Putting the jigsaw together

East Lammermuir Community Council

Infrastructure event 25 April 2023

Innerwick Village Hall



Purpose

- To describe the range of work proposed over the coming decade, with an eye to the impact on local people
- To consider and commence appropriate liaison arrangements so that local people can plan ahead and feedback on their experience whilst the work is being done, in order to minimise negative impacts
- To hear ideas for additional legacy projects which could be put in place whilst the (electricity-related) work is done

Outline agenda

- Introductions – community councillors, elected members ELC
- Brief presentations from developers and companies
- Questions for clarification
- Discussion – positive legacy?
- Close at 21.30

Running order - presentations

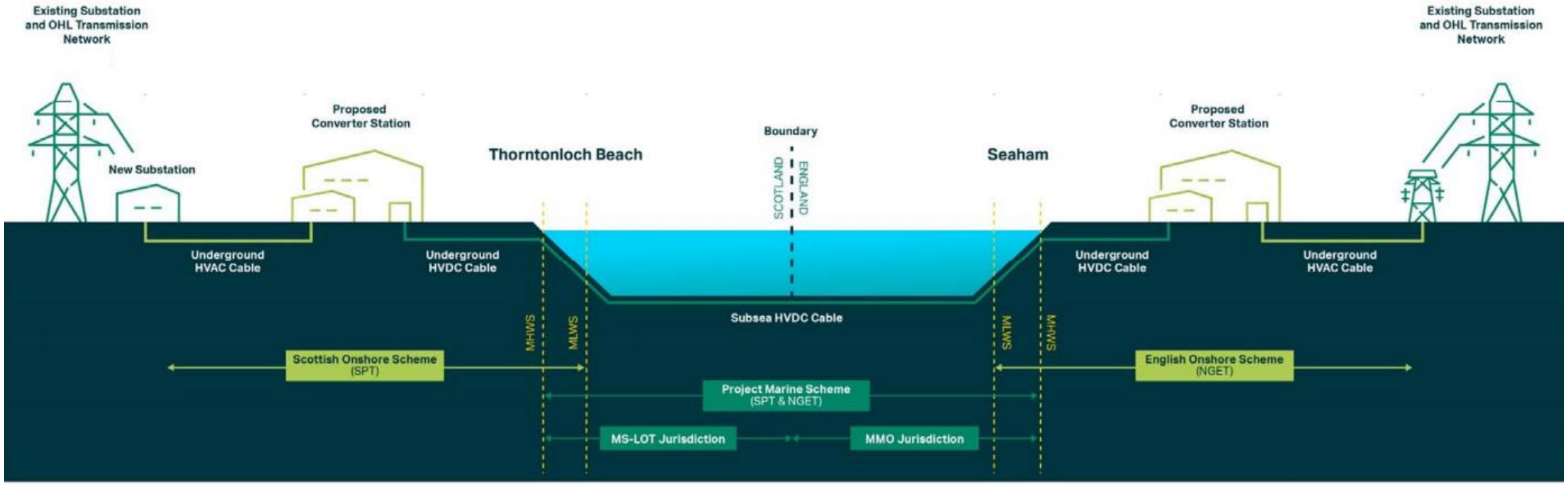
- Eastern Link - Scottish Power Energy Networks (absent)
- Berwick Bank windfarm and connections - SSE (Gary Donlin)
- NnG offshore windfarm – cable works (Florian Briard and Lesley Murray)
- Crystal Rig IV and Solar Farm – Fred Olsen Renewables (Rachel Baird)
- Branxton Energy Storage Facility - Eastcoastgridservices (Steve Ruggi (sent apologies))
- Battery storage at North Belton - FRV TH Powertek (Dan Elvin)
- Torness Decommissioning - EDF (Jason Brady)
- *Also in attendance Matt Olley, Belltown Power for Newlands Windfarm (outside East Lammermuir)*
- *Apologies from Valencia who run the landfill at Oxwellmains*

Eastern Green Link 1

SP Transmission

SP ENERGY NETWORKS

Project Background



SP ENERGY NETWORKS

Project highlights – Current Position

- Eastern Link - Marine License application (awaiting decision)
- Eastern Link - Planning application (awaiting decision)
- Tendering (Commenced)

The project is currently in a commercially sensitive period so external communications and engagement is on hold until the summer hence our absence at this meeting.

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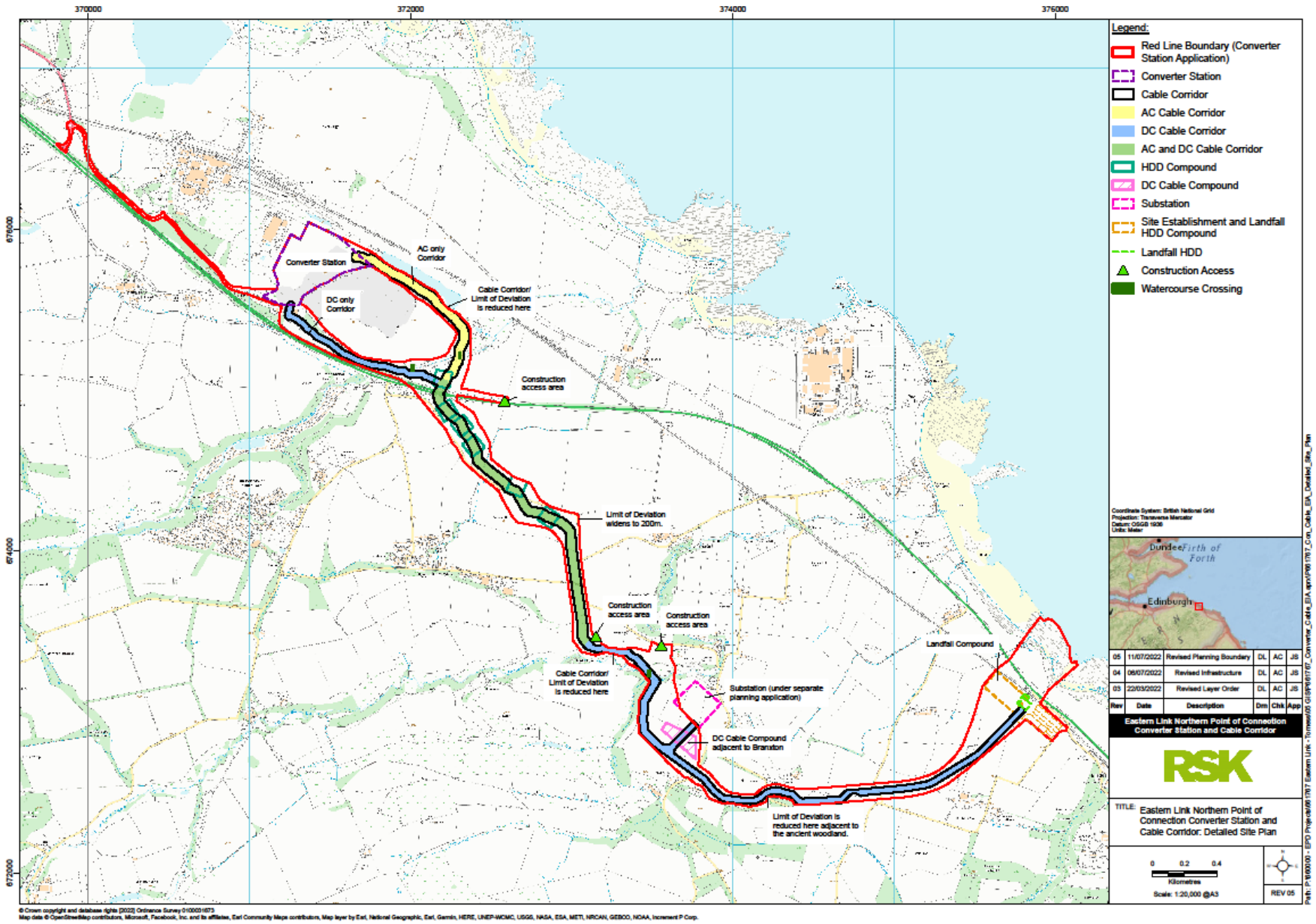
Next Steps

- We will be back to engage with the community over the summer once we have a planning decision and will contribute to any wider development plans in due course.

Eastern Link – Planning Site Layout Plans



Converter Block Visualisation



Berwick Bank Wind Farm

Overview Slides



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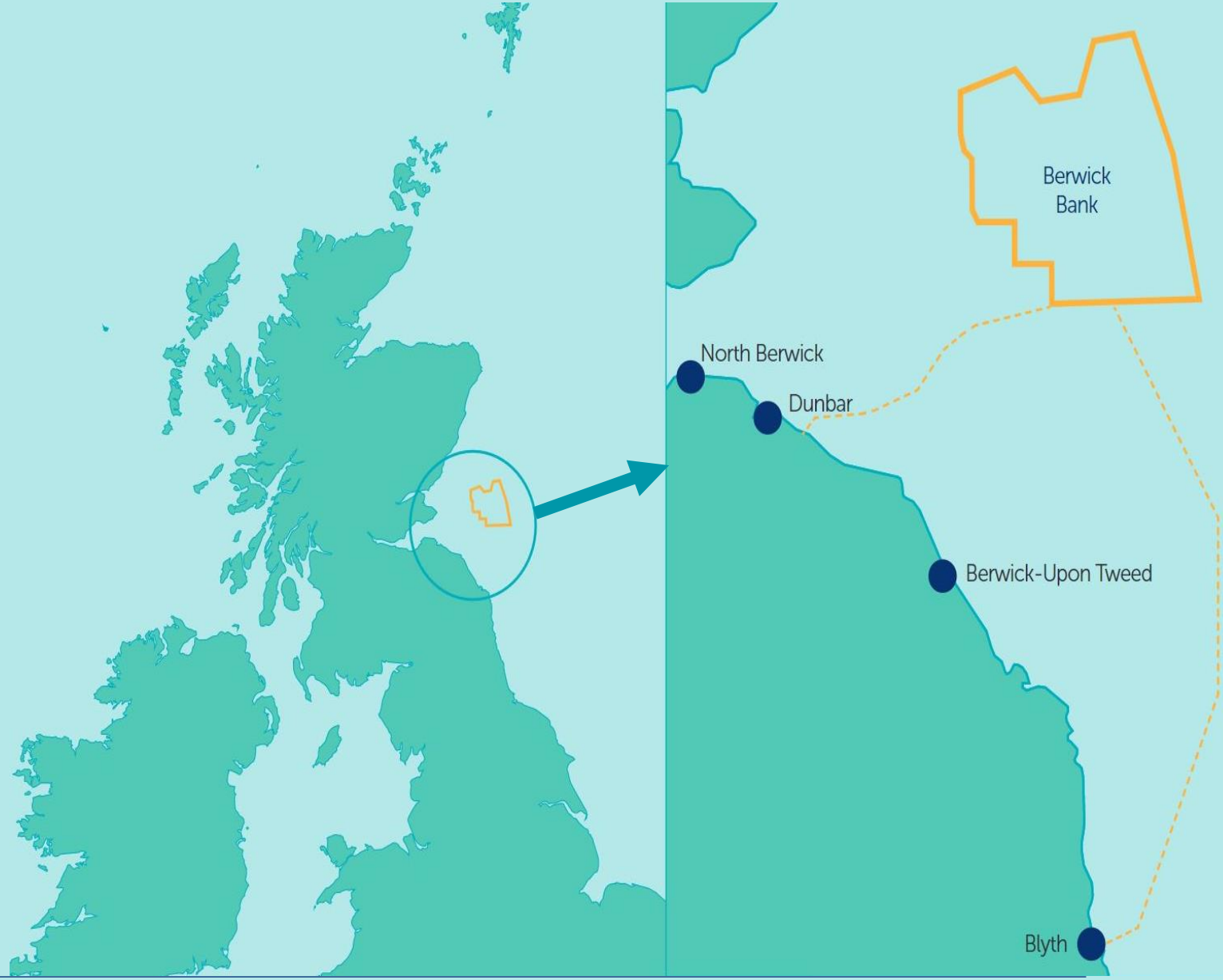
Berwick Bank

1. At 4.1 GW, Berwick Bank Wind Farm will play a crucial role in meeting the Scottish Government's targets of 11GW of new offshore wind by 2030.

2. We will build a maximum of 307 turbines, approx. 38km off the East Lothian coast line, with 6 offshore substation platforms, up to 8 offshore export cables onto land, underground cabling from landfall (Skateraw) to our proposed substation or convertor station site (near Innerwick) and further underground cabling to connect to our grid connection point at Branxton (Scottish Power Energy Networks).

3. A construction traffic management plan will be developed upon the appointment of our Tier 1 contractors. This will not happen until we have concluded the planning process and we are keen to consult with local communities to minimise disruption where possible.

4. Onshore enabling works could commence mid 2024 depending on the planning process. A typical onshore construction programme of this scale could take approx. 18-24 months to complete.



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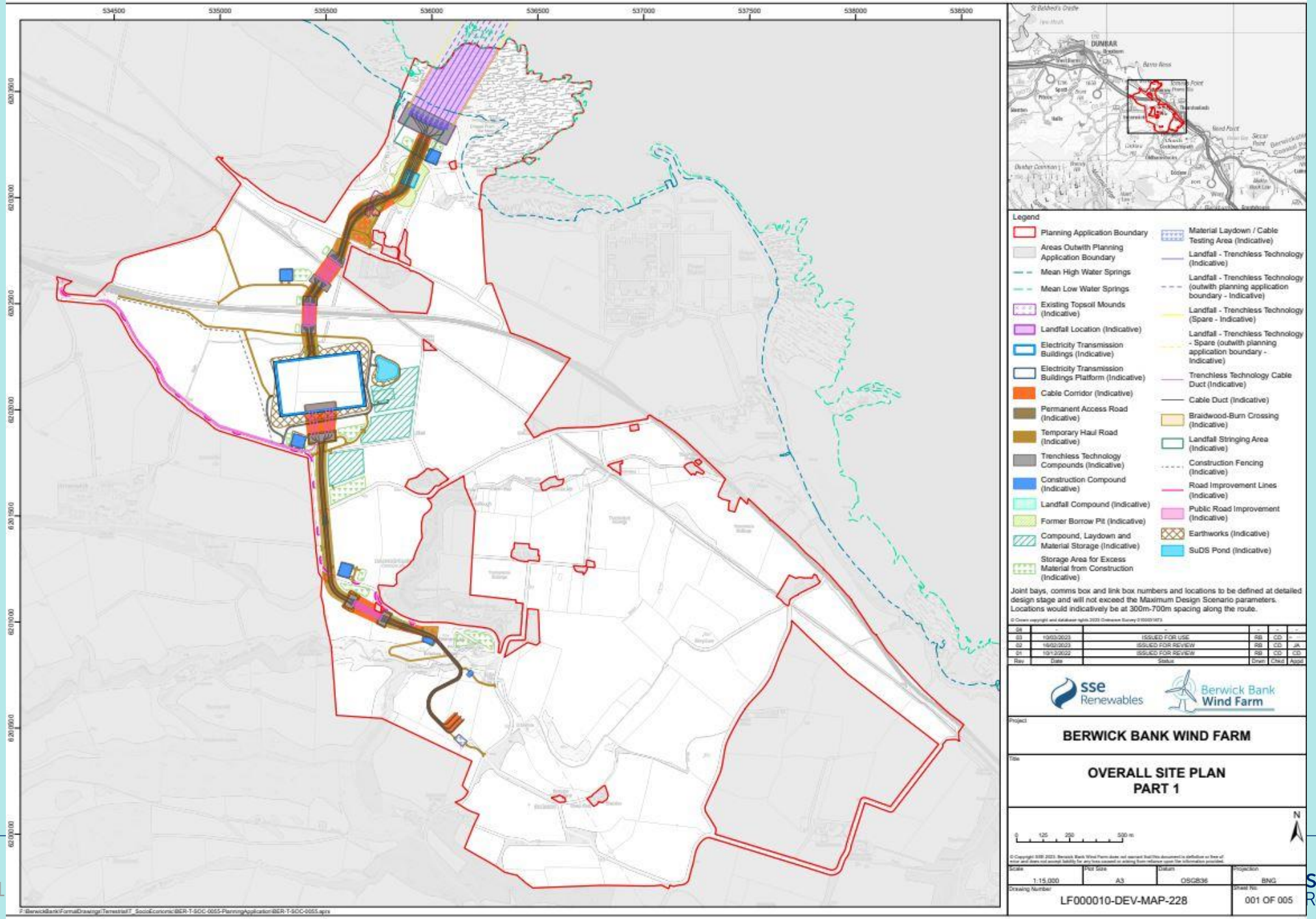
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DUNBAR
Legend
Planning Application Boundary
Areas Outwith Planning Application Boundary
Mean High Water Springs
Mean Low Water Springs
Existing Topsoil Mounds (Indicative)
Landfall Location (Indicative)
Electricity Transmission Buildings (Indicative)
Electricity Transmission Buildings Platform (Indicative)
Cable Corridor (Indicative)
Permanent Access Road (Indicative)
Temporary Haul Road (Indicative)
Trenchless Technology Compounds (Indicative)
Construction Compound (Indicative)
Landfall Compound (Indicative)
Former Borrow Pit (Indicative)
Compound, Laydown and Material Storage (Indicative)
Storage Area for Excess Material from Construction (Indicative)
Material Laydown / Cable Testing Area (Indicative)
Landfall - Trenchless Technology (Indicative)
Landfall - Trenchless Technology (outwith planning application boundary - Indicative)
Landfall - Trenchless Technology (Spare - Indicative)
Landfall - Trenchless Technology - Spare (outwith planning application boundary - Indicative)
Trenchless Technology Cable Duct (Indicative)
Cable Duct (Indicative)
Braidwood-Burn Crossing (Indicative)
Landfall Stringing Area (Indicative)
Construction Fencing (Indicative)
Road Improvement Lines (Indicative)
Public Road Improvement (Indicative)
Earthworks (Indicative)
SuDS Pond (Indicative)
Joint bays, comms box and link box numbers and locations to be defined at detailed design stage and will not exceed the Maximum Design Scenario parameters. Locations would indicatively be at 300m-700m spacing along the route.
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Berwick Bank Wind Farm
BERWICK BANK WIND FARM
OVERALL SITE PLAN
PART 1
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A3
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BNG
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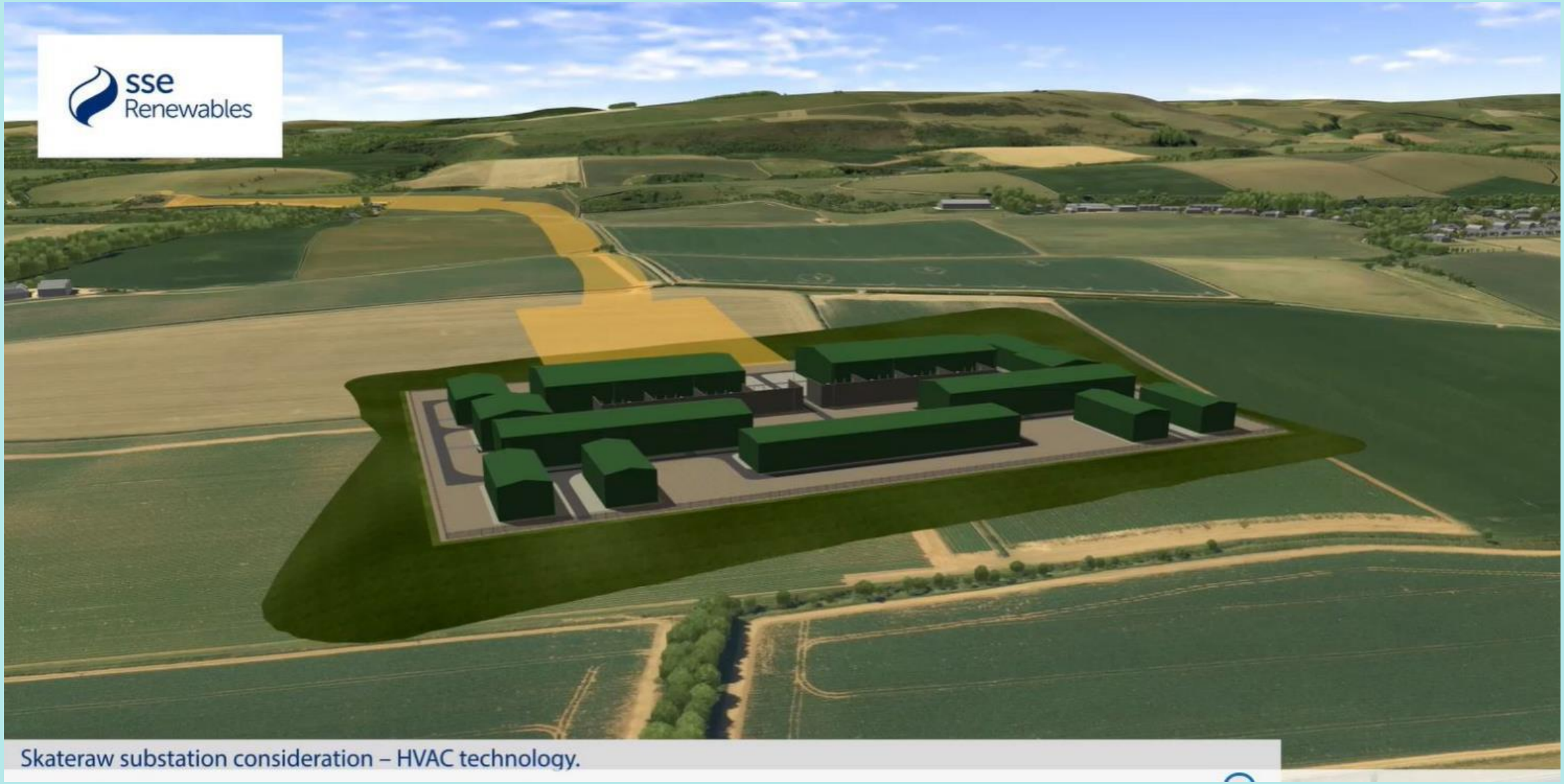

Skateraw substation consideration – HVAC technology.

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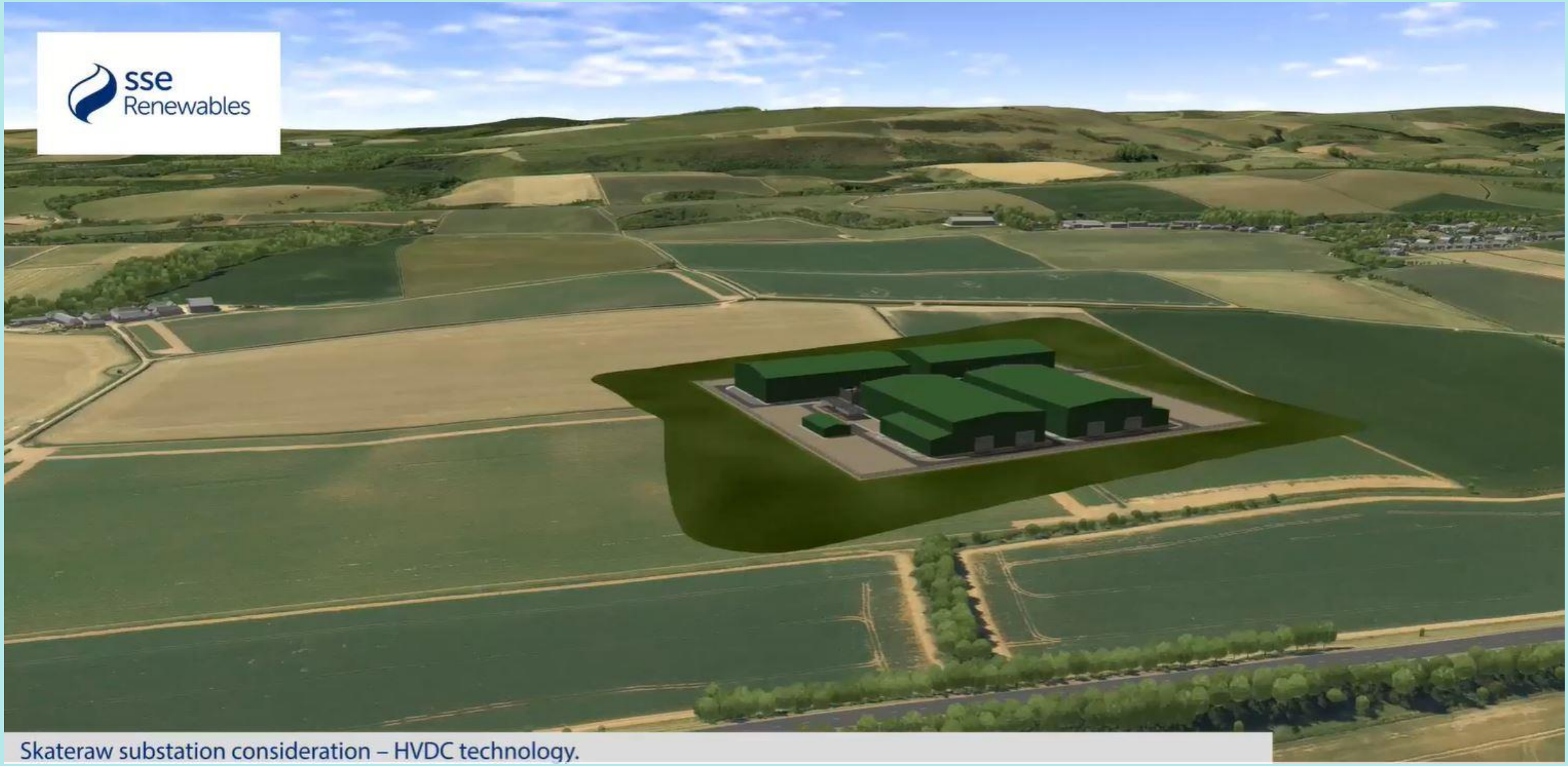

Skateraw substation consideration – HVDC technology.

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East Lammermuir Community Council (April 2023)

NnG Onshore Transmission Works

Florian Briard and Lesley Murray

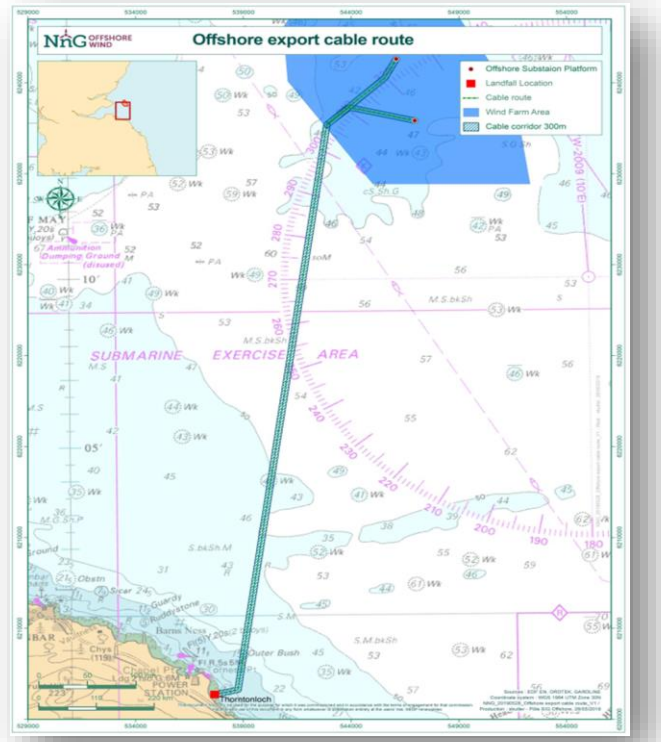
EDF Renewables

25/04/23

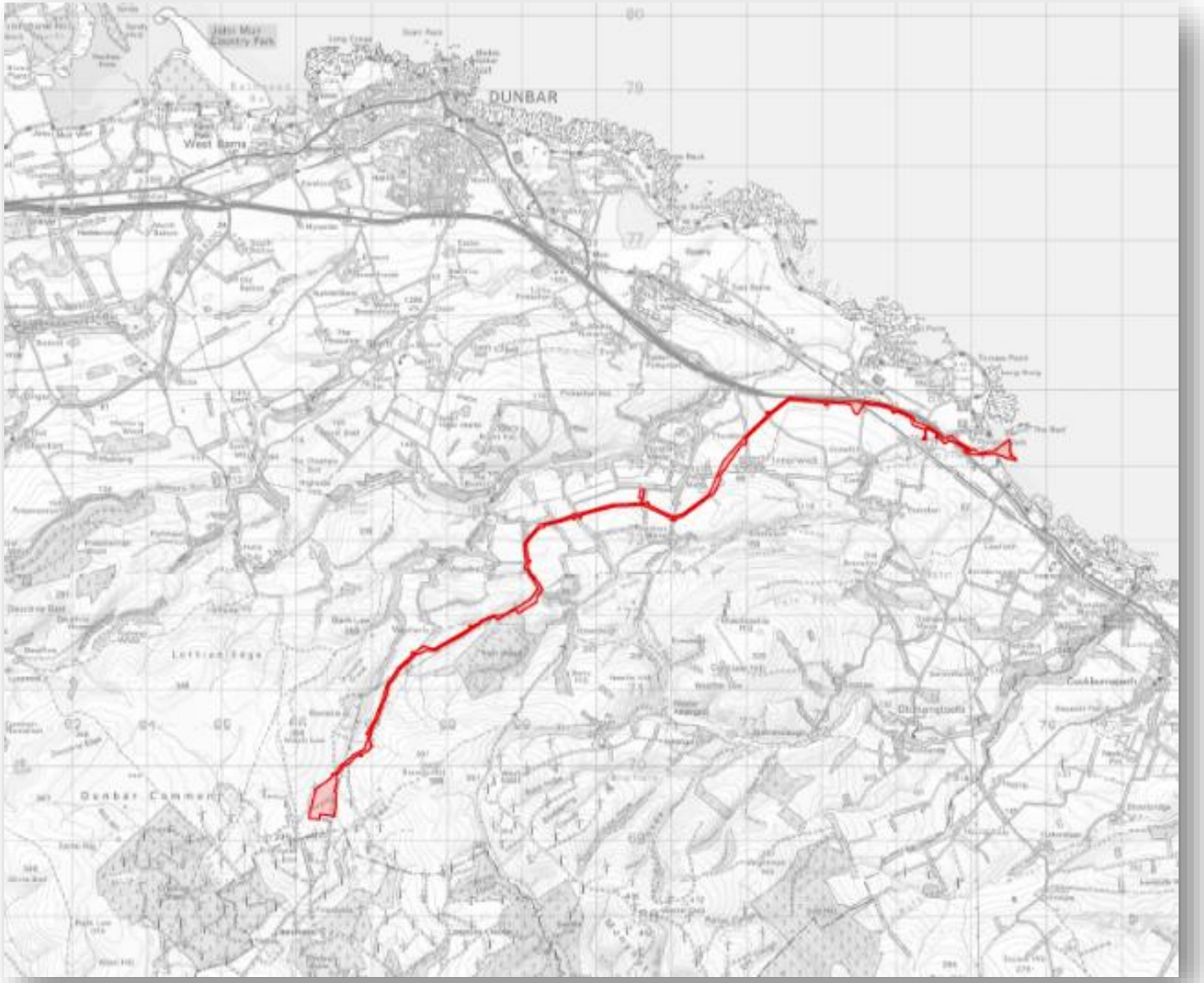


Project Background

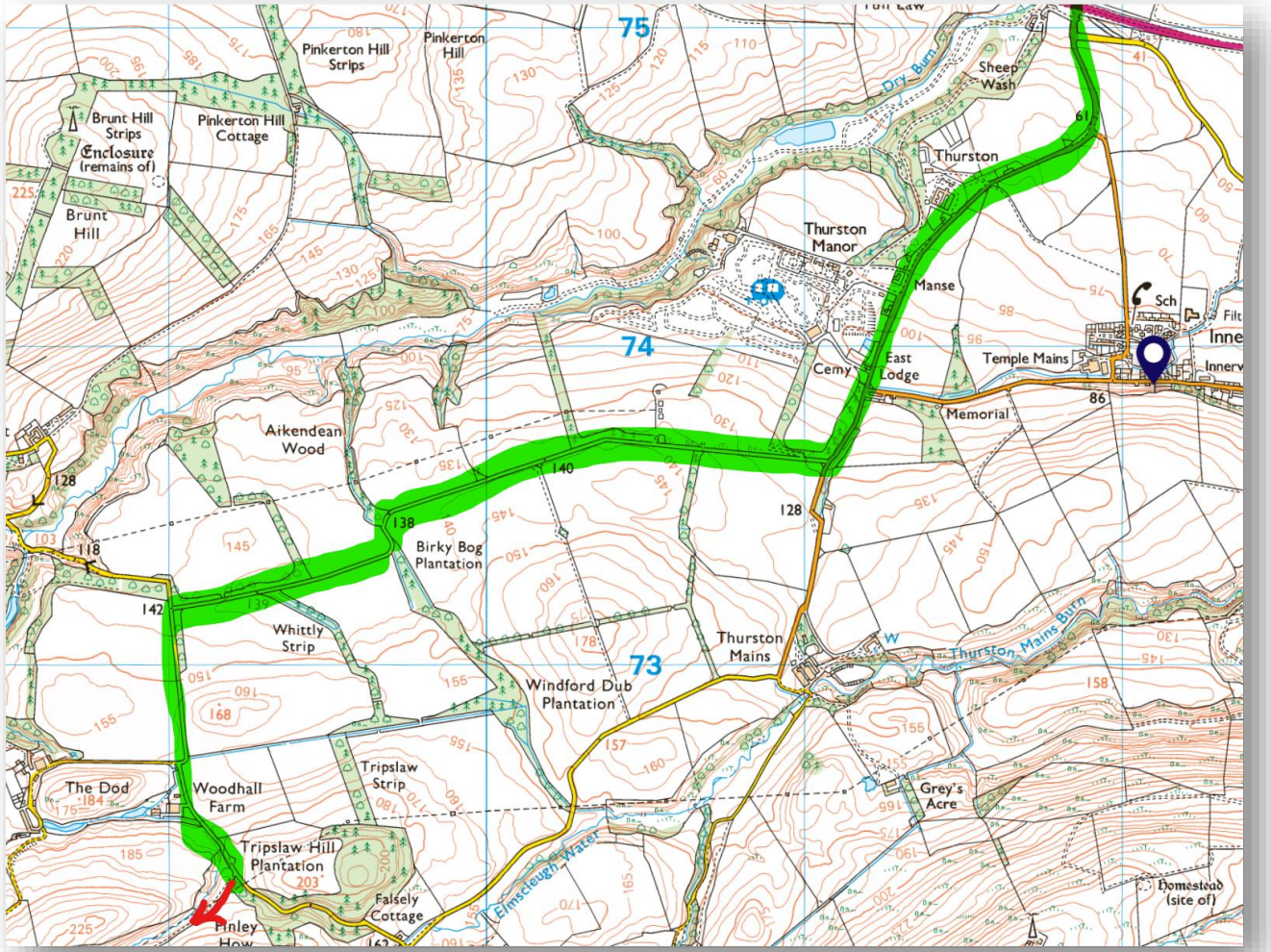
- Onshore Transmission Works for Neart na Gaoithe (NnG) Offshore Wind Farm
- Joint venture between EDF Renewables and ESB
- Located 15.5 km from Fife coast, 30km from Torness in Firth of Forth
- Will produce up to 450 MW from 54 turbines providing power for around 375,000 homes
- Will offset over 400,000 tonnes of CO_2 emissions per year
- Planned operational life of 25 years, decommissioning or repowering possible thereafter
- Operations and maintenance base in Eyemouth creating around 50 permanent jobs
- Export cable landfall at Thorntonloch Beach, 12.5 km buried cable route to substation at Crystal Rig (Lammermuir Hills)
- Planning permission for onshore works granted in June 2013
- Onshore construction commenced 2020 by GE and Prysmian, expected completion late 2023
- Offshore construction commenced 2020, turbines expected to be installed this summer



Project Location – Onshore Transmission Works (Cable route works completed)



Project Access Route (substation works)



- Standard working hours 07.00 - 19.00, 7 days
- Quiet overnight works where necessary
- HGV movements limited to 07.00 – 19.00
- Park and ride system and material delivery hub at Ark (Dunbar)
- 20mph HGV speed limit from A1
- Permanent and temporary passing places and junction widening
- Regular road sweeping and litter picks
- Temporary road repairs in conjunction with ELC
- Demobilisation and reinstatement from May 2023 – increase in HGV movements
- Liaising with ELC Roads Dept on scope of permanent repairs following completion of construction works



Thank you

info@nngoffshorewind.com or

Lesley.Murray@edf-re.uk

Fred. Olsen Renewables



Crystal Rig

The Proposed Development

What are we building and where?

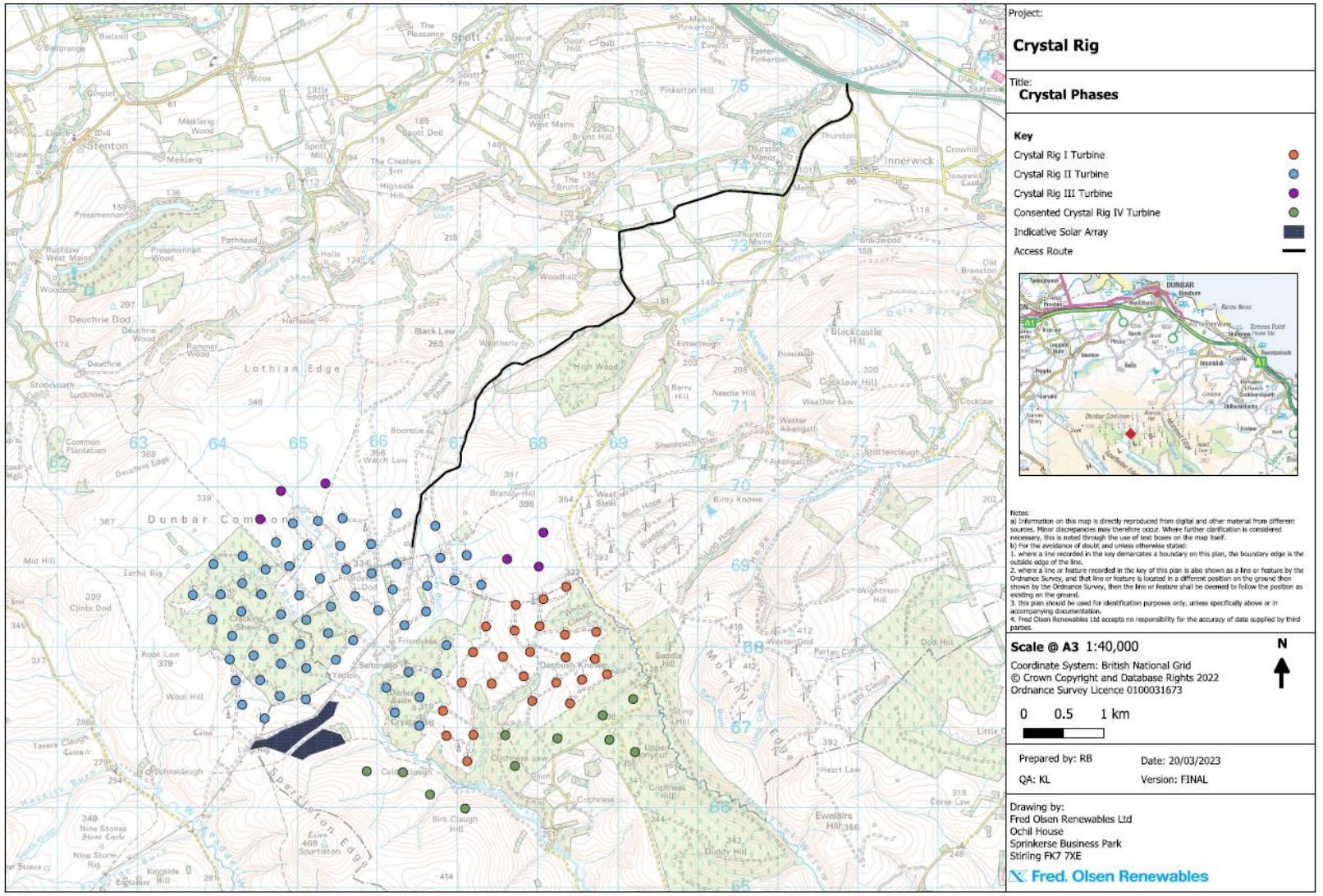
Fred. Olsen Renewables

Crystal Rig Phase IV:

- 11 turbines up to 200m, 42MW
- Scoping submitted 2018
- Project consented 2021
- Construction commences Q3 2023
- Route to site will be A1 to Innerwick Junction then south to site entrance

Crystal Rig Solar:

- 30MW solar array
- Scoping submitted February 2023
- Public consultation ongoing
- Application anticipated late 2023



The Proposed Development

Why we need our proposals

Fred. Olsen Renewables

Crystal Rig IV:

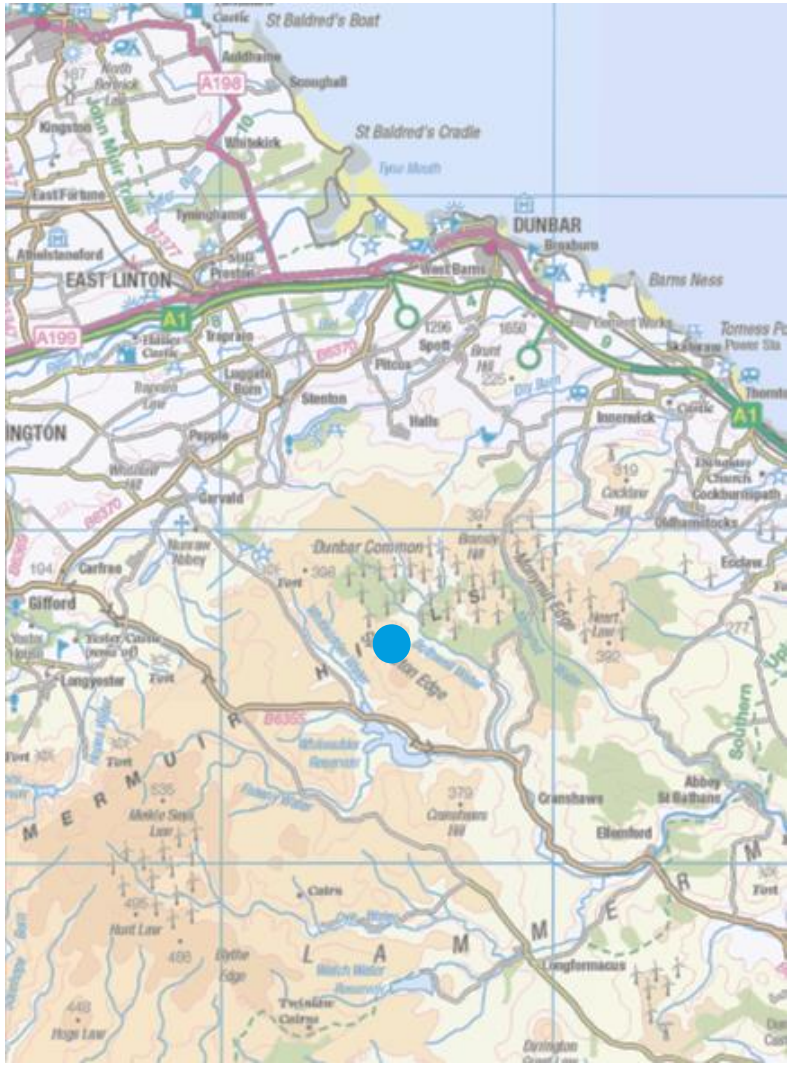
- Is a natural expansion of the existing site
- Utilising existing infrastructure where possible
- £5,000 community benefit per MW installed, more than £8m over project lifetime
- Crystal Rig has provided more than £2M in community benefit funding to the local area over the last 20 years

Crystal Rig Solar:

- Maximises the potential of the site
- Utilises existing infrastructure
- Secures a more consistent energy supply
- Provide over £520,000 throughout the lifetime of the project

Both Crystal Rig IV and Solar Proposals will:

- Actively supports Scotland's net zero ambitions
- Delivers local and regional supply chain opportunities
- Makes a positive contribution to the local economy



Branxton Energy Storage Facility

Planning application submitted by East Coast Grid Services Ltd

with Consultants Arcus Consulting/ERM Consulting/TCP Landscape Consulting

Steve Ruggi (sent apologies)

Branxton Energy Storage Facility

Location Plan




Branxton Battery Storage
Site outline
Legend
Feature 1
Site boundary
Edinburgh and Lothian Pet Crematorium
Blackberry Farm Paddocks
Google Earth
Image © 2023 Maxar Technologies
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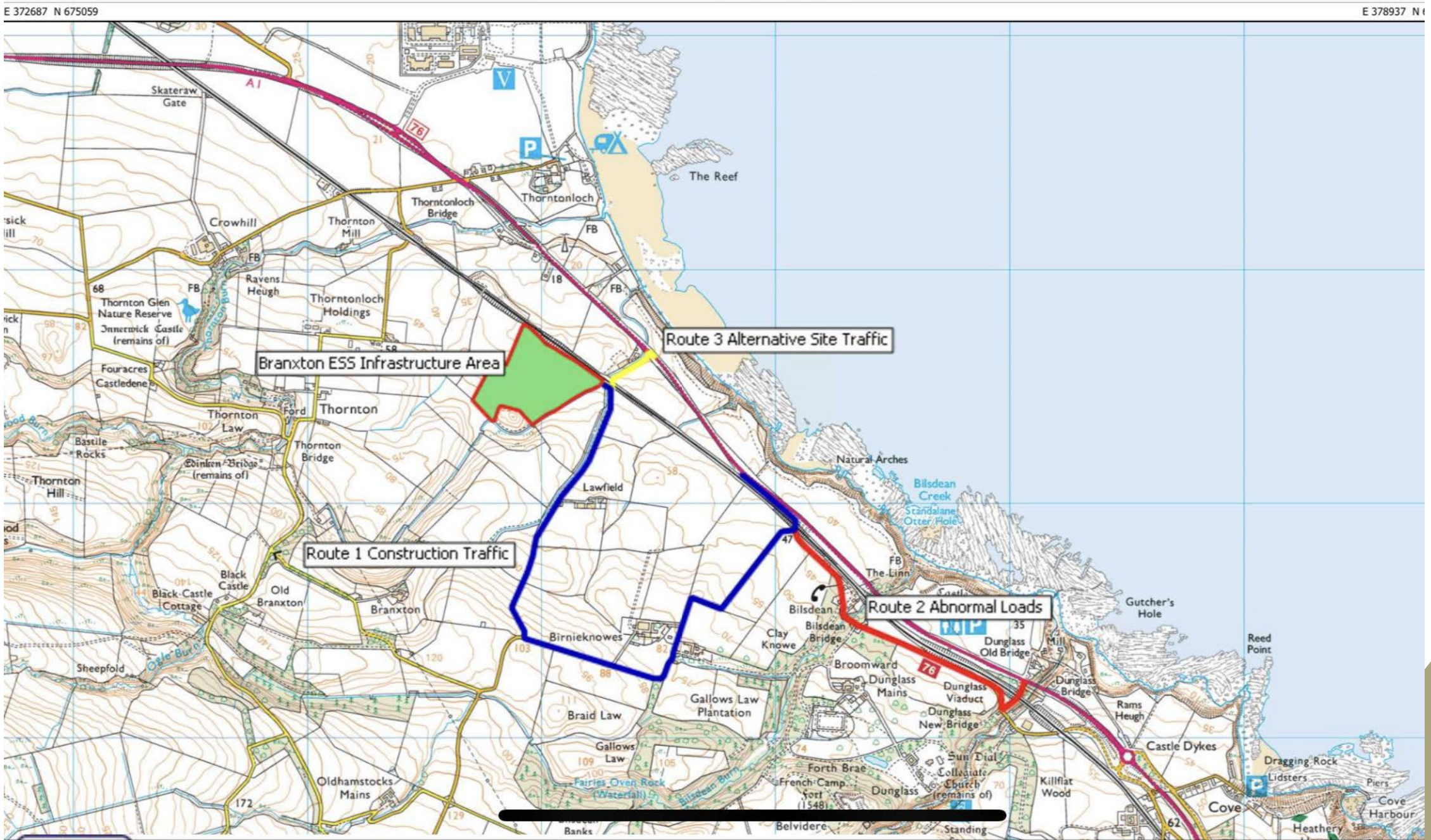
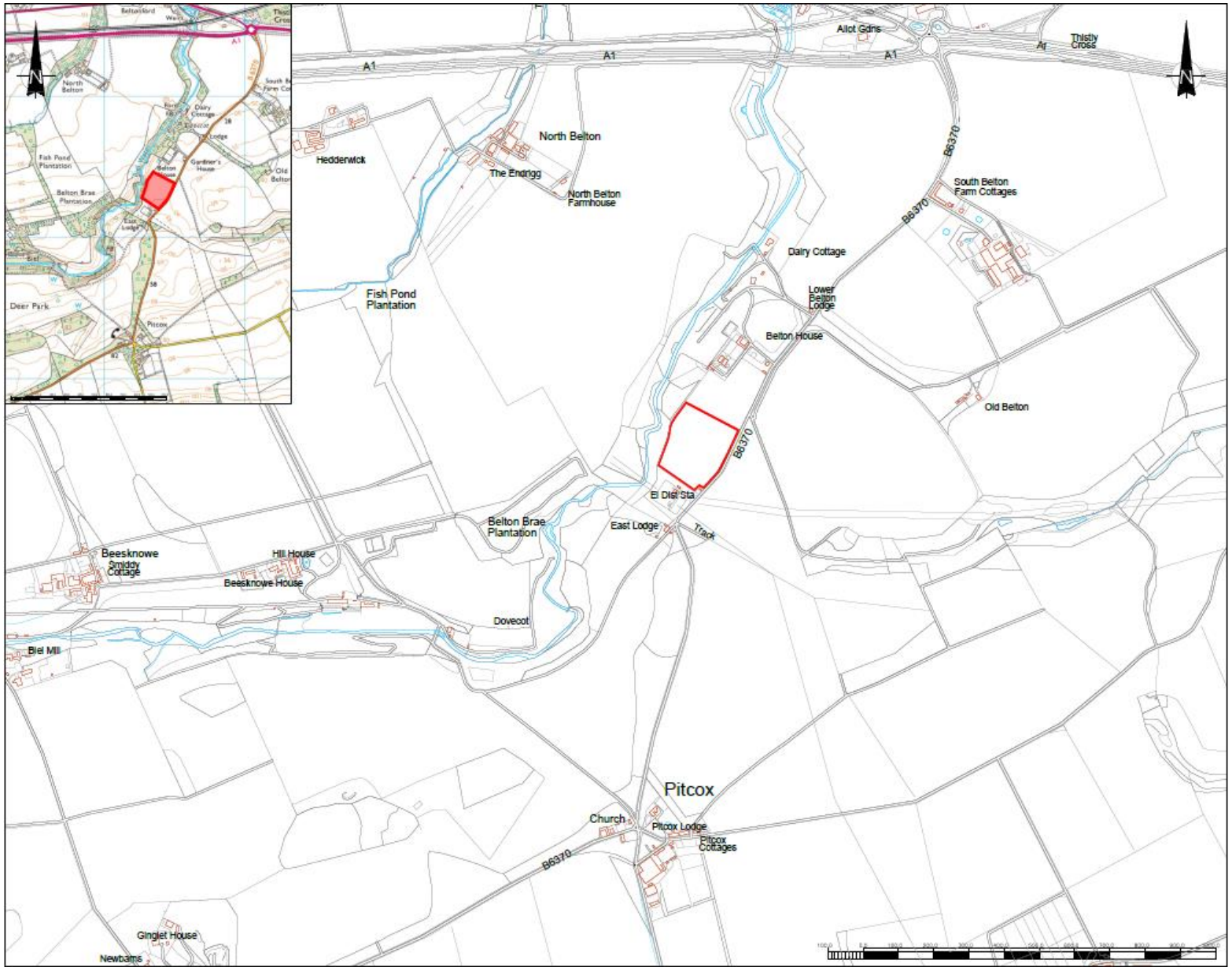
Transportation Routes.pdf



To see the photomontage/visualisations and submitted planning documents, visit the Project Website at http://branxtonenergystorage.com/

Dunbar Battery Energy Storage System (BESS)

near Dunbar, East Lothian



Developer

FRV TH Powertek – a leader in the development of sustainable energy solutions.

Planning Agent

Dan Elvin, Senior Planner, Sirius Planning.

Site Location

- Agricultural land to the west of the B6370 and north of a substation;
- 850m north of Pitcox and 3km south west of Dunbar;
- Plan shows site of c.3.53ha. Exact boundary TBC but application boundary is likely to be c.1.2ha.

Dunbar Battery Energy Storage System (BESS)

near Dunbar, East Lothian

Why we need it?

- By 2035, the UK will be powered entirely by clean electricity, subject to security of supply. In order to meet this target set by the UK Government it needs to be underpinned by flexibility. BESS provide balancing services to maintain sufficient power on the 'grid' at times of high demand for electricity.

What we are building – and where.

- A 49.9MW Battery Energy Storage System (BESS) is proposed, 850m north of Pitcox and 3km south west of Dunbar;
- 52no. Battery Units (arranged in 26no. pairs), 52 inverters and 26 transformers plus 2 spare storage cabins (numbers TBC);
- DNO substation compound and associated cabins; and
- Underground cable to the point of connection (substation immediately south of the site).

Construction access routes and volumes.

- All construction traffic to approach from the A1 junction north east of the site. All traffic to turn left out of the site back towards the A1 junction. Volumes TBC.

When this will happen?

- Surveys underway;
- POAN and Scoping Request submitted 21st April 2023;
- Consultation events proposed in June 2023;
- Application to be submitted July 2023. Decision by Q4 2023;
- Build out in 2026.



Torness Power Station

- EDF's Torness has one of the best rates of generation per annum in the fleet.
- In our 35th year of generation - remain a strong generator and integral part of East Lothian
- Over our generating life, we have produced almost as much zero-carbon energy as Hunterston B did in its 46 years: equivalent to powering every home in Scotland for 29 years.
- Torness supports around 500 staff and 250 contractors.
- Each year Torness contributes around £45m to the East Lothian economy
- During scheduled maintenance periods, that workforce is larger with an additional 800 contractors visiting site – these shutdowns are known as an outage
- While supporting this work these contractors boost the local economy, staying in local hotels and B&Bs and using other local services like taxis and restaurants.
- This is something that has been happening throughout the 35-year life of the station but we are conscious that alongside the increasing volume of projects in the area there may be an added strain on local suppliers.
- 2023 is a non-outage year, our next stat outage is March 2024 and then July 2025

Defueling

- Torness is currently due to end generation in March 2028
- Defueling begins when a station stops generating. EDF will remove all spent fuel from the site using the same methods used during generation
- Defueling is expected to last for approx. four years – during this time staff numbers onsite will remain largely the same and there will be no change to the site's footprint.

Decommissioning

- Once all spent fuel has been removed, site ownership will be transferred, to the Nuclear Decommissioning Authority (NDA). Its subsidiary, Magnox, will carry out the rest of the decommissioning job.
- Current plans will see most plant, equipment, services and buildings removed within around 12 years of end of generation.
- The reactor building will remain in situ for a further period until final site clearance.



Outline agenda

- Introductions – community councillors, elected members ELC
- Brief presentations from developers and companies
- Questions for clarification
- Discussion – positive legacy?
- Close at 21.30

Question for discussion

- What could developers do “whilst they are here” to improve East Lammermuir and leave a tangible positive local legacy for the community to enjoy?

Next steps

- Please fill out a feedback form
- We will analyse what we have heard and put a report on our website
- We will put this presentation on our website
- We will feed in to Paul McLennan MSP work on this at an East Lothian level – next meeting 26 May.

Thank you for coming and helping to put the jigsaw together

East Lammermuir Community Council

Infrastructure event 25 April 2023

Innerwick Village Hall

