**THE HIGHLAND COUNCIL**

**NORTH PLANNING APPLICATIONS COMMITTEE - 10 January 2017**

| | |
|---|---|
| Agenda Item | 5.2 |
| Report No | PLN/003/17 |

**15/04103/S37: Scottish Hydro Electric Transmission PLC**
**New double circuit 132kV transmission line between Thurso South substation and Phillip Mains near Gills Bay (Gills Bay substation)**

**Report by Head of Planning and Environment**


**SUMMARY**

**Description :** Erect a 132kV AC overhead, double circuit, steel lattice tower, transmission line between the proposed Sealing End Tower at Weydale and the proposed Sealing End Tower at Reaster, Caithness

**Recommendation -** Raise No Objection.

**Ward:** 04 – Landward Caithness.

**Development category:** National Development.

**Pre-determination hearing:** Yes.

**Reason referred to Committee:** National development


## 1. PROPOSED DEVELOPMENT

1.1 This application comes under the category of "National Development" as set out in the Scottish Government's third National Planning Framework Plan (NPF3). The Council is a **consultee** to the Section 37 application under the Electricity Act which will ultimately be determined by Scottish Ministers. The proposed development comprises the construction of a new double circuit 132kV transmission line between a new substation at Thurso South and a proposed new substation at Philips Mains nears Gills Bay. The ES outlines that analysis of the existing transmission network in the north of Scotland identified need for increased network capacity to facilitate the transmission of renewable energy generation projects including on-shore/off-shore wind, marine and tidal generation. This increase in network capacity can only be achieved by developing the transmission network in the North of Scotland.

1.2 The site covers a total area of 43 hectares. Specifically this Section 37 application consists of the following main elements: -

- 13km of **overhead** line;
- 10km of **underground** cable;

- 2.02 hectare development platform at 47.9m AOD
- Two transformer buildings, each measuring 46.9m x 16.9m x 12.8m
- One additional building measuring 44.1m x 32.7m x 8m containing switchgear, battery room, control and communications room, a mess room and toilet/wash room;
- Construction lay down to the north east of the substation platform;
- Approx 0.73km of new site access road;
- Internal site access roads;
- 2.4m high steel palisade securing fence to surround the substation buildings with gated access at the road exit;
- CCTV cameras and securing lighting

Existing woodland between the substation and the C1033 to the north is also included within the site boundary. This has been purchased by SSE to provide screening and will be managed as part of the landscape strategy to secure screening of views of the substation from the north.

1.3 It is proposed to install a 3km of underground cable between Thurso South substation and a Sealing End Compound (SEC) at Weydale, thereafter 13km of overhead lines (OHL) supported by lattice steel towers would be installed between the SEC at Weydale and a further SEC at Reaster. Thereafter another 7km of underground cable would be installed between the SEC at Reaster to the proposed substation at Gills Bay.

1.4 In terms of the overhead lines, a total of 52 galvanised grey steel lattice towers are proposed. The specific tower design will vary to accommodate localised engineering requirements for factors such as topography, span length (distance between towers), exposure and changes of direction. The ES notes that towers can vary in height however the typical tower height is 30m. The distance between the towers is likely to be in the region of 250m.

1.5 The application is for the line to be sited and contained within Limits of Deviation (LOD). The LOD are designed to allow flexibility in the final siting of individual towers and access tracks to reflect topographical, engineering and environmental constraints. The following parameters have been identified for the LOD:-

- presumption towards the narrowest possible LOD whilst providing flexibility for micro-siting;
- presumption towards avoiding sensitive environmental features;
- presumption towards avoiding residential properties

1.6 The application is supported by an Environmental Statement (ES) prepared under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000. Documents submitted as part of the ES contain plans, maps, assessments of environmental interests, construction and traffic impact, noise, hydrology, energy policy, routing options, cultural heritage landscape and visual impacts. A further EIA addendum, focusing on peat management, was submitted in April 2016.

## 2. SITE DESCRIPTION

2.1 The proposed development is located to the south east of Thurso, extending from the Thurso South substation, over the A9, and east and north-east towards Gills Bay terminating at the Gills Bay substation. The overhead line element of the proposal starts in the west in the vicinity of Weydale, at approximately 40m Above Ordance Datum (AOD), climbing around the south of Hill of Olrig to approximaltey 100m AOD before descending over gently undulating topography towards Gills Bay.

2.2 The landform of the area is relatively low lying, typically around 40m AOD with the highest points lying to the west, notably Spittal Hill, Hill of Olrig, Dunnet Head, Hill of Forss and Hill of Lieurary. Land form generally comprises a mosaic of improved and semi-improved grassland, rough grazing, moorland and commercial forestry plantations.

2.3 The main communities in the vicinity lie to the north of the proposed development, including Castletown, Dunnet and Mey. The larger settlements of Thurso and Halkirk also lie within the vicinity of the development.

2.4 The main transport routes through the area are the A9, the A882, the A836, the A99, the B855, the B874, the B870 and the B876 linked to a network of minor local roads and single track roads. The Inverness to Thurso/Wick railway lines dissect the area to the west.

2.5 There are no landscape designations covering the site itself however the Dunnet Head Special Landscape Area is located around 7km to the north and the Duncansby Head Special Landscape Area is located around 10km to the north east. The proposed development falls predominately within two Landscape Character Types as defined by SNH's Caithness and Sutherland Landscape Character Assessment. The site comprises a mosaic of improved and semi improved grassland, rough grazings, moorland and commercial forestry plantations.

2.6 The development site does not fall within any nature conservation site, although a number of protected species (badgers, bats, otters and squirrels) and birds are present in this locality. The line will also impact on a number of locations which are valued for habitat purposes including blanket bog, semi natural woodland, wet heath, Groundwater Dependent Terrestrial Eco-Systems, etc. Such features are relatively common to the area but nevertheless require particular attention in the development / construction phase to minimise adverse impact on such species.

2.7 Ornithological surveys have been undertaken to determine the species and numbers of birds that could be impacted across the route of the OHL. These included for example hen harrier, geese and whooper swan.

2.8 In the wider area there is a larger number of historical interests, the most notable of which is the Castle of Mey, an A Listed building located north of the proposed development.

## 3. PLANNING HISTORY

3.1 Pre-application advice was provided through the Council's formal pre-application advice service for major developments in 2012. This indicated that the proposed development is broadly supported and viewed positively by the Council subject to the satisfactorily resolution of the points raised in the pre-application advice.

## 4. PUBLIC PARTICIPATION

4.1 Advertised: October 2015

Representation deadline: 3rd December 2015

Timeous representations: 6

Late representation: None.

4.2 Material considerations raised are summarised as follows:

- Adverse visual impact generally as well as from specific properties;
- Adverse health impact
- Disruption during construction phase;
- Adverse impact on wildlife;
- Lack of information from SSE regarding the project/residents not notified regarding the design route;
- Concern that feedback provided to SSE following public exhibitions has not informed the design route;
- Proximity to residential properties
- Non-compliance with 'Holford Rules'
- Misleading visualisations
- Inaccuracy of submitted plans.

4.3 Letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet www.wam.highland.gov.uk/wam. Access to computers can be made available via Planning and Development Service offices.

## 5. CONSULTATIONS

**Consultations Undertaken by the Planning Authority:** -

5.1 **Bower Community Council** did not respond to the consultation.

5.2 **Castletown Community Council** objects to the proposed development. Its response highlights the following concerns:

- Adverse impact to residential amenity and those living closest to the proposed overhead lines;
- Adverse health impact
- Adverse visual impact, particularly in combination with wind turbines;

- Adverse impact on tourism arising as a result of visual impact;
- Non-compliance with Caithness Local Plan
- Disruption arising from construction traffic

The CC note that the route should be re-considered and if possible undergrounded for the entire length.

5.3 **Dunnet Community Council** did not respond to the consultation.

5.4 **Access Officer** has no objection to the application. Whilst it is noted the route does not conflict with any core paths (or recorded public rights of way) the ground covered is that on which access rights, as given in the Land Reform (Scotland) Act 2003, will reasonably apply. It is possible therefore that the construction of the proposed development may impact on these wider access rights, say by land or tracks been adversely affected by construction traffic or locally used routes being obstructed by the actual stringing of the towers or site compounds.

Consideration should be given to protecting the access tracks and other routes used during the construction of this development, this is in order to both protect the public amenity and for those who require to use these route to access other land or their dwellings.

5.5 **Transport Planning** has no objection to the application. Further relevant information will be required in advance of any construction as part of a Construction Traffic Management Plan which can be set by condition. This will also require a wear and tear agreement including a bond to safeguard against potential damage to the existing network.

5.6 **Environmental Health** has no objections/comment on the proposed development.

5.7 **Flood Unit** has no objection to the application subject to conditions.

5.8 **Historic Environment Team/Archaeology** has no objection. The Cultural Heritage Chapter of the Environmental Statement submitted for this application provides a good level of detail with regard to the predicted impacts on historic environment assets. The ES identifies a number of impacts on historic environment assets and proposes mitigation for these in Section 9.7. Although mitigation by design is noted in the ES, further consideration with regard to the siting of towers is recommended to lessen the impacts to specific assets. This option would appear to be possible for the scheduled cairns of Stemster Hill (HES Index 486) and Earney Hillock (HES Index 439). In addition it is considered possible that further archaeological features may survive buried within the application area that will be impacted by the proposed development.

In summary, the required mitigation should comprise a programme of works including the following:

- further walkover survey (in areas that were excluded from the ES work)
- marking-out of historic assets with a buffer (during construction)
- minimising impacts to linear features where they must be impacted
- evaluation of features where impacts cannot be avoided

- monitoring during construction (watching briefs)
- post-excavation studies and reporting, as necessary

This work should be secured by means of a condition requiring in the first instance, the submission of a Written Scheme of Investigation for approval by the Historic Environment Team.

**Consultations undertaken by the Energy Consent and Development Unit:** -

5.9 **Scottish Water (SW)** has no objection to the application. Any design proposals relating to the protection of Scottish Water's assets should be submitted to Scottish Water for review and acceptance by SSE.

5.10 **Scottish Environmental Protection Agency (SEPA)** has no objection to the application subject to condition requiring submission of a site specific construction environmental management plan (CEMP) for review, at least two months prior to commencement of works.

5.11 **Transport Scotland (TS)** has no objection to the application. The proposed development is unlikely to have a significant environmental impact on the trunk road.

5.12 **Scottish Natural Heritage (SNH)** has no objection to the application subject to conditions to avoid impact on the Caithness Lochs Special Protection Area arising from the construction

5.13 **Historic Environment Scotland (HES)** has no objection to the application.

5.18 **Royal Society for the Protection of Birds (RSPB)** has no objection to the application however highlights some concern with regard the methodology employed in undertaking the ES.

5.19 **Caithness District Salmon Fishery Board** has no objection to the application.

5.21 **British Telecom** has no objection to the application.

5.22 **The British Horse Society** has no objection to the application.

5.23 **Highlands and Islands Airport Limited (HIAL)** has no objection to the application.

5.24 **Visit Scotland** has no objection to the application. A number of considerations with regards tourism in Scotland are highlighted however its response would appear to relate to a wind farm development.

## 6. DEVELOPMENT PLAN POLICY

6.1 The following policies are relevant to the assessment of the application.

**Highland Wide Local Development Plan 2012**

6.2 Policy 28 - Sustainable Design
Policy 29 - Design Quality and Place-making
Policy 31 - Developer Contribution
Policy 52 - Principle of Development in Woodland
Policy 55 - Peats and Soil
Policy 57 - Natural, Built and Cultural Heritage
Policy 58 - Protected Species
Policy 61 - Landscape
Policy 64 - Flood Risk
Policy 66 - Surface Water Drainage
Policy 67 - Renewable Energy Developments
Policy 69 - Electricity Transmission Infrastructure.
Policy 72 - Pollution
Policy 77 - Public Access

**Caithness Local Plan**

6.3 No site specific policies. The general policies of the Plan have been superseded by the provisions of the Highland-wide Local Development Plan.

## 7. OTHER MATERIAL CONSIDERATIONS

### 7.1 Caithness and Sutherland Local Development Plan (Proposed Plan, 2016)

The Caithness and Sutherland Local Development Plan continues the commitment of the Caithness Local Plan for the region to be a centre of excellence for energy and engineering. The proposed development is located within the designated 'Energy Business Expansion' strategy zone.

### 7.2 National Planning Framework

The Action Programme for implementation of Scotland's third National Planning Policy Framework (NPF3) provides key considerations for the project level consent of strategic OHL development including potential impacts arising from construction and installation as well as long terms operations effects.

### 7.3 Scottish Government Planning Policy and Guidance

The Scottish Government have principal policies on Sustainability and Placemaking including Policies for: -

- A Low Carbon Place
    - Delivering Heat and Electricity.
    - Support for construction and improvement of strategic energy infrastructure.
    - Onshore Wind.
- A Natural Resilient Place
    - Valuing the natural Environment.
    - Promoting responsible extraction of Resources.

- Managing Flood risk and Drainage.

**Highland Council Supplementary Planning Policy Guidance**

7.4
- Construction Environmental Management Process for Large Scale Projects (August 2010).
- Flood Risk and Drainage Impact Assessment (Jan 2013).
- Highland's Statutorily Protected Species (March 2013).
- Trees, Woodlands and Development (Jan 2013).

## 8. PLANNING APPRAISAL

8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise. This approach is used by the Council for Section 37 consultations / applications under the Electricity Act.

8.2 The determining issues for the Council as planning authority responding to this consultation are:

- Does the proposal accord with the Development Plan?
- If it does, are there any material considerations for not approving the proposed development?
- If it does not accord, are there any material considerations for approving the proposed development?

**Assessment**

8.3 To address the determining issues, the Planning Authority must consider the following:-

a) Development Plan.
b) National Policy.
c) Roads / Traffic Impact and Public Access.
d) Water / Drainage
e) Forestry / Woodland / Trees.
f) Natural Heritage.
g) Design.
h) Landscape Impact.
i) Visual Impact.
j) Cultural Heritage.
k) Noise.
l) Construction Impacts.
m) Other Material considerations within representations.

**Development Plan**

8.4 The Development Plan comprises the adopted Highland-wide Local Development Plan (HwLDP) and Caithness Local Plan. The Development Plan must be read as a whole, with applications then assessed against all of the policies relevant to the

proposed development and its location. Conformity with a single policy or element of the plan does not necessarily indicate that a proposal is acceptable. The HwLDP adopted in April 2012 provides policy which can be regarded as up-to-date. There are no site specific policies affecting this application site within the Caithness Local Plan.

8.5 The principal HwLDP policy on which the application needs to be determined is Policy 69 - Electricity Transmission Infrastructure. Other policies listed at 6.2 of this report are also relevant and the application must be assessed against these also for example Policy 61 - Landscape. These matters are assessed in full within a number of material considerations examined within this report.

8.6 Policy 69 specifically highlights that the "Council will have regard to their level of strategic significance in transmitting electricity from areas of generation to areas of consumption." "It will support proposals which are assessed as not having unacceptable impact on the environment including natural, built and cultural heritage features." "Where new infrastructure provision will result in existing infrastructure becoming redundant, the Council will seek the removal of redundant infrastructure as a requirement of the development."

8.7 Policy 52 (Principle of Development in Woodland) highlights the Council will maintain a strong presumption in favour of protecting woodland resources. Development proposals will only be supported where they offer clear and significant public benefit. Where this involves woodland removal, compensatory planting will usually be required.' It also advises "the Council will consider major development proposals against their socio economic impact on the forestry industry within the locality, the economic maturity of the woodland, and the opportunity for the proposals to co-exist with forestry operations"

**National Policy**

8.8 Scotland's Third National Planning Framework sets out the government thoughts on how best to achieve a more successful country, through increasing sustainable economic growth. It includes plans for infrastructural investment including a high voltage electricity transmission network vital in meeting national targets for electricity generation, statutory climate change targets and security of energy supplies. The current application falls into the category of National Development. Whist this profile's the need for such projects all necessary assessments and consents is still required for such development. Appropriate levels of mitigation would still be expected to avoid or reduce environmental effects and demonstrate no adverse effects on the integrity of European protected sites.

8.9 An aim of the planning system is to achieve the right development in the right place. SPP introduces a presumption in favour of development that contributes to sustainable development. The connection of approved renewable energy projects to the grid, which would be enhanced by this project, advances its sustainable development credentials. The extension and upgrading of the area's grid transmission not only is a short term economic construction boost, but also a valued investment in the grid network in Caithness.

8.10 Further advice is also provided in SPP in respect of potential impacts on the natural environment and the need to protect and enhance Scotland's key natural resources including landscape, ecology, woodland, habitats and biodiversity. The impacts on these resources have been presented within the supporting ES and are considered in more detail within this assessment. The policies and content of SPP is a material consideration that carries significant weight, it is for the decision maker to determine the appropriate weight in each case. If there are no significant impacts on the locality, the development should be supported.

**Roads / Traffic Impact and Public Access**

8.11 Approximately 17.5km of private access track will require to be upgraded or installed. This will include alterations to or construction of approximately 23 bellmouths/junctions as detailed in Table 2.2 of Section 2 of the ES.

8.12 The Transport Assessment estimates a construction phase of 22 months duration, with months 2 and 3 considered to be the peak period for construction traffic. The greatest impact during this time is expected to be on the minor road network although no capacity issues associated with construction traffic are anticipated on the identified routes.

8.13 In particular HGV levels are expected to increase by more than 30% on all construction routes; the maximum number of additional HGV movements on the A836 and B876 are each predicted to be 88 per day. Transport Planning accept that the main traffic and transport impacts of the development will occur during the construction phase and thus will be temporary. In terms of capacity, Transport Planning agree with the ES in that development traffic can generally be accommodated on the local road network and that the environmental impact of development traffic is unlikely to be significant. However there will remain a risk of damage to a number of minor public roads from the movement of large and heavy construction vehicles.

8.14 As such, specific routes for vehicular movement are to be agreed with Transport Planning following the appointment of a Principal Contractor who will undertake a review of the access routes. This will help control vehicular movement and limit the risk of damage to the road network. A programme of mitigation works will also be agreed and undertaken by the developer. This is likely to include the provision of additional or enlarged passing places, carriageway strengthening, additional or improved road drainage and junction improvements. The programme of mitigation works will form part of the Construction Traffic Management Plan, which is sought by condition prior to any works commencing on site.

8.15 In addition, a condition has been added requiring the developer to establish a 'Community Liaison Group' which shall include the representatives of the local communities affected by the works. This approach has been successfully implemented with regards the installation of large scale wind farms.

**Water / Drainage**

8.16 A detailed Drainage Impact Assessment has been submitted as part of the ES, which was produced in consultation with the Council's Flood Risk Management Team. The surface water run-off from the proposed development will be attenuated and treated using sustainable drainage systems (SUDS), prior to discharge to a local watercourse and thereafter to an unnamed lochan to the west of the site. Run-off water from the transformer and any roof surfaces will be treated and will then discharge into an extended detention basin.

8.17 The Flood Risk Management team note that the initial Drainage Management Plan (DMP), should form part of the Construction Environmental Management Plan (CEMP) to be submitted for review and approval prior the commence of construction works. This should include the preparation of a plan of known existing land drainage and proposals (e.g. drawings, specifications and method statements) for site drainage for each of the main phases of works (to inform the design and positioning of mitigation measures).

**Forestry / Woodland / Trees**

8.18 The current route selection of the LOD for the OHL largely avoids areas of woodlands, with the exception of a small shelterbelt at Wester Olrig. The ES identifies that felling of the wind farm edge (i.e. the edge of the woodland able to withstand strong winds) shall be avoided.

8.19 The existing coniferous plantation woodland to the north of the site will be retained and a landscape management plan for this area of forestry will be implemented to ensure continued screening of the proposed development in views from the north.

A 50m wide strip of plantation will be established in the west and southwest of the site to provide permanent screening of the substation. In addition, landscaping bunding up to 3m in height will be installed at various locations within the proposed development site. The landscaping plan has still to be finished and bunded areas will be added when the extent and type of materials excavated on the site is finalised. Additional native tree and shrub planting will also be put in place along the southern eastern and eastern edge of the access road, as shown in the indicative landscaping strategy.

**Design**

8.20 The project design has been advanced from an assessment of the area and the application of the "Holford Rules" which is an established methodology for grid network design. These rules advocate a hierarchical approach to routeing which avoids major areas of highest amenity, then avoids smaller areas of high amenity, and then considers factors such as backdrop, woodland and orientation.

8.21 The preferred corridor emerged as having least adverse interaction with the key environmental features and sensitivities considered in this locality.

8.22 Consideration of alternative technology, scale of development, etc. is raised within any design process where different engineering solutions are assessed. Some options such as using different current (Direct Current v Alternating Currant (DC/AC)) and undergrounding cables are not practical, have drawbacks, nor were seen as cost effective. In addition, the use of wood pole structures in place of steel lattice towers could not meet the engineering requirements necessary to support a 132kv OHL.

8.23 The proposal is consistent with the existing infrastructure and thereby in design terms acceptable. A minimum separation distance of 100m from any house has been selected to ensure no existing residence would experience any significant effects from the OHL, particularly noise, electric-magnetic interference with Radio / TV reception. There remains some flexibility in the design as set out in the application, in respect of different spanning between pylons and limits of deviation (LOD) it will be necessary to ensure impacts are not varied to any great extent at key locations. This can be managed by condition to ensure further consultation over micro-siting where impacts are more critical to the acceptability of development. It is noted that there is one residential dwelling which would be located within 100m of the overhead lines. This is discussed in detailed in Section 8.40.

**Landscape Impact**

8.24 Given the nature and scale of the proposed lattice steel tower OHL, the ES considers that it is unlikely that significant landscape and visual effects would be experienced in distances in excess of 10km from the proposed development. The study area boundary for the Landscape and Visual Impact Assessment has therefore been set at 10km. This is considered appropriate.

8.25 In terms of landscape designations, there are two special landscape designations within 10km of the proposed development:

Dunnet Head - located 7km from the nearest section of OHL
Duncansby Head - located 10km from the nearest section of OHL

The LVIA concludes that there would no significant effects on either of these landscape designations. This position is agreed by SNH.

8.26 Using the mapping of the Zone of Theoretical Visibility (ZTV) of the development the impact on the landscape and key receptors has been assessed. The development predominantly crosses two landscape character types (LCT), as defined by SNH's Landscape Character Assessment for Caithness and Sutherland. These are the Mixed Agriculture and Settlement LCT, which comprises 58% of the study area and the Sweeping Moorland LCT which comprises 18% of the study area.

8.27 In terms of the Sweeping Moorland LCT, the LVIA outlines that there will be 43% visibility of the proposed development from within this LCT, taking into account the presence of existing forestry north east of Loch Heilen.

8.28 In terms of the Mixed Agriculture and Settlement LCT, the LVIA outlines that the proposed development will introduce vertical man-made structures and OHLs into a part of this LCT where no such features exist at present although there are steel lattice towers in the western portion of the LCT. The Zone of Theoretical Visibility shows that predicted visibility of the development from within this LCT would be 67% when taking account of the screening effects of forestry and woodland.

8.29 SNH advise that the effect of introducing the 13km length of OHL as horizontal features into these LCTs are not themselves likely to result in significant effects however these become an issue when considered with the supporting towers as vertical features which contrast with the open, expansive and strongly horizontal character. The towers generally appear as contrasting elements in open views introducing large features in relation to those that currently exist which diminish this sense of expansiveness. As such there will be a reduction in simplicity of the strongly horizontal character across the strongly horizontal character across the length of the proposal.

8.30 Looking at particular sections of the line the impacts of the development are seen to be moderate as opposed to major adverse or severe adverse as presented within the supporting ES. Moderate impact can be regarded in some assessments to be significant in its effect. However with regard to this project the lack of landscape designations, settlement, main roads, routeways and areas of public interests in the immediate vicinity development all help to diminishes the effect of the impact not only upon receptors in the area, but on landscape designations in the surrounding area and the landscape within which the project sits.

8.31 In relation to areas of wild land, the policy position set out in SPP is clear that development may be appropriate in certain circumstances. No part of the development sits within an area of wild land (AWL).

**Visual Impact**

8.32 Following on from how the proposal would look in the landscape, consideration has been given to the key visual impacts that would be experienced by principal receptors. These include people living working, traveling through or using the countryside surrounding the proposed development. The visual receptors of the development have been highlighted and assessed in the ES. 19 viewpoints have been identified, in consultation with the Council and SNH, to best consider the key impacts of the proposal.

8.33 Due to the nature of the proposal the development will introduce a new overhead line into the area forming a large scale, man-made, linear feature comprising of relatively regularly spaced, large scale, vertical towers connected by overhead transmission cables, and SEC enclosures into a landscape where currently such features are of limited occurrence or not present. As such the introduction of the proposed development would result in a direct and permanent change to the existing visual baseline.

8.34 Two Zones of Theoretical Visibility have been submitted alongside the application; these are the 'Bare Ground ZTV' which does not take account of existing buildings or vegetation and the 'with Screening' ZTV which represents a more realistic visibility scenario as it takes into account existing buildings and vegetation which would provide a screening effect. The Bare Ground ZTV demonstrates that visibility of the proposed development would extent to 63.94% of the study area (i.e. a 10km radius). This figure is reduced to 50.39% when taking into account the existing landform, as demonstrated on the 'with Screening' ZTV. It is noted that this ZTV has not taken account of existing tree cover therefore the development may in reality by screened further than currently suggested by the ZTV.

8.35 In terms of the 19 viewpoints presented in the ES, severe effects are anticipated for one location, Hill of Olrig, which lies approximately 1.75km from the proposed development. This is a result of its elevated location which will overlook, the entire length of the OHL element of the proposed development.

8.36 A moderate visual impact, which must be considered as significant under the terms of the EIA, has been identified for 6 of the 19 viewpoints. These are:

**Viewpoint 6** located at the A9 junction with Sordale at a distance of 1.5km south of the proposed development. From this location, the overhead lines will appear partially on the skyline. It is acknowledged that at present, existing wooden pole overhead lines are visible in this location within close proximity to the viewpoint.

**Viewpoint 8** located at Hoy at a distance of 0.5km from the proposed development. The visualisations show that, due to the intervening woodland, the overhead line would not be visible in this location however the ES has assumed the worst case scenario and as such a moderate impact has been assigned to this VP in the event that this woodland is removed at a future date.

**Viewpoint 9** located on the B876 to the south of Castletown at a distance of 3km from the proposed development. The viewpoint faces a southerly direction and demonstrates that from this location a significant stretch of the overhead line would be visible and would be seen partially against the skyline. From this location, additional man made elements would also be visible including blocks of forestry and existing wooden pole style overhead lines in the foreground.

**Viewpoint 11** located at Reaster at a distance of 0.1km south of the proposed development. From this location a large stretch of the overhead line would be visible, appearing as differing scales within the foreground and into the horizon.

**Viewpoint 13** at Dunnet located at a distance of 7.5km north of the proposed development. In this location, due to the open view available, a large stretch of the overhead line would be visible from this location and would be seen partially set against the skyline. Due to the distance which separates the viewpoint from the development, it is not considered that the overhead lines would appear dominant or overly prominent from this location.

**Viewpoint 14** at Dunnet Head located at a distance of 9.75km north of the proposed development. This VP has been selected to be representative of tourists and visitors. The wireline demonstrates that a lengthy stretch of the overhead line would be visible in this location however as with VP 13, due to the distances involved it would not result in the formation of a dominant focus from this location. Whilst it is not shown on the photomontage, the wider panorama from Dunnet Head now includes two large scale wind farm developments at Stroupster and Lochend.

8.37 The photomontages demonstrate that the most significant visual effects arising from the proposed development are likely to appear in short range views with effects diminishing in longer range views. It is also acknowledged that many views already contain a number of additional man made elements including existing overhead lines. Although the visual effects for the viewpoints listed above are considered to be significant under the terms of the EIA regulations, the key policy test under Policy 69 of the Highland-wide Local Development Plan is whether such effects are significantly detrimental. As noted above, the proposed development will introduce new relatively large scale elements into the landscape however it is not considered that the development would result in an overly prominent or indeed dominant focus being formed, nor is it considered that the proposed development would overwhelm this landscape.

8.38 Retention and management of the existing surrounding forest plantations would predominately screen views of the proposed development from its introduction and during its operational lifetime, particularly in views from the north. The landscaping would reduce the extent to which the proposed development would be visible in views from the south-east, although some parts of the upper sections of the proposed buildings and apparatus would be likely to remain visible within these views. The proposed native trees and shrub planting would, over time, provide some further screening of the proposed development in these views although growth rates are likely to be slow in this location, and any reduction in overall visibility resulting from the planting would only be likely to occur in excess of 15-20 years from planting.

**Cumulative Visual Impact**

8.39 A range of built, consented and planning projects which have been considered in combination with the proposed development are set out in 6.14 of the ES. Such projects include Stroupster and Lochend Wind Farms, Thurso substation and the Dounreay to Mybster OHL. The ES concludes that there would be no significant cumulative effects arising from this proposal. This position is agreed.

**Impact on Residential Amenity**

8.40 As noted earlier, SSE have sought to operate within certain parameters which include the siting of overhead lines outwith 100m of any dwelling house. In this instance however, there is one property which lies 89m from the proposed over head lines. This property, Rennabreach, is located within a scattering of houses at Bowermadden and is a relatively new house. It faces onto the public road however from the rear and side elevation, views of the line would be present.

**Cultural Heritage**

8.41 The Council's Historic Environment Team have advised that the cultural heritage chapter of the Environmental Statement submitted provides a good level of detail with regard to the impacts on historic environment assets. Mitigation measures to minimise any adverse impact are also identified in the ES; such measures largely include mitigation by design. Of particular note are the scheduled cairns of Stemster Hill and Earney Hillock.

8.42 It is possible that further archaeological features may survive buried within the application area and that these may be impacted by the proposed development. The offered mitigation is welcomed but it is also recommended that a condition is attached to any consent to address potential finds arising from ground breaking activities in key areas of interest.

**Construction Impacts**

8.43 Following commissioning of the proposed development, all construction sites will be reinstated. The reinstatement will form part of the contract obligations for the Principal Contractor and will include the removal of all temporary access tracks, all work sites around the tower locations and the re-vegetation of all construction compounds. Reinstatement plans will be detailed as part of the Construction Environmental Management Document (CEMD) which will require to be agreed prior to commencement of any works on site.

8.44 Construction working is likely to be during daytime periods only. Working hours are currently anticipated between 07.00 to 19.00 in summer and 07.30 to 17.00 (or within daylight hours) in winter, Monday to Saturday. Any out of hours working would be agreed in advance with The Highland Council.

**Other matters raised in representations**

8.45 The potential for adverse health impacts to arise as a result of proximity to overhead lines has been cited by objectors. The UK Health Protection Agency (HPA) is the government body responsible for policy and guidance on electromagnetic fields (EMFs) which are specifically cited as a concern by objectors. The HPA has adopted exposure guidelines developed by the International Commission on Non-Ionising Radiation Protection (ICNRIP) to ensure protection of human health in different situations. It is noted that the predicted EMFs fall below the ICNRIP guidelines.

**Matters to be secured by Legal Agreement**

The Council's Transport Planning team have advised that a Wear and Tear Agreement would be required to ensure any damage to the public road network that arises during construction is repaired to the satisfaction of the Roads Authority. This also requires the securing of a bond to safeguard against potential damage to the existing network. This would need to be secured by a Section 96 Legal Agreement.

## 9. CONCLUSION

9.1 The need for the proposed development of strategic electricity infrastructure is set out in Scottish Government's National Planning Framework. This is emphasised through the aims of the local policy context as set out in the Highland-wide Local Development Plan and Caithness and Sutherland Local Development Plan. As such there is a strong presumption in favour of the proposed development.

The concerns of objectors, and off the Community Council, are noted particularly with regards visual impact. It is regrettable that the entire line cannot be placed underground however it must be recognised that SSE have sought to route the sections of overhead line in accordance with the Holford Rules and its SSE's own Limits of Deviation. In this instance, the line has been sited at least 100m from any individual property as such that any significant impacts to residential amenity can be avoided.

It is unavoidable that a development of this nature will result in visual effects. As noted previously it is evident that, as would be expected, the most pronounced effects will arise from short range views. Overall it is not considered that the visual impact of the development is so significantly detrimental that it would warrant raising an objection to the proposed development.

## 10. RECOMMENDATION

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations. As such it is recommended that the Council raises no objection to the proposed development.

Any conditions attached to any permission issued by the Scottish Government Energy Consents Unit are to be determined by the Scottish Government and its standard conditions are included as an Appendix to this report for information. It is recommended that the following conditions are put forward for consideration:

1. No development shall commence until a site specific Construction Environmental Management Document (CEMD) has been submitted to, and approved in writing by the Planning Authority. The CEMD shall include a drawing/map showing the locations of the towers and the construction works. All the construction works and towers should be located outside of floodplain area and in 20m standoff distances from watercourses. All watercourse crossings (access tracks, underground cable) need to be designed to convey the 0.5% AEP flood with an allowance for climate change and for potential blockage.

*Reason: To prevent flood risk*

2. No development shall commence until a Drainage Management Plan (DMP) has been submitted to and approved in writing by the Planning Authority. The DMP shall include known existing land drainage and proposals (e.g. drawings, specifications and method statements) for site drainage for each of the main

phases of works (to inform the design and positioning of mitigation measures). The DMP shall also include detailed drawings showing the watercourse crossings, either for access tracks or for the underground cable element. For the avoidance of doubt, temporary access tracks should be removed at the end of the construction phase. This includes the removal of artificial drainage measures and reinstatement of natural drainage patterns

*Reason: To ensure the site can be adequately drained*

4. No development shall commence until a Construction Traffic Management Plan has been submitted to and agreed in writing by the Planning Authority in consultation with the Roads Authority. For the avoidance of doubt, the CTMP shall satisfy the requirements of the Police and as required, community representations. The CTMP shall include the following:

- A risk assessment for transportation during daylight hours and hours of darkness;
- Proposed traffic management on the access routes. Measures such as temporary speed limits, suitable temporary signage, road markings and the use of speed activated signs should be considered;
- Proposed measures to mitigate the impact of general construction traffic on the local road network following detailed assessment of relevant roads;
- A contingency plan prepared by the abnormal load haulier. The plan shall be adopted only after consultation and agreement with the Police and the respective roads authorities. It shall include measures to deal with any haulage incidents that may result in public roads becoming temporarily closed or restricted.
- A procedure for the regular monitoring of road conditions and the implementation of any remedial works required during the construction period.
- A detailed protocol for the delivery of abnormal loads/vehicles, prepared in consultation and agreement with interested parties, including Highland Council, the Police, Transport Scotland and, as required, community representatives. The protocol shall include arranagements to provide advance notice of abnormal loads movements in the local media. Temporary signage, in the form of demountable signs or similar approved, shall be established, when required, to alert road users and local residents of expected abnormal load movements. All such movements on Council maintained roads shall take place outwith peak times on the network, including school travel times, and shall avoid local community events;
- A detailed delivery programme for abnormal load movements, which shall be made available to Highland Council and, as required, community representations;
- Details of appropriate upgrading works at the junction of access track/public road junctions. Such works will include suitable drainage measures, improved geometry and construction, measures to protect the public road and the provision and maintenance of appropriate visibility splays;
- Details of appropriate traffic management which shall be established and maintained at site accesses for the during of construction works. Full details shall be submitted for the prior approval of Highland Council, as Roads Authority;

- Measures to ensure that all affected public roads are kept free of mud and debris arising from the development. In this regard a vacuum type road brush will be required;
- Following completion of mitigation/improvement measures the condition of the relevant routes shall be recorded by the developer in association with the roads authority.
- A concluded agreement in accordance with Section 96 of the Roads (Scotland) Act 1984 under which the developer is responsible for the repair of any damage to the public road network that can reasonably be attributed to construction related traffic including through the provision of a Road Bond or similar security. As part of this agreement, joint pre-start and post-construction road condition surveys (developer and Highland Council) must be carried out by the developer, to the satisfaction of the Roads Authority(s) and regular monitoring of traffic levels and road conditions shall be undertaken during the construction phase of the development. The Agreement shall take account of any significant neighbouring developments that might progress concurrent with works proposed and will provide, if necessary, a mechanism for apportionment of costs between respective developers.

***Reason:*** *In the interests of road safety, and that the works involved comply with applicable standards.*

No development shall commence until a Community Liaison Group has been established by the developer and confirmed in writing with the Planning Authority. The Group shall include representatives of the local communities directly affected by the works. During the construction phase of the development the developer shall meet at regular intervals with this group to review the impact of the works and agree measures to address any issues that arise.

***Reason****: In order to ensure the safety and free flow of traffic on the public road.*

Prior to the movement on Council maintained roads of any construction traffic associated with the development, the following shall be completed to the satisfaction of Highland Council:

- A further review of maximum axle loading on structures along the access route;
- A further review of overhead services along the access routes;
- A review, in summer conditions, of roadside vegetation along the access routes and clearance of any vegetation that may interfere with construction traffic;
- A review of road works or road closures that could affect the movement of construction traffic;
- A review of new or diverted underground services that may be at risk from construction traffic;
- Consultation shall be carried out and agreement reached with the Police and respective Roads Authorities regarding the movement of construction traffic on the local road network.

***Reason:*** *In order to ensure the safety and free flow of traffic on the public road.*

No development shall commence until a Written Scheme of Investigation has been submitted to and approved in writing by the Planning Authority. This shall include a programme of works including the following:

- further walkover survey (in areas that were excluded from the ES work)
- marking-out of historic assets with a buffer (during construction)
- minimising impacts to linear features where they must be impacted
- evaluation of features where impacts cannot be avoided
- monitoring during construction (watching briefs)
- post-excavation studies and reporting, as necessary

***Reason:*** *In order to protect the archaeological and historic interest of the site.*

Any ongoing maintenance shall be agreed in advance with the Planning Authority in consultation with the Roads Authority, and community councils for any significant construction traffic required during this period.

***Reason:*** *In order to ensure the safety and free flow of traffic on the public road.*

| | |
|---|---|
| Signature: | Dafydd Jones |
| Designation: | Area Planning Manager North |
| Author: | Gillian Webster |
| Background Papers: | Documents referred to in report and in case file. |

Relevant Plans:

Plan 1 – 000001 Rev J
Plan 2 – 000002 Rev J
Plan 3 – 000003 Rev J
Plan 4 - 000004 Rev J
Plan 5 - 000005 Rev J
Plan 6 - 000006 Rev J
Plan 7 - 000007 Rev J
Plan 8 - 000008 Rev J
Plan 9 - 000009 Rev J
Plan 10 - 000010 Rev J
Plan 11 - 000011 Rev J
Plan 12 - 000012 Rev J
Plan 13 - 000013 Rev J
Plan 14 - 000014 Rev J
Plan 15 - 000015 Rev J
Plan 16 - 000016 Rev J
Plan 17 - 000017 Rev J

This list of specimen conditions has been prepared for use by the ECDU, to assist consistency of decision making. However, this list is not comprehensive. Conditions should always be revised or adapted where appropriate to suit the particular circumstances of a case.

**The consent granted in accordance with Section 37 of the Electricity Act 1989 and direction that planning permission be deemed to be granted under section 57 of the Town and Country Planning (Scotland) Act 1997 are subject to the following conditions:**

| **Conditions Attached to Section 37 Consent** | |
|---|---|
| 1. | **Commencement of Development**<br><br>The Commencement of the Development shall be no later than [three years][1] from the date of this consent, or in substitution such other period as the Scottish Ministers may hereafter direct in writing. Written confirmation of the intended date of Commencement of Development shall be provided to the Planning Authority and Scottish Ministers no later than one calendar month before that date.<br><br>*Reason: In accordance with s58 of the Town and Country Planning (Scotland) Act 1997. To avoid uncertainty and ensure that the consent is implemented within a reasonable period.* |
| 2. | **Non-assignation**<br><br>This consent may not be assigned without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may assign the consent (with or without conditions) or refuse assignation as they may, in their own discretion, see fit. The consent shall not be capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure. The Company shall notify the local planning authority in writing of the name of the assignee, principal named contact and contact details within 14 days of written confirmation from the Scottish Ministers of an assignation having been granted.<br><br>*Reason: To safeguard the obligations of the consent if transferred to another company.* |
| 3. | **Serious Incident Reporting**<br><br>In the event of any serious incident relating to health and safety or environmental obligations relating to the Development occurring during the period of this consent, the Company will provide written notification of the nature and timing of the incident to the Scottish Ministers, including confirmation, where relevant, of remedial measures taken and/ or to be taken to rectify the breach, within 24 hours of the incident occurring.<br><br>*Reason: To keep the Scottish Ministers informed of any such incidents which may be in the public interest.* |
| 4. | **Grant of Section 37 Consent in circumstances where necessary wayleaves have not been agreed**<br><br>No work is to proceed on or over land [insert description of land in respect of which necessary wayleaves have not been secured, eg from towers 1 - 21 and from towers 29 – 31] as more particularly shown [delineated in red] on plan reference XXX, until Scottish Minsters have given their written permission. |

[1] This period may be increased where a longer period for implementation is justified in the circumstances of the case.

| | |
|---|---|
| | *Reason: In implementation of powers conferred by paragraph 6 of Schedule 8 to the Electricity Act 198, to allow consent to be implemented in respect of those areas of land where relevant land rights have been secured.* |

| **Conditions Attached to Deemed Planning Permission** | |
|---|---|
| 5. | **Implementation in accordance with approved plans and requirements of this consent**<br><br>Except as otherwise required by the terms of this consent and deemed planning permission, the Development shall be undertaken in accordance with the application ([including the approved drawings listed at Appendix 1 to this decision/ insert drawing reference showing site layout]), environmental statement (as supplemented or amended by any further or additional environmental information) and other documentation lodged in support of the application.<br><br>*Reason: to ensure that the Development is carried out in accordance with the approved details.* |
| 6. | **Design of sub-station and ancillary development**[2]<br><br>There shall be no Commencement of Development unless final details of the external appearance, dimensions, and surface materials of the substation building, ancillary development, associated compounds, any construction compound boundary fencing, external lighting and parking areas have been submitted to and approved in writing by the Planning Authority. The substation building, ancillary development, associated compounds, fencing, external lighting and parking areas shall be constructed in accordance with the approved details.<br><br>*Reason: To ensure that the environmental impacts of the sub-station and ancillary development forming part of the Development conform to the impacts assessed in the environmental statement and in the interests of the visual amenity of the area.* |
| 7. | **Infrastructure Location Allowance/ Limits of Deviation**[3]<br><br>Towers, areas of hardstanding and tracks may be adjusted by micro-siting within infrastructure location allowances specified in this condition. However, unless otherwise approved in advance in writing by the Planning Authority (in consultation with SEPA and SNH), micro-siting and [infrastructure location allowances/ limits of deviation] are subject to the following restrictions:<br><br>a. All towers, electric lines and other apparatus will be restricted to the area shown [shaded in pink] on plan reference XXXX.<br>b. No tower shall positioned higher than XXXX metres Above Ordinance Datum (Newlyn);<br>c. No access track shall be constructed outwith the limits shown on the original approved plans (reference XXXX); |

[2] Consideration should be given phasing approval to various tranches of the project, to reflect is linear nature. For example, the restriction could relate to commencement of development of the substation, or commencement of the development of access tracks between points X and Y, to allow implementation in a phased manner. NB – Ancillary development which has been assessed in the ES, included in the description of development for which deemed planning issued or which is controlled by condition does not benefit from permitted development rights and approval of design etc should be obtained.

[3] Either term can be used, but should be consistent throughout conditions and decision letter.

| | |
|---|---|
| | d. No micro-siting shall take place within areas of peat of greater depth than has been assessed in the environmental statement;<br>e. No micro-siting shall take place within areas hosting Ground Water Dependent Terrestrial Ecosystems which have not been assessed in the environmental statement;<br>f. All micro-siting permissible under this condition must be approved in advance in writing by the Environmental Clerk of Works (ECoW).<br><br>No later than [three months] after the Date of Commissioning, an updated site plan must be submitted to the Planning Authority showing the final position of all towers, areas of hardstanding, tracks and associated infrastructure forming part of the Development. The plan should also specify areas where micro-siting has taken place and, for each instance, be accompanied by copies of the ECOW and,if applicable, Planning Authority's written approval.<br><br>*Reason: to control environmental impacts while taking account of local ground conditions.* |
| 8. | **Borrow Pits – Scheme of Works**[4]<br><br>There shall be no development of borrow pits unless a site specific scheme for the working and restoration of [the/ each] borrow pit forming part of the Development has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The scheme shall include;<br><br>a. A detailed working method statement based on site survey information and ground investigations;<br>b. Details of the handling of any overburden (including peat, soil and rock);<br>c. Drainage, including measures to prevent surrounding areas of peatland, water dependant sensitive habitats and Ground Water Dependant Terrestrial Ecosystems (GWDTE) from drying out;<br>d. A programme of implementation of the works described in the scheme; and<br>e. Full details of the reinstatement, restoration and aftercare of the borrow pit(s) at the end of the construction period, to include topographic surveys of pre-construction profiles, and details of topographical surveys to be undertaken of the restored borrow pit profiles.<br><br>The approved scheme shall thereafter be implemented in full.<br><br>*Reason: To ensure that excavation of materials from the borrow pit(s) is carried out in a manner that minimises the impact on road safety, amenity and the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented. To secure the restoration of borrow pit(s) at the end of the construction period.* |
| 9. | **Borrow Pits – Blasting**<br><br>Blasting shall only take place between the hours of [10.00 to 16.00 on Monday to Friday inclusive and 10.00 to 12.00 on Saturdays], with no blasting taking place on a Sunday or on national public holidays, unless otherwise approved in advance in writing by the planning authority.<br><br>Ground vibration from blasting shall not exceed a peak particle velocity of [6mm/second] at agreed blasting monitoring locations. The measurement shall be the maximum of three |

[4] Consider whether this can be subsumed within the CEMP condition – SEPA preference to include within CEMP, but take advice from planning authority on preferred approach.

| | |
|---|---|
| | mutually perpendicular directions taken at the ground surface.<br><br>*Reason: To ensure that blasting activity is carried out within defined timescales to control impact on amenity.* |
| 10. | **Planning Monitoring Officer**[5]<br><br>There shall be no Commencement of Development unless the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified environmental consultant to assist the Planning Authority in monitoring compliance with the terms of the deemed planning permission and conditions attached to this consent ("PMO"). The terms of appointment shall;<br><br>a. Impose a duty to monitor compliance with the terms of the deemed planning permission and conditions attached to this consent, including recommendations on discharge of pre-commencement conditions;<br>b. Require the PMO to sumbit a monthly report to the Planning Authority summarising works undertaken on site; and<br>c. Require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the terms of the deemed planning permission and conditions attached to this consent at the earliest practical opportunity.<br><br>The PMO shall be appointed on the approved terms throughout the period from Commencement of Development to completion of post construction restoration works.<br><br>*Reason: To enable the development to be suitably monitored to ensure compliance with the consent issued.* |
| 11. | **Ecological Clerk of Works**<br><br>There shall be no Commencement of Development unless the Company has appointed an independent Ecological Clerk of Works (ECoW). The ECoW shall;<br><br>a. Monitor and support compliance with the ecological and hydrological commitments provided in the environmental statement and other information lodged in support of the application, the Construction and Environmental Management Plan, the Habitat Management Plan approved in accordance with condition 12, [any species or habitat management plans identified in the Environmental Statement] and other plans approved in terms of condition 14 ("the ECoW works");<br>b. Report to and submit a monthly written report to the Company's nominated construction project manager;<br>c. Report to the Company's nominated construction project manager any incidences of non-compliance with the ECoW Works at the earliest practical opportunity.<br><br>The ECoW reports shall be made available to the Planning Monitoring Officer [Planning Authority in cases where no PMO] on request.<br><br>The EcoW shall be appointed throughout the period from Commencement of Development, throughout any period of construction activity and during any period of post construction restoration works approved in terms of condition 12p.<br><br>*Reason: To secure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Development.* |
| 12. | **Construction and Environmental Management Plan**[6] |

[5] Discuss with LPA and applicant whether this condition is appropriate – will not be appropriate in all cases, having regard to the scale of development and sensitivity of receptors.

| | |
|---|---|
| | There shall be no Commencement of Development unless a Construction and Environmental Management Plan ("CEMP") outlining site specific details of all on-site construction works, post-construction reinstatement, drainage and mitigation, together with details of their timetabling, has been submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA.<br><br>The CEMP shall include (but shall not be limited to)[7]:<br><br>a. a site waste management plan (dealing with all aspects of waste produced during the construction period other than peat), including details of contingency planning in the event of accidental release of materials which could cause harm to the environment;<br>b. details of the formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material stockpiles, oil storage, lighting columns, and any construction compound boundary fencing;<br>c. a dust management plan;<br>d. site specific details for management and operation of any concrete batching plant (including disposal of pH rich waste water and substances);<br>e. details of measures to be taken to prevent loose or deleterious material being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network;<br>f. a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;<br>g. soil storage and management;<br>h. a peat management plan, to include details of vegetated turf stripping and storage, peat excavation (including volumes), handling, storage and re-use;<br>i. a drainage management strategy, demonstrating how all surface and waste water arising during and after development will be managed and prevented from polluting any watercourses or sources;<br>j. a surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt laden water;<br>k. sewage disposal and treatment;<br>l. temporary site illumination;<br>m. the construction of the access into the site and the creation and maintenance of associated visibility splays;<br>n. the method of construction of tower foundations and erection of steel lattices;<br>o. details of watercourse crossings;<br>p. post-construction restoration/ reinstatement of the working areas not required during the operation of the Development, including construction access tracks, borrow pits, construction compound, storage areas, laydown areas, access tracks, passing places and other construction areas. Wherever possible, reinstatement is to be achieved by the careful use of turfs removed prior to construction works. Details should include all seed mixes to be used for the reinstatement of vegetation;<br>q. a wetland ecosystems survey and mitigation plan[8]<br>r. a felling and tree management plan[9] |

[6] Consideration should be given to phasing approval for various tranches of the project, to reflect is linear nature. For example, the restriction could relate to commencement of development of the substation, or commencement of the development of access tracks between points X and Y, to allow implementation in a phased manner. NB – Ancillary development which has been assessed in the ES, included in the description of development for which deemed planning issued or which is controlled by condition does not benefit from permitted development rights and approval of design etc should be obtained.

[7] Select from the following list those requirements which are relevant to the circumstances of the application.

[8] This requirement should be applied only where appropriate in the circumstances on the case and will not be relevant to all applications

[9] This requirement should be applied only where appropriate in the circumstances on the case and will not be relevant to all applications

| | |
|---|---|
| | The development shall be implemented thereafter in accordance with the approved CEMP unless otherwise approved in advance in writing by the Planning Authority in consultation with SNH and SEPA.<br><br>*Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented.* |
| 13. | **Pre- Construction Species Survey Work (SHETL)**<br><br>Prior to the Commencement of Development, surveys for protected species shall be carried out by a suitably qualified person or persons in a manner appropriate to the phasing of the development and written survey results provided to the Planning Authority and SNH.<br><br>The Development shall thereafter be undertaken in accordance with the principles of the Species Protection Plans [previously approved by SNH/ incorporated into the ES].[10]<br><br>*Reason: To minimise disruption to protected species and their habitats.*<br><br>**Pre- Construction Species Survey Work (SPT)[11]**<br><br>Prior to the Commencement of Development, surveys for [insert species] shall be carried out by a suitably qualified person or persons in a manner appropriate to the phasing of the development.<br><br>The results of these surveys should be used to inform preparation of a [insert species] Mitigation and Management Plan. There shall be no Commencement of Development until the [insert species] Mitigation and Management Plan has been approved in writing by the Planning Authority. The approved [insert species] Mitigation and Management Plan shall thereafter be implemented in full.<br><br>*Reason: To minimise disruption to protected species and their habitats.* |
| 14. | **Construction Hours**<br><br>Construction work which is audible from any noise-sensitive receptor shall only take place between the hours of 07.00 to 19.00 on Monday to Friday inclusive and 07.00 to 16.00 on Saturdays, with no construction work taking place on a Sunday or on national public holidays. Outwith these specified hours, development on the site shall be limited to maintenance, emergency works, dust suppression, and the testing of plant and equipment, unless otherwise approved in advance in writing by the planning authority.<br><br>HGV movements to and from the site (excluding abnormal loads) during construction of the Development shall be limited to 07.00 to 19.00 Monday to Friday, and 07.00 to 16.00 on Saturdays, with no HGV movements to for from site taking place on a Sunday or on national |

[10] To applied to SHETL and SHEPD consents following discussion with the planning authority to increase awareness of the Species Protection Plans which have been agreed between SHETL, SHEPD and SNH. The Species Protection Plans set out an overarching framework applicable to SSE developments, to avoid the need to preparation of individual species mitigation plans on a case by case basis. The Species Protection Plan covers all species and a single condition is sufficient to address them all.

[11] SPT is working on an overarching framework with SNH, although this has not yet been formalised. Pending completion, species mitigation plans should be approved before commencement of development. SPT has expressed a preference that multiple conditions be applied – with a single condition relating to each protected species of relevance in the context of the application ie one relating to badgers, a second relating to water vole etc.

| | |
|---|---|
| | public holidays, unless otherwise approved in advance in writing by the planning authority.<br><br>*Reason: In the interests of local amenity.* |
| 15. | **Traffic Management Plan**<br><br>There shall be no Commencement of Development unless a traffic management plan has been submitted to and approved in writing by the Planning Authority. The traffic management plan shall include:<br><br>a. The routeing of all traffic associated with the Development on the local road network;<br>b. Measures to ensure that the specified routes are adhered to, including monitoring procedures;<br>c. Details of all signage and lining arrangements to be put in place;<br>d. Provisions for emergency vehicle access;<br>e. Identification of a nominated person to whom any road safety issues can be referred; and<br>f. A plan for access by vehicles carrying abnormal loads, including the number and timing of deliveries, the length, width, axle configuration of all extraordinary traffic accessing the site.<br><br>The approved traffic management plan shall thereafter be implemented in full, unless otherwise agreed in advance in writing with the Planning Authority.<br><br>*Reason: In the interests of road safety and to ensure that abnormal loads access the site in a safe manner.* |
| 16. | **Habitat Management Plan**[12]<br><br>There shall be no Commencement of Development unless a habitat management plan has been submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA. The habitat management plan shall set out proposed habitat management of [insert details of relevant area] during the period of construction and shall provide for the maintenance, monitoring and reporting of [insert site specific details or particular species, habitats or wetlands as appropriate] habitat on site.<br><br>The approved habitat management plan will include provision for regular monitoring and review to be undertaken to consider whether amendments are needed to better meet the habitat plan objectives. In particular, the approved habitat management plan will be updated to reflect ground condition surveys undertaken following construction and prior to the date of Final Commissioning and submitted to the Planning Authority for written approval in consultation with SNH and SEPA.<br><br>Unless otherwise agreed in advance in writing with the Planning Authority, the approved habitat management plan shall be implemented in full.<br><br>*Reason: In the interests of good land management and the protection of habitats.* |
| 17. | **Programme of Archaeological Works**[13]<br><br>There shall be no Commencement of Development unless the Planning Authority has approved the terms of a programme of archaeological works to be observed during construction of the Development, to include measures to be taken to protect and preserve any features of archaeological interest in situ and the recording and recovery of archaeological features which cannot be so preserved. The approved scheme of |

[12] Include only where relevant in response to demonstrable requirement.
[13] This condition should be applied only where appropriate in the circumstances on the case and will not be relevant to all applications.

| | |
|---|---|
| | archaeological works shall thereafter be implemented in full.<br><br>*Reason: To ensure the protection or recording of archaeological features on the site.*<br><br>OR<br><br>**Archaeological Clerk of Works**[14]<br>There shall be no Commencement of Development unless the Company has appointed an independent Archaeological Clerk of Works (ACoW). The ACoW shall;<br><br>a. Monitor and support compliance with the archaeological mitigation works that have been approved in this consent ("the ACoW Works");<br>b. Advise the Company on adequate protection of archaeological interests on the site;<br>c. Check for new records of archaeological interests for which additional mitigation may be required;<br>d. Direct the micro-siting and placement of towers and other apparatus;<br>e. Report to the Company's nominated construction project manager any incidences of non-compliance with the ACoW Works at the earliest practical opportunity.<br><br>The ECoW reports shall be made available to the Planning Monitoring Officer [Planning Authority in cases where no PMO] on request.<br><br>Unless otherwise agreed in advance in writing with the Planning Authority, the AcoW shall be appointed on the approved terms throughout the period from Commencement of Development, throughout any period of construction activity and during any period of post construction restoration works approved in terms of condition 12.<br><br>*Reason: To ensure the protection or recording of archaeological features on the site.* |
| 18. | **Replanting of Forestry**[15]<br><br>There shall be no Commencement of the Development unless a woodland planting scheme to compensate for the removal of [insert area which corresponds to woodland to be removed[16]] hectares of existing woodland ("the Replanting Scheme") has been submitted for the written approval of the Planning Authority in consultation with Forestry Commission Scotland Conservator.<br><br>The Replanting Scheme must comply with the requirements set out in the UK Forestry Standard (Forestry Commission, 2011. ISBN 978-0-85538-830-0) and the guidelines to which it refers, or such replacement standard as may be in place at the time of submission of the Replanting Scheme for approval. The Replanting Scheme must include-<br><br>(a) details of the location of the area to be planted;<br>(b) details of land owners and occupiers of the land to be planted;<br>(c) the nature, design and specification of the proposed woodland to be planted;<br>(d) details of all consents required for delivery of the Replanting Scheme and timescales within which each will be obtained;<br>(e) the phasing and associated timescales for implementing the Replanting Scheme;<br>(f) proposals for the maintenance and establishment of the Replanting Scheme, |

[14] This condition should be applied only where appropriate in the circumstances on the case and will not be relevant to all applications.
[15] This condition should be applied only where appropriate in the circumstances on the case and will not be relevant to all applications.
[16] This figure should reflect the area to be felled as a consequence of the development. The toal area of replanting may differ, depending upon nature and quality of area felled/ replanted etc in accordance with Control of Woodland Removal policy.

| | |
|---|---|
| | including annual checks, replacement planting, fencing, ground preparation and drainage; and<br>(g) proposals for reporting to the Planning Authority on compliance with timescales for obtaining the necessary consents and thereafter implementation of the Replanting Scheme.<br><br>Unless otherwise agreed in writing by the Planning Authority, the Development shall not be commissioned unless all relevant consents necessary for implementation of the approved Replanting Scheme in accordance with the phasing and timescales set out therein have been obtained.<br><br>In the event that there is no reasonable prospect of the relevant consents necessary for implementation of the approved Replanting Scheme being obtained, then the Company shall submit an amended Replanting Scheme to the Planning Authority for approval in consultation with Forestry Commission Scotland. Unless otherwise agreed in writing by the Planning Authority, the Development shall not be commissioned unless all relevant consents necessary for implementation of the approved amended Replanting Scheme in accordance with the phasing and timescales set out therein have been obtained.<br><br>The approved Replanting Scheme (or, as the case may be, an approved amended Replanting Scheme) shall be implemented in full, unless otherwise agreed in writing by the Planning Authority after consultation with Forestry Commission Scotland Conservator.<br><br>*Reason: To secure replanting to mitigate against effects of deforestation arising from the Development.* |
| 19. | **Peat Landslide Management**[17]<br><br>There shall be no Commencement of the Development until a detailed peat landslide risk assessment, addressing construction phase of the development and post-construction monitoring, has been approved in writing by the Planning Authority.<br><br>The peat landslide risk assessment shall comply with best practice contained in "Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments" published by the Scottish Government in January 2007, or such replacement standard as may be in place at the time of submission of the peat landslide risk assessment for approval. The peat landslide risk assessment shall include a scaled plan and details of any mitigation measures to be put in place.<br><br>The approved peat landslide risk assessment shall thereafter be undertaken in full prior to Commencement of Development.][18]<br><br>There shall be no Commencement of Development unless the Company has appointed an independent and suitably qualified geotechnical engineer. The ECoW shall;<br><br>The Company shall undertake continuous monitoring of ground conditions during the construction and deforestation phases of the Development. Continuous analysis and call out services shall be provided by the geotechnical engineer throughout the construction phase of the Development. If a risk of peat failure is identified, the Company shall install such geotechnical instrumentation to monitor ground conditions as is recommended by the geotechnical engineer and shall monitor ground conditions. Any remediation work |

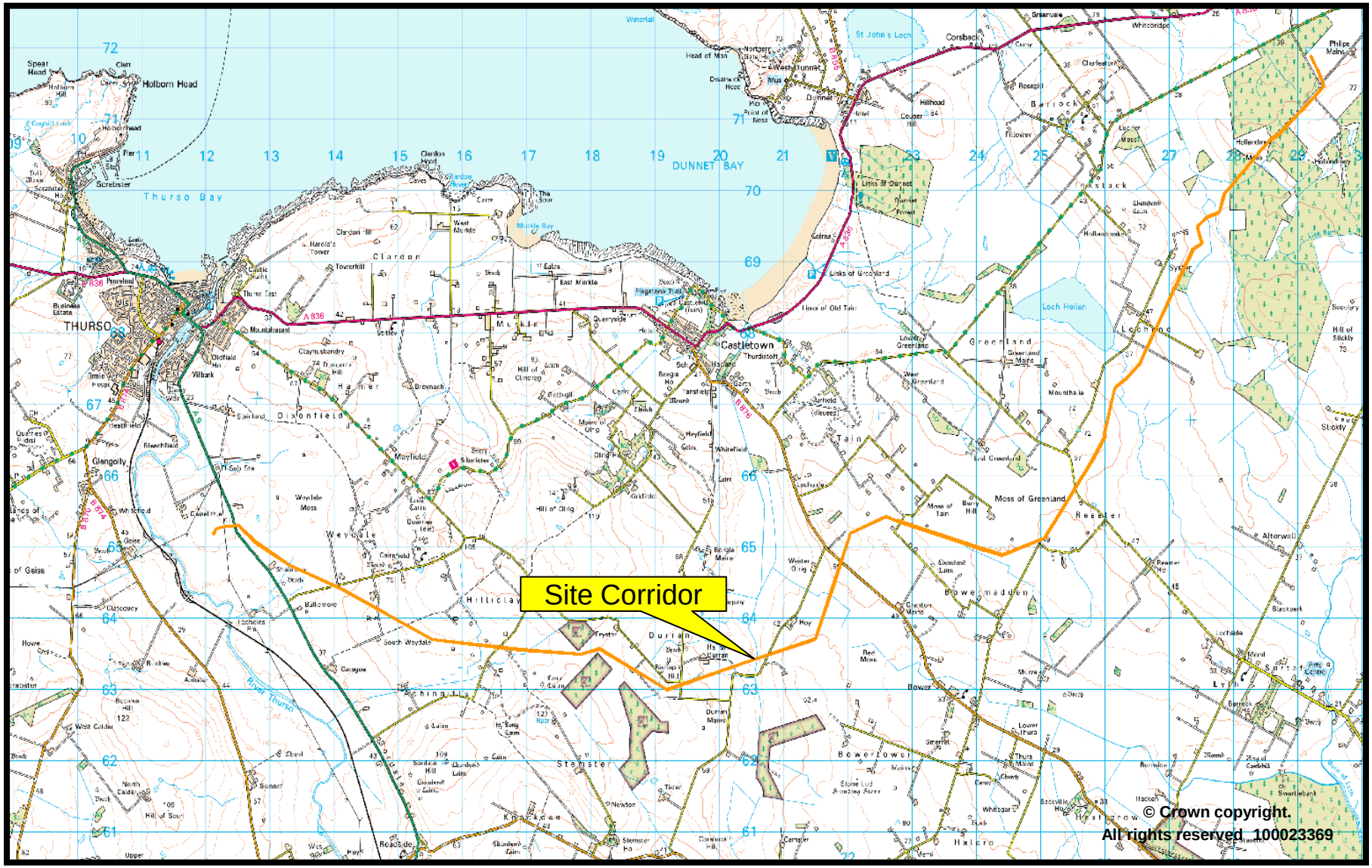
[17] To be imposed only in response to demonstrable requirement following peat risk assessment – not to be applied in all cases. Peat landslide risk should be assessed as part of the EIA process to ascertain whether the environmental risk is acceptable, prior to consent being granted. This condition should be used to control any acceptable risks which have been identified and should not be used to postpone the assessment of acceptability until post-grant.

[18] This section will only be relevant in circumstances where updated landslide assessment is required prior to commencement of development.

| | |
|---|---|
| | considered necessary by the geotechnical engineer shall be implemented by the Company to the satisfaction of the geotechnical engineer. Monitoring results shall be fed into risk analysis reports to be be made available to the Planning Monitoring Officer (Planning Authority in cases where no PMO) on request or at no greater interval than a quarterly basis.<br><br>*Reason: To minimise the risk of peat failure arising from the Development.* |
| 20. | **Private Water Supplies**[19]<br><br>There shall be no Commencement of Development unless a method statement has been submitted to and approved in writing by the Planning Authority, detailing all mitigation measures to be delivered to secure the quality, quantity and continuity of water supplies to properties which are served by private water supplies at the date of this consent and which may be affected by the Development. The method statement shall include water quality sampling methods and shall specify abstraction points. The approved method statement shall thereafter be implemented in full.<br><br>*Reason: To maintain a secure and adequate quality water supply to all properties with private water supplies which may be affected by the development.* |

| | |
|---|---|
| Commencement of the Development | Means the implementation of the consent and deemed planning permission by the carrying out of a material operation within the meaning of section 26 of the Town and Country Planning (Scotland) Act 1997. |
| Date of Commissioning | Means the date on which electricity is first [distributed/ transmitted] via the Development. |
| Development | Means [insert description of development as it appears on application] authorised by this consent and deemed planning permission. |

[19] This condition should be applied only where appropriate in the circumstances on the case and will not be relevant to all applications.




The Highland Council
Comhairle na Gàidhealtachd

Development & Infrastructure Service

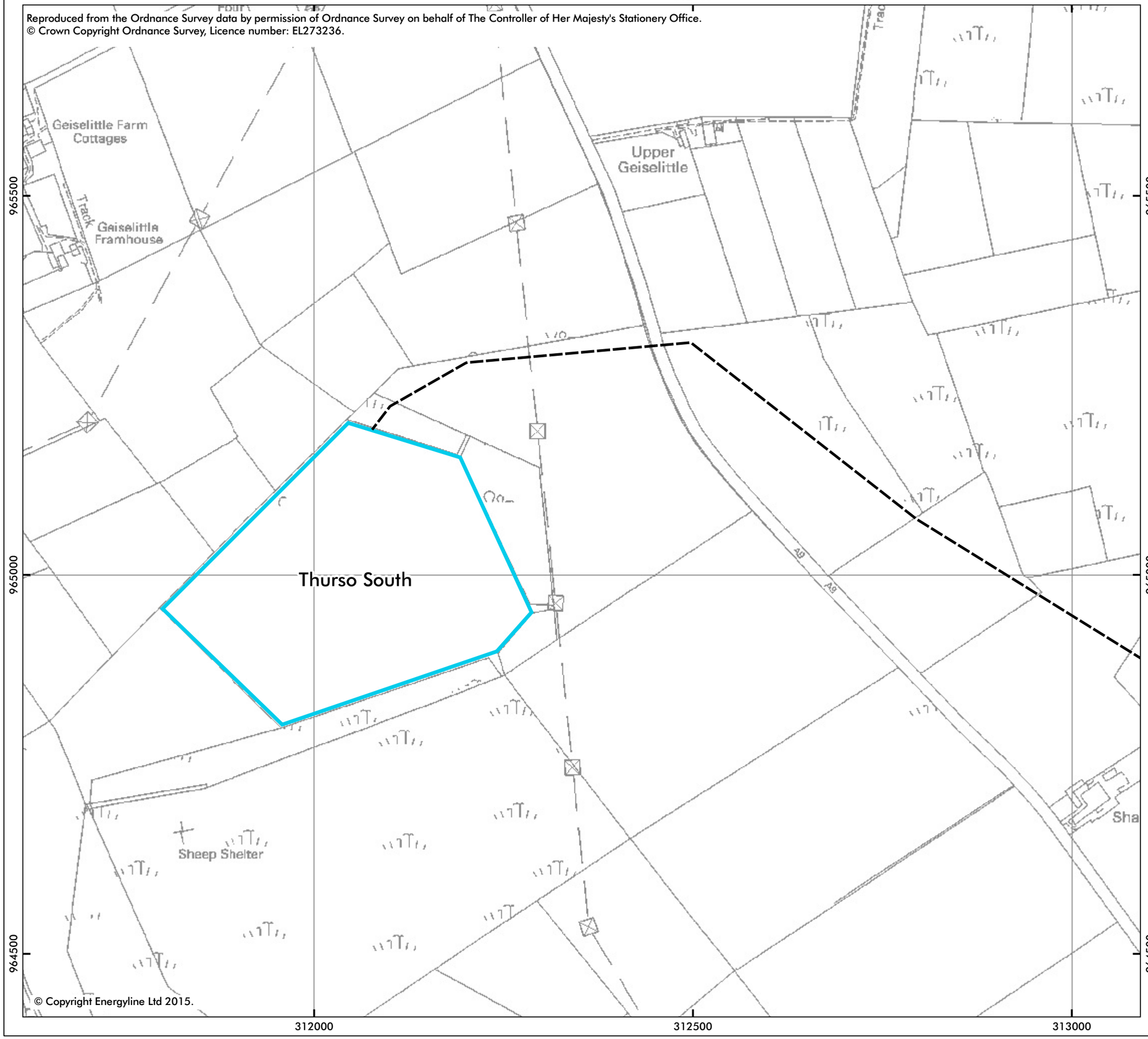
# 15/04103/S37

**Erect a 132kV AC overhead, double circuit, steel lattice tower, transmission line between the proposed Sealing End Tower at Weydale and the proposed Sealing End Tower at Reaster, Caithness.**

**Date: 08/12/2016**

N

**Scale:**




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

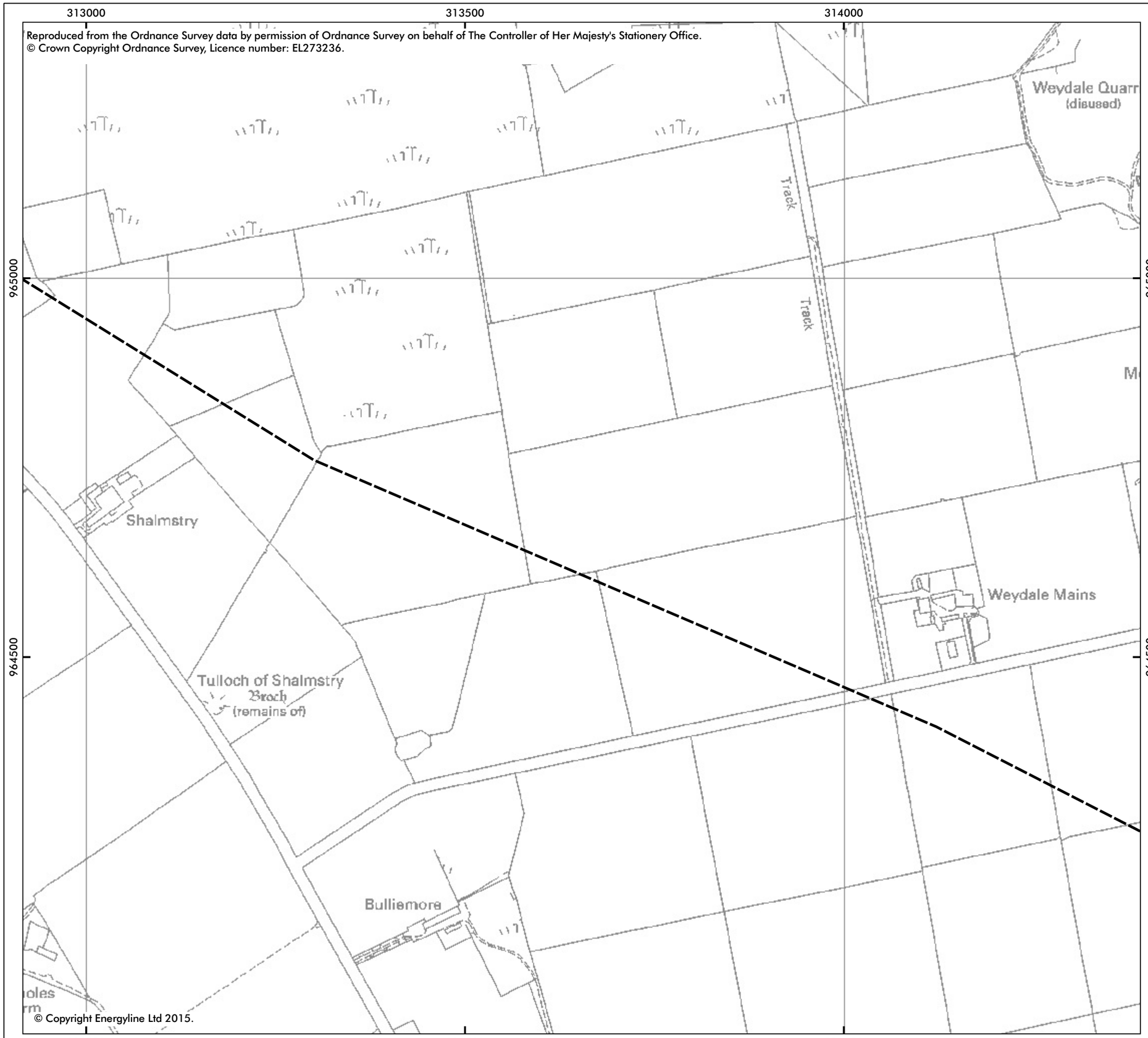
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 1 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

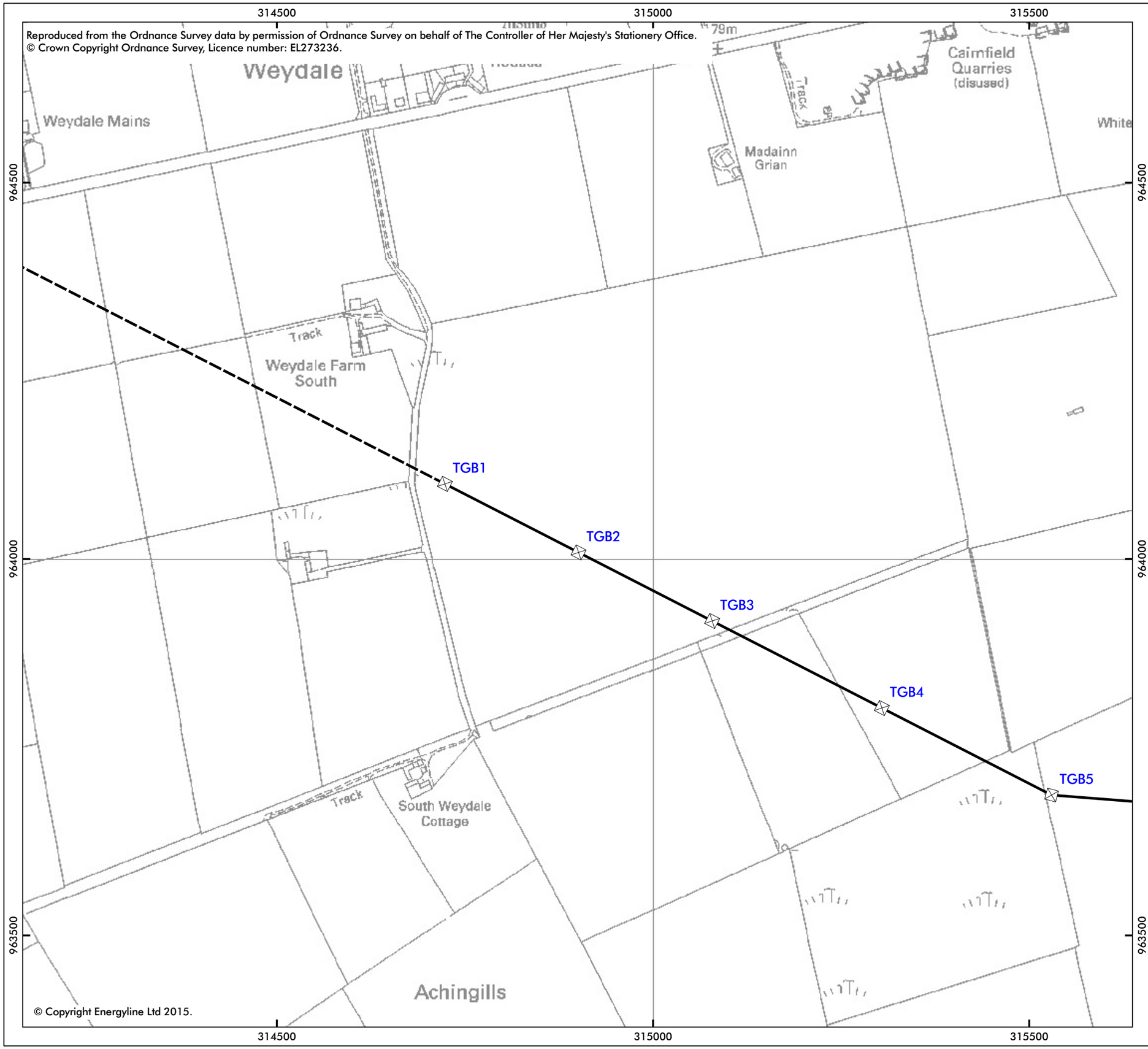
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 2 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

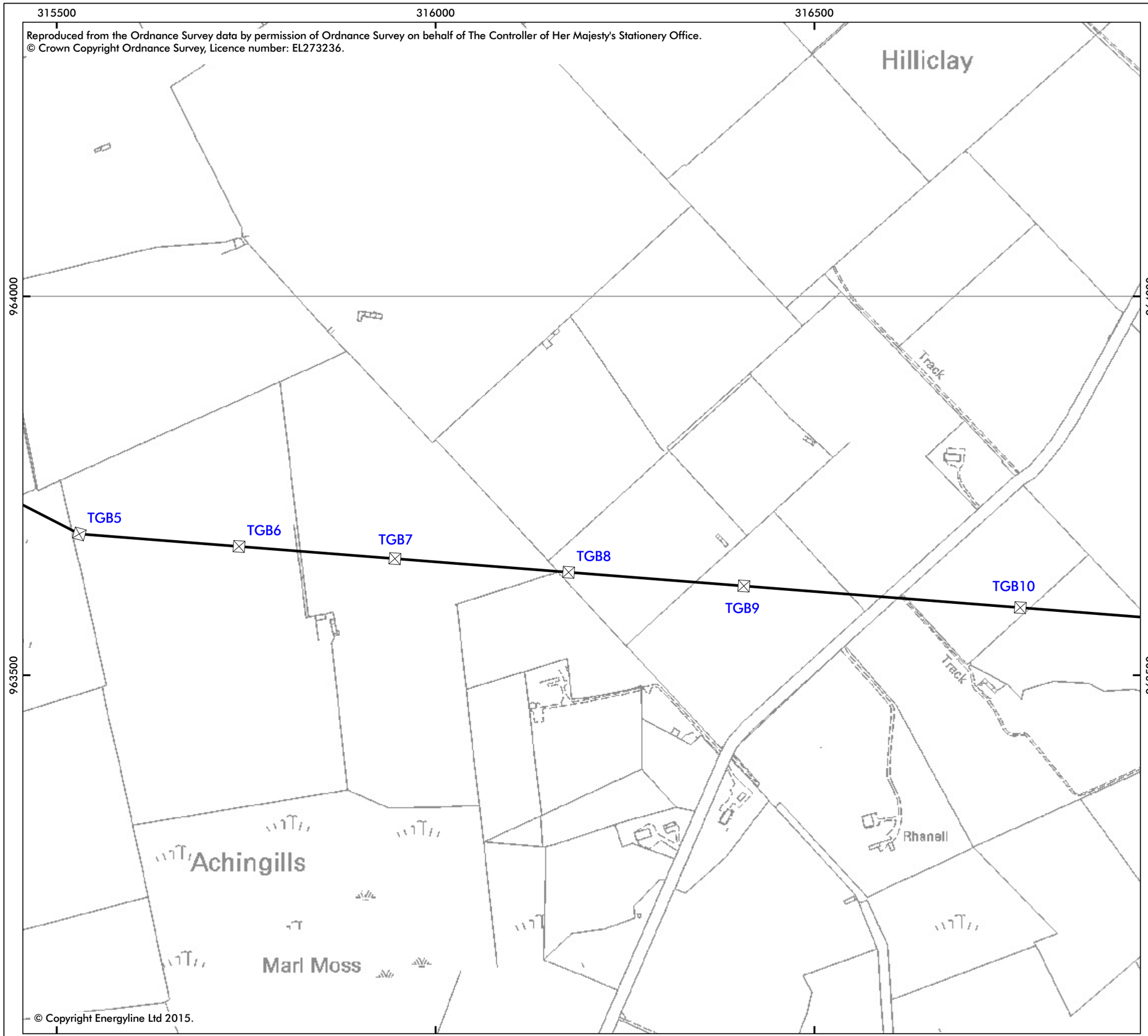
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 3 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

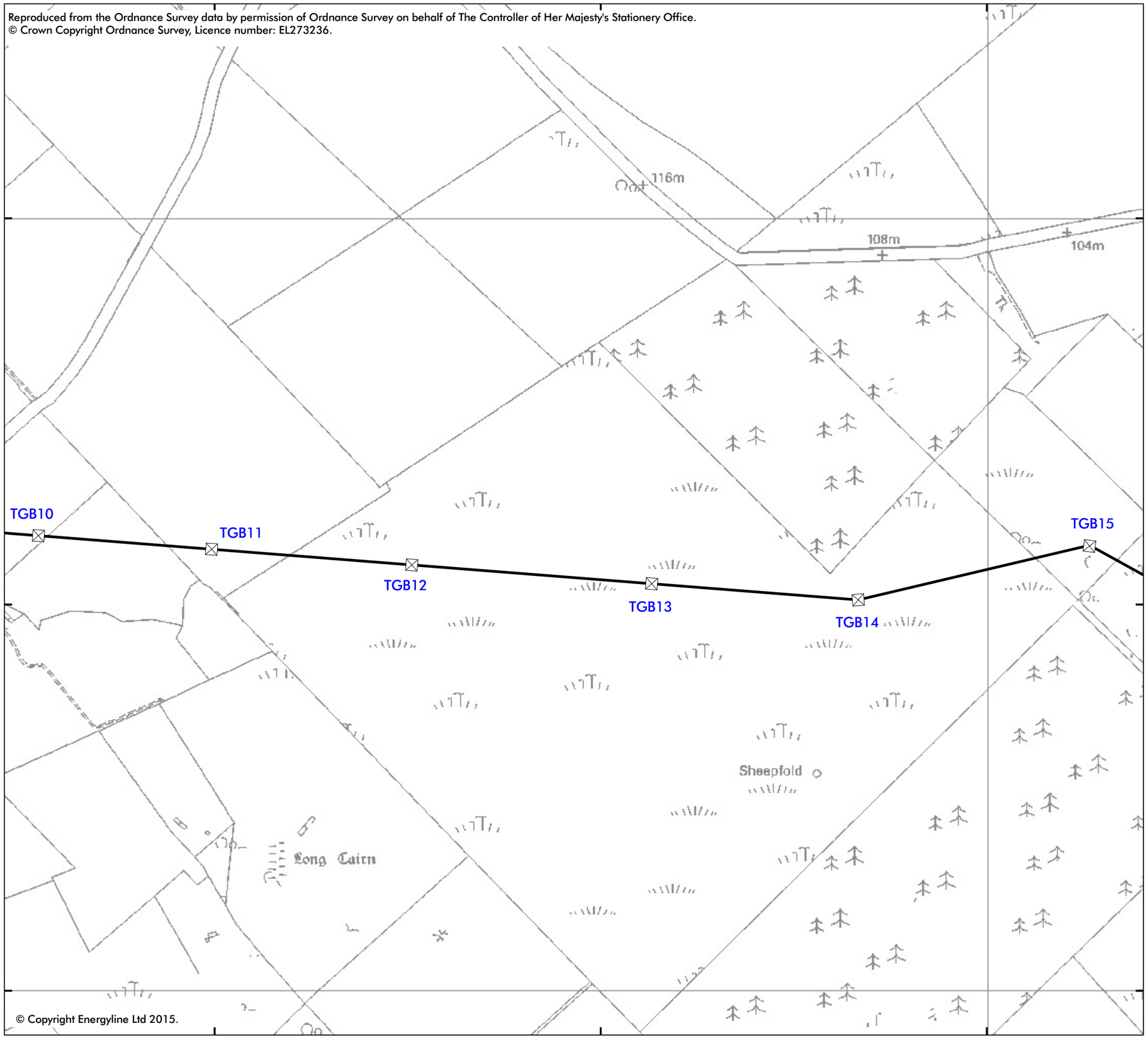
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 4 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

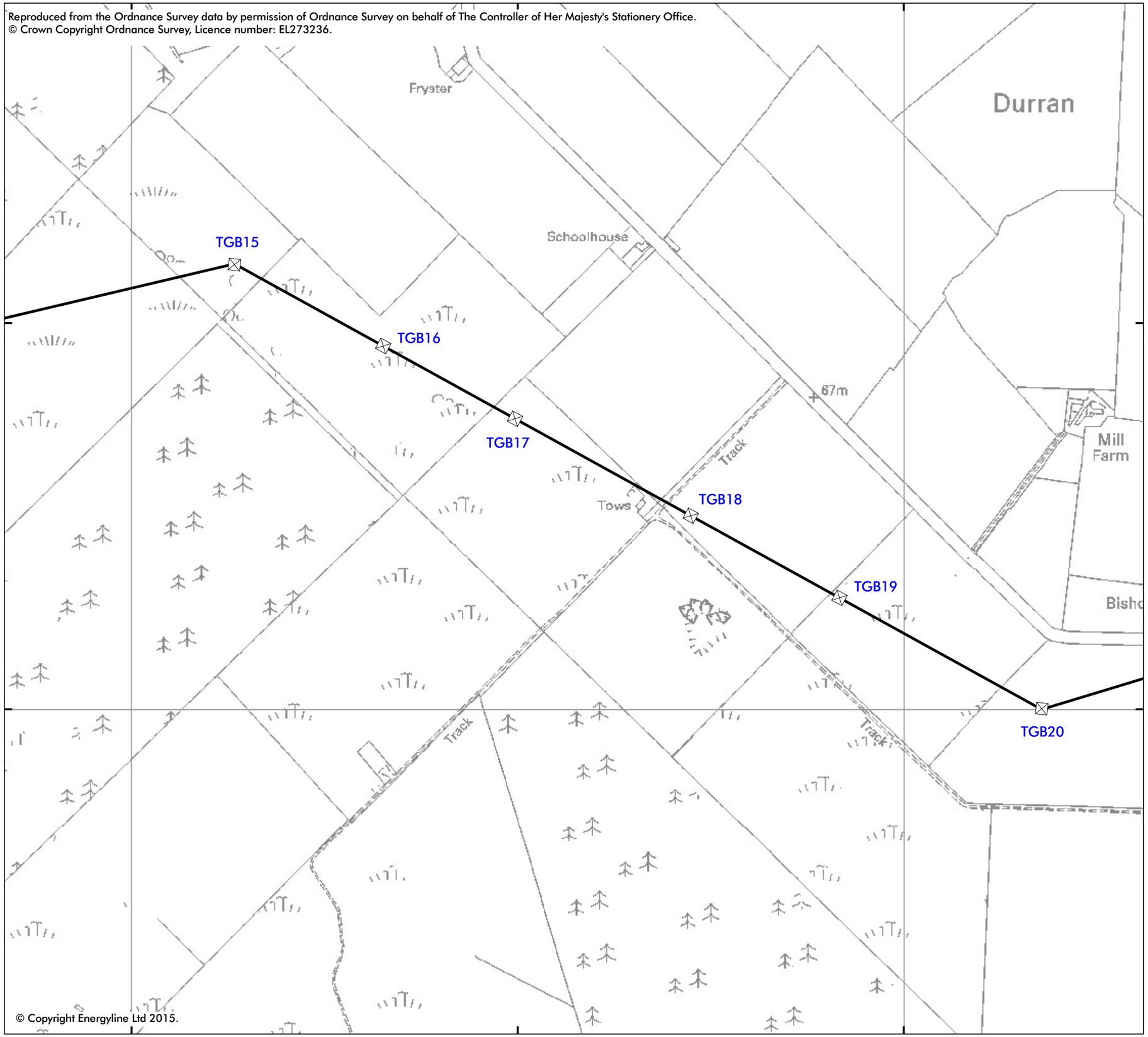
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 5 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

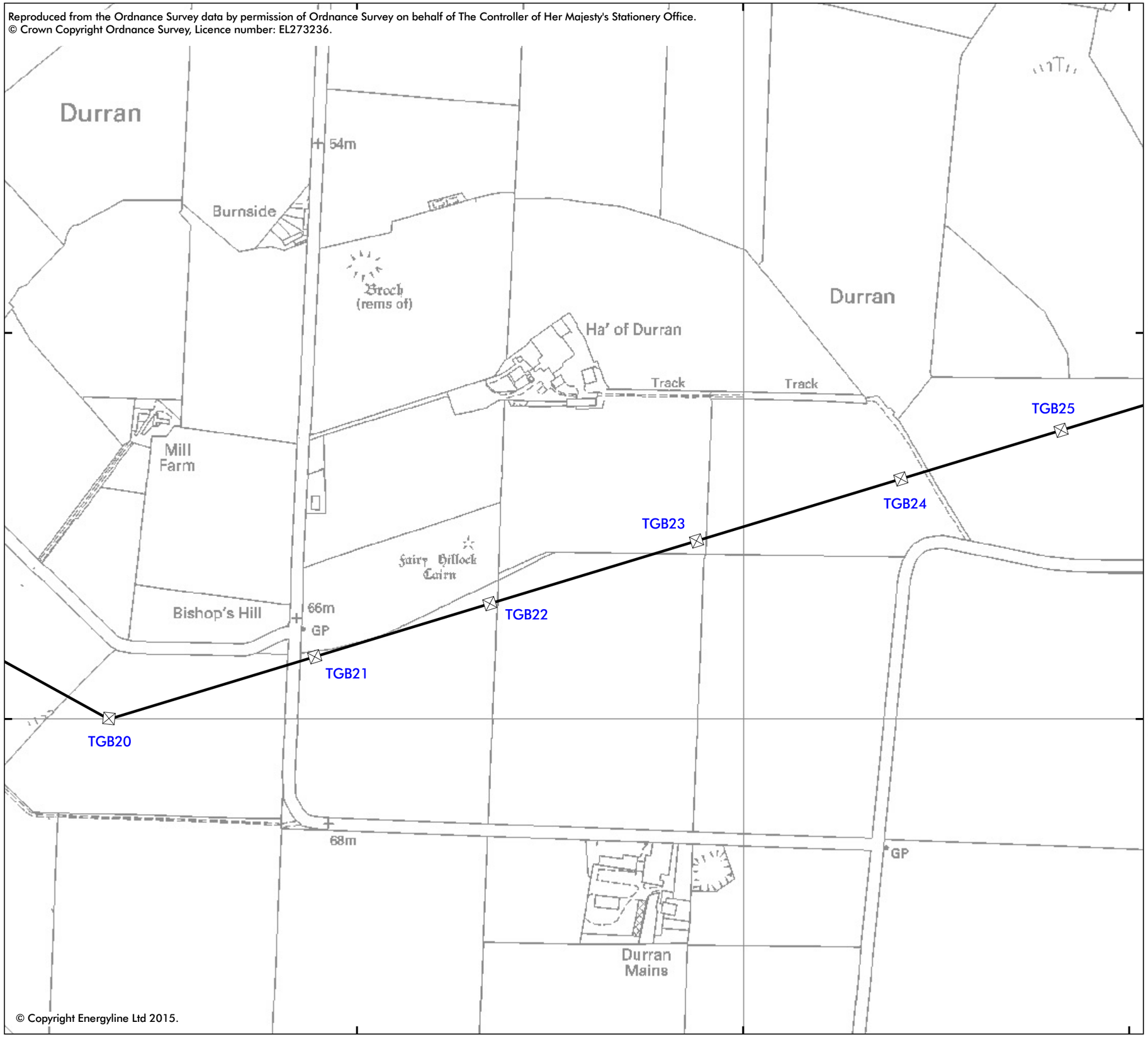
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 6 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 7 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |

320500 321000 321500

964500 964000 963500

TGB32 TGB31 TGB30 TGB29 TGB28 TGB27 TGB26 TGB25

42m

Hoy Farm Bungalow

Hoy

Sheepfold

Track

28m



## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

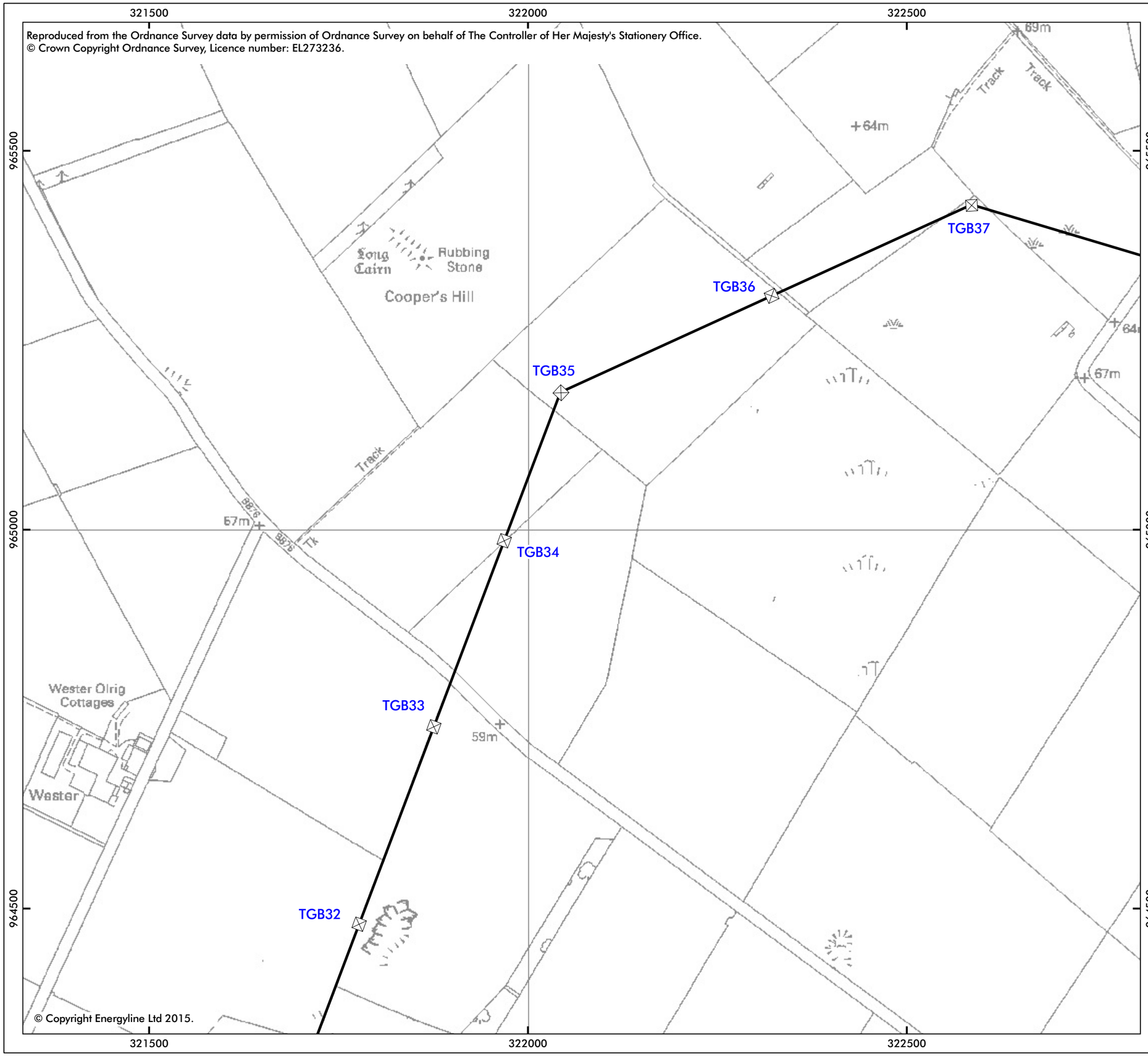
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 8 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 9 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |

323000 323500

965500 965000

Roegnester
Berry Hill
Moss of Tain
Round Hill
Bowermadden
Hill View
Earney Hillock
Chambered Cairn
Stone
Sheep Wash
Track
Track
69m
59m
63m
66m
64m
67m
67m
63m
63m

TGB37 TGB38 TGB39 TGB40 TGB41 TGB42



## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

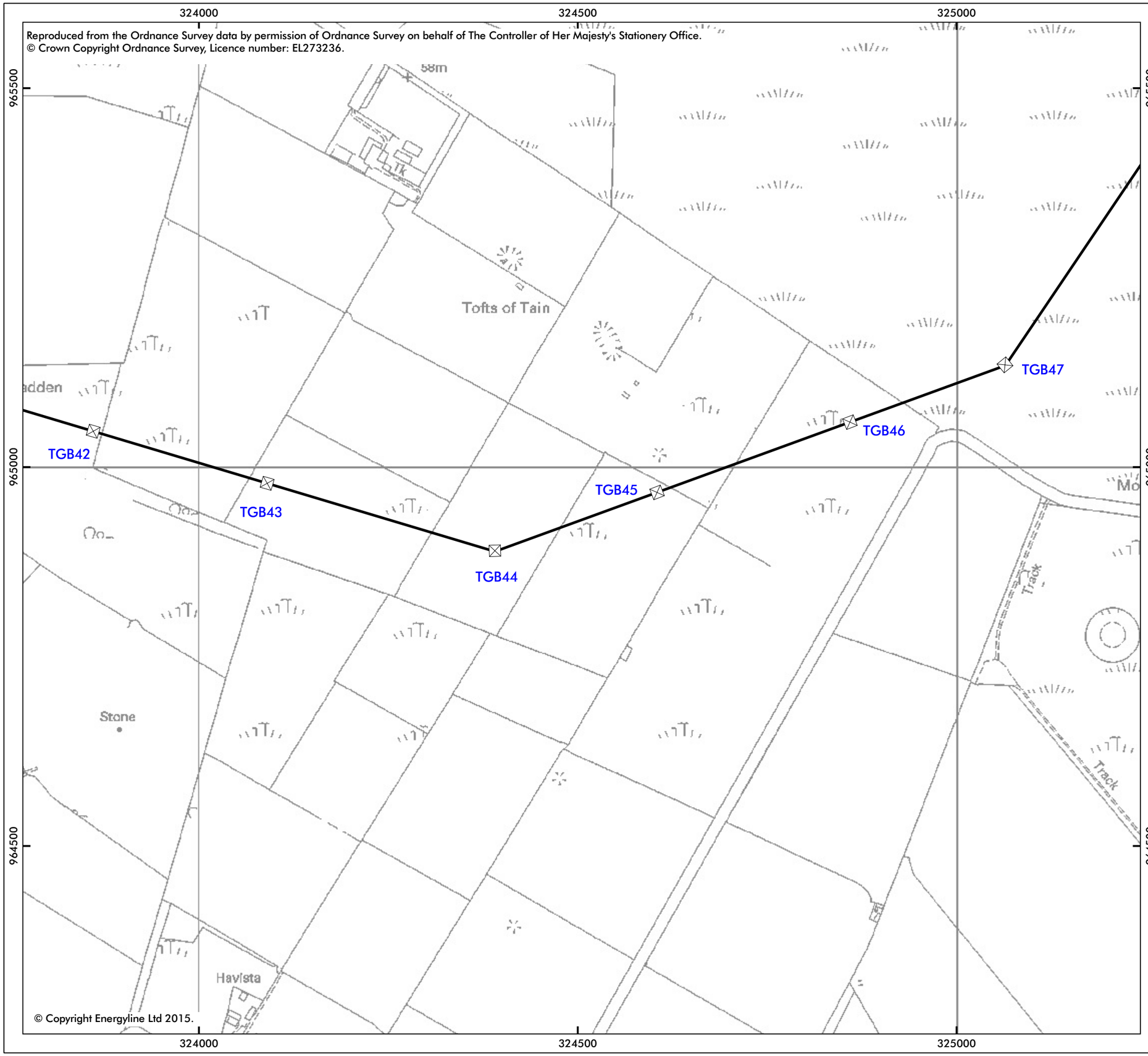
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 10 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

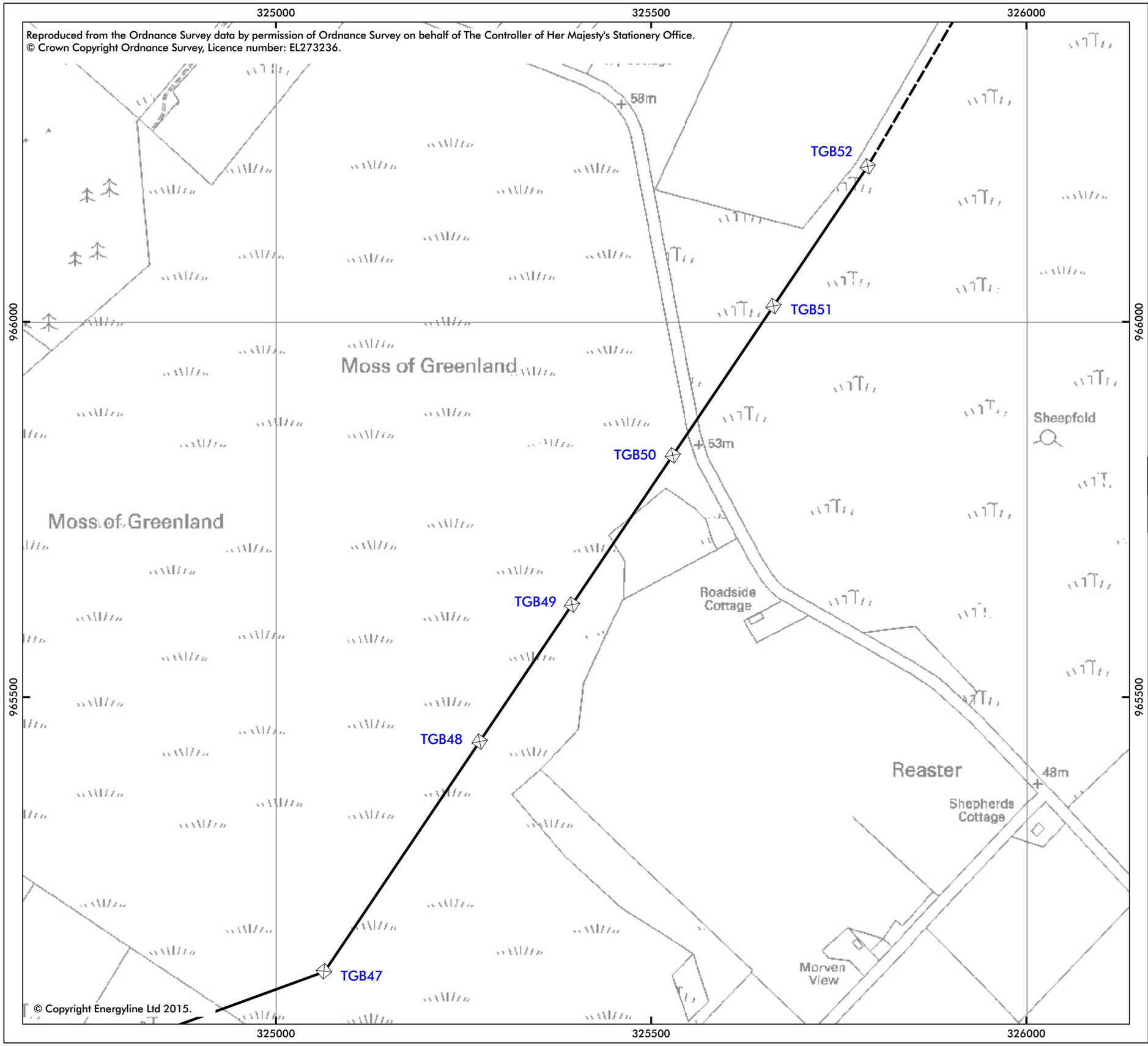
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 11 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

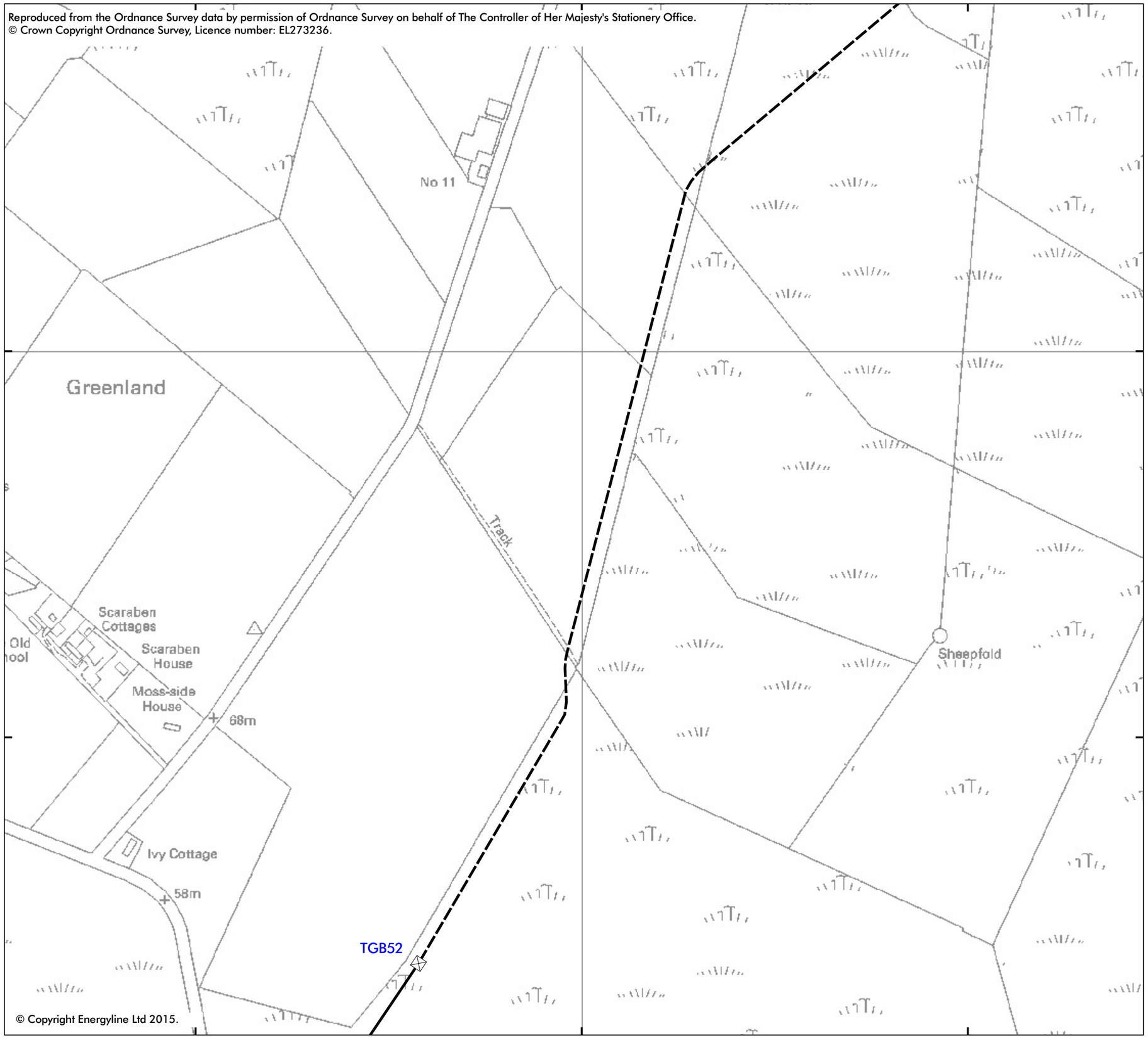
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 12 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

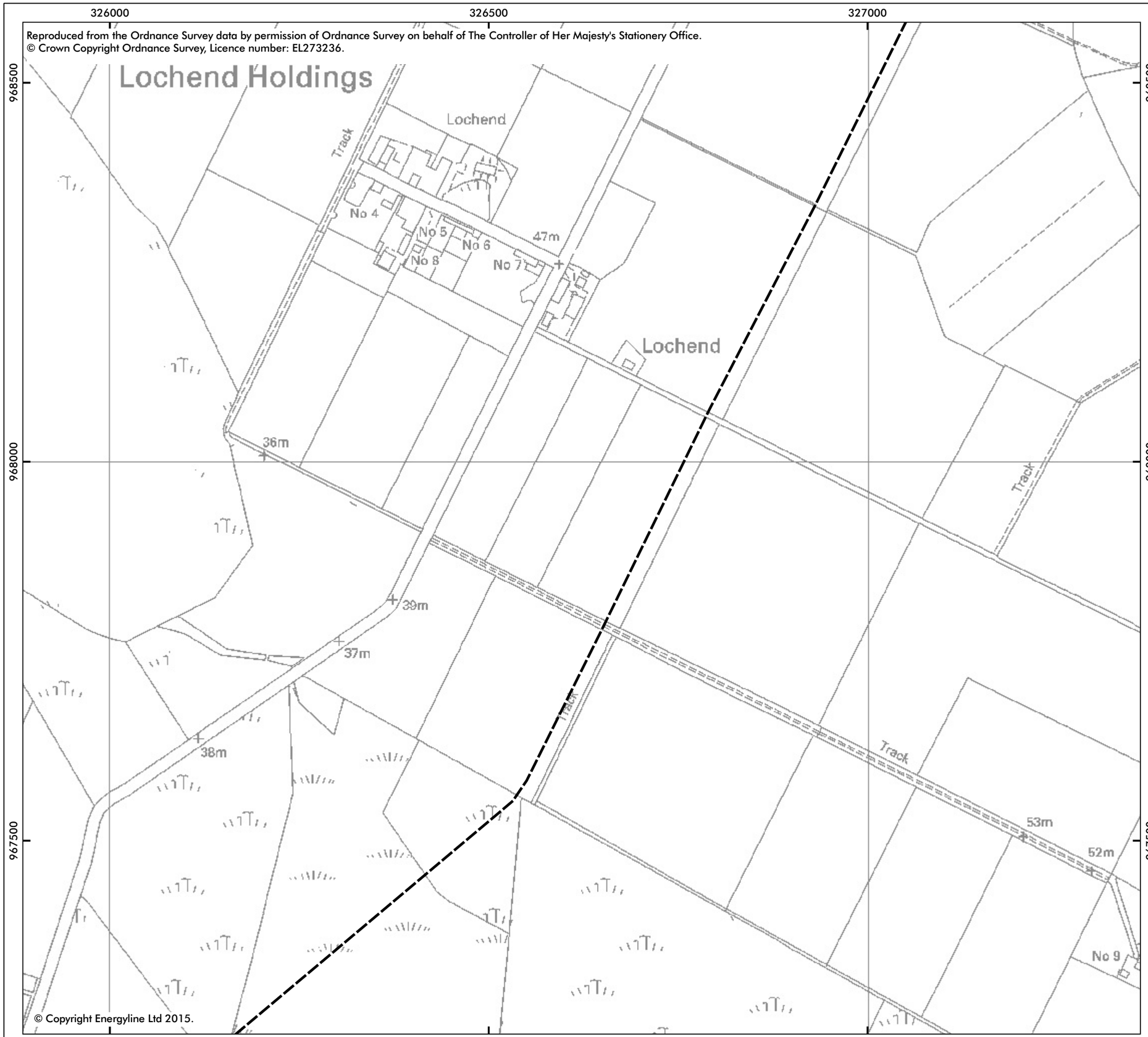
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 13 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

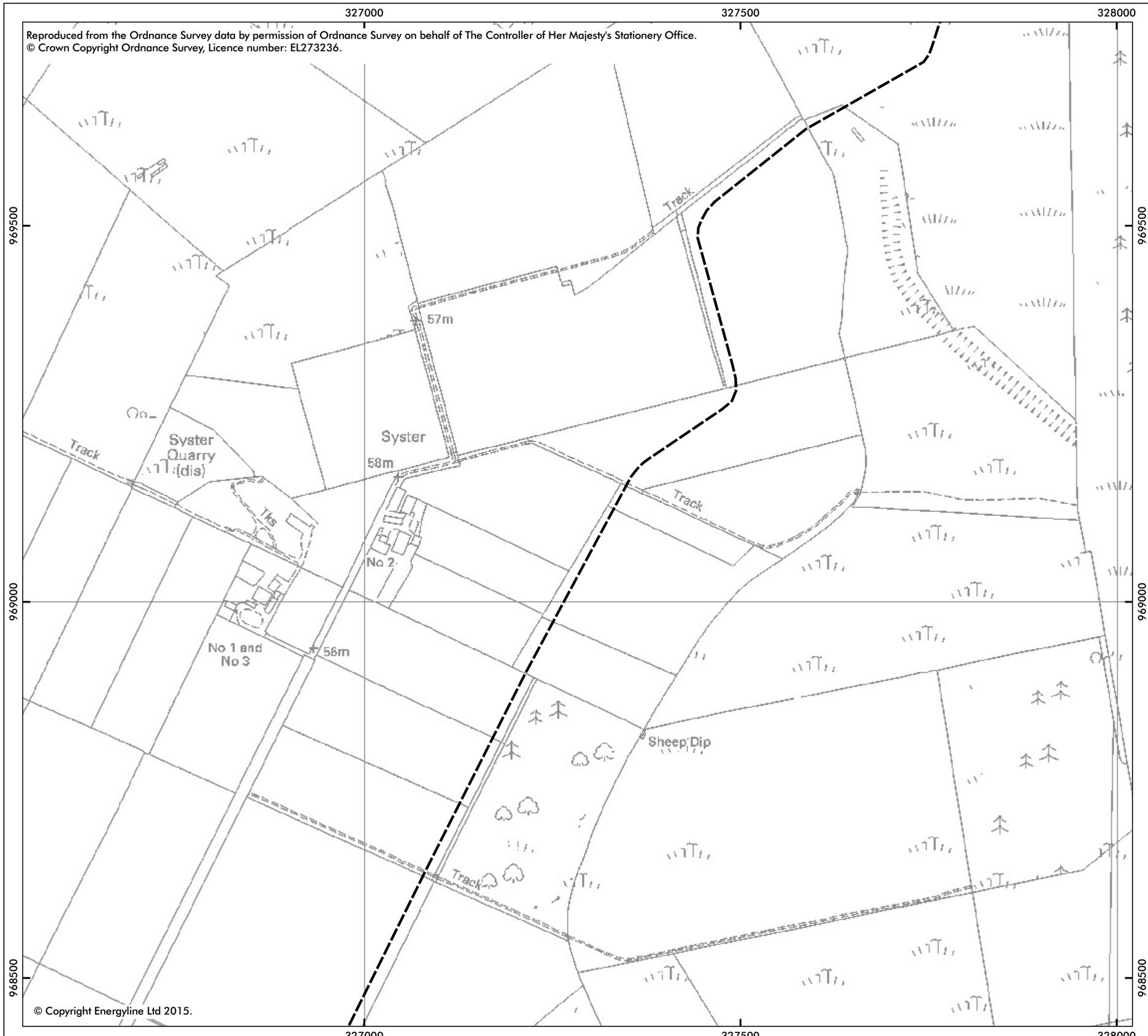
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 14 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

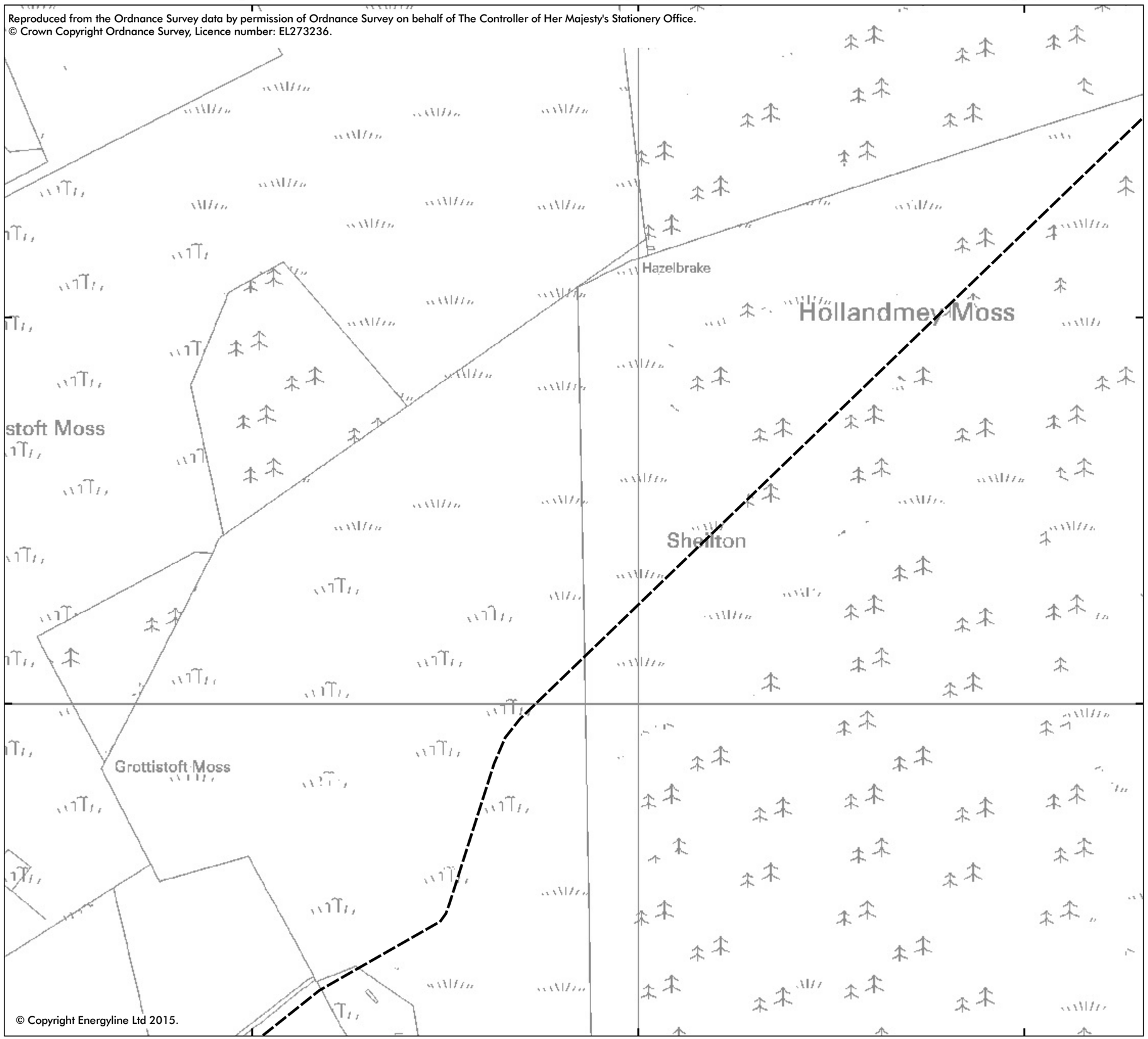
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 15 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

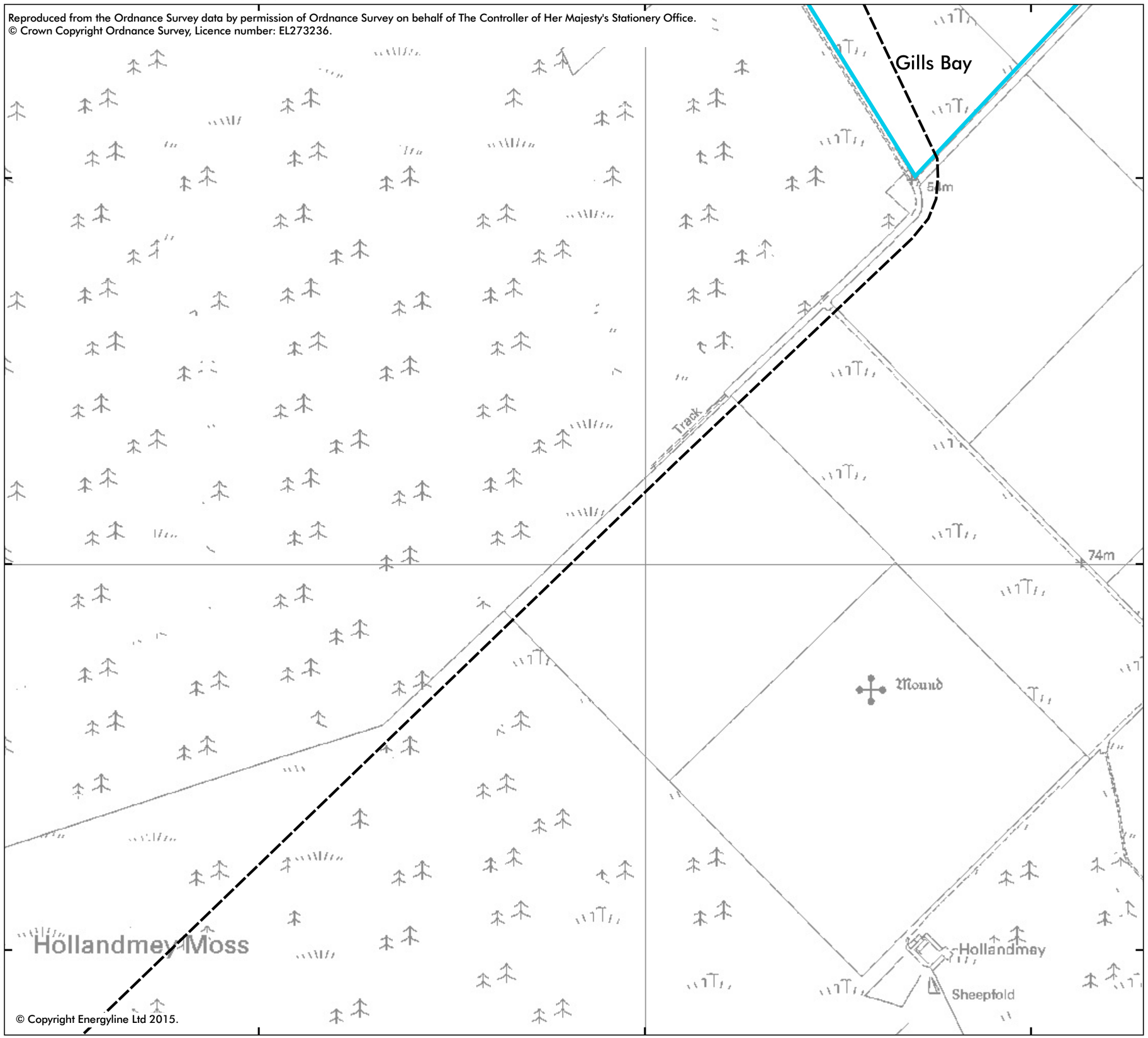
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 16 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

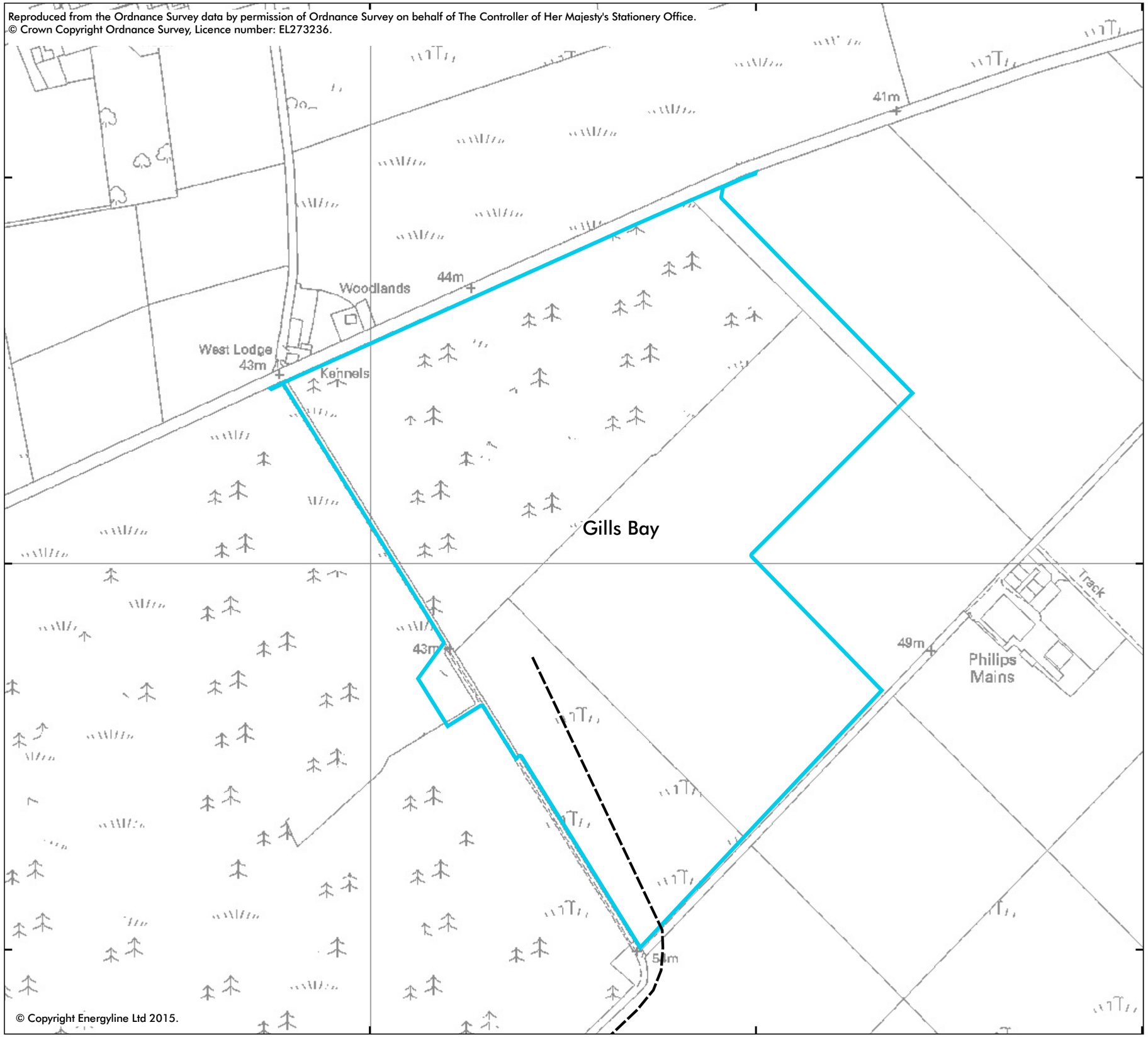
ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 17 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |




## Legend

- Tower position
- Centreline of overhead line
- Centreline of underground cable
- Proposed substation site

## Notes

1. PRELIMINARY DESIGN ONLY.
2. Symbol indicates position of tower only. Base not shown to scale.
3. Underground cable alignments shown are indicative only and subject to design confirmation.

| ISSUE | DATE | REVISION | DRWN | CHK'D | APP'D |
|---|---|---|---|---|---|
| J | 13/03/15 | GILLS BAY TERMINAL STRUCTURE RELOCATED & OHL ALIGNMENT REVISED (TGB5 - TGB20, TGB47 - TGB52); GILLS BAY CABLE ALIGNMENT REVISED | W.W. | M.R. | M.R. |
| H | 26/11/14 | OVERHEAD LINE & CABLE ALIGNMENTS REVISED; VARIOUS CHANGES TO TOWER POSITIONS AND ACCESS ROUTES | W.W. | M.R. | M.R. |
| G | 15/09/14 | CABLE ALIGNMENT REVISED BETWEEN TGB49 - TGB50 | W.W. | M.R. | M.R. |
| F | 09/09/14 | TERMINAL TOWER TGB49 REINSTATED; TOWERS RE-NUMBERED | W.W. | M.R. | M.R. |
| E | 04/09/14 | MAJOR REVISION TO OHL ALIGNMENT; U/G CABLE SECTION ADDED; TERMINAL STRUCTURES REPOSITIONED | W.W. | M.R. | M.R. |
| D | 02/04/14 | ISSUED FOLLOWING COMPLETION OF PRELIMINARY DESIGN STAGE | W.W. | M.R. | M.R. |
| C | 13/02/14 | STAGE 1A REVIEW: ANGLE TOWER TGB7 & INTERMEDIATE TOWERS IN SECTION TGB7 - 17 RE-POSITIONED | W.W. | K.L. | |
| B | 29/01/14 | STAGE 1 REVIEW: ALIGNMENT REVISED (TGB23 - 35); VARIOUS CHANGES TO TOWER POSITIONS IN OTHER SECTIONS | W.W. | M.R. | |
| A | 29/11/13 | FIRST ISSUE | W.W. | R.H-S. | M.R. |

energyline
YORK HOUSE, 9 YORK PLACE, KNARESBOROUGH HG5 0AD
TEL: 01423 799950

TITLE

# PROPOSED 132 kV OVERHEAD LINE & UNDERGROUND CABLE ROUTE PLAN

ROUTE

THURSO SOUTH - GILLS BAY 1 & 2

CLIENT

Scottish and Southern Energy Power Distribution

| CLIENT DWG. No. | CLIENT PROJECT No. | | |
|---|---|---|---|
| *** | LT000022 | | |
| ENERGYLINE PROJECT / DWG No. | SHEET | No. OF SHEETS | |
| 90SS455/22/005 | 18 | 18 | |
| SCALE | FORMAT | SIZE | REV |
| 1:5,000 | PDF | A3 | J |