The Great Grid Upgrade

North Humber to High Marnham

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North Humber to High Marnham

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14. Traffic and Transport

14.1 Introduction

14.1.1 This chapter of the Environmental Statement (ES) presents the assessment of likely significant traffic and transport effects that could result from the North Humber to High Marnham Project (the Project) as described in **Application Document 6.4 Chapter 4 Description of the Project**.

14.1.2 This chapter describes relevant legislation and policy, the scope of the assessment, the methodology used, the datasets that have informed the assessment, the baseline conditions, mitigation measures, and the traffic and transport residual significant effects that could result from the Project.

14.1.3 The Order Limits, which illustrate the boundary of the Project, are shown on **Application Document 6.1.F1 Figure 1.1 Project Location and Route Sections**.

14.1.4 This chapter should be read in conjunction with the following ES chapters:

- **Application Document 6.4 Chapter 4 Description of the Project**;
- **Application Document 6.5 Chapter 5 Environmental Impact Assessment Approach and Methodology**;
- **Application Document 6.15 Chapter 15 Air Quality**;
- **Application Document 6.16 Chapter 16 Noise and Vibration**;
- **Application Document 6.20 Chapter 20 Intra-project Cumulative Effects**; and
- **Application Document 6.21 Chapter 21 Inter-project Cumulative Effects**.

14.1.5 This chapter is supported by the following figures:

- **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**;
- **Application Document 6.14.F2 Figures 14.2Sensitive Receptors**;
- **Application Document 6.14.F3 Figure 14.3 Collision Data;** and
- **Application Document 6.14.F4 Figure 14.4 - Public Rights of Way (PRoW) Impacted During Construction Phase**

14.1.6 This chapter is supported by the following appendices:

- **Application Document 6.14.A1 Appendix 14.1 Regional and Local Planning Policy**;
- **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**;
- **Application Document 6.14.A3 Appendix 14.3 Future Baseline**; and
- **Application Document 6.14.A4 Appendix 14.4 Magnitude of Impact**.

14.1.7 This chapter is supported by the following application documents:

- **Application Document 5.1 Consultation Report**;
- **Application Document 6.5.A1 Appendix 5.1 Environmental Impact Assessment Scoping Report**
- **Application Document 6.5.A2 Appendix 5.2 Scoping Opinion**
- **Application Document 6.5.A3 Appendix 5.3 Scoping Response Tables**
- **Application Document 6.16 Appendix 16.4 Construction Traffic Noise and Vibration Assessment**
- **Application Document 6.17 Socio-economic, Recreation and Tourism:**
- **Application Document 7.2 Outline Code of Construction Practice**;
- **Application Document 7.3 Register of Environmental Actions and Commitments**;
- **Application Document 7.4 Outline Construction Traffic Management Plan**;
- **Application Document 7.6 Outline Public Right of Way Management Plan**;
- **Application Document 7.15 Transport Assessment**; and
- **Application Document 7.22 Navigational Risk Assessment.**

14.1.8 For the purposes of this chapter, the following definitions apply:

- Site: Defined as the area beyond an access bellmouth off the public highway. Once a vehicle passes through a bellmouth, it is considered to be off the public highway and travelling internally via construction access tracks or temporary access routes;
- Bellmouths: The access area off the public highway to allow construction traffic into and out of the working area and internal haul road. Treated as the boundary of highway impact; and
- Highway Network: Highway up to and including the bellmouth.

14.2 Regulatory and Planning Context

14.2.1 This section sets out the legislation and planning policy that is relevant to the traffic and transport assessment. A full review of compliance with relevant national, regional, and local planning policy is provided within **Application Document 5.5 Planning Statement** submitted as part of the application for development consent.

14.2.2 **Application Document 6.2 Chapter 2 Legislation and Policy Context** describes the overall regulatory and planning policy context for the Project. Key legislation, policy, and planning guidance relevant to the assessment of traffic and transport effects of the Project is presented below.

Legislation

Transport Act 2000

14.2.3 The Transport Act 2000 (HM Government, 2000) sets the framework for local transport plans, road user charging and workplace parking levies, and supports wider government objectives for a safe, efficient and sustainable transport system. It establishes the context within which highway and transport authorities consider the impacts of major infrastructure. For the Project this means that any works affecting the highway, such as conductor stringing over the highway and installation of temporary bellmouths for construction access or compounds, must be consistent with local transport strategies prepared under the Transport Act 2000 (HM Government, 2000). Construction traffic management arrangements should also show how they support the objectives of the Transport Act 2000 (HM Government, 2000), including minimising congestion, maintaining safety and aligning with sustainable transport measures.

Highways Act 1980

14.2.4 The Highways Act 1980 (HM Government, 1980) is the principal legislation governing the creation, maintenance and improvement of highways in England and Wales. It sets out the responsibilities of highway authorities and the processes for carrying out works within the highway. The Highways Act 1980 (HM Government, 1980) is relevant where works involve crossing or working adjacent to the public highway. Permissions would be required for activities such as opening up or altering the highway, forming new accesses (temporary bellmouths), or placing structures within the highway boundary. The Highways Act 1980 (HM Government, 1980) therefore provides the legal framework for securing the necessary approvals from the highway authority to enable construction, and for ensuring that works are undertaken safely and without detriment to the operation of the road network.

New Road and Street Works Act 1991

14.2.5 The New Roads and Street Works Act 1991 (HM Government, 1991) provides the legal framework for carrying out street works and road excavations on public highways in the UK. It regulates utility companies, contractors, and highway authorities, setting out requirements for planning, notifying, signing, guarding and reinstating roads after works are completed. The Act aims to ensure that street works are carried out safely, by qualified personnel, and with minimal disruption to road users while protecting the integrity of the highway network.

Road Traffic Regulation Act 1984

14.2.6 The Road Traffic Regulation Act 1984 (HM Government, 1984) gives traffic authorities the powers to manage and regulate traffic on roads. It enables the creation of Traffic Regulation Orders (TROs) for measures such as speed limits, parking restrictions, one-way systems, road closures, weight limits, bus lanes and pedestrian crossings. The Act's primary purpose is to improve road safety, facilitate the efficient movement of traffic, protect the environment and preserve the character of roads and surrounding areas.

Traffic Management Act 2004

14.2.7 The Traffic Management Act 2004 (HM Government, 2004) was introduced to reduce congestion and improve the operation of road networks. It places a statutory duty on local highway authorities to secure the efficient movement of traffic and provides powers to coordinate street works, operate permit schemes, enforce traffic and parking regulations and manage road networks more effectively. The Act strengthens the control of roadworks and civil traffic enforcement, helping to minimise disruption and keep traffic flowing smoothly.

National Policy

National Policy Statements

14.2.8 National Policy Statements (NPSs) set out the primary policy tests against which the application for a Development Consent Order (DCO) for the Project will be considered.

14.2.9 Table 14.1 provides details of the elements of the Overarching NPS for Energy (EN-1) (Department for Energy Security and Net Zero, 2025), referred to hereafter as NPS EN-1, that are relevant to the assessment of the Project on traffic and transport and how and where related information is provided in the ES and Application.

14.2.10 The NPS for Electricity Networks Infrastructure (EN-5) (Department for Energy Security and Net Zero, 2025) does not specifically cover traffic and transport and therefore is not considered further within this chapter.

Table 14.1 – NPS EN-1 sections relevant to traffic and transport

NPS EN-1 section	Where this is covered in the application
5.14.1 '*The transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks, for example through increased congestion. Impacts may include economic, social and environmental effects*.'	The assessment of construction traffic is presented in section 14.8.14 of this chapter. Traffic impacts during operation and maintenance have been scoped out on the basis that operational and maintenance movements (foot patrols, light vehicles, occasional HGVs) are expected to be substantially below the threshold of a 30% increase, or 10% increase on sensitive links, over existing flows and would have no potential to give rise to significant effects. Operational and maintenance activity would require a limited workforce, with infrequent access required to ensure the operational Project is appropriately surveyed, assessed, and maintained.
5.14.4 '*The consideration and mitigation of transport impacts is an essential part of government's wider policy objectives for sustainable development as set out in Section 2.5 of this NPS*.'	Mitigation measures are set out in section 14.8 of this chapter and within **Application Document 7.4 Outline Construction Traffic Management Plan**, **Application Document 7.3 Register of Environmental Actions and**

NPS EN-1 section	Where this is covered in the application
	Commitments and **Application Document 7.2 Outline Code of Construction Practice**.
5.14.5 '*If a project is likely to have significant transport implications, the applicant's ES (see Section 4.3) should include a vision for transport and an assessment of potential transport impacts.*' 5.14.6 '*The DfT's Transport Analysis Guidance (TAG) … provides guidance on modelling and assessing the impacts of transport schemes*.'	This chapter has been prepared using the National Planning Practice Guidance for Travel Plans, Transport Assessments and Statements (Department for Communities and Local Government, 2014) and includes the components that typically form part of a Transport Assessment (see **Application Document 7.15 Transport Assessment**). The Project is not expected to have significant transport implications, and the approach to **Application Document 7.15 Transport Assessment** has been agreed with the relevant local highway authorities (LHAs) and National Highways (as custodians of the Strategic Road Network).
5.14.7 '*National Highways and Highways Authorities are statutory consultees on NSIP applications including energy infrastructure where it is expected to affect the strategic road network and/or have an impact on the local road network. Applicants should consult with National Highways and Highways Authorities as appropriate on the assessment, including any reasonable future tested scenarios and mitigation to inform the application to be submitted*.'	National Highways and the relevant LHAs have been consulted on the approach to the assessment and the mitigation measures proposed. A summary of this engagement is provided in section 14.3 of this chapter. National Grid Electricity Transmission plc (National Grid) have engaged with National Highways during the pre-application stage, with details of engagement and matters under discussion set out within **Application Document 5.8.4 Statement of Common Ground National Highways**.
5.14.8 '*The applicant should prepare a travel plan adopting a vision-led approach to identify demand management and monitoring and fall-back measures that proactively mitigate transport impacts by providing details of proposed measures to improve access by active, public and shared transport to:* *Reduce the need for parking associated with the proposal;* *Contribute to decarbonisation of the transport network; and* *Improve user travel options by offering genuine modal choice*.'	Details of control and management measures, including those relating to construction staff travel movements, are set out within **Application Document 7.4 Outline Construction Traffic Management Plan**.
5.14.9 '*The assessment should also consider any possible disruption to services and infrastructure (such as road, rail and airports).*'	An assessment of the forecast impacts on the road network as a result of the Project during the construction phase is set out in section 14.8.14 of this chapter. Details of the proposed crossing methods have been provided in the

NPS EN-1 section	Where this is covered in the application
	crossing schedule in **Application Document 6.4.A3 Appendix 4.3 Indicative Public Right of Way, Road and Railway Crossing Schedule**. Consideration of the effects on aerodromes is provided in **Application Document 6.17 Chapter 17 Socio-economics, Recreation and Tourism**.
5.14.10 '*If additional transport infrastructure is needed or proposed, it should always include good quality walking, wheeling and cycle routes, and associated facilities (changing/storage etc.) needed to enhance active transport provision*.'	Management of the affected public right of way (PRoW) network is reported in section 14.8 of this chapter and **Application Document 7.6 Outline Public Right of Way Management Plan**. No additional permanent transport infrastructure is currently planned.
5.14.12 '*Where mitigation is needed, possible demand management measures must be considered. This could include identifying opportunities to*: *Reduce the need to travel by consolidating trips;* *Locate development in areas already accessible by active travel and public transport;* *Provide opportunities for shared mobility;* *Re-mode by shifting travel to a sustainable mode that is more beneficial to the network;* *Retime travel outside of the known peak times; and* *Reroute to use parts of the network that are less busy.*'	Demand management measures identified as part of the mitigation of the Project are reported in section 14.8 of this chapter as well as in **Application Document 7.4 Outline Construction Traffic Management Plan**.
5.14.15 '*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, and associated high-quality drive facilities either on the site or at dedicated facilities elsewhere, to support driver welfare, 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*	Further details about heavy goods vehicle (HGV) management, including movements, routeing, compounds/parking and the management of abnormal indivisible loads, are provided within **Application Document 7.4 Outline Construction Traffic Management Plan**.

NPS EN-1 section	Where this is covered in the application
consultation with network providers and the responsible police force.'	
5.14.20 '*Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the Secretary of State should consider requirements to mitigate adverse impacts on transport networks arising from the development, as set out below*.'	The proposed mitigation is set out within section 14.8 of this chapter as well as within **Application Document 7.4 Outline Construction Traffic Management Plan** and **Application Document 7.6 Outline Public Right of Way Management Plan** and is designed to reduce the impact of the Project on transport infrastructure to acceptable levels. The Project is not expected to result in any significant traffic and transport effects with the inclusion of these measures, as demonstrated within section 14.8.14 of this chapter.
5.4.22 '*The Secretary of State should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision*.'	As set out in section 14.8.14 of this chapter, the Project would not result in any unacceptable impact on highway safety, and as set out in **Application Document 6.21 Chapter 21 Inter-project Cumulative Effects**, the Project would not result in cumulative impacts on the road network that would be severe. **Application Document 7.4 Outline Construction Traffic Management Plan** sets out measures to encourage active travel for construction staff, and operational staff and visitors where relevant, such as the use of car sharing to compounds and other site construction and maintenance locations.

National Planning Policy Framework

14.2.11 The National Planning Policy Framework (NPPF) as revised in August 2026 (Ministry of Housing, Communities & Local Government, 2026) sets out national planning policies that reflect priorities of the Government for the operation of the planning system and the economic, social, and environmental aspects of the development and use of land. The NPPF (Ministry of Housing, Communities & Local Government, 2026) has a strong emphasis on sustainable development, with a presumption in favour of such development. Although the NPSs set out the primary policy tests for the Project, the NPPF (Ministry of Housing, Communities & Local Government, 2026) has the potential to be considered important and relevant to the consideration of the Project by the Secretary of State (SoS).

14.2.12 Table 14.2 provides details of the elements of the NPPF (Ministry of Housing, Communities & Local Government, 2026) that relate to the traffic and transport assessment, and how and where they are covered in the ES and Application.

Table 14.2 – NPPF sections relevant to traffic and transport

NPPF section	Where this is covered in the application
TR3: Locating development in sustainable locations: *'a. Development proposals which could generate a significant amount of movement, in the context of the area within which they would be situated, should be in locations that are sustainable (or which can be made so, taking into account planned improvements, including any provided for as part of the development itself). This means the location should limit the need to travel, particularly by private car, and offer a genuine choice of transport modes for residents and users, unless the nature of the development would make this impractical;* *b. Opportunities should be taken to utilise existing or proposed transport infrastructure in optimising the amount or density of development which can be accommodated in different locations, especially where this can support more walking, wheeling, cycling and public transport use;'*	**Application Document 7.15 Transport Assessment** sets out how transport issues were considered from the earliest design stages, through understanding the usage of construction access tracks and Primary Access Routes (PARs). **Application Document 7.4 Outline Construction Traffic Management Plan** demonstrates early planning of construction routes, phasing and environmental mitigation.
TR3: Locating development in sustainable locations: *'c. Any significant adverse impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, should be mitigated to an acceptable degree using a vision-led approach;'*	As set out in section 14.9 of this chapter, the Project would not result in any unacceptable impact on highway safety, and as set out in **Application Document 6.21 Chapter 21 Inter-project Cumulative Effects,** the Project would not result in cumulative impacts on the road network that would be severe. **Application Document 7.4 Outline Construction Traffic Management Plan** sets out measures to minimise environmental disturbance during construction (routeing, timing, vehicle type, site management). **Application Document 7.15 Transport Assessment** reviews proposed accesses, increase in trips associated with the Project, and compliance with design standards.
TR3: Locating development in sustainable locations: *'d. The environmental impacts of traffic and transport infrastructure should be identified, assessed and taken into account – including taking opportunities to avoid or mitigate any adverse environmental effects, and to secure*	The traffic and transport assessment presented in this chapter includes an assessment of severance; driver/passenger delay; non-motorised user delay; non-motorised amenity, fear and intimidation, highway safety, large loads, PRoW diversions and closures, driver delay for road closures

NPPF section	Where this is covered in the application
net environmental gains such as reductions in air pollution; and'	and diversions in accordance with the 2023 Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023) (referred to hereafter as the 'IEMA guidelines'). **Application Document 7.4 Outline Construction Traffic Management Plan** sets out measures to encourage active travel for construction staff. PRoW routes will be managed where required to ensure that these routes remain safe, secure and attractive for pedestrians and cyclists to avoid any conflicts. Further details are set out in **Application Document 7.6 Outline Public Right of Way Management Plan**. The proposed access points and construction access tracks have been designed to accommodate construction vehicles. Further details are set out within **Application Document 7.4 Outline Construction Traffic Management Plan**. The proposed temporary car parks for construction workers within the site compounds will include electric vehicle charging facilities.
TR3: Locating development in sustainable locations: *'e. In rural areas, opportunities to improve walking, wheeling, cycling and public transport and enhance the connectivity of an area should be taken where they exist and can be supported by the development proposed.'*	PRoW routes will be managed where required to ensure that these routes remain safe, secure and attractive for pedestrians and cyclists to avoid any conflicts. Further details are set out in **Application Document 7.6 Outline Public Right of Way Management Plan**.
TR4: Street design, access and parking '1. To contribute to creating well-designed places, transport considerations should be integral to the design of development, proposals for which should: *a. Give priority first to walking, wheeling and cycle movements,…* *b. Incorporate or contribute towards appropriate features to support this prioritisation.* *c. Ensure that the arrangement of streets and other routes help to create places that are safe, inclusive and attractive for all users…*	The traffic and transport assessment presented in this chapter includes an assessment of severance; driver/passenger delay; non-motorised user delay; non-motorised amenity, fear and intimidation, highway safety, large loads, PRoW diversions and closures, driver delay for road closures and diversions in accordance with the 2023 Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023) (referred to hereafter as the 'IEMA guidelines').

NPPF section	Where this is covered in the application
d. Allow for the efficient delivery of goods, and ease of access by service and emergency vehicles…; and *e. Provide a suitable number of parking spaces for a range of transport modes where appropriate, reflecting the location and nature of the development …allow for the charging of electric vehicles in safe, accessible and convenient locations.…'*	**Application Document 7.4 Outline Construction Traffic Management Plan** sets out measures to encourage active travel for construction staff. PRoW routes will be managed where required to ensure that these routes remain safe, secure and attractive for pedestrians and cyclists to avoid any conflicts. Further details are set out in **Application Document 7.6 Outline Public Right of Way Management Plan**. The proposed access points and construction access tracks have been designed to accommodate construction vehicles. Further details are set out within **Application Document 7.4 Outline Construction Traffic Management Plan**. The proposed temporary car parks for construction workers within the site compounds will include electric vehicle charging facilities.
TR6: Assessing transport impacts: *'1. Development proposals that are likely to generate significant amounts of movement should be supported by: a. A transport statement or transport assessment (depending on the extent and significance of the transport issues involved), which is proportionate to the nature and scale of the development, so that the likely impacts of the proposal for transport can be assessed and monitored; and b. A travel plan, which indicates how sustainable transport objectives will be delivered, monitored and managed over time.* *3. In assessing movement patterns and potential impacts, including whether they are considered to be severe, reasonable future scenarios should be considered, taking into account impacts at relevant times of the day, potential cumulative impacts, multimodal trip generation and the promotion of sustainable modes of travel…'*	A Transport Assessment has been prepared and is included in **Application Document 7.15 Transport Assessment.** The Transport Assessment reviews proposed accesses, increase in trips associated with the Project, and compliance with design standards. It also assesses future scenarios to understand project impact. **Application Document 7.4 Outline Construction Traffic Management Plan** sets out measures to encourage active travel for construction staff.
TR6:Assessing transport impacts: *4 –'"Development proposals should be refused if they would have a severe adverse impact on the transport network (in terms of capacity and congestion, including cumulative impacts), or an unacceptable impact on highway safety;*	As set out in section 14.8.14 of this chapter, the Project would not result in any unacceptable impact on highway safety, and as set out in **Application Document 6.21 Chapter 21 Inter-project Cumulative Effects**, the Project would not result in

NPPF section	Where this is covered in the application
taking into account any mitigation measures proposed as well as any wider network improvements, including measures to support sustainable patterns of movement. This applies both during the construction phase and following completion."	cumulative impacts on the road network that would be severe.
TR8: Public rights of way *'1. Development proposals should:* *a. Protect and enhance the network of public rights of way, including through suitable diversions agreed with the highway authority; and* *b. Take opportunities to extend, link or improve the quality of existing routes where this enables one or more of the following:…* *iii. The provision of accessible, safe and convenient links to services and facilities;* *…'*	PRoW routes will be managed where required to ensure that these routes remain safe, secure and attractive for pedestrians and cyclists to avoid any conflicts. Further details are set out in **Application Document 7.6 Outline Public Right of Way Management Plan**.

National Planning Practice Guidance

14.2.13 The NPPF (Ministry of Housing, Communities & Local Government, 2026) is supported by Planning Practice Guidance (PPG) which was first published in March 2014. The PPG is updated on a regular basis and provides advice on a range of topics related to the implementation of NPPF (Ministry of Housing, Communities & Local Government, 2026) policies. The PPG that is relevant to the traffic and transport assessment is summarised below.

Planning Practice Guidance for Travel Plans, Transport Assessments and Statements

14.2.14 The PPG for Travel Plans, Transport Assessments and Statements (Department for Communities and Local Government, 2014) explains when a Transport Assessment, Transport Statement or Travel Plan is required, and how the scope should be proportionate to the scale and impact of the proposal. It is focused on decision taking and supports early consideration of mitigation, monitoring, and conditions or obligations. It is relevant as it frames what the Transport Assessment, as presented in **Application Document 7.15 Transport Assessment**, and the Construction Worker Travel Plan, as presented as part of **Application Document 7.4 Outline Construction Traffic Management Plan**, should cover for the Project.

Regional and Local Policy

14.2.15 **Application Document 6.2 Chapter 2 Legislation and Policy Context** lists relevant regional and local policy documents.

14.2.16 A range of regional and local planning policies are in place that seek to protect and enhance the local road network, strategic road network (SRN) and surrounding area. These have been given due regard in the traffic and transport assessment and have been considered as part of the design development process of the Project. Full details of local policies relevant to this assessment are presented in **Application Document 6.14.A1 Appendix 14.1 Regional and Local Planning Policy**.

14.3 Scoping Opinion and Consultation

Scoping Opinion

14.3.1 A Scoping Report for the Project was issued to the Planning Inspectorate on 21 August 2023 (**Application Document 6.5.A1 Appendix 5.1 Environmental Impact Assessment Scoping Report**) and a Scoping Opinion was received from the Planning Inspectorate on behalf of the SoS for the Department for Energy Security and Net Zero on 29 September 2023 (**Application Document 6.5.A2 Appendix 5.2 Scoping Opinion**). Table 14.3 sets out the comments raised in **Application Document 6.5.A2 Appendix 5.2 Scoping Opinion** that relate to traffic and transport and how these have been addressed in this assessment. **Application Document 6.5.A2 Appendix 5.2 Scoping Opinion** takes account of responses from prescribed consultees as appropriate. **Application Document 6.5.A3 Appendix 5.3 Scoping Response Tables** provide responses to the comments made by the prescribed consultees at the scoping stage that relate to the scope of the assessment and how each comment has been considered.

Table 14.3 – Comments raised in the Scoping Opinion

ID	Inspectorate's comments	Response
3.8.1	**Traffic impacts during operation and maintenance:** The Scoping Report seeks to scope out traffic impacts relating to operation and maintenance of the Proposed Development on the basis that operational and maintenance traffic from overhead line projects would be expected to be substantially lower than 30% of existing traffic and movements and is therefore not anticipated to have a material effect on the transport network and receptors. The Inspectorate notes from the description of maintenance activities at Section 4.5 of the Scoping Report that this would comprise maintenance, minor repairs and modifications and refurbishment, with access primarily by foot patrol, van, pickup truck or air (drone/ helicopter) with possibly some HGVs at CSECs. Based on the information in the Scoping Report, the	This matter has been scoped out of this assessment as agreed due to the low levels of generated traffic movements during these stages of the Project's lifecycle. As a result of further assessment and appraisal, no Cable Sealing End Compounds (CSEC) are proposed reducing vehicular trips across the maintenance phase. Traffic impacts during operation and maintenance have been excluded on the basis that operational and maintenance movements (foot patrols, light vehicles, occasional HGVs) are

ID	Inspectorate's comments	Response
	Inspectorate agrees that significant effects are unlikely from an increase in road traffic and/or other impacts to the road network and is content to scope these matters out of the ES. The description of the Proposed Development in the ES should explain the likely number and nature of vehicle movements to provide confidence for excluding these matters from more detailed assessment. The Inspectorate draws the Applicant's attention to ID 2.1.11 of this Opinion. The Inspectorate considers that the traffic movements considered against the relevant thresholds should be a combination of total movements for both operation and maintenance activities referred to within the Scoping Report.	expected to be well below the threshold of a 30% increase, or 10% increase on sensitive links, over existing flows and would not give rise to significant effects. Operational and maintenance activity would require a limited workforce, with infrequent access required to ensure the operational Project is appropriately surveyed, assessed, and maintained.
3.8.2	**Increased driver delay on PRoW, national/regional walking/cycling and bridleway routes - construction**: The Applicant proposes to scope this matter out on the basis that PRoW and walking and cycling routes are not utilised by drivers. Given the lack of impact pathway present for increased driver delay on the listed receptors, the Inspectorate agrees to scope this matter out from further assessment.	This matter has been scoped out of this assessment as agreed.
3.8.3	**Decline in highway safety on PRoW, national/regional walking/cycling and bridleway routes – Construction** The Applicant proposes to scope this matter out on the basis that this impact relates only to collisions on the highway. Given the lack of impact pathway present for a decline in highway safety on the listed receptors, the Inspectorate agrees to scope this matter out from further assessment.	This matter has been scoped out of this assessment as agreed.
3.8.4	**Increased pedestrian, cyclist and equestrian journey length on road links and junctions – Construction:** The Applicant proposes to scope this matter out on the basis that this impact does not relate to the road network. Given the lack of impact pathway present for increased pedestrian, cyclist and equestrian journey length on road links and junctions, the Inspectorate agrees to scope this matter out from further assessment.	This matter has been scoped out of this assessment as agreed.
3.8.5	**Increased risk of accidents caused by hazardous load on PRoW, national/regional walking/cycling and bridleway routes – Construction** The Applicant proposes to scope this matter out on the basis that hazardous loads	This matter has been scoped out of this assessment as agreed.

ID	Inspectorate's comments	Response
	would not use PRoW, national/regional walking/cycling and bridleway routes. Given the lack of impact pathway present for increased risk of accidents caused by hazardous loads on the listed receptors, the Inspectorate agrees to scope this matter out from further assessment	
3.8.6	**Rail network**: The Applicant proposes to scope out an assessment of railway network from the Traffic and Transport assessment on the basis that crossing methods would be employed to avoid any potential impacts on the railway, and that any vehicle crossing points of the railway (if required) will be managed to ensure operational rail safety. Given the stage of the Proposed Development and the lack of information on where the cable route may cross railway infrastructure and the crossing methods that could be used, and the need for any road crossings, the Inspectorate considers that there is insufficient evidence at this stage to scope this matter out of the assessment. The ES should include an assessment of the potential impacts to the railway network and operational rail safety, where there is potential for likely significant effects to occur. The assessment should also consider the potential impacts of any temporary closures required to facilitate construction activities on the rail network. The Applicant should make effort to agree the approach to assessment with relevant consultation bodies including Network Rail. The Applicant's attention is drawn to the consultation response from Network Rail (Appendix 2 of this Opinion) in this regard.	The only interaction with the rail network associated with the Project relates to the installation and subsequent removal of temporary crossing protection required for conductor stringing. These works would be undertaken under a line possession, managed in accordance with Network Rail procedures, to ensure operational rail safety is maintained at all times. On this basis, it is not considered likely that there would be any interruption to rail services during either the construction or operational phases of the Project, and therefore significant effects on the rail network are not anticipated. Impacts on the railway network have accordingly not been considered further within this assessment. Details of the proposed crossing methods have been provided in the crossing schedule in **Application Document 6.4.A3 Appendix 4.3 Indicative Public Right of Way, Road and Railway Crossing Schedule**.
3.8.7	**Abnormal loads:** The Scoping Report sets out that the Outline Construction Traffic Management Plan (CTMP) would include measures to manage abnormal loads. The Inspectorate recommends that an assessment of the suitability of access routes to accommodate abnormal loads is undertaken. This assessment should consider the worst-case number of abnormal loads and types of vehicles required. The outcome of this assessment should be reported in the ES, together with	An Abnormal Indivisible Loads (AILs) strategy which sets out the vehicle numbers and routes is included in **Application Document 7.4 Outline Construction Traffic Management Plan**. Measures to manage AILs are set out in in **Application Document 7.4 Outline**

ID	Inspectorate's comments	Response
	confirmation of any measures required to mitigate significant adverse effects arising from this matter.	**Construction Traffic Management Plan**.
3.8.8	**Transport modes:** The Inspectorate recommends the consideration of water-borne or rail transportation over road transport in line with the Overarching National Policy Statement for Energy (EN-1) (Department for Energy Security and Net Zero, 2025). The Applicant's attention is drawn to the consultation response from the Canal and River Trust (Appendix 2 of this Opinion) in this regard.	Consideration for the use of alternative transport modes, including both rail and waterborne transport has been undertaken. An assessment of the available transport infrastructure, site access requirements and construction logistics concluded that road transport represents the most practical, efficient, and feasible means of transporting materials, plant, and equipment required for the construction of the Project. Accordingly, road-based transport has been adopted as the primary mode for construction-related movements.
3.8.9	**Waterways:** The receptors listed in Table 13.8 does not include consideration of users of waterways. The study area of the Proposed Development crosses several watercourses, there is potential for navigational, and disruption impacts to users of these waterways including marine users and users of the canal network. The ES should consider potential impacts to affected waterways. The potential impact on these crossings such as canal closures to facilitate construction upon navigable crafts on the canals should be considered within the ES. The Applicant's attention is drawn to the response from the Canal and River Trust and the Maritime and Coastguard Agency (Appendix 2 of this Opinion) in this regard.	The Project crosses five navigable waterways. Temporary closures during the installation and removal of temporary structures would be required. **Application Document 7.22 Navigational Risk Assessment** has been produced and submitted alongside the DCO. The assessment takes account of implications of the temporary stopping up of navigable waterways. This has informed the assessment reported in **Application Document 6.17 Chapter 17 Socio-Economic Tourism and Recreation.**
3.8.10	**Guidance:** The technical guidance referred to within Table 13.4 lists the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic (GEART) (1993). The Inspectorate considers that the assessment undertaken in the ES should utilise the latest	This assessment has been undertaken following guidance set out in the IEMA guidelines (IEMA, 2023).

ID	Inspectorate's comments	Response
	IEMA Guidance: Environmental Assessment of Traffic and Movement (2023).	

Statutory Consultation

14.3.2 Statutory consultation for the Project took place between 18 February and 15 April 2025. A summary of the relevant feedback received during statutory consultation relating to traffic and transport is provided in Table 14.4. Further details on how consultation responses have informed the assessment are provided in **Application Document 5.1 Consultation Report**.

Table 14.4 – Assessment aspects raised at statutory consultation and how these have been addressed

Stakeholder	Assessment aspects raised	How this has been addressed
Nottinghamshire County Council	Required additional information on baseline or source data. Requested a breakdown of vehicle movements for material deliveries or contractor/worker movement forecasts.	A breakdown of vehicle movements for material deliveries and contractor/worker forecasts is provided within this assessment. Baseline data were collected through a substantial programme of Automatic Traffic Count (ATC) surveys, undertaken in 2024 and 2025 within 'neutral periods' and agreed with the LHAs. These data are provided in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**. ATC locations are shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**.
Nottinghamshire County Council	Further impact assessment is required for preliminary construction activities that may cause significant Traffic and Transport effects. The focus is on five key areas: driver delay, non-motorised delay, severance and amenity, fear and intimidation, and road safety. Highway link assessment methodology – two rules: Rule 1 for traffic or HGV flow increases over 30%, and Rule 2 for sensitive areas with traffic flow increases of 10% or more.	An assessment of the residual effects is presented in section 14.8.14. This includes assessments of all key areas listed, and also uses the two rules, which are included in the IEMA guidelines (IEMA, 2023).

Stakeholder	Assessment aspects raised	How this has been addressed
Nottinghamshire County Council	The Misterton-Walkeringham section shows high sensitivity at Primary Access Route (PAR) 78 (Carr Lane) and PAR 79 (B1403 Church Street), with an increase of 222 HGVs per day- equivalent to around 18 per hour. The applicant is asked to confirm whether this figure represents one-way HGV movements.	Vehicle numbers presented in the preliminary assessment were preliminary only and have been updated as part of this assessment. PAR 78 and 79 have medium sensitivity and an increase of 34 and 24 two-way HGV, respectively. Vehicle numbers are set out in the form of two-way movements.
Nottinghamshire County Council	In Route Section 9, all links are below the 30% threshold except PAR 84, which shows a 43.2% increase but is not sensitive, so no further assessment is proposed. The Highway Authority cannot locate PAR 84 on the plans, so cannot confirm this.	Screened in PARs can be found in Table 14.20. PAR 84 has been excluded from the assessment as it is no longer required to gain vehicular access to the Project. Updated traffic flow diagrams have been shared with NCC.
Nottinghamshire County Council	Route Section 10 N Wheatley to Fledborough and Route Section 11 Fledborough to High Marnham - All forecasted traffic increases on these PAR's are below the 30% threshold.	Vehicle numbers presented in the preliminary assessment were preliminary and have been updated as part of this assessment. Screened in PARs can be found in Table 14.20.
Nottinghamshire County Council	The preliminary assessment identifies several links- PAR 74 (A161 Station Road), PAR 128 (Norfolk Bank West), PAR 135 (Meredyke Road West) and PAR 136 (B1392 Eastoft Road) as experiencing significant effects, yet they are not shown in the same category. The applicant is asked to clearly explain this discrepancy.	Significant effects presented in the preliminary assessment were preliminary and have been updated as part of this assessment. The methodology has been updated as part of this assessment, as outlined in Section 14.4, and there is now no discrepancy.
Nottinghamshire County Council	LHA is reasonably content with the overall approach, assessment methodology and scope of work for the transport impact assessment and intended management controls for the project.	No action required.
Nottinghamshire County Council	The proposed assessments are broadly appropriate for this early DCO stage, though several minor discrepancies need clarification. The LHA is content that additional data	No action required.

Stakeholder	Assessment aspects raised	How this has been addressed
	provided through the iterative process should resolve these issues.	
Canal and Rivers Trust	The Stainforth & Keadby Canal and the River Trent are freight waterways capable of handling freight traffic. Opportunities may exist for the carriage of construction associated traffic to the site via waterborne craft, reducing the need for carriage by road.	The Canal and Rivers Trust have been consulted. Table 14.3 states that engagement with the Canal and Rivers Trust has confirmed that the use of canals would not be appropriate for construction traffic for the movement of construction materials. Therefore, the assessment for traffic and transport has led to the assessment of all trips being undertaken by road. Sustainable transport methods have been investigated in **Application Document 7.4 Outline Construction Traffic Management Plan**.
National Highways	Subject to the anticipated impact at the SRN and the need for future capacity assessments, due to potential unsuitability of Trip End Model Presentation Program (TEMPro) for localised analyses, the Applicant may need to use an alternative method to verify traffic growth forecasts by comparison with actual count data trends for the relevant road section.	This has been reviewed as part of this assessment. Along with TEMPro growth, committed development traffic has been added to the future baseline traffic flows, where deemed appropriate, and to meet a specific criterion. Further information is included in **Application Document 6.14.A3 Appendix 14.3 Future Baseline**. National Grid have engaged with National Highways during the pre-application stage, with details of engagement and matters under discussion set out within **Application Document 5.8.4 Statement of Common Ground National Highways,** including the sharing of traffic data used in production of the application**.**
National Highways	The preliminary assessment confirms that committed development traffic is not yet included in the future baseline. If future capacity assessments are required, particularly where impacts on the SRN are anticipated, committed development traffic will need to be	Along with TEMPro growth, committed development traffic has been added to the future baseline traffic flows, where deemed appropriate, and to meet a specific criterion. Further information is included in **Application Document 6.14.A3 Appendix 14.3 Future**

Stakeholder	Assessment aspects raised	How this has been addressed
	incorporated within network impact assessments.	**Baseline**. No highway capacity assessments are required as part of this traffic and transport assessment. This is because most staff travel will be before the network morning peak hour and after the evening peak hour. Construction vehicle trips will occur throughout the day and avoid peak hours where possible.
National Highways	The Project is split into 11 Route Sections from Creyke Beck to High Marnham, with combined section flows used to illustrate overall project traffic. Daily peak construction flows are presented, but these do not necessarily align with the highway network's peak periods.	Flow diagrams specific to the National Highways network have been updated and shared with National Highways. From new ATCs the peak period was derived and traffic has been assigned to that period. This has been discussed with National Highways.
National Highways	The anticipated construction period timeframe should be provided to determine if the impact will be prolonged.	Construction period timeframes have been provided in section 14.4. Further construction information and the indicative construction programme is included in **Application Document 6.4 Chapter 4 Description of the Project**.
National Highways	Depending on the impact of construction traffic at each SRN junction, capacity assessments may be required to highlight whether there will be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.	Following the assessment of highway safety and the residual effects after mitigation, the resulting effects presented in this chapter are not considered significant. Therefore, junction capacity assessments were not deemed necessary.
National Highways	Personal Injury Collision (PIC) data from STATS 19 Department for Transport (DfT) Road Safety Data was obtained for roads along the PARs for 2020 to 2023.	Personal Injury Collision data have been updated in this assessment to include the latest STATS19 DfT Road Safety Data (January 2020 to December 2024) (Department for Transport, 2025). In addition, a Highway Safety Assessment has been undertaken and a summary is included in **Application Document 7.15 Transport Assessment.**

Stakeholder	Assessment aspects raised	How this has been addressed
National Highways	PIC data should be provided for any impacted junction for the most recent five-year period, excluding 2020 and 2021 due to COVID-19 travel restrictions.	Personal Injury Collision data has been updated in this assessment to include the latest STATS19 DfT Road Safety Data (Department for Transport, 2025). Data presented for the most recent five-year period, 2020 to 2024, but have included 2020 and 2021 data to illustrate a full dataset. Whilst it is acknowledged that the data includes the period of COVID-19 restrictions between the first lockdown in March 2020 and the end of the last lockdown in March 2021, this dataset nonetheless includes more than three years of 'typical' data. A Highway Safety Assessment has been undertaken and a summary is included in **Application Document 7.15 Transport Assessment.**

Stakeholder Engagement

14.3.3 National Grid Electricity Transmission plc (National Grid) has engaged with relevant stakeholders throughout the evolution of the Project, including; East Riding of Yorkshire Council (ERYC), North Lincolnshire Council (NLC), Nottinghamshire County Council (NCC) and National Highways (NH).

14.3.4 A summary of discussions and how these have influenced the scope and the approach to the traffic and transport assessment are provided in Table 14.5.

Table 14.5 – Further engagement

Organisation and date	Key topic raised	How this has been addressed
Nottinghamshire County Council meeting held on 13 March 2025	A meeting was held with NCC to discuss construction traffic routeing and management. Key points covered included the phasing of works, potential temporary restrictions (e.g. scaffolding, traffic lights, speed reductions), local constraints such as weight limits and low bridges, and concerns about HGV movements through villages. NCC requested clearer presentation of route plans and traffic numbers for specific areas. It	National Grid confirms that additional traffic data has been provided to address NCC's comments in the form traffic flow diagrams along with mapping showing the road links in the study area. Baseline traffic flows that include ATC surveys are included in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

Organisation and date	Key topic raised	How this has been addressed
	was agreed that traffic impacts should be minimised wherever possible, for example through the use of staff minibuses to compounds.	Future baseline traffic flows are included in **Application Document 6.14.A3 Appendix 14.3 Future Baseline**. Clarifications have been provided on construction traffic numbers. National Grid also indicated flexibility in traffic routeing to reduce impacts on sensitive villages. Environmental Weight Limit Zones only prohibit through traffic, not loading. Project traffic will be going to and from specific points within these zones, not traversing the area as a through route to another destination. Traffic flow diagrams have been provided to NCC which indicate the routes and traffic numbers (total vehicle and HGV). Details of worker travel is included within **Application Document 7.4 Outline Construction Traffic Management Plan,** within a section which sets out measures to reduce car usage.
Nottinghamshire County Council meeting held on 20 March 2025	A meeting was held with NCC on 20 March 2025 to discuss the management of PRoWs during construction. Over 30 PRoWs were identified as affected across Route Sections 8–11. The interventions required are a mix of temporary management/stop-up, with some diversions or closures also proposed. It was agreed that clear coordination will be required to define the type and duration of interventions and to distinguish between temporary and permanent measures.	National Grid worked closely with the relevant PRoW officers to ensure that the scope of proposed management, temporary closures and diversions is clearly set out. **Application Document 7.6 Outline Public Right of Way Management Plan** has been prepared as part of the application for development consent, in consultation with the local authorities, detailing how to manage impacts, agree suitable diversion routes and reinstate affected paths following construction. Permanent extinguishment of PRoWs has been avoided, with proposed temporary diversions identified in agreement with the councils. Further clarification has been provided on PRoW status, references, and the treatment of promoted routes and

Organisation and date	Key topic raised	How this has been addressed
		the National Trail. National Grid is committed to minimising disruption, maintaining safe access for users, and identifying opportunities for local improvements, where appropriate. Assessment of PRoW closures and diversions is reported in section 14.8.14 of this chapter.
East Riding of Yorkshire Council meeting held on 13 March 2025	A meeting was held with ERYC on 13 March 2025 to discuss construction traffic routeing and management. ERYC expressed a preference for construction access tracks to minimise use of the public highway and highlighted that Temporary Traffic Regulation Orders (TTROs) may be required at certain locations, although their maximum 2-year duration does not align with the full construction programme. ERYC raised issues around parking and traffic management in villages, requested traffic numbers before agreeing to measures, and noted that road condition surveys and potential upgrades may be necessary. They also advised that road safety audits would be expected where widening or crossings are proposed. Sensitive receptors, including community facilities, will require particular consideration, and ERYC emphasised the importance of early engagement with local communities to address concerns.	The Project access strategy has been developed to utilise construction access tracks as far as possible. TTRO details, dilapidation survey information and parking management measures where local constraints exist can be found in **Application Document 7.15 Transport Assessment**. TTROs details are included in **Application Document 2.5 Traffic Regulation Order Plans**. It has been agreed that the TTROs will be included in a Schedule to **Application Document 3.1 Draft Development Consent Order** of Made TTROs that will be valid for the entire project duration (although not necessarily required for all of that time), as set out in the Statement of Common Ground. The Project team acknowledge site-specific sensitivities (e.g. narrow streets and proximity to schools) and continue to refine measures in consultation with ERYC. Overall, National Grid considers the assessment approach sound. Outstanding matters have been addressed through further technical detail and agreement with ERYC.
East Riding of Yorkshire Council meeting held on 1 April 2025	A meeting was held with ERYC on 1 April 2025 to discuss PRoWs. ERYC requested clarity on terminology (distinguishing between permanent stopping up, temporary closures, diversions, and management) and asked that existing reference numbers be used. ERYC confirmed that only the	National Grid acknowledges the comments from the ERYC and have clarified the use of terminology around ‘stopping up’, temporary closures, diversions and management to avoid any ambiguity, as set out in the **Application Document 7.6 Outline Public Right of Way**

Organisation and date	Key topic raised	How this has been addressed
	Yorkshire Wolds Way and King Charles III Coast Path are National Trails, with other promoted routes also requiring consideration. ERYC stated that a management plan will be required to set out measures for diversions, reinstatement, safety, and cumulative impacts, and suggested a Section 106 fund for local access improvements. They strongly objected to permanent closures, emphasising that diversions should be provided instead. Particular concern was raised about the Yorkshire Wolds Way, where impacts on landscape, recreation, tourism and health were considered to be under-estimated. ERYC noted that burial of lines should be considered as mitigation.	**Management Plan**. No permanent closures are proposed as part of the Project. **Application Document 7.6 Outline Public Right of Way Management Plan** has been developed in consultation with ERYC to set out how temporary impacts will be managed, diversions agreed, and reinstatement delivered after construction. National Grid recognises the importance of the Yorkshire Wolds Way National Trail and have engaged with officers and the Yorkshire Wolds Way Partnership to identify proportionate measures to minimise and mitigate impacts. The Project would not interact with the King Charles III Coast Path. Existing PRoW names and reference numbers have been used in all reporting, and early dialogue will be maintained to ensure that safety, user experience and local amenity are appropriately protected throughout the Project. Cumulative impacts with other projects have been considered in **Application Document 6.21 Chapter 21 Inter-project Cumulative Effects**. All forms of mitigation, including cable burial, have been considered but are not deemed necessary to achieve compliance with national policy. Impacts on landscape are reported in **Application Document 6.6 Chapter 6 Landscape**. Impacts on recreation and tourism are reported in **Application Document 6.17 Chapter 17 Socio-economics, Recreation and Tourism**. Impacts on health are reported in **Application Document 6.18 Chapter 18 Health and Wellbeing**.

Organisation and date	Key topic raised	How this has been addressed
North Lincolnshire Council meeting held on 14 March 2025 and 6 May 2025.	Meetings were held with NLC on 14 March and 6 May 2025 to discuss construction traffic routeing and management. NLC expressed a strong preference for construction access tracks over highway widening to minimise impacts on the public road network, though they recognised that some widening and new bellmouths will still be required. Challenges were noted around parking demand in villages, where suspensions may be difficult to enforce. Several local routes were identified as unsuitable for HGVs, with use by only Light Goods Vehicles (LGVs) considered more appropriate. Safety concerns were highlighted at accident-prone locations, and the need for further discussions with NLC's Asset Officer on road condition and drainage issues was agreed. Engagement with bus operators and local councillors was recommended to manage conflicts with public transport and to address wider community concerns.	National Grid acknowledged the need to clarify and expand the assessment of traffic impacts in North Lincolnshire, particularly around sensitive routes and junctions. Additional survey data and more detailed traffic forecasts have been provided in **Application Document 6.14.A2 Appendix 14.2 Traffic, Transport Baseline Conditions, Application Document 6.14.A3 Appendix 14.3 Future Baseline** and **Application Document 7.15 Transport Assessment,** with corrections made where discrepancies were identified. The Project team confirmed that the methodology remains robust and aligned with the IEMA guidelines (IEMA, 2023). National Grid has worked with NLC and engaged with the recommended stakeholders to address local sensitivities through refinement of routes and provision of further details. PARs shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes and** traffic flows diagrams have been provided.
North Lincolnshire Council meeting held on 16 March 2025	A meeting was held with NLC on 16 March 2025 to discuss PRoWs. NLC identified discrepancies between the preliminary assessment figures and the definitive map and requested that these be addressed. Options for using existing byways instead of creating new temporary diversions were explored, and the importance of maintaining continuity of access for users where road widening is proposed was emphasised.	National Grid noted the discrepancies raised between the preliminary assessment figures and the definitive map and has ensured that all PRoWs are accurately represented in the ES figures and supporting documentation. It has been agreed with North Lincolnshire Council that the digitised definitive map alignment will be used. Widening is required on Newlands Lane, and National Grid will ensure that arrangements are put in place to maintain east–west connectivity for PRoW users, by retaining safe passage for pedestrians. The final approach has been developed in

Organisation and date	Key topic raised	How this has been addressed
		consultation with the highway and PRoW authorities to maintain safe, continuous access and is set out in **Application Document 7.6 Outline Public Right of Way Management Plan.**
National Highways	Key topics raised include matters relating to construction traffic routeing, potential impacts on the SRN, and the approach to traffic forecasting and assessment.	Engagement outcomes with National Highways are documented in **Application Document 5.1 Consultation Report** submitted as part of the application for development consent. **Application Document 7.15 Transport Assessment** has been prepared in accordance with agreed methodologies and reflects National Highways' consultation responses.

Summary of Scope of Assessment

14.3.5 The following summarises which aspects scoped into and out of the assessment through **Application Document 6.5.A1 Appendix 5.1 Environmental Impact Assessment Scoping Report** and **Application Document 6.5.A2 Appendix 5.2 Scoping Opinion** as set out in Table 14.3, statutory consultation as set out in Table 14.4 and further engagement with stakeholders as set out in Table 14.5.

Aspects scoped into the assessment

14.3.6 The following aspects have been included in the assessment based on **Application Document 6.5.A2 Appendix 5.2 Scoping Opinion** and adjusted to take account of changes in guidance and matters raised through consultation and engagement.

- Severance of communities, referred to as 'severance';
- Road vehicle driver and passenger delay, referred to as 'driver/passenger delay';
- Non-motorised user delay;
- Non-motorised amenity;
- Fear and intimidation on and by road users, referred to as 'fear and intimidation';
- Road user and pedestrian safety, referred to as 'highway safety'; and
- Hazardous/large loads.

14.3.7 In addition, the following categories have been considered in this assessment for the construction stage of the Project:

- Temporary PRoW diversions and closures;

- Driver delay associated with temporary road closures and associated traffic diversions; and
- Temporary effects on navigation along freight waterways, where relevant.

Aspects scoped out of the assessment

14.3.8 The following aspects have been scoped out of the assessment:

- Construction
  - Increased driver delay on receptors such as PRoWs and walking and cycling routes – scoped out as these routes are not used by drivers.
  - Decline in highway safety on PRoWs and national/regional/walking/cycling/bridleway routes – scoped out as these receptors are not part of the highway network where collision risk would apply.
  - Increased pedestrian, cyclist and equestrian journey length on road links and junctions – scoped out as there is no relevant impact pathway on the road network.
  - Hazardous loads on PRoWs and walking/cycling/bridleway routes – scoped out as these routes would not be used by abnormal or hazardous loads.
  - Hazardous/AILs: There would be a requirement for hazardous/AILs during the construction of the Project. AILs would include cranes, heavy plant such as piling rigs. Hazardous loads would include a number of fuel tankers for refuelling the compound and plant during construction. These have been included in the traffic forecasts and have therefore been assessed within this chapter. It is predicted there would be 2,930 two-way fuel tanker movements across the five-year construction phase, which would have minimal impacts and have been screened out of detailed further assessment (hazardous loads). **Application Document 7.4 Outline Construction Traffic Management Plan** includes details of measures that will be employed to ensure the safe vehicular transport of components to and from the Project. **Application Document 7.4 Outline Construction Traffic Management Plan** includes a separate AIL strategy which set out vehicle numbers and routes. The AIL strategy has identified routes for all AILs and has concluded that all such routes can be used safely for this purpose, with appropriate mitigation identified. As such, it is not anticipated that AIL movements would present any increase in impacts related to the other assessment categories considered and AILs are not therefore considered further in this assessment.

14.3.9 Decommissioning has been scoped out of the assessment as explained in **Application Document 6.5 Chapter 5 Environmental Impact Assessment Approach and Methodology**.

Operation and maintenance

14.3.10 Traffic impacts during operation and maintenance have been excluded on the basis that operational and maintenance movements (foot patrols, light vehicles, occasional HGVs) are expected to be well below the threshold of a 30% increase, or 10% increase on sensitive links, over existing flows and would not give rise to significant effects.

14.3.11 Operational and maintenance activity would require a limited workforce, with infrequent access required to ensure the operational Project is appropriately surveyed, assessed, and maintained.

14.4 Assessment Approach and Methods

14.4.1 **Application Document 6.5 Chapter 5 Environmental Impact Assessment Approach and Methodology** sets out the overarching approach which has been used preparing the information in this ES. This section describes the technical methods used to determine the baseline conditions, sensitivity of receptors, and magnitude of impacts and sets out the criteria that have been used for the traffic and transport assessment. Where the assessment criteria terminology differs from the general assessment criteria terminology, as set out in **Application Document 6.5 Chapter 5 Environmental Impact Assessment Approach and Methodology**, justification is provided.

Guidance Specific to the Traffic and Transport Assessment

14.4.2 Relevant guidance, specific to traffic and transport, that has informed the approach to the assessment in this chapter comprises:

- PPG for Travel Plans, Transport Assessments and Statements (Department for Communities and Local Government, 2014);
- IEMA Guidelines: Environmental Assessment of Traffic and Movement (IEMA, 2023) (referred to herein as the 'IEMA guidelines');
- Department for Transport (DfT) Circular 01/2022: Strategic Road Network and the Delivery of Sustainable Development (Department for Transport, 2022);
- Design Manual for Roads and Bridges (DMRB) LA 103 Scoping Projects for Environmental Assessment (Highways England, 2020);
- DMRB LA 104 Environmental Assessment and Monitoring (Highways England, 2020); and
- Transport Analysis Guidance (TAG) Unit M1.2 Data Sources and Surveys (Department for Transport, 2024).

Study Area

14.4.3 The study area for the assessment has been defined based on the area where there is likely to be a transport impact resulting from the construction of the Project. This includes routes (PARs) along which HGVs would travel during construction, as well as routes that would be used by LGVs only, including construction worker movements. The study area includes key highway links which provide a route between the site and SRN. These links have been used to form the PARs for the construction of the Project. The PARs are presented in **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**.

14.4.4 PARs include sections of the SRN or specific A-classification roads, referred to as the Major Road Network (MRN). These highway links have been discussed and agreed with the relevant LHAs, as detailed in Table 14.4.

14.4.5 The study area for the Highway Safety Assessment encompasses all PARs and extends to include areas within 30 metres of PAR. A summary of the Highway Safety Assessment is presented in **Application Document 7.15 Transport Assessment.**

14.4.6 The PARs have been developed using the following guiding principles:

- Construction HGV traffic would access the site via either specified bellmouths or other construction access points (as shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**) from the PARs. A description of each of the PARs is provided in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**. The description includes the type of carriageway, character, speed limits, highway constraints, presence of street lighting, bus routes and on-carriageway parking, and pedestrian, cyclist and horse-rider provision.
- The PARs connect to the closest junction with the SRN/MRN, though it should be noted that some parts of the SRN/MRN are also identified as PARs.
- From the bellmouths, construction vehicles would be routed off the public highway along construction access tracks to access the various working areas.
- Where practical, shorter routes between the SRN/MRN and construction sites have been selected.
- Existing highway constraints, such as challenging road geometry, height and weight restrictions, junction arrangements and other physical constraints, have been avoided where possible. Where these cannot be avoided, physical highways works, including road widening and passing places, are proposed to enable safe access for construction traffic.
- Settlements and sensitive locations such as schools or hospitals along the PARs have been avoided, where possible, to reduce potential effects on more sensitive receptors.

14.4.7 The PRoW receptors that have been assessed in this chapter, and which have closures and diversions that are within the study area, are listed in Table 14.6.

Table 14.6 – PRoWs with closures and PRoWs and closures with diversions

PRoW number	Description of PRoW
ROWLB13	Bridleway in the East Riding of Yorkshire extending east from the A164 and connecting at its eastern terminus with footpath WOODB30. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
WOODF07	Footpath in the East Riding of Yorkshire running north to south, connecting at its northern end with bridleway WOODB06 and at its southern end with footpath SKIDF16. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
ROWLF12	Footpath in the East Riding of Yorkshire running east to west, connecting at its eastern end with SKIDF16 and at its western end just off the A164. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.

PRoW number	Description of PRoW
SKIDB04	Bridleway in the East Riding of Yorkshire running north to south, connecting at its northern end with ROWLB07 and at its southern end to Church Rise in the village of Skidby. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
ROWLF15	Footpath in the East Riding of Yorkshire running north to south, connecting at its northern end with Dunflat Road and at its southern end to SKIDF13. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
ROWLF03	Footpath in the East Riding of Yorkshire running north to south, connecting at its northern end with Rowley Road and at its southern end to Riplingham Road. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
ELLRF02	National Trail footpath in the East Riding of Yorkshire running generally south-west to north-east through the Yorkshire Wolds, forming part of the long-distance Yorkshire Wolds Way route between Hessle and Filey. Passes through predominantly rural agricultural landscapes, including open farmland, chalk valleys and woodland, and comprises mainly non-trafficked sections with some stretches following farm and access tracks.
ELLRF04	Footpath in the East Riding of Yorkshire running northwest to southeast between Howden Croft Hill and Moor Lane. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
BROOF05	Footpath in the East Riding of Yorkshire near the village of Broomfleet running north-eastwards from Carr Lane to BROOF08 at the eastern end. The route follows the northern bank of Broomfleet Beck, crosses the railway line, and passes through agricultural land.
BROOF10	Footpath in the East Riding of Yorkshire near the village of Broomfleet running north to south along the eastern bank of the Market Weighton Canal, connecting with Landing Lane at its northern end and BROOB03 at its southern end. The route passes predominantly through agricultural land, comprising both off-road sections and stretches along Landing Lane.
OUSEB01	Bridleway in East Riding of Yorkshire near the village of Garthorpe running north-eastwards from Kings Causeway to Hoggard Lane. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
OUSEB02	Bridleway in East Riding of Yorkshire near the village of Garthorpe running north-eastwards from Kings Causeway to Hoggard Lane. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
ADLFB01	Bridleway located in the East Riding of Yorkshire, near the village of Garthorpe, running east–west and connecting to OUSEB01 at its western end, and with Cow Lane at its eastern end.Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.

PRoW number	Description of PRoW
NI|LUDD|5A	Restricted Byway in North Lincolnshire running north to south, connecting at its northern end with Meredyke Road, running along the east of the drain. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
NI|LUDD|9	Footpath in North Lincolnshire running generally north to south through agricultural land. The route follows a series of field-edge alignments and farm access tracks, changing direction at several points as it passes through open farmland and connects with Carr Lane at the north end and NI|KEAD|9 at the south.
NI|CROW|13	Bridleway in North Lincolnshire near the village of Ealand connecting Outgate, Bonnyhale Road and South Cross Moors Road. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
NI|CROW|11	Bridleway in North Lincolnshire near the village of Ealand connecting Bonnyhale Road, South Cross Moors Road and Bonnyhale Moor Road. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks
NI|CROW|12	Bridleway in North Lincolnshire near the village of Ealand connecting Outgate, Bonnyhale Road and South Cross Moors Road. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
NI|BELT|2	Restricted Byway in North Lincolnshire running south-eastward from the A161 to Out Mill. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
NI|EPWO|60	Footpath in North Lincolnshire running north to south, connecting at its northern end with Beltoft Road and at its southern end to Newland Lane. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
MistertonFP11	Footpath in Nottinghamshire running north to south, connecting at its northern end with Tindale Bank Road and at its southern end to MistertonBW21 near the River Idle. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
Misterton|BOAT 18	Byway Open to All Traffic in Nottinghamshire, connecting at its east end to Debdhill Road in the village of Misterton and at its western end to Cornley Road. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
Gringley On The HillFP13	Footpath in Nottinghamshire running on a southwest-to-northeast alignment, connecting at its southwestern end to Shaw Road and terminates at the B1403 to the east. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
BeckinghamFP12	Footpath in Nottinghamshire running east to west, connecting with ClayworthBW7 at its western end and terminating at Wood Lane to the east.

PRoW number	Description of PRoW
	The route passes through agricultural land, comprising both off-road sections and stretches that follow farm access tracks.
SaundbyFP3	Footpath in Nottinghamshire running east to west, connecting to BeckinghamFP3 to the west and SaundbyFP4 to the east. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
West Burton FP8	Footpath in Nottinghamshire running east to west, connecting with North WheatleyFP3 at its western end and terminating at Gainsborough Road to the east. The route passes through agricultural land, comprising both off-road sections and stretches that follow farm access tracks.
Sturton Le SteepleFP20	Footpath in Nottinghamshire running on a southeast-to-northwestern alignment, connecting at its southeastern end to Sturton Le SteepleFP19, and terminates at Station Road. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
Sturton Le SteepleBW25	Footpath in Nottinghamshire running north to south, connecting to Sturton Le SteepleBW26 to the north near the railway line crossing and Sturton Le SteepleFP41 to the south. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
South LevertonFP8	Footpath in Nottinghamshire located to the west of the village of South Leverton, running east to west connecting to Meetinghouse Lane to the east and Grove Road to the west. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
South LevertonFP21	Footpath in Nottinghamshire located to the west of the village of South Leverton running north to south connecting to Cowsland Road to the south and Hollowgate Road to the north. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
South LevertonFP11	Footpath in Nottinghamshire connecting to South LevertonFP26 to the north and TreswellBW11 to the south near the village of Treswell. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
TreswellBW11	Bridleway in Nottinghamshire connecting to SouthLevertonFP11 to the north and Rectory Road to the south near the village of Treswell. Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.
East DraytonFP3	Located in Nottinghamshire, this public footpath runs primarily east to west before turning north to south, connecting Darlton Road at its western end to a junction near Southbeck Lane and East DraytonFP3 at its northern terminus. The route passes along the boundaries of agricultural fields, utilising a combination of non-trafficked field edges and established agricultural access tracks.
Fledborough|FP 7	Located in Nottinghamshire, this public footpath runs east to west, connecting Far Road at its western end to Main Street at the eastern end.

PRoW number	Description of PRoW
	Runs through agricultural fields, partly non-trafficked and partly along agricultural access tracks.

14.4.8 Further details about the PRoWs, national cycle routes and navigable watercourses that are within the study area are presented in the following documents:

- **Application Document 7.6 Outline Public Right of Way Management Plan**; and
- **Application Document 2.6 Access, Rights of Way and Public Rights of Navigation Plans**, as in **Application Document 3.1 Draft Development Consent Order**; and
- **Application Document 7.22 Navigational Risk Assessment** and **Application Document 6.17 Socioeconomic, recreation and tourism.**

Baseline Data Gathering and Forecasting Methods

Data sources

14.4.9 The baseline information presented in this chapter has been informed by a desk study which has drawn on the following information sources:

- Identification of constraints on the highway network (such as height and width restrictions, on-street parking, visibility constraints, or capacity issues on roads and junctions of the PARs) were obtained from Google imagery of the highway network (see **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**).
- Identification of pedestrian, horse-riding and cycle infrastructure provision along the PARs was obtained from Google imagery of the highway network, routes digitised from Ordnance Survey (OS), and local authority data (see **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**).
- Identification of sensitive receptors in the vicinity of the road links forming the PARs were obtained from Google Maps satellite and street view images (see **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**).
- Road collision data for the latest available five-year period (2020–2024), for all the roads and junctions on the PARs, from STATS19 database (Department for Transport, 2025) to identify collision clusters and patterns in collision locations in order to establish any areas of safety concerns and estimate the collision rate per million vehicle kilometres to compare against the national statistics (see **Application Document 6.14.F3 Figure 14.3 Collision Data**).
- Public transport information for the PARs, including bus route information was obtained from Google imagery and bus operator websites of the highway network (**Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**).

- Estimation of the future baseline traffic along PARs with growth factors used from TEMPro software (see **Application Document 6.14.A3 Appendix 14.3 Future Baseline**).
- The planning applications that are listed in **Application Document 6.21.A1 Appendix 21.1 Long List Nationally Significant Infrastructure Projects (NSIP)** that are within the study area have been considered for the inter-project cumulative effects assessment (see **Application Document 6.21 Chapter 21 Inter-project Cumulative Effects**).
- Committed transport scheme details were obtained from the relevant LHA planning portal and NSIP planning portal (see **Application Document 6.14.A3 Appendix 14.3 Future Baseline**).
- National cycle routes were obtained from Sustrans (see **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**).
- OS 1:10,000, 1:25,000, 1:50,000 and 1:250,000 base mapping.
- OS Mastermapping.
- OS AddressBase Plus data.
- Aerial mapping.

14.4.10 No surveys of PRoWs have been carried out as the proposed management and mitigation relating to PRoWs as set out within **Application Document 7.6 Outline Public Right of Way Management Plan,** will be put in place irrespective of existing usage levels, to retain safe or provide alternative PRoW access for all users.

Site visits and surveys

14.4.11 The baseline within this chapter has been informed by automatic traffic surveys undertaken for the week of 23 June 2024 and 29 June 2024 and the week of 2 June 2025 to 8 June 2025, avoiding the school Summer holiday period, specifically for the Project. These dates were agreed with the local authorities. ATC survey locations are shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**.

14.4.12 Parking beat surveys were undertaken during two separate survey periods, comprising a one-week survey commencing 12 January 2026 and a further one-week survey commencing 26 January 2026. Surveys were undertaken during typical weekday conditions and avoided periods of abnormal parking demand, public holidays or unusual local events, where practicable. This approach was adopted to ensure the results are representative of baseline conditions. These surveys collected data on the number of parked vehicles, the location and type of parking, the duration of stay, any existing parking controls and any additional observations. The survey methodology and approach was agreed with the LHAs in advance of surveys being undertaken.

14.4.13 Surveys have been undertaken for access suitability, including Temporary Traffic Regulation Order (TTRO) area requirements and a Highways Safety Assessment at key higher-risk locations in accordance with GG104 of DMRB. Assessment Methods and Criteria

Assessment criteria

14.4.14 In accordance with the IEMA guidelines (IEMA, 2023), this chapter assesses the environmental impacts of road traffic with the following impact categories considered in relation to key receptors:

- Severance;
- Driver/passenger delay;
- Non-motorised User delay;
- Non-motorised amenity;
- Fear and intimidation;
- Highway safety; and
- Hazardous/large loads.

14.4.15 In addition, the following impact categories have been considered in this assessment for the construction stage of the Project:

- Temporary PRoW diversions and closures;
- Driver delay associated with temporary road closures and associated traffic diversions; and

Screening of PARs and PRoWs for assessment

PARs

14.4.16 To establish whether PARs require further analysis, the following two rules have been considered for each PAR, in line with the IEMA guidelines (IEMA, 2023).

- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%).
- Rule 2: Include highway links of high sensitivity where traffic flows have increased by 10% or more.

14.4.17 Highly sensitive areas have been defined as those that have been categorised as ‘very high’, as part of the receptor sensitivity methodology. This includes where there are two or more of any combination of schools, play areas, care/retirement homes, disabled parking bays, hospitals, places of worship or historic buildings on a PAR. Further information is listed in Table 14.7.

14.4.18 If a PAR meets either rule, then the PAR has been screened in for further analysis and assessment.

Hazardous/AILs, PRoW diversions and closures, and road closures and diversions

14.4.19 AILs, PRoW diversions and closures, and road closures and diversions are not screened into assessment with reference to percentage increases but instead follow different screening criteria to PARs as follows:

- Hazardous/AILs – Only PARs that would be used by AILs have been screened in. Hazardous loads have been screened in if a significant number of trips are anticipated.

- PRoW diversion and closures – Only PRoWs that have a diversion and/or closure have been screened in.
- Road closures and diversions – For road closures and diversions generally, there is no fixed minimum time a road closure must be in place to be screened in for assessment. However, based on professional judgement, road closures and diversions have been screened in if all the following criteria are met:
  - A closure/diversion would be in place for more than 50 working days;
  - Impact of the diverted traffic is greater than a 30% increase (e.g. using IEMA guidelines Rule 1, stating that roads experiencing a daily increase in traffic of greater than 30% should be assessed); and
  - The diversion route uses B-class roads or lower.

Sensitivity

Receptor – PAR sensitivity

14.4.20 A desktop exercise has been undertaken to classify the sensitivity of the PARs within the study area. The classification of the PAR sensitivity is based on the presence of sensitive receptors and the application of professional judgement, with consideration of the IEMA guidelines (IEMA, 2023) on defining sensitive receptor geographic locations. For example, if the PAR passes a school, care home or similar, it would be a higher sensitivity due to the presence of vulnerable users. Sensitive PARs have been identified based upon the presence of sensitive receptors.

14.4.21 In terms of severance, driver/passenger delay, non-motorised delay, non-motorised user amenity, fear and intimidation, and road closures and diversions, the PARs between junctions have been used as proxy receptors for the receptors they serve, such as drivers, pedestrians, and local communities. The general criteria for defining the sensitivity of receptors for these elements are set out in Table 14.7.

Table 14.7 – PAR sensitivity criteria – categorising the overall sensitivity of receptors (of severance, driver/passenger delay, non-motorised delay, non-motorised amenity, fear and intimidation, and road closures and diversions)

Sensitivity	Description
Very high	**Highway links and junctions**: more than two sensitive receptors present (such as schools, play areas, care/retirement homes, disabled parking bays, hospitals, places of worship, historic buildings) and/or a primary residential street with properties on both sides of the carriageway. **Pedestrian/cycle links**: including heavily trafficked highway with on-road pedestrian/cycle route.
High	**Highway links and junctions**: two sensitive receptors present (such as schools, play areas, care/retirement homes, disabled parking bays, hospitals, places of worship, historic buildings) and/or a large number of residential properties present. **Pedestrian/cycle links**: including lightly trafficked highway with on-road pedestrian/cycle route.
Medium	**Highway links and junctions**: at least one of the following:

Sensitivity	Description
	• One sensitive receptor present (such as schools, play areas, care/retirement homes, disabled parking bays, hospitals, places of worship, historic buildings); • Many residential properties with direct frontage to highway link being used as construction route; • Pedestrians using footways and/or crossings on highway link; and • Cyclists using on-road designated cycle routes along highway links. **Pedestrian/cycle links**: including heavily trafficked highway with off-road pedestrian/cycle route.
Low	**Highway links and junctions**: at least one of the following: • Few residential properties with direct frontage to the highway link being used as a construction traffic route; • Workplaces with direct frontage to highway link being used as construction route; and • Cyclists using off-road designated cycle routes along highway link. **Pedestrian/cycle links**: including lightly trafficked highway with off-road pedestrian/cycle route.
Negligible	**Highway links and junctions**: no receptors along link. **Pedestrian/cycle links**: including pedestrian/cycle route not running alongside highway.

14.4.22 Further information on PAR sensitivity is included **in Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

14.4.23 For Highway Safety and Hazardous/Large Loads, sensitivity has been assessed with reference to road traffic collision data via two methods, in line with IEMA guidelines (IEMA, 2023).

14.4.24 Firstly, for each link in the study area, the collision rate per million vehicle kilometres was calculated based on existing collision data for the 2020 to 2024 period sourced from STATS19 (Department for Transport, 2025) and the Annual Average Daily Traffic (AADT) traffic flows. The collision rate per million vehicle kilometres of each link was then compared with the equivalent national collision rates published in the latest available TAG Data Book (Department for Transport, 2026). This has been termed the Observed Collision Rate (OCR).

14.4.25 Secondly, STATS-19 (Department for Transport, 2025) was used to evaluate the collision severity split for each PAR in the study area. These splits were then compared with equivalent national severity splits sourced from the Cobalt 3 and Cobalt 4 tabs of the latest TAG Data Book (Department for Transport, 2026). This has been termed the Severity Rate (SR).

14.4.26 These parameters of link sensitivity were then classified as green, amber, or red according to the criteria set out in Table 14.8.

Table 14.8 – Highway Safety and Large Loads – link sensitivity parameter thresholds

Sensitivity	OCR (per million vehicle kilometres)	SR
Green	<1.00	<1.10
Amber	1.00 – 1.20	1.10 – 1.20
Red	>1.20	>1.20

14.4.27 The two parameters of link sensitivity for highway safety were then cross-referenced to produce the overall highway safety sensitivity using the matrix shown in Table 14.9.

Table 14.9 – Overall sensitivity matrix – categorising the overall sensitivity of receptors (Highway Safety and Large Loads)

		Severity Rate (SR)		
		Green	Amber	Red
Observed Collision Rate (OCR)	Green	Very low	Low	Medium
	Amber	Low	Medium	High
	Red	Medium	High	Very high

14.4.28 The calculations for Highway Safety and Large Loads receptor sensitivity are set out in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

Receptor – PRoW sensitivity

14.4.29 The general criteria for defining the importance or sensitivity of PRoW receptors for the assessment of PRoW diversions and closures are set out in Table 14.10.

Table 14.10 – Overall PRoW sensitivity – categorising the overall sensitivity of receptors (PRoW diversions and closures)

Sensitivity	Description
Very high	Main route of excellent quality expected to be well used, with no alternative route(s) of equivalent quality available.
High	Main route of good quality, expected to be fairly well used, with no alternative route(s) available.
Medium	Main route of good quality, expected to be fairly well used, with alternative route(s) available OR a minor route of mixed quality, expected to be lightly used, with no alternative route(s) available.
Low	Minor route of mixed quality, expected to be lightly used, with alternative route(s) available.
Negligible	Poor quality route which appears to be inaccessible, out of use or rarely used.

14.4.30 Sensitivity levels attributed to each receptor are set out in section 14.8.14 and within **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

Magnitude of impact

14.4.31 As identified within the IEMA guidelines (IEMA, 2023), the magnitude of each impact represents the level of change from the baseline conditions. In Section 3 of the IEMA guidelines (IEMA, 2023), several criteria by which the magnitude of impact can be measured are set out.

14.4.32 This assessment considers a range of potential impacts that could occur during the construction stage. This section identifies how magnitude has been considered for each impact, which is then set out in full in Table 14.11.

Severance

14.4.33 In the context of a traffic and movement assessment, 'severance' is defined in the IEMA guidelines (IEMA, 2023), in paragraph 3.13, as the '*perceived division that can occur with a community when it becomes separated by a major transport infrastructure. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure*'.

14.4.34 The assessment has considered both total traffic and the proportion of HGVs. The guidance for thresholds of magnitude is taken from paragraph 3.16 of the IEMA guidelines (IEMA, 2023) which states that '*changes in traffic flow of 30%, 60% and 90% are regarded as producing 'slight', 'moderate' and 'substantial' changes in severance respectively'*.

14.4.35 These changes in severance have been categorised in this assessment as 'negligible', 'small', 'medium', and 'large' impacts. It is also important to note that the IEMA guidelines go on to say, '*However, caution should be observed when applying these thresholds to links with very low baseline flows which are unlikely to experience severance impacts even with high percentage changes in traffic*'.

Driver/passenger delay

14.4.36 Driver delay is an impact cited in the IEMA guidelines (IEMA, 2023), in paragraph 3.19, and relates to incremental increases in total traffic of <30% (negligible), 30–59% (small), 60–89% (medium), and >90% (large), as outlined in Table 14.11. Note that the magnitude of driver/passenger delay does not consider HGVs alone, just total traffic numbers.

Non-motorised user delay

14.4.37 Pedestrian delay (incorporating delay to all non-motorised users) is considered to be influenced by the changes in volume, composition or speed of traffic, in terms of their respective impacts on the ability of people to cross highways and is closely related to severance.

14.4.38 In general, changes in the volume, composition or speed of traffic may affect the ability of people to cross highways, and delays would also depend upon the level of pedestrian activity, visibility and general physical conditions along PARs.

14.4.39 Due to the range of local factors and conditions that can influence pedestrian delay, no definitive thresholds are provided within the IEMA guidelines (IEMA, 2023). The assessment therefore uses Transport Research Laboratory Supplementary Report 356 (Goldschmidt, 1977) which provides a useful approximation for determining pedestrian delay. A two-way flow of 1,400 vehicles per hour has been adopted as a lower threshold for assessment (equating to a mean 10 second delay for a link with no pedestrian facilities in the Transport Research Laboratory report). Above this level, increase has been based upon that determined from the severance criteria.

Non-motorised amenity

14.4.40 Non-motorised amenity is broadly defined by the IEMA guidelines (IEMA, 2023) as '*the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic*'. The guidance suggests that a tentative threshold for judging the significance of changes, i.e. whether a PAR is significant or not, in pedestrian and cycle amenity would be where the traffic flow (or HGV component) is halved or doubled.

14.4.41 Based upon this, a level of professional judgement has been used, with changes in total traffic thresholds of 50%, 70%, 100% and above 100% constituting a negligible, small, medium, and large change, respectively.

Fear and intimidation

14.4.42 With reference to the IEMA guidelines (IEMA, 2023), the extent of fear and intimidation is dependent upon the total volume of traffic, HGV composition, speed of traffic, and proximity of traffic to people and the quality of any non-motorised provision.

14.4.43 To assess the level of fear and intimidation, a weighting system, as set out in Table 3.1, Table 3.2, and Table 3.3 of the IEMA guidelines (IEMA, 2023), has been adopted which quantifies the degree of hazard based upon average 18-hour traffic flows for both 'all vehicles' and HGVs alone, along with the average vehicle speeds along a link. The step change in any degree of hazard determines whether any magnitude is either negligible, low, medium, or large, as set out within Table 14.11.

14.4.44 General criteria for defining the magnitude of an impact are set out in Table 14.11.

Highway Safety

14.4.45 For Highway Safety, the IEMA guidelines (IEMA, 2023) states that the 'Safe System' is considered to be international best practice in road safety by the World Health Organisation (WHO) and the Organisation for Economic Co-Operation and Development (OECD). The 'Safe System' assessment method has been used for this assessment. The approach used can be summarised as follows:

- Identify personal injury road collisions in the study area for the last five years. For this assessment, collision data have been used for the period 2020–2024.
- Undertake evidence-led, objective modelling techniques to establish a baseline road safety level for the roads within the study area on which the impact thresholds are exceeded in relation to either non-motorised users or motorised user traffic. This has been achieved by assigning road types and accident rates as defined in the TAG Data Book (Department for Transport, 2026) to each PAR in the study area.

- Assess the effects of additional development traffic for all road users. For this assessment, the construction traffic has been assessed across the study area.

14.4.46 The Highway Safety Assessment calculates the change in the intrinsic safety of each PAR based on estimated collision rates per annum per km of PAR length and proportionate changes in traffic flows.

Public Rights of Way

14.4.47 PRoW diversions and closures have been considered on the basis of the type of impact, such as whether a temporary closure or diversion is proposed, as well as any increases in pedestrian journey length following a closure/diversion and how long any potential disruption to an existing route would occur for. The assessment considers the indicative thresholds presented in Table 14.11 which have been derived based on experience and professional judgement.

Impact magnitude summary

14.4.48 Table 14.11 summarises the criteria that have been used to assess the magnitude of impact, along with the thresholds that have been used to determine whether impacts are considered negligible, small, medium, or large, applying IEMA guidelines (IEMA, 2023).

Table 14.11 – Impact magnitude criteria

Impact	Negligible	Small	Medium	Large
Severance	Increase in total traffic flows of 29% or under (or increase in HGV flows under 10%).	Increase in total traffic flows of 30–59% (or increase in HGV flows of between 10–39%).	Increase in total traffic flows of 60–89% (or increase in HGV flows between 40–89%).	Increase in total traffic flows or HGV flows of 90% and above.
Driver/ passenger delay	Increase in total traffic flow of 29% or under.	Increase in total traffic flow of between 30% and 59%.	Increase in total traffic flow of between 60% and 89%.	Increase in traffic flow of 90% and above.
Non-motorised user delay	Total traffic flows under 1,400 per hour.	Where traffic flows exceed 1,400 vehicles per hour the magnitude of the impact will be determined based on the thresholds identified above for severance.		
Non-motorised amenity	Increase in total traffic flows of 49% or under.	Increase in total traffic flows of 50–69%.	Increase in total traffic flows of 70–99%.	Increase in total traffic flows of 100% or above.
Fear and intimidation	No change in degree of hazard between baseline and construction phase.	One step change in degree of hazard, with: • <400 vehicle increase in average 18 hr two-	One step change in degree of hazard, but with: • >400 vehicle increase in average 18 hr two-way all	Two step changes in degree of hazard.

Impact	Negligible	Small	Medium	Large
		way all vehicle flow; and/or • <500 HGV increase in total 18 hr two-way HGV flow.	vehicle flow; and/or • >500 HGV increase in total 18 hr two-way HGV flow.	
Highway safety	Equal to or less than 0.05 additional collisions per annum per km of link length.	Between 0.06 and 0.15 additional collisions per annum per km of link length.	Between 0.16 and 0.25 additional collisions per annum per km of link length.	More than 0.26 additional collisions per annum per km of link length.
Diversions and/or closures (PRoWs)	No closures/ diversions required, or temporary (short-term, one to five days) closures are only required to install safety measures to retain PRoW access throughout construction.	Temporary (short-term, one to four weeks) localised closures/ diversions are required.	Temporary (long-term, more than four weeks in any 12-month period) or permanent closures/ diversions are required, with an increase in journey length of less than 400 m.	A closure without a diversion route for more than five days, or temporary (long-term, more than four weeks in any 12-month period) or permanent closures/ diversions are required, with an increase in journey length of more than 400 m.
Road closures/ diversions	Road closures and diversions have been assessed by reviewing the increase in journey time due to the diversion using professional judgement to assess the impact.			

14.4.49 It is possible that where the future baseline traffic flows are notably low on a PAR, even small numbers of construction vehicles would result in a large percentage change. Therefore, caution has been observed when applying the thresholds to PARs with very low baseline flows, given that these are unlikely to experience impacts even with high percentage changes in traffic. In consideration of this, the level of magnitude has been lowered where the baseline traffic flow falls below a certain level. Thresholds adopted are 600 total vehicle movements (i.e. fewer than one vehicle per minute across a 12-hour day) and 200 HGV movements (i.e. fewer than one HGV every three minutes across a 12-hour day). This has been based on movements where the percentage change initially results in a large, medium or small magnitude.

Significance of effects

14.4.50 The significance of effect is determined through consideration of two elements: the sensitivity of the receptor and the magnitude of the impact, as outlined above. Table

14.12 shows the matrix that has been used to determine the effect category. Effects which are classified to be 'major' or 'moderate' are considered significant, whilst effects predicted to be 'minor' or 'negligible' are considered not significant.

14.4.51 It is to be noted that where either the receptor sensitivity or magnitude of impact is Negligible, the effect is consequently not significant regardless of the opposing magnitude of impact or receptor sensitivity.

Table 14.12 – Significance of effects matrix

Magnitude of impact	**Receptor sensitivity**				
	Very high	**High**	**Medium**	**Low**	**Negligible**
Large	**Major**	**Major/ moderate**	**Major/moderate/** minor	**Moderate/** minor	Minor/ negligible
Medium	**Major/ moderate**	**Major/ moderate**	**Moderate**/minor	Minor/ negligible	Negligible
Small	**Major/ moderate/** minor	**Moderate/** minor	**Moderate**/minor	Minor/ negligible	Negligible
Negligible	Minor/ negligible	Minor/ negligible	Minor/negligible	Negligible	Negligible

14.4.52 The above significance levels are indicative only and subject to the application of professional judgement based upon extensive experience. Where multiple levels of significance are included, professional judgement has been used to identify the most appropriate level.

14.4.53 With the exception of diversion and closure effects of roads and PRoWs, all impacts have a proposed magnitude that does not consider the duration over which an effect is likely to be experienced. The frequency, permanence, and reversibility of effects have therefore been considered, using professional judgement, when assessing the overall significance of residual effects. Factors considered include:

- The duration of the impact – would it be short-term, lasting for a few days/weeks/months, or long-term, lasting for several years;
- The frequency of the impact – would it occur hourly, daily, monthly or would it be permanent, lasting for the duration of the Project; and
- The reversibility of the effect – can it be reversed following completion of the construction or operation of the Project.

14.4.54 All of the traffic and transport effects associated with the construction of the Project would be temporary effects and reversible. Some temporary effects would be likely to last longer than others (i.e. short to medium-term). The significance of effects has been judged considering the influence duration has over how effects are likely to be experienced.

Road closures and diversions

14.4.55 Where any temporary road closures and/or diversions are screened into the assessment and are likely to be in place to enable the construction of the Project, any additional potential delay caused by these resultant diversion routes on traffic have been reported, with significance of effect derived through professional judgement on increase in journey time. Where roads are closed and there is no diversion, this is considered in **Application Document 6.17 Chapter 17 Socio-economics, Recreation and Tourism**. This is because these roads are either dead ends or else little used other than by the businesses and residents located on them and, as such, the impact of the road closure is considered to have socio-economic effects rather than traffic and transport effects per se.

Assumptions and Limitations

14.4.56 The assessment has been undertaken using baseline data and Project information as described in **Application Document 6.4 Chapter 4 Description of the Project**.

14.4.57 To ensure transparency within the assessment process, the following assumptions and limitations apply:

- Traffic flows for the baseline years of 2024 and 2025 have been obtained from ATC survey data collected for the week of 23 June 2024 and 29 June 2024 and the week of 2 June 2025 to 8 June 2025 (non-school holiday period). This was used to establish the 2029 future baseline (2029 is the peak year of construction activities). This approach has been discussed with ERYC, NLC, and NCC, as detailed in Table 14.5.
- Construction traffic forecasts include the following assumptions that reflect the nature of construction activity and provide a robust worst-case assessment in the absence of contractor-specific profiles:
  - A peak construction year of 2029 has been used based on the highest concentration of the busiest traffic construction activities across the construction programme. This is driven by the front-loading of enabling works and early construction activities such as installing construction compounds, tower working areas and creating construction access tracks and bellmouths. These activities would generate the greatest HGV intensity, largely due to the need to import stone, and place the highest demand on the PARs.
  - The 2029 peak year flows use daily average, assuming 358 working days.
- The traffic flows within the assessment are based on the peak year of 2029, assuming average daily conditions throughout the year.
- The construction traffic includes a 25% contingency to cover unforeseen movements, site constraints, site audits/visits and variations in contractor methodologies.
- A worst-case approach to the assessment of construction flows accessing site via each bellmouth has been applied. Rather than apportioning construction traffic evenly across multiple bellmouths within a construction access track section, the full number of trips associated with that section has been applied to each bellmouth at the end of each section individually. This approach is based on the number of vehicle movements per metre of construction access track, and rates for other elements, such as vehicles per pylon for pylon erection, vehicles per

pylon for foundations. This ensures that each bellmouth is assessed independently on a conservative basis.

- In terms of construction staff, it has been assumed that:
  - Construction gangs travel from accommodation in shared construction vehicles (such as crew buses, welfare vans, 4x4s), and not individually in private cars.
  - For pylon works, most staff travel directly from accommodation to site in the morning and return directly in the evening, avoiding the construction compound.
  - The exception is the foreman, who uses a 4x4 to visit the compound for a briefing before and after travelling to site.
  - For non-pylon activities, all staff are assumed to travel via the compound (accommodation to compound, then onwards to the site in the morning, and the reverse in the evening) for robustness.
- In practice, staff worker arrivals would occur before the weekday 08:00 to 09:00 highway network peak, with departures also avoiding the PM peak due to shift patterns. It is anticipated most workers would arrive before 07:00 and leave after 19:00. Construction traffic will occur during the core Monday to Friday working hours (07:00–19:00) (Further details and any exceptions are provided in **Application Document 7.2 Outline Code of Construction Practice)**.

14.4.58 AILs will be subject to movement order notification or subject to existing regulations and therefore may have to arrive outside of core working hours, but these will be minimal and managed, as set out in **Application Document 7.4 Outline Construction Traffic Management Plan**.

- **Application Document 7.4 Outline Construction Traffic Management Plan** sets measures to minimise peak-time impacts, where reasonably practicable, particularly for worker travel.
- It is anticipated that all construction traffic would access the site from the PARs. There are other routes and access points required in addition to the PARs. These routes are needed for minor works related to activities such as delivery and monitoring of mitigation and also undergrounding of third-party utilities. The vehicle types and numbers associated with these works are not assessed on these routes as they would be negligible; however, vehicle numbers associated with third party mitigation have been included in the overall vehicle numbers to ensure a robust assessment.
- The traffic forecasts presented within this assessment represent a reasonable worst case, with the addition of a 25% contingency added to anticipated traffic numbers.
- In addition to the PARs, there are roads located on the local highway network where a crossover point is provided, as detailed in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**. These would allow all construction vehicles to cross over the highway and progress along the construction access tracks, but in the majority of cases, LGV's can turn left or right onto the highway network. These crossover points would not, therefore, contribute to an increase in traffic along the local roads as no HGV construction traffic is proposed to access the construction access tracks from the

public highway under typical operation, and vice versa; hence, an increase in traffic is not expected and has not been assessed within this assessment. In addition to these crossover points, there are a limited number of locations where short sections of the public highway will be used to connect movements between two BMs. These sections are few in number and of limited length and therefore would give rise to only a negligible amount of construction traffic on the local highway network. As such, they are not expected to materially alter traffic conditions. Temporary traffic management measures will be provided to avoid delays at crossover points as described within **Application Document 7.4 Outline Construction Traffic Management Plan**.

14.5 Basis of Assessment

14.5.1 This section sets out the assumptions that have been applied in respect of design flexibility maintained within the Project.

14.5.2 Details of the available flexibility and assessment scenarios are presented in **Application Document 6.5 Chapter 5 Environmental Impact Assessment Approach and Methodology**.

Flexibility Assumptions

14.5.3 The traffic and transport assessment has been undertaken based on the description of the Project provided in **Application Document 6.4 Chapter 4 Description of the Project**. To take account of the flexibility allowed in the Project, consideration has been given to the potential for effects to be of greater or different significance, should any of the permanent or temporary infrastructure elements be moved within the Limits of Deviation (LoD) (horizontal, vertical or longitudinal) or Order Limits.

14.5.4 The assumptions made regarding the use of flexibility for the assessment are set out in Table 14.13.

Table 14.13 – Flexibility assumptions

Element of flexibility	How this has been considered within the assessment
Horizontal LoD	Any variations in pylon design/location and foundation type (and therefore materials deliveries) are more than accommodated for within the +25% contingency which is included in the traffic figures.
Vertical LoD	
Longitudinal LoD	
Pylon footprint	
Foundation types	
Order Limits – temporary construction works	
Watercourse crossings	The 25% contingency that has been added to the traffic figures would allow for any unforeseen movements and site constraints relating to watercourse crossing (bridge/culverts) scenarios.

Element of flexibility	How this has been considered within the assessment
Modification to third party assets – construction methodology	The 25% contingency added to traffic figures allows for variations in methodologies of the third parties.

Optionality

14.5.5 As set out in **Application Document 6.4 Chapter 4 Description of the Project** and shown on **Application Document 6.4.F3 Figure 4.3 Temporary Construction Works** optionality has been included at the following five locations.

- Two alternative options for temporary construction access between Pennyhill Cottages (Main Street) Primary Access Route (PAR 34) and proposed pylon 4AF82 and satellite construction compound S-3:
  - Bellmouths BM-040/41, associated construction access track and watercourse crossings C-169 and BC-11; or
  - Bellmouths BM-040A/41A off Pennyhill Cottages (PAR 34), associated construction access tracks and watercourse crossings C-220A, C-169A and BC-11A.
- Two alternative options for temporary construction access tracks to proposed pylon 4AF88:
  - Watercourse crossings BC-36 and BC-37; or
  - Watercourse crossing B-06A.
- Two alternative options for the construction access track between proposed pylons 4AF130 and 4AF131:
  - Watercourse crossing BC-29; or
  - Watercourse crossings BC-29A and BC-29B
- Two alternative options for taking access off High Melwood (PAR 63) and the associated construction access track:
  - Bellmouth BM-077; or
  - Bellmouth BM-100.
- Two alternative power supply connections to the proposed main construction compound (M1) as shown on **Application Document 6.4.F4 Figure 4.4 Third Party Works.**
  - NPG-09A from the west – there is currently uncertainty whether capacity of the network would be sufficient for this this connection; or
  - NPG-09B from the east.

14.5.6 Where differences in effects between options have been identified, these are set out within section 14.8.14, with clear reference to the nature, extent, and significance of any resulting traffic and transport effects.

Sensitivity Test

14.5.7 Under the terms of the DCO, construction could commence any year up to five years from the granting of the DCO which is assumed to be 2028. Consideration has therefore been given to whether the effects reported would be different if the works were to commence in any year up to year five, following the granting of the DCO. Where there is a difference, this is reported in section 14.9 of this chapter.

14.5.8 The peak period of construction in terms of total annual forecast construction traffic movements is expected to occur in 2029 (based on works commencing in 2028). This chapter assesses the highest construction year traffic flows for each PAR against a 2029 future baseline traffic flows.

14.5.9 Should there be a delay in the commencement of construction of the Project (such as if the works were to commence up to five years later), there would be no additional construction traffic movements generated, and the same PARs would be utilised should there be a delay. The future baseline traffic flows would be expected to be higher during the peak construction phase of the delayed Project (e.g. 2034), reducing proportional traffic increases as a result of the Project (upon which the majority of the assessments have been based). Therefore, whilst total traffic flows may be higher, this would be attributed to background traffic growth rather than the Project. The effects within this chapter are therefore considered to be both valid and robust were the works to commence at a later date.

14.5.10 Furthermore, as the proposed mitigation outlined within **Application Document 7.4 Outline Construction Traffic Management Plan** and **Application Document 7.6 Outline Public Right of Way Management Plan** would still be provided, there would be no new or different likely significant effects anticipated to those identified in this traffic and transport assessment.

14.5.11 Any potential overlap with newly committed developments arising from a delayed construction start date would be addressed within their respective planning applications, which would need to account for the Project's construction traffic flows in any assessment of cumulative effects. Accordingly, no further assessment of the baseline construction programme is considered necessary.

14.6 Baseline Conditions

14.6.1 This section describes the baseline traffic and transport environment in the study area.Baseline conditions have been gathered from desk-based information and site surveys as set out in section 14.4.

14.6.2 Data to support the traffic and transport baseline are provided in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

Existing Baseline

Highway network

14.6.3 Within East Riding of Yorkshire, the main traffic routes comprise the A164 and A1079 between Hull and Beverley, the A63 around South Cave and the B1230 through Newport. South of the River Ouse the A161 runs through Goole and Swinefleet.

14.6.4 Within the North Lincolnshire Council administrative boundary, again the A161 through Goole and Swinefleet forms a main route to the west, with the A161 through Eastoft, Ealand, Belton and Epworth forming the main route connecting into the Project. The A18 runs through Scunthorpe and is located within the vicinity of Keadby.

14.6.5 The M180, part of the SRN, provides a strategic link to the wider highway network.

14.6.6 Within Nottinghamshire, the A161 provides access in the north around Walkeringham, with the A631 and A156 providing wider strategic access.

14.6.7 Continuing south, the A620 and A638 provide access via Sturton-le-Steeple, Retford and Eaton, with the A57 in the south providing access to the southern section of the study area.

14.6.8 Further details of the local highway network are set out in **Application Document 7.15 Transport Assessment**.

14.6.9 Further information related to the PARs is provided in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**. The document lists the PARs and provides a description which includes the type of carriageway, character, speed limits, highway constraints, presence of street lighting, bus routes and on-carriageway parking, and pedestrian, cyclist and horse-rider provision. This appendix also provides baseline conditions for non-motorised users, including pedestrians, cyclists and equestrians. Baseline conditions for these aspects have also been established through identification of PRoW crossings which are reported separately within the **Application Document 7.6 Outline Public Right of Way Management Plan**.

Baseline traffic flows

14.6.10 Baseline traffic flow data have been obtained using site-specific ATC surveys. ATC survey periods are described in section 14.4. The traffic surveys were undertaken during neutral months and during school term time. The survey periods did not coincide with abnormal traffic conditions, roadworks or public holiday periods and are therefore considered representative of typical baseline conditions.

14.6.11 The locations of the traffic survey sites are shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**.

14.6.12 Baseline average daily 24-hour and 18-hour weekday traffic flows for 2024 and 2025 for each of the PARs are presented in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

Personal Injury Collision data

14.6.13 Personal Injury Collision (PIC) data have been obtained from STATS19 (Department for Transport, 2025) for the PARs for the most recent period where data were available (2020 to 2024). Whilst it is acknowledged that the data includes the period of COVID-19 restrictions between the first lockdown in March 2020 and the end of the last lockdown in March 2021, this dataset nonetheless includes more than three years of ‘typical’ data and the only other data available is 2019 or earlier, which is now considered to be out of date.

14.6.14 The PIC data (2020 to 2024) have been summarised in Table 5.1 to Table 5.3 within **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline**

Conditions for the roads and junctions on the PARs. The locations of all collisions are shown on **Application Document 6.14.F3 Figure 14.3 Collision Data**.

14.6.15 The collisions involving cyclist and pedestrian casualties are recorded in Table 5.2 and Table 5.3, respectively, within **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

14.6.16 A collision cluster analysis has been undertaken on certain PARs where the collision data meet the following criteria, which has been based on professional judgement:

- A: A location where there are six or more injury collisions occurring within a junction or a 100 m stretch; and/or
- B: A location with three or more fatal and/or serious collisions happening either within a junction or within a 100 m stretch.

14.6.17 In addition to these criteria, the collision data have been analysed along the full length of the PARs to identify patterns in collision locations to establish any areas of safety concern.

14.6.18 From the collision data analysis, Table 14.14 details the collision clusters that have been identified on the PARs and SRN/MRN junctions, categorised by severity, i.e. slight, serious or fatal.

Table 14.14 – Collision clusters identified within the study area (2020 to 2024)

PAR ID	Location	Criteria	Severity		
			Slight	Serious	Fatal
PAR 1A/B	A1079/A1033/Beverley Road Roundabout	A	12	1	0
PAR 2	A1079/A1035/York Road Killingwoldgraves Roundabout	A	6	0	0
PAR 9	A164/Willerby Court Roundabout	A	6	1	0
PAR 12/ PAR 140	A15/A164/A1105 Roundabout	A	19	0	0
PAR 14	Westoby Lane/Common Road Crossroad Junction	B	1	3	0
PAR 15/ PAR 16	B1230 The Avenue/Hunsley Road/Brick Dike Lane Crossroad Junction	A and B	3	3	0
PAR 16/ PAR 17/ PAR 18	A1034 Kettlethorpe Hill/B1230 Hunsley Road Priority Junction	A	8	2	0
PAR 29/ PAR 30	M62 Junction 38 North Cove Interchange (eastbound)	A	5	2	0
PAR 50/ PAR 51/	A18/A161 Roundabout	A	5	0	2

PAR ID	Location	Criteria	Severity		
			Slight	Serious	Fatal
PAR 52/ PAR 53					
PAR 52	M180 Junction 1 Tudworth Roundabout	A	6	1	0
PAR 71 / PAR 72 / PAR 74	A161 Haxey Lane/Station Road/Ferry Road Crossroad Junction	A	5	1	0
PAR 105	A638/B6044/Carolgate Signalised Junction	A	6	0	0
PAR 140/ PAR 147	M180 Junction 5 Barnetby Top Roundabout	A	23	2	0
PAR 143	M18 Junction 5 North Ings Roundabout	A	7	1	0
PAR 145	A1077(M)/A18 Frodingham Grange Roundabout	A	12	2	0

14.6.19 The review identified that, across the dataset, most collisions are classified as slight, with fewer serious incidents and only two locations recording fatal collisions. Higher collision frequencies are generally associated with larger, more complex junctions, such as SRN roundabouts and motorway interchanges.

14.6.20 Overall, the data suggest that certain key junctions, particularly those with higher traffic volumes and more complex movements, are generally more sensitive from a highway safety perspective, whereas locations with lower collision counts (around five or fewer incidents) could be less sensitive, although still requiring consideration due to the presence of some serious collisions.

PAR sensitivity

- For the PARs that are screened in, the sensitivity of the PAR has been assessed against the criteria outlined in Table 14.7 and summarised in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**. All PARs are shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**.

14.6.21 The sensitivity ratings of the assessed links are set out in column 3 of Table 14.15. This sensitivity is for severance, driver/passenger delay, non-motorised delay, non-motorised amenity, and fear and intimidation. Further information on receptor sensitivity criteria is summarised in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

14.6.22 For Highway Safety, the sensitivity of each link has been assessed against the criteria outlined in Table 14.9. The sensitivity ratings of the assessed links are set out in column 4 of Table 14.15.

Table 14.15 – Sensitivity of receptors – PARs

PAR ID	PAR name	Sensitivity rating	Sensitivity rating (highway safety)
5	Dunflat Road	Negligible	Low
7	Main Street	Medium	Negligible
8	Little Weighton Road	Low	Medium
11	Rowley Road (between Riplingham Road/Rowley Road junction and BM 008)	Negligible	Medium
13	Lambwell Hill	Negligible	Negligible
21	Ellerker Road	Negligible	Negligible
23	Brantingham Road	Negligible	Negligible
24A	Brough Road (Between A1034 roundabout and Brantingham Road)	Medium	Negligible
24B	Brough Road (South of Brantingham Road)	Low	Negligible
27	Carr Lane	Low	Very high
28	Tongue Lane	Low	Very high
33	A161 King's Causeway	Low	Medium
37	A161 Field Lane (North of Eastoft)	High	Medium
39	Carr Lane	Negligible	Medium
41	Ox Pasture Lane	Negligible	Negligible
42	Carr Lane	Negligible	Negligible
43	B1392 Luddington Road	Low	Negligible
46	Bonnyhale Dale Road	Low	Negligible
48	Bonnyhale Road	Low	Negligible
49A	Keadby Power Station Internal Roads/Unnamed Roads	Negligible	Negligible
49B	Keadby Power Station Internal Roads/Unnamed Roads 2	Negligible	Negligible
55	King Edward Street	Medium	Very high
56	Bracon	Medium	Negligible

PAR ID	PAR name	Sensitivity rating	Sensitivity rating (highway safety)
57	Belton Road	Negligible	Negligible
59	Melwood Hill (South)	Low	Negligible
62	Rectory Street	Medium	Negligible
63	Melwood Hill (North)	Low	Negligible
69	Brackenhill Road/E Lound Road	Medium	Negligible
70	B1396 Tower Hill	Very high	Medium
72	Ferry Road/Main Street	Medium	High
77	Cornley Road	Low	Negligible
78	Carr Lane	Medium	Negligible
80	Cattle Road	Low	Negligible
90	Wood Lane	Low	Negligible
101	Cross Street	Medium	Negligible
102	Springs Lane	Low	Negligible
103	Retford Road (West)	Medium	Negligible
104	Leverton Road/Spital Hill	Low	Medium
107	Cocking Lane	Low	Medium
108	Town Street/Forewood Lane	Medium	Medium
110	Grove Road	Low	Medium
111	Lady Well Lane	Low	Medium
112	Main Street	Low	Medium
113	Hazelwood Lane	Low	Medium
114	Ashley Lane	Negligible	Negligible
115	Retford Road (North of Rampton Hospital)	Medium	Very high
116	Laneham Road	Low	Medium
124	Top Street/Darlton Road	Medium	Negligible
126	Willow Flats	Low	High
127	Ellerker Lane	Low	Medium
128	Norfolk Bank Lane	Low	Medium

PAR ID	PAR name	Sensitivity rating	Sensitivity rating (highway safety)
129	Common Rd	Negligible	Negligible
130	Wallingfen Lane	Low	Negligible
131	Staddlethorpe Lane	Medium	Negligible
132	Thornton Dam Lane/Scalby Lane	High	Very high
135	Meredyke Rd (West)	Medium	Medium
136	B1392 Eastoft Rd	Medium	Medium
137	Outgate East	Low	Negligible
153	Leverton Road	High	Negligible
154	Main Street	Medium	Medium
155	Retford Road (East)	Negligible	Negligible
158	Sands Lane	Negligible	Negligible
159	Landing Lane	Low	Negligible
160	Pasture Lane	Negligible	Negligible

14.6.23 For PRoWs, the sensitivity been assessed against the criteria outlined in Table 14.10. The sensitivity ratings of the assessed PRoWs are set out in Table 14.16. Further information on PRoW sensitivity is in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**.

Table 14.16 – Sensitivity of PRoWs with a diversion and/or closure

PRoW Name	PRoW Code	Sensitivity rating
Rowley Bridleway No.13	ROWLB13	Low
Woodmansey Bridleway No.30	WOODB30	Low
Woodmansey Footpath No.7	WOODF07	Low
Skidby Bridleway No.7	SKIDB07	Low
Rowley Footpath No.12	ROWLF12	Low
Skidby Footpath No.17	SKIDF17	Low
Skidby Bridleway No.4	SKIDB04	Low
Rowley Bridleway No.7	ROWLB07	Low
Rowley Footpath No.15	ROWLF15	Low

PRoW Name	PRoW Code	Sensitivity rating
Skidby Bridleway No.1	SKIDB01	Low
Skidby Bridleway No.2	SKIDB02	Low
Skidby Bridleway No.15	SKIDB15	Low
Rowley Bridleway No.4	ROWLB04	Low
Rowley Bridleway No.5	ROWLB05	Low
Rowley Footpath No.3	ROWLF03	Low
Ellerker Footpath No.3	ELLRF03	Low
Ellerker Footpath No.2 (also Yorkshire Wolds Way National Trail)	ELLRF02	Medium
Ellerker Footpath No.4	ELLRF04	Low
Broomfleet Footpath No.12	BROOF12	Low
Broomfleet Footpath No.8	BROOF08	Low
Broomfleet Footpath No.5	BROOF05	Low
Broomfleet Footpath No.10	BROOF10	Low
Blacktoft Bridleway No.5	BLACB05	Low
Blacktoft Footpath No.9	BLACF09	Low
Twin Rivers Footpath No. 5	TWINF05	Low
Former Parish of Ousefleet Bridleway No.1	OUSEB01	Low
Former Parish of Ousefleet Bridleway No.2	OUSEB02	Low
Former Parish of Adlingfleet Bridleway No.1	ADLFB01	Low
BRIDLEWAY GART1A	BRIDLEWAY GART1A	Low
FOOTPATH GART3	FOOTPATH GART3	Low
FOOTPATH LUDD4	FOOTPATH LUDD4	Low
FOOTPATH LUDD5	FOOTPATH LUDD5	Low
FOOTPATH AMCO5	FOOTPATH AMCO5	Low
RESTRICTED BYWAY LUDD5A	RESTRICTED BYWAY LUDD5A	Low
FOOTPATH LUDD9	FOOTPATH LUDD9	Low
BRIDLEWAY CROW11	BRIDLEWAY CROW11	Low

BRIDLEWAY CROW14	BRIDLEWAY CROW14	Medium
BRIDLEWAY CROW13	BRIDLEWAY CROW13	Low
BRIDLEWAY CROW12	BRIDLEWAY CROW12	Low
FOOTPATH BELT25	FOOTPATH BELT25	Low
RESTRICTED BYWAY BELT2	RESTRICTED BYWAY BELT2 (Trent Valley Way)	Medium
BRIDLEWAY BELT28A	BRIDLEWAY BELT28A	Low
BRIDLEWAY BELT28B	BRIDLEWAY BELT28B	Low
FOOTPATH BELT148	FOOTPATH BELT148	Low
BRIDLEWAY BELT29	BRIDLEWAY BELT29	Low
FOOTPATH EPWO77	FOOTPATH EPWO77	Low
FOOTPATH EPWO60	FOOTPATH EPWO60	Low
FOOTPATH EPWO78	FOOTPATH EPWO78	Low
MistertonFP11	MistertonFP11 (Trent Valley Way)	Medium
MistertonBOAT18	MistertonBOAT18	Medium
MistertonFP17	MistertonFP17	Low
Gringley On The HillBW15	Gringley On The HillBW15	Low
Gringley On The HillFP13	Gringley On The HillFP13	Low
BeckinghamFP3	BeckinghamFP3	Low
BeckinghamFP12	BeckinghamFP12	Low
BeckinghamFP4	BeckinghamFP4	Low
SaundbyFP3	SaundbyFP3	Low
SaundbyFP4	SaundbyFP4	Low
North WheatleyFP5	North WheatleyFP5	Low
North WheatleyFP4	North WheatleyFP4	Low
West BurtonFP8	West BurtonFP8	Low
North WheatleyFP8	North WheatleyFP8	Low
North WheatleyFP3	North WheatleyFP3	Low
Sturton Le SteepleFP19	Sturton Le SteepleFP19	Low
Sturton Le SteepleFP20	Sturton Le SteepleFP20	Low

Sturton Le SteepleRB31	Sturton Le SteepleRB31	Low
Sturton Le SteepleBW25	Sturton Le SteepleBW25	Low
North Leverton With HabblesthorpeFP24	North Leverton With HabblesthorpeFP24	Low
North Leverton With HabblesthorpeBW10	North Leverton With HabblesthorpeBW10	Low
South LevertonFP8	South LevertonFP8	Low
South LevertonFP21	South LevertonFP21	Low
South LevertonBW9	South LevertonBW9	Low
South Leverton FP11	South Leverton FP11	Low
South Leverton FP26	South Leverton FP26	Low
TreswellBW11	Treswell BW11	Low
TreswellBW14	TreswellBW14	Low
East DraytonBW11	East DraytonBW11	Low
East DraytonFP13	East DraytonFP13	Low
East DraytonFP10	East DraytonFP10	Low
East DraytonFP12	East DraytonFP12	Low
East DraytonFP14	East DraytonFP14	Low
East DraytonFP3	East DraytonFP3	Low
DarltonFP3	DarltonFP3	Low
DarltonBW1	DarltonBW1	Low
FledboroughFP7	FledboroughFP7	Low
MarnhamBOAT8	MarnhamBOAT8	Medium

Future Baseline

14.6.24 The baseline presented in the previous section is the baseline as it was at the time the ATC surveys were undertaken and/or the years represented by the data collected. However, as the construction of the Project would commence in a future year, it is important to understand how these baseline conditions may change in the interim.

14.6.25 It is first necessary to select a peak construction year, or years (in terms of peak construction vehicle numbers), that will be assessed.

14.6.26 It is then necessary to consider what factors may influence the baseline environment associated with traffic and transport by the assessment years. These factors include:

- Background traffic growth;
- Committed development;
- Cumulative development; and
- Future network changes.

Assessment years

14.6.27 Subject to gaining development consent, construction works would be expected to start in 2028 and be available for commercial load (operational) by the end of 2031, with reinstatement works continuing into 2032 and potentially 2033. Certain preparatory works and measures may take place in advance of the commencement of construction authorised by the DCO in accordance with **Application Document 7.4 Outline Construction Traffic Management Plan**. Examples of such works and measures include archaeological trenching, ground investigations and the implementation of environmental mitigation, including protected species mitigation.

14.6.28 A construction year of 2029 has been selected following consideration of the construction programme as set out in **Application Document 6.4 Chapter 4 Description of the Project**. It is the peak year because it would have the largest concentration of high-traffic generating construction activities, driven by the front-loading of enabling works and early construction activities such as setting up compounds and constructing accesses (including bellmouths) and construction access tracks. Therefore, 2029 is the construction year with the greatest potential to have traffic and transport related impacts.

14.6.29 The 2029 yearly flows have been divided by 358 working days to provide average daily flows.

14.6.30 To determine the effect of the Project on the transport network, the PARs within the study area have been considered without and with the Project to determine the level of effect that the construction of the Project is likely to have. The potential effects of the Project have been considered across the day (24-hour AADT and 18-hour Annual Average Weekday Traffic (AAWT)) as part of this assessment. The traffic assessment scenarios include the following:

- Future baseline without the Project in the peak construction year (2029); and
- Future baseline with the Project's construction traffic in the peak construction year (2029)

14.6.31 The 24-hour AADT and 18-hour AAWT future baseline (2029) have been derived from the ATC surveys with TEMPro growth and committed development traffic added. These future baseline flows are set out in in Table 1.4 within **Application Document 6.14.A3 Appendix 14.3 Future Baseline** along with the methodology explaining how they were derived.

14.6.32 As detailed in **Application Document 6.5 Chapter 5 Environmental Impact Assessment Approach and Methodology**, a review has been undertaken to determine whether the existing baseline conditions might change between the time of undertaking the assessment and the future years in which the Project is planned to be constructed and become operational.

Background traffic growth

14.6.33 TEMPro traffic growth factors are used to estimate future travel demand and traffic growth. These factors are derived from the National Trip End Model (NTEM) and are essential for transport planning and assessment. Given the availability of observed ATC data in both 2024 and 2025, a two-stage growth approach has been adopted. First, TEMPro growth factors have been used to adjust the 2024 ATC survey data to a 2025 baseline to make all the base year data consistent to 2025. Second, TEMPro growth factors have been applied from the 2025 baseline to 2029 to represent background traffic growth to the forecast peak construction year. This approach ensures that the assessment is anchored to the most recent observed traffic conditions while providing a consistent and transparent basis for forecasting. Further details are set out in **Application Document 6.14.A3 Appendix 14.3 Future Baseline**.

Committed development

14.6.34 A review of committed development has been undertaken to establish a 2029 future baseline scenario. This included a review of relevant local planning authority planning portals and DCO schemes. Further information on the committed development inclusion methodology is in Section 1 of **Application Document 6.14.A3 Appendix 14.3 Future Baseline** and a list of committed developments, which are considered within the assessment, is presented in Table 1.2 within **Application Document 6.14.A3 Appendix 14.3 Future Baseline**.

Future network changes

14.6.35 Consideration has been given to changes (temporary and permanent) to the highway (PARs) and PRoW network as a result of other developments where construction programmes are known to overlap in the 2029 peak construction year. These include the following:

- Highway network (PARs):
  - Access roads around Birkhill Wood power station:
    - Construction of a new junction off the A1079.
    - Construction of a new vehicular access road from the A1079.
    - Extension of the access road to serve:
      - Birkhill Wood Substation;
      - Existing Creyke Beck Substation; and
      - Wanlass Beck Substation Extension.
  - A164 priority junction near Dunflat Road - implemented.
  - Jocks Lodge A164/A1079 upgrade scheme will be fully implemented in 2029, due for completion end of 2026.
- PRoW network:
  - ROWLB13: Birkhill Wood Substation Project
  - ROWLF12: NPG-02/NPG-03
  - ELLRF04: NPG-09B

- OUSEB01: NPG-19
- NI|GART|3: NPG-20
- NI|LUDD|5A: NPG-21
- Gringley On The Hill|FP13: NGED-03
- Beckingham FP3: NGED-04
- Beckingham FP12: NGED-05
- Saundby|FP4: NGED-06
- Sturton Le Steeple|FP20: NGED-08
- NT|South Leverton|FP8: NGED-09
- TreswellBW14: NGED-11
- East Drayton|BW11: NGED-13
- Fledborough|FP7: NGED-16
- Marnham|BOAT8: NGED-17

14.6.36 There are not expected to be any further changes to the highway network, as a result of other projects, within or in close proximity to the Project that require consideration.

Cumulative development

14.6.37 Cumulative developments have been considered and assessed within **Application Document 6.21 Chapter 21 Inter-project Cumulative Effects** and **Application Document 6.21.A2 Appendix 21.2 Short List of Other Developments**. Only some committed developments have been included as part of the future baseline, as set out within **Application Document 6.14.A3 Appendix 14.3 Future Baseline**.

14.7 Potential Effects

14.7.1 Based on the assessment scope (see section 14.3), the following sections describe how construction (C) activities are likely to affect traffic and transport receptors in the study area. This takes account of the embedded mitigation measures which are defined in **Application Document 6.4 Chapter 4 Description of the Project.** This takes account of the embedded mitigation measures which are defined in **Application Document 7.3 Register of Environmental Actions and Commitments**. This section first lists the receptors and potential effects that could result from construction of the Project and Table 14.17 sets out the potential effects on the receptors identified in section 14.6.

Table 14.17 – Summary of potential traffic and transport effects

Receptor	Potential effect	Description	C
Non-motorised users	Severance	Potential for increased severance to pedestrians, cyclists and bridleway users on road lines, road junctions, PRoWs and national/regional	✓

Receptor	Potential effect	Description	C
		walking/cycling and bridleway routes from increase in traffic.	
	User Delay	Potential for increased pedestrian, cyclist and bridleway user delay on road links, road junctions, PRoWs and national/regional walking/cycling and bridleway routes from increase in traffic.	✓
	User Amenity	Potential for reduction in pleasantness of journey for pedestrians, cyclists, and bridleway users on road links, road junctions, PRoWs and national/regional walking/cycling and bridleway routes from increase in traffic.	✓
	Fear and Intimidation	Potential for fear and intimidation and reduction in pedestrian, cyclist, and equestrian amenity on road links, road junctions, PRoWs and national/regional walking/cycling and bridleway routes from increase in traffic.	✓
	PRoW Diversions and/or Closures	Potential for increased pedestrian, cyclist and equestrian journey length on PRoWs and national/regional walking/cycling and bridleway routes from the temporary closure and diversion of PRoWs during construction.	✓
Motorised users	Driver/ Passenger Delay	Potential for effects on increased driver delay on road links and road junctions from increase in traffic.	✓
	Highway Safety	Potential for a decline in highway safety on road links and road junctions	✓

Construction Vehicle Movements – Trip generation and distribution

Source of construction traffic data and definitions

14.7.2 National Grid has vast experience in setting out construction traffic requirements for similar projects. A construction logistics specialist has provided the traffic forecasts based on this experience. A 25% uplift has been applied to all predicted construction vehicle movements to provide contingency to allow for unforeseen movements, site constraints, site audits/visits and variations in the contractor's detailed construction methodologies. This contingency is retained throughout the assessment to ensure a robust and precautionary approach.

Vehicle types and movement assumptions

14.7.3 Construction traffic is categorised as:

- Light goods vehicles (LGVs) – up to 3.5 tonnes Gross Weight Vehicle, predominantly staff and supervisory vehicles but also small parts equipment vans and service vehicles; and

- Heavy goods vehicles (HGVs) – over 3.5 tonne Gross Weight Vehicle, typically including plant, materials and deliveries.

14.7.4 LGV staff movements are assumed to comprise of:

- Movements to compound – travelling via compounds before accessing site internally via construction access tracks; and
- Movements to site – travelling directly to site via bellmouths.

14.7.5 Non-construction site staff such as administrators are marginal and included within the traffic figures.

14.7.6 This assumption reflects National Grid's experience of delivering similar projects and applies consistency with the structure of the logistics data.

14.7.7 HGV movements are assumed to comprise:

- Direct access to site via access bellmouths for the majority of plant and deliveries; and
- Compound-based deliveries for materials requiring storage.
- Onward internal travel from compound/bellmouth via construction access tracks are excluded from traffic analysis numbers.

Trip distribution and assignment

14.7.8 For the purposes of construction traffic assessment and presentation, the Project has been subdivided into a series of construction traffic zones, defined by extents between major A-roads and key highway junctions.

14.7.9 The zoning has been applied for analytical and reporting purposes only, to enable construction traffic movements to be quantified, assigned and presented in a clear and structured manner along the length of the Project. The construction traffic zones do not represent physical barriers or constraints on construction traffic movement.

14.7.10 Construction vehicle movements have been generated, distributed and assigned within each construction traffic zone in accordance with the methodology set out in this chapter, with traffic subsequently routed onto the PARs via the relevant bellmouths and SRN links.

14.7.11 This approach ensures that construction traffic flows can be assessed in a transparent and proportionate manner, while avoiding dilution of impacts across long sections of the Project.

14.7.12 A summary of the construction traffic zones, including the PARs located within each zone and the relevant LHA areas, is provided in Table 14.18.

Table 14.18 – Construction traffic zones and LHA coverage

Zone	PARs	LHA
Zone 1	PAR 1A - A1079 Beverley Bypass East (between A164/A1079 int and BM 001), PA1B - A1079 Beverley Bypass East (east of BM 001), PAR 4-A164 Beverley Road - Between A1079 and Dunflat Road, PAR 6 - A164 - Between Dunflat Road and B1233/A164 Roundabout	EYRC

Zone	PARs	LHA
Zone 2	PAR 4 - A164 Beverley Road - Between A1079 and Dunflat Road, PAR 6 - A164 - Between Dunflat Road and B1233/A164 Roundabout, PAR 5-Dunflat Road,PAR7-Main Street, PAR 8 - Little Weighton Road, PAR 10 - Riplingham Road, PAR 11 - Rowley Road (between Riplingham Road/ Rowley Road jn and BM 008), PAR 13 - Lambwell Hill, PAR 14-Westoby Lane, PAR 20 - Beverley Road,PAR125-Dale Road, PAR 21 -Ellerker Road, PAR 22 - A63 Petuaria Way (South) ,PAR 23 - Brantingham Road	EYRC
Zone 3	PAR 22 - A63 Petuaria Way (South) , PAR 23 - Brantingham Road, PAR 24 - Brough Road, PAR 19 - A1034 - Beverley Road and A63, PAR 25 - A63 Petuaria Way (West), PAR 126 - Willow Flats, PAR 127 - Ellerker Lane, PAR 128 - Norfolk Bank Lane, PAR 158 - Sands Lane, PAR 26 - Ings Lane, PAR 26B - Main Street, PAR 27 - Carr Lane, PAR 129 - Common Rd, PAR 130 - Wallingfen Lane, PAR 28 - Tongue Lane, PAR 29 - B1230 Main Road (East), PAR 156 - B1230 Main Road West, PAR 131 - Staddlethorpe Lane, PAR 132 - Thornton Dam Lane/Scalby Lane, PAR 159 - Landing Lane.	EYRC
Zone 4	PAR 34 – Main Street (Pennyhill Cottages), PAR 35 - Main Street, PAR 36 - Church Lane, PAR 33 - A161 King's Causeway, PAR 37 - A161 Field Lane (North of Eastoft), PAR 160 - Pasture Lane, PAR 38 - Luddington Road, PAR 39 - Carr Lane, PAR 40 - B1392 Meredyke Road, PAR 133 - Meredyke Rd East (Between Carr Ln and B1392 Shore Rd), PAR 135 - Meredyke Rd West, PAR 136 - B1392 Eastoft Rd, PAR 43 - B1392 Luddington Road.	EYRC/ North Lincolnshire Council
Zone 5	PAR 133 - Meredyke Rd East (Between Carr Ln and B1392 Shore Rd), PAR 135 - Meredyke Rd West, PAR 136 - B1392 Eastoft Rd, PAR 41 - Ox Pasture Lane, PAR 42 - Carr Lane, PAR 43 - B1392 Luddington Road, PAR 44 - A161 Crowle Road/Wharf Road (Eastoft to Ealand), PAR 134 - B1392, PAR 46 - Bonnyhale Dale Road, PAR 49 - Keadby Power Station Internal Roads/Unnamed Roads, PAR 45 - Outgate (West), PAR 47 - Main Street, PAR 50 - A161 (Between Outgate and A18 Interchange), PAR 48 - Bonnyhale Road, PAR 51 - A18 Trunk Road (East), PAR 157 - A18 Althorpe Bypass.	North Lincolnshire Council
Zone 6	PAR 53 - A161 (Between A18 and M180), PAR 51 - A18 Trunk Road (East), PAR 157 - A18 Althorpe Bypass, PAR 144 - M180 (Between A161 and M181), PAR 54 - A161 (Between M180 and Belton), PAR 55 - King Edward Street, PAR 56 - Bracon, PAR 57 - Belton Road, PAR 61 - A161 High Street (Between King Edward Street and Blow Row), PAR 58 - Hollingsworth Lane, PAR 64 - Newland Lane, PAR 64B - Newland Lane, PAR 63 - Melwood Hill North, PAR 60 - Blow Row, PAR 138 - Greengate, PAR 65 - A161 Epworth Road, PAR 59 - Melwood Hill South, PAR 66 - Burnham Road West, PAR 68 - East Lound Road, PAR 69 - Brackenhill Road/E Lound Road, PAR 71 - A161 Haxey Lane, PAR 72 - Ferry Road/Main Street, PAR 73 - Stockwith Road, PAR 74 - A161	North Lincolnshire Council

Zone	PARs	LHA
	Station Road, PAR 75 - Tindale Bank Road, PAR 76 - A161 Haxey Road.	
Zone 7	PAR 74 - A161 Station Road, PAR 75 - Tindale Bank Road, PAR 76 - A161 Haxey Road, PAR 77 - Cornley Road, PAR 78 - Carr Lane, PAR 79 - B1403 Church Street, PAR 80 - Cattle Road, PAR 82 - B1403 Gringley Road, PAR 83 - B1403 Fountain Hill, PAR 85 - B1403 Walkeringham Road.	North Lincolnshire Council/ Nottinghamshire County Council
Zone 8	PAR83-B1403 Fountain Hill,PAR85-B1403 Walkeringham Road,PAR87-A631 (Gringley on the Hill East).	Nottinghamshire County Council
Zone 9	PAR 87 - A631 (Gringley on the Hill East), PAR 88 - A631 (Between A161/A631 Roundabout and Wood Lane), PAR 89 - A631 (Between Wood Lane and A620/A631 Roundabout), PAR 90 - Wood Lane, PAR 91 - A620 (Between A620/A631 Roundabout to Saundby/Sturton/Gainsborough Road Roundabout), PAR 98 - A620 Gainsborough Road.	Nottinghamshire County Council
Zone 10	PAR 98 - A620 Gainsborough Road, PAR 96 - Sturton Road, PAR 92 - Sturton Road, PAR 93 - Gainsborough Road, PAR 94 - Station Road, PAR 95 - Wheatley Road, PAR 101 - Cross Street, PAR 102 - Springs Lane, PAR 153 - Leverton Rd, PAR 154 - Main St, PAR 155 - Retford Road East, PAR 103 - Retford Road West, PAR 107 - Cocking Lane, PAR 108 - Town Street/Forewood Lane, PAR 109 - Wood Lane/Main Street, PAR 114 - Ashley Lane, PAR 116 - Laneham Road (between Retford Rd and Main Street), PAR 112 - Main Street, PAR 113 - Hazelwood Lane, PAR 115 - Retford Road (North of Rampton Hospital), PAR 118 - A57 - Between Darlton Road and BM 52/53 , PAR 119 A57 - Between BM 52/53 east along A57 to PAR 120, PAR 123 - Retford Road (East Drayton), PAR 124 - Top Street/Darlton Road.	Nottinghamshire County Council
Zone 11	PAR 118 - A57 - Between Darlton Road and BM 52/53 , PAR 119 - A57 - Between BM 52/53 east along A57 to PAR 120, PAR 122 - Main Street, PAR 139 - Fledborough Road.	Nottinghamshire County Council

14.7.13 Routeing patterns are informed by highway suitability, safety considerations and access constraints. Routes are designated as either LGV-only or all-vehicle (i.e. LGV and HGV).

14.7.14 LGV-only PARs are as follows:

- PAR 14 - Westoby Lane;
- PAR 15 - Brick Dike Lane;
- PAR 16 - B1230 - Hunsley Road;
- PAR 20 - Beverley Road;
- PAR 26A - Ings Lane;
- PAR 34 - Main Street (Pennyhill Cottages);

- PAR 35 - Main Street;
- PAR 36 - Church Lane;
- PAR 38 - Luddington Road;
- PAR 39 - Carr Lane;
- PAR 40 - B1392 Meredyke Road;
- PAR 45 - Outgate (West);
- PAR 47 - Main Street;
- PAR 48 - Bonnyhale Road;
- PAR 58 - Hollingsworth Lane;
- PAR 59 - Melwood Hill South;
- PAR 64 - Newland Lane;
- PAR 66 - Burnham Road West;
- PAR 67 - Church Walk;
- PAR 68 - East Lound Road;
- PAR 80 - Cattle Road;
- PAR 90 - Wood Lane;
- PAR 95 - Wheatley Road;
- PAR 96 - Sturton Road;
- PAR 97 - Low Street;
- PAR 102 - Springs Lane;
- PAR 109 - Wood Lane/Main Street;
- PAR 125 - Dale Road;
- PAR 133 - Meredyke Rd East (Between Carr Ln and B1392 Shore Rd);
- PAR 134 - B1392;
- PAR 138 – Greengate;
- PAR 149 - Epworth Road North;
- PAR 150 - Epworth Road South;
- PAR 151 - Burnham Road East;
- PAR 152 - Church Street; and
- PAR 159 - Landing Lane.

14.7.15 All other PARs in study area are all-vehicle (i.e. HGV and LGV).

14.7.16 The traffic distribution assumes the following, to ensure a worst-case assessment on each of the PARs:

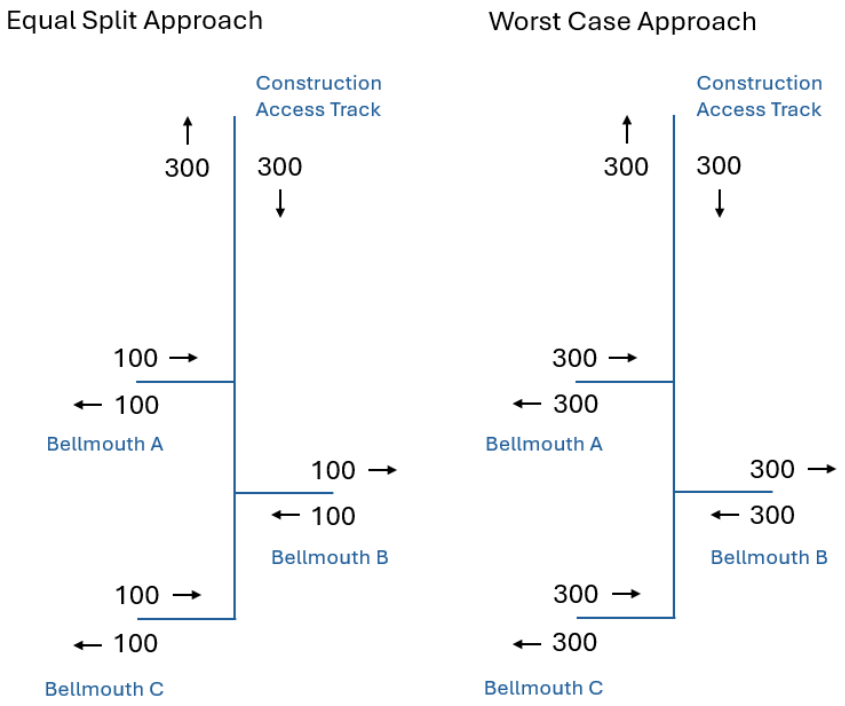
- The main roads into the zone carry the total zone traffic;

- The connecting roads to each bellmouth also carry the total zone traffic; and
- The bellmouths have total traffic flows for each zone.

14.7.17 A worst-case approach has been used for the assessment of flows at each bellmouth. Rather than apportioning construction traffic evenly across multiple bellmouths within a construction access track section, the full number of trips associated with that section has been applied to each bellmouth individually.

14.7.18 This approach is based on the number of vehicle movements per metre of construction access track and ensures that each bellmouth is assessed independently on a worst-case basis. By way of example, where a construction access track section equates to 300 two-way vehicle trips and contains three bellmouths, 300 inbound (arrival) and outbound (departure) trips are assumed to occur at each of the three bellmouths. This is illustrated as the 'Worst Case Approach' as opposed to the 'Equal Split Approach' in Image 14.1.

Image **14.1** – Approach used for construction access track vehicle trips



14.7.19 Adopting this approach ensures that the assessment does not rely on assumptions regarding the precise phasing of construction distribution of traffic between individual bellmouths and represents a conservative worst-case scenario for highway impact assessment.

Trip generation

14.7.20 The average daily trip generation for each construction traffic zone for the 2029 peak construction year has been split into LGVs and HGVs and total vehicles and is set out in Table 14.19. Zone descriptions are set out in Table 14.18.

Table 14.19 – Average daily trip generation by zone – 2029 peak construction

Construction traffic zone	LGVs		HGVs		Total vehicles (LGV+HGV)	
	Arrivals/ departures	Two-way	Arrivals/ departures	Two-way	Arrivals/ departures	Two-way
Zone 1	12	24	11	22	23	46
Zone 2	36	72	28	56	64	128
Zone 3	61	122	50	100	111	222
Zone 4	30	60	26	52	56	112
Zone 5	50	100	40	80	90	180
Zone 6	50	100	38	76	88	176
Zone 7	25	50	21	42	46	92
Zone 8	6	12	7	14	13	26
Zone 9	10	20	8	16	18	36
Zone 10	48	96	38	76	86	172
Zone 11	14	28	13	26	27	54

14.7.21 A summary of the trip generation by zone is as follows:

- The highest total vehicle flows occur in Zones 3, 5, 6, and 10, each recording two-way totals above 170 vehicles, with Zone 3 peaking at 222 vehicles.
- The lowest flows are recorded in Zone 8, with only 26 two-way vehicles.
- Most zones show a broadly balanced distribution, with HGVs contributing a substantial share of total traffic, typically around 40% to 50% of movements.

14.7.22 It is important to acknowledge that the construction vehicle traffic flows used within this analysis provide a worst-case scenario and a contingency uplift, and traffic flows as the Project progresses are highly likely to be lower than those shown here. This is because of the following reasons:

- The assessment takes forecast construction activity from the peak year of the Project (2029);
- Each bellmouth has the maximum amount of construction vehicles possible assigned to it, rather than the traffic being split between nearby bellmouths; and
- A 25% increase in all construction traffic has been included as contingency.

Construction Access

14.7.23 Construction traffic would access the site via either specified bellmouths, construction access tracks, or off a construction traffic route (as shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**) from the PARs.

Screening for PARs, Road Diversions and/or Closures and PRoWs for assessment

PARs

14.7.24 The PARs that have been screened into the assessment based upon the two rules set out in paragraph 14.4.16, and which therefore may potentially be subject to one or more of the potential effects listed above, are set out in Table 14.20.

Table 14.20 – Screened-in PARs

PAR ID	PAR name	Rule 1: Total Vehicle Change (%)	Rule 2: HGV Change (%)
5	Dunflat Road	3	**35**
7	Main Street	2	**35**
8	Little Weighton Road	4	**51**
11	Rowley Road (between Riplingham Road/ Rowley Road jn and BM 008)	21	**399**
13	Lambwell Hill	19	**593**
21	Ellerker Road	19	**179**
23	Brantingham Road	19	**179**
24A	Brough Road (Between A1034 roundabout and Brantingham Road)	3	**36**
24B	Brough Road (South of Brantingham Road)	3	**38**
27	Carr Lane	**45**	**323**
28	Tongue Lane	**37**	**131**
33	A161 King's Causeway	8	**49**
37	A161 Field Lane (North of Eastoft)*	14	**105**
39	Carr Lane	**52**	0
41	Ox Pasture Lane	3	**32**
42	Carr Lane	**450**	0
43	B1392 Luddington Road	**36**	**267**
46	Bonnyhale Dale Road	**164**	**1096**
48	Bonnyhale Road	**66**	0
49A	Keadby Power Station Internal Roads/Unnamed Roads	5	**220**

PAR ID	PAR name	Rule 1: Total Vehicle Change (%)	Rule 2: HGV Change (%)
49B	Keadby Power Station Internal Roads/Unnamed Roads 2	5	**220**
55	King Edward Street	10	**76**
56	Bracon	10	**76**
57	Belton Road	14	**78**
59	Melwood Hill (South)	10	**70**
62	Rectory Street	6	**44**
63	Melwood Hill (North)	10	**70**
69	Brackenhill Road/E Lound Road	13	**84**
70	B1396 Tower Hill*	4	**50**
72	Ferry Road/Main Street	15	**92**
77	Cornley Road	**56**	**362**
78	Carr Lane	**32**	**136**
80	Cattle Road	**50**	0
90	Wood Lane	**76**	**384**
101	Cross Street	2	**46**
102	Springs Lane	**1266**	0
103	Retford Road (West)	5	**34**
104	Leverton Road/Spital Hill	4	**45**
107	Cocking Lane	3	**62**
108	Town Street/Forewood Lane	17	**275**
110	Grove Road	7	**70**
111	Lady Well Lane	7	**70**
112	Main Street	26	**192**
113	Hazelwood Lane	8	**109**
114	Ashley Lane	**415**	**3164**
115	Retford Road (North of Rampton Hospital)	5	**93**
116	Laneham Road	4	**31**
124	Top Street/Darlton Road	9	**99**

PAR ID	PAR name	Rule 1: Total Vehicle Change (%)	Rule 2: HGV Change (%)
126	Willow Flats	3	**44**
127	Ellerker Lane	16	**147**
128	Norfolk Bank Lane	**36**	**252**
129	Common Rd	24	**208**
130	Wallingfen Lane	25	153
131	Staddlethorpe Lane	6	**58**
132	Thornton Dam Lane/Scalby Lane*	6	**58**
135	Meredyke Rd (West)	**36**	**273**
136	B1392 Eastoft Rd	22	**170**
137	Outgate East	**155**	**959**
153	Leverton Rd*	2	**40**
154	Main St	11	**81**
155	Retford Road (East)	3	**65**
158	Sands Ln	29	**278**
159	Landing Lane	**45**	**323**
160	Pasture Lane	19	**78**

14.7.25 * PAR with a sensitivity of 'high' or 'very high'.

14.7.26 Percentage exceeding Rule 1 threshold marked in bold.

Road diversions and/or closures

14.7.27 For road closures and diversions, no PARs meet the screening criteria (breaching the 50 working day criteria) as set out in paragraph 14.4.19 and are therefore not assessed within this chapter.

PRoWs

14.7.28 PRoWs that have been screened in are those that have a diversion and/or closure as set out in Table 14.6.

14.8 Mitigation

Embedded Measures

14.8.1 Environmental appraisal has been an integral part of the Project design from the outset, which has meant that the Project has been able to avoid environmentally sensitive features as far as reasonably practicable. National Grid has also embedded measures into the design of the Project to avoid or reduce significant effects that may

otherwise be experienced during construction and operation (and maintenance) of the Project.

14.8.2 Embedded measures are those that are intrinsic to and built into the design of the Project; these are listed in **Application Document 7.3 Register of Environmental Actions and Commitments**. Embedded measures of relevance to the traffic and transport assessment are:

- The design includes strategically located and optimised construction access tracks (construction access tracks) along the Project alignment to support construction of the Project and reduce the effects of construction traffic movements on the local public highway network during construction.
- The selection of PARs has been in part informed by a need to avoid impacting areas of population wherever possible and to maximise the use of construction access tracks. PARs are shown on **Application Document 6.14.F1 Figure 14.1 Primary Access Routes**.
- DE1: The Project will be delivered and operated in compliance with all relevant legislation, consents and permits.
- DE10: Clearly demarcated, dedicated access routes will be provided during construction.
- GG01 The following outline environmental management plans will be submitted for approval:
  - Code of Construction Practice (CoCP)
  - Construction Traffic Management Plan (CTMP) including an Construction Worker Travel Plan
  - Soil Management Plan (SMP)
  - Public Rights of Way Management Plan (PRoWMP)
  - Materials and Waste Management Plan (MWMP)
  - Noise and Vibration Management Plan (NVMP)
  - Landscape and Ecology Management Plan (LEMP)
  - Archaeological Written Scheme of Investigation (WSI)
  - Cultural Heritage Management Plan; and
  - Framework Construction Surface Water Management Plan (CSWMP).

Control and Management Measures

14.8.3 Control and management measures comprise management activities and techniques that will be implemented during construction and reinstatement to limit effects, through adherence to good site practices and ensuring legal compliance.

14.8.4 Measures relevant to the control and management of impacts during construction have been included within **Application Document 7.2 Outline Code of Construction Practice, Application Document 7.4 Outline Construction Traffic Management Plan** which are secured by Requirement 4 of **Application Document 3.1 Draft Development Consent Order** and **Application Document 7.3 Register**

of Environmental Actions and Commitments secured by Requirement 5 of **Application Document 3.1 Draft Development Consent Order.** These outline management plans and the following measures in **Application Document 7.3 Register of Environmental Actions and Commitments** have been taken into account in assessing the traffic and transport effects of the Project.

TTROs

14.8.5 TTROs are applied to facilitate construction activities where works cannot be undertaken safely while maintaining unrestricted use of the public highway. These measures are temporary and relate solely to the construction phase. The need for such measures has been discussed and agreed with the relevant LHAs. Detailed proposals for TTROs, including location plans, extents, indicative durations, traffic management arrangements and underlying assumptions, are set out in **Application Document 7.15 Transport Assessment** and in **Application Document 2.5 Traffic Regulation Order Plans**.

14.8.6 TTROs will include:

- Temporary speed limit reductions on the approach to bellmouths and other access points to allow for safe access and egress;
- Traffic control on highways (potentially temporary traffic lights) limiting traffic to one way at a time;
- Parking suspensions and associated loading/waiting restrictions through stretches of PARs and in the vicinity of bellmouths during working hours; and
- Any other temporary restrictions required to enable safe construction operations such as full closure and overtaking restrictions.

Temporary traffic management and highway works

14.8.7 Temporary traffic management and highway works to include the following:

- Road widening including construction of passing places: Localised widening on some PARs to enable safe two-way HGV movements. In certain locations, temporary passing places, surface upgrades or carriageway widening on the public highway may be required. Further information is provided in **Application Document 6.4 Chapter 4 Description of the Project** and illustrated on **Application Document 6.4.F3 Figure 4.3 Temporary Construction Works**.
- Bellmouth construction: Temporary bellmouths will be built to provide access points from the highway to the site (refer to **Application Document 6.4 Chapter 4 Description of the Project**).
- Access through villages: Temporary traffic signals, 20mph restrictions and parking restrictions will be deployed along some PARs through villages to facilitate safe two-way HGV movements.
- Visibility splays at bellmouths: Visibility splay provision will be implemented at temporary accesses as required for safety. Where speed management is required, temporary speed limits will be implemented via TTRO (see above).In addition ‘no overtaking’ TTROs at bellmouth locations will be implemented.
- Distribution network operator and third-party works: Diversions of existing overhead and below ground utility assets interfacing with the highway will be

managed with appropriate traffic management arrangements including full carriageway closure.

Construction working hours and worker travel

14.8.8 The 07:00 to 19:00 shift pattern means that workers will typically need to arrive at site before 07:00 and will not typically leave until 19:00 (Monday to Friday). As such, most construction workers will travel to work outside of traditional network peak hours of 08:00–09:00 and 17:00–18:00. Construction worker trips will therefore typically not add to existing peak-hour traffic. Whilst there may be some relatively low levels of construction worker movements outside of these shift times, these are considered to be negligible. Further information is contained in **Application Document 7.4 Outline Construction Traffic Management Plan**.

14.8.9 HGV movements will comply with the timing controls set out in the **Application Document 7.4 Outline Construction Traffic Management Plan**, including any weekend and public holiday controls where applicable.

Measures secured via the Register of Environmental Actions and Commitments and related outline management plans

14.8.10 Measures relevant to the control and management of impacts during construction have been included within **Application Document 7.3 Register of Environmental Actions and Commitments** (REAC). The following measures have been taken into account in assessing the traffic and transport effects of the Project:

- TT01: All construction HGVs will adhere to the designated construction routes (Preliminary Access Routes (PARs)) to and from the site. As noted within **Application Document 7.4 Outline Construction Traffic Management Plan**.
- TT02: Emergency access protocols will be put in place and complied with. These will be identified within the site health and safety procedures.
- TT03: The Main Works Contractor(s) will seek to ensure no debris deposits onto the public road occur due to construction traffic and that cleaning facilities are available where required. These will involve wheel washers for vehicles leaving the compound site(s) and road sweepers being deployed if necessary.
- TT04: Appropriate road signs warning motorists of the site access/egress and of construction HGVs turning in and out of the site will be provided and installed.
- TT05: Provision of appropriate road markings and signs will be in place to warn the public of increased traffic movements to and from the site during construction
- TT06: Site inductions will cover traffic safety, highlighting the need to pay special attention to vulnerable road users.
- TT07: The Main Works Contractor(s) will prepare a Driver Information Pack prior to construction commencing covering a variety of topics and providing information on the requirements of working on the Project, to form part of the CTMP.
- TT08: Depending on the type and size of the equipment, a range of the following measures for abnormal loads will be implemented (where appropriate and necessary) to minimise disruption and risks to other road users:
  - Marker boards;

- Escort vehicles;
- Police escort;
- Appropriate notice;
- Speed restriction; and
- Additional lights.

- TT09: Where practicable, temporary traffic management measures (including single lane running, temporary traffic signals or stop/go working) will be used to avoid the need for road closures. Where appropriate and subject to agreement with the relevant local authority, works may be undertaken outside of peak traffic periods, including overnight or outside standard business hours, to reduce disruption to road users and affected receptors.
- TT10: Where road closures are required for safe construction, the extent and duration of such closures will be minimised. Where reasonably practicable, suitable diversion routes will be provided. This may include programming works outside of peak hours or normal business hours, including overnight working where appropriate and agreed with the relevant local authority
- TT11: In circumstances where diversion routes are not reasonably practicable, including on single-access or no-through roads, access will be managed through controlled access arrangements. These may include temporary time-restricted closures, escorted access, or pre-arranged access periods and agreed with the relevant local highway authority.
- TT12: Where controlled access arrangements would result in unacceptable disruption, particularly for residential occupiers, businesses or agricultural operations, further/enhanced mitigation measures will be developed in consultation with affected parties. These may include alternative access provision, changes to construction programming or working methodologies, or other bespoke arrangements.
- TT13: All parties affected by road closures will be informed of access arrangements in advance of works commencing and will be provided with advance notice of any changes to access restrictions. Emergency and pedestrian access will be maintained at all times.

14.8.11 **Application Document 7.3 Register of Environmental Actions and Commitments** also includes standard/good practice measures that are relevant to the control and management of traffic and transport impacts as follows:

- GG02: The Mains Works Contractor(s) will undertake site inspections to check conformance to the measures set out within each of the management plans and their subordinate plans as set out within GG01.
- GG12: Vehicles and vessels will be correctly maintained and operated in accordance with manufacturer's recommendations and in a responsible manner. The operators of plant and vehicles will be required to switch off their engines when not in use and when it is safe to do so. Electric or other low carbon plant and equipment will be used where available and where practicable.
- GG20: Wheel washing facilities will be provided at each compound and intermittently along construction access tracks. Road sweepers will be deployed

on public roads where necessary to prevent excessive dust or mud deposits. Dry sweeping of large areas will be avoided.

- GG28: Members of the community and local businesses will be kept informed regularly of the works through active community liaison. This will include notification of noisy activities, heavy traffic periods and start and end dates of key phasing. A free telephone Project helpline and website will be provided which members of the public can use to raise any concerns or complaints about the Project. All construction-related queries will be logged by National Grid in a complaint register, together with a record of the responses given and actions taken.
- S02: Where community facilities, businesses, tourism, and recreational assets cannot be avoided, access to these affected assets will be maintained where practicable. In the case of closures, appropriate access arrangements, including provision of temporary diversion routes, will be provided where possible. Advance notice signage will be erected regarding route diversions. These notice boards will be erected prior to and throughout the construction period.
- S05: To reduce the duration of temporary closure of the Yorkshire Wolds Way, crossing protection will be implemented for both lines. During this closure, users will be signposted onto an alternative route to bypass the closed section of the Yorkshire Wolds Way.

  This will include constructing crossing protection for both lines simultaneously to shorten the overall duration the route be closed for
- S07: Residential and business properties subject to road closures resulting in temporary loss of vehicular access to the property will be managed through the staged mitigation approach outlined within **Application Document 7.4 Outline Construction Traffic Management Plan**:

- Stage 1 - application of standard construction phasing and traffic management measures which to ensure maintenance of vehicular access and avoidance of severance effects;
- Stage 2 - application of standard best practice control and management measures. Such measures may include sensitive programming of works, managed crossings, effective communication, ensuring delivery windows, etc; and
- Stage 3 - application of additional mitigation measures which may be bespoke to the affected location.

Outline Construction Traffic Management Plan

14.8.12 **Application Document 7.4 Outline Construction Traffic Management Plan** sets out all the procedures for managing construction traffic, including routeing, timing, and minimising disruption to local roads and communities. Some of the key procedures are set out below:

- Heavy goods vehicles, other than those associated with activities permitted outside core working hours, will not be permitted to arrive at site before 06:00 or depart after 19:00 on Mondays to Fridays, or before 06:00 or after 17:00 on Saturdays, Sundays and public holidays.

- Avoidance of school drop-off/pick-up: Where a Primary Access Route passes a primary school, construction vehicles will avoid weekday school drop-off and pick-up periods to safeguard pupil safety and minimise disruption.
- Night working restrictions: Night working is not standard practice, but may occur for certain operations (e.g., trenchless crossings, road works) to reduce effects on local traffic.
- Temporary construction compounds and laydown areas: Establishment and management of temporary compounds and laydown areas to support construction logistics and minimise impacts on public highways.
- Public Rights of Way Management Plan: **Application Document 7.6 Outline Public Right of Way Management Plan** addresses diversion, closure, and safe access for PRoWs affected by construction.
- Pre-site and post-site condition surveys: Surveys of roads and tracks before and after construction to ensure any damage that is reasonably attributable to the Project, is identified and rectified, maintaining infrastructure quality.
- AILs (where necessary): Coordination with National Highways, LHA, police, and Network Rail for safe transport of AILs.
- Community engagement and information: Provision of information to residents about works, including traffic management, timings, and contact details for complaints or queries.
- Driver Training: Training includes agreed traffic routes, access points, and interaction with road users (pedestrians, cyclists, horse riders) to ensure safety and compliance. HGV drivers must complete FORS Professional Safe Driving training as a mandatory safety requirement
- Environmental Emergency and Incident Response Plan: Procedures for incident response, including traffic-related emergencies, to protect life, property and minimise disruption.

Additional Measures

14.8.13 Additional measures comprise measures over and above any embedded and control and management measures, for which assessment within this ES has identified a requirement to further reduce significant environmental effects.

14.8.14 No additional mitigation measures, beyond the embedded and control and management measures identified above, are required. Residual Effects Assessment

14.8.15 The likely significant effects of the Project have been assessed using current available data relating to the construction phase of the Project. The residual effects are outlined below. As previously stated, this section assumes that all mitigation – embedded (design measures), and control and management measures, are in place when assessing the residual significance of effect. This is in accordance with guidance from IEMA (IEMA, 2023) as part of ensuring a proportional assessment.

Magnitude of impact and significance of effects

14.8.16 The magnitude of impact and significance of effect is set out in this section. Note that the sensitivity of each of the PARs was set out in section 14.6 which set out the existing and future baseline.

14.8.17 Further details about how the magnitude of impacts has been determined are provided in **Application Document 6.14.A4 Appendix 14.4 Magnitude of Impact**. Professional judgement has been applied to determine the final magnitude of effects, considering the changes that would result from the applied mitigation.

PARs with no significant adverse effects under any category of impact, prior to the application of mitigation measures

14.8.18 In total, 27 of the 64 screened in PARs have been identified as having no residual significant adverse effects, prior to the application of mitigation, based on the magnitude of impact (further detailed in **Application Document 6.14.A4 Appendix 14.4 Magnitude of Impact**) and receptor sensitivity considered for each impact category (further detailed in **Application Document 6.14.A2 Appendix 14.2 Traffic and Transport Baseline Conditions**). These PARs are set out in Table 14.21.

Table 14.21 – PARs with no significant adverse effects relating to any of the impact categories

PAR ID	PAR name	Significance
5	Dunflat Road	**Negligible – not significant**
8	Little Weighton Road	**Negligible – not significant**
13	Lambwell Hill	**Negligible – not significant**
21	Ellerker Road	**Negligible – not significant**
23	Brantingham Road	**Negligible – not significant**
24B	Brough Road (South of Brantingham Road)	**Negligible – not significant**
33	A161 King's Causeway	**Negligible – not significant**
41	Ox Pasture Lane	**Negligible – not significant**
42	Carr Lane	**Negligible – not significant**
48	Bonnyhale Road	**Negligible – not significant**
49A	Keadby Power Station Internal Roads/Unnamed Roads	**Negligible – not significant**
49B	Keadby Power Station Internal Roads/ Unnamed Roads 2	**Negligible – not significant**
57	Belton Road	**Negligible – not significant**
59	Melwood Hill (South)	**Negligible – not significant**
63	Melwood Hill (North)	**Negligible – not significant**

PAR ID	PAR name	Significance
80	Cattle Road	**Negligible – not significant**
104	Leverton Road/Spital Hill	**Negligible – not significant**
107	Cocking Lane	**Negligible – not significant**
110	Grove Road	**Negligible – not significant**
111	Lady Well Lane	**Negligible – not significant**
114	Ashley Lane	**Negligible – not significant**
116	Laneham Road	**Negligible – not significant**
126	Willow Flats	**Negligible – not significant**
129	Common Rd	**Negligible – not significant**
155	Retford Road (East)	**Negligible – not significant**
158	Sands Lane	**Negligible – not significant**
160	Pasture Lane	**Negligible – not significant**

14.8.19 As all of these PARs were assessed to be negligible (the lowest significance category)prior to the application of mitigation, the above table represents the final residual effects for these routes and they are not reported on further. .

PARs with significant adverse effects prior to mitigation

14.8.20 The 37 PARs identified as having potential significant adverse effects prior to the application of mitigation, are set out in this section for further assessment. These are set out for each of the impact categories considered.

14.8.21 This section considers assessment factors with all mitigation (embedded (design measures) and control and management measure) in place when assessing the residual significance of effect, for these PARs. This is in accordance with the IEMA guidelines (IEMA, 2023) as part of ensuring a proportional assessment.

14.8.22 The tables include consideration of baseline traffic flows and/or baseline HGV traffic flows where these are considered noteworthy in relation to the assessment factors.

Severance

14.8.23 The assessment of severance is summarised in Table 14.22.

Table 14.22 – Assessment of effect and significance - Severance

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
7	Main Street	Medium	Small	Baseline HGV flows are low at 155 two-way daily. The PAR is predicted to have an increase of 54 two-way HGVs. In line with the IEMA guidelines (IEMA, 2023) these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
24A	Brough Road (Between A1034 roundabout and Brantingham Road)	Medium	Small	Baseline HGV flows are moderate at 383 two-way daily. The PAR is predicted to have an increase of 102 two-way HGVs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
27	Carr Lane	Low	Large	Baseline flows are low at 362 two-way vehicles daily of which 26 are HGVs. The PAR is predicted to have an increase of 162 two-way vehicles of which 84 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
28	Tongue Lane	Low	Large	Baseline flows are low at 598 two-way vehicles daily of which 78 are HGVs. The PAR is predicted to have an increase of 224 two-way vehicles of which 102 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
37	A161 Field Lane (North of Eastoft)	High	Large	Baseline HGV flows are low at 103 two-way daily. The PAR is predicted to have an increase of 108 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8. High sensitivity receptor due to presence of a school. Specific mitigation includes control measure for HGVs to avoid school drop off and pick up times reducing the magnitude of impact.	Negligible	**Negligible – not significant**
43	B1392 Luddington Road	Low	Large	Baseline flows are moderate at 973 two-way vehicles daily of which 67 are HGVs. The PAR is predicted to have an increase of 346 two-way vehicles of which 178 are HGVs.	Mitigation as set out in section 14.8.	Medium	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
46	Bonnyhale Dale Road	Low	Large	Baseline flows are low at 109 two-way vehicles daily of which 7 are HGVs. The PAR is predicted to have an increase of 180 two-way vehicles of which 80 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
55	King Edward Street	Medium	Medium	Baseline HGV flows are low at 94 two-way daily. The PAR is predicted to have an increase of 72 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
56	Bracon	Medium	Medium	Baseline HGV flows are low at 94 two-way daily. The PAR is predicted to have an increase of 72 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
62	Rectory Street	Medium	Small	Baseline HGV flows are low at 163 two-way daily. The PAR is	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
				predicted to have an increase of 72 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.			
69	Brackenhill Road/E Lound Road	Medium	Medium	Baseline HGV flows are low at 85 two-way HGVs daily. The PAR is predicted to have an increase of 72 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
70	B1396 Tower Hill	Very high	Small	Baseline HGV flows are low at 145 two-way daily. The PAR is predicted to have an increase of 72 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
72	Ferry Road/Main Street	Medium	Large	Baseline HGV flows are low at 78 two-way daily. The PAR is predicted to have an increase of 72 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have	Mitigation as set out in section 14.8.	Small	**Minor – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
				influenced the assessment of residual effects and significance*.			
77	Cornley Road	Low	Large	Baseline flows are low at 119 two-way vehicles daily of which 9 are HGVs. The PAR is predicted to have an increase of 66 two-way vehicles of which 34 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
78	Carr Lane	Medium	Large	Baseline flows are low at 205 two-way vehicles daily of which 25 are HGVs. The PAR is predicted to have an increase of 66 two-way vehicles of which 34 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
90	Wood Lane	Low	Large	Baseline flows are low at 40 two-way vehicles daily of which 4 are HGVs. The PAR is predicted to have an increase of 30 two-way vehicles of which 16 are HGVs. In line with the IEMA guidelines	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
				these low levels of baseline traffic have influenced the assessment of residual effects and significance*.			
101	Cross Street	Medium	Small	Baseline HGV flows are low at 144 two-way daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
102	Springs Lane	Low	Large	Baseline flows are low at 5 two-way daily of which 0 are HGVs. The PAR is predicted to have an increase of 66 two-way vehicles of which all are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
103	Retford Road (West)	Medium	Small	Baseline HGV flows are moderate at 221 two-way daily. The PAR is predicted to have an increase of 76 two-way HGVs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
108	Town Street/Forewood Lane	Medium	Large	Baseline HGV flows are low at 24 two-way daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
112	Main Street	Low	Large	Baseline HGV flows are low at 34 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
113	Hazelwood Lane	Low	Large	Baseline HGV flows are low at 60 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
115	Retford Road (North of Rampton Hospital)	Medium	Large	Baseline HGV flows are low at 71 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with	Mitigation as set out in section 14.8.	Small	**Minor – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
				the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.			
124	Top Street/Darlton Road	Medium	Large	Baseline HGV flows are low at 67 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
127	Ellerker Lane	Low	Large	Baseline HGV flows are low at 57 two-way vehicles daily. The PAR is predicted to have an increase of 84 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
128	Norfolk Bank Lane	Low	Large	Baseline flows are low at 454 two-way vehicles daily of which 33 are HGVs. The PAR is predicted to have an increase of 162 two-way vehicles of which 84 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
				the assessment of residual effects and significance*.			
130	Wallingfen Lane	Low	Small	Baseline HGV flows are low at 55 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
131	Staddlethorpe Lane	Medium	Small	Baseline flows are low at 144 two-way vehicles daily. The PAR is predicted to have an increase of 84 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
132	Thornton Dam Lane/Scalby Lane	High	Small	Baseline HGV flows are low at 144 two-way vehicles daily. The PAR is predicted to have an increase of 84 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
135	Meredyke Road (West)	Medium	Large	Baseline flows are low at 583 two-way vehicles daily of which 24 are HGVs. The PAR is predicted to have an increase of 210 two-way vehicles of which 66 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
136	B1392 Eastoft Road	Medium	Large	Baseline HGV flows are low at 64 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
137	Outgate East	Low	Large	Baseline flows are low at 109 two-way vehicles daily of which 7 are HGVs. The PAR is predicted to have an increase of 170 two-way vehicles of which 70 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
153	Leverton Rd	High	Small	Baseline HGV flows are low at 164 two-way daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8. High sensitivity receptor due to presence of a school. Specific mitigation includes control measure for HGVs to avoid school drop off and pick up times reducing the magnitude of impact. These reduce the magnitude of impact by two categories, although only one category reduction is needed to reach the lowest magnitude level.	Negligible	**Negligible – not significant**
154	Main St	Medium	Medium	Baseline HGV flows are low at 81 two-way daily. The PAR is predicted to have an increase of 66 two-way HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
159	Landing Lane	Low	Large	Baseline flows are low at 362 two-way vehicles daily of which 26 are HGVs. The PAR is predicted to have an increase of 162 two-way vehicles of which 84 are HGVs. In line with the IEMA guidelines these low levels of baseline traffic have influenced the assessment of residual effects and significance*.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

*The IEMA guidelines (IEMA, 2023) state that '*very low baseline flows are unlikely to experience severance impacts even with high percentage changes in traffic*'

Non-Motorised User Delay

14.8.24 There are no PARs with residual adverse effects above negligible, with respect to Non-Motorised User Delay.

Non-Motorised User Amenity

14.8.25 The assessment of Non-Motorised User Amenity is summarised in Table 14.23 below.

Table 14.23 – Assessment of effect and significance -Non-Motorised User Amenity

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
27	Carr Lane	Low	Large	Baseline HGV flows are low at 26 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
28	Tongue Lane	Low	Large	Baseline HGV flows are low at 78 two-way daily. The PAR is predicted to have an increase of 102 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
37	A161 Field Lane (North of Eastoft)	High	Large	Baseline HGV flows are low at 103 two-way daily. The PAR is predicted to have an increase of 108 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8. High sensitivity receptor due to presence of a school. Specific mitigation includes control measure for HGVs to avoid school drop off and pick up times reducing the	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
					magnitude of impact.		
43	B1392 Luddington Road	Low	Large	Baseline HGV flows are low at 67 two-way daily. The PAR is predicted to have an increase of 178 HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
46	Bonnyhale Dale Road	Low	Large	Baseline flows are low at 109 two-way vehicles daily. The PAR is predicted to have an increase of 180 two-way vehicles. Baseline HGV flows are low at 7 two-way daily. The PAR is predicted to have an increase of 80 two-way HGVs. These two-way increases across the day are not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
55	King Edward Street	Medium	Medium	Baseline HGV flows are low at 94 two-way daily. The PAR is predicted to have an increase of 72 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
56	Bracon	Medium	Medium	Baseline HGV flows are low at 94 two-way daily. The PAR is predicted to have an increase of 72 two-way HGVs. This two-way increase across the day is not	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
				deemed significant in terms of amenity given the low baseline flows.			
69	Brackenhill Road/E Lound Road	Medium	Medium	Baseline HGV flows are low at 85 two-way HGVs daily. The PAR is predicted to have an increase of 72 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
72	Ferry Road/Main Street	Medium	Large	Baseline HGV flows are low at 78 two-way daily. The PAR is predicted to have an increase of 72 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
77	Cornley Road	Low	Large	Baseline HGV flows are low at 9 two-way daily. The PAR is predicted to have an increase of 34 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
78	Carr Lane	Medium	Large	Baseline HGV flows are low at 25 two-way HGVs. The PAR is predicted to have an increase of 34 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
90	Wood Lane	Low	Large	Baseline HGV flows are low at 4 two-way daily. The PAR is predicted to have an increase of 16 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
102	Springs Lane	Low	Large	Baseline flows are low at 5 two-way daily vehicles. The PAR is predicted to have an increase of 66 two-way vehicles. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
108	Town Street/Forewood Lane	Medium	Large	Baseline HGV flows are low at 24 two-way daily. The PAR is predicted to have an increase of 66 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
112	Main Street	Low	Large	Baseline HGV flows are low at 34 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
113	Hazelwood Lane	Low	Large	Baseline HGV flows are low at 60 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
115	Retford Road (North of Rampton Hospital)	Medium	Medium	Baseline HGV flows are low at 71 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Minor – not significant**
124	Top Street/Darlton Road	Medium	Medium	Baseline HGV flows are low at 67 two-way vehicles daily. The PAR is predicted to have an increase of 66 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Minor – not significant**
127	Ellerker Lane	Low	Large	Baseline HGV flows are low at 57 two-way vehicles daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
128	Norfolk Bank Lane	Low	Large	Baseline HGV flows are low at 33 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
130	Wallingfen Lane	Low	Small	Baseline HGV flows are low at 55 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
131	Staddlethorpe Lane	Medium	Small	Baseline HGV flows are low at 144 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
132	Thornton Dam Lane/Scalby Lane	High	Small	Baseline HGV flows are low at 144 two-way vehicles daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
135	Meredyke Road (West)	Medium	Large	Baseline HGV flows are low at 24 two-way daily. The PAR is predicted to have an increase of 66 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
136	B1392 Eastoft Road	Medium	Large	Baseline HGV flows are low at 64 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Minor – not significant**
137	Outgate East	Low	Large	Baseline flows are low at 109 two-way vehicles daily of which 7 are HGVs. The PAR is predicted to have an increase of 170 two-way vehicles of which 70 are HGVs. These two-way increases across the day are not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
154	Main St	Medium	Medium	Baseline HGV flows are low at 81 two-way daily. The PAR is predicted to have an increase of 66 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
159	Landing Lane	Low	Large	Baseline HGV flows are low at 26 two-way daily. The PAR is predicted to have an increase of 84 two-way HGVs. This two-way increase across the day is not deemed significant in terms of amenity given the low baseline flows.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

Fear and Intimidation

14.8.26 There are no PARs with residual adverse effects above negligible relating to Fear and Intimidation.

Driver Delay

14.8.27 The assessment of Driver Delay is summarised in Table 14.24 below.

Table 14.24 – Assessment of effect and significance - Driver Delay

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
46	Bonnyhale Dale Road	Low	Large	The PAR has low baseline flows for total vehicles with 109 two-way flows, and an increase of 180 two-way vehicles across the day. This is minimal when split over the course of the day and unlikely to cause driver delay. Given the rural characteristic of the road, with free flow conditions i.e. no traffic signals, crossings etc, and the temporary increase in traffic, it is not considered a significant effect.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
78	Carr Lane	Medium	Small	The PAR has low baseline flows for total vehicles with 205 two-way flows, and an increase of 66 two-way vehicles across the day. This is minimal when split over the course of the day and unlikely to cause driver delay (6 additional hourly vehicles over the course of 12 hours). Given the semi-rural characteristic of the road, with free flow conditions i.e. no traffic signals, crossings etc, and the temporary increase in traffic, it is not considered a significant effect.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
102	Springs Lane	Low	Large	The PAR has low baseline flows for total vehicles with 5 two-way flows, and an increase of 66 two-way vehicles across the day. This is minimal when split over the course of the day and unlikely to cause driver delay. Given the rural characteristic of the road, with free flow conditions i.e. no traffic signals, crossings etc, and the temporary increase in traffic, it is not considered a significant effect.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**
135	Meredyke Road (West)	Medium	Medium	The PAR has low baseline flows for total vehicles with 583 two-way flows, and an increase of 210 two-way vehicles across the day. This is minimal when split over the course of the day and unlikely to cause driver delay. Given the semi-rural characteristic of the road, with free flow conditions i.e. no traffic signals, crossings etc, and the temporary increase in traffic, it is not considered a significant effect.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
137	Outgate East	Low	Large	The PAR has low baseline flows for total vehicles with 109 two-way flows, and an increase of 170 two-way vehicles across the day. This is minimal when split over the course of the day and unlikely to cause driver delay.	Mitigation as set out in section 14.8.	Small	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects			
				Assessment factors	Mitigation	Final magnitude of impact	Significance
				Given only 20% of the route is residential in nature, the remainder of the PAR is rural, the PAR has free flow conditions i.e. no traffic signals, crossings etc, and the temporary increase in traffic, it is not considered a significant effect.			

Highway Safety

14.8.28 The assessment of Highway Safety, which is based on the methodology in section 14.4 Assessment Approach and Methods, is summarised in Table 14.25 below.

Table 14.25 – Assessment of effect and significance - Highway Safety

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects Assessment factors	Mitigation	Final magnitude of impact	Significance
11	Rowley Road (between Riplingham Road/Rowley Road and BM 008)	Medium	Small	Only one slight collision has occurred between 2020 to 2024 on this PAR, relatively close to the Riplingham Road/Rowley Road junction. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
27	Carr Lane	Very high	Medium	One slight and one serious collision has occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects Assessment factors	Mitigation	Final magnitude of impact	Significance
				identifies no systemic safety deficiencies have been identified along the PARs.			
28	Tongue Lane	Very high	Small	One slight and two serious collisions have occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
39	Carr Lane	Medium	Small	Two slight collisions have occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects Assessment factors	Mitigation	Final magnitude of impact	Significance
55	King Edward Street	Very high	Small	Two slight and one serious collision have occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
72	Ferry Road/Main Street	High	Small	Three slight and one serious collision have occurred on this PAR between 2020 to 2024. There is a collision cluster on this PAR at the crossroad junction with PAR 71 (A161 Haxey Lane) and PAR 74 (A161 Station Road) as set out in Table 14.14. This consists of five slight and one serious collision. However, the magnitude of impact on this PAR is classified as small. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects Assessment factors	Mitigation	Final magnitude of impact	Significance
127	Ellerker Lane	Medium	Medium	Only one slight collision has occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely . A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
128	Norfolk Bank Lane	Medium	Small	Two slight collisions have occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

PAR ID	PAR name	Receptor sensitivity	Initial magnitude of impact	Assessment of effects Assessment factors	Mitigation	Final magnitude of impact	Significance
132	Thornton Dam Lane/Scalby Lane	Very high	Small	Two slight and one serious collision have occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**
135	Meredyke Road (West)	Medium	Small	One serious collision has occurred on this PAR between 2020 to 2024. There is no collision cluster on this PAR as set out in Table 14.14, suggesting no identifiable existing road safety issues or inherent deficiencies in road design or operation. The low and dispersed incident record suggests the route is currently operating safely. A Highway Safety Assessment has been undertaken and is included in **Application Document 7.15 Transport Assessment** which identifies no systemic safety deficiencies have been identified along the PARs.	Mitigation as set out in section 14.8.	Negligible	**Negligible – not significant**

Summary of Assessment Findings for IEMA Impact Categories

14.8.29 No likely significant effects have been identified as a result of the construction traffic associated with the Project with the proposed mitigation in place, as for all impact categories effects are categorised as either minor or negligible.

14.8.30 A summary of the residual significance of effects on PARs is provided in Table 14.26.

Table 14.26 – 2029 peak construction year residual significance of effects (PARS)

PAR ID	PAR name	Severance significance	Non-Motorised User Delay significance	Non-Motorised User Delay significance	Fear and Intimidation significance	Driver Delay Significance	Highway Safety significance	Significant/not significant
5	Dunflat Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
7	Main Street	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
8	Little Weighton Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
11	Rowley Road (between Riplingham Road/ Rowley Road and BM 008)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
13	Lambwell Hill	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
21	Ellerker Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
23	Brantingham Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
24A	Brough Road (Between A1034 roundabout and Brantingham Road)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
24B	Brough Road (South of Brantingham Road)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
27	Carr Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
28	Tongue Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
33	A161 King's Causeway	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
37	A161 Field Lane (North of Eastoft)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
39	Carr Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
41	Ox Pasture Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
42	Carr Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
43	B1392 Luddington Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
46	Bonnyhale Dale Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
48	Bonnyhale Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
49A	Keadby Power Station Internal Roads/ Unnamed Roads	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
49B	Keadby Power Station Internal Roads/ Unnamed Roads 2	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
55	King Edward Street	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
56	Bracon	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
57	Belton Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
59	Melwood Hill (South)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**

PAR ID	PAR name	Severance significance	Non-Motorised User Delay significance	Non-Motorised User Delay significance	Fear and Intimidation significance	Driver Delay Significance	Highway Safety significance	Significant/not significant
62	Rectory Street	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
63	Melwood Hill (North)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
69	Brackenhill Road/E Lound Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
70	B1396 Tower Hill	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
72	Ferry Road/Main Street	Minor	Negligible	Minor	Negligible	Negligible	Negligible	**Not significant**
77	Cornley Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
78	Carr Lane	Minor	Negligible	Minor	Negligible	Negligible	Negligible	**Not significant**
80	Cattle Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
90	Wood Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
101	Cross Street	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
102	Springs Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
103	Retford Road (West)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
104	Leverton Road/Spital Hill	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
107	Cocking Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
108	Town Street/Forewood Lane	Minor	Negligible	Minor	Negligible	Negligible	Negligible	**Not significant**
110	Grove Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
111	Lady Well Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
112	Main Street	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
113	Hazelwood Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
114	Ashley Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
115	Retford Road (North of Rampton Hospital)	Minor	Negligible	Minor	Negligible	Negligible	Negligible	**Not significant**
116	Laneham Road	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
124	Top Street/Darlton Road	Minor	Negligible	Minor	Negligible	Negligible	Negligible	**Not significant**
126	Willow Flats	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
127	Ellerker Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
128	Norfolk Bank Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
129	Common Rd	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
130	Wallingfen Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
131	Staddlethorpe Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**

PAR ID	PAR name	Severance significance	Non-Motorised User Delay significance	Non-Motorised User Delay significance	Fear and Intimidation significance	Driver Delay Significance	Highway Safety significance	Significant/not significant
132	Thornton Dam Lane/Scalby Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
135	Meredyke Rd (West)	Minor	Negligible	Minor	Negligible	Negligible	Negligible	**Not significant**
136	B1392 Eastoft Rd	Minor	Negligible	Minor	Negligible	Negligible	Negligible	**Not significant**
137	Outgate East	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
153	Leverton Rd	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
154	Main St	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
155	Retford Road (East)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
158	Sands Ln	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
159	Landing Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**
160	Pasture Lane	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	**Not significant**

Public Rights of Way

14.8.31 The significance of effects in relation to the PRoWs with a diversion and/or closure is summarised in Table 14.27. This sets out the magnitude of impact both before and after mitigation is applied.

14.8.32 Embedded mitigation and control and management measures are set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan** has been considered in the assessment of the significance of effects, with the magnitude of impact being reduced in most instances following the application of mitigation. All are shown to be **not significant**.

Table 14.27 – Assessment of effect and significance - PRoWs temporarily closed with and without diversions

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
Rowley Bridleway No.13	ROWLB13	Low	Medium	Closure with no diversion but diverted by another project.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Woodmansey Bridleway No.30	WOODB30	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Woodmansey Footpath No.7	WOODF07	Low	Large	A temporary diversion is provided of approximately 2,870m additional length.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Minor – not significant**
Skidby Bridleway No.7	SKIDB07	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Rowley Footpath No.12	ROWLF12	Low	Medium	A temporary diversion is provided. The length of the route is reduced by 8 m.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Skidby Footpath No.17	SKIDF17	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Skidby Bridleway No.4	SKIDB04	Low	Medium	A temporary diversion is provided. The increase in journey length is only approximately 27 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Rowley Bridleway No.7	ROWLB07	Low	Medium	A temporary diversion is provided. The increase in journey length is only 30 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Rowley Footpath No.15	ROWLF15	Low	Medium	A temporary diversion is provided. The increase in journey length is	Mitigation as set out in section 5 of **Application Document 7.6 Outline**	Small	**Negligible – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
				only 15 m which is a minimal increase when considering impacts on journey time.	**Public Right of Way Management Plan.**		
Skidby Bridleway No.1	SKIDB01	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Skidby Bridleway No.2	SKIDB02	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Skidby Bridleway No.15	SKIDB15	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Rowley Bridleway No.4	ROWLB04	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Rowley Bridleway No.5	ROWLB05	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Rowley Footpath No.3	ROWLF03	Low	Large	A temporary diversion is provided which is approximately 740 m longer than the existing route.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Minor – not significant**
Ellerker Footpath No.3	ELLRF03	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Ellerker Footpath No.2 (also Yorkshire Wolds Way National Trail)	ELLRF02	Medium	Large	An alternative existing route is available on the public highway. The alternative route for the YWW adds approximately 734 m.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**	Medium	**Minor – not significant**
Ellerker Footpath No.4	ELLRF04	Low	Large	A temporary diversion is provided. The increase in journey length is approximately 756 m which is a minimal increase when considering impacts on journey	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Minor – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
				time, which is approximately a 5-minute walking diversion.			
Broomfleet Footpath No.12	BROOF12	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Broomfleet Footpath No.8	BROOF08	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Broomfleet Footpath No.5	BROOF05	Low	Large	A temporary diversion is provided. The increase in journey length is only 20 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Medium	**Minor – not significant**
Broomfleet Footpath No.10	BROOF10	Low	Large	A temporary diversion is provided. The increase in journey length is only 420 m which is a minimal increase when considering impacts on journey time, which is approximately a 2.5-minute walking diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Medium	**Minor – not significant**
Blacktoft Bridleway No.5	BLACB05	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Blacktoft Footpath No.9	BLACF09	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Twin Rivers Footpath No. 5	TWINF05	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Former Parish of Ousefleet Bridleway No.2	OUSEB02	Low	Large	A temporary diversion is provided. The increase in journey length is only 10 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Minor – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
Former Parish of Ousefleet Bridleway No.1	OUSEB01	Low	Large	A temporary diversion is provided of approximately 4,150m.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Medium	**Minor – not significant**
Former Parish of Adlingfleet Bridleway No.1	ADLFB01	Low	Large	A temporary closure.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Minor – not significant**
BRIDLEWAY GART1A	BRIDLEWAY GART1A	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
FOOTPATH GART3	FOOTPATH GART3	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
FOOTPATH LUDD4	FOOTPATH LUDD4	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
FOOTPATH LUDD5	FOOTPATH LUDD5	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
FOOTPATH AMCO5	FOOTPATH AMCO5	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
RESTRICTED BYWAY LUDD5A	RESTRICTED BYWAY LUDD5A	Low	Large	A temporary diversion is provided. The increase in journey length is only approximately 40 m which is a minimal increase when considering impacts on journey time	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Negligible – not significant**
FOOTPATH LUDD9	FOOTPATH LUDD9	Low	Large	Temporary diversion is provided which is 280 m longer.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Minor – not significant**
BRIDLEWAY CROW11	BRIDLEWAY CROW11	Low	Small	No temporary diversion is proposed.	Mitigation as set out in section 5 of **Application Document 7.6 Outline**	Negligible	**Negligible – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
				Closed for 2 x 2 days.	**Public Right of Way Management Plan.**		
BRIDLEWAY CROW14 (Peatlands Way recreational route)	BRIDLEWAY CROW14	Medium	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Minor – not significant**
BRIDLEWAY CROW12	BRIDLEWAY CROW12	Low	Small	No temporary diversion is proposed.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Negligible	**Negligible – not significant**
BRIDLEWAY CROW13	NI|CROW|13	Low	Large	An alternative route is available that is approximately 1450 m longer.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Medium	**Minor – not significant**
FOOTPATH BELT25	FOOTPATH BELT25	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
RESTRICTED BYWAY BELT2 (Trent Valley Way recreational route)	RESTRICTED BYWAY BELT2	Medium	Large	A temporary diversion is provided that is approximately 600 m longer.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Medium	**Minor – not significant**
BRIDLEWAY BELT28A	BRIDLEWAY BELT28A	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
BRIDLEWAY BELT28B	BRIDLEWAY BELT28B	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
FOOTPATH BELT148	FOOTPATH BELT148	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
BRIDLEWAY BELT29	BRIDLEWAY BELT29	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
FOOTPATH EPWO77	FOOTPATH EPWO77	Low	Medium	Brief periods of closure with no diversion.		Small	**Negligible – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
FOOTPATH EPWO60	FOOTPATH EPWO60	Low	Medium	A temporary diversion is provided. The increase in journey length is only 140 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
FOOTPATH EPWO78	FOOTPATH EPWO78	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
MistertonFP11(Trent Valley Way recreational route)	MistertonFP11	Medium	Small	A temporary diversion is provided. The increase in journey length is only approximately 33 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Negligible	**Negligible – not significant**
MistertonBOAT18	MistertonBOAT18	Medium	Small	No temporary diversion is proposed.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Negligible	**Minor – not significant**
MistertonFP17	MistertonFP17	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Gringley On The HillBW15	Gringley On The HillBW15	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
Gringley On The HillFP13	Gringley On The HillFP13	Low	Medium	A temporary diversion is provided. The increase in journey length is only 100 m which is a minimal increase when considering impacts on journey time, which is approximately a 2.5-minute walking diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
BeckinghamFP3	BeckinghamFP3	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
BeckinghamFP12	BeckinghamFP12	Low	Small	A temporary diversion is provided. The increase in journey length is only 17 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Negligible	**Negligible – not significant**
BeckinghamFP4	BeckinghamFP4	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
SaundbyFP3	SaundbyFP3	Low	Medium	A temporary diversion is provided. The increase in journey length is only approximately 123 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
SaundbyFP4	SaundbyFP4	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
North WheatleyFP5	North WheatleyFP5	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
North WheatleyFP4	North WheatleyFP4	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
West BurtonFP8	West BurtonFP8	Low	Large	A temporary diversion is provided. The increase in journey length is only approximately 27 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Negligible – not significant**
North WheatleyFP8	North WheatleyFP8	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
North WheatleyFP3	North WheatleyFP3	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline**	Small	**Negligible – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
					Public Right of Way Management Plan.		
Sturton Le SteepleFP19	Sturton Le SteepleFP19	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Sturton Le SteepleFP20	Sturton Le SteepleFP20	Low	Medium	A temporary diversion is provided. The increase in journey length is only 90 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Sturton Le SteepleBW25	Sturton Le SteepleBW25	Low	Medium	A temporary diversion is provided. The increase in journey length is only 68 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
Sturton Le SteepleRB31	Sturton Le SteepleRB31	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
North Leverton With HabblesthorpeFP24	North Leverton With Habblesthorpe FP24	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
North Leverton With HabblesthorpeBW10	North Leverton With Habblesthorpe BW10	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
South LevertonFP8	South LevertonFP8	Low	Medium	A temporary diversion is provided. The increase in journey length is only 926 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
South LevertonFP21	South LevertonFP21	Low	Medium	A temporary diversion is provided. The increase in journey length is only 53 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
South LevertonBW9	South LevertonBW9	Low	Medium	Brief periods of closure with no diversion	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
South Leverton FP11/ TreswellBW11	South LevertonFP11 / TreswellBW11	Low	Large	A temporary diversion is provided. The increase in journey length is only approximately 67 m which is a minimal increase when considering impacts on journey time.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Medium	**Negligible – not significant**
South Leverton FP26	South Leverton FP26	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
TreswellBW14	TreswellBW14	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
East DraytonBW11	East DraytonBW11	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
East DraytonFP13	East DraytonFP13	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
East DraytonFP10	East DraytonFP10	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
East DraytonFP12	East DraytonFP12	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
East DraytonFP14	East DraytonFP14	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**
East DraytonFP3	East DraytonFP3	Low	Large	A temporary diversion is provided.	Mitigation as set out in section 5 of **Application Document 7.6 Outline**	Medium	**Negligible – not significant**

PRoW Name	PRoW Code	PRoW Sensitivity	Initial magnitude of impact	Assessment of Effects			
				Key assessment factors	Mitigation	Final magnitude of impact	Significance
				There will be no increase in journey length.	**Public Right of Way Management Plan**.		
DarltonFP3	DarltonFP3	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
DarltonBW1	DarltonBW1	Low	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
FledboroughFP7	FledboroughFP7	Low	Medium	A temporary diversion is provided. There would be no increase in journey length.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan**.	Small	**Negligible – not significant**
MarnhamBOAT8	MarnhamBOAT8	Medium	Medium	Brief periods of closure with no diversion.	Mitigation as set out in section 5 of **Application Document 7.6 Outline Public Right of Way Management Plan.**	Small	**Negligible – not significant**

Summary of Assessment Findings for PRoWs

14.8.33 No likely significant effects have been identified as a result of the PRoW temporary closures and closures with diversions associated with the Project with the proposed mitigation in place, as for all PRoWs categories effects are categorised as either minor or negligible.

Waterways

14.8.34 Further information regarding the assessment of navigable waterways is included in **Application Document 7.22 Navigational Risk Assessment** and **Application Document 6.17 Socioeconomic, recreation and tourism.**

14.9 References

Department for Communities and Local Government. (2014). *Planning Practice Guidance - Travel Plans, Transport Assessments and Statements*. Retrieved from GOV.UK: https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

Department for Energy Security and Net Zero. (2025). *National Policy Statement for Electricity Networks Infrastructure (EN-5).* Retrieved from GOV.UK: https://assets.publishing.service.gov.uk/media/695d12e1b5c46330350ed9a1/national-policy-statement-for-electricity-networks-infrastructure-en-5-web-accessible.pdf

Department for Energy Security and Net Zero. (2025). *Overarching National Policy Statement for Energy (EN-1).* Retrieved from GOV.UK: https://assets.publishing.service.gov.uk/media/695d1015f41883f4e50ed9ab/overarching-national-policy-statement-for-energy-en-1-web-accessible.pdf

Department for Transport. (2022, December 23). *Strategic road network and the delivery of sustainable development*. Retrieved from GOV.UK: https://www.gov.uk/government/publications/strategic-road-network-and-the-delivery-of-sustainable-development/strategic-road-network-and-the-delivery-of-sustainable-development

Department for Transport. (2024, May). *TAG Unit M1.2 Data Sources and Surveys.* Retrieved from GOV.UK: https://assets.publishing.service.gov.uk/media/664db4debd01f5ed32793ffc/tag-m1-2-data-sources-and-surveys.pdf

Department for Transport. (2025, September 25). *Road safety statistics: guidance*. Retrieved from GOV.UK: https://www.gov.uk/guidance/road-accident-and-safety-statistics-guidance

Department for Transport. (2026, May). *TAG Data Book.* Retrieved from GOV.UK: https://www.gov.uk/government/publications/tag-data-book

Goldschmidt, J. (1977). *Supplementary Report 356: Pedestrian delay and traffic management.* Berkshire: Transport and Road Research Laboratory.

Highways England. (2020). *Design Manual for Roads and Bridges, LA 103 Scoping projects for environmental assessment.* Retrieved from Standards for Highways: https://www.standardsforhighways.co.uk/search/fb43a062-65ad-48d3-8c06-374cfd3b8c23

Highways England. (2020). *Design Manual for Roads and Bridges, LA 104 Environmental assessment and monitoring.* Retrieved from Standards for Highways: https://www.standardsforhighways.co.uk/search/0f6e0b6a-d08e-4673-8691-cab564d4a60a

HM Government. (1980). *Highways Act 1980.* Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/1980/66/contents

HM Government. (1984). *The Road Traffic Regulation Act 1984*. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/1984/27/contents

HM Government. (1991). *New Roads and Street Works Act 1991*. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/1991/22/contents

HM Government. (2000). *Transport Act 2000.* Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/2000/38/contents

HM Government. (2004). *Traffic Management Act 2004*. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/2004/18/contents

IEMA. (2023, July). *Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement.* Retrieved from https://www.iema.net/media/5mrmquib/iema-report-environmental-assessment-of-traffic-and-movement-rev07-july-2023.pdf

Ministry of Housing, Communities & Local Government. (2026). *National Planning Policy Framework.* Retrieved from https://assets.publishing.service.gov.uk/media/6aabe97844ec1aa417346c0b/National_Planning_Policy_Framework.pdf

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