YG-DCO-010

# Yorkshire Green Energy Enablement (GREEN) Project

Volume 2

Document 2.3 Plan Guidance Document

Final Issue A

November 2022

Planning Inspectorate Reference: EN020024

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

nationalgrid

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| Version History | | | |
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| **Date** | **Version** | **Status** | **Description / Changes** |
| 01/11/2022 | A | FINAL | First Issue |

# 1. Introduction

## 1.1 Introduction to this Plan Guidance Document

1.1.1 This Plan Guidance Document accompanies an application for development consent ('the Application') by National Grid Electricity Transmission plc (National Grid) for powers to construct, operate and maintain the Yorkshire Green Energy Enablement (GREEN) Project (referred to as the Project or Yorkshire GREEN throughout)

1.1.2 The Project is defined as a Nationally Significant Infrastructure Project (NSIP) under Section 14(1)(b) and Section 16 of the Planning Act 2008[1] (the Act) as it comprises new overhead electricity transmission connections of more than two kilometres (km) in length, with an operating voltage above 132 kilovolts (kV). Under Section 31 of the Act, development consent is required for development to the extent that it is or forms part of an NSIP. Development consent is granted by the making of a Development Consent Order (DCO) for which an application may be made under section 37 of the Planning Act.

1.1.3 This Plan Guidance Document has been prepared in support of the series of DCO Plans and Drawings submitted as **Volume 2**, as required by the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009[2] as amended (the APFP Regulations).

1.1.4 This document has been prepared to aid understanding of the plans and drawings submitted as part of **Volume 2** of the Application and provides further details as to what is shown on them.

[1] The Planning Act 2008 (Online). Available from: https://www.legislation.gov.uk/ukpga/2008/29/contents (Accessed 17 October 2022)

[2] The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (Online) The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (legislation.gov.uk) (accessed 17 October 2022)

# 2. Available Plans and Drawings

## 2.1 List of Plans and Figures

2.1.1 National Grid have prepared and submitted a number of plans and drawings to support the Application that form **Volume 2** of the Application documents (**Volume 2, Documents 2.1 to 2.16**). In addition to the plans and drawings that accompany the Application, a series of plans have been produced, referred to as figures, that form part of the **Environmental Statement (ES) (Volume 5, Documents 5.1 to 5.4.18**) that when read with the ES provide further information on the Project.

2.1.2 The plans published to support National Grid's Application are:

- **Document 2.1: Overall Location Plan** – identifying the location of the Project within its local context (required under APFP Regulation 5(2)(o));
- **Document 2.2: Master Key to Section Identification Plan** – the Project sections to help identify the plan the reader wishes to view (required under APFP Regulation 5(2)(o));
- **Document 2.3: Plan Guidance Document (this document) –** a guide to provide more detail about the plans and drawings that have been produced for the Application (required under APFP Regulation 5(2)(q));
- **Document 2.4: Land Affected Plan** - showing the boundaries of all land affected, within which National Grid proposes to build the Project (required under APFP Regulation 5(2)(i) - (i));
- **Document 2.5: Land Plan** - showing the boundary within which National Grid proposes to build the connection and the powers or rights to be exercised over the land (required under APFP Regulation 5(2)(i) - (ii)(iii));
- **Document 2.6: Works Plan** – a breakdown of the different work elements associated with the Project, the route of the proposed overhead lines in each section, and the distance either side of the proposed route where work may be carried out, known as the 'Limits of Deviation' (LoD) (required under APFP Regulation 5(2)(j));
- **Document 2.7: Access, Rights of Way and Public Rights of Navigation Plan** – changes proposed to public roads, footpaths, bridleways and rights of navigation for the duration of the Project (required under APFP Regulation 5(2)(k));
- **Document 2.8: Statutory or Non-Statutory Sites or Features of Nature Conservation Plan -** locations that are of particular environmental importance, including areas that are important for the protection of nature (provided for by APFP Regulation 5(2)(l)(i);
- **Document 2.9: Habitats of Protected Species, Important Habitats or Other Diversity Features and Water Bodies Plan** – locations of protected species' habitats and Water Framework Directive (WFD) water bodies and catchment areas (provided for by APFP Regulation 5(2)(l)(ii) and (iii));

- **Document 2.10: Statutory or Non-Statutory Sites or Features of the Historic Environment Plan** – locations of archaeological sites, scheduled monuments, historic buildings and other historic aspects of the landscape (provided for by APFP Regulation 5(2)(m));
- **Document 2.11: Trees and Hedgerows Potentially Affected Plan** – showing the trees and hedges that may be affected during construction of the Project (required under APFP Regulation 5(2)(o));
- **Document 2.12: Traffic Regulation Order Plan** – showing the proposed traffic management National Grid to be implemented during the construction of the Project (provided for by APFP Regulation 5(2)(o));
- **Document 2.13: Crown and Special Category Land Plan** – to note this plan has been included for completeness only, and highlights that no crown land or special category land is identified within the Order Limits to be impacted by the Project (Crown Land Plan required under APFP Regulation 5(2)(n); Special Category Land Plan required under APFP Regulation 5(2)(i) - (iv));
- **Document 2.14: Extinguishment of Easements, Servitudes and Other Private Rights Plan** – the existing private rights that National Grid look to extinguishment through the Project as part of the final configuration (required under APFP Regulation 5(2)(i) – (iii));
- **Document 2.15: Design Drawings** – details of the size and height of the proposed new overhead line infrastructure, including substation and Cable Sealing End Compound (CSEC) parameters (provided for by APFP Regulation 5(2)(o)); and
- **Document 2.16: Construction Plans** – illustrative plans showing typical construction infrastructure, such as access roads, working areas and construction compounds (provided for by APFP Regulation 5(2)(o)).

## 2.2 Format of the Plans

2.2.1 All of the supporting plans are split into sections, so you can easily identify which parts of the Project relate to the areas affected, with the exception of the **Design Drawings (Volume 2, Document 2.15)** and **Construction Plans** (**Volume 2, Document 2.16**), which show illustrative, typical and generic details relating to the Project.

2.2.2 There are six sections for the Project between Osbaldwick and Monk Fryston Substations, Sections A to F:

- **Section A:** Osbaldwick Substation;
- **Section B:** North west of York Area;
- **Section C:** Moor Monkton to Tadcaster;
- **Section D:** Tadcaster Area;
- **Section E:** Tadcaster to Monk Fryston; and
- **Section F:** Monk Fryston Area.

2.2.3 At the start of every plan series, for each section, a Key Plan is available that details the sheets comprising that section. The plans show the Order Limits, sheet

boundaries, local authority boundaries and the section boundaries where the Project transitions into the next identified section.

2.2.4 Each set of plans are accompanied by a legend to assist with interpretation. Common legend entries across the plan suites have been named and coloured consistently, for example, the Order Limits, pylons and overhead lines. Plan legends are based on the Project sections. Therefore, not all legend items in each section are present on every plan sheet. The legend entries and associated symbology can be found in Appendix A of this document.

## 2.3 Local Authorities

2.3.1 The Project currently falls within the administrative areas of six local authorities:

- Hambleton District Council;
- City of York Council;
- Harrogate Borough Council;
- Selby District Council;
- Leeds City Council; and
- North Yorkshire County Council.

2.3.2 The local authorities' boundaries and titles are correct at the time of submission in November 2022. North Yorkshire County Council, Hambleton District Council, Selby District Council, Ryedale District Council, Scarborough Borough Council, Harrogate Borough Council, Craven District Council and Richmondshire District Council are expected to form a new single council (North Yorkshire Council) on 1 April 2023 as a result of Local Government Reorganisation.

# 3. Plan Drawing Details

## 3.1 Overall Location Plan

3.1.1 The **Overall Location Plan (Volume 2, Document 2.1)** shows an overview of the Project and its geographic location. It breaks the Project down into the main work elements, namely new build, dismantling, reconductoring and modification works; however, it also shows existing infrastructure not affected as part of the Project.

3.1.2 Th plan identifies existing National Grid substations associated with the Project and locates the proposed new substations and CSECs as part of the Project.

3.1.3 The scale of this plan is contrary to Regulation 5(3) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009[2] as amended (the APFP Regulations) however, it has been provided to give a high-level overview of the Project.

## 3.2 Master Key to Section Identification Plan

3.2.1 The **Master Key to Section Identification Plan (Volume 2, Document 2.2)** assists to identify the location of a particular area or section of interest across the Project. It shows the Order Limits, which defines the area within which the Project would be constructed, including all of the land that may be required to deliver the Project (the Order Land). All of the activities required to construct, maintain and operate the new connection are contained within the Order Limits.

3.2.2 This plan also shows the six sections of the Project, which are consistent across the plan series.

3.2.2 The scale of this plan is contrary to Regulation 5(3) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009[32] as amended (the APFP Regulations) however, it has been provided to give a high-level overview of the Project.

## 3.3 Land Affected Plan

3.3.1 The **Land Affected Plan (Volume 2, Documents 2.4.1 to 2.4.6)** shows the Order Land, which in this case is the same as the Order Limits, that defines the area within which the Project would be constructed, including all of the land that may be required to deliver the Project.

## 3.4 Land Plan

3.4.1 The **Land Plan (Volume 2, Documents 2.5.1 to 2.5.6)** identifies the statutory land powers that are sought for the land required within the Order Limits. The land powers are split into land plots and are given a unique plot number that can be found within

[2] The Infrastructure Planning (Applications: Prescr bed Forms and Procedures) Regulations 2009 (Online) The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (legislation.gov.uk) (accessed 17 October 2022)

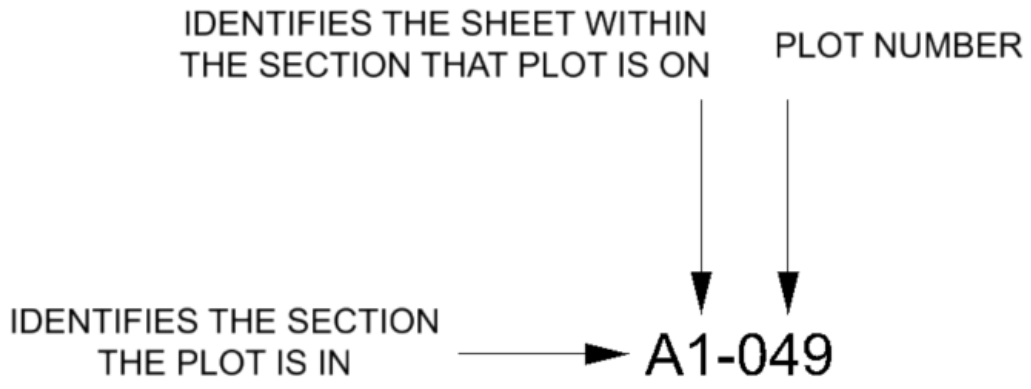
the **Book of Reference (Volume 4, Document 4.3**). There are seven classes of land powers sought within the Application:

- **Class 1: Compulsory Acquisition of Land:** The compulsory acquisition of all interests and rights over the land. For example, where permanent buildings such as substations or CSECs are proposed to be constructed;
- **Class 2: Compulsory Acquisition of Rights for the Authorised Development:** The acquisition of rights by the creation of new rights, the imposition of restrictions, or the acquisition of existing rights or benefits of existing restrictions over and/or under the land for the Project. These rights are sought to enable National Grid to construct, operate and maintain the Project now and in the future;
- **Class 2A: Extinguishment of Private Rights:** The extinguishment of private rights of access for the Project. These rights are sought to enable National Grid to construct, operate and maintain the Project now and in the future;
- **Class 3: Compulsory Acquisition of Rights of Access:** The acquisition of rights for access, which would enable National Grid to construct, operate and maintain the Project now and in the future;
- **Class 4: Temporary Use for Construction and Mitigation:** The temporary use of land to construct, upgrade, modify, replace and dismantle the existing, proposed and temporary assets associated with the Project. This also covers temporary mitigation, such as the installation and removal of drainage. These areas of land would only be used temporarily for the duration of the construction period;
- **Class 5: Temporary Use for Dismantling:** The temporary possession of land to dismantle existing infrastructure no longer required as part of the final arrangement for the Project. This includes rights to remove assets, and to temporarily access the necessary areas of land; and
- **Class 6: Temporary Use for Access:** The temporary possession on the surface of the land for access across the Project.

3.4.2 On the Land Plan, each of the individual land plots are given their own unique plot reference number. As shown in Figure 3.1 below, the letter A refers to Section A, the number one refers to sheet one, and the number after the hyphen is the plot number within that specific section.

3.4.3 On this plan, any land outside of the Order Limits does not have an allocated land class as no rights or powers are being sought over that land.

Figure 3.1 – Example Plot Numbering for the Land Plan



## 3.5 Works Plan

3.5.1 The **Works Plan (Volume 2, Documents 2.6.1 to 2.6.6.)** shows the permanent and temporary works that comprise the Project as described in the list of numbered works in Schedule 1 of the draft **DCO** (**Volume 3, Document 3.1**).

3.5.2 The plan also shows pylon and gantry structure positions that correspond to the relevant linear and non-linear works elements. These structures have been numbered, where possible, to coincide with existing numbering conventions across the Project. Some structures are suffixed with a 'T' denoting that these would be temporary for the construction duration and do form part of the final arrangement, which includes both new temporary structures and existing structures.

3.5.3 The main elements of proposed linear works (overhead lines and underground cables) are:

- **New Overhead Line** – sections of new overhead line;
- **Temporary Overhead Line** – sections of temporary overhead line required to facilitate different construction stages of the Project;
- **Existing Overhead Line to be Reconductored** – sections of existing overhead line subject to replacement of overhead conductors, earthwires and pylon fittings;
- **Existing Overhead Line to be Modified** – sections of existing overhead line that may require amendments to the conductor tension, sag or regulation;
- **Existing Overhead Line to be Dismantled** – sections of existing overhead line to be removed as part of the final arrangement of the Project;
- **Existing Overhead Line Not Affected** – sections of existing overhead line that are not be affected by the Project;
- **New Underground Cable** – sections of new underground cable; and
- **Utility Diversions** – existing Distribution Network Operator (DNO) and other third party owned assets that would need to be modified, diverted, or removed to facilitate the Project.

3.5.4 The main elements of proposed non-linear works (substations and CSECs) are:

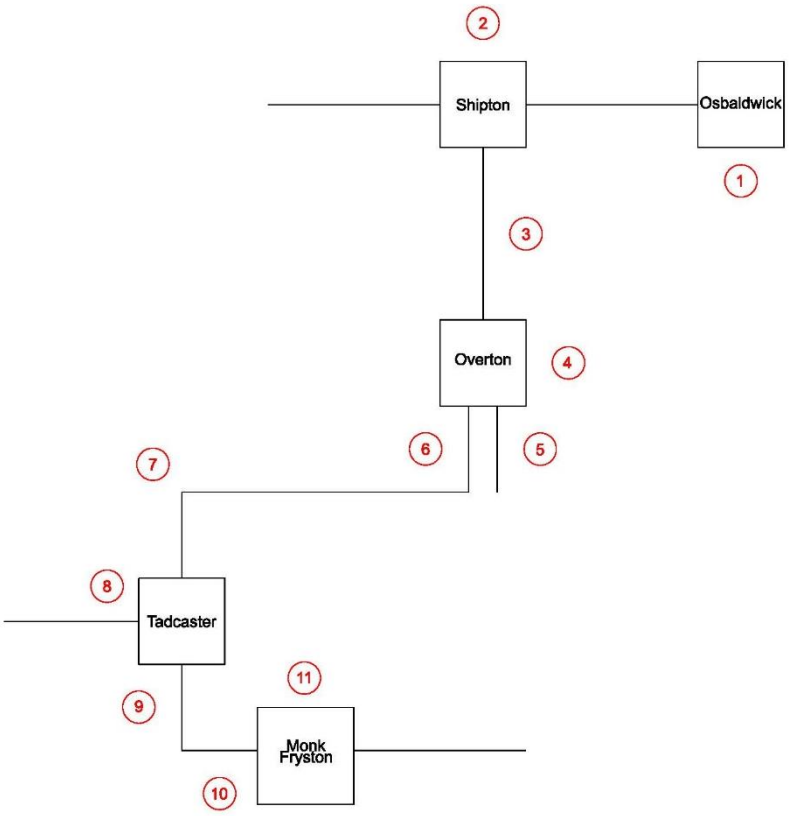
- Existing Osbaldwick Substation;
- Shipton North and South CSECs;
- Proposed Overton Substation;
- Tadcaster Tee East and Tee West CSECs;
- Proposed Monk Fryston Substation; and
- Shipton, Overton, Tadcaster and Monk Fryston temporary construction compounds

3.5.5 The Works Plan also shows the LoD sought, to enable some flexibility in the overall design of the Project. National Grid has applied the LoD to all new build and temporary linear works, however, in some areas this has been restricted for localised constraints. The LoD is further explained in the **Construction Plans** (**Volume 2, Document 2.16**) and in **ES Chapter 3 Description of the Project (Volume 5, Document 5.2.3**).

3.5.6 The different elements of linear and non-linear works have been broken down into specific work numbers as described in Schedule 1 of the draft **DCO** (**Volume 3, Document 3.1**). Commencement and termination lines have been shown on the plans where each work number starts and finishes. There are a total of 11 work numbers for this Project, excluding the utility diversion works which are numbered separately and prefixed with a 'U'.

3.5.7 Figure 3.2 below provides a high-level overview of the 11 work numbers and their locations in relation to the substations and CSECs. Red numbers refer to linear and non-linear work numbers and the black boxes are existing and proposed substations and CSECs.

Figure 3.2 – Example Work Numbers for the Works Plan




## 3.6 Access, Rights of Way and Public Rights of Navigation Plan

3.6.1 The **Access, Rights of Way and Public Rights of Navigation Plan** (**Volume 2, Documents 2.7.1 to 2.7.6)** shows all access points from the public highway and private roads that are needed to construct, operate or maintain the Project.

3.6.2 At each of the access points, National Grid would need to make sure its equipment and vehicles can safely join and leave the relevant public highway or private road. Most of the accesses installed would be temporary and would be reinstated after use, however gates and/or fencing would be left in place to enable future access for operation and maintenance purposes. Some accesses would be permanent, for example, those to substations and CSECs.

3.6.3 As detailed on the **Land Plan** (**Volume 2, Documents 2.5.1 to 2.5.6)** appropriate rights are sought for all accesses to enable construction and future maintenance and operation of the assets.

3.6.4 Each of the access points have been given a unique number, for example, AP1, which corresponds to the ES **Construction Traffic Management Plan (Volume 5, Document 5.3.3F**).

3.6.5 This plan also shows Public Rights of Way (PRoW) that are affected by the Project and the extent of management proposed. Each of the management types are colour coded and have been given references at the start and end points, or where one PRoW management extent meets another. These reference points accord with Schedule 8 of the draft **DCO (Volume 3, Document 3.1**), which identify the type of management being sought, and its location.

3.6.6 This plan also shows locations on the public highway network that need to be both temporarily and permanently widened to faciliate construction works and future operation and maintenance access. Further details can be found in the ES **Construction Traffic Management Plan (Volume 5, Document 5.3.3F)** and Schedules 6, 7, and 9 of the draft **DCO (Volume 3, Document 3.1**).

3.6.7 Furthermore, this plan also shows parts of any navigable watercourse that would need to be temporarily stopped up to enable certain construction activities to take place, such as installation of crossing protection.

3.6.8 Data for PRoWs was obtained from relevant highway authority websites (definite maps). Further information on PRoWs is provided within the ES **PRoW Management Plan (Volume 5, Document 5.3.3F)**

## 3.7 Statutory or Non-Statutory Sites or Features of Nature Conservation Plan

3.7.1 The **Statutory or Non-Statutory Sites or Features of Nature Conservation Plan** (**Volume 2, Documents 2.8.1 to 2.8.6)** shows designated sites that are in close proximity to the Project; noting that designations shown are not exhaustive of the wider plan area:

- Ramsar Sites, Special Areas of Conservation (SAC), Special Protection Areas (SPA), potential SACs and potential SPAs, and Sites of Special Scientific Interest (SSSIs);
- National Nature Reserve (NNR), Local Wildlife Sites and Yorkshire Wildlife Trust Sites, Sites of Importance for Nature Conservation (SINC), Candidate SINCs and Deleted SINCs;
- Ancient Woodland and Veteran Trees; and
- Locally Important Landscape Areas and Candidate Locally Important Landscape Areas.

3.7.2 An assessment of the potential effects of the Project on designated and non-designated sites or features of nature conservation is provided within ES **Statement Chapter 8 Biodiversity (Volume 5, Document 5.2.8**, and an assessment of the effects of the Project on ancient woodland caused by the Project is presented in ES **Chapter 8 Biodiversity** (**Volume 5, Document 5.2.8**) and the ES **Arboricultural Impact Assessment (Volume 5, Document 5.3.3I).**

## 3.8 Habitats of Protected Species, Important Habitats or Other Diversity Features and Water Bodies Plan

3.8.1 The **Habitats of Protected Species, Important Habitats or Other Diversity Features and Water Bodies Plan (Volume 2, Documents 2.9.1 to 2.9.6)** shows locations of protected species' habitats within the Order Limits, and WFD water bodies and catchment areas in proximity to the Project.

3.8.2 The Phase 1 data shown on this plan was obtained from Phase 1 habitat surveys that were undertaken during 2021 and 2022. The extended Phase 1 habitat survey encompassed the Order Limits and a 50m surrounding buffer, where accessible. Areas that could not be accessed during the field surveys were classified and mapped using a combination of aerial imagery and surveying from adjacent land parcels, public rights of ways and nearby roads where this was possible.

3.8.3 An assessment of the effects on these habitats caused by the Project is presented in ES **Chapter 8 Biodiversity (Volume 5, Document 5.2.8).**

## 3.9 Statutory or Non-Statutory Sites or Features of the Historic Environment Plan

3.9.1 **The Statutory or Non-Statutory Sites or Features of the Historic Environment Plan** (**Volume 2, Documents 2.10.1 to 2.10.6)** shows Scheduled Monuments, Listed Buildings, Conservation Areas, historic aspects of the landscape and records of previous historic environmental surveys.

**3.9.2** An assessment of effects on relevant sites associated with the Project is presented in ES **Chapter 7 Historic Environment (Volume 5, Document 5.2.7).**

## 3.10 Trees and Hedgerows Potentially Affected Plan

3.10.1 The **Trees and Hedgerows Potentially Affected Plan (Volume 2, Documents 2.11.1 to 2.11.6)** shows the trees and hedgerows that are to be removed, affected/managed and potentially affected by the Project.

3.10.2 The trees and hedgerows have been assessed and categorised as follows:

- **Removed:** Individual trees, groups of trees, woodland and hedgerows that are needed to be removed for construction of the Project;
- **Affected/Managed:** Individual trees, groups of trees, woodlands and hedgerows that will be managed for construction of the Project; and
- **Potentially Affected:** Individual trees, groups of trees, woodland and hedgerows unlikely to be affected by the Project as per the current design but may be impacted should the infrastructure move within the LoD.

3.10.3 Individual trees, groups of trees, woodland and hedgerows deemed not affected by the Project have not been identified on the plan.

3.10.4 Individual trees, groups of trees, woodland and hedgerows categorised as removed, affected/managed and potentially affected may change through utilisation of the project's flexibility applied for in the DCO, known as the LoD.

3.10.5 On this plan, some vegetation that is located outside of, but immediately adjacent to the Order Limits has been included. If a large portion of a tree is identified for

removal, it has been assumed that the remaining canopy that is not directly affected by infrastructure would not survive.

3.10.6 More information on how trees and hedges could be affected can be found in ES **Chapter 8 Biodiversity (Volume 5, Document 5.2.8) and** ES **Arboricultural Impact Assessment (Volume 5, Document 5.3.3l).**

## 3.11 Traffic Regulation Order Plan

3.11.1 The **Traffic Regulation Order Plan (Volume 2, Documents 2.12.1 to 2.12.6)** shows the extent of the proposed temporary traffic regulation orders (TRO) which are required to obtain access to construct the Project.

3.11.2 This includes, for example, locations where speed restrictions may be required, or prohibition of waiting may be enforced. The TRO's are further detailed in Schedule 14 of the draft **DCO (Volume 3, Document 3.1**).

## 3.12 Crown and Special Category Land Plan

3.12.1 Whilst a **Crown and Special Category Land Plan (Volume 2, Document 2.13**) has been included in the plan series, there is no crown land or special category land affected by the Project. Therefore, a Master Key Plan has been provided in this plan document for completeness and shows that no part of the Project contains any special category land or crown land.

## 3.13 Extinguishment of Easements, Servitudes and Other Private Rights Plan

3.13.1 The **Extinguishment of Easements, Servitudes and Other Private Rights Plan (Volume 2, Document 2.14)** show existing easements, servitudes and private rights that are sought to be extinguished as part of the final arrangement for the Project.

3.13.2 The plan only comprises Section D of the Project, as no other easements, servitudes or rights are being extinguished in any of the remaining Project sections.

## 3.14 Design Drawings

3.14.1 The **Design Drawings (Volume 2, Document 2.15)** are a suite of explanatory, indicative design drawings that provide details on the size, layouts and heights of proposed new and existing infrastructure such as overhead line, substations and CSECs.

3.14.2 A brief overview of each drawing contained within the **Design Drawings (Volume 2, Document 2.15)** is listed in Table 3.1 below. These drawings do not comprise individual document numbers, therefore a 'List of Design Drawings' has been produced to help navigate the different drawings.

Table 3.1 – Project Design Drawings and their content

| Design Drawing | Description of the Drawing and its content |
|---|---|
| List of Design Drawings | A list of all the design drawings produced to support the DCO application, with accompanying document numbers, sheet numbers and revision statuses. |
| Explanatory Overhead Line Profile | A detailed and annotated example of an overhead line profile explaining how the profiles should be interpreted. This describes what the different aspects of the profile are showing, what the various lines represent and what the different text is referring to. This example profile has no connection to the Project and the overhead line displayed is illustrative.<br>The information shown on the overhead line profiles for this Project includes:<br>• Pylon numbers, height above ground level and angle of deviation from straight line<br>• Distance between adjacent pylons<br>• Vertical scale as defined by ordnance datum<br>• Horizontal scale from preceding angle pylon (vertical scale is 10 times that of the horizontal scale)<br>• Location of earthwires and conductors<br>• Conductor profile at maximum operating temperature<br>• Ground level along the route<br>• Key crossings across the route, and<br>• OS Mapping (orientated so that the overhead line is horizontal). |
| Indicative Overhead Line Profile YR and 2TW Routes | Indicative overhead line profile of the 2TW and YR routes. |
| Indicative Overhead Line Profile YR and YN Routes | Indicative overhead line profile of the YR and YN routes. |
| Indicative Overhead Line Profile SP Route | Indicative overhead line profile of the SP route. |
| Indicative Overhead Line Profile XC Route | Indicative overhead line profile of the XC route. |
| Indicative Overhead Line Profile XC, XD and PHG Routes | Indicative overhead line profile of the XC, XD and PHG route. |
| Indicative Overhead Line Profile 4YS and 4ZZ Routes | Indicative overhead line profile of the 4YS and 4ZZ routes. |

| Design Drawing | Description of the Drawing and its content |
|---|---|
| Indicative Overhead Line Profile XC and XCP Temporary Routes | Indicative overhead line profile of the temporary XC and XCP routes. |
| Indicative Overhead Line Profile XC Temporary Route | Indicative overhead line profile of the temporary XC route. |
| Indicative Overhead Line Profile XC and XD Temporary Routes | Indicative overhead line profile of the temporary XC and XD routes. |
| Indicative Overhead Line Profile YR and 2TW Temporary Routes | Indicative overhead line profile of the temporary YR and 2TW routes. |
| Indicative Maximum and Minimum Lattice Pylon Heights | Indicative minimum and maximum lattice pylon heights for existing and proposed L2, L3, L66, L8(c), L12 and L6 suspension pylons for the project. |
| Substation Parameter Plan – Overton | A plan drawing showing the new substation location, bounded by the new perimeter fence line, as well as the overhead line pylon connection points and the proposed permanent access road. The plan denotes areas within the new substation of differing maximum potential equipment heights using varying hatching types. No equipment details are shown on the plan. |
| Indicative Substation Layout – Overton | A plan drawing showing the new substation location, bounded by the new perimeter fence line, as well as the overhead line pylon connection points and the proposed permanent access road. The plan shows the details and locations of proposed high voltage equipment on the drawing, as well as anticipated construction compound, permanent landscaping bunds and potential temporary and permanent drainage requirements. |
| Indicative Substation Elevation – Overton | An elevation drawing showing the new substation elevations from north, south, east and west views. The elevations show the anticipated equipment required for the new substation, as well as the proposed overhead line pylon connection points. |
| Substation Parameter Plan – Monk Fryston | A plan drawing showing the new substation location, bounded by the new perimeter fence line, and the location of the existing substation location. New overhead line pylon connection points and proposed new works within the existing substation are also shown. The plan denotes areas within the new substation of differing maximum potential equipment heights using varying hatching types. No equipment details are shown on the plan. |
| Indicative Substation Layout – Monk Fryston | A plan drawing showing the new substation location, bounded by the new perimeter fence line, and the location of the existing substation location. |

| Design Drawing | Description of the Drawing and its content |
|---|---|
| | New overhead line pylon connection points and proposed new works within the existing substation are also shown. The plan shows the details and locations of proposed high voltage equipment on the drawing, as well as anticipated construction compound, permanent landscaping bunds and potential temporary and permanent drainage requirements. |
| Indicative Substation Elevation – Monk Fryston | An elevation drawing showing the new and existing substation elevations from north, south, east and west views. The elevations show the anticipated equipment required for the new and existing substations, as well as the proposed overhead line pylon connection points. |
| Substation Parameter Plan – Osbaldwick | A plan drawing showing the existing substation location, bounded by the existing perimeter fence line, and the proposed location of new equipment within the existing boundary. The plan denotes areas within the new substation of differing maximum potential equipment heights using varying hatching types. No equipment details are shown on the plan. |
| Indicative Substation Layout – Osbaldwick | A plan drawing showing the existing substation location, bounded by the existing perimeter fence line, and the proposed location of new equipment within the existing boundary. The plan shows the details and locations of proposed high voltage equipment on the drawing. |
| Indicative Substation Elevation – Osbaldwick | An elevation drawing showing the new and existing substation elevations from north, south, east and west views. The elevations show the anticipated equipment required for the new and existing substations, as well as the proposed overhead line pylon connection points. |
| Parameter Plan for Shipton North 400kV Cable Sealing End Compound | A plan drawing showing the new CSEC locations, bounded by the new perimeter fence lines, as well as the overhead line pylon connection points and the proposed permanent access road. The plan denotes areas within the new cable sealing end of differing maximum potential equipment heights using varying hatching types. No equipment details are shown on the plan. |
| Indicative Cable Sealing End Compound Layout – Shipton North 400kV Cable Sealing End Compound | A plan drawing showing the new CSEC locations, bounded by the new perimeter fence lines, as well as the overhead line pylon connection points and the proposed permanent access road. The plan shows the details and locations of proposed high voltage equipment on the drawing, as well as |

| Design Drawing | Description of the Drawing and its content |
|---|---|
| | anticipated construction compound, permanent landscaping bunds and potential construction drainage requirements. |
| Indicative Cable Sealing End Compound Elevation – Shipton North 400kV Cable Sealing End Compound | An elevation drawing showing the new CSEC elevations from north/south, east/west views. The elevations show the anticipated equipment required for the new CSEC, as well as the proposed overhead line pylon connection points |
| Parameter Plan for Shipton South 400kV Cable Sealing End Compound | A plan drawing showing the new CSEC locations, bounded by the new perimeter fence lines, as well as the overhead line pylon connection points and the proposed permanent access road. The plan denotes areas within the new cable sealing end of differing maximum potential equipment heights using varying hatching types. No equipment details are shown on the plan. |
| Indicative Cable Sealing End Compound Layout – Shipton South 400kV Cable Sealing End Compound | A plan drawing showing the new CSEC locations, bounded by the new perimeter fence lines, as well as the overhead line pylon connection points and the proposed permanent access road. The plan shows the details and locations of proposed high voltage equipment on the drawing, as well as anticipated construction compound, permanent landscaping bunds and potential construction drainage requirements. |
| Indicative Cable Sealing End Compound Elevation – Shipton South 400kV Cable Sealing End Compound | An elevation drawing showing the new CSEC elevations from north/south, east/west views. The elevations show the anticipated equipment required for the new CSEC, as well as the proposed overhead line pylon connection points. |
| Parameter Plan for Tadcaster West 275kV Cable Sealing End Compound | A plan drawing showing the new CSEC locations, bounded by the new perimeter fence lines, as well as the overhead line pylon connection points and the proposed permanent access road. The plan denotes areas within the new cable sealing end of differing maximum potential equipment heights using varying hatching types. No equipment details are shown on the plan. |
| Indicative Cable Sealing End Compound Layout – Tadcaster West 275kV Cable Sealing End Compound | A plan drawing showing the new CSEC locations, bounded by the new perimeter fence lines, as well as the overhead line pylon connection points and the proposed permanent access road. The plan shows the details and locations of proposed high voltage equipment on the drawing, as well as anticipated construction compound, permanent landscaping bunds and potential construction drainage requirements. |

| Design Drawing | Description of the Drawing and its content |
|---|---|
| Indicative Cable Sealing End Compound Elevation – Tadcaster West 275kV Cable Sealing End Compound | An elevation drawing showing the new CSEC elevations from north/south, east/west views. The elevations show the anticipated equipment required for the new CSEC, as well as the proposed overhead line pylon connection points |
| Parameter Plan for Tadcaster East 275kV Cable Sealing End Compound | An elevation drawing showing the new CSEC elevations from north/south, east/west views. The elevations show the anticipated equipment required for the new CSEC, as well as the proposed overhead line pylon connection points |
| Indicative Cable Sealing End Compound Layout – Tadcaster East 275kV Cable Sealing End Compound | A plan drawing showing the new CSEC locations, bounded by the new perimeter fence lines, as well as the overhead line connection points and the proposed permanent access road. The plan shows the details and locations of proposed high voltage equipment on the drawing, as well as anticipated construction compound, permanent landscaping bunds and potential construction drainage requirements. |
| Indicative Cable Sealing End Compound Elevation – Tadcaster East 275kV Cable Sealing End Compound | An elevation drawing showing the new CSEC elevations from north/south, east/west views. The elevations show the anticipated equipment required for the new CSEC, as well as the proposed overhead line pylon connection points |

## 3.15 Construction Plans

3.15.1 The **Construction Plans (Volume 2, Document 2.16)** are a suite of illustrative construction plans detailing typical layouts for construction working areas and compounds, accesses, lattice pylons, underground cables and substations.

3.15.2 A brief overview of each plan contained within the **Construction Plans (Volume 2, Document 2.16**) is listed in Table 3.2 below. These plans do not comprise individual document numbers, therefore a 'List of Construction Plans' has been produced to help navigate the different plans.

Table 3.2 – Project Construction Plans and their content

| Construction Plan | Description of the Plan and its content |
|---|---|
| List of Construction Plans | A list of all the construction plans produced to support the DCO, with accompanying document numbers, sheet numbers and revision statuses. |
| Illustrative Lattice Pylons | An illustration of standard pylons detailing overall height and footprint dimensions including configurations of cross arms and their spacings. The heights and cross-arm widths of existing (L2 (D2), L3 (D), L12 (D), L6 (D)) and proposed (L66 (D), L8c (D)) standard pylons across the Project. |

| Construction Plan | Description of the Plan and its content |
|---|---|
| Illustrative Lattice Pylon Footprints | An illustration of standard pylon footprints in plan view, illustrating pad and column foundations. This shows how a pylon, and its foundations, may be orientated within the working area. Dimensions are provided for the foundations and for the pylon in respect to its position within the working area. |
| Illustrative Lattice Pylon Foundations | Illustrative plan and elevation views of Pad and Column and Tube Pile foundations for L12 (D) standard and L8c (D) standard pylons. The plan views show how each foundation type would typically look from above and provides dimensions for each foundation type. The elevation views show how each foundation may look once constructed above and below ground, alongside typical widths and depths. Approximate concrete and excavation volumes per pylon leg are also provided. |
| Indicative Overhead Line Limits of Deviation | An indicative plan of maximum variability in lateral movement from a pylon centre location. This includes conductor swing to a maximum of 30m. |
| Illustrative Lattice Pylon Working Areas | A plan illustration of the typical temporary area required around a lattice pylon structure to conduct the necessary works associated with delivery of goods, assembly and erection. |
| Illustrative Lattice Pylon Conductor Pulling Positions | A plan illustration of the typical temporary area required around a lattice pylon structure to conduct the necessary works associated with conductor stringing. This includes winch tensioners, drums and storage areas. |
| Illustrative Bellmouth Layout | A typical layout of a bi-directional bellmouth that could be used as access to construct and maintain the Project. It shows how heavy goods vehicles (HGVs) could manoeuvre in the bellmouths and pass each other. The drawing also shows the extent of the bellmouths surface that could be sealed, for example, with blacktop or tarmac. |
| Illustrative Stone Access Road | A typical stone access road that may be used to provide access to different aspects of the Project. It details how a typical access road is likely to contain a base layer of geotextile membrane, overlain by a section of durable access track material and topped with a finished surface. Stock proof and silt fencing are identified, along with roadside drainage and an appropriate stockpile for excavated topsoil and subsoil. |
| Illustrative Interlocking Panel Access for Overhead Line Construction | A typical layout of interlocking panels that may be used to provide access to different aspects of the Project. It details how individual panels are |

| Construction Plan | Description of the Plan and its content |
|---|---|
| | connected together to create a connected temporary access track, with potential stock proof fencing either side if required. |
| Illustrative Culvert Construction Details | A typical culvert design that could be used along access roads/tracks to cross ditches, drains and watercourses that do not require a bridge structure. It shows how a culvert could be designed using infill and sandbags perpendicular to the direction of the watercourse, with a pipe through the middle to enable water to continue flowing. This plan gives an aerial, a cross-section and a side-view of the culvert. |
| Illustrative Bridge Details for Overhead Line Construction | A typical bridge design that could be used along access tracks to cross WFD watercourses. This particular drawing shows the use of ballast walls and concrete abutments, however other stabilising techniques are available such as wooden sleepers. The drawing shows that the bridge structure is likely to be steel, with a minimum 600mm clearance to the watercourse to ensure a 1:100-year flood event does not impact on the access track. This drawing shows a plan view, side view and cross-section of the structure. |
| Illustrative Construction Compound | A plan illustration showing a typical construction compound delineated by soil bunds. The compound comprises a laydown area, storage area with lockups, fuel/generator areas, site cabin units and temporary soil storage areas. Clearly defined parking areas are established, and traffic flow directions shown. |
| Illustrative Underground Cable Cross Section | A plan illustration showing possible buried depths of underground cables in cross sectional view. It shows the depth of protective tile layers and waring tape for potential future excavations. |
| Illustrative Underground Cable Horizontal Directional Drill Cross-Section | A plan illustration showing a horizontal direction drill underground cables installation technique under existing infrastructure. The dimensions and design may vary depending on site and installation conditions. Two areas are set up, the launch pit working area for the drilling rig and associated temporary stores/structures, the second for the reception pit working area. |
| Illustrative Substation Equipment | Plans showing typical substation equipment utilised on the project, such as circuit breakers and supergrid transformers |

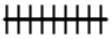
# Appendix A Plan Legend Symbology

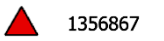
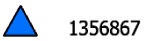
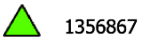
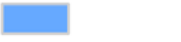
Table A1 – Plan Legend Symbology

| Plan Title | Legend Entry | Symbol |
|---|---|---|
| COMMON SYMBOLS – FOUND ACROSS MULTIPLE PLANS | LOCAL AUTHORITY BOUNDARY |  |
| | SECTION BOUNDARY |  |
| | ORDER LIMITS |  |
| | INDICATIVE NEW OVERHEAD LINE |  |
| | INDICATIVE NEW UNDERGROUND CABLE |  |
| | EXISTING OVERHEAD LINE – TO BE RECONDUCTORED |  |
| | EXISTING OVERHEAD LINE TO BE REMOVED |  |
| | EXISTING OVERHEAD LINE TO BE MODIFIED |  |
| | EXISTING OVERHEAD LINE NOT AFFECTED |  |
| | TEMPORARY OVERHEAD LINE DIVERSION |  |
| OVERALL LOCATION PLAN | EXISTING SUBSTATION |  |
| | PROPOSED SUBSTATION |  |
| | CABLE SEALING END COMPOUND (CSEC) AND UNDERGROUND CABLE (UGC) |  |
| | EXISTING OVERHEAD LINE TO BE MODIFIED |  |
| MASTER KEY TO SECTION IDENTIFICATION PLAN | SECTION INDEX |  |
| KEY PLANS (ALL PLANS) | SHEET INDEX |  |
| LAND PLANS | CLASS 1 – COMPULSORY ACQUISITION OF LAND |  |
| | CLASS 2 – COMPULOSRY ACQUISITION OF RIGHTS FOR THE AUTHORISED DEVELOPMENT |  |
| | CLASS 2A – EXTINGUISHMENT OF PRIVATE RIGHTS |  |
| | CLASS 3 – COMPLUSORY ACQUISITION OF RIGHTS FOR THE AUTHORISED DEVELOPMENT |  |
| | CLASS 4 – COMPULSORY ACQUISITION OF RIGHTS OF ACCESS |  |

| Plan Title | Legend Entry | Symbol |
|---|---|---|
| | CLASS 5 – TEMPORARY USE FOR CONSTRUCTION, MITIGATION, MAINTENANCE, DISMANTLING | |
| | CLASS 6 – TEMPORARY USE FOR ACCESS | |
| WORKS PLAN | COMMENCEMENT OF WORKS | |
| | TERMINATION AND COMMENCEMENT OF WORKS | |
| | TERMINATION OF WORKS | |
| | LIMITS OF DEVIATION | |
| | ORDER LIMITS & LIMITS OF DEVIATION | |
| | NEW FULL LINE TENSION GANTRY | |
| | NEW GANTRY | |
| | GANTRY TO BE REMOVED | |
| | NEW LATTICE PYLON | |
| | EXISTING LATTICE PYLON TO BE REMOVED | |
| | EXISTING LATTICE PYLON TO BE MODIFIED | |
| | EXISTING LATTICE PYLON NOT AFFECTED | |
| | TEMPORARY LATTICE PYLON | |
| | THIRD PARTY ASSET TO BE REMOVED | |
| | THIRD PARTY ASSET DIVERSION / UNDERGROUND | |
| | THIRD PARTY LIMITS OF DEVIATION | |
| | CONSTRUCTION COMPOUND | |
| | NON-LINEAR WORK | |
| ACCESS AND RIGHTS OF WAY KEY PLAN WITH DETAILS | NATIONAL CYCLE NETWORK | |
| | NATIONAL CYCLE NETWORK DIVERSION | |
| | NATIONAL CYCLE NETWORK STOPPED UP | |
| | EXAMPLE REFERENCE FOR TEMPORARY STOPPED UP SECTION OF NATIONAL CYCLE NETWORK | RWXX |
| | ACCESS FROM PUBLIC HIGHWAY | |
| | UNAFFECTED PUBLIC RIGHT OF WAY (WITH FOOTPATH REFERENCE) | |
| | TEMPORARY DIVERSION OF AFFECTED SECTION OF RIGHT OF WAY | |
| | TEMPORARY STOPPED UP | |

| Plan Title | Legend Entry | Symbol |
|---|---|---|
| | TEMPORARY STOPPED UP (MANAGED) | |
| | EXAMPLE REFERENCE FOR TEMPORARY DIVERTED RIGHT OF WAY | RWXX |
| | EXAMPLE REFERENCE FOR TEMPORARY STOPPED UP SECTION OF RIGHT OF WAY | RWXX |
| | EXAMPLE REFERENCE FOR TEMPORARY STOPPED UP (MANAGED) SECTION OF RIGHT OF WAY | RWXX |
| **STATUTORY OR NON-STATUTORY SITES OR FEATURES OF NATURE CONSERVATION, HABITATS AND WATER BODIES PLAN** | WATER FRAMEWORK DIRECTIVE (WFD) RIVER | |
| | ANCIENT WOODLAND | |
| | SITE OF INTEREST FOR NATURE CONSERVATION (SINC) | |
| | YORKSHIRE WILDLIFE TRUST (YWT) RESERVE | |
| | DELETED SITE OF INTEREST FOR NATURE CONSERVATION (SINC) | |
| | LOCALLY IMPORTANT LANDSCAPE AREA | |
| | CANDIDATE LOCALLY IMPORTANT LANDSCAPE AREA | |
| | SITE OF SPECIAL SCIENTIFIC INTEREST | |
| **HABITATS OF PROTECTED SPECIES, IMPORTANT HABITATS OR OTHER DIVERSITY FEATURES PLAN** | A2.2 – SCRUB - SCATTERED | |
| | A3.1: PARKLAND AND SCATTERED TREES - BROADLEAVED | |
| | A3.2: PARKLAND AND SCATTERED TREES - CONIFEROUS | |
| | A2.1: SCRUB – DENSE/CONTINOUS | |
| | A2.2 – SCRUB – SCATTERED | |
| | A3.1: PARKLAND AND SCATTERED TREES - BROADLEAVED | |
| | A3.2: PARKLAND AND SCATTERED TREES - CONIFEROUS | |
| | A3.2: PARKLAND AND SCATTERED TREES - MIXED | |
| | G2 – RUNNING WATER | |
| | J2.1.1: INTACT HEDGE NATIVE SPECIES - RICH | |
| | J2.1.2: INTACT HEDGE NATIVE SPECIES – POOR | |
| | J2.2.1: DEFUNCT HEDGE NATIVE SPECIES – RICH | |
| | J2.2.1: DEFUNCT HEDGE NATIVE SPECIES – POOR | |

| Plan Title | Legend Entry | Symbol |
|---|---|---|
| | J2.3.1: HEDGE AND TREES NATIVE SPECIES - RICH |  |
| | J2.3.2: HEDGE AND TREES NATIVE SPECIES - POOR |  |
| | J2.4: FENCE |  |
| | J2.6: DRY DITCH |  |
| | WATER FRAMEWORK DIRECTIVE RIVER WATER |  |
| | A1.1.1 – BROADLEAVED WOODLAND – SEMI-NATURAL |  |
| | A1.1.2 – BROADLEAVED WOODLAND - PLANTATION |  |
| | A1.2.2 – CONIFEROUS WOODLAND - PLANTATION |  |
| | A1.3.2 – MIXED WOODLAND - PLANTATION |  |
| | A2.1 – SCRUB – DENSE/CONTINUOUS |  |
| | A2.2 – SCRUB - SCATTERED |  |
| | A3.1 – BROADLEAVED PARKLAND/SCATTERED TREES |  |
| | B2.2 – NEUTRAL GRASSLAND – SEMI-IMPROVED |  |
| | B4 – IMPROVED GRASSLAND |  |
| | B6 – POOR SEMI-IMPROVED GRASSLAND |  |
| | C3.1 – OTHER TALL HERB AND FERN – RUDERAL |  |
| | I2.1 - QUARRY |  |
| | G1 – STANDING WATER |  |
| | G2 – RUNNING WATER |  |
| | J1.1 – CULTIVATED/DISTURBED LAND – ARABLE |  |
| | J1.2 – CULTIVATED/DISTURBED LAND – AMENITY GRASSLAND |  |
| | J1.4 – INTRODUCED SHRUB |  |
| | J2.2.2 – DEFUNCT HEDGE – SPECIES-POOR |  |
| | J3.6 BUILDINGS |  |
| | J4 – BARE GROUND |  |
| | J5 - OTHER HABITAT |  |
| | HARDSTANDING |  |
| | WATER FRAMEWORK DIRECTIVE RIVER WATER BODY CATCHMENT AREA (RWCA) |  |

| Plan Title | Legend Entry | Symbol |
|---|---|---|
| STATUTORY OR NON-STATUTORY SITES OR FEATURES OF THE HISTORIC ENVIRONMENT PLAN | SCHEDULE MONUMENT WITH ACCOMPANYING ID REFERENCE |   |
| | GRADE I LISTED BUILDING WITH ACCOMPANYING ID REFERENCE |   |
| | GRADE II* LISTED BUILDING WITH ACCOMPANYING ID REFERENCE |   |
| | GRADE II LISTED BUILDING WITH ACCOMPANYING ID REFERENCE |   |
| | HISTORIC ENVIRONMENT RECORD POLYGON WITH ACCOMPANYING ID REFERENCE |   |
| | HISTORICAL ENVIRONMENT RECORD LINE WITH ACCOMPANYING ID REFERENCE |   |
| | HISTORICAL ENVIRONMENT RECORD WITH ACCOMPANYING ID REFERENCE |   |
| | HISTORICAL ENVIRONMNET RECORD EVENT POLYGON WITH ACCOMPANYING ID REFERENCE |   |
| | HISTORICAL ENVIRONMENT RECORD EVENT LINE WITH ACCOMPANYING ID REFERENCE |   |
| | HISTORICAL ENVIRONMENT RECORD EVENT WITH ACCOMPANYING ID REFERENCE |   |
| | CONSERVATION AREA WITH ACCOMPANYING ID REFERENCE |   |
| | REGISTERED BATTLEFIELD |  |
| TREES AND HEDGEROWS AFFECTED | TREE PESERVATION ORDERS (TPO) WITH ACCOMPANYING ID REFERENCE |  |
| | ANCIENT WOODLAND WITH ACCOMPANYING ID REFERENCE |  |
| | TREES - POTENTIALLY AFFECTED |  |
| | TREES - AFFECTED/MANAGED |  |
| | TREES - REMOVED |  |
| | HEDGEROWS - POTENTIALLY AFFECTED |  |
| | HEDGEROWS - AFFECTED/MANAGED |  |
| | HEDGEROWS - REMOVED |  |
| TRAFFIC REGULATION ORDER PLAN | TRAFFIC REGULATION ORDERS |  |
| | EXAMPLE REFERENCE FOR TRAFFIC REGULATION ORDERS |   |
| | LAND SUBJECT TO EXTINGUISHMENT OF PRIVATE RIGHTS |  |

| Plan Title | Legend Entry | Symbol |
|---|---|---|
| **EXTINGUISHMENT OF RIGHTS** | SECTION INDEX |  |
| | SECTION INDEX (NO INFORMATION SHOWN) |  |

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