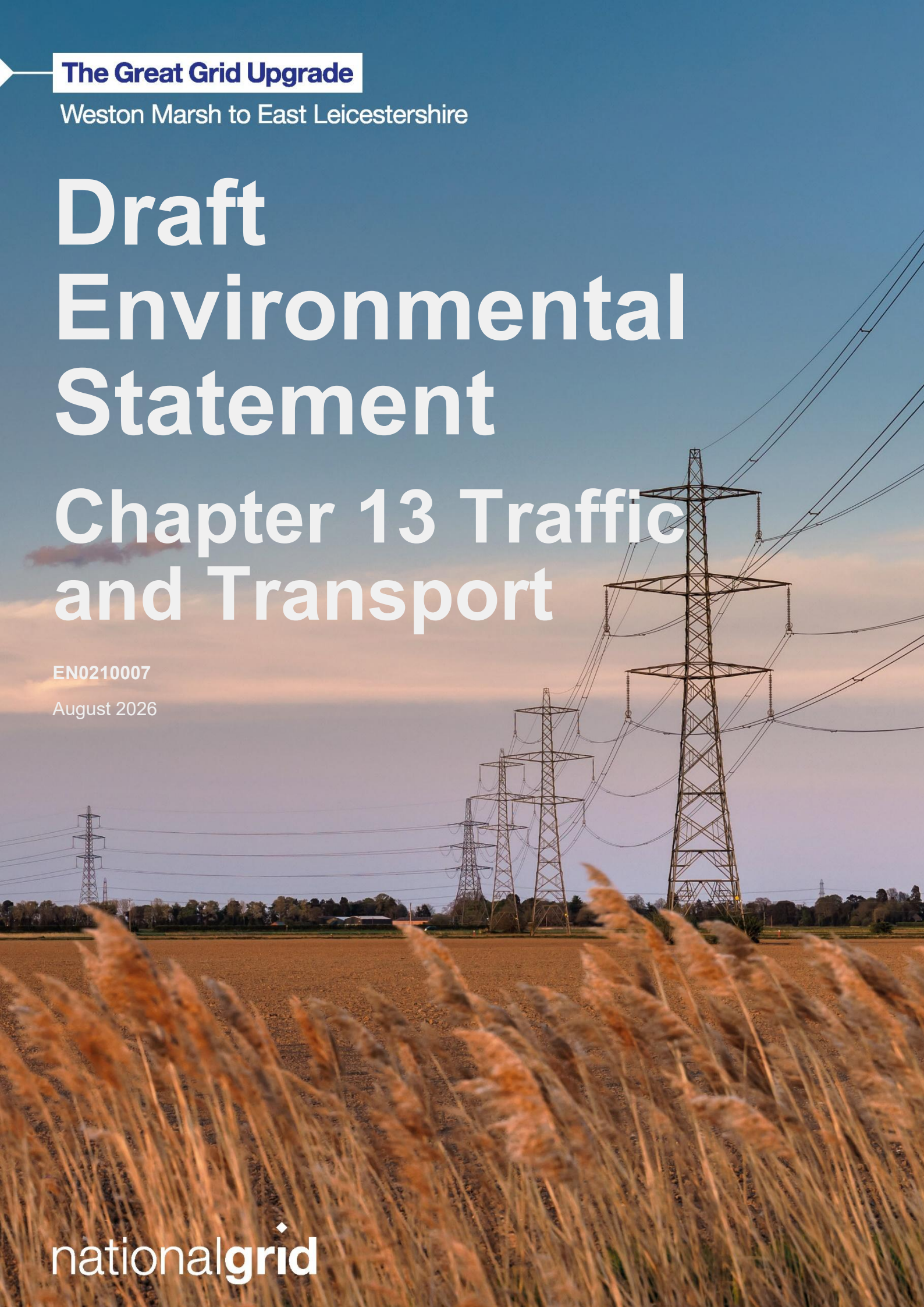




The Great Grid Upgrade

Weston Marsh to East Leicestershire

Draft Environmental Statement

Chapter 13 Traffic and Transport

EN0210007

August 2026

nationalgrid

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13. Traffic and Transport

13.1 Introduction

- 13.1.1 This chapter reports the preliminary assessment of the potential effects of the Weston Marsh to East Leicestershire Project (the Project) on traffic and transport. This chapter includes consideration of the following matters:
- change in traffic flows on the highway network due to the construction of the Project; and
 - change in journey distance due to the closure and diversion of Public Rights of Way (PRoWs) or designated walking routes during construction and operation of the Project.
- 13.1.2 This chapter should be read in conjunction with the following chapters which provide the Project context and approach to Environmental Impact Assessment (EIA):
- **Chapter 2 Regulatory and Planning Policy Context;**
 - **Chapter 3 Main Alternatives Considered;**
 - **Chapter 4 Description of the Project;** and
 - **Chapter 5 EIA Approach and Methodology.**
- 13.1.3 There are interrelationships with other disciplines. Therefore, this chapter should also be read in conjunction with the following chapters:
- **Chapter 14 Air Quality** which considers the effects on air quality due to changes in traffic flows as a result of the Project;
 - **Chapter 15 Noise and Vibration** which considers the effects on noise and vibration levels in relation to changes in traffic flows due to the Project;
 - **Chapter 16 Socio-Economics, Recreation and Tourism** which describes the effects from changes to recreational routes and PRoWs due to the Project;
 - **Chapter 17 Health and Wellbeing** which considers the effects on health and wellbeing due to changes to PRoWs and traffic flows as a result of the Project;
 - **Chapter 18 Climate Change** which considers the impact on greenhouse gas emissions that may arise from traffic associated with the Project; and
 - **Chapter 19 Cumulative Effects** which includes consideration of the potential for cumulative effects on traffic and transport.
- 13.1.4 This chapter is supported by the following figures and appendices:

- **Figure 13.1 Overall Context Map;**
- **Figure 13.2 Primary Access Route (PAR);**
- **Figure 13.3 Existing Public Rights of Way;**
- **Figure 13.4 Route Sensitivity;**
- **Figure 13.5 Preliminary Impact Analysis;**
- **Appendix 13A Traffic and Transport Baseline;**
- **Appendix 13B Preliminary Construction Information;**
- **Appendix 13C Future Baseline and Impact Analysis;**
- **Appendix 13D Draft Outline Construction Traffic Management Plan; and**
- **Appendix 13E Draft Outline Public Rights of Way Management Plan.**

13.2 Legislation, Policy Framework, and Guidance

Legislation and National Policy

- 13.2.1 Legislation and national policy relevant to the Project and this chapter are described in **Chapter 2 Regulatory and Planning Policy Context**, and supporting appendices **Appendix 2A Key Legislation**, **Appendix 2B National and Regional Policy** and **Appendix 2C Local Policy**.

Regional and Local Policy

- 13.2.2 **Chapter 2 Regulatory and Planning Policy Context** sets out relevant regional and local policy. Regional and local plans or policies relevant to this assessment are as follows:

Local plans

- South East Lincolnshire Local Plan 2011-2036 (Adopted March 2019) (Ref 13.1): Policy 32: Community, Health and Well-being; and Policy 33: Delivering a More Sustainable Transport Network;
- The South Kesteven District Council Local Plan 2011-2036 (Adopted 2020) (Ref 13.2): Policy ID2 Transport and Strategic Transport Infrastructure;
- Melton Local Plan 2011-2036 (Adopted October 2018) (Ref 13.3): Policy EN3 The Melton Green Infrastructure Network and Policy IN2 Transport, Accessibility and Parking;
- Draft Harborough Local Plan 2020-2041 (Consultation Draft May 2025) (Ref 13.4): Policy DS03 Development Strategy: Tackling Climate Change and Enhancing the Natural Environment and Policy DM06 Transport and Accessibility; and
- North Northamptonshire Local Plan (North Northamptonshire Joint Core Strategy 2011-2031 (Adopted 2016) and Part 2, Local Plans) (Ref 13.5): Policy 26: Renewable and Low Carbon Energy.

Transport strategies

- Lincolnshire Local Transport Plan 5 (Adopted 2022) (Ref 13.6);
- Leicestershire Local Transport Plan 2025-2040 (LTP4) (Adopted July 2025) (Ref 13.8);
- Interim Melton Mowbray Transport Strategy (Adopted July 2021) (Ref 13.7);
- Northamptonshire Transportation Plan (Adopted March 2012) (Ref 13.9); and
- West Northamptonshire Council Local Transport Plan 2025-2045 (Adopted March 2025) (Ref 13.10).

Guidance

- 13.2.3 Relevant guidance, specific to traffic and transport, that has informed this non-statutory Draft Environmental Statement (DES) (referred to in this document as “DES” and non-statutory DES”) and will inform the assessment within the Environmental Statement (ES), comprises:
- The Institute of Sustainability and Environmental Professionals (ISEP) (the Institute of Environmental Management and Assessment (IEMA) officially rebranded to the ISEP), 2023 Environmental Assessment of Traffic and Movement (Ref 13.11);
 - Planning Practice Guidance: Travel Plans, Transport Assessments and Statements, 2014 (Ref 13.12);
 - Department for Transport (DfT) Strategic Road Network and the Delivery of Sustainable Development, Circular 01/2022 (Ref 13.13);
 - Design Manual for Roads and Bridges (DMRB): LA 103 Scoping projects for environmental assessment, 2020 (Ref 13.14) (in line with the requirements of the EIA Directive 2014/52/EU (Ref 13.15)); and
 - DMRB: LA 104 Environmental assessment and monitoring, 2020 (Ref 13.16) (in line with the requirements of the EIA Directive 2014/52/EU (Ref 13.15)).

13.3 Scope of Assessment

- 13.3.1 The scope of the assessment has been informed by the Scoping Opinion provided as **Appendix 5B Scoping Opinion** (adopted by the Planning Inspectorate on behalf of the Secretary of State on 17 December 2025) and ongoing engagement with relevant technical consultees.
- 13.3.2 A full summary of the issues raised relevant to traffic and transport in the Scoping Opinion and National Grid’s response is provided in **Appendix 5C Preliminary Scoping Opinion Response**. Further details of engagement undertaken to date are provided in Section 13.4.
- 13.3.3 The following matters have been scoped out of the assessment as agreed with the Planning Inspectorate in **Appendix 5B Scoping Opinion**:
- **Scoping Opinion ID 3.9.4 – Operational effects on road users, bus users, pedestrian and cyclists (except on PRoWs)** – during the operation and maintenance of the Project, the amount of traffic generated would be low and

associated with routine maintenance, occasional repair and inspection activities, and potentially a small number of operational staff at substations. A description of the likely number and type of vehicles required will be provided, but significant effects are not likely to occur.

- **Scoping Opinion ID 3.9.5 – Operational effects on railway users** – for the purpose of operation and maintenance of the Project, railway lines would be crossed using existing crossing points, e.g. bridges, underpasses or level crossings. Significant effects are not therefore likely to occur.

13.3.4 The preliminary assessment contained in this report is based on the information available at the time of assessment, and for traffic and transport will involve a simplified methodology, as set out in Section 13.5.

13.4 Stakeholder Engagement

13.4.1 National Grid has held one meeting with stakeholders including National Highways, Leicestershire County Council and Lincolnshire County Council. A summary of discussions and how these have influenced the Project, scope and/or the approach to the assessment is provided in **Table 13.1**.

Table 13.1 Key stakeholder engagement and National Grid response

Organisation and Date	Summary of Issue Discussed	Project Response
Technical Working Group Meeting One – 13 April 2026 National Highways, Leicestershire County Council, Lincolnshire County Council	Key comments received on the EIA Scoping Report relating to the scope of the traffic and transport assessment and proposed responses. Transport Assessment (TA) scope including Study Area, baseline, assessment years, future baseline, trip generation and assessment of impacts. High level summary of assessment to be included in preliminary environmental assessment.	A full summary of all issues raised relevant to traffic and transport in the Scoping Opinion and National Grid's response is provided in Appendix 5C Preliminary Scoping Opinion Response. The scope of the EIA has been informed by the Scoping Opinion provided as Appendix 5B Scoping Opinion. This chapter presents where further assessment is likely to be required to establish environmental effects on traffic and transport. The assessment methodology is described in Section 13.5. The TA scope will be developed in consultation with the relevant highway authorities.

13.5 Assessment Methodology

13.5.1 This section describes the methodology used to establish the existing and future baseline together with the methodology/approach used to undertake the preliminary assessment of traffic and transport. The overarching approach is also described in

Chapter 5 EIA Approach and Methodology. This section also identifies further assessment needed to be undertaken as part of the ES.

13.5.2 The assessment is based on the guidance identified in Paragraph 13.2.3.

Study Area

13.5.3 This section describes the spatial scope (the area which may be impacted) for the preliminary assessment as it applies to traffic and transport.

13.5.4 The traffic and transport Study Area for the Project comprises highway links used to provide access for construction vehicles and considers the impacts to traffic, bus routes and pedestrian/cycle routes along these highway access routes, thereby informing the assessment of effects on the users of these routes. The Study Area for highway links is defined in further detail below.

13.5.5 The Study Area also includes pedestrian/cycle/equestrian routes and PRow networks, railways and navigable waterways that are crossed by the draft Order Limits.

Highways

13.5.6 The access strategy used in this preliminary assessment comprises:

- use of a haul road for the new overhead line between Weston Marsh Substation and WMEL-B Substation; and
- general use of existing operation and maintenance accesses for the reconductoring section between WMEL-B Substation and the existing Grendon Substation.

13.5.7 **Figure 13.1 Overall Context Map** provides the wider Project context showing the Strategic Road Network (SRN), Major Road Network (MRN) and other A roads that provide access to all Sections of the Project. Construction traffic has been assigned to the road network based upon an assessment of the intersections between the works site within the draft Order Limits and the road network, and the most suitable/likely routes that will be used to access the site. This approach is based upon creating site access bellmouths, use of existing Operation and Maintenance accesses, Primary Access Routes and Worker Access Routes, which are defined in **Table 13.2**. However, the preliminary assessment contained in this report only considers the Primary Access Routes, which are shown in **Figure 13.2 Primary Access Route (PAR)**.

Table 13.2 Distribution of Project traffic – definitions

Site Access Terminology	Definitions
Bellmouth	Access points from the existing highway network to the construction compounds and site haul roads.
Operation and Maintenance access	Existing Operation and Maintenance access points from the existing highway network to the existing overhead line towers along the reconductoring section.

Site Access Terminology	Definitions
Primary Access Route	Highway routes between the SRN/MRN and the bellmouths/Operation and Maintenance accesses for access by Heavy Goods Vehicles (HGVs). Identification of these routes is based on existing conditions, potential for improvements and professional judgement.
Worker Access Route	Additional roads and junctions which are not proposed as construction HGV routes but could be used by workers and Light Goods Vehicles (LGVs) to travel to site. These are identified as likely routes between residential areas and the bellmouths/Operation and Maintenance accesses.

Construction traffic routes – HGVs

- 13.5.8 Initial construction information (including construction traffic, compound locations, bellmouths/Operation and Maintenance accesses and haul roads) has been used to determine the Primary Access Routes which form the basis of the initial assessment presented in the DES.
- 13.5.9 Primary Access Routes have been developed using the following criteria where possible:
- Construction HGVs would access site via Primary Access Routes along the local road network. The Primary Access Routes would then connect to an appropriate junction on the SRN, MRN and/or classified road network. Whilst it is acknowledged that the SRN is part of the classified road network, the report makes a distinction between the two because of the capacity of the SRN to carry trunk road traffic and abnormal loads.
 - From the site bellmouths, construction vehicles would be routed off the public highway along haul roads to access the construction compounds and construction areas. Haul roads are temporary in nature and will be decommissioned and associated land reinstated upon completion of the construction phase.
 - From the Operation and Maintenance accesses, construction vehicles would be routed off the public highway along existing tracks and/or temporary trackway mats to access each existing tower location.
 - Shortest available routes between the SRN/MRN/classified road network and site accesses have been selected where possible, balancing distance and suitability of links to accommodate construction traffic.
 - Existing known highway constraints, such as road geometry, height and weight restrictions, junction arrangement and other physical constraints have been avoided where possible.
 - Settlements and sensitive locations such as schools or hospitals have been avoided where possible to reduce potential effects on traffic and transport receptors.
- 13.5.10 Primary Access Routes are formed of one or more roads within the road network between the SRN/MRN/classified road network and the site access bellmouths/existing Operation and Maintenance accesses. The Primary Access Routes are made up of Core Routes which are the main A roads providing

connections across the wider Study Area, and Local Links (LK series), which are roads providing local access from the Core Routes to the individual bellmouths/Operation and Maintenance accesses.

- 13.5.11 Primary Access Routes will be discussed with the relevant highway authorities to confirm their suitability to accommodate HGVs. Any new or alternative Primary Access Routes identified will be considered and subject to a feasibility assessment. The final construction routes will be assessed in the ES.

Construction traffic routes – Worker Access Routes

- 13.5.12 In addition to the Primary Access Routes, construction workers' cars/LGVs are also likely to use the wider highway network. Therefore, additional access routes will be identified that construction workers are expected to use, which provide access from the main urban areas where workers are assumed to travel to and from.
- 13.5.13 The Study Area is subject to refinement as discussions are undertaken with the relevant highway authorities and as the design evolves it is expected to be updated for the ES.

Data Collection

Desk study

- 13.5.14 The baseline assessment has been informed by a desk study which has drawn on the following key information:
- details of the highway network including identification of potential geometric constraints, on-street parking, visibility constraints or capacity issues, obtained from Google Earth Pro, Google Maps and FindMyStreet (National Street Gazetteer);
 - public transport information including bus routes and bus stops obtained from the relevant highway authority and bus operator websites;
 - rail timetable information obtained from the National Rail website;
 - details of navigable waterways obtained from The Inland Waterways Association website;
 - designated non-motorised user routes for pedestrian, cyclists and equestrians, and PROWs obtained from the Walk Wheel Cycle Trust and relevant highway authorities;
 - other promoted/recreational routes for pedestrians obtained from the Long Distance Walkers Association;
 - details of pedestrian, cycle and horse-riding infrastructure along highway links, obtained from Google Earth Pro;
 - Annual Average Daily Traffic (AADT) flows publicly available from the DfT;
 - Personal Injury Collision data for the latest available five-year period from the CrashMap website; and
 - traffic growth factors obtained from the Trip End Model Presentation Program (TEMPro)/National Trip End Model.

Further data to be collected to inform the ES

- 13.5.15 In addition to the data collected to inform the DES, the ES will be informed by the following additional third-party data or surveys:
- Traffic surveys – 24/7 road link counts, junction turning counts and queue length surveys at locations expected to be materially affected by changes in traffic due to the Project. The requirement, scope and location of the surveys will be discussed with the relevant highway authorities.
 - Non-motorised user/PRoW usage surveys – on PRoWs and roads expected to be materially affected by the Project. The requirement, scope, and location of the surveys will be discussed with relevant highway authority PRoW officers.
 - Information on committed developments and transport schemes that would affect the road network materially affected by the Project.
 - More detailed accident data from the STATS19¹ database where collision clusters are identified on roads materially affected by a change in traffic due to the Project.
 - Traffic signal timing data if signalised junctions are materially affected by changes in traffic flows due to the Project.
 - Traffic Regulation Orders restricting movement such as weight restrictions as viewed on Google Earth Pro.
 - Highway boundary information where highway improvements may be required to mitigate the impacts of the Project.

Impact Assessment Methodology

Assessment scenarios

- 13.5.16 **Chapter 5 EIA Approach and Methodology** of this DES, provides an overview of the Project's approach to the temporal scope (the timescales over which impacts may occur) of the EIA. This section describes the temporal scope for the assessment of impacts, forming the basis for the assessment of effects as it applies to traffic and transport in the DES.
- 13.5.17 Based on the proposed construction programme for the Project (2030–2035), the peak year for construction activities has been assumed as 2032 for the purposes of this assessment. The future baseline year which will be based on the peak month for construction traffic movements, will be confirmed in the ES.
- 13.5.18 The following scenarios have therefore been assessed in the DES to determine the impact of the Project due to traffic flow changes:
- Core scenario:
 - 2032 Future Baseline ('Without Development'); and
 - 2032 Future Baseline with the addition of the Project ('With Development').
- 13.5.19 A baseline (Base Year) scenario of 2026 has been used as the basis for developing the future baseline (2032) traffic flows. The baseline traffic flows have been derived from DfT AADT data (Ref 13.17), where these are available for the Primary Access

¹ STATS19: police-recorded personal injury road collision data in Great Britain.

Routes. The most recent DfT traffic flow dataset has been used for each DfT traffic count location on the Primary Access Routes, and TEMPro growth factors have been used to establish a 2026 baseline. Worker Access Routes have not been considered in the DES.

- 13.5.20 Traffic surveys will be undertaken for the ES to infill gaps in the DfT data and provide a comprehensive set of baseline traffic flow data for the Primary and Worker Access Routes.
- 13.5.21 For the DES assessment, an initial future baseline has been established by applying background traffic growth (using TEMPro traffic growth factors) only. This future baseline will be refined within the ES to take account of committed developments and transport schemes to avoid double counting of future growth. The future baseline traffic flows form the basis for assessing the impacts and effects of the Project for the Without Development and With Development scenarios referenced in Paragraph 13.5.18.
- 13.5.22 The With Development scenario considers the 2032 background traffic flows (future baseline), in conjunction with the estimated peak construction flows for each site (Operation and Maintenance) access/bellmouth.
- 13.5.23 The ES will consider a cumulative scenario alongside the 2032 With Development scenario. This will include development agreed with the relevant highway authorities and may include schemes that are not yet committed but considered to be sensitive to the assessment.

Effects assessment methodology

Construction

- 13.5.24 The assessment of construction effects in the DES is based on the construction traffic access routes identified for HGVs and preliminary construction traffic forecasts. The DES does not consider worker car/LGV movements.
- 13.5.25 The ISEP guidance (Ref 13.11) considers the effect on users by assessing the impact on the transport infrastructure upon which they rely.
- 13.5.26 For the 2032 future baseline year, the magnitude of impact has been provided as the percentage increase in HGVs associated with the Project along each highway link providing access to the Project, and has been used to undertake an initial assessment on the impact on traffic levels, based on ISEP guidance. The ISEP guidance provides screening criteria under Rules 1 and 2 to identify areas where effects associated with the Project should be subject to further assessment, to understand if the Project would give rise to any significant effects:
 - 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%); and
 - Rule 2: include highway links of high sensitivity where traffic flows have increased by 10% or more.
- 13.5.27 Increases below 10% are considered not significant, given that daily variations in background traffic flow would usually fluctuate by this amount. Therefore, changes in traffic flow below this level are assumed to result in no discernible environmental effects. These highway links will be reviewed once consideration of workers' car/LGV

movements have been included to assess the change in total traffic against the ISEP thresholds. This will be reported in the ES.

- 13.5.28 For the purposes of the DES, the assessment determines highway links where Rule 1 or Rule 2 applies and if the above screening criteria are met, confirms that further environmental assessment will be undertaken and presented in the ES. Highway links have therefore been assessed to determine where traffic flows (the proportion of HGVs) are expected to increase by 30% or more, and where there are increases of 10% or more in an area identified with high or very high sensitivity.
- 13.5.29 Sensitive areas are those where sensitive receptors are present as defined by the ISEP guidance (Ref 13.11), as well as consideration of congestion and accident data. Sensitive areas have been identified and are defined by the presence of sensitive receptors such as hospitals, residential properties, community facilities, schools, or collision clusters and routes with road safety concerns, or junctions and highway links at or over capacity. The sensitive receptors include all users of the highway in these areas. The criteria to determine sensitivity of receptors is set out in **Table 13.3**.

Table 13.3 Sensitivity of receptors

Value/Sensitivity	Description
Very high	Highway links and junctions: more than two sensitive users' locations present (e.g. schools, care/retirement homes, disabled parking bays, hospitals, places of worship, recreational/tourist and retail areas, routes with poor safety and congestion). Walk/cycle/bridleway links including PRowWs: heavily trafficked highways with on-road pedestrian/cycle/bridleway routes.
High	Highway links and junctions: two sensitive users' locations present (e.g. schools, care/retirement homes, disabled parking bays, hospitals, places of worship, recreational/tourist and retail areas, routes with poor safety and congestion). Walk/cycle/bridleway links including PRowWs: lightly trafficked highway with on-road pedestrian/cycle/bridleway routes.
Medium	Highway links and junctions: at least one of the following: - one sensitive users' location present (e.g. schools, care/retirement homes, disabled parking bays, hospitals, places of worship, recreational/tourist and retail areas, routes with poor safety and congestion); - many residential properties with direct frontage to the highway link being used for construction traffic; - pedestrians using footways, PRowWs and/or crossings on highway link; and - cyclists using on-road designated cycle routes along highway link. Walk/cycle/bridleway links including PRowWs: heavily trafficked highway with off-road pedestrian/cycle/bridleway routes.
Low	Highway links and junctions: at least one of the following: few residential properties with direct frontage to the highway link being used for construction traffic;

Value/Sensitivity	Description
	- workplaces with direct frontage to the highway link being used for construction traffic; and - cyclists using off-road designated cycle routes along highway link. Walk/cycle/bridleway links including PRoWs: lightly trafficked highway with off-road pedestrian/cycle/bridleway route.
Negligible	Highway links and junctions: no receptors on link. Walk/cycle/bridleway links including PRoWs: pedestrian/cycle/bridleway route not running alongside carriageway.

- 13.5.30 In addition, the sensitivity of a link considers the location of collision clusters which have been defined as locations where there is an average of more than three injury collisions per year occurring within a junction or a 100 m stretch over a five year period.
- 13.5.31 On routes where the screening criteria are met (10% increase in HGV movements on sensitive routes or 30% on other routes) and the potential effects are considered significant within the DES, these routes will be discussed with the relevant highway authorities and may be subject to more detailed assessment within the ES.
- 13.5.32 At this stage of assessment, some construction traffic access routes do not have baseline data. For these routes a qualitative analysis has been undertaken to consider whether the volume of construction traffic is likely to be significant given the type of road and type of construction vehicles (HGVs). These links will be considered further within the TA and ES if the total number of all construction vehicles exceeds 50 per day or the number of HGVs exceeds 20 per day. These highway links will be discussed with the relevant highway authorities and additional data collected for the TA and ES if required.
- 13.5.33 A qualitative assessment of impacts on bus users has been undertaken based on the projected increase in traffic flows as a result of the Project and potential impact to bus services. More detailed assessment will be provided within the ES if the projected increase in traffic flows on the highway links where bus services operate exceed the ISEP guidance screening criteria defined above.
- 13.5.34 A qualitative assessment of impacts on railway users and navigable waterway users during construction has been undertaken based on the proposed methodology to design and construct the Project. An initial assessment of sensitivity is based on consideration of the likely numbers of users of the infrastructure; for railways this is considered high as there are likely to be high numbers of passengers, for waterways this is considered low as the number of users will likely be less. More detailed assessment will be provided in the ES if required.
- 13.5.35 A qualitative assessment of impacts to pedestrians and cyclists has been undertaken based on the projected increase in traffic flows as a result of the Project during construction and potential impacts upon pedestrians and cyclists using the affected highway routes. More detailed assessment will be provided in the ES where the projected increase in traffic flows exceed the ISEP guidance criteria and the impact thresholds defined within the EIA Scoping Report, detailed in **Appendix 5A EIA Scoping Report**.

- 13.5.36 In addition, PRowS and promoted/recreational routes that are expected to be crossed by works within the overhead line route are identified and a qualitative assessment of impacts to pedestrians, cyclists and equestrians undertaken where routes are anticipated to require temporary diversion or closure. The significance of effects on PRowS and promoted/recreational routes is determined through professional judgement based on the sensitivity (national, regional, local importance and potential usage of the routes) and magnitude of impact based on the requirement for diversion or closures of routes. A more detailed assessment will be provided within the ES.
- 13.5.37 A high-level summary of potential effects (without mitigation) on roads and PRowS is provided based on professional judgement and experience on other similar (National Grid) transmission projects. Residual effects will be assessed and reported in the ES.

Operation and maintenance

- 13.5.38 Traffic and transport effects associated with the operation and maintenance of the Project have been scoped out, with the exception of effects on pedestrians and cyclists due to permanent PRow closures/diversions (ID 3.9.4 and 3.9.5 of **Appendix 5B Scoping Opinion**). A qualitative assessment of impacts to pedestrians, cyclists and equestrians has been undertaken where PRow routes are anticipated to require permanent diversion or closure. The significance of effects on PRowS has been determined through professional judgement, similar to the approach used for temporary PRow diversions. A more detailed assessment will be provided within the ES.

Cumulative assessment

- 13.5.39 The methodology for the assessment of cumulative effects as part of this DES is described in **Chapter 19 Cumulative Effects**, and a preliminary assessment of effect is provided in **Appendix 19B Preliminary Assessment of Cumulative Effects**. The final assessment of cumulative traffic and transport effects will be reported within the ES.

Assessment Assumptions and Limitations

- 13.5.40 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:
- Construction traffic forecasts are based on an initial high-level view of the construction methodology and programme based on projects of similar size and complexity, and are considered to provide a reasonable worst-case scenario. It is considered that these limitations do not affect the robustness of the assessment of likely significant effects, but further confirmation on assessment conclusion will be reported in the ES.
 - The baseline assessment is informed by desk studies and site surveys. The baseline desk studies use publicly available data and literature. Further details of existing highway constraints will be determined through discussions with the relevant highway authorities as part of the scheme development to inform the TA and ES.
 - Construction worker travel demands and Worker Access Routes are not considered in the preliminary assessment.

- The baseline traffic flows use publicly available DfT traffic count data, with limited coverage of the Primary Access Routes. Where baseline data is not available, professional judgement has been used to estimate the potential for significant effects on the basis of the sensitivity of the road link and the volume of construction traffic.
- The assessment estimates the percentage increase in HGV movements as a proportion of background traffic flows on the road network (future baseline). The preliminary assessment does not therefore include trips related to committed schemes which would potentially increase future baseline traffic and therefore reduce percentage impacts, providing a robust initial assessment.
- An assessment of the percentage increase in total traffic (i.e. car/LGV and HGV) is not included in the preliminary assessment but will be included in the ES.
- Construction HGVs would access the site from the Primary Access Routes along the local highway network. The Primary Access Routes would connect to the SRN, MRN and classified (A or B) road network, i.e. those routes between major settlements and ports/airports across Great Britain, where materials and equipment would be sourced.
- Details of PROWs have been obtained from the relevant highway authorities. Additional promoted/recreational routes have been identified through the desk-based study.
- The DES assessment considers the impact of construction traffic on the Primary Access Routes only. These are assessed to determine whether they meet the ISEP guidance Rule 1 or Rule 2, relating to the percentage impact on traffic flows. An initial assessment of route sensitivity has been undertaken based on professional judgement. More detailed assessment of environmental criteria, as set out within the ISEP guidance will be provided within the ES.
- Some construction operations may take place outside of the core working hours, for example, Abnormal Indivisible Load (AIL) deliveries.
- It is assumed that Weston Marsh Substation will be constructed by the Grimsby to Walpole project.

13.5.41 These key parameters and assumptions will be reviewed based on the design presented in the application for development consent and, where required, updated, or refined, for the ES.

13.6 Baseline Conditions

Existing Baseline

13.6.1 The Project has been divided into five Sections as described in **Chapter 4, Description of the Project** and shown on **Figure 1.1 Project Location Plan**. Each of the five Sections are defined by the geographical alignment of the draft Order Limits and the administrative boundaries of the local authorities.

13.6.2 The following section outlines the traffic and transport baseline, which has been established from desk-based information and presented, where appropriate, with reference to the Section of the Project where potential receptors are located. The baseline section should be read in conjunction with the following supporting figures and appendices:

- **Figure 13.1 Overall Context Map;**
- **Figure 13.2 Primary Access Route (PAR);**
- **Figure 13.3 Existing Public Rights of Way;**
- **Figure 13.4 Route Sensitivity;** and
- **Appendix 13A Traffic and Transport Baseline.**

Highway network

- 13.6.3 A description of each link which forms part of the Primary Access Routes, including the type of carriageway, character, speed limits, highway constraints, presence of street lighting, bus routes and on-street parking, and pedestrian, equestrian and cycle provision can be found within **Appendix 13A Traffic and Transport Baseline**.
- 13.6.4 The links forming the Primary Access Routes are presented on **Figure 13.2 Primary Access Route (PAR)**.
- 13.6.5 For the DES, no assessment of junction impacts along the Primary Access Routes has been undertaken. However, the baseline review of link congestion and accident data provided in **Appendix 13A Traffic and Transport Baseline** does consider junctions as part of the route sensitivity. More detailed assessment of junction operation will be undertaken as required and presented with the TA and ES to be submitted with the application for development consent.
- 13.6.6 In addition to the Primary Access Routes and Worker Access Routes (to be identified in the ES), there are roads located on the local highway network where a crossover point is proposed. This allows construction vehicles to cross over the road and progress along the proposed haul roads and applies to the new overhead line between Weston Marsh Substation and WMEL-B Substation. It is important to note that these intersections would not contribute to an increase in baseline traffic along the local road network; hence, they have not been assessed within the DES. Temporary traffic management measures would be in place to avoid delays at crossover points.

Traffic flows

- 13.6.7 Where available, baseline traffic flows have been obtained from the DfT's traffic counters for road links forming the Primary Access Routes. The DfT traffic counter sites are shown on **Figure 13.2 Primary Access Route (PAR)**.
- 13.6.8 Appropriate growth factors derived from the DfT's TEMPro, have been applied to the DfT data where required to present all traffic data for a consistent 2026 Base Year.
- 13.6.9 The resultant AADT flows were converted into average weekday traffic flows by applying an appropriate factor. This factor was derived from a standard daily traffic profile from the DfT's online road traffic statistics Table TRA0307 (Ref 13.17).

- 13.6.10 For links that do not have available or recent DfT traffic flows, traffic survey data will be collected.
- 13.6.11 Baseline traffic flows on road links forming the Primary Access Routes are presented in **Table 1.3** in **Appendix 13A Traffic and Transport Baseline**.
- 13.6.12 In addition, a Congestion rating is set out in **Table 1.3** within **Appendix 13A Traffic and Transport Baseline**. This is based on a review of Google traffic flow categories for typical weekday peak hours, using the coloured grading of fast to slow represented as green = 0, orange = 1, red = 2, dark red = 3.
- 13.6.13 Congestion along the whole link has been considered and where congestion varies along the link or over different time periods a judgement has been made for the overall link rating.

Collision data

- 13.6.14 Personal injury collision data has been obtained from DfT Road Safety Data for the roads along the Primary Access Routes. The presence of collision clusters in the latest five-year personal injury collision data (2020–2024) has been summarised in **Table 1.3** within **Appendix 13A Traffic and Transport Baseline** for the roads and junctions on the Primary Access Routes. The location of the collisions is shown on **Figure 13.4 Route Sensitivity**.
- 13.6.15 Using the criteria outlined in the Impact Assessment Methodology sub-section of Section 13.5, the collision data has been analysed along the full length of the links to identify any collision clusters to establish any areas of safety concerns.
- 13.6.16 From the collision data analysis, the only collision cluster identified on the Primary Access Routes was at the A17/A16 junction near Sutterton (Section 1).

Sensitive areas

- 13.6.17 Receptor/area sensitivity has been assigned to all assessed highway links which constitute the Primary Access Routes. The sensitivity level follows ISEP guidance (Ref 13.11) and is categorised as negligible, low, medium, high and very high as set out in **Table 13.3**. Sensitivity of a link has been determined based on the identified receptors which are present, alongside the assessment of each highway link's congestion rating and any associated collision clusters.
- 13.6.18 A description, location, and sensitivity level of each highway link on the Primary Access Routes is summarised in **Table 1.3** within **Appendix 13A Traffic and Transport Baseline** and presented on **Figure 13.4 Route Sensitivity**.

Public Rights of Way

- 13.6.19 There are several PRowS used by walkers, cyclists and horse riders that would be affected by the Project. These routes are presented on **Figure 13.3 Existing Public Rights of Way**.
- 13.6.20 PRowS that have been initially identified as potentially highly used with extensive connectivity and/or social significance such as long distance trails, recreational circular routes or local authority promoted routes are presented in **Table 13.4**. Discussions with PRow officers from all relevant local authorities will be undertaken to confirm these key routes.

Table 13.4 Potentially highly used PRowS

PRow Ref. No	Type	Location
Section 1		
Pinc/5/1 (Part of MacMillan Way)	Footpath	Footpath connecting Surfleet and Crossgate along the River Glen
Pinc/5/2 (Part of MacMillan Way)	Footpath	Footpath connecting Surfleet and Crossgate along the River Glen
Section 2		
Haco/14/1	Footpath	Footpath connecting Haconby and Dunsby (via adjacent footpaths)
Haco/8/9	Footpath	Footpath connecting Haconby and Dunsby (via adjacent footpaths/restricted byways)
Haco/6/2	Restricted byway	Restricted byway connecting Haconby and Dunsby (via adjacent footpaths/restricted byways)
Haco/8/2	Footpath	Footpath connecting Haconby and Dunsby (via adjacent footpaths/restricted byways)
Haco/8/3	Footpath	Footpath connecting Haconby and Dunsby (via adjacent footpaths/restricted byways)
Sway/5/1	Footpath	Footpath connecting Corby Glen and Swayfield (via adjacent footpaths)
BurC/9/2, BurC/9/3, BurC/9/4, BurC/10/1, Corb/10/1, Sway/6/2	Footpaths/Restricted Byway	Footpaths/Restricted Byway connecting Burton Coggles and Swayfield
NWit/8/1, NWit/9/1, SWit/5/1	Footpath	Footpath connecting South Witham and North Witham (via adjacent footpaths)
Section 3		
Viking Way	Long distance walking trail	Long distance walking trail between Humber Bridge, North Lincolnshire and Oakham, Rutland. There is limited residential population local to this section of Viking Way.
E18/1 (Part of Leicestershire Jubilee Way)	Long distance path	Long distance path connecting Melton Mowbray and Mowbray Way
H36/2	Footpath	Within residential area at Asfordby
H36/3	Footpath	Within residential area at Asfordby
H109/1	Footpath	Within residential area at Asfordby

PRoW Ref. No	Type	Location
I88/2	Footpath	Footpath connecting Ashby Folville and Great Dalby (via adjacent footpaths)
D59/3 (Part of Leicestershire Round)	Footpath	Footpath connecting Ashby Folville and Thorpe Satchville
D66/1	Footpath	Footpath connecting Midshires Way (long distance path) and Twyford
Section 4		
C98/1	Footpath	Footpath connecting Midshires Way (long distance path) and Tilton on the Hill
Midshires Way	Long distance path	Long distance footpath links to Tilton on the Hill
C66/2	Footpath	Footpath connecting Skeffington and Midshires Way (long distance path) via adjacent footpath/byway
B90/1 and B90/2	Bridleway	Bridleway connecting Rolleston and Tugby
B22/1 (Part of Leicestershire Round)	Footpath	Footpath connecting Stonton Wyville and Glooston
Midshires Way	Long distance path	Long distance footpath links to the north west of Welham
Midshires Way	Long distance path	Long distance footpath links to the west of Welham
Section 5		
HB1 (Part of Midshires Way)	Bridleway	Near Welham Lane (Part of long distance path). There is limited residential population local to this section of Midshires Way.
MacMillan Way/Midshires Way/Jurassic Way	Long distance path	Long distance footpath links to Braybrook
TR5	Footpath	Footpath connecting Orlingbury and Hardwick (via adjacent footpaths)
TR13	Footpath	Footpath connecting Little Harrowden and Hardwick (via adjacent footpaths)
TK12	Footpath	Footpath connecting Little Harrowden and Hardwick (via adjacent footpaths)
UL23	Footpath	Footpath links to Park Farm Industrial Estate
Nene Way	Long distance path	Long distance path connecting Earls Barton and Great Doddington

PRoW Ref. No	Type	Location
TF3	Footpath	Footpath in the vicinity of Grendon Lakes
TF17	Footpath	Footpath in the vicinity of Grendon Lakes
TF2	Bridleway	Bridleway in the vicinity of Grendon Lakes

National Cycle Network

13.6.21 There are a number of National Cycle Network (NCN) routes that would potentially be affected by the Project and these are shown in **Table 13.5**.

Table 13.5 NCN routes potentially affected by the Project

NCN Ref. No	Type	Location
Section 1		
No NCN on Primary Access Routes		
Section 2		
No NCN on Primary Access Routes		
Section 3		
NCN 64	On-road	Routed along Melton Spinney Road which is crossed by the draft Order Limits.
NCN 48	On-road	Routed along LK-105 (Main Street), LK-104 (Saxelby Road), LK-106 (Saxelby Road) and LK-108 (Hoby Road) which are PARs. LK-105 and LK-108 also cross the draft Order Limits.
Section 4		
NCN 63	On-road	Routed along LK-149 (Main Street, Tugby) and LK-152 (Three Gates Road/Ilston Road/The Avenue) which are PARs. LK-152 (Three Gates Road/Ilston Road/The Avenue) also crosses the draft Order Limits.
NCN 64	On-road	Routed along LK-158 (Goadby Road), LK-157 (Welham Lane/Cranoe Road), LK-164 (Bowden Lane) and LK-170 (Welham Lane) which are PARs. LK-157 (Welham Lane/Cranoe Road) and LK-164 (Bowden Lane) also cross the draft Order Limits.

NCN Ref. No	Type	Location
Section 5		
No NCN on Primary Access Routes		

Bus routes

- 13.6.22 There are a number of bus routes that operate along roads that would be used as Primary Access Routes and roads that would cross the draft Order Limits under the overhead line. The bus routes shown in **Table 13.6** operate along roads proposed as Primary Access Routes.

Table 13.6 Bus services operating along Primary Access Routes

Route ID	Route Between	Road Impacted
Section 1		
37	Johnson Hospital and Queensgate Bus Station	Route runs along the A16 (CR-5).
43	Spalding Bus Station and Sutton St James	Route runs along the A16 (CR-4).
505/505A /505B	Spalding Bus Station and Kings Lynn Int Stand	Route runs along the A151 Weston Bypass (LK-3).
5A	Hampton Serpentine Green and Herald Way	Route runs along the A15 Glinton Bypass/Paston Parkway (LK-24).
B13	Spalding Bus Station and Boston Bus Station	Route runs along the A152 (LK-10).
B3/B3X	Spalding Bus Station and Boston Bus Station	Route runs along the A16 between Rangell Gate and A17 (CR-4, CR-5, CR-7, CR-8).
B9	Spalding Bus Station and Boston High School	Route runs along the A152 (LK-10).
G76	Spalding High School and Gosberton Risegate	Route runs along the A16 (CR-5, CR-6, CR-7) and along the A152 (LK-10) and the B1397 (LK-11).
NG1	Spalding Grammar School Playing Field and Sutton Bridge Hotel	Route runs along the A16 (CR-4) and the A151 Weston Bypass (LK-3).
X12	Bus Station and Queensgate Bus Station	Route runs along the A16 (CR-5, CR-6, CR-7, CR-8) which is located within Section 1 and along the A15 (LK-23), which is located within Section 2.
Section 2		
4	Stamford Bus Station and Grantham Bus Station	Route runs along the A151 (LK-28) and B1176 (LK-29).
26	Grantham Bus Station and Billingborough	Route runs along the A15 (LK-16).

Route ID	Route Between	Road Impacted
33	Lincoln Central Bus Station and Bourne Bus Station	Route runs along the A15 (LK-15, LK-16, and LK-18).
36	Boston Bus Station and Sleaford Rail Station	Route runs along the A15 (LK-15 and LK-16).
183	Great Casterton and Corby Glen	Route runs along the A151 (LK-225, LK-226, LK-30, and LK-32), the B676 (LK-34, and LK-35) and the B668 Hooby Lane at Stretton (LK-53).
185	Stamford Bus Station and Oakham	Route runs along the B668 Stretton Road (LK-52) and B668 Hooby Lane (LK-53).
5A	Hampton Serpentine Green and Herald Way	Route runs along the A15 (LK-24).
RZ1	Melton Mowbray and Oakham	Route runs along the B668 Stretton Road (LK-52) and B668 Hooby Lane (LK-53).
S112S	Sleaford and Dowsby	Route runs along the A15 (LK-15).
S148S	Sleaford and Aslackby	Route runs along the A15 (LK-15 and LK-16).

Section 3

No bus routes on Primary Access Routes

Section 4

No bus routes on Primary Access Routes

Section 5

10	Kettering Horsemarket and Northampton Bus Interchange	Route runs along the A43 (CR-192, CR-193), Old Road (LK-196), and Kettering Road (LK-202).
17	Little Stanion and Kettering Churchill Way	Route runs along Arthingworth Road/Braybrooke Road (LK-182).
18	Market Harborough Market Hall and Kettering Churchill Way	Route runs along Harborough Road (LK-179), Desborough Road (LK-180), and Arthingworth Road/Braybrooke Road (LK-182 and LK-183).
78/78D	Kettering and Walgrave (via Broughton and Mawsley)	Route runs along the A43 (CR-192, CR-193, CR-194), Old Road (LK-196), Northampton Road (LK-199), and Kettering Road (LK-202).
80P	Northampton and Mawsley (via Overstone Gate)	Route runs along Old Road, between Harrington Road and the A43 (LK-196).
ChattyBus2	Stanwick Lakes and Corby	Route runs along Turnells Mill Lane (CR-223) and Pytchley Road (LK-205).
W8	Bozeat Camden Square and Wellingborough Church Street Interchange	Route runs along the A509 (CR-224).
X10	Kettering Horsemarket Stop and Northampton Bus Interchange	Route runs along the A43 (CR-193, CR-194, and CR-195), and Northampton Road (LK-199).

Route ID	Route Between	Road Impacted
X4	Corby George Street and Northampton Bus Interchange	Route runs along the A4500 (LK-213 and LK-215) and Grendon Road (LK-219).
X46	Rushden Lakes and Northampton, Northampton Bus Interchange	Route runs along the B573 (LK-216 and LK-217), Earls Barton Road (LK-220) and the A509 (CR-224).
X47	Raunds Bus Shelter and Northampton, Northampton Bus Interchange	Route runs along the B573 (LK-216 and LK-217) and Turnells Mill Lane (CR-223).

13.6.23 **Table 13.7** shows the bus routes which would cross the draft Order Limits and pass under the overhead line.

Table 13.7 Bus services passing underneath proposed overhead line

Route ID	Route Between	Road Impacted
Section 1		
B3	Spalding Bus Station and Boston Bus Station	B1356 Surfleet Road, Pinchbeck
B3X	Springfields Outlet and Boston Bus Station	A16 bypass between A152 to A151 Holbeach Road, Pinchbeck
B9	Spalding Bus Station and Boston High School	B1356 Surfleet Road, Pinchbeck
B13	Spalding Bus Station and Boston Bus Station	B1356 Surfleet Road, Pinchbeck
G76	Spalding High School and Gosberton Risegate	A16 bypass between A152 to A151 Holbeach Road, Pinchbeck
X12	Bus Station and Queensgate Bus Station	A16 bypass between A152 to A151 Holbeach Road, Pinchbeck
Section 2		
4	Stamford Bus Station and Grantham Bus Station	B1176 Bitchfield Road, Burton Coggles
183	Great Casterton and Corby Glen	A151
33	Lincoln Central Bus Station and Bourne Bus Station	B1177 Main Road, Haconby
Section 5		
X46	Rushden Lakes and Northampton, Northampton Bus Interchange	A45 south east of Earls Barton

Route ID	Route Between	Road Impacted
10	Kettering Horsemarket Stop 11 and Northampton Bus Interchange	A43 Between Old Road and Broughton Road
X4	Corby George Street and Northampton Bus Interchange	A4500 Main Road, between Wellingborough Road and Doddington Road
18	Market Harborough Market Hall and Kettering Churchill Way	Harborough Road, Braybrooke
78/78D	Kettering and Walgrave (via Broughton & Mawsley)	A43 Between Old Road and Broughton Road
X10	Kettering Horsemarket Stop 11 and Northampton Bus Interchange	A43 Between Old Road and Broughton Road
X47	Raunds Bus Shelter and Northampton, Northampton Bus Interchange	Earls Barton Road, adjacent to A45 northbound on/off slip

Rail infrastructure

- 13.6.24 The draft Order Limits are crossed by a railway line in five locations.
- 13.6.25 The Peterborough to Lincoln railway line crosses the draft Order Limits approximately 2 km to the west of Surfleet in Section 1. It provides approximately hourly services in each direction between Peterborough and Lincoln, stopping at Spalding, Sleaford, Ruskington, and Metheringham.
- 13.6.26 The East Coast Main Line (ECML) crosses the draft Order Limits near Burton Coggles in Section 2. The ECML provides rail services between London and Edinburgh via Peterborough and Grantham. The nearest station is Grantham approximately 12 km to the north of the draft Order Limits.
- 13.6.27 The Birmingham to Peterborough rail line and Old Dalby Test Track pass through Section 3 to the west of Melton Mowbray. The Birmingham to Peterborough rail line is a cross-country railway which crosses the draft Order Limits near Asfordby. The nearest station is in Melton Mowbray. The Old Dalby Test Track runs between Melton Mowbray and Nottingham crossing the draft Order Limits near Saxelbye, where the line is in a tunnel.
- 13.6.28 The Midland Main Line railway connects London, Leicester, Nottingham and Sheffield and passes through the southern end of Section 4 and the northern end of Section 5 near Market Harborough.

Navigable waterways

- 13.6.29 The draft Order Limits are crossed by five navigable waterways.
- 13.6.30 The River Welland, River Glen and Boston to Peterborough Wetland Corridor, and Navigable Black Sluice (also known as the South Forty Foot Drain) are all navigable waterways that pass within Section 1.

- 13.6.31 The Melton Mowbray Navigation (also known as the River Wreake) is a navigable waterway that crosses Section 3 between Melton Mowbray and East Goscote, to the north of the A607.
- 13.6.32 The River Nene is a navigable waterway that crosses Section 5, just to the north of Grendon Substation.

Future Baseline

- 13.6.33 The future baseline relates to known or foreseeable changes to the current baseline, against which the effects of the Project during construction and operation are assessed. These changes to the current baseline would include committed developments and planned improvements/changes to the transport network.
- 13.6.34 A full assessment of committed developments and future transport schemes has not been undertaken but will be included in the ES.
- 13.6.35 The peak year for construction activities that would affect each road link comprising the Primary Access Routes has been assumed as 2032. The future baseline traffic along these road links has been calculated by applying an appropriate growth factor derived from DfT's TEMPro to the baseline traffic flows. These flows are summarised in **Appendix 13C Future Baseline and Impact Analysis**.
- 13.6.36 A review of all committed developments and planned transport schemes will be undertaken for the assessment to be presented within the TA and ES. This will identify any developments anticipated to be operational prior to construction of the Project commencing, that could generate additional traffic along the identified construction traffic routes.
- 13.6.37 Any known public transport and non-motorised user infrastructure changes will also be reviewed as part of the future baseline within the ES.

13.7 Design, Standard, and Additional Mitigation Measures

- 13.7.1 Mitigation measures to avoid, reduce, manage, or control potential impacts and resulting effects of the Project are typically described and considered in assessment in three groups or types as defined on **Chapter 5 EIA Approach and Methodology** of this DES. Each measure considered in this preliminary assessment is described in the relevant section below.

Design Measures

- 13.7.2 The Project and draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the Holford Rules (Ref 13.18) applicable to routeing of new overhead lines and the Horlock Rules (Ref 13.19) which apply to the design and siting of substations. These approaches are explained in further detail within the Corridor Preliminary Routeing and Siting Study (Ref 13.20) and **Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum.
- 13.7.3 Following selection of the preferred route corridor, environmental specialists have been integral to ongoing design refinement of works. This has further contributed to

the avoidance or reduction of the potential environmental impacts of the Project, and these mitigation measures are described in **Chapter 4 Description of the Project**. Specifically relevant to the traffic and transport assessment, this included construction traffic being routed along classified roads as far as possible, and haul roads used to minimise construction vehicle movements on local roads where appropriate.

Standard Measures

13.7.4 Standard mitigation measures are those that would be implemented on a project of this scale and nature regardless of being subject to statutory assessment. As such, it can be assumed that these measures will be applied in the assessment.

13.7.5 A range of standard measures for the Project will be adopted throughout the duration of the construction phase. A draft Outline Code of Construction Practice is provided in **Appendix 4A Draft Outline Code of Construction Practice**. Measures relevant to the control and management of impacts that could affect traffic and transport are (refer to **Appendix 4A** for the full description of each measure):

- GG05 – on construction worker training to increase awareness of environmental issues as applicable to their role on the Project, including agreed construction traffic routes and access;
- GG07 – on documents (including a Construction Traffic Management Plan (CTMP)) collectively referred to as ‘the Environmental Control Plans’ that will be produced prior to construction;
- GG13 – on site layout and housekeeping measures at construction sites including managing staff/vehicles entering or leaving site;
- GG14 – on maintenance and operation of plant and vehicles;
- GG15 – on materials and equipment handling;
- GG19 – on the provision of wheel washing facilities at each main compound, where appropriate, and the use of road sweepers on public roads where necessary;
- GG27 – on communication with local communities and businesses regarding issues including heavy traffic periods;
- TT01 – on the CTMP measures to manage and control construction vehicle movements. The Outline CTMP will be provided with the application for development consent and the Final CTMP secured through the draft development consent order;
- TT02 – on monitoring and reporting to check compliance with the measures set out within the CTMP;
- TT03 – on management of affected PRowS;
- W04 – on measures to cross waterways with vehicular traffic; and
- AS03 – on maintaining access to residential, commercial, community and agricultural land uses.

13.7.6 A suite of management plans will be produced to manage traffic and access impacts during the construction phase of the Project, including a CTMP and a Public Rights of

Way Management Plan. Measures relevant to the control and management of impacts are provided in **Appendix 13D Draft Outline Construction Traffic Management Plan** and **Appendix 13E Draft Outline Public Rights of Way Management Plan** and include:

- Construction traffic crossing rail lines or navigable waterways will use existing vehicle crossings where possible to minimise the impact on railway and navigable waterway users. Where rail or navigable waterway closures are required, the period of the closure would be kept to a minimum.
- Where road closures are required, the period of the closure would be kept to a minimum and diversions would be via the most appropriate alternative route. Access to properties would be maintained at all times. Any route diversions or closures will be discussed with the relevant highway authorities.
- PRowS will only be closed or diverted on safety grounds to protect PRow users or workers. Haul roads crossing PRowS will be designed such that the PRow remains open by default and passing construction traffic affords priority of movement to PRow users. In the locality of PRow crossing points, the haul road will be fenced and gated to prevent PRow users and animals from straying into a construction site.
- Where more than one PRow crosses the haul road in close proximity to another, local diversions will be required to merge PRow routes across a single passing point to reduce the likelihood of pedestrian–vehicular conflict (including equestrians and horses).
- PRowS will be closed when necessary on safety grounds. This is likely to be over a couple of months during the overhead line stringing. Where PRow closures are required, the period of the closure would be kept to a minimum, and a diversion provided where necessary and practicable. Any route diversions or closures will be discussed with the relevant authorities.

Additional Mitigation Measures

- 13.7.7 Additional mitigation measures are those identified through assessment to reduce likely significant adverse environmental effects which may still occur despite the inclusion of the embedded design and standard measures described above.
- 13.7.8 Although additional mitigation measures are not specifically identified and accounted for in this traffic and transport assessment, the TA and EIA may identify highway mitigation in response to impacts of the Project on the highway network. If identified, these measures will be designed to an appropriate level of detail and incorporated into the Project. Therefore, these potential measures are described here in general as specific requirements will be identified through assessment; however, when identified and agreed they will likely be considered design measures embedded in the Project design considered in the ES, for example:
- Primary Access Routes and Worker Access Routes will be discussed with the relevant highway authorities with a view to utilising the SRN, MRN and classified road network as much as practicably possible. Where narrow roads form part of the Primary Access Routes (i.e. closer to bellmouths), areas of temporary highway improvement works (e.g. road widening and creation of passing places) will be considered for implementation to maintain a safe operational highway.

- Where further assessment identifies the need for off-site road and junction improvements (i.e. mitigation works), these will be designed in collaboration with the local highway authorities to maintain a safe and operational highway network. Any improvements will be set out in the TA and ES.

13.8 Preliminary Assessment of Effects

- 13.8.1 A summary of potential impacts and mitigation measures identified in this preliminary assessment, and likely significance of the resulting effect with that mitigation in place, is provided in **Table 13.8**. Where appropriate for likely significant or notable effects, further explanation is provided in the following sections on construction and operation effects.
- 13.8.2 It should be noted that the assessment which has informed the conclusions presented remains ongoing and is subject to change, due to baseline data collection and further design development of the Project. A full detailed assessment will be included within the ES submitted with the application for development consent.

Construction

Highway network

- 13.8.3 The primary traffic and transport effects on users of the highway network will be as a result of an increase in traffic flows on those roads used by vehicles associated with the construction of the Project. An assessment has been undertaken to calculate the percentage increases in HGV flows due to construction traffic associated with the Project using the local road network. An assessment of the percentage increases in all construction vehicles (HGVs and workers) will be presented within the TA and ES.
- 13.8.4 Construction phase effects on traffic and transport receptors relate to the change in traffic flow and the sensitivity of highway links. **Appendix 13C Future Baseline and Impact Analysis** sets out the predicted worst-case increase in traffic on the local road network for each Primary Access Route based on HGV impacts. These increases were then assessed against the assigned sensitivity of each road link.
- 13.8.5 The assessment identifies highway links where an increase in baseline traffic flows due to construction traffic exceeds 10% for sensitive roads and 30% for non-sensitive roads, in accordance with the ISEP guidance thresholds (Ref 13.11). On these links, there is potential for adverse impacts on receptors and users of the highway network that may lead to potentially significant effects. Therefore, these links have been identified for further consideration within the TA and ES. **Figure 13.5 Preliminary Impact Analysis** shows the location of highway links that are above or below the ISEP thresholds.
- 13.8.6 At this stage of assessment, baseline data for some of the construction traffic access routes is not currently available (from DfT counts). For these routes, a qualitative analysis has been undertaken to consider whether the volume of projected construction traffic is likely to be significant, given the type of road and type of construction vehicles (HGVs). These links will be considered further within the TA and ES if the total number of all construction vehicles exceeds 50 per day or the number of HGVs exceeds 20 per day.

- 13.8.7 The receptors/users on the highway links exceeding the appropriate sensitivity thresholds for potential significant effects based on HGV impacts, are summarised in **Table 13.8**. As the preliminary assessment only considers HGV movements (i.e. without consideration of worker trips), highway links will be subject to further screening of final construction traffic projections and assessment in the ES. **Figure 13.5 Preliminary Impact Analysis** shows the location of highway links that are below or above the ISEP thresholds based on the HGV impacts.
- 13.8.8 Detailed assessment, in terms of severance, delay, highway safety, and fear and intimidation has not been undertaken as the preliminary assessment only considers HGV movements, and therefore these are not provided in **Table 13.8**. As such, significant effects cannot be ruled out at this stage and effects are identified as potentially significant and subject to further assessment in the ES.

Abnormal Indivisible Loads

- 13.8.9 The requirements and routeing of AIL and hazardous loads are still being determined and therefore detail to inform the assessment is not available at this stage. The TA and ES will include preferred routes for the movement of AILs including vehicle type, load, anticipated time of movements and the nature of any highway works and/or traffic management required. Whilst this may lead to some congestion/increased journey times from temporary road closures/diversions, experience from other projects will be employed to seek to minimise disruption and delay to other road users. However, at this stage, associated significant effects cannot be ruled out entirely and this will be reviewed and reported within the ES.

Hazardous loads

- 13.8.10 The only hazardous loads anticipated to be generated by the construction phase of the Project are fuel deliveries for construction plant. Fuel deliveries would be made to active work sites and would use the construction HGV access routes. Given the likely low frequency of hazardous load deliveries, the nature of the deliveries, presence of only one accident cluster, and the proposed construction routeing strategy focused on A and B roads with mitigation to be provided where necessary to provide safe passing of construction HGVs, it is not anticipated that fuel deliveries would lead to significant adverse effects. However, details of hazardous loads, routes and frequency of deliveries and any likely significant effects will be reported within the ES.

Public Rights of Way and promoted/recreational routes

- 13.8.11 Measures for the management of PRowS affected by the Project are provided within **Appendix 13E Draft Outline Public Rights of Way Management Plan**.
- 13.8.12 From an accessibility and connectivity perspective, PRowS and promoted/recreational route users are unlikely to be significantly affected during the delivery of the Project. Routes will remain open by default during both construction working hours and outside working hours. Haul road crossings are designed such that pedestrian/cycle/equestrian users are afforded priority of movement.
- 13.8.13 Where more than one route crosses the haul road within close proximity of each other, these will be merged to provide a single passing point to reduce the likelihood of conflict with vehicular traffic.
- 13.8.14 It is expected that PRowS and promoted/recreational routes which would cross substation sites, construction compounds, tower construction zones, laydown areas or

form a temporary construction access, will be closed/diverted for the duration of the associated works, with the potential for significant adverse effects due to an increase in journey distance and/or a duration of impact greater than four weeks (28 days).

- 13.8.15 In addition, during stringing works which are undertaken in approximately 3 km sections, it is expected that PRowS that pass beneath the overhead line will need to be closed for short periods of up to 28 days on safety grounds. Routes would be reopened at the earliest opportunity following completion of these works, but this may lead to significant adverse effects due to an increase in journey distance on well used routes.
- 13.8.16 The non-motorised user routes where impacts could potentially lead to significant adverse effects on users are shown in **Table 13.8**.

Rail infrastructure

- 13.8.17 The construction strategy for the overhead line will be designed to avoid significant disruption to rail users, and the construction works will be discussed with Network Rail.
- 13.8.18 Towers will be positioned outside the railway boundary to avoid constructing permanent structures over rail infrastructure. In addition, towers will be positioned and have enough height clearance such that the scaffold towers can be designed and built so the fall radius of the scaffold is outside the boundary fence of Network Rail's property.
- 13.8.19 Short-term protective scaffolding or temporary netting will be installed before conductor stringing. These works ensure that no construction materials or tools can fall onto operational rail lines. Installation and removal of these protection systems occur during planned possessions (overnight and weekend). There will be two short-duration possessions required at each rail crossing, one for netting the protection scaffold and one for de-netting after the conducting works are complete. Each closure would be no more than six hours and would be carried out during pre-agreed possessions or closures when rail transport activity is lowest.
- 13.8.20 Conductors are pulled across the rail corridor using winches and tensioners located away from the railway limits. The railway will be protected at all times by the scaffold, preventing any part of the overhead line coming into contact with any part of Network Rail's property.
- 13.8.21 No permanent platforms, bridge decks, or haul-road bridges are required. Conducting works would take approximately 15 working days to complete for each crossing.
- 13.8.22 Since there would only be two short duration possessions required for each railway crossing, and these would be undertaken overnight and at weekends in pre-agreed time slots, it is not expected that the Project would lead to any significant adverse effects on rail passengers.

Navigable waterways

- 13.8.23 The construction strategy for the overhead line will be designed to avoid significant disruption to navigable waterway users. The approach is similar to that used for crossing rail infrastructure. The construction works will be discussed with the Environment Agency/relevant navigation authorities.
- 13.8.24 Towers will be positioned to avoid placing structures within navigable waterways and associated land.

- 13.8.25 Short-term protective scaffolding or temporary netting will be installed before conductor stringing. Installation and removal of these protection systems occur overnight and at weekends. There will be two short duration closures required at each navigable waterway crossing, one for netting the protection scaffold and one for de-netting after the conducting works are complete. Each closure would be no more than six hours.
- 13.8.26 Conductors would be pulled across the navigable waterway using winches and tensioners located away from the waterway. The navigable waterway will be protected at all times by the scaffold and netting.
- 13.8.27 No permanent platforms, bridge decks, or haul-road bridges would be required.
- 13.8.28 Since there would only be two short duration closures required for each navigable waterway crossing, and these would be undertaken overnight and at weekends, it is not expected that the Project would lead to any significant adverse effects on navigable waterway users. The relevant navigation authorities will be informed in advance of a closure.

Operation and Maintenance

Highway network

- 13.8.29 The EIA Scoping Report, detailed in **Appendix 5A EIA Scoping Report**, sought to scope out effects associated with increased traffic volumes due to operation and maintenance of the Project. However, the Scoping Opinion, detailed in **Appendix 5B Scoping Opinion**, requested that a description of the likely number and type of vehicles should be provided to demonstrate that the number of trips would not trigger the screening thresholds specified in the ISEP guidance (Ref 13.11).
- 13.8.30 The operational traffic flows for the two new substations (WMEL-A and WMEL-B) are anticipated to comprise of vehicles associated with routine visit and fault maintenance. Based upon existing precedent and National Grid estimates, typical routine maintenance vehicle movements to each substation would comprise approximately two visits per month by two people.
- 13.8.31 For operational visits to the overhead line, based upon existing precedent and National Grid estimates, typical routine maintenance vehicle movements would comprise approximately two vehicle trips per permanent tower, per year (i.e. one arrival and departure respectively). A LGV would be used and would access via the permanent access routes. There could also be a drone or helicopter survey taken from the air, taking off from a nearby vantage point.
- 13.8.32 Whilst there may be occasional variation in traffic flows associated with maintenance or refurbishment as required, the projected volume of traffic is expected to be low.
- 13.8.33 On this basis, operational/maintenance traffic will not trigger the screening thresholds in the ISEP guidance and significant effects are not likely.

Public Rights of Way and promoted/recreational routes

- 13.8.34 PRoWs crossed and/or diverted during construction will generally be reinstated, and there would not therefore be any significant adverse effects during operation and maintenance. However, based upon the preliminary assessment, the permanent siting of WMEL-A Substation may require the permanent closure/diversion of

Footpath Corb/10/1 and Footpath BurC/10/1 which could potentially result in significant adverse effects due to an increase in journey distance.

Rail infrastructure

- 13.8.35 Where railways are beneath the overhead line, maintenance vehicles would use existing highway crossing points, e.g. bridges or level crossings for access, and there would not therefore be any significant effects on rail passengers.

Navigable waterways

- 13.8.36 Where navigable waterways are beneath the overhead line, maintenance vehicles would use existing highway crossing points, and there would not therefore be any significant effects on waterway users.

Table 13.8 Preliminary summary of likely significant traffic and transport effects

Receptor	Key Design, Standard and Additional Mitigation	Impact	Magnitude of Change	Sensitivity/ Value	Likely Significance of Effect
Construction					
Highway Network					
Road users (all vehicles)	See Section 13.7	Severance, driver delay and highway safety effects due to increased traffic	>30% change in HGV movements	Low	Potentially significant – subject to further assessment in the TA/ES Section 1 – LK-1 (Marsh Road), LK-2 (Stone Gate), LK-13 (Gubboles Drove), LK-12 (Cheal Lane/Beach Lane), LK-11 (B1397 Risegate Road/Station Road/Belchmire Lane), LK-10 (A152) and LK-9 (A152) Section 2 – LK-16 (A15), LK-14 (A15), LK-17 (A15), LK-21 (A15), LK-22 (A15), LK-23 (A15), LK-24 (A15 Paston Parkway), LK-25 (A151), LK-225 (A151 Station Road), LK-29 (B1176), LK-30 (A151 Bourne Road/Village Street), LK-31 (A151 Bourne Road), LK-32 (A151 Loop), LK-33 (A151), LK-50 (Foosse Lane/The Drift), LK-52 (B668 Stretton Road), LK-53 (B668 Hooby Lane), LK-51 (Hooby Lane/New Road), LK-35 (B676 Stainby Road) and LK-34 (B676 Stainby Road) Section 3 – LK-44 (A606 Potter Hill Nottingham Road/Melton Road/Nottingham Road), LK-49 (Barn Lane/Restricted Byway 9/2, LK-37 (B676 Coston Road), LK-36 (B676 Coston Road), LK-38 (unnamed track), LK-39 (Freeby Lane), LK-40 (Freeby

Receptor	Key Design, Standard and Additional Mitigation	Impact	Magnitude of Change	Sensitivity/ Value	Likely Significance of Effect
					Lane), CR-41 (A607), CR-42 (A607), CR-43 (A607), LK-45 (A606), LK-46 (A606), LK-47 (B676 Six Hills Lane), LK-48 (B676 Six Hills Lane) and LK-119 (Pasture Lane North) Section 4 – LK-129 (Marefield Lane), LK-130 (B6047 Melton Road), LK-131 (B6047 Melton Road), LK-132 (B6047 Melton Road), LK-156 (Harborough Road, Glooston) and LK-155 (Cranoe Road) Section 5 – LK-179 (Harborough Road, Braybrooke), LK-180 (Desborough Road), LK-183 (Arthingworth Road) and LK-182 (Braybrooke Road)
Road users (all vehicles)	See Section 13.7	Severance, driver delay and highway safety effects due to increased traffic	>10% change in HGV movements	High	Potentially significant – subject to further assessment in the TA/ES Section 2 – LK-15 (A15), LK-18 (A15), LK-19 (A15), LK-20 (A15), LK-26 (A151)
Bus users	See Section 13.7	Potential for delay due to congestion as a result of increased traffic	To be determined at ES stage	To be determined at ES stage	Potentially significant – subject to further assessment in the TA/ES Section 1 Bus route 5A – LK-24 (A15 Glington Bypass/Paston Parkway) Bus route B13 – LK-10 (A152) Bus route B9 – LK-10 (A152) Bus route X12 – LK-23 (A15) Section 2 Bus route 4 – LK-28 (A151), LK-29 (B1176)

Receptor	Key Design, Standard and Additional Mitigation	Impact	Magnitude of Change	Sensitivity/ Value	Likely Significance of Effect
					Bus route 26 – LK-16 (A15) Bus route 33 – LK-15 (A15), LK-16 (A15), LK-18 (A15) Bus route 36 – LK-15 (A15), LK-16 (A15) Bus route 183 – LK-225 (A151 Station Road), LK30 (A151 Bourne Road/Village Street), LK-32 (A515 Loop), LK-34 (B676 Stainby Road), LK-35 (B676 Stainby Road), LK-53 (B668 Hooby Lane) Bus route 185 – LK-52 (B668 Stretton Road), LK-53 (B668 Hooby Lane) Bus route 5A – LK-24 (A15) Bus route RZ1 – LK-52 (B668 Stretton Road), LK-53 (B668 Hooby Lane) Bus route S112S – LK-15 (A15) Bus route S148S – LK-15 (A15), LK-16 (A15) Section 5 Bus route 17 – LK-182 (Braybrooke Road) Bus route 18 – LK-179 ((Harborough Road, Braybrooke), LK-180 ((Desborough Road), LK-182 (Braybrooke Road), LK-183 (Arthingworth Road)
Pedestrians and cyclists	See Section 13.7	Potential for severance, delay, decline in amenity, additional fear and intimidation as a	N/A	N/A	Potentially significant – subject to further assessment in the TA/ES Section 3 – LK-105 (Main Street), LK-104 (Saxelby Road), LK-106 (Saxelby Road) and LK-108 (Hoby Road)

Receptor	Key Design, Standard and Additional Mitigation	Impact	Magnitude of Change	Sensitivity/ Value	Likely Significance of Effect
		result of increased traffic			Section 4 – LK-149 (Main Street, Tugby) and LK-152 (Three Gates Road/Ilston Road/The Avenue), LK-158 (Goadby Road), LK-157 (Welham Lane/Cranoe Road), LK-164 (Bowden Lane) and LK-170 (Welham Lane)
All users	See Section 13.7	Potential for severance, delay, due to potential road closures and/or diversions to facilitate AILs	N/A	N/A	Potentially significant – subject to further assessment in the TA/ES
All users	See Section 13.7	Potential for impact as a result of a road traffic accident leading to hazardous load spill	N/A	N/A	Potentially significant – subject to further assessment in the TA/ES
Public Rights of Way and Promoted/Recreational Routes					
Pedestrians, cyclists and equestrians	See Section 13.7	Potential for increased journey distance/time due to long-term temporary closures/diversions of routes crossing substation sites, construction compounds, tower construction	Large	Low – Very high	Potentially significant – subject to further assessment in the TA/ES Section 2 – Haco/8/9, Haco/6/2, Haco/15/1, Sway/5/1, BurC/9/2, BurC/9/3, BurC/9/4, Corb/10/1, BurC/10/1, NWit/9/1, and NWit/12/2 Section 3 – E36/4, E93/1, E95/1, G60/1, H33/1, G64/1, G66/1 and G67/4

Receptor	Key Design, Standard and Additional Mitigation	Impact	Magnitude of Change	Sensitivity/ Value	Likely Significance of Effect
		zones, laydown areas or forming a temporary construction access			
Pedestrians, cyclists and equestrians	See Section 13.7	Potential for increased journey distance/time due to PRow closures during conductor stringing	Medium – Large	Medium – Very high	Potentially significant – subject to further assessment in the TA/ES Section 1 – Pinc/5/1 (Part of MacMillan Way) and Pinc/5/2 (part of MacMillan Way) Section 2 – Haco/14/1, Haco/8/9, Haco/6/2, Haco/8/3, Haco/8/2, Sway/5/1, Sway/6/2 and NWit/9/1 Section 3 – Viking Way, E18/1 (part of Leicestershire Jubilee Way), H36/2, H36/3, H109/1, I88/2, D59/3 (Part of Leicestershire Round) and D66/1 Section 4 – C98/1, Midshires Way (South of Tilton on the Hill)), C66/2, B90/1, B90/2, B22/1 (Part of Leicestershire Round) and Midshires Way (West of Welham) Section 5 – HB1 (Part of Midshires Way), MacMillan Way/Midshires Way/Jurassic Way, TR5, TK13, TK12, UL23, Nene Way and TF3
Rail Infrastructure					
Railway users	See Section 13.8	Potential for delay due to rail closure	Negligible	High	There would only be two short duration possessions required for each railway crossing, and these would be undertaken overnight and at weekends in pre-agreed

Receptor	Key Design, Standard and Additional Mitigation	Impact	Magnitude of Change	Sensitivity/ Value	Likely Significance of Effect
					time slots. It is expected that the effects of the Project on rail passengers would be not significant .
Navigable Waterways					
Navigable waterway users	See Section 13.8	Potential for reduced access/delay due to navigable waterway closure	Negligible	Low	There would only be two short duration closures required for each navigable waterway crossing, and these would be undertaken overnight and at weekends. It is expected that the effects of the Project on navigable waterway users would be not significant .
Operation					
Highway Network					
Road users, public transport users (Bus), pedestrians and cyclists	See Section 13.8	Severance, driver delay and highway safety effects due to increased traffic	Negligible	Low – High	Operational/maintenance traffic will not trigger the screening thresholds in the ISEP guidance (Ref 13.11) and the effects on road users are therefore likely to be not significant .
Public Rights of Way and Promoted/Recreational Routes					
Pedestrians, cyclists and equestrians	See Section 13.7	Potential for increased journey distance/time due to permanent PRow closures/diversions	Small – Large	Medium – Very high	Potentially significant – subject to further assessment in the TA/ES Section 2 – Corb/10/1 and BurC/10/1

Receptor	Key Design, Standard and Additional Mitigation	Impact	Magnitude of Change	Sensitivity/ Value	Likely Significance of Effect
Rail Infrastructure					
Railway users	See Section 13.8	Potential for delay due to rail closure	Negligible	High	Maintenance vehicles would use existing highway crossing points, and the effects on rail passengers would therefore be not significant .
Navigable Waterways					
Navigable waterway users	See Section 13.8	Potential for reduced access/delay due to navigable waterway closure	Negligible	Low	Maintenance vehicles would use existing highway crossing points, and the effects on navigable waterway users would therefore be not significant .

Alternative Scenarios

- 13.8.37 As described in Section 4.4 of **Chapter 4 Description of the Project**, there are elements of the Project which have not been fixed at this stage. Therefore flexibility needs to be considered in this DES. Two alternative scenarios are outlined in **Table 4.3** and are assessed in **Table 13.9**.
- 13.8.38 This assessment considers each scenario, together with the assumptions and mitigation measures described in this chapter. It provides a qualitative appraisal of the potential changes to the preliminary conclusions reported in this section, should these scenarios occur.
- 13.8.39 **Table 13.9** presents the conclusions of this appraisal, supported by appropriate qualitative justification, to ensure that any potentially significant effects are identified in this DES. If these alternative scenarios remain under consideration in the application for development consent, they will be appropriately assessed in the ES.

Table 13.9 Preliminary assessment of alternative scenarios

Scenario	Potential Change in Impacts	Potential Change in Effects
1. No or reduced haul roads	This scenario could reduce the total number of construction HGV movements on the local road network as there would no longer be a need for materials to construct and remove a haul road. In addition, the lack of a haul road will require more site accesses along the route corridor to enable access to each tower location, and this will in turn require the use of more roads (Primary Access Routes and Worker Access Routes) including lower classification/less suitable roads for construction traffic (HGVs and workers). On lower classification/less suitable roads, this could lead to requirements for more traffic management measures potentially including road or lane closures, particularly in relation to construction HGV movements. The use of more local roads could impact on more bus routes and the potential use of lower classification/less suitable roads could impact on non-motorised users, particularly in areas where there are limited dedicated facilities. The duration of impact on some of the PRoWs that cross the Project, particularly under the overhead line	In terms of the Primary Access Routes identified in this preliminary assessment, the reduction in haul road materials and consequently construction HGV movements could reduce the number of road links potentially requiring further assessment. However, with no haul road, the more dispersed nature of the construction HGVs/agricultural vehicles on the local road network will likely lead to roads not considered in the preliminary assessment, potentially requiring assessment once the ISEP thresholds are considered. This is in addition to Worker Access Routes which are not considered in the preliminary assessment. There is therefore the potential for severance, driver delay and highway safety effects due to increased traffic or traffic management on more of the road network due to removing the haul road. There could also be more bus routes affected by construction traffic and/or traffic management measures on local roads, with potential for delay due to congestion as a result of increased traffic or diversion.

Scenario	Potential Change in Impacts	Potential Change in Effects
	sections may be reduced due to the absence of a haul road, which would likely be in place for most of the construction period.	The lack of a haul road could lead to the following potential effects on more roads: • potential for severance, delay, decline in amenity, additional fear and intimidation on pedestrians and cyclists; • potential for severance and delay, due to potential road closures and/or diversions to facilitate AILs; and • potential for impact due to a road traffic accident leading to a hazardous load spill.
2. Off-site construction compound near Melton Mowbray	This scenario includes an off-site centralised compound, in addition to the compounds on the new overhead line and at substations. The centralised off-site compound would be used to store some materials and would include some staffing. Therefore, there would be construction HGV deliveries, vehicle movements between the off-site compound and worksites and worker trips to/from the compound, potentially using roads not covered by the Primary Access Routes or Worker Access Routes that would be required to access the various compounds along the new overhead line.	With construction traffic travelling to and from the off-site compound, and between the off-site compound and worksites on the new overhead line, this will likely lead to roads not considered in the preliminary assessment potentially requiring assessment once the ISEP thresholds are considered. This is in addition to Worker Access Routes which are not considered in the preliminary assessment. There is therefore the potential for severance, driver delay and highway safety effects due to increased traffic or traffic management on other areas of the road network due to the additional traffic movements. There could also be more bus routes affected by construction traffic on other areas of the road network with potential for delay due to congestion, as well as potential for severance, delay, decline in amenity, and additional fear and intimidation on pedestrians and cyclists.

13.9 Monitoring

- 13.9.1 Proposed monitoring measures specific to traffic and transport are set out in **Appendix 4A Draft Outline Code of Construction Practice**.

13.10 Further Assessment

- 13.10.1 This chapter provides a preliminary assessment based on the development of the Project and data gathered to date. Full details of the methodology will be presented within the ES, together with further assessment detail on assigning value (sensitivity) to receptors as well as criteria for assigning impact magnitude. The criteria will consider the scale/extent of the predicted change and the nature and duration of the impact. The factors are combined to give an overall significance of effect, using a matrix following guidance set out in Section 13.8 of **Appendix 5A EIA Scoping Report**.
- 13.10.2 The ES will include traffic surveys comprising 24/7 road link counts, junction turning counts and queue length surveys as appropriate to infill gaps in the DfT traffic count data and provide comprehensive baseline data for the highway locations materially affected by changes in traffic due to the Project. The ES will also include non-motorised user surveys on PRowS and roads materially affected by the Project, where appropriate.
- 13.10.3 More detailed accident data from the STATS19 database would be considered where collision clusters are identified on roads materially affected by a change in traffic due to the Project.
- 13.10.4 Information on committed developments and transport schemes would be considered in the future baseline.
- 13.10.5 Construction programme, construction traffic routes and construction traffic volumes will be updated based on the design presented in the application for development consent.
- 13.10.6 Traffic modelling to inform the ES will include consideration of all construction traffic (HGVs and workers), daily traffic flows as well as traffic impacts during the weekday AM and PM peak hours, to assess junction capacity issues and the potential effects on driver delay.
- 13.10.7 The ES will include a full assessment as described in the ISEP guidance (Ref 13.11), including:
- severance of communities;
 - road vehicle driver and passenger delay;
 - non-motorised user delay;
 - non-motorised user amenity;
 - fear and intimidation on and by road users;
 - highway safety; and
 - hazardous/dangerous loads.
- 13.10.8 The ES will consider a cumulative scenario including committed developments (in the future baseline) and any schemes that are not yet committed but are considered to have impacts affecting the Study Area for the Project.
- 13.10.9 The ES will include any modelling and mitigation requirements. Potential significant effects on routes identified in the DES will be taken as a starting point and may need further assessment in the ES, subject to discussions with the relevant local authorities.

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