The Great Grid Upgrade

North Humber to High Marnham

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North Humber to High Marnham

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Contents

Executive Summary 1

1. Introduction 2

1.1 Overview 2
1.2 Purpose and Structure of this Document 2
1.3 Pre-commencement Works 4
1.4 Process of the CTMP 4

2. Project Overview 5

2.1 Project Commitments 5
2.2 Construction Programme 5
2.3 Working Hours 5
2.4 Consents, Licences and Permits 7

3. Project Team Roles and Responsibilities 9

3.1 Project Responsibilities 9
3.2 Information Training and Awareness 9
3.3 Traffic Liaison Group(s) 10
3.4 Community Engagement and Public Information 10

4. Highway Network Mitigation 11

4.1 Introduction and Terminology 11
4.2 Pre-and Post-Construction Condition Surveys 11
4.3 Vehicle Classification 12
4.4 Construction Traffic 28
4.5 Site Access Points 31
4.6 Crossover Points 31
4.7 Construction Compound Access Points 32
4.8 Construction Access Track Design 33
4.9 Traffic Management 34
4.10 Highway Alteration Measures 54
4.11 Blue Light Services 56
4.12 Bus Stops and Routes 57
4.13 Pedestrians and Other Road Users 57
4.14 Staff Travel 57

5. Implementation 58
5.1 Adherence to the CTMP 58
5.2 Monitoring of Implementation 58
5.3 Routeing Adherence 59
5.4 Vehicle and Driver Safety 60
5.5 Enforcement 62
5.6 Non-Compliance Procedure 62
5.7 Community Liaison 62
5.8 Coordination with Other Developments/Events 63
5.9 Complaints Procedure 63
5.10 Change Process 64
6. Outline Construction Workforce Travel Plan 65
6.1 Introduction and Purpose 65
6.2 Objectives of the OCWTP 65
6.3 Scope and Applicability 65
6.4 Governance and Responsibilities 66
6.5 Baseline and Workforce Characteristics 66
6.6 Travel Modes and Measures 66
6.7 Monitoring and Review 67
6.8 Detailed Travel Plan Updates and Approval 67

Table 1.1 – Structure of the CTMP 3
Table 2.1 – Primary schools located along Primary Access Routes (PARs) 6
Table 4.1 – Vehicle types permitted on each PAR 15
Table 4.2 – Construction compound access points 32
Table 4.3 – Road closures and diversion routes 37
Table 4.4 – Direct Severance Staged Mitigation Measures 55
Table 5.1 – Monitoring implementation of measures relevant to the CTMP 59

References 68

Appendix A AIL Access Strategy
Appendix B AIL Route Figures

Executive Summary

National Grid Electricity Transmission plc (National Grid) is developing the North Humber to High Marnham Project (the Project), a proposed new 400 kV electricity transmission connection between East Riding of Yorkshire and Nottinghamshire. The Project would reinforce the national electricity transmission network, enabling the connection of new low carbon energy generation and supporting the delivery of the UK Government's clean power and net zero ambitions. The Project is a Nationally Significant Infrastructure Project (NSIP) for which development consent is being sought through a Development Consent Order (DCO) under the Planning Act 2008 (HM Government, 2008). It is recognised as a critical reinforcement to provide the network capacity required to meet future electricity demand and support the transition to a low-carbon energy system.

The purpose of this Outline Construction Traffic Management Plan (Outline CTMP) is to set out the proposals for the management of construction-related traffic along the local highway network and the Strategic Road Network within the vicinity of the construction route during the build-out period of the Project, in order to limit any potential disruptions and implications on the overall transport network.

The document sets out the proposed management of heavy goods vehicle movements and construction traffic routeing. It also includes the Outline Construction Workforce Travel Plan (Outline CWTP), which establishes the principles, targets and management processes for construction staff travelling to and from the Project. The Abnormal Indivisible Load (AIL) Access Strategy, provided in Appendix A, describes the proposed approach for transporting large or abnormal loads required during construction.

This Outline CTMP has been informed by feedback received from stakeholders as part of the statutory consultation and ongoing engagement with the local highway authorities (LHAs). As an outline document, certain aspects will continue to be refined as the Project progresses through the detailed design stage. Consequently, full details of all measures will be incorporated into the Post-DCO approval CTMPs as appropriate. Post-DCO approval CTMPs will, however, be prepared in accordance with the principles and requirements set out in this Outline CTMP.

1. Introduction

1.1 Overview

1.1.1 National Grid Electricity Transmission plc (National Grid) owns and maintains the national high voltage electricity transmission network throughout England and Wales.

1.1.2 The transmission network connects the power from where it is generated to the regional distribution network operators who then supply businesses and homes.

1.1.3 National Grid holds the Transmission Licence for England and Wales, and its statutory duty is to develop and maintain an efficient, coordinated and economical system of electricity transmission and to facilitate competition in the generation and supply of electricity, as set out in the Electricity Act 1989 (HM Government, 1989).

1.1.4 National Grid has developed plans for the North Humber to High Marnham Project (the Project). The Project would support the UK government's net zero target through the connection of new low carbon energy generation and by reinforcing the transmission network.

1.1.5 The Project would establish a new 400 kilovolt (kV) transmission connection approximately 90 kilometres (km) in length between a new substation to be built in the vicinity of Birkhill Wood, located to the north of Hull near Creyke Beck in the East Riding of Yorkshire, and a new substation at High Marnham in Nottinghamshire. The reinforcement is needed because the existing transmission network, even with current upgrading, will not have sufficient capacity for the new renewable energy (a substantial proportion of which would be generated by offshore wind) that is expected to connect to the network over the next 10 years and beyond. Completion of the Project, together with other new reinforcements across the country, will meet this future energy transmission demand across the UK.

1.1.6 The Project is a Nationally Significant Infrastructure Project (NSIP), and National Grid is seeking development consent under the Planning Act 2008 (HM Government, 2008). NSIPs require a type of planning permission known as a Development Consent Order (DCO). Instead of applying to the local authority for planning permission, the developer must apply to the Secretary of State via the Planning Inspectorate for a DCO.

1.1.7 National Grid has submitted an application for development consent to the Planning Inspectorate for the Project. The Examining Authority (consisting of one or more examining inspectors), after a period of public examination, will make its recommendation to the Secretary of State for Energy Security and Net Zero, who in turn will decide on whether development consent should be granted. The Project has been identified as being critical to delivering a network which supports the clean power pathways for 2030 delivery.

1.2 Purpose and Structure of this Document

1.2.1 The purpose of this Outline CTMP is to set out the approach to managing construction traffic impacts on the Local Road Network (LRN), Major Road Network (MRN) and Strategic Road Network (SRN). This includes impacts arising from works affecting roads and public access, such as the construction of site access points, construction access tracks and traffic management measures.

1.2.2 Post-DCO approval CTMPs, which will be based upon this Outline CTMP, will be submitted to, and approved by, the relevant local planning authority (LPA), in consultation with the relevant highway authority, prior to commencement of each stage of the authorised development to which it relates. The appointed Main Works Contractor(s) will be responsible for implementing the measures set out within the Post-DCO approval CTMPs.

1.2.3 Other documents submitted with the application for development consent that interface with this Outline CTMP include the following:

- **Application Document 6.14 Environmental Statement Chapter 14 Traffic and Transport** and **Application Document 7.15 Transport Assessment**, which establish the baseline transport conditions relevant to the Project, identify the future transport conditions and transport impacts of the Project, and establish whether mitigation is required for transport issues generated by the Project.
- **Application Document 7.3 Register of Environmental Actions and Commitments**, which sets out embedded, control and management, and additional mitigation measures, including standard approaches and site-based actions intended to reduce or avoid environmental effects. These measures are general or topic-specific and are typically applicable across the whole Project.
- **Application Document 7.6 Outline Public Rights of Way Management Plan**, which details the strategy and measures to be adopted where public rights of way (PRoWs) are affected by the Project.

1.2.4 This Outline CTMP includes the following appendix, which is referenced within this Outline CTMP where relevant:

- Abnormal Indivisible Load (AIL) Access Strategy (Appendix A), which sets out the proposed strategy and routes for AIL movements.

1.2.5 The Outline CTMP structure is set out in Table 1.1.

Table 1.1 – Structure of the CTMP

Chapter	Content
1. Introduction	Sets out the purpose of the Outline CTMP and its overall structure.
2. Project Overview	Sets out the construction programme, working hours, and the consents, licences and permits anticipated to be required for aspects covered by the Outline CTMP.
3. Project Team Roles and Responsibilities	Sets out the roles and responsibilities relevant to the Outline CTMP and the training to be undertaken.
4. Highway Network Mitigation	Describes the highway network potentially affected by the Project during construction. It sets out measures to reduce effects arising from works to the road network, including site access points and crossings of electricity transmission infrastructure. It also describes measures to reduce potential effects arising from additional construction traffic.
5. Implementation	Presents the site checks and procedures anticipated to be undertaken to monitor and manage compliance with the Outline CTMP.

Chapter	Content
6. Outline Construction Workforce Travel Plan	Establishes the principles, objectives and minimum requirements for managing construction workforce travel in a sustainable manner.

1.3 Pre-commencement Works

1.3.1 All pre commencement operations must be carried out in accordance with this document unless otherwise agreed with the relevant planning authority and implement all applicable environmental commitments and monitoring requirements identified in **Application Document 7.3 Register of Environmental Actions and Commitments**.

1.4 Process of the CTMP

1.4.1 This Outline CTMP is the version submitted as part of the application for development consent. As the Project develops, this Outline CTMP will be reviewed and updated into the Post-DCO approval CTMPs broadly in accordance with the following stages:

- Outline CTMP: The Outline CTMP has been developed to include feedback received from the LHAs during statutory consultation and ongoing traffic-related meetings.
- Post-DCO approval CTMPs: These will be prepared by the Main Works Contractor(s) in consultation with the relevant highway authority and submitted to the relevant Local Planning Authority (LPA) for approval prior to the commencement of each relevant stage of the authorised development. The post-DCO approval CTMPs will be substantially in accordance with this Outline CTMP. Compliance with this Outline CTMP will be secured through the applicable Requirement in Schedule 2 of **Application Document 3.1 Draft Development Consent Order**. Any subsequent amendments to the post-DCO approved CTMPs will be subject to agreement with the relevant LPA, in consultation with the relevant highway authority, and progressed in accordance with the change control process set out in section 5.10 of this Outline CTMP.

2. Project Overview

2.1 Project Commitments

2.1.1 The embedded, control and management, and additional mitigation measures proposed by National Grid that are relevant to the road networks and PRoWs network are primarily set out within **Application Document 7.3 Register of Environmental Actions and Commitments**.

2.1.2 Diversions to PRoWs are identified **within Application Document 2.6 Access Rights of Way and Public Rights of Navigation Plans**, with mitigation and management requirements detailed within **Application Document 7.6 Outline Public Rights of Way Management Plan**. Measures relating specifically to the management of construction traffic are set out within this Outline CTMP.

2.1.3 Measures relating to the management of construction workforce travel are set out within the Outline Construction Workforce Travel Plan (Outline CWTP) (Chapter 6 of this Outline CTMP).

2.2 Construction Programme

2.2.1 The detailed construction programme will be subject to refinement as the Project progresses, influenced by factors such as procurement, system access requirements (including outages), resource and material availability, weather conditions and ground conditions.

2.2.2 The indicative construction programme is set out within **Application Document 6.4 Environmental Statement Chapter 4 Description of the Project**.

2.2.3 Subject to the granting of development consent, it is anticipated that construction would commence with site mobilisation and access and enabling works in 2028. Main construction activities are anticipated to continue through to 2031, with demobilisation and reinstatement works potentially continuing thereafter where required, through to 2033.

2.2.4 Due to the nature of the works, and where activities are required to be undertaken within agreed outage windows, some construction access tracks or temporary fencing may need to remain in place until testing and commissioning activities have been completed. This will enable snagging or remedial works to be addressed prior to reinstatement.

2.3 Working Hours

2.3.1 Core working hours for construction are set out in the requirements of **Application Document 3.1 Draft Development Consent Order.** Work may only take place between the hours of 07:00 and 19:00 Monday to Friday and 08:00 and 17:00 on Saturdays, Sundays, bank holidays and other public holidays, unless otherwise approved by the relevant planning authority:

2.3.2 No heavy goods vehicles (HGVs) deliveries may be made to site outside of the hours of 06:00 to 19:00 Monday to Friday and 07:00 to 17:00 on Saturdays, Sundays and public holidays.

Activities Outside Core Working Hours

2.3.3 Certain activities would be required to take place outside the core working hours where necessary. These would include the following:

- Trenchless crossing operations.
- The installation and removal of conductors, pilot wires and associated protective netting (included but not limited to) across highways, railway lines or watercourses.
- The jointing of underground cables.
- The continuation of any work activity commenced during the core working hours to a point where they can securely and or safely be paused.
- Any highway works requested by the highway authority to be undertaken on a Saturday or Sunday or outside the core working hours.
- The testing or commissioning of any electrical plant installed as part of the Project including undertaking of any identified corrective activities.
- The completion of works delayed or held up by severe weather conditions which disrupted or interrupted normal construction activities.
- Activity necessary in the instance of an emergency where there is a risk to persons or property.
- Security monitoring.
- Non-intrusive surveys.
- Intrusive surveys.
- Delivery to the site of AILs.
- Mechanical and electrical installation works within buildings once erected and enclosed.
- Installation and removal of temporary clear-span bridges

2.3.4 Core working hours exclude start-up and close-down activities, which may take place for up to one hour either side of these hours.

2.3.5 Where a Primary Access Route (PAR) directly passes a primary school, construction vehicles will avoid weekday school drop-off and pick-up periods to minimise disruption and safeguard pupil safety. A full list of primary schools located along a PAR is provided in Table 2.1 below.

Table 2.1 – Primary schools located along Primary Access Routes (PARs)

PAR	School	Authority
PAR 7	Skidby Church of England Primary School	East Riding of Yorkshire
PAR 29	Newport Primary School	East Riding of Yorkshire
PAR 32	Swinefleet Primary School	East Riding of Yorkshire
PAR 37	Eastoft Church of England Primary School	North Lincolnshire

PAR	School	Authority
PAR 134	Althorpe and Keadby Primary School	North Lincolnshire
PAR 61	Belton All Saints Church of England Primary School	North Lincolnshire
PAR 151	St Martin's Church of England Primary School	North Lincolnshire
PAR 96	North Wheatley Church of England Primary School	Nottinghamshire
PAR 105	St Swithun's Church of England Primary School	Nottinghamshire
PAR 116	Dunham-on-Tent C of E Primary School	Nottinghamshire

Heavy Goods Vehicle Timings

2.3.6 HGVs, other than those associated with activities permitted outside core working hours, will not be permitted to arrive at site before 07:00 or depart after 19:00 on Mondays to Fridays, or before 07:00 or after 17:00 on Saturdays, Sundays and Bank Holidays.

2.3.7 It is recognised that this restriction may result in HGVs travelling to or from the Project outside the defined working hours. Any HGVs forecast to arrive at site prior to 07:00 will be required to wait at an appropriate lorry park, service area or other designated overnight parking location until they are able to complete their journey in compliance with the applicable restrictions. This will be communicated to drivers via delivery instructions.

2.3.8 A Vehicle Movement Planning System (VMPS), which will be implemented and operated by the Main Works Contractor(s), is a system used for planning deliveries, supplier booking and recording of deliveries at various site locations across the Project. Details of the suppliers, drivers, and vehicles making deliveries to site would be recorded in the VMPS. The VMPS would be the principal source of information, reporting in the following areas:

- The working hours for deliveries, including those exceptions as listed in paragraph 2.3.3;
- Compliance of deliveries including the suitability of the driver and vehicle;
- The use of designated routes by construction traffic; and
- The number of planned versus actual vehicle movements.

2.4 Consents, Licences and Permits

Permit Schemes

2.4.1 Part 3 of the Traffic Management Act 2004 (HM Government, 2004) introduced permit schemes as an alternative to the notification regime under the New Roads and Street Works Act 1991 (HM Government, 1991) for highway maintenance and improvement works. Permit schemes operate alongside the street works powers set out in Article 11 of **Application Document 3.1 Draft Development Consent Order**. All necessary street works permits will be applied for and managed through the Department for Transport's Street Manager system.

2.4.2 In accordance with Article 12 of **Application Document 3.1 Draft Development Consent Order**, National Grid proposes to operate under the permit schemes in place and administered by East Riding of Yorkshire Council, North Lincolnshire Council and Nottinghamshire County Council. This approach will support effective coordination of street works required for the Project.

2.4.3 Permits issued under the relevant permit schemes will regulate many of the matters addressed within this Outline CTMP. Given the enforceable nature of permit schemes, and the statutory role of highway authorities in determining permit applications and conditions, the Project will comply with the requirements of all relevant permits. Where there is a conflict between the terms or conditions of an approved permit and the provisions of this Outline CTMP, the provisions of Article 11 of **Application Document 3.1 Draft Development Consent Order** will take precedence.

Temporary Traffic Regulation Orders

2.4.4 Temporary Traffic Regulation Orders (TTROs) are illustrated on **Application Document 2.5 Traffic Regulation Order Plans** and will be required to regulate traffic on roads affected by the Project, including where streets are required to be temporarily closed or diverted during construction. These measures may include:

- Temporary speed limit restrictions;
- On-street parking restrictions;
- Temporary road, carriageway and lane closures;
- Temporary prohibition of overtaking
- Temporary traffic signal arrangements; and
- Other works on the public highway.

2.4.5 Other highway-related works may include, where necessary:

- Cut-back or clearance of vegetation;
- Utility diversion works at the locations of bellmouth (or other) access points;
- Use of stop/go boards in place of temporary traffic signals; and
- Construction of highway mitigation measures (such as road widening and passing bays), site access points, or construction access track crossing points.

2.4.6 Article 48 of **Application Document 3.1 Draft Development Consent Order** provides National Grid and its Main Works Contractor(s) with the power to introduce TTROs for the purposes set out in Schedule 11, and to any other extent that is expedient or necessary, subject to the consent of the relevant LHA.

3. Project Team Roles and Responsibilities

3.1 Project Responsibilities

3.1.1 The Main Works Contractor(s) will undertake the construction work in accordance with the DCO and its associated documents including this Outline CTMP. Post-DCO approval CTMPs will be in effect during construction and will be implemented by the Main Works Contractor(s).

3.1.2 The relevant aspects of this Outline CTMP and Post-DCO approval CTMPs will be communicated to the workforce at the commencement of works, and as necessary thereafter, to ensure that all personnel are aware of their responsibilities and the commitments applicable to the activities they are undertaking.

3.1.3 Overall roles and responsibilities are presented in **Application Document 7.2 Outline Code of Construction Practice**.

3.1.4 The Main Works Contractor(s) will be responsible for the development, implementation and day-to-day management of the CTMP(s). National Grid will retain overall responsibility for compliance with the CTMP(s) and for any breach of the requirements of the DCO.

3.2 Information Training and Awareness

3.2.1 In accordance with commitments GG04 and TT01-TT13 set out in **Application Document 7.3 Register of Environmental Actions and Commitments**, all staff, operatives and HGV drivers working on the Project will receive a site-specific induction prior to commencing work. Further information on implementation is provided in Chapter 5 of this Outline CTMP.

3.2.2 The site induction will include, as relevant to the CTMP:

- General traffic management requirements applicable to the Project;
- General construction traffic management requirements;
- Car parking arrangements;
- Good practice measures for commuting, including car sharing and use of sustainable transport options;
- How to access approved construction routes for HGV and light goods vehicle (LGV) movements;
- Driver information packs (see section 5 for further details, which confirms that these packs are issued in advance); and
- Expected behaviours on-site (for example, switching off plant and vehicles when not in use).

3.2.3 Regular toolbox talks will be delivered by the Main Works Contractor(s). These will give targeted information about site-specific issues or activities taking place at the time.

3.3 Traffic Liaison Group(s)

3.3.1 National Grid will establish a Traffic Liaison Group (TLG) with the LHAs. These meetings would be attended by representatives from the highway authorities, the Project team and the Main Works Contractor(s), relevant public transport stakeholders and emergency services. The objective for the Project is to ensure that all stakeholders are informed of the works impacting the highway and that consents are in place on time to proceed safely and as programmed. The meeting would take place at appropriate regular intervals following an agreed agenda with materials distributed before the meeting.

3.4 Community Engagement and Public Information

3.4.1 The Main Works Contractor(s) will implement arrangements to provide timely and appropriate information to local residents and stakeholders about the works. A dedicated community relations team will be in place to provide community liaison and external communications support during construction. The information to be provided to local residents will be specific to the works carried out, describing the nature of the works, the location and extent of the works, the duration of the works and the hours to be worked.

3.4.2 Local residents will be informed of the commencement and expected duration of temporary traffic management measures and construction activities through letter drops and/or email notifications. The letter/email will include the contact telephone number for public information. These letters/emails will be shared with the relevant LHA and applicable parish council and will be issued at least two weeks in advance of the installation of traffic management measures and construction activities being undertaken on-site.

3.4.3 The Main Works Contractor(s) will display an Information Board at or in the near vicinity of the traffic management works, which will include the permit reference number and details of how to contact the Main Works Contractor(s) traffic management operator in the event of any issues that are considered to need urgently addressed.

3.4.4 The name and contact details for the Project will be displayed at the entrance to each site compound. This will include an emergency telephone number. Details of the works, including contact details, will be provided to the relevant community groups, such as LHAs, parish councils and landowners, before work commences. In the instance this number may be updated throughout construction, the contact details at each site entrance will be updated and circulated to the local parish councils, local highway authorities and landowners.

3.4.5 A freephone Project helpline and dedicated Project website will be maintained by the National Grid community relations team. The Project helpline and website will be provided on boards placed in appropriate locations where they will be visible to the public. The telephone number and Project website details will also be provided to the relevant local authorities and other relevant parties. This will be updated in the instance of contact details changing throughout the project construction.

3.4.6 The community relations team will record details of any complaints received and how these are to be investigated and appropriately managed. Further information on the complaints procedure can be found in section 5.9 of this Outline CTMP.

4. Highway Network Mitigation

4.1 Introduction and Terminology

4.1.1 This section sets out the pre-construction surveys, embedded controls and management measures, together with additional mitigation measures that will be implemented in relation to the highway network. It considers potential impacts caused by the construction of the Project to the road network, for example, creating site access points for access to the working area and works where the proposed overhead line would cross the highway. It also includes impacts that may be caused by the additional traffic that would be generated during the construction phase of the Project.

4.1.2 The following terminology is used to describe the construction traffic routes:

- Strategic Road Network (SRN): Comprises the motorway and trunk road network, managed by National Highways, as defined by the Department for Transport.
- Major Road Network (MRN): Routes in the middle tier of the road network (between the SRN and Local Road Network), as defined by the Department for Transport. MRNs are managed by the LHAs. For the Project, the LHAs are East Riding of Yorkshire Council, North Lincolnshire Council and Nottinghamshire County Council.
- Local Road Network (LRN): Comprising the local roads managed by LHAs, as listed above.
- Primary Access Routes (PARs): Access routes on the public highway designated for use by construction vehicles to site access points. A full list of PARs is provided in Table 4.1.
- Site access point: The location where construction vehicles will transition between the PAR and construction access tracks.
- Construction access tracks: Temporary construction access tracks provided from the existing highway network to link the site access points (bellmouths) to the working areas. These routes will be managed by Main Works Contractor(s).
- Crossover points: Locations where construction access tracks cross the public highway, but are not proposed for construction HGVs to egress to/from the public highway (except in emergency situations).
- Site compounds: The proposed locations for the temporary construction compounds.

4.2 Pre-and Post-Construction Condition Surveys

4.2.1 A desktop assessment of highway structures along the routes anticipated to be used by AILs has been undertaken using available Google Maps imagery. The findings of this assessment, together with the proposed routeing of AILs, are provided in the AIL Access Strategy (Appendix A).

4.2.2 Road condition surveys will be carried out pre-construction, during construction and post-construction, to identify any defects arising to highways assets and verges that may be due to construction of the Project. The scope and methodology of these surveys will be developed in consultation with each LHA, prior to commencement of the works and contained within the Post-DCO approval CTMPs.

4.2.3 In accordance with commitment GG05 in **Application Document 7.3 Register of Environmental Actions and Commitments**, a record of condition will be carried out (photographic and descriptive) of the agreed roads that may be affected by construction activities. These records will provide the baseline against which the condition of the roads will be assessed following completion of the works and any necessary reinstatement, ensuring that reinstatement achieves a standard equivalent to the pre-construction condition. The locations covered by the record of condition surveys will be identified on a plan.

4.3 Vehicle Classification

Abnormal Indivisible Load Vehicle Deliveries

4.3.1 The Road Vehicles (Authorisation of Special Types) (General) Order (HM Government, 2023), states that an AIL is a large load which cannot 'without undue expense or risk of damage' be divided into two or more smaller loads for the purposes of being transported by road, and which exceeds limits set out in terms of weight (>44 tonnes), length (>18.65m), and width (>2.9m).

4.3.2 A detailed AIL Access Strategy (Appendix A of this Outline CTMP) has been produced. This report outlines the access strategy for delivery of AILs on the Project and identifies feasible transportation routes considering route suitability and constraints.

4.3.3 Where PARs and site access points are anticipated to be used by AILs, specific consideration will be given to determining suitable routeing and facilities to accommodate these movements. AIL movements associated with the construction of the Project are anticipated to include Large Mobile Cranes, piling rigs, excavators, dumpers and welfare cabins. Large Mobile Cranes will travel to site under their own power, with appropriate escort arrangements, whereas other AILs, such as piling rigs, will require transportation on another vehicle.

4.3.4 The Special Types Enforcement Guide (Driver & Vehicle Standards Agency, 2018) defines three categories of AIL vehicles which can be used under a Special Types General Order (STGO); STGO Cat (Category) 1, STGO Cat 2 and STGO Cat 3. AIL vehicles which do not comply with the STGO conditions require a Special Order to travel on the road network.

4.3.5 While the number of AILs is small compared to the number of HGVs, they would be of a size which may require temporary works to accommodate the loads. All temporary works, such as removal of street furniture if required, will be organised by the Main Work Contractor(s), with engagement from the relevant highways' authority and the police (where necessary), discussed at the TLG and form part of a delivery plan for each AIL, which will also consider:

- Locations of laybys or other such holding areas; and
- Potential diversion routes.

4.3.6 Each delivery will be planned in advance. Where required, appropriate escort arrangements will be implemented based on the characteristics of the load and the requirements of the delivery. Such arrangements will be procured through a standard process at the appropriate time.

4.3.7 The movement of AILs will be outside the restrictions (routes and times) contained within the CTMP (section 2.3) and will be subject to separate agreement with the relevant highway authorities and police through the Electronic Service Delivery for Abnormal Loads (ESDAL) system or another appropriate abnormal load notification system (for example Abhaulier.co.uk). This includes notifications to stakeholders (relevant highway authorities, police and Network Rail) and advising of timings, routes and any asset protection measures appropriate to the type of road.

4.3.8 Where blue light services (police, fire and ambulance services) have a local embargo on AIL movements, these hours will be adhered to for AIL movements associated with the Project, unless agreed otherwise.

4.3.9 Should delivery of AILs be required outside the core working hours (section 2.3 of this Outline CTMP), appropriate notice for AIL movements will be given to the relevant highway authority via the movement notification system before such traffic movements commence.

4.3.10 There are several structures (such as bridges) along the allocated AIL routes which will need to undergo further assessment work to confirm their suitability for AIL vehicles following the grant of development consent. A detailed list has been provided within the AIL Access Strategy (Appendix A of this Outline CTMP).

4.3.11 Ahead of any delivery of AILs, the Community Liaison Officer (CLO) will communicate information, where appropriate, via local notice boards and email updates to stakeholders and those who have registered for updates. The communication could also include notifications issued to the local press and, where appropriate, notification letters/emails to local residents and businesses that may be impacted.

4.3.12 Notification letters/emails will contain the following information:

- Name and contact details of relevant Project personnel;
- Estimated commencement date for deliveries;
- Duration of delivery period;
- Estimated times of deliveries;
- Any details of the route (where appropriate); and
- Request to keep the highway clear of parked cars during the delivery period (where appropriate).

4.3.13 Efforts will be made to work with local stakeholders to ensure disruption caused by AIL deliveries is minimised. Such stakeholders include, but are not limited to:

- Schools;
- Local bus operators, including school bus operators;
- Local doctors, surgeries and health providers;
- Holiday accommodation owners;

- Royal Mail;
- Leisure centres; and
- Churches.

4.3.14 Contact with these stakeholders will be made in advance of planning AIL deliveries.

Other Construction Vehicles

4.3.15 A range of construction vehicles will be required for the Project and will use the public highway network. The majority of construction materials will be transported to construction sites by HGVs. These are vehicles with a gross vehicle weight of over 3.5 tonnes and include low-loader vehicles used to transport larger items, such as excavators, construction mats and welfare units, and rigid tipper lorries used to transport aggregate and stone. LGVs, which are vehicles with a gross vehicle weight of 3.5 tonnes or less, including vans, will also be used to transport smaller materials, equipment and site personnel to and from construction sites.

4.3.16 In accordance with commitment AQ13 in **Application Document 7.3 Register of Environmental Actions and Commitments**, plant and construction vehicles (not including construction worker private vehicles) will conform to relevant applicable standards for the vehicle type.

4.3.17 Table 4.1 details the vehicle types considered in the access assessments undertaken for each PAR, and the infrastructure it is assumed they will be providing construction access to.

Table 4.1 – Vehicle types permitted on each PAR

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 1A	A1079 Beverley Bypass East (between A164/A1079 Interchange and BM 001)	A	East Riding of Yorkshire	4AF1-8	All vehicles	Large mobile crane
PAR 1B	A1079 Beverley Bypass East (east of BM 001)	A	East Riding of Yorkshire	4AF1-8	All vehicles	N/A
PAR 2	A1079 Beverley Bypass West	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 3	A164 - north of A1079	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 4	A164 Beverley Road - between A1079 and Dunflat Road	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 5	Dunflat Road	A	East Riding of Yorkshire	4AF9-15	All vehicles	N/A
PAR 6	A164 - between Dunflat Road and B1233/A164 Roundabout	A	East Riding of Yorkshire	4AF1-8	All vehicles	Large mobile crane
PAR 7	Main Street	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 8	Little Weighton Road	A	East Riding of Yorkshire	4AF9-27	All vehicles	N/A
PAR 9	A164 - between B1233/A164 Roundabout and A164/Riplingham Road Roundabout	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 10A	Riplingham Road - between A164/ Riplingham Road Junction and Rowley Road	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 10B	Riplingham Road (west of Rowley Road)	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 11	Rowley Road	A	East Riding of Yorkshire	4AF16-28	All vehicles	N/A
PAR 12	A164 - between A164/Riplingham Road Roundabout and Wingfield Farm Roundabout	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 13	Lambwell Hill	A	East Riding of Yorkshire	4AF30- 36 4ZQ79A-75 as well as modification works to some existing pylons	All vehicles	N/A
PAR 14	Westoby Lane	A	East Riding of Yorkshire	N/A	LGV	N/A
PAR 15	Brick Dike Lane	A	East Riding of Yorkshire	N/A	LGV	N/A
PAR 16	B1230 - Hunsley Road	A	East Riding of Yorkshire	N/A	LGV	Large mobile crane
PAR 17	A1034 - between Hunsley Road and A1079/A1034 Roundabout (North)	A	East Riding of Yorkshire	N/A	All vehicles	
PAR 18	A1034 - between Hunsley Road and Beverley Road (South)	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 19	A1034 - Beverley Road and A63	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 20	Beverley Road	A	East Riding of Yorkshire	N/A	LGV	N/A
PAR 21	Ellerker Road	A	East Riding of Yorkshire	4AF30-36 4ZQ79A-75 as well as modification works to some existing pylons.	All vehicles	N/A
PAR 22	A63 Petuaria Way (South)	A	National Highways	N/A	All vehicles	Large mobile crane
PAR 23	Brantingham Road	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 24A	Brough Road - between A1034 Roundabout and Brantingham Road	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 24B	Brough Road (South of Brantingham Road)	A	East Riding of Yorkshire	4ZQ74-65 4AF48-49 as well as modification and dismantling works to some existing pylons	All vehicles	Large mobile crane
PAR 25	A63 Petuaria Way (West)	A	National Highways	N/A	All vehicles	Large mobile crane
PAR 26	Ings Lane	A	East Riding of Yorkshire	4AF50-54	LGV	N/A
PAR 26B	Main Street	A	East Riding of Yorkshire	4AF55-57	All vehicles	N/A
PAR 27	Carr Lane	A	East Riding of Yorkshire	4ZQ64 4AF50-65 as well as modification and dismantling works to some existing pylons	All vehicles	N/A

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 28	Tongue Lane	A	East Riding of Yorkshire	4AF59-69	All vehicles	Large mobile crane
PAR 29	B1230 Main Road (East)	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 30	M62	A	National Highways	N/A	All vehicles	Large mobile crane
PAR 31	A161 Tom Pudding Way / A161 Normandy Way	B	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 32	A161 Swinefleet Road	B	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 33	A161 Kings Causeway	B	East Riding of Yorkshire	4AF78-98	All vehicles	Large mobile crane
PAR 34	Pennyhill Cottages	B	East Riding of Yorkshire	4AF78-83	LGV	N/A
PAR 35	Main Street	B	East Riding of Yorkshire	N/A	LGV	N/A
PAR 36	High Street	B	East Riding of Yorkshire	N/A	LGV	N/A
PAR 37	A161 Field Lane (North of Eastoft)	B	North Lincolnshire	4AF78-98	All vehicles	Large mobile crane
PAR 38	Luddington Road	B	North Lincolnshire	4AF84-96	LGV	N/A
PAR 39	Carr Lane	B	North Lincolnshire	4AF95-98	LGV	N/A
PAR 40	B1392 Meredyke Road	B	North Lincolnshire	4AF95-111	LGV	N/A
PAR 41	Washinghall Lane	B	North Lincolnshire	4AF99-114	All vehicles	N/A
PAR 42	Carr Lane	B	North Lincolnshire	4AF99-111	All vehicles	Large mobile crane
PAR 43	B1392 Luddington Road	B	North Lincolnshire	N/A	All vehicles	Large mobile crane

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 44	A161 Crowle Road/Wharf Road - Eastoft to Ealand	B	North Lincolnshire	N/A	All vehicles	Large mobile crane
PAR 45	Outgate (West)	C	North Lincolnshire	Works to the existing ZDA overhead line	LGV	N/A
PAR 46	Bonnyhale Moor Road	C	North Lincolnshire	4AF112-118 and works to the existing ZDA overhead line	All vehicles	N/A
PAR 47	Main Street	C	North Lincolnshire	N/A	LGV	N/A
PAR 48	Bonnyhale Road	C	North Lincolnshire	4AF119-123 and works to the existing ZDA overhead line	LGV	N/A
PAR 49	Keadby Power Station internal/unnamed roads	C	North Lincolnshire	4AF119-123 and works to the existing ZDA overhead line	All vehicles	N/A
PAR 50	A161 – Between Outgate and A18 Interchange	C	North Lincolnshire	N/A	All vehicles	Large mobile crane
PAR 51	A18 Trunk Road (East)	C	North Lincolnshire	4AF127-133	All vehicles	
PAR 52	A18 High Levels Bank (West)	C	North Lincolnshire	N/A	All vehicles	Large mobile crane
PAR 53	A161 - between A18 and M180	C	North Lincolnshire	4AF126	All vehicles	N/A
PAR 54	A161 - between M180 and Belton	D	North Lincolnshire	N/A	All vehicles	Large mobile crane

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 55	King Edward Street	D	North Lincolnshire	N/A	All vehicles	N/A
PAR 56	Bracon	D	North Lincolnshire	N/A	All vehicles	N/A
PAR 57	Belton Road	D	North Lincolnshire	4AF134-148	All vehicles	N/A
PAR 58	Hollingsworth Lane	D	North Lincolnshire	4AF136-144	LGV	N/A
PAR 59	Melwood Hill (South)	D	North Lincolnshire	N/A	LGV	N/A
PAR 60	Blow Row	D	North Lincolnshire	N/A	All vehicles	N/A
PAR 61	A161 High Street - between King Edward Street and Blow Row	D	North Lincolnshire	N/A	All vehicles	Large mobile crane
PAR 62	Rectory Street	D	North Lincolnshire	N/A	All vehicles	N/A
PAR 63	Melwood Hill (North)	D	North Lincolnshire	4AF136-154	All vehicles	N/A
PAR 64	Newland Lane	D	North Lincolnshire	4AF146-148	LGV	N/A
PAR 64B	Newland Lane 2	D	North Lincolnshire	4AF136-148	All vehicles	N/A
PAR 65	A161 Epworth Road	D	North Lincolnshire	N/A	All vehicles	Large mobile crane
PAR 66	Burnham Road (West)	D	North Lincolnshire	4AF149-154	LGV	Large mobile crane
PAR 67	Church Walk	D	North Lincolnshire	N/A	LGV	N/A
PAR 68	East Lound Road	D	North Lincolnshire	4AF149-158	LGV	N/A
PAR 69	Brackenhill Road / East Lound Road	D	North Lincolnshire	4AF149-158	All vehicles	N/A

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 70	B1396 Tower Hill	D	North Lincolnshire	N/A	All vehicles	N/A
PAR 71	A161 Haxey Lane	D	North Lincolnshire	N/A	All vehicles	Large mobile crane
PAR 72	Ferry Road/Main Street	D	North Lincolnshire	4AF155-161	All vehicles	N/A
PAR 73	Stockwith Road	D	North Lincolnshire	4AF159-166	All vehicles	N/A
PAR 74	A161 Station Road	D	North Lincolnshire	4AF163-166	All vehicles	Large mobile crane
PAR 75	Tindale Bank Road	D	North Lincolnshire	4AF167-171	All vehicles	Large mobile crane
PAR 76	A161 Haxey Road	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 77	Cornley Road	E	Nottinghamshire	4AF172-186	All vehicles	N/A
PAR 78	Carr Lane	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 79	B1403 Church Street	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 80	Cattle Road	E	Nottinghamshire	4AF175-186	LGV	N/A
PAR 81	A161 High Street to A161/A631 Roundabout	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 82	B1403 Gringley Road	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 83	B1403 Fountain Hill	E	Nottinghamshire	4AF175-191	All vehicles	N/A
PAR 85	B1403 Walkeringham Road	E	Nottinghamshire	4AF175-191	All vehicles	N/A
PAR 86	A631 (Gringley on the Hill West)	E	Nottinghamshire	N/A	All vehicles	Large mobile crane

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 87	A631 (Gringley on the Hill East)	E	Nottinghamshire	4AF187-201	All vehicles	Large mobile crane
PAR 88	A631 - between A161/A631 Roundabout and Wood Lane	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 89	A631 - between Wood Lane and A620/A631 Roundabout	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 90	Wood Lane	E	Nottinghamshire	4AF192-201	LGV	N/A
PAR 91	A620 - between A620/A631 Roundabout to Saundby/Sturton/ Gainsborough Road Roundabout	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 92	Sturton Road	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 93	Gainsborough Road	E	Nottinghamshire	4AF202-210	All vehicles	N/A
PAR 94	Station Road	E	Nottinghamshire	4AF209-218	All vehicles	N/A
PAR 95	Wheatley Road	E	Nottinghamshire	4AF209-218	LGV	N/A
PAR 96	Sturton Road	E	Nottinghamshire	N/A	LGV	N/A
PAR 97	Low Street	E	Nottinghamshire	N/A	LGV	N/A
PAR 98	A620 - Gainsborough Road	E	Nottinghamshire	4AF192-208	All vehicles	N/A

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 99	A620 - between Low Street in North Wheatley to Spital Hill in Retford	E	Nottinghamshire	N/A	All vehicles	Large mobile crane
PAR 100	A620 Amcott Way	E	Nottinghamshire	N/A	All vehicles	Large mobile crane
PAR 101	Cross Street	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 102	Springs Lane	E	Nottinghamshire	4AF211-218	LGV	N/A
PAR 103	Retford Road 3	E	Nottinghamshire	4AF219-228	All vehicles	Large mobile crane
PAR 104	Leverton Road / Spital Hill	E	Nottinghamshire	N/A	All vehicles	Large mobile crane
PAR 105	A638 Arlington Way/London Road	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 106	A638 Great North Road - To the A1	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 107	Cocking Lane	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 108	Town Street / Forewood Lane	E	Nottinghamshire	4AF223-232	All vehicles	N/A
PAR 109	Wood Lane / Main Street	E	Nottinghamshire	N/A	LGV	N/A
PAR 110	Grove Road	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 111	Lady Well Lane	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 112	Main Street	E	Nottinghamshire	4AF223-240	All vehicles	N/A
PAR 113	Hazelwood Lane	E	Nottinghamshire	4AF229-234	All vehicles	N/A

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 114	Ashley Lane	E	Nottinghamshire	NA	All vehicles	N/A
PAR 115	Retford Road (North of Rampton Hospital)	E	Nottinghamshire	4AF229-234	All vehicles	N/A
PAR 116	Laneham Road	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 117	A57 Broad Gate	E	Nottinghamshire	N/A	All vehicles	Large mobile crane
PAR 118	A57 – between Darlton Road and BM 52/53	E	Nottinghamshire	4AF244-255	All vehicles	Large mobile crane
PAR 119	A57 - between BM 52/53 and PAR 120	E	Nottinghamshire	4AF244-255	All vehicles	Large mobile crane
PAR 120	A57 – between PAR 119 and Laneham Road	E	Nottinghamshire	N/A	All vehicles	Large mobile crane
PAR 121	A57 - between A57/Main Street Junction East	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 122	Main Street	F	Nottinghamshire	N/A	All vehicles	N/A
PAR 123	Retford Road (East Drayton)	E	Nottinghamshire	4AF236-243	All vehicles	N/A
PAR 124	Top Street / Darlton Road	E	Nottinghamshire	4AF241-247	All vehicles	N/A
PAR 125	Dale Road	A	East Riding of Yorkshire	4AF30-36 4ZQ79A-75	LGV	N/A
PAR 126	Willow Flats	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 127	Ellerker Lane	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 128	Norfolk Bank Lane	A	East Riding of Yorkshire	4AF42-54	All vehicles	N/A

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 129	Common Road	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 130	Wallingfen Lane	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 131	Staddlethorpe Lane	A	East Riding of Yorkshire	4AF66-77	All vehicles	N/A
PAR 132	Thornton Dam Lane / Scalby Lane	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 133	Meredyke Road East - between Carr Lane and B1392 Shore Road	B	North Lincolnshire	N/A	LGV	N/A
PAR 134	B1392	B	North Lincolnshire	N/A	LGV	N/A
PAR 135	Meredyke Road (West)	B	North Lincolnshire	4AF78-111	All vehicles	N/A
PAR 136	B1392 Eastoft Road	B	North Lincolnshire	N/A	All vehicles	N/A
PAR 137	Outgate East	C	North Lincolnshire	4AF119-123 and works to the existing ZDA overhead line	All vehicles	N/A
PAR 138	Greengate	D	North Lincolnshire	N/A	LGV	N/A
PAR 139	Fledborough Road	F	Nottinghamshire	4AF248-255	All vehicles	N/A
PAR 140	A15 (from Wingfield Farm Roundabout to A180 Interchange)	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 141	A63 (from A15 Interchange to A1079)	A	National Highways	N/A	All vehicles	N/A

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 142	M62 (from A614 Interchange to M18 Interchange)	B	National Highways	N/A	All vehicles	Large mobile crane
PAR 143	M180 - between M18 Interchange and A161	C	National Highways	N/A	All vehicles	Large mobile crane
PAR 144	M180 - between A161 and M181	D	National Highways	N/A	All vehicles	N/A
PAR 145	M181	C	North Lincolnshire	N/A	All vehicles	N/A
PAR 146	M180 - between M181 Interchange and A15	D	National Highways	N/A	All vehicles	N/A
PAR 147	M180 - between A15 Interchange and A180	C	National Highways	N/A	All vehicles	N/A
PAR 149	Epworth Road North	D	North Lincolnshire	N/A	LGV	N/A
PAR 150	Epworth Road South	D	North Lincolnshire	N/A	LGV	N/A
PAR 151	Burnham Road East	D	North Lincolnshire	N/A	LGV	N/A
PAR 152	Church Street	D	North Lincolnshire	N/A	LGV	N/A
PAR 153	Leverton Road	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 154	Retford Road 1	E	Nottinghamshire	N/A	All vehicles	N/A
PAR 155	Retford Road 2	E	Nottinghamshire	4AF219-228	All vehicles	N/A
PAR 156	B1230 Main Road (West)	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane
PAR 157	A18 Althorpe Bypass	C	North Lincolnshire	4AF127-133	All vehicles	N/A

PAR	Road Name	Route Section	Highway Authority	Pylon Access	Proposed Vehicle Type	Most Onerous Anticipated AIL/Special Order Vehicles
PAR 158	Sands Lane	A	East Riding of Yorkshire	N/A	All vehicles	N/A
PAR 159	Landing Lane	A	East Riding of Yorkshire	4AF59-65	LGV	N/A
PAR 160	Pasture Lane	B	North Lincolnshire	N/A	All vehicles	N/A
PAR 161	A15 Boothferry Way	A	East Riding of Yorkshire	N/A	All vehicles	Large mobile crane

4.4 Construction Traffic

General Construction Routeing Strategy

4.4.1 Construction traffic will use the SRN and MRN to access the region and will be routed along PARs to the site access points. From these site access points; construction traffic will travel off the public highway along construction access tracks to access the construction sites.

4.4.2 Primary Access Routes are proposed to access each end of a construction access track section, allowing construction traffic to enter the construction access track at one end, travel along the construction access track and exit the other end (if required). Dead-end construction access tracks have been avoided as far as practicable.

4.4.3 The construction access tracks also form an almost continuous off-highway route, only discontinuing at obstructions such as major roads, railways and rivers. Each obstruction has been assessed individually. Construction traffic will use the continuous access tracks wherever possible to minimise construction vehicles on the public highway. Finally, the construction access tracks will be removed once the construction phase has been completed.

4.4.4 The construction access track arrangement as described above is considered to present a favourable solution for access as it reduces impacts on the highway and local community by:

- Minimising use of public highways;
- Avoiding sensitive areas such as villages and schools;
- Reducing the total number of PARs;
- Limiting the number of site access points and temporary junctions with the public highway;
- Using longer construction access tracks to route to the site predominantly via ‘A’ and ‘B’ classification roads; and
- Reducing distances travelled via minor, rural and local roads (‘C’ and unclassified roads) wherever possible.

Interaction with other developments

4.4.5 A list of highway schemes that are planned on the PARs proposed by the Project has been provided by the LHAs. Information on the highway schemes is detailed in **Application Document 7.15 Transport Assessment**.

4.4.6 The timescales for the implementation of these schemes are subject to change. The post-DCO approval CTMPs will need to be reviewed and amended through engagement with the relevant LHA and the TLG should planned highway works have a material effect on the agreed construction routeing strategy.

HGV Deliveries

4.4.7 Heavy goods vehicle movements will normally take place during the core working hours, and construction vehicles will be scheduled to arrive throughout the core working hours. Where required, vehicle movements for certain time-critical activities (those detailed in section 2.3 of this Outline CTMP) may take place outside the core working hours. HGV deliveries for activities not listed in section 2.3 of this Outline CTMP are to take place across the core working hours, with deliveries managed by the Main Works Contractor(s) to avoid concentration of movements in any particular hour, and to provide a consistent level of movements throughout the core working hours.

4.4.8 The Main Works Contractor(s) will be responsible for monitoring and managing compliance with this strategy, particularly during road network peak periods.

4.4.9 The number of HGV movements has been calculated and assessed using a comprehensive trip generation and distribution approach which is summarised within **Application Document 6.14 Environmental Statement Chapter 14 Traffic and Transport**.

4.4.10 These movements have been determined against the construction programme presented in **Application Document 6.4 Environmental Statement Chapter 4 Description of the Project** and will therefore be subject to change upon finalisation of the construction programme by the Main Works Contractor(s). The vehicle volumes are considered robust, also factoring in a 25% contingency as referenced in **Application Document 7.15 Transport Assessment**.

4.4.11 The construction vehicle traffic movements will be managed though the monitoring and management mechanisms outlined in Chapter 6 of this Outline CTMP. Given the robust arrangements that would be available to monitor and review these traffic movements, the comprehensive trip generation and distribution approach and the proposed mitigation measures, a cap on HGV numbers is not considered necessary.

Contingency Routes

4.4.12 There may be circumstances, such as those listed below, where traffic movements on the PARs may be compromised. These may include:

- Traffic or other similar incident on the PAR that disrupts the normal operation of the highway network or results in the closure of the PAR;
- A breakdown of an HGV on the way to an authorised access point;
- Work requested to be completed out of hours by a third party such as the relevant highway authority or Network Rail;
- Emergency health and safety incidents; and
- Planned or emergency highway works.

4.4.13 In the event of any incident occurring which impacts on the safe and efficient operation of the PARs, additional mitigation measures will be considered, which could include the use of contingency routes. Contingency routes will be provided by previously established traffic diversions, and diversions as set out by National Highways, the relevant LHAs and the police.

4.4.14 In addition, the Main Works Contractor(s) will liaise with National Highways or the relevant LHA directly and through the TLG, to establish where pre-defined construction routes may be disrupted. Where a pre-defined construction route is subject to a physical obstruction, unexpected event or other circumstance that prevents or materially restricts its use, the Main Works Contractor(s) will liaise with National Highways and/or the relevant LHA to identify an appropriate contingency route. Where practicable, any contingency route will be consistent with the principles and routing arrangements. Where required, the Main Works Contractor(s) will propose the estimated frequency of the use of the contingency routes and share information with the LHA and at the TLG.

Construction Route Signage

4.4.15 All signage for temporary access to construction work sites will comply with relevant standards, including Traffic Signs Regulations and General Directions 2016 (Department for Transport, 2016) and Traffic Signs Manual Chapter 8: Traffic Safety Measures and Signs for Road Works and Temporary Situations (Department for Transport, 2009). The signs will follow the process of Department for Transport approval. The signs will include the name of the Project, to differentiate them from signs relating to other projects within the area. All signage to be placed in highway land is to be agreed with the highway authority.

4.4.16 The following signage is proposed:

- **PAR and site access point signs**: Temporary signage will be erected along construction routes on the public highway to provide access (directional) route information. Temporary signage will be provided in the vicinity of each site access and crossover point which will provide warning to other road users of the likely presence of construction vehicles, including temporary speed limits (where appropriate). Where appropriate, public roads that are not prescribed as PARs will be signed to indicate they are not to be used by construction traffic. Signage will be provided on sections of the SRN, MRN and PARs which may be subject to temporary traffic congestion and delay at peak periods.
- **Construction access track signs**: Similarly to the above, temporary signage will be erected along the construction access tracks within the working area where necessary. The signage will provide drivers with information on distances to destination and warning (hazard) information relating to potential vehicle conflict or pedestrian conflict areas (for example, crossover points of public highways and PRoWs).
- **Temporary diversion signs**: For traffic diversion routes, temporary signage will be installed in accordance with relevant signage design guidance.
- **Road closure signs**: Where temporary road or lane closures are required, clear and prominent regulatory signage will be deployed in advance of the affected areas. These signs will guide traffic onto designated alternative routes and provide clear notification of the closure durations and affected vehicle types in compliance with highway authority requirements.

4.4.17 The Main Works Contractor(s) will undertake regular maintenance checks to report and rectify any defects with signage. Members of the public will also be able to report issues related to signage through the reporting arrangements set out in Section 3.4.

4.5 Site Access Points

4.5.1 Site access points have been assessed based on site-specific constraints and highway safety considerations. The locations of the site access points off the public highway are generally close to the proposed overhead line construction. The most suitable location for the site access point, and access to the construction access tracks, has been determined with consideration of road geometry, junction visibility and other site-specific constraints. Locations have, where appropriate, been chosen to minimise the impact on trees and hedgerows. Existing land/field accesses have been used where they are considered to be suitable locations as determined by the above assessment criteria. When forming site access points, connectivity for active travel users (footways and cycleways) will be preserved, where safe and practicable.

4.5.2 The site access point layouts are designed to allow for two-way HGV movements to occur; that is, an HGV can enter the junction while a second HGV is waiting to exit and vice-versa.

4.5.3 Site access points requiring highway widening have been assessed through detailed swept path analysis to inform the access designs. For other site access points, a swept path assessment has been undertaken for a generic bi-directional arrangement capable of accommodating the anticipated HGV movements and allowing vehicles to pass. Where larger vehicles, such as cranes or AILs, require the full site access area to manoeuvre, appropriate traffic management measures will be implemented to facilitate these infrequent movements. Any necessary traffic management arrangements will be agreed with the appropriate LHA, where required.

4.5.4 Security fencing and gates are proposed where required for site access points to secure the works area, the construction corridor and construction access tracks. Security gates are to be set back from the edge of the carriageway to allow for vehicles transitioning between the works area and public highway to stop outside the gate while not impeding the public highway. An illustrative site access point layout, including tracking of construction vehicles, visibility splays and fencing arrangements, is provided in **Application Document 2.12 Typical Design Drawings.**

4.5.5 Where feasible, site access points will be constructed directly from the highway using temporary traffic management measures, including temporary road closures where necessary. In some locations, where it is not practicable to construct an access point directly from the highway, the construction access track may first be established from an alternative construction access point or bellmouth. This would enable the access point to subsequently be constructed from the rear, such as may be required for crossovers

4.6 Crossover Points

4.6.1 Crossover points are locations where construction access tracks intersect the public highway to enable construction traffic to cross the highway. These locations are not proposed for routine construction HGV access to or from the public highway, except in emergency situations. Where a crossover point intersects a PAR, LGVs will be permitted to enter and exit the public highway.

4.6.2 The crossover points also allow emergency vehicles to access the construction access tracks from the public highway.

4.6.3 The locations for crossover points were selected based on road geometry, the suitability of the road to facilitate the passing of HGVs, visibility and other site constraints. Where possible, these points were positioned to minimise the impact on existing trees and hedgerows. Where visibility or other constraints cannot be fully avoided, appropriate temporary traffic management measures will be implemented to manage vehicle movements safely.

4.6.4 Where a crossover point intersects a PRoW, the management of vehicles and usage of gates will be followed as per **Application Document 7.6 Outline Public Rights of Way Management Plan**.

4.6.5 In the event that a construction access track is blocked due to unforeseen circumstances, resulting in a site location becoming inaccessible from a site access point, access may be facilitated via an alternative crossover point, subject to an assessment of its suitably. Where an alternative crossover point is used by construction traffic, appropriate temporary traffic management measures will be implemented to ensure the safe movement of vehicles to and from the public highway. The affected construction access track will be reinstated as soon as reasonably practical.

4.6.6 At crossover points, construction traffic will 'give way' to the public highway traffic. At locations where temporary traffic signals are proposed, the impact of these traffic management measures will be monitored and managed, with priority given to the flow of traffic on the public highway.

4.7 Construction Compound Access Points

4.7.1 Construction compounds are required at locations along the length of the Project to ensure provision of welfare, storage, and messroom facilities for site operatives. Table 4.2 provides information about the proposed access routes to each of the compounds.

4.7.2 Compounds will be used to service specific sections of construction. The function of the compound may differ depending on the construction works it services. The indicative locations for each compound are shown in **Application Document 6.4 F3 Environmental Statement Figure 4.3 Temporary Construction Works**.

Table 4.2 – Construction compound access points

Compound	Primary Access Route
S-1 Satellite compound located on land west of Creyke Beck Substation, Cottingham, East Riding of Yorkshire	A1079 Beverley Bypass (PAR 1A) A1079 Beverley Bypass East (PAR 1B) A164 – Between Dunflat Road and B1233/A164 Roundabout (PAR 6)
M-1 Main compound located on land north of Whin Moor Lane, Ellerker, East Riding of Yorkshire	Brough Road (PAR 24B)
S-2 Satellite compound located on land to the west of Wienerberger Ltd Factory, Broomfleet, East Riding of Yorkshire	Tongue Lane (PAR 28)

Compound	Primary Access Route
S-3 Satellite compound located on land to the south of the village of Ousefleet, East Riding of Yorkshire	A161 Kings Causeway (PAR 33) / A161 Field Lane (North of Eastoft) (PAR 37)
M-2 Main compound located on land to the west of Ealand farm, Ealand, North Lincolnshire	Bonnyhale Moor Road (PAR 46) / Outgate East (PAR 137)
S-4 Satellite compound located on land to the north of Misterton Holiday Park, Misterton, Nottinghamshire	Tindale Bank Road (PAR 75)
M-3 Main compound located on land to the north of the A631, Beckingham, Nottinghamshire	B1403 Fountain Hill (PAR 83) / B1403 Walkeringham Road (PAR 85) / A631 (Gringley on the Hill East) (PAR 87)
S-6 Satellite compound located on land to the west of the High Marnham Substation, Newark, Nottinghamshire	A57 - B- between Darlton Road and BM 127 (PAR 118) / A57 - B- between BM 127 and BM 126 (PAR 119) / Fledborough Road (PAR 139)
S-5 Satellite compound located on land to the north of Retford Road, Retford, Nottinghamshire	Retford Road 2 (PAR 155)

4.8 Construction Access Track Design

4.8.1 A single way construction access track would typically be 4 m wide, and typically up to 8 m wide at passing places, which, coupled with the area for soil storage and drainage between the track and the fence line, would give a typical swathe of 12 m. Access tracks would be stone laid on a geotextile membrane. A typical layout of a stone construction access track is shown on **Application Document 2.12 Typical Design Drawings - Illustrative Stone Access Road Sheet 13 of 20**.

4.8.2 Other accesses may also be used comprising interlocking panels, depending on ground conditions and the duration and type of use. A typical layout of an interlocking panel access track is shown on **Application Document 2.12 Typical Design Drawings - Illustrative Interlocking Panel Access Sheet 15 of 20**. The Main Works Contractor(s) once appointed may adopt different construction methods, such as soil stabilisation (subject to local conditions) or transport techniques that would not result in materially new or different impacts to those assessed.

4.8.3 For the assessment of access track construction, it is currently assumed, in accordance with **Application Document 7.5 Outline Soil Management Plan**, that topsoil and where required some subsoil, would be stripped and stockpiled adjacent to the proposed access track or haul road. Geotextile would then be placed over the exposed ground, with aggregate, such as stone, subsequently delivered to site by HGVs and placed to form the access track.

4.8.4 Speed limits will be enforced on all construction access tracks. The speed limits are not defined at this stage and will vary depending on site-specific and sectional conditions. These will typically include limits up to a maximum speed of 20 mph.

4.9 Traffic Management

4.9.1 Traffic management will be used on the public highway, and construction access tracks where appropriate, to maintain public and/or workforce safety. This will primarily occur during construction and removal of site access points when erecting or dismantling scaffolding, for the safe operation of site access points and crossover points, and at locations on the PARs where mitigation measures are required. In addition, the following would also be implemented:

- Overtaking restrictions at bellmouths will be in for the duration of the works;
- Although temporary speed limits only for construction will be used (e.g. a single lane closure with a 30mph speed limit), the majority of speed limit reductions will be in for the duration of the works; and
- Parking suspensions will either be in for the duration of the works, or during enabling works only.

4.9.2 Instances other than those detailed above may arise where traffic management on the public highway and construction access tracks is required.

4.9.3 Traffic management will be provided in accordance with Traffic Signs and General Directions 2016 and Traffic Signs Manual Chapter 8: Traffic Safety Measures and Signs for Road Works and Temporary Situations (Department for Transport, 2009), proportionate to the type of road, duration of works and volume of traffic. Traffic management measures may include temporary traffic signals or stop/go boards.

4.9.4 In some instances, there will be the need for road closures, particularly on narrow or single track roads. In these locations the following measures would apply:

- Vehicular access to and from residential, commercial, community and agricultural land uses will be maintained throughout construction, so far as it is reasonably practicable and safe to do so, or as otherwise agreed with affected landowners and occupiers. Pedestrian access will be maintained.
- Where practicable, temporary traffic management measures (including single lane running, temporary traffic signals or stop/go boards) will be used to maintain access and avoid the need for road closures. Where appropriate and subject to agreement with the relevant local authority, works may be undertaken outside peak traffic periods, including overnight or outside standard business hours, to reduce disruption to road users and affected receptors.
- Where road closures are required for safe construction, the extent and duration of such closures will be minimised. Where reasonably practicable, suitable diversion routes have been provided. This may include programming works outside peak hours or normal business hours, including overnight working where appropriate and agreed with the relevant local authority.
- In circumstances where diversion routes are not reasonably practicable, including on single-access or no-through roads, access will be managed through controlled access arrangements. These may include temporary time-restricted closures, escorted access, or pre-arranged access periods agreed with affected parties and the relevant LHA.

- Where controlled access arrangements could result in disruption, particularly for residential occupiers, businesses or agricultural operations, further/enhanced mitigation measures may be considered in consultation with affected parties. These may include alternative access provision, changes to construction programming or working methodologies, or other bespoke arrangements.
- All affected parties will be informed of access arrangements in advance of works commencing and will be provided with advance notice of any changes to access restrictions. Pedestrian and emergency access will be maintained at all times.
- Where agricultural land is affected, alternative field and field-to-field access arrangements will seek to be provided in consultation with the landowner or occupier.

4.9.5 LHAs will be informed through the appropriate permit schemes, including the submission and management of relevant street works permit applications through the DfT Street Manager system, and through discussion at the TLG of all traffic management measures proposed to be put in place on the public highway. It is anticipated that this information will be publicly available on the Project website and the relevant LHA's website. This would include information on road closures, traffic management, temporary speed restrictions, and information on planned AIL movements.

4.9.6 National Grid will use reasonable endeavours to inform other relevant stakeholders (such as Royal Mail or blue light services) of any road closures, diversions or access arrangements that are considered to impact their operations, at the earliest possible opportunity.

4.9.7 A full list of the proposed traffic management measures is detailed in the following schedules of **Application Document 3.1 Draft Development Consent Order** and shown on **Application Document 2.6 Access Rights of Way and Public Rights of Navigation Plans** and **Application Document 2.5 Traffic Regulation Order Plans**:

- Schedule 4 – Streets Subject to Street Works;
- Schedule 5 – Streets subject to Alteration of Layout;
- Schedule 6 – Streets and PRoWs to be Temporarily Closed;
- Schedule 7 – Access to Works; and
- Schedule 11 – Temporary Traffic Regulations Orders.

Road Closures and Diversion Routes

4.9.8 Where diversions are necessary (due to temporary closure of roads), they will adopt the principle that they will use the same classification of highway, or higher where practicable and available. A full point-to-point diversion on public roads, using the shortest practicable route, will be provided so that all vehicles that will usually and legitimately use a road can continue to use it to complete their journey. Diversion routes will also be selected having regard to capacity, road geometry, existing traffic conditions, the suitability of the route for the types of vehicles expected to use it, and other relevant constraints. The means of access will be communicated to the relevant highway authorities and emergency and essential services.

4.9.9 Temporary road closures may be required for the proposed overhead line stringing, construction of highway alternation works, construction of site access points and modifications to third-party services. Other roads are expected to be managed through Managed/Road Open/Single Lane Running/Single Lane Running with widening, avoiding the need to close the road. Table 4.3 lists the proposed diversion routes and these are illustrated on **Application Document 2.6 Access Rights of Way and Public Rights of Navigation Plans**. Where no diversion is available, the measures set out in Section 4.9 will be implemented to manage the impacts of the road closure.

Table 4.3 – Road closures and diversion routes

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
A164/Beverley (PAR 6) – East Riding of Yorkshire	250 m	2x 1 day (stringing – road crossings installation and removal)	Route A: 35.0 km Route B: 34.0 km	Route A: At the roundabout, take the 1st exit onto A1079 3.55 km At the roundabout, take the 1st exit and stay on A1079 -1.76 km At the roundabout, take the 2nd exit onto Raich Carter Wy./A1033 - 1.00 km At the roundabout, take the 2nd exit and stay on Raich Carter Wy./A1033 - 371 m At the roundabout, take the 3rd exit onto Thomas Clarkson Way/A1033 - 1.39 km At the roundabout, take the 2nd exit onto Ennerdale/A1033 - 231 m At the roundabout, take the 1st exit onto Sutton Rd/A1033 - 875 m At the roundabout, take the 3rd exit onto Holwell Rd/A1033 - 1.04 km At the roundabout, take the 2nd exit onto Stoneferry Rd/A1033 - 386 m At the roundabout, take the 2nd exit onto Stoneferry Rd/A1165 - 324 m At the roundabout, take the 2nd exit and stay on Stoneferry Rd/A1165 - 840 m At the roundabout, take the 2nd exit onto Mount Pleasant/A1033Go through 1 roundabout - 1.57 km At the roundabout, take the 2nd exit onto A1033 - 160 m At the roundabout, take the 3rd exit onto the A63 slip road to M62/Leeds/Humber Brg/City Centre - 431 m Merge onto Roger Millward Way/A63 - 371 m Keep right to stay on Roger Millward Way/A63Continue to follow A63 - 1.36 km Keep right to stay on A63 - 895 m Keep right to continue on Clive Sullivan Way/A63 - 8.43 km Take the A15 slip road to York/Beverley/Humber Br/A164 - 226 m Turn left onto A15 - 645 m At the roundabout, take the 3rd exit onto Boothferry Rd/A15 - 541 m At Wingfield Farm Roundabout, take the 1st exit onto A164 - 1.63 km At the roundabout, take the 2nd exit and stay on A164 - 2.44 km At the roundabout, take the 2nd exit and stay on A164 - 1.44 km At the roundabout, take the 2nd exit and stay on A164 - 1.03 km At the roundabout, take the 1st exit and stay on A164 - 418 m At the roundabout, take the 1st exit and stay on A164 - 1.64 km Enter the roundabout Route 2: Route B (Drive 34 km, 38 minutes): At the roundabout, take the 2nd exit and stay on A164 - 1.04 km At the roundabout, take the 2nd exit and stay on A164 - 1.40 km At the roundabout, take the 2nd exit and stay on A164 - 2.46 km At the roundabout, take the 2nd exit and stay on A164 - 1.64 km At Wingfield Farm Roundabout, take the 3rd exit onto Boothferry Rd/A15 - 648 m At the roundabout, take the 3rd exit onto A15 - 221 m Merge onto Clive Sullivan Way/A63 via the slip road to Hull/A15/Bridlington/A165Continue to follow A63 - 8.82 km Continue straight to stay on A63 - 1.76 km Keep right to continue on Roger Millward Way/A63 - 478 m Take the A1033 slip road to Bridlington/York/Beverley/Alexandra/Dock - 270 m	Route A: 39 mins Route B: 38 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
				At the roundabout, take the 2nd exit onto Mount Pleasant/A1033Go through 1 roundabout - 1.60 km At the roundabout, take the 2nd exit onto Stoneferry Rd/A1165 - 859 m At the roundabout, take the 1st exit and stay on Stoneferry Rd/A1165 - 301 m At the roundabout, take the 2nd exit onto Stoneferry Rd/A1033 - 333 m At the roundabout, take the 2nd exit onto Holwell Rd/A1033 - 896 m At the roundabout, take the 1st exit onto Sutton Rd/A1033 - 906 m At the roundabout, take the 3rd exit onto Ennerdale/A1033 - 261 m At the roundabout, take the 2nd exit onto Thomas Clarkson Way/A1033 - 1.35 km At the roundabout, take the 2nd exit onto Raich Carter Wy./A1033 - 361 m At the roundabout, take the 2nd exit and stay on Raich Carter Wy./A1033 - 898 m At the roundabout, take the 2nd exit onto A1079 - 1.87 km At the roundabout, take the 2nd exit and stay on A1079 - 3.57 km At the roundabout, take the 3rd exit onto A164 -167 m	
Dunflat Road (PAR 5) – East Riding of Yorkshire	140 m	2x 5 days (BM construction and removal)	16.0 km	Head east on Dunflat Rd toward A164 Merge onto A164 - 1.57 km At the roundabout, take the 4th exit and stay on A164 - 3.38 km At the roundabout, take the 3rd exit - 138 m Continue onto Main St Go through 1 roundabout - 1.15 km Turn right onto Little Weighton Rd - 2.14 km Continue onto Risby Hill - 352 m Continue onto Skidby Rd - 174 m Turn right onto Walkington Rd - 1.91 km Continue onto Little Weighton Rd - 931 m Turn left onto Townend Rd - 422 m Turn right onto W End/B1230 - 1.43 km Turn right onto Coppleflat Ln- 2.18 km Slight right - 564 m Continue onto Dunflat Rd Destination will be on the left- 61 m	22 mins
Little Weighton Road (PAR 8) – East Riding of Yorkshire	430 m	2x 10 days (BM construction and removal) 2x 1 day (stringing – road crossings installation and removal)	16.0 km	Head west on Little Weighton Rd - 475 m Continue onto Risby Hill - 352 m Continue onto Skidby Rd - 174 m Turn right onto Walkington Rd - 1.91 km Continue onto Little Weighton Rd - 931 m Turn left onto Townend Rd - 422 m Turn right onto W End/B1230 - 1.43 km Turn right onto Coppleflat Ln - 2.18 km Slight right - 564 m Continue onto Dunflat Rd - 367 m Merge onto A164 - 1.57 km	22 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
				At the roundabout, take the 4th exit and stay on A164 - 3.38 km At the roundabout, take the 3rd exit - 138 m Continue onto Main St Go through 1 roundabout - 1.15 km Turn right onto Little Weighton Rd Destination will be on the right - 1.15 km	
Rowley Road (PAR 11) – East Riding of Yorkshire	570 m	2x 10 days (BM construction and removal) 2x 1.5 days (stringing – road crossings) installation and removal 2x 8 days (highway widening and reinstatement) 29 days (third party works)	7.2 km	Traffic heading north on Rowley Rd Head towards Riplingham Rd Turn right onto Westoby Ln Turn right onto Comberdale Hill Turn right onto White Gap Rd Turn right to rejoin Rowley Rd Traffic heading south on Rowley to follow reverse journey route to rejoin Riplingham Rd.	8 minutes
Riplingham Road (PAR 10A / PAR 10B) – East Riding of Yorkshire	475 m	2x 1.5 days (stringing – road crossings) installation and removal 28 days (third party works)	Route A: 15.4 km Route B: 11.6 km Route C: 11.6 km	Route A: Traffic heading north on Lambwell Hill Continue on Westoby Ln Turn right onto Comberdale Hill Turn right onto White Gap Rd Continue onto Old Village Rd Continue onto Skidby Rd Continue onto Risby Hill Continue onto Little Weighton Rd Little Weighton Rd turns left and becomes Main St At the roundabout, take the 3rd exit onto Beverley Rd Continue on Westfield Rd Turn right to rejoin Riplingham Rd Route B: Traffic to head north on Rowley Rd Turn left onto White Gap Rd Turn left onto Comberdale Hill Turn left onto Westoby Ln to continue onto Lambwell Hill Route C: Traffic to head north on Rowley Rd Turn right onto Old Village Rd Continue onto Skidby Rd Continue onto Risby Hill Continue onto Little Weighton Rd Turn left onto Main St At the roundabout, take the 3rd exit onto Beverley Rd Continue on Westfield Rd to rejoin Riplingham Rd	Route A: 17 mins Route B: 7 mins Route C: 13 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
Lambwell Hill (PAR 13) – East Riding of Yorkshire	270 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 4 days (highway widening and reinstatement) 19 days (third party works)	12.0 km	Head south on Lambwell Hill toward Elloughton Dl - 1.16 km Continue onto Wauldby Rd - 3.05 km Turn left onto Kidd Ln - 322 m Turn right onto Cowgate - 499 m Turn right onto Welton Rd - 295 m Turn right onto Welton Low Rd - 1.29 km Turn right onto Main St - 191 m Continue onto Brantingham Rd - 1.21 km Turn right onto The Outgang - 268 m Turn right onto Main Rd - 387 m Continue onto Dale Rd - 3.00 km Turn right - 511 m Turn right onto Lambwell Hill - 8 m	15 mins
Dale Road (PAR 125) – East Riding of Yorkshire	250 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	11.0 km	Traffic from Diamond Cottage to head north Turn left onto Beverley Rd Turn left onto Comberdale Hill Comberdale Hill turns slightly left and becomes Beverley Rd Turn left onto Market Pl/A1034 Continue to follow A1034 At the roundabout, take the 2nd exit onto Cave Rd Turn left onto The Outgang Turn right onto Main Rd Continue to rejoin Dale Rd Traffic heading north on Dale Rd to follow reverse journey route to rejoin Beverley Rd	13 mins
A63 Petuaria Way (PAR 22) – East Riding of Yorkshire	890 m	2x 1 day (installation and removal of crossing protection)	Route A: 42.0 km Route B: 39.0	Route A: Head east towards A1034 - 198 m Turn left onto A1034 - 11.8 km At the roundabout, take the 3rd exit onto A1079 - 12.7 km At Killingwoldgraves Roundabout, take the 3rd exit and stay on A1079 - 3.95 km At the roundabout, take the 3rd exit onto A164 - 3.31 km At the roundabout, take the 2nd exit - 93 m Continue onto A164Go through 1 roundabout - 1.99 km At the roundabout, take the 2nd exit and stay on A164 - 1.04 km At the roundabout, take the 2nd exit and stay on A164 - 1.40 km At the roundabout, take the 2nd exit and stay on A164 - 2.46 km At the roundabout, take the 2nd exit and stay on A164 - 1.64 km At Wingfield Farm Roundabout, take the 3rd exit onto Boothferry Rd/A15 - 648 m At the roundabout, take the 3rd exit onto A15 - 221 m	Route A: 41 mins Route B: 40 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
				Merge onto Clive Sullivan Way/A63 via the slip road to Hull/A15/Bridlington/A165Destination will be on the left - 567 m Route B: A63, North Ferriby HU14 3LD, UK Head north-west on Clive Sullivan Way/A63 - 32 m Take the A15 slip road to York/Beverley/Humber Br/A164 - 226 m Turn left onto A15 - 645 m At the roundabout, take the 3rd exit onto Boothferry Rd/A15 - 541 m At Wingfield Farm Roundabout, take the 1st exit onto A164 - 1.63 km At the roundabout, take the 2nd exit and stay on A164 - 2.44 km At the roundabout, take the 2nd exit and stay on A164 - 1.44 km At the roundabout, take the 2nd exit and stay on A164 - 1.03 km At the roundabout, take the 1st exit and stay on A164 - 418 m At the roundabout, take the 1st exit and stay on A164 - 1.64 km At the roundabout, take the 2nd exit - 84 m Continue onto A164 - 3.12 km At the roundabout, take the 1st exit onto A1079 - 3.89 km At Killingwoldgraves Roundabout, take the 2nd exit and stay on A1079 - 12.6 km At the roundabout, take the 1st exit onto Sancton Rd/A1034Continue to follow A1034 - 12.1 km At the roundabout, take the 1st exit onto the A63 slip road to Leeds/Goole/M62 - 102 m	
Ellerker Road (PAR 21) – East Riding of Yorkshire	320 m	2x 5 days (BM construction and removal) 3 days (stringing – road crossings)	2.9 km	Traffic from Ellerker Wold Ln towards Ellerker Rd Continue onto Brantingham Rd Turn left onto Cave Rd Turn left onto The Outgang Continue to rejoin Ellerker Rd Traffic heading west on Burill Ln to follow reverse journey route to rejoin Brantingham Rd	3 mins
Brough Road (PAR 24) – East Riding of Yorkshire	720 m	3 days (stringing – road crossings)	2.4 km	Traffic heading north on Cave Rd Turn right onto The Outgang Continue onto Ellerker Rd Continue onto Brantingham Rd Turn right or left to rejoin Cave Rd	3 mins
Sands Lane (PAR 158) – East Riding of Yorkshire	250 m	2x 5 days (BM construction and removal) 3 days (stringing – road crossings) 4 days (third party works)	NA	No diversion available	NA

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
Ellerker Lane (PAR 127) – East Riding of Yorkshire	200 m	2x 4 days (highway widening and reinstatement)	1.0 km	Traffic heading south on Ellerker Lane Turn right onto Willow Flats Turn right onto Stonepit Rd Head towards Cave Ln to rejoin Ellerker Ln Traffic heading north on Cave Ln to follow reverse journey route to rejoin Ellerker Ln	1 min
Norfolk Bank Lane (PAR 128) – East Riding of Yorkshire	1,350 m	2x 40 days (highway widening and reinstatement)	2.6 km	Traffic heading east Ings Ln towards Millbeck Bank Turn left onto Millbeck Bank Turn right onto Common Rd Turn right onto Ellerker Ln Continue to rejoin Norfolk Bank Ln	4 mins
Ings Lane East (PAR 128) – East Riding of Yorkshire	600 m	2x 10 days (BM construction and removal) 2 days (stringing – road crossings) 2x 11 days (highway widening and reinstatement) 4 days (third party works)	8.5 km	Traffic to head south-west towards Main St Turn right onto Carr Ln Turn right onto Common Rd Turn right onto Millbeck Bank Continue to rejoin Ings Ln	12 mins
Ings Lane West (PAR 26B) – East Riding of Yorkshire	425 m	2x 5 days (BM construction and removal) 2x 3 days (highway widening and reinstatement)	8.0 km	Traffic to head south-west on Main St Turn right onto Carr Ln Turn right onto Common Rd Turn right onto Millbeck Bank Continue to rejoin Ings Ln	11 mins
Wallingfen Lane (PAR 130) – East Riding of Yorkshire	2,500 m	2x 11 days (highway widening and reinstatement)	11.2 km	Traffic to head north on Wallingfen Ln towards Main Rd/B1230 Turn right onto Main Rd/B1230 Turn right onto Newport Rd/B1230 Continue to follow B1230 Turn right onto Station Rd Continue onto Sand Ln Continue onto Ferry Rd Continue onto W End Turn right onto Water Ln Continue onto Ellerker Ln Turn right onto Common Rd Continue on Common Rd to rejoin Wallingfen Ln Traffic heading towards Wallingfen Rd from Common Rd to follow reverse journey route to rejoin Main Rd/B1230	14 mins
Common Road (PAR 129) – East Riding of Yorkshire	500 m	2x 5 days (highway widening and reinstatement)	11.0 km	Head east on Common Rd towards Carr Dike Ln - 4.30 km Turn right onto Ellerker Ln - 258 m Turn right onto Norfolk Bank Ln - 1.40 km	14 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
				Continue onto Ings Ln - 2.12 km Continue onto Main St - 1.51 km Turn right onto Carr Ln - 1.51 km	
Carr Lane (PAR 27) – East Riding of Yorkshire	1,200 m	2x 15 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 5 days (highway widening and reinstatement)	11.0 km	Head east on Common Rd towards Wallingfen Ln - 4.81 km Turn right onto Ellerker Ln - 258 m Turn right onto Norfolk Bank Ln - 1.40 km Continue onto Ings Ln - 2.12 km Continue onto Main St - 1.51 km Turn right onto Carr Ln Destination will be on the right - 424 m	13 mins
Landing Lane (PAR 159) – East Riding of Yorkshire	250 m	2x 12 days (BM construction and removal)	NA	No diversion route	NA
Tongue Lane (PAR 28) – East Riding of Yorkshire	1,100 m	2x 20 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 48 days (highway widening and reinstatement)	11.2 km	Wienerberger UK access can be maintained through phased closures. Traffic to head north on Tongue Ln Turn left onto Main Rd/B1230 Turn left onto Thornton Dam Ln Turn right onto Scalby Ln Turn left onto Station Rd Continue onto Staddlethorpe Broad Ln Continue onto Sparrowcroft Ln Turn left Continue onto Faxfleet Ln to rejoin Tongue Ln Traffic heading towards Main Rd/B1230 from Faxfleet Ln to follow reverse journey route to rejoin Main Rd/B1230	15 mins
Staddlethorpe Broad Lane (PAR 131) – East Riding of Yorkshire	2,500 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 9 days (highway widening and reinstatement)	13.5 km	Traffic to head south on Staddlethorpe Broad Ln towards Gowthorpe Ln Continue onto Sparrowcroft Ln Turn left Continue onto Faxfleet Ln Continue onto Tongue Ln Turn left onto Main Rd/B1230 Turn left onto Thornton Dam Ln Turn right onto Scalby Ln Turn left onto Station Rd to rejoin Staddlethorpe Broad Ln Traffic heading towards Sparrowcroft Ln/ Blacktoft Ln from Staddlethorpe Broad Ln to follow reverse journey route to rejoin Sparrowcroft Ln	18 mins
Blacktoft Lane – East Riding of Yorkshire	140 m	2x 5 days (BM construction and removal)	18.2 km	Traffic to head west towards Hutch Ln Continue onto Stable Yard Cottages Turn right Turn left onto Greenoak Ln	22 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
		2x 1 day (installation and removal of crossing protection)		Turn right onto Main Rd/B1230 Turn right onto Tongue Ln Continue onto Faxfleet Ln Continue to rejoin Blacktoft Ln	
Narrow Lane – East Riding of Yorkshire	550 m	31 days (third party works)	NA	Traffic to make U-turn and head north towards Pennyhill Cottages Note: Residents Access Only	NA
Pennyhill Cottages (Main Street)	8, 700m	2x 1 day (installation and removal of crossing protection)	28 km	Head east on Pennyhill Cottages towards Narrow Ln - 1.19 km Continue onto Townsend Causeway - 822 m Townsend Causeway turns right and becomes Hoggard Ln - 2.03 km Hoggard Ln turns left and becomes Garthorpe Rd - 1.42 km Continue onto Adlingfleet Rd - 709 m Turn right onto High St - 292 m High St turns right and becomes Luddington Rd - 1.44 km Continue onto Garthorpe Rd - 1.19 km Garthorpe Rd turns left and becomes High St - 631 m Turn right onto Eastoft Rd/B1392Continue to follow B1392 - 3.45 km Turn right onto Yorkshireside/A161Continue to follow A161 - 9.15 km At the roundabout, take the 2nd exit onto Church Ln - 205 m Turn right onto High St - 2.25 km Continue onto Council Bungalows - 816 m Continue onto Old Hill Cottages - 988 m Continue onto Main St - 809 m Continue onto Pennyhill Cottages - Destination will be on the left - 963 m	33 mins
Pasture Lane (PAR 160) – North Lincolnshire	450 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	NA	No diversion route	NA
Luddington Road (PAR 38) – North Lincolnshire	430 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	8.4 km	Traffic to head south and continue onto Garthorpe Rd Turn left onto High St Turn left onto Meredyke Rd/B1392 Turn left onto Shore Rd Continue onto Shore Rd Turn left onto High Rd Turn right to rejoin Luddington Rd	11 mins
Carr Lane (PAR 39) - North Lincolnshire	450 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	4.5 km	Traffic to head south-east on Carr Ln Turn right onto Meredyke Rd/B1392 Continue straight onto High St Turn right onto Garthorpe Rd	7 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
		2 days (third party works)		Turn right to rejoin Carr Ln	
Meredyke Road (PAR 135) - North Lincolnshire	950 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 12 days (highway widening and reinstatement)	25.0 km	Head north-west on Meredyke Rd/B1392 towards Halkon Cl - 526 m Turn left onto Eastoft Rd/B1392Continue to follow B1392 - 3.45 km Turn left onto Sampson St/A161Continue to follow A161 - 4.78 km At the roundabout, take the 2nd exit onto Woodland Ave/A161 - 3.06 km Continue straight onto A18 - 6.06 km Turn left onto Station Rd/B1392Continue to follow B1392 - 4.56 km Turn right onto Church St/B1392 - 382 m Turn left onto Northfield Ln/B1392 - 2.64 km Turn left onto Meredyke Rd/B1392 - 3 m	28 mins
Carr Lane (PAR 42) – North Lincolnshire	650 m	2x 5 days (BM construction and removal) 2x 14 days (highway widening and reinstatement)	5.8 km	Traffic to head west from Ox Pasture Ln Turn right onto Carr Ln Turn left onto Luddington Rd/B1392 Turn left onto Washinghall Ln Turn left at the 1st cross street Continue on Washinghall Ln to rejoin Carr Ln	8 mins
Washinghall Lane (PAR 41) - North Lincolnshire	1,000 m	2x 15 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 5 days (highway widening and reinstatement)	11.7 km	Traffic to head north on Washinghall Ln from Carr Ln junction Turn left onto Luddington Rd/B1392 Turn left onto Sampson St/A161 Continue to follow A161 At the roundabout, turn right onto Woodland Ave/A161 Go through 1 roundabout Turn left onto Outgate Continue straight to rejoin Washinghall Ln	18 mins
Outgate (PAR 46) - North Lincolnshire	1,150 m	2x 5 days (BM construction and removal) 3 days (stringing – road crossings) 2x 12 days (highway widening and reinstatement) 8 days (third party works)	11.9 km	Traffic to head north on Washinghall Ln Turn left onto Luddington Rd/B1392 Turn left onto Sampson St/A161 Continue to follow A161 Go through 1 roundabout Turn left onto Outgate Traffic heading towards the A161 from Outgate to follow reverse journey route to rejoin the A161	17 mins
Bonnyhale Moor Road (PAR 46) - North Lincolnshire	1,000 m	2x 5 days (BM construction and removal)	12.7 km	Traffic to head north on Washinghall Ln Turn left onto Luddington Rd/B1392 Turn left onto Sampson St/A161 Continue to follow A161 Go through 1 roundabout Turn left onto Outgate to rejoin Bonnvhale Rd	19 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
				Traffic heading towards the A161 from Outgate to follow reverse journey route to rejoin the A161	
Bonnyhale Road (PAR 48) - North Lincolnshire	750 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 2 days (highway widening and reinstatement)	5.0 km	Bonnyhale Rd, Crowle, Scunthorpe DN17 4DG, UK Head north on South Cross Moors Road - 1.20 km Turn left onto Outgate - 791 m Continue onto Outgate - 908 m Turn left onto Main St - 421 m Turn left onto Bonnyhale Rd - 1.21 km	8 mins
A18 (PAR 51) – North Lincolnshire	150 m	2x 1 day (installation and removal of crossing protection)	Route A: 22.0 km Route B: 23.0 km Route C: 27.0 km	Route A: Head west on A18 - 1.14 km Slight left onto A161 - 1.83 km Turn left to merge onto M180 towards Grimsby/Scunthorpe - 6.99 km Take the M181 exit towards Scunthorpe W/Scunthorpe Centre - 1.05 km Continue onto M181 - 574 m Keep left to continue on A1077(M) - 1.26 km Keep left to stay on A1077(M) - 1.33 km At the roundabout, take the 1st exit onto Doncaster Rd/A18Continue to follow A18 - 7.57 km Route B: Head east on A18 - 7.54 km At the roundabout, take the 3rd exit onto A1077(M) heading to Humber Brg/Doncaster/M181/M180 - 1.64 km Keep left to stay on A1077(M) - 1.23 km Slight left onto M181 - 666 m Take the exit onto M180 towards Doncaster - 7.92 km At junction 2, take the A161 exit to Galnsboro' - 365 m Turn right onto A161 - 1.96 km Slight right to stay on A161 - 45 m Turn right onto A161/A18 - 81 m Turn right to stay on A161/A18 - 78 m Continue straight onto A18 - 1.11 km Route C: Head east on A18 - 4.62 km Turn left onto Station Rd/B1392Continue to follow B1392 - 4.56 km Turn right onto Church St/B1392 - 382 m Turn left onto Northfield Ln/B1392 - 2.64 km Turn left onto Meredyke Rd/B1392 - 2.15 km Turn left onto Eastoft Rd/B1392Continue to follow B1392 - 3.45 km Turn left onto Sampson St/A161Continue to follow A161 - 4.78 km At the roundabout, take the 1st exit onto Mill Rd - 19 m	Route A: 17 mins Route B: 18 mins Route C: 29 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
				At the roundabout, take the 2nd exit onto Fieldside - 635 m At the roundabout, take the 1st exit onto Wharf Rd/A161Continue to follow A161 - 2.34 km Continue straight onto A18 - 1.11 km	
M180 (PAR 144) – North Lincolnshire	8,720 m	2x 1 day (installation and removal of crossing protection)	Route A: 16.0 km Route B: 16.0 km	Route A: Head east on M180 - 15 m At junction 2, take the A161 exit to Gainsboro'/Goole - 369 m Turn left onto A161 - 1.87 km Slight right to stay on A161 - 45 m Turn right onto A161/A18 - 81 m Turn right to stay on A161/A18 - 78 m Continue straight onto A18 - 8.98 km At the roundabout, take the 3rd exit onto A1077(M) heading to Humber Brg/Doncaster/M181/M180 - 1.64 km Keep left to stay on A1077(M) - 1.23 km Slight left onto M181 - 666 m Take the M180 exit towards Humber Br/Hull/Grimsby/Airport - 541 m Route B: Head west - 1.26 km Continue onto M181 - 574 m Keep left to continue on A1077(M) - 1.26 km Keep left to stay on A1077(M) - 1.33 km At the roundabout, take the 1st exit onto Doncaster Rd/A18Continue to follow A18 - 9.03 km Slight left onto A161 - 1.97 km Turn right onto the M180 slip road to Doncaster/Leeds - 394 m	Route A: 14 mins Route B: 14 mins
Hollingsworth Lane (PAR 58) - North Lincolnshire	450 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 7 days (third party works)	10.0 km	Head north on Hollingsworth Ln - 564 m Turn left to stay on Hollingsworth Ln - 21 m Turn left onto Belton Rd - 1.80 km Continue onto Bracon - 305 m Continue onto King Edward St - 405 m At the roundabout, take the 1st exit onto High St/A161Continue to follow A161 - 3.54 km Turn left onto High St - 291 m Turn left onto Market Pl - 45 m Turn right onto Hollingsworth Ln - 1.92 km Continue onto Hollingsworth Ln - 1.43 km	13 mins
Belton Road (PAR 57) - North Lincolnshire	1,500 m	2x 1 day (installation and removal of crossing protection)	8.3 km	Traffic to head south on the High St/A161 Continue to follow Belton Rd/A161 Turn left onto High St	11 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
		2x 11 days (highway widening and reinstatement)		Turn left onto Market Pl Turn right onto Hollingsworth Ln Continue onto Hollingsworth Ln Turn right and rejoin Belton Rd	
Newlands Lane (PAR 64B) - North Lincolnshire	450m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 22 days (highway widening – concurrent with BM construction)	NA	No diversion available	NA
Melwood Hill (PAR 63) - North Lincolnshire	825 m	2x 15 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 5 days (highway widening and reinstatement) 2 days (third party works)	10.9 km	Traffic to head north on Melwood Hill Melwood Hill turns left and becomes Rectory St Turn left onto Blow Row Turn left onto Burnham Rd/A161 Continue to follow A161/ Epworth Rd Turn left onto E Lound Rd Continue onto Brackenhill Rd Continue onto E Lound Rd/ Church St Turn left onto Epworth Rd to rejoin Melwood Hill	14 mins
Burnham Road (PAR 66) – North Lincolnshire	450 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	NA	No diversion available	NA
East Lound Road (PAR 68 / 69) – North Lincolnshire	750 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 11 days (highway widening and reinstatement)	8.9 km	Traffic to head west towards Brackenhill Rd Continue onto Brackenhill Rd Continue onto E Lound Rd Turn left onto Haxey Ln/A161 Turn left onto Ferry Rd/Main St Continue onto Station Rd Turn left onto Church St Continue to rejoin E Lound Rd Traffic heading towards E Lound Rd west to follow reverse journey route to rejoin E Lound Rd	11 mins
Ferry Road (PAR 72) - North Lincolnshire	1,400 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	8.0 km	Head west on Ferry Rd towards Graizelound Fields Rd/A161 - 641 m Turn right onto Haxey Ln/A161 - 1.03 km Turn right onto Low St/A161 - 224 m Slight right onto E Lound Rd - 322 m	10 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
		2x 12 days (highway widening and reinstatement) 13 days (third party works)		Continue onto Brackenhill Rd - 1.04 km Continue onto E Lound Rd - 2.00 km Continue onto Church St - 403 m Turn right onto Station RdDestination will be on the right - 2.59 km	
Stockwith Road (PAR 73) - North Lincolnshire	1,250 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 11 days (third party works) 2x 14 days (highway widening and reinstatement) 11 days (third party works)	8.0 km	Head west on Ferry Rd towards Stockwith Rd - 888 m Turn left onto Station Rd/A161Continue to follow A161 - 2.62 km Turn left onto N Carr Rd - 2.13 km Turn left onto Owston Rd - 1.18 km Continue onto Stockwith RdDestination will be on the right - 1.00 km	8 mins
Station Road (PAR 74) – North Lincolnshire	275 m	2x 5 days (BM construction and removal)	63.0 km	Head south on Haxey Gate Rd/A161 towards Tindale Bank RdContinue to follow A161 - 2.34 km Turn right onto Church St/B1403Continue to follow B1403 - 5.19 km Turn right onto A631 - 9.78 km Turn right onto High St/A638 - 351 m Turn right onto Station Rd/A614Continue to follow A614 - 3.79 km At the roundabout, take the 3rd exit and stay on A614 - 3.67 km Turn left onto Wroot Rd/A614 - 10.1 km Slight right onto Main St/A614Continue to follow A614 - 1.33 km Turn right onto Epworth Rd/A18Continue to follow A18 - 1.54 km At the roundabout, take the 3rd exit onto High Levels Bank/A18Continue to follow A18 - 10.2 km Turn right onto A161/A18 - 78 m Slight right onto A161 - 73 m Turn right onto A161/A18 - 49 m Slight left onto A161 - 3.38 km At the roundabout, take the 2nd exit onto High St/A161Continue to follow A161 - 7.99 km Slight right onto Low St/A161 - 262 m Turn left onto Haxey Ln/A161Continue to follow A161 - 2.61 km	1 hr 1 min
Tindale Bank Road (PAR 75) - North Lincolnshire	850 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 2x 6 days (highway widening and reinstatement) 14 days (third party works)	8.3 km	Traffic to head north on Haxey Gate Rd/A161 Turn left onto Akeferry Rd At the roundabout, take the 1st exit onto Doncaster Rd/B1396 Turn left onto Idle Bank south to rejoin Tindale Bank Rd	9 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
South Cross Moors Road - North Lincolnshire	200 m	2x 1 day (installation and removal of crossing protection)	4.2 km	Traffic to head west on Outgate Turn left onto Main St Turn left onto Bonnyhale Rd Continue on Bonnyhale Rd to rejoin South Cross Moors Road	7 mins
Cornley Road (PAR 77) - Nottinghamshire	1,500m	1 day (stringing – road crossings) 2x 82 days (BM construction and highway widening)	NA	No diversion available	NA
Cattle Road (PAR 80) - Nottinghamshire	1,000m	2x 5 days (BM construction and removal) 1 day (stringing – road crossings) 35 days (third party works)	NA	No diversion available	NA
B1403 Fountain Hill (PAR 83) - Nottinghamshire	273m	2x 1 day (installation and removal of crossing protection)	Route A: 15.0 km Route B: 11.0 km	Route A: Route from northern closure point on B1403 to southern closure point on B1403: Head north on B1403 towards Cave's Ln - 3.93 km Turn right onto High St/A161Continue to follow A161 - 1.93 km At the roundabout, take the 1st exit onto Marsh Ln/A161 - 42 m At the roundabout, take the 2nd exit onto Stockwith Rd/A161Continue to follow A161 - 4.16 km At the roundabout, take the 3rd exit onto A631 - 3.51 km Turn right onto Green Rd/B1403Continue to follow B1403Destination will be on the left - 1.11 km Route B: Route from eastern closure point on Walkeringham Road to southern closure point on B1403: Head east on Walkeringham Rd towards Wooden Beck Hill - 396 m Continue onto Wooden Beck Hill - 497 m Continue onto Gringley Rd - 1.81 km Turn left onto Stockwith Rd/A161 - 1.95 km At the roundabout, take the 1st exit onto Marsh Ln/A161 - 40 m At the roundabout, take the 3rd exit and stay on Marsh Ln/A161Continue to follow A161 1.95 km Turn left onto Church St/B1403Continue to follow B1403	Route A: 15 mins Route B: 12 mins
A631 (Gringley on the Hill East) (PAR 87) - Nottinghamshire	50 m	2x 1 day (installation and removal of crossing protection) 1 days (third party works)	43.0 km	Head east on A631 - 1.87 km At the roundabout, take the 3rd exit and stay on A631 - 1.22 km At the roundabout, take the 3rd exit onto Bar Rd/A620Continue to follow A620 - 2.35 km At the roundabout, take the 2nd exit onto Gainsborough Rd/A620Continue to follow A620 - 7.10 km	42 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
				Slight left onto Main St/A620Continue to follow A620 - 4.73 km At the roundabout, take the 3rd exit onto North Rd/A638Continue to follow A638 - 13.8 km Turn right onto Gainsborough Rd/A631Continue to follow A631Destination will be on the left - 11.7 km	
Gainsborough Road / A620 (PAR 98) - Nottinghamshire	160 m	2x 1 day (installation and removal of crossing protection)	22.0 km	Head south-west on Gainsborough Rd/A620Continue to follow A620 - 5.00 km Turn right onto Main St/B1403Continue to follow B1403 - 1.83 km Turn right onto Clayworth Common/B1403 - 2.73 km Turn left onto Town St/B1403 - 338 m Turn right onto Gringley Rd/B1403Continue to follow B1403 - 2.58 km Turn right onto A631 - 3.96 km At the roundabout, take the 3rd exit and stay on A631 - 1.22 km At the roundabout, take the 3rd exit onto Bar Rd/A620Continue to follow A620 - 2.35 km At the roundabout, take the 2nd exit onto Gainsborough Rd/A620Destination will be on the right - 1.61 km	21 mins
Station Road (PAR 94) - Nottinghamshire	250 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	12.4 km	Traffic heading west on Station Rd Turn right onto Gainsborough Rd Continue onto Sturton Rd At the roundabout, continue straight onto Gainsborough Rd/A620 Turn left onto Haughgate Hill Continue onto Low St Turn right onto Sturton Rd Continue onto Wheatley Rd to rejoin Station Rd Traffic heading east on Wheatley Rd towards Gainsborough Rd to follow reverse journey route to rejoin	12 mins
Retford Road (PAR 103/155) - Nottinghamshire	425 m	2x 1 day (installation and removal of crossing protection) 2x 10 days (BM construction and removal) 12 days (stringing – road crossings)	8.0 km	Traffic heading east on Retford Rd Turn right onto Grove Rd Turn left onto Wood Ln Continue onto Forewood Ln Continue onto Town St Turn left onto Leverton Rd Continue onto Treswell Rd Continue onto Church St Turn left to rejoin Retford Rd to continue journey	9 mins
Forewood Lane (PAR 109) - Nottinghamshire	375 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection)	Route A: 8.2 km Route B: 8.4 km	Route A: Traffic heading west from Town St towards Forewood Ln Turn left onto Ashley Ln Turn right onto Hazelwood Ln Continue onto Lady Well Ln	Route A: 10 mins Route B: 10 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
		12 days (third party works)		Continue onto Grove Rd Turn right onto Main St Continue onto Wood Ln to rejoin Forewood Ln Route B: Traffic to head east from Town St/Ashley Ln Continue onto Town St Turn left onto Leverton Rd Continue onto Treswell Rd Continue onto Church St Turn left onto Retford Rd Turn left to stay on Retford Rd Turn left onto Grove Rd Turn left onto Wood Ln to rejoin Forewood Ln	
Ashley Lane (PAR 114) - Nottinghamshire	450 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 9 days (third party works)	4.0 km	Traffic head west towards Ashley Ln Continue onto Town St Turn right onto Cocking Ln Turn right onto Laneham Rd Turn right at the 1st cross street onto Retford Rd Turn left onto Retford Rd Continue on Retford Rd to rejoin Ashley Ln	5 mins
Main Street (PAR 112) - Nottinghamshire	250 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 29 days (third party works)	5.0 km	Traffic heading east on Lady Well Ln Turn left onto Hazelwood Ln Continue onto Retford Rd Turn right onto Laneham Rd Turn right to rejoin Main St	5 mins
Retford Road (PAR 123) - Nottinghamshire	260 m	2x 5 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 19 days (third party works)	6.8 km	Traffic head east on Eaton Rd towards Yew Tree Rd Turn left onto Yew Tree Rd Continue onto Thorpe St Turn right onto Main St Turn right onto Drayton Rd Continue onto N Green Turn right onto Church Ln to rejoin Retford Rd	8 mins
Darlton Road (PAR 124) - Nottinghamshire	450 m 300 m	2x 10 days (BM construction and removal) 2x 1 day (installation and removal of crossing protection) 10 days (third party works)	4.2 km	Traffic heading east on Broad Gate/A57 towards Darlton Rd Continue to follow A57 Turn left onto Southbeck Ln Turn left onto Long Ln Continue onto Low St Continue onto Top St to rejoin Darlton Rd	6 mins

Name of road	Approx length of closure	Closure duration	Approx. length of diversion	Diversion route	Approx. diversion time (by car)
A57 - Between BM 127 and BM 126 (PAR 119) - Nottinghamshire	150 m	2x 1 day (installation and removal of crossing protection)	26.0 km	Head east on A57 - 1.97 km Turn left onto Laneham Rd - 2.50 km Continue onto Laneham Rd - 1.38 km Turn left onto Main St - 3.56 km Continue onto Lady Well Ln - 733 m Continue onto Grove Rd - 3.81 km At the roundabout, take the 1st exit onto London Rd/A638Continue to follow A638 - 5.78 km At Markham Moor Interchange, take the 1st exit onto Cliff Gate/A57Continue to follow A57 Destination will be on the left - 6.41 km	24 mins
Far Road - Nottinghamshire	70 m	2 days	12.4 km	Traffic to head south Far Rd towards Skegby Rd Continue onto Crabtree Ln Continue onto Skegby Rd Turn left onto Polly Taylor's Rd Turn left Continue onto Main St Turn left at the 1st cross street onto A57 Turn left onto Woodcoates Rd Continue onto Green Ln to rejoin Far Rd	14 mins
Main Road or Fledborough Road or Main Street (PAR 139) - Nottinghamshire	450 m	2x 1 day (installation and removal of crossing protection) 13 days (third party works)	15.6 km	Traffic to head north towards A57 Continue onto Main St Turn left onto A57 Turn left onto Tuxford Rd/A6075 Turn left onto Marnham Rd At the roundabout, take the 1st exit and stay on Marnham Rd Turn right onto Skegby Rd Turn left onto Polly Taylor's Rd Turn left to rejoin Main St	15 mins

Site Access Points and Crossover Points

4.9.10 Traffic management will be required during the construction of the proposed site access points and crossover points for the safety of road users. **Application Document 2.5 Traffic Regulation Order Plans** identifies the locations and extent of the proposed Temporary Traffic Regulation Orders (TTROs) associated with site access points and crossover points. Traffic management will vary dependent on site-specific requirements, but will typically include:

- Temporary traffic light systems (and/or stop and go boards) to control flows during construction of site access points and crossover points to allow single lane working where roads are of suitable width.
- Further use of temporary traffic light systems during periods of peak construction traffic flows to control turning/crossing movements at public highway interfaces.
- Temporary speed limit restrictions in the vicinity of proposed access and crossing points. This will be completed in combination with other measures including vegetation clearance to achieve the relevant visibility requirements.
- Temporary overtaking restrictions at site access points and crossover points.
- Temporary parking suspensions on approaches to site access and crossover points.

4.9.11 It is anticipated that for the construction of site access and crossover points on single track roads, the roads would need to be closed during construction of the Bellmouth and diversions provided in line with Table 4.3. It is planned that the construction of site access points onto wider roads (e.g. A Roads or larger B Roads) will be constructed using temporary traffic management measures such as temporary traffic signals.

4.9.12 Access control measures such as fencing and gated accesses to working areas will typically be in place for safety and security. Where construction access points require works within the public highway, full highway closures are expected to be required in the majority of cases, with the remaining locations managed through appropriate traffic management measures. Access and crossover points will be designed to reduce highway safety risks and congestion on the public highway by providing for the safe and efficient passage of construction traffic.

4.10 Highway Alteration Measures

4.10.1 Highway alteration measures have been proposed on the existing highway network to facilitate construction vehicle access to the construction sites.

4.10.2 A package of highway alteration measures has been developed covering all of the PARs and AIL routes. These measures have been designed to facilitate access to the construction sites for all construction vehicles including AILs.

4.10.3 The measures are subject to change throughout the construction of the Project; changes will be developed in consultation with the appropriate LHA.

4.10.4 Table 4.3 sets out the roads affected by highway improvement works, including road widening; it also sets out likely road closure durations.

4.10.5 A staged approach has been developed to identify mitigation for receptors potentially affected by road closures that cause direct severance associated with private accesses and driveways:

- Stage 1 – application of standard construction phasing and traffic management measures which will seek to ensure maintenance of access and avoidance of severance impacts
- Stage 2 – application of standard best practice control and management measures; and
- Stage 3 – application of additional mitigation measures that could be put in place which may be bespoke to the affected location.

4.10.6 Table 4.4 sets out the potential mitigation measures that may be put in place at each stage by the Main Works Contractor to minimise temporary restrictions on vehicular access as a result of temporary construction activities.

4.10.7 The site-specific measures will be developed during detailed design and set out in the post-DCO approval CTMPs which will be prepared in consultation with the relevant highway authority.

4.10.8 As a minimum emergency vehicle access and pedestrian access will be maintained at all times, as secured through the relevant commitment in **Application Document 7.3 Register of Environmental Actions and Commitments**.

Table 4.4 – Direct Severance Staged Mitigation Measures

Mitigation stage	Measures
Stage 1	Apply standard construction phasing and traffic management assumptions to proposed works to ensure vehicular access can be maintained to residential and commercial receptors in order to avoid severance effects.
Stage 2	General access management planning: • Access management (set out in the Construction Traffic Management Plan) detailing potential mitigation solutions for each road closure • Programming of works to avoid peak traffic periods, including extended hours working where appropriate and agreed with the relevant local authority; • Contact details for community liaison officer; • Advanced notice of works as well as endeavouring to notify residents of any access windows that become available due to breaks in work • Regular updates during disruptive/time-critical works (daily or weekly, as considered necessary); and • Managed crossings of active work sites where safe to do so; and • Structural plating for crossings for example over cable trenches; Farms and rural landholding measures: • Livestock crossing arrangements; and

Mitigation stage	Measures
	• Programming of works where practicable around, for example, cropping or harvesting; Commercial, business and retail measures: • Delivery windows; • Staff access arrangements; • Customer access signage; • Co-ordination of deliveries; • Covering reasonable additional operational or logistical costs; • Funding reasonable alternative access or delivery arrangements; and • Supporting, where practicable, business or agricultural continuity during disruption. Residents measures: • Daily access maintained; • Working hour limits; • Individual household communication; and • Assisted movement of urgent goods.
Stage 3	Operational and management measures: • Extended-working hours or additional construction workforce to reduce duration of works where appropriate and agreed with relevant local authority; Residential measures: • Offer short-term alternative accommodation for residents depending on specific needs of the resident and where the works: – may be reasonably considered to be so intensive or onerous that amenity and enjoyment of property is markedly affected; and/or – where their duration (and associated disruption) is expected to last for an unreasonably significant period of time.

4.11 Blue Light Services

4.11.1 Blue light services will be given written notice of:

- Planned temporary road and lane closures and diversions; and
- AIL deliveries. Blue light services will be kept fully informed throughout the delivery period (through the ESDAL system or suitable alternative system described in paragraph 4.3.7).

4.11.2 Engagement on any police escorts required to support the delivery of the AILs will be undertaken as early as practicable by the Main Works Contractor(s) haulier through the movement notification system, and discussed at the TLG.

4.11.3 The Main Works Contractor(s) will develop an Incident Management Plan in agreement with the blue light services and the TLG to develop a procedure for any incidents on the PARs.

4.12 Bus Stops and Routes

4.12.1 National Grid will discuss with the relevant highway authority, transport executive and the bus operators where, during construction, a bus stop is required to be closed or a bus route diverted. Temporary bus stops will be provided, where a suitable location can be identified. where practicable.

4.13 Pedestrians and Other Road Users

4.13.1 Local communities will be kept informed of the commencement and likely duration of the construction work activities through letter drops/emails and local signage. Information on the impact(s) will be shared with parish councils. Mitigation measures will be developed to manage the impact on pedestrians and other road users throughout construction, based on the number and type of construction vehicles using the route and users of the public highway. This may involve providing signage to advise of alternative footways and cycleways that can be used during construction (as far as is practical). **Application Document 7.6 Outline Public Rights of Way Management Plan** has been developed to provide information on the temporary diversions and closures, as well as other measures that will be employed by the Main Works Contractor(s) to manage the impact on users of PRoWs and to maintain public safety during the construction phase.

4.14 Staff Travel

4.14.1 In accordance with good practice measures set out in **Application Document 7.3 Register of Environmental Actions and Commitment**, an Outline Construction Workforce Travel Plan has been developed and is provided in Chapter 6 of this Outline CTMP. This sets out the good practice measures that will be put in place to encourage sustainable transportation by the workforce, in a way which reduces traffic, environmental and social impacts on the local area. The post-consent CTMP will also incorporate the post consent Construction Workforce Travel Plan.

4.14.2 A proportion of construction workers will be transported from accommodation hubs, and around the site, by minibus (where travel distance exceeds that for which walking would be feasible) to reduce vehicle trips on the surrounding highway network. The minibuses will be stored and accessed from within the construction compounds.

4.14.3 The use of the staff car parking areas will be monitored, to ensure that parking does not occur outside the compounds. The Main Works Contractor(s) will explore alternative travel arrangements including measures, such as additional parking spaces, car share schemes etc should the issue arise.

5. Implementation

5.1 Adherence to the CTMP

5.1.1 Robust procedures will put in place to inform and supervise all personnel working on the Project. This includes contractual requirements on the Main Works Contractor(s), to ensure control measures set out within the CTMP are adopted when undertaking the construction of works authorised by the DCO. The Main Works Contractor(s) will be responsible for implementing these control measures.

5.1.2 The Main Works Contractor(s) will be responsible for briefing all operatives on the specific details within the Post-DCO approval CTMPs prior to the commencement of works. The briefings will be led by a suitably trained member of the team, such as the Works Supervisor(s), Transport Coordinator(s) or Environmental Manager(s).

5.2 Monitoring of Implementation

5.2.1 The Main Works Contractor(s) will undertake localised pre-construction site condition surveys prior to the site set up. This will include making a record of the condition of existing features such as public highways, tracks and PRoWs, including the location of each feature. Condition surveys will be undertaken post-construction, and the results of these and any remedial works will be discussed and agreed with the landowner and, where applicable, the relevant highway authorities, prior to handover.

5.2.2 Regular monitoring visits are required to be carried out across the construction phase to monitor compliance with the CTMP. The programme of site checks and vehicle and driver safety requirements will be controlled by the Traffic and Logistics Manager, supported by their Transport Coordinators (see section 3.1 of this Outline CTMP) who will appoint suitably experienced specialists to undertake specific tasks where required. The inspection types are summarised in Table 5.1. Appropriate action will be taken should any incidents of non-conformance with the Post-DCO approval CTMPs be found during inspections.

5.2.3 The MWCs will report on agreed performance metrics as defined in the post-DCO approval CTMPs at the regular TLGs.

Table 5.1 – Monitoring implementation of measures relevant to the CTMP

Inspection type	Purpose	Who	Frequency
Transport, traffic and logistics inspections	To monitor compliance with Project commitments relating to transport, traffic management and logistics. To monitor adherence to good practice commitments and raise actions where concerns are identified. To check mitigation measures such as wheel wash facilities and road cleaning are in place and being undertaken.	Traffic and Logistics Manager	Weekly
Traffic management scheme site checks	To ensure that working practices are carried out in accordance with approved methods, standards and good practice commitments. These should also check compliance with requirements agreed in any applicable street works permit and TTRO.	Transport Coordinators and Highways Works Supervisors	Daily visual check
Site access vehicle and driver checks	Recording of actual versus planned vehicle arrivals. Monitoring of vehicle safety equipment and driver training requirements and adherence to the CLOCS Standard.	Site Access Traffic Marshals	Daily
Monitoring of vehicles and road network	Checking signage is in place at site and compound accesses and at sites where Project directional construction traffic signage is placed. Use of prescribed construction routes.	Transport Coordinators	Weekly

5.2.4 All staff will be encouraged to raise concerns or good practice ideas to promote continual improvement and innovation.

5.2.5 The results of traffic and logistics checks are required to be recorded in a Vehicle Movement Planning System (VMPS). Findings will be disseminated to the wider construction team as appropriate and additional procedures put in place if required. Should incidents of non-conformance be reported, these will be shared with the relevant LHA and the TLG on a monthly basis.

5.3 Routeing Adherence

5.3.1 The Main Works Contractor(s) will implement a monitoring and reporting system to check compliance with the measures set out within the Post-DCO approval CTMPs. This may include the need for a Global Positioning System (GPS) tracking system to be fitted to HGVs owned and operated by the Main Works Contractor(s) and the whole supply chain to check for compliance with the PARs. Automatic Number Plate Recognition may also be utilised for monitoring compliance; however, these can be difficult to implement across all vehicles for the Project.

5.3.2 All delivery drivers and construction staff will be instructed to use the agreed construction access routes, complying with the agreed Post-DCO approval CTMPs. In particular, the following measures will be implemented to monitor and enforce HGV PAR compliance:

- Temporary signage will be installed along the PARs to the site access points prior to the commencement of construction activities. The specification of the signage is to be agreed with the DfT and location of signage is to be agreed with the LHA. More information on signage is detailed in section 4.4 of this Outline CTMP.
- Signage will also be placed at the exits of site access points to instruct construction traffic to follow the designated PARs.
- The Main Works Contractor(s) will use a VMPS to plan deliveries and collections. The delivery routes and timings will be communicated by the Main Works Contractor(s) to all companies and/or drivers involved in the transport of materials and plant to and from site by construction HGVs. The Main Works Contractor(s) supply chain shall be issued with a Driver Information Pack that will include information on prescribed routes for distribution to their drivers prior to making any Project-related journey.
- An 'identifier' will be placed on the nearside dashboard adjacent to the windscreen of all delivery vehicles to enable residents to identify if an HGV is engaged on work on the Project. These identifier details will be submitted to and approved by the relevant LHA(s) as part of the Post-DCO approval CTMPs.
- Monitoring data will be collected from HGVs that are fitted with tracking devices (such as GPS systems), including the routes taken, timing and speed of vehicles when making deliveries. These data would be used for auditing and complaint investigation. The Main Works Contractor(s) will be encouraged to ensure a high proportion of HGVs are fitted with GPS trackers so that route compliance can be checked.
- The registration numbers for all HGVs making deliveries will be planned and recorded in the VMPS. Together with HGV tracking device data (where fitted), this information may be used to investigate reported breaches of the agreed delivery routes (e.g. using available roadside CCTV or other evidence) and enable appropriate enforcement action to be taken where necessary.

5.4 Vehicle and Driver Safety

5.4.1 The Main Works Contactor(s) and their supply chain will meet the standards set out in the Construction Logistics and Community Safety (CLOCS) standard

5.4.2 All fleet operators servicing the Project, including HGV and LGV operators, will be required to be members of the Fleet Operator Recogntion Scheme (FORS) at bronze level as a minimum before commencing work on the Project and attain silver level within six months of their first visit to any Project site, compound or traffic management scheme.

5.4.3 The Main Works Contractor(s) will set out their methods for mitigating, recording and monitoring the following safety-related issues:

- Traffic-related accidents.

- Modes of transport used by staff to travel to site. The use of the car parks will be monitored and the need for additional parking spaces during peak construction will be reviewed, where necessary, to ensure that parking does not occur outside the works site.
- Vehicles and operations not meeting safety requirements.

5.4.4 The driver information pack will be issued to each driver prior to them commencing work on the Project and will include:

- Clarification of approved HGV routes, including a plan showing the delivery routes, the location of the site access points and areas with road safety concerns;
- Speed limit requirements;
- Details of procedures for reporting accidents and near misses;
- Details of the types of location where it would not be acceptable to park on the local highway network;
- Information on available lorry parks, services and other designated overnight parking that hauliers may choose to use, where required, to support deliveries arriving on-site after 07:00. Where appropriate, compounds or other designated site areas may also be used to hold deliveries overnight for servicing or delivery the following morning.
- Where drivers are permitted to stop, which should be used to ensure deliveries arrive on-site after 07:00;
- General details of any restrictions on delivery hours, and on specific PARs;
- Details of HGV safety standards;
- Details of disciplinary measures for non-compliance;
- Information on footways, cycleways and bridleways intersected by the PARs and construction access routes, including warnings where these routes may have higher volumes of pedestrians, cyclists and equestrians;
- Information on collision cluster locations;
- Information on local pedestrian crossings and pedestrian safety precautions;
- Information on sensitive locations within the local area, such as hospitals, care homes and schools, including any restrictions that apply in these areas; and
- A copy of the identifier to display in the vehicle window.

5.4.5 The Main Works Contactor(s) will be responsible for briefing all operatives on the specific details within the CTMP prior to the commencement of works. The driver information pack will be monitored and controlled by the Main Works Contractor(s). The Main Works Contactor(s) will implement an audit system, recording the distribution of the driver information pack and confirmation that it has been received and read.

5.5 Enforcement

5.5.1 To ensure that the Post-DCO approval CTMPs is effectively enforced, the following matters have been defined as non-compliance matters that would be investigated to understand if corrective measures would be required:

- Failure to display the unique identifier when on Project business, or removing the unique identifier when not on Project business;
- Construction workers overspill parking on the public highway;
- Construction traffic operating outside the agreed hours;
- Construction traffic not adhering to the agreed routes;
- Construction traffic parking or waiting on the highway in inappropriate locations, which could result in highway safety issues; and
- Traffic management schemes not permitted or working in breach of a permit or its conditions.

5.5.2 On receipt of a report of potential non-compliance, the Traffic and Logistics Manager would follow the procedure set out in section 5.6 of this Outline CTMP.

5.6 Non-Compliance Procedure

5.6.1 The Traffic and Logistics Manager and their team will be responsible for undertaking compliance checks and audits to check compliance with the CTMP.

5.6.2 All incidents associated with the construction of the Project, including environmental incidents and non-conformance with the CTMP, will be reported to the Traffic and Logistics Manager by the Site Access Traffic Marshals, Transport Coordinators and any other Project employee. Where a breach or complaint is reported, the Main Works Contractor(s) and/or National Grid will carry out an investigation in order to identify appropriate corrective actions. Where a corrective action is identified, the LHA will be informed.

5.6.3 Data recorded from the non-compliance procedure set out above will be collated on a quarterly basis by National Grid and the Main Works Contractor(s) and will be issued to the relevant parties, including LHAs, as well as being discussed at the TLG.

5.7 Community Liaison

5.7.1 In accordance with commitment GG28 in **Application Document 7.3 Register of Environmental Actions and Commitments**, members of the community and local businesses will be kept informed regularly of the works through active community liaison, which will include prior notification of busy traffic periods. A contact number will be provided which members of the public can use to raise any concerns, suggestions, or complaints about the Project. All construction-related complaints will be logged by the Community Liaison Officer in a complaints register, together with a record of the responses given and actions taken.

5.7.2 The specific requirements for works on public highways will be in accordance with the permit schemes as set out in Section 2.4 of this Outline CTMP and the DCO and will outline the communications expectations for road works. All necessary street works permit applications will be submitted and managed through the DfT Street Manager system, as applicable. Communication will include letters/emails to residents living within close proximity of the construction corridor detailing the extent of the works.

5.7.3 The Community Liaison Officer will engage with key stakeholders and the local community to stay informed of any planned community events, so the Project can avoid these wherever practicable when scheduling any vehicle movements that may cause disruption.

5.8 Coordination with Other Developments/Events

5.8.1 The Main Works Contractor(s) will liaise with LHAs and National Highways and other third-party development schemes, to ensure a coordinated approach to construction traffic management wherever practicable. This liaison will also take into account any significant local events within the area surrounding the Project.

5.9 Complaints Procedure

5.9.1 Details of the Project wide complaints procedure are set out in **Application Document 7.2 Outline Code of Construction Practice** and **Application Document 7.3 Register of Environmental Actions and Commitments**.

5.9.2 The detailed complaints procedure (including but not limited to complaints relating to noise, dust, vibration, pollution and construction traffic) will set out:

- How and to whom complaints can be made;
- A reasonable timeframe for responding to complaints;
- The potential remedies available to address complaints; and
- Whom to contact in the event that the complainant is not satisfied with the outcome.

5.9.3 Primarily, any minor issues or complaints relating to vehicle and traffic management and highway works incidents will be dealt with by the Main Works Contractor(s). The escalation of these issues, or more serious issues, will be dealt with by the National Grid Project Team.

5.9.4 In addition to the Project telephone helpline and the Project website, complaints from an external party may also be received via a number of other sources, for example, via written correspondence or incidental contact with construction workers.

5.9.5 Where a member of the public makes a complaint, it will be passed initially to the community relations team. The community relations team will liaise with the other members of the Project team to investigate the complaint and appropriate action will be taken.

5.10 Change Process

Introduction

5.10.1 The CTMP is one of the plans listed in sub-paragraph (2) of the Requirement in **Application Document 3.1 Draft Development Consent Order** which states:

'Each stage of the authorised development must be carried out in accordance with the approved plans referred to in sub-paragraph (1), unless otherwise agreed with the relevant planning authority or other discharging authority as may be appropriate to the relevant plan concerned.'

5.10.2 Sub-paragraph (4) of the Requirement within **Application Document 3.1 Draft Development Consent Order** states:

'Where an approval or agreement is required under the terms of any requirement or a document referred to in a requirement, or any requirement specifies "unless otherwise approved" or "unless otherwise agreed" by the relevant discharging authority, such approval or agreement may only be given where it has been demonstrated to the relevant discharging authority that the subject matter of the approval or agreement sought will not give rise to any materially new or materially different environmental effects from those identified in the Environmental Statement.'

5.10.3 Where there is a need to update the Post-DCO approval CTMPs beyond derogations addressed pursuant to the above, the following section addresses the process for changing the CTMP itself. This does not cover changes to the DCO (material or non-material) which would be managed through the process set out in Schedule 6 of the Planning Act 2008 (HM Government, 2008).

5.10.4 Therefore, the following process is limited to changes to the CTMP.

CTMP Changes

5.10.5 It may be necessary to amend the details contained in the Post-DCO approval CTMPs as a result of the iterative discussion and engagement that will continue through the TLG, after the Post-DCO approval CTMPs have been approved. The resulting changes would not alter any of the underlying commitments, mitigations and methodologies set out in the CTMP. An example may be where a pre-construction survey identifies that a measure already committed to, is no longer required in the CTMP. In every case, consideration will be given to any changes to the outcome of the assessment of environmental effects.

5.10.6 Where there is a proposed change to the Post-DCO approval CTMP, National Grid will provide details to the relevant highway authority and at the TLG together with evidence of relevant stakeholder engagement, whereupon, the relevant highway authority will, acting reasonably, endeavour to respond within 28 days to either confirm its consent to the change to the CTMP or provide its reasons why the change is not accepted. National Grid will also publish any amended version of the Post-DCO approval CTMP on the Project website and will make clear, in doing so, that any previous version(s) are superseded.

6. Outline Construction Workforce Travel Plan

6.1 Introduction and Purpose

6.1.1 This section sets out the detail of the Outline Construction Workforce Travel Plan (OCWTP) for the Project. The OCWTP forms part of this Outline CTMP and establishes the principles, objectives and minimum requirements for managing construction workforce travel in a sustainable manner. The OCWTP will follow the DfT and best practice guidance on sustainable worker travel.

6.1.2 The Main Works Contractor(s) will be required to:

- Prepare detailed post-DCO approval Construction Workforce Travel Plans (CWTPs) as part of the post-DCO CTMP that will be substantially in accordance with this OCWTP;
- Submit the detailed CWTPs to the relevant local planning authority for approval;
- Implement the CWTPs prior to commencement of construction; and
- Keep the CWTPs under review and update throughout the construction phase to reflect changes in workforce numbers, construction phasing and site arrangements.

6.1.3 This OCWTP has been prepared to support the requirements of the Environmental Statement, and the Outline CTMP.

6.2 Objectives of the OCWTP

6.2.1 The overarching objectives of the OCWTP are to:

- Minimise the number of single-occupancy car trips generated by the construction workforce;
- Promote sustainable modes of travel where reasonably practicable, including walking, cycling, public transport and shared transport;
- Manage workforce travel in a way that minimises impacts on the local highway network and surrounding communities; and
- Ensure construction workforce travel is planned, monitored and managed in a transparent and auditable manner.

6.3 Scope and Applicability

6.3.1 This OCWTP will apply to:

- All construction workers, supervisors and management staff attending the site;
- Visitors to the site, including professional staff and inspectors; and

- All temporary construction compounds and ancillary areas associated with the Project, such as highway works and associated traffic management schemes.

6.3.2 This OCWTP will apply for the entire duration of the construction phase, including enabling works, main construction works and reinstatement.

6.4 Governance and Responsibilities

6.4.1 The Main Works Contractor(s) will appoint a Travel Plan Coordinator (TPC) who will report to the Traffic and Logistics Manager prior to commencement of construction. The TPC will:

- Be responsible for day-to-day implementation of the CWTPs;
- Act as the primary point of contact for the LPA and LHA in relation to workforce travel matters, in accordance with the Project governance arrangements;
- Oversee monitoring, reporting and review of the CWTPs; and
- Ensure that CWTPs measures are communicated effectively to the workforce.

6.4.2 National Grid will retain overall responsibility for ensuring that the Main Works Contractor(s) complies with the requirements of this CTMP and the approved CWTPs.

6.5 Baseline and Workforce Characteristics

6.5.1 The detailed CWTPs prepared by the Main Works Contractor(s) will include:

- Anticipated workforce numbers by construction phase;
- Typical shift patterns and working hours;
- Expected staff origins (where known); and
- Identification of peak workforce periods.

6.5.2 The CWTPs will be informed by the construction stage and will be updated as programme assumptions evolve.

6.6 Travel Modes and Measures

6.6.1 The CWTPs will set out measures to promote and manage the following travel modes, where reasonably practicable. The CWTPs will form part of the Main Works Contractor(s) site induction process.

6.6.2 All workers will be provided with clear information on:

- Permitted access routes;
- Parking arrangements;
- Parking restrictions;
- Sustainable travel options; and
- Behavioural expectations when travelling to and from the site.

6.6.3 Information will be kept under review and updated as construction phasing or site arrangements change.

6.7 Monitoring and Review

6.7.1 The Main Works Contractor(s) will agree performance measures with the LHA and undertake monitoring of workforce travel as part of the CWTP. Monitoring results will be discussed at the TLG and be used to:

- Assess the effectiveness of CWTPs measures;
- Identify targets against which improvement measures can be measured against;
- Identify opportunities for improvement; and
- Inform updates to the CWTPs.

6.7.2 Where monitoring identifies that targets are not being met, the Main Works Contractor(s) will implement additional or amended measures, subject to agreement with the relevant authority where required by the Development Consent Order.

6.8 Detailed Travel Plan Updates and Approval

6.8.1 The detailed CWTPs will be a live document which may be updated through the construction phase to reflect:

- Changes in workforce numbers;
- Changes in construction phasing or compound arrangements; and
- Feedback from monitoring and stakeholder engagement.

6.8.2 Updates to the Construction Workers Travel Plans will be submitted to the relevant highway authority for approval where required by the Development Consent Order or associated Requirements, as part of the Construction Traffic Management Plan.

References

Department for Transport. (2009). Traffic Signs Manual Chapter 8: Traffic Safety Measures and Signs for Road Works and Temporary Situations, Part 1: Design. Retrieved from https://assets.publishing.service.gov.uk/media/5a74adeaed915d7ab83b5ab2/traffic-signs-manual-chapter-08-part-01.pdf

Department for Transport. (2016). Traffic Signs Regulations and General Directions 2016: an overview. Retrieved from GOV.UK: https://www.gov.uk/government/publications/traffic-signs-regulations-and-general-directions-2016-an-overview?utm_source=chatgpt.com

Driver & Vehicle Standards Agency. (2018, September). Special types enforcement guide. Retrieved from GOV.UK: https://www.gov.uk/government/publications/special-types-enforcement-guide/special-types-enforcement-guide

Driver & Vehicle Standards Agency. (2018). Special types enforcement guide. Retrieved from GOV.UK: https://www.gov.uk/government/publications/special-types-enforcement-guide/special-types-enforcement-guide

HM Government. (1986). The Road Vehicles (Construction and Use) Regulations 1986. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/uksi/1986/1078/contents

HM Government. (1989). Electricity Act 1989. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/1989/29/contents

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

HM Government. (1998). The Road Vehicles (Authorised Weight) Regulations 1998. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/uksi/1998/3111/made

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

HM Government. (2008). Planning Act 2008. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/2008/29/contents

HM Government. (2023). The Road Vehicles (Authorisation of Special Types) (General) Order 2003. Retrieved from legislation.gov.uk: https://www.legislation.gov.uk/uksi/2003/1998/contents/made

Appendix A
AIL Access Strategy

nationalgrid

Contents

Executive summary A-1

1. Introduction A-2

1.1 Background A-2
1.2 Policy and Guidance A-2
1.3 Document Aims A-3

2. Methodology A-4

2.1 Assessment Overview A-4
2.2 Assessment Scope and Assumptions A-5
2.3 Project Transport Requirements A-6

3. Routing A-14

3.1 Rail A-14
3.2 Ports and Waterways A-14
3.3 Start and End Locations A-14
3.4 Headroom Clearances A-15
3.5 Structural Capacity A-16

4. Route Assessment A-18

4.1 Large Mobile Crane AILs A-18
4.2 Construction Materials & Plant AILs A-19
4.3 Routing A-20

5. Transport A-29

5.1 Trip Generation A-29

6. AIL Movement Procedures A-32

6.1 Overview A-32
6.2 Electronic Service Delivery for Abnormal Loads (ESDAL) A-32
6.3 Local Council Abnormal Load Movements A-32
6.4 Police Liaison A-33
6.5 Emergency Response A-33
6.6 Removal and Replacement of Street Furniture A-33
6.7 Road Condition Surveys A-33

7. Summary A-35

7.1 Summary of Large Mobile Crane AIL Routes A-35
7.2 Summary of Construction Material & Plant AIL Routes A-35

7.3 Route Assessment Summary A-37
7.4 Conclusion A-37

Table A.1 – Abnormal load classification summary - general A-2
Table A.2 – Order classification summary for AIL vehicle movements A-6
Table A.3 – AIL transport requirements for project construction A-7
Table A.4 – AIL maximum vehicle heights A-16
Table A.5 – AIL route options to Beverley/A1079 (Satellite Construction Compound) A-20
Table A.6 – AIL route options to Brough Road Compound A-21
Table A.7 – AIL route options to Tongue Lane Compound site A-22
Table A.8 – AIL route options to Ousefleet Compound site A-22
Table A.9 – AIL route options to King's Causeway/A161 Compound A-23
Table A.10 – AIL route options to Outgate (Main Construction Compound) site A-24
Table A.11 – AIL route options to Tindale Bank Rd Compound site A-25
Table A.12 – AIL route options to A631 (nr Beckingham) (Main Construction Compound) site A-26
Table A.13 – AIL route options to (Satellite Construction Compound) site A-27
Table A.14 – AIL route options to High Marnham compound site A-28
Table A.15 – Indicative Large Mobile Crane AIL movements per PAR A-30
Table A.16 – Large Mobile Crane AIL route summary from PARs to site access points A-35
Table A.17 – Route summary from Goole Port to site locations A-36
Table A.18 – Initial structures identified A-42

Image A.1 – Methodology flowchart A-4
Image A.2 – Large Mobile Crane (Liebherr LTM 1650-8.1) – Ouse crossing A-8
Image A.3 – Large Mobile Crane (Liebherr LTM 1650-8.1) – Ouse crossing - typical dimensions A-9
Image A.4 – Large Mobile Crane (Liebherr LTM 1300-6.2) – Regular use A-10
Image A.5 – Large Mobile Crane (Liebherr LTM 1300-6.2) – Regular use – typical dimensions A-11
Image A.6 – Indicative piling rig on transport A-12
Image A.7 – Large Mobile Crane AIL movement at a haul road severance. A-18
Image A.8 – Ouse Crossing North A-19
Image A.9 – Ouse Crossing South A-19

Abbreviations A-38
Glossary A-39
References A-41

Annex A Structures Schedule

Executive summary

This report outlines the construction access strategy for the delivery of Abnormal Indivisible Loads (AILs) on the North Humber to High Marnham Project. The strategy is presented in line with the Overarching National Policy Statement (NPS) for Energy (EN-1) (Department for Energy Security and Net Zero 2024a) with a methodology describing the steps required to assess the AIL routes. The routing principles and vehicle types are driven by the project construction requirements, with overhead line and cabling works requiring AIL deliveries. Of the required vehicles, routing is assessed for those that are most physically onerous with the most restrictive manoeuvrability; Large Mobile Cranes, Pilling Rigs and other Construction Material and Plant Delivery vehicles.

Large Mobile Crane AILs will be transported along the Strategic Road Network (SRN), Major Road Network (MRN) and prescribed Primary Access Routes (PARs) in order to reach the construction sites, accessing via a given bellmouth to the haul road, then to points between towers and, to compounds where more practical. Routing for the Large Mobile Cranes has been assessed only from the point at which the vehicles leave the SRN/MRN and travel along the local road network. The journey start locations will be confirmed by the Main Works Contractor. Vehicle movements are forecast for all vehicles and summarised. The procedures required to implement transportation of the AILs are stated.

This document, which forms an appendix to the Outline Construction Traffic Management Plan (CTMP) (document reference 7.4), presents feasible routes for transporting the AILs required for the Project, and provides information which shows how potential routes have been determined. Though some routes have been discounted due to constraints, optionality remains open for most destinations at this stage of the Project where feasible. Post-DCO approval, the Main Works Contractor will take responsibility for securing AIL access through standard notification procedures such as via the Electronic Service Delivery for Abnormal Loads (ESDAL) system (or other suitable system) which automatically notifies highway authorities, the police and structure owners such as Network Rail. These, amongst other procedures, are set out in Section 6.

1. Introduction

1.1 Background

1.1.1 This document outlines the construction access strategy for AILs, which would use the SRN and MRN to access the region. AILs are defined in Section 2.3. The strategy also utilises several prescribed construction access routes – PARs – to access the construction areas.

1.1.2 This document should be read in conjunction with the main body of the Outline Construction Traffic Management Plan (CTMP) (document reference 7.4) and its other appendices.

1.1.3 Whilst policy and guidance documents, including those referenced in the bibliography often refer to abnormal loads and AILs interchangeably, for the purpose of this document AILs are, by definition, abnormal loads. Refer to the Glossary for more details.

1.2 Policy and Guidance

1.2.1 The Project is a Nationally Significant Infrastructure Project (NSIP) and this and other relevant documentation will be considered during the DCO application process.

1.2.2 Due consideration is to be given to the use of rail and water for transportation of abnormal loads as far as practicable.

1.2.3 The Project shall follow the guidance as listed in the Bibliography section of this document.

Table A.1 – Abnormal load classification summary - general

Characteristic Threshold	All Abnormal Loads	VR1 Classification	(Individual Vehicle) Special Order (SO) Classification
Total Vehicle Weight	>44,000kg	Not applicable	>150,000kg
Total Width	>2.9m	Applicable 5m-6.1m	>6.1m
Rigid Length	>18.65m (C&U)	Not applicable	>30m
Rigid Length	>18.75m (STGO)	Not applicable	>30m

1.2.4 The Project does not expect any loads requiring a (Individual Vehicle) Special Order.

1.3 Document Aims

1.3.1 This document presents the AIL routing strategy and aims to cover the following:

- AIL transport requirements anticipated for construction works including tower erection works and delivery of pilling rig and mobile cranes for construction works.
- The assessment of suitable AIL access routes for the vehicles required for construction works that are the most physically onerous with the most restrictive manoeuvrability; Large Mobile Cranes, Pilling Rigs, Excavators, Dumpers, welfare cabins etc.
- The assessment of access routes for Large Mobile Crane AILs will only cover the section of PARs used; these run between the SRN/MRN and site access points (bell mouths and compounds) and will be subject to further assessment by the Contractor and their haulier(s) in consultation with the relevant highway authorities and structure owners post-DCO approval. The assessment of the routes from the compounds to the PARs will be developed after DCO once the Contractor is appointed and detailed in the post-DCO approved CTMPs.
- The assessment of access routes for the AILs via coastal ports to the required site access points, based on physical/structural constraints, input from Local Highways Authorities/National Highways, Network Rail and historical AIL usage where applicable.

1.3.2 It has been prepared and coordinated by qualified logistics specialists who are competent members of the Chartered Institute of Logistics and Transport (CILT), Chartered Institution of Highways and Transportation (CIHT) and Institute of Highway Engineers (IHE).

1.3.3 This report is intended to supplement the approach identified within the main body of the Outline CTMP (document reference 7.4) as an appendix which presents feasible access routes for AILs on the Project. Following submission of this document, the Main Works Contractor will be responsible for following standard procedures in order to submit formal movement applications and obtain the necessary permits prior to AIL movements.

2. Methodology

2.1 Assessment Overview

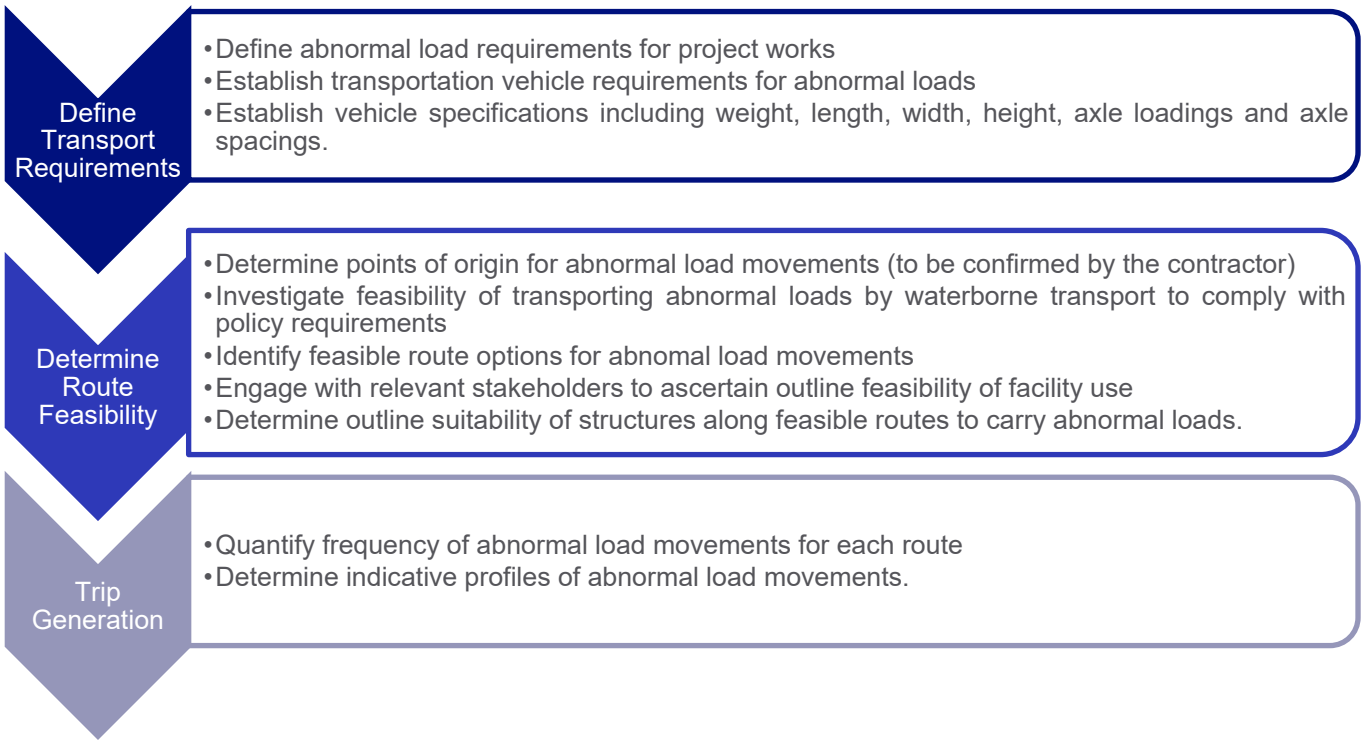
2.1.1 As established in Section 1.3, the purpose of this document is to identify and assess options for suitable AIL routes for Large Mobile Cranes, Pilling Rigs, Excavators, Dumpers, Welfare cabins etc; the specifications for which are outlined in Section 2.3. To achieve this, it is important to understand both the transportation infrastructure in the region and identify suitable routes to reach site.

2.1.2 Hence, the methodology outlined in the flowchart shown in Image A.1 has been utilised. This consists of three components:

1) Definition of Transportation Requirements
2) Determination of Route Feasibility
3) Trip Generation

2.1.3 The methodology assumption is a bespoke approach developed specifically for the Project and sought to form a holistic understanding of the specific logistical challenges and opportunities associated with construction of the Project in the context of regional geography and transportation infrastructure.

Image A.1 – Methodology flowchart



2.2 Assessment Scope and Assumptions

2.2.1 The primary focus of this assessment is the identification of suitable routes for AILs as well as to determine any route constraints to site compound destinations at access points to the internal haul road and directly via a bellmouth and internal haul road, where applicable. A desktop study using Google Maps information has been undertaken to identify the following constraints:

- Level crossings
- Bridges and other identified structures
- Highway constraints due to road geometry
- Height and width constraints.

2.2.2 Some materials required for the project may be required to be delivered into the UK by water to coastal ports on the basis that these items are not manufactured in the UK. Therefore, it is appropriate for the assessment to consider deliveries from a coastal port location to required site locations.

2.2.3 On this basis, the scope for the assessment was as follows:

- Assessment of AIL vehicles required, using project construction information for other key elements such as the required Crane and Pilling Rig, representing the largest loads
- Consideration of AIL movement for certain plant (e.g. excavators transported on low loaders) required for enabling works prior to construction of the haul road, subject to the contractor's methodology and plant selection.
- Identification of potential points of origin and destination for delivery of abnormal loads for the project work
- Assessment of routing options for AILs.

Limitations of Assessment

2.2.4 The accuracy of any constraints identified is limited to the desktop study using Google Maps data available.

2.2.5 Measures proposed to mitigate against identified constraints have been categorised as follows:

- Vegetation removal/cutting back/temporary traffic regulation orders
- Modifications to existing highway features (temp bellmouth construction)
- Highway mitigation works within existing highway boundary
- Highway mitigation works outside the existing highway boundary.

2.2.6 Constraints have been identified through swept path analyses (SPA) in certain areas using OS mapping and Autodesk vehicle tracking software and using Google Maps to identify route suitability and constraints in the selected areas. Custom vehicles have been built to simulate the different AIL vehicle types. These may not wholly represent the exact vehicles which are used, however the custom vehicles created are considered as the most onerous of any such variant. The SPAs are therefore expected to be developed further post-DCO approval by a haulage specialist once the Contractor is appointed and specific details of the vehicles and loads are known.

2.2.7 Regarding bridges and identified structures, it is worth noting that structural capacity assessments carried out at this stage would be a 'snapshot in time' of structural condition and suitability, and that structures may deteriorate between surveys and the proposed AIL deliveries. This is also true of any carriageway condition.

2.2.8 Asset owners such as LHAs and Network Rail typically carry out a principal/detailed inspection every six years and a simple general/visual inspection every year. It is therefore considered reasonable to assume that, where such record information has been provided by the asset owner, the condition determined from a principal/detailed inspection would remain valid for 6 years, subject to the identification, likelihood of deterioration, and risk level of any defects highlighted. The validity of a structural assessment varies, however, CS451 from the Design Manual for Roads and Bridges (DMRB) (applicable to LHAs) states that structures should have a Structural Review every 12 years.

2.3 Project Transport Requirements

Definition of AILs

2.3.1 The Road Vehicles (Authorisation of Special Types) (General) Order (2003) (UK Statutory Instruments 2003 No. 1998), states that an AIL is a large load which cannot 'without undue expense or risk of damage' be divided into two or more smaller loads for the purposes of being transported by road, and which exceeds limits set out in terms of weight (>44 tonnes), length (>18.65m), and width (>2.9m).

2.3.2 In line with this, the Special Types Enforcement Guide (Driver & Vehicle Standards Agency 2018) defines three categories of AIL vehicles which can be used under a Special Types (General) Order (STGO); STGO Cat (Category) 1, STGO Cat 2 and STGO Cat 3. AIL vehicles which exceed the STGO conditions require an Individual Vehicle Special Order (SO) to travel on the public road network. All STGO/SO vehicles must display a plate showing their category, e.g. 'STGO Cat 1', as well as a plate marked 'Special Types Use' which shows the gross, train and axle weights. Advance notice of the planned movements must also be agreed with the Local Highway Authority (LHA)/Bridge Authority/Police and given accordingly.

2.3.3 The conditions for each movement order category are summarised in Table A.2 below. It should be noted that reference to 'clear working days' in the table excludes Saturdays, Sundays and public holidays.

Table A.2 – Order classification summary for AIL vehicle movements

Characteristic Threshold	STGO Cat 1	STGO Cat 2	STGO Cat 3	SO**
Maximum total vehicle weight	46,000kg (min. 5 axles) 50,000kg (min. 6 axles)	80,000kg	150,000kg	>150,000kg Table A.1 for full dimension criteria of SO vehicle classification)
Maximum axle weight	Refer to AW Regulations*	12,500kg	16,500kg	>16,500kg

Characteristic Threshold	STGO Cat 1	STGO Cat 2	STGO Cat 3	SO**
No. clear working days' notice to LHA/Bridge Authority	2	2	5	5
No. clear working days' notice to Police	Dimensions may need to be given	Minimum 2; dimensions may need to be given	Minimum 2; dimensions may need to be given	5

Note – for mobile cranes classifications, see section 2.3.14
** AW Regulations refers to the Road Vehicles (Authorised Weight) Regulations 1998 (UK Statutory Instruments 1998 No. 3111)*
*** Minimum 10 weeks' notice to National Highways required with a completed Special Order application form (Form BE16)*

Types of AILs and Construction Requirements for the Project

2.3.4 The anticipated AIL project requirements for each main construction activity are set out in the following sections. These include a summary of the largest typical AIL vehicles expected for plant and machinery deliveries associated with each main activity; there may be additional AILs for such items as smaller plant, office cabins and long lengths of steel structures which are likely to be less in terms of weights and dimensions than those listed within Table A.3 below, so it can be assumed those can be accommodated on routes that can take the larger and heavier vehicles assessed in this report. Highway widening proposals also take account of vehicle width requirements.

Table A.3 – AIL transport requirements for project construction

Construction Works	AIL Transport Requirements
Overhead line construction	Large Mobile Crane, Piling Rig
Plant & Equipment	Plant-carrying vehicle such as articulated low-loader

Overhead Line Construction

2.3.5 For the construction of the overhead lines, AILs are proposed to be used for the delivery of the Piling Rigs and the Large Mobile Crane would classify as an AIL movement. The delivery of steelwork to construct the pylons is not likely to be an AIL movement as they will be delivered to site in a standard Low Loader HGV and assembled at each working area.

Large Mobile Cranes

2.3.6 The Large Mobile Crane AILs, including the 650t crane for the Ouse Crossing, will use the PARs to enter and exit the site access points. However, once on site, the vehicle will utilise the haul roads to travel within the site. They will then exit the site onto the PAR, which is considered an AIL movement, once the required works are finished. Hence, there is one AIL movement upon entry and one upon exit, totalling two AIL movements per crane delivery.

2.3.7 In this report, we have identified potential suppliers that may be used and looked at routes from their depots. These suppliers may or may not be used, actual suppliers will be appointed by the contractor.

Image A.2 – Large Mobile Crane (Liebherr LTM 1650-8.1) – Ouse crossing

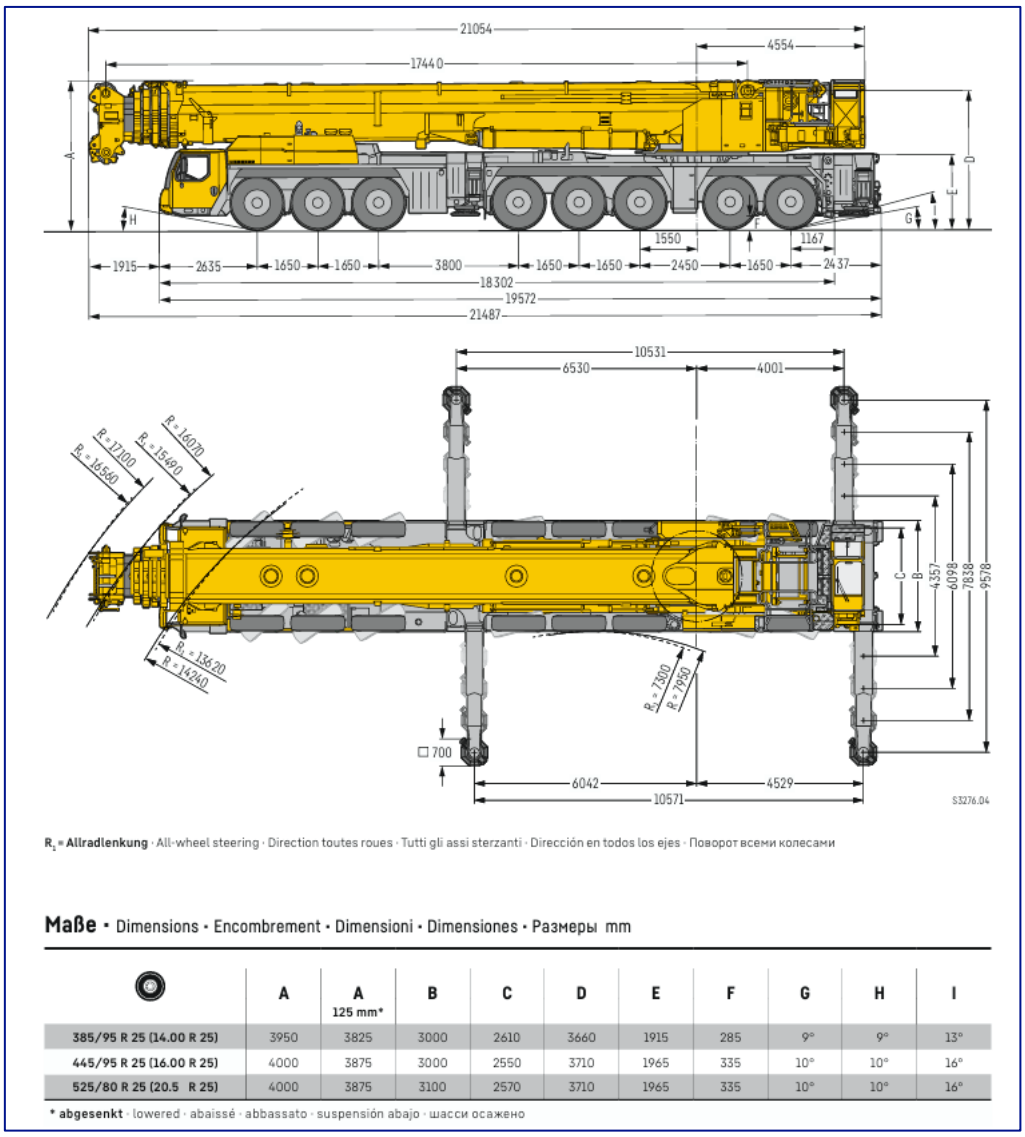


2.3.8 The typical Large Mobile Crane AIL specifications are noted as follows:

- Overall length of approximately 21m
- Overall width of 3.0m
- Overall body height of 4.0m
- Max track width of 3.0m.

2.3.9 Image A.3 shows the indicative dimensions for a Large Mobile Crane (Liebherr LTM 1650-8.1) vehicle (other makes may be used with similar specification), which is the largest AIL anticipated on the Project. This is the crane that is likely to be used to facilitate the Ouse crossing works, one used on each side of the river, its lifting capacity is 700 tonnes. Unless stated otherwise, dimensions are in mm.

Image A.3 – Large Mobile Crane (Liebherr LTM 1650-8.1) – Ouse crossing - typical dimensions



R_1 = **Allradlenkung** · All-wheel steering · Direction toutes roues · Tutti gli assi sterzanti · Dirección en todos los ejes · Поворот всеми колесами

Maße · Dimensions · Encombrement · Dimensioni · Dimensiones · Размеры mm

	A	A 125 mm*	B	C	D	E	F	G	H	I
385/95 R 25 (14.00 R 25)	3950	3825	3000	2610	3660	1915	285	9°	9°	13°
445/95 R 25 (16.00 R 25)	4000	3875	3000	2550	3710	1965	335	10°	10°	16°
525/80 R 25 (20.5 R 25)	4000	3875	3100	2570	3710	1965	335	10°	10°	16°

* **abgesenkt** · lowered · abaissé · abbassato · suspensión abajo · шасси осажено

2.3.10 The estimated gross vehicle weight is approximately 96,000kg with the maximum axle load of 16,500kg per six axles, classifying it as a Category C Mobile Crane in accordance with paragraph 2.1 of the Special Types Enforcement Guide (Driver and Vehicles Standards Agency 2018). Therefore, five working days' notice must be given to the LHAs/bridge authorities. Given the weight of the vehicle is >80,000kg and the width exceeds 2.9m, the vehicle is Police notifiable (two clear days' notice) as per The Road Vehicles (Authorisation of Special Types) (General) Order 2003 (UK Statutory Instruments 2003 No. 1998). As stated in Table A.1, the order required for usage of the Large Mobile Crane is STGO Cat 3 (total vehicle weight < 150,000kg, axle weight <16,500kg).

2.3.11 As there are multiple speed limits stated for a Category C Mobile Crane and a STGO Cat 3 AIL vehicle in the Special Types Enforcement Guide (Driver and Vehicles Standards Agency 2018), the lowest have been selected (from STGO Cat 3 conditions in paragraph 1.2 of the guide):

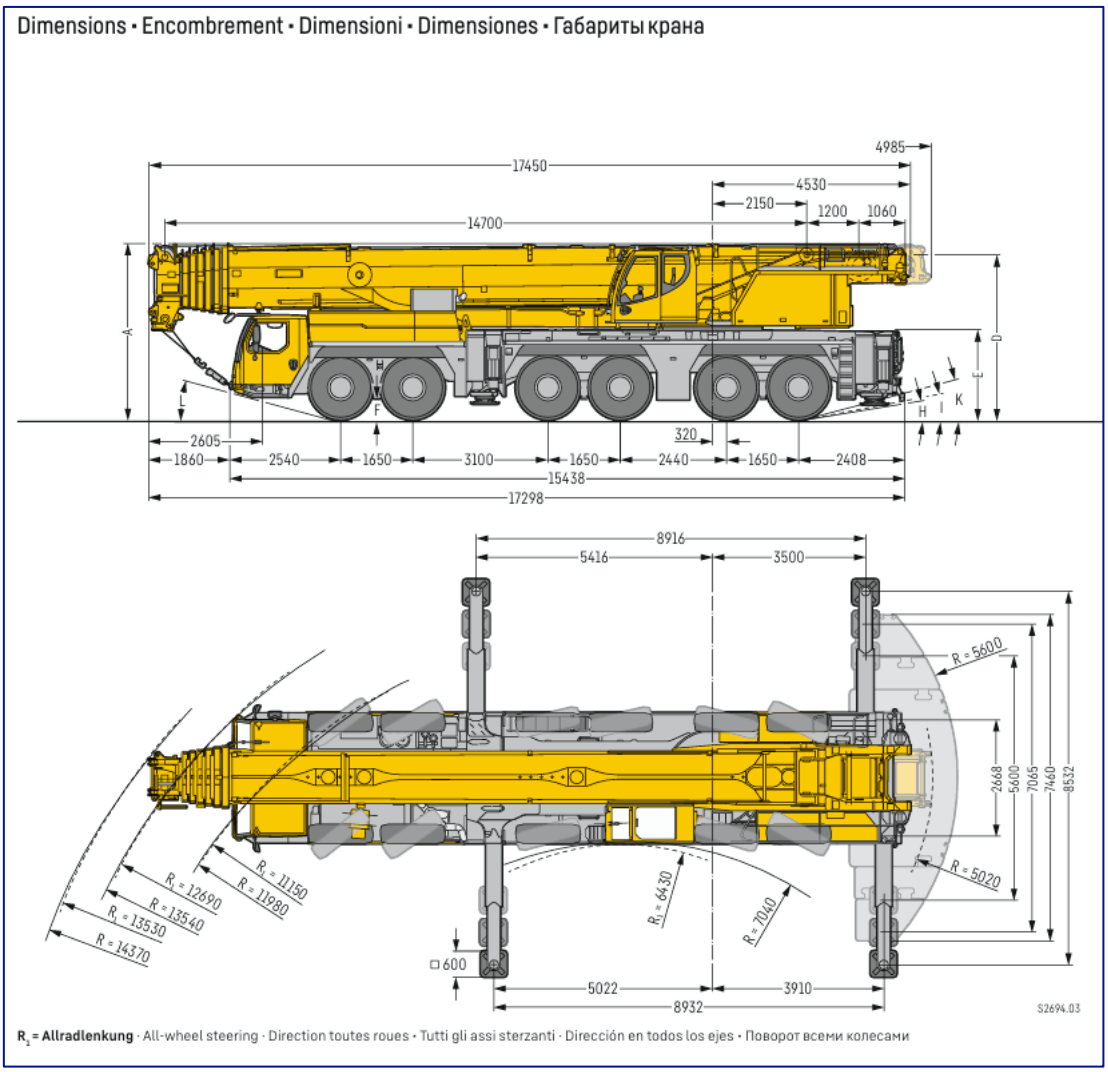
- Motorways at 40mph
- Dual carriageways at 35mph
- Other roads at 30mph.

2.3.12 For all other mobile crane requirements, we are assuming the use of a six-axle mobile crane (as a worst case) with a lifting capacity of 300 tonnes, as depicted in Image A.4 below (other makes may be used with similar specification):

Image A.4 – Large Mobile Crane (Liebherr LTM 1300-6.2) – Regular use



Image A.5 – Large Mobile Crane (Liebherr LTM 1300-6.2) – Regular use – typical dimensions



2.3.13 The regular use mobile crane is classed as a Category C mobile crane under STGO. The same notification periods and limitations apply for this type of mobile crane as the one describing the Ouse crossing mobile crane aforementioned.

2.3.14 In the event that the Contractor deems the use of smaller mobile cranes is required, such information will be included in the post-DCO approved CTMPs. A summary of mobile crane definitions for highway use under STGO is as below:

Category A

- maximum gross weight of 20,000kg on 2 axles
- maximum gross weight of 30,000kg on 3 axles
- maximum gross weight of 36,000kg on 4 axles
- maximum of 4 axles
- maximum of 11,500kg on a single driving axle
- maximum of 10,000kg on a single non-driving axle
- speed limits:
  - motorway 60mph

- dual carriageway 50mph
- other roads 40mph

Category B

- maximum axle weight of 12,500kg
- maximum gross weight of 12,500kg multiplied by the number of axles
- speed limits:
  - motorway 50mph
  - dual carriageway 45mph
  - other roads 40mph

Category C

- maximum axle weight of 16,500kg
- maximum gross weight of 16,500kg multiplied by the number of axles: up to a maximum of 150,000kg
- speed limits:
  - motorway 40mph
  - dual carriageway 35mph
  - other roads 30mph

Piling Rig

2.3.15 A Pilling Rig is also required for the construction of the piled foundations of the pylon towers. An indicative Piling Rig is shown in Image A.6.

Image A.6 – Indicative piling rig on transport



2.3.16 An indicative Piling Rig specification is noted below:

- Overall length of approximately 16.5m
- Overall width of 2.5m
- Overall height of approximately 4.0m
- Weight of approximately 47,000kg.

- It is possible larger piling rigs will be required, which will be confirmed by the Main Works Contractor. Where this is identified, further engagement with the relevant authorities will take place and routes re-assessed if required.

2.3.17 The Piling Rig detailed above will be transported to site on a suitable Low Loader and will use the same access points and routes as the Large Mobile Crane(s). The gross vehicle weight for such a load is likely to be in the region of 72 tonnes, making this a Cat 2 STGO notifiable load.

2.3.18 It is likely that the Contractor will design the foundations to accommodate a smaller Piling Rig, which would require a greater number of smaller piles. This approach is advantageous as a smaller Piling Rig is more manageable and incurs lower mobilisation costs. As per Table A.1, the vehicle is classified as STGO Cat 1 in the event it has five axles and total vehicle weight does not exceed 46,000kg. Under Cat 1, if there are six axles, this cannot exceed 50,000 kg. Once the load has been delivered, the departing vehicle would not be classed as an AIL in terms of weight.

2.3.19 For the overhead line works, the worst case AIL vehicle is the Large Mobile Crane(s).

3. Routing

3.1 Rail

3.1.1 The transportation of project cargo that necessitates an AIL delivery vehicle on the road network is considered unsuitable for rail transport. This is due to the unique logistical challenges and constraints associated with such loads. Consequently, the option of routing these goods from rail sidings has been discounted, as detailed in the Multi-Mode Transport Report, which is appended to the TA (document reference 7.15).

3.2 Ports and Waterways

3.2.1 The AIL routing strategy has considered both ports and inland waterways. Project cargo that cannot be sourced in the UK will be required to be delivered into the UK by water to coastal ports, as may be necessary.

3.2.2 The findings of a waterborne transport assessment as part of the Multi-Mode Transport Report, appended to the TA (document reference 7.15), identified the following coastal ports as viable for handling abnormal loads, forming part of the assumed assessed routes:

- Port of Hull
- Port of Immingham
- Port of Grimsby
- Port of Goole

3.2.3 For the purposes of this report, it is assumed some construction material (equipment) will be received at one port, and Goole has been used as the most likely of the options.

3.2.4 Furthermore, the multi-mode waterborne transport assessment discounted the use of inland waterways from access consideration due to routes constrained by physical size and depth of water, and limited navigability of the inland waterways near the scheme alignment.

3.3 Start and End Locations

Large Mobile Crane AILs – Ouse crossing & Regular use

3.3.1 The start locations for the Large Mobile Crane AILs are likely to be from various suppliers with depots across Nottinghamshire, North Lincolnshire and East Yorkshire. These specific locations will be confirmed once a contractor/haulage company is appointed at a later stage of the project. However, it is recognised that Large Mobile Crane AILs will utilise the SRN, appropriate for AIL movements, prior to accessing the proposed local road network which has been assessed for width and forms part of the proposed PARs.

3.3.2 The Large Mobile Crane AILs are required for the construction of the pylon towers, including for the works related to the Ouse crossing and will travel to the site construction compound or access bellmouth.

Construction Materials AILs

3.3.3 For the delivery of large electrical project cargo such as OHL conductor, it is understood that these items may not presently be manufactured in the UK and hence would be delivered by ship from overseas suppliers to coastal ports near the project site location. Prior assessment work as part of the Multi-Mode Transport Report, appended to the TA (document reference 7.11), identified 4No. coastal ports, listed in Section 3.2, as suitable to handle abnormal loads, although for the purposes of this report, it is assumed only one port would be used as a consolidated inbound centre, at Goole.

3.3.4 Although marine AIL arrivals are not currently anticipated, if required and based on the project construction requirements, AIL vehicles would use the road network from Goole Port to reach the following site compound end locations, as well as given access points from PARs directly via a bellmouth:

- Beverley/A1079 (Satellite construction compound)
- Brough Road (Main construction compound)
- Tongue Lane (Satellite construction compound)
- Ousefleet (Satellite construction compound)
- King's Causeway/A161 (Construction compound laydown storage area)
- Outgate, Crowle (Main construction compound)
- Tindale Bank Rd (Satellite construction compound)
- Doncaster/A631 (Main construction compound)
- Retford Road (Satellite construction compound)
- High Marnham (Satellite construction compound)

3.3.5 The end locations listed above in 3.3.6 are approximate descriptions of construction material AIL delivery destination. For the purpose of this document, these destination references are used when referring to AIL route options. Refer to Table A.17 for corresponding site compound references correlating to the main body of the Outline CTMP (document reference 7.4).

3.4 Headroom Clearances

3.4.1 Although there is no legal height limit, in practical terms, the maximum heights of AIL vehicles required for the scheme are shown in Table A.4. The maximum vehicle heights shown include the height of the load and the height of the trailer and cab (i.e. the highest point of any of those is the ‘maximum vehicle height’).

Table A.4 – AIL maximum vehicle heights

AIL Vehicle	Maximum Vehicle Height (m)
Large Mobile Crane AIL	4.0
HGV carrying heavy plant	4.5

Headroom – Overhead Bridges and Gantries

3.4.2 A maximum headroom of 5.03m (16’ 6”) is typically maintained within the UK road network as per DMRB (CD127) however, the actual headroom measurements are usually displayed on structures such as gantries and bridges.

Headroom – Level Crossing

3.4.3 At-grade level crossings may also pose a potential headroom restriction due to the electrified overhead lines. Similar to the overhead road structures on the UK road network, a safe height of 5.03m (16’ 6”) is usually maintained (as noted in The Highway Code, Rule 291). However, the actual safe crossing height at each level crossing can be found on signs located ahead of them.

3.4.4 It is important to note that even if a tall load falls below the safe height threshold, permission to pass underneath is not automatically granted due to the risk of flashover – consultation with Network Rail will be held to seek agreement to pass under the Overhead lines.

Headroom – Overhead Utilities

3.4.5 Beyond the headroom restrictions imposed by structures like gantries, bridges, and level crossings, there are also limitations due to overhead services such as telephone lines and local power distribution lines. Given that the safe height clearance on the UK road network is 5.03m (16' 6"), it is assumed that utilities crossing the road are at this height.

3.4.6 In cases where these services restrict sufficient clearance for taller vehicles, there are potential mitigations. For shorter lengths of constraint, it may be feasible to raise or bury these overhead lines. However, for longer routes, the cost and impact of the mitigations work may be unpractical hence the routes will be discounted. In all cases, any necessary arrangements for these modifications must be coordinated by the haulage company with the responsible undertakers.

3.5 Structural Capacity

3.5.1 The load carrying capacity of roads and bridges depends on the axle loading and the axle arrangements. When assessing structural capacity for abnormal loading, a case-by-case approach is necessary, involving coordination with Network Rail, National Highways, and the LHA.

Network Rail

3.5.2 For Network Rail, the following are regarding structural assessment for bridges and level crossings:

The bridge and level crossings will require abnormal load assessments to establish the allowable capacity of each asset with the respective frequency of use and particularly, the wheels' cleanliness at the level crossings (to avoid clogging rail tracks with site debris or mud and prevent derailment); and

Impact assessments, signal sighting assessments and structural assessments are to be provided for any works/activities that have a potential to affect Network Rail assets unless otherwise agreed with the Designated Project Engineer (DPE).

3.5.3 Based on the above, each of the AIL routes with Network Rail affected assets will be identified and notified to Network Rail to obtain structural information. With the structural information received, a review will be undertaken to assess the suitability of the assets in supporting the proposed AIL vehicles.

3.5.4 A total of 2No. rail level crossings (along Tongue Ln, PAR 28, and Station Rd, PAR 74) were identified as requiring further assessment by the Project team.

LHAs and National Highways

3.5.5 For the proposed AIL routes, affected structures identified will be notified to the Local Highways Authorities and National Highways for them to conduct a high-level review, confirming any that are of concern and require further assessment.

3.5.6 With the provision of structural information by the Local Highways Authorities and National Highways, structural assessments may be undertaken as necessary to confirm suitability of those structures to carry the AIL vehicles for each of the routes.

4. Route Assessment

4.1 Large Mobile Crane AILs

4.1.1 The Large Mobile Crane AIL will utilise prescribed PARs as set out in the main body of the Outline CTMP (document reference 7.4). For indicative movements per PAR, refer to Section 5.1 of this document.

4.1.2 They will reach the bellmouth at the start of the haul road section and continue along the internal haul road until nearing a site compound or severance point.

4.1.3 To cross over the severed haul road, the Large Mobile Crane AIL will use the PAR to access the MRN and travel on until it reaches the next PAR which it will travel along to re-access the haul road – see Image A.7.

Image A.7 – Large Mobile Crane AIL movement at a haul road severance.



Left: Large Mobile Crane AIL using PAR to access haul road north of severance. Right: Large Mobile Crane AIL using major road network without severance to southern section of haul road

4.1.4 For a full list of PAR IDs, refer to the main body of the Outline CTMP (document 7.4).

4.1.5 Further details on the routes including site access point (bellmouth) references, constraints identified, and indicative mitigation measures can be found on the Indicative Highway Mitigation Plans, appended to the Outline CTMP (document reference 7.4).

4.1.6 Ouse crossing mobile crane routes (from M62) are depicted below. Note the potential traffic management and temporary road layout changes identified are subject to a pre-condition road survey by the Contractor in consultation with the relevant highway authority.

Image A.8 – Ouse Crossing North

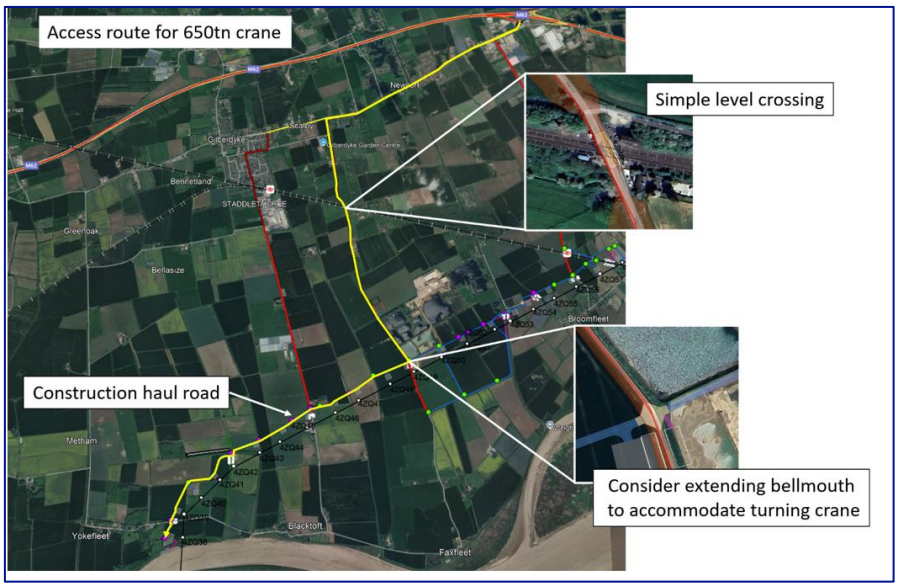
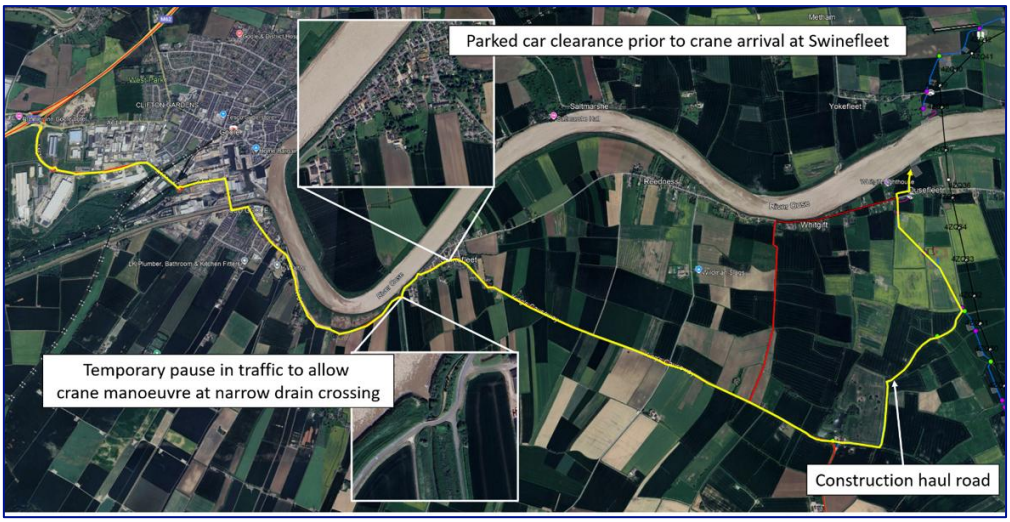


Image A.9 – Ouse Crossing South



4.2 Construction Materials & Plant AILs

4.2.1 This section provides an overview of the routes considered for other construction materials AIL Delivery vehicles.

4.2.2 AIL route IDs have been assigned based on final location and number of options per destination (e.g. for Beverley/A1079 (Satellite construction compound), route IDs begin with ‘H11-’ followed by ‘-AIL1’ (option 1), ‘AIL2’ (option 2), etc.).

4.2.3 Final locations are referred to with approximate descriptions (e.g. Beverley/A1079 (Satellite construction compound). For corresponding compound site access point references, refer to Table A.17.

4.2.4 For the remaining routes, access options to reach each destination point are kept open where feasible at this stage of the project.

4.3 Routing

4.3.1 This section gives route details to construction compounds. Individual bellmouth routings will follow the same main roads up to the relevant location and at the current stage, it is assumed these final legs are on local roads of the same standards as those to the compounds. Further work on this assumption will be provided in the contractor's CTMP, to be prepared in consultation with the relevant highway authority.

Beverley/A1079 (Satellite construction compound)

4.3.2 There are 2No. route options to reach the Beverley/A1079 (Satellite construction compound) site as shown in Table A.5 below.

Table A.5 – AIL route options to Beverley/A1079 (Satellite Construction Compound)

AIL Route ID	Start Location	Final Location	Distance (miles)*	Affected LHA
H11-AIL1	Cranswick (via A1035)	Beverley/A1079	12	East Riding of Yorkshire
H11-AIL2	Port of Goole (via M62)		35	East Riding of Yorkshire

** Distances marked miles represent the AIL route from Cranswick and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Cranswick.*

H11-AIL1 – Cranswick to Beverley/A1079 (Satellite construction compound)

4.3.3 The proposed route, a distance of 12 miles (from Cranswick Industrial Estate) to Beverley/A1079 satellite construction compound, will be for the Mobile Crane AIL vehicle and will take the route as shown Sheet 1 of Appendix B.

4.3.4 The mobile crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.5 Caution advised due to presence of agricultural tractors travelling along the A1079.

H11-AIL2 – Goole to Beverley/A1079 (Satellite construction compound)

4.3.6 The proposed route, a distance of 35 miles (from Port of Goole) to Beverley/A1079 satellite construction compound, will be for other AIL Delivery vehicle and will take the route as shown in as shown in Sheet 2 of Appendix B.

4.3.7 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

Brough Road (Main Construction Compound)

4.3.8 There are 2No. route options to reach the Brough Road Compound as shown in Table A.6 below.

Table A.6 – AIL route options to Brough Road Compound

AIL Route ID	Start Location	Final Location	Distance (miles)*	Affected LHA
H13-AIL1	Cranswick (via A1035)	Brough Road	20	East Riding of Yorkshire
H13-AIL2	Port of Goole (via M62)		17	East Riding of Yorkshire

** Distances marked miles represent the AIL route from the Cranswick and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Cranswick and terminal at the Port of Goole.*

H13-AIL1 – Cranswick to Brough Road Compound

4.3.9 The proposed route, a distance of 20 miles (from Cranswick Industrial Estate) to Brough Road main construction compound, will be for the Mobile Crane AIL vehicle and will take the route as shown AIL Delivery vehicle only and will take the route as shown in Sheet 3 of Appendix B.

4.3.10 The Mobile Crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.11 Old Road to Miles Lane (Scorborough) has a narrow carriageway with traffic calming measures (speed humps), a 7.5-tonne weight limit, unrestricted on-street parking, and is bordered by residential properties.

H13-AIL2 – Goole to Brough Road Compound

4.3.12 The proposed route, a distance of 17 miles, will be for other Construction Material AIL Delivery vehicle and will take the route as shown in Sheet 4 of Appendix B.

4.3.13 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

Tongue Lane (Satellite Construction Compound)

4.3.14 There are 2No. route options to reach the Tongue Lane Compound site as shown in Table A.7 below. Tongue Lane will be widened as part of proposed enabling works.

4.3.15 Tongue Lane has a narrow carriageway, functioning as a rural farm road with bends and ditches on both sides, presenting a risk of conflict between opposing traffic flows

4.3.16 Network Rail assets, unelectrified level crossings without an overhead catenary system have been identified along Tongue Lane. Engagement with Network Rail will be required for further structural assessments following the DCO submission and once a contractor or haulage company has been appointed at a later stage of the project.

Table A.7 – AIL route options to Tongue Lane Compound site

AIL Route ID	Start Location	Final Location	Distance (miles)*	Affected LHA
H14-AIL1	Cranswick (via A614)	Tongue Lane	32	East Riding of Yorkshire
H14-AIL2	Port of Goole (via M62)		16	East Riding of Yorkshire

** Distances marked miles represent the AIL route from Cranswick and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Cranswick.*

H14-AIL1 – Cranswick to Tongue Lane Compound

4.3.17 The proposed route, a distance of 23 miles (from Cranswick Industrial Estate) to Tongue Lane satellite construction compound, will be for the Mobile Crane AIL vehicle and will take the route as shown in Sheet 5 of Appendix B.

4.3.18 The mobile crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.19 Route H14-AIL1 and AIL2 will be taken forward for further discussion and assessment.

H14-AIL2 – Goole to Tongue Lane Compound

4.3.20 The proposed route, a distance of 16 miles, will be for other Construction Material AIL Delivery vehicle only and will take the route as shown in Sheet 6 of Appendix B.

4.3.21 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

Ousefleet (Satellite Construction Compound)

4.3.22 There are 2No. route options to reach the Ousefleet Compound site as shown in Table A.8 below.

Table A.8 – AIL route options to Ousefleet Compound site

AIL Route ID	Start Location	Final Location	Distance (miles)*	Affected LHA
H16-AIL1	Doncaster (via M18)	Ousefleet	25	City of Doncaster, East Riding of Yorkshire
H16-AIL2	Port of Goole (via A161)		6	East Riding of Yorkshire

** Distances marked mileage represent the AIL route from Doncaster and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Doncaster.*

H16-AIL1 – Doncaster to Ousefleet Compound

4.3.23 The proposed route, a distance of 25 miles (from Doncaster to Ousefleet), will be for the Mobile Crane AIL vehicle only and will take the route as shown Sheet 7 of Appendix B.

4.3.24 The mobile crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.25 Railway bridge identified on Narnby Dun Road with advance warning signage prohibiting vehicles exceeding 4.3 m in height.

4.3.26 Low Street/A161, Swinefleet features a narrow carriageway with unrestricted on-street parking alongside residential properties.

4.3.27 Due to restricted Light Vehicles access in Ousefleet, the vehicle will travel to the King's Causeway/A161 (Construction compound laydown storage area), Bellmouth BM-042 and use the internal site haul road to access the Ousefleet compound.

H16-AIL2 – Goole to Ousefleet Compound

4.3.28 The proposed route, a distance of 6 miles, will be for other Construction Material AIL Delivery vehicle and will take the route as shown in Sheet 8 of Appendix B.

4.3.29 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

4.3.30 Due to restricted Light Vehicles access in Ousefleet, the vehicle will travel to the King's Causeway/A161(Construction compound laydown storage area) Bellmouth BM-042 and use the site internal haul road to access the Ousefleet compound.

King's Causeway/A161 (Satellite Construction Compound)

4.3.31 There are 2No. route options to reach the King's Causeway/A161 Compound site as shown in Table A.9 below.

Table A.9 – AIL route options to King's Causeway/A161 Compound

AIL Route ID	Start Location	Final Location	Distance (miles)*	Affected LHA
H17-AIL1	Doncaster (via M18)	King's Causeway/A161	25	City of Doncaster, East Riding of Yorkshire
H17-AIL2	Port of Goole (via A161)		6	East Riding of Yorkshire

** Distances marked miles represent the AIL route from Doncaster and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Doncaster.*

H17-AIL1 – Doncaster to King's Causeway/A161 Compound

4.3.32 The proposed route, a distance of 25 miles, from Doncaster will be for the Mobile Crane AIL Delivery vehicle and will take the route as shown in Sheet 7 of Appendix B.

4.3.33 The mobile crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.34 Railway bridge identified on Narnby Dun Road with advance warning signage prohibiting vehicles exceeding 4.3 m in height.

4.3.35 Low Street/A161, Swinefleet features a narrow carriageway with unrestricted on-street parking alongside residential properties

H17-AIL2 – Goole to King's Causeway/A161 Compound

4.3.36 The proposed route, a distance of 6 miles (from Port of Goole), will be for other Construction Material AIL Delivery vehicle and will take the route as shown in Sheet 8 of Appendix B.

4.3.37 The AIL Delivery vehicle using this route is classified as an STGO Category 3 movement.

4.3.38 Low Street/A161, Swinefleet features a narrow carriageway with unrestricted on-street parking alongside residential properties

Outgate (Main Construction Compound)

4.3.39 There are 2No. route options to reach the Outgate (Main Construction Compound) site as shown in Table A.10 below.

Table A.10 – AIL route options to Outgate (Main Construction Compound) site

AIL Route ID	Start Location	Final Location	Distance (miles)*	Affected LHA
H19-AIL1	Doncaster (via M180/A161)	Outgate, Crowle	20	City of Doncaster, East Riding of Yorkshire, North Lincolnshire
H19-AIL2	Port of Goole (via A161)		10	East Riding of Yorkshire, North Lincolnshire

** Distances marked miles represent the AIL route from Doncaster and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Doncaster.*

H19-AIL1 – Doncaster to Outgate Compound

4.3.40 The proposed route, a distance of 20 miles, will be for the Mobile Crane AIL vehicle and will take the route as shown in Sheet 9 of Appendix B.

4.3.41 The Mobile Crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.42 Railway bridge identified on Narnby Dun Road with advance warning signage prohibiting vehicles exceeding 4.3 m in height.

4.3.43 The A161 features a narrow carriageway with unrestricted on-street parking alongside residential properties

4.3.44 Due to restricted Light Vehicles access only on Outgate, the vehicle will travel via the A161 to Luddington Rd/B1392 to Carr Ln Bellmouth BM-056 and use the site internal haul road to access the Outgate compound

H19-AIL2 – Goole to Outgate Compound

4.3.45 The proposed route, a distance of 10 miles (from the Port of Goole), will be for other Construction Material AIL Delivery vehicle and will take the route as shown in Sheet 10 of Appendix B

4.3.46 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

4.3.47 Due to restricted Light Vehicles access only on Outgate, the vehicle will travel via the A161 to Luddington Rd/B1392 to Carr Ln Bellmouth BM-056 and use the site internal haul road to access the Outgate compound

4.3.48 The A161 features a narrow carriageway with unrestricted on-street parking alongside residential properties

Tindale Bank Rd (Satellite Construction Compound)

4.3.49 There are 2No. route options to reach the Tindale Bank Rd Compound site as shown in Table A.11 below.

4.3.50 Railway bridge identified on Narnby Dun Road with advance warning signage prohibiting vehicles exceeding 4.3 m in height.

4.3.51 High Street/A161, Belton features a narrow carriageway with unrestricted on-street parking alongside residential properties.

Table A.11 – AIL route options to Tindale Bank Rd Compound site

AIL Route ID	Start Location	Final Location	Distance (miles)	Affected LHA
H25-AIL1	Doncaster (via M180/A161)	Tindale Bank Rd	23	City of Doncaster, North Lincolnshire.
H25-AIL2	Port of Goole (via M62/M180)		27	East Riding of Yorkshire, North Lincolnshire.

** Distances marked miles represent the AIL route from Doncaster and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Doncaster*

H25-AIL1 – Doncaster to Tindale Bank Rd Compound

4.3.52 The proposed route, a distance of 23 miles, will be for the Mobile Crane AIL vehicle and will take the route as shown in Sheet 11 of Appendix B.

4.3.53 The mobile crane AIL vehicle using this route is classified as an STGO Category C movement.

H25-AIL2 – Goole to Tindale Bank Rd Compound

4.3.54 The proposed route, a distance of 27 miles (from the Port of Goole), will be for other Construction Material AIL Delivery vehicle only and will take the route as shown in Sheet 12 of Appendix B.

4.3.55 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

4.3.56 Route H25-AIL1 and AIL2 will be taken forward for further discussion and assessment.

4.3.57 Network Rail assets, level crossing have been identified along Station Road/A161 (PAR 17). Engagement with Network Rail will be required for further structural assessments following the DCO submission and once a contractor or haulage company has been appointed at a later stage of the project.

A631 (Main Construction Compound, near Beckingham)

4.3.58 There are 2No. route options to reach Doncaster/A631 (Main Construction Compound) site for access, as shown in Table A.12.

Table A.12 – AIL route options to A631 (nr Beckingham) (Main Construction Compound) site

AIL Route ID	Start Location	Final Location	Distance (miles)	Affected LHA
H36-AIL1	Doncaster (via M18/A1)	A631 (Main Construction Compound)	29	City of Doncaster, Bassetlaw DC, Notts CC.
H36-AIL2	Port of Goole (via M18/A1)		40	East Riding of Yorkshire, South Yorkshire, City of Doncaster, Bassetlaw DC, Notts CC.

** Distances marked miles represent the AIL route from Doncaster and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Doncaster*

H36-AIL1 – Doncaster to A631 Compound

4.3.59 The proposed route, a distance of 29 miles, will be for the Mobile Crane AIL vehicle and will take the route as shown in Sheet 13 of Appendix B.

4.3.60 The mobile crane AIL Delivery vehicle using this route is classified as an STGO Category C movement.

4.3.61 Railway bridge identified on Narnby Dun Road with advance warning signage prohibiting vehicles exceeding 4.3 m in height.

H36-AIL2 – Goole to Doncaster/A631 (Main Construction Compound)

4.3.62 The proposed route, a distance of 40 miles, will be for other Construction Material AIL Delivery vehicle and will take the route as shown in Sheet 14 of Appendix B.

4.3.63 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

4.3.64 Gainsborough Rd/A631 features a narrow carriageway with business and residential properties

Retford Road (Satellite Construction Compound)

4.3.65 There are 2No. route options to reach Retford Road satellite construction compound for access as shown in Table A.13.

Table A.13 – AIL route options to (Satellite Construction Compound) site

AIL Route ID	Start Location (Port)	Final Location	Distance (miles)	Affected LHA
H37-AIL1	Doncaster (via M18 / A1)	Retford Road (Satellite Construction Compound)	32	City of Doncaster, Bassetlaw DC
H37-AIL2	Port of Goole (M18 / A1)		44	East Riding of Yorkshire, City of Doncaster, Bassetlaw DC.

** Distances marked miles represent the AIL route from Doncaster and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Doncaster*

H37-AIL1 – Doncaster to Retford Road Compound

4.3.66 The proposed route, a distance of 32 miles will be for the Mobile Crane AIL vehicle and will take the route as shown in Sheet 15 of Appendix B.

4.3.67 The Mobile Crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.68 Railway bridge identified on Narnby Dun Road with advance warning signage prohibiting vehicles exceeding 4.3 m in height.

4.3.69 Spital Hill to Leverton Road features a narrow carriageway with unrestricted on-street parking alongside residential properties and a school.

H37-AIL2 – Goole to Retford Road Compound

4.3.70 The proposed route, a distance of 44 miles will be for other Construction Material AIL Delivery vehicle and will take the route as shown in Sheet 16 of Appendix B.

4.3.71 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

4.3.72 Spital Hill to Leverton Road features a narrow carriageway with unrestricted on-street parking alongside residential properties and a school[1].

High Marnham (Satellite Construction Compound)

4.3.73 There are 2No. route options to reach High Marnham (Satellite Construction Compound) access as shown in Table A.14

Table A.14 – AIL route options to High Marnham compound site

AIL Route ID	Start Location (Port)	Final Location	Distance (miles)	Affected LHA
H38-AIL1	Doncaster (via A6182 / A1 / A57)	High Marnham (Satellite Construction Compound)	45	City of Doncaster, Nottinghamshire County Council
H38-AIL2	Port of Goole (via M62 /M18 /A1)		47	East Riding of Yorkshire, City of Doncaster, Nottinghamshire County Council

H38-AIL1 – Doncaster to High Marnham compound

4.3.74 The proposed route, a distance of 45 miles will be for the Mobile Crane AIL vehicle and will take the route as shown in Sheet 19 of Appendix B.

4.3.75 The mobile crane AIL vehicle using this route is classified as an STGO Category C movement.

4.3.76 Railway bridge identified on Narnby Dun Road with advance warning signage prohibiting vehicles exceeding 4.3 m in height.

H38-AIL2 – Goole to High Marnham compound

4.3.77 The proposed route, a distance of 47 miles will be for other Construction Material AIL Delivery vehicle and will take the route as shown in Sheet 20 of Appendix B.

4.3.78 The AIL Delivery vehicle using this route is classified as an STGO Category 2 movement.

[1] Distances marked mileage (m) represent the AIL route from Doncaster and terminal at the Port of Goole. Both options are kept open at the current stage of the project regarding routes originating from Goole and Doncaster.

5. Transport

5.1 Trip Generation

5.1.1 Construction vehicle requirements have been assessed for each of the access routes where AIL movements are expected.

5.1.2 These movements are indicative will be therefore subject to change upon finalisation of the construction programme by the Main Works Contractor.

5.1.3 In common with other Nationally Significant Infrastructure Projects, the construction programme will be subject to change from factors such as procurement, system access requirements (outages), resource and material availability, weather and ground conditions.

5.1.4 Trip generation for crane movements have been assessed. At this stage, construction material AIL movements are not anticipated so have not been quantified. There are additional AIL movements associated with site set up and construction plant/equipment AIL Delivery vehicles.

Large Mobile Crane AIL Movements

5.1.5 The key assumptions for this data set are:

- Based on one crane being per relevant construction site or compound, unless stated otherwise, there will be one AIL movement per arrival, and one AIL movement per departure. It is expected that the majority of crane movements will go to direct to site via a bellmouth, and use the internal haul road to reach the point of work. Some may travel to a compound first, where appropriate, then access the haul road from there.
- The cranes remain on the internal haul road (where continuous) until the section is complete and then returns.
- Movements are two-way vehicle movements (i.e. two-way vehicles, two trips = one vehicle)
- The AIL trip generation has been developed based on crane movements associated with overhead line construction works. If an alternative approach was taken to deliver the materials for the Project, e.g. using multi-modal ports and sidings, the volume of AIL movements would not change
- As a worst case, it has been assumed that each tower along the route would generate two crane movements.
- Large Mobile Cranes are expected to enter via one PAR and exit via another using the construction haul road to move between towers and therefore avoiding impacts on the road network wherever possible. Where the haul road is severed, the crane will need to enter and exit along the same PAR.
- Large Mobile Crane AIL movements can mostly use the crossover points to connecting haul road sections, without using the PARs, however there will be occasion to leave the haul road and use part of the highway, before returning to the haul road.

5.1.6 A summary of the trip generation is set out in Table A.15. Please note that bellmouths are entry/exit PARs are labelled as indicative as this is ultimately dependent on contractor methodology.

Table A.15 – Indicative Large Mobile Crane AIL movements per PAR

Indicative Entry Access Junction (Bellmouth) ID	Indicative Exit Access Junction (Bellmouth) ID	Indicative Entry/Exit PAR	Number of New Build Towers	Total Proposed Crane Movements (Arrivals)	Total Proposed Crane Movements (Departures)
BM001	BM002	PAR1 (A1079) / PAR 6 (A64)	6	6	6
BM003	BM007	PAR 5 (Dunflat Road) / PAR 11 (Rowley Road)	19	19	19
BM008	BM008	PAR 11 (Rowley Road) / PAR 11 (Rowley Road)	1	1	1
BM009/ BM010	BM013	PAR 13 (Lambwell Hill) / PAR21 (Ellerker Road)	15	15	15
BM016/ BM018	BM014	PAR 24 (Brough Road) / PAR 27 (Carr Lane)	21	21	21
BM029/ BM030	BM033/ BM035	PAR 28 (Tongue Lane)	19	19	19
BM033 (for access to northern River Ouse crossing)	BM033	PAR 28 (Tongue Lane)	1	1	1
BM042/BM043 (for access to southern River Ouse crossing)	BM042/BM043	PAR 33 (A161 King's Causeway)	1	1	1
BM042/ BM043	BM056	PAR 33 (Kings Causeway) / PAR 42 (Carr Lane)	51	51	51
BM065	BM065	PAR 51 (A18) / PAR 51 (A18)	2	2	2
BM015	BM015	PAR 153 (A161) / PAR153 (A161)	1	1	1
BM068	BM068	PAR 51 (A18) / PAR51 (A18)	7	7	7

Indicative Entry Access Junction (Bellmouth) ID	Indicative Exit Access Junction (Bellmouth) ID	Indicative Entry/Exit PAR	Number of New Build Towers	Total Proposed Crane Movements (Arrivals)	Total Proposed Crane Movements (Departures)
BM069/ BM070	BM78	PAR 57 (Belton Road) / PAR63 Melwood Hill (North)	15	15	15
BM079	BM084	PAR 63 Melwood Hill (North) / PAR72 (Ferry Road)	10	10	10
BM085	BM086	PAR 72 (Ferry Road) / PAR 73 (Stockwith Road)	3	3	3
BM089	BM089	PAR 74 (Station Road) / PAR 74 (Station Road)	5	5	5
BM091/BM092	BM091/ BM092	PAR 75 (Tindale Bank Road) / PAR 75 (Tindale Bank Road)	5	5	5
BM093/BM094	BM099	PAR 77 (Cornley Road) / PAR 87 (A631)	20	20	20
BM101	BM103	PAR 87 (A631) / PAR93 (Gainsborough Road)	17	17	17
BM107/BM108	BM107/BM10 8	PAR 93 (Gainsborough Road) / PAR 93 (Gainsborough Road)	10	10	10
BM113	BM113	PAR 155 (Retford Road) / PAR 155 (Retford Road)	4	4	4
BM114	BM090/ BM109	PAR 155 (Retford Road) / PAR 115 (Retford Road)	11	11	11
BM004/ BM023	BM052	PAR 112 (Main Street) / PAR 119 (A57)	12	12	12
BM053	BM076	PAR 119 (A57)/ PAR/139 (Fledborough Road)	8	8	8
BM054/ BM100	BM54/BM100	PAR 139 / PAR 139 (Fledborough Road)	3	3	3

6. AIL Movement Procedures

6.1 Overview

6.1.1 This section outlines the procedures associated with transportation of the AILs required for the Project. The Main Works Contractor will be responsible for managing and adhering to these processes.

6.2 Electronic Service Delivery for Abnormal Loads (ESDAL)

6.2.1 The ESDAL system is managed by National Highways. It is a tool used by contractors/hauliers to plan routes and notify relevant authorities, including structure owners, highway authorities, and the police of the intended route and the vehicle particulars.

6.2.2 Other suitable software is available such as AbHaulier.co.uk, the particular software used will be at the discretion of the haulier, provided it is recognised by all parties as being fit for purpose.

6.2.3 The police, road and bridge authorities and structural owners use the ESDAL system to:

- Manage haulier's abnormal load notifications
- Check the suitability of the haulier's proposed route.
- Provide an objection if required. If no response is given by the LHA, police or structural owner within the prescribed timescale, this shall be taken as a non-objection and an assumption that the proposed movement can proceed.

6.2.4 While ESDAL assists in route planning for abnormal loads, its accuracy relies on the data provided. In certain cases, the system may lack information about all the structures along the route, in such case, the relevant structural owner should make the necessary checks and advise the haulier of any issue.

6.3 Local Council Abnormal Load Movements

6.3.1 Contractors/hauliers must notify the highway authority for the routes they want to use before moving an abnormal load, which will be facilitated by the suitable notification software. The load must not be moved if the highway authority has advised of refusal. No response within the prescribed timescale shall be taken as the proposed movement being acceptable. The routing information, along with the vehicle axle loads and arrangements, is included in the haulier’s notification and the relevant highway authority should assess its structures under their ownership to determine if it can handle the load.

6.4 Police Liaison

6.4.1 The local police will be notified of AIL movements over 80 tonnes and all wide loads to ensure the safe and efficient transport of oversized or heavy loads, via the haulier's notification system. A police escort may be required when the width of the vehicle exceeds the road width resulting in vehicle overhang on the opposite lane, although self-escorting may be allowed. In urban areas, a police escort can help manage traffic and ensure public safety.

6.4.2 As part of the North Humber to High Marnham scheme, there will be regular engagement with the police to ensure that adequate resources are in place to facilitate the AIL movements if required. Discussions about movement frequency, dates, and vehicle specifications will be included in the haulier's notification which allows the police to conduct their assessment.

6.4.3 Where local police impose embargo times on escorting AIL vehicles, these will be considered during continued engagement as the programme for AIL movements is developed in more detail with the Main Works Contractor. For example, Humberside Police have declared embargo times between 0730-0930hrs and 1630-1830hrs (Monday to Friday) and during hours of darkness, Lincolnshire Police between 0700-0900hrs and 1600-1800hrs (Monday to Friday), no movement in the dark except on A1 or A180 & no movement in adverse weather or poor visibility and, Nottinghamshire Police between 0700-0900hrs and 1600-1800hrs (Monday to Friday), except on M1 and A1.

6.5 Emergency Response

6.5.1 In the event of an emergency or accident along the route, the AIL vehicle will stop and remain stationary. The AIL vehicle is restricted to travel exclusively on its predefined and approved route and cannot be diverted to any alternative routes, unless directed to do so by the police. The vehicle will only proceed when it is safe to do so; otherwise, it will remain stationary. The precise location for emergency stops and related details will be determined by the specialist haulage company during a later stage upon their appointment.

6.6 Removal and Replacement of Street Furniture

6.6.1 The removal and replacement of street furniture may be required to facilitate AIL movements and is generally managed under Traffic Regulation Order (TRO), of which none are envisaged as being required for the Project, Temporary Traffic Regulation Order (TTRO) and Street Works Legislations. The removal and replacement of street furniture is typically organised by the contractor/haulier however, in some circumstances the highway authority or local authority may require their preferred contractor carry out these works.

6.7 Road Condition Surveys

6.7.1 Prior to the start, and following completion, for each stage of the project, road condition surveys for the routes should be undertaken and agreed with each of the affected LHAs. These surveys would inform any works that may be required to rectify specific damage to the road network as a direct result of construction work.

6.7.2 A visual road condition survey is a simple survey to record the condition of the road only; the road is walked with photographs taken at regular intervals to record the condition of the road.

6.7.3 It is anticipated that two surveys are to be taken (jointly with the Contractor and the relevant highway authority) – one before and one after each stage of the project – so that they can be compared to determine if any damage has been caused to the road surface by the construction traffic (including the movement of AILs) and appropriate repairs can be undertaken as necessary.

6.7.4 Subject to negotiation with the affected Highway Authority, relevant repairs can either be undertaken by the developer, or a contribution can be made to the relevant Highway Authority to enable them to undertake the repairs.

6.7.5 For abnormal load movements, indemnities are part of the haulier responsibility and are included in the established notification process conditions.

7. Summary

7.1 Summary of Large Mobile Crane AIL Routes

7.1.1 Large Mobile Crane AILs will use the PARs to reach site access points. A summary of the total Large Mobile Crane AIL movements, along with affected LHA for each PAR is given in Table A.16 below. The Large Mobile Crane movements associated with H11-AIL1 / H38-AIL1 are assumed to travel through Yorkshire and the Humber through to Lincolnshire regions; this is subject to desktop study using Google Maps checks and therefore are included for completeness at this stage of the project.

7.1.2 It should be noted that the below gives route details to construction compounds. Individual bellmouth routings will follow the same main roads up to the relevant location and at the current stage, it is assumed these final legs are on local roads of the same standards as those to the compounds.

Table A.16 – Large Mobile Crane AIL route summary from PARs to site access points

PAR ID	Access Junction (Bellmouth) ID	Route Length (miles)	Affected LHA
PAR 1	BM-001	12	East Riding of Yorkshire
PAR 24	BM-017	20	East Riding of Yorkshire
PAR 28	BM-034	23	East Riding of Yorkshire
PAR 33	BM-042 & BM-043	25	East Riding of Yorkshire / North Yorkshire Council
PAR 42	BM-056	20	East Riding of Yorkshire / North Yorkshire Council
PAR 74	BM-092	18	North Yorkshire Council / North Lincolnshire Council
PAR 87	BM-099	19	North Yorkshire Council / Bassetlaw District Council
PAR 103	BM-113	31	North Yorkshire Council / Bassetlaw District Council
PAR 119	BM-053	47	North Lincolnshire / Nottinghamshire County Council

7.2 Summary of Construction Material & Plant AIL Routes

7.2.1 Based on a primary desktop study using Google Maps to identify route suitability and constraints, the routes outlined in Table A.17 for Construction Material AIL delivery vehicle should be taken forward for further discussion and assessment with the rail asset owner in relation to the identified level crossings.

7.2.2 At this current stage, AIL construction material and plant movements are yet to be confirmed, but have been assessed to allow contractor flexibility.

Table A.17 – Route summary from Goole Port to site locations

AIL Route ID	Start Location (Port)	Destination (Description, Compound Reference)	Route Length (miles)	Affected LHA (i.e. routed from, via and to)
H11-AIL2	Goole	Beverley (A1079) Satellite Construction Compound	35	East Riding of Yorkshire (ERoY)
H13-AIL2	Goole	Brough Road Compound	17	ERoY
H14-AIL2	Goole	Tongue Lane (Satellite Construction Compound)	16	ERoY
H16-AIL2	Goole	Ousefleet Compound	6	ERoY, North Lincolnshire
H17-AIL2	Goole	King's Causeway	6	ERoY, North Lincolnshire
H19-AIL2	Goole	Outgate Compound	10	ERoY, North Lincolnshire
H25-AIL2	Goole	Tindale Bank Rd (Satellite Construction Compound)	27	ERoY, North Lincolnshire
H36-AIL2	Goole	A631 Main Construction Compound	40	ERoY, South Yorkshire, City of Doncaster, Bassetlaw DC, Notts CC.
H37-AIL2	Goole	Retford Road	44	East Riding of Yorkshire, City of Doncaster, Bassetlaw DC.
H38-AIL2	Goole	High Marnham	47	East Riding of Yorkshire, City of Doncaster, Nottinghamshire County Council

Note only construction material and/or plant and equipment, if required, will start their journeys from Goole Port. Mobile cranes will come from the relevant supplier depot.

7.3 Route Assessment Summary

7.3.1 Potential routes for AIL deliveries have been explored based on construction requirements for the Project.

7.3.2 Where a structure has been identified through desktop study Google Map as possibly requiring a structural assessment, the process to assess it will commence post-DCO submission by the Main Works Contractor when appointed. This process will include development of a formal Approval in Principle (AiP) which requires sign-off by the relevant authority and the relevant certificates to be appointed.

7.3.3 Interactions with Network Rail assets including under/overbridges and level crossings have been reviewed through route desktop study, a total of two were identified as requiring further structural assessments which will be completed by the Project team, with approval signed off by Network Rail.

7.3.4 The relevant police forces will be engaged to discuss the proposed AIL routes, by the Main Works Contractor to develop the routing strategy and inform their abnormal load assessments in order to manage the potential resource impacts to the police.

7.3.5 The relevant highway authority and local authority (for information) along the entire length of the proposed routes will be informed of proposed movements via ESDAL or another suitable software notification system.

7.4 Conclusion

7.4.1 This report has outlined the access strategy for delivery of AILs on the Project and identified feasible transportation routes based on a primary desktop study using Google Maps to identify route suitability and constraints. Route optionality to reach the required destinations remains open at this stage of the Project where feasible.

7.4.2 The Main Works Contractor will be responsible for further developing the AIL access strategy, including continuation of the structural checks process, confirming preferred routes where appropriate and progressing towards formal movement applications (including securing necessary permits), pursuant to established procedures, which will need to be submitted closer to the time of movements.

Abbreviations

Abbreviation	Full Reference
AIL	Abnormal Indivisible Load
AiP	Approval in Principle
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DPE	Designated Project Engineer
EN-1	Overarching National Policy Statement for Energy
ES	Environmental Statement
ESDAL	Electronic Service Delivery for Abnormal Loads
HGV	Heavy Goods Vehicle (over 3.5 tonnes gross weight)
km	Kilometre
LGV	Light Goods Vehicle (of 3.5 tonnes gross weight and under)
LHA	Local Highway Authority
m	Metre
MRN	Major Road Network
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
OS	Ordnance Survey
PAR	Primary Access Route
Q1/Q2	Quarter 1/Quarter 2 (1st Quarter/2nd Quarter)
SO	(Individual Vehicle) Special Order
SPA	Swept Path Analysis
SRN	Strategic Road Network
STGO	Special Types (General) Order
TA	Transport Assessment
TROs	Traffic Regulation Orders
TTROs	Temporary Traffic Regulation Orders

Glossary

Term	Description
Abnormal load	A vehicle which has a weight of more than 44,000kg; or an axle load of more than 10,000kg for a single non-driving axle and 11,500kg for a single driving axle; or a width of more than 2.9 m; or a rigid length of more than 18.65m.
Abnormal Indivisible Load (AIL)	A vehicle that is used to transport very large equipment which by the nature of the equipment cannot be broken into smaller multiple deliveries, and has a weight of more than 44,000kg; or an axle load of more than 10,000kg for a single non-driving axle and 11,500kg for a single driving axle; or a width of more than 2.9m; or a rigid length of more than 18.65m.
Bellmouth	A flared vehicular access point connecting a construction site to the public highway, designed to accommodate turning movements by large vehicles.
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Environmental Impact Assessment (EIA)	An assessment of the likely effects of a development project on the environment, which is reported in an Environmental Statement that is publicised and consulted on and taken into account in the decision on whether a project should proceed.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Electronic Service Delivery for Abnormal Loads (ESDAL)	National service for managing abnormal loads; used to notify Police, highway and structures authorities of abnormal load movements.
Haul road	Another term used for the temporary access route, which is a temporary route built to carry construction vehicles within the Order Limits.
Local Highway Authority (LHA)	The public authority whose duty it is to maintain and protect the safety and usability of public roads.

Term	Description
Main Works Contractor(s)	The contractor appointed by the client to plan, manage, monitor, and coordinate the construction phase of a project involving multiple contractors. They are responsible for ensuring that construction work is carried out safely, efficiently, and in compliance with legal and regulatory requirements. This includes preparing the Construction Phase Plan, coordinating health and safety measures, and liaising with the Principal Designer and other stakeholders throughout the project.
Major Road Network (MRN)	Routes in the middle tier of the road network (between the SRN and LRN), as defined by the Department for Transport. MRNs are managed by the LHAs. For the Project, the LHAs are Thurrock Council and Essex, Suffolk and Norfolk County Councils.
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Nationally Significant Infrastructure Project	Typically, a large scale development of national importance that requires development consent from the Secretary of State, under the Planning Act 2008.
Overhead line	Conductor (wire) carrying electric current, strung from pylon to pylon.
Primary Access Routes (PARs)	Access routes on the public highway designated for use by construction vehicles (typically for HGVs) to travel from the strategic road network / major road network to the site access point.
Special Order (SO)	A category of abnormal load for those which are above 150,000kg in total weight, 6.1m in total width or 30m in rigid length.
STGO Cat (Category) 1/2/3	STGO refers to a Special Types General Order; a movement order under which abnormal loads can be transported subject to conditions which are split into 3 categories (STGO Cat 1/2/3) and are governed by vehicle and/or axle weight.
Strategic Road Network (SRN)	Comprises the motorway and trunk road network, managed by National Highways, as defined by the Department for Transport.
Swept path analysis	A digital simulation process used to assess whether a proposed or existing road layout can accommodate the movement of modelled vehicles.
Transport Assessment	A TA is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport impacts of the scheme.
VR1	A category of abnormal load for those which are 5m – 6.1m in total width.

References

Department for Energy Security and Net Zero (2024a) *Overarching National Policy Statement for Energy (EN-1)* https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-national-policy-statements

Driver and Vehicles Standards Agency (2018) *Special Types Enforcement Guide* https://www.gov.uk/government/publications/special-types-enforcement-guide/special-types-enforcement-guide

National Highways (2022) *Aide Memoire for Notification Requirements for the Movement of Abnormal Indivisible Loads* https://nationalhighways.co.uk/media/ox4pi2ge/aide-memoire-notification-requirements-for-moving-abnormal-loads.pdf

UK Statutory Instruments 2003 No. 1998 (2003) *Road Vehicles (Authorisation of Special Types) (General) Order 2003* https://www.legislation.gov.uk/uksi/2003/1998/contents

UK Statutory Instruments 1998 No. 3111 (1998) *Road Vehicles (Authorised Weight) Regulations 1998* https://www.legislation.gov.uk/uksi/1998/3111/contents/made

Annex A
Structures Schedule

nationalgrid

Annex A
Structures Schedule

A.1.1 This section will present a schedule of principal structures interacting with the proposed AIL routes following engagement with key stakeholders. Details of each structure will be listed such as location and structure type. Interactions in terms of potential engineering assessments between AILs and structures will be investigated post-DCO submission and will be developed further by the Main Works Contractor, in consultation with the relevant LHAs and structure owners, where necessary.

Table A.18 – Initial structures identified

Structure	Location	Owner
Vazon's Bridge	Scunthorpe DN17 3ER	North Lincolnshire
Overhead Rail Bridge (4.3m)	Doncaster DN3 1TR	Network Rail
OXMARDYKE Level Crossing	Tongue Ln, Brough HU15 2UY	Network Rail
A161 Dutch River Bridge	A161, Goole DN14 5TD	East Riding of Yorkshire

Appendix B
AIL Route Figures

nationalgrid

Doc Ref: 7.4
(Appendix A)

Cranswick Industrial Estate
Access Road
Hutton Cranswick
Cranswick
Cranswick Common
Old Field
Bainton
Cawkeld Field
Bainton Burrows
West Fall
B1246
Middleton-on-the-Wolds
A614
Middleton Wold
Watton
Kilnwick
A164
Beswick
Lund
Lund Wold
Lockington
Great West Field
Little West Field
Little Wold
Dalton Park
High Wold Fall
South Dalton Wold
South Dalton
B1248
Cottage Pasture
Scorborough Ings
Beverley Airfield
Old Road
A1079
Arram
Leconfield
Common Wold
Etton Wold
Etton
Dog Kennel Lane
Cherry Burton
The Paddock
B1248
Fairy Ground
Old Gardham Field
Howe Hill Field
A1035
Molescroft
Swine Moor
Hull Bridge
Tickton
Routh
Haver Fields
Bishop Burton
Beverley
Bishop Burton Wold
Weel
Weel Stone
Morris Carr
Woodmansey
Wawne
Wawne Common
East Field
Newbald Wold
North Newbald
Walkington
Walkington Wold
Howe Hill Field
Beverley Access from A1079/ via Bellmouth BM-001/ Haul Road
4AF Satellite Compound Location ID S-1
Strick Pastures
Low Thorns
Crow Shaw
Clayfield Carr
Park Carr
Burshill Carrs
Easingwold Plantation
Ella Carr
Friar's Tongue
Star Carr
Lough North
Leven
Linley Carr
Grange Field
Selley Carr
Lincoln
Doncaster
York
Ripon

Legend

- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2
Kilometers

Rev	Date	Description	GIS	Chk	App
A	OCT 2026	FOR DCO SUBMISSION	TL	TW	GS

nationalgrid

Scheme:
NORTH HUMBER TO HIGH MARNHAM

Document Title:
ROUTE H11-AIL1 - CRANSWICK TO BEVERLEY/A1079
(SATELLITE CONSTRUCTION COMPOUND)

Planning Inspectorate App Number:
EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:60,000	A3	1	A

Doc Ref: 7.4
(Appendix A)

4AF Satellite Compound Location ID S-1
Access from A1079/ via Bellmouth
BM-001/ Haul Road

A1079

A164

A63

A15

A614

A161

M62

J38

Legend

- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

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0 0.5 1 2 3 4
Kilometers

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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H11-AIL2 - GOOLE TO BEVERLEY/A1079 (SATELLITE CONSTRUCTION COMPOUND)

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:100,000	A3	2	A

Doc Ref: 7.4
(Appendix A)

Cranswick Industrial Estate

Access Road

A4AF / 4ZQ Main Construction Compound
Access via Bellmouth BM-017

Old Road

Dog Kennel Lane

B1248

A1035

Killingwoldgraves Lane

Walkington Heads

Wold Road

B1230

A1034

Brough Road

A164

Legend

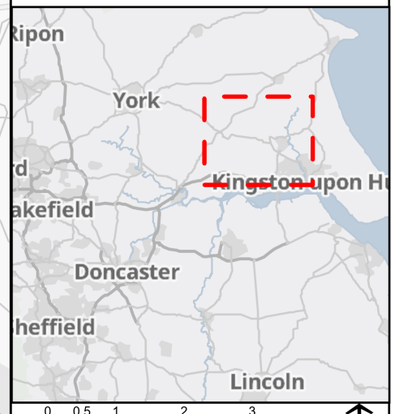
- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2 3
Kilometers

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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H13-AIL1 - CRANSWICK TO BROUGH ROAD COMPOUND

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:90,000	A3	3	A

Doc Ref: 7.4
(Appendix A)

Legend

- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

A4AF / 4ZQ Main Construction Compound
Access via Bellmouth BM-017

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Kilometers

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Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:70,000	A3	4	A

Doc Ref: 7.4
(Appendix A)

Cranswick Industrial Estate

Access Road

A164

Wilfholme Road

A614

4AF / Satellite Construction Compound ID S-2
Access via Bellmouth BM-034

Tongue Lane

B1230

Legend

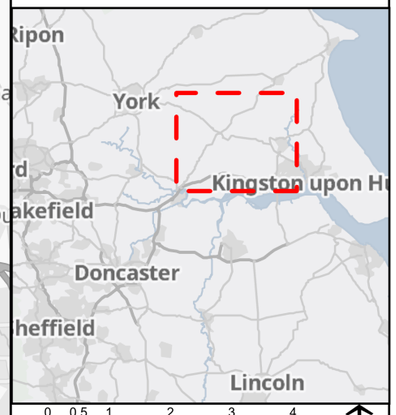
- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2 3 4
Kilometers

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Document Title: ROUTE H14-AIL1 - CRANSWICK TO TONGUE COMPOUND

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
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Doc Ref: 7.4
(Appendix A)

Legend

- Compound Access
- Port of Goole
- Route

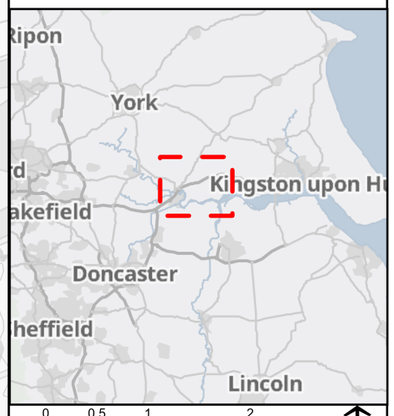
AIL Vehicle



Indicative AIL Delivery Vehicle

4AF / Satellite Construction Compound ID S-2
Access via Bellmouth BM-034

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Kilometers

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Document Title: ROUTE H14-AIL2 - GOOLE TO TONGUE LANE COMPOUND

Planning Inspectorate App Number: EN020034

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Doc Ref: 7.4
(Appendix A)

Access via Bellmouth BM-042 and BM-043
through Haul Road to Compound ID S-3 and Laydown Storage Area ID L-1

Emsley Crane Hire Depot

Legend

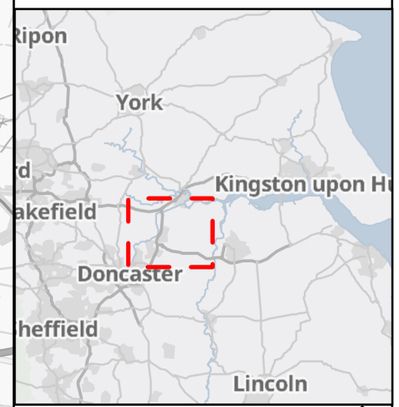
- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2
Kilometers

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Scheme:
NORTH HUMBER TO HIGH MARNHAM

Document Title:
ROUTE H16-AIL1 / H17-AIL1 - DONCASTER TO OUSEFLEET COMPOUND / DONCASTER TO KING'S CAUSEWAY/A161 COMPOUND

Planning Inspectorate App Number:
EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:70,000	A3	7	A

Doc Ref: 7.4
(Appendix A)

Access via Bellmouth BM-042 and BM-043
through Haul Road to Compound ID S-3 and Laydown Storage Area ID L-1

Legend

- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

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0 0.5 1
Kilometers

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Document Title: ROUTE H16-AIL2/ H17-AIL2 - GOOLE TO OUSEFLEET COMPOUND / GOOLE TO KING'S CAUSEWAY/A161 COMPOUND

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:30,000	A3	8	A

Doc Ref: 7.4
(Appendix A)

Legend

- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

Emsley Crane Hire Depot

Sandall Stones Road

Doncaster Road

Church Balk

Carr Lane

Access via Bellmouth BM-56, Haul Road, BM-59 and BM-60 to Main Compound ID M-2

Fieldside

Eastoft

B1392

A161

A18

M180

A614

A630

J2

J4

J5

J6

Thorne North

Thorne South

Thorne

Moorends

Crowle

Ealand

Hatfield Woodhouse

Sandtoft

Epworth

Wroot

Low Burnham

Belton

Beltoft

Kirk Sandall

Dunsville

Armthorpe

Stainforth

Hatfield and Stainforth

Barnby Dun

Sykehouse

Kirkhouse Green

Braithwaite

Pollington

Far Bank

Moss

Crow Croft

New Ings

Ashton Wood

South Park

Hales

Hook Moor

Goole Fields

Gossips Moor

Rawcliffe Moors

Snaith and Cowick Moors

Goole Moors

Reedholme Common

Inkle Moors

Warwick Field

Little Fen Field

Flashley Carr

Tween Bridge Moors

South Moors or Sand Moors

Thorne Waste or Thorne Moors

Crowle Waste or Crowle Moors

Crowle Common

Rainsbutt Moor

Swinefleet and Reedness Pasture

Swinefleet and Reedness Moor

Moor Fields

Whitgift Pasture

Ousefleet Pasture

Ousefleet Moor

Adlingfleet Moor

Adlingfleet Common

Fockerby Moor

Haldenby Common

Haldenby Moor

Eastoft Moor

Bully Field

The Flats

East Green

West Field

Keadby Common

North Moor

Derrythorpe Common

Sandtoft Airfield

Stockholes Turbary

Grey Green

Church Town

Hatfield Moors

Huggin Carr or Low Grounds

Wroot Acres

Cantley Low Common

Cantley Common

Old Cantley

Branton

Auckley Common

Ling Common or High Common

Nutwell

Woodhouse Field

Huddle Grounds

Braithwaite Low Common

Burgar Common

South Common

Nun Moors

Bramwith Field

Old Field

The Lings

New Mill Field

The Parks

Barnby Dun Common

Old Mill Field

West End

Brick Hill Carr Common

Waterton Carr

West Moor

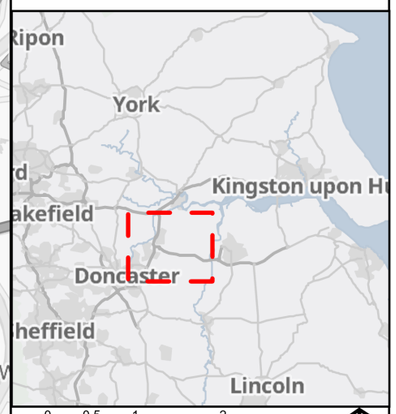
Kirk Sandall Common

Long Sandall

Bull Moors

High Levels

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Kilometers

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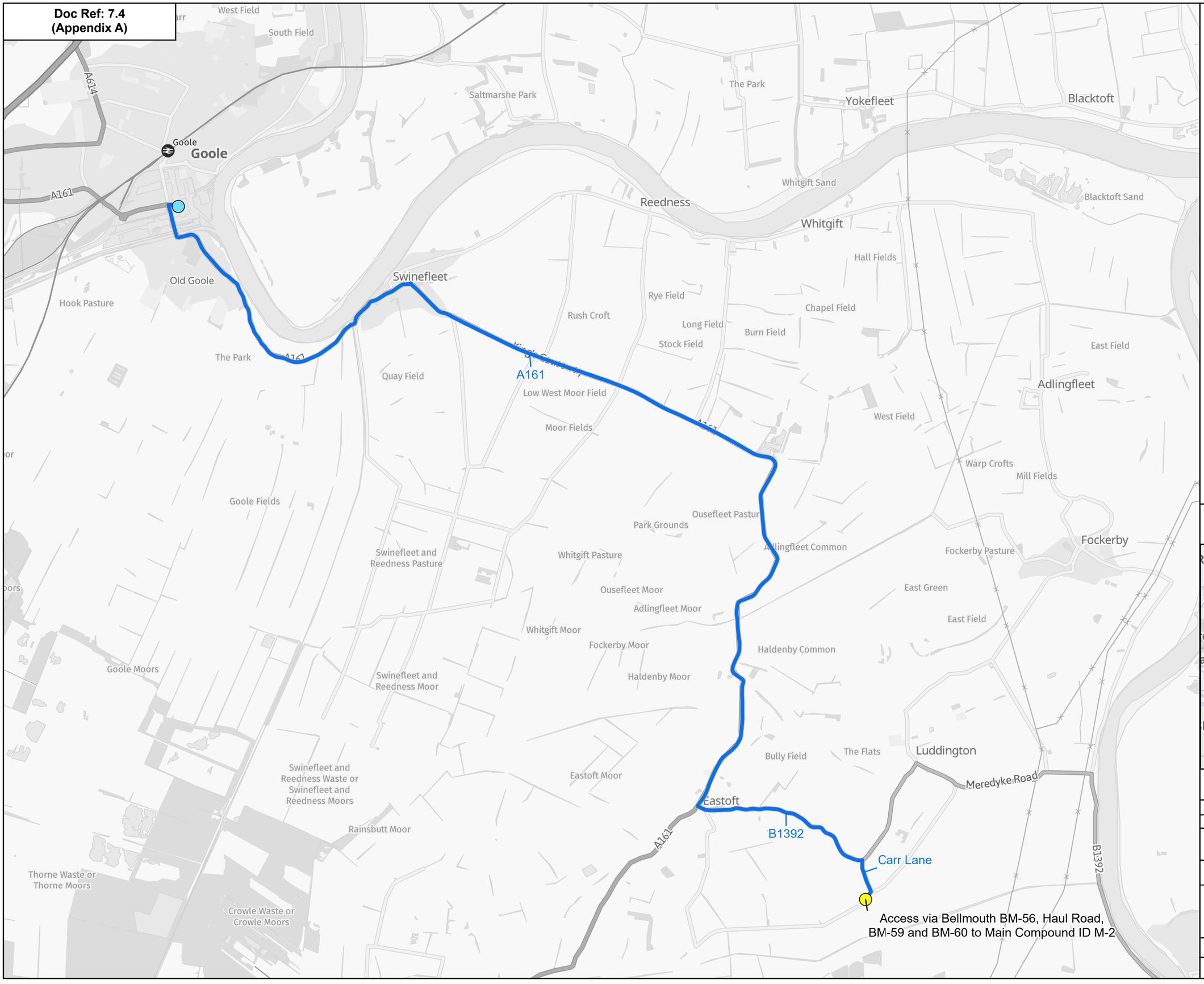
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Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:70,000	A3	9	A

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(Appendix A)



Legend

- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

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0 0.5 1
Kilometers

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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H19-AIL2 - GOOLE TO OUTGATE COMPOUND

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:40,000	A3	10	A

Doc Ref: 7.4
(Appendix A)

Emsley Crane Hire Depot

Barnby Dun Road

Sandall Stones Road

4AF Satellite Construction Compound ID S-4
Access via Bellmouth BM-092

Tindale Bank Road

Legend

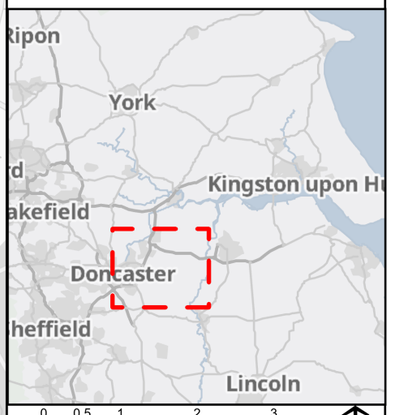
- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2 3
Kilometers

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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H25-AIL1 - DONCASTER TO TINDALE BANK RD COMPOUND

Planning Inspectorate App Number: EN020034

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(Appendix A)

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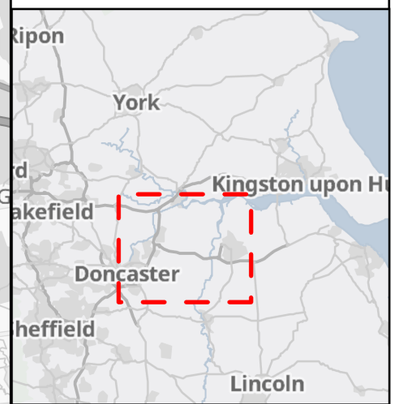
- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

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0 0.5 1 2 3 4
Kilometers

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Document Title:
ROUTE H25-AIL2 - GOOLE TO TINDALE BANK RD COMPOUND

Planning Inspectorate App Number:
EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:110,000	A3	12	A

Doc Ref: 7.4
(Appendix A)

Emsley Crane Hire Depot

Barnby Dun Road

Sandall Stones Road

A630

A18

A630

J4

A1(M)

A631

A638

A614

M18

A6182

A1

A161

4AF Main Construction Compound ID M-3
Access via Bellmouth BM-099

Legend

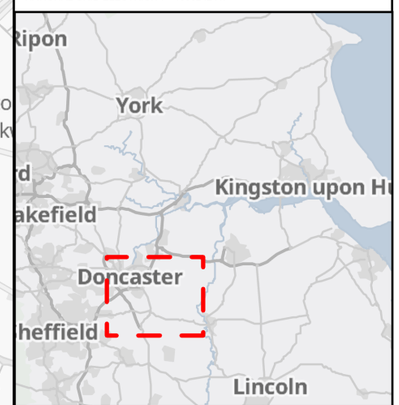
- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2 3
Kilometers

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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H36-AIL1 - DONCASTER TO A631 COMPOUND

Planning Inspectorate App Number: EN020034

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Doc Ref: 7.4
(Appendix A)

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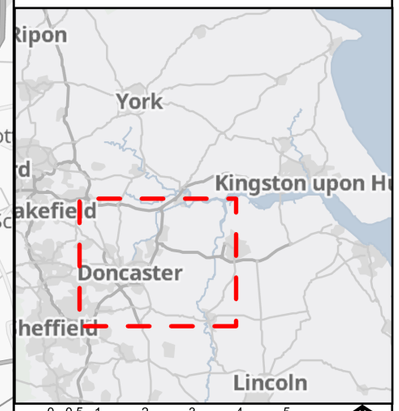
- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

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0 0.5 1 2 3 4 5
Kilometers

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Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:130,000	A3	14	A

4AF Main Construction Compound ID M-3
Access via Bellmouth BM-099

Doc Ref: 7.4
(Appendix A)

Emsley Crane Hire Depot
Sandall Stones Road
Barnby Dun Road
A630
A18
A630
Armthorpe
M18
A1(M)
A1
Retford Road
Leverton Road
A620
A638
4AF Satellite Construction Compound ID S-5
Access via Bellmouth BM-113

Kirk Sandall
Dunsville
West End
Edenthorpe
Bentley
Doncaster
Belton
Beltoft
East Butterw
West Butterw
Hickleton
Marr
Scawsby
Cusworth
Barnburgh
Dearne
High Melton
Sprotbrough
Cadeby
Warmsworth
Denaby Main
Old Denaby
Conisbrough
New Edlington
Loversall
Old Cantley
Branton
Auckley
Blaxton
Hayfield Green
Finningley
Rossington
New Rossington
Wroot
Epworth
Low Burnham
Owston Ferry
East Lound
East Ferry
Westwoodside
Graizelound
Gunthorpe
Laugh
Old Edlington
Hooton Roberts
Clifton
Wadworth
Ravenfield
Micklebring
Ravenfield Common
Stainton
Sunnyside
Bramley
Wickersley
Hellaby
Maltby
Hooton Levitt
Tickhill
Bawtry
Misson
Austerfield
Misterton
West Stockwith
Harworth
Scrooby
Everton
Gringley on the Hill
Mattersey Thorpe
Mattersey
Beckingham
Gainsborough
Saundby
Clayworth
Ranskill
Torworth
Lound
Bole
Lea
North Wheatley
Knaith Pa
Sturton le Steeple
Hayton
Clarborough
Sutton cum Lound
Carlton in Lindrick
Thurcroft
Brookhouse
Laughton en le Morthen
Firbeck
Oldcotes
Letwell
Langold
Blyth
Dinnington
Todwick
North Anston
South Anston
Woodsetts
Kiveton Park
Vales
Shireoaks
Thorpe Salvin
Woodall
Rhodesia
Worksop
Ranby
Welham
Retford
Grove
Rampton
Cottam
Torkse
Woodbeck
Eaton
Torksey Loc
North Leverton with Habblesthorpe
Marton
Walkeringham
Ripon
York
Kingston upon H
akefield
Doncaster
heffield
Lincoln

A638
A631
A614
A60
A634
A620
A57
A161
A6182
A635
J37
J4
J3
J34
J32

Legend

- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2 3 4
Kilometers

Rev	Date	Description			
A	OCT 2026	FOR DCO SUBMISSION	TL	TW	GS

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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H37-AIL1 - DONCASTER TO RETFORD ROAD COMPOUND

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:110,000	A3	15	A

Doc Ref: 7.4
(Appendix A)

M62 A161 Goole
Knottingley
Normanton
Pontefract
Featherstone
Hemsworth
Royston
South Elmsall
Adwick le Street
Thurnscoe
Goldthorpe
Bentley
Doncaster
Wombwell
Bolton upon Dearne
Wath upon Dearne
Mexborough
Conisbrough
Rawmarsh
Rotherham
Maltby
Thorne
Crowle
Winterton
Scunthorpe
Epworth
Kirton in Lindsey
Gainsborough
Bawtry
Dinnington
Worksop
Staveley
Tickhill
M18
A1(M)
A1
Leverton Road
A620
A638 Retford Road
4AF Satellite Construction Compound ID S-5
Access via Bellmouth BM-113

Legend

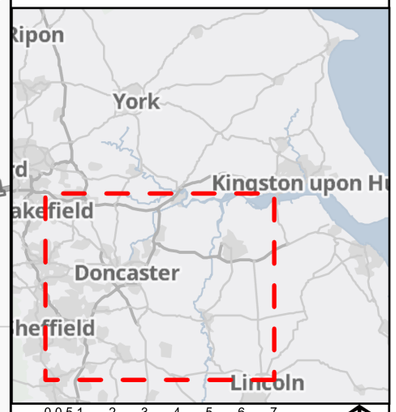
- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

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0 0.5 1 2 3 4 5 6 7
Kilometers

Rev	Date	Description			
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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H37-AIL2 - GOOLE TO RETFORD ROAD COMPOUND

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:190,000	A3	16	A

Doc Ref: 7.4
(Appendix A)

Emsley Crane Hire Depot
Sandall Stones Road
Barnby Dun Road
A630
A18
A630
M18
A1
A1(M)
4AF Satellite Construction Compound ID S-6
Access via Bellmouth BM-053 and Haul Road
A57

Legend

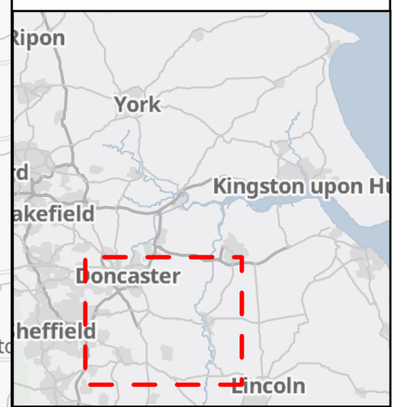
- Compound Access
- Vehicle Yard
- Route

AIL Vehicle



Large Mobile Crane
(Leibherr LTM 1650-8.1)

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0 0.5 1 2 3 4 5
Kilometers

Rev	Date	Description	GIS	Chk	App
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Scheme: NORTH HUMBER TO HIGH MARNHAM

Document Title: ROUTE H38-AIL1 - DONCASTER TO HIGH MARNHAM COMPOUND

Planning Inspectorate App Number: EN020034

Document Ref:	Scale:	Format:	Sheet:	Rev:
7.4	1:130,000	A3	17	A

Doc Ref: 7.4
(Appendix A)

A161
Goole
M62
Knottingley
Normanton
Pontefract
Featherstone
Wakefield
A638
A1
A19
M18
Hemsworth
Royston
South Elmsall
Adwick le Street
Barnsley
Thurnscoe
Goldthorpe
Bentley
Doncaster
A1(M)
Worsbrough
Wombwell
Bolton upon Dearne
Wath upon Dearne
Mexborough
Conisbrough
Rawmarsh
Rotherham
Maltby
Tickhill
Bawtry
A631
Gaisborough
Sheffield
M1
A61
A6102
Dinnington
A57
Retford
Worksop
Dronfield
A619
A60
A614
Staveley
Chesterfield
Bolsover
Thorne
Crowle
Epworth
Winterton
Scunthorpe
M180
Brigg
A159
A15
Kirton in Lindsey
Lincoln
4AF Satellite Construction Compound ID S-6
Access via Bellmouth BM-053 and Haul Road

Legend

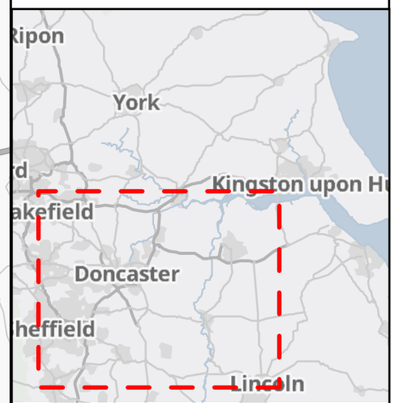
- Compound Access
- Port of Goole
- Route

AIL Vehicle



Indicative AIL Delivery Vehicle

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0 0.5 1 2 3 4 5 6 7 8
Kilometers

N

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Scheme: NORTH HUMBER TO HIGH MARNHAM

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