XLCC Hunterston

Non-Technical Summary

MAKING COMPLEX EASY

XLCC

Quality Management

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GLOSSARY

Term	Definition
AIL	Abnormal Indivisible Load
AOD	Above Ordnance Datum
CEMP	Construction Environmental Management Plan
CoCP	Code of Construction Practice
CTMP	Construction Traffic Management Plan
EIA	Environmental Impact Assessment
GEA	Gross external area (GEA) is the area taken to the outside face of the external walls of a building
GIA	Gross internal area (GIA) is the area taken to the inside face of the external walls of a building
GVA	Gross Value Added
ha	Hectares
HGV	Heavy Goods Vehicle
Hunterston PARC	Hunterston Port and Resource Centre
km	kilometres
m	Meters
m^2	Square meters
NCN	National Cycle Network
SEPA	Scottish Environmental Protection Agency
SSSI	Site of Special Scientific Interest
SuDs	Sustainable Urban Drainage Strategy
The EIA Regulations	Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017
UK	United Kingdom
ZTV	Zone of Theoretical Visibility

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1 INTRODUCTION

Introduction

1.1.1 XLCC Limited ('The Applicant') proposes the development of a high-voltage cable manufacturing facility at Hunterston Port (hereafter referred to as the 'Project'). The Project will manufacture high-voltage cables for use in distributing renewable energy from a variety of sources.

1.1.2 The Project is located at Hunterston Terminal on the west coast of Scotland, south of the village of Fairlie, and north of the EDF Hunterston Power Station. The Project would occupy approximately 50.7 hectares (ha) of land on part of the former Hunterston Coal Yard within the wider Hunterston Port and Resource Centre (Hunterston PARC).

1.1.3 The Project lies within the administrative area of North Ayrshire Council. Primary vehicular access to the site will be gained from the existing site access to the Hunterston Terminal via Irvine Road (A78).

1.1.4 The location and geographic extent of the Project is presented in the Site Location Plan, **Figure 1**, of this Non-Technical Summary (NTS).

1.1.5 Considering the nature and scale of the Project, a process of Environmental Impact Assessment (EIA) has been undertaken in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations') to identify the likely significant environmental effects of the Project.

1.1.6 An EIA Report has been produced, setting out the findings of the assessment process. The EIA Report accompanies an application for Planning Permission in Principle submitted to North Ayrshire Council.

1.1.7 This document is the Non-Technical Summary of the EIA Report. This summary document provides an overview of the assessment findings. Details of how to view the full EIA Report or to obtain further copies of this NTS are provided at the end of this Non-Technical Summary.

2 THE PROPOSED DEVELOPMENT

The Project Site and Surrounding Area

2.1.1 The Project is located on the west coast of Scotland, south of the village of Fairlie, and north of the EDF Hunterston Power Station. The Project would occupy approximately 50.7 ha of land on part of the former Hunterston Coal Yard within the wider Hunterston Port and Resource Centre (Hunterston PARC).

2.1.2 The area surrounding the Project is dominated by port infrastructure. This includes the Hunterston Marine Construction Yard located to the west of the Project site. The nearest residential property is located approximately 157m east of the Project site, beyond the A78 on Fairlie Moor Road.

2.1.3 Hunterston Nuclear Power Stations A and B are located approximately 2.7km to the southwest of the Project site. In addition, an electrical substation and a converter station are situated adjacent to these Nuclear Power Stations.

2.1.4 The location and geographic extent of the Project is presented in the Site Location Plan, **Figure 1**, of this Non-Technical Summary.

2.1.5 Further information regarding key environmental constraints located within and surrounding the Project site has been provided in **Section 5** of this Non-Technical Summary.

2.1.6 The location of key environmental constraints in relation to the Project site is illustrated in the Environmental Constraints Plan, **Figure 3** of this Non-technical Summary.

Description of Development

2.1.7 The Project is at an outline level of design and therefore, the description of the Project remains indicative and will be refined at a later stage in the application process. Notwithstanding, the Project for which Planning Permission in Principle is sought will comprise the construction and/or operation of the following key components shown on **Figure 2** of this Non-technical Summary:

- Preparation of a suitable development platform and provide suitable topography for landscape and drainage purposes.
- Steel portal framed buildings with a gross external area (GEA) of 281,500 $m^2$and a maximum height of 45m above ground level.
- Cable manufacturing equipment, research and development laboratory, control rooms, welfare facilites and heating and cooling plant to be housed within the steel portal framed buildings.
- Cable extrusion tower with a footprint area of 30m x 65m and maximum height of 185m above ground level.
- External plant, which would house switchgear and transformers, 12 cable carrying conveyors and 12 carousels 50m in diameter. The carousels would be connected to two pairs of roller-pathways, which would extend to the jetty head.
- Two pairs of tensioner towers at the jetty head, which would be connected to the roller pathways via chutes.
- Access roads from the existing port access road (A78), internal access and circulation road to provide access during consutrction and operation of the Project.
- Installation of drainage infrastructure to manage and control surface water within the Project Site.
- Landscape and ecological planting to avoid or minimise the impact of the Project on the receiving environment.

- Consturction working areas and laydown areas, which are to be located adjacent to the Project site, within the existing curtilage of Clydeport's landholding.

2.1.8 The Project would be able to produce approximately 167km of cable per month and will have a maximum storage capacity of approximately 2000km of high-voltage cable.

2.1.9 Construction of the Project would commence towards the end of 2022 and would be completed in a single phase over a 24-month period. The Project would remain operational for 25 years. Once this period has elapsed, the possibility to extend the operational lifetime would be reviewed. If it is determined that operation is not feasible beyond the 25-year period, the Project may be decommissioned, either in part or in full.

2.1.10 Site access will be achieved via a single point of access from the existing port access road via Irvine Road (A78) during the construction and operation of the Project.

2.1.11 The key parameters for each element of the Project are presented in the Parameters Plan (Factory) **Figure 2.1a** and Parameters Plan (Jetty) **Figure 2.1b** of this Non-Technical Summary.

Summary of Key Parameters

2.1.12 **Table 2.1** below provides a summary of the key parameters for each element of the Project which have formed the basis for the EIA.

Table 2.1: Key Parameters for EIA

Element of Project	Key Parameter	Measure
Project wide	Footprint	50.7ha
	Maximum storage capacity	2000km of cable
	Maxium production capacity	167km of cable (per month)
	Construction period	24 months
	Operation period	25 years
Steel portal framed buildings	GIA	234,290m^2
	GEA	281,500m^2
	Max height	45m AGL**
	Finished floor level	6.5m AOD*
Cable extrusion tower	Footprint area	30m x 65m
	Max height	185m AGL
Carousels	Number	12
	Diameter	50m
Cable carrying conveyors	Number	12
Roller pathways	Number	2 pairs (4 no.)
	Max height	11m AGL
Tensioner towers	Number	2 pairs (4 no.)
	Max height	13m AGL

*Above Ordnance Datum (AOD).

** Above Ground Level (AGL)

2.1.13 Within the above parameters, an illustrative masterplan has been developed. Approval of the detailed design will be a matter reserved for subsequent approval. The current illustrative masterplan demonstrating how the factory is likely to be built-out is provided at Indicative Masterplan (Factory) **Figure 2.2a** and Indicative Masterplan (Jetty) **Figure 2.2b** of this Non-Technical Summary.

2.1.14 The following sections of this Non-Technical Summary provide a more detailed description of the Project, including the construction, operation, and decommissioning phase.

Landscape and Drainage

Landscape

2.1.15 Landscaping proposals within the Project site would be focused in two areas. One area of landscaping would be at the Entrance Zone, including staff offices and visitor parking, located in the northwest region of the Project Site. The second area of landscaping would be at the Staff Zone, including staff welfare facilities, canteen, and maintenance building, located in the southeast region of the Project Site.

2.1.16 The landscaping within each of these areas would comprise native tree planting, planted verges and laying down of a permeable surface (e.g. Grasscrete) to create a more pleasant environment for staff arriving to work. In addition, landscaping proposals would be integrated with the Sustainable Urban Drainage Strategy (SuDS) to effectively manage surface water and maintain appropriate drainage within the Project site.

Drainage

2.1.17 Surface water drainage would be managed through an outline drainage scheme, which has been developed for the Project. Surface water runoff originating from car parking areas and concrete yard areas within the Project site would be managed by collecting and treating rainwater before being discharged into the Firth of Clyde via the existing outfall. Surface water runoff from roofs would be discharged without treatment.

2.1.18 The Project site is not currently served by an existing foul sewer drain. However, it is understood that Peel Ports intend to pursue a connection to the Scottish Water foul sewage network as part of delivering site-wide infrastructure to Hunterston PARC.

2.1.19 However, in the absence of an existing foul sewer drain (or as a temporary measure) foul water runoff will be collected locally to each building and pumped to a single packaged treatment plant. The treated effluent will then discharge into the surface water drainage network at a location agreed with the Scottish Environmental Protection Agency (SEPA).

2.1.20 A separate network discharging to large below-ground storage tanks will be provided for the collection of waste flows originating from the processing plant. A further network is provided for the collection and storage of lead contaminated flows. The below ground storage tanks will be emptied when full periodically and removed for treatment by tanker.

2.1.21 The construction phase will incorporate pollution prevention and flood response measures to ensure that the potential for any temporary effects on water quality or flood risk are reduced as far as practicable. Such measures will be implemented through the Code of Construction Practice (CoCP) and subsequent construction method statements contained within the Principal Contractor's Construction Environmental Management Plan (CEMP).

Access and Transport Management

2.1.22 Site access during the construction and operation of the Project will be achieved via a single point of access from the existing port access road via Irvine Road (A78).

Construction

2.1.23 Access to the Project site will be required for construction workforce traffic and Heavy Goods Vehicles (HGVs). In addition, there may also be the requirement to provide access for Abnormal Indivisible Loads (AILs), which are typically large items which cannot be broken down into smaller parts before being transported the Project site (e.g. battery buildings, cranes, transformers).

2.1.24 Additional traffic generated during construction of the Project would be managed through a Construction Traffic Management Plan (CTMP), which is to be produced at a later stage in the application process.

Operation and maintenance

2.1.25 Access to the Project site will be for required for vehicles delivering materials and the movement of staff. It is anticipated that operation of the Project will require approximately 900 full-time equivalent employees, including 738 factory workers and 162 support staff. Therefore, the Project will include parking provision for 30 HGVs and approximately 636 staff vehicles.

2.1.26 The location and geographic extent of parking provision within the Project site is presented in the Indicative Masterplan (Factory) **Figure 2.2a** of this Non-Technical summary.

Lighting

Construction

2.1.27 Construction of the Project would primarily take place during daylight hours (e.g. Monday to Friday 07:00-19:00 and Saturday 08:00-13:00). However, additional directional lighting may be required to facilitate construction of the Project during normal construction hours in the winter months. In addition, motion-activated directional security lighting may be used within the Project site.

2.1.28 Where possible, task lighting will be used for specific works to direct light towards the working areas during the night-time. Such task lighting will be positioned at low level on posts around the site and directed at the most frequently used areas of work. However, some floodlighting will be required for accesses and walking routes.

2.1.29 The Project design incorporates measures to reduce the impact of construction lighting on the environment, including solid fencing, which will be erected to limit light escaping beyond the boundary of the Project site. In addition, site offices located within the Project site will be internally lit and shutters can be closed at night to prevent light spill.

Operation and maintenance

2.1.30 It is anticipated that the Project would operate 24 hours a day. Therefore, external lighting would be required to allow for safe operation and security of the Project site at night. However, external lighting would be designed in accordance with an exterior lighting scheme, which would minimise light spill into the surrounding area. A lighting impact assessment is presented at Appendix 2.3 of the EIA report which demonstrates how this could be achieved.

Construction Phase

2.1.31 Construction of the Project would be undertaken in accordance with a CoCP, which would seek to avoid or minimise the environmental impact of construction activities. In addition, the CoCP will be supported by detailed Construction Method Statements, to be produced by the lead construction contractor, which will provide method statements for construction activities, detailing how the requirements for the CoCP are met.

2.1.32 It is anticipated that construction of the Project would commence towards the end of 2022 and would take approximately 24 months (104 weeks) to complete. Construction of the Project would take place from 07:00 to 19:00 (Monday to Friday) and 08:00 to 13:00 (Saturday). No construction works would take place on Sundays, public/ bank holidays or at night.

2.1.33 However, construction activities which are unlikely to generate high levels of noise (e.g. fit-out within buildings) may be undertaken outside of standard working hours, where these will not cause disturbance to the area surrounding the Project site.

2.1.34 Construction working hours would be subject to agreement with North Ayrshire Council. If works are required outside of these hours in exceptional circumstances, this would be agreed with the North Ayrshire Council prior to commencement of the activity.

2.1.35 At this stage in the application process, the broad sequence of activities required to facilitate construction of the Project will comprise:

- **Site setup (weeks 1-4)** – Securing the Project site and installing fencing, site cabins and temporary drainage.
- **Site Preperation and Enabling Works (week 1-18) -** Demoition of coal yard surface and earthworks. This phase will include any required remediation of contamination and removal of unsuitable material as appropriate.
- **Substructure (Weeks 4-31)** – Piling and laying raft foundations.
- **Superstructure (Weeks 11-47)** – Erection of steel frames, facades, floor slabs and the cable extrusion tower, inlcuding the basement.
- **Fitout (Weeks 10-104)** – Installation of the mechanical and engineering plant and internal finishes.
- **Externals (Weeks 3-104)** – Installation of permanent drainage, hard and soft landscaping, fencing and gates
- **Process Equipment (Weeks 21-104)** – Installation of factory production machinery, cable carousels and export conveyor and high-voltage testing facility.

2.1.36 Typical equipment to be used during the construction of the Project will include excavators, drilling rigs, graders (used to create flat surfaces), haulage vehicles, cranes, light goods vehicles, and heavy goods vehicles.

2.1.37 In addition, piling rigs may be required for the installation of foundations for structures within the Project site. All piling is anticipated to comprise augured/board type piling, except for sheet piling required for the construction of the extrusion tower basement.

2.1.38 The Project site would be fenced during the construction phase. It is the intention of the Applicant that the Project site would be registered under the Considerate Constructors Scheme or locally recognised certification scheme.

Special construction activities

2.1.39 The extrusion tower is to be constructed in a continuous process known as ‘slip forming’, which is the fastest method of construction for vertical reinforced concrete structures. The slip forming process requires a continuous supply of concrete from an on-site concrete batching plant that cannot be interrupted.

2.1.40 Therefore, slip-forming would occur between 07:00 and 00:00 (Monday to Saturday) and would take approximately 43 weeks to complete. Cleaning and preparation of slip forming equipment would take place on Saturday and Sunday, to prepare for further works the following Monday.

2.1.41 The requirement and operating conditions for slip forming outside of the standard working hours would be agreed with North Ayrshire Council prior to commencement of the activity, as to avoid noise becoming a potential nuisance to the area surrounding the Project.

Construction waste

2.1.42 The Project will largely be assembled from components that have been pre-manufactured off-site, (e.g. steel portal frame building and carousels). Therefore, the quantity of construction waste generated during the assembly and installation of each element of the Project is likely to be limited.

2.1.43 Notwithstanding, the CoCP will include good practice measures for managing waste generated during construction of the Project. All waste generated during the construction of the Project will be disposed of by a suitably licensed waste contractor.

2.1.44 Construction may require foundation excavations, depending on the final design of the Project. Spoil generated during foundation excavations would be re-used for earthworks and landscaping proposals within the Project site. Where spoil cannot be re-used on-site, this material would be transported away from site.

2.1.45 The impact of additional vehicle movements required for the transport spoil off-site has been considered in the assessment of Traffic and Transport where appropriate.

Operational Phase

2.1.46 The anticipated operational lifetime of the Project is 25 years. The Project is expected to operate 24 hours a day. In addition, the Project will require approximately 900 full-time equivalent employees, including 738 factory workers and 162 support staff.

2.1.47 Operation of the Project will require the consumption of materials required for the manufacture of the cables and the use of natural resources, including a mains water supply. Operation of the Project will also generate methane, alpha-methylstyrene, cumylalcohol and acetophenone as by-products of the cable manufacturing process.

2.1.48 Operation of the Project and the cable manufacturing process is not anticipated to generate large quantities of waste. Notwithstanding, waste generated during operation of the Project would be segregated, recycled (where possible) and disposed of in accordance with North Ayrshire Council waste collection arrangements.

Decommissioning Phase

2.1.49 The Applicant intends to review the feasibility of extending the operational lifetime of the Project beyond 25 years. An extension of the operational lifetime of the Project would be dependent on prevailing market conditions. If the decision is made to extend the operational lifetime, the Project would be suitably upgraded and would adhere to the any relevant approvals process in place at that time.

2.1.50 Should the decision be made not to extend the operational lifetime, the Project would be decommissioned and all above ground structures would be dismantled and removed. Where possible, component materials would be re-used or recycled. Where component materials cannot be repurposed, these would be removed and transported to an appropriate waste disposal facility by a suitably licensed contractor.

2.1.51 With regard to below ground infrastructure (e.g. foundations), the decision on how much of the Project will be retained will be agreed with the landowner and other interested parties.

2.1.52 Taking the above information into account, the potential effects of decommissioning activities are considered to be equal to or less than those arising because of construction of the Project.

3 NEED AND ALTERNATIVES CONSIDERED

3.1.1 This chapter of the Non-Technical Summary provides describes the need for the Project and the main alternatives considered by the Applicant during the EIA process. It includes a summary of the main reasons for the selection of the Project site and a description of the alternative design and layout options considered.

Need for the Project

3.1.2 In May 2019, the Scottish Government declared a climate emergency and pledged to drastically reduce emissions of greenhouse gases over the next ten years. Therefore, there been a focussed effort in Scotland to curb the emissions of greenhouse gases and develop additional sources of renewable electricity.

3.1.3 Renewable energy developments, such as offshore wind farms and interconnectors (high-voltage cables that connect the electricity systems of neighbouring countries) require significant lengths of high-voltage cables to transfer electricity from one location to another. For example, high-voltage cables are often used to transfer electricity over large distances between an offshore windfarm array and an onshore electrical substation.

3.1.4 However, increasing demand for high-voltage cable has resulted in long delays due to supply backlogs, that risk the delivery of renewable energy developments at the pace and scale required to meet the Scottish Governments climate change objectives.

3.1.5 Therefore, there is an urgent need for an increased supply of high-voltage cables to serve the growing demand for renewable energy developments. The Project will address this issue by producing UK manufactured high-voltage cable suitable for interconnectors and offshore wind farms, allowing developers of renewable energy developments to obtain sufficient quantities of the critical high-voltage cable more efficiently and avoiding unnecessary delay.

3.1.6 In summary, the manufacture of sufficient high-voltage cable of the type to be produced by the Project is critical to the delivery of renewable energy developments and will be integral to achieving the Scottish Governments climate change objectives over the next ten years.

Alternatives Considered

Project Site Location

3.1.7 The Applicant conducted an exhaustive search of available ports in the UK that could support the effective operation of the Project. The Applicant considered the following operational requirements when evaluating the suitable of ports:

- The Project site requires a significant area of land adjacent to a high-quality port facility with deep water access for large cable laying vessels.
- The Project site must be located near a power source capable of delivering approximately 40 megawatts of electricity, required to run the cable manufacturing facility.
- The Project site requires excellent road and rail links for the delivery of material and access to a highly skilled workforce.

3.1.8 There are a limited number of ports in the UK that would be capable of hosting the Project whilst meeting all operational requirements, including those listed above. Therefore, the Applicant is satisfied that the Project is suitably located, considering the following opportunities and environmental constraints:

- land availability;
- availability of a large skilled workforce;

- suitability of the jetty and berth;
- its proximity to other energy infrastructure able to supply the necessary power requirement;
- access to the trunk road network, public transport and a rail freight oportunity;
- its location away from main settlements; and
- its location in an area of low flood risk.

Project Layout and Design

3.1.9 An evaluation of Project site constraints and opportunities was undertaken to inform the site layout and design. The Project presents an opportunity to provide the following:

- access to the existing jetty for cable export;
- connectivity by public transport, walk, cycle and road at the Hunterston PARC entrance;
- optimum east to west arrangement of the process buildings from raw material to finished product and cable export;
- retention of the protected woodland bund to the east to retain visual screening of the Project;
- creation of a suitable drainge network; and
- provide safe and optimal access to the Project site from the adjacent road network allowing access for HGVs and emergency vehicles.

3.1.10 The following design constraints were identified that influenced the current layout and design of the Project:

- existing common roads and railway tracks;
- other commercial interests on adjoining plots; and
- as yet undeveloped site-wide infrastructure to support approximately 900 full time workers.

3.1.11 The EIA process has been used to inform the design and layout of the Project, through the identification of important environmental constraints/ effects and issues raised during consultation. This has resulted in several iterations of the design and layout of the Project.

3.1.12 In addition, the layout, location, and size of specific elements of the Project (e.g. buildings and equipment) have also undergone several design iterations to ensure safe and effective operation.

3.1.13 Iterative design changes made to the Project are presented in Iterations of the Parameters Plan **Figure 3.1** of the EIA Report. An explanation of why the chosen design and layout of the Project has emerged is provided in Chapter 3 of the EIA Report.

3.1.14 In the absence of the Project, the national demand for renewable energy would continue to grow leading to further supply backlogs of high-voltage cable and additional delays in the delivery renewable energy developments over time. This would make meeting the Scottish Governments climate change objectives more difficult by inhibiting future reductions in greenhouse gas emissions. XLCC Ltd has therefore not considered a do-nothing scenario.

4 CONSULTATION, SCOPE OF ASSESSMENT AND METHODOLOGY

Scoping and Consultation

4.1.1 Scoping is the process of identifying the issues to be addressed in the EIA and sets the context for the assessment. A request for a Scoping Opinion was submitted by RPS on behalf of the Applicant to North Ayrshire Council on 10 November 2021. A response was provided by North Ayrshire Council in the form of a Scoping Opinion on the 17th December 2021.

4.1.2 A copy of the Scoping Report submitted to North Ayrshire Council is provided in Appendix 4.1 of the EIA Report. A copy of Scoping Opinion provided by North Ayrshire Council is provided in Appendix 4.2 of the EIA Report.

4.1.3 Responses were received from a range of consultees contacted by the North Ayrshire Council. The responses to scoping are provided in Appendix 4.3 of the EIA Report.

4.1.4 Considering the nature, size and location of the proposed development, the information provided in the Scoping Opinion and other consultation responses provided throughout the EIA process, the following topics have been covered within the EIA Report:

Table 4.1: Information Provided within the EIA Report

Structure of ES	
Non-Technical Summary	Summary of the EIA Report using non-technical terminology
Volume 1: Text	
	Glossary
Chapter 1	Introduction
Chapter 2	Project Description
Chapter 3	Need and Alternatives Considered
Chapter 4	Environmental Assessment Methodology
Chapter 5	Ecology and Nature Conservation
Chapter 6	Historic Environment
Chapter 7	Seascape, Landscape and Visual Impact Assessment (SLVIA)
Chapter 8	Hydrology and Flood Risk
Chapter 9	Hydrogeology, Geology and Ground Conditions
Chapter 10	Traffic and Transport
Chapter 11	Noise and Vibration
Chapter 12	Climate Change
Chapter 13	Air Quality
Chapter 14	Socio-economics
Volume 2: Figures	
Figures and drawings to accompany the EIA Report.	
Volume 3: Appendices	
Specialist reports forming technical appendices to the main text.	

Environmental Assessment Methodology

4.1.5 EIA is a means of identifying and collating information to inform an assessment of the likely significant environmental effects of a development. For each of the key environmental topics in the EIA Report, the following have been addressed:

- Methodology;
- Description of the existing environmental (baseline) conditions;

- Identification of and assessment of the significance of likely effects arising from the proposed development;
- Identification of any mitigation measures proposed to avoid, reduce and, if possible, remedy adverse effects; and
- Assessment of any cumulative effects with other proposed developments planned in the area.

Project Design Parameters

4.1.6 **Table 2.1** of this Non-Technical Summary sets out the indicative design parameters and the maximum design scenario for the Project. Each topic author has reviewed this information and identified which parameters represent a worst case scenario for their assessment of the Project. Therefore, regardless of the final design of the Project, the worst case scenario has been assessed during the EIA.

Significance of Effects

4.1.7 Significance levels are defined separately for each environmental topic. Unless separately defined in the topic chapters, the assessments consider relevant topic specific guidance, based on the following scale and guidance:

- **Substantial**: Only adverse effects are normally assigned this level of significance. They represent key factors in the decision-making process with regard to planning consent. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer the most damaging impact and loss of resource integrity.
- **Major**: These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process.
- **Moderate**: These beneficial or adverse effects may be important, but are not likely to be key decision-making factors. The cumulative effects of such factors may influence decision making if they lead to an increase in the overall adverse effect on a particular resource or receptor.
- **Minor**: These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process, but are important in enhancing the subsequent design of the Project.
- **Negligible**: No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

4.1.8 The terms minor, moderate, major, and substantial apply to either beneficial or adverse effects. Effects may also be categorised as direct or indirect, secondary, short, medium, or long term, or permanent or temporary as appropriate.

Cumulative Effects

4.1.9 The EIA Regulations require consideration of cumulative effects, which are effects on a receptor that may arise when the Project is considered together with other proposed developments in the area.

4.1.10 The cumulative effects of the Project in conjunction with other proposed schemes have been considered within each topic chapter of the EIA Report. Other developments considered within the cumulative assessment include those that are:

- under construction;
- permitted, but not yet implemented;

- submitted, but not yet determined; and
- identified in relevant local planning policy documents (and emerging planning policy - with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.

4.1.11 It is noted that developments that are built and operational at the time of submission of the EIA Report, form part of the existing baseline conditions. Further information regard to cumulative effects is provided in **Section 5** of this Non-Technical Summary below.

4.1.12 An indicative list and the geographic location of other proposed developments in the surrounding area is presented in **Appendix 4.4** and **Figure 4.1** of the EIA Report respectively.

5 SUMMARY OF ENVIRONMENTAL EFFECTS

5.1.1 This section of the Non-Technical Summary provides a summary of the findings of the EIA process. For full details of the assessments, please refer to the relevant section(s) of the EIA Report.

5.1.2 The location of key environmental constraints in relation to the Project site is illustrated in the Environmental Constraints Plan, **Figure 3** of this Non-technical Summary.

Ecology and Nature Conservation

Part 1

Introduction

5.1.3 The potential effects arising from the construction and operation of the Project on ecology and nature conservation has been considered in **Chapter 5** of the EIA Report. The findings of the ecology and nature conservation assessment are summarised below.

Baseline

5.1.4 Baseline information was compiled over a series of site surveys undertaken throughout year of 2021. The assessment of ecology and nature conservation was undertaken considering the sensitivity of any receptors identified during the baseline assessment and mitigation measures embedded into the design of the Project.

Methodology

5.1.5 The assessment of ecology and nature conservation considered the following impacts arising from the construction and operation of the Project:

- Direct and indirect permanent loss and change in habitat; and
- Disturbance and effect upon protected and/or notable species.

5.1.6 Following the identification and assessment of the key receptors and considering the potential effects listed above, a range of appropriate mitigation measures and best practice methods/guidance will be embedded into the design.

5.1.7 In addition, the following mitigation measures with respect to ecology and nature conservation will be undertaken:

- A pre-construction survey prior to the construction phase for evidence of badger, otter and red squirrel.
- The appointment of an Ecological Clerk of Works (ECow) during the construction phase of works; and
- The production of a Construction and Environmental Management Plan (CEMP).

Likely Effects

Construction

5.1.8 The assessment determined that construction of the Project would result in a **Minor Adverse** effect on ecology and nature conservation, which is **not significant**.

Operation

5.1.9 The assessment determined that operation of the Project would result in a **Minor Adverse** effect on ecology and nature conservation, which is **not significant**.

Part 2 – Non-Breeding Birds

Introduction

5.1.10 Chapter 5 (Part 2) of this EIA report considers matters relevant to ornithology, covering all impacts during the construction and operation phases. The effects arising from the decommissioning phase are predicted to be similar in extent and duration as construction and have therefore not been included in this assessment.

Methodology

5.1.11 Information on ornithology within the Project area was collected through a desktop review of existing datasets and studies, Scottish and UK statutory guidance, analysis of data collected during the site-specific surveys (undertaken between September and December 2021) and consultation with relevant stakeholders.

5.1.12 The following potential effects on the ornithology of the Project were considered:

- Direct and indirect permanent loss and change in habitat; and
- Disturbance during construction and operation.

Likely Effects

Construction and Decommissioning

5.1.13 Disturbance as a result of construction or decommissioning activities was considered for waders and waterfowl at high-tide roosts and foraging areas. Due to the localised and temporary nature of the activities and the small number of birds affected as a result, these were all considered to be of low to negligible impacts of minor to moderate adverse significance; however, due to the relatively low abundance of IOFs in the inter-tidal and nearshore area, and based on the previously reported conservation status and recoverability levels for each species, in combination with vulnerability, it is unlikely that the effects would be beyond **minor adverse**, which is **not significant** in EIA terms.

Operation

5.1.14 Following the successful design and implementation of mitigation measures, it is anticipated that the majority of operational effects on sensitive IOF will be **negligible** and **not significant** in EIA terms.

5.1.15 The extrusion tower has the potential to significantly impact on bird species present within the local area derived from changes in orientation, disorientation and attraction or repulsion from the altered light environment, which may, in turn affect foraging, migration or communication. Following the use of appropriate mitigation such as directional lighting, shielding light sources, reducing the intensity of lights and following the external lighting scheme design for the Project, it is considered that the impacts on local bird populations would not extend beyond **minor adverse**, which is **not significant** in EIA terms.

5.1.16 An assessment of cumulative impacts on ornithology from the Project together with other developments within approximately 10km were assessed, which were predicted to be **non-significant** in EIA terms, following successful implementation of mitigation, specifically when considering traffic management and road use. However, documentation will be reviewed and updated throughout the construction phase if further potential risks are identified.

Historic Environment

Introduction

5.1.17 The potential effects arising from the construction and operation of the Project on the historic environment has been considered in **Chapter 6** of the EIA Report. The findings of the historic environment assessment are summarised below.

Baseline

5.1.18 The historic environment chapter of the EIA Report has considered the potential effects of the Project upon heritage assets within the Project site and in the surrounding area. It is based on a baseline study comprising desk-based research and site visits, supported by visualisations.

5.1.19 The baseline assessment identified that there were no designated heritage assets located within (or adjacent to) the Project site.

5.1.20 The Project site takes in the former Hunterston Ore Terminal. Hunterston Ore Terminal was built in the 1970s on agricultural and intertidal land in an area that lay in the intertidal zone through most of the Holocene. Therefore, it was determined that the Project site would exhibit low archaeological potential.

5.1.21 However, this archaeological potential was likely to have been removed completely during the construction of the Hunterston Ore Terminal, which is known to have involved ground reduction and other disturbance that would have removed any archaeological features that may have been present within the Project site.

5.1.22 Views of the Project site from heritage assets are largely screened by woodland, topography, or existing buildings/ structures. However, due to the height of the Project, it has potential to be visible from several designated heritage assets located in the surrounding area, which may result in a change in their setting.

Likely Effects

Construction

5.1.23 The Hunterston Ore Terminal itself is considered to represent a heritage asset of local importance. However, plant associated with Hunterston Ore Terminal located within the Project site has been removed. Therefore, construction of the Project has no potential to physically affect heritage assets and no mitigation has been proposed with respect to the construction of the Project.

5.1.24 The assessment determined that construction of the Project had **no potential** to result in an adverse effect on the historic environment and is therefore **not significant**.

Operation

5.1.25 The assessment determined that operation of the Project would result in a **Moderate Adverse** effect on the setting of Millport Conservation Area, which is **significant**. However, it is considered that mitigation of this predicted effect is not possible as the effect is a result of the Project appearing in views from the Conservation Area. This cannot be prevented, reduced or otherwise mitigated and therefore no mitigation measures have been proposed.

Seascape, Landscape and Visual Effects

Introduction

5.1.26 The potential effects arising from the construction and operation of the Project on the seascape, landscape and visual receptors has been considered in **Chapter 7** of the EIA Report. The findings of the seascape, landscape and visual impact assessment are summarised below.

Methodology

5.1.27 The Seascape, Landscape and Visual Resources chapter of the EIA Report describes and analyses the existing character of the Project Site and study area, and the views people experience.

5.1.28 The seascape, landscape and visual assessment identifies the changes to the character and features of the landscape and seascape that would arise during the construction and operation of the Project. In addition, it considers the visual effects that would arise.

5.1.29 The seascape, landscape and visual assessment reports on studies (including a combination of field surveys and desktop research) to describe, classify, and evaluate the existing resources to form a basis for the assessment of the likely effects of the Project.

5.1.30 As a matter of best practice, the seascape, landscape and visual assessment has been undertaken based on relevant policy, legislation, and guidance. The key guidance for landscape and visual resources is the Landscape Institute and Institute of Environmental Management and Assessment (2013) 'Guidelines for Landscape and Visual Impact Assessment' 3rd Edition.

5.1.31 To establish an appropriate study area for the Project, a Zone of Theoretical Visibility (ZTV) has been prepared based on the 185m high cable extrusion tower and a radius of 50km. This has ensured that all landscape, seascape, and visual receptors that may experience significant effects are identified.

5.1.32 The 50km ZTV used to inform the seascape, landscape and visual impact assessment is presented in **Figure 4.0** of this Non-Technical Summary.

Baseline

Site Character

5.1.33 The majority of the Project Site comprises a large area of bare ground, rubble and hardstanding which remain following its previous use as the Hunterston Coal Yard and ore terminal and has a poor condition and low sensitivity to change.

5.1.34 The deep water jetty for the mooring of vessels extends into the Firth of Clyde and would be retained and improved as part of the proposed scheme. The existing earth bunds and mature tree and shrub planting to the east of the Project Site would be retained.

Character of the Wider Study Area

5.1.35 The landscape and seascape that surround the Project Site vary greatly in their quality and value. The Project Site is in the Raised Beach Coast and Cliffs Landscape Character Type where it forms a thin strip of land facing towards the Firth of Clyde. The level terrace of land comprises farmland, settlements, roads and railway and industrial land uses at Peel Port, the former wind turbine testing facility and Hunterston Nuclear Power Station.

5.1.36 The farmland and rugged moorland to the east which covers the uplands of the Clyde Muirshiel Regional Park including Wild Land Areas has considerably higher value and provides a distinct contrast with the Project Site. The islands of Great and Little Cumbrae and associated Special

Landscape Areas are located approximately 1.2 km and 4.2 km west of the Project Site respectively and form a large part of the attractive local seascape context.

5.1.37 The wider study area includes the attractive, rugged mountains and coastline of the Isle of Arran, including areas designated as National Scenic Areas, Wild Land Areas and Special Landscape Areas over 20 km to the west.

5.1.38 The highly scenic, steeply sloping uplands around sea lochs within the Loch Lomond and the Trossachs National Park are located approximately 26 km to the north of the Project site.

5.1.39 At a regional scale, the Project site lies within the Upper Firth of Clyde coastal character area. The character area is focussed on the Cumbrae islands and the coastlines of the mainland to the east and the Isles of Bute and Arran to the west, extending north along the Firth of Clyde to Dunoon, which coincides with key areas of the study area.

5.1.40 The location and geographic extent of designated landscapes within and surrounding the Project site is presented in **Figure 5** of this Non-Technical Summary.

Visual Baseline

5.1.41 Representative viewpoints for seascape, landscape and visual assessment have been agreed with Scottish Natural Heritage and North Ayrshire Council. Photographs have been taken at each viewpoint and used to create a panorama of the view. People based either on land or in the sea with views towards the Project Site include the following:

- Walkers, equestrians and cyclists using the public rights of way network including the Ayrshire Coastal Path;
- Users of beaches, public open space;
- Occupiers of residential properties at Fairlie, Millport, Largs, West Kilbride, Dunoon, Brodick and Corrie;
- Tourists and visitors within settlements;
- Tourists and visitors at attractions including Hunterston Castle and Kelburn Estate;
- Occupiers of vehicles travelling on the A78 Irvine Road;
- Passengers on trains on the west coast railway line;
- Passengers on ferries to Cambrae and Isle of Arran; and
- Residents and walkers at high points at Goldenberry Hill, Clyde Muirshiel Regional Park and Wild Land Area, Goat Fell Isle of Arran National Scenic Area and Loch Lomond and the Trossachs National Park.

5.1.42 The seascape, landscape and visual impact assessment also considered people using the sea recreationally and commercially as sensitive receptors.

5.1.43 The visualisations of key viewpoints used to inform the seascape, landscape and visual impact assessment are presented in **Figures 6.1, 6.2, 6.3 and 6.4** of this Non-Technical Summary.

Proposed Development

5.1.44 The size, scale and layout of the Project is defined by the operational processes that would take place within the factory buildings. The 185 m high extrusion tower would be a concrete structure rising out of a cluster of lower level, largely steel framed buildings between 20 m and 45 m high.

5.1.45 The building design will use metal cladding to visually break up the scale and mass of the built forms and reflect the various colours, textures and forms within the surrounding landscape and seascape of the Firth of Clyde. The jetty would incorporate new lighting and infrastructure for the cable export system.

5.1.46 The design would retain the existing mature tree and scrub planting on the earth bund east of the Project Site. Landscape planting proposals would be focused around offices, car parking and welfare facilities.

5.1.47 Areas of wildflower planting would be established in open areas of the site. Locally native species would be selected to attract wildlife.

5.1.48 Colour recomendations would be made for the buildings in consultation with the local planning authority to reflect the natural environment.

5.1.49 A management plan would maintain the proposed landscape and ecological planting. The details of the proposed building design, materials and landscape proposals will be controlled via further planning applications.

Likely Effects on Landscape and Seascape Character

Construction

5.1.50 The activities required to facilitate construction of the Project would temporarily change the existing poor condition of the disused Project Site. There would be minimal adverse impacts on the site itself during the construction phase and effects would not be significant. The large scale construction activities would influence the character of the surrounding landscape and seascape within the 50 km radius study area.

5.1.51 The activities required to facilitate construction of the Project would be visible from the ten landscape character types within the surrounding study area. The temporary, short term effects on these character types, including the very highly valued Isle of Arran and Waterhead Moor, would generally range from **Minor to Moderate** adverse, which is **not significant**.

5.1.52 The activities required to facilitate construction of the Project would temporarily form a discordant feature that would influence the complex seascape character of the Outer Firth with Islands coastal character type, including nationally designated landscapes/seascapes. The seascape character area encompasses all the landscape character types assessed and forms an overview of how these different areas connect and combine to form a distinct part of Scotland.

5.1.53 Overall, it is considered that the construction of the Project would result in a **Major** adverse level of effect in the short term, which **is significant**.

Operation

5.1.54 The Project would introduce a large scale industrial development into a site which comprises a large area of previously industrial bare ground alongside the retained deep water jetty. The sensitivity of the Project site is considered to be low and its remediation through redevelopment can deliver some beneficial changes. There would be no loss of any important features or characteristics and no significant adverse effects.

5.1.55 The Project would add to the urban character of this part of the North Ayrshire coastline forming a new landmark in the surrounding landscape. Ten landscape character types have been assessed within the study area, including nationally designated landscape on the Isle of Arran and Waterhead Moor.

5.1.56 The long term effects on landscape character types within the 50 km radius study area would generally range from **Minor to Moderate** adverse, which is **not considered individually to be significant**.

5.1.57 The Outer Firth with Islands Coastal Character Type is focused on the location of the Project Site and extends out to coincide relatively closely with the proposed ZTV. The surrounding uplands and mountains are of high or very high sensitivity and form a backdrop or distinctive focal points at a national scale. Panoramic views throughout the Firth of Clyde allow much of the area to be

experienced as a single unit. The proposed development would form a recognisable, prominent, or dominant new feature that could influence this character.

5.1.58 When considered as a single seascape unit, operation of the Project would result in a **Moderate to Major** adverse level of effect in the long term, **which is significant.**

Likely Effects on Views

Construction

5.1.59 The activities required to facilitate construction of the Project would temporarily change views gained by people within the study area. There would be **no significant adverse effects** on views at any of the individual representative viewpoint locations assessed.

5.1.60 However, there would be significant sequential effects on walkers using the Ayrshire Coastal Path which follows most of the coastline of the mainland within the study area. The construction site and activities would be visible within journeys of up to 12 km when walking towards the Project Site. Significant adverse effects would also be experienced by people using the sea west of the Project site near the construction site and activities.

5.1.61 The activities required to facilitate construction of the Project would be visible and at times dominant in views across the open water resulting in a **Major** adverse level of effect, **which is significant**.

Operation

5.1.62 The large scale of the proposed industrial buildings and in particular the height of the main tower would form a prominent or dominant addition to views in a coastal location in the Firth of Clyde. The development would break the skyline of the Clyde Muirshiel uplands, hills above sea lochs and mountains of Arran. The proposed lighting associated with the scheme would be prominent in a relatively dark location.

5.1.63 People using footpaths, open spaces or the sea would experience a **Minor to Major** adverse level of effect, which is significant in the day and at night for people using the Ayrshire Coast Path, for walkers at night using the Black Hill Circular Walk, Clyde Muirshiel Regional Park and at Great Cumbrae Island, Farland Point. Effects on private views from some houses east of the Project Site and people using the sea west of the site would also be significant.

5.1.64 Effects on views gained by people within other parts of the study area would **not be significant**. In some near views the cable factory development would replace a large part of the visible area of disused land at Hunterston, providing some beneficial visual effects which are able to partially offset any adverse effects.

5.1.65 In other near views the tower structure would form a prominent and somewhat incongruous addition to some rural views where no other industry is visible. In other distant and mid-distance views of partially settled and developed coastline and wild and attractive seascape and islands, the large scale of the buildings would form either a prominent, recognisable, or barely perceptible addition to the view. The character of coastal views would be altered where the development would form a new focus in views. At night new light sources and rows of high level red warning lights on the tower would be visible.

5.1.66 The long term effects on people's views in these locations, during operation of the Project, would range from **Negligible to Moderate** adverse, which is **not significant**.

5.1.67 The potential cumulative effects between the Project and other developments is discussed in the Cumulative Effects section of this Non-technical Summary.

Hydrology and Flood Risk

Introduction

5.1.68 The potential effects arising from the construction and operation of the Project on hydrology and flood risk has been considered in **Chapter 8** of the EIA Report. The findings of hydrology and flood risk assessment are summarised below.

Baseline

5.1.69 The baseline hydrology and flood risk were characterised by a desk-top study of published sources of information and consultation.

5.1.70 The flood risk within and surrounding the Project site is illustrated in the Environmental Constraints Plan, **Figure 3** of this Non-technical Summary.

Fluvial Flooding

5.1.71 Most of the Project site is located within an area designated as having little to no risk of fluvial flooding (rivers or streams), whereby the annual probability of flooding is classified as less than 0.1%.

5.1.72 There is a linear area in the north of the Project site, including part of the access road and the water sump, which is classified as being at high risk of fluvial flooding, whereby the annual probability of flooding is classified as 10%. However, further analysis of the topographic survey indicates that flooding is unlikely to extend to the water sump and Project site.

5.1.73 The Indicative Master Plan (Factory) **Figure 2.2a** and Indicative Masterplan (Jetty) **Figure 2.2b** show that all built development within the Project site has been steered to areas of lowest flood risk, beyond areas susceptible to fluvial flooding.

Coastal Flooding

5.1.74 The Project site is located within an area which is designated as having little to no risk of coastal flooding, whereby the annual probability of flooding is classified as less than 0.1%.

Surface Water Flooding

5.1.75 The Project site is predominantly located in an area designated as having little to no risk of flooding from surface water, whereby the annual probability of flooding is classified as less than 0.1%.

5.1.76 However, the northern boundary of the Project site partially coincides with areas classified as having a high and medium risk of surface water flooding, with annual probabilities of flooding of 10% and between 10% and 0.5% respectively.

5.1.77 In addition, there are localised areas located within the Project site that are classified as having medium to high risk from surface water flooding. These localised extents susceptible to surface water flooding appear to correlate with low-lying areas of land within the Project site.

Ground Water Flooding

5.1.78 The Project site is located within an area potentially vulnerable to groundwater flooding. However, baseline data with regards to groundwater levels was not available at the Project site. Water present within the boreholes was subject to tidal fluctuations.

Methdology

5.1.79 The assessment of hydrology and flood risk focuses on the potential for increased flooding and waterbody disturbance because of the Project.

5.1.80 Based on the information gathered, the environmental impacts of the Project on hydrology and flood risk during the construction and operation phase have been assessed, and mitigation measures that could minimise reduce or prevent the possible adverse environmental impacts have been proposed.

Mitigation

5.1.81 In relation to Hydrology and Flood Risk several designed-in mitigation measures have been proposed to reduce the potential for impacts of the development both during construction and operation.

Likely Effects

5.1.82 The assessment of hydrology and flood risk identified the following potential effects during the construction and operation of the Project:

- polluted runoff to surrounding waterbodies and SSSIs;
- turbid water run-off / spills may have an effect on surrounding ecosystems; and
- a disruption of on-site drainage networks due to heavy vehicle movement and construction.

5.1.83 The hydrology and flood risk impact assessment has determined that the development will have **no significant effects** on hydrology and flood risk, following the implementation of appropriate and agreed upon mitigation measures.

Hydrogeology, Geology and Ground Conditions

Introduction

5.1.84 The potential effects arising from the construction and operation of the Project hydrogeology, geology and ground conditions has been considered in Chapter 9 of the EIA Report. The findings of hydrogeology, geology and ground conditions assessment are summarised below.

Baseline

5.1.85 The Project site is underlain by superficial Marine Beach and Raised Beach Deposits overlying the Kelly Burn Sandstone. The underlying groundwater forms part of the West Kilbride and North Ayrshire Coastal waterbodies in the Clyde basin district and classifies the overall groundwater quality as good. The site is not indicated to be located in a groundwater Source Protection Zone and there are no sensitive groundwater abstractions in the vicinity of the site.

5.1.86 The nearest surface water feature is the Largs Channel coastal water body immediately west of the site and numerous watercourses surround the site the closest being tributaries of Glen Brun and Burn Gill. Within the Largs Channel is Southannan Sands which is designated a Site of Special Scientific Interest (SSSI).

5.1.87 A review of historical maps indicates the northern part of the site is reclaimed land which was developed (circa 1979) along with the remainder of the site as a coal stockyard as part of the Hunterston Ore Terminal. It is understood that the reclamation works are likely to have included the import of quarried aggregate from local sources however the extent and nature of imported material used for this purpose is unconfirmed. Made Ground is expected to be present across the Project site because of the past construction and demolition activities.

5.1.88 Off-site historical potential sources of contaminants of concern include railway lines, storage tanks and electricity substations.

5.1.89 A Phase 2 ground investigation of a site immediately south of the Project site comprised a series of trial pits and hand augers. It identified no contaminant exceedances of Generic Assessment Criteria for a commercial land use in relation to the underlying soils. Metal concentrations within groundwater encountered during trial pit excavation exceeded selected marine surface water screening values.

Methodology

5.1.90 The assessment has considered potential impacts on the underlying aquifers, surface watercourses, ecological sites, and human health. The Project incorporates mitigation measures, including the implementation of a detailed CoCP and installation of an on-site drainage system and use of best practice pollution control measures.

Likely Effects

Construction

5.1.91 With the proposed mitigation measures in place, the assessment determined that construction of the Project had **no potential** to result in an adverse effect on hydrogeology, geology and ground conditions and is therefore **not significant**.

Operation

5.1.92 With the proposed mitigation measures in place, the assessment determined that operation of the Project had **no potential** to result in an adverse effect on hydrogeology, geology and ground conditions and is therefore **not significant**.

Traffic and Transport

Introduction

5.1.93 The potential effects arising from the construction and operation of the Project on traffic and transport has been considered in **Chapter 10** of the EIA Report. The findings of traffic and transport assessment are summarised below.

Baseline

5.1.94 The Traffic and Transport environment for the Project is characterised by a fairly mature semi-rural network or pedestrian/cycle and road infrastructure, with a main multi-modal access point off the A78(T).

5.1.95 The A78(T) is a two-way 7.3m single carriageway road. It is generally of a standard that can accommodate mixed-type traffic. To the south-east of the site, the A78(T) bypasses Ardrossan and becomes a two-way dual carriageway from Dalry Road at the Chapel Hill roundabout.

5.1.96 A 3m wide combined footway/cycleway lies on the western side of the carriageway. While this width is not continuous further south, the route runs alongside the A78(T) and forms part of the future National Cycle Route 753 (NCN753) which will extend along the coast to link NCN73 in Ardrossan with the NCN75 at Gourock.

5.1.97 Baseline conditions have been informed by a review of infrastructure and amenity, as well as traffic surveys sourced from the Department for Transport for 15 locations. These traffic surveys were factored to represent a common 2022 Baseline situation, representing the period of construction and a 2024 Forecast Baseline to represent conditions on the opening of the Project.

Methodology

5.1.98 From the traffic survey information, it has been possible to determine the magnitude of impact arising from the Project based on the changes in traffic that would occur across the road network. These changes have been presented for both 'All vehicles' and more specifically for 'HGVs' for all of the links for which traffic data was available.

5.1.99 However, a more detailed assessment was undertaken considering the Highway Users at the following identified locations (according to the following receptor sensitivity):

- A78 Main Street, Largs (High);
- A78 Main Road, Fairlie (Medium); and
- Abbey Primamry and Kilwinning Academy Schools (Low).

5.1.100 The environmental criteria relating to Traffic and Transport that have been assessed are as follows:

- Pedestrian Severance and Delay;
- Driver Stress and Delay;
- Pedestrian and Cycle Amenity; and
- Accidents and Road Safety.

5.1.101 The Project includes specific mitigation to off-set its impacts during construction and operation phases. These measures include the following:

- Construction Phase:
  - Commitment to implement a CTMP with, from the perspective of Traffic and Transport, specific restrictions on the routeing of HGVs.
- Operational Phase:
  - Provision of bus stops on the A78 or u-turn facilities at entrance to the site;
  - Extension the footway/cycleway on site access road to enhance accessibility for active modes of travel; and
  - Impelmentation of a Travel Plan to promote sustainable transport.

Likely Effects

Construction

5.1.102 The assessment determined that construction of the Project would result in a **short-term minor** adverse effect on all three sensitive receptors across all Traffic and Transport environmental criteria, which is **not significant**.

Operation

5.1.103 The assessment determined that operation of the Project would result in the following effects on traffic and transport:

- A **short-term minor** adverse effect on Pedestrian Severance and Delay, Driver Stress and Delay Pedestrian and Cycle Amenity at the sensitive receptor identified in Largs and Fairlie, which is **not siginfcant**;
- A **negligible** effect on Pedestrian Severance and Delay, Driver Stress and Delay Pedestrian and Cycle Amenity at the sensitive receptor identified in Kilwinning, which is **not signficant**; and

- A **short-term minor** adverse effect on all three sensitive receptors in relation to Accidents and Road Safety, which is **not significant**.

5.1.104 The individual and combined assessment of all changes in conditions reported across the Traffic and Traffic environmental criteria leads to the conclusion that the impact of the Project will **not be significant**, during both the construction and operation of the facility.

Noise and Vibration

Introduction

5.1.105 The potential effects arising from the construction and operation of the Project on noise and vibration has been considered in **Chapter 11** of the EIA Report. The findings of noise and vibration assessment are summarised below.

Baseline

5.1.106 The Project site is in a rural location with the surrounding uses being mainly agricultural and woodland. There is a wildlife sanctuary to the north, and a wetlands SSSI to the west. The A78, Irvine Road, a busy main road runs around 100 m to the east of the site, and a railway line runs parallel to this at around 200 m to the east of the site.

5.1.107 The village of Fairlie is around 400 m to the north-east of the Project site. There are also several individual properties within 400 m to the east of the Project site and Hunterston House is around 1.4 km to the south-west.

5.1.108 The nearest property on the Isle of Cumbrae is the Field Studies Council, which is located around 2.7 km to the west of the Project site and 1.7 km to the west of the jetty. The main existing sound source in the area is from road traffic on the A78 Irvine Road and other local roads.

Likely Effects

5.1.109 The potential noise and vibration effects from the construction and operation of the Project are considered to be:

- Construction:
  - temporary effects of noise generated during the construction works; and the
- Operation:
  - noise generated by plant and operational activities on site.

5.1.110 Due to the separation distances involved, vibration generated by construction works or operations on site would not be experienced at nearby residential properties.

Construction

5.1.111 Construction plant is likely to include noise generating plant such as excavators; haulage vehicles; mobile cranes; heavy and light goods vehicles; breakers to remove existing areas of hardstanding; concrete mixers and pumps, concrete rollers and poker vibrators to construction of new hardstanding areas, roads and building foundations; various hand tools such as cutting tools, drills and air compressors for fit-out works; and generators to power site equipment and lighting, water pumps and a road sweeper operating throughout the construction period.

5.1.112 Piling is likely to be required for foundations of structures on site; this will be dependent on the ground type. It is likely that the piling method would utilise a bored piling technique, rather than impact, driven or vibratory techniques. Bored piling techniques are unlike impact, driven or vibratory methods of piling, in that it does not generate significant levels of vibration and is not significantly noisier than other mechanised construction plant, such as excavators or dump trucks.

5.1.113 Most construction works would take place during the daytime between 07:00 and 19:00. However, the cable extrusion tower would be constructed from a slip form method which is a continuous concrete pour and would require working from 07:00 to 00:00 Monday to Saturday for a period of 43 weeks within the construction programme.

5.1.114 Noise would be controlled during the construction of the Project by means of measures incorporated in a CoCP. The control measures to be incorporated into the CoCP would ensure that noise disturbance at residential properties during construction of the Project would be minimised to a reasonable level.

5.1.115 Noise levels from construction traffic are unlikely to cause disturbance in the context of existing traffic within the area.

5.1.116 The assessment determined that construction of the Project would result in **no adverse effect** on noise and vibration and is **not significant**.

Operation

5.1.117 Most of the noise generating operational plant would be housed within buildings. These buildings would mainly comprise concrete construction, which is a good insulator of noise, so noise breakout from the buildings should not cause disturbance at nearby residences. Some external plant would be required, as necessary. If required, external plant can be fitted with silencers to ensure that there is no noise disturbance to residents.

5.1.118 During the operational phase, noise from the Project is unlikely to be noticeable or intrusive in residential properties or be detrimental to the enjoyment of residential gardens. The noise levels from the Project would be below those at which the onset sleep disturbance would occur according to recognised international guidance.

5.1.119 Noise levels from operational traffic are unlikely to cause disturbance in the context of existing traffic within the area.

5.1.120 The assessment determined that operation of the Project would result in **no adverse effect** on noise and vibration and is **not significant**.

Climate Change

Introduction

5.1.121 The potential effects arising from the construction and operation of the Project on climate change has been considered in **Chapter 12** of the EIA Report. The findings of climate change assessment are summarised below.

Baseline

5.1.122 As the Project site is not currently in active use, there is no baseline of activity for Greenhouse Gas (GHG) emissions to be calculated. The Project site is brownfield land with no potential for significant GHG fluxes or carbon stocks due to vegetation or peat on site, so further baseline survey has not been required to inform the climate change assessment.

Methodology

5.1.123 The climate change assessment considered the impact of GHGs, emitted (directly or indirectly) during the construction and operation of the Project, on global atmospheric concentrations of GHGs that contribute to climate change.

5.1.124 The climate change assessment was undertaken in accordance with the relevant national, regional, and local legislation, policy and guidance.

5.1.125 As set out in Chapter 4 of the EIA Report, it was agreed that an assessment of climate change vulnerability and the influence of climate change on other environmental topics could be scoped out of the assessment of climate change.

Likely Effects

Construction

5.1.126 Activities required to facilitate construction of the Project would result in both direct and indirect GHG emissions. These activities include the manufacturing and transport of construction materials and the operation of heavy machinery and/or large equipment within the Project site.

5.1.127 The climate change assessment determined that construction of the Project would generate 127,688 tCO2e, resulting in an **adverse effect** on climate change, which **is significant**.

Operation

5.1.128 Activities required to facilitate operation of the Project would result in both direct and indirect GHG emissions. These activities include the consumption of electricity, transportation of materials, staff commuting, and the venting of methane during the cable production process.

5.1.129 The climate change assessment determined that operation of the Project would generate 53,263 tCO2e per year, resulting in an **adverse effect** on climate change, which **is significant**.

5.1.130 Further mitigation has been recommended for the construction and operational of the Project. These mitigation proposals may significantly reduce total GHG emissions. With these mitigation measures in place, the Project could avoid significant adverse effects on climate change.

5.1.131 It should be noted that while construction and operation may result in an adverse effect on climate change, the Project would facilitate the growth of further renewable energy developments through the provision of high voltage cable. As such the Project would aid Scotland and the UK in transitioning to a low carbon economy and achieving climate change objectives in the long term.

5.1.132 The potential cumulative effects between the Project and other developments is discussed in the Cumulative Effects section of this Non-technical Summary.

Air Quality

Introduction

5.1.133 The potential effects arising from the construction and operation of the Project on air quality has been considered in **Chapter 13** of the EIA Report. The findings of air quality assessment are summarised below.

Likely Effects

5.1.134 For the construction phase, the most important consideration is dust. Without appropriate mitigation, dust could cause temporary soiling of surfaces, particularly windows, cars and laundry. The mitigation measures provided within the Air Quality Chapter should ensure that the risk of adverse dust effects is reduced to a minimum. The residual effects during the construction phase are ‘negligible’.

5.1.135 For the operational phase, arrivals at and departures from the Project may change the number, type and speed of vehicles using the local road network. Changes in road emissions are the most important consideration during this phase of the development.

5.1.136 Detailed atmospheric dispersion modelling has been undertaken for the year in which the development is expected to be fully operational, 2024. The operational impact of the Project on

existing receptors is predicted to be 'negligible' taking into account the changes in pollutant concentrations and absolute levels. Using the criteria adopted for this assessment, together with professional judgement, the operational air quality effects are considered to be '**negligible**' overall without the need for any mitigation.

5.1.137 Using professional judgement, the resulting air quality effect of the Project is considered to be '**negligible**' and '**not significant**' overall.

5.1.138 The Project does not, in air quality terms, conflict with national or local policies, or with measures set out in the North Ayrshire Local Development Plan 2. There are no constraints to the development in the context of air quality.

Socio-Economics

Introduction

5.1.139 The potential effects arising from the construction and operation of the Project on air socio-economics has been considered in **Chapter 14** of the EIA Report. The findings of socio-economic assessment are summarised below.

Baseline

5.1.140 North Ayrshire has a falling population, with a declining share of working age. The area has low economic activity rates, high unemployment and low wages compared to the Scottish and UK average, which suggests that new drivers of the economy are needed. Tourism is relatively important to North Ayrshire, with several tourism destinations within the vicinity of the Project.

Likely Effects

Construction

5.1.141 It was estimated during the construction phase that the Project would contribute the following socio-economic effects:

- An economic impact of £4 million Gross Value Added (GVA) and 50 jobs years in North Ayrshire, assessed as a **minor, beneficial, short-term** effect, which is **not signififcant**.
- An economic impact of £27 million GVA and 340 job years in Scotland, assessed as a **negligible, beneficial, short-term** effect, which is **not signififcant**.
- An economic impact of £79 million GVA and 1,150 job years in the UK, assessed as a **negligible, beneficial, short-term** effect, which is **not signififcant.**

Operation

5.1.142 It was estimated during the operational phase that each year the Project would contribute the following socio-economic effects:

- an economic impact of £60 million GVA and 1,010 jobs in North Ayrshire.
- an economic impact of £78 million GVA and 1,380 jobs in Scotland; and
- an economic impact of £165 million GVA and 3,390 jobs in the UK.

5.1.143 The socio-economic effect of the operation has been assessed as **major and significant** on the North Ayrshire economy. In addition to the socio-economic effects, there will be an estimated £2.4 million in non-domestic rates payments annually.

5.1.144 By creating high quality employment in North Ayrshire, it will meet the strategic objectives of supporting places with low productivity and high deprivation, while increasing employment in

manufacturing and supporting research and development. It will also expand the UK's offshore wind supply chain, increasing the benefits associated with the transition to renewable energy in the UK.

5.1.145 An assessment of the effect on the tourism economy was undertaken and it was found that there would be **no effects** on tourism behaviour because of the Project.

Cumulative Effects

5.1.146 An indicative list and the geographic location of other proposed developments in the surrounding area is presented in **Appendix 4.4** and **Figure 4.1** of the EIA Report respectively.

5.1.147 Each topic author has reviewed the overall list of developments and allocations and identified those relevant to their topic. The topic chapters of the EIA Report include an assessment of the potential for significant cumulative effects with the relevant developments.

Likely Effects

5.1.148 For most of the environmental topics considered in the EIA Report, the assessment of cumulative effects concludes that no significant effects would occur because of the Project (or that the Project would make only a small contribution to any cumulative effect).

5.1.149 However, the seascape, landscape and visual impact assessment determined that the Project may result in significant cumulative effects on seascape and landscape character and visual receptors. These findings are summarised below.

Cumulative Landscape and Seascape Effects

5.1.150 Eight cumulative schemes are considered within the assessment and are in the same Raised Beach Coast and Cliffs character type as the Project Site. Four are associated with the installation of energy infrastructure at Hunterston and three are associated with the former wind turbine testing facility in the Firth of Clyde. If these cumulative developments were to go ahead, they would very slightly intensify the level of industrial development located in the character type.

5.1.151 The construction or completion of eight cumulative developments, together with the influence of the Project, either during construction or when operational, would result in a **Moderate** adverse level of direct cumulative landscape effect in the day and at night, which would **not be significant**. The Project would make a considerable contribution to this cumulative effect, due to its large scale.

5.1.152 The levels of effects on landscape character within the rest of the study area previously identified for the Project in isolation, would be the same as the levels of effects because of the Project in combination with the cumulative developments, **none of which would be significant**.

5.1.153 The eight cumulative developments would also result in a slightly intensified level of development within the Outer Firth with Islands coastal character type which includes nationally designated landscapes.

5.1.154 The construction or completion of eight cumulative developments, together with the influence of the Project, either during construction or when operational, would result in a **Moderate to Major** adverse level of direct cumulative seascape effect in the day and at night, which **would be significant**. The Project would make a considerable contribution to this cumulative effect, due to its relative scale and nature.

Cumulative Visual Effects

5.1.155 Due to the relatively small scale nature of the eight cumulative developments, only people near to the Project Site or with mid-distance views would notice any change in views.

5.1.156 For people in the following locations the cumulative schemes would be clearly visible although would have a minimal influence on the overall character of the view:

- Walkers using the Ayrshire Coastal Path;
- Walkers using the core pathat Black Hill; and
- Walkers at Farland Point on Great Cumbrae.

5.1.157 Cumulative effects on views gained by people at the following locations would be **Minor to Moderate** adverse, which is **not significant**.

- People using the open space at Fairlie Viewpoint;
- Occupiers of vehicles travelling north on the A78;
- Walkers at Drummilling Hill West Killbride; and
- Walkers at Portachur Point and Millport town centre on Great Cumbrae.

5.1.158 When considered in combination with the large scale industrial development of the Project would result in a **Major adverse** cumulative effect which is significant.

Climate Change

5.1.159 With respect to climate change, all developments that emit greenhouse gases have the potential to impact the climate and so may have a cumulative impact on climate change.

5.1.160 Cumulative effects due to other specific local development projects are not individually predicted (as the receptor is global rather than local) but are considered when evaluating the impact of the Project on the climate within the assessment.

5.1.161 The operational phase beneficial effect of the assessment of the Project takes account of cumulative changes in greenhouse gas emissions from other energy generation sources.

6 FURTHER INFORMATION

6.1.1 This Non-Technical Summary provides a summary of the EIA Report accompanying the planning application for the High-Voltage Cable Manufacturing Facility at Hunterston Port. Details of the Project can be viewed here:

https://xlcc.co.uk/

6.1.2 The application, EIA Report and Non-Technical Summary can be viewed on the NAC website:

https://www.north-ayrshire.gov.uk/planning-and-building-standards/search-view-track-planning-applications.aspx

6.1.3 Further copies of the EIA Report can be obtained from the following address quoting project reference 12180:

RPS

20 Western Avenue

Milton Park

Abingdon

Oxfordshire

OX14 4SH

6.1.4 An electronic copy of the EIA Report on CD can be obtained for a cost of £10, and a paper copy can be obtained for an administration fee (price on application).

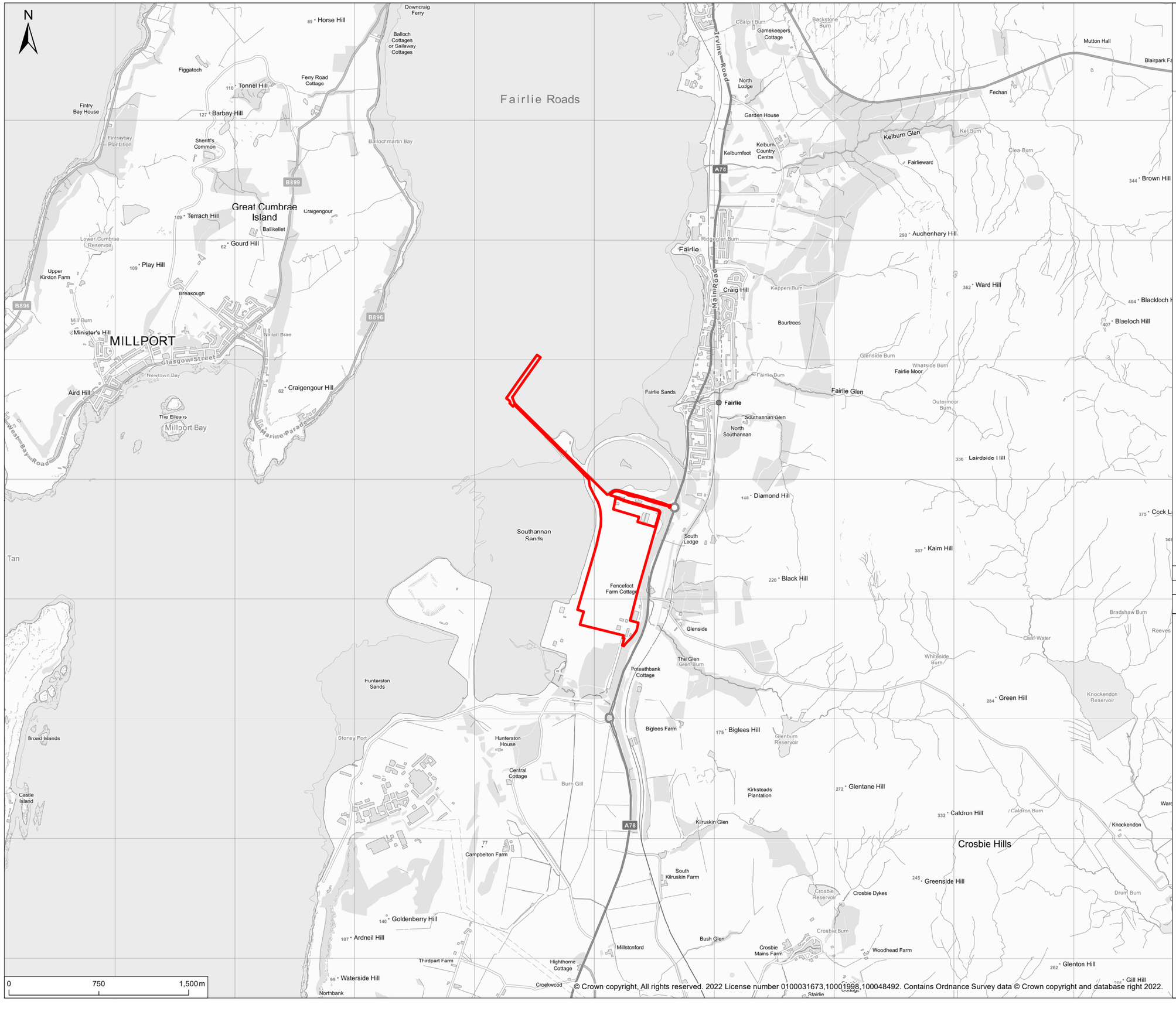
6.1.5 All comments on the EIA Report (and application) should be issued to NAC. At the current time, the NAC encourage representations to be made through the NAC website:

7 REFERENCES

Landscape Institute and Institute of Environmental Management and Assessment (IEMA) (2013) Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GVLIA3). Available: https://www.landscapeinstitute.org/technical/glvia3-panel/

Scottish Government (2017) The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. Available: https://www.legislation.gov.uk/ssi/2017/102/contents/made

FIGURES



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Legend

Site Boundary

Rev	Description	By	CB	Date

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rpsox@rpsgroup.com

Client: XLCC Ltd

Project: XLCC Hunterston

Title: Site Location

Status	Drawn By	PM/Checked By
ISSUE	MP	MB

Project Number	Scale @ A3	Date Created
NP12180	1:30,000	FEB 2022

Figure Number	Rev
1	-

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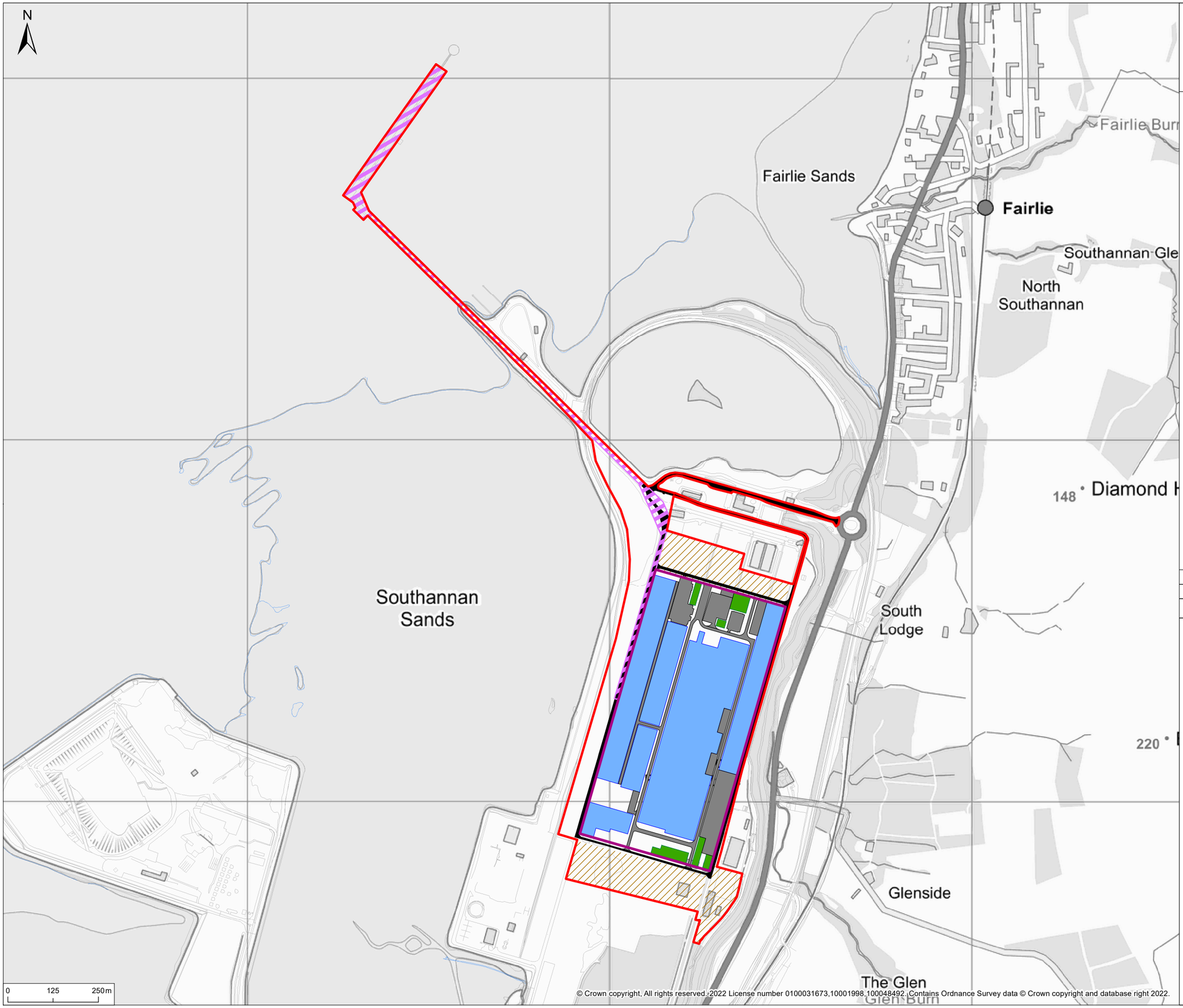

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Legend

- Site Boundary
- Development Boundary

Development Zone

- Existing Roads
- Access & Parking
- Construction Laydown
- Manufacture
- Other Building
- Jetty / Cable Export

Rev	Description	By	CB	Date

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T: +44(0)1235 821 888 E: rpsox@rpsgroup.com

Client: XLCC Ltd

Project: XLCC Hunterston

Title: Indicative Development Zones

Status	Drawn By	PM/Checked By
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Figure Number: **2**

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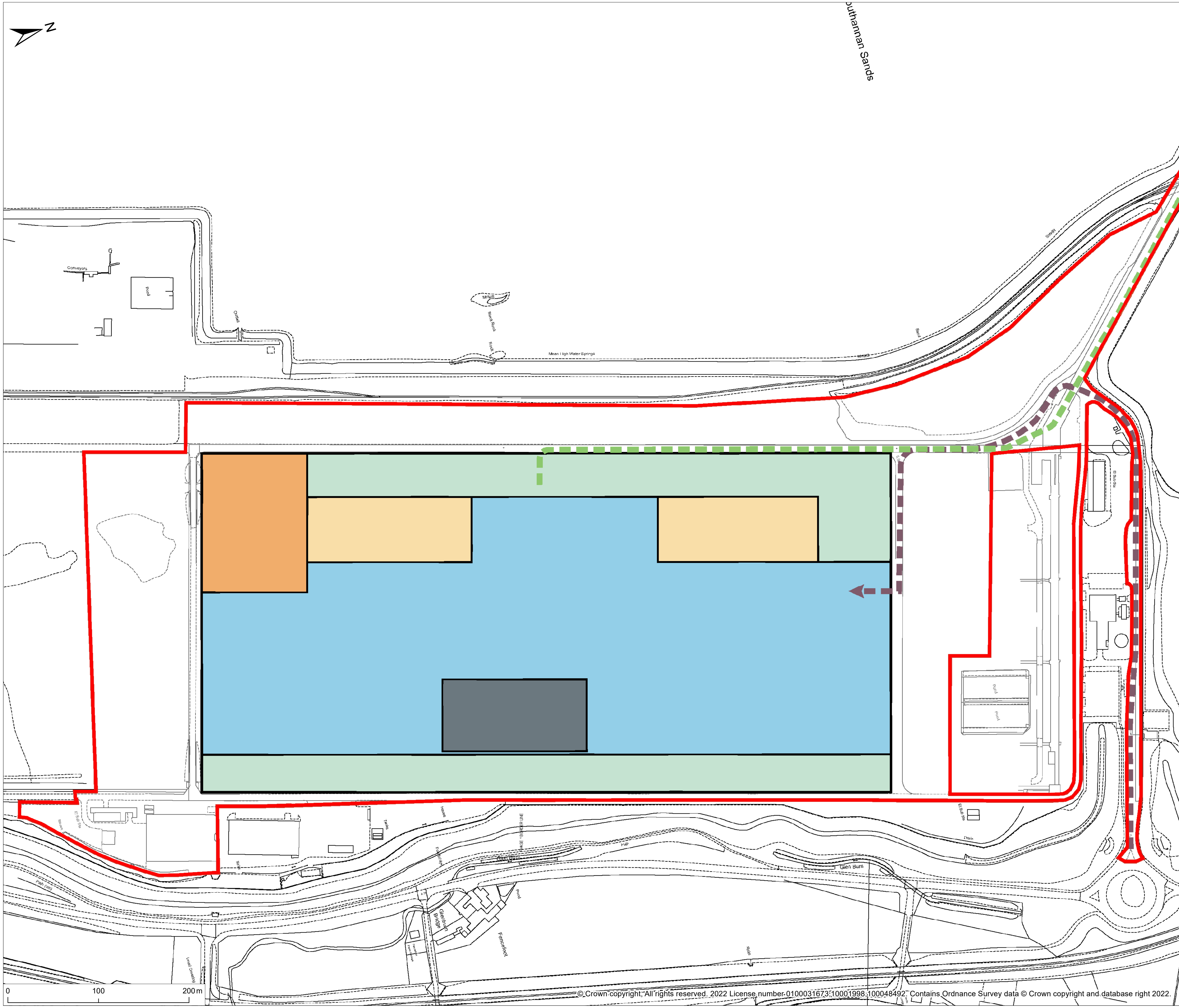

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Legend

Site Boundary

No.	Process Description	Zone Max. Height A.O.D.	Zone Clear height
1	PQ Testing	41.500m	35.000m
2	Testing Carousel Hall 1	36.500m	30.000m
3	High Voltage testing	51.500m	45.000m
4	Testing Carousel Hall 2	36.500m	30.000m
5	Offices	26.500m	20.000m
6	Security Gatehouse	26.500m	20.000m
7	Main Factory Hall	51.500m	45.000m
8	Utilities Compound	26.500m	20.000m
9	Canteen/Welfare	26.500m	20.000m
10	Facilities maintenance	26.500m	20.000m
11	Rod Breakdown	26.500m	20.000m
12	Storage carousels	26.500m	20.000m
13	Cable Rewinding	26.500m	20.000m
14	Reel Testing (N)	51.500m	45.000m
15	Reel Testing (S)	51.500m	45.000m
16	VCV Tower	191.500m	185.000m

Primary Access route - For Approval

Cable track route: 8m clear below, max height 11.25m. Width 11.33m

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20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rpsox@rpsgroup.com

Client XLCC Ltd

Project XLCC Hunterston

Title Parameters Plan (factory)

Status	Drawn By	PM/Checked By
ISSUE	MP	MB
Project Number	**Scale @ A3**	**Date Created**
NP12180	1:4,000	FEB 2022

Figure Number 2.1a

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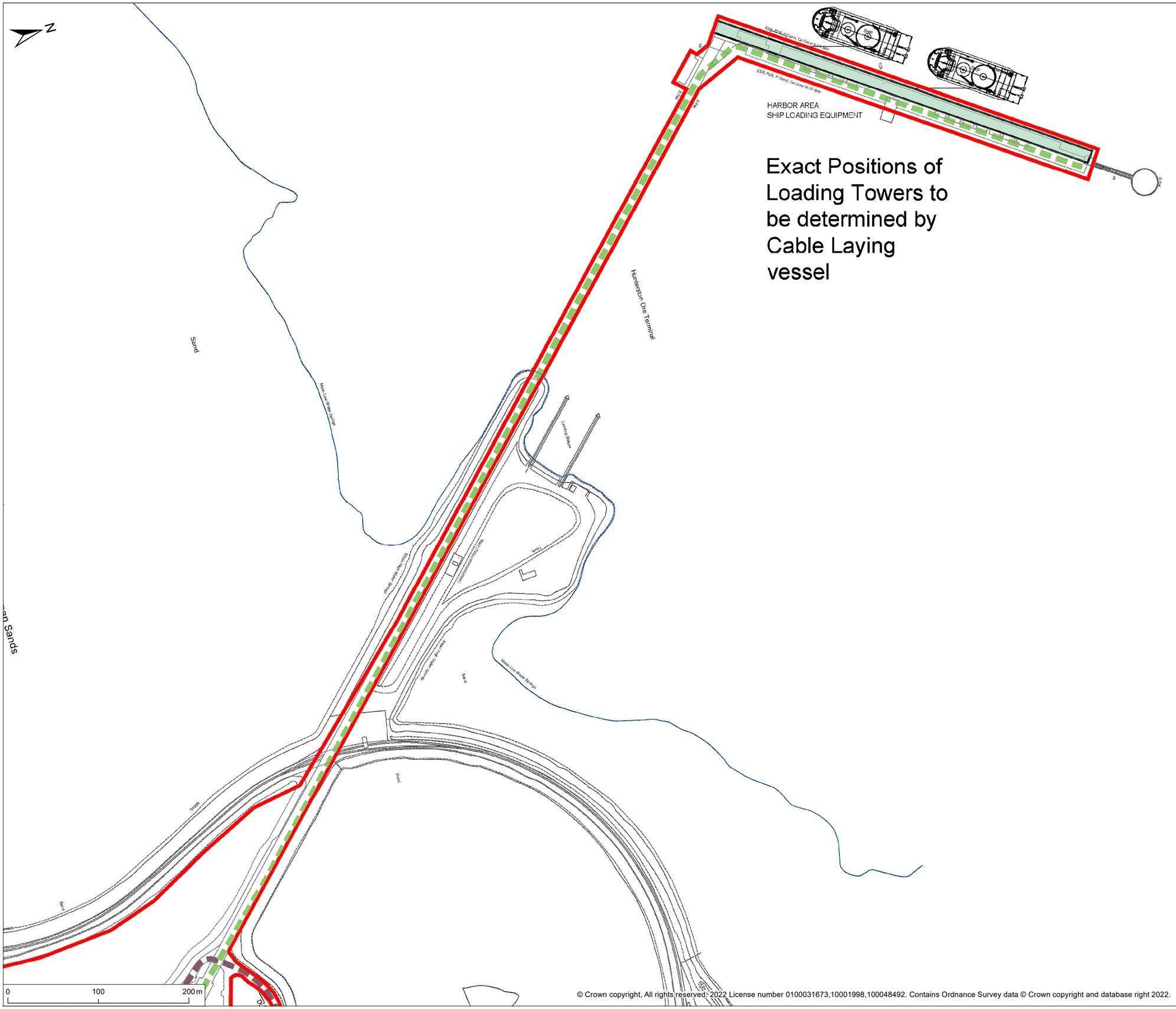

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Legend

- Site Boundary
- Cable Loading Towers and Trackway
- Cable track route: 8m clear below, max height 11.25m. Width 11.33m

Rev	Description	By	CB	Date

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rpsox@rpsgroup.com

Client: XLCC Ltd

Project: XLCC Hunterston

Title: Parameters Plan (jetty)

Status	Drawn By	PM/Checked By
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Figure Number: **2.1b**

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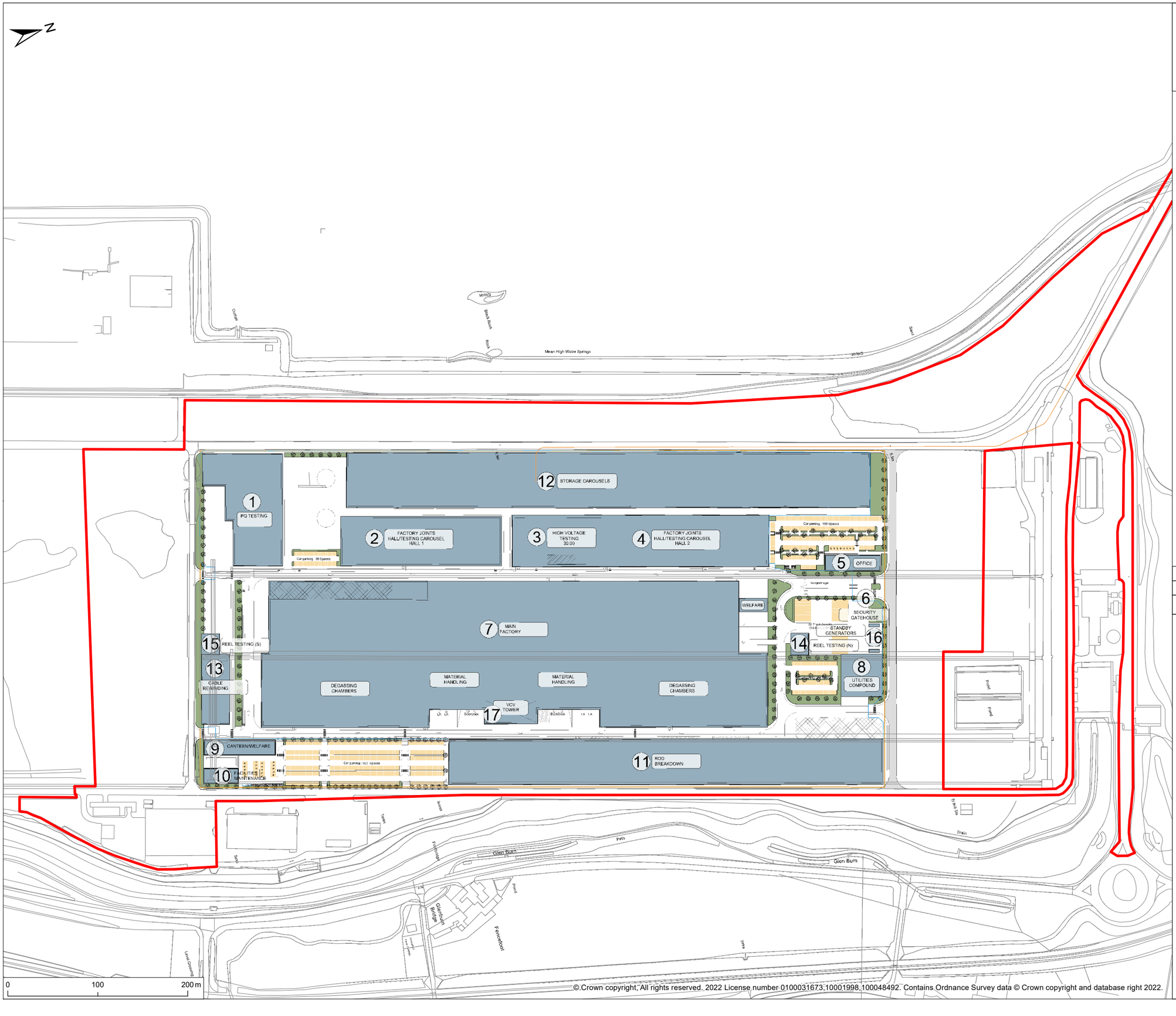

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Legend

Site Boundary

1	PQ Testing
2	Testing Carousel Hall 1
3	High Voltage Testing
4	Testing Carousel Hall 2
5	Offices
6	Security Gatehouse
7	Main Factory Hall
8	Utilities Compound
9	Canteen/Welfare
10	Facilities Maintenance
11	Rod Breakdown
12	Storage Carousels
13	Cable Rewinding
14	Reel Testing (N)
15	Reel Testing (S)
16	Standby Generators
17	VCV Tower

Rev	Description	By	CB	Date

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rpsox@rpsgroup.com

Client: XLCC Ltd

Project: XLCC Hunterston

Title: Indicative Masterplan (factory)

Status	Drawn By	PM/Checked By
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Project Number	Scale @ A3	Date Created
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Figure Number: **2.2a**

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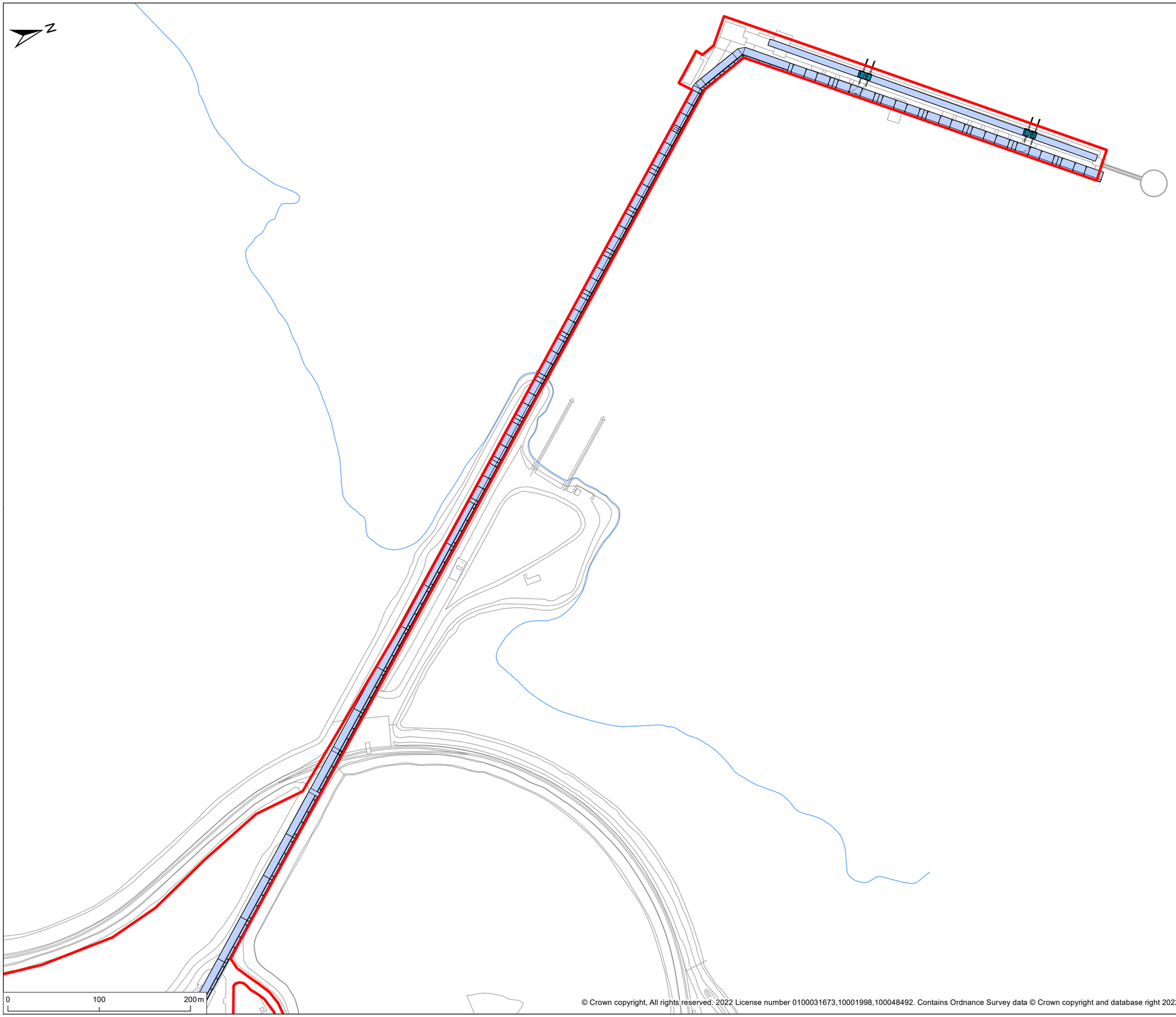

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Site Boundary

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Client: XLCC Ltd

Project: XLCC Hunterston

Title: Indicative Masterplan (jetty)

Status	Drawn By	PM/Checked By
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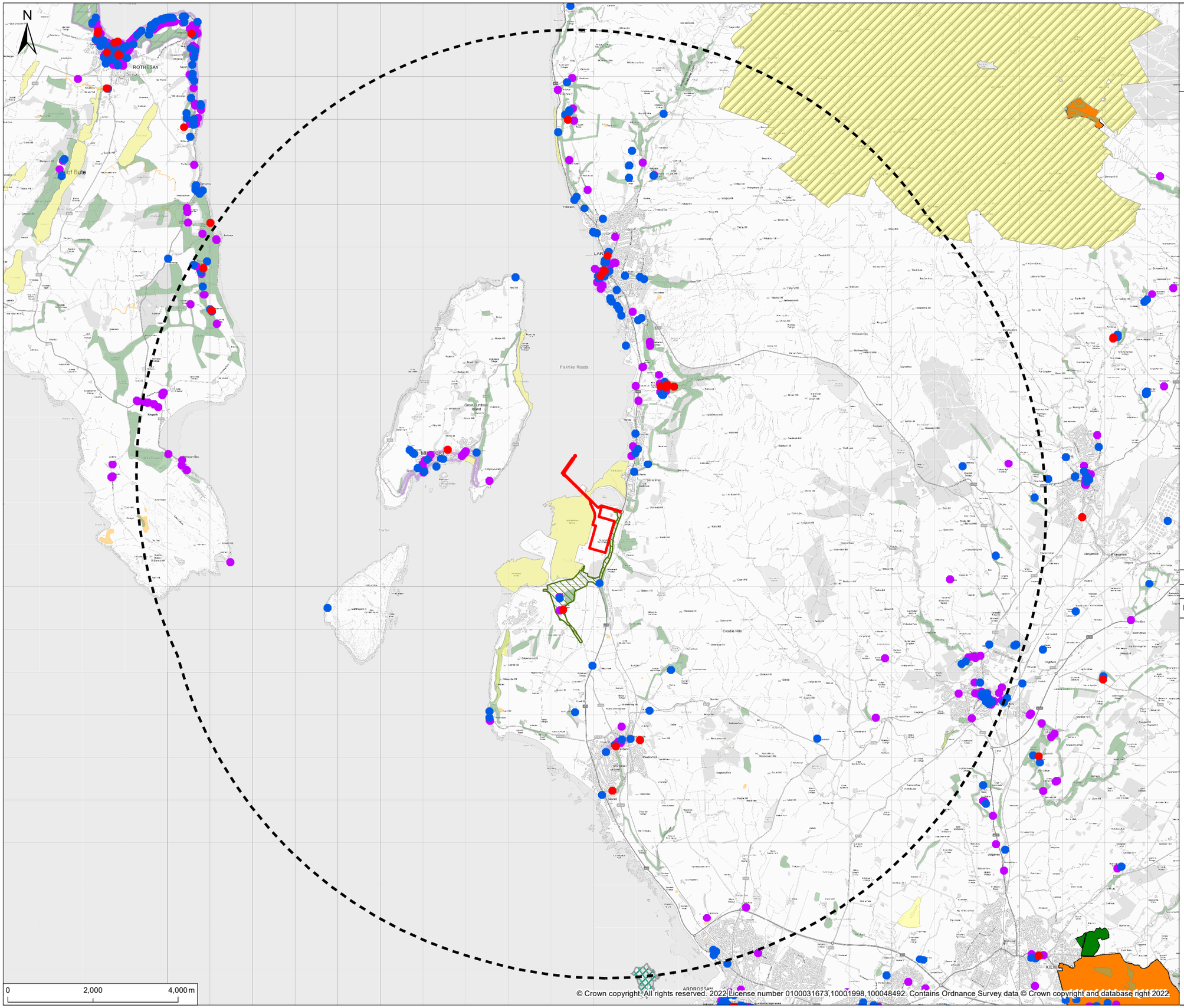

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Legend

- Site Boundary
- 10km Buffer
- RSPD Reserves UK
- Country Park
- Scheduled Monument
- Scottish Wildlife Trust Reserve Boundary
- Site of Special Scientific Interest
- Special Protection Area
- Ancient Woodland
- Tree Protection Order
- Conservation Area

Listed Buildings by Category

- A
- B
- C

Rev	Description	By	CB	Date

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Client: XLCC Ltd

Project: XLCC Hunterston

Title: Environmental Constraints Plan

Status	Drawn By	PM/Checked By
ISSUE	MP	MB
Project Number	**Scale @ A3**	**Date Created**
NP12180	1:85,000	FEB 2022
Figure Number		**Rev**
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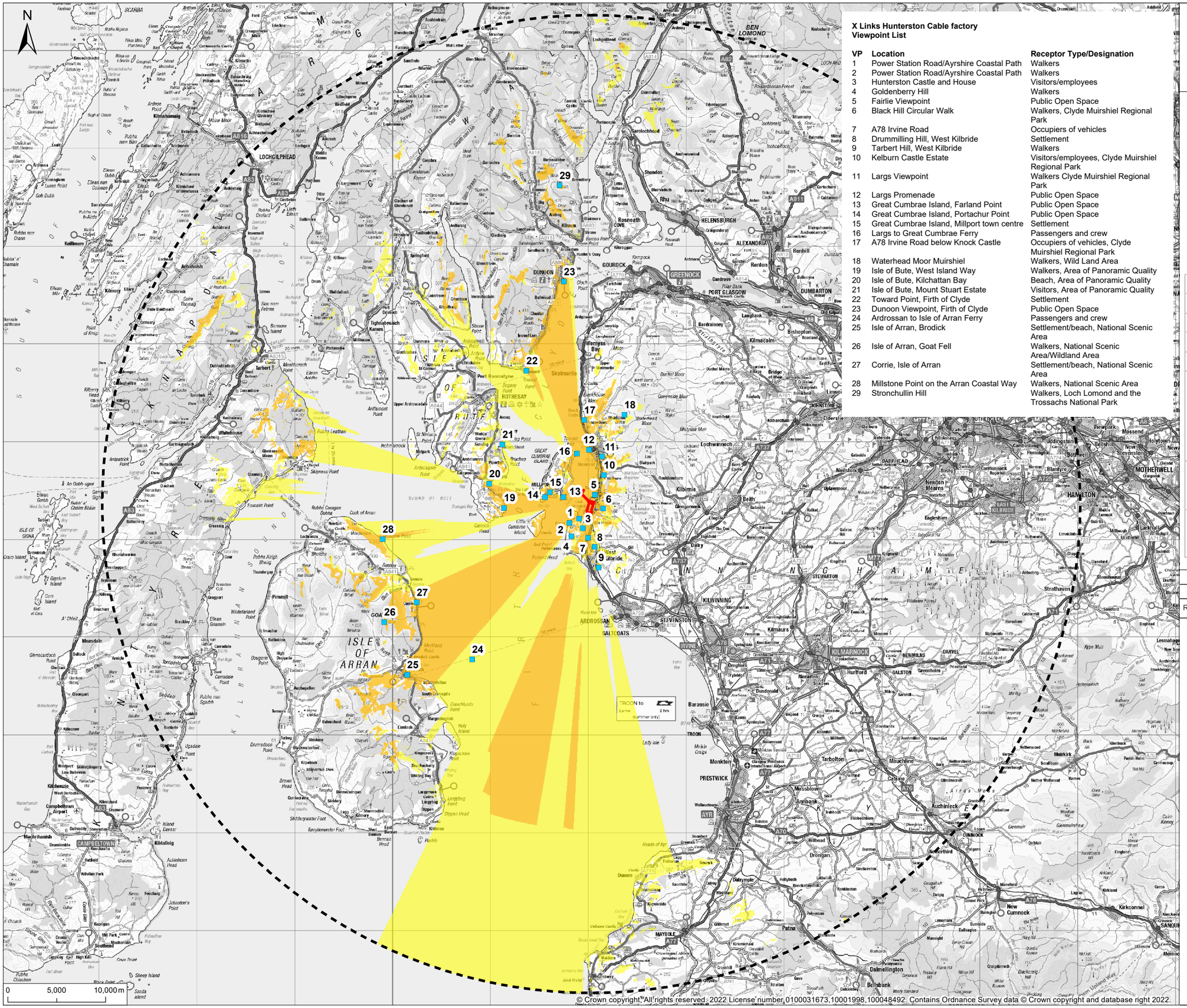

X Links Hunterston Cable factory
Viewpoint List

VP	Location	Receptor Type/Designation
1	Power Station Road/Ayrshire Coastal Path	Walkers
2	Power Station Road/Ayrshire Coastal Path	Walkers
3	Hunterston Castle and House	Visitors/employees
4	Goldenberry Hill	Walkers
5	Fairlie Viewpoint	Public Open Space
6	Black Hill Circular Walk	Walkers, Clyde Muirshiel Regional Park
7	A78 Irvine Road	Occupiers of vehicles
8	Drummilling Hill, West Kilbride	Settlement
9	Tarbert Hill, West Kilbride	Walkers
10	Kelburn Castle Estate	Visitors/employees, Clyde Muirshiel Regional Park
11	Largs Viewpoint	Walkers Clyde Muirshiel Regional Park
12	Largs Promenade	Public Open Space
13	Great Cumbrae Island, Farland Point	Public Open Space
14	Great Cumbrae Island, Portachur Point	Public Open Space
15	Great Cumbrae Island, Millport town centre	Settlement
16	Largs to Great Cumbrae Ferry	Passengers and crew
17	A78 Irvine Road below Knock Castle	Occupiers of vehicles, Clyde Muirshiel Regional Park
18	Waterhead Moor Muirshiel	Walkers, Wild Land Area
19	Isle of Bute, West Island Way	Walkers, Area of Panoramic Quality
20	Isle of Bute, Kilchattan Bay	Beach, Area of Panoramic Quality
21	Isle of Bute, Mount Stuart Estate	Visitors, Area of Panoramic Quality
22	Toward Point, Firth of Clyde	Settlement
23	Dunoon Viewpoint, Firth of Clyde	Public Open Space
24	Ardrossan to Isle of Arran Ferry	Passengers and crew
25	Isle of Arran, Brodick	Settlement/beach, National Scenic Area
26	Isle of Arran, Goat Fell	Walkers, National Scenic Area/Wildland Area
27	Corrie, Isle of Arran	Settlement/beach, National Scenic Area
28	Millstone Point on the Arran Coastal Way	Walkers, National Scenic Area
29	Stronchullin Hill	Walkers, Loch Lomond and the Trossachs National Park

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Legend

- Site Boundary
- Candidate Photographic Viewpoint Location
- Zone of Theoretical Visibility (Tower)
- Zone of Theoretical Visibility (Building)

Data source	OS Terrain 50
Date sourced	2013
Coverage	Within 50km of the site
Original cell size	50m
Ground cover is modelled using indicative heights of 9m for buildings, and 12m for woodland blocks. Ground cover is located using OS Open Maps.	ZTV calculated using a height of 185m for the cable tower and a max height of 46m for the building.
ZTV is not calculated beyond 50km from the tower location.	Viewer height is 2m.
ZTV calculation does not use mathematically approximate methods	The effects of earth curvature and light refraction are considered.

Rev	Description	By	CB	Date

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Client: XLCC Ltd

Project: XLCC Hunterston

Title: Zone of Theoretical Visibility and Viewpoint Locations (50km radius study area)

Status	Drawn By	PM/Checked By
ISSUE	MP	MB
Project Number	**Scale @ A3**	**Date Created**
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Figure Number		**Rev**
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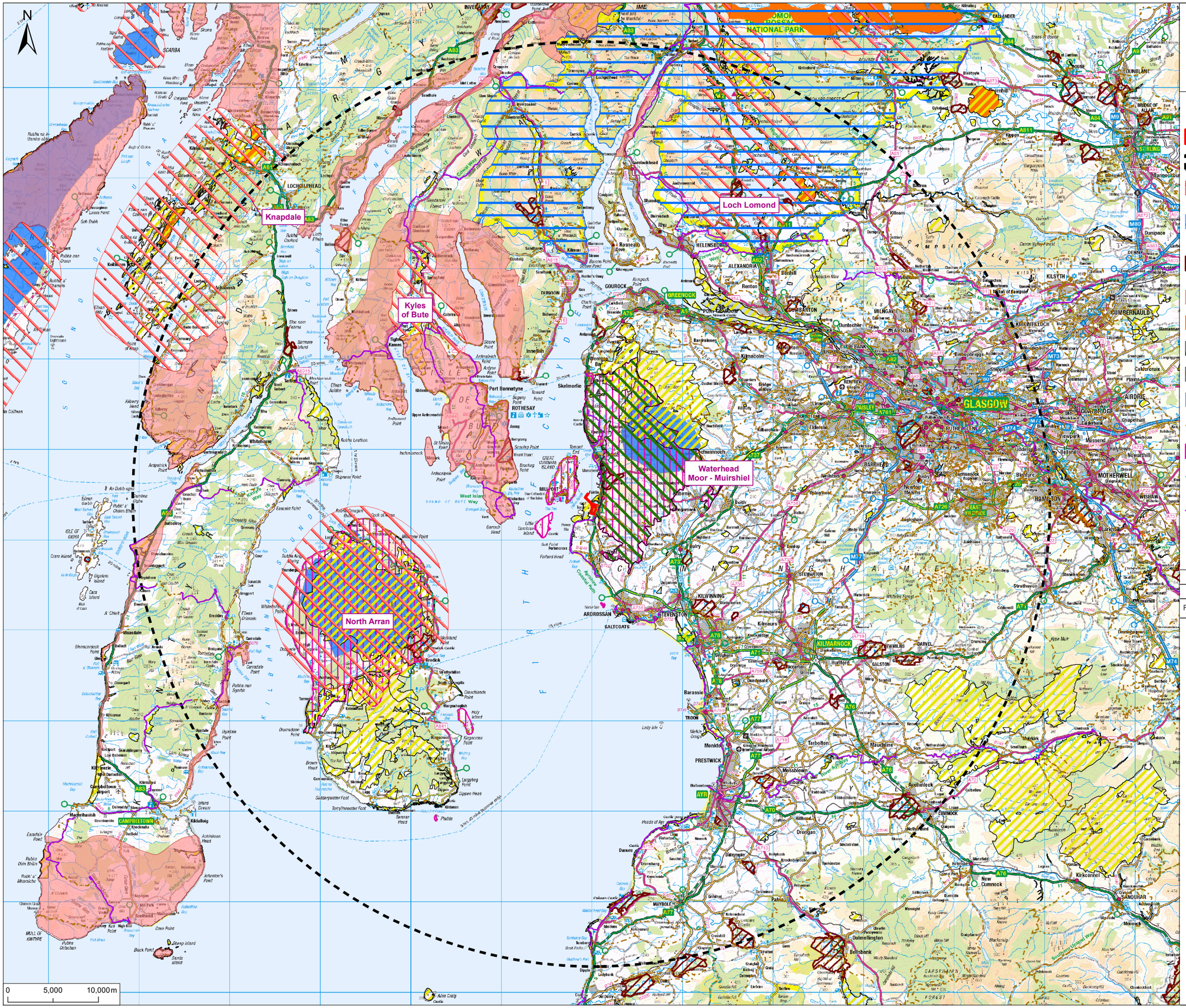

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Legend

- Site Boundary
- 50km Study Area
- National Scenic Area
- Loch Lomond & Trossachs National Park
- Gardens & Designed Landscapes
- Areas of Panoramic Quality
- National Nature Reserve
- Clyde Muirshiel Regional Park
- Site of Special Scientific Interest
- Wildland Area
- Core Paths
- Special Landscape Areas
- National Cycle Network
- Long Distance Recreational Route

Rev	Description	By	CB	Date

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
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Client: XLCC Ltd

Project: XLCC Hunterston

Title: Landscape Designations Plan

Status	Drawn By	PM/Checked By
ISSUE	RD	PE
Project Number	**Scale @ A3**	**Date Created**
NP12180	1:400,000	FEB 2022
Figure Number		**Rev**
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ref: 12180-0044-02

Proposed massing view

Ref: 12180-0045-01

XLCC Cable Factory, Hunterston NP12180	Date of Photo: 02/11/2021 Lens Type: 50mm	Distance to site: 2.9 km OS reference: 218286, 650325	Direction to site: north Viewpoint height: 142 m AOD	Horizontal field of view: 39.6° To be viewed at comfortable arms length	**Viewpoint 4: Goldenberry Hill (Mass Model)** **Figure: 6.1**

Proposed massing view

Ref: 12180-0045-01

XLCC Cable Factory, Hunterston NP12180	Date of Photo: 02/11/2021 Lens Type: 50mm	Distance to site: 1.1 km OS reference: 221541, 653170	Direction to site: west Viewpoint height: 220 m AOD	Horizontal field of view: 39.6° To be viewed at comfortable arms length	**Viewpoint 6: Black Hill Circular Walk, Clyde Muirshiel Regional Park (Maximum Parameters Model)** **Figure: 6.2**

Proposed massing view

XLCC Cable Factory, Hunterston NP12180	Date of Photo: 02/11/2021 Lens Type: 50mm	Distance to site: 3.9 km OS reference: 221440, 658467	Direction to site: south Viewpoint height: 185 m AOD	Horizontal field of view: 39.6^0 To be viewed at comfortable arms length	**Viewpoint 11: Largs Viewpoint, Clyde Muirshiel Regional Park (Mass Model)** **Figure: 6.3**

Ref: 12180-0045-01

Proposed massing view

Ref: 12180-0045-01

XLCC Cable Factory, Hunterston NP12180	Date of Photo: 02/11/2021 Lens Type: 50mm	Distance to site: 1.8 km OS reference: 217454,654313	Direction to site: 0 Viewpoint height: 6 m AOD	Horizontal field of view: 39.6^0 To be viewed at comfortable arms length	**Viewpoint 13: Great Cumbrae Island, Farland Point (Mass Model)** **Figure: 6.4**