

Tillbridge Solar

PEI Report Volume I Chapter 2: Scheme Location April 2023

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2. Scheme Location

2.1 Introduction

- 2.1.1 This chapter provides a description of the existing conditions of the land within which the Scheme will be delivered (hereafter referred to as 'the Scheme Boundary') and the surrounding areas and key receptors that are assessed within the technical topic chapters.
- 2.1.2 Constraints and opportunities identified through further studies and surveys are described in the relevant technical chapters (PEI Report Volume I Chapters 6-16).
- 2.1.3 This chapter is supported by the following figures in **PEI Report Volume III**:
 - Figure 2-1: Scheme Location; and
 - Figure 2-2: Environmental Constraints Plan.

2.2 Site Description

The Scheme Boundary

- 2.2.1 The Scheme Boundary is located approximately five kilometres to the east of Gainsborough and approximately 13 kilometres to the north of Lincoln. The area within and surrounding the Scheme Boundary is a primarily rural setting, comprising open agricultural fields with sparse areas of woodland and villages.
- 2.2.2 There are two sections to the Scheme Boundary:
 - 'the Principal Site', which is the location where ground mounted solar photovoltaic (PV) panels, electrical sub-stations and battery energy storage systems (BESS) will be installed; and
 - 'the Cable Route Corridor', which will comprise the underground electrical infrastructure required to connect the Principal Site to national transmission system.
- 2.2.3 The maximum area of land required for the construction, operation (including maintenance) and decommissioning of the Scheme is shown in **PEI Report Volume III Figure 2-1**. There will be no additional land required temporarily for construction or decommissioning outside of the Scheme Boundary. It is important to note that the Scheme Boundary may be subject to change if the area of land take changes following the statutory consultation process. The land take for the Scheme Boundary, particularly the Cable Route Corridor, will be refined as the Scheme design progresses, taking into account environmental, planning, landowner and other technical factors, and statutory consultation responses.
- 2.2.4 Infrastructure within the surrounding area includes 33kV overhead powerlines carried by pylons and 400kV national grid overhead powerlines carried by towers. Data for below ground utility assets is currently awaited from relevant

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statutory undertakers. The locations of any assets in proximity to the Scheme will be considered further in the design and, if necessary, assessed within the ES submitted with the DCO application.

Principal Site

- 2.2.5 As shown on **PEI Report Volume III Figure 2-1**, the Principal Site is located to the south of Harpswell Lane (A631), to the west of Middle Street (B1398) and largely to the north of Kexby Road and to the east of Springthorpe. The Principal Site covers an area of approximately 1,400ha and is located entirely within the administrative area of West Lindsey District Council.
- 2.2.6 Harpswell Lane (A631) and Middle Street (B1398) form the extent of the northern and eastern boundaries of the Principal Site. A thin strip of land on the western side of Middle Street is included within the Scheme Boundary to allow for landscape screening. The Principal Site extends to the south of Kexby Road with the inclusion of field parcels that are located to the south of the road.
- 2.2.7 The Principal Site comprises numerous field parcels used for arable farming. The fields are large with limited hedgerows and trees. Where there are hedgerows, these generally form the boundaries of fields as they adjoin roads. There are also some small, scattered areas of woodland located within the Principal Site, along with some rural dwellings as well as agricultural buildings dispersed across the area.
- 2.2.8 Mature hedgerows and trees line the northern boundary of the Principal Site along the A631. To the west, the surrounding area is predominantly open fields with some defined with hedgerows. To the east, the landscape is defined by a sharp slope referred to as the Lincoln Cliff. This area is relatively elevated compared to the general character of the area, which is characterised by its flat rural landscape.

Cable Route Corridor

- 2.2.9 The Principal Site will be connected to Cottam National Grid sub-station located at the decommissioned Cottam Power Station in Cottam on the Nottinghamshire border. The Cable Route Corridor is shown on **PEI Report Volume III Figure 2-1** and is approximately 16km long (approximate distance between the Principal Site and National Grid Cottam Substation). The electrical connection will comprise underground cables and is described further in **PEI Report Volume I Chapter 3: Scheme Description**.
- 2.2.10 Heading south from the Principal Site, the cable route crosses Common Lane, Cow Lane, Kexby Road and Fillingham Lane before turning to the west crossing South Lane, Stone Pit Lane and Stow Road (B1241) (located to the south of Willingham by Stow). The Cable Route Corridor continues in a westerly direction before crossing the East Midlands Railway line that provides services between Doncaster and Lincoln and runs in a broad north-south direction to the west of Willingham by Stow and to the east of Gate Burton. The route then continues westwards crossing the A1500 (Stow Park Road), followed by the A156 (Gainsborough Road) before crossing the River Trent to connect with the Cottam sub-station.

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2.3 Site Designations and Surroundings

Principal Site

- 2.3.1 Immediately surrounding the Principal Site are a series of villages interspersed along Middle Street (east of the Principal Site) including Harpswell (to the north), Glentworth, Fillingham and Ingham (to the south). Springthorpe and Heapham are located to the west of the Principal Site.
- 2.3.2 An Area of Great Landscape Value (Central Lincolnshire Local Plan Policy LP17) runs directly to the east of the Principal Site, with a small area of the Principal Site earmarked for mitigation within this designation to the south of Harpswell.
- 2.3.3 There are no international, national, regional, or locally designated nature conservation sites within the Principal Site. Within a 10km radius of the Principal Site there are a number of statutory designated nature sites, including Sites of Special Scientific Interest (SSSIs). The nearest to the Principal Site is Lea Marsh SSSI, located to the south of Gainsborough and approximately 6km west of the Principal Site and Cliff House SSSI located 6km to the north east of the Principal Site on the A15.
- 2.3.4 There are no Scheduled Monuments or Designated Heritage Assets located within the Principal Site. There are two Scheduled Monuments in close proximity to the Principal Site: Harpswell Hall adjacent to the north east of the Principal Site (a post medieval house and gardens that overlays earlier medieval remains) and Elm Tree Farm (a moated manorial complex) 800m to the west.
- 2.3.5 Many of the surrounding villages such as Gate Burton, Marton, Torksey, Corringham, Upton, Stow, Hemswell, Glentworth, Fillingham, Ingham, Springthorpe and Brattleby have clusters of designated assets including listed buildings and conservation areas, all located within 10km of the Scheme Boundary. There is a Registered Park and Garden, associated with Fillingham Castle, located 3km to the east of the Principal Site.
- 2.3.6 Most of the Principal Site is located within Flood Zone 1 and therefore at a low risk of flooding from fluvial sources and surface water. There are some watercourses located within the southern and western extent of the Principal Site area including tributaries of the River Till with some areas at a high risk of flooding (Flood Zone 3). There are also land drains, ponds and covered reservoirs located across the Principal Site area.
- 2.3.7 The Principal Site lies across three Water Framework Directive (WFD) surface waterbodies, two WFD River Basin Districts (RBDs), two WFD Management Catchments and two Operational Catchments as shown in Table 2-1.

Table 2-1: Principal Site WFD RBD, Management and Operational Catchments, and Waterbodies

RBD	Management Catchment	Operational Catchment	Water Body
Anglian	Witham	Upper Witham	Fillingham Beck - GB105030062490
			Till (Witham) – GB105030062500
Humber	Trent Lower and Erewash	Trent and tributaries	Eau from Source to Northorpe Beck – GB104028057970

- 2.3.8 The majority of the Principal Site is located within Agricultural Land Classification (ALC) Grade 3b land, although there are some isolated areas of Grade 3a land. These areas are shown in **PEI Report Volume III Appendix 14-2**.
- 2.3.9 The local transport network comprises several strategic connections including the A631 located directly north of the Principal Site. To the east of the Principal Site the A631 connects with the A15 providing further access to the strategic highway network with the M180 located approximately 6km to the north.
- 2.3.10 Public Rights of Way (PRoW) are notably limited within the Principal Site, the only route being on the southern periphery, a bridleway extending south from Kexby Road near Glentworth Grange, towards Willingham Road (Gltw/85/1). There are a large number of additional recreational routes and PRoW within 500m of the Principal Site most notably the network of bridleways and PRoWs located between the villages of Ingham and Fillingham to the south of the Principal Site and a network of PRoWs to the west of the Principal Site connecting the villages of Kexby, Upton, Heapham and Springthorpe.

Cable Route Corridor

- 2.3.11 There are no international, national or regional nature conservation sites within the Cable Route Corridor, however, locally designated nature conservation sites are present. The nearest SSSIs are Ashton's Meadow SSSI, which is located 1.3km west of the Cable Route Corridor, and Lea Marsh SSSI, located to the south of Gainsborough approximately 5km northwest of the Cable Route Corridor.
- 2.3.12 Several areas of National Forest Inventory designations are present within the current Cable Route Corridor or adjacent to it. There are no areas of Ancient Woodland or Areas of Outstanding Natural Beauty (AONBs) within the current Cable Route Corridor.
- 2.3.13 There are no Scheduled Monuments, Registered Parks and Gardens or Conservation Areas within the Cable Route Corridor. There are a number of non-designated built heritage assets within the Cable Route Corridor and a few Grade II Listed Buildings located on the edge of the Cable Route Corridor

- 2.3.14 Parts of the Cable Route Corridor are located within Flood Zone 2 and 3, where there is increased risk from flooding. The River Trent and River Till (tributaries) are located within the Cable Route Corridor, for which the Environment Agency is the regulating authority.
- 2.3.15 The Cable Route Corridor lies across five WFD surface waterbodies, two WFD RBDs, two WFD Management Catchments, and two Operational Catchments as shown in Table 2-2.

Table 2-2: Cable Route Corridor WFD RBD, Management and Operational Catchments, and Waterbodies

Management Catchment	Operational Catchment	Water Body
Witham	Upper Witham	Skellingthorpe Main Drain – GB105030062390
		Tributary of Till – GB105030062480
Trent Lower and Erewash	Trent and tributaries	Marton Drain Catchment (tributary of Trent) – GB104028057840
		Seymour Drain Catchment (tributary of Trent) – GB104028058340
		Trent from Carlton-on-Trent to Laughton Drain – GB104028058480
	Catchment Witham Trent Lower	Catchment Catchment Witham Upper Witham Trent Lower Trent and

- 2.3.16 According to online mapping, the Cable Route Corridor is located within Grade 3 ALC land with the area primarily agricultural in use. There are some residential properties within the route in particular close to Cottam Village, Marton and some barn conversions along Stow Park Road and at Normanbyby-Stow.
- 2.3.17 Two PRoW cross the Cable Route Corridor within Lincolnshire (east of the River Trent) and there are several PRoW within Nottinghamshire that would be crossed.