Planning Appeal by
A C Goatham & Son

STATEMENT OF CASE

LAND OFF PUMP LANE, LOWER RAINHAM, KENT, ME8 7TJ

Planning Application Reference - MC/19/1566

22 September 2020
Our Ref: MJB/18-01307

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1 INTRODUCTION

1.1 This Statement of Case has been prepared by Rapleys LLP on behalf of A C Goatham & Son ('the Appellant') in response to the refusal of outline planning permission (planning application ref: MC/19/1566) for the redevelopment of land at Pump Lane, Lower Rainham, Kent, ME8 7TJ ('the Appeal Site') by Medway Council ('the LPA'). It is submitted in support of an appeal pursuant to section 78 of the Town and Country Planning Act 1990 (as amended) and is made in accordance with the Town and Country Planning (Inquiries Procedure) (England) Rules 2000 (as amended).

1.2 This appeal seeks outline planning permission for up to 1,250 dwellings, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle) ('the Proposed Development'). Scale, layout, landscape and appearance are all reserved.

1.3 The Appeal Site boundary consists of two farms separated by Pump Lane, totalling 48 hectares.

DESCRIPTION OF DEVELOPMENT

Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

REASONS FOR REFUSAL

1.4 There are nine reasons for refusal listed on the decision notice, dated 12/06/2020. These are:

1. Insufficient information has been provided in relation to mitigation measures, and no agreement has been reached to secure such measures, which are necessary to ensure that there will be no adverse impact on the integrity of the Medway Estuary & Marshes SSSI, SPA and Ramsar site as a result of the additional recreational pressures caused by the proposal.

    a. Note: Discussions are ongoing with Natural England regarding proposed mitigation measures. It is anticipated that any concerns will be resolved and this reason for refusal withdrawn.

2. The proposed development would have a harmful impact on the local historic landscape, as well as the setting and significance of an number of designated heritage assets, including: listed buildings (York Farmhouse (Grade II); Pump Farmhouse (Grade II); Chapel House (Grade II); 497-501 Lower Rainham Road (Grade II); The Old House (Grade II); Bloors Place (Grade II*); a range of outbuildings including cart lodge and granary west of Bloors Place (Grade II); and, the garden walls to south and east of Bloors Place (Grade II)); and, two Conservation Areas (Lower Twydall; and, Lower Rainham).

    Applying the great weight which has to be given to the conservation of the designated heritage assets (by virtue of NPPF paragraph 193 and Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990), the proposal is contrary to Local Plan policies BNE12 and BNE18. In addition, as the public benefits of the scheme would not outweigh the harm to the designated heritage assets, the proposed development is also contrary to the NPPF paragraph 196.

3. The proposed development would lead to significant long-term adverse landscape and visual effects to the local valued Gillingham Riverside Area of Local Landscape Importance (ALLI), which would not be outweighed by the economic and social benefits of the scheme, in conflict with Local Plan policy BNE34 and NPPF paragraph 170.

4. The applicant has failed to satisfy Highways England that the development will not materially affect the safety, reliability and / or operation of the Strategic Road Network (SRN). This is contrary the tests set out in department for Transport Circular 2/13 paragraphs 9 & 10 and the NPPF at paragraph 109.

    a. Note: Discussions are ongoing with Highways England. It is anticipated that their concerns will be resolved and this reason for refusal withdrawn.

5. The cumulative impact from the increased additional traffic cannot be accommodated on the highway in terms of overall network capacity without a severe impact. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

6. The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

    a. Note: Further accident data has been provided to the LPA. It is anticipated that this matter will be resolved and this reason for refusal withdrawn.

7. No assessment nor technical details have been provided regarding the two new access points along Pump Lane to serve the proposed development, therefore it has not been possible to appropriately assess the adequacy of these access points. This is contrary to Policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF.

    a. Note: The information the subject of this reason for refusal was provided to the LPA as part of the application. It was not commented upon or apparently reviewed by the LPA. As such, this information has been re-issued following refusal. It is anticipated that this matter will be resolved and this reason for refusal withdrawn.

8. The proposed development would result in the irreversible loss of 'best and most versatile' (BMV) agricultural land, contrary to Local Plan policy BNE48 and the NPPF at paragraph 170 and footnote 53.

9. In the absence of a completed S106 legal agreement, the proposal fails to secure infrastructure necessary to meet the needs of the development. This is contrary to Local Plan policy S6 and the NPPF at paragraph 54.

    a. Note: The Appellant will enter into a s106 legal agreement to secure delivery of the necessary infrastructure, etc. It is anticipated that this reason for refusal will be withdrawn.

1.5 In response to the reasons for refusal and the officer's report, updating and additional documents are submitted as part of the appeal. These include:

- Transport Addendum (Appendix 1)
- BMV Note (Appendix 2)
- LVIA (see chapter 11 consolidated Environmental statement)
- Revised Master Plan Ref: PL 009 Rev C (Appendix 5)

- Updated Parameter Plans showing Heritage and Landscape buffer planting refinements – Building Heights (Ref: PL 004 Rev B), Land use (PL 006 Rev B), Movement (Ref: 007 Rev B) and Green and Blue Infrastructure (Ref: PL 005 Rev B) (Appendix 6).
- Indicative Recreation Plan (Ref: PL 008 Rev B) (Appendix 7)
- Updated Environmental Statement

1.6 This Appeal Statement addresses the following matters

- Appeal Site and surroundings
- Planning history
- The need for housing in Medway
- The Proposed Development
- Planning policy and guidance
- Chronology of the Application
- The Appellant's case
- The benefits of the Proposed Development
- Planning balance
- Conclusions

1.7 The Appellant requests for the appeal to be dealt with through the Public Inquiry procedure. Notice has been served on the LPA and Planning Inspectorate. The justification for this has been given within the submitted appeal forms, and includes the reasons below:

- The Proposed Development is for a significant level of new housing, associated development and infrastructure;
- The reasons for refusal raise various expert, technical and factual matters that merit full exploration, including through cross-examination, in order to allow for a properly informed decision; and
- The Proposed Development has generated a substantial amount of local interest.

2 APPEAL SITE AND SURROUNDINGS

2.1 The Appeal Site and surroundings are described in detail in Section 2 of the General Matters Statement of Common Ground (SoCG).

2.2 In summary, the Appeal Site is made up of two farms, Pump Farm (circa 23ha) and Bloors Farm (circa 25ha), which predominantly comprises Grade 2 (79%), with some areas being Grade 1 (17%) and Grade 3a (4%) agricultural land that is currently in use as commercial fruit orchards.

2.3 The farms are separated by Pump Lane, which runs from north to south through the Appeal Site. The Appeal Site is part developed and includes a number of farm buildings used for storage and other uses in connection with the commercial orchard which are now at the end of their useful economic life.

PLANNING HISTORY

2.4 The planning history of the Appeal Site is detailed at section 3 of the General Matters SoCG. There have not been any recent or relevant applications involving the Appeal Site.

3 THE NEED FOR HOUSING IN MEDWAY

3.1 The housing supply and recent delivery position in Medway has been analysed using data provided by the LPA and Central Government. A detailed review was included as part of the Application. An updated local position relative to housing need and delivery is summarised below.

3.2 Since submission of the Application, new information has been published regarding the LPA's housing supply position. The updated evidence includes (in order of publication):

- Housing Delivery Test Action Plan (August 2019);
- Authority Monitoring Report (December 2019);
- Medway Strategic Land Availability Assessment (SLAA, December 2019);
- Housing Delivery Test 2019 Results (February 2020).

3.3 In addition:

- In November 2019 it was announced that the LPA had apparently been successful in a Housing Infrastructure Fund (HIF) bid;
- A recently issued housing appeal decision involving the LPA (decision letter dated 30 July 2020 Appendix 9) (ref. MC/19/0188). The Inspector records, at paragraph 6, the LPA's agreement that its housing land supply is 3.27 years.

3.4 A consultation on 'Planning for growth on the Hoo Peninsula' was undertaken in April 2020. Our representation submitted as part of this consultation process, is attached at Appendix 8. This reviewed in outline, the proposed high level of development, required infrastructure (as proposed by Medway) and the tight timescale for this to come forward. Ultimately, the overall deliverability of this level of development is highly questionable and remains poorly evidenced, especially given the timescales outlined, which appear wholly unrealistic.

HOUSING REQUIREMENT

3.5 Updated affordability ratio figures (affecting the Standard Method) have been published by Central Government. The revised housing requirement for the LPA is shown to be 1,693 dwellings per annum (dpa).

HOUSING SUPPLY

3.6 In appeal decision ref. APP/A2280/W/19/3240339, concerning a proposal for 130 dwellings at Land at Orchard Kennels, off Meresborough Road, Rainham, Kent ME8 8QJ, is recorded (paragraph 6) (Appendix 9):

> *"The Council admits to being able to demonstrate only a 3.27 years supply of land for housing. The Council's figures, based on the period 2019-24, are not disputed. On this basis, it is common ground that paragraph 11(d) of the National Planning Policy Framework (NPPF), is engaged."*

3.7 This flatly contradicts the position erroneously presented in the LPA's AMR (December 2019).

3.8 The deliverability of the AMR 2019 claimed figure (which has never been accepted) is nonetheless briefly considered here, and in the light of:

- Historic shortfall; and
- Future deliverability

AMR 2019 - HISTORIC SHORTFALL

3.9 The AMR 2019 records that the LPA has an undersupply of 1,046 units in Year 1 of the Plan (2018/19) and suggests this will increase, by 434 units, in Year 2 (to be included in any 5YHLS position statement).

AMR 2019 - FUTURE DELIVERABILITY

3.10 Contrary to the agreed position set out in the appeal decision of July 2020, the LPA had previously asserted a 5YHLS in the AMR 2019.

3.11 The LPA also announced that it has been awarded HIF money and suggests (without any clear or adequate evidence) that this funding will 'unlock' the delivery of 10,000+ houses. This was supplemented by a consultation on the Hoo Peninsula proposals which acknowledged that such development may only come forward in conjunction with a sufficient level of HIF-funded infrastructure improvements.

3.12 In summary, considering the timescales for similarly scaled HIF schemes, it is extremely unlikely that the LPA will complete HIF-funded works before (say) 2025. The extent of any delivery at Hoo Peninsula is therefore far from certain. The timescale offered up is shown to be wholly unrealistic.

3.13 The AMR 2019 had also wrongly included, within the sites making up its then claimed 5YHLS, sites that are HIF dependent. None benefit from extant planning permission (whether full or outline). None are shown to be 'deliverable' for the purposes of the NPPF. As such, these sites could not properly have been included in the supply at that stage, and on this basis alone (even before the Council's agreement reported in July 2020) the LPA's approach adopted in the AMR was shown to be significantly flawed.

SUMMARY

3.14 The LPA has a minimum housing requirement of 1,693dpa.

3.15 The LPA's own agreed position is that it may merely demonstrate a housing land supply of "just over 3 years". Upon separate analysis we see no reason to properly find any higher supply figure.

4 THE PROPOSED DEVELOPMENT

4.1 The details of the Proposed Development are set out in Section 4 of the General Matters SoCG. In summary, it includes:

- Up to 1,250 dwellings;
- Community and commercial uses (local centre, care facility);
- Educational uses (primary school);
- Recreational space (village green, dog walk routes, landscaped buffers, etc.).

4.2 It will additionally be noted that officers (including the case officer: see officer's report at paragraphs 1.3 and 4.240) and some consultees have wrongly treated the proposed Development as proposing 1250 units, and no less. The application form had referenced "approximately" [1250 units]. The application documents also clearly referenced an 'up to' [1250 units] figure. The nature and correctness of the case officer's assessment on this aspect has regrettably been less than clear.

5 PLANNING POLICY AND GUIDANCE

5.1 The adopted Development Plan is the Medway Local Plan 2003 (saved policies).

5.2 Relevant planning policy and guidance includes:

- National Planning Policy Framework (2019)
- National Planning Practice Guidance
- Medway Guide to Developer Contributions and Obligations (2018)
- Strategic Assessment Management and Mitigation Medway Council Interim Policy Statement (November 2015)
- Medway Housing Design Standards (interim) (November 2011)
- Medway Landscape Character Assessment (2011)
- The Kent Design Guide (2010)
- Kent County Council Local Transport Plan (KCC LTP4)

5.3 Additionally, there is the White Paper (August 2020).

5.4 A detailed review of the then relevant planning policy and guidance was set out in the Planning Statement in support of the application. The General Matters SoCG and, where relevant, appendices in support of this Appeal Statement, provide further commentary.

5.5 National and development plan policy themes relevant to the Appeal include:

- The presumption in favour of sustainable development;
- The significance of the LPA's chronic housing supply shortfall and national policy consequences for decision-taking under paragraph 11 of the NPPF;
- Policy BNE25: Development in the Countryside: only permits development in the countryside in given circumstances. This restricts housing delivery and is contrary to the NPPF in seeking the delivery of a sufficient supply of homes. The planning policy officer's response dated 15/07/2019 (see appendix 10) considered that the weight to be attached to this policy in assessing development sites in the countryside is modest, if any weight. The very/limited weight to be given to this policy has similarly been confirmed in appeal decisions (Appendix 9) for development at:
    - Land at Gibraltar Farm (APP/A2280/W/16/3143600) (paragraphs 11 and 46-50);
    - Land at Station Road (APP/A2280/W/15/3002877) (paragraphs 13 and 14);
    - Land to the North of Brompton Farm Road (APP/A2280/W/18/3214163) (paragraphs 56 and 105).
- Policy BNE34 Areas of Landscape Importance: The Proposed Development complies with the objectives of this policy which seeks to ensure proposals do not materially harm the landscape character and function of the area. In the Gibraltar Farm appeal, the Inspector gave Policy BNE34 limited weight. In an appeal relating to Land at Station Road (APP/A2280/W/15/3002877 and Ref MC/14/0285), the Inspector found that the weight to be afforded to policy BNE34 must be reduced in consequence of the inconsistency found with paragraph 113 of the then NPPF 2012 (paragraph 170 of the NPPF 2019).

6 CHRONOLOGY OF THE APPLICATION

PRE-APPLICATION ENGAGEMENT

6.1 A request for pre-application advice was initially sought on 18 September 2018 with the pre-application meeting held on 1 November 2018 and a subsequent design meeting held on 8 November 2018. The LPA's formal pre-application response was received on 19 November 2018 and was included within the submitted planning statement.

6.2 With regard to 5 years housing land supply, it was stated in the LPA's response that *"at present Medway does not currently possess a 5 year land supply for housing and a 20% buffer should be applied, as per paragraphs 11, 14 and 73 of the NPPF."*

6.3 A more detailed account of pre-application engagement can be found at section 4 of the planning statement.

APPLICATION SUBMISSION

6.4 The application was submitted on 13 June 2019 and subsequently validated on 28 June 2019 with reference number MC/19/1566

6.5 The application sought:

Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

DETERMINATION OF THE APPLICATION

6.6 Following validation and during the determination process, additional supporting/replacement documents were formally submitted. This included multiple rebuttal letters/emails submitted by the project team addressing Transport, Heritage, Landscape, Ecology, Loss of Agricultural Land, Flooding and Drainage, Archaeology and Air Quality matters. A chronology of submissions is provided at section 6 of the General Matters SoCG.

6.7 On 1 April 2020 an updated Environmental Statement was submitted.

6.8 As a general observation, it is considered that officers have not given the application adequate consideration. The appellant, and their project team, have needed to refer officers/consultees to various and clear sections of the submission not considered or adequately considered, 'chase' consultation responses (months following submission). Often when responses were eventually passed onto the project team and uploaded on the application website, they were weeks or months aged.

6.9 The application was refused by delegated powers on 12 June 2019.

7 THE APPELLANT'S CASE

7.1 The Appellant's Case is clearly set out in the following section, explaining why it is considered that the appeal should be allowed and planning permission granted.

7.2 Reason 1 alleges insufficient information regarding mitigation measures to limit the impact on the nearby Estuary. Reason 2 alleges an impact on the local historic landscape and heritage assets. Reason 3 alleges adverse landscape and visual effects. Reason 4, 5, 6 and 7 (4 in total) concern highways matters including safety, network capacity issues and access off Pump Lane. Reason 8 concerns the loss of agricultural land. Reason 9 concerns the lack of a completed s106 agreement.

IMPACT ON MEDWAY ESTUARY & MARSHES (REASON 1)

7.3 This reason for refusal reflects the holding objection issued by Natural England. The Appellant has actively engaged with the LPA and Natural England to seek to agree appropriate mitigation measures corresponding to potential additional recreational pressures.

7.4 Mitigation measures would include a bespoke visitor warden package funded by the Proposed Development. This would be in addition to the strategic contribution to the Strategic Access Management and Monitoring (SAMM) projects and, also the provision of informal open space and dog walking routes within the Appeal Site (see appendix 3 for latest correspondence with Natural England - letters dated 18/08/2020, 14/09/2020 and email dated 15/09/2020).

7.5 It is anticipated that appropriate recreational mitigation measures will be agreed. The Proposed Development will not therefore have any adverse or objectionably adverse impact on the integrity of the Medway Estuary and Marshes SSSI, SPA and Ramsar site.

7.6 The Appellant therefore expects this reason for refusal to be withdrawn.

HERITAGE IMPACT (REASON 2) – SEE ALSO CONSOLIDATED ES CHAPTER 14

7.7 No proper assessment has been undertaken of heritage impacts. The PPG clearly advises that that any harm to designated heritage assets must be articulated in terms of being 'substantial' or 'less than substantial'. Within each category of harm, the extent of the harm should be clearly articulated.

7.8 In considering harm to non-designated heritage assets, the NPPF states 'a balanced judgement is required having regard to the scale of any harm or loss and the significance of the heritage asset' (Para 197, NPPF). The level of harm assessed must also be articulated.

Assessment of Harm

7.9 When the harm is assessed using the relevant Historic England Guidance and in conformity with the NPPF and PPG, it is considered that the Proposed Development will result in:

- No harm to the heritage significance of the walls and outbuildings at Bloors Place, York Farmhouse, 497-501 Lower Rainham Road and The Old House;
- Less than substantial harm (at low end of the spectrum) to Pump Farmhouse, Chapel House and Lower Rainham Conservation Area; and
- Less than substantial harm (at the very lowermost end of the spectrum) to the main building of Bloors Place and the Lower Twydall Conservation Area.

7.10 These modest levels of harm should be considered within the context of paragraph 196 of the NPPF.

7.11 It is considered that the planning benefits tilt heavily in the planning balance in favour of planning permission being granted. As such, the Proposed Development is considered to be

acceptable in heritage terms and meet the requirements of the NPPF and satisfy local policies BNE14, BNE18 and BNE21.

LANDSCAPE (REASON 3) – SEE ALSO CONSOLIDATED ES CHAPTER 11

7.12 The appeal submission confirms:

- The Appeal Site and Proposed Development is considered to have a moderate and contained visual envelope and as such, its impact is contained locally. In wider views across the estuary from the Hoo Peninsula, the site forms part of a wider backdrop within expansive views across the estuary. The proposed development would result in neutral effects in these views.
- The more highly valued attributes and qualities of the landscape, including those along the shoreline to the north of the Appeal site will be preserved. These include ecological designations, the Saxon Shore Way, Riverside Country Park and the conservation area, at Lower Rainham and Lower Twydall which will be preserved.
- The proposals offer opportunities to improve access to the countryside and shoreline, whilst also offering recreation and amenity benefits associated with areas of open space, a village green, community orchards, play areas and recreation routes, linking with the adjacent rights of way network and amenities including the Riverside Country Park, Saxon Shore Way and Bloors Lane Community Woodland.
- Within the ALLI the function of the Appeal Site is identified as an important 'green buffer' separating built areas from areas of importance for nature conservation and recreation along the Medway estuary, as well as enhancing the setting of the northern relief road and allowing attractive views from the river and railway. The proposals will retain the function of the site as a buffer to the shoreline. In views from the estuary, the site is enclosed and surrounded by shelterbelts and woodland. The structural landscaping to site boundaries and within the site will ensure that the proposed development maintains a green backdrop and the function of the ALLI.

7.13 The appeal is supported by an updated LVIA (Chapter 11 ES) which has assessed the Appeal Site's landscape character and function and impact of the proposals in regard to landscape and visual effects.

7.14 It is considered that the ALLI is a non-statutory, local designation that is based on an out-of-date evidence base. Its publication formed part of the Local Plan (2003) and its evidence pre-dates the current (yet out of date) Medway Landscape Character Assessment (LACK 2011)

7.15 The LCA recognises the influence of the ring road, the urban fringe landscape and fragmentation of the area, lacking an overall sense of coherence that arises from the diverse land uses and poor condition of some areas.

7.16 The updated LVIA concludes that the Appeal Site and wider Lower Rainham and Lower Twydall Fruit Belt Local Landscape Character Area (LLCA) that has been defined by a detailed site-specific landscape character assessment within the LVIA make an overall Low / Medium contribution to the function and features of the ALLI.

7.17 The Appeal Site is separated from the Medway Estuary shoreline by Lower Rainham Road and farmland to the north with shelterbelts, woodland and vegetation providing a green backdrop and screening inland views. The land along the shoreline is valued for recreation and includes the Saxon Shore Way and Riverside Country Park as well as conservation interests, as recognised by the Medway Estuary and Marshes RAMSAR, SSSI and SPA designations.

7.18 As identified by the Medway Landscape Character Assessment, there is also poor accessibility across the area from Twydall and Rainham towards the shoreline and Riverside Country Park.

The appeal scheme offers opportunities to enhance the function of the land within the Appeal Site and wider ALLI area through the provision of improved accessibility and connectivity with the Riverside Country Park and Public Rights of Way networks, as well as providing areas of attractive open space and community orchards incorporating recreation routes and play areas throughout the scheme. The Appeal Site is physically and visually well contained and does not form part of an appreciable "green buffer" between settlements and areas of international importance for nature conservation and recreation along the Medway estuary.

7.19 In order to develop a scheme that takes the landscape context into account, the Proposed Development incorporates mitigation measures. These include reinforced boundary vegetation, strategic landscape planting and creation of substantial areas of open space and green infrastructure. Community orchards, a village green and meadows are also located to respect the character and setting of Pump Farm and the fruit belt.

7.20 There is currently no access to the Appeal Site. The Proposed Development will provide (existing and future) residents with access to an attractive landscape. It will substantially improve the recreational value of the land through opening up areas of open space throughout the Appeal Site for a variety of activities and functions. This includes the integration of Green Infrastructure incorporating ecological, landscape and amenity enhancements that are respectful of the heritage / historic landscape, landscape character and biodiversity and habitats

7.21 Whilst the Appeal Site does form a small part of the green backdrop when viewed from across the Medway to the north, this is formed by commercial orchards that are seen in context with existing development at Twydall and Rainham, with the site being contained by boundary vegetation and shelter belts and woodland within the local area. he proposed development of the Appeal Site would not impact upon the role that the existing shoreline vegetation and that surrounding the site make to the green backdrop, and offers opportunities to enhance it through bolstering the boundary vegetation and tree planting within areas of Green Infrastructure and along streets within the development that will create a green canopy and break up the proposed and existing built form.

7.22 In regards to landscape effects of the proposals, in the initial phase (construction) this will result in a localised, temporary moderate / major adverse effect. The same level of impact is seen through construction and upon completion, the proposals will give rise to localised, sitewide, moderate / major adverse effects.

7.23 Upon maturation of the areas of green infrastructure, open space and landscape mitigation planting, the residual landscape effects at a localised and site-wide level will result in permanent moderate adverse effects. There will be localised beneficial effects for the setting and character of bridleway GB6a, which will be incorporated into the scheme as part of the Green Infrastructure including the village green, linear green space, play areas and community orchards.

7.24 A full assessment of visual effects is provided within the LVIA. In short, it is considered that the proposals post 15 years from completion largely have a permanent, localised minor adverse visual effect. Users of the Saxon Shore Way and Riverside Country Park with clear views towards the site are limited to those from Horrid Hill and Motney Hill, where there are expansive views across the estuary. Views towards the site are from only a small part of these wider views. The mitigation planting to the site boundaries and within areas of Green Infrastructure and development parcels will soften the development, tying-in with the surrounding shelterbelts and woodland. There will also be localised beneficial effects for users of Bridleway GB6a that will have access to new areas of open space, Green Infrastructure and recreational spaces and facilities, as well as the opening up of views across the village green and community orchards.

7.25 Accordingly, the Proposed Development will protect the features and function of the ALLI and the locally valued landscape, providing improved access and recreational value both within the site and between surrounding areas and the Riverside Country Park and shoreline. The scheme proposals also provide substantial amounts of new structural landscape planting and areas of green infrastructure incorporating characteristic features including community orchards. The landscape framework will ensure that the proposals are integrated with the surrounding landscape and features

7.26 In accordance with Paragraph 170 of the NPPF and BNE34, the proposals have sought to protect and enhance recognised attributes and function of a locally valued landscape, whilst respecting the landscape character of the area and offering opportunities to enhance the function of the site and links with the shoreline of the Medway Estuary.

HIGHWAYS MATTERS

7.27 The application submission confirmed that, the Proposed Development is well placed in terms of connectivity to the surrounding road network. A full assessment of the strategic and local road network was undertaken. It concludes that traffic can be adequately accommodated on the network with some localised improvements at junctions to mitigate specific impacts.

Reason 4 (Highways England)

7.28 The Appellant has liaised closely with Highways England. This reasons for refusal presents a holding objection. It is considered that the Proposed Development will not materially affect the safety and/or operation of the strategic network.

7.29 The Appellant anticipates that this matter will be agreed with Highways England (see in particular, paragraph 4.1 to 4.6 of the Transport Addendum (Appendix 1)).

7.30 The Proposed Development will not be contrary to paragraphs 9, 10 and 109 of the NPPF.

Reason 5 (Traffic Impact)

7.31 As demonstrated by the supporting information provided with the application, it is considered that the cumulative impacts from the additional traffic generated can be accommodated without a severe impact on the overall network capacity.

7.32 As outlined in the Transport Addendum at Appendix 1, the LPA applied the wrong policy test with respect NPPF Para 109 and Local Plan Policy T1. As agreed with the LPA, the future traffic flows at the identified key junctions have been taken from The Medway Model, which the LPA then considered to be the most appropriate assessment. Following several requests for clarification from the Appellant's transport consultant, the details of the model inputs have not been confirmed by the LPA. Mitigation measures have been provided where necessary, as agreed with the LPA. These are comparable to those identified in the Transport Assessment.

7.33 The LPA have provided no response to the proposed mitigation, nor the offer for a financial contribution to wider Infrastructure improvements. Their response fails entirely to consider the impact of the scheme in the light of the mitigation proposed. No further response has been received to date in respect of further information on the modelling inputs.

7.34 The Appellant is consequently unable to respond further at this stage to the reason for refusal 5, which is considered an unfounded reason for refusal.

Reason 6 (Highway Safety)

7.35 Prior to the determination of the application the LPA's concerns in connection with this reason for refusal were not put to the Appellant. Specific highway concerns were however

provided within the officer's report, as explained in section 6 of the Transport Addendum (Appendix 1).

7.36 An appraisal report has been prepared which addresses the concerns raised by the LPA and demonstrates that reason for refusal 6 is not properly founded. This comprehensive assessment demonstrates that the recorded number of accidents is immaterial. Similarly, there is no evidence to suggest either that the Proposed Development will "significantly add to the risk of road traffic accidents" (Policy T1) or that it will have an unacceptable impact on road safety (NPPF Para 109).

Reason 7 (Site Access)

7.37 As explained from paragraph 6.1 of the Transport Addendum (Appendix 1), the application included detailed drawings for the northern access (DTA Drawing 20230-05-2) and the Pump Lane Railway Bridge Improvements (DTA Drawing 20230-05). A further plan that shows individual junctions on Pump Lane (DTA Drawing 20230-05-03a) was provided to the LPA in July 2019. Following this, at the meeting on 17 September 2019, the LPA confirmed they were comfortable with the level of detailed provided and requested a Road Safety Audit (RSA) which was completed and submitted for comment. No formal comment has ever been received.

7.38 Upon preparation and determination of a planning application, it is necessary to consider what degree of detail is required in terms of the access arrangements to confirm compliance with both the County Council's highway design requirements and the safety test under the NPPF. Any new access onto the public highway will ultimately require a Section 278 agreement, prior to construction, over which the Highway Authority has discretion.

7.39 On this basis, and having regard to the NPPF (and Policy T1) it is clear the decision maker should be satisfied that there are no fundamental highway safety deficiencies in the design and that any outstanding design matters are capable of being addressed at the more detailed design stage.

7.40 The access drawings proposed for the development comprised the detail of the northern and southern access points to sufficient detail to allow a Stage 1 Road Safety Audit to be undertaken. These plans are at a level of detail to show that policy tests provided for under local policy T1 and Para 109 of the NPPF are satisfied.

7.41 The proposals and strategy were subject to Road Safety Audit Stage 1 on 18 October 2019 (Appendix F of the Transport Addendum). It is clear from the Audit that there are no substantive issues raised. All matters may appropriately be addressed through the normal detail design progression at the Section 278 stage, post-consent. It is therefore demonstrated that safe and suitable access to the Appeal Site can be provided (NPPF paragraph 108).

Reasons 4-7 (Highways - summary)

7.42 The Proposed Development will give rise to long term benefits for improving the amenity of local pedestrians, cyclists and public transport users once the development is completed through the provisions of new and improved routes and facilities, offering localised improvements to local routes and reduction in journey times and distances.

7.43 In accordance with Paragraph 102 of the NPPF, the potential impacts on the highway and required mitigation have been identified. The overall pattern of movement is integral to the design of the scheme. There is no unacceptable impact on highways safety or, the local and strategic road network. The Proposed Development is fully in accordance with Paragraph 109 of the NPPF and Local Plan Policies T1 and T2.

LOSS OF AGRICULTURAL LAND (REASON 8)

7.44 The existing operation of Pump and Bloors Farm is unviable due to their size, configuration and location. For the last decade the Appeal Site has been operating, in effect, as a satellite farm of the larger business.

7.45 In common with all other farming enterprises the profits from growing apples and pears has notably declined, as a consequence of static sales prices and increasing cost of production. Of particular note is cost of seasonal labour which has increased by 200% over the last 20 years

7.46 With part of the existing orchard stock at Pump Farm being a variety that is surplus to consumer demand and the other part being at maturity, the Appeal Site will require replanting in the next 2-3 years which would cost some £1.5 million. Additionally, to be viable, technological advances would also need to be implemented and the size and configuration of the Appeal Site prevents this. The exposure of the Appeal Site to hail also means that it would not be economically unviable to replant the orchards.

7.47 In the Appellant's view and as explained within the application submission (Appendix 13.2 (ii) consolidated ES - Lambert and Foster) and by Mr J. Pelham – Partner at Andersons Midlands (Appendix 2) alternative farming enterprises are not viable for similar reasons due to size and configuration. Additionally, the existing farm buildings are not considered to be worthwhile farm buildings which could realistically offer a viable diversification project which would support greater consolidation and reinvestment in substantial commercial orchard planting. The strong likelihood is that the same would be viewed by other potential investors.

7.48 The release of Bloors Farm and Pump Farm for other purposes will generate much-needed, additional funds that will enable the Appellant to continue to invest in more economical farms, producing a notably higher yield of fruit. In accordance with Para 170 the economic benefits of maximising what would be an alternative area of BMV agricultural land elsewhere in Medway and/or the wider area of Kent, should be given very significant weight. The Proposed Development will not therefore be contrary to Local Plan Policy BNE48 and the NPPF at paragraph 170 and footnote 53.

PLANNING OBLIGATIONS (REASON 9)

7.49 The Appellant will continue to engage with the LPA with the intention of agreeing planning obligations outlined at paragraph 4.210 of the Officer's Report. Subject to this engagement, this shared position will be put to the Inspector in the form of an agreed draft s.106 agreement at exchange of proofs of evidence, thereby addressing Reason for Refusal 9.

8 THE BENEFITS OF THE DEVELOPMENT

8.1 The Proposed Development will deliver a wide range of conspicuous and substantial planning benefits relevant to the three (economic, social and environmental) objectives of sustainable development, as set out in paragraph 8 of the NPPF (2019).

8.2 These have been exemplified in the Planning Statement at chapter 7 and in outline, include:

- The Proposed Development is eminently sustainable development;
- The creation of a new village settlement with the provision of up to 1250 new homes will provide a very significant and much needed contribution to housing supply in Medway, including affordable housing. Historic under-delivery and the existing housing shortfall is chronic: Medway's 2019 HDT result was 46%. There is a clear local plan failure in delivery terms. The Proposed Development for up to 1,250 units will strongly contribute to addressing this shortfall and remedying historic under delivery. This benefit attracts high significance, even if (which is strongly doubted) significant development is eventually delivered at Hoo;
- The increase in population will greatly contribute to ensuring the future viability of community facilities such as healthcare centres, post offices, and schools. The Proposed Development would support the viability of the wider area by boosting the local economy, delivering a policy-complaint level of affordable housing, and by funding (through planning obligations) improvements to local community facilities such as healthcare and education;
- The increase in local population will support existing and future local employment centres and opportunities, whilst reducing the requirement for (and also distance of) work journeys by private car;
- Much improved pedestrian and cycle networks promoting sustainable travel and enhancing local connections through the site and surrounding area.
- Improved public transport links will create jobs for those operating within the sector directly and increase the accessibility of employment opportunities for local residents.
- The provision of community facilities, landscaping and recreational areas will, in turn, each meaningfully contribute to the provision of a new settlement promoting sustainable development and social well-being;
- The access to the Appeal Site will be significantly opened up and improve both pedestrian and vehicular connectivity through the Appeal Site, integrating beneficially with the surrounding transport network. Pedestrian movement and local connectivity will be improved through a number of connection points via a series of footpath links, including from Lower Rainham Road (north), Lower Bloors Lane (east), and Lower Twydall Lane to the (west);
- The existing orchard is a commercial farm which is heavily sprayed and in terms of ecology and biodiversity is not important habitat. The proposed development will include areas of landscaping and open space which will assist in protecting and also enhancing the ecological value of the site.
- The Proposed Development will generally bolster the level and diversity of habitat, with a buffer zone around the Appeal Site and landscaping between the individual development plots to create connected habitats, allowing for an improved network for animal movement through the Appeal Site. The introduction of enhanced

hedgerows, the green buffer, the mix of grassland habitats, garden areas and mature trees and SUDs will all promote biodiversity;

- Employment gain: The build-out period for the Proposed Development is estimated at c.10 years and will boost employment during this phase. Once completed, further (direct and indirect) employment opportunities will arise in connection with the school, the care home and facilities located within the new village settlement;
- General expenditure and tax take: A residential scheme of the size proposed can reasonably be expected to generate substantial residential expenditure together with the other revenue from council tax and financial contributions;
- The release of Bloors Farm and Pump Farm for other purposes will generate additional funds that will enable the Appellant to continue to meaningfully invest in farms that produce a materially higher fruit yield, giving rise to local and national economic benefits.

9 PLANNING BALANCE

9.1 The Proposed Development is in accordance with the Development Plan, meaning that permission should be granted without delay. For the purposes of section 38(6) of the Planning and Compulsory Purchase Act 2004, other material considerations including the NPPF, NPPG, other relevant policy and guidance and the very substantial benefits of the Proposed Development all similarly favour the grant of planning permission.

9.2 The presumption in favour of sustainable development is firmly engaged. The sustainable credentials of the Proposed Development have been outlined within the planning statement and include matters set out in section 8 of this Appeal Statement.

9.3 Various 'most important' policies of the Development Plan are 'out of date' for the purposes of determining whether planning permission is granted. Little weight should be given to these policies.

9.4 As regards NPPF paragraph 11(d)(i), it is also not the case that the application of policies in the NPPF that protect areas or assets of particular importance provide a clear reason for refusing planning permission. The presumption in favour of sustainable development is therefore not disengaged.

9.5 Even in application of NPPF paragraph 11(d)(ii), the substantial benefits of the Proposed Development are not significantly and demonstrably outweighed by the modest adverse effects of the Proposed Development in terms of landscape impacts and heritage, etc.

9.6 In summary the substantial benefits include:

- An evidently sustainable development.
- A sustainably located new settlement with local (improved) bus services and nearby train station limiting the need for the use of a private car.
- Improved pedestrian and cycle networks promoting sustainable travel and enhancing local connections.
- Up to 1,250 units, including much needed affordable housing, significantly boosting the housing supply and assisting the LPA in meeting their housing requirement, viewed against the background of chronic and continuing under supply.
- Large areas of open space, landscaping and community facialists create a strong sense of place, promoting social well-being for future and existing residents within the locality.

<u>Landscape</u>

9.7 Turning to landscape impacts, the Proposed Development seeks to develop largely undeveloped land. There will inevitably be an appreciable level of landscape impact.

9.8 As regards policy BNE34, planning decisions have applied varying weight to this policy. Modest weight should be preferred. However, even were greater weight to be applied, when the modest adverse impacts of the Proposed Development are weighted against the substantial economic and social benefits (per policy BNE34), the balance weighs heavily in favour of planning permission being approved.

9.9 Consistent conclusions with regard to acknowledged landscape impacts were drawn by the Inspector in determining the appeal for Land to the North of Brompton Farm Road (APP/A2280/W/18/3214163) (paragraph 68: appendix 9).

Heritage

9.10 In regards to impacts on heritage assets outlined in section 7, it is considered that low end less than substantial harm is caused.

10 CONCLUSIONS

10.1 The presumption in favour of sustainable development confirms that applications should be approved without delay where they accord with an up-to-date development plan. The Proposed Development is in accordance with the Development Plan.

10.2 The Proposed Development is promoted in the context of an obvious and chronic housing shortage in Medway. The housing situation in Medway is critical and requires urgent redress through the delivery of sustainable development and locations, such as here.

10.3 Paragraph 11(d) of the NPPF states that decisions should apply a presumption in favour of the sustainable development where policies which are "most important" to determining the application are 'out of date'. In light of the lack of a 5 years housing land supply and 2019 HDT results, if paragraph 11(d)(ii) is engaged, planning permission should only be refused where any adverse impacts would significantly and demonstrably outweigh the benefits.

10.4 The scheme proposes the delivery of 1250 new homes, including affordable homes within a new sustainable village settlement with significant social infrastructure as part of a Masterplan that supports place making and the creation of a place that is truly inclusive and accessible, as well as one that promotes health and wellbeing. The benefits of the Proposed Development are conspicuous and substantial. These will prove transformative.

10.5 The Appellant's case concludes, from an assessment of the relevant planning issues, assisted by a comprehensive suite of technical documents, that this appeal should be allowed, and planning permission be granted. There are no significant adverse impacts, which would arise from the Proposed Development, which would demonstrably weigh in favour of the refusal of planning permission. Instead, the Proposed Development provides multiple economic, social and environmental planning benefits which further supports the grant of planning permission.

10.6 Accordingly, the appeal should be allowed and planning permission granted.

Appendix 1

TRANSPORT ADDENDUM- DAVID TUCKER ASSOCIATES

Land at Pump Farm and Bloors Farm, Lower Rainham

Transport Assessment Addendum

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Land at Pump Farm and Bloors Farm, Lower Rainham

Transport Assessment Addendum

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SJT/JA /20230-14_Transport Assessment Addendum
(Final)

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Appendices

1.0 Introduction

1.1 This Transport Addendum has been prepared to update on Transport matters following the refusal of application MC/19/1566 (the application), which seeks consent for up to 1,250 residential dwellings, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

1.2 The purpose of this Addendum is to:

1. Provide a summary and update on the progression of discussions in relation to transport issues since submission of the application;
2. Explain the comprehensive assessment and review process undertaken by the applicant; and
3. Respond to the transport related reasons for refusal.

1.3 This report includes the following sections:

a) Decision Notice
    i. Reasons for Refusal
    ii. Relevant Policy Tests
b) Submissions to Authorities
c) Highways England
d) Traffic Impact
e) Road Safety
f) Access Arrangements
g) Public Transport

1.4 Despite the applicant submitting a scoping report prior to the application, and seeking to engage on all matters with the Local Highway Authority (LHA), no substantive comments were provided on the application until the final response (undated) was received on 22nd May 2020 and the Case officer's report (undated) was received on

16th June 2020. The issues relating to highways are presented differently in both documents and further vary in specific ways from the final reasons for refusal.

1.5 This addendum focuses on matters pertinent to the reasons for refusal.

1.6 In terms of traffic impact, a range of mitigation measures are set out in the Transport Assessment, including off-site highway works and a substantial package of Travel Planning measures. The applicant provided all the assessments requested by the LHA including a review of our modelling work based on traffic flows derived from the LHAs own modelling approach ("The Medway Model"). This was provided in April 2020 and provided a robust cumulative assessment, demonstrating the conclusions of the Transport Assessment were unchanged. The assessment confirmed that appropriate mitigation measures have already been proposed, but that these were not considered or considered appropriately by the LHA, contrary to NPPF paragraph 108. Reason for refusal 5 does not bear out any or any appropriate consideration of mitigation by the LHA.

1.7 Further details have been requested from the LHA to clarify both the inputs and outputs of the Medway Model (DTA letter of 7th July 2020). These are required before any weight can be given to the data provided to date.

1.8 A detailed review of additional accident data demonstrates that the proposals will not materially (still less, significantly) add to the risk of road traffic accidents (Policy T1) or have an unacceptable impact on highway safety (NPPF paragraph 109), so overcoming reason for refusal 6.

1.9 Discussions are progressing with Highways England (HE) who have agreed to work proactively to address the outstanding technical issues in relation to reason for refusal 4. An agreed position is being pursued with HE.

1.10 It is demonstrated that safe and suitable access to the site can be provided in accordance with NPPF paragraph 108, so overcoming reason for refusal 7.

2.0 Decision Notice

2.1 Medway issued the Decision Notice for refusal on 12th June 2020. A copy of this is included in **Appendix A**. The Transport Related reasons for refusal together with further commentary on the current position in relation to each is set out below.

2.2 **Reasons for Refusal**

Reason 4

The applicant has failed to satisfy Highways England that the development will not materially affect the safety, reliability and / or operation of the Strategic Road Network (SRN). This is contrary the tests set out in department for Transport Circular 2/13 paragraphs 9 & 10 and the NPPF at paragraph 109.

2.2.1 A meeting was held with HE and their consultants WSP on 17th August 2020. This matter is discussed in section 4, below.

Reason 5

The cumulative impact from the increased additional traffic cannot be accommodated on the highway in terms of overall network capacity without a severe impact. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

2.2.2 Fundamentally, Medway have applied the wrong policy test with respect to NPPF paragraph 109 and Local Plan Policy T1.

2.2.3 Medway have provided no response to the proposed mitigation, nor the offer for a financial contribution to wider IDP / Local Plan requirements if appropriate. Their response fails entirely to consider the impact of the scheme in the light of the mitigation proposed. This approach is contrary to NPPF Para 108.

2.2.4 No further response has been received to date in respect of further information on the modelling inputs. This matter is discussed further in section 5 of this report.

Reason 6

The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

2.2.5 This relates to the request for a wider accident appraisal and this matter is dealt with further in section 6 of this report.

Reason 7

No assessment nor technical details have been provided regarding the two new access points along Pump Lane to serve the proposed development, therefore it has not been possible to appropriately assess the adequacy of these access points. This is contrary to Policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF.

2.2.6 The access plan showing individual junctions on Pump Lane (DTA Drawing 20230-05-03a) was provided to Medway in July 2019. Further details in relation to access are set out in section 7 of this report.

2.2.7 None of the reasons for refusal are specifically related to public transport, however specific comments on the bus and rail network were included in the committee report. These are as follows:

It is noted that from the Letter of Arriva, they outline no plans to change the 182 service and would recommend extending the number 1 service. It was requested that a patronage test should be provided by the applicant to ensure that the bus service would be self-sufficient without the need for bus subsidy from Medway Council. No such assessment has been provided.

The nearest railway station is Rainham and is approximately 2.5km from the centre of the application site. The rail station provides services to London Waterloo to the east and Dover to the west. The station provides cycle and car parking, 64 and 233 spaces respectively, however no assessment has been provided as to whether there is any spare capacity to accommodate any additional demand from the development on the

rail network and on cycle parking at the station. The applicant has suggested that rail could be used as a multi-modal journey with cycling.

2.2.8 These matters are considered further in section 8 of this report.

2.3 Relevant Policy Tests

2.3.1 The policy tests referred in the transport related reasons for refusal are as follows:

Department for Transport Circular 2/13 – Paragraph 9

"Development proposals are likely to be acceptable if they can be accommodated within the existing capacity of a section (link or junction) of the strategic road network, or they do not increase demand for use of a section that is already operating at over-capacity levels, taking account of any travel plan, traffic management and/or capacity enhancement measures that may be agreed. However, development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."

Department for Transport Circular 2/13 – Paragraph 10

"However, even where proposals would not result in capacity issues, the Highways Agency's prime consideration will be the continued safe operation of its network."

National Planning Policy Framework – Paragraph 109

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

2.3.2 Whilst it is not specifically listed in the reasons for refusal, paragraph 109 of the NPPF should clearly be read in conjunction with paragraph 108 which is as follows:

National Planning Policy Framework – Paragraph 108

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

Policy T1 of the Medway Local Plan 2003 – Impact of Development

In assessing the highways impact of development, proposals will be permitted provided that:

(i) the highway network has adequate capacity to cater for the traffic which will be generated by the development, taking into account alternative modes to the private car; and
(ii) the development will not significantly add to the risk of road traffic accidents; and
(iii) the development will not generate significant H.G.V. movements on residential roads; and
(iv) the development will not result in traffic movements at unsociable hours in residential roads that would be likely to cause loss of residential amenity.

2.3.3 Only the first two tests of Policy T1 are relevant to the proposed development given that points (iii) and (iv) relate specifically to HGV and operational impacts.

2.3.4 The key policy tests in NPPF/ DfT Circular 02/13 require the LHA and HE to give full consideration to the mitigation measures proposed by any development including Travel Planning and capacity / safety enhancements (Para 108a). The scale of such mitigation needs to be cost effective and appropriate (Para 108c).

2.3.5 The key considerations under relevant NPPF policy, as follows:

Test 1 – Have appropriate opportunities to promote sustainable transport modes been taken up, given the type of development and its location;

Test 2 – can safe and suitable access to and within the development be satisfactorily achieved for all people; and

Test 3 – can the impact of the development (including the impact of traffic) be safely and satisfactorily accommodated or mitigated?

2.3.6 The key tests in Policy T1 of Medway Local Plan differ in that they require a higher test than NPPF in terms of traffic impact stating: "*The highway network has adequate capacity to cater for the traffic which will be generated by the development*".

2.3.7 In terms of safety the test is that the development should not significantly add to the risk of road traffic accidents.

3.0 Background to Submissions to the Authorities

3.1 A significant amount of assessment work was been undertaken since the planning application was submitted. The various submissions to the LHA in relation to transport are summarised in **Table 1.**

Table 1 – Submissions to Medway Council

Document	Date of issue/receipt
Transport Assessment Scoping Note (No response ever received)	20 November 2018
Transport Assessment and Framework Travel Plan submitted with application	May 2019
Draft response from Medway Council	28 August 2019
Technical Note 1 to respond to initial highway comments to include: • Stage 1 Road Safety Audit • Walking, Cycling and Horse Riding Assessment Review • Revised Framework Travel Plan	21 October 2019
Technical Note 2 to respond to further highway comments	31 October 2019
Technical 3 (20230-10a) in response to Medway's modelling of the development impact	9 January 2020
Revised Technical Note 3 (20230-10f) including to include additional junction modelling	2 April 2020
2x letters to Medway requesting further details in respect of further information on the modelling inputs and clarification on reason for refusal 6 and 7	7 and 23 July 2020

3.2 Discussions have also been had with HE and the various responses submission of the application and these are set out in **Table 2**.

Table 2 – Submissions to Highways England

Document	Date of issue
Response to Highways England initial comments (Response HE)	14 August 2019
Response to Highways England second set of comments (Response HE 2)	5 March 2020
Response to Highways England third comments (via email)	30 April 2020
Response to Highways England following meeting on 17 August 2020	19 August 2020

4.0 Update on Highways England Matters

4.1 Reason for Refusal 4 states:

The applicant has failed to satisfy Highways England that the development will not materially affect the safety, reliability and / or operation of the Strategic Road Network (SRN). This is contrary the tests set out in department for Transport Circular 2/13 paragraphs 9 & 10 and the NPPF at paragraph 109.

4.2 HE responded to the application via email and requested further information on 17th July 2019. DTA responded by email dated 14th August 2019.

4.3 Upon review of DTA's response, HE issued a second set of comments via email dated 31st October 2019. A second response was prepared by DTA dated 5th March 2020.

4.4 A third response was received from HE via email on 23rd April 2020. DTA responded by email on 30th April 2020 and requested a meeting to discuss. No response was received however prior to determination.

4.5 A meeting was held on 17th August 2020 to discuss the outstanding issues. A copy of the meeting notes is included in **Appendix B**. The outstanding points include:

- HE requested the online source for the Census 2011 journey to work data to allow verification of the data adopted by DTA;
- A further review of trip distribution including potential impact on junction 2 and explanation of why some traffic with destinations to the wider network were not assigned to the strategic road network.

4.6 DTA responded to the above by email to WSP and HE on 19th August 2020 (**Appendix C**). HE responded to this on 11th September 2020 confirming acceptance of the traffic generation and traffic distribution on the strategic road network (also included in **Appendix C**). In respect of the distribution of traffic, HE agree with the points DTA set out in the email of 19th August as follows:

- Trips to Tonbridge and Malling would be most directly accessed via junctions 4 and 3 as shown. We have also reviewed the other destinations assigned to junction 1 and our view is that it would be very unlikely that trips would route through Chatham on the A2, across the river and then down Cuxton Road (A228 which is for a significant part residential) to join the M2 a junction earlier (which is to the south and in the wrong direction). If traffic did route this way rather than along the A289 to the north, they would continue on the A2 and join at junction 1.

- Overall, therefore we would argue that no traffic would use junction 2 from the site for access to the SRN. However some movements might take place on the A228 (across the motorway) to reach Tonbridge and Malling.

4.7 Other methodological issues were discussed at the meeting and the agreed trip generation and distribution on the SRN is set out as follows:

			AM Peak		PM Peak	
M2	%		Arrivals	Deps	Arrivals	Deps
J1	16.9%	Eastbound off slip	10		30	
		Westbound on slip		37		14
J2	0.0%	All slip roads/approaches				
J3	15.1%	Northbound off slip		33		12
		Southbound on slip	9		27	
J4	16.1%	Eastbound on slip		2		1
		Westbound off slip	1		2	
		Westbound on slip		33		12
		Eastbound off slip	9		29	
		Agreed Commuting and Business Trips	**58**	**219**	**180**	**82**

5.0 Traffic Impact

5.1 Reason for refusal 5 states:

The cumulative impact from the increased additional traffic cannot be accommodated on the highway in terms of overall network capacity without a severe impact. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

5.2 Fundamentally, as discussed below, Medway have applied the wrong policy test with respect NPPF Para 109 and Local Plan Policy T1. As agreed with Medway, the future traffic flows at the identified key junctions have been taken from The Medway Model which the Council considered to be the most appropriate assessment. This included future flows to a future forecast year of 2035 which is understood to include all projected Local Plan growth in Medway, hence, a cumulative assessment. However, following several requests for clarification of the details of the model inputs were not confirmed by Medway. Mitigation measures have been provided where necessary as agreed with Medway and these are comparable to those identified in the Transport Assessment.

5.3 Medway have provided no response to the proposed mitigation, nor the offer for a financial contribution to wider IDP / Local Plan requirements if appropriate and their response fails entirely to consider the impact of the scheme in the light of the mitigation proposed. This approach is contrary to NPPF paragraph 108 (as set out below).

5.4 A review of impact on link corridors has been undertaken by DTA based on the model output flows. There are clearly errors in the data presented in the model and this was highlighted to Medway, but no clarification has been received. The change in flow on the various links is minimal and insignificant, particularly during the PM peaks, and many of the links also have a negative impact as a result of the development.

5.5 No further response has been received to date in respect of further information on the modelling inputs.

6.0 Road Safety

6.1 Reason for Refusal 6 states that:

The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

6.2 Medway provided further detail in respect of the road safety concerns in the committee report, as follows:

"The applicant has included five years of recorded Personal Injury Accident data from June 2013 to May 2018 and this is considered acceptable to the Highway Authority, however the survey area is too narrow and due to the large scale nature of the development would need to cover all the main routes connecting to the main carriageways i.e. A2 and Ito Way.

The Council's transport officers raise concerns regarding Will Adams Roundabout (A2 Junction, Ito Way) and A289 Yokosuka Way/Cornwallis Roundabout which have a combined 12 incidents on or near the junction. The accident data demonstrates that many of incidents relate to failure to judge other persons path or speed, therefore they have significant concerns that, with the substantial forecast increase in vehicles, incidents are more likely to occur.

Furthermore concerns relate to Pump Lane (adjacent the A2) [sic]*, this road has the potential to become a rat run and already has a number of incidents (which were not been reviewed by the applicants)* [sic]*, as well as the double roundabout along Beechings Way. In regard to Lower Rainham Road, a number of serious incidents within the survey period and consequently concerns are raised that the additional traffic from the proposed development would likely lead to an increase in road collisions.*

Therefore, when assessing the wider accident data, the forecast large increase in vehicles is likely to have a detrimental impact at known accident hotspots which is contrary to policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF."

6.3 An appraisal report has been prepared to ultimately address and demonstrate that reason for refusal 6 is not properly founded and should now be withdrawn by Medway. This is included in **Appendix D**.

6.4 This comprehensive assessment demonstrates that the recorded number of accidents is immaterial, and certainly not significant. Similarly, there is no evidence to suggest either that the development proposals will "significantly add to the risk of road traffic accidents" (Policy T1) or that it will have an unacceptable impact on road safety (NPPF Para 109).

7.0 Access Arrangements

7.1 Reason for Refusal 7 states:

No assessment nor technical details have been provided regarding the two new access points along Pump Lane to serve the proposed development, therefore it has not been possible to appropriately assess the adequacy of these access points. This is contrary to Policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF.

Context at Application Stage

7.2 The Access Strategy for the site is described in Section 4.3 of the Transport Assessment. For clarity as part of the application the Transport Assessment included detailed drawings for the northern Access Point (Drawing 20230-05-2 and the Pump Lane Railway Bridge Improvements 20230-05).

7.3 A further plan showing individual junctions on Pump Lane (DTA Drawing 20230-05-03a) was provided to Medway in July 2019. At the meeting on 17th September 2019 (recorded by Rapleys), Medway confirmed they were comfortable with the level of detail provided and requested a Road Safety Audit which was completed and submitted for comment. No formal comment has ever been received.

7.4 The position adopted by Medway was challenged by DTA (their letter 23rd July 2020). On 28th July 2020, Medway emailed:

"As outlined within drawing 20230-0503 Rev A, the access to the north has a supplementary technical drawing, as well as the highway improvement works to the south, can you provide a rationale of why you considered more detailed design drawings were not required. Furthermore I note that the scale within the drawing is NTS (Not to Scale). It would be beneficial to understand how a NTS drawing, can be considered sufficient to serve a large scale development such as this".

7.5 It is firstly necessary to consider what degree of detail is required in terms of the access arrangements to confirm compliance with both the County Council's highway design requirements and the safety test under NPPF policy.

7.6 Any new access onto the public highway will ultimately require a Section 278 (Highways Act 1980) agreement with the LHA, prior to construction. The agreement will effectively provide a private party with the powers to undertake works within the highway as if they were the LHA. The Council will require the approval of the detailed construction design of all aspects of the works including drainage, horizontal and vertical alignment.

7.7 There are four levels of Road Safety Audit normally required as part of any highway scheme, 1 – 4. Stage 1 is undertaken at the preliminary design stage (planning application or draft orders stage). Stage 2 audit is undertaken once the detailed construction plans are complete and construction is ready to commence (i.e. the Section 278 stage). Stage 3 and 4 occur post opening of the scheme.

7.8 Although there is no specific national advice on the matter, most highway authorities require a satisfactory Design Office Response to a Stage 1 RSA at the planning stage and this is what was understood to be the requirement of Medway. This stage provides comfort that a safe access can be achieved without prejudicing the need for more detailed design work post planning consent. Although there is no trunk road involved in this case, the approach is consistent with the requirements of the DMRB (at GG119 – Para 5.17.1) which stipulates a Stage 1 audit prior to planning consent being applied for.

7.9 The purpose of a Stage 1 RSA is to provide an independent view of the safety of any scheme prior to progression to the more detailed design. Clearly if the audit raises fundamental issues of layout then these need to be addressed. Otherwise, it is normal that detailed matters arising from the Stage 1 audit are dealt with through design progress / further detail at the detailed design stage. These are then reconsidered, along with any other issues, under a Stage 2 audit.

7.10 On this basis and having regard to the NPPF (and Policy T1) it is clear the decision maker needs to be satisfied that there are no fundamental highway safety deficiencies in the design and that any outstanding design matters are capable of being addressed at the more detailed design stage.

7.11 The access drawings proposed for the development comprised the detail of the northern and southern access points to sufficient detail to allow a Stage 1 Road Safety Audit to be undertaken. These plans are based on topographical survey and are at a level of detail which is appropriate to allow consideration of the planning policy tests of T1 and Para 109 as discussed above. In particular at the planning stage it is appropriate to consider:

a) How the proposed arrangement can be achieved in geometrical terms for appropriate widths/ alignment and visibility splays;
b) Whether there are any significant topographical or land ownership constraints;
c) Whether there are any highway safety implications of the proposed layouts.

7.12 For clarity the following drawings set out the proposals in terms of the access arrangements (**Appendix E**):

20230-05 Rev E Overall Access Strategy and Key network. This shows the overall access strategy which includes a new right ghost island junction to the north of the site to Lower Rainham Road, a connection to Pump Lane south and two interim crossing points on Pump Lane itself. The detailed plans of each arrangement are thus:

20230-05-2 Rev D– Proposed Right Turn Lane Lower Rainham Road

20230-05-6 Rev E – Northern Pump Lane crossing arrangement

20230-05-5 Rev E – Southern Local Access / Spine Road Junction

20230-05-1 Rev E – Pump Lane Proposed Railway Bridge Improvements

7.13 The strategy and the detail contained therein was subject to Road Safety Audit Stage 1 on 18th October 2019 (**Appendix F**). The design office response to that is attached at **Appendix G**).

7.14 It is clear from the Audit that there are no substantive issues raised and all can be dealt with through the normal detail design progression at the Section 278 stage, post consent. It is demonstrated that safe and suitable access to the site can be provided (NPPF paragraph 108).

7.15 It is therefore demonstrated that reason for refusal 7 is not properly founded and should be withdrawn by the Council.

8.0 Public Transport

8.1 The transportation reasons for refusal do not incorporate any objection on public transport grounds. Some comments concerning the bus and rail network were included in the committee report, as follows:

It is noted that from the Letter of Arriva, they outline no plans to change the 182 service and would recommend extending the number 1 service. It was requested that a patronage test should be provided by the applicant to ensure that the bus service would be self-sufficient without the need for bus subsidy from Medway Council. No such assessment has been provided.

The nearest railway station is Rainham and is approximately 2.5km from the centre of the application site. The rail station provides services to London Waterloo to the east and Dover to the west. The station provides cycle and car parking, 64 and 233 spaces respectively, however no assessment has been provided as to whether there is any spare capacity to accommodate any additional demand from the development on the rail network and on cycle parking at the station. The applicant has suggested that rail could be used as a multi-modal journey with cycling.

8.2 Public Transport is clearly and sufficiently addressed in the Transport Assessment. In summary, a high quality 10 minutes bus service (the Service 182 – see Table 1 of the TA running to the south of the site would fall within a reasonable walking distance of 80% of the houses on the development. This is highlighted in the plans at **Appendix H.**

8.3 The bus service connects to the Town Centre and Chatham Station.

8.2 A significant proportion of the site can therefore be served without the need for changes to the local service network. Changes might nonetheless provide betterment both in terms of the development and also the wider area. On this basis, discussions were held in late 2018/early 2019 with Arriva about the scope for further improving the existing bus service. Arriva has confirmed they will consider implementing the following changes to the wider network:

a) Extend the existing 191 to and through the site. This would provide a 20 minute service to supplement the 191;

b) Consider connections between 191 and 182 to provide inter-working and potentially a clockwise and anti-clockwise combined service running through the site;

c) Diversions to Nos 120 / 121 to route through the site and provide a connection to Rainham High Street and Station.

8.2.1 The appropriate planning of the location and type of bus stops may come at the detailed design. The masterplan shows that it would be possible to provide high quality public transport accessibility to the site.

8.2.2 Medway requested in the final highway response and committee report that a patronage test should be undertaken. There is no record of such a request prior to this.

8.2.3 The applicant has confirmed its willingness to include within a Section 106 agreement, an appropriate and proportionate contribution towards public transport enhancements. A response is yet to be received from Medway to this offer.

Appendix A

Decision Notice

MC/19/1566

Mr Conor Healy
Rapleys LLP
Rapleys LLP
33 Jermyn Street
London
SW1Y 6DN

Applicant Name:
AC Goatham and Sons

Planning Service
Physical & Cultural Regeneration
Regeneration, Culture, Environment & Transformation
Gun Wharf
Dock Road
Chatham
Kent
ME4 4TR
01634 331700
01634 331195
Planning.representations@medway.gov.uk

Town and Country Planning Act 1990

Location: Land Off Pump Lane, Rainham, Kent, ME8 7TJ,

Proposal: Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

Notification of Refusal of Outline Planning Permission to Develop Land

Take Notice that the Medway Council in pursuance of its powers under the above Act HAS REFUSED OUTLINE PERMISSION for the development of land as described above in accordance with your application for planning permission received complete on 28 June 2019.

for the following reason(s):-

1 Insufficient information has been provided in relation to mitigation measures, and no agreement has been reached to secure such measures, which are necessary to ensure that there will be no adverse impact on the integrity of the Medway Estuary & Marshes SSSI, SPA and Ramsar site as a result of the additional recreational pressures caused by the proposal.

In the absence of imperative reasons of overriding public interest, Regulations 63 and 70 of the Habitats Regulations require permission to be refused.

In addition, the lack of information and mechanism to secure the mitigation also results in non-compliance with policies S6 and BNE35 of the Local Plan and NPPF paragraphs 175 &176.

2 The proposed development would have a harmful impact on the local historic landscape, as well as the setting and significance of an number of designated heritage assets, including: listed buildings (York Farmhouse (Grade II); Pump Farmhouse (Grade II); Chapel House (Grade II); 497-501 Lower Rainham Road (Grade II); The Old House (Grade II); Bloors Place (Grade II*); a range of outbuildings including cart lodge and granary west of Bloors Place (Grade II); and, the garden walls to south and east of Bloors Place (Grade II)); and, two Conservation Areas (Lower Twydall; and, Lower Rainham).

Applying the great weight which has to be given to the conservation of the designated heritage assets (by virtue of NPPF paragraph 193 and Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990), the proposal is contrary to Local Plan policies BNE 12 and BNE18. In addition, as the public benefits of the scheme would not outweigh the harm to the designated heritage assets, the proposed development is also contrary to the NPPF paragraph 196.

3 The proposed development would lead to significant long-term adverse landscape and visual effects to the local valued Gillingham Riverside Area of Local Landscape Importance (ALLI), which would not be outweighed by the economic and social benefits of the scheme, in conflict with Local Plan policy BNE34 and NPPF paragraph 170.

4 The applicant has failed to satisfy Highways England that the development will not materially affect the safety, reliability and / or operation of the Strategic Road Network (SRN). This is contrary the tests set out in department for Transport Circular 2/13 paragraphs 9 & 10 and the NPPF at paragraph 109.

5 The cumulative impact from the increased additional traffic cannot be accommodated on the highway in terms of overall network capacity without a severe impact. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

6 The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

7 No assessment nor technical details have been provided regarding the two new access points along Pump Lane to serve the proposed development, therefore it has not been possible to appropriately assess the adequacy of these access points. This is contrary to Policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF.

8 The proposed development would result in the irreversible loss of 'best and most versatile' (BMV) agricultural land, contrary to Local Plan policy BNE48 and the NPPF at paragraph 170 and footnote 53.

9 In the absence of a completed S106 legal agreement, the proposal fails to secure infrastructure necessary to meet the needs of the development. This is contrary to Local Plan policy S6 and the NPPF at paragraph 54.

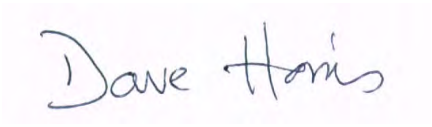
Your attention is drawn to the following informative(s) :-

1 In accordance with paragraph 38 of the NPPF Medway Council takes a positive, proactive and creative approach to development proposals focused on solutions. Medway Council works with applicants/agents in a positive, proactive and creative and manner by:

Offering a pre-application advice service;
Updating applicants/agents of any issues that may arise in the processing of their application;
Where possible suggesting solutions; and
Informing applicants/agents of any likely recommendation of refusal prior to a decision.

In this instance;

The applicant/agent was updated of any issues after the initial site visit.
The applicant/agent was provided with pre-application advice.
The applicant/agent was advised the application was unlikely to be acceptable and asked how he/she wished to proceed.



David Harris
Head of Planning
Date of Notice 12 June 2020

TOWN & COUNTRY PLANNING (APPEALS) (WRITTEN REPRESENTATIONS) (ENGLAND) (AMENDMENT) (REGULATIONS 2013)

TOWN AND COUNTRY PLANNING ACT 1990

Appeals to the Secretary of State

- If you are aggrieved by the decision of your Local Planning Authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.

- If you want to appeal against your Local Planning Authority's decision then you must do so within **12 weeks** from the date of this notice for appeals being decided under the Commercial Appeals Service and **6 months** from the date of this notice for all other **minor and major applications.**

  - However, if an enforcement notice has been served for the same or very similar development within the previous 2 years, the time limit is:
  - **28 days** from the date of the LPA decision if the enforcement notice was served before the decision was made yet not longer than 2 years before the application was made.
  - **28 days** from the date the enforcement notice was served if served on or after the date the decision was made (unless this extends the appeal period beyond 6 months).
  - Appeals must be made using a form which you can obtain from the Planning Inspectorate by contacting Customer Support Team on 0303 444 50 00 or to submit electronically via the Planning Portal at

  https://www.planningportal.co.uk/info/200207/appeals/110/making_an_appeal

Commercial Appeals Service

- This type of appeal proceeds by way of written representations, known as the "Commercial Appeals Service". Third parties will not have the opportunity to make further representations to the Planning Inspectorate on these.

All other Minor and Major Applications

- The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

- The Secretary of State need not consider an appeal if it seems to him that the Local Planning Authority could not have granted planning permission for the

proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.

- In practice, the Secretary of State does not refuse to consider appeals solely because the Local Planning Authority based on their decision on a direction given by him.

Purchase Notes

- If either the Local Planning Authority or the Secretary of State refuses permission to development land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

- In these circumstances, the owner may serve a purchase notice on the Council (District Council, London Borough Council or Common Council of the City of London) in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

Appendix B

Note of Meeting: Pump Farm, Lower Rainham

17th August 2020, 11am

Venue: MS Teams call

Meeting Attendees

David Bowie – Highways England (HE)
Kevin Bown – HE
Daniel Jenkins – WSP (on behalf of HE)
Simon Tucker; Jacqueline Aggiss – DTA

Meeting Objectives

1. To discuss traffic impact on the trunk road network (with regard to Decision Notice reason for refusal 4) and HE's formal response dated 5th June 2020. It was agreed that both parties would actively engage to resolve the outstanding technical queries raised by HE (email dated 23rd April 2020; final response dated 5th June 2020: **Appendix A**).

2. DTA summarised the dates of various correspondence with HE. WSP explained they had reviewed DTA's reply dated 30th April 2020 to HE's email dated 23rd April 2020 and had prepared a draft response (not yet provided to DTA). It was confirmed that HE's formal application response dated 5th June 2020 did not take into account DTA's 30th April 2020 reply.

3. It was agreed that moving forward, all parties would seek to positively address and discuss outstanding matters with the aim of reaching agreement on all technical implications of the development.

4. WSP tabled their draft response. This was used as an informal agenda for the meeting on the matters below.

Base Traffic

5. This concerns the lack of baseline traffic flow data for the trunk road junctions. HE remains of the view that modelling might be required to assess and consider mitigation. It was agreed that the issue will be reviewed once development traffic generation and assignment has been agreed.

Committed Development

6. DTA's submission of 30th April 2020 provided a comparison of TEMPRO growth for Medway as a whole and Medway 018. It was agreed that growth rates of 1.1063 in the AM peak and 1.1074 in the PM peak are acceptable and provide a robust assessment of background growth. HE also agreed that TEMPRO subsumes the committed development listed in paragraph 6.1.3 of the TA

and that no further account needs to be made of these committed developments. TEMPRO growth rates are therefore agreed between HE and DTA.

7. HE confirmed that it will further request (by next meeting) Medway Council to confirm the list of committed developments stated in the TA.

Trip Generation

8. On the Travel Plan, HE welcomed their inclusion in future discussions regarding bus strategy. This will include HE's review of any related s.106 agreement. It was agreed this would be revisited at the next meeting.

9. HE confirmed that the only outstanding issue concerning traffic generation was the verification of the source of the data adopted by DTA from the Census 2011 journey to work.

10. WSP requested that DTA provide the hyperlink to the specific data source so that WSP could independently verify the data. WSP stated that it would review trip generation (by end 28/08/20) upon receipt.

Trip Distribution

11. On trip distribution, WSP explained that their concern was the number of different route choices to reach the M2 and invited for the worst case scenario for each junction to be considered. WSP requested a review of the assignment, specifically:

- North westbound traffic, using Junction 1 or junction 2;
- Traffic to destinations in Tonbridge and Malling and whether that traffic would use junction 2 as opposed to junctions 3 and 4 as assessed in the TA;
- An explanation of why some traffic with destinations to the wider network were not assigned to the SRN.

12. It was agreed that the DTA assessment is robust in not assigning local destinations to the SRN.

Modelling

13. HE stated their expectation to receive from Medway Council, in September 2020, the modelling for the mitigation scenarios relevant to the emerging Local Plan. HE confirmed that modelling has also been undertaken in respect of the Lower Thames Crossing, albeit only limited outputs for this are presently available.

14. As set out in their email of 23rd April 2020, HE confirmed that it has already specifically requested Medway Council to provide all relevant outputs for the Medway model run for the proposed development, on the SRN.

15. HE has however not yet received a reply from Medway Council. HE will again ask Medway Council.

Mitigation

16. The issue of mitigation was briefly discussed. HE confirmed their preference for development proposals, if appropriate, to make a proportional contribution to improvement schemes being identified to mitigate Local Plan growth. Any need for this will be reviewed upon agreement of the above points (see paragraphs 8 and 10).

Action Summary

1. WSP to provide their draft response to DTA email of 30th April 2020 [provided to DTA on 17th August 2020]
2. DTA to provide Census source data [provided to HE/WSP 19th August 2020]
3. DTA to further review traffic distribution [provided to HE/WSP on 19th August 2020]
4. HE to request, from Medway Council, all relevant outputs for the Medway model run for the proposed development, on the SRN.

Signed:

Simon Tucker [on behalf of DTA]

Date:

Signed:

David Bowie [on behalf of HE]

Date:

Appendix A

Jacqueline Aggiss

From: Bowie, David <David.Bowie@highwaysengland.co.uk>
Sent: 23 April 2020 11:38
To: gunner, hannah
Cc: Planning SE; Bown, Kevin; Bradley, Alistair; Jacqueline Aggiss; Simon Tucker; Michael.Birch@rapleys.com; Duncan.Parr@rapleys.com
Subject: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Follow Up Flag: Follow up
Flag Status: Completed

For attention of:	Hannah Gunner, Medway Council
Site:	Land Off Pump Lane, Rainham, Kent, ME8 7TJ
Proposal:	residential development comprising approximately 1,250 residential units, a local centre, a village green, a two-form entry primary school, a 60-bed extra care facility, an 80-bed care home and associated access (vehicular, pedestrian, cycle).
Your Reference:	MC/19/1566
Highways England's Reference:	85118 #8020

Dear Hannah,

Further to our response to the above application dated 31 October 2019, we have received a response directly from the applicant's agent on 2 April 2020, which was also copied to Medway Council Planning.

Highways England ("we") have been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and are the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

We will be concerned with proposals that have the potential to impact on the safe and efficient operation of the SRN. In this case our interest relates to the M2, and potentially the A2, A249 and M20.

We understand that the proposal/site is **not** in the Medway Local Plan 2003.

The emerging Medway Local Plan for 2019 to 2037 is still being developed. It is not clear if the site will be part of the new emerging Medway Local Plan for 2018 to 2035.

We have therefore assessed the site on the following basis in accordance with NPPF, C2/13 and the Highways England guidance on working with applicants.

History of the Proposal

Initially, we reviewed the following document related to this application and responded on 17 July 2019:

- David Tucker Associates, 21 March 2019, *Land at Pump Farm and Bloors Farm, Lower Rainham, Final Transport Assessment* ("the TA").

We then received the following document, which we reviewed in our response of 31 October 2019:

- David Tucker Associates, 14 August 2019, *Land at Pump Farm and Bloors Farm, Lower Rainham, Response to Highways England* ("the August 2019 submission").

Subsequently, we received the following document on 2 April 2020, which we review in this current response:

- David Tucker Associates, 5 March 2020, *Land at Pump Farm and Bloors Farm, Lower Rainham, Second Response to Highways England* ("the March 2020 submission").

Review of the March 2020 Submission

I refer to our previous response of 31 October which has resulted in the March 2020 submission from David Tucker Associates. Our response to that March 2020 submission is only where I consider that our original concerns/requests have not been adequately addressed and therefore remain issues of concern.

For ease of reference, the following comments in this section are colour-coded as follows:

- Our 31 October 2019 response text in black;
- The applicant's March 2020 submission in blue; and
- Our updated response in red.

Base traffic volumes and growth

We previously commented as follows:

- The TA has no details of base traffic data for the SRN;
- TEMPRO growth factors have only been determined for urban roads, not strategic roads,
- TEMPRO output needs to be provided so we can verify if the selection parameters are accurate.
- For base and future traffic volumes on the SRN, use of the Medway Local Plan Traffic Modelling may be appropriate. This is still under development; please see further comments below under "Modelling".

The August 2019 submission responded to this as follows:

- The TA included forecast development traffic on the SRN at junctions 1, 3 and 4 of the M2.
- The "*impact of the proposals on base traffic levels on the M2 will be indiscernible*".
- The DfT website provided base flow data on the M2 within the vicinity of junctions 2, 3 and 4 shows an annual average daily flow of in the region of 70,000 and 100,000 vehicles.
- If TEMPRO factors are applied this will reduce the percentage impact of development traffic.
- "*On the basis of the forecast traffic impact on the SRN, full modelling of individual junctions is not warranted, and therefore TEMPRO factors are not necessary*".
- For completeness, 10-year growth factors for Medway 018 (selecting urban and trunk roads) are 1.1156 for the AM peak and 1.1185 for the PM peak.

In response, we commented as follows:

- As noted further below in this response, for various reasons we cannot yet be confident that the "*impact of the proposals on base traffic levels on the M2 will be indiscernible".*
- ***Furthermore, junction 2 may be impacted also.***
- ***See comments below regarding TEMPRO also.***
- If we reach agreement on the other parameters of this assessment, it should be noted that ***a reduced percentage impact of the development traffic, due to background traffic growth, is not necessarily an acceptable argument against further assessment.*** Where there is existing congestion, a small proportional impact can make a large difference, as a small volume of traffic would consume a large proportion of any available capacity (if any capacity is available).
- ***Our previous comments therefore still apply.***

The March 2020 submission responds as follows:

- Table 1 replicates the development trips on the SRN as given previously (in the August 2019 submission);
- It then states that the "*proposed impact will be a maximum of 2 vehicles per minute on any given approach which cannot be considered to be material in the context of the operation of the motorway junctions*".
- It also states that "*it is unlikely that Junction 2 of the M2 will be impacted as the main destinations would preclude the use of this junction*".

Our updated response is as follows:

- Please also see our other comments further below regarding growth, trip generation and distribution.
- Even if we assume the Table 1 development trips to be accurate, the impact *on any given approach* would be up to one vehicle every two minutes (correcting this error in the March 2020 submission actually improves the situation); however, the impact within the junctions would be higher. Traffic from the different approaches interacts within the junctions, so we need to consider the combined volumes as well as the link volumes.
- The assumption that these volumes "*cannot be considered to be material"* needs to be supported with evidence, for the volumes on the links and within the junctions. Such volumes may seem small but – as mentioned before – where there is existing congestion, a small proportional impact can make a large difference, as a small volume of traffic would consume a large proportion of any available capacity (if any capacity is available). Our view is that any impact on a severely congested network is in itself severe as the additional traffic will only serve to increase vehicle delay, journey times and queue lengths.
- The current Medway modelling is showing need for mitigation at all SRN junctions; this development – which is outside the Local Plan – then further adds to this, so we still need to understand more fully the impact of this traffic.
- If we permitted every development that adds a "small, immaterial" amount of traffic to a junction, these all add up; as is demonstrated by the need for mitigation even before this development's traffic is added.
- The assumption that Junction 2 would not be impacted needs further supporting evidence; the comment in the submission is essentially anecdotal and is not accepted.
- While an assessment *might* potentially demonstrate that our concerns are unfounded (or relatively less of a concern than we thought), we need to see such an assessment in order to decide on this. **Therefore, all our previous comments still apply.**

Committed developments

We previously commented as follows:

- We requested that Medway Council confirm, or otherwise, that the list of committed developments in Paragraph 6.1.3 of the TA is complete and that the stated development types and quantums are correct?
- As noted above, we need some details of the TEMPRO growth for the SRN in order to determine their accuracy and also then to assess the validity of the point in paragraphs 6.1.4 and 6.1.5 of the TA, i.e. the assertion that no account needs to be made of the committed development traffic because TEMPRO growth already accounts for a greater level of growth.
- Also, as noted above, use of the Medway Local Plan Traffic Modelling may be appropriate once agreed and finalised with the council.

The August 2019 submission responded to this as follows:

- A response is awaited from Medway Council in respect of the TA which will confirm the position in respect of committed development.
- Within the TA, the committed development sites were reviewed within the immediate vicinity and total around 900 dwellings. The extent of additional housing growth included within TEMPRO for Medway is for 11,380 households. This is significantly higher than the committed development quantum and therefore no further uplift is required.

In response, we commented as follows:

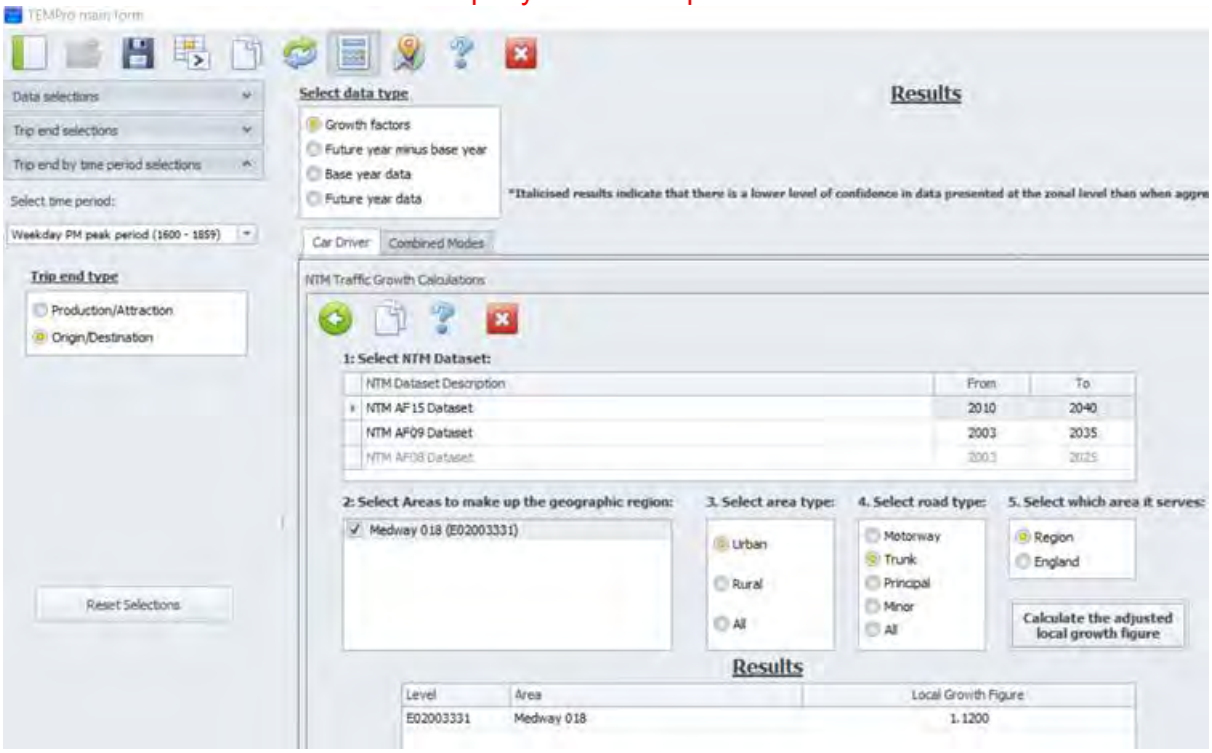
- We agree with the general principle that TEMPRO growth can subsume committed development traffic. ***However, in this particular case we cannot be certain that this applies until we review the TEMPRO output (as previously requested), so we can verify if the selection parameters are accurate, in particular the study area extent (and potentially other parameters). Also, the growth factors for SRN and urban roads separately should be provided.***
- ***As before, we also request confirmation from Medway Council that the list of committed developments in Paragraph 6.1.3 of the TA is complete and that the stated development types and quantums are correct.***

The March 2020 submission responds as follows:

- The TEMPRO growth factors are set out in Table 2 for these parameters:
  - Trunk road;
  - Urban roads;
  - Car driver;
  - Medway 018 study area;
  - 2019-2029;
  - Using TEMPRO7.2 and the NTM AF15 Dataset.
- The submission also states that *"Medway Council have confirmed in a meeting on 28th October 2019 that the list of committed developments in the TA are appropriate."*

Our updated response is as follows:

- Our own TEMPRO query using the above parameters produced quite different results; we need to see a screenshot of the above TEMPRO query, to verify the results of the March 2020 submission.
- A screenshot of our own TEMPRO query for the PM peak is shown below:



- The Medway 018 study area is a very small local area around the development site, as shown in this link: http://statistics.data.gov.uk/atlas/resource?uri=http://statistics.data.gov.uk/id/statistical-geography/E02003331
- As we are concerned with the *background* traffic on the SRN, it would be appropriate to expand the study area further.
- We ask that Medway Council confirm the statement that they "*have confirmed in a meeting on 28th October 2019 that the list of committed developments in the TA are appropriate*."

Development trip generation

We previously commented as follows:

- The residential trip generation is determined in the TA by:
    - TRICS *person* trip rates; National Travel Survey (NTS) data to determine percentages of AM and PM peak trip for each purpose; Census 2011 Journey to Work Statistics for Middle Super Output Area Medway 018, to determine mode share for each journey purpose separately.
    - A degree of internalisation is applied to the residential trips, as described in section 5.9 and the resulting external residential trips are then summarised in Table 31.
- The care facilities trip generation is determined in the TA by TRICS vehicle trip rates.
- We requested the NTS data and Census 2011 Journey to Work Statistics, to verify the quoted percentages.
- The NTS data in Table 17 (journey purpose splits) could vary across locations.
- We requested details of the geographical extent of the Middle Super Output Area Medway 018, used to determine mode share. If this includes locations with much better access to non-car transport than the proposal site, then this could be under-estimating the probable car mode share of the proposal.
- Use of TRICS *vehicle* trip rates, with careful selection of TRICS sites based on similar characteristics to the proposal site, may be more accurate and should at least be used for comparison. These similar characteristics should include on- and off-street parking provision; non-car transport provision; local population, vehicle ownership, location type, as well as the age of the surveys and sample sizes.

The August 2019 submission responded to this as follows:

- NTS data and Census 2011 Journey-to-Work data are provided in Appendix B of the August 2019 submission.
- NTS data is "*based on national figures and no equivalent dataset is available for specific regions*".
- The development trips on the SRN are limited to commuting and business trips on the basis that trips associated with other trip purposes will be local to the site.
- The numbers of commuting and business trips are summarised in the August 2019 submission in the table under paragraph 4.2 (which is also Table 47 of the TA). These are determined from the data in Appendix B, which also includes assessment of traffic distribution.
- The extent of the MSOA for Medway 018 is illustrated in Image 1 in the August 2019 submission. "*The area included is immediately adjacent to the proposed site and includes the built up residential area immediately to the south*".

In response, we commented as follows:

- We have reviewed the NTS 0502 data in Appendix B of the August 2019 submission and checked it against the Table 17 of the TA. While the combined proportions of commuting and business trips are correctly recorded in Table 17 for the periods 8 to 9am (24%) and 5 to 6pm (37%), these may not necessarily be the peak hours on the SRN. The period 7 to 8am could feasibly be very busy also; and in this period, the NTS data show that combined proportions of commuting and business trips are 56%, i.e. over twice as much. Therefore, application of this methodology could more than double the number of development trips per hour during the critical AM peak period.
- As mentioned before, there is also the additional concern that the NTS data are national averages, not local. While this could of course mean that this data source is *over*-estimating impact, it may also be under-estimating the impact and we need to consider the potential worst-case scenario. While we need to be reasonable, it must also be considered that there is existing congestion at various M2 junctions and the proposal is not in the Local Plan; therefore, we need to be particularly careful to assess the impact more thoroughly.
- ***Regarding both points related to the NTS data, sensitivity testing would be appropriate in this instance, or the use of a different data source as we suggested in our previous response.***
- ***We also previously requested the Census 2011 Journey to Work Statistics for Middle Super Output Area Medway 018, which was used in the TA to determine mode share for each***

journey purpose separately. Appendix B does not include this; it only includes the directional data for the traffic distribution assessment. <u>This request is still outstanding</u>.

- The geographical extent of the Middle Super Output Area Medway 018 includes streets served by several bus services. Many homes in this area would have a bus stop within a very short distance, served by several bus routes, whereas residents of the proposed site would have to walk much further. This could make a real difference to mode shares and therefore, as commented previously, this methodology could be under-estimating the probable car mode share of the proposal. ***In order to verify the use of this data source for mode share, we would recommend that funding of a bus service within close proximity to most houses of the development (ideally 400 metres, in line with planning guidance) could be secured through a S106 Agreement, in the event that this development is approved in future.***
- ***Overall, we cannot yet agree to the stated trip generation of the TA.***

The March 2020 submission responds as follows:

- Table 4 of the submission summarises the revised AM peak development trips on the SRN.
- Reference is also made to the strategy for improving bus services to the site in section 4.5 of the TA.

Our updated response is as follows:

- The strategy for improving bus services to the site, as in section 4.5 of the TA, is welcomed and should be secured by the S106 Agreement if the proposals are consented. Highways England would like to be consulted on the planning of the strategy, if consent for the development were given.
- As previously requested, we require the Census 2011 Journey to Work Statistics for Middle Super Output Area Medway 018; not just a table of results. We need a link to the dataset on the appropriate online source so that we can assess the source of the data and all assumptions/exclusions etc.
- ***Subject to the above and subject to our comments below under "Development trip distribution"***, the revised AM peak development trips in Table 4 would appear broadly acceptable. However, we still do not agree with the assertion that these trips "*cannot be considered material in the context of the operation of the strategic network*", for the reasons already given above in our updated response to "*Base traffic volumes and growth*".

Development trip distribution

We previously commented as follows:

Different methodologies are applied for different journey purposes. The majority of trips in the critical AM peak are for commuting, business, escorted education and education.

Secondary education trips have been distributed according to the locations of nearby schools and assumed splits between them.

Primary school pupil and staff trips have been distributed according to 2011 Census journey to work data for the Middle Super Output Area (MSOA) of Medway 018.

The commuting and business vehicle trips have also been distributed based on the 2011 Census journey to work data for the Middle Super Output Area (MSOA) of Medway 018.

- We requested the Census 2011 Journey to Work Statistics, to verify the quoted percentages.
- We requested details of the geographical extent of the Middle Super Output Area Medway 018, as this could have quite varied distribution in reality.
- We said that, on receipt of the above information, we will review the distribution further. We will also check that the methodology does not double-count the reduction in trips due to internalisation (as noted under "Development trip generation" above).

The August 2019 submission responded as follows:

- Census 2011 Journey to Work Statistics are provided in Appendix B.
- The geographical extent of the Middle Super Output Area Medway 018 is shown in Image 1.
- The numbers of commuting and business trips are summarised in the August 2019 submission in the table under paragraph 4.2 (which is also Table 47 of the TA). These are determined from the data in Appendix B of the August 2019 submission.

In response, we commented as follows:

- We agree that the geographical extent of the Middle Super Output Area Medway 018 is acceptable for determination of trip distribution (although we have raised concerns above regarding its use for trip *generation*).
- ***We have the following queries regarding the distribution of commuting / business trips in the peak:***
    - ***While the use of Census 2011 Journey to Work directional percentages is reasonable, it is likely that traffic commuting to destinations to the west may use either Junction 2 or Junction 1; we will consider the potential worst case for each junction in our assessment of potential impacts.***
    - ***Regarding the internal Medway locations in Appendix B, we ask that the applicant's agent provide a map of these locations, so that we can assess the accuracy of this methodology.***
- Upon receipt of the above requested information, we will complete our review of the development trip distribution, based on this information.

The March 2020 submission responds as follows:

- The submission again asserts that "*it is unlikely that there will be an impact at junction 2. In any event, if a proportion of journeys take this route this will only reduce the overall impact at other locations*".
- Of the internal Medway locations from Appendix B of the previous August 2019 submission, the March 2020 submission shows the locations of three of them (out of a total of 38).

Our updated response is as follows:

- As we stated above, we cannot assume that there will be no impact at Junction 2.
- We need to consider the potential worst case for *each* junction. They may use Junction 2 *or* they may use other junctions, so we cannot accept that an impact on Junction 2 is acceptable because it reduces the impacts on other junctions. Either situation may happen – we need to plan for each junction's worst-case scenario.
- Furthermore, some traffic may use Junction 2 and other junctions in the same trip.
- We had requested a plan showing the locations of the 38 Medway internal locations listed in the methodology in Appendix B of the previous August 2019 submission; not just the three local ones. We need to assess the accuracy of this methodology for determining the distribution of commuting / business trips in the peak.
- Upon receipt of the above requested information, we will complete our review of the development trip distribution, based on this information.

Modelling

We previously responded as follows:

- No modelling of the SRN has been undertaken; the TA states that this is not considered necessary because the "*the impact on any single link will be a maximum of 30 trips during the peak hour*".
- Please refer back to our above comments on various aspects of the TA's methodology. When these are addressed, we will be in a better position to understand whether or not SRN modelling may be required.
- We need to consider the cumulative impact with committed developments and/or background traffic growth too.
- There is existing congestion at various M2 junctions. Also, the proposal is not in the Local Plan and we therefore need to be particularly careful to assess the impact more thoroughly.
- It may be appropriate to consider this proposal within the Medway Local Plan Traffic Modelling. This is still under development, and Highways England are involved in this process.
- The number of additional trips at a junction is more important than the additional trips on a *link*, due to the interaction of links at a junction.

The August 2019 submission does not address this, and instead maintains that, based on the forecast additional traffic onto the M2, a detailed assessment of the SRN is not warranted.

In response, re-iterate that we have outstanding concerns regarding the methodology of the assessment; and therefore, our previous comments on modelling still apply.

The March 2020 submission responds as follows:

- *"Based on the forecast traffic impact on the strategic road network, which is modest, it is not considered junction modelling is warranted."*
- *"Medway have undertaken their own modelling on the surrounding network using their AIMSUN model which includes the strategic road network (Subnetwork 1). They have confirmed that only subnetworks 2, 3 and 7 experience any material change on flows and therefore the strategic road network is not affected."*

Our updated response is as follows:

- For our reasons given elsewhere in this response, we do not have certainty that the impact on the strategic road network is modest; junction modelling is therefore warranted.
- We need further detail on the Medway model, particularly in support of the statement that "*only subnetworks 2, 3 and 7 experience any material change on flows*". In what growth and development scenarios, which time periods and years? And how is a "material change" defined in this instance?
- Even if Medway's modelling showed no material change in flows on the SRN, the addition of the development traffic on top could be a material impact, especially as the model shows that there is already a need for mitigation at all SRN junctions without this development.
- ***All our previous comments on modelling still apply***.

Mitigation

We previously commented as follows:

We will consider the need, if any, for mitigation measures when the above comments and queries have been addressed and we are in a position to understand fully the potential SRN impacts.

We may also comment on construction traffic impact, if appropriate, which could be addressed by a construction traffic management plan.

The March 2020 submission does not respond to this at all.

Our response remains the same.

Summary and Conclusions

Overall, we remain of the view that the development has the potential to result in a significant amount of AM and PM peak hour trips, and there is not yet a definite indication of the impact upon the SRN. We therefore cannot determine if the proposal will materially affect the safety, reliability and / or operation of the SRN (the tests set out in DfT Circular 02/13, particularly paragraphs 9 & 10, and DCLG NPPF, particularly para 109).

Please note that this email does not constitute a formal recommendation from Highways England. We will provide a formal recommendation when we can be confident that the application is in its final form. In the meantime, we would ask that **the planning authority does not determine the application** (other than a refusal), ahead of us receiving and responding to the required/requested information. In the event that the authority wishes to permit the application before this point, we would ask the authority to inform us so that we can provide substantive response based on the position at that known time**.**

You will note that I have also copied our response to the applicant's agents and transport advisors. If they or you have any queries, please contact us at planningse@highwaysengland.co.uk.

Kind regards,

David
David Bowie

Area 4 Spatial Planning Manager (Acting)
Tel: +44 (0) 7900 056130
Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ
Web: http://www.highwaysengland.co.uk
Please note that for the foreseeable future we are all working from home. All meetings will be via telephone, Skype or similar. We will continue to seek to work to our statutory and other deadlines. In case of IT or other issues, as a precaution, please copy all emails to PlanningSE@highwaysengland.co.uk **. Thank you.**

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Developments Affecting Trunk Roads and Special Roads

Highways England Planning Response (HEPR 16-01)
Formal Recommendation to an Application for Planning Permission

From: Nicola Bell (Regional Director, South East)
Operations Directorate
South East Region
Highways England
PlanningSE@highwaysengland.co.uk

To: Swale Borough Council (FAO Case Officer: Hannah Gunner)
hannah.gunner@medway.gov.uk

CC: transportplanning@dft.gsi.gov.uk
growthandplanning@highwaysengland.co.uk

Council's Reference: MC/19/1566

Location: Land Off Pump Lane Rainham Kent ME8 7TJ

Proposal: Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

Highways England Ref: 85118

Referring to the planning application (original consultation received dated 28 June 2019) referenced above, in the vicinity of the M2 Motorway near the Medway Towns that forms part of the Strategic Road Network, notice is hereby given that Highways England's formal recommendation is that we:

~~a) offer no objection;~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – Highways England recommended Planning Conditions);~~

~~c) recommend that planning permission not be granted for a specified period (see Annex A – further assessment required);~~

d) recommend that the application be refused (see Annex A – Reasons for recommending Refusal).

Highways Act Section 175B (covering access to the SRN) is not relevant to this application.[1]

HIGHWAYS ENGLAND ("we") have been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

This represents Highways England's formal recommendation (prepared by the Area 4 Spatial Planning Team) and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority disagree with any recommendation made under b), c) or d) above, the application must not be determined before they have:

i) informed Highways England; and

ii) consulted the Secretary of State for Transport, as per the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gsi.gov.uk

Signature: 	**Date:** 05/06/2020
Name: Lara Southam	**Position:** Head of Planning & Development (South East)
Highways England: Bridge House, Walnut Tree Close, Guildford, GU1 4LZ PlanningSE@highwaysengland.co.uk	

[1] Where relevant, further information will be provided within Annex A.

Annex A Highways England Reason for Refusal

We recommend that application MC/19/1566 Land Off Pump Lane Rainham Kent ME8 7TJ is refused for the following reason:

1. That the applicant has failed to provide sufficient, robust information to demonstrate that the traffic and transport impacts of the proposed development will not have a detrimental impact on the reliability, operation and/or safety of the Strategic Road Network, contrary to the policy and tests set out in DfT C2/13 paragraphs 9 & 10 and MHCLG NPPF paragraph 109.

History of Highways England Engagement with the Applicants Consultants

Highways England initially reviewed the following document related to this application and responded on 17 July 2019:

- David Tucker Associates, 21 March 2019, *Land at Pump Farm and Bloors Farm, Lower Rainham, Final Transport Assessment* ("the TA").

  Highways England expressed concerns with the applicants regarding:
  - base traffic volumes and growth,
  - the inclusion of Committed developments within the assessment,
  - the development trip generation and distribution used,
  - the Modelling of the development and its impacts
  - the identification and testing of any identified highway mitigations to achieve a tolerable impact on the Strategic Road Network.

We then received the following document, which we reviewed in our response of 31 October 2019:

- David Tucker Associates, 14 August 2019, *Land at Pump Farm and Bloors Farm, Lower Rainham, Response to Highways England* ("the August 2019 submission").

  All the previous identified issues of concern within the applicant's assessment of the 21st March 2019 remained outstanding as they had not been satisfactorily resolved.

Subsequently, we received the following document on 2 April 2020, which we reviewed and responded to on the 23 April 2020:

- David Tucker Associates, 5 March 2020, *Land at Pump Farm and Bloors Farm, Lower Rainham, Second Response to Highways England* ("the March 2020 submission").

  All of the previous identified issues of concern within the applicant's assessments and responses to Highways England remained outstanding. To date the following matters have yet to be resolved:

  - Base traffic volumes and growth,
  - the inclusion of Committed developments within the assessment,
  - the development trip generation and distribution used,
  - the Modelling of the development and its impacts

- the identification and testing of any identified highway mitigations to achieve a tolerable impact on the Strategic Road Network.

We have been asked by Medway council to provide a formal response to enable them to determine the application.

The above represents our current recommendation. If either the Council does not determine the application, or it is appealed, we stand ready to work with all parties to receive, assess and respond to any evidence seeking to address our concerns. We therefore reserve the right to add to or amend the above recommendation as necessary or appropriate. Equally we stand ready to participate, as required, in any appeal to support our recommendation.

Appendix C

Jacqueline Aggiss

From: Simon Tucker
Sent: 19 August 2020 15:02
To: Jenkins, Daniel; Jacqueline Aggiss; David.Bowie@highwaysengland.co.uk; Bown, Kevin
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ
Attachments: Nomis JtW 2011 Medway 018.xlsx; Routes to SRN.pdf; Journey to Work Distribution_RevA.xlsx

Thank you Dan,

Further to our meeting on Monday, I attach further information on the two outstanding points we discussed on the traffic generation and assignment.

1. The link to data is direct but the origin for the journey to work dataset is from the Nomis website (https://www.nomisweb.co.uk/census/2011/wu03ew) Following the link you then click "query data" on the left side and then chose method of travel to work, select all columns. Under Place of Work select 2011 Super Output Area – mid layer and then click all. The usual residence and then select Medway 018. And then get data. If you want us to talk that through on a call let me know. I attach the full dataset from their website which includes the relevant dataset number.

2. We have further reviewed the traffic distribution in accordance with your comments re. movements through Junction 2. Trips to Tonbridge and Malling would be most directly accessed via junctions 4 and 3 as shown. We have also reviewed the other destinations assigned to junction 1 and our view is that it would be very unlikely that trips would route through Chatham on the A2, across the river and then down Cuxton Road (A228 which is for a significant part residential) to join the M2 a junction earlier (which is to the south and in the wrong direction). If traffic did route this way rather than along the A289 to the north, they would continue on the A2 and join at junction 1. Overall, therefore we would argue that no traffic would use junction 2 from the site for access to the SRN. However some movements might take place on the A228 (across the motorway) to reach Tonbridge and Malling and we have reflected these below.

3. In your response you queried the locations with specific assignment to the SRN. These are all very small percentages and have therefore been combined into the "other" category. They are therefore all taken into account in the numbers below. For these we assigned them all to the M2 with 90% of traffic via Junction 1 and 10% via Junctions 3 and 4 on the basis the majority of traffic to destinations further afield is to/from London and the north west. In reviewing that we have realised that the junctions 3 and 4 traffic from "others" was added twice. We have corrected this and now there is a slight reduction in number below from what you have seen before. I attach a revised spreadsheet.

I trust this address the outstanding queries and that we can agree the overall impact at each of the junctions. If you would like a quick call to go through these please let me know?

Kind regards

Simon Tucker
David Tucker Associates
Transport Planning Consultants

Forester House, Doctors Lane, Henley in Arden, Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983

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From: Jenkins, Daniel <Daniel.Jenkins2@wsp.com>
Sent: 17 August 2020 12:59
To: Jacqueline Aggiss <JA@dtatransportation.co.uk>; David.Bowie@highwaysengland.co.uk; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>; Simon Tucker <SJT@dtatransportation.co.uk>
Subject: FW: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Hi All,

As discussed, this is the draft response to the 30 April email from DTA.

Kevin and Dave – remember that it includes actions for Medway Council.

Thanks,

Daniel Jenkins – *BSc (Hons) MSc MCIHT*
Principal Transport Planner

T: 01483 358 630
daniel.jenkins2@wsp.com

Please note that, from week commencing 3rd August 2020 onwards, I will be working Mondays to Thursdays only.

2, London Square,
Cross Lanes,
Guildford
GU1 1UN

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From: Jenkins, Daniel
Sent: 13 May 2020 20:13
To: Bowie, David <David.Bowie@highwaysengland.co.uk>
Cc: Bradley, Alistair <Alistair.Bradley@highwaysengland.co.uk>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Dave / Kevin,

Please see attached draft response.

Regards,

Daniel Jenkins – *BSc (Hons) MSc MCIHT*
Principal Transport Planner

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-LAEmHhHzdJzBlTWfa4Hgs7pbKl

Jacqueline Aggiss

From: Bowie, David <David.Bowie@highwaysengland.co.uk>
Sent: 11 September 2020 19:16
To: Simon Tucker; Jacqueline Aggiss
Cc: Planning SE; Jenkins, Daniel; Bown, Kevin; Bradley, Alistair; gunner, hannah
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Good evening Simon,

Daniel Jenkins (WSP) has reviewed the outstanding matters in relation to the potential impacts to the Strategic Road Network. We note that the information/response sent to us on the 30 April 2020 was not copied Medway Council Planning dept., presumably because the site is not at appeal following refusal. Also the council will be unaware of our discussions on the 17 August and the information sent prior on the 14 August. For completeness and transparency I will copy these to the councils case officer Hannah Gunner. to as follows:

Highways England ("we") have been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and are the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

We will be concerned with proposals that have the potential to impact on the safe and efficient operation of the SRN. In this case our interest relates to the M2, and potentially the A2, A249 and M20.

The comments of Daniels review of the latest information/understanding pertaining to the proposals is set out in line with previous responses. I would be grateful if you could review and address the following:

History of the Proposal

Initially, we reviewed the following document related to this application and responded on 17 July 2019:

- David Tucker Associates, 21 March 2019, *Land at Pump Farm and Bloors Farm, Lower Rainham, Final Transport Assessment* ("the TA").

We then received the following document, which we reviewed in our response of 31 October 2019:

- David Tucker Associates, 14 August 2019, *Land at Pump Farm and Bloors Farm, Lower Rainham, Response to Highways England* ("the August 2019 submission").

We then received the following document on 2 April 2020, which we reviewed in our response of 23 April 2020:

- David Tucker Associates, 5 March 2020, *Land at Pump Farm and Bloors Farm, Lower Rainham, Second Response to Highways England* ("the March 2020 submission").

Subsequently, we received the following documents on 30 April 2020 and 14 and 17 August 2020, which we review in this current response:

- Email from David Tucker Associates, 30 April 2020, Subject: *MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ*, with two PDF attachments and one Excel attachment ("the April 2020 submission").

- Email from David Tucker Associates, 19 August 2020, Subject: *RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ*, with two Excel attachments and one PDF attachment. (The August 2020 submission").

Review of the April 2020 and August 2020 Submissions

I refer to our previous response of 23 April which has resulted in the April 2020 and August 2020 submissions from David Tucker Associates. Our response to those April and August 2020 submissions is only where I consider that our original concerns/requests have not been adequately addressed and therefore remain issues of concern.

For ease of reference, the following comments in this section are colour-coded as follows:

- Our 23 April 2020 (summarised) response text in black;
- The applicant's April 2020 and August 2020 submissions (where relevant to the outstanding points) in green; and
- Our updated response in red.

Base traffic volumes

We previously commented as follows (in summary):

- We requested details of base traffic data for the SRN.
- We said that we cannot yet be confident that the "*impact of the proposals on base traffic levels on the M2 will be indiscernible"* (as claimed by the applicant).
- If we reach agreement on the other parameters of this assessment, it should be noted that ***a reduced percentage impact of the development traffic, due to background traffic growth, is not necessarily an acceptable argument against further assessment.*** Where there is existing congestion, a small proportional impact can make a large difference, as a small volume of traffic would consume a large proportion of any available capacity (if any capacity is available).
- Even if we assume the Table 1 development trips from the March 2020 submission[1] to be accurate, the impact *on any given approach* would be up to one vehicle every two minutes; however, the impact within the junctions would be higher. Traffic from the different approaches interacts within the junctions, so we need to consider the combined volumes as well as the link volumes.
- The assumption that these volumes "*cannot be considered to be material"* needs to be supported with evidence, for the volumes on the links and within the junctions. Such volumes may seem small but – as mentioned before – where there is existing congestion, a small proportional impact can make a large difference, as a small volume of traffic would consume a large proportion of any available capacity (if any capacity is available). Our view is that any impact on a severely congested network is in itself severe as the additional traffic will only serve to increase vehicle delay, journey times and queue lengths.
- The current Medway modelling is showing need for mitigation at all SRN junctions; this development – which is outside the Local Plan – then further adds to this, so we still need to understand more fully the impact of this traffic.
- If we permitted every development that adds a "small, immaterial" amount of traffic to a junction, these all add up; as is demonstrated by the need for mitigation even before this development's traffic is added.
- The March 2020 submission states that "*it is unlikely that Junction 2 of the M2 will be impacted as the main destinations would preclude the use of this junction*" but this needs further supporting evidence.
- While an assessment *might* potentially demonstrate that our concerns are unfounded (or relatively less of a concern than we thought), we need to see such an assessment in order to decide on this.

- Please also see our other comments further below regarding growth, trip generation and distribution.

The April and August 2020 submission responds as follows:

- In response to our point that "The current Medway modelling is showing need for mitigation at all SRN junctions; this development – which is outside the Local Plan – then further adds to this, so we still need to understand more fully the impact of this traffic": the applicant responds that "*HE to provide assessment*".
- In response to our point that "The March 2020 submission states that "*it is unlikely that Junction 2 of the M2 will be impacted as the main destinations would preclude the use of this junction*" but this needs further supporting evidence": the applicant responds that they will review upon receipt of HE's review of trip assignment.

Our updated response is as follows:

- Please see our various other comments under the subsequent sections below.
- **Our previous comments on base traffic volumes therefore still apply, at least until our other queries have been addressed. We might be able to review our position following resolution of our other queries.**

Committed developments

We previously commented as follows (in summary):

- We need some details of the TEMPRO growth for the SRN in order to determine their accuracy and also then to assess the validity of the point in paragraphs 6.1.4 and 6.1.5 of the TA, i.e. the assertion that no account needs to be made of the committed development traffic because TEMPRO growth already accounts for a greater level of growth.
- We agreed with the general principle that TEMPRO growth can subsume committed development traffic. ***However, in this particular case we cannot be certain that this applies until we review the TEMPRO output (as previously requested, for strategic roads), so we can verify if the selection parameters are accurate, in particular the study area extent (and potentially other parameters). Also, the growth factors for SRN and urban roads separately should be provided.***
- Our own TEMPRO query – using the parameters that the applicant used in the March 2020 submission – produced quite different results to those in the March 2020 submission; we therefore requested a screenshot of the applicant's TEMPRO query, to verify the results.
- We provided a screenshot of our own TEMPRO query for the PM peak.
- The Medway 018 study area is a very small local area around the development site, as shown in this link: http://statistics.data.gov.uk/atlas/resource?uri=http://statistics.data.gov.uk/id/statistical-geography/E02003331
- As we are concerned with the *background* traffic on the SRN, it would be appropriate to expand the study area further.
- We ask that Medway Council confirm the applicant's statement that Medway Council "*have confirmed in a meeting on 28th October 2019 that the list of committed developments in the TA are appropriate*."

The April and August 2020 submission responds as follows:

- In response to our request for a screenshot of the applicant's TEMPRO query, to verify the results: the applicant have provided TEMPRO screenshots and they comment that there is "*No material difference in growth*".
- In response to our concern that the Medway 018 study area in TEMPRO is a very small local area and that it would be appropriate to expand the study area further: the applicant provided screenshots of TEMPRO re-run for Medway which show that "*overall growth is lower*".

- In response to our request that Medway Council confirm the applicant's statement that Medway Council "*have confirmed in a meeting on 28th October 2019 that the list of committed developments in the TA are appropriate*", the applicant attached meeting notes and Medway's draft response, with the additional comment that it should be highlighted that "*the question is for Medway planners*."

Our updated response is as follows:

- The TEMPRO outputs for Medway, as shown on pages 1 and 2 of the PDF "*Additional info for HE*" in the April 2020 submission, are acceptable, including the selection parameters, for ten-year growth.
- Furthermore, we are content that the TEMPRO subsumes the committed development listed in Paragraph 6.1.3 of the TA (and therefore that no account needs to be made of these committed developments), ***subject to Medway Council's confirmation that this list of committed developments is appropriate for this assessment. Therefore, we will ask Medway to confirm if the following list of committed developments was agreed at the meeting on 28th October:***
    - Site 1 – Land at Station Road, Rainham, Kent ME8 7QZ – 90 Units.
    - Site 3 – Land North of Moor Street, Rainham – 190 Units.
    - Site 4 – Land at Otterham Quay Lane Rainham Kent – 300 Units.
    - Site 6 – Berengrave Nursery, Berengrave Lane, Rainham, Gillingham ME8 7NL – 121 Units.
    - Site C – Land South of Lower Rainham Road Rainham Gillingham Medway ME8 7UD – 202 Units.

Development trip generation

We previously commented as follows (in summary):

- The strategy for improving bus services to the site, as in Section 4.5 of the TA, is welcomed and should be secured by the S106 Agreement if the proposals are consented. Highways England would like to be consulted on the planning of the strategy, if consent for the development were given.
- As previously requested, we require the Census 2011 Journey to Work Statistics for Middle Super Output Area Medway 018; not just a table of results. We need a link to the dataset on the appropriate online source so that we can assess the source of the data and all assumptions/exclusions etc.
- ***Subject to the above and subject to our comments below under "Development trip distribution"***, the revised AM peak development trips in Table 4 of the March 2020 submission would appear broadly acceptable. However, we still do not agree with the assertion that these trips "*cannot be considered material in the context of the operation of the strategic network*", for the reasons already given above in our updated response to "*Base traffic volumes and growth*".

The April and August 2020 submission responds as follows:

- In response to our request that the strategy for improving bus services to the site be secured by the S106 Agreement, and for Highways England to be consulted on the planning of the strategy, if consent for the development were given: the applicant confirm they are happy for HE to input to the strategy at detailed design stage .
- In response to our comment that we still do not agree with the assertion that these trips "*cannot be considered material in the context of the operation of the strategic network*", for the reasons already given above in our updated response to "*Base traffic volumes and growth*": the applicant state that "*trip generation is agreed*" as well as making reference to points that are responded to under "Modelling".
- In response to our request for the Census 2011 Journey to Work Statistics for Middle Super Output Area Medway 018, including a link to the appropriate online dataset so that we can assess the source of the data and all assumptions/exclusions etc.: the applicant re-submitted in April the same

spreadsheet as before. However, in the August 2020 submission, they submitted more details including a link to the data source – the Journey to Work dataset from https://www.nomisweb.co.uk/census/2011/wu03ew – and the criteria they used in the selection, as follows:

- Click 'query data';
- Method of travel to work: select all columns;
- Place of Work: select 2011 Super Output Area – mid layer; and click All on drop-down menu to the left;
- Usual residence: select Medway 018.

Our updated response is as follows:

- We gratefully acknowledge the applicant's agreement to discuss the strategy for improving bus services to the site at the detailed design stage. If planning consent is given, we will ensure the bus strategy, and HE's involvement, are included within the S106 Agreement.
- We have reviewed the Census 2011 Nomis data for mode shares of journeys to work from Middle Super Output Area Medway 018, and can comment as follows:
  - We have reviewed the descriptions of the data on the above Nomis website to ensure that this data source is an appropriate way to determine mode share, i.e. that there are no assumptions/exclusions that would be inapplicable in this case. As a result of this review, we conclude that this is an appropriate way to determine peak-period journey-to-work mode share for the development site, subject to the following comment.
  - The development site is located in Medway 018 MSOA; and this MSOA is a sufficiently small area that the travel characteristics can be expected to be reasonably similar across this area, ***subject to the improvement of bus services to the site (which, as mentioned above, will be secured by S106). Bus services to the site should be improved at least to the level of provision elsewhere in Medway 018 MSOA.***
  - Table 19 of the TA correctly records the Journey to Work observed modal share (Census 2011) to all destinations, based on the Nomis data.
- ***Therefore, subject to the bus service improvements and to our comments below under "Development trip distribution"***, the revised AM peak development trips in Table 4 of the March 2020 submission (*"Forecast Strategic Network Impact 07:00-08:00*") would appear broadly acceptable.

Development trip distribution

We previously commented as follows (in summary):

- The commuting and business vehicle trips have been distributed based on the 2011 Census journey to work data for the Middle Super Output Area (MSOA) of Medway 018.
  - We requested the Census 2011 Journey to Work Statistics, to verify the quoted percentages. This was then provided in Appendix B of the August 2019 submission.
  - The numbers of commuting and business trips are summarised in the August 2019 submission in the table under paragraph 4.2 (which is also Table 47 of the TA). These are determined from the data in Appendix B of the August 2019 submission.
- We had the following queries regarding the distribution of commuting / business trips in the peak (including some points made on the April 2020 submission which were answered in the August submission):
  - While the use of Census 2011 Journey to Work directional percentages is reasonable, it is likely that traffic commuting to destinations to the west may use either Junction 2 or Junction 1; we will consider the potential worst case for each junction in our assessment of potential impacts. We cannot assume that there will be no impact at Junction 2.

- We need to consider the potential worst case for *each* junction. They may use Junction 2 *or* they may use other junctions, so we cannot accept that an impact on Junction 2 is acceptable because it reduces the impacts on other junctions. Either situation may happen – we need to plan for each junction's worst-case scenario.
- Furthermore, some traffic may use Junction 2 and other junctions in the same trip.
- We had requested a plan showing the locations of the 38 Medway internal locations listed in the methodology in Appendix B of the previous August 2019 submission; not just the three local ones. We need to assess the accuracy of this methodology for determining the distribution of commuting / business trips in the peak.
- Upon receipt of the above requested information, we will complete our review of the development trip distribution, based on this information.
- We raised a concern that junction 1 traffic may use junction 2 instead of or in addition to junction 1, and that Tonbridge and Malling trips may use junction 2.
- We had raised a point that in Sheet 1 of the Excel file "*Journey to Work Distribution*" in the April 2020 submission, there were several locations without any specific assignment to the SRN shown; many of which would actually use the SRN.

The April and August 2020 submissions respond as follows:

- In response to our request for a plan showing the locations of the 38 Medway internal locations listed in the methodology in Appendix B of the previous August 2019 submission in order to assess the accuracy of this methodology for determining the distribution of commuting / business trips in the peak: this has been provided.
- In response to our various comments that there could be an impact at Junction 2: the applicant refers to the plan of the 38 Medway internal locations; HE are to review this and respond.
- The August 2020 submission provided more detail on the distribution which can be summarised as follows:
  - In response to a concern that junction 1 traffic may use junction 2 instead of or in addition to junction 1, the submission argues that "*it would be very unlikely that trips would route through Chatham on the A2, across the river and then down Cuxton Road (A228 which is for a significant part residential) to join the M2 a junction earlier (which is to the south and in the wrong direction). If traffic did route this way rather than along the A289 to the north, they would continue on the A2 and join at junction 1*."
  - "*Trips to Tonbridge and Malling would be most directly accessed via junctions 4 and 3 as shown."*
  - The submission concludes that "*Overall, therefore we would argue that no traffic would use junction 2 from the site for access to the SRN".*
  - *"However, some movements might take place on the A228 (across the motorway) to reach Tonbridge and Malling".*
  - We had raised a point that in Sheet 1 of the Excel file "*Journey to Work Distribution*" in the April 2020 submission, there were several locations without any specific assignment to the SRN shown. In response, the August submission argues that the locations without specific assignment to the SRN are "*very small percentages*" and have therefore been combined into the "other" category. These were all assigned to the M2 with 90% of traffic via Junction 1 and 10% via Junctions 3 and 4 on the basis the majority of traffic to destinations further afield is to/from London and the north west.
  - *"In reviewing that we have realised that the junctions 3 and 4 traffic from 'others' was added twice. We have corrected this and now there is a slight reduction in number below from what you have seen before".* A revised spreadsheet was provided to reflect this.

Our updated response is as follows:

- We have checked the internal locations as provided in the April 2020 submission; the only such location that appears likely to attract trips via the SRN is Medway 028.

- We have also checked the distribution, as given in Appendix B of the August 2019 submission, more fully. This is also shown in the Excel file "*Journey to Work Distribution*" provided in the April 2020 submission. We have the following comments:
    - As requested under "*Development trip generation*" above, we request a link to the appropriate online source for the Census 2011 Journey to Work Statistics for Middle Super Output Area Medway 018.
    - Having examined the routes further, we concede and agree with the points that Junction 1 traffic would be highly unlikely to use Junction 2 either instead of or in addition to Junction 1.
    - We also concede that trips to Tonbridge and Malling would use junctions 3 and 4 or cross the motorway using the A228 at junction 2. In the latter case, this may apply to more than just Tonbridge and Malling trips; but the key point is that these movements across the motorway will impact on a junction of motorway *access* roads over 300 metres from the mainline carriageway of the motorway. Therefore, the impacts will not be severe.
    - Those locations without any specific SRN – excluding 'Medway' which would not need to use the SRN – make up 14.28% of the total "Sum of Driving a car or van" for locations in Sheet 1 of the 'Journey to Work Distribution' Excel file of the April 2020 submission. This is small enough that we can concede on the point that the assignment of these trips to junction 1 (90%) and junctions 3 and 4 (10%) is acceptable, as any variation from this will not have large impact on the assessment.
    - Overall, we concede that the traffic distribution – in Sheet 1 of the 'Journey to Work Distribution' Excel file of the April 2020 submission – is acceptable for the assessment.
    - Therefore, subject to the bus service improvements noted above under "Development Trip Generation", the revised AM peak development trips in Table 4 of the March 2020 submission ("*Forecast Strategic Network Impact 07:00-08:00*") and Table 47 of the TA for the PM peak *("Traffic Impact at the M2 Junctions")* appear broadly acceptable.
    - However, we still do not agree with the assertion that these trips "*cannot be considered material in the context of the operation of the strategic network*", for the reasons already given above in our updated response to "*Base traffic volumes and growth*".

Modelling

We previously responded as follows (in summary):

- No modelling of the SRN has been undertaken; the TA states that this is not considered necessary because the "*the impact on any single link will be a maximum of 30 trips during the peak hour*".
- Please refer back to our above comments on various aspects of the assessment's methodology. When these are addressed, we will be in a better position to understand whether or not SRN modelling may be required.
- We need to consider the cumulative impact with committed developments and/or background traffic growth too.
- There is existing congestion at various M2 junctions. Also, the proposal is not in the Local Plan and we therefore need to be particularly careful to assess the impact more thoroughly.
- It may be appropriate to consider this proposal within the Medway Local Plan Traffic Modelling. This is still under development, and Highways England are involved in this process.
- The number of additional trips at a junction is more important than the additional trips on a *link*, due to the interaction of links at a junction.
- For our reasons given elsewhere in this response, we do not have certainty that the impact on the strategic road network is modest; junction modelling is therefore warranted.
- We requested further detail related to the applicant's comment on the Medway model, in the March 2020 submission, that "*only subnetworks 2, 3 and 7 experience any material change on flows*" [the

March 2020 submission also said that SRN is Subnetwork 1]. In what growth and development scenarios, which time periods and years? And how is a "material change" defined in this instance?

- Even if Medway's modelling showed no material change in flows on the SRN, the addition of the development traffic on top could be a material impact, especially as the model shows that there is already a need for mitigation at all SRN junctions without this development.

The April and August 2020 submission responds as follows:

- In response to our requests for further details related to the applicant's comments that *only subnetworks 2, 3 and 7 experience any material change on flows*": the applicant say that "*DTA have asked Medway to provide this and they refused*".
- In response to our comment that even if Medway's modelling showed no material change in flows on the SRN, the addition of the development traffic could be a material impact, especially as the model shows that there is already a need for mitigation at all SRN junctions without this development: the applicant request that HE provide an assessment (as Medway refused to give them details).

Our updated response is as follows:

- HE will request that Medway Council provide HE with the requested information above.
- Please also see our various other comments under other sections above.
- **Modelling may still be required although we might be able to review our position following resolution of our other queries.**
- **When considering any traffic modelling, it should be noted that Medway Services are inappropriately used as a junction; however, any modelling must not be assigning any traffic through the Services in place of an actual junction even if this currently happens in practice, as it is hoped that this practice will be stopped.**

Mitigation

We previously commented as follows:

- We will consider the need, if any, for mitigation measures when the above comments and queries have been addressed and we are in a position to understand fully the potential SRN impacts.
- We may also comment on construction traffic impact, if appropriate, which could be addressed by a construction traffic management plan.

The April and August 2020 submission does not respond to this.

This will be discussed when the above comments and queries from the previous sections have all been addressed. There may still be a requirement for mitigation.

One form of mitigation that will be required is the agreed improvement of bus services which will be secured by a S106 Agreement. Bus services to the site should be improved at least to the level of provision elsewhere in Medway 018 MSOA.

There may be other required mitigation also.

Summary and Conclusions

Overall, we remain of the view that the development has the potential to result in a significant amount of AM and PM peak hour trips, and there is not yet a definite indication of the impact upon the SRN. We therefore cannot determine if the proposal will materially affect the safety, reliability and / or operation of the SRN (the tests set out in DfT Circular 02/13, particularly paragraphs 9 & 10, and DCLG NPPF, particularly para 109).

However, resolution of remaining concerns is mostly dependent on provision of the requested information from Medway Council, as noted elsewhere in this response.

As noted in Daniels comments above, whilst we have moved closer in relation to concluding the impacts of the proposed development there are a number of issues still to resolve. However, I consider that sufficient progress has been made for you to begin putting together a statement of common ground which should be between ourselves and also include Medway Council's highway dept.

You will note that I have copied our response to the Medway Council so they are aware of our progress and can hopefully provide us with the information we require directly from them. If they or you have any queries, please contact us at planningse@highwaysengland.co.uk

Kind regards,

David

David Bowie
Area 4 Spatial Planning Manager (Acting)
Tel: +44 (0) 7900 056130
Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ
Web: http://www.highwaysengland.co.uk
Please note that for the foreseeable future we are all working from home. All meetings will be via telephone, Skype or similar. We will continue to seek to work to our statutory and other deadlines. In case of IT or other issues, as a precaution, please copy all emails to PlanningSE@highwaysengland.co.uk . Thank you.

From: Simon Tucker [mailto:SJT@dtatransportation.co.uk]
Sent: 04 September 2020 11:17
To: Jenkins, Daniel <Daniel.Jenkins2@wsp.com>; Jacqueline Aggiss <JA@dtatransportation.co.uk>; Bowie, David <David.Bowie@highwaysengland.co.uk>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Hi Daniel,
Any news on this please?
Thanks

Kind regards

Simon Tucker
David Tucker Associates
Transport Planning Consultants

Forester House, Doctors Lane, Henley in Arden, Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983

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From: Jenkins, Daniel <Daniel.Jenkins2@wsp.com>
Sent: 26 August 2020 10:46
To: Simon Tucker <SJT@dtatransportation.co.uk>; Jacqueline Aggiss <JA@dtatransportation.co.uk>;

David.Bowie@highwaysengland.co.uk; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Thanks Simon; I'm working on our updated response now

Daniel Jenkins – *BSc (Hons) MSc MCIHT*
Principal Transport Planner

T: 01483 358 630
daniel.jenkins2@wsp.com

I will be on annual leave during w/c 31 August 2020.

Please also note that, from week commencing 3rd August 2020 onwards, I will be working Mondays to Thursdays only.

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From: Simon Tucker <SJT@dtatransportation.co.uk>
Sent: 26 August 2020 10:45
To: Jenkins, Daniel <Daniel.Jenkins2@wsp.com>; Jacqueline Aggiss <JA@dtatransportation.co.uk>; David.Bowie@highwaysengland.co.uk; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Daniel,
Thank you – look forward to hearing from you. I have in the meantime drafted notes of the meeting for agreement as attached.

Kind regards

Simon Tucker
David Tucker Associates
Transport Planning Consultants

Forester House, Doctors Lane, Henley in Arden, Warwickshire B95 5AW
Tel: +44(0)1564 793598
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From: Jenkins, Daniel <Daniel.Jenkins2@wsp.com>
Sent: 19 August 2020 15:07
To: Simon Tucker <SJT@dtatransportation.co.uk>; Jacqueline Aggiss <JA@dtatransportation.co.uk>; David.Bowie@highwaysengland.co.uk; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Thank you Simon.

I will take a look at these very soon. I'm tied up with other work today and possibly tomorrow, but next week should be OK.

Regards,

Daniel Jenkins – *BSc (Hons) MSc MCIHT*
Principal Transport Planner

T: 01483 358 630
daniel.jenkins2@wsp.com

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From: Simon Tucker <SJT@dtatransportation.co.uk>
Sent: 19 August 2020 15:02
To: Jenkins, Daniel <Daniel.Jenkins2@wsp.com>; Jacqueline Aggiss <JA@dtatransportation.co.uk>; David.Bowie@highwaysengland.co.uk; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Thank you Dan,

Further to our meeting on Monday, I attach further information on the two outstanding points we discussed on the traffic generation and assignment.

1. The link to data is direct but the origin for the journey to work dataset is from the Nomis website (https://www.nomisweb.co.uk/census/2011/wu03ew) Following the link you then click "query data" on the left side and then chose method of travel to work, select all columns. Under Place of Work select 2011 Super Output Area – mid layer and then click all. The usual residence and then select Medway 018. And

then get data. If you want us to talk that through on a call let me know. I attach the full dataset from their website which includes the relevant dataset number.

2. We have further reviewed the traffic distribution in accordance with your comments re. movements through Junction 2. Trips to Tonbridge and Malling would be most directly accessed via junctions 4 and 3 as shown. We have also reviewed the other destinations assigned to junction 1 and our view is that it would be very unlikely that trips would route through Chatham on the A2, across the river and then down Cuxton Road (A228 which is for a significant part residential) to join the M2 a junction earlier (which is to the south and in the wrong direction). If traffic did route this way rather than along the A289 to the north, they would continue on the A2 and join at junction 1. Overall, therefore we would argue that no traffic would use junction 2 from the site for access to the SRN. However some movements might take place on the A228 (across the motorway) to reach Tonbridge and Malling and we have reflected these below.

3. In your response you queried the locations with specific assignment to the SRN. These are all very small percentages and have therefore been combined into the "other" category. They are therefore all taken into account in the numbers below. For these we assigned them all to the M2 with 90% of traffic via Junction 1 and 10% via Junctions 3 and 4 on the basis the majority of traffic to destinations further afield is to/from London and the north west. In reviewing that we have realised that the junctions 3 and 4 traffic from "others" was added twice. We have corrected this and now there is a slight reduction in number below from what you have seen before. I attach a revised spreadsheet.

I trust this address the outstanding queries and that we can agree the overall impact at each of the junctions. If you would like a quick call to go through these please let me know?

Kind regards

Simon Tucker
David Tucker Associates
Transport Planning Consultants

Forester House, Doctors Lane, Henley in Arden, Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983

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From: Jenkins, Daniel <Daniel.Jenkins2@wsp.com>
Sent: 17 August 2020 12:59
To: Jacqueline Aggiss <JA@dtatransportation.co.uk>; David.Bowie@highwaysengland.co.uk; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>; Simon Tucker <SJT@dtatransportation.co.uk>
Subject: FW: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Hi All,

As discussed, this is the draft response to the 30 April email from DTA.

Kevin and Dave – remember that it includes actions for Medway Council.

Thanks,

Daniel Jenkins – *BSc (Hons) MSc MCIHT*
Principal Transport Planner

T: 01483 358 630
daniel.jenkins2@wsp.com

Please note that, from week commencing 3rd August 2020 onwards, I will be working Mondays to Thursdays only.

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From: Jenkins, Daniel
Sent: 13 May 2020 20:13
To: Bowie, David <David.Bowie@highwaysengland.co.uk>
Cc: Bradley, Alistair <Alistair.Bradley@highwaysengland.co.uk>; Bown, Kevin <Kevin.Bown@highwaysengland.co.uk>
Subject: RE: MC/19/1566 - Land Off Pump Lane, Rainham, Kent, ME8 7TJ

Dave / Kevin,

Please see attached draft response.

Regards,

Daniel Jenkins – *BSc (Hons) MSc MCIHT*
Principal Transport Planner

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-LAEmHhHzdJzBlTWfa4Hgs7pbKl

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[1] These are replicated from the August 2019 submission

Appendix D

1.0 Introduction

1.1 The Local Highway Authority (LHA), by their consultation response incorporated within the Council's delegated report, have requested a developed review of highway accident data in respect of the proposed development of up to 1,250 dwellings and associated development and infrastructure on Land Off Pump Lane, Lower Rainham, Kent (Ref: MC/19/1566) (the Development). The LHA's response in relation to highway accidents is as follows:

> *"4.167 The applicant has included five years of recorded Personal Injury Accident data from June 2013 to May 2018 and this is considered acceptable to the Highway Authority, however the survey area is too narrow and due to the large scale nature of the development would need to cover all the main routes connecting to the main carriageways i.e. A2 and Ito Way.*
>
> *4.168 The Council's transport officers raise concerns regarding Will Adams Roundabout (A2 Junction, Ito Way) and A289 Yokosuka Way/Cornwallis Roundabout which have a combined 12 incidents on or near the junction. The accident data demonstrates that many of incidents relate to failure to judge other persons path or speed, therefore they have significant concerns that, with the substantial forecast increase in vehicles, incidents are more likely to occur.*
>
> *4.169 Furthermore concerns relate to Pump Lane (adjacent the A2)* [sic]*, this road has the potential to become a rat run and already has a number of incidents (which were not been reviewed by the applicants)* [sic]*, as well as the double roundabout along Beechings Way. In regard to Lower Rainham Road, a number of serious incidents within the survey period and consequently concerns are raised that the additional traffic from the proposed development would likely lead to an increase in road collisions.*
>
> *4.170 Therefore, when assessing the wider accident data, the forecast large increase in vehicles is likely to have a detrimental impact at known accident hotspots which is contrary to policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF."*

1.2 Reason 6 of the Decision Notice refusing planning permission, concerning highway safety, states:

> *"The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109."*

1.3 Paragraph 109 of the NPPF advises that

> "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*." (emphasis added)

1.4 In so far as highway safety is concerned, Policy T1(ii) advises:

> "POLICY T1: IMPACT OF DEVELOPMENT
>
> *In assessing the highways impact of development, proposals will be permitted provided that…*
>
> *(ii) the development will not significantly add to the risk of road traffic accidents…"*

1.5 Contrary to the reason for refusal, Policy T1(ii) does not in fact address highway safety in unacceptability of impact terms, but is instead framed around whether the risk of highway accidents will be 'significantly added to', a matter that is neither asserted by the LHA nor demonstrated.

1.6 The purpose of this Review is to provide an overview response to, and ultimately address, the consultation response of the LHA in highway safety terms, and in turn demonstrate that reason for refusal 6 is not properly founded, and should be withdrawn by the Council, without further delay.

2.0 Outline of LHA Response

2.1 The LHA's consultation response on highway safety, carefully examined, gives rise not least to the following points of discussion.

2.2 The LHA at paragraph 4.167 suggest that the survey area presented in the Transport Assessment has been too narrowly scoped. This is not agreed and furthermore, the Council's response does not prescribe their preferred, wider area, save for suggesting merely that it includes "*all the main routes connecting to the main carriageways i.e. A2 and Ito Way.*"

2.3 At paragraph 4.168, two roundabouts are specifically said to raise concern, being the Will Adams Roundabout (A2 Junction, Ito Way) and A289 Yokosuka Way/Cornwallis Roundabout. The derivation of the statement that the "*combined 12 incidents*" reported to have been "*on or near the junction*" is not clear. The DfT COBALT User Guide (Page 13) defines accidents 'at junction' as to be confined to any within 20m of the junction itself.

2.4 The records for the last 5 years period show a total of 11 accidents at the Will Adams Roundabout, and 5 accidents at the A289 Yokosuka Way/ Cornwallis Roundabout.

2.5 The suggestion that "*incidents are more likely to occur*" in and around these locations, by virtue of the forecasted increase in vehicular traffic is not agreed. Nor is it the policy test. Firstly, whilst the level of traffic change at the junctions is not agreed, nonetheless the impact of those changes is clearly not material from a highway safety perspective. Secondly, the LHA does not (and cannot properly) suggest that this will be a "*significant*" addition (Policy T1)(ii)), or that this will give rise to "unacceptable" highway safety impacts (when taking account of mitigation - as the NPPF clearly advises must be done). Moreover, no adverse conclusion has been reached that the magnitude of any impact in safety terms will be objectionable in policy terms.

2.6 The LHA suggest that accident data demonstrates that many of the recorded incidents relate to a "*failure to judge other persons path or speed*", but this is clearly not borne out by evidence. The contributory factors listed against the individual accidents for each junction is summarised below in Section 3. That confirms that there is no direct

correlation between the type of accidents occurring and the risk of those increasing as a result of an increase in traffic. These are discussed in more detail below.

2.7 Moreover, even if the LHA's position were well-founded (which is rejected), it nonetheless fails to take into account the clear potential for mitigation, including that proposed at the A2/ Bloors Lane junction, and localised safety improvements that could come forward as part of the development (albeit none are considered to be necessary).

2.8 Paragraph 4.169 suggests that Pump Lane has the potential to become a 'rat run' by virtue of the Development. This is an outcome which is not accepted nor, conspicuously, is it in fact supported by the modelling that either the Council or the applicant has undertaken. The Applicant maintains its significant concerns, already well expressed to the LHA on numerous occasions (as far back as January 2020), that the model significantly over-estimates impacts on the wider network. Certainly, the estimation is materially inaccurate. However, taken at face value the Council's model confirms no material change in flows other than those arising from the development. Traffic flows on Pump Lane are currently low which confirm it is not presently used by any significant level of extraneous traffic.

2.9 For the sake of completeness only, it is confirmed that the accidents on Pump Lane were included within DTA's assessment of accident data, contrary to an earlier assertion of the LHA. Accident data on Pump Lane adjacent to the A2 has further been considered as part of this Review. These locations, viewed individually and cumulatively, have not given rise to any objectionable concerns (again, considering the terms of the relevant policy, etc.) and indeed this remains the position today. The LHA does not in fact suggest otherwise, with regard to specific accident data.

2.10 Clearly, across the whole study area, the number and type of accidents recorded do not give rise to any objectionable concerns in terms of paragraph 109 of the NPPF or Policy T1(ii).

2.11 The LHA has not in fact properly addressed the accident data in terms either of significant addition, or rather, unacceptability in safety impact terms, as national policy advises it must do.

3.0 Accident Data Study Area

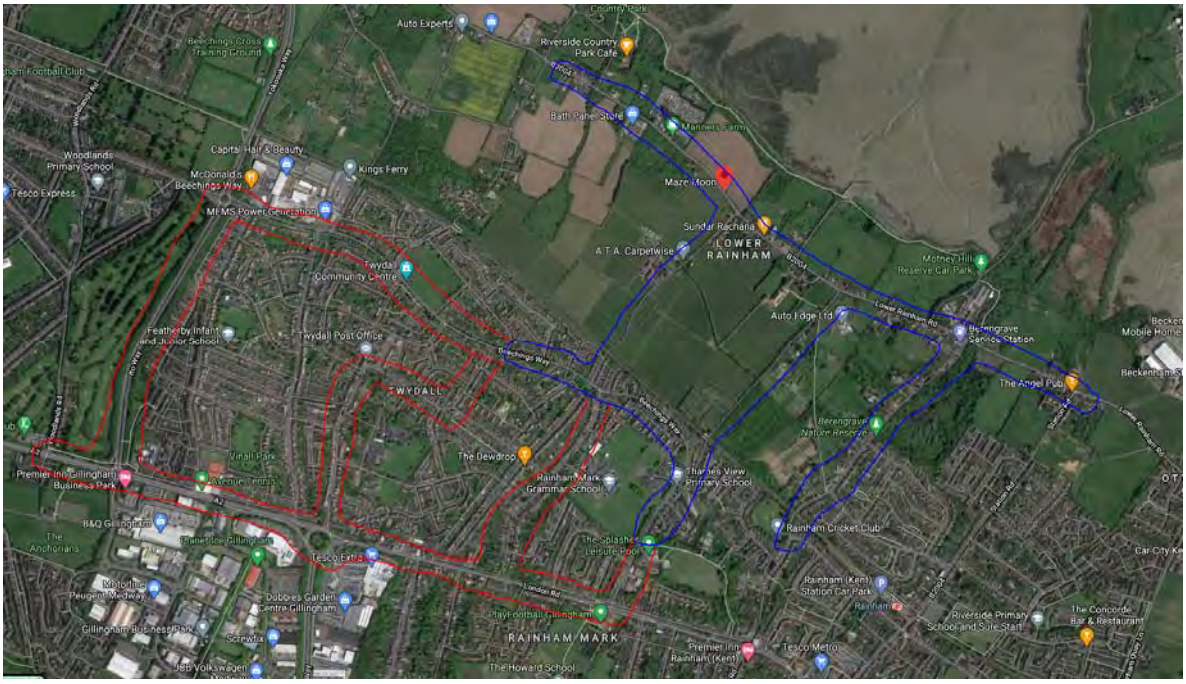
3.1 Following the decision to refuse the Development, accident data has been provided by the LHA, corresponding to a wider survey area, extending to the main routes connecting the A2 and Ito Way including Beechings Way, Pump Lane, Twydall Lane, Bloors Lane, and the roundabout junctions of Ito Way/ Yokosuka Way/ Cornwallis Avenue/ Beechings Way, Will Adams Roundabout, Bowaters Roundabout, and the A2/ Pump Lane and A2/ Bloors Lane junctions.

3.2 The LHA does not therefore require any more extensive period, or wider area of search than is consistent with the information DTA has been provided, and that this encompasses "*all the main routes connecting to the main carriageways".*

3.3 Albeit DTA considers that this wider survey area in fact exceeds what is necessary or appropriate, nonetheless, for the purposes of enabling an onward assessment and indeed for reinforcing its overall conclusion on highway safety, the widening of the area of search does not actually give rise to any different overall outcome. Fundamentally, it remains demonstrated that additional traffic from the Development will not give rise to an impact on highway safety which is unacceptable.

3.4 The wider survey area includes the main corridors and connecting junctions on the A2 and Ito Way, as shown in red in **Figure 1** below. The area previously assessed in the TA is shown in blue.

Figure 1 – Accident Survey Area (wider)



3.5 The accident data corresponding to the wider survey area is provided in **Appendix A**.

3.6 The area identified in blue in **Figure 1** above was considered fully in the TA (Appendix C), however these additional links are queried in the LHA response. Data for Lower Rainham Road and Pump Lane has therefore been reviewed again in this response. The main junctions relating to development traffic impact included in the wider search area have been reviewed.

4.0 Comparison with National Averages

4.1 National guidance on accident rates is provided in COBALT, prepared by DfT. The guidance uses the following formula as follows to derive an accident rate per year based on national data: $A = a \times f^b$, where 'a' and 'b' are standard parameters depending on junction type, number of arms, speed limit, etc. and f is flow in '000 AADT. This includes the number of accidents at junctions including the 20m leading up to the junction on each arm, as specified in the DfT COBALT User Guide (page 13).

4.2 Base flow data (2018) as reported in the TA (Appendix E) is available for all of the junctions that the LHA sought an assessment of, including: Bowaters Roundabout, A2/ Pump Lane, A2/ Bloors Lane, Will Adams Roundabout and Ito Way/ Cornwallis Avenue/ Beechings Way roundabout. The Beechings Way double mini-roundabout is outside of the scope of traffic impact that Medway requested and is further not included in any of the model subnetworks provided. Medway have previously confirmed such areas do not require assessment. Accordingly, no traffic flow data is available.

4.3 This information has been used to determine the accident rate, per year, using the 2018 data as a baseline adopting the COBALT accident forecasts. This has been compared with the actual accident rates over the latest 5 years period. Full calculations are provided at **Appendix B**. A comparison of the accident rates is provided in **Table 1**.

Table 1 – Accident Rate Comparison

Junction	COBA_LT Accident Rate/year	COBA_LT Accident Rate/5 yrs	Actual Accidents Recorded/5 yrs
Bowaters Roundabout	4.65	23.3	19
A2/ Pump Lane	1.04	5.2	5
A2/ Bloors Lane	3.06	15.3	5
Will Adams Roundabout	4.53	22.7	11
Ito Way/ Cornwallis Avenue/ Beechings Way Roundabout	3.59	17.9	5

4.4 **Table 1** shows that in relation to 4 of 5 junctions (excluding A2/ Pump Lane), the COBALT accident rates for a 5 years period significantly exceed the assessed, actual accident rate over the same period. In other words, the rates in respect of these junctions fall significantly below national accident rates data. As regards A2/ Pump Lane, this accident rate also falls below the appropriate national comparator rate.

5.0 Individual Junction Assessment

5.1 In addition to consideration of the overall accident rate, it is pertinent to consider the individual accidents and contributory factors to allow for a proper assessment of the development in the context of the two (development plan and national) policy tests, referenced above.

(1) *A2 West of Bowaters Roundabout / Will Adams roundabout*

5.2 A total of 11 accidents have been recorded at the Will Adams roundabout (A2/Ito Way) all of which are properly classed as "slight", in effect meaning an accident which at least one person is "slight" injured but no person is killed or seriously injured. A summary of the accidents is shown in **Table 2**.

Table 2 – Accident Summary: Will Adams Roundabout

Reference	Severity	Time	Causal Factors	Related to volume of traffic?
866740	Slight	07:44	Failed to signal/misleading signal Failed to look properly Failed to judge other person's path or speed Road layout e.g. bend, hill or narrow	No
822860	Slight	05:00	Failed to look properly	No
157034	Slight	11:10	Wrong use of pedestrian crossing Failed to look properly Careless/ Reckless	No
135612	Slight	16:55	Poor turn or manoeuvre Failed to look properly	No
129206	Slight	03:25	Careless/ Reckless Slippery road due to weather Poor turn or manoeuvre	No
150254709	Slight	06:35	Failed to look properly Too close to cyclist, horse or pedestrian	No
66186	Slight	09:13	Vehicle blind spot Poor turn or manoeuvre	No
150260963	Slight	18:10	Failed to look properly	No

43410	Slight	12:30	Slippery road due to weather Failed to look properly	No
332612	Slight	09:40	Failed to look properly	No
150262539	Slight	13:15	Failed to look properly	No

5.3 Two of the accidents involved a pedal cyclist and one a motorcyclist. There are no patterns in the location or type of the accidents recorded. Given the scale of the junction which comprises a dual carriageway with three lane approaches, this number of accidents is not considered significant or unacceptable. Further, all were "slight" in magnitude.

5.4 Three, isolated, incidents were recorded to the east of the Will Adams roundabout outside the 20m buffer. One is classed as "serious". The "serious" accident involved a collision between a car and pedestrian at a traffic signal-controlled crossing on the A2. This was caused when a pedestrian crossed the road at a signal crossing when the driver should have stopped for a red light.

5.5 Overall, the number of accidents is neither significant nor unacceptable. None of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

(2) *A2/ Woodlands Road/ Rotary Gardens*

5.6 A total of 5 accidents occurred at or within the vicinity of this junction, of which 3 were classed as "serious", and one of which was "fatal". A summary of the accidents is shown in **Table 3**.

Table 3 – Accident Summary: Woodlands Road/ Rotary Gardens

Reference	Severity	Time	Causal Factors	Related to volume of traffic?
327067	Serious	21:18	Sudden braking Aggressive driving	No
140248533	Slight	10:50	Disobeyed automatic traffic signal Disobeyed pedestrian crossing Exceeding speed limit Sudden braking Inexperienced driver/ learner	No

218312	Serious	14:52	Exceeding speed limit Travelling too fast for conditions Careless/ Reckless Inexperience with vehicle type Loss of control Stolen vehicle	No
132828	Serious	16:45	Loss of control Uncertain/nervous driver Cyclist entering road from pavement	No
236581	Fatal	12:52	Failed to look properly Other Wrong use of pedestrian crossing	No

5.7 The "fatal" accident involved a car colliding with a pedestrian at the pedestrian crossing. One of the "serious" accidents involved a pedal cyclist cycling on the pavement who clipped the bus stop losing control and went into the road resulting in a subsequent collision with a goods vehicle. Neither of these accidents were directly associated with vehicle volumes or turning movements through the junction. Two of the other "serious" accidents involved motorcyclists. One of the accidents involved a (stolen) motorcycle with the driver travelling at speed through small gaps in traffic resulting in a rear shunt. The other involved a car suddenly braking at the traffic lights causing a rear shunt collision from a motorcyclist.

5.8 The number of accidents is neither significant nor unacceptable. None of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

(3) *Bowaters Roundabout*

5.9 A total of 19 accidents occurred at the junction, of which 18 were "slight", and 1 was "serious". A summary of the accidents is shown in **Table 4**.

Table 4 – Accident Summary: Bowaters Roundabout

Reference	Severity	Time	Causal Factors	Related to volume of traffic?
100005	Slight	17:00	Aggressive Driving	No
112305	Slight	12:06	Failed to judge other person's path or speed	No
128806	Slight	20:53	Failed to look properly	No
140248308	Slight	15:45	Failed to judge other person's path or speed	No

			Poor turn or manoeuvre Aggressive driving Careless/reckless	
140249545	Slight	21:35	Failed to signal/misleading signal	No
150253408	Slight	15:20	Poor turn or manoeuvre	No
150255118	Slight	20:00	Failed to look properly Failed to judge other person's path or speed Fatigue	No
150256116	Slight	17:50	Failed to look properly	No
150256164	Slight	15:30	Failed to judge other person's path or speed	No
150258504	Slight	10:11	Poor turn or manoeuvre Failed to look properly Failed to judge other person's path or speed	No
180167	Slight	23:44	Impaired by alcohol Disobeyed automatic traffic signal	No
247277	Slight	17:30	Failed to look properly	No
255261	Slight	12:20	Poor turn or manoeuvre Failed to look properly Failed to judge other person's path or speed	No
263756	Slight	12:39	Poor turn or manoeuvre Failed to look properly Careless/ Reckless	No
340812	Slight	20:20	Disobeyed automatic traffic signal Failed to look properly	No
346113	Slight	17:45	Poor turn or manoeuvre Road layout e.g. bend, hill or narrow Failed to look properly	No
78905	Slight	16:09	Following too close Poor turn or manoeuvre Failed to signal/misleading signal Failed to look properly Swerved	No
817956	Serious	15:22	Impaired by alcohol Failed to look properly	No
868840	Slight	14:49	Following too close Failed to look properly Failed to judge other person's path or speed	No

5.10 The "serious" accident involved a collision between a car and pedestrian (impaired by alcohol) at the pedestrian crossing on the A278. The pedestrian crossed the road when traffic had priority. As such, the incident was clearly not directly associated with vehicle volumes or turning movements through the junction.

5.11 One "slight" accident involved a motorcycle. The other "slight" accidents involved collisions between two vehicles, predominantly cars, whilst changing lanes or approaching the roundabout.

5.12 The junction is a 5-arm and fully signalised carrying a substantial amount of traffic. Factoring this into account not least, the number of accidents is neither significant nor unacceptable. All but one was "slight" in severity. Furthermore, none of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

(4) *A2/ Pump Lane*

5.13 A total of 5 accidents were recorded at this junction, 2 of which were classed as "serious" and 3 were "slight". A summary of the accidents is shown in **Table 5**.

Table 5 – Accident Summary: A2/ Pump Lane

Reference	Severity	Time	Causal Factors	Related to volume of traffic?
249558	Slight	19:54	Failed to judge other person's path or speed Failed to look properly	No
812629	Slight	15:45	Failed to look properly Wrong use of pedestrian crossing Careless/ Reckless	No
849028	Serious	13:35	Sudden braking Careless/ Reckless Failed to judge other person's path or speed	No
120035	Slight	15:44	Failed to look properly Failed to judge other person's path or speed	No
147313	Serious	06:20	Failed to look properly Failed to judge other person's path or speed Not displaying lights at night or poor visibility	No

5.14 One of the "serious" accidents involved a motorcyclist pulling out of Pump Lane colliding with a vehicle on the A2. The other "serious" accident involved the collision of several cars, caused by a vehicle suddenly stopping on the A2 to let another vehicle turn from the A2 into Pump Lane.

5.15 Of the remaining "slight" accidents these involved rear shunt collisions or occurred as a result of vehicles pulling out into path of others.

5.16 The number of accidents is neither significant nor unacceptable. None of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

(5) *A2/ Bloors Lane*

5.17 A total of 5 accidents were recorded at this junction, all of which were classed as "slight".

5.18 One of the incidents involved a motorcyclist. A summary of the accidents is shown in **Table 6**.

Table 6 – Accident Summary: A2/ Bloors Lane

Reference	Severity	Time	Causal Factors	Related to volume of traffic?
42748	Slight	11:19	Sudden braking Swerved Distraction in vehicle Inexperience with vehicle type	No
826506	Slight	19:13	Disobeyed automatic traffic signal Exceeding speed limit Careless/reckless	No
73834	Slight	23:40	Failure to look properly	No
67760	Slight	18:09	Careless/reckless Following too close	No
194873	Slight	00:01	Sudden braking Failure to look properly Distraction in vehicle	No

5.19 The number of accidents is neither significant nor unacceptable. None of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

(6) *A289 Ito Way/Cornwallis Avenue Roundabout*

5.20 A total of 5 accidents were recorded at the junction, 2 of which were classed as "serious". A summary of the accidents is shown in **Table 7**.

Table 7 - Accident Summary: A289 Ito Way/ Cornwallis Avenue

Reference	Severity	Time	Causal Factors	Related to volume of traffic?
144088	Slight	17:10	Failed to signal/misleading signal Failed to look properly Failed to judge other person's path or speed	No
150252478	Slight	04:50	Failed to look properly Rider wearing dark clothing Not displaying lights at night or poor visibility	No
150260584	Serious	15:07	Failed to look properly (pedestrian)	No
234749	Serious	00:37	Careless/Reckless Exceeding speed limit Poor turn or manoeuvre	No
285827	Slight	20:03	Slippery road due to weather Sudden braking	No

5.21 One of the "serious" accidents involved two motorcycles travelling in convoy one of which clipped the other as they negotiated the roundabout. The other "serious" accident involved a child running into the road, resulting in a collision with a car.

5.22 Of the remaining "slight" accidents, one involved a pedal cyclist colliding with a car and another involved a motorcyclist slipping on a wet road surface.

5.23 The number of accidents is neither significant nor unacceptable. None of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

(7) *Beechings Way/Eastcourt Lane double mini roundabout*

5.24 Data for this junction is available for the latest 3-year period. Three "slight" accidents have been recorded at the eastern roundabout. Two "slight" accidents have been recorded at the western roundabout. Two of the incidents involved rear shunt collisions and another involved a motorcyclist.

5.25 All of the accidents were classed as "slight" and the overall number of accidents is not significant or unacceptable.

(8) *Pump Lane*

5.26 Accident records for Pump Lane to the north of Beechings Way were reviewed as part of the TA. This showed 1 "serious" and 1 "slight" accident. Neither had occurred at junctions. The "serious" accident involved a moped losing control on a wet surface. The "slight" accident involved a collision between two cars near the railway bridge.

5.27 Data is available for the southern section of Pump Lane (north of the A2) for a 3-year period and this shows one "slight" accident occurred on Pump Lane and was not at a junction. The incident involved a vehicle trying to park mounting the footway resulting in impact with a pedestrian on the footway. This was an isolated incident and is not related to vehicle volumes.

5.28 The number of accidents is neither significant nor unacceptable. None of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

(9) *Lower Rainham Road*

5.29 Accident records for Lower Rainham Road were reviewed as part of the TA. A total of 4 "serious" accidents have been recorded. These however occurred over a considerable distance (2.4km) and were also isolated incidents, at different locations.

5.30 The number of accidents is neither significant nor unacceptable. None of the accidents were brought about by deficiencies in junction layout, or specifically related to traffic volume.

6.0 Conclusion

6.1 This Review has clearly presented a robust assessment undertaken on behalf of the applicant of all the issues raised in paras 4.167 – 4.170 of the Officer's report, referenced and summarised above.

6.2 It is plainly demonstrated that the accident assessment, as formerly set out within the TA, was entirely sufficient to have enabled a proper, and ultimately different, conclusion to have been reached by the LHA (and Council) regarding whether the development complies with Policy T1 and NPPF Para 108/109 in highway safety terms. That assessment had demonstrated that the development satisfies both policies in this respect.

6.3 Notwithstanding such an assessment having already been put before the LHA (and Council), the assessment has since been widened (beyond which is considered necessary) in order to cover the main carriageways and junctions connecting to A2 and Ito Way, as (belatedly) requested by the LHA.

6.4 The LHA has raised (poorly framed and notably unspecific) concerns with accidents at the A2/ Ito Way roundabout (Will Adams Roundabout) and at the A289 Yokosuka Way/ Cornwallis Roundabout. In particular, the LHA has commented that, "*they have significant concerns that, with the substantial forecast increase in vehicles, incidents are more likely to occur.*"

6.5 The LHA has inadequately failed to address the accident data in terms either of significant addition, or rather, unacceptability in safety impact terms, as national policy advises it must do.

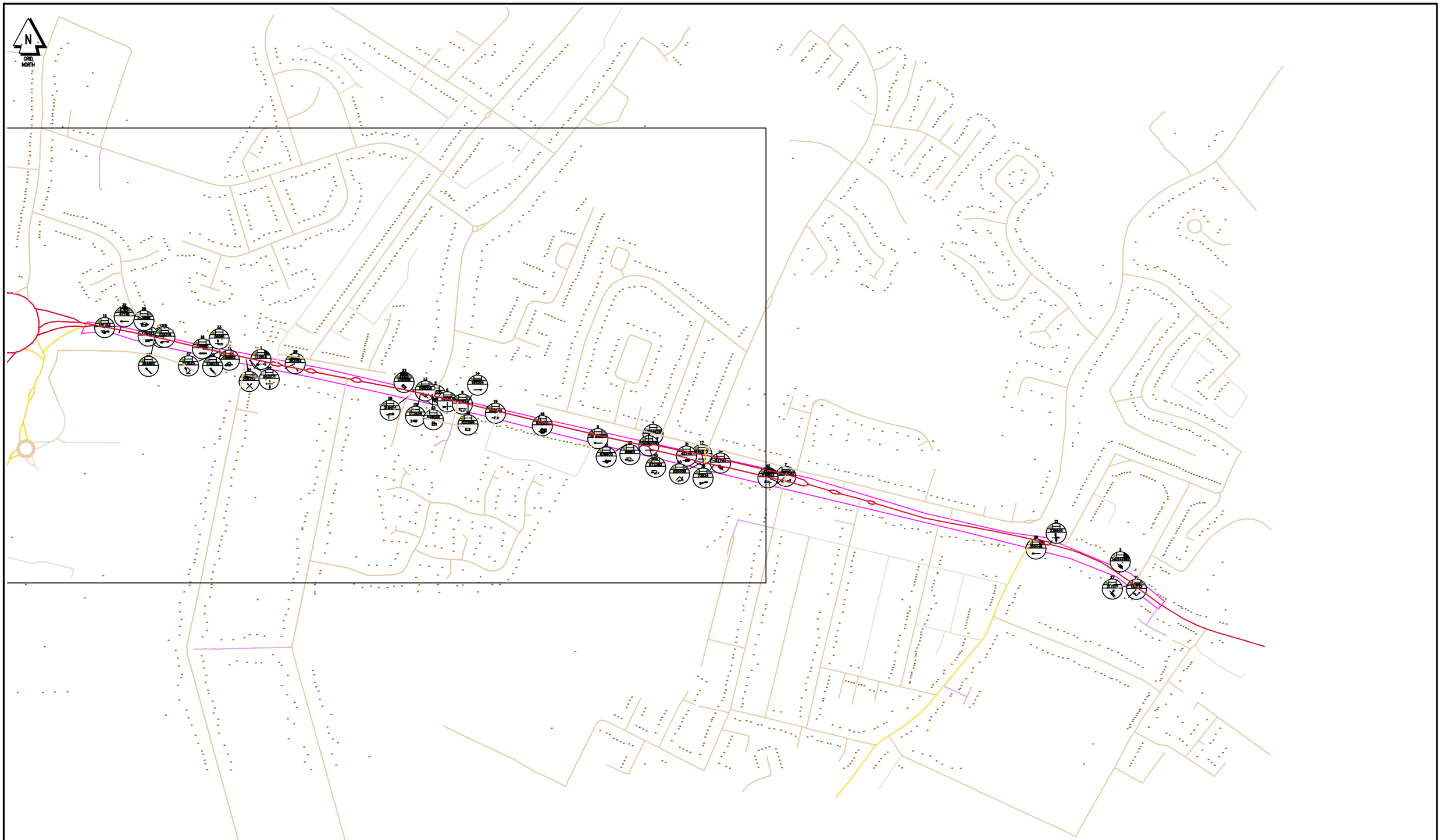
6.6 This Review (as the TA has done before it, with regard to the smaller surveyed area) demonstrates that the recorded number of accidents is not significant. Similarly, there is simply no evidence to suggest either that the development proposals will "*significantly add to the risk of road traffic accidents*" (Policy T1) or that it will have an unacceptable impact on road safety (NPPF Para 109).

6.7 In respect of accident data on Lower Rainham Road and Pump Lane, these were reviewed as part of the TA. Accident data on Beechings Way and Pump lane adjacent to the A2 has been reviewed here. The review of each of these locations does not (begin to) give rise to any objectionable concerns.

6.8 Furthermore, the accident rate at the main junctions on the A2 and Ito Way are, in the far majority of instances, significantly below national accident rates. All are below.

6.9 This Review further demonstrates there will be no unacceptable impacts on highway safety, justifying reason for refusal 6. This reason for refusal should now be withdrawn, without delay. Further to earlier correspondence, the Council is (again) so invited. Any decision hereinafter of the Council to maintain this reason for refusal will mean that the applicant will incur (ultimately abortive) work, which may well lead to a partial costs application on transportation matters being made against the Council. The Council is so advised.

Appendix A



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Rev	Description	By	Date	Chk'd	Appr'd

Medway Council
Serving You

REGENERATION, CULTURE, ENVIRONMENT & TRANSFORMATION DIRECTORATE
HIGHWAYS DESIGN AND ADOPTIONS
GUN WHARF
DOCK ROAD, CHATHAM
KENT, ME4 4TR
Tel. (01634) 306000

Project: Collision Data 2014–Sept 2019

Title: A2 (east)

A1

Scale	Drawn	Checked	Approved	Drawing No.	Rev
NTS	MJ			–	–
	Date 11/06.2020	Date	Date		

SEVERITY	District	Medway		Grid Reference	580085 / 166377
SLIGHT	Ref.No	112918		Police Officer Attend:	No - reported over the counter

Date	26/09/2016 Day Monday
Time	19:40
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lighting unknown

Road A2 Location A2 London Road, Gillingham

Description of Accident: C1 PUSHED BUTTON AT CROSSING BEFORE GLANCING BOTH DIRECTIONS AND DECIDED THEY COULD JUST CROSS ONCE IN THE ROAD C1 WAS STRUCK BY V1 CAUSING C1 TO BE THROWN OVER V1. RIDER OF V1 HAS SKIDDED ALONG ROAD AFTER COMING OFF V1.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
802 Failed to look properly (Pedestrian)	Casualty 001	A
803 Failed to judge vehicle's path/speed (Pedestrian)	Casualty 001	A
808 Careless/Reckless (Pedestrian)	Casualty 001	B

VEHICLES INVOLVED 1

Veh.No. 1 Vehicle type M/cycle > 500cc Make YAMAHA Model R6 600

Manoeuvre	Going ahead other
Veh. direction from	West to East
Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Not at or within 20m of junction
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Front
Veh registration no.	
Other veh.hit (ref.no)	0
Hit and run	Not hit and run
Drivers age	29 yrs
Sex	Male
Breath test	Negative
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1

Severity	SLIGHT
Age	29 yrs
Sex	Male
Post code	
Car Passenger?	Not a passenger
PSV Passenger?	Not a passenger
Seat Belt	
Cycle Helmet	Not a cyclist
Ped Movement	Not applicable
Ped Location	Not applicable
Ped Direction to	Not applicable
School Pupil	Other
Roadworker injured	

Cas No 2 Cas Class Pedestrian Veh ref No 1

Severity	SLIGHT
Age	27 yrs
Sex	Female
Post code	
Car Passenger?	Not a passenger
PSV Passenger?	Not a passenger
Seat Belt	Not applicable
Cycle Helmet	Not a cyclist
Ped Movement	Crossing from driver's nearside
Ped Location	On ped. crossing facility
Ped Direction to	West bound
School Pupil	Other
Roadworker injured	Not known

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	580363 / 166321
	Ref.No 120035	Police Officer Attend: Yes

Date	19/10/2016 Day Wednesday
Time	15:44
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 London Road atg it's Junction with Pump Lane, Gillingham

Description of Accident: V1 was waiting on Pump Lane j/w Lower Rainham Road. There was a queue of traffic on Lower Rainham Road waiting for traffic lights to change. A taxi driver has flashed V1 indicating for V1 to pull out.
V2 a motor cycle was travelling on the wrong side of the centre line passing the stationary traffic. V2 has seen V1 pull out and V2 has

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FIAT Model BRAVO
Manoeuvre Moving off
Veh. direction from Southwest to Northeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Entering main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Did not impact
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Not hit and run
Drivers age 21 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh.
Journey purpose Not Known

Veh.No. 2 Vehicle type M/Cycle Unknown cc Make KAWASAK Model
Manoeuvre Overtaking stat veh on its offside
Veh. direction from Northwest to Southeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Did not impact
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Not hit and run
Drivers age 60 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 60 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt		Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	581454 / 166039
SLIGHT	Ref.No 140247861		Police Officer Attend:	Yes

Date	07/10/2014 Day Tuesday	Road A2	Location High Street J/W Holding Street, Rainham
Time	22:05		
Weather	Fine without high winds	Description of Accident	V1 was Travelling Along the A2 Towards Sittingbourne when it Appears That the Driver Blacked Out. V1 Clipped V2 which was Parked Before Mounting the Nearside Kerb and Hitting the Rear of V2 and V3 which Were Parked Outside Regal Lettings. V1 Collided with a Streeet Light and a Sign as it Crossed Holding Street Before Colliding with the Wall of Harrisons Letting Agents Causing Substantial
Road Surface	Dry		
Street Lighting	Dark: street lights present but unlit		

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Mini roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
410 Loss of control (Driver/Rider - Error)	Vehicle 001	A
503 Fatigue (Driver/Rider - Impairment)	Vehicle 001	B
505 Illness or disability, mental or physical (Driver/Rider - Impairm	Vehicle 001	B

VEHICLES INVOLVED 4

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Going ahead other
Veh. direction from Northwest to Southeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Left carriageway nearside
Hit object in c'way? Parked vehicle
Hit object off c'way? Lamp post
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 33 yrs Sex Male Breath test Not requested Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Parked
Veh. direction from Parked to Parked Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age ? yrs Sex Not know Breath test Driver not contacted Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Passenger Veh ref No 1
Severity SLIGHT Age 21 yrs Sex Male Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 33 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

Veh.No.	3	Vehicle type	Car		Make	Model	
Manoeuvre		Parked					
Veh. direction from		Parked to Parked		Towing?	No tow or articulation		
Skidded		No skidding, jack-knifing or overturning					
Veh location at impact (restricted lane)		Footway (pavement)					
Junct. location of veh. at 1st impact		Approaching junction or waiting					
Veh left carriageway?		Did not leave carriageway					
Hit object in c'way?		None					
Hit object off c'way?		None					
First point of impact		Back					
Veh registration no.			Other veh.hit (ref.no)	1	Hit and run	Not hit and run	
Drivers age	? yrs	Sex	Not know	Breath test	Driver not contacted	Driving Lic	
Left Hand Drive		Unknown		Foreign veh.	Not foreign registered vehicle		
Journey purpose		Other					

Veh.No.	4	Vehicle type	Car		Make	Model	
Manoeuvre		Parked					
Veh. direction from		Parked to Parked		Towing?	No tow or articulation		
Skidded		No skidding, jack-knifing or overturning					
Veh location at impact (restricted lane)		Footway (pavement)					
Junct. location of veh. at 1st impact		Approaching junction or waiting					
Veh left carriageway?		Did not leave carriageway					
Hit object in c'way?		None					
Hit object off c'way?		None					
First point of impact		Back					
Veh registration no.			Other veh.hit (ref.no)	1	Hit and run	Not hit and run	
Drivers age	? yrs	Sex	Not know	Breath test	Driver not contacted	Driving Lic	
Left Hand Drive		Unknown		Foreign veh.	Not foreign registered vehicle		
Journey purpose		Other					

SEVERITY	District		Grid Reference	580709 / 166242
SERIOUS	Ref.No 140249781		Police Officer Attend:	Yes

Date	21/11/2014	Day Friday	
Time	08:10		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location London Road Approx 75M W of J/W Bloors Lane, Rainham

Description of Accident: V1 was Travelling East Along the A2 Towards Bloors Lane. at this Point the Road Widens and a right Turn Lane is Introduced to Access Play Football. V1 Entered the Hatched Area Prior to the Start of the right Turn Lane. Two Pedestrians Crossed the Road from the Nearside of V1. V1 Collided with One of the Peds (C1).

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Footbridge or subway

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
803 Failed to judge vehicle's path/speed (Pedestrian)	Casualty 001	B
805 Dangerous action in carriageway (Pedestrian)	Casualty 001	B

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type	Van/Goods < 3.5t	Make	Model	
Manoeuvre	Going ahead other				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	Skidded				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 36 yrs	Sex Male	Breath test	Negative	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class	Pedestrian		Veh ref No	1
Severity SERIOUS	Age 13 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet			
Ped Movement	Crossing from driver's nearside				
Ped Location	Within 50m of ped. crossing				
Ped Direction to	South bound				
School Pupil	Yes on way to or from school				
Roadworker injured	Not applicable				

Other Details

SEVERITY	District		Grid Reference	580620 / 166256
SLIGHT	Ref.No 140250223		Police Officer Attend:	Yes

Date	25/11/2014 Day Tuesday	Road A2	Location London Road Approx 180M W of J/W Bloors Lane, Rainham
Time	00:37		
Weather	Fine without high winds	Description of Accident	V1 (Stolen Vehicle) Failed to Stop for the Police. V2 and V3 (Police Vehicles) Pursued V1 Along the A2 Before Performing a Box Stop Causing Damage to All Three Vehicles.
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
901 Stolen vehicle (Special Codes)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Going ahead other
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 35 yrs Sex Male Breath test Positive Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Slowing or stopping
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 44 yrs Sex Male Breath test Negative Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Journey as part of work

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 43 yrs Sex Female Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 44 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

Veh.No.	3	Vehicle type	Car	Make	Model
Manoeuvre	Slowing or stopping				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age	45 yrs	Sex	Male	Breath test	Negative	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Journey as part of work				

SEVERITY	District	Medway		Grid Reference	580358 / 166322
SERIOUS	Ref.No	147313		Police Officer Attend:	Yes

Date	14/01/2017 Day Saturday	Road A2	Location A2 London Road at Junction with Pump Lane, Gillingham
Time	06:20		
Weather	Fine without high winds	Description of Accident	V2 TRAVELLING ON LONDON ROAD TOWARDS SITTINGBOURNE, V1 PULLED OUT OF PUMP LANE, TO WHICH COLLIDED WITH VEHICLE 2.
Road Surface	Frost/Ice		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B
506 Not displaying lights at night or poor visibility (Driver/Rider - I	Vehicle 002	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FORD Model FIESTA
Manoeuvre Going ahead other
Veh. direction from North to South Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 40 yrs Sex Male Breath test Driver not contacted Driving Lic Not known
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Commuting to/from work

Veh.No. 2 Vehicle type M/Cycle Unknown cc Make HYOSUNG Model
Manoeuvre Going ahead other
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 53 yrs Sex Male Breath test Not provided (medical reas Driving Lic Not known
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Commuting to/from work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SERIOUS Age 53 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	580921 / 166191
SERIOUS	Ref.No 150263262		Police Officer Attend:	Yes

Date	19/10/2015 Day Monday	Road A2	Location A2 London Road Jw Salisbury Avenue, Rainham
Time	05:56		
Weather	Fine without high winds	Description of Accident	C1 Appears to Have Been Crossing the Road when V1 Has Collided with Them. C1 was Pushing Their Pedal Cycle and Had no Memory of the Incident. Rider of V1 Stated C1 Just Walked out in Front of Them Leaving Them no Time to React.
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Central refuge - no other controls

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Casualty 001	A
507 Rider wearing dark clothing (Driver/Rider - Impairment)	Casualty 001	A
802 Failed to look properly (Pedestrian)	Casualty 001	A

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type M/cycle 50 - 125cc		Make	Model	
Manoeuvre	Going ahead other				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	Skidded				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 24 yrs	Sex Male	Breath test	Negative	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Commuting to/from work				

CASUALTIES INVOLVED 2

Cas No 1	Cas Class Driver or Rider			Veh ref No 1	
Severity SLIGHT	Age 24 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet			
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Cas No 2	Cas Class Pedestrian			Veh ref No 1	
Severity SERIOUS	Age 25 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet			
Ped Movement	Crossing from driver's nearside				
Ped Location	In centre of carriageway				
Ped Direction to	South bound				
School Pupil	Other				
Roadworker injured	Not applicable				

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 150265526		580704 / 166244
			Police Officer Attend:	Yes

Date	31/12/2015	Day Thursday	
Time	11:44		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 London Road 100 Metres from Bloors Lane, Gillingham, Kent

Description of Accident: V1 Has Driven into the Rear of V2 which Had Slowed down to Stop at Traffic Lights Causing V2 to Drive into Rear of V3. Low Sun Causing Glare.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
706 Dazzling sun (Driver/Rider - Vision Affected)	Vehicle 001	B
803 Failed to judge vehicle's path/speed (Pedestrian)	Vehicle 001	B

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Slowing or stopping
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 47 yrs Sex Female Breath test Negative Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Slowing or stopping
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 58 yrs Sex Female Breath test Negative Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 58 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

Veh.No.	3	Vehicle type	Car	Make	Model
Manoeuvre	Slowing or stopping				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	34 yrs	Sex	Male	Breath test	Negative	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

SEVERITY	District	Grid Reference
SLIGHT	Medway	580403 / 166310
	Ref.No 150924	Police Officer Attend: Yes

Date	17/01/2017 Day Tuesday
Time	19:25
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lights present and lit

Road A2 Location A2 London Road Guardian Court, Gillingham

Description of Accident: V1 has collided into the back of V2 in a straight line due to difference in speed of the vehicles. *N.B. Location based on grid reference details of location unknown.*

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 002	A
308 Following too close (Driver/Rider - Injudicious)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Goods unknown weight Make MERCEDES Model ARCTIC
Manoeuvre Going ahead other
Veh. direction from East to West Towing? Articulated vehicle
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 44 yrs Sex Male Breath test Driver not contacted Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Journey as part of work

Veh.No. 2 Vehicle type Car Make SKODA Model FABIA
Manoeuvre Overtaking on nearside
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Not hit and run
Drivers age 22 yrs Sex Female Breath test Driver not contacted Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 22 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt		Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	581480 / 166011
SLIGHT	Ref.No	153112		Police Officer Attend:	Yes

Date	29/01/2017	Day Sunday	
Time	04:23		
Weather	Fine without high winds		
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

Road A2 Location A2 High Street j/w Holding Street, Gillingham

Description of Accident: VEH 1 WAS FAILING TO STOP DURING A POLICE PURSUIT. VEH 2 IS A POLICE VEH. VEH 1 WAS TRAVELLING EAST ALONG A2 HIGH STREET RAINHAM. VEH 1 BRAKED HARD AND ATTEMPTED TO TURN LEFT INTO HOLDING STREET. DUE TO SPEED AND LOSS OF CONTROL VEH 1 WAS UNABLE TO COMPLETELY NEGOTIATE THE TURN RESULTING IN

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Mini roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
307 Travelling too fast for conditions (Driver/Rider - Injudicious)	Vehicle 001	A
401 Junction overshoot (Driver/Rider - Error)	Vehicle 001	A
601 Aggressive driving (Driver/Rider - Behaviour)	Vehicle 001	A
902 Vehicle in course of crime (Special Codes)	Vehicle 001	A
603 Nervous/Uncertain (Driver/Rider - Behaviour)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VAUXHALL Model CORSA
Manoeuvre: Turning left
Veh. direction from: Northwest to Northeast Towing? No tow or articulation
Skidded: Skidded
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Left carriageway offside and rebounded
Hit object in c'way?: None
Hit object off c'way?: Road sign/traffic signal
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 0 Hit and run: Not hit and run
Drivers age 25 yrs Sex Male Breath test: Negative Driving Lic: Provisional
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make BMW Model
Manoeuvre: Turning left
Veh. direction from: Northwest to Northeast Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 0 Hit and run: Not hit and run
Drivers age 32 yrs Sex Male Breath test: Not requested Driving Lic: Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Journey as part of work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Passenger Veh ref No 1
Severity SLIGHT Age 24 yrs Sex Male Post code

Car Passenger?	Front seat passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 156682		580036 / 166379
			Police Officer Attend:	Yes

Date	08/02/2017	Day Wednesday	
Time	08:15		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location (o/s 258) A2 London Road, Gillingham

Description of Accident: VEH 1 (PEDAL CYCLE) WAS TRAVELLING ON PAVEMENT DOWN LONDON ROAD, FROM THE DIRECTION OF GILLINGHAM TOWARDS RAINHAM. VEH 1 WAS ON THE RIGHT HAND SIDE PAVEMENT. VEH 2 (CAR) WAS DRIVING OUT OF DRIVE FORWARD. THERE WAS A GRAVEL LORRY PARKED HALF ON THE PAVEMENT AND HALF ON ROAD. THIS HAS

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
701 Stationary or parked vehicle(s) (Driver/Rider - Vision Affected)	Vehicle 001	A
309 Vehicle travelling along pavement (Driver/Rider - Injudicious)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Pedal Cycle Make Model
Manoeuvre: Going ahead other
Veh. direction from: West to East Towing? No tow or articulation
Skidded: Skidded
Veh location at impact (restricted lane): Footway (pavement)
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 11 yrs Sex Male Breath test Not Applicable Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Pupil riding to/from school

Veh.No. 2 Vehicle type Car Make RENAULT Model TRAFFIC P
Manoeuvre: Waiting to turn left
Veh. direction from: South to North Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 56 yrs Sex Male Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 11 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not known
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Medway		Grid Reference	579926 / 166412
SLIGHT	Ref.No	178288		Police Officer Attend:	Yes

Date	26/04/2017	Day	Wednesday
Time	12:26		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 London Road, Gillingham

Description of Accident: V3 WAS STATIONARY AT A RED TRAFFIC LIGHT. V2 SLOWED AND STOPPED BEHIND V3. V1 DID NOT STOP AND DROVE INTO THE BACK OF V2 CAUSING THIS TO GO INTO V3. THERE WAS MINIMAL DAMAGE TO V3 BUT HEAVY DAMAGE TO V2 REAR END AND SUBSTANTIAL DAMAGE TO THE FRONT END OF V1. IT WOULD APPEAR DRIVER OF V1 MAY HAVE

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres
	Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make VOLKSWA Model TIGUAN M

Manoeuvre	Going ahead other
Veh. direction from	West to East
Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Not at or within 20m of junction
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Front
Veh registration no.	
Other veh.hit (ref.no)	2
Hit and run	Not hit and run
Drivers age 67 yrs	Sex Male
Breath test	Negative
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known

Veh.No. 2 Vehicle type Car Make VOLKSWA Model TOUAREG

Manoeuvre	Slowing or stopping
Veh. direction from	West to East
Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Not at or within 20m of junction
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Back
Veh registration no.	
Other veh.hit (ref.no)	1
Hit and run	Not hit and run
Drivers age 44 yrs	Sex Female
Breath test	Negative
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 67 yrs Sex Male Post code

Car Passenger?	Not a passenger
PSV Passenger?	Not a passenger
Seat Belt	
Cycle Helmet	Not a cyclist
Ped Movement	Not applicable
Ped Location	Not applicable
Ped Direction to	Not applicable
School Pupil	Other
Roadworker injured	

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 44 yrs Sex Female Post code

Car Passenger?	Not a passenger
PSV Passenger?	Not a passenger
Seat Belt	
Cycle Helmet	Not a cyclist
Ped Movement	Not applicable
Ped Location	Not applicable
Ped Direction to	Not applicable
School Pupil	Other
Roadworker injured	

Other Details

Veh.No.	3	Vehicle type	Car	Make	TOYOTA
Model	AURIS TR I				
Manoeuvre	Slowing or stopping				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	68 yrs	Sex	Female	Breath test	Negative
Driving Lic	Full				
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District	Medway		Grid Reference	579914 / 166418
SLIGHT	Ref.No	178457		Police Officer Attend:	No - reported over the counter

Date	27/04/2017	Day Thursday	
Time	06:40		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location (o/s 56 Rainham Mark Social Club) London Road, Gillingham

Description of Accident: Cyclist on cycle path - as Cyclist crossed the entrance to the social club they were reversed into by V1. The car driver did not give any details but the cyclist a lift to work.

SITE DETAILS

Speed Limit	70 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS — PARTICIPANT — PROBABILITY

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model

Manoeuvre	Reversing		
Veh. direction from	East to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Did not impact		
Veh registration no.		Other veh.hit (ref.no)	0
Hit and run	Not hit and run		
Drivers age	? yrs	Sex	Not know
Breath test	Driver not contacted	Driving Lic	Not known
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

Veh.No. 2 Vehicle type Pedal Cycle Make Model

Manoeuvre	Waiting to go ahead but held up		
Veh. direction from	East to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	30 yrs	Sex	Male
Breath test	Not Applicable	Driving Lic	
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	2
Severity	SLIGHT	Age	30 yrs	Sex	Male
Post code					
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet	Not known		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District	Medway		Grid Reference	580415 / 166309
SLIGHT	Ref.No	181064		Police Officer Attend:	Yes

Date	03/05/2017	Day	Wednesday
Time	19:35		
Weather	Fine without high winds		
Road Surface	Wet/Damp		
Street Lighting	Daylight		

Road A2 Location A2 London Road at Junction with Guardian Court, Gillingham

Description of Accident: 3 VEH RTC. VEH 1 WENT INTO THE BACK OF VEH 2 WHICH MADE VEH 2 GO INTO THE BACK OF VEH 3. DRIVER OF VEH 1 STATED THAT THEY DIDN'T SEE THE TRAFFIC AHEAD HAD STOPPED.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	Control by other authorised person Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make MERCEDES Model C220
Manoeuvre: Going ahead other
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Cleared junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run: Not hit and run
Drivers age 32 yrs Sex Female Breath test: Negative Driving Lic: Not known
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make VAUXHALL Model CORSA ME
Manoeuvre: Going ahead other
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Cleared junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact: Back
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run: Not hit and run
Drivers age 23 yrs Sex Male Breath test: Not requested Driving Lic: Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 23 yrs Sex Male Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 23 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

Veh.No.	3	Vehicle type	Car	Make	VOLKSWA Model CADDY
Manoeuvre	Going ahead other				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Cleared junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	46 yrs	Sex	Male	Breath test	Not requested	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District	Grid Reference	
SLIGHT	Medway	579837 / 166429	
	Ref.No 181154	Police Officer Attend:	Yes

Date	03/05/2017 Day Wednesday	Road A2	Location A2 London Road, Gillingham
Time	15:15		
Weather	Fine without high winds	Description of Accident	Collision between V1 and V1(motorbike). D1 stated collision occurred when she made a u-turn across the central reservation. *Location plotted to grid reference*
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B
305 Illegal turn or direction of travel (Driver/Rider - Injudicious)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Car		Make FORD	Model S-MAX	
Manoeuvre	U turn				
Veh. direction from	West to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Offside				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age 24 yrs	Sex Female	Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

Veh.No. 2	Vehicle type M/cycle > 500cc		Make TRIUMPH	Model STREET TF	
Manoeuvre	Moving off				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 29 yrs	Sex Male	Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No 2	
Severity SLIGHT	Age 29 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger		PSV Passenger?	Not a passenger	
Seat Belt	Not applicable		Cycle Helmet	Not a cyclist	
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	579994 / 166395
	Ref.No 188681	Police Officer Attend: No - reported over the counter

Date	24/05/2017 Day Wednesday
Time	07:42
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location (o/s Hidsons Vauxhall) A2 London Road, Gillingham

Description of Accident: V1 travelling along the A2 London Road. D1 has seen someone they knew and briefly looked away. V1 had slowed but impacted the rear of V2. V2 then went into the rear of V3.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Van/Goods < 3.5t Make VAUXHALL Model COMBO
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 34 yrs Sex Male Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make SMART Model FORTWO P
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 73 yrs Sex Male Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 34 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 73 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

Veh.No.	3	Vehicle type	Car	Make	KIA
Model	RIO				
Manoeuvre	Going ahead other				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	23 yrs	Sex	Female	Breath test	Negative
Driving Lic	Full				
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District	Medway		Grid Reference	580789 / 166225
SLIGHT	Ref.No	194873		Police Officer Attend:	No - reported over the counter

Date	11/06/2017 Day Sunday
Time	00:01
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lights present and lit

Road A2 Location A2 London Road at Junction with Bloors Lane, Gillingham

Description of Accident: V1 AND V2 HAVE BEEN TRAVELLING IN CONVOY ON LONDON ROAD TOWARDS SITTINGBOURNE. THE DRIVER OF V2 HAS GOT THEIR FLIP FLOP STUCK UNDER THE BRAKE PEDAL AND TRYING TO RECTIFY THIS, HAS BRAKED SHARPLY. THIS CAUSED V1 TO COLLIDE WITH THE REAR OF V2. AIRBAGS HAVE BEEN DEPLOYED.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Junction - more than 4 arms (not a roundabou
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	Footbridge or subway

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 002	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
509 Distraction in vehicle (Driver/Rider - Impairment)	Vehicle 002	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FORD Model FIESTA
Manoeuvre: Going ahead other
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 19 yrs Sex Male Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make FORD Model FIESTA
Manoeuvre: Slowing or stopping
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 19 yrs Sex Female Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 19 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 19 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Medway		Grid Reference	579931 / 166414
SLIGHT	Ref.No	229219		Police Officer Attend:	No - reported over the counter

Date	04/10/2017 Day Wednesday
Time	16:30
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location (o/s Rainham Mark Social Club) A2 London Road, Gillingham

Description of Accident: V2 in heavy traffic, Rainham bound, Vehicles ahead brake causing V2 to brake. V1 then brakes colliding into V2 rear causing damage and slight injury to Rider 1.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 002	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type M/cycle 50 - 125cc Make QINGQI Model QM 125 GY

Manoeuvre	Going ahead other		
Veh. direction from	West to East	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Not hit and run		
Drivers age	17 yrs	Sex	Male
Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

Veh.No. 2 Vehicle type Car Make RENAULT Model SCENIC DY

Manoeuvre	Slowing or stopping		
Veh. direction from	West to East	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Back		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	37 yrs	Sex	Male
Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1

Severity	SLIGHT	Age	17 yrs
Sex	Male	Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	580459 / 166293
	Ref.No 232644	Police Officer Attend: No - reported over the counter

Date	02/10/2017 Day Monday
Time	10:50
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 London Road, Gillingham

Description of Accident: V1 WAS TRAVELLING ON LONDON ROAD, SITTINGBOURNE BOUND WHEN IT COLLIDED WITH V2 WHICH WAS STATIONARY AT RED TRAFFIC LIGHTS.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
605 Inexperienced or learner driver/rider (Driver/Rider - Behaviour)	Vehicle 001	A
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 001	A
308 Following too close (Driver/Rider - Injudicious)	Vehicle 001	B
408 Sudden braking (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FORD Model FOCUS LX
Manoeuvre: Going ahead other
Veh. direction from: West to East Towing? No tow or articulation
Skidded: Skidded
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run: Not hit and run
Drivers age 19 yrs Sex Female Breath test: Driver not contacted Driving Lic: Not known
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make VAUXHALL Model ZAFIRA 16
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run: Not hit and run
Drivers age 46 yrs Sex Female Breath test: Driver not contacted Driving Lic: Not known
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 46 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	580030 / 166386
	Ref.No 239032	Police Officer Attend: No - reported over the counter

Date	24/10/2017 Day Tuesday
Time	13:10
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location (o/s 299) A2 London Road, Gillingham

Description of Accident: V2 STATIONARY IN TRAFFIC, V1 HAS COLLIDED INTO THE REAR OF V2.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Van/Goods < 3.5t Make PEUGEOT Model PARTNER (
Manoeuvre: Slowing or stopping
Veh. direction from: Southeast to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 36 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

Veh.No. 2 Vehicle type Car Make TOYOTA Model
Manoeuvre: Slowing or stopping
Veh. direction from: Southeast to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 77 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 77 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 239949		581346 / 166089
			Police Officer Attend:	No - reported over the counter

Date	10/11/2017	Day Friday	
Time	13:50		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 High Street, Gillingham

Description of Accident: Rider of the bike was cycling out of Hidsons garage onto high street and cycled straight into the main road without looking and collided with V2. Rider fell off his bike on collision with V2.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
310 Cyclist entering road from pavement (Driver/Rider - Injudicious	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Pedal Cycle Make Model

Manoeuvre	Moving off		
Veh. direction from	North to South	Towing?	No tow or articulation
Skidded	Skidded		
Veh location at impact (restricted lane)	Footway (pavement)		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no) 2	Hit and run Not hit and run
Drivers age 12 yrs	Sex Male	Breath test Not Applicable	Driving Lic Not known
Left Hand Drive	No	Foreign veh. Not foreign registered vehicle	
Journey purpose	Pupil riding to/from school		

Veh.No. 2 Vehicle type Car Make TOYOTA Model AYGO BLU

Manoeuvre	Going ahead other		
Veh. direction from	West to East	Towing?	No tow or articulation
Skidded	Skidded		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Nearside		
Veh registration no.		Other veh.hit (ref.no) 1	Hit and run Not hit and run
Drivers age 89 yrs	Sex Male	Breath test Driver not contacted	Driving Lic Full
Left Hand Drive	No	Foreign veh. Not foreign registered vehicle	
Journey purpose	Other		

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1

Severity	SLIGHT	Age 12 yrs Sex Male	Post code
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	Not known
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Yes on way to or from school		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	580355 / 166321
SLIGHT	Ref.No 249558		Police Officer Attend:	No - reported over the counter

Date	29/11/2017 Day Wednesday	Road U	Location Pump Lane at Junction with A2 London Road, Gillingham
Time	19:54		
Weather	Fine without high winds	Description of Accident	V2 travelling along London Road towards Rainham centre. V1 was at top of Pump Lane with London Road. V1 pulled out of junction turning towards Gillingham colliding with V2.
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Car		Make VOLKSWA	Model POLO E	
Manoeuvre	Turning right				
Veh. direction from	Northeast to Northwest	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age 40 yrs	Sex Female	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

Veh.No. 2	Vehicle type Car		Make VAUXHALI	Model ASTRA GT	
Manoeuvre	Going ahead other				
Veh. direction from	Southeast to Northwest	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Offside				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 27 yrs	Sex Female	Breath test	Negative	Driving Lic	Not known
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No 1	
Severity SLIGHT	Age 40 yrs	Sex Female	Post code		
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Unknown	Cycle Helmet	Not a cyclist		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District	Medway		Grid Reference	580332 / 166326
SLIGHT	Ref.No	249598		Police Officer Attend:	Yes

Date	06/12/2017 Day Wednesday
Time	07:55
Weather	Raining without high winds
Road Surface	Wet/Damp
Street Lighting	Dark: street lights present and lit

Road A2 Location A2 London Road, Gillingham

Description of Accident: All 3 vehicles were travelling West along London Road, in stop start traffic. V1 has crashed into the rear of V2 which was subsequently shunted into the rear of V3. Driver of V1 told driver 2 and police he may have fallen asleep at the wheel.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
503 Fatigue (Driver/Rider - Impairment)	Vehicle 001	A
308 Following too close (Driver/Rider - Injudicious)	Vehicle 001	B

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make VAUXHALL Model VECTRA L
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: Southeast to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run: Not hit and run
Drivers age 40 yrs Sex Male Breath test: Driver not contacted Driving Lic: Not known
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make VAUXHALL Model ASTRA ES
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: Southeast to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run: Not hit and run
Drivers age 40 yrs Sex Female Breath test: Driver not contacted Driving Lic: Not known
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 4

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 40 yrs Sex Female Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 3
Severity SLIGHT Age 41 yrs Sex Male Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 3 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 14 yrs Sex Female Post code
Car Passenger?: Rear seat passenger PSV Passenger?: Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Yes on way to or from school
Roadworker injured

Veh.No.	3	Vehicle type	Car	Make FORD	Model
Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	Southeast to Northwest	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	41 yrs	Sex	Male	Breath test	Driver not contacted	Driving Lic	Not known
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

Cas No	4	Cas Class	Passenger	Veh ref No	2
Severity	SLIGHT	Age	12 yrs	Sex	Female	Post code	
Car Passenger?	Front seat passenger	PSV Passenger?	Not a passenger		
Seat Belt	Unknown	Cycle Helmet	Not a cyclist		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Yes on way to or from school				
Roadworker injured					

Other Details

SEVERITY	District	Grid Reference	
SLIGHT	Medway	580063 / 166378	
	Ref.No 255757	Police Officer Attend:	No - reported over the counter

Date	19/12/2017 Day Tuesday	Road U	Location Edwin Road at Junction with A2 London Road, Gillingham
Time	17:00		
Weather	Fine without high winds	Description of Accident	V1 not seen the approaching junction and carried on across the main road, as if the junction was not there. V2 has not had time to brake and has hit the rear offside quarter of V1 as it crossed it's path. V1 could have poor eyesight contributing to the crash.
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
401 Junction overshoot (Driver/Rider - Error)	Vehicle 001	A
410 Loss of control (Driver/Rider - Error)	Vehicle 001	B
504 Uncorrected, defective eyesight (Driver/Rider - Impairment)	Vehicle 001	B
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	B
505 Illness or disability, mental or physical (Driver/Rider - Impairm	Vehicle 001	B
302 Disobeyed give way or stop sign markings (Driver/Rider - Injud	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FORD Model FOCUS

Manoeuvre	Going ahead other		
Veh. direction from	Southwest to Northeast	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Leaving main road		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Offside		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Not hit and run		
Drivers age	77 yrs	Sex	Male
Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Other		

Veh.No. 2 Vehicle type Car Make SKODA Model OCTAVIA

Manoeuvre	Going ahead other		
Veh. direction from	Southeast to Northwest	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Nearside		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	43 yrs	Sex	Male
Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Other		

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1

Severity	SLIGHT	Age	77 yrs
Sex	Male	Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	579903 / 166418
SERIOUS	Ref.No	259896		Police Officer Attend:	Yes

Date	10/01/2018 Day Wednesday	Road	A2 Location A2 London Road at Junction with Rainham Mark Social Club, Gillingham
Time	18:50		
Weather	Fine without high winds	Description of Accident	V2 WAS STOPPED STATIONARY WEST ON LONDON ROAD, SIGNALLING TO TURN RIGHT. V3 WAS TRAVELLING EAST ON LONDON ROAD AND HAS STOPPED TO ALLOW V2 TO TURN RIGHT. V1 WAS TRAVELLING WEST ON LONDON ROAD ALONG THE MIDDLE OF TRAFFIC. V1 DID NOT SEE V2 TURNING RIGHT AND HAS COLLIDED WITH V2, REBOUNDED
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Using private drive or entrance
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type M/cycle 50 - 125cc Make HONDA Model

Manoeuvre	Overtaking moving veh on its offside		
Veh. direction from	East to West	Towing?	No tow or articulation
Skidded	Skidded and overturned		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Approaching junction or waiting		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Not hit and run		
Drivers age	17 yrs	Sex	Male
Breath test	Negative	Driving Lic	Not known
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

Veh.No. 2 Vehicle type Car Make MINI Model COOPER

Manoeuvre	Waiting to turn right		
Veh. direction from	East to North	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Approaching junction or waiting		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Offside		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	45 yrs	Sex	Female
Breath test	Negative	Driving Lic	Not known
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1

Severity	SERIOUS	Age	17 yrs
Sex	Male	Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

Veh.No.	3	Vehicle type	Car	Make	Model
Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age	58 yrs	Sex	Male	Breath test	Negative	Driving Lic	Not known
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District	Medway		Grid Reference	581331 / 166085
SLIGHT	Ref.No	316448		Police Officer Attend:	No - reported over the counter

Date	28/07/2018	Day	Saturday
Time	22:05		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Dark: street lighting unknown		

Road A2 Location A2 High Street at Junction with C98 Maidstone Road, Gillingham

Description of Accident: POLICE VEHICLE STOPPED AT TRAFFIC LIGHTS HELD AT RED. V1 WAS STOPPED BEHIND POLICE VEHICLE. D1 GOT OUT TO APPROACH POLICE TO MAKE OFFICERS AWARE THAT SHE HAD SEEN A MALE WITH A KNIFE AND HAD NOT SET THE PARKING BRAKE. V1 ROLLED FORWARD HITTING POLICE VEHICLE.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Automatic traffic signal
2nd Road Number	C98
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
510 Distraction outside vehicle (Driver/Rider - Impairment)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make MAZDA Model CX-5 SE-L
Manoeuvre: Slowing or stopping
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: Parked vehicle
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 37 yrs Sex Female Breath test Negative Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

Veh.No. 2 Vehicle type Car Make VAUXHALL Model ASTRA DE
Manoeuvre: Slowing or stopping
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 37 yrs Sex Male Breath test Negative Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 28 yrs Sex Male Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 37 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	581476 / 166020
	Ref.No 317221	Police Officer Attend: No - reported over the counter

Date	26/07/2018 Day Thursday
Time	08:04
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 High Street at Junction with Holding Street, Gillingham

Description of Accident: V2 WAS APPROACHING THE ROUNDABOUT WITH HOLDING STREET, COMING ALONG THE A2 HIGH STREET RAINHAM TOWARDS MEDWAY. V1 WAS TRAVELLING IN THE OPPOSITE DIRECTION, AS V2 DROVE AROUND THE ROUNDABOUT, TURNING INTO HOLDING STREET. V1 DROVE OVER THE ROUNDABOUT AND V2 DROVE INTO THE SIDE OF V1.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make BMW Model
Manoeuvre: Turning right
Veh. direction from: Southeast to Northeast Towing?: No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run: Not hit and run
Drivers age 51 yrs Sex Female Breath test: Driver not contacted Driving Lic: Not known
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make VAUXHALL Model CORSA
Manoeuvre: Going ahead other
Veh. direction from: Northwest to Southeast Towing?: No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 1 Hit and run: Not hit and run
Drivers age 24 yrs Sex Female Breath test: Driver not contacted Driving Lic: Not known
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Commuting to/from work

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 51 yrs Sex Female Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 24 yrs Sex Female Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

SEVERITY	District	Medway		Grid Reference	580323 / 166321
SLIGHT	Ref.No	318454		Police Officer Attend:	Yes

Date	17/07/2018	Day	Tuesday
Time	16:04		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 London Road at Junction with London Road Entrance, Gillingham

Description of Accident: V2 was travelling east along A2 towards Sittingbourne when V1 pulled out of an entrance road into the path of V2. Vehicle performed an emergency stop but still collided with V1.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Using private drive or entrance
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A
505 Illness or disability, mental or physical (Driver/Rider - Impairm	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make SUZUKI Model WAGON R-
Manoeuvre: Turning right
Veh. direction from: South to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 57 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

Veh.No. 2 Vehicle type Car Make SEAT Model LEON SE T
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 31 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 34 yrs Sex Male Post code

Car Passenger?	Front seat passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 353152		580139 / 166371
			Police Officer Attend:	No - reported over the counter

Date	04/12/2018	Day	Tuesday
Time	15:54		
Weather	Fine without high winds		
Road Surface	Wet/Damp		
Street Lighting	Daylight		

Road A2 Location A2 LONDON RD, RAINHAM (MAPPED TO COORDS)

Description of Accident: C1 rang the bell for V1 to stop. C1 stood up and was holding onto a handrail when V1 suddenly lurched forward causing C1 to fall over.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Bus or Coach	Make	Model
Manoeuvre	Slowing or stopping				
Veh. direction from	Northwest to Southeast	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	Entering lay-by/hard shoulder				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Did not impact				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age	? yrs	Sex	Female	Breath test	Driver not contacted
Left Hand Drive	No	Foreign veh.		Driving Lic	
Journey purpose	Journey as part of work				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Passenger	Veh ref No	1
Severity	SLIGHT	Age	87 yrs	Sex	Female
Post code					
Car Passenger?	Not a passenger			PSV Passenger?	Standing passenger
Seat Belt	Unknown			Cycle Helmet	Not a cyclist
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	579916 / 166409
	Ref.No 354890	Police Officer Attend: Yes

Date	20/12/2018 Day Thursday
Time	10:57
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2, LONDON RD, RAINHAM, (MAPPED TO COORDS).

Description of Accident: Both vehicles have been travelling down London Rd, towards [Bowaters] rndbt. Traffic has started slowing. V2 has started to slow/stop. V1 has misjudged V2's speed and hit the back of it.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make HYUNDAI Model I10
Manoeuvre: Slowing or stopping
Veh. direction from: Southeast to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 24 yrs Sex Female Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

Veh.No. 2 Vehicle type Goods > 7.5t Make DAF TRUC Model FA LF55.18
Manoeuvre: Slowing or stopping
Veh. direction from: Southeast to Northwest Towing? Articulated vehicle
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 53 yrs Sex Male Breath test Negative Driving Lic
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 24 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	580775 / 166229
SLIGHT	Ref.No 42748		Police Officer Attend:	Yes

Date	24/01/2016	Day Sunday	
Time	11:19		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 LONDON ROAD/BLOORS LANE, RAINHAM

Description of Accident: V3 had slowed down and stopped for the red lights along London Road A2. V2 stopped and V1 went to slow down behind V2. V1 then accidentally put foot onto accelerator pedal and drove into back of V2. V2 was then shunted into back of V3.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Junction - more than 4 arms (not a roundabou
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	Footbridge or subway

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 001	B
409 Swerved (Driver/Rider - Error)	Vehicle 001	A
509 Distraction in vehicle (Driver/Rider - Impairment)	Vehicle 001	B
607 Inexperience with vehicle type (Driver/Rider - Behaviour)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make MERCEDES Model C220 CDI C
Manoeuvre: Going ahead other
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run: Not hit and run
Drivers age 28 yrs Sex Male Breath test: Negative Driving Lic: Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make FORD Model S-MAX TIT
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no.
Other veh.hit (ref.no) 3 Hit and run: Not hit and run
Drivers age 37 yrs Sex Female Breath test: Negative Driving Lic: Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 37 yrs Sex Female Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 18 yrs Sex Female Post code
Car Passenger?: Front seat passenger PSV Passenger?: Not a passenger
Seat Belt: Unknown Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

Veh.No.	3	Vehicle type	Car	Make	VAUXHALL
Model	CORSA				
Manoeuvre	Moving off				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	24 yrs	Sex	Male	Breath test	Negative
Driving Lic	Full				
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District		Grid Reference	579860 / 166421
SLIGHT	Ref.No 47145		Police Officer Attend:	Yes

Date	13/02/2016 Day Saturday	Road A2	Location A2 London Road, Gillingham
Time	17:44		
Weather	Raining with high winds	Description of Accident	V2 was heading towards Bowaters roundabout when V3 undertook V2 and pulled in front. V3 braked sharply which caused V2 to brake hard. V1 has then hit the back of V2 and pushed it into the back of V3. V2 stopped but V1 and V3 drove off
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	50 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A
408 Sudden braking (Driver/Rider - Error)	Vehicle 003	A
408 Sudden braking (Driver/Rider - Error)	Vehicle 002	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Slowing or stopping
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Hit and Run
Drivers age 35 yrs Sex Not know Breath test Not requested Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

Veh.No. 2 Vehicle type Car Make NISSAN Model JUKE ACEI
Manoeuvre Slowing or stopping
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Not hit and run
Drivers age 27 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 29 yrs Sex Female Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

Veh.No.	3	Vehicle type	Car	Make	Model
Manoeuvre	Slowing or stopping				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Hit and Run
Drivers age	35 yrs	Sex	Not know	Breath test	Not requested	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District		Grid Reference	580021 / 166383
SLIGHT	Ref.No 58561		Police Officer Attend:	Yes

Date	10/04/2016 Day Sunday	Road A2	Location A2 London Road, Gillingham
Time	19:05		
Weather	Fine without high winds	Description of Accident	V1 WAS DRIVING EN ROUTE TO RAINHAM VIA THE A2 LONDON ROAD, DRIVING AND HAS THEN COLLIDED WITH V2 WHO WAS TURNING RIGHT INTO DOMINO'S PIZZA, V1 HAS SWERVED TO AVOID HEAD ON COLLISION AND INSTEAD GLANCED V2 AND THEN SPAN OFF HITTING A DOUBLE SKIMMED WALL OF NUMBER 287 LONDON ROAD CAUSING
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Using private drive or entrance
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 002	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 002	B
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FORD Model FIESTA
Manoeuvre Going ahead other
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 18 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Journey as part of work

Veh.No. 2 Vehicle type Car Make VOLKSWA Model POLO
Manoeuvre Turning right
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Leaving main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 20 yrs Sex Female Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 18 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 20 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	580816 / 166214
	Ref.No 67760	Police Officer Attend: No - reported over the counter

Date	13/05/2016 Day Friday
Time	18:09
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 London Road Junction with Bloors Lane, Gillingham, Kent

Description of Accident: There was fairly heavy traffic, all stationary on A2 London Road, Rainham at the traffic lights at the junction of Bloors Lane and Play Football. V4 was in the right hand lane (westbound on A2) at a red traffic light waiting to turn right onto Bloors Lane. There was 1 maybe 2 cars in front of them. V3 was stationary behind V2 all waiting to turn right into Bloors Lane. V1 has come up in the middle lane

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Crossroads
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	B
308 Following too close (Driver/Rider - Injudicious)	Vehicle 001	B

VEHICLES INVOLVED 4

Veh.No. 1 Vehicle type Car Make FIAT Model 127 FIORIN
Manoeuvre: Going ahead other
Veh. direction from: Southeast to Northwest Towing?: No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 4 Hit and run: Not hit and run
Drivers age 44 yrs Sex Male Breath test: Negative Driving Lic: Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Commuting to/from work

Veh.No. 2 Vehicle type Car Make NISSAN Model QASHQAI
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: Southeast to Northwest Towing?: No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run: Not hit and run
Drivers age 30 yrs Sex Female Breath test: Negative Driving Lic: Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 4

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 44 yrs Sex Male Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 30 yrs Sex Female Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 3 Cas Class Driver or Rider Veh ref No 3
Severity SLIGHT Age 32 yrs Sex Female Post code
Car Passenger?: Not a passenger PSV Passenger?: Not a passenger
Seat Belt Cycle Helmet: Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Veh.No.	3	Vehicle type	Car	Make	NISSAN
Model	JUKE ACEI				
Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	Southeast to Northwest	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	4	Hit and run	Not hit and run
Drivers age	32 yrs	Sex	Female	Breath test	Negative
Driving Lic	Full				
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

Veh.No.	4	Vehicle type	Car	Make	FIAT
Model	PANDA 45				
Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	Southeast to Northwest	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	Bridge - side				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age	27 yrs	Sex	Male	Breath test	Negative
Driving Lic	Full				
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

Cas No	4	Cas Class	Passenger	Veh ref No	2
Severity	SLIGHT	Age	10 yrs	Sex	Female
Post code					
Car Passenger?	Front seat passenger	PSV Passenger?	Not a passenger		
Seat Belt		Cycle Helmet	Not a cyclist		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 69801		580698 / 166245
			Police Officer Attend:	No - reported over the counter

Date	13/05/2016	Day Friday	
Time	08:40		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 London Road 100m west of J/W Bloors Lane, Gillingham, Kent

Description of Accident: V1 WAS AT A STANDSTILL IN TRAFFIC. D1 DECIDED WAS GOING TO PERFORM A U-TURN, LOOKED IN MIRROR AND DIDN'T SEE ANYTHING. WENT TO PERFORM THE MANOEUVRE WITHOUT LOOKING A SECOND TIME AND V2 HAS BEEN HIT BY V1 WHEN CARRYING OUT THE MANOEUVRE

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VOLKSWA Model CRAFTER

Manoeuvre	U turn		
Veh. direction from	West to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Offside		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Not hit and run		
Drivers age	43 yrs	Sex	Male
Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Taking pupil to/from school		

Veh.No. 2 Vehicle type M/cycle 125 - 500cc Make PIAGGIO Model VESPA GTS

Manoeuvre	Overtaking stat veh on its offside		
Veh. direction from	West to East	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	50 yrs	Sex	Male
Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider
Veh ref No	2		
Severity	SLIGHT	Age	50 yrs
Sex	Male	Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt		Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 73834		580808 / 166210
			Police Officer Attend:	No - reported over the counter

Date	25/05/2016 Day Wednesday
Time	23:40
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lights present and lit

Road A2 Location A2 London Road Junction with Bloors Lane, Gillingham

Description of Accident: IT APPEARS A MEMBER OF THE PUBLIC HAS KNOCKED OFF A MOTORCYCLIST IN FRONT OF PATROL. AS PATROL APPROACHED TRAFFIC LIGHTS VEHICLES HAVE MOVED TO LET PATROL THROUGH, FRONT VEHICLE HAS MADE CONTACT WITH BIKE WHO HAS MADE CONTACT WITH CURB AND COME OFF.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Other junction
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Footbridge or subway

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make TOYOTA Model YARIS S
Manoeuvre: Changing lane to left
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Nearside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 22 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

Veh.No. 2 Vehicle type M/cycle 50 - 125cc Make Model 125
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: Overturned
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 31 yrs Sex Female Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 31 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

Veh.No.	3	Vehicle type	Car	Make	BMW
Model	X5				
Manoeuvre	Going ahead other				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Did not impact				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age	42 yrs	Sex	Male	Breath test	Driver not contacted
Driving Lic	Full				
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Journey as part of work				

SEVERITY	District	Grid Reference
SLIGHT	Medway	580020 / 166391
	Ref.No 812625	Police Officer Attend: Yes

Date	14/11/2018 Day Wednesday
Time	08:49
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location LONDON ROAD (A2) - 44 METRES JUNCTION EDWIN ROAD

Description of Accident: V2 WAS TRAVELLING ALONG LONDON ROAD, GILLINGHAM, RAINHAM, HEADING TOWARDS COURTNEY ROAD, GILLINGHAM AND STOPPED IN STATIONARY TRAFFIC. V2 HAD THEIR OFFSIDE INDICATOR ON TO TURN RIGHT INTO DOMINO'S, WHEN V1, WHICH IS A MOTORCYCLE, WAS FILTERING LANES AND COLLIDED WITH V2, CAUSING MINOR

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 002	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type M/cycle > 500cc Make YAMAHA Model R6

Manoeuvre	Overtaking stat veh on its offside
Veh. direction from	Northwest to East
Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Not at or within 20m of junction
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Offside
Veh registration no.	
Other veh.hit (ref.no)	2
Hit and run	Not hit and run
Drivers age 28 yrs	Sex Male
Breath test	Not requested
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Other

Veh.No. 2 Vehicle type Car Make AUDI Model Q5 S LINE

Manoeuvre	Turning right
Veh. direction from	Northwest to East
Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Not at or within 20m of junction
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Front
Veh registration no.	
Other veh.hit (ref.no)	1
Hit and run	Not hit and run
Drivers age 29 yrs	Sex Female
Breath test	Not requested
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Taking pupil to/from school

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1

Severity SLIGHT Age 28 yrs Sex Male Post code

Car Passenger?	Not a passenger
PSV Passenger?	Not a passenger
Seat Belt	Not applicable
Cycle Helmet	Not a cyclist
Ped Movement	Not applicable
Ped Location	Not applicable
Ped Direction to	Not applicable
School Pupil	Other
Roadworker injured	

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	580340 / 166323
	Ref.No 812629	Police Officer Attend: Yes

Date	14/01/2019 Day Monday
Time	15:45
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 London Road Junction London Road, Gillingham

Description of Accident: Casualty 1 wanted to cross road quickly to catch bus, rather than use bridge over London road. Casualty 1 crossed road onto central reservation, then without looking has crossed the A2 London Road, Westbound. V1 travelling 35/40mph has hit Casualty 1, Casualty 1 has been thrown by the force of impact to the pavement. V1 had right of way. Casualty 1 sustained minor injuries. SECAS attended and took

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Other junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Footbridge or subway

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
802 Failed to look properly (Pedestrian)	Casualty 001	A
804 Wrong use of pedestrian crossing (Pedestrian)	Casualty 001	A
808 Careless/Reckless (Pedestrian)	Casualty 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type Car		Make FORD	Model KA	
Manoeuvre	Moving off				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Cleared junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 19 yrs	Sex Female	Breath test	Not requested	Driving Lic	
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Pedestrian			Veh ref No 1	
Severity SLIGHT	Age 12 yrs	Sex Female	Post code		
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt		Cycle Helmet	Not a cyclist		
Ped Movement	Crossing from driver's offside				
Ped Location	In carriageway, crossing elsewhere				
Ped Direction to	Southwest bound				
School Pupil	Other				
Roadworker injured	Not applicable				

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 820596		580416 / 166310
			Police Officer Attend:	No - reported over the counter

Date	26/02/2019	Day Tuesday	
Time	14:57		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location LONDON ROAD (A2) NEAR JUNCTION GUARDIAN COURT, RAINHAM

Description of Accident: V1 was positioned behind V2 which was stationary . The driver of V1 pressed on the accelerator instead of the brake and collided with the rear of V2 .
V2 has subsequently collided into the rear of V3 . V3 left the scene before emergency workers attended .

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Other junction
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A
308 Following too close (Driver/Rider - Injudicious)	Vehicle 002	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Car Make VOLKSWA Model GOLF TDI

Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	Parked vehicle				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age 39 yrs	Sex Male	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

Veh.No. 2 Vehicle type Car Make ROVER Model 214 I

Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	Parked vehicle				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 51 yrs	Sex Female	Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	2
Severity	SLIGHT	Age	51 yrs	Sex	Female
Post code					
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Unknown	Cycle Helmet	Not a cyclist		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

Veh.No.	3	Vehicle type	Car	Make	MINI
Model					
Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	? yrs	Sex	Not know	Breath test	Driver not contacted
Driving Lic					
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District	Grid Reference
SLIGHT	Medway	580792 / 166216
	Ref.No 826506	Police Officer Attend: Yes

Date	14/03/2019 Day Thursday
Time	19:13
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lights present and lit

Road A2 Location LONDON ROAD (A2) JUNCTION BLOORS LANE, RAINHAM

Description of Accident: Vehicle 2 was second car to turn right off LONDON ROAD into PlayFootball Gillingham when Vehicle 1 has collided with the nearside of the vehicle, causing it to spin in the road and make contact with the island on the PlayFootball junction.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	T or staggered junction
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
301 Disobeyed automatic traffic signal (Driver/Rider - Injudicious)	Vehicle 001	A
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 001	B
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FORD Model FIESTA ZE

Manoeuvre	Overtaking on nearside		
Veh. direction from	Northeast to Southwest	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Not hit and run		
Drivers age	19 yrs	Sex	Male
Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Other		

Veh.No. 2 Vehicle type Car Make SKODA Model OCTAVIA S

Manoeuvre	Turning right		
Veh. direction from	Southwest to Southeast	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Leaving main road		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Nearside		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	32 yrs	Sex	Male
Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Other		

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2

Severity SLIGHT Age 32 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	580668 / 166243
	Ref.No 838603	Police Officer Attend: Yes

Date	29/04/2019 Day Monday
Time	16:00
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location LONDON ROAD (A2), RAINHAM

Description of Accident: RIDER OF V1 CAME OFF OF THE LIGHTS REVING ENGINE. RIDER OF V1 PULLED A WHEELIE FOR APPROAXIMATELY 20 METRES, LOST CONTROL AND THE V1 (MOTORCYCLE) FLIPPED BACKWARDS, RIDER OF V1 CAME OFF AND SLID DOWN THE ROAD ON HIS BACK AND V1 SLID INTO THE BACK OF V3. AS V1 HIT THE GROUND, FRAGMENTS FROM V1

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	A
601 Aggressive driving (Driver/Rider - Behaviour)	Vehicle 001	A
410 Loss of control (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type M/cycle 125 - 500cc Make YAMAHA Model MT-07 ABS
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: Skidded
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 20 yrs Sex Male Breath test Not requested Driving Lic
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make RENAULT Model SCENIC DY
Manoeuvre: Parked
Veh. direction from: Parked to Parked Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Nearside
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 47 yrs Sex Female Breath test Not requested Driving Lic
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Taking pupil to/from school

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 20 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

Veh.No.	3	Vehicle type	Car	Make	VAUXHALL Model ZAFIRA 16
Manoeuvre	Parked				
Veh. direction from	Parked to Parked	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age	39 yrs	Sex	Female	Breath test	Not requested	Driving Lic	
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Taking pupil to/from school				

SEVERITY	District	Grid Reference
SLIGHT	Medway	580898 / 166188
	Ref.No 839513	Police Officer Attend: Yes

Date	27/04/2019 Day Saturday
Time	01:33
Weather	Raining without high winds
Road Surface	Wet/Damp
Street Lighting	Dark: street lights present but unlit

Road A2 Location LONDON ROAD (A2) - 22 METRES JUNCTION SALISBURY AVENUE, RAINHAM

Description of Accident: Driver of V1 was pulling out of Salisbury Avenue to go onto London Road making a left turn. There was said to be a parked car on the corner of the junction where V1 was turning. As V1 merged onto London Road, V2 was breaking so V1 sharply broke and collided into the rear of V2.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
103 Slippery road due to weather (Road Environment Contrib)	Vehicle 001	A
308 Following too close (Driver/Rider - Injudicious)	Vehicle 001	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A
701 Stationary or parked vehicle(s) (Driver/Rider - Vision Affected)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VOLKSWA Model POLO SE
Manoeuvre: Turning left
Veh. direction from: South to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 18 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make VAUXHALI Model INSIGNIA I
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Not at or within 20m of junction
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Not hit and run
Drivers age 37 yrs Sex Male Breath test Not requested Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 37 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	580359 / 166322
SERIOUS	Ref.No	849028		Police Officer Attend:	Yes

Date	01/06/2019	Day	Saturday
Time	13:35		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location LONDON ROAD (A2) JUNCTION PUMP LANE, RAINHAM

Description of Accident: V3 WAS TRAVELLING ON THE LONDON ROAD TOWARDS RAINHAM AND SUDDENLY BRAKED AT THE YELLOW BOX JUNCTION WITH PUMP LANE ALLOWING A VAN TO TURN INTO PUMP LANE. V2 THEN COLLIDED WITH V3, V1 REVERSED SLIGHTLY AND DROVE INTO ONCOMING TRAFFIC AND TURNED DOWN PUMP LANE, V1 THEN DROVE OFF

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 003	A
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 003	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 003	B
408 Sudden braking (Driver/Rider - Error)	Vehicle 003	A
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 003	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 003	B

VEHICLES INVOLVED 6

Veh.No. 1 Vehicle type Car Make FORD Model FIESTA
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Hit and Run
Drivers age ? yrs Sex Not know Breath test Driver not contacted Driving Lic
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make FORD Model FIESTA
Manoeuvre: Waiting to turn right
Veh. direction from: South to North Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Hit and Run
Drivers age ? yrs Sex Not know Breath test Driver not contacted Driving Lic
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 3
Severity SERIOUS Age 36 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 3
Severity SERIOUS Age 36 yrs Sex Female Post code
Car Passenger? Rear seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

Veh.No.	3	Vehicle type	Car		Make	FORD	Model MONDEO
Manoeuvre	Waiting to go ahead but held up						
Veh. direction from	West to East			Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning						
Veh location at impact (restricted lane)	On main carriageway not in restricted lane						
Junct. location of veh. at 1st impact	Approaching junction or waiting						
Veh left carriageway?	Did not leave carriageway						
Hit object in c'way?	None						
Hit object off c'way?	None						
First point of impact	Back						
Veh registration no.		Other veh.hit (ref.no)	2		Hit and run	Not hit and run	
Drivers age	36 yrs	Sex	Female	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle				
Journey purpose	Not Known						

Veh.No.	4	Vehicle type	Car		Make	FORD	Model MONDEO
Manoeuvre	Waiting to go ahead but held up						
Veh. direction from	West to East			Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning						
Veh location at impact (restricted lane)	On main carriageway not in restricted lane						
Junct. location of veh. at 1st impact	Approaching junction or waiting						
Veh left carriageway?	Did not leave carriageway						
Hit object in c'way?	None						
Hit object off c'way?	None						
First point of impact	Back						
Veh registration no.		Other veh.hit (ref.no)	3		Hit and run	Not hit and run	
Drivers age	64 yrs	Sex	Male	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle				
Journey purpose	Not Known						

Veh.No.	5	Vehicle type	Car		Make	HONDA	Model ACCORD
Manoeuvre	Waiting to go ahead but held up						
Veh. direction from	West to East			Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning						
Veh location at impact (restricted lane)	On main carriageway not in restricted lane						
Junct. location of veh. at 1st impact	Approaching junction or waiting						
Veh left carriageway?	Did not leave carriageway						
Hit object in c'way?	None						
Hit object off c'way?	None						
First point of impact	Back						
Veh registration no.		Other veh.hit (ref.no)	4		Hit and run	Not hit and run	
Drivers age	36 yrs	Sex	Female	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle				
Journey purpose	Not Known						

Veh.No.	6	Vehicle type	Car	Make	HONDA
Model	ACCORD				
Manoeuvre	Waiting to go ahead but held up				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	5	Hit and run	Not hit and run
Drivers age	36 yrs	Sex	Female	Breath test	Negative
Driving Lic	Full				
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

SEVERITY	District	Grid Reference
SERIOUS	Medway	580068 / 166377
	Ref.No 853271	Police Officer Attend: No - reported over the counter

Date	01/06/2019 Day Saturday
Time	18:00
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location LONDON ROAD (A2) NEAR JUNCTION EDWIN ROAD, RAINHAM

Description of Accident: V1 driving along A2 London Road towards Gillingham, V2 pulled out from Edwin Road without seeing V1, the driver then did a u turn in front of the garage not noticing V2. The morcyclist could not move out of the way and hit the drivers side of V1 and was dragged into the garage forecourt. Ambulance did not attend even though V1 and V2 had injuries, driver 2's wife picked him up and took him to hospital.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
305 Illegal turn or direction of travel (Driver/Rider - Injudicious)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
305 Illegal turn or direction of travel (Driver/Rider - Injudicious)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VAUXHALL Model CORSA LS
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 55 yrs Sex Male Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type M/cycle > 500cc Make KAWASAKI Model 1000
Manoeuvre: Going ahead other
Veh. direction from: South to North Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Cleared junction or waiting
Veh left carriageway?: Left carriageway nearside
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 49 yrs Sex Male Breath test Not provided (medical reas Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SERIOUS Age 49 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 1
Severity SERIOUS Age 55 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	580704 / 166240
	Ref.No 872392	Police Officer Attend: Yes

Date	10/08/2019 Day Saturday
Time	17:09
Weather	Fine with high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location LONDON ROAD (A2) - 92 METRES JUNCTION BLOORS LANE, RAINHAM

Description of Accident: Driver of V1 was travelling down the A2 towards Rainham when he saw there was a police road closure on. He has then checked his mirrors before performing a U-turn. V2 was driving a motorcycle and was travelling down the outside of the traffic whilst V1 was turning right performing the U-turn. Both vehicles have then collided. Minor injury to driver of V2.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Footbridge or subway

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VAUXHALL Model ASTRA S L

Manoeuvre	U turn		
Veh. direction from	West to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Offside		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Not hit and run		
Drivers age	32 yrs	Sex	Male
Breath test	Not requested	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

Veh.No. 2 Vehicle type M/cycle <= 50cc Make HONDA Model NSC 110 W

Manoeuvre	Overtaking moving veh on its offside		
Veh. direction from	West to East	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	32 yrs	Sex	Male
Breath test	Not requested	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider
Veh ref No	2		
Severity	SLIGHT	Age	32 yrs
Sex	Male	Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	580534 / 166274
SLIGHT	Ref.No 876106		Police Officer Attend:	Yes

Date	26/08/2019 Day Monday	Road A2	Location LONDON ROAD (A2) - 73 METRES JUNCTION DANSON WAY, RAINHAM
Time	19:45		
Weather	Fine without high winds	Description of Accident	Casualty was cycling on A2 London Road towards Bowater's Roundabout. He was passing parked cars on the nearside. V1 has then overtaken casualty which then clipped the bicycle, knocking him off onto the road where he managed to roll out.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
407 Too close to cyclist, horse or pedestrian (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 002	B

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type Van/Goods < 3.5t Make Van Model
Manoeuvre Overtaking on nearside
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age ? yrs Sex Not know Breath test Not requested Driving Lic
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

Veh.No. 2 Vehicle type Pedal Cycle Make Model
Manoeuvre Overtaking on nearside
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 47 yrs Sex Male Breath test Not Applicable Driving Lic
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

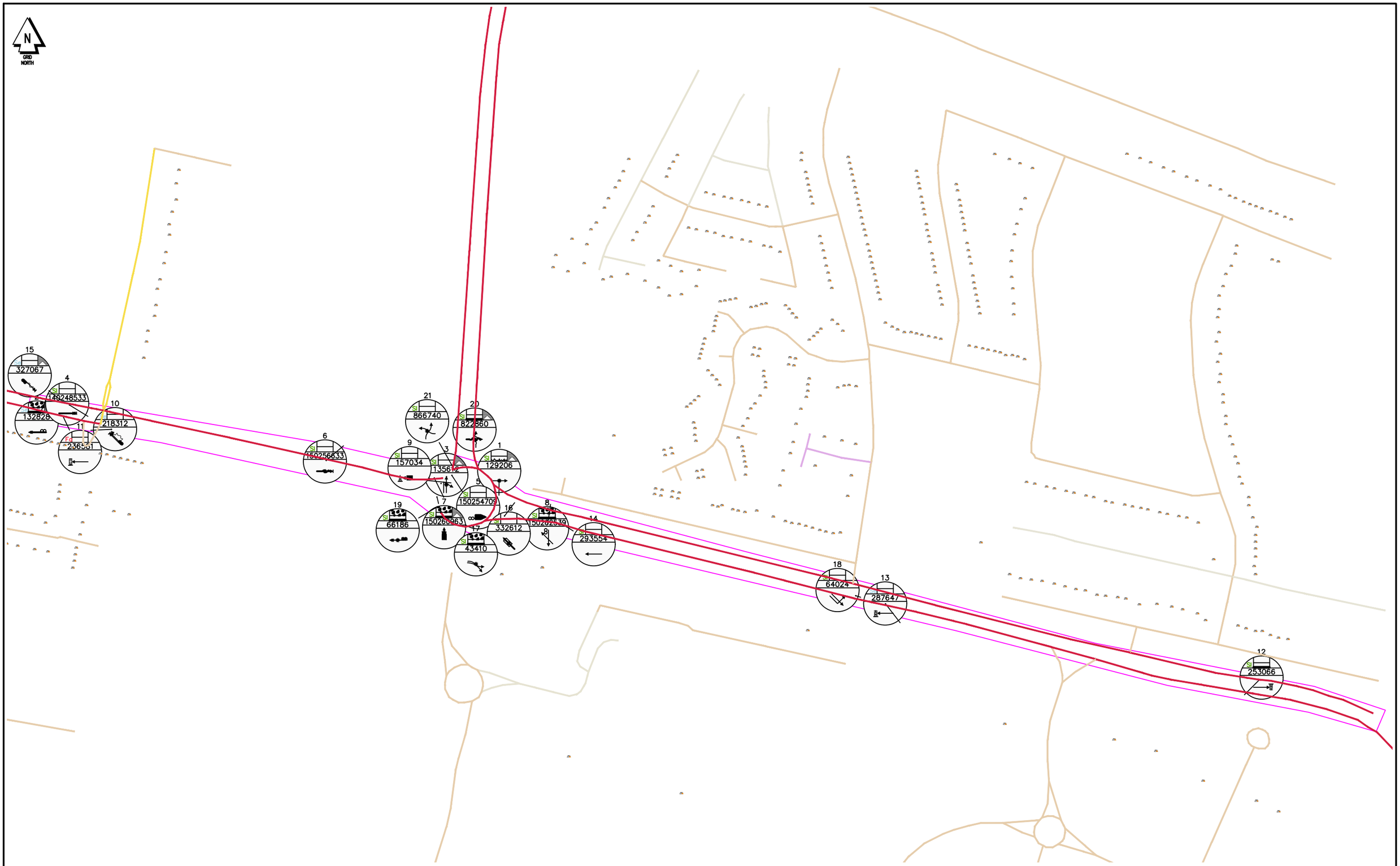
CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 47 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

Veh.No.	3	Vehicle type	Van/Goods < 3.5t		Make	FORD	Model TRANSIT 8
Manoeuvre		Parked					
Veh. direction from		Parked to Parked		Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning						
Veh location at impact (restricted lane)		On main carriageway not in restricted lane					
Junct. location of veh. at 1st impact		Not at or within 20m of junction					
Veh left carriageway?		Did not leave carriageway					
Hit object in c'way?		None					
Hit object off c'way?		None					
First point of impact		Offside					
Veh registration no.			Other veh.hit (ref.no)	2	Hit and run	Not hit and run	
Drivers age	? yrs	Sex	Not know	Breath test	Not requested	Driving Lic	
Left Hand Drive		No		Foreign veh.	Not foreign registered vehicle		
Journey purpose		Not Known					



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Rev	Description	By	Date	Chk'd	Appr'd

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Tel. (01634) 306000

Project: Collision Data 2014-Sept 2019

Title: A2 and Ito Way Roundabout

A1

Scale	Drawn	Checked	Approved	Drawing No.	Rev
NTS	MJ			–	–
	Date 11.06.2020	Date	Date		

SEVERITY	District	Medway		Grid Reference	578938 / 166677
SLIGHT	Ref.No	129206		Police Officer Attend:	Yes

Date	08/11/2016 Day Tuesday	Road A289	Location A289 Ito Way, at its Junction with A2 Watling Street, Gillingham
Time	03:25		
Weather	Fine without high winds	Description of Accident	V1 LEFT THE ROUNDABOUT AND LOST CONTROL, V1 COLLIDED WITH RAILINGS AND LAMP POST WHICH WAS SITUATED ON THE NEARSIDE.
Road Surface	Frost/Ice		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	A
103 Slippery road due to weather (Road Environment Contrib)	Vehicle 001	A
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type Car		Make FORD	Model FIESTA	
Manoeuvre	Going ahead other				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Leaving roundabout				
Veh left carriageway?	Left carriageway nearside				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 20 yrs	Sex Male	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Passenger			Veh ref No 1	
Severity SLIGHT	Age 19 yrs	Sex Female	Post code		
Car Passenger?	Rear seat passenger	PSV Passenger?	Not a passenger		
Seat Belt		Cycle Helmet	Not a cyclist		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District	Medway		Grid Reference	578598 / 166726
SERIOUS	Ref.No	132828		Police Officer Attend:	No - reported over the counter

Date	16/11/2016 Day Wednesday
Time	16:45
Weather	Raining without high winds
Road Surface	Wet/Damp
Street Lighting	Dark: street lights present and lit

Road A2 Location A2 Watling Street, 30m West of junction with Rotary Gardens, Gillingham

Description of Accident: C1 WAS RIDING BIKE ON THE PAVEMENT, CLIPPED THE BUS STOP AND LOST CONTROL OF BIKE AND WENT INTO THE ROAD AND WAS CLIPPED BY THE LORRY.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
410 Loss of control (Driver/Rider - Error)	Vehicle 001	A
603 Nervous/Uncertain (Driver/Rider - Behaviour)	Vehicle 001	A
310 Cyclist entering road from pavement (Driver/Rider - Injudicious	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Pedal Cycle Make Model

Manoeuvre	Going ahead other		
Veh. direction from	East to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Offside		
Veh registration no.		Other veh.hit (ref.no) 2	Hit and run Not hit and run
Drivers age 14 yrs	Sex Male	Breath test Not Applicable	Driving Lic Full
Left Hand Drive	No	Foreign veh. Not foreign registered vehicle	
Journey purpose	Other		

Veh.No. 2 Vehicle type Van/Goods < 3.5t Make CITROEN Model AMI 8 SER'

Manoeuvre	Going ahead other		
Veh. direction from	East to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Not at or within 20m of junction		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Nearside		
Veh registration no.		Other veh.hit (ref.no) 1	Hit and run Not hit and run
Drivers age 25 yrs	Sex Male	Breath test Not requested	Driving Lic Full
Left Hand Drive	No	Foreign veh. Not foreign registered vehicle	
Journey purpose	Other		

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1

Severity SERIOUS Age 14 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt		Cycle Helmet	Not known
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	578903 / 166681
SLIGHT	Ref.No	135612		Police Officer Attend:	Yes

Date	26/11/2016	Day Saturday	
Time	16:55		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

Road A2 Location Will Adams Roundabout, at its Junction with Ito Way, Gillingham

Description of Accident V2 ENTERED THE RDBT FROM B&Q. V2 WAS TURNING RIGHT TOWARD SITTINGBOURNE. V1 CAME UP THE OUTSIDE FORCING V2 DOWN ITO WAY AND CAUSED CONTACT BETWEEN THE TWO VEH'S BEFORE V1 DROVE OFF

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A289
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 002	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 002	B

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Car		Make	Model	
Manoeuvre	Going ahead other				
Veh. direction from	South to Southeast	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Nearside				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Hit and Run
Drivers age ? yrs	Sex Not know	Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

Veh.No. 2	Vehicle type Car		Make FORD	Model GALAXY A	
Manoeuvre	Turning right				
Veh. direction from	South to Southeast	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 22 yrs	Sex Male	Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No 2	
Severity SLIGHT	Age 22 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger		PSV Passenger?	Not a passenger	
Seat Belt			Cycle Helmet	Not a cyclist	
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District		Grid Reference	578620 / 166733
SLIGHT	Ref.No 140248533		Police Officer Attend:	Yes

Date	23/10/2014 Day Thursday	Road A2	Location Watling Street J/W Woodlands Road, Gillingham
Time	10:50		
Weather	Fine without high winds	Description of Accident	V2 was Travelling Along the A2 when the Driver Accelerated to Try and Get Through the Traffic Lights Before They Changed to Red. when the Driver Realised V2 Wouldn't Make It, They Applied the Brakes Heavily and Stopped Suddenly. V1 was Travelling Behind V2 and Attempted to Brake and Carry out an Evasive Manoeuvre. However, V1 Collided with the Rear of V2.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Crossroads
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
301 Disobeyed automatic traffic signal (Driver/Rider - Injudicious)	Vehicle 002	B
304 Disobeyed pedestrian crossing (Driver/Rider - Injudicious)	Vehicle 002	B
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 001	B
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 002	B
408 Sudden braking (Driver/Rider - Error)	Vehicle 002	A
605 Inexperienced or learner driver/rider (Driver/Rider - Behaviour)	Vehicle 002	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Van/Goods < 3.5t Make Model
Manoeuvre Slowing or stopping
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 23 yrs Sex Female Breath test Not requested Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Slowing or stopping
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 17 yrs Sex Male Breath test Negative Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 23 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 54 yrs Sex Female Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District		Grid Reference	578890 / 166679
SLIGHT	Ref.No 150254709		Police Officer Attend:	Yes

Date	27/03/2015 Day Friday	Road A2	Location Sovereign Boulevard J/W Ito Way (Will Adams Roundabout), Gillingham
Time	06:35		
Weather	Fine without high winds	Description of Accident	V1 was Waiting to Enter the Roundabout, Intending to Travel Straight across to Continue Along the A2 Towards Sittingbourne. V2 (P/Cycle) was to the Nearside of V1. as V1 Pulled Away it Caught V2 Rider's Shoulder Causing Injury.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A289
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
407 Too close to cyclist, horse or pedestrian (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Van/Goods < 3.5t		Make		Model
Manoeuvre	Moving off				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Nearside				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age 28 yrs	Sex Female	Breath test	Not requested	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Commuting to/from work				

Veh.No. 2	Vehicle type Pedal Cycle		Make		Model
Manoeuvre	Moving off				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Offside				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 24 yrs	Sex Male	Breath test	Not Applicable	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No	2
Severity SLIGHT	Age 24 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet			
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District		Grid Reference	578810 / 166692
SLIGHT	Ref.No 150256633		Police Officer Attend:	Yes

Date	11/05/2015 Day Monday	Road A2	Location Sovereign Boulevard 50 Metres from J/W Ito Way, Gillingham
Time	08:50		
Weather	Fine without high winds	Description of Accident	V1 Approaching Roundabout and Did Not See V2 Braking. V1 was Not Able to Stop in Time Due to Size and Weight and Has Hit Rear of V2.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A289
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 002	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Goods > 7.5t		Make		Model
Manoeuvre	Slowing or stopping				
Veh. direction from	West to East	Towing?	Single trailer		
Skidded	Skidded				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age 60 yrs	Sex Male	Breath test	Not requested	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Journey as part of work				

Veh.No. 2	Vehicle type Van/Goods < 3.5t		Make		Model
Manoeuvre	Slowing or stopping				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Approaching junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 30 yrs	Sex Male	Breath test	Not requested	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Journey as part of work				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No	2
Severity SLIGHT	Age 30 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger		PSV Passenger?	Not a passenger	
Seat Belt	Not applicable		Cycle Helmet		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District		Grid Reference	578892 / 166665
SLIGHT	Ref.No 150260963		Police Officer Attend:	No - reported over the counter

Date	31/08/2015 Day Monday	Road U	Location Will Adams Way Atj/W Sovereign Boulevard, Gillingham
Time	18:10		
Weather	Raining without high winds	Description of Accident	V1 and V2 both Pulled out of Will Adams Way onto Will Adams Roundabout; V2 in the Middle Lane to Go Straight On, and V1 in the right Hand Lane to Go Straight On. V1 Revved Their Engine as They Pulled Away, Skidded on the Wet Road Surface and Hit V2's Offside. V1 Did Not Stop.
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Car		Make	Model	
Manoeuvre	Moving off				
Veh. direction from	South to North	Towing?	No tow or articulation		
Skidded	Skidded				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Hit and Run
Drivers age ? yrs	Sex Not know	Breath test	Driver not contacted	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

Veh.No. 2	Vehicle type Car		Make	Model	
Manoeuvre	Moving off				
Veh. direction from	South to North	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Offside				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 44 yrs	Sex Male	Breath test	Not requested	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No 2	
Severity SLIGHT	Age 44 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger		PSV Passenger?	Not a passenger	
Seat Belt	Not applicable		Cycle Helmet		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 150262539		578974 / 166645
			Police Officer Attend:	Yes

Date	06/10/2015	Day Tuesday	
Time	13:15		
Weather	Raining without high winds		
Road Surface	Wet/Damp		
Street Lighting	Daylight		

Road A2 Location Sovereign Way at Crossing Prior to Will Adams Roundabout Jw Will Adams Way, Gillingham

Description of Accident: V1 was Stationary at Traffic Lights and Pulled Forward Slowly as the Lights Turned to Amber. V2 (Pedal Cycle) Has then Pulled in Front of V1, Causing a Collision.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres
	Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 002	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Going ahead other
Veh. direction from Southeast to Northwest Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 27 yrs Sex Male Breath test Negative Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Pedal Cycle Make Model
Manoeuvre Going ahead other
Veh. direction from North to South Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Not at or within 20m of junction
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 48 yrs Sex Female Breath test Not Applicable Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 48 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	578886 / 166679
SLIGHT	Ref.No	157034		Police Officer Attend:	Yes

Date	13/02/2017 Day Monday
Time	11:10
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 Will Adams Roundabout at Junction with A2 Watling Street, Gillingham

Description of Accident: V1 was travelling from Sovereign Boulevard to Will Adams Way when he passed a stationary vehicle and saw a male get out of the front passenger side but did not see where he went. V1 then proceeded to roundabout and as he did C1 appeared at the front of the V1 and was hit by V1. C1 refused medial attention and no obvious injuries were seen by patrols.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
804 Wrong use of pedestrian crossing (Pedestrian)	Casualty 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
808 Careless/Reckless (Pedestrian)	Casualty 001	A

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type Car		Make MAZDA	Model 3 TS2	
Manoeuvre	Moving off				
Veh. direction from	East to North	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 65 yrs	Sex Male	Breath test	Not requested	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Pedestrian			Veh ref No	1
Severity SLIGHT	Age 21 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist		
Ped Movement	Crossing from driver's nearside				
Ped Location	In centre of carriageway				
Ped Direction to	Northbound				
School Pupil	Other				
Roadworker injured	Not applicable				

Other Details

SEVERITY	District	Medway		Grid Reference	578651 / 166715
SERIOUS	Ref.No	218312		Police Officer Attend:	Yes

Date	25/08/2017	Day Friday	Road A2 Location A2 Watling Street at Junction with C378 Woodlands Road, Gillingham
Time	14:52		
Weather	Fine without high winds		Description of Accident V1 motorcyclist travelling at high speed between slow/stationary traffic. Gap between vehicles too small. Collided with rear of V2 which sent V1 spinning into V3 then out into the junction.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Dual carriageway
Junction Detail	Crossroads
Junction Control	Automatic traffic signal
2nd Road Number	C378
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 001	A
307 Travelling too fast for conditions (Driver/Rider - Injudicious)	Vehicle 001	A
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	A
607 Inexperience with vehicle type (Driver/Rider - Behaviour)	Vehicle 001	A
410 Loss of control (Driver/Rider - Error)	Vehicle 001	A
901 Stolen vehicle (Special Codes)	Vehicle 001	A

VEHICLES INVOLVED 3

Veh.No. 1 Vehicle type M/cycle 125 - 500cc Make SUZUKI Model GS 500 EW
Manoeuvre Overtaking stat veh on its offside
Veh. direction from Southeast to Southwest Towing? No tow or articulation
Skidded Skidded
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 23 yrs Sex Male Breath test Not requested Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

Veh.No. 2 Vehicle type Car Make VOLKSWA Model SHARAN S
Manoeuvre Slowing or stopping
Veh. direction from Southeast to Northwest Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 55 yrs Sex Male Breath test Not requested Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SERIOUS Age 23 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

Veh.No.	3	Vehicle type	Goods unknown weight		Make	FORD	Model TRANSIT C
Manoeuvre		Slowing or stopping					
Veh. direction from		Southeast to Northwest		Towing?	No tow or articulation		
Skidded		No skidding, jack-knifing or overturning					
Veh location at impact (restricted lane)		On main carriageway not in restricted lane					
Junct. location of veh. at 1st impact		Approaching junction or waiting					
Veh left carriageway?		Did not leave carriageway					
Hit object in c'way?		None					
Hit object off c'way?		None					
First point of impact		Nearside					
Veh registration no.			Other veh.hit (ref.no)	1	Hit and run	Not hit and run	
Drivers age	46 yrs	Sex Male	Breath test	Not requested	Driving Lic	Full	
Left Hand Drive		No	Foreign veh.	Not foreign registered vehicle			
Journey purpose		Not Known					

SEVERITY	District	Grid Reference	
FATAL	Medway	578615 / 166725	
	Ref.No 236581	Police Officer Attend:	Yes

Date	06/11/2017 Day Monday	Road	A2 Location (pedestrian crossing) A2 Watling Street near Junction with Rotary Gardens, Gillingham
Time	12:52		
Weather	Fine without high winds	Description of Accident	V1 travelling towards Chatham when having passed through a green light at the junction for Woodlands Road/Rotary Gardens, collided with C1 crossing the road towards Woodlands Road.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Crossroads
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
802 Failed to look properly (Pedestrian)	Casualty 001	B
999 Other (Special Codes)	Casualty 001	B
804 Wrong use of pedestrian crossing (Pedestrian)	Casualty 001	B

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type Car		Make TOYOTA	Model AYGO X-Pl	
Manoeuvre	Going ahead other				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Cleared junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 29 yrs	Sex Female	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Pedestrian			Veh ref No 1	
Severity FATAL	Age 37 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist		
Ped Movement	Crossing from driver's offside				
Ped Location	On ped. crossing facility				
Ped Direction to	Northbound				
School Pupil	Other				
Roadworker injured	Not applicable				

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 253066		579501 / 166530
			Police Officer Attend:	No - reported over the counter

Date	13/12/2017 Day Wednesday
Time	14:45
Weather	Fine without high winds
Road Surface	Wet/Damp
Street Lighting	Daylight

Road A2 Location (pedestrian crossing) A2 Watling Street near Junction with South Avenue, Gillingham

Description of Accident: COLLISION UNCLEAR TWO THEORIES:
1ST: PEDESTRIAN CROSSED INTO LIVE LANE COLLIDED WITH V1 PRIOR TO GREEN PEDESTRIAN SIGNAL
2ND: V1 RAN THE RED LIGHT, PEDESTRIAN STEPPED INTO THE LIVE LANE V1 HIT PEDESTRIAN/CYCLIST

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Single carriageway
Junction Detail	T or staggered junction
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
802 Failed to look properly (Pedestrian)	Casualty 001	B
304 Disobeyed pedestrian crossing (Driver/Rider - Injudicious)	Vehicle 001	B
804 Wrong use of pedestrian crossing (Pedestrian)	Casualty 001	B
301 Disobeyed automatic traffic signal (Driver/Rider - Injudicious)	Vehicle 001	B

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Car	Make FIAT	Model PANDA 45
Manoeuvre	Going ahead other				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Cleared junction or waiting				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Offside				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age	82 yrs	Sex	Female	Breath test	Driver not contacted
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Journey as part of work				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Pedestrian	Veh ref No	1
Severity	SLIGHT	Age	59 yrs	Sex	Male
Post code					
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist		
Ped Movement	Crossing from driver's nearside				
Ped Location	On ped. crossing facility				
Ped Direction to	South bound				
School Pupil	Other				
Roadworker injured	Not applicable				

Other Details

SEVERITY	District	Medway		Grid Reference	579224 / 166586
SERIOUS	Ref.No	287647		Police Officer Attend:	No - reported over the counter

Date	16/04/2018	Day Monday	
Time	14:30		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 Watling Street, Gillingham

Description of Accident: V1 WAS DRIVING IN LANE 2 OF THE DUAL CARRIAGEWAY.AS V1 WAS APPROACHING A TRAFFIC LIGHT CONTROLLED PEDESTRIAN CROSSING, THE PEDESTRIAN HAS BEGUN TO CROSS THE ROAD AS THE LIGHTS HAD TURNED RED . V1 WENT THROUGH THE RED LIGHT AND HIT THE PEDESTRIAN .

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
301 Disobeyed automatic traffic signal (Driver/Rider - Injudicious)	Vehicle 001	A
304 Disobeyed pedestrian crossing (Driver/Rider - Injudicious)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	A

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type Car		Make HYUNDAI	Model I10 SE	
Manoeuvre	Going ahead other				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 28 yrs	Sex Female	Breath test	Negative	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Pedestrian			Veh ref No 1	
Severity SERIOUS	Age 40 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist		
Ped Movement	Crossing from driver's nearside				
Ped Location	On ped. crossing facility				
Ped Direction to	South bound				
School Pupil	Other				
Roadworker injured	Not applicable				

Other Details

SEVERITY	District	Medway		Grid Reference	578988 / 166643
SLIGHT	Ref.No	293554		Police Officer Attend:	No - reported over the counter

Date	03/05/2018 Day Thursday
Time	20:18
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 Watling Street, Gillingham

Description of Accident: D1 has been on the phone and was over the prescribed alcohol unit, he has driven into the barriers prior to the roundabout, he states he reversed and then lost control as he was driving from sovereign blvd going towards Watling street, in the direction of Chatham.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
501 Impaired by alcohol (Driver/Rider - Impairment)	Vehicle 001	A
508 Driver using mobile phone (Driver/Rider - Impairment)	Vehicle 001	A
410 Loss of control (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Car	Make FORD	Model TOURNEO
Manoeuvre	Going ahead other				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Left carriageway offside				
Hit object in c'way?	None				
Hit object off c'way?	Central crash barrier				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age	28 yrs	Sex	Male	Breath test	Positive	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Not Known				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	1
Severity	SLIGHT	Age	28 yrs	Sex	Male	Post code	
Car Passenger?	Not a passenger			PSV Passenger?	Not a passenger		
Seat Belt	Unknown			Cycle Helmet	Not a cyclist		
Ped Movement	Not applicable						
Ped Location	Not applicable						
Ped Direction to	Not applicable						
School Pupil	Other						
Roadworker injured							

Other Details

SEVERITY	District	Medway		Grid Reference	578613 / 166737
SERIOUS	Ref.No	327067		Police Officer Attend:	Yes

Date	29/08/2018 Day Wednesday
Time	21:18
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lights present and lit

Road A2 Location A2 SOVEREIGN BLVD J/W WOODLANDS RD, LUTON

Description of Accident: V1 and V2 were travelling southeast on Sovereign Blvd. As they approached the junction with Woodlands Rd, V1 stopped suddenly at the traffic lights, causing V2 to collide with the rear of V1. R2 tried to speak to D1 but they drove away without providing any details. (NO POSTCODE FOR V2 AND C1)

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Crossroads
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
408 Sudden braking (Driver/Rider - Error)	Vehicle 001	A
601 Aggressive driving (Driver/Rider - Behaviour)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VAUXHALL Model INSIGNIA I
Manoeuvre Slowing or stopping
Veh. direction from Northwest to Southeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Hit and Run
Drivers age 30 yrs Sex Male Breath test Not requested Driving Lic
Left Hand Drive No Foreign veh.
Journey purpose Not Known

Veh.No. 2 Vehicle type M/cycle 50 - 125cc Make YAMAHA Model XT 125 X
Manoeuvre Going ahead other
Veh. direction from Northwest to Southeast Towing? No tow or articulation
Skidded Skidded
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 21 yrs Sex Male Breath test Not requested Driving Lic Provisional
Left Hand Drive No Foreign veh.
Journey purpose Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SERIOUS Age 21 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Grid Reference	
SLIGHT	Ref.No 332612	Police Officer Attend:	578942 / 166651 No - reported over the counter

Date	05/09/2018 Day Wednesday	Road A2	Location A2 SOVEREIGN BLVD J/W WILL ADAMS WAY, GILLINGHAM
Time	09:40		
Weather	Fine without high winds	Description of Accident	V2 WAS WAITING TO ENTER THE RNDBT WHEN V1 COLLIDED WITH THE REAR OF V2. D1 LEFT THE SCENE IN A HURRY.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Dual carriageway
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Car	Make SUZUKI	Model ALTO SZ3
Manoeuvre	Waiting to go ahead but held up		
Veh. direction from	Southeast to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Approaching junction or waiting		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no) 2	Hit and run Not hit and run
Drivers age 68 yrs	Sex Female	Breath test Driver not contacted	Driving Lic Full
Left Hand Drive	No	Foreign veh.	
Journey purpose	Not Known		

Veh.No. 2	Vehicle type Van/Goods < 3.5t	Make CITROEN	Model BERLINGC
Manoeuvre	Going ahead other		
Veh. direction from	Southeast to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Approaching junction or waiting		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Back		
Veh registration no.		Other veh.hit (ref.no) 1	Hit and run Not hit and run
Drivers age 31 yrs	Sex Male	Breath test Driver not contacted	Driving Lic
Left Hand Drive	No	Foreign veh.	
Journey purpose	Not Known		

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider	Veh ref No 2
Severity SLIGHT	Age 31 yrs Sex Male	Post code
Car Passenger?	Not a passenger	PSV Passenger? Not a passenger
Seat Belt	Not applicable	Cycle Helmet Not a cyclist
Ped Movement	Not applicable	
Ped Location	Not applicable	
Ped Direction to	Not applicable	
School Pupil	Other	
Roadworker injured		

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	578895 / 166675
	Ref.No 43410	Police Officer Attend: No - reported over the counter

Date	27/01/2016 Day Wednesday
Time	12:30
Weather	Raining without high winds
Road Surface	Wet/Damp
Street Lighting	Daylight

Road A2 Location A2 WILL ADAMS ROUNDABOUT 15 METRES WEST OF JUNCTION WITH A289 ITO WAY, GILLINGHAM

Description of Accident: V1 was in the inside lane going around the Will adams roundabout, as V1 haD gone to move out to lane 2 V1 collided with V2 causing minor damage.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A289
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
103 Slippery road due to weather (Road Environment Contrib)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make FORD Model FOCUS
Manoeuvre: Changing lane to right
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 28 yrs Sex Male Breath test Not requested Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

Veh.No. 2 Vehicle type Car Make FORD Model FIESTA
Manoeuvre: Going ahead right hand bend
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact: Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 18 yrs Sex Female Breath test Driver not contacted Driving Lic Provisional
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Journey as part of work

CASUALTIES INVOLVED 3

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 18 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 13 yrs Sex Male Post code
Car Passenger? Rear seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 3 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 38 yrs Sex Female Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	579202 / 166592
	Ref.No 64024	Police Officer Attend: No - reported over the counter

Date	25/04/2016 Day Monday
Time	09:39
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location A2 Watling Street, at its Junction with Featherby Road, Gillingham

Description of Accident: VEH 1 WAS ON OUTSIDE LANE (2) AND VEH 2 WAS TRAVELLING ON INSIDE LANE (1). VEH 1 SIGNALLED LEFT AND CUT ACROSS VEH 2 CAUSING THE COLLISION. BOTH VEHS WERE TRAVELLING IN THE DIRECTION OF RAINHAM. VEH 1 IN LANE 2 WANTED TO TURN DOWN FEATHERBY ROAD.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Other junction
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make SKODA Model OCTAVIA
Manoeuvre Turning left
Veh. direction from Northwest to Southeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Leaving main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 25 yrs Sex Female Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

Veh.No. 2 Vehicle type Car Make FORD Model KA
Manoeuvre Going ahead other
Veh. direction from Northwest to Southeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 43 yrs Sex Female Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 43 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Grid Reference	
SLIGHT	Ref.No 66186	Police Officer Attend:	Medway 578891 / 166657 Yes

Date	09/05/2016 Day Monday
Time	09:13
Weather	Raining without high winds
Road Surface	Wet/Damp
Street Lighting	Daylight

Road A2 Location A2 Will Adams Roundabout, at its Junction with A2 Watling Street, Gillingham, Kent

Description of Accident: V.1 HAS BEEN TRAVELLING IN LANE 1 FROM GILLLINGHAM TOWARDS CHATHAM ON THE A2 WATLING STREET V1 HAS APPROACHED THE WILL ADAMS ROUNDABOUT IN LANE 1 STILL AND GONE STRAIGHT OVER THE ROUNDABOUT INDICATING LEFT AS THEY PREPARED TO TAKE EXIT 2 FOR ROMAN ROAD AT THIS POINT V.1 HAS SEEN V2 IN

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
710 Vehicle blind spot (Driver/Rider - Vision Affected)	Vehicle 001	A
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 002	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make RENAULT(Model MEGANE I

Manoeuvre	Going ahead other
Veh. direction from	East to West
Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Front
Veh registration no.	
Other veh.hit (ref.no)	2
Hit and run	Not hit and run
Drivers age 48 yrs	Sex Male
Breath test	Driver not contacted
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known

Veh.No. 2 Vehicle type M/Cycle Unknown cc Make SUZUKI(M Model SV 650 SK6

Manoeuvre	Going ahead other
Veh. direction from	East to West
Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Offside
Veh registration no.	
Other veh.hit (ref.no)	1
Hit and run	Not hit and run
Drivers age 21 yrs	Sex Male
Breath test	Driver not contacted
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2

Severity SLIGHT Age 21 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 822860	Police Officer Attend:	578899 / 166680 Yes

Date	07/03/2019	Day Thursday	
Time	05:00		
Weather	Fine without high winds		
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

Road A2 Location WILL ADAMS ROUNDABOUT (A2) JUNCTION WATLING STREET (A2), GILLINGHAM

Description of Accident: V2 TRAVELLING FROM GILLINGHAM BUSINESS PARK HEADING STRAIGHT ACROSS ROUNDABOUT ONTO ITO WAY . V1 APPROACHING FROM A2 COMING FROM GILLINGHAM TOWARDS RAINHAM. V1 SAID HE WAS APPROACHING ROUNDABOUT AND CHECKED TO MAKE SURE NO OTHER VEHICLES WERE APPROACHING OR ON ROUNDABOUT . V1

SITE DETAILS

Speed Limit	50 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Van/Goods < 3.5t Make CITROEN Model BERLINGC
Manoeuvre: Going ahead other
Veh. direction from: West to East Towing? No tow or articulation
Skidded: Skidded
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 55 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

Veh.No. 2 Vehicle type Car Make MAZDA Model CX-5 SPOR
Manoeuvre: Going ahead other
Veh. direction from: South to North Towing? No tow or articulation
Skidded: Skidded and overturned
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 50 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

CASUALTIES INVOLVED 3

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 55 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 50 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 3 Cas Class Passenger Veh ref No 1
Severity SLIGHT Age 55 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Medway		Grid Reference	578905 / 166685
SLIGHT	Ref.No	866740		Police Officer Attend:	Yes

Date	11/07/2019 Day Thursday
Time	07:44
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A2 Location WILL ADAMS ROUNDABOUT (A2) JUNCTION ITO WAY, GILLINGHAM

Description of Accident: V1 travelling from Rainham towards Ito Way. V2 coming from Will Adams Ways towards Rainham in outside lane turning right. V1 has been on the inside lane and both vehicles have collided as they have got to junction off Ito Way on roundabout. V1 has swerved and hit roadside furniture.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A289
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
404 Failed to signal/misleading signal (Driver/Rider - Error)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A
108 Road layout e.g. bend, hill or narrow (Road Environment Contri	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make NISSAN Model MICRA SE
Manoeuvre: Changing lane to right
Veh. direction from: East to North Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 25 yrs Sex Female Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Taking pupil to/from school

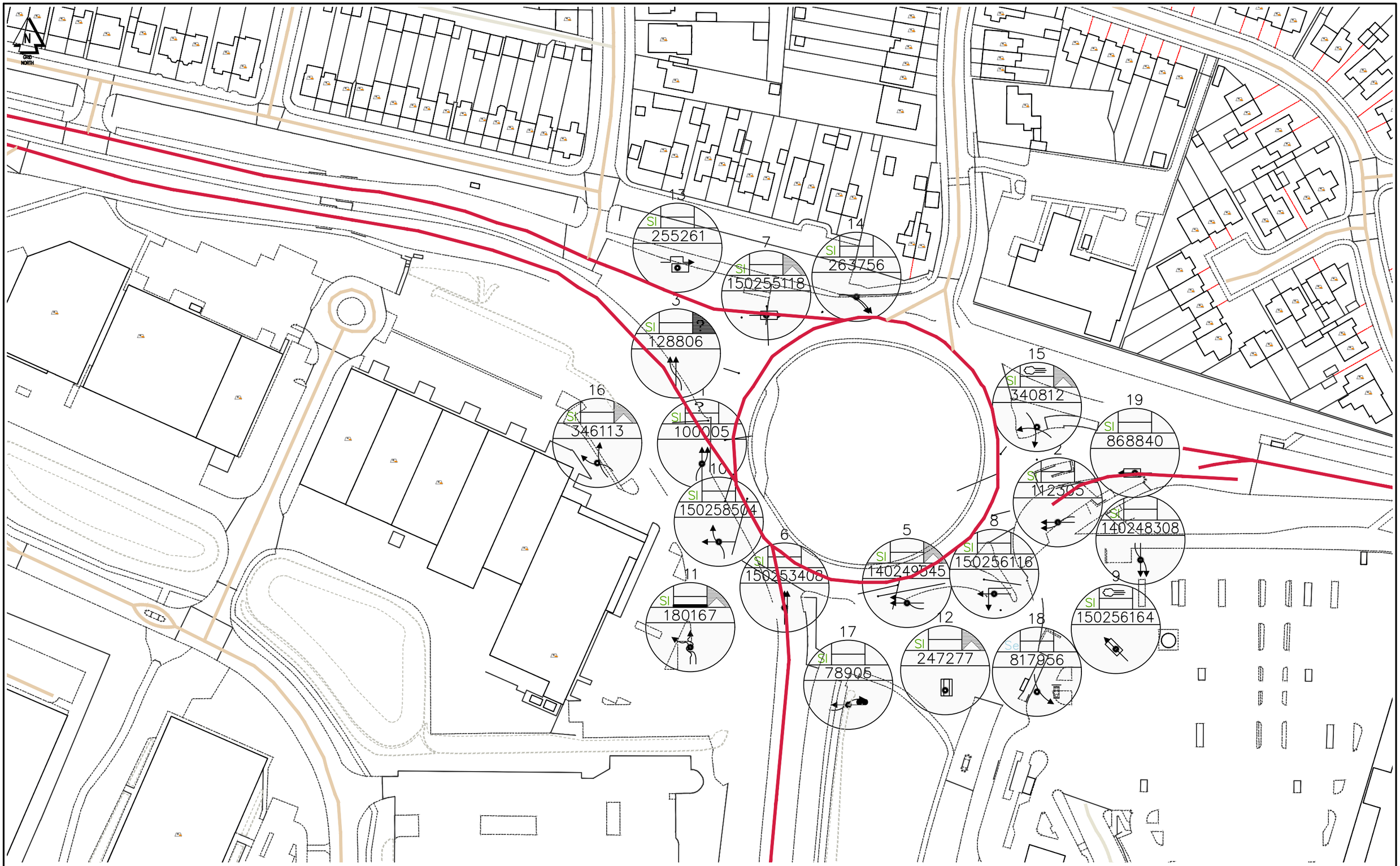
Veh.No. 2 Vehicle type Car Make VAUXHALL Model CORSA CL
Manoeuvre: Changing lane to right
Veh. direction from: South to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving roundabout
Veh left carriageway?: Left carriageway offside and crossed cent.
Hit object in c'way?: None
Hit object off c'way?: Road sign/traffic signal
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 18 yrs Sex Female Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Other

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 25 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 18 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Unknown Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details



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Rev	Description	By	Date	Chk'd	Appr'd

Medway Council
Serving You

REGENERATION, CULTURE, ENVIRONMENT & TRANSFORMATION DIRECTORATE
HIGHWAYS DESIGN AND ADOPTIONS
GUN WHARF
DOCK ROAD, CHATHAM
KENT, ME4 4TR
Tel. (01634) 306000

Project: Collision Dat 2014–Sept 19

Title: Bowaters Roundabout

A1

Scale	Drawn	Checked	Approved	Drawing No.	Rev
NTS	MJ			–	–
	Date 11.06.2020	Date	Date		

SEVERITY	District	Medway		Grid Reference	579634 / 166440
SLIGHT	Ref.No	100005		Police Officer Attend:	Yes

Date	20/08/2016	Day	Saturday
Time	17:00		
Weather	Unknown		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 Bowaters Roundabout, at its Junction with A2 Watling Street, Gillingham

Description of Accident: V2 TRAVELLING IN CENTRAL LANE ON BOWATERS ROUNDABOUT WHEN STRUCK BY V1 WHO WAS TRYING TO CHANGE LANE AND MOVE FROM INSIDE LANE TO OUTSIDE LANE TO TAKE EXIT. V2 SUSTAINED DENT AND SCRATCHES TO REAR PASSENGER SIDE. BOTH VEHICLES INITIALLY STOPPED BUT V1 DROVE AWAY WITHOUT

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
601 Aggressive driving (Driver/Rider - Behaviour)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make LAND ROV Model DISCOVER
Manoeuvre: Changing lane to right
Veh. direction from: South to Northeast Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Hit and Run
Drivers age 35 yrs Sex Male Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make VOLKSWA Model POLO
Manoeuvre: Going ahead other
Veh. direction from: South to Northeast Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 24 yrs Sex Female Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 25 yrs Sex Male Post code

Car Passenger?	Front seat passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	579732 / 166428
SLIGHT	Ref.No	112305		Police Officer Attend:	Yes

Date	25/09/2016	Day Sunday	
Time	12:06		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location Bowaters Roundabout, at its Junction with A2 London Road, Gillingham

Description of Accident: V1 was travelling along A2 Pump Lane D1's attention was drawn to a veh exiting Pump Lane, V1 didnt see V2 brake in front and skidded impacting rear of V2. Minor damage- passenger v2 stating injury. Section 170 complied with.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VAUXHALL Model ADAM
Manoeuvre: Changing lane to left
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 46 yrs Sex Female Breath test Driver not contacted Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Commuting to/from work

Veh.No. 2 Vehicle type Car Make SUBARU Model
Manoeuvre: Going ahead other
Veh. direction from: East to West Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 73 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 18 yrs Sex Female Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 41 yrs Sex Female Post code
Car Passenger? Rear seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

SEVERITY	District	Medway		Grid Reference	579639 / 166464
SLIGHT	Ref.No	128806		Police Officer Attend:	Yes

Date	08/11/2016 Day Tuesday	Road A2	Location A2 Bowaters Roundabout, at its Junction with Twydall Lane, Gillingham
Time	20:53		
Weather	Fine without high winds	Description of Accident	V1 AND V2 WERE BOTH ON THE ROUNDABOUT GILLINGHAM BOUND. V1 WAS IN LANE 3 AND V2 WAS IN LANE 2. V2 WENT AROUND THE ROUNDABOUT TO HEAD TOWARDS TWYDALL AND MERGED IN TO LANE 1 WHILST V1 MERGED INTO LANE 2. V1 WANTED TO GO INTO TWYDALL ALSO AND TRIED TO GO INTO LANE 1 CAUSING A COLLISION.
Road Surface	Dry		
Street Lighting	Dark: street lighting unknown		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	T or staggered junction
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VAUXHALL Model ASTRA
Manoeuvre Changing lane to left
Veh. direction from South to Northeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Leaving roundabout
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Nearside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 21 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

Veh.No. 2 Vehicle type Car Make VAUXHALL Model MOKKA EX
Manoeuvre Going ahead other
Veh. direction from South to Northeast Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Leaving roundabout
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 23 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 23 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 23 yrs Sex Male Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	140248308	Police Officer Attend:	No - reported over the counter

Date	15/10/2014	Day Wednesday	
Time	15:45		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location London Road J/W Courteney Road (Bowaters Roundabout), Gillingham

Description of Accident: V2 was in Lane 1 Intending to Take the Exit onto Hoath Way when it was Hit by V1 which was Changing Lanes in Order to Enter Courteney Road. V1 Failed to Stop at the Scene.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B
601 Aggressive driving (Driver/Rider - Behaviour)	Vehicle 001	B
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre: Changing lane to left
Veh. direction from: North to Southeast Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Nearside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Hit and Run
Drivers age ? yrs Sex Female Breath test Driver not contacted Driving Lic
Left Hand Drive: Unknown Foreign veh. Not foreign registered vehicle
Journey purpose: Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre: Going ahead other
Veh. direction from: North to South Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 27 yrs Sex Female Breath test Driver not contacted Driving Lic
Left Hand Drive: Unknown Foreign veh. Not foreign registered vehicle
Journey purpose: Taking pupil to/from school

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 7 yrs Sex Male Post code
Car Passenger? Rear seat passenger PSV Passenger? Not a passenger
Seat Belt: Not applicable Cycle Helmet
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Yes on way to or from school
Roadworker injured

Other Details

SEVERITY	District		Grid Reference	579696 / 166388
SLIGHT	Ref.No 140249545		Police Officer Attend:	No - reported over the counter

Date	14/11/2014 Day Friday	Road A2	Location Watling Street J/W Hoath Way (Bowaters Roundabout), Gillingham
Time	21:35		
Weather	Fine without high winds	Description of Accident	V1 and V2 Were Travelling Round the Roundabout. V1 was Heading Towards Hoath Way but Changed Their Mind and Changed Lanes to the right Colliding with V2. V1 and V2 Stopped. V1 Driver Became Abusive and then left the Scene Without Exchanging Details.
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A278
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
404 Failed to signal/misleading signal (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Changing lane to right
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Mid junction - on roundabout or main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Hit and Run
Drivers age ? yrs Sex Not know Breath test Driver not contacted Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Going ahead other
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Mid junction - on roundabout or main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 43 yrs Sex Female Breath test Driver not contacted Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 43 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District		Grid Reference	579654 / 166388
SLIGHT	Ref.No 150253408		Police Officer Attend:	No - reported over the counter

Date	17/02/2015	Day Tuesday	
Time	15:20		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A278 Location Hoath Way J/W Watling Street, Gillingham

Description of Accident: V1 and V2 Were Entering the Roundabout when V1 Collided with the Rear of V2.

SITE DETAILS

Speed Limit	50 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Car	Make	Model
Manoeuvre	Going ahead other		
Veh. direction from	South to North	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Entering roundabout		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no) 2	Hit and run Not hit and run
Drivers age 76 yrs	Sex Male	Breath test Driver not contacted	Driving Lic
Left Hand Drive	Unknown	Foreign veh. Not foreign registered vehicle	
Journey purpose	Other		

Veh.No. 2	Vehicle type Car	Make	Model
Manoeuvre	Going ahead other		
Veh. direction from	South to North	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Entering roundabout		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Back		
Veh registration no.		Other veh.hit (ref.no) 1	Hit and run Not hit and run
Drivers age 24 yrs	Sex Female	Breath test Driver not contacted	Driving Lic
Left Hand Drive	Unknown	Foreign veh. Not foreign registered vehicle	
Journey purpose	Other		

CASUALTIES INVOLVED 2

Cas No 1	Cas Class Driver or Rider	Veh ref No 1
Severity SLIGHT	Age 76 yrs Sex Male	Post code
Car Passenger?	Not a passenger	PSV Passenger? Not a passenger
Seat Belt	Not applicable	Cycle Helmet
Ped Movement	Not applicable	
Ped Location	Not applicable	
Ped Direction to	Not applicable	
School Pupil	Other	
Roadworker injured		

Cas No 2	Cas Class Driver or Rider	Veh ref No 2
Severity SLIGHT	Age 24 yrs Sex Female	Post code
Car Passenger?	Not a passenger	PSV Passenger? Not a passenger
Seat Belt	Not applicable	Cycle Helmet
Ped Movement	Not applicable	
Ped Location	Not applicable	
Ped Direction to	Not applicable	
School Pupil	Other	
Roadworker injured		

Other Details

SEVERITY	District		Grid Reference	579649 / 166488
SLIGHT	Ref.No 150255118		Police Officer Attend:	No - reported over the counter

Date	04/04/2015 Day Saturday	Road A2	Location London Road J/W Twydall Lane (Bowaters Roundabout), Gillingham
Time	20:00		
Weather	Fine without high winds	Description of Accident	V2 was Travelling Along the A2 Towards Sittingbourne when it Came to a Stop at the Traffic Lights at Bowaters Roundabout. V1 Failed to Stop in Time and Collided with the Rear of V2.
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B
503 Fatigue (Driver/Rider - Impairment)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Going ahead other
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 75 yrs Sex Female Breath test Driver not contacted Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Waiting to go ahead but held up
Veh. direction from West to East Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Approaching junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 24 yrs Sex Male Breath test Driver not contacted Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 24 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 1 yrs Sex Male Post code
Car Passenger? Rear seat passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District		Grid Reference	579689 / 166384
SLIGHT	Ref.No 150256116		Police Officer Attend:	Yes

Date	16/04/2015 Day Thursday	Road A2	Location London Road J/W Hoath Way (Bowaters Roundabout), Gillingham
Time	17:50		
Weather	Fine without high winds	Description of Accident	V2 was Leaving Bowaters Roundabout onto Hoath Way in the Outside Lane. V1 was Continuing Around the Roundabout to Travel Towards Chatham. V1 and V2 Collided at the Hoath Way Exit.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A278
Pedestrian Facilities	None within 50 metres
	Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 002	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Going ahead other
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Mid junction - on roundabout or main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 30 yrs Sex Female Breath test Not requested Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Turning left
Veh. direction from East to South Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Leaving roundabout
Veh left carriageway? Left carriageway offside
Hit object in c'way? None
Hit object off c'way? Other permanent object
First point of impact Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 35 yrs Sex Female Breath test Not requested Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 35 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 150256164		579727 / 166390
			Police Officer Attend:	No - reported over the counter

Date	06/05/2015	Day	Wednesday
Time	15:30		
Weather	Fine with high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road U Location Courteney Road at J/W Bowaters Roundabout, Gillingham

Description of Accident: V2 was Waiitng/Held up at the Roundabout . V1 Collided into the Rear of V2. both Parties Stopped and Exchanged Details.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	Central refuge - no other controls

SPECIAL SITE CONDITIONS: None

CARRIAGEWAY HAZARDS: None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre: Going ahead other
Veh. direction from: Southeast to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age ? yrs Sex Male Breath test Driver not contacted Driving Lic
Left Hand Drive: Unknown Foreign veh. Not foreign registered vehicle
Journey purpose: Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: Southeast to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Approaching junction or waiting
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 35 yrs Sex Female Breath test Driver not contacted Driving Lic
Left Hand Drive: Unknown Foreign veh. Not foreign registered vehicle
Journey purpose: Other

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 35 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District		Grid Reference	579634 / 166418
SLIGHT	Ref.No 150258504		Police Officer Attend:	Yes

Date	02/07/2015 Day Thursday	Road A2	Location A2 Watling Street, Roundabout with A278 Hoath Way, Gillingham
Time	10:11		
Weather	Fine without high winds	Description of Accident	V1 was Travelling Around Bowaters Roundabout Towards Twydall and V2 was in the left Hand Lane Following the Road to the left down Watling Street. V1 Collided with V2 as Pulled out of Lane.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A278
Pedestrian Facilities	None within 50 metres
	Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre Changing lane to left
Veh. direction from South to North Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Cleared junction or waiting
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Nearside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 43 yrs Sex Male Breath test Negative Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Other

Veh.No. 2 Vehicle type Car Make Model
Manoeuvre Going ahead other
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Leaving roundabout
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 25 yrs Sex Male Breath test Negative Driving Lic
Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle
Journey purpose Commuting to/from work

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 43 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 50 yrs Sex Female Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Medway		Grid Reference	579642 / 166419
SLIGHT	Ref.No	180167		Police Officer Attend:	Yes

Date	05/05/2017 Day Friday
Time	23:44
Weather	Fine without high winds
Road Surface	Wet/Damp
Street Lighting	Dark: street lights present and lit

Road A278 Location A278 Bowaters Roundabout at Junction with Watling Street, Gillingham

Description of Accident: V2 driving on the roundabout South to North. As it was passing first exit on the left, it has collided on rear offside with V1. This caused V1 to spin 180 degrees and end up on the verge. V1 has carried on in its direction of travel and ended up on the verge roughly 5 meters away from V2. *location plotted to description*

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
501 Impaired by alcohol (Driver/Rider - Impairment)	Vehicle 001	B
301 Disobeyed automatic traffic signal (Driver/Rider - Injudicious)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make PEUGEOT Model 307

Manoeuvre	Going ahead left hand bend
Veh. direction from	South to North
Towing?	No tow or articulation
Skidded	Skidded
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road
Veh left carriageway?	Did not leave carriageway
Hit object in c'way?	None
Hit object off c'way?	None
First point of impact	Front
Veh registration no.	
Other veh.hit (ref.no)	2
Hit and run	Not hit and run
Drivers age	37 yrs
Sex	Male
Breath test	Driver not contacted
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known

Veh.No. 2 Vehicle type Car Make VOLKSWA Model GOLF

Manoeuvre	Going ahead other
Veh. direction from	South to North
Towing?	No tow or articulation
Skidded	Skidded
Veh location at impact (restricted lane)	On main carriageway not in restricted lane
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road
Veh left carriageway?	Left carriageway nearside
Hit object in c'way?	None
Hit object off c'way?	Other permanent object
First point of impact	Back
Veh registration no.	
Other veh.hit (ref.no)	1
Hit and run	Not hit and run
Drivers age	26 yrs
Sex	Female
Breath test	Driver not contacted
Driving Lic	Full
Left Hand Drive	No
Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 26 yrs Sex Female Post code

Car Passenger?	Not a passenger
PSV Passenger?	Not a passenger
Seat Belt	Unknown
Cycle Helmet	Not a cyclist
Ped Movement	Not applicable
Ped Location	Not applicable
Ped Direction to	Not applicable
School Pupil	Other
Roadworker injured	

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 32 yrs Sex Male Post code

Car Passenger?	Front seat passenger
PSV Passenger?	Not a passenger
Seat Belt	Unknown
Cycle Helmet	Not a cyclist
Ped Movement	Not applicable
Ped Location	Not applicable
Ped Direction to	Not applicable
School Pupil	Other
Roadworker injured	

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	579733 / 166379
	Ref.No 247277	Police Officer Attend: No - reported over the counter

Date	24/11/2017 Day Friday
Time	17:30
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lights present and lit

Road U Location Courteney Road at Junction with A2 Bowaters Roundabout, Gillingham

Description of Accident: V2 CAME OUT OF TESCO WAS WAITING AT THE FIRST SET OF LIGHTS ON THE ROUNDABOUT , V1 HIT REAR AND STOPPED.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Dual carriageway
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A278
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make BMW Model 118I SPORT
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: South to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no.
Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 29 yrs Sex Male Breath test Driver not contacted Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Other

Veh.No. 2 Vehicle type Car Make RENAULT Model MEGANE F
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: South to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no.
Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 30 yrs Sex Male Breath test Driver not contacted Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 30 yrs Sex Male Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	579640 / 166484
SLIGHT	Ref.No	255261		Police Officer Attend:	Yes

Date	09/12/2017	Day	Saturday
Time	12:20		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 Watling Street at Junction with A2 Bowaters Roundabout, Gillingham

Description of Accident: V2 WAS STATIONARY AT TRAFFIC LIGHTS ON THE BOWATERS ROUNDABOUT, V2 TRIED TO GET PASSED ON THE NEARSIDE, MISJUDGED THE SPACE AND CLIPPED THE REAR NEARSIDE OF V2 CAUSING DAMAGE TO THE REAR BUMPER. V1 FAILED TO STOP.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS
None

CARRIAGEWAY HAZARDS
None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model
Manoeuvre: Overtaking on nearside
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Hit and Run
Drivers age ? yrs Sex Not know Breath test Driver not contacted Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make RENAULT Model SCENIC AU
Manoeuvre: Waiting to go ahead but held up
Veh. direction from: West to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 27 yrs Sex Female Breath test Driver not contacted Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Other

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 27 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	579669 / 166486
SLIGHT	Ref.No	263756		Police Officer Attend:	Yes

Date	25/01/2018	Day	Thursday
Time	12:39		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location A2 Bowaters Roundabout at Junction with A2 Watling Street, Gillingham

Description of Accident: V1 AND V2 BOTH TRAVELLING ON THE ROUNDABOUT, COLLIDED, V1 FAILED TO STOP. V2 DRIVER AND PASSENGER HAVE INJURIES AND V2 HAS DAMAGE TO NEARSIDE.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Dual carriageway
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make Model

Manoeuvre	Going ahead right hand bend		
Veh. direction from	West to East	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Entering roundabout		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Offside		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Hit and Run		
Drivers age	? yrs	Sex	Not know
Breath test	Driver not contacted	Driving Lic	Not known
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

Veh.No. 2 Vehicle type Car Make HONDA Model ACCORD L

Manoeuvre	Going ahead right hand bend		
Veh. direction from	West to East	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Entering roundabout		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Nearside		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	68 yrs	Sex	Male
Breath test	Driver not contacted	Driving Lic	Full
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2

Severity	SLIGHT	Age	68 yrs
Sex	Male	Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Cas No 2 Cas Class Passenger Veh ref No 2

Severity	SLIGHT	Age	57 yrs
Sex	Female	Post code	
Car Passenger?	Front seat passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	579733 / 166435
SLIGHT	Ref.No	340812		Police Officer Attend:	Yes

Date	21/09/2018	Day Friday	
Time	20:20		
Weather	Fine with high winds		
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

Road A2 Location A2 BOWATER RNDBT J/W A2 LONDON RD, RAINHAM

Description of Accident: The lights for V2, which was on the rndbt, changed to green and V2 pulled away. V1 travelling west on London Rd continued through their set of traffic lights, which were believed to be red. V1 and V2 collided on the rndbt. (NO VRM FOR V1)

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
301 Disobeyed automatic traffic signal (Driver/Rider - Injudicious)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 002	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 002	B

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make NISSAN Model MICRA L
Manoeuvre: Going ahead right hand bend
Veh. direction from: Northwest to Southwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 71 yrs Sex Female Breath test Not provided (medical reas Driving Lic Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Journey as part of work

Veh.No. 2 Vehicle type Car Make BMW Model
Manoeuvre: Going ahead left hand bend
Veh. direction from: Southeast to Southwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 28 yrs Sex Male Breath test Positive Driving Lic Full
Left Hand Drive: No Foreign veh.: Not foreign registered vehicle
Journey purpose: Journey as part of work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 71 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Unknown	Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details

SEVERITY	District	Medway		Grid Reference	579628 / 166447
SLIGHT	Ref.No	346113		Police Officer Attend:	Yes

Date	31/10/2018	Day Wednesday	
Time	17:45		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

Road A2 Location A2, BOWATERS RNDBT J/W SOVEREIGN BLVD, GILLINGHGAM.

Description of Accident: COMPLICATED JUNCTION, NEW ROAD LAYOUT. FOREIGN LORRY DRIVER IN THE WRONG LANE HAS CUT ACROSS V2 WHICH WAS IN THEIR BLIND SPOT. LORRY DRIVER WOULD HAVE BEEN IN CORRECT LANE WITH THE OLD ROAD LAYOUT. (POSTCODES FOR VEHS & C2 NOT AVAILABLE).

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A2
Pedestrian Facilities	None within 50 metres Pedestrian phase at traffic signal junction

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A
108 Road layout e.g. bend, hill or narrow (Road Environment Contri	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Goods > 7.5t Make SCANIA Model
Manoeuvre: Changing lane to left
Veh. direction from: Southeast to Northwest Towing? Articulated vehicle
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Front
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 39 yrs Sex Male Breath test Not requested Driving Lic
Left Hand Drive: Yes Foreign veh. Registered foreign vehicle, left hand driv
Journey purpose: Journey as part of work

Veh.No. 2 Vehicle type Car Make NISSAN Model X-TRAIL
Manoeuvre: Going ahead right hand bend
Veh. direction from: Southeast to Northwest Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Back
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 67 yrs Sex Male Breath test Not requested Driving Lic
Left Hand Drive: No Foreign veh.
Journey purpose: Not Known

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 67 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Cas No 2 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 69 yrs Sex Female Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

SEVERITY	District	Grid Reference
SLIGHT	Medway	579697 / 166391
	Ref.No 78905	Police Officer Attend: No - reported over the counter

Date	28/05/2016 Day Saturday
Time	16:09
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road A278 Location A278 Bowaters Roundabout, at its Junction with Hoath Way, Gillingham

Description of Accident: V2 WAS COMING FROM DIRECTION TWYDALL TO GO TOWARDS GILLINGHAM ON BOWATERS ROUNDABOUT V 1 IN LANE 3 V2 IN MIDDLE LANE AS APPROACHING JUNCTION HOATH WAY. V1 CHANGED LANES TO GO UP HOATH WAY CAUSING V2 TO BRAKE HARD AND COME OFF BIKE, V1 HAS THEN CARRIED OFF UP HOATH WAY. V2 CRASHED

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Automatic traffic signal
2nd Road Number	A278
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
308 Following too close (Driver/Rider - Injudicious)	Vehicle 002	B
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A
404 Failed to signal/misleading signal (Driver/Rider - Error)	Vehicle 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
409 Swerved (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make VOLKSWA Model GOLF L
Manoeuvre Changing lane to left
Veh. direction from West to Southwest Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Mid junction - on roundabout or main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Did not impact
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Hit and Run
Drivers age 37 yrs Sex Not know Breath test Driver not contacted Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

Veh.No. 2 Vehicle type M/cycle 50 - 125cc Make QINGQI Model QM 125-2D
Manoeuvre Going ahead other
Veh. direction from East to West Towing? No tow or articulation
Skidded No skidding, jack-knifing or overturning
Veh location at impact (restricted lane) On main carriageway not in restricted lane
Junct. location of veh. at 1st impact Mid junction - on roundabout or main road
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact Did not impact
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Not hit and run
Drivers age 27 yrs Sex Male Breath test Not requested Driving Lic Full
Left Hand Drive No Foreign veh. Not foreign registered vehicle
Journey purpose Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 27 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District	Medway		Grid Reference	579704 / 166395
SERIOUS	Ref.No	817956		Police Officer Attend:	Yes

Date	15/02/2019	Day Friday	Road A2 Location BOWATERS ROUNDABOUT (A2) JUNCTION COURTENEY ROAD, GILLINGHAM
Time	15:22		
Weather	Fine without high winds		Description of Accident V1 was travelling around Bowaters roundabout in Lane 1 joining the A278 heading South. At the pedestrian crossing, lights were green and V1 has struck pedestrian causing serious injuries.
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres
	Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
806 Impaired by alcohol (Pedestrian)	Casualty 001	A
802 Failed to look properly (Pedestrian)	Casualty 001	A
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	B

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type Car		Make TOYOTA	Model YARIS T SI	
Manoeuvre	Going ahead left hand bend				
Veh. direction from	North to South	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Leaving roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 57 yrs	Sex Male	Breath test	Negative	Driving Lic	
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Commuting to/from work				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Pedestrian			Veh ref No 1	
Severity SERIOUS	Age 41 yrs	Sex Male		Post code	
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist		
Ped Movement	Crossing from driver's offside				
Ped Location	On ped. crossing facility				
Ped Direction to	East bound				
School Pupil	Other				
Roadworker injured	Not known				

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 868840		579746 / 166433
			Police Officer Attend:	Yes

Date	11/07/2019	Day Thursday	
Time	14:49		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Daylight		

Road A2 Location LONDON ROAD (A2) NEAR JUNCTION BOWATERS ROUNDABOUT, GILLINGHAM

Description of Accident: V1 & V2 were waiting to enter a roundabout. V1 believed that V2 had started to drive, however, it remained stationary, resulting in V1 driving into the rear of V2.

SITE DETAILS

Speed Limit	40 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U2
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
308 Following too close (Driver/Rider - Injudicious)	Vehicle 001	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Goods > 7.5t Make DAF TRUC Model

Manoeuvre	Going ahead other		
Veh. direction from	East to West	Towing?	Articulated vehicle
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Approaching junction or waiting		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Front		
Veh registration no.		Other veh.hit (ref.no)	2
Hit and run	Not hit and run		
Drivers age	27 yrs	Sex	Male
Breath test	Not requested	Driving Lic	
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Journey as part of work		

Veh.No. 2 Vehicle type Car Make PEUGEOT Model 207 CC ALI

Manoeuvre	Waiting to go ahead but held up		
Veh. direction from	East to West	Towing?	No tow or articulation
Skidded	No skidding, jack-knifing or overturning		
Veh location at impact (restricted lane)	On main carriageway not in restricted lane		
Junct. location of veh. at 1st impact	Approaching junction or waiting		
Veh left carriageway?	Did not leave carriageway		
Hit object in c'way?	None		
Hit object off c'way?	None		
First point of impact	Back		
Veh registration no.		Other veh.hit (ref.no)	1
Hit and run	Not hit and run		
Drivers age	33 yrs	Sex	Female
Breath test	Not requested	Driving Lic	
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle
Journey purpose	Not Known		

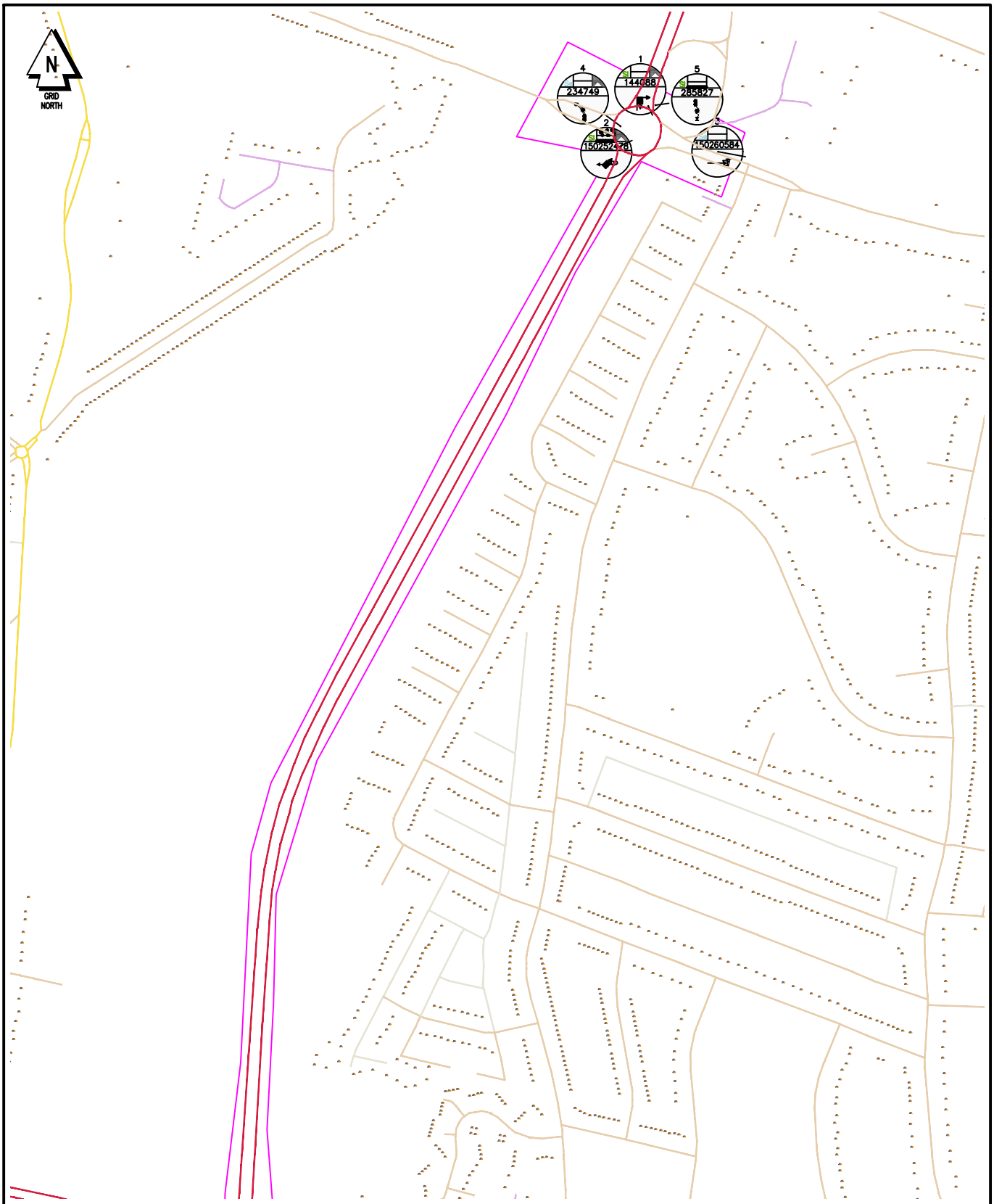
CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 2

Severity SLIGHT Age 33 yrs Sex Female Post code

Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt		Cycle Helmet	Not a cyclist
Ped Movement	Not applicable		
Ped Location	Not applicable		
Ped Direction to	Not applicable		
School Pupil	Other		
Roadworker injured			

Other Details



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Medway Council
Serving You

Project: Collision Data 2014– Sept 2019

Title: Ito Way to Cornwallis Roundabout

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Rev	Description	By	Date	Chk`d	Appr`d

Scale	Drawn	Checked	Approved
NTS	MJ		
	Date 11.06.2020	Date	Date

Drawing No. –

Rev –

SEVERITY	District	Medway		Grid Reference	579293 / 167739
SLIGHT	Ref.No	144088		Police Officer Attend:	Yes

Date	20/12/2016 Day Tuesday
Time	17:10
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Dark: street lights present and lit

Road A289 Location Cornwallis Roundabout, at its Junction with A289 Yokosuka Way, Gillingham

Description of Accident: V1 travelling in traffic towards Hempstead. Came to Cornwallis Roundabout juct with Yokosuka Way in right hand lane. V2 has come around roundabout towards Beechings Way. V1 has pulled out as V2 has come towards them. Low speed impact. No injuries to V1 occupants and slight left side pain to passenger of V2.

SITE DETAILS

Speed Limit	50 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A289
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
404 Failed to signal/misleading signal (Driver/Rider - Error)	Vehicle 002	B
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car Make JAGUAR Model XF LUXUR
Manoeuvre: Moving off
Veh. direction from: North to South Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Entering roundabout
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age 74 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type Car Make AUDI Model A3 SE
Manoeuvre: Turning right
Veh. direction from: South to East Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Leaving roundabout
Veh left carriageway? Did not leave carriageway
Hit object in c'way? None
Hit object off c'way? None
First point of impact: Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age 30 yrs Sex Male Breath test Negative Driving Lic Full
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Passenger Veh ref No 2
Severity SLIGHT Age 58 yrs Sex Male Post code
Car Passenger? Front seat passenger PSV Passenger? Not a passenger
Seat Belt Cycle Helmet Not a cyclist
Ped Movement: Not applicable
Ped Location: Not applicable
Ped Direction to: Not applicable
School Pupil: Other
Roadworker injured

Other Details

SEVERITY	District		Grid Reference	579266 / 167701
SLIGHT	Ref.No 150252478		Police Officer Attend:	Yes

Date	08/01/2015 Day Thursday	Road A289	Location Ito Way J/W Beechings Way, Gillingham
Time	04:50		
Weather	Raining without high winds	Description of Accident	V2 (P/Cycle) was Negotiating the Roundabout when V1 Pulled out of Ito Way into the Path of V2, Resulting in a Collision.
Road Surface	Wet/Damp		
Street Lighting	Dark: street lights present and lit		

SITE DETAILS

Speed Limit	50 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres Footbridge or subway

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
405 Failed to look properly (Driver/Rider - Error)	Vehicle 001	A
507 Rider wearing dark clothing (Driver/Rider - Impairment)	Vehicle 002	A
506 Not displaying lights at night or poor visibility (Driver/Rider - I	Vehicle 002	A

VEHICLES INVOLVED 2

Veh.No. 1	Vehicle type Car		Make	Model	
Manoeuvre	Moving off				
Veh. direction from	Southwest to Northeast	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Offside				
Veh registration no.		Other veh.hit (ref.no)	2	Hit and run	Not hit and run
Drivers age 81 yrs	Sex Male	Breath test	Not requested	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

Veh.No. 2	Vehicle type Pedal Cycle		Make	Model	
Manoeuvre	Going ahead other				
Veh. direction from	East to West	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Mid junction - on roundabout or main road				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Veh registration no.		Other veh.hit (ref.no)	1	Hit and run	Not hit and run
Drivers age 61 yrs	Sex Female	Breath test	Not Applicable	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No 2	
Severity SLIGHT	Age 61 yrs	Sex Female		Post code	
Car Passenger?	Not a passenger		PSV Passenger?	Not a passenger	
Seat Belt	Not applicable		Cycle Helmet		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details

SEVERITY	District	Medway		Grid Reference	579359 / 167696
SERIOUS	Ref.No	150260584		Police Officer Attend:	Yes

Date	21/08/2015 Day Friday
Time	15:07
Weather	Fine without high winds
Road Surface	Dry
Street Lighting	Daylight

Road U Location Beechings Way, Gillingham

Description of Accident: C1 (Child Pedestrian) Ran into the Road and was Struck by V1, Travelling East Towards Twydall.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Single carriageway
Junction Detail	Not at or within 20 metres of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	None within 50 metres Pelican, puffin, toucan or similar

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
802 Failed to look properly (Pedestrian)	Casualty 001	A

VEHICLES INVOLVED 1

Veh.No. 1	Vehicle type Car		Make	Model	
Manoeuvre	Going ahead other				
Veh. direction from	West to East	Towing?	No tow or articulation		
Skidded	No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Not at or within 20m of junction				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Nearside				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age 35 yrs	Sex Male	Breath test	Negative	Driving Lic	
Left Hand Drive	Unknown	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Other				

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Pedestrian		Veh ref No 1
Severity SERIOUS	Age 13 yrs	Sex Female	Post code
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger
Seat Belt	Not applicable	Cycle Helmet	
Ped Movement	Crossing from driver's nearside - maske		
Ped Location	In carriageway, crossing elsewhere		
Ped Direction to	South bound		
School Pupil	Other		
Roadworker injured	Not applicable		

Other Details

SEVERITY	District	Medway		Grid Reference	579267 / 167720
SERIOUS	Ref.No	234749		Police Officer Attend:	Yes

Date	22/10/2017	Day	Sunday
Time	00:37		
Weather	Fine without high winds		
Road Surface	Dry		
Street Lighting	Dark: street lights present and lit		

Road A289 Location A289 Ito Way at Junction with A289 Cornwallis Roundabout, Gillingham

Description of Accident: V1 and V2 have travelled in convoy together down Ito Way and entered the roundabout. At the junction with Cornwalis Avenue, Gillingham, it appears that V1 has clipped V2 causing both motorbikes to crash and land on Yokosuka Way. Injuries to both rider and pillion passenger of V2.

SITE DETAILS

Speed Limit	30 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	A289
Pedestrian Facilities	None within 50 metres
	No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 001	A
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 002	A
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 001	A
306 Exceeding speed limit (Driver/Rider - Injudicious)	Vehicle 001	A
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A
403 Poor turn or manoeuvre (Driver/Rider - Error)	Vehicle 001	A

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type M/cycle > 500cc Make HUSQVARN Model 693 cc
Manoeuvre: Going ahead left hand bend
Veh. direction from: South to North Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Offside
Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run
Drivers age ? yrs Sex Male Breath test Negative Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

Veh.No. 2 Vehicle type M/cycle > 500cc Make KAWASAK Model 998 cc
Manoeuvre: Going ahead left hand bend
Veh. direction from: South to North Towing? No tow or articulation
Skidded: No skidding, jack-knifing or overturning
Veh location at impact (restricted lane): On main carriageway not in restricted lane
Junct. location of veh. at 1st impact: Mid junction - on roundabout or main road
Veh left carriageway?: Did not leave carriageway
Hit object in c'way?: None
Hit object off c'way?: None
First point of impact: Nearside
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run
Drivers age ? yrs Sex Male Breath test Negative Driving Lic Not known
Left Hand Drive: No Foreign veh. Not foreign registered vehicle
Journey purpose: Not Known

CASUALTIES INVOLVED 3

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age -1 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity SERIOUS Age -1 yrs Sex Male Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Cas No 3 Cas Class Passenger Veh ref No 2
Severity SERIOUS Age -1 yrs Sex Female Post code
Car Passenger? Not a passenger PSV Passenger? Not a passenger
Seat Belt Not applicable Cycle Helmet Not a cyclist
Ped Movement Not applicable
Ped Location Not applicable
Ped Direction to Not applicable
School Pupil Other
Roadworker injured

Other Details

SEVERITY	District		Grid Reference	
SLIGHT	Ref.No	Medway 285827		579300 / 167740
			Police Officer Attend:	Yes

Date	15/04/2018 Day Sunday
Time	20:03
Weather	Fine without high winds
Road Surface	Wet/Damp
Street Lighting	Daylight

Road A289 Location A289 Yokosuka Way at Junction with Beechings Way, Gillingham

Description of Accident: V1 (motorcyclist) has slowed approaching the roundabout, passed over a wet patch on the road slipped and his leg was squashed under the bike as he fell.

SITE DETAILS

Speed Limit	50 MPH
Carriageway	Roundabout
Junction Detail	Roundabout
Junction Control	Give way or uncontrolled
2nd Road Number	U
Pedestrian Facilities	None within 50 metres No physical crossing facility within 50 metre

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

CONTRIBUTORY FACTORS	PARTICIPANT	PROBABILITY
103 Slippery road due to weather (Road Environment Contrib)	Vehicle 001	A
408 Sudden braking (Driver/Rider - Error)	Vehicle 001	A

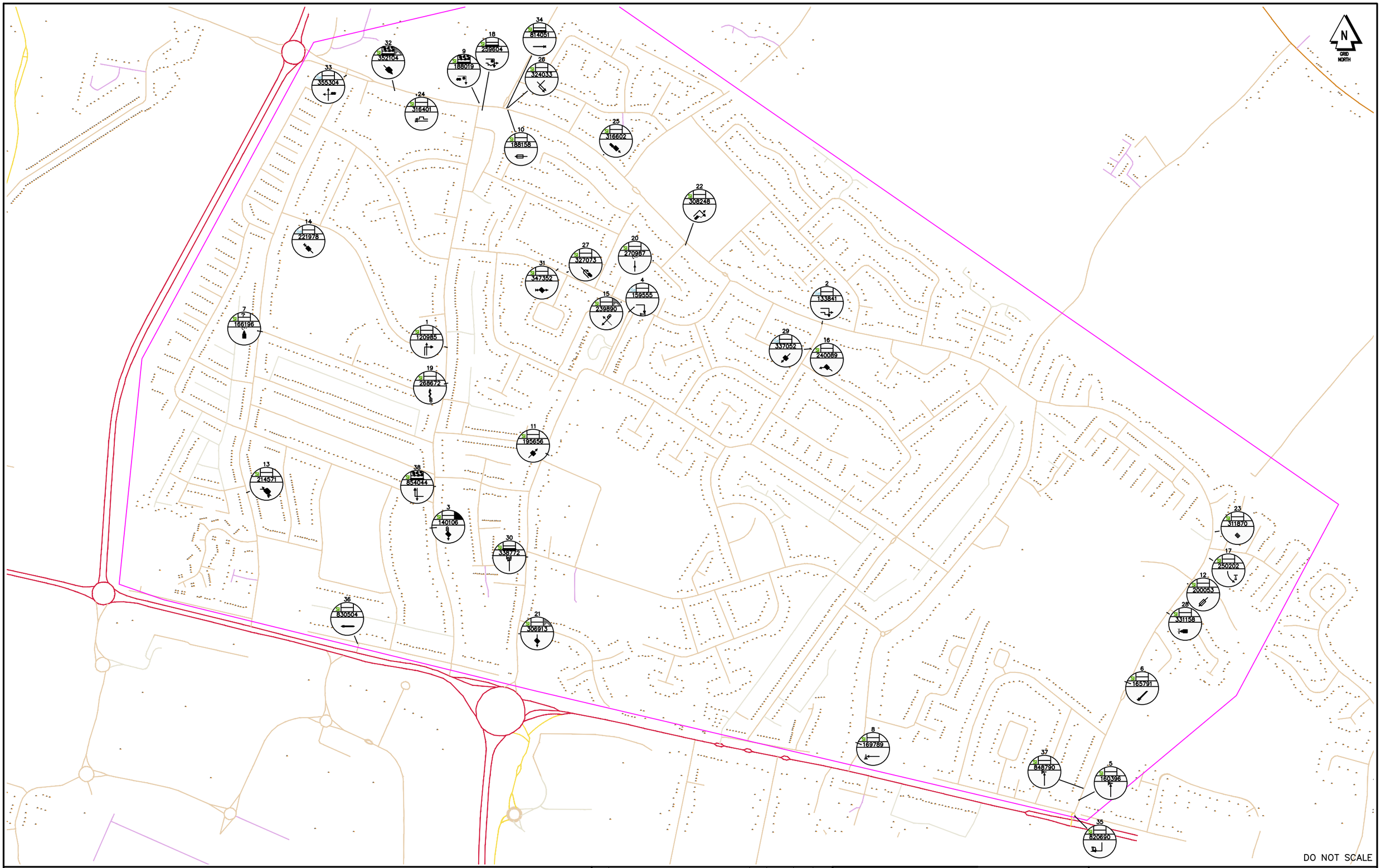
VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	M/cycle 50 - 125cc	Make SINNIS	Model ZS 125-79 F
Manoeuvre	Slowing or stopping				
Veh. direction from	North to South	Towing?	No tow or articulation		
Skidded	Skidded				
Veh location at impact (restricted lane)	On main carriageway not in restricted lane				
Junct. location of veh. at 1st impact	Entering roundabout				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Did not impact				
Veh registration no.		Other veh.hit (ref.no)	0	Hit and run	Not hit and run
Drivers age	45 yrs	Sex	Male	Breath test	Driver not contacted
Left Hand Drive	No	Foreign veh.	Not foreign registered vehicle		
Journey purpose	Commuting to/from work				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	1
Severity	SLIGHT	Age	45 yrs	Sex	Male
Post code					
Car Passenger?	Not a passenger	PSV Passenger?	Not a passenger		
Seat Belt	Not applicable	Cycle Helmet	Not a cyclist		
Ped Movement	Not applicable				
Ped Location	Not applicable				
Ped Direction to	Not applicable				
School Pupil	Other				
Roadworker injured					

Other Details



DO NOT SCALE

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Rev	Description	By	Date	Chk'd	Appr'd

Medway Council
Serving You

REGENERATION, CULTURE, ENVIRONMENT & TRANSFORMATION DIRECTORATE
HIGHWAYS DESIGN AND ADOPTIONS
GUN WHARF
DOCK ROAD, CHATHAM
KENT, ME4 4TR
Tel. (01634) 306000

Project: Rainham Area: Beechings Way to Bloors Lane

Title: Personal Injury crashes over three years to end of September 2019

A1

Scale	Drawn	Checked	Approved	Drawing No.	Rev
NTS	CGR			–	–
	Date	Date	Date		

Date: 29-May-2020
Time: 16:53:37

Title:

Requested output: **F- Print (Full print) Crash Report**
Date: 29-May-2020

There were 38 reported crashes resulting in injury

F - Print Crash Report

Date: 29-May-2020

Time: 16:53

No.1		Road **U** Section	Map ref: E579581 N167143	Parish: District: Medway
Location	**Eastcourt Lane at it's Junction with Allington Road, Gillingham**			
Description	V1 WAS DRIVING DOWN EAST COURT LANE WITH V2 ALREADY STATIONARY INDICATING TO TURN RIGHT ONTO ALLINGTON ROAD. A CAR HAS THEN SPED DOWN THE ROAD WHEN V2 HAS BEGAN TO TURN CAUSING V2 TO BREAK SHARPLY. V1 HAS THEN DRIVEN INTO THE REAR OF V2, V1 FULLY ADMITS FAULT			
Severity SLIGHT	Date: 24/10/2016 Mon 16:45	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	S -> N	0	female
	did not leave c'way	not contacted	front		33
2 car	not at junction	turning right	S -> E	0	female
	did not leave c'way	not contacted	back		28

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					female 28

F - Print Crash Report

No.2		Road **U** Section	Map ref: E580309 N167189	Parish: District: Medway
Location	**Milsted Road at it's junction with Beechings Way, Gillingham**			
Description	V1 WAS INITIALLY BEHIND V2 TRAVELLING EAST ALONG BEECHINGS WAY GILLINGHAM. V2 SLOWED AND AS IT STARTED TO TURN RIGHT INTO MILSTEAD, V1 HAS COLLIDED WITH THE FRONT NEARSIDE OF V2 AS IT WAS IN THE PROCESS OF OVERTAKING. RIDER OF V1 HAS THEN LOST CONTROL OF THE MOTORBIKE AND FALLEN TO THE GROUND CAUSING AN INJURY TO LEFT LEG			
Severity SERIOUS	Date: 28/11/2016 Mon 09:50	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	o/t moving vehicle on its O/S	W -> E	2	male
	did not leave c'way	negative	nearside		31
2 car	approaching or parked on approach	turning right	W -> E	1	female
	did not leave c'way	negative	offside		46

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SERIOUS					male 31

F - Print Crash Report

Date: 29-May-2020

Time: 16:53

No.3		Road **U** Section	Map ref: E579560 N166793	Parish: District: Medway
Location	**O/s 50 Eastcourt Lane, Gillingham**			
Description	CYCLIST RIDING ALONG EASTCOURT LANE, NIGHT TIME, CYCLIST HAD NO LIGHTS ON. D1 EXITED VEHICLE, OPENING THE DOOR, KNOCKING CYCLIST OFF.			

Severity SLIGHT	Date: 14/12/2016 Wed 17:20	DRK STU	Road Surface Dry Weather Fine	Speed limit 30mph

Single carriageway	Not at or within 20m of junction No Human control within 50m

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	parked	P -> P	2	female
	did not leave c'way	negative	offside		56
2 pedal cycle	not at junction	going ahead other	N -> S	1	male
	did not leave c'way	not applicable	front		13

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					male 13

No.4		Road **U** Section	Map ref: E579944 N167221	Parish: District: Medway
Location	**Twydall Green at Junction with Goudhurst Road, Gillingham**			
Description	V1 turning right into Twydall Green from Goudhurst Road at low speed when a pedestrian stepped off the pavement from V 1's offside. V1 was unable to avoid a collision with the pedestrian. Pedestrian was struck on the front offside of V 1 causing her to be thrown against the windscreen of V1 causing serious head injuries			

Severity SERIOUS	Date: 24/02/2017 Fri 10:10	L	Road Surface Dry Weather Fine	Speed limit 30mph
One Way Street	T or Staggered junction No Human control within 50m			

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	mid junction	turning right	W -> S	0	female
	did not leave c'way	negative	front		48

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SERIOUS	In c'way crossing elsewhere	E			female
hit by veh 1		Crossing from drivers offside				70

No.5		Road **U** Section	Map ref: E580808 N166264	Parish: District: Medway
Location	**Bloors Lane 10m North of Junction with A2, Gillingham**			
Description	3X PEDESTRIANS WERE CROSSING THE ROAD, V1 DROVE ALONG THE ROAD (ON THE WRONG SIDE OF THE ROAD) AND HIT 2X PEDESTRIANS. V1 DID STOP AT THE SCENE TO CHECK IF C1 C2 WERE OK. HOWEVER V1 DID NOT PROVIDE DETAILS.			

Severity SLIGHT	Date: 28/02/2017 Tue 08:20	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	leaving main road	going ahead other	S -> N	0	female
	did not leave c'way	not contacted	front		34

Casualty details Crash resulted in 2 casualties

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	In c'way crossing elsewhere	W			female
hit by veh 1		Crossing from drivers nearside				13
pedestrian	SLIGHT	In c'way crossing elsewhere	W			female
hit by veh 1		Crossing from drivers nearside				13

F - Print Crash Report

Date: 29-May-2020

Time: 16:53

No.6		Road **U** Section	Map ref: E580908 N166490	Parish: District: Medway
Location	**Bloors Lane, Gillingham**			
Description	V1 and v2 were in slow moving traffic going up bloors lane , rainham towards tesco. Vehicle 2 put brakes on and V1 hit the back of V2. They exchanged details but since then driver of V2 which is a taxi, called driver of V1 to say the passenger states they have an injury and are going to hospital.			
Severity SLIGHT	Date: 14/03/2017 Tue 07:00	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	stopping	NE -> SW	2	female
	did not leave c'way	not contacted	front		26
2 car	not at junction	stopping	NE -> SW	1	male
	did not leave c'way	not contacted	back		37

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
passenger in veh 2	SLIGHT					male 35

No.7		Road **U** Section	Map ref: E579213 N167175	Parish: District: Medway
Location	**Featherby Road near it's Junction with Chilham Road, Gillingham**			
Description	Vehicle 1 was driving up Featherby Road towards Beechings Way. V1 has pulled in as there was various school traffic. Casualty 1 ran across road and away from their parent. V1 begun to move off, colliding with Casualty 1. Parent of C1 was present at all times and stated is was C1's fault, not V1. C1 has been taken to MMH			

Severity SLIGHT	Date: 13/03/2017 Mon 16:08	L	Road Surface Dry Weather Unknown	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	cleared junction or parked at junction exit	starting	S -> N	0	female
	did not leave c'way	not contacted	front		62

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	In c'way crossing elsewhere				male
hit by veh 1		Unknown or other				9

No.8		Road **U** Section	Map ref: E580385 N166372	Parish: District: Medway
Location	**Pump Lane, Gillingham**			
Description	*Location / Directions unclear.* PEDESTRIAN REPORTING THAT DRIVER HAS DRIVEN OVER INFT FOOT CAUSING SOFT TISSUE INJURY WHEN TRYING TO PARK. THE DRIVER APOLOGISED BUT DID NOT EXCHANGE OR OFFER DETAILS. DRIVER MOUNTED THE FOOTPATH WHEN IMPACT OCCURRED.			
Severity SLIGHT	Date: 27/03/2017 Mon 15:20	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	E -> W	0	male
	left c'way near-side	not contacted	front		?

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	In c'way crossing elsewhere	SE			female
hit by veh 1		Crossing from drivers nearside				17

No.9		Road **U** Section	Map ref: E579643 N167618	Parish: District: Medway
Location	**Beechings Way at it's Junction with Eastcourt Lane, Gillingham**			
Description	V1 travelling Beechings Way towards junction with Eastcourt Lane . Road surface wet due to weather conditions. V1 turning right at mini roundabout onto Eastcourt Lane and bike slipped and fell.			

Severity SLIGHT	Date: 26/04/2017 Wed 14:25	L	Road Surface Wet Weather Rain	Speed limit 30mph
Roundabout		Roundabout No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 m/cycle 50 - 125cc	leaving roundabout	turning right	W -> S	0	male
	did not leave c'way	not contacted	offside		17

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 17

No.10		Road **U** Section **001**	Map ref: E579699 N167603	Parish: 0 District: Medway
Location	**Beechings Way at Junction with Eastcourt Lane, Gillingham**			
Description	V2 gave way at mini roundabout, was stationary for 10-15 seconds when struck from behind by a silver BMW which then tried to make off. Due to damage, V1 stopped a short distance away. After a brief conversation between drivers, D1 ran off after locking their car. V2 has dashcam which will show V1 driver as well, corroborating D2's version of events.			
Severity SLIGHT	Date: 30/05/2017 Tue 11:05	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Mini Roundabout No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	going ahead other	E -> W	2	male
	did not leave c'way	not contacted	front		?
2 car	approaching or parked on approach	waiting to go ahead but held up	E -> W	1	male
	did not leave c'way	not contacted	back		35

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					male 35

No.11		Road **U** Section	Map ref: E579773 N166937	Parish: District: Medway
Location	**Twydall Lane at Junction with Brenchley Road, Gillingham**			
Description	V1 driving down Twydall Lane, Gillingham when he misjudged his spacing and glazed with a parked car causing damage to the f/n/s wheel, wing and headlights to both cars. V2 was parked with noone in the car. Passenger in V1 has a previous injury aggravated by the collision, so was taken to hospital. *location plotted to grid reference*			
Severity SLIGHT	Date: 15/06/2017 Thu 11:55	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	going ahead other	SW -> NE	2	male
	did not leave c'way	negative	front		73
2 car	approaching or parked on approach	parked	P -> P	1	male
	did not leave c'way	not contacted	front		32

Casualty details Crash resulted in 2 casualties

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 73
passenger in veh 2	SLIGHT					male 82

No.12		Road **U** Section **001**	Map ref: E581019 N166684	Parish: 0 District: Medway
Location	**Zebra Crossing Bloors Lane near Junction with Thames View Primary School, Gillingham**			
Description	V2 STOPPED TO ALLOW A FAMILY TO CROSS THE ROAD ON A ZEBRA CROSSING, V1 HAS DRIVEN INTO THE REAR OF V2, BOTH PARTIES STOPPED AND EXCHANGED DETAILS, REPORT DUE TO INJURIES.			

Severity SLIGHT	Date: 05/07/2017 Wed 20:30	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway	Using private drive or entrance No Human control within 50m			

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	going ahead other	NE -> SW	2	female
	did not leave c'way	not contacted	front		20
2 car	cleared junction or parked at junction exit	waiting to go ahead but held up	NE -> SW	1	male
	did not leave c'way	not contacted	back		28

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					male 28

No.13		Road **U** Section **001**	Map ref: E579192 N166861	Parish: 0 District: Medway
Location	**Featherby Road at Junction with Abbey Road, Gillingham**			
Description	V1 driving North down Featherby Rd at speed when V2 had come out of Abbey Rd. V2 was already in the road when V1 has collided with the drivers side door of V2 and scrapped down the side of the vehicle taking out the back wheel. V1 has then collided with V3 (parked) that has then shunted into another two vehicles, V4 and V5.			
Severity SLIGHT	Date: 30/07/2017 Sun 18:00	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 5 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	going ahead other	SE -> NW	2	male
	did not leave c'way	negative	front		23
2 car	entering main road	turning right	W -> S	1	male
	did not leave c'way	negative	offside		37
3 car	approaching or parked on approach	parked	P -> P	1	female
	did not leave c'way	not contacted	back		21
4 goods < 3.5t	approaching or parked on approach	parked	P -> P	3	male
	did not leave c'way	not contacted	front		37
5 car	approaching or parked on approach	parked	P -> P	4	female
	did not leave c'way	not contacted	back		29

Casualty details	Crash resulted in 3 casualties					
class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
passenger	SLIGHT					female
in veh 2						15
driver/rider	SLIGHT					male
in veh 2						37
passenger	SLIGHT					female
in veh 2						34

No.14		Road **U** Section	Map ref: E579317 N167387	Parish: District: Medway
Location	**Allington Road near Junction with Appledore Road, Gillingham**			
Description	V2 (children inside) was parked outside Featherby Infants school, V1 came up behind V2 and drove into rear of V2. V1 hit and run.			

Severity SERIOUS	Date: 15/09/2017 Fri 08:40	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	cleared junction or parked at junction exit	stopping	SE -> NW	2	not known
	did not leave c'way	not contacted	front		?
2 car	cleared junction or parked at junction exit	parked	P -> P	1	male
	did not leave c'way	not contacted	back		31

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
passenger in veh 1	SERIOUS					female 9

No.15		Road **U** Section	Map ref: E579919 N167231	Parish: District: Medway
Location	**Goudhurst Road at Junction with Twydall Green, Gillingham**			
Description	A child has cycled across the road in front of a bus and the cycle has collided with the bus . D2 applied its breaks very sharply at the time of the incident, which has caused a couple of the passengers to be thrown forward.			

Severity SLIGHT	Date: 07/11/2017 Tue 17:00	DRK STL	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway	T or Staggered junction No Human control within 50m			

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 pedal cycle	leaving main road	going ahead other	NE -> SW	2	male
	did not leave c'way	not applicable	nearside		6
2 bus or coach	entering main road	going ahead other	SE -> NW	1	female
	did not leave c'way	negative	front		50

Casualty details Crash resulted in 3 casualties

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 6
passenger in veh 2	SLIGHT				Seated	female 72
passenger in veh 2	SLIGHT				Seated	female 21

No.16		Road **U** Section	Map ref: E580286 N167141	Parish: District: Medway
Location	**(o/s 45) Milsted Road, Gillingham**			
Description	V1 TRAVELLING TOWARDS BEECHINGS WAY WHEN D1 MISJUDGED THE WIDTH OF THE ROAD AS THERE WERE CARS PARKED ON THE PAVEMENT EITHER SIDE OF THE ROAD. V1 HAS COME OVER TOO WIDE ON THE RIGHT HAND SIDE OF THE ROAD AND CAUGHT THE LEFT SIDE OF V2'S BUMPER CAUSING DAMAGE. V2 WAS PARKED AND UNATTENDED.			

Severity SLIGHT	Date: 27/10/2017 Fri 08:13	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead left hand bend	SE -> N	2	male
	did not leave c'way	not contacted	offside		33
2 car	not at junction	parked	P -> P	1	female
	did not leave c'way	not requested	nearside		55

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 33

No.17		Road **U** Section	Map ref: E581062 N166733	Parish: District: Medway
Location	**Bloors Lane at Junction with Pembury Way, Gillingham**			
Description	V1 was driving up Bloors Lane towards A2, had just gone round the bend, just passed Pembury Way doing around 15-20 mph. C1 stepped off the grass verge/pavement without looking and into the path of V1. C1 hit the bonnet area slightly and fell to the road.			
Severity SLIGHT	Date: 30/11/2017 Thu 08:15	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Other Junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	cleared junction or parked at junction exit	going ahead left hand bend	N -> S	0	male
	did not leave c'way	negative	front		47

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	Within 50m of ped crossing	W			male
hit by veh 1		Crossing from drivers offside				11

No.18		Road **U** Section	Map ref: E579649 N167604	Parish: District: Medway
Location	**Beechings Way at Junction with Eastcourt Lane, Gillingham**			
Description	V1 travelling along Beechings Way from the direction of the services towards the roundabout of East Court Lane on the wrong side of the carriageway. V1 approaches the island prior to the roundabout and appears to accelerate. V2 (2 vehicles ahead of V1) having just entered the roundabout turning right onto East Court Lane, V1 braked, skidded collided with V2. V1 failed to stop, vehicle later found abandoned in an alley way.			

Severity SLIGHT	Date: 05/01/2018 Fri 12:29	L	Road Surface Wet Weather Fine	Speed limit 30mph

Roundabout	Roundabout No Human control within 50m

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	o/t moving vehicle on its O/S	W -> E	2	male
	did not leave c'way	not contacted	front		37
2 car	leaving roundabout	turning right	W -> S	1	male
	did not leave c'way	not contacted	back		?

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					male ?

No.19		Road **U** Section	Map ref: E579576 N167072	Parish: District: Medway
Location	**Eastcourt Lane, Gillingham**			
Description	V2 RIDING HIS BIKE ALONG EASTCOURT LANE, WHEN V1 SPED PAST KNOCKING HIM OFF HIS BIKE, V1 FAILED TO STOP.			

Severity SLIGHT	Date: 08/02/2018 Thu 15:45	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway	Not at or within 20m of junction No Human control within 50m			

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	S -> N	2	female
	did not leave c'way	not contacted	nearside		?
2 pedal cycle	not at junction	going ahead other	S -> N	1	male
	did not leave c'way	not applicable	offside		11

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					male 11

No.20		Road **U** Section	Map ref: E579981 N167311	Parish: District: Medway
Location	**(o/s 26) Boughton Close, Gillingham**			
Description	V1 driver has asked passenger to get out of the vehicle prior to reversing on the drive. Passenger has walked around the back of the V1 after being directed to go round the front. V1 driver has then reversed onto the drive and ran over (passenger) P1 leg.			
Severity SLIGHT	Date: 15/02/2018 Thu 14:30	L	Road Surface Dry Weather Fine	Speed limit 30mph
Unknown		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	reversing	S -> N	0	male
	did not leave c'way	negative	back		80

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	Unknown or other	E			female
hit by veh 1		Unknown or other				79

No.21		Road **U** Section	Map ref: E579721 N166587	Parish: District: Medway
Location	**(o/s 30) Twydall Lane, Gillingham**			
Description	V1 has been heard accelerating harshly and driving at speed. V1 has collided with a tree on the offside and caused the it to roll, colliding with a parked vehicle and garden walls.			

Severity SLIGHT	Date: 26/06/2018 Tue 21:32	DRK STL	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway	Not at or within 20m of junction No Human control within 50m			

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	N -> S	2	male
	left c'way near-side	positive	front		28
2 car	not at junction	parked	P -> P	1	not known
	did not leave c'way	not contacted	back		?

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 28

No.22		Road **U** Section	Map ref: E580044 N167342	Parish: District: Medway
Location	**Boughton Close at Junction with Beechings Way, Gillingham**			
Description	V1 HAS TRIED TO OVERTAKE V2 AT THE BOUGHTON CLOSE, BEECHING WAY JUNCTION. V1 HAS HIT THE OFFSIDE OF V2 AND FALLEN OFF AS V2 HAS TURNED.			
Severity SLIGHT	Date: 24/06/2018 Sun 16:10	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway	T or Staggered junction No Human control within 50m			

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 m/cycle 50 - 125cc	approaching or parked on approach	o/t moving vehicle on its O/S	SW -> SE	2	male
	did not leave c'way	negative	front		19
2 car	entering main road	turning right	SW -> SE	1	female
	did not leave c'way	negative	nearside		40

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 19

No.23		Road **U** Section	Map ref: E581073 N166785	Parish: District: Medway
Location	**Beechings Way near Junction with Pembury Way, Gillingham**			
Description	Elderly lady returning home on the bus when she attempted to exit the bus, she missed the step and fell between the bus and the kerb. The injured lady sustained minor injuries. The bus was stationary when the passenger exited the vehicle.			

Severity SLIGHT	Date: 21/06/2018 Thu 15:21	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway	T or Staggered junction No Human control within 50m			

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 bus or coach	approaching or parked on approach	parked	P -> P	0	female
	did not leave c'way	not contacted	did not impact		43

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
passenger in veh 1	SLIGHT			Alighting		female 24

No.24		Road **U** Section	Map ref: E579521 N167634	Parish: District: Medway
Location	**(o/s 38) Beechings Way, Gillingham**			
Description	V2 HEADING IN THE DIRECTION OF CORNWALLIS AVENUE. AT THE ROUNDABOUT JUNCTION WITH EASTCOURT LANE V1 WAS DIRECTLY BEHIND V2. V1 WAS INDICATING LEFT ON TO EASTCOURT LANE, BOTH VEHICLES HAVE DRIVEN STRAIGHT AHEAD, ONTO BEECHINGS WAY. V1 HAS CONTINUED TO DRIVE CLOSE TO THE REAR OF V2, AS V2 SLOWED DOWN TO ALLOW V1 TO PASS, V1 HAS DRIVEN INTO THE REAR OF V2			

Severity SLIGHT	Date: 25/07/2018 Wed 17:38	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	o/t moving vehicle on its O/S	E -> W	2	male
	did not leave c'way	not contacted	front		28
2 car	not at junction	stopping	E -> W	1	male
	did not leave c'way	negative	back		52

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
passenger in veh 2	SLIGHT					female 56

No.25		Road **U** Section	Map ref: E579885 N167517	Parish: District: Medway
Location	**(o/s 113) Beechings Way, Gillingham**			
Description	V1 WAS PARKED AND ATTEMPTING TO GET OUT OF THE SPACE, V2 WAS DRIVING ALONG BEECHINGS WAY WHEN V1 PULLED OUT OF THEIR SPACE INTO THE PATH OF V2. THIS CAUSED V2 TO BREAK HARD AND SWERVE CAUSING HIM TO COME OFF THE MOTORCYCLE.			

Severity SLIGHT	Date: 13/07/2018 Fri 20:40	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	parked	P -> P	0	female
	did not leave c'way	not contacted	did not impact		39
2 m/cycle 50 - 125cc	not at junction	going ahead other	NW -> SE	0	male
	did not leave c'way	not contacted	offside		17

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					male 17

No.26		Road **U** Section **001**	Map ref: E579700 N167609	Parish: 0 District: Medway
Location	**EASTCOURT LANE RNDBT J/W BEECHINGS WAY, GRANGE**			
Description	V1 pulled out of Eastcourt Lane, failing to see V2 approaching from their right. V1 collided with the nearside of V2.			

Severity SLIGHT	Date: 21/08/2018 Tue 10:28	L	Road Surface Dry Weather Fine	Speed limit 30mph
Roundabout	Mini Roundabout No Human control within 50m			

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	entering roundabout	turning left	NE -> SE	2	female
	did not leave c'way	not requested	front		27
2 car	leaving roundabout	going ahead other	NW -> SE	1	male
	did not leave c'way	not requested	nearside		48

Casualty details Crash resulted in 3 casualties

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					female 27
driver/rider in veh 2	SLIGHT					male 48
passenger in veh 2	SLIGHT					female 36

No.27		Road **U** Section	Map ref: E579814 N167289	Parish: District: Medway
Location	**GOUDHURST ROAD NEAR JN WITH CHARING ROAD**			
Description	V2 is driving, going ahead along Goudhurst Road. V1 is being ridden, going ahead along Goudhurst Road in the opposite direction. V1 has pulled over to the right hand side pulling behind a stationary vehicle. V2 assumed V1 is giving way. V2 carries on ahead. V1 pulls out again in a manoeuvre to turn round and collides with the nearside of V2.			

Severity SLIGHT	Date: 05/08/2018 Sun 19:44	L	Road Surface Dry Weather Fine	Speed limit 30mph

Single carriageway	T or Staggered junction No Human control within 50m

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 m/cycle unknown cc	approaching or parked on approach	u turn	SE -> SE	0	male
	did not leave c'way	positive	front		21
2 car	approaching or parked on approach	going ahead other	NW -> SE	0	male
	did not leave c'way	not requested	nearside		42

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 21

No.28		Road **U** Section	Map ref: E580979 N166628	Parish:
				District: Medway
Location	**Unclassified Road Bloors Lane, at its Junction with Unclassified Road Penshurst Close, Gillingham, Medway**			
Description	V1, AN AUTOMATIC VEHICLE, WAS PARKED BY D1 OUTSIDE THEIR PROPERTY. C1 GOT OUT OF V1, WITH THE ENGINE STILL RUNNING, AND CHECKED ITS POSITION TO MAKE SURE IT WAS CLEAR OF THE DRIVEWAY. D1 STARTED TO GET BACK INTO V1 TO MOVE IT FORWARD WHEN THEIR FOOT GOT CAUGHT ON A PEDAL. C1 LOST THEIR BALANCE AND KNOCKED V1 INTO DRIVE MODE. C1 WAS THEN DRAGGED BY V1 WHILE BEING HALF INSIDE AND OUTSIDE OF THE DRIVERS DOOR. V1 STRUCK A SCHOOL FENCE AND THEN CAME TO A STOP.			

Severity SLIGHT	Date: 14/09/2018 Fri 13:00	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	starting	E -> W	0	male
	left c'way near-side	not contacted	offside		83

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	In c'way not crossing	ST			male
hit by veh 1		In c'way stationary-not crossing (standing or playing)				83

No.29		Road **U** Section **001**	Map ref: E580286 N167140	Parish: 0 District: Medway
Location	**MILSTED RD J/W HOLLINGBOURNE RD, TWYDALL.**			
Description	V1 DRIVING AT NORMAL SPEED DOWN MILSTED RD AND VEERING SLOWLY TO IT LEFT HAND SIDE. V1 EVENTUALLY VEERS TOO FAR AND COLLIDEDS WITH V2 PARKED & STATIONARY ON THE SIDE OF THE ROAD, WITH DRIVER INSIDE. (ONLY INJURY STATED IS 'STROKE' FOR C1, UNKNOWN IF ANY OTHER INJURIES WERE SUSTAINED, AGE FOR C1/V1 NOT AVAILABLE).			

Severity SERIOUS	Date: 02/10/2018 Tue 18:40	L	Road Surface Dry Weather Fine	Speed limit 30mph

Single carriageway	T or Staggered junction No Human control within 50m

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	going ahead other	NE -> SW	2	male
	did not leave c'way	not contacted	nearside		?
2 car	approaching or parked on approach	parked	P -> P	1	female
	did not leave c'way	not contacted	offside		57

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SERIOUS					male ?

No.30		Road **U** Section **001**	Map ref: E579735 N166736	Parish: 0 District: Medway
Location	**TWYDALL LANE J/W ROMANY RD, TWYDALL.**			
Description	V1 TRAVELLING NORTH, PEDESTRIAN RAN FROM EASTERN KERB INTO ROAD AND INTO PATH OF V1, PEDESTRIAN CAME INTO CONTACT WITH V1, FELL TO GROUND GOT UP AND WALKED OFF. NO DETAILS OF PEDESTRIAN KNOWN.			
Severity SLIGHT	Date: 15/10/2018 Mon 15:45	L	Road Surface Wet Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	approaching or parked on approach	going ahead other	S -> N	0	male
	did not leave c'way	not contacted	front		45

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	In c'way crossing elsewhere	W			male
hit by veh 1		Crossing from divers offside masked				11

No.31		Road **U** Section	Map ref: E579796 N167295	Parish: District: Medway
Location	**36 Goudhurst Road, Gillingham, Medway**			
Description	V1 TRAVELLING EAST ON GOUDHURST ROAD, V2 TRAVELLING WEST, CARS PARKED BOTH SIDES, V1 DRIVES DOWN MIDDLE OF ROAD, V2 STOPS, V1 CONTINUES THROUGH GAP, SCRAPES ALONG SIDE OF PARKED V3, LOOSES CONTROL AND HITS REAR OF PARKED V4 (Ford Transit, no VRM and no casualty so deleted from record).			
Severity SLIGHT	Date: 31/10/2018 Wed 12:50	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 3 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	W -> E	0	male
	did not leave c'way	not contacted	front		65
2 car	not at junction	stopping	E -> W	0	female
	did not leave c'way	not contacted	did not impact		23
3 car	not at junction	parked	P -> P	0	male
	did not leave c'way	not contacted	nearside		37

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 65

No.32		Road **U** Section **001**	Map ref: E579479 N167642	Parish: 0 District: Medway
Location	**BEECHINGS WAY O/S 8, GRANGE**			
Description	D1 FELL ASLEEP AT THE WHEEL, CROSSED OVER THE CENTRAL LINE ONTO THE OTHER SIDE OF THE ROAD AND COLLIDED WITH V2, WHICH WAS PARKED TO THE OFFSIDE. V2 WAS FORCED INTO V3 AND V3 WAS FORCED INTO V4, BOTH OF WHICH WERE ALSO PARKED.		
Severity SLIGHT	Date: 28/11/2018 Wed 22:16	DRK STL	Road Surface Wet Weather Rain	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 4 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	NW -> SE	2	male
	did not leave c'way	negative	front		37
2 car	not at junction	parked	P -> P	1	male
	did not leave c'way	not requested	front		60
3 goods < 3.5t	not at junction	parked	P -> P	2	not known
	did not leave c'way	not requested	front		?
4 car	not at junction	parked	P -> P	3	male
	did not leave c'way	not requested	back		48

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 37

No.33		Road **U** Section	Map ref: E579385 N167671	Parish: District: Medway
Location	**Beechings Way near junction with Featherby Road, Gillingham**			
Description	Two lanes approaching roundabout Lane 2 had static traffic, Lane 1 was empty. V2 travelled down Lane 1 V1 waited until a gap appeared in line of traffic then turned right into Featherby Road. Neither vehicle saw the other, V1 has T-boned V2 sustained minor injuries.			
Severity SERIOUS	Date: 09/01/2019 Wed 07:59	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	S -> W	2	male
	did not leave c'way	negative	back		?
2 m/cycle 125 - 500cc	not at junction	going ahead other	E -> W	1	male
	did not leave c'way	negative	back		?

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SERIOUS					male ?

No.34		Road **U** Section	Map ref: E579697 N167608	Parish: District: Medway
Location	**BEECHINGS WAY - JUNCTION EAST COURT LANE GILLINGHAM**			
Description	V2 passed in front of V1 at some traffic lights and driver of V1 was behind vehicle V2. V2 then drove along Beechings Way and V1 was close behind. V2 braked to go over a speed hump and V1 collided with the rear of V2.			
Severity SLIGHT	Date: 30/01/2019 Wed 11:18	L	Road Surface Wet Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	W -> E	2	male
	did not leave c'way	negative	front		33
2 car	not at junction	stopping	W -> E	1	female
	did not leave c'way	negative	back		32

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 2	SLIGHT					female 32

No.35		Road **U** Section	Map ref: E580800 N166233	Parish: District: Medway
Location	**BLOORS LANE NEAR JUNCTION DENBIGH AVENUE, RAINHAM**			
Description	V1 WAS TURNING RIGHT ONTO THE A2, LONDON ROAD, FROM BLOORS LANE, THE TRAFFIC LIGHT WAS GREEN. AS V1 TURNED ROUND THE CENTRAL RESERVATION TO ENTER LANE 2 OF THE A2, A GROUP OF 4 PEDESTRIANS WERE CROSSING IN AN UNSUITABLE CROSSING AREA V1 HAS NOT SEEN THE PEDESTRIAN STEP INTO THE ROAD AND HAS COLLIDED WITH HER ON HIS FRONT OFFSIDE AT ROUGHLY 10MPH			

Severity SLIGHT	Date: 21/02/2019 Thu 16:07	L	Road Surface Dry Weather Fine	Speed limit 40mph
Single carriageway		Crossroads No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	leaving main road	turning right	N -> W	0	male
	did not leave c'way	negative	offside		91

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	Within 50m of ped crossing				female
hit by veh 1		Crossing from divers offside masked				13

No.36		Road **U** Section	Map ref: E579407 N166568	Parish: District: Medway
Location	**SOUTH AVENUE NEAR JUNCTION WATLING STREET, STROOD**			
Description	V1 HAS HAS COLLIDED WITH REAR OF V2 AFTER FAILING TO BRAKE IN TIME AT TRAFFIC LIGHTS			

Severity SLIGHT	Date: 25/03/2019 Mon 11:35	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		T or Staggered junction No Human control within 50m		

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 goods < 3.5t	approaching or parked on approach	going ahead other	E -> W	2	male
	did not leave c'way	not contacted	front		26
2 car	approaching or parked on approach	going ahead other	E -> W	1	female
	did not leave c'way	not contacted	back		18

Casualty details Crash resulted in 2 casualties

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					male 26
passenger in veh 2	SLIGHT					male 52

No.37		Road **U** Section	Map ref: E580816 N166287	Parish: District: Medway
Location	**BLOORS LANE, RAINHAM**			
Description	PEDESTIAN ON SKATEBOARD CROSSING ROAD FROM WEST TO EAST V1 TRAVELLING ON ROAD SOUTH TO NORTH COLLIDED WITH PEDESTIAN IN CARRIAGEWAY SLIGHT INJURY NO DETAILS EXCHANGED			
Severity SLIGHT	Date: 23/05/2019 Thu 12:00	L	Road Surface Dry Weather Fine	Speed limit 30mph
Single carriageway		Not at or within 20m of junction No Human control within 50m		

Vehicle details Crash involved 1 vehicle

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	not at junction	going ahead other	S -> N	0	female
	did not leave c'way	not requested	nearside		?

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
pedestrian	SLIGHT	In c'way crossing elsewhere	E			male
hit by veh 1		Crossing from drivers nearside				15

No.38		Road **U** Section	Map ref: E579557 N166873	Parish: District: Medway
Location	**EASTCOURT LANE NEAR JUNCTION LEWIS AVENUE, GILLINGHAM**			
Description	V1 came out of Lewis Avenue and was turning right to travel north on Eastcourt Lane , hit by V2 travelling South on Eastcourt Lane. Damage to both vehicles. Details exchanged.			

Severity SLIGHT	Date: 07/06/2019 Fri 18:40	L	Road Surface Wet Weather Rain	Speed limit 30mph
Single carriageway	T or Staggered junction No Human control within 50m			

Vehicle details Crash involved 2 vehicles

vehicle type	location	movement	dir	veh hit	sex
registration		b-test	1st hit	damaged	age
1 car	entering main road	turning right	E -> N	99	female
	did not leave c'way	not contacted	offside		20
2 car	mid junction	going ahead other	N -> S	1	male
	did not leave c'way	not contacted	front		19

Casualty details Crash resulted in 1 casualty

class	severity	pedestrian location	dir	seat belt	PSV passenger	sex
		pedestrian movement	school name		**to/from school	age
driver/rider in veh 1	SLIGHT					female 20

Appendix B

2018 Base

Junction		Coefficient	Power	Formula type	F (AADT)	X	AADT*	Y	AADT*	Accident rate/yr	Accident rate/5yrs	Accidents recorded/5yrs
Bowaters	96	0.006	1.73	I	47					4.65	23.3	19
A2/Pump Lane	14	0.195	0.46	C	38	1636	18	188	2	1.04	5.2	5
A2/ Bloors Lane	44	0.291	0.51	C	101	1801	20	455	5	3.06	15.3	5
Will Adams R/B	56	0.022	0.85	C	528	2616	29	1637	18	4.53	22.7	11
Ito Way/ Cornwallis	55	0.063	0.69	C	350	2258	25	1259	14	3.59	17.9	5

* AM peak to 5 day AADT factor (LRR) 11.1

AADT express in 000s vehicles

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Appendix E

Primary Access Ghost Island Right Turn Lane
(see drawing 20230-05e-2)

New Northern Junction
(see drawing 20230-05e-6)

New Southern Junction
(see drawing 20230-05e-5)

New Signal Controlled Arrangement
(see drawing 20230-05e-1)

PUMP FARM

BLOORS FARM

At grade raised table crossing of bridle way

LOWER RAINHAM ROAD

B 2004

LOWER TWYDALL LANE

PUMP LANE

LOWER BLOORS LANE

Bloors

Lower

Allotment Gardens

Recreation Ground

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REV	DESCRIPTION	DRAWN	INITIALS	DATE

DRAWING STATUS	CHECKED BY	DATE

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JOB TITLE	CLIENT
Pump Farm, Lower Rainham	AC Gotham

DRAWING TITLE

Overall Access Strategy & Key Network

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:2000@A1	BP/DN	Aug 20	20230-05	E

Existing Bridge
Width - 6m

Signal Control - Shuttle Working

59m visibility splay

Signal Control - Shuttle Working

2.5m footway/ cycleway

26.5m

1416 to 22

30

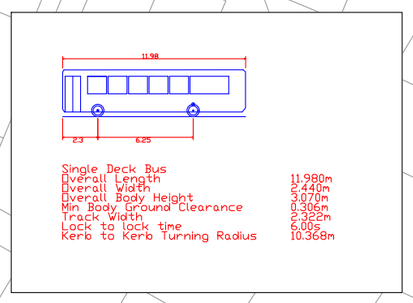
185

175

204

SL

13



Single Deck Bus	
Overall Length	11.980m
Overall Width	2.440m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	10.368m

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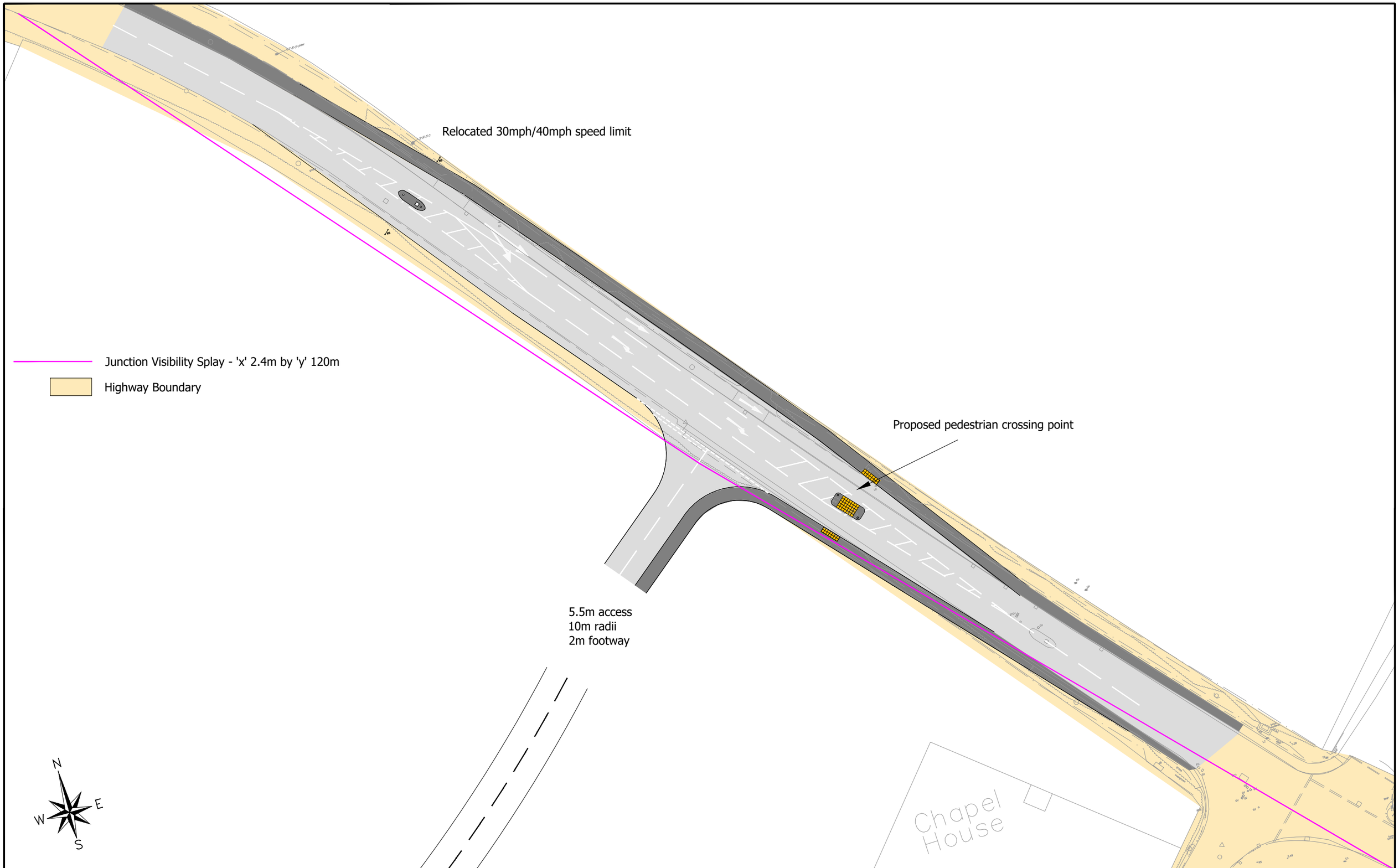
JOB TITLE	CLIENT
Pump Farm, Lower Rainham	AC Goatham

DRAWING TITLE

Pump Lane

Proposed Railway Bridge Improvements

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A3	BP/DN	Aug 20	20230-05-1	E



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DRAWING STATUS	CHECKED BY	DATE

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JOB TITLE	CLIENT
Pump Farm, Lower Rainham	AC Goatham

DRAWING TITLE

Lower Rainham Road

Proposed Right Turn Lane

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A3	BP/DN	Aug 20	20230-05-2	E

Chevron Sign and planting to reduce "see-through" between new road and existing Pump Lane

Junction Visibility Splay - 'x' 2.4m by 'y' 43m for 30mph limit

Forward visibility to turning vehicle - 43m

Forward visibility - 43m

Overrun area to reduce vehicle speeds through bend

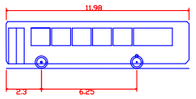
21.0m

N

W E

S

Existing width of Pump Lane widened at approach to junction to 5m to enable 2 vehicles to pass



Single Deck Bus	
Overall Length	11.980m
Overall Width	2.440m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	10.368m

21.0m

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DRAWING STATUS	CHECKED BY	DATE

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JOB TITLE	CLIENT
Pump Farm, Lower Rainham	AC Gotham

DRAWING TITLE

Southern Local Access/ Spine Road Junction

Visibility and Vehicle Tracking Details

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A3	BP/DN	Aug 20	20230-05-5	E

Junction Visibility Splay - 'x' 2.4m by 'y' 43m for 30mph limit

Existing Pump Lane widened at approach to junction to 5m to enable 2 vehicles to pass

Existing drive to be extended with any planting to be outside of driveway visibility splays

Existing carriageway to be punctured and grassed. Planting/ vegetation to be introduced to reduce "see-through" between Pump Lane either side of new development road.

N
W E
S

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DRAWING STATUS	CHECKED BY	DATE

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JOB TITLE	CLIENT
Pump Farm, Lower Rainham	AC Gotham

DRAWING TITLE
Northern Local Access/ Spine Road Junction

General Arrangement

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1:500@A3	BP/DN	Aug 20	20230-05-6	E

Appendix F

MOTT MACDONALD

Pump Lane, Lower Rainham

Road Safety Audit
Stage 1

18 October 2019

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Pump Lane, Lower Rainham

Road Safety Audit
Stage 1

18 October 2019

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	26/09/2019	J Man	M S Ring	T J Blaney	First Issue
B	18/10/2019	M S Ring	J Man	S Jones	Second Issue

Information class: Standard

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Contents

1 Introduction

This report describes a Stage 1 Road Safety Audit carried out on the proposed highway modifications in the vicinity of Pump Lane, Lower Rainham.

The audit was carried out at the request of David Tucker Associates.

The audit took place at the Croydon office of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

It is confirmed that this is a Stage 1 Road Safety Audit and that the audit was undertaken upon completion of the preliminary design work.

The Road Safety Audit Team as approved by the client's Project Sponsor, Simon Tucker, consisted of:

Matthew Ring	BSc (Hons), MCIHT, MSoRSA (Certificate of Competency in Road Safety Audit, April 2016) Audit Team Leader, Mott MacDonald
Jeffrey Man	MEng, MCIHT, MSoRSA Audit Team Member, Mott MacDonald

The Audit Team visited the site of the proposed works together on Friday 20th September 2019 at 14:00hrs. During this visit the weather was fine, and the road surface dry. Traffic conditions were light. No pedestrian or cycle activity were observed in the vicinity.

This Road Safety Audit was carried out in accordance with Highways England's Departmental Standard GG119. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

The comments and suggestions for road safety improvements made in this report seek to address matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme. Consequently, the auditors accept no responsibility for the design or construction of the scheme.

All the issues raised in this report are considered to be required for action. The comments contained in the report are based on safety related concerns and as such the design engineer will need to consider carefully how to respond to each of the issues. The Audit Response Report to the audit should be completed by the Design Team and kept on file for future reference.

A Key Plan indicating the location of any identified safety related issues is provided in **Appendix B**.

Scheme Description

The scheme consists of three areas where improvements are proposed:

Pump Lane, Lower Rainham – A signal controlled alternate one-way working system is proposed at the southern end of Pump Lane, Lower Rainham at the railway underbridge. Furthermore, a 2.5m shared footway / cycleway is proposed on the eastern side of Pump Lane.

Lower Rainham Road, Lower Rainham – The main site access consists of a priority T-junction on Lower Rainham Road. The carriageway is proposed to be widened to accommodate a right-turn lane.

Yokosuka Way – Lower Rainham Road, Gillingham – The approach to the roundabout on the eastern arm of the existing roundabout is proposed to be widened to accommodate two lanes, with kerb realignments on the southern side of Lower Rainham Road and amendments to the central splitter island to facilitate this.

Two further junctions are proposed on Pump Lane:

- North of the railway overbridge a new junction and side road to the east will join Pump Lane, Pump lane will be realigned northwards into the proposed development site.
- North of no. 328 Pump Lane, it is proposed to realign Pump Lane northwards to create a new staggered junction with an east / west development access road.

2 Items Raised at this Stage 1 Audit

This section describes road safety related issues identified by the Audit Team that are associated with the scheme as presented in **Appendix A**. A reference key plan is shown in **Appendix B**.

2.1 Pump Lane, Lower Rainham

2.1.1 Problem 2.1.1

Location: Pump Lane, south of railway underbridge.

Summary: Proximity of stop line to single lane shuttle working section, south of the railway underbridge.

Alternate one-way working signal system is proposed at the railway underbridge and the carriageway is proposed to be reduced under the bridge to 3.0m to provide a 2.5m wide shared footway / cycleway.

On the southern side of the railway underbridge, the stop line is proposed approximately 10m south from the single lane section, with a short taper in the eastern footway provided. Swept paths have not been provided for vehicles travelling southbound. The audit team is concerned the short manoeuvring distance could increase the risk of head-on collisions and / or kerb strikes leading to loss of control type collisions.

Figure 1: Proposed alternate one-way working.

Source: David Tucker Associates

Recommendation

It is recommended that swept path analysis is undertaken for vehicles travelling southbound. Should the movement be unfeasible, it is recommended the stop line south of the underbridge is set further back from the junction.

2.1.2 Problem 2.1.2

Location: Pump Lane, south of railway underbridge.

Summary: On street parking leading to vehicles on approach to signal stop line not being in a position to see nearside signals.

The audit team observed a number of vehicles parked on street on the section of Pump Lane south of the railway underbridge. The proposed stop line is located in a section where vehicles were observed to be parked. The audit team is concerned that the presence of parked vehicles requires drivers to use the centre of Pump Lane on approach to the railway underbridge which could reduce the visibility of the nearside traffic signals.

This could increase the risk of late braking, leading to shunt-type collisions, or vehicles proceeding on a red signal, leading to head-on collisions.

Furthermore, drivers in the centre of Pump Lane travelling northbound waiting at a red traffic signal are likely to obstruct southbound vehicles increasing the risk of late braking shunt type collisions.

Figure 2: Existing on-street parking on Pump Lane.

Source: Mott MacDonald

Recommendation

It is recommended that parking restrictions are considered to provide a clear approach to the signals. Furthermore, it is recommended that offside signals are proposed in addition to any nearside signals.

2.1.3 Problem 2.1.3

Location: Pump Lane, south of railway underbridge.

Summary: Signal equipment potentially impeding access to properties.

The location of traffic signal equipment has not been provided for the proposed alternate one-way working signal system. The driveway for No. 185 Pump Lane is located between the stop line and the railway underbridge. Should signal equipment be located in the vicinity of the vehicular crossover, this could increase the risk of vehicles striking the signal equipment.

Recommendation

It is recommended that care is taken to locate the signal equipment south of the railway underbridge, such that it would not impede access to the existing driveway.

2.1.4 Problem 2.1.4

Location: Pump Lane, south of railway underbridge.

Summary: Vegetation present on corner north of No. 204 Pump Lane reducing visibility at potential pinch point.

A buildout is proposed to facilitate the provision of the 2.5m wide shared footway / cycleway. The proposed shared footway / cycleway re-joins the existing footway by a sharp taper, which potentially creates a pinch point where the width of the footway / cycleway reduces. Vegetation is present immediately east of this location, which would reduce the inter-visibility of pedestrians and cyclists from the railway underbridge, and other pedestrians and cyclists south of the pinch point, as well as vehicles egressing from the driveway of No. 204 Pump Lane. This could result in an increased risk of collisions between different users of the shared users of the shared footway / cycleway facility.

Recommendation

It is recommended the vegetation is cut back at the corner of north of No.204 Pump Lane. Furthermore, it is recommended that a shallower taper is provided where the proposed footway / cycleway re-joins the existing footway.

2.1.5 Problem 2.1.5

Location: Pump Lane, north of railway underbridge.

Summary: New side road junction proposed on the outside of a bend

North of the Pump Lane rail overbridge, Pump Lane will be realigned to form a sweeping curve north-eastwards. On the outside of this bend, a new side road junction is proposed which ties into the existing Pump Lane alignment and will serve as local access.

The audit team have not been provided with detailed carriageway widths, details such as whether a right turn facility will be provided and visibility splay information. There is a concern that the junction being provided on the outside of the bend may cause the following safety issues:

- Reduced inter-visibility for drivers exiting from the local access arm of Pump Lane, increasing the risk of collisions between turning vehicles and those on the main carriageway.

- It is not clear what forward visibility will be provided for vehicles on Pump Lane to those vehicles stationary waiting to turn right into the local access road. Where insufficient forward visibility is provided, this could increase the risk of late braking or shunt-type collisions.

Recommendation

It is recommended that appropriate visibility splays from the local access road and forward stopping sight distance on the main Pump Lane carriageway are reviewed and appropriate distances are provided for the design speed of the proposed highway layout.

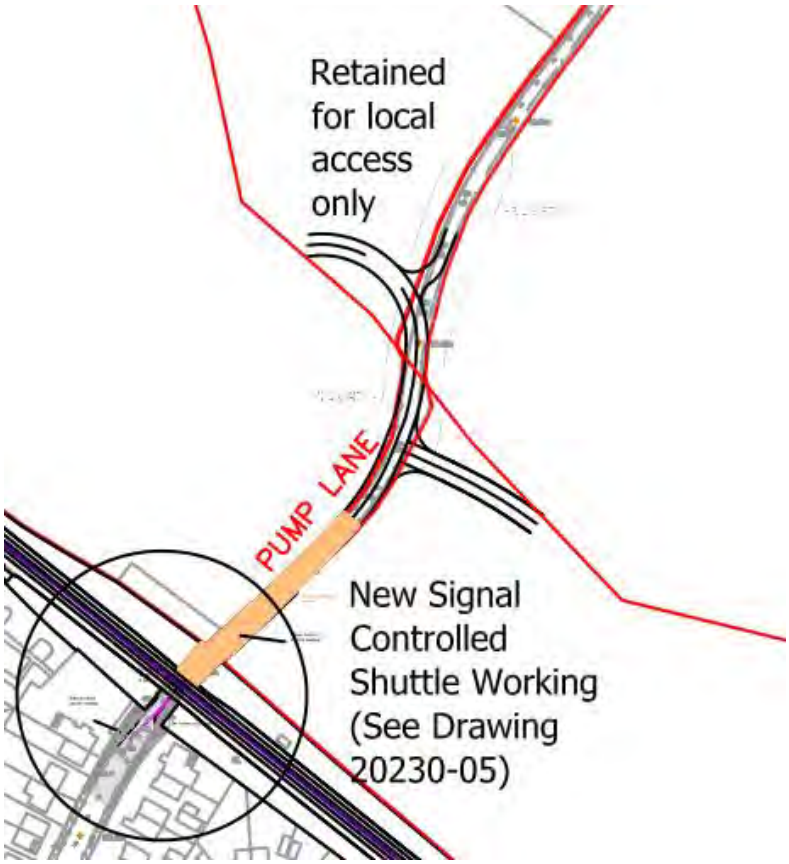
2.1.6 Problem 2.1.6

Location: Pump Lane, north of railway underbridge.

Summary: Proposed curvature of the bend may increase the risk of loss of control collisions

The realigned Pump Lane carriageway is expected to curve north-westwards north of the railway overbridge (see **Figure 3**). The radius of the curve is unknown, and it is also not clear how it will tie into the downstream highway network in the proposed development site. Furthermore, the proposed curvature of the bend and the presence of existing vegetation would restrict the forward visibility to oncoming vehicles. Pump Lane in this location is subject to the national speed limit.

Figure 3: Existing on-street parking on Pump Lane.



Source: Mott MacDonald

The audit team are concerned that the curvature of the bend and unclear tie-in to the downstream highway network may increase the risk of loss of control collisions, particularly in wet or icy conditions, and the reduced visibility from the curvature of the bend and existing vegetation could result in an increased risk of head-on collisions.

Recommendation

It is recommended that the radii of the bend be reviewed to ensure an appropriate radius and forward visibility is provided for the intended design speed of Pump Lane in this location.

2.1.7 Problem 2.1.7

Location: Pump Lane, north of railway underbridge.

Summary: Pump Lane 'local access only' route to be used as a rat-run

Between the new northern and southern junction on Pump Lane, the existing Pump Lane alignment is to be designated as local access only. The audit team are of the opinion that the short length of route between the two junctions will be attractive for rat-running as there are limited other north / south routes in the adjacent area.

The audit team are concerned that the width of the carriageway and junctions at each extremity of the route may not be designed to accommodate these movements, particularly as the existing Pump Lane is very narrow in places and it appears the proposed arms of Pump Lane will maintain these widths.

Should vehicles use Pump Lane for this purpose and the junctions not be designed for these volumes of movements, it could result in turning movement or side-swipe collisions.

Recommendation

It is recommended that measures be introduced to discourage rat-running on the local access only length of Pump Lane.

2.2 Lower Rainham Road, Lower Rainham

2.2.1 Problem 2.2.1

Location: Lower Rainham Road, east of proposed site access.

Summary: The posted change in speed limit in close proximity to the new access.

On Lower Rainham Road immediately east of the proposed site access, the posted mandatory traffic speed limit changes from 40mph to 30mph. The audit team is concerned that eastbound motorists may accelerate due to the change in speed limit at the same location motorists will be slowing to turn into the proposed site access, leading to an increased risk of rear-end shunt type collisions.

Furthermore, drivers waiting to egress the proposed new access may fail to fully appreciate the approach speed of vehicles slowing down or accelerating for the change in speed limit increasing the risk of turning vehicle collisions.

Figure 4: Existing 30mph / 40mph speed transition.

Source: Mott MacDonald

Recommendation

It is recommended that, in conjunction with the Highway Authority, the position of the 30mph / 40mph speed limit transition is reviewed and relocated away from the new site access.

2.2.2 Problem 2.2.2

Location: Lower Rainham Road, east of proposed site access.

Summary: Lack of crossing facility across Lower Rainham Road.

A footway is proposed on the east side of the site access road providing pedestrian access between the site westwards towards Lower Rainham Road. A footway is currently provided on the south side of Lower Rainham Road towards Pump Lane but terminates at Pump Lane and no dropped kerb facility is provided. A footway is provided on the northern side of Lower Rainham Road providing eastbound access towards Grange.

It is not proposed to provide a pedestrian crossing facility on Lower Rainham Road linking the site access with the northern footway. The lack of a formal crossing facility could lead to pedestrians using the existing traffic islands that are not designed for this purpose. This increases the risk of collisions between pedestrians travelling to and from the site, and passing vehicles, and also slips, trips and falls as no dropped kerb facilities are provided.

Recommendation

It is recommended that a formal pedestrian crossing facility with a central refuge island is provided to allow pedestrians to cross Lower Rainham Road.

2.3 Yokosuka Way – Lower Rainham Road, Gillingham

2.3.1 Problem 2.3.1

Location: Yokosuka Way – Lower Rainham Road, Eastern Arm.

Summary: Kerb alignment on approach to roundabout directs vehicles from the nearside lane into the offside lane.

On the eastern arm of the roundabout between Lower Rainham Road and Yokosuka Way, the approach to the roundabout is proposed to be widened to increase the number of approach lanes from one to two. Realignment of the southern kerbline and the central splitter island is proposed to facilitate this.

Approximately 15m east of the roundabout the proposed southern kerbline appears to ‘kink’ which could deflect drivers in the nearside lane towards the offside lane. This could increase the risk of side-swipe type collisions.

Recommendation

It is recommended that the proposed kerb realignment is revised to provide a continuous alignment.

3 Audit Team Statement

We certify that this audit has been carried out in accordance with Highways England's Departmental Standard GG119

Road Safety Audit Team Leader

M S Ring BSc (Hons) MCIHT, MSoRSA
(Certificate of Competency in Road Safety Audit, April 2016)

Signed:

Date: 18th October 2019

Projects Principal
Mott MacDonald House
8-10 Sydenham Road
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CR0 2EE

J Man MEng MCIHT MSoRSA

Signed:

Date: 18th October 2019

Traffic Engineer
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Appendices

A. List of Drawings & Documents Examined

The following drawings and documents were examined as part of this Road Safety Audit.

Table 1: Drawings

Drawing Number	Revision	Drawing Title
20230-05	A	Proposed Pump Lane Railway Bridge Improvements
20230-05-3	A	Overall Access Strategy
20230-05-02	-	Proposed Right Turn Lane, Lower Rainham Road
20230-10	A	Proposed Improvements, Yokosuka Way – Lower Rainham Road, Lower Rainham Road East Arm

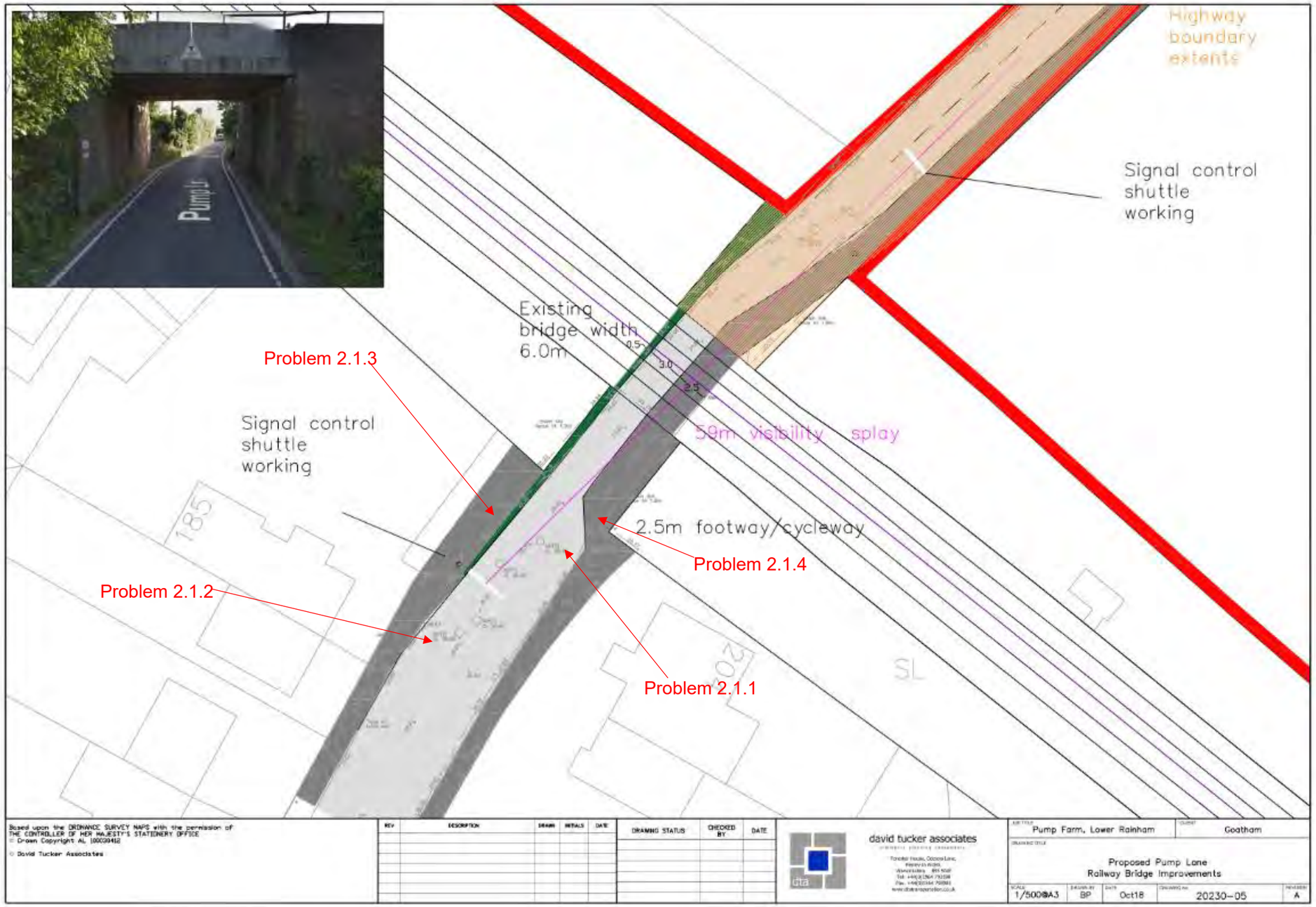
Source: David Tucker Associates

Table 2: Documents

Document Number	Revision	Document Title
-	-	Road Safety Audit Brief
20230-03	-	Transport Assessment

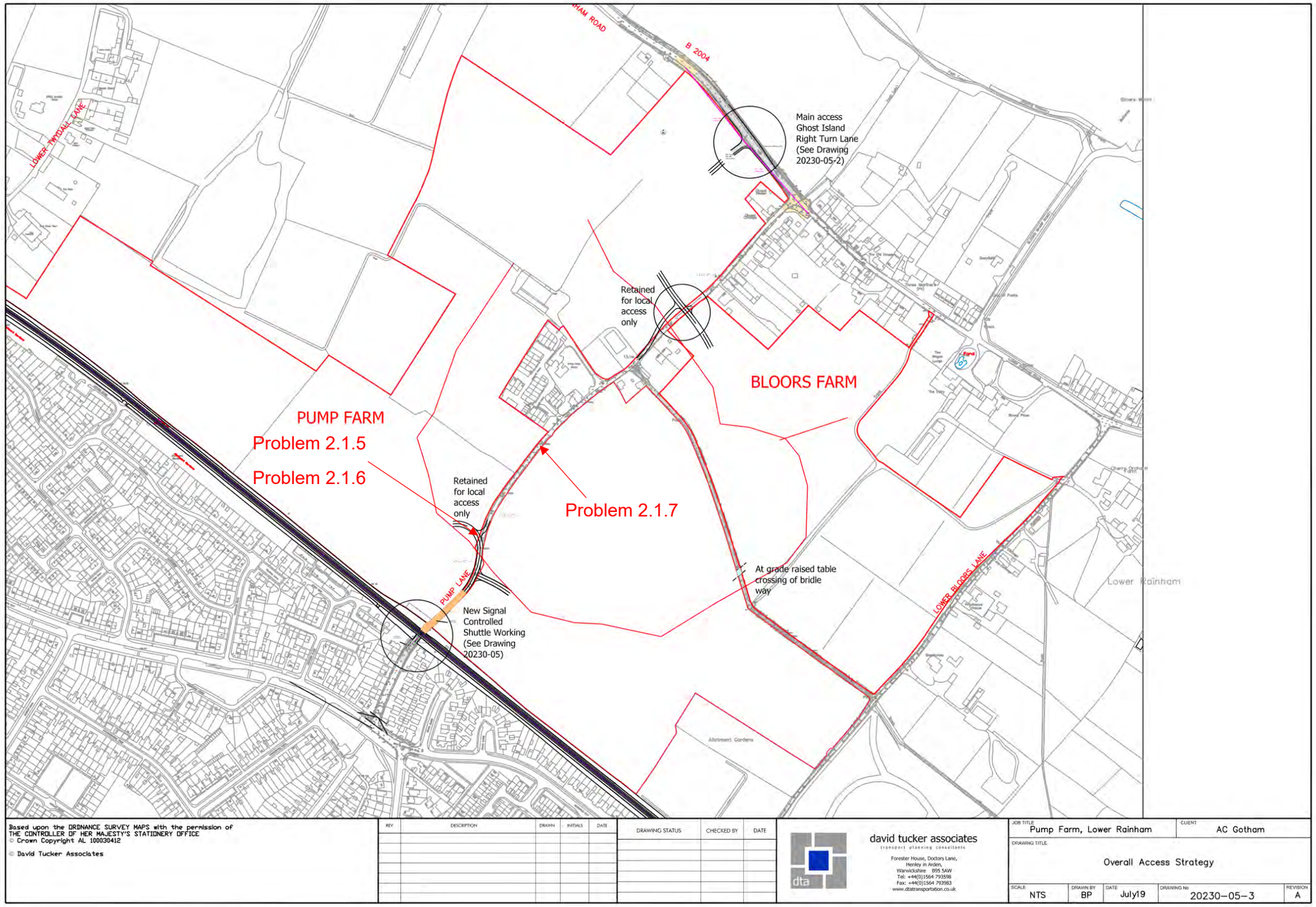
Source: David Tucker Associates

B. Key Plan – Pump Lane, Lower Rainham

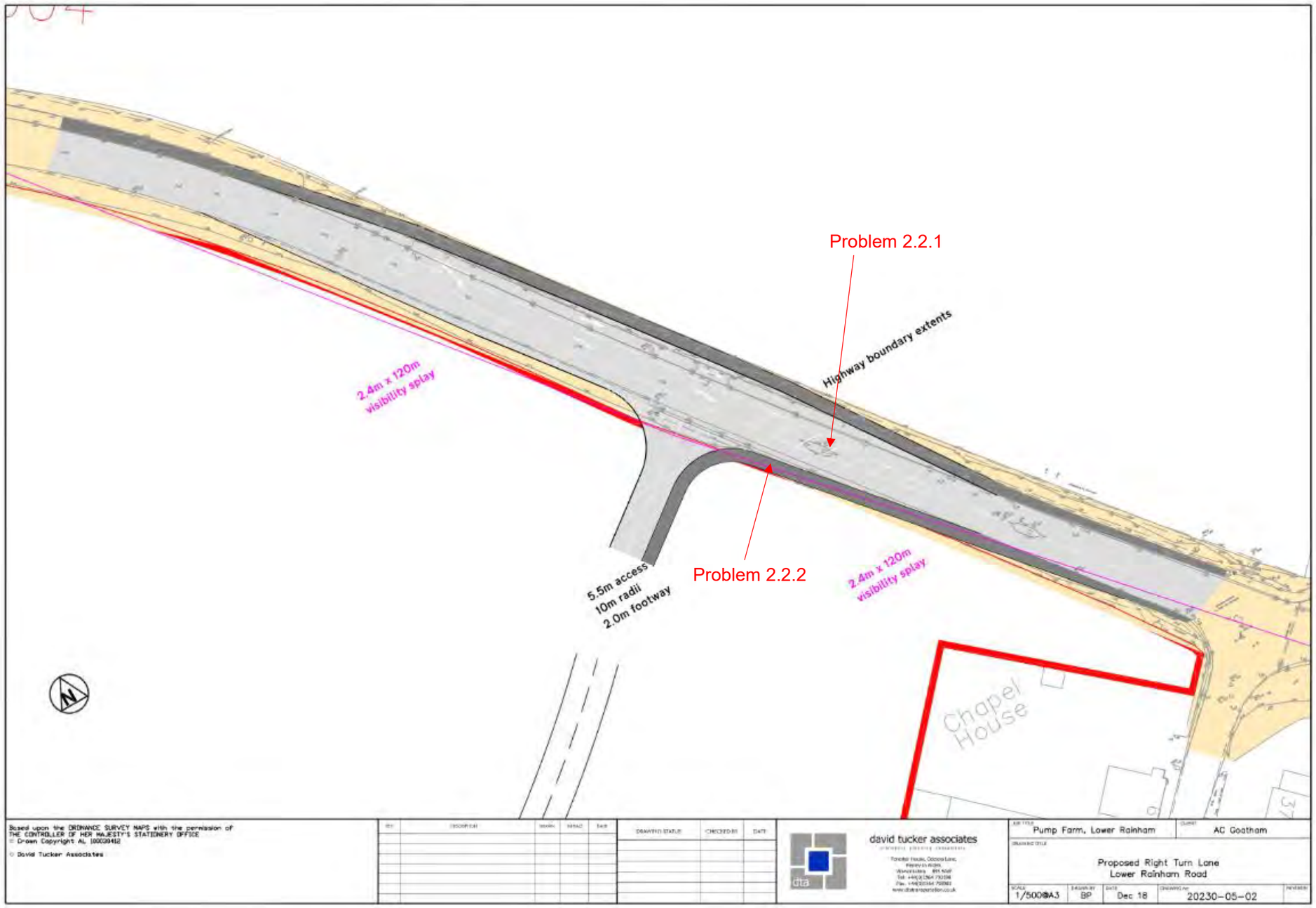


Not to Scale

C. Key Plan – Pump Lane Local Access



D. Key Plan – Lower Rainham Road, Lower Rainham



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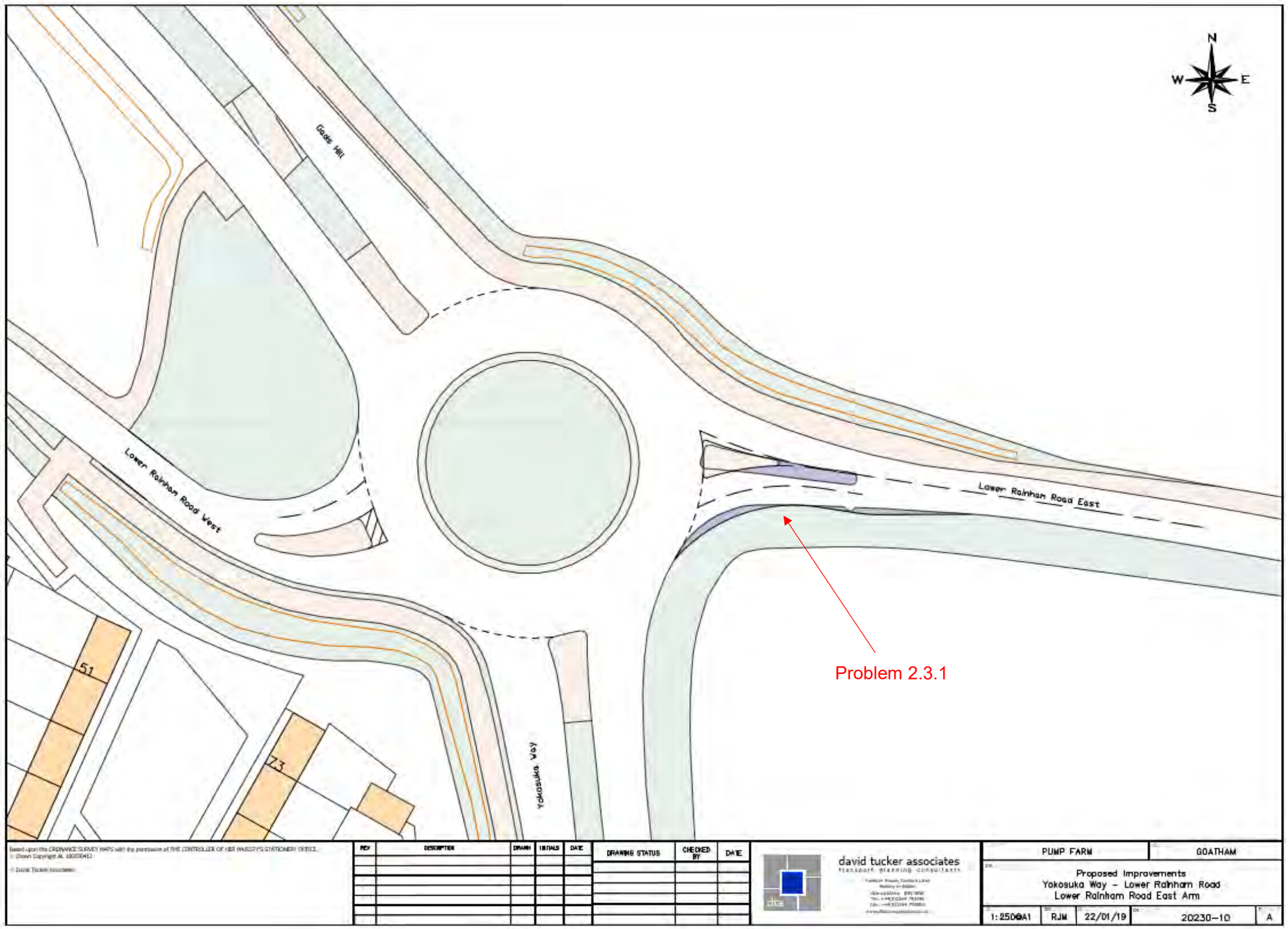
E. Key Plan – Yokosuka Way – Lower Rainham Road, Gillingham



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Appendix G

1.0 INTRODUCTION

1.1 This report sets out the design office response to the results of a Stage 1 Road Safety Audit (RSA) carried out by Mott Macdonald in relation to the access proposals associated with the development of land off Pump Lane, Lower Rainham. The RSA Report (Reference 398911-TPN-ITD-077-A | 18 October 2019 is attached at **Appendix 1**.

2.0 ITEMS RAISED

Problem 2.1.1

Location: *Pump Lane, South of Railway Underbridge*

Summary: *Proximity of stop line to single lane shuttle working section, south of the railway underbridge.*

Recommendation

2.1 It is recommended that swept path analysis is undertaken for vehicles travelling southbound. Should the movement be unfeasible, it is recommended the stop line south of the bridge is set further back from the junction.

Designer's Response

2.2 The auditor's recommendation is accepted. Swept path analysis has been undertaken on the junction and is shown on D**rawing 20230-05d** attached to this note. The southern stop line has been moved south, whilst still not impacting the access to dwelling 185. The eastern kerb for the footway/cycleway has been smoothed to allow vehicles better transition.

Problem 2.1.2

Location: *Pump Lane, South of Railway Underbridge.*

Summary: *On street parking leading to vehicles on approach to signal stop line not being in a position to see nearside signals.*

Recommendation

2.3 It is recommended that parking restrictions are considered to provide a clear approach to the signals. Furthermore, it is recommended that offside signals are proposed in addition to any nearside signals.

Designer's Response

2.4 The auditor's recommendation is noted. A TRO will be considered to address on street parking issues within the vicinity of the signal junction. This can be secured at the detailed design stage.

Problem 2.1.3

Location: *Pump Lane, South of Railway Underbridge.*

Summary: *Signal equipment potentially impeding access to properties.*

Recommendation

2.5 It is recommended that care is taken to locate the signal equipment south of the railway underbridge, such that it would not impede access to the existing driveway.

Designer's Response

2.6 The auditor's recommendation is accepted and this will be addressed at the detailed design stage.

Problem 2.1.4

Location: *Pump Lane, South of Railway Underbridge*

Summary: *Vegetation present on corner north of No. 204 Pump Lane reducing visibility at potential pinch point.*

Recommendation

2.7 It is recommended the vegetation is cut back at the corner of north No. 204 Pump Lane. Furthermore, it is recommended that a shallower taper is provided where the proposed footway / Cycleway re-joins the existing footway.

Designer's Response

2.8 The auditor's recommendation is accepted and this will be addressed at the detailed design stage.

Problem 2.1.5

Location: *Pump Lane, North of Railway Underbridge*

Summary: *New side road junction proposed on the outside of a bend*

Recommendation

2.9 It is recommended that appropriate visibility splays from the local access road and forward stopping sight distance on the main Pump Lane carriageway are reviewed and appropriate distances are provided for the design speed of the proposed highway layout.

Designer's Response

2.10 The auditor's recommendation is accepted and this is shown on Drawing 2023005-5.

Problem 2.1.6

Location: *Pump Lane, North of Railway Underbridge*

Summary: *Proposed curvature of the bend may increase the risk of loss of control collisions*

Recommendation

2.11 It is recommended that the radii of the bend be reviewed to ensure an appropriate radius and forward visibility is provided for the intended design speed of Pump Lane in this location.

Designer's Response

2.12 The auditor's recommendation is accepted and this is shown on Drawing 20230-05-5.

Problem 2.1.7

Location: *Pump Lane, North of Railway Underbridge*

Summary: *Pump Lane 'local access only' route to be used as a rat-run*

Recommendation

2.13 It is recommended that measures be introduced to discourage rat-running on the local access only length of Pump Lane.

Designer's Response

2.14 The auditors recommendation is accepted. At present all the traffic modelling undertaken for the site show that there will be very little change in through traffic on Pump Lane. Given the future layout of the wider development is subject to further detailed design it is not appropriate to fix the strategy for the retained section of Pump Lane and this should be addressed at the detailed stage when phasing of the development will also need consideration.

Problem 2.2.1

Location: *Lower Rainham Road, East of proposed site access.*

Summary: *The posted change in speed limit in close proximity to the new access.*

Recommendation

2.15 It is recommended that, in conjunction with the Highway Authority, the position of the 30mph/40mph speed limit transition is reviewed and relocated away from the new site access.

Designer's Response

2.16 The auditor's recommendation is accepted. **Drawing 20230-05d-2** shows the proposed relocated 30mph/40mph location to the west of the site access right turn lane.

Problem 2.2.2

Location: *Lower Rainham Road, East of proposed site access.*

Summary: *Lack of crossing facility across Lower Rainham Road.*

Recommendation

2.17 It is recommended that a formal pedestrian crossing facility with a central refuge island is provided to allow pedestrians to cross Lower Rainham Road.

Designer's Response

2.18 The auditor's recommendation is accepted and a proposed pedestrian crossing is shown on **Drawing 20230-05d-2**. This is located to the east of the access, where the relocated speed limit change will be moved from.

Problem 2.3.1

Location: *Yokosuka Way – Lower Rainham Road, Eastern Arm.*

Summary: *Kerb alignment on approach to roundabout directs vehicles from the nearside lane into the offside lane.*

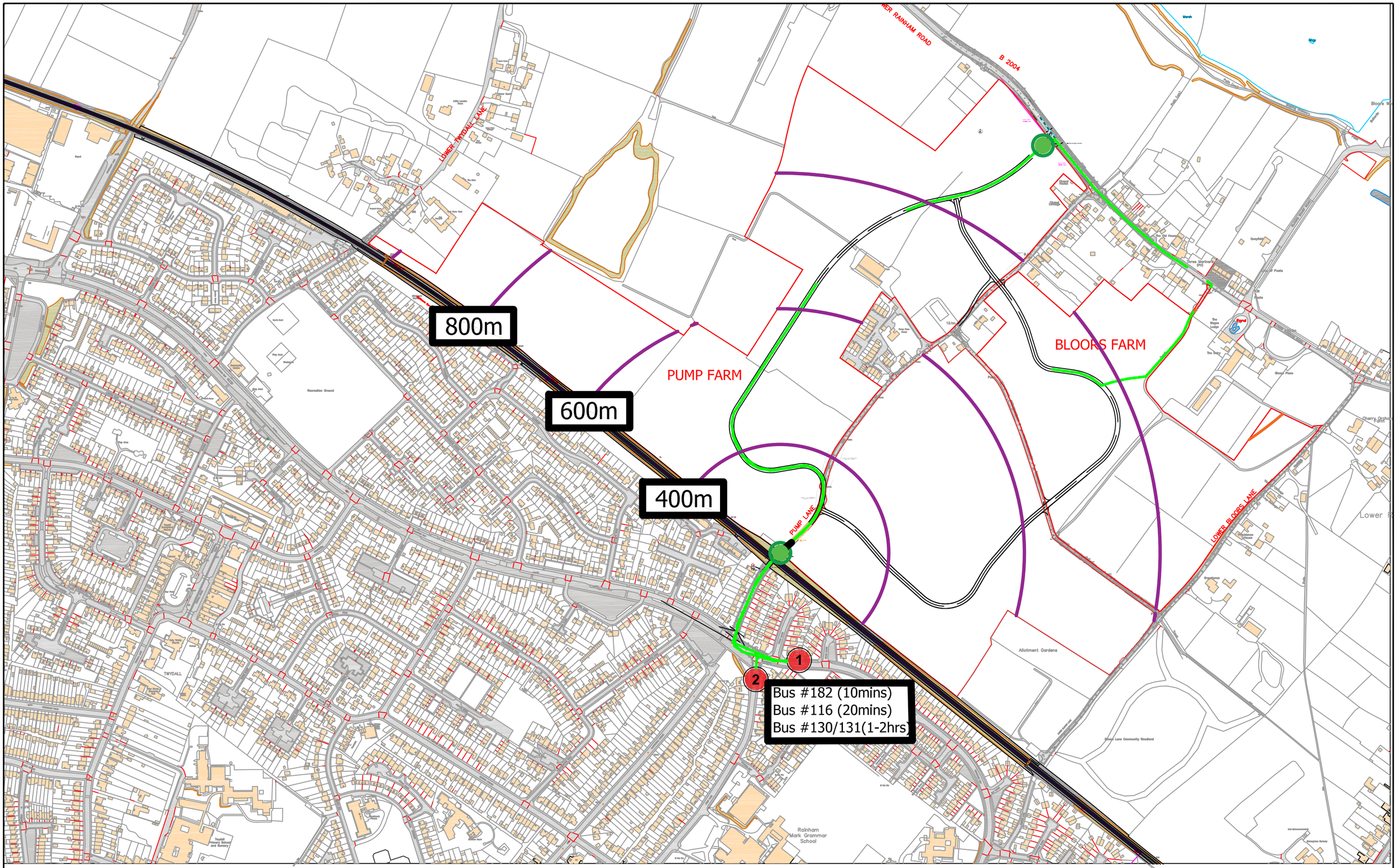
Recommendation

2.19 It is recommended that the proposed kerb alignment is revised to provide a continuous alignment.

Designer's Response

2.20 The auditor's recommendation is accepted and a proposed kerb has been realigned to provide better alignment. This is show on **Drawing 20230-05d-3**.

Appendix H



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REV	DESCRIPTION	DRAWN	INITIALS	DATE

DRAWING STATUS	CHECKED BY	DATE

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transport planning consultants
Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE: Pump Farm, Lower Rainham
CLIENT: A C Goatham

DRAWING TITLE:
Bus Stop Proximity to Site (400m, 600m, 800m)
Bus Stop 1: Beechings Way
Bus Stops 2: Pump Lane

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/5,000 @A3	JA	Sept 2020	20230–07	A

Appendix 2

FARMING VIABILITY REPORT – E J PELHAM

A REPORT ON FARM BUSINESS FINANCIAL VIABILITY:

PUMP & BLOORS FARMS, KENT

Prepared by:

E J Pelham

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Parsonage Farm

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CONTENTS **Page No.**

TABLES

APPENDICES

1. INTRODUCTION

EJ Pelham – background and experience

1.1 I am a Partner in Andersons Midlands, one of four independent business advisory practices trading under the style of Andersons the Farm Business Consultants. Andersons Midlands specialises in providing independent business advice to agricultural, horticultural and rural businesses as well as the allied industries. A summary of advice service areas is included in Appendix I.

1.2 Having completed a degree in Agricultural and Forest Sciences from Oxford University, I gained six years farm management experience before joining what was then David Anderson and Company in October 1985, becoming a Partner in 1990. I am now a Partner in the Andersons Midlands Partnership, formed in the spring of 2001. I work with all types of businesses, in both crop and livestock production, advising on a wide range of issues including strategy, investment appraisal, budgeting, costings and cost of production benchmarking. I have a specialist knowledge of horticultural production. A curriculum vitae is included in Appendix II.

Instruction

1.3 I have been instructed by AC Goatham and Son to prepare an expert report on the financial viability of Pump and Bloors farms, Lower Rainham.

1.4 I confirm that I have undertaken work previously for AC Goatham & Son, as follows:

- the preparation of economic crop models for orchard fruit;
- a report on the business's requirement to invest in further fruit storage;
- an expert report in respect of a financial damages claim.

Financial viability

1.5 This report investigates the current and future capacity of Pump and Bloors farms to support a financially viable farming operation, that is one capable of creating adequate profit to meet a business's essential financial requirements, including:

- a return on the proprietor's time;
- the payment of tax;
- the repayment of capital.

1.6 This assessment of the financial viability of Pump and Bloors farms considers both:

- The physical characteristics of the farms – their features and facilities.
- The economics of the enterprises which may reasonably be undertaken on the farms.

1.7 Financial viability is influenced by a wide range of features (e.g. soil type, drainage, field size and layout, climate, frost and hail risk) and facilities (e.g. buildings, fencing and irrigation), as well as the economics of the enterprises that may be undertaken.

1.8 In the case of perennial crops, such as apples and pears, whose life cycle may be 15–20 years, the assessment of whether they are financially viable must take account of potential future, as well as current, profitability.

Report content

1.9 Section 2 includes a description of the holding.

1.10 Section 3 reviews the features and facilities of Pump and Bloors farms.

1.11 Section 4 considers the changing economics of farm production, including an illustration of changing costs for dessert apple production.

1.12 Section 5 investigates the requirement for reinvestment in orchards at Pump and Bloors farms and considers the physical and financial factors that need to be taken into account when planting a new orchard, including the suitability of Pump and Bloors farms for replanting.

1.13 Section 6 looks at the suitability of Pump and Bloors farms for other farming enterprises, as well as commenting on possible non-food crops.

1.14 Section 7 summarises the findings and conclusions of this report.

2 DESCRIPTION OF THE FARMS

Location and summary

2.1 Pump and Bloors farms are owned by AC Goatham & Son and are located at Lower Rainham, near Gillingham in north Kent, ME8 7TJ.

2.2 Both farms are bounded by the Lower Rainham Road to the north, by the railway line to the south and are separated by Pump Lane.

2.3 The gross area of Pump Farm is some 25.5 hectares, that of Bloors is 24.9 hectares, a combined total of 50.4 hectares.

2.4 The gross area figure given for Pump Farm includes a rented area of 4.2 hectares. This land is occupied under an informal annual agreement and has been excluded from the cropping areas set out in this report.

Soil type

2.5 The Soil Survey of England and Wales identifies the soils as belonging to the Hamble 1 Soil Association, which are described as:

"Deep well drained often stoneless silty soils and similar soils affected by groundwater, over gravel locally. Usually flat land".

2.6 The Survey describes potential uses as follows:

"Fruit and horticultural crops; field vegetables; cereals and potatoes; some hops."

Soil classification

2.7 The DEFRA Agricultural Land Classification ("ALC") system ranks soil productive potential into five grades, with Grade 1 being the most and Grade 5 the least productive. Grade 3 is sub-divided into 3a (more productive) and 3b (less productive).

2.8 The higher grades of land (Grades 1, 2 and 3a) outwardly suggest more flexibility in the range of crops that can be grown ("versatility"), as well as typically requiring less inputs and producing more consistent yields.

2.9 Factors affecting the grade are climate, site and soil characteristics, and the important interactions between them, taking into account:

***Climate**: temperature and rainfall; aspect, exposure and frost risk.*

***Site**: gradient, microrelief and flood risk.*

***Soil**: texture, structure, depth and stoniness; chemical properties which cannot be corrected.*

2.10 There is, however, one highly influential factor which the grading system does not take into account – due to its variable and often highly localised occurrence – and that is hail. This is particularly relevant for Pump Farm, where AC Goatham & Son have recorded a high incidence of hail: in five out of the nine seasons that they have owned the farm (similar evidence is not available for Bloors farm which was not acquired by AC Goatham & Son until 2016, but the likelihood is that historically the incidence of hail has not been dissimilar). The issue of hail is dealt with more fully in Section 3 of this report.

2.11 The soils at Pump and Bloors Farms include Grades 1, 2 and 3a, the proportions of each grade being 17%, 79% and 4% respectively (*Source: Reading Agricultural Consultants "Agricultural Land Classification and Soil Resources at Pump Farm, Lower Rainham").*

2.12 The predominant Grade 2 category is defined as follows:

"Grade 2–very good quality agricultural land:
Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1."

Layout and boundaries

2.13 Pump Farm is a single parcel of land with a cropping area of 21.75 hectares (excluding rented land). It is currently planted in a total of fourteen orchards.

2.14 Bloors Farm is effectively two parcels of land, divided by a bridleway. The cropping area to the north of the bridleway is 9.5 hectares, currently planted in two orchards. Cropping area to the south is 12.06 hectares, planted in three orchards.

2.15 Plans of the orchard areas for Pump and Bloors farms are included in Appendices III and IV respectively.

2.16 The southern boundary to each of Pump and Bloors farms is a chainlink fence supported by concrete posts, erected against the railway.

2.17 Other boundaries include hedges, trees and some lengths of wire fencing, some of which is dilapidated former stock fencing. None of these boundaries are livestock-proof.

Public access

2.18 Bloors Farm itself has no public rights of way (the bridleway that runs east/west across the centre of the farm is not in the ownership of AC Goatham and Son). Local residents are currently claiming that a public footpath has been established at Bloors, running north/south

through the holding.

2.19 Pump Farm has no public rights of way.

2.20 Unauthorised public access is an issue on both farms. This not only has Health & Safety implications (particularly for the operation of orchard machinery, such as sprayers), but also has led to many instances of both crop and tree loss. Site security is an issue.

Accommodation and Buildings

2.21 There is no permanent residential accommodation for staff at either Pump or Bloors farms.

2.22 Bloors Farm has no farm buildings of any type.

2.23 Farm buildings at Pump Farm include:

- Agricultural storage building – 6 bay box profile clad building, roller shutter door, earth floor.
- Timber barn lean-to building.
- Spray shed – metal roof, concrete floor.
- 14 temporary mobile caravans

2.24 There are no fruit storage facilities at Pump Farm, with all harvested fruit being transported to AC Goatham & Sons' Flanders Farm.

Drainage and irrigation

2.25 Both sites are free draining; it is not known whether an underdrainage system has been installed in the past.

2.26 Both sites have independent bore hole irrigation. The licence is for trickle feeding.

Current cropping

2.27 Both Pump and Bloors Farms are currently cropped exclusively with apples and pears. Total cropped area is 43.31 hectares in nineteen separate orchards. Only two orchards are over 5 hectares in area, both of which are at Bloors Farm.

2.28 40.71 hectares is planted with dessert apples, principally the varieties Gala and Braeburn, with 4.45 hectares of Discovery. The oldest orchards were planted in 2002/2003.

2.29 The 2.6 hectares of pears (located on Pump Farm) were planted in c. 1950.

3 PUMP & BLOORS FARMS – FEATURES AND FACILITIES

Summary

3.1 Pump and Bloors farms both have high-quality soils, comprising ALC Grades 1, 2 and 3a, have little risk of frost (due to their proximity to the sea) and access to borehole trickle irrigation. Crucially, however, this potential is significantly undermined by the high incidence of hail.

3.2 There are four aspects of the combined holdings which restrict their financial viability under current and (in all likelihood) future economic conditions. These are:

- Satellite operation
- Farms layout
- Buildings and Fixed Equipment
- Hail

Satellite operation

3.3 The long-term trend – in all sectors of UK agriculture and horticulture – is for individual farms to increase in size to counter continuing reductions in farm profitability. Consequently, the minimum area required to support an independent farming operation has increased with time.

3.4 Whilst the profitability of forty years ago would have enabled both Pump and Bloors farms to each support a full-time proprietor and their own workforce, declining profitability means that their combined area, of some 43 hectares, is of inadequate scale to be operated as an independent unit today. To provide some financial context, in 1980 an apple grower would have needed to sell 20 tonnes of apples to pay the wages of a full-time man; in 2020 the equivalent figure is over 50 tonnes.

3.5 Today both Pump and Bloors are operated as a satellite to a farming operation whose base is elsewhere, as they have been for the majority of the last ten years. AC Goatham & Son took on the farming of Pump in 2011 and Bloors in 2016, purchasing the latter from another fruit-growing business that operated Bloors as a satellite unit.

3.6 The operation of satellite sites leads to significant additional costs of production for transport of equipment, staff and produce, as well as for management directing and overseeing the farming operations. These additional costs are proportionately higher for smaller areas of land than they are for larger areas (say 100 hectares or more).

3.7 These additional costs of satellite operations are becoming increasingly hard to support in the face of radical recent reductions in farming profits, most notably for those horticultural crops with a high requirement for labour. This issue is dealt with more fully in the following Section 4.

3.8 An assessment of the financial viability of Pump and Bloors farms for fruit growing, or indeed for any other enterprise, will need to take into account the significantly higher costs of production that arise from their operation as a satellite to another farming unit.

Farms layout

3.9 As already noted, Pump and Bloors farms comprise three main blocks, which are currently planted to a total of nineteen orchards.

3.10 Of the existing orchards, seven are less than 1 hectare in area and a further five are less than 2 hectares; the overall average is just over 2 hectares. The twelve orchards of less than 2 hectares are financially unviable in 2020 due to their disproportionately high costs.

3.11 Costs of production increase as orchards reduce in size due to greater downtime for field operations (e.g. from additional requirement for turning at row ends) and harvesting (with additional movements for bins, pickers, supervisors and transport).

3.12 Orchards are ideally planted with rows running north/south, as this reduces shading and increases crop yield and quality (e.g. apple colour). At Pump Farm eight out of the fourteen orchards are planted south-east/north-west, an area of 13.75 hectares or over 60% of the crop area. This alignment will reduce their potential for profit.

3.13 If replanting were undertaken there would be some opportunities to increase orchard size, but this is constrained on both farms by field shape and layout, as well as by the requirement for north/south planting. The implications are dealt with more fully in Section 5.

Buildings and Equipment

3.14 The combined facilities of the two farms are very limited. There are no buildings at Bloors Farm and the main building at Pump Farm, although of a reasonable size, has an earth floor, limiting its use without further investment. There are no facilities for livestock production and limited stockproof fencing.

3.15 The dilemma for any potential operator of Pump and Bloors farms is that whilst further investment (and therefore increased costs) will be required in buildings and/or other equipment if the holding is to have the basic facilities to meet modern production standards (e.g. for assurance / health and safety) and the security requirements of a satellite site, such additional costs are unlikely to reduce the already higher costs of operating at distance.

Hail

3.16 AC Goatham and Son's own evidence indicates that Pump Farm has a history of hail events.

3.17 During the nine seasons that they have been in occupation of the farm (2012-2020), there have been incidents of hail in five separate years.

3.18 Those years, and their losses of yield, are as follows:

TABLE 1

HAIL INCIDENTS AT PUMP FARM 2012 – 2020

Year	Hail incident(s) – Yes / No	% Crop Damage
2012	No	
2013	Yes	8
2014	Yes	35
2015	Yes	18
2016	Yes	15
2017	No	
2018	No	
2019	No	
2020	Yes	15–20*

* Provisional

3.19 AC Goatham and Son acquired Bloors Farm in 2016. In the current 2020 season Bloors Farm has suffered the same level of hail damage (i.e. 15-20%) as neighbouring Pump Farm.

3.20 The susceptibility to hail undermines the financial viability of Pump and Bloors farms, from both reductions in output (lost yield and reduced fruit quality)) and additional costs (e.g. for harvesting and packing).

3.21 In my consistent experience if the crop damage is over 10% then it is likely that the entire crop will be loss-making. On this basis AC Goatham & Son will have incurred financial losses at Pump Farm in four out of the last nine years.

3.22 In the future, in the light of continuing cost inflation, the level of damage that can be carried before the crop becomes loss-making is likely to decline below this 10% figure.

3.23 As the following section will set out, the economics of growing tree fruit and other crops is becoming increasingly challenged, to the extent that it is no longer possible to accommodate the risk of hail within potential farm profitability.

4 THE ECONOMICS OF TREE FRUIT AND OTHER FARMING ENTERPRISES

Background to changing economics

4.1 A central feature of the economics of all farming enterprises – whether crop or livestock production – is that in the long-term:

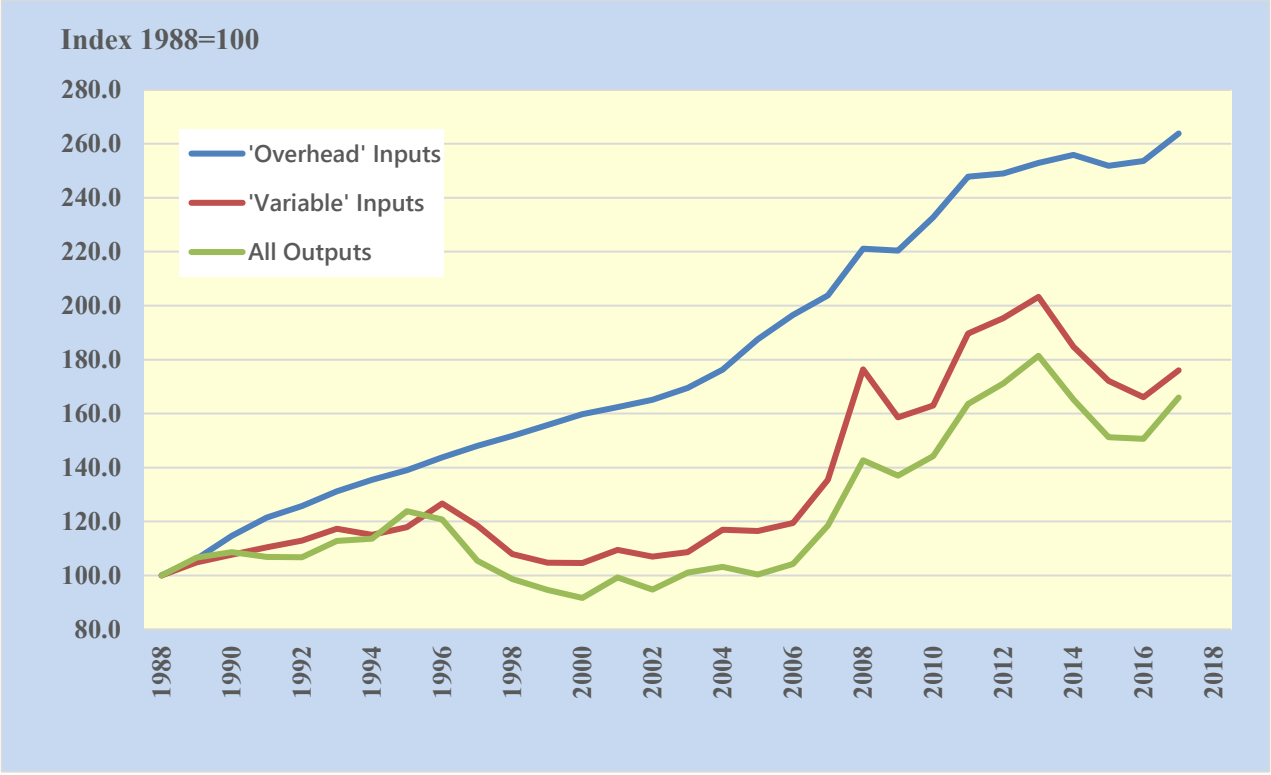
- sale prices tend to remain static, albeit with periods of temporary reductions or increases;
- the costs of "Variable" inputs (i.e. those directly linked to production such as fertilisers and animal feeds) tend to fluctuate in line with sale prices;
- the cost of "Overhead" inputs consistently increase.

4.2 The following table illustrates how general agricultural output values and input costs have changed over the last thirty years. In short, costs have continued to rise at a greater rate than output, with the result that profits have consistently declined.

TABLE 2

CHANGING AGRICULTURAL OUTPUT VALUES & INPUT COSTS

1988 – 2018



Source:DEFRA / Andersons Research

4.3 The inevitable consequence of this financial "pincer" is that the profits of all farming enterprises decline with time, unless farmers are able to improve productivity.

4.4 In UK agriculture and horticulture, amongst the most important ways by which productivity improvements have been achieved are through changes to production methods (resulting in improved yields) and in increased scale of operations (i.e. farms have become larger). In some cases this has led to a reduction in the land required for production; this is well illustrated by two horticultural crops – dessert apples and strawberries – both grown extensively in south-east England.

4.5 In 1985 the UK production of dessert apples was some 154,000 tonnes from an area of 12,771 hectares; by 2018 this had increased to 203,000 tonnes from 6,078 hectares (*Source:DEFRA)*, an increase in average yields from 12 to over 33 tonnes per hectare.

4.6 In 1985 the UK production of strawberries was some 50,000 tonnes from an area of 6,078 hectares; by 2018 this had increased to 132,000 tonnes from 4,731 hectares (*Source:DEFRA)*, an increase in average yields from some 8 to 28 tonnes per hectare.

4.7 Futhermore, these figures for strawberries do not fully reflect the changing requirement for more fertile land (i.e. the better quality Grade 1, 2 and 3a soils), as there has been a significant shift since 2010 in the production of strawberries from soil to substrate (or artificial growing medium, such as coir). Whilst figures are not available for the proportion of the UK crop in substrate in 2018, the figure for 2015 was estimated at 55% (*Source: British Summer Fruits "The Impact of Brexit on the UK Soft Fruit Industry").* Applying this percentage to the 2018 crop area of 4,731 hectares indicates that merely 2,131 hectares relied on soil quality; for the remaining 2,600 hectares of substrate-grown strawberries soil quality was irrelevant.

Increasing costs of production

4.8 Whilst most costs tend to increase over time, there are some categories where the rate of inflation is higher than others; most important of these is the cost of employment, that is the wages paid to full-time, part-time and seasonal employees.

4.9 To put the long-term trend of inflationary wage increases into a recent context, between 2000–2020 there has been a threefold increase in labour costs (based on the National Minimum Wage/National Living Wage rates) – or wage inflation of some 200% over the last twenty years.

4.10 High rates of wage inflation are a particular issue for those enterprises where labour represents a significant proportion of their production costs –most importantly horticultural crops such apples, pears, strawberries, hops and many vegetable crops.

4.11 The response to wage inflation, where the opportunity allows, has been to seek ways to reduce the labour requirement through the investment of capital (whose cost is less than the labour it replaces) and an increase in the scale of operations.

4.12 The result has been the committed and continuing mechanisation of UK farming, in a range of areas – including field operations, stores and packhouses – and an increase in the size of holdings.

4.13 Whilst the general trend has been to replace labour with capital, the opportunity to do so varies between enterprises. This is illustrated by horticultural crops, with some now highly mechanised (e.g. carrots, vining peas), whilst others continuing to have a considerable (often seasonal) labour requirement for husbandry and harvest operations (for crop examples see above).

4.14 Employment is not the only category where producers have seen significant, continuing increases in their input costs; other important examples include machinery, crop protection products, seeds, plants and trees.

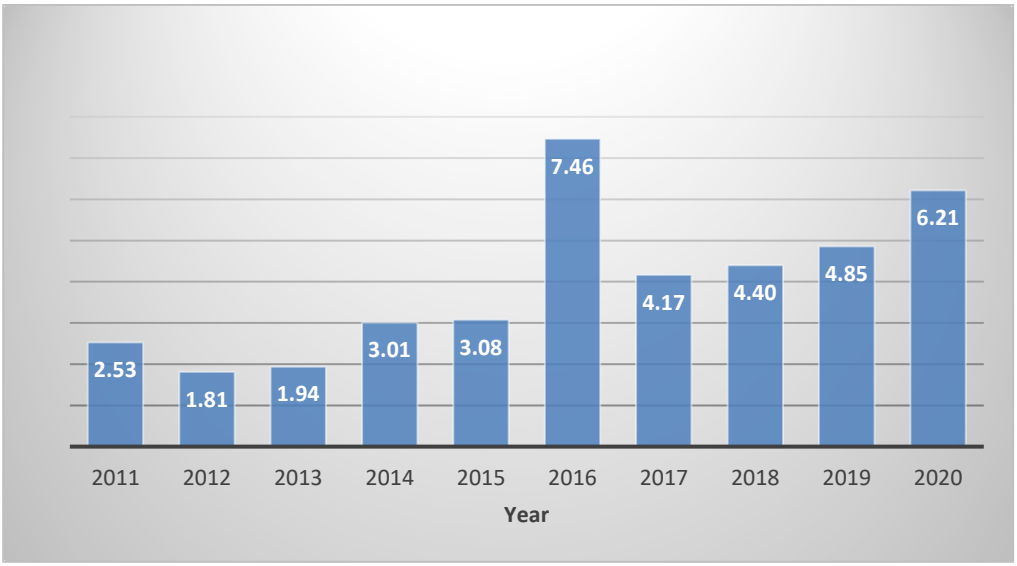
Seasonal Worker Wage inflation 2016 –2020

4.15 Over the last five years there have been unusually high increases in the wage rates for seasonal workers, as the following table, which compares 2016-2020 with the preceding five-year period, illustrates:

TABLE 3

ANNUAL WAGE INFLATION 2011 – 2020

%



4.16 The National Living Wage was introduced in the UK on 1st April 2016. The previous award, under the National Minimum Wage, was made on 1st October 2015. What is not immediately clear from the above table is that for the 2016 year, the wage rates for seasonal workers effectively increased twice (in October 2015 and April 2016) since the previous season. The increases of 3.08% and 7.46% – i.e. a combined 10.54% – was the annual increase in cost to seasonal employers between 2015 and 2016.

4.17 The total increase between the 2015 and 2020 hourly rates is some 35%, although in practice many growers have incurred increases of over 40% in this period when other factors (e.g. pension, provision of accommodation) are taken into account.

4.18 These recent cost increases, unmatched by an improvement in sale prices, have significantly altered the economics of many farming enterprises. This is particularly so for the growers of those horticultural crops with a high requirement for seasonal labour, which includes apples and pears.

4.19 Any assessment of the financial viability of Pump and Bloors farms will need to take into account the consequences of wage inflation – and in particular the unusually high increases of the last five years – as well as increases in other cost categories (e.g. crop protection and mechanisation) for the growing of tree fruit and for the alternative crop or livestock enterprises that might also be considered.

Increasing costs – dessert apple production

4.20 A significant proportion of the crops grown in the UK are annual, that is they are planted, grown and harvested in a single season.

4.21 By contrast, perennial crops – which are nearly all horticultural – have an extended life and are planted for life cycles of between five years (e.g. asparagus) and fifty years (e.g. cider apples); replanting only takes place at longer intervals. Many of these crops, such as the apples and pears grown Pump and Bloors farms, also have a high requirement for labour, which makes them particularly exposed to wage inflation.

4.22 To understand the financial implications of inflation, the following illustration indicates how the costs of production have changed over the last ten years for Gala dessert apple production; the figures are based on actual grower data. It is assumed that the orchard was planted in 2006, reached full yield in its fifth year (i.e. 2010), and has a yield of 45 tonnes per hectare. The following figures show how costs of production – in £ per tonne – have changed over ten years:

TABLE 4

GALA COST INFLATION 2010 / 2020

YIELD AT 45 TONNES PER HECTARE

ILLUSTRATION BASED ON ACTUAL GROWER DATA

GALA 2006 PLANTING - COST INFLATION YEARS 5 / 15			
Category	**2010 Cost**	**2020 Cost**	**Increase**
	£/T	**£/T**	**£/T**
Orchard Depreciation	40	40	0
Fertilisers & Crop Protection	25	45	20
Other Crop Costs	5	7	2
Labour – Husbandry	20	29	9
Labour – Harvest	45	66	21
Labour – Packing	95	140	45
Packaging, Haul, Commission	220	260	40
Overheads – Labour	32	47	15
Overheads – Power/Machinery	40	60	20
Overheads – Administration	20	25	5
Overheads – Property	15	18	3
Overheads – Rent & Finance	14	14	0
TOTAL	**571**	**751**	**180**

4.23 Over the ten-year period costs of production have increased, very significantly, by £180 per tonne, or nearly 32%.

4.24 Over the same period the sale price for Gala apples has remained static, although may have actually reduced in the case of a clone (e.g. Mondial) that has been replaced by better coloured versions.

5 THE REQUIREMENT AND ECONOMICS OF ORCHARD INVESTMENT

Requirement for replanting – general observations

5.1 Whilst forty years a new orchard would have been planted at lower densities with an anticipated life at least 20–30 years, the subsequent trend has been to increase the density of tree planting. This has had two main effects – to bring crop production earlier and to reduce the orchard lifetime. For dessert apple orchards planted in the last, say, twenty years an orchard's expected life would typically be 12–18 years.

5.2 There are four main reasons why an orchard may need to be replaced – age, disease or damage, crop variety or clone and orchard size.

5.3 All of the orchards at Pump and Bloors farms are either at, or approaching, the time at which they will require replacement, for the following reasons:

- Existing orchard age.
- Current apple varieties and clones.
- Existing orchard size and alignment.

Existing orchard age

5.4 All of the 2.6 hectares of pears are some seventy years old. Over 10% of the original trees have been lost (principally to disease) and, as a result, yields are low and the orchards are loss-making. These orchards have reached the end of their working lives and require replacement.

5.5 Of the dessert apple area of 40.71 hectares, a total of 4.80 hectares is over fifteen years old and, on age alone, will require replacement in the next 2–3 years.

Current apple varieties and clones

5.6 There are three dessert apple varieties planted at Pump and Bloors farms – Discovery, Gala and Braeburn.

5.7 The younger "Discovery" orchards have yielded below what was anticipated and, coupled with reduced customer demand, means that they require replacement. The area at Pump Farm is 4.45 hectares.

5.8 An apple clone is, in effect, a "sub-variety" which has been selected for its characteristics. The Gala "Mondial" clone and the "Hilwell" Braeburn clone, which represent the majority of these varieties at Pump and Bloors, have been superseded by clones whose features (most importantly for colour) better meet customers' requirements. As a result, it is becoming increasingly difficult to sell the Mondial and Hilwell clones at a profit, despite their good

yield performance. 87% of the combined Gala area is planted to Mondial and Hilwell.

Existing orchard size and alignment

5.9 As noted in Section 2, the combined Pump/Bloors crop area of 43.31 hectares comprises nineteen orchards, of which twelve are less than 2 hectares and only two are over 5 hectares in area. With the continuing erosion of the profitability of apple production by cost inflation, such small production areas – with their disproportionately high costs for both husbandry (e.g. spraying) and harvest – are no longer financially viable for any grower.

5.10 As noted in Section 3, over 60% of the Pump Farm cropping area is planted on a south-east/north-west alignment, rather than the preferable north/south. Profit is therefore reduced in these areas (e.g. from poorer apple colouration).

Orchard replanting

5.11 Section 4 sets out the economic challenge facing all producers (including tree fruit growers when considering orchard replanting) – that of how to maintain profitability in the face of static sale prices but increasing costs of production.

5.12 The illustration in Table 3 (see page 14) sets out how the cost of production for Gala apples has increased between 2010 and 2020. On the assumption that costs increase at the same rate for the coming ten years, the cost of production by 2030 would be as follows:

TABLE 5
GALA PROJECTED COST INFLATION 2020 / 2030
YIELD AT 45 TONNES PER HECTARE
ILLUSTRATION BASED ON ACTUAL GROWER DATA

GALA PRODUCTION - COST INFLATION 2020/2030			
Category	**2020 Cost £/T**	**2030 Cost £/T**	**Increase £/T**
Orchard Depreciation	40	40	0
Fertilisers & Crop Protection	45	81	36
Other Crop Costs	7	10	3
Labour – Husbandry	29	43	14
Labour – Harvest	66	97	31
Labour – Packing	140	205	66
Packaging, Haul, Commission	260	307	47
Overheads - Labour	47	69	22
Overheads – Power/Machinery	60	90	30
Overheads – Administration	25	31	6
Overheads – Property	18	22	4
Overheads - Rent & Finance	14	14	0
TOTAL	**751**	**1,010**	**259**

5.13 Total cost of production in 2020 is £751 per tonne, with a forecast increase of £259 per tonne to £1,010 per tonne by 2030.

5.14 Importantly, the forecast 2030 cost of production of £1,010 per tonne is likely to be considerably higher than the sale value of the fruit (perhaps by £200-300 per tonne), assuming no changes to price in the coming decade.

5.15 In my experience replanting orchards in the same way as 15–20 years ago, even with improved clones (which tend to maintain rather than increase sale price), will be unprofitable, a conclusion confirmed by lifetime orchard profitability forecasts that I have undertaken with a significant number of apple growers.

5.16 The key issues, when considering orchard planting, are:

- whether there are potential productivity gains that a grower can adopt when planting a new orchard that will enable future cost inflation to be managed to a level that enables a profit to be made, and
- whether there are features of the site that restrict profit as a result of increased risk (e.g. frost, hail).

5.17 As has already been noted, the cost category that increases at the highest rate is labour and productivity gains in this area will be vital for a new orchard planting to be financially viable over its lifetime.

5.18 There are two developments for orchard production – one current and one anticipated – which will be important in improving labour productivity. These are:

- Three-row sprayers.
- Mechanical harvesting.

5.19 Until ten years ago all orchard spraying (of both fertilisers and crop protection materials) was undertaken with machines being driven between every row in the orchard, an operation undertaken up to thirty times per orchard per season.

5.20 The development of three-row sprayers has, with the use of an elevated boom, enabled growers to spray three rows, rather than a single row, at a pass. The result has been a significant reduction in the labour requirement for spraying, coupled with the collateral benefit of improved timeliness of operations (due to improved work rates).

5.21 However, as a consequence of its increased size, this machine requires larger orchards of a regular shape, and with wider turning headlands, to deliver its full benefits.

5.22 It also has to be based on a single site, as it is not appropriate for movement on the roads.

5.23 Due to its high capital cost (of £70-80,000), it is my opinion that an individual farming unit would need to be a minimum area of 60 hectares (and ideally larger) in order to carry the depreciation costs associated with such an investment.

5.24 Mechanical harvesting is now being trialled commercially in a number of the main apple-producing areas of the world and will become an important way by which UK apple growers seek to contain, at least in part, continuing increases in labour costs in their future orchard plantings.

5.25 The introduction of three-row sprayers and the prospect of mechanical harvesting have both significantly altered the specification for new orchard sites, capable of delivering the benefits of both these developments. The key requirements are orchards of a large size, of regular shape, all within the context of tree rows with a north/south alignment.

5.26 The relationship between orchard size and cost of production has already been noted in Section 3 – with costs of production increasing as orchards reduce in size. Whilst there is no definitive ideal size, in my experience the area of a newly-planted orchard is likely to be minimum of 8–10 hectares in order to be financially viable; orchards of lesser area, particularly if accompanied by irregular field shape, will lose much of the financial benefit of this mechanisation, both for orchard husbandry operations (e.g. increased down-time from additional turning and short runs) and harvest (e.g. increased movement requirement for bins, pickers, supervisors and transport).

Orchard replanting: suitability of Pump and Bloors farms

5.27 As has already been identified, Pump and Bloors farms currently include a total of nineteen orchards on a total crop area of 43.31 hectares, an average orchard size of just over 2 hectares. Such an orchard layout would be financially unviable for future plantings.

5.28 The requirements for area and block size with any new orchard plantings (whether at Pump and Bloors farms, or elsewhere), in order to accommodate the improvements in mechanization that will be vital to their financial viability, has been set out above.

5.29 In respect of overall size, the combined area of Pump and Bloors farms of some 43 hectares is below the minimum 60 hectares that is required, in my opinion, to support the significant investment in three-row spraying.

5.30 Furthermore, in my experience the layout of the two farms indicates that it is impossible to organize the land into the required block size and shape. At Pump Farm, for example, although a single large block of the right orientation is possible, this would lead to an area of the farm having to remain uncropped (because of field shape and the location of

buildings), which would make the farm operation financially unviable.

5.31 Furthermore, in my experience the layout of the two farms indicates that it is impossible to organize the land into the required block size and shape. At Pump Farm, for example, although a single large block of the right orientation is possible, this would lead to an area of the farm having to remain uncropped (because of field shape and the location of buildings), which would make the farm operation financially unviable.

6 THE SUITABILITY OF THE FARMS FOR OTHER ENTERPRISES

Summary of options

6.1 As noted in Section 2, the Soil Survey of England and Wales identifies the following potential uses for land of the type found at Pump and Bloors farms:

"Fruit and horticultural crops; field vegetables; cereals and potatoes; some hops."

6.2 The Agricultural Land Classification similarly bears out the importance of these soils, of Grade 1, 2 and Grade 3a designations, for a wide range of crops (whose production may be limited or impossible on soils of lesser quality).

The changing requirement for land for horticultural crops

6.3 As has already been noted in Section 5, the requirement for better quality land (Grades 1,2 and 3a) for horticultural crops has been declining, as underlying economic trends have driven improvements in production methods, resulting in increased yields and reductions in crop areas.

6.4 By way of illustration, in Kent the area of horticultural crops in 1985 was 26,636 hectares. By 2016 this had declined to 16,238 hectares, of which over 1,000 hectares is likely to be in substrate production, in either glasshouses or polytunnels. Over thirty years the requirement for better quality land for horticultural crops has fallen by over 11,000 hectares (or over 40%).

The availability of best and most versatile land in Kent

6.5 Whilst there is no data available for the precise available area of Grades 1,2 and 3a soils in Kent for farm production, it is possible to prepare an indicative estimate, based on the data available. Natural England suggest that some 21% of all farmland in England falls into Grades 1 and 2, with a further 21% in Grade 3a (*Source: Natural England Technical Information Note TIN049)*.

6.6 If this proportion of 42% of best and most versatile land is applied to the 2016 farmed area in Kent – possibly a conservative assumption – of 221,331 hectares (*Source: DEFRA),* then some 93,000 hectares of Grades 1,2 and 3a land (i.e. 221K hectares x 42%) are available for the growing of some 15,000 hectares of horticultural crops. The evidence suggests that there is considerably more Grade 1, 2 and 3a land available in Kent than is needed for production of the more specialist crops, such as apples and pears, that are suited to soils of this type.

6.7 The remainder of this section will consider each of the crops that could be grown at Pump and Bloors farms as an alternative to apple and pears, together with observations on the potential for livestock production and the growing of non-food crops.

Fruit

6.8 There are two categories of fruit that could be grown at Pump and Bloors farms instead of apples and pears – other tree fruit and soft fruit.

6.9 Other tree fruit would principally include cherries and plums. As with apples and pears, both of these crops are now grown on 15–20 year cycles and, as a result, face the same problems of continuing cost inflation over an extended period with limited, if any, any prospect of sale price increases. In the case of cherries recent evidence is of sale price deflation, with the significant expansion of the UK crop area during the last decade.

6.10 In my experience of preparing financial forecasts for growers, new plantings for both cherries and plums now produce financial losses. In my opinion, neither crop is a commercial alternative to apples and pears.

6.11 In 2020 the main UK soft fruit crops, strawberries and raspberries, are almost exclusively grown under crop covers, or polytunnels. In the south-east, the majority of strawberry production, and a significant proportion of raspberry production, is also undertaken in an artificial growing medium, or substrate (generally coir); soil quality is therefore no longer relevant.

6.12 Whilst the combined area of Pump and Bloors farms is theoretically of a scale to support an independent soft fruit production unit, it is my opinion that a soft fruit grower is most unlikely to seek to establish a new operation at this site. Not only would there be the significant cost of submitting a planning application for both polytunnnels and worker accommodation, but there continues to be considerable uncertainty over seasonal labour availability. In my experience, where growers wish to increase their output, the recent trend has been to either expand or intensify production at existing sites.

Other horticultural crops including field vegetables

6.13 The decline in the area of field vegetables grown in Kent provides a clear illustration of the consequences of the underlying economic trends described in Section 5.

6.14 In 1985 the area of vegetables grown in the county was 7,595 hectares (*Source; DEFRA)*. The last three-yearly survey undertaken by DEFRA in 2016 showed that the area had declined to 1,291 hectares. Over a thirty-year period the area had reduced by 6,304 hectares, or 83%, and with it the demand for the higher grade soils required to grow these more specialist crops.

6.15 The issues in respect of Pump and Bloors farms for the specialist vegetable grower (of which there has been a significant decline in numbers) are similar to those of the potential apple and pear grower. The disproportionate Overhead Costs associated with what is now

a small satellite unit, the lack of any modern building facilities and, perhaps most importantly, the risk of hail make this an uncommercial proposition for vegetable and lettuce crops, which have high costs and production risk.

6.16 As has already been noted, there is a plentiful supply of land of the appropriate quality in Kent for these crops – without the hail risk – that is currently only being used to grow lower value cereal crops.

Cereals and potatoes

6.17 Pump and Bloors farms are too small to be an independent unit for cereals and potatoes, with no facilities for either crop drying or storage. They would therefore need to be farmed as a satellite to another farming operation.

6.18 For both crops the long-term effect of the continuing price:cost pincer has been an increase in the scale of operations, characterized by fewer staff and larger machines, in order to maintain profitability. As a result, the growers of cereals (e.g. wheat and barley) and potatoes now require "satellite" land that is in larger blocks (many would cite a minimum of 80-100 hectares) with high average field size of regular shape.

6.19 The key reason for the notable unattractiveness of Pump/Bloors to prospective growers of cereals and potatoes is the small area involved, creating disproportionately high travel costs. Costings indicate that wheat grown on satellite holdings, without grain storage, can incur travel costs of between £5-10 per tonne; Pump and Bloors farms, because of their small size, are likely to be at the top of this range. To this additional travel cost would need to be added the cost of grain drying, handling and storage of, say, £6-15 per tonne. These additional costs, together with the smallness of the unit (< 50 hectares), divided into a number of relatively small fields of irregular shape, make Pump and Bloors uncommercial for cereal production.

6.20 For husbandry reasons potato cropping can only be undertaken one year in five; in my experience it is most unlikely that a grower would wish to take on Pump and Bloors farms for an annual area of potatoes of less than 10 hectares.

6.21 The impending reduction and eventual discontinuation of the Basic Payment Scheme, the area-based subsidy paid to UK producers, will also further reduce the economic viability of Pump and Bloors, particularly for cereal production.

6.22 In the light of the pressure on profit for both crop types, the additional costs for both travel and crop storage and the pending decline and removal of subsidy, it is my opinion that Pump and Bloors farms are capable of, at best, generating a low level of profit, but that this is likely to disappear with the reduction and removal of the Basic Payment.

Hops

6.23 Formerly hops were extensively grown in the south-east, but the consequence of the price:cost pincer has been a significant decline in the crop area, as the economics have become marginal or financially unviable. In 1985 there were over 2,500 hectares of hops grown in the south-east, which has declined to a present area of less than 500 hectares (*Source: DEFRA/British Hop Association*). My experience in preparing financial budgets for new hop plantings, indicates that they are likely to be loss-making. In my opinion hops are not a financially viable alternative to apples and pears.

Livestock

6.24 There are five mainstream livestock enterprises on the UK farm – dairy, beef, sheep, pigs and poultry.

6.25 As a result of their size and the absence of any appropriate buildings, Pump and Bloors farms could not support an independent unit for any of the grassland-using enterprises – dairy, beef or sheep. The alternative of summer grazing for either beef or sheep would be unprofitable when accounting for the cost of erecting new, stockproof fencing around the perimeter of both farms (save for the southern boundary next to the railway), internal fencing (to create manageable paddocks), the installation of drinkers and handling facilities.

6.26 The combined issues of smell and the availability of land for the disposal of waste make Pump and Bloors farms unsuitable for either pig or poultry enterprises.

Non-food crops

6.27 There are two main categories of non-food crop currently grown in the UK – for biomass and for pharmaceutical use.

Biomass

6.28 The two principal crops grown for biomass are Short Rotation Coppice ("SRC" – most commonly willow) and Miscanthus. Both are perennial crops, with a life expectancy of at least fifteen years and are most commonly grown on soils of lower quality (Grades 3b, 4 and 5).

6.29 Gross margins for both crops are below most cereal enterprises, with relatively high levels of Overhead Costs, particularly for transport, drying and, in the case of willow, chipping. Their profit potential is low compared with other alternatives.

6.30 There are a number of features of biomass crops which make them unsuitable for planting on many sites, including:

- Planting costs are expensive, for either cuttings (SRC) or rhizomes (Miscanthus). The Energy Crop Scheme, which previously part-funded the planting of these crops, was discontinued in 2013.
- Vermin control – rabbit proof fencing is generally required, a potentially high capital cost depending on the size and layout of the site fields.
- SRC has the potential to damage land drainage systems.
- SRC is winter harvested, typically at three yearly intervals, generally using large scale machinery; there is a high risk of soil damage.

6.31 In addition, there is the further complexity of removing both crops at the end of their production period. The technique currently employed is the use of Glyphosate herbicide and cultivations, although some growers have found it difficult to remove Miscanthus in this way. There is also a possibility that the use of Glyphosate will be prohibited in the future; at present there is no effective alternative.

6.32 With their relatively small field size, lack of vermin-proof fencing, difficulty of access for large machinery, as well as limited, if any, production of this type in the locality, in my opinion Pump and Bloors farms are not suitable for the growing of biomass crops.

Pharmaceutical crops

6.33 Two main crops are grown outdoors for pharmaceutical use in the UK – borage and poppies.

6.34 There is also a relatively small area of cannabis grown for pharmaceutical use in the UK under glass; glasshouse production is not relevant for Pump and Bloors farms.

6.35 Borage is an oil crop with a high gamma linolenic acid content, used in both pharmaceuticals and cosmetics.

6.36 Up to some 5,000 hectares of borage have been grown in the UK annually, all of which is under contract. In some seasons (e.g. 2009-2011) no crop was grown, as no contracts were available, due to a world surplus.

6.37 Borage is grown by a small number of specialist growers who have the appropriate knowledge and experience.

6.38 The crop is low-yielding with a high risk of seed shedding at maturity and difficulties at harvesting.

6.39 Being small seeded, facilities for crop drying, cleaning, handling and storage need to be of a high standard.

6.40 Pump and Bloors farms do not have the appropriate facilities for a crop of this type. In my opinion it is most unlikely that a grower would undertake the growing of a small area of such a demanding crop on a satellite site without the appropriate facilities.

6.41 Commercial growing of poppies commenced in the UK some twenty years ago, the poppy heads being processed to produce morphine for pharmaceutical uses. By 2016 some 2,000 hectares were grown, all under contract. However, since 2017 no contracts have been offered and production has ceased in the UK. Poppy production is therefore not an option for Pump and Bloors farms.

7 REPORT SUMMARY

In summary the key points of this report are as follows:

7.1 Pump and Bloors farms were once farmed as separate and independent fruit holdings. The continuing reductions in orchard profitability (described in Section 4) has resulted in them being operated, for much of the last decade, as satellite units of larger businesses.

7.2 The cropping area of the two farms of some 43 hectares currently includes nineteen orchards, of which only two are over 5 hectares. The majority of the orchards are now too small to be financially viable, for the reasons set out in Section 4.

7.3 As a result of orchard size, age and alignment, as well as issues with and varieties/clones, all of the crops at Pump and Bloors will require replacement in the next 2–3 years at a very significant expense. Orchard establishment costs are typically between £25-35,000 per hectare, indicating a total cost for orchard replacement at Pump and Bloors farms of between £1.1 million and £1.5 million.

7.4 In common with all other farming enterprises, the profits from the growing of apples and pears have notably declined with time, as a consequence of static sale prices and increasing costs of production.

7.5 The most significant of these costs is labour, which has increased considerably. Over the last twenty years the wage rates for seasonal workers, of particular importance for the growers of horticultural crops such as apples and pears, have increased by over 200% (i.e. a threefold increase).

7.6 Unusually high wage increases in the last five years have reduced the profits of many existing UK apple and pear orchards to such an extent that, in my experience, many are producing little, if any, profit and indeed some are now loss-making.

7.7 Growers have sought to address the price:cost (of production) pincer by adopting new developments to improve productivity. These are typically implemented when a new crop is established and are particularly important for those longer-lived crops, such as apples and pears, where the opportunity to introduce new developments during the orchard's life is often limited.

7.8 The new developments of both three-row spraying and mechanical harvesting will require scale in order to deliver their practical and financial benefits, in the form of a farm with a minimum area, in my opinion, of 60 hectares which is made up of large, ideally rectangular, blocks of land. Whilst there is no definitive ideal block size, in my experience the area of a newly-planted orchard is likely to be minimum of 8–10 hectares in order to be financially

viable. Orchards of lesser area, particularly if accompanied by irregular field shape, will gain little or no net financial benefit from developments in mechanisation, both for orchard husbandry operations (e.g. increased down-time from additional turning and short runs) and harvest (e.g.increased movement requirement for bins, pickers, supervisors, transport).

7.9 Nonetheless, Pump and Bloors farms, even with any such improvement in orchard size, cannot be organised into a layout that could enable an advantage from this new mechanisation to be adopted, without which new plantings will be financially unviable.

7.10 Despite their fertility and the availability of irrigation, Pump and Bloors farms suffer clear intrinsic shortcomings in both size and layout, when considering their suitability for the planting of new orchards.

7.11 As important in determining their suitability for orchard planting (or, indeed, a number of other horticultural crops) is the susceptibility of the farms to hail. This risk can only be overcome with the use of hail nets for protection. In my experience the additional cost of hail nets makes orchard replanting financially unviable.

7.12 In the light of current and future economics, in my experience it is not financially viable to plant an orchard on any site that has an identified risk of hail. Hail would be also be a key issue for a number of other horticultural crops (e.g. plums, lettuce) that might be considered as alternative enterprises for Pump and Bloors farms.

7.13 DEFRA data indicate that the area of soil-grown horticultural crops in Kent is currently some 15,000 hectares. The best and most versatile land – Grades 1, 2 and 3a – available for the growing of these specialist crops in Kent is over 90,000 hectares. With such capacity it should be possible to locate new plantings of high-risk horticultural crops on sites with limited, if any, risk of hail.

7.14 A review of the alternative enterprises to apples and pears – as set out in Section 6 – indicates that in nearly all cases their financial viability would be undermined by the same two key features of Pump and Bloors farms that make future apple and pear production financially unviable – namely scale and hail, exacerbated by a lack of facilities for either crop or livestock production.

7.15 In summary, the conspicuous smallness of the area of Pump and Bloors, their unattractive, irregular layout, the lack of buildings and other facilities (e.g. fencing) and, perhaps most importantly, their susceptibility to hail means that their capacity for profit is limited. When the additional costs of being satellites of another operation are properly taken into account it is my opinion that Pump and Bloors farms generate little, if any, profit and that within two-three years they will become financially unviable.

8 EXPERT DECLARATION

I, ERIC JOHN PELHAM DECLARE THAT

1. I understand that my duty in providing written reports and giving evidence is to help the Inspector appointed by the Secretary of State , and that this duty overrides any obligation to the party by whom I am engaged or the person who has paid or is liable to pay me. I confirm that I have complied and will continue to comply with my duty.
2. I am aware of the requirements of CPR Part 35 and the Guidance for the Instruction of Experts in Civil Claims 2014.
3. I confirm that I have made clear which facts and matters referred to within this report are within my own knowledge and which are not. Those which are within my knowledge I confirm to be true. The opinions that I have expressed represent my true and complete professional opinion on the matters to which they refer.
4. I have endeavoured to include in my report those matters, of which I have knowledge or of which I have been made aware, that might adversely affect the validity of my opinion. I have clearly stated any qualifications to my opinion.
5. I have identified the sources of all information I have used, bracketed and in italics.
6. I have not without forming an independent view included or excluded anything which has been suggested to me by others including my instructing lawyers.
7. I will notify those instructing me immediately and confirm in writing if for any reason my existing report requires any correction or qualification.
8. I understand that;
    a) my report, subject to any corrections before swearing as to its correctness, will form the evidence to be given under oath or affirmation;
    b) I may be cross-examined on my report by a cross-examiner assisted by an expert;
    c) I am likely to be the subject of public adverse criticism if the Inspector and/or the Secretary of State concludes that I have not taken reasonable care in trying to meet the standards set out above.
9. I confirm that I have not entered into any arrangement where the amount or payment of my fees is in any way dependent on the outcome of the case.

Signed: E J Pelham Date: 31.8.20

APPENDIX I

Andersons Midlands Service Areas

ANDERSONS MIDLANDS SERVICE AREAS

- Business appraisal and strategic planning
- Investment planning and appraisal
- Financial planning including budget and cashflow preparation
- Enterprise costings and benchmarking
- Farm business administration
- IT and software design
- Contract Farming Agreements and Joint Ventures
- Cooperation and collaboration
- Diversification
- Understanding CAP schemes and grant support
- Single payment / agri-environment claims and problem solving
- Preparation of grant applications
- Tenancy matters, rent review and arbitration
- Expert witness
- Insolvency
- Recruitment

APPENDIX II

EJ Pelham curriculum vitae

EJ PELHAM CURRICULUM VITAE

John Pelham - MA (Oxon) Agricultural & Forest Sciences

Joined what was, then, David Anderson & Company in 1985, becoming a Partner in 1990 and assuming responsibility for the management of a consultancy team operating throughout the Midlands region. One of the founding Partners of the Andersons Midlands practice, formed in 2001, and is now based at their West Midlands office in Hereford.

With over 30 years' consultancy experience, he has provided advice to a large number of farming businesses throughout the UK, working with both cropping and livestock systems and drawing extensively on the seven years' practical experience previously gained in farming and farm management. He increasingly advises on strategy and business development and has particular expertise in helping businesses address the issue of succession.

He has a detailed working knowledge of all aspects of business advice with particular experience in:

* Strategic Business Planning
* Financial forecasts and Investment Appraisal
* Detailed enterprise costings and benchmarking for all crop and livestock systems
* Specialist business advice for top and soft fruit growers
* Farming systems and agricultural support
* Contract Farming Agreements and Joint Ventures
* Expert Witness
* Training and Recruitment

Background and Practical Farming Experience

Brought up with farming background, Father being Principal of Hertfordshire College of Agriculture and Horticulture

1974-75	Farm worker on 700 acre farm with dairy, beef, pig and arable enterprises in Hertfordshire
1978	Graduated from Oxford University with degree in Agricultural and Forest Sciences
1978-79	Farm worker on 900 acre farm with dairy, beef, sheep and arable enterprises in Devon
1979-1983	Assistant Farm Manager on arable, fruit, livestock and leisure business in Suffolk
1983-1985	Farm Manager on 1,000 acres in County Westmeath, Eire including a 400 cow dairy herd, dairy youngstock and cereal cropping

APPENDIX III

Pump Farm Plan

Pump Farm – Pump Lane, Lower Rainham Road, Gillingham, Kent Me8 7TJ

APPENDIX IV

Bloors Farm Plan

Bloors Farm – Lower Bloors Lane, Rainham, Kent ME8 7TJ

Appendix 3

CORRESPONDENCE WITH NATURAL ENGLAND

Land at Lower Rainham Road - Bespoke Wardening Package

Option 1 - Basic Proposal

		Rationale / Justification
Role	Seasonal Warden / Ranger	The role of the seasonal warden / ranger would essentially match that of the North Kent SAMMS / BirdWise seasonal rangers (funded by strategic contributions), but with a slightly more targeted geographical focus (see below). The seasonal warden / ranger's responsibilites are anticipated to include but not be limited to: actively patrolling sensitive areas, engaging with visitors; putting up seasonal signs, fences etc.; familiarisation with the area and identification of disturbance issues; putting in place mitigation measures to remove sources of disturbance (such as illegal motor biking) or reducing disturbance from legitimate users (education, signs, screening etc.; liaison with local communities, landowners and land managers and other organisations; education initiatives with local schools etc.; monitoring impacts from human activities and the effectiveness of mitigation measures
Type of Role	Part-time: August to March inclusive	Winter is the key period for adverse effects to the European designated site. The strategic approach involves seasonal wardens covering this period only; and the bespoke proposal would mirror this.
Geographical Scope	Riverside Country Park and Medway Estuary Sites	Primary focus for the additional warden / ranger would be the Riverside Country Park and Medway Estuary - i.e. all of those sites in closest proximity to the development site. This would either be in addition to the BirdWise ranger that covers this area (to double the likelihood of visitors being 'captured' in the various tasks), or alternatively would effectively free them up to visit other key locations, as most appropriate
Cost	£ 20,000.00	Figure mirrors that identified in the Footprint Ecology report, which underpins the costings for the strategic approach. This report notes that this is '*inclusive of office and vehicle costs*' , and so this would be appropriate as a total figure for an additional warden / ranger
Length of Role	5 to 10 Years	It is considered that a seasonal warden would not be required in perpetuity, as their role is educational and seeks to ensure that when new residents visit the site, they are aware of the key sensitivies, such that access patterns which could cause disturbance (such as dog walking off the lead) are minimised. In terms of dealing with potential effects beyond this stage - i.e. in perpetuity - this would be addressed via the financial contribution which the scheme is already committed to contributing towards (£245.56 per dwelling x 1,250 + £550 = **£307,500**) This proposal is supported by information set out in the Footprint Ecology report, which notes that seasonal ranger posts "*may not be required in perpetuity. This is because once access patterns have become established in particular ways that reduce disturbance (such as dogs on leads at particular sites) then there may no longer be a need for staffing to continue at such a level*" To get NE to accept 5 years, an argument would need to be made that beyond the first five years, the benefit of any wardening would be very limited. However, the Footprint Ecology report makes reference to a longer period of eight to ten years before this can be reviewed, and for this project the time between occupation of the first new dwelling and occupation of the last new dwelling is likely to be circa 10 years (i.e. new residents will still be moving into the development after the five year period has elapsed). As such, 10 years would appear to be perhaps a more realistic fall back

Total Cost		
5 Years	**£**	**100,000.00**
10 Years	**£**	**200,000.00**

Land at Lower Rainham Road - Bespoke Wardening Package

Option 2 - Detailed Proposal

		Est. annual cost	One off cost	Cost over 5 years	Cost over 10 years
Staff cost					
Seasonal Warden / Ranger salary[1]		£ 16,000.00		£ 80,000.00	£ 160,000.00
Employers NI		£ 1,016.78		£ 5,083.90	£ 10,167.80
[2]LPA Administration				£ 2,000.00	£ 2,000.00
General Equipment					
Laptop and associated equipment			£ 600.00		
Computer: Programmes / Licenses (e.g. Office Home / Business, PDF)			£ 350.00		
Maps / stationery			£ 150.00		
Field Equipment					
Waterproof clothing			£ 150.00		
Boots			£ 100.00		
Rucksack			£ 50.00		
Binoculars			£ 700.00		
[3] Mileage fund for personal vehicle use		£ 1,440.00		£ 7,200.00	£ 14,400.00
	Sub totals		£ 2,100.00	£ 94,283.90	£ 186,567.80
	Project subtotal			**£ 96,383.90**	**£ 188,667.80**
Contingency @ 5% of project value over 5 years (to take into account inflation)				£ 4,819.20	£ 9,433.39
	Project total			**£ 101,203.10**	**£ 198,101.19**

[1] *based upon a 30hr working week over 8 months (August to March inclusive)*

[2] *To cover insurance uplifts and other administrative costs for post*

[3] *Based on 100 miles per week @ £0.45 / mile*

Our Ref: 8252/TG/ST/005.let.sh
Your Ref:

18 August 2020

Sean Hanna
Natural England

Sent via email only: sean.hanna@naturalengland.org.uk

Dear Sean

RE: Land at Lower Rainham, Kent – Bespoke Wardening Proposals in respect of Medway Estuary and Marshes SPA / Ramsar site

Trust you are well and are keeping safe. I thought I'd drop you a quick line following the telephone call on Friday between your colleague Perdeep Maan and Simon Taber regarding Land at Lower Rainham. I wanted to send you a brief letter to let you know my thoughts.

Having spoken to a number of your senior colleagues across the country over recent months, I do fully appreciate that Natural England are exceptionally stretched at present, and that your availability is very limited indeed. As such we had no problem whatsoever with your colleagues engaging with us regarding the key issues, and indeed we are very grateful for Natural England's assistance. However, on behalf of our client we really do need to move forward with this site and to do this we will need a clear steer from Natural England but I do want to emphasise that we are keen to work with you to find an appropriate solution.

Following a helpful discussion that I know Simon had with you a few weeks ago, we have subsequently prepared additional information regarding a bespoke visitor wardening package which would be funded as part of the proposed development. For the avoidance of doubt, I can confirm that this package would be delivered *in addition* to the strategic contribution to the SAMM project and also the provision of informal open space and circular dog walking routes within the site itself. The intention of engaging with NE via DAS was to establish whether Natural England are content with this bespoke package (which would, of course, be over and above that required in accordance with strategic mitigation).

Unfortunately, whilst the call was generally helpful, at this stage it remains unclear what Natural England's view is on the proposals. As I know Simon mentioned to Perdeep, our impression is that an appropriate avoidance and mitigation solution is definitely achievable for this site, but evidently we will need your feedback in terms of whether you are content with the wardening proposal as it stands, or whether you feel that amendments or clarification are needed. I hope you understand when I say I can't presently sign off the payment relating to the DAS charges because the purpose of the DAS was to get that clear steer from Natural England and I'm sure our clients would be concerned if I didn't raise this with you.

ECOLOGYSOLUTIONS
Part of the ES Group

Ecology Solutions Limited
Farncombe House | Farncombe Estate
Broadway | Worcestershire | WR12 7LJ

DIRECTORS
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Dominic Farmer
Karl Goodbun
Simon Taber

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I know that Perdeep has taken a number of questions and points that Simon raised back to you for discussion but I would be ever so grateful if you are able to liaise with Perdeep at your earliest convenience and come back to us. My own feeling is that we are not that far apart, if at all, but I appreciate that both you and indeed our client need to be certain in order to pass the necessary tests set down in the legislation. If it would be helpful to convene a further telephone meeting or if you need any further information, please do not hesitate to let either Simon or I know. Unfortunately, as ever, there is some urgency and so I would be grateful if you could please come back to us as soon as possible. If you'd prefer to have a quick telephone conversation with me so that we can subsequently leave Simon and Perdeep to wrap any remaining detail then I'm happy to try and make myself available at your convenience.

Obviously keep safe in what are incredibly strange times and I look forward to hearing from you to be able to move this issue forward.

Kind regards

Yours sincerely

Tim Goodwin
Director

cc
Perdeep Maan
Simon Taber

Date: 14 September 2020
Our ref: DAS/323244
Your ref: 14125

Simon Taber
Ecology Solutions,
Farncombe House,
Farncombe Estate,
Broadway, Worcester,
WR12 7LJ

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

0300 060 3900

BY EMAIL ONLY

Dear Simon Taber

Discretionary Advice Service (Charged Advice)
DAS/14124/275569
Development proposal and location: Proposed residential development on land at Pump Farm and Bloors Farm, Lower Rainham, Kent.

Thank you for your consultation on the above dated 24 July 2020, which was received on the same date.

This advice is being provided as part of Natural England's Discretionary Advice Service. Ecology Solutions has asked Natural England to provide advice upon:

- The ecological mitigation plan
- The bespoke wardening package

This advice is provided in accordance with the Quotation and Agreement dated 31/07/2020.

The following advice is based upon the information within:

1. 8252 Bespoke Warden Package.vf (23/07/2020)
2. Conference Call dated 14/08/2020 attended Simon Taber and Perdeep Maan
3. Letter from Tim Goodwin (18/08/2020)

Due to the proximity of the proposed development to protected sites (Medway Estuary and Marshes Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar Site, a bespoke wardening package and alternative greenspace provision have been proposed in additional to financial contributions to the Thames, Medway and Swale Estuaries Strategic Access Management and Monitoring Strategy (SAMMS).

My advice is that, although these additional measures are being proposed in recognition of the development's proximity to the coast, Natural England will, for the reasons set out below, have particular concerns regarding this development proposal. Given this, I advise it will be necessary to demonstrate robustly how the proposed measures, together with the standard SAMM contribution, will avoid an adverse impact on these sites. In particular, Natural England's concerns would include:

- The proposed development's close proximity to the coastal protected sites, with access facilitated by the existing path and road network, which would introduce a source of recreational disturbance to an area where currently there is not a high density of housing.

- The scale of the proposal. Reducing the number of houses, for instance, would reduce the impact and we would be happy to discuss that further as an option.

Bespoke Wardening Package

The wardening package currently proposes a dynamic and flexible approach to the location of the warden. My advice is Natural England would require confirmation of how the wardening proposal, (together with the greenspace provision) will effectively mitigate the potential impacts from recreational disturbance as a result of the new development. I would recommend that the Birdwise Project is consulted to discuss how the wardening proposal will complement its activities, and enable dedicated wardening to be provided.

An analysis would also be needed to be provided on whether the proposal for one warden would be sufficient, based on an assessment of the likely increase of visitors to the coast as a result of this development proposal. To further inform mitigation measures, I would recommend these are assessed against the expected number of residents for the new development.

Effective mitigation needs to be implemented for the duration of the impact, and in the case of residential development, this is the lifespan of the homes. The SAMMS is therefore implemented in perpetuity. The length of the wardening role is proposed to be for a 10 year fixed term. I advise that Natural England will require evidence on why in perpetuity provision is not being proposed, and how the fixed term proposal would be sufficient to mitigate the 'lifespan' effect arising from the proposed development.

Provision of alternative spaces

The development proposes to provide green spaces, with four alternative walking routes, as well as enclosed areas aimed at dog walkers.

I would recommend that detailed plans are provided for the specific design, management and maintenance of the alternative greenspace in perpetuity, drawing on the north Kent visitor survey evidence base [1] which aims to understand the coastal draw, and which attributes of recreational space are attractive to local residents. I recommend providing details of how the alternative green spaces will incorporate this evidence to provide an effective alternative to the coast.

I advise that details of these plans should be provided, to demonstrate how the proposed alternatives will provide the recommended high quality outdoor spaces. The proposed measures being taken to encourage residents to use these spaces should be demonstrable. This would mean, for instance, providing the features (such as those summarised in Table 11 of the north Kent visitor survey) that would be necessary to attract residents (particularly dog walkers) away from the coast. I would also recommend setting out how the proposed amount (area) of greenspace would be sufficient in the context of the number of residents.

Given that these areas will need to attract dog walkers away from the coast, the proposal should also set out how the proposed enclosed areas and dog walking routes would work as an effective alternative. This could be, for example, by providing routes of comparable length and quality to those recorded in the north Kent visitor survey.

It is recommended that additional land outside of the proposed development boundary is investigated as having potential to provide local alternative recreational spaces.

In summary, I recommend further clarity is provided on how the proposed green space and wardening package will provide effective mitigation for the proposed development, and I would be happy to provide further advice if needed as these elements are developed in more detail.

[1] Fearnley, H. & Liley, D. (2011) *North Kent Visitor Survey Results,* Footprint Ecology.

Senior adviser to QA letter and check box below

☐ The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Yours faithfully,

Perdeep Maan
Sussex and Kent

Cc commercialservices@naturalengland.org.uk

Appendix 4

CONSOLIDATED ENVIRONMENTAL STATEMENT SEPTEMBER 2020

Environmental Statement For
AC Goatham and Sons

MAIN TEXT- CONSOLIDATED ENVIRONMENTAL STATEMENT VERSION - LAND AT PUMP AND BLOOR FARM, LOWER RAINHAM

September 2020

Our Ref: SRS/18-01307

21 Prince Street Bristol BS1 4PH
0370 777 6292 | info@rapleys.com | rapleys.com
LONDON | BIRMINGHAM | BRISTOL | CAMBRIDGE | EDINBURGH | HUNTINGDON | MANCHESTER

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QUALITY ASSURANCE

This report has been prepared within the quality system operated at Rapleys LLP according to British Standard ISO 9001:2008.

Created by:	Sarah Smith BA (Hons) MRTPI Planning Partner
Signature:	
Checked by:	Duncan Parr BA DUPI Dip TP FRGS MRTPI Cgeog MEWI Planning Partner
Signature:	

INFORMATIVE

1. In May 2019, an outline planning application for the development of land at Pump and Bloor Farms, Lower Rainham was submitted to Medway Council (MC) accompanied, amongst other documents, by an Environmental Statement (ES), prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('The Regulations').

2. In March 2020, following extensive consultation with both statutory bodies and the Council, further technical environmental information on a number of topics was formally submitted in accordance with Regulation 25 of the aforementioned Regulations. This 'further information' was submitted by Rapleys LLP as a Supplementary Environmental Statement (SES) which incorporated Supplementary Technical Appendices covering drainage, transport, agricultural land and air quality matters. A Supplementary Non-Technical Summary (SNTS) was also submitted.

3. This 'further information' comprised a number of short responses to questions raised on a number of topics and where this related directly to the information contained within the May 2019 ES submission, it was reported within the March 2020 SES. In addition, some further investigative/survey work was undertaken, also included within that SES. This 'further information' did not result in any changes to the illustrative masterplan or the proposed development itself. The' further information' was summarised as follows –

   (i) Borehole and infiltration testing resulting in revisions and clarifications to drainage/flooding matters;
   (ii) Review of MC strategic highway modelling resulting in clarifications to highway/transportation matters;
   (iii) Clarifications in respect of air quality matters;
   (iv) Clarifications in respect of agricultural matters.

4. In September 2020, to accompany a S78 appeal following the refusal of the outline planning application in April 2020, a further SES (dated September 2020) was prepared and submitted to the Secretary of State. That SES focussed on refinements to, and further consideration of, impacts of the development on heritage assets and the landscape & visual assets, on and within the vicinity of, the Site – these matters were the subject of two of the reasons for refusal of the application. It also noted any changes in policy where appropriate, further information in respect of transport matters and made some revisions relative to cumulative impact assessment.

5. Minor amendments to the illustrative masterplan and the parameter plans reflect the heritage and landscape buffer planting refinements in the north of the Site west of Pump Lane and in the south-western corner of the Site north of the railway. There was no change to the actual development description itself.

6. The Supplementary Technical Appendices relative to these topics and a SNTS were also submitted.

7. All of the supplementary documents are to be read alongside the original May 2019 ES documents.

8. This document, the Consolidated Environmental Statement (CES), represents the combining of both the ES May 2019, the SES March 2020 and the SES September 2020 (subject to amendments and deletions as referenced in the two SES's). It is a composite document put together for ease of reading and reference only. The Scoping Report contained within this (CES) remains unchanged from August 2018. A Consolidated Non-Technical Summary (CENTS) has similarly been put together.

9. The basic structure and format of this document remains unaltered from the ES May 2019, but where changes have been made and incorporated from the text of the two SES's they are shown in blue (SES March 2020) and purple (SES September 2020), the unaltered text remaining printed in grey with titling in green and blue. Where Figures were updated or modified from the ES May 2019 the titles are in blue or purple and carry a suffix 'a'; those Figures new to the ES are also titled in blue or purple.

10. The following examples indicate this:

SES March 2020

This chapter is supported by a Flood Risk Assessment and Drainage Strategy report presented as **Technical Appendix 8.1** and **Technical Appendix 8.1sup**, the latter detailing infiltration borehole testing carried out in late 2019, drainage modelling results for the 1 in 100 year flood plus 40% climate change, a 10% increase in impermeable area allowing for urban creep and further information on Suds and water quality improvement.

SES September 2020

Chapel House - Chapel House is located on the corner of Pump Lane and Lower Rainham Road. It abuts the Site (existing orchards) to the north-west and south-west. It has road frontage with a garden curtilage to the rear. There are no alterations proposed to the character of this part of Pump Lane.

Residential development will replace some of the existing orchards surrounding the listed building altering the wider setting of the listed building. Construction activities will be short term and indirect in nature. The overall impact of construction including the establishment of development is considered to be **Minor adverse**, and the effect Minor Adverse.

1 INTRODUCTION

1.1 AC Goatham and Son (the applicant) is proposing the development of land at Pump and Bloor Farms, Lower Rainham in Kent. The locational context of the Site is shown at **Figure 1.1** together with the boundaries of the application outlined in red.

1.2 An outline planning application has been prepared for the development of the Site comprising:

- Up to 1,250 dwellings, comprising a mix of properties sizes at a medium density;
- Up to 1,000 sq. m of retail or other neighbourhood uses (Use Classes A1, A2, A3, A4 and A5, D1);
- A primary school (Use Class D1);
- A 60 bed extra care facility;
- An 80 bed care home;
- Open space, strategic landscaping and other green infrastructure, and
- Associated vehicular, cycle, pedestrian and drainage infrastructure, including a primary access onto Lower Rainham Road and a secondary access onto Pump Lane.

1.3 The Site Masterplan is presented at **Figure 1.2a.**

1.4 This ES presents the findings of an independent EIA. The EIA is a systematic process which identifies the 'significant' environmental effects of a proposed development and allows environmental concerns to be taken into account in the decision making process before development consent is granted. It also provides an opportunity for such issues to be considered at an early stage and, where possible, for impacts to be designed out of the development.

1.5 This ES has been prepared in accordance with the requirements of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (herein 'the Regulations') and guidance contained in the National Planning Practice Guidance (NPPG).

REQUIREMENT FOR EIA

1.6 The requirement for an EIA is derived from the EC Directive no. 2011/92/EU (*ref. 1.1*). These directives are transposed into UK law through the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the Regulations')(ref. 1.2). The Regulations require that prior to the grant of planning permission the likely significant effects of a project on the environment should be assessed.

1.7 The Regulations set out the types of development which will always be subject to EIA under Schedule 1 and other development which may require EIA under Schedule 2. It is considered that the application proposals fall under Schedule 2 of the Regulations, specifically category 10 (b) Urban Development Projects.

1.8 In accordance with the Regulations the Proposed Development is not Schedule 1 development and the Site is not within a 'sensitive area'. However, the Development does fall within Schedule 2, Class 10 (b) "Urban development projects for the following reasons:

- The Proposed Development includes more than 1 hectare of urban development which is not dwelling house development;
- The Proposed Development includes more than 150 dwellings; and
- The overall area of the Proposed Development exceeds 5 hectares.

SCREENING OPINION

1.9 Rapleys considered that the Proposed Development constituted EIA development under the EIA Regulations and prepared a formal Screening Opinion request (**Technical Appendix 1.1**) to that effect that was sent to MC for consideration.

1.10 The formal decision of MC concluded that the Proposed Development was EIA development under the Regulations.

SCOPING REPORT

1.11 A formal Scoping Opinion was prepared by the team and consultation carried out with MC and relevant statutory bodies in accordance with the Regulations. This occurred in August 2018.

1.12 It should be pointed out that there appeared to be confusion within the MC in respect of the formal decision on the Screening Opinion and the Scoping Opinion. Whilst a letter was received relating to the screening opinion, much of the contents were comments one would expect in the scoping opinion. Very few comments were received from the consultees. A copy of the formal decision is appended to the back of the Scoping Opinion report.

1.13 In addition, some separate discussions have been undertaken with the relevant bodies in respect of the application subject of this ES, the results of which are reflected in the individual chapters.

1.14 The Scoping Report has been updated taking into account amendments resulting from the aforementioned consultation, as well as updates to the baseline survey position, national and local policy changes and alterations to the application strategy and development proposals. These changes are highlighted in red type within the Revised Scoping Report (**Technical Appendix 1.2**).

CONSULTANT TEAM

1.15 The application was submitted on behalf of AC Goatham and Son.

1.16 The ES has been compiled by Rapleys LLP, corporate members of the Institute of Environmental Management and Assessment (IEMA), in conjunction with technical input from a number of professional consultants whose roles are set out below. Three new consultants joined the team in August 2020 and were instructed to appraise heritage, landscape & visual matters and farm business viability.

1.17 A Statement of Competence can be found at **Technical Appendices 1.3** and 1.3sup.

Table 1.1: Consultant Team

Organisation	Role
Rapleys LLP	Project Management; all planning matters; socio economic chapter; EIA co-ordinator.
PBA Stantec	Water Resources (including Flood risk and Drainage), Ground Conditions, Air Quality, and Utilities/Infrastructure.
PRC	All matters relating to the masterplanning of the site.
Tyler Grange	Landscape, Townscape and Visual Amenity.
Lloyd Bore	Landscape, Townscape and Visual Amenity.
Reading Agricultural	Agricultural Land and Soils Assessment.
Anderson Midlands (J Pelham)	Farm Business Viability.
Bloomfields	Farm Business Analysis.

Pegasus Group Ltd	Cultural Heritage.
SWAT/Quest	Archaeology and Cultural Heritage.
The Ecology Partnership	Ecology and Conservation.
DTA	Transportation and Highways

STRUCTURE OF THE ES

1.18 This ES comprises the following documents:

Environmental Statement – Main Text – Volume 1

1.19 This document presents the full ES text and is divided into chapters, supported by figures and tables as appropriate.

1.20 Chapter 2 outlines the methodology for the EIA and details the technical assessments required.

1.21 Chapter 3 sets out the background to the Applications.

1.22 Chapter 4 provides a summary of relevant national and local planning policy.

1.23 Chapter 5 provides a description of the alternatives studied by the applicant, as required by the EIA Regulations.

1.24 Chapter 6 provides a summary description of the Application proposals.

1.25 Chapters 7 to 15 present an assessment of the environmental effects of the proposed development on a topic by topic basis.

1.26 Chapter 16 is now a new separate chapter titled 'Cumulative Effects'.

1.27 Chapter 17 is now an 'Overview' of the environmental effects post-mitigation.

Environmental Statement – Technical Appendices – Volume 2

1.28 A set of technical appendices is presented as a separately bound volume, which support the assessments provided in the chapters above. This is to allow the ES to be a readable document whilst providing the full basis for assessment if required.

Environmental Statement – Non Technical Summary (NTS)

1.29 A non-technical summary has been produced as a free-standing document, which provides a summary of the whole ES in non-technical language, to be easily understood by a lay audience.

1.30 The Application was also supported by a number of other documents including:

- Planning Statement;
- Design and Access Statement;
- Statement of Community Involvement;
- Viability Assessment;
- Noise/Acoustic Assessment Report;
- Sustainability Statement;
- Energy Statement, and
- Utilities Report.

COMMENTS

1.31 This ES is made available by the Council for public viewing during normal office hours. For details of where it can be viewed and the times that it is available, the Council's Development Management Department can be contacted via the following contact details:

- **Telephone:** 01634 331700
- **Email:** Planning.representations@medway.gov.uk
- **Address**: Development Management, Medway Council, Gun Wharf, Dock Road, Chatham, ME4 4TR.

1.32 The ES and planning application documents is also available via the Council's website.

1.33 Comments on the application can be made to the Council.

1.34 It should be noted that the SESs of March and September 2020 were submitted during the Covid-19 pandemic. The SESs and associated documentation were only available electronically via the aforementioned website and email as a result of lockdown restrictions.

1.35 Comments in respect of the appeal documentation, including the SES/SNTS September 2020 can be made to the Secretary of State via the Planning Inspectorate, Temple Quay House, The Square, BRISTOL, BS1 6NP.

AVAILABILITY OF DOCUMENTS

1.36 Additional hard copies of the NTS (free of charge), or electronic copies of all documentation (either via a sharefile link of on a cd) are available from:

- **Email**: info@rapleys.com
- **Address:** 33 Jermyn Street, LONDON, SW1Y 6DN

2 METHODOLOGY

INTRODUCTION

2.1 This chapter describes the methodology used for the ES.

LEGISLATION

2.2 In accordance with Regulation 4(2) of the Regulations (ref 2.1) the environmental topics will identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development to include the following factors:

- Population and human health;
- biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC(a) and Directive 2009/147/EC(b);
- land, soil, water, air and climate;
- material assets, cultural heritage and the landscape; and
- the interaction between the factors referred to in sub-paragraphs (a) to (d).

2.3 In addition, the significant effects to be identified, described and assessed will include the expected significant effects arising from the vulnerability of the proposed development to major accidents or disasters that are relevant to that development.

EIA PARAMETERS

2.4 This EIA assesses potential significant environmental effects having regard to the following parameter plans:

- **Figure 2.1a** Land Use Parameter Plan
- **Figure 2.2a** Building Heights Parameter Plan
- **Figure 2.3a** Movement Parameter Plan
- **Figure 2.4a** Blue/green infrastructure Parameter Plan

2.5 Maximum parameters are defined in order to determine the potentially significant effects of the Proposed Development. The parameters are described in Chapter 6 of this ES.

KEY EIA ISSUES

2.6 Accordingly, the ES considers all the environmental topics identified in Schedule 4 of the EIA Regulations.

2.7 The following environmental issues associated with the development have therefore been considered to have the potential to be significant and are to be addressed in detail by the ES:

- Socio-economic impacts, including population;
- Water Resources;
- Transportation;
- Ecology and Conservation;
- Landscape and Visual Amenity;
- Air quality;
- Land use and Agriculture, and
- Archaeology and Cultural Heritage.

2.8 Impacts associated with the following topics are considered to be ‘non-significant’ and are not considered further in this ES:

- Sunlight, daylight and overshadowing;
- Wind, and

- Light pollution.

EIA METHODOLOGY

2.9 The key stages of the EIA process are identified in **Figure 2.5**. Both project and design team meetings attended by key members of the project team were held regularly throughout the scheme evolution process. These meetings ensured that the design team were made aware of potential environmental effects and these were 'designed out' as far as possible. Conversely, this process has also allowed mitigation measures to be 'designed into' the development proposal – this is known as 'inherent or design' mitigation, and is line with the IEMA best practice.

2.10 Each key issue has been given a separate chapter in the ES (chapters 7 to 15). The technical assessments all follow the same format as recommended by relevant good practice guidance (ref. 2.2). Accordingly, each chapter follows the structure below.

2.11 Each chapter starts with an **introduction** outlining the topic area to be assessed.

2.12 The **context** for the assessment is then set out including reference to national, and where appropriate, local guidance relevant to the topic area.

2.13 The methods for undertaking the technical studies are then outlined in the **methodology** section, making reference to best practice and other relevant legislation and guidance.

2.14 Whilst the proposed development is described consistently, the geographical extent of the assessment varies depending upon the aspect being assessed. For example, some environmental effects are confined within the boundaries of the proposed development site; others have a wider assessment area. Accordingly, the geographical scope of the assessments is confirmed in each of the specialist chapters with an indication of the sensitive receptors identified on a topic by topic basis.

2.15 The **baseline conditions** are then described, against which the potential environmental impacts of the proposal are assessed. The conditions are referred to as at the present time, on the basis no significant changes are anticipated between assessment and development works commencing.

2.16 The **potential impacts** are then assessed utilising the methodology as set out below.

2.17 The methodology used to assess the relative magnitude of significance of the effects reviewed in this ES is based on a standardised scale, as set out in **Table 2.1** below. Each of the specialist consultants have based their assessment on this general approach, but the accepted good practice criteria within each topic has led, in some cases, to modifications to this general approach.

2.18 The magnitude of an impact is judged by comparing the extent of the change with particular standards and criteria relevant to each environmental topic. The magnitude is generally estimated as combination of the magnitude of the impact and the sensitivity or value of the affected receptor. The process is described in **Tables 2.1** and **2.2**:

Table 2.1: Magnitude of Impact

Magnitude of Impact	Description - include subject specific examples
High	Very large or large change in environmental conditions (e.g. pollution levels, destruction of habitat). This could result in exceedance of Statutory objectives and/or breaches of legislation.
Medium	Intermediate change in environmental conditions.
Low	Small change in environmental conditions.
Negligible	No discernible change in environmental conditions.

Table 2.2: Sensitivity/Value of Receptor

Sensitivity/value of a Receptor	Description
Very High	Change resulting in a high degree of deterioration or improvement.
High	Change resulting in a material deterioration or improvement.
Medium	Change resulting in a low degree of deterioration or improvement.
Low	Change resulting in a negligible degree of deterioration or improvement.
Neutral	No change.

2.19 **Table 2.3** proves a matrix showing impact significance and magnitude of change.

2.20 The effect is determined by combining the predicted magnitude of impact with the assigned sensitivity of the receptor. The level at which a significant effect arises is provided within the topic method section of each chapter of the ES. Unless stated otherwise, effects of moderate significance or above are considered to be significant in EIA terms.

Table 2.3: Impact Significance Matrix

	Magnitude of Impact			
Sensitivity/ value of a Receptor	**High**	**Medium**	**Low**	**Negligible**
Very High	Substantial	Substantial	Moderate	Slight
High	Substantial	Moderate	Slight	Negligible
Medium	Moderate	Slight	Negligible	Negligible
Low	Slight	Negligible	Negligible	Negligible

2.21 There is no statutory definition of significant. For the purpose of the EIA **Table 2.4** below provides a general description of significance.

Table 2.4: General Definition of Significance

Significance	Description
Substantial	These effects represent key factors in the decision-making process and will have a major influence on key decision making issues.
Moderate	These effects are likely to be important considerations at a local scale. If adverse these effects have a moderate influence on key decision making issues.
Slight	These effects may be raised as local issues but are unlikely to be of importance in the decision making process. Nevertheless, they are of relevance in the detailed design of the project. When combined with other effects these effects may have a moderate influence on decision making issues.
Negligible	Effects which are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error. These effects will not have an influence on decision making issues.

2.22 The likely significant effects of the Proposed Development are described as:

- Adverse or beneficial
- Direct or indirect
- Temporary or permanent
- Reversible or irreversible
- Cumulative

2.23 **Mitigation measures** are then considered to avoid, offset or reduce the significant adverse effects of the development. The mitigation strategy follows the following hierarchy:

- Avoid
- Reduce
- Remedy

2.24 Mitigation can be carried out through design (inherent mitigation) or management (additional mitigation), the latter often being considered separately for construction and operation.

2.25 Measures that avoid environmental impacts and effects and which form part of the assessed Proposed Development (as set out in the scheme description or shown on the parameter plans) are known as inherent mitigation that is included in the design of the Proposed Development is taken into account in the assessments.

2.26 Additional Mitigation is defined as a proposed measure that is additional to the assessed Proposed Development in response to environmental impacts identified through the assessment. These aspects may not be capable of representation on the parameter plans as they may involve off-site measures and/or be delivered by a third party via financial contributions.

2.27 Mitigation measures are broadly described in **Table 2.5** below.

Table 2.5: Mitigation Measures

Category	Description
Design (Inherent)	Measure incorporated into design in order to minimise specific effects.
Construction Management (Additional)	Commitment to undertake the construction works in a specific way, for example the use of particular plant, phasing of the works, regular monitoring and management of works.
Operational Management (Additional)	Features specific to the particular technical category including management practices, Environmental Management Systems etc.

2.28 A **summary of the residual impacts** is then included, in order to assess development after mitigation measures have been applied. A summary table is provided at the end of each chapter to present this information.

2.29 Chapter 16 of the ES outlines the assessment of **cumulative effects** of the Proposed Development arising from its construction and operation. Cumulative effects are the result of multiple actions on receptors or resources. There are principally two types of cumulative effect:

(i) Type 1 – Where different environmental impacts are acting on one receptor, as a result of the scheme; and

(ii) Type 2 – Where environmental impacts are acting on one receptor, but are the result of multiple projects in combination (including the scheme being assessed).

2.30 The impacts from a single development or a single environmental impact may not be significant on their own but when combined with other developments or impacts these effects could become significant.

2.31 The methodologies for determining the potential effects of the Proposed Development are detailed in the specialist chapters of the ES. The cumulative impacts assessment focuses on effects that are significant, therefore only receptors experiencing moderate or major adverse effects are to be included in the assessment.

Table 2.6: Cumulative Development Sites

Site Name	Description of Development	Status
Land at Station Road, Rainham MC/14/0285	Development of 90 dwellings	Allowed on appeal
Land North of Moor Street, Rainham MC/14/3784	Development of 190 dwellings	Refused, but identified on the MC housing supply in the SHLAA
Land at Otterham, Quay Lane, Rainham MC/16/2051	Development of 300 Dwellings	Permitted Feb 2017
Berengrave Nursery, Rainham MC/17/3687	Development of 121 dwellings	Permitted Mar 2018

Land south of Lower Rainham Road, Rainham **MC/17/1896**	Development of 202 dwellings	Permitted August 2020, but also within MC housing supply in SHLAA

ASSUMPTIONS AND LIMITATIONS

2.32 The principal assumptions that have been made, and any limitations that have been identified, in undertaking the EIA are set out below. Assumptions specifically relevant to each topic have been set out in the relevant chapter:

(i) The assessments contained within each of the technical chapters are based on the parameter plans, for which planning approval is sought;

(ii) Baseline conditions have been established from a variety of sources, including historical data. Due to the dynamic nature of the environment, conditions may change during the construction and operation of the development;

(iii) For the purposes of the ES, it has been assumed development would start in 2020 and would take nine years to build out, with the overall development completing during 2029;

(iv) Construction activities will take place to a pre-determined schedule and are likely to be conditioned as part of any planning permission, and

(v) A commitment is made to the delivery of a Construction Environmental Management Plan (CEMP), which could form a planning condition to permission.

3 BACKGROUND TO DEVELOPMENT

INTRODUCTION

3.1 This chapter describes the Site and surrounding area, and sets out the background to the Development including any relevant planning history.

THE SITE

3.2 The Site is made up of two farms, Pump farm (circa 23ha) and Bloors farm (circa 25ha) which is largely grade 2 (with some areas being grade 1) agriculture land currently in use as commercial fruit orchards. The farms are separated by Pump Lane, which runs from north to south through The Site.

3.3 The majority of the Site is planted commercial orchard within limited landscaping in the form of hedges surrounding the Site and separating individual parts of the orchard. The Site is part developed and includes a number of farm buildings used for storage and other uses in connection with the commercial orchard which are now at the end of their useful life.

3.4 The Site does not have open public access although dog walkers informally use the Site. There is one public right of way, a bridle way which extends from Pump Lane in the West, crossing Bloors Farm in an easterly direction to Lower Bloor Lane. The proposals allow for betterment in terms of improved access and recreational use of the Site.

3.5 The Site is bounded to the north-west by agricultural fields; to the north and north-east partly by houses and the B2004 Lower Rainham Road and beyond this the Medway River Estuary; to the south by allotments and Lower Bloors Lane beyond which is Bloors Lane Community Woodland and to the west by a railway line and residential development.

SURROUNDING AREA

3.6 The surrounding area is characterised by a mixture of suburban residential development and agricultural land. To the south of the Site on the other side of the rail line is the urban area of Rainham. Further to the north at the far side of Lower Rainham road are the marshes, which are a designated Country Park, within flood zone 3.

3.7 There are two conservation areas bordering the Site, Lower Rainham Conservation Area which is immediately north of Bloors Farm, and Twydall Conservation Area to the West of Pump Farm.

3.8 There are several Listed Buildings in close proximity to the Site. The assets are all Grade II listed and are known as:

(i) Chapel House.
(ii) 497, 499 and 501 Lower Rainham Road (separate listings).
(iii) The Old House.
(iv) Bloors Place.
(v) A range of outbuildings including Cart Lodge and Granary West of Bloors Place.
(vi) Garden walls south and east of Bloors Place.

3.9 The Site straddles Pump Lane which runs north to south between the B2004 Lower Rainham Road and Beechings Way respectively. Pump Lane is a narrow road approximately 4m wide meaning there is limited opportunity for two-way vehicle passage.

3.10 Rainham train station is located approximately 2.5km south east of the Site which is well within walkable and cyclable distance (29 and 8 minutes respectively). The station lies on the principal south east rail route. Train services are available directly to and from the main regional centres at London and Dover. There is a taxi-rank and general drop-off/pick-up area immediately in front of the station entrance.

3.11 There are a number of bus stops located within the vicinity of the Site. The closest is located on Beechings Way approximately 600m south of the centre of the Site. The second of which is located on Lower Rainham Road which runs along the Site frontage and can be accessed approximately 600m north of the Site. Regular services run to and from these stops routing through Lower Rainham and providing links to towns and cities further-a-field.

3.12 Existing walking and cycling facilities within the immediate vicinity of the Site are limited especially along Pump Lane which runs through the centre of the Site.

PLANNING HISTORY

3.13 At the time of the application submission in May 2019, there was no planning history of relevance. Subsequently, on 12th June 2020 MC refused the application for the following reasons:

1. Insufficient information has been provided in relation to mitigation measures, and no agreement has been reached to secure such measures, which are necessary to ensure that there will be no adverse impact on the integrity of the Medway Estuary & Marshes SSSI, SPA and Ramsar site as a result of the additional recreational pressures caused by the proposal. In the absence of imperative reasons of overriding public interest, Regulations 63 and 70 of the Habitats Regulations require permission to be refused. In addition, the lack of information and mechanism to secure the mitigation also results in non-compliance with policies S6 and BNE35 of the Local Plan and NPPF paragraphs 175 &176.

2. The proposed development would have a harmful impact on the local historic landscape, as well as the setting and significance of an number of designated heritage assets, including: listed buildings (York Farmhouse (Grade II); Pump Farmhouse (Grade II); Chapel House (Grade II); 497-501 Lower Rainham Road (Grade II); The Old House (Grade II); Bloors Place (Grade II*); a range of outbuildings including cart lodge and granary west of Bloors Place (Grade II); and, the garden walls to south and east of Bloors Place (Grade II)); and, two Conservation Areas (Lower Twydall; and, Lower Rainham). Applying the great weight which has to be given to the conservation of the designated heritage assets (by virtue of NPPF paragraph 193 and Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990), the proposal is contrary to Local Plan policies BNE 12 and BNE18. In addition, as the public benefits of the scheme would not outweigh the harm to the designated heritage assets, the proposed development is also contrary to the NPPF paragraph 196.

3. The proposed development would lead to significant long-term adverse landscape and visual effects to the local valued Gillingham Riverside Area of Local Landscape Importance (ALLI), which would not be outweighed by the economic and social benefits of the scheme, in conflict with Local Plan policy BNE34 and NPPF paragraph 170.

4. The applicant has failed to satisfy Highways England that the development will not materially affect the safety, reliability and / or operation of the Strategic Road Network (SRN). This is contrary the tests set out in department for Transport Circular 2/13 paragraphs 9 & 10 and the NPPF at paragraph 109.

5. The cumulative impact from the increased additional traffic cannot be accommodated on the highway in terms of overall network capacity without a severe impact. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

6. The cumulative impact from the increased additional traffic from the development is unlikely to be able to create a safe highway environment. This is contrary to Local Plan policy T1 and the NPPF at paragraph 109.

7. No assessment nor technical details have been provided regarding the two new access points along Pump Lane to serve the proposed development, therefore it has not been possible to appropriately assess the adequacy of these access points. This is contrary to Policy T1 of the Medway Local Plan 2003 and paragraph 109 of the NPPF.

8. The proposed development would result in the irreversible loss of 'best and most versatile' (BMV) agricultural land, contrary to Local Plan policy BNE48 and the NPPF at paragraph 170 and footnote 53.

9. In the absence of a completed S106 legal agreement, the proposal fails to secure infrastructure necessary to meet the needs of the development. This is contrary to Local Plan policy S6 and the NPPF at paragraph 54.

3.14 An appeal has been lodged in respect of the application refusal.

4 PLANNING POLICY

4.1 A detailed review of the proposals against the background of the planning policy context is set out in the Planning Statement accompanying the application. However, the summary below demonstrates that the scheme is broadly in accordance with the relevant planning framework.

4.2 This chapter sets out the general guidance in relation to the development of the Site. Specific policy regarding individual issues is referred to in the relevant topic chapters.

NATIONAL PLANNING POLICY FRAMEWORK

4.3 Relevant national planning policy and guidance is set out in National Planning Policy Framework 2019 (NPPF) (ref 4.1) and online NPPG (ref 4.2).

The Presumption in Favour of Sustainable Development

4.4 The NPPF's overriding objective is to secure the sustainable development needed to meet the needs of the country's communities and businesses. Paragraph 8 identifies that there are three dimensions to sustainable development: economic, social and environmental. In terms of an economic role the planning system should contribute to building a strong, responsive and competitive economy by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation. A social role would support strong, vibrant and healthy communities by supplying housing required to meet the needs of present and future generations, and an environmental role that contributes to protecting and enhancing the natural, built and historic environment.

4.5 In the pursuit of sustainable development improvements should be made to people's quality of life, including:

(i) Making it easier for jobs to be created in cities, towns and villages
(ii) Moving from a net loss of biodiversity to achieving net gains for nature
(iii) Replacing poor design with better design
(iv) Improving the conditions in which people, live, work, travel and take leisure
(v) Widening the choice of high quality homes

4.6 The policies which have particular relevance to the proposal for a new settlement are set out below.

Delivering a Wide Choice of High Quality Homes

4.7 NPPF, paragraph 59 states that to boost significantly the supply of housing LPAs should use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area. Furthermore, LPAs are required to identify a supply of deliverable (within 5 years) and developable (available within 6-15 years) housing sites.

4.8 NPPF, paragraph 49 notes that housing applications should be considered in the context of the presumption in favour of sustainable development and housing policies should not be considered up to date if the LPA cannot demonstrate a five-year land supply. This is of relevance to the Development as Medway District has a significant shortfall in its five year land supply – the latest position in this regard is acknowledged in appeal reference APP/A2280/W/19/3240339 dated 30 July 2020 where the housing supply was noted at 3.27 years for the period 2019-2024.

4.9 Paragraph 61 explains that the size, type and tenure of housing needed for different groups in the community should be assessed and reflected in planning policies (including, but not

limited to, those who require affordable housing and families with children, which reflect local demand.

4.10 Paragraph 64 outlines that where major development involving the provision of housing is proposed, planning decisions should expect at least 10% of the homes to be available for affordable home ownership, unless this would exceed the level of affordable housing required in the area, or significantly prejudice the ability to meet the identified affordable housing needs of specific groups.

4.11 Paragraph 73 explains LPAs should identify and update annually a supply of specific deliverable sites sufficient to provide a minimum of five years' worth of housing against their housing requirement set out in adopted strategic policies, or against their local housing need where the strategic policies are more than five years old with an appropriate buffer applied.

Building a strong, competitive economy

4.12 Paragraph 80 explains that planning decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development.

4.13 Paragraph 82 also sets out that planning decisions should recognise and address the specific locational requirements of different sectors, including making provision for storage and distribution operations at a variety of scales and in suitably accessible locations.

Promoting healthy and safe communities

4.14 Paragraph 91 explains that planning decisions should achieve healthy, inclusive and safe places, which promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other; are safe and accessible; and enable and support healthy lifestyles.

4.15 Paragraph 92 sets out that to provide the social, recreational facilities and services the community needs, planning decisions should inter alia, plan positively for the provision and use of shared spaces, community facilities – including meeting places, sports venues and open space) and ensure that established facilities and services are able to develop and modernised and are retained for the benefit of the community.

Promoting sustainable transport

4.16 Paragraph 102 explains that transport issues should be considered from the earliest stages of development proposals so that inter alia, the potential impacts of development on transport networks can be addressed, opportunities for promoting walking, cycling and public transport can be pursued in parallel with mitigating any adverse effects on the environment, and contributing to making high quality places.

4.17 Paragraph 109 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or if the residual cumulative impacts on the road network would be severe.

Achieving appropriate densities

4.18 Paragraph 122 explains that planning decisions should support development that make efficient use of land, taking into account:

(i) The identified need for different types of housing and other forms of development, and the availability of land suitable for accommodating it;
(ii) Local market conditions and viability;
(iii) The desirability of maintaining an area's prevailing character and setting; and

(iv) The importance of securing well-designed, attractive and healthy places.

4.19 Paragraph 123 states that it is especially important that planning decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site.

Achieving well-designed places

4.20 Paragraph 124 that the creation of high quality buildings and places is fundamental to what the planning and development process should achieve.

4.21 Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities

4.22 Paragraph 127 sets out a number of design criteria applicable to new developments covering matters such as function, visual attractiveness, local character (whilst not preventing or discouraging appropriate innovation or change, including increased densities), a sense of place, accessibility and security.

4.23 However, as confirmed within paragraph 131, in determining applications, great weight should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.

Conserving and enhancing the natural environment

4.24 Paragraph 170 confirms that planning decisions should contribute to and enhance the natural and local environment by inter alia, minimising impacts on and providing net gains for biodiversity and prevent development from contributing to, being put at unacceptable risk from, or being adversely affected by soil, air, water or noise pollution.

Conserving and enhancing the historic environment

4.25 Paragraph 189 explains that in determining applications, LPAs should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.

4.26 Paragraph 193 confirms that when considering the impact of development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. Furthermore, paragraph 197 advises that in weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

DEVELOPMENT PLAN

4.27 The development plan for Medway Council comprises the saved elements of the Local Plan 2003 (ref 4.3), which were saved in September 2007.

4.28 From a review of the saved proposals map, the following site specifics are noted:

(i) The site is designated within a local landscape importance area, and
(ii) Pump Lane is classified as a Rural Lane.

4.29 Given the age of the adopted Local Plan, it is evidently out of date with reference to the NPPF. As such, its contents should carry limited weight in the consideration of this development proposal – far more weight should be given to national policy and the local authority's position relative to housing need.

4.30 However, for completeness, reference to the relevant policies contained within the Local Plan are listed below and can be viewed in more detail within the accompanying Planning Statement:

(i) Policy S2 - Strategic Principles;
(ii) Policy S4 - Landscape and Urban Design;
(iii) Policy S6 - Planning Obligations;
(iv) Policy BNE1 - General Principles for Built Development;
(v) Policy BNE18 - Setting of Listed Buildings;
(vi) Policy BNE21 - Archaeological Sites;
(vii) Policy BNE24 - Air Quality;
(viii) Policy BNE25 - Development in the Countryside;
(ix) Policy BNE34 - Areas of Local Landscape Importance;
(x) Policy BNE48 - Agricultural Land;
(xi) Policy H3 - Affordable Housing;
(xii) Policy H8 - Residential Institutions;
(xiii) Policy H10 - Housing Mix;
(xiv) Policy R9 - Retail Provision in New Residential Developments;
(xv) Policy L10 - Public Right of Way;
(xvi) Policy T1 - Impact of Development;
(xvii) Policy T2 - Access to the Highway;
(xviii) Policy CF2 - New Community Facilities; and
(xix) Policy CF6 - Primary Schools.

EMERGING POLICY

4.31 The emerging local plan is still in its early stages of preparation and as a result of Covid-19, the timescale has slipped even further. The latest Local Development Scheme (LDS), as reported to Planning Committee on 4th August 2020 identifies that the publication draft (Regulation 19) is planned to be published in spring of 2021, with submission for examination by December 2021 and target adoption of December 2022.

5 ALTERNATIVES

5.1 The EIA Regulations Schedule 4, Part 1 (ref: 5.1) requires that an ES provides:

> *"An outline of the main alternatives studied by the applicant and an indication of the main reasons for the choice, taking into account the environmental effects".*

5.2 This section outlines the need for the development and the main alternatives considered.

NEED FOR THE DEVELOPMENT AND ITS OBJECTIVES

5.3 Lower Rainham is a primary location for development where sustainable growth is to be concentrated. The Council has a duty to provide a sufficient and continuous five year supply of housing to meet its identified needs. There is a pressing need for housing to be delivered in the Medway Council area and the Site represents a major strategic development opportunity on which to provide much needed housing. (Further commentary on this is provided within Chapter 6 of this ES and in the Planning Statement accompanying the application).

5.4 The key objectives of the Application can be summarised as follows:

(i) Creation of an attractive, deliverable, sustainable development in accordance with planning policy; and
(ii) Provision of much needed housing.

ALTERNATIVES

5.5 There are a number of ways of considering Alternatives – the status quo or 'do nothing scenario'; different sites; different uses and different design/layout combinations.

5.6 These are considered briefly in turn below.

Do Nothing Scenario

5.7 Guidance on the preparation of an EIA suggests that the evaluation of a site in the absence of specific proposals should be addressed, which can be described as the "do nothing" alternative. The "do nothing" scenario is a hypothetical alternative, conventionally considered in EIA as a basis for comparing the development proposal under consideration.

5.8 In this situation, this would comprise the land remaining under horticultural use, with very limited public access. However, a top fruit orchard will reach the end of its productive life after around 14 years; thereafter the yield diminishes as the trees effectively become 'exhausted'. The orchard on Pump Farm is at maximum maturity and is no longer a benefit-yielding Site. Furthermore, the farm is surrounded by residential development from whence a number of complaints about farming operations have been made. Access is difficult given its location resulting in farm machinery and HGV's travelling through highly populated, urban areas potentially increasing traffic, pollution and noise – as such, movement and growth is restricted at the farm which prevents modernisation and investment.

Site Alternatives

5.9 The land within the Application is under the control of AC Goatham and Son.

5.10 Other land in other locations around the wider locality of the Peninsula that is controlled by AC Goatham and Son is also already used for fruit farming. Together, the farms make up the AC Goatham and Son business entity.

5.11 There is no reasonable alternative Site for the provision of the orchards currently farmed at Pump Farm.

Use Alternatives

5.12 As identified above, replacement orchards would require significant investment. Resulting improved yields would produce more fruit and a consequential increase in associated traffic movements by workers, machinery, HGV's over the existing situation, which would not be welcomed by local residents.

5.13 Notwithstanding the quality of the land, diversification into arable, dairying, or other pastoral farming is not practicable due to the capital outlay of specialist machinery, reduced labour, new buildings to store grain/milk cattle, location of the land within an urban environment potentially resulting in continued complaints from residents, conflict with dog walkers, etc.

5.14 Consequently, alternative farming uses are not considered to be a viable alternative (new Technical Appendix 13.2(i), Farm Business Financial Viability, August 2020).

Design Alternatives

5.15 Discussions concerning the nature and form of the development of the Site have been on-going for a number of months. During this time various design solutions have been considered. The Design and Access Statement accompanying the Applications details the most recent evolution of the design. The ES summarises a selection of the design alternatives below.

November 2018 Initial Design Concept Masterplan

5.16 The initial design concept in November 2018 as presented to MC as part of the pre-application discussion process (Figure 21 in the Design and Access Statement). The principles here focussed on the creation of a single urban extension with a community hub containing a primary school and provision for Class E uses (formally A1, A2, A3, A4, A5, D1 or D2 uses), a 60 bed care home, open space, play space and other green infrastructure, associated accesses (vehicular, pedestrian, cycle).

The Illustrative Masterplan (February 2019) (Figure 5.1)

5.17 The Illustrative Masterplan design submitted with the application package in May 2019 is shown in **Figure 5.1** and described in chapter 6 of the ES. A number of refinements were made to that Proposed Development in response to further assessment work and comments made during the pre-application and consultation process. The Masterplan includes further landscaping, refinement of the drainage strategy and swale locations, introduction of character areas within the residential development, the introduction of a 60 be extra care facility.

The Illustrative Masterplan (September 2020) (Figure 1.2a)

5.18 A number of refinements have been made to the Proposed Development in response to further assessment work in seeking to address the reasons for refusal (as referenced in paragraph 3.4). The Illustrative Masterplan (Figure 1.2a) includes refinements to landscaping detail and green infrastructure particularly to the west of Pump Lane/south of Lower Rainham Road around the Proposed Development access, in the south-west adjacent to the Lower Twydall Conservation Area and within the school site plot south of Lower Rainham Conservation Area.

6 DEVELOPMENT DESCRIPTION

6.1 The formal description of development for this application is as follows:

> *"Redevelopment of land off Pump Lane to include residential development comprising upto 1,250 residential units, a local centre (with final uses to be determined at a later stage), a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated accesses (vehicular, pedestrian, cycle)."*

6.2 This application relates only to the area shown on **Figure 1.2a.** The parameter plans (land use, building heights, movement, blue/green infrastructure) at **Figures 2.1a-2.4a** have formed the basis of the EIA for the Application. Appropriate conditions attached to any planning permission would ensure that the detailed design is in accordance with these parameter principles.

LAND USE AND QUANTUM

6.3 **Table 6.1** sets out the proposed land uses and Site area/floorspace as described above. This table should be read alongside the parameter plans (**Figures 2.1a-2.4a**)

Table 6.1: Development Quantum Masterplan Application

Land Use	Ha	Amount
Residential	29.78	Up to 1250 dwellings
Village Green	1.12	
Local Centre	0.64	Up to 1,000sqm
Primary School	2.60	
Green/Blue Infrastructure	15.69	
Care Home and Extra Care Facility	1.23	Up to 140 beds
TOTAL	**51.07**	

PARAMETERS

Land Use, Amount and Density (Figure 2.1a)

6.4 The scale of the Masterplan Application Development has had regard to the existing context of the Site, its relationship to the local and wider landscape, topography, views and the nature of the surrounding rural environment. As such, up to 1,250 dwellings are considered deliverable in design terms within identified environmental constraints.

6.5 The dwellings will consist of both market and affordable properties, designed as a range of family housing rather than apartments either side of Pump Lane. Densities will have an average of 15 dwellings per acre pending on the location within the masterplan.

6.6 The local centre comprises a strategic community hub containing a primary school (to the east of Pump Lane) and up to 1000 sq. m of commercial and community space consisting of uses falling in class E (formally A1, A2, A3, A4, A5, D1, D2) (west of Pump Lane), albeit the precise combination of retail and community facilities is to be determined at a later stage. Residential use (class C1) will also form part of the local centre with the aforementioned class E uses at ground level.

6.7 The two form entry primary school is located close to the local centre hub area and is readily accessible on foot or by cycle from the whole of the new development as well as the existing housing area to the south of the Site.

Building Heights (Figure 2.2a)

6.8 The Building Heights Parameter Plan identifies maximum heights. Building heights are measured against AoD. In broad terms the residential development will have a typical 9m ridge height, with the majority of the dwellings across the Site being two storeys. However, albeit undefined at present, there will be some variation in residential height and storeys to a maximum of 12m AoD. Consequently, the maximum building height parameter within the residential areas (including the care/extra care) is 12m.

6.9 Within the village centre, maximum building heights are 10m AoD.

6.10 The maximum building height allowance for the school is 10m AoD.

6.11 The building heights have been informed by early landscape analysis and inputs and have been prepared having regard to the endorsed Masterplan and design approach. Further details are set out in the Design and Access Statement produced by PRC which accompanies the planning application.

Movement (Figure 2.3a)

6.12 The Movement Parameter Plan identifies the main access into the Site from Lower Rainham Road. Secondary points of access are provided either side of Pump Lane to both the north and south of the Russet Farm complex. Neither the main access nor the secondary access points on Pump Lane are reserved as part of the application – they are fixed.

6.13 Indicative points of access for cyclists and pedestrians are proposed via Lower Twydall Road in the far south western corner of the Site, as well as the existing bridleway and main estate road.

6.14 The existing bridleway runs west-east from Pump Lane and is to remain in situ.

6.15 The Transport Assessment together with the Design and Access Statement accompanying the Application sets this out in detail – a summary of the key principles are outlined here.

(i) Primary street/major access road – all-purpose main vehicular road through the Site with a 5.5m carriageway and 2m;
(ii) Minor access road access – leading off from the major access road into the heart of the Development, minimum 4.8m carriageway with some shared surfaces.

Green/Blue Infrastructure (Figure 2.4a)

6.16 Existing vegetation across the Site has been retained as far as possible as shown on the Green and Blue Infrastructure Parameter Plan. Some loss of hedgerow and trees has been necessary to facilitate development.

6.17 The proposed green areas will be set aside as public open space to be secured via the S106 agreement. The detailed design of the attenuation basins and the landscaping of the Site will be determined at the reserved matters stage. Within residential areas further green spaces and play areas are proposed to provide local amenity space.

6.18 The bridleway crossing the eastern part of the Site from west to east will be retained within its existing hedgerows. It will need to be crossed in two places to accommodate the proposed main vehicular road through the Development.

6.19 Existing non-fruit trees and hedgerows will be retained as far as possible and have been used to define the types of green space and development blocks.

DEVELOPMENT PROGRAMME AND CONSTRUCTION

Phasing

6.20 It is difficult to be precise in respect of the phasing of the Development as this is essentially dependent on the timing of securing the planning permission. A detailed phasing strategy is not, therefore, confirmed at this stage. The planning application approval would likely be subject to a condition requiring the submission of a phasing plan prior to commencement.

6.21 Subject to the timing of planning permission, the construction of development is assumed as follows – planning permission received end 2019, submission of first reserved matters end first quarter 2020, start on site end 2020, first house completion autumn 2021, whole site completion April 2030. Accepting that these dates have now been superceded with the passage of time, the principles of the timescales involved for each part of the Development process described remain.

Utilities and Services

6.22 A programme of new infrastructure, upgrades and diversions will be required to facilitate the scale of development proposed. This will include works to electricity, gas, potable water and foul drainage networks. A Utilities Assessment Report detailing existing infrastructure has been submitted as part of the planning application documentation.

Construction

6.23 Construction methods are influenced by a combination of factors including the existing ground conditions and the preferred methods of the building contractor that will be appointed. As such, a programme for the delivery of the development has not yet been established. The identification of potentially significant effects at the construction stage (and the identification of suitable mitigation measures) assumes that a generic construction methodology will be adopted based on standard construction methods and timings derived from similar developments in similar locations. The assumptions made will need to be realistic and appropriate to the development proposed, and many will ultimately be defined in the Construction Environmental Management Plan (CEMP).

6.24 It is assumed that construction of built development will be more or less continuous throughout this time and will include the following activities:

(i) **Enabling works and site preparation:** to include earth moving (cut and fill) and arboricultural works.
(ii) **Provision of infrastructure:** to include the provision of the north-south relief road and access points into the Proposed Development from the relief road.
(iii) **Construction of substructure:** to include localised re-grading, excavation for foundations and installation of ground slabs.
(iv) **Construction of superstructure: comprising the** construction of the main building envelope.
(v) **Fit out of buildings**: to include the installation of insulated timber frames or block work party walls, surfaces finishes, internal division walls, mechanical and electrical installations; and internal fixtures.
(vi) **Landscaping:** soil preparation; tree and vegetation planting, seeding, and construction of footpaths/ cycle routes.

6.25 Enabling works and site preparation will include:

(i) Earth moving – excavation and grading;

(ii) Arboricultural works – including the protection of trees/vegetation to be retained and removal of trees/vegetation to be lost; and
(iii) Some new structural planting may also be implemented as part of the site.

Hours of Work

6.26 It is anticipated that the working hours for works audible at the Site boundary will be as set out below:

(i) 0730 – 1800 Monday to Friday;
(ii) 0800 – 1300 Saturday; and
(iii) No working on Sundays or Bank Holidays.

6.27 These hours will be agreed with the Council prior to the commencement of the works. All work outside of these hours will be subject to prior agreement, and/ or reasonable notice, to the Council, who may impose certain restrictions and will have regard to any planning conditions attached to any grant of permission. Night-time working will be restricted to exceptional circumstances.

Construction Environmental Management Plan (CEMP)

6.28 A CEMP which will clearly set out the methods of managing environmental issues for all involved with the construction works, including supply chain management, will be provided to the Council prior to commencement of the relevant phase of works.

6.29 Throughout the ES measures are set out to mitigate the effects of the Proposed Development during construction. These would be collated in, and implemented by, the CEMP where appropriate.

Waste Management, Recycling and Disposal

6.30 Waste will be generated during all stages of the construction works. Sources of waste within the construction process include:

(i) Packaging – tins, plastics, pallets, expanded foams etc.;
(ii) Dirty water, for example from silt; and
(iii) Timber, off-cuts etc.

6.31 All relevant contractors will be required to investigate opportunities to minimise waste arisings at source and, where such waste generation is unavoidable, to maximise the recycling and re-use potential of construction materials. Wherever feasible, such arisings will be dealt with in a manner that reduces environmental impact and maximises potential re-use of materials.

6.32 A Site Waste Management Plan (SWMP) will be implemented specifically to mitigate the effects of waste arisings during the construction of the Proposed Development. Measures will include:

(i) Making efficient use of materials, including the use of recycled and existing materials on site when and where appropriate; and
(ii) Screening and crushing of surplus material generated during site clearance (where the opportunity exists) prior to relocation in order to reduce the amount of waste generated on the Site.

6.33 For those materials removed from the Application Site, notification by the Construction Liaison Officer for approval (via consultation with the authorities) will take place. Loads will only be deposited at authorised waste treatment and disposal sites. Deposition will be in accordance with the requirements of the Environment Agency (EA); the Environmental Protection Act 1990 (ref 6.1); the Environmental Protection (Duty of Care) Regulations 1992

as amended, (ref 6.2); the Waste Management (England and Wales) Regulations 2006 (ref 6.3); the Landfill (England and Wales) Regulations 2002 and the Landfill (England and Wales) (Amendment) Regulations 2000 (ref 6.4); the Hazardous Waste (England and Wales) Regulations 2005 (ref 6.5); and the List of Wastes (England) Regulations 2005 (ref 6.6).

6.34 To prove the correct depositing of excavated material and to prevent the occurrence of fly-tipping, a waste transfer note system will be used in accordance with the Environmental Protection (Duty of Care) Regulations 1992.

Site Drainage and Effect on Water Resources

6.35 The potential effects on water resources during the construction process are likely to include:

(i) Water demand for construction activities and domestic use by the contractor (however, this is anticipated to be low);
(ii) Generation of domestic foul effluent by contractors;
(iii) Increase in rate of run-off due to creation of impermeable areas for contractor's site facilities, construction of road infrastructure and buildings; and
(iv) Risk of pollution of run-off and groundwater due to construction activities.

6.36 Surface water drainage will be controlled and discharge arrangements will be agreed with the EA or, in the case of discharges to sewer, Southern Water as set out in Chapter 8 (Water Resources).

6.37 The Construction Liaison Officer will ensure that any water which may have come into contact with any contaminated materials during construction will be disposed of in accordance with the Water Resources Act (1991) (ref 6.7) and other legislation, and to the satisfaction of the EA. In addition, any risk will be reduced by adopting good management practices.

6.38 All liquids and solids of a potentially hazardous nature (for example diesel fuel, oils, solvents) will be stored on surfaced areas, with bunding, to the satisfaction of the EA.

7 ECONOMY, POPULATION AND SOCIETY – SOCIO ECONOMICS

INTRODUCTION

7.1 The chapter has been prepared by Rapleys LLP and assesses the potential socio-economic impacts of the Proposed Development on the surrounding locality, both during the construction and operational stages.

7.2 It sets out the policy context of the Development in relation to socio-economic issues and describes the methodology used in assessing the socio-economic impacts.

7.3 The baseline position has been established to confirm the socio-economic profile of the area using published data gathered from a variety of sources. The chapter goes on to describe the potential impact that the Development may have on the local baseline conditions, including consideration of cumulative impacts.

CONTEXT

7.4 A review of planning policy is set out below, where relevant to socio-economic issues.

National Planning Policy Framework

7.5 In accordance with the NPPF (ref 7.1) the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

(i) **An economic objective** – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

(ii) **A social objective** – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

(iii) **An environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

7.6 The following parts of the NPPF are relevant to this chapter of the ES:

5. Delivering a sufficient supply of homes:

7.7 The Government's objective is to significantly boot the supply of homes ensuring that a sufficient amount and variety of land can come forward where it is needed, that the needs of groups with specific housing requirements are addressed ,and that land with permission is developed without unnecessary delay (para.59).

6. Building a strong, competitive economy:

7.8 Planning decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development (para.80).

8. Promoting healthy and safe communities:

7.9 Planning decision decisions should aim to achieve healthy, inclusive and safe places which:

(i) Promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;

(ii) Are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas; and

(iii) Enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling (Para.91)

7.10 To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should (amongst other principles):

(i) Plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments;

(ii) Take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community; and

(iii) Ensure an integrated approach to considering the location of housing, economic uses and community facilities and services (Para 92).

7.11 To ensure that a sufficient choice of school places is available to meet the needs of existing and new communities, planning decisions should give great weight to the need to create, expand or alter schools and work with schools promoters, delivery partners and statutory bodies to identify and resolve key planning issues before applications are submitted (Para. 94).

7.12 In relation to open space and recreation, the NPPF recognises (para.96) that access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities.

7.13 Decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users (para. 98).

Relevant 'Saved' Policies of The Medway Local Plan 2003 (ref 7.2)

7.14 Several policies were saved by the Sectary of State in September 2007. Local Plan policies relevant to this chapter of the ES are summarised below:

(i) **Policy S1: Development Strategy:** The development strategy for the plan area is to prioritise re- investment in the urban fabric. This will include the redevelopment and recycling of under-used and derelict land within the urban area, with a focus on the Medway riverside areas and Chatham, Gillingham, Strood, Rochester and Rainham town centres.

Land use and transport will be closely integrated, and priority will be given to a range of new and improved transport facilities, including facilities for walking, cycling and public transport.

Strategic economic development provision will be made both within the urban area and at Kingsnorth and Grain.
In recognition of their particular quality and character, long-term protection will be afforded to:

(a) areas of international, national or other strategic importance for nature conservation and landscape; and

(b) the historic built environment, including the Historic Dockyard, associated sites and fortifications.

Outward peripheral expansion onto fresh land, particularly to the north and east of Gillingham, will be severely restricted. The open heartland of Medway at Capstone and Darland will be given long-term protection from significant development.

(ii) **Policy S2: Strategic Principles:** The implementation of the development strategy set out in policy S1 will focus on:

(a) maintaining and improving environmental quality and design standards;

(b) a sustainable approach to the location and mix of new development, to provide local communities with a range of local facilities, (including transport measures to serve development and sensitivity in the use of energy and natural resources);

(c) the adoption of a sequential approach to the location of major people and traffic attracting forms of development, including retailing, leisure, educational and health facilities.

(iii) **Policy BNE1***: General Principles of Built Development* supports development which is appropriate in relation to the character, appearance and functioning of the built and natural environment by *inter alia*:

(a) being satisfactory in terms of use, scale, mass, proportion, details, materials, layout and siting; and
(b) respecting the scale, appearance and location of buildings, spaces and the visual amenity of the surrounding area".

(iv) **Policy CF2** *New Community Facilities* permits facilities where:

(a) the size and scale of development being appropriate to the site;
(b) the development having no detrimental impact on the countryside, residential amenity, landscape or ecology; and
(c) accessibility to the local population by a variety of means of transport, including public transport, cycling and walking.

METHODLOGY

7.15 The majority of the Site lies in the Rainham North ward. Given that this ward adjoins the Twydall ward, consideration has been given to the existing baseline conditions of Twydall alongside the Rainham North ward.

7.16 To allow for a wider assessment, the existing baseline conditions of the following geographical scales have also been reviewed, where possible:

(i) Medway (Local Authority Area);
(ii) South East (regional); and

(iii) England (national).

7.17 In confirming the methodology, reference has been made to the DoE Good Practice Guide on Environment Assessment (DOE, 1995) (ref. 7.3), works by Chadwick (2002) (ref. 7.4) and Morris and Therival (2001) (ref. 7.5)

Baseline Methodology

7.18 The Proposed Development has been assessed in the context of an analysis of the socio-economic characteristics of the research area, including:

(i) Demographics;
(ii) Economy and Employment;
(iii) Wealth and Deprivation;
(iv) Housing;
(v) Education and Training;
(vi) Health, Community and Leisure; and
(vii) Shopping.

7.19 The baseline assessment of the socio-economic conditions was predominantly a desk-based exercise. The main data sources utilised are outlined below, and a full list of websites visited during the gathering of baseline data can be found in the references:

(i) Nomis Official Labour Market Statistics: 2011 Census Data (ref. 7.6);
(ii) Office for National Statistics website (ref. 7.7);
(iii) Population 2017 July 2018 - Medway Council (ref:7.8)
(iv) HM Land Registry Open Data website (ref. 7.9);
(v) North Kent Strategic Housing and Economic Needs Assessment (November 2015) (7.10);
(vi) The website of Medway Council (ref. 7.11);
(vii) Medway Infrastructure Position Statement (ref. 7.12):
(viii) The Department for Education's 'Get information about schools' (GIAS) website (ref 7.13);
(ix) The MHCLG website (ref. 7.14);
(x) Google search and maps , and
(xi) North Kent SHENA Retail & Commercial Leisure Assessment November 2016 (ref:7.15).

7.20 In terms of limitations, the baseline assessment has relied on published sources, notably the 2011 Census.

Significance Criteria

7.21 The significance of socio-economic impact arising from the Proposed Development has been judged by comparing the extent of change with standards and criteria relevant to socio-economic factors.

7.22 The standard approach of combining the magnitude of the effect with the sensitivity of the receptor, as utilised elsewhere in this ES is not, however, readily applicable to this assessment of significance as the receptor population is singularly sensitive. However, a standard approach, as set out below, can still be adopted based on qualitative judgement:

(i) Substantial impact – very large changes in socio-economic conditions, of greater than local scale;
(ii) Moderate impact – intermediate change in socio-economic conditions, at a local level;

(iii) Minor impact – small change in socio-economic conditions, of low importance;
(iv) Negligible impact – no discernible change in socio-economic conditions, below normal levels of perception; and
(v) Nil impact – no change in socio-economic conditions.

7.23 A qualitative, descriptive assessment of impacts is applicable to socio-economic assessment as it is not universally appropriate or possible to predict the precise quantum of impact, as in other areas of assessment. In terms of the spatial scope of impacts, local impacts are those affecting the Rainham North and Twydall Wards and the surrounding areas, and wider impacts are those affecting the Medway area as a whole.

Assessment Methodology

7.24 The baseline conditions of the following 'receptors' considered to be appropriate to the EIA process have been examined, analysed and an assessment made of the impacts the development will have on each of these. Each receptor has been afforded a 'medium sensitivity' reflecting the local demographics and recognising that changes can lead to significant social economic effects requiring an infrastructure response.

(i) Demographics (population (count and demographic structure)
(ii) Economy and Employment (economic activity and employment composition)
(iii) Wealth and Deprivation (levels of deprivation and material wealth)
(iv) Housing (house prices, tenures and compositions)
(v) Education and Training (level of education and existing capacities)
(vi) Health, Community and Leisure (existing facilities and provision)
(vii) Shopping (existing facilities and local centre health)

BASELINE CONDITIONS

7.25 This section considers the baseline conditions for each receptor prior to the Proposed Development commencing. For the purposes of this assessment, the Site is considered to be part of the Rainham North ward; the baseline condition is outlined within this chapter.

Demographics

7.26 **Table 7.1** sets out the increase in population identified between the 2001 and 2011 Census' across the local, district, regional and national scale. This indicates that Rainham North has experienced a proportionally larger increase in population during the ten year period in comparison to the district, regional and national scale areas.

7.27 The 2011 Census records the population of the Medway Area as 263,925 residents. Furthermore, Medway Council (Population 2017 July 2018 - Medway Council) uses a best fit approach to produce an area definition based on wards and super output areas which estimates the current (July 2017) population of to be 277,616 residents. The ONS 2018 mid-year population estimates (published in July 2019) identify the population of Medway as 277,855.

Table 7.1: Population Increase

	Rainham North	Twydall	Medway	South East	England
2001	8,677	13,282	249,488	8,000,645	49,138,831
2011	8,563	13,048	263,925	8,634,750	53,012,456

Increase (No.)	-114	-234	14,437	7,834,105	3,873,635
Increase (%)	-1.3%	-1.7%	5.7%	7.9%	7.8%

7.28 **Table 7.2** identifies the population and age distribution for the Rainham North and Twydall wards relative to the local authority, regional and national scale areas. The Census data does indicate a larger elderly population for instance, the aged 65 and over group are well represented in the Rainham North and Twydall wards, with higher than national average figures of 20.08% and 18.13%, respectively. Younger populations, in particular those aged 0 to 4 are less well represented in Rainham North and Twydall when compared to the regional and national averages.

Table 7.2: Population Age Structure

Age Group	Rainham North		Twydall		Medway		South East		England	
	No	%	No	%	No	%	No	%	No	%
0 to 4	478	5.58%	764	5.85%	17,224	6.52%	534,235	6.18%	3,318,449	6.24%
5 to 19	1,449	16.92%	2,603	19.94%	51,763	19.61%	1,542,617	17.86%	9,393,826	17.7%
20 to 29	927	10.82%	1,471	11.27%	36,622	13.87%	1,062,344	12.3%	7,246,202	13.66%
30 to 44	1,730	20.2%	2,331	17.86%	54,321	20.58%	1,761,278	20.39%	10,944,271	20.6%
45 to 64	2,259	26.38%	3,513	26.92%	66,990	25.38%	2,252,256	26.08%	13,449,179	25.3%
65+	1,720	20.08%	2,366	18.13%	37,005	14.02%	1,482,020	17.16%	8,660,529	16.3%
Total	**8,563**		**13,048**		**263,925**		**8,634,750**		**53,012,456**	

7.29 The ONS have produced 2016-based sub-national population projections for each local authority in the UK. The latest projections were published by the Medway Council in July 2018 and provide a useful update on anticipated population trends following the 2011 Census. The latest projections suggest that the population of Medway will increase by 8.2% (equating to 22,800 people) by mid-2026, ahead of the national average of 5.9%.

7.30 According to the projections, it is expected that proportion of younger people (aged 0 to 15) in Medway will increase marginally from 20.4% in 2016 to 20.7% in 2026. Whereas for the same period, the proportion of working age people (aged 16 to 64) in the Local Authority area is expected to decrease from 64% to 61.9%. The projections also suggest that the district will follow the national trend of an increasingly ageing population with the proportion of those aged 65 and over-estimated to increase from 15.6% in 2016 to 17.5% in 2026.

Economy and Employment

7.31 In general, the baseline data in **Table 7.3** shows that the percentages of those of working age (16-74 years) that are economically active in the Rainham North Ward (50.89%) is broadly comparable to Twydall (49.01%%). However, this remains lower than the Local Authority Area

(52.27%), regional (52.36%) and national figures (51.27%). The percentage of those economically active but currently unemployed in Rainham North (2.68%) is slightly lower than that of Twydall (3.47%), the wider District (3.58%) and the national average (3.21%), however, is slightly above the average for the region (2.5%).

Table 7.3: Economic Activity

	Rainham North		Twydall		Medway		South East		England	
	No.	%	No.	%	No.	%	No.	%	No.	%
Economically active	4,358	50.89%	6,395	9.01%	137,954	52.27%	4,521,184	52.36%	27,183,134	51.27%
Economically inactive	1,835	21.42%	2,876	22.04%	56,204	21.29%	1,753,157	20.30%	11,698,240	22.06%
Unemployed	230	2.68%	454	3.47%	9,469	3.58%	216,231	2.50%	1,702,847	3.21%

7.32 **Table 7.4** confirms that, in Rainham North, 37.09% of the working population work in a managerial/professional role (occupations 1-3), which is higher than Twydall (26.63%) and Medway (34.39%) however, is lower than the average for the region (44.81%) and England (41.2%). Rainham North has a higher percentage of the population working in administrative/secretarial roles at 16.05% compared to Twydall at 12.99%, the Medway (12.80%) and England (11.45%).

7.33 The percentage of the population working in skilled trades in both Rainham North (12.51%) is lower than both the average for Twydall (14.92%) and for Medway (13.07%) however is higher than both the average for the region (11.1%) and England (11.36%). The percentage of people working in process plant and machinery roles is at 6.696% within Rainham North; this is lower than Twydall at 10.1%. Within the Medway, 8.58% of the population works within process plant and machinery, while the average in England is 7.18%.

Table 7.4: Employment by Occupation

Occupation	Rainham North		Twydall		Medway		South East		England	
	No.	%	No.	%	No.	%	No.	%	No.	%
1. Managers, directors and senior officials	430	10.51%	462	7.85%	11,924	9.41%	521,978	12.25%	2,734,900	10.86 %
2. Professional occupations	565	13.81%	533	9.06%	16,404	12.94%	798,224	18.73%	4,400,375	17.48%
3. Associate professional and technical occupations	523	12.78%	556	9.45%	15,265	12.04%	589,352	13.83%	3,219,067	12.79%
4. Administrative and secretarial occupations	657	16.05%	764	12.99 %	16,223	12.80%	488,467	11.46%	2,883,230	11.45%
5. Skilled trades occupations	512	12.51%	877	14.92 %	16,564	13.07%	473,290	11.10%	2,858,680	11.36%

6. Caring, leisure and other service occupations	348	8.50%	612	10.41 %	12,171	9.60%	397,104	9.32%	2,348,650	9.33%
7. Sales and customer service occupations	370	9.04%	653	11.1%	11,670	9.21%	336,150	7.88%	2,117,477	8.41%
8. Process plant and machine operatives	274	6.69%	594	10.1%	10,870	8.58%	242,998	5.703%	1,808,024	7.18%
9. Elementary occupations	412	10.07%	827	14.06 %	15,598	12.31%	413,160	9.69%	2,792,318	11.09%
All categories: Occupation	4,09 1		5,8 78		126,68 9		4,260,7 23		25,162,72 1	

7.34 **Table 7.5** below identifies and displays the distribution of employee jobs by economic sector. Within both Rainham North and Twydall wards, the largest economic sectors by number of employees are: wholesale and retail trade including motor vehicle repair; human health and social work; Manufacturing and construction. This remains consistent with the Local Authority Area, regional and national contexts, with other high value sectors such as information and communication, real estate activities and Electricity, gas, steam and air conditioning supply less represented at the Rainham and Twydall wards, indicating a lower skilled local economy.

Table 7.5: Employment by Industry

Industry	Rainham North		Twydall		Medway		South East		England	
	No.	%	No.	%	No.	%	No.	%	No.	%
Agriculture, forestry and fishing	10	0.24%	15	0.25%	446	0.35%	28,582	0.67%	203,789	1.6%
Mining and quarrying	2	0.04%	2	0.03	83	0.06%	5,832	0.13%	43,302	0.2%
Manufacturing	297	7.25%	517	8.79%	9,603	7.57%	306,391	7.19%	2,226,247	9.1%
Electricity, gas, steam and air conditioning supply	19	0.46	20	0.34%	966	0.76%	24,500	0.57%	140,148	0.6%
Water supply, sewerage, waste management and remediation activities	51	1.24%	67	1.13%	1,523	1.2%	29,749	0.69%	175,214	0.8%
Construction	444	10.85%	707	12.02%	13,857	10.93%	339,761	7.97%	1,931,936	8.0%
Wholesale and retail trade; repair of motor vehicles and motor cycles	728	17.79%	1,179	20.05%	22,022	17.38%	662,860	15.55%	4,007,570	16.2%
Transport and storage	224	5.47%	425	7.23%	7,672	6.05%	222,795	5.22%	1,260,094	4.0%

Accommodation and food service activities	166	4.05%	242	4.11%	5,639	4.45%	214,329	5.03%	1,399,931	6.3%
Information and communication	100	2.44%	100	1.7%	3,398	2.68%	235,081	5.51%	1,024,352	3.3%
Financial and insurance activities	303	7.4%	253	4.3%	6,336	5%	191,566	4.49%	1,103,858	3.7
Real estate activities	56	1.36%	83	1.41%	1,591	1.25%	61,133	1.43%	367,459	1.4
Professional, scientific and technical activities	245	5.98%	184	3.13%	5,988	4.72%	317,787	7.45%	1,687,127	5.9
Administrative and support service activities	165	4.03%	284	4.81%	6,408	5.05%	219,830	5.15%	1,239,422	4.4
Public administration and defence; compulsory social security	316	7.72%	341	5.8%	9,688	7.64%	255,674	6%	1,483,450	7.1
Education	338	8.26%	513	8.72%	11,215	8.85%	432,119	10.14%	2,490,199	9.7
Human health and social work activities	443	10.82%	703	11.95%	14,754	11.64%	495,212	11.62%	3,121,238	12.9
Arts, entertainment, recreation and other services	179	4.37%	239	4.06%	5,355	4.22%	208,963	4.9%	1,257,385	4.8

7.35 The Annual Survey of Hours and Earnings (ASHE) provides the most comprehensive and up to date source of information on the structure and distribution of earnings in the UK. The latest data from 2018 identifies that the average weekly earnings for full-time workers in Medway (£536.6) are lower than that of the regional average (£589.2) and the national average (£575). Similarly, the survey finds that full-time workers in the District work on average 37.5 hours a week, which is in line with both the regional and national average at 37.5 hours a week.

7.36 In **Table 7.6**, the travel to work distances from the 2011 Census are displayed. The largest proportion of residents in Rainham North travel 'less than 10 km' to get to work; this is generally consistent with the wider comparator areas (however lower than the average for England (52%) but still indicates a strong level of local employment).

Table 7.6: Travel to Work

	Rainham North		Twydall		Medway		South East		England	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 10km	1,866	45.61%	3,129	53.23%	58,827	46.43%	1,999,263	46.92%	13,162,415	52%
10 km to less than 30 km	677	16.30%	1,006	17.11%	23,488	18.53%	884,170	20.75%	5,287,919	21%
30 km and over	836	20.43%	736	12.52%	21,519	18.53%	494,686	11.61%	2,002,678	8%

Other	712	17.4%	1,007	17.13%	22,855	18.04%	882,604	20.71%	4,709,709	19%

Wealth and Deprivation

7.37 Overall, the levels of deprivation in Medway are found to be relatively low on the Index of Deprivation 2015, ranking 121st out of 326 local authorities (where 1 equals the most deprived). Deprivation data is not available at ward level but the most recent review of the deprivation index carried out by Medway Council (2016) prepared by Medway Council indicates that the Site is not located within an area identified as having the most deprivation within Medway.

7.38 In terms of car ownership, 79.1% of households have at least one car or van in the Rainham North ward, whereas 74 of households do so in Twydall. This compares to 78.12% of households in the District, 81.42% in the wider region and 74% in England.

7.39 **Table 7.7** shows that 76.46% of all households in Rainham and 66.22% of all households in Twydall are owner occupiers (either outright or with a mortgage). This falls above (marginally lower for Twydall) the Medway average at 67.65%, but higher than the national average of 63%. Rainham North appears to have a lower proportion of households under social rented tenure (7.45%) in comparison to the Medway (13.77%), region (13.71%) and country (18%), whereas Twydall (24.03%) has a higher proportion of social rented tenure households to the comparator areas.

Table 7.7: Housing Tenure

	Rainham North		Twydall		Medway		South East		England	
	No.	%	No.	%	No.	%	No.	%	No.	%
Owned	2,872	76.46%	3,538	66.22%	71,853	67.65 %	2,404,517	67.62%	13,975,024	63%
Shared ownership	10	0.266%	20	0.37%	1,114	1.04%	39,280	1.1%	173,760	1%
Social rented	280	7.45%	1,284	24.03%	13,996	13.77 %	487,473	13.71%	3,903,550	18%
Private rented	552	14.69%	414	7.74%	18,153	17.09 %	578,592	16.27%	3,715,924	17%
Living rent free	42	1.11%	86	1.6%	1,093	1.02%	45,601	1.28%	295,110	1%

Housing

7.40 As set out in **Table 7.7**, 14.69% of households in the Rainham North ward are under private rental tenure; this is lower than the regional (16.27%) and national (17%) averages. The Twydall Ward considerably lower with only 7.74% of all households identified as being under private rental tenure.

7.41 With regards to household composition, there are less single person households (30.61%) than married couple households (34.69%) within Rainham North, this is also constant with Twydall ward there are a greater proportion of married couple households (33.39%) than single person households (27.55%). For reference, the level of single person households and married couple households in Medway is 27.71% and 35.09% respectively, and in England, 30.21% and 33.08% respectively.

7.42 The percentage of one-family pensioner householders in both the Rainham North is 26.27%, which is higher than the Medway (18.17%) and England average (20.46%).

7.43 Medway Council have not provided details on the vacancy rates within Medway.

7.44 In terms of the level of detached housing, the overall Local Authority Area has a lower rate than the national average (22.43%) at 13.82%. This is similar to that of the ward Rainham North (13.15%) with the Twydall ward considerably lower at 4.97%. In comparison, at the region level, 28.19% of houses in the South East are detached. The percentage of terraced housing within Rainham North and Twydall is 39.32% and 38.33% respectively, which compares to a Medway average of 40.82%, however these are well above the national average of 25%.

7.45 According to the HM Land Register Open Data website, the average house price in Medway (as of February 2019) was £242,370, which is considerably lower than the regional average of £315,700 and marginally lower than the national average of £242,964. In December 2019 figures for Medway had increased to £250,000. This is still considerably lower than the South-East as a whole at £325,000. Using the ONS' 2017 house price to residence-based earning ratio – or 'affordability ratio' – Medway can be considered to be more affordable than the wider region with an affordability ratio of 7.95, compared to 9.93 for the South East however is comparable to that of the national average of 7.91.

7.46 Based on the November 2015 North Kent Strategic Housing and Economic Needs Assessment the Local Authority Area has an objectively assessed housing need figure of 1,124 homes per year (between 2012-2037).

Education and Training

7.47 **Table 7.8** below indicates that the general level of education obtained within Medway is slightly lower than the comparator areas considered within this section. For instance, the Rainham North and Twydall wards have a lower proportion of people with level 4 qualifications, at 18.81% and 12.87% respectively, in comparison to 19.13%, 29.94% in the surrounding region and 27% at the national scale.

Table 7.8: Level of Qualification

	Rainham North		Twydall		Medway		South East		England	
Highest level of qualification	No.	%	No.	%	No.	%	No.	%	No.	%
No qualifications	1,634	23.27%	3,150	30.2%	48,226	22.9%	1,333,955	19.07%	9,656,810	22.5%
Level 1 qualification	1,120	15.95%	1,922	18.43%	35,473	16.85%	946,056	13.52%	5,714,441	13.3%
Level 2 qualifications	1,302	18.54%	1,792	17.18%	38,653	18.36%	1,110,706	15.88%	6,544,614	15.2%
Level 3 qualifications	869	12.37%	1,157	11.09%	26,818	12.73%	892,915	12.76%	5,309,631	12.4%
Level 4 qualifications	1,321	18.81%	1,343	12.87%	40,275	19.13%	2,093,693	29.94%	11,769,361	27.4%

7.48 From the Department for Education's 'Get information about schools' (GIAS) website, it has been identified that there is one primary school and one secondary school in within 1km of the site. There are a further eleven primary schools within 3 km of the Site. **Table 7.9** represents the current capacities of primary schools in Medway as registered with the Department of Education. This indicates that the current deficit capacity for additional primary school children within 1km of the site is -62, with a deficit capacity of -314 in primary schools within 3km of the Site.

Table 7.9: Primary School Capacity Levels

Name	Type	Distance	Capacity	Roll	Surplus/Deficit
Thames View Primary School	Primary, Academy converter	0.91km	420	482	-62
				Sub-total:	-62
Meredale Independent Primary School	Not applicable, Other independent school	1.65km	140	79	61
Twydall Primary School and Nursery	Primary, Academy sponsor led	1.67km	525	500	52
Riverside Primary School	Primary, Academy converter	1.67km	210	231	-21

St Margaret's Infant School	Primary, Academy converter	1.8km	270	322	-52
St Margaret's Church of England Junior School	Primary, Academy converter	1.8km	360	356	4
Featherby Infant and Nursery School	Primary, Academy converter	2.1km	270	324	-54
Featherby Junior School	Primary, Academy sponsor led	2.1km	360	348	12
Miers Court Primary School	Primary, Academy converter	2.4km	420	420	0
Woodlands Primary School	Primary, Academy converter	2.6km	420	681	-261
Holywell Primary School	Primary, Community school	3km	210	203	7
TOTAL CAPACITY (within 3km)					**-314**

7.49 The level of capacity at the only secondary school in the area is set out below in **Table 7.10**. This indicates a deficit of -13 places at the Rainham Mark Grammar School which is located 1km from the Site and an overall surplus within 3km of 297 spaces.

Table 7.10: Secondary School Capacity Levels

Name	Type	Distance	Capacity	Roll	Surplus/Deficit
Rainham Mark Grammar School	Secondary, Academy converter	1km	1242	1355	-13
TOTAL					**-13**
The Howard School	Secondary, Academy converter	1.85km	1725	1415	310
Rainham School for Girls	Secondary, Academy converter	1.97km	1558	1644	-86
The Robert Napier School	Secondary, Academy sponsor led	3km	1080	994	86
TOTAL CAPACITY (within 3km)					**297**

7.50 A desk-top review of nurseries and pre-schools in Medway (ref. 8.15) finds the following facilities, all of which are within 1.5 km from the Site:

(i) Busy Bees at Gillingham;

(ii) Featherby Infant and Nursery School;
(iii) Twydall Primary School Nursery & Childrens Centre; and
(iv) Scallywags Nursery.

7.51 The Medway Infrastructure Position Statement published in January 2017 (ref. 8.19) recognises that education is likely to be a key infrastructure issue in Medway due to the anticipated delivery of houses over the Local Plan period. It has specifically identified that there is a shortfall in early years, primary and secondary, however, it has also identified that there is no deficiency in further education.

7.52 The position statement goes on to detail that a new Primary School is being developed at Hoo St Werburgh and one has been included as a part of the Rochester Riverside development along with a potential planned expansion of the Medway University campus. The Proposed Development also incorporates the creation of a new primary school.

Health, Community and Leisure

7.53 The 2011 Census data highlights that the proportion of residents in the Rainham North (81.31%) and Twydall (77.91%) wards that consider themselves to be in a 'good' or 'very good' state of health is lower than the average of Medway (81.96%), the regional average (83.63%) and national average (81.38%).

7.54 In terms of local health facilities that are in close proximity to the Site, a desk-top review has identified one GP practice, the details of which are set out below in **Table 7.11**.

Table 7.11: GP Capacity

GP Practice	No. GPs	Practice List	Patients per GP	Currently accepting patients
Waltham Road Medical Centre	1	1,686	1,686	Yes
Pump Lane Surgery	1	2079	2,079	Yes
Orchard Family Practice	2	4,939	2,469	No
Thames Ave Surgery	3	5,474	1,825	Yes
Dr Vridhagiri Nandini	1	2,125	2,125	Yes
Maidstone Road Rainham Surgery	2	4,684	2,342	Yes

7.55 With regards to secondary care, the Will Adams NHS Treatment Centre is located approximately 800m to the west of the site and the Medway Maritime Hospital is located approximately 3.3km to the west - these offer a range of healthcare services for the local towns and wider rural area. A desk-top review of existing health facilities has also identified that there is one dental surgery and four pharmacies, all of which are within 2.5 km distance to the Site.

7.56 The surrounding area has a number of community facilities, the nearest of which to the Site are:

(i) Twydall Community Centre; and
(ii) St. Margaret's Millennium Centre.

7.57 Medway does not have an up-to-date open space strategy, therefore it is not possible to assess the current oversupply/undersupply of open space within Medway. From a desk based study it has been identified that the following parks are located within 3km of the Site:

(i) Riverside Country Park Copperhouse Lane;
(ii) The Strand (park and garden);
(iii) Gillingham Park;
(iv) Luton Rec (park);
(v) Hempstead Park; and
(vi) Hilly Fields Community Park.

7.58 The Proposed Development includes the following blue and green infrastructure – some 14.48ha including a village green (1.125ha). The precise use of these areas will be agreed with the Council at a later stage through a S106 agreement.

Shopping

7.59 The closest food retail facility to the Site is a Tesco express store located approximately 1.2 km to the south on London Road. Beyond this, there is also a Londis, Iceland Foods, Aldi another Tesco, as well as a range of small convenience and comparison retail facilities within the wider area of Gillingham and Chatham.

7.60 In terms of retail, the most recent evidence-based document is the North Kent SHENA Retail & Commercial Leisure Assessment (November 2016). This does not provide details on the total market shares of comparison and convenience good within Medway as a whole, but focuses on the turnover and market growth.

7.61 The Medway Council Retail Needs Study (2009) identifies that Medway's market share of total convenience expenditure is estimated to be 36.4% (£457.19 million of £1,255.13 million). It also identifies that Medway's market share of comparison expenditure is estimated to be 31% (£682.27 million).

IMPACTS

Construction Impacts

7.62 This section considers the effects of the construction phase on the baseline conditions. The main socio economic impacts during construction relate to economy and employment, and specifically, job creation.

Demographics (population (count and demographic structure)

7.63 Given the levels of construction employment in the Local Authority Area and ability of the labour market to meet demand, no population migration will be required for the construction.

7.64 As a result, the overall impact of the Proposed Development on population is considered to be ***nil***.

Economy and Employment (economic activity and employment composition)

7.65 The construction phase will offer benefits to the economy in terms of jobs created directly on the Site, through the local sourcing of materials and spend of workers. Direct and indirect, temporary and permanent jobs are likely to be created during this time. Likely skills required and jobs created include:

(i) Ground workers in carrying out excavations, foundations and drainage;
(ii) Bricklayers and joinery;
(iii) Specialist steel frame construction;
(iv) Specialist car park construction staff;

(v) Mechanical, electrical and plumbing staff;
(vi) Building and finishing trades;
(vii) Landscape-related trades, and
(viii) Construction managers and other professionals.

7.66 The total construction workforce is currently unknown, however, the development of the Site will support additional temporary jobs locally, regionally and nationally.

7.67 There are around 13,857 construction workers in Medway. It is likely that employment requirements for the Proposed Development will displace only a small amount of existing work in the area as the requirement is a relatively small proportion of labour.

7.68 The construction phase is expected to provide some opportunities to reduce local unemployment through partnerships between housebuilders, contractors and local employment agencies. This may support jobs at the town and local level.

7.69 Overall, the impact of the Proposed Development on this receptor is considered to have a temporary effect that is **minor beneficial.**

Wealth and Deprivation (levels of deprivation and material wealth)

7.70 Increased construction employment would not be considered to materially alter the ward or District earning structure, but can sustain and grow the local sector. Therefore, it is considered to have a **negligible** effect on this receptor.

Housing (house prices, tenures and compositions)

7.71 Employment numbers which are to be supported by the construction phase of the Development are unlikely to affect the housing market in the town or District. Construction workers are expected to largely be located within the Local Authority area given the size of labour pool. Therefore, it is considered that the Development will have **nil** effect on the baseline conditions.

Education and Training (level of education and existing capacities)

7.72 The construction phase is expected to provide some opportunities to link construction to local education and training programmes. The scale of employment and size of the Development suggests that the effects on this receptor will be **negligible**.

Health, Community and Leisure (existing facilities and provision)

7.73 Modern average site accident rates are low and overall it is considered that there would be no effect on health status. Overall, the construction phase is considered to have **nil** effect on health facilities.

7.74 The construction phase is unlikely to have any significant effect on local recreational or social facilities. No facilities surrounding the Site or within Medway are anticipated to be affected by the construction process. Therefore, the construction phase is considered to have a **nil** effect.

Shopping (existing facilities and town centre health)

7.75 Constructions workers will bring indirect beneficial impacts as a result of an increase of money within the local economy and an increase in the demand and use of local services, and retail facilities.

7.76 It is likely that construction workers employed on site will utilise local facilities within the town centre causing some additional retail trade. Previous experience suggests that approximately just over half of the workforce (60%), would spend money on subsistence

averaging £6 a day (YouGov data, 2005). It can therefore be assumed that the during the construction period (10 years) the workforce at the Proposed Development will contribute around £1m to the local economy (based on a 220 day working year). The effect of the construction phase is considered to be **minor beneficial** and short to medium term.

Operational Impacts

7.77 The following section considers the potential impacts of the Proposed Development on the baseline conditions, during its operational/completed development period. The following factors are considered to be inherent mitigation that is taken into account within this assessment:

(i) Proposed on-site green space, including play to be secured via S106 Agreement;
(ii) Proposed flexible use Local Centre (up to 1,000sqm) (with final uses to be determined at a later stage);
(iii) Proposed footpaths and cycleways; and
(iv) S106 contributions.

Demographics (population (count and demographic structure)

7.78 Based on the Local Authority average household size ratio of 2.48 persons per dwelling, the Proposed Development can be expected to accommodate a population of about 3,100 new residents. The demographic make-up of the population is difficult to predict; however, it is expected that there will be a broad mix of occupiers across the Proposed Development.

7.79 The completed and occupied Development will result in an increase in population in the Medway by about 1.17%. This increase is not considered to be significant. This increase in population is considered to have **minor beneficial** effect through an increase in children and population of working age helping to balance an ongoing increase in the ageing population and decrease in working age population.

Economy and Employment (economic activity and employment composition)

7.80 The Proposed Development comprises mixed use development to include a Local Centre comprising; a strategic community hub containing a 2 form entry primary school and up to 1000 sq. m of commercial and community space with final uses to be determined at a later stage. A 60-bed care home and 80 bed extra care facility is also proposed.

7.81 Direct jobs will, therefore, be created as a result of the Development.

7.82 Overall, the Proposed Development is considered to have a **minor beneficial** permanent effect on this receptor.

Wealth and Deprivation (levels of deprivation and material wealth)

7.83 It is assumed that earnings of the incoming population will be similar to the existing and therefore that the Proposed Development is considered to have a **nil** effect on this receptor.

Housing (house prices, tenures and compositions)

7.84 The Proposed Development will provide up to 1,250 dwellings in the period 2021/22 to 2029/30, contributing around 100-150 dwellings per annum. Assuming a provision of 25% affordable housing, a total of 312 affordable homes would be delivered by the Proposed Development in the same period. The Proposed Development will deliver new homes in Medway in the short and medium terms, contributing towards the Council's five-year supply of deliverable housing.

7.85 Overall, the Proposed Development would lead to a **moderate beneficial** permanent effect on this receptor.

Education and Training (level of education and existing capacities)

7.86 The number of primary and secondary students that will be generated by the Proposed Development is calculated using the Local Education Authority's pupil yield figures as below:

(i) 0.27 pupils per dwelling for primary schools.
(ii) 0.20 pupils per dwelling for secondary schools.

7.87 It has, therefore, been estimated that up to 1,250 dwellings will generate up to 337.5 primary and 250 secondary students.

7.88 The current capacity within primary schools within 1km of the site is -61 spaces. Therefore, the Proposed Development would lead to a deficit of 398.5 primary school spaces based on the baseline conditions. While the Proposed Development would exceed the existing baseline capacity in primary schools in Medway, the proposal includes a 2 form entry primary school and as such, it is considered that the specific need requirement created by the proposal can be dealt with onsite.

7.89 The current capacity for secondary school places is -13 (within 1km of the site). A surplus of 297 secondary school places. The Proposed Development would create a demand for 250 spaces which would leave an approximate surplus of 50 spaces following occupation of the Proposed Development.

7.90 Overall, taking into account embedded mitigation, the Proposed Development will have a **minor beneficial** permanent effect on this receptor.

Health, Community and Leisure (existing facilities and provision)

7.91 Assuming a population increase of 3,100 persons, this would result in a total of 24,087 patients to be covered by 10 GPs currently based in Medway. This would mean approximately 2,408 patients per GP, which is considerably above the recommended 1,800 capacity limit set out by NHS.

Table 7.12: GP capacity with and without Proposed Development

GP Practice	No. GPs	Practice List	Patients per GP
Current	10	20,987	2,098
With Proposed Development	10	24,087	2,408.7

7.92 There are therefore exacerbated capacity issues in the local health service as a result of the Development. The mix of uses proposed within the local centre may offer the opportunity for further health care facilities to be provided, although this would also depend on funding from other sources. The effect on health services is, therefore, **a minor adverse** effect**.**

7.93 The Proposed Development would result in an increase in demand for community/leisure facilities. The Proposed Development would, therefore, have a **minor adverse** effect on community facilities.

Shopping (existing facilities and town centre health)

7.94 The Proposed Development includes provision of a local centre, the exact make up of this is to be decided at a later stage. The Proposed Development would also benefit those residents that live near to the Site providing greater choice for possible day to day, small scale, convenience needs. Therefore, have a **minor beneficial** effect on this receptor.

7.95 The proposed local centre element is not intended to replace town centre shopping trips and is intended to serve the day to day needs of future residents. On this basis the Proposed Development will have **nil** effect on town centre health.

MITIGATION

7.96 This chapter has determined that no significant adverse effects have been identified when taking into account inherent mitigation. A number of beneficial effects have been identified. Notwithstanding this, it is anticipated that a S106 Agreement will be required to further mitigate impacts arising from the Development on matters such as waste and recycling, community and leisure facilities.

RESIDUAL IMPACTS

7.97 There would be no residual impacts associated with the Proposed Development.

CUMULATIVE IMPACTS

Construction Impacts

7.98 The cumulative sites considered as part of this chapter assessment are those identified in Table 2.6 of the ES.

Demographics (count and demographic structure)

7.99 Given the levels of construction employment in the District and ability of the labour market to meet demand as summarised above, no population migration will be required for the construction of the cumulative impact sites. As a result, the cumulative effects on this receptor are considered to be **nil.**

Economy and Employment (economic activity and employment composition)

7.100 The cumulative sites will create similar construction jobs and offer benefits to the economy in terms of jobs created directly on each site to the Proposed Development. This will include direct and indirect, temporary and permanent jobs.

7.101 Multiplier effects through supply chain and worker spend will increase further by supporting additional temporary jobs locally, regionally and nationally. The cumulative effects of the construction phases of the cumulative impact sites are expected to provide further opportunities to reduce local unemployment through partnerships between housebuilders, contractors and local employment agencies.

7.102 Overall, the cumulative impact on this receptor is considered to have a temporary effect that is **moderate beneficial.**

Wealth and Deprivation (levels of deprivation and material wealth)

7.103 Increased construction employment would not be considered to materially alter the ward or Local Authority earning structure, but can sustain and grow the local sector. Therefore, it is considered to have a **negligible** effect on this receptor.

Housing (house prices, tenures and compositions)

7.104 The cumulative impacts of the construction phases of the developments are unlikely to affect the housing market in the town or Local Authority Area. Construction workers are expected to largely be located within the District given the size of labour pool. Therefore, it is considered that the cumulative developments will have **nil** effect on the baseline conditions.

Education and Training (level of education and existing capacities)

7.105 The construction phases of the cumulative developments are expected to provide some opportunities to link construction to local education and training programmes. The scale of employment and size of developments suggests that the effects on this receptor will be **negligible** overall.

Health, Community and Leisure (existing facilities and provision)

7.106 It remains the case that the construction phase across all cumulative sites will have **nil** effect on health, community or leisure facilities.

Shopping (existing facilities and town centre health)

7.107 Constructions workers associated with each cumulative site will bring indirect beneficial impacts as a result of an increase of money within the local economy and an increase in the demand and use of local services, and retail facilities. It remains the case that the cumulative effect of the construction phases is considered to be **minor beneficial** and short to medium term.

Operational Impacts

7.108 The following section considers the potential cumulative impacts during operation. The following factors are considered to be inherent mitigation across all cumulative sites that are taken into account within this assessment:

(i) Proposed on-site green space to be secured via S106 Agreement;
(ii) Proposed footpaths and cycleways; and
(iii) Potential S106 contributions.

Demographics (population (count and demographic structure)

7.109 The completed and occupied cumulative developments represent an increase in the population in Medway of around 1.92% based on the district average of 2.48 people per dwelling. This increase is not considered to be significant and should be viewed in the context of meeting the needs of the Local Authority as a whole. This increase in population is considered to have a **minor beneficial** long term effect overall.

Economy and Employment (economic activity and employment composition)

7.110 Further direct jobs will be created.

7.111 The amount of employment generating uses across all cumulative sites is limited to the Proposed Development subject of this ES. Overall, it remains the case that the cumulative impacts of the sites will have a **minor beneficial** long term effect on this receptor.

Wealth and Deprivation (levels of deprivation and material wealth)

7.112 It is assumed that earnings of the incoming population will be similar to the existing and therefore that the cumulative effect is **nil.**

Housing (house prices, tenures and compositions)

7.113 The cumulative developments will deliver around 2,153 dwellings (including 25% affordable homes) in Medway in the short and medium terms, contributing towards the Council's five-year supply of deliverable housing in the short and medium terms.

7.114 Overall, the cumulative sites would lead to a **moderate beneficial** effect on this receptor.

Education and Training (level of education and existing capacities)

7.115 The estimated projected increase in demand across cumulative sites will exceed the current capacity within primary schools and secondary schools in Medway. Through a combination of S106 contributions and on-site primary school provision. Without mitigation this will lead to a **minor adverse** impact across the district.

Health, Community and Leisure (existing facilities and provision)

7.116 The cumulative developments will result in an increase in demand for local community facilities resulting in a **minor adverse** impact across the district.

Shopping (existing facilities and town centre health)

7.117 An increase in population as a result of the cumulative sites will increase footfall and spend in the surrounding centres. The effect of the cumulative sites on existing shopping facilities is, therefore, considered to be **minor beneficial** and long term.

Mitigation

7.118 All of the committed cumulative developments make (or will make) a financial contribution via a S106 Agreement towards things like leisure and community facilities, waste and recycling, etc proportionate to the impacts of each development. In the case of the Proposed Development, given its size, on-site provision of primary education is considered as inherent mitigation.

Residual Impacts

7.119 Taking into account the inherent mitigation and that provided through financial contributions as described above in paragraph 7.117, the residual impacts of the cumulative developments is considered to be **negligible**.

SUMMARY

7.120 This chapter has discussed a range of potential socioeconomic impacts of the Proposed Development and related mitigation measures across the construction and operational phases, including consideration of Cumulative Impacts. Overall, no significant adverse effects have been identified in relation to socio-economic receptors. A number of beneficial effects have been identified and these are summarised in **Table 7.13** below.

Table 7.13: Summary Table

Description of Likely Significant Effects	Significance	Effects					Description of Mitigation	Description of Residual Effects	Significance	Residual Effects				
		B/A	P/T	D/I	ST/M /LT	L/R /N				B/A	P/T	D/I	ST/M/ LT	L/R/N
Demolition and Construction Phase														
Demographics: population count and demographic structure	Nil								Nil					
Economy and Employment	Minor Beneficial	B,	T,	D/I,	ST/MT,	L			Minor Beneficial	B,	T,	D/I,	ST/MT,	L
Wealth and Deprivation	Negligible								Negligible					
Housing (house prices, tenure, composition)	Nil								Nil					
Education and Training	Negligible								Negligible					
Health, Community and Leisure	Nil								Nil					
Shopping	Minor Beneficial	B,	T,	D/I,	ST/MT,	L			Minor Beneficial	B,	T,	D/I,	ST, MT,	L
Operational Phase														
Demographics: population count and demographic stricture	Minor beneficial	B,	P,	D,	LT,	L			Minor beneficial	B,	P,	D,	LT,	L
Economy and Employment	Minor beneficial	B,	P,	D,	LT,	L			Minor beneficial	B,	P,	D,	LT,	L
Wealth and Deprivation	Nil								Nil					
Housing (house prices, tenure, composition)	Moderate beneficial	B,	P,	D,	LT,	L			Moderate beneficial	B,	P,	D,	LT,	L

Education and Training	Negligible		Onsite primary provision. Financial contribution for secondary		Negligible	
Health/Community Facilities	Minor adverse	B,P,D,ST,L	Financial contribution		Negligible	
Shopping Facilities	Minor Beneficial	B, P, D, LT, L			Nil	
Town Centre Health	Nil				Nil	
Cumulative Impacts: Construction						
Demographics: population count and demographic stricture	Nil				Nil	
Economy and Employment	Moderate Beneficial	B, T, D/I, ST/MT, L			Moderate Beneficial	B,T,D/I,ST/MT, L
Wealth and Deprivation	Negligible				Negligible	
Housing (house prices, tenure, composition)	Nil				Nil	
Education and Training	Negligible				Negligible	
Health, Community and Leisure	Nil				Nil	
Shopping	Minor Beneficial	B, T, I, ST/MT, L			Minor Beneficial	B,T,I,ST/MT, L
Cumulative Impacts: Operation						
Demographics: population count and demographic stricture	Minor Beneficial	B, P, D, LT, L			Minor Beneficial	B, P, D, LT, L
Economy and Employment	Minor Beneficial	B, P, D, LT, L			Minor Beneficial	B, P, D, LT, L
Wealth and Deprivation	Nil				Nil	

Housing (house prices, tenure, composition)	Moderate Beneficial	B, P, D, LT, L			Moderate Beneficial	B, P, D, LT, L
Education and Training	Minor adverse	B,P,D,ST,L	Financial contribution		Negligible	
Health /Community Facilities	Minor adverse	B,P,D,ST,L	Financial contribution		Negligible	
Shopping/town centre health	Minor Beneficial	B, P, D, LT, L			Minor Beneficial	B, P, D, LT, L

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

8 WATER RESOURCES

INTRODUCTION

8.1 This chapter of the ES has been prepared by Peter Brett Associates LLP, now part of Stantec (PBA) and considers the potential significant effects of the Proposed Development on water resources including flood risk.

8.2 The chapter describes the baseline conditions existing at the Site and surroundings, the potential direct and indirect effects on the water resources, the methods used to assess the impacts, the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been employed.

8.3 There are no watercourses on the Site, or locally to it, but the Site is located within 300m of the marshes of Rainham Creek, which forms part of the Medway Estuary and Marshes SSSI. The Site is within the Lower Medway catchment.

8.4 The Site lies within fluvial Flood Zone 1 'Low Probability' (less than a 1 in 1000 (0.1%) annual probability of river flooding).

8.5 There are two potential up to medium risk surface water flow routes running through the centre of the western part of the Site in a north easterly direction.

8.6 The geology of the Site is general Thanet Beds (stiff or very stiff, brown sand CLAY) over Seaford Chalk Formation. The groundwater is within the Seaford Chalk Formation, which has been identified as being a Principal Aquifer. The depth to the ground water varies from ~ 26m at the higher end of the site to ~ 8m at the lower. There is no Groundwater Source Protection Zones within 500m of the Site.

8.7 This chapter is supported by a Flood Risk Assessment and Drainage Strategy report presented as **Technical Appendix 8.1** and **Technical Appendix 8.1sup**, the latter detailing infiltration borehole testing carried out in late 2019, drainage modelling results for the 1 in 100 year flood plus 40% climate change, a 10% increase in impermeable area allowing for urban creep and further information on Suds and water quality improvement.

CONTEXT

8.8 This section of the ES discusses the context of the Proposed Development with regard to the relevant international and national legislation, in addition to national and local planning policies.

National Legislation

8.9 In relation to water resources, the relevant legislative framework includes the following:

(i) Flood and Water Management Act 2010 (ref. 8.1);
(ii) Water Act 2003, as amended (ref.8.2);
(iii) Water Industry Act 1991 (as amended by the Water Act 2003) (ref.8.3);
(iv) Land Drainage Act 1991, as amended (ref.8.4);
(v) Water Resources Act 1991 (ref.8.5);
(vi) Environment Act 1995, as amended (ref.8.6);
(vii) Water Framework Directive (ref.8.7).

National Planning Policy

8.10 The aim of water policy in England and Wales is to protect both public health and the environment by maintaining and improving the quality of natural waters. These include surface water bodies (e.g. rivers, streams, lakes, ponds) and groundwater.

8.11 Planning Practice Guidance (MHCLG, last updated 2018) [PPG] (ref.8.8), issued by the Ministry of Housing, Communities and Local Government, this brings together planning practice guidance for England and it provides advice on how planning can take account of the risks associated with flooding and coastal change in plan-making and the planning application process. This includes demonstrating how flood risk will be managed now and over the lifetime of the development, taking climate change into account.

8.12 The NPPF (ref.8.9), sets out the government's planning policies for England and how these are expected to be applied. It makes reference to climate change, flood risk, water quality and biodiversity.

8.13 The NPPF aims are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding and to direct development away from areas of highest risk. In exceptional circumstances where new development is necessary in flood risk areas the policy also aims to ensure it is safe, without increasing flood risk elsewhere, and where possible, reducing flood risk overall.

8.14 The NPPF advocates the use of a risk based sequential test, in which new development is directed towards the areas of lowest risk of flooding. The different areas of flooding are defined by the following Flood Zones:

(i) Flood Zone 1: 'Low Probability' of flooding (less than 1 in 1,000 annual probability of river or sea flooding in any year);
(ii) Flood Zone 2: 'Medium Probability' of flooding (between a 1 in 100 and 1 in 1,000 annual probability of river flooding or between a 1 in 200 and 1 in 1,000 annual probability of tidal flooding in any year);
(iii) Flood Zone 3a: 'High Probability' (1 in 100 or greater annual probability of river flooding or 1 in 200 or greater annual probability of sea flooding in any year); and
(iv) Flood Zone 3b: The functional floodplain (where water is stored in times of flood, including water conveyance routes, annual probability of 1 in 20 or greater in any given year).

8.15 In addition, the PPG specifies the type of land use, defined by its flood risk vulnerability that is appropriate in each Flood Zone. For example, more sensitive developments that would be most severely affected in the event of flooding, such as hospitals, should not be permitted in areas at high probability of flooding, although leisure and tourism developments may be allowed in Flood Zone 3a.

8.16 In February 2017, the Environment Agency (EA) released new guidance 'Flood risk assessments: climate change allowances' (ref.8.10). This provides contingency allowances for potential increases in peak river flow, rainfall intensity and sea level.

8.17 The Table 1 of the current climate change guidance provides a peak river flow allowances table, outlining a range of allowances based on percentile (i.e. the degree of certainty of an event occurring, based on the range of climate change scenarios assessed through scientific investigations). The provided allowances are also subject to the vulnerability classification of the proposed use and the river basin district of the Site.

8.18 The EA issued an updated national study on the projected impacts of climate change in November 2018, by the Met Office (UKCP18) (ref.8.11). The EA is expected to release updated guidance on climate change allowances based on UKCP18 in due course (including new guidance on river flows, sea level rise and rainfall intensity), but the extent to which the recommended allowances will vary from the 2017 allowances (if at all) has not yet been confirmed. Until further practice guidance is released, guidance provided by the EA confirms that the continued use of the 2017 climate change allowances is recommended.

Local Planning Policy

8.19 Medway Council Local Plan (MC, 2003) (ref.8.12) does not contain any specific policies related to surface water flood risk and drainage.

8.20 The MC Strategic Flood Risk Assessment (SFRA) [Mott MacDonald, 2006] (ref.8.13), its Addendum (Scott Wilson, 2011) and the High Level Appraisal of Potential Solutions to Manage Flood Risk in the Urban Medway (Scott Wilson, 2011) makes a number of recommendations related to flood risk and drainage throughout Medway and these are:

(i) 2.2.2. The Local Planning Authority will expect the developer to provide an assessment of flood risk, including runoff implications which are appropriate to the nature and scale of the development and the risks involved. This assessment should be submitted with the planning application.
(ii) 3.2.9. Medway Council promote SuDS as the normal drainage practice, where appropriate, for all new developments.
(iii) 3.2.9. SuDS are favoured over traditional piped networks as they mimic natural flow patterns; reducing the developments flood risk; minimising pollution arising from surface water runoff which could enter a watercourse or groundwater; maintaining a groundwater recharge and/or enhancing the quality of wildlife habitats, amenity and landscapes.

8.21 The MC SFRA Addendum made the following additional recommendations:

(i) 6.10. SuDS should be encouraged and could count towards 'reducing flood risk'.
(ii) 6.8. By installing SuDS without arranging for their adoption or maintenance, there is a risk that they will eventually cease to operate as designed and could therefore present a flood risk to the development and/or neighbouring property.
(iii) There is no guidance given in relation to minimum surface water runoff rates, although there is reference to best practice guidance.

8.22 MC Preliminary Flood Risk Assessment (MC, 2011) (ref.8.14) this a high-level overview of flood risk from local flood sources, including surface water, groundwater, ordinary watercourses and canals. The Environment Agency (EA) has used a national methodology, which has been set out by Department for Environment, Food and Rural Affairs (Defra), to identify indicative Flood Risk Areas across England. Of the ten indicative Flood Risk Areas that have been identified nationally, one is located within Medway Council's administrative area. Here is a summary of the findings from this assessment that relate to this Site:

(i) From an overview of historic flooding in Medway, none has been recorded on the site.
(ii) The EA's Areas Susceptible to Groundwater Flooding (AStGWF) is a strategic scale map showing groundwater flood areas on a 1km square grid. It was developed specifically for use in PFRAs and only provides a high-level view of the wider areas which might be at risk from groundwater flooding. It does show that there is a potential for groundwater flooding on the Site. However, in common with the majority of flooding datasets showing areas which may experience groundwater emergence, it covers a large area of land, and only isolated locations within the overall susceptible area are actually likely to suffer the consequences of groundwater flooding.
(iii) There is no local information available that provides evidence on future groundwater flood risk across Medway and groundwater rebound is not believed to be an issue in the area.

8.23 Surface Water Management Plan Final Revision (SWMP) (AECOM, 2016) (ref.8.15) investigates the risks of surface water flooding and proposes a surface water management strategy for

MC. Surface water flooding is defined as flooding from sewers, drains, groundwater, runoff from land, small watercourses and ditches, which occurs as a result of heavy rainfall. The aim of this SWMP was to understand and resolve complex, high risk surface water flooding problems in urbanised areas. A high-level assessment of the risk of this type of flooding was undertaken within Medway using previous modelling results included in the Local Flood Risk Management Strategy and the EA's updated Flood Map for Surface Water. This process was to determine the level of probable future risk, prioritise higher risk areas for further investigation and identify 'quick win' flood mitigation actions. This identified four priority areas for further consideration and three settlements to be assessed at the intermediate level. The Lower Rainham area was not identified as a high-risk area by this process.

Other Relevant Policy, Standards and Guidance

8.24 The assessment is underpinned by the following guidance and/or best practice: Defra guidance on Flood risk assessment for planning applications, 2017 (ref.8.16).

(i) Preparation and assessment of Flood Risk Assessments and any relevant standing advice relating to vulnerable development and development within critical drainage areas (if applicable).

(ii) The EA has released an update of their 2011 document Adapting to Climate Change: Advice to Flood & Coastal Risk Management Authorities. The update (EA, 2016) reflects an assessment completed by the EA between 2013 and 2015 using updated climate change data to produce more representative climate change allowances for England. The document provides a range of climate change allowances for peak rainfall intensities between 20% and 40%, rather than 30% as previously recommended through the NPPF. The Drainage Strategy has been designed to provide for a 20% increase from climate change, with consideration given to a 40% increase and the effect it would have.

(iii) The EA published its Approach to Groundwater Protection (EA, 2018 (ref.8.17)), an update to the previous GP3 document, to outline their approach to management and protection of groundwater in England and Wales. It provides guidance for landowners and developers whose activities may impact upon groundwater. Given the sensitive hydrogeology of the site, guidance within this document has informed the Drainage Strategy.

(iv) In March 2015, Defra published Non-statutory technical standards for sustainable drainage systems (Defra, 2015 (ref.8.18)). This document contains technical standards for the design, maintenance and operation of SuDS. Its purpose is to guide decision makers considering new surface water drainage schemes.

(v) The method of disposing surface water from sites is prioritised within the Building Regulations Requirement Part H3. It requires that rainwater from roofs and paved areas is carried away from the surface to discharge to one of the following, listed in order of priority: i) an adequate soakaway or some other adequate infiltration system, or where that is not reasonably practicable; ii) a watercourse, or where that is not practicable; iii) a sewer.

(vi) Best practice sustainable urban drainage design advice is given in The SUDS Manual (CIRIA, 2015 (ref.8.19)). SuDS drainage can be in a variety of forms, including infiltration trenches, swales, permeable surfaces, detention basins and green roofs.

(vii) Flood estimation for small catchments (Institute of Hydrology, 1994 (ref.8.20)) provides flood estimation equations for deriving catchment runoff rates and volumes. This has been used to determine the existing rate of surface water runoff for parts of the site.

(viii) Water. People. Places. A guide for master planning sustainable drainage into developments (AECOM, 2013 (ref.8.21)) has been prepared by the South East England Lead Local Flood Authorities (LLFAs). The guidance outlines the process for

integrating SuDS into the master planning of large and small developments. The LLFAs expect this guidance to be used as part of the initial planning and design process for all types of development. It states that consideration of the movement of water and its interaction with space at the earliest stage of design is crucial to the success of SuDS and allows the developer to maximise wider benefits.

(ix) Sewers for Adoption (WRc, 2012 (ref.8.22)) contains guidance for the design and construction of sewers that will be adopted by Sewerage Undertakers in England and Wales in accordance with Section 104 of the Water Industry Act 1991. The proposed drainage strategy has been progressed in consideration of the design requirements with this guide.

METHODOLOGY

Assessment Methodology

8.25 The methodology adopted in this assessment has focussed on the identification and evaluation of key sensitive receptors identified and then focussing specifically on identifying impact 'types' and risks which have the potential to have a beneficial or adverse impact on a sensitive receptor. This methodology and criteria for assessment has been developed with reference to a variety of legislative drivers and guidance/best practice documents as described under the Legislation and Planning Policy Context in the preceding section.

8.26 The assessment of potential impacts and significant effects has been designed to be part of an iterative process where the results of the assessment process are inputted into the design of the Proposed Development and the development of the mitigation measures.

8.27 The methods used in undertaking the technical study are outlined in this section with and the key sources of information can be summarised as follows:

(i) The Flood Risk Assessment (FRA), prepared by PBA;
(ii) The Surface Water Drainage Strategy, which is within the FRA;
(iii) Gov.UK online flood map for planning and online surface water flood map (EA, 2018);
(iv) MC Preliminary Flood Risk Assessment (MC, 2011);
(v) MC Strategic Flood Risk Assessment (SFRA) [Mott MacDonald, 2006];
(vi) Gov.UK online flood risk from reservoir map (EA,2018).

8.28 The study area for the water resources and flood risk assessment extends to 1 km from the Application Site boundary to enable the identification of any resources/receptors that may potentially be affected by the proposed development to be identified and the impacts and effects assessed.

Consultation

8.29 **Table 8.1** provides a summary of the consultation activities undertaken in support of the preparation of this chapter.

Table 8.1: Summary of Consultation Undertaken to Date

Consultee	Individual/department	Comments
Medway Council	Daniel Atkinson - Flood Risk Officer, Medway Council	Received from Rapleys - Draft Pre-Application Meeting Minutes dated 1st October 2018- Confirmed.
		Received from Rapleys – Pre-Application written response from Medway Council dated 19th November 2018 – 'technical assessments will be required covering.

	Submitted to Medway Council during August 18	Environmental Impact Assessment – Scoping Report (SRS/18-013070) dated 1st August 2018
Environment Agency	Customers & Engagement Team for Kent, South London & East Sussex	EA provided Flood Data - Product 4 data (EA ref KSL 99588 JM, Sep 18)

Significance Criteria

8.30 The significance of the effects is defined using a combination of the value/sensitivity of the potential receptor and the potential consequence of the effect. **Tables 8.2** to **8.4** illustrate how the value of the receptor and the magnitude of the impact determine the significance level of the impact which can be 'Negligible', 'Slight', 'Moderate', or 'Substantial'.

Table 8.2: Sensitivity / value of receptor

Sensitivity/value of a receptor	Example of Receptors
Very High **Receptor of international value**	Human Health: Residential and uses where children are present Groundwater: Source Protection Zone Flooding: NPPF Flood Risk Vulnerability Classification "Essential Infrastructure" or "Highly Vulnerable" Surface Water: General Quality Assessment (GQA) Grade A High Ecological Status Ecology: Special areas of conservation, Special Protection Area, RAMSAR Buildings: World Heritage Sites
High **Receptor of national value**	Human Health: Employment Groundwater: Principal Aquifer Flooding: NPPF Flood Risk Vulnerability Classification "Essential Infrastructure" or "Highly Vulnerable" Surface Water: GQA Grade B Ecology: Site of Special Scientific Interest, National or Marine Nature Reserve Buildings: Conservation Area
Medium **Receptor of regional value**	Human Health: Transient or Limited Access, construction workers* Groundwater: Secondary A Aquifer Flooding: Floodplain providing a moderate volume of storage NPPF Flood Risk Vulnerability Classification "More Vulnerable" Surface Water: GQA Grade C or D Good or Moderate Ecological Status

	Ecology: County wildlife sites, Area of Outstanding Natural Beauty (AONB) Buildings: Area of Historic Character
Low **Receptor of local value**	Human Health: Unoccupied Groundwater: Secondary B Aquifer or Secondary (Undifferentiated) Flooding: Floodplain with limited existing development. NPPF Flood Risk Vulnerability Classification "Less Vulnerable" Surface Water: Poor Ecological Status Ecology: Local habitat resources or no designation Buildings: Replaceable or Local value
*** assuming that construction workers will adopt appropriate health and safety and personal protective equipment procedures and therefore sensitivity with respect to hazards is reduced to Low.**	

8.31 Determination of the magnitude of change to the receptors as a result of the scheme has been undertaken based upon the criteria set out in **Table 8.3**.

Table 8.3: Magnitude of Impact

Magnitude of Impact	Description
High	Very large or large change in environmental conditions (e.g. pollution levels, destruction of habitat). This could result in exceedance of Statutory objectives and/or breaches of legislation.
Medium	Intermediate change in environmental conditions.
Low	Small change in environmental conditions.
Negligible	No discernible change in environmental conditions.

8.32 The significance of a potential effect is derived based upon the sensitivity of the receptor and the magnitude of the change. The matrix for assigning the significance of effects is presented as **Table 8.4**, effects of 'Moderate' significance or above are considered significant in EIA terms. The significance of an effect can be beneficial, neutral or adverse. The significance of an effect should also be qualified based on the likelihood of an impact occurring (using a scale of certain, likely or unlikely) and the confidence in the accuracy of the assessment.

Table 8.4: Impact Significance Matrix

	Magnitude of Impact			
Sensitivity/Value of a Receptor	**High**	**Medium**	**Low**	**Negligible**
Very High	Substantial	Substantial	Moderate	Slight
High	Substantial	Moderate	Slight	Negligible
Medium	Moderate	Slight	Negligible	Negligible
Low	Slight	Negligible	Negligible	Negligible

8.33 The significance of residual impacts (i.e. the impacts that remain after the incorporation of mitigation measures) has been assessed through consideration of their magnitude, duration and nature (i.e. reversible or irreversible) and also the geographic context (e.g. highly localised or widespread). The significance criteria are set out in **Table 8.5**.

8.34 In the absence of 'industry standard' significance criteria for the consideration of hydrology and flood risk impacts, a qualitative approach, based upon available knowledge, experience and professional judgement, is employed, which is summarised in **Table 8.5**.

Table 8.5: Significant Criteria

Significance Level	Significance Level Criteria	Typical Examples
Major Beneficial	Major improvements at catchment scale	○ Fundamental changes to the regional hydrological regime. ○ Fundamental reduction in volume and/or peak discharge of surface water runoff from the Site. ○ Fundamental changes to flow conveyance and floodplain storage.
Moderate Beneficial	Improvements at local scale	○ Moderate changes to the local hydrological regime. ○ Moderate reduction in volume and/or peak discharge of surface water runoff from the Site. ○ Moderate changes to flow conveyance and floodplain storage.
Minor Beneficial	Limited improvements at local scale	○ Some noticeable changes to the local hydrological regime. ○ Some noticeable reduction in volume and/or peak discharge of surface water runoff from the Site. ○ Some noticeable changes to flow conveyance and floodplain storage.
Not Significant	No appreciable impact	○ No noticeable changes to the local hydrological regime. ○ No noticeable change in volume and/or peak discharge of surface water runoff from the Site. ○ No noticeable changes to flow conveyance and floodplain storage.
Minor Adverse	Limited detrimental effects at a local scale	○ Some noticeable changes to the local hydrological regime. ○ Some noticeable increase in volume and/or peak discharge of surface water runoff from the Site. ○ Some noticeable changes to flow conveyance and floodplain storage.
Moderate Adverse	Detrimental effects at a local scale	○ Moderate changes to the local hydrological regime.

		○ Moderate increase in volume and/or peak discharge of surface water runoff from the Site. ○ Moderate changes to flow conveyance and floodplain storage.
Major Adverse	Important detrimental effects at a catchment scale which may become key factors in the decision-making process	○ Fundamental changes to the regional hydrological regime. ○ Pollution of potable sources of water abstraction. ○ Fundamental increase in volume and/or peak discharge of surface water runoff from the Site. ○ Fundamental changes to flow conveyance and floodplain storage.
Severe	Important detrimental effects at sites of national or regional importance which will likely become key factors in the decision making process	○ Fundamental changes to the regional/national hydrological regime. ○ Fundamental increase in volume and/or peak discharge of surface water runoff from the Site. ○ Fundamental changes to flow conveyance and floodplain storage.

BASELINE CONDITIONS

8.35 The baseline situation is the prevailing environmental conditions against, which the potential environmental impacts of the proposals are assessed. The conditions referred to are those applicable at the present time and, unless noted otherwise, seen as those which will prevail with no significant change predicted during the interim period before development works are commenced.

8.36 The water resource related baseline conditions for the site have been identified through the PBA Ground Condition and Flood Risk Assessments.

Present Use

8.37 The Site is divided principally in two main parcels of land, divided by Pump Lane which traverses from the southwest to the northeast through the subject Site. The first area, termed "Pump Farm", is bounded by Pump Lane to the east and Lower Twydall Lane to the west. The second area, termed "Bloors Farm", is bounded by Lower Bloors Lane to the east and Pump Lane to the west.

8.38 Pump Farm is agricultural land with a number of orchards and its associated storage buildings are located closest to its eastern boundary along Pump Lane. On its eastern boundary with Pump Lane there is Russett Farm, which is a small scale housing development. From the site walkover undertaken by a PBA Engineers it was noted that the Pump Farm buildings were used to store farming equipment and materials, with another building used for fruit processing. A free-standing LPG gas tank was located near the buildings. Two chemical storage sheds and a large water tank were also noted alongside the main storage building. It was also advised by the Client that a fuel tank was located inside the main farm building, but it is fully bunded and is placed on hardstanding. The Client advised that there is an abstraction borehole located at the rear of the main storage building that is used for irrigation purposes.

8.39 Bloors Farm is agricultural land with a number of orchards with three residential buildings. From aerial photography there is a water tank present along the south eastern boundary of the Site. The water tank seems to be sited on a concrete plinth with an associated abstraction borehole believed to be used for irrigation purposes. From the site walkover it was noted that a Contractor's compound was present, which is associated with the recent localised residential development to the north east of the Site.

Fluvial Setting

8.40 The site is within Flood Zone 1, with land in this zone being described as having a less than 1 in 1,000 annual probability of river, or tidal flooding (<0.1%), as shown in **Figure 8.1**.

8.41 There are no watercourses on the Site, with the closest one being the Medway Estuary, which is within 300m. From an overview of historic flooding in Medway, it was reported in the PFRA, there has been no fluvial flooding recorded on the Site. Therefore, it is assessed that there is a low risk of fluvial flooding on the Site.

Surface Water Setting

8.42 The Gov.UK online surface water flood map (EA, 2018) is presented in **Figure 8.2** and shows the potential route of surface water exceedance flow paths local to the Site.

8.43 Several surface water flow paths are located adjacent to the Site, with zones of medium (1 in 30 to 1 in 1,000 annual probability) to high (less than 1 in 30 annual probability) flood risk running in a north-easterly direction, e.g. along Pump Lane. There is a more limited extent flow path, of medium to high flood risk, starting mainly on the bridle way before running in a north-easterly direction along Lower Bloor Lane.

8.44 Two potential up to medium risk flow routes are identified running through the centre of the western part of the Site in a north-easterly direction, crossing neighbouring agricultural land and the B2004 Lower Rainham Road, prior to reaching the Rainham Creek Marshes.

8.45 From an overview of historic flooding in Medway, it was reported in the PFRA, there has been no surface water flooding recorded on the Site. Therefore, it is assessed that there is a low risk of surface water flooding on the Bloors Farm site with low to medium on the Pump Farm site.

Groundwater Flooding

8.46 From an overview of historic flooding in Medway, it was reported in the PFRA, there has been no groundwater flooding recorded on the Site and that there is no evidence for there being a future risk across Medway; and groundwater rebound is not believed to be an issue in the area.

8.47 From a review of the available geotechnical information, the depth to the ground water varies from ~ 26m at the higher southwestern end of the Site to ~ 8m at the lower north-eastern end.

8.48 Therefore, it is assessed that there is a low risk of groundwater flooding on the Site.

Flood Risk from Failure of Infrastructure

Sewers

8.49 The SFRA and PFRA do not identify that there has been any historic sewer flooding.

Reservoirs

8.50 There are no reservoirs close enough to impact the Site in the event of a reservoir breach.

Water Mains

8.51 There have been no reported issues with water main bursts causing flooding.

Geology and Ground Conditions

8.52 The Site is partially underlain by Thanet Beds comprising pale yellow-brown, fine grained sand, to a stiff brown sandy clay. These strata are underlain by the Seaford Chalk Formation

comprising firm white chalk with flint seams. Publicly available borehole and trial pit logs within the general vicinity of the Site have generally confirmed the anticipated geological sequence.

Hydrology and Groundwater Vulnerability

8.53 The superficial Head Deposits are considered to be a Secondary (Undifferentiated) aquifer, the Thanet Sand Formation is considered to be a Secondary A aquifer and the Seaford Chalk Formation is considered to be a Principal aquifer. The Site is not located within a groundwater Source Protection Zone (SPZ).

8.54 There are no registered abstractions on the Site. However, the client has advised that a borehole is located to the rear of the main storage buildings, associated with Pump Farm, and is used for irrigation purposes. Another borehole was located during the site walkover towards the eastern boundary of the Site and appears to be part of the irrigation system for the orchard associated with the Bloors Farm site.

Environmental Setting

8.55 The Medway Estuary is located less than 300m northeast of the Site which is classified as being: Site of Special Scientific Interest (SSSI); Special Protection Area (SPA); Marine Nature Reserve; and Ramsar Site.

Summary of Potential Receptors

8.56 Potential receptors at, and adjacent to the Site are set out in **Table 8.6**:

Table 8.6: Summary of Potential Receptors and Sensitivity

Receptor	Description	Sensitivity
Human Health – On-site current users	Farm workers and general public.	High
Human Health – On-site future users	Future residents, school pupils	Very High
Human Health - Neighbours	Owners of houses in Twydall and Lower Rainham. People visiting the adjacent Bloors Lane Community Woodland and Allotment Gardens	Very High
Human Health – Construction/ maintenance workers	Workers constructing the proposed development	Medium
Groundwater - Shallow	Superficial Head Deposits - Secondary Undifferentiated Aquifer	Low
Groundwater - Deep	Seaford Chalk Formation – Principal Aquifer	High
Property – Buildings	Proposed buildings and services	Low
Property - Animal or Crop	Proposed Community Orchard and off-site Allotments and woodland.	Low
Ecological systems	RAMSAR, Special Protection Area and SSSI within 300m from the site.	Very High

IMPACTS

8.57 This section identifies the likely significant water resource impacts resulting from the Proposed Development and considers impacts during construction and once the Development is completed prior to any mitigation.

Construction Impacts

Fluvial Flood Risk

8.58 Due to the low flood risk posed to the Site, which will not alter from the baseline conditions identified, the construction activities are not considered likely to affect flooding within the area, or be affected by external sources of flooding. As such, the construction activities are considered to result in **No Significant** effects, direct or indirect, on flood risk on a short-term basis and at a local or regional scale.

Surface Water

8.59 The surface water drainage system to be installed as part of the Proposed Development will be designed to intercept the majority of contaminants produced as a result of the construction works, such as silty or accidental oily run-off, and prevent any such contaminants entering the local drainage system or ground water. This will be achieved through setting up a surface drainage system to collect site run-off and passing it through oil interceptors and silt separation processes, before discharging to surface water sewers and/or soakaways.

8.60 During this period, contaminants produced as a result of the construction works, such as silty and accidental oily run-off could be directed into the public surface water sewer impacting its correct operation, or discharge to soakaways affecting ground water quality. Accordingly, taking this worst-case scenario, the effect of construction on hydrology is considered to be of low sensitivity and medium impact and therefore to be direct **Minor Adverse** significant effects on a short-term basis and at a local scale.

8.61 The construction of the Proposed Development will occur on existing agricultural land resulting in new large impermeable areas and potentially increased run-off rates leading to on and off-site flooding. The surface drainage strategy for the Site is based on sustainable drainage system (SuDS) principles with a connection to the existing public surface water sewer network, with infiltration drainage to supplement, if further site investigations during detail design shows this is viable. The proposed approach will make use of the network of interconnected swales and flow-controlled attenuation basins to maintain the current greenfield runoff rate, therefore, maintaining the 'pre-development' discharge rate and quality of surface water run-off. The construction activities will be phased such that the proposed drainage system will be in place before the hard surfaces are installed. As such construction will result in **No Significant** effects, either direct or indirect, on a medium-term basis and at a local scale.

Groundwater

8.62 The Principal Aquifer at the Site (underlying superficial deposits and in addition the Thanet Sand formation in places), is classed as having a High sensitivity. The risk of contaminants (such as the inadvertent disturbance of existing contaminated material within the ground and/or the accidental spillage of hydrocarbons) directly entering the groundwater resource is medium to low, even if soakaways are used. Based on this, the direct effect of the construction on groundwater quality is considered to be of medium sensitivity and low impact and therefore of **No Significant** effect on a medium-term basis and at a regional scale.

Foul Drainage

8.63 Reasonable volumes of foul water are likely to be generated during the construction phase. The foul water produced may need to be removed from temporary welfare facilities initially using tankers before permanent facilities are provided, which it should be possible to connect to the existing local drainage system and then through the new foul water drainage system for the proposed development, once installed. As such, the construction of foul water drainage is considered to result in **No Significant** effects, either direct or indirect, on a short-term basis and at a local scale.

Water Supply

8.64 There two likely water demands during the construction process, which are the supply for the construction workers, via their associated welfare facilities, and any construction processes that need a water supply, e.g. on-site batching of concrete. Through the likely proposed phased nature of delivering the development this should mean that the peak number of on-site workers will be kept to a reasonable level, as well as the actual welfare demand being relatively low. If a water-based on-site construction process is selected with the relatively standard residential properties being considered it is unlikely any processes will need continuous high-volumes of water. Based on this, the direct effect of construction on water supply is considered to be of low sensitivity and up to a medium impact and therefore of **No Significant** effect on a medium-term basis and at a local scale.

Operational Impacts

Fluvial Flood Risk

8.65 Given the low flood risk posed to the Site as it is in Flood Zone 1 and due to the proposed drainage system maintaining the baseline conditions, the operational phase is not considered likely to affect flooding within the area. As such the operational phase will have **No Significant** effects, either direct or indirect, on flood risk on a long-term basis and at a local or regional scale.

Surface Water

8.66 The surface drainage strategy for the Site is based on SuDS principles with a connection to the existing public surface water sewer network, with further infiltration drainage to supplement if possible. This approach will make use of the proposed network of interconnected swales and flow-controlled attenuation. This will provide the necessary flood protection, attenuated discharge from the Site and ensure high water quality, so the discharge is at a pre-development rate and quality. Based on this, the operational phase will have **No Significant** effects, either direct or indirect, on surface water discharge rates and water quality on a long-term basis and at a local scale.

Groundwater

8.67 The surface drainage strategy being based on SuDS principles will result in 'good quality' surface water, so if infiltration is possible, there will be **No Significant** effects during the operational phase, either direct or indirect, on groundwater quality on a long-term basis and at a regional scale.

Foul Drainage

8.68 The foul water drainage system will be designed and installed to ensure adequate capacity to service the Proposed Development, with any off-site sewer reinforcements or improvement in existing infrastructure being undertaken. This would ensure the anticipated volume of foul discharge would be adequately managed. As such, the operation phase will have **No Significant** effects, direct or indirect, on a long-term basis and at a local scale.

Water Supply

8.69 While Southern Water (SW) has identified that there is not adequate network capacity to service the overall final development once installed, i.e. water mains to carry the water to the site, they have not said that their current, or planned, water resources cannot cope. This is assumed that this is because SW resources planning has been developed to service the local residential property growth, which this Proposed Development will be partly providing. Assuming this growth will occur with, or without, this development, regionally it could be argued that this Proposed Development is not effectively linked to this impact. At a more local level it may have a medium impact on supplies, as regionally the houses could be built elsewhere. Based on this, the direct effect of the operational phase on water supply is considered to be of low sensitivity and up to a medium impact and therefore of **No Significant** effect on a on a long-term basis and at a local scale.

MITIGATION

8.70 This section presents the mitigation measures that will be adopted.

Construction

Fluvial Flood Risk

8.71 No specific mitigation measures are considered necessary.

Surface Water

8.72 Whilst the surface water drainage system to be installed as part of the Proposed Development will likely intercept the majority of contaminants produced as a result of the construction works, the initial period of the construction phase will be undertaken when there is no formal drainage system, i.e. during the construction of the drainage system itself. To address these short-term, minor adverse significant effects, management and operational systems will be put in place through a CEMP to minimise the potential effects posed to water quality.

Groundwater

8.73 Even though the Proposed Development poses no significant effects to groundwater quality, for best practice reasons, particularly if infiltration is possible and used, reference will be made to the need for appropriate process and procedure to maintain water quality and therefore, it will be made a requirement for this to be covered in the CEMP. For example, to minimise the risk of pollution from oils on site, the CEMP will request details to be supplied of the measures to be used in relation to their storage, use and disposal. It is likely that it will be suggested in the CEMP that environmentally considerate lubricants, such as synthetic, non-toxic biodegradable hydraulic fluids should be used at sensitive locations.

Foul Drainage

8.74 No specific mitigation measures are considered necessary for foul drainage as there will be no significant effects with good site management practices. However, again for best-practice reasons, the need for this will be made a requirement to be covered in the CEMP. For instance, the CEMP will require the contractor to confirm the level of usage of his welfare facilities and identify an appropriate method of disposing of the generated wastewater.

Water Supply

8.75 No specific mitigation measures are considered necessary for water supply as there will be no significant effects with good site management practices. However, again for best-practice reasons, the need for this will be made a requirement to be covered in the CEMP. For instance, the CEMP will require the contractor to use water saving devices in the welfare

facilities and if water on-site construction processes are being considered, with high peak-demands, on-site storage will be specified to help address this.

Operational

Fluvial Flooding

8.76 No specific mitigation measures are considered necessary, as there will be no significant effects when the Development is completed on flood risk. However, measures will be incorporated through detailed design to mitigate any residual localised flood risk including finished floor levels of proposed buildings to be set a minimum of 150mm above final ground level.

Surface Water

8.77 The design of the surface water drainage system to be installed as part of the Proposed Development based on SuDS principles will ensure a high water-quality discharge via to sewer and / or soakaways to the ground water. Based on this, and provided that an adequate maintenance regime is put in place by the adopting authority / management company, no additional measures are considered necessary.

Groundwater Quality

8.78 Given that there will be no significant effects of the operational phase on groundwater quality no specific additional mitigation measures are considered necessary.

Drainage

8.79 The drainage for the completed Development will be designed with adequate on-site capacity and the completion of any offsite improvements, as well as the drainage network installation being provided in line with the phasing of the Development. No specific mitigation measures are necessary.

Water Supply

8.80 Measures will be incorporated through detailed design to reduce water usage of the completed Development. Such measures will include: installation of water efficient bathroom and kitchen devices, and landscaping and open space areas will be designed to have a low water use.

RESIDUAL IMPACTS

8.81 Residual impacts are those that are predicted to remain after implementation of the mitigation measures.

8.82 As a result, with the mitigation proposed in place, there will be N**o Significant** residual effects during either the construction or operational phases.

CUMULATIVE IMPACTS

8.83 Cumulative impacts are identified as impacts that may arise from a combination of a Proposed Development impacts and those of other planned developments in the area identified in chapter 2. There will be **No Significant** cumulative effects.

SUMMARY

8.84 There are no watercourses on the Site, or locally to it, but the Site is located within 300m of the marshes of Rainham Creek, which forms part of the Medway Estuary and Marshes SSSI. The Site is within the Lower Medway catchment.

8.85 The Site lies within fluvial Flood Zone 1 ‘Low Probability’ (less than a 1 in 1000 annual probability of river flooding) and therefore, it is assessed that there is a low risk of fluvial flooding on the Site.

8.86 There are two potential up to medium risk surface water flow routes running through the centre of the western part of the Site in a north easterly direction. It is assessed that there is a low risk of surface water flooding on the Bloors Farm site with low to medium on the Pump Farm site.

8.87 The geology of the Site is general Thanet Beds over Seaford Chalk Formation, where the groundwater is situated. There are no groundwater protection zones as a result of public drinking water being extracted, where risk of contamination is critical, within 500m of the Site. It is assessed that there is a low risk of groundwater flooding on the Site.

8.88 There is no identified flood risk from failure of infrastructure, e.g. sewers or reservoirs.

8.89 Generally, it has been identified that in terms of the likely significant water resource impacts resulting from the proposed development during the construction phase there are likely to be minor significant effects on the hydrology of the site.

8.90 Mitigation during construction will be the use of a CEMP.

8.91 Once the development is completed, there are anticipated to be No Significant effects.

Table 8.7: Summary Table

Description of Likely Significant Effects	Significance	Effects B/A, P/T, D/I, ST/M/LT, L/R/N					Description of Mitigation	Description of Residual Effects	Significance	Residual Effects B/A, P/T, D/I, ST/M/LT, L/R/N				
Construction Phase														
Fluvial Flood Risk	Negligible (not significant)	A	T	D/I	ST	L/R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface Water - initial period water quality	Slight adverse (not significant)	A	T	D	ST	L	CEMP to minimise the potential effects posed to water quality	None	N/A	N/A	N/A	N/A	N/A	N/A
Surface Water - flood risk	Negligible (not significant)	A	T	D/I	MT	L	CEMP	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Groundwater – High sensitivity Principal Aquifer	Negligible (not significant)	A	T	D	MT	R	CEMP	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Foul drainage	Negligible (not significant)	A	T	D/I	ST	L	CEMP	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water Supply	Negligible (not significant)	A	T	D	MT	L	CEMP	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Operational Phase														
Fluvial Flood Risk	Negligible (not significant)	A	P	D/I	LT	L/R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface Water	Negligible (not significant)	A	P	D/I	LT	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Groundwater	Negligible (not significant)	A	P	D/I	LT	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Foul drainage	Negligible (not significant)	A	P	D/I	LT	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water Supply	Negligible (not significant)	A	P	D	LT	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

9 GROUND CONDITIONS/CONTAMINATION

INTRODUCTION

9.1 This chapter of the ES has been produced by Peter Brett Associates LLP, now part of Stantec (PBA) and considers the potential significant effects of the proposed development in relation to ground conditions with consideration given to potential ground stability and contamination related impacts.

9.2 The chapter describes the baseline conditions existing at the Site and surroundings, the potential direct and indirect effects of the ground conditions, the methods used to assess the impacts, the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been employed.

9.3 This chapter is supported by a Phase 1 Ground Condition Assessment report comprising a Preliminary Ground Stability Risk Assessment and a Tier 1 Qualitative Contamination Risk Assessment presented as **Technical Appendix 9.1** (ref 9.1)**.**

CONTEXT

9.4 This section of the ES discusses the context of the Proposed Development with regard to the relevant international and national legislation, in addition to national and local planning policies.

International/National Legislation

9.5 The role of the planning system is to control future development and land use. UK legislation on contaminated land is principally contained in Part 2A of the Environmental Protection Act 1990 (ref. *9.2)*. Part 2A was introduced in England on 1 April 2000 and provides a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment. The broad approach, concepts and principles with respect to land contamination management in Part 2A should be applied in the determination of planning applications. Part 2A focuses on the identification and remediation of land which in its current use poses an unacceptable risk to people or the environment.

9.6 The assessment of risk arising from contamination and remediation requirements should be considered on the basis of both the current and proposed use. The underlying approach to identifying and dealing with risk and the broad policy objective of safeguarding human health and the environment are similar for both the planning system and Part 2A.

9.7 The Regulations and Statutory Guidance that accompany the Environmental Protection Act, include the Contaminated Land Statutory Guidance for England 2012 (ref. *9.3)* and the Contaminated Land (England) Regulations 2006, which have been revised with the issue of The Contaminated Land (England) (Amendment) Regulations 2012 (SI 2012/263) (ref. *9.4*). The guidance includes a definition of 'risk', where a risk is said to be a combination of *"(a) the likelihood that harm, or pollution of water, will occur as a result of contaminants in, on or under the land; and (b) the scale and seriousness of such harm or pollution if it did occur*".

9.8 The Environmental Damage (Prevention and Remediation) (ref *9.5)* Regulations came into force on 19th July 2015 and implement the European Environmental Liability Directive. The Regulations provide that, for certain activities, where there is an imminent risk of environmental damage, steps must be taken to prevent such damage. If environmental damage has already occurred; the regulations stipulate that the operator of the activity must prevent further damage. The provisions include enforcement procedures including criminal sanctions for breaches of the Environmental Damage Regulations.

9.9 Controlled Waters are rivers, estuaries, coastal waters, lakes and groundwater, but not perched groundwater. The Environmental Permitting (England and Wales) Regulations 2016 (ref. *9.6*) have replaced those parts of the Water Resources Act 1991 that relate to the regulation of discharges to controlled waters (including groundwater). Under the Environmental Permitting Regulations, groundwater activities relate to inputs of pollutants to groundwater. The Environmental Permitting Regulations also replace the Groundwater Regulations 2009 which replaced the Groundwater Regulations 1998.

9.10 The Environmental Permitting Regulations transposed the Groundwater Directive 1980 (GWD), the Water Framework Directive 2003 (WFD) (ref. *9.7*) and Groundwater Daughter Directive 2006 (GWDD) (ref. *9.8*). The GWD remained in force until its repeal in December 2013.

9.11 The GWD was enacted by the Groundwater (England and Wales) Regulations 2009, which were subsumed by the Environmental Permitting Regulations, which clarify four objectives that specifically relate to groundwater quality in the Water Framework Directive (2000):

(i) Achieve 'Good' groundwater chemical status by 2015, commonly referred to as 'status objective';

(ii) Achieve Drinking Water Protected Area Objectives;

(iii) Implement measures to reverse any significant and sustained upward trend in groundwater quality, referred to as 'trend objective'; and

(iv) Prevent or limit the inputs of pollutants into groundwater, commonly referred to as 'prevent or limit' objectives.

9.12 The Water Act 2003 (Commencement No.11) Order 2012 (ref. *9.9*) brought into full force the amendments in section 86 of the Water Act 2003 for the test for 'contaminated land' which relates to water pollution so that pollution of controlled waters must now be 'significant' to meet the definition of contaminated land.

National Planning Policy

9.13 Section 15, paragraphs 170, 178, 179 and 180 of the NPPF (ref. *9.10*) describe the policy considerations that local planning authorities should have regard to when preparing policies for development plans and in making decisions on applications in respect of land affected by contamination or land instability. After remediation required through the planning process, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990 (Para 178).

9.14 For planning purposes, the NPPF requires that the assessment of risks arising from contamination and remediation requirements should be considered on the basis of the current environmental setting, the current land use, and the circumstances of its proposed new use. The NPPF stipulates that planning policies and decisions on planning applications should ensure that:

> *"the site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation)"; and that "after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990"; and "adequate site investigation information, prepared by a competent person, is available to inform these assessments." (Para 178).*

9.15 The NPPF stipulates that planning policies and decisions should "contribute to and enhance the natural and local environment", including by "preventing new and existing development

from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability." (Para 170).

9.16 It is generally considered that a Phase 1 Ground Conditions Assessment (Desk Study and site reconnaissance) is the minimum requirement to support any planning application for a site that might be affected by contamination or land instability.

9.17 Further information on land stability is given in a Planning Practice Guidance Note on "Land stability" published by DCLG in March 2014 (ref. 9.11). Paragraph 001 of this states that *"The planning system has an important role in considering land stability by:*

(i) Minimising the risk and effects of land stability on property, infrastructure and the public;

(ii) Helping ensure that various types of development should not be placed in unstable locations without various precautions; and

(iii) To bring unstable land, wherever possible, back into productive use".

9.18 Paragraph: 006 (Reference ID: 45-006-20140306) states "*A preliminary assessment of ground instability should be carried out at the earliest possible stage before a detailed planning application is prepared. Developers should ensure that any necessary investigations are undertaken to ascertain that their sites are and will remain stable or can be made so as part of the development of the site. A site needs to be assessed in the context of surrounding areas where subsidence, landslides and land compression could threaten the development within its anticipated life or damage neighbouring land or property. Such information could be provided to the planning authority in the form of a land stability or slope stability risk assessment report. Developers may choose to adopt phased reporting, e.g. desk study results followed by ground investigation results*".

Local Planning Policy

9.19 The current Local Plan for Medway Council was adopted in May 2003 (ref *9.12*). Policy BNE23 addresses the issue of development on potentially contaminated land. Policy BNE23 states that:

> *"Development on land known or likely to be contaminated or affected by adjacent or related contamination must be accompanied by findings of a detailed site examination to identify contaminates and the risks that these might present to human health and the wider environment. Appropriate measures to reduce, or eliminate, risk to building structures, services and occupiers of the site and of adjoining sites must be agreed. Such remedial measures must be satisfactorily implemented before the development is occupied."*

9.20 The Medway Local Plan (2012 to 2035) has undergone a consultation exercise on the Development Strategy stage (June 2018). The draft plan consultation is expected to be the winter 2018/19 therefore changes to the Local Planning Policy may need to be considered at a later date.

9.21 At the time of writing this report no information on the future Contaminated Land policies was available for review.

Other Relevant Policy, Standards and Guidance

9.22 The assessment is underpinned by the following guidance and/or best practice:

(i) DEFRA/EA, Contaminated Land Report 11 (CLR 11) 'Model Procedures for the Management of Land Contamination' (ref. *9.13*);

(ii) BS 5930:2015 "Code of practice for ground investigations" (ref. *9.14*); and,

(iii) BS 10175:2011+A1:2013 "Investigation of contaminated sites – code of practice" (ref. *9.15*).

9.23 This assessment adopts a tiered approach to ground condition assessment as set out in the aforementioned documents. The assessment also considers the requirements detailed in the Environment Agency's (EA) "Guiding principles for land contamination" (ref. *9.16)*. The guiding principles documents are a package of three documents (Guiding Principles for Land Contamination (GPLC) 1 to GPLC3) that replaced the EAs 'requirements for land contamination reports' published in 2005. It should be noted that the GPLC documents were withdrawn at the end of 2015 as part of the measures implemented by the EA as they no longer provide guidance. Whilst regulatory endorsement is no longer in place, these documents still provide useful guidance.

METHODOLOGY

Assessment Methodology

9.24 This assessment, which is based on the findings of a Phase 1 Ground Condition Assessment (**Technical Appendix 9.1),** seeks to establish the current baseline conditions in respect of land contamination and stability, before identifying and assessing the potential impacts that may arise due to the Proposed Development, and the effects upon identified receptors from the impacts.

9.25 The study area is defined as the Site and up to a 1km radius from the Site as, based on professional judgement and accepted industry practice, this is considered to represent the likely zone of influence of any impacts on ground conditions or from contamination. Where impacts have the potential for effects further afield than this, this has been identified.

9.26 Within the context of this report, the word 'impact' and 'effect' are used, in accordance with best practice to differentiate between impacts as a consequence of development, and effects upon identified receptors.

9.27 The assessment of the ground conditions at the Site has been undertaken by following a tiered approach as recommended within the industry guidance (namely the Model Procedures for the Management of Contaminated Land):

(i) Tier 1 – a qualitative assessment of historical and published information, together with a site reconnaissance, undertaken in order to develop a preliminary conceptual site model and inform a preliminary risk assessment;

(ii) Tier 2 – an assessment of ground condition data using published generic assessment criteria to screen the site and establish whether there are actual, or potential, unacceptable risks; and (if required);

(iii) Tier 3 - detailed - a quantitative assessment involving the generation of site specific assessment criteria (SSAC).

9.28 For this assessment, a Tier 1 assessment has been undertaken. The results of the Tier 1 assessment form the basis for the baseline conditions and assessment of impacts within this ES chapter.

9.29 The assessment has involved a study of available desk-based information including information from a site walkover survey, readily available information and a Landmark Envirocheck report encompassing the Site and surrounding area to establish local ground conditions and environmental setting.

9.30 In order to evaluate whether the presence of a source of contamination could potentially lead to harmful consequences a source-pathway-receptor methodology is adopted, with the underlying principle that the identification of pollutant linkages consists of the following three elements:

(i) A source/hazard (a substance or situation that has the potential to cause harm or pollution);

(ii) A pathway (a means by that the hazard moves along / generates exposure); and

(iii) A receptor/target (an entity that is vulnerable to the potential adverse effects of the hazard).

9.31 Without a pollutant linkage, the contamination may be a potential hazard but does not constitute a risk unless all three elements are present. Therefore, in assessing the potential for contamination to cause a significant effect, the extent and nature of the potential source or sources of contamination must be assessed, pathways identified, and sensitive receptors or resources identified and appraised, to determine their value and sensitivity to contamination related impacts.

9.32 The methodology adopted in this chapter is qualitative with a progression from factual information (stated with reasonable certainty) regarding the baseline conditions, to appraisal informed by professional judgement and expression of opinions on the relative significance.

9.33 Baseline conditions for the study area have been identified for the purpose of this ES using a Phase 1 Ground Condition Assessment (GCA) for the site, undertaken by PBA in 2018 which presents information on the geotechnical and geo-environmental setting of the Site. The PBA 2018, GCA report is included in **Technical Appendix 9.1** and describes the types and locations of:

(i) Potential Sources of Contamination (PSCs), based on identification of current and historic land use; and

(ii) Potential Geological Hazards (PGHs), (such as ground stability hazards that may result from artificial and natural cavities, and potential adverse foundation conditions that may be affected by compressibility, shrinkage/swelling of clay stratum, groundwater and drainage).

9.34 The PBA 2018, GCA report also identifies the type and sensitivity of potential receptors (including consideration of human health, buildings, groundwater, surface water and certain ecological systems) and identification of possible migration or transportation pathways.

Consultation

9.35 **Table 9.1** provides a summary of the consultation activities undertaken in support of the preparation of this chapter.

Table 9.1: Summary of Consultation Undertaken to Date

Consultee	Individual/department	Comments
Medway Council	Stuart Seed – Environmental Protection Officer	Received from Rapleys - Draft Pre-Application Meeting Minutes dated 1st October 2018- Confirmed a phase one contamination assessment would be sufficient with the application.
		Received from Rapleys – Pre-Application written response from Medway Council dated 19th November 2018 – 'technical assessments will be required covering contamination. These reports will be required with any planning application'
	Submitted to Medway Council during August 18	Environmental Impact Assessment – Scoping Report (SRS/18-013070) dated 1st August 2018
Environment Agency	Lucy Payne Customers and Engagement officer. Kent and South London	Closure Report and Environmental Monitoring Data to 2015 pertaining to the adjacent landfill site at the Lower Twydall Chalk Pit
Environment Agency	Russell Bayliss Customer Services Team. Kent, South London and East Sussex	Environmental Monitoring Data to Dec 2017 pertaining to the adjacent landfill site at the Lower Twydall Chalk Pit

Significance Criteria – Land Contamination

9.36 The significance of the effects is defined using a combination of the value/sensitivity of the potential receptor and the potential consequence of the effect. **Tables 9.2-9.4** illustrate how the value of the receptor and the magnitude of the impact determine the significance level of the impact which can be 'Negligible', 'Slight', 'Moderate', or 'Substantial'.

9.37 The classifications have been generated using descriptions of environmental receptor importance and value given in various guidance documents including Guidance for the Safe Development of Housing on Land Affected by Contamination (ref. *9.17*) and Department of the Environment, Transport and the Regions (DETR) Circular 02/2000, Contaminated Land: Implementation of Part 2A of the Environmental Protection Act 1990 (ref. 9.18). Human health and buildings classifications have been generated by PBA using the attribute description for each class based on professional judgement.

Table 9.2: Criteria Used in Ground Conditions for Classifying Receptor Value or Sensitivity

Sensitivity/value of a receptor	Example of Receptors
Very High **Receptor of international value**	Human Health: Residential and uses where children are present; Groundwater: Source Protection Zone Surface Water: General Quality Assessment (GQA) Grade A High Ecological Status Ecology: Special areas of conservation, Special Protection Area, RAMSAR Buildings: World Heritage Sites
High **Receptor of national value**	Human Health: Employment Groundwater: Principal Aquifer Surface Water: GQA Grade B Ecology: Site of Special Scientific Interest, National or Marine Nature Reserve Buildings: Conservation Area
Medium **Receptor of regional value**	Human Health: Transient or Limited Access, construction workers* Groundwater: Secondary A Aquifer Surface Water: GQA Grade C or D Good or Moderate Ecological Status Ecology: County wildlife sites, Area of Outstanding Natural Beauty (AONB) Buildings: Area of Historic Character
Low **Receptor of local value**	Human Health: Unoccupied Groundwater: Secondary B Aquifer or Secondary (Undifferentiated) Surface Water: Poor Ecological Status Ecology: Local habitat resources or no designation Buildings: Replaceable or Local value
*** assuming that construction workers will adopt appropriate health and safety and personal protective equipment procedures and therefore sensitivity with respect to contamination (not potential geological hazards) is reduced to Low.**	

Table 9.3: Magnitude of Impact on Ground Conditions

Magnitude of Impact		Description
High	Adverse	A marked impact that causes a key attribute of the receptor to be lost/degraded
	Beneficial	A marked improvement in relation to a key attribute of the receptor
Medium	Adverse	A noticeable impact that exceeds a standard (for example a generic assessment criteria (GAC)) but that does not cause a key attribute of the receptor to be lost/degraded
	Beneficial	Benefit to, or addition of, key characteristics, features or elements or improvement of attribute quality
Low	Adverse	A discernible impact that is below a standard (for example a generic assessment criteria (GAC)) and does not cause a key attribute of the receptor to be lost/degraded
	Beneficial	A discernible improvement in relation to a key attribute of the receptor.
Negligible		No discernible impact

9.38 The matrix for assigning the significance of effects is presented as **Table 9.4**, effects of 'Moderate' significance or above are considered significant in EIA terms.

Table 9.4: Impact Significance Matrix for Assessing Ground Conditions

	Magnitude of Impact			
Sensitivity/Value of a Receptor	**High**	**Medium**	**Low**	**Negligible**
Very High	Substantial	Substantial	Moderate	Slight
High	Substantial	Moderate	Slight	Negligible
Medium	Moderate	Slight	Negligible	Negligible
Low	Slight	Negligible	Negligible	Negligible

Significance Criteria – Land Stability

9.39 Evaluation of the ground conditions (from a land stability perspective) at the site is based on the suitability of the geomorphological and geotechnical properties of the ground for the intended end use, and the processes and treatment of the ground that may be required to achieve that end use.

9.40 The significance of the effects of these processes has been assessed by comparing the likely impacts of the interactions between these processes and the existing ground conditions. Factors taken into consideration include;

(i) Magnitude, scale and duration of the impact

(ii) The sensitivity of any receptors identified

(iii) The level of risk that an impact will occur

(iv) Effectiveness of any mitigation measures

9.41 For the purposes of this chapter, the following criteria have been adopted to describe the magnitude of impacts.

Table 9.5: Magnitude of Impact (Land Stability)

Magnitude of Impact		Description
High	Adverse	Complete destruction of the affected receptor/feature
	Beneficial	Complete restoration/remediation of the affected receptor/feature
Medium	Adverse	Fundamental adverse changes to the affected receptor/feature
	Beneficial	Fundamental improvements to the affected receptor/feature
Low	Adverse	Limited adverse changes to the affected receptor/feature
	Beneficial	Limited improvements to the affected receptor/feature
Negligible		No discernible impact

9.42 A receptor/feature is classified in terms of its value or sensitivity; the criteria used in this ground conditions chapter are described in **Table 9.6** below. The human health and built environment classifications have been generated by PBA using professional judgement for each class.

Table 9.6: Sensitivity of Receptors (Land Stability)

Sensitivity/value of a receptor	Built Environment	Human health
Very High **Receptor of international value**	Residential, education, employment development, motorways, mainline Railway, power transmission line, gas/oil pipelines. Motorways	Residential and uses where children are present
High **Receptor of national value**	Commercial, A roads, Dual Carriageway,	Construction Workers
Medium **Receptor of regional value**	B Road, branch line railway, power distribution Lines(local)	Public Open Space
Low **Receptor of local value**	Local Services, C Road	Limited Access

9.43 This approach allows any effects of the development during the Construction and Operational Phases to be identified as Beneficial or Adverse (except where negligible) and, depending on the magnitude of the change in impact, to be assessed as being Negligible, Slight, Moderate or Substantial.

9.44 The matrix for assigning the significance of impacts is presented as **Table 9.7**, impacts of 'Moderate' significance or above are considered significant in EIA terms.

Table 9.7: Impact Significance Matrix (Land Stability)

	Magnitude of Impact			
Sensitivity/Value of a Receptor	**High**	**Medium**	**Low**	**Negligible**
Very High	Substantial	Substantial	Moderate	Slight
High	Substantial	Moderate	Slight	Negligible
Medium	Moderate	Slight	Negligible	Negligible
Low	Slight	Negligible	Negligible	Negligible

Assumptions/Limitations

9.45 Whilst there are some inherent limitations associated with the preliminary studies, the Site is largely structurally undeveloped in nature and mostly undisturbed competent ground. Therefore, it is considered that the level of uncertainty with the land contamination and stability datasets for the Proposed Development is relatively insignificant in the context of the overall scale, condition and nature of the Site.

9.46 It is recognised however that further ground investigation and assessment will be undertaken at the Site following determination of the planning application, and that the information from such studies will be used to further inform and confirm the impact assessment contained herein. It is expected that such studies will be secured through a suitable planning condition.

9.47 Some of the conclusions in this assessment and the PBA 2018, GCA are based on third party data. No guarantee can be given for the accuracy or completeness of any of the third-party data used.

BASELINE CONDITIONS

9.48 Baseline conditions for the Site have been identified through the PBA 2018, GCA as described in Section 9.33 of this chapter. Given the land use (historical and current) across the Site, and baseline data available, the assessment presented herein is considered appropriate for a preliminary characterisation of the Site sufficient for robust environmental assessment testing.

Site History and Present Use

9.49 A description of the historical land use both on-site and off-site is provided in the PBA 2018, GCA presented in **Technical Appendix 9.1.** Within this report the Site has been divided principally as two main parcels of land, divided by Pump Lane which traverses northeast to southwest through the subject site. The first area, termed “Pump Farm”, is bounded by Pump Lane to the east and Lower Twydall Lane to the west. The second area, termed “Bloors Farm”, is bounded by Lower Bloors Lane to the east and Pump Lane to the west.

9.50 Pump Farm has remained as agricultural land with a number of orchards since the mid 1800’s, Pump Farm is located adjacent to the south eastern boundary of this area along Pump Lane. By 1974 a small-scale residential development has occurred immediately north of the site along the Lower Rainham Road. By the map dated 1985 Pump Farm is labelled as a Depot. By the 1990 aerial photography the Pump Farm storage shed has been constructed in its current location. By the aerial photography dated 2006 Pump Farm has been developed into housing but the Pump Farm storage shed remains. From the site walkover undertaken by a PBA Engineers it was noted that the Pump Farm buildings were used to store farming equipment

and materials, with another building used for fruit processing. A free-standing LPG gas tank was located near the buildings. Two chemical storage sheds and a large water tank were also noted alongside the main storage building. It was also advised by the client that a fuel tank was located inside the main farm building but it is fully bunded and is placed on hardstanding. He also advised that there is an abstraction borehole located at the rear of the main storage building that is used for irrigation purposes.

9.51 Bloors Farm has also remained as agricultural land with a number of orchards since the mid 1800's. By 1896 a small building is located along the north eastern boundary, this is later labelled as a Windpump. This area continues to expand with more buildings being added until they are demolished in 2015 and three residential buildings are erected by 2018. From the aerial photography dated July 2013 it was noted that a water tank is present along the south eastern boundary of the Site. From the site walkover it was noted that a Contractor's compound was present associated with the recent localised residential development to the north east of the Site, as previously mentioned. The compound contained associated construction material waste and an associated temporary access track constructed from general demolition rubble. The demolition rubble was described as potentially containing limited amounts of asbestos containing materials. The water tank previously discussed was noted to be cited on a concrete plinth with an associated abstraction borehole believed to be used for irrigation purposes.

9.52 A number of chalk pits were noted on the historical maps off-site with the closet being adjacent to the north-western boundary of Pump Farm named Lower Twydall Chalk Pit. The pit has been subsequently used as an inert landfill, now completed and restored. The Closure Report, obtained from the Environment Agency, indicates the restoration of the site was completed in March 2013, with the site restored currently to rough open ground, with the intention to be restored to agriculture. To date the site appears to remain as rough open ground.

Geology and Ground Conditions

9.53 A description of the anticipated geological sequence at the site is presented in **Technical Appendix 9.1** and summarised here.

9.54 The Site is partially underlain Thanet Beds comprising pale yellow-brown, fine grained sand. These strata, is in turn underlain by the Cretaceous age Seaford Chalk Formation comprising firm white chalk with flint seams. The Thanet Sand is mapped locally as an outlier and thins to the northern, western and eastern boundaries of the Site, but is shown extending beneath the railway line to the south. Superficial Head Deposits comprising clay, silt and gravel are mapped as being present locally to the north of the Site, principally in areas not overlain by Thanet Sand. In particular Head Deposits are found within the narrow shallow valley feature occupied by Pump Lane. Publicly available borehole and trial pit logs within the general vicinity of the Site have generally confirmed the anticipated geological sequence.

Environmental Setting

9.55 The Envirocheck Report, contained within **Technical Appendix 9.1**, identified two landfill sites within 250m of the site, the location of these are shown on Figure 2 within **Technical Appendix 9.1**:

(i) Licence Number: 210049. Name: 'Lower Twydall Chalk Pit'. Category: Inert landfill. Licence Holder: Kent Land Reclamation Ltd.

(ii) Licence Number: Unknown. Name: 'Pump Lane'. Category: Inert Waste. Licence Holder: Unknown.

9.56 Lower Twydall Chalk Pit landfill is located immediately adjacent to the north-western boundary of Pump Farm. The landfill is currently in a period of "Closure", to which

environmental monitoring data provided by the Environment Agency indicates that ground gas concentrations on the perimeter are relatively low, with methane concentrations recorded being below 0.4% and carbon dioxide generally between about 2% and 3.5%. Similarly, groundwater quality monitoring has shown that the Site poses a low risk of contamination.

9.57 Pump Lane Landfill is located approximately 150m south of the Site. The landfill is believed to have been a historical chalk pit infilled with inert waste prior to the construction of the residential area which now surrounds it. Given the scale of the landfill, its age and likely composition and proximity to existing development, it is not considered as representing a significant risk to the Proposed Development, and is not taken forward as a potential offsite source of contamination.

9.58 The Medway Estuary is located approximately 190m northeast of the Site which is classified as being: a Site of Special Scientific Interest (SSSI); a Special Protection Area (SPA); a Marine Nature Reserve; and, a Ramsar Site.

Hydrology and Groundwater Vulnerability

9.59 The superficial Head Deposits are considered to be a Secondary (Undifferentiated) aquifer, the Thanet Sand Formation is considered to be a Secondary A aquifer and the Seaford Chalk Formation is considered to be a Principal aquifer. The Site is not located within a groundwater Source Protection Zone (SPZ).

9.60 There are no registered abstractions on the site. However, the client has advised that a borehole is located to the rear of the main storage buildings, associated with Pump Farm, and is used for irrigation purposes. Another borehole was located during the site walkover towards the eastern boundary of the Site and appears to be part of the irrigation system for the orchard associated with Bloors Farm Site.

9.61 Groundwater levels recorded on available BGS records and also from available groundwater monitoring from boreholes associated with the Lower Twydall Chalk Pit indicate that groundwater levels are between about 4m and 2m AOD (above ordnance datum). The regional groundwater flow is expected to be directed to the north-northeast towards the Medway Estuary. Monitoring date from the Lower Twydall Chalk Pit confirms this flow direction

Land Contamination

Potential Sources of Contamination

9.62 The majority of the Site comprises undeveloped land and has remained as open fields and agricultural farmland. In these areas, it is considered that the likelihood of sources of significant potential contamination being present is Very Low and very localised Low potential in areas used for the storage of chemicals and fuels, and in areas of localised made ground.

9.63 The surrounding land use is predominantly agricultural and residential use and whilst this generally presents a Very Low risk of widespread contamination it is recognised that agricultural storage areas may represent very localised contamination hazards.

9.64 The historical Lower Twydall Chalk Pit landfill site borders the application Site to the northwest and represents a potential geo-environmental hazard. The available factual data received from the Environment Agency indicates that the landfill was filled with Inert Waste arising from the local construction industry. Gas concentrations at the landfill were monitored between 2010 and 2017 as part of the landfill closure procedure; the monitoring wells located around the perimeter of the landfill recorded very low concentration of ground gases, with methane recorded below 0.3% and carbon dioxide below 3.5%. Furthermore, groundwater quality monitoring undertaken at the Site has not revealed any significant groundwater

contamination occurring. Furthermore, it is noted that this landfill is located down/cross - gradient of the site. Therefore, it is unlikely any contaminants will be mobilised from the landfill and transported onto the Site. This suggests that fugitive emissions from the landfill site onto the Site are likely to be negligible and the landfill does not constitute a significant source of potential contamination. The risk associated with the landfill is considered to be **Low.**

Summary of Potential Receptors

9.65 Potential receptors at and adjacent to the Site have been identified as part of the GCA and are set out in **Table 9.8** below:

Table 9.8: Summary of Potential Receptors and Sensitivity

Receptor	Description	Sensitivity
Human Health – On-site current users	Farm workers and general public.	High
Human Health – On-site future users	Future residents, school pupils	Very High
Human Health - Neighbours	Owners of houses in Twydall and Lower Rainham. People visiting the adjacent Bloors Lane Community Woodland and Allotment Gardens	Very High
Human Health – Construction/ maintenance workers	Workers constructing the proposed development	Medium
Groundwater - Shallow	Superficial Head Deposits - Secondary Undifferentiated Aquifer	Low
Groundwater - Deep	Seaford Chalk Formation – Principal Aquifer	High
Property – Buildings	Proposed buildings and services	Low
Property - Animal or Crop	Proposed Community Orchard and off-site Allotments and woodland.	Low
Ecological systems	RAMSAR, Special Protection Area and SSSI approximately 190m from the site.	Very High

Land Stability

Potential Geological Hazards

9.66 The majority of the Site is undeveloped and therefore undisturbed natural ground. The potential geological hazards that have been identified as part of the GCA are set out in **Table 9.9** below:

Table 9.9: Summary of Geological Hazards

Description	Hazard Classification
Coal Mining Affected Areas	Not in a Coal mining area
Collapsible Ground Stability Hazards	Very Low
Compressible Ground Stability Hazards	Very Low
Dissolution Hazard	High
Landslide Ground Stability	Low
Running Sand	Very Low
Shrinking or Swelling Clay	Low/Very Low

9.67 From this assessment, Dissolution is taken forward as a Potential Geological Hazard. There is a possibility that localised areas of limited thicknesses made ground may be present on the Site this is therefore also taken forwards as a Potential Geological Hazard.

Embedded Mitigation

9.68 Prior to construction a site characterisation ground investigation will be undertaken at the site to identify the need, development and agreement of a remedial strategy such that as part of the construction stage that areas of land contamination or land instability are appropriately considered, and mitigation measures put in place. Such works will be agreed with the regulatory authorities.

9.69 During construction works, potential sources of contamination may be introduced to the Site on a transient basis, including fuel storage for construction plant, bulk cement and more minor storage and use of construction products. Impacts, provided that these materials are properly controlled, are not expected to be significant.

9.70 Mitigation measures will be designed in accordance with BS 6031:2009 (ref. 9.20), BS 8004:2015 (ref. 9.21), CIRIA C649 (ref. 9.22) and CIRIA C648 (ref. 9.23). Embedded mitigation measures would include adherence to good practice guidelines and could potentially involve the following:

(i) Soils which are to be reused onsite would be tested for suitability. This would form part of a site materials and waste management strategy which would be drafted prior to construction and would focus on the re-use, recycling and reduction of waste spoil; Any additional soil materials that are to be imported to the Site would be required to be certified to ensure that contaminative materials are not being introduced to the area. This would be undertaken in accordance with the Waste Duty of Care Code of Practise (ref. 9.24) and the excavation and reuse of materials would be undertaken in accordance with a Materials Management Plan (MMP);

(ii) Any vegetation, topsoil and subsoil would be removed to expose a suitable sub-grade. Any soils, sub-soils or aggregate suitable for reuse would be stockpiled appropriately in accordance with a MMP;

(iii) In order to limit disturbance, site access tracks and defined compound areas would be constructed first to allow controlled movement of vehicles around the Site;

(iv) Stockpiles will be sited a minimum distance from watercourses to avoid pollution run-off;

(v) During construction, silt traps and oil interceptors would be placed in drains on site. No untreated surface or waste waters would be allowed to drain into water bodies during construction, operation or decommissioning. Where necessary appropriate consents from the local water or Sewerage Company and/or the Environment Agency would be obtained. The disposal of this effluent would be the responsibility of the contractor. If necessary, this water would be tanked off-site for disposal at a suitable facility;

(vi) All oil and chemical storage tanks and areas where drums are stored would be surrounded by an impermeable bund sized to contain 110% of capacity. In addition, multiple tanks or drums would be within bunds sized to contain the greater of 110% of the capacity of the largest tank or 25% of the total tank's contents;

(vii) All foundations would be appropriately specified to resist chemical attack from soils or groundwater; and

(viii) Foundations and underground infrastructure would also be designed so as not to present a preferential pathway for contaminant migration, if present at the Site, this may include the provision of a Foundation Works Risk Assessment (FWRA) and the use of EA guidance 'Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination (*ref. 9.24*).

9.71 Further, specific mitigation measures could include, for example; removal of as yet undetermined contamination hotspots following a site characterisation ground investigation, development and agreement of remedial strategies with regulatory authorities, and dealing with unforeseen ground conditions.

9.72 Appropriate design requirements will be specified within the new buildings to mitigate against any residual risks from land and water quality and the associated geological hazards. For example, the design and depth of foundations, and ground infiltration systems (soakaways) would take account of the potential dissolution risk determined from the results of proposed ground investigation.

9.73 The principal risk to soils and controlled waters following construction will result from the potential migration of pollutants associated with uncontrolled/accidental spillages or discharges from the development activities. Measures will be proposed to mitigate against such risk and will follow good practise, such as the use of trapped gulley's, interceptors etc.

9.74 The risk to site workers during any subsequent maintenance works would relate to the risk of skin contact, inhalation and ingestion of any residual as yet undetermined contaminated material on the Site. In accordance with current health and safety legislation, the contractor will be required to adopt measures to mitigate the risk to site workers and as such would be considered to be low.

IMPACTS

Land Contamination

9.75 The features of the Proposed Development that are relevant to the effects related to land contamination are those that would change the impacts arising from the potential for a significant source of contamination, pathway or receptor to be present. The assessment has been carried out with respect to the most likely effects that may occur in relation to the proposed development. The possible effects are presented in **Table 9.10** with respect to each of the receptors identified.

Table 9.10: Description of Effects (relative to receptors) – Land Contamination

Receptor	Description
Human Health	Skin contact, inhalation or ingestion of contaminated soils, surface water and groundwater. Death or injury by inhalation or explosion of ground gases. Death or injury by inhalation of harmful in-ground vapours.
Groundwater	Movement of contaminants by surface water infiltration, groundwater flows and drainage. Leaching of contaminants from the near-surface soils.
Built Environment	Movement of contaminants by surface water infiltration, groundwater flows and drainage. Leaching of contaminants from the near-surface soils.
Ecological Systems	Deterioration or change in conditions resulting in loss or damage to system.

Construction Impacts

9.76 During the construction stage of the Proposed Development, the number of and length of time that site workers would be on the Site will increase compared with currently. The activities that site workers are likely to be involved in, e.g. excavations etc. may also provide a new potential pathway between the receptor (site worker) and any potential sources of contamination that have been identified.

9.77 **Construction Workers**: The majority of the Site is currently undeveloped and the potential for land contamination to be present in these areas is Very Low, the magnitude of impact is considered to be negligible and as such, without any mitigation, the potential significant impact on construction workers in these areas is considered to be **Negligible**. The exception relates to any areas where the potential for land contamination to be present is Low, the magnitude of impact is considered to be low and as such the potential significant impact on construction workers without mitigation is considered to be **Negligible**. Prior to construction as set out in section 9.68 above, a site characterisation ground investigation will be undertaken at the site to identify the need, development and agreement of a remedial strategy such that as part of the construction stage that areas of land contamination are appropriately considered, and mitigation measures put in place.

9.78 **Groundwater**: The presence of a Principal Aquifer at the Site (underlying superficial deposits and in addition the Thanet Sand formation in places) which is classed as having a High sensitivity, the magnitude of impact is currently considered to be Low which, following ground investigation and implementation of remediation, if required, would reduce to **Negligible**.

9.79 **Ecology**: It is considered that due to the fact there is currently a Very Low to Low potential for contamination to be present on the Site, migration of any potential localised contaminants is limited and the distance of the ecological receptors and, following ground investigation and implementation of remediation, if required, would result in a **negligible** magnitude of impact. Given the Very High sensitivity of the receptor the potential significant impact on the Medway Estuary and Marshes SPA/SSSSI/Ramsar following implementation of any remediation, if necessary, would be **Slight Adverse.**

Operational Impacts

9.80 **On site users**: The majority of the Site is currently undeveloped and the potential for land contamination to be present in these areas is Very Low. It is assumed that as part of the Construction stage that necessary remedial works will have been undertaken, informed by a ground investigation and agreed remedial strategy. The exception relates to areas where the potential for land contamination to currently be present is Low. As such it is considered that whilst there is an increase in receptor sensitivity given the residential use of the site, compared to the current land use, the magnitude of impact will have been reduced to Negligible and as such the potential effect is **Slight**.

9.81 **Groundwater**: The presence of a Principal Aquifer at the Site (underlying superficial deposits and in addition the Thanet Sand formation in places), results in the Site as having a High sensitivity. Whilst there is an increased built development (therefore reduced infiltration potential), it is assumed that remedial action, as determined through ground investigation at the site, will have been undertaken as part of the construction stage works and as such the potential effect is **negligible**.

9.82 **Built Environment**: Whilst there is currently a Very Low to locally Low potential for contamination to be present across the Site, it is assumed that remedial action, as determined through ground investigation at the site, will have been undertaken as part of the construction stage works and as such the potential effect is **negligible**.

9.83 **Ecology**: It is considered that due to the Very Low/Low potential for contamination to be present on the Site, and any remedial action undertaken as part of the construction stage remedial action, as determined through ground investigation at the site, will have been undertaken as part of the construction stage works and as such the potential effect is **negligible**.

Land Stability Impacts

9.84 The potential effects are presented in **Table 9.11** with respect to features/receptors and the potential geological hazards identified.

Table 9.11: Description of Effects – Land Stability

Receptor	Description
Human Health	Injury due to ground movement due to dissolution.
Built Environment	Damage to buildings and infrastructure due to ground movements related to dissolution. (Operational Phase only)

Construction Impacts

9.85 **Human Health**: During the construction stage the number and length of time that site workers would be on the Site will increase compared to the baseline. The potential significant impact on site workers from the identified geological hazards, with a magnitude of impact being medium, is considered to be **Slight Adverse.** Prior to construction as set out in section 9.70 above, a site characterisation ground investigation will be undertaken at the site to identify the need, development and agreement of a remedial strategy such that as part of the construction stage that areas of land contamination are appropriately considered, and mitigation measures put in place. Such works will be agreed with the regulatory authorities.

Operational Impacts

9.86 **Human Health**: The completed Development will comprise built development across the Site and there will be increased numbers of site users who will be within the Site for longer periods compared to the baseline. Whilst there is an increase in receptor sensitivity, remedial action and mitigation in design undertaken as part of the construction stage, as determined through ground investigation at the site, will have been undertaken as part of the construction stage works and as such the potential effect is **negligible**.

9.87 **Built Environment:** The potential significant impact from ground movement following the completion of the Development associated with dissolution is considered to have a potential significance impact of Moderate Adverse, due to the very high receptor sensitivity and the low magnitude of impact.

MITIGATION

9.88 This section presents the mitigation measures that will be adopted and provides a re-assessment of the potential effects identified in the sections above, post mitigation.

Land Contamination

9.89 It is anticipated that an appropriate ground investigation will be undertaken prior to Development, including ground gas monitoring and geoenvironmental testing of soils and groundwater, to confirm the nature of the ground conditions, refine the Conceptual Site Model if necessary, update the risk assessments, and to enable any remediation or specific mitigation measures in respect of land contamination to be agreed with the regulatory authority and implemented. It is a presumption that all construction activity will commence after further ground investigation has been carried out, in accordance with good practice, statutory controls, including appropriate PPE for construction workers, and in order to meet the intended end use of a particular development parcel.

9.90 If any potential contamination is identified following the ground investigation, example mitigation in the design of the proposed development could be the provision of a sufficient clean cover within soft landscaping areas, if required, to prevent prolonged skin contact, inhalation and ingestion of contaminated soils.

Construction

9.91 **Construction Workers:** To mitigate any potential significant impact, resulting from any identified or unidentified contamination as part of the construction stage, appropriate protective clothing and equipment will be worn by site workers; and good standards of hygiene adopted to prevent prolonged skin contact, inhalation and ingestion of soils during construction. In addition, the methods of working will be selected to limit the potential for air-borne dust to arise associated with the excavation and disturbance of the soils present on the Site. Good working practices such as appropriate protective clothing and equipment, inclusion of tool box talks and watching briefs for unexpected contamination should also be adopted.

9.92 To mitigate any potential effect associated with the inhalation of potentially hazardous ground gases, appropriate ventilation will be provided to all confined spaces and appropriate procedures adopted to ensure they are checked for hazardous gases prior to man-entry.

9.93 It is considered that the mitigation measures will reduce the potential significant impact on site workers to **Negligible**.

9.94 **Groundwater:** To mitigate any potential significant impacts prior to commencement of development a ground investigation will be undertaken across the Site, and this will identify any existing contamination and any specific mitigation measures that may be required. In

areas of significant impact, and elsewhere as identified during the Site investigation, appropriate mitigation (if necessary) will be carried out if a potential significant impact is identified. In addition, the design of foundations for buildings and structures will avoid techniques that will create potential pollution pathways, and best practice construction techniques will be used.

9.95 It is considered that following implementation of the mitigation measures the potential significant impact on groundwater will be **Slight Beneficial**.

9.96 **Ecology:** It is considered that following implementation of the mitigation measures mentioned above the potential significant impact on ecological systems will be **Slight Beneficial**.

Operational

9.97 **Site Users:** To mitigate any potential significant impact on human health associated with contact or ingestion of contaminated soils, and/or the inhalation of potentially hazardous ground gases (in areas adjacent to the Landfill), the proposed ground investigation will enable refinement of the site conceptual model and appropriate risk assessment which will then lead to development of appropriate mitigation measures as necessary. In relation to any land gas issues, should they arise, appropriate gas protection measures will be designed after gas monitoring and gas risk assessment has been completed (if required) and implemented during the construction stage. Such measures could include a proprietary gas resistant membrane and/or passively vented under floor sub-space (as appropriate and determined in accordance with BS8485:2015).

9.98 It is considered that following investigation and assessment, and implementation of mitigation measures (if needed) during construction the potential effects on site users will be **Slight Beneficial.**

9.99 **Groundwater:** Following construction and during operation of the Site the surface water system will incorporate appropriate measures to ensure any contaminated water does not reach the groundwater as a result of accidental spillage or leaks during the Site operation.

9.100 It is considered that following implementation of the mitigation measures mentioned above and in previous sections the potential significant impact on groundwater will be **Slight Beneficial**.

9.101 **Ecology:** It is considered that following implementation of the mitigation measures mentioned above the potential significant impact on ecological systems will be **Slight Beneficial**.

Land Stability

9.102 This section presents the additional mitigation measures that will be adopted and provides a re-assessment of the potential effects identified in the sections above, post mitigation.

9.103 It is anticipated that appropriate ground investigation will be undertaken prior to development, to determine the nature of the ground conditions and any potential geological hazards, and enable any specific remediation or mitigation measures in respect of land stability to be determined.

9.104 The development design will include foundation and other infrastructure and drainage construction design elements appropriate for the encountered ground conditions and the land stability risk assessment. Such measures may include as necessary reinforced strip or trench fill or grillage foundations with minimum widths and cantilever spans, and employing appropriate standoff distances for the location of soakaways from foundations or primary infrastructure.

9.105 It is a presumption that all construction activity will commence after full ground investigation is completed, in accordance with good practice.

9.106 It is considered that following the mitigation measures the potential significant impact from Land Stability will be **Slight Beneficial**.

RESIDUAL IMPACTS

9.107 Residual impacts are those that are predicted to remain after implementation of the mitigation measures described above.

9.108 The Proposed Development will result in the investigation and assessment of the Site prior to commencement of the Development, from a land contamination and suitability for proposed end use perspective. The investigation and assessment will identify any areas where there is a hazard and subsequent remediation/mitigation is necessary. Therefore, following the implementation of the mitigation measures described above, residual effects during both the construction and the operation stages of development with reference to potential land contamination will be at worst **Negligible.**

9.109 It is considered that subject to the mitigation measures described above, residual effects during both the construction and the operation stages of development with reference to potential geological hazards it is considered that there will **no significant residual effects.**

CUMULATIVE IMPACTS

9.110 Construction of the Pump and Bloor Site could occur simultaneously with some other developments identified.

9.111 Given the geological and hydrogeological setting of the Site, and its distance from the majority of the other developments, it is considered that there is no significant linkage or association between the developments and the Pump and Bloor Farm site and consequently no cumulative ground condition effects will result.

9.112 The only exception to this is the Site denoted A1, Land South of Lower Rainham Road, which includes land currently forming the Lower Twydall Chalk Pit landfill area. There is currently no planning information regarding this site however it is assumed that this site will be subject to review through the planning regime and would incorporate their own site specific mitigation measures, as required, to address any potential changes in land gas regime and groundwater conditions and management and monitoring, then it is anticipated that there would be **No effects** in relation to cumulative construction impacts to ground conditions.

SUMMARY

9.113 This assessment of ground conditions has been undertaken to identify the likely potential significant effects of the Proposed Development in relation to ground conditions with consideration given to potential ground stability and contamination related impacts. This assessment is informed by undertaking a Phase 1 Ground Condition Assessment Report which comprised a Preliminary Ground Stability Risk Assessment and a Tier 1 Qualitative Contamination Risk Assessment which was used to establish the current baseline conditions and assessment of impacts within this ES Chapter.

9.114 The Site is underlain by the Thanet Sand Formation or Superficial Head Deposits which in turn overlie the Seaford Chalk Formation. Whilst the Site is located in close proximity to Lower Twydall Chalk Pit landfill, the environmental monitoring of that site to date, does not indicate that there are significant risks associated with offsite sources of land gas or contaminated land/groundwater.

9.115 Based on historical and current land use, the potential for contamination to be present at the Site is Very Low with very limited areas being Low. There are therefore no currently identified significant geo-environmental risks at the Site which would preclude development for the proposed end use.

9.116 The receptors considered in the assessment are those receptors identified in statutory guidance. The importance of each receptor is classified in one of five bands with a Very High classification associated with receptors of national or international importance. Human health has been identified as receptors of high to very high importance/sensitivity, ecological systems has been identified as being of very high sensitivity, whilst groundwater has been identified as being of high sensitivity.

9.117 A review of potential geological hazards has identified the risk of land instability or potentially adverse foundation conditions to be present, in general, to be High. This is due to the risk of solution features associated with the dissolution of the Seaford Chalk Formation underlying the Site.

9.118 It is considered that provided further characterisation of the ground is obtained through a Phase 2 intrusive ground investigation and subsequent remediation and/or mitigation measures are adopted (if required), and that appropriate design and construction methods are used for the development, this will, in themselves, provide mitigation against the potential issues and reduce residual impacts to an acceptable level. The residual impacts on the Proposed Development, following mitigation, from contamination is considered to be, at worst, Negligible in relation to harm to construction workers during the construction phase and at worst Negligible during the operational phase in relation to damage to the built environment.

9.119 The residual impacts on the Proposed Development, following mitigation, from land stability is considered to be, at worst, Negligible during the construction phase in relation to harm to construction workers and, at worst, Slight Beneficial during the operational phase in relation to harm to site workers and damage to the built environment.

9.120 It is concluded that the potential residual impacts, associated with contamination and land stability do not pose an unacceptable constraint to the Proposed Development.

Table 9.12: Summary Table

Description of Likely Significant Effects	Significance	Effects				Description of Mitigation	Description of Residual Effects	Significance	Residual Effects				
		B/A	P/T	D/I	ST/M/LT	L/R/N				B/A	P/T	D/I	ST/M/LT	L/R/N
Demolition and Construction Phase														
Harm to construction workers - Contamination	Negligible	T,D,ST,L					Described in section 9.68-9.74	None	Negligible	T,D,ST,L				
Contamination of groundwater	Negligible	A,T,D,ST,N					Described in section 9.68-9.74	None	Negligible	B,T,D,ST,N				
Harm to ecological systems - contamination	Slight adverse	A,T,I,ST,N					Described in section 9.68-9.74	None	Slight adverse	B, T, I St, N				
Harm to construction workers – land stability	Slight adverse	A, T, D, ST, L					Discussed in section 9.104-9.198	None	Negligible	T, D ST, L				
Operational Phase														
Harm to site users - contamination	Slight adverse	A, P, D, LT, R					Described in section 9.99	None	Negligible	B. P, D, LT, L				
Contamination of groundwater	Negligible	A, P, D, LT, N					Described in section 9.101	None	Negligible	B, P D LT, N				
Harm to ecological systems - contamination	Slight adverse	A, P, I, LT, N					Described in section 9.103	None	Negligible	B, P, I, LT, N				
Damage to built environment - contamination	Negligible	P, D, LT, L						None	Negligible	P, D, LT, L				
Harm to site users – land stability	Moderate adverse	A, P, D, LT, R					Discussed in section 9.104-9.108	None	Slight adverse	B, P. D. LT, R				

Damage to built environment and ground – land stability	Moderate adverse	A, P, D, LT, L	Discussed in section 9.104-9.108	None	Slight adverse	B, P, D, LT,L

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

10 TRANSPORTATION

INTRODUCTION

10.1 This chapter of the ES assesses the impact of the Proposed Development on transport and highway effects. This chapter has been prepared by David Tucker Associates.

10.2 This assessment considers the potential transport and highway impacts of the proposals including the impact of construction traffic and development generated traffic on the capacity and safety of the surrounding road network, and the implications for public transport and pedestrian and cycling movements.

10.3 Full details of the above are provided within the Transport Assessment (TA) provided as **Technical Appendices 10.1**, **10.1sup** (relating to Technical Notes 1,2,3 providing information on highway safety, walking/cycling/horse riding assessment, educational trip generation and analysis of sensitivity test data) and **10.1 sup (September 2020)** (providing further information on accident data and analysis, on the access arrangements to the site, minor amends to traffic assignment on the wider network and further information on the public transport strategy). A Framework Travel Plan was also prepared to support the application and is included as **Technical Appendix 10.2a.**

10.4 Where necessary, details of the mitigation measures required to prevent, reduce, or offset identified traffic impacts associated with the Proposed Development are stated in this chapter. The resulting residual impacts are also reported, which assumes that mitigation will be applied.

CONTEXT

10.5 This section of the ES discusses the context of the Proposed Development with regard to national and local planning policies.

Planning Policy

National Planning Policy Framework

10.6 The Government's overall planning policies for England are described in the revised NPPF (ref.10.1). The NPPF states that "…Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe".

10.7 It further states as Paragraph 111 that "All development that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed".

Kent County Council Local Transport Plan (KCC LTP4)

10.8 The LTP4 (ref 10.2) has been adopted and the document strategies and policies cover the period from 2016-2031. The LTP4 aims to ensure that Kent County grows in a consistent and sustainable manner.

10.9 The LTP4 has 4 key outcomes which it aims to achieve through a set of policies;

> *Outcome 1) Economic growth and minimised congestion: Deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development, meeting demand from a growing population.*

Outcome 2) Affordable and accessible door-to-door journeys: Promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services.

Outcome 3) Safer Travel: Provide a safer road, footway and cycleway network to reduce the likelihood of casualties, and encourage other transport providers to improve safety on their networks.

Outcome 4) Enhanced Environment: Deliver schemes to reduce the environmental footprint of transport and enhance the historic and natural environment.

Outcome 5) Better Health and Wellbeing: Provide and promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality.

The Kent Design Guide

10.10 The adopted Kent Design Guide (KDG) (ref 10.3) seeks to promote *a "Common approach to the main principles which underlie Local Planning Authorities criteria for assessing planning applications. It also seeks to ensure that the best of Kent's places remain to enrich the environment for future generations".*

10.11 Planning Authorities in Kent will adopt this guide as a supplementary Planning Document so that it can be a material consideration in determining planning applications.

10.12 The KDG includes various sections which all outline expected standards and policies which new developments should adhere to. These include;

(i) "Developments should be permeable and linked to the surrounding network, allowing safe, direct routes for pedestrians and cyclists. Direct routes through developments should be provided for walkers and cyclists'.
(ii) 'Homezone' developments are required to adhere to the following guidelines:
(iii) Traffic speeds restricted to around 10mph
(iv) High quality hard paving
(v) Strong enclosure of the public access space
(vi) Minimal front gardens
(vii) Careful planting of trees within the public area
(viii) Integration within the overall network of streets, making them part of a through route system.
(ix) Speed reducing features should be an intrinsic part of any layout and should be a combination of urban form and carriageway alignment.
(x) To enable drivers to both, see and be seen at junctions, around cures and at entrances to premises, it is necessary to provide clear unobstructed visibility related to the anticipated vehicle speeds.
(xi) The need for turning facilities should generally be avoided by designing layouts with through routes.
(xii) Consideration should be given in new development to the size and type of vehicles that need access and – for emergency service vehicles – the provision of 'standing' space.
(xiii) Access for fire appliances must be considered at the initial design stage.
(xiv) The materials used in the public realm are important in the creation of quality places.
(xv) The Better Homes: Localism, Aspiration and Choice Document".

METHODOLOGY

10.13 This section provides details of the data and information supplied for the purposes of undertaking the traffic assessment. It also describes the adopted methodology for assessing and appraising the potential traffic impacts associated with the construction and operation phases of the Proposed Development.

Study Area

10.14 The following junctions have been considered within the Transport Assessment:

(i) Lower Rainham Road/ Yokosuka Way/Gads Hill;
(ii) Beechings Way/ Yokosuka Way/ Cornwallis Avenue/ Ito Way;
(iii) A2/ Ito Way;
(iv) Hoath Way/ London Road/ Twydall Lane;
(v) Pump Lane/ A2 London Road;
(vi) Bloors Lane/ A2 London Road;
(vii) Beechings Way/ Pump Lane priority; and
(viii) Beechings Way/ Pump Lane mini roundabout.

10.15 Further wider assessment in terms of M2 and further afield is considered in terms of air quality impacts.

Traffic Flow Assessment

10.16 Traffic flows before and after the Proposed Development are quantified in terms of the AM peak hour (0800-0900) and the PM peak hour (1700-1800), and daily traffic movements. The Development will pass through a number of stages in its lifetime during which the volume and type of traffic will lead to different environmental impacts. The scenarios considered within this traffic and transport chapter include for the purposes of appraisal:

(i) Base Year (2018): This is representative of existing traffic levels;
(ii) Base Year (2029): This is the future year, 10 years after application submission without the Proposed Development.
(iii) Base Year (2029) + Development: This is the future year with the Proposed Development.

Assessment Approach

10.17 The Institute of Environmental Management and Assessment (IEMA), formerly the Institute of Environmental Assessment (IEA) has prepared "Guidelines for the Environmental Assessment of Road Traffic "(IEA 1993)" (ref 10.4) which sets out the recommended list of environmental impacts which could be considered as potentially significant whenever a new development is likely to give rise to changes in traffic flows. These are:

(i) severance;
(ii) driver delay;
(iii) pedestrian delay and amenity;
(iv) accidents and safety;
(v) hazardous loads; and
(vi) fear and intimidation.

Severance

10.18 Severance is the perceived division that can occur within a community when it becomes separated by a major traffic route. Whilst the IEMA Guidelines refer to the effect of traffic on severance of 30%, 60% and 90% producing "slight", "moderate" and "substantial" changes in severance respectively, it is suggested that caution be applied to relying on this quantum

of change. The consideration of severance in this assessment has had due regard to specific local conditions, in particular, the location of pedestrian routes to local facilities and whether crossing facilities are provided or not.

Driver Delay

10.19 Traffic delays to 'non-development' traffic can occur:

(i) at the Site entrances where there will be additional turning movements;
(ii) on the highways passing the Site where there may be additional flow; and
(iii) at key junctions on the nearby highway network.

10.20 Effect on driver delay is based on the quantum of change in traffic levels against interpretation of the local highway link capacity expressed in terms of predicted flows.

Pedestrian Delay

10.21 The Proposed Development will bring about increases in the number of vehicle movements during the construction and operational phases. In general terms, increases in traffic levels are likely to lead to greater increases in delay to pedestrians seeking to cross-roads. The IEMA Guidelines recommend that, rather than rely on thresholds of pedestrian delay, the assessor should use judgement to determine whether pedestrian delay is a significant impact. This is the approach which has been adopted for the purposes of this assessment.

Pedestrian Amenity

10.22 This is broadly defined as the relative pleasantness of a journey and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic. The IEMA Guidelines cite a doubling of traffic flow (or its lorry component) as representing a threshold for effect evaluation. This measure is considered within the assessment that follows.

Fear and Intimidation

10.23 This again relates to pedestrians, and shares characteristics with pedestrian amenity. There are no commonly agreed thresholds for estimating danger, but research work is cited setting out "degree of hazard" levels relating to 18 hour average traffic flow, 18 hour HGV flow and average vehicle speed. These levels are considered within the assessment that follows in terms of effect.

Accidents and Safety

10.24 The Personal Injury Accident (PIA) record for the local and strategic highway network has been obtained for the most recently available 5 year period. The effect of additional traffic from the Proposed Development is considered in terms of the magnitude of traffic increase and existing accident record data.

Hazardous Loads

10.25 The IEMA Guidelines acknowledge that most developments will not result in increases in the number of movements of hazardous/dangerous loads.

Assessment of Significance

10.26 The significance of an effect is determined by the interaction of the following two factors:

(i) the magnitude, scale or severity of the effect or change, and
(ii) the value, importance or sensitivity of the environmental resource being affected.

10.27 The IEMA Guidelines make it clear that:

"For many effects there are no simple rules or formulae which define thresholds of significance and there is, therefore, a need for interpretation and judgement on the part of the assessor, backed up by data or quantified information wherever possible" (paragraph 4.5)".

10.28 Having regard to this guidance, the approach to determining the significance of identified impacts that has been followed in this assessment is explained in the following paragraphs. The approach has had regard to the guidance given in 'Design Manual for Roads and Bridges Vol II Section 2 Part 5 HA205/08 – Determining Significance of Environment Effects' (ref 10.5) in terms of defining the measure of magnitude and significance of impacts.

10.29 The following series of tables describe in turn how the following terms are defined for the purposes of this assessment:

(i) Value or Sensitivity of the receptor (**Table 10.1**)
(ii) Magnitude of the impact (**Table 10.2**)
(iii) Quantified significance of effect (**Table 10.3**)

Table 10.1: Environmental Value (or Sensitivity) and Typical Descriptors

Value (sensitivity)	Typical Descriptors
Very High	Facility of international or national significance.
High	Close proximity to schools, colleges, accident black-spots.
Medium	Close proximity to congested junctions, hospitals, community centres, conservation areas.
Low (or Lower)	Close proximity to public open space, nature conservation areas, and residential areas with adequate pavements.
Negligible	Receptors of low sensitivity.

Table 10.2: Magnitude of Impact

Magnitude of Impact	Description
High	Very large or large change in environmental conditions (e.g. pollution levels, destruction of habitat). This could result in exceedance of Statutory objectives and/or breaches of legislation.
Medium	Intermediate change in environmental conditions.
Low	Small change in environmental conditions.
Negligible	No discernible change in environmental conditions.

Table 10.3: Impact Significance Matrix

		Sensitivity of Receptor			
		High	**Medium**	**Low**	**Negligible**
Magnitude of Effect (degree of change)	Large	Major	Major	Moderate	Minor
	Moderate	Major	Moderate	Minor	Negligible
	Small	Moderate	Minor	Minor	Negligible
	Negligible	Minor	Negligible	Negligible	Negligible

BASELINE CONDITIONS

Site Description

10.30 The Site is located in Lower Rainham which is situated approximately 400m south of the Medway River Estuary.

10.31 The Site straddles Pump Lane which runs north to south between the B2004 Lower Rainham Road and Beechings Way respectively. Pump Lane is a narrow road approximately 4m wide meaning there is limited opportunity for two-way vehicle passage. Pump Lane is subject to a 30mph speed limit with additional vehicle height and width restrictions of 13'6'' and 6'6'' respectively.

10.32 At the northern boundary of the Site Pump Lane meets the B2004 Lower Rainham Road where Pump Lane forms a wide bellmouth at a simple priority T-junction. To the west where the B2004 carriageway runs through Lower Twydall the single carriageway has an approximate width of 7.0m and is subject to a 40mph speed limit. Further east as the B2004 enters Lower Rainham the width of the single carriageway becomes more variable as it passes through residential frontage. The speed limit here is reduced to 30mph, inclusive of the junction where Pump Lane meets the B2004. The route is managed by a series of traffic light controls which incorporate shuttle working and speed cushions.

10.33 To the west the B2004 provides access to minor local roads including Lower Twydall Lane, Eastcourt Lane and Lower Featherby Road and eventually runs to a 4-arm roundabout where Yokosuka Way can be accessed to the south and the A289 Gads Hill to the north west. To the east the B2004 provides access to minor local roads including Pump Lane, Lower Bloors Lane, Motney Hill, Berengrave Lane and Station Road. Station Road and Ottenham Quay Lane can be followed south for approximately 1.5km where they join the A2 trunk road.

10.34 Pump Lane continues south and passes under the rail line where the carriageway narrows and shuttle working for two-way car passage is exercised. Approximately 150m south of this passage, Pump Lane joins Beechings Way via a simple priority T-junction. Beechings Way is an important local distributor road providing access to a number of residential streets within the local vicinity and connecting the eastern border of Gillingham with the A2 corridor.

10.35 Further east Lower Bloors Lane runs parallel with Pump Lane, this carriageway is similarly narrow as Pump Lane and at approximately 400m south Lower Bloors Lane narrows further, transitioning from a vehicle worthy carriageway into a pedestrian only access. Where Lower Bloors Lane meets the rail line there is a footbridge crossing which provides pedestrian access onto the wider road network south of the Site and into the centre of Lower Rainham.

Baseline and Future Traffic Flows (AADT)

10.36 Baseline 24-hour traffic flows for 2019 have been derived using the ATCs. Tempro local growth factors for the area (Medway 018, Urban, Minor and Principal routes) have been used to factor the 2017 flows to 2019 flows and provide a future year of 2029. The Annual Average Daily Traffic (AADT) flows are set out in **Table 10.4**.

Table 10.4: Base and Future Traffic Flows

Road Link	2019 Base	% HGVs	2029 Base	% HGVs
A289 Pier Road	35,540	2.5%	39,899	2.5%
A289 Yokosuka Way	28,658	2.4%	32,173	2.4%
Cornwallis Avenue	10,756	1.9%	12,121	1.9%
A289 Ito Way	23,268	2.9%	26,121	2.9%
A2 Sovereign Blvd (W of Ito Way)	25,698	1.9%	28,850	1.9%
A2 Sovereign Blvd (E of Ito Way)	36,204	2.5%	40,645	2.5%
Beechings Way (W of Pump Lane)	13,618	2.6%	15,346	2.6%
Beechings Way (E of Pump Lane)	10,181	2.1%	11,473	2.1%
A2 London Road (West of Pump Lane)	12,210	4.0%	13,707	4.0%
A2 High Street	12,210	4.0%	13,707	4.0%
A278 Hoath Way	37,033	3.5%	41,576	3.5%
Lower Rainham Road (E of access)	9,107	0.6%	10,263	0.6%
Lower Rainham Road (W of access)	9,107	0.6%	10,263	0.6%

IMPACTS

Construction Impacts

10.37 During the construction of the Proposed Development, it would be necessary for various plant, equipment and material to be transported to the Site. It is proposed that the majority of construction traffic will enter or leave the Site via Lower Rainham Road and then to Yokosuka Way, A2 and Hoath Way towards the M2.

10.38 The construction operation will be the subject of a CEMP. In addition to vehicle routing, this would also set out items such as periods of operation and construction workers parking within the Site.

10.39 The types of vehicles and number of vehicles that will deliver construction material to the Site will vary depending on phasing and the materials collected or delivered. Typically, the

final rate of project completion reflects many competing factors, such as access to the development, completing the sales of buildings and availability of labour and materials, as well as maintaining a quality environment during the early phases of a project during these construction phases.

10.40 It is therefore estimated that the number of HGV and LGV movements associated with the construction of the site based on 5 day delivery and collection schedule over 48 working weeks per year, there is likely to be in the order of 40 HGV movements and 40 LGV movements per day. These numbers will be refined at the reserved matters stage and following the appointment of the relevant parties.

Severance

10.41 Given the low levels of daily flows generated by construction traffic, no significant severance effect will result.

10.42 Adopting the methodology set out in **Tables 10.1-10.3**, it is considered to be a low sensitivity receptor (**Table 10.1**). The magnitude of the effect is minor (**Table 10.2**) and overall, this is considered to be a **negligible effect** (**Table 10.3**).

Driver Delay

10.43 Given the low levels of traffic flows generated by construction traffic there will be no significant effect on driver delay. Background traffic peak hour movements are unlikely to coincide with any peak (however limited in view of overall numbers) in construction traffic.

10.44 Adopting the methodology set out in **Tables 10.1-10.3**, the roads within the vicinity of the site are considered to be a low sensitivity receptor (**Table 10.1**). The magnitude of the effect is minor (**Table 10.2**) and overall, this is considered to be a **negligible effect** (**Table 10.3**).

Pedestrian Delay and Amenity

10.45 Given the range of local factors and conditions which can influence pedestrian delay, the guidance suggests it is not considered wise to set down any thresholds, but instead it is recommended that assessors use their judgement to determine whether pedestrian delay is significant.

10.46 Construction traffic will be constrained to defined routes, which focus on access to and from Lower Rainham Road, Yokosuka Way, A2, Hoath Way and the M2. Any impacts on pedestrian delay and amenity are likely to occur on the Lower Rainham Road where there is a footway present and a number of residential properties. It is however considered that these are minor given the construction traffic is temporary and will only occur over the duration of the construction period.

10.47 Adopting the methodology set out in **Tables 10.1-10.3**, the pedestrian routes within the vicinity of the Site are considered to be a low sensitivity receptor (**Table 10.1**). The magnitude of the effect is minor (**Table 10.2**) and overall, this is considered to be a **minor effect** (**Table 10.3**).

Fear and Intimation

10.48 There are no commonly agreed thresholds for estimating danger, but research work is cited setting out “degree of hazard” levels relating to 18 hour average traffic flows, 18 hour HGV flows and average vehicle speed.

10.49 The thresholds are based upon the conclusions of the 1981 study by Crompton and Gilbert entitled ‘Pedestrian Delays, Annoyance and Risk’.

Table 10.5: Magnitude Criteria Fear and Intimidation Thresholds

Degree of Hazard	Ave. traffic flow over 18hr day	Total 18hr HGV Flow	Ave. speed over 18hr day miles/hr
Extreme	1800 +	3000+	20+
Great	1200-1800	2000-3000	15-20
Moderate	600-1200	1000-2000	10-15

10.50 Given the low levels of daily flows generated by the construction traffic, it is considered to be a low sensitivity receptor (**Table 10.1**). The magnitude of the effect is minor (**Table 10.2**) and overall, this is considered to be a **negligible effect** (**Table 10.3**).

Accident and Safety

10.51 The expected changes in traffic are too small in comparison to base flows to have any statistically meaningful effects upon the observed local accident rate record. The resulting significance of effect is **negligible**.

Hazardous Loads

10.52 Due to the nature of the construction activities it is not anticipated that the construction process will require carriage of materials listed on The Carriage of Dangerous Goods in the UK. The resulting significance of effect is **negligible**.

Operational Impacts

10.53 The completed Development would be likely to give rise to a range of transport related impacts. These would be likely to include longer term benefits to the amenity of local pedestrians, cyclists and public transport users once the Development is completed through the provisions of new and improved routes and facilities. It is expected that these would be of beneficial impact of moderate significance, offering localised improvements to local routes and reduction in journey times and distances.

10.54 In addition, whilst not specifically relevant to the assessment of environmental impacts, the Transport Assessment sets out the wider beneficial impacts the Development would have in terms of meeting local and national policy objectives of achieving sustainable development growth in the area.

10.55 The percentage increase on each of the links as a result of the Development traffic in 2021 and 2031 is shown in **Table 10.6**. It is considered there are no EIA impacts on any route.

Table 10.6: Percentage Increase for Total Volume

Road Link	2029
	Increase in Total Flow
A289 Pier Road	5.1%
A289 Yokosuka Way	1.6%
Cornwallis Avenue	4.2%
A289 Ito Way	2.0%
A2 Sovereign Blvd (W of Ito Way)	3.6%
A2 Sovereign Blvd (E of Ito Way)	1.3%
Beechings Way (W of Pump Lane)	23.7%
Beechings Way (E of Pump Lane)	6.7%
A2 London Road (West of Pump Lane)	20.9%
A2 High Street	3.0%
A278 Hoath Way	3.7%
Lower Rainham Road (E of access)	0.9%
Lower Rainham Road (W of access)	24.5%

Severance

10.56 Severance is the perceived division that can occur within a community when it becomes separated by a major traffic route. Whilst the IEMA Guidelines refer to the effect of traffic on severance of 30%, 60% and 90% producing "slight", "moderate" and "substantial" changes in severance respectively, it is suggested that caution be applied to relying on this quantum of change.

10.57 Taking total traffic volumes, in accordance with the IEMA Guidelines, the level of traffic related to the development proposals is less than 30% on all links, as shown in **Table 10.5**. The magnitude of overall traffic increase can, therefore, in accordance with **Table 10.2** be defined as **negligible**. Combined with the fact that the road links can, in accordance with **Table 10.1**, be defined as receptors of low sensitivity means that the overall effect is **negligible** (**Table 10.3**).

Driver Delay

10.58 The IEMA Guidelines note that driver delay is only likely to be significant when the traffic on the highway network is at or close to the capacity of the system. Each of the roads considered within the assessment operate well within capacity threshold levels for future years. It can, therefore, be concluded that there will be negligible impact in respect of driver delay.

10.59 During the typical network peak periods (08:00-09:00 and 17:00-18:00) traffic generation from the proposals has been tested for capacity on the local and strategic road network. This is set out in detail in the supporting Transport Assessment. Minor localised improvements are proposed various locations on the local network. There will be no material impact on junction operation as a result of the Development proposals.

10.60 Adopting the methodology set out in **Tables 10.1-10.3**, the overall network is a low sensitive receptor (**Table 10.1**). The magnitude of the impact is negligible (**Table 10.2**) and overall, this is considered to be a **minor effect** (**Table 10.3**). As already indicated, in common with standard assessment practice, minor effects are not considered to be significant in environmental assessment terms.

Pedestrian Delay and Amenity

10.61 The Proposed Development will bring about increases in the number of vehicle movements and pedestrian movements. In general, increases in traffic levels are likely to lead to greater increases in delay to pedestrians seeking to cross.

10.62 Any impacts on pedestrian delay and amenity are likely to occur on the Lower Rainham Road, Pump Lane and Beechings Wat where footways are present.

10.63 Adopting the methodology set out in **Tables 10.1-10.3**, the overall network is a low sensitive receptor (**Table 10.1**). The magnitude of the impact is negligible (**Table 10.2**) and overall, this is considered to be a **minor effect** (**Table 10.3**). As already indicated, in common with standard assessment practice, minor effects are not considered to be significant in environmental assessment terms.

Fear and Intimation

10.64 In accordance with the criteria contained in **Table 10.5**, the Proposed Development traffic would fall below the threshold for average hourly flows and 18 hour flows.

10.65 Adopting the methodology set out in **Tables 10.1 – 10.3**, the low sensitivity (**Table 10.1**) and negligible magnitude of impact (**Table 10.2**) results in a **negligible effect** of hazardous or abnormal loads as a result of the Proposed Development (**Table 10.3**).

Accident and Safety

10.66 A full review of personal injury accidents within the vicinity of the Site has been undertaken. There were a total of 20 recorded personal injury collisions within the surveyed area, of these one was recorded as fatal in severity, another six were serious and the remaining collisions were recorded as slight.

10.67 The fatal collision involved a car and motorcyclist. The six serious collisions involved cars, motorcyclists and a pedal cycle.

10.68 Adopting the methodology set out in **Tables 10.1-10.3**, the low sensitivity of the receptor (**Table 10.1**) and low magnitude of impact (**Table 10.2**) results in a **minor effect** (**Table 10.3**) of the proposals on highway safety.

Hazardous Loads

10.69 It is unlikely there will be hazardous or abnormal loads associated with the Proposed Development. Adopting the methodology set out in **Tables 10.1 - 10.3**, the low sensitivity (**Table 10.1**) and negligible magnitude of impact (**Table 10.2**) results in a **negligible effect** of hazardous or abnormal loads as a result of the Proposed Development (**Table 10.3**).

MITIGATION

Construction Phase

10.70 The construction phase of the Development would be unlikely to result in significant traffic impacts. However, as with all major construction projects, a CEMP should be developed. The aim of this will be to ensure the contractors meet the requirements of all relevant environmental legislation, agreements, authorisations and commitments.

10.71 As part of the CEMP the routing of construction traffic should be agreed with the relevant authorities and should form part of the construction methodology adopted by the contractor. The contractors should be encouraged to require employees to share vehicles or use public transport to reduce the impact of employee's cars.

10.72 Given the additional traffic generated from the construction works is considered to be within the capacity of the local road network, and with the adoption of the CEMP the residual impact is considered to be insignificant.

Operational Phase

10.73 The Transport Assessment sets out a detailed transport strategy as to how the site can be best and most appropriately served from a transport perspective.

10.74 Localised highway improvement works have been identified at junctions to deal with the NPPF test impact, however none trigger the specific EIA threshold impact.

10.75 A Framework Travel Plan has been prepared for the Proposed Development. This is aimed at reducing vehicular trips associated with the Site and includes a set of measures to encourage travel by sustainable modes.

RESIDUAL IMPACTS

Construction Phase

10.76 With the implementation of the mitigation measures described above and good site practice, the residual effects of traffic generated by construction activities is considered to be **negligible**.

Operational Phase

10.77 The scale of effects as set out above for each of the transport related elements will remain unchanged with the mitigation in place. The residual effects of the Proposed Development on transport are considered to be **negligible**.

CUMULATIVE IMPACTS

Construction Phase

10.78 There are no developments nearby the Proposed Development that will cause cumulative construction impacts. As such no cumulative construction impacts are anticipated.

Operational Phase

10.79 The major housing development sites in the immediate area have been reviewed. This includes sites which are identified in the Council's supply which may not come forward, and is therefore a worst case scenario. These are as follows:

(i) Site 1 – Land at Station Road, Rainham, Kent ME8 7QZ – 90 Units. (Allowed)
(ii) Site 3 – Land North of Moor Street, Rainham – 190 Units. (Refused, but identified in the Council's supply in SLAA)
(iii) Site 4 – Land At Otterham Quay Lane Rainham Kent – 300 Units. (Approved)
(iv) Site 6 – Berengrave Nursery, Berengrave Lane, Rainham, Gillingham ME8 7NL – 121 Units. (Approved)
(v) Site C - Land South Of Lower Rainham Road Rainham Gillingham Medway ME8 7UD – 202 Units. (Permitted August 2020, and identified in the Council's supply within SLAA)

10.80 This amounts to around 900 dwellings in total. To understand the likely growth, the base traffic forecasts have been uplifted using local TEMPRO growth factors. TEMPRO is a tool for interrogating the National Road Traffic Forecasts taking into account demographic changes and pricing trends.

10.81 On this basis, it is assumed that local background traffic growth factors derived from the latest TEMPRO will take account of increases in traffic flows for these land parcels. Comparison of the planning assumptions within TEMPRO for the Local Plan period up to 2029 includes around 11,380 dwellings in Medway as a whole. This is significantly higher than that for the individual sites above and hence no further uplift is required.

10.82 The operational phase cumulative impacts associated with the Proposed Development are predicted to be **negligible**.

SUMMARY

10.83 Potential environmental impacts resulting from the traffic that are likely to be generated by the Proposed Development have been identified. The major direct potential impacts are increases in traffic congestion and delay.

10.84 The impact assessment was based on an analysis of the traffic likely to be generated by the Proposed Development. When considered in the context of the existing traffic flows on the surrounding road network, the number of construction vehicles would not be expected to have a significant impact on the operation or safety of the surrounding road network.

10.85 In terms of adverse impacts, the main issue would be increased overall flows on the local road network. In general terms, the traffic can be adequately accommodated on the network, although some localised improvements have been identified to mitigate specific impacts.

10.86 In conclusion, the Proposed Development meets the key transport tests set out by the Local Highway Authorities in that would allow for efficient maintenance and management of transport infrastructure, it will improve accessibility and provide healthier travel choices. In addition, it would provide for safer roads and communities and would reduce congestion which might otherwise occur through less sustainable development growth.

Table 10.7: Summary Table

Description of Likely Significant Effects	Significance	Effects B/A, R/T, D/I, ST/M/LT, L/R/N					Description of Mitigation	Description of Residual Effects	Significance	Residual Effects B/A, P/T, D/I, ST/M/LT, L/R/N				
Construction Phase														
Severance	Negligible	A	T	D	ST	L	Described in section 10.70/71	None	Negligible	A	T	D	ST	L
Driver Delay	Negligible	A	T	D	ST	L	Described in section 10.70/71	None	Negligible	A	T	D	ST	L
Pedestrian Delay and Amenity	Negligible	A	T	D	ST	L	Described in section 10.70/71	None	Negligible	A	T	D	ST	L
Fear and Intimidation	Negligible	A	T	D	ST	L	Described in section 10.70/71	None	Negligible	A	T	D	ST	L
Accident and Safety	Negligible	A	T	D	ST	L	Described in section 10.70/71	None	Negligible	A	T	D	ST	L
Operational Phase														
Severance	Negligible	A	P	D	LT	L	Described in section 10.73/74	None	Negligible	A	P	D	LT	L
Driver Delay	Negligible	A	P	D	LT	L	Described in section 10.73/74	None	Negligible	A	P	D	LT	L
Pedestrian Delay and Amenity	Negligible	A	P	D	LT	L	Described in section 10.73/74	None	Negligible	A	P	D	LT	L
Fear and Intimidation	Negligible	A	P	D	LT	L	Described in section 10.73/74	None	Negligible	A	P	D	LT	L
Accident and Safety	Negligible	A	P	D	LT	L	Described in section 10.73/74	None	Negligible	A	P	D	LT	L

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

11 LANDSCAPE AND VISUAL

INTRODUCTION

11.1 This chapter provides a summary of the findings of a Landscape and Visual Impact Assessment (LVIA) prepared by Tyler Grange Group Limited that forms **Technical Appendix 11.1a** to this Environmental Statement.

11.2 An overview of the Site context, key policy constraints and the landscape and visual baseline is included, as well as those landscape and visual receptors which have formed the basis of the assessment, having been identified as those with the potential to experience significant landscape or visual effects associated with the Proposed Development.

11.3 Key landscape and visual design principles and mitigation measures that have been incorporated into the proposals and have been taken into account within the assessment are set out. Full details of these can be found in the Design and Access Statement and the LVIA (**Technical Appendix 11.1a**).

11.4 A summary of the landscape and visual effects for each receptor during the construction phase, upon completion and residual effects after 15 years once mitigation planting has matured is provided. The text provides a summary of the reasonings behind the assessment. A summary of the significance of effects is set-out on Table 11.2 at the rear of this chapter.

Proposed Development

11.5 The Proposed Development incorporates a range of mitigation measures to minimise the landscape and visual effects and respond to the local context. These are set out in the Design and Access Statement and have been illustrated on the Landscape Framework plan contained in the LVIA. The landscape principles and mitigation measures include the following:

(i) Retaining hedgebanks and hedgerows along Pump Lane and Lower Bloors Lane to respect their character;
(ii) Planting of community orchards within areas of green space alongside Pump Lane and around the buildings at Pump Farm and Russett Farm;
(iii) Provision of a village green to provide setting to Pump Lane and the farm buildings / properties and reflect the agricultural heritage and character;
(iv) Areas of open space incorporating native hedgerows, trees and woodland planting to provide separation and buffers to the conservation areas at Lower Rainham and Lower Twydall;
(v) Strengthening of existing hedgerows to site boundaries and provision of landscape buffers to incorporate tree belts and green corridors with recreation routes, foot cycleways and SUDs;
(vi) Creation of improved connections through areas of green infrastructure and open space within the Site;
(vii) Limiting the height of development to respect the existing built form; and
(viii) Strategic landscape planting throughout the Development and tree planting to streets to break up the built form and provide a soft green backdrop when the Site is viewed from the estuary to the north.

LOCAL PLANNING POLICY

Area of Local Landscape Importance

11.6 The Site is situated within the Gillingham Riverside Area of Local Landscape Importance (ALLI), a non-statutory designation in the Local Plan that represents the lowest tier of designations at a local level (Policy BNE34 within the Medway Local Plan, adopted 2003). The ALLI includes land that extends to the east and west of the site, as well as land to the

north of Lower Rainham Road, including the shoreline. The ALLI includes the Riverside Country Park, Parts of the Medway Estuary SSI, SPA and RAMSAR Site, as well as the Motney Hill Local Nature Reserve. The Saxon Shoreline Way long-distance path runs alongside the shoreline within the ALLI.

11.7 In addition to their landscape importance, the ALLIs are identified as functioning as buffers between neighbourhoods and communities, green corridors or links for the community to reach the wider countryside, urban fringe land to be protected from urban sprawl and a habitat and wildlife corridors. More specific functions are identified for each of the ALLIs, with the following identified for the Gillingham Riverside ALLI:

(i) Green buffer separating Twydall and Rainham from areas of international importance for nature conservation and recreation along the Medway estuary;
(ii) Enhances the setting of the Medway Towns Ring Road and allows attractive views from the river and railway;
(iii) Provides residents with an extensive area with access to attractive, rural landscape;
(iv) Provides an attractive setting to the Lower Rainham and Lower Twydall conservation areas;
(v) Contains a number of orchards, mature hedgerows and farm groups complementing and contributing to the Riverside Country Park; and
(vi) Forms a green backdrop when viewed from the Medway Estuary.

11.8 The site-specific landscape character assessment to inform the LVIA (Technical Appendix 11.1a) has considered the function and features of the ALLI when assessing the value of each of the Local Landscape Character Areas identified. Along with a review of the Box 5.1 Value Factors identified within the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) *(ref 11.1)* this has allowed for the assessment to identify which of the features of each LLCA are related to those factors attributed to the designation of the ALLI area. This, in turn has enabled the LVIA to allow an informed assessment of how the Site contributes to the local character, features and valued aspects of the landscape.

BASELINE CONDITIONS

Site Context

11.9 The Site comprises an area of land comprising approximately 51.2 hectares of agricultural land that is managed for commercial fruit growing and is laid to orchard. The Site is situated on land to the immediate northeast of the built area of Twydall, which bounds the Site alongside the London to Margate railway line. To the southeast, development at Rainham extends to the north of the railway. The wider conurbation of Gillingham is situated to the west, adjoining Twydall.

11.10 To the northeast, the Site is bounded by Lower Rainham Road, including the settlement of Lower Rainham. To the southeast, the Site is bound by Lower Bloors Lane which connects with Lower Rainham Road and extends to the railway, where a footbridge provides pedestrian access into Twydall to the south. The western site boundary is irregular in shape, following field boundaries formed by hedgerows and tree belts to areas managed as orchard and arable fields to the northwest, east of Lower Twydall.

11.11 The Site is bisected by Pump Lane, which runs north-south from Lower Rainham Road and crosses under the railway south of the Site. To the centre of, and outside the Site development along Pump Lane include Pump Farm and a modern development of houses at Russett Farm.

11.12 A bridleway runs diagonally from Lower Bloors Lane on the eastern boundary, connecting with Pump Lane opposite Pump Farm.

11.13 Fields within the Site are divided by coniferous shelterbelts, including those along the bridleway, as well as bounding the allotments and railway line east of Pump Lane. Tall hedgerows run alongside Pump Lane and Lower Bloors Lane, with breaks in the vegetation at gateways, development frontages and accesses.

11.14 The land slopes gently upward from the low-lying marshes north of Lower Rainham Road and shoreline beyond towards the edge of Twydall to the south. The urban area of Twydall, Rainham and Gillingham extend sup the slopes towards the wooden skyline of the North Downs beyond.

11.15 Land along the shoreline lies within the Riverside Country Park, with car parks, café and play areas on land north of Mariners Farm, north of the Site. Horrid Hill and Motney Hill project the shoreline into the Medway Estuary, with the Saxon Shore Way long distance path running along the shoreline. Bloors Lane community woodland lies to the east of the Site, accessed off Bloors Lane. Woodland and shelterbelts along the shoreline and inland provide containment and are distinctive features in the local landscape.

11.16 The Landscape Character and site Features are considered in detail in Section 4 of the LVIA (**Technical Appendix 11.1a**). This has included a review of published landscape character assessments, as well as a site- specific landscape character assessment undertaken by Tyler Grange which identifies Local Landscape Character Areas and features within the Site that maybe affected by the Proposed Development.

Landscape Character

11.17 The Site is situated within the "Lower Rainham Farmlands" LCA as identified by the Medway Landscape Character Assessment. The LCA extends between the railway to the south and Lower Rainham Road to the north and includes land up to the ring road to the northwest and edge of Rainham to the southeast. The key characteristics of the LCA include the mixed farmland including orchards, shelterbelts, and hedgebanks, as well as the enclosure by Lower Rainham Road and the railway line. The Medway Landscape Character Assessment recognises that the area has poor accessibility and links to urban areas and is divided by development at Rainham. Guidelines for the area include improving links between Twydall and the open countryside and with the Riverside Marshes to the north which is recognised for its value as a green buffer, wildlife corridor and as a wildlife corridor and link to the wider countryside.

11.18 The site-specific landscape character assessment has defined the **Lower Rainham and Lower Twydall Fruit Belt LLCA** which covers the area of and between the ring road on the edge of Gillingham to the west and Rainham to the east. The Site is situated within this LLCA, which is characterised by the gently sloping land with large rectilinear field managed as commercial orchards and arable fields. Paddocks and remnant orchards are present near the ring road to the northwest. Bloors Lane Community Woodland and tree belts provide enclosure to the southeast of the area.

11.19 The site-specific character assessment also identifies those features within and adjacent to the Site which may be affected by the Proposed Development. These include: Lower Bloors Lane, Pump Lane, Bridleway GB6a, Pump Farm & Russett Farm, Commercial Orchards; Lower Rainham & Lower Twydall; Lower Rainham Road; and the role of the Site as part of a green backdrop when viewed from the Medway.

11.20 The land north and east of Rainham has been identified as falling within the **Medway Marshes Farmland LLCA** which is separated from the Site by Rainham Road to the north and development that extends northwards along Berengrave Lane to Motney Hill Road. The Medway Marshes Farmland LLCA provides separation between the shoreline and land south of Rainham Road.

11.21 The site-specific assessment has defined the strip of land north of the marshes farmland as the **Medway Shoreline and Riverside Country Park LLCA.** This includes the Saxon Shore Way and Riverside Country Park, including woodland and tree belts that form a distinctive vegetated backdrop to the estuary. Views across the estuary are identified as a perceptual attribute of this LLCA.

Landscape Sensitivity

Lower Rainham and Lower Twydall Fruit Belt LLCA

11.22 The assessment has identified the Lower Rainham and Lower Twydall Fruit Belt LLCA as having an overall **Medium Landscape Sensitivity** to residential development. The LLCA has been assessed as making a Low / Medium Contribution to the features and function of the Gillingham Riverside ALLI. This recognises that, whilst the area makes a limited contribution overall, the land within the LLCA has a role in providing a setting to the conservation areas at Lower Rainham and Lower Twydall, as well as part of a wider buffer between Twydall and Rainham and green backdrop in views from the estuary.

11.23 There are opportunities to provide improved access across the LLCA to connect the urban areas with the shoreline and country park, as well as respect the character of lanes and historic land use for traditional orchards and native trees and hedgerows to field boundaries.

Medway Marshes Farmland LLCA

11.24 The Medway Marshes Farmland LLCA has been assessed as having a **Medium Landscape Sensitivity**. The LLCA is valued for its recreation and ecological qualities associated with the Riverside Country Park and nature reserves. Woodland and hedgerows to field boundaries provide structure and enclosure, linking with the vegetation along the shoreline to the north. The LLCA has been assessed as making a Medium Contribution to the features and function of the Gillingham Riverside ALLI.

11.25 Development on land within the Site to the south of the LLCA beyond Lower Rainham Road would not directly impact upon the recreation or ecological value of the land, nor the character of the agricultural land and associated trees and hedgerows linking with the woodland and vegetation along the shoreline.

Medway Shoreline and Riverside Country Park LLCA

11.26 The Medway Shoreline and Riverside Country Park LLCA has been assessed as having a **High Landscape Sensitivity**. The LLCA is valued for its recreation, ecological and perceptual qualities associated with views across the estuary, as well as the distinctive character of the shoreline well vegetated backdrop. The LLCA makes a High Contribution to the features and function of the Gillingham Riverside ALLI.

11.27 However, given the physical and visual containment by a strong band of vegetation along the inland edge of the shoreline, development outside the LLCA would not directly impact upon the recreation value of the land and views across the estuary, nor the distinctive character of the shoreline and associated vegetated edge.

Visual Context

11.28 A summary of the composition of views obtained from within the Study Area is set out below. A full description of the composition of views is included alongside the representative Photoviewpoints within the LVIA (**Technical Appendix 11.1a**).

Views from the North

11.29 From the Hoo Peninsula on the northern shore of the Medway estuary there are expansive panoramic views across the mudflats and marshes towards the southern shoreline.

11.30 The shoreline and marshes to the north of Lower Rainham are well vegetated, with woodland at the Riverside Country Park and around Mariners Farm combining with trees and hedgerows to field boundaries to provide a soft green edge and backdrop to the views across the Medway. Beyond the marshes, houses at Lower Rainham are visible amongst the vegetation. The northern edge of Twydall is defined by linear housing that adjoins the railway line to the south of the Site. These properties form a developed backdrop that then extends up the slopes towards Gillingham beyond.

11.31 There are also expansive views across the wider estuary and backdrop to the shorelines of the Hoo Peninsula to the north and Lower Rainham to the south from Horrid Hill and Motney Hill. The composition of the views from these locations is similar to that from the more distant views to the north, with the vegetated shoreline and buildings along Lower Rainham Road beyond.

11.32 The land to the southwest of the Site adjacent to the railway line is situated in front of the properties on the northern edge of Twydall which form a linear edge and developed backdrop. The lower lying fields to the southwest and south of the Site are set beyond intervening vegetation and built form. Tall hedgerows bounding the Site along Lower Bloors Lane, the community woodland and hedges alongside the railway and bridleway provide enclosure and a well treed backdrop to the east.

11.33 Views from the shoreline along the Saxon Shore Way north of Lower Rainham Road are orientated across the expansive views of the Estuary to the north and northwest. Views inland are screened by the vegetation and woodland that runs alongside the shoreline associated with the Riverside Country Park and boundaries within the marshes.

11.34 Views along Lower Rainham Road include the linear settlement of Lower Rainham and tall hedgerows bounding the Site, with glimpsed views across arable fields towards the estuary to the north.

Views from the East

11.35 From the east, the Site is set beyond tall hedgerows and hedgebanks along Lower Bloors Lane. Views are focussed along the narrow, enclosed lane, with occasional glimpsed over hedgerows or through gateways.

Views from the South

11.36 Within the built area of Twydall, views are orientated along the residential streets and local rods. These follow a grid pattern, with Beechings Way running southeast – northwest channelling views.

11.37 From streets on the higher slopes that are orientated to look north-eastwards, there are framed views out across the estuary. In the foreground, linear development along Beechings Way forms a backdrop blocking views across the site.

11.38 There are some views north from properties and streets that overlook the Site adjacent to the railway line. In the summer, when trees and hedgerows are in leaf views across the Site are heavily filtered. In the wintertime, there may be some views across the Site towards the wider views north of the estuary.

Views from the West

11.39 In views obtained from gateways on Lower Twydall Lane, the rolling topography and hedgerows to field boundaries limit distant views to the east. The main focus of views is along the narrow lane that is bounded by tall hedgerows with little outward visibility.

11.40 There are views along the railway line for the footbridge on Lower Twydall Lane, with oblique views across the Site to the wooded backdrop beyond. Wider views are limited by trees surrounding properties at Lower Twydall.

Views from within the Site Area

11.41 Views from the bridleway that runs between Pump Lane and Lower Bloors Lane through the Site are enclosed by tall coniferous hedgerows and channelled along the route of the path. Outward views are limited to those through gateways or short sections of post and rail fencing.

11.42 Views along Pump Lane are channelled by the tall roadside hedgerows with glimpses through gateways into the Site. Properties at Pump Farm, Russetts Farm and cottages along the lane introduce development and focal points.

Visual Receptors

11.43 Having identified the extent of visibility, composition of views and representative viewpoints, those groups of people (visual receptor) who may have the potential to have their views and visual amenity affected by the Proposed Development have been identified. These are set out on the table below, along with their respective sensitivities to visual change associated with the Proposed Development.

Table 11.1 Visual Receptors

Visual Receptor	Representative Photoviewpoint	Visual Sensitivity		
		Value	Susceptibility	Overall Sensitivity
Users of the Saxon Shore				
Northern shore of the Medway	Photoviewpoint 1	High	Low	**Medium**
South of Motney Hill	Photoviewpoint 4	High	Medium	**Medium / High**
North of Lower Rainham	Photoviewpoint 5	High	Low	**Medium**
Users of the Riverside Country Park				
Users of the Riverside Country Park - Horrid Hill	Photoviewpoint 2	High	Medium	**Medium / High**
Users of Lower Rainham Road	Photoviewpoints 6, 7 and 8	Low	Medium	**Medium**
Users of Lower Bloors Lane	Photoviewpoints 9 - 11	Medium	Medium	**Medium**
Users of Lower Twydall Lane	Photoviewpoints 12 and 13	Medium	Medium	**Medium**
Users of Bridleway GB6a	Photoviewpoints 14a, 14b and 15	Medium	Medium / High	**Medium**

Users of Pump Lane	Photoviewpoints 16, 17 and 18	Medium	Medium	**Medium**
Users of Trains Passing the Site		Medium	Low	**Low/Medium**
Residents of Properties adjacent to and overlooking the site				
Lower Twydall South of the Railway	Photoviewpoint 19	High	Medium	**Medium**
Pump Lane		High	High	**High**
Lower Bloors Lane		High	High	**High**
				Medium
Lower Rainham		High	High	**High**
Lower Twydall		High	Medium	**Medium**

LANDSCAPE EFFECTS

Landscape Effects Within the Study Area

11.44 Within the wider Study Area, the Proposed Development would not be inconsistent with the pattern and extent of development. The Site is situated within a peri urban context with the urban form of Twydall and Rainham impacting upon the character of the landscape across the Study Area.

11.45 The settlement pattern in the area includes development that lies in proximity to the shoreline, including the edge of Gillingham to the northwest. In proximity to the Site, land at Rainham to the east extends north beyond the railway line up to Lower Rainham Road, south of Motney Hill. Houses and commercial / light industrial units extend north of Lower Rainham Road on Motney Hill Road, on land adjacent to a nature reserve and in proximity to the Saxon Shore Way.

11.46 As recognised within the Medway Landscape Character Assessment, the Medway Fruit Belt Landscape Character Area has poor east-west connectivity and access to the recreation facilities and landscape of the Riverside Country Park and Saxon Shore Way. The Site in particular has poor access and does not provide connections from the wider urban area to existing amenities, including nature reserves, community woodland and the wider Public Right of Way network.

11.47 The Proposed Development offers the opportunity to greatly improve public access across the area, as well as the provision of attractive areas of green space including community orchards, recreation walks, equipped play areas, a village green and informal green spaces.

Lower Rainham and Lower Twydall Fruit Belt LLCA

11.48 The Proposed Development has been assessed as resulting in **Moderate Adverse** landscape effects at the Local Landscape Character Area scale for the Lower Rainham and Lower Twydall Fruit Belt LLCA. This reflects the extent of the Site within this LLCA and degree of change associated with the removal of the commercial orchards and construction of the Proposed Development.

Site-Wide

11.49 The assessment has also identified that the effects at a site-wide level will also be **Moderate Adverse**. The containment of the Site by existing development and woodland, shelterbelts / tree belts and tall hedgerows limit the influence that the Proposed Development will have upon the wider landscape. The strategic landscape buffers and associated planting proposed on the Site boundaries (embedded mitigation) will further contain and enclose the Site, limiting any effects on landscape receptors and character areas beyond.

11.50 The assessment has also identified the likely effects on a number of landscape receptors within and bounding the Site, taking into account embedded mitigation. These have identified **Moderate Adverse** effects for the Orchards, setting to Lower Rainham and character of Pump Lane, feeding into the overall site-wide assessment.

Indirect Effects: Medway Shoreline and Riverside Country Park LLCA

11.51 In addition to the effects on the Site area and associated features, the assessment has also considered indirect effects on other landscapes within the Study Area, including the Medway Marshes Farmland LLCA and Medway Shoreline and Riverside Country Park LLCA that have been identified by the site-specific landscape character assessment as part of the LVIA.

11.52 Although these LLCAs are separated from the Site by Lower Rainham Road, settlement and the belt of woodland and tree planting along the shoreline, land on the upper slopes to the southwest of the Site is visible from vantage points on the shoreline from Horrid Hill (Riverside Country Park) and Motney Hill (Saxon Shore Way). As recognised within the Local Plan, the green backdrop to views from the estuary is a feature of the Gillingham Riverside ALLI, within which the Site is situated. In this respect the backdrop to the estuary is one of the perceptual aspects and part of the scenic quality of the Medway Shoreline and Riverside Country Park LLCA.

11.53 As recognised by the site-specific landscape character assessment, the vegetation along the shoreline within this LLCA makes a high contribution to the green backdrop to the estuary. The Proposed Development will not impact on this.

11.54 The tree planting associated with the Proposed Development will, upon maturation provide a green canopy that will soften and break up development both on the Site and within the built area of Twydall on the rising land to the south. There will therefore be a **residual Localised, Indirect Minor Adverse Effect** on the Medway Shoreline and Riverside Country Park associated with the Proposed Development.

VISUAL EFFECTS

11.55 A summary of the key findings of the assessment are set out below for each of the groups of people (visual receptors) identified within the baseline assessment as having the potential to have their views and visual amenity affected by the Proposed Development. The effects during the construction phase are therefore generally greater than those experienced upon completion and the residual effects once the landscape mitigation has matured.

Users of the Saxon Shore Way and Riverside Country Park

11.56 As identified through the analysis of policy and the baseline studies, access to the countryside and the associated recreational and amenity benefits are valued aspects of the landscape, with the views along the shoreline and across the estuary forming part of the experience enjoying by people using the Saxon Shore Way and Riverside Country Park. The contribution that the visual experience and views make to the value of the landscape has been incorporated into the assessment of landscape effects and has also informed the sensitivity of these people to visual changes associated with the Proposed Development. This has

included consideration of the contribution that the Site makes as part of the green backdrop in views from the estuary, including those obtained from Horrid Hill (within the Riverside Country Park) and the Saxon Shore Way. Users of these recreation resources have been assessed as being of a Medium / High sensitivity to visual change associated with the Proposed Development.

11.57 Users of the Saxon Shore Way to the north of the Medway Estuary have the potential to experience **Minor Adverse Visual Effects** upon completion of the Proposed Development, reducing to **Neutral** after 15 years when the planting to site boundaries and within the Site mature. This reflects the distance of the viewers and limited nature of change in relation to the expansive views across the wider estuary.

Construction Phase

11.58 During the construction phase, **Temporary Moderate Adverse Visual Effects** have been identified for visitors to Horrid Hill and views obtained from the Saxon Shore Way to the south of Motney Hill. This is due to the introduction of uncharacteristic elements and movement that will draw attention and disrupt views towards the Site. The wider views across the estuary would remain unaffected.

On Completion and Residual Effects

11.59 In views from the Saxon Shore Way south of Motney Hill and Horrid Hill within the Riverside Country Park, the Proposed Development will be more visible due to the closer proximity. In views from these locations, the Proposed Development will be visible, set beyond vegetation on the shoreline and properties in Lower Rainham. The houses will be viewed against the built edge of Twydall and Rainham that extends up the slopes beyond the Site the south.

11.60 Upon completion, there will be **Minor / Moderate Adverse Visual Effects** resulting from the introduction of development into these views.

11.61 Upon maturation of the landscape buffer planting and trees throughout the Proposed Development, this will reduce to **residual Permanent, Localised Minor Adverse Visual Effects.**

11.62 As recognised within the assessment for the above receptors, the expansive views across the estuary from these vantage points and along the recreational routes will not be affected by the Proposed Development. In those views back towards the shore from the north and promontories of Horrid Hill and Motney Hill, the Proposed Development will retain a green backdrop, set beyond the woodland and shelterbelts along the shoreline and tying-in with the woodland and trees that bound the Site and within adjacent areas. The Proposed Development will also soften the existing linear developed edge south of the railway line through the provision of extensive new planting to boundaries and within the Site.

Users of Lower Rainham Road

On Completion and Residual Effects

11.63 For users of Lower Rainham Road passing the Site, there will be **localised minor adverse visual effects** arising from the implementation of the new site entrance to the northwest of Pump Lane both at completion and residual effects (after 15 years) when the landscape mitigation has matured.

11.64 The Site entrance will introduce a new gateway on the approach to Lower Rainham where there is a developed context with associated road signage, bollards and traffic lights. The Proposed Development will be set back beyond the retained tall hedgerows to the road and landscape buffer beyond incorporating tree planting. This will serve to screen views of the Proposed Development. At the Site frontage beyond the entrance of Lower Rainham Road,

development is set beyond landscape buffers and areas of open space incorporating ponds, trees and hedgerow presenting an attractive entrance to the Site.

Users of Lower Bloors Lane

Construction Phase

11.65 During the construction phase, **Temporary Moderate Adverse Visual Effects** have been identified for users of Lower Bloors Lane where the works will be in close proximity to the lane and visible beyond lower sections of hedgerow and gateways.

On Completion and Residual Effects

11.66 Upon completion these will reduce to **Localised Minor / Moderate Adverse Visual Effects** where views of houses may still be obtained in close proximity along the lane.

11.67 The residual effects will be **Permanent, Localised and Minor Adverse** once the mitigation planting has matured.

Users of Lower Twydall Lane

11.68 In the limited views of the Site available Lower Twydall Lane, the Site is set beyond intervening trees and hedgerows to field boundaries. In these views, the Proposed Development will result in **Minor Adverse Visual Effects** at completion, reducing to **Permanent Negligible Visual Effects** upon completion when the mitigation planting has matured.

Construction Phase

11.69 In views from the footbridge over the railway on Lower Twydall Lane, there will be Temporary Moderate Adverse Visual Effects associated with the construction works in these localised and limited views.

On Completion and Residual Effects

11.70 Upon completion, housing to the southwest of the Site will replace oblique views across the Site beyond filtering vegetation along the railway line. The Proposed Development will be seen in context with houses at Lower Twydall to the south of the railway line and result in **Localised Minor /Moderate Adverse Visual Effects.**

11.71 These will reduce to **Permanent, Minor Adverse** with the maturation of the tree belts alongside the railway which will filter and soften views of the houses within the Site.

Users of Pump Lane

Construction Phase

11.72 During the construction phase, the works to create new accesses roads and development of the village centre, care home, school and housing will give rise to **Temporary, Major Adverse Visual Effects** for users of Pump Lane. This is a result of the proximity to the works and extent of construction works taking place along the lane, including the new access roads opening up views into the Site as well as and disruption caused by temporary closures and traffic management.

On Completion and Residual Effects

11.73 Upon completion of the Proposed Development, assuming the mitigation planting has not established there would be **Localised, Moderate Adverse Visual Effects.**

11.74 Once the landscape planting and community orchard areas, village green and buffers to the village centre, care home and school have established, the residual effects for users of Pump Lane will be **Permanent, Localised and Minor / Moderate Adverse.**

11.75 Development will be set back from the lane beyond areas managed as community orchards, the village green and opens spaces, in keeping with the existing glimpsed views of orchards obtained to the south of Russett Farm. The hedgerows along the lane and supplementary planting will screen views of development, with views along new accesses off the lane set beyond verges with street trees.

Users of Bridleway GB6a

Construction Phase

11.76 During the construction phase, there will be disruption to users of the bridleway with temporary closures to allow for the implementation of the internal roads and development.

On Completion and Residual Effects

11.77 Upon completion, there will be **Localised, Minor Beneficial Visual Effects** for users of the bridleway, which will be incorporated into a green corridor. The bridleway will pass alongside areas of open space including play areas / pocket parks and pass through the village green.

11.78 As the landscape establishes and planting matures, these will increase to **Permanent, Localised Minor / Moderate Beneficial Visual Effects.** This reflects the change from an enclosed path with glimpsed views of commercial orchards to a route that is integrated into areas of open space with recreation and amenity spaces at the heart of the new community.

Users of Trains Passing the Site

On Completion and Residual Effects

11.79 For users of trains passing the Site, the Proposed Development will result in the loss of filtered glimpsed views across the Site west of Pump Lane. Upon completion, this will result in **Localised, Minor / Moderate Adverse Visual Effects**.

11.80 With the maturation of buffer planting incorporating tree belts along the railway this will reduce to **Permanent, Localised and Minor Adverse Visual Effects**. The assessment reflects the fleeting, glimpsed nature and extent of the views from the trains and the existing vegetation that filters outward views across the Site from along much of the southwestern site boundary.

Residents of Properties Adjacent to and Overlooking the Site

11.81 The Visual Assessment has also given consideration to the likely effects upon the views and visual amenity of residents of properties adjacent to and overlooking the Site. No properties have been accessed as part of the baseline studies. The assessment is based upon observation made from fieldwork in the public realm and from analysis of maps and aerial imagery.

Residents of properties in Twydall south of the railway

Construction Phase

11.82 For residents of properties with views across the Site, the construction works will give rise to **Temporary, Localised and Moderate / High Adverse Visual Effects.**

On Completion and Residual Effects

11.83 Upon completion, prior to maturation of landscape buffer planting alongside the railway, the loss of views across the Site will give rise to L**ocalised, Moderate Adverse Visual Effects.**

11.84 Once the trees have matured, this will reduce to **Permanent Minor / Moderate Adverse.**

11.85 The assessment recognises the context within which the views of the Site are experienced, beyond a busy railway line and planting to gardens and alongside the railway line filtering views across the Site.

Residents of Properties on Pump Lane

Construction Phase

11.86 During the construction phase, residents of these properties will likely experience **Temporary, Localised Major Adverse Visual Effects** on their views and visual amenity. This reflects the extent of construction works to the lane and on adjacent land surrounding the properties. This includes that associated with the implementation of infrastructure, opens space and development.

On Completion and Residual Effects

11.87 Upon completion there will be **Localised, Moderate / Major Adverse Visual Effects** before the landscaping to the open spaces and village green established, and trees within the community orchards, landscape buffers and opens paces mature.

11.88 Upon maturation of the trees and establishment of landscape to areas of green infrastructure and open spaces, the residual effects will reduce to **Permanent, Localised and Moderate Adverse**. This recognises the setting of the properties at the heart of a landscape framework to the centre of the Site and development incorporating buffers, green spaces, the village green and community orchards.

Residents of Properties on Lower Bloors Lane

On Completion and Residual Effects

11.89 For residents of those properties fronting onto and overlooking Lower Bloors Lane, there may be **Localised, Minor / Moderate Adverse Visual Effects** upon views and their visual amenity upon completion of the Proposed Development and before the maturation of mitigation planting.

11.90 Once gapping up and enhancement works to the hedgerows and trees / landscape buffer within the Site has matured, these will reduce to **Permanent, Localised and Minor Adverse Visual Effects**.

Residents of Properties of Lower Rainham

Construction Phase

11.91 From properties overlooking the Site, the construction works associated with the school and houses north of the bridleway will be visible, set back beyond the playing fields. This may give rise to **Temporary, Localised and Moderate Adverse Visual Effects** for these residents.

On Completion and Residual Effects

11.92 Upon completion, the setting-back of the Proposed Development beyond a landscape buffer and the playing fields will result in **Localised, Minor / Moderate Adverse Visual Effects**.

11.93 These will reduce to **Permanent, Localised and Minor Adverse Visual Effects** with the maturation of the planting to the landscape buffers along the Site boundaries and adjacent to the playing fields and housing south of the school.

Residents of Properties at Lower Twydall

11.94 There are limited views towards the Site from properties at lower Twydall. For those with outward views to the east, intervening vegetation to field boundaries filters views into the western site area.

On Completion and Residual Effects

11.95 Upon completion, any development visible from these properties will be set beyond intervening trees and hedgerows, resulting in **Localised, Minor Adverse Visual Effects.**

11.96 These will reduce to **Permanent Negligible Visual Effects** upon maturation of the landscape buffer planting to the western site boundary which will screen views of the Propose Development.

SUMMARY

11.97 The effects of the Proposed Development at the construction stage, at completion (with embedded mitigation planting), ie, year 1 and the residual effects after 15 years of growth are summarised in Table 11.2 below.

Table 11.2: Summary of Landscape and Visual Effects

Description of Likely Significant Effects	Significance	Summary	
		B/ A, P/T, D/I ST/M/LT,L/R/N	
Demolition and Construction Phase			
Landscape Receptors			
Lower Rainham Farmlands LCA	Minor Adverse	A,T,I,LT,R	Works will introduce uncharacteristic elements into the local landscape, with the development changing the land use and character of the site area.
Lower Rainham and Lower Twydall Fruit Belt LLCA	Moderate / Major Adverse	A,T,I,LT,L	Works will introduce uncharacteristic elements into the local landscape, with the development changing the land use and character of the site area.
Medway Shoreline and Riverside Country Park LLCA	Minor Adverse	A,T,I,LT,L	Works will introduce uncharacteristic elements into the local landscape, with the development changing the land use and character of the site area.
Medway Marshes Farmland LLCA	Minor Adverse	A,T,I,LT,L	Works will introduce uncharacteristic elements into the local landscape, with the development changing the land use and character of the site area.
Site Area and Site Features	Major adverse (localised)	A,T,D,LT,L	Works will introduce uncharacteristic elements into the local landscape, with the development changing the land use and character of the site area.
Visual Receptors			
Users of Northern shore of the Medway	Minor adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of South of Motney Hill	Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of North of Lower Rainham	Minor Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.

Users of Horrid Hill	Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of Lower Rainham Road	Minor / Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of Lower Bloors Lane	Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of Lower Twydall Lane	Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of Bridleway GB6a	Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of Pump Lane	Major Adverse (localised)	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Users of Trains Passing the Site	Minor / Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Residents of properties in Twydall south of the Railway	Moderate / Major Adverse (localised)	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Residents of properties on Pump Lane	Major Adverse (Localised)	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Residents of properties on Lower Bloors Lane	Minor / Moderate Adverse	A,Y,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Residents of properties of Lower Rainham adjacent to and overlooking the site	Moderate Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.
Residents of properties at Lower Twydall	Minor Adverse	A,T,D,M,L	Construction activities introduce uncharacteristic elements, movement of vehicles and plant and disruption into views.

Description of Likely Significant Effects	Significance	Effects Year 1	Description of Mitigation	Significance	Residual Effects (Year 15) (At maturation of proposed mitigation planting)
		B/ A, P/T,D/I,ST/M/LT,L/N/R			B/A,P/T,D/I,ST/M/L,L/R/N
Operational Phase					
Landscape Receptors					
Lower Rainham Farmlands LCA	Minor Adverse	A,T,D,LT,R	Embedded landscape mitigation measures.	Minor Adverse	A,P,I,LT,L
Lower Rainham and Lower Twydall Fruit Belt LLCA	Moderate Adverse	A,T,D,LT,L	Range of embedded landscape mitigation measures, including landscape buffers, tree planting and implementation of new areas of community orchards and village green.	Moderate Adverse	A,P,D,LT,L
Medway Shoreline and Riverside Country Park LLCA	Minor Adverse	A,T,I,LT,L	Embedded landscape mitigation measures.	Minor Adverse	A,P,I,LT,L
Medway Marshes Farmland LLCA	Minor Adverse	A,T,I,LT,L	Embedded landscape mitigation measures.	Minor Adverse	A,P,I,LT,L
Site Area and Site Features	Major Adverse (Localised)	A,T,D,LT,L	Range of embedded landscape mitigation measures, including landscape buffers, tree planting and implementation of new areas of community orchards and village green.	Moderate Adverse	A,P,D,LT,L
Visual Receptors					
Users of Northern shore of the Medway (Photoviewpoint 1)	Minor Adverse	A,P,D,M,L	Landscape buffer planting and trees throughout the development	Neutral	P,D,LT,L
Users of South of Motney Hill (Photoviewpoint 4)	Minor / Moderate Adverse	A,P,D,M,L	Landscape buffer planting and trees throughout the development	Minor Adverse	A,P,D,LT,L

Users of North of Lower Rainham (Photoviewpoint 5)	Minor Adverse	A,P,D,M,L	Landscape buffer planting and trees throughout the development	Neutral	P,D,LT,L
Users of Horrid Hill (Photoviewpoint 2)	Moderate Adverse	A,P,D,M,L	Landscape buffer planting and trees throughout the development	Minor Adverse	A,P,D,LT,L
Users of Lower Rainham Road (Photoviewpoint 6,7 and 8)	Minor Adverse	A,P,D,M,L	Development will be set back beyond the retained tall hedgerows to the road and landscape buffer beyond incorporating tree planting.	Minor Adverse	A,P,D,LT,L
Users of Lower Bloors Lane (Photoviewpoints 9, 10 and 11)	Minor / Moderate Adverse	A,P,D,M,L	Landscape buffer incorporating planting to gap-up and enhance the existing hedgerows alongside the lane, as well as new tree and hedgerow planting within the site.	Minor Adverse	A,P,D,LT,L
Users of Lower Twydall Lane (Photoviewpoints 12 and 13)	Minor Adverse	A,P,D,M,L	Landscape buffer and screening vegetation.	Minor Adverse	A,P,D,LT,L
Users of Bridleway GB6a (Photoviewpoints 14a, 14b and 15)	Minor Beneficial	B,P,D,M,L	The bridleway will pass alongside areas of open space including play areas / pocket parks and pass through the village green.	Minor / Moderate Beneficial	B,P,D,LT,L
Users of Pump Lane (Photoviewpoints 16, 17 and 18)	Moderate Adverse	A,P,D,M,L	Development will be set back from the lane beyond areas managed as community orchards, the village green and opens spaces, in keeping with the existing glimpsed views of orchards obtained to the south of Russett Farm. The hedgerows along the lane and supplementary planting will screen views of development, with views along new accesses off the lane set beyond verges with street trees.	Minor / Moderate Adverse	A,P,D,LT,L

Users of Trains Passing the Site	Minor / Moderate Adverse	A,P,D,M,L	Buffer planting incorporating tree belts along the railway.	Minor Adverse	A,P,D,LT,L
Residents of properties in Twydall south of the Railway	Moderate Adverse	A,P,D,M,L	Buffer planting incorporating tree belts along the railway.	Minor / Moderate Adverse	A,P,D,LT,L
Residents of properties on Pump Lane	Moderate / Major Adverse (localised)	A,P,D,M,L	Development will be set back from Pump Lane, with hedgerows retained and areas of community orchards will replace the commercial orchards, viewed through the access and beyond the hedgerow.	Moderate Adverse	A,P,D,L
Residents of properties on Lower Bloors Lane	Minor / Moderate Adverse	A,P,D,M,L	Gapping up of hedgerows and planting to landscape buffers along the lane.	Minor Adverse	A,P,D,L
Residents of properties of Lower Rainham adjacent to and overlooking the site	Minor / Moderate Adverse	A,P,D,M,L	Mitigation planting to the site boundaries.	Minor Adverse	A,P,D,L
Residents of properties at Lower Twydall	Minor Adverse	A,P,D,M,L	Mitigation planting to the site boundaries.	Negligible	P,D,L

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

12 AIR QUALITY

INTRODUCTION

12.1 Air pollution adjacent to the site and in proximity to roads is dominated by emissions from vehicles. **Figure 12.1** shows the location of the diffusion tube monitoring and Local Nature Conservation Sites in the vicinity of the Application Site. The main pollutants of concern from road traffic exhaust releases are nitrogen dioxide (NO_2) and particulates assessed as the fraction of airborne particles of mean aerodynamic diameter less than 10 micrometres (PM_{10}) and 2.5 micrometres ($PM_{2.5}$). These pollutants are most likely to approach their respective air quality standard, set for the protection of human health and vegetation, in proximity to busy and congested roads.

12.2 The Proposed Development has the potential to impact local traffic movements and thus emissions of the aforementioned pollutants, which could affect air quality at existing and proposed sensitive receptor locations. As such, these pollutants form the focus of the air quality assessment.

12.3 This chapter is supported by **Technical Appendices 12.1, 12.1sup** (which is a Note responding to a number of questions raised by the Environmental Health Officer during the determination of the application), **12.2 to 12.7**. The chapter summarises the findings of the air quality assessment undertaken for the Proposed Development, which include:

(i) establishing the current and future baseline air quality conditions at and in proximity to the Application Site, including the identification of existing sensitive receptors to changes in air quality;

(ii) assessing potential construction-phase air quality impacts at identified sensitive receptors, specifically relating to fugitive dust and exhaust emissions associated with construction activities;

(iii) assessing potential operation-phase local air quality impacts at identified sensitive receptors, particularly associated with sections of the local road network where changes in vehicle emissions are likely to be caused by the introduction of the Proposed Development;

(iv) undertaking an emissions mitigation calculation in accordance with the Medway Air Quality Planning Guidance in conjunction with determining appropriate mitigation to reduce emissions from the operational development; and

(v) assessing the suitability of the Application Site for the proposed land uses, which includes potentially sensitive receptors (e.g. residential properties and primary school) with respect to predicted future local air quality levels.

12.4 Where necessary, details of the mitigation measures required to prevent, reduce, or offset identified air quality impacts associated with the Proposed Development are stated in this chapter. The resulting residual impacts are also reported, which assumes that mitigation will be applied.

12.5 Specific assessment in relation to international / European designated sites of nature conservation interest is presented within the document entitled “Information for Habitats Regulations Assessment” (IHRA), produced by Ecology Solutions. As air quality matters are pertinent to the IHRA, reference is made to this document within this chapter, where relevant.

POLICY CONTEXT

12.6 This section of the ES discusses the context of the Proposed Development with regard to the relevant European Union (EU) and UK air quality legislation, in addition to national and local planning policies.

European & National Air Quality Legislation

European Ambient Air Quality Directive 2008

12.7 The 2008 Ambient Air Quality Directive (2008/50/EC)(ref. 12.1) is the primary driver for managing and improving air quality for each member state of the EU. The Directive sets legally binding limit values for concentrations in ambient (outdoor) air of pollutants that can impact public health, including NO_2 and particulates (PM_{10}, $PM_{2.5}$).

12.8 EU limit values are set for individual pollutants and comprise a concentration value, an averaging time over which it is to be measured, the number of allowed exceedances per year (if any), and a date by which it must be achieved. Some pollutants (e.g. PM_{10}) have more than one limit value covering different averaging times.

Air Quality Standards Regulations 2010

12.9 The EU Directive was transposed into English law via the Air Quality Standards Regulations 2010, as amended (ref. 12.2).

12.10 The responsibility for meeting the prescribed air quality limit values is devolved to the national administrations. In England, the Secretary of State for Environment, Food, and Rural Affairs has responsibility for adhering to the limit values, whilst the Department for Environment, Food and Rural Affairs (Defra) co-ordinate the assessment of compliance with limit values and development of Air Quality Plans for the UK.

12.11 Under the 2017 Air Quality Plan (ref. 12.3), certain local authorities are required under the Environment Act to undertake feasibility studies to identify options to deliver compliance with EU limit values. Medway Council was not included in the list of authorities required to do this.

Local Air Quality Management

12.12 Under the Environment Act 1995 (ref.12.4), the UK Government and the devolved administrations are required to prepare and publish a national Air Quality Strategy. The most recent version of the Strategy was published in 2007 (ref.13.5) and establishes the UK's air quality standards and objectives, in addition to providing guidance, where needed, on air quality action planning at national, regional and local scales.

12.13 Air quality standards are concentrations recorded over a given averaging period, which are considered to be acceptable in terms of what is scientifically known about the effects of each pollutants on health and the environment. An objective is the target date of which exceedances of a standard must not exceed a prescribed number.

12.14 Local authorities in England are required to review air quality within their jurisdiction, under Part IV of the Environment Act 1995, and designate air quality management areas (AQMAs) where air quality standards are not being met and/or where air quality improvement is needed. Local authorities are then required to work towards achieving the national Air Quality Strategy objectives and standards as prescribed in the Air Quality Standards Regulations 2010.

12.15 An air quality action plan must be established by the local authority outlining the measures to improve air quality within the designated AQMA. The purpose of these action plans is to contribute to the achievement of air quality limit values at the local level.

Relevant UK Air Quality Objectives

12.16 The national air quality objectives and EU limit values that the UK must comply with, specifically for traffic-related pollutants NO_2, PM_{10}, and $PM_{2.5}$, are presented in **Table 12.1**.

12.17 The respective UK objective and EU limit value concentration standards and averaging periods are numerically identical for each pollutant, based on air quality standards set for the protection of human health and vegetation.

Table 12.1: National Air Quality Objectives and European Directive Limit Values for the Protection of Human Health

Pollutant	UK Objective / EU Limit Value (µg/m^3)	Averaging Period	Date to be achieved by and maintained thereafter:	
			UK Objective	EU Directive
Protection of Human Health				
Nitrogen Dioxide (NO_2)	200*	1 hour mean	31.12.2005	01.01.2010
	40	annual mean	31.12.2005	01.01.2010
Particulate Matter (PM_{10})	40	annual mean	31.12.2004	01.01.2005
	50**	24 hour mean	31.12.2004	01.01.2005
Particulate Matter ($PM_{2.5}$)	25	annual mean	2020	2010
Protection of Vegetation				
Oxides of Nitrogen (NO_x)	30	Annual Mean	30.12.2000	19.07.2001
	75	Maximum 24-hour mean	30.12.2000	19.07.2001

* Not to be exceeded more than 18 times per year; ** Not to be exceeded more than 35 times per year

Critical Levels and Loads for Designated Ecological Sites

12.18 Critical loads (CLOs) and levels are used for assessing the risk of air pollution impacts on ecosystems. Critical loads are defined as *'a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge'* (Ref 12.6).

12.19 Empirical CLOs for nutrient nitrogen are set under the Convention on Long-Range Transboundary Air Pollution. They are based on empirical evidence such as observations from experiments and gradient studies. CLOs are assigned to habitat classes defined within the European Nature Information System (EUNIS) (Ref 12.7) which enables consistency of habitat terminology and understanding. CLOs are given as ranges and reflect the variation in ecosystem response across Europe.

12.20 CLOs for use in impacts assessments, which were revised in June 2010, are provided on the Air Pollution Information System (APIS) (Ref 12.8). The impact of the development on nutrient nitrogen and acid (from nitrogen) deposition has been assessed at relevant identified sensitive ecological receptors against the CLO's set out on the APIS website. Further information is also provided in the Supplementary Advice to the Conservation Objectives of European designated sites, published by Natural England.

12.21 The Application Site and local road network is located in close proximity to an international/European Designated Site - Medway Estuary and Marshes Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and RAMSAR site. The CLOs of relevance to this Designated Site, identified in conjunction with Ecology Solutions, are set out in **Table 12.2.**

12.22 In addition, in light of pre-application correspondence with Natural England (NE), consideration has been afforded to potential impacts which would arise on European designated sites located further away from the Development Site which may be associated with an increase in road traffic on the strategic transport network. As outlined in detail in the IHRA, whilst the potential for effects arising on a number of site has been scoped out using traffic data, further consideration has been afforded to potential for effects arising to a further two European designated Sites, being the Swale SPA and RAMSAR site, which spans the A249 north of Iwade and the North Downs Woodlands Special Area of Conservation (SAC), the nearest component of which is located adjacent to the A249 south of Detling and the A229 south of Kit's Coty, respectively. The CLOs relevant to these sites are also provided in **Table 12.2.**

Table 12.2: Critical Loads for European Designated Sites

Pollutant Species	Critical Load	Background Deposition	Habitat CL Designation
Medway Estuary and Marshes SSSI/SPA/RAMSAR site			
Nitrogen Deposition	20-30 kgN/ha/yr	13.21 kgN/ha/yr	Saltmarsh Habitat[1]
Acid (nitrogen) Deposition	There are no critical loads related to Acid deposition for saltmarsh habitats, so an assessment of acid deposition has not been included		
Swale SPA/RAMSAR site			
Nitrogen Deposition	15-30 kgN/ha/yr	14.2 kgN/ha/yr	Rich Fens (reed beds within 200 m)[1]
Acid (nitrogen) Deposition	There are no critical loads related to Acid deposition for saltmarsh and reedbed habitats, so an assessment of acid deposition has not been included		
North Downs Woodland SAC			
Nitrogen Deposition	5-15 kgN/ha/yr	25.87 kgN/ha/yr	Coniferous Woodland[1]
Acid (nitrogen) Deposition	0.142 keq/ha/yr	1.85 keq/ha/yr	Coniferous Woodland
[1]**lowest critical load has been selected for the assessment**			

Environmental Protection Act 1990 – Control of Dust and Particulates (Construction Works)

12.23 The Environmental Protection Act (ref.12.9) contains a definition of what constitutes a 'statutory nuisance' with regard to dust and places a duty on Local Authorities to detect any such nuisances within their area. Dust arising from construction works could lead to statutory nuisance if it '*interferes materially with the wellbeing of the residents, i.e. affects their wellbeing, even though it may not be prejudicial to health*'.

12.24 Section 80 of the Act states that where a statutory nuisance is shown to exist, the local authority must serve an abatement notice. Failure to comply with an abatement notice is an offence and if necessary, the local authority may abate the nuisance and recover expenses.

12.25 There are no statutory limit values for dust deposition above which 'nuisance' is deemed to exist. Nuisance is a subjective concept and its perception is highly dependent upon the existing conditions and the change which has occurred.

Climate Emergency

12.26 On 8 October 2018, the UN Intergovernmental Panel on Climate Change (IPCC) released a report on the state of climate science, warning that if the planet warmed by 1.5 °C there would be devastating consequences such as extreme weather conditions. Medway Council, along with Kent County Council declared a climate emergency in April 2019. Council requested that the Cabinet establish a clear action plan for Medway to become carbon neutral within an appropriate timescale. Notwithstanding this, the Council does not have a statutory duty to reduce emissions in line with the Climate Change Act 2008 or to develop an action plan.

12.27 On 9 July 2019, a report was presented to the Cabinet setting out the Council's aspirations and approach to the delivery of an action plan. In particular, the Cabinet agreed to the establishment of the Climate Change Member Advisory Group. A five-year rolling action plan is being developed.

12.28 On 20 March 2020, an update report was presented to Cabinet which identified that

(i) a draft Kent and Medway Energy and Low Emissions Strategy (KMELES) setting out how the Council would achieve carbon neutrality by 2050 was consulted on over the summer of 2019, with the final document expected to be adopted as policy in the spring of 2020 – this did not happen due to Covid-19 and there is no further update on this at this time,

(ii) the Climate Change Action Plan would be finalised by August 2020 subject to the completion of a carbon assessment and any other work arising as a result, and that the Action Plan would be presented to Cabinet in November 2020 – no further update is available at the time of writing this SES.

12.29 A number of measures that the Advisory Group have identified and are being pursued as part of the Action Plan (in addition to the KMELES) include EV charging infrastructure, electric buses in Medway, promoting car sharing/walking/cycling, developing an energy policy, developing a biodiversity/tree planting strategy, plastics use reduction, etc. It remains to be seen as these proposals are developed further, how they are translated into planning policy.

Planning Policy

National Planning Policy Framework

12.30 The Government's overall planning policies for England are described in the NPPF (ref.12.10). The NPPF states that the planning system has three overarching objectives in achieving sustainable development including a requirement to *'contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy'*.

12.31 Under Section 15: Conserving and Enhancing the Natural Environment, the NPPF (paragraph 170) requires that *'planning policies and decisions should contribute to and enhance the natural local environment by …preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels*

of soil, air, water or noise pollution or land instability. Development should, wherever possible help to improve local environmental conditions such as air and water quality'.

12.32 In dealing specifically with air quality the NPPF (paragraph 181) states that *'planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan'.*

12.33 Paragraph 183 states that '*the focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively*'.

Medway Council, Local Plan 2003

12.34 MC is currently developing a new Local Plan. However, until such time as the new Local Plan is published policies set out in the 2003 Local Plan (ref.12.11), continue to be used to guide development across the district.

12.35 Under Policy BNE2 the Plan requires all development to '*secure the amenities of its future occupants and protect those amenities enjoyed by nearby and adjacent properties'* thus requiring development to have regard to airborne emissions which can impact amenity such as fumes, smoke, soot, ash, grit and dust.

12.36 The Plan also sets out Policy BNE24 which states that *'development likely to result in airborne emissions should provide a full and detailed assessment of the likely impact of these emissions. Development will not be permitted when it is considered that unacceptable effects will be imposed on the health, amenity or natural environment of the surrounding areas taking into account the cumulative effects of other proposed or existing sources of air pollution in the vicinity'.*

METHODOLOGY

12.37 This section provides details of the data and information supplied for the purposes of undertaking the air quality assessment. It also describes the adopted methodology for assessing and appraising the potential air quality impacts associated with the construction and operation phases of the Proposed Development.

12.38 The scope of the air quality assessment and associated methodology was agreed through consultation with MC Environmental Protection Officer.

Key Guidance

12.39 A summary of the guidance documents referred to in the completion of this assessment is provided below.

Medway Council Air Quality Planning Guidance

12.40 MC has produced specific Air Quality Planning Guidance (ref.12.12). The guidance has been developed in conjunction with the Kent and Medway Air Quality Partnership to improve air

quality across Kent and Medway and with an aim to provide a consistent approach to undertaking air quality assessments as part of the planning regime.

12.41 The methodology used for undertaking the assessment is based on the guidance set out within the document. In conjunction with an assessment of operational and construction impacts the guidance requires all major developments to undertake an emissions mitigation assessment to '*calculate the emissions resulting from a development and produce an exposure cost value to be spent on mitigation measures*'. This assessment has therefore included an emissions mitigation calculation and refers to the standard and additional mitigation measures listed in the guidance, which are addressed in the mitigation section of this chapter.

Local Air Quality Management Review and Assessment Technical Guidance 2016

12.42 Defra has published technical guidance for use by local authorities in their review and assessment work (ref. 12.13). This guidance, referred to in this document as LAQM.TG16, has been used where appropriate in the assessment presented herein.

Land-use Planning & Development Control: Planning for Air Quality 2017

12.43 Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) have published guidance (ref.12.14) that offers comprehensive advice on: when an air quality assessment may be required; what should be included in an assessment; how to determine the significance of any air quality impacts associated with a development; and, the possible mitigation measures that may be implemented to minimise these impacts.

Guidance on the Assessment of Dust from Demolition and Construction 2016

12.44 This document (ref.12.15) published by the IAQM was produced to provide guidance to developers, consultants and environmental health officers on how to assess the impacts arising from construction activities. The emphasis of the methodology is on classifying sites according to the risk of impacts (in terms of dust nuisance, PM_{10} impacts on public exposure and impact upon sensitive ecological receptors) and to identify mitigation measures appropriate to the level of risk identified.

National Planning Practice Guidance – Air Quality 2014

12.45 This guidance (from paragraph: 001 Reference ID: 32-001-20140306) (ref.12.16) provides a number of guiding principles on how the planning process can take into account the impact of new development on air quality and explains how much detail air quality assessments need to include for proposed developments, and how impacts on air quality can be mitigated. It also provides information on how air quality is taken into account by Local Authorities in both the wider planning context of Local Plans and neighbourhood planning, and in individual cases where air quality is a consideration in a planning decision.

BASELINE CONDITIONS

12.46 The 2018 Air Quality Annual Status Report (ASR) (ref. 12.17) published by MC was reviewed to establish baseline air quality conditions in the vicinity of the Application Site. The ASR provides the annual mean NO_2 monitored levels at the respective monitoring sites for the previous five years (2013 – 2017). This monitoring data was used to enable model verification and adjustment as part of the atmospheric dispersion modelling study.

12.47 Background NO_x, NO_2, PM_{10} and $PM_{2.5}$ pollutant concentrations corresponding to the 1 km^2 grid squares covering the Application Site and road network considered within the assessment were obtained from Defra's published national pollutant mapping data (Ref 12.18) for use in the air quality assessment.

12.48 Background NO_x concentrations for the international/European designated sites outlined above have been obtained from the APIS website (Ref 12.8), along with background nitrogen and acid deposition rates, and are provided in **Table 12.2**.

Construction Phase Assessment

Fugitive Dust Emissions

12.49 Construction phase activities associated with the Proposed Development may result in the generation of fugitive dust emissions (i.e. dust emissions generated by site-specific activities that disperse beyond the construction site boundaries).

12.50 If transported beyond the site boundary, dust can have an adverse impact on local air quality. The IAQM has published a guidance document for the assessment of demolition and construction phase impact (Ref 12.15). The guidance considers the potential for dust nuisance and impact to human health and ecosystems to occur due to activities carried out during the following stages of construction:

(i) Demolition;
(vi) Earthworks;
(vii) Construction; and
(viii) Trackout.

12.51 A qualitative assessment of air quality impacts due to the release of fugitive dust and particulates (PM_{10}) during the construction phase was undertaken in accordance with the methodology detailed in the IAQM guidance.

12.52 The assessment takes into account the nature and scale of the activities undertaken for each source and the sensitivity of the area to an increase in dust and PM_{10} levels, thus enabling a level of risk to be assigned. Risks are described in terms of there being a low, medium or high risk of dust impacts.

12.53 Once the level of risk has been ascertained, then site specific mitigation proportionate to the level of risk is identified, and the significance of residual effects determined.

12.54 A summary of the IAQM assessment methodology is provided in **Technical Appendix 12.1**.

Construction Vehicles and Plant Emissions

12.55 Exhaust emissions from construction vehicles and plant may have an impact on local air quality adjacent to the routes used by these vehicles to access the Application Site and in the vicinity of the Application Site itself.

12.56 As information on the number of vehicles and plant associated with the construction phase was not available at the time of writing, a qualitative assessment of their impact on local air quality has been undertaken using professional judgement and by considering the following:

(i) The number and type of construction traffic and plant likely to be generated by this phase of the Proposed Development;
(ii) The number and proximity of sensitive receptors to the Application Site and along the likely routes to be used by construction vehicles; and
(iii) The likely duration of the construction phase and the nature of the construction activities undertaken.

Operation Phase Assessment

12.57 The assessment of operation phase air quality impacts has focussed on vehicle emissions of NO_x, NO_2, PM_{10}, and $PM_{2.5}$, given that the Proposed Development will generate additional traffic movements on the local road network and will introduce sensitive receptors adjacent

and/or near to existing roads. Therefore, a detailed atmospheric dispersion modelling exercise was undertaken to predict the level of change in local air quality.

Atmospheric Dispersion Modelling

Model Selection and Assessment Scenarios

12.58 Cambridge Environmental Research Consultants (CERC) ADMS-Roads v4.1.1 dispersion model was used to assess the potential changes in local concentrations of the aforementioned air pollutants associated with additional vehicle emissions generated by the operation the Proposed Development. The model uses advanced algorithms for the height-dependence of wind speed, turbulence and stability to compute emissions dispersion. It can predict long-term and short-term pollutant concentrations, as well as calculations of percentile concentrations for comparison with the respective UK air quality objectives.

12.59 The following scenarios were assessed within ADMS-Roads:

(i) 2017 – Atmospheric Dispersion Model Verification (*see below for further information*);
(ii) 2017 – Baseline year;
(iii) 2022 – Future Assessment Year 'Without Development' (i.e. future baseline only, including committed developments); and
(iv) 2022 – Future 'With Development' (i.e. future baseline + Proposed Development).

12.60 2017 is the most recent year for which monitoring data and meteorological data were available to enable verification of the model performance. A baseline year of 2017 was modelled to provide predictions of existing pollutant concentrations at the identified sensitive receptors. 2029 is the anticipated completion year of the Proposed Development, however, to ensure a worst-case assessment the 2029 traffic data has been used for the 2022 assessment year.

Traffic Data and Emissions Inventories

12.61 Traffic data were provided by the project transport planning consultants for each of the above scenarios, encompassing the local road network in the immediate vicinity and leading into Rainham, Chatham and Gillingham, including the Rainham and Central Medway AQMA.The EPUK Land-use Planning Guidance sets out the following criteria for determining when there is a risk of significant impacts on local air quality and thus when a detailed air quality assessment is required:

(i) A change in Light Duty Vehicles (LDVs) flows of more than 100 AADT within or adjacent to an AQMA or more than 500 AADT elsewhere;
(ii) A change in Heavy Duty Vehicles (HDVs) flow of more than 25 AADT within or adjacent to an AQMA or more than 100 AADT elsewhere

12.62 Those road links where the above criteria are met have been included within the modelling assessment.

12.63 Traffic data were provided as Annual Average Daily Traffic (AADT) flows and the percentage of Heavy Duty Vehicles (HDVs) applicable to each modelled link. Average traffic speeds were assumed for each road link and reduced on the approach to and progress through the junctions, with reference to guidance provided in LAQM.TG16 and using professional judgement. A summary of the traffic data applicable to all modelled roads included in the assessment is provided in **Technical Appendix 12.2.**

12.64 The traffic data for all future year scenarios include flows for other committed developments in the locality of the Application Site.

12.65 Traffic data was used to develop emissions inventories for each pollutant (NO_x, PM_{10}, $PM_{2.5}$) and scenario using Defra's latest emissions factors toolkit (EFT v8.0.1) (ref. 12.19). The EFT allows for the calculation of emission factors arising from road traffic for all years between 2015 and 2030. For the predictions of future year emissions, the toolkit takes into account factors such as anticipated advances in vehicle technology and changes in vehicle fleet composition, such that vehicle emissions are assumed to reduce over time.

12.66 In order to take account of uncertainties relating to future year vehicle emissions, an assessment has been carried out utilising 2021 emission factors and background concentrations combined with traffic data from 2029 to predict impacts within the 2022 assessment year. This is considered a conservative assumption of emissions in the future. **Technical Appendix 12.3** provides a justification for the selection of future year vehicle emission factors.

12.67 Each emissions inventory for the respective scenario was input to the ADMS-Roads model to enable prediction of pollutant concentrations at identified sensitive receptor locations (see 'Selection of Sensitive Receptors' below). The modelling exercise utilised the following key inputs:

(i) Pollutant emission rates for each road link within the modelled area (g/km/s);
(ii) Geometry of each modelled road link;
(iii) Hourly sequential meteorological data obtained from Gravesend Airport for 2017; and,
(iv) Coordinates of each sensitive receptor at which the model calculated pollutant concentrations.

12.68 Meteorological data, such as wind speed and direction, is used by the model to determine pollutant transportation and levels of dilution by the wind. Meteorological data obtained from the Met Office observing station at Gravesend for 2017 were considered representative for the modelled area.

Model Outputs and Results Processing

Human Receptors

12.69 For each modelled scenario, the ADMS-Roads model predicted the local road contributions of NO_x, PM_{10}, and $PM_{2.5}$ to the respective annual mean total concentration at each sensitive receptor. The relevant Defra background pollutant value was added to the roads contribution to derive the total annual mean concentration reported in the assessment.

12.70 Annual mean road-NO_x was converted to total annual mean NO_2 concentrations using Defra's NO_x to NO_2 Calculator v6.1 (ref.12.20). This calculator converts the road-NO_x at the specified receptors to road-NO_2 and enables the background NO_2 contribution to be accounted for to derive the annual mean NO_2 total.

12.71 LAQM.TG16 advises that exceedances of the 1-hour mean NO_2 objective are unlikely to occur where annual mean concentrations are below 60µg/m^3, and it provides guidance on the approach that should be taken if either measured or predicted annual mean NO_2 concentrations are 60µg/m^3 or above.

12.72 The number of days with PM_{10} concentrations greater than 50µg/m^3 was estimated using the relationship with the annual mean concentration described in LAQM.TG16.

12.73 The predicted annual mean NO_2, PM_{10}, and $PM_{2.5}$ concentrations at each modelled receptor were compared against the relevant UK air quality objectives (see **Table 12.1**) and evaluated within the context of the assessment significance criteria (see 'Significance Criteria').

Ecological Receptors

12.74 The ADMS-Roads model has also been used to predict local road concentrations of NO_x at identified ecological receptors (as discussed in detailed below).

12.75 The predicted annual mean NO_x concentrations have been added to background NO_x concentrations taken from the APIS website and resulting concentrations compared against the relevant objective limit set for vegetation (**Table 12.1**). the model has also predicted the maximum 24-hour NO_x concentrations with the 24-hour background concentrations calculated from the annual mean using guidance provided by DEFRA (2 x annual mean, multiplied by 0.59)

12.76 Guidance produced by the Environment Agency on assessing emissions to air in relation to the Habitats Directive (AQEAG06) (Ref 12.22) sets out empirical methods for calculating nitrogen deposition (N-deposition) rates based on calculated NOx concentrations and deposition velocity using the following formula:

(i) Dry deposition flux (µg/m^2/yr) = ground level concentration (µg/m^3) x deposition velocity (m/s)

12.77 The AQTAG06 guidance only provides deposition velocities for grassland (0.0015 m/s) and forest habitats (0.003 m/s). The deposition rate for grassland has been used for the Medway Estuary and Marshes SSSI/SPA/RAMSAR site and the Swale SPA/RAMSAR site while the forest deposition rate has been applied for receptors within the North Downs Woodland site.

12.78 The resulting dry deposition rate can be converted to N-deposition in kg/ha/yr by multiplying by a factor of 95.9.

12.79 The acid (nitrogen) deposition has been calculated from the predicted dry deposition rate by applying a factor of 6.82, as set out within the AQEAG06 guidance.

12.80 The maximum predicted deposition rates have been added to background deposition rates and compared with site specific critical loads obtained from APIS (**Table 12.2**).

Model Verification

12.81 The predicted annual mean NO_2 results from the base year (2017) model scenario were compared with the equivalent 2017 MC monitored results to identify where differences occur. The majority of modelled concentrations should be within +/-25% of the equivalent monitored value, but ideally within +/10%.

12.82 Differences between modelled and measured pollutant concentration can be caused by a number of factors, including:

(ii) Estimates of background concentrations;
(iii) Meteorological data uncertainties;
(iv) Uncertainties in source activity data such as traffic flow data and vehicle emissions factors;
(v) Model input parameters such as roughness length, minimum Monin-Obukhov length, overall model limitations; and
(vi) Uncertainties associated with monitoring data, including locations.

12.83 Model verification is a process that facilitates these uncertainties to be investigated and, through appropriate adjustment of the modelled road-NO_x contribution, minimised to improve the consistency of modelling results versus available monitored data.

12.84 Model adjustment factors for road-NO_x derived through this process were applied to all subsequent model scenario outputs to provide the final predicted concentrations.

12.85 Details of the model verification and adjustment calculations are presented in **Technical Appendix 12.4.** The adjustment factor derived through this process was applied to the model road-NO_x outputs for all scenarios prior to conversion to annual mean NO_2 concentrations

12.86 Monitoring carried out at the Chatham AURN site has also been used to verify predicted PM_{10} and $PM_{2.5}$ concentrations in accordance with the guidance set out in LAQM.TG16. The calculated adjustment factors have been applied to predicted PM_{10} and $PM_{2.5}$ concentrations. Details of the model verification are also set out in **Technical Appendix 12.4**.

Selection of Sensitive Receptors

12.87 Sensitive receptors are locations where the public or sensitive ecological habitats may be exposed to pollutants resulting from activities associated with the Proposed Development (as defined in LAQM.TG16). These will include locations sensitive to an increase in dust deposition and PM_{10} exposure as a result of on-site construction activities, and locations sensitive to exposure to air pollutants emitted from the exhausts of construction and operational traffic associated with the Proposed Development.

Construction Phase

12.88 The IAQM assessment is undertaken where there are:

(i) human receptors within 350m of the site boundary or within 50m of the route(s) used by construction vehicles on the public highway;
(ii) human receptors up to 500m from the site entrance(s);
(iii) ecological receptors within 50m of the site boundary, or within 50m of the route(s) used by construction vehicles on the public highway; and
(iv) ecological receptors up to 500m from the site entrance(s).

12.89 It is within these distances that the impacts of dust soiling and increased particulate matter in the ambient air will have the greatest impact on local air quality at sensitive receptors.

Operational Phase

Human Receptors

12.90 A number of receptor locations representative of relevant public exposure were identified at which pollution concentrations were predicted. Receptors have been identified adjacent to the roads that are likely to experience the greatest change in traffic flows or composition, and therefore NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) concentrations, as a result of the Proposed Development.

12.91 In terms of locations that are sensitive to pollutants emitted from vehicles on the local road network, these will include places where members of the public are likely to be regularly present over the averaging periods prescribed in the relevant air quality objectives (see **Table 12.1**). For instance, on a footpath where exposure will be transient, comparison with a short-term standard (i.e. 1-hour mean) may be relevant. At a school or a private dwelling, where exposure may be for longer periods, comparison with a long-term standard (i.e. 24-hour mean or annual mean) may be more appropriate.

12.92 The locations of the assessment receptors are shown on **Figures 12.2 to 12.4** and listed in **Table 12.3** below.

Table 12.3: Identified Human Sensitive Receptor Locations included in local air quality assessment

Receptor	Description/Address	Grid Reference (X,Y)		Height (m)
R1	430 Lower Rainham Road	581037	167913	1.5
R2	405 Lower Rainham Road	580957	168010	1.5
R3	316 Lower Rainham Road	580588	168218	1.5
R4	92 Lower Rainham Road	579661	168677	1.5
R5	Herleva Way	579448	168668	1.5
R6	1 Danes Hill	579158	168882	1.5
R7	45 Gads Hill	578866	168968	1.5
R8	82 Odo Rise	579480	168431	1.5
R9	Hillyard Close	579318	167868	1.5
R10	106 Corn Wallis Avenue	579041	167793	1.5
R11	55 Corn Wallis Avenue	578890	167870	1.5
R12	95 Beechings Way	579861	167549	1.5
R13	201 Beechings Way	580358	167189	1.5
R14	2 Truro Close	580732	167050	1.5
R15	Thames View Infant School	581020	166764	1.5
R16	43 Bloors Lane	580864	166428	1.5
R17	Broadway	579056	167201	1.5
R18	Dane Court School	579016	166670	1.5
R19	Rotary Gardens	578648	166702	1.5
R20	38 Watling Street	578034	166870	1.5
R21	159 Rainham Road	577766	166926	1.5
R22	70 Rainham Road	577594	166953	1.5

R23	105 Chatham Hill	577233	167064	1.5
R24	64 Chatham Hill	576771	167328	1.5
R25	Otway Terrace	576345	167441	1.5
R26	New Road Primary School	576271	167432	1.5
R27	5 Twydall Lane	579702	166504	1.5
R28	50 London Road	579932	166423	1.5
R29	Scallywags Nursery	580701	166226	1.5
R30	69 London Road	580885	166181	1.5
R31	24 High Street	581436	166031	1.5
R32	54 High Street	581557	165959	1.5
R33	Care Home 117 High Street	581842	165884	1.5
R34	135 High Street	581894	165854	1.5
R35	6 Hoath Lane	579699	164925	1.5
R36	3 Wigmore Glade	579611	163833	1.5
R37	Haughton Avenue	579722	163379	1.5
R38	Rosebury House, Bedhurst	579336	162318	1.5

Ecological Receptors

12.93 In terms of ecological receptors, the impact of vehicle emissions at designated sites (SSSIs, SPAs, SACs, Ramsar) within 200 m of an affected road should be considered within the air quality assessment, as stipulated by Highways England guidance (ref. 12.21). Affected roads are those that experience any of the following:

(i) Road alignment change of more than 5m;
(ii) Daily traffic flow change of more than 1000 per day;
(iii) HDV change or more than 200 per day;
(iv) Change in traffic speeds of 10 km/hr or more;
(v) Change in peak hour speed of more than 20 km/hr.

12.94 The Medway Estuary and Marshes SSSI/SPA/RAMSAR site is located to the north of the Application Site, as shown in **Figure 12.1**. Traffic flows are predicted to change along road links 1 and 13 (Figure 12.2.1, **Technical Appendix 12.2**) by more than 1000 vehicles per day as a result of the operational development. Parts of the Medway Estuary and Marshes Designated Site lies within 200 m of both road links. A number of receptors have been selected

representing the Designated Site at locations within 200 m of the road links. The locations of these receptors are shown in **Figure 12.2** and details are provided in **Table 12.4**.

12.95 Concentrations have also been predicted at 10m intervals, up to 100m from receptors E3 and E4 leading away from Links 1 and 13 to the north, to assess the distance at which significant impacts may occur.

Table 12.4: Identified Ecological Sensitive Receptor Locations Included in Local Air Quality Assessment

Receptor	Description/Address	Grid Reference (X,Y)		Height (m)
E1	Medway Estuary and Marshes SSSI/SPA/RAMSAR site (north of Lower Rainham Road)	581304	167923	0
E2	Medway Estuary and Marshes SSSI/SPA/RAMSAR site (north of Lower Rainham Road)	581059	168184	0
E3	Medway Estuary and Marshes SSSI/SPA/RAMSAR site (north of Gads Hill, including a transect of receptors at 10 m intervals up to 100 m north of the site boundary)	579415	168875	0
E4	Medway Estuary and Marshes SSSI/SPA/RAMSAR site (north of Gads Hill, including a transect of receptors at 10 m intervals up to 100 m north of the site boundary)	579042	169047	0
E5	Medway Estuary and Marshes SSSI/SPA/RAMSAR site (north of Gads Hill,)	578813	169189	0

12.96 In light of the predicted change in road traffic movements on the strategic transport network, receptors have also been selected along transects at 10 m intervals spanning the A249 up to 100 m either site to predict impacts within the Swale SPA/RAMSAR site. A further two transects have also been selected up to 100 m from the A249 and A229 at 10 m intervals to predict impacts within the North Downs Woodlands SAC. The locations of these receptors are shown in **Figures 12.5 to 12.7**.

Significance Criteria

Construction Phase

12.97 The IAQM assessment methodology recommends that significance criteria are only assigned to the identified risk of dust impacts occurring from a construction activity with appropriate mitigation measures in place. For almost all construction activities, the application of effective mitigation should prevent any significant effects occurring to sensitive receptors and therefore the residual effect will normally be negligible.

12.98 For the assessment of the impact of exhaust emissions from plant used on-site and construction vehicles accessing and leaving the Application Site on local concentrations of

NO_2 and particulate matter, the significance of residual effects has been determined using professional judgement and the principles outlined in the EPUK/IAQM guidance, which are described below.

Operational Phase

Human Receptors

12.99 The results of the local air quality impact assessment have been evaluated with reference to the guidelines presented in **Table 12.5**. These are based on EPUK guidance, which provides the basis to assess the potential significance of the Proposed Scheme on local air quality.

12.100 The IAQM guidance describes the magnitude of incremental change (Do-Minimum versus Do-Something) in the pollutant concentration at each individual sensitive receptor as a proportion of a relevant air quality assessment level (AQAL). In this assessment, the AQALs are the annual mean NO_2, PM_{10} and $PM_{2.5}$ objectives.

12.101 The incremental change at each receptor is examined in the context of the total predicted annual mean concentration and its relationship with the AQAL. This allows an impact descriptor to be assigned to each receptor, with overall significance of the effects of any impacts assigned by professional judgement.

Table 12.5: Impact Descriptors for Individual Receptor

Annual mean concentration at receptors in assessment year	% Change in Concentration (DM - DS) Relative to Air Quality Assessment Level (AQAL)			
	1	2-5	6-10	>10
75% or less of AQAL	Negligible	Negligible	Slight	Moderate
76-94% of AQAL	Negligible	Slight	Moderate	Moderate
95-102% of AQAL	Slight	Moderate	Moderate	Substantial
103-109% of AQAL	Moderate	Moderate	Substantial	Substantial
110% or more of AQAL	Moderate	Substantial	Substantial	Substantial

Notes:

AQAL = Air Quality Assessment Level, which for this assessment related to the UK Air Quality Strategy objectives.

Where the %change in concentrations is <0.5%, the change is described as 'Negligible' regardless of the concentration.

When defining the concentration as a percentage of the AQAL, 'without scheme' concentration should be used where there is a decrease in pollutant concentration and the 'with scheme;' concentration where there is an increase.

Where concentrations increase, the impact is described as 'adverse', and where it decreases as 'beneficial'.

12.102 In reporting the overall significance on local air quality, a number of potential contributing and/or limiting factors should be accounted for, including:

(i) The existing and future air quality in the absence of the development;
(ii) The extent of current and future population exposure to the impacts, and
(iii) The influence and validity of any assumptions adopted when undertaking the prediction of impacts.

12.103 The EPUK/IAQM guidance states that for most road transport related emissions, long-term average concentrations are the most useful for evaluating the impacts. The guidance does

not include criteria for determining the significance of the effect on hourly mean NO_2 concentrations or daily mean PM_{10} concentrations. The significance of effects of hourly mean NO_2 and daily mean PM_{10} concentrations arising from the operational phase have therefore been determined qualitatively using professional judgement and the principles described above.

Ecological Receptors

12.104 The Environment Agency has set criteria for assessing the significance of air quality impacts within AQTAG06, stating that if the process contribution (PC) is less than 1% of the relevant long-term benchmark (CLE or CLO) and less than 10% of the short-term (i.e. 24-hour NO_x CLE), then emissions are not likely to have a significant effect either alone or in combination. This criterion has been used to identify where impacts predicted as a result of traffic related emissions can be classed as being insignificant.

12.105 Where a predicted impact cannot immediately be classed as insignificant further consideration of the effect needs to be carried out to establish the likely significance of the impact and to assist in establishing appropriate mitigation measures. Where impacts are predicted that cannot immediately be classed as not significant, these have been discussed further with Ecology Solutions. Further detailed consideration in light of the test of the Habitats Regulations is presented in the IHRA.

Limitations and Assumptions: Atmospheric Dispersion Modelling

12.106 There are naturally (if, limited) uncertainties associated with both measured and modelled concentrations. The model (ADMS-Roads) used in this assessment relies on input data (including predicted traffic flows), which also have uncertainties associated with them. The model itself simplifies complex physical systems into a range of algorithms. In addition, local micro-climatic conditions may affect the concentrations of pollutants that the ADMS-Roads model will not take into account.

12.107 The application of model verification for the 2017 model scenario allowed a number of potential uncertainties to be investigated (see 'Model Verification' above) and, through appropriate adjustment of the model outputs, minimised to improve the consistency of modelling results versus available monitored data. Model verification was completed with reference to guidance set out in LAQM.TG16.

12.108 To evaluate model performance and assess these uncertainties, the verified model results were subjected to statistical analyses to establish confidence in the results being presented. The statistical parameters assessed comprised:

(i) Root Mean Square Error (RMSE);
(ii) Correlation Coefficient, and
(iii) Fractional Bias.

12.109 See **Technical Appendix 12.4** for further details and outcomes of the model performance analysis.

12.110 In future year scenarios, another uncertainty relates to the projection of vehicle emissions and, in particular the rate at which emissions per vehicle will improve over time. This assessment has utilised the most recent version of Defra's Emissions Factors Toolkit to provide the most up to date estimate of current and future vehicle emissions projections.

12.111 Due to the uncertainty surrounding the accuracy of future year background concentrations, a precautionary approach has been taken whereby, for the future scenario in 2022 has used background concentrations from 2021 in accordance with the approach set out in **Technical Appendix 12.3**. This approach is considered to provide a conservative assessment.

Emissions Mitigation Assessment

12.112 In accordance with the Medway Air Quality Planning Guidance (Ref 12.12) an emissions mitigation assessment has been carried out. This uses the emissions mitigation calculation to calculate the emissions resulting from the operational development and produces an exposure cost value which should be spent on mitigation measures.

12.113 EFT v8.0.1 has been used to calculate the amount of transport related pollutant emissions from the operational development based on the total daily trips. The output has then been multiplied by the Interdepartmental Group on Costs and Benefits (IGCB) damage costs (Ref 12.23) for the key pollutants, nitrogen oxides (NO_x) and particulates (PM_{10}) and adjusted to account for inflation. Finally, the calculated annual cost has been multiplied by 5 and adjusted to account for changing use value (following the Defra guidance) to provide a 5-year exposure cost value which is the amount (value) of mitigation that is expected to be spent on measures to mitigate the emissions.

BASELINE CONDITIONS

Review and Assessment of Air Quality

12.114 MC has declared four AQMAs within their administrative area as a consequence of their local air quality review and assessment work.

12.115 The Central Medway AQMA is approximately 2.4 km to the south west of the Application Site and covers the main road network within Chatham and Rochester. The Gillingham AQMA lies approximately 2.9 km to the north west of the Application Site and incorporates part of Pier Road. The Rainham AQMA is located along the High Street and lies approximately 1.3 km to the south east of the Application Site.

12.116 The Application Site does not fall within any of the four AQMA, the final AQMA being located at Chattenden over 3 km to the north west. Air quality in the immediate vicinity of the Site has not been found to exceed the relevant air quality objectives as part of the review and assessment process.

Local Emission Sources

12.117 The Application Site is located in an area where air quality is mainly influenced by emissions from road transport using Lower Rainham Road.

12.118 There are no industrial pollution sources in the immediate vicinity of the Application Site that will influence local air quality. There is a train line running adjacent to the southern boundary, however, this line is not a *relevant railway track* as set out within LAQM.TG16 and background NO_2 concentrations at the Site are less than 25 µg/m^3 (**Table 12.6)**, therefore based on the screening process set out within LAQM.TG16, emissions from the railway line will not result in an exceedance of the objective limits at the Site and therefore have not been considered any further within the assessment.

Background Air Quality Data

12.119 The background pollutant concentrations of NO_2, PM_{10} and $PM_{2.5}$ for 2017 and 2021 from the grid squares representing the Application Site are summarised in **Table 12.6**. Additional concentrations from all the grid squares representing the total assessment area (as presented in Figure 12.2.1, **Technical Appendix 12.2**) are provided in **Technical Appendix 12.5**. All of the annual mean background concentrations are well below the relevant objectives.

12.120 As detailed previously background NO_x concentrations for the Medway Estuary and Marshes SSSI/SPA/RAMSAR site, the Swale SPA/RAMSAR site and the North Woodlands Downs SAC have been obtained from the APIS website. The data indicates an annual mean background

concentration across the Designated Site of 24.4 µg/m^3, which is below the annual mean objective of 30 µg/m^3.

12.121 NO_x background concentrations of 12.3 µg/m^3 and 17.4 µg/m^3, have been obtained from the APIS website for the Swale SPA/Ramsar site and North Downs Woodlands SAC, respectively.

Table 12.6: Background Concentrations (µg/m^3)

Grid Square (OS Grid Reference)	NO_2 (µg/m^3)		PM_{10} (µg/m^3)		$PM_{2.5}$ (µg/m^3)	
	2017	2021	2017	2021	2017	2021
580500, 167500	14.2	12.6	13.9	13.5	9.6	9.2
581500, 167500	13.2	11.8	13.3	12.9	9.3	8.9

Local Authority Air Quality Monitoring Data

Automatic Monitoring Data

12.122 MC operates two continuous automatic monitoring stations. One of these is located in Lower Stoke, approximately 10 km north of the Application Site in a rural background location. This site is not considered relevant to this assessment and therefore has not been used for the baseline analysis. The other site is located within the Central Medway AQMA approximately 3km to the south west of the Application Site. The air pollutants monitored comprise NO_2, PM_{10} and $PM_{2.5}$.

12.123 The annual mean concentrations recorded at this monitoring site for the latest four years of data capture, as published by MC, are presented in **Table 12.7**.

Table 12.7: MC Automatic Monitoring Data

Site Name	Site Type	Distance from Application Site (km)	Pollutant	Annual Mean Concentration (µg/m^3)			
Chatham AURN	Roadside	3 to the south west	NO_2 (annual mean)	24.8	23.5	25.7	25.4
			NO_2 (1-hour mean >200 µg/m^3)	0	0	0	0
			PM_{10} (annual mean)	21.4	18.5	19.1	21.6
			PM_{10} (24-hour means >50 µg/m^3)	15	4	3	7
			$PM_{2.5}$	14	11.8	11.5	14.1

Note: Exceedances of air quality objective are highlighted in **Bold**.

12.124 Annual mean NO_2 concentrations have met the annual mean and 1-hour objective limits at this site since 2014 showing that the objective is being met at locations within the Central Medway AQMA.

12.125 Annual mean concentrations of PM_{10} and $PM_{2.5}$ are also meeting the relevant objective limits at this location. The site has recorded between 3 and 15 exceedances (**Table 12.7**) of the 24-hour mean PM_{10} objective limit of 50 µg/m^3, however as the objective allows for up to 35 exceedances in any given year, the objective has been met since 2014.

12.126 The data shows no significant trend in concentrations during this period with no obvious increase or decrease in concentrations over the four-year period.

Diffusion Tube (No_2) Monitoring Data

12.127 MC also undertakes diffusion tube monitoring of NO_2 at various locations within the borough. Annual mean concentrations of NO_2 recorded at sites within the assessment area are provided in **Table 12.8**, as published by MC, for the latest four years of data.

Table 12.8: MC Diffusion Tube Monitoring Data

Site Name	Site Type	Distance from Application Site (km)	AQMA Location	Annual Mean Concentrations (µg/m^3)			
DT01	Roadside	1.1 to the south east	Rainham	44.7	43.4	42.2	45.4
DT04	Roadside	4 to the south west	Central Medway	38.2	36.8	38.6	37.9
DT09	Roadside	3 to the south west	Central Medway	26.2	27.7	25.6	25.5
DT11	roadside	4 to the south west	Central Medway	35.2	36.3	35.6	35.7
DT15	Roadside	1.5 to the south east	Rainham	34.4	34.4	35.3	36.0
DT16	Roadside	1.6 to the south east	Rainham	26.9	25.8	28.6	28.6
DT17	Roadside	3 to the south west	Central Medway	43.7	45.0	43.5	45.3
DT18	Roadside	4 to the south west	Central Medway	45.4	45.4	46.3	48.0
DT25	Roadside	3 to the north west	Gillingham	-	37.6	36.5	42.9
DT26	Roadside	3 to the north west	Gillingham	-	25.8	33.6	28.1
DT27	Roadside	3 to the north west	Gillingham	-	37.6	33.5	39.1

12.128 The objective for annual mean NO_2 was exceeded at four monitoring locations during 2017 and has been consistently exceeded at three of the sites since 2014. One of these sites falls within the Rainham AQMA while two are within the Central Medway AQMA. At all other monitors the objective has been met since 2014.

12.129 There are no monitoring sites at or in the immediate vicinity of the Application Site which falls outside the AQMA. Pollutant concentrations at the Application Site are expected to be considerably lower than recorded at the monitoring sties set out in **Table 12.8** due to is location south of Lower Rainham Road, which experiences traffic flows considerably lower than those within the AQMA.

Summary

12.130 MC operates an extensive monitoring programme which includes a number of locations in Medway, all of which are within the identified AQMA.

12.131 The monitoring shows that within the AQMA air quality is often above the objective with exceedances of the annual mean NO_2 objective recorded at a number of locations. However, the Application Site is located in a relatively undeveloped area, at a relatively significant distance of 2.5 km from the boundary of the AQMA. Existing pollutant concentrations at the Application Site are likely to be closer to those predicted in the Defra Background maps (**Table 12.6**).

12.132 Model verification relies on the use of local monitoring data to enable a comparison with model outputs to be undertaken and appropriate model adjustment derived (see **Technical Appendix 12.4**). In the absence of local monitoring specific to the Application Site, MC automatic and diffusion tube data were utilised to verify the model.

IMPACTS

Construction Impacts

12.133 Construction activities that have the potential to generate and/or re-suspend dust and PM_{10} include:

(i) Site clearance and preparation;
(ii) Preparation of temporary access/egress to the Application Site and haulage routes;
(iii) Earthworks;
(iv) Materials handling, storage, stockpiling, spillage and disposal;
(v) Movement of vehicles and construction traffic within the Application Site (including excavators and dumper trucks);
(vi) Use of crushing and screening equipment/plant;
(vii) Exhaust emissions from site plant, especially when used at the extremes of their capacity and during mechanical breakdown;
(viii) Construction of buildings, roads and areas of hardstanding alongside fabrication processes;
(ix) Internal and external finishing and refurbishment; and
(x) Site landscaping after completion.

12.134 The majority of the releases are likely to occur during the 'working week'. However, for some potential release sources (e.g. exposed soil produced from significant earthwork activities) in the absence of dust control mitigation measures, dust generation has the potential to occur 24 hours per day over the period during which such activities are to take place.

Assessment of Potential Dust Emission Magnitude

12.135 The IAQM assessment methodology has been used to determine the potential dust emission magnitude for the following four different dust and PM_{10} sources: demolition; earthworks; construction; and trackout. The findings of the assessment are presented below.

Demolition

12.136 There are two storage barns that will require demolition as part of the development process, along with the removal of a number of caravans, all located in an area to the west of Pump Lane. The total volume of the buildings to be demolished is less than 7,000 m^3 and the two buildings are less than 10 m in height. Furthermore, the main construction materials are timber and metal cladding. The potential dust emissions magnitude for demolition activities is considered to be **small**.

Earthworks

12.137 The total area of the Application Site is more than 50,000 m^2 and the total material that will be moved is estimated to be more than 100,000 tonnes. There will also be more than 10 heavy earth moving vehicles active on the site at any one time, and storage bunds are expected to

be more than 8 m in height. The potential dust emission magnitude is considered to be **large** for earthwork activities.

Construction

12.138 The total volume of buildings to be constructed on the Application Site is not yet known. However, it is anticipated that it will be greater than 100,000 m^3 with construction materials being used having a moderate to large potential for releasing dust (i.e. concrete and brick work). Therefore, the potential dust emission magnitude is considered to be **large** for construction activities.

Trackout

12.139 Information on the number of HDVs associated with this phase of the Proposed Development is not available and therefore professional judgement has been used. It has been assumed that given the size of the development area there are likely to be more than 50 HDV outward movements in any one day, travelling over 100 m of dusty surface material. Given the above, it is considered that the potential dust emission magnitude for trackout is **large**.

12.140 A summary of the potential dust emission magnitude determined for each construction activity considered is presented in **Table 12.9**.

Table 12.9: Potential Dust Emission Magnitude

Activity	Dust Emission Magnitude
Demolition	Small
Earthworks	Large
Construction Activities	Large
Trackout	Large

Assessment of Sensitivity of the Study Area

12.141 A wind rose generated using the 2017 meteorological data for Luton (see **Technical Appendix 12.6)**, shows that the prevailing wind direction is from the southwest. Therefore, receptors located to northeast of the Application Site are more likely to be affected by dust and particulate matter emitted and re-suspended during the construction phase.

12.142 Under low wind speed conditions, it is likely that the majority of dust would be deposited in the area immediately surrounding the source. The closest sensitive receptors to the Application Site are the residential areas located to the north of the Application Site (0 - 200m), including dwellings off Pump Lane and along Lower Rainham Road, plus residential to the south (20 – 350 m), on the opposite side of the railway line.

12.143 Taking the above into account and following the IAQM assessment methodology, the sensitivity of the area to changes in dust and PM_{10} has been derived for each of the construction activities considered. The results are shown in **Table 12.10**.

Table 12.10: Sensitivity of the Study Area

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Low	High	High	Medium
Human Health	Low	Low	Low	Low

Risk of Impacts

12.144 The predicted dust emission magnitude has been combined with the defined sensitivity of the area to determine the risk of impacts during the construction phase, prior to mitigation. A summary of the risk of dust impacts associated with the construction of the Proposed Development is provided in **Table 12.11**.

Table 12.11: Summary Dust Risk Table to Define Site Specific Mitigation

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Negligible	High	Large	Medium
Human Health	Negligible	Low	Low	Low

12.145 The risk category identified for each construction activity has been used to determine the level of mitigation required. Overall, the development is expected to have a **High** risk for dust impacts.

Construction Vehicles & Plant

12.146 The greatest impact on air quality due to emissions from vehicles and plant associated with the construction phase will be in the areas immediately adjacent to the site access. It is anticipated that construction traffic will access the site via Lower Rainham Road and Pump Lane. Due to the expected phasing of the Development, it is considered likely that the construction traffic will be low in comparison to the existing traffic flows on these roads.

12.147 Final details of the exact plant and equipment likely to be used on site will be determined by the appointed contractor and is considered likely to comprise dump trucks, tracked excavators, diesel generators, asphalt spreaders, rollers, compressors and trucks. The number of plant and their location within the site are likely to be variable over the construction period.

12.148 Based on the current local air quality in the area, the proximity of sensitive receptors to the roads likely to be used by construction vehicles, and the likely numbers of construction vehicles and plant that will be used, the local air quality impacts are considered to be **negligible** according to the assessment significance criteria and based on professional judgement.

Operational Impacts

12.149 The detailed results of the atmospheric dispersion modelling exercise are presented in **Technical Appendix 12.7** and a summary is provided below.

Human Receptors

Existing Sensitive Receptors

Annual Mean NO_2 Concentrations

12.150 The results of the assessment demonstrate that, in the 2017 baseline scenario, predicted concentrations do not exceed the annual mean objective for NO_2 (40 µg/m^3) at any modelled receptor. The highest predicted concentration is 38.6 µg/m^3 at R21, which is located at the junction of the A2 and Canterbury Street within the Central Medway AQMA.

12.151 In 2022, the predicted annual mean NO_2 concentrations at all sensitive receptors are well below the annual mean objective, both 'with' and 'without' the Proposed Development. The highest predicted concentrations again are at R21.

12.152 Traffic generated by the operational development is predicted to increase annual mean NO_2 concentrations at all the selected receptor locations (**Technical Appendix 12.7, Table 12.7.3**). The highest increase in annual mean concentrations attributed to the Proposed Development is 1.9 µg/m^3, predicted at receptors R12 and R13. Both receptors are located on Beechings Way to the west of Pump Lane, which experiences the highest increase in trips as a result of the operational development.

12.153 Based on the significance criteria set out in **Table 12.5**, the change of 1.9 µg/m^3, which equates to 5% of the AQAL, is of **negligible** significance due to concentrations under the with development scenario being less than 75% of the objective.

12.154 Overall, the impact of the increased vehicle emissions associated with the operation of the Proposed Development, on annual mean NO_2 concentrations, is considered to be **negligible** at all receptor locations, including within the Central Medway and Rainham AQMA.

Hourly Mean NO_2 Concentrations

12.155 All annual mean NO_2 concentrations predicted in each modelled scenario were below 60 µg/m^3. Therefore, hourly mean NO_2 concentrations are unlikely to cause a breach of the hourly mean objective. The impact of the Proposed Development on hourly mean NO_2 concentrations at existing sensitive receptors is considered to be **negligible**.

Annual Mean PM_{10} Concentrations

12.156 The results of the assessment demonstrate that, in the 2017 baseline scenario, predicted concentrations do not exceed the annual mean objective for PM_{10} (40 µg/m^3) at any modelled receptor. The highest predicted concentration is 26.4 µg/m^3 at receptor R21 (A2 junction).

12.157 Predicted annual mean concentrations of PM_{10} are well below the objective at all sensitive receptors in both the 'without' and 'with' Proposed Development scenarios for the assessment year (2022).

12.158 The predicted changes in annual mean PM_{10} concentrations are all 3% or less of the respective annual mean objective and, based on the EPUK/IAQM guidance, the impact of increased vehicle emissions, associated with the Proposed Development, on annual mean PM_{10} concentrations, is considered to be **negligible**.

Daily Mean PM_{10} Concentrations

12.159 The objective for daily mean PM_{10} concentrations is 50 µg/m^3 to be exceeded no more than 35 times a year. The results of the dispersion modelling indicate that, based on the predicted annual mean (calculated using the guidance set out in LAQM.TG16), the highest number of exceedance days was predicted at receptor R21 with 16 exceedances per annum in 2017.

12.160 The increased vehicle emissions associated with the Proposed Development result in an increase in exceedence days of no more than 1, with the highest being at R21 with 19 exceedances in the 2022 with development scenario. Therefore, the impact on daily mean PM_{10} concentrations is considered to be **negligible**.

Annual Mean $PM_{2.5}$ Concentrations

12.161 The predicted annual mean concentrations of $PM_{2.5}$ are all well below the respective objective (25µg/m^3) in each of the modelled scenarios. The highest predicted concentration is 16.5 µg/m^3, which is predicted at receptor R21.

12.162 All changes in $PM_{2.5}$ as a result of increased traffic associated with the Proposed Development are <3% of the objective and therefore, based on the EPUK/IAQM guidance, the Proposed Development is considered to have a **negligible** impact on $PM_{2.5}$ concentrations.

Exposure of Future Residents

12.163 Receptors R1 to R3 are all located adjacent to Lower Rainham Road, and therefore most representative of the Application Site along the northern boundary. Predicted concentrations of NO_2, PM_{10} and $PM_{2.5}$ are all below the relevant objectives at each of these receptor locations therefore concentrations along the northern boundary of the Site are also expected to be comfortably meeting the relevant objective limits.

12.164 Concentrations of all three pollutants are known to decline with increasing distance from source. Traffic emissions along Lower Rainham Road are the main source of emissions influencing air quality at the Application Site. Concentrations across the rest of the Site will therefore be lower than predicted at receptors R1 to R3 and therefore meeting the relevant objective limits.

12.165 The Application Site is considered to be suitable for the proposed land uses with respect to local air quality.

Ecological Receptors

Annual Mean NO_x Concentrations

Medway Estuaries and Marshes SPA/RAMSAR

12.166 Baseline NO_x concentrations assessed at a number of locations within the Medway Marshes SPA/SSSI/RAMSAR exceed the annual mean critical level for NO_x under the 2017 baseline scenario (receptors E3, E4 and E5).

12.167 The modelling assessment predicts annual mean NO_x concentrations below the critical level of 30 µg/m^3 at receptors E1 and E2 under all three assessment scenarios (**Technical Appendix 12.7,** Table 12.7.4). The critical level is exceeded at receptors E3 and E4, which represent the closest areas of the SSSI/SPA to Gads Hill. The critical level is exceeded for over 100 m from the nearest point to Gads Hill at receptor 3 and up to 60m at E4. Beyond this, concentrations fall below the objective under all scenarios. The objective is also predicted to be just above the objective at receptor E5. It is noted that this is the case prior to the assessment of the Proposed Development (i.e. arising as a result of the Local Plan (LP) development). However, the predicted concentrations show a decline in concentrations

between the 2017 and 2022 baseline scenarios at all locations. This is due to a decline in vehicle emissions in future years as a result of improvements in vehicle technology.

12.168 Traffic generated by the operational development results in an increase in NO_x concentrations within the Medway Estuary and Marshes SPA/SSSI/Ramsar. As outlined in Table 12.7.6 of **Technical Appendix 12.7**, the change in NOx concentrations arising as a result of the proposed development has been identified for each of these points. At receptors E1, E2 and E5 the change in concentrations has been modelled to be 1% or less of the identified critical level. On this basis, the change in NO_x levels arising as a result of the proposed development can properly be classed as not significant and can therefore be scoped out from further assessment. Further consideration in this regard is provided in the IHRA.

12.169 At receptors E3 and E4 the change in concentrations have been modelled to be more than 1% of the critical level and therefore cannot be classed as 'not significant'. Further consideration has therefore been undertaken in relation to the European designated site, as outlined in the IHRA.

Swale SPA/RAMSAR site

12.170 Annual mean NO_x concentrations predicted at the Swale Estuary SPA/RAMSAR are set out in Tables 12.7.7 to 12.7.9 of **Technical Appendix 12.7.** The modelling is predicting an exceedance of the critical level up to 20 m from the A249 at receptors L1, with concentrations falling below the critical level by 30 m either side of the road. However, the critical level is met at all L2 receptors. This is due to the road elevation above ground level.

12.171 Traffic generated by the operational development is predicted to result in no change in the critical level at any receptors within the Swale Estuary SPA/Ramsar. The impact of the development can therefore be deemed as not significant within this European designated site and no further consideration of the impacts on this habitat site is considered necessary.

North Downs Woodlands SAC

12.172 The modelling assessment is predicting an exceedance of the critical level up to 60 m from the A249 at receptor transect L3 (Table 12.7.10, **Technical Appendix 12.7**). Beyond 60m concentrations fall below the critical level.

12.173 Adjacent to the A229 annual mean NO_x concentrations are predicted to meet the critical level.

12.174 Traffic generated by the operational development would not result in a change in annual mean NO_x concentrations at either of the two modelled locations within the North Downs Woodlands SAC (Table 12.7.12, **Technical Appendix 12.7**). The impact of the development can therefore be deemed as not significant and no further consideration of the impacts on this habitat site is considered necessary.

24-hour NO_x Concentrations

Medway Estuary and Marshes SSSI/SPA/RAMSAR site

12.175 The modelling assessment is predicting 24-hour NO_x concentrations below the objective limit of 75 µg/m^3 at all receptor locations under the base scenarios. (**Technical Appendix 12.7,** Table 12.7.4). However, the objective is exceeded at receptors E3 under the with development scenario (**Technical Appendix 12.7,** Table 12.7.5).

12.176 Predicted increases in the 24-hour NO_x concentrations as a result of the operational development equate to between 0.3% - 2.7% of the CLE. This is below the 10% criteria, as discussed in paragraph 13.95 and therefore impacts are not considered to be significant. No further assessment is considered necessary.

Swale SPA/RAMSAR site

12.177 The 24-hour NO_x critical level is also being exceeded either side of the A249 for up to 40 m at receptor transect L1 (Table 12.7.7, **Technical Appendix 12.7**). At all other locations within the Swale SPA/RAMSAR site the critical level is being met.

12.178 The impact of traffic on 24-hour NO_x concentrations is predicted to be not significant given that the change would be less than 10% of the critical level and no further consideration of the impacts on this habitat site is considered necessary.

North Downs SAC

12.179 The 24-hour critical level is being exceeded up to 20 m from the A249 within the North Downs Woodlands SAC. However, the critical level is being met adjacent to the A229 within this European designated site (Table 12.7.10, **Technical Appendix 12.7**).

12.180 There would be no change in the critical level as a result of the operational development therefore the impact on 24-hour NO_x concentrations would not be significant (Table 12.7.12, **Technical Appendix 12.7)** and no further consideration of the impacts on this habitat site is considered necessary.

Nitrogen Deposition

Medway Estuary and Marshes SSSI/SPA/RAMSAR site

12.181 The calculated N-deposition rates are below the CLO of 20-30 kgN/ha/yr at all the selected receptors under all three assessment scenarios (**Technical Appendix 12.7,** Table 12.7.4).

12.182 The change in N-deposition as a result of emissions from the operational development is predicted to be less than 1% of the CL at all receptor locations, therefore the impact is classed as not significant and no further consideration of potential effects arising on these international/European designated sites is considered necessary. Further information in relation to the assessment of nitrogen deposition (in relation to all such sites) is presented in the IHRA.

Swale SPA/RAMSAR site

12.183 The calculated N-deposition rates are exceeding the lower level of the CLO of 15-30 kgN/ha/yr at the majority of receptors along L1 and L2 transects within the Swale SPA/RAMSAR site (Table 12.7.7 and 12.7.8, **Technical Appendix 12.7**). However, there will be no change in deposition rates as a result of the operational development therefore the impact are classed as not significant and no further consideration of potential effects arising on these international/European designated sites is considered necessary.

North Downs Woodlands SAC

12.184 The calculated N-deposition rates are exceeding the CLO of 5-15 kgN/ha/yr at all receptors along the L3 and L4 transects (Table 12.7.10, **Technical Appendix 12.7**). However, there will be no change in deposition rates as a result of traffic generated by the operational development (Table 12.7.12, **Technical Appendix 12.7**) therefore the impact would be not significant and no further consideration of potential effects arising on the European designated site is considered necessary.

Acid (Nitrogen) Deposition

North Downs Woodlands SAC

12.185 The calculated acid (nitrogen) deposition rates are exceeding the CLO of 0.142 keq/ha/yr at all receptors along the L3 and L4 transects (Table 12.7.10, **Technical Appendix 12.7**). However, there will be no change in deposition rates as a result of traffic generated by the operational development (Table 12.7.12, **Technical Appendix 12.7**) therefore the impact would be not significant on acid deposition and no further consideration of potential effects arising on this European designated site is considered necessary.

MITIGATION

Construction Phase

12.186 In the absence of mitigation, activities associated with the construction phase of the Proposed Development are considered to represent a high risk with respect to potential dust impacts at nearby sensitive receptors. As such, a number of best practice mitigation measures should be implemented during construction of the two phases. They are measures that accord with IAQM guidance and which are commensurate to the scale and nature of the Proposed Development.

12.187 The mitigation measures focus on controlling fugitive releases of construction phase dust and should be implemented by the contractor through a Construction Environmental Management Plan (CEMP) or similar. The recommended measures include, but may not be limited to, measures stated below.

General Dust Management

(i) A Dust Management Plan (DMP), which may include measures to control other emissions, in addition to the dust and PM_{10} mitigation measures given in this report, should be developed and implemented, and approved by the Local Authority. The DMP may include a requirement for monitoring of dust deposition, dust flux, real-time PM_{10} continuous monitoring and/or visual inspections.

Site Management

(i) All dust and air quality complaints should be recorded, and causes identified. Appropriate remedial action should be taken in a timely manner with a record kept of actions taken including of any additional measures put in-place to avoid reoccurrence.

(ii) The complaints log should be made available to the local authority on request.

(iii) Any exceptional incidents that cause dust and/or air emissions, either on- or offsite should be recorded, and then the action taken to resolve the situation recorded in the log book.

(iv) Regular liaison meetings with other high-risk construction sites within 500 m of the Application boundary (i.e. Bengrave Nursery Development) should be undertaken to ensure plans are co-ordinated and dust and particulate emissions minimised.

Monitoring

(i) Daily on-site and off-site inspections should be carried out, particularly where receptors are nearby. The results of the inspections should be recorded, and the log made available to the LA when asked. The inspection should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of the site boundary, with cleaning provided where necessary.

(ii) Regular site inspections to monitor compliance with the DMP should be carried out, inspection results recorded, and an inspection log made available to the local authority when asked.
(iii) The frequency of site inspections should be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

Preparing and maintaining the site

(i) Plan the Site layout so that machinery and dust causing activities are located away from receptors, as far as is practicable.
(ii) Where practicable, erect solid screens or barriers around dusty activities or the Site boundary that are at least as high as any stockpiles on site.
(iii) Where practicable, fully enclose site or specific operations where there is a high potential for dust production and the Site is active for an extensive period.
(iv) Avoid site runoff of water or mud.
(v) Keep site fencing, barriers and scaffolding clean using wet methods.
(vi) Remove materials that have a potential to produce dust from the Site as soon as possible, unless being re-used on site. If they are being re-used on-site cover appropriately.
(vii) Where practicable, cover, seed or fence stockpiles to prevent wind whipping.

Operating vehicle/machinery and sustainable travel

(i) Ensure all vehicle operators switch off engines when stationary - no idling vehicles.
(ii) Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.
(iii) A Construction Logistics Plan should be produced to manage the sustainable delivery of goods and materials;
(iv) Impose and signpost a maximum speed limit of 15 mph on surface and 10 mph on unsurfaced haul roads and work areas;
(v) A Travel Plan that supports and encourages sustainable travel by construction workers should be implemented.

Operations

(i) Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
(ii) Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
(iii) Use enclosed chutes and conveyors and covered skips.
(iv) Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
(v) Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

Waste Management

(i) Avoid bonfires and burning of waste materials.

Measures Specific to Demolition

(i) Ensure effective water suppression is used during demolition operations such as hand-held sprays which are more effective than hoses;

(ii) Avoid explosive blasting and use manual or mechanical alternatives;
(iii) Bag and remove any biological debris or damp this down before demolition takes place.

Measures Specific to Earthworks

(i) Stockpile surface areas should be minimised (subject to health and safety and visual constraints regarding slope gradients and visual intrusion) to reduce area of surfaces exposed to wind pick-up.
(ii) Where practicable, windbreak netting/screening should be positioned around materil stockpiles and vehicle loading/unloading areas, as well as exposed excavation and material handling operations, to provide a physical barrier between the Application Site and the surroundings.
(iii) Where practicable, stockpiles of soils and materials should be located as far as possible from sensitive properties, taking account of the prevailing wind direction.
(iv) During dry or windy weather, material stockpiles and exposed surfaces should be dampened down using a water spray to minimise the potential for wind pick-up.
(v) Long-term earthworks and stockpiles should be re-vegetated as soon as practicable to stabilise surfaces. Where this is not possible hessian, mulches or trackifiers should be use.

Measures Specific to Construction

(i) All construction plant and equipment should be maintained in good working order and not left running when not in use.
(ii) Scabbling should be avoided if possible.
(iii) Any sand and aggregates should be stored in bunded areas and kept damp to prevent emissions and dispersion.
(iv) All bulk cement and fine powders should be delivered in enclosed tankers and stored in silos or sealed bags, depending on volume.

Measures Specific to Trackout

(i) Water-assisted dust sweepers should be used to remove tracked material from access and local roads.
(ii) Dry sweeping should be avoided, ensuring damping equipment is made available.
(iii) All vehicles entering and leaving the site should be covered if carrying materials.
(iv) Regular inspections of on-site haul roads should be carried out to check for integrity and repairs carried out as soon as practicable.
(v) All inspections should be recorded and logged.
(vi) Where practicable, hard surfaced haul roads should be installed and swept being kept damped down at all times.
(vii) A wheel washing facility should be installed, including rumble grids, at an appropriate location close to the site exit point with an adequate area of surfaced road between the wheel wash and exit point.
(viii) Where possible, access points should be located at least 10 m from existing receptors.

12.188 Detailed mitigation measures to control construction traffic should be discussed between the Proposed Development contractor and MC to establish the most suitable access and haul routes for the site traffic.

12.189 The most effective mitigation will be achieved by ensuring that construction traffic does not pass along sensitive roads (residential roads, congested roads, via unsuitable junctions, etc.) where possible, and that vehicles are kept clean (through the use of wheel washers, etc.) and sheeted when on public highways. Timing of large-scale vehicle movements should be

programmed to avoid peak hours on the local road network to reduce any potential for contributing to traffic congestion.

Operational Phase

Mitigation Emissions Calculation

12.190 The Proposed Development is predicted to generate 7,104 movements per day with 0.5% heavy duty vehicles, in 2022. The annual emissions have been calculated using the EFT V8.0 using the data set out in **Table 12.12**. The annual emissions are estimated to be 6777 kg/yr of NO_x and 808 kg/yr for PM_{10}.

Table 12.12: Emissions Calculation Input to EFT V8.0

Road Type	Year	Traffic Flow	% HDV	Speed (kph)	No. of Hours	Link Length (km)
Urban (not London)	2022	7,104	0.5	50	25	10

12.191 The Interdepartmental Group on Costs and Benefits (IGBC) damage costs used are the IGCB Air Quality Damage Costs per tonne, 2015 prices Central Estimate (Ref 12.23). As the impacts of PM are being quantified and valued alongside NO_x, it is appropriate to reduce the direct health impact of NO_2 and therefore Table 2 values for NO_x damage costs were used.

12.192 In accordance with the Defra guidance on the calculation of damage costs, the 2015 damage costs were inflated to 2021 (representing 2022) prices by 2.5% per annum (**Table 12.13**). For the 5-year appraisal period (2021 to 2025), the costs were then increased by 2% per annum in accordance with the guidance (**Table 12.14** and **Table 12.15**), and the total values discounted by 3.5% per annum to get the net present value of the damage costs (**Table 12.16**). These steps are shown in the following tables.

Table 12.13: Inflation of 2015 Damage Costs to 2021

Pollutant	2015 Damage Costs (£ per Tonne)	2021 Damage Costs (£ per Tonne)
NO_x	21,044	24,405
PM_{10}	58,125	67,407

Table 12.14: Uplift of Damage Costs 2% per Annum

Year	NO_x (£ per Tonne)	PM_{10} (£ per Tonne)
2021	24,405	67,407
2022	24,893	68,755

2023	25,391	70,130
2024	25,898	71,533
2025	26,416	72,964

Table 12.15: Calculated Damage Costs Per Annum

Year	NO_x (£)	PM_{10} (£)
2021	169,091	55,675
2022	172,4731	56,788
2023	175,922	57,924
2024	179,441	59,083
2025	183,030	60,264

Table 12.16: NPV of Damage Costs (Discounted 3.5% per annum)

Year	NO_x (£)	PM_{10} (£)
2021	169,091	55,675
2022	166,640	54,868
2023	164,225	54,073
2024	161,845	53,289
2025	159,500	52,517

12.193 The estimated damage costs are £821,302 for NO_x and £270,422 for PM_{10} and therefore the total damage cost is £1,091,724 over the first five-year period.

Mitigation Measures

12.194 The change in pollutant concentrations attributable to traffic emissions associated with the operation phase of the Proposed Development (i.e. impacts on local air quality) are negligible in terms of impacts on human receptors. Further assessment with regards to the significance of effects on international / European designated sites is presented in the IHRA. As identified in that assessment, specific avoidance or mitigation measures in respect of air quality impacts

on the international / European designated sites are not required, in order to reach a conclusion of no adverse effect on integrity.

12.195 The emissions mitigation calculation calculated a damage cost of £1,091,724, which is expected to be spent on implementing mitigation measures to reduce emissions. The MC Air Quality Planning Guidance advises the following standard mitigation methods for all major developments:

(i) All gas fired boilers to meet a minimum of <40mgNO_x/kWh
(ii) 1 electric charging point per unit (dwelling with dedicated parking) or 1 charging point per 10 spaces (unallocated parking).

12.196 In addition to the above measures the guidance recommends the following scheme mitigation measures for consideration:

(i) Travel plan (where required) including mechanisms for discouraging high emission vehicle use and encouraging the uptake of low emission fuels and technologies;
(ii) A welcome pack available to all new residents online and as a booklet, containing information and incentives to encourage the use of sustainable transport modes from new occupiers;
(iii) Eco-driver training and provision of eco-driver aid to all residents;
(iv) EV recharging infrastructure within the development (wall mounted or free standing in-garage or off-street points);
(v) Car club provision within development or support given to local car club/eV car clubs;
(vi) Designated parking spaces for low emission vehicles;
(vii) Improved cycle paths to link cycle network;
(viii) Adequate provision of secure cycle storage;
(ix) Using green infrastructure, in particular trees, to absorb dust and other pollutants;
(x) Contribution to low emission vehicle refuelling infrastructure;
(xi) Low emission bus service provision and waste collection services;
(xii) Bike/e-bike hire schemes;
(xiii) Contribution to renewable fuel and energy generation projects;
(xiv) Incentives for the uptake of low emission technologies and fuels.

12.197 The above list is not exhaustive and MC is willing to consider other options which aim to reduce overall emissions from the Site. The developer will determine a package of mitigation measures equivalent to the calculated damage cost which will be agreed with MC.

12.198 It is not possible to quantify the reduction in emissions as a result of the mitigation plan however, it is anticipated that the measures would significantly reduce overall emissions which would reduce the potential for impacts.

RESIDUAL IMPACTS

Construction Phase

12.199 With the implementation of the mitigation measures described in section 13.165 and good site practice, the residual effects of dust and PM_{10} generated by construction activities is considered to be **negligible**.

12.200 The residual effects of emissions to air from construction vehicles and plant on local air quality is considered to be **negligible**.

Operational Phase

Human Receptors

12.201 The residual effects of the Proposed Development on air quality are considered to be **negligible** for all pollutants considered within the assessment, based on the assessment results and criteria provided by the IAQM/EPUK guidance, with the application of professional judgement.

Ecological Receptors

12.202 The assessment has found that the impact of the development can be classed as not significant in relation to nitrogen deposition, acid (nitrogen) deposition and the 24-hour critical level for NO_x. However, impacts associated with annual mean NO_x critical level have been considered further within the IHRA.

CUMULATIVE IMPACTS

Construction Phase

12.203 There are a number of permitted and allocated development sites in the vicinity of the Application Site which have been considered in terms of cumulative effects. If under construction during the same period as the Proposed Development, there is the risk of cumulative effects from dust and traffic emissions on local sensitive receptors. However, significant effects are only likely to occur as a result of dust emissions at receptors within 350 m of construction activities, therefore any construction sites over 700 m from the Application Site are unlikely to result in significant cumulative effects at receptors within 350 m of the Proposed Development.

12.204 A review of recent planning applications identifies a permitted development at Bengrave Nursery, located approximately 200m to the south east of the Application Site. There is therefore a risk of cumulative effects at receptors located between the two sites. However, the Bengrave Nursery development would be subject to stringent mitigation measures similar to those proposed for this application, which are expected to result in negligible effects beyond the site boundaries. On this basis it is expected that any cumulative impacts are unlikely to be significant. Furthermore, given the location of the Bengrave Nursery Site construction traffic is expected to use different haul routes, the cumulative impact of emissions from construction traffic is unlikely to be significant on local air quality.

12.205 All other identified permitted or allocated developments are located over 900 m from the Application Site, therefore there any cumulative effects would be **negligible**.

Operational Phase

12.206 Traffic flows from committed developments in the vicinity of the Application Site were accounted for within the traffic data utilised in this air quality assessment. Considering the atmospheric dispersion model results, the operational phase cumulative impacts associated with the Proposed Development are predicted to be **negligible** in relation to human receptors and ecological receptors.

SUMMARY

12.207 A qualitative assessment of the potential impacts on local air quality from construction activities has been completed for this phase of the Proposed Development using the IAQM methodology. This identified that there is a High Risk of dust soiling impacts and a Low Risk of increases to particulate matter concentrations due to construction activities.

12.208 However, through good site practice and the implementation of suitable mitigation measures, the effect of dust and PM_{10} releases would be significantly reduced. The residual effects of

dust and PM_{10} generated by construction activities on air quality are therefore considered to be negligible. The residual effects of emissions to air from construction vehicles and plant on local air quality are considered to be **negligible** and would not constitute a significant environmental effect.

12.209 A quantitative assessment of the potential impacts during the operational phase of the Proposed Development was undertaken using ADMS-Roads to predict the changes in NO_2, PM_{10}, and $PM_{2.5}$ concentrations that would occur due to traffic generated by the Proposed Development. The assessment has accounted for the additional vehicle movements on the assessed road network generated by other committed development within proximity to the Proposed Development.

12.210 The assessment demonstrated that the Proposed Development would result in a **negligible** increase in pollutant concentrations and would not cause any exceedances of the statutory UK air quality objectives. The results also show that future residents of the Proposed Development would not be subject to pollutant concentrations that would exceed the statutory objectives, thus the Application Site is considered suitable for the proposed land uses.

12.211 Assessment of impacts on the identified European designated sites are less than 1% of the relevant 24-hour critical level for NO_x and critical load for nitrogen deposition and acid (nitrogen) deposition. Therefore, the impact of the development can be classed as not significant in relation to these pollutants. However, impacts exceed 1% of the annual mean NO_x critical level. On this basis, the change in NO_x levels arising as a result of the proposed development cannot be classed as not significant. Impacts in relation to the critical level for annual mean NO_x within the Medway Estuary and Marshes SSSI/SPA/RAMSAR site have been considered further within the IHRA document.

12.212 In accordance with the Medway Air Quality Planning Guidance an emissions mitigation calculation was carried out which calculated a damage cost of £1,091,724. A package of mitigation measures equivalent to this cost will be determined in agreement with MC to reduce emissions from the operational development.

12.213 Based on the assessment significance criteria, the residual effects of the Proposed Development on local air quality are considered to be **negligible** in terms of human receptors and would not constitute a significant environmental effect.

12.214 As outlined in the IHRA, having undertaken further detailed assessment it is concluded that the development proposals are not likely to lead to an adverse effect on the integrity of any international / European designated sites as a result of air quality impacts; as such, there would be **no** residual effects.

12.215 The Proposed Development is considered to comply with relevant national and local air quality policies.

Table 12.17: Summary Table

Description of Likely Significant Effects	Significance	Effects B/A, R/T, D/I, ST/M/LT, L/R/N					Description of Mitigation/ Enhancement Measures	Description of Residual Effects	Significance	Residual Effects B/A, P/T, D/I, ST/M/LT, L/R/N				
Construction Phase														
Impact from dust soiling	Substantial (high according to IAQM guidance)	A	T	D	ST	L	Described in section 12.166	None	Negligible	A	T	D	ST	L
Impact on human health	Slight (low according to IAQM guidance)	A	T	D	ST	L	Described in section 12.166	None	Negligible	A	T	D	ST	L
Operational Phase														
Impact on existing sensitive receptors	Negligible	A	P	D	LT	L	Described in section 12.176	None	Negligible	A	P	D	LT	L
Impact on proposed residential receptors	Negligible	A	P	D	LT	L	Described in section 12.176	None	Negligible	A	P	D	LT	L
Impact on Ecological Receptors	Unknown	A	P	D	LT	L	Described in section 12.176 and in the IHRA (albeit not specifically required in respect of international/European designated sites)	None	Negligible	A	P	D	LT	L

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

13 LAND USE AND AGRICULTURE

INTRODUCTION

13.1 This chapter of the ES assess the impact of the Proposed Development on the environment in respect of agricultural soils and land use, and also considers the impact on the existing horticultural business.

13.2 The agricultural soils and land classification part of the chapter has been prepared by Reading Agricultural Consultants who have many years' experience and expertise in the preparation of Environmental Impact Assessments (EIAs) as well as contributing Agricultural Land Classification (ALC) surveys to EIAs for housing, minerals, infrastructure and other large-scale developments.

13.3 The Proposed Development will impact agricultural land and soils at Pump Farm, Lower Rainham.

13.4 This chapter presents the findings of the ALC survey undertaken for the Proposed Development. The detail is found in **Technical Appendix 13.1** and includes:

(i) a statement of the actual amount and quality of agricultural land on the Site;
(ii) the sensitivity of agricultural land according to its grade within the ALC;
(iii) the sensitivity of the soil resource; and
(iv) the impact on the soil and land resource.

13.5 Where necessary, details of the mitigation measures required to prevent, reduce or offset identified impacts associated with the Proposed Development are stated in this chapter. The resulting residual impacts are also reported, which assumes that mitigation will be applied.

13.6 Matters in connection with the farm business are presented in full within **Technical Appendix 13.2(i), August 2020** produced by Anderson Midlands (J Pelham), Technical Appendix 13.2(ii) produced by Lambert and Foster, and **Technical Appendix 13.2(iii)sup**, which included a Note responding to queries raised by Officers during the determination of the application.

POLICY CONTEXT

13.7 This section of the ES discusses the context of the Proposed Development with regard to the relevant European Union (EU) and UK legislation, in addition to national and local planning policies.

European & National Legislation

13.8 There is no adopted legislation at the EU or national level relating to soil protection. The EU Thematic Strategy for Soil Protection (ref. 13.1) outlines the condition of soils in Europe and aims to ensure their protection and sustainable use. The overarching aims are to prevent further soil degradation, preserve soil functions and restore degraded soils to a standard appropriate to their intended use.

13.9 The strategy includes a proposal for an EU Soil Framework Directive which promotes the sustainable use of soil and its protection as a natural and non-renewable resource. However, the proposed Directive was withdrawn in 2014 as it could not be agreed by a qualified majority. In taking its decision, the European Commission stated that it remains committed to the objective of the protection of soil and will examine options on how best to achieve this.

13.10 No direct replacement proposals have yet come forward from the Commission, although Directive 2014/52/EU emphasises that public and private projects should consider and limit their impact on land, particularly in respect of land-take, and on soil, particularly in respect

of organic matter, erosion, compaction and sealing (i.e. covering undisturbed natural soils with urban development and infrastructure construction).

Planning Policy

National Planning Policy Framework

13.11 The Government's overall planning policies for England are described in the Revised National Planning Policy Framework (NPPF) (ref.13.2).

13.12 Paragraph 170 of the NPPF identifies the protection and enhancement of soils as a priority in the conservation and enhancement of the natural and local environment.

13.13 Paragraph 170 goes on to advise that planning policies and decisions should take into account the economic and other benefits of best and most versatile (BMV) agricultural land which is land classified as Grades 1, 2 and 3a in the ALC system of England and Wales.

13.14 Paragraph 171 of the NPPF advises in footnote 53 that, where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred by those of a higher quality.

13.15 There is no policy within the NPPF on the effects of development on any agricultural interests other than land quality, although guidance in Natural England's Technical Information Note (TIN) 049 (ref.13.3) indicates that, although ALC is a basis for assessing how development proposals affect agricultural land within the planning system, it is not the sole consideration, with planning authorities guided to protect and enhance soils more widely.

Medway Local Plan 2003 and Future Medway Local Plan (2012 – 2035)

13.16 There are no policies within the Medway Local Plan 2003 (ref.13.4) or the emerging development strategy (ref. 13.5) that deal with development involving agricultural land or soils.

METHODOLOGY

13.17 This section describes the adopted methodology for classifying the quality of agricultural land and soils present at the Site.

13.18 The effects on the agricultural resource are concerned with the permanent loss of agricultural land and soils to the Development and the temporary and permanent effects of the Development on the land and soil resources within the Site.

13.19 The Site was subject to a detailed ALC survey in accordance with the established ALC guidelines (ref.13.6) in November 2018. The report of survey is contained at **Technical Appendix 13.1.** In total, 69 soil profiles were examined using an Edelman (Dutch) auger at an observation density of more than one per hectare. One observation pit was also excavated examine soil structure.

13.20 At each observation point, the following characteristics were assessed and recorded for each soil horizon up to a maximum of 120cm or any impenetrable layer: soil texture; significant stoniness; colour (including local gley and mottle colours); consistency; structural condition; free carbonate and depth.

13.21 Soil Wetness Class (WC) was inferred from the matrix colour, presence or absence of, and depth to, greyish and ochreous gley mottling and/or poorly permeable subsoil layers at least 15cm thick.

13.22 Soil droughtiness is investigated by the calculation of moisture balance equations. Crop-adjusted Available Profile (AP) water is estimated from texture, stoniness and depth, and

then compared to a calculated Moisture Deficit (MD) for the standard crops, wheat and potatoes. The MD is a function of potential evapotranspiration and rainfall. Grading of the land can be affected if the AP in insufficient to balance the MD and droughtiness occurs. When a profile is found with significant stoniness, sufficient to prevent penetration of a hand auger, then it is assumed for the purposes of calculating draughtiness, that similar levels of stoniness continues to the full 1.2m depth considered.

Significance Criteria

13.23 The ALC survey provides a statement of the actual amount and quality of agricultural land on the Site. Agricultural land in England and Wales is graded between 1 and 5, depending on the extent to which physical or chemical characteristics impose long-term limitations on agricultural use. Grade 1 land is excellent quality agricultural land with very minor or no limitations to agricultural use, and Grade 5 is very poor quality land, with severe limitations due to adverse soil, relief, climate or a combination of these. Grade 3 land is divided into Subgrade 3a (good quality land) and Subgrade 3b (moderate quality land). The best and most versatile agricultural land comprises Grades 1, 2 and 3a.

13.24 The impact on the soil resource is assessed according to the degree to which disturbed soil resources are re-used in a manner that enables the resource to fulfil one or more of the primary soil functions of:

(i) the production of food and biomass, and the provision of raw materials;
(ii) the storage, filtration and cycling of water, carbon and nitrogen in the biosphere;
(iii) the support of ecological habitats and biodiversity;
(iv) support of the landscape;
(v) the protection of cultural heritage; and
(vi) the provision of a platform for human activities, such as construction and recreation.

13.25 The sensitivity of agricultural land is assessed according to its grade within the ALC, as set out in **Table 13.1**. The sensitivity of the soil resource reflects its textural characteristics and its susceptibility to the effects of handling during construction and the re-instatement of land.

Table 13.1: Sensitivity of Agricultural Land and Soil Resources

Sensitivity	Agricultural Land	Soil Resources
High	Grades 1 and 2	Soils with high clay and silt fractions (clays, silty clays, sandy clays, heavy silty clay loams and heavy clay loams)
Medium	Subgrades 3a and 3b	Silty loams, medium silty clay loams, medium clay loams and sandy clay loams
Low	Grades 4 and 5	Soils with high sand fractions (sands, loamy sands, sandy loams and sandy silt loams)

13.26 The thresholds for determining the magnitude of change have been derived taking into account the statutory consultation procedures with Natural England for development involving the loss of agricultural land. These require specific consultation with Natural England for non-agricultural development proposals that are not consistent with an adopted local plan and involve the loss of 20ha or more of BMV land (Ref. 13.3). **Table 13.2** sets out the magnitude of change for agricultural land resources.

13.27 The magnitude of change on soil resources takes into account the continued ability of a soil to fulfil its primary functions, as set out in **Table 13.2**. These definitions have been derived from good practice guidance on handling soils, particularly the Defra Construction Code of Practice for the Sustainable Use of Soils (Ref. 13.7).

Table 13.2: Magnitude of Impact on Agricultural Land and Soil Resources

Magnitude of Impact	Agricultural Land	Soil Resource
High	Development would directly lead to the loss of over 50ha of agricultural land	The soil displaced from development is unable to fulfil one or more of the primary soils functions
Medium	Development would directly lead to the loss of between 20 and 50ha of agricultural land	The soil displaced from development mostly fulfils the primary soil functions off-site or has a reduced capacity to fulfil the primary functions on site
Low	Development would directly lead to the loss of between 5 and 20ha of agricultural land	The soil displaced from development mostly fulfils the primary soil functions on-site
Negligible	Development would directly lead to the loss of less than 5ha of agricultural land	The soil retains its existing functions on-site

13.28 The significance of the effect is then assessed based on the sensitivity of the resource and the magnitude of impact, as shown below in **Table 13.3**. Those effects that are moderate or substantial are considered to be significant.

Table 13.3: Impact Significance Matrix

	Magnitude of Impact			
Sensitivity/value of a Receptor	High	Medium	Low	Negligible
Very High	Substantial	Substantial	Moderate	Slight
High	Substantial	Moderate	Slight	Negligible
Medium	Moderate	Slight	Negligible	Negligible

Limitations and Assumptions

13.29 No assumptions were made, or limitations experienced in respect of the collection of baseline soils and agricultural land quality information. Full access was granted to all land sufficient to undertake the surveys to the recommended methodology.

The Farming Business

13.30 Reports have been prepared by Anderson Midlands (August 2020) and Lambert and Foster, advisers to the Applicant in respect of the farm business aspect of the property. The reports consider the existing business and how the changing demands of the horticulture industry are likely to affect the operation of the business at Pump Farm in the future. These are included as **Technical Appendices 13.2(i) August 2020, 13.2(ii)** and **13.2(ii)sup.**

BASELINE CONDITIONS

Agricultural Land and Soils

13.31 The Site extends to approximately 52ha of agricultural land, predominantly comprising apple orchards with a small area of grass to the east. The Site lies to the north west of Rainham and is bounded in the north by the Lower Rainham Road. It is bounded in the east by the Lower Bloors Lane, to the south by a railway line and to the west by agricultural land and residential properties off Lower Twydall Lane. The Site slopes downward, from west to east, falling from around 30m Above Ordnance Datum (AOD) to 10m AOD.

13.32 Local agro-climatic factors have been calculated using the Meteorological Office's data set for the centre of the Site at a representative altitude of 20m AOD and are shown in **Table 13.4**. The data shows the Site to be warm and moderately dry with large crop moisture deficits. Field Capacity Days (FCD) are shorter than is typical for lowland England, providing adequate opportunities for agricultural work.

Table 13.4: Local Agro-Climatic Conditions

Parameter	Value
Average Annual Rainfall	619mm
Accumulated Temperatures >0°C	1,478 day°
Field Capacity Days	124 days
Average Moisture Deficit, wheat	121mm
Average Moisture Deficit, potatoes	118mm

13.33 The British Geological Survey map (ref.13.8) of the Site shows the underlying geology in the west and east to be of the Thanet Formation, mostly comprising fine-grained sand that can be clayey. There is a narrow band of the Seaford Chalk Formation running roughly north east to south west comprising firm white chalk. This chalk is overlain with superficial deposits of glacial Head and may include gravel, sand and clay.

13.34 The Soil Survey of England and Wales soil association mapping (1:250,000 scale) (ref.13.9) shows the Hamble 1 association across the Site. These soils are characterised by deep, often stoneless, fine silty soils. Series within this association may be affected by groundwater, with impeded drainage at depth, or be shallow over chalk. However, profiles are typically well drained, of Wetness Class (WC) I.

13.35 Agricultural land quality is at the Site is affected mostly by soil droughtiness, with some profiles also limited by Soil Wetness, and varies across the Site from Grade 1 to Subgrade 3a.

13.36 In the northern and southern parts of the Site there are some excellent quality Grade 1 soils. Soils from these profiles generally comprise fine, sandy silt loam topsoils with some medium silty clay loam topsoils also present. These soils have low stone, light silty profiles with adequate available water and no limitations.

13.37 Most (79%) of the soils found across the Site are of Grade 2 quality. These silty clay loam and medium clay loam soils are most affected by droughtiness as a result of large moisture deficits, slight stoniness and medium or heavy textured subsoils.

13.38 Profiles of WC I with heavy topsoil textures and profiles of WC II with medium topsoil textures are also slightly limited to Grade 2.

13.39 There are some small pockets of Subgrade 3a land within the Site. These are found to the south west bordering the railway and to the east of the Site, off Pump Lane. In these pockets of land, the upper subsoil is moderately stony or chalky, with a resultant droughtiness limitation to Subgrade 3a. Some rare instances of profiles of WC III are also limited to Subgrade 3a.

13.40 The areas of the various ALC grades are given in **Table 13.5** and are mapped on **Figure 13.1**.

Table 13.5: Agricultural Land Classification of the Site

Grade	Description	Area (ha)	% of agricultural land
1	Excellent quality	8.6	17
2	Very good quality	40.6	79
3a	Good quality	2.3	4
Total Agricultural		51.5	100
	Non-agricultural	0.5	-

The Farming Business

13.41 AC Goatham and Son farms over 2,400 acres of land all for top fruit (apples and pears). Pump Farm is a part of this operation comprising approximately 135 acres (54.8 hectares) of predominately apple orchard with a small area of grass in the east. Of the 135 acres, 12 acres is rented. There is no security of tenure on the rented land, with this only being rented on an annual basis.

13.42 Pump Farm has a modest range of old farm buildings and mobile units on site, most of which are in a poor condition. These buildings do not meet the modern demands on the business to improve the living quarters for attracting seasonal workers and in addition to ensuring the standards of storage facilities, equipment stores and accommodation meet the need of the supermarket auditors (commissioned by the client buying the fruit, so not just the standards and requirements set out by the business itself). These facilities are inadequate to service the holding.

13.43 The orchards at Pump Farm are established commercially planted root stock. 50% of Pump Farm is 4 / 5-year-old Braeburn rootstock. However, this Braeburn stock requires replacement due to it no longer being a favoured variety by the supermarkets as there is an oversupply of this being grown.

13.44 Over the last 3 years Pump Farm has produced an average of 6,702 bins across the orchards, which at 330 kg per bin equates to 48 tonnes per hectare. The farm is no longer generating a commercial yield when compared to modern requirements at around 75 tonnes per hectare and as such, is not deemed suitable to be retained.

13.45 When the Braeburn crop is taken out, the 2018 figures alone would show that the rest of the orchards of other varieties (Conference / Gala / Discovery) only produced a yield of 49.39 tonnes per hectare. This is below the requirements of the business which requires 60 tonnes per hectare.

13.46 A requirement for specialist machinery brings about the need to transport this equipment from the larger supporting hub farms. The type of machinery used at Pump Farm is standard mechanised machinery for planting, pruning, spraying, picking, hedge trimming and orchard mowing. This is predominantly tractor-driven machinery, other than at harvest, when self-propelled motorised elevated picking platforms are utilised. None of the machinery is stored at the farm, given the limited storage capacity and security issues. All the machinery is sent over from Howt Green Farm, near Bobbing, some 7 miles away.

13.47 In order to survive, the fruit growing industry has undergone consolidation in terms of distribution of produce. It is not possible or practical to provide infrastructure required to make each fruit farm in the overall business 'self-sufficient' in storage term needs, accommodation, machinery. Hub farms are the norm which means that cold storage, accommodation for labour and storage of machinery is shared and based at a single site serving a number of farms within the business. Flanders Farm, Hoo and Howt Farm, Bobbing are two sites that form this function for the overall business.

13.48 In short, the key issues facing the farm business at Pump Farm are commercial (profitability in a competitive market and balancing whether the need to completely replace the tree stock in the next couple of years makes financial sense), as well as practical (ease of transporting the fruit and machinery through an increasingly urban environment, increasing residents' complaints about farming operations, etc.).

IMPACTS

Construction Phase

Effect on Agricultural Land

13.49 Construction effects will primarily relate to the loss of agricultural land within the Site. The Development will involve the loss of 51.5ha of BMV agricultural land mostly in Grades 1 and 2, with a small area of Subgrade 3a, either for built development, or for the provision of open space and green infrastructure.

13.50 Grades 1 and 2 land is of high sensitivity and Subgrade 3a land is a resource of medium sensitivity (**Table 13.1**). The combined magnitude of impact is high (**Table 13.2**). Therefore, from **Table 13.3** the Development will result in a direct, permanent, **substantial adverse** impact on BMV agricultural land.

Effect on Soil Resources

13.51 As soil is a finite resource that fulfils many important functions and services for society in addition to the production of food and fibre, it is important that soil resources are protected and used sustainably. During the construction phase, damage to, and loss of, topsoil could occur if other dissimilar materials such as subsoil or other materials were stockpiled directly on it without a separating layer or possibly by poor work causing mixing of topsoil, subsoil and other materials during stockpile placement or removal.

13.52 There is also a risk to long-term damage to soil structure, and the loss of potentially valuable soil, if there is uncontrolled trafficking of land and soil by heavy machinery, especially wheeled machinery.

13.53 Biodegradation of topsoil would occur if it is compacted in storage, stockpiled when wet, if stockpiled in the medium- to long-term, or covered by soil stores for significant periods.

13.54 Permanent, direct, adverse impacts may arise, therefore, from disposing of soil or re-using it for inappropriate purposes that do not meet the many beneficial functions of soil; by mixing incompatible soil resources; and by poor management of the soil resource. This would represent an **adverse** effect.

13.55 The soils on the Site are predominantly silty clay loams which are of medium sensitivity to movements and handling and which, prior to mitigation, would be subject to a high magnitude of change in **Table 13.2**. The effect of the Development on the soil resource prior to mitigation is therefore assessed as being **moderate adverse**.

Effects on Farm Business

13.56 With the whole of the site given over to development, the farm business at Pump Farm would inevitably cease in its entirety. It would not be practical, as set out in **Technical Appendices 13.2(i) and 13.2(ii),** to retain even a small part of the business on the site. The Development would result in the loss of some 51ha of commercial fruit orchards. This will result in a **substantial adverse** effect on the business at Pump Farm which is significant.

13.57 Whilst seasonal jobs would directly be lost from Pump Farm, with the hub farm method of operations within the overall business, these seasonal workers would be transferred to other farms within the business. Overall, the effect on seasonal jobs is considered to be **slight to negligible**.

Operational Phase

13.58 The permanent removal of land from agriculture would occur during the construction phase of the Development, it is not considered that any further effects would occur during operation of the Development.

13.59 Similarly, the permanent loss of the farm business from Pump Farm would occur during or prior to the construction phase of the Development. There would be no further effects during the operation of the Development.

MITIGATION

Construction Phase

Effect on Agricultural Land

13.60 There are no universally applicable measures available to mitigate the direct loss of agricultural land. The use of BMV land for development needs to be considered in the context of the need for development, the high quality of agricultural land in the District and the ongoing potential for the land to realise its inherent agricultural land quality.

Effect on Soil Resources

13.61 The primary measures available to mitigate the impacts on soil resources would be set out in a Soil Resource Management Plan (SMRP), to be prepared at the detailed design stage. The plan would confirm the different soil types (based on the soil survey work already undertaken); the most appropriate re-use for the different types of soils; and the proposed methods for handling, storing and replacing soils on-site.

13.62 The aim of a soil management plan will be to re-use as much of the surplus soil resources on-site in the detailed design of open spaces and green infrastructure. Any surplus soils will be disposed of in a sustainable manner (i.e. as close to the Site as possible and to an after-use appropriate to the soils quality) in accordance with Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (ref.13.7).

13.63 The quality of soils retained on-site and exported off-site (if required) will be maintained by following good practice guidance on soil handling and storage, particularly to avoid compaction and biodegradation of soils that are to be retained on site in storage. In this respect, topsoil must be stockpiled separately to subsoil.

13.64 With the adoption of appropriate mitigation for the handling and restoration of soils, as part of a Construction Environmental Management Plan (CEMP), most soils will be able to continue their various ecosystem functions on or off the Site, principally as a medium for producing food and biomass; for storing and cycling water and carbon; and for supporting habitats, biodiversity and landscape planting.

Effect on Farm Business

13.65 There are no real measures available to mitigate the direct loss of the farm business at Pump Farm. The effects of permanent loss of agricultural land on the farm business are considered to be fully mitigated through the process of adaption and consolidation of the farms that make up the overall farm business operated by the Applicant. Consequently, the magnitude of impact is considered to be reduced to **negligible.**

RESIDUAL IMPACTS

Construction Phase

13.66 The Development will result in the loss of 51.5ha of best and most versatile agricultural land. This remains a direct, permanent substantial adverse effect, which is significant.

13.67 Following best practice guidance on soil handling, storage and re-use of the soils in an appropriate manner will enable the soil to re-establish some of the existing functions. The magnitude of change to the soil resource would therefore be moderate to slight, and the effect would be slight, and is not expected to give rise to a significant effect.

13.68 The Development will result in the loss of 51.5ha of land at Pump Farm from the overall farm business covering some 2,600ha. This remains a direct, permanent, substantial adverse effect. In the context of Pump Farm alone, this is significant, but in the context of the overall farm business the effect is not significant.

Operational Phase

13.69 There will not be any residual effects on agricultural land and soils from the Development once complete.

13.70 There will not be any residual effects on the Pump Farm business from the Development once complete.

CUMULATIVE IMPACTS

13.71 Cumulative effects (i.e. effect of more than one development upon a single environmental factor) is not considered relevant to the assessment of potential agricultural effects, as these are by nature site specific. Furthermore, effects associated with soils and agriculture are not considered relevant to assessing likely combined effect of environmental factors upon single receptors (e.g. combined effect of noise, dust and visual effects on one receptor). There are thus no cumulative effects anticipated on land use, soil resources or land classification due to the Proposed Development.

SUMMARY

13.72 **Table 13.10** contains a summary of the likely significant effects of the Development.

13.73 The preceding chapter addresses the impact of the Development on agricultural land and soil resources across 51.5ha of agricultural land at Rainham. This has been informed by a detailed site survey in accordance with the MAFF ALC guidelines and criteria.

13.74 The land is in agricultural production, under apple orchards with some smaller areas of grass.

13.75 The Site is classified as excellent to good quality land, of best and most versatile quality. The most extensive soil type found across the Site is of Grade 2 quality, comprising approximately 40.6ha of land. The next most prevalent soil type is excellent quality Grade 1 land which comprises 8.6ha of the Site. The least prevalent soil type is good quality, Subgrade 3a land which comprises 2.3ha of the site. The remaining area is made up of non-agricultural land comprises farm buildings, roads and tracks.

13.76 There are no universally applicable measures to mitigation the direct loss of agricultural land. The use of BMV land for development needs to be considered in the context of the need for the development, the high quality of agricultural land in the District and the continued ability of the Site to realise its inherent agricultural production in continuing to grow high value fruit crops.

13.77 The Development will have a direct, permanent, substantial adverse effect on BMV agricultural land which would be significant.

13.78 The primary measures to mitigate the impacts on soil resources relate to identifying the most appropriate re-use for the soil types found on the Site, and following good practice guidance on handling, storing and replacing soils on site. The predominantly silty clay loam soils on the Site are a receptor of medium sensitivity. With mitigation, the residual effect of the proposed Development on the soil resource is assessed as slight adverse, which is not significant.

13.79 The effects of permanent loss of agricultural land on farm business are considered to be fully mitigated through the consolidation of the business plan by the Applicant. The effect of the Proposed Development on the overall farm business would be not significant.

Table 13.6: Summary Table

Description of Likely Significant Effects	Significance	Effects B/A, R/T, D/I, ST/M/LT, L/R/N					Description of Mitigation/ Enhancement Measures	Description of Residual Effects	Significance	Residual Effects B/A, P/T, D/I, ST/M/LT, L/R/N				
Construction Phase														
Loss of BMV agricultural land	Significant	A	P	D	LT	L	None available	Significant	Significant	A	P	D	LT	L
Effects on Farm Business	Significant	A	P	D	ST	L	Consolidation of farm business	Moderate	Moderate adverse	A	P	D	LT	L
Effect on soil resources	Moderate	A	P	D	LT	L	Implementation of a soil resource plan	Slight	Slight adverse	A	P	D	LT	L
Operational Phase														
No effects														

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

14 ARCHAEOLOGY AND CULTURAL HERITAGE

INTRODUCTION

14.1 The chapter focuses on the assessment of the likely significant environmental effects of the Proposed Development on Non Designated Heritage Assets/Archaeology of the environment. It considers the likely significant effects of the proposed works on any buried archaeological remains within the Site and the wider study area. The chapter has been prepared by SWAT Archaeology and Pegasus Group.

14.2 **Technical Appendix 14.1** accompanies the chapter and comprises the Archaeological Desk-Based Assessment produced by SWAT Archaeology, which provides a comprehensive survey of all relevant data sources, including a full cartographic regression exercise. This Appendix should be referred to for any further details regarding the below ground archaeology at the site and the immediate vicinity.

14.3 **Technical Appendix 14.2** comprises of the Pleistocene and Palaeolithic Desk-Based Assessment produced by QUEST, which provides a more detailed assessment of the potential for Palaeolithic Archaeology.

14.4 Consideration has also been given to the impact of the development on Designated Heritage Assets and their setting, the detail of which is found in **Technical Appendix 14.3a** Heritage Setting Assessment, prepared by Pegasus Group.

CONTEXT

Legislative Framework

14.5 National legislation and guidance relating to the protection of, and proposed development on or near, important archaeological sites or historical buildings within planning regulations is defined under the provisions of the Town and Country Planning Act 1990. In addition, local authorities are responsible for the protection of the historic environment within the planning system and ensure than a Heritage Asset is protected to enable it to be passed on to future generations.

14.6 Statutory protection is also provided to certain classes of designated heritage assets under the following legislation:

(i) Ancient Monuments and Archaeological Areas Act 1979 (ref 14.1);
(ii) Planning (Listed Buildings and Conservation Areas) Act 1990 (ref 14.2);
(iii) Enterprise and Regulatory Reform Act 2013 (ref 14.3);
(iv) Hedgerow Regulations (statutory Instrument No. 1160) 1997 (ref 14.4);
(v) Treasures Act 1996 (ref 14.5); and
(vi) Burial Act 1857 (ref 14.6).

14.7 Section 7 of the Planning (Listed Buildings and Conservation Areas) Act provides that listed building consent is required for:

> *'any works for the demolition of a listed building or for its alteration or extension in any manner which would affect its character as a building of special architectural or historic interest....'*

14.8 Section 16(2) of the Act states that:

> *'In considering whether to grant listed building consent for any works the local planning authority.....shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses'.*

14.9 For applications for planning permission affecting the setting of listed buildings, Section 66 of the Act requires that:

> *'in considering whether to grant planning permission for development that affects a listed building or its setting or whether to grant listed building consent, the local authority shall have special regard to the desirability of preserving a listed building or its setting or any features of special architectural or historic interest which it possesses'.*

14.10 The assessment of potential setting effect has followed the guidance set out in '*The Setting of Heritage Assets', published by English Heritage in 2011* (ref 16.7). Paragraph 2.2 (EH 2011) observes that:

> *"... setting embraces all of the surroundings ... from which the heritage asset can be experienced or that can be experienced from or within the asset. Setting does not have a fixed boundary and cannot be definitively and permanently described as a spatially bounded area or as lying within a set distance of a heritage asset".*

14.11 As far as 'key principles' are concerned, EH (2011) states that:

> *"... setting is the surroundings in which an asset is experienced. All heritage assets have a setting, irrespective of the form in which they survive and whether they are designated or not. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral."*

14.12 EH (2011) then adds that:

> *"... the extent and importance of setting is often expressed by reference to visual considerations. Although views of or from an asset will play an important part, the way in which we experience an asset in its setting is also influenced by other environmental factors such as noise, dust and vibration; by spatial associations; and by our understanding of the historic relationship between places".*

14.13 In practical terms, EH (2011) sets out an approach to setting and development management based on a five-step procedure; i.e.

1. Identify which heritage assets and their settings are affected;

2. Assess whether, how, and to what degree, these settings make a contribution to the significance of the heritage asset(s);

3. Assess the effects of the proposed development, whether beneficial or harmful, on that significance;

4. Explore ways of maximising enhancement and avoiding or minimising harm; and

5. Make and document the decision and monitor outcomes.

National Planning Policy Framework

14.14 The NPPF (ref 14.7) sets out the Government's core principles in relation to planning and the historic environment and is covered in section 16, paragraphs 185-202. These principles are designed to underpin the planning and decision-making process to ensure that Local Planning Authorities (LPA), developers and owners of heritage assets adopt a consistent approach to the conservation of the Historic Environment.

14.15 The Historic Environment, as defined in the NPPF, Annex 2, comprises:

'all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.'

14.16 NPPF Annex 2 defines a Heritage Asset as:

'a building monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing)'.

14.17 Paragraph 189 of the NPPF states that:

'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting.'

14.18 Paragraph 190 of the NPPF states that:

'The LPA should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.'

14.19 The NPPF further provides definitions of terms which relate to the historic environment in order to clarify the policy guidance given. For the purposes of this report, the following are important to note:

(i) **Significance.** The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

(ii) **Setting**. The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

14.20 The NPPF is supported by the Planning Policy Guidance (ref 14.8), which includes Conservation Principles, Policy and Guidance (2008) as well as Good Practice Advice in Planning Notes 1 to 3, all issued by Historic England.

Local Policies

14.21 Medway Council has a Local Plan adopted in 2003 (ref 14.9). The plan has a number of saved policies relevant to archaeology:

(i) Policy BNE20: Scheduled Ancient Monuments
(ii) Policy BNE21: Archaeological Sites

14.22 These policies are covered in greater detail below:

Policy BNE20: Scheduled Ancient Monuments

14.23 Development affecting scheduled ancient monuments or other nationally important sites will not be permitted if it would: (i) damaged or destroy such sites; or (ii) be detrimental to their setting.

Policy BNE21: Archaeological Sites

14.24 Development affecting potentially important archaeological sites will not be permitted unless:

(i) The developer, after consultation with the Archaeological Officer, has arranged for an archaeological field evaluation to be carried out by an approved archaeological body before any decision on the planning application is made; and

(ii) It would not lead to the damage or destruction of important archaeological remains. There will be a preference for the preservation of important archaeological remains in situ.

(iii) Where development would be damaging to archaeological remains, sufficient time and resources are made available for an appropriate archaeological investigation undertaken by an approved archaeological body. Such investigations should be in advance of development and in accordance with a specification and programme of work approved by the Council. Resources should also be made available for the publication of the results of the investigation.

Heritage Asset Review (November 2017) (ref 14.10)

14.25 Medway Borough Council has produced a review focussing on its Heritage assets. There is a short section on Rainham which quotes the following:

> *'Positioned on the fringe of the urban area, Rainham is subject to a great deal of development pressure due to the current demand for housing in the area. Pressure to develop agricultural land is intense and should be resisted in all but the most appropriate instances to ensure that the agricultural character that defines Rainham's heritage is preserved.'*

Assumptions/Limitations

14.26 The assessments set out in this report have been undertaken on the basis of professional experience. However, the assessment of impacts on heritage assets (archaeological or cultural) is often subjective, especially in relation to setting issues, as thee is no accepted definition of what the setting of an individual heritage asset might comprise.

METHODOLOGY

14.27 The consideration and forecasting of potential development effects is based upon an assessment of data relating to designated and non-designated heritage assets, undertaken by professionals with extensive desk and field-based experience in the identification, assessment, and mitigation of development-related effects on the historic environment. The Significance of the Effect is dependent on the important of the heritage asset or its setting and the magnitude of the effect.

14.28 The NPPF refers to the consideration of the 'significance' of heritage assets. In the context of an EIA however, the term significance is used to denote the magnitude of likely environmental effects. Therefore, to avoid confusion, when referring to the NPPF, the term importance or sensitivity (rather than significance) is used within this assessment.

14.29 The determination of the importance of these assets is based on statutory designation and/or professional judgement. The Conservation Principles, Policy and Guidance (Historic England, 2008) includes four values:

(i) Evidential value: The potential of the physical remains to yield evidence of past human activity. This might consider: date, rarity, state of preservation, diversity/complexity, and contribution to published priorities, supporting documentation, collective value, and comparative potential;

(iii) Historic value: The ways in which past people, events and aspects of life can be connected through heritage assets to the present, such as a connection often being illustrative or associative;

(iv) Aesthetic value: This derives from the ways in which people draw sensory and intellectual stimulation from the heritage asset, considering what other people have said or written; and

(v) Communal value: This derives from the meanings of a heritage asset for the people who know about it, or for whom it figures in their collective experience or memory. Communal values are closely bound up with historical, particularly associative, and aesthetic values, along with educations, social or economic values.

Table 14.1 – Definition of Receptor Sensitivity

Sensitivity/value of a Receptor	Sensitivity/value of a Receptor
Very High	Internationally important archaeological sites or monuments. International important areas, structures and other buildings designated as World Heritage Sites.
High	Ancient Monuments scheduled under the Ancient Monuments and Archaeological Areas Act 1979, or archaeological sites and remains of comparable quality, assessed with reference to the Secretary of State's non-statutory criteria. Scheduled Monuments with standing remains; Grade I and II* Listed Buildings; Conservation Areas containing very important buildings;
Medium	Archaeological sites and remains which, while not of national importance, score well against most of the Secretary of State's criteria. Grade II Listed Buildings. Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historic associations; Conservation Areas containing buildings that contributes significantly to its historic character; and Historic Townscape or built up areas with important historic integrity in their buildings.
Low (or lower)	Archaeological sites that score less well against the Secretary of State's criteria. 'Locally listed buildings' and undesignated built heritage of local significance.
Negligible	Areas in which investigative techniques have produced no or only minimal evidence for archaeological remains, or where previous large-scale disturbance or removal of deposits can be demonstrated

Table 14.2 – Determining Magnitude of Impact

Magnitude of Impact		Description
Major	Adverse	Demolition of a built heritage asset or complete alteration to its setting Complete removal of an archaeological site.
	Beneficial	Arrest of physical damage or decay to a built heritage asset or structure. Alteration to a built heritage asset resulting in significant beneficial impact. Arrest of physical damage or decay to an archaeological site resulting in significant beneficial impact.
Moderate	Adverse	Harmful alteration (but not demolition) of a built heritage asset or that its setting is significantly modified. Removal of a major part of an archaeological site and loss of research potential.
	Beneficial	Alterations to a built heritage asset resulting in moderate beneficial impacts. Land use change resulting in improved conditions for the protection of archaeological remains plus interpretation measures (heritage trails, etc.).
Minor	Adverse	Alterations to a built heritage asset resulting in minor harm or noticeably different from original setting. Removal of an archaeological site where a minor part of its total area is removed but the site retains a significant future research potential.
	Beneficial	Alterations to a built heritage asset resulting in minor beneficial impacts Land use change resulting in improved conditions for the protection of archaeological remains
Negligible	Adverse	Negligible impact from changes in use, amenity, or access. Negligible direct impact to the built heritage asset or is setting Negligible impact from changes in use, amenity, or access to an archaeological asset.
	Beneficial	Very minor benefit.
No Change		No change would be perceptible, either positive or negative.

Determining Significance of Effect

14.30 The assessment of significance of any effect in EIA terms is founded on a professional judgement of the heritage important of a given asset or group of assets, as informed by policy guidance, when taken against the magnitude of effect.

Table 14.3 – Determining Significance of Effect

		Magnitude of Impact				
		No Change	**Negligible**	**Minor**	**Moderate**	**Major**
Receptor Sensitivity	**Very High**	Neutral	Minor Adverse	Moderate Adverse	Major Adverse	Extreme Major Adverse
	High	Neutral	Minor Adverse	Moderate Adverse	Major Adverse	Major Adverse
	Medium	Neutral	Minor Adverse	Minor Adverse	Moderate Adverse	Major Adverse
	Low	Neutral	Minor Adverse	Minor Adverse	Minor Adverse	Moderate Adverse
	Negligible	Neutral	Neutral	Neutral	Neutral	Neutral

14.31 The assessment matrix in **Table 14.3** is not intended to be 'prescriptive', but rather it allows for the employment of professional judgement to determine the most appropriate level of effect for each heritage asset. Only those effects defined as Major or Moderate are considered to be significant in terms of the EIA Regulations. All other effects are deemed to be 'not significant'.

Consultations

14.32 In accordance with the NPPF early consultation has taken place with Kent County Senior Archaeological Officer, Ben Found.

BASELINE CONDITIONS

Non-Designated Heritage Assets/Archaeology

14.33 The baseline assessments combine both an examination of all available information (from sources such as the local Historic Environment Record, historical maps, historical borehole data held by the British Geological Survey, and relevant geological, Quaternary and archaeological literature), site visits and professional judgement to establish the known or potential baseline conditions on the development site.

14.34 The archaeological desk-based assessment incorporated a search of Kent HER. The methodology followed relevant guidance and complied with the Code of Conduct and other relevant regulations issued by the Chartered Institute for Archaeologists (CIfA). An intensive walkover of the site visit was undertaken on the 8th August 2018, where the topography and evidence for archaeological remains on the site was assessed.

14.35 The following section presents a summary of the historical and archaeological background of the general area. This is presented by historical period, and has been compiled in order to place the study area into a wider archaeological context.

Table 14.4: Ages of Historic Development

Prehistoric	Palaeolithic	c. 500,000 BC – c.10,000 BC
	Mesolithic	c.10,000 BC – c. 4,300 BC
	Neolithic	c. 4.300 BC – c. 2,300 BC
	Bronze Age	c. 2,300 BC – c. 600 BC
	Iron Age	c. 600 BC – c. AD 43
Romano-British		c. AD 43 – c. AD 410
Anglo-Saxon		AD 410 – AD 1066
Medieval		AD 1066 – AD 1485
Post-medieval		AD 1485 – AD 1900
Modern		AD 1901 – present day

14.36 The Archaeological Desk-Based Assessment has generally shown that the area to be developed is within an area of high archaeological potential for the prehistoric and Post Medieval periods with moderate and low/moderate chance for the Roman and Anglo-Saxon period respectively. All other periods are low. An archaeological walkover was conducted, and no artefacts or archaeological features were noted. Historical mapping shows that the vast majority of the area was and is agricultural from at least the Post Medieval period, if not earlier. Sections 14.37 to 14.59 are taken from the Archaeological Desk-Based Assessment. Detailed Analysis regarding the Palaeolithic taken from the Pleistocene and Palaeolithic Desk-Based Assessment is covered in sections 14.60.

Prehistoric Period

14.37 The non-designated assets relate from the earliest period of human activity the Palaeolithic onwards and relates to the attractiveness and use of the estuary area that also continued into the Mesolithic and Neolithic periods. The Bronze Age is also represented. There appears to be a gap in activity in the area until the Roman period whereby the foreshore for maritime transport links was important as well as the Romans leaving burial and pottery evidence, especially to the area east of the Site. Medieval occupation began in the area around the Lower Road and Twydall Lane and the hamlet grew in the Post Medieval period as seen by the Designated Assets of the surviving houses with the creation of scattered farms.

14.38 Evidence from the Prehistoric period has been found within the Site and the wider area. The Kent HER has two records from the Palaeolithic period within the assessment area. The chalk pit adjacent to the Site on the western side had many Palaeolithic finds. South of Bloors Place Palaeolithic hand axes on the eastern side of the Site and other flint debitage has also been found. In the wider area nearby Otterham Quay has Palaeolithic finds and the wider area around the Medway is well known for early finds from this period as seen on the Hoo Peninsular. In the immediate area around the Site, little has been securely dated in primary locations. The Kent HER has two records from the Mesolithic period within the assessment area being blades and flakes found in the area near Pump Farm, where the exact location is unknown but likely to be within the Site. To the south east at Berengrave Nursery, a large

number of flints were found including possible Mesolithic blades. Mesolithic artefacts are less common in the wider area. The Kent HER has two records from the Neolithic period within the assessment area. A Neolithic hand axe was found at Bloor's Place and the Lower Twydall chalk pit also originally contained late Neolithic flints. In addition, there are the flints found at Berengrave Nursery that included the Neolithic period. The finds from the Twydall Chalk pit are discussed in greater detail in the Pleistocene and Palaeolithic section.

14.39 For the Bronze Age period, two finds of axes have been found south of the railway and the Site, 350m apart, with none in the wider area and the Kent HER had no records relating to the Iron Age.

14.40 In the Palaeolithic period, the Medway was initially the dominant river rather than the Thames. As a consequence, many of the sand and gravel areas of the Medway contain Palaeolithic finds especially in the areas around the Hoo Peninsular and Rochester. The Twydall chalk pit has evidenced many Palaeolithic finds and Palaeolithic implements have also been found at nearby Otterham Quay. Of the Mesolithic period there is little evidence. The Neolithic has limited evidence as well but a gully and posthole have been found at Grange Farm, Gillingham and a Neolithic/Bronze Age flint working floor was found west of Motney Hill, north east of the SITE in 1952. In the wider Medway area Medway has megalithic monuments, in particular Neolithic long barrows of great importance. Grange Farm to the north west of the SITE has also provided evidence of Bronze Age activity.

14.41 Located just south of the A2 in Rainham, evidence of Iron Age occupation and activity has been found with enclosure and a roundhouse. In the wider area the known important Iron Age areas are hill forts located at Bigbery (near Canterbury), Oldbury and Quarry Wood.

Romano-British Period

14.42 The Kent HER has two records from the Roman period within the assessment area. The exact location unknown but Roman pottery possible relating to a cremation burial was found near the Lower Twydall chalk pit. North west of the Site in the area of Sharp's Green further Roman pottery was discovered, again the exact location is unknown. Roman activity in the wider area includes Roman settlement activity has been found in the area of Rainham Creek and Otterham Quay, to the north east of the Site and a Roman-British pottery kiln circa 500m east of the Site at Berengrave Nature Reserve although the precise location is unknown. A Roman cremation burial ground is located just to the east of Rainham Docks East, and near the head of Otterham Quay is another probably Roman cemetery.

14.43 In addition, the A2 is on the path of Watling Street, the Roman Road from London to Canterbury and on to Dover. Upchurch the next village on the north Kent coast to the east of Otterham is well known for its Roman occupation and cemetery as well as many Roman pottery works.

Anglo-Saxon

14.44 The Kent HER has two records from the Anglo-Saxon period within the assessment area. Anglo-Saxon period pottery was found in the area of Sharp's Green, north west of the Site. In addition, a 5th century coin was discovered in the north western area of the eastern half of the Site, exact location unknown. These suggest that there is Anglo-Saxon activity in the area.

14.45 In a charter dated 811 AD, Rainham is described as a royal town when the charter records a grant of land to Wulfred, Archbishop of Canterbury. An Anglo-Saxon cemetery has been found at nearby Otterham Creek.

Medieval Period

14.46 For the Medieval period there are 11 records. There are two main Medieval areas, the ribbon development along the Lower Rainham Road and the cluster of buildings on the northern end of Lower Twydall Lane. Chapel house (Grade II) is mid to late 15th century in date and is located on the western side of the northern end of Pump Lane is adjacent to the SITE. More Grade II houses are on the southern side of the Lower Rainham Road also from the late 15th century being No. 497, 499 and 501, originally an open hall house, it is now three houses. On the northern side of the Lower Rainham Road is The Old House (Grade II) from the 15th century. Medieval domestic occupation was also found below the Post Medieval house at The Black House on the Lower Rainham Road Adjourning the north east area of the SITE is Bloors Place, a Grade II* listed building with 15th century origins. On Lower Twydall Lane is the grade II Little London Farmhouse, thought to be late 15th century or early 16th century. The Manor Barn (Grade II) is dated to the 16th century origins. Nearby Twydall Barn is 15th century and York Farmhouse is 16th century. Within the area of the SITE but exact location unknown but in the eastern half, a Medieval copper alloy seal matrix was founded and reported under the PAS scheme.

14.47 There is no separate entry for Rainham in the Domesday Book. Nearby Upchurch and Newington come under the Manors in Milton, near Sittingbourne with Gillingham under the manor of Chatham.

14.48 Rainham Street was essentially a linear development along Watling Street focused around the junction with station Road. Rainham East was situated at the southern end of a spur of land Called Motney Hill and the docks and the area of Rainham East is known to have Medieval origins. Lower Rainham (also known as West Rainham) is the area around Bloors Place and the Lower Rainham Road was essentially a ribbon development as was at one time the main road from Chatham to Queenborough.

14.49 The church in Rainham is located on the south side of Watling Street and is dated to the 13th century with the local Kentish Ragstone and flint used in its construction. As with many other churches, it underwent restoration in the Victorian period.

14.50 Bloors Place takes its name from the family of le Bloere or le Blore. Originally built in the 15th century as a Wealden hall house with a stone range added to the rear in the early 16th century. Based of writings in 1798 by Hasted a historian he comments that Christopher Bloor, who had bought the Manor of Sileham from Sir Antony St Leger, 'rebuilt his seat in this parish …..in which his ancestors had resided for several generations'. The house has been altered and extended many times and some of it demolished in the late 18th century to reduce its size. The house subsequently belonged to the Earl of Thanet.

14.51 Berengrave Park to the east of the SITE had been part of the Manor of Queencourt. Queen Elenor, the widow of Henry II gave it to St. Catherine's Hospital in 1273. The Park was mainly used for cattle and sheep grazing.

Post Medieval Period

14.52 The Kent HER has 11 records from the Post Medieval period within the assessment area. Pump Farmhouse is from this period (Grade II) being late 18th century. The grade II garden walls and outbuildings of Bloors Place are from this period. Black House, north west of the Site (Grade II) dated to the early-mid 17th century. The Manor House (Grade II) in Lower Twydall Lane is late 17th century. The railway was opened in 1853. Post Medieval pottery has been found near Twydall and is thought to be an area south of the railway. North of the Site on the foreshore are two wharfs from this period. On the Lower Rainham Road are recorded the location of the Methodist Church that was to the west of Bloors Place and The St. John's Mission Church that closed in the 1950s. Map regression confirms that the majority of the

Site was either arable fields or orchards in this period. However, within the SITE there was a house on the northern side of the bridleway that has been demolished along with a number of other structures in the western half that have also been demolished. These included buildings in the northern part of the western half where the nursery used to be and a number of smaller buildings in the area west of Pump Farm within the orchards.

14.53 The north Kent coast and proximity to London meant a number of chalk quarries and clay extraction occurred in the area with the manufacturing of bricks, cement and lime. Adjoining the SITE is Twydall chalk quarry and the cement works to the north of this quarry on the coast at Sharps Green north west from the SITE. The Cement Works started in 1902 and were closed by 1913. The works incorporated a barge quay north of Sharps Green in an area called Horrid Hill as well as having 7 chamber kilns. The chalk pit at Twydall was connected to the cement works by tramway. Bloors Wharf is located north of Bloors Place. It was originally called Blowers Quay based on a survey commissioned by Queen Elizabeth I in 1566.

14.54 In 1912 at Motney Hill cement works started connected to a chalk pit located to the south now known as Berengrave Local Nature Reserve. The cement works also had its own docks called Rainham Docks East. The cement works closed at Motney Hill in the 1930s with the chalk pit also closing in 1931.

14.55 In the early 20th century much of the area north of Watling Street being the dip slope of the North Downs was dug for brickearth for the local brick making industry. In the tithe records, the field designated No. 2 is called 'Pump Farm Brickearth'. The nearest brickworks were located around Otterham Quay. One, known as Leeneys, was right on Otterham Quay itself. This brickfield closed in 1931-1932. Another located in an area known as Four Gun field closed in 1954. Opposite this field was Clover Lay brickfield which closed in 1953. The largest brickworks were in Big Field which closed in the 1980s. Brickearth deposits are normally 2-4m thick that overlay chalk. It is this brickearth that provides the rich soil needed for agriculture

14.56 There are 10 farmstead records confirming the rural and agricultural nature of the area. Some farmsteads still have the farmhouse remaining, which are listed with the exception of Queens Court. This includes Pump Farm, Twydall Farm, York Farm, Little London Farm and Bloors Farm. A number have been completely demolished such as an outfarm south east of Bloors Farm, another on Pump Lane south of the railway, an outfarm east of Sharp's Green. There is a surviving farmstead north east of Twydall to the north west of the Site.

14.57 The railway was constructed in 1858 from Chatham to Faversham, which fuelled the growth of industry but also urbanisation, particularly the area north of the High Street. Following electrification of the railway and increasing urbanisation, to the south of Watling Street, saw Rainham as a commuter town for London in the 20th century. As a result of this growth, the various separate areas of Rainham, such as east, west and Lower have now all been incorporated into the main town.

14.58 In 1997, Bloors Wharf became part of the Riverside Country Park. The park is situated on the coastal region between Gillingham and Rainham and consists of circa 100 hectares. It was originally established in 1970 and officially opened in 1987 following designation as the area as a country park under the Countryside Act 1968. The land was formally farmland that was then used as waste disposal by the Council, which stopped in the 1950s with the land being left.

14.59 The Archaeological desk-based assessment has considered the archaeological potential of the site. Archaeological investigations in the vicinity, map research, the historical environment record results and recent archaeological investigations have shown that the Site may contain archaeological sites and these can be summarised as:

(i) Prehistoric: high
(ii) Iron Age: low
(iii) Roman: moderate
(iv) Anglo-Saxon: low/moderate
(v) Medieval: low
(vi) Post-Medieval: high
(vii) Modern: low

Pleistocene and Palaeolithic Archaeology

14.60 To understand the potential for Palaeolithic archaeological remains, focus is given to the geology of the area. The Site is on the lower dip-slope of the North Downs. Its south-west boundary coincides closely with the 30m contour. From this level the ground falls north-eastward as a gently concave slope with no obvious irregularities to a level of ca. 7.0m OD near the north-east edge of the Site. The lower dipslope of the North Downs within the Site and nearby is dissected by shallow dry valleys approximately parallel with one another and aligned from SW to NE. Near the middle of the Site, Pump Lane occupies one of these dry valleys, and an even shallower depression, marked by slight re-entrants in the contours, is present near the NE end of the Site. Immediately downslope from this part of the Site, this depression was formerly occupied by Twydall Chalk Pit.

14.61 The Site is underlain mainly by the Thanet Formation with smaller areas mapped as Head, all resting on bedrock Chalk. There are no BGS archive boreholes or other good quality records of sub-surface conditions within or close to the Site. There is little mapped evidence of river terrace development, or of any fluvial deposition above the level of the Holocene floodplain. This is in contrast with the situation on the north side of the Medway in the Hoo peninsula. It is not possible therefore to develop deposit models to illustrate the stratigraphy beneath the Site.

14.62 The Twydall Chalk Pit served a cement works at Horrid Hill in the intertidal zone on the south side of the estuarine Medway and was linked to it by a tramway. Where the tramway crossed the estuarine mudflats, it was elevated on an artificial causeway which was constructed using the superficial deposits that overlay the Chalk in the Twydall Chalk Pit. The material forming the causeway has been the source of large numbers of Palaeolithic artefacts. It was recorded in 1968 that 85 handaxes and 179 retouched and flake implements had been found. The initial discovery of these artefacts was found in 1908 and reported as several hundreds of flint implements of various forms and types. Other investigators have continued to collect material from this site, but there are no detailed records of these investigations and it is difficult to piece together exactly what was collected where and by whom. A field survey in 1971 by the Upchurch Archaeological Research Group recovered 700 mainly Palaeolithic artefacts.

14.63 Although the Twydall Chalk Pit is not within the Site, there is clearly the likelihood that deposits present in the pit extend into the Site. In 1990, Whittaker described the superficial deposit sequence overlying the chalk in Twydall Chalk Pit that incorporated the Palaeolithic assemblage. Whittaker regarded the deposits as being associated with the 3rd Terrace of the Medway describes them as being up to 2.0m thick overlying a chalk surface penetrated in places by ‘angular or ill-defined depressions’ which he regarded as solution features; or cut into by ‘shallow well-defined features’ which he regarded as ‘stream channels formed within a braided stream environment’. The solution features he described as occupied by ‘weathered chalk and massive blocks of dark “soil” within a matrix of light brown loam’. The ‘stream channels’ he described as occupied by ‘layers of laminated sands’.

14.64 The examination of mapped outcrops and scattered borehole records in the area between Upnor and Upchurch in the height range of the Site shows that the superficial deposits overlying the Chalk are variable. A major component in these deposits is sandy silt often

described in the record as 'brickearth', together with sandy and stony clays forming Head, and much less commonly beds of gravel. There is no evidence within the Site or elsewhere on the south side of the estuarine Medway for the well-developed sequence of river terraces recognized on the north side of the river in the Hoo peninsula. There are spreads of River Gravel in Gillingham, to the west of the Lower Rainham site and at a slightly higher level, which have been a significant source of Palaeolithic material, but the age of these gravels and their place in the Medway terrace sequence has not been established on the basis of detailed investigation.

14.65 There are no Palaeolithic find spots that are definitely within the Site. There is however ample evidence for Palaeolithic occupation on the lower dipslope of the Chalk in the height range of the Site, mainly as records of isolated artefacts but with a few records of more prolific sites. There is no record that artefacts were ever recovered from the chalk pit itself. There appears to be Palaeolithic material representing both a handaxe (Acheulian) industry and a flake-based (?Clactonian) industry.

14.66 Consequently, there is therefore no way of knowing whether they were preserved in Head or River Terrace Deposits, or possibly in Head reworking River Terrace Deposits. Furthermore, if terrace deposits are present within the Site, there is no agreement as to the stratigraphic position that they may occupy, in particular how they may relate to the various Members of the Hoo Gravel Formation in the Hoo peninsula.

14.67 As a consequence, since there is good evidence of Palaeolithic occupation in the immediate vicinity of the Site and a real possibility that deposits incorporating Palaeolithic material are present within the Site. **Table 14.6** along with **Figure 14.3** provides an assessment as to the Palaeolithic potential in various areas across the site. It will be appropriate to undertake a programme of intrusive interventions to gain a clearer understanding of the superficial geology within the site during the evaluation phase in respect of the potential for Palaeolithic archaeological remains.

Archaeological Significance

14.68 Prehistoric activity, particularly in the Palaeolithic period is rare and as a result understanding the occupation and activity and exploitation of the estuary is a key research topic of national significance. As in understanding the Roman occupation and exploitation along the foreshore in this area is considered of regional significance. Understanding of the Medieval and Post-Medieval development of the area can be considered to be of local rarity.

14.69 The survival of the potential archaeological remains within the Site for all periods is currently unknown. Mapping shows that the vast majority of the area was and is agricultural and therefore archaeological remains may survive. However, repeated grubbing out of fruit trees over time would have disturbed the upper layers as well as the digging of shallow trenches in modern times for water pipes for irrigation of the trees. In addition, map regression shows some Post Medieval structures, some residential and some of unknown purpose, which have since been demolished that would have had foundations and could have potentially disturbed any archaeological remains in those areas. It is possible that some of the foundations of these earlier buildings may also survive below ground.

14.70 Based on the information gained in the Archaeological, Pleistocene and Palaeolithic Desk-Based Assessments, it can be concluded that the Site is of high archaeological interest. The south east research framework (SERF), mentions the need to understand Palaeolithic chronology especially in the areas of Palaeolithic deposits of which the Thames Estuary is significant. The Palaeolithic desk-based assessment concluded that a clearer understanding of the superficial geology was required since there were no well-developed sequence of river terraces recognized on the south side in the area of the Site in comparison to the north side of the river in the Hoo peninsula. Previous finds have been unstratified and not subject to

modern archaeological methods in the area, which adds to the significance of the Site. Understanding the exploitation of the coastal area for all the prehistoric periods is key. SERF also expresses a requirement to understand more about the rural settlement in Roman times for non-villa sites. The Conservation Area focuses on the hamlets historical Medieval / Post-Medieval origins and local significance along the Lower Rainham Road as well as in Twydall Lane, although no appraisal for either Conservation Area has yet been written. However, the Council's SHLAA has reviewed and considered the area not suitable due to the historic landscape, archaeological and agricultural significance.

14.71 Initial consultation with KCC suggests that further archaeological investigation is required specifically for the assessing the condition and survivability of any Palaeolithic remains as well as for later periods of archaeology.

Designated Heritage Assets

Scheduled Ancient Monuments

14.72 There are no Scheduled Monuments either on or in the near vicinity of the Site.

Conservation Areas

14.73 There are two conservation areas within the assessment area, but not within the Site. The Council has not yet issued any appraisals relating to either area. One conservation area located along the ribbon development of the Lower Rainham Road and the other at Lower Twydall Lane. The Lower Rainham Conservation area extends to the area in the west around Chapel House and includes the Site area to the north of Chapel House and the Lower Rainham Road. It also effectively borders the Site at the rear of the houses of 500-506 Lower Rainham Road. The Lower Twydall Conservation area encompasses both sides of the Lower Twydall Road including York Farm, The Barn, Little London Farm and the Manor Court. The Site borders parts of the conservation area in the region of the rear of York Farm and The Barn.

Listed Buildings

14.74 There are a number of listed buildings within the Study Area, generally concentrated within the Lower Rainham Conservation Area to the north-east and Lower Twydall Conservation Area to the west / north-west of the Site.

14.75 Those within the Lower Rainham Conservation Area are as follows:

(i) Chapel House.
(ii) 497, 499 and 501 Lower Rainham Road (separate listings).
(iii) The Old House.
(iv) Bloors Place.

14.76 A range of outbuildings and garden walls including Cart Lodge and Granary West are associated with Bloors Place. There are also two Listed Buildings to the north of the Site on Lower Rainham Road; Bay Tree Villa and The Black House.

14.77 The closest Listed building to the Site within the Lower Twydall Conservation Area is York Farmhouse. Beyond this to the north are Little London Farmhouse, Manor House (and attached garden wall) and Manor Barn (and attached north and west walls). Pump Farmhouse is outside the Site, but within its central apex.

IMPACTS

Construction Impacts

14.78 The effects from the construction phase will be direct or physical within the boundary of the Site where housing and /or groundworks for infrastructure are proposed.

Non-Designated Heritage Assets/Archaeology

14.79 The nature and extent of any surviving below ground archaeology is inherently uncertain as it is not practical at this stage of the process to undertake intrusive evaluation across the Site due to the nature of the existing horticultural operation. Realistically, such evaluation would have to be the subject of a condition on any grant of planning permission. What is clear though is that the Proposed Development has the potential to impact any unknown archaeological deposits that exist. The resultant effect magnitude of impact to significance is therefore uncertain as is the significance of effect.

14.80 Should there be potential for Palaeolithic remains at the Site following additional investigation, however, which are considered of national importance, the resultant impact of significance would be considered **major adverse**.

Designated Heritage Assets

14.81 None of the designated heritage assets will experience physical or direct impact from the construction phase of the Proposed Development. However, there may be some indirect impacts to a number of the assets through changes to their setting.

14.82 **Chapel House -** Chapel House is located on the corner of Pump Lane and Lower Rainham Road. It abuts the Site (existing orchards) to the north-west and south-west. It has road frontage with a garden curtilage to the rear.

14.83 There are no alterations proposed to the character of this part of Pump Lane.

14.84 Residential development will replace some of the existing orchards surrounding the listed building altering the wider setting of the listed building. Construction activities will be short term and indirect in nature. The overall impact of construction including the establishment of development is considered to be **minor adverse**, and the effect Minor Adverse.

14.85 **Pump Farmhouse -** located on the western side of Pump Lane at approximately the halfway point of Pump Lane. Pump Farmhouse is situated towards the rear of a relatively large land parcel which includes surrounding mature vegetation and a garage at the rear. The Farmhouse is set back from Pump Lane itself and is almost surrounded by a recent residential development at Russett Farm.

14.86 Glimpsed views of the existing orchards are available from Pump Farmhouse, particularly to the north-east as these are separated from the curtilage by the existing farm track. Construction activities will be short term and indirect. The overall impact is considered to be **minor adverse** and the effect **minor adverse.**

14.87 **Bloors Place** - located on the southern side of Lower Rainham Road to the north-west of the Site. The complex of listed structures has its own substantial and well defined curtilage and is contained within considerable mature vegetation; it is not visible from the public highway nor is it readily visible from the adjacent existing Site.

14.88 Construction activities will be short term and indirect. The overall effect of construction including the establishment of development on Bloors Place itself is considered to be **negligible adverse,** and the effect **minor adverse**. No harm is anticipated to the outbuildings.

14.89 **Lower Rainham Conservation Area** - The Conservation Area runs along Lower Rainham Road, and contains at either end Chapel House to the northwest and Bloors Place to the southeast. It was designated in March 1989. The Site lies immediately along the full length of its southern boundary.

14.90 Notwithstanding the lack of formal Conservation Area appraisal, the designated area is very specifically defined and contained to the curtilage of the buildings identified within it. There

appears little historic association with the adjacent Site and orchards, which themselves are now farmed in a very 'modern' and commercially orientated way.

14.91 Construction of the residential development will be short term and indirect. The overall impact of construction including the establishment of development is considered to minor adverse and the effect is considered to be **moderate adverse**.

14.92 **Lower Twydall Conservation Area** - The Conservation Area runs along Lower Twydall Lane, and contains five Grade II listed buildings, including York Farmhouse. The Conservation Area was designated August 2014. It lies to the west of the Site, adjoin it at its extreme south-eastern extent. Here the Conservation area is characterised by farmhouses set in large parcels of land, shielded from the Site by mature vegetation.

14.93 Despite the lack of formal conservation area appraisal, its boundaries, again a tightly drawn to the curtilage of the buildings within it. Only one farmstead has a direct boundary with the Site.

14.94 Construction activities will be short term and indirect. The overall impact of construction including the establishment of development is considered to be **negligible** and the effect **minor adverse.**

Operational Impacts

Non-Designated Heritage Assets/Archaeology

14.95 There would be no effect on archaeological assets during the occupation phase because impacts and effects would be mitigated at the construction stage.

Designated Heritage Assets

14.96 Without further mitigation over and above the embedded mitigation, the level of impact is considered to be as identified during construction.

MITIGATION

Construction Phase

Non-Designated Heritage Assets

14.97 The presence, location and significance of buried archaeological remains for all periods cannot be confirmed based on the available information. Whilst the site has a high archaeological potential, KCC Archaeology may suggest additional archaeological mitigation works to be secured by an appropriate condition as part of the planning process. If additional archaeological works are to be carried out as a condition to planning approval, the scale, scope and nature of archaeological works will need to be agreed through consultation with the statutory authorities.

14.98 Intrusive evaluation and any subsequent further excavation will identify and record any buried remains and determine whether there is a need for preservation in situ – in which case, alterations to the masterplan would need to be made as part of any further planning permission.

Designated Heritage Assets

14.99 The intention is to retain existing boundary planting and vegetation wherever possible, and particularly that adjacent to the designated heritage assets – this is embedded mitigation. Consequently, this will reduce, in each case, the impact/effect on the setting of the assets.

Operational Phase

Non-Designated Heritage Assets

14.100 No mitigation measures are proposed.

Designated Heritage Assets

14.101 In each case, existing vegetation along the boundaries of the Site with the asset is to retained, i.e., embedded mitigation. In addition, further landscaping and planting is proposed of varying depths along all Site boundaries. As this matures over time, the level of impact on the setting of the assets is anticipated to reduce accordingly.

14.102 Specifically around Chapel House, a wide belt of new orchard type planting is to be created as part of a proposed community orchard. In respect of Pump Farmhouse, the existing vehicle farm track immediately to the east will be down-graded to a simple pedestrian/cycleway, improving the setting of the asset as a result in the reduction of vehicular traffic.

RESIDUAL IMPACTS

Non-Designated Heritage Assets

14.103 There will be no residual effects on archaeological assets following the completion of the development; all effects will have been mitigated at the design and construction stage.

Designated Heritage Assets

14.104 Once the Development is completed, the level of impact to the setting of the assets is considered to reduce slightly, with the maturing of the additional planting, but remain in the overall levels as assessed above.

CUMULATIVE IMPACTS

14.105 There are considered to be no cumulative impacts on either non designated or designated heritage assets.

SUMMARY

14.106 The area of Lower Rainham is area of important archaeological interest relating to the prehistoric period having been occupied for millennia. Palaeolithic finds have been found all along the north Kent coast and the area of the site is no exception with Palaeolithic and Neolithic finds located around the eastern and western half. Unfortunately for many finds the exact location is not known as they were discovered in antiquity and aside from an evaluation of the Twydall chalk pit, there has been little opportunity for archaeological exploration in the area of the Site.

14.107 Anglo-Saxon evidence has been found below a house on the Lower Rainham Road, attesting to the fact that that the area continued to utilised into the Medieval period and the listed buildings from the Medieval and Post Medieval period along the Lower Rainham Road and Lower Twydall Lane confirms this and as a result the Site is bordered by two Conservations Areas, one to the north and one to the west.

14.108 An assessment has been undertaken of the likely significance of effect of the Proposed Development on the Archaeological environment, both within and outside the Proposed

Development area. The presence, location and significance of buried archaeological remains cannot be confirmed based on the current available information – this is due to the very damaging disruption that intrusive investigation would cause to the existing horticultural operations. Whilst the Site is considered to be of high archaeological potential, KCC Archaeology may suggest additional archaeological mitigation as part of the planning process. If additional archaeological works are to be carried out as a condition to planning approval, the scale, scope and nature of archaeological works will need to be agreed through consultation with the statutory authorities.

14.109 The impact of the Proposed Development on the heritage significance of listed buildings and conservation areas within close proximity has been considered. minor adverse impacts were identified to Pump Farmhouse, Chapel House and the Lower Rainham Conservation Area, and Negligible Adverse Impacts were identified to Bloors Place and Lower Twydall Conservation Area. The significance of the effect of these impacts would be Minor for Bloors Place, Chapel House, Pump Farmhouse and Lower Twydall Conservation Area and Moderate for Lower Rainham Conservation Area.

Table 14.5: Summary Table

Description of Likely Significant Effects	Significance	Effect	Mitigation	Description of Residual Effects	Significance	Residual Effects
		B/A,P/T,D/I,ST/MT/LT,L/R/N				B/A,P/T,D/I,ST/MT/LT,L/R/N
Demolition & Construction						
Buried Archaeology	Major adverse	A,P,D,LT,N	Secured by Condition	None	Moderate adverse	A,P,D,LT,N
Setting of designated assets – listed building	Minor adverse	A,T,I,ST,L	CEMP, Use of hoardings as necessary. Retention of existing planting.	As assessed	Minor adverse	A,T,I,ST,L
Setting of designated assets – conservation areas	Moderate adverse (L R) Minor adverse (Lower Twydall)	A,T,I,ST,L	CEMP, Use of hoardings as necessary. Retention of existing planting.	As assessed	Moderate adverse (Lower Rainham) Minor adverse (Lower Twydall)	A,T,I,ST,L
Operation						
Buried Archaeology	Same as construction effects					
Setting of designated assets – listed buildings	Minor adverse	A,P,I,LT,L	Supplemental planting will mature over time, screening the development	As assessed	Minor adverse	A,P,I,LT,L
Setting of designated assets – conservation areas	Moderate adverse (LR) Minor adverse (Lower Twydall)	A,P,I,LT,L	Supplemental planting will mature overtime, screening development	As assessed	Moderate adverse (Lower Rainham) Minor adverse (Lower Twydall)	A,P,I,LT,L

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

15 ECOLOGY AND CONSERVATION

INTRODUCTION

15.1 This chapter has been prepared by The Ecology Partnership and presents the results of surveys in and around the Site, which aims specifically to assess the significance of the impacts created by the proposed development on protected species and habitats, and cumulative impacts alongside other developments. The following impacts from the Proposed Development are considered on the following:

(i) On site habitats;
(ii) Protected species known to be present on site;
(iii) Local cumulative impacts;
(iv) Wider cumulative impacts on locally designated sites and nationally and internationally designated sites.

CONTEXT

Legislation

15.2 Wildlife legislation and national and local planning policies may have an effect on the Proposed Development. The following paragraphs identify relevant planning policies legislation and discuss these in the context of the Site.

Wildlife Legislation

15.3 The applicable legislative framework for ecology and nature conservation is summarised as follows:

(i) The Conservation of Habitats and Species Regulations, 2017 (as amended) (commonly referred to as the 'Habitats Regulations') (ref 15.1);
(ii) Wildlife and Countryside Act, 1981 (as amended) (ref 15.2);
(iii) The Natural Environment and Rural Communities Act, 2006 (ref 15.3);
(iv) The Countryside and Rights of Way Act, 2000 (ref 15.4);
(v) Town and Country Planning (Environmental Impact Assessment) Regulations, 2011 (ref 15.5);
(vi) The Hedgerows Regulations, 1997 (ref 15.6);
(vii) The Protection of Badgers Act, 1992 (ref 15.7);
(viii) The Wild Mammals (Protection) Act, 1996(ref 15.8).

National Planning Policy

15.4 National policy guidance is provided by National Planning Policy Framework (NPPF) 2018 (ref 15.9), which sets out the Government's planning policies for England and how they should be applied. The section on **habitats and biodiversity** notes in section 174 (b) that plans should;

> *"promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity";*
>
> *and that in determining planning applications, local planning authorities should follow certain principles, including that (section 175 (d));*
>
> *"opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity".*

Local Planning Policy

Medway Local Plan (2003)

15.5 The Medway Local Plan was adopted in 2003 (ref 15.10) and contains the following policies relating to nature conservation:

(i) BNE35: International and National Nature Conservation Sites
(ii) BNE36: Strategic and Local Nature Conservation Sites
(iii) BNE37: Wildlife Habitats
(iv) BNE38: Wildlife Corridors and stepping stones
(v) BNE39: Protected Species

15.6 The Site was surveyed to assess its ecological value and to ensure compliance with national and local plan policies. The PEA report was produced with reference to then current guidelines for preliminary ecological appraisal (CIEEM 2017. Ref 15.11) and in accordance with BS 42020:2013 Biodiversity – Code of Practice for Planning and Development (ref 15.12). This impact assessment has been produced in accordance with CIEEM's EcIA Guidelines 2018 (ref 15.13).

METHODLOGY

15.7 The pre-development ecological baseline was established through review of existing survey data obtained from the following documents, which are found as **Technical Appendices 15.1 - 15.6** to the ES:

(i) Preliminary Ecological Appraisal, EPR, (2017) – **Technical Appendix 15.1**
(ii) Bat activity survey, Ecology Partnership (2018) – **Technical Appendix 15.2**
(iii) Badger Survey, Ecology Partnership (2018d) – **Technical Appendix 15.3**
(iv) Breeding Bird Survey, Ecology Partnership (2018a) – **Technical Appendix 15.4**
(v) Reptile survey, Ecology Partnership (2018c) – **Technical Appendix 15.5**
(vi) GCN eDNA Letter of Report, Ecology Partnership (2018b) – **Technical Appendix 15.6**

15.8 A desktop study search was completed using an internet-based mapping service, *MAGIC*, for statutory designated sites, and two internet-based aerial mapping services (*Bing Maps* and *Google Maps*) were used to understand the habitats present in and around the survey area and habitat linkages and features (ponds, woodlands etc.) within the wider landscape.

15.9 The Site was surveyed by EPR (Ecological Planning and Research Ltd) on the 21st June 2017 (**Technical Appendix 15.1**). From the EPR report methodology: Habitats were mapped based on the Joint Nature Conservancy Committee's (JNCC) Phase 1 Habitat Survey methodology (ref 15.14) with additional notes taken on the potential presence of protected or notable species.

15.10 The purpose of this assessment was to identify whether more comprehensive species surveys for protected species or habitats (Phase 2) were to be recommended. Phase 2 surveys were then undertaken by The Ecology Partnership in 2018.

15.11 Species specific surveys were undertaken with respect to bats, badgers, reptiles, GCNs, and bird surveys. A summary of the work is set out in the table below. Detailed survey methodologies are provided in the baseline ecological reports found in **Technical Appendices 15.1-15.6**.

Table 15.1: Protected Species and Vegetation Surveys

Faunal Group	Survey Methodology	Date of Surveys	Guidance
Bats – activity surveys	Seasonal dusk surveys from May to September 2018 across the site using transect methods and stops for recording activity as per Bat Conservation Trust guidelines (ref 15.6). Anabat Express static recording devices were left on-site in three locations for at least five consecutive nights per season, in May, July and September.	**2018** Dusk activity transects were undertaken on: 4th June 23rd July 4th September Anabat Express were deployed on site and recorded data from: 17th-21st May 23rd – 29th July 4th - 10th September	Bat Surveys – Good Practice Guidelines 3rd edition (ref 15.6).
Reptiles	The refugia were placed within suitable habitat across the site, along the site boundaries and treelines. Mats were set up prior to the commencement of the reptile survey. A total of seven survey visits were made to the site to check the refugia for the presence of reptiles during each survey. Visits were only carried out if the weather conditions were suitable for locating reptiles. On each visit to the site, a minimum of one circuit to check all refugia was carried out. Natural refugia were also surveyed during these visits. Any natural refugia, such as log piles and brash piles, were lifted and hand searched for evidence of reptiles.	24th May to the 21st June 2018	The timing and number of surveys completed were based on guidelines produced by Froglife (1999) and Gent and Gibson (1998) (ref 15.11 and 15.12)
Badgers	During the survey, all habitats potentially suitable for badgers were systematically examined for evidence of badger activity. Particular attention was paid to areas where the vegetation and/or the topography offered suitable sett sites. Where potential badger setts were identified, trail cameras were left in situ to record activity and determine sett type/species present.	Surveys between the 17th May and 10th September	The evaluation of badger activity was based on methodology developed for the National Survey of Badgers (ref 15.8).

Great Crested Newt Surveys	Habitat Suitability Index assessment of accessible off-site ponds. eDNA surveys conducted on two ponds off site. All water samples were taken by Jade Brennan BSc (Hons) MSc Grad CIEEM (GCN Licence Ref – 2017 – 31295 – CLS - CLS), with Emma Bagguley BSc (Hons) MSc MCIEEM (GCN Licence Ref – 2016-23003-CLS-CLS). All water samples were analysed by Surescreen in accordance with the protocol set out in Appendix 5 of Biggs *et al*. (2014).	HSI surveys were undertaken alongside the water samples. Water Samples for eDNA analysis were collected on the 28th June 2018.	Oldham at al. (2000) ref 15.19) Biggs et al (2014) (ref 15.5)
Breeding Bird Surveys	A single visit was undertaken once a month during the breeding season from April to June 2018. On each visit the site was walked along each boundary and, where possible through the centre of the site. Each bird seen or heard was identified to species, registered to the parcel of land in which it was recorded and given a BTO Atlas breeding evidence code.	**2018** 26th April 17th May 11th June	Balmer et al. (2013)

Ecological Assessment Methodology

15.12 This assessment has been carried out with reference the CIEEM *Guidelines for Ecological Impact Assessment* (EcIA). This document provides best practice guidance in identifying whether an EcIA is required and where it is required, guidance on determining the value of ecological features and resources including those that have been designated for nature conservation, and the impact magnitude, including description of baseline conditions and cumulative impact assessment.

15.13 The baseline condition of the Site is taken to be the situation as found by The Ecology Partnership during site surveys carried out throughout 2018. Surveys conducted in the wider landscape have been reviewed to help assess the cumulative impact scenarios.

15.14 Future baseline is considered to be the year of completion of the project (anticipated 2030, albeit currently unknown). The assessment considers the 'worst case' development permitted within the parameters being applied for.

15.15 The methodology below defines how the criteria for how the assessment is to be made. This includes identifying the importance of ecological features (the 'receptor') within the Site and around the Site, the significance of the impact in which the assessment addresses the importance of the receptor and the extent, magnitude, duration of the impact on that receptor.

The level importance of a receptor

15.16 The evaluation of ecological features and resources should be based on sound professional judgement whilst also drawing on the latest available industry guidance and research. The

approach taken in this report is based on that described in 'Guidelines for Ecological Impact Assessment in the UK and Ireland' published by the Chartered Institute of Ecology and Environmental Management whereby important ecological features are identified, and these are considered within a defined geographical context using the following frame of reference:

15.17 A receptor is defined as a feature affected by an impact. This receptor may be of negligible nature conservation value, or it may have a value at local, county, national or international level.

(i) International; Features of **International** importance are those protected by international treaties, legislation, agreements and designations. Examples include Ramsar sites, Special Protection Areas (SPA) and Special Areas of Conservation (SAC). Certain species are also protected under international law, such as those listed in the Habitats Directive (1992).
(ii) National / Regional; Features of importance at the **National** level include those with statutory protection, such as National Nature Reserves (NNRs), Sites of Special Scientific Interest (SSSIs) and species with legal protection, such as BAPs/ Red Data Book species.
(iii) County / District; Features that are important at **County or District** level may be protected by local development framework policies. Sites can also have local statutory designations as Local Nature Reserves (LNRs) or local non-statutory designations such as the Sites of Nature Conservation Importance (SNCI)
(iv) Local; Features that are important at a **local** level may be of particular value in the context of the site itself.
(v) Site (not of elevated importance at a local level).

15.18 Features considered to be of importance at the site level only have been scoped out of this assessment (with the exception of protected species which are considered in terms of mitigation and any legislative requirements, for example a bat roost of low conservation significance is likely to be site level only importance, however, a Natural England licence will still be required for works impacting such a roost type). Legally protected species can be important solely because of the need to meet legislation, or because they are also a feature of a County Wildlife Site or target of a local Biodiversity Action Plan. In these cases, the same species could warrant different levels of importance, possibly with different implications for what is reasonable mitigation or compensation, beyond legislative compliance.

Assessment of Impacts and Significance

15.19 The CIEEM publication also sets out a methodology for the assessment of potential effects arising from development.

15.20 The impacts which are set out below are those which arise after taking account of the design mitigation. The impacts on ecology are assessed by (a) determining the level of importance/sensitivity of the receptor, for example national, county, or local; (b) determining the type, magnitude and timescale of the impact; and then (c) using this information on the receptor and impact to determine the significance of the impact: described as major, moderate, or minor significant, or not significant. For example, a moderate or small impact on an internationally important feature is likely to be significant, while a similar impact on a feature of local value is less likely to be significant.

15.21 Based on this context, the nature of the effect is characterised and considered under the following parameters:

(i) Positive or negative – will the activity lead to an adverse, beneficial or neutral effect;
(ii) Extent – the size or amount of an impact, the area of habitat or number of individuals affected;

(iii) Duration – the time for which the impact is expected to last prior to recovery or replacement, i.e. short-term or long-term;

(iv) Reversibility – an effect may be irreversible in that recovery is not possible within a reasonable timescale or there is no reasonable chance of action being taken to reverse it, i.e. permanent or temporary;

(v) Timing and frequency – some changes may only cause an impact if they coincide with critical life-stages or seasons, whilst frequent events may cause a greater effect than a single event.

15.22 Based on the nature of the effect, an assessment is then made whether the effect on a habitat or species is likely to be ecologically 'significant'. CIEEM guidance defines a 'significant effect' as *"an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general", going onto state that "significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution)."*

15.23 Specific assessment with regards to potential effects arising on international / European designated sites as a result of the proposed development has been undertaken, in the report entitled "Information for Habitats Regulations Assessment" (IHRA), produced by Ecology Solutions, which accompanies the Application. This assessment has been undertaken in light of the relevant tests under the Habitats Regulations, in order to provide the Competent Authority with all information that they may reasonably require to discharge their duties. This Chapter should therefore be read in conjunction with the IHRA in terms of effects relating to international / European designated sites.

Table 15.2: Matrix for determining impact significance

		Levels of importance of the receptor				
		International	**National**	**County / District**	**Local**	**Site / negligible**
Effect Significance	**Large**	Major	Major	Moderate	Minor	Negligible
	Medium	Major	Moderate	Minor	Minor	Negligible
	Small	Moderate	Minor	Minor	Negligible	Negligible
	Negligible	Minor	Minor	Negligible	Negligible	Negligible

Limitations of the assessment

15.24 It should be noted that whilst every effort has been made to provide a comprehensive description of the Site, no single investigation could ensure the complete characterisation and prediction of the natural environment. The site was visited over the period of several site visits, as such seasonal variations cannot be fully observed and potentially only a selection of all species that potentially occur within the site have been recorded. Therefore, the survey provides a general assessment of potential nature conservation value of the Site and does not include a definitive plant species list. However, the survey area was visited on a number of occasions over the optimal period, ensuring that detailed habitat information could be gathered. It is therefore considered that the survey work has allowed a robust assessment of habitats and botanical interest across the Site.

15.25 The specific protected species surveys were undertaken at the appropriate time of year and during suitable weather conditions to an appropriate level of survey effort. Any specific limitations are noted in the relevant sections above or discussed in the results section.

BASELINE CONDITIONS

Desktop Study

15.26 An ecological data search was obtained from Kent and Medway Biological Records Centre (TVERC) in November 2018 by The Ecology Partnership. Records of protected species were identified within a 2km radius of the site (See **Table 15.3**).

15.27 Several additional water bird species are listed within the biological records due to the location close to the coast and SPA, but have not been included in **Table 15.3** as they are considered very unlikely indeed to utilise the Site, given the habitats present and the requirements of the relevant species.

Table 15.3: Notable and Protected Species within 2km in the last ten years

Species	Status	Closest record distance	Most recent record
Common pipistrelle (*Pipistrellus pipistrellus*)	UK BAP species, Annex IV of the Habitats Directive, Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006, Wildlife and Countryside Act 1981 Schedule 5 Section 9; Schedule 2 of Conservation of Habitats and Species Regulations 2017 (European Protected Species animal)	c.2km	2017
Soprano pipistrelle (Pipistrellus pygmaeus)		c.2km	2017
Brown long-eared bat (Plecotus auritus)		c.2km	2015
Noctule (Nyctalus noctula)		c.2km	2017
Nathusius pipistrelle (Pipistrellus nathusii)		700m	2012
Daubenton's bat (Myotis daubentonii)		c.2km	2011
Serotine (Eptesicus serotinus)		c.2km	2015
Leisler's bat (Nyctalus leisleri)		c.2km	2008
Natterer's bat (Myotis nattereri)		c.2km	2009
Slow Worm (Anguis fragilis)	Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England; Sussex BAP species; Sussex Protected Species Register;	250m north	2012
Common lizard (Zootoca vivipara)		250m north	2012
Adder (Vipera berus)		250m north	2012

Grass snake (Natrix helvetica)	UK BAP priority species; Wildlife and Countryside Act 1981 Schedule 5 Section 9	250m north	2012
Red kite (Milvus milvus)	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended) IUCN Amber List	c.1km	2016
Goshawk (Accipiter gentilis)	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended)	c.1km	2012
Merlin (Falco columbarius)	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended); Birds Directive Annex 1	c.1km	2015
Hobby (Falco subbuteo)	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended)	c.1km	2015
Turtle Dove (Streptopelia turtur)	BoCC Red List	c.1km	2016
Skylark (Alauda arvensis)	NERC Act (2006) Section 41; Birds Directive Annex 2.2	c.1km	2016
Redwing (Turdus iliacus)	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended); BoCC Red List	c.1km	2016
Barn owl (Tyto alba)	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended) IUCN Amber List	c.2km	2016
European Water Vole (Arvicola amphibious)	Wildlife and Countryside Act (1981 as amended) Schedule 5; NERC Act (2006) Section 41	1.4km northeast	2012
Great Crested Newt	Wildlife and Countryside Act (1981 as amended) Schedule 5; Bern Convention Appendix	1.2km southwest	2011

2; European Protected Species; Habitats Directive Annex 2 & 4; NERC Act (2006) Section 41

15.28 The Site lies within 250m of an internationally designated site, with a further nine statutory designations within 5km, these are detailed below within **Table 15.4.**

Table 15.4: Statutory Sites within 5km of the Site

Name of site and designation	Description (Taken from site citation where applicable)	Approximate Distance from Site (At nearest point)	Scale of Importance
Medway Estuary and Marshes SPA, SSSI and Ramsar	The estuary has a complex arrangement of tidal channels, which drain around large islands of saltmarsh and peninsulas of grazing marsh. The mud-flats are rich in invertebrates and also support beds of *Enteromorpha* and some Eelgrass *Zostera spp*. Small shell beaches occur, particularly in the outer part of the estuary. The complex and diverse mixes of coastal habitats support important numbers of waterbirds throughout the year.	234m north	International
Queendown Warren SAC, SSSI and LNR	This site contains heath and scrub (10%), dry grassland (70%) and deciduous broad-leaved woodland (20%).	4.2km southeast	International
Purple Hill SSSI	The site includes areas of chalk grassland, scrub and woodland. The grassland is of the upright brome *Bromus erectus*, sheep's fescue *Festuca ovina* type and is extremely herb rich, with one nationally rare plant species occurring.	4.3km south	National
Tower Hill to Cockham Wood SSSI	The site contains woodland representative of that on Tertiary deposits in Kent and supports a rich insect fauna. In addition, Upnor Quarry exposes a complete Tertiary stratigraphic sequence. Much of Cockham Wood consists of neglected coppice, principally ash *Fraxinus excelsior*, with oak *Quercus robur* standards. The shrub layer, is especially varied towards the central part of the wood.	4.5km northwest	National

15.29 The Site lies within a local wildlife site and a number of others are situated within a 2km radius, these are detailed within **Table 15.5** below.

Table 15.5: Non-statutory wildlife sites within 2km

Site name and designation	Description	Approximate distance and direction from site	Scale of importance
Ambley Wood LNR	Ancient woodland	1.9km southwest	County
Darland Banks LNR	Chalk grassland, scrub and woodland.	2.1km southwest	County
Berengrave Chalk Pit LNR	Forms part of the Riverside Country Park. There is a small lake in a disused chalk pit, and other habitats are scrub, woodland and reedbeds.	500m east	County

15.30 There are Habitats of Principle Importance (Section 41 NERC Act 2006) surrounding the Site. These are shown in **Figure 15.1**.

15.31 The Site consists largely of managed commercial orchard habitat, surrounded by treelines and hedgerows with treelines throughout the Site. There are a number of buildings on the Site that have been excluded from the survey area.

15.32 The detail below has been taken directly from the 'Preliminary Ecological Appraisal and Briefing Note' by EPR in June 2017 (**Technical Appendix 15.1**).

Orchards and Grassland

15.33 The main habitats on the Site are orchards with narrow grass strips between rows of apple trees and wider grass verges, which vary in width between approximately 5-10 m around the margins of the Site. These grassed areas are intensively managed, regularly mown with herbicide treatment applied along the edges; plant species present are those that are more tolerant of such management, including Annual Meadow-grass *Poa annua*, Perennial Rye-grass *Lolium perenne*, Cock's-foot *Dactylis glomerata*, Greater Plantain *Plantago major* and White Clover *Trifolium repens*. In a few places along the margins of the Site were planted lavender and thyme to provide a foraging resource for bees within the on-site hives.

15.34 A small area of orchard in the north-east of the Site is less intensively managed with unmown grass strips and brash piles at the ends of the rows presumably for invertebrates. Nearby is an area of less intensively managed grassland where crates are stored, but still of no significant botanical interest. Species included Yorkshire-fog *Holcus lanatus*, Creeping Bent *Agrostis stolonifera* and Creeping Buttercup *Ranunculus repens*.

Hedgerow and Trees

15.35 The boundary of the Site is formed primarily from tall (c. 2-4 m high) species-poor hedgerows, locally dominated by English Elm *Ulmus procera* and Poplar cf. *Populus balsamifera* with locally frequent Ash *Fraxinus excelsior* and elder *Sambucus nigra*. Tree lines c. 6-14 m high also form part of the boundary in places as well as within the Site to act as wind breaks/shelter belts; plant species include Grey Alder *Alnus incana* and Leyland Cypress *x Cupressocyparis leylandii*.

15.36 Hedgerows and trees also line both sides of a public footpath that runs across the eastern half of the Site in a more-or-less NW-SE orientation from Pump Lane to Lower Bloors Lane. This footpath becomes more sunken to the east with c. 1m high banks.

Foraging and Commuting Bats

15.37 Bat activity surveys were undertaken seasonally across the Site in 2018, with visits in June, July and September. Transect routes were plotted along areas of suitable bat foraging and commuting habitat and walked by surveyors equipped with full spectrum bat detectors.

15.38 Bat surveys were undertaken on the 4th June, 23rd July and the 4th September 2018. The dusk surveys commenced at sunset and observations were maintained until 2 hours after sunset. Bats usually emerge about twenty minutes after sunset depending on the species, light level, weather conditions and time of year. Peak activity will normally last for about two hours after sunset, during times of peak insect activity.

15.39 The bat surveys indicated a low level of activity across the Site, with the majority situated along the western railway line, central southern public footpath and habitat around the edges of the allotments and woodland to the south.

15.40 Static detectors left on-site for five nights in May, July and September reinforced the findings of the walked transects. The positions of the Anabats were chosen to give a good representation of activity on the edges of the Site and within the centre. These give a good indicator of the overall level of use on site by bat species.

15.41 Activity was dominated (66%) by common pipistrelles on all three Anabat locations with over 600 calls recorded in May. Soprano pipistrelles were also fairly dominant with 100-200 calls recorded each season (over the five recording days). Also present on site are noctules, serotines and Nathusius pipistrelles. These bats were recorded in low numbers across all three locations, making up a total of only 5% of all bat calls recorded on site. These species appear to use the Site to commute across on an infrequent basis. Diversity of bat species using the Site is considered to be low, reflecting the position of the Site adjacent to residential developments and the main landuse of the Site being agricultural (with the likely use of insecticides reduces food sources). Supporting this theory, the central poplar treeline Anabat recorded the least level of activity. This is likely due to the poor foraging opportunities the orchard habitat affords, whilst the native treelines and hedgerows along the western railway line create a 'natural' green corridor providing food for invertebrates and in turn bats.

15.42 Using assessment criteria set out by Wray et al. (2010) (Ref 15.15), the Site qualifies as a receptor of site importance only, owing to the low quality of on-site habitat, lack of food sources and low numbers of bats present.

Badgers

15.43 Various mammal holes were identified in 2017 and 2018 across the Site and these were monitored at various intervals in 2018 through use of motion-triggered cameras.

15.44 All holes across the Site have been periodically checked throughout May – September 2018 during other species specific surveys. Conclusions for each area identified in **Figure 15.2** are detailed below:

(i) Area 1: Rabbit warren with fox activity around.
(ii) Area 2: Used by rabbits. Overgrown.
(iii) Area 3: No holes identified in 2018. Overgrown. Not in use.
(iv) Area 4: Well vegetated, overgrown over the season. Rabbit use only and not in use by September.
(v) Area 5: No holes identified. Overgrown. Not in use.

(vi) Area 6: Overgrown but spoil identified in September 2018.
(vii) Area 7: No animals recorded using the holes in July however rabbits use found in September 2018 with a brief view of a badger in the area. Badger faeces nearby suggests they are present in this area of the site (but the sett may be off-site).
(viii) Area 8: New in September 2018: Rabbit warren with fox activity around.

15.45 Badger evidence was found in September around area 7. Several areas of droppings were identified and footage caught one glimpse of badger legs over a week's filming.

15.46 In September there are large amounts of fallen fruit throughout the Site and much of these appear to be eaten by mammals. This food source will attract badgers to the Site to forage but does not necessarily mean they reside on the Site.

15.47 No holes identified on the Site have been confirmed to be in use by badgers. All holes identified by EPR in 2017 and by The Ecology Partnership in 2018 are considered to be in use by rabbits, foxes or no longer in use by any species.

15.48 The habitat on-site provides good foraging opportunities for badgers with areas of open grassland, woodland and fruiting tree species. Limited evidence of badger activity was recorded and observed in a single location on the Site while undertaking other survey work. The Site is therefore considered a receptor of site level importance for foraging badgers only.

Reptiles

15.49 The grassland edges of the Site were considered to hold some potential for supporting reptiles, along hedgerows and scrub. A terrestrial survey of the Site for reptiles (presence or absence) was carried out between the dates of 24th May and the 21st June 2018. Prior to the commencement of the survey, bitumen felt tiles were left in areas of suitable habitat on 17th May 2018. Surveys were only undertaken in suitable weather conditions.

15.50 A peak count of nine slow worms (good population) was found on the Site, largely within the western fields along the railway line, and two common lizards (low population) were found on the Site. It is considered likely that more reptiles are present on the Site as there is a high disturbance level from dog walkers and workers.

15.51 The Site is not a key reptile site is considered to be of site level importance only.

Great Crested Newts

15.52 There are no ponds on the Site, however OS maps revealed two ponds located within 250m, with an additional three ponds within 500m of the Site. The closest waterbody is within the curtilage of a private residential property and the additional three were located within the Riverside Country Park to the north of the Site. **Figure 15.3** shows the identified waterbodies.

15.53 Ponds 1 and 2 were accessible within the fields towards to the eastern end of the Country Park and permission was granted to survey these on the 28th June 2018. These two ponds were virtually identical in shape, size and vegetation and are 347m north of the edge of the Site. Pond 3 was inaccessible and located on private land so could not be surveyed. The pond was noted to be surrounded by mown grassland and hardstanding. This pond is 70m from the Site boundary. Pond 4 within the grounds arounds around the visitors centre at the Country Park 370m from the Site boundary, with the Lower Rainham Road as a barrier between the development and the pond. Pond 5 is 250m from the Site boundary but could be seen due to 7ft wooden fencing along the footpath. This pond was therefore not able to be surveyed.

15.54 Ponds 1 and 2 were given an HSI score of 'average'. Pond 4 was assessed as 'Below average'. Ponds 3 and 5 were inaccessible to survey.

15.55 Ponds 1 and 2 were surveyed for presence of GCN using eDNA survey methodology. Water samples were taken from water bodies on-site on the 28th June 2018 and analysed by SureScreen Scientifics. All samples returned a negative result for GCN eDNA presence, indicating their likely absence from the water bodies. Pond 4 is considered highly unlikely to contain any GCN due to the isolation from other suitable habitat and ponds, the presence of waterfowl and below average HSI score.

15.56 Pond 3 is the closest to the Site boundary, 70m, and on the southern side of the Lower Rainham Road. This pond is considered to be isolated from other such waterbodies however. The closest waterbody on the same side of the main road is located within Berengrave Local Nature Reserve over 500m east, for which there are no records of GCN presence, only common amphibians. Ponds 1 and 2 are 277m north of pond 4 and were negative for GCN presence. It is therefore considered unlikely that a population of GCN could persist within this waterbody.

15.57 The terrestrial habitat within the redline boundary is dominated by short managed grassland between the rows of apple trees within the orchard. This habitat is not considered to be suitable for GCN due to the lack of structure and cover. The Site is bordered by mature treelines and hedgerows however which could provide dispersal opportunities for amphibians and small mammals around the edge of the Site. These boundaries are understood to be retained within the scheme, therefore there is to be no loss of suitable terrestrial habitat. GCN are therefore not considered further within this impact assessment.

Breeding Birds

15.58 Breeding bird surveys were undertaken between April and June 2018, the surveys identified 26 bird species using the Site, of which 17 were either breeding on-site or included the Site as part of their territory.

15.59 It is noted that none of the species recorded during the survey are qualifying features (species / assemblage) associated with either Medway Estuary and Marshes SPA, Ramsar site or SSSI. This result is expected as most of the qualifying waterbird species do not use orchard habitat and hedges. On this basis, it is considered that there is no functional link between the Site and adjacent sites of statutory interest for their breeding birds. Further assessment in this regard is presented in the IHRA.

15.60 Any impact of the Development through habitat loss is therefore on the populations of the four common, but declining farmland birds that are classified as Section 41 species or of Red List status; house sparrow, dunnock, linnet and starling.

15.61 The Site is considered a receptor of site importance.

Table 15.6: Summary table of faunal groups present on -site and levels of importance

Faunal Group/Species	Description	Level of importance
Bats – foraging and commuting	Bat activity surveys undertaken in 2018 identified low levels of foraging and commuting activity, primarily situated along the railway, public footpath and along the edges of the woodland and allotments in the south-eastern half. These features provide green links across the Site for bats in the local area. The short grassland and orchard were considered of lesser value due to the high levels of management.	Local

	The bats recorded were largely dominated by common species, with common and soprano pipistrelle both well represented. Other species included noctule, Nathusius pipistrelle in very of pass numbers.	
Badgers	Monitoring of various holes in 2018 identified that the majority were in use by rabbits or foxes. A single hole was shown to be of interest to a badger on a single occasion in September only. The Site is considered to be of use to badgers as a foraging habitat only, with the fallen orchard apples providing an attractive late summer food source.	Site
Reptiles	Reptile surveys in 2018 identified a good population of slow worms and low populations of common lizard. This does not meet criteria for a Key Reptile Site. Low numbers were identified within overgrown vegetation along hedgerows and the western railway line.	Site
Birds	Boundary features only were found to be use by a relatively low number of bird species. A low number of BoCC Red List species were found to be using the Site, with no evidence of use of the Site by qualifying species associated with the international / European designated site recorded during the survey.	Site

Future Baseline

15.62 Future baseline conditions are conditions which would be likely to arise if present conditions continue and none of the proposed alternatives are implemented. Future baseline conditions of the Site will be described as the maintenance of the Site as grazed pasture and horse paddocks to the south and east, with a continued absence of management on large areas of the Site.

15.63 The future baselines are considered to be as follows:

(i) Commercial orchard – Regular maintenance and use of orchard through pruning and use of insecticide, no change likely.
(ii) Semi-improved grassland – Regular mowing likely and grazing by rabbits, no change likely.
(iii) Buildings, bare earth and hardstanding – Outside of the development boundary. No significant change likely. Agricultural barns to be in continued use for storage. Hardstanding in continued use as access track and car park area.
(iv) Hedgerows – Boundary features and internal hedges unlikely to be change much overtime. Growth is capped through management.
(v) Treelines within the site – Used as windbreaks therefore likely to be maintained in good condition. No change likely.
(vi) Treelines along the public footpath – Defunct areas within the hedgerows likely to enlarge through use.

15.64 In summary, future baseline conditions of the Site will largely be the same as what is currently present, as the Site is in use as a commercial orchard and the majority of habitats will be highly managed.

IMPACTS

Construction Activities with the Potential for Significant Effects

15.65 Construction within the red line boundary of the Site is considered to involve the following activities:

(i) Removal of semi-improved grassland, orchard habitat and scattered internal short treelines and internal hedgerows.
(ii) Removal of some trees on-site;
(iii) Construction of new buildings, hardstanding and infrastructure;
(iv) Tree and shrub planting and landscaping within the scheme;
(v) SUDS creation; and
(vi) Disturbance - construction lighting and plant / vehicle noise, vibration, movement and general activity.

15.66 Habitats and species which are considered in terms of potential impacts:

(i) Habitats present on the Site, including mature trees, hedgerows, semi improved grassland and the orchard habitat;
(ii) Protected species present on the Site;
(iii) Off-site habitats which are designated and protected either locally or nationally designated.

Construction Effects on Designated Sites / Off Site Habitats

15.67 Detailed consideration with regards to potential effects arising during the construction phase on Medway Estuary and Marshes SPA/SSSI/Ramsar site (in addition to other international / European designated sites) has been undertaken, with full details provided within the IHRA. The following paragraphs summarise the key findings of the assessment insofar as they relate to the construction phase, prior to the adoption of mitigation measures.

15.68 For the reasons outlined in the IHRA, the Site does not offer potential opportunities for qualifying bird species associated with the Medway Estuary and Marshes SPA/SSSI/Ramsar site. On this basis, it does not represent land which could be classed as important 'supporting habitat' for Medway Estuary and Marshes SPA/SSSI/ Ramsar site (or indeed other international / European designated sites in the vicinity).

15.69 Furthermore, the Development will not have any impacts on the Medway Estuary and Marshes SPA/SSSI/ Ramsar site as a result of damage to habitats, lighting or noise during the construction phase, given the significant separation of the Site from the nearest part of the international / European designated site and the existing baseline. It is considered that this conclusion may be reached without any specific or avoidance measures required specifically for the SPA/SSSI/Ramsar site.

15.70 There are no watercourses which flow through or which lie adjacent to the Site which are linked to Medway Estuary and Marshes SPA/SSSI/Ramsar site. As such, there is no potential pathway for an adverse effect to arise to the designated site during the construction phase through hydrological impacts, such as surface run-off, contaminated water or siltation.

15.71 Specific and detailed assessment in relation to air quality effects arising from road traffic to both Medway Estuary and Marshes SPA/SSSI/Ramsar site and other international / European designated sites in the wider area has also been undertaken in the IHRA (including construction and operational phases). In conclusion, the Proposed Development will not result

in adverse effects on the integrity of any such sites, either considered alone or in combination with other plans or projects, as a result of air quality effects.

15.72 Berengrave Nursery is located 500m to the east of the Site. There are no direct linkages between the habitats within the red line boundary and the off-site habitats. Indirect impacts resulting from construction including, lighting, traffic pollution, dust and noise will all be considered as part of the CEMP following best standard and mitigation practises.

Construction Effects on Site Habitats and Ecological Features

15.73 The construction process will involve the clearance of habitats, including the orchard, semi-improved grassland and individual trees in order to facilitate the construction of new access roads and buildings with associated residential gardens, communal greenspace and infrastructure.

Commercial Orchard

15.74 The orchard habitat dominates the Site and covers approximately 40ha. The whole of this habitat is to be lost to the development and will be cut down during the construction phase. All of this habitat is to be lost during construction but overall the quality of the habitat is considered to be of low ecological value and highly managed and therefore will have a permanent **indiscernible impact** to the biodiversity at a local level.

Semi-improved grassland

15.75 The semi-improved grassland at the edges of the Site along hedgerows and between orchard rows across the Site. During construction the majority of this habitat will be lost, with exception to the boundary edges. This is considered to be a large loss of this habitat but at type at site level only. The quality of habitat was low, however without suitable mitigation and replanting across the Site, the loss of grassland will have a **minor negative impact** during the construction.

Hedgerows and scattered trees

15.76 The majority of the boundary hedgerows are to be retained and protected during the construction phase. Some internal hedgerows and trees are to be lost during the construction phase; the quantity of habitat to be lost is considered to be small in relation to the quantity of hedgerows and trees on the Site as a whole. These are considered to be of site level importance only due to their isolation from boundary hedgerows and therefore the impact would be of **indiscernible significance.**

15.77 The impacts are of indiscernible significance either owing to the nature of habitats to be lost in the case of the semi-improved grassland and orchard or due to the small scale of proposed habitat loss in the case of the scattered trees within the Site.

Foraging and commuting bats

15.78 The proposals will result in the retention of the majority of the foraging habitat i.e. the boundary hedgerows, treelines and the trees along the public footpath. The bats have been shown to make limited use of the central orchard habitat, which is to be lost to the proposals. The loss of this habitat type is therefore considered to be a minor loss of foraging habitat and of **minor negative significance**. No significant impacts from habitat fragmentation are considered likely as a result of habitat loss as the boundary features are to be retained. The greatest level of bat activity was recorded along the western hedgerows and along the footpath and allotment edge to the south. No habitat loss is to occur along these boundaries of the Site. There is potential for indirect impacts from noise and lighting pollution during the construction phase, this would result in an impact of **minor significance** at site level, the impact would be temporary and negative.

Reptiles

15.79 The primary impact of the construction phase upon reptiles will result from the loss of habitat adjacent to breeding, foraging and hibernation habitat in addition to direct mortalities from construction activities. The habitat in use by reptile is the boundary hedgerows and adjacent grassland, which is to be largely retained. The two impacts combined may significantly reduce the population of reptiles present on-site. Unmitigated, these impacts without suitable mitigation in place will result in an impact of **minor negative significance** at site level.

Badgers

15.80 The clearance of habitat and subsequent construction of buildings and infrastructure close to mammal holes potentially in use by badgers may results in disturbance from noise and vibration through construction activities. No main sett is present on the Site and none of the mammal holes were confirmed to be in use by badgers as such no impacts are predicted on badger setts. Update surveys are always recommended.

15.81 The Site is used as foraging habitat. The loss of foraging habitat is likely to result in an impact of **minor significance** at site level.

Birds

15.82 Common bird species were largely confined to the Site boundary hedgerows and treelines which are to be largely retained under the proposals. Removal of scattered tree habitat during construction phase has the potential to result in direct mortality of nesting birds. There is also likely to be minor disturbance from noise, vibrations and human presence during the construction phase. These impacts are short term, temporary and negative and considered to be of **minor significance** at site level.

Table 15.7: Summary Table of Construction Phase Impacts

Receptor	Impact/effects	Predicted effects with no mitigation in place				
		Receptor Level[1]	Effect magnitude[2]	Permanence[3]	Positive/ negative [4]	Effect Significance
Medway Estuary and Marshes SPA/SSSI/Ramsar site	Direct damage to habitats supporting internationally important breeding populations of over wintering waders and waterfowl species and disturbance to qualifying bird species – through noise, lighting, hydrological impacts and air quality impacts	I	N	T	N	**Negligible**
Other statutory designated sites (including SSSI)	Other designated sites over 4km from the redline boundary and considered to be sufficient distance that construction impacts are negligible	N	-	-	-	**Negligible**
Nearby Local Wildlife Sites / LNR (Berengrave Chalk Pit)	Increased disturbance to habitats and species – noise, dust, pollution measures	C	M	T	N	**Minor**
Commercial Orchard	Loss of entire orchard (approx. 40ha)	L	M	P	N	**Negligible**
Semi-improved grassland	Loss of semi-improved grassland across the majority of the site	S	M	P	N	**Minor**
Hedgerows and scattered trees	Loss of internal hedgerows and scattered trees	S	S	T	N	**Negligible**
Sustainable Drainage Systems	Creation of new SUDs and ponds on site	S	M	P	P	**Negligible**
Foraging and commuting bats	Loss of foraging habitat and commuting routes – some minor loss of internal trees and hedgerows. Loss of orchard and grassland.	L	S	P	N	**Minor**
	Disturbance of bats – noise and light pollution in suitable habitat for foraging and commuting bats may negatively impact upon bats using these features	L	S	T	N	**Minor**

Reptiles	Loss of suboptimal habitat and disturbance during construction. Direct mortality through clearance works may result in direct killing or injuring of individual reptiles.	S	S	T	N	**Minor**
Badger	Disturbance – construction works cause disturbance from noise, light and vibrations	S	S	T	N	**Negligible (no confirmed setts)**
	Loss of foraging habitat	S	S	P	N	**Minor**
Breeding birds	Loss of nests – Clearance of hedgerows and individual trees may result in loss of nesting habitat	S	S	P	N	**Minor**
	Disturbance – increased human presence, noise, light and dust from construction works may cause minor disturbance to nesting birds,	S	S	T	N	**Minor**

1. S = site, L = local, C = county, N – national & I – international 2. N = negligible, S = small, M = medium, L = large 3.T = temporary, P = permanent 4. P = positive, N = negative

Operational Impacts

15.83 The operational stage will involve the use of the new roads, buildings, residential gardens and communal greenspace and associated infrastructure. There will also be a new school on the Site and residential care home. It is understood that a management company will be employed to manage all open space areas. Each of the areas will have a bespoke management plan. The management plan for the habitats on the Site would be conditioned as part of the permission.

Activities and Proposal with the Potential for Significant Effects

15.84 Operational impacts include the following:

(i) Increased recreational pressure to internationally, nationally and locally designated sites;
(ii) Increase in local pet population and the associated pressure on the on-site species in terms of disturbance and predation.
(iii) Increase in the local human population and potential for direct impacts through damage and degradation to off-site habitats.
(iv) Increase in disturbance from lighting and noise
(v) Potential for air quality impacts to international / European designated sites arising as a result of an increase in road traffic along the strategic road network.

15.85 Operational activities will include the management of existing and newly created habitats and open spaces within the development. It is considered that the management of gardens will not be significant in terms of ecology and biodiversity.

International / European Designated Sites

15.86 The Proposed Development will result in a net increase in population in the local area, in close proximity to a number of international / European designated sites including in particular Medway Estuary and Marshes SPA/SSSI/Ramsar site. As such, in the absence of avoidance or mitigation measures, there is potential for an increase in recreational pressure to arise at these sites, which could result in adverse effects including disturbance of qualifying bird species (e.g. through disturbance from dog walkers) and damage or degradation to the habitats supporting qualifying species. Detailed consideration in this regard is provided within the IHRA.

15.87 The Proposed Development will also result in an increase in road traffic movements, both in the immediate locality of the Site and also to the wider strategic transport network. Specific assessment with regards to potential effects has been undertaken, based on detailed traffic modelling and dispersion modelling work undertaken by DTA and PBA respectively. The findings of the assessment are outlined in the IHRA; however, in conclusion, the Proposed Development will not result in adverse effects on the integrity of any international / European designated sites, either considered alone or in combination with other plans or projects, as a result of air quality effects

15.88 The Proposed Development will lead to an increased water run off and sewage demand. Given that the design of the Development incorporates appropriate measures including the delivery of a SuDS system (proposed irrespective of the international / European designated site), the risk of potential adverse effects (via hydrological pathways) occurring as a result are considered to be de minimis in nature. In terms of foul water drainage the Proposed Development will connect to the existing public sewer network, considered to be treated at Motney Hill Waste Water Treatment Works (WWTW) which is understood to have capacity. On this basis, it may be concluded that the Development would not be likely to have a significant effect on the European / international designated sites via hydrological impacts, either considered alone or in combination with other plans or projects.

Other Sites of Special Scientific Interest and Local Nature Reserves

15.89 Berengrave Chalk Pit LNR is located 500m to the east of the Site. Berengrave Chalk Pit LNR has developed since the cessation of the cement works in the 1930s. Woodland on the site is a few decades old. The site supports public footpaths around the site and around the pond, located in the centre of the pit. It is considered likely that this site would be impacted by local increase in recreational pressure. This is likely to result in increased disturbance to wildlife, trampling of vegetation and littering and as such the impact is considered to be minor.

15.90 All other LNR and SSSIs are over 2km from the Site. These sites will likely experience and increase in recreational pressure as a result of the Development, where public access is possible. This is likely to result in increased disturbance to wildlife, trampling of vegetation and littering. The level of impact is considered to be minor.

Other Local Wildlife Sites

15.91 The Site lies within 2km of a number of Local Wildlife Sites, some of which feature public access. The increase in the local population from the Proposed Development is likely to result in increased disturbance to these sites through trampling of vegetation, disturbance of wildlife and littering. The level of impact is considered to be minor.

Off-site woodland

15.92 The Bloors Lane Community Woodland lies adjacent to the Site in the southeast corner. The Proposed Development will result in an indirect minor impact upon this habitat through increased recreational pressure as a result of the increased local population and open public access. There is also potential for **minor** impacts from lighting in proximity to the woodland habitat.

Habitats and fauna on-site

15.93 The retained or re-landscaped open habitats on-site may suffer some minor negative impacts from recreational pressure. Some general recreational pressures to habitats can include the following:

(i) Increased use of the public footpath and trampling of the edge vegetation, leading to degradation of the hedgerows and treelines along this feature;
(ii) Increased cat predation of wildlife as a result of local population increases;
(iii) Nutrient enrichment from dog waste can result in changes in plant communities, favouring plants associated with higher nutrient levels such as stinging nettles;
(iv) Increased fly tipping and littering, can also increase spread of non-native species from garden waste disposal.

Foraging and commuting bats

15.94 Bats can be adversely impacted by artificial lighting of suitable habitat, this can result in disruption of commuting routes as well as loss of foraging habitat. The proposals include construction in proximity to boundary treelines and hedgerows, which are used by foraging bats. Artificial lighting within these areas therefore has potential to have a moderate impact upon commuting and foraging bats on-site.

Reptiles

15.95 Reptiles may suffer from increased cat predation as a result of increased local cat population from the Proposed Development. These impacts are not considered significant beyond site level, however. The impact at site level is considered to be moderate.

Badgers

15.96 The increase in traffic may result in in increased badger mortalities from road traffic accidents. There will also be the loss of foraging habitat and fragmentation of the foraging habitat. The badgers are not considered to use the Site for breeding or year-round foraging so the impacts are not considered significant.

Breeding birds

15.97 Breeding birds may suffer from increased cat predation as a result of increased local cat population from the Proposed Development. Other operational impacts include disturbance from noise and human presence. The significance of these impacts will vary across the species, farmland specialists may be more vulnerable to these impacts whereas urban adaptor species may be largely unaffected or even stand to benefit in some ways. The site-level impacts will largely be negative although not at a level considered significant above site level.

Table 15.8: Summary Table of Operational Phase Impacts

Receptor	Impact/effects	Predicted effects with no mitigation in place				Effect Significance
		Receptor Level[1]	Effect magnitude[2]	Permanence[3]	Positive/ negative[4]	
International / European Designated Sites	Increased recreational pressure – increased disturbance to habitats supporting internationally important breeding populations of over wintering waders and waterfowl species. Increase in local population likely to cause trampling, disturbance/predation of wildlife by cats and dogs, enrichment of habitats from dog fouling, increased likelihood of littering. Impacts resulting from changes in air quality and hydrology (resulting from an operational development). See accompanying IHRA report (Ecology Solutions 2019)	I	L	P	N	**Major**
Other statutory designated sites (LNR and SSSI) (Berengrave Chalk Pit LNR)	Increase in local population likely to cause trampling, disturbance/predation of wildlife by dogs, enrichment of habitats from dog fouling, increased likelihood of littering.	N	S	P	N	**Minor**
Nearby Local Wildlife Sites	Increase in local population likely to cause trampling, disturbance/predation of wildlife by dogs, enrichment of habitats from dog fouling, increased likelihood of littering.	C	S	P	N	**Minor**
Orchard	Change in management from commercial to community orchard will change integrity of the retained/replanted habitat. Recreational pressure.	L	S	P	N	**Minor**
Semi-improved grassland	Increased recreational pressure – Increase in local population likely to cause trampling, disturbance/predation of wildlife by cats and dogs, enrichment of habitats from dog fouling, increased likelihood of littering.	S	S	P	N	**Negligible**
Hedgerows and scattered trees	Degradation of boundary habitats that form back gardens through lack of appropriate management.	S	S	P	N	**Negligible**

SUDs and Ponds	Creation during the construction phase. Degradation during the operational phase through littering and poor management.	S	S	P	N	**Negligible**
Foraging and commuting bats	Disturbance of bats – Light pollution from operational street lighting and other sources from operational phase may impact upon foraging and commuting habitat for bats.	S	S	P	N	**Minor**
Reptiles	Degradation of habitat and receptor areas through lack of appropriate management. Increase site use through increase of recreational pressure.	S	S	P	N	**Minor**
	Cat predation – increase in local cat population likely to occur as a result of development. May result in increased mortality of reptiles	S	S	P	N	**Minor**
Badger	Mortalities from road traffic accidents due to increased traffic during operational phase within proximity to badger habitat.	S/L	L	P	N	**Minor**
	Loss of foraging habitat	S/L	M	P	N	**Minor**
Breeding birds	Loss of nests – Clearance of internal hedgerows and individual trees may result in loss of nesting habitat through inappropriate management	S	S	P	N	**Negligible**
	Cat predation – increase in local cat population may result in increased mortality of birds.	L	S	P	N	**Minor**

MITIGATION

General Construction Mitigation

15.98 In order to minimise effects of construction, standard mitigation measures will be put in place during the construction phase. These measures could be included within a CEMP at the detailed stage, and will include:

(i) Erection of tree protection fencing around retained trees and boundary features in accordance with BS5837:2012;
(ii) Hedge and tree clearance to be undertaken outside nesting bird season, or checked by a suitably qualified person prior to removal;
(iii) Damping down of dust sources and covering of loose materials to reduce dust deposition within adjacent habitats;
(iv) Sensitive lighting scheme in the vicinity of retained habitats and along the edges of the Site to be kept to a minimum, with use of directional lighting or screening as required to reduce light spill;
(v) Monitoring of mammal holes to continue, if necessary, badger sett closure to be performed under NE License;
(vi) Use of best practice guidance for construction work in areas where badgers are active;
(vii) Supervised clearance of habitats suitable for reptiles;
(viii) New wildlife planting including; new woodland planting, new buffer planting and green corridor planting and enhancements;
(ix) Creation of 'dark corridors' and 'green corridors' within the Site with native planting;
(x) Storage of chemicals and hazardous materials in line with best practice guidelines;
(xi) Use of interceptors, bunds and spill kits following best construction methods to void impacts to hydrology;
(xii) General housekeeping rules, including litter removal, maintenance of fence lines etc.

Species-specific Construction Mitigation

Foraging and commuting bats

15.99 The construction phase will result in the loss of areas of poor habitat for bats, at the construction phase this is likely to result in a low residual impact, this will be later mitigated for within the operational phase of the Development where on-going management of the retained habitats and newly created habitats/replacement planting will result in a long-term benefit to bats. This includes the creation of habitats of value to bats such as SUDS and new hedgerows as well as management of retained treelines.

15.100 Disturbance to bats through the construction phase will be limited through working only during daylight hours, this will reduce the impact of light and noise pollution from construction machinery on foraging and commuting bats.

15.101 Mitigation for bats is included within the design of the Site. This includes retaining and protecting features for bats to use as for commuting and foraging and, where possible, the enhancement of these habitats. The treelines will be subject to management to increase its suitability for foraging and commuting bats, the creation of a SUDS pond will also be of value to foraging bats, encouraging a range of invertebrate prey species. Additional planting including planting that will benefit bats will be included within the open space to the north. Linear corridors, green links, use of swales will all provide suitable ecological networks for bats within the Site. A community orchard area, created for wildlife interest, will also be considered an enhancement for bat species on the Site. Enhancements within the Site will include planting of native species and the use of bat boxes on retained trees and within buildings.

15.102 A sensitive lighting scheme will also be employed for this scheme post development for the operational stage. This will be installed at the construction stage. This will shield features of importance for bats such as retained bat potential trees and commuting and foraging features such as woodland edges and tree lines as well as any newly created habitats.

Reptiles

15.103 Reptiles have been found along the western edge of the Site, along the railway line and along the internal hedgerows along the roadside of Pump Lane. The hedgerows are to be retained within the scheme, however the clearance of grassland habitats has potential to result in direct killing or injuring of reptiles.

15.104 Dependent on the extent of habitats lost and retained, reptiles can be translocated from areas subject to disturbance or maintained in situ. Habitat maintained, created and provided as part of the mitigation scheme is considered to be suitable and sufficient in size to ensure the long term survival of the species of reptile on the Site.

15.105 The hedgerows and edges of the Site are to be enhanced with native planting schemes and the grassland should be allowed to grow up along the bases of the hedgerows. Hedgerows and retained habitat should be fenced off to protect these areas of habitat.

15.106 The western edge of the site along the railway line is to be enhanced a green connective corridor along the edge of the Site. The grassland within the orchard is largely considered to be suboptimal due grazing by rabbits. The creation of new open space, internal hedgerows within the scheme and garden habitats, will see a net gain in optimal reptile habitat.

Badgers

15.107 Badgers are a mobile species that can establish new setts or expand existing ones in a short period of time. At the time of writing, no setts were confirmed in use by badgers on the Site, and the Site is only considered to be used as a foraging ground.

15.108 An update badger survey is therefore to be undertaken prior to works commencing to determine whether additional badger activity has occurred in the intervening period. Should any additional mammal holes be identified during this survey then a monitoring period may be required to determine the status and nature of the hole. In the event the hole is a badger sett, this monitoring can be used in support of a Natural England closure license. Should any additional setts be identified within close proximity to the development footprint then the surrounding area around the sett/s will be fenced off, encouraging badgers to avoid the construction site and instead forage within retained treelines and off-site gardens and woodland.

15.109 The following best practice guidance for working in proximity to badger setts should be adopted.

(i) Any trenches or excavations on the Site should be either covered over at night or a plank of wood placed in so as to allow any mammals to escape if the badgers were to accidentally fall in.

(ii) Any open pipes or conduits laid should be blocked off each night to prevent badgers from entering them.

(iii) Construction work should only take place between dawn and dusk with no late evening work. This will reduce possible disturbance to badgers as they emerge to forage and also reduce the risk of traffic casualties from late working site traffic.

(iv) All site workers will be informed of the known badger sett. Site workers must be informed that, by law, they must not:

- Interfere with setts;

- Dump equipment or litter in badger holes;
- Have fires next to badger holes;
- Damage or destroy the setts.

Birds

15.110 The UK breeding season for most bird species takes place between March and September. Any works affecting the suitable bird habitat on the Site are to be carried out outside of this period. If this is not possible, areas of suitable vegetation and ground will be checked for active nests no more than 48 hours prior to clearance. Should active nests be discovered, any works in the vicinity of the nest must cease until the birds have fledged the nest.

15.111 Treelines and hedgerows which are to be maintained within the Development will protected by fence lines to ensure that these features are adequately protected. Dust screens will be erected along the treelines of the public footpath to protect birds that may be nesting within. Furthermore, heras fencing will be in place around the development footprint to prevent site operatives from encroaching into adjacent retained habitats resulting in disturbance.

15.112 Bird boxes are to be hung on suitable retained trees to increase the number of breeding opportunities throughout the Site. Bird boxes can also be integral into the buildings within the Site. New habitat planting across the Site will also provide new opportunities for bird species. Birds were largely restricted to the edges of the Site currently, with the new development extensive garden habitats will be created providing new opportunities for a range of more common garden bird species.

Operational Mitigation

15.113 It is considered that there are potential disturbance effects to qualifying bird species arising from an increase in informal recreation at Medway Estuary and Marshes SPA/SSSI/Ramsar site (and other coastal sites).

15.114 To address these effects, a package of avoidance and mitigation measures are proposed. This comprises three key elements: firstly, provision of an appropriate financial contribution towards management and monitoring at the SPA/SSSI/Ramsar sites, in accordance with the North Kent Coast SAMM; secondly, the provision of enhancements to on-site public open space to maximise opportunities for informal recreation including dog walking; and thirdly engagement with Medway Council to provide further contributions towards off-site recreational opportunities in the local area. Discussions in this regard are still ongoing with English Nature. This is discussed in detail in the accompanying IHRA (Ecology Solutions 2019).

15.115 In terms of air quality and hydrology, impacts are discussed in the accompanying IHRA. Impacts regarding the European and internationally designated sites are considered to be negligible.

15.116 Other local and off site habitats, such as Berengrave Chalk Pit and Bloor Community Woodland, are likely to experience some disturbance from an increase in recreational pressure. It is likely that a financial contribution to support the long term conservation objectives of these features would be sought through any S106 Agreement.

15.117 The Proposed Development includes a village green and areas of enhanced habitat and creation of SUDs. A long-term management plan for open spaces and on-site habitats will be developed which will prescribe the management requirements for each habitat area for a period of 5 - 10 years. After the initial 5 years a review of the management plan will be implemented and adjustments made where necessary.

15.118 The design of the Development has incorporated significant mitigation measures to reduce any potential impacts on protected species and habitats.

15.119 Maintaining dark corridors along existing Site boundaries will reduce the impact the new Development has on foraging and commuting routes for bats. The enhancement of these corridors will also increase the invertebrate diversity and prey sources present in these areas.

15.120 Existing hedgerows on the Site will be retained and enhanced with layered planting, filling in gaps and creating varied structure. The bases of these hedgerows will contain shrubs and taller grassland tussocks, creating habitat for small mammals and reptiles. Additional tree planting will occur throughout the Site, in gardens, along streets and within the community open spaces and school grounds. Tree and hedgerow planting will provide nesting habitat for birds and foraging habitat for bats.

15.121 Creation of ponds and SUDs on the Site will provide habitat for a range of wildlife species including amphibians, reptiles, small mammals, birds and bats. Native aquatic species will be allowed to establish with strict management of invasive species. The ponds will be fenced off to limit public interaction and litter should be removed regularly.

15.122 The creation of enhanced habitats, with native species planting, the establishment of wildlife boxes, the creation and maintenance of connectivity around the Site, will provide optimal conditions for a range of species present on the Site and in the local area. Thus, the new planting will enhance the local carrying capacity for these species.

RESIDUAL IMPACTS

15.123 Residual impacts are finally considered taking the development, construction and operational impacts, alongside mitigation measures. The outcome of the layout of the Site and the mitigation measures employed throughout the construction and operational stages of the Development aim to remove, where possible, any residual impacts.

15.124 The mitigation measures in place should effectively negate the most significant predicted negative impacts on the Site.

Table 15.9: Residual Effects Operation

Receptor Receptor Importance	Significance before mitigation	Mitigation	Residual Impacts
Medway Estuary and Marshes SPA/SSSI/Ramsar site	Major negative	SAMMS provision, on site mitigation and off site provision. See accompanying IHRA report.	Negligible
Other statutory designated sites (LNR and SSSI)	Minor negative	Provision of off-site financial contributions Creation of on-Site open space. Educational leaflets to new home owners detailing impacts of recreational pressure on designated sites.	Indiscernible
Nearby Local Wildlife Sites	Minor negative	Provision of off-site financial contributions Creation of on-Site open space. Educational leaflets to new home owners detailing impacts	Indiscernible

		of recreational pressure on designated sites.	
Orchard	Minor negative	Management plan for the retained/replanted orchard. Less use of pesticides to encourage more invertebrate and bird life. Restrict usage and entrance through fencing. Higher quality habitat than the commercial orchard.	Minor positive
Semi-improved grassland	Negligible	Enhancement of retained grassland habitat to diversify sward. More sensitive management scheme, with annual cut late summer following flowering species.	Minor positive
Hedgerows and scattered trees	Negligible	Fencing off of area to prevent public access. Management plan for hedgerows. Enhancement planting, infilling, additional tree planting across the Site.	Minor positive
SUDs and Ponds	Negligible	Appropriate management of plant species. Fenced off with litter removal.	Minor positive
Foraging and commuting bats	Minor negative	Implementation of sensitive lighting scheme as detailed within bat activity survey. Creation of dark corridors along suitable habitat features such as woodland edge.	Indiscernible
Reptiles	Minor negative	On-going management during operational phase of receptor areas to create structurally diverse grassland habitat. Management of habitat features for reptiles such as log and brash piles and hibernacula and to ensure plenty of cover available for reptiles to reduce predation risk.	Indiscernible
Badger	Minor negative	Replacement orchard planting for foraging to occur on a small scale.	Indiscernible

		Creation of green corridors and open space within development site	
Breeding birds	Minor negative	Installation of nest boxes across the Site to increase nesting opportunities. Additional tree and hedgerow planting. Installation of cat resistant nest boxes such as Schwegler 2GR Nest Box. Boundary habitat to be enhanced for birds.	Minor positive

CUMULATIVE IMPACTS

15.125 A number of planning applications have been made within the local area and should be considered in combination with the application at Pump Farm (which is the largest proposed development in the area).

15.126 The most significant cumulative impact is predicted to be the indirect recreation pressure increase on the Medway Estuary and Marshes SPA/SSSI/Ramsar site. SAMMS is used to negate this pressure and help conserve the designated site and its wildlife. Local large-scale developments can be found below:

(i) MC/18/1796 – outline planning application for 202 residential dwellings, open space, landscaping, 455 car parking spaces. Ecology Solutions provided an Ecological Assessment in 2014 and an update in 2018. This found populations of common reptiles and skylarks on site.
(ii) MC/18/2827 – screening opinion for a residential/mixed use scheme of up to 975 dwellings, open space and infrastructure. Entran conducted and EIA scoping report and an EIA is considered necessary.
(iii) MC/17/1820 – 90 dwellings, several conditions and reserved matters under consideration.
(iv) MC/16/2051 – 300 new dwellings, open amenity space, infrastructure works. Several conditions currently being discharged.
(v) MC/11/2756 – 950 residential units, student accommodation, hotels, leisure and events facilities, petrol station and retail use.
(vi) MC/14/3631 - demolition of existing buildings and structures and redevelopment for a mixed development of up to 253 apartments and houses and up to 339 sq.m of Class A1 floorspace
(vii) MC/17/3687 – 121 dwellings, permission granted. Mitigation for the impact on the SPA secured through Section 106 agreement and SAMMS.
(viii) MC/18/1307 – 27 3-bedroom dwellings with access works and landscaping.
(ix) MC/18/3160 – 64 dwellings – SAMMS proposed

15.127 The consented developments are all required, as a result of the planning process, to minimise effects on ecology through mitigation measures. The granting of planning permission for these sites must have been a result of assessing potential impacts on the surrounding habitats, including designated sites, as required by law and policy. This includes assessing the impacts alone and in combination with other projects and plans within the local landscape.

15.128 The majority of individual housing developments listed above have already been granted planning permission and it is therefore anticipated that impacts on ecology and local designated sites have been considered and deemed not significant.

SUMMARY

15.129 The Site lies within the 5km buffer zone of the Medway Estuary and Marshes SPA/SSSI/Ramsar site. The Site lies within 2km of a number of other statutory LNRs and SSSIs and LWs.

15.130 The separate IHRA considers all of the potential significant effects that could arise from the Proposed Development in respect to European and internationally designated sites. Through avoidance and mitigation measures, Ecology Solutions conclude that the Development would not result in any adverse effects on the integrity on any European/international designated sites (in view of their conservation objectives), when the Development is considered alone or in combination with other plans or projects.

15.131 Similar recreational impacts are also predicted on off-site habitats, such the local wildlife sites and nature reserves, including Berengrave Chalk Pit. Off-site financial contributions to their management are considered a suitable method of compensation. This would usually be agreed through a s106.

15.132 On-site open space is proposed, along with footpaths around the Site for use by the public to help reduce the impact on other designated sites. It is expected that long term management plans will be sufficient in ensuring the maintenance of the suitability and functionality of these open spaces.

15.133 The Site is currently dominated by commercial orchard, semi-improved grassland and hedgerows with scattered trees. The habitats were considered to be of low-ecological value and species-poor whilst under the high-level management of the commercial operation. The loss of these habitats is therefore not considered to be significant in terms of ecology.

15.134 The Proposed Development will result in loss of the entire commercial orchard on the Site, along with large areas of the semi-improved grassland and some internal hedgerows and scattered trees. The loss of the habitats on-site is not considered to result in impacts above site level and is considered to be of negligible significance.

15.135 The Proposed Development will see a small area of community orchard replanted, along with areas of grassland, SUDs, ponds and internal hedgerows and street trees created within it. This will see significant improvements in the biodiversity value of the Site, through a varied planting structure, increased species diversity and different management scheme. The Proposed Development must include green corridors around and through the Site (linked to street tree planting, swales and ponds) and ensure 'dark' corridors are developed as part of the scheme. Overall there is considered to be a positive residual impact as a result of the Development.

15.136 The Site has been subjected to numerous protected species surveys including bats, badgers, reptiles, breeding birds and great crested newts.

15.137 The Site contains a reptile population of site level importance, with the suitable habitat on the Site being predominantly at the edges, along the bases of the hedgerows adjacent to the railway line. Impacts of minor significance are identified to the reptile population on the Site, which are to be mitigated through translocation and habitat removal in stages, and retention of suitable habitat along the edges. No significant residual impacts are considered likely to reptiles as a result.

15.138 The Site is in use by badgers as foraging habitat. The mammal holes on the Site are not currently considered to host a sett, however monitoring will be on-going. The loss of the

foraging habitat is considered to be indiscernible as the badgers only use it at certain times of year.

15.139 A number of bird species are situated within the Site boundary, including some birds of conservation concern. Birds are only found within the Site boundary hedgerows and scattered trees due to the commercial nature of the orchards. These habitats are largely to be retained supplemented by additional planting. Timing of works, post development planting and habitat management and provision of new nest boxes will result in a positive impact.

15.140 Low numbers of bats have been found to use the Site boundaries and treeline along the footpath. The proposals have potential to result in negative impacts to foraging and commuting bats on-site, mainly as a result of loss of small areas of habitat and through indirect light pollution. These impacts will be mitigated by new habitat creation and the implementation of a sensitive lighting scheme. No residual impacts are predicted to foraging and commuting bats as a result.

15.141 Some minor operational impacts are likely as a result of the increased local population and provision of public access to the retained habitats on-site. It is considered these would largely be off-set by the implementation of habitat management on the Site and provision of educational leaflets to new home owners.

Table 15.10: Summary Table

Description of Likely Significant Effects	Significance	Effects					Description of Mitigation	Description of Residual Effects	Significance	Residual Effects				
		B/A	P/T	D/I	ST/M/ LT	L/R/N				B/A	P/T	D/I	ST/M/LT	L/R/N
Demolition and Construction Phase														
Medway Estuary and Marshes SPA/SSSI/Ramsar	Negligible	A	T	I	M	N	See separate CEMP and section 15.115-117	See separate CEMP	Negligible	A	T	I	M	N
Other statutory sites	Minor adverse	A	T	I	ST	R	See separate CEMP and section 15.115-117	See separate CEMP	Negligible	A	T	I	M	R
Nearby LWS and LNR	Minor adverse	A	T	I	ST	L	See separate CEMP and section 15.115-117	See separate CEMP	Negligible	A	T	I	M	L
Commercial Orchard (as an ecological habitat there is no value)	Negligible	A	P	D	LT	L	Replanting smaller area of orchard of better-quality habitat.	Permanent net loss of this habitat	Negligible	A	P	D	LT	L
Semi-improved grassland	Minor adverse	A	P	D	ST	L	Replacement of grassland areas sown with species-rich seed mix	Permanent net loss of this habitat	Minor adverse	A	P	D	LT	L
Hedgerows and scattered trees	Negligible	A	T	D	ST	L	Replacement and additional tree planting across the site	Enhancement planting and infilling with additional tree planting across the site	Negligible	A	T	D	LT	L

Sustainable Drainage Systems	Nil	B	P	D	LT	L	New SUDs and ponds to be created and managed within the site.	Permanent new features under management plan.	Negligible	B	P	D	LT	L
Foraging and commuting bats	Minor adverse	A	P	D	LT	L	See 15.101-104	None	Negligible	A	T	D	ST	L
Reptiles	Minor adverse	A	T	D	ST	L	See 15.115-118	None	Negligible	A	T	D	ST	L
Badgers	Minor adverse	A	T	D	ST	L	See Technical Appendix 15.3	None	Negligible	A	T	D	ST	L
Breeding Birds	Minor adverse	A	T	D	ST	L	See Technical Appendix 15.4	None	Negligible	A	T	D	ST	L
Operational Phase														
Medway Estuary and Marshes SPA/SSSI/Ramsar	Major adverse - Significant	A	P	I	LT	N	SAMMS, on site recreation and off site provision See 15.116	Recreational Pressure	Negligible	A	P	I	LT	N
Other statutory sites	Minor adverse	A	P	I	LT	R	See 15.116	Recreational Pressure	Indiscernible	A	P	I	LT	R
Nearby LWS and LNR	Minor adverse	A	P	I	LT	L	See 15.118	Recreational Pressure	Indiscernible	A	P	I	LT	L
Orchard (non commercial)	Minor adverse	A	P	D	LT	L	Replanting smaller area of orchard of better-quality habitat.	Creation of new non commercial orchard of higher ecological value	Minor beneficial	B	P	D	LT	L
Semi-improved grassland	Negligible	A	P	D	LT	L	Replacement of grassland areas sown with species-rich seed mix	Net loss of this habitat	Minor beneficial	B	P	D	LT	L

Hedgerows and scattered trees	Negligible	A	P	D	LT	L	See 15.122 Replacement and additional tree planting across the site.	Enhancement tree and hedgerow planting	Minor beneficial	B	P	D	LT	L
Sustainable Drainage Systems and Ponds	Negligible	A	P	D	LT	L	See 15.119 New SUDs and ponds to be created and managed within the site.	Permanent new features under management plan.	Minor beneficial	B	P	D	LT	L
Foraging and commuting bats	Minor adverse	A	P	D	LT	L	See 15.119 -122 See Technical Appendix 15.2	None Better quality foraging habitat. Dark corridors.	Indiscernible	B	P	D	LT	L
Reptiles	Minor adverse	A	P	I	LT	L	See Technical Appendix 15.5	None Better grassland habitats in receptor area.	Indiscernible	B	P	D	LT	L
Badgers	Minor adverse	A	P	D	LT	L	See Technical Appendix 15.3	Net loss of foraging habitat.	Indiscernible	A	P	D	LT	L
Breeding Birds	Minor adverse	A	P	I	LT	L	See Technical Appendix 15.4	Increase in nesting habitat.	Minor beneficial	B	P	D	LT	L

(Beneficial or Adverse) (B/A), (Permanent or Temporary) (P/T), (Direct or Indirect) (D/I), (Short Term, Medium, Long Term) (ST, M, LT), (Local, Regional, National) (L, R, N)

16 CUMULATIVE EFFECTS

16.1 This chapter assesses the cumulative effects of the scheme arising from the construction and operation of the Proposed Development. Cumulative effects result from the combined impacts of multiple developments as well as multiple in-scheme impacts, for example, combined landscape and ecology impacts on the same sensitive receptor. The impacts from a single development or a single environmental impact may not be significant on their own but when combined with other developments or impacts these effects could become significant.

16.2 There are several definitions of cumulative effects depending on the context in which the term is applied. However, generally, cumulative effects can be defined as 'impacts that result from the incremental changes caused by other past, present and reasonably foreseeable future actions together with the project' (Hyder 1999, Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions) (ref 16.1).

16.3 The guidelines also define impact interactions as "The reactions between impacts whether between the impacts of just one project or between the impacts of other projects in the area."

16.4 Cumulative Effects Assessment (CEA) is a systematic procedure for identifying and evaluating the significance of effects from multiple activities and developments. The purpose of CEA at project level is to consider the incremental contribution of any impacts arising from the activities associated with the development of the proposed scheme which is the focus of the ES, together with impacts from any other significant activities that may be taking place in the vicinity.

STUDY AREA AND BASELINE CONDITIONS

16.5 The study area, and thus receptors, for the assessment of cumulative effects has been informed by the study areas of the specialist environmental assessments – primarily the transport assessment as this had the largest study area, and hence the largest zone of influence of the scheme.

16.6 Baseline conditions are described in the relevant specialist environmental chapters of this ES. Paragraph 2.32 and **Table 2.6** of this ES identify the committed developments which were considered as part of the cumulative effects assessment. Table 2.6 is included in this chapter as **Table 16.1** below for ease of reference. These have been identified by the Consultant Team. No further advice or site suggestions have been forth coming from MC in this regard.

Table 16.1: Cumulative Development Sites

Site Name	Description of Development	Status
Land at Station Road, Rainham	Development of 90 dwellings	Permitted
Land North of Moor Street, Rainham	Development of 190 dwellings	Refused, but identified on the MC housing supply in the SHLAA
Land at Otterham, Quay Lane, Rainham	Development of 300 Dwellings	Permitted
Berengrave Nursery, Rainham	Development of 121 dwellings	Permitted
Land south of Lower Rainham Road, Rainham	Development of 202 dwellings	Undetermined, but also within MC housing supply in SHLAA

METHODOLOGY

16.7 The EIA Regulations require an environmental assessment to identify the potential for, and where present, assess the cumulative effects of a project. Cumulative effects can also be considered as effects resulting from incremental changes caused by other past, present or reasonably foreseeable actions together with the scheme. 'Reasonably foreseeable' is interpreted to include other projects that are 'committed'. These should include (but not necessarily be limited to) development projects with valid planning permissions as granted by the Local Planning Authority, and for which formal EIA is a requirement or for which non-statutory environmental impact assessment has been undertaken, but the projects have not been constructed.

16.8 Cumulative effects are the result of multiple actions on receptors or resources. There are principally two types of cumulative effect:

(i) Type 1 – Where different environmental topic impacts are acting on one receptor, as a result of the scheme; and

(ii) Type 2 – Where environmental impacts are acting on one receptor, but are the result of multiple projects in combination (including the scheme being assessed).

16.9 The methodologies for determining the potential effects of the proposed scheme are detailed in the specialist chapters of this report. The cumulative impacts assessment has focused on effects that were significant, therefore only receptors experiencing moderate or major effects were included in the assessment.

16.10 When considering type 2 cumulative effects, the receptors experiencing effects of moderate or major significance were assessed to understand how they would be affected by other proposed development projects. A two stage approach initially considered whether the receptors affected by the proposed scheme would be affected by other development projects. Following this, the second stage identified the significance of the cumulative impacts.

16.11 The significance of cumulative effects has been determined using the criteria shown in **Table 16.2** below, which is taken from DMRB Volume 11, Section 2, Part 5 (ref 16.2).

Table 16.2 Determining Significance of Cumulative Effect

Significance	Effect
Severe	Effects that the decision-maker must take into account as the receptor/resource is irretrievably compromised.
Major	Effects that may become key decision-making issues.
Moderate	Effects that are unlikely to become issues on whether the project design should be selected, but where future work may be needed to improve on current performance.
Minor	Effects that are locally significant.
Not Significant	Effects that are beyond the current forecasting ability or are within the ability of the resource to absorb such change.

DESIGN AND MITIGATION

16.12 Mitigation measures are proposed in the individual specialist environmental chapters of this report and no further mitigation measures have been proposed for the cumulative impacts.

MAGNITUDE AND IDENTIFICATION OF IMPACTS

Type 1 Cumulative Impacts

16.13 The specialist topic chapters (chapters 7-15) have identified major/moderate significant impacts of the Proposed Development. These are summarised in **Table 16.3** below.

Table 16.3: Major/Moderate Impacts of The Proposed Development

TOPIC CHAPTER	RECEPTOR	CONSTRUCTION		OPERATION	
		PRIOR TO MITIGATION	RESIDUAL	PRIOR TO MITIGATION (embedded in Landscape/Visual Context)	RESIDUAL (15 years growth in landscape context)
Society, Population, Economy	Provision of housing/housing supply			Moderate Beneficial	Moderate Beneficial
Archaeology & Cultural Heritage	Buried Archaeology	Major Adverse	Moderate adverse		
	Lower Rainham Conservation Area	Moderate Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse
Landscape Receptors	Lower Rainham and Lower Twydall Fruit Belt LLCA	Moderate/Major Adverse	-	Moderate Adverse	Moderate Adverse
	Site Area and Site Features	Major Adverse (localised)	-	Major Adverse (localised)	Moderate Adverse
Visual Receptors	Users of South of Motney Hill	Moderate Adverse	-		
	Users of Horrid Hill Users of Lower Bloors Lane	Moderate Adverse Moderate Adverse	-	Moderate Adverse	
	Users of Lower Twydall Lane	Moderate Adverse			
	Users of Bridleway GB6a	Moderate Adverse			Moderate Beneficial
	Users of Pump Lane	Major Adverse (localised)		Moderate Adverse	

	Residents of properties in Twydall south of the Railway	Moderate/Major Adverse (localised)		Moderate Adverse	
	Residents of properties on Pump Lane	Major Adverse (localised)		Moderate/Major Adverse (localised)	Moderate Adverse
	Residents of properties of Lower Rainham adjacent to and overlooking the site	Moderate Adverse			
Ecology & Conservation	RAMSAR – from recreational pressure			Major Adverse	Negligible
Agricultural Land	BMV land	Major Adverse	Major Adverse		
	Horticultural Business	Major Adverse	Moderate Adverse		

16.14 Potential inter-related effects arise between

(i) Agricultural land, landscape and heritage during construction – in the context of the loss of the existing horticultural landuse which in turn affects the existing very localised landscape character of the Site and the setting of Lower Rainham Conservation Area. These cumulative effects are assessed as being of **minor adverse** significance.

(ii) Landscape and heritage operational and residual - in the context of the very localised landscape character of the Site and the setting of Lower Rainham Conservation Area. These cumulative effects are again assessed as being of **minor adverse** significance.

Type 2 Cumulative Impacts

16.15 **Table 16.1** identifies the committed developments already incorporated into the ES cumulative assessment considerations. Table 16.3 identifies the major/moderate significant impacts of the development on identified receptors. The potential for the other planned or committed developments within the study area to affect those sensitive receptors has been considered.

16.16 There are not considered to be any significant cumulative construction or residual effects. This is principally because the timing of the construction of all of the sites is unlikely to coincide given that they all have planning permission or have been built out, with exception of the Proposed Development. In any event, it would be common practice for all development sites to operate under a Construction Environmental Management Plan.

16.17 Cumulative operational effects are considered to occur as follows -

(i) Recreational pressure on the RAMSAR sites,

(ii) Squeezing of or loss of biodiversity resource,

(iii) Pressure on health/community/educational facilities, and

(iv) Additional provision of housing /maintaining a supply of housing.

16.18 The following cumulative operational residual effects are considered to occur –

(i) Provision of housing/housing supply across the District would increase as a result of the development of the identified sites – this is a cumulative effect of **moderate positive** significance.

16.19 In respect of the above conclusion, it is assumed that any mitigation proposed by the developers of these committed sites is fully executed and is successful – for example, in respect of recreational impacts on the RAMSAR site and the biodiversity resource in general, there would be overarching commitments to maintaining and enhancing biodiversity, as well as financial compensation through SAMMS or onsite recreational improvements that would be applicable to each site.

SUMMARY

16.20 This CEA has examined the impacts of the scheme in combination and /or with other identified developments. Sensitive receptors and impacts identified through the EIA process for the Proposed Development have been considered and the nature and significance of any potential cumulative impacts likely to arise on these receptors have been examined and found to be of limited occurrence in respect of both Type 1 (both minor adverse significance) and Type 2 (moderate positive significance).

17 OVERVIEW

17.1 An overview of construction and operational effects is set out in **Table 17.1** below.

Table 17.1: Summary of Effects

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
CONSTRUCTION					
Agricultural Land	Loss of agricultural land	Major Adverse (significant)	N/A	Significant	Major adverse (significant)
	Effect on Soil Resource	Moderate adverse	Site Waste Management Plan; a Soil Management Plan or similar	Slight	Slight adverse
	Impact on Agricultural Business	Major/ Moderate adverse (significant)	Consolidation of business plan		Moderate adverse
Economy, Population and Society	Demographics: population count and demographic stricture	Nil	N/A	N/A	Nil
	Economy and Employment	Minor Beneficial	N/A	N/A	Minor Beneficial
	Wealth and Deprivation	Negligible	N/A	N/A	Negligible
	Housing (house prices, tenure, composition)	Nil	N/A	N/A	Nil
	Education and Training	Negligible	N/A	N/A	Negligible
	Health, Community and Leisure	Nil	N/A	N/A	Nil
	Shopping	Minor Beneficial	N/A	N/A	Minor Beneficial
Water Resources	Fluvial Flood Risk	Negligible (not significant)		N/A	N/A
	Water Quality – surface water	Slight adverse (not significant)	CEMP (embedded)	N/A	N/A

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Ground Water	Negligible (not significant)	CEMP (embedded)	N/A	N/A
	Foul Drainage	Negligible (not significant)	CEMP (embedded)	N/A	N/A
	Water Supply	Negligible (not significant)	CEMP and NMP (embedded)	N/A	N/A
Ground Conditions and Contamination	Human Health (Construction Workers)	Negligible	Standard operational health & safety. Embedded mitigation assumed site remediated if necessary prior to construction	N/A	Negligible
	Controlled Waters/ground water	Negligible	As above.	N/A	Negligible
	Ecological systems	Negligible. Slight adverse - RAMSAR	As above	N/A	Negligible
	Ground Stability Landslide	Slight adverse	As above	N/A	Negligible
Transport	Community Severance	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
	Driver and Pedestrian Delay	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
	Accidents and Safety	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
	Fear and Intimidation	Negligible	Construction Traffic Management Plan/CEMP	N/A	Negligible
Ecology and Conservation	Medway Estuary and Marshes SPA/SSSI/Ramsar -Contaminated run-off -Dust -Air quality -Water abstraction	Negligible	CEMP and refer to paras 15.115-117 of ES		Negligible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Non-statutory sites – LNR, LWS -Dust -Contaminated run-off -Noise	Minor adverse	CEMP and refer to para 15.115-117 of ES		Negligible
	Commercial orchard -Loss of habitat, but it is of little ecological value	Negligible	Replanting smaller area of orchard of quality better habitat	Permanent net loss of this habitat	Negligible
	Hedgerows/scattered trees -Loss of habitat -Damage to retained habitat -Dust	Negligible	Majority of hedgerows retained, for losses existing gaps or least sensitive location chosen, retained habitats protected, new hedge planting and sensitive management implemented. CEMP will prevent dust impacts.		Negligible
	Semi-improved grassland -Loss of habitat -Damage to retained habitat	Minor adverse	Replacement grassland with species rich mix	Permanent loss of this habitat	Minor adverse
	Foraging and commuting bats	Minor adverse	Refer to ES paras 15.101-104		Negligible
	Reptiles	Minor adverse	Refer to ES paras 15.115-118		Negligible
	Breeding Birds	Minor adverse	Refer to ES Technical Appendix 15.4		Negligible
	Badgers	Minor adverse	Refer to ES Technical Appendix 15.3		Negligible
Landscape	Lower Rainham/Lower Twydall Fruit Belt LCA	Moderate/ Major Adverse			
	(Lower Rainham farmland LCA)	Minor adverse			
	Medway Shoreline & Marshes, Riverside Country Park LLCA	Minor adverse			
	Site Features	Major adverse (localised)			

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Users of Northern Shore	Minor adverse			
	Users south Motney Hill	Moderate adverse			
	Users north of Lower Rainham	Minor adverse			
	Users of Lower Rainham Road	Moderate/ Minor adverse			
	Users Horrid Hill	Moderate adverse			
	Users Lower Bloor Lane	Moderate adverse			
	Users Lower Twydall Lane	Moderate adverse			
	Users of Bridleway	Moderate Adverse			
	Users of Pump Lane	Major Adverse (localised)			
	Users of trains passing Site	Minor/ Moderate adverse			
	Residents of Twydall south of railway	Moderate/ Major adverse (localised)			
	Residents on Pump Lane	Major adverse (localised)			
	Residents on Lower Bloor Lane	Minor/ Moderate adverse			
	Residents Lower Rainham	Moderate adverse			
	Residents Lower Twydall	Minor adverse			

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
Air Quality	From dust soiling	Major (substantial) (high according to IAQM guidance)	Refer to chapter 12 para 12.166 of ES		Negligible
	Human Health	Slight (low according to IAQM guidance)			Negligible
Archaeology and Heritage	Physical impact to the potential buried Site archaeology	Major adverse (significant)	Preservation by record (strip, map and sample)	The loss of the asset would be offset by knowledge gained	Moderate adverse
	Setting on designated assets – listed buildings	Minor adverse	CEMP, embedded mitigation (retention of existing planting)	As assessed	Minor adverse
	Setting of designated assets – conservation areas	Moderate adverse (Lower Rainham)	As above	As above	Moderate adverse (Lower Rainham)
		Minor adverse (Lower Twydall)			Minor adverse (Lower Twydall)
OPERATION					
Society, Population and Society	Demographics: population count and demographic stricture	Minor beneficial	N/A	N/A	Minor beneficial
	Economy and Employment	Minor Beneficial	N/A	N/A	Minor Beneficial
	Wealth and Deprivation	Nil	N/A	N/A	Nil
	Housing (house prices, tenure, composition)	Moderate Beneficial	N/A	N/A	Moderate Beneficial
	Education and Training	Negligible	Onsite primary, secondary financial contribution	N/A	Negligible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Health/Community Facilities	Minor adverse	Financial contribution	N/A	Negligible
	Shopping Facilities/town centre health	Minor Beneficial	N/A	N/A	Minor Beneficial
Water Resources	Fluvial Flood Risk	Negligible (not significant)	N/A	N/A	N/A
	Surface water	Negligible (not significant)	CEMP	N/A	N/A
	Waste water drainage /Foul drainage	Negligible (not significant)	N/A	N/A	N/A
	Water Supply	Negligible (not significant)	N/A	N/A	N/A
	Groundwater	Negligible (not significant)	N/A	N/A	N/A
Ground Conditions	Human Health – site users	Slight adverse	Embedded through decontamination if necessary prior to construction.	N/A	Negligible
	Ground water - contamination	Negligible	As above	N/A	Negligible
	Ecological systems	Slight adverse	As above	N/A	Negligible
	Damage to built environment - contamination	Negligible	As Above	N/A	Negligible
	Site Users – land stability	Moderate adverse	As above	N/A	Slight adverse
Transportation	Community Severance	Negligible	Framework Travel Plan as standard	N/A	Negligible
	Driver and Pedestrian Delay	Negligible	Framework Travel Plan as standard	N/A	Negligible
	Accidents and Safety	Negligible	Framework Travel Plan as standard	N/A	Negligible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Fear and Intimidation	Negligible	Framework Travel Plan as standard	N/A	Negligible
Ecology & Conservation	Statutory Sites – Medway Estuary and Marshes SPA/SSSI/Ramsar -recreational pressures	Major adverse (significant)	SAMMS, on-site recreation and off site provision		Negligible
	Other statutory sites - -recreational pressure	Minor adverse	Refer to paras 15.116 of ES		Indiscernible
	Orchard (non commercial, i.e. new planting as part of scheme of higher ecological value)	Minor adverse	Replanting to create betterment of habitat		Minor beneficial
	Hedgerows, scattered trees	Negligible	Refer to ES paras 15.122	Replacement and additional planting	Minor beneficial
	Semi-improved grassland	Negligible	Areas replanted and managed to enhance habitat, with more detail provided in a LEMP.		Minor beneficial
	Newly created Ponds and Suds	Negligible	Creation of new habitat as part of Development. More detail provided in a LEMP.	Overall habitat enhancement post-development.	Minor beneficial
	Foraging and commuting bats	Minor adverse	Refer to ES para 15.119-122. Management implemented to enhance habitat, with more detail provided in a LEMP.	Overall habitat enhancement post-development.	Indiscernible
	Reptiles	Minor adverse	Refer to ES Technical Appendix 15.5. Sensitive management implemented to enhance habitat, with more detail provided in a LEMP.	Overall habitat enhancement post-development.	Indiscernible
	Badgers – net loss of foraging habitat	Minor adverse	Refer to ES Technical Appendix 15.3.		Indiscernible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Breeding Birds – increase in nesting habitat	Minor adverse	Refer to ES Technical Appendix 15.4		Minor beneficial
Landscape	Lower Rainham/Lower Twydall Fruit Belt LCA	Moderate adverse	Range of embedded landscape mitigation measures, including landscape buffers, tree planting and implementation of new areas of community orchards and village green.		Moderate adverse
	(Lower Rainham farmland LCA)	Minor adverse	Embedded landscape mitigation measures.		Minor adverse
	Medway Shoreline & Marshes, Riverside Country Park LLCA	Minor adverse	As above		Minor adverse
	Site Features	Major adverse (localised)	As above		Moderate adverse
	Users of Northern Shore	Minor adverse	Landscape buffer planting and trees throughout the development		Neutral
	Users south Motney Hill	Moderate /Minor adverse	As above		Minor adverse
	Users north of Lower Rainham	Minor adverse	As above		Neutral
	Users of Lower Rainham Road	Minor adverse	As above		Minor adverse
	Users Horrid Hill	Moderate adverse	As above		Minor adverse

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	Users Lower Bloor Lane	Minor/ Moderate adverse	As above		Minor adverse
	Users Lower Twydall Lane	Minor adverse	As above		Minor adverse
	Users of Bridleway	Minor beneficial	As above		Minor/ Moderate Beneficial
	Users of Pump Lane	Moderate adverse	As above		Minor/moderate adverse
	Users of trains passing Site	Minor/ Moderate adverse	As above		Minor adverse
	Residents of Twydall south of railway	Moderate adverse	As above		Minor/ Moderate adverse
	Residents on Pump Lane	Moderate/ Major adverse (localised)	As above		Moderate adverse
	Residents on Lower Bloor Lane	Minor/ Moderate adverse	As above		Minor adverse
	Residents Lower Rainham	Minor/ Moderate adverse	As above		Minor adverse
	Residents Lower Twydall	Minor adverse	As above		Negligible
Air Quality	Existing sensitive receptors	Negligible	Refer to chapter 12 para 12.176 in ES	N/A	Negligible
	On Proposed residential receptors	Negligible	As above	N/A	Negligible

TOPIC	IMPACT	SIGNIFICANCE	MITIGATION	RESIDUAL IMPACT	SIGNIFICANCE
	On Ecological receptors	Unknown	Refer to para 12.176 of ES and the separate IHRA (albeit not specifically required in respect of international/European designated sites)		Negligible
Archaeology and Heritage	Indirect impact on setting of Listed buildings and conservation areas	Minor for the listed buildings.	Considerable strengthening and additional boundary planting and on site planting.	Indirect impact on setting listed buildings and conservation areas reducing over time as planting matures	Minor for listed buildings.
		Moderate adverse Lower Rainham CA			Moderate adverse Lower Rainham CA
		Minor adverse Lower Twydall CA.			Minor adverse Lower Twydall CA

CUMULATIVE EFFECTS

17.2 Chapter 16 has assessed the potential cumulative effects arising from the Proposed Development, including recommendations for mitigation where applicable.

17.3 The CEA has determined that no additional mitigation measures are necessary to address cumulative effects.

17.4 There are no predicted interactions between potential significant environmental effects that have not already been taken account of within the topic chapters in this ES.

CONCLUSIONS

17.5 The ES explains and describes in full the environmental effects likely to be associated with the Proposed Development and places the determining authority in possession of all the necessary environmental information required by both statute and policy.

17.6 This ES therefore enables a decision to be made on the accompanying planning application with adequate provision to be made for environmental mitigations, where appropriate.

ABBREVIATIONS

AAR	Average Annual Rainfall
AADT	Annual Average Daily Traffic
AAHT	Annual Average Hourly Traffic
ARCADY	Assessment of Roundabout Capacity And Delay
AoD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
ALC	Agricultural Land Classification
AQMA	Air Quality Management Area
ATC	Automatic Traffic Counters
BAP	Biodiversity Action Plan
CEMP	Construction and Environmental Management Plan
CTMP	Construction Traffic Management Plan
CIEEM	Chartered Institute for Ecology and Environmental Management
CWS	County Wildlife Site
DEFRA	Department of Environment, Food and Rural Affairs
DAS	Design and Access Statement
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EC	European Commission
EIA	Environmental impact Assessment
EPSL	Natural England European Protected Species Licence
ES	Environmental Statement
FRA	Flood Risk Assessment
GCN	Great Crested Newts
GIS	Geographical Information Systems
HDV	Heavy Duty Vehicle
HGV	Heavy Goods Vehicle
HIS	Habitat Suitability Index
IEEM	Institute of Ecology and Environmental Management
IEMA	Institute of Environmental Management and Assessment
LEMP	Landscape and Ecological Management Plan
LAQM	Local Air Quality Management

LCA	Landscape Character Area
LVIA	Landscape and Visual Impact Assessment
LNR	Local Nature Reserve
MAFF	Ministry of Agriculture, Fisheries and Food
MHCLG	Ministry of Housing, Communities & Local Government
NE	Natural England
NPPF	National Planning Policy Framework 2019
NPPG	National Planning Policy Guidance
NTS	Non-Technical Summary
ONS	Office for National Statistics
OSWI	Other sites of wildlife interest
PEA	Preliminary Ecological Appraisal
PIA	Personal Injury Accident
PICADY	Priority Intersection Capacity and Delay
PRoW	Public Right of Way
SAC	Special Area of Conservation
SAMMS	Strategic Access Management and Monitoring Strategy
SNCI	Sites Of Nature Conservation Interest
SPA	Special Protection Area
SPD	Supplementary Planning Document
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Systems
SWMP	Site Waste Management Plan
TA	Transport Assessment
FTP	Framework Travel Plan
TCPA	Town and Country Planning Act
UWS	Unconfirmed wildlife sites
WFD	Water Framework Directive
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility
m	metres
km	kilometres

REFERENCES AND GLOSSARY

CHAPTER 1

1.1 EU Directive no. 2011/92/EU

1.2 Town and Country Planning (Environmental Impact Assessment) Regulations 2017

1.3 Rapleys LLP, Supplementary Environmental Statement, March 2020

CHAPTER 2

2.1 Town and Country Planning (Environmental Impact Assessment) Regulations 201

2.2 HMSO Department of the Environment, 1995, Preparation of Environmental Statements for planning projects that require Environment Assessment: A Good Practice Guide, London

CHAPTER 4

4.1 MHCLG, 2019, National Planning Policy Framework

4.2 MHCLG National Planning Practice Guidance
https://www.gov.uk/government/collections/planning-practice-guidance

4.2 Medway Local Plan 2003

CHAPTER 5

5.1 Town and Country Planning (Environmental Impact Assessment) Regulations 2017

CHAPTER 7

7.1 MHCLG, 2019, National Planning Policy Framework

7.2 Medway Local Plan 2003

7.3 HMSO Department of the Environment, 1995, Preparation of Environmental Statements for planning projects that require Environment Assessment: A Good Practice Guide, London

7.4 Chadwick, A, 2002, 'Socioeconomic Impacts: Are now still the poor relations in the UK Environmental Statements', Journal of Environmental Planning and Management, Vol. 45 – (1), PP. 3-24

7.5 Morris, P. and Therival, R. (eds), (2001) Methods of Environmental Impact Assessment (2nd edition), London: Spon Press

7.6 Nomis Official Labour Market Statistics: 2011 Census Data

7.7 Office for National Statistics website https://www.ons.gov.uk/

7.8 Population 2017 July 2018 – Medway Council

7.9 HM Land Registry Open Data website http://landregistry.data.gov.uk/

7.10 North Kent Strategic Housing and Economic Needs Assessment, November 2015

7.11 The website of Medway Council

7.12 Medway Council Infrastructure position Statement

7.13 The Department for Education's 'Get information about schools' (GIAS) website https://get-information-schools.service.gov.uk/

7.14 The MHCLG website https://www.gov.uk/government/organisations/ministry-of-housing-communities-and-local-government

Google search and maps

7.15 North Kent SHENA Retail and Commercial Leisure Assessment, November 2016

CHAPTER 8

8.1 Flood and Water Management Act 2010.

8.2 Water Act 2003, as amended.

8.3 Water Industry Act 1991 (as amended by the Water Act 2003).

8.4 Land Drainage Act 1991, as amended.

8.5 Water Resources Act 1991.

8.6 Environment Act 1995, as amended.

8.7 The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003.

8.8 MHCLG, Planning Practice Guidance, 2018.

8.9 MHCLG, 2019, National Planning Policy Framework .

8.10 Environment Agency, Flood risk assessments: climate change allowances, February 2017.

8.11 Met Office, UK Climate Projections, November 2018.

8.12 Medway Council, Medway Local Plan, May 2003.

8.13 Mott MacDonald, Medway Strategic Flood Risk Assessment, 2006.

8.14 Medway Council, Medway Council Preliminary Flood Risk Assessment, 2011.

8.15 AECOM, Medway Council Surface Water Management Plan Final Revision, 2016.

8.16 DEFRA, Flood risk assessment for planning applications, 2017.

8.17 Environment Agency, Adapting to Climate Change: Advice to Flood & Coastal Risk Management Authorities, 2016.

8.18 Environment Agency, Approach to Groundwater Protection, 2018.

8.19 DEFRA, Non-statutory technical standards for sustainable drainage systems, 2015.

8.20 CIRIA C753, The SUDS Manual, 2015.

8.21 Institute of Hydrology, Flood estimation for small catchments, Report 124, 1994.

8.22 AECOM, Water. People. Places. A guide for master planning sustainable drainage into developments, 2013.

8.23 WRc, Sewers for Adoption 7th Edition - A Design & Construction Guide for Developer, 2012.

8.24 Gov.UK, Online flood map for planning and online surface water flood map, 2018.

8.25 Gov.UK, Online flood map for planning and online surface water flood map, 2018.

CHAPTER 9

9.1 PBA Technical Appendix 9.1 Part 1 Ground Conditions

9.2 Part 2A Environmental Protection Act 1990

9.3 Contaminated Land Statutory Guidance for England 2012

9.4 The Contaminated Land (England) Regulations 2006 (and Amendment 2012)

9.5 The Environmental Damage (Prevention and Remediation) Regulations 2015

9.6 The Environmental Permitting (England and Wales) Regulations 2016

9.7 Water Framework Directive 2003

9.8 Ground water Daughter Directive 2006

9.9 The Water Act 2003 (Commencement No. 11) Order 2012

9.10 MHGLC National Planning Policy Framework 2019

9.11 MHCLG National Planning Practice Guidance
https://www.gov.uk/government/collections/planning-practice-guidance

9.12 Medway Council Local Plan 2003

9.13 DEFRA/EA Contaminated Land Report 11 (CLR11) Model Procedures for the Management of Contaminated Land

9.14 BS5930:2015 Code of Practice for Ground Investigations

9.15 BS10175:2011 + A1:2013 Investigation into Contaminated Sites – Code of Practice

9.16 EA Guiding Principles for Land Contamination

9.17 Guidance for the Safe Development of Housing on Land Affected by Contamination

9.18 DETR Circular 2/1000 Contaminated Land: Implementation of Part 2A of Environmental Protection Act 1990

CHAPTER 10

10.1 MHGLC National Planning Policy Framework 2019

10.2 Kent County Council Local Transport Plan LTP4

10.3 Kent Design Guide

10.4 IEA Guidelines for Assessment of Road Traffic 1993

10.5 DMRB Vol II Section 2 Part 5 HA205/08 Determining Significance of Effects

CHAPTER 11

11.1 IEMAQ/Landscape Institute – Guidance for Landscape and Visual Assessment (GLVIA3) 2013

CHAPTER 12

12.1 Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

12.2 Statutory Instrument 2010, No. 1001, 'The Air Quality Standards Regulations 2010, HMSO, London

12.3 Department of the Environment, Food and Rural Affairs (2017) UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations, Detailed Plan

12.4 Secretary of State, Environment Act 1995, Part IV

12.5 Department of the Environment, Transport and the Regions (DETR, 2007) in Partnership with the Welsh Office, Scottish Office and Department of the Environment for Northern Ireland (2007). 'The Air Quality Strategy for England, Scotland, Wales, Northern Ireland' HMSO, London

12.6 http://www.unece.org/env/lrtap/WorkingGroups/wge/definitions.htm

12.7 http://eunis.eea.europa.eu/index.jsp

12.8 www.apis.ac.uk

12.9 Secretary of State, The Environment Act 1990 HMSO

12.10 Ministry of Housing, Communities and Local Government: National Planning Policy Framework (July 2018)

12.11 Medway Council (2003) Medway Local Plan

12.12 Medway Council (2016) Air Quality Planning Guidance

12.13 Department of the Environment, Food and Rural Affairs (Defra) in partnership with the Scottish Executive, The National Assembly for Wales and the Department of the Environment for Northern Ireland (2016). 'Local Air Quality Management Technical Guidance, LAQM.TG(16)'. HMSO, London

12.14 Moorcroft and Barrowcliffe et al. (2017). 'Land-use Planning & Development Control: Planning for Air Quality'. V1.2. The Institute for Air Quality Management, London

12.15 Holman et al. (2016) 'Assessment of dust from demolition and construction', IAQM, London

12.16 Planning Practice Guidance (2014) 'Air Quality'

12.17 Air Quality Consultants (2018) 2018 Annual Status Report: Medway Council, June 2018

12.18 https://uk-air.defra.gov.uk/data/laqm-background-home

12.19 https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html

12.20 https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxNO2calc

12.21 The Highways Agency (2007) Design Manual for Roads and Bridges, Volume 11, Section 3, Part 1, HA207/07, Air Quality

12.22 Environment Agency (2006) Technical Guidance on Detailed Modelling Approach for an Appropriate Assessment for Emissions to Air, Updated Version Approved March 2014

12.23 https://www.gov.uk/guidance/air-quality-economic-analysis

12.24https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S1000244&ReportTitle=Medway%20Estuary%20and%20Marshes%20SSSI

CHAPTER 13

13.1 European Commission (2006). Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Thematic Strategy for Soil Protection [SEC(2006)620] [SEC(2006)1165]. Brussels: Commission of the European Communities

13.2 CLG (2018). National Planning Policy Framework

13.3 Natural England (2012). Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land, Second Edition 19th December 2012

13.4 https://www.medway.gov.uk/downloads/download/22/medway_local_plan_2003

13.5 https://www.medway.gov.uk/downloads/download/289/development_strategy

13.6 Ministry of Agriculture, Fisheries and Food (1988). Agricultural Land Classification of England and Wales - Revised guidelines and criteria for the grading of the quality of agricultural land. London: Defra Publications

13.7 Department for Environment, Food and Rural Affairs (2009), Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.

13.8 www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html

13.9 Cranfield University (2001). The National Soil Map of England and Wales 1:250,000 scale. Cranfield University: National Soil Resources Institute

CHAPTER 14

14.1 DCLG (2018). National Planning Policy Framework. Department for Communities and Local Government.

14.2 English Heritage Guidance (2014) The setting of the Heritage Assets

14.3 Historic England, 2008: Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment.

14.4 Historic England, 2015. Historic Environment Good Practice Advice in Planning. Note 3: The Setting of Heritage Assets.

14.5 Medway District Council Local Plan

14.6 Medway Strategic Land Availability Assessment 2018

14.7 Chartered Institute for Archaeologists, 2014. *Standards and guidance for historic environment desk-based assessment*.

14.8 Whittaker, K. (1990) Report on the archaeological potential of Lower Twydall Chalk Pit and the archaeological implications for the plans proposed by Kent Reclamation Ltd. Unpublished report.

CHAPTER 15

15.1 Anon (1981 & subsequent amendments). *Wildlife and Countryside Act*. HMSO, London.

15.2 Anon (1994). *The Conservation (Natural Habitats &c) Regulations*. HMSO, London.

15.3 Anon (2012) *National Planning Policy Framework*. Communities and Local Government, London

15.4 Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F 2014. Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. Freshwater Habitats Trust, Oxford.

15.5 Balmer, D. *et al*. 2013. *Bird Atlas 2007-11: The Breeding and Wintering Birds of Britain and Ireland*. British Trust for Ornithology.

15.6 Bat Conservation Trust (2008) *Bats and lighting in the UK*, version 2 January 200B, http://www.bats.org.uk/publications_download.php/243/BATSANDLIGHTINGINTHEUKJan0B.pdf

15.7 Bat Conservation Trust (2016). *Bat Surveys – Good Practice Guidelines* (3rd Edition). Bat Conservation Trust, London.

15.8 Cresswell, P, Harris, S & Jefferies, D J (1990). *The history, distribution, status and habitat requirements of the badger in Britain*. Nature Conservancy Council, Peterborough.

15.9 English Nature (1999) *Habitats Regulations guidance note 3: the determination of likely significant effect under the Conservation (Natural Habitats &c) Regulations 1994.*

15.10 English Nature (1997) *Habitats Regulations guidance note 1: The Appropriate Assessment (Regulation 48) The Conservation (Natural Habitats &c) Regulations, 1994*

15.11 Froglife (1999) *Advice Sheet 10 - Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife, Peterborough.

15.12 Gent, T and Gibson, S (1998) *Herpetofauna Workers' Manual*. JNCC, Peterborough

15.13 Harrison, C., Burgess, J., Millward, A. and Dawe, G. (1995) *Accessible natural greenspace in towns and cities: A review of appropriate size and distance criteria*. English Nature Research Report 153.

15.14 CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland*, Institute of Ecology and Environmental Management, http://www.ieem.net/ecia

15.15 JNCC (2007) *Handbook for Phase 1 habitat survey - a technique for environmental audit*, Joint Nature Conservation Committee

15.16 ODPM (2005) *A Practical Guide to the Strategic Environmental Assessment Directive*

15.17 Wray S, Wells D, Long E, Mitchell-Jones T *(*2010*) Valuing Bats in Ecological Impact Assessment*, IEEM In-Practice p 23-25

15.18 CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

15.19 Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10(4), 143-155.

CHAPTER 16

16.1 (Hyder 1999, Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions)

16.2 DMRB Volume 11, Section 2, Part 5

Appendix 6

Please see attached documents

Appendix 7

INDICATIVE RECREATION PLAN

Figured dimensions only are to be used. All dimensions to be checked onsite. Differences between drawings and between drawings and specification or bills of quantities to be reported to the PRC Group.

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Revisions:		Drawn / Chkd:	Date:
A	Issued for Planning.	TG/GS	17.05.2019
B	General update.	TG/GS	09.09.2020

LEGEND

- Strategic landscape
- Balancing swales
- Dog walk route 01
- Dog walk route 02
- Dog walk route 03
- Dog walk route 04
- Fenced off-lead area 01
- Fenced off-lead area 02
- Fenced off-lead area 03
- Fenced off-lead area 04
- Fenced off-lead area 05
- Fenced off-lead area 06
- Play - indicative location

Dog walk 01
Distance: 1.9km

Dog walk 02
Distance: 1.4km

Dog walk 03
Distance: 1.5km

Dog walk 04
Distance: 1.2km

Off-lead area

Off-lead area

Off-lead area

Off-lead area

01

02

03

04

05

06

INDICATIVE RECREATION PLAN

N

0 50 100 150 200m

Scale 1:2000

G:\11047 Lower Rainham Masterplan\2_Planning\Drg Sheets\11047 PL 008B - Indicative Recreation Plan.dwg

Client:
A. C . GOATHAM & SON

Project:
PUMP FARM & BLOOR FARM
LOWER RAINHAM, KENT

Drawing Title:
Indicative Recreation Plan

Scale @ A0:	Checked by :	Date :
1:2000	GS	May 2019

Job No:	Stage :	Drawing No :	Rev :
11047	PL	008	B

Issue Status:
☐ Construction ☐ Preliminary
☐ Information ☐ Approval
☐ Tender

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Appendix 8

PLANNING FOR GROWTH ON THE HOO PENINSULA REPRESENTATION – RAPLEYS LLP

"PLANNING FOR GROWTH" – HOO PENINSULA CONSULTATION DRAFT

1 INTRODUCTION

1.1 Rapleys LLP is instructed on behalf of AC Goatham & Sons to submit representations to Medway Council, as LPA, in relation to the consultation draft, entitled "*Planning for Growth*" on the Hoo Peninsula (**"Draft Document"**). The intended status of any adopted version of this document is presently unclear. For present purposes it is treated as an intended draft/supplementary planning document or guidance.

1.2 These representations follow on from earlier representations prepared by Rapleys LLP in respect of the Regulation 18 consultation (June 2018).

1.3 These representations include consideration of the following:

- Present stage of local plan-making process and its onward scheduling
- Housing Infrastructure Fund
- LPA's overarching vision for development of the Hoo Peninsula
- Constraints to development of the Hoo Peninsula.
    - Transport capacity
    - Pedestrian and cycle provision
    - Air quality and climate change implications
    - SSSI and landscape implications
    - Green infrastructure provision
    - Sustainability
- Review of housing delivery and supply, encompassing SLAA 2019

2 LOCAL PLAN-MAKING PROCESS

2.1 Following regulation 18 consultation in Summer 2018, the LPA is yet to publish a draft Local Plan for regulation 19 consultation. The timescale for doing so has progressively slowed considerably. It is now very unlikely that the LPA will meet even their revised target (Local Development Scheme December 2019) of "*Summer 2020*". The consultation document now broadly advises publication "*later this year*". This is very unlikely to prove achievable.

2.2 Any adoption of a (sound) local plan even by December 2021, is now almost certainly unachievable.

3 OVERARCHING VISION FOR DEVELOPMENT ON THE HOO PENINSULA

3.1 Building on the regulation 18 consultation document (Development Strategy 2018), the Draft Document seems to continue to pursue 'Scenario 3' within the context of concentrated housing delivery of the Hoo Peninsula. This is despite the very recent approval by the Council of a sizeable housing scheme (202 units) at Land South of Lower Rainham Road.

3.2 The Draft Document is notably very limited in detail. It appears instead to adopt the format of an uninformed, very high-level 'vision' document. It does not incorporate any considered assessment but merely outlines the one proposed option: for the provision of up to 12,000 homes on Hoo Peninsula. Disappointingly, no consideration is given to any alternatives for the delivery of housing.

3.3 Quite aside from the demerits of concentrating housing development, of such a scale, on Hoo Peninsula, this represents a fundamentally flawed approach since the growth strategy will ultimately prove dependent on very significant infrastructure delivery and upgrading – of which, again, conspicuously no detail has been

provided by the Council. If any one of the significant and interdependent infrastructure projects (whether road or rail, etc.) were not to come forward, then consequently, the level of development provided would inevitably be frustrated – and in significant part.

3.4 It is unsatisfactory that a proposal for what amounts to a very significant level of development is so precariously dependent upon doubtful and vaguely expressed infrastructure schemes, the delivery of which remains without evidence and highly questionable.

3.5 In addition to infrastructure, various constraining environmental designations (including the protection of Hoo Peninsula's habitats, etc.) require appropriate protection and management. Other protections are afforded to various local landscapes. No detailed consideration is given within the Draft Document to the impact on protected habitats, features and landscapes, of a strategy for delivering c.12,000 homes. It presently appears doubtful that such constraints can sustainably be met.

3.6 Consistently, our previous representations fundamentally questioned whether the Hoo Peninsula is, first, the most sustainable location for significant housing development and second, if it is a sustainable location in principle, whether development of such a scale is sustainable and indeed deliverable. The Draft Document regrettably does nothing to alleviate these basic concerns.

3.7 We note that whilst the Draft Document incorporates a list of headline opportunities that provide for a (very high level) illustration of the potential of Hoo Peninsula sites, these fail to address the severe constraints associated with the envisaged level of development of the Hoo Peninsula. These do not extend into any meaningful discussion of sustainability or deliverability. The opportunities outlined are just three generic statements which purport (poorly) to address obvious concerns with development on the Hoo Peninsula. This includes: new inward investment in the local economy associated with large scale residential development; improvements to the road network and public transport, yet no assessment of how additional movements will be managed, is given; and, an improvement in the 'general quality of life', which may be true of many locations where up to 12,000 additional homes are proposed to be built. Overall, the insignificant opportunities do not begin to outweigh the major constraints noted within these representations and which are indeed recognised by the Council.

3.8 In addition, an alternative concern arises even were such large-scale development even sustainable in principle (which is strongly doubted). Should development fall materially below the level projected in the Draft Document, due (say) to lack of critical mass, then it would follow that many of the improvement opportunities outlined would also fall away. Such improvements are presently suggested to include an aspirational re-opening of the train station at Hoo and revival of some stopping passenger train services, in addition to road network improvements, and bus service and cycle route enhancements.

3.9 This concern is substantiated by the Council's approval on 28 April 2020 for 202 units on the unallocated site at Land South of Lower Rainham Road (MC/18/1796). The Council here acknowledges that Scenario 3 and the Hoo Peninsula cannot suitably deliver the quantum of housing it claims.

4 HIF

4.1 The Draft Document is heavily reliant on HIF. There is clear acknowledgment that much of any development of the Hoo Peninsula will only prove possible in conjunction with HIF funded infrastructure and derivative investment. HIF was awarded in November 2019. However, the specific triggers for and any phasing etc. remains unknown.

4.2 To our knowledge there remains no published information detailing the content of the Council's HIF award. Three published reports to Committee provide scant information of the progression to the award:

- Cabinet Meeting of 5 February 2019;
- Council Meeting of 10 October 2019; and
- Cabinet Meeting of 7 April 2020.

4.3 Development of the Hoo Peninsula was discussed at a Committee meeting on 10 October 2019. This report was inviting additional funding to allow for work to continue in association with the HIF bid. Whilst the decision was approved, the additional work required to be undertaken to properly formulate the bid (and ultimately to direct any award) and which had been briefly mentioned, is still yet to be published.

4.4 The report had stated that the work to be completed by December 2019 (if the expenditure deadline was to be met) included the publication of an Infrastructure Delivery Plan and associated viability assessment for the Hoo Peninsula. Unsatisfactorily, there remains no evidence that this work has been meaningfully progressed, still less completed, internally. No Infrastructure Delivery Plan has been published, to date.

4.5 The 7 April 2020 Report to Cabinet failed to detail the progression/timescales of any HIF funded projects, albeit it did suggest that all HIF money must be spent by 31 March 2024. No evidence has been published by the Council projecting any infrastructure works.

4.6 In the circumstances, there is serious doubt on the ability of the Council to allocate/expend all (or even the majority part) of the HIF money awarded. This is before any scrutiny is given of the triggers for HIF expenditure. This will, in turn, have obvious implications for the delivery of all infrastructure necessary to support development of the Hoo Peninsula.

5 CONSTRAINTS TO DEVELOPMENT ON THE HOO PENINSULA

Transport Capacity

5.1 The Draft Document unsurprisingly confirms that the development of a small rural town on the Hoo Peninsula and extended employment areas will be much dependent on strengthened connections and significant transportation upgrades. Highway improvements to the existing A228 and A289, a new road and new rail passenger services are highlighted as key infrastructure projects.

5.2 A break-down of funding was outlined in a report to Committee in October 2019:

- Road investment - £86.7m
- Rail investment - £64m
- Other essential infrastructure - £14.3m

  [Professional fees - £5m]

5.3 The Council has suggested that this infrastructure will unlock the delivery of 10,000 new homes. The Council's own understanding is that this includes a 'deadweight' figure of 2,000 homes for Hoo Peninsula. 'Deadweight' has been approached by the Council as to mean the number of dwellings said to be capable of delivery when accounting for current infrastructure, without the requirement for HIF money. No evidence has been provided regarding how the deadlock figure has been reached, especially considering existing constraints acknowledged by the Council.

Road Network

5.4 Identified, required, road improvements total circa £86.7 million. These include:

- improvements to A289 for:
  - Anthony's Way Roundabout, and
  - Sans Pareil Roundabout;
- Four Elms Hill;
- local road improvements Bells Land and Ropers Lane roundabout;
- new bypass from A228 Main Road roundabout to:

- A289 west of Four Elms, and
- A228 at Chattenden Road;

- new signalised junction to replace roundabout at Main Road and Hoo Peninsula;
- New signalised access road off Ratcliffe Highway for new train station at Sharnal Street.

5.5 The Draft Document confirms that HIF money will be necessary to bring about a reduction of traffic queuing on Four Elms Hill, an acknowledged area highlighted in the Draft Document to be a major constraint. No specification is given for these improvements, and so their acceptability cannot properly be assessed.

5.6 For the Council to even have the chance of meeting the HIF timescale (i.e. expenditure by 31 March 2024), this road scheme, as with others, would need to reach (developed design) 'RIBA stage 3' and include coordinated and updated proposals, realistically, as part of a December 2020 submission. There is no basis for thinking this to be achievable.

5.7 More generally, there is a continued absence of any detailed proposals in respect of required road investments, which the Council itself acknowledges.

5.8 If the Council has indeed completed design work as part of progressing the above road or other improvements, then this warrants publication, further consultation and review.

Rail

5.9 Proposed rail improvements, totalling £64 million, may include:

- Creation of new (direct) service from London Victoria to Hoo Peninsula:
  - Up to one train per hour frequency (said to be deliverable with existing infrastructure);
- reopened station at Sharnal Street:
  - new modular station and platform;
  - passenger drop-off area;
  - new signalised access off Ratcliffe Highway;
  - new access road to the station;
  - public space;
  - car parking;
- Link on Medway Cord line to Higham:
  - allowing freight to connect to Paddock Wood, without travel via London;
  - new services from Hoo to Medway via Higham and Strood;
  - Up to two trains per hour frequency.

5.10 No information has been forthcoming regarding possible rail improvements within the Draft Document. None is available online.

5.11 The accent within the Draft Document on rail infrastructure coming forward rather emphasises the importance of detailed infrastructure delivery plans to fully set out such proposed improvements, as well as the timescales and basis for their sustainable delivery.

5.12 In their absence it is obviously impossible to appreciate how these will enable or impact upon the deliverability more generally of housing on the Hoo Peninsula. The complete absence of this information is

the more disappointing given the Council's present direction of travel for the Hoo Peninsula to be a significant focus of the eventual submission local plan.

5.13 More particularly, in that the Council outlines its vision that the reopening of a train station may be achievable and an extended service provided, it is highly questionable that there exists the wider integrating infrastructure across the rail network to sustain this. Discussions with Network Rail appear to be at a very early stage. We anticipate that Network Rail will require a robust business case to justify the provision of a new rail service, subject to integration within the network.

5.14 Further, without the delivery of a new train station, it is questionable whether the significant level of development for Hoo Peninsula would prove sustainable and deliverable.

5.15 Even if sustainable in principle, delivery of rail infrastructure would inevitably take considerable time. Even were the Council now in a position to forecast the delivery of this infrastructure (which, evidently it clearly is not), its reliability would be questionable given the Council's track record.

5.16 It is by no means characteristic of a HIF award authority to withhold or fail to work up a properly developed infrastructure proposal. For example, the proposal by Essex County Council for Beaulieu Station and North Eastern Bypass is, openly, to provide a new railway station alongside highways improvements (including a bypass similar to that proposed by Medway Council). By an update published 19 February 2020, ECC had announced the following 'opening' dates:

- North Eastern Bypass – 2024;
- Beaulieu Station – 2025/16.

5.17 A request for a Scoping Opinion (ref. CC/CHL/14/20/SPO on Essex CC's planning database) was also validated 21 February 2020 for: *Chelmsford North East Bypass (CNEB): A single carriageway road between Roundabout 4 of the Beaulieu Park Radial Distributor Road (RDR1) and a new roundabout on the A131 at Chatham Green plus dualling of the existing A131 between Chatham Green and Deres Bridge roundabout.*

5.18 We add that albeit Medway Council's HIF bid was c.£50 million less than that of ECC, it has seemingly been made in respect of broadly the same level of infrastructure works.

5.19 In clear contrast with ECC, the Council is regrettably yet to publish any detailed information for future HIF expenditure and intended HIF works.

5.20 Indeed, were ECC's infrastructure delivery trajectory to be adopted as any comparable guide, it appears highly unlikely that Medway will complete HIF infrastructure works before 2025.

Pedestrian & Cycle Provision

5.21 The Draft Document also rightly highlights various significant barriers to development of the Hoo Peninsula. But one notable constraint is the existing pedestrian network which is notably fractured throughout the Peninsula. Other parts of this network are unsafe (e.g. travelling north east along Stoke Road, and access between Peninsula Way and Stoke Road (north – south). Additionally, as also noted by the consultation document, Peninsula Way acts as a barrier for movement with limited safe crossings. Evidently, with proposed development to the north and south of Peninsula way, safe crossings are vital to allow for sustainable travel. However, the document provides limit information on how this will be provided, instead it loosely locates two areas on the peninsula where this might be possible.

5.22 The pedestrian network will certainly require very significant improvement, inevitably requiring significant investment - which it is presently uncertain to come forward.

5.23 There is additionally the road network, other than intended HIF road improvements. Ropers Lane has seen investment to improve the pedestrian and cycle routes yet many other roads have not (including between the new proposed train station, and proposed or existing settlements at Hoo and High Halstow along Christmas Lane and Ratcliffe Highway). It has not been demonstrated that any funding will be available

through HIF in order to carry out what amount to essential strategic infrastructure works in support of such development of the Hoo Peninsula.

Sustainability

5.24 The Hoo Peninsula is notably poorly connected to surrounding large towns such as Gillingham, Chatham and Strood. The Four Elms roundabout which serves as a gateway in and out of the Peninsula already suffers severe congestion. In the absence of any detailed evidence regarding improvement to the Four Elms roundabout, it is unknown whether this gateway can begin to sustain very sizeable development of up to 12,000 homes.

5.25 The Hoo Peninsula is also poorly connected by public transport. The bus service providing direct access to Rochester and Chatham is limited and journey times are often delayed due to congestion on Four Elms Hill and across the River Medway. There is also no rail service which provides high speed travel.

Air Quality & Climate Change

5.26 The gateway into Hoo Peninsula is the Four Elms Roundabout. There is a traffic bottleneck between the Four Elms roundabout and the roundabout at the junction of Peninsula Way and Main road. This stretch is included within an Air Quality Management Area. It is unknown how the Council intends to successfully develop an action plan for air quality improvement within this area, compatibly with the development of up to 12,000 homes on the Hoo Peninsula.

5.27 The only information showing any integrated consideration of air quality and development on Hoo Peninsula is briefly set out in the Council's 2019 air quality monitoring report. This rather unconvincingly suggests that the intended development of the Hoo Peninsula is likely to bring about air quality action planning benefits, including:

- increasing bus use, albeit this is dependent on traffic flow improvements, enabling shorter journey times and increased punctuality in services. Whilst an improved bus network may well be introduced when development come forwards, service take-up is a complete unknown and most likely to be marginal when compared with the considerable level of private car use. Private car use is not addressed;
- promoting walking and cycling, through new walking and cycling routes via a Strategic Environmental Management Scheme. However, only a small proportion of pedestrians will be located within a reasonable walking distance of the proposed train station, which will likely give rise to only an immaterial reduction in private car use for those travelling through the AQMA; and
- Hoo peninsula masterplaning.

SSSI &Landscape

5.28 Chattenden Woods and Lodge Hill are Sites of Special Scientific Interest (SSSI), including an area of ancient woodland and rare grassland, are of national importance. Any development inappropriately affecting the habitats and features of either of these sites and their ineffective management, will be contrary to national policy and no less important environmental policies of the development plan.

5.29 The Draft Document plainly proposes a very significant level of housing development in close proximity to (and directly abutting) the boundary of the Chattenden Woods and Lodge Hill SSSI. It is however unclear what justification the Council may provide for the arising impacts on the SSSI and whether an appropriate level of SSSI management could be achievable alongside development on this scale.

Green Infrastructure

5.30 The Draft Document outlines that a comprehensive green infrastructure network consisting of both natural green assets and public open spaces will enable travel to key destinations for pedestrians and cyclists. These areas are however currently shown merely as green buffers on a plan. No evidence has been provided of how much of these networks will be need to enable sustainable movement.

5.31 The green corridors and landscape buffers located between Hoo St Werburgh, Port Werburgh and Chattenden appear to be minimal. It is unclear how these will provide the necessary buffers required to adequately protect the characteristic open landscape of Hoo Peninsula.

5.32 Overall, it is far from clear how the constraints acknowledged by the Council will be adequately protected and with appropriate mitigation, where required. The very limited scope of the Draft Document fails obviously to detail and provide comfort that proposed development of the scale of anything approaching 12,000 homes can prove sustainable and deliverable. The strong appearance is that such significant focus within Hoo Peninsula will prove unsustainable and undeliverable.

5.33 We again urge the Council to develop alternative strategies for housing delivery.

6 HOUSING DELIVERY

6.1 The 2019 Housing Delivery Test (HDT) results were published in February 2020. The result in Medway is 46% (4,328 required; 1,978 delivered; 2,350 shortfall).

6.2 While the overall number of units delivered has increased since 2018, the overall result has worsened. Had the Council seen the delivery of just 53 fewer units over the previous three years, the result would have fallen to below 45%.

6.3 Next year (and for all those following) the presumption will be triggered by any delivery below 75% of housing required. The Council would have to see the delivery of c.2,200 units in the next year. This will almost inevitably prove unachievable.

6.4 The housing supply shortfall is expected to exacerbate extensively over subsequent years. Should the Council plan for such a large concentration of housing delivery in Hoo Peninsula, in respect which the delivery rate is expected to be slow, this will only undermine the Council's housing supply over the immediate and medium terms.

6.5 Since 2002, the Council's rate of delivery has averaged at 699dpa. Since the expiration of the Kent Structure Plan in 2011, this has reduced to 605dpa. When viewed against the standard method requirement of 1,693, this highlights an annual and increasing shortfall of an average of 1,000 units.

6.6 There is strong evidence that the Council has consistently over-estimated is housing supply. It has been unable to deliver more than c.3,400 units per five-year period, since at least 2009.

2019 SLAA

6.7 The 2019 SLAA suggests that all sites have been reassessed. However, within the Appendix 3 schedule, very little detail is given of this reassessment. Several sites are also now included which were acknowledged to be unsuitable by the preceding SLAA (June 2018).

6.8 The SLAA now includes 22 new sites located within the Hoo Peninsula, in respect of which it is suggested that HIF money will provide for appropriate mitigation. The SLAA inadequately suggests for all of these that "*Transport and environmental impacts to be mitigated by Housing Infrastructure Fund*". Of these sites, it is suggested that a total of 1,324 units will come forward over the next 5 years. In light however of the questionable support which HIF money will offer within this same timescale, the significant level of infrastructure which will be required, and the absence of detail over infrastructure delivery, this is a wholly unrealistic 'vision'.

6.9 Additionally, albeit there are 17 new sites which have now been considered suitable outside of Hoo Peninsula, the reason for promoting these sites is not set out, even in outline, for many sites. No update is

given in respect of 10 sites. 2 sites maintain previous text outlining that the site is "*unachievable and unavailable*". There is presently no evidence as to the suitability and availability of these sites. Absent this, these sites may only properly be considered to be undeliverable. The contribution of these sites to overall supply (totalling 895) should be removed.

7 CONCLUSION

7.1 In summary, it is almost inconceivable that the Council will be able to progress the Local Plan in the timescale previously outlined. Aside from programme issues, a Plan which is proposing to concentrate housing development on the Hoo Peninsula represents a fundamentally flawed approach. Development on the Hoo Peninsula is dependent on very significant infrastructure delivery and upgrading, which is primarily proposed to be funded by HIF. There is serious doubt on the ability of the Council to use the HIF money awarded, in the timescale outlined. If any one of the significant infrastructure projects were not to come forward, then the level of development would also be impacted.

7.2 Albeit the Draft Document includes headline opportunities, these fail to address the severe constraints associated with the level of development envisaged on the Hoo Peninsula. But one major constraint is the need for necessary infrastructure. There is a continued absence of any detailed proposals in respect of potential road and rail investment. From the bare information available timescales are already slipping in relation to the delivery of such projects.

7.3 The Hoo Peninsula is poorly connected by public transport. The Draft Document offers notably limited information on how this will be improved. Indeed, Four Elms Hill suffers severe congestion, and the local bus network will be severely impacted. Four Elms Hill is the subject of severe air quality concerns, with this stretch of road having been included in an AQMA. It is unknown how the Council intends to successfully develop an air quality action plan for improving air quality whilst proposing up to 12,000 homes on the Hoo Peninsula which will inevitably increase traffic movements through the AQMA.

7.4 Equally, as noted in the Draft Document, the pedestrian network will require significant improvement. However, no detailed information is provided. From a review of the projected HIF spend, it is uncertain how these improvements may come forward. Additionally, the development of 12,000 homes will prove transformational in landscape terms and have a severe impact on the adjacent SSSI and other protected landscapes. The green corridors and landscape buffers located between Hoo St Werburgh, Port Werburgh and Chattenden appear to be minimal. It is unclear how these will provide the necessary buffers required to adequately protect the SSSI and characteristic open landscape of Hoo Peninsula.

7.5 Notwithstanding the flawed approach to development on the Hoo Peninsula, the Council has continually under-delivered on their housing requirement, with an annual shortfall of 1,000 units. This emphasises the need for well-considered, plan-led delivery housing, especially during the early part of the plan period and in evidently sustainable locations.

7.6 Overall, the level of development envisaged on the Hoo Peninsula is unsustainable and highly unlikely to prove deliverable. Even if sustainable, projected timescales offered by the Council are wholly unrealistic.

Appendix 9

RELEVANT APPEAL DECISIONS

The Planning Inspectorate

Appeal Decision

Inquiry held on 22, 23 and 24 September 2015
Site visits made on 21 and 24 September 2015

by Chris Preston BA (Hons) BPl MRTPI

an Inspector appointed by the Secretary of State for Communities and Local Government

Decision date: 07 December 2015

Appeal Ref: APP/A2280/W/15/3002877
Land at Station Road, Rainham, Kent ME8 7QZ

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
- The appeal is made by Mr Hill (McCulloch Homes) against the decision of The Medway Council.
- The application Ref MC/14/0285, dated 29 January 2014, was refused by notice dated 17 July 2014.
- The development proposed is residential development (comprising about 90 dwellings).

Decision

1. The appeal is allowed and planning permission is granted for residential development of up to 90 dwellings at land at Station Road, Rainham, Kent ME8 7QZ in accordance with the terms of the application, Ref MC/14/0285, dated 29 January 2014, subject to the conditions in the schedule appended to my decision.

Procedural Matters

2. The application was submitted in outline with all matters reserved for subsequent approval. A proposed site plan was submitted with the application (drawing No 54-003, revision 00) for indicative purposes, to illustrate one potential layout for the proposed development. That plan depicted access from Station Road and indicated a layout comprising 58 dwellings and 36 flats; a total of 94 units.

3. The description of the proposed development on the application form is for residential development 'comprising about 90 dwellings'. At the Inquiry, the appellants made clear that the reference to 36 flats on the indicative plan submitted to the Council was a typographical mistake. The intention was to indicate 58 dwellings and 32 flats to show a layout comprising 90 units. To that effect, they submitted a revised site plan to the Inquiry (drawing No 54-003, revision A) which was essentially the same plan that had been submitted to the Council, in terms of the indicative layout, but with the number of units shown to be 58 dwellings and 32 flats.

4. The Council raised no objection to the submission of the plan. I accepted that plan on the basis of the appellants' explanation regarding the mistake in the numbers of units shown on the original plan and am satisfied that no party will be prejudiced by my decision to do so. Both plans were submitted for indicative purposes and neither alters the description or nature of the

development for which planning permission is sought; all matters being reserved for future approval.

5. In terms of the parameters of the proposed development, as described on the application form, the term 'comprising about 90 dwellings' is somewhat unclear. When questioned at the Inquiry, the appellants stated that it was not their intention to construct more than 90 dwellings and that they would be happy for any decision to reflect those intentions. The documents submitted in support of the scheme were compiled on that basis. Thus, for clarity and to accord with the appellants' intentions, I have amended the description within my formal decision to refer to a proposal for 'up to 90 dwellings'.

6. The application was refused for three reasons. The second reason for refusal related to the Council's concerns that insufficient information had been submitted to assess whether the site was suitable for residential development, in view of potential land contamination. The third reason alleged that insufficient information had been provided with regard to the likely impact upon protected species. A contaminated land assessment was submitted with the appeal[1] and, on the basis of that report, the Council is satisfied that the second reason for refusal is capable of being resolved, subject to the imposition of suitably worded conditions. As such, the Council did not defend the second reason for refusal at the Inquiry.

7. Ecological surveys relating to potential translocation sites for reptiles were submitted with the appeal in relation to the third reason for refusal[2]. Kent County Council's ecological advice service provided comment upon these surveys and, following that correspondence, Medway Council is satisfied that the third reason for refusal can be addressed through the submission of a planning obligation and condition to secure the translocation of slow worms to an appropriate receptor site.

8. A signed and dated unilateral undertaking made by the owner of the proposed translocation site was submitted at the Inquiry. The terms of that undertaking require the owner to make the receptor site available for the translocation of reptiles, if required as a result of any condition attached to a planning permission for the proposed development. A suggested condition to secure a 'Reptile Translocation Plan' was put forward by the Council and the appellants at the Inquiry. The Council are satisfied that the mechanism would be adequate to overcome their third reason for refusal and this was not a matter of dispute between the parties at the Inquiry. I shall consider the undertaking and suggested condition in more detail later in this decision.

9. In addition, a further unilateral undertaking was submitted by the appellants at the Inquiry. The obligations within the undertaking are to make financial contributions towards the cost of providing additional nursery, primary and secondary school places; the provision of a scheme of workforce training or a financial contribution towards the Medway Apprentice Placement Service; financial contributions towards the maintenance of footpaths and vegetation at Great Lines Heritage Park; financial contributions towards open space improvements at Rainham Recreation Ground; financial contributions towards pedestrian accessibility improvements; and a requirement to provide a

[1] Core Document 6.4: Phase II Contaminated Land Assessment Report, prepared by Ecologia, issue date 31 October 2014
[2] Core Documents 6.5 and 6.6.

minimum of 25% of the dwellings as affordable housing. I will consider those obligations within the main body of my decision.

Main Issues

10. In view of the above, the main issues are:

    i) The effect of the proposal on the character and appearance of the area;

    ii) Whether the proposal would represent sustainable development and, having regard to the presumption in favour of sustainable development at paragraph 14 of the National Planning Policy Framework, whether any adverse impacts of granting planning permission would significantly and demonstrably outweigh the benefits, when assessed against the policies of the Framework taken as a whole.

Reasons

Planning Policy Position

11. The development plan for the area is the Medway Local Plan (2003) (the Local Plan). The Local Plan was adopted in 2003 and covered the period between 1996 and 2006. Therefore, it is time expired. Nonetheless, a number of policies were 'saved' following a direction from the Secretary of State (SoS) in 2007[3]. Two of those saved policies, BNE25 and BNE34, are relied upon by the Council in support of the first reason for refusal.

12. As set out within the Statement of Common Ground (SoCG), the Council cannot demonstrate a five-year supply of deliverable housing land, as required by paragraph 47 of the National Planning Policy Framework (the Framework). In such circumstances, paragraph 49 of the Framework dictates that relevant policies for the supply of housing should not be considered up-to-date. It is common ground between the Council and appellants that policy BNE25 is a relevant policy for the supply of housing.

13. I concur with that view on the basis that the policy is a general policy of restraint which prohibits housing development on all land beyond settlement boundaries. The courts have held that general restraint policies such as BNE25 are clear counterparts to policies within development plans that seek to provide for the distribution of development, as summarised within the *Wenman* judgement[4]. Therefore, in accordance with paragraph 49 of the Framework, policy BNE25 is not up to date.

14. Notwithstanding that the policy is not up-to-date by virtue of paragraph 49 it remains part of the development plan. Paragraph 215 of the Framework states that due weight should be given to policies within existing plans according to their degree of consistency with the Framework. In view of the absence of a five-year supply of housing land, the application of a blanket policy restriction on housing development beyond settlement boundaries is inconsistent with the aims of paragraph 47 of the Framework which seeks to boost significantly the supply of housing. In that context, the weight that I attach to policy BNE25 is reduced substantially.

[3] Core Document 5.7
[4] Paragraphs 49 to 60: *Mark Wenman v Secretary of State for Communities and Local Government & Waverley Borough Council* [2015] EWHC 925 (Admin): Produced at Appendix 5 to the proof of Mrs Allen

15. Paragraph 17 of the Framework identifies a number of core planning principles, including the need to take account of the different roles and character of different areas and to recognise the intrinsic character and beauty of the countryside. Nonetheless, whilst the Framework recognises the value of the countryside it does not expressly prohibit residential development within it or state that planning permission should be limited to certain types of development. Thus, the emphasis within the Framework is substantially different to the restrictive approach of policy BNE25 and this also affects the weight to be attached to the policy in reaching my decision.

16. Policy BNE34 relates to Areas of Local Landscape Importance (ALLI). Unlike policy BNE25 the policy does not prohibit particular forms of development. Under the terms of the policy development will only be permitted if it does not materially harm the landscape character and function of the area; *or* the economic and social benefits are so important that they outweigh the local priority to conserve the area's landscape.

17. The ALLI designation does not cover the full extent of countryside beyond defined settlement boundaries but does cover a substantial proportion of land within the district[5]. I also note that the designation is drawn tightly around the settlement boundaries of Gillingham and Rainham. Thus, it appears to me that, in geographical terms, the policy is somewhere between blanket policies applying to all countryside, such as BNE25, and 'green wedge' or 'green gap' that are designed to maintain separation between settlements[6].

18. Nonetheless, it is clear that the aim of the policy is to protect the character and function of landscapes on the urban fringe. It is not a policy that explicitly seeks to restrict housing supply. Moreover, the wording of the policy requires a balance of judgement between any harm to the local landscape and any social and economic benefits arising from a proposal. As such, development could still be permissible under the terms of the policy if harm would arise to the ALLI designation.

19. The balance within the policy is very similar to the approach to sustainable development within the Framework which is based upon social, economic and environmental strands. That approach is built into policy BNE34. To my mind, it is a policy that seeks to protect landscape character and function rather than a policy for the supply of housing.

20. Mr Warner suggested at the Inquiry that he had been unable to find a single example where the Council had granted planning permission on the basis that social and economic factors outweighed harm to the ALLI. As such, he maintained that the Council were, in fact, using the designation as a blanket restriction on housing development beyond settlement boundaries. Insufficient evidence was presented for me to determine whether that was the case. In any event, however it has been interpreted by the Council, I am satisfied that the policy, as written, is not a policy for the supply of housing, for the reasons set out above.

21. With regard to paragraph 215 of the Framework, the balance of social, economic and environmental factors built into the policy is consistent with the

[5] As shown on the Local Plan proposals maps at Appendix 5 to the proof of Mr Warner
[6] William Davis Ltd v Secretary of State for Communities and Local Government & Amor [2013] EWHC 3058 (Admin) and Cheshire East Borough Council v Secretary of State for Communities and Local Government & Anor [2015] EWHC 410 (Admin)

broad approach to sustainable development in the Framework. The Council have previously assessed the policy to be 'partially consistent' with the Framework[7] but the committee report that provided the assessment of compliance does not expand on why that was considered to be the case.

22. However, the Medway Landscape Character Assessment (2011) (the LCA) notes the preference within the then extant Planning Policy Statement 7 for a move away from rigid local landscape designations to a criteria based policy approach based on landscape character assessment. That preference has been carried through to paragraph 113 of the Framework which requires local planning authorities to set 'criteria based' policies against which proposals in protected landscape areas will be judged.

23. Policy BNE34 does not set a criteria based approach and the ALLI designations were not based upon a landscape character assessment. The policy does not fully accord with the Framework in those respects. However, it appears to me that the discrepancy relates to the nuances of how landscape should be protected through planning policy as opposed to the fundamental principle of whether those landscapes should be protected.

24. The area has a distinct character, defined as the Gillingham Riverside in policy BNE34 and the Lower Rainham Farmland within the LCA. I can find nothing inherently inconsistent with the Framework in seeking to recognise and protect areas of recognised local landscape character. Thus, whilst the weight afforded to policy BNE34 must be reduced to a degree as a result of the inconsistency with paragraph 113 of the Framework, I am satisfied that its aims are broadly consistent with the Framework as a whole and I attach significant weight to the policy.

The effect of the proposal on the character and appearance of the area

25. The appeal site, known locally as Bakers Field, is a roughly rectangular parcel of land adjacent to Station Road on the northern edge of Rainham. Following the cessation of brickearth extraction the site has been unused, other than for recreational purposes, for a considerable period. In 2002 the Inspector's report regarding the Local Plan noted that ground cover was sparse albeit that there was plenty of vegetation around the perimeter[8]. In the intervening period the level of vegetation has increased and the site is now predominantly overgrown with scrub, with the exception of open pockets within the centre.

26. In other respects, the character of the surrounding area remains largely as described by the examining Inspector in 2002. The site lies to the north of Rainham, within a swathe of mainly undeveloped countryside between the town and the River Medway. The undeveloped character of the site helps to maintain a degree of physical separation between the edge of the town and the cluster of houses situated around the junction between Station Road and Lower Rainham Road. To the east lies an open piece of land known as Woolleys Orchard and to the west, on the opposite side of Station Road, the land remains largely undeveloped, being a mixture of overgrown scrub and equine related uses typical of the urban fringe.

27. With regard to policy BNE34, the site falls within the Gillingham Riverside ALLI. The explanatory text to the policy describes the area as a rural landscape of

[7] Core Documents 4.6 & 4.7: Planning Committee Report, dated 19 February 2014, with associated table.
[8] Extract of Inspector's Report included at Appendix 3 to the proof of Mrs Allen

orchards and arable fields with country lanes, situated to the north of Rainham and Twydall. The character of the site and the immediate areas surrounding it do not conform fully with this description. It is not a landscape of orchards and arable fields but is more accurately described within the LCA which identifies the area lying between Rainham and Lower Rainham Road as the 'Lower Rainham Farmland'.

28. The LCA describes a character of small to medium scale fields with a mixture of orchards, arable and rough grazing, with neglected pockets of land and a gradual trend towards suburbanisation in localised areas. In the immediate context, the appeal site and the land on the opposite side of Station Road represent neglected pockets of land and Woolleys Orchard, to the east, is used occasionally for car boot sales but not for any agricultural purpose.

29. Station Road is one of a number of roads branching northwards from Rainham to connect with Lower Rainham Road; others include Berengrave Lane to the west and Otterham Quay Lane to the east. Residential development straddles the side of all of these routes representing the northward expansion of the town into the countryside beyond. Therefore, although the site is within the designated ALLI, the pockets of neglected land, trend towards suburbanisation and urban fringe character are moderating factors when attributing value to the landscape. Taking account of those factors, I concur with the findings of the Landscape and Visual Assessment (LVIA) prepared on behalf of the appellants which describes the landscape value as 'medium'[9], with a 'medium' sensitivity to change.

30. Nonetheless, the areas of undeveloped land to the north of Rainham, of which the appeal site forms a part, help to provide a clear distinction to the edge of the settlement. In the immediate context, the site forms the only break between the northern extent of Rainham, at Finwell Road, and the cluster of dwellings at the junction between Station Road and Lower Rainham Road. To my mind, that cluster of development is distinct from Rainham and has a rural character, being surrounded on all sides by undeveloped land.

31. Despite the frontage of the site being relatively short in length, the vegetation adjacent to Station Road, in combination with that on the opposite side of the carriageway, provides a strong sense of enclosure. When travelling past the site there is a clear feeling of being within the countryside, and that the town has been left behind. In that sense, the site contributes positively to the character of the area. In visual terms, the maturing vegetation across the site is an attractive feature in its own right, representing a green buffer between two areas of built development. The wooden fencing that has been erected to the front of the site does not detract unduly from the pleasant green backdrop.

32. One of the key functions of the Gillingham Riverside ALLI, as described in the explanatory text to policy BNE34, is that it provides an important green buffer separating the built-up area of Rainham from areas of nature conservation importance and recreation along the Medway estuary. Development of the site would erode the buffer between Rainham and the housing development further to the north and would result in the extension of the town up to Lower Rainham Road. The collection of houses around the Lower Rainham Road junction would be subsumed within the town and the present gap between town and country would be lost.

[9] Lloyd Bore Landscape and Visual Impact Assessment, revision A. Core Document 6.2

33. It would also impinge on the continuity of the open spaces at Woolleys Orchard to the east and the paddocks and scrubland to the west. The coherence of the open spaces to the north of Rainham has already been disrupted by the development to the north-west of Otterham Quay Lane, on the opposite side of Woolleys Orchard, as described within the LCA[10]. The appeal proposal would have a similar effect and would effectively leave Woolleys Orchard as an isolated pocket of open space, in between housing developments, in contrast to the current situation where a continuous run of undeveloped land stretches from east to west, providing a rural setting to the north of the town. Thus, despite its relatively small scale, the appeal site plays an important function in maintaining the landscape character of the local area.

34. I recognise that it would be possible to incorporate landscaping along the frontage of the site as part of the detailed design and that would mitigate the effects of the proposal to some extent but would not ameliorate the full extent of the change from undeveloped land to a substantial residential estate. In landscape terms, the loss in continuity in the open belt of land to the north of the settlement would remain harmful.

35. However, although the development would disrupt the continuity of the green buffer to the north of Rainham, it would not bring residential development closer to the Medway estuary because of the housing that already exists immediately to the north of the site. Thus, whilst there would be some harm to the function of the buffer between the town and the estuary, the effects would be modest and localised in extent.

36. The other relevant function of the ALLI is that it provides residents within an extensive urban area with access to an attractive rural landscape. There is a relatively thin strip of land between the town and the Medway estuary to the north. The site is within close proximity of the southern fringe of the town and is likely to be experienced frequently by residents travelling past it, either on foot, cycle or car. When passing the front of the site there is a sense of being within the countryside, as described above. Informal access has also been granted and footpaths across the site indicate that people frequently use the area for recreational purposes. I note that those rights of access are concessionary and could be removed at any point by the landowner.

37. Notwithstanding that point, even without such access rights, I consider that the site contributes positively to the function of the ALLI purely as a result of the benefits of providing an attractive and undeveloped environment on the edge of the conurbation. If developed for housing the site would no longer perform that function. Those travelling northwards along Station Road would be predominantly within an urban environment as opposed to one of a rural character. The experience of being within the countryside would be pushed further to the north beyond Lower Rainham Road. The detrimental effects in that regard are likely to be most keenly felt by residents residing in the local area and the proposal would not have any significant wider ramifications on that particular function of the ALLI beyond the local context.

38. In visual terms, the presence of existing built development at the junction of Station Road and Lower Rainham Road prevents clear views of the site from the north on footpaths and roads close to the estuary. The visual effects would be most noticeable at close range, particularly from Station Road and Finwell

[10] Core Document 5.5, page 68

Road. As set out above, the vegetation alongside Station Road provides an attractive green backdrop and adds to the definition of the urban/ rural edge. Consequently, I disagree with the assessment of view 3 within the LVIA which describes the visual condition as 'ordinary' and not visually pleasant.

39. To my mind, the visual condition of the existing frontage to Station Road should be considered as 'Good'; the same value attributed to views from Finwell Road. The sensitivity of those localised views to change would also be high given the current attractive condition and the fact that residential development would bring about a substantial change from undeveloped land to a residential suburban estate. Consequently, I consider that the degree of effect from those viewpoints would be substantially greater and more harmful than suggested within the LVIA.

40. However, that harm would be localised. In the wider context, taking account of the sensitivity of the landscape and the scale and magnitude of the likely change, I concur with the findings of the LVIA that the effect on landscape character would be moderate[11]. That degree of change would represent material harm to the landscape character and function of the ALLI, contrary to the aims of sub-section (i) of saved policy BNE34. Whether any economic or social benefits exist to outweigh the local priority to conserve the area's landscape is a matter that I shall consider in the wider planning balance on the second main issue.

41. The proposal would also be contrary to the aims of saved policy BNE25 but, for the reasons given, I attach limited weight to any conflict in that regard.

42. In the terms expressed at paragraph 17 of the Framework, I consider that the proposal would cause harm to the intrinsic character of the area. Paragraph 109 of the Framework seeks to protect and enhance valued landscapes but does not define what constitutes a 'valued landscape'. To my mind, designation within a Local Plan is indicative that a landscape is valued locally. Whilst the immediate character of the landscape surrounding the site does not conform to the wider Gillingham Riverside ALLI landscape, as described in the Local Plan, the site plays an important role in the function of the ALLI for the reasons set out. The reduction in the green buffer at the edge of Rainham and the urbanisation of the countryside on the edge of the settlement would therefore represent harm to a valued landscape, contrary to the aims of paragraph 109 of the Framework.

Whether the proposal would represent sustainable development and, having regard to the presumption in favour of sustainable development at paragraph 14 of the National Planning Policy Framework, whether any adverse impacts of granting planning permission would significantly and demonstrably outweigh the benefits, when assessed against the policies of the Framework taken as a whole

43. Paragraphs 18 to 219 of the Framework, taken as a whole, constitute the Government's view of what sustainable development means in practice for the planning system. Paragraph 7 identifies three dimensions to sustainable development, economic, social and environmental, and paragraph 8 notes that these roles are mutually dependent and should not be looked at in isolation.

[11] Paragraph 5.8 of the LVIA

44. In my consideration of the first main issue I have identified that the proposal would cause harm to the character and appearance of the countryside and would harm the function of the Gillingham Riverside ALLI. That harm would represent environmental harm for the purposes of the three stranded definition of sustainable development. For the reasons given above, I attach moderate weight to that harm.

45. It is common ground that the Council cannot demonstrate a five year supply of deliverable housing land. Furthermore, as set out within the SoCG, there was a substantial shortfall in housing delivery, when set against housing requirements, in previous years. The table produced at paragraph 4.15 of the SoCG shows that the housing delivery target was only met in 3 out of 23 years and that the Council has failed to achieve its target in 4 out of the last 5 years. On the evidence presented, this represents persistent under-delivery.

46. A 'Further Statement of Common Ground' with regard to housing land supply was submitted at the Inquiry. The parties agree that the shortfall in housing land supply is likely to be significant. They also agree that the Council cannot demonstrate a five-year supply of affordable housing, that the shortfall in that regard is likely to be significant, and that the provision of affordable housing in general is a significant benefit to be weighed in the planning balance. On the information presented, I see no reason to depart from that conclusion. Ninety dwellings, 25% of which would be affordable, would represent a substantial contribution towards local housing supply and I attach significant weight to the benefits in that regard.

47. The site is situated in a sustainable location within close proximity of the existing settlement of Rainham. It is within walking distance of the train station and local shops and the sustainable location of the site is an environmental benefit that weighs in favour of the proposal. The provision of housing would bring economic benefits in the short term, through employment and investment related to construction activity, and the longer term, through the spending power of local residents that would benefit local shops and businesses

48. It is also common ground that there would be no unacceptable highway impacts with regard to access from Station Road, traffic flows or general highway safety. All matters are reserved for future approval and details of access do not form part of the application. The appellants have indicated that vehicular access would be formed from Station Road and not from Finwell Road. A suggested condition was put forward to that effect. They have also indicated that it would be possible to widen the width of the carriageway at Station Road, across the site frontage, to facilitate the free passage of traffic. Full details of that matter would be required under a future reserved matters application but, on the basis of the information before me, I am satisfied that satisfactory access arrangements could be achieved.

49. Similarly, with careful attention to design and layout, I am satisfied that the site could accommodate the proposed quantum of development without undue harm to the living conditions of neighbouring residents by way of overlooking or loss of privacy. The contaminated land assessment provided by the appellants demonstrates that the land can be made suitable for residential purposes, subject to conditions to secure any necessary remediation.

50. Furthermore, I am satisfied that a mechanism to secure the translocation of slow worms can be secured through the imposition of a condition to require a 'Reptile Translocation Plan'. The landowner of a suitable receptor site has submitted an obligation to the effect that he would be willing to allow for the translocation of slow worms and the mechanism put forward provides sufficient surety that the development can be undertaken without causing environmental harm to the local slowworm population.

51. Consequently, in the overall balance, the proposal would result in significant social benefits in terms of housing provision and associated economic benefits. It would result in moderate harm to the character and appearance of the local area. However, with regard to other environmental matters, the site is well located in terms of shops, services and transport links and can be developed without undue harm to ecological assets. Based upon the three-stranded definition of sustainable development at paragraph 7 of the Framework, and paragraphs 18 to 219, taken as a whole, I consider that the proposal would represent sustainable development.

52. Moreover, with regard to the presumption in favour of sustainable development at paragraph 14 of the Framework, the significant benefits of granting planning permission would not be significantly and demonstrably outweighed by the adverse impacts that I have identified.

53. In the context of saved policy BNE34 of the Local Plan I consider that the social and economic benefits of the proposal, as described above, are of sufficient importance to outweigh the material harm to the character and function of the area, particularly considering the pressing need for housing and the aim of paragraph 47 of the Framework to provide a significant boost to housing delivery. Accordingly, the proposal would not contravene the terms of the policy which contains a requirement to balance environmental, social and economic factors.

Conditions

54. In advance of the Inquiry the Council put forward a list of suggested conditions which they thought should be attached if I were minded to allow the appeal. Following discussions between the Council and the appellants an amended set of conditions was submitted on the third day of the Inquiry. That revised list was considered in a round table discussion. I have included those conditions that meet the tests set out at paragraph 206 of the Framework, making amendments to wording, where necessary, in the interests of precision.

55. I have attached statutory conditions relating to the time limit for the commencement of work and the submission of reserved matters details. As the application is submitted entirely in outline, a condition to ensure compliance with the submitted plans is unnecessary; full details and plans will need to be submitted as part of the reserved matters details and the suggested layout at this stage was submitted for indicative purposes. As set out within my procedural note, the appellant confirmed at the Inquiry that the proposal was for outline permission for up to 90 dwellings. For the avoidance of doubt, I have attached a condition to limit the number of dwellings to that level.

56. Landscaping is one of the reserved matters and, as such, a specific landscaping condition is unnecessary. Landscaping matters, including consideration of subsequent management, could be considered fully as part of any reserved

matters application. The application was put forward on the basis that a specified amount of open space/ play space (0.531 hectares as a minimum) would be provided on site. That level of open space was considered to be acceptable by the Council and no contrary evidence has been submitted that would lead me to conclude that it would be insufficient to meet the needs of the development. I am satisfied that the suggested condition is necessary, for the avoidance of doubt as to the nature of the proposal, and to ensure that an acceptable level of on-site open space is provided as part of the scheme.

57. The response from the County Council's archaeological officer identified that the site lies within an area that has known archaeological potential. Accordingly, a condition is necessary to secure a programme of archaeological work for the areas of the site that have not been disturbed by previous brickearth extraction. As set out above, in the interests of providing a satisfactory residential environment, conditions are also necessary to ensure the remediation of any contamination on site, in accordance with a detailed scheme that should be submitted to and approved in writing by the local planning authority.

58. The application has been put forward and assessed on the basis that vehicular access would be formed from Station Road. Finwell Road is presently a quiet residential cul-de-sac and, in the interests of highway safety, the amenity of residents of Finwell Road, and for the avoidance of doubt as to the nature of the development proposed, I am satisfied that a condition is necessary to ensure that vehicular access would be from Station Road. Details of the design of that access and any other highway related alterations would be considered at the reserved matters stage. A condition has been suggested to the effect that the level of car parking within the site should accord with 'adopted parking standards'. The wording of the condition is not precise and does not specify whether the parking standards referred to are those existing at present or any that may apply at the time of any reserved matters application. Accordingly, the condition does not meet the test of precision. In any event, I consider that it would be more appropriate to consider the level of car parking at the reserved matters stage once the detailed layout and housing mix are known. I am not satisfied that it is necessary to attach a condition at this stage.

59. A condition to secure a construction management plan is necessary in the interests of highway safety and residential amenity. No compelling reason was put forward for the suggested condition relating to the need for underground ducts for dwellings or the removal of permitted development rights for overhead cables or distribution poles. The Planning Practice Guidance advises that permitted development rights should only be removed in exceptional circumstances[12]. Detailed design would be considered at the reserved matters stage and I can find nothing exceptional to justify the suggested condition with regard to the provision of services to proposed dwellings.

60. For reasons set out above, a condition is necessary to ensure that a Reptile Translocation Plan is implemented, in accordance with details that have been submitted to and approved in writing by the local planning authority. An alternative site has been identified and the landowner is content to accept the translocation, as identified by unilateral undertaking. The Council sought that undertaking because they were not satisfied that the requirement to provide

[12] Paragraph 017, Reference ID: 21a-017-20140306

on-going management on third party land could be adequately secured through the provisions of a condition. I am satisfied that the condition and associated obligation provide sufficient surety that the scheme could be implemented to provide adequate protection for slowworms.

Unilateral Undertaking

61. Two unilateral undertakings were submitted, as summarised in my procedural paragraphs above. I have considered the obligations with respect to regulation 122 of the Community Infrastructure Levy Regulations (2010) (the CIL Regulations) and advice at paragraph 204 of the Framework. The provision of an affordable housing scheme to secure 25% affordable housing is directly related to the development, reasonable in scale and kind and necessary to make the development acceptable in planning terms, having regard to the Framework and saved policy H3 of the Local Plan.

62. Based upon the consultation response from the Council's children's services team I am satisfied that there is a need for financial contributions towards education provision to mitigate the impact of the proposal on nursery, primary and secondary education. The proposed contributions are calculated on the basis of formulae within the Medway Council Guide to Developer Contributions (2014) (the Contributions Guide). Those formulae are based upon relatively up to date costs associated with providing education facilities and calculated pupil ratios for new development.

63. No evidence has been presented that would lead me to doubt that the method of calculating the level of contribution is fairly and reasonably related to the proposed development. The relevant obligations require that the contributions would be spent at specific local nursery, primary and secondary schools and the Council's CIL Compliance Note[13] confirms that no more than 5 obligations have been entered into in relation to those schools. I have no reason to doubt that position and am satisfied that the education contributions meet the relevant tests and would accord with saved policy S6 of the Local Plan.

64. At the Inquiry, the Council accepted that the obligations in respect of training and workforce development would not, of themselves, be necessary to make the development acceptable in planning terms. Whilst I can appreciate the benefits of local workforce training in an economic and social sense, it is not clear how the need for on-site training is directly related to the impact of the proposed development or necessary for it to be acceptable in planning terms. Accordingly, I am not satisfied that the obligation meets the required tests and have not afforded it any weight in reaching my decision.

65. Little information is before me with regard to the quantum or condition of open space at the Rainham Recreation Ground or the condition of footpaths and vegetation within Great Lines Heritage Park. Thus, whilst the proposal would no doubt increase demand for local recreation facilities, I cannot determine whether there are any qualitative of quantitative defects in existing facilities that would need to be remedied in order to accommodate any demand that may arise from the proposal. As such, the information presented does not demonstrate that the contributions are necessary to make the development acceptable in planning terms and I have not afforded those contributions in that regard any weight in reaching my decision.

[13] Inquiry Document 3

66. Similarly, little information has been presented to demonstrate why improvements would be necessary at the Station Road/ Tilbury Street and Station Road/ William Street/ Henry Street/ Wakely Road junctions as a result of the proposed scheme. No specific schemes for those junctions have been presented and, on the face of the information before me, I am not satisfied that the proposed contributions are necessary to make the development acceptable in planning terms and have not afforded the contributions any weight in reaching my decision.

67. The obligation with regard to the provision of a receptor site at Trenchman's Wharf is necessary to make the development acceptable in planning terms. It is also related to the proposed development and reasonable in scale and kind to the likely impact.

Overall Conclusion

68. The proposal would result in moderate harm to the character and appearance of the area and the function of the Gillingham Riverside ALLI. However, the social and economic benefits of the scheme would significantly outweigh that harm such that the proposal would comply with the terms of saved policy BNE34 of the Local Plan. It would be contrary to the aims of saved policy BNE25 but, for the reasons given, little weight can be afforded to that policy. The benefits of the proposal represent material considerations to outweigh any conflict with the development plan in that regard. Despite conflict with saved policy BNE25, when assessed in the round, I am satisfied that the proposal would not conflict with the aims of the development plan as a whole.

69. Furthermore, the proposal would represent sustainable development and the presumption in favour of sustainable development applies. Having regard to paragraph 14 of the Framework the adverse impacts of granting planning permission would not significantly and demonstrably outweigh the benefits.

70. I have noted the planning history of the site, including previous appeal decisions and examining Inspector's reports. However, those decisions and reports pre-date the publication of the Framework and were not made in the same context as the current proposal, particularly with regard to the pressing need for housing and the requirement to significantly boost housing supply. Accordingly, the planning history has not been a significant factor in my decision.

71. In view of the above, and having regard to all other matters raised, I conclude that the appeal should be allowed.

Chris Preston

INSPECTOR

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Mr Graeme Keen of Counsel	Instructed by the Borough Solicitor
He called	
Mr David Withycombe MSc CMLI	Landscape consultant commissioned by Medway Council
Mrs Caroline Allen BA (Hons) PGDip	Senior Planner, Medway Council

FOR THE APPELLANTS:

Mr Richard Turney of Counsel	Instructed by Kingsley Smith LLP
He called	
Mr Julian Bore BA Hons MPhil CMLI	Of Lloyd Bore Ltd
Mr Iain Warner BSc Hons MRTPI	Of Tetlow King Planning
Mr Stephen Hinsley BA Hons MRTPI	Of Tetlow King Planning

INTERESTED PERSONS:

Mrs Margaret Francis	Local resident
Mr Alan Peterkin	Local resident
Mr James Monday	Local resident

DOCUMENTS SUBMITTED AT THE INQUIRY

1) Transcript of the statement of Mrs Margaret Francis
2) Further Statement of Common Ground, signed and dated 22 September 2015
3) Medway Council Compliance Note re Community Infrastructure Levy
4) Copies of Local Plan policies relevant to discussion regarding the unilateral undertaking
5) Medway Council Guide to Developer Contributions (2014)
6) Minutes of the meeting of the Cabinet of Medway Council of 15 July 2014, relating to the Council's adoption of the Guide to Developer Contributions (2014)
7) List of suggested conditions
8) Updated list of Core Documents, dated 23 September 2015
9) Unilateral Undertaking, signed and dated 24 September 2015, made by Palm Developments Ltd
10) Unilateral Undertaking, signed and dated 24 September 2015, made by McCullochs (CI) Ltd

SCHEDULE OF CONDITIONS

1) Details of the access, appearance, landscaping, layout, and scale, (hereinafter called "the reserved matters") shall be submitted to and approved in writing by the local planning authority before any development begins and the development shall be carried out as approved.

2) Application for approval of the reserved matters shall be made to the local planning authority not later than three years from the date of this permission.

3) The development hereby permitted shall begin not later than two years from the date of approval of the last of the reserved matters to be approved.

4) No more than 90 dwellings shall be erected on the site.

5) The details submitted pursuant to condition 1 shall only provide for vehicular access to be derived via Station Road.

6) The details submitted pursuant to condition 1 shall include not less than 0.531 hectares of open space and play space.

7) No development shall take place until the developer has secured the implementation of a programme of archaeological work in accordance with a written specification and timetable that has been submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved specification.

8) A detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and the natural and historical environment shall be prepared, and submitted to and approved in writing by the Local Planning Authority prior to commencement of the development. The scheme shall include all works to be undertaken, proposed remediation objectives and remediation criteria, timetable of works and site management procedures. The scheme shall ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

9) The approved remediation scheme, submitted pursuant to condition 8, shall be carried out in accordance with its terms prior to the commencement of any development (other than development required to enable the remediation process to be implemented) unless otherwise agreed in writing by the Local Planning Authority. The Local Planning Authority shall be given not less than two weeks written notification prior to the commencement of the remediation scheme works. Following completion of the measures identified in the approved remediation scheme, a verification report that demonstrates the effectiveness of the remediation carried out must be produced, and submitted to and approved in writing by the Local Planning Authority prior to the first occupation of the development.

10) In the event that contamination is found at any time when carrying out the approved development that was not previously identified it shall be reported in writing immediately to the Local Planning Authority. An

investigation and risk assessment must be undertaken and where remediation is necessary a remediation scheme shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, any necessary remediation shall be undertaken in accordance with the details so approved.

11) No development shall take place, including any works of demolition, until a Construction Method Statement has been submitted to, and approved in writing by, the local planning authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:
   i) the parking of vehicles of site operatives and visitors
   ii) dust management
   iii) measures to ensure public access to the highways and footways adjoining the site at all times during construction
   iv) measures to control noise and vibration levels during the construction period, including the predicted noise levels and a methodology for monitoring the levels during the period of works
   v) the days of the week and times of the day when construction work at the site and construction traffic movements to and from the site will be undertaken
   vi) measures to protect the public highway from mud and debris
   vii) traffic routing for construction vehicles

12) No development shall take place until a Reptile Translocation Plan has been submitted to, and approved in writing by, the local planning authority. The Reptile Translocation Plan shall include:
   i) the identification of a receptor site for reptiles
   ii) details of how reptiles would be captured and translocated to the designated receptor site
   iii) a management plan for the receptor site which shall identify any measures required to enhance the capacity of the receptor site to accommodate translocated reptiles
   iv) details of a monitoring plan over a period of five years; and
   v) a timetable for implementation

   Thereafter, the Reptile Translocation Plan shall be carried out in accordance with the details so approved.

Department for Communities and Local Government

Our Ref: APP/A2280/W/16/3143600

Mr Alister Hume
Hume Planning Consultancy Ltd
Innovation House
Discovery Park
Sandwich
Kent CT13 9ND

6 March 2017

By email:info@humeplanning.co.uk

Dear Mr Hume

TOWN AND COUNTRY PLANNING ACT 1990 – SECTION 78
APPEAL MADE BY MESSRS KD, JC & MC ATTWOOD
LAND AT GIBRALTAR FARM, HAM LANE, HEMPSTEAD, GILLINGHAM, KENT ME7 3JJ - APPLICATION REF: MC/14/2395

1. I am directed by the Secretary of State to say that consideration has been given to the report of Mrs Zoe Hill BA (Hons) Dip Bldg Cons (RICS) MRTPI IHBC, who held a public local inquiry opening on 4 October 2016 into your client's appeal against the decision of the local authority to refuse planning permission for the erection of up to 450 market and affordable dwellings together with provision of access, estate roads and residential open space, in accordance with application ref: MC/14/2395, dated 8 August 2014.

2. On 4 August 2016, this appeal was recovered for the Secretary of State's determination, in pursuance of section 79 of, and paragraph 3 of Schedule 6 to, the Town and Country Planning Act 1990, because it involves proposals for residential development of over 150 units or sites of over five hectares which would significantly impact on the Government's objective to secure a better balance between housing demand and supply and create high quality, sustainable, mixed and inclusive communities.

Inspector's recommendation and summary of the decision

3. The Inspector recommended that the appeal be allowed on the basis of the revised plans and planning permission be granted subject to conditions set out in Annex A.

4. For the reasons given below, the Secretary of State agrees with the Inspector's conclusions, and agrees with her recommendation. He has decided to allow the appeal.

Department for Communities and Local Government
Stephen Jewell
Planning Casework
3rd Floor Fry Building
2 Marsham Street
London SW1P 4DF

Tel: 0303 444 42110
Email: PCC@communities.gsi.gov.uk

A copy of the Inspector's report (IR) is enclosed. All references to paragraph numbers, unless otherwise stated, are to that report.

Procedural matters

5. In January 2015 the Secretary of State refused to make a direction under s.98 of the Local Government, Planning and Land Act 1980 which the appellants had sought to secure access using land in the Council's ownership. A revised scheme was submitted with a single primary access point which only involves a modest area of land in the Council's ownership. The provision of an emergency access onto Ham Lane remains the same. The Inspector considered the appeal on the basis of the single primary access proposal (IR3). The Secretary of State notes (IR4-5) that revised plans were submitted and that she, along with the main parties agreed that consideration of the amended plans would not cause any prejudice to any interested party.

Policy and statutory considerations

6. In reaching his decision, the Secretary of State has had regard to section 38(6) of the Planning and Compulsory Purchase Act 2004 which requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise.

7. In this case the development plan consists of the saved policies of the Medway Local Plan (adopted 2003). The Secretary of State considers that the development plan policies of most relevance to this case are those set out at IR11 (S4, BNE34 and BNE25).

8. Other material considerations which the Secretary of State has taken into account include the National Planning Policy Framework ('the Framework') and associated planning guidance ('the Guidance'), as well as Supplementary Planning Guidance; Medway Council Guide to Developer Contributions (2014) and Medway Landscape Character Assessment 2011 and the North Kent Strategic Housing and Economic Needs Assessment (SHENA) (2015).

Main issues

9. The Secretary of State agrees with the Inspector that the main issues are those set out at IR184.

The Planning Policy position

10. In the context of the development plan position set out above, three saved local plan policies are cited as being of relevance; these are BNE25, BNE34 and S4.

11. Like the Inspector, the Secretary of State notes that policy BNE25 relates to development in the open countryside and clearly seeks to restrict housing growth. He also agrees with the Inspector, that as it is agreed that the Council does not have a five year land supply, and given the advice in the Framework paragraph 49, policy BNE25 is out of date and should only be afforded limited weight (IR187). Additionally, and like the main parties and the Inspector, the Secretary of State agrees, for the reasons in IR188, that policy BNE34 should also be considered out of date and has similarly afforded the policy limited weight.

12. Policy S4 seeks 'a high quality of built environment' with 'landscape mitigation where appropriate'. The Secretary of State has considered the appeal scheme in the context of the Inspector's view of this policy at IR191. Like the Inspector, he agrees that it is not a policy which seeks to restrict development in this, or any other, location and as such, it is not a policy which is of significance in the determination of this appeal. The Secretary of State agrees and has gone on to consider two of the three policies (BNE25 and BNE34) further under the main related issue below at paragraph 14.

Housing land supply

13. The Secretary of State has carefully considered the Inspectors analysis and reasoning set out at IR194-200. He notes that the main parties agree that a 5 year housing land supply cannot be demonstrated and the Council acknowledges a supply in the range of 2.21 to 2.79 years. The appellant considers that even that level is optimistic (IR194) and the Inspector considers that the housing land supply is significantly lacking (IR197). Overall the Secretary of State agrees with the Inspector's conclusion at IR200, that the shortfall in five year housing land supply is so great and the pressure on sites is so significant, that it is inevitable that Greenfield land will have to be developed.

Character and Appearance of the Countryside which is also designated as part of the Capstone and Horsted Valleys ALLI

14. For the reasons set out at IR 201-225 the Secretary of State agrees with the Inspector and considers that the proposed development would harm the character and appearance of the immediate area and, therefore, fail to accord with the provisions of policies BNE25 and BNE34 (IR224). He also agrees that the harm would not represent a critical harm to the function of the Capstone and Horsted Valleys ALLI taken as a whole (IR224). Furthermore, given that policy BNE34 allows for development in an ALLI if the social and economic benefits of the proposal outweigh the local priority to conserve the area's landscape (IR225), the Secretary of State has gone on to consider these benefits for the appeal scheme.

Whether there are other benefits of the scheme

15. The Secretary of State agrees with the Inspector's consideration of matters other than housing land supply to be added to the planning balance (IR226-231). In this the Inspector attaches significant weigh to the provision of (25%) affordable homes (IR226) as she does to the economic benefits (IR227). Furthermore additional weight is afforded by the Inspector to the benefit resulting from the open space, including a children's place (IR228) and modest, biodiversity and access benefit of the scheme (IR229). For the reasons set out in IR230-231, the Secretary of State agrees that the proposed landscaping/planting and New Homes Bonus Payments attract little and no additional weight respectively.

Other matters

16. For the reasons given at IR232-248 the Secretary of State has considered and agrees with the Inspector's conclusions in considering a range of matters raised by interested parties that do not reflect issues between the main parties.

Planning conditions

17. The Secretary of State has given consideration to the Inspector's analysis at IR170-172, the recommended conditions set out at the end of the IR and the reasons for them, and

to national policy in paragraph 206 of the Framework and the relevant Guidance. He is satisfied that the conditions recommended by the Inspector comply with the policy test set out at paragraph 206 of the Framework.

Planning obligations

18. Having had regard to the Inspector's analysis at IR173-183, the signed s.106 Unilateral Undertaking, paragraphs 203-205 of the Framework, the Guidance and the Community Infrastructure Levy Regulations 2010, as amended, the Secretary of State agrees with the Inspector's conclusion in IR183 and that, other than in respect of the specific items referred to for the waste and recycling contribution, the obligation complies with Regulation 122 of the CIL Regulations and the tests at paragraph 204 of the Framework as being necessary to make the development acceptable in planning terms, directly related to the development, and are fairly and reasonably related in scale and kind to the development.

19. The Secretary of State has taken into account the number of planning obligations which have been entered into on or after 6 April 2010 which provide for the funding or provision of a project or type of infrastructure for which an obligation has been proposed in relation to the appeal. The s.106 Unilateral Undertaking contributions calculation is as set out at IR7 and accords with the Council's Medway Guide to Developer Contributions (2014) and provides for education, healthcare, open space, public transport, waste and recycling, community facilities, impact on the Medway Estuary Special Protection Area and affordable housing. However, in respect of certain aspects of the waste and recycling contribution, the Inspector does not consider that those aspects of the calculation are CIL compliant and does not take them into account in her appeal recommendation (IR179). Nonetheless, in all other respects, the Secretary of State concludes that the obligations are compliant with Regulations 123(3), as amended.

Planning balance and overall conclusion

20. For the reasons given above, the Secretary of State considers that the appeal scheme is not in accordance with saved policies BNE25 and BNE34 of the development plan, and is not in accordance with the development plan overall. He has gone on to consider whether there are material considerations which indicate that the proposal should be determined other than in accordance with the development plan.

21. Given that policies for the supply of housing are out of date, the Secretary of State considers that paragraph 14 of the Framework is engaged. He has therefore considered whether the adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the Framework policies as a whole.

22. In terms of the sustainability, there would be economic gains from housing delivery, including affordable housing, and in the value of construction works and subsequent housing to the local economy. The Inspector also notes that the housing would be accessibly located, in close proximity to recreational facilities and local transport, and concludes this would make economic sense in terms of reducing the need for private car travel. The Secretary of State agrees that these benefits significantly outweigh the dis-benefits, in economic terms, of losing the site from agricultural use.

23. Turning to the social role the proposed dwellings would provide much needed homes, including affordable homes and this would provide for an improvement in peoples' quality of life. This is alongside some benefits for existing residents in terms of play space and

sustainable transport provision. Although there are concerns that existing residents may experience some detrimental impact on their amenity and not feel their views have been listened to. Like the Inspector, the Secretary of State considers, on balance that the social benefits weigh heavily in favour of the proposal.

24. The overall positive balance for the economic and social strands of sustainability from the development contrast with the environmental role where there is clear harm to this area of countryside which is locally designated for protection. However, the development would not lead to coalescence between Lordswood and Hempstead or critical harm to the ALLI's function. The Secretary of State therefore concludes that the sustainability of the appeal scheme along with the fact that the relevant policies for the supply of housing land in Medway are out of date, outweigh the landscape harm and other harm, and that the adverse impacts of the scheme do not significantly and demonstrably outweigh its benefits when assessed against the policies of the Framework taken as a whole.

Formal decision

25. Accordingly, for the reasons given above, the Secretary of State agrees with the Inspector's recommendation. He hereby allows your client's appeal and grants planning permission subject to the conditions set out in the annex to this decision letter for the erection of up to 450 market and affordable dwellings together with provision of access, estate roads and residential open space.

26. This letter does not convey any approval or consent which may be required under any enactment, bye-law, order or regulation other than section 57 of the Town and Country Planning Act 1990.

Right to challenge the decision

27. A separate note is attached setting out the circumstances in which the validity of the Secretary of State's decision may be challenged. This must be done by making an application to the High Court within 6 weeks from the day after the date of this letter for leave to bring a statutory review under section 288 of the Town and Country Planning Act 1990.

28. An applicant for any consent, agreement or approval required by a condition of this permission for agreement of reserved matters has a statutory right of appeal to the Secretary of State if consent, agreement or approval is refused or granted conditionally or if the Local Planning Authority fail to give notice of their decision within the prescribed period.

29. A copy of this letter has been sent to Medway Council, and notification has been sent to others who asked to be informed of the decision.

Yours sincerely

S Jewell

Stephen Jewell
Authorised by Secretary of State to sign in that behalf

Annex A: List of conditions

1) Details of the appearance, landscaping, layout, and scale, (hereinafter called "the reserved matters") shall be submitted to and approved in writing by the local planning authority before any development begins except that authorised by condition 4 below and the development shall be carried out as approved.

Reason for the condition: As required to be imposed by Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2) Application for approval of the reserved matters shall be made to the local planning authority not later than 18 months from the date of this permission. The development hereby permitted shall begin not later than 12 months from the date of approval of the last of the reserved matters to be approved.

Reason for the condition: For the avoidance of doubt and to ensure the satisfactory and prompt development of the site.

3) No development shall take place until a scheme of phasing for the dwellings and highways and drainage infrastructure and associated open space / green infrastructure has been submitted to and approved in writing by the local planning authority. Development shall be carried out in accordance with the approved scheme of phasing.

Reason for the condition: This pre-commencement condition is required to ensure that the key elements of each phase of the development is completed in an order which ensures that infrastructure needs, landscaping/open space and access are in place relevant to each phase before further development is undertaken, in the interests of good planning.

4) The development of Phase One as agreed by condition 3 above shall begin not later than 12 months from the date of the approval of reserved matters applications relating to that phase.

Reason for the Condition: To ensure a prompt start on site.

5) All reserved matters and details required to be submitted pursuant to condition 1 shall be in accordance with the principles and parameters described and identified in the Illustrative Masterplan (Drawing No. EDP1995/97a received 24/09/2015 and the Design and Access Statement (Revised 12/08 2014). A statement shall be submitted with each reserved matters application, demonstrating how the submitted reserved matters comply with the Design and Access Statement and the indicative Masterplan documents.

Reason for the condition: For the avoidance of doubt and to ensure the satisfactory development of the site.

6) No dwelling or ancillary building construction shall take place until details of the materials to be used in the construction of the external surfaces of the buildings hereby permitted have been submitted to and approved in writing by the local planning authority. Development shall be carried out in accordance with the approved details.

Reason for the condition: As the scheme is a large new development with limited screening in the initial years this condition is necessary in the interests of visual amenity and to ensure the satisfactory development of the site.

7) No more than 450 dwellings shall be constructed on the site.

Reason for the condition: For the avoidance of doubt and given all assessments have been on the basis of this figure such that it is necessary to ensure the satisfactory development of the site.

Trees and Landscaping and Ecology

8) The plans and particulars required to be submitted in accordance with the condition 1 shall ensure that no less than 2.96 ha of the site is set aside as woodland, 0.531 ha as open space and play space and where the development abuts the adjoining ancient woodland a clear minimum of 15m landscape buffer area/zone shall be maintained.

Reason for the condition: To ensure adequate open space for future occupiers of the development and to provide for the interests of the ancient woodland.

9) The development shall not commence until an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP), which shall include details of all trees to be retained and removed, any facilitation pruning required and the proposed measures of protection, undertaken in accordance with BS 5837 (2012) 'Trees in Relation to Design, Demolition and Construction-Recommendations' has been submitted to and approved in writing by the local planning authority. The AMS shall include full details of areas of hard surfacing within the root protection areas of retained trees which should be of permeable, no-dig construction and full details of foundation design, where the AMS identifies that specialist foundations are required. The approved barriers and/or ground protection measures shall be erected before any equipment, machinery or materials are brought onto the site and shall be maintained until all equipment, machinery and surplus materials have been removed from the site. Nothing shall be stored or placed, nor fires lit, within any of the areas protected in accordance with this condition. The siting of barriers/ground protection shall not be altered, nor ground levels changed, nor excavations made within these areas without the written consent of the local planning authority. The measures set out in the AMS and TPP shall be adhered to in accordance with the approved details.

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the arboricultural interests of the site before works commence that could cause irrevocable harm and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

10)A Landscape and Ecology Management Plan (LEMP), including long term design objectives, management responsibilities and maintenance schedules with timetable(s) for works for all landscape areas, other than domestic gardens, shall be submitted to the local planning authority for approval in writing prior to the occupation of the development. The LEMP shall be carried out as approved in accordance with the approved timetable(s).

Reason for the condition: To safeguard the landscape and ecological interests of the site and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

11) No dwelling shall be occupied until a Woodland Management Plan (WMP) for the existing and proposed woodland areas has been agreed in writing by the local planning authority. That part of the WMP for Hall Wood Ancient Woodland shall be in accordance with EDP's Heads of Terms for a WMP (EDP report ref: C_EDP1997_07).

The WMP shall include the following:

a) Review of existing constraints and opportunities;

b) Management objectives and associated practical measures;

c) Details of initial enhancements and long term maintenance;

d) Extent and location/area of management works on scaled maps and plans at a scale which shall have first been agreed by the local planning authority in writing;

e) Timetable for implementation demonstrating that works are aligned with the proposed programme of development;

f) Details for monitoring and remedial measures; and

g) Persons responsible for implementing the works.

The measures set out in the WMP shall be implemented in accordance with the approved details and timetable(s).

Reason for the condition: This condition is required to safeguard the woodland and to ensure adequate management for the protection of landscape and habitat in the interests of ecological and local amenity.

12)The development shall not commence until details of all fencing, walling and other boundary treatments, to include hedgehog holes have been submitted to and approved in writing by the local planning authority. The landscaping areas and buffer zones shall be implemented in full in accordance with the approved details before the first occupation of any of the dwelling as hereby approved, or in accordance with a programme to be agreed in advance in writing by the local planning authority. All boundary treatments and buffer zones to be installed in or adjacent the ancient woodland shall be carried out in accordance with the approved details.

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the ecological interests of the site. The works subsequently required are necessary in the interests of residential and local amenity.

13) All planting, seeding or turfing comprised in the approved details of landscaping shall be carried out in the first planting and seeding seasons for the phase to which it relates following the occupation of the first dwelling on that phase or the completion of that phase of development, whichever is the sooner; and any trees or plants which within a period of 5 years from the completion of that phase of the development die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species.

Reason for the condition: This condition is required to ensure that the landscaping gets properly established which is particularly important to visual amenity given the size and partly open location of the site.

14) No works shall take place (including ground works and vegetation clearance) until an updated species survey has been carried out to inform production of an Ecological Design Strategy (EDS) addressing all species mitigation for all species recorded within the site has been submitted to and approved in writing by the local planning authority.

The EDS shall include the following:

a) Purpose and conservation objectives for the proposed works;

b) Review of site potential and constraints;

c) Detailed method statements to achieve stated objectives for each species;

d) Extent and location/area of proposed mitigation for all species on appropriate scale maps and plans;

e) The location of bat and bird boxes and/or bricks and their specifications;

f) Type and source of materials to be used (including whether or not they are native species and local provenance);

g) Timetable for implementation demonstrating that works are aligned with the proposed programme of development;

h) Persons responsible for implementing the works;

i) Details of initial aftercare and long term maintenance;

j) Details for monitoring and remedial measures; and,

k) Details for disposal of any wastes arising from works.

The EDS shall be implemented in accordance with the approved details and retained thereafter.

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the ecological interests of the site before works commence that could cause irrevocable harm and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

15) No part of the development hereby granted (including ground works and vegetation clearance) shall take place until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning Authority. The CEMP: Biodiversity shall include the following:

a) Details of the areas where ancient woodland soil and coppiced stools are to be translocated and method statement for translocation;

b) Risk assessment of potentially damaging construction activities;

c) Identification of biodiversity protection zones;

d) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements);

e) The location and timing of sensitive works to avoid harm to biodiversity features;

f) The times during construction when specialist ecologists need to be present on site to oversee works;

g) Responsible persons and lines of communication;

h) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person;

i) Use of protective fences, exclusion barriers and warning signs; and,

j) Cordwood above 20cm in diameter from the site should be retained and placed within the site in locations and quantities to be agreed with the local planning authority prior to any tree felling take place.

The approved CEMP: Biodiversity shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the ecological interests of the site before works commence that could cause irrevocable harm and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

16) No external lighting fixtures or fittings shall be attached to any building or structure hereby approved and no free standing lighting equipment shall be erected on the site, other than those shown on the plans approved for condition 17 below or as may be agreed on a temporary basis under condition 15 during the construction period.

Reason for the condition: This condition is required to safeguard the ecological interests of the site.

17) No dwelling shall be occupied until a Lighting Strategy for Biodiversity, including a timetable for its implementation has been submitted to and approved in writing by the local planning authority. The strategy shall:

a) identify those areas/features on site that are particularly sensitive for bats, dormice and otters and that are vulnerable to light disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging; and

b) show how and where external lighting will be installed (through the provision of appropriate lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places.

All external lighting shall be installed in accordance with the specifications and locations set out in the strategy, and these shall be maintained thereafter in accordance with the strategy.

Reason for the condition: This condition is required to safeguard the ecological interests of the site.

Highways

18) The access to the site shall be from North Dane Way Drive as show in drawing 186-SK-006 Rev A and the emergency vehicular access shall be from Ham Lane.

Reason for the condition: In the interests of highway safety and emergency access, for the avoidance of doubt and to ensure the satisfactory development of the site.

19) Development shall not begin until details of the proposed emergency access have been submitted and approved in writing by the local planning authority. The approved emergency access shall be made available prior to the first occupation of any dwelling and thereafter retained for the purpose intended.

Reason for the condition: This condition is required in the interests of highway safety and emergency access.

20) No development shall take place until a Construction Method Statement (CMS) has been submitted to and approved in writing by the local planning authority. The approved CMS shall be adhered to throughout the construction period. The CMS shall provide for:

i) the parking of vehicles of site operatives and visitors;

ii) loading and unloading of plant and materials;

iii) storage of plant and materials used in constructing the development;

iv) wheel washing facilities;

v) measures to control the emission of dust and dirt during construction; and,

vi) a scheme for recycling/disposing of waste resulting from construction works.

Reason for the condition: This condition is required to be addressed pre commencement as it relates to activities which would be likely to have an impact immediately upon first works on the site and it relates to the interests of highway safety and the protection of the environment.

21) No development hereby permitted shall commence until such time as the improvement works to the junction of North Dane Way and Albermarle Road and the link access road to the site as shown in the drawing 1661-SK-001 Revised A within appendix H of the Transport Assessment Report have been completed in accordance with details which shall first have been approved by the local planning authority in writing.

Reason for the condition: This condition is required pre-commencement as it is essential that safe access is provided to the site before activities commence on site in the interests of highway safety and the free flow of traffic.

22) No dwellings on the development shall be occupied until the carriageway(s) (including surface water drainage/disposal, vehicular turning head(s) and street lighting) providing access from the nearest public highway to that dwelling have been completed to at least binder course level and the cycle and footway(s) to surface course level.

Reason for the condition: This condition is required to ensure pedestrian and cycle and vehicular access is available for each dwelling before it is occupied in the interests of the welfare and safety of the occupiers of the related dwelling.

23) No dwelling shall be occupied until details of the proposed arrangements for future management and maintenance of the proposed streets within the development have been submitted to and approved in writing by the Local Planning Authority. The streets shall thereafter be maintained in accordance with the approved management and maintenance details until such time as either a dedication agreement has been entered into or a private management and maintenance company has been established.

Reason for the condition: To ensure highways are maintained in a safe condition for the protection of those using them.

24) No dwelling hereby approved shall be occupied until a travel plan based on the Framework Travel Plan has been submitted to and approved in writing by the local planning authority.

Reason for the condition: To encourage alternative means of transport to that of the private car in the interests of the environment.

25) Details submitted pursuant to condition 1 shall include a shared footway/cycleway on the north side of North Dane Way to link the development site with the Lords Wood Leisure Centre with associated improvements and street lighting.

Reason for the condition: To encourage alternative means of transport to that of the private car in the interests of the environment.

Archaeology

26) No development shall take place within any phase of the development until a programme of archaeological work has been secured and implemented in accordance with a written scheme of investigation for the relevant phase, which shall have first been submitted to and approved in writing by the Local Planning Authority.

Reason for the Condition: It is necessary for this condition to be a pre-commencement condition so that archaeological assessment can take place before the land is disturbed.

Flood Risk and Drainage

27) The first application for the approval of reserved matters on the site shall be accompanied by a sustainable surface drainage strategy for the entire application site. No dwelling hereby permitted shall be occupied until surface water drainage works have been implemented in accordance with details that have been submitted to and approved in writing by the Local Planning Authority as part of the reserved matters applications for the phase within which the dwelling is situated.

Before these details are submitted, an assessment shall be carried out of the potential for disposing of surface water by means of a sustainable drainage system in accordance with the principles set out in DEFRA's non-statutory technical standards for the design, maintenance and operation of sustainable drainage to drain surface water (or any subsequent version), and the results of the assessment provided to the local planning authority. Where a sustainable drainage scheme is to be provided, the submitted details shall:

i) provide information about the design storm period and intensity, the method employed to delay and control the surface water discharged from the site and the measures taken to prevent pollution of the receiving groundwater and/or surface waters;

ii) include a timetable for its implementation; and

iii) provide a management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime.

Reason for the condition: To ensure acceptable drainage of the site so as to minimise flood risk.

28) No dwelling in any phase of development hereby permitted shall be occupied until sewage disposal works for that phase have been implemented in accordance with a scheme which has first been submitted to and approved in writing by the Local Planning Authority.

Reason for the condition: To ensure acceptable foul drainage of the site.

Noise

29) No dwelling shall be constructed until an acoustic appraisal specifying attenuation measures (where necessary) has been submitted for approval in writing by the local planning authority. No dwelling shall be occupied until the approved attenuation measures have first been installed in accordance with the approved details. The approved attenuation measures shall be maintained and retained thereafter.

Reason for the condition: To ensure acceptable living conditions for future occupiers of the site.

Air Quality

30) The development shall not be commenced until an Air Quality report has been submitted to the local planning authority for its written approval. The report shall contain and address the following:

i) An assessment of air quality on the application site and of any scheme necessary for the mitigation of poor air quality affecting the residential amenity of occupiers of this development.

ii) An assessment of the effect that the development will have on the air quality of the surrounding area and any scheme necessary for the reduction of emissions giving rise to that poor air quality. The assessment should quantify the measures or offsetting schemes to be included in the development which will reduce the air pollution of the development. Any scheme of mitigation set out in the subsequently approved report shall include a timetable for implementation. The development shall be implemented and managed in accordance with the approved scheme.

Reason for the condition: This condition is required as a pre-commencement condition as air quality needs to be initially assessed prior to any works of development commencing as they could alter background air quality levels and this condition is required in the interests of the environment and living conditions of future occupiers of the development.

Contamination

31) If during the course of development, contamination is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted, and obtained written approval from the local planning authority for a remediation strategy detailing how the contamination shall be dealt with. The remediation strategy shall be implemented as approved, verified and reported to the satisfaction of the local planning authority.

Reason for the condition: This area is prone to fly-tipping and therefore it is anticipated that as yet unidentified contamination may exist on site. In such circumstances it may be necessary for remedial works to take place in order that the land becomes safe for residential use.

The Planning Inspectorate

Report to the Secretary of State for Communities and Local Government

by Mrs Zoë Hill BA(Hons) Dip Bldg Cons(RICS) MRTPI IHBC

an Inspector appointed by the Secretary of State for Communities and Local Government

Date: 5 December 2016

Town and Country Planning Act 1990

Appeal by Messrs KD, JC & MC Attwood

Against the decision of

Medway Council

Inquiry opened on 4 October 2016

Gibraltar Farm, Ham Lane, Hempstead, Gillingham, Kent ME7 3JJ

File Ref: APP/A2280/W/16/3143600

Contents

Abbreviations

ALLI	Area of Local Landscape Importance
AMR	Annual Monitoring Report
AONB	Areas of outstanding natural Beauty
The Council	Medway Council
CIL	Community Infrastructure Levy Regulations
CPRE	Campaign to Protect Rural England
dpa	dwellings per annum
The Framework[1]	National Planning Policy Framework
The Guidance	The National Planning Practice Guidance
ha	hectares
LCA	Landscape Character Assessment
LCT	Landscape Character Type
OAN	Objectively Assessed Need
PRoW	Public Right of Way
SHENA	Strategic Housing and Economic Needs Assessment
SLAA	Strategic Land Availability Assessment
SoS	Secretary of State
SPA	Special Protection Area
ZVI	Zone of Visual Influence

[1] (also referred to when quoted as NPPF)

File Ref: APP/A2280/W/16/3143600
Gibraltar Farm, Ham Lane, Hempstead, Gillingham, Kent ME7 3JJ

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
- The appeal is made by Messrs KD, JC & MC Attwood against the decision of The Medway Council.
- The application Ref: MC/14/2395, dated 8 August 2014, was refused by notice dated 27 January 2016.
- The development proposed is the erection of up to 450 market and affordable dwellings together with provision of access, estate roads and residential open space.

Summary of Recommendation: The appeal be allowed, and planning permission granted subject to conditions.

Procedural Matters

Determination

1. The Secretary of State (SoS) has directed that, in exercise of powers under section 79 and paragraph 3 of Schedule 6 of the Town and Country Planning Act 1990, he shall determine the appeal because it involves proposals for residential development of over 150 units or sites of over five hectares which would significantly impact on the Government's objective to secure a better balance between housing demand and supply and create high quality, sustainable, mixed and inclusive communities.

Inquiry Dates

2. The Inquiry opened on the 4 October 2016 and sat for three days. The accompanied site visit was conducted on the 6 October 2016.

Plans and Planning History

3. In January 2015 the SoS refused to make a direction under s.98 of the Local Government, Planning and Land Act 1980 which the appellants had sought to secure access using land in the Council's ownership. That scheme included two main access points. In light of that refusal to make such a Direction, a revised scheme was submitted with a single primary access point which only involves a modest area of land in the Council's ownership. The provision of an emergency access onto Ham Lane remains the same. I have considered the appeal on the basis of the single primary access proposal.

4. During the appeal process, and prior to the Inquiry, an inaccuracy was found in the 'red line' site boundary. As a consequence revised plans were submitted with the appeal. Those plans show a fractionally smaller site. It makes no material difference to the scheme proposed on the 'masterplan'. The parties agree that consideration of the amended plans would not cause prejudice to any interested party and, from the evidence before me, I agree. The revised plans are: Illustrative Masterplan [Dr No EDP 1995/125] (dated 5 Sept 2016); Site Plan / Application Boundary Plan [Dr No EDP 1995/74d] (dated 5 Sept 2016); and, Informative to Application Boundary Plan [Dr No EDP 1995/124a] (dated 5 Sept 2016).

5. The advance planting plan, road access plan, site section plan and open space breakdown plan, which were submitted as part of the planning application as illustrative plans, also require consideration.

Environmental Impact Assessment

6. The application was screened by the Local Planning Authority which decided on 24 February 2014 that it did not require an Environmental Impact Assessment. I have no reason to disagree.

S.106 Unilateral Undertaking

7. A draft s.106 Unilateral Undertaking was submitted for consideration with the appeal proposals. A signed s.106, dated 6 October 2016, was submitted at the Inquiry. It varies in detail, but not principle, from the draft and, in broad terms, it provides for:

   Education Contribution - £2,226,674

   Affordable Housing – 25% to be affordable housing

   Healthcare Contribution - £210,577

   Open Space Contribution - £290,928

   Public Transport Contribution - £201,843

   Waste and Recycling Contribution - £69,948

   Community Facilities Contribution - £61,519.50

   Impact on the Medway Estuary Special Protection Area (SPA) Contribution (tariff) - £81,300.

8. Community Infrastructure Levy Regulations (CIL) compliance is dealt with later in this report.

The Site and Surroundings

9. The appeal site is some 23.93 hectares (ha) of mainly open agricultural land. It is bordered by Lordswood to the south-west and Ham Lane to the north. Beyond Ham Lane is the Elm Court Business Park[2]. The western boundary is formed by the farm building complex at Gibraltar Farm and the woodland 'Hook Wood'. The east/south-east boundary is not marked by any specific feature but runs across an open agricultural field. A byway runs north-west to south-east through the appeal site. This would be retained in the proposed scheme.

Planning Policy

10. The Development Plan comprises the saved policies of the Medway Local Plan (May 2003).

11. The main parties agree that the saved policies which are relevant to the appeal are:

[2] I note that this site was also referred to as Elm Park, Elm Court Business Village, Elm Court Industrial Village and may be referred to by similar titles. For ease of reading I have adopted Elm Court Business Park throughout

Policy S4 - Landscape and Urban Design

Policy BNE34 - Areas of Local Landscape Importance

Policy BNE25 - Development in the Countryside

12. It is agreed between the main parties that little weight should be given to Policy BNE25. The pertinence and weight to be attached to the other policies was a matter of debate.

13. In addition, the following guidance is relevant to the appeal:

Supplementary Planning Guidance –

Medway Council Guide to Developer Contributions (2014)[3]

Medway Landscape Character Assessment 2011(LCA)[4]

14. The National Planning Policy Framework (the Framework) is a relevant material consideration.

15. The Medway Submissions Draft Core Strategy (2006-2028) was withdrawn. The emerging Issues and Options consultation seeks to identify contextual matters for the new Local Plan, rather than setting out detailed policies or site specific matters. It is currently envisaged that a new Local Plan will be submitted in early 2018.

16. The North Kent Strategic Housing and Economic Needs Assessment (SHENA) (2015) underpins the objectively assessed housing need (OAN) of 29,463 dwellings for the plan period (or 1281dpa). The Issues and Options Consultation makes it clear that Medway intends to meet the OAN for its area. The intention is that 25% affordable housing would be sought on sites of 15 or more units.

The Appeal Proposals

17. The application is described as the erection of up to 450 market and affordable dwellings together with provision of access, estate roads and residential open space. The highways access would be a continuation of North Dane Way which is to the north-east of housing in Lordswood[5]. The emergency access would be from Ham Lane at the opposite side of the site.

18. The scheme is in outline with only access for consideration at this stage and all other matters reserved for subsequent consideration. However, the illustrative Masterplan broadly identifies structural landscaping, open/play space, potential open water storage areas, retention of the public byway across the site, and primary and secondary vehicular routes.

Other Agreed Facts[6]

[3] CD10.6
[4] CD10.5
[5] I note that in some places the address is given as Lords Wood – I have adopted Lordswood throughout this report
[6] Key matters taken from the Statement of Common Ground CD8.1

19. **Housing Matters**: The site is not allocated for any development purpose in the Medway Local Plan and, as the land lies beyond the designated settlement confines, comprises countryside and is designated as an Area of Local Landscape Importance (ALLI).

20. The parties agree that Medway Council does not have a five year housing land supply. They acknowledge that at a recent appeal for land west of Hoo St Werburgh[7] the Inspector concluded at paragraph 75 of his Decision that Medway's five year housing land supply was within a range of 2.21 and 2.79 years.

21. The Council's Annual Monitoring Report (AMR) for 2014-15 sets out that housing completions in the years 2012-2015 respectfully were: 809, 565, 579 and 483 giving a total of 2436 dwellings.

22. It is recognised by both parties that the Framework supports housing and economic growth with a balanced approach applied through the presumption in favour of sustainable development. Paragraph 49 of the Framework states that relevant policies for housing should not be considered up-to-date if the local planning authority cannot demonstrate a five year supply of deliverable housing sites. Medway Council acknowledges in the officer's report that it does not have sufficient sites to meet the 5-year housing land supply. It is agreed that, in line with the Framework, a 20% buffer should be applied given the recent rate of housing completions that are identified in the Annual Monitoring Report (AMR).

23. The parties agree that the Framework sets out a presumption in favour of sustainable development and that, in the context of Medway and the relationship of the site to the surrounding urban area, the site represents a sustainable location in accessibility terms and would contribute to the supply of housing, including market choice and affordable provision, to meet a persistent record of under delivery relative to annualised targets.

24. There is no dispute that the site is readily deliverable and could make a short term contribution to supply and the agreed timing conditions would help to accelerate delivery.

25. **Heritage Matters**: The site contains no designated or non-designated heritage assets. Nor does it form part of or affect the setting of any conservation area or listed building. It is also agreed that an archaeological investigation condition would safeguard any archaeological potential of the site.

26. **Design and Residential Amenity**: The parties agree that the masterplan accompanying this outline scheme, combined with the distance of separation from existing housing and proposed buffer landscaping, would allow the site to be developed for up to 450 dwellings without material harm to the living conditions of existing residential occupiers in terms of overshadowing, overlooking and conventional expectations of distances of separation required for providing adequate outlook from property windows.

27. **Flood/Drainage and Sewage**: There is agreement between the parties that flooding, drainage and sewerage considerations have been properly addressed

[7] CD10.7 APP/A2280/W/15/3132141 (dated 6 September 2016)

within the outline planning proposal subject to the imposition of appropriate planning conditions.

28. **Air Quality Noise and Contamination**: There is agreement that the impact of the proposed outline development on living conditions in the locality would be acceptable with suitable mitigations that can be secured via appropriate conditions.

29. **Agricultural Land Quality**: It is agreed that the appeal site consists of Grade 3a and 3b agricultural land - classified as good to moderate quality. The proposal therefore meets the requirement of the Framework at paragraph 112, which seeks to protect the best and most versatile agricultural land.

30. **Ancient Woodland**: It is accepted that the small area of woodland that would be required for access contains no significant tree specimens. The proposal includes some 2.96ha of new woodland and additional open space that would be safeguarded by planning conditions. It is accepted by both parties that the loss of Ancient Woodland is minor and offset by mitigation in the form of new woodland and open space, in line with paragraph 118 of the Framework. The parties have agreed planning conditions which seek to ensure that proposed housing would not encroach within a distance of 15 metres from the Ancient Woodland. This is reflected within the illustrative masterplan.

31. **Highways**: The parties agree that there is no highway objection to the appeal scheme.

The Case for Messrs KD, JC & MC Attwood (the Appellants)

The Appellants' Introduction

32. The appellants' contend that the key issues are the policy framework and particularly the weight to be attached to the development plan; whether the appeal proposals would cause harm to the ALLI, or to a valued landscape; and if so, the magnitude of that harm; and, whether the harm significantly and demonstrably outweigh the benefits of the scheme.

Weight to be attached to the Development Plan

33. It is common ground that s.38(6) of the Planning and Compulsory Purchase Act 2004 (s.38(6)) requires the decision taker to start from the development plan.

34. It is common ground that the appeal proposal conflicts 'in principle' with Policy BNE25 of the Local Plan which resists most development in the countryside, and that, in the absence of any other material considerations, this would indicate that permission should be refused.

35. However, it is also common ground that the Framework is an important material consideration which is capable of justifying a decision other than in accordance with the development plan. In particular, paragraph 49 advises that the relevant policies for the supply of housing should not be considered up-to-date if the local planning authority cannot demonstrate a five year housing land supply. Where relevant policies are out-of-date, the presumption set out in paragraph 14 is engaged.

36. The appellant's take the view that it is wrong to say that the bar set by s.38(6) is a high one in terms of according with the development plan. S.38(6) doesn't

include weighting as some other parts of statute do (for example green belt or listed buildings) rather the weighing of other material considerations is one for the decision maker.

37. In this appeal, the key development plan policies relied on (BNE25 and BNE34) are both agreed to be relevant policies for the supply of housing within the meaning of Framework paragraph 49. Since the Council does not have a five year housing land supply, those policies are out-of-date.

38. As the Court of Appeal made clear in Suffolk Coastal District Council v Hopkins Homes[8] (Suffolk Coastal), the fact that the policies are out-of-date does not mean that they are necessarily irrelevant, or must be given no weight: rather weight is ultimately a matter for the decision-maker.

39. However, the Framework is clear about the weight to be attached to policies that are out-of-date. In particular, paragraph 14 of the Framework advises that, where relevant policies are out-of-date, permission should be granted unless "*any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole*".

40. There are two important components in the para 14 formulation. Firstly, what is important is not harm when assessed against the out-of-date development plan policies, but harm when assessed against the Framework as a whole; and secondly, the starting point is that permission should be granted, unless the harm "*significantly and demonstrably outweighs the benefits*".

41. As the Court of Appeal made clear in Suffolk Coastal it is for the decision-maker to decide what weight is to be given to Framework policies, and the weight to be given to policies of the development plan is not dictated by the Framework. In the present case, the decision-maker will be the same SoS who is responsible for the Framework. While the SoS is perfectly entitled to disregard his own policy, he would need good reasons for so doing and would want to be careful about the precedent this might set for others.

42. This is a straightforward case for the application of paragraph 14 of the Framework. The appellants have considered each of the policies referred to in the reasons for refusal in light of this context.

43. **Policy S4** states that: *"A high quality of built environment will be sought from new development, with landscape mitigation where appropriate. Development should respond appropriately to its context, reflecting a distinct character."*

44. It was accepted by the Council that there is no reason why the appeal scheme could not satisfy the first part of the policy: the Council's complaint relates to the second part.

45. In the appellants' submission, when policy S4 is read together with its reasoned justification, it is clear that it is primarily intended to govern issues of detailed design, rather than the location of new development. However, if it provides locational guidance of any relevance to this appeal, it was accepted by the Council that it adds nothing substantive to policies BNE25 and BNE34.

[8] CD11.2

46. **Policy BNE25** is a typical old style countryside policy, premised on the need to protect the countryside for its own sake. It creates an 'in principle' policy objection to any form of development which does not fall within the categories listed in its sub-paragraphs; this position exists irrespective of the quality or value of the countryside in which that development is proposed and of whether the development would cause harm. In all these respects, it is completely inconsistent with the Framework.

47. Further, in circumstances where the Council does not have a five year housing land supply, the Council accepts that it will not be possible to meet Medway's housing needs without the release of greenfield sites beyond the built up area. It is therefore difficult to see how any weight could rationally be attached to the 'in-principle' conflict with policy BNE25.

48. This leaves the first limb of the policy, which states that development in the countryside will only be permitted if it maintains and wherever possible enhances the character, amenity and functioning of the countryside. For the Council it is argued that this part of the policy is consistent with the Framework, in as much as its paragraphs 17 and 109 both seek to protect the countryside. However, the fact that there is an overlap in the subject matter of policy BNE25 and paragraphs 17 and 109 is not enough to make the development plan policy consistent with the Framework, because of the way in which the Framework tells us how the countryside should be protected.

49. In that regard, paragraph 17 of the Framework speaks only of recognising the intrinsic character and beauty of the countryside, which is some way short of requiring the character, amenity and functioning of the countryside to be maintained and enhanced. Paragraph 109 speaks only of protecting valued landscapes, whereas BNE25 applies to all countryside. Moreover, it is implicit in the policy BNE25 criterion (i) requirement that character, amenity and function are maintained and that the policy requires development to cause no harm. In contrast, where there is a shortfall in the five year housing land supply, but meeting housing need conflicts with paragraphs 17 and 109, paragraph 14 tells us how that balance should be struck, in terms which expressly recognise that this may mean doing harm to the countryside.

50. Once these elements are stripped out of policy BNE25, it is difficult to see what is left. Consequently, if one seeks to protect the countryside in a way which is consistent with the Framework, there is no need to look to policy BNE25 to know how to do it: the answer is in the Framework itself. The Council's planning witness confirmed that he was not seeking to resile from the SoCG, which states that little weight should be attributed to policy BNE25. That was also the view of officers when reporting the Mierscourt application to committee[9], and of the Inspector dealing with the Station Road appeal[10]. Reference to the Audlem Road decision[11] to seek a contrary view ignores the evidence of the Council's witness and SoCG.

51. **Policy BNE34** is accepted by the Council to be a relevant policy for the supply of housing. Nonetheless, the Council seeks to argue that it should be given

[9] CD11.7
[10] CD11.3 para 14
[11] CD11.4

considerable weight, on the basis that it is consistent with Framework paragraph 109. The appellants do not share that view.

52. As the 2011 Landscape Character Assessment (LCA) observed[12], national policy has for some time discouraged the protection of landscape via rigid local landscape designations, and has instead advocated the use of criteria-based policy guidance. Further, as the Gleaming Wood[13] Inspector points out, it should be based on objective landscape character assessment rather than qualitative perception. In contrast, policy BNE34 is clearly based on a rigid designation and, as two Inspectors have now pointed out, there is no evidence that it was ever underpinned by an objective landscape character assessment. In neither respect is it consistent with the Framework.

53. The Framework expects development plan policies to be up-to-date. The ALLI designation dates back to 1992. There is no evidence that the appropriateness of either the designation generally or that the detailed boundaries have ever been reviewed since that time. Further, when the SoS saved the policy in 2007, he did so specifically to give Medway a chance to justify the continued retention of the policy. In the 9 years since that letter, no justification has been forthcoming.

54. Although the 2011 LCA assesses the landscape character of all the ALLIs it makes no recommendations as to the retention of the designation generally or the validity of particular boundaries. That is to be expected given that the LCA's recognition that national policy guidance proposed the replacement of rigid local landscape designations. The LCA was intended to provide the basis for such a replacement policy, not the justification for retaining policy BNE34.

55. The absence of an up-to-date review justification is all the more critical, given the way in which the ALLI designations have been tightly drawn around the main urban areas of Medway. Effectively, policy BNE34 means that any proposal for a sustainable urban extension to meet housing needs will be contrary to policy. However, this conflict is inevitable given that Medway cannot demonstrate a five year housing land supply. In these circumstances, meeting the future housing needs of the district will necessarily involve development within areas designated as ALLIs. Indeed, in resolving to grant permission for the Mierscourt application, the Council has recognised that this is the case. The Station Road appeal decision[14] is to similar effect. Further, as the LCA makes clear, there are significant differences in the quality and importance of the landscape areas within individual ALLIs. This is precisely why the Framework has moved away from the concept of blanket designations and towards a criteria-based approach, informed by objective landscape character assessment.

56. The policy BNE34 approach to balancing harm is markedly different to paragraph 14 of the Framework. Whereas paragraph 14 requires permission to be granted unless the harm significantly and demonstrably outweighs the benefits, in policy BNE34 the presumption is the other way around.

57. Between them, the Council's witnesses accepted that each and every one of these points reduced the weight which should be attached to policy BNE34.

[12] CD10.5 page 2
[13] CD3.5 Appeal Ref: APP/U2235/W/14/2227572 & 3132364
[14] CD11.3

Thus, the appellants contend it is difficult to see how the policy could have considerable weight. Such an approach stands in stark contrast to the advice given to members when the Mierscourt application was reported to committee with a recommendation for approval. In that case, officers concluded that policy BNE34 should only be given limited weight, notwithstanding the fact that that was a case in which they considered there would be significant harm to the ALLI.

58. Policy BNE34 may be claimed to be about protecting valued landscapes in line with the Framework. However, this overlooks the inconsistency between policy BNE34 and the Framework over the way valued landscapes should be protected, and how any conflicts should be balanced.

59. The Council's planning witness contended that there was no difference between the balancing exercise in policy BNE34 and that in paragraph 14 but he accepted that, when making a decision on the appeal, the approach in paragraph 14 should be applied. If the SoS wishes to act consistently with his own policy this must be done. If one wants to understand how the Framework considers things should be done, there is no need to refer to policy BNE34: all that is needed is Framework paragraph 109, read together with paragraph 14.

Whether the appeal proposals would cause harm to the ALLI, or to a valued landscape; and if so, the magnitude of that harm

60. The first question to be considered is whether the appeal site is, or forms part of, a valued landscape. It is common ground that value is not to be equated with popularity, and that what one is looking for is some demonstrable physical attribute which lifts a site out of the ordinary.

61. The appeal site lies within an area which has been designated in a Local Plan as an ALLI which can be taken as evidence that it is valued. However, just as landscapes can be valued even though they are not designated, as the Council's landscape witness agreed, the ALLI designation does not necessarily equate to value. For the reasons set out above, it is necessary to be careful about assuming that the ALLI designation is an assessment of value in the sense referred to in Framework at paragraph 109. Value is not an on or off switch. There is a hierarchy of landscape designations, with higher value placed on national designations such as AONBs. Even within single designations, there will be parts of the landscape that have greater value than others.

62. As their name suggests, ALLIs are a local designation. Consequently, we are not dealing with an AONB, a National Park or even a county-wide designation such as a Special Landscape Area. This does not mean that ALLIs are not valued, but it means that their value is towards the lower end of the spectrum. It is therefore important not to apply the same rigorous standards that would be expected in an AONB.

63. It is necessary to assess whether the landscape in which the appeal site sits has demonstrable physical attributes which raise it above the ordinary. It is common ground between the parties that, when considering whether the appeal site has such attributes, it is helpful to start from the 2011 LCA. As the LCA makes clear[15], while the ALLI for the Capstone area as a whole has some demonstrable

[15] CD10.5

physical attributes which engage paragraph 109 of the Framework, not all parts of the Capstone ALLI are equally valuable. The LCA does not seek to rank the ALLIs but nor does it suggest that they are of equal value; what it does is to provide some information for comparison.

64. The appeal site lies within the 'Elm Court' landscape character type (LCT). In that context, it has value in terms of its spatial and recreational function. However, there is nothing about the fabric of the land which takes Elm Court out of the ordinary. This is borne out by the LCA, which describes Elm Court as being characterised by indistinct field patterns, a lack of containment, the discordant presence of the Elm Court Industrial Estate, monotonous open farmland, and urban fringe activities such as fly tipping.

65. In short, Elm Court is part of a wider valued landscape, but the Elm Court LCT is in poor condition overall, and has significantly less value than the other LCTs which make up the wider Capstone ALLI. Moreover, this specific proposal leaves the roles of the wider ALLI to the north unaffected. Paragraph 109 of the Framework is engaged, but very much at the lower end of the spectrum.

66. It is in this context that the harm which would be caused should be assessed. In this regard, the Council's landscape witness identifies the key attributes of the ALLI as being a green wedge linking urban communities into the wider countryside, preventing coalescence of Lordswood/Princes Park and Hempstead, being a rural landscape in close proximity to the urban area, contributing to the wider landscape setting of Capstone Farm Country Park and, contributing to the setting of the Kent Downs AONB.

67. The Council's landscape witness agreed that the contribution to the setting of the Kent Downs AONB was a secondary issue, and he made no issue in respect of the contribution to the setting of Capstone Farm Country Park.

68. Turning to the matter of the site being part of a green wedge linking urban communities into the wider countryside, it is relevant to consider the size of the ALLI as a green wedge (the Council's viewpoint 1 is, in the appellants' view, a good illustration). The ALLI totals over 575ha, and extends for almost 4km north of the appeal site up to Darland Banks, along two sharply incised valleys. The appeal site is invisible from the urban edges to the north, and for residents along 90% of the ALLI's boundaries there would be no change in their sense of being linked to the countryside.

69. The Council's landscape witness referenced his concerns to what he described as the flow of countryside from north to south. However, the LCA notes that there are few footpaths in the ALLI which run north-south, and none which run the length of the ALLI in that direction. To the extent that the flow can be experienced in a single journey, it is most likely to be in a car or on a bicycle, travelling the length of Shawstead Road/Ham Lane or Capstone Road/Lidsing Road. In the appellant's view the appeal scheme would not materially affect the extent to which that journey is experienced as being a journey through countryside.

70. Turning to the prevention of coalescence between Lordswood/Princes Park and Hempstead, there is no doubt that the appeal proposal would narrow the gap between these settlements in this particular location. However, the effect of this would be localised. In the extensive areas of the ALLI to the north, there would

still be very substantial separation between the urban areas to the east and west, and development on the appeal site would have no effect on this at all. Even within the immediate locality, there would still be a gap of at least 0.5km between the two settlements. Elsewhere within the LCA, the authors of that document recognise that areas of land such as the Horsted Valley still manage to fulfil the function of preventing coalescence, even though they are narrower than would be the case for this location were the scheme developed.

71. It is also important to consider the extent to which the reduction in the gap would be perceived once the proposed mitigation has matured. In this regard, it is worth reflecting on the extent to which the existing urban development on either side of the ALLI is already largely screened by woodland. In time, there is no reason why development on the appeal site should be any different.

72. As to the importance of the site as a rural landscape in close proximity to the urban area, the appeal proposals would inevitably change the character of the existing open field. However, although residents of the nearest parts of Lordswood would have a slightly longer walk to get there, they would still be able to access open countryside via the footpaths through the site. Moreover, the development would provide its own areas of open space for recreation, as well as better managed access to Hall Wood.

73. In considering the Council's criticisms, it is important to recognise the extent to which these impacts are localised. In considering the functions and value of the ALLI as a whole, the appeal scheme would have a negligible effect. Further, a number of the impacts are time limited. In the medium to long term, any visual harm would be substantially mitigated by the landscape proposals and, in particular, the 20m wide block of woodland which is proposed for the southern boundary of the site.

Whether the harm significantly and demonstrably outweighs the benefits of the scheme

74. It is common ground that whatever the precise figure, the shortfall against Medway Council's five year housing land supply is significant. In the words of the Moor Street Inspector[16], the situation is "parlous". Leaving the disagreement over landscape impacts to one side, the appeal proposal site is in a sustainable location. The provision of 450 houses with ready access to jobs, services and public transport would make a valuable and sustainable contribution to Medway's housing needs, and that is a matter to which significant weight should be given.

75. The only area of uncertainty relates to precisely how bad the shortfall in the five year housing land supply is. In this regard, the SoS may take the view that, even on the best estimate, the Council is so far short of its requirement that the exact figure is of limited relevance. However, in Suffolk Coastal, the Court of Appeal indicated that the magnitude of the shortfall will be important in determining the weight to be attached to development which will address that problem.

[16] CD11.5 Appeal Ref: APP/A2280/W/15/3012034

76. In terms of need, the appellants are content to accept the Moor Street Inspector's conclusion that the total requirement (recovering a backlog of 2215 units within the next 5 years and adding a 20% buffer) is 10344, or 2068 dpa.

77. At the Moor Street appeal, the Council claimed a supply of 5587 units, which equates to a 2.7 year supply. However, in the more recent Hoo St Werburgh appeal[17] the Inspector concluded that the 5 year housing land supply was somewhere between 2.21 and 2.79 years. Precisely how this range was arrived at is not clear from the decision letter but, despite the Council's planning witness referring to 2.7 years, the SoCG records that the Council now considers that the correct figure lies within the range identified at Hoo St Werburgh.

78. As the Hoo St Werburgh decision records, the range of 2.21 to 2.79 years was arrived at without any exploration of the supply side. It is this aspect, or the lack of transparency which surrounds it, which results in concern about the robustness of the 2.21 to 2.79 range. In particular, the appellant has been unable to unearth any document which clearly explains what the Council considers its supply side is, and how that figure has been arrived at.

79. A table from the appendices to the 2015 AMR has been submitted[18] which appears to have been the source of the 5587 figure relied on at Moor Street. That table provides a breakdown between sites with planning permission, allocations, sites from the latest Strategic Land Availability Assessment (SLAA) and windfalls. While that document answers some questions, it raises others.

80. In particular, the Housing Trajectory table[19] shows large sites with planning permission for 3649 units. However, elsewhere the 2015 AMR records that the SLAA has identified 12808 sites of which 11481 do not have planning permission, which suggests that there are only 1327 units with planning permission[20]. That is less than one year's supply. The difference is not explained, nor are we able to interrogate the list of large sites to understand what assumptions have been made with regard to phasing.

81. The overall total includes in the five year housing land supply two allocations from the 2003 Local Plan which begin to deliver a projected 232 dwellings starting mid-way through the five year period. However, it is impossible to tell why, having been allocated for 15 years, it is assumed that they should suddenly come to life now. There is no way of identifying the basis on which it has been concluded that the sites from the SLAA are deliverable.

82. In circumstances where it is not possible to interrogate the Council's figure and so test its reliability, the appellants' planning witness has taken an alternative approach based simply on looking at what the Council has managed to deliver over the last five years. He readily accepts that that is not a conventional approach to deciding what is on the supply side, but the reason why he has done it is because it has not been possible to find (and the Council has not been able to provide) any better information from which to work.

[17] CD10.7
[18] Inquiry Document 9
[19] Inquiry Document 9 p.112
[20] CD10.3 p.4

83. Working on this basis, for the appellants it is considered that the five year housing land supply could be as low as 1.5 to 1.8 years, depending on whether the backlog is spread over the remaining plan period ('Liverpool' approach) or made up in the next five years ('Sedgefield' approach).

84. In this regard, attention is also drawn to the fact that, when reporting the application for residential development at Mierscourt Road to committee in June this year, the Council's Head of Planning advised members that Medway had "more like a two year supply".

85. In the appellants' submission, it is worrying that the Council appears to have so little idea of what the true position is, and is unable to provide the basic data from which a meaningful figure could be calculated. The appellants are not in a position to fill that gap definitively, but in their submission there is a very real possibility that the true five year housing land supply position is even worse than the Hoo St Werburgh decision suggests.

86. Second, the appeal scheme would deliver 25% affordable housing. The significance of this can be gauged from the Moor Street decision, where the Inspector records that the need is for 713 affordable homes per year over the plan period, but that over the last four years the Council has delivered only 845. In other words, the Council is currently achieving only 30% of the affordable housing required. In those circumstances, the potential for up to 112 units from the appeal scheme is also a matter to which considerable weight should be given.

87. Third, it is common ground that the appeal scheme would bring economic benefits. The government's views on the importance of this are well known. In this case, during the construction period the appeal scheme would provide jobs and training opportunities for local people, as well as spend in the local economy. In the longer term, occupants of the new development would provide additional expenditure to support local services.

88. Fourth, the appeal proposals would bring forward social and environmental benefits in the form of 5.67ha of open space, including a community park and children's play area.

89. Fifth, there would be significant environmental benefits from the woodland management plan for Hall Wood. Hall Wood is currently not well managed and, as a result, suffers damage from unregulated access and fly-tipping. The proposed Woodland Management Plan (WMP) would address these issues, benefitting the ancient woodland itself, and its value for recreation and biodiversity.

90. Sixth, there would be 2.96ha of new woodland planting. This would also improve biodiversity and address the LCA objectives of introducing new planting to provide a strong landscape framework into which future development can be absorbed. It would also strengthen the landscape structure by breaking up the monotony of the open farmland with new woodland planting.

91. The Council's landscape witness accepted the benefits of this new woodland planting for biodiversity, but was critical of its location on the grounds that this was arbitrary, lacked historical justification and, being a straight line, would look out of place. However, in light of the widespread clearance of woodland in the

last half century to create Lordswood, the LCA specifically advocates new planting in the Elm Court LCT.

92. In fact, there has historically been planting along the line of parts of the southern boundary. There is certainly as much justification for planting along this line as there is for anywhere else. In any event, planting does not have to be historically accurate to achieve the LCA objectives of strengthening the landscape structure and breaking up the monotony of the open farmland; nor does it have to be historically accurate to deliver much needed habitat and biodiversity improvements.

93. The southern boundary is not a straight line, nor is there any reason why it should be perceived as such. Moreover, when looking at a layered woodland backdrop, it can be difficult to perceive differences in the depth of field.

94. In the appellants' submission, the new woodland would emulate the wooded character of surrounding settlements, and so be appropriate in context, as well as enhancing the appeal site's denuded ecological interest.

95. Seventh, there would be additional receipts to the Council in the form of New Homes Bonus and a capital receipt in excess of £4m for the small area of land required for access. Despite some initial reluctance to do so, the Council eventually accepted that this latter point was a relevant consideration. It is a benefit which would flow directly from the grant of permission, and so is plainly a matter to which weight should be given.

96. In summary, there would be significant and material benefits under each of the three dimensions of sustainable development.

97. In considering the weight to be attached to them, the appellants draw attention to one final factor which is the prospect that, in the absence of the release of sites such as the appeal site, Medway would not be able to meet its housing needs. On this issue, it is noted that when bringing forward the (now abandoned) 2012 Core Strategy, the Council itself recognised that achieving even 815 dpa would be challenging. Since then little has changed. However, the requirement has gone up by over 60% since that time because of undersupply. The OAN figure spans the period 2012 to 2035. In the first four years of that period the Council has consistently failed to hit the required target to the extent that there is already (as at December 2015) a shortfall of 2215 dwellings. The Council's trajectory for 2017/18, 2018/19 and 2019/2020 requires delivery of 1259, 1239 and 1581 dwellings respectively. This level of delivery has never been achieved at any time in the last 25 years. It is somewhere between 2 and 4 times what has been achieved in the last three years. Without a major injection of new sites, it is simply not credible.

98. There is no realistic prospect of the need being met by the Council through the development plan process at any time in the near future. The 2003 Local Plan is 10 years past its end date. If there are any unused allocations from that plan, the fact that they have not already been taken up must raise a significant question over their deliverability. Medway has twice tried and failed to bring forward a replacement development plan. Its third attempt has only just reached the issues and options stage. Even on the Council's best estimates, it is unlikely to be adopted before the end of 2018/early 2019.

99. There are good grounds for caution in accepting the Council's estimates of its housing land supply. In particular, although Lodge Hill is not relied on as part of the Council's five year housing land supply, it is clear that this site remains a key issue for the Council. It is difficult to see how it can progress the Local Plan much further until the Lodge Hill situation has been resolved.

The Appellants' Conclusion

100. This case falls squarely within paragraph 14 of the Framework. Permission should be granted unless the harm "significantly and demonstrably outweighs" the benefits, when assessed against the policies in the Framework as a whole.

101. There would be some localised harm to the landscape. However, harm of this sort is going to be inevitable, somewhere within Medway, if the Council is going to meet its housing needs.

102. Against this, both individually and cumulatively, the benefits of the scheme are considerable, and cover all three dimensions of sustainable development. The harm does not "significantly and demonstrably" outweigh those benefits.

103. If, the SoS decides to give policy BNE34 any material weight, the issue of balance would be addressed slightly differently, but the answer would remain the same, that is the economic and social benefits of the appeal scheme are so important that, on the facts of this case, they "outweigh the local priority to conserve the area's landscape".

104. Either way, it is the appellants' view that the overall balance is firmly in favour of the grant of permission.

The Case for Medway Council

The Council's Introduction

105. It is common ground that the appeal proposal breaches saved Local Plan policy BNE25, such that under the first limb of s.38(6), the appeal should be dismissed "*unless material considerations indicate otherwise*". The same point also applies if the development breaches policies BNE34 and S4, as the Council maintains.

106. Before jumping to material considerations (primarily that the Council cannot demonstrate a five year housing land supply), it is necessary to consider the nature and extent of the breach of the development plan[21]. Local Plan policy BNE25 is an 'in principle' policy in the sense that it tells the reader that development is not acceptable here. It is not a policy that deals with detail or minutiae, but rather the fundamental question of whether it is acceptable under the Local Plan to build here. Policy BNE34 requires an analysis of the nature of the proposed development in terms of the criteria of the policy. Policy S4 seeks development to respond appropriately to its context, reflecting a distinct local character.

[21] Tesco Stores Ltd v Dundee City Council [2012] UKSC " Where it is concluded that the proposal is not in accordance with the development plan, it is necessary to understand the nature and extent of the departure from the plan which the grant of consent would involve in order to consider on a proper basis whether such a departure is justified by other material considerations." (Lord Reed [22])

107. The Council considers that the proposed scheme conflicts with these policies. Therefore, given the breach of the countryside (BNE25), the ALLI (BNE34) and landscape and urban design (S4) policies, building up to 450 dwellings here would constitute a significant breach of, and inconsistency with, the Development Plan.

108. Thus, when it comes to the issue of whether material considerations indicate that the appeal should be allowed, rather than dismissed, because of its breach of the development plan, the question to be asked is whether those material considerations are sufficiently weighty to justify sanctioning a significant departure from the development plan.

109. Further, in order to allow the appeal, not only must the material considerations be judged to be as weighty as explained above, they must also be sufficiently weighty to justify not according the development plan "*the priority which the statute has given it*".[22] In other words, the bar is set high.

Housing Land Supply

110. As made clear in the SoCG, the Council accepts that it cannot demonstrate the requisite five year housing land supply, that the shortfall is substantial and that the housing land supply position is a significant material consideration in the determination of the appeal. Despite the appellants' acceptance of this, some Inquiry time was spent in cross examining the Council's planning witness on housing supply.

111. The SoCG records that the most recent appeal decision[23] concluded that the supply was within a range of 2.21 to 2.79 years. The appellants' planning witness suggested 1.8 years, albeit based on what he accepted was an unusual approach of averaging completions over the last five years and projecting the figure forward over the next five year period. Moreover, this witness stated that if the 'Sedgefield' approach was applied, wherein any backlog is made up over the next five year period, the supply would drop to 1.5 years.

112. Whilst the appellants' figures are not accepted by the Council, given the extent of any difference is readily apparent, and the common ground is that the shortfall is substantial, the Council considers that the Inspector and SoS have sufficient information, when considering the weight to be attributed to policies BNE25 and BNE34 to assess "*the extent to which relevant policies fall short of providing for*" the five year housing land supply, as sought by Suffolk Coastal[24]. In that context, the Council has taken proactive measures of promoting regeneration and is being robust in looking at sites such as Mierscourt Road to address the shortfall prior to the adoption of a new Local Plan.

The weight to be accorded to Local Plan Policies

113. The material considerations in this appeal spring from the Framework. The presumption in Framework paragraph 14 applies in any one of three circumstances; the first, where the development plan is "*absent*", and second,

[22] As set out in Bloor Homes East Midland v SSCLG & Hinckley & Bosworth BC [2014] EWHC 754 (Admin)
[23] CD10.7 (Hoo St Werburgh)
[24] CD11.2 paragraph 47

where it is "*silent*", do not arise here; the policies address what will or will not be permitted in the open countryside and the ALLI and thus whether the site is an appropriate location for the proposed development. Policies BNE25 and BNE34 are both saved, extant, policies and neither is temporary in nature. It is therefore only the third circumstance where "*relevant policies are out-of-date*" that is relevant in the present case.

114. It was accepted by the appellants' planning witness that Policies BNE25 and BNE34 are not out-of-date on the basis of inconsistency in principle with the Framework given that paragraph 215 in respect of protecting the countryside from being built upon is consistent with the fifth core planning principle in Framework paragraph 17 of "*recognising the intrinsic character and beauty of the countryside*" and the environmental dimension of sustainability at Framework paragraph 7. The March 2015 Ministerial letter[25] also makes it clear that it is consistent with the Framework to seek to protect the countryside from being built upon.

115. The Framework means to recognise the intrinsic, the inherent and innate, character and beauty of all countryside as countryside. This has nothing to do with special designations for landscape quality. Some parts of the countryside have a stronger or more distinct character and beauty than others, but the Council takes the view that all countryside is regarded by the Framework as intrinsically characterful and beautiful. Having recognised these intrinsic qualities, it would be nonsensical not to protect the countryside from development – there would be little point of recognising the intrinsic character and beauty of the countryside if one then did nothing with that recognition.

116. Therefore, the countryside protection purpose of BNE25 is consistent with the fifth bullet point of Framework paragraph 17. In the recent Audlem Road decision (in relation to a policy with a similar purpose to BNE25), the SoS concluded the policy to be generally consistent with the Framework and to carry "*reduced but still significant weight*" although it is acknowledged that in the present case it has been agreed that only limited weight should be afforded to policy BNE25 .

117. As to BNE34, the ALLI policy is a landscape character protection policy which is also consistent with the Framework. In the Station Road case, the Inspector found that although "*BNE34 does not set a criteria-based approach and the ALLI designations were not based upon a landscape character assessment*" so that the policy did not fully accord with the Framework in those respects, "*the discrepancy related to the nuances of how landscape should be protected through planning policy as opposed to the fundamental principle of whether those landscapes should be protected*". The Inspector then concluded that "*I can find nothing inherently inconsistent with the Framework in seeking to recognise and protect areas of recognised local landscape character. Thus, whilst the weight afforded to policy BNE34 must be reduced to a degree as a result of the inconsistency with paragraph 113 of the Framework, I am satisfied that its aims are broadly consistent with the Framework as a whole and I attach significant weight to the policy*". It is acknowledged by the Council that the Station Road decision predates the Suffolk judgment, and that the Inspector considered (on the basis

[25] CD11.1 Mr Harouni proof of Evidence Appendix 1

of the authorities as they then stood) that the policy was not a policy for the supply of housing, but he reached a clear conclusion, which remains relevant, that the landscape protection purpose of the policy was consistent with the Framework. Whilst the appellants' landscape witness, endorsed the Station Road Inspector's approach he did not agree that the policy should be accorded significant weight.

118. The Council accepts it cannot demonstrate a five year housing land supply. Thus, by virtue of the Suffolk Coastal case, Framework paragraph 49 applies such that Local Plan policies BNE25 and BNE34 are out-of-date for the purposes of Framework paragraph 49. It is accepted that policy BNE34 is a policy for the supply of housing for the purposes of Framework paragraph 49, such that the weight to be afforded to the policy is reduced. However, the Council's case is that considerable weight should be attached to BNE34 in the present case, because its landscape character protection purpose is consistent with the Framework. This is reinforced as the site falls within part of a valued landscape for the purposes of Framework paragraph 109.

119. The Council acknowledges that the ALLI designations have not been reviewed and that the designations are part of a dated local plan. However, the LCA makes it clear that despite the then (Planning Policy Statement 7: *Sustainable Development in Rural Areas*) national policy approach moving away from local designations, the assessment work within the LCA "*will ensure an appropriate level of protection continues to be provided* [for the ALLIs] *without a continued need for rigid designation*". It also states it: "*is important that all of these valuable* [ALLI] *functions continue to be valued and protected, particularly when considering the urban-fringe character areas of Medway*". Thus, the criteria-based LCA 2011 is compliant with the objectives and approach of the Framework in relation to the assessment of effects on the natural environment, and the area assessed within the Capstone and Horsted Valleys LCA includes all of the Capstone, Darland and Elm Court ALLI.

120. The supporting text to policy BNE34[26] makes clear that the ALLIs are areas of landscape that enhance local amenity and environmental quality, providing an attractive setting to the urban area and surrounding villages. The ALLIs are significant not only for their landscape importance but for other specified important functions, including as green lungs or buffers, helping to maintain the individual identity of urban neighbourhoods and rural communities, as green corridors (or links) for the community to reach the wider countryside and as edge or fringe land, needing protection from the pressures of urban sprawl. In this case the function of maintaining biodiversity is not at issue. The landscape character and function of each of the ALLIs is to be protected, with the justification for designating each ALLI set out in order to provide guidance on the landscape features and functions the Council will aim to protect.

121. The Council considers that weight, limited in the case of policy BNE25 and considerable in the case of policy BNE34, should be given to the policies because of the countryside protection purpose, consistent with the approach set out in the Suffolk Coastal case:

[26] CD10.4

"46. We must emphasize here that the policies in paragraphs 14 and 49 of the NPPF do not make "out-of-date" policies for the supply of housing irrelevant in the determination of a planning application or appeal. Nor do they prescribe how much weight should be given to such policies in the decision. Weight is, as ever, a matter for the decision-maker (see the speech of Lord Hoffmann in Tesco Stores Ltd. v Secretary of State for the Environment [1995] 1 W.L.R. 759, at p.780F-H). Neither of those paragraphs of the NPPF says that a development plan policy for the supply of housing that is "out-of-date" should be given no weight, or minimal weight, or, indeed, any specific amount of weight. They do not say that such a policy should simply be ignored or disapplied. That idea appears to have found favour in some of the first instance judgments where this question has arisen. It is incorrect.

47. One may, of course, infer from paragraph 49 of the NPPF that in the Government's view the weight to be given to out-of-date policies for the supply of housing will normally be less than the weight due to policies that provide fully for the requisite supply. The weight to be given to such policies is not dictated by government policy in the NPPF. Nor is it, nor could it be, fixed by the court. It will vary according to the circumstances, including, for example, the extent to which relevant policies fall short of providing for the five-year supply of housing land, the action being taken by the local planning authority to address it, or the particular purpose of a restrictive policy – such as the protection of a "green wedge" or of a gap between settlements. There will be many cases, no doubt, in which restrictive policies, whether general or specific in nature, are given sufficient weight to justify the refusal of planning permission despite their not being up-to-date under the policy in paragraph 49 in the absence of a five-year supply of housing land. Such an outcome is clearly contemplated by government policy in the NPPF. It will always be for the decision-maker to judge, in the particular circumstances of the case in hand, how much weight should be given to conflict with policies for the supply of housing that are out-of-date. This is not a matter of law; it is a matter of planning judgment (see paragraphs 70 to 75 of Lindblom J.'s judgment in Crane, paragraphs 71 and 74 of Lindblom J.'s judgment in Phides, and paragraphs 87, 105, 108 and 115 of Holgate J.'s judgment in Woodcock Holdings Ltd. v Secretary of State for Communities and Local Government and Mid-Sussex District Council [2015] EWHC 1173 (Admin))."

122. In this case, the first criterion of policy BNE34 is breached because the proposed development would be an inappropriate form of development in the countryside that would materially harm the landscape character and function of the area. Further, the second criterion is not satisfied, because the economic and social benefits are not so important that they outweigh the local priority to conserve the area's landscape.

123. Although it is acknowledged that the objective of policy S4, that development should respond appropriately to its context, reflecting a distinct local character, adds little to the issues to be determined in relation to policies BNE25 and BNE34. It is the Council's case that there would also be conflict with policy S4 because the development would fail to respond appropriately to its context and fail to reflect the distinct local character of the area.

Sustainability

124. In light of the recent judgment in the Suffolk Coastal case, whether the development is, or is not, sustainable is to be assessed by the exercise to be undertaken in accordance with Framework paragraph 14, in other words, the proposed development would not be sustainable only if the adverse impacts significantly and demonstrably outweigh the benefits.

125. Therefore, the absence of a five year housing land supply is not an automatic green light to planning permission. The lack of a five year housing land supply does not mean that housing development should be permitted anywhere, but only where it amounts to sustainable development taking account of all relevant considerations.

126. In terms of whether this proposal is sustainable, on the positive side of the weighing scales the Council recognises that building market and affordable homes against the backdrop of a need for both provides important benefits and contributes towards the economic and social dimensions of sustainable development as expounded in paragraph 7 of the Framework. This should be given significant weight. On the negative side of the weighing scales is the loss of greenfield land in the open countryside and an ALLI, by reason of a very significant extension of the urban form of Lordswood in an area of high sensitivity.

Landscape, Rural Character and Appearance

127. As set out above, the site falls within the Capstone and Horsted Valleys LCA. The principal characteristics of the Capstone Valley are listed in the LCA and include that the area forms a green wedge linking urban communities into the wider countryside and the North Downs, connects into the heart of Medway's urban areas, is a valuable semi-rural open space in close proximity to densely populated urban communities, provides a distinctive edge to urban areas and prevents coalescence of Lordswood and Hempstead, contains blocks of deciduous woodland (predominantly ancient woodland) which are distinct features, particularly on the shallower slopes and plateau landform, contains woodlands providing valuable containment for open arable farmland and retains a distinctly rural character and has a strong sense of overall coherence. Further, the LCA identifies the development pressure that the area is under, and emphasises that both valleys are valuable green wedges linking town with countryside and bringing the distinctive North Downs landscape character into urban areas.

128. The Capstone Character Area is then separated into sub-areas in the LCA. The site falls within the Elm Court sub character area, described as flat or undulating wooded farmland. It is common ground that the site reflects many of the characteristics of the Elm Court sub-area – it is typical of the undulating open farmed arable plateau, with a weak hedgerow pattern.

129. The Council considers that the site has a rural character. Whilst the appellants' landscape witness acknowledged that the site looks rural, he stated that it does not feel rural. The main area of difference on this point is the influence of the identified detractors. The M2 motorway cuts through the landscape approximately 1km to the south of the site, is set in a shallow landscaped cutting, and is largely screened from view. The site is bordered by open countryside to the north, to the west notwithstanding Elm Court Business

Park and to the south. The Council considers that the influence of the motorway, including traffic noise, has been overstated by the appellants and notes that motorways cutting through rural areas are a common feature throughout the country.

130. The appellants consider that road, aircraft noise and services infrastructure serve as constant reminders of proximity of urban area. However, the Council's conclusion is that the noise impacts on the tranquillity of the site are negligible and the electricity pylons are an unremarkable countryside feature. As such, the appeal site and the surrounding area retain a predominantly rural character, characterised by rolling arable farmland, with wooded blocks and a network of narrow country lanes and paths.

131. The Council's landscape witness also considers that the existing residential development at Lordswood can only be glimpsed through breaks in the wooded edge to the settlement. Thus, the influence of the Lordswood development on the character of the appeal site and the Elm Court sub-area is negligible, because it is, in the main, screened in views north and west across the appeal site.

132. It is common ground that the Elm Court Business Park is a detractor, but it is an isolated development and is typical of small industrial or business parks often located in the urban fringe countryside.

133. The LCA assessed the landscape condition of the Elm Court Area as poor, but the landscape sensitivity as high which is consistent with the Kent Landscape Assessment. The high sensitivity assessment is attributable to the perceived development pressure and the visual openness. The appellants' landscape witness agreed on this point but not to the Council's view that high sensitivity is due to the spatial sensitivity of the area. Despite this he accepted that the wider ALLI fulfils such a function, and that this sub-area of course forms part of the ALLI. Although the appellants' disliked the word 'pinch-point', the area is a relatively narrow point of the ALLI and it is, in the Council's view, right to regard the area as spatially sensitive.

134. The appellants draw attention to the low marks attributed to the Elm Court sub character area, compared to the others in the Capstone and Horsted LCA. However, this does not draw attention to the fact that the area is assessed as one of only two sub-areas to have a "*coherent*" pattern of elements and "*high*" visibility. Further, Elm Court is one of four "*high*" sensitivity areas (the other three are moderate). It is also important to note that the LCA does not seek to rank the sub-areas against each other[27] and the recommendation to restore is recognition that the area warrants restoration because of its high sensitivity. The LCA defines sensitivity as a measure of the ability of a landscape to accept change without causing irreparable damage to the essential fabric and distinctiveness of that landscape. The sensitivity categories used were: distinctiveness, continuity, sense of place, landform, tree cover and visibility. As to the appellants' claim that the Elm Court sub-area is the least harmful location for development, it is clear that the LCA makes no such ranking and without a full assessment of the other sub-areas (indeed the other ALLIs), there is no evidence to support the suggestion.

[27] CD10.5 p122

135. Turning to the function of the ALLI as a green wedge preventing coalescence between Lordswood and Hempstead, the appellants acknowledged that the development would adversely affect the ALLI. The appellants' landscape witness agreed that the proposed development would result in material harm to the spatial function of the ALLI in this part of it and, therefore, that there would be harm to the ALLI overall, albeit that the appellants' planning witness made the assessment that there would be no material harm to the ALLI overall.

136. The Council maintains that the development would lead to coalescence between settlements because of the significant reduction in the open countryside and as it would enclose the southern end of the Capstone Valley. The development would reduce the width of the gap between the eastern edge of Lordswood and the nearest residential areas on the western edge of Hempstead (in the vicinity of Elm Court Business Park) from some 1.4km to 0.7km or approximately 50%, as was accepted by the appellants.

137. The Council considers that the result would be that the continuous flow of countryside through the valleys to the AONB would be adversely affected. Indeed, the connection to the wider valley to the north would be reduced to Ham Lane and Public Rights of Way (PRoW) KH34 and 41, whereas at present, the connection is formed by the open countryside in a green wedge, in an uninterrupted flow (bar Elm Court Business Park), of rural landscape. At present, the appellants' landscape witness accepts that a sense of separation is experienced within the ALLI, adding that the open land remaining post development would "*punch above its weight*", because of the contrast between the wooded edges of the settlements and the open countryside. He described that contrast as "*a powerful delineation of those 2 settlements*", and finally acknowledged that the existence of those features means that the site similarly operates as part of that powerful delineation. The Council considers that narrowing of the separation by 50% would not reinforce that delineation in any positive sense; rather, it would reduce the gap to a material extent and cause adverse harm to the spatial function of the ALLI.

138. Further, the site forms part of a valued landscape for the purposes of Framework paragraph 109. The appellants' landscape witness agreed that the site and its environs are part of a valued landscape. He also accepted that the demonstrable physical attributes of the site and its surroundings, which apply to the whole of the ALLI, are as a green wedge preventing coalescence between Lordswood and Hempstead, as part of the wider setting of the Country Park and AONB, providing a continuous flow of open countryside from the Capstone Valley to the AONB, providing an accessible rural landscape in close proximity to urban areas and, that it meets informal open space needs of communities nearby. Finally, he agreed that identifying demonstrable physical attributes was not just about physical features on a site, but the character, function and role of the landscape.

139. In terms of the effect on landscape character of the Elm Court sub-area, the Landscape and Visual Impact Assessment (LVIA)[28] concludes that the development would result in a major/moderate adverse effect during the short term (years 1-15) which is considered significant. Notably the LVIA defines

[28] CD1.9

major as "*changes resulting in a fundamental change to the landscape resource or visual amenity*" and moderate as "*a material but non-fundamental change to the landscape resource or visual amenity*". The table (A3.67) explains that a ranking of moderate or above is judged to be a significant effect. Therefore, it is common ground that the development would have a significant adverse effect on local landscape character in the short term.

140. In the medium term, the LVIA concludes that the development would result in a low overall magnitude of change with a consequent minor to minor/negligible adverse residual effect. That conclusion is largely based on the perceived benefits of the proposed landscape infrastructure mitigation, as it matures. However, the Council notes that that mitigation would come at the cost of the loss of a substantial area of open countryside and spatial harm, in terms of the large reduction in the rural gap/green wedge between Lordswood and Hempstead.

141. Moreover, while the proposed landscape infrastructure on the south eastern boundary shown on the illustrative masterplan and the photomontages[29] would help to mitigate some of the adverse visual effects, it does not follow any existing topographical feature but simply cuts across the field. The proposed boundary is arbitrary. Indeed the LVIA acknowledges that the boundary is arbitrary, because it follows the administrative boundary between Maidstone and Medway and is not representative of any change in landscape character further south. The need to plant a dense tree belt to screen the development is a consequence of the arbitrary or artificial nature of the boundary and it would result in the enclosure of the southern end of the Capstone Valley. Therefore, the Council considers that in the medium term (15yrs +), the overall residual landscape effect would be moderate adverse.

142. In terms of visual effects, the LVIA identifies a significant adverse effect (major or major/moderate adverse) from seven out of 10 of the representative viewpoints in the short term (1-15 years). The Council's six additional viewpoints reinforce the findings of the LVIA that the development would result in significant adverse visual effects. Indeed, all six would experience major or major/moderate adverse effects in the short term.[30]

143. Although the LVIA and appellants' landscape witness both describe the significant visual effects as geographically confined, the Zone of Visual Influence (ZVI) is not particularly geographically small, it extends approximately 1km north and south of the site and across the entire width of open countryside between Lordswood and Hempstead. As the viewpoints show, views from within the visual envelope tend to be relatively wide and expansive. It is also relevant to note that several of the viewpoints are from PRoW, where similar views would be experienced over substantial lengths of each route, for example some 400m of footpath RC11 between viewpoints 8 and 16, and similar lengths of footpath RC28/KH34 and byway KH41[31]. Views from these rights of way are highly sensitive to change. Further, the development would be very prominent in the

[29] CD11.9 (Appendix 10)
[30] CD11.9 (Appendix 7)
[31] See the appellants' landscape witness's Plan 2

short to medium term, such that there would be a harmful loss of visual openness and countryside character.

144. As to the medium term (15 years +), the LVIA records that even after the landscape infrastructure has matured there would remain significant adverse effects from seven of the 10 viewpoints. In terms of the Council's additional viewpoints from three of those six there would be significant (major) adverse effects, moderate effects from one viewpoint and minor effects from the other two.

145. The appellants' landscape witness acknowledged that the proposed development would contribute to a permanent erosion of the rural character of the area and the open countryside separating the settlements of Lordswood and Hempstead. He acknowledged that those were material detrimental effects, albeit that the appellants' case is they are outweighed by benefits.

146. Moreover, however well landscaped as a housing estate, the proposed development would utterly transform the site because the open greenfield countryside would be lost, the development would cause a change for the worse to the intrinsic character of the site and the local area as countryside. That change would have a significant and permanent effect on the character of the area. The permanent loss of openness cannot be mitigated. Therefore, building up to 450 dwellings on this land would result in an inappropriate development because of the significant harmful change to the intrinsic character and beauty of the countryside, and the material harm to the landscape character and function of the ALLI, contrary, the Council considers, to policies BNE25, BNE34 and S4 of the Local Plan.

147. The fact that greenfield sites on the edge of settlements are needed to meet the housing requirement in Medway does not mean that the impact on the open countryside and ALLI, as set out in this case, must be acceptable. Each proposed development falls to be determined on its merits and the Council has permitted development of some sites in the open countryside and in ALLIs, where they have been considered to be sustainable. In this case the Council attaches significant weight to the harm to the countryside's intrinsic character and function. This, the Council considers, is not a place where it would be appropriate for such a large scale development to extend the settlement of Lordswood, materially and adversely reducing the important green wedge and leading to coalescence with Hempstead. Greater weight should be given to protection of the countryside in this location.

The Council's Conclusion

148. Much has been made by the appellants of the lack of a five year housing land supply, and it is acknowledged that is an important material consideration in the determination of this appeal. However, the real issue here is whether the acknowledged material harm caused to the landscape and rural character and appearance of the area significantly and demonstrably outweighs the benefits of the proposed development, when assessed against the policies in the Framework taken as a whole.

149. The Council's case is that the negatives weigh very heavily against the proposal in the scales. In the Council's judgment they outweigh the significant weight given to the benefits of providing market and affordable housing such

that, having weighed the competing considerations, the appropriate conclusion to reach is that the appeal scheme is not sustainable development. Material considerations would not indicate otherwise than dismissing the appeal. In these circumstances the appeal should be dismissed because of the significant breaches of the development plan.

The Case Advanced by Others Appearing at the Inquiry

150. **Mrs Vanessa Jones,** who is the chair of Bredhurst Parish Council and Bredhurst Woodland Action Group, explained that this proposal would impact on the Kent Downs AONB. Bredhurst is on the edge of that AONB in, she considers, a beautiful location. The residents of Bredhurst value the arable farmland which forms the appeal site and want it to be kept as rural land. Whilst traffic figures are not questioned, the traffic along the lanes is of concern. In particular she notes that there are no footpaths. The vehicles used by the occupiers of the proposed 450 additional dwellings would have a devastating effect on the existing community and change the rural character of the area.

151. **Mrs Pauline Bowdery** is the Clerk to Boxley Parish Council and spoke on behalf of the Parish Council, reading out a statement[32]. The Parish Council supports Medway Council's decision. In particular, she explains that what is important about the ALLI is the patchwork of different habitats with open flatter land being necessary to enjoy the sweeping views. Moreover, open spaces can be improved with hedges. It is not reasonable to suggest monotonous fields should be improved by developing 450 houses and tree planting. The fact that Elm Court Business Park exists as a detractor does not justify further development. The proposed development would extend urban frontages into the countryside. The proposed tree belt is only proposed as it would be required for mitigation. Further, the screen planting would take a long time to establish, it might not achieve the extent of screening predicted and for half of the year, when trees are not in leaf, the screening effect would be reduced.

152. Lordswood already has a clearly defined boundary. The proposed development would be at a pinch point in the ALLI and would impact upon the whole of the ALLI as 50% of the land at the pinch point would be developed. As a result development here would erode the function of the green wedge in terms of preventing coalescence between Lordswood and Hempstead.

153. The site is rural regardless of how quiet it might be. In this respect it is no different from the North Downs AONB which is rural even though in many parts noise can be heard from motorways or high speed rail and the M20 can be glimpsed.

154. The Parish Council do not understand why there is no case being made on traffic grounds or on the lack of medical facilities. One surgery has closed and another may close altogether as staff retire and money will not solve the problem of retiring doctors. In terms of traffic, people from the development would use private cars as buses use circuitous routes, get stuck in traffic and are costly. People would not walk to Hempstead because it is a 60mph road without footways and is too far, particularly with heavy shopping. Traffic at the beginning/end of school day indicates the difficulty of relying on public transport.

[32] Inquiry Doc 6

That said, it is acknowledged that there is one good commuter service for the Walderslade area.

155. It is unlikely that future residents of the site would work at Elm Court Business Park because generally it is not a high spec /high tech employment area. As a result, future residents would be likely to commute for work. Thus, there would be much use of the local road network. To get to Maidstone the cross country journey cuts through the ALLI, AONB, and the villages of Boxley and Bredhurst. At Boxley the road reduces to single width. The additional traffic would cause more noise and air pollution particularly where cars stop to allow for passing.

156. The Parish Council offices are located near to the application site and junction 3 of the M2 motorway. As such, it is felt by local residents and the Parish Council that they are much more aware of local traffic issues and impacts than Highways England.

157. There is an asbestos waste transfer site near to the proposed housing and future residents should be made aware of this.

158. A greenfield site would be lost forever if this proposal goes ahead, the green wedge would be reduced, 50% of the greenfield pinch point would be eroded and the proposed development would join up with Elm Court Business Park. This harm is such that Boxley Parish Council requests that the appeal be refused.

159. **Mr N Van der Vliet,** a local resident, explained the importance of this open land, and access across it, as open space for his family and for others. He stressed the importance of the relief this open space brings to the nearby developed areas and its ease of access. He also expressed concern about accessibility of the development to local facilities and services. He noted that people are unlikely to travel the proposed distances on foot or by bicycle when carrying heavy shopping. As such, those in affordable housing who might have lesser access to a private car would find this location difficult. He also had significant doubts about the highway situation. Given the access issues he considers it most unlikely that households would only have one car. Rather, based on the experience of living where he does, it is more likely they would have in excess of two vehicles per household.

160. In terms of other facilities Mr Van der Vliet is concerned that there would not be adequate capacity to serve the needs of future occupiers of the proposed development. For instance there is no space at the local doctors' surgery and the schools are oversubscribed so that those in catchment cannot get places. The contribution to education appears far too small given the very high costs involved. The green wedge is important and loss of it, as well as his concerns for future occupiers, results in his view that the site should not be developed.

161. **Mr Dines,** a local resident, set out his expertise as a highway manager and, thus, his relevant experience in dealing with highway matters. He explained that his main concern relates to the lack of sustainable credentials for this greenfield site. In particular he voiced concerns that the site is difficult to serve by public transport. The walking distance to Clandon Road is some 500m and so beyond the 400m distance which would normally be sought. He considers that the contribution to be made through the s.106 would be inadequate to entice a bus service operator into the culs-de-sac of the site. Moreover, the bus services are not good. He also felt conditions to secure the proposed works at the Gleaming

Wood Road/Lordswood Lane junction would be essential and expressed concern about whether the detail was acceptable in terms of pedestrian and cycle users at this junction. Whilst being close to Hempstead and Elm Valley there are no specific provisions for walking or cycling. Thus, there would be reliance from future occupiers on the private car.

Written Representations to the Inquiry

162. The Local Member of Parliament for this area, Tracey Crouch MP, wrote reiterating her earlier objections made to the Council in respect of the scheme. In particular the MP focusses on the loss of green space which creates a green buffer between distinct residential areas, the precedent it would cause, the impact on local services and on the local road network with particular concern for the motorway junction no.3 of the M2. The previous letters also set out concerns regarding wildlife and proximity to an asbestos waste transfer site.

163. In addition to the MP's letter I received a letter from the Campaign to Protect Rural England (CPRE) who object on a numbers of grounds. They express concern at the impact on local character, noting the siting at a pinch point harms the 'green lung' benefits of the ALLI and the effect on the setting of the Kent Downs AONB. Concern is raised regarding the impact on designated habitats and protected species and the loss of best and most versatile agricultural land. They consider that the environmental harm is such that the proposed development is not sustainable development. They also express concern that the habitat has not been properly assessed and draw attention to the concerns of others regarding traffic.

164. A further 22 letters or e-mails of objection were received. In addition to the points raised by objectors at the Inquiry and by the MP and CPRE these letters expressed the following concerns:

i) that it would result in pressure on schools, emergency services, roads, water, power, health provision, including dental services, play space provision and air quality (existing services are overstretched in schools and the national health service);

ii) the negative impact on house prices and a reduction in the desirability of the Hempstead area;

iii) impact on wildlife, including skylarks;

iv) it is too close to Capstone Country Park;

v) brownfield land should be utilised as once greenfield sites have gone they are lost forever. In particular Chattenden Barracks site could offer comprehensive development on a brownfield site;

vi) highways impacts, especially at overstretched junctions and on single carriageway lanes, harm to road safety, concern about learner HGV drivers operating from the Gillingham Business Park. There would also be a further harm to existing poorly surfaced roads;

viii) that migration should be controlled to reduce housing need;

ix) the recent hawthorn planting would not screen this proposed development;

x) this proposal could lead to widespread social unrest and a lack of integration between residents of the proposed development;

xi) the area is already burdened by traffic to the Channel ports, widening of the M2, threats of an airport and expansion of the Hempstead Valley Shopping Centre. These are not local benefits;

xii) future residents would add to the existing jobless figures;

xiii) financial contributions would be insufficient to resolve the pressure on medical services and the Council might not spend the money on this need. One objector records two personal incidents where family members had been left in hospital corridors before being found rooms; one was given life-saving surgery whilst the other died. They are not critical of the medical care but consider adding to the populous in these circumstances would be criminal;

xiv) the scheme is opportunistic property development,

xv) this scheme should be considered with the Lodge Hill site,

xvi) allowing the proposal would be contrary to localism,

xvii) extensive housing is already being provided for instance at Horsted Park (250-300 dwellings) and on North Dane Way (100 dwellings); and,

xviii) the site is not sustainable because of the likely number of car movements given the lack of access to schools, doctors, dentists and shops and that there is no public money to support public transport.

165. One further email was received and asked to be considered with the sender's details omitted. It indicates that the sender considers the land to be a Site of Special Scientific Interest and green belt. The writer complains about static caravans on a nearby site (outwith the appeal site) and objects on grounds already covered above.

Written Representations at the Application Stage

166. **Petitions**: The Council received four petitions of objection at the application stage. The committee report advises that the largest of these was signed by 2,730 people objecting to the proposal on the grounds of loss of local beauty spots, loss of farmland and additional strain on local schools and medical services. Three petitions of 169 signatories were received on grounds of additional pollution, impact on the local highway leading to reduced highway safety, impact on the character and appearance of the area and AONB, loss of a green lung providing relief to the adjoining urban areas and preventing coalescence, loss of ancient woodland, loss of habitat reducing flora and fauna, extra demand on education and healthcare, impact on local water supply, asbestos risk from the nearby waste transfer station and no benefits from the scheme for the existing residents.

167. **Letters of objection**: At the application stage the committee report records 295 letters of objection from 285 respondents, with a further 74 letters of objection reiterating objections and adding to them. In addition to the matters raised by the letters above the following objections are made:

i) the proposed development would not be a natural extension to the urban area which is well contained;

ii) the occupiers of Gibraltar Farm and Gibraltar Farm Cottages would be surrounded on three sides by residential development;

iii) this might be a part of a piecemeal application as the site boundary follows an administrative boundary and a subsequent application might be made for the Maidstone Council's area;

iv) there is no need to support housing here as the Council supports 5000 houses at Lodge Hill;

v) harm to a recreational walking route;

vi) inadequate resources for the Police service and this would add to the burden;

vii) doubts about the highway modelling;

viii) doubts about the likelihood of success for the travel plan;

ix) concern about additional traffic near to the recreational space and Lords Wood Leisure Centre;

x)North Dane Way to Gleaming Wood Drive should be extended to relieve congestion;

xi) North Dane Way should not be speed restricted as it is designed as a quick peripheral route;

xii) the emergency access could be used as a secondary route;

xiii) construction traffic would cause traffic issues and disturb residents;

xiv) light pollution;

xv) loss of privacy;

xvi) Gibraltar Farm was used as a gun position during WW2 and munitions may remain on site;

xvii) the provision of affordable housing would result in anti-social behaviour;

xviii) an EIA should be required;

xix) flood risk;

xx) walking routes to bus stops are 500m not 400m as reported by the appellants and bus services and stops in the Transport Assessment are inaccurate;

xxi) concerns about pedestrian and cyclist safety;

xxii) two access points are needed, a priority junction at North Dane Way/Albemarle would be less safe than a roundabout; and,

xxiii) the main access off North Dane Way would create security concerns for existing residents.

168. Bredhurst Parish Council, Boxley Parish Council and Hempstead Residents Association all objected at the application stage on grounds already covered above.

169. **Letters of support and other letters**: There was one letter of support and one neither supporting nor objecting.

Conditions and Obligations

170. **Conditions** were discussed at the Inquiry in the light of the advice in the Guidance which has replaced, in part, Circular 11/95. The conditions have in some cases been amalgamated, as discussed, and amended to provide compliance with the Guidance. Those conditions would be necessary in order to achieve an acceptable development, were the Secretary of State to consider the

principle of the development to be acceptable. Thus, they are set out in the Schedule attached at Annex A. Where necessary, specific conditions have been addressed in the Considerations below. Reasoning for the conditions is otherwise contained with the conditions in the Annex. The conditions set out would be relevant, necessary to make the development acceptable and otherwise comply with the necessary tests.

171. The conditions include a shortened timescale for the submission of reserved matters and commencement given the pressing need for housing. It is for the Council to be prompt in discharging conditions to get progress made on site. The timing and phasing conditions proposed by the parties have been adjusted for clarity and to avoid conflict between conditions. I have omitted the suggested electric car charging point condition as there is no formal policy basis for it nor is it a pre-requisite for making the proposal acceptable in planning terms, although I accept it is a laudable suggestion and the appellants did not object to it.

172. I have reorganised the conditions into clear subject groups and altered pre-commencement style conditions to other trigger points where it is appropriate.

173. **The s.106 Unilateral Undertaking** provides for education, healthcare, open space, public transport, waste and recycling, community facilities and Medway SPA contributions as set out in the details at paragraph 7 above. It also commits to providing 25% affordable housing.

174. I have had regard to this planning obligation in the light of the tests set out in the s.122 of the Community Infrastructure Levy Regulations 2010 and repeated in the Framework at paragraph 204. These state that a planning obligation may only be sought if it is necessary to make the development acceptable in planning terms, is directly related to the development and is fairly and reasonably related in scale and kind to the development. In this regard a CIL compliance checklist has been provided by the Council[33] . The approach to seeking contributions is set out in the Council's Medway Council Guide to Developer Contributions (2014)[34].

175. In terms of the education contribution it is derived from a formula based on the likely number of children arising from the proposed development. The calculations are based on charging rates per type of pupil. It is calculated that the scheme would result in the need for 44.55 nursery places (£377,396). This would be used at one or more of Swingate Primary, Hempstead infants or new provision. For primary education 109.35 places are sought (£930,010). This would be used at one or more of Lords Wood Primary Academy, St Benedict's RC School or new provision. The secondary provision would require 66.95 places (£919, 269). This would be used at Walderslade Girls and Greenacre Boys Schools or a new provision. This results in the total contribution of £2,226,674. The calculations are set out in Inquiry Document 1 and the sums are fairly and reasonably related to the development based on Education Department confirmation that there is inadequate capacity within schools in this area, a calculated pupil product ratio and costs. The schools proposals identified would be necessary to provide capacity through expansion and extension. No issue arises with regard to other projects or pooling of s.106 monies. This contribution accords with the Council's Medway Council Guide to Developer Contributions.

[33] Inquiry Document 1
[34] CD10.5

176. The National Health Service (NHS) confirms that it has insufficient capacity to accommodate additional demands from the proposed development and I am conscious that this has been mentioned in many of the objections. The contribution is based on a sum arising from the Healthy Urban Development Unit model taking account of demographics, predicted population growth, and NHS costs and floor space requirements. This results in a calculation per dwelling. The monies would be utilised at Lordswood Community Living Centre, Hempstead Medical Centre and Princes Park Medical. Again no pooling issue would arise and the approach and sums follow the Council's Guide to developer contributions.

177. The public open space requirement is also based on a set formula and would provide monies towards sport improvements at Hook Meadow and/or Princes Meadow and /or Kings Frith, allotment improvements at Chapel Lane and/or Hatton Road and, park improvements at Capstone Country Park and/or Wigmore Park. It is not disputed that these facilities do not have sufficient capacity to accommodate additional demand from the proposed development and the proposal is likely to result in demand for such facilities. The contribution is therefore directly related to the development. Again no pooling issue would arise and the sums and approach follow the Council's Guide to developer contributions.

178. The transport contribution relates to improvements in evening services and frequency of the Sunday service and to provide for diversion of the bus service into the site. The sum for diverting into the site is clearly related to the proposed development. It is also reasonable to expect a contribution towards the improvement of existing services into the evening and on Sundays to make the site more sustainable. The Council advises that the sum sought in this regard relates to the anticipated cost of the improvements. While I agree a need is generated by the development, I note it is likely to have ancillary benefits to others on the bus route. Nonetheless, given the contribution is required to facilitate those improvements it is reasonably related to the appeal development.

179. The waste a recycling contribution is costed in detail and is based on a rate per dwelling using 2013 figures. It does not relate to costs involved in collecting and disposing of waste which is met from Council Tax. Whilst bin provision and additional waste site capacity are justified as a result of need generated by the site, I am not satisfied that payments for graffiti removal have been justified as necessary in relation to this development. Nor is there any reason to suspect pest control leaflets would be required for this site. Despite these being matters set out in the Council's Guide to developer contributions, I do not consider that those aspects of the calculation are CIL compliant and so they shall not be taken into account in my recommendation in respect of this appeal.

180. The contribution towards community facilities relates to Lordswood and Hempstead libraries to provide more meeting room and associated facilities which the main parties agree are under pressure. The space provision is based on 31sqm per 1000 population which reflects Medway's provision and on construction costs of £1,800 per square metre. I accept that this appears a fair basis on which to seek a contribution and that it relates to needs likely to be generated by the proposed development. Again no pooling issue would arise and the approach and sums follow the Council's Guide to developer contributions.

181. The SPA contribution is a per dwelling contribution. Over 80.8% of the site is within 6km of the North Kent Marshes SPA/ Ramsar site. This contribution is for

mitigation and designated habitat monitoring, including through management to enhance certain locations to attract visitors so as to avoid disturbance of these sensitive areas for over-wintering birds. The limited details are set out in Inquiry Document 1. Whilst those details are rather limited, on the basis that they do not relate to site infrastructure (which has not been identified) this satisfies the CIL regulations. Natural England advises that the payment avoids the need for Appropriate Assessment under the Habitat Directive. On the basis that the sum relates to management of sites the CIL pooling provisions do not apply to this tariff.

182. The affordable housing requirement would be policy compliant (policy H3) and directly relates to housing need in this Council's area. The s.106 sets out details relating to provision, management and occupation of that housing in line with the Council's Guide to developer contributions (2014).

183. Thus, from the information and evidence provided, other than in respect of the specific items referred to for the waste and recycling contribution, I am satisfied that the obligation tests set out in the Framework would be met for these items. It is therefore appropriate to take the obligation into account in the determination of this scheme save in respect of the matters identified.

Inspector's Conclusions

[References to earlier paragraphs are set out in square brackets]

The Main Considerations

184. The main issue in this case is whether or not the proposed development amounts to sustainable development having regard to local and national planning policies for the supply of housing and the countryside. In order to arrive at a recommendation in this regard, the main considerations I have set out before arriving at the planning balance are:-

(a) whether or not the proposal accords with local and national planning policy and the implications of this;

(b) the implications of housing land supply for the proposed development;

(c) the effect of the proposed development on the character and appearance of the area which is within an ALLI; and,

(d) the assessment of other matters, including other benefits and disbenefits.

The Planning Policy Position

185. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that where the development plan contains relevant policies, applications for development should be determined in accordance with the development plan unless material considerations indicate otherwise. [33, 105]

186. In terms of this appeal three saved Local Plan policies are cited as being of relevance; these are BNE25, BNE34 and S4 of the Medway Local Plan which was adopted in 2003. Whilst it is an old plan, a matter to which I shall return, it has status as the development plan.

187. Policy BNE25 relates to development in the countryside, which it seeks to resist except for specific uses or circumstances, none of which apply in this case. As such, the appeal scheme is in clear breach of this development plan policy. However, policy BNE25 clearly seeks to restrict housing growth. It is agreed that the Council does not have a five year housing land supply. Given this, and based on the advice of the Framework at paragraph 49, there is no doubt in my mind that policy BNE25 of the Medway Local Plan, which, incidentally, was only intended to run until 2006, is out-of-date. As such, it should only be afforded limited weight as was originally agreed in the SoCG.

188. Policy BNE34 relates to the ALLI's. It seeks to limit development only permitting it where it would not materially harm the landscape character and function of the area or the economic and social benefits are so important that they outweigh the local priority to conserve the area's landscape. This policy, because of its restrictive approach, is a relevant policy for the supply of housing within the meaning of paragraph 49 of the Framework and thus, given the housing land supply situation, it is to be considered out-of-date, a position with which both main parties agree. [118]

189. Policies BNE25 and BNE34 are also of reduced weight because of their age: their formation dates from a time when national guidance sought to protect the countryside for its own sake. Moreover, in terms of Policy BNE34, local landscape designations were a standard approach when it was drafted, whereas current policy advice seeks to avoid blanket restrictions and takes a more balanced and pragmatic criteria based landscape character approach. In this case the work on the ALLIs dates back to 1992. Since that time there appears to have been no reassessment of the designation boundaries, despite the saving direction indicating that saving would give an opportunity to justify the retention of the policy. That opportunity has not been taken despite the LCA being clear about the change in direction and noting that the LCA itself would be a tool for informing decision making. While this reduces weight to policy BNE34, so that it is limited, that cannot be said of the LCA itself which reflects a criterion based approach. The Council is clearly aware of the pressure on the ALLIs and the need to look at their quality. Indeed, it has supported housing development within them in certain circumstances, for example in the Mierscourt scheme.

190. While the policies BNE25 and BNE34 are out-of-date and old, this does not mean that they are of no weight or that they relate to planning matters of no merit - a principle confirmed by the Suffolk Coastal Court of Appeal Decision. It remains reasonable and legitimate to consider the impacts of development on the character and appearance of the countryside. Indeed, the current Framework identifies, as a core principle, the importance of recognising the intrinsic character and beauty of the countryside albeit this represents a shift in emphasis form former days of protecting the countryside for its own sake. The Framework, at paragraph 14, differentiates between countryside and specific designated countryside assets. The ALLI designation and its level of importance is a matter which will be considered in more detail later in this report. [38-39]

191. Policy S4 is entitled Landscape and Urban Design. It seeks 'a high quality of built environment' with 'landscape mitigation where appropriate'. The Council does not dispute that this could be achieved and does not take issue in terms of the first part of this policy. The policy goes on to explain that 'development should respond appropriately to its context, reflecting a distinct local character'.

While the Council considers the proposal would fail in this regard, because it says the scheme would harm the local character and not fit the site's context, it seems to me that this policy is being misapplied. The policy is one of the strategic policies of the plan. Reading it as a whole, it indicates what will be expected of developers when schemes are submitted. It is not a policy which seeks to restrict development in this, or any other, location. Rather it is a policy to achieve a positive scheme, in design and landscape terms, should development be allowed in any given location. As such, it is not a policy which is of significance in the determination of this appeal and, even if it were considered directly relevant, the character harm set out by the Council would be no different in terms of this policy than for that addressed in the BNE25 and BNE34 policies which I consider are relevant. [43-45, 123]

192. Notwithstanding my view in respect of policy S4, it is important to consider a number of matters in arriving at a conclusion as to whether the development would be sustainable. Moreover, it is possible that, when looking at the wider benefits of the scheme, one might come to the conclusion that the appeal scheme could be compliant with policy BNE34 because it allows for "*development where the economic and social benefits are so important that they outweigh the local priority to conserve the area's landscape*". Aside from this, it is the balance of a number of key matters that results in the recommendation as to whether material considerations justify determining the proposal other than in accordance with the development plan. [122]

193. In this case those key matters for consideration relate to the housing land supply position, the effect of the proposed development on the character of the countryside and the impacts on the Capstone and Horsted Valleys ALLI. There are some further matters raised by interested parties, relating to highways issues, pressures on infrastructure and services, other development sites, localism, proximity to an asbestos waste transfer station, light pollution, flood risk and ecological matters, including impacts upon an area of ancient woodland, which also require consideration.

Housing Land Supply

194. The parties agree that a 5 year housing land supply cannot be demonstrated. Indeed, it is agreed that the supply is significantly lacking. The Council, based on the Inspector's reasoning in Hoo St Werburgh, an appeal relating to an Inquiry held in August 2016, acknowledges a supply in the range of 2.21 to 2.79 years. The appellants consider that even that level is optimistic.

195. The housing supply figures were not the subject of significant interrogation at the Inquiry. This was, in part, because the AMR appendices were supplied late in the event and because neither party sought to waste Inquiry time given the relatively recent Hoo St Werburgh appeal decision and so had broadly agreed to adopt the figures from that decision (as set out in the SoCG). That said, despite the lack of figures to interrogate, I do not endorse the appellants' unorthodox approach of calculating delivery in the last five years as a way of predicting supply. However, I share some of the appellants' scepticism about the Council's supply side figures. In particular, I agree with the appellants that the three allocations brought forward from the 2003 Local Plan (those listed in the AMR as Strood Riverside North Canal Road, Commissioners Road Strood and Gray's Garage Chatham) have been identified for so long, yet not been developed, that

it appears likely that they have significant sticking points. Thus, without clear explanation, it seems unlikely that they would now be imminently deliverable.

196. I also note that the appellants point out that the AMR refers to 90 sites being identified as suitable for housing with an estimated capacity of 12808 units, of which 11481 do not have planning permission. However, this included Lodge Hill which is now discounted. Moreover, these figures appear to reflect the early stages in the call for sites and not the more detailed assessment included elsewhere in the AMR regarding residential land availability of large sites with planning permission which is provided at Table 4 Section 3. I appreciate the robustness of sites within that table was not a matter of discussion. Nevertheless, I do not share the appellants' concerns, as set out above, regarding the level of large sites with planning permission.

197. I acknowledge that the Council appears to be showing some pragmatism for instance in the Mierscourt Road resolution to grant planning permission for 134 dwellings despite it being within an ALLI. That resolution, assuming it results in planning permission, and the appeal decision for Station Road for 90 dwellings would assist in housing supply. However, even on these reasonably large sites, in the context of the shortfall in the range of 2.21 to 2.79 years supply it is evident very much more has to be done. In this respect, to give a more meaningful numerical picture, it is agreed that the housing requirement for 2012-2035 is 1281 dpa, yet the completions in the four years 1 April 2012-31 March 2015 only amount to 2436 dwellings, so at that point there was already a backlog of 2688 dwellings. Interested parties refer to other sites but there is no evidence as to how they would fit into the supply side, if at all. Thus, from the evidence before me I take the view that housing land supply is significantly lacking and constitutes a very serious issue for this Council. [21, 97, 164]

198. Whether or not the Head of Planning Services was lacking caution when/if he advised members that the supply side was more like a two year supply when dealing with the Mierscourt Road application in June 2016 it seems to me that this level of supply may well be the case and it may be even worse still. However, without rigorous testing of the evidence that was simply not available, it is not possible to be definitive. [84]

199. That said, it is acknowledged by the parties that the lack of supply is significant. Having regard to the Suffolk Coastal case, the extent of undersupply in this case is such that housing provision attracts materially greater weight than if the supply was only marginally under the five year housing land supply requirement.

200. Moreover, the shortfall in five year housing land supply is so great and the pressure on sites so significant, that it is agreed to be inevitable that greenfield land will have to be developed. Furthermore, given the extent of the ALLI designations, ALLI designated land will need to be developed unless new development is to be located where it would not be accessible in terms of proximity to existing development with its associated services and facilities. These factors are considerations which also need to be placed in the planning balance.

Character and Appearance of the Countryside which is also designated as part of the Capstone and Horsted Valleys ALLI

201. The appeal site is open countryside and situated within the Capstone and Horsted Valleys ALLI. Whilst this is not a national designation, the area is recognised for its local value. The Framework seeks that the planning system contributes to and enhances the natural and local environment by protecting and enhancing valued landscapes. But it is also clear that weight should be apportioned on the importance of the landscape with great weight being given to those areas protected by national designations. The ALLI designation is at the lower end of the landscape designation hierarchy. [65, 138]

202. The principal characteristics of the Capstone Valley part of ALLI are set out in the LCA. The main characteristics which are relevant to the issues in this appeal include the two valleys with a central plateau area, its provision of a setting for the Capstone Farm Country Park, its position as a green wedge linking urban communities into the wider countryside and the North Downs, valuable semi-rural open space in close proximity to densely populated urban communities offering significant health and recreational benefits, a distinct edge to urban areas and prevention of coalescence of Lordswood/Princes Park and Hempstead, remnant chalk grassland on steep slopes leading to smaller fields and then larger arable units to the southern section, blocks of deciduous planting providing containment for arable land and distinct rural character and coherence despite proximity to urban settlements. [66-67, 128, 138]

203. The appeal site is situated within the Elm Court sub-area. This area forms the central plateau with dry valleys to west and east and with the Capstone Country Park to the north. Access to the area is by the country lanes network, with Ham Lane being one of the roads through this sub-area. There are PRoW which give east/west access but there is little north/south access, although there is a footpath across the appeal site in this direction. The characteristics of this sub-area include the gently undulating open farm arable plateau rising towards the North Downs and the indistinct field pattern with a weak hedgerow structure. I saw, as set out in the LCA, that this lack of uniform containment provides a large scale landscape.

204. The Elm Court Business Park, to the east of the appeal site, has a long and tall conifer boundary. That boundary treatment, along with the buildings on the business park, introduces discordant urban elements into the rural scene. The Lordswood Leisure centre and its associated playing fields are situated to the north-west of the appeal site and are within the ALLI. It creates a feature that has a different use to that of agriculture. [63, 127]

205. The appeal site consists mainly of an expansive area of arable agricultural land with wide views over the appeal site and attached agricultural land as well as more distant views. There is also a small area of woodland within the site boundary. The dwellings of Lordswood are well screened from the appeal site by trees for about half of the length of the western boundary and for the remaining part of this boundary there is a good degree of screening which softens the appearance of the dwellings. This can be partly seen in LVIA viewpoints 4 and 7 and the Council's viewpoint 15 and also the appellants' landscape proof of evidence plan 3 *Oblique Ariel Photograph of the Site*. [131]

206. The buildings of Gibraltar Farm and Gibraltar Farm Cottages are rural in character such that the only main detractor which can be seen is the Elm Court Business Park (this can be seen in LVIA viewpoint 6 on Byway RC29 adjacent to

Hall Wood looking across the site). However, it has a rural industrial appearance and it is partly screened by planting, albeit in addition to the traditional hedgerow there are uncharacteristic conifers.

207. In landscape terms the lack of hedgerow planting detracts from the area, although this provides for open views (as shown in LVIA viewpoint 4 from PRoW RC27 on Ham Lane looking across the site). Both landscape witnesses agreed that the site looked rural. [129, 132]

208. I appreciate that on this site there are certain factors which detract from the feeling of being in a rural area, particularly background noise. That said, motorways often cross rural areas yet do not change them from being rural. This is particularly so where the traffic movement is not seen, as is the case here. I also saw high levels of fly-tipping on Ham Lane and littering more generally in the area. Whilst that is a landscape detractor, I do not consider this to be simply an urban phenomenon (albeit it an urban fringe is likely to be under greater pressure because of proximity to the community).

209. Those aspects prevent the appeal site, in its wider context, being entirely attractive or tranquil. However, I concur with the Council that it is in a rural countryside location where the appeal site provides a sense of being away from the urban area. It is this which provides the 'visual relief' that some local residents describe as being important for well-being. [130, 153, 159]

210. In addition to the appearance of the site, the spatial matters which are of importance for the ALLI and appeal site are the distinct rural character despite close proximity to urban areas, the green wedge position which links urban areas to the Downs and the position in relation to preventing the coalescence of Lordswood/Princes Park with Hempstead. [120]

211. In spatial terms, I have no doubt that the ALLI as a whole, the sub-area and the appeal site are of value because of their rural character and appearance in close proximity to the urban area. However, that situation could arise in many circumstances, particularly in this Council's area where so many ALLI designations adjoin the urban area. This matter is therefore of limited weight. [72]

212. The extent of the green wedge formed by the ALLI can be seen in the Council's viewpoint 1 taken from the top of the scarp at Darland Banks and also in the LVIA viewpoint EDP 1 (Kingsway Road). I agree with the appellants that the appeal scheme would cause limited visual intrusion in that expansive view. This, also reflects the LVIA assessment that even in the short term (1-15 years) the magnitude of change seen from this viewpoint would be 'very low' with a minor neutral' significance of change (hereafter in this report the impacts are listed in the same order i.e. magnitude of change followed by significance of change). I also agree that the site seems modest in the context of the size of the ALLI as a green wedge given the ALLI covers some 575ha. However, visual impact is not just about a particular static view or the proportion of an area occupied; rather, it is also requires consideration of movement through the area as well as consideration of other key views. [68]

213. Many of the viewpoints provided are taken close to the site (e.g. LVIA viewpoints EDP 2, 3, 4, 5, 6, 7 are all taken on the site or close to its boundary as are Council viewpoints 4, 6a and 7). As such, considerable change would be

felt here particularly by those people (receptors) walking or riding on PRoW through the appeal site or travelling along Ham Lane. Indeed the LVIA considers the short term impacts to be 'very high' and 'major adverse' or 'moderate adverse' for viewpoints 2, 4, 5, 6 and 7, with a level of 'high' and 'major/moderate adverse' at the least for viewpoints 2, 5 and 6 in the medium term (15 years) and beyond. However, development of any greenfield site would inevitably result in a considerable change when seen from the site itself or any of its unscreened boundaries. [69, 139-140, 142]

214. In other views, such as that from Footpath RC11 (LVIA viewpoint EDP 8, Council viewpoint 8) some distance to the north of the site, the proposed development would be seen in the distance as a detractor to the rural view. The LVIA identifies short term impacts as being 'high' and 'major/moderate adverse' reducing to 'medium' and 'moderate adverse' in the medium term once planting becomes established. Similarly the proposed development would have an urbanising effect, but at closer proximity, when seen from the Council's viewpoint 11 taken on PRoW KG35 near Roots Wood. I consider that view would be more adversely affected than LVIA viewpoint EDP 8 due to proximity. [143]

215. In terms of the distant views from the south, I agree that the proposed tree planting is likely be able to screen much of the site in the long term, though not all light spill. The foreshortening of views such as that from the motorway bridge (LVIA viewpoint EDP 10, Council viewpoint 10) would alter the character of this view even at a distance. However, dense tree cover is a characteristic of the wider area. As such, I consider that the LVIA conclusion of a 'medium' and 'moderate/minor neutral' reducing to 'very low' and 'minor/negligible' in the medium and longer term represents a reasonable assessment of the likely visual impact. This is a relatively sensitive location heading towards the ALLI and the green wedge/corridor it provides. It would result in change because it would appear to partially block this southern end of the ALLI. That said, the blocking would be by trees in the long term and so would not be uncharacteristic for the wider locality. Moreover, the blocking effect would be to block views of trees rather than longer open views. [71, 73, 93, 141]

216. The route leaving the urban area, along Shawstead Road/Ham Lane and heading out towards the Downs, is currently one of a rural character despite the fly-tipping referred to above. The effect of the proposed development on the sequential views along this route would be to create an urbanised section from Gibraltar Farm almost to the junction with the Lidsing Road. Thus, the presence of the appeal development would be prominent and uncharacteristic in views on this route until the planting became established. Even in the long term, with established planting, it is likely that the development's presence would be felt. This is because of likely glimpsed views into the site, for instance along the emergency access route and retained footpaths as well as from associated activity and lighting. Given the site boundary adjoins Ham Lane at a point where the Elm Court Business Park also adjoins the lane it is likely to result in a feeling of consolidated development, exacerbating the impact of that existing, albeit semi-rural, detractor. Even though I accept that landscaping using deep tree belts would not be uncharacteristic in this locality, the current route of Ham Lane as a countryside rural route would feel less rural. Furthermore, such planting would take a considerable time to provide robust screening particularly during winter months. [69, 151, 158]

217. In practical terms those walking across the appeal site would have to simply walk further to access an open countryside view. Once there they would lose visual connection with the rest of the ALLI to the north but there would still be views southwards to the Downs. Nonetheless, there would be some harm to this public recreational route within the ALLI contrary to the assertion made by the appellants. That said, the appeal scheme would offer other recreational opportunities. [72]

218. Turning to the matter of coalescence, the comparison with other smaller ALLIs is not particularly helpful as the issue is site specific and requires assessment of other matters beside distance. Essentially, in terms of this spatial function of the ALLI, the matter is one of whether the erosion of the gap between Lordswood/Princes Park and Hempstead would be so significant that the settlements began to appear or feel like they are merging. The parties agreed that the existing separation distance between Hempstead and Lordswood (Princes Park is further to the north) would be reduced by some 50% to somewhere in the region of 500-700m. In contrast with the existing situation this would represent a pinch-point at the southern end of the ALLI, particularly given the position of the Elm Court Business Park in relation to the appeal site. [70, 158]

219. Viewpoint EDP 4 on Ham Lane is assessed in the LVIA as having a 'very high' and 'major/moderate adverse' short term impact and a medium to longer term impact of 'medium' and 'moderate/minor neutral'. This relies heavily on the landscape planting significantly filtering or screening views of the development behind. However, even with a planted boundary, the existing open rural/agricultural gap seen between the areas of Lordswood and Hempstead from the surrounding road and PRoW network, would be markedly altered. This would particularly be the case for views from Ham Lane, Lidsing Road and Chapel Lane (this can be seen in in LVIA viewpoint EDP 4 and Council viewpoints 4, 15 and 14 respectively). However, that landscape change does not indicate a merging of settlements. The landscaping combined with the traffic flow which would be from the southern side towards Lordswood rather than onto the rural Ham Lane would mean that the neighbouring settlements would not appear to merge.[71, 133, 135-137, 145]

220. The appeal would also see other sizeable new landscaping belts. Whilst a number of these would reinforce existing planting or enhance roadside planting, that across the southern end of the site would be a lengthy boundary traversing an open tract of arable land as set out above. Although tree screening of housing is a characteristic of this area, the position chosen follows the Council's administrative boundary rather than being robustly determined by existing landscape features. That said, the administrative boundary does not follow any current fixed feature and so may well be reflective of historic features such as those dating back to 1860, as shown on the appellants' proof of evidence plan 6 *Landscape Change through the 20th Century* such that the planting would reintroduce a historic boundary feature. [141]

221. Aside from the main development area of the appeal site, I appreciate that the small area of woodland within the site boundary would remain largely intact and be proactively managed were the appeal to be successful. The section to be removed would be limited to that essential for the access, and does not contain high importance trees. Thus, in respect of the existing woodland the proposals overall would be able to secure a benefit.

222. The LCA analyses the condition of the area, which it notes is strongly influenced by external factors with urban fringe areas often under pressure, to be poor. It also assesses the sensitivity, described as measure of the ability of a landscape to accept change without causing irreversible damage to the distinctiveness of that landscape, as high. It goes on to seek restoration of the area.

223. In this regard, the poor landscape condition does not render the appeal site of limited landscape value. Rather, I agree that its sensitivity in this part of the ALLI depends on the role it plays as part of the green wedge the ALLI creates, and in preventing coalescence. On these points I do not consider that the site is critical to maintaining separation between the settlements of Lordswoods and Hempstead. Further, when considered in more distant views (rather than those on the site or at its boundaries) does not have a particular prominence or importance in creating the sense of a green wedge.

224. I conclude that the proposed development would harm the character and appearance of the immediate area and, therefore, fail to accord with the provisions of policies BNE25 and BNE34. However, that harm would not represent a critical harm to the function of the Capstone and Horsted Valleys ALLI taken as a whole. [133-134]

225. Policy BNE34 allows for development in an ALLI if the social and economic benefits of the proposal are so important that they outweigh the local priority to conserve the area's landscape. It is therefore necessary to consider whether there are social and economic benefits of the proposal before coming to a final conclusion in respect of policy BNE34 and indeed before making the final planning balance.

Whether there are other Benefits of the Scheme

226. As set out above the housing land supply situation is very significant in this case. However, there are other matters to be added to the planning balance. The first is directly linked to housing supply and relates to affordable housing provision. The scheme would deliver 25% affordable housing. Based on the Moor Street decision the Inspector recorded the need for 713 affordable dwellings to be provided per year, yet only 845 such dwellings have been delivered over the last four years. Given that shortfall I agree with the appellants that significant weight should be attached to the provision of affordable homes. In this regard I also note that there is no evidence to suggest the provision of affordable housing would result in anti-social behaviour.

227. I agree with the appellants that the appeal scheme would bring economic benefits. The government's views on the importance of this are well known. In this case, during the construction period the appeal scheme would provide jobs and training opportunities for local people, as well as spend in the local economy. In the longer term, occupants of the new development would provide additional expenditure to support local services. These factors clearly align with the economic dimension of planning and should be afforded significant weight.

228. Whilst the proposal would bring forward open space, including a community park and children's play space this, to a large extent, is a requirement of the scheme, both to serve the needs of future occupiers and to be able to screen the

proposed development. As such, I consider modest additional weight should be afforded to this benefit.

229. I agree, as set out above that the provision of a Woodland Management Plan for Hall Wood would represent a positive, albeit modest, biodiversity and access benefit of the scheme.

230. The extensive structural landscape planting which is proposed would create a biodiversity benefit. However, although the Elm Court LCT encourages new planting of woodland and hedgerows I am not convinced it envisaged woodland belts of the extent proposed to screen the appeal site. Nor do I agree that the form of planting proposed necessarily improves the landscape character, which at this point is of wider views and larger and more open fields, rather it is more neutral in landscape terms. Thus, and given that planting is largely required to screen the appeal proposal, I attach little additional weight to this matter.

231. New Homes Bonus payments would be significant, but this does not attract weight in the planning balance, as it offers an incentive for Councils to provide much needed housing on appropriate sites. I also note that the Council would be in receipt of a capital sum in excess of £4m as a result of the scheme. This clearly should be a matter of public record and I appreciate this would bolster the Council's resources and so assist the provision of public services. However, it seems to me this should attract no weight as a material consideration because it is unrelated to the planning matters in this case.

Other Matters

232. Interested parties raise a significant number of other matters which do not reflect issues between the parties and it is to these I shall now turn.

233. Many interested parties have raised concerns about access to medical and education services. As part of the appeal process the appellants have signed up to a s.106 Unilateral Undertaking in which they agree to make provision based upon the Council's formulae in respect of need anticipated to be generated from the future occupiers of the appeal site. It is not for the developer to have to make up for existing shortcomings in service provision. There is no evidence before me from any main service provider to indicate that the scheme should be resisted because of likely impact on services. Thus, there is nothing before me to justify withholding permission because of the concerns raised.

234. There are a number of transported related matters raised by interested parties. Many relate to general concerns regarding traffic in the locality. However, it is important to note that all traffic would come through the primary access route on North Dane Way / Albemarle Road before joining the highway network. The traffic modelling has been agreed with the highway authority. It is agreed that existing junctions currently operate within their capacity albeit queuing is experienced in the morning and evening peak periods. It is also agreed that the appeal scheme would not unacceptably impinge on the free flow of traffic in the locality. The access to Ham Lane would be for emergencies only. Mr Dines' concerns regarding the Gleaming Wood Road /Lordswood Lane Junction are understandable given the queue predictions. However, the junction improvement scheme would allow ahead traffic to pass traffic waiting to turn right, reducing queuing. This and pedestrian/cycle links would be dealt with through the imposition of conditions.

235. A circular bus route is a core part of the transport plans and a contribution to this (at the level sought) would be provided through the s.106 undertaking. The internal road layout would be designed to accommodate a bus route and the Council would be able to control this through the reserved matters application process. Details of bus stops close to the site are in Albemarle Road and Clandon Way (CD1.14 Appendix C). The frequency of bus services indicate a reasonable level of service, for instance with the Lordswood/Chatham service having five buses per hour during the day Monday to Saturday and hourly on Sundays (CD1.14 Table 3.19 p.12). It is proposed that evening and Sunday services would be enhanced through the s.106 contribution.

236. Many services would be within easy walking or cycling distances (CD1.14 Appendix C) albeit one would not wish to transport heavy shopping over longer distances. That would be the case in many locations and delivery services are not uncommon.

237. There is no substantiated evidence to support withholding a decision on this appeal to await the outcome of the Lodge Hill proposals.

238. I am satisfied that the site would provide ample opportunity for positioning of dwellings in the detailed scheme so as to prevent adverse impacts in terms of privacy or overshadowing of existing residential properties. It is likely that there would be impacts on outlook but there is no right to a private view.

239. Whilst there is criticism of the scheme for being opportunistic, house-building relies upon business to take development opportunities and risks to develop the housing that is needed for the nation.

240. Fluctuation in property prices as a consequence of development, be it good or bad, is not a matter which the planning system is designed to control.

241. Other infrastructure projects, such as motorway improvements, may be considered by some to result in undesirable change but they reflect community and business needs and are not a reason to withhold planning permission in this case.

242. The substantiated evidence before me indicates that the scheme would not have a harmful impact on ecology, which, in any event, is limited given the arable agricultural management of much of the site. Ecological mitigation proposals, which would be secured by condition were the appeal to be allowed, would make improvements to the surrounding area and so no statutory objections are raised. In terms of the Ancient Woodland conditions would be required to secure a Woodland Management Plan and prevent encroachment within 15 metres of the Ancient Woodland.

243. The site is good classified as grade 3a and 3b agricultural land but is not of the highest quality. In any event, impact upon it must be judged in the context of the dire need for homes.

244. The visual effect on the ALLI set out above would have a modest contextual impact on the Capstone Country Farm Park and the scheme would be likely to increase visitor numbers and thus management needs. S.106 monies have been put forward to assist in recreation requirements arising from the site and are identified for this location. Aside from this, the proximity to this facility would be

a benefit for future occupiers of the site in terms of access to recreational space for health and well-being.

245. Concerns are raised about a waste transfer station near to the site which takes asbestos. That business will be carefully regulated under other legislation and should be managed so that it poses no risk to occupiers of the proposed development.

246. There is no substantiated evidence before me that flood risk/drainage would pose a problem here which could not be dealt with by the conditions proposed.

247. I appreciate that there is substantial local opposition, including as sustained by the Parish Councils and the MP. I am mindful of the Government's localism agenda. However, I have to consider the proposed development having regard to local development plan policies and associated documents, including those relating to local housing need. I also have to report on the development having regard to national planning policies and all other material considerations.

248. It is not unreasonable for people to have homes and I am not satisfied that providing such homes here would lead to social unrest. Nor do I consider that immigration and its potential impact on the requirements of housing need is a matter for consideration in dealing with this housing scheme. Furthermore, there is no substantiated evidence before me that occupiers of the proposed development would materially add to the existing jobless figures for this area.

The Planning Balance

249. The planning balance must be considered in the light of the Framework as a whole. This sets out that there are three dimensions to sustainable development; economic, social and environmental. Gains should be sought jointly and simultaneously for each of those roles. It is inevitable that there will be times when different strands pull in different directions, as is the case here.

250. In terms of economic benefits there would be gains in housing delivery, including affordable housing, and in the value of the construction works and subsequent housing to the local economy. The housing would be accessibly located, in close proximity to recreational facilities, reasonably close to other facilities and to bus service provision, so would make economic sense in terms of reducing the need to travel by private car. I consider those benefits significantly outweigh the disbenefit, in economic terms, of losing the site from agricultural use.

251. In terms of the social role, the proposed dwellings would provide much needed homes, including affordable homes. The social benefits of being able to house people are significant in creating stable communities. I do not share the objection raised that this scheme would result in social unrest; on the contrary it should make life better for many by easing housing pressure. In this case there is no reason to doubt that the homes would create a high quality environment. This would provide for an improvement in people's quality of life, improving the conditions in which they live and take leisure and would widen the choice of quality homes. These are all important objectives of the Framework.

252. There would also be benefits for existing residents as a result of access to the on-site children's play facilities, recreational open space on the site and better woodland management. The bus services would also be improved.

253. Some existing residents that adjoin the site may feel the proposed development would be to the detriment of their living conditions. However, development would be likely to have that impact in many cases and the living conditions of those residents would be considered in the light of normal development management policies at the time of the reserved matters application.

254. I have greater concerns, in terms of social impacts, that local people would feel they have not been listened to, that the Local Plan is being ignored and that localism would not have been taken seriously were the appeal to be allowed. However, the Local Plan is not up-to-date in terms of its policies for the supply of housing and this is a materially important consideration. Despite this, other local assessments providing evidence to support the new local plan, including for housing and affordable housing, have identified local requirements and it is these which need to be considered.

255. Weighing these social dimension matters together, I consider that the balance of social benefits weighs heavily in favour of the proposed development.

256. In terms of the environmental role I find that, despite the landscaping proposals and management plans, the proposed development would cause harm to this area of countryside which is locally designated for protection. Whilst it would begin to close off the southern end of the ALLI and so impinge on the sense of spaciousness, it would not lead to coalescence between Lordswood and Hempstead. It would reduce the sequential countryside views from Ham Lane and the PRoW across the site, but these are limited distances and in terms of Ham Lane, the impact would significantly reduce as planting becomes established.

257. Moreover, acknowledging those harms, even the dated policy BNE34 accepts that economic and social benefits of a scheme might be so important that they outweigh the local priority to conserve the area's landscape. In this case the economic and social benefits are particularly clear and the harms are not critical to the functioning of the ALLI as a whole. Moreover, I am mindful that ALLI designations cover a significant part of undeveloped land in accessible locations in this Council's area, so that it is inevitable that to fulfil housing requirements ALLI land will need to be developed. As such, I consider this is a case where policy BNE34 would be complied with.

258. Turning to the Framework, the balancing exercise is explicit where relevant policies are out-of-date. It sets out the presumption in favour of sustainable development and says that for decision taking planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the Framework as a whole. Those policies make it clear that the locally designated ALLI is at the lower level of priority in terms of weight to its protection and I have already determined that harm to the ALLI as a whole is not so significant that it outweighs the benefits of the appeal scheme, particularly in terms of housing provision.

259. Local planning authorities are advised by the Framework to boost significantly the supply of housing. In this case it is evident that the supply of housing is in a precarious state, at best being in the range 2.79 to 2.21 years. That very substantial policy under-provision has no clear solution in the near future, despite

the Council's more flexible approach to development on ALLI sites. Thus, given the sustainable location in close proximity to Lordswood and its facilities, the harm to the landscape would not significantly and demonstrably outweigh the benefits of the proposed development. Thus, the Framework planning balance lies in favour of the proposal.

260. It is not disputed that there would be conflict with adopted policy BNE25 of the development plan and that policy is afforded limited weight by the parties in the SoCG. As noted above, s.38(6) requires that applications for development should be determined in accordance with the development plan unless material considerations indicate otherwise. In this case, the Framework is a significant material consideration. Because the development plan policies are out-of-date, the Framework test is whether any adverse impacts of approving this development would significantly and demonstrably outweigh the benefits when assessed against the Framework as a whole. It is my view that the appeal should succeed as the harms do not significantly and demonstrably outweigh the benefits of the scheme in the circumstances before me, where housing land supply is so significantly below that required. Accordingly, I find the proposed development to be a sustainable one in the terms of the Framework, that being a material consideration which warrants a decision other than in accordance with the development plan.

Recommendation

261. I recommend that the appeal be allowed on the basis of the revised plans and planning permission be granted subject to conditions set out in Annex A.

Zoë H R Hill

Inspector

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Paul Brown QC	Instructed by Mrs V. Stoodley
He called	
Mr D McInerney	
Mr G Warren	

FOR THE APPELLANT:

Graeme Keen	Instructed by the Head of Legal Services, Medway Council
He called	
Mr Withycombe	
Mr Harouni	

INTERESTED PERSONS:

Mrs Pauline Bowdery	on behalf of Boxley Parish Council
Mr Van der Vliet	Local resident
Mrs Vanessa Jones	Chair of Bredhurst Parish Council and Bredhurst Woodland Action Group
Mr Dines	Local resident

INQUIRY DOCUMENTS:

1 CIL Compliance Checklist
2 Opening on behalf of the Appellants
3 Opening Statement on behalf of the Council
4 Judgement of Mr Justice Ouseley: Stroud District Council v SoS Communities and Local Government Gladman Developments [2015] EWHC 488 (Admin)
5 Bundle of documents submitted by Mrs Bowdery
6 Statement on behalf of Boxley Parish Council (made by Mrs Bowdery)
7 Proposed conditions list with additional sheet
8 Email regarding s.106 contributions - G Gould
9 Housing Land Availability Tables
10 Closing Submissions for the Council
11 S.106 Unilateral Undertaking
12 Closing Submissions on behalf of the Appellants

CORE DOCUMENTS

1.1 Pre-Application Response
1.2 Covering Letter
1.3 Application Forms
1.4 Ownership Certificates
1.5 Acknowledgement of Application

1.6 Environmental Screening Opinion
1.7 Planning Statement
1.8 Design and Access Statement (EDP1995_04a)
1.9 Landscape and Visual Impact Assessment (Volume 1 EDP1995_04a)
1.10 Landscape and Visual Impact Assessment Volume 2 L_EDP1995_04a
1.11 Ecological Appraisal. C_EDP 1995_05a.
1.12 Archaeological and Heritage Assessment. EDP 1995_03a
1.13 Arboricultural Assessment. T_EDP 1995_02a. July 2014
1.14 Transport Plan Amended. GC/HB/P14-630/10
1.15 Residential Travel Plan. GC/CS/P14-630/02
1.16 Flood Risk Assessment. GL/HB/P14-630/03
1.17 Utilities Assessment. PL/HB/P14-630/04
1.18 Site Ground Investigation. Appendix C to FRA CD DOC GF1.16
1.19 Residential Travel Plan Amended. GC/CS/P14-630/11
1.20 Furneaux & Co. Agricultural Land Classification (P889)
1.21 Ecology Addendum Report. (C_EDP 1995_06)
1.22 LinSig Output M2 J3 (Scheme Model with Lodge Hill Mitigation Scheme)
1.22.1 LinSig Output M2 J3 (Base Model (Existing Junction) Without Development)
1.22.2 LinSig Output M2 J3 (Base Model (Existing Junction) With Gibraltar Farm + Lodge Hill)

2.1 Illustrative Masterplan. 1995/77d
2.2 Illustrative Masterplan. Amended Version 1 1995/97a
2.3 Site Plan EDP 1995/74b
2.4 Parameter Plan 5 Advance Planting Amended. edp 1995/99
2.5 Parameter Plan 2 Access Plan Amended. 1661-SK-006 Rev A
2.6 Site Section Plan EDP/1995/79a
2.7 Open Space Breakdown EDP1995/102 dated 03 Dec 2015
2.8 Application Boundary Site Plan EDP 1995/74c (Amended August 2016)

3.1 Covering email updating ecological report
3.2 Letter to case officer (G. Gould)
3.3 Letter to case officer (G. Gould) with appended letters by BTF Lister
3.4 Letter to case officer (G. Gould) clarifying transport + S106 position
3.5 Gleaming Wood Drive, Lordswood appeal decision
3.6 Email to case officer clarifying points before committee
3.7 Email to case officer (G. Gould) with extract from Autumn Statement
3.8 Email from Noel Filmers (Medway Council) to Appellant
3.9 Email to case officer
3.10 Letter from case officer seeking clarification on open space contribution request
3.11 EDP email to case officer (G. Gould) clarifying open space
3.12 Email from Medway's G. Gould to G. Warren re S106
3.13 Email from Medway's G. Gould confirming open space

4.1 Planning Committee Report
4.2 Planning Committee Supplementary Report
4.3 Minutes of the Meeting
4.4 Decision

5.1 Appeal Application Form
5.2 Appeal Notification to Ownership
5.3 Appeal Covering letter

6.1 Appellants Statement of Case
6.2 LPA Statement of Case

7.1 LPA Planning Evidence Proof of Evidence – Majid Harouni
7.2 LPA Planning Evidence Summary of Proof – Majid Harouni
7.3 LPA Landscape Proof of Evidence – David Withycombe
7.4 LPA Landscape Summary Proof of Evidence – David Withycombe
7.5 Appellant Planning Evidence Proof of Evidence – Graham Warren
7.6 Appellant Planning Evidence Summary Proof of Evidence – Graham Warren
7.7 Appellant Planning Evidence Proof of Evidence – Duncan McInerney
7.8 Appellant Planning Evidence Summary Proof of Evidence – Duncan McInerney

8.1 Statement of Common Ground September 2016

9.1 List of Agreed Draft Conditions
9.2 Signed but Undated s.106 Unilateral Undertaking

10.1 Medway Local Plan Update
10.2 Medway Council Issues and Options (2012-35)
10.3 Medway Council Annual Monitoring Report
10.4 Medway Local Plan (saved policies) (S4, BNE25, BNE34)
10.5 Medway Landscape Character Assessment Mar11 Main Report
10.5.1 Medway Landscape Character Assessment Mar11 Appendices
10.5.2 Medway Landscape Character Assessment Mar11 Map
10.6 Medway Developers Contribution Guide
10.7 Appeal Decision Land West of Hoo St Werburgh

11.1 LPA Planning Evidence Appendix 1 Minister of State for Housing Letter 27th March 2015
11.2 LPA Planning Evidence Appendix 2 Suffolk Coast Hopkins Judgement
11.3 LPA Planning Evidence Appendix 3 Appeal Decision Land at Station Road, Rainham
11.4 LPA Planning Evidence Appendix 4 Appeal Decision Muller Properties Group
11.5 LPA Planning Evidence Appendix 5 Appeal Decision Moor Street, Rainham

11.6	LPA Planning Evidence Appendix 6 Appeal Decision Land Off Bath Road, Leonard Stanley
11.7	LPA Planning Evidence Appendix 7 Land East of Mierscourt Road, Committee Report 01-06-2016
11.8	LPA Planning Evidence Appendix 8 Land North of Peninsula Way, Chattenden, Rochester, MC-15-3104
11.9	LPA Planning Evidence Landscape Proof of Evidence Appendices – David Withycombe
11.10	Appellant Planning Evidence Proof of Evidence Appendices – Graham Warren
11.11	Appellant Planning Evidence Proof of Evidence Appendices Parts 1 - 13 – Duncan McInerney
12.1	Illustrative Masterplan [EDP 1995/125] (dated 5 Sept 2016)
12.2	Site Plan / Application Boundary Plan [EDP 1995/74d] (dated 5 Sept 2016)
12.3	Informative to Application Boundary Plan [EDP 1995/124a] (dated 5 Sept 2016)

Appendix 1 – Conditions

1) Details of the appearance, landscaping, layout, and scale, (hereinafter called "the reserved matters") shall be submitted to and approved in writing by the local planning authority before any development begins except that authorised by condition 4 below and the development shall be carried out as approved.

   Reason for the condition: As required to be imposed by Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2) Application for approval of the reserved matters shall be made to the local planning authority not later than 18 months from the date of this permission. The development hereby permitted shall begin not later than 12 months from the date of approval of the last of the reserved matters to be approved.

   Reason for the condition: For the avoidance of doubt and to ensure the satisfactory and prompt development of the site.

3) No development shall take place until a scheme of phasing for the dwellings and highways and drainage infrastructure and associated open space / green infrastructure has been submitted to and approved in writing by the local planning authority. Development shall be carried out in accordance with the approved scheme of phasing.

   Reason for the condition: This pre-commencement condition is required to ensure that the key elements of each phase of the development is completed in an order which ensures that infrastructure needs, landscaping/open space and access are in place relevant to each phase before further development is undertaken, in the interests of good planning.

4) The development of Phase One as agreed by condition 3 above shall begin not later than 12 months from the date of the approval of reserved matters applications relating to that phase.

   Reason for the Condition: To ensure a prompt start on site.

5) All reserved matters and details required to be submitted pursuant to condition 1 shall be in accordance with the principles and parameters described and identified in the Illustrative Masterplan (Drawing No. EDP1995/97a received 24/09/2015 and the Design and Access Statement (Revised 12/08 2014). A statement shall be submitted with each reserved matters application, demonstrating how the submitted reserved matters comply with the Design and Access Statement and the indicative Masterplan documents.

   Reason for the condition: For the avoidance of doubt and to ensure the satisfactory development of the site.

6) No dwelling or ancillary building construction shall take place until details of the materials to be used in the construction of the external surfaces of the buildings hereby permitted have been submitted to and approved in writing by the local planning authority. Development shall be carried out in accordance with the approved details.

Reason for the condition: As the scheme is a large new development with limited screening in the initial years this condition is necessary in the interests of visual amenity and to ensure the satisfactory development of the site.

7) No more than 450 dwellings shall be constructed on the site.

Reason for the condition: For the avoidance of doubt and given all assessments have been on the basis of this figure such that it is necessary to ensure the satisfactory development of the site.

Trees and Landscaping and Ecology

8) The plans and particulars required to be submitted in accordance with the condition 1 shall ensure that no less than 2.96 ha of the site is set aside as woodland, 0.531 ha as open space and play space and where the development abuts the adjoining ancient woodland a clear minimum of 15m landscape buffer area/zone shall be maintained.

Reason for the condition: To ensure adequate open space for future occupiers of the development and to provide for the interests of the ancient woodland.

9) The development shall not commence until an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP), which shall include details of all trees to be retained and removed, any facilitation pruning required and the proposed measures of protection, undertaken in accordance with BS 5837 (2012) 'Trees in Relation to Design, Demolition and Construction-Recommendations' has been submitted to and approved in writing by the local planning authority. The AMS shall include full details of areas of hard surfacing within the root protection areas of retained trees which should be of permeable, no-dig construction and full details of foundation design, where the AMS identifies that specialist foundations are required. The approved barriers and/or ground protection measures shall be erected before any equipment, machinery or materials are brought onto the site and shall be maintained until all equipment, machinery and surplus materials have been removed from the site. Nothing shall be stored or placed, nor fires lit, within any of the areas protected in accordance with this condition. The siting of barriers/ground protection shall not be altered, nor ground levels changed, nor excavations made within these areas without the written consent of the local planning authority. The measures set out in the AMS and TPP shall be adhered to in accordance with the approved details.

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the arboricultural interests of the site before works commence that could cause irrevocable harm and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

10) A Landscape and Ecology Management Plan (LEMP), including long term design objectives, management responsibilities and maintenance schedules with timetable(s) for works for all landscape areas, other than domestic gardens, shall be submitted to the local planning authority for approval in writing prior to the occupation of the development. The LEMP shall be carried out as approved in accordance with the approved timetable(s).

Reason for the condition: To safeguard the landscape and ecological interests of the site and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

11) No dwelling shall be occupied until a Woodland Management Plan (WMP) for the existing and proposed woodland areas has been agreed in writing by the local planning authority. That part of the WMP for Hall Wood Ancient Woodland shall be in accordance with EDP's Heads of Terms for a WMP (EDP report ref: C_EDP1997_07).

The WMP shall include the following:

a) Review of existing constraints and opportunities;

b) Management objectives and associated practical measures;

c) Details of initial enhancements and long term maintenance;

d) Extent and location/area of management works on scaled maps and plans at a scale which shall have first been agreed by the local planning authority in writing;

e) Timetable for implementation demonstrating that works are aligned with the proposed programme of development;

f) Details for monitoring and remedial measures; and

g) Persons responsible for implementing the works.

The measures set out in the WMP shall be implemented in accordance with the approved details and timetable(s).

Reason for the condition: This condition is required to safeguard the woodland and to ensure adequate management for the protection of landscape and habitat in the interests of ecological and local amenity.

12)The development shall not commence until details of all fencing, walling and other boundary treatments, to include hedgehog holes have been submitted to and approved in writing by the local planning authority. The landscaping areas and buffer zones shall be implemented in full in accordance with the approved details before the first occupation of any of the dwelling as hereby approved, or in accordance with a programme to be agreed in advance in writing by the local planning authority. All boundary treatments and buffer zones to be installed in or adjacent the ancient woodland shall be carried out in accordance with the approved details.

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the ecological interests of the site. The works subsequently required are necessary in the interests of residential and local amenity.

13) All planting, seeding or turfing comprised in the approved details of landscaping shall be carried out in the first planting and seeding seasons for the phase to which it relates following the occupation of the first dwelling on that phase or the completion of that phase of development, whichever is the sooner; and any trees or plants which within a period of 5 years from the completion of that phase of the development die, are removed or become seriously damaged or diseased

shall be replaced in the next planting season with others of similar size and species.

Reason for the condition: This condition is required to ensure that the landscaping gets properly established which is particularly important to visual amenity given the size and partly open location of the site.

14) No works shall take place (including ground works and vegetation clearance) until an updated species survey has been carried out to inform production of an Ecological Design Strategy (EDS) addressing all species mitigation for all species recorded within the site has been submitted to and approved in writing by the local planning authority.

The EDS shall include the following:

a) Purpose and conservation objectives for the proposed works;

b) Review of site potential and constraints;

c) Detailed method statements to achieve stated objectives for each species;

d) Extent and location/area of proposed mitigation for all species on appropriate scale maps and plans;

e) The location of bat and bird boxes and/or bricks and their specifications;

f) Type and source of materials to be used (including whether or not they are native species and local provenance);

g) Timetable for implementation demonstrating that works are aligned with the proposed programme of development;

h) Persons responsible for implementing the works;

i) Details of initial aftercare and long term maintenance;

j) Details for monitoring and remedial measures; and,

k) Details for disposal of any wastes arising from works.

The EDS shall be implemented in accordance with the approved details and retained thereafter.

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the ecological interests of the site before works commence that could cause irrevocable harm and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

15) No part of the development hereby granted (including ground works and vegetation clearance) shall take place until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning Authority. The CEMP: Biodiversity shall include the following:

a) Details of the areas where ancient woodland soil and coppiced stools are to be translocated and method statement for translocation;

b) Risk assessment of potentially damaging construction activities;

c) Identification of biodiversity protection zones;

d) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements);

e) The location and timing of sensitive works to avoid harm to biodiversity features;

f) The times during construction when specialist ecologists need to be present on site to oversee works;

g) Responsible persons and lines of communication;

h) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person;

i) Use of protective fences, exclusion barriers and warning signs; and,

j) Cordwood above 20cm in diameter from the site should be retained and placed within the site in locations and quantities to be agreed with the local planning authority prior to any tree felling take place.

The approved CEMP: Biodiversity shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority

Reason for the condition: This condition is required and to be agreed pre-commencement to safeguard the ecological interests of the site before works commence that could cause irrevocable harm and to ensure adequate maintenance for the protection of landscape and habitat in the interests of ecological and local amenity.

16) No external lighting fixtures or fittings shall be attached to any building or structure hereby approved and no free standing lighting equipment shall be erected on the site, other than those shown on the plans approved for condition 17 below or as may be agreed on a temporary basis under condition 15 during the construction period.

Reason for the condition: This condition is required to safeguard the ecological interests of the site.

17) No dwelling shall be occupied until a Lighting Strategy for Biodiversity, including a timetable for its implementation has been submitted to and approved in writing by the local planning authority. The strategy shall:

a) identify those areas/features on site that are particularly sensitive for bats, dormice and otters and that are vulnerable to light disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging; and

b) show how and where external lighting will be installed (through the provision of appropriate lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above

species using their territory or having access to their breeding sites and resting places.

All external lighting shall be installed in accordance with the specifications and locations set out in the strategy, and these shall be maintained thereafter in accordance with the strategy.

Reason for the condition: This condition is required to safeguard the ecological interests of the site.

Highways

18) The access to the site shall be from North Dane Way Drive as show in drawing 186-SK-006 Rev A and the emergency vehicular access shall be from Ham Lane.

Reason for the condition: In the interests of highway safety and emergency access, for the avoidance of doubt and to ensure the satisfactory development of the site.

19) Development shall not begin until details of the proposed emergency access have been submitted and approved in writing by the local planning authority. The approved emergency access shall be made available prior to the first occupation of any dwelling and thereafter retained for the purpose intended.

Reason for the condition: This condition is required in the interests of highway safety and emergency access.

20) No development shall take place until a Construction Method Statement (CMS) has been submitted to and approved in writing by the local planning authority. The approved CMS shall be adhered to throughout the construction period. The CMS shall provide for:

i) the parking of vehicles of site operatives and visitors;

ii) loading and unloading of plant and materials;

iii) storage of plant and materials used in constructing the development;

iv) wheel washing facilities;

v) measures to control the emission of dust and dirt during construction; and,

vi) a scheme for recycling/disposing of waste resulting from construction works.

Reason for the condition: This condition is required to be addressed pre commencement as it relates to activities which would be likely to have an impact immediately upon first works on the site and it relates to the interests of highway safety and the protection of the environment.

21) No development hereby permitted shall commence until such time as the improvement works to the junction of North Dane Way and Albermarle Road and the link access road to the site as shown in the drawing 1661-SK-001 Revised A within appendix H of the Transport Assessment Report have been completed in accordance with details which shall first have been approved by the local planning authority in writing.

Reason for the condition: This condition is required pre-commencement as it is essential that safe access is provided to the site before activities commence on site in the interests of highway safety and the free flow of traffic.

22) No dwellings on the development shall be occupied until the carriageway(s) (including surface water drainage/disposal, vehicular turning head(s) and street lighting) providing access from the nearest public highway to that dwelling have been completed to at least binder course level and the cycle and footway(s) to surface course level.

Reason for the condition: This condition is required to ensure pedestrian and cycle and vehicular access is available for each dwelling before it is occupied in the interests of the welfare and safety of the occupiers of the related dwelling.

23) No dwelling shall be occupied until details of the proposed arrangements for future management and maintenance of the proposed streets within the development have been submitted to and approved in writing by the Local Planning Authority. The streets shall thereafter be maintained in accordance with the approved management and maintenance details until such time as either a dedication agreement has been entered into or a private management and maintenance company has been established.

Reason for the condition: To ensure highways are maintained in a safe condition for the protection of those using them.

24) No dwelling hereby approved shall be occupied until a travel plan based on the Framework Travel Plan has been submitted to and approved in writing by the local planning authority.

Reason for the condition: To encourage alternative means of transport to that of the private car in the interests of the environment.

25) Details submitted pursuant to condition 1 shall include a shared footway/cycleway on the north side of North Dane Way to link the development site with the Lords Wood Leisure Centre with associated improvements and street lighting.

Reason for the condition: To encourage alternative means of transport to that of the private car in the interests of the environment.

Archaeology

26) No development shall take place within any phase of the development until a programme of archaeological work has been secured and implemented in accordance with a written scheme of investigation for the relevant phase, which shall have first been submitted to and approved in writing by the Local Planning Authority.

Reason for the Condition: It is necessary for this condition to be a pre-commencement condition so that archaeological assessment can take place before the land is disturbed.

Flood Risk and Drainage

27) The first application for the approval of reserved matters on the site shall be accompanied by a sustainable surface drainage strategy for the entire application

site. No dwelling hereby permitted shall be occupied until surface water drainage works have been implemented in accordance with details that have been submitted to and approved in writing by the Local Planning Authority as part of the reserved matters applications for the phase within which the dwelling is situated.

Before these details are submitted, an assessment shall be carried out of the potential for disposing of surface water by means of a sustainable drainage system in accordance with the principles set out in DEFRA's non-statutory technical standards for the design, maintenance and operation of sustainable drainage to drain surface water (or any subsequent version), and the results of the assessment provided to the local planning authority. Where a sustainable drainage scheme is to be provided, the submitted details shall:

i) provide information about the design storm period and intensity, the method employed to delay and control the surface water discharged from the site and the measures taken to prevent pollution of the receiving groundwater and/or surface waters;

ii) include a timetable for its implementation; and

iii) provide a management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime.

Reason for the condition: To ensure acceptable drainage of the site so as to minimise flood risk.

28) No dwelling in any phase of development hereby permitted shall be occupied until sewage disposal works for that phase have been implemented in accordance with a scheme which has first been submitted to and approved in writing by the Local Planning Authority.

Reason for the condition: To ensure acceptable foul drainage of the site.

Noise

29) No dwelling shall be constructed until an acoustic appraisal specifying attenuation measures (where necessary) has been submitted for approval in writing by the local planning authority. No dwelling shall be occupied until the approved attenuation measures have first been installed in accordance with the approved details. The approved attenuation measures shall be maintained and retained thereafter.

Reason for the condition: To ensure acceptable living conditions for future occupiers of the site.

Air Quality

30) The development shall not be commenced until an Air Quality report has been submitted to the local planning authority for its written approval. The report shall contain and address the following:

i) An assessment of air quality on the application site and of any scheme necessary for the mitigation of poor air quality affecting the residential amenity of occupiers of this development.

ii) An assessment of the effect that the development will have on the air quality of the surrounding area and any scheme necessary for the reduction of emissions giving rise to that poor air quality. The assessment should quantify the measures or offsetting schemes to be included in the development which will reduce the air pollution of the development. Any scheme of mitigation set out in the subsequently approved report shall include a timetable for implementation. The development shall be implemented and managed in accordance with the approved scheme.

Reason for the condition: This condition is required as a pre-commencement condition as air quality needs to be initially assessed prior to any works of development commencing as they could alter background air quality levels and this condition is required in the interests of the environment and living conditions of future occupiers of the development.

Contamination

31) If during the course of development, contamination is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted, and obtained written approval from the local planning authority for a remediation strategy detailing how the contamination shall be dealt with. The remediation strategy shall be implemented as approved, verified and reported to the satisfaction of the local planning authority.

Reason for the condition: This area is prone to fly-tipping and therefore it is anticipated that as yet unidentified contamination may exist on site. In such circumstances it may be necessary for remedial works to take place in order that the land becomes safe for residential use.

Department for
Communities and
Local Government

RIGHT TO CHALLENGE THE DECISION IN THE HIGH COURT

These notes are provided for guidance only and apply only to challenges under the legislation specified. If you require further advice on making any High Court challenge, or making an application for Judicial Review, you should consult a solicitor or other advisor or contact the Crown Office at the Royal Courts of Justice, Queens Bench Division, Strand, London, WC2 2LL (0207 947 6000).

The attached decision is final unless it is successfully challenged in the Courts. The Secretary of State cannot amend or interpret the decision. It may be redetermined by the Secretary of State only if the decision is quashed by the Courts. However, if it is redetermined, it does not necessarily follow that the original decision will be reversed.

SECTION 1: PLANNING APPEALS AND CALLED-IN PLANNING APPLICATIONS

The decision may be challenged by making an application for permission to the High Court under section 288 of the Town and Country Planning Act 1990 (the TCP Act).

Challenges under Section 288 of the TCP Act

With the permission of the High Court under section 288 of the TCP Act, decisions on called-in applications under section 77 of the TCP Act (planning), appeals under section 78 (planning) may be challenged. Any person aggrieved by the decision may question the validity of the decision on the grounds that it is not within the powers of the Act or that any of the relevant requirements have not been complied with in relation to the decision. An application for leave under this section must be made within six weeks from the day after the date of the decision.

SECTION 2: ENFORCEMENT APPEALS

Challenges under Section 289 of the TCP Act

Decisions on recovered enforcement appeals under all grounds can be challenged under section 289 of the TCP Act. To challenge the enforcement decision, permission must first be obtained from the Court. If the Court does not consider that there is an arguable case, it may refuse permission. Application for leave to make a challenge must be received by the Administrative Court within 28 days of the decision, unless the Court extends this period.

SECTION 3: AWARDS OF COSTS

A challenge to the decision on an application for an award of costs which is connected with a decision under section 77 or 78 of the TCP Act can be made under section 288 of the TCP Act if permission of the High Court is granted.

SECTION 4: INSPECTION OF DOCUMENTS

Where an inquiry or hearing has been held any person who is entitled to be notified of the decision has a statutory right to view the documents, photographs and plans listed in the appendix to the Inspector's report of the inquiry or hearing within 6 weeks of the day after the date of the decision. If you are such a person and you wish to view the documents you should get in touch with the office at the address from which the decision was issued, as shown on the letterhead on the decision letter, quoting the reference number and stating the day and time you wish to visit. At least 3 days notice should be given, if possible.

The Planning Inspectorate

Appeal Decision

Inquiry Held on 9-12 April 2019
Site visit made on 12 April 2019

by Zoe Raygen Dip URP MRTPI

an Inspector appointed by the Secretary of State

Decision date: 13th June 2019

Appeal Ref: APP/A2280/W/18/3214163
No 178 and Land to the North of Brompton Farm Road, Strood, Rochester ME2 3RE

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
- The appeal is made by Brookworth Homes Ltd against the decision of The Medway Council.
- The application Ref MC/17/2956, dated 23 August 2017, was refused by notice dated 19 April 2018.
- The development proposed is demolition of existing dwelling and residential development of up to 122 dwellings with associated parking, garaging and landscaping. Formation of new access road. Creation of public open space and landscape and biodiversity enhancements to Stonehorse Lane.

Decision

1. The appeal is dismissed.

Preliminary matters

2. I conducted an accompanied site visit on the 12 April 2019, and a number of unaccompanied site visits at various times during the Inquiry, both to the appeal site and the Hoo Peninsula in general, including High Halstow, Hoo St Werburgh, Cliffe Woods, and Allhallows.

3. The application was made in outline form with all matters reserved for future consideration except for access. It was confirmed at the Inquiry that plan ref 14073/C201 showing a housing layout is to be treated as illustrative only. However, a parameters plan ref 14073/C202A is one of the plans to be considered as part of the appeal. This broadly identifies structural landscaping, spread and height of development and open/play space. I have determined the appeal on that basis.

4. The Statement of Common Ground (SOCG) submitted prior to the Inquiry confirms that there is agreement that the Council is unable to demonstrate a five year housing land supply. A separate Housing Statement of Common Ground (HSOCG) deals with the detail of that five year housing land supply and was the subject of a round table discussion at the Inquiry to which I return below.

5. There is also no dispute between the parties that the appeal site is outside of the settlement boundary and is inappropriate development within the Green Belt. I concur with these views.

6. At my request written submissions were made by both parties regarding the effect of the development on the Medway Estuary and Marshes and Thames Estuary and Marshes Special Protection Areas (SPAs). This matter is not in dispute between the parties and having reviewed the submitted information I see no reason to reach a different conclusion. Had the proposal been otherwise acceptable I would have undertaken an Appropriate Assessment.

7. A Unilateral Undertaking (UU) under S106 of the Town and Country Planning Act 1990, as amended was tabled at the Inquiry. However, following discussion, with agreement, a revised UU was submitted after the Inquiry, taking into account relevant comments from the Council's Greenspace Development officer regarding the proposed contribution towards open space. The UU, which is a material consideration, includes obligations relating to financial contributions towards the Strategic Access Management and Monitoring Strategy (£223.58/dwelling), Great Lines Heritage Park (£124.94 per dwelling), Monitoring Officer Costs (£5,700), NHS Health Care facilities (£191 per dwelling), nursery provision (£81,619.20), open space (£287,039.34), primary education provision (£204,422.20), secondary education (£205,592.40), sixth form education (£55,614) and waste and recycling (£155.44 per dwelling). Prior to the hearing the Council had submitted a Planning Obligations and Community Infrastructure Levy (CIL) Compliance Statement, which was supplemented during the Inquiry. I have had regard to the both documents in my consideration of the appeal. While the UU is a material consideration, the obligations, other than that in relation to affordable housing, which I address below, would only reflect mitigation and be neutral in any planning balance, and in light of my overall findings, I have not considered them further.

Main Issues

8. Within the above context the main issues are:

- the effect on the openness of the Green Belt and whether the proposal would conflict with the purposes of the Green Belt;
- the effect of the proposal on the character and appearance of the area with particular regard to its location within the Dillywood Lane Area of Local Landscape Importance;
- The effect of the proposal on best and most versatile agricultural land; and,
- whether the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations so as to amount to the very special circumstances necessary to justify the development.

Reasons

Openness and Purposes of the Green Belt

9. Policy BNE30 of the Local Plan regarding the Metropolitan Green Belt was adopted prior to the National Planning Policy Framework (the Framework). However, paragraph 213 of the Framework states that existing policies should

not be considered out of date simply because they were adopted prior to the Framework. Due weight should be given to them, according to their degree of consistency with the Framework.

10. Policy BNE30 reflects most of the restrictions on inappropriate development set out in the Framework. It does not though refer to point (f) of paragraph 145 of the Framework which states that limited affordable housing for local community needs under policies set out in the development plan should be an exception to the consideration of new buildings as inappropriate in the Green Belt. Indeed, there is no means within the Local Plan to achieve any affordable housing in the Green Belt. However, both parties agree that the appeal proposal would not, in any case, constitute limited affordable housing.

11. Policy BNE30 also refers to openness and the purposes of including land in the Green Belt, which is in broad accordance with the Framework. While therefore the Policy is not strictly in accordance with the requirements of the Framework, I give any conflict with it considerable weight in my decision.

12. Paragraph 133 of the Framework states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence. The Court of Appeal[1] has confirmed that the openness of the Green Belt has a spatial aspect as well as a visual aspect. The part of the appeal site which is within the Green Belt is currently a large undeveloped field containing an orchard. From this baseline the provision of 122 dwellings, some up to three storeys in height, covering about 70% of the site would be significantly harmful to both the spatial and visual openness of the Green Belt. I saw on my site visit that the houses would be visible from the Public Right Of Way(PROW) to the west, roads to the north, properties to the south and from Brompton Farm Road where there would be views through the proposed access.

13. In a Court of Appeal Judgement[2] it was confirmed that "the absence of other harmful visual effects does not equate to an absence of visual harm to the openness of the Green Belt. To my mind therefore, the fact that the proposed housing would be seen within the context of existing housing does not diminish the visual impact on openness. There would be significant built development where there is currently none, irrespective of the surrounding housing and whether it is in the Green Belt or not. This would be significantly harmful both visually and spatially.

14. Given the lack of development on the site, and the amount and extent of the proposal then it would encroach into the countryside. Furthermore, as it would extend the built up area of Strood into the countryside there would be clear conflict with the purpose of the Green Belt to check the unrestricted sprawl of large built up areas.

15. The A289 is a major dual carriageway, to the north of the appeal site. I understand that the Green Belt was designated prior to the building of the A289. Nevertheless, the road is within a cutting and is at a considerably lower level than the appeal site. While traffic can be heard when standing in the

[1] *Turner v SSCLG & East Dorset Council* [2016] EWCA Civ 466
[2] *Samuel Smith Old Brewery (Tadcaster) & Oxton Farm v North Yorkshire CC & Darrington Quarries Ltd* [2018] EWCA Civ 489

appeal site, it is not visible until standing very close to its northern boundary. Similarly, I saw from various vantage points to the north that while it is possible to see traffic using the road, the road itself has very limited visibility. As a result, the green fields do not appear particularly severed by the A289, as suggested by the appellant. Furthermore, I am not persuaded that it undermines the functioning of the appeal site in preventing the sprawl of development. I therefore am of the view that the findings of the Gravesham Green Belt Study 2018 (GGBS), that the A289 has significantly encroached into the Green Belt, cannot be transferred to this site, but that the Medway Green Belt Review 2018 (MGBR) is more applicable.

16. The appeal site is situated in land parcel 2 within the Medway Green Belt Review 2018 (MGBR). Although it states that the land parcel should be viewed integrally with land parcel 1, the findings for both parcels are that the contribution to the purposes of the Green Belt are significant. Furthermore, it states that the urbanising influence of the A289 is mitigated by the cutting and planted edge, confirming my view of the road.

17. While the MGBR does not provide an assessment of the appeal site itself, it is part of a wider parcel that has been found to make a significant contribution to the purposes of the Green Belt. As a result, there are no proposals to significantly amend the boundary of the Green Belt within Medway Council. Furthermore, the appellant has not disputed the methodology of the MGBR.

18. Both the MGBR and the GGBS find that the land including the appeal site and the land around it, which is largely contained by the A289, make a contribution to the purposes of the Green Belt regarding sprawl and encroachment. The MGBR finds it makes a significant contribution. The lower finding in the GGBS seems in part be predicated by the view that the A289 would provide an alternative stronger strategic boundary.

19. I note the that paragraph 139 (f) of the Framework states that when defining Green Belt boundaries, plans should define boundaries clearly, using physical features that are readily recognisable and likely to be permanent. However, this relates to the definition of Green Belt boundaries in plans, it is not for me as part of a S78 appeal to amend boundaries of a Green Belt.

20. In addition, there is nothing before me to suggest that field boundaries and the curtilages of dwellinghouses are not appropriate boundaries as seen elsewhere in the Green Belt. Moreover, given my findings regarding the A289 I am satisfied that it does not effectively sever the Green Belt to the extent to reduce the effective functioning of the land to the south, including the appeal site as part of the Green Belt.

21. Therefore, I am of the view that the conflict with the purposes of the Green Belt to check the unrestricted sprawl of large built up areas and to assist in the safeguarding the countryside from encroachment would be significant. While there would be some open space and planting on the appeal site this would not, given the size and extent of the area of the proposed built development, effectively mitigate the conflict with the purposes of the Green Belt.

22. A further purpose of the Green Belt is to prevent neighbouring towns from merging into one another. In this instance, I am of the view that the most relevant towns would be Strood and Gravesend. Reference was made to Higham, an inset village, between the two much larger settlements. However,

the precise wording of purpose within the Framework relates to towns. Furthermore, the wording within Policy BNE30 requires accordance with the purposes of including land in the Green Belt.

23. The part of the Green Belt between Strood and Gravesend is one of the narrowest parts of the Green Belt overall. The development of the site would bring that part of Strood closer to Gravesend, and therefore there would be some conflict with the purpose of preventing merging of the towns. However, this is not the narrowest point between the settlements[3] and therefore there would still be a significant distance between them, and the towns would not merge as a result of the proposals. Indeed, the MGBR considers that land parcel 2 only makes a moderate contribution to the purpose. Therefore, harm in this respect is limited.

24. It is agreed between the parties that there would be no harm caused by the proposal in terms of the purpose of the Green Belt in preserving the setting and special character of historic towns.

25. The purpose of the Green Belt to assist in urban regeneration by encouraging the recycling of derelict and other urban land applies to all parts of the Green Belt. I have seen no substantive evidence to suggest that this proposal would cause significant harm in this respect and therefore any conflict with this purpose would be limited.

26. For the reasons above, I conclude that the proposal is contrary to Policy BNE30 of the Local Plan. I attach substantial weight to this conflict due to the harm arising to the Green Belt, by virtue of the development's inappropriateness, its significant harmful effect on openness and two of its purposes.

27. The appellant suggests that if the only real basis that the appeal scheme is inappropriate development is that it is not limited affordable housing then the harm by reason of inappropriateness is tempered by the fact that the appeal proposal is for 100% affordable housing. However, the development is inappropriate development, and while there is no definition of limited within the Framework, to my mind 122 houses is significantly above what could be considered limited, even in the context of the large settlement of Strood. Furthermore, I have found significant other harm caused by the development to the Green Belt.

Character and appearance

28. The appeal site is subject to a number of different Landscape Character Assessments from a National through to Local Level[4]. At the Inquiry it was agreed, at a round table discussion, that there are some consistent themes between the classifications which are characteristic of the local and wider area within which the appeal site is located. These are, gently undulating landscape, diverse area of farmlands and orchards/horticulture, strong urban influence of large settlements and main roads and a mix of shelter belts and some hedgerows.

[3] With reference to Figure 2 within the GGBS
[4] Natural England's National Character Area (NCA):113 'North Kent Plain', Landscape Assessment of Kent 2004 – Hoo Peninsula character area Medway Landscape Character Assessment 2011 – Cliffe Woods Farmland

29. The appeal site itself, displays many of these characteristics. Located on the edge of Strood it consists of a field, which is undulating, currently mostly operating as an intensive orchard with rows of trees. To the south is a row of houses fronting Brompton Farm Road. To the east is Stonehorse Lane, which is truncated by the A289 at its northern end. Although surfaced, it is mostly used as a pedestrian walkway and is enclosed by the poplar shelter belt to the appeal site on the west and houses on the east. To the west of the site are further fields in agricultural use, separated by a hedge. A Public Right of Way (PROW) runs to the west of the site.

30. The Medway Landscape Character Assessment 2011 shows the site being within the southern part of the Cliffe Woods Farmland character area where the condition is described as being moderate with an intact degree of visual unity and a moderate degree of sensitivity. The stated actions are to conserve and create landscape character. The appeal site displays many of the characteristics of this character area and I would concur that it has a moderate degree of sensitivity.

Valued Landscape

31. Paragraph 170a of the Framework states that planning decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes…(in a manner commensurate with their statutory status or identified quality in the development plan). In the Council's view the designation of the area within which the appeal sits as an Area of Local Landscape Importance (ALLI) means that it is a valued landscape as envisaged under paragraph 170a.

32. The appellant instead considers the value of the landscape against the factors defined at Box 5.1 of GLVIA3, concluding that it does not demonstrate any physical attributes, characteristics or value that makes it any more valuable than general countryside as in the approach of a relevant High Court Judgement[5].

33. However, I note that Box 5.1 of GLVIA3 refers specifically to landscapes which are not designated. Furthermore, the Stroud judgement was made prior to the revised wording of the National Planning Policy Framework in both 2018 and 2019.

34. The introduction to the ALLIs within the Medway Local Plan 2003 states that there are several areas of landscape that enhance local amenity and environmental quality, providing an attractive setting to the urban area and surrounding villages and therefore have been designated as ALLI. It goes on to say that these ALLIs are significant not only for their landscape importance, but also for other important functions. The Dillywood Lane ALLI within which the appeal site is located is described as a gently undulating, visually diverse area of orchards and mixed farmland, which extends from the north west edge of Strood and Wainscott to the borough boundary. Its function is fourfold, namely it creates an attractive, rural setting to the Medway Towns Northern Relief Road, contributing to the positive image of the borough; connects to the South East of Higham Upshire ALLI in Gravesham; constitutes an established rural

[5] *Stroud District Council v Secretary of State for Communities and Local Government v Gladman Developments Limited* [2015] EWHC 488 (Admin) (referred to as the Stroud judgement)

landscape in close proximity to a large urban area and helps to maintain the separate identity of Higham.

35. Box 5.1 of the GLVIA sets out a number of factors that can be considered when assessing landscape value. I accept that these do not include function. However, this is a designated site of Local Landscape Importance within an adopted local plan. The Framework states that plans should distinguish between the hierarchy of international, national and locally designated sites. The ALLI designation is at the lower end of that landscape designation hierarchy. While the plan is old, I heard no evidence to suggest that the landscape has changed materially since that time. Furthermore, the development plan identifies the relevant characteristics of this particular ALLI and part ii of Policy BNE34 allows for a balancing exercise. Therefore, there is some broad accordance with the requirements of the Framework.

36. I understand that the concept of local landscape designations is no longer being used within the neighbouring Gravesham emerging local plan and indeed the South East of Higham Upshire ALLI in Gravesham to which this ALLI is connected has been extinguished therefore, the identified function of linking with the ALLI in Gravesham is of little relevance here.

37. However, it seems to me that from the above, and my observations on site, the other identified functions do still hold good and the ALLI has some value in providing an attractive rural setting to the A289 and Strood together with maintaining the separate identity of Higham, given the proximity of Strood to the settlement. Furthermore, The Council advises it is likely to carry forward some form of designation of areas for their strategic landscape importance through Policy NE4 of the Development Strategy Regulation 18 report, March 2018. However, this policy is at a very early stage of preparation and therefore I give it very limited weight in my consideration.

38. Nonetheless, I find that the ALLI still fulfils most of the functions of this landscape designation and, in combination with the contribution it makes to the landscape character of the area, means it is a valued landscape.

39. In finding that the site comprises part of a valued landscape I have endorsed the professional judgments of the Council's landscape witness. I acknowledge that this goes against the opinion of the appellants' professional witness. All of the assessments are largely based on qualitative judgments. In coming to my conclusions, I have had the benefit of expert opinions focussed on an analysis of the site and its surroundings, as well as several site visits.

40. With regard to the specific functions of the ALLI, I saw that the A289 is largely not visible both from the site itself and from longer distance views from the north. Here the undeveloped nature of the site forms part of the attractive rural setting of Strood which is a large urban area, rather than the A289. Its development with a substantial number of dwellings would erode that rural setting.

41. A further function of the ALLI is to help maintain the separate identity of Higham. There is no intervisibility between Strood in the vicinity of the appeal site and Higham. Given the distance between the two settlements I am not persuaded that the proposal would materially harm the separate identity of the two settlements.

Landscape character

42. Part i) of Policy BNE34 of the Local Plan states that development will only be permitted if it does not materially harm the landscape character and function of the area.

43. The scheme would result in the construction of a large housing development of up to 122 dwellings that would extend Strood to the north and west into the open countryside. This would cause a significant change to the appearance of the appeal site, through the change of use and would result in the direct loss of open countryside that makes a pleasant contribution to the setting of the northern part of Strood. The orchard would be replaced with a substantial level of built development and associated infrastructure. Furthermore, the undulating topography would be altered to accommodate the various aspects of the built development. Moreover, the hedgerow to the south of the orchard would be removed. Therefore, I am of the view that the proposal would have a moderate to high adverse effect on the landscape character of the site itself, albeit this would be a localised view.

44. There is a level of agreement between the Council and the appellant that the appeal site does not have wide visibility within the surrounding area, and I saw this to be the case at my site visit. Views from the south and east would be limited by the existing built development. Views from the north and west would be more apparent.

45. However, the appeal site is on the edge of the settlement and would be generally viewed against a backdrop of existing housing. I saw that the existing housing at the edge of Strood, when viewed from the roads to the north and the PROW to the west, is clearly visible. Although views are tempered by planting in gardens and filtered by existing hedgerows around and within the appeal site, the built form is apparent from the public footpaths and roads approaching Strood.

46. The parameters plan allows for about 30% of the site to be open space. Development would be set behind a woodland on the western boundary, with open space to the south which would soften the appearance of the estate within the countryside creating a similar edge to the built development as currently exists.

47. There is little between the parties on this issue with the Council finding slight to moderate adverse landscape impacts and the appellant a slight magnitude of effect which would be of moderate-minor significance overall. As a result of my observations above, I would concur that in the first instance the adverse impacts are likely to be moderate to minor. While effects would reduce over time as the planting matures, the built development would still be visible in the landscape, particularly in the winter, replacing the existing orchard and therefore would continue to have a minor adverse effect in the wider landscape.

Visual impact

48. There was some discussion regarding the use of a number of telegraph poles on the appeal site as markers for the height of the proposed development. Although there was some disagreement regarding the height of the telegraph poles and their relationship to two storey development, it is evident that the

parameters plan includes for development of a maximum ridge height of 13 metres high. Therefore, whether 8.5 or 10 metres high, some elements of the scheme may, in any case, be higher than the telegraph poles.

49. The highest level of visual effects is likely to be experienced by the users of the PROW to the west of the appeal site. The Council consider these adverse impacts to be between moderate and high, whereas the appellant considers them to be moderate or major-moderate. When walking the footpath from north to south the first part is fairly enclosed by existing trees and views are limited towards the site. However, when emerging from the trees, this changes and views are available to the wider surrounding open countryside.

50. I saw that the existing houses are visible. As the southern end of the footpath is reached views recede, and the extent of the housing that is visible also changes as the footpath undulates across the field.

51. Generally, therefore, the proposed housing would be closer to the users of the footpath. Notwithstanding the proposed woodland belt, the height and extent of the housing, and, in particular, the three-storey housing would be particularly prominent, given the predominance of two-storey housing that I saw in the vicinity of the appeal site; this would give rise to a high adverse effect on parts of the footpath. However, the extent of the planting on the western boundary, would, over time, ensure that this effect would reduce as the planting matures. It was agreed at the Inquiry that planting is likely to be predominantly deciduous in nature. In winter therefore, when the trees lose their leaf the screening effects would not be as effective as in the summer. This together with, the extent and height of development proposed, would still mean that there would be a limited adverse effect for users of the PROW in the long term.

52. Residents to the south of the appeal site would experience a significant change in outlook to that currently experienced over the orchard. However, the properties have lengthy gardens and the area of public open space would be sited closest to the boundaries with the properties. Therefore, any adverse impact would be reduced over time.

53. I saw that views from roads to the north would be available and the site would clearly be seen in some viewpoints. I accept that the proposed development would in all likelihood be easier to see in long distance views than the current field and trees. However, the houses would be seen against the backdrop of the existing settlement. Furthermore, these views must be considered in the context of the users of the roads and, in my opinion, the experience of the drivers would not be materially altered by the development.

54. The tree planting to the west would be in the form of a wide belt of about 20 metres. I have seen or heard no substantive evidence to suggest that such a width of planting could not accommodate the proposed footpath as suggested by the Council.

Conclusions on Character and Appearance

55. There would be harm to landscape character through the loss of part of the land of the character type identified. However, the visual effects would be largely localised, and mostly reduced by the proposed mitigation measures over time. Therefore, there would be some limited harm to the character and

appearance of the area contrary to requirement of Policy BNE25 of the Local Plan. This states that development in the countryside will only be permitted if it maintains, and wherever possible enhances the character, amenity and functioning of the countryside.

56. Both the Gibraltar Farm and Cliffe Woods appeal decisions[6] address the weight to be given to Policy BNE25, with the decision maker in each giving the policy differing weight. For the purposes of this appeal, although Policy BNE25 seeks to protect the countryside, it does so in a manner that does not reflect the hierarchical approach of the Framework. Given the agreed position on housing land supply, it is also apparent that its strict application is restricting housing growth. Therefore, I give conflict with this Policy limited weight in my decision.

57. For all of the reasons given, I am satisfied that this site comprises part of a valued landscape and its development would fail to protect and enhance the landscape contrary to the objectives set out in the Framework and the requirements of criteria i) of Policy BNE34, albeit that the harm I have identified would be limited.

58. The second criterion of Policy BNE34 of the Local Plan states that development will only be permitted within an ALLI if the economic and social benefits are so important that they outweigh the local priority to conserve the area's landscape. It is therefore necessary to reach a view on the social and economic benefits of the proposal before reaching a conclusion as to whether the proposal conflicts with the further requirements of this Policy; I address this in my conclusions below.

Best and Most Versatile Agricultural Land (BMVAL)

59. The Framework identifies the best and most versatile agricultural land as land in Grades 1, 2 and 3a of the Agricultural Land Classification. There is agreement within the SOCG that the appeal site comprises Grade 2 agricultural land and the proposal would result in its loss. Both parties agreed that although not determinative, the loss of the BMVAL is a material consideration which needs to be weighed in the planning balance.

60. Policy BNE48 of the Local Plan states that development on BMVAL will only be permitted exceptionally where criteria are met. This is not entirely consistent with the requirement of the Framework in footnote 53 which states that where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

61. The appellant draws my attention to both the Cliffe Woods and the Gibraltar Farm appeal decisions where the Secretary of State found that the loss of BMVAL carried limited weight. However, the appeal sites in both cases were only partially made up of BMVAL and that was of grade 3a rather than Grade 2 as is the case here.

62. I appreciate that there is no definition of significant, in this context, within the Framework. However, the appeal site is about 4.37 ha in size and contains a productive orchard on the site which it was confirmed at the Inquiry would be lost due to the proposal.

[6] Gibraltar farm appeal decision APP/A2280/W/16/3143600
Cliffe Woods appeal decision APP/A2280/W/17/3175461

63. Nevertheless, given the amount of land classified as Grade 2 on the appeal site then the harm caused by its loss would be limited. This is reinforced by the extent of BMVAL within the district[7], including Grade 2 land, and the acknowledged likelihood that house building would need to be accommodated on greenfield land to address the extent of the housing shortfall.

64. While therefore, there is some conflict with Policy BNE48 and the Framework with regard to the loss of BMVAL, there would be limited resultant harm.

Other considerations

65. The appellant alleges that the Council is unable to meet its obligations to provide an up to date development plan, to identify a sufficient supply of deliverable housing land and to secure affordable housing to meet its local needs and have no plans or intentions to resolve the issues.

66. There is agreement between the parties that the Council is unable to demonstrate a five year housing land supply. It was confirmed at the Inquiry that the housing supply figures had been calculated using the affordability ratio for 2017. Just before the Inquiry the 2018 affordability ratios were published. Following discussion between the parties it is agreed in the HSOCG that the 2017 affordability ratios would be relied on. There is very limited difference between the 2017 and 2018 figures, and therefore, in this instance, I am content to proceed on that basis.

67. Within the HSOCG the Council considers it can demonstrate a 3.08 year supply, whereas the appellants consider it only has a 2.26 year supply. I note the reasons behind the difference between the two figures. Furthermore, I note the position of the authority in relation to housing requirement and performance of other authorities in the Kent and the south east. However, both figures represent a significant shortfall in the five year housing land supply.

68. The question is what is being done to rectify the situation regarding housing land supply[8]. The Council accept that in order to meet the shortfall, development will need to be accepted on greenfield land, and I was presented with a list of 14 large scale planning applications which have either been granted planning permission or have received a resolution to grant planning permission subject to the signing of a S106 agreement since January 2018. The Council confirmed that the list was not exhaustive and was not submitted to change the five year housing land position, but to demonstrate the efforts made by the Council to boost delivery.

69. The Council does not have an up to date development plan with regard to housing Policy. Housing figures are based on now defunct regional guidance and have little correlation with the current requirement figure.

70. The latest Regulation 18 submission of the emerging Local Plan[9] dated March 2018 contains four scenarios for housing growth, all of which include a rural town centred on Hoo St Werburgh. In the appellant's view, for a variety of reasons, this is unlikely to come forward and the Council will need to revisit

[7] Appendix 06 Proof of Evidence Mr Canavan
[8] *Hallam Land Management v SSCLG & Eastleigh Borough Council* [2018] EWCA Civ 1808
[9] Future Medway Development Strategy Consultation March 2018 (FMDS)

proposals in a previous Regulation 18 document[10] to release land within the Green Belt to facilitate suburban expansion.

71. In particular, the appellant pointed to a recent reduction in the number of homes likely to be proposed on land at Lodge Hill due to restrictions associated with the Site of Special Scientific Interest. Furthermore, a large part of the proposed growth strategy relates to the establishment of a rural town within the Hoo Peninsula. Growth within that area of the District is reliant on significant investment in infrastructure, with the Council confirming that the current highway network giving access to the Peninsula would be at capacity following the development of about 2000 houses. About 940 homes are already committed and therefore, only a further 1060 houses could receive planning permission in the area before the road infrastructure would be at capacity which is less than one year's housing supply requirement. Furthermore, I appreciate that a number of the developments recently granted planning permission are on the Hoo Peninsula.

72. The Council is currently part of a consortium comprising a number of housing developers and Homes England that has submitted a bid for up to £170 million to the Housing Infrastructure Fund (HIF) following successful completion of the Expression of Interest stage of the bid process. This is an ambitious and complex project but, if successful, this would enable investment in the road and rail infrastructure to allow the provision of about 12,100 new homes in the District by 2043[11].

73. I accept that such investment would take time to put in place and the need for housing exists now. However, it seems to me that considerable effort is being put in to addressing the housing supply situation. Both in the granting of planning permission on greenfield sites and through the preparation and submission of a comprehensive bid for funding which, if successful, would give substantial economic and social benefits. The fact that the Council is not working alone but in a consortium including Homes England is encouraging. Moreover, the proactive efforts of the Council in seeking to expedite problems in consultation with developers and landowners and in securing monies from the HIF to facilitate regeneration and the provision of infrastructure, deserves a chance to bear fruit. To that end, the Council is aligning the preparation of the emerging Local Plan with the outcome of the HIF bid which is expected in the summer, such that the draft plan would be published in the summer of this year and submitted for examination in December 2019[12] with adoption likely in 2020.

74. I accept that there is no guarantee that the bid will be successful. Nevertheless, even if the bid is unsuccessful and previous scenarios would need to be revisited, there is no certainty that land within the Green Belt would need to be released. I note that Scenario 2 of the LPES states that release of Green Belt land to the west of Strood, where the appeal site is located, is also included in order to consider whether such a significant policy change may be necessary or justified. Moreover, the annotation to the scenario shows employment led mixed use development rather than just housing. Given recent appeal decisions and the efforts of the Council in granting planning

[10] Medway Council Local Plan 2012-2035 Executive Summary January 2017 (LPES)
[11] Housing Infrastructure Fund Bid – New Routes to Good Growth Medway Council report to Cabinet 5 February 2019
[12] Medway Local Development Scheme 2019 - 2022 December 2018

permissions, I accept it is highly likely that greenfield land would need to be released to enable housing growth. However, this does not necessarily mean that that Green Belt land would need to be released to meet demand, particularly as it only constitutes about 5% of the land in the District.

75. Even if it was accepted that Green Belt land would need to be released for development, I note that other parcels of land within the MGBR performed more poorly in contributing to the purposes of the Green Belt than the area within which the appeal site is located. Therefore, I accept that such parcels of land are more likely to be considered for release than that within which the appeal site is located.

76. I have been referred to two appeal decisions which have been allowed for housing within the Green Belt. However, within both there is some acknowledgement that housing development would need to be accommodated within the Green Belt or is proposed to be located within the Green Belt[13]. This is not the case here. While there is general acceptance that housing development is likely to occur on greenfield sites, that is not the same as Green Belt land, which has protection over and above greenfield land. Therefore, I do not consider the circumstances regarding these two appeal decisions to be sufficiently comparable to the appeal before me now, in order to reach a similar decision.

77. Bearing all the above in mind, I attach significant weight to the benefit of the additional housing this appeal would bring, as agreed in the SOCG. The Framework seeks to significantly boost the supply of housing. A scheme of up to 122 houses, which could be delivered straight away in an accessible location where there is an agreed shortfall would go a considerable way to achieving that aim.

78. I have had regard to the Written Ministerial Statements of 1 July 2013 and 17 December 2015 (WMS) which state that unmet demand for housing "is unlikely to clearly outweigh harm to the Green Belt and any other harm so as to establish very special circumstances". While these WMS predate the revised Framework, the Council advise that following a written question to Parliament in 2018 it was confirmed by the Housing Minister that they are still a potential material consideration. I am aware that this policy wording is no longer part of the Planning Policy Guidance. Nevertheless, the WMS still have weight in decisions.

79. The WMS do not say that housing need can never amount to very special circumstances and I would concur with the Inspector in the West Malling appeal decision that that wording would not preclude that an unmet demand for housing may still be weighed against the harm to the Green Belt, whether on its own or in combination with other factors, however, given the wording of the WMS I would expect there to be significant other considerations to be counted in the balance.

80. There is no dispute between the parties that the site is in an accessible location. I had the opportunity to visit housing sites in the Hoo Peninsula. The evidence of Mr Williams shows that given the relatively small rural nature of the settlements to which they are appended, there are less services and

[13] Paragraph 51 of APP/P3040/W/17/3185493 (the Ruddington appeal decision) and paragraph 45 of APP/H2265/W/18/3202040 (the West Malling appeal decision)

facilities in these settlements within walking distance of the housing sites. In addition, public transport facilities are less regular, and it therefore takes longer to reach services in Strood and Rochester than it would do from the appeal site. This was my experience at my site visits.

81. Indeed, the Secretary of State in the Cliffe Woods decision decided that the proposed development of 225 houses did not limit the need to travel or offer a genuine choice of transport modes and therefore considered the development to be in conflict with the Framework's policy on promoting sustainable transport. However, I am advised that the Council has resolved to grant planning permission on a different site at Cliffe Woods for 92 dwellings, an office and a nursery and an associated package to improve public transport and pedestrian facilities. In addition, the Inspector in the Hoo St Werburgh appeal decision[14] considered the settlement as a whole to be sustainable. However, he states at paragraph 16 that the "verdict of "sustainable location" does not automatically or readily transfer from the village to the site. He found the appeal site not to be in an accessible location.

82. Paragraph 103 of the Framework states that significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering genuine choice of transport modes. To my mind therefore the appeal sites and subsequent planning permission granted by the Council at Cliffe Woods demonstrates that the accessibility of the site depends on its location with reference to existing and proposed services and facilities and availability of a choice of transport methods. The fact that future residents of the appeal site would have access to a wider range of services and public transport makes this site policy compliant but does not mean it attracts positive weight. Indeed, although this is agreed as an accessible location, the majority of the services and facilities are 15-20 minutes' walk away and the railway station 25 minutes[15], both outside the distance which the IHT considers to be most conducive to walking[16]. Therefore, while to my mind the site is in an accessible location and in this respect, complies with the requirement in Policy BNE25 to offer a realistic chance of access by a range of transport modes, it is neutral in any balancing exercise.

83. The appeal site incorporates Stonehorse Lane with the intention of maintaining public access over it and to create an ecological zone through new planting. Furthermore, a new community woodland would be provided along the western boundary of the site.

84. However, I saw at my site visit that Stonehorse Lane is already well planted, with a strong line of trees along its western boundary. While landscaping is a reserved matter requiring details to be submitted for approval by the Council in the first instance, there is nothing to suggest what the level of enhancement would be. It is likely that the planting of a significant tree belt on the western edge of the appeal site would bring some ecological benefits. However, a large number of trees would be felled, only a small number of which have been assessed as having to be removed irrespective of the development[17]. Furthermore, all of the orchard trees would be removed. While it is not a traditional orchard and is presented in rows of trees as an intensive activity it is

[14] APP/A2280/W/15/3132141
[15] Mr Giles Appendix SG1 to proof of evidence
[16] Chartered Institute of Highways and Transportation Planning for Walking 2015
[17] Arboricultural Assessment Report 2 August 2017 and plan ref 15224-BT4

likely to have some ecological benefit. Therefore, notwithstanding the reference made by Kent County Council to enhancement recommendations, while there would be some planting and associated enhancements, I am not persuaded, on the basis of the evidence before me, that there would be net benefits to biodiversity as required by paragraph 170 (d) of the Framework.

85. A new area of open space and a play space would be provided on the development. However, the provision of open space is a requirement of Policy L4 of the Local Plan, and it would primarily be for the future residents of the scheme. Therefore, I give limited weight to the provision of a new children's play space in respect of its potential use by existing residents.

86. When the planning application which is the subject of this appeal was originally submitted to the Council for consideration it was done so on the basis of the provision of 25% affordable housing. The day before the consideration of the planning application at the planning committee on 11 April 2018 the appellant wrote to the Council advising that they wished to amend the application proposal such that it would provide for a minimum of 50% of the dwellings to be affordable housing. The letter went on to say that as the discussions with the Housing Associations were ongoing it was certainly likely that the scheme would be delivered as a 100% affordable scheme[18].

87. The Committee minute records that the offer of 50% affordable housing was considered at the Planning Committee and the application refused on that basis. The appellant now formally proposes that the scheme be considered as 100% affordable.

88. Both parties agree in the SOCG that there is unmet need for affordable housing in Medway. It is also agreed that the North Kent Strategic Housing and Economic Needs Assessment Strategic Housing Market Assessment 2015 (SHMA) includes an affordable requirement of 18,592 dwellings over the projection period (2012-2037), giving a requirement for 744 dwellings annually.

89. The PPG states that the total affordable housing need can then be considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments, taking into account the probable percentage of affordable housing to be delivered by eligible market housing led developments. An increase in the total housing figures included in the plan may need to be considered where it could help deliver the required number of affordable homes[19].

90. The supporting text to Policy H3 of the Local Plan identifies a minimum target of 25% for the provision of affordable housing. It is clear therefore that at this level of provision based on either the OAN figure of 1281 contained in the SHMA, or the latest agreed annual requirement of 1672 in the HSOCG, the figure of 744 affordable dwellings is unrealistic. It is perhaps unsurprising therefore that the Council has delivered only 20% of that need over the past five years. Furthermore, comparisons with other authorities in Kent based on housing need are not helpful as I am not aware on what basis other authorities affordable housing need figure has been reached and whether it is achievable. Moreover, the HSOCG confirms that the Council has, in the last five years

[18] Appendix 13 Mr Escott Proof of Evidence
[19] Paragraph: 024 Reference ID: 2a-024-20190220

averaged 148 affordable dwellings per annum, which is 25% of all housing completions, and therefore delivering Policy expectations.

91. My attention is drawn to a High Court Judgment[20] which suggests that the Framework makes clear that these needs (gross unmet need for affordable housing) should be addressed in determining the Full Objectively Assessed Need (FOAN), but neither the Framework or the PPG suggest that they have to be met in full when determining the FOAN. Although this Judgement was made at the time of the previous Framework, Mr Butterworth accepted that this remains the case under the new Framework.

92. Instead the Council has set itself what it considers to be an achievable target of 204 affordable dwellings per year within its draft Medway Council Housing Strategy 2018-2022. This has been assessed by carrying out a Strategic Housing Economic Needs Assessment which is used alongside a database of planned housing developments, as a basis to predict the amount of affordable housing achievable in the Medway area.

93. As was stated in the High Court Judgement, the vast majority of the delivery of affordable housing will occur as a proportion of open-market schemes and is therefore dependent for its delivery upon market housing being delivered. Even so the Council has only delivered 73% of that target over the past year. While the general trend in delivery has been downwards over the last few years,[21] I do acknowledge that the Council is expected to deliver 250 affordable units in 2018/19 and therefore exceed the target. Nevertheless, whether using affordable housing need or the Council's own target, there is still a large shortfall in affordable housing delivery which the Council accepts.

94. In terms of delivery of the affordable housing, in a letter dated 26 February 2019, Hyde Housing Group confirm that it recently entered into a strategic partnership agreement with Homes England to deliver about 1600 affordable homes within the south east of England by March 2024. It identifies the appeal site as a key site to meet that target by delivering 122 affordable homes with 60% of the units for shared ownership and 40% for social rent. This is almost the opposite to the tenure split that is required in the SHMA, but nevertheless is supported by the Council's housing officer. Given the overall undersupply of affordable housing then I see no reason to disagree with this approach.

95. In addition, there would be a mix of housing tenure here, including shared ownership and social rented accommodation. Furthermore, a mix of the size of houses has been agreed across the site ranging from one bedroom flats to four bedroom houses[22]. Therefore, I am satisfied that the proposal would not conflict with the requirements of paragraph 62 and 91 of the Framework regarding the delivery of mixed and balanced communities.

96. In response to my request, the appellant has submitted a note on viability which states that the offer from Hyde Homes was the subject of a financial appraisal by Brookworth Homes and considered to be financially viable. I have seen or heard no evidence to suggest otherwise. A Grampian condition has been agreed between the parties to secure an affordable housing scheme. It was explained at the Inquiry that this was considered the most appropriate

[20] *Kings Lynn and West Norfolk v Secretary of State for Communities and Local Government* [2015] EWHC 2464
[21] Figure 7.1 Mr Butterworth's Proof of Evidence
[22] Letter to the Hyde Group dated 27 February 2019 from Medway Council

option to allow myself flexibility over the percentage of affordable housing to be provided should the appeal be allowed, given that I had raised concerns regarding whether the appeal scheme should be considered as 100% or 50% affordable housing at this stage.

97. The Council confirmed that the condition would be discharged, not by way of a legal agreement, but by some form of agreed scheme. While the condition is agreed between the Council and the appellant, I note that there has been no agreement of heads of terms or principal terms need to ensure that the test of necessity is met and in the interests of transparency as advised by the PPG.

98. However, in my view, in order for affordable housing to be provided effectively, arrangements must be made to transfer it to an affordable housing provider, to ensure that appropriate occupancy criteria are defined and enforced, and to ensure that it remains affordable to first and subsequent occupiers. The legal certainty provided by a planning obligation, (either a section 106 agreement or unilateral undertaking) makes it the best means of ensuring that these arrangements are effective. While there is a requirement in the UU to abide by the Inspectors Decision Letter in relation to the provision of Affordable Housing on the Site this would not, in my view, adequately secure the above matters.

99. I have had regard to the advice in the Planning Practice Guidance on this[23]. It confirms that ensuring that any planning obligation or other agreement is entered into prior to granting planning permission is the best way to deliver sufficient certainty for all parties about what is being agreed. It encourages the parties to finalise the planning obligation or other agreement in a timely manner and is important in the interests of maintaining transparency. It goes on to state that in exceptional circumstances a negatively worded condition requiring a planning obligation or other agreement to be entered into before certain development can commence may be appropriate in the case of more complex and strategically important development where there is clear evidence that the delivery of the development would otherwise be at serious risk.

100. I am not convinced that the development is complex or strategically important or that its delivery would otherwise be at serious risk. I have had regard to the appeal decisions submitted by the appellant where both Inspectors applied conditions to secure affordable housing[24]. While I accept the need for consistency on appeal decisions, I am not aware of the individual circumstances of these appeals or the evidence before the Inspectors at the time regarding the affordable housing delivery. Furthermore, it appears that neither decision placed reliance on the affordable housing as a very special circumstance as neither scheme is in the Green Belt.

101. I accept that paragraph 145 (f) gives a unique exception to a particular group or tenure of housing within the Green Belt. This could, as the appellant suggests, be indicative of the importance the Government places on meeting affordable needs. However, this appeal does not concern limited affordable housing. Furthermore, if I accept the appellant's argument regarding the importance placed on affordable housing by the Government then it is imperative that it is secured as such and delivered on site in an appropriate manner. Therefore, I do not accept that a higher level of affordable housing can be secured by a condition in this case. While the delivery of affordable

[23] PPG ID: 21a-010-20140306
[24] APP/G5180/W/17/3174961, APP/G5180/W/17/3179001 & APP/C3810/W/17/3178817

housing would be a benefit of the scheme, given the overall shortfall, I cannot be sure that it would be delivered at either 50% or 100%. Therefore, in that context, I give it only moderate weight.

102. There would be some economic benefits of the scheme which would be in the form of construction jobs, but these would be short term only. In the longer term, new households would introduce expenditure into the local economy and there would be additional benefits from further council tax income and a new homes bonus. However, no schemes upon which the bonus would be spent have been identified. In accordance with advice in the PPG[25] it would not be appropriate to make a decision based on the potential for the development to raise money for the Council in the absence of evidence to demonstrate how that money would be used to make this particular development acceptable in planning terms. Moreover, the economic benefits of the proposal would be generic and would arise with any housing development. Furthermore, the existing orchard on the farm must have some economic value. This has not been quantified and the proposal would lead to its loss. Consequently, I can only attach minimal weight to the economic benefits in my decision.

103. The appellant asserts that the appeal site would have its own strong defensible boundaries, and as at the Ruddington appeal decision, that this would be a benefit. However, the A289 does not, in my view, affect the functioning of the parcel of land within which the appeal site is located within the appeal site.

Conclusion

104. I have found that the proposal is contrary to criterion i) of Policy BNE34 of the Local Plan albeit that the harm caused would be limited. However, given that I have found that there would be significant social benefits of the proposal then together with the minimal economic benefits they would outweigh the local priority to conserve the area's landscape. Therefore, there would be no conflict with the Policy.

105. I have found that the proposal would cause limited harm to landscape character and visual impact and therefore would be in conflict with Policy BNE25. While I have found that Policy BNE25 only attracts limited weight, the proposal would cause some harm to a valued landscape, and therefore I give this harm limited weight in my decision.

106. The proposal would be in conflict with the requirements of Policy BNE48 and the Framework with regard to the loss of BMVAL and I have given this limited weight.

107. The proposal would be inappropriate development in the Green Belt and would be significantly harmful to its openness, contrary to the Framework and Policy BNE30. There would also be significant harm to the purposes of the Green Belt in terms of the unrestricted sprawl of large built up areas and assisting in safeguarding the countryside from encroachment. There would be limited harm in the prevention of neighbouring towns merging into one another. In accordance with the Framework I give these harms substantial weight.

[25] ID 21b-011-20140612

108. Therefore, I find that the other considerations in this case do not clearly outweigh the harm that I have identified. Consequently, the very special circumstances necessary to justify the development do not exist.

109. Even were I to have concluded that through the imposition of a condition, the scheme could deliver a higher proportion of affordable housing, and consequently have attracted significant weight in its favour, this would still, together with the other considerations, not clearly outweigh the substantial harm I have identified to the Green Belt and other harms. Consequently, the very special circumstances necessary to justify the development would still not exist.

110. Although the proposal accords with many of the current development plan policies, it would be in conflict with the development plan taken as a whole given the conflict with the policies regarding the protection of the Green Belt and development in the countryside. However, the lack of a five year housing land supply means that the policies most important for the determination of the appeal are out of date. Nevertheless, in accordance with paragraph 11d)1) I have found that the application of Policies in the Framework that protect the Green Belt provide a clear reason for refusing the development proposed. There are no material considerations in this case that indicate a decision other than in accordance with the development plan and the Framework.

111. In light of the above, and having considered all other matters, the appeal is dismissed.

Zoe Raygen

INSPECTOR

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY

Mr R Williams of Counsel	Instructed by Laura Caiels, Principal Lawyer, Medway Council
He called	
Mr Canavan	Associate, Carter Jonas, on behalf of Medway Council
Mr J Etchells	Director, Jon Etchells Consulting Limited

FOR THE APPELLANT

Mr J Clay of Counsel	Instructed by Mr J Escott Robinson Escott Planning LLP
He called	
Mr PG Russell-Vick	Director, Enplan
Mr SJ Butterworth	Senior Director, Lichfields
Mr S Giles	Director, Motion Consultants Limited
Mr J Escott	Senior Partner, Robinson Escott Planning

INTERESTED PERSONS

Mr Morgan	Local Resident
Mrs Masey	Local Resident
Mrs Morgan	Local Resident

DOCUMENTS SUBMITTED AT THE INQUIRY

1 Habitat Regulation Assessment and Screening Matrix and Appropriate Assessment Statement from the Council

2 Letter from Natural England dated 28 January 2019

3 Council's submission on Monitoring Officer's Costs

4 Copy of *The Queen on the application of Save Britain's Heritage v SSCLG & Westminster City Council & Great Western Developments Limited* [2018]EWCA Civ 2137

5 Copy of *Borough Council of kings Lynn and West Norfolk v SSCLG & Elm Park Holdings* [2015]EWHC 2464 (Admin)

6 Plan ref 14073/C202A annotated showing power lines

7 Appeal decision APP/P3040/W/17/3185493

8 Appeal decisions APP/G1580/W/17/3174961 & APP/G1580/W/17/3179001

9 Appeal decision APP/C3810/W/17/3178817

10 Medway Council Cabinet Report, Housing Infrastructure Fund Bid – New Routes to Good Growth 5 February 2019

11 Large scale planning permissions granted by Planning Committee since January 2018

12 Copy of *Hallam Land Management v SSCLG & Eastleigh Borough Council* [2018] EWCA Civ 1808

13 Lichfields Research: South East LPAs – Local Plan Requirement and Standard Method (2018-2028, 2014 household projections and 2017 (April 2018) Affordability Ratio

14 Email dated 5 April 2019 from Senior Planning manager Bellway Homes to Medway Council regarding Nightingale Rise Completions Rate

15 Response to Planning Inspector's queries re CIL Compliance/S106 contributions

16 Deliverability and submissions on Woolpit Principle by Medway Council

17 Email regrading viewpoints for site visit

18 Appellant's response to Medway Council's written submission on deliverability and the Woolpit Principle

19 Copy of CABI and Cala Management Ltd v South Oxfordshire DC [2017] P.A.D 43

20 Response to Planning Inspectors queries re CIL 11/04/2019 including Internal Memorandum from Greenspace Development to Planning dated 5 October 2017 and Medway Council Guide to Developer Contributions

21 Opening submissions on the behalf of the appellant

22 Opening statement on behalf of Medway Council

23 Closing statement on behalf of Medway Council

24 Closing submissions on behalf of the appellant

DOCUMENTS SUBMITTED AFTER THE INQUIRY

A Agreed list of conditions received 23 April 2019

B Signed Unilateral Undertaking dated 17 April 2019

Appendix 10

PLANNING POLICY OFFICER'S RESPONSE DATED 15/07/2019

MEMO

Planning Policy Response

To: Hannah Gunner	From: Tom Gilbert
CC:	Date: 15/07/19
Application: MC/19/1566	

PROPOSAL: Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

LOCATION: Land at Pump Farm & Bloors Farm, Rainham

POLICY & GUIDANCE:

Listed below are policies deemed relevant to this application. In reference to the Local Policies those listed are saved and have been tested for consistency with the NPPF and confirmed to conform unless otherwise stated.

National Policy

National Planning Policy Framework (2012):

- Paragraph 8
- Paragraph 61
- Paragraph 63
- Paragraph 91
- Paragraph 104
- Paragraph 170

Local Policy

Medway Local Plan 2003:

- S1 – Development Strategy
- S2 – Strategic Principles
- BNE25 – Development in the Countryside
- BNE34 – Area of Local Landscape Importance
- CF13 – Tidal Flood Risk

Local Guidance
Medway Landscape Character Assessment (2011):

- 21. Lower Rainham Farmland

COMMENTS:

Development Plan Status
The current Development Plan for Medway is formed of saved policies of the Medway Local Plan 2003 (MLP). These are in force until a new Local Plan has been adopted.

Work has started on the production of a new Local Plan in 2014, with a planned adoption date 2020. The detailed programme for this work is outlined in the Council's Local Development Scheme published in the December 2018.

5 Year Land Supply
The council acknowledges that it does not currently possess a 5 year land supply for housing and a 20% buffer should be applied. The Council has and is taking steps to rectify this position.

Strategic Land Availability (2018)
In July 2018 Medway Council published its latest version of the SLAA assessing site for suitability for inclusion within the emerging Medway Local Plan. Sites 750 and 1061, which form this pre-application area were tested. Both sites were found to be unsuitable for the following reasons: access to services, landscape and impact on agricultural land. Whilst the SLAA does not grant planning permission and influence it in any way it does highlight potential issues.

Principle of Development

The proposed scheme comprises 1,250 residential units, extra care, care home, local centre and primary school. The proposed scheme falls outside the urban boundary in the countryside (Policy BNE25), an area of local landscape importance (BNE34). In normal circumstances the proposal would in principle be unacceptable. It would be deemed contrary to the strategic direction of the MLP2003 highlighted in Policy S1. This policy directs development to brownfield sites and is supported by policy BNE25 that restricts development in the countryside.

The application of these policies is compromised by the lack of a 5 year housing land supply (as explained above) and the conformity of the policies to the NPPF.

As noted above the site lies outside of the urban boundary and so policy BNE25 applies. An assessment of the conformity of this policy with the NPPF – undertaken by the Council- has found it to have significant issues, except as a definition of the separation between the urban and rural areas. Therefore if a site is just located in the countryside is no longer a reason for refusal and the sustainability of the site needs to be assessed.

Due to the present 5 year land supply the sustainability of the site is very important. Sustainability is defined in paragraph 8 of the NPPF. It has three

dimensions, including: environmental, social and economic considerations. Any assessment needs to encompass all of the dimensions of sustainable development and note that they are 'mutually dependent' as per paragraph 8 of the NPPF.

In principle upon assessing the site against the NPPF it is felt the site is not sustainable. The reasons for this are as follows:

- **Not sustainable due to proximity to local sources of employment.** Development of the site would bring about short-term economic benefits through construction jobs and associated employment. However this is very niche and would not supply work for the new residents of the proposed development. These residents will need to find employment elsewhere and the proposal is not located within a sustainable distance of existing employment sites that is a key consideration as per (para 92). Therefore the development would not be sustainable economically.
- **Environmental – due to significant impact on high grade agricultural land and an area of landscape value.** The site is within an area of local landscape importance Policy BNE34. A designation supported by paragraph 170 of NPPF. This stipulates that valued landscapes should be protected and enhanced.

  To assess the value of the landscape the Medway LCA 2011 has been reviewed. The site falls within section 21. Lower Rainham Farmland of the Medway LCA 2011. This describes the site as having moderate sensitivity and moderate condition. It recommends to 'resist further built development and introduce more positive landscape management systems'.

  The site is high grade agricultural land as defined by agricultural land classification mapping 1988 and the applicants own surveys. Grades 1-3 are the best and versatile agricultural land. As such this area demands a certain level of protection from development as outlined in para 170 of the NPPF that seeks to recognise the 'economic and other benefits' of BMV agricultural land. The applicant has assessed the site and feels the economic potential of the land to be minimal for agricultural value at the scale that it is currently used for. However another landowner or producer may be able to make to site work economically due to different methods.

Other considerations

Self-build

It is noted that the site has made provision for 8 self-build plots on site in the proposed masterplan. While this is not a material planning consideration and their presence does not change the sustainability considerations of the site the Planning Policy Team does have some comment on their inclusion.

Medway Council is required to keep a register of those interested in self and custom build housing. At present there are 78 individuals and two associations on the register (11 permitted). In terms of areas of demand

Rainham is the third most popular area with Medway. Therefore the 8 units proposed is less than 1% of the overall housing proposed on site, which appears to not be a reasonable level.

Conclusion

In summary while it is noted that the proposal would bring about positive benefits in relation to the delivery of housing and address some of the issues of social sustainability, it would still be detrimental on the economic and environmental grounds. For these reasons the proposed development would not be sustainable and should not be considered acceptable.

Tom Gilbert
Senior Planner (Policy)