

# **Consultation Document – Substation Site Selection**

**Project: LT382 Tealing 400kV Substation**

**REF: LT382**

**May 2023**



## TRANSMISSION

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## CONTENTS

<b>GLOSSARY</b>	<b>I</b>
<b>PREFACE</b>	<b>III</b>
<b>EXECUTIVE SUMMARY</b>	<b>IV</b>
<b>1. INTRODUCTION</b>	<b>1</b>
1.1 Purpose of Document	1
1.2 Document Structure	1
1.3 Next Steps	2
<b>2. THE PROPOSALS</b>	<b>3</b>
2.1 The Need for the Project	3
2.2 Substation Design	3
2.3 Construction Activities	5
2.4 Project Construction Programme	5
<b>3. SITE SELECTION PROCESS</b>	<b>6</b>
3.1 Introduction	6
3.2 Methodology	6
<b>4. STAGE ONE: SITE SCREENING</b>	<b>9</b>
4.1 Identification and Appraisal of Potential Sites	9
4.2 Site Options Proceeding to Stage 2 Appraisal	12
<b>5. STAGE TWO: DETAILED SITE SELECTION</b>	<b>13</b>
5.1 Introduction	13
5.2 Comparative Appraisal of Sites	13
5.3 Comparative Appraisal of Substation Site Options	21
5.4 Rationale for the Selection of the Preferred Site	23
<b>6. CONSULTATION ON THE PROPOSALS</b>	<b>24</b>
6.1 Questions for Consideration by Consultees	24
6.2 Next Steps	24

## GLOSSARY

Term	Definition
Air Insulated Switchgear (AIS) Substation	An AIS substation is constructed with switchgear which relies on open air components, which can require large clearance areas for operation and safety, which takes up a larger area of land than Gas Insulated Switchgear (GIS).
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
Ancient Woodland Inventory (AWI)	AWI is a provisional guide to the location of Ancient Woodland. It contains three main categories of woodland, all of which are likely to be of value for their biodiversity and cultural value. These include Ancient Woodland, Long-established woodlands of plantation origin (LEPO), and other woodlands.
Area of Search (Study Area)	A broad geographical area within which possible sites might be capable of identification within approximately 5km of the required connectivity point; usually determined by geographical features such as coastlines or hill/mountain ranges, or designation boundaries, such as National Park boundaries.
Biodiversity Net Gain (BNG)	Biodiversity Net Gain (BNG) is an approach to development that aims to leave the natural environment in a measurably better state than it was pre-development. It focuses on the change in the biodiversity value of a site, comparing the pre and post construction biodiversity values to ensure a positive impact overall.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action.
Double circuit	A double circuit transmission line comprises of two independent circuits each made up of three sets of conductors (cables).
Environmental Impact Assessment (EIA)	Environmental Impact Assessment. A formal process codified by EU directive 2011/92/EU, and subsequently amended by Directive 2014/52/EU. The national regulations are set out in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. The EIA process is set out in Regulation 4(1) of the regulations and includes the preparation of an EIA Report by the developer to systematically identify, predict, assess and report on the likely significant environmental impacts of a proposed project or development.
Engagement	The establishment of effective relationships with individuals or groups.
Electricity System Operator (ESO)	National Grid is the Electricity System Operator (ESO) for Great Britain. The ESO balances electricity supply and demand to ensure the electricity supply.
Gardens and Designed Landscapes (GDLs)	The Inventory of Gardens and Designed Landscapes lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance.
Gas Insulated Switchgear (GIS) Substation	A GIS substation is constructed with switchgear with gaseous reliant components which allows operation and safety clearances to be reduced compared to an AIS substation.
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Holford Rules (as modified)	Principles used to inform the routing of overhead lines and siting of substations. Supplementary Notes for the Siting of Substations capture relevant aspect of the Holford Rules in SSEN's guidance document <i>Substation Site Selection Procedures for Voltages at or above 132V</i> .
Kilovolt (kV)	One thousand volts.
Landscape Character Type (LCT)	A distinct, recognisable and consistent pattern of elements in a landscape that differentiate the area from another.



Term	Definition
Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C(s).
Offshore Integrated Link	Offshore cable connection between the onshore network and offshore network being developed as part of the Coordinated Offshore Network. This is being developed as a result of the Holistic Network Design (HND) publication in summer of 2022 produced by National Grid Electricity System Operator (NGESO) to facilitate greater co-ordination and efficiency for offshore windfarms. In the autumn of 2022 Ofgem published their Asset Classification findings which in turn meant SSENT were tasked with delivering large parts of the Coordinated Offshore Network.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel structures or poles.
Plantation Woodland	Woodland of any age that obviously originated from planting.
RAG Rating	A Red, Amber, Green rating provided to allow for a comparison between different options being appraised.
Red Line Boundary	This area should include all land necessary to carry out the Proposed Development.
Riparian Woodland	Woodland that grows along the banks of rivers or other watercourses.
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.
Site of Special Scientific Interest (SSSI)	A designated area of national importance for natural heritage. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Special Protection Area (SPA)	A designated area to protect one or more rare, threatened or vulnerable bird species listed in Annex I of the Birds Directive, or certain regularly occurring migratory species.
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Substation	A node on the network to allow safe control of the electricity network. This could include convergence of multiple circuits, transformation of voltage or other functions to maintain and operate the electricity network.
Substation Site Area	Site area identified as necessary to deliver all the substation infrastructure requirements e.g. platform, access tracks, temporary construction area, drainage including SUDS, landscaping.
Sustainable Urban Drainage Systems (SUDS)	Drainage solutions that provide an alternative to the direct channelling of surface water through networks of pipes and sewers to nearby watercourses.
The National Grid	The electricity transmission network in the Great Britain.
UK Biodiversity Action Plan (UK BAP)	The UK BAP was published in 1994 after the Convention on Biological Diversity. It summarised the most threatened species and habitats in the UK and gave detailed plans for their recovery.
Works	Constructing new transmission infrastructure such as substations, overhead lines, underground cables; major refurbishment of these; the dismantling and removal of any parts of the system; and associated works, which may include formation of access tracks, bridge and road improvements, tree cutting, drainage etc.

## PREFACE

This Consultation Document has been prepared by Land Use Consultants (LUC), on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission) to seek comments from all interested parties on the Preferred Site identified for a new 400kV substation near the existing 275/132kV Tealing substation, by Tealing in Angus.

The proposed new Tealing 400kV Substation is part of a suite of projects collectively known as East Coast 400kV Phase 2. These projects comprise; the proposed new Kintore-Fiddes-Tealing 400kV Overhead Line (OHL) Connection and proposed new 400kV substations at Fiddes and Tealing. In addition, two of the existing 275kV overhead lines which connect the existing Tealing Substation with, respectively, the Alyth Substation and the Westfield Substation (near Glenrothes and in Scottish Power Transmission's (SPT) Licence Area) require upgrades to enable them to operate at 400kV and to connect to the proposed new Tealing 400kV Substation.

These proposals have been determined as critical to enable the delivery of the UK and Scottish Government's renewable energy targets. This Consultation Document is available online at the project website: <https://www.ssen-transmission.co.uk/projects/project-map/kintore-fiddes-tealing-400kv-ohl-connection/>.

Over the coming months SSEN Transmission will be engaging with Statutory Consultees and stakeholders to further understand constraints and identify potential opportunities. Public consultation events detailing the proposals described in this document will be held at the following times and locations:

2 <sup>nd</sup> May 2023 (2-7pm) Skene – Milne Hall, Kirkton of Skene	9 <sup>th</sup> May 2023 (2-7pm) Brechin – Brechin City Hall
3 <sup>rd</sup> May 2023 (2-7pm) Peterculter – Ardoe House Hotel – Ogston Suite	10 <sup>th</sup> May 2023 (2-7pm) Kirriemuir – Westmuir Hall, Kirriemuir
4 <sup>th</sup> May 2023 (2-7pm) Laurencekirk – Dickson Hall, Laurencekirk	11 <sup>th</sup> May 2023 (2-7pm) Tealing – Tealing Village Hall, Tealing

A virtual event will be held on 17th May (4-6pm) – joining details will be available on the project website here: <https://www.ssen-transmission.co.uk/projects/project-map/kintore-fiddes-tealing-400kv-ohl-connection/>

Comments on this Consultation Document should be sent to:

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All comments are requested by **9<sup>th</sup> June 2023**.

## EXECUTIVE SUMMARY

Scottish and Southern Electricity Networks Transmission (SSEN Transmission) operating under licence held by Scottish Hydro Electric Transmission plc, is proposing to establish a network of 400 kilovolt (kV) electricity transmission infrastructure across the north-east of Scotland. This is needed to provide greater capacity and flexibility for the transmission of electricity generated in the north of Scotland, in particular from the increasing number of offshore wind farms and to help meet the Scottish Government's energy and Net Zero targets.

A key part of the infrastructure upgrade is the construction of a new 400kV overhead transmission line (OHL) between the existing substation at Kintore (north west of Aberdeen) and a proposed new substation to be built near Tealing in Angus, just north of Dundee (the Kintore-Fiddes-Tealing 400kV OHL Connection project). The OHL would need connect to proposed new 400kV substations at Fiddes near Stonehaven in Aberdeenshire and at Tealing, just north of Dundee in Angus. These projects form part of the East Coast 400kV Phase 2 scheme which also involves upgrading the existing overhead lines from the existing Tealing Substation to substations at Alyth and to Westfield (near Glenrothes) from their current 275kV capacity to 400kV.

This document sets out the key findings of a comparative appraisal of alternative site options within which the proposed new 400kV substation at Tealing could be developed. The approach to the identification and appraisal of substation site options has followed SSEN Transmission's Guidance 'Substation Site Selection Procedures for Voltages at or above 132kV guidance document'<sup>1</sup>.

The appraisal process followed two stages. In the first stage, site options were identified within a defined Area of Search which provided feasible areas for the proposed Tealing 400kV Substation to be sited. Nine potential sites were identified based on analysis of areas of least constraint using tools such as Geographic Information Systems (GIS). A comparative analysis of these sites was undertaken focusing on their degree of constraint in terms of physical, access, environmental and technical issues and opportunities. From this process two potential substation sites (Sites 4 and 7) were considered to be suitable for further appraisal.

The second stage involved more detailed consideration of the environmental, engineering and cost constraints of the two shortlisted sites. A series of criteria was used to structure this process, and the desk-based analysis of constraints was supported by initial site visits to the sites by relevant specialists.

Overall, there is little to distinguish between the two sites, the principal factors being the relative level of cultural heritage constraint, the works necessary to rationalise existing OHL connections and the associated costs. While Site 7 is marginally preferred in terms of its greater distance from cultural heritage features, the lower technical challenges and costs of Site 4 in rationalising existing connections is a material factor which weighs in favour of Site 4. There are slightly fewer residential properties in close proximity to Site 4 than to Site 7. Site 4 is considered to achieve a balance between environmental, engineering and economic factors and has been identified as the Preferred Site.

This Consultation Document invites comments from all stakeholders on the Preferred Site and summarises how the Preferred Site location has been identified. Moving forward, confirmation of the Preferred Site will be informed by this consultation exercise and through detailed surveys, which may identify as yet unknown engineering, environmental or land use constraints. Subject to the outcome of the consultation, a Proposed Site will be confirmed.

Whilst this Consultation Document has been prepared to seek comments in relation to the Preferred Substation Site at Tealing, Consultation Documents for the combined consultation for the Kintore-Fiddes-Tealing 400kV OHL Connection project Corridor and Route can be found here: <https://www.ssen-transmission.co.uk/projects/project-map/kintore-fiddes-tealing-400kv-ohl-connection/>.

The Consultation Document for the Preferred Substation site at Fiddes can be found here: <https://www.ssen-transmission.co.uk/projects/project-map/fiddes-400kv-substation/>.

The findings of the appraisal of substation options presented in this document will be reviewed taking account of feedback from key stakeholders, and from the public consultation. Following the outcome of the combined consultation, SSEN Transmission will confirm the Proposed Substation sites at Tealing and Fiddes as well as the Proposed Corridor and

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<sup>1</sup> SSEN Transmission (September 2022) Substation Site Selection Procedures for Voltages at or above 132kV. PR-NET-ENV-502.

Proposed Route for the 400kV OHL project. On identification of a Proposed Site, the requirement for an Environmental Impact Assessment (EIA) will be screened, and a planning application to seek consent to develop the substation will be submitted to Angus Council.

All comments on the proposals are requested by **9th June 2023**. A Report on Consultation (RoC) will be published after the consultation period has ended, which will document the consultation responses received, how these responses have been considered, and the decisions made in light of these responses.

# 1. INTRODUCTION

## 1.1 Purpose of Document

This Substation Site Selection Consultation Document has been prepared by Land Use Consultants Ltd (LUC) on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission). SSEN Transmission, operating under licence held by Scottish Hydro Electric Transmission plc, owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands.

This Consultation Document invites comments from all interested parties on the Preferred Substation Site identified for a proposed new 400kV substation at Tealing, in Angus, to connect a proposed new 400kV overhead line (OHL) approximately 106 km in length between the new substation at Tealing and the existing Kintore Substation in Aberdeenshire. This new OHL, known as the Kintore-Fiddes-Tealing 400kV OHL Connection project, would also require a proposed new 400kV substation at Fiddes, in Aberdeenshire.

A location context plan for the proposed substation at Tealing is shown in Figure 1.1.

This Consultation Document describes the substation Site options appraisal undertaken, the alternatives considered during the selection of substation Site options and the identification of the preferred substation Site at Tealing. Comments are now sought from statutory authorities, key stakeholders, elected representatives and the public on the substation site selection process and the Preferred Site.

All feedback received in relation to the Preferred Site will be reviewed and a Report on Consultation (RoC) will be produced that provides SSEN Transmission's response to the feedback received.

SSEN Transmission is also undertaking a combined Corridor and Route Consultation for the Kintore-Fiddes-Tealing 400 kV OHL Connection project, due to the accelerated delivery programme that is required to achieve the UK and Scottish Government 2030 targets. The feedback on the Preferred Corridor consultation exercise will be assessed independently of the fact that the project has progressed to the routeing stage. If there are changes to either or both of the Preferred Corridor or the Preferred Route as a result of the consultation exercise, the substation site selection process will be reviewed.

Consultation Documents for the combined consultation for the Kintore-Fiddes-Tealing 400kV OHL Connection project Corridor and Route can be found here: <https://www.ssen-transmission.co.uk/projects/project-map/kintore-fiddes-tealing-400kv-ohl-connection/>.

The Consultation Document for the proposed new 400kV substation at Fiddes can be found here: <https://www.ssen-transmission.co.uk/projects/project-map/fiddes-400kv-substation/>.

## 1.2 Document Structure

This report is comprised of six sections as follows:

1. **Introduction** – sets out the purpose of the Consultation Document, document structure and next steps.
2. **The Proposals** – describes the need for the proposals, a description of the proposed substation design and technology solution and the typical construction methods.
3. **Site Selection Process** – sets out the site selection process and methodology that has been applied to date to derive a Preferred Substation Site.
4. **Stage One: Site Screening** – summarises the potential sites that have been considered for the substation.
5. **Stage Two: Detailed Site Appraisal** – summarises the key considerations of each potential site from an environmental, engineering and economic perspective, and provides a comparative appraisal of each site in order to select the Preferred Option.
6. **Consultation on the Proposals** – invites comments on the substation Site assessment process and identification of the Preferred Site.

### 1.3 Next Steps

- As part of the consultation exercise, comments are sought from statutory authorities, key stakeholders, elected representatives and members of the public on the Preferred Substation Site described in this report.
- In parallel, respondents are also being asked for their feedback on the Preferred Corridor and the Preferred Route for the Kintore – Fiddes – Tealing 400kV OHL Connection project and on the Preferred Substation Site at Fiddes. Section 1.1 contains links to the respective project Consultation Documents.
- All comments are requested by **9th June 2023** and thereafter a separate Report on Consultation (RoC) will be produced for the Corridor, Route and Substation sites. Each RoC will document the consultation responses received and the decisions made in light of these responses. Each RoC will also confirm the proposed Corridor, Route and Substation sites.
- Following the completion of this consultation exercise SSEN Transmission will then develop a series of alignment options for the OHL including how these connect with the new substations, identify a preferred alignment (within the Preferred Route) and undertake consultation on the preferred alignment.
- Further detailed public consultation will also be carried out with respect to each substation site.

## 2. THE PROPOSALS

### 2.1 The Need for the Project

Scottish and Southern Electricity Networks Transmission (SSEN Transmission) operating under licence held by Scottish Hydro Electric Transmission plc has a statutory duty under Schedule 9 of the Electricity Act to develop and maintain an efficient, co-ordinated and economical electrical transmission system in its licence area. Where there is a requirement to extend, upgrade or reinforce its transmission network, SSEN Transmission's aim is to provide an environmentally aware, technically feasible and economically viable solution which would cause the least disturbance to the environment and to people who use it.

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND)<sup>2</sup>, setting out the blueprint for the onshore and offshore electricity transmission network infrastructure required to enable the forecasted growth in renewable electricity across Great Britain, including the UK and Scottish Government's 2030 offshore wind targets of 50GW and 11GW.

For the north of Scotland, this confirms the need for a significant and strategic increase in the capacity of the onshore electricity transmission infrastructure to deliver 2030 targets and a pathway to net zero, several of which will require accelerated development and delivery to meet 2030 completion dates. The East Coast 400kV Phase 2 requires to be progressed accordingly. The need for these reinforcements has been further underlined within the recent British Energy Security Strategy<sup>3</sup>. This sets out the UK Government's plans to accelerate homegrown power for greater energy independence.

The extensive studies completed to inform the ESO's Pathway to 2030 HND confirmed the requirement to increase the power transfer capacity of the onshore corridor from Kintore to Tealing. This requires a 400kV connection between these sites to enable the significant power transfer capability needed to take power from onshore and large scale offshore renewable generation which is proposed to connect at onshore locations on the East Coast of Scotland before then being transported to areas of demand.

SSEN Transmission is proposing to establish a new 400kV overhead line (OHL) between Kintore, Fiddes and Tealing. This also requires two new 400kV substations to be constructed at Fiddes and Tealing to enable future connections and export routes to areas of demand. In addition, two of the existing 275kV overhead lines connecting the existing Tealing Substation with Alyth and Westfield (Glenrothes) substations respectively, require upgrades to enable operation at 400kV and to allow them to connect to the proposed new Tealing 400kV Substation Site.

The proposed Tealing 400kV Substation forms part of the East Coast 400kV Phase 2 projects. The new substation requires to be built near the existing Tealing 275kV substation, near Kirkton of Tealing, north of Dundee, in Angus (see Figure 1.1).

### 2.2 Substation Design

#### 2.2.1 New Substation Proposals

The project comprises the construction of a new 400kV substation close to the existing 275kV substation site at Tealing. The works will involve:

- construction of a new outdoor, Air Insulated Switchgear (AIS), 400kV substation complete with 400kV double busbar arrangement;
- installation of two or three new super grid transformers (SGT) depending on network requirements;
- a new substation control building;
- installation of underground cables or reuse of the existing OHLs to connect the new 400kV substation to the existing 275kV Tealing Substation;

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<sup>2</sup> National Grid ESO (July 2022). Pathway to 2030: A holistic network design to support offshore wind deployment for net zero. Available [online]: <https://www.nationalgrideso.com/future-energy/the-pathway-2030-holistic-network-design>.

<sup>3</sup> UK Government (April 2022). British Energy Security Strategy. Available [online]: <https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy>.

- new terminal towers to facilitate incoming 400kV connections from the new Kintore-Fiddes-Tealing OHL; and
- space provision to allow for connection of future renewable energy generation projects.

Plate 2.1 shows the existing substation at Tealing. The new substation will be broadly similar.



**Plate 2.1 - Aerial Photograph of the Existing Tealing Substation**

#### 2.2.2 Substation Design Requirements

The current design requires provision for a 20 bay<sup>4</sup> 400kV substation in vicinity to the existing Tealing 275/132kV substation<sup>5</sup>. For the purposes of undertaking the site selection process, it has been assumed that a footprint of approximately 645m x 280m would be required for a 400kV AIS substation design<sup>6</sup>.

Additional land take would also be required for landscaping and screening, Sustainable Urban Drainage Scheme (SUDs) and for habitat enhancement to achieve Biodiversity Net Gain (BNG)<sup>7</sup> at the site. The requirement for further land take will be considered once the Proposed Site has been confirmed. An additional area of approximately 200m x 80m would also be required for temporary welfare and laydown areas during construction, located in close proximity to the Site. This area would be restored following construction.

#### 2.2.3 Substation Connections and Tie-Ins

The following existing and proposed new infrastructure would require connection to the proposed new Tealing Substation:

- The proposals require a new 275kV connection between the new Tealing 400kV Substation and the existing Tealing 275kV substation. The new connection may comprise a new double circuit 275kV OHL or a new underground cable (UGC) connection depending on the distance and route between the two substations. It may also be possible to use

<sup>4</sup> A bay is a high voltage connection between an electrical circuit (power lines or transformers) and a busbar. Busbars are solid metal bars used to provide electrical connections in substations.

<sup>5</sup> The detailed design will be based on the proposed works under the East Coast 400kV Phase 2 Design Requirement Document (DRD) and the updated Single Line Diagram (SLD) issued by SSEN Transmission System Planning and Investment team (TSP&I): Conceptual 2030 Design – Single Line Diagram.

<sup>6</sup> An AIS substation represents the largest area of land take that would potentially be required.

<sup>7</sup> <https://www.ssen-transmission.co.uk/globalassets/documents/a-network-for-net-zero/supporting-evidence/our-approach-to-implementing-biodiversity-net-gain.pdf>



the existing 275kV tower lines which would become redundant between the existing and new substation sites when they are upgraded to 400kV capability as they would need to be connected to the new substation.

- The proposed new Kintore-Fiddes-Tealing 400kV OHL Connection.
- The existing 275kV OHLs from Tealing to Alyth (YT1/YT2) and Tealing to Westfield (TW1/TW2 into Scottish Power Transmission's licence area) are to be upgraded to 400kV operation under a separate project in the East Coast 400kV Phase 2 scheme. When upgraded to 400kV operation, both circuits would be connected into the new Tealing 400kV Substation.

### **2.3 Construction Activities**

The main construction elements associated with the Proposed Development are anticipated to include:

- enabling works (e.g. site clearance including diverting existing utilities, establishment of temporary construction compound(s), laydown areas and any temporary / permanent access tracks);
- establishment of a new bell mouth junction and associated access tracks to the new substation from the public highway;
- substation platform construction including cut/fill ground works;
- installation of drainage and SUDSs;
- delivery of components and materials to site;
- construction of foundations for major plant items including transformers and buildings;
- installation of major plant items including transformers and buildings;
- commissioning of electrical plant items; and
- removal of temporary works and site reinstatement.

Possible public road improvements (PRI), such as road widening, bridge reinforcements or installation of new junctions, may be required to provide suitable construction and maintenance access.

All construction activities would be undertaken in accordance with a Construction Environmental Management Plan (CEMP) which would define specific methods for environmental survey, monitoring and management throughout construction. A CEMP would be produced by the Principal Contractor and agreed with statutory stakeholders prior to the commencement of construction.

### **2.4 Project Construction Programme**

All works described within this scope are programmed to commence in Spring 2026 to allow completion of construction and energisation of Tealing 400kV substation by October 2029. A detailed construction programme will be developed as the project progresses.

## 3. SITE SELECTION PROCESS

### 3.1 Introduction

The approach to site selection has been informed by SSEN Transmission's *Substation Site Selection Procedures for Voltages at or above 132kV guidance document*<sup>8</sup> (hereafter referred to as SSEN Transmission's Substation Guidance). This guidance document considers the approach to identification and selection of new electricity transmission substation sites and also covers requirements to extend existing substations.

The guidance document sets out a consistent approach to the selection of substation sites by SSEN Transmission. This document helps SSEN Transmission to meet its obligations under Schedule 9 of the Electricity Act 1989, which requires transmission licence holders:

- to develop and maintain an efficient, coordinated and economical electricity transmission system in its licensed area;
- to 'have regard to the desirability of preserving the natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and protecting sites, buildings and objects of architectural, historic or archaeological interest'; and
- to do what they reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects.

The guidance develops a process which aims to balance these environmental considerations with technical and economic considerations throughout the site selection process. The guidance splits a project into the following key stages:

- Stage 1: Initial Site Screening; and
- Stage 2: Detailed Site Selection.

The project is currently at Stage 2 Detailed Site Selection, which seeks to identify a preferred substation site, which avoids where possible physical, environmental and amenity constraints, is likely to be acceptable to stakeholders, and is economically viable, taking into account engineering and connection requirements.

### 3.2 Methodology

#### 3.2.1 Area of Search

The extent of area of search (the study area), has been defined as the area within a 5km radius of the proposed connection point and the existing Tealing Substation.

#### 3.2.2 Baseline Conditions

A series of desk-based studies have been undertaken to identify potential constraints and opportunities within the study area. These have included:

- Identification of environmental designated sites utilising GIS datasets available including those via NatureScot Site Link<sup>9</sup>;
- Identification of archaeological and cultural heritage statutory designations, available via Historic Environment Scotland (HES) Digital Download, and heritage assets recorded as of 'Regional Significance' and Non-Inventory Designed Landscapes (NIDLs) within Angus Council's online Historic Environment Records (HER);
- Review of SEPA interactive Flood Risk Mapping<sup>10</sup>;
- Review of information on the online NatureScot (2016) Carbon and Peatland Mapping<sup>11</sup>;
- Review of the Angus Local Development Plan (LDP) to identify further environmental constraints and opportunities, such as regional level designations or other locations important to the public<sup>12</sup>;

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<sup>8</sup> SSEN Transmission (September 2022) Substation Site Selection Procedures for Voltages at or above 132kV. PR-NET-ENV-502.

<sup>9</sup>

<sup>10</sup> <https://map.sepa.org.uk/floodmaps>

<sup>11</sup> <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/soils/carbon-and-peatland-2016-map>

<sup>12</sup> Angus Local Development Plan 2016 [https://www.angus.gov.uk/directories/document\\_category/development\\_plan](https://www.angus.gov.uk/directories/document_category/development_plan)

- Review of Landscape Character Assessments<sup>13</sup> and landscape designations of relevance to the Study Area (including those identified by relevant local authorities);
- Review and extrapolation of Ordnance Survey (OS) mapping, OS Vectormap GIS data and other online GIS data sources to identify land use, terrain and elevation and slope, watercourses, water bodies, residential properties, settlements, roads and other built infrastructure such as wind farms;
- Identification of existing OHL transmission infrastructure, roads, gas pipelines<sup>14</sup> and railway lines within the study area;
- Identification of proposed developments from a review of the Angus Council planning application portal<sup>15</sup>; and
- Review of other relevant information on soils, ground conditions and land use capability with reference to land capability for agriculture (LCA) mapping<sup>16</sup>.

### 3.2.3 Site Option Identification and Selection Methods

High-Level Suitability Multi-Criteria Analysis (MCA) and Geographic Information System (GIS) tools were initially used to identify site options with the study area, in line with SSEN Transmission's Substation Guidance. Nine potential sites were identified initially for appraisal as part of the Stage 1 site screening phase. A comparative analysis of the Stage 1 sites was undertaken using the constraints information collated from the tools referenced above and in combination with initial site visits by the SSEN Transmission project team to verify conditions and constraints on the ground. This process informed which sites from the list of options at Stage 1 should proceed to more detailed appraisal at Stage 2. A workshop-based approach was then used to review all relevant information and key constraints associated with each site option, to sift the sites, and the reasons for non-selection of the sifted out sites were then recorded.

### 3.2.4 Stage 2 Appraisal Method

A series of high-level site appraisals were carried out by experienced professionals qualified in the various specialist fields to consider, systematically, the extent to which the sifted Stage 2 site options were constrained in relation to the following environmental criteria.

#### *Environmental Criteria*

- Natural Heritage – designations, protected species, habitats, ornithology, hydrology, geology and hydrogeology and biodiversity net gain (BNG).
- Cultural Heritage – designations and cultural heritage assets.
- Landscape and Visual – designations, landscape character and visual amenity.
- Land Use – agriculture, woodland/forestry and recreation.
- Planning – Policy and proposals.

The appraisals were informed by feedback from early consultation with key statutory environmental consultees and from targeted site visits undertaken by relevant environmental specialists in the team. A detailed GIS database was also developed with environmental constraints layers to support the constraints analysis and site appraisals.

In assessing the natural heritage of each substation site, consideration has been given to the ecological designations present and the implications for the assessment of BNG. The relative number, density and proportion of habitats considered irreplaceable in BNG terms – such as internationally and nationally designated sites, and Ancient Woodland – has been considered and taken into account when assigning the Natural Heritage RAG ratings to each substation site.

#### *Engineering Criteria*

- Access and Connectivity – construction access, operation and maintenance, distance from existing circuits/networks, future development possibilities, interface with SSEN distribution and generation and DNO connection.
- Footprint Requirements – technology, adjacent land use and space availability.

<sup>13</sup> NatureScot's 2019 National Landscape Character Assessment of Scotland <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>

<sup>14</sup> <https://www.nationalgas.com/land-and-assets/network-route-maps>

<sup>15</sup> <https://planning.angus.gov.uk/online-applications/search.do?action=simple&searchType=Application>

<sup>16</sup> <https://soils.environment.gov.scot/maps/capability-maps/national-scale-land-capability-for-agriculture/>

- Hazards – unique and existing hazards.
- Ground Conditions – topography and geology.
- Environmental Conditions – elevation, salt pollution, flooding, carbon footprint, contaminated land and noise.

*Economic Criteria*

- Capital – construction cost.
- Operational – Maintenance and operational cost.

3.2.5 Comparative Appraisal

A Red-Amber-Green (RAG) rating has been applied to each topic area listed above drawing on the findings of the Stage 2 appraisal of key constraints for substation development at each site considered. This rating is based on a three-point scale drawn from the SSEN Transmission Substation Guidance as shown in Figure 3.1.

**Figure 3.1 – RAG Ratings for Appraisal of Environmental, Technical and Cost Criteria**

Performance	Comparative Appraisal
Most preferred	Low potential for the development to be constrained
	Intermediate potential for the development to be constrained
Least preferred	High potential for the development to be constrained

The identification of impact for each criteria considered has been informed by the team’s understanding of the level of engineering and environmental constraint at each site and taking account of the potential effects of the project and mitigation measures which would routinely be employed in the design and construction and operation of substations.

The overall objective throughout the appraisal of options is to take full consideration of all environmental factors to minimise any potential adverse impacts on the environment whilst taking into account technical and cost considerations.

## 4. STAGE ONE: SITE SCREENING

### 4.1 Identification and Appraisal of Potential Sites

In line with the methodology presented above, nine site options were identified as illustrated in Figure 4.1. Site visits were carried out by the SSN Transmission project team comprising representatives from Engineering, Consents & Environment, Project Management, Land Management and Community Liaison, which led to modifications of the original site options identified; these are denoted as 'A' or 'B' and shown on Figure 4.1.

Each of the options was considered in a workshop attended by the project team and supporting discipline specialists, to consider the extent to which each site was more or less constrained in comparison to others, to identify sites with fewest constraints which warranted more detailed appraisal at Stage 2. The constraints and opportunities were recorded.

The outcome of the Stage 1 appraisal is presented in Table 4.1.

**Table 4.1 - Summary of Site Screening Appraisal**

Initial Option	Site Comparison Notes	Proceed to Stage 2?
Option 1	<p>The Site is at a prominent elevation, with likely open views and high visibility from receptors in the village of Tealing and at Prieston and Kirkton of Tealing. The Site is on sloped terrain.</p> <p>Existing access routes would need to be upgraded, improvements would likely include road widening and bellmouth works. The principal access route via Tealing would pass close to several residential properties.</p> <p>The existing 275kV OHL from the existing Tealing substation to Alyth follows an east to west alignment immediately to the south of the site.</p>	<p>No</p> <p>The Site was discounted due its slope, which would require extensive earthworks to create a level development platform, and its elevation and visibility from surrounding settlements.</p>
Option 2	<p>The Site is at a prominent elevation in the landscape, with likely open views and high visibility from receptors in the village of Tealing and from nearby farms at Prieston and Balcalk.</p> <p>Existing access routes would need to be upgraded, improvements would likely include road widening and bellmouth works. The principal access routes via Tealing would pass close to several residential properties.</p> <p>Tealing Primary School is located 600m to the east of the site which is considered to be a sensitive receptor with respect to noise, traffic and disturbance.</p> <p>The Site is crossed by a small heavily modified watercourse. There are two existing 275kV OHLs which pass within 50m of the site (the Tealing to Alyth OHL to the west and the Tealing to Fiddes OHL to the east) both following a north to south alignment.</p>	<p>No</p> <p>The Site was discounted due to its elevation and visibility and due to the likely requirement to divert a water course.</p>
Option 3	<p>The Site is located on sloped terrain.</p> <p>Existing access routes would need to be upgraded, improvements would likely include road widening and bellmouth works. The principal access route via Tealing would pass close to several residential properties.</p> <p>The Site is close to residential properties which may be impacted in terms of visual amenity and noise particularly those within approximately 100m to the north at South Balluderon and Dunian.</p>	<p>No</p> <p>The Site was discounted due to the presence of a National Grid high pressure gas pipeline through the Site, which had not been identified at the time of the initial site identification.</p>

Initial Option	Site Comparison Notes	Proceed to Stage 2?
	<p>The Site is located in proximity to a Scheduled Monument (Balkemback Cottage Stone Circle) (circa 300m north east) and close to a group of listed buildings within 50m north west at South Balluderon.</p> <p>A National Grid Transmisson high pressure gas pipeline crosses under the site. It is not feasible to build a substation over this asset.</p> <p>An existing 275kV OHL (Westfield-Tealing (TW1/TW2)) is located within 300m to the south of the Site.</p> <p>There are two wind turbines located on farm land to the east of the Site (adjacent to Site 4).</p>	
Option 3A	<p>Option 3A is located down slope and to the south of Option 3 on relatively flat terrain.</p> <p>Existing access routes would need to be upgraded, improvements would likely include road widening and bellmouth works. The principal existing access route via Tealing passes close to several residential properties.</p> <p>The upstream extent of the Fithie Burn is located in the south east corner of the site. SEPA Flood Maps show no flood risk from the Fithie Burn at the Site but indicate some minor areas of surface water flood risk along drainage routes in the south east part of the site. The Site is located in proximity to a Scheduled Monument (Balkemback Cottage Stone Circle) (circa 500m north east) and close to a group of listed buildings within 100m north west at South Balluderon.</p> <p>A National Grid Transmisson high pressure gas pipeline crosses under the site. It is not feasible to build a substation over this asset.</p> <p>An existing 275kV OHL (Westfield-Tealing (TW1/TW2)) follows an east to west course within 100m to the south of the site. There are two wind turbines located to the east of the Site (adjacent to Site 4).</p>	<p>No</p> <p>The Site was discounted due the presence of the gas pipeline.</p>
Option 4	<p>The Site is located on relatively flat and level terrain.</p> <p>An existing access route to Tealing substation could be utilised, although upgades would be required. Other existing access routes and farm tracks would need to be upgraded, improvements would likely include road widening and bellmouth works. The principal existing access route via Tealing would pass close to several residential properties.</p> <p>The Fithie Burn is located just south of the site. SEPA Flood Maps show no risk of fluvial flooding from the Fithie Burn within the plot, although some risk is indicated just south of the Site.</p> <p>The Site is located in proximity to a Scheduled Monument (Balkemback Cottage Stone Circle) (circa 600m north west of the site) and a Category C listed building at Balkemback Farm (within 150m to the north east).</p> <p>An existing 275kV OHL (Westfield-Tealing (TW1/TW2)) crosses east to west within 50m to the south of the site.</p>	<p>Yes</p> <p>The Site is considered to have suitable access, connectivity and is sited on flat terrain with no flood risk.</p>

Initial Option	Site Comparison Notes	Proceed to Stage 2?
	<p>There are two operational wind turbines located within the Site, one on the western boundary and one located within the south western area.</p>	
Option 5	<p>The Site is close to the hamlet of Kirkton of Tealing, and scattered properties at Balnuith to the north, west and south west of the Site (within 100m at the closest point to the site) which may be impacted in terms of visual amenity and noise.</p> <p>Existing access routes would need to be upgraded, improvements would likely include road widening and bellmouth works. The principal existing access route via Tealing passes close to several residential properties.</p> <p>SEPA Flood Maps show there is a medium risk of surface water flooding across parts of the Site associated with drainage ditches, tracks and low lying ground.</p> <p>A group of listed buildings associated with the farm and steading at Kirkton of Tealing is located within 150m of the northern edge of the site. Tealing souterrain scheduled monument is located 750m north east of the Site.</p> <p>The site is located immediately north east of the existing Tealing Substation. There are a number of existing 275kV OHLs running adjacent (to the west) to the site and an existing 132kV OHL clips the south east corner of the site. The presence of these lines would make connection of the new and existing substations very complex.</p> <p>There is an existing wind turbine located on farm land approximately 100m to the south east of the site.</p>	<p>No</p> <p>The Site was discounted due to the number of properties that would potentially be affected and due to the complexity of OHL connections.</p>
Option 6	<p>The Site is located on relatively flat farm land and within 300m of residential properties located to the east at North Mains of Baldoan. There is a residential property located within the north western part of the Site (which would need to be purchased and demolished).</p> <p>SEPA Flood Maps show that there is a surface water flood risk spanning the width of the Site in its central area and a further area of surface water and fluvial flood risk along the southern boundary of the Site associated with a field drain.</p> <p>A 275kV OHL (Westfield-Tealing (TW1/TW2)) is located to the north of the site.</p>	<p>No</p> <p>The Site was discounted due to flood risk.</p>
Option 6A	<p>Site 6A is a combination of Options 6 and 7 and is positioned directly between and overlapping Sites 6 and 7. There are no residential properties on the Site. It offers good connection back to the existing Tealing Substation Site and for connection of the OHLs.</p> <p>Existing access routes, junctions and farm access roads would need to be upgraded, improvement works would likely include road widening and bellmouth works. The principal existing access route via Tealing would pass close to several residential properties.</p>	<p>No</p> <p>The Site was discounted due to flood risk.</p>

Initial Option	Site Comparison Notes	Proceed to Stage 2?
	<p>The Site is located on flat terrain. There is a cluster of properties located within the Site associated with the farm and residential properties at North Mains of Baldovan.</p> <p>SEPA Flood Maps show that there is a surface water and fluvial flood risk spanning the width of the Site in the central area of the Site associated with field drains.</p>	
Option 7	<p>Site 7 is located on relatively flat terrain. It is relatively remote from residential properties, with one group of receptors located approximately 100m north at North Mains of Baldovan.</p> <p>Existing access routes would need to be upgraded, improvement works would likely include road widening and bellmouth works.</p> <p>There are no watercourses or drainage ditches on the Site and it is not located within the flood plain.</p> <p>The Site is considered to have good connectivity back to the existing Tealing Substation.</p> <p>There is an existing 132kV OHL which passes across the south east corner of the Site.</p>	<p>Yes</p> <p>It is considered that this site has good connectivity, would impact relatively few properties and reduce the overall requirement for purchase of properties and land.</p>

#### 4.2 Site Options Proceeding to Stage 2 Appraisal

The sites considered to warrant further appraisal are as follows:

- Site Option 4:** Land at Balkemback Farm (site centred at National Grid Reference (NGR) NO389 377). The Site is on relatively flat terrain with an elevation change of approximately 25m. It comprises open arable farmland with some fields separated by drystone dykes. It is open to adjacent farmland with tree cover limited to occasional deciduous trees on the southern boundary. There are small drainage ditches located on the Site and the Fithie Burn lies just south of the Site. There are two small wind turbines present. There are existing access tracks which link the Site to the local road network, with good connections to the A90.
- Site Option 7:** Land to the south of North Mains of Baldovan (site centred at NGR NO 391 364). The Site is on relatively flat terrain and comprises arable fields and with polytunnel horticulture on neighbouring land to the east. The Site overlaps with a minor road and there is a drainage ditch to the north of the Site. Existing accesses link the Site to the local road network, with good connections to the A90.



## 5. STAGE TWO: DETAILED SITE SELECTION

### 5.1 Introduction

This section summarises the comparative appraisal of the two Site options taken forward from Stage 1 and the rationale for the selection of the preferred Site.

The following figures accompany the appraisal.

- Figure 5.1: Landscape Constraints with Site Options
- Figure 5.2: Ecological Constraints with Site Options
- Figure 5.3: Cultural Heritage Constraints with Site Options
- Figure 5.4: Hydrology Constraints with Site Options
- Figure 5.5: Land Use Constraints with Site Options

### 5.2 Comparative Appraisal of Sites

A comparative appraisal of the site options has been undertaken following the approach described in Section 3. Table 5.1 is structured in accordance with the appraisal criteria set out in SSEN Transmission’s Substation Guidance.

**Table 5.1 - Comparative Analysis of Substation Sites 4 and 7**

Topic	Site Option 4	Site Option 7
Natural Heritage	<p><u>Designations</u></p> <p>There are no ecological designations within the boundaries or close to this Site. The nearest designated site is Auchterhouse Hill Site of Special Scientific Interest (SSSI), over 2km north west of Site 4.</p> <p>The Site option is within 20km north of the Firth of Tay &amp; Eden Special Protection Area (SPA), Outer Firth of Forth and St. Andrews Complex SPA, Loch of Kinnordy SPA and Loch of Lintrathen SPA.</p> <p><u>Habitats &amp; Protected Species</u></p> <p>The Fithie Burn lies to the south of Site 4 and has potential for use by otter. There is potential that badgers could use the fields within the Site for foraging.</p> <p>The Site is predominantly comprised of low-lying enclosed farmland, under a mix of arable and pasture with occasional trees along field boundary hedgerows.</p> <p>No woodland is present within Site 4. Blocks of woodland listed on the Ancient Woodland Inventory (AWI) are present in the area surrounding the site. The majority of these are designated as long-established of plantation origin (LEPO). Wynton Wood is the closest woodland block, located approximately 700m south west of the Site and is LEPO although its true extent is less than shown on the AWI.</p>	<p><u>Designations</u></p> <p>There are no ecological designations within the boundaries or close to this site. Auchterhouse Hill SSSI is over 4km to the north west.</p> <p>Trottick Mill Ponds Local Nature Reserve (LNR) is located over 2km south of Site 7 within the northern suburbs of Dundee.</p> <p>The substation Site is within 20km north of the Firth of Tay &amp; Eden Special Protection Area (SPA), Outer Firth of Forth and St. Andrews Complex SPA, Loch of Kinnordy SPA and Loch of Lintrathen SPA.</p> <p><u>Habitats &amp; Protected Species</u></p> <p>A modified watercourse / field drain immediately to the north of Site 7 connects to the Fithie Burn and has the potential for use by otter. There is the potential that badgers could use the fields for foraging across the Site.</p> <p>There is a residential property within 50m (to the north) of the Site at North Mains of Baldovan which has bat roosting potential.</p> <p>The Site is predominantly comprised of low lying enclosed farmland, under a mix of arable and pasture, with very few trees or hedgerows.</p>

Topic	Site Option 4	Site Option 7
	<p>There is some potential for use of this habitat by protected species including red squirrel.</p> <p><u>Ornithology</u></p> <p>The substation Site has the potential to be used by the qualifying species of the SPAs identified above as it lies within the foraging distance for over wintering geese (including pink footed and greylag geese) and it is possible that these species forage at the Site. There is also potential for breeding birds to be present on suitable habitat withihn the Site including UK BAP species.</p> <p>There are small stands of woodland and linear sections of riparian woodland in close proximity to the Site, potentially supporting populations of woodland passerines which would be unlikely to be impacted by the development.</p> <p><u>Hydrology and Geology</u></p> <p>SEPA Flood Maps show no risk of fluvial flooding from the Fithie Burn within the site, although there is an area designated at High Likelihood of fluvial flooding from the Fithie Burn some 250m south of the Site.</p> <p>There are no Scottish Water assets indicated within the Site.</p> <p>There are no geological conservation review sites within or in close proximity to the Site. The Site is underlain with geology from the Dundee Flagstone Formation comprising sandstone, siltstone and mudstone. Superficial deposits are indicated as sedimentary comprising Devensian Till.</p> <p>The BGS Hydrogeology Viewer (1:625,000 scale map) indicates that the Site is underlain by a moderately productive aquifer.</p> <p>Reference to the NatureScot Carbon and Peatland 2016 map indicates the Site is underlain with mineral soils.</p> <p><u>BNG</u></p> <p>The Site does not contain any designated sites or notable areas of habitat for which there are publicly available data. The Site is dominated by heavily modified agricultural habitat types which are considered to be of limited</p>	<p>There are no areas of woodland listed on the AWI in close proximity to the site, although there is a small mature woodland near Hillhouses within 50m of the south western corner of the Site. There is some potential for use of this habitat by protected species including red squirrel. Wynton Wood is the closest AWI woodland block located approximately 600m north west of the Site and is LEPO.</p> <p><u>Ornithology</u></p> <p>The Substation Site has the potential to be used by the qualifying species of the SPAs identified above as it lies within the foraging distance for over wintering geese (including pink footed and greylag geese) and it is possible that these species forage at the Site. There is also potential for breeding birds to be present on suitable habitat withihn the Site including UK BAP species.</p> <p>There are small stands of woodland and linear sections of riparian woodland in close proximity to the Sites, potentially supporting populations of woodland passerines which would be unlikely to be impacted by the development.</p> <p><u>Hydrology and Geology</u></p> <p>SEPA flood maps indicate a small area of pluvial flooding (High Likelihood) along the course of the minor watercourse to north of the Site which follows the line of the access track to North Mains of Baldovan. There is however no fluvial flooding indicated within or near to the Site.</p> <p>There are no Scottish Water assets indicated within the Site, with the exception of a mains distribution pipe along the public road which runs within 100m of the northern boundary of the site.</p> <p>There are no geological conservation review sites within or in close proximity. The Site is underlain with geology from the Dundee Flagstone Formation comprising sandstone, siltstone and mudstone. Superficial deposits are indicated as sedimentary comprising Devensian Till.</p>

Topic	Site Option 4	Site Option 7
	<p>ecological value. As such, it should be possible to deliver BNG within the Site.</p>	<p>The BGS Hydrogeology Viewer (1:625,000 scale map) indicates that the Site is underlain by a moderately productive aquifer.</p> <p>Reference to the NatureScot Carbon and Peatland 2016 map indicates the Site is underlain with mineral soils.</p> <p><u>BNG</u></p> <p>The Site does not contain any designated sites or notable areas of habitat for which there are publicly available data. The Site is dominated by heavily modified agricultural habitat types which are considered to be of limited ecological value. As such, it should be possible to deliver BNG within the Site.</p>
Cultural Heritage	<p><u>Designations and Assets</u></p> <p>Within 5 km of the substation Site boundary there are 14 Scheduled Monuments:</p> <ul style="list-style-type: none"> <li>• Balkemback Cottages, stone circle (SM 2868), 600m to the north west.</li> <li>• Martin's Stone, cross slab, Balkello (SM 159), 1.1km to the west.</li> <li>• Balkello, standing stone (SM 6145), 2.2km to the north west.</li> <li>• Tealing, dovecot (SM 90298) and souterrain (SM 90299), 2.2km to the east. The dovecot is well screened by woodland.</li> <li>• Huntingfaulds, cairn (SM 6562), 2.5km north east.</li> <li>• Dundee and Newtyle Railway embankment N of Baldragon (SM 5967), 2.8km to the west.</li> <li>• Home Farm, enclosure (SM 7059), 3.1km to the south east.</li> <li>• Dronley Mill, enclosure (SM 6466), 4.1km to the south west.</li> <li>• Dronley House, mound (SM 6535), 4.5km to the south west.</li> <li>• Craig Hill, fort and broch (SM 3038), 4.3km to the east south east.</li> <li>• Souterrains, 162m W of Westwood (SM 6367) and Unenclosed settlement</li> </ul>	<p><u>Designations and Assets</u></p> <p>Within 5km of the substation Site boundary there are 14 Scheduled Monuments:</p> <ul style="list-style-type: none"> <li>• Balkemback Cottages, stone (SM 2868), 1.5km to the north west.</li> <li>• Martin's Stone, cross slab, (SM 159), 1.6km to the north west.</li> <li>• Home Farm, enclosure 400m E of (SM 7059), 1.7km to the south east.</li> <li>• South Auchray, fort (SM 6561), 2.4km to the south west.</li> <li>• Tealing, dovecot (SM 90298) and souterrain (SM 90299), 2.5km to the north east. The dovecot is well screened by woodland.</li> <li>• Powrie Castle, Powrie (SM 2871), also a Category A Listed Building, 3km to the south east.</li> <li>• Dundee and Newtyle Railway, embankment N of Baldragon (SM 5967), 3km to the north west.</li> <li>• Balkello, standing stone (SM 6145), 3.1km to the north west.</li> <li>• Dundee and Newtyle Railway embankment SW of Balbeuchly House (SM 6125), 3.2km to the west north west.</li> <li>• Huntingfauld, cairn (SM 6562), 3.3km to the north north east.</li> </ul>

Topic	Site Option 4	Site Option 7
	<p>3000m SW of Westwood (SM 6628), both 4.9km to the west north west.</p> <ul style="list-style-type: none"> <li>• Powrie Castle, Powrie (SM 2871), also a Category A Listed Building, 4.2km to the south east.</li> </ul> <p>There are two Properties in Care (PIC) located within 5km of site, both lie 2.2km to the east of the substation Site boundary:</p> <ul style="list-style-type: none"> <li>• Tealing Dovecot (PIC 45).</li> <li>• Tealing Souterrain (PIC 46).</li> </ul> <p>There are four Category A Listed Buildings located within 5km of the site:</p> <ul style="list-style-type: none"> <li>• Kirkton of Tealing, Former Tealing Parish Church including churchyard (LB 17450), 1.3km east of the Site.</li> <li>• 23-45 (Odd Nos) and 14-22 (Even Nos) Heron Rise, Claverhouse Road, Claverhouse Bleachfield, Former Beetling House, Office and Chimney Stalk (LB 25112), located 4.1km to the south east.</li> <li>• Powrie, Powrie Castle (LB 19019), also a Scheduled Monument, located 4.2km to the south east.</li> <li>• Caird Park Mains Castle (LB 25066), located 4.9km to the south west.</li> </ul> <p>There is one Conservation Area within 5km of the substation Site listed as Trottick CA (CA252). The Conservation Area lies c.3.9km to the south east of the Site. This Conservation Area, lies on the northern outskirts of Dundee.</p> <p>There is one Inventory Garden and Designed Landscape present within 5km of the substation Site, Camperdown House GDL (GDL 82). The GDL lies c.4.7 km to the south west of the substation Site on the northern outskirts of Dundee</p> <p>There are no Inventory Historic Battlefields present within 5 km of the substation Site.</p>	<ul style="list-style-type: none"> <li>• Craig, hillfort (SM 3038), 3.5km to the east.</li> <li>• Dronley Mill, enclosure (SM 6466), 4.2km to the west.</li> <li>• Dronley House, mound (SM 6535), 4.8km to the west.</li> </ul> <p>There are two PIC located within 5km of the site, both lie 2.2km to the north east of the substation Site boundary:</p> <ul style="list-style-type: none"> <li>• Tealing Dovecot (PIC 45).</li> <li>• Tealing Souterrain (PIC 46).</li> </ul> <p>There are six Category A Listed Buildings located within 5km of the substation Site boundary:</p> <ul style="list-style-type: none"> <li>• Kirkton of Tealing, Former Tealing Parish Church including churchyard (LB 17450), 1.7km north east of the Site.</li> <li>• South Balluderon Farm, Steading including stackyard walls, implement shed, field trough and mill dam with walls (LB 17458), 1.9km north west of the Site (and well screened by surrounding woodland).</li> <li>• 23-45 (Odd Nos) and 14-22 (Even Nos) Heron Rise, Claverhouse Road, Claverhouse Bleachfield, Former Beetling House, Office and Chimney Stalk (LB 25112), located 2.8km to the south east.</li> <li>• Powrie, Powrie Castle (LB 19019), also a Scheduled Monument, located 3km to the south east.</li> <li>• Caird Park Mains Castle (LB 25066), located 3.4km to the south west.</li> <li>• Camperdown House (LB 25078), forming part of Camperdown House GDL (GDL 82), located 4.3km south west.</li> </ul> <p>There is one Conservation Area within 5km of the substation Site listed as Trottick CA (CA252). The Conservation Area lies c.2.3km to the south east of the Site. This Conservation Area, lies on the northern outskirts of Dundee.</p> <p>There is one Inventory Garden and Designed Landscape present within 5km of the Site, Camperdown House GDL (GDL 82). It lies</p>

Topic	Site Option 4	Site Option 7
		<p>c.3.8km to the south west of the Site on the northern outskirts of Dundee.</p> <p>There are no Inventory Historic Battlefields present within 5km of the substation Site.</p>
<p>Landscape and Visual</p>	<p><u>Designations and Landscape Character</u></p> <p>The Site is not located in or close to any national, regional or locally designated landscapes.</p> <p>The Site falls within the Landscape Character Area LCT 387 – Dipslope Farmland. NatureScot’s Landscape Character Assessment notes that this LCT is characterised by <i>“lowland farmland running parallel to the coastline”</i> which has an <i>“open, medium-scale character which is predominantly productive arable land use with simple geometric field patterns”</i>. There is very limited woodland cover and evidence of development including electricity transmission lines and <i>“single and small clusters of a range of domestic and medium scale commercial wind turbines”</i> which are prominent due to the lack of woodland cover (SNH National Landscape Character Assessment, 2019).</p> <p>Landform across the Site falls very gradually in a north to south orientation with an elevation change of approximately 25m.</p> <p>Landcover across the Site comprises open arable farmland and pasture with some fields separated by drystone dykes. The Site is open to adjacent farmland in all directions.</p> <p>Tree cover is limited to occasional deciduous trees along one field boundary within the southern extent of the site.</p> <p><u>Visual</u></p> <p>Properties and associated farm buildings at Balkemback are located some 130m to the north east of the Site and would have direct and open elevated views over and across the Site.</p> <p>Balkemback Cottages, Hillview House and a property at Dunian are located some 280m north and 350m north respectively and would have open elevated views south towards the Site. Views are also likely from Gamekeeper’s Cottage (some 470m north) and Cross Roads</p>	<p><u>Designations and Landscape Character</u></p> <p>The Site is not located in or close to any national, regional or locally designated landscapes.</p> <p>The Site falls within Landscape Character Area LCT 387 - Dipslope Farmland, as described for Site 4. There is very limited woodland cover and evidence of development including electricity transmission lines and <i>“single and small clusters of a range of domestic and medium scale commercial wind turbines”</i> which are prominent due to the lack of woodland cover (SNH National Landscape Character Assessment, 2019).</p> <p>Landform across the Site rises in a north east to south west orientation with an elevation change of approximately 30m. The slope is more pronounced in the south west corner of the Site where the land steepens towards a small wooded hill at Hillhouses.</p> <p>Landcover across the Site comprises open arable farmland and pasture. The fields are generally separated by dykes or hedges leaving a very open agricultural landscape.</p> <p>There is no mature tree cover within the site.</p> <p><u>Visual</u></p> <p>Several groups of residential properties are located in proximity to the Site from which development would be predicted to be visible: at North Mains of Baldovan (100m to the north), Shenaval (120m to the north east), New House (200m north east), Myretown of Claverhouse (400m north east) and Hillhouses (350m to the west).</p> <p>Close proximity views towards the Site would be predicted from these properties. These properties are also likely to have some glimpsed visibility of the existing substation to the north-east.</p> <p>Other groups of properties are located at Balyndown (500m to the south) and at The Bungalow (630m to the south east). These</p>

Topic	Site Option 4	Site Option 7
	<p>Cottage / Cross House (approximately 500m north east).</p> <p>More distant properties are located at Balnuith (600m east), Prieston (670m north east) and North Mains of Baldovan (670m south) with potential for direct views to the Site.</p> <p>Open views towards the Site are also likely from the minor (C class) road between Tealing and Auchterhouse which is located to the north of the Site within 200m at its closest point.</p>	<p>properties are unlikely to have clear views of the Site due to a ridge of ground separating them from the Site.</p> <p>A minor (unclassified) access road to North Mains of Baldovan crosses the Site to the some 50m from the northern site boundary.</p>
Land Use	<p><u>Agriculture</u></p> <p>The Land Capability for Agriculture (LCA) classification is identified as class 3.2 across the site which is currently used for arable cropping and pasture.</p> <p>The Site lies in open agricultural fields west of Balnuith. There are some small field drainage ditches located within the site. The Fithie Burn lies just south of the site.</p> <p><u>Woodland / Forestry</u></p> <p>The Site does not comprise any areas of woodland or forestry which would require felling. Wynton Wood is the closest AWI block which is approximately 600 m from the Site and is LEPO (see 'Natural Heritage' section).</p> <p><u>Recreation</u></p> <p>Balkello Community Woodland which comprises trees planted in the 1990s is a recreational woodland located 1.6km north west of Site 4. It has walking trails and picnic areas.</p> <p>There are no core paths, National Cycle Networks or Scottish Great Trails within or in close proximity to the site.</p> <p>There are some points of recreation interest close to Site 4 which include Balnuith Alpacas located 500m to the east of the Site, a rare breed farm open to visitors.</p> <p><u>Infrastructure</u></p> <p>There are two domestic scale wind turbines present on the Site.</p>	<p><u>Agriculture</u></p> <p>The LCA classification is mainly class 3.1 with a small proportion (approx. 10%) class 3.2, in areas along the northern boundary and south west corner.</p> <p>The Site occupies large arable fields and areas of pasture south of a farm at North Mains of Baldovan.</p> <p><u>Woodland / Forestry</u></p> <p>The Site does not comprise any woodland or forestry which would require felling. Wynton Wood is the closest AWI block which is approximately 600m from the Site and is LEPO (see 'Natural Heritage' section).</p> <p>There are some deciduous trees located along the minor road adjacent to Site 7.</p> <p><u>Recreation</u></p> <p>There are no core paths, National Cycle Networks or Scottish Great Trails within or in close proximity to the site.</p> <p>There is a farm shop located at Myreton of Claverhouse Farm located 300m to the east of the site.</p>

Topic	Site Option 4	Site Option 7
Planning	<p><u>Policy and Proposals</u></p> <p>The key national policy of relevance to the project is National Policy Framework 4 (NPF4) which was adopted in February 2023. Strategic Renewable Electricity Generation and Transmission Infrastructure is a National Development in NPF4 and considered to support the delivery of the spatial strategy for the North East of Scotland.</p> <p>The Site is not located within or close to allocations in the Angus Local Development Plan (LDP) or national developments which would cause conflict.</p> <p>At the time of writing, there are no screening or scoping opinion requests, no Proposal of Application Notices and no planning applications of a scale greater than domestic units under determination identified on Angus Council’s planning portal on or within 5km of the Site.</p> <p>An application for an energy storage facility on land at Moathill Bridge, Tealing adjacent to the existing Tealing Substation has recently been approved.</p>	<p><u>Policy and Proposals</u></p> <p>The key national policy of relevance to the project is National Policy Framework 4 (NPF4) which was adopted in February 2023. Strategic Renewable Electricity Generation and Transmission Infrastructure is a National Development in NPF4 and considered to support the delivery of the spatial strategy for the North East of Scotland.</p> <p>The Site is not located within or close to allocations in the Angus Local Development Plan (LDP) or national developments which would cause conflict.</p> <p>At the time of writing, there are no screening or scoping opinion requests, no Proposal of Application Notices and no planning applications of a scale greater than domestic units under determination identified on Angus Council’s planning portal on or within 5km of the Site.</p>
Engineering	<p><u>Access</u></p> <p>Road access to the Site would follow the same route as the existing Tealing Substation with some improvements required to an existing farm access track to reach the Site.</p> <p>Tracks to the Site are between 500m and 1km of well maintained public roads.</p> <p><u>Connectivity</u></p> <p>This Site option is adjacent to, or with 1km of, the highest voltage connecting circuit and there are no significant constraints between the point of connection and the site.</p> <p>Site 4 allows for removal of a section of the existing Alyth-Tealing (YT1/YT2) 275kV OHL between Prieston and the existing Tealing substation (7 towers) as this line, which is to be upgraded to 400kV, would connect to the new 400kV Tealing substation (west of the existing substation).</p> <p>When the existing Tealing-Westfield (TW1/TW2) 275kV OHL (also to be upgraded</p>	<p><u>Access</u></p> <p>Road access to the Site would follow the same route as the existing Tealing Substation with some upgrading and widening required to the access track to North Mains of Baldovan.</p> <p>Tracks to the Site are between 500m and 1km of well maintained public roads.</p> <p><u>Connectivity</u></p> <p>This option is in excess of 1km of the highest voltage connecting circuit and there are constraints between the point of connection and the Site.</p> <p>The existing Alyth-Tealing (YT1/YT2) 275kV OHL would need to be diverted for a greater distance than for Site 4 to connect with the new substation (as the line is to be upgraded to 400kV). However some of the subsequently redundant section of OHL between Prieston and the existing substation would be removed (similar to Site 4).</p>

Topic	Site Option 4	Site Option 7
	<p>to 400kV) is connected to the new Tealing substation, the 'remaining' section of OHL which connects to the existing substation can then be re-used to be provide the required 275kV connection between the two substations.</p> <p>Overall Site 4 would have less disruption to the OHL network in the Tealing area with fewer constraints for connecting the new and existing substations.</p> <p>There are no material issues in relation to future development possibilites, interfaces with SSEN distribution and generation requirements. DNO connection is &lt;1km.</p> <p><u>Footprint Requirements</u></p> <p>The Site footprint is considered sufficient to accommodate any technology type and the optimal site design can be accommodated. There are no known constraints on adjacent land that would affect ancillary infrastructure.</p> <p>There are two wind turbines on the Site which, subject to detailed substation design, might require to be relocated or dismantled.</p> <p><u>Hazards</u></p> <p>No specific hazards that cannot be mitigated have been identified at this stage. Further information will be reviewed at the next stage to confirm the presence of any unique hazards.</p> <p><u>Ground Conditions</u></p> <p>The Site is situated on relatively flat and level ground, with no visible surface water issues. The Site is located on agricultural land which slopes very gently down towards the Fithie Burn. No constraints have been identified in relation to ground conditions or underlying geology.</p> <p>The Site's gentle slope may require some limited earthworks to create a level platform.</p> <p><u>Environmental Conditions</u></p> <p>The site is located more than 6km from the coast and salt pollution is not considered to be a key issue.</p> <p>At this early design stage both Sites would have the same anticipated carbon footprint</p>	<p>The required 275kV OHL connection between the substations would need a new cable route or OHL because the location of Site 7 with respect to the Tealing-Westfield (TW1/TW2) 275kV OHL does not allow for re-use of the 'remaining' section as it does for Site 4.</p> <p>The OHL diversion routes to Site 7 are longer than for Site 4. The routes between the new and existing Tealing substations would require three cable routes which would be difficult to establish and more costly than reusing the existing TW1/TW2 OHL.</p> <p>Future connectivity could also be difficult to the south side of the substation due to the proximity of an existing 132kV OHL and being slightly closer to a residential area.</p> <p>There are no material issues in relation to future development possibilites, interfaces with SSEN distribution and generation requirements. DNO connection is &lt;1km.</p> <p><u>Footprint Requirements</u></p> <p>The Site footprint is considered sufficient to accommodate any technology type and the optimal site design can be accommodated. There are no known constraints on adjacent land that would affect ancillary infrastructure.</p> <p><u>Hazards</u></p> <p>No specific hazards that cannot be mitigated have been identified at this stage. Further information will be reviewed at the next stage to confirm the presence of any unique hazards.</p> <p><u>Ground Conditions</u></p> <p>The Site is located on slightly higher ground than Site 4 and on the opposite site of the lower ground occupied by the Fithie Burn. There are no visible surface water issues. No constraints have been identified in relation to ground conditions or underlying geology.</p> <p>The Site's gentle slope may require some limited earthworks to create a level platform.</p> <p><u>Environmental Conditions</u></p> <p>The site is located more than 6km from the coast and salt pollution is not considered to be a key issue.</p>



Topic	Site Option 4	Site Option 7
	<p>and it is unlikely that the design would require use of sulphur hexafluoride (SF6).</p> <p>No potentially contaminated land has been identified.</p> <p>Residential properties (potential noise receptors) are present at Balkemback Farmhouse (130m to the north east), Dunian (350m north west), Balkemback Cottages (280m to the north) and Cross Roads Cottage (500m north east).</p>	<p>At this early design stage both Sites would have the same anticipated carbon footprint and it is unlikely that the design would require use of sulphur hexafluoride (SF6).</p> <p>No potentially contaminated land has been identified.</p> <p>Several groups of residential properties (potential noise receptors) are present at North Mains of Baldoan (100m to the north), Shenaval (120m to the north east), New House (200m to the north east), Myretown of Claverhouse (400m north east) and Hillhouses (350m to the west).</p>
Cost	<p>Diversions and OHL tie-ins are shorter and therefore less costly for Site 4, compared to Site 7. There is an opportunity to reduce overall project cost associated with connecting the new and existing substations by reusing some of the existing infrastructure.</p> <p>Maintenance and operations costs are likely to be similar for each site. However, the reduced length and type of structures which are associated with the tie-ins at Site 4 would reduce the maintenance burden compared to Site 7.</p>	<p>Diversions and OHL tie-ins are longer and more complex for Site 7. Therefore the capital cost of completing them would be higher. There is no opportunity to reuse existing infrastructure to connect the new and existing substations and a new connection would be required.</p> <p>Maintenance and operations costs are similar for each site. However, the increased length and type of structures which are associated with the tie-ins at Site 7 would increase the maintenance burden compared to Site 4. This will increase significantly if the connection between the new Site and the existing substation is required to be underground cable.</p>

### 5.3 Comparative Appraisal of Substation Site Options

Table 5.2 below presents the findings of the RAG Ratings for the Site options. With reference to environmental criteria, Site 7 is preferred on the grounds that it lies furthest from the Scheduled Monuments and Category A Listed Buildings identified within the vicinity of the substation sites and from areas noted to be at risk from fluvial flooding noted by SEPA Flood Maps for the Fithie Burn. There are slightly fewer residential properties in close proximity to Site 4 than to Site 7.

In engineering terms however, Site 4 is preferred principally because it would involve shorter OHL diversion routes to the new Tealing Substation, the least disruption to the existing OHL network and more efficient connection between the existing and new substations.

In cost terms, Site 4 is the preferred option because it is in closer proximity to the required OHLs and so the capital cost to construct and maintain the diversion and connections would be lower than for Site 7. Also, since fewer landowners would be impacted by the connections into Site 4, the land assembly costs would be less compared to that required for Site 7. Overall the preferred Substation Site is Site 4.

**Table 5.2 - Summary of RAG Rating**

Category	Site 4	Site 7
<b>Environmental / Consenting</b>		
<i>Natural Heritage:</i>		
Designation	L	L
Protected Species	M	M
Habitats	L	L
Ornithology	M	M
Hydrology/Geology	L	L
<i>Cultural Heritage:</i>		
Designation	M	L
Cultural Heritage Assets	M	L
<i>Landscape and Visual:</i>		
Designation	L	L
Landscape Character	M	M
Visual	H	H
<i>Land Use:</i>		
Agriculture	M	M
Woodland/Forestry	L	L
Recreation	L	L
<i>Planning:</i>		
Policy	L	L
Proposals	L	L
<b>Engineering</b>		
<i>Access &amp; Connectivity:</i>		
Construction Access	L	L
Operation and Maintenance	L	L
Existing Circuits/Networks	L	M
Future Development Possibilities	M	M
Interface with SSEN Distribution and Generation	L	L
DNO Connection	L	L
<i>Footprint Requirements:</i>		
Technology	L	L
Adjacent Land Use	L	L
Space Availability	L	L
<i>Hazards:</i>		
Unique Hazards	M	M
Existing Hazards	L	L
<i>Ground Conditions:</i>		
Topography	L	L
Geology	L	L
<i>Environmental Conditions:</i>		
Elevation	M	M
Salt Pollution	L	L
Flooding	L	L
Carbon Footprint	L	L
SF6	L	L
Contaminated Land	L	L
Noise	M	M
<b>Cost</b>		
Capital	L	M
Operational	L	M

#### **5.4 Rationale for the Selection of the Preferred Site**

As described in Table 5.1 and illustrated in Table 5.2, there is little to distinguish between Sites 4 and 7, the principal factors being cultural heritage, the works necessary to rationalise existing connections and the associated costs. While Site 7 is marginally preferred in terms of its greater distance from cultural heritage features, the lower costs of Site 4 in rationalising existing connections is a material factor which weighs in favour of Site 4. There are fewer residential properties in close proximity to Site 4 than to Site 7. Moreover, while Site 4 is a little closer to some of the principal cultural heritage assets identified, none is so close that their integrity and essential setting would be adversely impacted by development at Site 4.

SSEN Transmission has identified Site option 4, located on land at Balkemback Farm as the Preferred Substation Site. This site accommodates the substation design and size and offers a degree of flexibility with regards to connections to the existing Tealing Substation site.

## 6. CONSULTATION ON THE PROPOSALS

SSEN Transmission places great importance on, and is committed to, consultation and engagement with all parties, or stakeholders, likely to have an interest in proposals for new projects such as this. Stakeholder consultation and engagement is an essential part of an effective development process.

### 6.1 Questions for Consideration by Consultees

When providing your comments and feedback, SSEN Transmission would be grateful for your consideration of the questions below:

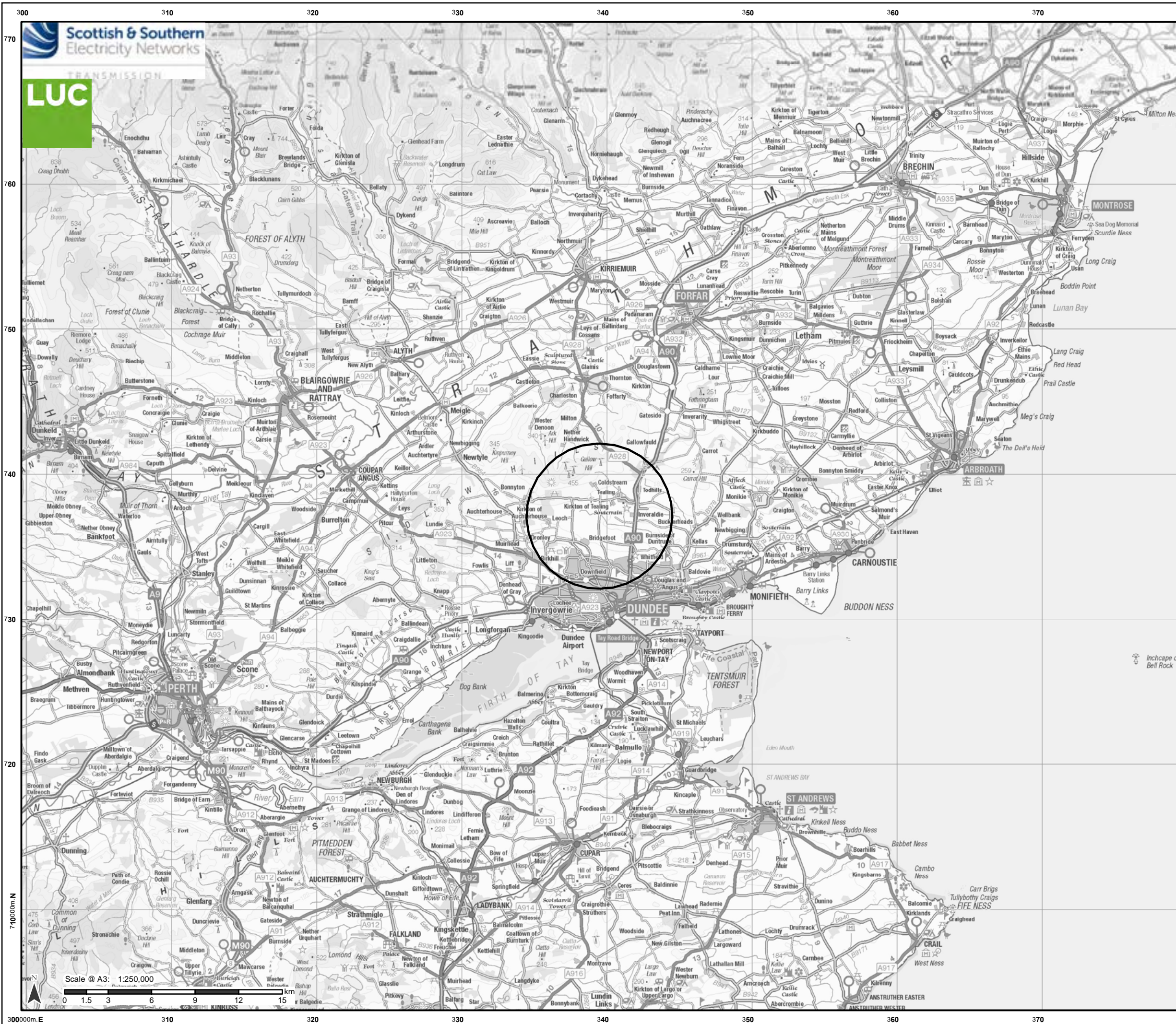
- Has the need for the Project been explained adequately?
- Has the approach to select the substation site been explained adequately?
- Are there any factors, or environmental features, that you consider should be reconsidered as part of the site selection process?
- Do you agree that, on balance, Site 4 is the most appropriate for further consideration for a new substation at Tealing?

### 6.2 Next Steps

Consultation events will be held as detailed in the preface of this document. The responses received from these consultation events, and those sought from statutory consultees and other key stakeholders, will inform further considerations, and the confirmation of the preferred to take forward to the next stage.

All comments are requested by **9<sup>th</sup> June 2023**. A Report on Consultation (RoC) will be published after the consultation period has ended, which will document the consultation responses received, and the decisions made in light of these responses.

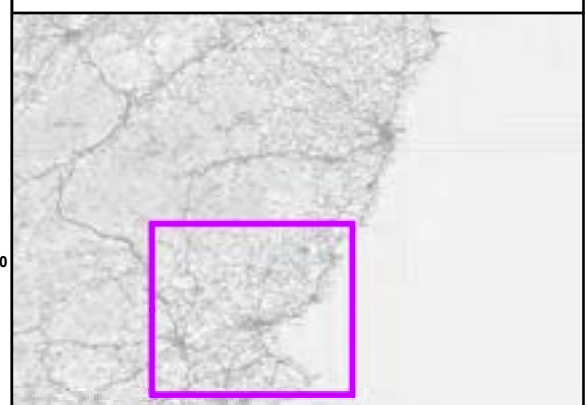




Scottish & Southern  
Electricity Networks

LUC

Area of search (5km radius from existing substation)



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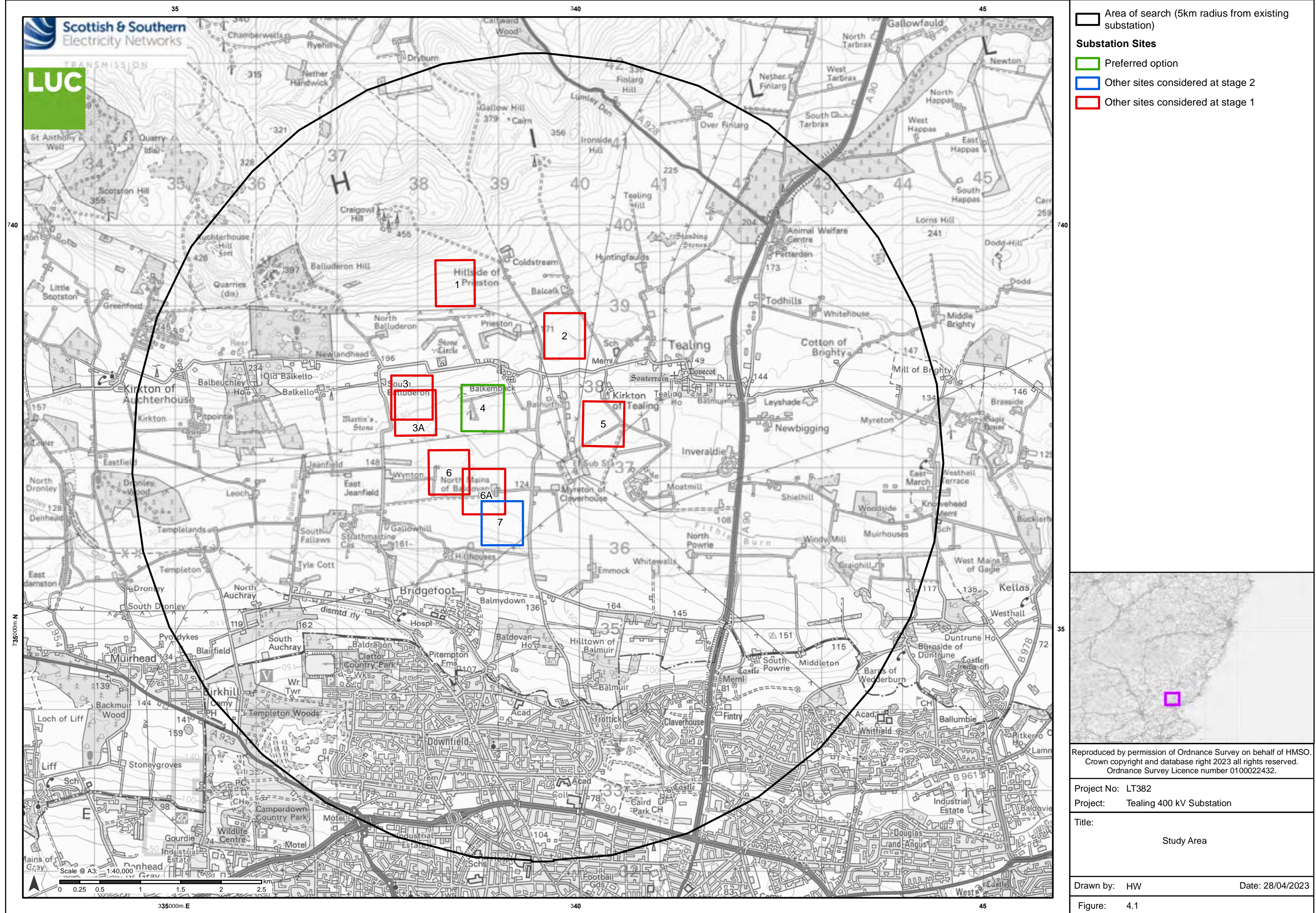
Project No: LT382  
Project: Tealing 400 kV Substation

Title: Site Location

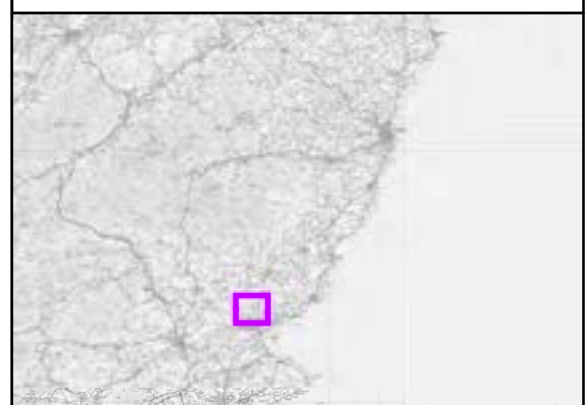
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Figure: 1.1





- Area of search (5km radius from existing substation)
- Substation Sites**
- Preferred option
- Other sites considered at stage 2
- Other sites considered at stage 1



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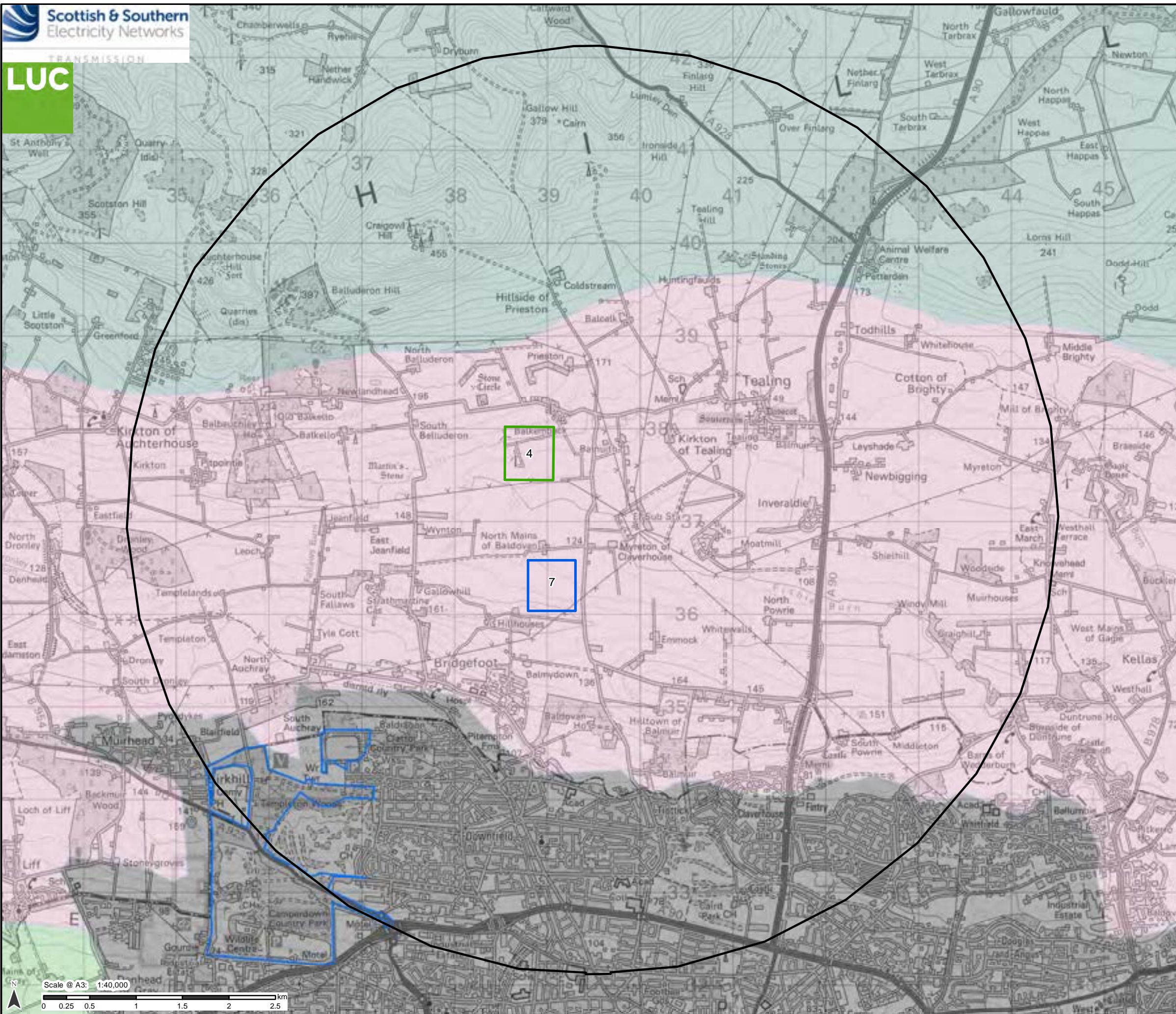
Project No: LT382  
Project: Tealing 400 kV Substation

Title: Study Area

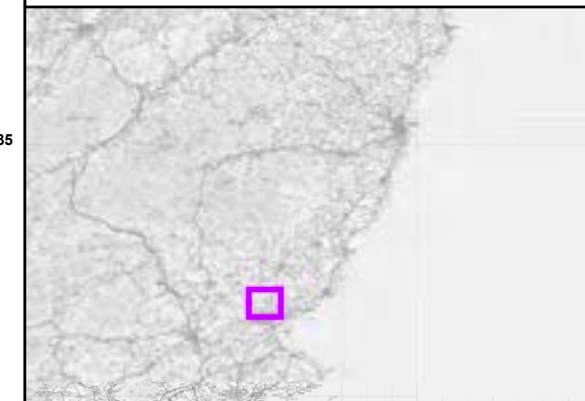
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Figure: 4.1





- Area of search (5km radius from existing substation)
- Substation Sites**
- Preferred option
- Other sites considered at stage 2
- Landscape Designations**
- Country Park
- Landscape Character Assessment**
- Urban
- 382: Lowland Hill Ranges
- 385: Firth Lowlands
- 387: Dipslope Farmland



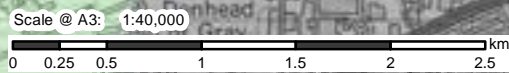
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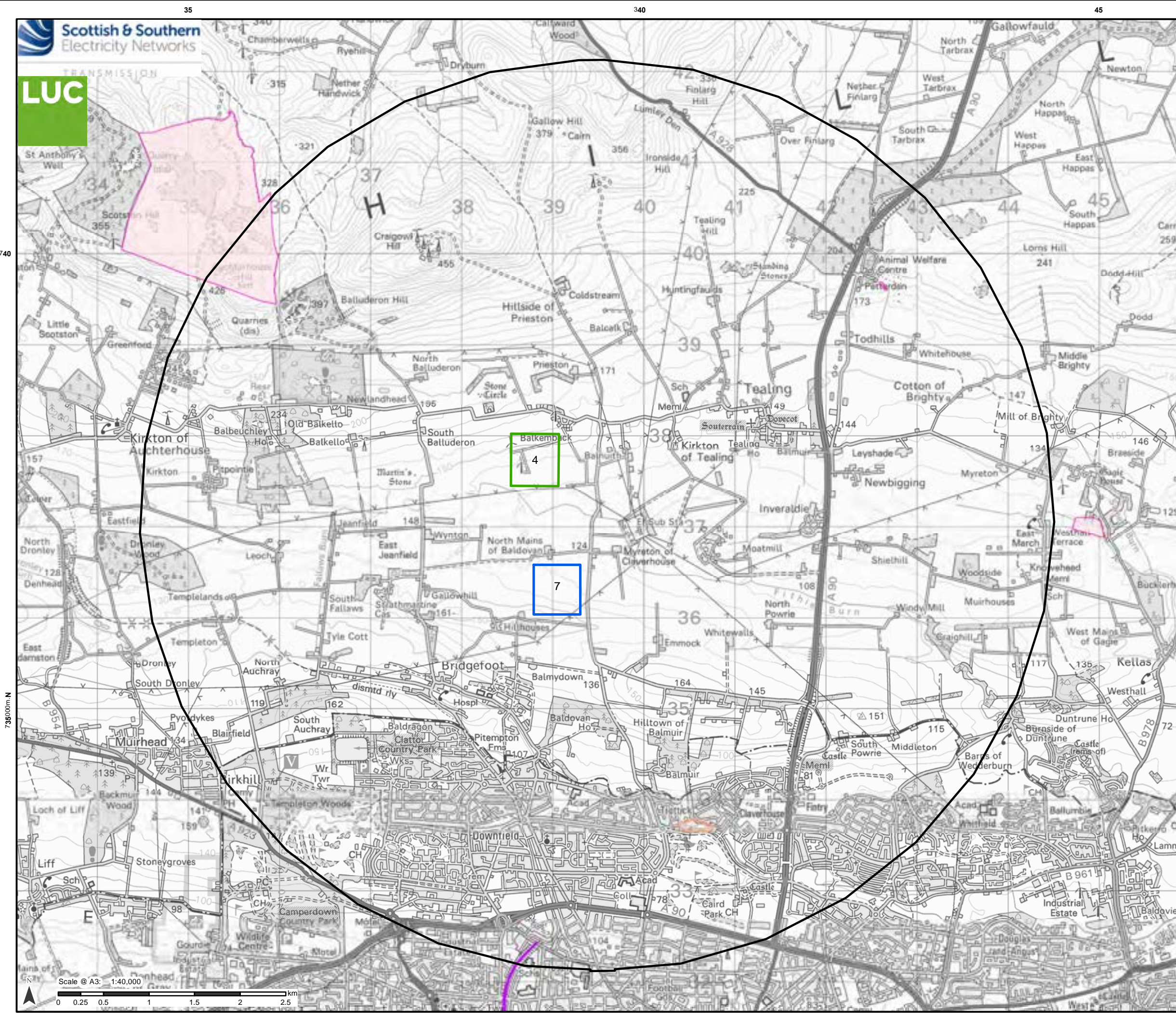
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Landscape and Visual Constraints with Site Options

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Date: 28/04/2023

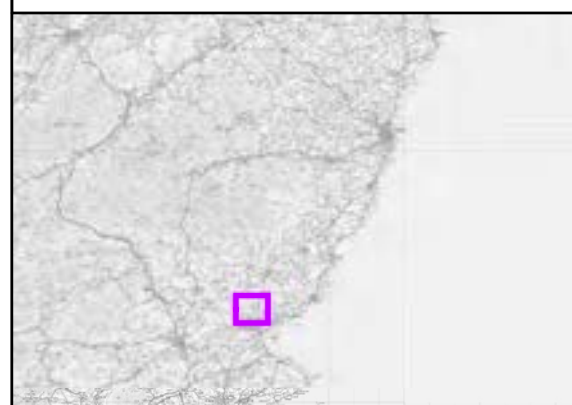
Figure: 5.1







- Area of search (5km radius from existing substation)
- Substation Sites**
- Preferred option
- Other sites considered at stage 2
- Ecological Constraints**
- Site of Special Scientific Interest
- Local Nature Reserve
- Scottish Wildlife Trust reserve



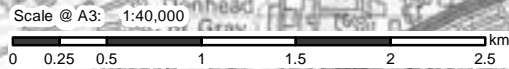
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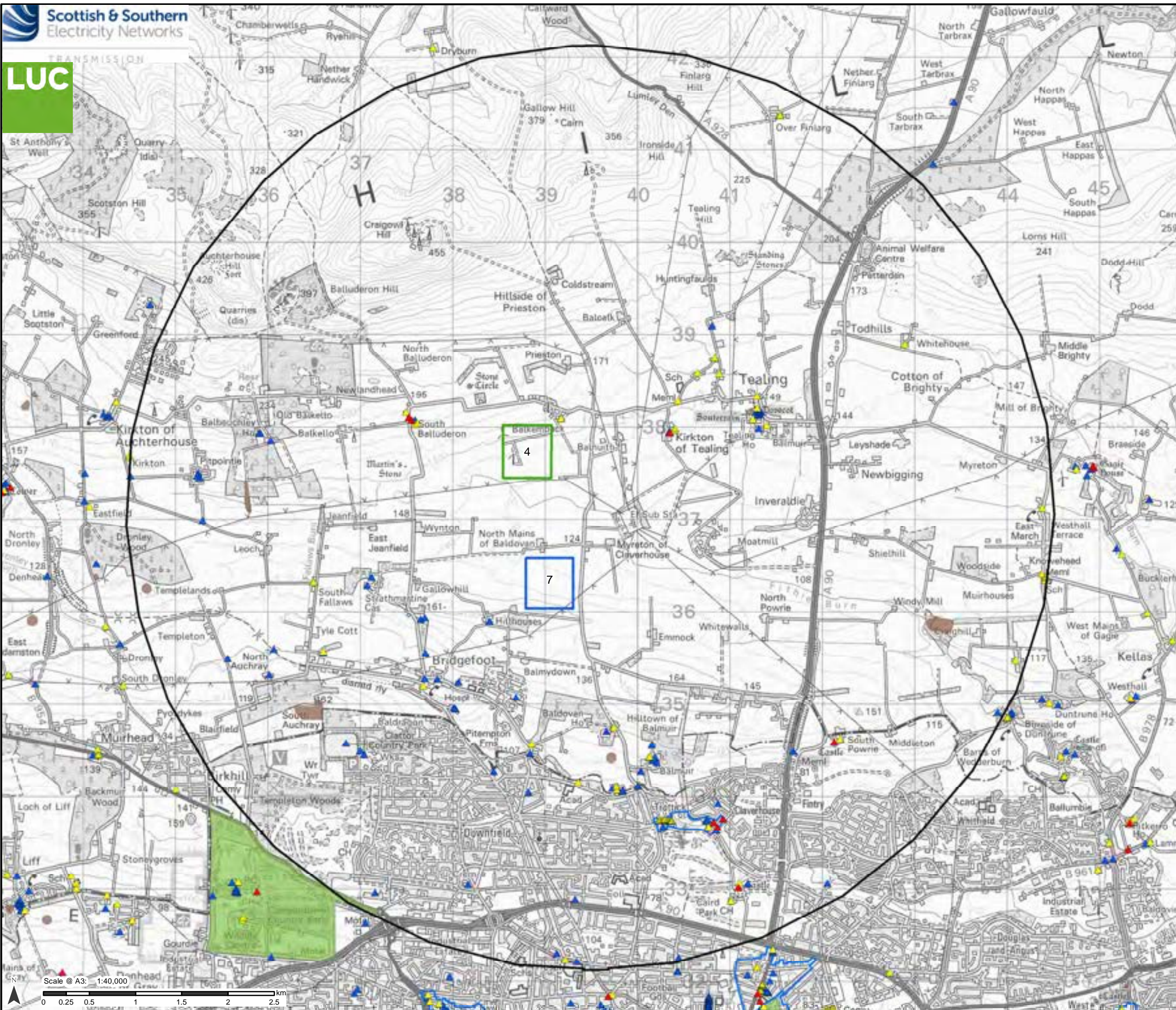
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Ecological Constraints with Site Options

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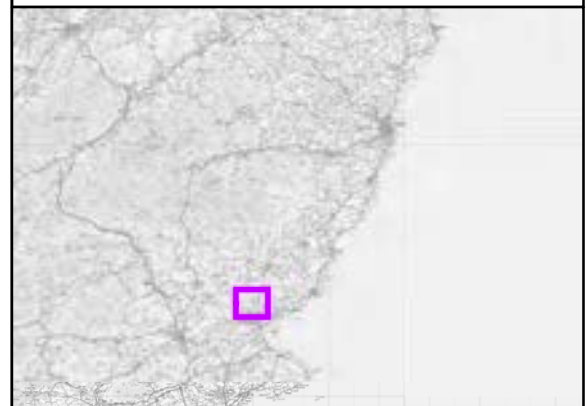
Figure: 5.2







- Area of search (5km radius from existing substation)
- Substation Sites**
- Preferred option
- Other sites considered at stage 2
- Cultural Heritage Constraints**
- Listed building**
- ▲ A
- ▲ B
- ▲ C
- Conservation area
- Scheduled monument
- Garden and Designed Landscape



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Title:  
Cultural Heritage Constraints with Site Options

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Figure: 5.3

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35

340

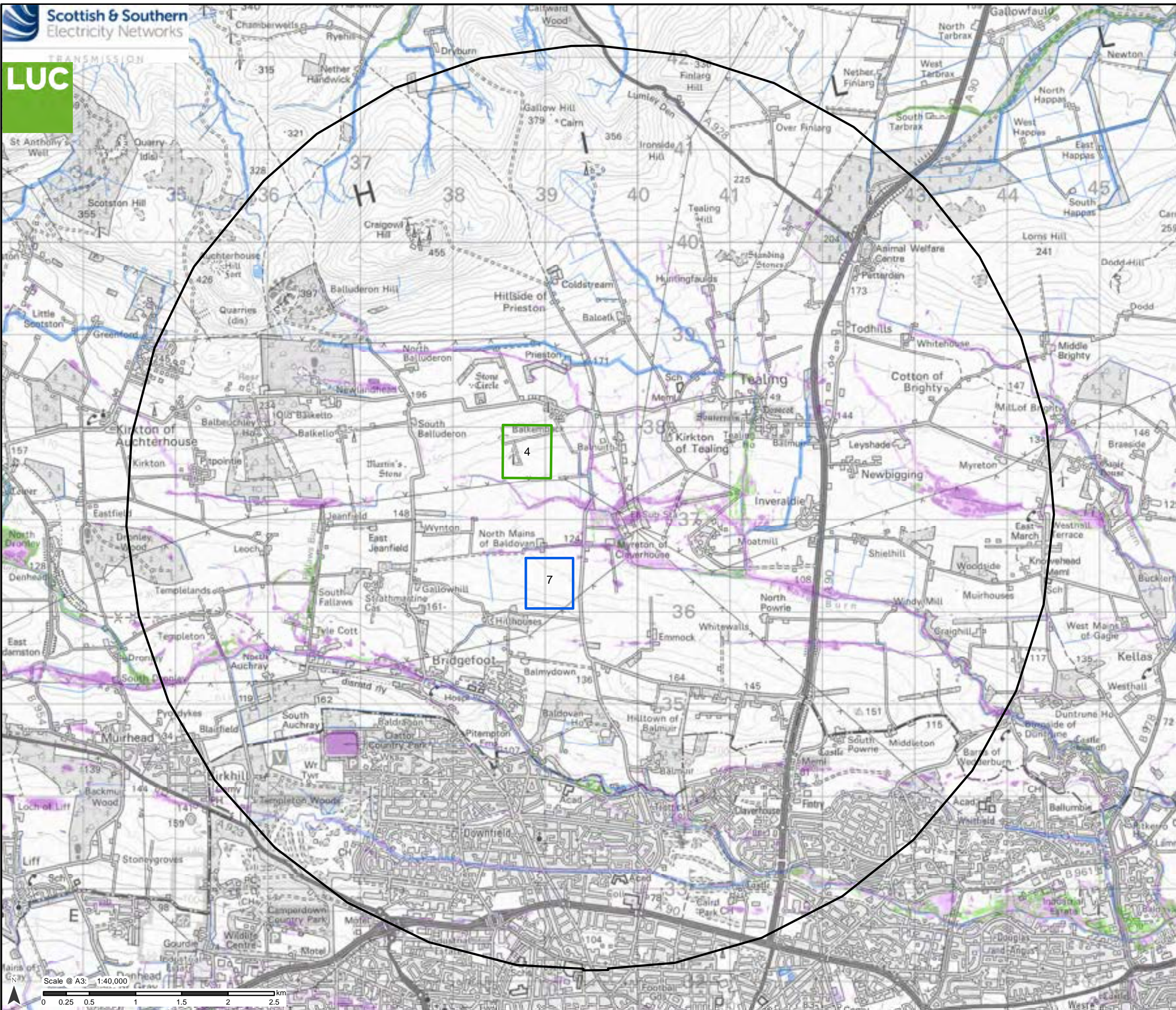
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335000m E

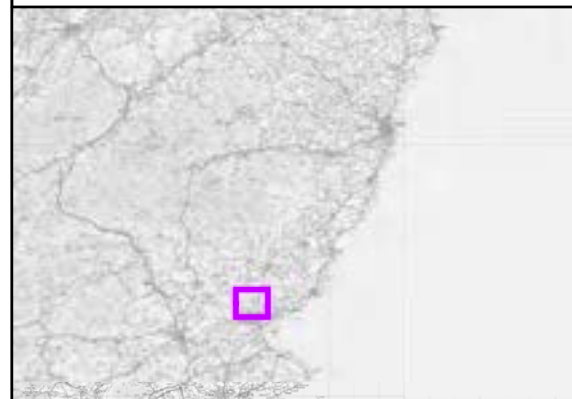
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- Area of search (5km radius from existing substation)
- Substation Sites**
- Preferred option
- Other sites considered at stage 2
- Hydrology Constraints**
- Flood Risk Management - Surface High (10 year)
- Flood Risk Management - Surface Medium (200 year)
- Flood Risk Management - Surface Low (1000 year)
- Flood Risk Management - Rivers High (10 year)
- Flood Risk Management - Rivers Medium (200 year)
- Flood Risk Management - Rivers Low (1000 year)
- Surface Water Line
- Surface Water Area
- Main watercourses (Open Rivers)



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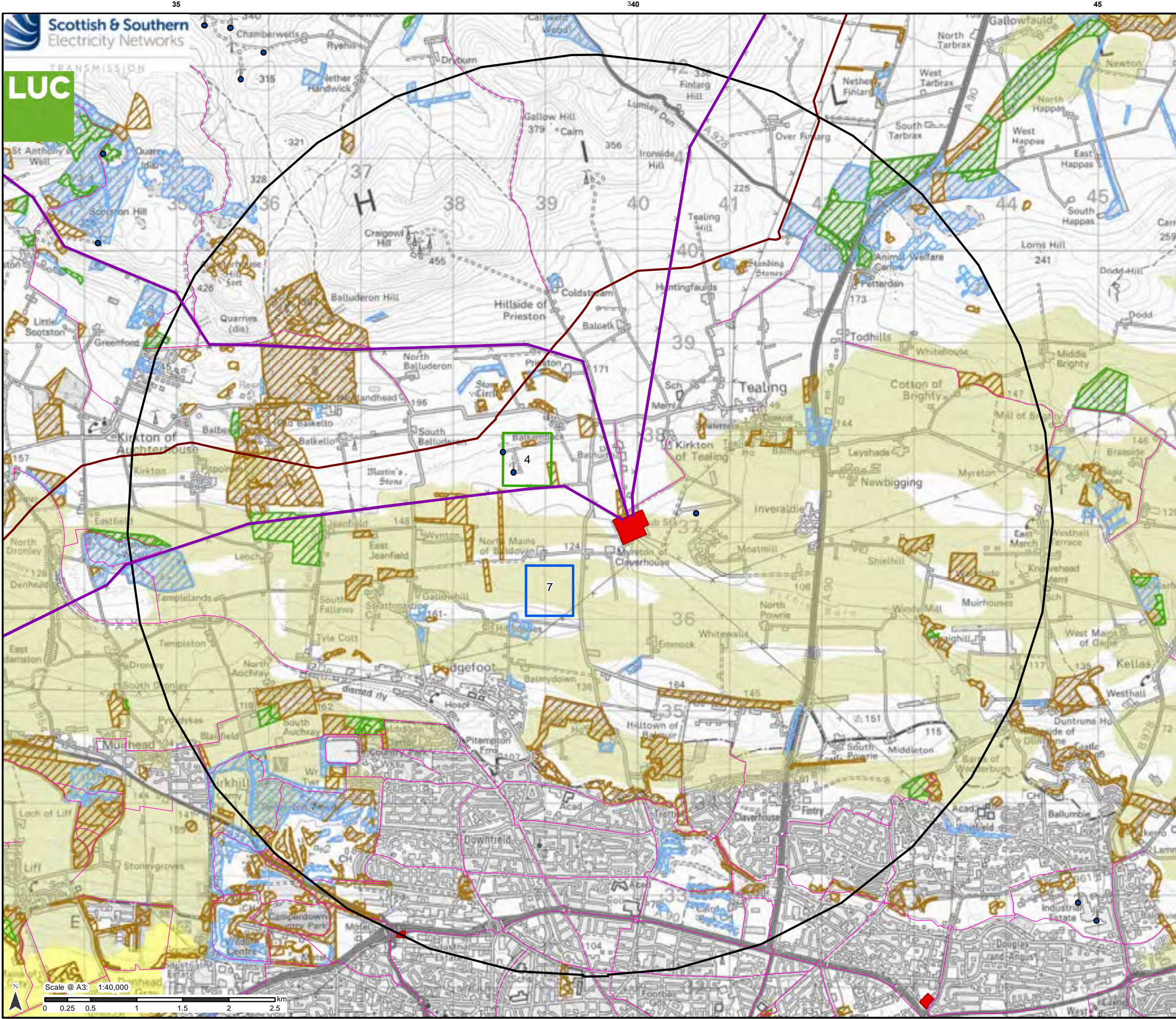
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Title:  
Hydrology Constraints with Site Options

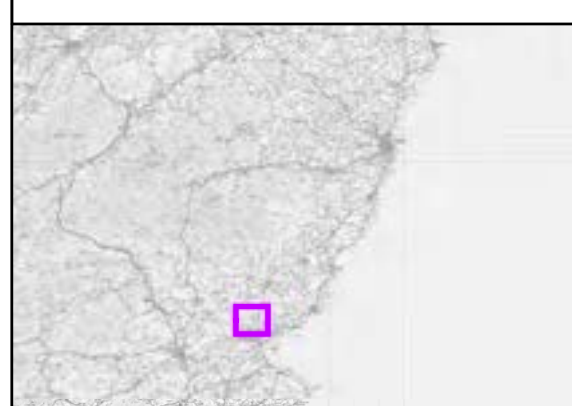
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Figure: 5.4





- Area of search (5km radius from existing substation)
- Substation Sites**
- Preferred option
- Other sites considered at stage 2
- Land Use Constraints**
- Operational wind turbine
- Existing substation site
- Gas pipe
- 275 kV overhead line
- Core path (indicative)
- National Forest Inventory**
- Broadleaved; Mixed mainly broadleaved;
- Coppice; Coppice with standards; Young trees; Assumed woodland
- Conifer; Mixed mainly conifer
- Other
- Land Capability for Agriculture**
- Class 2 - Land capable of producing a wide range of crops.
- Class 3.1 - Land capable of producing consistently high yields of a narrow range of crops and/ or moderate yields of a wider range. Short grass leys are common.



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Project No: LT382  
 Project: Substation Site Selection - Tealing

Title:  
 Land Use Constraints with Site Options

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 Date: 04/05/2023

Figure: 5.5