



Seaham Solar Park

Elements Green





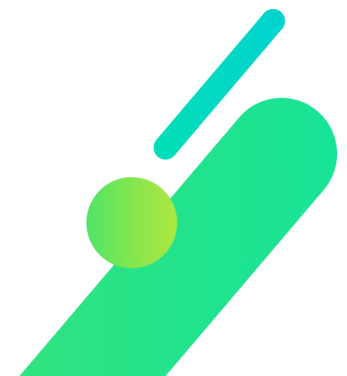
Purpose of the Event

This consultation is a requirement of the planning process and provides an opportunity for the community to learn about the proposed solar farm, its benefits, and potential impacts. The event aims to gather feedback, address concerns, and ensure the project aligns with local priorities. It also serves as a platform to foster collaboration, build trust, and demonstrate our commitment to transparency.

Agenda

- **Introduction** – Project details, developer introduction and timeline.
- **Powering the Future** – Building on a legacy of energy generation.
- **Components of a Solar Farm**– Key components (panels, inverters, etc.) and energy generation.
- **Landscape Changes** –Overview of landscape masterplan and 2 key visualisations.
- **Ecological Enhancement** – Surveys, assessments and mitigation measures.
- **Site Designations and Opportunities** – Overview of site-specific considerations affecting design
- **Transport Proposals** – Access and construction delivery routes.
- **Community Benefit** – Education and Community Benefit Fund
- **Q&A Session** – Questions, feedback, ideas for community benefit and discussion.

We are eager to hear your feedback on how the project can best meet your needs.





Who we are

Elements Green is a renewable energy company with 15 years' experience in renewable energy development across the UK, EU, and globally.

We have a pipeline of 12 GW of renewable energy projects worldwide. This equates to clean energy for 4.8 million homes.

Seaham Solar Park

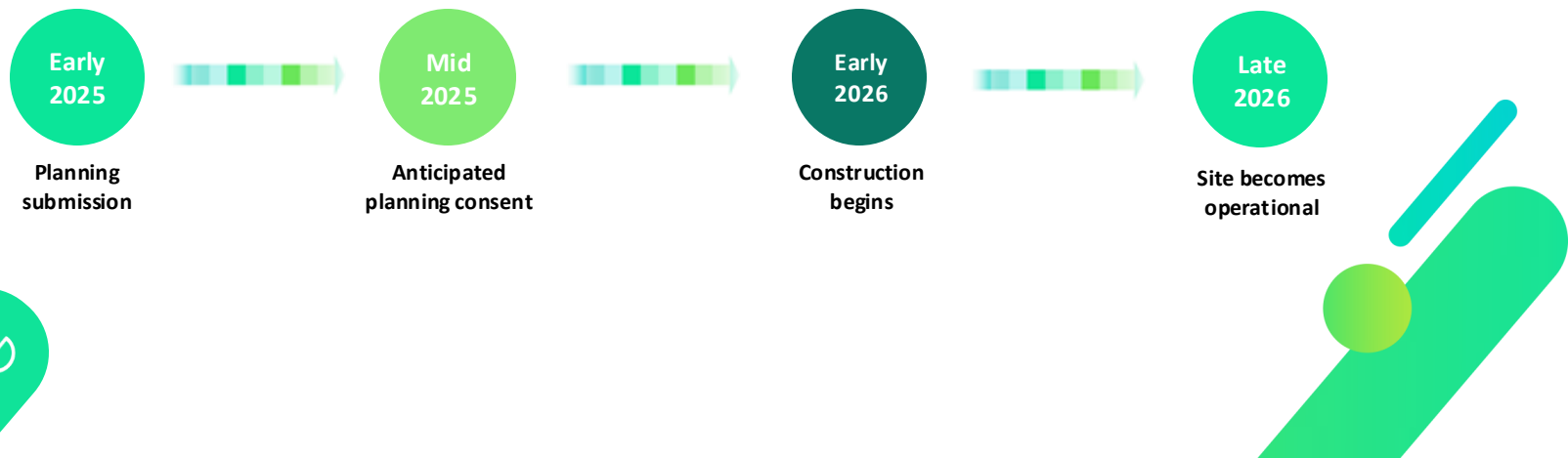
Elements Green is developing a solar park 1.5 km north of Seaham.

The 80-hectare site spans four parcels of land south of Ryhope, near the railway.

The project will connect to the Northern Power Grid network and provide renewable energy to the region.

The development will contribute to the UK Government's 2035 renewable energy targets and Durham and Sunderland Councils' Climate Emergency.

Project Timeline





Honouring Seaham's Energy Legacy



Seaham was historically served by several collieries, each comprising multiple pits. The primary collieries and their respective pits were:

- Seaham Colliery
- Seaton Colliery
- Vane Tempest Colliery

In the 19th century Seaham Colliery was producing between 2,500 and 2,800 tons of coal per day.

At its height, in 1914, the colliery employed 2,574 people below ground and 520 above ground.

Today, we honour that heritage by embracing a new chapter in Seaham's energy story.

The solar park will continue this long-standing tradition of energy generation.



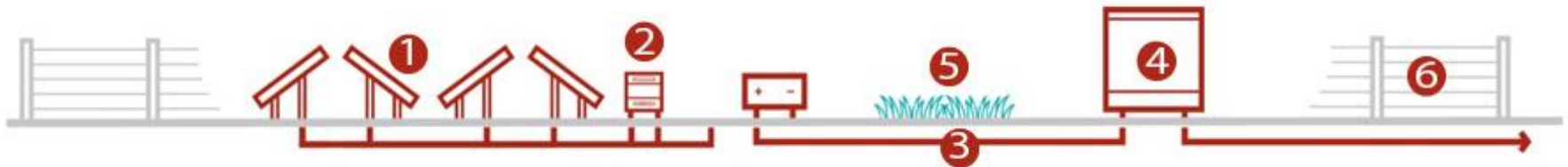
Components of a solar farm - a snapshot



A solar farm generates clean energy using an array of photovoltaic (PV) panels, which convert sunlight into direct current (DC) electricity. This is sent to inverters, where it is converted into alternating current (AC) for compatibility with the power grid.

Electricity is transported via underground cables to an on-site substation, which distribution the electricity to the grid.

The development includes landscape areas to support biodiversity and minimise visual impact, as well as fencing for security and protection of equipment. Together, these components deliver reliable, renewable energy while blending into the environment.



Solar array

① Solar Panels

Electrical connection infrastructure

② Inverter

③ Underground cable

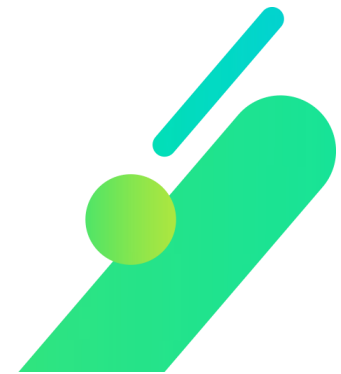
④ Substation

Mitigation and enhancement measures

⑤ Landscape area

Ancillary works

⑥ Fencing



Landscape Masterplan



- Proposed Solar Array Areas
- Substation Area
- Existing Public Rights of Way
- - - Bridleway
- Cycleway
- Footpath
- Proposed Bat Roost Box
- Proposed Owl Nest Box
- Proposed Ground Nesting Bird Plot
- Retained Grassland
- Existing Trees and Woodland
- Existing and Proposed Hedgerow
- Proposed Native Woodland
- Proposed Mixed Scrub Planting Line
- Proposed Species Rich Grass Mix

0 75 150 300 Meters

Ref: 009-001-045 | Date: 05/12/2024 | Scale: 1:4,000 @ A1

Landscape Masterplan
Seaham Solar Park

It is a priority for us and a requirement of the planning process to ensure that any ecological factors are appropriately considered and addressed

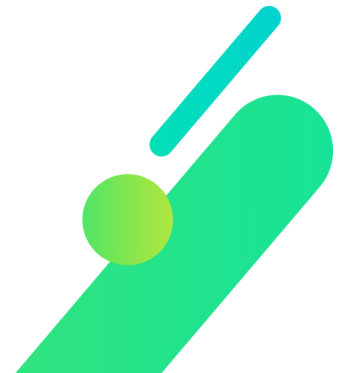
Before submitting the planning application, we will have conducted numerous ecological surveys to ensure our enhancement measures are both appropriate and effective:

- Preliminary Ecological Appraisal
- Breeding bird survey
- Protected species survey
- Wintering bird survey
- Habitat regulations assessment
- Biodiversity net gain (BNG) statement
- Ecological impact assessment
- Habitat management and monitoring plan
- Modular river survey for physical habitat (MoRPh)

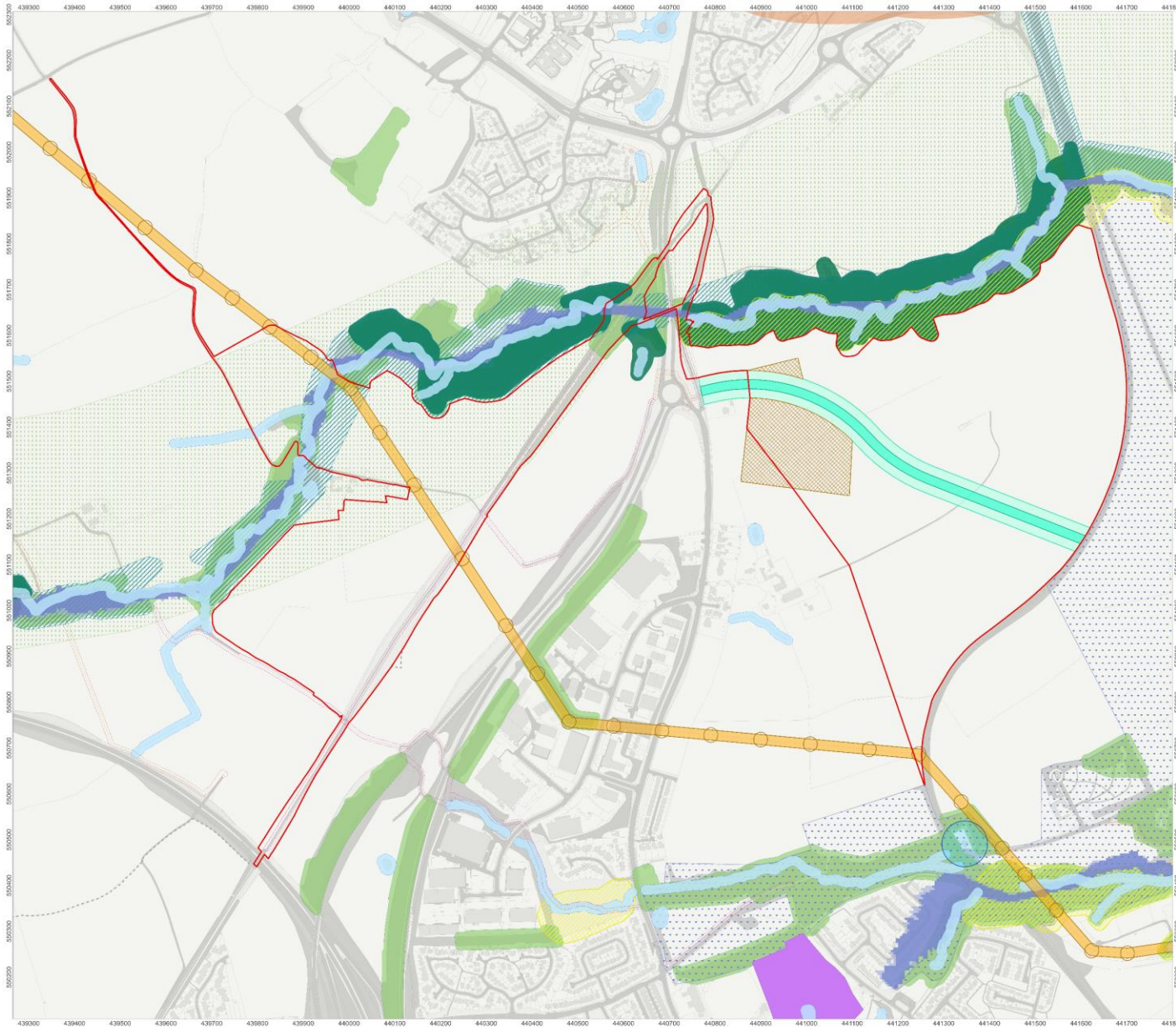


Elements Green are proud to partner with the RSPB to ensure that wildlife thrives on our parks. Charlotte Martin-Taylor of the RSPB: *“We are excited to unite expertise with Elements Green to create a future where both wildlife and clean energy thrive.”*

We are currently assessing the feasibility of incorporating sheep grazing and apiaries on the site.

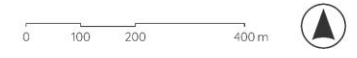


Site Designations and Opportunities



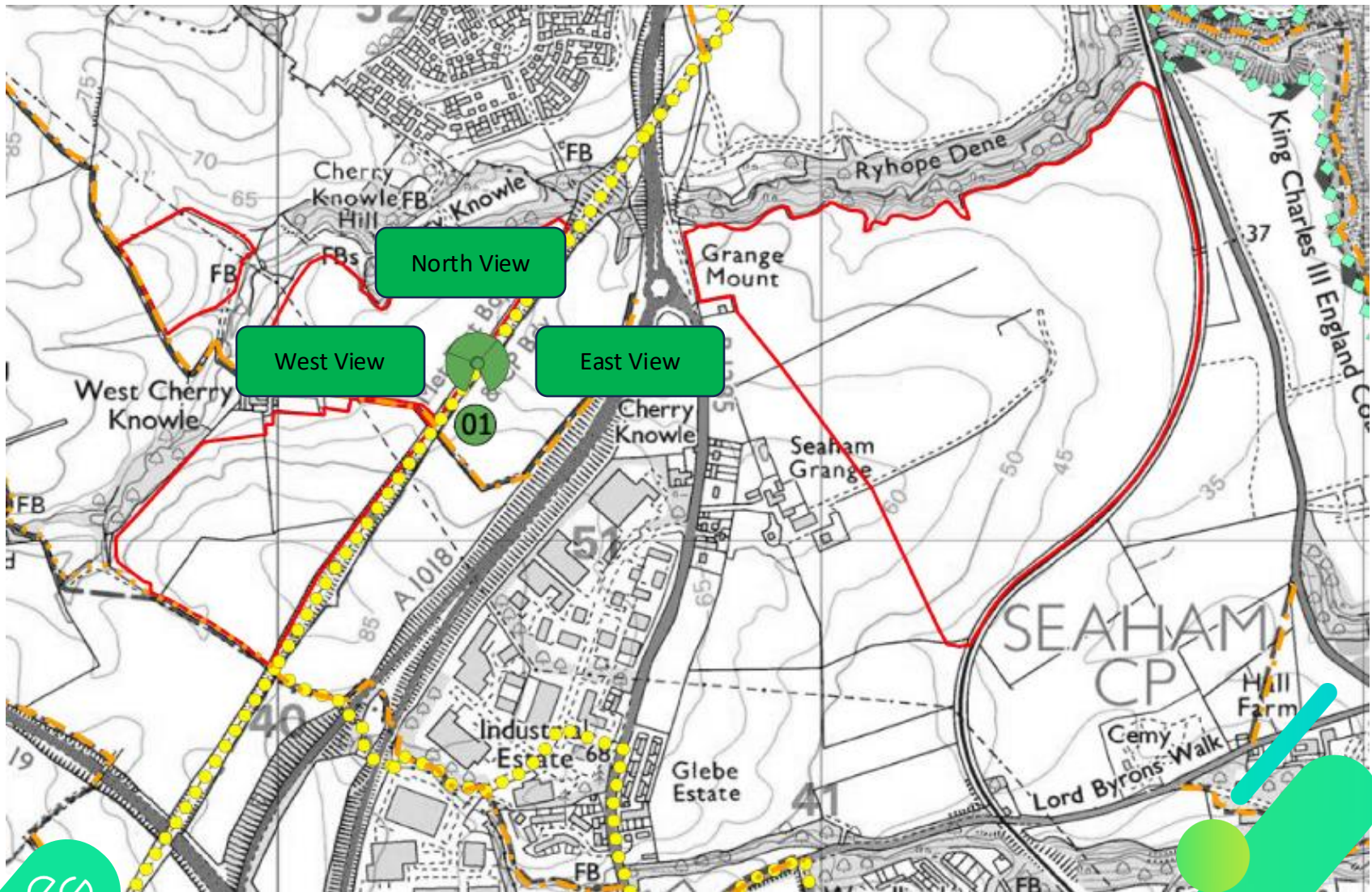
- Site Area
- Watercourses and Waterbodies (10m Buffer)
- Flood Zone 3
- Flood Zone 2
- Bridleway (5m Buffer)
- Cycleway (5m Buffer)
- Footpath (5m Buffer)
- Overhead Line Poles (15m Buffer)
- 66kV Overhead Lines (11m Buffer)
- Eastern Green Link (EGL) Cable Easement (20m Corridor)
- Eastern Green Link (EGL) Construction (60m Corridor)
- Eastern Green Link (EGL) Construction Compound
- Listed Buildings (50m Buffer)
- Housing Land Allocation
- Areas of Higher Landscape Value
- Local Wildlife Site (15m Buffer)
- Site of Nature Conservation Importance (15m Buffer)
- Ancient Woodland (15m Buffer)
- Woodland (10m Buffer)
- Wildlife Corridor
- Conservation Areas (500m Buffer)

Site Area: 81.23 ha



Ref: 009-001-043 | Date: 28/11/2024 | Scale: 14,000 @ A1

Project Designations and Opportunities
Seaham Solar Park





Site extents

Year 1

West View



Type 3 Visualisation: Photowire: after construction

View flat at a comfortable arm's length

Year 15

Indicative proposed planting to fill gaps and provide screening



Type 3 Visualisation: Photowire: 15 years after construction

View flat at a comfortable arm's length



Site extents

Year 1

North View



Type 3 Visualisation: Photowire: after construction

View flat at a comfortable arm's length

Year 15

Some filtered views of proposed solar farm

Indicative proposed planting to infill gaps and provide screening



Type 3 Visualisation: Photowire: 15 years after construction

View flat at a comfortable arm's length



Site extents

Year 1

East View



Type 3 Visualisation: Photowire: after construction

View flat at a comfortable arm's length

Year 15

Small views of proposed solar farm in the distance

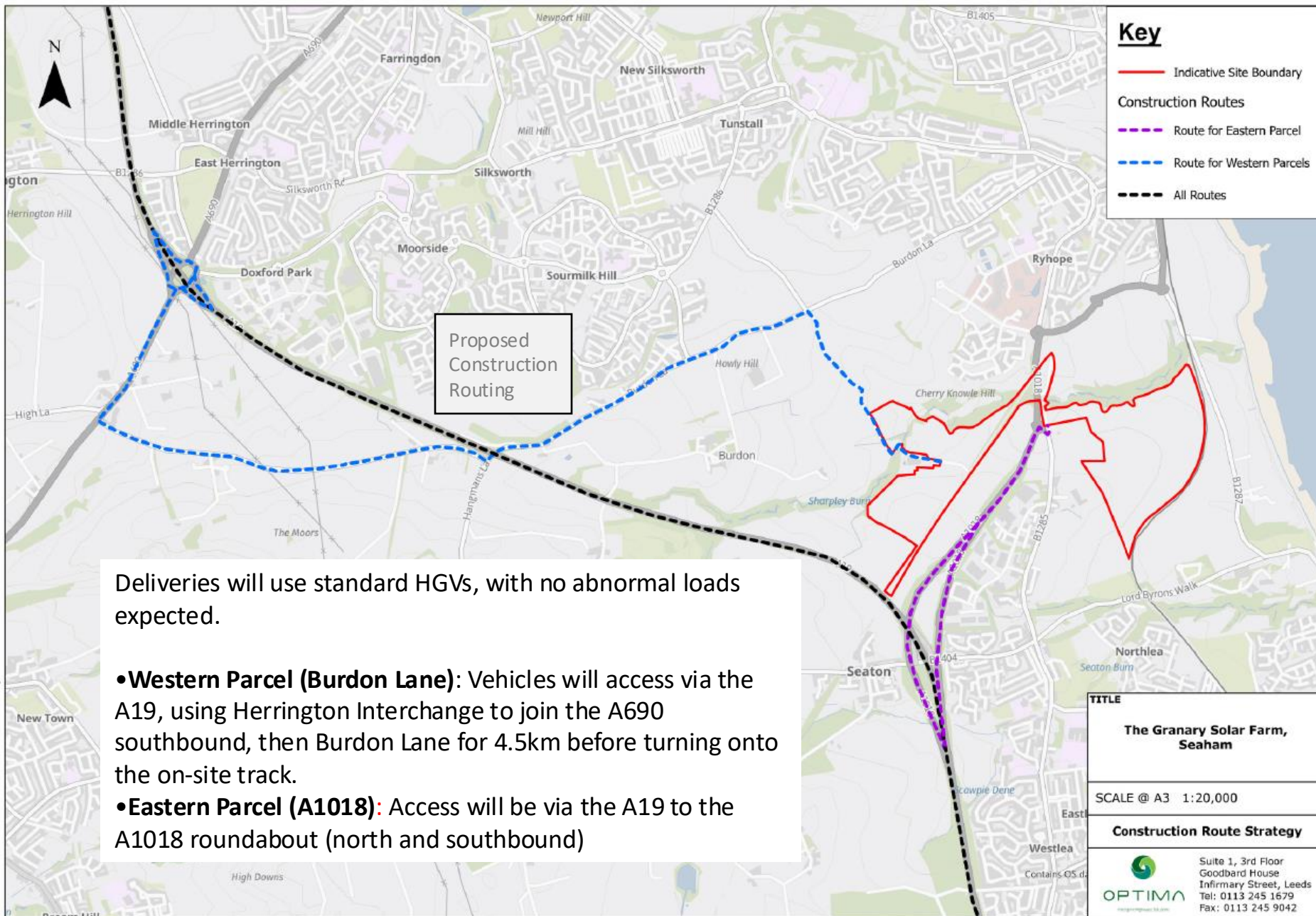
Indicative proposed planting to fill gaps and provide some screening

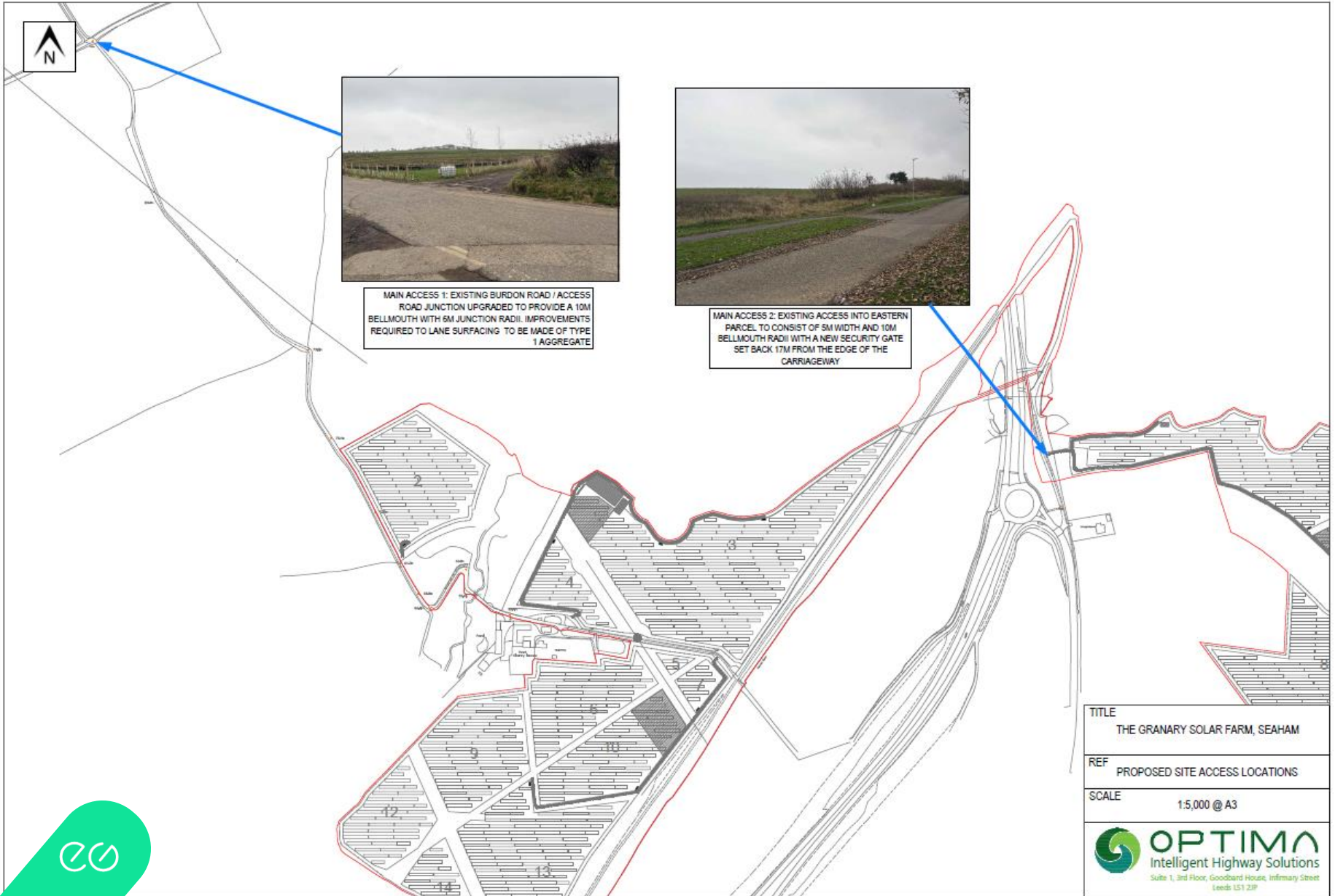


Type 3 Visualisation: Photowire: 15 years after construction

View flat at a comfortable arm's length

Transport – construction delivery route







Education

As part of our commitment to creating a positive impact beyond renewable energy projects, we are proud to offer additional community benefits through initiatives like the EG Academy.



EG Academy provides accredited online courses, in-person seminars, and work experience opportunities, empowering young people and professionals with the skills and knowledge to thrive in the renewable energy industry.

EG Academy ensures communities are actively engaged in shaping a sustainable future. Our EG Academy is free to residents of the parishes included in the consultation area.

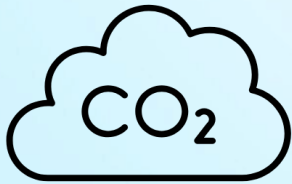
Community benefit

We work closely with local councils, recreational organisations, and community groups to ensure our plans for community benefits align with resident needs and support local causes.





Key benefits



Contributing to national and local climate targets by avoiding approximately 19,000 tonnes of CO₂



Helping reduce household bills and provide energy security with home-grown solar power



Increasing biodiversity and protecting wildlife with additional plantings and protected areas



A community benefit fund, that will support initiatives that directly benefit local communities





We now invite any questions or feedback you may have about the project.

You can submit feedback at any time by visiting www.seahamsolar.com or scanning the QR code.

Your feedback is an essential part of today's consultation, the planning application, and the project as a whole. We are dedicated to ensuring that developments in this region provide meaningful benefits to the local community.



This is your opportunity to shape the project's design and development to maximise benefits for the community.

