Scotland England Green Link 2 - English Onshore Scheme

Environmental Statement: Volume 2

Chapter 14: Traffic and Transport

May 2022

For: National Grid Electricity Transmission

Table of Contents

Figures

Tables

14. Traffic and Transport

14.1 Introduction

This chapter of the Environmental Statement (ES) presents the results of baseline studies and the assessment of the potential impacts of the English Onshore Scheme on users of the local transport network. The chapter details the methodology followed for the assessment, summarises the regulatory and policy framework related to traffic and transportation and describes the existing road network in the area surrounding the English Onshore Scheme. The assessment has identified the likely significant impacts to arise during the construction or operational phases of the English Onshore Scheme and identifies any mitigation necessary to avoid or reduce these impacts where possible.

This chapter should be read in conjunction with, **Chapter 13: Noise and Vibration**, **Chapter 15: Socio Economics, Recreation and Tourism**, and **Chapter 16: Cumulative and In-Combination Effects** of this ES.

This chapter is supported by the following figures:

- **Figure 14-1**: Study Area;
- **Figure 14-2**: Highway Network;
- **Figure 14-3**: Eastern A164/Southburn Road Weight Restrictions;
- **Figure 14-4**: Western A614/Southburn Road Weight Restrictions;
- **Figure 14-5**: ATC Locations; and
- **Figure 14-6**: Wilfholme Road Sign HGV Weight Restriction.

This assessment is supported by more detailed figures of the receptors identified as part of this assessment, and further information in associated appendices, including:

- **Appendix 14A**: Public Right of Way Network;
- **Appendix 14B**: ATC Locations;
- **Appendix 14C**: Collision Analysis;
- **Appendix 14D**: Traffic Flow Diagrams; and
- **Appendix 14E**: Outline Construction Traffic Management Plan.

14.2 Planning Policy and Applicable Legislation

14.2.1 National Policy Statements

This chapter takes under consideration the following National Policy Statements (NPS), including the drafts published in September 2021, which are matters that will be important to the decision-making process (but does not change the statutory status of locally prepared plans as the starting point for decision making for Town and Country Planning Act applications):

- Overarching National Policy Statement for Energy (EN1) (Ref 14-1);
- National Policy Statement for Renewable Energy Infrastructure (EN3) (Ref 14-2); and
- National Policy Statement for Electricity Networks Infrastructure (EN5) (Ref 14-3).

The NPSs include specific criteria and issues which should be covered by applicants' assessments of the effects of their scheme, and how the decision maker should consider these impacts. In regard to traffic and transportation, only EN-1 directly applies.

The Government is currently reviewing and updating the Energy NPS to reflect its policies and strategic approach for the energy system that is set out in the Energy White Paper (December 2020) (Ref 14-4), and to ensure that the planning policy framework enables the delivery of the infrastructure required for

the country's transition to net zero carbon emissions. As part of the Energy NPS review process, the Government published a suite of Draft Energy NPSs for consultation on 6 September 2021. The existing NPS states the following:

Paragraph 5.14.3 of the EN-1 states "*if a project is likely to have significant transport implications, the applicant's ES…should include a transport assessment, using the NATA/TAG methodology stipulated in Department for Transport guidance, or any successor to such methodology. Applicants should consult the Highways Agency and Highways Authorities as appropriate on the assessment and mitigation*".

Meanwhile, in regard to mitigation paragraph 5.14.9 of the EN-1 states that "*where mitigation is needed, possible demand management measures must be considered and if feasible and operationally reasonable, required, before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts*".

As per paragraph 5.14.12, the Secretary of State may attach requirements to a consent where there is likely to be substantial HGV traffic that:

- control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements;
- make sufficient provision for HGV parking, either on the site or at dedicated facilities elsewhere, to avoid 'overspill' parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions; and
- ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force.

14.2.2 National Policy

14.2.2.1 National Planning Policy Framework

The NPPF (Ref 14-5) provides a framework for local communities and authorities to development relevant local development plans and strategies. A revised version of NPPF was released in July 2021.

The NPPF has two key themes:

- Providing a greater level of integration and simplification of the planning policies governing new development nationally; and
- Contribute to the achievement of sustainable development from an economic, social and environmental perspective.

The NPPF is in favour of sustainable development, which should be reflected in local development plans and frameworks to ensure that sustainable development and the needs of an area are identified and subsequently approved without delay. The NPPF is based on a range of core planning principles, which are aimed at supporting the focus on sustainable plan-led development.

Transport specific policies play a key role in supporting and achieving the core planning principles and are intrinsically linked to the objective of sustainable development. The NPPF specifically states that development should only be prevented or refused on transport grounds if there would be an unacceptable impact on highway safety or where the residual cumulative impacts of development are severe.

Paragraph 106 states that planning policies should "*be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned*."

Paragraph 110 of the NPPF states that whilst assessing applications for development, it should be ensured that:

- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users;

- the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

In terms of parking, paragraph 108 states that maximum parking standards for residential and non-residential developments should only be set if there is a clear and compelling justification that they are necessary for managing the local road network.

The core planning principles above provide a framework to provide inclusive, accessible, well connected and sustainable development.

Paragraph 111 states that "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*".

Paragraph 113 states that a development that generates a significant amount of movement should be supported by a Transport Statement (TS) or Transport Assessment and should provide a travel plan.

14.2.3 Local Policy

14.2.3.1 East Riding of Yorkshire Plan (2020 – 2039)

The East Riding Local Plan was adopted in 2016 and whilst it is currently undergoing an update, it sets out the policies on how growth will be manged throughout the region to 2039.

Policy EC4 Enhancing sustainable transport states that "*In order to increase overall accessibility, minimise congestion, improve safety, reduce greenhouse gas emissions, encourage healthy lifestyles and reduce social exclusion, new development will be supported where it is accessible, or can be made accessible, by sustainable modes of transport and addresses its likely transport impact.*

Development proposals should:

1. Produce and agree a transport assessment and travel plan, where a significant transport impact is likely;

2. Encourage the use of sustainable travel options which may include public transport, electric and ultra-low emission vehicles, car sharing, cycling and walking; particularly in the Major Haltemprice Settlements, Principal Towns, and Towns; and

3. Bring forward other necessary transport infrastructure to accommodate expected movement to and from the development."

14.2.3.2 Selby District Core Strategy Local Plan (2011 – 2027)

The Selby District Core Strategy Local Plan was adopted in 2013 and sets out the policies on how growth will be manged throughout the region to 2027. This is partnered by 'saved' policies from the Selby District Local Plan (2005); however it is noted that the saved policies do not relate to transport impacts and have therefore not been considered further within this assessment.

Policy SP15 Sustainable Development and Climate Change, part B *'Design and Layout of Development', states that "In order to ensure development contributes toward reducing carbon emissions and are resilient to the effects of climate change, schemes should where necessary or appropriate:*

f) Minimise traffic growth by providing a range of sustainable travel options (including walking, cycling and public transport) through Travel Plans and Transport Assessments and facilitate advances in travel technology such as Electric Vehicle charging points;'.

14.2.4 Guidance

In addition to the policies and documents outlined in **Chapter 4: Planning Policy Context**, the following guidance documents have been considered in the production of the chapter. These have provided guidance for the methodology and design guidelines on which the permanent access road designs have been based:

- Travel Plans, Transport Assessments and Statements – Planning Practice Guidance (Department for Communities and Local Government, March 2014);
- Institute of Environmental Management and Assessment's (IEMA) (formally the Institute of Environmental Assessment (IEA)) 'Guidelines for the Environmental Assessment of Road Traffic' – January 1993; and
- Design Manual for Road and Bridges (DMRB).

14.3 Approach to Assessment

14.3.1 Introduction

This section describes the approach to the identification and assessment of impacts resulting from the construction and operation of the English Onshore Scheme on traffic and transport.

14.3.2 Summary of Consultation

14.3.2.1 Scoping Opinion Review

East Riding of Yorkshire Council (ERYC) confirmed via scoping response dated 3rd June 2021, that they accept the proposed scope of the environmental assessment for traffic and transport, as identified within Chapter 13 of the AECOM EIA Scoping Opinion Report.

North Yorkshire County Council (NYCC) also confirmed that the proposed constructions works only appear to directly affect a small part of North Yorkshire County Councils Highway network, around Drax Village, as such a comprehensive Construction Management Plan including the provision of dilapidation surveys on proposed haulage routes would be prior to commencement of operations. This has been noted by AECOM.

Advice and comments regarding baseline traffic surveys has been provided by ERYC and considered during the production of this chapter of the ES.

It was agreed with ERYC that surveys undertaken in line with TAG Unit M1.2 neutral periods are defined as Monday to Thursday from March through to November (excluding August) and avoiding the weeks before/after Easter. It was also agreed that, where Automatic Traffic Count (ATC) locations could perceivably be impacted by tourist seasonality, then supplementary summer month traffic counts should be conducted alongside neutral counts. A COVID-19 factor validation check comparing AECOM 2021 ATC count data against a ERYC count has also been conducted, at the request of the Council, details of this can be provided if required.

14.3.3 Assessment Method

14.3.3.1 Overview

The methodology for assessing the impact of development-generated traffic has been based on that outlined in the Institute of Environmental Assessment (IEA, now known as IEMA) 'Guidelines for the Environmental Assessment of Road Traffic' (January 1993). Please note that there has been no update to the guidance since 1993 (Ref 14-6).

The IEA guidelines state that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

The IEA guidelines recommend that several environmental effects may be considered important when considering traffic from an individual development. This chapter considers the following effects:

- Impact of HGV construction traffic;
- Severance;
- Pedestrian delay;
- Pedestrian amenity; and
- Accidents and safety.

The type of traffic which will be generated by the English Onshore Scheme can be categorised as follows; primarily general traffic, light goods vehicles (LGVs), heavy goods vehicles (HGVs) and Abnormal Indivisible Loads (AILs). The vehicle routing and movement associated with the English Onshore Scheme construction has been considered in detail and discussed through on-going consultation with ERYC and NYCC.

Once the locations and volumes of the proposed traffic were identified it was possible to identify those receptors that may be impacted upon, due to the increase in vehicle movements. This was done by identifying the percentage increase in vehicular activity along the identified construction routes following the collection of traffic data. The ATCs were used to derive annual average weekly traffic (AAWT) for individual links, subdivided into 18 hour counts for total traffic and HGVs.

The traffic survey validation exercise that was completed at the request of ERYC concluded that, at the time the 2021 AECOM ATC data was collected, traffic levels was be seen to be generally in-line with pre-pandemic levels, therefore the application of a COVID factor is not necessary. As noted before this information is available upon request.

In order to calculate the trip distribution of workers travelling to and from the proposed converter station site and the construction compounds along the underground DC cable alignment each day, a simple gravity model was developed. Construction traffic associated with the English Onshore Scheme was distributed onto the local highway network to calculate the resultant percentage increase on each link.

Assessments have been undertaken for the peak years throughout the construction period.

Currently, it is anticipated that the converter station will take up to 3 years to complete, with the underground Direct Current (DC) cable route laid across a period of up to 5-years. Growth factors derived from TEMPro v7.2c have been applied to base year data to derive future traffic flows, for the East Riding of Yorkshire and North Yorkshire areas impacted by the English Onshore Scheme. The peak construction traffic flows have been derived by analysing construction traffic data and construction programmes provided by National Grid.

14.3.3.2 Significance Criteria

The significance of environmental effect is typically a function of the sensitivity of a receptor and the magnitude of an impact. An indicative matrix for the determination of significance is provided in Table 5-5 in **Chapter 5: Approach to EIA**. Effects predicted to be ‘major’ or ‘moderate’ are considered significant whilst effects predicted to be ‘minor’ or ‘negligible’ are considered not significant.

14.3.3.3 Assessment Criteria

The significance of effect is determined by both the sensitivity of the receptors on the link affected and the magnitude of the impact exerted on it.

The general criteria for defining the importance or sensitivity of receptors are set out in **Table 14-1**. Key factors influencing this include:

- *The value of the receptor or resource based upon empirical and/or intrinsic factors* - for example considering any legal or policy protection afforded which is indicative of the receptor or resources’ value internationally, nationally or locally; and

- *The sensitivity of the receptor or resource to change* - for example is the receptor likely to acclimatise to the change. This will consider legal and policy thresholds which are indicative of the ability of the resource to absorb change.

Table 14-1: Receptor Sensitivity Criteria (Traffic & Transport)

Sensitivity	Description
Very High	Schools, colleges, playgrounds, hospitals, retirement homes.
High	Heavily congested junctions, residential properties very close to carriageway.
Medium	Congested junctions, shops/businesses, areas of heavy pedestrian / cycling use, areas of ecological/nature conservation, residential properties close to carriageway.
Low	Tourist/visitor sites, places of worship, residential areas set back from the highway with screening.
Negligible	Those people and places located away from the affected highway link.

The link sensitivity will be based upon an average sensitivity of the whole link with a separate assessment of high/very high receptors. Some links will be broken down into sensible sections where appropriate i.e. between two main junctions or villages.

14.3.3.4 Magnitude

General criteria for defining the magnitude of an impact are set out in **Table 14-2.** Key factors influencing this include:

- *The physical or geographical scale of the impact* - note that this will be relative to the scale of the receptor or resource affected;
- *The duration of the impact* - will it be short term, lasting for a few days or weeks, or long term, lasting for several years;
- *The frequency of the impact* - will it occur hourly, daily, monthly or will it be permanent lasting for the duration of the development; and
- *The reversibility of the effect* - can it be reversed following completion of construction of the development.

Table 14-2: Impact Magnitude Criteria (Traffic and Transport)

Magnitude	Description
High	Total loss or major alternation to key elements/features of the baseline conditions such that post development character/composition of baseline condition will be fundamentally changed.
Medium	Loss or alteration to one or more key elements/features of the baseline conditions such that post development character/composition of the baseline condition will be materially changed.
Low	Minor shift away from baseline conditions. Changes arising from the alteration will be detectable but not material; the underlying character/composition of the baseline condition will be similar to the pre-development situation.
Negligible	Very little change from baseline conditions. Change is barely distinguishable, approximating to a “no change” situation.

Information provided in **Table 14-3** expands on the information from **Table 14-2** and shows further details of the individual aspects of the assessment and the thresholds to be applied for each.

Table 14-3: Magnitude of Change (Traffic and Transport)

Magnitude	Description	Illustrative Criteria
High	HGV Construction Traffic	High number of construction vehicles using roads over a protracted period of time. More than a 40% increase for more than 6 months.

Magnitude	Description	Illustrative Criteria
	Pedestrians/Cyclists	Limited or no facilities for pedestrians and cyclists with limited crossing facilities and low-quality linkages to the local facilities.
	Severance	Increase in total traffic flows of 90% and above (or increase in HGV flows over 10% based on the sensitivity of the receptors).
	Road Safety	High increase in traffic at known collision locations.
Medium	HGV Construction Traffic	Moderate number of construction vehicles using roads over a protracted time period. • 16-39% increase for more than 6 months; or • More than 40% increase for 3-6 months.
	Pedestrians/Cyclists	Few facilities for pedestrians and cyclists with limited crossing facilities and linkages to the local facilities.
	Severance	Increase in total traffic flows of 60-89% (or increase in HGV flows over 10% based on the sensitivity of the receptors).
	Road Safety	Moderate increase in traffic at known collision locations.
Low	HGV Construction Traffic	Small number of construction vehicles using roads over a short period of time. • 6-15% increase for more than 6 months; • 31-39% for 3-6 months; or • >40% increase for less than 3 months.
	Pedestrians/Cyclists	Facilities for pedestrians and cyclists with safe and convenient crossing facilities and good linkages to the local facilities.
	Severance	Increase in total traffic flows of 30-59% (or increase in HGV flows over 10% based on the sensitivity of the receptors).
	Road Safety	Minor increase in traffic at known collision locations.
Negligible	HGV Construction Traffic	Occasional construction vehicles using roads over a short period of time. • Less than 5% Increase for more than 6 months; or • Between 6-30% increase for 3- 6 months; or • Between 31-40% for less than 3 months.
	Pedestrians/Cyclists	Dedicated facilities for pedestrians and cyclists with safe and convenient crossing facilities and good linkages to the local facilities.
	Severance	Increase in total traffic flows of 29% or under (or increase in HGV flows under 10%).
	Road Safety	Negligible increase in traffic at known collision locations.

14.3.3.5 Significance of Effect

Having established the magnitude of change and the sensitivity of the receptor the significance of the effect was then assessed using the significant matrix shown in **Table 14-4**. Moderate and Major levels of significance were considered to be significant in EIA terms, whilst Negligible or Minor impacts were not considered to be significant.

Table 14-4: Significance of Effects Matrix

Sensitivity of Receptor	Magnitude of Change			
	Negligible	Low	Medium	High
Very High/ High	Negligible/ Minor	Moderate	Major	Major
Medium	Negligible	Minor	Moderate	Major
Low	Negligible	Negligible	Minor	Moderate
Negligible	Negligible	Negligible	Negligible	Negligible/ Minor

14.4 Study Area

14.4.1 Overview

The prediction of construction effects has focused on activities that could directly or indirectly impact on receptors within the defined study area. The study area includes those roads which may be utilised during construction, and upon which there is the potential for a significant impact.

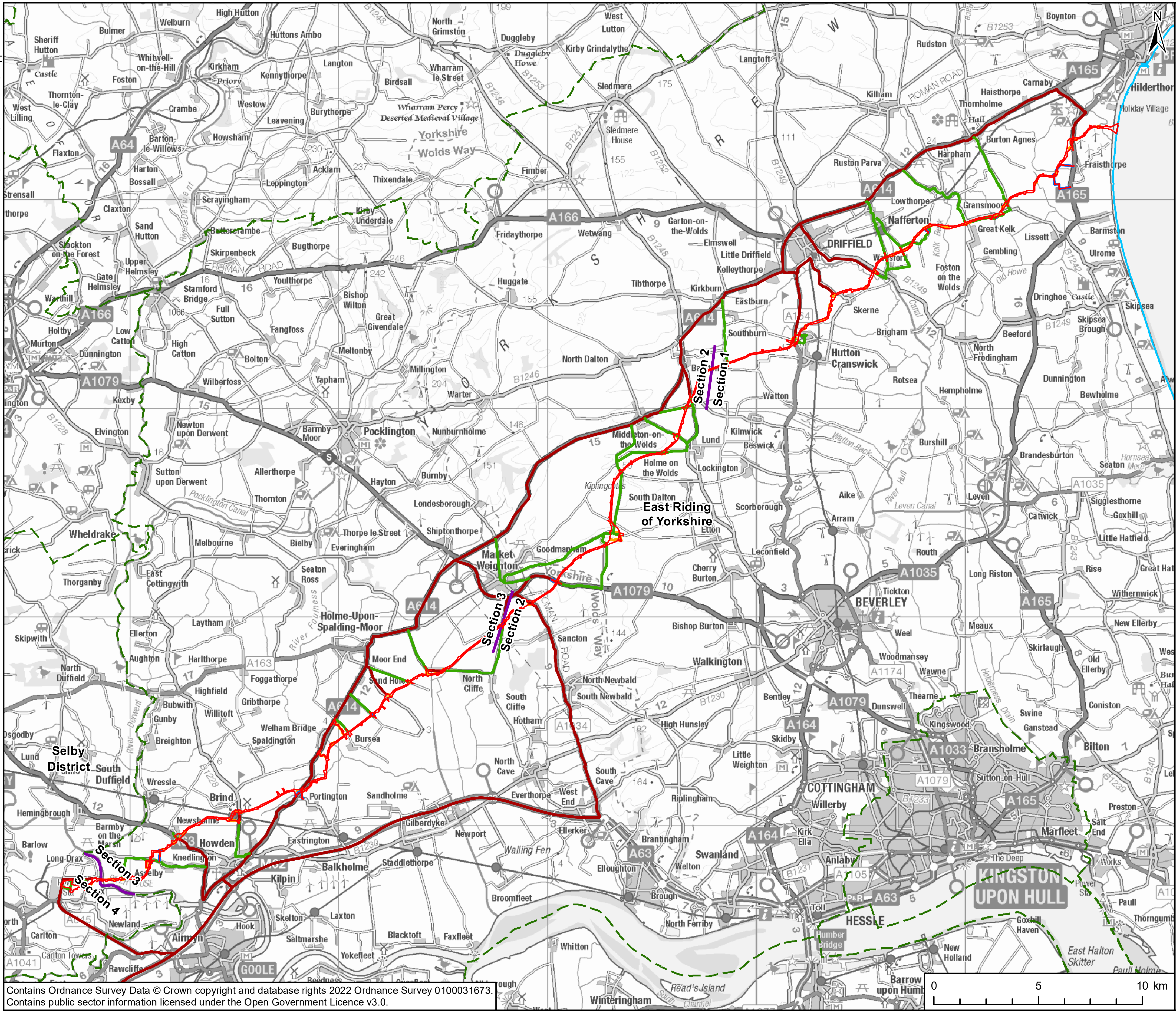
Due to the extent of the proposed underground DC cable route, the detailed baseline environment and potential impacts is considered in four sections from the proposed landfall to the proposed converter station (i.e. from east to west):

- Section 1 – Landfall to Bainton;
- Section 2 – Bainton to Market Weighton;
- Section 3 – Market Weighton to River Ouse; and
- Section 4 – River Ouse to Drax Substation.

Route Sections 1, 2 and 3 fall within the East Riding of Yorkshire Highways Authority area, and Route Section 4 is within the North Yorkshire County Council Highways Authority area.

Figure 14-1: Study Area below outlines the Study Area and identifies Route Sections 1-4.

GIS: ER Checked: LC Approved: MW



Coordinate System: British National Grid

Scale @ A3 1:170,000

nationalgrid

PROJECT

Scotland England Green Link 2

KEY

- Planning Application Boundary
- Route Section Break
- Mean Low Water Springs
- District Borough Unitary Boundary
- Advanced HDD access route
- Indicative public highway access routes
- Haul road where alignment differs from HVDC cables
- Mobilisation and light vehicle access routes

TITLE

Figure 14-1
Study Area

REFERENCE

SEGL2_T_ES_14-1_v3_20220530

SHEET NUMBER 1 of 1

DATE 30/05/2022

14.5 Baseline Environment

14.5.1 Baseline Highway Conditions

Baseline highway conditions are presented below across each Route Sections, with the analysis broken down into the following sub-sections:

- Surrounding Public Rights of Way (PRoW) and National Cycle Network (NCN);
- Surrounding Highway Network;
- Baseline Traffic Flows; and
- Personal Injury Collision (PIC) Analysis.

14.5.2 Route Section 1 – Landfall to Bainton

Route Section 1 extends some c.24km south-west from the DC landfall location, through to the village of Bainton.

14.5.2.1 PRoW/NCN Network

This section outlines the details of the PRoW and NCN in Route Section 1. The individual route section plans are contained in **Appendix 14A.**

Some 1.5 kilometre (km) north-east of construction compound CCT01 (see **Appendix 14A**), the cable route crosses Bridleway BAGN05, which extends north from the Hamlet of Gransmoor through an area of open agricultural land before providing a connection with Moor Lane. The crossing is proposed via open-cut and no temporary diversion is required.

Some 1 km west of construction compound CCT01, the DC cable route also crosses Bridleway KELKB03, which commences midway along Gransmoor Lane and leads north over c. 600m before meeting PRoW KELKB02, which provides a western connection to Main Street. No temporary PRoW diversion is required, KELKB003 will continue to run along unnamed access track.

HDD_009 entry is located just east of NCN Route 1, which runs along the carriageway of Out Gates. However, it is anticipated that the HDD will be placed underneath the carriageway. The cable route then diverts south-west and crosses Hords Lane, via open cut.

HDD_014 passes under the Nafferton Beck, PRoW footpath SKERF10 runs along the eastern bank of the Beck and provides a link between Wansford with Carr Lane. The Cable will cross underneath the river and SKERF10 via HDD, with no temporary diversion required.

Similarly, HDD_015 passes under the River Hull, just south of the B1249, SKERF06 runs along the southern bank of the River Hull, the cable crosses underneath the watercourse via HDD, with no temporary diversion required.

HDD_017 passes underneath NCN Route 1 (where a construction compound (CCS02) is also located), which runs along the carriageway of Driffield Road, it is anticipated that the HDD cable route will be placed underneath the carriageway with no temporary diversion required.

The proposed cable route crosses PRoW footpath HCRAF18, which provides a c. 850 m connection through open agricultural land between Orchard Lane and A614 Beverley Road. No temporary PRoW diversion is required.

Some 1.8 km south-west of CC07 the cable routing shall cross PRoWs HCRAF11 and HCRAF12 and NCN 164. HCRAF11 and HCRAF12 provide an east-west connection between Burnbutt Lane and Neswick Lane through open agricultural land and NCN 164 runs north-south along Burnbutt Lane from A614 adjacent to Kilburn. No temporary diversion is required to HCRAF11 however, localised diversion of HCRAF12 may be required to achieve a broadly perpendicular crossing of the construction swathe. No temporary diversion is required to NCN 164 which runs along the carriageway of Burnbutt Lane, which is proposed via open cut.

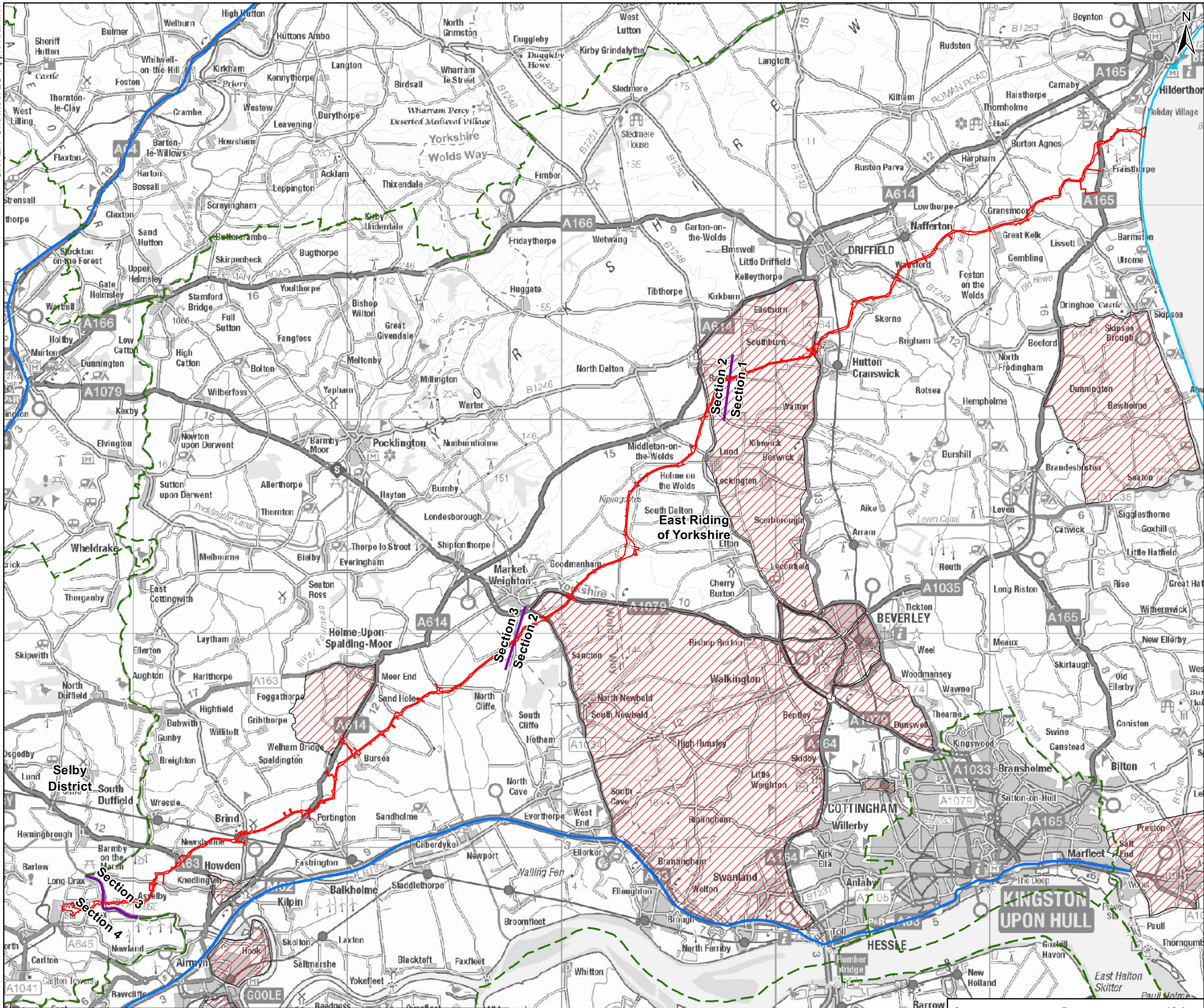
14.5.2.2 Surrounding Highway Network

The next section describes the local highway network within Route Section 1. The figure below provides an overview of the highway network across the entire route corridor.

The key road links identified across Route Section 1 are identified below:

- A165;
- Main Road;
- Main Street;
- Carr Lane;
- Wansford Road;
- A614;
- B1249;
- Driffield Road;
- A164;
- Southburn Road; and
- Burnbutt Lane.

GIS: ER Checked: LC Approved: MW



Contains Ordnance Survey Data © Crown copyright and database rights 2022 Ordnance Survey 0100031673.
Contains public sector information licensed under the Open Government Licence v3.0.

Coordinate System: British National Grid

Scale @ A3 1:170,000

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent.
Do not scale this document. All measurements must be obtained from the stated dimensions.

nationalgrid

PROJECT
Scotland England Green Link 2

KEY
- Planning Application Boundary
- Route Section Break
- Mean Low Water Springs
- District Borough Unitary Boundary
- Strategic Road Network
- 7.5t HGV Weight Restriction Zone

TITLE
Figure 14-2
Surrounding Highway Network

REFERENCE
SEGL2_T_ES_14-3_v2_20220524

SHEET NUMBER	DATE
1 of 1	24/05/2022

A165

The A165 runs on a north-south alignment between Scarborough and Hull, providing access to Filey and Bridlington amongst other places over its c. 80 km length.

Within the vicinity of the study area, the A165 diverts east to provide access to Bridlington Town Centre, before continuing south as A615 Kingsgate, at which point the route is formed of an c. 7.3 m wide single carriageway, with verges to both sides and is subject to a 50 mile per hour (mph) speed limit, with this increasing to the national speed limit (60 mph) some 900 m south of its four-arm round about junction with Moor Lane and an unnamed private access road, south of the Carnaby Industrial Estate.

South of the study area, the A165 continues as Bridlington Road and provides access to other key strategic routes such as A1035, on route to Hull City Centre.

Main Road

Main Road crosses the study area in the form of a single-track rural carriageway of c. 6 m width, which is flanked by areas of grass verge to both sides and is subject to the national speed limit (60 mph).

To the north, Main Road extends c. 3.25 km as Moor Lane, and then to Station Road and provides a connection with A614 Main Street with a priority T junction within the village of Burton Agnes.

To the south, Main Road extends c. 3.75 km and provides access to A165 via Gransmoor Road and Fisher Lane.

Main Street

Main Street provides access to the village of Little Kelk and Great Kelk, and within the study area is formed of a 6–7 m wide single carriageway, with a short section of footway along the northern flank, through the village of Little Kelk. Main Street is subject to a 30 mph speed limit within Little Kelk, although this increases to the national speed limit (60 mph) and 40 mph to the north and south of Little Kelk, respectively.

Main Street combines with Mill Lane to provide access to the A614 via a priority crossroads junction, some 4.25 km north of the study area.

Carr Lane

Carr Lane extends between Wansford Road and New Bridge lane over a c. 3.25 km distance and crosses the study area in the form of a c. 4-5 m wide single carriageway, which is subject to the national speed limit (60 mph).

Carr Lane can be utilised to access Wansford Road to the west, and to the north via New Bridge Lane. To the west, Carr Lane crosses the Nafferton Back via an over-bridge, although no weight restrictions are currently in place or have been identified.

Wansford Road

Wansford Road runs on a north-south alignment between Wansford and Nafferton, where the route continues as Station Road providing access to the A614 in the form of a four-arm roundabout junction. Wansford Road is formed of a c. 6.5 m wide single carriageway with areas of the verge to both sides and is subject to the national speed limit (60 mph).

A614

The A614 runs on a north-east – south-west alignment over c. 157 km and connects Nottinghamshire with South Yorkshire and the East Riding of Yorkshire. The A614 runs roughly parallel to the study area along its western flank and within the vicinity of the planning application boundary connects Bridlington with Driffield and then Market Weighton, before crossing the study area providing access to junction 37 M62, just outside the village of Howden, which forms part of the SRN.

Generally, the A614 is formed of a c.7.3 m wide single carriageway, with some sections of central hatching and is majority subject to the national speed limit (60 mph), although this varies along its route.

B1249

The B1249 extends west c. 3.9 km from a priority crossroads junction with B1242 Main Street/Bridlington Road/Back Street west of Skipsea before meeting the A165 in the form of a priority crossroads junction, within the village of Beeford.

The B1249 then continues westbound providing access to North Frodingham, before the route diverts north-west, crossing the study area on route to Driffield.

The B1249 crosses the study area in the form of an un-lit, c. 6 m wide single carriageway, with areas of grass verge to both sides and is subject to the national speed limit, with the River Hull running along the south-western flank.

North of the study area, the B1249 speed limit reduces to 30 mph on approach to Driffield where a lit, 2 m wide footway also commences along the B1249 eastern flank. North of Driffield, the B1249 meets the A614 in the form of a four-arm roundabout junction before continuing north with the speed limit reverting to 60 mph.

The B1249 then extends north over c. 20 km before meeting the A64 in the form of a traffic signal-controlled junction, this section of the B1249 is identified as an 'other proposed HGV route' within ERYC HGV Freight Map.

Driffield Road

Driffield Road extends over a c. 2.6 km distance roughly on a north-west – south-east alignment between Skerne Road and West End, within Driffield and Skerne to the north and south, respectively. Driffield Road is formed of a c. 6 m wide single carriageway, flanked by areas of verge to both sides and is subject to the national speed limit (60 mph), as it passes through the study area.

A164

The northern section of the A164 extends c. 17 km on a north-south alignment from a three-arm roundabout junction with the A614 within Driffield, through to a three-arm roundabout junction with the A1035, just north of Beverley. This section of the A164 is generally formed of a c. 6.7 m wide single carriageway and is subject to the national speed limit (60 mph).

The A164 passes through the study area adjacent to the village of Hutton Cranswick, at which point the road is formed of a c. 6.7 m wide single carriageway with grass verges on both sides and is subject to the national speed limit, although this reduces to 30 mph as the road passes through the village of Hutton Cranswick. Footways of varying width are provided to one, or both sides of the carriageway as the A164, which at the point is known as A164 Beverley Road, passes through Hutton Cranswick.

The speed limit increases incrementally to 50 mph upon exiting Hutton Cranswick, before the A164 continues south providing access to Beverley, via Leconfield.

Southburn Road

Southburn Road extends roughly on an east west alignment from a priority crossroads junction with A164 Beverly Road and Hutton Balk, just north of the village of Hutton Cranswick, through to a priority junction with A614 to the west of the study area over a c. 4.5 km distance.

Southburn Road provides access to a number of farm complexes and residential dwellings on route and is formed of a c. 3.5 m wide single-track carriageway as it crosses the study area. Southburn Road is subject to a continuation of the national speed limit, which is present along the A164 Beverley Road to the east.

There are also informal agricultural field access points along both sides of the carriageway. Southburn Road is subject to HGV 7.5t signed weight restrictions, throughout.

Figure 14-3: Eastern A164/Southburn Road Weight Restrictions **and Figure 14-4**: Western A614/Southburn Road Weight Restrictions show the signed HGV weight restrictions from Southburn Road, from its junctions with A164 Beverley Road and A614 at its eastern and western extents, respectively.

Figure 14-3: Eastern A164/Southburn Road Weight Restrictions

Figure 14-4: Western A614/Southburn Road Weight Restrictions

The signed HGV weight restriction covers all routes west of the A164 between its junctions with the A614 and the B1248 to the north and south respectively and is bound to the north and west by the A614 and the B1248.

Burnbutt Lane

Burnbutt Lane extends south from Southburn Lane and provides access to the A164 to the south-east of the study area. Burnbutt Lane, like Southburn Lane, forms part of a signed 7.5t HGV weight restriction zone, throughout.

Burnbutt Lane crosses the study area in the form of a c. 3.5 m wide single-track carriageway which is subject to the national speed limit.

14.5.2.3 Baseline Traffic

Introduction

Baseline traffic levels have been established in order to quantify the magnitude of impact of the English Onshore Scheme and associated construction traffic.

Automatic Traffic Count (ATC) data has been collected and analysed to provide two-way traffic flows classified by vehicle type, including HGVs, the majority of the data was collected on the week commencing the 05/11/21 (neutral) and week commencing 17/08/21 (Summer). A number of ATCs had to be re-commissioned due to failures upon initial installation, these surveys were undertaken on the week commencing 16/10/21 (Neutral) and 25/08/21 (Summer). All surveys have been conducted in line with TAG Unit M1.2 neutral periods are defined as Monday to Thursday from March through to November (excluding August) and avoiding the weeks before/after Easter.

The figure below outlines the location of the ATCs that have been conducted as part of the assessment.

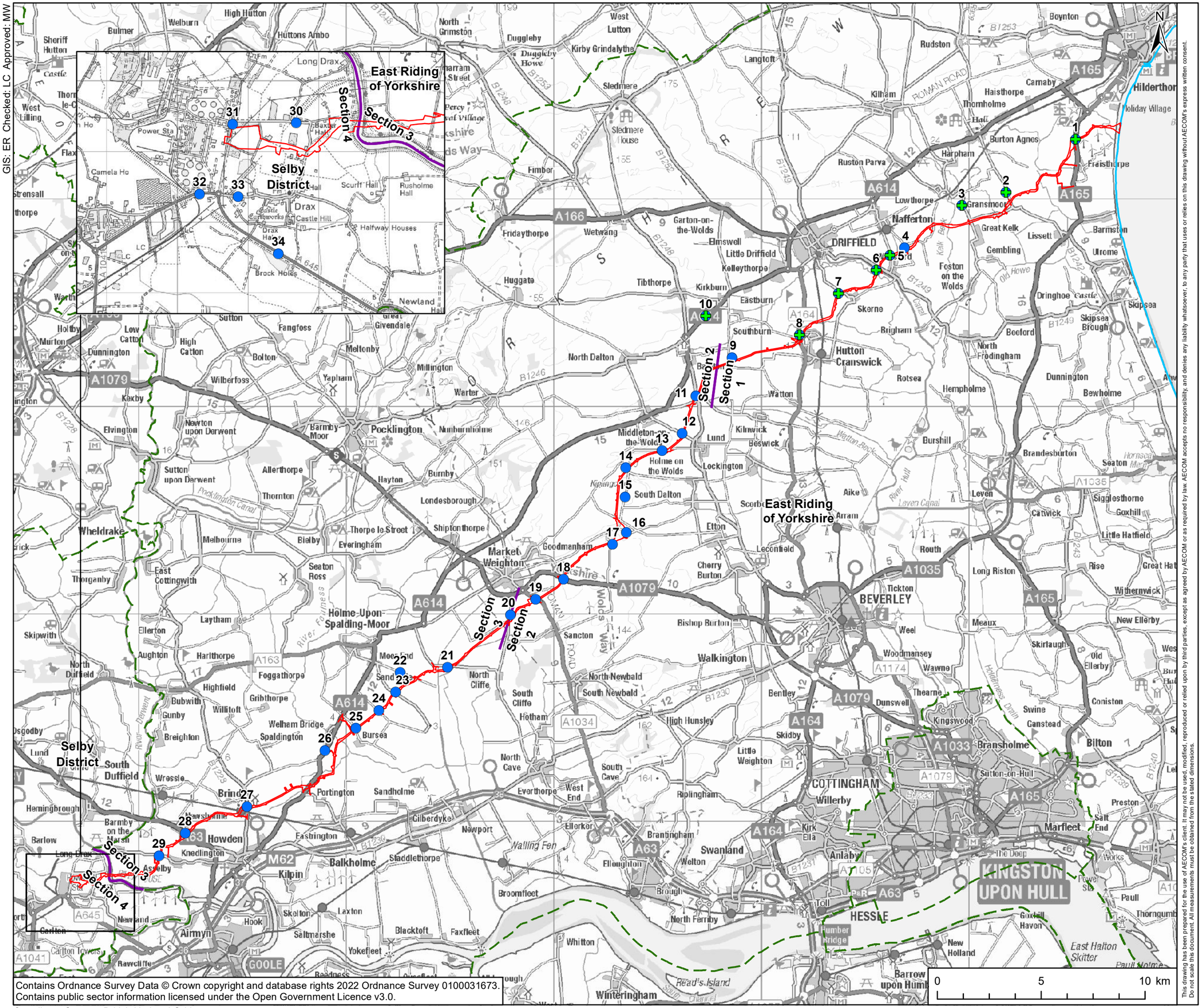
The ATC locations across Route Section 1 have been selected to provide a basis for the analysis and incorporates local routes within the corridor close to potential sensitive receptors and also routes along key strategic links to provide a robust baseline for assessment.

The individual route section plans for the traffic counts are contained in **Appendix 14B**.

Due to the proximity of sections of the cable route to the coast and summer holiday destinations, it was agreed with ERYC Local Highway Authority (LHA) that in order to account for potential changes in traffic volumes as a result of tourist seasonality, baseline traffic levels would be recorded during peak tourist season. This is in addition to those collected in neutral months.

Both the neutral and summer month surveys covered the 24hr periods for 7 days, and the neutral surveys were conducted in-line with TAG Unit M1.2 guidance on neutral periods.

GIS: ER Checked: LC Approved: MW



Coordinate System: British National Grid

Scale @ A3 1:170,000

nationalgrid

PROJECT

Scotland England Green Link 2

KEY

- Planning Application Boundary
- Route Section Break
- Mean Low Water Springs
- District Borough Unitary Boundary
- Neutral ATC Location
- Summer Holiday ATC Location

TITLE

Figure 14-5
ATC Locations

REFERENCE

SEGL2_T_ES_14-4_v2_20220524

SHEET NUMBER

1 of 1

DATE

24/05/2022

Baseline Traffic Flows

The ATC data has been used to derive 18 hour AAWT for individual links for total traffic and HGVs.

Table 14-5 below lists the 18-hour 5-day average flows on each of the links for all traffic.

Table 14-5: ATC Flows - 18hr AAWT Flows

Site No.	Road Link	Survey Period	Survey Date	Posted Speed	85th %ile (mph)	All Traffic (two-way)	HGV Flows	
							HGV	HGV%
1	A156	Summer	25/08/21 - 31/08/21	60	54	13226	1244	9%
		Neutral	05/10/21–11/10/21	60	56	10418	1371	13%
		Neutral v Summer	**-**	**-**	**+2**	-2808	127	4%
2	Main Road	Summer	17/08/21 - 23/08/21	60	46	908	122	13%
		Neutral	05/10/21–11/10/21	60	48	741	125	17%
		Neutral v Summer	**-**	**-**	**+2**	-168	3	3%
3	Main Street	Summer	17/08/21 - 23/08/21	30	37	345	63	18%
		Neutral	05/10/21–11/10/21	30	36	342	52	15%
		Neutral v Summer	**-**	**-**	**-1**	-3	-11	-3%
4	Carr Lane	Neutral	05/10/21–11/10/21	60	39	108	5	5.0%
5	Wansford Road	Summer	17/08/21 - 23/08/21	60	48	876	72	8%
		Neutral	05/10/21–11/10/21	60	46	964	78	8%
		Neutral v Summer	**-**	**-**	**-2**	87	5	0%
6	B1249	Summer	17/08/21 - 23/08/21	60	60	3731	400	8%
		Neutral	05/10/21–11/10/21	60	59	3649	428	12%
		Neutral v Summer	**-**	**-**	**-1**	-82	28	3%
7	Driffield Road	Summer	17/08/21 - 23/08/21	40	33	584	50	9%
		Neutral	05/10/21–11/10/21	40	36	547	53	10%

Site No.	Road Link	Survey Period	Survey Date	Posted Speed	85th %ile (mph)	All Traffic (two-way)	HGV Flows	
							HGV	HGV%
		Neutral v Summer	**-**	**-**	**+3**	-37	3	1%
8	A164 Beverley Road	Summer	17/08/21 - 23/08/21	60	60	10277	1336	13%
		Neutral	05/10/21– 11/10/21	60	58	9190	1075	12%
		Neutral v Summer	**-**	**-**	**-2**	-1087	-260	-1%
9	Burnbutt Lane	Neutral	05/10/21– 11/10/21	60	47	107	4	4.1%

14.5.2.4 Road Safety Analysis

To ensure that there are no underlying highway safety issues across Route Section 1, personal injury collision (PIC) data has been analysed and is included in **Appendix 14C** which outlines the individual route section plans.

Route Section 1 is contained within the authoritative boundary of ERYC and therefore PIC data has been requested from ERYC covering the most recent five-year period, with data provided data from 01/01/2016 – 31/12/2020.

A combined total of 15 Collison's have been recorded across the highway network within Route Section 1, 10 of which were classed as slight in severity, with 4 serious and 1 fatal collision recorded. **Table 14-6** presented below, provides a summary of collisions by the severity and year.

Table 14-6: Collisions by Severity and Year

Year	Severity									Total
	Slight			Serious			Fatal			
	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	
2015	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	0	0	0	0	0	0	**0**
2017	3	0	0	2	0	0	0	0	0	**5**
2018	1	0	0	1	0	0	0	0	0	**2**
2019	5	0	0	1	0	0	1	0	0	**7**
2020	1	0	0	0	0	0	0	0	0	**1**
2021	0	0	0	0	0	0	0	0	0	**0**
Total	**10**	0	0	**4**	0	0	**1**	0	0	**15**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

As presented above, the greatest number of collisions within the search cordon occurred in 2019, with a total of 7 collisions.

None of the recorded collisions involved a pedestrian or cyclist throughout the 5-year period.

The recorded collisions have been filtered to provide an overview of PIC's recorded along each road link within Route Section 1.

Table 14-7: Collisions by Location

Location	Severity									Total
	Slight			Serious			Fatal			
	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	
A164	3	0	0	2	0	0	1	0	0	**6**
A165	5	0	0	2	0	0	0	0	0	**7**
Unclassified	2	0	0	0	0	0	0	0	0	**2**
Total	**10**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**15**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

A total of 7 collisions have been recorded on the A165 link, which is the highest total collision recorded across the study area (**Table 14-7**). Of those collisions recorded on or along the A165, five were classed as slight in severity, with two serious and no fatal collision recorded. None of the collisions recorded along the A165 involved a pedestrian, or cyclist.

Collision by Primary Contributory Factor

Table **14-8** identifies the primary contributory factor for the collisions along the key links.

Table 14-8: Collision Attributes

Attributes	Severity			
	Slight	Serious	Fatal	Total
Failed to look properly	1	2	1	**4**
Failed to judge other persons path or speed	1	0	0	**1**
Exceeding speed limit	1	0	0	**1**
Animal or object in carriageway	1	0	0	**1**
Dazzling headlights	1	0	0	**1**
Careless/Reckless/ In a hurry	1	2	0	**3**
Distraction in vehicle	4	0	0	**4**
Total	**10**	**4**	**1**	**15**

No collisions have been recorded within Route Section 1 where the road layout has been identified as a contributory factor.

Collisions involving HGVs

Of the 15 collisions recorded across the study area within the latest five-year period, none involved a HGV.

Fatal Collisions

One fatal collision has been recorded across Route Section 1, the details of which are presented below, with analysis of the contributing factors also provided (**Table 14-9**).

Table 14-9: Collision Attributes - Fatal Collisions

Accident Ref.	Date/Time	Location	Contributing Factor	Details
868662	15/08/2019 18:20	A614 Beverley Road/Unclassified Road Junction (E: 502031 N: 454387)	Failed to look properly, careless/reckless driving	Driver fails to look properly when entering A164 Beverley Road from junction with an Unnamed Road, causing a fatal collision.

Summary

This section has provided a review of the collision data for the most recent five-year period provided by ERYC across Route Section 1.

14.5.3 Route Section 2 – Bainton – Market Weighton

Route Section 2 covers the c. 16km distance between Bainton and Market Weighton, with the route generally continuing on a north-east to south-west alignment.

14.5.3.1 PRoW/NCN Network

This section outlines the details of the PRoW and NCN in Route Section 2. The individual route section plans are contained in **Appendix 14A.**

The cable route diverts south-west at the start of Route Section 2 after crossing the Minster Way and then also crosses PRoW footpath WATTF01. The footpath provides a short north-west to south-east connection over c. 250 m. The crossing of WAFFF01 and Minster Way are proposed via open cut and no temporary PRoW diversion is required.

Some 2 km west of Lund, the proposed cable route crosses PRoW footpath LUNDF02 which extends c. 800 m south of an unnamed road west of A164 Beverley Road via open cut. No temporary PRoW diversion is required. The proposed route then diverts south, crossing PRoW footpath DHOLF03 via open cut, DHOLF03 provides an east-west connection between Kipling Cotes Race Course and an unnamed road over a c. 1.1 km through open agricultural land. No temporary PRoW diversion is required.

HDD_024 crosses NCN 66 which runs along Kiplingcotes Lane and Bridleway ETTOB05 which commences at the eastern end of Goodhanham Bridleway no.9 and leads east along a disused railway for c. 3.75 km to Gardham Road. No temporary diversion is required to either crossing.

The proposed route further crosses NCN 164, which runs along Kiplingcotes Lane as it diverts south towards the A1079 Weighton Hill, with the crossing proposed via open cut, no temporary diversion required.

The cable route also crosses PRoW footpath GOODF06 which extends between Spring Road and Kiplingcotes Lane over agricultural land. No temporary PRoW diversion is required.

14.5.3.2 Surrounding Highway Network

The next section describes the local highway network within Route Section 2.

The key road links identified across Route Section 2 are identified below:

- B1248;
- Beverley Road;
- A1079;
- A1034; and
- Cliffe Road.

B1248

The B1248 runs roughly on a north-south alignment and connects Morton and Norton with Beverley via Wetwang, provides a connection with the A166. The B1248 is mostly subject to the national speed limit and is rural in nature, although this varies along the c. 50 km route.

The B1248 crosses the study area between the villages of Bainton and Lund, some 12 km north of Beverley. The B1248 Beverley Road extends south from a priority junction with the A614 Middleton Road at the southern extent of Bainton, shortly after the speed limit increases from 30 mph to the national speed limit.

Between Bainton and Lund the A1248 is known as Station Road and is generally formed of 6.7 m wide single carriageway, which is flanked by grass verges to both sides. The B1248 is marked as an 'other proposed HGV route' as part of the ERYC HGV Freight Map. The route can be utilised to access key strategic routes within the area such as the A614 and the A1079 to the north and south of the study area, respectively.

The B1248 provides access to the A164 via Wilfholme Road, although Wilfholme Road forms part of the signed HGV maximum 7.5t weight restriction zone. **Figure 14-6** below shows the on-ground HGV weight restrictions zone warning signs, from the B1248/Wilfholme Road junction.

Figure 14-6: Wilfholme Road Sign HGV Weight Restriction

Beverley Road

Beverley Road runs on a north-west – south-east alignment between the A614 and the B1248, providing access to the villages of Middleton-on-the-Wolds and Lund, to the north-west and south-east of the study area, respectively.

At its north-western extents, Beverley Road provides one-way access from A614, with access to the A614 provided via South Street and then Chapel Lane, which circumnavigate the southern extent of the village before meeting the A614 in the form of a priority T junction, within the village centre.

Beverley Road is formed of a c. 6 m wide single carriageway which is flanked by grassed verges to both sides and is subject to the national speed limit, although this reduces to 30 mph on approach to Middleton-on-the-Wolds.

Unnamed Rural Access Roads

A network of unnamed rural roads provide access to a large area of agricultural land as well as several residential dwellings and farm outbuildings from priority junctions with the A614, the B1248 and the A1079 to the north, east and south, respectively.

A number of the routes cross the study area and are generally formed of a 3 m-4 m wide single-track rural carriageway and are subject to the national speed limit.

The southernmost link is known as Kiplingcotes Lane and provides the access to the A1079 via a priority crossroads with Hessleskew Lane. Hessleskew Lane marks the commencement of a further signed HGV weight restriction zone, which covers the area south of the A1079 and is bound to the east by the A15, the A63 to the south and A1034 to the west.

A1079

The A1079 runs between York and Hull and also provides access to Beverley and Pocklington over the c. 60 km route, which runs roughly on a north-east to south-west alignment. The A1079 passes through the study area as the A1079 Weighton Hill, to the east of Market Weighton. The eastbound carriageway is formed of two lanes for c. 2.5 km east of the four-arm roundabout junction with Sancton Road within Market Weighton, with the westbound carriageway formed of a single lane. Throughout the study area the A1079 is subject to the national speed limit (60 mph).

The A1079 can be utilised to access other key strategic routes within the local area such as the A1035, the A614 and the A166.

A1034

The A1034 runs on a north-south alignment from a four-arm roundabout junction with Sancton Road and A1079 within Market Weighton over a c. 12 km distance to grade separated junction with the A63, which continues as the M62 some 5.5 km to the west, both of which form part of the SRN.

The A1034 passes through the study area in the form a c. 6.7 m wide single carriageway, with a footway of varying width flanking the eastbound carriageway over initial c. 875 m. A footway then commences along the western flank whilst the A1034 continues south-east as Gaufer Hill and then Market Weighton Road.

The A1034 is mostly subject to the national speed limit, however this reduces to 40 mph and then 30 mph on approach to Sancton, before reverting back to the national speed limit upon exiting the village.

Cliffe Road

Cliffe Road extends south from its ghost island priority junction with the A1079 over a c. 9 km distance through to the village of North Cave, where the route continues as Townsend Lane, which can be utilised, in combination with the B1230 to provide access to the junction 38 M62, which forms part of the SRN.

Cliffe Road crosses the study area just south of Market Weighton and is formed of a c. 6.3 m wide single carriageway with areas of grassed verge and sporadic agricultural access point on both sides of the carriageway. Cliffe Road is also subject to a continuation of the national speed limit (60 mph), which is present along the A1079 to the north of the study area.

14.5.3.3 Baseline Traffic

Introduction

The ATC locations across Route Section 2 have been selected to provide a basis for the analysis and incorporates local routes within the corridor close to potential sensitive receptors and also routes along key strategic links to provide a robust baseline for assessment.

The individual route section plans for the traffic counts are contained in **Appendix 14B**.

14.5.3.4 Baseline Traffic Flows

The ATC data has been used to derive 18 hour AAWT for individual links for total traffic and HGVs.

Table 14-10 below lists the 18-hour 5-day average flows on each of the links for all traffic.

Table 14-10: ATC Flows - 18hr AAWT Flows

Site No.	Road Link	Survey Period	Survey Date	Posted Speed	85th %ile (mph)	All Traffic (two-way)	HGV Flows	
							HGV	HGV%
10	A614	Summer	17/08/21 -23/08/21	60	55	13252	1810	14%
		Neutral	05/10/21 – 11/10/21	60	54	10010	1690	17%
		Neutral v Summer	**-**	**-**	**-1**	-3242	-120	3%
11	B1248 Station Road	Neutral	05/10/21 – 11/10/21	60	63	4846	745	15.4%
12	Beverley Road	Neutral	05/10/21 – 11/10/21	60	59	1044	107	10.3%
13	Unnamed Road	Neutral	16/10/21 – 22/10/21	60	55	102	8	7.7%
14	Holme Wold Road	Neutral	05/10/21 – 11/10/21	60	45	140	10	7.0%
15	Fisher Street	Neutral	16/10/21 – 22/10/21	60	50	115	26	22.3%
16	Unnamed Road (east of Kiplingcotes Lane)	Neutral	05/10/21 – 11/10/21	60	48	164	15	9.3%
17	Kiplingcotes Lane	Neutral	05/10/21 – 11/10/21	60	42	127	26	20.2%
18	A1079	Neutral	05/10/21 – 11/10/21	60	61	11068	1828	16.5%
19	A1034 Sancton Road	Neutral	05/10/21 – 11/10/21	60	60	7208	1251	17.4%
20	Cliffe Lane	Neutral	05/10/21 – 11/10/21	60	66	2748	563	20.5%

14.5.3.5 Road Safety Analysis

To ensure that there are no underlying highway safety issues across Route Section 2, personal injury collision (PIC) data has been analysed and is included in **Appendix 14C**. Route Section 2 is contained within the authoritative boundary of ERYC and therefore PIC data has been requested from ERYC covering the most recent five-year period, with data provided data from 01/01/2016 – 31/12/2020.

A combined total of 10 Collison's have been recorded across the highway network within Route Section 2, 6 of which were classed as slight in severity, with 2 serious and 2 fatal collisions recorded. **Table 14-11** presented below, provides a summary of collisions by the severity and year.

Table 14-11: Collisions by Severity and Year

	Severity									
	Slight			Serious			Fatal			
Year	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Total
2015	0	0	0	0	0	0	0	0	0	**0**
2016	3	0	0	0	0	0	0	0	0	**3**
2017	0	0	0	1	0	0	0	0	0	**1**
2018	1	0	0	1	0	0	0	0	0	**2**
2019	1	0	0	0	0	0	2	0	0	**3**
2020	1	0	0	0	0	0	0	0	0	**1**
2021	0	0	0	0	0	0	0	0	0	**0**
Total	**7**	0	0	**2**	0	0	**2**	0	0	**10**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

As presented above, the greatest number of collisions within the search cordon occurred in 2019, with a total of 3 collisions, 2 of which resulted in fatalities.

None of the recorded collisions involved a pedestrian or cyclist throughout the 5-year period.

The recorded collisions have been filtered to provide an overview of PIC's recorded along each road link within Route Section 2.

Table 14-12: Collision by Location

	Severity									Total
	Slight			Serious			Fatal			
Location	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	
A1034	2	0	0	0	0	0	1	0	0	**3**
B1248	1	0	0	2	0	0	1	0	0	**4**
Unclassified	3	0	0	0	0	0	0	0	0	**3**
Total	**6**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**10**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

A total of 4 collisions have been recorded on the B1248 link (**Table 14-12**). Of those collisions recorded on along the B1228, one was classed as slight in severity, with two serious and one fatal collision recorded. None of the collisions recorded along the B1228 involved a pedestrian, or cyclist.

Collision by Primary Contributory Factor

Table 14-13 identifies the primary contributory factor for the collisions along the key links.

Table 14-13: Collision Attributes

Attributes	Severity			
	Slight	Serious	Fatal	Total
Loss of Control	0	0	1	**1**
Driver impaired by alcohol	1	0	0	**1**
Exceeding speed limit	0	0	1	**1**
Animal or object in carriageway	2	0	0	**2**
Deposit on the road	1	0	0	**1**
Careless/Reckless/ In a hurry	1	2	0	**3**
Road Layout	1	0	0	**1**
Total	**6**	**2**	**2**	**10**

Road layout was identified as a contributory factor resulting in one slight collision across Route Section 2. Individual collision analysis has been provided of each collision recorded where road layout has been recorded as a contributing factor.

The afore mentioned induvial collision analysis is presented within **Table 14-14** below.

Table 14-14: Collision Attributes - Road Layout Collisions

Accident Ref.	Date/Time	Location	Severity	Contributing Factor	Description	Analysis
326587	26/08/2018 16:15pm	B1248 Station Road (E: 496851 N: 450455)	Slight	Road Layout (Driver Visibility Affected)	Driver of car traveling southeast bound along B1248 Station Road from Bainton,	At the time of the accident the weather conditions were poor, which could have reduced driver visibility. The road was also cited as slippery, which could have increased the chances of the driver losing control. No accident trend can be identified as the result of the road layout affecting driver visibility as the above accident was only one of two accidents recorded in this specific location, since 1998.

Collisions involving HGVs

Of the 10 collisions recorded across the study area within the latest five-year period, none involved a HGV.

Fatal Collisions

Two fatal collisions have been recorded across the Route Section 2, none of which involved a pedestrian and/or cyclist. Each of the recorded fatal collisions were not located in proximity to each other and can be seen to be spaced out across the network. The contributing factors to each fatal collision have been analysed in detail to establish the presence, or otherwise, of any underlying accident trends/hotspots. Details of the analysis is contained within **Table 14-15** below.

Table 14-15: Collision Attributes - Fatal Collisions

Accident Ref.	Date/Time	Location	Contributing Factor	Details
873192	01/09/2019 16:22	A1034 Market Weighton - c. 180m north of Existing Farm Access Junction (E: 489428 N: 440499)	Travelling too fast for the conditions/loss of control	Driver loses control of vehicle as a result of driving too fast for the conditions, traveling south-east bound on A1032 Market Weighton Road, causing collision with vehicle traveling north-west bound, resulting in a fatal collision.
876708	11/09/2019 07:25	B1248 Lund Road – Opposite Existing Farm Access (E: 497000 N: 449691	Loss of control	Driver loses control traveling north-east bound along B1248 Lund Road, colliding with a vehicle traveling south-east bound, resulting in a fatal collision.

Summary

This section has provided a review of the collision data for the most recent five-year period provided by ERYC across Route Section 2.

14.5.4 Route Section 3 - Market Weighton - River Ouse

Route Section 3 covers the c. 24km distance between Market Weighton and the River Ouse, which demarks the ERYC and NYCC authoritative boundary.

14.5.4.1 PRoW/NCN Network

This section outlines the details of the PRoW and NCN in Route Section 3. The individual route section plans are contained in **Appendix 14A**.

Some 500 m north-east of the crossing Cliffe Road the cable route crosses PRoW footpath MWEIF11 which extends south-east from Cliffe Road. The crossing is proposed via open cut and no temporary PRoW diversion is required.

The cable route crosses PRoW footpath SPALF12 some 700 m north of the crossing of Featherbed Drain, a proposed access track will also extend down the farm track that the PRoW is located on and a localised diversion may be required to achieve a broadly perpendicular crossing of the construction swathe and provisions made for continued safe use of the route during construction.

Just south of HDD_034 the proposed cable route crosses PRoW HOWDF13, the requirement, or otherwise for a temporary PRoW diversion is subject to confirmation. The route then diverts south-west and crosses PRoWs WRESF09, WRESF08 and WRESF10, with no temporary PRoW diversions required.

South of the A63, the cable route crosses PRoW ASSEF01 via open cut, no temporary PRoW diversion is required. HDD_037 crosses underneath PRoW ASSEF02 which runs along an unnamed access track, the cable crosses underneath the track.

HDD_038 crosses under NCN route 65, which runs along Main Street between Asselby and Barmby on the Barmby on the Marsh.

14.5.4.2 Surrounding Highway Network

The next section describes the local highway network within Route Section 3.

The key road links identified across Route Section 3 are identified below:

- Sand Lane;
- A63;
- M62;
- Lock Lane;
- Skiff Lane;
- Drain Lane;
- Burnsea Lane;
- A163;
- B1228; and
- Main Street (Asselby).

Sand Lane

Sand Lane provides a c. 5.3 km connection between priority junctions with Cliffe Road and the A614 to the east and west, respectively, and is subject to the national speed limit (60 mph) throughout.

Sand Lane is formed of a c. 5 m wide single-track carriageway which is flanked by verges of varying width to both sides, as the route crosses the study area.

A63

The eastern section of the A63 runs roughly on an east-west alignment between the A1033 within Hull City Centre c. 22 km before continuing as the M62. This section of the A63, along with the A1033 and M62 form part of the SRN. Between the A1033 and M62, the A63 is formed of a dual carriageway, benefits from street lighting and is subject to the national speed limit (70 mph).

The eastern section of the A63 extends c. 22 km west from the A1033 within Hull City Centre before the route continues as the M62. A grade separated junction provides access to the A164 and the A15 some 11 km east of the A63/A1034 junction. The A15 represents the major north-south route to/from Hull and crosses the River Humber in the form of the Humber Bridge, providing access to the M180, some 18 km east of Scunthorpe, before continuing south towards Lincoln.

The western section of the A63 extends north-west from a three-arm roundabout junction with the A614 Boothferry Road over a c. 14 km distance through to a four-arm roundabout junction with A19/Highfield View, to the north-east of Selby. The A63 crosses the study area c. 3.5 km north-west of the three-arm roundabout junction with A614 Boothferry Road, at which point the A63 is formed of a c. 6.7 m wide single carriageway which is flanked by grass verges to both sides and is subject to the national speed limit.

The A63 extends south from its four-arm roundabout junction with Highfield View/A19 via a short section of the A19, to form the Selby-bypass before continuing westbound providing access to Leeds via the junction 46 M1, known as the Austhorpe Interchange.

M62

The M62 extends west from the A63 and represents the major east-west vehicular Trans-Pennine route and extends over c. 172 km between Hull and Liverpool, via Leeds and Manchester. The M62 is by nature formed of a dual carriageway and is subject to the national speed limit (70 mph), and benefits from street lighting. Junctions 36-38 provide access to/from the study area via a number of routes.

Lock Lane

Lock Lane is formed of a c. 3.5 m wide single-track carriageway which extends c. 3 km west from a priority junction with Port Royal providing access to agricultural land along both sides of the carriageway, as well as a number of agricultural out buildings and a large residential dwelling at its western extent.

Lock Lane can be utilised in combination with Port Royal to access A614 Howden Road to the east of the study area.

Skiff Lane

Skiff Lane runs roughly on a north-west south-east alignment between Port Royal and Drain Lane over a c. 4km route providing access to a number of areas of agricultural land and Skiff Lane industrial Estate.

Skiff Lane is subject to the national speed limit and is formed of a c. 4-5 m wide single-track carriageway as the route crosses the study area.

Drain Lane

Drain Lane extends south from Skiff Lane before diverting north-west to provide access to the A614 in the form of a priority crossroads junction, before continuing north-west.

Drain Lane is subject to the national speed limit and is formed of a c. 3.5 m wide single-track carriageway with areas of grassed verge to both sides, as the route crosses the study area. Drain Lane provides access to a number of agricultural complexes as well as Burnsea Lane.

Burnsea Lane

Burnsea Lane extends south from Drain Lane before diverting north-west to provide access to the A614 in the form of a priority crossroads junction with the A614/Arglam Lane, which continues north-west forming part of a signed HGV max. 7.5t weight restrictions zone.

Burnsea Lane is formed of a c. 3.5 m wide single-track carriageway flanked by areas of grass verge to both sides of the carriageway and is subject to the national speed limit, as the route crosses the study area.

A163

The A163 runs to the north of the study area and extends over a c. 19 km distance between a three-arm roundabout junction with the A19, just north of Selby, through to a three-arm roundabout junction with the A614, within Holme-on Spalding-Moor.

The A163 is generally formed of a 6.7 m wide single carriageway and is mainly subject to the national speed limit, although this reduces on approach to, and passing through villages of North Duffield, Bubwith and Holme-on-Spalding-Moor.

The A163 can be accessed via the B1228 in the form of a priority crossroads junction and provides approximate equidistant access to the A19 and A63, both of which represent key strategic routes within the vicinity of the study area.

B1228

The B1228 extends roughly on north-south alignment over a c. 30 km distance between York and Howden and crosses the study area just north of Howden Railway Station, at which point the road is formed of a c. 7 m wide single carriageway and is subject to a 40-mph speed limit.

North of the railway line, the B1228 is known as Wood Lane and is flanked by a narrow footway to the west over the initial 100 m, thereafter grass verges are present to both sides of the carriageway. The B1228 then continues north providing access to the A163 within the village of Highfield before continuing north before meeting A1079 in the form of a traffic signal-controlled junction, providing access to the SRN in the form of the A64 and York City Centre.

South of the railway line, which the B1228 crosses in the form of a traffic signal-controlled level crossing, the route continues as B1228 Station Road and is formed of a c. 6.5 m wide single carriageway, which is subject to a 40 mph speed limit and flanked by a c. 3 m wide shared pedestrian/cycle route, to the west.

The speed limit reduces to 30 mph on approach to the village of Howden, where the B1228 Station Road meets A1230 Bridgegate/Flatgate in the form of a priority T junction, at which point 7.5t weight restrictions apply.

Main Street (Asselby)

Main Street extends west from its priority crossroads junction with the A63 Knedlington Road/B1228 and provides access to a number of residential dwellings, agricultural complexes and the village of Asselby, before continuing west as High Street, which in turn provides cul-de-sac access to Barmby on the Marsh.

Main Street crosses the study area in the in the form of a c. 6-7 m wide carriageway which is flanked by areas of verge to both sides and subject to the national speed limit (60 mph), although this reduces to 30 mph on approach to, and through the village of Asselby, to the east.

14.5.4.3 Baseline Traffic

Introduction

The ATC locations across Route Section 3 have been selected to provide a basis for the analysis and incorporates local routes within the corridor close to potential sensitive receptors and also routes along key strategic links to provide a robust baseline for assessment.

The individual route section plans for the traffic counts are contained in **Appendix 14B**.

Baseline Traffic Flows

The ATC data has been used to derive 18 hour AAWT for individual links for total traffic and HGVs.

Table 14-16 below lists the 18-hour 5-day average flows on each of the links for all traffic.

Table 14-16: ATC Flows - 18hr AAWT Flows

Site No.	Road Link	Survey Period	Survey Date	Posted Speed	85th %ile (mph)	All Traffic (two-way)	HGV Flows	
							HGV	HGV%
21	Sand Lane	Neutral	05/10/21 – 11/10/21	60	49	459	65	14.3%
22	Lock Lane	Neutral	05/10/21 – 11/10/21	60	39	123	25	20.0%
23	Skiff Lane	Neutral	05/10/21 –	60	47	1097	358	32.7%

Site No.	Road Link	Survey Period	Survey Date	Posted Speed	85th %ile (mph)	All Traffic (two-way)	HGV Flows	
							HGV	HGV%
			11/10/21					
24	Drain Lane	Neutral	05/10/21 – 11/10/21	60	49	159	27	16.8%
25	Burnsea Lane	Neutral	05/10/21 – 11/10/21	60	39	118	17	14.1%
26	A614 Holme Road	Neutral	05/10/21 – 11/10/21	60	54	9196	1878	20.4%
27	B1228 Wood Lane	Neutral	05/10/21 – 11/10/21	40	51	2986	707	23.7%
28	A63 Selby Road	Neutral	05/10/21 – 11/10/21	60	59	7683	1115	14.5%
29	Main Street (Drax)	Neutral	05/10/21 – 11/10/21	60	48	1098	144	13.1%

Road Safety Analysis

To ensure that there are no underlying highway safety issues across Route Section 3, personal injury collision (PIC) data has been analysed and is included in **Appendix 14C.**

Route Section 3 is contained within the authoritative boundary of ERYC and therefore PIC data has been requested from ERYC covering the most recent five-year period, with data provided data from 01/01/2016 – 31/12/2020.

A combined total of 14 Collison's have been recorded across the highway network within Route Section 1, 7 of which were classed as slight in severity, with 6 serious and 1 fatal collisions recorded. **Table 14-17** presented below, provides a summary of collisions by the severity and year.

Table 14-17: Collisions by Severity and Year

	Severity									
	Slight			Serious			Fatal			
Year	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Total
2015	0	0	0	0	0	0	0	0	0	**0**
2016	2	0	0	1	0	0	0	0	0	**3**
2017	3	0	0	1	0	0	1	0	0	**4**
2018	1	0	0	1	0	0	0	0	0	**2**
2019	2	0	0	1	0	0	0	0	0	**3**
2020	0	0	0	1	1	0	0	0	0	**2**
2021	0	0	0	0	0	0	0	0	0	**0**

Year	Severity									Total
	Slight			Serious			Fatal			
	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	
Total	**7**	0	0	**6**	0	0	**1**	0	0	**14**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

As presented above, the greatest number of collisions within the search cordon occurred in 2017, with a total of 4 collisions, 1 of which was fatal.

1 collision involved a pedestrian and was classed as serious in severity.

The recorded collisions have been filtered to provide an overview of PIC's recorded along each road link within Route Section 3.

Table 14-18: Collisions by Location

Location	Severity									Total
	Slight			Serious			Fatal			
	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	
A614	3	0	0	2	1	0	1	0	0	**7**
B1228	3	0	0	2	0	0	0	0	0	**5**
A63	1	0	0	0	0	0	0	0	0	**1**
Unclassified	0	0	0	1	0	0	0	0	0	**1**
Total	**7**	**0**	**0**	**5**	**1**	**0**	**1**	**0**	**0**	**14**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

A total of 7 collisions have been recorded on the A614 link, of which three was classed as slight in severity, with two serious and one fatal collision recorded. One recorded collision along the A614 involved a pedestrian (**Table 14-18**).

Collision by Primary Contributory Factor

Table 14-19 identifies the primary contributory factor for the collisions along the key links.

Table 14-19: Collision Attributes

Attributes	Severity			
	Slight	Serious	Fatal	Total
Loss of control	0	0	0	**1**
Driver failed to look properly	1	2	0	**3**
Driver impaired by alcohol	1	0	0	**1**
Exceeding speed limit	0	0	0	**0**
Fatigue	0	1	1	**2**
Animal or object in carriageway	0	0	0	**0**

Attributes	Severity			
	Slight	Serious	Fatal	Total
Deposit on the road	0	1	0	**1**
Careless/Reckless/ In a hurry	1	2	0	**3**
Overloaded or poorly loaded trailer	1	0	0	**1**
Distraction outside vehicle	1	0	0	**1**
Stationary/parked vehicles – visibility affected	2	0	0	**2**
Road Layout	1	0	0	**1**
Total	**7**	**6**	**1**	**14**

One collision within Route Sections 2 has been recorded with the road layout identified as a contributory factor. Therefore, in order to provide a robust assessment, this collision has been assessed individually, with the analysis presented in the **Table 14-20** below.

Table 14-20: Collision Attributes - Road Layout Collisions

Accident Ref.	Date/Time	Location	Severity	Contributing Factor	Description	Analysis
343957	19/10/2018 14:44pm	A63, adjacent to Parks Farm Access (E: 472679 N: 429154)	Slight	Road Layout (Bend, Hill, or Narrow)	Driver of car travelling loses control when travelling southbound along A63 around sweeping right hand bend.	Notwithstanding the fact that the driver involved in the is cited as losing control, which could be considered as driver error, the above accident is the only accident recorded in that location within the last five years.

Collisions involving HGVs

Of the 14 collisions recorded across the study area within the latest five-year period, none involved an HGV.

Fatal Collisions

one fatal collision has been recorded across the highway network within Route Section 3, none of which involved a pedestrian and/or cyclist. Each of the recorded fatal collisions were not located in proximity to each other and can be seen to be spaced out across the network. The contributing factors to each fatal collision have been analysed in detail to establish the presence, or otherwise, of any underlying accident trends/hotspots. Details of the analysis are contained within **Table 14-21** below.

Table 14-21: Collision Attributes - Fatal Collisions

Accident Ref.	Date/Time	Location	Contributing Factor	Details
188063	29/05/2017 09:30	A614 Howden Road– o/s Sykes Farm (E: 479144	Fatigue, loss of control, Distraction in vehicle & Driver	Driver of vehicle loses control due to fatigue and/or distractions within

Accident Ref.	Date/Time	Location	Contributing Factor	Details
		N: 433711)	Illness or disability, mental or physical	car causing head on collision with vehicle travelling in opposite direction along A614.

Summary

This section has provided a review of the collision data for the most recent five-year period provided by ERYC across Route Section 3.

14.5.5 Route Section 4 - River Ouse – Drax Power Station

Route Section 4 covers the remaining c 1.5 km between the River Ouse, which represents the NYCC/ERYC boundary, and the proposed converter station site, which is located immediately east of Drax Power Station.

Route Section 4 is contained within the Authoritative boundary of NYCC.

14.5.5.1 PRoW/NCN Network

This section outlines the details of the PRoW and NCN in Route Section 4. The individual route section plans are contained in **Appendix 14A**.

HDD_041 crosses underneath the River Ouse and PRoW footpath BOTMF03. The cable passes underneath the watercourse via HDD and no temporary PRoW diversion is required.

The cable route then crosses PRoW footpath 35.47/5/2 west of the River Ouse. Diversion required to avoid two crossings of this PROW (on either side of Black Tom Drain). PRoW is to be temporarily realigned to west of construction swathe and around the temporary construction compound.

The southern section of PRoW footpath 35.47/5/2 and footpath 35.47/9/1 are also crossed on route via HDD, with no temporary PRoW diversion required.

HDD_043 (which may be open cut, subject to agreement) crosses PRoW footpaths 35.26/6/1 and 35.26/5/1 on route to the proposed converter station. It is proposed that footpath 35.26/5/1 will be permanently diverted to extNo temporary PRoW diversion is required to either, with both crossings proposed via HDD.

14.5.5.2 Surrounding Highway Network

A desktop study has been conducted to establish the presence of HGV weight restrictions within the NYCC administrative boundary, within the vicinity of the English Onshore Scheme.

The routes outlined below are not subject to HGV restrictions, with the surrounding network providing good access to/from the SRN and strategically important components of the local highway network.

The key road links identified across Route Section 4 are identified below:

- Redhouse Lane;
- Carr Lane (Drax);
- New Road;
- Main Road;
- A19;
- A645; and
- A1041.

Redhouse Lane

Redhouse Lane extends west from Carr Lane over c. 300 m meeting Main Road and Sharp Hill Lane in the form of a priority crossroads junction, before continuing west and then north providing cul-de-sac access to an agricultural complex, west of the River Ouse.

Redhouse Lane is generally formed of a c. 6.7 m wide single carriageway and is subject to the national speed limit, within the vicinity of the study area.

Carr Lane (Drax)

Carr Lane forms a short length of c. 6.7 m wide single carriageway which links Redhouse Lane with New Road to the west, adjacent to Drax Power Station. Carr Lane is subject to the national speed limit and also provides access to Wren Hall Lane.

New Road

New Road extends north form the 4-arm roundabout junction with A645/Main Road and provides access to Drax Power Station, Carr Lane and Wren Hall Lane. New Road is formed of a c. 7 m wide single carriageway with a footway of c. 1.5 m to the west and an area of verge to the east. New road is subject to the national speed limit and provides access to the wider highway network to the south.

Main Road

Main Road leads east from the four-arm roundabout junction with A645/New Road provides access to the village of Drax, before diverting north meeting Redhouse Lane and Sharp Hill Lane in the form of a priority crossroads junction.

The speed limit reduces to 30 mph on approach to Drax, with footways provided to both sides of the c. 6-6.5 m wide single carriageway, as Main Road passes through the village. The carriageway narrows upon exiting the village and the road reverts to the national speed limit c. 400 m north of The Read School.

A19

The A19 is an all-purpose dual carriageway road subject to the national speed limit running from the junction with the A1 at Seaton Burn north of Newcastle in a southern direction towards Doncaster, running parallel with the A1.

It is a main distributor road serving the heavy industry associated with ports of Teesside, Wearside and Tyneside.

The A19 can be accessed via a combination of the B1228 and A163 and represents a key strategic route within the vicinity of the study area.

A645

The eastern extent of the A645 commences at a three-arm roundabout junction with A1041 Station Road, just north of the village of Carlton.

The Eastern extent of the A645 runs roughly on a north-west – south-east alignment over a c. 6.5 km providing access to the village of Drax, and Drax Power Station. Here the A645 extends north-east over a c. 2 km distance before meeting New Road and Main Road, with the former providing access to Drax Power Station, and the latter serving the village of Drax.

Over its initial 2 km length between the A1041 and the aforementioned roundabout junction, the A645 is formed of c. 6.7 m wide single carriageway which is flanked by a c. 1.5-2 m wide footway to the north, and grass verge to the south.

The A645 extends south, and then south-west from the A645/New Road/Main Road roundabout c. 4.5 km before meeting A614 in the form of a three-arm roundabout junction and can be used in combination with the A614, to access junction 36 M62 both eastbound and westbound entry and exit slip roads.

This section of the A614 is subject to the national speed limit and also formed of a c. 6.7 m wide single carriageway, with areas of grassed verge, to both sides.

A1041

The A1041 runs between A614 and A63 on a roughly on a north-south alignment via the villages of Carlton and Snaith over a c. 12.5 km route. Just north of Carlton the A1041 forms a three-arm roundabout junction with the A645 provides access to Drax Power Station and can be utilised to access the study area.

14.5.5.3 Baseline Traffic

Introduction

The ATC locations across Route Section 4 have been selected to provide a basis for the analysis and incorporates local routes within the corridor close to potential sensitive receptors and also routes along key strategic links to provide a robust baseline for assessment.

The individual route section plans for the traffic counts are contained in **Appendix 14B**.

Baseline Traffic Flows

The ATC data has been used to derive 18 hour AAWT for individual links for total traffic and HGVs

Table 14-22 below lists the 18-hour 5-day average flows on each of the links for all traffic.

Table 14-22: ATC Flows - 18hr AAWT Flows

Site No.	Road Link	Survey Period	Survey Date	Posted Speed	85th %ile (mph)	All Traffic (two-way)	HGV Flows	
							HGV	HGV%
30	Redhouse Lane	Neutral	05/10/21–11/10/21	60	46	443	66	14.9%
31	New Road	Neutral	05/10/21–11/10/21	60	49	1752	341	19.5%
32	A645 Adj. Power Station Access	Neutral	05/10/21–11/10/21	60	49	8794	1077	12.2%
33	Main Road (Drax)	Neutral	05/10/21–11/10/21	60	42	1987	249	12.5%
34	A645 E	Neutral	05/10/21–11/10/21	60	63	8099	1263	15.6%

To ensure that there are no underlying highway safety issues across Route Section 4, personal injury collision (PIC) data has been analysed and is included in **Appendix 14C**.

Route Section 4 is contained within the authoritative boundary of NYCC and therefore PIC data has been requested from NYCC covering the most recent five-year period, with data provided data from 01/01/2016 – 31/12/2020.

A combined total of 5 Collison's have been recorded across the highway network within Route Section 4, all of which were classed as slight in severity. **Table 14-23** presented below, provides a summary of collisions by the severity and year.

Table 14-23: Collision by Severity and Year

Year	Severity									Total
	Slight			Serious			Fatal			
	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	
2015	1	0	0	0	0	0	0	0	0	**1**
2016	0	0	0	0	0	0	0	0	0	**0**
2017	1	0	0	0	0	0	0	0	0	**1**
2018	0	0	0	0	0	0	0	0	0	**0**
2019	0	0	1	0	0	0	0	0	0	**1**
2020	1	0	0	0	0	0	0	0	0	**1**
2021	0	0	1	0	0	0	0	0	0	**1**
Total	**3**	0	**2**	**0**	0	0	0	0	0	**5**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

As presented above, the collisions recorded evenly across the 5-year period, with no identifiable peak.

1 collision involved a cyclist and was classed as slight in severity.

The recorded collisions have been filtered to provide an overview of PIC's recorded along each road link within Route Section 4.

Table 14-24: Collisions by Location

Location	Severity									Total
	Slight			Serious			Fatal			
	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	Vehicle*	Ped	Cyclist	
A645	3	0	1	0	0	0	0	0	0	**4**
Unclassified	1	0	0	0	0	0	0	0	0	**1**
Total	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**

**Vehicle includes "Driver or rider" and "Vehicle or pillion passenger"*

A total of 4 collisions have been recorded on the A645 link, all of which were classed as slight in severity, with one collision involving a cyclist (**Table 14-24**).

Collision by Primary Contributory Factor

Table 14-25 below identifies the primary contributory factor for the collisions along the key links.

Table 14-25: Collision Attributes

Attributes	Severity			
	Slight	Serious	Fatal	Total
Driver failed to look properly	1	0	0	**1**

Attributes	Severity			
	Slight	Serious	Fatal	Total
Driver impaired by alcohol	2	0	0	**2**
Slippery road (due to weather conditions)	1	0	0	**1**
Road layout	1	0	0	**1**
Total	**5**	**0**	**0**	**5**

One collision within Route Section 4 has been recorded with the road layout identified as a contributory factor. Therefore, in order to provide a robust assessment, this collision has been assessed individually, with the analysis presented in **Table 14-26** below.

Table 14-26: Collision Attributes - Road Layout Collisions

Accident Ref.	Date/Time	Location	Severity	Contributing Factor	Description	Analysis
12170113642	29/06/2017 08:59am	Main Road (Drax), c. 300m south of the Redhouse Lane/Main Road/Sharp Hill Lane junction (E: 467873 N: 427091)	Slight	Road Layout (Bend, Hill, or Narrow)	Driver of car travelling southbound on Main Road towards Drax village from Redhouse Lane collides with car travelling in opposite direction on obscured bend.	The above accident is the only accident recorded within the specific location not only in the last five years, but supplementary review Crashmap.co.uk has also confirmed that no other accident has been recorded in that location since 1998.

14.5.5.4 Collisions involving HGVs

Of the 5 collisions recorded across the study area within the latest five-year period, none involved a HGV.

14.5.5.5 Fatal Collisions

No fatal collision have been recorded within the latest 5-year period across the highway network within Route Section 4.

14.5.5.6 Summary

This section has provided a review of the collision data for the most recent five-year period provided by NYCC across Route Section 4.

14.6 Potential Impacts

14.6.1 Introduction

The likely impacts on Traffic and Transport receptors as a result of the English Onshore Scheme construction phases are described in this section.

To provide context for the transport impacts related to the construction of the English Onshore Scheme, this chapter has assessed the period which will generate the greatest amount of traffic, and a summary of the main engineering elements and their related construction activities is provided in Table 13.11: Summary of Main Engineering Elements and Related Construction Activities and is described in more detail in **Chapter 3: Description of the English Onshore Scheme**.

Table 14-27: Summary of the Main Engineering Elements of construction phase

Element	Related Activities
Cabling Works	Open cut trench and direct burial, Open cut trench and ducting, Trenchless methods, and Jointing
Converter Station	Enabling works, Main civil works, Installation and Commissioning.

By combining these baseline traffic flows with the forecast levels of construction traffic it was possible to predict the likely significant effects caused by the English Onshore Scheme throughout the route sections. It is anticipated that the traffic associated with the construction phase, including plant, equipment and welfare facilities will be transported to the various construction compounds by road.

Properties which lie on the proposed site access route are likely to be the most affected receptor from the traffic associated with the pre-construction, construction and operational works. The proposed access routes largely avoid travelling through the larger urban towns such as Market Weighton.

Despite the scale of the English Onshore Scheme, the amount of traffic associated with the construction is not likely to be significant on the local road network compared to existing levels. In terms of the Strategic Road Network (SRN) given the distance between the nearest access junction (M62J34) and the corridor route there is unlikely to be any impact on the National Highways SRN given the number of access route options and the spread across the day. However, all necessary steps will be taken to ensure that the level of daily construction traffic movements does not cause a significant detrimental impact to the surrounding area and nearby communities.

14.6.2 Mitigation by Design

Where possible embedded mitigation measures, or mitigation by design, have been incorporated into the design such that they inform its design and/or how it shall be constructed. Through iterative assessment, potential impacts have been predicted and opportunities to mitigate them identified with the aim of preventing or reducing impacts as much as possible. This approach provides the opportunity to prevent or reduce potential effects from the outset thereby minimising disruption.

This mitigation by design has been considered when evaluating the significance of the potential impacts. Residual impacts described in this chapter are those which remain considering the proposed project specific mitigation (as outlined in section 14.7).

All access points that require the creation of a junction bellmouth will be designed based on the relevant standard from DMRB CD 123 Geometric Design of at grade priority (Ref 14-7) and signal-controlled junctions and in consultation with the LHA thereby negating any potential safety impact associated with the construction activity associated with the English Onshore Scheme and the existing road safety.

The English Onshore Scheme has been developed through an iterative process which involves seeking to avoid or reduce potential environmental effects through the appropriate routeing and siting of the English Onshore Scheme infrastructure and design of the scheme.

As part of the works the applicant will ensure that a Road Condition Survey is carried out prior to any enabling works or construction commencing. The results of this survey will determine the areas which require remedial works to ensure they are suitable to accommodate construction traffic associated with the English Onshore Scheme whilst maintaining accessibility and safety for existing road users. Furthermore, the current condition of the highway network will be documented that will allow a ‘Wear and Tear Agreement’ to be made with the LHA to ensure that the condition of the highway network is kept to a similar level pre and post construction.

Any AILs that are transported to working areas throughout the English Onshore Scheme will be required to adhere to the guidance and mitigation that will be included in the finalised Construction Traffic Management Plan (CTMP). By doing so, the impact on pedestrians and road users will be mitigated as much as possible. In addition, as identified by the scope, it is anticipated that an AIL report will be needed to assess the delivery of a transformer to the converter station. This will need to demonstrate that a suitable route is available to the proposed converter station site, supported by desk based swept path analysis and a record of consultation and agreement with the key highway authorities, it is envisaged that this will be completed by the appointed contractor. However the location of the converter station, adjacent to the existing Drax Power Station, means that it is considered that the local highway network will be able to accommodate AIL movements, nonetheless as stated above these will be agreed with the LHA in advance of AIL deliveries to site.

The routes which have been selected for conventional construction traffic seek to minimise disruption to residential areas and highly sensitive points in the area surrounding the English Onshore Scheme. However, there are still many settlements and properties that have the potential to be impacted by the construction of the English Onshore Scheme and where necessary appropriate project-specific mitigation measures have been identified to lessen the impact on them (see Section 14.7).

Other identified measures include:

- The necessary agreements and timing restrictions for construction traffic for example Monday – Saturday working, prohibition during school drop-off and pick-up times (this will be managed by appropriate measures in the CTMP which will likely prohibit movements during busy network periods), and prohibition during loading times at commercial premises;
- Proposals for maintenance of the agreed routes for the duration of the construction phase;
- Proposals for monitoring and agreeing maintenance costs;
- Escort arrangements for abnormal loads;
- Route signing;
- Details of the advanced notification to the general public warning of any construction transport movements, specifically AILs;
- Details of information and road signage warning road users of forthcoming AIL transport and construction traffic movements;
- Arrangements for regular road maintenance and cleaning, e.g. road sweeping in the vicinity of the site access point as necessary, drain clearing, wheel cleaning / dirt control arrangements;
- Arrangements for winter road maintenance e.g. de-icing and snow clearing;
- The Contractor will prepare a Construction Workers Travel Plan prior to starting on site setting out measures to reduce the impact of the workforce upon the highway network.
- Construction Contractor speed limits; and
- Community and emergency services liaison details.

14.6.3 Assessment of Potential Impacts: Construction Phase

14.6.3.1 Assessment of Effects

In order to accurately assess the possible impacts that the construction activities will have on the surrounding area, it is important to identify the roads from the surrounding highway network which will be the focus of assessment. Based on the access routeing as developed alongside the design of the English Onshore Scheme, access to working areas is possible via a network of primary, secondary and tertiary roads, as outlined in the baseline environment section above.

The aforementioned roads which will form the base of the traffic impact assessment in this chapter are taken from the recorded ATCs that will then enable the determination of the magnitude of change with regards to traffic to be determined.

The purpose of this section is to identify and discuss the likely significant effects so that appropriate mitigation can be implemented. All the effects identified are considered to be negative and adverse, unless stated otherwise.

14.6.3.2 Forecasted Construction Traffic Levels

With an anticipated construction start year of Quarter four of 2024, it is necessary to use the calculated baseline traffic flows and combine these with the expected volume of construction traffic for the English Onshore Scheme. Once this has been carried out, the relative increase in traffic can be calculated to enable the impact to be assessed and for any required mitigation measures to be identified.

In terms of other developments, both the Drax BECCS development and the Hornsea 4 application have been included, although the impact from Drax will be mainly centred around Route Section 4 and the converter station, with Hornsea having an impact within Route Section 1.

For the Drax BECCS development, whilst detailed traffic flows are not available, c800 staff are predicted to be on site, for purposes of a robust assessment each member of staff has been assumed to travel at a 2/1 ratio (based on the predicted worker movements within this assessment).

As mentioned above, the Hornsea 4 application has its the main impact within Section 1 of the route as the focus of the application is between Hull, Driffield and the East Coast as such there are a few matching links assessed included in both the Hornsea and English Onshore Scheme applications.

This is on top of the existing factored growth which allows for a robust assessment of the impact and takes into account committed developments within the area.

The anticipated volume of construction-related traffic has been calculated by the Applicant based on their experience of delivering similar schemes, identifying the material, plant and personnel requirements for all construction activities, and assigning the associated vehicles to stages in the construction process.

14.6.3.3 Construction Programme

The calculation of predicted construction related traffic identifies the number of HGVs, LGVs, cars and AIL's (two-way movements) per month. In order to assess a worst-case scenario, the highest individual month traffic volume has been used from each of the construction years, and an uplift of 20% has also been applied to the construction traffic to allow for potential variations in vehicle movements following Contractor appointment and ensuring a robust assessment of the construction traffic impact.

it is recognised that the works schedule will likely be completed by multiple teams working across the route at any one time and the phasing of activities are likely to be overlapping throughout the cable installation programme. At this stage the construction programme, as provided by National Grid Engineering team is approximate and has been developed for the purpose of estimating traffic flows and will be subject to further development and confirmation upon appointing a Contractor to deliver the works. Approximate dates of construction are presented in **Table 14-28.**

The table below outlines the total number of vehicles associated with each aspect of the construction.

Table 14-28: Overview of Total Traffic Associated with each Construction Activity

	Construction Period (Months)	Construction Start/End Data	Total Vehicles (2-Way)	Monthly Vehicles (2-Way)	Daily Vehicles (2-Way) on 24 day working month
Construction Compound Installation	9	October 2024 to July 2025	37,320	4,170	187

	Construction Period (Months)	Construction Start/End Data	Total Vehicles (2-Way)	Monthly Vehicles (2-Way)	Daily Vehicles (2-Way) on 24 day working month
Bellmouth Installation	9	December 2024 to July 2025	18,746	2,093	91
Access Road Installation	29	December 2024 to March 2027	57,146	1,976	87
Duct Installation	33	March 2025 to December 2027	97,426	2,958	130
Cable Installation	56	March 2025 to October 2029	54,656	976	48
Converter Station	71 (52 months of construction)	January 2024 to September 2029	111,668	2,147	89

The next table (**Table 14-29**) presents the trip generation in relation to the predicted months with the largest amount of traffic on the road network by activity. It is noted that in relation to the converter station there will be periods of inactivity within the construction period as such the vehicles numbers are based on the number of months where works are occurring. As such the number of monthly trips to the converter station are different across different periods of construction.

Table 14-29: Overview of Traffic Associated with the Busiest Months

	2025 (April to June)		2026 (July to November)	
	Monthly Trips	Daily Trips	Monthly Trips	Daily Trips
Construction Compound Installation	4,170	187	0	0
Bellmouth Installation	2,093	91	0	0
Access Road Installation	1,976	87	1,976	87
Duct Installation	2,959	130	2,958	130
Cable Installation	976	48	976	48
Converter Station	0	0	1,628	68
Total	10,198	543	7,538	333
Total (+20%)	12,238	657	9046	400

Based on the construction programme above and the anticipated levels of construction traffic Summer 2025 and Summer 2026 have been identified as generating the largest amount of traffic.

Assuming a 24-day working month to account for non-working days in the month results in the following daily traffic movements by year:

- 2025 – 657 vehicles/day – 63% HGV.
- 2026 – 400 vehicles/day – 42% HGV.

It is noted that given the scale of the construction across the corridor and the types of construction work being undertaken means that differing levels of construction vehicles will be working on the network within different places within any one month or year.

TEMPro growth factors have been extracted to account for future growth on the network from 2021 to 2025 and 2021 to 2026. The relevant ATCs within ERYC were extrapolated based on the average weekday growth for the entire of ERYC whilst the counts within North Yorkshire were extrapolated using the same methodology using Selby 008 as this Middle Super Out Area (MSOA) of the route corridor is only applicable to that section whilst the area within East Riding combines multiple different MSOAs.

The table below (**Table 14-30**) outlines the growth factors and have been applied to the 2021 ATCs.

Table 14-30. TEMPro Growth Factors

	Selby 008	ERYC
2021-2025	1.0334	1.0312
2021-2026	1.0406	1.0380

All construction traffic will be subject to the policies and procedures specified in the Outline CTMP and site worker traffic will be the focus of mitigation measures to reduce its impact.

For ease of presentation each route section has been presented individually with the traffic flow diagrams associated with the impact assessment included in **Appendix 14D.**

14.6.4 Route Section 1 – Landfall to Bainton

This section presents the overall results of the Landfall to Bainton section of the route which includes sites 1 to 9.

A summary of the main traffic impact receptors for the Route Section 1 can be found in the table below (**Table 14-31**), with relative sensitivity level as advised by **Table 14-1**. Likely receptors have been identified around each ATC point within the network so that the likely impact can be established at each location.

Table 14-31: Summary of Main Traffic Receptors and Associated ATC Site – Route Section 1

ATC Site No. Ref	Receptor No.	Name	Sensitivity	Route Section
1	1	South Bridlington Town Centre	Medium	1
1	2	Carnaby Industrial Estate	Low	1
1	3	Hilderthorpe Primary School	Very High	1
1	4	Bridlington Hospital	Very High	1
1	5	South Cliff Holiday Park	Low	1
2	6	Burton Agnes Village	High	1
3	7	Lowthorpe	High	1
3	8	Great Kelk	High	1
4	9	Nafferton Village	High	1
4	10	Nafferton Primary School	Very High	1
4	11	Wansford Village	High	1
5	12	Nafferton Village	High	1
5	13	Nafferton Primary School	Very High	1
5	14	Wansford Village	High	1
6	15	Wansford Trout Farm and Other nearby residential properties	Medium	1
7	16	South Driffield	Medium	1
7	17	Skerne Park	Medium	1
7	18	Tot Stop Pre School	Very High	1
7	19	Skerne Village	High	1

7	20	Properties on Driffield Road	High	1
8	21	Hutton Village	Medium	1
8	22	Cranswick Industrial Estate	Low	1
9	23	Local Properties	Medium	1

14.6.4.1 2025 Cumulative Impact Assessment

The table below (**Table 14-32**) outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2025 for route section 1. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the summer counts and the neutral counts.

The counts have been based on 18hr AAWT as this best reflects the likely working times associated with construction activities.

Table 14-32: Worst Case Traffic Impact Assessment– 2025 – Neutral – Route Section 1

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
1	A156	10744	1414	13%	10807	1452	13%	0.6%	2.6%
2	Main Road	764	129	17%	770	132	17%	0.8%	2.3%
3	Main Street	353	54	15%	359	57	16%	1.7%	5.3%
4	Carr Lane	111	6	5%	117	9	7%	5.1%	35.0%
5	Wansford Road	994	80	8%	1000	83	8%	0.6%	3.6%
6	B1249	3763	441	12%	3801	463	12%	1.0%	4.7%
7	Driffield Road	564	55	10%	591	75	13%	4.6%	26.8%
8	A164 Beverley Road	9478	1388	15%	9484	1391	15%	0.1%	0.2%
9	Burnbutts Lane	110	5	4%	116	8	7%	5.2%	39.8%

The analysis therefore shows that two links have a >30% increase in HGV increase (details of this significance are detailed in the section below). Carr Lane is considered to have a very high sensitivity receptor nearby whilst Burnbutts Lane is considered to be of medium sensitivity.

The remaining links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The next table outlines the results of the impact assessment with the locations where summer counts were undertaken. It is noted that that summer counts were only performed in Section 1 of the route corridor.

Table 14-33: Worst Case Traffic Impact Assessment for All Vehicles – 2025 – Summer Counts

No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %

No.	Name	Baseline			With Construction			Increase	
1	A156	13639	1283	9.4%	13699	1315	9.6%	0.4%	2.4%
2	Main Road	937	126	13.5%	942	128	13.6%	0.6%	1.4%
3	Main Street	356	65	18.1%	362	66	18.4%	1.5%	2.8%
5	Wansford Road	904	75	8.3%	909	76	8.4%	0.6%	2.4%
6	B1249	3847	413	10.7%	3882	432	11.1%	0.9%	4.4%
7	Driffield Road	602	52	8.6%	627	68	10.9%	3.9%	24.1%
8	A164 Beverley Road	10598	1378	13.0%	10604	1379	13.0%	0.1%	0.1%
10	A164	13,666	1,866	13.7%	13,699	1,886	13.8%	0.2%	1.0%

The analysis therefore shows that none of the identified receptors meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

The tables below outline the traffic impact significance which sets out the significance based on the receptor and the approach to assessment in the section above. The road safety impact, the severance impact, the impact of pedestrian and cyclists and road safety impact will also be presented based on the assessment of significance table presented above. Effects predicted to be 'major' or 'moderate' are considered to be significant whilst effects predicted to be 'minor' or 'negligible' are considered to be not significant.

Table 14-34: Significance of Effects 2025 – Route Section 1

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All%	HGV %					
1	A156	0.6%	2.6%	Medium	Negligible	Negligible	Negligible	Negligible
2	Main Road	0.8%	2.3%	High	Minor	Minor	Minor	Minor
3	Main Street	1.7%	5.3%	High	Minor	Minor	Minor	Minor
4	Carr Lane	5.1%	35.0%	Very High	**Moderate**	Minor	Minor	Minor
5	Wansford Road	0.6%	3.6%	Very High	Minor	Minor	Minor	Minor
6	B1249	1.0%	4.7%	Medium	Negligible	Negligible	Negligible	Negligible
7	Driffield Road	4.6%	26.8%	High	Minor	Minor	Minor	Minor
8	A164 Beverley Road	0.1%	0.2%	Medium	Negligible	Negligible	Negligible	Negligible
9	Burnbutts Lane	5.2%	39.8%	Medium	Minor	Negligible	Negligible	Negligible

The table above shows that the impact across all but one of the links is **Minor or Negligible** which is considered **not to be significant** whilst the impact on Carr Lane is considered to be **Moderate** in terms of the HGV construction traffic only.

However as shown in **Table 14-32** the increase in HGVs is from 6 in the baseline to 9 in the 'with development' scenario. As such this small increase in HGVs results in a large increase in % however in reality the impact would likely be unnoticed across the working day. As such measures such as the implementation of a CTMP (see section 14.6.2) would be used to limit the impact where possible on sensitive receptors. Activity will be monitored to identify any potential measures (e.g. support vulnerable users crossing road and consideration of timing of deliveries to minimise impacts on school pick-up/drop-off times).

14.6.4.2 2026 Cumulative Impact Assessment

The table below outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2026 for route section 1. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the summer counts and the neutral counts.

The counts have been based on 18hr AAWT as this best reflects the likely working times associated with construction activities.

Table 14-35: Worst Case Traffic Impact Assessment– 2026 – Neutral – Route Section 1

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
1	A156	10814	1424	13%	10856	1445	13%	0.4%	1.5%
2	Main Road	769	130	17%	772	131	17%	0.5%	0.9%
3	Main Street	355	54	15%	359	55	15%	1.0%	2.2%
4	Carr Lane	112	6	5%	116	7	6%	3.1%	17.6%
5	Wansford Road	1000	81	8%	1004	82	8%	0.4%	1.5%
6	B1249	3787	444	12%	3805	451	12%	0.5%	1.6%
7	Driffield Road	567	55	10%	577	61	11%	1.7%	9.8%
8	A164 Beverley Road	9540	1397	15%	9543	1398	15%	0.0%	0.1%
9	Burnbutts Lane	111	5	4%	114	6	5%	3.2%	20.8%

The links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The next table outlines the results of the impact assessment with the locations where summer counts were undertaken.

Table 14-36: Significance of Effects 2026 – Route Section 1

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All%	HGV %					
1	A156	0.4%	1.5%	Medium	Negligible	Negligible	Negligible	Negligible
2	Main Road	0.5%	0.9%	High	Minor	Minor	Minor	Minor
3	Main Street	1.0%	2.2%	High	Minor	Minor	Minor	Minor
4	Carr Lane	3.1%	17.6%	Very High	Minor	Minor	Minor	Minor
5	Wansford Road	0.4%	1.5%	Very High	Minor	Minor	Minor	Minor
6	B1249	0.5%	1.6%	Medium	Negligible	Negligible	Negligible	Negligible
7	Driffield Road	1.7%	9.8%	High	Minor	Minor	Minor	Minor
8	A164 Beverley Road	0.0%	0.1%	Medium	Negligible	Negligible	Negligible	Negligible
9	Burnbutts Lane	3.2%	20.8%	Medium	Negligible	Negligible	Negligible	Negligible

The table above shows that the impact across all of the links is **Minor or Negligible** which is considered **not to be significant.**

14.6.5 Route Section 2 – Bainton – Market Weighton

This section presents the overall results of the Bainton to Market Weighton section of the route which includes sites 10 to 20.

A summary of the main traffic impact receptors for the Route Section 2 can be found in the table below, with relative sensitivity level as advised by **Table 14-1**. Likely receptors have been identified around each ATC point within the network so that the likely impact can be established at each location.

Table 14-37: Summary of Main Traffic Receptors and Associated ATC Site – Route Section 2

ATC Site No. Ref	Receptor No.	Name	Sensitivity	Route Section
10	24	Local Properties	Medium	2
10	25	Kirkburn Village	Medium	2
11	26	Lund Village	Medium	2
12	27	Lund Village	Medium	2
12	28	Middleton on the Wolds	Medium	2
13	29	Lund Village	Medium	2
14	30	Local Properties	Medium	2
15	31	Local Properties	Medium	2
16	32	Local Properties	Medium	2
17	33	Local Properties	Medium	2
18	34	Local Properties	Medium	2
19	35	South Market Weighton	Medium	2
20	36	South Market Weighton	Medium	2

14.6.5.1 2025 Cumulative Impact Assessment – Route Section 2

Table 14-38 outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2025 for route section 2. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the neutral counts.

The counts have been based on 18hr AAWT as this best reflects the likely working times associated with construction activities.

Table 14-38: Worst Case Traffic Impact Assessment– 2025 – Neutral – Route Section 2

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
10	A164	10322	1743	17%	10482	1805	17%	1.5%	3.4%
11	B1248 Station Road	4998	768	15%	5031	792	16%	0.7%	3.0%
12	Beverley Road	1077	111	10%	1112	135	12%	3.1%	17.8%
13	Unnamed Road	105	8	8%	111	11	10%	5.4%	27.2%
14	Holme Wold Road	144	10	7%	168	19	11%	14.3%	47.1%
15	Fisher Street	118	26	22%	136	29	22%	13.2%	10.2%
16	Unnamed Road (east of Kiplingcotes Lane)	169	16	9%	175	19	11%	3.4%	16.1%
17	Kiplingcotes Lane	131	26	20%	137	29	22%	4.4%	10.2%
18	A1079	11414	1885	17%	11458	1914	17%	0.4%	1.5%
19	A1034 Sancton Road	7433	1290	17%	7456	1307	18%	0.3%	1.3%
20	Cliffe Road	2834	580	20%	2881	606	21%	1.6%	4.3%

The analysis therefore shows that one link has a >30% increase in HGV increase which occurs on Holme Wold Road which is considered to be located in proximity to a medium sensitive receptor.

The remaining links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The table below outlines the traffic impact significance which sets out the significance based on the receptor and the approach to assessment in the section above. The road safety impact, the severance impact, the impact of pedestrian and cyclists and road safety impact will also be presented based on the assessment of significance table presented above. Effects predicted to be ‘major’ or ‘moderate’ are considered to be significant whilst effects predicted to be ‘minor’ or ‘negligible’ are considered to be not significant.

Table 14-39: Significance of Effects 2025 – Route Section 2

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All%	HGV %					
10	A164	1.5%	3.4%	Medium	Negligible	Negligible	Negligible	Negligible

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All%	HGV %					
11	B1248 Station Road	0.7%	3.0%	Medium	Negligible	Negligible	Negligible	Negligible
12	Beverley Road	3.1%	17.8 %	Medium	Negligible	Negligible	Negligible	Negligible
13	Unnamed Road	5.4%	27.2 %	Medium	Negligible	Negligible	Negligible	Negligible
14	Holme Wold Road	14.3 %	47.1 %	Medium	**Moderate**	Negligible	Negligible	Negligible
15	Fisher Street	13.2 %	10.2 %	Medium	Negligible	Negligible	Negligible	Negligible
16	Unnamed Road (east of Kiplingcotes Lane)	3.4%	16.1 %	Medium	Negligible	Negligible	Negligible	Negligible
17	Kiplingcotes Lane	4.4%	10.2 %	Medium	Negligible	Negligible	Negligible	Negligible
18	A1079	0.4%	1.5%	Medium	Negligible	Negligible	Negligible	Negligible
19	A1034 Sancton Road	0.3%	1.3%	Medium	Negligible	Negligible	Negligible	Negligible
20	Cliffe Road	1.6%	4.3%	Medium	Negligible	Negligible	Negligible	Negligible

The table above shows that the impact across all but one of the links is **Negligible** which is considered **not to be significant** whilst the impact on Holme Wold Road is considered to be **Moderate** in terms of the HGV construction traffic only.

However as shown in **Table 14-38** the increase in HGVs is from 10 in the baseline to 19 in the with development scenario. As such this small increase in HGVs results in a large increase in % however in reality the impact would likely be unnoticed across the working day. As such measures such as the implementation of a CTMP (see section 14.6.2) would be used to limit the impact where possible on sensitive receptors. Activity will be monitored to identify any potential measures (e.g. support vulnerable users crossing road and consideration of timing of deliveries) to minimise impacts on local properties.

14.6.5.2 2026 Cumulative Impact Assessment

The table below outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2026 for route section 2. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the neutral counts.

The counts have been based on 18hr AAWT as this best reflects the likely working times associated with construction activities.

Table 14-40: Worst Case Traffic Impact Assessment– 2026 – Neutral – Route Section 2

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
10	A164	10322	1743	17%	10482	1805	17%	0.8%	1.4%
11	B1248 Station Road	4998	768	15%	5031	792	16%	0.2%	0.9%
12	Beverley Road	1077	111	10%	1112	135	12%	1.6%	8.8%

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
13	Unnamed Road	105	8	8%	111	11	10%	3.3%	12.9%
14	Holme Wold Road	144	10	7%	168	19	11%	9.0%	32.1%
15	Fisher Street	118	26	22%	136	29	22%	8.3%	4.3%
16	Unnamed Road (east of Kiplingcotes Lane)	169	16	9%	175	19	11%	2.1%	7.1%
17	Kiplingcotes Lane	131	26	20%	137	29	22%	2.7%	4.3%
18	A1079	11414	1885	17%	11458	1914	17%	0.2%	0.6%
19	A1034 Sancton Road	7433	1290	17%	7456	1307	18%	0.1%	0.3%
20	Cliffe Road	2834	580	20%	2881	606	21%	0.9%	1.2%

The links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The tables below outline the traffic impact significance which sets out the significance based on the receptor and the approach to assessment in the section above. The road safety impact, the severance impact, the impact of pedestrian and cyclists and road safety impact will also be presented based on the assessment of significance table presented above. Effects predicted to be 'major' or 'moderate' are considered to be significant whilst effects predicted to be 'minor' or 'negligible' are considered to be not significant.

Table 14-41: Significance of Effects 2026 – Route Section 2

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All%	HGV %					
10	A164	0.8%	1.4%	Medium	Negligible	Negligible	Negligible	Negligible
11	B1248 Station Road	0.2%	0.9%	Medium	Negligible	Negligible	Negligible	Negligible
12	Beverley Road	1.6%	8.8%	Medium	Negligible	Negligible	Negligible	Negligible
13	Unnamed Road	3.3%	12.9%	Medium	Negligible	Negligible	Negligible	Negligible
14	Holme Wold Road	9.0%	32.1%	Medium	Minor	Negligible	Negligible	Negligible
15	Fisher Street	8.3%	4.3%	Medium	Negligible	Negligible	Negligible	Negligible
16	Unnamed Road (east of Kiplingcotes Lane)	2.1%	7.1%	Medium	Negligible	Negligible	Negligible	Negligible
17	Kiplingcotes Lane	2.7%	4.3%	Medium	Negligible	Negligible	Negligible	Negligible
18	A1079	0.2%	0.6%	Medium	Negligible	Negligible	Negligible	Negligible

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All%	HGV %					
19	A1034 Sancton Road	0.1%	0.3%	Medium	Negligible	Negligible	Negligible	Negligible
20	Cliffe Road	0.9%	1.2%	Medium	Negligible	Negligible	Negligible	Negligible

The table above shows that the impact across all of the links is **Minor or Negligible** which is considered **not to be significant.**

14.6.6 Route Section 3 - Market Weighton - River Ouse

This section presents the overall results of the Market Weighton to River Ouse section of the route which includes sites 21 to 29.

A summary of the main traffic impact receptors for the Route Section 3 can be found in the table below, with relative sensitivity level as advised by **Table 14-1**. Likely receptors have been identified around each ATC point within the network so that the likely impact can be established at each location.

Table 14-42: Summary of Main Traffic Receptors and Associated ATC Site – Route Section 3

ATC Site No. Ref	Receptor No.	Name	Sensitivity	Route Section
21	37	Local Properties	High	3
21	38	St Johns Church, North Cliffe	Low	3
22	39	Moor End Village	High	3
22	40	Local Business/Property	High	3
23	41	Skiff Lane Industrial Estate	Medium	3
23	42	Local Business/Property	High	3
23	43	Moor End Village	High	3
24	44	Local Business/Property	Medium	3
25	45	Local Business/Property	Medium	3
26	46	Local Business/Property	Medium	3
27	47	Brenda House Touring Caravan Park	Low	3
27	48	Howden Village	Medium	3
27	49	Local Business/Property	Medium	3
28	50	Local Business/Property	Medium	3
29	51	Asselby Village	High	3
29	52	Local Business/Property	Medium	3

14.6.6.1 2025 Cumulative Impact Assessment – Route Section 2

Table 14-43 outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2025 for route section 3. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the neutral counts.

The counts have been based on 18hr AAWT as this best reflects the likely working times associated with construction activities.

Table 14-43: Worst Case Traffic Impact Assessment– 2025 – Neutral – Route Section 3

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
21	Sand Lane	473	46	10%	479	49	10%	1.3%	6.1%
22	Lock Lane	127	25	20%	133	28	21%	4.5%	10.6%
23	Skiff Lane	1131	369	33%	1149	384	33%	1.6%	3.9%
24	Drain Lane	164	27	17%	170	30	18%	3.5%	9.9%
25	Bursea Lane	122	17	14%	128	20	16%	4.7%	14.9%
26	A614 Holme Road	9484	1937	20%	9998	2255	23%	5.1%	14.1%
27	B1228 Wood Lane	3080	730	24%	3112	751	24%	1.0%	2.8%
28	A63 Selby Road	7923	1150	15%	7963	1176	15%	0.5%	2.2%
29	Main Street Near Asselby (East of the Ouse)	1132	148	13%	1138	151	13%	0.5%	2.0%

The links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The table below outlines the traffic impact significance which sets out the significance based on the receptor and the approach to assessment in the section above. The road safety impact, the severance impact, the impact of pedestrian and cyclists and road safety impact will also be presented based on the assessment of significance table presented above. Effects predicted to be ‘major’ or ‘moderate’ are considered to be significant whilst effects predicted to be ‘minor’ or ‘negligible’ are considered to be not significant.

Table 14-44: Significance of Effects 2025 – Route Section 3

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All %	HGV %					
21	Sand Lane	1.3%	6.1%	High	Minor	Minor	Minor	Minor
22	Lock Lane	4.5%	10.6%	High	Minor	Minor	Minor	Minor
23	Skiff Lane	1.6%	3.9%	High	Minor	Minor	Minor	Minor
24	Drain Lane	3.5%	9.9%	Medium	Negligible	Negligible	Negligible	Negligible
25	Bursea Lane	4.7%	14.9%	Medium	Negligible	Negligible	Negligible	Negligible
26	A614 Holme Road	5.1%	14.1%	Medium	Negligible	Negligible	Negligible	Negligible

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All %	HGV %					
27	B1228 Wood Lane	1.0%	2.8%	Medium	Negligible	Negligible	Negligible	Negligible
28	A63 Selby Road	0.5%	2.2%	Medium	Negligible	Negligible	Negligible	Negligible
29	Main Street Near Asselby (East of the Ouse)	0.5%	2.0%	High	Minor	Minor	Minor	Minor

The table above shows that the impact across all but one of the links is **Minor or Negligible** which is considered **not to be significant**.

However, a construction traffic management plan would be used to limit the impact where possible on sensitive receptors.

14.6.6.2 2026 Cumulative Impact Assessment

The table below outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2026 for route section 3. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the neutral counts.

The counts have been based on 18hr AAWT as this best reflects the likely working times associated with construction activities.

Table 14-45: Worst Case Traffic Impact Assessment– 2026 – Neutral – Route Section 3

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
21	Sand Lane	476	47	10%	480	48	10%	0.8%	2.5%
22	Lock Lane	128	26	20%	131	27	20%	2.7%	4.5%
23	Skiff Lane	1138	372	33%	1138	372	33%	0.0%	0.0%
24	Drain Lane	165	28	17%	168	29	17%	2.1%	4.2%
25	Bursea Lane	122	17	14%	126	18	15%	2.9%	6.5%
26	A614 Holme Road	9546	1949	20%	9808	2071	21%	2.7%	5.9%
27	B1228 Wood Lane	3100	734	24%	3113	741	24%	0.4%	1.0%
28	A63 Selby Road	7975	1157	15%	7997	1169	15%	0.3%	1.0%
29	Main Street Near Asselby (East of the Ouse)	1139	149	13%	1143	151	13%	0.3%	0.8%

The links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The table below outlines the traffic impact significance which sets out the significance based on the receptor and the approach to assessment in the section above. The road safety impact, the severance impact, the impact of pedestrian and cyclists and road safety impact will also be presented based on the assessment of significance table presented above. Effects predicted to be 'major' or 'moderate' are considered to be significant whilst effects predicted to be 'minor' or 'negligible' are considered to be not significant.

Table 14-46: Significance of Effects 2026 – Route Section 3

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All %	HGV %					
21	Sand Lane	0.8%	2.5%	High	Minor	Minor	Minor	Minor
22	Lock Lane	2.7%	4.5%	High	Minor	Minor	Minor	Minor
23	Skiff Lane	0.0%	0.0%	High	Minor	Minor	Minor	Minor
24	Drain Lane	2.1%	4.2%	Medium	Negligible	Negligible	Negligible	Negligible
25	Bursea Lane	2.9%	6.5%	Medium	Negligible	Negligible	Negligible	Negligible
26	A614 Holme Road	2.7%	5.9%	Medium	Negligible	Negligible	Negligible	Negligible
27	B1228 Wood Lane	0.4%	1.0%	Medium	Negligible	Negligible	Negligible	Negligible
28	A63 Selby Road	0.3%	1.0%	Medium	Negligible	Negligible	Negligible	Negligible
29	Main Street Near Assesslby (East of the Ouse)	0.3%	0.8%	High	Minor	Minor	Minor	Minor

The table above shows that the impact across all of the links is **Minor or Negligible** which is considered **not to be significant.**

14.6.7 Route Section 4 - River Ouse – Drax Power Station

This section presents the overall results of the Market Weighton to River Ouse section of the route which includes sites 30 to 34. This is the only section within Selby District Council.

A summary of the main traffic impact receptors for the Route Section 4 can be found in the table below, with relative sensitivity level as advised by **Table 14-1**. Likely receptors have been identified around each ATC point within the network so that the likely impact can be established at each location

Table 14-47: Summary of Main Traffic Receptors and Associated ATC Site – Route Section 4

ATC Site No. Ref	Receptor No.	Name	Sensitivity	Route Section
30	53	Local Business/Property	Medium	4
31	54	Drax	Medium	4
31	55	Drax Golf Club	Medium	4

32	56	Drax	High	4
33	57	Drax Village	High	4
34	58	Local Business/Property	Low	4

14.6.7.1 2025 Cumulative Impact Assessment – Route Section 4

The table below outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2025 for route section 4. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the neutral counts.

The counts have been based on 18hr AAWT as this best reflects the likely working times associated with construction activities.

Table 14-48: Worst Case Traffic Impact Assessment– 2025 – Neutral – Route Section 4

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
30	Redhouse Lane	458	68	15%	481	85	18%	4.8%	19.9%
31	New Road	1811	352	19%	1876	380	20%	3.5%	7.4%
32	A645 Adj. Power Station Access	9087	1113	12%	9087	1113	12%	0.0%	0.0%
33	Main Road (Drax)	2054	257	13%	2054	257	13%	0.0%	0.0%
34	A645 E	8370	1305	16%	8435	1350	16%	0.8%	3.3%

The links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The table below outlines the traffic impact significance which sets out the significance based on the receptor and the approach to assessment in the section above. The road safety impact, the severance impact, the impact of pedestrian and cyclists and road safety impact will also be presented based on the assessment of significance table presented above. Effects predicted to be ‘major’ or ‘moderate’ are considered to be significant whilst effects predicted to be ‘minor’ or ‘negligible’ are considered to be not significant.

Table 14-49: Significance of Effects 2025 – Route Section 4

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All%	HGV %					
30	Redhouse Lane	4.8 %	19.9%	Medium	Negligible	Negligible	Negligible	Negligible
31	New Road	3.5 %	7.4%	Medium	Negligible	Negligible	Negligible	Negligible

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All%	HGV %					
32	A645 Adj. Power Station Access	0.0 %	0.0%	High	Minor	Minor	Minor	Minor
33	Main Road (Drax)	0.0 %	0.0%	High	Minor	Minor	Minor	Minor
34	A645 E	0.8 %	3.3%	Low	Negligible	Negligible	Negligible	Negligible

The table above shows that the impact across all but one of the links is **Minor or Negligible** which is considered **not to be significant**.

However, a construction traffic management plan would be used to limit the impact where possible on sensitive receptors.

14.6.7.2 2026 Cumulative Impact Assessment

The table below outlines the worst-case traffic impact assessment for All Vehicles and HGVs in 2026 for route section 4. The table displays the relative increase that the busiest period of construction will have on the baseline traffic based on the neutral counts.

The counts have been based on 18hr Average Annual Weekday Traffic (AAWT) as this best reflects the likely working times associated with construction activities.

Table 14-50: Worst Case Traffic Impact Assessment– 2026 – Neutral – Route Section 4

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
30	Redhouse Lane	461	69	15%	467	72	16%	1.3%	5.0%
31	New Road	1823	355	19%	1921	380	20%	5.1%	6.6%
32	A645 Adj. Power Station Access	9151	1121	12%	9151	1121	12%	0.0%	0.0%
33	Main Road (Drax)	2068	259	13%	2068	259	13%	0.0%	0.0%
34	A645 E	8428	1314	16%	8525	1339	16%	1.1%	1.9%

The links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

As noted earlier in the document schools, colleges, playgrounds, hospitals, retirement homes, heavily congested junctions, residential properties very close to carriageway are considered to be highly sensitive receptors.

The table below outlines the traffic impact significance which sets out the significance based on the receptor and the approach to assessment in the section above. The road safety impact, the severance impact, the impact of pedestrian and cyclists and road safety impact will also be presented based on the assessment of significance table presented above. Effects predicted to be ‘major’ or ‘moderate’ are

considered to be significant whilst effects predicted to be 'minor' or 'negligible' are considered to be not significant.

Table 14-51: Significance of Effects 2026 – Route Section 4

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All%	HGV %					
30	Redhouse Lane	1.3%	5.0%	Medium	Negligible	Negligible	Negligible	Negligible
31	New Road	5.1%	6.6%	Medium	Negligible	Negligible	Negligible	Negligible
32	A645 Adj. Power Station Access	0.0%	0.0%	High	Minor	Minor	Minor	Minor
33	Main Road (Drax)	0.0%	0.0%	High	Minor	Minor	Minor	Minor
34	A645 E	1.1%	1.9%	Low	Negligible	Negligible	Negligible	Negligible

The table above shows that the impact across all of the links is **Minor or Negligible** which is considered **not to be significant.**

14.6.7.3 Assessment Assumptions

Overall, the following points should be considered in relation to the impact of the increase in HGV traffic across the different route sections:

- An additional uplift of 20% has been applied to the construction traffic to account for an uncertainty in the flows thereby allowing for a more robust assessment;
- An increase of 214% has been applied to all associated converter station traffic alongside all flows being rounded up within the calculations to account for a worst case scenario;
- Conventional construction (i.e. excluding AIL's) traffic will be restricted to the identified routes as set out in this assessment to be controlled via the Construction Traffic Management Plan (CTMP);
- AIL deliveries are included in the anticipated daily HGV movements to give an accurate representation of the number of HGV movements to and from the English Onshore Scheme;
- The locations where a large increase in relative HGVs is predicted, is generally caused by a low number of baseline HGV's and as such an increase in 1 or 2 HGVs results in a larger percentage increase;
- Excluding the residential areas, the route sections are predominantly rural in nature with little direct frontage development, with only intermittent field and private dwelling access points. Therefore, the number of residents which will be impacted by construction traffic will be low
- The increase in traffic during the construction phase is temporary and will fluctuate.

14.6.7.4 Abnormal Indivisible Loads

There will be a requirement for a significant number of AILs to deliver materials across the construction area and the converter station site during the construction phase. At present, it is estimated that there will be 100 trips related to AILs; however, this value is subject to change. These will be required throughout for the delivery of the DC cables which will be 'pulled' from drums, as well as at the converter station site where large equipment such as transformers will need to be delivered.

AIL deliveries will be carried out at off-peak times to minimise traffic disruption to the local road network and to maintain accessibility for local residents.

14.6.8 Construction Potential Effects

As described above, the increase in traffic flows does not meet the first step of the assessment criteria which would require further of assessment of the potential effects listed in the IEA Guidelines for the Environmental Assessment of Road Traffic. Notwithstanding this, the potential effects are listed below:

- Visual impact (considered in **Chapter 8: Landscape and Visual Assessment**);
- Severance (for motorists or pedestrians);
- Increased journey times for non-construction traffic;
- Pedestrian delay, intimidation, loss of amenity;
- Road accidents and safety;
- Hazardous loads (not considered as no hazardous substances will be transported to the working areas);
- Air quality, dust and dirt (not considered as the combined development traffic flows demonstrate compliance which scoping criteria, and the measures identified for air quality and dust management as outlined in **Chapter 18: Construction Environmental Management Plan** will mitigate any potential localised issues).; and
- Ecological impact (considered in **Chapter 7: Ecology and Nature Conservation**).

Each of these are discussed separately in the following sections.

14.6.8.1 Visual Impact of Construction Traffic

Chapter 8: Landscape and Visual Assessment details the anticipated visual impact of construction traffic routes.

14.6.8.2 Severance

According to the IEA (1993) guidelines, severance is "*the perceived division that can occur within a community when it becomes separated by a major traffic artery…. severance could equally be applied to residents, motorists or pedestrians*".

An increase in construction traffic can make it more difficult for pedestrians to cross a road or for traffic to enter a carriageway. For there to be a perceived division, a significant increase in traffic is required.

The EIA guidelines in regard to severance state that changes in flow of 30%, 60% and 90% represent a slight, moderate and substantial change in severance respectively.

Therefore, as the levels of traffic associated with the worst-case scenario have been shown to be below a 30% increase in most cases, the significance of the effect of severance is considered to be **Negligible** as this is below <30%. Most links assessed within both assessed years have <30% increases in total traffic as such does not meet the first step of the assessment criteria this would result in a **Negligible impact,** which would **not be significant**.

14.6.8.3 Increased Journey Time for Non-Construction Traffic

HGVs by their very nature travel slower than the average vehicle and can delay other road users by increasing their journey times. It is not uncommon for a 'convoy' effect to occur when suitable overtaking opportunities for vehicles are few and far between. Increased journey times can lead to driver frustration. If HGVs do cause a 'convoy' effect, then this can cause delays for vehicles wishing to join the carriageway that the HGVs are travelling on.

The A156, A164 and A1079 already carry a significant amount of HGV traffic and English Onshore Scheme-related trips once leaving will be dispersed across a number of different routeing options depending on the location they are accessing therefore the magnitude of the effect on increased journey times is considered to be low.

This would result in a **Negligible** effect, which is **not significant.**

14.6.8.4 Pedestrian Delay, Intimidation and Loss of Amenity

Pedestrians can also experience intimidation and the degree to which this is true is determined by the volume of traffic, the proportion of HGV traffic and its proximity to pedestrians.

The levels of HGV traffic associated with the worst-case scenario have been shown for most of the assessed link to be under 30% increase, therefore the magnitude of the effect on amenity is considered to be low with the increase in HGVs indistinguishable from every day traffic levels.

In the 2025 assessment Carr Lane, Burnbutts Lane and Holme Wold Road all have HGV increase in excess of 30% with the receptor on Carr Lane considered to have a high sensitivity although it is worth that the increase is from 6 to 9 HGVs which is considered to be a low increase. Overall Carr Lane and Holme Wold Road have a **moderate** impact without additional mitigation based on the significance of effects matrix whilst there is a **minor** impact on Burnbutts Lane whilst the remaining links are **Negligible** which would **not be significant**. As stated a detailed CTMP will be put in place by the contractor in there will be appropriate measures to manage all movements. Activity will be monitored to identify any potential measures (e.g. support vulnerable users crossing road and consideration of timing of deliveries to minimise impacts on school pick-up/drop-off times).

As the increase in traffic on the remaining links does not meet the first step of the assessment criteria this would result in a **Negligible** impact, which would **not be significant**.

In the 2026 assessment Holme Wold Road has an HGV increase in excess of 30% with the link considered to have a medium sensitivity which results in a **Minor** effect which is not **significant.** Carr Lane has also be identified due to an increase of ~17% HGVs a rise from 6 to 7 which results in a **Minor** overall effect which is not **significant.**

As the increase in traffic does not meet the first step of the assessment criteria this would result in a **Negligible** impact, which would **not be significant**.

As noted above, the areas which see a large increase in HGV are associated with a relatively low baseline so with the addition of one or two daily HGV trips this sees the impact above that of the threshold when in reality the impact would be indistinguishable.

14.6.8.5 Road Accidents and Safety

Road accidents are attributable to a variety of local factors but an increase in traffic on any particular route has the potential to increase the frequency of accidents. The Collision Data section has provided a review of the collision data for the most recent five-year period provided by the LHA.

The collision data revealed that there are no underlying highway design or safety issues within the search cordon, with no patterns of collision type, primary contributory factor, location, or movement revealed by the data. There are no collision cluster sites (locations with three or more collisions) on key road links or at junctions that would be exacerbated by construction traffic associated with the English Onshore Scheme. As noted earlier all designs/alteration to the road network will be designed based on relevant national/local standards.

As the increase in traffic does not meet the first step of the assessment criteria this would result in a **Negligible** impact, which would **not be significant**.

14.6.9 Assessment of Potential Impacts: Operational Phase

During the operational phase of the English Onshore Scheme, it is likely that activity along the proposed DC and AC cable route would generally be limited to nonintrusive inspections and cable repairs. The latter would only be required in the unlikely event of a cable fault.

Following a period of commissioning and testing, the proposed converter station will operate continuously throughout the year, the converter station will not be permanently manned, but will be operated by a small team who will visit site on an anticipated weekly basis. During maintenance (planned and unplanned) the number of personnel present on site would increase with the number of

staff proportionate to the nature of the maintenance works being undertaken. The anticipated operational life of the proposed converter station is approximately 40 years.

The operational phase of the English Onshore Scheme will therefore require minimal vehicle trips, which are primarily attributed to the workforce. The number of HGV movements associated with these operational activities and maintenance works is also anticipated to be minimal and therefore any potential impact associated will be negligible.

The number of vehicle movements will be low and would likely only result in minor disruption to local residents and road users. It can be concluded that the significance of the operational effects of the English Onshore Scheme would result in a **Negligible effect**, which is **not significant**.

14.6.10 Assessment of Potential Impacts: Decommissioning

The scale and nature of activities undertaken during decommissioning would be similar to those described previously for construction, and they would be temporary during the period of decommissioning activities on site. Following the removal of the structures and the reinstatement of the land there would be no further potential effects from traffic. The potential effects from decommissioning should therefore be regarded as the same as construction as described below.

14.7 Project Specific Mitigation

14.7.1 Construction Phase Mitigation

There is no identified need for project-specific mitigation as no potentially significant impacts have been identified, however some additional measures are outlined below to further reduce the number of vehicle movements and improve traffic management around working areas. An outline CTMP has been produced which is included as part of **Appendix 14E**.

14.7.1.1 Site Worker Traffic

The finalised CTMP will include measures that will seek to reduce single occupancy trips by stipulating the need for minibus or coach style services to and from accommodation areas and promoting car sharing when travelling outside of the planning application boundary.

14.7.1.2 Site Traffic Restrictions

To mitigate the impact of disruption to local residents and road users, the finalised CTMP (will detail the hours for which construction can take place and therefore the hours in which traffic will be travelling to and from working areas. At present, this is assumed to be 08:00 – 18:00 Monday to Saturday with no construction taking place on Sundays, however this is yet to be confirmed and is subject to an agreement between all relevant parties before construction commences. Should (other) construction work be required to take place on a Sunday, approval from would be required from the LHA prior to any work taking place.

In addition to a restriction on construction hours, there may also be a requirement for restrictions on when construction traffic can pass sensitive areas such as Schools during school drop-off and pick-up periods due to the potential for children to be on the road and congestion caused by waiting vehicles.

14.7.1.3 Road Safety

To improve the safety of road users and pedestrians, signage will be present near site access points to warn the public that they are likely to experience a higher than normal volume of HGV movements in the area. This, in addition to any necessary traffic management measures including but not limited to speed restrictions adjacent to site access points, will help mitigate any potential safety issues near access points on public highways. Further information related to the type and location of any road signs will be provided in the finalised document and agreed with the LHA.

The Contractor will arrange for winter maintenance to be carried out when required to maintain the safety of road users and site workers. Details of any winter maintenance would be included in the finalised document and would be subject to an agreement with the LHA.

14.7.1.4 Monitoring

The monitoring and enforcement of the English Onshore Scheme's CTMP will be a key responsibility of the Contractor to ensure that any negative impacts associated with construction traffic are quickly addressed and that suitable action is taken. This is in addition to the communications strategy, as outlined in the Outline CTMP which will include complaints hotlines, email addresses and/or details for key points of contact for site management for stakeholders and the public to engage directly with the Project.

14.7.2 Operational Phase Mitigation

Due to the low numbers of maintenance and operational trips required there is no additional mitigation regarded as being required.

14.8 Residual Effects

14.8.1 Assessment of Residual Effects: Construction Phase

Due to the embedding of design mitigation and construction mitigation into the planning application boundary the residual effects of the English Onshore Scheme remain largely unchanged from the potential effects outlined in Section 14.6 above.

This is due to the impacts of construction traffic not exceeding the thresholds for assessment as the first step of the assessment process, with only a few links with HGV increase >30% with the majority of HGV increases under 30% in all worst-case assessment scenarios.

The following links have been identified as having >30% increase in HGVs:

- Carr Lane - 2025
- Burnbutts Lane - 2025
- Holme Wold Road - 2025 and 2026

However as stated above the relatively large percentage increases are associated with a low baseline of HGVs and as such a minor increase of one or two HGV movements results in a larger significance than the sites with a high baseline and high HGV numbers. The increase of one or two HGVs across the working day is considered to be a minor increase and through the implementation of a CTMP, if deemed necessary, additional management measures could be implemented on these links to further limit the impact on sensitive receptors. These may include restricting the timing of deliveries to minimise impacts on school pick-up/drop-off times, and as such the increases in HGV movements are unlikely to cause any significant issues on these links.

The mitigation measures discussed in the preceding paragraphs will further assist in mitigating the majority of temporary traffic impacts associated with the construction phase of the English Onshore Scheme across all links utilised by for construction vehicles.

Table 14-52 and Table 14-53 identifies the residual effects of the construction phase in 2025 and 2026 respectively as this differ slightly and the applicable mitigation.

Table 14-52: Construction Phase Residual Effects and Associated Mitigation 2025

Description	Value/ Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s)	Residual Effect	
						Magnitude	Significance
Severance	Negligible	Increase in the amount of traffic on the roads used by construction vehicles resulting in perception that a road is less safe to cross or that parts of a settlement or property become isolated	Negligible	Negligible (Not Significant)	HGVs to follow defined routes to and from working areas and construction compounds.	Negligible	Negligible (Not Significant)
Increased journey time for non-construction related traffic	Negligible	Increase in slow moving HGV traffic which results in a convoy of vehicles being unable to overtake the HGV. This in turn leads to increased journey times, driver frustration and drivers taking unnecessary risks	Negligible	Negligible (Not Significant)	Detailed CTMP Escort vehicles to accompany abnormal load. Abnormal load delivery to be programmed in such a way so as to cause minimal disruption i.e. at night or during off-peak hours	Negligible	Negligible (Not Significant)
Traffic Increase due to site workers	Negligible	Site workers travelling to working areas by personal vehicle will increase the volume of traffic on the local road network which may cause delay to other road users	Negligible	Negligible (Not Significant)	Implementation of the CTMP	Negligible	Negligible (Not Significant)
Pedestrian Delay, intimidation and loss of amenity	Negligible	Increase in the amount of traffic on the routes used by vehicles associated with the construction phase resulting in increased perception of danger when travelling within the route sections.	Low	Minor (Not Significant)	HGVs to follow defined routes to and from working areas and construction compounds which will be signposted. Instruct HGV drivers to abide by advisory speed limit in local area.	Negligible	Negligible (Not Significant)
Road accidents and safety	Negligible	Increase in slow moving HGV traffic which results in a convoy of vehicles being unable to overtake the HGV. This in turn leading to	Negligible	Negligible (Not Significant)	HGVs to follow defined routes to and from working areas and	Negligible	Negligible (Not Significant)

Description	Value/ Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s)	Residual Effect	
						Magnitude	Significance
		increased journey times, driver frustration and drivers taking unnecessary risks. Abnormal loads may need to overrun footways to negotiate some junctions along the delivery route to site. Adverse weather could result in poor road conditions which could lead to road traffic accidents occurring.			construction compounds which will be signposted. Educate HGV drivers to stop at suitable locations allowing vehicles to pass. All bellmouth will be designed based on relevant national/local standard. Abnormal load vehicle speeds will be low and will be escorted. Footways will be closed on a temporary basis if abnormal loads require incurring onto pedestrian space. Winter maintenance will be carried out on public roads which will be used by construction traffic to maintain road user safety.		
Dust and Dirt	Negligible	Construction traffic travelling to, from and throughout the English Onshore Scheme is likely to disturb the surface of the access tracks which will produce dust and dirt. Should a large quantity of dirt be spread over a public road, vehicles could lose traction could lead to road traffic accidents and an overall reduction in road user safety	Negligible	Negligible (Not Significant)	Implementation of the CTMP. Wheel washing and road cleaning will be carried out at public road crossings and site access points.	Negligible	Negligible (Not Significant)

Table 14-53: Construction Phase Residual Effects and Associated Mitigation 2026

Description	Value/ Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s)	Residual Effect	
						Magnitude	Significance
Severance	Negligible	Increase in the amount of traffic on the roads used by construction vehicles resulting in perception that a road is less safe to cross or that parts of a settlement or property become isolated	Negligible	Negligible (Not Significant)	HGVs to follow defined routes to and from working areas and construction compounds.	Negligible	Negligible (Not Significant)
Increased journey time for non-construction related traffic	Negligible	Increase in slow moving HGV traffic which results in a convoy of vehicles being unable to overtake the HGV. This in turn leads to increased journey times, driver frustration and drivers taking unnecessary risks	Negligible	Negligible (Not Significant)	Detailed CTMP Escort vehicles to accompany abnormal load. Abnormal load delivery to be programmed in such a way so as to cause minimal disruption i.e. at night or during off-peak hours	Negligible	Negligible (Not Significant)
Traffic Increase due to site workers	Negligible	Site workers travelling to working areas by personal vehicle will increase the volume of traffic on the local road network which may cause delay to other road users	Negligible	Negligible (Not Significant)	Implementation of the CTMP	Negligible	Negligible (Not Significant)
Pedestrian Delay, intimidation and loss of amenity	Negligible	Increase in the amount of traffic on the routes used by vehicles associated with the construction phase resulting in increased perception of danger when travelling within the route sections.	Negligible	Negligible (Not Significant)	HGVs to follow defined routes to and from working areas and construction compounds which will be signposted. Instruct HGV drivers to abide by advisory speed limit in local area.	Negligible	Negligible (Not Significant)
Road accidents and safety	Negligible	Increase in slow moving HGV traffic which results in a convoy of vehicles being unable to overtake the HGV. This in turn leading to	Negligible	Negligible (Not Significant)	HGVs to follow defined routes to and from working areas and	Negligible	Negligible (Not Significant)

Description	Value/ Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s)	Residual Effect	
						Magnitude	Significance
		increased journey times, driver frustration and drivers taking unnecessary risks. Abnormal loads may need to overrun footways to negotiate some junctions along the delivery route to site. Adverse weather could result in poor road conditions which could lead to road traffic accidents occurring.			construction compounds which will be signposted. Educate HGV drivers to stop at suitable locations allowing vehicles to pass. All bellmouth will be designed based on relevant national/local standard. Abnormal load vehicle speeds will be low and will be escorted. Footways will be closed on a temporary basis if abnormal loads require incurring onto pedestrian space. Winter maintenance will be carried out on public roads which will be used by construction traffic to maintain road user safety.		
Dust and Dirt	Negligible	Construction traffic travelling to, from and throughout the English Onshore Scheme is likely to disturb the surface of the access tracks which will produce dust and dirt. Should a large quantity of dirt be spread over a public road, vehicles could lose traction could lead to road traffic accidents and an overall reduction in road user safety	Negligible	Negligible (Not Significant)	Implementation of the CTMP. Wheel washing and road cleaning will be carried out at public road crossings and site access points.	Negligible	Negligible (Not Significant)

14.8.1 Assessment of Residual Effects: Operational Phase

The residual effects associated with the operation of the English Onshore Scheme have not been considered as it has been determined that any traffic impact associated with operational activities will be **Negligible** (Not Significant).

14.9 Combined and Cumulative Effects

14.9.1 Assessment of Intra-Project Effects

As outlined in Chapter 1: Introduction, the English Onshore Scheme forms one element of the wider Project, along with the Marine Scheme and Scottish Onshore Scheme. Due to the distances of separation between the English Onshore Scheme and the Scottish Onshore Scheme, intra-Project cumulative effects to individual receptors will not occur, for example no property or ecological site would experience effects from both the English Onshore Scheme and Scottish Onshore Scheme. Similarly, although there is a slight overlap of the English Onshore Scheme and Marine Scheme in the intertidal area between Mean High Water Springs and Mean Low Water Springs (as shown in Figure 1-2), as the HVDC cable reaches the landfall site (part of the English Onshore Scheme) via HDD, the works which could give rise to environmental impacts are physically separated and hence no significant intra-Project cumulative effects to individual receptors are predicted to occur.

The separate EIA/EA reports produced for the English Onshore Scheme, Marine Scheme and Scottish Onshore Scheme provide an environmental assessment of each topic area for which potential environmental effects could arise from that element. Once the assessment of the other elements of the Project is complete, a Bridging Document will be prepared which summarises the main interactions of these three individual environmental assessments. The Bridging Document will be made available as soon as it is available, but as highlighted above, there are no significant in-combination impacts between the English Onshore Scheme, Marine Scheme or Scottish Onshore Scheme. This section, therefore, provides an assessment of the combined and cumulative effects relating to the English Onshore Scheme only. For full definitions of terminology and details of other projects considered in this assessment see Chapter 17: Cumulative Assessment.

14.9.2 Assessment of Inter-Project Effects

The combination of predicted environmental effects resulting from a single development (the English Onshore Scheme) on any one receptor that may collectively cause a greater (or lesser) effect than each effect in isolation is referred to in this ES as a ‘combined effect’.

As noted above the Drax BECCS development is currently in the planning stage within the vicinity of the proposals outlined in this assessment, it is anticipated that c800 workers will be required on site.

In line with the FEED traffic movements methodology a ratio 2/1 has been applied to the 800 workers which results in 800 daily two way trips (400 in arrivals and 400 departures), these have then been assigned to the network, it is noted that this has only been assessed within Route Section 4.

In addition, the Hornsea 4 development flows have also been included based on the information presented in the traffic and transport technical report that supported the application. As previously mentioned the impact of the Hornsea 4 development is centred around Route Section 1 with the construction vehicle routeing of this scheme mainly between Driffield and Hull and as such use alternative routes to the English Onshore Scheme.

The table below shows the results of the 2025 assessment for Route Section 1 with Hornsea 4 traffic included.

Table 14-54: Worst Case Traffic Impact Assessment– 2025 – Neutral – Route Section 1 – Hornsea 4 Traffic Included

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
1	A156	10744	1414	13%	10849	1452	13%	1.0%	2.6%
2	Main Road	764	129	17%	770	132	17%	0.8%	2.3%
3	Main Street	353	54	15%	359	57	16%	1.7%	5.3%
4	Carr Lane	111	6	5%	117	9	7%	5.1%	35.0%
5	Wansford Road	994	80	8%	1000	83	8%	0.6%	3.6%
6	B1249	3763	441	12%	3961	603	15%	5.0%	26.9%
7	Driffield Road	564	55	10%	591	75	13%	4.6%	26.8%
8	A164 Beverley Road	9478	1388	15%	9796	1531	16%	3.2%	9.3%
9	Burnbutts Lane	110	5	4%	116	8	7%	5.2%	39.8%

As shown by the table the largest increase in HGVs will be on the B1249 with an increase of 26.9% (up from 4.7% in the English Onshore Scheme assessment). The remaining links will remain the same in terms of HGVs however there will be a slight increase in the overall number of vehicles compared to the English Onshore Scheme however this only minor.

Table 14-55: Significance of Effects 2025 – Route Section 1

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All%	HGV %					
1	A156	1.0%	2.6%	Medium	Negligible	Negligible	Negligible	Negligible
2	Main Road	0.8%	2.3%	High	Minor	Minor	Minor	Minor
3	Main Street	1.7%	5.3%	High	Minor	Minor	Minor	Minor
4	Carr Lane	5.1%	35.0%	Very High	**Moderate**	Minor	Minor	Minor
5	Wansford Road	0.6%	3.6%	Very High	Minor	Minor	Minor	Minor
6	B1249	5.0%	26.9%	Medium	Negligible	Negligible	Negligible	Negligible
7	Driffield Road	4.6%	26.8%	High	Minor	Minor	Minor	Minor
8	A164 Beverley Road	3.2%	9.3%	Medium	Negligible	Negligible	Negligible	Negligible
9	Burnbutts Lane	5.2%	39.8%	Medium	Minor	Negligible	Negligible	Negligible

The table above shows that the impact across all but one of the links is **Minor or Negligible** which is considered **not to be significant** whilst the impact on Carr Lane is considered to be **Moderate** in terms of the HGV construction traffic only.

Table 14-56: Worst Case Traffic Impact Assessment– 2026 – Neutral – Route Section 1 – Hornsea 4 Traffic Included

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
1	A156	10814	1424	13%	10898	1445	13%	0.8%	1.5%
2	Main Road	769	130	17%	772	131	17%	0.5%	0.9%
3	Main Street	355	54	15%	359	55	15%	1.0%	2.2%
4	Carr Lane	112	6	5%	116	7	6%	3.1%	17.6%
5	Wansford Road	1000	81	8%	1004	82	8%	0.4%	1.5%
6	B1249	3787	444	12%	3965	591	15%	4.5%	24.9%
7	Driffield Road	567	55	10%	577	61	11%	1.7%	9.8%
8	A164 Beverley Road	9540	1397	15%	9855	1538	16%	3.2%	9.2%
9	Burnbutts Lane	111	5	4%	114	6	5%	3.2%	20.8%

As shown by the table the largest increase in HGVs will be on the B1249 with an increase of 24.9% (up from 1.6% in the English Onshore Scheme assessment). The A164 will also see an increase of ~9% in HGVs compared to the English Onshore Scheme. The remaining links will remain the same in terms of HGVs however there will be a slight increase in the overall number of vehicles compared to the English Onshore Scheme however this only minor.

Table 14-57: Significance of Effects 2026 – Route Section 1

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians / Cyclists	Severance	Road Safety
		All%	HGV %					
1	A156	0.8%	1.5%	Medium	Negligible	Negligible	Negligible	Negligible
2	Main Road	0.5%	0.9%	High	Minor	Minor	Minor	Minor
3	Main Street	1.0%	2.2%	High	Minor	Minor	Minor	Minor
4	Carr Lane	3.1%	17.6%	Very High	Minor	Minor	Minor	Minor
5	Wansford Road	0.4%	1.5%	Very High	Minor	Minor	Minor	Minor
6	B1249	4.5%	24.9%	Medium	Negligible	Negligible	Negligible	Negligible
7	Driffield Road	1.7%	9.8%	High	Minor	Minor	Minor	Minor
8	A164 Beverley Road	3.2%	9.2%	Medium	Negligible	Negligible	Negligible	Negligible
9	Burnbutts Lane	3.2%	20.8%	Medium	Negligible	Negligible	Negligible	Negligible

The table above shows that the impact across all but one of the links is **Minor or Negligible** which is considered **not to be significant.**

We have then assessed Route Section 4 with the Drax BECCS traffic included.

Table 14-58: Worst Case Traffic Impact Assessment– 2025 – Neutral – Route Section 4 – BECCS Traffic Included

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
30	Redhouse Lane	458	68	15%	481	85	18%	4.7%	19.9%
31	New Road	1811	352	19%	2676	380	20%	32.3%	7.4%
32	A645 Adj. Power Station Access	9087	1113	12%	9487	1113	12%	4.2%	0.0%
33	Main Road (Drax)	2054	257	13%	2054	257	13%	0.0%	0.0%
34	A645 E	8370	1305	16%	8835	1350	16%	5.3%	3.3%

As shown with the additional traffic from the Drax BECCS the total traffic is increased to 32.3% from 3.5% as outlined in Table 14-48 which details the impact of the English Onshore Scheme on its own.

The other links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

Table 14-59: Significance of Effects 2025 – Route Section 4 – BECCS Traffic Included

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All%	HGV %					
30	Redhouse Lane	4.7%	19.9%	Medium	Negligible	Negligible	Negligible	Negligible
31	New Road	32.3%	7.4%	Medium	Negligible	Negligible	Minor	Negligible
32	A645 Adj. Power Station Access	4.2%	0.0%	High	Minor	Minor	Minor	Minor
33	Main Road (Drax)	0.0%	0.0%	High	Minor	Minor	Minor	Minor
34	A645 E	5.3%	3.3%	Low	Negligible	Negligible	Negligible	Negligible

The table below shows the results of the 2026 assessment with BECCS traffic included.

Table 14-60: Worst Case Traffic Impact Assessment– 2026 – Neutral – Route Section 4 – BECCS Traffic Included

ATC No.	Name	Baseline			With Construction			Increase	
		All	HGV	HGV%	All	HGV	HGV%	All %	HGV %
30	Redhouse Lane	461	69	15%	467	72	16%	1.3%	5.0%
31	New Road	1823	355	19%	2721	380	14%	33.0%	6.6%

ATC No.	Name	Baseline			With Construction			Increase	
32	A645 Adj. Power Station Access	9151	1121	12%	9551	1121	12%	4.2%	0.0%
33	Main Road (Drax)	2068	259	13%	2068	259	13%	0.0%	0.0%
34	A645 E	8428	1314	16%	8925	1339	15%	5.6%	1.9%

As shown with the additional traffic from the Drax BECCS the total traffic is increased to 34.4% from 7.9% as shown in **Table 14-50.**

The other links have no identified receptors that meet the first step of the IEA guidelines which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

Table 14-61: Worst Case Traffic Impact Assessment– 2026 – Neutral – Route Section 4 – BECCS Traffic Included

No.	Name	Increase		Sensitivity of Receptor	HGV Construction Traffic	Pedestrians/ Cyclists	Severance	Road Safety
		All%	HGV %					
30	Redhouse Lane	1.3%	5.0%	Medium	Negligible	Negligible	Negligible	Negligible
31	New Road	33.0%	6.6%	Medium	Negligible	Negligible	Minor	Negligible
32	A645 Adj. Power Station Access	4.2%	0.0%	High	Minor	Minor	Minor	Minor
33	Main Road (Drax)	0.0%	0.0%	High	Minor	Minor	Minor	Minor
34	A645 E	5.6%	1.9%	Low	Negligible	Negligible	Negligible	Negligible

Multiple effects upon one or more common receptors could theoretically interact or combine, to result in a combined effect which is either different or the same as the effects individually. As noted earlier in the assessment the construction traffic has also been increased by 20% alongside the growth factoring to account for any uncertainty in the assessment and thereby making the assessment more robust.

Overall, there are no significant identified combined effects. This is due to the impacts of construction traffic not exceeding a **Minor impact** as such the impact is considered to **not to be significant.**

In addition, the nature of the methodology for the traffic and transport assessment means that the combined traffic flows generated by different Access Points for construction vehicles, distributed to the highway network and then used to assess each receptor ensures there are no receptors assessed in isolation without the overall impact on the highway network being considered.

14.10 Summary of Assessment

Traffic levels have been surveyed to determine the baseline highway conditions on the surrounding network to quantify the magnitude of impact from the construction traffic. Automated Traffic Counter (ATCs) surveys have been undertaken within both a neutral week throughout the full length of the route and during a summer week close to Bridlington. This established the base year flows and Heavy Goods Vehicle (HGV) proportions for the highway network.

The collision data for the most recent five-year period was provided by the local highway authority (LHA). Analysis of the data revealed that there are no underlying highway design and/or safety issues within the search cordon, with no patterns of collision type, primary contributory factor, location, or movement identified. There are no collision cluster sites (locations with three or more collisions) on key road links or at junctions that would be exacerbated by the English Onshore Scheme.

Despite the length of the English Onshore Scheme, the amount of traffic associated with its construction and installation phase is not likely to be significant compared to existing levels particularly on the main routes within the route corridor. However, all necessary steps will be taken to ensure that the level of daily construction traffic movements does not cause a significant detrimental impact to the surrounding area and nearby communities.

The analysis of construction related impacts shows that only some of the identified receptors meet the first step of the IEA guidelines as described below which states that a link on the highway network should be included within the study if one of the following criteria is met:

- Traffic flows increase by more than 30% (or HGV flows increase by more than 30%); or
- Traffic flows in sensitive areas increase by more than 10%.

The following links have been identified as having >30% increase in HGVs:

- Carr Lane - 2025
- Burnbutts Lane - 2025
- Holme Wold Road - 2025 and 2026

As the increase in traffic generally does not meet the first step of the assessment criteria (with exception of Carr Lane, Burnbutts Lane and Holme Wold Road) this would result in a **Negligible impact**, which would **not be significant** for all of the potential traffic and transport related potential effects, which are:

- Severance (for motorists or pedestrians);
- Increased journey times for non-construction traffic;
- Pedestrian delay, intimidation, loss of amenity;
- Road accidents and safety;
- Air quality (covered in the CTMP and CEMP); and
- Dust and dirt (covered in the CTMP and CEMP).

Whilst the percentage increase in HGVs for Carr Lane, Burnbutts Lane and Holme Wold Road are >30% during peak construction periods, the actual increase in HGV movements per day is minimal (<10). As such with the implementation of appropriate management measures, including considerate timing of deliveries, the increases in HGV movements are not likely to result in a significant impact to receptors on these links.

An outline CTMP is provided as part of this ES and will be developed further by the contractor in consultation with the LHA, National Highways (as necessary), and other stakeholders following award of consent enabling management of any construction related traffic and transport impacts.

Due to the embedding of design mitigation and construction mitigation into the planning application boundary the residual effects of the English Onshore Scheme remain unchanged from the potential effects. The impact of the construction traffic does not exceed the threshold with HGV increases of under 30% in most worst-case assessment scenarios. Notwithstanding this assessment good practice mitigation measures have been outlined to assist in mitigating the majority of temporary traffic impacts associated with the construction phase of the English Onshore Scheme. Construction phase effects will likely be **Negligible** (**Not Significant**).

The operational phase of the English Onshore Scheme requires minimal vehicle trips to the converter station site, which are primarily attributed to the workforce. The number of vehicle movements will therefore be low and would likely only result in minor disruption to local residents and road users. It can

be concluded that the significance of the operational effects of the English Onshore Scheme would result in a **Negligible impact,** which would **not be significant.**

14.11 References

Ref 14-1 Department of Energy and Climate Change (2011) Overarching National Policy Statement for Energy (EN-1).

Ref 14-2 Department of Energy and Climate Change (2011) National Policy for Renewable Energy Infrastructure (EN-3).

Ref 14-3 Department of Energy and Climate Change (2011) National Policy for Electricity Networks Infrastructure (EN-5).

Ref 14-4 Department for Business Energy and Industrial Strategy (2020) Energy white paper: Powering our net zero future.

Ref 14-5 Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework.

Ref 14-6 Institute of Environmental Management and Assessment's (IEMA) (1993) Guidelines for the Environmental Assessment of Road Traffic.

Ref 14-7 National Highways (2021) Design Manual for Road and Bridges.