EAST PARK ENERGY

East Park Energy

EN010141

Outline Construction Traffic Management Plan

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Outline Construction Traffic Management Plan

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1.0 INTRODUCTION

1.1 Purpose of the Document

1.1.1 This outline Construction Traffic Management Plan (oCTMP) has been prepared on behalf of BSSL Cambsbed 1 Ltd (the 'Applicant') for the construction phase of the East Park Energy project (the 'Scheme').

1.1.2 The Scheme comprises a new ground-mounted solar photovoltaic energy generating station and an associated on-site battery energy storage system (BESS), with the Order Limits covering an area of 773 ha of land to the north-west of St Neots, Cambridgeshire (the 'Site'). The Scheme also includes the associated infrastructure for connection to the national grid at the Eaton Socon National Grid Substation.

1.1.3 This oCTMP sets out the overall approach to how the movement of construction traffic, including Site personnel movements, will be safely managed and controlled by the Applicant and any sub-contractors working on their behalf.

1.1.4 This oCTMP should be read in conjunction **with ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1]** and **ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2]**. These documents appraise the traffic and transport effects of the Scheme and identify the proposed mitigation measures to be implemented. The mitigation measures described in these documents are set out and secured within this oCTMP.

1.1.5 The primary objectives of the oCTMP are as follows:

- Ensure the movement of people and materials is conducted in a safe, efficient, timely and sustainable manner;
- Keep construction traffic to a minimum ~~during peak network periods~~ to reduce the impact on the highway network;
- Ensure that effects and disruption on local communities is minimised;
- Minimise construction staff vehicle trips where possible; and

- Avoid or reduce the impacts on the natural and built environment.

1.1.6 This oCTMP is a control document that will be certified as part of the Development Consent Order (DCO) and secured via a Requirement in Schedule 2 of the **draft DCO [EN010141/DR/3.1]**. Should the Scheme be consented, the DCO will require that a final Construction Traffic Management Plan (CTMP) in substantial accordance with this oCTMP is prepared prior to commencing the construction phase. It will be a requirement of the DCO that the final CTMP will be prepared in consultation with / for approval by the relevant Local Highway Authorities (LHAs) and National Highways.

1.2 Document Structure

1.2.1 Following this introductory section, the remainder of this outline CTMP comprises:

- **Section 2.0** provides a summary of the Scheme and the construction period.
- **Section 3.0** sets out the project team roles and responsibilities with regard to construction traffic management.
- **Section 4.0** sets out the proposed construction programme and phasing, as well as the forecast construction staff numbers and construction compound details, as well as the proposed staff parking and sustainable travel provisions.
- **Section 5.0** describes the proposed access route for construction traffic and describes the procedures to be implemented to manage vehicular access to and from the Site.
- **Section 6.0** identifies the measures to be implemented to manage HGV movements to minimise impacts on other road users and manage vehicle circulation within the Site.
- **Section 7.0** sets out the procedures to be implemented to mitigate the environmental impacts of construction traffic.

- **Section 8.0** sets out the proposed methodology for mitigating the cumulative impact of construction traffic resulting from other proposed major infrastructure schemes.
- **Section 9.0** provides details of the proposed procedures for the monitoring and review of the final CTMP.

1.3 Relationship with other management plans

1.3.1 This oCTMP is part of a framework of environmental management documents that will be implemented across the lifetime of the Scheme. The final CTMP will work alongside several other relevant management plans, which provide further details on mitigation and management measures, pursuant to DCO Requirements:

- **Construction Environmental Management Plan (CEMP)**: This plan will set out how the construction phase of the Scheme will be managed to avoid, reduce, or mitigate environmental impacts. It will cover topics like pollution prevention measures, dust and noise control, protection of wildlife, site waste management, and incident response protocols. The CEMP ensures that commitments made in the ES are translated into practical measures on-site. An **outline Construction Environmental Management Plan [EN010141/DR/7.3]** has been prepared and submitted with the application for development consent.
- **Operational Environmental Management Plan (OEMP)**: This plan will set out how the operational phase of the Scheme will be managed to control environmental risks. An **outline Operational Environmental Management Plan [EN010141/DR/7.5]** has been prepared and submitted with the application for development consent.
- **Decommissioning Environmental Management Plan (DEMP):** This plan will set out how the decommissioning phase of the Scheme will be managed to control environmental risks. An **outline Decommissioning Environmental Management Plan [EN010141/DR/7.6]** has been prepared and submitted with the application for development consent.

- **Landscape and Ecological Management Plan (LEMP)**: This plan will set out measures for landscape planting, habitat management, and biodiversity net gain, ensuring that mitigation planting and screening vegetation are effectively maintained. An **outline Landscape and Ecological Plan [EN010141/DR/7.7]** has been prepared and submitted with the application for development consent.
- **Public Right of Way Management Plan (PROWMP):** This plan will set out how the extent of the public right of way (PRoW) network which would be impacted by the Scheme would be managed to ensure that all PRoWs remain safe to use, and that disruption to users of the PRoW network is minimised. An **outline Public Right of Way Management Plan [EN010141/DR/7.8]** has been prepared and submitted with the application for development consent.
- **Soil Management Plan (SMP)**: This plan will ensure the sustainable management of soils and materials by setting out strategies for handling, storage, and reuse of soils. An **outline Soil Management Plan [EN010141/DR/7.9]** has been prepared and submitted with the application for development consent.
- **Battery Safety Management Plan (BSMP)**: This plan describes the safety measures and protocols for the BESS, including fire detection and suppression systems, emergency response procedures, and regulatory compliance. An **outline Battery Safety Management Plan [EN010141/DR/7.10]** has been prepared and submitted with the application for development consent.
- **Waste Management Plan (WMP)**: This plan sets out how materials and waste will be managed during the construction, operation and decommissioning phases of the Scheme. An **outline Waste Management Plan [EN010141/DR/7.12]** has been prepared and submitted with the application for development consent.
- **Surface Water Management Plan (SWMP)**: This plan will detail site-wide measures for managing drainage, rainfall runoff, and groundwater interaction. An **outline Surface Water Management Plan**

[EN010141/DR/7.13] has been prepared and submitted with the application for development consent.

- **Archaeological Mitigation Strategy (AMS):** This plan sets out the management of archaeological remains, both known and currently unknown, across the lifetime of the Scheme. An **outline Archaeological Mitigation Strategy [EN010141/DR/7.15]** has been prepared and submitted with the application for development consent.

1.3.2 Each of these plans will contain specific monitoring and reporting requirements, which will be reviewed regularly by the Construction Project Manager, Environmental Manager, and relevant regulatory authorities. Monitoring results will be documented as part of the compliance framework for the Scheme.

2.0 THE SCHEME

2.1 Order Limits

2.1.1 The area of land required for the construction, operation and maintenance of the Scheme, which includes land required for permanent and temporary purposes, is shown on **ES Vol 3 Figure 1-1: Site Location [EN010141/DR/6.3]**. This is referred to as the 'Order Limits' or the 'Site'.

2.2 The Site

2.2.1 The 'Site' is located to the north-west of the town of St Neots, and is across two administrative areas; Bedford Borough Council (a unitary authority) and Huntingdonshire District Council (a two-tier authority with Cambridgeshire County Council). The Site location is shown on **ES Vol 3 Figure 1-1: Site Location [EN010141/DR/6.3]**. The Site area extends to approximately 773 hectares (ha).

2.2.2 With reference to **ES Vol 3 Figure 1-2: Site References [EN010141/DR/6.3]**, for ease of reference the Order Limits have been sub-divided into East Park Sites A to D, in which all of the above ground infrastructure proposed as part of the operational Scheme would be located (excluding works to the Eaton Socon Substation). The Order Limits also cover land outside of East Park Sites A to D which will be required for access, cabling, and the grid connection to the Eaton Socon Substation. East Park Sites A to D can be described as follows:

- **East Park Site A** – covering land west of the B660 between Pertenhall and Swineshead at the western end of the Site. East Park Site A comprises arable fields located to the north, west and east side of a small hill that lies between Pertenhall and Riseley. East Park Site A lies either side of the Pertenhall Brook, with access proposed from the B660 to the east.
- **East Park Site B** – covering land between Pertenhall, Keysoe, and Little Staughton. East Park Site B comprises arable fields located north of an

elevated ridgeline which runs between Keysoe and Little Staughton. East Park Site B is crossed by a number of small watercourses, with access proposed from the B660, Great Staughton Road, Little Staughton Road, and an unnamed road between Little Staughton and Great Staughton Road.

- **East Park Site C** – covering land south of Great Staughton. East Park Site C comprises arable fields located south of the River Kym, with access proposed from Moor Road to its south-eastern boundary, and from Little Staughton Road to the north-west.
- **East Park Site D** – covering land around Pastures Farm between Great Staughton and Hail Weston. East Park Site D comprises arable fields with access proposed via a new access from the B645.

2.2.3 With reference to **ES Vol 3 Figure 1-2: Site References [EN010141/DR/6.3]**, there are three linear corridors proposed for underground cabling that connect the different parts of the Site and provide a grid connection to the Eaton Socon Substation. These are also shown on **ES Vol 3 Figure 1-2** and identified as:

- **Cable Corridor – Site B to Site C** – which connects Site B to Site C across an unnamed road and arable fields.
- **Cable Corridor – Site C to Site D** – which connects Site C to Site D across Moor Road and an arable field.
- **Grid Connection** – Site D to Eaton Socon Substation – which connects Site D to the Eaton Socon Substation and crosses open arable fields, the Duloe Brook, and Duloe Road and Bushmead Road.

2.2.4 The relevant LHAs are Bedford Borough Council (BBC) and Cambridgeshire County Council (CCC). National Highways will also have a role in ensuring that the CTMP is not breached and that safety at the junction between the A1 and B645 is not compromised with, for example, queuing back onto the A1 mainline.

2.3 The Scheme

2.3.1 The Scheme comprises a new ground-mounted solar photovoltaic energy generating station and an associated on-site battery energy storage system (BESS) on land to the north-west of St Neots. The Scheme also includes the associated infrastructure for connection to the national grid at the Eaton Socon National Grid Substation.

2.3.2 The Scheme would allow for the generation and export of 400 megawatts (MW) of renewable electricity, as well as the storage of 100 MW of electricity in the BESS. The precise generating capacity and storage capacity will be subject to detailed design, but it should be noted that the Applicant presently has a grid connection agreement with National Grid for 400 MW export and 100 MW import.

2.3.3 Subject to the Scheme securing Development Consent in Winter 2026/27 it is anticipated that works would start on site in early 2028 and be completed by mid-to late 2030 (although initial energisation of the Scheme is likely to commence prior to 2030). The Scheme comprises a temporary development with an operational phase of 40 years; decommissioning activities would therefore likely commence in 2070, 40 years after commissioning.

2.3.4 A more detailed description of the Scheme is provided within **ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1]**.

3.0 ROLES AND RESPONSIBILITIES

3.1 Site Team

3.1.1 The following are key roles during the construction phase that will have responsibility for implementing the final CTMP, with responsibilities for each role also set out (this list is not definitive and additional roles and responsibilities may be added to the final CTMP):

- **Principal Contractor** – This is a formal role established in the CDM Regulations (2015). The Principal Contractor will be appointed by the Applicant and have responsibility for co-ordinating the construction phase of the Scheme.
- **Construction Project Manager** – The Principal Contractor will identify a Construction Project Manager who will have overall responsibility for implementation of the final CTMP and all other DCO and legislative requirements.
- **Quality Manager** – The Quality Manager will have responsibility for quality assurance and compliance, document management and record keeping, inspections for quality control, management of risks, and process improvement related to quality control and assurance. For the final CTMP, they will have responsibility for quality assurance of procedures and for management of documentation, records, and monitoring of the systems relating to the same.
- **Health and Safety Manager** – responsible for the monitoring and control of health and safety, and the rules and regulations arising from this.
- **Environmental Manager** – The Environmental Manager has responsibility for management of environmental matters related to the construction phase of the Scheme, including ensuring compliance with legislation, ensuring that mitigation, management and monitoring measures are implemented, and that best practice is applied during works. The Environmental Manager will be a point of contact with environmental bodies and other third parties as required to perform their duties.

- **Flood Warden** – The Flood Warden will be responsible for preparation, management, and response to flood incidents, inclusive of reacting to flood warnings and alerts.
- **Community Liaison Officer** – The Community Liaison Officer will ensure that the Community Liaison Group (CLG) is established and will be the point of contact for the CLG, ensuring that regular updates are issued during the construction of the Scheme.

3.1.2 These roles and responsibilities are indicative and will be confirmed in the final CTMP.

3.2 Community Liaison Group

3.2.1 As set out in the **outline Construction Environmental Management Plan [EN010141/DR/7.3]**, a CLG will be formed prior to construction and will continue through until ultimate decommissioning of the Scheme.

3.2.2 During all stages of the project lifecycle, the purpose of the CLG will be to allow interested community members and bodies to be updated on progress and activities. The CLG will allow local residents to raise issues with the Community Liaison Officer and to act as a forum to discuss relevant issues for the construction of the Scheme. Membership will be open to the following non-exhaustive list of groups:

- Parish Councils;
- Local Businesses; and
- Local Community Groups.

4.0 CONSTRUCTION OVERVIEW

4.1 Construction Programme

4.1.1 The construction phase is expected to last for 30 months based on experience of constructing other similar-scale installations across Europe. The final programme will be dependent on the final Scheme design and the discharge of any pre-commencement Requirements under the DCO.

4.1.2 The Scheme will be split into a number of construction phases, which are illustrated in **ES Vol 2 Appendix 2-1: Indicative Construction Phasing and Resourcing Schedule [EN010141/DR/6.2]**. These would be managed such that they are often happening in tandem in order to build out the Scheme in the most efficient way possible.

4.1.3 The primary construction phases, as illustrated in **ES Vol 2 Appendix 2-1: Indicative Construction Phasing and Resource Schedule [EN010141/DR/6.2]**, are as follows:

i) Enabling Works (Months 1 to 3)
   a. Establishment of Main Construction Compound in Site D;
   b. Establishment of Main Site Access from B645 into Site D to the Main Construction Compound;
   c. Establishment of Access Tracks and Temporary Access Tracks across Sites A, B, C and D;
   d. Establishment of crossing points over drainage ditches and existing utilities; and
   e. Establishment of soft landscaping in areas of habitat mitigation.

ii) Construction of the East Park Substation (Months 2 to 12);
   a. Establishment of internal access roads, fencing and surfacing;
   b. Establishment of foundations for the Transformers, Control Building and Electrical Equipment;
   c. Construction of the Control Building;
   d. Establishment of metallic structures for the Electrical Equipment;

e. Installation of the 400 kV transformers;
f. Installation of Switchgear, Cabling and other Equipment; and
g. Establishment of other minor ancillary works.

iii) Construction of the 400 kV Grid Connection (Months 3 to 13);
a. Establishment of temporary access road;
b. Excavation of trench;
c. Excavation for Jointing Chambers;
d. Laying of cable conduits in the trenches between Jointing Chambers;
e. Pouring of concrete around the conduits and backfilling of trench with soils;
f. Construction of Jointing Chambers;
g. Cable pulling between Jointing Chambers;
h. Connecting of cables within Jointing Chambers;
i. Establishment of new Generation Bay within the Eaton Socon Substation;
j. Testing and commissioning of grid connection;
k. Sealing of Jointing Chambers and backfilling of land above Jointing Chamber; and
l. Removal of temporary access road and reinstatement of all land.

iv) Construction of the East Park BESS (Months 7 to 24);
a. Establishment of internal access roads, fencing and surfacing;
b. Establishment of foundations for the Battery Storage Units, Transformers, Control Building; Auxiliary Transformer and Water Storage Tanks;
c. Establishment of internal cable trenches between equipment;
d. Installation of cabling;
e. Delivery and installation of Battery Storage Units, Transformers, Control Building, Auxiliary Transformer and Water Storage Tanks; and
f. Testing and commissioning of BESS.

v) Construction of East Park Sites A, B C and D (Months 2 to 30).

a. Establishment of Satellite Compound;
b. Establishment of Fencing;
c. Marking out locations of Solar PV Tables, Transformers, and Trenches;
d. Excavation of trenches and laying of conduit for cables;
e. Establishment of surface water drainage infrastructure;
f. Establishment of foundations for Transformers;
g. Establishment of Solar PV Mounting Structures;
h. Installation of Solar PV Modules and Inverters;
i. Establishment of CCTV and Monitoring Systems;
j. Installation of Low Voltage Cabling between Solar PV Modules, String Inverters, Transformers and CCTV;
k. Installation of 33 kV High Voltage Cabling between Transformer and East Park Substation;
l. Testing and Commissioning; and
m. Establishment of soft landscaping in areas of habitat mitigation.

4.1.4 Construction operations would be limited to 08.00 to 18.00hrs Monday to Friday and 08:00 to 13:00hrs Saturday, with no construction work on Sundays, public holidays or ~~Bank~~ bank ~~Holidays~~holidays.

4.1.5 There may be instances where operations are required outside of the above times, e.g. delivery of abnormal loads, fit out of internal equipment within the substation, or other quiet non-intrusive works such as electrical testing, commissioning and inspection. However, no HGV movements would occur outside the above hours unless such work is associated with an emergency or with prior written consent of the LHAs.

4.1.6 Furthermore, whilst no local highway capacity concerns are anticipated, to minimise disruption construction traffic will be managed such that traffic movements occur outside of the standard highway peak hours of 08:00-09:00 and 17:00-18:00 Monday to Friday, as detailed in **Section 6.0**.

4.2 Construction Traffic Generation

4.2.1 The number and type of deliveries that are anticipated to be generated during the 30-month construction period are summarised in **Table 4.1**. This includes trips associated with the enabling works phase for each element of the Scheme.

Table 4.1: Estimated Construction Traffic

Work Package	Number of Loads
Construction of PV Solar Arrays	
Site A	
- 16.5m Artic	393
- 30t Tipper	331
- Mixer Truck	0
Total	*724*
Site B	
- 16.5m Artic	1,070
- 30t Tipper	582
- Mixer Truck	0
Total	*1,652*
Site C	
- 16.5m Artic	306
- 30t Tipper	241
- Mixer Truck	0
Total	547
Site D	
- 16.5m Artic	271
- 30t Tipper	225
- Mixer Truck	257
Total	753
Construction of BESS / Substation	
- 16.5m Artic	164
- 30t Tipper	158
- Mixer Truck	758
Total	*1,080*
Grid Connection to Eaton Socon Substation	
- 16.5m Artic	57
- 30t Tipper	0
- Mixer Truck	465
Total	522
Other Misc. Deliveries (Welfare, Fuel, Water, Refuse) (LGVs)	
Total	*790*
Total HGVs	***5,278***
Total LGVs	***790***
TOTAL (one-way deliveries)	**6,068**

TOTAL (two-way vehicle movements)	12,136

4.2.2 As summarised in **Table 4.1**, it is anticipated that the total number of deliveries requiring access to the Scheme would be approximately 5,278 HGV deliveries (10,556 two-way movements) and 790 deliveries (1,580 two-way movements) by light goods vehicle across the full 30-month construction period.

4.2.3 In addition, typically 495 construction-related staff will require access to the Site per day on average, with a maximum of around 854 staff per day during peak activities. There would also be a requirement for a small number of larger abnormal load deliveries to the Site, as described below.

HGV Deliveries

4.2.4 Assuming construction deliveries will occur over 5.5 days per week on average during the construction period, the total anticipated HGV trip generation set out in **Table 4.1** would equate to an average of approximately 16 two-way movements per day (8 in and 8 out) across the construction period.

4.2.5 An illustrative resourcing schedule has been prepared, set out within **ES Vol 2 Appendix 2-1: Indicative Construction Phasing and Resource Schedule [EN010141/DR/6.2]**, which provides an estimated breakdown of the number of staff and construction delivery trips which would be required for each element of the Site during each month of the construction period.

4.2.6 This identifies that the most intensive phase of activity will result from the delivery of aggregate for the construction of access tracks and compounds. This would occur over a 12-week period during the initial three months of the construction period, during which construction trips would peak at approximately 60 daily two-way HGV movements (30 in and 30 out). For the remainder of the construction programme, the level of daily HGV traffic is anticipated to be much lower.

Construction Staff Trips

4.2.7 The resourcing schedule identifies that across the full 30-month construction period around 496 construction-related staff would require access to the Site per day, on average.

4.2.8 The number of construction staff requiring access to the Site per day would be greatest between months 7 and 24 of the construction period. During this 18-month period there would be a requirement for approximately 700 staff per day, on average. This would peak~~ing~~ in month 12 when a total of 854 staff per day would be required.

4.2.9 As described below, measures would be implemented to encourage construction staff to participate in a car share thereby reducing the number of trips to the Site. Accordingly, assuming an average car/van occupancy of ~~2~~1.4, this would equate to ~~a~~ approximately ~~700~~ 1,000 daily two-way staff trips (~~350~~ 500 arrivals and ~~350~~ 500 departures) during the 18-month period of peak activity, peaking at ~~854~~ 1,220 two-way trips (~~427~~ 610 arrivals and ~~427~~ 610 departures) during the peak of construction activity in month 12.

Abnormal Indivisible Loads (AILs)

4.2.10 The Scheme will require the delivery of certain components which would be classified as Abnormal Indivisible Loads (AILs). It is anticipated that the following larger vehicles will be required in relation to the delivery of transformers at the East Park Substation:

- 2 no. Abnormal Indivisible Loads (AILs) expected to be up to 200 tonne weight; and
- 1 no. 250 tonne mobile crane.

4.2.11 These would require transport to the Site to be managed subject to the Road Vehicle Authorisation of Special Types Order 2003. An AIL Access Report has been prepared. This route appraisal is attached at **Appendix A** of this **outline Construction Traffic Management Plan [EN010141/DR/7.4]**. The AIL Access Report identifies that there are no negotiability issues along the

immediate approach to the Site from the A1(M) via the B645 that would necessitate any off-site remedial measures. Further consideration of the necessary arrangements for managing AIL movement to the Site is included in Section 6.4.

4.3 Construction Compounds

4.3.1 The main construction compound will be located in East Park Site D close to the main site access from the B645 to the north-east. The main construction compound would comprise offices and welfare facilities, car parking, materials and equipment storage area, and vehicle manoeuvring and unloading area.

4.3.2 Satellite compounds would also be located across Sites A, B and C in relation to the construction phasing of the areas of solar photovoltaics. These compounds would be smaller in footprint than the main construction compound but would still provide offices and welfare facilities.

4.3.3 The locations of construction compounds are shown on **ES Vol 3 Figure 2-5: Illustrative Construction Access and Compounds [EN010141/DR/6.3]**.

4.3.4 The CDM Regulations 2015 also require suitable and sufficient welfare facilities, with arrangements for maintaining them in a functional, clean, and tidy condition. Temporary buildings, potentially double stacked to reduce footprint, would therefore be installed within each of the compounds to provide:

- Site office space
- Toilets and showers
- Canteen facilities
- Drying room
- Storage and security offices

4.3.5 The satellite construction compounds would also include areas for storing plant, material, equipment and components. Additionally, it is expected that there would be multiple mobile welfare units (toilets, drying rooms and canteen units) that would move around the Site as work progresses.

4.3.6 There would be no dedicated construction compounds located along the grid connection as excavated soils would be stored adjacent to the trench, and materials such as conduit, concrete and cabling would be delivered to the main construction compound and installed along the grid connection as and when required. Temporary laydown areas formed of heavy-duty construction matting would be located intermittently along the grid connection to support the works as required, but these would only be for the temporary storage of materials, or to facilitate trenchless crossings.

4.3.7 The boundaries of construction works will be kept secure by means of temporary fencing to minimise the risk of unauthorised persons from gaining access to the site during the works.

4.4 Contractor and Visitor Parking Provision

4.4.1 A temporary car parking area will be provided within each of the site compound areas to facilitate parking for contractor and visitor vehicles, to ensure that all site-related vehicles will be parked off the local highway network. The main car parking area for the Scheme would be located within the main construction compound in Site D.

4.4.2 As described in Section 4.5, it is proposed to implement an internal minibus shuttle service to transport construction staff around the Site from the main car parking area in Site D. As such, ~~Based~~ based on the anticipated breakdown of staff resourcing requirements at each Site, and the forecast construction schedule, it is estimated that there would be a requirement for a provision of parking for up to 350 vehicles within the main site compound in Site D, as well as parking for up to 50 vehicles within Sites A, B and C.

4.4.3 As also described in Section 4.5, it is proposed that the internal minibus service will be extended to provide a collection / drop-off service to transport construction staff between the Site and pre-arranged pick-up locations, in order to minimise the number of construction staff vehicle movements. ~~However, as described in Section 4.5, it is proposed to implement an internal minibus shuttle service to transport construction staff around the~~

~~Site from the main car parking area in Site D.~~ ~~If required~~However, ~~therefore,~~ there is sufficient space within the compound in Site D to provide overspill parking for the full peak construction workforce, if required.

4.4.4 A limited number of visitor parking spaces will be provided within main construction compound in Site D, located close to the Site office where practicable to minimise interaction with active construction areas. All visitors will be required to pre-book their attendance where possible and will be directed to the appropriate parking area upon arrival. Unauthorised parking within operational areas of the Site will not be permitted.

~~4.4.2~~ Section 6.5 of the oCTMP outlines the proposed measures in relation to the management of on-Site car parking.

~~4.4.3 Parking would be managed and carefully monitored by the Construction Project Manager to ensure that it is provided in an efficient and safe manner, with sufficient separation distance from any plant, materials or construction activity. Special precautions would be taken when catering for any disabled staff / visitors to ensure that all access/egress to parking and other facilities are safe, practical and reasonable.~~

~~4.4.4~~4.4.5 ~~The only vehicles that would be parked within the confines of the main construction areas are construction vehicles such as construction plant and machinery, and delivery vehicles. Construction staff would park within the temporary car parking area within each of the construction compounds. All construction vehicles and plant would be parked in a safe and tidy manner within one of the construction compounds when not in use (overnight).~~

4.5 Sustainable Travel Considerations

4.5.1 In order to reduce the impact of construction staff vehicle movements on the local highway network, construction staff would be encouraged to consider ways of travelling to the Site by means other than individual private car.

4.5.2 The exact nature of the measures that would be employed to encourage sustainable travel would be dependent on the composition of construction

staff and the locations from which they would be travelling to the Site. This would be a matter for the main construction contractor, who would not be appointed until after the DCO has been granted, and addressed in the final CTMP.

4.5.3 Full details of the measures to encourage sustainable travel would be set out within a Construction Workers Travel Plan (CWTP), which would form part of the final CTMP that would be prepared by the contractor. An outline CWTP is attached at **Appendix B** of this **outline Construction Traffic Management Plan [EN010141/DR/7.4]**.

4.5.4 Some of the key measures that will be implemented by the contractor to minimise the number and length of journeys are set out below:

Lift-Sharing

4.5.5 Given the relatively rural nature of the Site, and based on experience with similar construction projects, it is proposed that a car share scheme would be set up, to minimise the number of construction staff travelling to the Site in individual vehicles.~~anticipated that a significant number of construction staff would partake in a car share to travel to the Site~~. To encourage this, it is proposed that a fleet of minibuses will be provided to facilitate internal transport around the Site from the main construction compound.

Collection / Drop-off Service

4.5.6 In addition, the number of staff vehicle trips ~~could~~ will be further reduced by extending the staff minibus service to provide a collection / drop-off service, to transport staff to the main construction compound from pre-arranged collection / drop-off locations, which ~~could~~ would include nearby public transport hubs, town centres, and/or local accommodation. The designated pick up / drop off points will be clearly identified within the final CTMP.

4.5.7 Assuming the use of 15-seat minibuses, if used to transport 50% of the peak workforce a total of 29 minibuses would be required, if full. This would in turn reduce the overall number of construction staff trips during the peak period of

construction activity by approximately ~~40~~50%, compared to the forecast trip generation based on car sharing alone.

As noted above, it is likely that minibus collection / drop-off points would be identified within town centre locations and/or at public transport hubs. Minibus journeys between these locations and the Site would route via the identified construction access routes described in Section 5.1.

5.0 PROPOSED ACCESS STRATEGY

5.1 Construction Access Strategy

5.1.1 The proposed construction access strategy is described in **ES Vol 1 Chapter 2: The Scheme [EN010141/DR/6.1]**. In summary, it is proposed that construction traffic, including construction staff trips, will approach the Site via the B645 Kimbolton Road from the A1 at Eaton Socon. To minimise the impact of construction traffic and prevent HGVs from routing through the populated area of Eaton Ford, all construction HGVs will be directed to access the B645 from the A1 using the northbound exit slip, and to access the A1 using the northbound entry slip when departing the Site.

5.1.2 Temporary and permanent access roads will be constructed to connect each of the development areas via a series of temporary and permanent site access junctions.

5.1.3 The indicative construction access route, including the sections of existing public highway which would be utilised, is illustrated on Figure 15, contained in **Appendix C** of this **outline Construction Traffic Management Plan [EN010141/DR/7.4]**.

5.1.4 The proposed construction site access locations are illustrated and referenced in **ES Vol 3 Figure 2-4: Proposed Site Access [EN010141/DR/6.3]**. A full description of each of the proposed site access junctions is included in **Table 5.1** below, whilst Indicative Site Access designs are also shown on Figures 1 to 14 in **Appendix D** of this **outline Construction Traffic Management Plan [EN010141/DR/7.4]**.

5.1.5 The areas where works will be required to create new or upgrade existing accesses are illustrated within the **Street Works, Rights of Way and Access Plan [EN010141/DR/2.4]**.

5.1.6 In total there are 20 permanent or temporary points of access with the public highway. Each access has been identified with a specific Site Access (SA) reference number from SA01 to SA20.

Table 5.1: Proposed Site Access Locations

Ref.	Existing, Proposed or Upgraded Access?	Location	Description	Purpose
SA01	Existing	B660 Kimbolton Road	Existing access to Pertenhall Solar Farm, provides access to Site A	Construction Operation Decommissioning
SA02	Upgraded	B660 Kimbolton Road	Upgrade existing field access, provides western access to Site B	Construction Operation Decommissioning
SA03	Upgraded	Great Staughton Road	Upgrade existing field access, provides access to single field in Site B	Construction Operation Decommissioning
SA04	Upgraded	Great Staughton Road	Upgrade existing field access, provides access to single field in Site B	Construction Operation Decommissioning
SA05	Upgraded	Great Staughton Road	Upgrade existing field access, provides access to single field in Site B	Construction Operation Decommissioning
SA06	Upgraded	Great Staughton Road	Upgrade existing field access, provides access to north of Site B	Construction Operation Decommissioning
SA07	Upgraded	Little Staughton Road	Upgrade existing field access, provides access to west of Site B	Construction Operation Decommissioning
SA08	Proposed	Little Staughton Road	New access, provides access to east of Site B	Construction Operation Decommissioning
SA09	Upgraded	Little Staughton Road	Upgrade existing field access, provides access to south of Site B	Construction Operation Decommissioning

Ref.	Existing, Proposed or Upgraded Access?	Location	Description	Purpose
SA10	Upgraded	Spring Hill Road	Upgrade existing field access, provides eastern access to Site B	Construction Operation Decommissioning
SA11	Proposed	Spring Hill Road	Temporary access required for laying cable between Site B and Site C	Construction Decommissioning
SA12	Upgraded	Great Staughton Road	Upgrade to existing access to provide access from Site A / B to Site C / D	Construction Operation Decommissioning
SA13	Upgraded	Moor Road	Upgrade existing access to Site C	Operation
SA14	Proposed	Moor Road	Temporary access required during construction and decommissioning to provide access to Site C from Site D, and to lay cable between Site C and Site D	Construction Decommissioning
SA15	Proposed	Moor Road	Temporary access required during construction and decommissioning to provide access to Site C from Site D, and to lay cable between Site C and Site D	Construction Decommissioning
SA16	Proposed	B645	Main Site Access, and access to Site D	Construction (inc. Abnormal Load) Operation Decommissioning
SA17	Proposed	Duloe Road	Temporary access required to lay grid connection between Site	Construction Decommissioning

Ref.	Existing, Proposed or Upgraded Access?	Location	Description	Purpose
			D and Eaton Socon Substation	
SA18	Existing	Duloe Road	Existing access from Duloe Road to provide temporary access to fields south of Duloe Road for laying grid connection to Eaton Socon Substation	Construction Decommissioning
SA19	Proposed	Bushmead Road	Temporary access required to lay grid connection between Site D and Eaton Socon Substation	Construction Decommissioning
SA20	Existing	Bushmead Road	Existing access from Bushmead Road to the Eaton Socon Substation, required on temporary basis to lay grid connection between Bushmead Road and Eaton Socon Substation	Construction Decommissioning

5.1.7 The main site access will be from the B645 into Site D (SA16), with all HGVs arriving at the Site from this point. It is likely that a number of deliveries would be unloaded within the main site compound in Site D and would then be transferred on to the satellite compounds by smaller vehicles. Any such loads transferred to smaller vehicles in this manner would still be transported across the Site in accordance with the proposed routing strategy described below.

5.1.8 As described in Section 4.5, the majority of daily staff movements would also arrive at Site D, with a minibus shuttle service provided to transport staff around the Site, although a small number of daily staff movements (approximately 2-3 per day), related to tasks such as setting up traffic management and delivering banksmen to open and man access gates and

crossing points, would access Sites A, ~~and~~ B and C without passing through the main site access.

5.1.9 The construction access strategy has been designed to avoid vehicles using the public highway as much as practicable. Once vehicles arrive in Site D from the main site access (SA16) via the B645, a temporary access road will connect westward across fields to Site C, avoiding the use of Moor Road other than at a temporary crossing point (SA14/SA15).

5.1.10 From Site C, access will be taken north-west via a new track to an existing HGV access to Great Staughton Road (SA12) where vehicles will follow the public highway to access Site B, thus avoiding large volumes of traffic from passing through Great Staughton. Vehicles would be routed through Site B from Spring Hill Road (SA10), crossing Green End close to Lodge Farm (SA07/SA08) before continuing west towards the B660 (SA02). At the B660 vehicles would follow the public highway for a short section before accessing Site A using an existing access at Manor Farm (SA01).

5.1.11 Site B also has a number of site access junctions which require construction traffic to use short sections of the public highway along Great Staughton Road (SA03, SA04, SA05, SA06) and Green End (SA09).

5.1.12 There are existing access tracks through the Site that will be utilised as far as practicable, as will existing agricultural access points with the public highway. Where required, sections of the existing access track will be upgraded or restored in order to provide safe and suitable access for vehicles. Passing places will be established as necessary at intermittent positions along these tracks in order to manage vehicle movements during the construction phase.

5.1.13 Minor road widening works will also be required along Spring Hill Road, and ~~potentially~~ Great Staughton Road, to facilitate the two-way movement of HGVs between access SA12 and access SA10 during the construction phase.

~~5.1.13~~5.1.14 The identified construction access routes described above represent the only permitted routes to be used by construction HGVs. These routes are

illustrated in the Proposed Construction Access Strategy plan included as Figure 15 in **Appendix C** of this **outline Construction Traffic Management Plan [EN010141/DR/7.4]**. All other routes not illustrated on the Proposed Construction Access Strategy plan are to be treated as restricted routes. Any construction HGVs found to be using restricted routes would be considered to be in breach of the CTMP.

~~5.1.14~~5.1.15 As mentioned earlier, indicative Site Access designs for each of the accesses described above, including visibility splays and swept path analysis of the largest vehicles that are anticipated to use each access, are shown on Figure 1 to 14 at **Appendix D** of this **outline Construction Traffic Management Plan [EN010141/DR/7.4]**.

5.2 Standard Access Designs and Types

Existing field gate access

5.2.1 Where access is proposed via an existing field gate, a standard bell mouth design will be created in these locations where gateways are too narrow. Design improvements to widen the access to accommodate construction vehicles and an appropriate visibility splay would be made if necessary. These designs will be agreed with the local highway authorities.

5.2.2 This applies to accesses SA02, SA03, SA04, SA05, SA07, SA09 and SA10.

5.2.3 On the Figures in **Appendix D**, visibility splays have been indicated for both the observed / posted traffic speeds, as well as the reduced temporary speed limits that will be in place at or close to accesses SA01, SA02, SA03, SA04, SA05, SA06, SA07, SA08, SA09, SA10, SA11, SA14, SA15, SA17, SA18, SA19 & SA20.

Existing bell mouth access

5.2.4 Where access is proposed via an existing bell mouth, design improvements to widen the access to accommodate construction vehicles and an appropriate visibility splay would be made if necessary.

5.2.5 This applies to accesses SA01, SA12, SA13 and SA20.

New accesses

5.2.6 A limited number of new accesses are required where access is proposed but no current facility exists. All of these are located at the edges of agricultural fields and will require the removal (or coppicing) of hedgerow or other vegetation management. The proposed new access junctions would be designed so as to be sufficiently wide to accommodate the movement of construction vehicles, with appropriate visibility splays provided. The detailed design of each proposed new access junction will be agreed with the local highway authorities post-consent.

5.2.7 This applies to accesses SA06, SA08 and SA16.

5.3 Temporary Construction Access

5.3.1 Temporary construction accesses will be designed to follow standard construction practice as set out in Design Manual for Road and Bridges (DRMB) and to meet relevant LHA requirements, details of which are provided in the following section. The final specific access arrangements for temporary construction accesses will be discussed with the LHAs post-consent.

5.3.2 Direct access is not proposed from the Strategic Road Network (SRN) and therefore there will not be a requirement to consult with National Highways (NH) on access design.

5.3.3 At this stage, the following is assumed for the types of access:

- Where it is proposed to use existing tracks/private farm bell mouth accesses which are already provided with suitable visibility splays, no changes to the existing access layouts would be made but the access would be supplemented with traffic management and signage.
- Where it is proposed to use an existing field gate access or farm track where there is no existing visibility splay, a visibility splay would be provided by coppicing vegetation to below 1m, in accordance with Figure

3.3 of DMRB, CD123 Geometric Design of At Grade Priority and Signal Controlled Junctions, August 2020. As indicated earlier, reduced visibility splay requirements will be possible at those site accesses where temporary speed limit reductions will be imposed.

- Where a new temporary construction access is proposed, a standard bellmouth access design would be used with implementation of a full visibility splay.

5.3.4 At the end of the construction phase, temporary construction accesses would be removed or reinstated to existing layouts/condition (unless these are required for access during the operation and maintenance of the Scheme, as set out in **Table 5.1** above.

5.3.5 This applies to accesses SA11, SA14, SA15, SA17, SA18 and SA19.

5.4 Order Limits and Visibility Standards

5.4.1 Each of the temporary construction accesses has been included within the Order Limits. The Order Limits include access tracks to the highway with an allowance for a temporary construction access as well as the required visibility splays. This is to ensure any clearance works required to achieve these splays can be undertaken. The coppicing, pushing back or removal of hedgerows may be required, depending on site specific issues, in particular at temporary access SA14. Such activity will facilitate temporary construction access from the carriageway along with using traffic management as well as standard hedgerow maintenance. However, the site accesses have been located where possible such that the required visibility will be achievable with minimal requirement for hedgerow management.

5.4.2 Visibility splays at each of the proposed new permanent Site accesses, including those accesses which will comprise the upgrade of an existing field access, have been determined based on the guidance and standards set out in the DMRB. For completeness, visibility splays based on the observed traffic speeds / posted speed limits, as well as the temporary reduced speed limits, are shown on Figures 1 to 14 in **Appendix D**.

5.4.3 The majority of the proposed temporary access points – specifically accesses SA14, SA15, SA17, SA18 and SA19 – are situated in locations where it is not possible to achieve a full DMRB-compliant visibility splay in one or both directions. It is proposed that speed restrictions and traffic management measures will be implemented to manage the safe movement of construction traffic at these junctions, as described below.

5.4.4 The achievable visibility splays at each of the temporary and permanent site access junctions is illustrated in Figures 1 to 14 in **Appendix D** of this oCTMP.

5.5 General Construction Traffic Management / Mitigation

5.5.1 In order to manage the safe movement of construction traffic along the temporary access road, particularly at the crossings over Moor Road between accesses SA14 and SA15, Spring Hill Road between accesses SA10 and SA11, and Green End between accesses SA07 and SA08, additional temporary traffic management would be deployed as necessary, as authorised by the DCO in accordance with the **Traffic Regulation Measures Plan [EN010141/DR/2.5]**. This could include the deployment of Banksmen with 'Stop / Go' boards or the use of temporary traffic signals.

5.5.2 Details of the proposed traffic management measures to be implemented at each location would be submitted for approval by the relevant Local Highway Authority prior to implementation.

5.6 Traffic Signage

5.6.1 Temporary signage would be erected along construction traffic routes on the local highway network to provide directional routeing information for construction vehicles, to ease navigation between the SRN and the Main Site Access, and between each of the Sites.

5.6.2 Temporary signage warning other road users of the likely presence of construction vehicles would also be provided in the vicinity of each construction access location.

5.6.3 All signage would be provided in accordance with the Traffic Signs Regulations and General Directions (TSRGD) and Traffic Signs Manual Chapter 8 published by the Department for Transport.

5.7 Access Road Signage

5.7.1 Temporary signage would also be erected along the proposed on-site construction access roads where necessary. This would provide construction vehicle drivers with information on the distances to relevant destinations within each Site (e.g. construction compound locations), and warning information related to potential conflict areas (e.g. PRoW crossings).

5.8 Detailed Design

5.8.1 As set out within Requirement 3 of the draft DCO, prior to any construction works being undertaken within the adopted public highway, the detailed design of the proposed works will be submitted to the relevant LHA for approval. The detailed design submissions will include:

- A programme for the works, details of the construction method and traffic management requirements;
- A detailed design pack of drawings and specifications detailing the works and any service / utility works that may need to be accommodated;
- The necessary health and safety information required under the Construction (Design & Maintenance) Regulations, or their equivalent at the point of submission;
- Details of the proposed contractor, including their insurance provisions;
- Stage 2 Road Safety Audits;
- Details of any necessary road signage and road markings; and

~~5.7.1~~5.8.2 Details of any proposed remediation works for temporary infrastructure constructed for use during the construction phase only.

~~5.8~~5.9 Highway Condition Survey

~~5.8.1~~5.9.1 A pre-construction highway condition survey will be undertaken on the local highway network prior to commencement of the construction phase. The extent of the survey will be agreed with the Local Highway Authorities prior to commencement.

5.9.2 Once construction is complete, a post-construction condition survey will be undertaken in order to identify any defects that can reasonably be attributable to construction activities at the Site.

5.9.3 The condition of the local highway will also be checked on an interim basis by the Site Team, who will also ensure no mud or dust is being entrained on the road, as part of regular inspections during the construction phase.

~~5.8.2~~5.9.4 Any highway defects resulting from construction activities identified during these inspections, or any issues which may be highlighted by the LHAs or members of the public, will be remediated to the satisfaction of the relevant LHA.~~Any identified highway defects resulting from construction activities will be corrected to the satisfaction of the relevant Local Highway Authority.~~

~~5.8.3~~5.9.5 Pre- and post-construction condition surveys, along with periodic interim monitoring inspections, will also be undertaken on any sections of private roads or PRoW affected by the Scheme. Any identified defects resulting from construction will be corrected to the reasonable satisfaction of the landowner.~~Pre and post construction condition surveys will also be undertaken on any sections of private roads or public rights of way affected by the Scheme. Any identified defects resulting from construction will be corrected to the reasonable satisfaction of the landowner.~~

~~5.8.4~~5.9.6 The final CTMP will include the following:

- The roads and PROWs to be included within the survey;
- Details of the methodology to be used, to include both visual and mechanical surveys such as SCANNER and SCRIM;
- Timing of surveys; and

- Commitment to provide the pre-construction condition survey findings to the local highway authorities following their completion.

~~5.8.5~~5.9.7 The condition of the local highway will also be checked by the Site Team as part of regular inspections, who will also ensure no mud or dust is being entrained on the road.

6.0 SITE MANAGEMENT PLAN

6.1 Delivery Management System

6.1.1 The Construction Project Manager or their designated deputy would be responsible for supervising, controlling and monitoring vehicle movements to and from the Site as well as whilst the vehicle is on Site, and ensuring that there are suitable arrangements for the safe delivery and collection of the vehicle load.

6.1.2 A Delivery Management System will be implemented to control bookings of HGV deliveries from the start of the construction programme. This will be used to plan all HGV deliveries in accordance with the construction programme.

6.1.3 HGV deliveries would be allocated a delivery slot which they must comply with. Delivery vehicles will also be allocated an anticipated departure window, based on expected on-Site turnaround times.

6.1.4 Slots would be allocated by the Construction Project Manager, and arrangements would be made for a banksman to be available to assist HGV drivers in accessing the Site. Only vehicles with a confirmed time slot allocation will be permitted to attend the Site.

6.1.5 The proposed management, including allocation of specific delivery slots, would mitigate against instances of HGVs meeting along narrow sections of the internal site access road. Continuous communication shall take place between delivery drivers and the Construction Project Manager to organise arrival during the delivery slot and to manage the departure of HGVs from the Site and ensure there are no inter-vehicular conflicts.

6.1.6 HGV drivers would be inducted and informed of the Construction Access Strategy (see **Section 5.1**) and behaviours to be adopted whilst on-site and during deliveries. Signage would be located at key junctions on the approach to the Site to guide HGV drivers along the appropriate HGV route and information would be provided to each driver highlighting any surrounding HGV restrictions.

6.1.7 Arrangements would be made to ensure that HGVs avoid (wherever possible) entering and leaving the Site during busy periods of the day. These arrangements would be organised locally by the Construction Project Manager who would be responsible for the day to day running of the construction programme.

6.1.8 Deliveries of materials would be restricted to vehicles that can access the Site and manoeuvre in such a manner that they can egress the Site in a forward gear, thus avoiding the need to reverse onto the local highway network.

6.2 Site Management

6.2.1 It would be a requirement of the project that all personnel working or carrying out deliveries to site would require as a minimum; safety helmet (hard hat), hi-vis tabard, coveralls, gloves, light eye protection and safety boots, spares will be on site for temporary visitors, if required.

6.2.2 Temporary safety and emergency lighting would be installed and maintained to provide a safe level of illumination in and around the site during the works.

6.2.3 All storage of plant and equipment would be on the construction site at the compound area. There would be no storage on the public highway.

6.2.4 All visitors would be required to report to the project management / reception offices and sign in. Visitors would be permitted onto site by arrangement and escorted by a construction member of staff. Visitors to the construction site would be required to undertake a visitor's induction prior to being allowed access to the site. It is a requirement that all site personnel and visitors sign in and out of the site on all occasions.

6.3 Use of Banksmen

6.3.1 Where required (and as set out in the final CTMP), trained banksmen will be deployed to manage and supervise vehicle movements within the Site. This will include managing the crossing points between accesses SA01 & SA02, SA07 & SA08, SA14 & SA15, SA17 & SA18, and SA19 & SA20.

6.3.2 Banksmen will be responsible for ensuring the safe manoeuvring of delivery vehicles, construction plant and other Site traffic, particularly in areas where visibility is restricted or where reversing operations are necessary. Banksmen will also be responsible for directing drivers to appropriate laydown areas.

6.3.3 All banksmen will be suitably trained and competent in vehicle marshalling duties and will operate in accordance with relevant health and safety guidance and Site-specific procedures.

6.3.4 High-visibility clothing and appropriate communication methods (e.g. radios or agreed hand signals) will be used at all times to ensure clear and effective communication between banksmen and vehicle operators.

~~6.2.4~~6.3.5 The requirement for banksmen will be assessed by the Site Manager on an ongoing basis and will be implemented during periods of high activity, complex manoeuvring, or when delivery operations present increased risk.

~~6.3~~6.4 Impact on Other Highway Users

~~6.3.1~~6.4.1 It is not envisaged that the construction site will have any impact on other road users caused by delays accessing the site. As noted above, arrangements will be made to ensure that HGVs avoid (wherever possible) entering and leaving the site during the weekday highway peak hour periods between 08:00 – 09:00 and 17:00 – 18:00. These arrangements will be organised locally by the Construction Project Manager who will be responsible for the day to day running of the construction programme.

~~6.3.2~~6.4.2 There are a number of Public Rights of Way (PRoW) that cross the Site. Although the construction works would be designed to minimise disruption to PRoW routes within the Site, during the construction phase it would be necessary to implement mitigation measures in certain areas to maintain public safety.

~~6.3.3~~6.4.3 This would include the use of temporary fencing and signage to warn, direct and protect PRoW users during the construction period, and prevent

unauthorised access to construction areas. Managed crossing points would be utilised where internal Site access tracks cross the route of a PRoW.

~~6.3.4~~6.4.4 Further details on the proposed mitigation to be implemented to manage the impact on the PRoW network is set out within the **outline Public Rights of Way Management Plan [EN010141/DR/7.8]**.

~~6.4~~6.5 Abnormal Indivisible Loads

~~6.4.1~~6.5.1 Abnormal Indivisible Loads (AIL) are considered loads that cannot be delivered using traditional vehicles i.e. 40ft artic truck with road haulage limits of 44T. The exact machinery and equipment required for the construction works would be updated at the detailed design stage. However, it is anticipated there would be a need for AIL deliveries for items such as high voltage transformers, cable drums and cranes.

~~6.4.2~~6.5.2 All abnormal load vehicles will travel to and from the site under escort following standard procedures, which will be carefully planned and agreed in advance with the LHA and National Highways, in accordance with the Road Vehicles (Authorisation of Special Types) (General) Order 2003 (STGO).

~~6.4.3~~6.5.3 These movements will also be planned in advance to ensure that the route between the A1 and the Site is kept entirely clear of other construction vehicles whilst the abnormal loads are routing to and from the site.

~~6.4.4~~6.5.4 An AIL Access Report has been prepared. This route appraisal is attached at **Appendix A** of this **outline Construction Traffic Management Plan [EN010141/DR/7.4]**. The AIL Access Report identifies that National Highways has approved in principle the access route to the Site via the strategic road network from the Port of Sutton Bridge. This route was previously accepted for transport of a transformer to the Eaton Socon Substation in 2018.

6.5.5 The AIL Access Report also identifies that there are no negotiability issues along the immediate approach to the Site from the A1(M) via the B645 that would necessitate any off-site remedial measures. The assessment also

identifies that minimal temporary street furniture removal works would be required.

6.6 Parking and On-Site Vehicle Management

Management of Staff and Visitor Parking

6.6.1 Parking would be managed and carefully monitored by the Construction Project Manager to ensure that it is provided in an efficient and safe manner, with sufficient separation distance from any construction plant, delivery areas, pedestrian routes or construction activity. Special precautions would be taken when catering for any disabled staff / visitors to ensure that all access/egress to parking and other facilities are safe, practical and reasonable.

6.6.2 All construction staff would be instructed to park within the designated car parking areas within each of the construction compounds. Parking provision will be monitored on a daily basis to ensure sufficient capacity is available and that no overspill occurs onto the surrounding highway network.

6.6.3 The only vehicles that would be parked within the confines of the main construction areas are construction vehicles such as construction plant and machinery, and delivery vehicles. All construction vehicles and plant would be parked in a safe and tidy manner within one of the construction compounds when not in use (overnight).

6.6.4 Visitor parking will be clearly signed and managed to ensure safe access and egress. Visitors will be escorted as necessary, particularly where pedestrian routes interface with construction activities.

6.6.5 Provision will be made for disabled visitors, including appropriately located parking spaces with safe, level access to Site facilities, in accordance with relevant accessibility guidance.

General Parking Management

6.6.6 The Site boundary will be secured with temporary fencing and controlled access points to prevent unauthorised entry. All parking areas will be located

within these secured zones. No construction-related vehicles (including operatives, visitors, or contractors) will be permitted to park outside of the Site. This restriction will be strictly enforced by the Site Manager.

6.6.7 Where necessary, a banksman or designated operative will be used to manage vehicle movements within parking areas to ensure safe manoeuvring, particularly during peak arrival and departure periods.

Measure to Prevent Off-Site Parking

6.6.8 All construction operatives, contractors and visitors will be required to park within the designated on-Site parking areas provided as part of the temporary Site compounds. No construction-related parking will be permitted on the public highway or on surrounding local roads at any time. This requirement will be communicated clearly to all personnel prior to and during the construction phase. Details will be included within Site induction materials, contractor agreements, and ongoing toolbox talks to ensure full awareness of the parking restrictions.

6.6.9 Parking arrangements will be monitored on a daily basis to ensure compliance. Regular checks will be undertaken at the start and end of the working day, when the risk of overspill parking is highest.

6.6.10 Adequate on-Site parking capacity will be maintained throughout the construction period to accommodate the anticipated number of operatives and visitors. Parking provision will be reviewed periodically and adjusted where necessary to prevent overspill onto the surrounding highway network.

6.6.11 Disciplinary procedures will be in place for operatives who fail to comply with the on-Site parking requirements. Persistent non-compliance may result in removal from the Site.

6.6.12 Physical measures, such as signage at the Site Access points, will clearly state that no construction parking is permitted on surrounding roads. Where necessary, temporary barriers or cones may be deployed to discourage informal parking in the vicinity of the Site.

~~6.4.5~~6.6.13 The Site Team will maintain communication with the LPA and LHA, and will respond promptly to any complaints from local residents or stakeholders regarding parking. Appropriate corrective actions will be implemented where issues are identified.

7.0 ENVIRONMENTAL MANAGEMENT

7.1 Vehicle Wheel Washing Facilities

7.1.1 Mud and debris would be prevented from being taken onto the adjacent highway network through the use of appropriate wheel wash facilities located within the Site. There would be wheel wash facilities located within each of the construction compounds and site operatives would direct all traffic to cross the wheel wash facility before exiting the site. The exact nature of the wheel wash units has yet to be determined, and it may be either hand-held jet washes or dry wheel wash rumble strips. This would be dependent upon seasonal conditions in the area at the discretion of the Construction Project Manager.

7.1.2 These facilities would remain in place from the start of the construction phase until the construction works are complete. Any residual deposits of dust or dirt on public roads would be removed regularly using road brushes and vacuum road sweepers.

7.2 Dust and Dirt Control

7.2.1 Dusty emissions generated by the construction may cause nuisance through, for example, surface soiling and loss of visibility due to deposition. Numerous construction activities have the potential to produce dust emissions, e.g. the movement and placing of granular materials.

7.2.2 Since it is difficult to suppress dust once it is airborne, where possible measures would be implemented to prevent dust from being generated in the first place.

7.2.3 Measures that would be implemented to control dust emissions include:

- Pre-assembly of equipment would be conducted to minimise on site particulates;
- Vehicles transporting materials capable of generating dust to and from site would be suitably sheeted on each journey to prevent release of materials

and particulate matter. The sheeting material would be maintained in good order, free from excessive rips and tears; and

- Regular monitoring of the road network in close proximity to the site access would be implemented to ensure appropriate additional measures are applied as required to minimise dust generation.

7.2.4 In dry weather, it is possible that the ground may dry out and then when site machinery traverses the access road it may create nuisance dust which could drift out of the site. Under these circumstances these areas would be dampened down so that any dust does not become a nuisance to the public.

7.2.5 Further details on the proposed measures to be implemented to control and manage dust emissions are set out within the **outline Construction Environmental Management Plan (OCEMP) [EN010141/DR/7.3]**. These procedures will be set out in further detail within a final Construction Dust Management and Monitoring Plan (CDDMP), which will form part of the final CEMP.

7.3 Noise

7.3.1 Control measures to reduce the impact of noise would include (but not be limited to):

- Vehicle noise would be kept as low as possible (e.g. excessive revving of vehicles would not be permitted, engines would be turned off rather than left idling);
- Where possible, HGVs would be routed away from sensitive noise receptors;
- Loading and unloading of vehicles around site would be conducted in such a manner as to minimise noise generation and where possible these actions would be conducted away from noise sensitive receptors; and
- Noise complaints, breaches of any Section 60 notices or exceedances of action levels would be reported to and investigated by the Construction Project Manager.

7.3.2 Further details on the proposed measures to be implemented to control and manage noise impacts are set out within the **outline Construction Environmental Management Plan (OCEMP) [EN010141/DR/7.3]**.

8.0 MANAGEMENT OF CUMULATIVE IMPACTS

8.1.1 As identified within Section 9.11 of **ES Vol 1 Chapter 9: Traffic and Transport [EN010141/DR/6.1]** and Section 6.5 of **ES Vol 2 Appendix 9-1 Transport Assessment [EN010141/DR/6.2]**, there are other infrastructure projects proposed in the vicinity of the Scheme which have the potential to generate construction traffic along the same extent of local highway network that would be utilised for the Scheme, notably the proposed High Wood solar farm.

8.1.2 In the event that there would be any significant overlap between the schemes with regard to construction traffic movements, a Construction Traffic Management Plan Working Group will be established in order to manage and co-ordinate the delivery of the schemes in order to minimise and mitigate the combined impact of construction traffic. This would include representatives for the Applicants for each site, as well as National Highways, Cambridgeshire County Council and Bedford Borough Council.

8.1.3 The above list is not exhaustive, and representatives of other major developments, as deemed necessary by the LHAs, would also be invited to join the working group as appropriate. It is assumed that other developers would also work pro-actively with the Applicant.

9.0 MONITORING AND COMPLIANCE

9.1 Monitoring and Review

9.1.1 Compliance with all the control documents, including the final CTMP, will be the responsibility of the Construction Project Manager. The contractor will undertake monitoring as necessary to ensure compliance with the requirements of the final CTMP. This will include the maintenance of records and traffic management measures.

9.1.2 The Principal Contractor will be responsible for implementing a system whereby construction HGVs associated with the Scheme are identifiable from other traffic on the highway network. This will enable data to be collected regarding vehicle routes, timings and speeds, to aid any compliance investigations.

9.1.3 Adherence to the proposed construction access strategy will be monitored through the implementation of an automatic number plate recognition (ANPR) system or a GPS-based geofencing system to help monitor and enforce the prescribed HGV delivery routes. At the time of writing, investigations are ongoing ~~in~~to identify which system would be the most feasible and appropriate option for this Site. ~~the feasibility and potential to introduce an automatic number plate recognition (ANPR) system or a GPS based geofencing system to help monitor and enforce the prescribed HGV delivery routes. If feasible,~~ ~~t~~This will be developed further as part of future updates to this oCTMP or the final CTMP.

9.1.4 Monitoring activities and responsibilities will be agreed with the LHAs and National Highways and set out within the final CTMP. This will also contain the contact details of the relevant Site contact with responsibility for managing the CTMP, along with a clear schedule of monitoring activities and timescales.

9.1.5 The CTMP will be reviewed on a regular basis to ensure proper adherence by construction staff.

9.2 Communications Strategy

9.2.1 A communications strategy will be developed by the Applicant and Principal Contractor to ensure that the measures contained within the CTMP are communicated to all construction staff and sub-contractors / suppliers. This will be set out within the final CTMP and would be developed in accordance with the overarching communications strategy which would be provided within the final CEMP.

9.2.2 The communication strategy is expected to include an information pack setting out the contractual requirements which will be provided to the sub-contractors. Regular meetings would also be held with sub-contractors to discuss HGV management and to address any issues associated with travel to/from the Site, as well as to relay information including any restrictions and requirements which should be followed.

9.2.3 A Community Liaison Officer will be appointed to communicate information to local communities and also act as the primary point of contact should there be any queries or complaints.

9.2.4 Clear contact arrangements will be in place throughout the construction period to ensure that any issues relating to construction traffic or highway safety can be addressed properly.

- A 24-hour emergency contact number will be provided and displayed at the Site entrance.
- Contact details for the Site Manager and/or Travel Plan Coordinator will be made available to the LHA, LPA, and local residents where appropriate.
- In the event of an emergency (e.g. significant obstruction of the highway, traffic incident, or safety hazard), immediate action will be taken to make the area safe and notify the relevant authorities.
- Emergency services will be given unrestricted access to and through the Site at all times.

~~9.2.3~~9.2.5 All contact details will be kept up to date and clearly communicated to relevant stakeholders.

9.3 Enforcement and Corrective Measures

9.3.1 If the Principal Contractor is made aware of a potential breach of the CTMP (except where otherwise agreed with the LHAs / National Highways or in the event of an emergency), the Principal Contractor will be required to investigate the circumstances and create a report for the LHA / National Highways.

9.3.2 To ensure compliance with the measures set out within the CTMP, within the Conditions of Contract of all haulage contractors / suppliers employed by the Principal Contractor to travel to and from the Site, the following escalating sanctions regime, ~~Should~~ should the LHA / National Highways deem that a material breach has occurred, ~~the following three stage process will be followed~~shall be included:

- Stage 1 – a written warning shall be issued for the first breach by a driver of a haulage contractor~~the LHA and Principal Contractor would agree the extent of the breach and any remedial action to be taken. This is likely to be a Principal Contractor warning at this stage~~.
- Stage 2 – for any second breach a notice suspending the same offending driver of the same contractor as referred to in Stage 1 for a period of not less than seven working days~~if a further material breach is identified, the Principal Contractor would be given a further warning and will be required to produce a plan to outline how the issue would be rectified and any additional mitigation measures to be implemented~~.
- Stage 3 – for any third breach a notice suspending the same offending driver of the same contractor as referred to in Stage 2 for a period of not less than thirty working days~~should further breaches occur; the Principal Contractor would be required to remove the relevant party from Site, and the sub-contractor / supplier would receive a formal warning~~.
- Stage 4 - In the event that the same offending driver of the same contractor referred to in Stage 3 fails to comply with the routing restrictions on a fourth occasion the termination by the Principal Contractor of the sub-contractor's haulage contract for all of its drivers.

9.3.3 The Principal Contractor shall use all reasonable endeavour to enforce such contractual requirements where any breaches are brought to their attention.

~~9.3.3~~9.3.4 All violations will be recorded in an electronic database, including details of the driver, the haulier, the vehicle registrations, and the date and nature of each violation. The Principal Contractor shall notify the LHAs / National Highways of all warnings, driver bans and contract terminations.

APPENDIX A: AIL ACCESS REPORT

Abnormal Indivisible Load Access Report for East Park Solar

Prepared for Axis



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Registered in England & Wales No. 3162297

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Checked by:		30.09.25
Approved by:		30.09.25

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DOCUMENT REVISIONS

Issue	Date	Details
0	30.09.25	AIL Access Report
1		
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Executive Summary

The contents of this report include transport feasibility investigations into achieving access to the East Park Energy Solar Development for Special Order movements of above 150te gross loads as part of a Solar Farm Development. The weight considered in these investigations is 160te nett which is advised to be the weight of the transformer required at East Park Solar Farm which is located near Eaton Socon in Cambridgeshire.

Due to the overall transport weight of the load being considered (plus carrying trailer) being in excess of 150te gross weight, the move will require a Special Order from National Highways (NH). It should be noted that Government policy is to maximise the use of water for the movement of Special Order (above 150te gross) AIL's wherever possible. NH require that access via the nearest available water access should be considered, as the development would be required to deliver via the nearest available marine offloading point that is practicable for AIL delivery. An Agreement in Principle (AIP) has been provided by NH which confirms that the preferred port of delivery is Port of Sutton Bridge in line with the signed Special Order.

Port of Sutton Bridge is an established heavy load delivery port and no specific works have been undertaken in terms of marine delivery requirements. The delivery of transformers can be facilitated by the use of mobile cranes and coastal vessels.

The proposed route from Port of Sutton Bridge to East Park Solar has received clearance in the form of a signed Special Order issued by NH Abnormal Load team in Birmingham.

Wynns have deemed the proposed access route negotiable with street furniture removal which will be assessed at the time by the appointed haulier and driven by the size of girder frame trailer being used for the movement.

The report is intended to be a summary of the Abnormal Indivisible Load (AIL) route access at the current time and is not a guarantee that the route will be cleared in the future. Specific movements will need to be assessed at the time on an individual basis. If any further information is required, it is available upon request.

1. Introduction

1.1. The contents of this report include land transport feasibility investigations into achieving access to a new solar development proposal northwest of St Neots for Special Order movements of above 150Te gross loads as part of a future substation development scheme.

1.2. The weight considered in these investigations is 160Te nett which is advised, to be the weight of the new transformer required at the substation site.

1.3. This report is a summary of the status of the current AIL access investigations to East Park and seeks to present the situation as it presently stands. The issues highlighted in this report as risks to achieving AIL access in the future will need to be revisited and progressed as the scheme develops.

1.4. This investigation considers the possible land transport routes from the port of Sutton Bridge. Formal movement applications will be necessary upon appointment of a haulage contractor by the transformer manufacturer.

1.5. Port of Sutton Bridge is well established for heavy load delivery via the use of mobile cranes and coastal vessels and therefore no specific marine investigations are detailed within this report.

1.6. A review of site access within the substation layout is not included and a more detailed appraisal of the technical requirements for handling transformers on site will be required as the scheme develops in the future.

1.7. The report is intended to be a summary of the AIL route access at the current time and is not a guarantee that the route will be cleared in the future. Specific movements will need to be assessed at the time on an individual basis. If any further information is required, it is available on request.

1.8. The report considers access to East Park Substation in terms of AIL transportation only.

2. National Highways Agreement in Principle and Legislative Requirements

2.1. *Definition of Abnormal Indivisible Load (AIL)*

2.1.1. The Department for Transport, of which National Highways (NH) is a government-owned company with responsibility for managing the core road network in England, state that the strict definition of an AIL refers to a load which cannot, without undue expense or risk of damage, be divided into two or more loads for the purpose of carriage on roads and which, owing to its dimensions or weight, cannot be carried on a vehicle which complies in all respects with the 'standard vehicle regulations' these are:

- The Road Vehicles (Construction and Use) Regulations 1986 (as amended)
- The Road Vehicles (Authorised Weight) Regulations 1998 (as amended)
- The Road Vehicles Lighting Regulations 1989 (as amended).

2.1.2. All equipment should be stripped of their ancillaries before they are transported. NH will only accept that further dismantling is not required where it cannot be economically achieved due to the requirement for its construction within specific factory environments or where extremely high tolerances have to be maintained.

2.2. *Legislation*

2.2.1. Conventional heavy goods vehicles have an operating weight limit of 44 tonnes. The category known as abnormal indivisible loads (AIL) covers those vehicles where the gross weight exceeds 44 tonnes. An Abnormal Load is defined as that which cannot be carried under Construction and Use (C&U) Regulations. Items which, when loaded on the load carrying vehicle exceed the weights encompassed by the C&U Regulations, but do not exceed Special Order Permission Limits, are governed by Special Types General Order (STGO) categories 1 to 3 depending on size. NH have issued an aide memoir that explains notification requirements in more detail. This document has been attached as Appendix 3.

2.2.2. Where dimensions exceed 6.1m in width, 30m in rigid length or 150 tonnes gross weight, Special Order from NH is required.

2.2.3. Special Order category AIL movements are authorised by the NH Abnormal Loads team, based in Birmingham. This is further discussed in section 2.3.

2.2.4. STGO loads orders grant consent for loads that satisfy the following criteria:

Category 1 weight	44 – 50 tonnes and 11.5te axle weights
Category 2 weight	50 – 80 tonnes and 12.5te axle weights
Category 3 weight	80 – 150 tonnes and 16.5te axle weights
Width Restriction	3.0m (C&U) –5m (VR1 Required)– 6.1m (SO required)
Length Restriction	18.65m (C&U) – 30.0m (SO required)

2.2.5. As the load will be above 150te gross, a Special Order permit and Agreement in Principle (AIP) is required from NH. This would require the loads to be moved from the nearest available port, in line with the Department for Transports (DfT) 'Water Preferred Policy'.

2.3. *Water Preferred Policy Requirements*

2.3.1. The Department for Transport has adopted a 'water-preferred' policy for the transport of AILs. This means that, where an application is sought for the movement of a Special Order or VR1 category load (more than 5.0m width) by road, the Department, via NH, will turn down the application where it is feasible for a coastal or inland waterway route to be used instead of road. NH advise that this decision is based on a number of factors including whether the load is divisible, the availability of a suitable route, the amount of traffic congestion that is likely to be caused and the justification for the load to be moved. The NH Abnormal Loads Team is the department responsible for the authorisation of Special Order AIL's and government policy is that the closest available port of access should be used for the delivery of such oversize items.

2.3.2. National Highways have asked for Wynns to explore the feasibility of the Port of Sutton Bridge for this Special Order movement. Historically the National Highways port of preference was the Port of Tilbury but due to the reopening of the Port of Sutton Bridge, NH have stipulated that this must be explored in-line with the policies requirements.

2.3.3. An Agreement in Principle (AIP) has been provided by NH which confirms the preferred port of delivery to be Port of Sutton Bridge in line with the signed Special Order (AIP Ref: 952 Dated: 30/09/25).

3. Abnormal Indivisible Load Movements - Highways Act 1980

3.1. *Recovery of Excessive Maintenance Costs - Section 59 Agreements*

3.1.1. Section 59 of the Highways Act 1980 allows the highways authority to raise a charge against a user of the highway to cover repair works necessitated by excessively heavy or unusual loads being carried on the road by that user. This provision is typically used where the passage of heavy lorries to and from industrial premises or building sites causes excessive damage to the road, requiring expensive remedial works by the Council. Under Section 59, the Council may charge on such costs to the organisation responsible for the damage, the amount payable being calculated as the excess cost of repair compared to normal maintenance costs for the road. Rather than wait to be charged such excessive repair costs, the Council and the third party may enter into an agreement under Section 59 whereby the third party accepts liability and makes payment of an agreed sum to the Council to cover the excessive repair costs.

3.2. *The Removal and Replacement of Street Furniture*

3.2.1. Where the removal and replacement of street furniture is required for the mobilisation of out of gauge vehicles into existing sites then these are generally managed under Temporary Traffic Regulation Order (TTRO) and Street Works Legislation. These are normally, but not necessarily, organised by the haulage contractor. These requirements are generally to ensure that the supervisors and operatives are competent and that the works will be carried out to a prescribe standard with the appropriate traffic management in place. In some circumstance the Highway Authority or LA will insist that their preferred contractors will carry out such work.

4. Historical Information

4.1. As East Park is a new site, there is no specific historical AIL route available. The closest National Grid substation is Eaton Socon near St Neots which is located 4 miles south of the East Park Solar Development. Records indicate that the last recorded Special Order AIL movement (in excess of 150te gross) to Eaton Socon was in 2019. This was the movement of 298te gross on an 18 axle girder frame trailer which was transported from Sutton Bridge.

4.2. Records indicate that Biggleswade substation received a delivery of a 178te transformer in 2024 which originated from the Port of Tilbury as Port of Sutton Bridge was not in operation at that time and also the route from Sutton Bridge was restricted by a structure on the A1(M) near Peterborough.

4.3. In 2024 a delivery took place to Little Barford Substation which originated from the Port of Tilbury. This was because a route was unable to be agreed from Port of Sutton Bridge as the transformer weight was much higher than what is being considered here.

5. Transport Configurations

5.1. Based on the information available to date the transformer considered within this report is assumed to be 160Te nett weight as detailed in drawing no. 24.1266.TC01 (attached in appendix 2 of this report).

5.2. As the height of the transformer is around 4.6 metres, movement using the less expensive and more manoeuvrable flat top trailers will not be possible as the loaded vehicle cannot achieve a running height of less than 4950mm. Bridges crossing motorway and trunk roads

are in general designed to 5030mm allowing a maximum loaded reducible height of 4950mm.

5.3. At theses dimensions it is not possible to transport the transformer within the Special Types General Order (STGO) regulations as a Category 3 load (80-150te gross) as the gross load will be in excess of 150te. It will therefore be necessary to comply with legislation regarding Special Order movements and to be delivered via the nearest port of delivery.

5.4. Based on information available at this moment in time it is assumed that the road transport configuration would consist of a ballast tractor pulling a 16 axle girder frame trailer followed by another ballast tractor pushing for which the trailer element would weigh in the region of 246.8te gross with axle loads around 15.43te.

5.5. There are currently 2no haulage contractors with equipment able to carry the transformer in the UK, Allelys Heavy Haulage and Collett and Sons.

5.6. It is expected that competitive heavy haulage procurement will be feasible for the transport of the transformers on girder frame transport arrangements.

6. Structural Route Information

6.1. The route considered in the structural checks to East Park from Port of Sutton Bridge is shown below. The route is also illustrated in the map appended to this report.

6.2. A signed Special Order movement application (WYNL/192/S1) has been approved by National Highways AIL team in Birmingham for the route listed below. This confirms that all highway and structural authorities on the route have approved the proposed trailer arrangements in terms of structures.

Exit Port of Sutton Bridge along West Bank (OS Grid Ref: TF 48402 21826)
Turn left Bridge Road
Turn right A17
Turn left A151
Turn right A151 Spalding Road
Turn left A16 and continue to Peterborough
Turn right A47
Avoid unsuitable A15 junction structure by taking A15 southbound slip road.
Circumnavigate 'Eye' Roundabout and return along A15 northbound.
Take 1st exit to continue along A47
Continue along A47 to A1
Take slip road for A1 southbound
Continue to Black Cat Roundabout
Circumnavigate roundabout and return along A1 northbound.
Take exit slip road for B645
Turn left onto B645
Continue to site access trackway egress on left (OS Grid Ref: TL 14674 63845)

6.3. The Following Structural Authorities have given their approval permitting for the vehicle to travel over their managed assets.

- Cambridgeshire County Council
- Bedford Borough Council
- Lincolnshire County Council

- A1(M) Alconbury to Peterborough DBFO
- Peterborough City Council
- National Highways East Region

6.4. National Highways East Region require for the transporting vehicle to adhere to the standard cautions of no gear changing, no stopping and travelling at crawl speed across all of their underbridges. This is common practice for movements of this size. Further information is available in the Jacobs report and has been appended in Appendix 4.

6.5. No specific issues have been identified by the police authorities (Lincolnshire Police and Bedfordshire/Hertfordshire/Cambridgeshire Constabulary) although a police escort would be required for the movement, along with private escort and it is recommended that further discussions are undertaken with respect to confirming escort requirements prior to deliveries with the relevant police forces. Very careful consideration on escort requirements will be needed and where traffic must be halted, consultation with the police is necessary as only police escorts can manage the movement. Private escorts are not allowed to direct traffic.

7. Route Negotiability Information

7.1. The route considered is described below. This report focuses on the route from the A1 to site as the route from Port of Sutton Bridge to site is deemed negotiable.



Photograph 1 - (OS Grid Ref: TL 17115 61019)
Vehicle moves away from camera and to leave A1 Northbound at junction for Kimbolton B645.



Photograph 2 - (OS Grid Ref: TL 17187 61297)
Vehicle moves away from camera. Make left hand turn onto B645.



Photograph 3 - (OS Grid Ref: TL 17187 61297)
'Give Way' signpost and bollards may be temporarily removed in order to make use of the over sail on left hand turn. This will be assessed at the time by the appointed haulier and driven by the size of frame trailer being used for the movement.



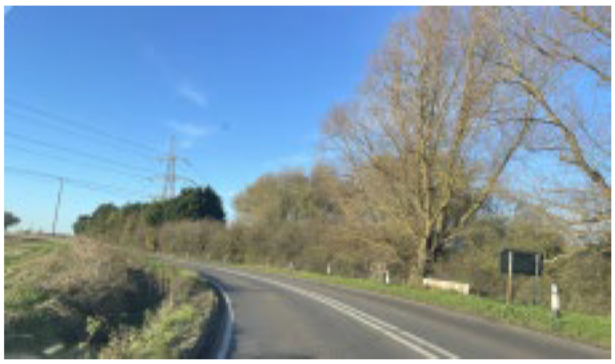
Photograph 4 - (OS Grid Ref: TL 17187 61297)
Vehicle moves away from camera. Travel through environmental 18Te weight limit restrictions is permitted under the agreed Special Order.



Photograph 5 - (OS Grid Ref: TL 16652 61612)
Vehicle moves away from camera and travels underneath overhead electrical power lines.



Photograph 6 - (OS Grid Ref: TL 15673 63002)
Vehicle moves away from camera. Roadway meanders around tree lined bends. Due to long sweeping nature of highway, this is deemed to be negotiable with full use of width of carriageway. A Police escort would be required to temporarily close the roadway. In some instances, Police forces have stipulated that temporary traffic regulation orders (TTRO) are in place.



Photograph 7 - (OS Grid Ref: TL 15356 63390)
Vehicle moves away from camera. Long sweeping left hand bend on approach to potential access area. Over sail area available.

8. Site Access Information

8.1. Access is yet to be constructed to the proposed solar farm site. The below photograph is an approximate location of where the access will be located.



Photograph 8 - (OS Grid Ref: TL 14674 63845)

Left of photograph is approximate location of entrance to access road development. No issues anticipated although temporary structure or installation of culvert will be required to traverse the drainage channel near to roadside. The proposed site access design will need to be considerate of the AIL delivery vehicle.

9. Summary and Conclusion

9.1. An Agreement in Principle (AIP) from NH has been provided by NH which confirms the preferred port of delivery to be Port of Sutton Bridge in line with the signed Special Order.

9.2. Port of Sutton Bridge is an established heavy load delivery port and no specific works have been undertaken in terms of marine delivery requirements. The delivery of transformers is achievable via the use of mobile cranes and coastal vessels.

9.3. In 2019, the route from Port of Sutton Bridge was utilised to access Eaton Socon National Grid Substation.

9.4. A signed Special Order (WYNL/192/S2) has been issued from National Highways and agrees to the movement from the Port of Sutton Bridge.

9.5. The result of this report determines that the route assessed from Port of Sutton Bridge to A1/B645 is negotiable in terms of manoeuvrability and there are no issues anticipated with clearance and negotiability to this point.

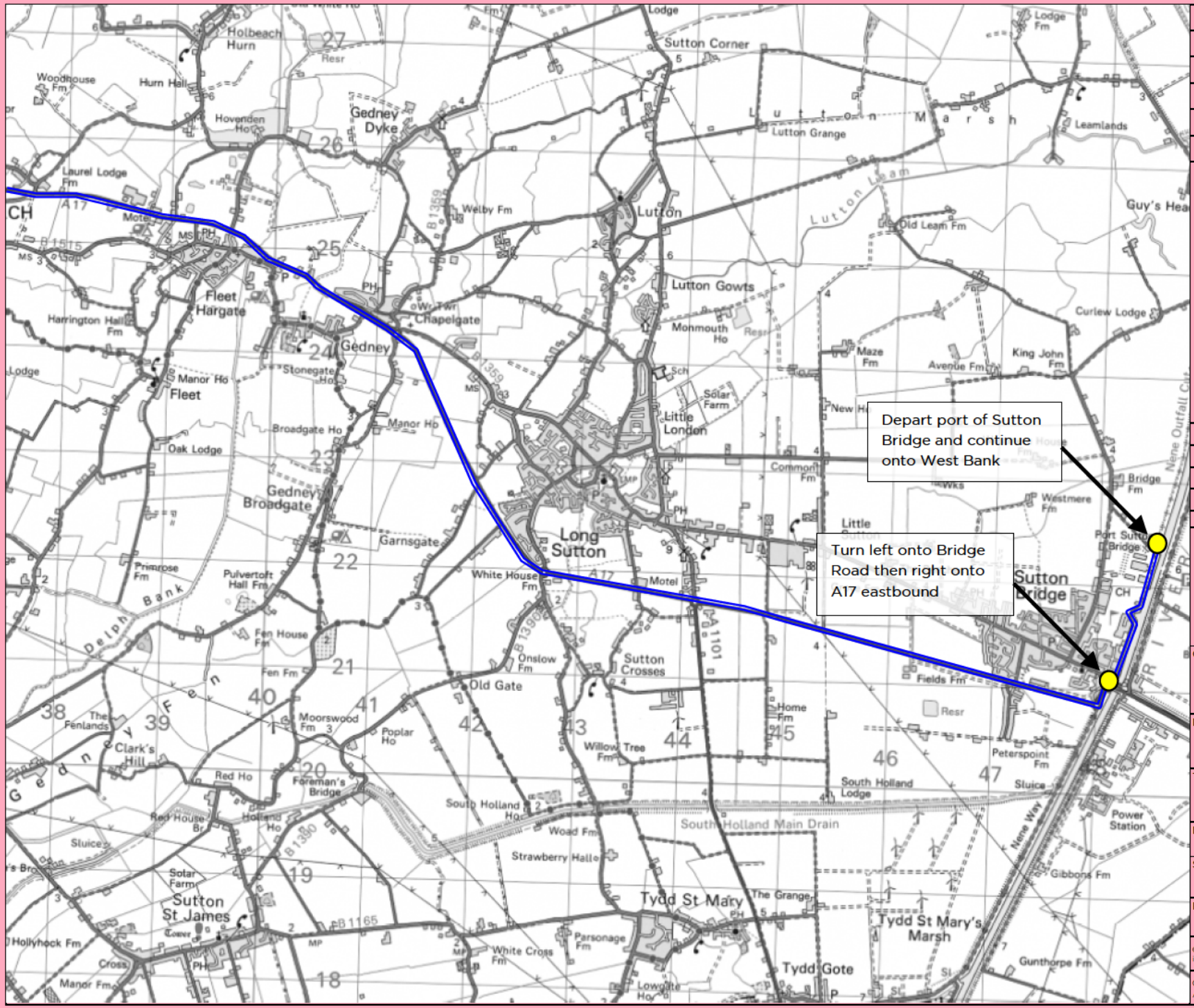
9.6. The route from the A1/B645 is negotiable with minimal street furniture removal works. No swept path assessments are required to confirm access.

9.7. A Police escort will be required for a movement of this nature as it requires use of full width of roadway in both directions. Depending on police force, a temporary traffic regulation order may be required to allow the road closure to remain in place for longer periods. Police escort requirements will be addressed by Haulier once appointed.

9.8. Consideration is required for traversing the drainage channel adjacent to the B645 in order to gain access to site and the proposed site access design will need to be considerate of the AIL delivery vehicle.

Appendix 1

Maps



Key

Route 1	
Point of Interest	

Rev	Date	Amendments:
B		
A		
0	30.09.25	First Issue

Revisions

Wynns Ltd.
Independent Transportation Engineers

Shaftesbury House, 2 High Street, Eccleshall, Stafford, ST21 6BZ. Tel: (01785) 850411

Client: axis

Project: East Park Solar

Title: Map 1 – Route to East Park Solar

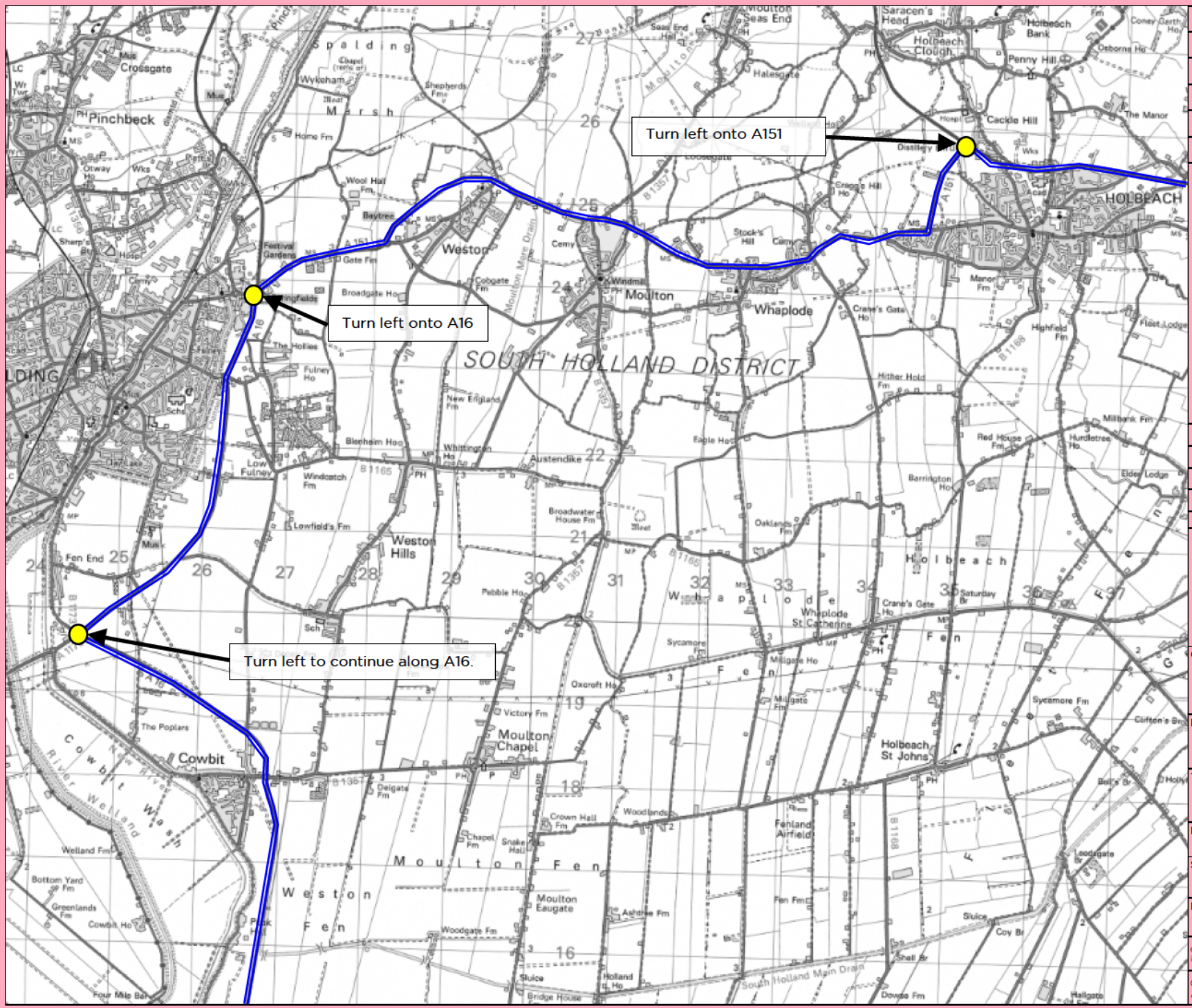
Drawing Status: AIL Summary Report

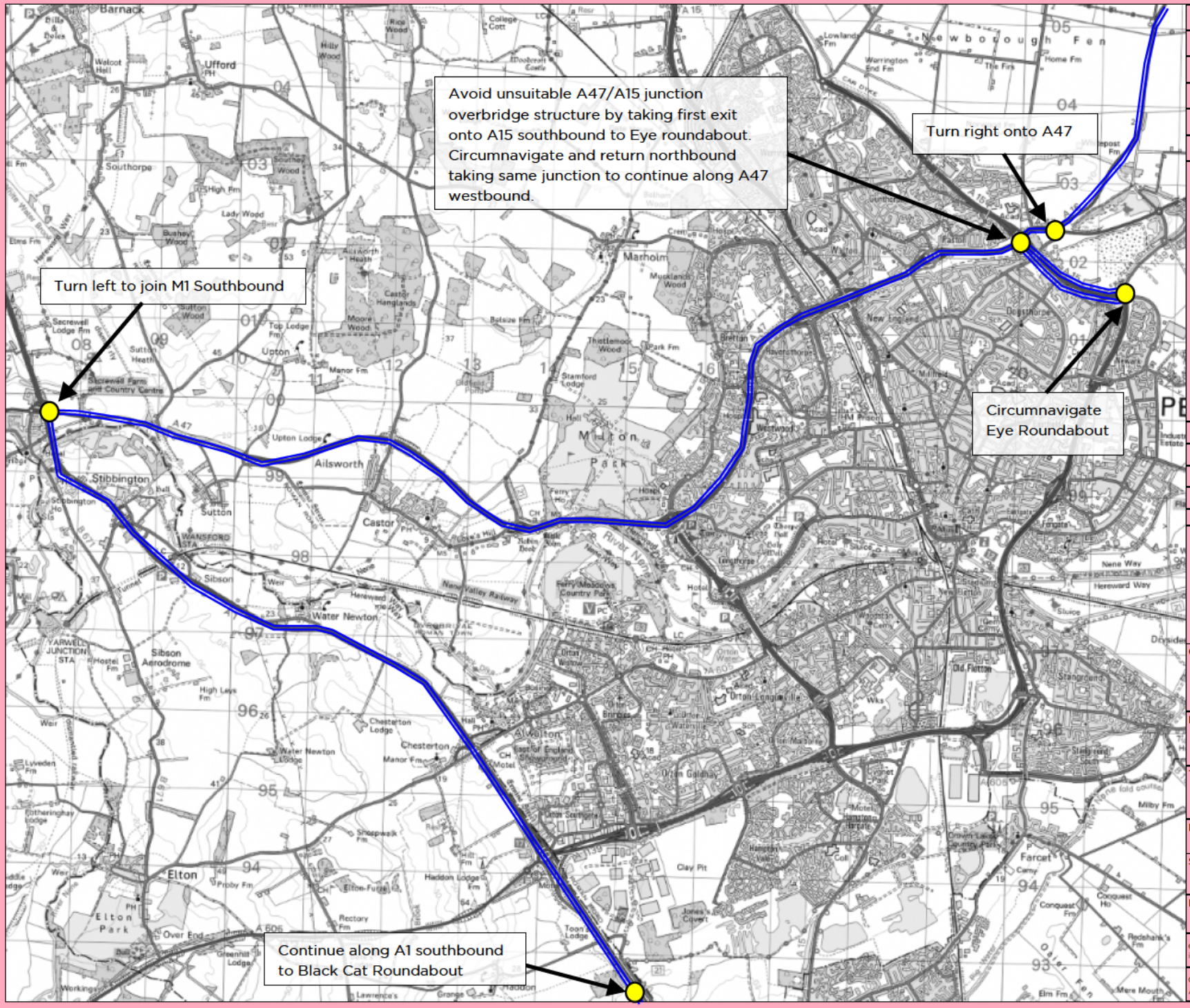
Scale (A4):	Drawn by:	Checked by:
NTS	SMB	ARP

Ref No.:	Sheet:	Rev.:
24-1266.Map01	1 of 4	0

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Turn left onto A151
Turn left onto A16
Turn left to continue along A16.
SOUTH HOLLAND DISTRICT
Pinchbeck
Weston
Moulton
Whaplode
HOLBEACH
Cowbit
Moulton Chapel
Weston Hills
Holbeach St Johns
Holbeach St Catherine
Moulton Eaugate
Fen End
Low Fulney
Austendike
Whaplode Drove
Moulton Fen
Weston Fen
Fenland Airfield
Cacicle Hill
Holbeach Clough
Holbeach Bank
Saracen's Head
Moulton Seas End
Crossgate
Wykeham
Marsh
Spalding
Sharp's Bridge
Festival Gardens
Broadgate Ho
The Hollies
Fulney Ho
New England Fm
Bleaham Hoo
Windcatch Fm
Lowfield's Fm
Broadwater House Fm
Pebble Ho
Oxcroft Ho
Victory Fm
The Poplars
Delgate Fm
Crown Hall Fm
Woodlands
Chapel Fm
Snake Hall
Woodgate Fm
Ashtree Fm
Holland Ho
Bridge House
Sluice
Four Mile Bar
Cowbit Ho
Greenlands Fm
Bottom Yard Fm
Welland Fm
River Welland
New River Wash
South Holland Main Drain
Dowse Fm
Hallgate
Leadgate
Fen Fm
Shell Br
Coy Br
Bell's Br
Clifton's Br
Sycamore Fm
Millgate Fm
Millgate Ho
Sycamore
Oakland Fm
Eagle Hoo
Whittington Ho
Barrington Ho
Red House Fm
Millbank Fm
Hurdletree Ho
Elder Lodge
Highfield Fm
Manor Fm
Crane's Gate Ho
Stock's Hill
Cemy
Windmill
Cobgate Fm
Baytree
Wool Hall Fm
Home Fm
Shepherds Fme
Seas End Hall
Halesgate
Penny Hill
Osborne Ho
The Manor
Coney Garth Ho
Distillery
Cross Hill Ho
Mither Hold Fm
Saturday Br
Whaplode Drove
Fen End
Pinchbeck
Crossgate
Otway Ho
Wks
Mus
Sch
Chapel (rems of)
Gate Fm
Cemy
Windmill
PH
MS
MP
LC
Wr
Twr
Hosp
Distillery
Wks
Acad
Fm
Ho
Hoo
Hall
Farm
Lodge
Garth
Grange
Hill
Bank
Clough
Head
Seas End
Moulton
Whaplode
Holbeach
Pinchbeck
Weston



Key	
	Route 1
	Point of Interest

Rev	Date	Amendments:
B		
A		
0	30.09.25	First Issue

Revisions

Wynns Ltd.
Independent Transportation Engineers

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Client: axis

Project: East Park Solar

Title: Map 1 – Route to East Park Solar

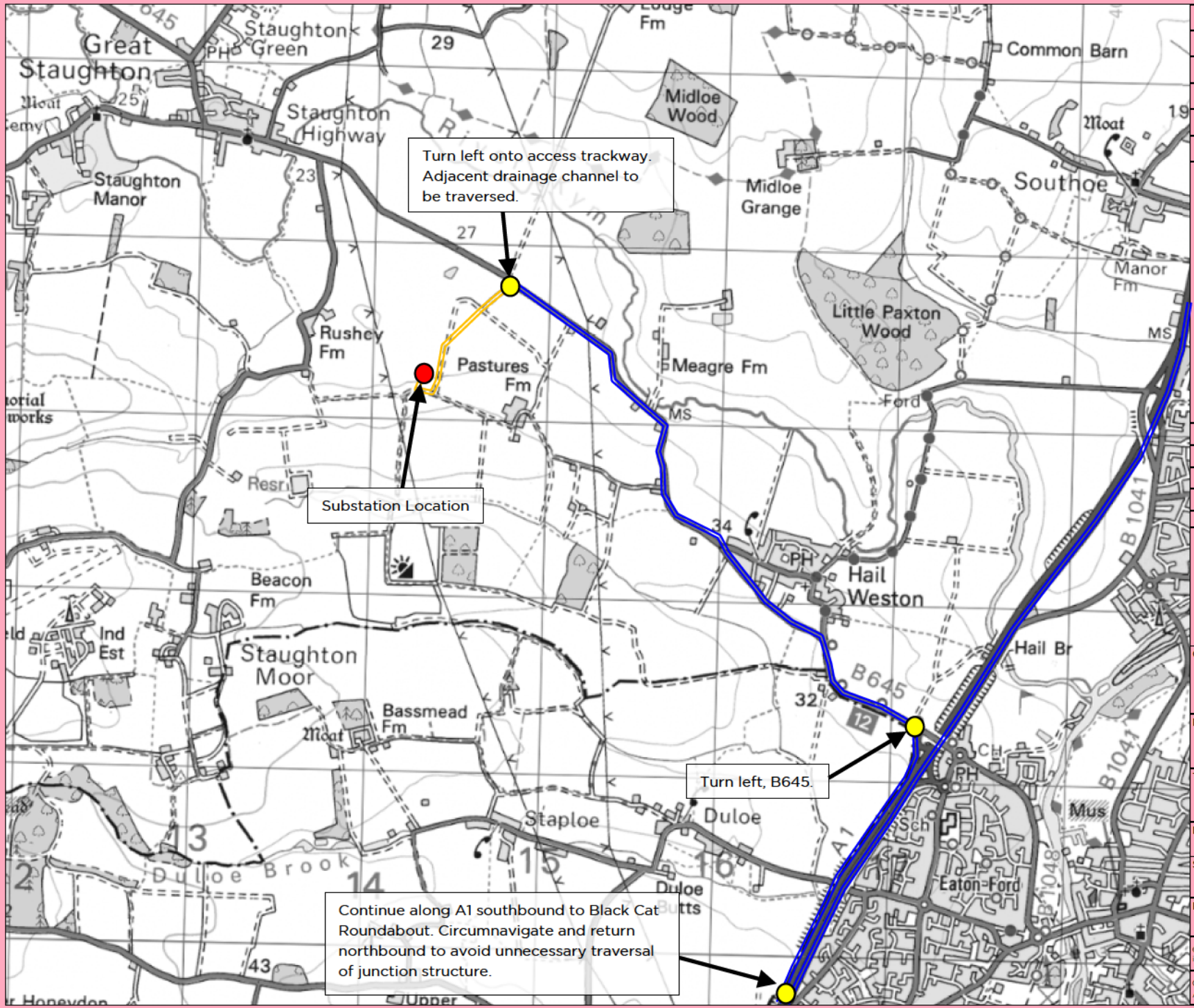
Drawing Status: AIL Summary Report

Scale (A4):	Drawn by:	Checked by:
NTS	SMB	ARP

Ref No.:	Sheet:	Rev.:
24-1266.Map01	3 of 4	0

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Key

	Route 1
	Site access trackway
	Point of Interest
	East Park Substation Location

Rev	Date	Amendments:
B		
A		
0	30.09.25	First Issue

Revisions

Wynns Ltd.
Independent Transportation Engineers

Shaftesbury House, 2 High Street, Eccleshall, Stafford, ST21 6BZ. Tel: (01785) 850411

Client: axis

Project: East Park Solar

Title: Map 1 – Route to East Park Solar

Drawing Status: AIL Summary Report

Scale (A4):	Drawn by:	Checked by:
NTS	SMB	ARP

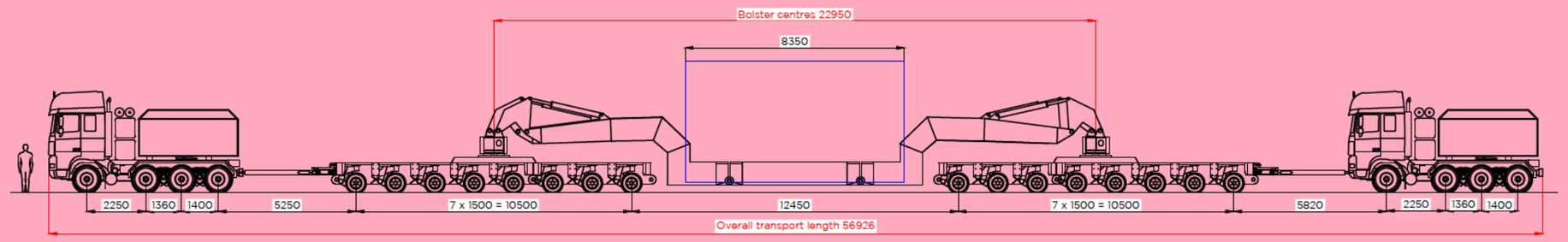
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24-1266.Map01	4 of 4	0

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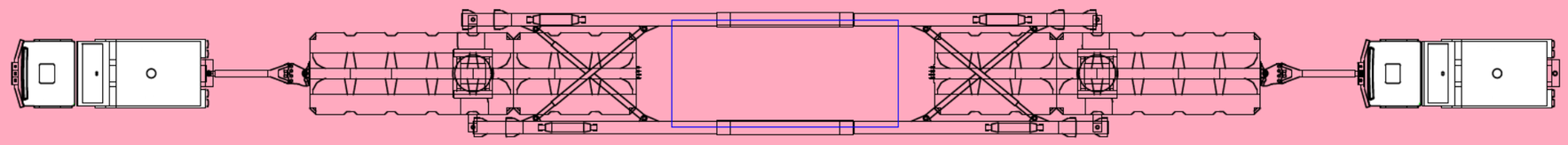
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Appendix 2

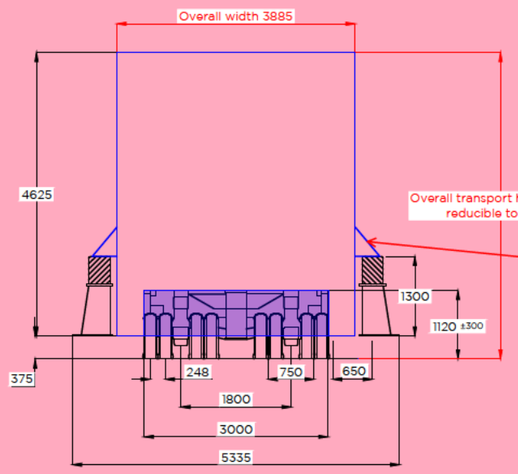
Transport Configuration Drawing



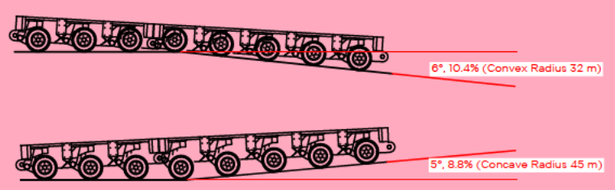
Elevation view - 16 axle girder frame trailer - concept model only
Indicative 160 te transformer
Scale 1:200



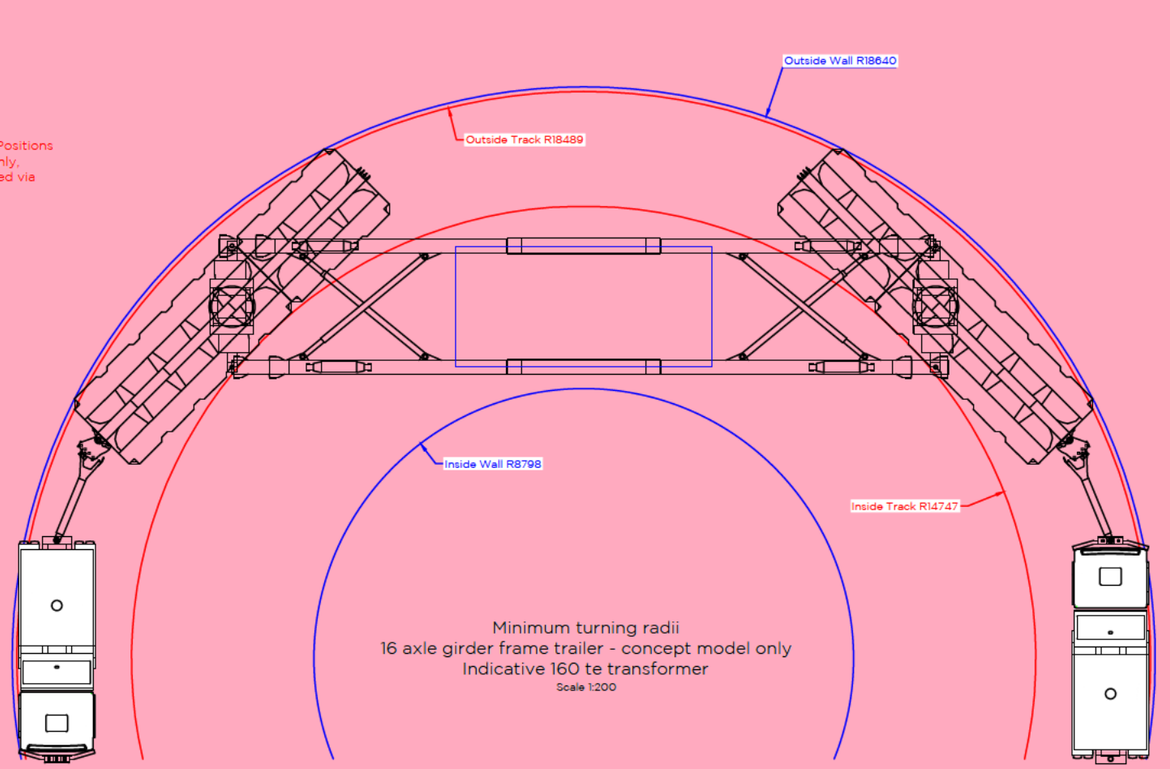
Plan view - 16 axle girder frame trailer - concept model only
Indicative 160 te transformer
Scale 1:200



Profile view
Indicative 160 te transformer
Scale 1:100
Final Carrying Arrangements, Including Final Overall Transport
Sizes to be Confirmed via Appointed Haulier.
Transformer Dimensions are:
8.35m (L), 3.885m (W), 4.625m (H)



Vertical curve negotiabilty information
based on manufacturers literature



Minimum turning radii
16 axle girder frame trailer - concept model only
Indicative 160 te transformer
Scale 1:200

Load table

16 axle girder frame trailer	
Self weight of transformer	160.0 te
Self weight of trailer	86.8 te
Self weight of aux. steelwork (for L&S)	0.0 te
Total combined weight	246.8 te
Load per trailer	123.4 te
Load per axle line	15.43 te
Load per axle	7.71 te
Load per wheel (4 per axle)	1.93 te
Overall ground bearing pressure	3.92 te/m²

Tractor(s) (42 te)	
Front axle	8.0 te
Second steer	10.0 te
Rear axle	12.0 te
Rear axle	12.0 te

Notes:

[1] The figures shown above are representative of the transport configuration portrayed. However as tractor and trailer arrangements vary then the loads and dimensions indicated should be treated as probable values.

[2] Actual dimensions, including axle spacing and mean running height, may vary slightly depending on manufacturer of trailer deployed.

[3] All linear measures in millimetres unless stated otherwise.

[4] Indicative transformer shown only.

Rev.	Date	Amendments
1		
0	06.11.24	Issued for comment

Revisions

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Tel: (01785) 850411
Independent Transportation Engineers

Client: axis

Project: East Park Solar

Title: Indicative transport configuration
Conceptual 160 te transformer carried within
16 axle girder frame trailer
showing minimum turning radii

Drawing status: Final report

Scale (A3):	Drawn By:	Checked By:
As shown	MTO	PW

Dwg. no:	Sheet:	Rev:
24-1266.TC01	1 of 1	0

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P:\Clients\Existing Clients\Axis\24-1266 East Park Solar\Transport Configurations\24-1266.TC01 East Park Solar 160 te transformer 16 axle girder small frame transport configuration. R0.dwg

Appendix 3

National Highways Aide Memoir for Abnormal Indivisible Loads

Aide Memoire for notification requirements for the movement of Abnormal Indivisible Loads or vehicles by road when not complying with The Road Vehicles (Construction and Use) Regulations 1986 (commonly known as C & U)

Weight

Gross weight of vehicle carrying the load exceeding C & U limits up to 80,000kgs (78.74 tons)	2 clear days notice with indemnity to Road and Bridge Authorities.
Gross weight of vehicle carrying the load exceeding 80,000kgs up to 150,000kgs (147.63 tons)	2 clear days notice to Police and 5 clear days with indemnity to Road and Bridge Authorities.
Gross weight of vehicle carrying the load exceeding 150,000kgs (147.63 tons)	Highways England Special Order* plus 5 clear days notice to Police and 5 clear days notice with indemnity to Road and Bridge Authorities

Width

C & U loads:- width exceeding 2.9m (9ft 6ins) up to 4.3m (14ft 1 ins) STGO loads:- width exceeding 3.0m (9ft 10ins) up to 5.0m (16ft 5ins)	2 clear days notice to Police
Width exceeding 5.0m (16ft 5ins) up to 6.1m (20ft)	Highways England form VR1** plus 2 clear days notice to Police
Width exceeding 6.1m (20ft)	Highways England Special Order* plus 5 clear days notice to Police and 5 clear days notice with indemnity to Road and Bridge Authorities

Length

C&U loads:- length exceeding 18.65m (61ft 2in) up to 27.4m (90ft) - See C&U Regulations 1986 for definition of length STGO loads:- length exceeding 18.75m (61ft 6 ins) - See part 2, article 12 of the Road Vehicles (Authorisation of Special Types) (General) Order 2003 (Commonly known as STGO) for definition of length	2 clear days notice to Police
Overall length of a part 2 vehicle-combination exceeding 25.9m (85ft)	2 clear days notice to Police
Maximum length exceeding 30.0m (98ft 5ins) – see STGO Schedule 1, part 4, paragraph 25 for definition of maximum length NB For some very light loads, such as yacht masts, that are moved on conventional motor vehicles not exceeding 12 tonnes gross weight or trailers not exceeding 10 tonnes gross weight, a Highways England Special Order* will be required if the rigid length exceeds 27.4m (89ft 11ins)	Highways England Special Order* plus 5 clear days notice to Police and 5 clear days notice with indemnity to Road and Bridge Authorities.

NOTE 1 "Clear days Notice" excludes Saturdays, Sundays or a public holiday in any part of Great Britain in relation to movements authorised by the Special Types General Order only, there being no such exclusion in Special Orders unless specifically stated.

NOTE 2 There is no statutory limit governing the overall height of a load, however, when applying for a Special Order or VR1 it should, wherever possible, not exceed 4.95m (16ft 3ins) in order that the maximum use can be made of the motorway and trunk road network.

NOTE 3 The notification requirements for mobile cranes can be found in the Road Vehicles (Authorisation of Special Types) (General) Order 2003, statutory instrument number 1998 (Part 2 Articles 10 to 18), which is available on the OPSI website: http://www.legislation.gov.uk/uksi/2003/1998/contents/made

NOTE 4 Application to move Special Types or Special Purpose vehicles, such as very large agricultural vehicles, that may not be fully permitted by the Construction & Use (C&U) Regulations or fall outside the scope of the Special Types General Order should be made to the Vehicle Certification Agency (VCA). Their website is at http://www.dft.gov.uk/vca/

*A Special Order application can be completed and submitted online at www.highways.gov.uk/esdal. The Special Order application form BE16 can also be downloaded and e-mailed to the address below. Approval is not automatic and is at the discretion of the Highways England abnormal loads team acting on behalf of the Secretary of State for Transport. To ensure that the necessary clearances can be obtained in good time from the Police, Highway and Bridge Authorities, you should request permission for the move by returning the completed form 10 weeks prior to the scheduled date of the move. In fact you cannot apply too early and we invite manufacturers or hauliers to contact us at pre tender stage, before making a financial commitment to supply the load, to check whether permission would be granted.

** A VR1 application can be completed and submitted online at www.highways.gov.uk/esdal. The form can also be downloaded but must not be e-mailed or faxed because the VR1 form is a legal document and so we must receive the original signed form. Approval is not automatic and is at the discretion of the Highways England abnormal loads team acting on behalf of The Secretary of State for Transport. To ensure that the necessary formalities can be completed in good time, you should request permission for the move by posting the completed form 2 weeks prior to the date of the scheduled move. Again, you cannot apply too early and we invite manufacturers or hauliers to contact us at pre tender stage, before making a financial commitment to supply the load, to check whether permission would be granted.

Forms and enquiries to:
Highways England
Abnormal loads team
9th Floor, The Cube
199 Wharfside Street
Birmingham B1 1RN

E-mail: abnormal.loads@highwaysengland.co.uk
Tel: 0300 470 3004

Appendix 4

Jacobs Report

Special Order AIL Movements 2024 to 2025 – Stage 3 SDF-CE-A6&8-WO16 CE16.6 Route WYNL/192/S1 Structures Route Appraisal

Document no: 602066-JAC-SBR-W016_XX-RP-CB-0004
Revision no: P02

National Highways
602066

Scheme Delivery Framework
20/06/25



Special Order AIL Movements 2024 to 2025 – Stage 3 SDF-CE-A6&8-WO16 CE16.6 Route WYNL/192/S1 Structures Route Appraisal

Client name:	National Highways		
Project name:	Scheme Delivery Framework		
Client reference:	602066	**Project no:**	SDFCE101
Document no:	602066-JAC-SBR-W016_XX-RP-CB-0004	**Project manager:**	[redacted]
Revision no:	P02	**Prepared by:**	[redacted]
Date:	20/06/25	**File name:**	602066-JAC-SBR-W016_XX-RP-CB-0004.docx
Doc status:	S4 - SUITABLE FOR STAGE APPROVAL		

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
P02	20/06/25	REVISED RECOMMENDATIONS TO NH COMMENT	DA	JD	SQ	DT
P01	06/05/25	FIRST ISSUE	DA	JD	SQ	DT

Distribution of copies

Revision	Issue approved	Date issued	Issued to	Comments

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Executive Summary

National Highways' regional structures asset portfolio for the combined Areas 6 & 8 under the East Region contains nearly 2,500 assets. These are managed in accordance with the Design Manual for Roads and Bridges (DMRB).

The East Region abnormal load movements related works as follows:

- Special Order Abnormal Load movements
- Route feasibility

For Special Order AIL Load Movements with a gross vehicle weight exceeding 150,000 kg, National Highways instruct the engineering consultant suppliers to the SDF regional contract to carry out an appraisal for the proposed movement to determine the suitability for passage across or beneath the regional bridges and structures.

This report covers the proposed special load movement Route: WYNL/192/S1.

The appraisal has been carried out in accordance with the assumptions and scope clarifications as agreed are recorded within the Decision Register, refer to Appendix D.

The appraisal has been carried out in accordance with the assumptions and scope clarifications as agreed are recorded within the Decision Register, document ref. 602066-JAC-SBR-W016_XX-RE-CB-0001. The appraisal assumes controlled movement of the Special Order loads, whereby overload and dynamic factors are discounted for the appraisal of underbridges.

Overall, the proposed load route to considered to be acceptable, subject to a number of conditions associated with the below structures and as detailed in Section 5:

Asset Key	Structure Name	Bridge Type	Risk Level
STR_7591	Wansford Railway	Underbridge	Low
STR_7590	Wansford Sluice	Underbridge	Low
Outstanding Structures (Undetermined Appraisals)			
STR_40348	Wansford NMU Underpass	Underbridge	Low
STR_40347	Sacrewell Farm Underbridge	Underbridge	Low
STR_40272	South Brook Roxton Road Link Culvert	Underbridge	Low
STR_42359	Brookhouse Chawston Culvert Replacement	Underbridge	Low
STR_43118	A1 / A47 Jct Approach Culvert KM 138/00	Underbridge	Low
STR_37190	Wansford Sluice Extension	Underbridge	Low
STR_40295	Begwary Brook Roxton Link Culvert	Underbridge	Low

Table 1. Summary of Conditions

Note:

- Risk level is defined approximately by considering a combination of the level of rigour required by the conditions set and the likelihood of adversely affecting the proposed load route.
- Conditions required to determined adequacy for these structures are defined in Section 5.2 Recommendations of this report.

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1. Introduction

Jacobs have been commissioned by National Highways under the Scheme Delivery Framework (SDF) Central Region (Area 6 & 8 East of England) to carry out structural appraisals for Special Order AIL movements for the period 2024 to 2025.

This report covers the proposed special load movement Route: WYNL/192/S1 as illustrated in Figure 1. Only National Highways structures, specifically those within Areas 6 & 8 only, are be covered under this scheme. Any remaining structures, such as local authorities, are assumed to be appraised by the relevant overseeing organisation.

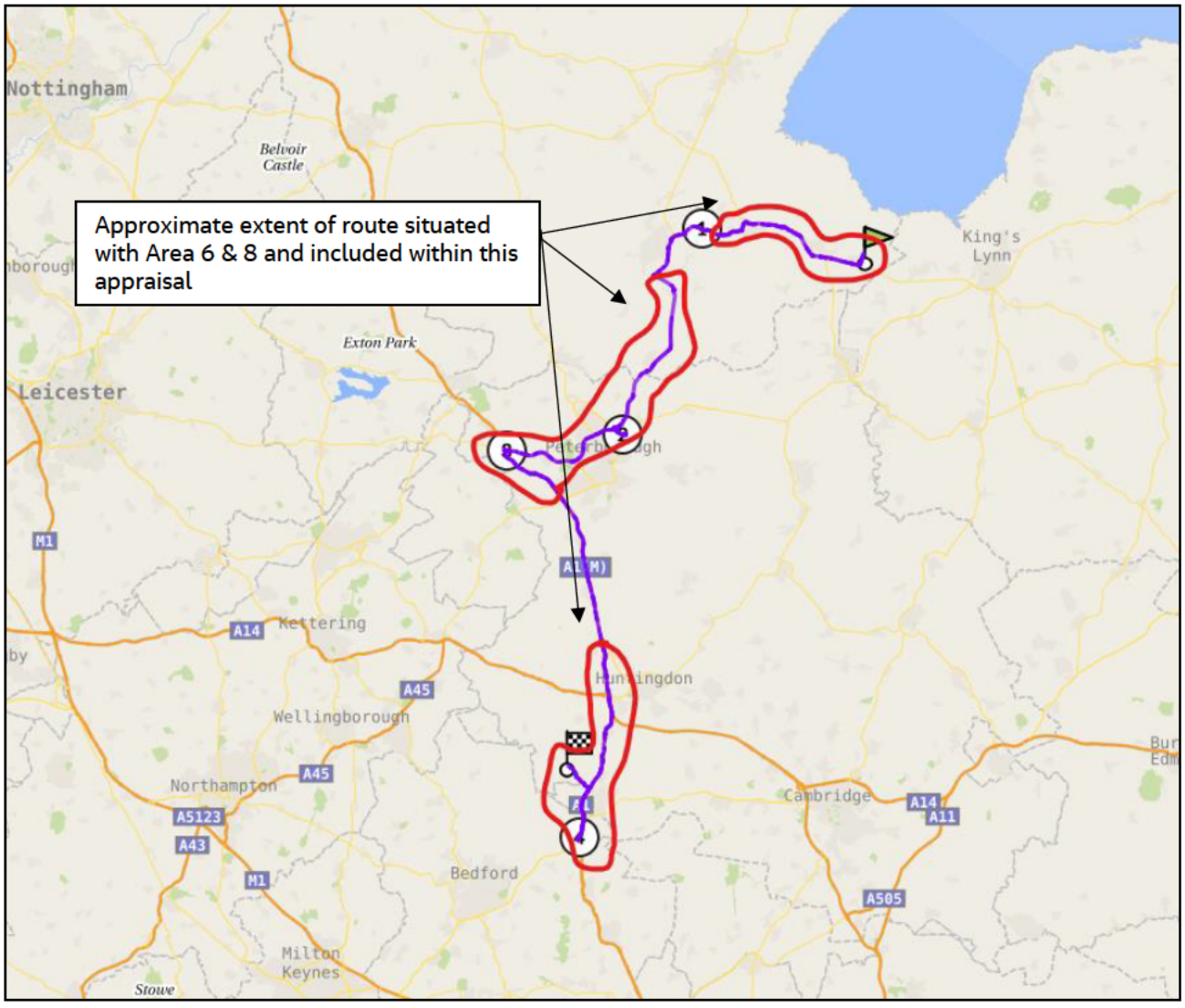


Figure 1. Route Map

Vehicle details are provided in Appendix A. This proposed load movement includes the movement of the following vehicles:

- 16 Axle Girder Frame Trailer (160te) of gross train weight 330880 kg and heaviest component weight 246880 kg.

2. Affected Structures

Structures located within National Highways' asset management Areas 6 & 8 are scheduled in the ESDAL system, as scheduled in Table 1 below. Note that structures outside of Areas 6 & 8, or structures not owned or maintained by National Highways, are excluded from the list.

Structure	Asset Key	Grid Ref	Type
S-TF196020-1- 7608 Paston Subway	STR_7608	519630, 302070	Underbridge
S-TF189020-1- 7606 Fulbridge I/C East	STR_7606	518900, 302040	Overbridge
S-TF188020-1- 7605 Fulbridge West	STR_7605	518820, 302000	Overbridge
S-TF185018-1- 7604 Fulbridge Footbridge	STR_7604	518580, 301810	Overbridge
S-TF183016-1- 7603 Fulbridge Subway	STR_7603	518310, 301700	Underbridge
S-TF178015-1- 7602 Lincoln Road East	STR_7602	517860, 301500	Underbridge
S-TF178014-1- 7601 Lincoln Road Subway	STR_7601	517810, 301470	Underbridge
S-TF177014-1- 7600 Lincoln Road West	STR_7600	519959, 302240	Underbridge
S-TF175013-1- 7599 Rhubarb Railway	STR_7599	517560, 301350	Underbridge
S-TF173012-1- 16852 Westwood I/C East	STR_16852	517233, 301217	Underbridge
S-TF172012-1- 16930 Westwood I/C West	STR_16930	517328, 301259	Underbridge
S-TF169011-1- 7597 Westwood Subway	STR_7597	516990, 301100	Underbridge
S-TF165006-1- 7596 Bretton Subway	STR_7596	516584, 300627	Underbridge
S-TF165003-1- 7594 Bretton I/C North	STR_7594	516561, 300337	Overbridge
S-TF165002-1- 7595 Bretton I/C South	STR_7595	516558, 300248	Overbridge
S-TL165998-1- 28318 Bretton Footbridge (2010)	STR_28318	516545, 299891	Overbridge
S-TL162990-1- 7592 Longthorpe Footbridge	STR_7592	516275, 299085	Overbridge
S-TL156985-1- 16853 Longthorpe I/C East	STR_16853	515660, 298560	Underbridge
S-TL155985-1- 16929 Longthorpe I/C West	STR_16929	515540, 298530	Underbridge
S-TL153984-1- Longthorpe Subway	-	515320, 298416	Underbridge
S-TL135984-1- 18435 Milton Park	STR_18435	513600, 298450	Overbridge
S-TL119994-1- 18436 Helpston Road	STR_18436	512000, 299500	Overbridge
S-TL089995-1- 7591 Wansford Railway	STR_7591	508982, 299572	Underbridge
S-TL088995-1- 7590 Wansford Sluice	STR_7590	508880, 299590	Underbridge
S-TL075997-1- 7588 Wansford Flyover	STR_7588	507525, 299746	Overbridge
S-TL076993-3- 5327 Nene Bridge Wansford	STR_5327	507650, 299377	Underbridge
S-TL076993-1- 5325 Wansford Accomodation S	STR_5325	507667, 299300	Underbridge
S-TL085984-1- 23273 Stibbington Overbridge	STR_23273	508605, 298420	Overbridge
S-TL090978-1- 5324 Wansford Railway	STR_5324	509070, 297892	Underbridge
S-TL116968-2- 5323 Water Newton S/B	STR_5323	511675, 296835	Underbridge
S-TL131955-1- 5320 Kates Cabin Flyover	STR_5320	513149, 295567	Overbridge
S-TL191740-1- 5304 CU101 - Matchams Bridge Culvert	STR_5304	519150, 274020	Underbridge
S-TL191739-1- 34602 Culvert 101A	STR_34602	519224, 273939	Underbridge
S-TL192728-1- 34631 Culvert 111	STR_34631	519442, 271747	Underbridge
S-TL193724-1- 18872 Brampton River Relief Culvert	STR_18872	519310, 272490	Underbridge
S-TL193721-1- 18871 Brampton River	STR_18871	519390, 272120	Underbridge
S-TL194719-2- 18870 Brampton Hut North	STR_18870	519430, 271990	Underbridge
S-TL194719-1- 18869 Brampton Hut South	STR_18869	519450, 271910	Underbridge

S-TL194715-1- 34633 Culvert 115a	STR_34633	519417, 271595	Underbridge
S-TL197694-1- 27688 A1 Brampton Interchange Bridge	STR_27688	519480, 271376	Overbridge
S-TL194713-1- 34634 Culvert 115c	STR_34634	519391, 271275	Underbridge
S-TL195708-2- 34637 Culvert 117	STR_34637	519538, 270863	Underbridge
S-TL195708-1- 34635 Culvert 116	STR_34635	519482, 270846	Underbridge
S-TL197698-1- 27680 Grafham Road Bridge (BN02)	STR_27680	519824, 269893	Overbridge
S-TL197695-1- 34570 Culvert 126b	STR_34570	519769, 269590	Underbridge
S-TL197694-2- 33638 A14/A1 Link Underbridge (BN26)	STR_33638	519811, 269389	Overbridge
S-TL197690-1- 5295 Buckden Railway	STR_5295	519720, 269020	Underbridge
S-TL192680-1- 5296 Buckden North Subway	STR_5296	519240, 268090	Underbridge
S-TL190674-1- 5294 Buckden South Subway	STR_5294	519040, 267450	Underbridge
S-TL188663-1- 5293 Diddington Brook	STR_5293	518880, 266340	Underbridge
S-TL185635-1- 5292 Toll Bar Culvert	STR_5292	518580, 263510	Underbridge
S-TL184629-1- 5291 Little Paxton Flyover	STR_5291	518410, 262970	Overbridge
S-TL176618-1- 5289 Hail	STR_5289	517610, 261780	Underbridge
S-TL172612-1- 5288 Crosshall Bridge	STR_5288	517290, 261230	Overbridge
S-TL167603-1- 5287 Duloe	STR_5287	516720, 260330	Underbridge
S-TL166602-1- 5286 Duloe Culvert	STR_5286	516650, 260250	Underbridge
S-TL163593-1- 5285 Bushmead	STR_5285	516370, 259380	Overbridge
S-TL164584-1- 5284 Colmworth Culvert	STR_5284	516480, 258440	Underbridge
S-TL165581-1- 5283 Settlement Underpass	STR_5283	516580, 258160	Underbridge
S-TL166576-1- 5282 Southern Junction Flyover	STR_5282	516620, 257640	Overbridge
S-TL163564-2- 5281 Wyboston Footbridge	STR_5281	516400, 256480	Overbridge
S-TL163564-1- 18 Begwary Brook Culvert	-	516401, 256444	Underbridge
S-TL162558-1- 5280 Brookhouse Chawston	STR_5280	516210, 255820	Underbridge
S-TL163564-2- 5281 Wyboston Footbridge	STR_5281	516400, 256480	Overbridge
S-TL166576-1- 5282 Southern Junction Flyover	STR_5282	516620, 257640	Overbridge
S-TL163593-1- 5285 Bushmead	STR_5285	516370, 259380	Overbridge

Table 2. ESDAL Structure List

As part of this appraisal, an independent review of National Highways' Bridge & Large Culverts and Small Span Structures present along the route has been carried out through investigation of the route within their own structures asset management database, IAMIS. All structures identified along the route are scheduled in Table 2 below, along with key asset information:

Asset Key	Structure Name	Structure Type	Bridge Type	Construction Type
STR_7611	Welland Road	Bridge & Large Culvert	Highway Overbridge	Not Known
STR_7609	Paston I/C North	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_7608	Paston Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_7607	Nab Lane Subway	Bridge & Large Culvert	Pedestrian Subway	Not Known
STR_8273	Nab Lane Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_7606	Fulbridge I/C East	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_7605	Fulbridge West	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_7604	Fulbridge Footbridge	Bridge & Large Culvert	Footbridge	Concrete
STR_7603	Fulbridge Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete

Asset Key	Structure Name	Structure Type	Bridge Type	Construction Type
STR_7601	Lincoln Road Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_7602	Lincoln Road East	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_7600	Lincoln Road West	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_7598	Custard Footbridge	Bridge & Large Culvert	Footbridge	Concrete
STR_7599	Rhubarb Railway	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_16852	Westwood I/C East	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_16930	Westwood I/C West	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_7597	Westwood Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_7596	Bretton Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_7594	Bretton I/C North	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_7595	Bretton I/C South	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_28318	Bretton Footbridge (2010)	Bridge & Large Culvert	Footbridge	Steel
STR_7593	Bretton Footbridge	Bridge & Large Culvert	Footbridge	Concrete
STR_41196	Longthorpe Footbridge Repl	Bridge & Large Culvert	Footbridge	Concrete
STR_7592	Longthorpe Footbridge	Bridge & Large Culvert	Footbridge	Concrete
STR_16853	Longthorpe I/C East	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_16929	Longthorpe I/C West	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_15112	Longthorpe Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_18435	Milton Park	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_18436	Helpston Road	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_37189	Wansford Railway (South)	Bridge & Large Culvert	Accom. Underbridge	Concrete
STR_40348	Wansford NMU Underpass	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_7591	Wansford Railway	Bridge & Large Culvert	Highway Underbridge	Brick/Masonry/Stone
STR_37190	Wansford Sluice Extension	Small Span Structure	-	-
STR_7590	Wansford Sluice	Small Span Structure	-	-
STR_37191	Sacrewell Farm Underbridge	Bridge & Large Culvert	Highway Underbridge	Composite
STR_40347	Sacrewell Farm Underbridge	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_24475	Wansford Subway Extension	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_7587	Wansford Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_43118	A1 / A47 Jct App Culvert KM	Bridge & Large Culvert	Large Culvert	-
STR_41952	Wansford Culvert	Small Span Structure	-	-
STR_7588	Wansford Flyover	Bridge & Large Culvert	Highway Underbridge (O)	Concrete
STR_5326	Wansford New	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_5327	Nene Bridge Wansford	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_15802	Wansford Accommodation N	Bridge & Large Culvert	Accom. Underbridge	Concrete
STR_5325	Wansford Accomodation S	Bridge & Large Culvert	Accom. Underbridge	Concrete
STR_23273	Stibbington Overbridge	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_5324	Wansford Railway	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_15803	Water Newton N/B	Bridge & Large Culvert	Large Culvert	Steel
STR_5323	Water Newton S/B	Bridge & Large Culvert	Large Culvert	Brick/Masonry/Stone
STR_5320	Kates Cabin Flyover	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_5304	CU101 - Matchams Bridge Culvert	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_34602	Culvert 101A	Bridge & Large Culvert	Large Culvert	Concrete

Asset Key	Structure Name	Structure Type	Bridge Type	Construction Type
STR_18872	Brampton River Relief Culvert	Bridge & Large Culvert	Large Culvert	Concrete
STR_5302	Ellington Brook Flood	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_5301	Ellington Brook	Bridge & Large Culvert	Highway Underbridge	Not Known
STR_18870	Brampton Hut North	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_18869	Brampton Hut South	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_34631	Culvert 111	Small Span Structure	-	-
STR_34633	Culvert 115a	Small Span Structure	-	Precast Concrete Pipe
STR_27688	A1 Brampton Interchange (BN03)	Bridge & Large Culvert	Highway Underbridge (O)	Composite
STR_34634	Culvert 115c	Small Span Structure	-	Precast Concrete Pipe
STR_5300	Nth Of West End Brampton	Small Span Structure	-	-
STR_34565	Culvert 110	Small Span Structure	-	-
STR_19154	Park Road	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_27680	Grafham Road Bridge (BN02)	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_34697	Alconbury Brook Footbridg (BN34)	Bridge & Large Culvert	Footbridge	Concrete
STR_18871	Brampton River	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_34696	Ellington Brook Footbridge (BN33)	Bridge & Large Culvert	Footbridge	Concrete
STR_5295	Buckden Railway	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_34635	Culvert 116	Small Span Structure	-	-
STR_34636	Culvert 116b	Small Span Structure	-	-
STR_34637	Culvert 117	Small Span Structure	-	-
STR_5296	Buckden North Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_5294	Buckden South Subway	Bridge & Large Culvert	Pedestrian Subway	Concrete
STR_34570	Culvert 126b	Small Span Structure	-	-
STR_33638	A14/A1 Link Underbridge (BN26)	Bridge & Large Culvert	Highway Underbridge (O)	Composite
STR_5293	Diddington Brook	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_5292	Toll Bar Culvert	Bridge & Large Culvert	Large Culvert	Concrete
STR_5291	Little Paxton Flyover	Bridge & Large Culvert	Highway Overbridge	Composite
STR_5289	Hail	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_5288	Crosshall Bridge	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_5287	Duloe	Bridge & Large Culvert	Highway Underbridge	Concrete
STR_5286	Duloe Culvert	Bridge & Large Culvert	Large Culvert	Concrete
STR_5285	Bushmead	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_5284	Colmworth Culvert	Bridge & Large Culvert	Large Culvert	Concrete
STR_5283	Settlement Underpass	Bridge & Large Culvert	Accom. Underbridge	Concrete
STR_5282	Southern Junction Flyover	Bridge & Large Culvert	Highway Overbridge	Concrete
STR_40295	Begwary Brook Roxton Link Culvert	Small Span Structure	-	-
STR_5281	Wyboston Footbridge	Bridge & Large Culvert	Footbridge	Steel
STR_40272	South Brook Roxton Road Link Cul	Bridge & Large Culvert	Large Culvert	Concrete
STR_42359	Brookhouse Chawston Culvert Repl	Bridge & Large Culvert	Large Culvert	Concrete
STR_5280	Brookhouse Chawston	Bridge & Large Culvert	Large Culvert	Concrete

Table 3. Structure Information List

The review of the route structures from IAMIS has identified the following discrepancies in comparison with ESDAL:

Structures listed by IAMIS and not within ESDAL:

STR_7611	Welland Road (O)	Road is adjacent to A47
STR_7598	Custard Footbridge (O)	Footbridge adjacent to A47
STR_7593	Bretton Footbridge (O)	Demolished and replaced by STR_7593
STR_7592	Longthorpe Footbridge (O)	Demolished
STR_34696	Ellington Brook Footbridge (BN33) (O)	Footbridge adjacent to A1
STR_34697	Alconbury Brook Footbridge (BN34) (O)	Footbridge adjacent to A1
STR_19154	Park Road (O)	Demolished
STR_7609	Paston I/C North (U)	Route diversion in place
STR_7607	Nab Lane Subway (U)	Missing from ESDAL. Demolished/replaced.
STR_8273	Nab Lane Subway (U)	Missing from ESDAL
STR_37189	Wansford Railway (South) (U)	Never built
STR_40348	Wansford NMU Underpass (U)	Under construction
STR_37191	Sacrewell Farm Underbridge (U)	Never built
STR_40347	Sacrewell Farm Underbridge (U)	Under construction
STR_24475	Wansford Subway Extension (U)	Opposite side of junction from route
STR_7587	Wansford Subway (U)	Opposite side of junction from route
STR_40272	South Brook Roxton Road Link Culvert (U)	Under construction
STR_42359	Brookhouse Chawston Culvert Replacement (U)	Under construction
STR_33638	A14/A1 Link Underbridge (BN26) (O)	Classified as overbridge for this route
STR_5301	Ellington Brook (U)	Demolished
STR_5302	Ellington Brook Flood (U)	Demolished
STR_15803	Water Newton N/B (U)	Opposite side of carriageway to route
STR_43118	A1 / A47 Jct Approach Culvert KM 138/00 (U)	Under construction
STR_37190	Wansford Sluice Extension (U)	Under construction
STR_40295	Begwary Brook Roxton Link Culvert (U)	Under construction
STR_34636	Culvert 116b (U)	Offline of the A1
STR_5300	Nth Of West End Brampton (U)	Infilled/buried
STR_34565	Culvert 110	Owned by Cambridgeshire County Council

STR_34631	Culvert 111 (U)	Owned by Cambridgeshire County Council
STR_41952	Wansford Culvert (U)	Missing from ESDAL
STR_7588	Wansford Flyover (O)	Classified as overbridge for this route
STR_5326	Wansford New (U)	Opposite side of carriageway to route
STR_15802	Wansford Accommodation N (U)	Opposite side of carriageway to route
STR_27688	A1 Brampton Interchange Bridge (BN03) (O)	Classified as overbridge for this route

National Highways confirmed on 16th May 2025 that Structures STR_34565 and STR_34631 are not owned or maintained by National Highways and that the relevant authorities would carry out their own route appraisal and communicate their findings directly to the haulier and as such, no recommendation for further action is made within this appraisal.

Structures listed by ESDAL and not within IAMIS:

Due to a return leg on the A1, the following 3 No. overbridges were duplicated in ESDAL:

S-TL163593-1- 5285 Bushmead

S-TL166576-1- 5282 Southern Junction Flyover

S-TL163564-2- 5281 Wyboston Footbridge

Non-NH Assets:

18 Begwary Brook Culvert (Under)	Not a recorded NH asset

Based on the above, the following structures are not included as part of this appraisal, although recommendations are provided in Section 5:

STR_7611	Welland Road (O)
STR_7607	Nab Lane Subway (U)
STR_7598	Custard Footbridge (O)
STR_7593	Bretton Footbridge (O)
STR_7592	Longthorpe Footbridge (O)
STR_34696	Ellington Brook Footbridge (BN33) (O)
STR_34697	Alconbury Brook Footbridge (BN34) (O)
STR_19154	Park Road (O)
STR_7609	Paston I/C North (U)
STR_37189	Wansford Railway (South) (U)
STR_40348	Wansford NMU Underpass (U)
STR_37191	Sacrewell Farm Underbridge (U)

STR_40347 Sacrewell Farm Underbridge (U

STR_24475 Wansford Subway Extension (U)

STR_7587 Wansford Subway (U)

STR_40272 South Brook Roxton Road Link Culvert (U)

STR_42359 Brookhouse Chawston Culvert Replacement (U)

STR_5301 Ellington Brook (U)

STR_5302 Ellington Brook Flood (U)

STR_15803 Water Newton N/B (U)

STR_43118 A1 / A47 Jct Approach Culvert KM 138/00 (U)

STR_37190 Wansford Sluice Extension (U)

STR_40295 Begwary Brook Roxton Link Culvert (U)

STR_34636 Culvert 116b (U)

STR_5300 Nth Of West End Brampton (U)

STR_34565 Culvert 110 (U)

STR_34631 Culvert 111 (U)

STR_5326 Wansford New (U)

STR_15802 Wansford Accommodation N (U)

To summarise, the number of recorded NH assets to be assessed for the proposed load route are as follows:

Asset Key	ESDAL	ESDAL Excl.	Residual	IAMIS	IAMIS Excl.	Residual	Appraised
Underbridges	43	1	42	65	22	43	**43**
Overbridges	23	3	20	27	7	20	**20**
Total	66	4	62	92	27	64	**63**

Table 4. Structures List Comparison

3. Underbridges

3.1 Loading

The work brief provided by National Highways sets out the scope for assessment as per the below:

In the first instance the Consultant will carry out comparisons between load effect of the proposed abnormal vehicles and the load effects ensuing from the application of certified, recorded loads that can be safely carried by the respective structure. This will be carried out by using simple line beam models where suitable or grillage models could be used where line beam models are considered unsuitable. It is expected that load distribution would be undertaken in the first pass rather than considered as a further "refined" analysis (CG 300 assessment). When utilisation factors are less than 100% in the first pass, then further "refined" analysis would not be required. Line beam analysis will not be undertaken for bridges with deck skew over 15 degrees, instead, the first pass will involve grillage analysis.

Where the grillage model is returning utilisation factors higher, but relatively close to 1.0 and it is believed that an improvement can be gained by undertaking bespoke or full quantitative assessments under the requirements of CG 300, this shall be recommended in the report. Note that undertaking such Assessments will need prior agreement from the technical approval authority and will be carried out as a separate compensation event.

For culverts without a load rating, if they have a span that is less than 3m and fill cover above the culvert of greater than 1m, then a qualitative appraisal will be conducted. This will involve reviewing historic abnormal load movement on the culvert alongside inspection reports. The output of the qualitative appraisal will be appended to the overall report for the proposed abnormal load route. This work will be priced as a separate CE and agreed in advance with the NH PM.

Table 4 below itemises the underbridges and culverts that carry the proposed load route, and schedules the dimensional details and as such, the proposed methods of assessment based on their dimensions:

Asset Key	Structure Name	Skew	Span / Dia.	Backfill Cover	Assessment Method
STR_7608	Paston Subway	0	4 m	-	Line Beam
STR_8273	Nab Lane Subway	0	5.5 m	-	Line Beam
STR_7603	Fulbridge Subway	0	4 m	-	Line Beam
STR_7601	Lincoln Road Subway	0	6 m	-	Line Beam
STR_7602	Lincoln Road East	12	18 m	-	Line Beam
STR_7600	Lincoln Road West	0	18 m	-	Line Beam
STR_7599	Rhubarb Railway	7	37 m	-	Line Beam
STR_16852	Westwood I/C East	0	21 m	-	Line Beam
STR_16930	Westwood I/C West	0	21 m	-	Line Beam
STR_7597	Westwood Subway	0	6.1 m	-	Line Beam
STR_7596	Bretton Subway	0	6.1 m	-	Line Beam
STR_16853	Longthorpe I/C East	0	18.5 m	-	Line Beam
STR_16929	Longthorpe I/C West	0	18.5 m	-	Line Beam
STR_15112	Longthorpe Subway	0	6 m	-	Line Beam
STR_7591	Wansford Railway	28	7.65 m	-	Arch Frame
STR_7590	Wansford Sluice	0	1.8 m	9 m	Qualitative
STR_41952	Wansford Culvert	8	2.3 m	4 m	Qualitative
STR_5327	Nene Bridge Wansford	13	82 m	-	Line Beam
STR_5325	Wansford Accomodation S	0	11.2 m	-	Line Beam
STR_5324	Wansford Railway	30	12.2 m	-	Grillage
STR_5323	Water Newton S/B	25	4.2 m	-	Arch Frame
STR_5304	CU101 - Matchams Bridge Culve	0	5.5 m	-	Line Beam

Asset Key	Structure Name	Skew	Span / Dia.	Backfill Cover	Assessment Method
STR_34602	Culvert 101A	0	4 m	-	Line Beam
STR_18872	Brampton River Relief Culvert	0	4.3 m	-	Line Beam
STR_18870	Brampton Hut North	24	20.7 m	-	Grillage
STR_18869	Brampton Hut South	25	20.7 m	-	Grillage
STR_34633	Culvert 115a	6.5	1.2 m	4 m	Qualitative
STR_34634*	Culvert 115c	25.4	1.2 m	0.9 m	Line Beam
STR_18871	Brampton River	4.9	11.1 m	-	Line Beam
STR_5295	Buckden Railway	0	9.5 m	-	Line Beam
STR_34635	Culvert 116	8.5	1.2 m	1.4 m	Qualitative
STR_34637	Culvert 117	2.5	1.5 m	1.6 m	Qualitative
STR_5296	Buckden North Subway	0	3 m	-	Line Beam
STR_5294	Buckden South Subway	0	3 m	-	Line Beam
STR_34570	Culvert 126b	17	1.5 m	7.7 m	Qualitative
STR_5293	Diddington Brook	0	6.6 m	-	Line Beam
STR_5292	Toll Bar Culvert	7.5	3.4 m	-	Line Beam
STR_5289	Hail	0	13.6 m	-	Line Beam
STR_5287	Duloe	0	11 m	-	Line Beam
STR_5286*	Duloe Culvert	28	3.7 m	-	Line Beam
STR_5284*	Colmworth Culvert	28	5 m	-	Line Beam
STR_5283	Settlement Underpass	0	4.6	-	Line Beam
STR_5280	Brookhouse Chawston	14	3.05 m	-	Line Beam

Table 5. Assessment Method

Note:

Further discussion was held between National Highways and Jacobs for the agreement of the proposed assessment approach on the 24th October 2024. The work brief scope is high level and intended to capture the overall intent for the approach to analysis but does account for structure specific conditions. Therefore, a summary of the choice of analysis method is provided below for those structures where the method may deviate from the brief. Generally, structures were assessed using a moving load spreadsheet to undertake a simple line beam analysis without considering any factors. For structures either with a skew over 20 degrees or a more refined analysis method was adopted in the previous assessment, either grillage or an alternative refined analysis method aligning with the previous assessment was adopted for this appraisal. For all methods of appraisal, controlled movement of the Special-Order loads is assumed, whereby overload and dynamic factors are discounted for the appraisal of underbridges. The particular arrangement of the grillages or alternative methods was primarily based on the arrangement used in the previous assessment from which the recognised load rating is based. Details of the assumptions and scope clarifications as agreed are recorded within the Decision Register, document ref. 602066-JAC-SBR-W016_XX-RE-CB-0001, with exceptions for the adoption of a refined analysis where the skew is over 20 degrees is listed below:

STR_34634 - Culvert 115c	Concrete pipe type structure. Line beam adopted due to square spanning nature, despite angle of skew to carriageway.
*STR_5286 - Duloe Culvert	Concrete box type structure. Line beam adopted due to square spanning nature, despite angle of skew to carriageway.
*STR_5284 - Colmworth Culvert	Concrete box type structure. Line beam adopted due to square spanning nature, despite angle of skew to carriageway.

The proposed analysis methods have been grouped in Table 5 below for clarity.

Assessment Method	No. Structures	Structures	
Line Beam	32	STR_7608	Paston Subway
		STR_8273	Nab Lane Subway
		STR_7603	Fulbridge Subway
		STR_7601	Lincoln Road Subway
		STR_7602	Lincoln Road East
		STR_7600	Lincoln Road West
		STR_7599	Rhubarb Railway
		STR_16852	Westwood I/C East
		STR_16930	Westwood I/C West
		STR_7597	Westwood Subway
		STR_7596	Bretton Subway
		STR_16853	Longthorpe I/C East
		STR_16929	Longthorpe I/C West
		STR_15112	Longthorpe Subway
		STR_5327	Nene Bridge Wansford
		STR_5325	Wansford Accomodation S
		STR_5304	CU101 - Matchams Bridge Culve
		STR_34602	Culvert 101A
		STR_18872	Brampton River Relief Culvert
		STR_34634	Culvert 115c
		STR_18871	Brampton River
		STR_5295	Buckden Railway
		STR_5296	Buckden North Subway
		STR_5294	Buckden South Subway
		STR_5293	Diddington Brook
		STR_5292	Toll Bar Culvert
		STR_5289	Hail
		STR_5287	Duloe
		STR_5286	Duloe Culvert
		STR_5284	Colmworth Culvert
		STR_5283	Settlement Underpass
		STR_5280	Brookhouse Chawston
Arch Frame	2	STR_7591	Wansford Railway
		STR_5323	Water Newton S/B
Grillage	3	STR_18869	Brampton Hut South
		STR_18870	Brampton Hut North
		STR_5324	Wansford Railway
Qualitative	6	STR_7590	Wansford Sluice
		STR_41952	Wansford Culvert
		STR_34633	Culvert 115a
		STR_34635	Culvert 116
		STR_34637	Culvert 117
		STR_34570	Culvert 126b

Table 6. Assessment Methods

3.1.1 Bridges & Large Culverts

The load effects from the proposed abnormal load vehicles were compared against the recorded HB loading capacity extracted from historically completed assessment reports or against load ratings available on IAMIS.

Asset Key	Structure Name	Skew	HB Rating	Assess. Date	AIL Vehicle	AIL / HB Utilisation	Result
STR_7608	Paston Subway	0	35	1992	16 Axle GF	50%	Adequate
STR_8273	Nab Lane Subway	0	45	1994 (D)	16 Axle GF	45%	Adequate
STR_7603	Fulbridge Subway	0	37	1992	16 Axle GF	48%	Adequate
STR_7601	Lincoln Road Subway	0	39	1992	16 Axle GF	54%	Adequate
STR_7602	Lincoln Road East	12	45	1992	16 Axle GF	76%	Adequate
STR_7600	Lincoln Road West	0	45	1992	16 Axle GF	76%	Adequate
STR_7599	Rhubarb Railway	7	45	1992	16 Axle GF	76%	Adequate
STR_16852***	Westwood I/C East	0	45	-	16 Axle GF	75%	Adequate
STR_16930***	Westwood I/C West	0	45	-	16 Axle GF	75%	Adequate
STR_7597	Westwood Subway	0	45	1992	16 Axle GF	48%	Adequate
STR_7596	Bretton Subway	0	45	1992	16 Axle GF	48%	Adequate
STR_16853	Longthorpe I/C East	0	45	1986 (D)	16 Axle GF	75%	Adequate
STR_16929	Longthorpe I/C West	0	45	1986 (D)	16 Axle GF	75%	Adequate
STR_15112	Longthorpe Subway	0	45	1992	16 Axle GF	47%	Adequate
STR_7591	Wansford Railway	28	45	1991	16 Axle GF	61%	Adequate
STR_5327	Nene Bridge Wansford	13	45	1996	16 Axle GF	85%	Adequate
STR_5325	Wansford Accomodation S	0	45	1996	16 Axle GF	74%	Adequate
STR_5324	Wansford Railway	30	45	1996	16 Axle GF	50%	Adequate
STR_5323	Water Newton S/B	25	30	1991	16 Axle GF	67%	Adequate
STR_5304	CU101 - Matchams Bridge	0	45	1995	16 Axle GF	36%	Adequate
STR_34602**	Culvert 101A	0	45	2019 (D)	16 Axle GF	39%	Adequate
STR_18872	Brampton River Relief Culv	0	45	1991 (D)	16 Axle GF	43%	Adequate
STR_18870	Brampton Hut North	24	45	1990 (D)	16 Axle GF	83%	Adequate
STR_18869	Brampton Hut South	25	45	1991 (D)	16 Axle GF	83%	Adequate
STR_34634*,**	Culvert 115c	25.4	45	2019 (D)	16 Axle GF	38%	Adequate
STR_18871	Brampton River	4.9	45	2017	16 Axle GF	43%	Adequate
STR_5295	Buckden Railway	0	32	1995	16 Axle GF	74%	Adequate
STR_5296	Buckden North Subway	0	45	1993	16 Axle GF	40%	Adequate
STR_5294	Buckden South Subway	0	45	1994	16 Axle GF	40%	Adequate
STR_5293	Diddington Brook	0	45	1992	16 Axle GF	53%	Adequate
STR_5292	Toll Bar Culvert	7.5	45	1995	16 Axle GF	39%	Adequate
STR_5289	Hail	0	45	2004 (D)	16 Axle GF	57%	Adequate
STR_5287	Duloe	0	45	1995	16 Axle GF	74%	Adequate
STR_5286	Duloe Culvert	28	45	1995	16 Axle GF	38%	Adequate
STR_5284	Colmworth Culvert	28	45	1995	16 Axle GF	41%	Adequate
STR_5283	Settlement Underpass	0	38	2007	16 Axle GF	50%	Adequate
STR_5280	Brookhouse Chawston	0/14	45	1996	16 Axle GF	38%	Adequate

Table 7. Quantitative Assessment Results

Note:

- (D) denotes design approval documents with no more recent assessment information.
- * This small span structure is included within the quantitative assessment due to limitations in its cover depth, however it does not hold a recorded HB rating and as such, 45 units of HB has been assumed
- ** The load management in IAMIS should be updated for the following structures:
    - STR_34602 Culvert 101A - SV08/100/196 designed loading assumed to meet requirements of 45 units of HB;
    - STR_34634 Culvert 115c – 45 units of HB.
- *** Neither original design nor previous assessment certificates are available for either STR_16852 Westwood I/C East or STR_16930 Westwood I/C West, however it is noted that the construction date for these structures is 1985 and therefore the original design would like have been subject to HB loading in accordance with the standards of that time. However, the level of HB loading is not clear, though it is noted that the current managed load rating for the structure is 45 units of HB, likely derived from the original design handover information. National Highways have confirmed on the 16th May 2025 that in lieu of formal certification, the Form 277 reports generated by IAMIS may be relied upon for confirmation of an assets load rating, which is understood to have informed their managed load rating also recorded in IAMIS. It is understood that the load ratings recorded within these forms have been adopted from design information supplied from the original design consultants. No recommendation for further action has therefore been made on the basis of this confirmation from National Highways and their acceptance of liability with respect to the Form 277 information.

The assessment programmes of the mid 1990s covered all of the structures scheduled in Table 6. Several structures have also received further refined assessments through the 2000s. The earliest governing standard for these previous assessments was BD 21/93, which is now superseded by CS 454 - Assessment of highway bridges and structures. Although the assessment standards have been changed, there are no major changes that would invalidate the previous assessment.

3.1.2 Small Span Structures

For culverts without a load rating, if they have a span that is less than 3m and fill cover above the culvert of greater than 1m, then a qualitative appraisal will be conducted. This will involve reviewing historic abnormal load movement on the culvert alongside inspection reports. These structures are specifically covered by this section of the report and include the following small span structures listed in Table 7, along with a scheduled outcome of their qualitative assessment:

Asset Key	Structure Name	Span	Proposed Vehicle	Check Type	Max. Historic AIL	Proposed AIL	Comment
STR_7590	Wansford Sluice	1.8m	16 Axle GF	Gross (kg)	148000	330880	Adequate
				Structure Gross (kg)	33000	30860	
				Axle (kg)	16500	15430	Adequate
				Min Spacing (m)	1.42	1.5	Adequate
STR_41952	Wansford Culvert	2.3m	16 Axle GF	Gross (kg)	182000	330880	Adequate
				Structure Gross (kg)	33000**	30860	
				Axle (kg)	16500	15430	Adequate
				Min Spacing (m)	1.37	1.5	Adequate
STR_34633	Culvert 115a	1.2m	16 Axle GF	Gross (kg)	150000	330880	Adequate
				Structure Gross (kg)	16000	15430	
				Axle (kg)	16500	15430	Adequate
				Min Spacing (m)	1.42	1.5	Adequate
STR_34634*	Culvert 115c	1.2m	16 Axle GF	Gross (kg)	150000	330880	Adequate
				Structure Gross (kg)	16500**	15430	
				Axle (kg)	16500	15430	Adequate
				Min Spacing (m)	1.37	1.5	Adequate
STR_34635	Culvert 116	1.2m	16 Axle GF	Gross (kg)	150000	330880	Adequate
				Structure Gross (kg)	16000	15430	
				Axle (kg)	16500	15430	Adequate

Asset Key	Structure Name	Span	Proposed Vehicle	Check Type	Max. Historic AIL	Proposed AIL	Comment
				Min Spacing (m)	1.42	1.5	Adequate
STR_34637	Culvert 117	1.5m	16 Axle GF	Gross (kg)	150000	330880	Adequate
				Structure Gross (kg)	32000	15430	
				Axle (kg)	16500	15430	Adequate
				Min Spacing (m)	1.32	1.5	Adequate
STR_34570	Culvert 126b	1.5m	16 Axle GF	Gross (kg)	150000	330880	Adequate
				Structure Gross (kg)	30000	15430	
				Axle (kg)	16500	15430	Adequate
				Min Spacing (m)	1.42	1.5	Adequate

Table 8. Qualitative Assessment Results

Note:

- *These small span structures are included in the qualitative assessments despite their limitations in their cover depth and are also assessed quantitatively in Section 3.1.1 because of this.
- Although the small span structures captured in Table 7 do not hold a load rating to use for comparative purposes, they do each have a history of Special-Order load movements. This qualitative review has considered the loads of the proposed Special-Order vehicle against the most onerous previous movements that the structure has experienced.
- Gross train weight has been used as a comparison as well as the maximum axle weight. Given the small span nature of these structures, an additional check for the maximum gross weight over the structure that could be accommodate by each span considering their span length is also reported to determine adequacy under gross vehicle weight.
- **Where successive axles from the heaviest gross train weight of the previous accepted movements is not adequate, successive axles from a previous vehicle filtered by heaviest axle weight has been considered.
- To check the effects of maximum axle weight against adjacent axles, the minimum spacing from the maximum axle weight has also been checked. The proposed vehicle comprises a minimum axle spacing of 1.5m, and in comparison, the maximum span of the scheduled small span structures is 2.3m. The combination of checks for gross train weight, maximum axle weight and the minimum spacing from the maximum axle weight is considered to be adequation for the configuration of these small span structures.

3.2 Geometry

In addition to load and structural condition checks, consideration has also been given to the plan geometry of each structure, and how the overall vehicle plan dimensions correlate to ensure safe passage of vehicles across the structures without obstruction. The plan dimensions of the proposed AIL vehicle is as follows:

Overall length - 56.926 m (including projections), 56.926 m (excluding projections)

Rigid length - 34.95 m

Overall width - 5.35 m

All the underbridges on the proposed load route within Area 6 & 8 and under National Highways ownership support either the A47 or A1 main westbound / southbound bound carriageways respectively, which are in general two-lane dual carriageways. Standard lanes widths are 3.65 m as published in CD 127, equating to an available running width of 7.3m for two-lane carriageways. The proposed vehicle width of 5.35m over a rigid length of 34.95m is just able to be accommodated by a 90m radius as shown in Figure 2 below. In comparison, CD 127 allows a radius of greater than 400 m for conventional road sections. Tightened radii of 90 – 400 metres is governed by CD 109, and radii less than 90 metres if governed by CD 123, both of which provide requirements for widening in accommodation of the tighter radii. For the majority of the route, it is considered suitable to accommodate the rigid dimensions of the proposed vehicle, on the understanding that the vehicle

will straddle both traffic lanes. The route comprises a number of roundabout crossings which could affect vehicle movement across underbridges, however no structures are identified within close proximity to the roundabout radii based on the vehicle dimensions above.

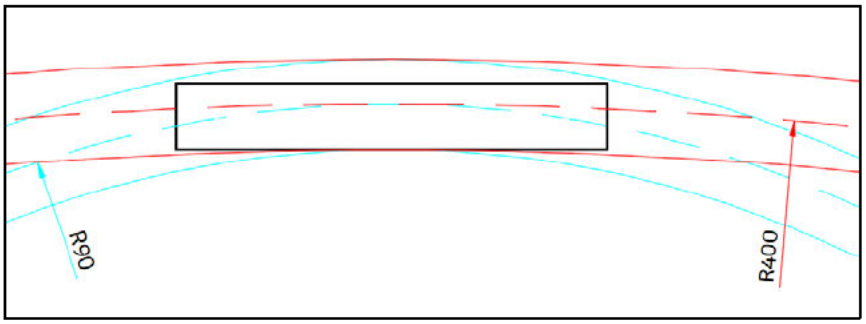


Figure 2. Horizontal Alignment Check

An exception to the above is a short section of the A47 between the junction with the A1 and its first roundabout, Sutton roundabout, which is a two-way single carriageway comprising one lane in each direction. The following underbridges and situated within this short section, where it is expected that oncoming traffic in the opposing lane will need to be halted to allow passage of the Special-Order movement:

STR_7591 Wansford Railway

STR_7590 Wansford Sluice

3.3 Condition

As part of the comprehensive appraisal for all underbridges, their reported condition has been reviewed and scheduled Table 8 below. Understanding their current condition is important to ensure the validity of the previous assessment results, against which the quantitative assessments for the proposed special loads are based.

Asset Key	Structure Name	Structure Type	Bridge Type	Cond.	Source	Affect
STR_7608	Paston Subway	Bridge & Large Culvert	Pedestrian Subway	Good	2021 PI	Adequate
STR_8273	Nab Lane Subway	Bridge & Large Culvert	Pedestrian Subway	Good	2021 PI	Adequate
STR_7603	Fulbridge Subway	Bridge & Large Culvert	Pedestrian Subway	Fair	2021 PI	Adequate
STR_7601	Lincoln Road Subway	Bridge & Large Culvert	Pedestrian Subway	Good	2021 PI	Adequate
STR_7602	Lincoln Road East	Bridge & Large Culvert	Highway Underbridge	Poor	2021 PI	Adequate
STR_7600	Lincoln Road West	Bridge & Large Culvert	Highway Underbridge	Fair	2021 PI	Adequate
STR_7599	Rhubarb Railway	Bridge & Large Culvert	Highway Underbridge	Fair	2022 PI	Adequate
STR_16852	Westwood I/C East	Bridge & Large Culvert	Highway Underbridge	Fair	2021 PI	Adequate
STR_16930	Westwood I/C West	Bridge & Large Culvert	Highway Underbridge	Good	2021 PI	Adequate
STR_7597	Westwood Subway	Bridge & Large Culvert	Pedestrian Subway	Good	2021 SI	Adequate
STR_7596	Bretton Subway	Bridge & Large Culvert	Pedestrian Subway	Fair	2021 PI	Adequate
STR_16853	Longthorpe I/C East	Bridge & Large Culvert	Highway Underbridge	Good	2021 PI	Adequate
STR_16929	Longthorpe I/C West	Bridge & Large Culvert	Highway Underbridge	Good	2021 PI	Adequate
STR_15112	Longthorpe Subway	Bridge & Large Culvert	Pedestrian Subway	Fair	2021PI	Adequate
STR_7591	Wansford Railway	Bridge & Large Culvert	Highway Underbridge	Fair	2022 PI	Adequate
STR_7590	Wansford Sluice	Small Span Structure	-	Good	2018 PI	Adequate
STR_41952	Wansford Culvert	Small Span Structure	-	Good	2021 PI	Adequate
STR_5327	Nene Bridge Wansford	Bridge & Large Culvert	Highway Underbridge	Fair	2023 SI	Adequate
STR_5325	Wansford Accom. S	Bridge & Large Culvert	Accom. Underbridge	Fair	2023 PI	Adequate

Asset Key	Structure Name	Structure Type	Bridge Type	Cond.	Source	Affect
STR_5324	Wansford Railway	Bridge & Large Culvert	Highway Underbridge	Good	2020 PI	Adequate
STR_5323	Water Newton S/B	Bridge & Large Culvert	Large Culvert	Fair	2022 PI	Adequate
STR_5304	CU101 - Matchams Bridge	Bridge & Large Culvert	Highway Underbridge	Fair	2019 PI	Adequate
STR_34602	Culvert 101A	Bridge & Large Culvert	Large Culvert	Good	2020 POI	Adequate
STR_18872	Brampton River Relief Culv	Bridge & Large Culvert	Large Culvert	Good	2019 PI	Adequate
STR_18870	Brampton Hut North	Bridge & Large Culvert	Highway Underbridge	Good	2020 PI	Adequate
STR_18869	Brampton Hut South	Bridge & Large Culvert	Highway Underbridge	Fair	2019 PI	Adequate
STR_34633	Culvert 115a	Small Span Structure	-	Good	2020 POI	Adequate
STR_34634	Culvert 115c	Small Span Structure	-	Good	2020 POI	Adequate
STR_18871	Brampton River	Bridge & Large Culvert	Highway Underbridge	Good	2019 PI	Adequate
STR_5295	Buckden Railway	Bridge & Large Culvert	Highway Underbridge	Fair	2021 PI	Adequate
STR_34635	Culvert 116	Small Span Structure	-	Good	2020 POI	Adequate
STR_34637	Culvert 117	Small Span Structure	-	Good	2019 POI	Adequate
STR_5296	Buckden North Subway	Bridge & Large Culvert	Pedestrian Subway	Fair	2021 PI	Adequate
STR_5294	Buckden South Subway	Bridge & Large Culvert	Pedestrian Subway	Good	2021 GI	Adequate
STR_34570	Culvert 126b	Small Span Structure	-	Good	2019 PI	Adequate
STR_5293	Diddington Brook	Bridge & Large Culvert	Highway Underbridge	Fair	2020 PI	Adequate
STR_5292	Toll Bar Culvert	Bridge & Large Culvert	Large Culvert	Fair	2023 PI	Adequate
STR_5289	Hail	Bridge & Large Culvert	Highway Underbridge	Fair	2023 SI	Adequate
STR_5287	Duloe	Bridge & Large Culvert	Highway Underbridge	Good	2019 PI	Adequate
STR_5286	Duloe Culvert	Bridge & Large Culvert	Large Culvert	Good	2019 PI	Adequate
STR_5284	Colmworth Culvert	Bridge & Large Culvert	Large Culvert	Good	2019 PI	Adequate
STR_5283	Settlement Underpass	Bridge & Large Culvert	Accom. Underbridge	Good	2021 PI	Adequate
STR_5280	Brookhouse Chawston	Bridge & Large Culvert	Large Culvert	Good	2019 PI	Adequate

Table 9. Condition of Underbridges

Of the 38 No. underbridges, the following reported condition categories apply to the stated number of structures:

Good - 25

Fair - 17

Poor - 1

Of those that are reported to either be in a poor condition, or similar relevant structures which area considered to require further action based on condition information and previous structural reviews, the following summaries are provided:

STR_7602 - Lincoln Road East

Defects to note include:

- *Ongoing deterioration to the abutment walls in the form of delamination and spalled concrete which has exposed the reinforcement. This defect has been raised from 'Medium' to 'High' priority.*
- *Previous defects were also identified and confirmed during the inspection with the only new defect found being, a hairline and leached filled crack to the Southeast wingwall.*
- *It is advised that concrete repairs are carried out to the abutment walls to prevent any further deterioration.*

The critical defects raised with the structure are noted to be mainly associated with concrete deterioration of the abutment walls and particularly at the bearing shelves; the deck itself is not reported to be in a poor condition. The concrete deterioration is longstanding and present in also identified in the earlier 2015 PI; though the 2021 PI has increase priority for repair from medium to high, and it is evident that deterioration has occurred since 2015.

An RSRF for the structure was prepared in 2024 by Costain, doc. ref. 4005-0260-075-7602-001 Rev C2. The review concluded that an assessment is recommended with very high priority, but that this was driven by the need to assess for SO/STGO vehicles and, based on the previous assessment information, the priority could be reduced to low. Further recommendations are repair and monitoring to the spalled and delaminated concrete and of the cracking in the abutments.

It is noted that this structure has not been subject to any previous abnormal indivisible loads greater than 140,000 kg gross weight, which is not immediately apparent in the evidencing of precedence for the movement of heavy loads. However, the comparison of loading to 45 units of HB in Section 3.1 indicates at 76% AIL utilisation of 45-unit HB loading. Simplistically if a 45 units vehicle were equated to 180,000 kg gross weight, the equivalent utilised weight for this AIL would be 136,800 kg (76% of 180,000) and on this basis, would be similar to the heaviest previous movements (maximum was 139,000 kg).

It is therefore considered that STR_7602 Lincoln Road East may be adequate for the proposed load movement given the history of the reported defects and the recent movement of general-order loads, but its final suitability should be considered by National Highways as a further action. National Highways have confirmed on the 16th May 2025 acceptance under their liability for the proposed movement over this structure based on the information provided in this report and the fact that a similar movements has occurred on the same route.

4. Overbridges

4.1 Headroom

Overbridges crossing the designated special load route have been assessed for the headroom allowance. The reported minimum available headroom, as scheduled in Table 10 below, has been compared with the published heights of the vehicle. The h eights of the relevant vehicles proposed under this movement are as follows:

16 Axle Girder Frame Trailer:

Overall height - 4.8 m (5.3 m with 500mm margin)

Reducible height 4.7 m (5.2 m with 500mm margin)

If the headroom clearance was found to be inadequate or potentially inadequate by a small margin of clearance, typically 500mm over the reducible height as a reasonable value, the minimum headroom clearance is re-reviewed against the reducible height. If it still found to be inadequate/potentially inadequate, it is recommended that a headroom survey is undertaken at these structures before the passage of the proposed vehicles are allowed. The categories of results are as follows:

Pass – Greater than vehicle height plus 500mm margin

Marginal - Less than vehicle height plus 500mm margin but greater than vehicle height

Not adequate - Less than vehicle height

The scheduled minimum structure headroom in the table below is the minimum value recorded for the carriageway relevant to the direction of travel for the proposed load, indicated by (N) Northbound, (S) Southbound, (W) Westbound or (E) Eastbound. The headrooms are obtained from measures taken by National Highways' Principal Inspection regime, where physical measurements were obtained and recorded in the most recent PI generally, or in some cases an accompanying sketch.

Asset Key	Structure Name	Bridge Type	Min Headrm	AIL Height Type	AIL Height	Pass / Fail
STR_7606	Fulbridge I/C East	Highway Overbridge	5.47m (W)	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_7605	Fulbridge West	Highway Overbridge	5.48m (W)	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_7604	Fulbridge Footbridge	Footbridge	5.44m (W)	Overall Reducible	4.8 m 4.7 m	Pass Pass
*STR_7594	Bretton I/C North	Highway Overbridge	Not Provided	Overall Reducible	4.8 m 4.7 m	Unable to check Unable to check
STR_7595	Bretton I/C South	Highway Overbridge	5.14 (W)	Overall Reducible	4.8 m 4.7 m	Marginal Marginal
STR_28318	Bretton Footbridge (2010)	Footbridge	5.87 (W)	Overall Reducible	4.8 m 4.7 m	Pass Pass
*STR_41196	Longthorpe Footbridge Replacement	Footbridge	Not Provided	Overall Reducible	4.8 m 4.7 m	Unable to check Unable to check
STR_18435	Milton Park	Highway Overbridge	5.41m (W)	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_18436	Helpston Road	Highway Overbridge	5.75m (W)	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_7588	Wansford Flyover	Highway Underbridge	5.67m (S)	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_23273	Stibbington Overbridge	Highway Overbridge	6.54m (S)	Overall	4.8 m	Pass

Asset Key	Structure Name	Bridge Type	Min Headrm	AIL Height Type	AIL Height	Pass / Fail
				Reducible	4.7 m	Pass
STR_5320	Kates Cabin Flyover	Highway Overbridge	6.31m (S)	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_27688	A1 Brampton Interchange Bri	Highway Underbridge	7.08m	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_27680	Grafham Road Bridge (BN02)	Highway Overbridge	6.78m	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_33638	A14/A1 Link Underbri(BN26)	Highway Overbridge	6.77m	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_5291	Little Paxton Flyover	Highway Overbridge	5.22m (S)	Overall Reducible	4.8 m 4.7 m	Marginal Pass
STR_5288	Crosshall Bridge	Highway Overbridge	5.29m (S)	Overall Reducible	4.8 m 4.7 m	Marginal Pass
STR_5285	Bushmead	Highway Overbridge	5.36m	Overall Reducible	4.8 m 4.7 m	Pass Pass
STR_5282	Southern Junction Flyover	Highway Overbridge	5.11m	Overall Reducible	4.8 m 4.7 m	Marginal Marginal
STR_5281	Wyboston Footbridge	Footbridge	6.25m	Overall Reducible	4.8 m 4.7 m	Pass Pass

Table 10. Structure Headroom List

Note:

- National Highways Abnormal Load Constraints drawing for Area 6 & 8, drawing reference ASC6&7/DR/0100/01 is understood to be an accepted limit as part of National Highways' load management strategy. The published maximum vehicle heights are 4.98 m along the A47 route and 5.27 m along the A1 route. It is noted that the overall height of the vehicle is below both of these limitations, and therefore the route is in general considered acceptable for the proposed vehicle.

* Whilst all structures have enough headroom to allow passage of the proposed Special-Order movement, the following 2 No. structures do not have recorded headrooms. However, National Highways have confirmed on 16th May 2025 that, further to the note above, the proposed movement will be adequate to pass beneath these structures without further headroom survey due to the regulated headrooms of these routes maintained by National Highways and as such, no further action is required.

- *STR_7594 Bretton I/C North
- STR_41196 Longthorpe Footbridge Replacement

4.2 Geometry

In addition to headroom checks, consideration has also been given to the plan geometry of each structure, and how the overall vehicle plan dimensions correlate to ensure safe passage of vehicles beneath without obstruction. The plan dimensions of the proposed AIL vehicle is as follows:

Overall length - 56.926 m (including projections), 56.926 m (excluding projections)

Rigid length - 34.95 m

Overall width - 5.35 m

All the overbridges on the proposed load route within Area 6 & 8 and under National Highways ownership span across either the A47 or A1 main westbound / southbound bound carriageways respectively, which are in general two-lane dual carriageways. Standard lanes widths are 3.65 m as published in CD 127, equating to an

available running width of 7.3m for two-lane carriageways. The proposed vehicle width of 5.35m over a rigid length of 34.95m is just able to be accommodated by a 90m radius as shown in Figure 2 below. In comparison, CD 127 allows a radius of greater than 400 m for conventional road sections. Tightened radii of 90 – 400 metres is governed by CD 109, and radii less than 90 metres if governed by CD 123, both of which provide requirements for widening in accommodation of the tighter radii. For the majority of the route, it is considered suitable to accommodate the rigid dimensions of the proposed vehicle, on the understanding that the vehicle will straddle both traffic lanes. The route comprises a number of roundabout crossings which could affect vehicle movement beneath overbridges, however no structures are identified within close proximity to the roundabout radii based on the vehicle dimensions above.

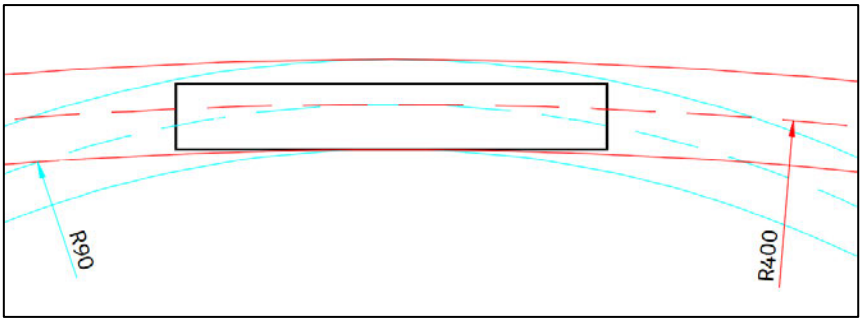


Figure 3. Horizontal Alignment Check

An exception to the above is a short section of the A47 between the junction with the A1 and its first roundabout, Sutton roundabout, which is a two-way single carriageway comprising one lane in each direction. There are however no overbridges situated within this short section, where it is expected that oncoming traffic in the opposing lane will need to be halted to allow passage of the Special-Order movement.

5. Conclusion and Recommendations

5.1 Summary of Results

The results of this appraisal for the proposed Special Order load route WYNL/192/S1 are summarised separately for underbridges and overbridges in the tables below:

Asset Key	Structure Name	Loading	Geometry	Condition	Conclusion
STR_7608	Paston Subway	Adequate	Adequate	Adequate	Adequate
STR_8273	Nab Lane Subway	Adequate	Adequate	Adequate	Adequate
STR_7603	Fulbridge Subway	Adequate	Adequate	Adequate	Adequate
STR_7601	Lincoln Road Subway	Adequate	Adequate	Adequate	Adequate
STR_7602	Lincoln Road East	Adequate	Adequate	Adequate	Adequate
STR_7600	Lincoln Road West	Adequate	Adequate	Adequate	Adequate
STR_7599	Rhubarb Railway	Adequate	Adequate	Adequate	Adequate
STR_16852	Westwood I/C East	Adequate	Adequate	Adequate	Adequate
STR_16930	Westwood I/C West	Adequate	Adequate	Adequate	Adequate
STR_7597	Westwood Subway	Adequate	Adequate	Adequate	Adequate
STR_7596	Bretton Subway	Adequate	Adequate	Adequate	Adequate
STR_16853	Longthorpe I/C East	Adequate	Adequate	Adequate	Adequate
STR_16929	Longthorpe I/C West	Adequate	Adequate	Adequate	Adequate
STR_15112	Longthorpe Subway	Adequate	Adequate	Adequate	Adequate
STR_7591	Wansford Railway	Adequate	Adequate	Adequate	Adequate
STR_7590	Wansford Sluice	Adequate	Further Action	Adequate	Further Action
STR_41952	Wansford Culvert	Adequate	Adequate	Adequate	Adequate
STR_5327	Nene Bridge Wansford	Adequate	Adequate	Adequate	Adequate
STR_5325	Wansford Accom. S	Adequate	Adequate	Adequate	Adequate
STR_5324	Wansford Railway	Adequate	Further Action	Adequate	Further Action
STR_5323	Water Newton S/B	Adequate	Adequate	Adequate	Adequate
STR_5304	CU101 - Matchams Bridge	Adequate	Adequate	Adequate	Adequate
STR_34602	Culvert 101A	Adequate	Adequate	Adequate	Adequate
STR_18872	Brampton River Relief Culv	Adequate	Adequate	Adequate	Adequate
STR_18870	Brampton Hut North	Adequate	Adequate	Adequate	Adequate
STR_18869	Brampton Hut South	Adequate	Adequate	Adequate	Adequate
STR_34633	Culvert 115a	Adequate	Adequate	Adequate	Adequate
STR_34634	Culvert 115c	Adequate	Adequate	Adequate	Adequate
STR_18871	Brampton River	Adequate	Adequate	Adequate	Adequate
STR_5295	Buckden Railway	Adequate	Adequate	Adequate	Adequate
STR_34635	Culvert 116	Adequate	Adequate	Adequate	Adequate
STR_34637	Culvert 117	Adequate	Adequate	Adequate	Adequate
STR_5296	Buckden North Subway	Adequate	Adequate	Adequate	Adequate
STR_5294	Buckden South Subway	Adequate	Adequate	Adequate	Adequate
STR_34570	Culvert 126b	Adequate	Adequate	Adequate	Adequate
STR_5293	Diddington Brook	Adequate	Adequate	Adequate	Adequate
STR_5292	Toll Bar Culvert	Adequate	Adequate	Adequate	Adequate
STR_5289	Hail	Adequate	Adequate	Adequate	Adequate
STR_5287	Duloe	Adequate	Adequate	Adequate	Adequate

Asset Key	Structure Name	Loading	Geometry	Condition	Conclusion
STR_5286	Duloe Culvert	Adequate	Adequate	Adequate	Adequate
STR_5284	Colmworth Culvert	Adequate	Adequate	Adequate	Adequate
STR_5283	Settlement Underpass	Adequate	Adequate	Adequate	Adequate
STR_5280	Brookhouse Chawston	Adequate	Adequate	Adequate	Adequate

Table 11. Summary of Underbridge Results

Asset Key	Structure Name	Headroom	Geometry	Conclusion
STR_7606	Fulbridge I/C East	Adequate	Adequate	Adequate
STR_7605	Fulbridge West	Adequate	Adequate	Adequate
STR_7604	Fulbridge Footbridge	Adequate	Adequate	Adequate
STR_7594	Bretton I/C North	**Unable to check**	Adequate	Adequate
STR_7595	Bretton I/C South	**Marginal**	Adequate	Adequate
STR_28318	Bretton Footbridge (2010)	Adequate	Adequate	Adequate
STR_41196	Longthorpe Footbridge Replacement	**Unable to check**	Adequate	Adequate
STR_18435	Milton Park	Adequate	Adequate	Adequate
STR_18436	Helpston Road	Adequate	Adequate	Adequate
STR_7588	Wansford Flyover	Adequate	Adequate	Adequate
STR_23273	Stibbington Overbridge	Adequate	Adequate	Adequate
STR_5320	Kates Cabin Flyover	Adequate	Adequate	Adequate
STR_27688	A1 Brampton Interchange Bri	Adequate	Adequate	Adequate
STR_27680	Grafham Road Bridge (BN02)	Adequate	Adequate	Adequate
STR_33638	A14/A1 Link Underbri(BN26)	Adequate	Adequate	Adequate
STR_5291	Little Paxton Flyover	**Marginal**	Adequate	Adequate
STR_5288	Crosshall Bridge	**Marginal**	Adequate	Adequate
STR_5285	Bushmead	Adequate	Adequate	Adequate
STR_5282	Southern Junction Flyover	**Marginal**	Adequate	Adequate
STR_5281	Wyboston Footbridge	Adequate	Adequate	Adequate

Table 12. Summary of Overbridge Results

Overall, it is concluded that the proposed Special Order load movement WYNL/192/S1 may only use this route if the conditions set out in Section 5.2 are satisfied.

5.2 Recommendations

5.2.1 Underbridges

- General

  The appraisal assumes controlled movement of the Special-Order loads, whereby overload and dynamic factors are discounted for the appraisal of underbridges, therefore the standard cautions of no gear changing, no stopping and travelling at crawl speed should apply across all underbridges.

- General

  A short section of the A47 between the junction with the A1 and its first roundabout, Sutton roundabout, which is a two-way single carriageway comprising one lane in each direction, will require oncoming traffic in the opposing lane will need to be halted to allow passage of the Special-Order movement across the following structures:

  - STR_7591 Wansford Railway
  - STR_7590 Wansford Sluice

- The load management in IAMIS should be reviewed and updated for the following structures as appropriate:

  - STR_34602 Culvert 101A - SV08/100/196 designed loading assumed to meet requirements of 45 units of HB;
  - STR_34634 Culvert 115c – 45 units of HB.

5.2.2 Overbridges

- None.

5.2.3 Outstanding Structures (Undetermined Appraisals)

In order to validate this proposal, the following conditions shall be actioned for the below structures which have not been conclusively appraised within this report:

- This report has assumed that construction has not yet started for the following structures, therefore the current construction states and planned construction date shall be confirmed and considered with respect to the proposed movement date. NH have confirmed on 16th May 2025 that these structures have not yet been constructed in the time period up to this date.

  STR_40348 Wansford NMU Underpass (Under)

  STR_40347 Sacrewell Farm Underbridge (Under)

  STR_40272 South Brook Roxton Road Link Culvert (Under)

  STR_42359 Brookhouse Chawston Culvert Replacement (Under)

  STR_43118 A1 / A47 Jct Approach Culvert KM 138/00 (Under)

  STR_37190 Wansford Sluice Extension (Under)

  STR_40295 Begwary Brook Roxton Link Culvert (Under)

- STR_7607 Nab Lane Subway is understood to have been replaced in the 1990s by STR_8273 Nab Lane Subway, though the status is recorded as being 'constructed' on IAMIS. It is therefore recommended that National Highways review and update the structure status as appropriate.

Appendix A. Special Order Vehicle Configuration

Vehicle: 16 Axle Girder Frame - 160Te Transformer

Summary	**16 Axle Girder Frame - 160Te Transformer**
Overall length	56.926 m (including projections), 56.926 m (excluding projections),
Rigid length	34.95 m
Front overhang	0 m
Overall width	5.35 m
Overall height	4.8 m
Gross weight	246880 kg (Trailer) 330880 kg (Train)
Max axle weight	15430 kg
Tractor	**Allelys 42te tractor**
Gross weight	42000 kg
Axle weight	8000 kg x 1 , 10000 kg x 1 , 12000 kg x 2
Wheel per axle	2 x 2 , 4 x 2
Axle spacing	2.6 m x 1 , 1.44 m x 1 , 1.42 m x 1 , 5.25 m x 1
Tyre size	385/80 22.5 x 4
Tyre centres	1.98 x 2 , 0.35,1.45,0.35 x 2
Length	8.04 m
Trailer	**Allelys 16 Axle Girder Frame Trailer**
Gross weight	246880 kg
Axle weight	15430 kg x 16
Wheel per axle	8 x 16
Axle spacing	1.5 m x 7 , 12.45 m x 1 , 1.5 m x 7 , 5.82 m x 1
Tyre size	215/75 17.5 x 16
Tyre centres	0.244,0.506,0.244,0.806,0.244,0.506,0.244 x 16
Length	34.95 m
Width	5.35 m
Max. height	4.8 m
Reducible height	4.7 m
Wheelbase	33.45 m
Left overhang	1.167 m
Right overhang	1.167 m
Front overhang	0 m
Rear overhang	0 m
Ground clearance	0.3 m
Reduced ground clearance	0.07 m
Outside track	3 m

Tractor	**Allelys 42te tractor**
Gross weight	42000 kg
Axle weight	8000 kg x 1 , 10000 kg x 1 , 12000 kg x 2
Wheel per axle	2 x 2 , 4 x 2
Axle spacing	2.6 m x 1 , 1.44 m x 1 , 1.42 m x 1
Tyre size	385/80 22.5 x 4
Tyre centres	1.98 x 2 , 0.35,1.45,0.35 x 2
Length	8.04 m

Appendix B. Structures Schedule

Scheme Name: Area 6 and 8 -Special Order AIL Movements 2024 to 2025 - Stage 3
Sheet Title: Schedule of structures load comparison results
Revision P02
AIL Movement Ref WYNL/192/S1
AIL Vehicle Type 16 Axle Girder Frame - 160Te Transformer

Number	Structure Name	Structure Key	Year of Construction	Structure Type	Bridge Type and Foundation	No. Spans	Clear Span Length (m)	Skew (°)	Road Carried	Latest PI / POI	Next Planned PI	Overall Condition rating from Latest PI/POI	Defects summary	AIP	Assessment Report	Previous method of assessment	Record Drawing Available	Current HB Load Rating (Units)	Method of Load Comaprison	Load Effects									Pass/ Fail	Overall Result
																					HB Loading			AIL Loading			Utilisation				
																				Model Parameters	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)		
1	Brookhouse Chawston	STR_5280	1938 Extended in 1960	Underbridge	Solid Slab Simply Supported	1	3.05	0 The extended part of the structre is at a 14 degree skew to the original	A1	2019	2025	Good	No new defects were observed and existing defects were found to have not significantly deteriorated. The coping stones to the top of both parapets have had longstanding defects and should be replaced.	AIP for assessment dated May 1989 Addendum to AIP dated December 1992 Another addendum to AIP dated May 1996	-	-	Drawing No 536/8/4E Drawing No 536/8/3E	45	Line Beam	N/A	-	343.1	634.1	-	131.3	230.6	-	38%	36%	Pass	Adequate
2	Wyboston Footbridge	STR_5281	1973	Overbridge	Solid slab constrcution Continuous	1	25.5	0	A1	2019		Poor	The structures overall condition would appear to be poor due to the amount of corrosion throughout the majority of steel elements, and its apparent deterioration since the last inspection. Where corrosion has continued to deteriorate there are large areas of pitting, along with numerous locations where lamination and loss of section have occurred. This is largely due to a breakdown in the protective coating which may have exceeded its life expectancy, although it should be noted that the structure has been repainted since construction. Consideration should therefor be given for all corrosion to be removed, a suitable inhibitor applied, and the structure repainted. It was previously noted that a number of fixings were missing from the rib connection directly over the central reserve and these were still noted to be missing. Whilst it is unclear as to the significance of this consideration should be given for their reinstatement. A number of previously recorded defects were also confirmed and included; minor degradation of the surfacing anti slip material; shrinkage cracking to the concrete protection surrounding the support columns; corrosion to the inner sections of the OBB safety fences adjacent to the northbound and southbound carriageways, all of which show little sign of deterioration.	-	-	-	Elevation drawing only	-	Not Applicable											Adequate
3	Southern Junction Flyover	STR_5282	1970	Overbridge	Slab construction Simply supported	4	2 no. @ 21.35m (Centre spans) 2 no. @ 15.25m (End spans)	32	A1	2019		Fair	These defects included; 2No areas of impact damage over the A1 southbound carriageway; hollow sounding concrete over each of the north and southbound carriageways; 2No. areas of unfilled testing over lanes 1 and 2 southbound; debonded polysulphide sealant at support locations; loss of grouting at shutter plug locations throughout; and minor spalling to intermediate supports. All other defects to be monitored include; numerous areas of corroded tie wires to deck soffits; exposed reinforcement to deck soffits over A1 carriageways; numerous longstanding cracks to supports, deck soffits, fascia and cantilevers; areas of water staining throughout; degraded surfacing verges; corroded north parapet anchor fixings; and areas of leaching to piers and fascias.	-	-	-	Elevation drawing only	45	Not Applicable											Adequate
4	Settlement Underpass	STR_5283	1970	Underbridge	Portal Continuous	1	4.876	0	A1	2021		Good	No defect giving any cause for concern with regards to the integrity or functionality of the structure. All defects identified have not deteriorated since the last inspection. Some defects maybe hidden with the amount of graffiti covering the substructure, however, there is no indication of any serious defects. The only new defect identified is a minor spall to the north abutment wall at the east portal.	AIP for assessment dated October 1995	-	-	Drg No. 536/8/8E Drg No. 536/8/2E	38	Line Beam	N/A	430.712	248.764	639.386	210.7	119.6	321	49%	48%	50%	Pass	Adequate
5	Colmworth Culvert	STR_5284	1970	Small Span Structures	Reinforced Concrete Box	1	4.572	30Â° 00'	A1	2019		Good	Silt banks over the culvert invert, dense vegetation growth around the culvertand a missing section of guardrail at the end of the guardrail.	AIP for assessment dated November 1994	Assessment Report dated January 1995	Analysis of box using CADS ANALYSE Computer program Structural element stiffness to be based on the entire cross-section ignoring the presence of reinforcement and taking into account corner fillets. E values taken from BD44/90, Clause 4.3.2.1 k min = 0.2 k max = 0.6 as per BD 31/87 and the guidelines in BA 55/94 Clause 3.3.	Drg No.BSZ 2502/CC/1	45	Line Beam	N/A	-	272	746	-	107.3	306.3	-	39%	41%	Pass	Adequate
6	Bushmead	STR_5285	1970	Overbridge	Sab construction Continous	3	1 by 13.106m (West end span) 1 by 27.432m 1 by 13.411m (East end span)	0	A1	2020		Fair	Defects include areas of cracked, as well as spalled and/or hollow sounding concrete in the piers, bankseat and deck elements. Corroded tie wires were present within the deck soffit, as well as areas of calcite leached deposits. An area of fire damage was noted on the surface of the west pier (west face), resulting in an area of spalled concrete measuring, 180x160x25mm.	-	-	-	Elevation drawing only	42.3	Not Applicable											Adequate
7	Duloe Culvert	STR_5286	1970	Underbridge	Solid Slab Uniform Box or Tubular Culvert	1	3.658	28Â° 00'	A1	do the rest	2025	Good	Existing defects to polysulphide joints had deteriorated slightly and should be repaired. Graffiti to the structure is offensive in locations and should be removed. An appropriate parapet should be installed on the West headwall as it presents a significant fall risk at present. Areas of spall with exposed reinforcement to the North abutment should be repaired to prevent future defects to the reinforcement and concrete. Vegetation growth to the West end of the structure should be cleared as it is obscuring a large amount of the wingwalls, copings, and training walls. A large item of debris is present to the centre of the culvert which is enabling silt accumulation and should be removed.	AIP for assessment dated November 1994	Assessment Report dated January 1995	Analysis of box using CADS ANALYSE Computer program Structural element stiffness to be based on the entire Cross-section ignoring the presence of reinforcement and taking into account corner fillets. E values taken from BD44/90, Clause 4.3.2.1 k min = 0.2 k max = 0.6 as per BD 31/87 and the guidelines in BA55/94 Clause 3.3	Elevation drawing only	45	Line Beam	N/A	-	405.2	658.7	-	154.4	251.2	-	38%	38%	Pass	Adequate
8	Duloe	STR_5287	1970	Underbridge	Beam And Slab Simply Supported	1	10.972	0	A1	2019	2025	Good	The concrete of the structure was in good condition and largely free of defects. Cracking was present to the wingwalls and the parapet edge beams, whilst this is unlikely to be damaging the structure at present, they should be monitored. Leachate staining was present in localised areas to the end beams and the deck soffit. Staining was minor and is unlikely to be affecting the structure but should be monitored in future inspections. The crack inducers in lane 2 of the Southbound carriageway had not been adequately sealed, these should be sealed with bitumen to prevent water ingress/future defects. Graffiti is widespread to the abutments and wingwalls and is non-offensive in nature. The graffiti to the abutments is believed to be part of a legal project, however the graffiti to the wingwalls is not. Graffiti to the wingwalls should be removed and a protective coating system applied to areas of coating loss.	AIP for assessment dated November 1994	Assessment Report dated October 1995	Deck by grillage analysis using LEAP 5 computer program. Abutments and wing walls as cantilevers from the base Structural element stiffness to be based on the entire cross-section ignoring the presence of reinforcement. E values taken from BD44/90, Clause 4.3.2.1 At rest $k_0 = 0.4$ Active $k_a = 0.6$ Passive k_p reciprocal of k_0 or k_a as appropriate	Elevation drawing only	45	Line Beam	N/A	-	2086.6	1014.4	-	1551.5	632.9	-	74%	62%	Pass	Adequate
9	Crosshall Bridge	STR_5288	1970	Overbridge	Voided Slab Continuous Spread Footings	2	2	0	A1	2020 (Special Inspection)	2026	Fair	The structure appeared to be in overall fair condition although no significant defects were observed during the inspection. However, there were new defects identified which included; splitting to the majority of the east abutment laminated bearings and this may be due to the continued water seepage through the cracked and debonded plug joint above; water ponding to the base of the west abutment wall; and an area of impact damage to the south fascia over Lane 1 northbound. There was also some deterioration to several previously recorded defects including; continued corrosion to parapet mesh panels and anchor fixings; potholes to the surfacing at the west end; and wheel tracking to the deck surfacing. Other defects confirmed included longstanding cracking to the west abutment and concrete decks; areas of water staining; small areas of impact damage; debonded polysulphide sealant to stringcourse and cantilevers; an area of spalling to the base of the centre support; and corroded tie wire to the deck soffit.	-	-	-	Elevation drawing only	45	Not Applicable											Adequate

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Sheet Title: Schedule of structures load comparison results
Revision P02
AIL Movement Ref WYNL/192/S1
AIL Vehicle Type 16 Axle Girder Frame - 160Te Transformer

Number	Structure Name	Structure Key	Year of Construction	Structure Type	Bridge Type and Foundation	No. Spans	Clear Span Length (m)	Skew (°)	Road Carried	Latest PI / POI	Next Planned PI	Overall Condition rating from Latest PI/POI	Defects summary	AIP	Assessment Report	Previous method of assessment	Record Drawing Available	Current HB Load Rating (Units)	Method of Load Comaprison	Load Effects									Overall Result
																					HB Loading			AIL Loading			Utilisation				
																				Model Parameters	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)	Pass/ Fail	
10	Hail	STR_5289	1958	Underbridge	Beam And Slab Simply Supported	3	19.6	0	A1	2023 (Special Inspection)	2029	Fair	Previous defects were confirmed with no significant deterioration noted since the last inspection. Water seepage most prominently through the central deck joint appears to be the contributing factor to majority of the defects to the abutments and piers including the steel columns. These defects include, delaminated and spalled concrete, corrosion staining and a breakdown of the protective paint system to surface corrosion. New defects identifie dduring this inspection include spalled concrete to the river span deck at the central joint location measuring 500x150x30mm. The over skim is also flaking off at the East end up to 2500x1200x10mm. An area of exposed reinforcement adjacent to column No. 6 measuring 300x50mm. The service cover to the West face of the deck slab is also missing. The damaged East parapet is still present with no signs of repairs being undertaken, although there is a varioguard now in place for public safety. It is advised that an investigation into the central reserve is undertaken to determine the cause of the water seepage.	AIP for assessment dated October 1991 Addendum to AIP dated 5th October 2001	Assessment Report dated January 2003	Superstructure Loads will be distributed using the programme LUSAS MOT/EBP/243c Substructure Abutments will be analysed using strip method. Values of ka and k₀ will be used in the assessment of the structure and the stability of the structure based on the recommendations for buried concrete box type structures in BD 31/87 and the method of redistribution given in C1 1.4343 of CP2 for propped structures. Famed piers will be assessed using a plane frame analysis Stiffness of members nased on C4 CA/CIRIA recommendations. Uncracked section properties will be used throughout, with due allowance made for the different strengths of precase and insitu concrete. k₀ = 0.27 ko = 0.4 Trial holes indicate granular back-fill.	Drg. No. 93260/745/9/002 Drg. No. CPL/16/002 rev 01 Drg. No. TR/H/3371 Drg. No. TR/H/3426 Drg. No. TR/H/3374 Drg. No. 93260/745/9/001 Drg. No. J3508/A1 Drg. No. J3508/A1/1	45	Line Beam	N/A	-	1271.3	789.5	-	707.6	447.4	-	56%	57%	Pass	Adequate
11	Little Paxton Flyover	STR_5291	1969	Overbridge	Beam and Slab Simply Supported	4	81.8	50	A1	2020	2026	Fair	The structure appeared to be in overall fair condition due to deterioration of previously reported areas of cracked, spalled and delaminated concrete to the encasement surrounding the longitudinal beams, with the most significant areas located over, and adjacent to, the three intermediate supports. Due to the location of the delamination above live carriageways it is recommended that repairs/removal of concrete be undertaken at the earliest convenience, whilst previously loose parapet copings should also be repaired during the planned works. Previously reported water seepage and staining over the intermediate supports was still present and may be the primary cause of the delamination to the beam encasements, whilst additional spalling and delamination was noted to the supports themselves, all of which is probably due to cracking along the edge of the surfacing joints. An increase in previously reported areas of exposed reinforcement to the concrete deck soffits has also increased, along with continued deterioration of the protective coating to the steel longitudinal beams. Other defects confirmed during the inspection included corrosion to the north and south parapets, silt deposits to joint runners, debonded polysulphide sealant throughout the structure, cracking and vegetation growth to surfacing verges, cracking to intermediate supports, and mortar loss below a number of parapet copings.	-	-	-	Elevation drawing and Headroom measurement	30	Not Applicable										Adequate
12	Toll Bar Culvert	STR_5292	1968	Underbridge	Slab - Solid Spread Footings	1	3.35	7.5	A1	2023	2029	Fair	The overall condition of the structure appears to be fair and this is primarily due to the corrosion and section loss to the east and west parapets, coupled with the lack of suitable vehicle safety fence protection to either verge, and the lack of adequate fall protection to the four corners of the structure. It is recommended that all of these defects be addressed at the earliest opportunity. If both parapets are to be upgraded then it would also be beneficial to replace the copings. The structure would also benefit from silt removal within the structure as it is now hampering internal inspections and any increase may make them unsafe. The remaining defects did not give an immediate cause for concern at this time.	AIP for assessment dated November 1994	Assessment Report dated January 1995	Analysis of box using CADS ANALYSE Computer program Structural element stiffness to be based on the entire Cross-section ignoring the presence of reinforcement and taking into account corner fillets. E values taken from BD44/90, Clause 4.3.2.1 k min = 0.2 k max = 0.6 as per BD 31/87 and the guidelines in BA55/94 Clause 3.3	Drg. No. TR:H:5227:2	45	Line Beam	N/A	269.7	188.4	649.7	105.7	64.8	243.4	39%	34%	37%	Pass	Adequate
13	Diddington Brook	STR_5293	1959	Underbridge	Beam and Slab Simply Supported	1	6.11	0	A1	2020	2026	Fair	There was no significant deterioration in the existing defects, however new areas of hollow sounding concrete were noted in the abutments and wingwall, as well as two areas of spalled concrete in the pre-cast beams.	AIP for assessment dated October 1991 Addendum to AIP dated August 1998 Another addendum to AIP dated September 1998	Assessment Report dated 10th March 1992	AIP 1: Superstructure - loads will be distributed using the program LUSAS MOT/EBP/243c. Substructure - abutments will be analysed using strip method. Values of ka and ko will be used in the assessment of the structure and the stability of the structure based on the recommendations for buried concrete box type structures in BD 37/88 and the method of redistribution given in C1 1.4343 of CP2 for propped structures. Stiffness of members base on C and CA/CIRIA recommendations. Uncracked section properties will be used ka = 0.27 ko = 0.4. Trial holes indicate granular back-fill. AIP 2: Analysis will be carried out by elastic hand calculated methods on a single beam width of slab. The structure will be analysed as a simply supported beam. The strutted abutments have been analysed in an earlier assessment and found to be adequate for 40 tonnes Assessment Live Loading and will not be reassessed. Uncracked concrete section properties will be used. AIP 3: That part of the deck beneath and to either side of a carriageway will be analysed using a finite element model to determine load effects in slab and loading distributed onto existing reinforced concrete beams. Section capacity will be based on composite beam/slab section. No analysis proposed for substructure and foundations. Gross uncracked cocrete section properties will be assumed throughout.	Elevation drawing only	45	Line Beam	N/A	-	1097.2	776.3	-	558.7	410.2	-	51%	53%	Pass	Adequate
14	Buckden South Subway	STR_5294	1962	Underbridge	Solid Slab Flat Spread Footings	1	3	0	A1	2021 (General Inspection)	2027	Good	Historic cracking in the wingwalls, copings and abutments, spalling and weathering to paintwork and underlying render material to the wingwalls and localised rust stains to the abutment were identified with no significant deterioration since the last inspection. The parapet and brick walls at the top of wingwalls were found to have signs of historic movement with missing coping at the SE and a joint crack up to 20mm wide with 5mm southward displacement at the NE wingwall. Minor impact damage was confirmed to the SW guardrail at 2No. locations and all guardrails and cycle barriers exhibit paint loss with some areas of localised surface corrosion. Minor areas of surface corrosion were also noted to the edges of some deck plates and to the pump room door with no deterioration visible since the last inspection. All defects should be reviewed at the next inspection.	AIP for assessment dated February 1993	Assessment Report dated April 1993 Addendum to assessment Report dated March 1994	The box structure will be analysed over a 1m strip using elastic analysis Uncracked concrete sections Poissons Ratio = 0.2 Youngs Modulus appropriate to steel and concrete grades γ = 18kN/m³ ϕ = 30 kₐ = 0.33 kₚ = 3.0 k₀ = 0.5	Drg. No. TR:L:S400:2 Drg. No. TR:H:S471	45	Line Beam	N/A	216.6	168.8	608.2	86.7	56.8	227	40%	34%	37%	Pass	Adequate
15	Buckden Railway	STR_5295	1957	Underbridge	Beam And Slab Simply Supported	1	Varies between 8.10m (East side) and 9.50m (West side) 6.55m between props	0	A1	2021	-	Fair	Water ingress between the deck beams and at the top of abutments is causing surface corrosion to the west deck bearings and steel H support beams. Cracking and leachate deposits are prevalent throughout the masonry elements, particularly at the top corner of wing walls, and in parapets (caused by freeze-thaw). Defects pertaining to public safety include: concrete fender reflective paint faded and a NE service manhole was found to be open (behind the fender). The tree growing at the SW wingwall does not appear to be a cause for immediate concern with regards to the stability, integrity or durability of the structure. However, it is growing in very close proximity to the wing wall and it may be contributing to the minor joint cracking noted. The water ingress may be due to failure of waterproofing, or lack of a waterproofing system. At present the concrete elements do not appear to have been significantly affected. But this should be monitored and confirmed at the next inspection.	-	Assessment Report dated 18th August 1995	-	Drg. No. K1161/01	32	Line Beam	N/A	-	779.8	552.0	-	558.2	410.1	-	72%	74%	Pass	Adequate
16	Buckden North Subway	STR_5296	1962	Underbridge	Slab Flat Spread Footings	1	3	0	A1	2021	-	Fair	High priority defects include: section loss noted to parapet posts. Medium priority defects which require monitoring / action include: Areas of missing surfacing material on approach ramps. Low priority defects which should be reviewed at the next inspection include: Vertical cracking and diagonal cracking to retaining walls and abutments, map cracking and missing copings to ramp retaining walls. Routine maintenance should cover the removal of graffiti, provision of a new mirror at the east ramp and clearance of vegetation to east ramp drainage channels.	AIP for assessment dated February 1993	Assessment Report dated April 1993	The box structure will be analysed over a 1m strip using elastic analysis Uncracked concrete sections Poissons Ratio = 0.2 Youngs Modulus appropriate to steel and concrete grades γ = 18kN/m³ ϕ = 30 ka = 0.33 kp = 3.0 ko = 0.5	Drg. No. 193682 Drg. No. 190674	45	Line Beam	N/A	216.6	168.8	608.2	86.7	56.8	86.7	40%	34%	14%	Pass	Adequate

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																				Model Parameters	HB Loading				AIL Loading			Utilisation			Pass/ Fail	
																					Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)		
17	Matchams Bridge Culvert	STR_5304	1961 (Extended in 2018 to the East)	Underbridge	Solid Slab Simply Supported Spread Footings	1	2.75 (Square)	60	A1	2019	2026	Fair	The structure is in Good condition overall although some deterioration does appear to have occurred since the last inspection.High priority defects which require monitoring / action include: Replace west parapet and timber fence over south west wing wall. Medium priority defects which require monitoring / action include: None Low priority defects which require monitoring / action include: Cracking in deck soffit, abutments and wing walls. Vegetation growth on western wing walls. Leachate staining on abutments. Minor leakage through construction joint. Failed polysulphide joint sealant.	AIP for assessment dated November 1994 Addendum to AIP dated December 1995	Assessment Report dated March 1995	Deck by grillage analysis using LEAP 5 computer program. Structural element stiffness to be based on the entire cross-section ignoring the presence of reinforcement. E values taken from BD44/90, Clause 4.3.2.1 At rest k0 = 0.4 Active ka = 0.27 Passive kp reciprocal of k0 or ka as appropriate.	Elevation drawing only	45	Line Beam	N/A	-	309.4	605.1	-	110.1	220.1	-	36%	36%	Pass	Adequate
18	Kates Cabin Flyover	STR_5320	1976	Overbridge	Deck 1 west: Voided Slab Deck 2: Box Beam And Cantilever Wings Deck 3: Box Beam And Cantilever Wings Deck 4 East: Voided Slab Simply Supported	4	79.2	0	A1	2023	2029	Good	During the inspection, bearings were numbered from North to South starting with 1. The structure was noted to have been resurfaced with parapets also being replaced. The concrete suffers from low cover and a number of areas of exposed reinforcement were discovered during the inspection. In particular the centre pier is spalled in a number of areas due to water seepage from the centre joint. Furthermore numerous leachate filled cracks were noted with leach stains also found to both edge beams. See defect list for further defects and full details.	-	-	-	Elevation drawing only	45	Not Applicable															Adequate
19	Water Newton S	STR_5323	1925	Underbridge	Brick Arch: Arch - Solid Spandrel Concrete Pipe: Uniform Box or Tubular Culvert	1	4.2	25	A1	2022	2029	Fair	The structure was found to be in overall fair condition, and this is primarily due to the longstanding movement and displacement to the spandrel wall which is also the likely cause for the movement located to the embankment above. It is unclear if the movement is historic or still ongoing, possible consideration to be given for the installation of monitoring equipment to be installed. Longstanding mortar loss, cracking and spalling were all confirmed to the internal elements and to the external spandrel wall, with the structure likely to benefit from localised repairs to the most significant areas. Areas of water seepage and algae staining were also confirmed internally and may be contributing to the spalling and mortar loss. New defects identified included damage to the west timber fencing, and consideration should be given for it to be repaired at the earliest opportunity.	AIP for assessment dated 22nd September 1992	Assessment Report dated January 1991 Addendum to assessment Report dated April 1993	Initial assessment by MEXE method as detailed in BD16/84 followed, if required by analysis using mechanism method Both analyses to be undertaken by proprietary arch assessment program ASSARC. Substructure is subject to a visual inspection in accordance with BD21/84. Preliminary figures k_a = 0.333 k_p = 3.0 k_h = 0.5	Elevation drawing only	30	Arch Frame	Arch	My	88.9	My	108.2	Fx Fz	477.6 300	My	50.8	My	55.9	Fx Fz	322 156	57%	52%	67% 52%	Pass	Adequate
20	Wansford Railway	STR_5324	1959	Underbridge	Beam and Slab Simply Supported	2	Main span - 12.2 Side span - 4.3	30	A1	2020	2026	Good	The structure was noted to be in good condition at the time of inspection and previous defects do not appear to have deteriorated significantly. There were no defects noted that would cause concern with regard to the stability and integrity of the structure in the immediate term. The south deck span appeared to be in good condition, however, the black staining may hide some smaller defects. The areas of delamination to the north deck slab should be repaired, however, it would be beneficial to prevent the further water ingress prior to carrying concrete repairs. Loose masonry was removed from coping stones, wingwalls, centre pier and abutments during the inspection as to make safe, however, larger areas of displaced masonry including the area to the north west return wall and centre pier elevations should be removed and replaced to prevent further displacement and possibility of falling on to the access path below.	AIP for assessment dated January 1996	Assessment Report dated April 1996	Grillage analysis using SUPERSTRESS computer modelling of the deck slab will be undertaken tpo determine design moments and shear forces. Analysis will be in accordance with BD 21/93 If the analysis indicates that the deck is inadequate for the 40t assessment live loading the deck will be reanalysed under two single lane loadings to BD 21/93. The deck will be assessed for HB capacity to BD 37/88 using the SUPERSTRESS computer model. The substructure has been analysed using hand methods. The abutments and central pier are founded on spread footings. The structure to be analysed will be based on the assumptions stated in 5.1 and the geometry determined from the record drawings. An idealisation diagram is included. Element of stiffness will be based on the entire member cross section, ignoring the presence of reinforcement. k_a = 0.27 k_o = 0.426 Φ=35° These are all assumed values.	Elevation drawing only	45	Grillage	Longitudinal	Mx My	34.1 25.7	Mx My	28.1 103.9	Fz	125.2	Mx My	14 8.5	Mx My	13 48.7	Fz	57	41% 33%	46% 47%	46%	Pass	Further Action
																				Transverse	Mx My	29.3 81.7	Mx My	30 37.7	Fz	178.9	Mx My	11.7 26	Mx My	14 19	Fz	62.4	40% 32%	47% 50%	35%		
21	Wansford Accomodation S	STR_5325	1974	Underbridge	Arch - Solid Spandrel Spread Footings	1	11.2	0	A1	2022	2028	Fair	This overall condition score is based on the water seepage and calcite leaching found through the construction joints and transverse cracks. The previous noted spall to the Northeast end of the structure is actually a poor joint detail, as there is no spalled concrete present. Previous defects were confirmed and did not appear to have significantly deteriorated since the last inspection. No new defects were identified.	AIP for assessment dated April 1996	-	-	Elevation drawing only	45	Line Beam	N/A	1443.6	923.6	992.9	1064.4	546.8	640.7	74%	59%	65%	Pass	Adequate
22	Nene Bridge Wansford	STR_5327	1973	Underbridge	Cantilever and Suspended Span	3	Main span - approx. 38 Side spans - both approx. 22 AIP values: Main span - 27 Side spans - both 17.2	15	A1	2023 (Special Inspection)	2028	Fair	No defects were observed to post tensioned elements of the deck that would indicate a loss of prestress during this inspection. However, extensive water ingress was leading to formation of leachate deposits and reinforcement corrosion / spalling primarily adjacent to the suspended span north half joint; but also prevalent in isolated areas throughout the structure. There was one spalled area at the North end of beam 9 inthe Centre span where prestressing tendons were exposed and corroded. Prestressing is likely to be affected at more locations, but the majority of beam ends were not visible due to clearance between joints and bearing shelves. Various beams were subject to cracking, up to 4mm wide which appears to be in line with reinforcement / prestressing strands. However, the width of cracks has not changed since the last inspection and the majority of cracks are hairline in width. The carriageway appears to have been resurfaced recently which has removed some of the defects previously noted. However, displaced EMR joint seals andcorrosion to rails was still evident, which will be contributing to the ongoing water ingress affecting the deck soffit below. There were some minor new areas of spalling to the elevations and East face of the North pier where cracking was noted at previous inspections, but these areas are small and appear to be due to low cover with no apparent effect on prestressing elements.	AIP for assessment dated January 1996 Addendum to AIP dated December 1998	Assessment Report dated October 1995 Addendum to assessment Report dated June 1996	The assessment will be in accordance with Advice Note BA 55/95 'The Assessment of Bridge Substructures and Foundations, Retaining Walls and Buried Structures' and will be based on a combined qualitative and quantitative assessment. The qualitative assessment will be based on observed condition of the substructure including trial holes where necessary to expose hidden elements of the substructure. The following models will be used for the quantitative assessment. Abutment - The wall between counterforts will be modelled as a finite element slabs with fix supports along three sides. Counterforts will be modelled as a T-beam cantilever. Abutment is backfilled with Pulverised Fuel Ash (PFA). Pier - A single 'A' frame of the Intermediate Pier will be modelled as a plane frame. This structure has piled foundations which will be considered as fixed supports. To consider induced moments and shears in the pile cap tie beam, a 10mm differential settlement a on support will be applied. Element stiffness will be calculated on the uncracked concrete sections. For the calculation of horizontal loads on the abutment an active earth pressure coefficient of 0.31 will be applied in accordance with BA 55/94.	Drawing Number: E026326/BD/04A/Z	45	Line Beam	N/A	11943.6	8640	1774.5	9565.75	6781.76	1500.15	80%	78%	85%	Pass	Adequate
23	Wansford Flyover	STR_7588	1963	Overbridge	Deck West: Framed Span - Bridges Beam And Slab Deck Central: Simply Supported Beam And Slab Deck East Framed Span - Bridges Beam And Slab Spread Footings	3	56.4	19	A1	2021	2028	Good	The structure appeared to be in overall good condition with no significant defects evident, although previously reported issues surrounding the drainage system over both intermediate supports will still need investigating as the seepage is still ongoing. The seepage may also be linked to the blocked kerb drainage system, and the visible leaching and staining to the deck soffit suggest that the current drainage system is not functioning as intended. There were also isolated areas of delaminated and spalled concrete to the concrete decks and to the stone block abutment walls, whilst longstanding cracking to several elements was also confirmed. Continued corrosion was recorded to the north and south parapets and to the adjacent OBB safety fencing, and longstanding settlement to revetments and embankments was also confirmed, with no change evident. Other defects confirmed included; degraded mortar over wing walls and land spans; debonded sealant throughout the north and south stringcourse; cracking to surfacing verges; and minor impact damage to northbound deck beams.	-	-	-	Elevation drawing only	45	Not Applicable															Adequate
24	Wansford Sluice	STR_7590	1900	Small Span Structures	Arched - Solid	1	1.8	0	A47	2018	2025	Good	The structure would appear to be in good condition, although a number of previous defects have yet to be repaired/actioned and these included; the installation of a suitable safety fence to the north verge and pedestrian restraint systems to both headwalls; and the repairing of a 6mm wide crack across the north end of the arch. A number of new defects were also highlighted during the inspection including; areas of minor displacement to both headwalls/spandrels; small areas of scouring and undermining to both ends of the structure; vegetation growth and debris to the downstream end of the watercourse; and impact damage to the south verge TCB. Several previously noted defects were also confirmed including; minor spalling and mortar loss to the south headwall; rocks to the invert; and areas of shallow spalling to the arch barrel typical at water level, all of which should be monitored during future inspections.	-	-	-	Elevation drawing only	-	Qualitative Assessment															Pass	Further Action

Scheme Name: Area 6 and 8 -Special Order AIL Movements 2024 to 2025 - Stage 3
Sheet Title: Schedule of structures load comparison results
Revision P02
AIL Movement Ref WYNL/192/S1
AIL Vehicle Type 16 Axle Girder Frame - 160Te Transformer

Number	Structure Name	Structure Key	Year of Construction	Structure Type	Bridge Type and Foundation	No. Spans	Clear Span Length (m)	Skew (°)	Road Carried	Latest PI / POI	Next Planned PI	Overall Condition rating from Latest PI/POI	Defects summary	AIP	Assessment Report	Previous method of assessment	Record Drawing Available	Current HB Load Rating (Units)	Method of Load Comaprison	Load Effects										Pass/ Fail	Overall Result
																				Model Parameters	HB Loading				AIL Loading				Utilisation				
																					Envelope Moments (Hog) (kNm/m)		Envelope Moments (Sag) (kNm/m)		Envelope Shear (kN/m)		Envelope Moments (Hog) (kNm/m)		Envelope Moments (Sag) (kNm/m)		Envelope Shear (kN/m)		Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)		
25	Wansford Railway	STR_7591	1880	Underbridge	Arch - Solid Spandrel Spread Footings	1	7.65 (SQUARE)	28	A47	2022	-	Fair	Confirmed defects: Efflorescence is present to the east and west abutment. There are occasional spalled bricks recorded to the arch barrel. There is minor rabbit activity to the southeast embankment. Access/egress to/from structure potentially dangerous for inspectors. Few missing & displaced masonry units in the south face of the south parapet. Several bricks on the road face of the south parapet, near the bottom were found that moved under light pressure. There are a number of diagonal cracks and mortar loss to the south parapet. There are a number of isolated spalled bricks to the North and South parapet. Vegetation growth obscuring the edges of the north parapet & shoots from the copings. Both parapets are too low. There are 3 missing half bricks at the corner of the north east retaining wall. There is minor rutting and loss of wear course present to the carriageway. Localised areas of minor mortar loss to the ashlar stone throughout the structure. There are various cracks throughout the structure. Some appear to have been caused by structural movement. There are areas of minor spalling to the ashlar stone courses of each wingwall. All the pedestrian guardrail adjacent to the four wingwalls have deteriorated significantly. Removed defects: Lack of fill around the concrete anchorage of the TCB, at the west end of the south parapet. A board is covering another void within the south verge. There are occasional isolated cracks to individual ashlar blocks to the abutments. West Abutment - There is 1No. replaced masonry block noted approximately 5m from the South end of the West abutment.	AIP for assessment dated November 2001	Assessment Report dated October 1991	Underpass:- Computer analysis for hoop forces. All structural design will be in accordnce with BD12/95. The design ignores any contribution to the strength of the existing structure. The design takes into account the properties of the proposed backfill material, and consuders any future distortion of the existing structure. Constrained soil modulus of fill assumed as 15N/mm² based on 90% compaction.	Elevation drawing only	45	Arch Frame	Arch	My	279.1	My	290.7	Fx Fz	801.7 458.9	My	121.6	My	107.8	Fx Fz	488 157.2	44%	37%	61% 34%	Pass	Adequate
26	Bretton I/C North	STR_7594	1971	Overbridge	Beam and Slab Simply Supported	4	43.2	0	A47	2021 (Special Inspection)	2027	Fair	Safety critical defects include the damage to the north and south parapets. Only limited access was available to the bankseats and wingwalls, due to dense overgrowth of vegetation.	-	-	-	Elevation drawing only	34	Not Applicable														Adequate
27	Bretton I/C South	STR_7595	1971	Overbridge	Beam and Slab Simply Supported	4	43.2	0	A47	2021 (Special Inspection)	2027	Fair	Existing: • Cracks in the abutments, wing walls and parapet beam. • Impact damaged areas of spalled concrete above lane 1 westbound and scratches to the soffit above the eastbound lanes.• Minor areas of spalled concrete in the beam soffits and cantilever parapet beam.• Vegetation growth around the structure, specifically in the embankments adjacent to the revetment and the carriageway verges.• Water seepage staining was noted on the external faces of the abutments.• Paint loss from the parapets.• Impact damage to a section of the south parapet and areas of missing infill mesh. New Defects:• Areas of hollow sounding concrete in the west pier. • Impact damage in the north parapet. The minimum recorded headroom taken was recorded at the north west corner of the structure, measuring 5.148m.	-	-	-	Elevation drawing only	33	Not Applicable														Adequate
28	Bretton Subway	STR_7596	1971	Underbridge	Portal Frame Precast Concrete Portal Spread Footings	1	6.1	0	A47	2021	-	Fair	Some defects have deteriorated since inspection. Defects noted include: Existing: Graffiti on the east and west abutment, headwalls and wingwall. The anti-graffiti paint is peeling off the edge beam and wingwalls. Crack at the edge of the soffit to precast box 1, through which there are signs of corrosion staining, leaching and moisture egress. Corrosion to the north parapet posts. One parapet mesh infill panel detached from the West end of the South parapet and the west end of the north parapet. Minor spall on the edge of the feature on the south east cantilever wingwall. The short end wingwalls and the concrete (used as shutter during construction) under the cantilever wingwalls (cast integral with the subway) have settled leading to a step between the cantilever section and the short walls. New Defects: Paint flaking on 5-20% of the parapets. Spalled concrete (300x150x30mm) in a footway kerbstone, which is displaced 13mm and gap has a 30mm gap to the adjacent maintenance cover. Offensive graffiti on the abutments. One side of the approach barrier is loose. Removed Defects: 2 No lighting units are not working on the west abutment. All working at GI 2019. Transverse cracking westbound carriageway above the east abutment. Leaching/dampness in soffit between precast sections 5/6, 4/5 and 1/2. Leaching deposits most severe between sections 1/2 and have led to a build up on the footway below. The drainage channel grating is deformed and corroding. Parts of Structure Not Inspected: Foundations, Buried & Concealed Elements	AIP for assessment dated February 1992	Assessment Report dated October 1992	The culvert will be analysed initially by statical methods on the basis of a one metre strip. If appropriate further analysis will be undertaken. Uncracked sections will be used for stiffness analysis. Ka = 0.33 kp = 3.0 Subject to verification of backfill and overlay material.	Elevation drawing only	45	Line Beam	N/A	699.9	404.9	805.5	323	175.1	383.1	46%	43%	48%	Pass	Adequate
29	Westwood Subway	STR_7597	1971	Underbridge	Solid Slab Uniform Box or Tubular Culvert Spread Footings	1	6.1	0	A47	2021 (Special Inspection)	2027	Good	Existing: Graffiti is present throughout the structure. Occasional areas of corrosion staining due to tie-wire cut-offs. Corrosion is present to the welds of the south west safety fence connection. Breakdown of the parapet protective coating. Small blowholes in wingwall surfaces. Settlement of the 'short wall ends' of the wingwalls. Concrete vertical feature at entrance to subway at north east corner has broken off. The northwest wingwall end wall has a diagonal crack at the bottom and a large but shallow spall. Parapet mesh infill missing from the north parapet at the east end. Removed Defects: All lighting units throughout structure are not working. Structure was inspected during daylight hours. Potholes forming in the eastbound carriageway, lane 1. REPAIRED The safety fencing and parapet at the north west corner of the bridge have been severely damaged by vehicular collision. The end parapet post has been pulled upwards, fixings broken and the parapet end wall spalled. the fixings to the2nd post are also damaged. Defect repaired prior to the 05/2013 GI. Lichen growth on parapet rails, extensive on north parapet, and to a lesser extent on south parapet. The trees around the structure have recently been cut back and this has reduced the level of algal growth. Water staining to soffit towards south end of structure.	AIP for assessment dated February 1992	Assessment Report dated March 1992	The culvert will be analysed initially by statical methods on the basis of a one metre strip. If appropriate further analysis will be undertaken. Uncracked sections will be used for stiffness analysis. Ka = 0.33 kp = 3.0 Subject to verification of backfill and overlay material.	Elevation drawing only	45	Line Beam	N/A	697.5	403.4	805	321.4	174.3	382.4	46%	43%	48%	Pass	Adequate
30	Rhubarb Railway	STR_7599	1971	Underbridge	Beam and Slab Simply Supported	2	East span - 17.7 West Span - 18.7	7	A47	2022	-	Fair	Previous defects were confirmed during the inspection with signs of deterioration apparent. Delaminated and spalled areas of concrete were found to the East and West faces of the central pier, these areas are exposing the cathodic protection wires and require remedial works to repair. Water seepage and leaching wasfound throughout the lengths of the supports and deck slabs. Vertical cracks up to 0.9mm in width were found to the central pier, some with associated leached deposits. Settlement was found at the Northwest and Southwest ends of the bridge, this is evidenced by the difference between the parapet beams. impact damage has left the South parapet damaged, although traffic cones have been placed adjacent to it, this area requires repairs as it may have been structurally weakened. Graffiti and vegetation were located throughout the structure and require removal as the areas are unsightly, the vegetation is obscuring the inspection of the Northeast and Southwest wingwalls. The only new defect found this inspection was two areas of spalled masonry located to the West abutment wall at the North end measuring 410x70x15mm and 50x50x10mm respectively.	AIP for assessment dated February 1992 Addendum to AIP dated February 2009	Assessment Report dated June 1992 Addendum to assessment Report dated October 1992	The decks will be idealised as a grillage for analysis using computer programme superstress. The piers and abutments will be analysed using elastic analysis by statical methods. Piled foundations will not be analysed. Poissons Ratio 0.2 Young's Modulus appropriate to steel and concrete grades. ka = 0.33 kp = 3.0 Subject to verification of backfill material	Drawing Number F34/RoS/M624299/BR/GA/2001	45	Line Beam	N/A	-	4712.6	1313.6	-	3572.8	870.4	-	76%	66%	Pass	Adequate
31	Lincoln Road West	STR_7600	1974	Underbridge	Beam and Slab Simply Supported	1	18	0	A47	2021	-	Fair	This is mainly due to the numerous areas of delaminated and spalled concrete with exposed reinforcement to the East and West abutments. There is also a large failed repair to the West abutment which has now become delaminated and spalled. Water was found to be leaking through the East abutment joint onto the abutment below, this may be contributing to the poor concrete. The only new defect identified during this inspection was cracking to the Eastbound carriageway adjacent to the East and West joints and cracking to the Westbound carriageway adjacent to the West joint.	AIP for assessment dated February 1992	Assessment Report dated June 1992 Addendum to assessment Report dated October 1992	The decks will be idealised as a grillage for analysis using computer programme superstress. The piers and abutments will be analysed using elastic analysis by statical methods. Poissons Ratio 0.2 Young's Modulus appropriate to steel and concrete grades. γ = 13kN/m³ Φ = 30 ka = 0.33 kp = 3.0 Subject to verification of backfill and overlay material	Drawing number 210 E / 202 A Drawing number 210 E /204	45	Line Beam	N/A	-	4815	1319.9	-	3642.3	862.8	-	76%	65%	Pass	Adequate

Scheme Name: Area 6 and 8 -Special Order AIL Movements 2024 to 2025 - Stage 3
Sheet Title: Schedule of structures load comparison results
Revision P02
AIL Movement Ref WYNL/192/S1
AIL Vehicle Type 16 Axle Girder Frame - 160Te Transformer

Number	Structure Name	Structure Key	Year of Construction	Structure Type	Bridge Type and Foundation	No. Spans	Clear Span Length (m)	Skew (°)	Road Carried	Latest PI / POI	Next Planned PI	Overall Condition rating from Latest PI/POI	Defects summary	AIP	Assessment Report	Previous method of assessment	Record Drawing Available	Current HB Load Rating (Units)	Method of Load Comaprison	Load Effects									Pass/ Fail	Overall Result
																				Model Parameters	HB Loading			AIL Loading			Utilisation				
																					Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)		
32	Lincoln Road Subway	STR_7601	1974	Underbridge	Framed Span - Bridges Box or Tube Granular Fill	1	6	0	A47	2021	-	Good	The structure was noted to be in overall good condition with no significant defects evident, and no notable deterioration appears to have occurred during the interim period between inspections, and no new defects were observed. Previously reported graffiti to the internal elements was confirmed with several areas of new offensive graffiti present, and consideration should be given for its removal/covering, and this may also alleviate the issue with paint loss if a full overall of the paint system was undertaken. A small area of delamination was confirmed to the lower section of an abutment wall, and the polysulphide sealant at the internal mid point was still present with no deterioration. Other defects confirmed included vegetation growth encroaching both parapets; blowholes and lichen to the wing walls; and exposed cabling to 2No. wing walls. Non functioning lighting has been repaired, and the A47 appears to have been resurfaced.	AIP for assessment dated February 1992	Assessment Report dated June 1992 Addendum to assessment Report dated October 1992	The box section will be analysed using elastic analysis by statical methods on the basis of a one metre strip. Uncracked sections will be used for stiffness analysis. Ka = 0.33 kp = 3.0 Subject to verification of backfill and overlay material.	Elevation drawing only	39	Line Beam	N/A	595.8	344.2	698.4	312.6	170.3	378.3	52%	49%	54%	Pass	Adequate
33	Lincoln Road East	STR_7602	1974	Underbridge	Beam and Slab Simply Supported	1	15.1	12	A47	2021	-	Poor	This is due to the ongoing deterioration to the abutment walls in the form of delamination and spalled concrete which has exposed the reinforcement. This defect has been raised from 'Medium' to 'High' priority. Previous defects were also identified and confirmed during the inspection with the only new defect found being, a hairline and leached filled crack to the Southeast wingwall. It is advised that concrete repairs are carried out to the abutment walls to prevent any further deterioration.	AIP for assessment dated February 1992	Assessment Report dated June 1992 Addendum to assessment Report dated October 1992	The decks will be idealised as a grillage for analysis using computer programme superstress. The piers and abutments will be analysed using elastic analysis by statical methods. Poissons Ratio 0.2 Young's Modulus appropriate to steel and concrete grades. γ = 13KN/m² Φ = 30 ka = 0.33 kp = 3.0 Subject to verification of backfill and overlay material.	Elevation drawing only	45	Line Beam	N/A	-	4815	1319.9	-	3642.3	877.8	-	76%	67%	Pass	Adequate
34	Fulbridge Subway	STR_7603	1972	Underbridge	Walls/Invert/Roof Structurally Cont. Box or Tube Spread footings (wing walls)	1	4	0	A47	2021	-	Fair	Existing: Cracks in the wing walls (concrete), parapet post (aluminium), footway approach ramps (asphalt) and the carriageway surfacing (asphalt).Paint flaking from the soffit, isolated to the south end. Deteriorating and de-bonding sealant in the centre joint and south east wingwall. Damaged lighting units along the approach ramp wingwalls. Missing parapet rail caps.Corroded drainage channel in the invert (north end) and water ponding. Algae growth along the bottom section of the approach ramp wingwalls. Missing and sheared bolts in the baseplate of an isolated parapet post, as well as a spalled plinth. New Defects: Four lighting units are not working in the east and west abutments, two in each abutment. Parts of Structure Not Inspected: Foundations, Buried & Concealed Elements	AIP for assessment dated February 1992 Addendum to AIP dated June 1998	Assessment Report dated June 1992 Assessment Report (Reassessment) dated October 1998	The box section will be analysed using elastic analysis by statical methods on the basis of a one metre strip. Uncracked sections will be used for stiffness analysis. Ka = 0.33 kp = 3.0 Subject to verification of backfill and overlay material.	Elevation drawing only	37	Line Beam	N/A	306.5	187.1	580.9	142.9	85.1	278.4	47%	45%	48%	Pass	Adequate
35	Fulbridge Footbridge	STR_7604	1974	Overbridge	Solid Slab Continuous With the exception of Deck 5 which is: Cantilever And Suspended Span Beam And Slab Spread Footings	9	Multi span	7	A47	2021 (Special Inspection)	2027	Fair	The structure appeared to be in overall fair condition due to the cracking and corrosion surrounding the north and south half joints, and the spalling to the adjacent cantilever solid slabs located to the north and south ends of the carriageway span. Additional cracking and corrosion was also noted to a number of deck edges, typically at pier locations, and this may be linked to a lack of suitable sealant at joint locations which may be allowing excessive seepage on the structure below. Previously reported drainage pipes that were defective have been repaired and appear to be functioning as intended. The footbridge surfacing also appears to have been updated as previously reported degradation and potholes were no longer visible, although other defects to the surfacing remain, which included, corrosion to drainage ends, isolated vegetation growth, and deformation to a number of vertical infill bars to the parapet. Other defects identified include; vegetation to supports and the adjacent land, cracking to the deck outer faces; isolated areas of spalling and delamination; areas of longstanding leaching; and graffiti to a number of supports.	-	-	-	Elevation drawing only	0	Not Applicable											Adequate
36	Fulbridge West	STR_7605	1974	Overbridge	South and North Decks: Solid Slab South Central and North Central Decks: Beam and Slab Simply Supported	4	41.2	0	A47	2022	-	Fair	The Principal Inspection carried out on Fulbridge West found the structure to remain in a fair condition at the time of the inspection. Previous defects were confirmed during the inspection, though, further deterioration was apparent. Most notably, there are numerous areas of delaminated, spalled and exposed reinforcement to the piers. 7No. areas of impact damage to the Eastbound span soffit, with a minor area to the Westbound soffit. Water seepage and calcite staining is present to the North and South pier faces, which appears to be the result of the failed sealant to the deck joints, and the parapet post welds have also corroded and require remedial works. New defects to note include, an area of spalled concrete with exposed reinforcement to the west fascia above lane 1 Eastbound and to beam No. 8. A further area was found to the East cantilevered edge beam over Lane 1 Westbound. An area of delamination was found to the North abutment and an unfilled test hole to the North face of the centre pier. It is apparent that remedial works are required before the next inspection to prevent further deterioration.	-	-	-	Elevation drawing and Headroom measurement	33	Not Applicable											Adequate
37	Fulbridge I/C East	STR_7606	1974	Overbridge	South and North Decks: Solid Slab South Central and North Central Decks: Beam and Slab Simply Supported	4	41.2	0	A47	2022	-	Fair	The Principal Inspection carried out on Fulbridge I/C East found the structure to appear in an overall 'Fair' condition at the time of the inspection. Although, some deterioration does appear to have occurred since the last inspection, most notably to the piers in the form of spalling, delamination and water staining. Previous defects were confirmed during the inspection with new defects to note which include, 4No. areas of spalled concrete with exposed reinforcement to the East cantilevered edge beam adjacent to the South pier with a further 2No. areas noted to the West cantilevered edge beam. A repair which has become delaminated was found to the West face of beam No. 28 adjacent to the North pier measuring 700x600mm. The central pier joint was found to be debonding along its nosing, as well as the sealant between the North and South central span decks. It is advised that remedial works are carried out to improve the overall condition rating for the structure.	-	-	-	Elevation drawing and Headroom measurement	33	Not Applicable											Adequate
38	Paston Subway	STR_7608	1974	Underbridge	Uniform Box or Tubular Culvert Box or Tube Spread Footings	1	4	0	A47	2021	-	Good	The subway appeared to be in overall good condition with no significant defects evident and no new defects were observed, although a number of longstanding defects were confirmed during the inspection, none of which showed any significant deterioration. However, there have likely been some continued deterioration of the protective coating to the internal elements and to the north and south parapets, whilst additional cracking was also recorded to the A47 carriageway. Longstanding settlement to the wingwalls appears to have stopped due to no increase in measurements, and the previously reported spalling to the deck soffit is probably due to fire damage caused by vandal action, with no change visible. Other defects confirmed included degradation to the brick north east training wall; graffiti to abutments; degraded polysulphide sealant to the abutments with associated water ingress; and minor crazing/cracking to the deck soffit.	AIP for assessment dated February 1992	Assessment Report dated June 1992	The box section will be analysed using elastic analysis by statical methods on the basis of a one metre strip. Uncracked sections will be used for stiffness analysis. γ = 13KN/m² Φ = 30 Ka = 0.33 kp = 3.0 Subject to verification of the backfill and overlay material.	Elevation drawing only	35	Line Beam	N/A	291.5	178	552.6	142.9	85.1	278.4	49%	48%	50%	Pass	Adequate
39	Nab Lane Subway	STR_8273	1995	Underbridge	Walls/Invert/Roof Structurally Cont. Solid Slab Spread Footings	1	5.5	0	A47	2021	-	Good	The subway was noted to be in overall good condition with no significant defects present, and no notable deterioration appears to have occurred during the interim period between inspections. There was however new defects observed which included an area of smoke staining and fire damage to the north end of the soffit and invert respectively, and previously reported non functioning light units to both abutment walls have yet to be repaired. A single area of offensive graffiti to a wing wall has also yet to be removed/covered. Other defects confirmed included cracked paving to the south surfacing verge, crazing and staining to the deck soffit, and a small area of mesh loss to a parapet.	-	-	-	Drawing number C-3519-GA01 A	45	Line Beam	N/A	609.1	350.1	786.8	262.9	147.1	353.6	43%	42%	45%	Pass	Adequate

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Sheet Title: Schedule of structures load comparison results
Revision P02
AIL Movement Ref WYNL/192/S1
AIL Vehicle Type 16 Axle Girder Frame - 160Te Transformer

Number	Structure Name	Structure Key	Year of Construction	Structure Type	Bridge Type and Foundation	No. Spans	Clear Span Length (m)	Skew (°)	Road Carried	Latest PI / POI	Next Planned PI	Overall Condition rating from Latest PI/POI	Defects summary	AIP	Assessment Report	Previous method of assessment	Record Drawing Available	Current HB Load Rating (Units)	Method of Load Comaprison	Load Effects									Overall Result
																				Model Parameters	HB Loading			AIL Loading			Utilisation			Pass/ Fail	
																					Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)		
40	Longthorpe Subway	STR_15112	1971	Underbridge	Uniform Box or Tubular Culvert Box or Tube Spread Footings	1	6	0	A47	2021	-	Fair	Existing: There are vertical 0.2mm wide cracks at the four construction joints. There is cracking in lane 2 of the carriageway surfacing. There is a 0.2mm wide transverse crack in the soffit at light unit 9. Where light units have been replaced there has been damage to the soffit surrounding the units. There is leaching through the construction crack in the soffit approximately 11m from the north end. There is one well established tree behind each of the northern wingwalls. There is animal burrowing in the south west embankment. There are occasional cracked slabs to the cycleway/footway. No guardrail has been installed on all four wingwalls. De-bonding sealant at the joints between wingwalls and abutments. 0.1mm crack, 2m from South end of the west abutment. Graffiti was noted throughout the structure, with some areas of offensive graffiti. Loss of tarmac around surface water drainage cover. Two areas of spalled concrete. One in each abutment, at the north end.	AIP for assessment dated February 1992	Assessment Report dated March 1992 Addendum to assessment Report dated October 1992	The culvert will be analysed using statical methods on the basis of a one metre strip. Uncracked sections will be used for stiffness analysis. Ka = 0.33 kp = 3.0 Subject to verification of backfill and overlay material.	Elevation drawing only	45	Line Beam	N/A	685.5	396	802.8	313	170.5	378.5	46%	43%	47%	Pass	Adequate
41	Westwood I	STR_16852	1985	Underbridge	Slab Flat Beam and Slab Simply Supported	1	21	0	A47	2021	-	Fair	Existing: Multiple areas of spalled concrete caused by impact damage and corroded reinforcement at areas of low cover. Active water seepage and water staining at drainage outlets, as well as partially blocked drainage in the bearing shelf. Cracks up to 0.2mm wide in the edge beams, cantilever and abutments. Tie bar mortar repairs with leached deposits present in the edge beams. Cracked and settled pavers in the revetments. Settlement of the embankments has resulted in movement of the VRS concrete footings and settlement of the footway. Isolated areas of corrosion in the parapets. New: Partially blocked drainage in the bearing shelf. Corroded debris in the main beams. The minimum recorded headroom taken at the south east corner of the carriageway was recorded as 5.152m. Parts of structure not inspected: Foundations, buried & concealed elements	-	-	-	DRG. NUMBER J 706/ 100 A.	45	Line Beam	N/A	-	6132.9	1388.5	-	4585.7	970.2	-	75%	70%	Pass	Adequate
42	Longthorpe I	STR_16853	1986	Underbridge	Beam and Slab Simply Supported	1	18.5	0	A47	2021	-	Good	Previous defects were confirmed during the inspection and do not appear to have notably deteriorated since the last inspection. New defects were found during the inspection which include, diagonal cracking at the Southeast and Southwest wingwall/abutment interface and water staining to the Southwest wingwall emanating from the West abutment.	-	-	-	DRG. NUMBER J 836/102	45	Line Beam	N/A	-	5033.9	1332.9	-	3793.4	893.2	-	75%	67%	Pass	Adequate
43	Longthorpe I	STR_16929	1986	Underbridge	Beam and Slab Simply Supported	1	18.5	0	A47	2021	-	Good	Previous defects were confirmed during the inspection with the only new defects found being, settlement to the embankments adjacent to the Southeast and Southwest wingwalls. A section of the manhole cover located on the East footway below the structure was found to be broken. Multiple slabs to the East revetment remain loose/displaced, it is advised that remedial works are carried out to replace them.	-	-	-	Elevation drawing only	45	Line Beam	N/A	-	5033.9	1332.9	-	3793.4	893.2	-	75%	67%	Pass	Adequate
44	Westwood I	STR_16930	1985	Underbridge	Beam and Slab Simply Supported	1	21	0	A47	2021	-	Good	Existing: Displacement of concrete slabs and possible movement of the south east embankment. Cracks, up to 0.2mm wide in various elements of the structure. Multiple minor areas of spalled concrete, including some areas caused by corroding construction debris. Water staining on the abutments and the main beams. Bird excrement and nesting on the bearing shelves. Surface corrosion of steel elements of the structure, including bearings, steel fixings and parapet. Non-offensive graffiti on the abutments. Cracked concrete slabs and spalled brickwork in the revetments. Settlement of the south verge footway above the structure. De-bonded joint sealant. The minimum recorded headroom taken was recorded at the north west corner of the structure, measuring 5.185m.	-	-	-	DRG. NUMBER J 706/ 100 A.	45	Line Beam	N/A	-	6132.9	1388.5	-	4585.7	970.2	-	75%	70%	Pass	Adequate
45	Milton Park	STR_18435	1991	Overbridge	Box Beam And Cantilever Wings Continuous Spread Footings	4	64.36	0	A47	2021	2027	Good	Previous defects were confirmed during the inspection and do not appear to have deteriorated significantly since the last inspection. The only new defects found during this inspection were, surface corrosion and paint flaking to the South pier bearings and cracking to the surfacing at the South approach. Water staining is still present to the supports with leached deposits present to the North span soffit. Cracking to the concrete elements now measure up to 0.3mm in width, continued monitoring at future inspections is advised.	-	-	-	Elevation drawing and Headroom measurement	-	Not Applicable											Adequate
46	Helpston Road	STR_18436	1991	Overbridge	Beam And Slab Simply Supported Spread Footings	2	41.5	7	A47	2021	2027	Good	Previous defects were confirmed during the inspection and do not appear to have deteriorated significantly since the last inspection. The only new defect found during this inspection was debonding and missing sealant above the central pier at the East elevation. Previous defects such as water staining to the south abutment and the cracking to the concrete elements should be monitored at the next inspection.	-	-	-	Elevation drawing and Headroom measurement	45	Not Applicable											Adequate
47	Brampton Hut South	STR_18869	1993	Underbridge	Beam and Slab Simply Supported	1	20.7	24Â° 48Â	A1	2019	2024	Fair	The structure would appear to be in fair condition with no significant deterioration having occurred since the last inspection to previously recorded defects. However, there were a number of new defects observed and these included; numerous nesting pigeons and subsequent guano to both bearing shelves, due to anti pigeon measures being ineffective. Due to the potentialbuild up of further deposits over time it is recommended that all pigeons be removed, shelves cleaned, and the anti pigeon measures be improved. Further animal infestation was present to the north west embankment where burrowing was recorded. A single section of debonded sealant was also noted to the stringcourse over the south west wing wall. A number of previously recorded defects were not visible or have been repaired, the majority of which were located to the surfacing area where scheme works are currently ongoing. All other defects should be monitored during any future inspection.	AIP for assessment dated March 1990	-	Superstructure: Global moments and shears determined from plane grillage idealisation using 'Leap 5'. Local wheel effects analysed using Pucher Charts. Substructure: analysed using hand methods. Foundations: piles analysed using 'PGROUP' Member stiffness calculated using gross concrete areas with no allowance for reinforcement. Ka = 0.271 Overall overturning, and vertical pile loads Ko = 0.426 Design of reinforced concrete elements. Allowance for compaction pressures to be included in the design.	Drg No 740-108-9-76-1	45	Grillage	Longitudinal	Mx	235.2	Mx	232.4	Fx	887.8	Mx	178.9	Mx	168.5	Fx	635.5	76%	73%	72%	Pass	Adequate
																					My	720.5	My	1438.3	Fy	228.5	My	566.4	My	1110.9	Fy	183.8	79%	77%	80%		
																					Mz	396.9	Mz	340.5	Fz	525.8	Mz	292	Mz	260.2	Fz	361.8	74%	76%	69%		
																				Transverse	Mx	20	Mx	25.7	Fx	295.1	Mx	15	Mx	21.4	Fx	210.3	75%	83%	71%		
																					My	72.3	My	75.8	Fy	185.8	My	51.7	My	46.5	Fy	132.7	72%	61%	71%		
																					Mz	378.5	Mz	242.5	Fz	208.7	Mz	290.5	Mz	192.4	Fz	121.3	77%	79%	58%		
48	Brampton Hut North	STR_18870	1993	Underbridge	Beam and Slab Simply Supported	1	20.7	24	A1	2020	2025	Good	The structure is in Good condition overall however, there are several existing defects and observations on the structure that require remedial works to be completed from the previous inspection which have not been undertaken. High priority defects which require monitoring / action include: water ingress at the back of both south and north abutment due to the failure of both expansion joints which had also been identified in previous inspections. Although the buried joint at the south end of the deck has been resurfaced, it had been reported to be damaged and degraded in previous inspections and therefore it should be replaced as per the previously raised Work Order Number 172147. The north deck joint suffers from corroded steel running rails, debris build-up and split of the rubber seal which should be replaced to prevent further water ingress as per the previously raised Work Order Number 173136. Medium priority defects which require monitoring / action include: the elastomeric bearings movement towards the centre of the structure is more pronounced on the north abutment where bearings are approaching their maximum displacement. Although no further movement has been observed from previous inspections, there are signs of further deterioration, mainly on the multiplate elastomeric bearing element and the cracked mortar base. Consideration should be given to the replacement of the bearings to the north abutment as per the previously raised Work Order Number 173135. Excessive bird excrement, nests and birds are present to both north and south abutment bearing shelves which should be cleaned at both ends and bird deterrent measures installed. The east verge kerb drainage units are partially blocked by the recent surfacing being too high and the presence of overgrown vegetation. The drainage system should be cleared with a view to it being replaced with a new drainage system. Low priority defects which require monitoring / action include: four areas of spalled concrete to the north abutment and north west wingwall that require repair as per the previously raised Work Order Number 171875; minor spalling and leaching to soffit precast concrete M beams; hairline shrinkage cracks to both abutments, all four wingwalls and both parapet upstands; local rabbit burrowing to the south west wingwall; minor pyrite stains to wingwalls and	AIP for assessment dated March 1990 Addendum to AIP dated October 1990	-	Superstructure: Global moments and shears determined from plane grillage idealisation using 'Leap 5'. Local wheel effects analysed using Pucher Charts. Substructure: analysed using hand methods. Member stiffness calculated using gross concrete areas with no allowance for reinforcement. Ka = 0.271 Overall overturning, and vertical pile loads Ko = 0.426 Design of reinforced concrete elements. Allowance for compaction pressures to be included in the design.	Drg No 740-108-9-75-1 Drg No 740-108-9-75-2	45	Grillage	Longitudinal	Mx	235.2	Mx	232.4	Fx	887.8	Mx	178.9	Mx	168.5	Fx	635.5	76%	73%	72%	Pass	Adequate
																					My	720.5	My	1438.3	Fy	228.5	My	566.4	My	1110.9	Fy	183.8	79%	77%	80%		
																					Mz	396.9	Mz	340.5	Fz	525.8	Mz	292	Mz	260.2	Fz	361.8	74%	76%	69%		
																					Mx	20	Mx	25.7	Fx	295.1	Mx	15	Mx	21.4	Fx	210.3	75%	83%	71%		

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AIL Vehicle Type 16 Axle Girder Frame - 160Te Transformer

Number	Structure Name	Structure Key	Year of Construction	Structure Type	Bridge Type and Foundation	No. Spans	Clear Span Length (m)	Skew (°)	Road Carried	Latest PI / POI	Next Planned PI	Overall Condition rating from Latest PI/POI	Defects summary	AIP	Assessment Report	Previous method of assessment	Record Drawing Available	Current HB Load Rating (Units)	Method of Load Comaprison	Load Effects											Overall Result
																				Model Parameters	HB Loading						AIL Loading						Utilisation			Pass/ Fail	
																					Envelope Moments (Hog) (kNm/m)		Envelope Moments (Sag) (kNm/m)		Envelope Shear (kN/m)		Envelope Moments (Hog) (kNm/m)		Envelope Moments (Sag) (kNm/m)		Envelope Shear (kN/m)		Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)		
													abutment walls; scrape marks to both north and south abutments; cracks at the top of north abutment on the west side and at the concrete repair of the eastern end of the south abutment; and minor paint flaking to the parapets. All these defects were noted in previous inspections and confirmed during this inspection except for the minor spalling and leaching to the soffit which was a new defect from this inspection and will need to be monitored. For the remaining previously identified defects, very little deterioration appeared to have occurred over the intervening period although these require monitoring in future inspections. Please note that at the time of authorising this Inspection, the following issues were occurring with the Contextual Report generated from IAMIS. These issues have already been reported to the IAMIS team: • The system automatically rotates some photos by 90, 180 or 270 degrees when they are transferred into the report. • Issues with format/style in generating the report – For instance in Appendix 1, some of the text is justified incorrectly Buried elements and back of walls were not inpected.						Transverse	My	72.3	My	75.8	Fy	185.8	My	51.7	My	46.5	Fy	132.7	72%	61%	71%		
																					Mz	378.5	Mz	242.5	Fz	208.7	Mz	290.5	Mz	192.4	Fz	121.3	77%	79%	58%		
49	Brampton River	STR_18871	1993	Underbridge	Arch - Solid Spandrel Spread Footings	1	11.1 Between hinges	4.9	A1	2019	2024	Good	Brampton River is in good condition overall with only minor new defects being recorded at the time of the 2019 principle inspection. the road surface above the structure had been resurfaced.	AIP for assessment dated August 1989 Addendum to AIP dated September 1990	Assessment Report dated February 2017	Superstructure: Plate frame analysis using CADS ANALYSE to determine moments and shears Substructure: Hand analysis Arch approx 6.58m radius divided into 13 member elements each approx 1.03m long. Gross concrete area with no allowance for reinforcement Kmin = 0.2, Kmax = 0.6, as required by BD 31/87	Elevation drawing only	45	Line Beam	N/A	-		2108.9		1021.5	-		1578		638.1	-	75%	62%	Pass	Adequate
50	Brampton River Relief Culvert	STR_18872	1993	Underbridge	Solid Slab Framed Span - Bridges Spread Footings	1	4.28 (Square)	0	A1	2019	2026	Good	The structure is in Good condition overall although some deterioration does appear to have occurred since the last inspection. High priority defects which require monitoring / action include: Area of impact damage to east parapet over south east wing wall; replace parapet section Medium priority defects which require monitoring / action include: None Low priority defects which require monitoring / action include: Crazing in box walls, minor leakage between box units, pyrite staining in eastern wing walls, minor areas of corrosion in east parapet weld joints. The foundations and waterproofing were not inspected.	AIP for assessment dated October 1989 Addendum to AIP dated April 1991	Assessment Report dated July 2016	Moment and shears determined from plane frame idealisation considering both rigid and flexible soil support. Wingwall - Hand analysis and design. Stiffness calculated using gross section of concrete with no allowance for reinforcement. Box structure :- In accordance with BD 31/87 Wingwalls :- Ka = 0.271 Ko = 0.426 Allowance for compaction pressures included.	Elevation drawing only	45	Line Beam	N/A	-		600.6		710.5	-		258.8		294.8	-	43%	41%	Pass	Adequate
51	Stibbington Overbridge	STR_23273	2003	Overbridge	Beam And Slab Simply Supported Spread Footings	2	44	0	A1	2022	-	Good	The structure was noted to be in good condition overall, although consideration should be given for the cracking to the carriageway surfacing to be filled and for potholes to be repaired before further deterioration becomes problematic. Previously reported vegetation and silt ingress to the deck side entry drainage was still visible and this should be removed during the annual routine maintenance. None of the remaining defects give any cause for concern at this time.	-	-	-	Elevation drawing and Headroom measurement	-	Not Applicable																Adequate
52	Grafham Road Bridge	STR_27680	2019	Overbridge	Beam and Slab Contiuous Piled foudations	3	100.89	20	A14	2019 (Pre-Opening Inspection)	-	Good	The Pre-Opening Inspection (POI) carried out on the 27th November 2019 found the structure with some minor defects that generally require nothing more than monitoring during future inspections, there are however some more significant defects that should be addressed. The inspection was carried out prior to the structure being completed, therefore it is possible that some defects have been rectified post inspection. The settlement was addressed post inspection, however the remedial action was taken too early and other works will be required in the future.	-	-	-	Elevation drawing only	-	Not Applicable																Adequate
53	A1 Brampton Interchange Bridge	STR_27688	2019	Overbridge	Beam and Slab Contiuous Piled foudations	2	81.2	55	A14	2019 (Pre-Opening Inspection)	-	Good	The Pre-Opening Inspection (POI) carried out on the 22nd October 2019 found the structure to be in good condition with some minor defects that require nothing more than monitoring during future inspections. There are however some defects that do require some form of remedial action, chiefly of which is the lack of effective drainage to the inspection chambers.	-	-	-	Elevation drawing only	-	Not Applicable																Adequate
54	Bretton Footbridge	STR_28318	2010	Overbridge	Not Known	1	30	0	A47	2019	-	Good	Structure was found to be in generally good condition.	-	-	-	-	-	Not Applicable																Adequate
55	A1 Link Underbridge	STR_33638	2019	Overbridge	Beam and Slab Simply Supported Piled foundations	2	55.43	47	A1	2019	-	Good	The Pre-Opening Inspection (POI) carried out on the 12th November 2019 found the structure to be in good condition with some minor defects that generally require nothing more than monitoring during future inspections for any signs of deterioration. The flooded chamber and unfinished safety connections are a cause for concern. The inspection was carried out prior to the structure being finished and therefore some defects may have been rectified post inspection.	-	-	-	Elevation drawing only	-	Not Applicable																Adequate
56	Culvert126b	STR_34570	2019	Small Span Structures	Uniform Box or Tubular Culvert Precast Concrete Box	1	1.5	0	A1	2019	-	Good	The Pre-Opening Inspection (POI) carried out on the 2nd December 2019 foundthe structure to be in good condition with some minor defects that require nothing more than monitoring during future inspections for any signs of deterioration. The debris should be removed from within the structure. The access ladder to the chamber is stiff to open and close, however this is a design issue. care should be taken by maintenance staff.	-	-	-	-	-	Qualitative Assessment															Pass	Adequate
57	Culvert 101A	STR_34602	2019	Underbridge	Uniform Box or Tubular Culvert Box or Tube	1	4	56.7	A1	2020 (Pre-Opening Inspection)	-	Good	The Pre-Opening Inspection (POI) carried out on the 7th October 2020 found the structure to be in good condition with some minor defects that should be monitored during future inspections. The damaged gabion basket should be removed.	-	-	-	-	45*	Line Beam	N/A	373.8		228.2		708.5	142.9		85.1		278.4	38%	37%	39%	Pass	Adequate
58	Culvert 115a	STR_34633	2019	Small Span Structures	Uniform Box or Tubular Culvert Precast Concrete Pipe	1	1.2	-	A14	2020 (Pre-Opening Inspection)	-	-	-	-	-	-	-	-	Qualitative Assessment																Pass	Adequate
59	Culvert 115c	STR_34634	2019	Small Span Structures	Uniform Box or Tubular Culvert Precast Concrete Pipe	1	1.2	-	A14	2020 (Pre-Opening Inspection)	-	Good	The Pre-Opening Inspection (POI) carried out on the 23rd June 2020 found the structure to be in good condition with a minor defect that requires nothing more than monitoring during future inspections.	-	-	-	-	45*	Line Beam / Qualitative	N/A	133.3		112.5		462.5	44.9		37.8		174.9	34%	34%	38%	Pass	Adequate
60	Culvert 116	STR_34635	2019	Small Span Structures	Uniform Box or Tubular Culvert Precast Concrete Pipe	1	1.2	-	A1	2020 (Pre-Opening Inspection)	-	Good	Pre-Opening Inspection (POI) carried out on the 23rd June 2020 found the structure to be in good condition with some minor defects that generally should be monitored during future inspections.	-	-	-	-	-	Qualitative Assessment															Pass	Adequate
61	Culvert 117	STR_34637	2019	Small Span Structures	Uniform Box or Tubular Culvert Buried Concrete Pipe	1	1.5	0	A1	2019 (Pre-Opening Inspection)	2025	Good	The Pre-Opening Inspection (POI) carried out on the 2nd December 2019 found the structure to be in Good condition with some minor defects that require nothing more than monitoring during future inspections. The water level was over 1m and therefore the decision was made not to enter the water.	-	-	-	-	-	Qualitative Assessment															Pass	Adequate
62	Longthorpe Footbridge Replacement	STR_41196	Unknown, understoof to be recently built.	Overbridge	Bridge deck is integral with the abutments to create a portal frame	1	30	0	A47	Not available	-	Not available	Not available	-	-	-	Construction issue drawings	-	Not Applicable																Adequate

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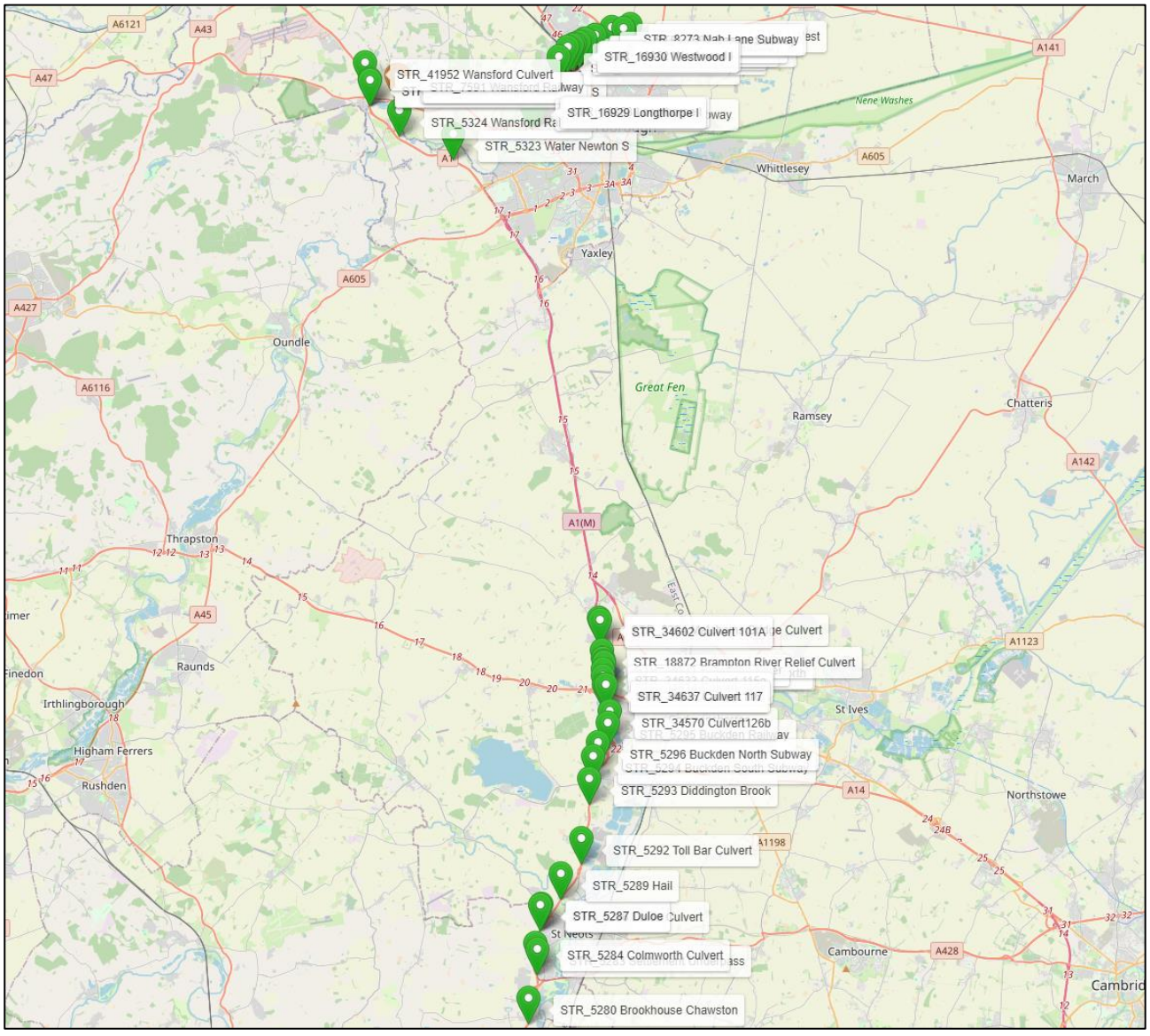
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																				HB Loading			AIL Loading			Utilisation				
																			Model Parameters	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Envelope Moments (Hog) (kNm/m)	Envelope Moments (Sag) (kNm/m)	Envelope Shear (kN/m)	Moments (Hog)(kNm/m)	Moments (Sag)(kNm/m)	Shear (kN/m)		
63	Wansford Culvert	STR_41952	2000	Small Span Structures	Arched - Solid	1	1.2	-	A1	2021	2027	Good	The structure was recently discovered after nearby works were being undertaken, with this being the first Principal Inspection. Due to the creation of the structure in lamis being after the actual inspection date (25-02-2021), it was not possible to input the correct inspection date as lamis does not allow this. All defects were therefor inputted as the day of the report being completed which was 22-09-2021. The structure appears to have been extended on various occasions due to the number of construction changes, and difference between internal heights. The overall condition of the structure was noted to be good, and it appears to be functioning as intended, with water flowing freely through with no evidence to suggest previous flooding. Defects identified internally included; areas of mortar and stone loss with the stone arch sections; surface corrosion throughout Section 2 Armco pipe; an isolated vertical joint crack within Section 3; and an area of scour within Section 4. Debris was noted to the watercourse/invert within Section 1, with additional debris located to the east embankment. External defects included; tree/vegetation growth to the west embankment; longstanding cracking and protruding steel both to the west headwall; missing sheet piles from the NW training wall; and rutting with cracking to the SB L1 carriageway.	-	-	-	-	-	Qualitative Assessment										Pass	Adequate

Appendix C. Results Map

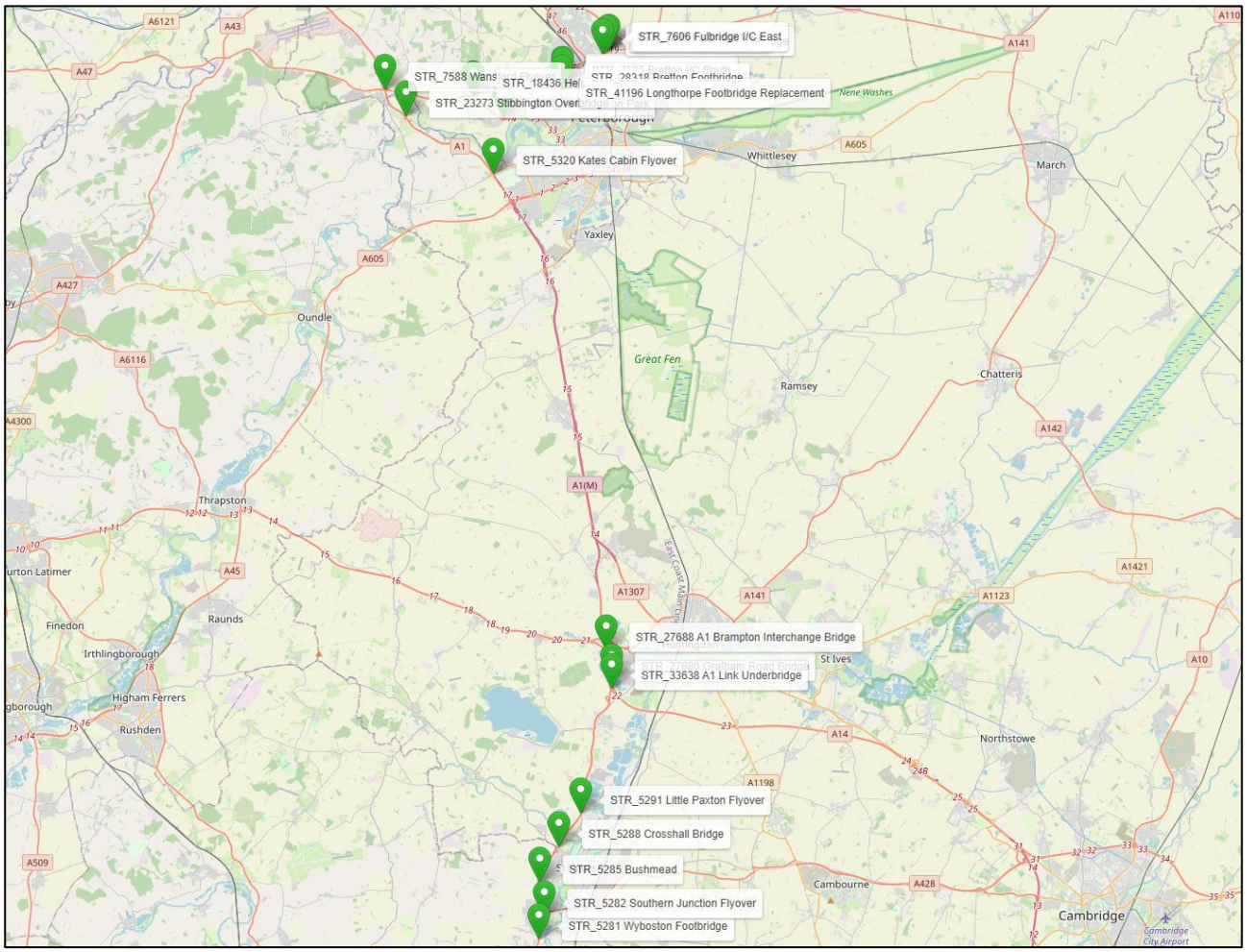
Legend:

Green	-	Adequate
Yellow	-	Follow-up action required
Red	-	Not adequate

Underbridges



Overbridges



Appendix 5

National Highways AIP and Signed Special Order

From: system@esdal.info
To: [redacted]
Subject: Special Order Agreement (WYNL/192/S2)
Date: 12 September 2025 16:20:56




Mail - Agreed route

Classification: SPECIAL ORDER

Date sent: 12 September 2025 15:20:42

AIL CONTACT: [redacted]
9th Floor
The Cube
199 Wharfside Street
Birmingham
B1 1RN
England
Direct tel: [redacted]
Fax number: [redacted]
E-mail address: [redacted]@nationalhighways.co.uk

To:

Project Assistant [redacted], A1(M) Alconbury to Peterborough DBFO

[redacted], Bedford Borough Council

Abnormal Loads Manager [redacted], Cambridgeshire County Council Abnormal Load Service

[redacted], Lincolnshire County Council

Senior Network Planner [redacted], National Highways East Region

[redacted], Peterborough City Council Abnormal Load Service

[redacted], **Wynns Ltd**

[redacted], **0 - National Highways**

FEASIBILITY ROUTE NOW COMPLETE AND AGREED

Route summary for WYNL/192/S2 - Port of Sutton Bridge, Sutton Bridge, Spalding, PE12 9QR to East Park Solar, B645, St. Neots, PE19 5LB

Agreed Route for the movement of Transformer 8.35mL x 3.885mW x 4.625mH x 160,000kgs

ESDAL reference:	WYNL/192/S2
Haulier reference:	Sutton Bridge to East Park Solar
From:	Port of Sutton Bridge, Sutton Bridge, Spalding, PE12 9QR
To:	East Park Solar, B645, St. Neots, PE19 5LB
Haulier:	Wynns Ltd
Haulier contact details:	[redacted] Shaftesbury House Highstreet Eccleshall Staffordshire ST21 6BZ England
Telephone number:	[redacted]
E-mail address:	[redacted]@wynnslimited.com

Approximate date of first movement: 10 March 2025 to 10 September 2025

Special Order no:	Signed on:	Expires on:
P502/2025	12 September 2025	12 March 2026

If, subsequent to the receipt of the agreed route below, emergency road or bridge works, including statutory undertaker's works, become necessary on any road shown in this route, the authority concerned is asked to inform the AIL contact and the haulier concerned without delay. Proposals for alternative routing should be formulated at this stage, if possible.

The haulier must:

a. Contact all police authorities before movement takes place to arrange for suitable timings and escorts where required.
b. Comply with all cautions specified in the route.
c. Survey the route prior to movement to satisfy himself of the negotiability of the vehicles concerned.
d. Make arrangements with the highway authority for the removal, at his own expense, of any street furniture that may be necessary.
e. Ensure that if the driver is unable to follow this route due to road-works or any other cause, he should telephone 0121 6788068 for instructions on the diversion to be followed to avoid the obstructed route. At weekends and outside normal working hours (8.30 -16.30) he should telephone 020 7944 5999 and inform the Duty Officer of the situation.
f. Note that the issue of this route does not constitute authority to carry out the movement, which should not be under taken until the relevant Special Order has been issued.

The Secretary of State, in proposing the attached route, has satisfied themselves as far possible that all bridges which will be passed over can safely carry the loads which have been reported to their provided that the conditions contained in the Special Order and the agreed route are complied with. They accept no responsibility that any vehicle described in the Special Order can negotiate the proposed route and neither the owner nor the operator of any such vehicle is relieved of any of their obligations or liabilities either under the Road Vehicle (Authorisation of Special Types)(General) Order 2003 or otherwise.

ROUTE OVERVIEW
Number of movements: 1
Number of pieces moved at one time: 1

Leg	Route	Distance
1	Sutton Bridge to East Park Solar	131 km

LEG 1 - Port of Sutton Bridge, Sutton Bridge, Spalding, PE12 9QR to East Park Solar, B645, St. Neots, PE19 5LB

Road	Distance
UNCLASSIFIED	40 m
WEST BANK	1.1 km
BRIDGE ROAD	80 m
UNCLASSIFIED	90 m
A17	15 km
A151	10.1 km
A16	25.9 km
A47	500 m
A15	2.9 km
A47	14.8 km
UNCLASSIFIED	300 m
A1	8.7 km
A1(M)	20.7 km
A1	27 km
UNCLASSIFIED	300 m
B645	3.6 km

VEHICLE DETAILS

Summary:	16 Axle Girder Frame - 160Te Transformer

Overall length:	56.926 m (including projections), 56.926 m (excluding projections),
Rigid length:	34.95 m
Front overhang:	0 m
Overall width:	5.35 m
Overall height:	4.8 m
Gross weight:	246880 kg
Max axle weight:	15430 kg

Leg 1 : Sutton Bridge to East Park Solar 131 km

Tractor	**Allelys 42te tractor**
Gross weight:	42000 kg
Axle weight:	8000 kg x 1 , 10000 kg x 1 , 12000 kg x 2
Wheel per axle:	2 x 2 , 4 x 2
Axle spacing:	2.6 m x 1 , 1.44 m x 1 , 1.42 m x 1 , 5.25 m x 1
Tyre size:	385/80 22.5 x 4
Tyre centres:	1.98 x 2 , 0.35,1.45,0.35 x 2
Length:	8.04 m

Trailer	**Allelys 16 Axle Girder Frame Trailer**
Gross weight:	246880 kg
Axle weight:	15430 kg x 16
Wheel per axle:	8 x 16
Axle spacing:	1.5 m x 7 , 12.45 m x 1 , 1.5 m x 7 , 5.82 m x 1
Tyre size:	215/75 17.5 x 16
Tyre centres:	0.244,0.506,0.244,0.806,0.244,0.506,0.244 x 16
Length:	34.95 m
Width:	5.35 m
Max. height:	4.8 m
Reducible height:	4.7 m
Wheelbase:	33.45 m
Left overhang:	1.167 m
Right overhang:	1.167 m
Front overhang:	0 m
Rear overhang:	0 m
Ground clearance:	0.3 m
Reduced ground	0.07 m

clearance:	
Outside track:	3 m

Tractor	**Allelys 42te tractor**
Gross weight:	42000 kg
Axle weight:	8000 kg x 1 , 10000 kg x 1 , 12000 kg x 2
Wheel per axle:	2 x 2 , 4 x 2
Axle spacing:	2.6 m x 1 , 1.44 m x 1 , 1.42 m x 1
Tyre size:	385/80 22.5 x 4
Tyre centres:	1.98 x 2 , 0.35,1.45,0.35 x 2
Length:	8.04 m

LEG 1 - Port of Sutton Bridge, Sutton Bridge, Spalding, PE12 9QR to East Park Solar, B645, St. Neots, PE19 5LB

Route directions	Cautions
Start from UNCLASSIFIED	**Start point further details:** **GridRef:** 548492, 322156 Port of Sutton Bridge, Sutton Bridge, Spalding, PE12 9QR
Continue UNCLASSIFIED for 40 m	
Continue WEST BANK for 1.1 km	
Turn right onto BRIDGE ROAD	
Continue BRIDGE ROAD for 80 m	
Turn Left onto UNCLASSIFIED	
Continue UNCLASSIFIED for 30 m	
Turn Left onto UNCLASSIFIED	
Continue UNCLASSIFIED for 60 m	
At the roundabout, take the 2nd exit onto A17	
Continue A17 for 300 m	
At the roundabout, take the 2nd exit onto A17	
Continue A17 for 4 km	

At the roundabout, take the 2nd exit onto A17	
Continue A17 for 1.5 km	
At the roundabout, take the 2nd exit onto A17	
Continue A17 for 2.8 km	
At the roundabout, take the 2nd exit onto A17	
Continue A17 for 5.9 km	
At the roundabout, take the 2nd exit onto A17	
Continue A17 for 500 m	
At the roundabout, take the 1st exit onto A151	
Continue A151 for 300 m	
At the roundabout, take the 2nd exit onto A151	
Continue A151 for 800 m	
At the roundabout, take the 3rd exit onto A151	
Continue A151 for 7.3 km	
At the roundabout, take the 2nd exit onto A151	
Continue A151 for 1.7 km	
At the roundabout, take the 1st exit onto A16	
Continue A16 for 1.1 km	
At the roundabout, take the 2nd exit onto A16	
Continue A16 for 3.8 km	
At the roundabout, take the 1st exit onto A16	
Continue A16 for 2.9 km	
At the roundabout, take the 2nd exit onto A16	
Continue A16 for 10.5 km	
At the roundabout, take the 2nd exit onto A16	
Continue A16 for 3.5 km	
At the roundabout, take the 2nd exit onto A16	

Continue A16 for 4.1 km	After 200 m **GridRef:**521243, 303323 **Caution: Car Dyke Bridge. CAUTION ALL CARRIAGEWAYS (DIRECTION OF TRAFFIC) - the vehicle may ONLY cross such bridge if ALL other traffic is EXCLUDED from the structure (ALL CARRIAGEWAYS - NO EXCEPTIONS) and the vehicle proceeds at LOW SPEED using the CENTRE of the carriageway, whilst the Police or any escorting vehicles should remain behind until the vehicle has crossed the entire Structure.**
At the roundabout, take the 3rd exit onto A47	
Continue A47 for 500 m	
At the roundabout, take the 1st exit onto A15	
Continue A15 for 1.5 km	
At the roundabout, take the 5th exit onto A15	
Continue A15 for 1.4 km	
Take Junction 20	
At the roundabout, take the 1st exit onto A47	
Continue A47 for 12.3 km	
At the roundabout, take the 2nd exit onto A47	
Continue A47 for 2.5 km	After 40 m **GridRef:**509015, 299565 **Caution: STR_7591 WANSFORD RAILWAY - Oncoming traffic in the opposing lane will need to be halted to allow passage** After 100 m **GridRef:**508903, 299591 **Caution: STR 7590 WANSFORD SLICE - Oncoming traffic in the opposing lane will need to be halted to allow passage**
At the roundabout, take the 2nd exit onto	

UNCLASSIFIED	
Continue UNCLASSIFIED for 200 m	
Turn Left onto UNCLASSIFIED	
Continue UNCLASSIFIED for 100 m	
Continue A1 for 8.7 km	**Due to culvert damage following an RTC, a lane 1 closure is implemented for the foreseeable future whilst repair options are considered. The focus will be on reopening the A1 as soon as possible.** C1-20000277-P1 CAUTION: After 3.2 km C1-20000277-P1 A1 southbound from Wansford to Alwalton **GridRef:** 509576, 297593
Continue A1(M) for 20.7 km	**Apply motorway caution**
Continue A1 for 7.8 km	
At the roundabout, take the 2nd exit onto A1	
Continue A1 for 12.9 km	
At the roundabout, take the 5th exit onto A1	
Continue A1 for 6.3 km	
Continue UNCLASSIFIED for 300 m	
Turn Left onto B645	
Continue B645 for 3.6 km	
Destination reached B645	**End point further details:** **GridRef:** 514820, 263772 East Park Solar, B645, St. Neots, PE19 5LB

AFFECTED STRUCTURE (Sutton Bridge to East Park Solar)

NOTES FOR HAULIER

NATIONAL HIGHWAYS

A copy of the Special Order must be carried in the vehicle during movement.

Hauliers are required to provide **5 clear days' notice*** to all affected parties. National Highways preferred method of notification is via https://esdal.dft.gov.uk their free-to-use on-line system.

Hauliers are also required to provide written confirmation to the National Highways National Traffic Information Centre (NTIC) 5 clear days' notice* prior to movement commencing to: abnormal.loads@nisjv.com

*** Clear days' notice excludes Saturdays, Sundays or a public holiday**

Please telephone NTIC 60 minutes before joining the National Highways network on ***0330 165 7810***.

NTIC should be informed of any changes to the movement schedule after the original notification is submitted.

Roadworks – For more information please visit www.highways.gov.uk or www.trafficengland.com.

The haulier should arrange Police Escorts with the relevant Police Force Area in order to comply with any structural cautions included in the route.

The haulier is to refer to driving instructions and adhere to all cautions referenced

PETERBOROUGH COUNCIL

Subject to the INCLUSION IN FULL of the CAUTIONS below, relevant COMMENTS and CONTENTS of this response, as well as the agreement of the Police and any other Bridge authorities involved, the movement may take place once the Haulier has notified Peterborough Council DIRECTLY. Any subsequent revisions of this application or new versions should continue to contain reference to all originally supplied cautions and comments until withdrawn by this authority or irrelevant to route path.

CAUTIONS included and to be ADHERED to:

Bridge no S212032 Car Dyke Bridge on the A16 about 3.42 miles NE of Peterborough and about 1.18 miles NE of Eye Green

(-0.211615°E 52.613405°N)

CAUTION ALL CARRIAGEWAYS (DIRECTION OF TRAFFIC) - the vehicle may ONLY cross such bridges if ALL other traffic is EXCLUDED from the structure (ALL CARRIAGEWAYS - NO EXCEPTIONS) and the vehicle proceeds at LOW SPEED using the CENTRE of the carriageway, whilst the Police or any escorting vehicles should remain behind until the vehicle has crossed the entire structure. PLEASE NOTE - This authority accepts that the abnormal load vehicle will proceed at REDUCED HEIGHT when passing under structures along the route where appropriate. Should height limits be included in this response they should only be referenced for guidance purposes and it should be noted that they are an indication of 'safe clearance'. Under STGO legislation it is the Hauliers responsibility to survey the route to ensure its complete suitability for the ACTUAL vehicle (paying particular attention to the height clearance of possible overhead obstacles) and RE-NOTIFY with full details at the time of travel in line with the Special Order process DIRECTLY to Peterborough Council. The load should not be moved on this areas road network during the morning and evening peak periods (Monday - Friday). The Haulier should consider the movement taking place at night or very early on weekends to avoid traffic disruption. The Haulier is responsible for checking the situation with regard to roadworks and incidents along the route immediately prior to travelling; this can be done by either using the National Highways traffic website - www.trafficengland.com OR another website such as www.one.network.

NATIONAL HIGHWAYS EAST REGION

CAUTION –

STR_7591 WANSFORD RAILWAY - Oncoming traffic in the opposing lane will need to be halted to allow passage

STR – 7590 WANSFORD SLICE - Oncoming traffic in the opposing lane will need to be halted to allow passage

It is recommended that a headroom measurement assessment is undertaken for overbridges

CAMBRIDGESHIRE CC

Subject to the INCLUSION IN FULL of the COMMENTS and CONTENTS of this response, as well as the agreement of the Police and any other Bridge authorities involved, the movement may take place once the Haulier has notified Cambridgeshire CC DIRECTLY. Any subsequent revisions of this application or new versions should continue to contain reference to all originally supplied cautions and comments until withdrawn by this authority or irrelevant to route path.

PLEASE NOTE - This authority accepts that the abnormal load vehicle will proceed at REDUCED HEIGHT when passing under structures along the route where appropriate. Should height limits be included in this response they should only be referenced for guidance purposes and it should be noted that they are an indication of 'safe clearance'.

Under STGO legislation it is the Hauliers responsibility to survey the route to ensure its complete suitability for the ACTUAL vehicle (paying particular attention to the height clearance of possible overhead obstacles) and RE-NOTIFY with full details at the time of travel in line with the Special Order process DIRECTLY to Cambridgeshire CC.

The load should not be moved on this areas road network during the morning and evening peak periods (Monday - Friday).

The Haulier is responsible for checking the situation with regard to roadworks and incidents along the route immediately prior to travelling; this can be done by either using the National Highways traffic website - www.trafficengland.com OR another website such as www.one.network.

General Highways information can be found at www.cambridgeshire.gov.uk

BEDFORD BOROUGH COUNCIL

B645 off the A1 towards Hail Weston - Relaxation of the environmental weight limit and any alterations to the highway assets will require prior acceptance by the Borough.

MOTORWAY CAUTIONS

(a) When travelling on the motorway, vehicles must not travel on the hard shoulder or in the right hand lane.
(b) When crossing motorway bridges, vehicles must travel in the left hand lane, unless otherwise stated in specific route cautions.
(c) If over 4.877 m in height, height of load must be reduced to a minimum when travelling under motorway bridges.
(d) If under but near 4.877 m in height, extreme caution must be exercised when travelling under motorway bridges.

Our ref: AIP 952
Your ref: East Park Solar Farm

[redacted]
Wynns Limited
Shaftesbury House
High Street
Eccleshall
Staffordshire
ST21 6BZ

[redacted]
Assistant Strategy and Customer Manager
Abnormal Indivisible Loads
National Highways, Three Snowhill,
Snow Hill Queensway, Birmingham,
B4 6GA

30th September 2025

Dear [redacted]

AGREEMENT IN PRINCIPLE 952 –Port of Sutton Bridge to East Park Solar Farm

Further to your email dated 30th September 2025, requesting provision of an AIP for future abnormal load moves to the Proposed East Park Energy site at East Park Solar Farm, Nearest postcode: PE19 5DA / OS Grid Ref: TL 14674 63845.

I can confirm that an AIP can be provided for the movement of transformers via Port of Sutton Bridge.

Movement of Transformers with a nett weight up to 160,000kgs. Estimated delivery dates and number of moves to be confirmed.

AIPs are subject to formal application nearer the time at which time National Highways will consult with all relevant parties and take into consideration their views and requirements.

Consequently, any Special Order issued is likely to include specific requirements relating to the day(s) on which movements will be authorised. The Special Order may also prescribe specific times during the day or night when movement will be permitted (which may take into account seasonal variations in traffic) in order to minimise traffic congestion, and disruption to other road users.

It is proposed that this AIP should be valid for a period of least seven years but with the proviso that should a nearer, suitable access become apparent, or prove to be feasible in that time, East Park Energy will undertake to investigate and assess its potential for future use, with a view to that new facility becoming the agreed access point for any future deliveries.

I trust this information is sufficient for your purposes, but please do not hesitate to get in touch if you require anything further.

Yours sincerely

[redacted]
Email: [redacted]@nationalhighways.co.uk

APPENDIX B: OUTLINE CONSTRUCTION WORKERS TRAVEL PLAN

EAST PARK ENERGY

East Park Energy

EN010141

Outline Construction Traffic Management Plan

Appendix B: Outline Construction Worker Travel Plan

Document Reference: EN010141/DR/7.4

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009: Regulation 5(2)(q)

~~April~~ May 2026

Version ~~P01~~P02

EAST PARK ENERGY

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Outline Construction Traffic Management Plan

Appendix B: Outline Construction Worker Travel Plan

APFP Regulation Reference:	Regulation 5(2)(o)
Planning Inspectorate Scheme Reference:	EN010141
Application Document Number:	EN010141/DR/7.4
Author:	Axis PED Ltd

Version	Date	Status
P01	April 2026	Deadline 1
P02	May 2026	Deadline 3

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1.0 INTRODUCTION

1.1 Purpose of This Report

1.1.1 This document provides the Outline Construction Workers Travel Plan (oCWTP) for the East Park Energy project ('the Scheme'). This document has been prepared on behalf of BSSL Cambsbed 1 Limited ('the Applicant') as part of the information that accompanies the Development Consent Order (DCO) for the Scheme.

1.1.2 The area of land required for the construction, operation and maintenance of the Scheme, which includes land required for permanent and temporary purposes, is shown on **ES Vol 3 Figure 1-1: Site Location [EN010141/DR/6.3]**. This is referred to as the 'Order Limits' or the 'Site'.

1.1.3 The oCWTP sets out how workers will travel to the Site during the construction phase and indicates measures that will be introduced to encourage the use of more sustainable travel modes.

1.1.4 This oCWTP forms an Appendix to the overarching **outline Construction Traffic Management Plan [EN010141/DR/7.4]** (oCTMP) for the Scheme. Post-consent, the oCTMP, including the oCWTP, will be developed into a detailed plan which must be in substantial accordance with the outline, and the Scheme must be constructed in accordance with that detailed plan. This is secured via Requirement 8 in Schedule 2 of the **draft DCO [EN010141/DR/3.1]**.

1.2 Aims and Objectives

1.2.1 The oCWTP helps to reduce environmental impacts by reducing the number of trips made to and from the Site by private car during the construction phase. A Travel Plan can bring the following benefits:

- To the individual – through improved health, reduced stress and cost savings;

- To the community – by the developer demonstrating commitment to environmental priorities and setting an example to others; and
- To the environment – through improved local air quality with less noise, dirt and fumes, which can contribute to other national and global improvements.

1.2.2 The core aims of this oCWTP are to:

- Set out the objectives of travel planning at the Site;
- Set out information on the accessibility of the Site by non-car modes of transport;
- Set out initiatives and measures to promote accessibility by non-car modes of travel, including the proposed construction worker minibus arrangement; and
- Set out the management requirements of the Travel Plan.

1.2.3 The primary objectives of the oCWTP are to:

- Reduce single-occupancy car travel by construction workers;
- Raise awareness of the available sustainable transport measures serving the Site;
- Minimise the impact of traffic on the local highway network;
- Minimise travel at peak network times; and
- Set clear and realistic targets associated with the construction period.

2.0 SITE ACCESSIBILITY

2.1 Overview

2.1.1 A key element of national and local planning policy is to ensure that new developments are located in areas where alternative modes of travel to the private car are available. It is important to ensure that developments are not isolated but are located close to complementary land uses. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.

2.1.2 Due to the rural location of the Site, the scope for trips to be made by non-car modes is relatively limited. Notwithstanding this, this section of the oCWTP assesses the accessibility of the Site by non-car modes of transport for construction staff and visitors travelling to the Site.

2.1.3 Accordingly, and to demonstrate the Site's compliance with the relevant planning policies, the modes that are considered comprise the following:

- Accessibility by public transport; and
- Accessibility by walking and cycling.

2.2 Accessibility by Public Transport

2.2.1 The 150 bus service, which provides 4 buses per day between Eynesbury and Tilbrook, runs along the B645 Kimbolton Road past the main Site access. However, there are no bus stops located along Kimbolton Road within close proximity of the main Site access.

2.2.2 The nearest served stops are located within the village of Hail Weston, approximately 2km south-east of the main site access, and in Great Staughton, approximately 1.4km west of the main Site access.

2.2.3 The 28A bus service provides 3 buses per day in the southbound direction along the B660 Kimbolton Road, as part of a circular route between Bedford

and Little Staughton. Again, there are no bus stops located close to the Site access junctions which connect to the B660.

2.2.4 The nearest informal stopping place is located at the B660 Kimbolton Road / Great Staughton Road junction, approximately 130m north of the proposed construction access route, although no formal bus stop infrastructure is provided.

2.3 Accessibility by Walking and Cycling

Walking

2.3.1 Walking is considered to be a viable alternative to car journeys over distances up to 2km and can also form part of a longer journey when using public transport.

2.3.2 The Site is accessible on foot from the B645 Kimbolton Road, Great Staughton Road, Moor Road, Green End and the B660 Kimbolton Road.

2.3.3 There is generally limited footway provision and no street lighting along any of these highway links within the vicinity of any of the Site accesses.

2.3.4 There are a number of PRoW which either cross the Order Limits or pass close to the Order Limits. The PRoW network within the Order Limits comprises sections of the following routes:

- Bedford Pertenhall 2 (Footpath 2);
- Bedford Pertenhall 10 (Footpath 10);
- Bedford Pertenhall 11 (Footpath 11);
- Bedford Pertenhall 17 (Footpath 17);
- Bedford Pertenhall 18 (Footpath 18);
- Bedford Pertenhall 26 (Bridleway 26);
- Bedford Pertenhall 29 (Footpath 29);
- Bedford Bolnhurst and Keysoe 13 (Footpath 13);
- Bedford Bolnhurst and Keysoe 32 (Footpath 32);
- Bedford Bolnhurst and Keysoe 34 (Footpath 34);

- Bedford Bolnhurst and Keysoe 35 (Footpath 35);
- Bedford Bolnhurst and Keysoe 36 (Footpath 36);
- Bedford Bolnhurst and Keysoe 37 (Bridleway 37);
- Bedford Bolnhurst and Keysoe 40 (Bridleway 40);
- Bedford Bolnhurst and Keysoe 47 (Footpath 47);
- Bedford Bolnhurst and Keysoe 50 (Footpath 50);
- Bedford Bolnhurst and Keysoe 112 (Footpath 112);
- Bedford Swineshead 15 (Footpath 15);
- Bedford Little Staughton 1 (Footpath 1);
- Bedford Little Staughton 3 (Footpath 3);
- Bedford Little Staughton 4 (Footpath 4);
- Bedford Little Staughton 8 (Footpath 8);
- Bedford Little Staughton 10 (Footpath 10);
- Bedford Little Staughton 11 (Footpath 11);
- Bedford Little Staughton 26 (Footpath 26);
- Bedford Staploe 16 (Footpath 16);
- Cambridgeshire Great Staughton 1 (Footpath 213/1);
- Cambridgeshire Great Staughton 2 (Footpath 213/2);
- Cambridgeshire Great Staughton 23 (Footpath 213/23);
- Cambridgeshire Great Staughton 28 (Footpath 213/28);
- Cambridgeshire Hail Weston 5 (Footpath 112/5);
- Cambridgeshire Hail Weston 7 (Bridleway 112/7);
- Cambridgeshire Hail Weston 8 (Footpath 112/8);
- Bedford Staploe 4 (Footpath 4);
- Bedford Staploe 8 (Footpath 8);
- Bedford Staploe 8A (Footpath 8A); and
- Bedford Staploe 16 (Footpath 16).

2.3.5 The PRoW network listed above is illustrated within the **Streets, Rights of Way and Access Plans [EN010141/DR/2.4]**.

2.3.6 Access to the Site construction compounds on foot can be achieved using this PRoW network. However, the majority of the proposed Site construction

compounds would be situated more than 2km walk distance from the nearest centres of population.

Cycling

2.3.7 Cycling can be considered a viable alternative to longer car journeys of up to 8km. It is recognised that a significant proportion of construction workers may be unlikely to cycle to the Site due to the need to bring tools and personal protective equipment to work each day. However, a brief overview of the facilities / opportunities to cycle is provided below.

2.3.8 National Cycle Network (NCN) Route 12 runs along the B645 Kimbolton Road between the A1 and Hail Weston. A shared foot/cycleway is present along the north-eastern side of the road to facilitate cycle travel along this section of the carriageway. This route also runs along Bushmead Road in the vicinity of the grid connection crossing point.

2.3.9 There is no specific provision for cyclists along any section of the local highway network in close proximity to any of the Site accesses. However, access to the main Site construction compound from the NCN Route 12 can be achieved either on-road via the B645 Kimbolton Road, or off-road via the Hail Weston 112/7 bridleway.

3.0 CONSTRUCTION PHASE SITE WORKER TRAFFIC GENERATION

3.1 Overview

3.1.1 The construction phase is expected to last for 30 months based on experience of constructing other similar-scale installations across Europe. The final programme will be dependent on the final Scheme design once any DCO Requirements have been discharged.

3.1.2 Construction activities would occur over 5.5 days per week, between 08:00 – 18:00 Monday to Friday, and 08:00 – 13:00 on Saturday.

3.2 Construction Staff Daily Trip Generation

3.2.1 Full details of the forecast numbers of construction staff requiring access to the Site per day during the construction phase are provided within the indicative resourcing schedule in Annex D of **ES Vol 2 Appendix 9-1: Transport Assessment [EN010141/DR/6.2]**.

3.2.2 This indicative resourcing schedule indicates that across the full 30-month construction period there would be approximately 496 construction-related staff per day requiring access to the Site.

3.2.3 The period of activity requiring the maximum number of staff on Site would occur in month 12, when there would be a maximum of 854 staff per weekday, and 427 staff at weekends.

3.2.4 The majority of staff trips would arrive in the hourly period prior to construction activities commencing and would depart in the hourly period at the end of the daily construction hours. As per the anticipated daily hours of construction set out above, staff would therefore arrive at the Site before 08:00 and would depart after 18:00. Staff trips would therefore generally take place outside of the network weekday AM and PM peak hours of 08:00 – 09:00 and 17:00 – 18:00, respectively.

4.0 PROJECT TEAM ROLES AND RESPONSIBILITIES

4.1 The Applicant

4.1.1 The Applicant's responsibilities will be as follows:

- Ensuring that contracts entered into with all contractors working on Site contain a requirement to develop and comply with the CWTP; and
- Appointing a Travel Plan Co-Ordinator (TPC) to deliver the CWTP.

4.2 The Travel Plan Co-Ordinator

4.2.1 The TPC has a key role in managing, monitoring, and implementing the individual measures within the CWTP. The TPC's details will be supplied to the relevant Local Planning Authorities, Huntingdonshire District Council (HDC) and Bedford Borough Council (BBC), the Local Highway Authorities (LHAs), BBC and Cambridgeshire County Council (CCC), as well as National Highways, to provide an appropriate point of contact.

4.2.2 The responsibilities of the TPC will include:

- Liaising with the overall Construction Project Manager to ensure that all workers are aware of the CWTP;
- Setting up a formal process of communication between all relevant parties (contractors, Local Authorities and National Highways);
- Encouraging adherence to the contractual obligations of contractors / sub-contractors related to the CWTP;
- Ensuring the CWTP notice boards are located in prominent positions at construction compounds across the Site and that the information is kept up to date;
- Being based on the Site during construction;
- Acting as the key point of contact for construction workers in relation to travel to the Site;
- Undertaking a snap-shot construction worker travel survey on a regular basis;

- Reviewing ~~cycle~~ car parking provision regularly;
- Engaging with local stakeholders;
- Monitoring performance against the targets of the CWTP, as set out in Section 6; and
- Implementing additional measures if not delivering on targets set.

4.2.3 The TPC will work closely with the Construction Project Manager, who has overall responsibility for the Site, and thus has the authority to introduce measures for those workers who do not follow the guidelines.

4.3 The Principal Contractor

4.3.1 The Principal Contractor will be responsible for managing how its workers travel to and from the Site and encouraging compliance to the CWTP. The main responsibilities of the Principal Contractor will include:

- Encouraging and promoting the use of sustainable transport measures included within the CWTP; and
- Organising crew minibuses to transport workers to and from the Site, where appropriate.

5.0 TRAVEL PLAN MEASURES

5.1 General

5.1.1 To encourage sustainable travel behaviour by construction staff throughout the construction phase, a package of measures will be introduced aimed at minimising the level of construction worker travel, and wherever possible minimising the impact and disruption of the remaining Site traffic on the local highway network.

5.2 Measures to Minimise Construction Worker Travel

Car Parking

5.2.1 The availability of car parking has a major influence on the means of transport people may choose for their journeys. The number of parking spaces available on-site will be managed, to help ensure that the number of vehicles is controlled and that sustainable transport options are provided.

5.2.2 The parking strategy seeks to minimise the potential impact of vehicle trips associated with construction staff, particularly in the surrounding villages.

5.2.3 The majority of car parking spaces will be provided within the main site compound in Site D, with an internal minibus shuttle service provided to transport workers to outlying areas of the Site.

5.2.4 It will be the responsibility of the TPC, working closely with the Construction Project Manager, to determine the number of spaces to be provided at various stages of the construction phase, such that the use of car sharing or minibuses will be encouraged over the use of personal cars.

5.2.5 A car parking permit system ~~could~~ would be implemented ~~during peak construction periods~~ to ~~further~~ minimise the number of vehicle trips on the local highway network and encourage the uptake of more sustainable means of accessing the Site, as described below.

5.2.6 All construction staff will be instructed not to park in the nearby villages or along the roads near to the Site and walk to the Site.

Car Sharing

5.2.7 Given the relatively rural nature of the Site, and based on experience with similar construction projects, it is anticipated that a significant number of construction staff would stay in local accommodation and would partake in a car share to travel to the Site. This is already a popular travel choice with workers on large construction projects due to the financial and social benefits it provides.

5.2.8 The TPC will set up and manage a car share scheme for construction staff. The Principal Contractor will ensure that a guaranteed lift home for car sharers is provided in the event of emergency, such as by taxi.

Minibuses

5.2.9 To further reduce the number of single occupancy car journeys, it is proposed that a fleet of minibuses will be provided to facilitate internal transport around the Site from the main Site compound.

5.2.10 The staff minibus service will also be extended to provide a collection / drop-off service, to transport staff to the main Site compound from pre-arranged collection / drop-off locations in the local area.

5.2.11 It is anticipated that the majority of non-local construction workers will stay at local accommodation. The locations of accommodation chosen by these workers could provide suitable pick-up points for the minibus, such as hotels or transport hubs. The Contractor will recommend local hotels and B&Bs for workers that are not from the local area, to encourage the use of the staff minibus service. Minibus routes will also be set up to collect workers that live locally from central pick-up points.

5.2.12 Assuming the use of 15-seat minibuses, if these are used to transport 50% of the peak workforce, a total of 29 minibuses would be required, if full. This would in turn reduce the overall number of construction staff trips during the

peak period of construction activity by approximately 45~~0~~%, compared to the forecast trip generation based on car sharing alone. This will be the principal measure to help achieve the minimum target of an average staff car occupancy of 1~~2~~.4~~0~~ workers per vehicle (see the following Section of this oCWTP).

Cycling

5.2.13 Although cycling to the Site may only be an option for a small proportion of workers, secure parking for bicycles will be provided. Construction staff that cycle to the Site will also have access to changing facilities and lockers to store clothing, cycle helmets and other equipment.

5.2.14 The TPC will liaise with local stakeholders and provide information on the local cycle network.

On-Site Storage

5.2.15 On-Site storage facilities will be provided by the Principal Contractor. These facilities will encourage construction workers to store their tools and PPE on-site. This will reduce the amount of equipment workers will need to transport to Site each day and assist those workers who are considering cycling or car sharing as a potential travel mode.

5.3 Measure to Minimise the Impact on the Local Highway Network

Working Hours

5.3.1 Working hours on major construction projects tend to be long due to pressures of timescales and often take place outside of winter months to benefit from longer hours of daylight.

5.3.2 As identified in Section 3.1, construction working hours at the Site will be between 08:00 and 18:00 on weekdays. Construction worker movements to and from the Site will therefore be timed to occur outside of the local highway peak periods, thereby minimising the impact on the highway network.

Construction Access Strategy

5.3.3 As set out in Section 5.0 of the oCTMP, the identified access route to the Site for construction traffic will be to approach the Site via the B645 Kimbolton Road from the A1 at Eaton Socon. Construction workers will be instructed to follow this prescribed access route at all times, and to avoid travelling to the Site using routes which pass through local villages.

5.3.4 As noted above, once within the Site a minibus service will be provided to transport workers between the main Site compound and the outlying areas of the Site, to minimise the number of vehicle movements on the local highway network.

Travel Plan Communication

5.3.5 Details of the sustainable travel options available for accessing the Site will be provided in an information pack and sent to construction workers prior to them starting work on the Scheme. This will raise awareness of the initiatives being implemented and allow staff to register an interest in minibus and car sharing schemes. The TPC will be responsible for ensuring all construction workers received the information pack prior to starting work on Site.

5.3.6 All construction workers will receive an introductory meeting on the CWTP when they commence work as part of the overall Site safety induction training. It will include provision of the following information:

- Designated access route to the Site;
- Details of sustainable transport measures available for accessing the Site;
- Parking arrangements across the Site; and
- Details on the importance of travelling sustainably and the environmental, social and financial benefits it can bring.

5.3.7 This will ensure that all construction workers are fully aware of the CWTP and the measures contained within it.

6.0 TARGETS

6.1 Single Occupancy Car Use

6.1.1 An objective of the CWTP is to set clear and realistic targets. The main target during construction is therefore:

- To achieve a minimum average car occupancy of 1.4 workers per vehicle at all times during the construction phase; and
- To seek to achieve an average car occupancy of 2.0 workers per vehicle ~~over the duration of the construction phase of the Scheme, and in particular~~ across the peak period of construction between months 6 to 24 of the construction phase.

~~6.1.2 This would result in a decrease from a maximum of 854 daily staff vehicles (assuming that no workers will use alternative means of transportation to the Site), to 427 vehicles during the peak construction period in month 12 of the construction phase.~~

6.1.2 The TPC will monitor the measure to ensure a minimum~~n~~ average car occupancy of 1~~2~~.4~~0~~ workers per car is achieved, and this will be monitored throughout the construction phase. This would result in a decrease from a maximum of 854 daily staff vehicles (assuming that no workers will use alternative means of transportation to the Site), to 610 vehicles during the peak construction period in month 12 of the construction phase.

~~6.1.3~~

6.2 Parking

6.2.1 The TPC will monitor car parking utilisation at the Site compounds on a daily basis, reviewing the split of vehicles between cars, vans and minibuses, ensuring that the Principal Contractor encourages its workers to travel to and from the Site by sustainable modes of travel.

6.2.2 If the monitoring (see Section 7) finds that the target is not being met, ~~this will result in the implementation of~~ additional measures would be identified, in discussion with the relevant LHAs, to help the CWTP get back on course to meet the overall target and objectives. If a particular sustainable mode is exceeding expectations, focus will be spent on further facilitating this means of travel.

7.0 MONITORING AND REVIEW

7.1 General Measures

7.1.1 Monitoring the CWTP will be central to ensuring its aims are delivered in practice. Monitoring guarantees that failures or changing conditions are identified at the earliest point and that remedial action (such as identifying additional measures, providing incentives, or undertaking a marketing campaign to promote the CWTP) can be taken, to ensure that it stays on course to meet its overall objectives.

7.1.2 The TPC will be responsible for monitoring the implementation of the CWTP, to ensure an efficient and effective execution of the measures, and to refine the measures, where necessary, to cope with the changes in demand throughout the construction phase.

7.1.3 An important part of the monitoring strategy will be the liaison meetings as well as obtaining feedback from construction workers, local residents and businesses regarding any issues with construction worker traffic. The appointment of a TPC will ensure that an appropriate point of contact is available and can react to such feedback.

7.1.4 Construction workers will also be given the opportunity to offer suggestions and ideas via a suggestion box and/or informal discussion with the TPC.

7.1.5 The TPC will ~~regularly~~ monitor the total number of construction workers on-site and the number of car parking spaces provided on a daily basis, to ensure car occupancy targets are being met.

7.2 Planned Liaison

7.2.1 A formal process of liaison between all relevant parties (the Contractor, Local Authorities and National Highways) will:

- Formalise the contact between local relevant parties, the Construction Project Manager and the TPC;

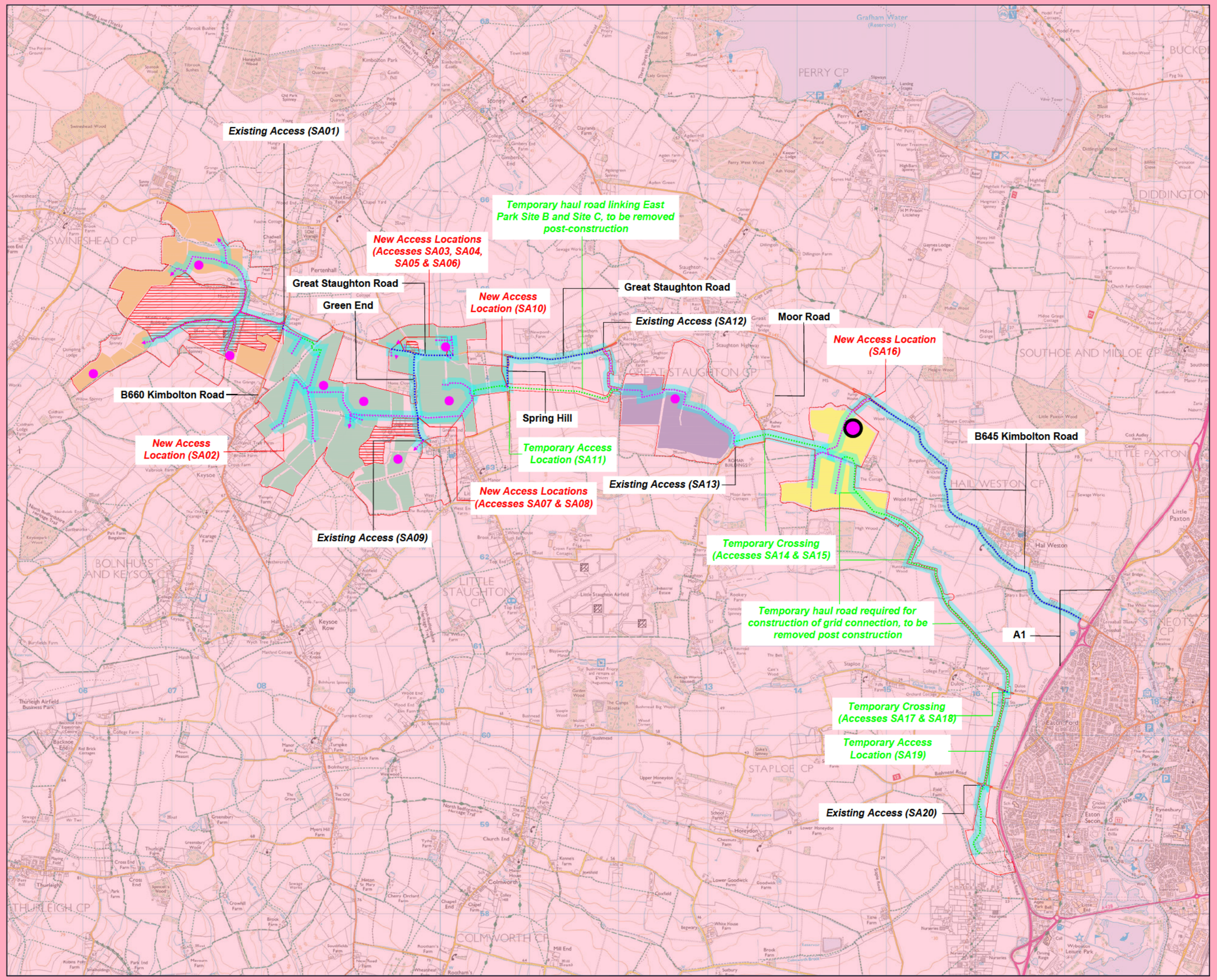
- Establish a channel of communication between the Contractor and the regulating Authorities;
- Make all parties aware of the results of monitoring of the final CWTP;
- Provide a channel by which any complaints can be communicated and dealt with; and
- Provide prior notice of significant events, such as major changes in the number of workers on-site.

7.2.2 In order to keep the CWTP 'live', it is proposed that a short written report is prepared by the TPC on a monthly basis (or other frequency to be agreed) and circulated to all key stakeholders. Any comments generated by the report will be circulated to all key stakeholders. ~~and a meeting may be held if required~~.

~~7.2.2~~7.2.3 Should the monitoring report identify that the identified targets are not being met, the TPC would arrange a meeting with the relevant parties to discuss and identify additional remedial measures that could be introduced to help meet the Travel Plan targets.

~~7.2.3~~7.2.4 Following the report and any meeting, the CWTP w~~c~~ould then be reviewed and updated ~~if required~~as necessary to reflect current operating conditions and measures.

APPENDIX C: PROPOSED CONSTRUCTION ACCESS STRATEGY



Order Limits

Land Excluded from Order Limits

East Park Site D

East Park Site C

East Park Site B

East Park Site A

HGV Delivery Route

Construction access utilising section of existing public highway

Indicative construction access utilising existing access tracks or proposed new access tracks internal to the site, and which would be retained post-construction

Indicative temporary access tracks (haul roads) required to install cabling and the grid connection that will be implemented at the start of the construction phase to keep construction traffic off local roads as far as possible. To be removed post construction

Main construction compound

Satellite construction compound

Note: *The full extent of construction access tracks internal to the site are illustrated in ES Vol 3 Figure 2-5 Indicative Construction Access and Compounds Plan (APP-125)*

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Figure Number

EN010141/DR/7.4 - Figure 15

Figure Title

Proposed Construction Access Strategy

Scale

1:40,000 @ A3

Date

March 2026

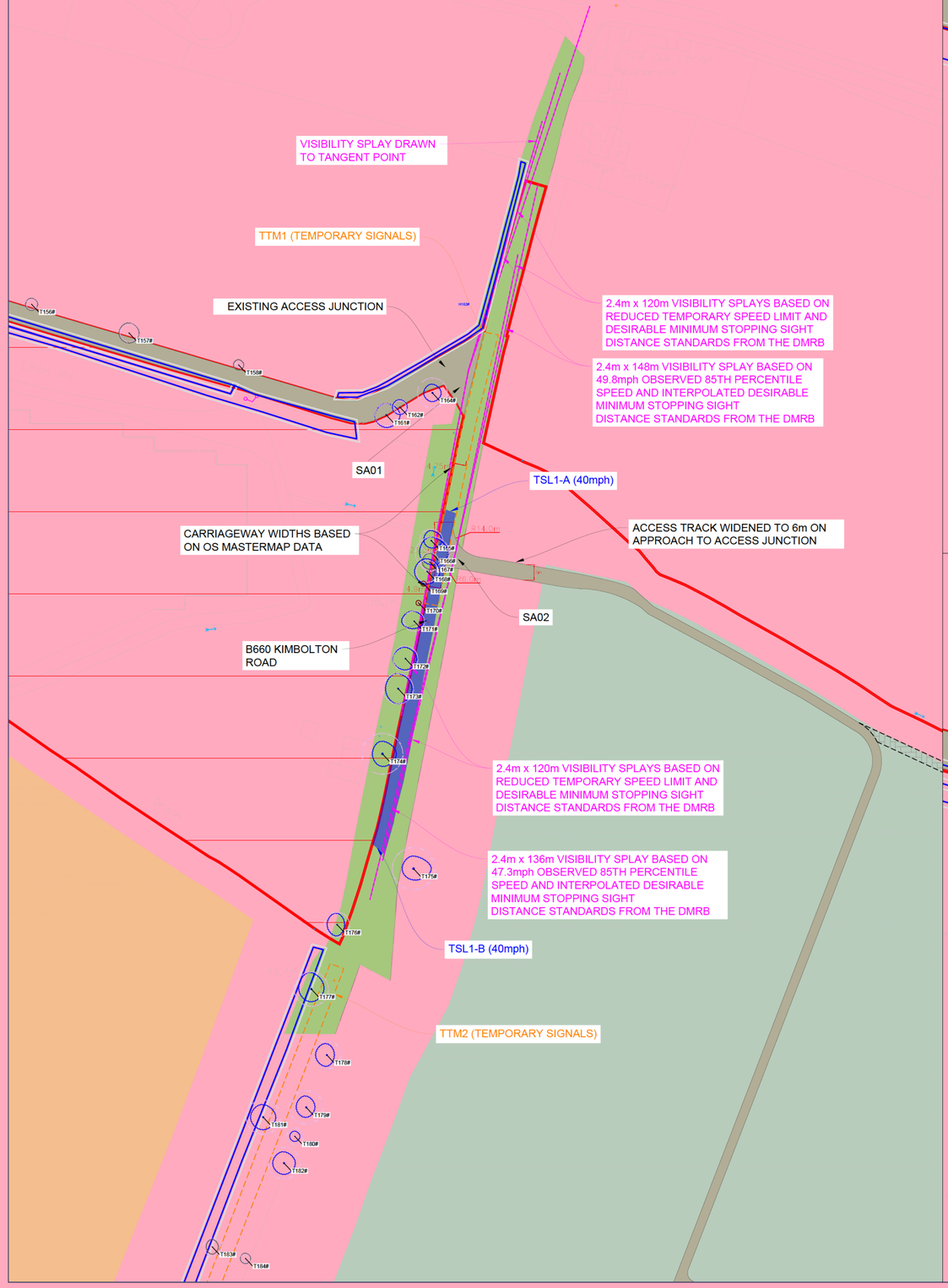
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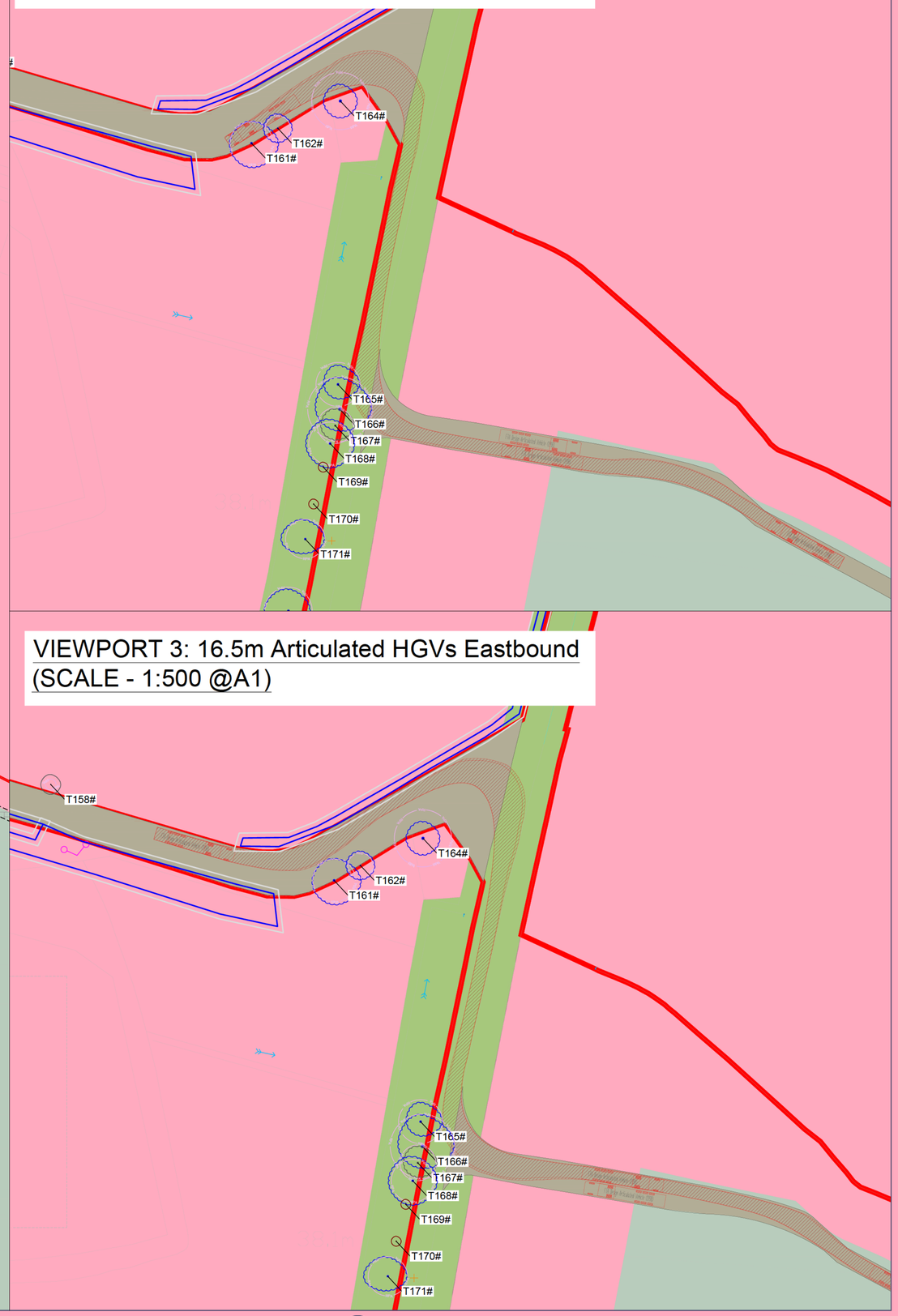
0 1 2 3 4 5km

APPENDIX D: INDICATIVE SITE ACCESS ARRANGEMENT DRAWINGS

VIEWPORT 1: Site Access Arrangement (Access SA01 & SA02) SCALE - 1:1000 @A1



VIEWPORT 2: 16.5m Articulated HGVs Westbound (SCALE - 1:500 @A1)

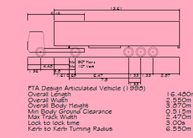


VIEWPORT 3: 16.5m Articulated HGVs Eastbound (SCALE - 1:500 @A1)

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Land Excluded from Order Limits
- Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

VEHICLE USED IN TRACKING:



FTA Design Articulated Vehicle (1:200)

Overall Length	16.400m
Overall Width	2.500m
Overall Body Height	3.870m
Min Body Ground Clearance	0.315m
Max Track Width	3.470m
Lock to lock time	6.0Os
Kerb to Kerb Turning Radius	6.550m

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Drawing Title
Indicative Site Access Drawings Sheet 1 of 14

Scale: As Shown
Status: DCO Application

APFP Reference: Regulation 5(2)(a)
Submission Reference: EN010141/DR/7.4

Dwg no: Figure 1
Rev: P02

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Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

2.4m x 120m VISIBILITY SPLAY BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE DMRB

2.4m x 152m VISIBILITY SPLAY BASED ON 50.6mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE DMRB

CARRIAGEWAY WIDTHS BASED ON OS MASTERMAP DATA

TSL2-A (40mph)

2.4m x 145m VISIBILITY SPLAY BASED ON 49.1mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE DMRB

SA03

SA04

TTM3 (TEMPORARY SIGNALS)

GREAT STAUGHTON ROAD

VISIBILITY SPLAY DRAWN TO TANGENT POINT

2.4m x 120m VISIBILITY SPLAY BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE DMRB

T588# T589# T591# T592# T593# T594# T595# T596# T597# T598# T599# T609# T610# T611# T612# T613# T614# T627# T628# T637# T638# T569# H620# H630# H641# H590#

VIEWPORT 1: Site Access Arrangement (Access SA03)

VIEWPORT 2: Site Access Arrangement (Access SA04)

- Order Limits
- Land Excluded from Order Limits
- Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

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Drawing Title
Indicative Site Access Drawings Sheet 2a of 14

Scale
1:500 @A1

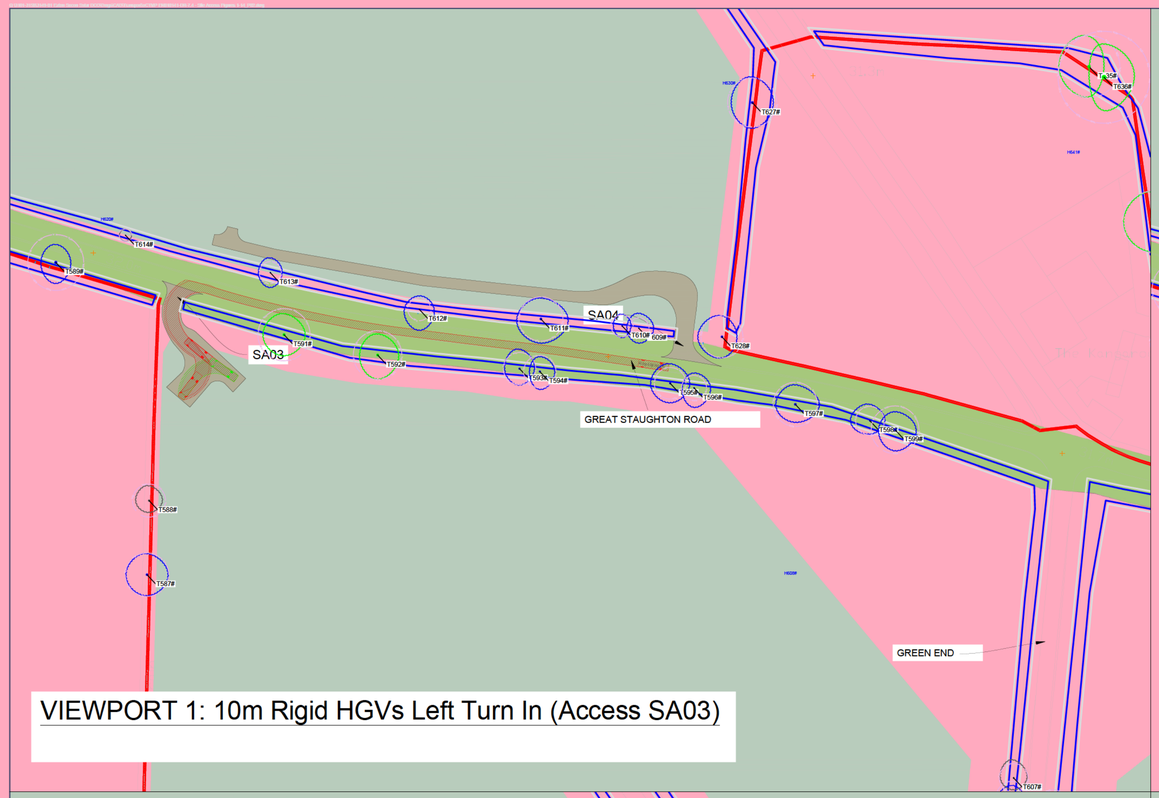
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DCO Application

APFP Reference
Regulation 5(2)(a)

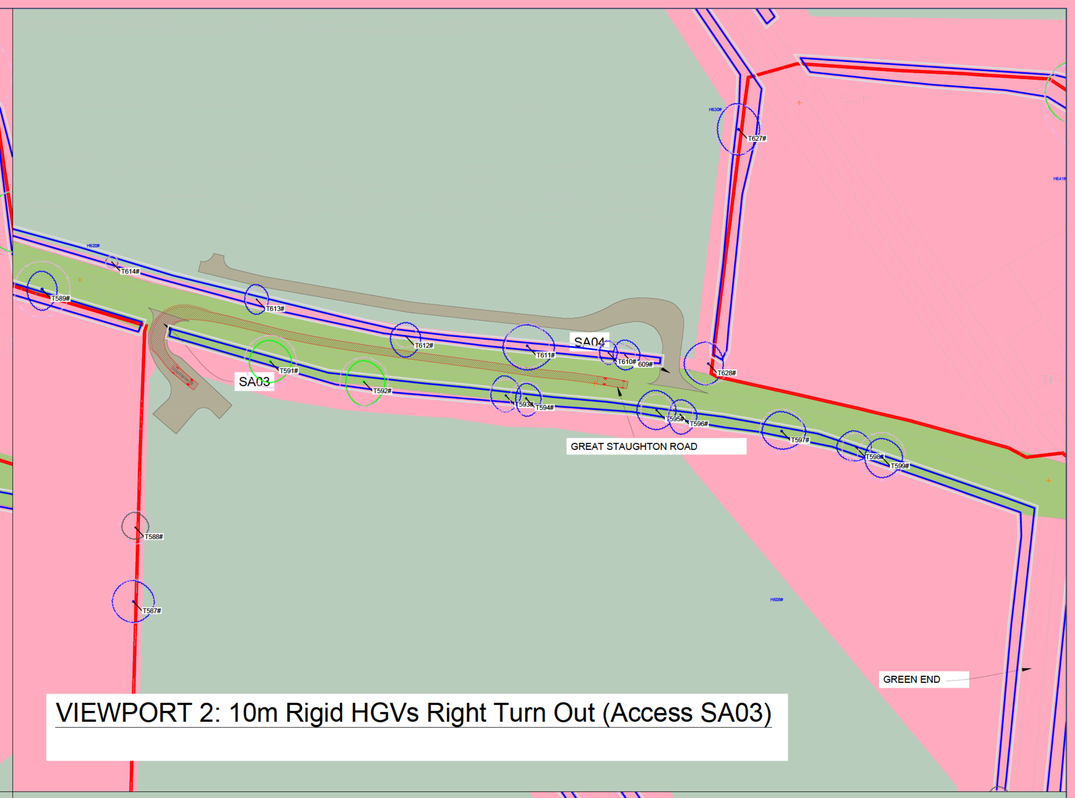
Submission Reference
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Dwg no
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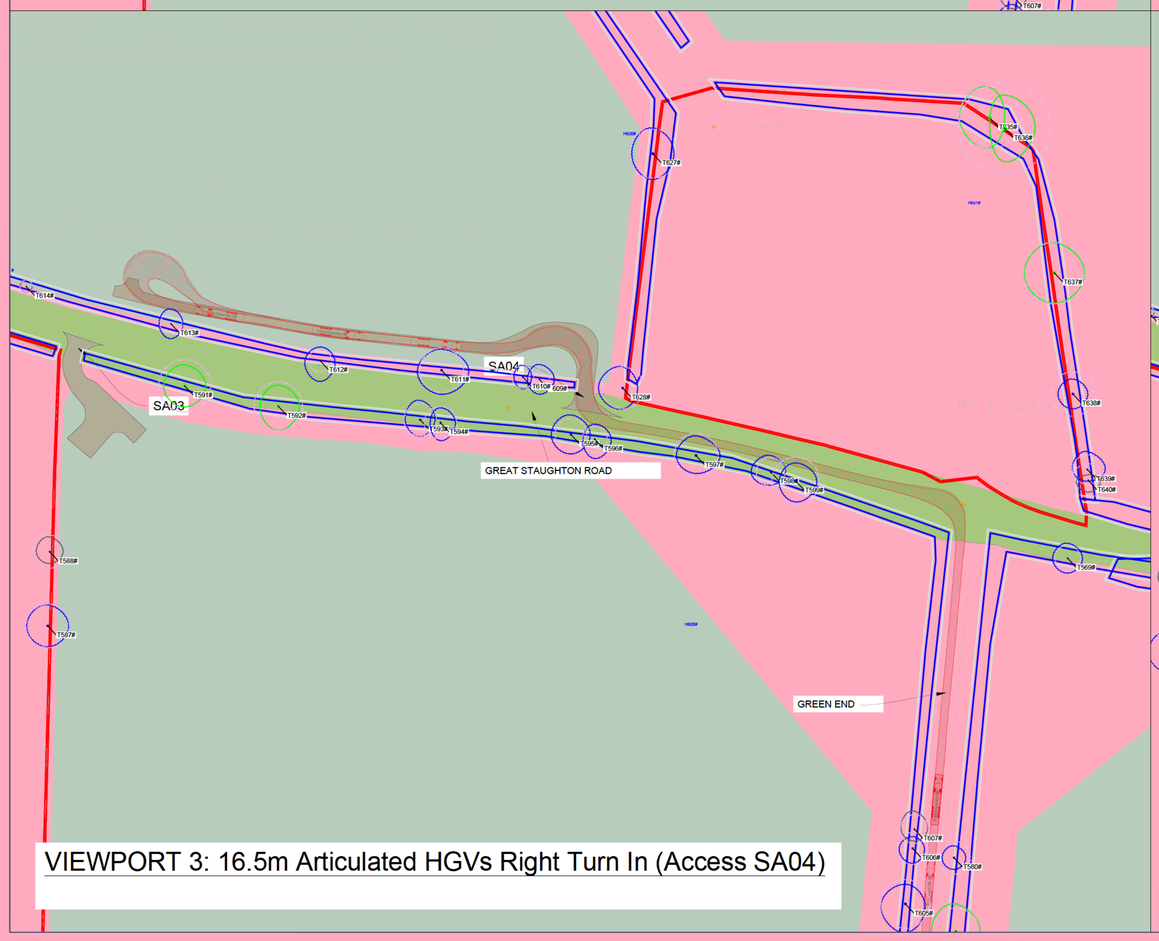
Rev
P02



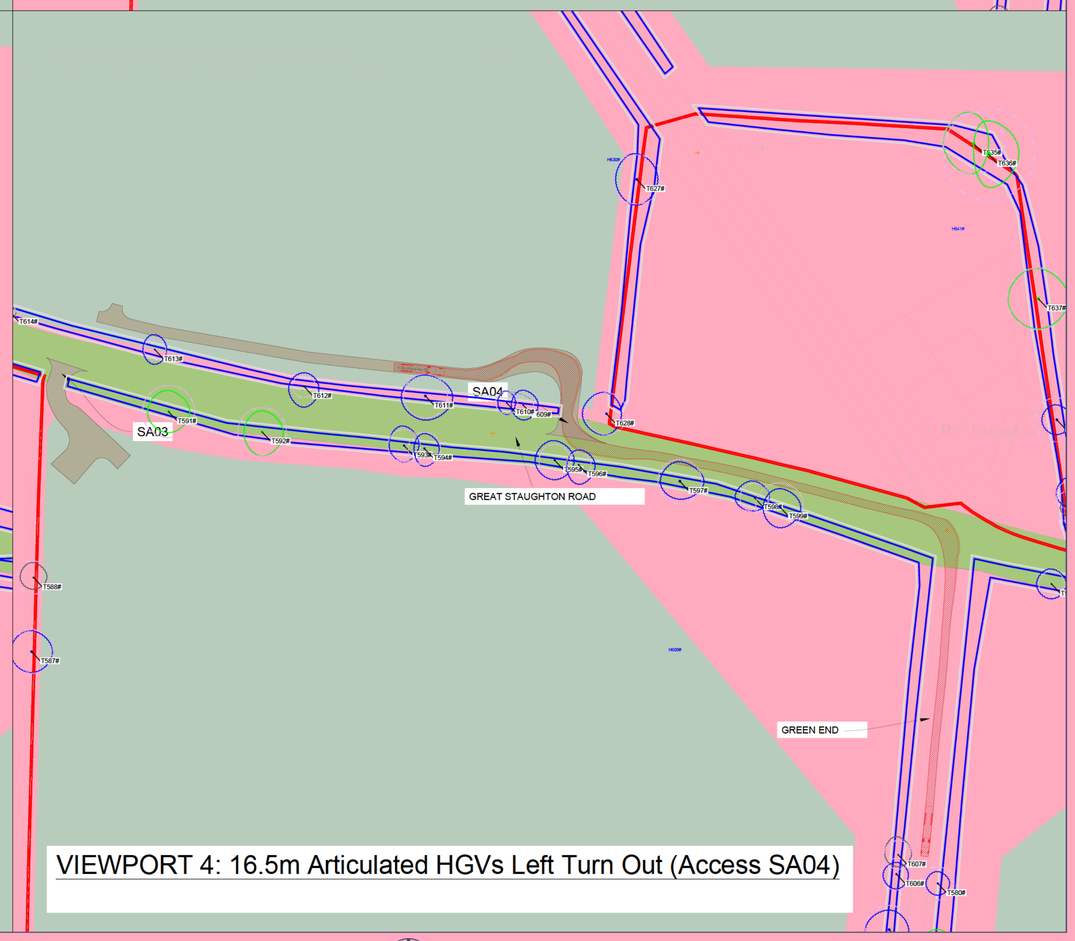
VIEWPORT 1: 10m Rigid HGVs Left Turn In (Access SA03)



VIEWPORT 2: 10m Rigid HGVs Right Turn Out (Access SA03)



VIEWPORT 3: 16.5m Articulated HGVs Right Turn In (Access SA04)



VIEWPORT 4: 16.5m Articulated HGVs Left Turn Out (Access SA04)

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

Order Limits

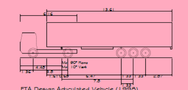
Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases

Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council

Indicative Extent of Existing Hedgerow

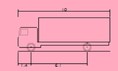
Existing Trees & Root Protection Area

VEHICLES USED IN TRACKING:



FTA Design Articulated Vehicle (1990)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.670m
Min Body Ground Clearance	0.513m
Max Track Width	2.470m
Lock to lock time	8.00s
Kerb to Kerb Turning Radius	8.550m



FTA Design HG Rigid Vehicle (1990)

Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.445m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	8.00s
Kerb to Kerb Turning Radius	11.000m

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Drawing Title
Indicative Site Access Drawings
Sheet 2b of 14

Scale
1:1000 @A1

Status
DCO Application

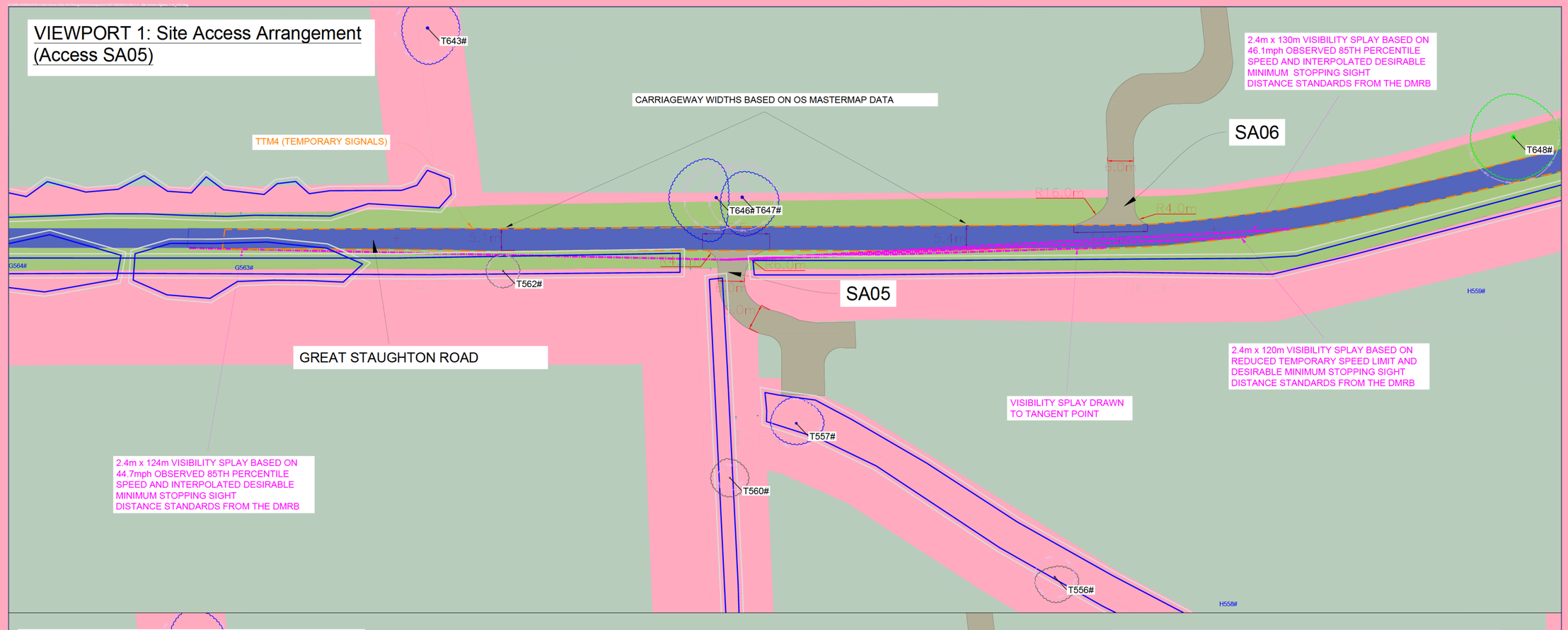
APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

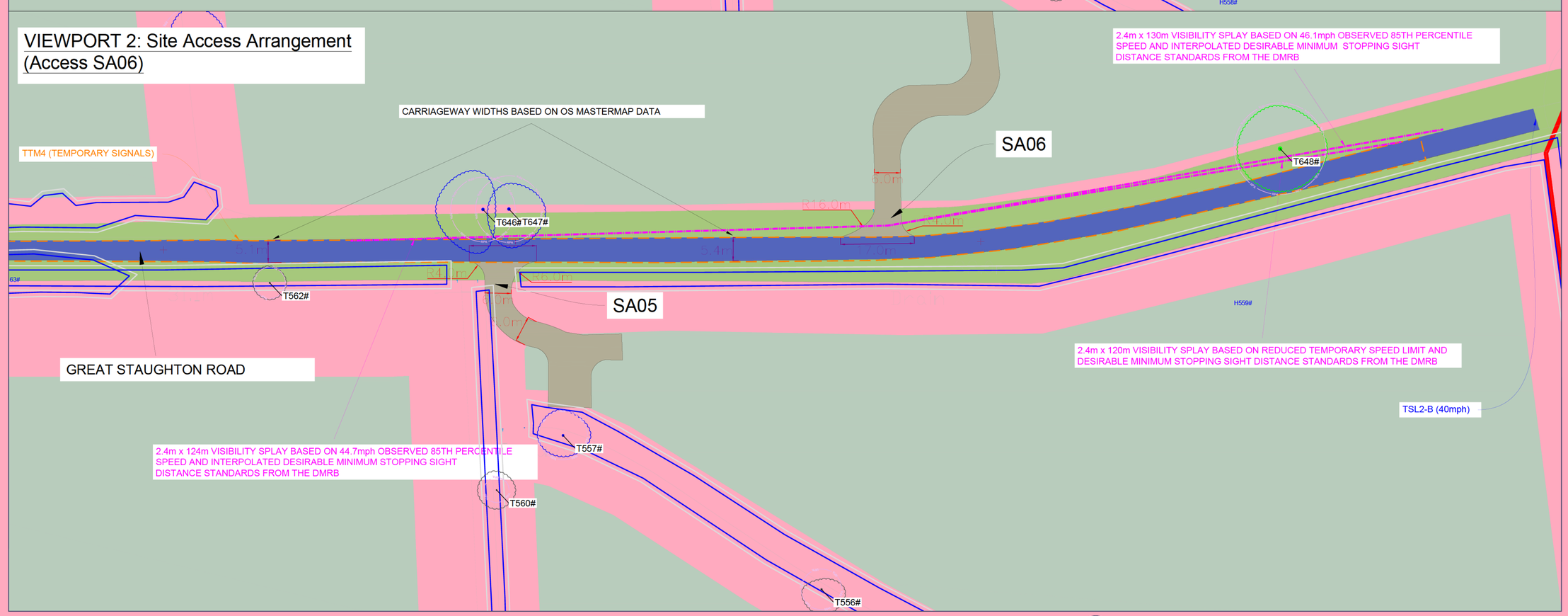
Dwg no
Figure 2b

Rev
P02

VIEWPORT 1: Site Access Arrangement (Access SA05)



VIEWPORT 2: Site Access Arrangement (Access SA06)



Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

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Drawing Title
Indicative Site Access Drawings Sheet 3a of 14

Scale
1:500 @A1

Status
DCO Application

APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 3a

Rev
P02

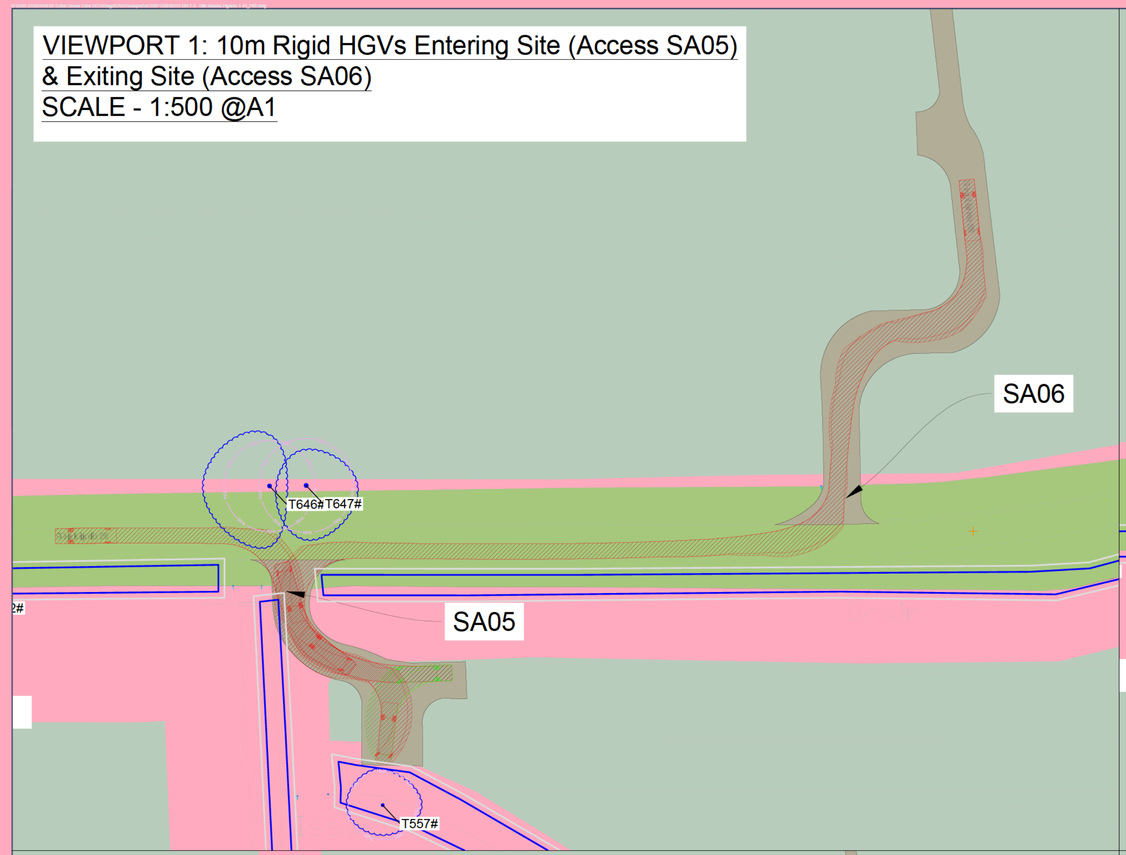
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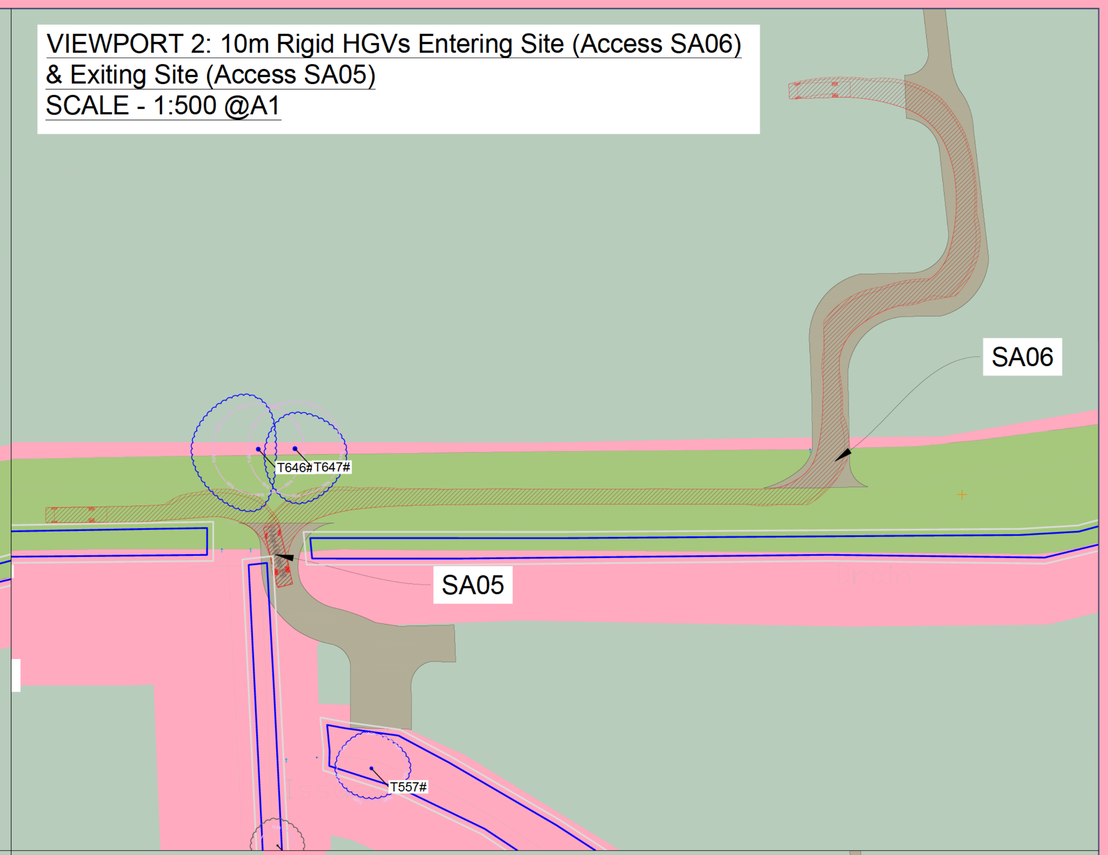
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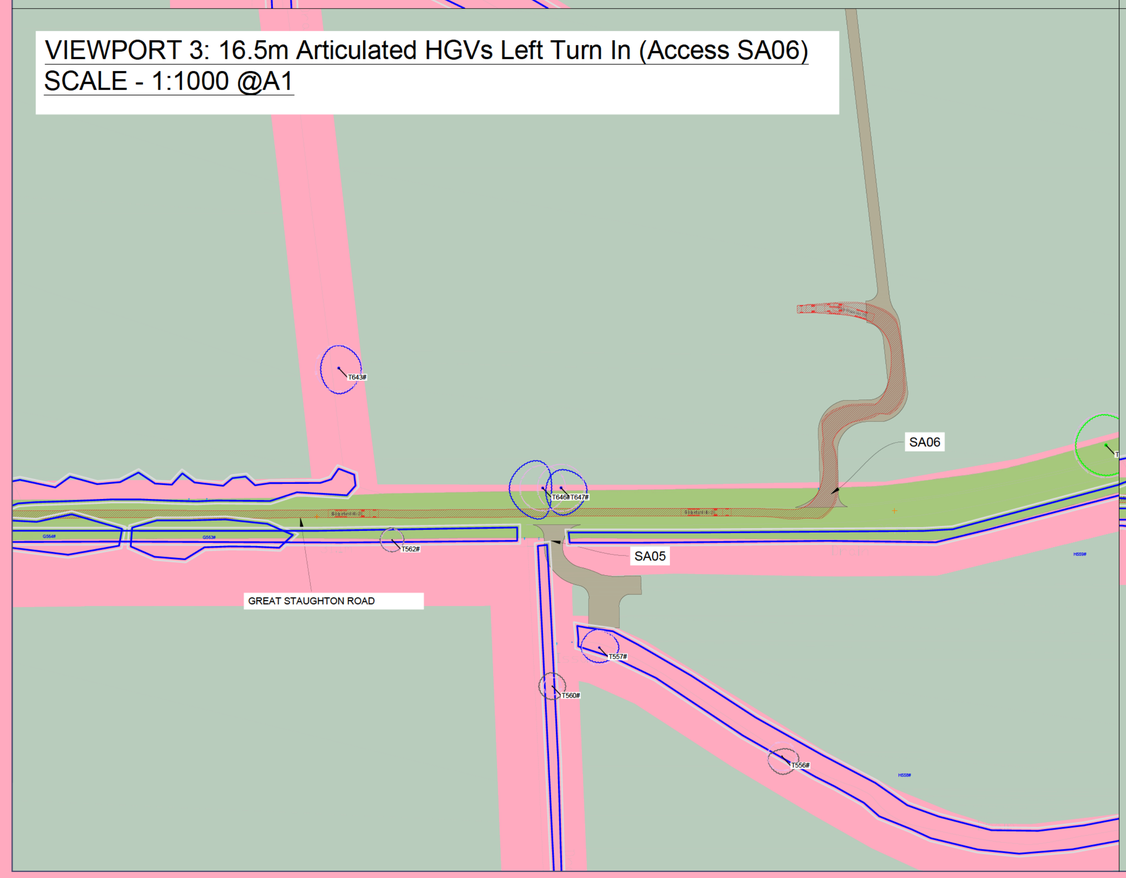
VIEWPORT 1: 10m Rigid HGVs Entering Site (Access SA05) & Exiting Site (Access SA06)
SCALE - 1:500 @A1



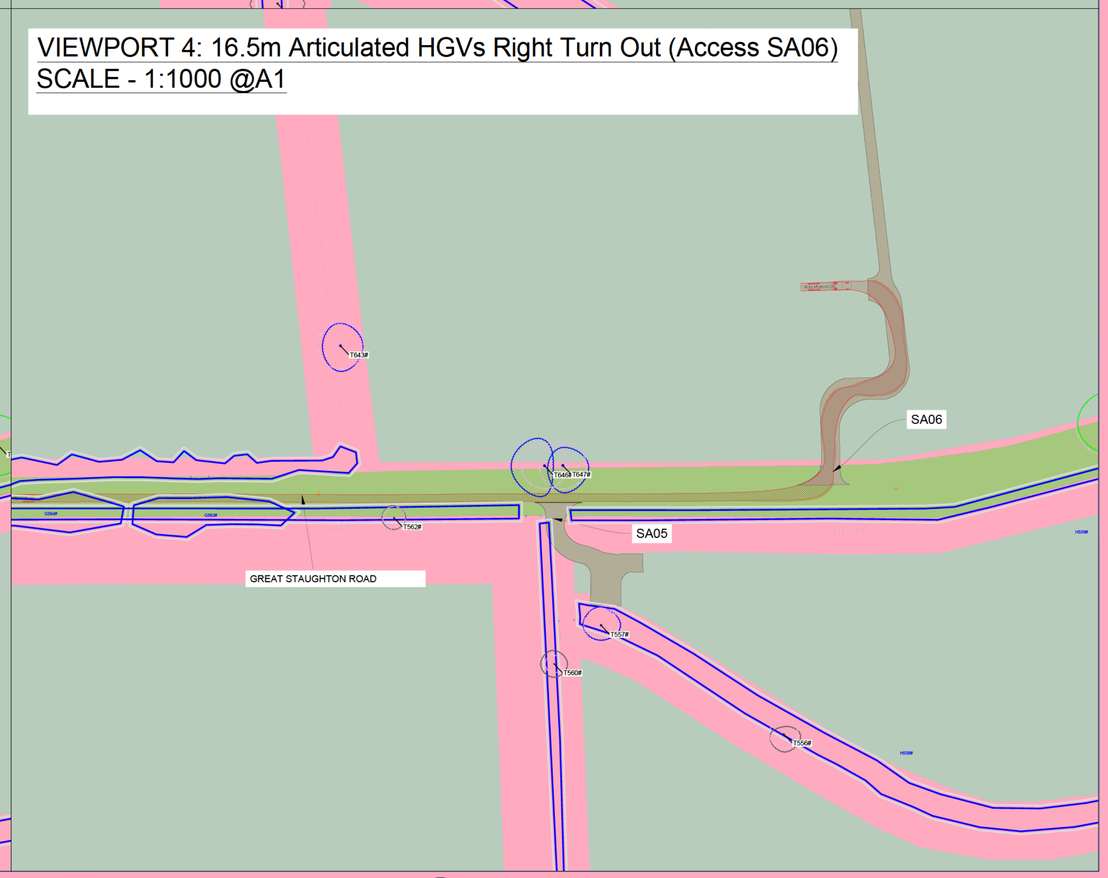
VIEWPORT 2: 10m Rigid HGVs Entering Site (Access SA06) & Exiting Site (Access SA05)
SCALE - 1:500 @A1



VIEWPORT 3: 16.5m Articulated HGVs Left Turn In (Access SA06)
SCALE - 1:1000 @A1



VIEWPORT 4: 16.5m Articulated HGVs Right Turn Out (Access SA06)
SCALE - 1:1000 @A1



Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

Order Limits

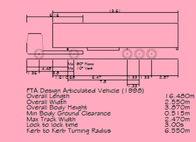
Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases

Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council

Indicative Extent of Existing Hedgerow

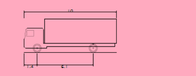
Existing Trees & Root Protection Area

VEHICLES USED IN TRACKING:



FTA Design Articulated Vehicle (1:950)

Overall Length	16.450m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	8.550m



FTA Design HG Rigid Vehicle (1:950)

Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.445m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	11.000m

EAST PARK ENERGY

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Client
BSSL Cambsbed 1 Ltd

Project
East Park Energy

Drawing Title
Indicative Site Access Drawings
Sheet 3b of 14

Scale
As Shown

Status
DCO Application

APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 3b

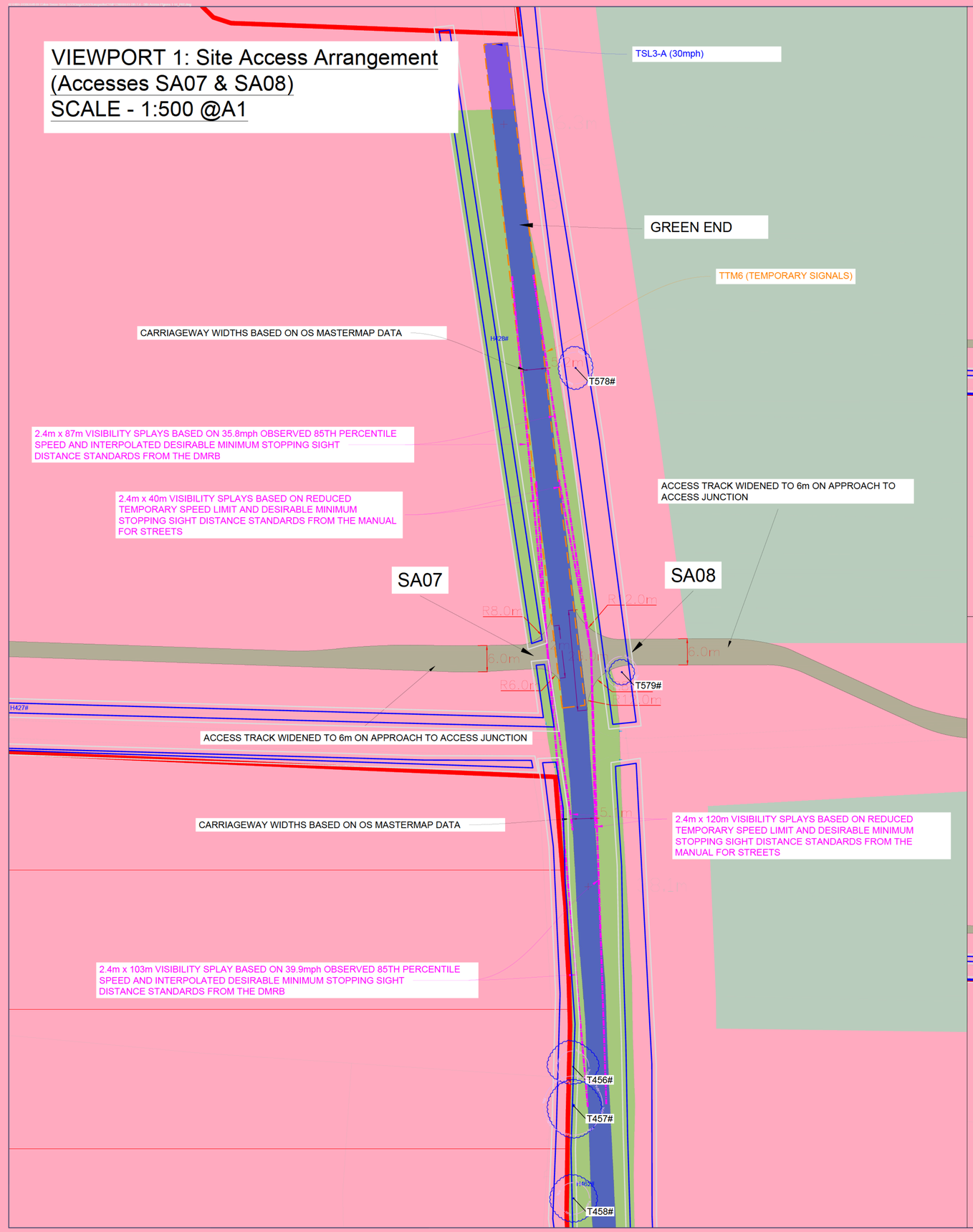
Rev
P02

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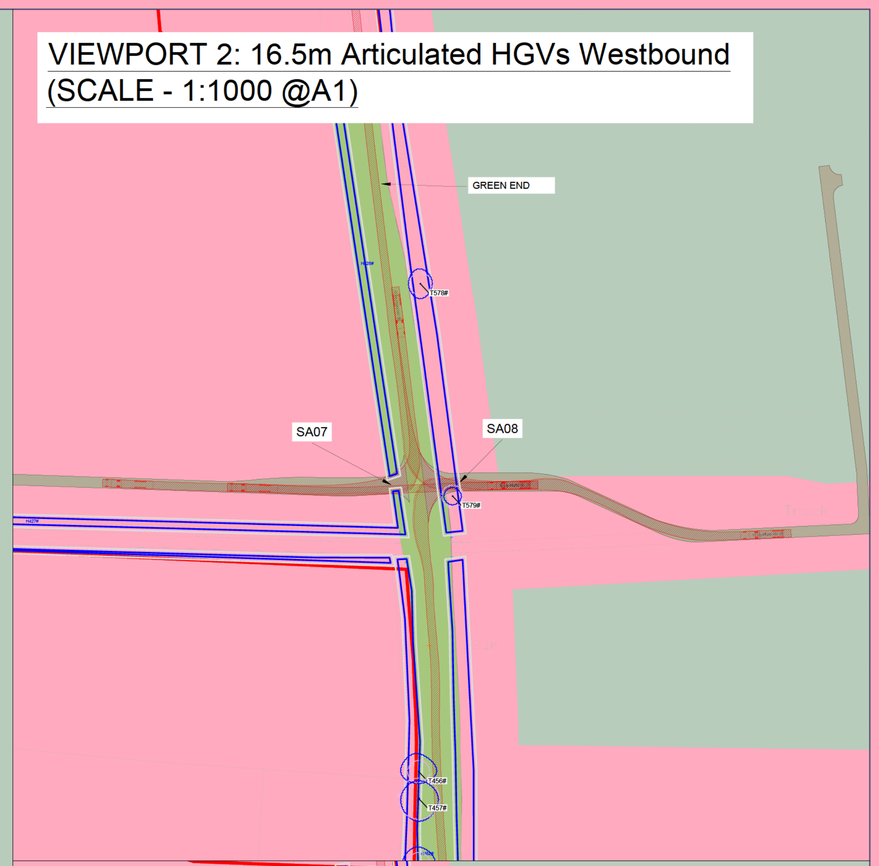
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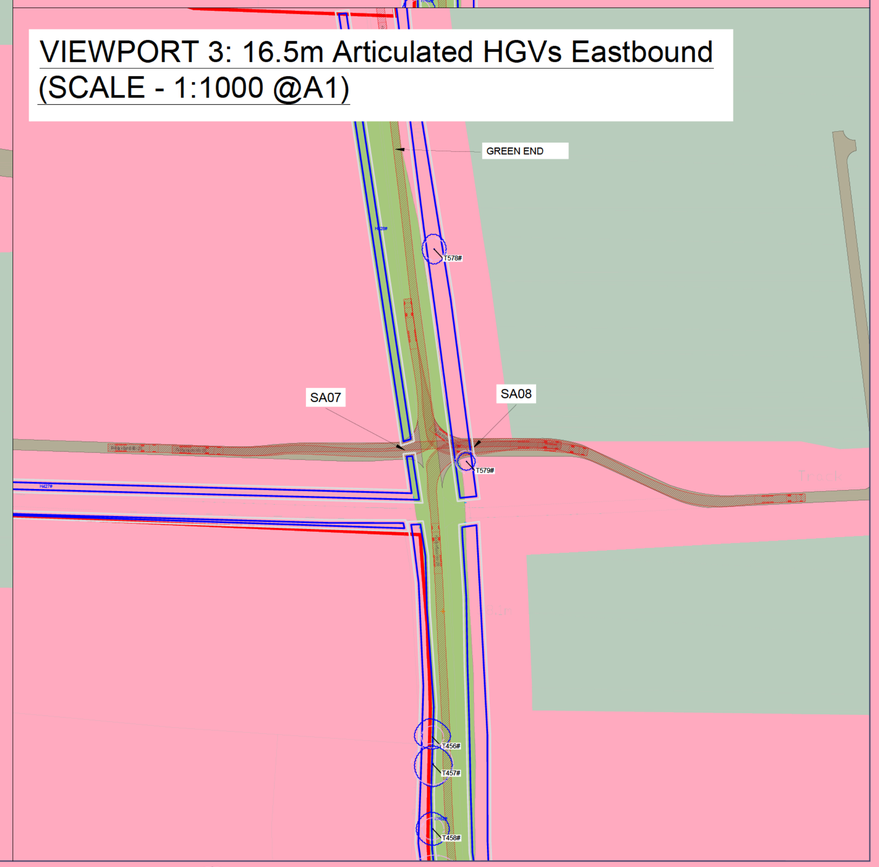
VIEWPORT 1: Site Access Arrangement (Accesses SA07 & SA08) SCALE - 1:500 @A1



VIEWPORT 2: 16.5m Articulated HGVs Westbound (SCALE - 1:1000 @A1)



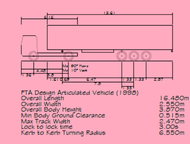
VIEWPORT 3: 16.5m Articulated HGVs Eastbound (SCALE - 1:1000 @A1)



Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases
- Land Excluded from Order Limits
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

VEHICLE USED IN TRACKING:



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Client
BSSL Cambsbed 1 Ltd

Project
East Park Energy

Drawing Title
Indicative Site Access Drawings Sheet 4 of 14

Scale: As Shown
Status: DCO Application

APFP Reference: Regulation 5(2)(a)
Submission Reference: EN010141/DR/7.4

Dwg no: Figure 4
Rev: P02

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N

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

GREEN END

T460#

T526#

T527#

T528#

T529#

T530#

2.4m x 87m VISIBILITY SPLAY BASED ON 35.8mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE DMRB

CARRIAGEWAY WIDTHS BASED ON OS MASTERMAP DATA

T461#

T531#

G460#

TTM7 (TEMPORARY SIGNALS)

2.4m x 40m VISIBILITY SPLAY BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

SA09

T464#

2.4m x 103m VISIBILITY SPLAY BASED ON 39.9mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE DMRB

T532#

2.4m x 40m VISIBILITY SPLAY BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

TSL3-A (30mph)

H465#

VIEWPORT 1: Site Access Arrangement (Access SA09)

GREEN END

T460#

T530#

T461#

T531#

G460#

SA09

T464#

T532#

VIEWPORT 2: 16.5m Articulated HGVs Right Turn In (Access SA09)

GREEN END

T460#

T530#

T461#

T531#

G460#

SA09

T464#

T532#

VIEWPORT 3: 16.5m Articulated HGVs Left Turn Out (Access SA09)

Order Limits

Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases

Land Excluded from Order Limits

Visibility Splay

Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council

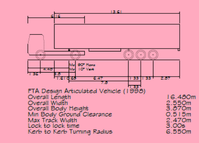
Temporary speed limit

Temporary traffic signals

Indicative Extent of Existing Hedgerow

Existing Trees & Root Protection Area

VEHICLE USED IN TRACKING:



FTA Design Articulated Vehicle (1990)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.315m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.550m

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N

0 10 20 30 40 50 100m

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Client
BSSL Cambsbed 1 Ltd

Project
East Park Energy

Drawing Title
Indicative Site Access Drawings Sheet 5 of 14

Scale
1:500 @A1

Status
DCO Application

APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 5

Rev
P02

EXISTING CARRIAGEWAY WIDTH BASED ON OS MASTERMAP DATA

PROPOSED CARRIAGEWAY WIDTH

2.4m x 103m VISIBILITY SPLAY BASED ON 39.9mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM DMRB

2.4m x 40m VISIBILITY SPLAYS BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

TTM9 (TEMPORARY SIGNALS)

T654#
T653#
G652#
T667#
T666#
T651#
T650#
H665#
R8.0m
R4.0m
R6.0m
SA11
SA10
SPRING HILL

2.4m x 40m VISIBILITY SPLAYS BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

2.4m x 119m VISIBILITY SPLAY BASED ON 43.6mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM DMRB

TSL4-B (30mph)

VIEWPORT 1: Site Access Arrangement (Accesses SA10 & SA11)

VIEWPORT 2: 16.5m Articulated HGVs Right Turn In (Access SA10)

VIEWPORT 3: 16.5m Articulated HGVs Left Turn Out (Access SA10)

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

Order Limits

Temporary Access Track - To be used during Construction & Decommissioning Phases only

Visibility Splay

Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council

Extent of Carriageway Widening Required to Facilitate Two-Way HGV Movement

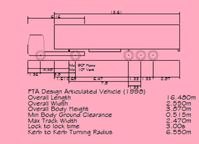
Temporary speed limit

Temporary traffic signals

Indicative Extent of Existing Hedgerow

Existing Trees & Root Protection Area

VEHICLE USED IN TRACKING:



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0 10 20 30 40 50 100m

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Project
East Park Energy

Drawing Title
Indicative Site Access Drawings Sheet 6 of 14

Scale
1:500 @A1

Status
DCO Application

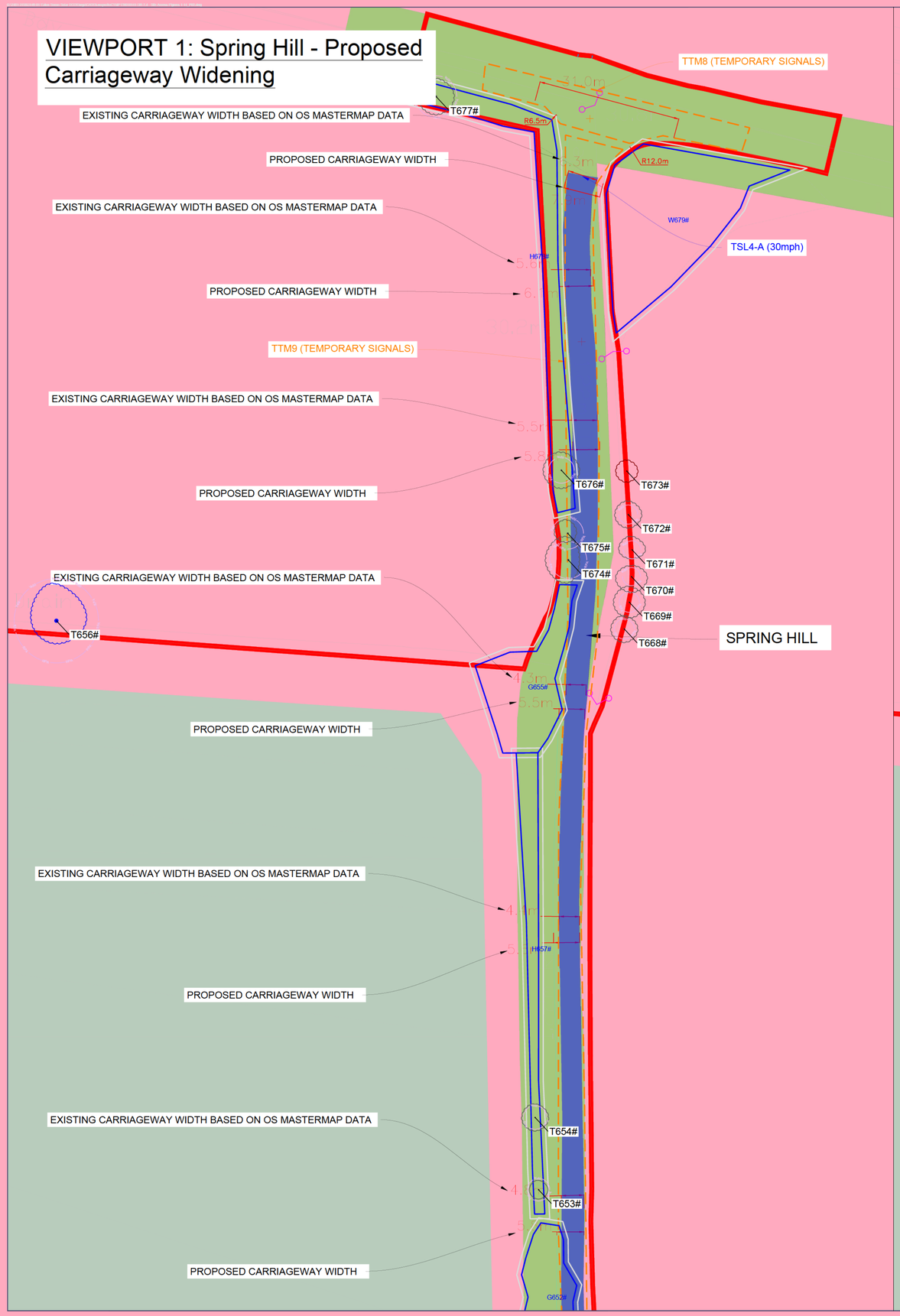
APFP Reference
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Submission Reference
EN010141/DR/7.4

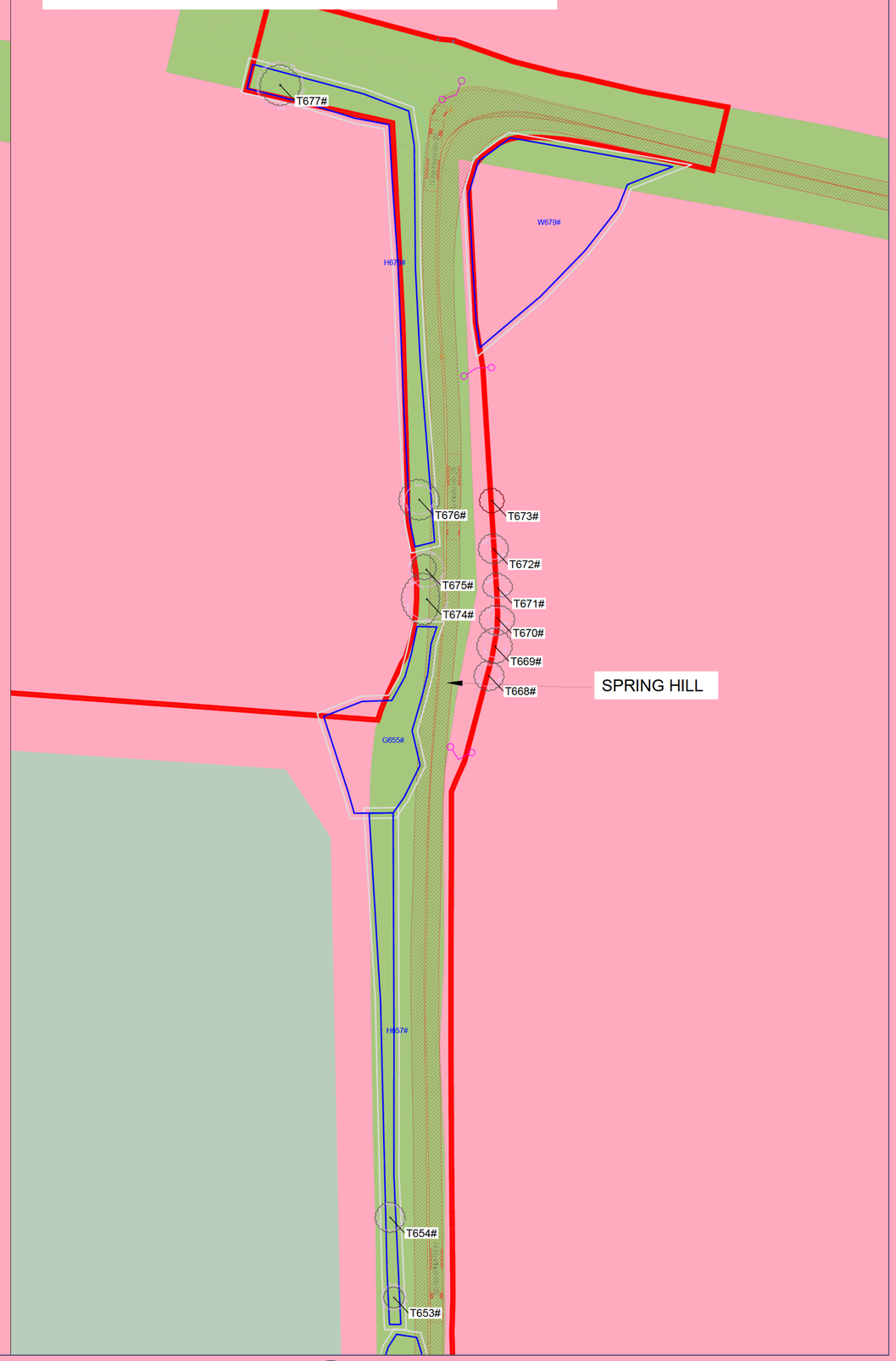
Dwg no
Figure 6

Rev
P02

VIEWPORT 1: Spring Hill - Proposed Carriageway Widening



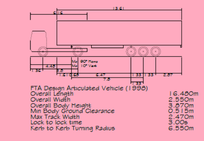
VIEWPORT 2: Spring Hill - 16.5m Articulated HGVs Two-Way Movements



Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Extent of Carriageway Widening Required to Facilitate Two-Way HGV Movement
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

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Drawing Title
Indicative Site Access Drawings
Sheet 7 of 14

Scale
1:500 @A1

Status
DCO Application

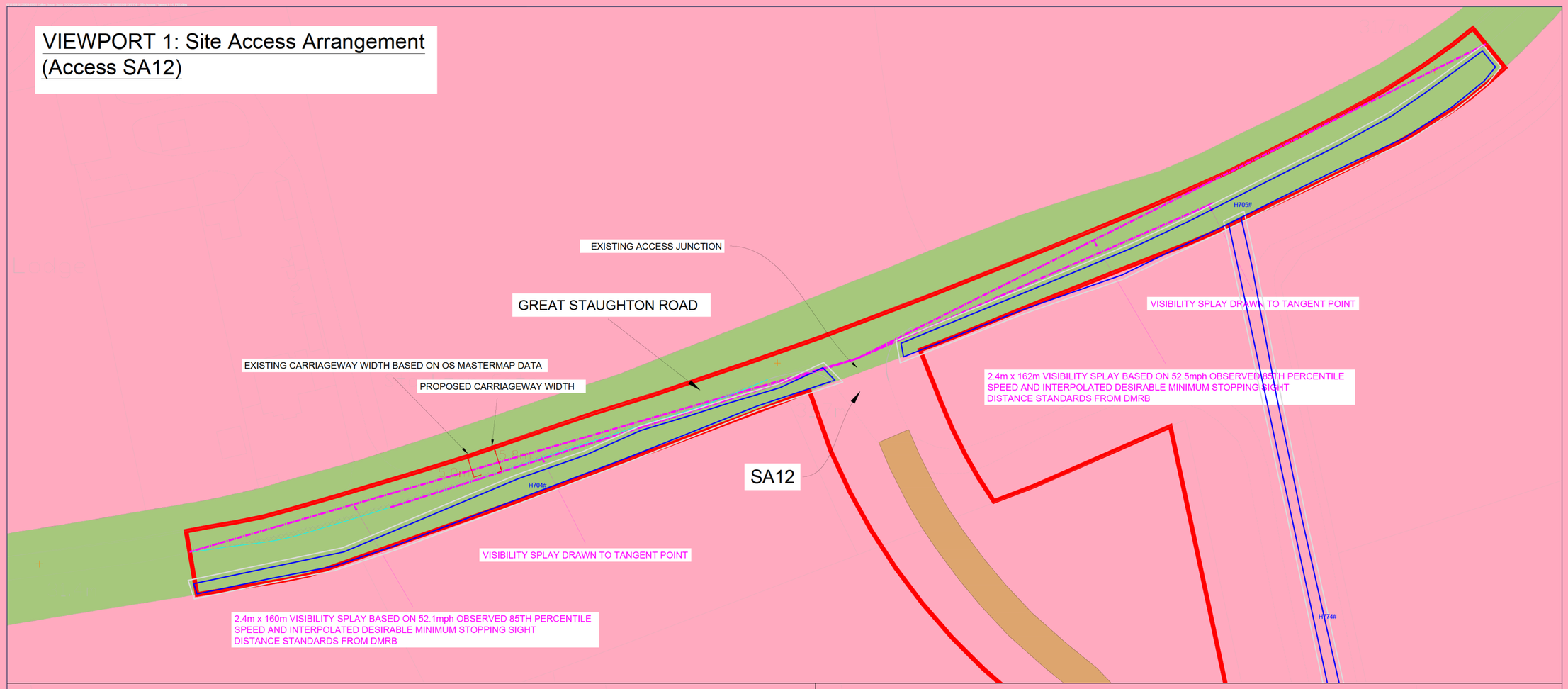
APFP Reference
Regulation 5(2)(a)

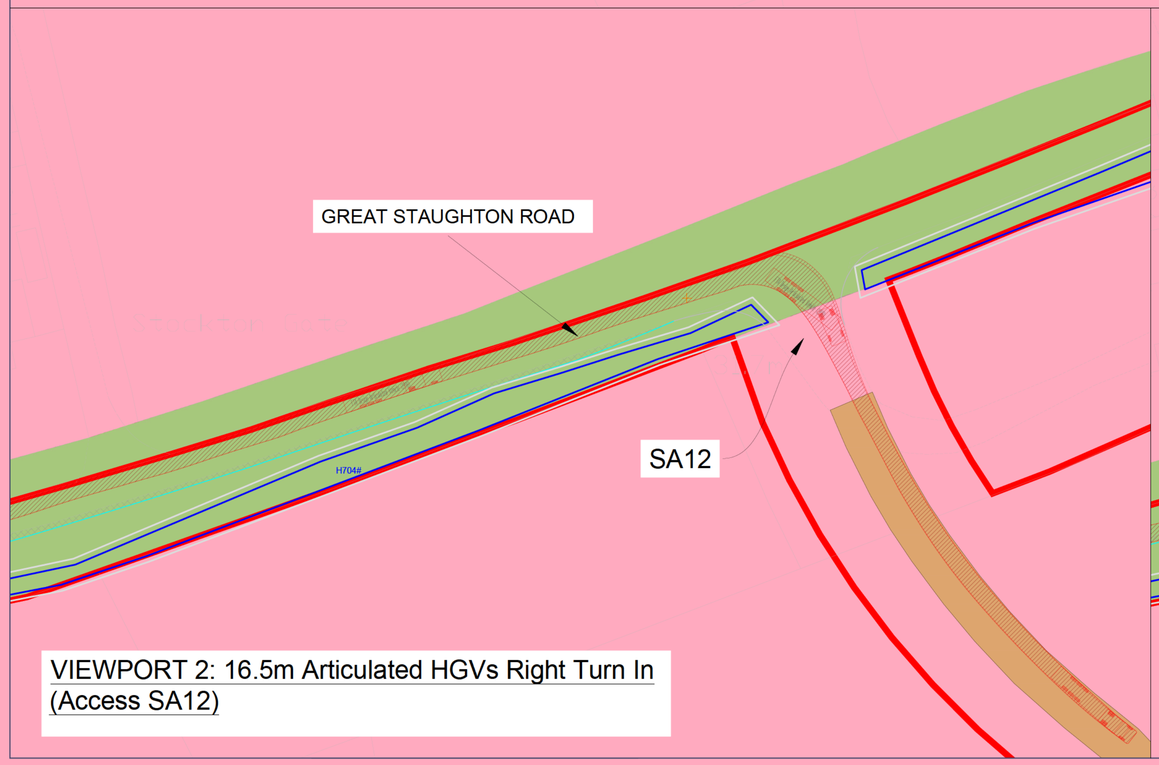
Submission Reference
EN010141/DR/7.4

Dwg no
Figure 7

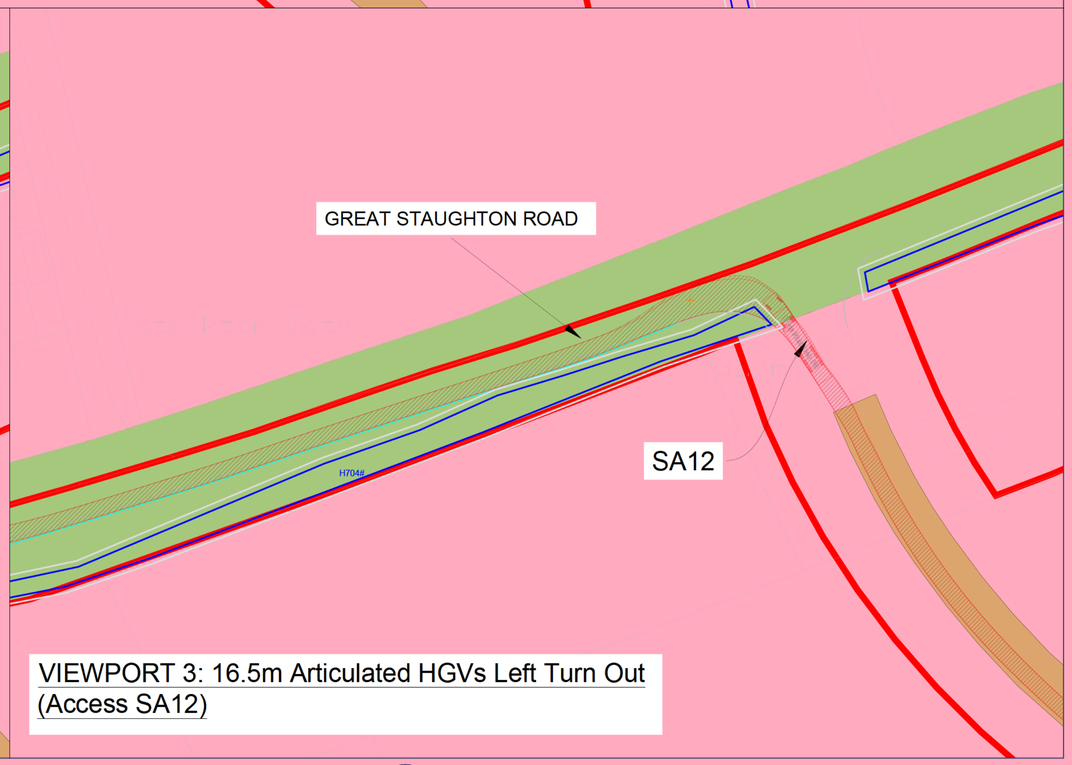
Rev
P02

VIEWPORT 1: Site Access Arrangement (Access SA12)





VIEWPORT 2: 16.5m Articulated HGVs Right Turn In (Access SA12)

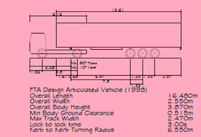


VIEWPORT 3: 16.5m Articulated HGVs Left Turn Out (Access SA12)

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases
- Potential Areas of Minor Carriageway Widening Within Adopted Highway Verge to Create Additional Passing Places
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

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N

0 10 20 30 40 50 100m

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Client: BSSL Cambsbed 1 Ltd

Project: East Park Energy

Drawing Title: Indicative Site Access Drawings Sheet 8 of 14

Scale: 1:500 @A1

Status: DCO Application

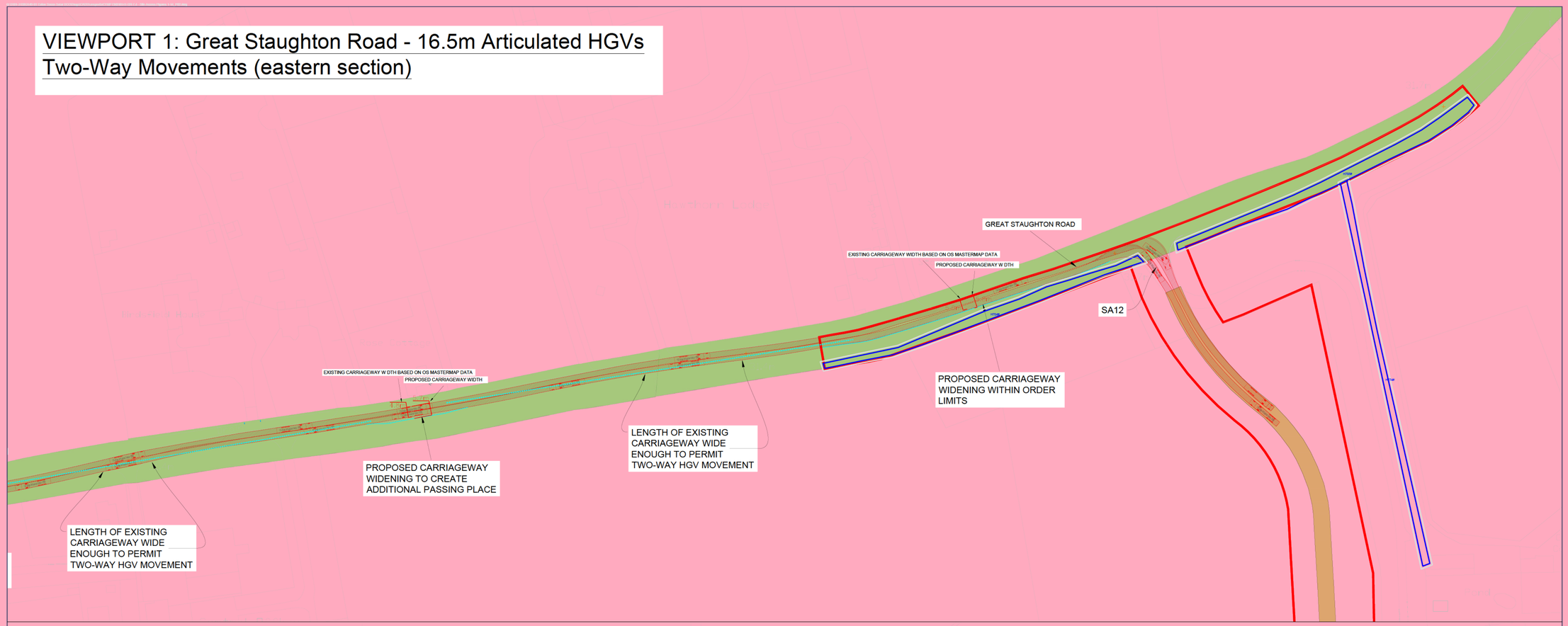
APFP Reference: Regulation 5(2)(a)

Submission Reference: EN010141/DR/7.4

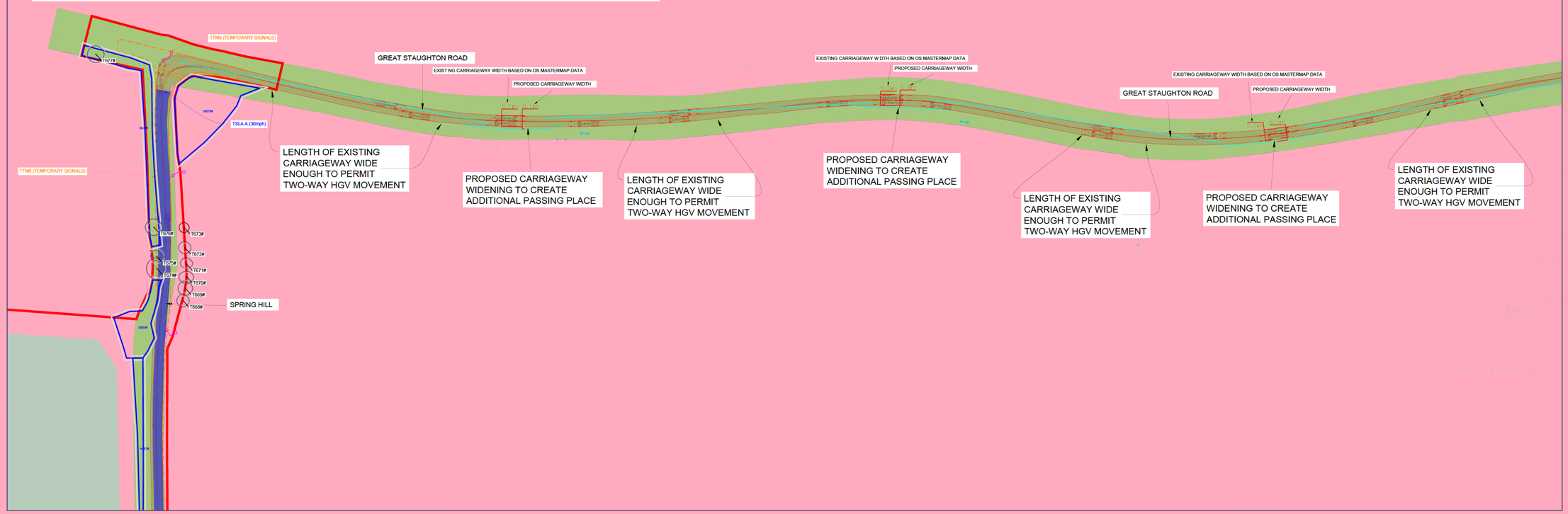
Dwg no: Figure 8

Rev: P02

VIEWPORT 1: Great Staughton Road - 16.5m Articulated HGVs Two-Way Movements (eastern section)



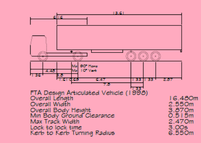
VIEWPORT 2: Great Staughton Road - 16.5m Articulated HGVs Two-Way Movements (western section)



Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Proposed Areas of Minor Carriageway Widening Within Adopted Highway Verge to Create Additional Passing Places
- Forward Visibility Between Proposed Additional Passing Places
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

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N

0 50 100 150 200m

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Drawing Title
Indicative Site Access Drawings
Sheet 9 of 14

Scale
1:1000 @A1

Status
DCO Application

APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 9

Rev
P02

VIEWPORT 1: Site Access Arrangement (Accesses SA14 & SA15 - Visibility Splays)

2.4m x 69m VISIBILITY SPLAY BASED ON 41.4mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED STOPPING SIGHT DISTANCE STANDARDS FROM THE MfS

2.4m x 40m VISIBILITY SPLAYS BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

TTM10 (TEMPORARY SIGNALS)

TSL5-B (30mph)

SA14

SA15

MOOR ROAD

2.4m x 40m VISIBILITY SPLAYS BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

2.4m x 69m VISIBILITY SPLAYS BASED ON 41.4mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED STOPPING SIGHT DISTANCE STANDARDS FROM THE MfS

TSL5-A (30mph)

ACCESS TRACK WIDENED TO 6m ON APPROACH TO ACCESS JUNCTION

VIEWPORT 2: Site Access Arrangement (Accesses SA14 & SA15 - Dimensions) SCALE - 1:250 @A1

SA14

SA15

6.0m

6.0m

6.0m

6.0m

MOOR ROAD

VIEWPORT 3: 16.5m Articulated HGVs Westbound

SA14

SA15

MOOR ROAD

VIEWPORT 4: 16.5m Articulated HGVs Eastbound

SA14

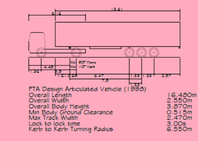
SA15

MOOR ROAD

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Temporary Access Track - To be used during Construction & Decommissioning Phases only
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

VEHICLE USED IN TRACKING:



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0 10 20 30 40 50 100m

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Project
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Drawing Title
Indicative Site Access Drawings
Sheet 10 of 14

Scale
1:500 @A1

Status
DCO Application

APFP Reference
Regulation 5(2)(a)

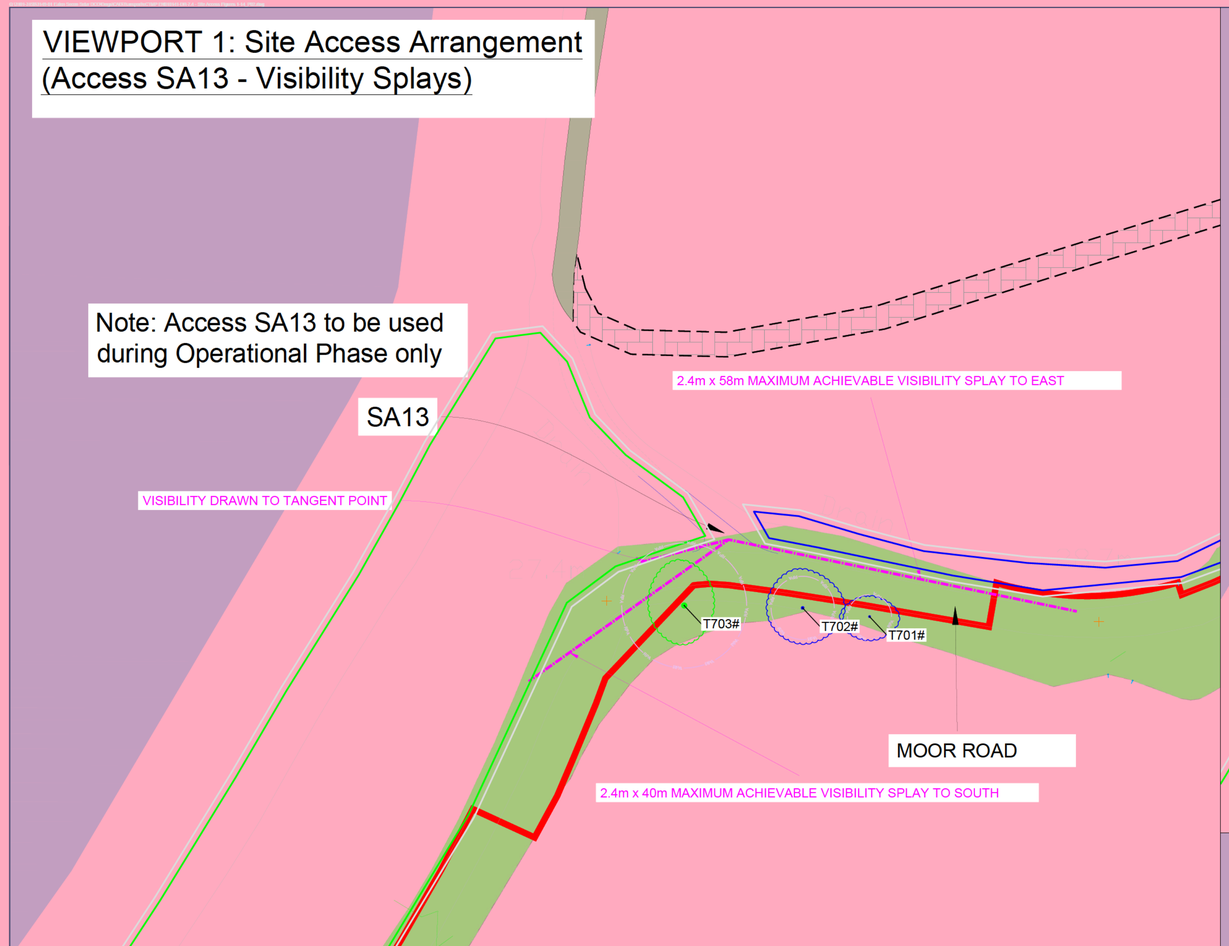
Submission Reference
EN010141/DR/7.4

Dwg no
Figure 10

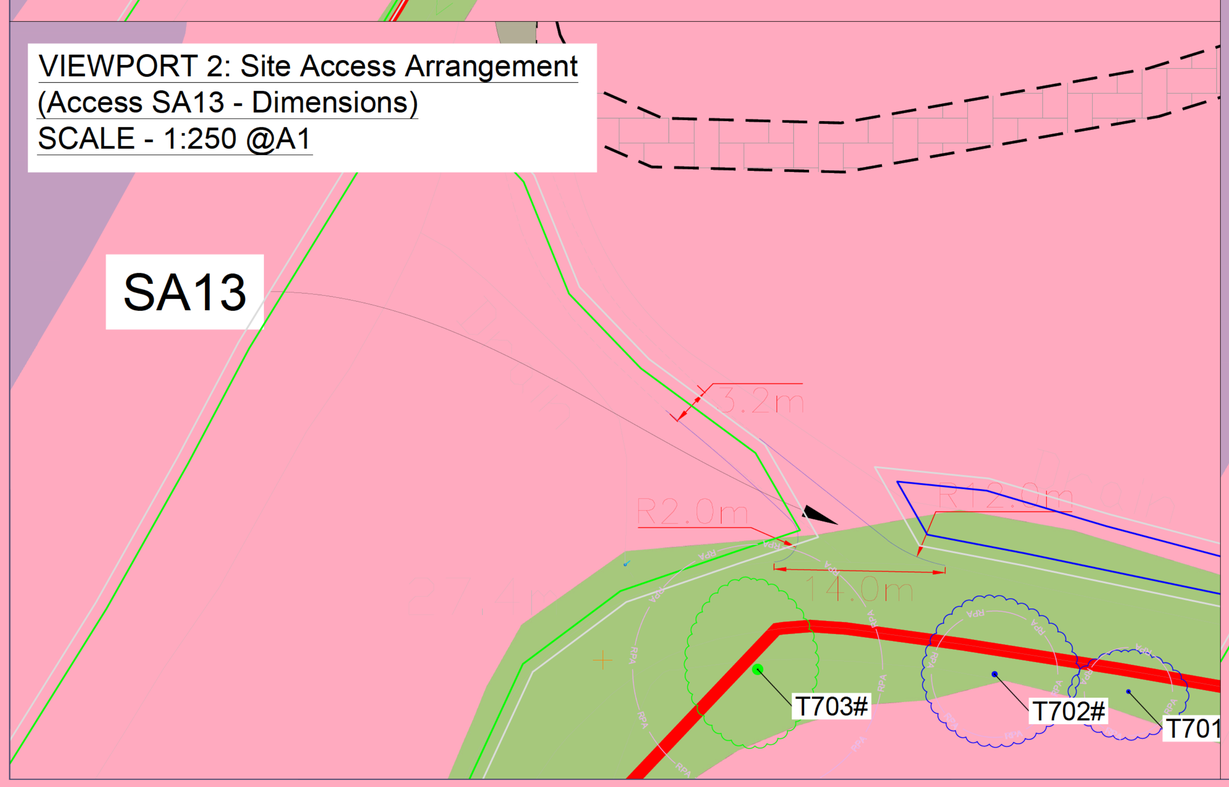
Rev
P02

VIEWPORT 1: Site Access Arrangement (Access SA13 - Visibility Splays)

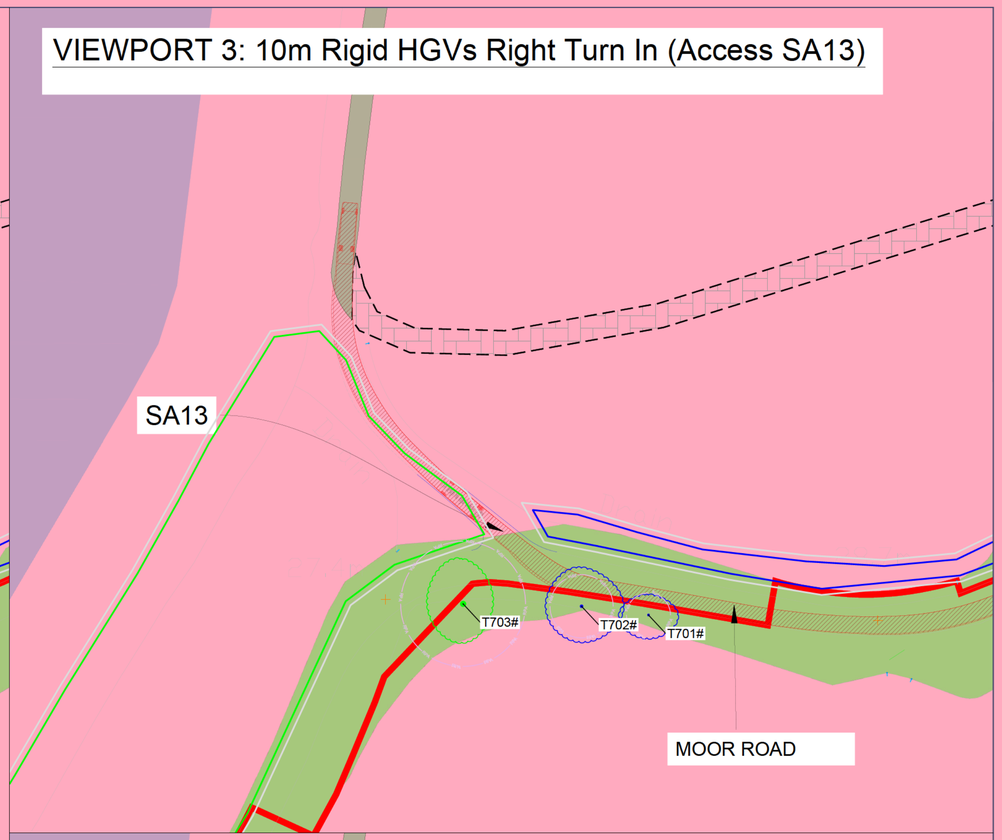
Note: Access SA13 to be used during Operational Phase only



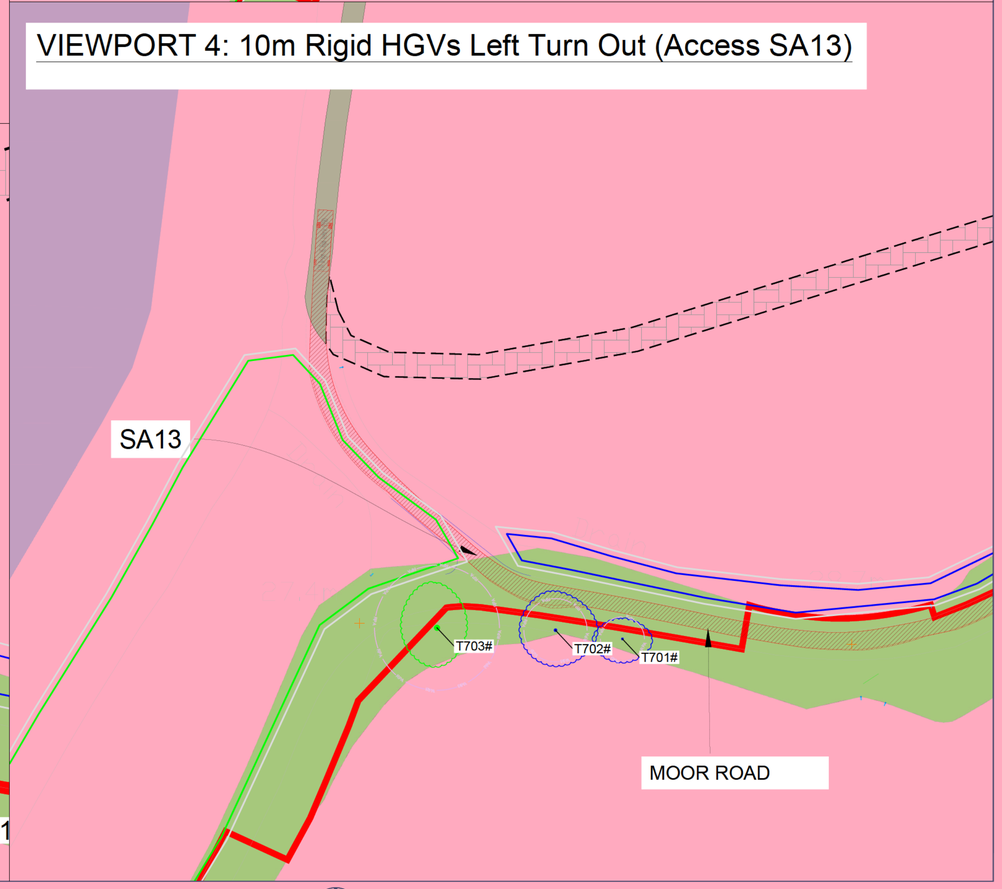
VIEWPORT 2: Site Access Arrangement (Access SA13 - Dimensions) SCALE - 1:250 @A1



VIEWPORT 3: 10m Rigid HGVs Right Turn In (Access SA13)



VIEWPORT 4: 10m Rigid HGVs Left Turn Out (Access SA13)



Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

- Order Limits
- Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases
- Temporary Access Track - To be used during Construction & Decommissioning Phases only
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Indicative Extent of Existing Hedgerow
- Existing Trees & Root Protection Area

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Indicative Site Access Drawings Sheet 11 of 14

Scale
1:500 @A1

Status
DCO Application

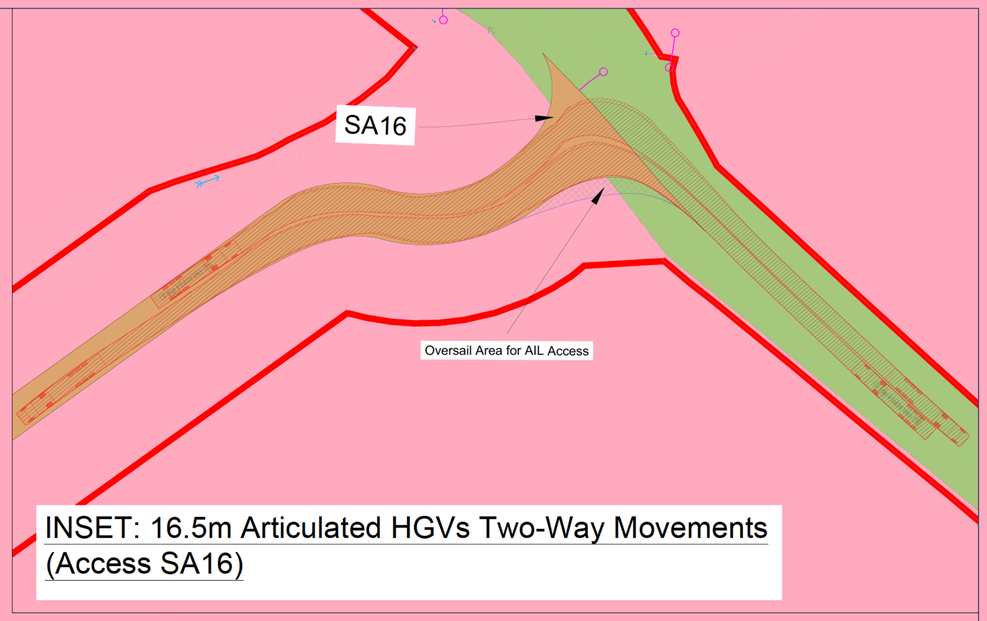
APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 11

Rev
P02

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3



INSET: 16.5m Articulated HGVs Two-Way Movements (Access SA16)

TTM11 (TEMPORARY SIGNALS)

SA16

R12.0m

39.0m

8.50

R16.0m

H741#

H742#

H714#

T706#

T707#

6.0m

2.4m x 215m VISIBILITY SPLAY BASED ON DMRB DESIRABLE MINIMUM STOPPING SIGHT DISTANCE FOR 60MPH ROAD

VISIBILITY DRAWN TO TANGENT POINT

CARRIAGEWAY WIDTH BASED ON OS MASTERMAP DATA

5.6m

B645 KIMBOLTON ROAD

Order Limits

Permanent Access Track - To be used during Construction, Operational & Decommissioning Phases

Temporary Access Track - To be used during Construction & Decommissioning Phases only

Visibility Splay

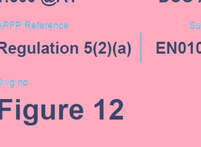
Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council

Extent of Required Temporary Widening of Existing Junction

Indicative Extent of Existing Hedgerow

Existing Trees & Root Protection Area

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Sheet 12 of 14

Scale
1:500 @A1

Status
DCO Application

APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 12

Rev
P02

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

TSL6-B (30mph)

2.4m x 74m VISIBILITY SPLAYS BASED ON 43.3mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED STOPPING SIGHT DISTANCE STANDARDS FROM THE MfS

2.4m x 76.5m VISIBILITY SPLAYS BASED ON 44.3mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED STOPPING SIGHT DISTANCE STANDARDS FROM THE MfS

SA17

TSL6-A (30mph)

2.4m x 40m VISIBILITY SPLAYS BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

T752#

T749#

SA18

EXISTING ACCESS JUNCTION

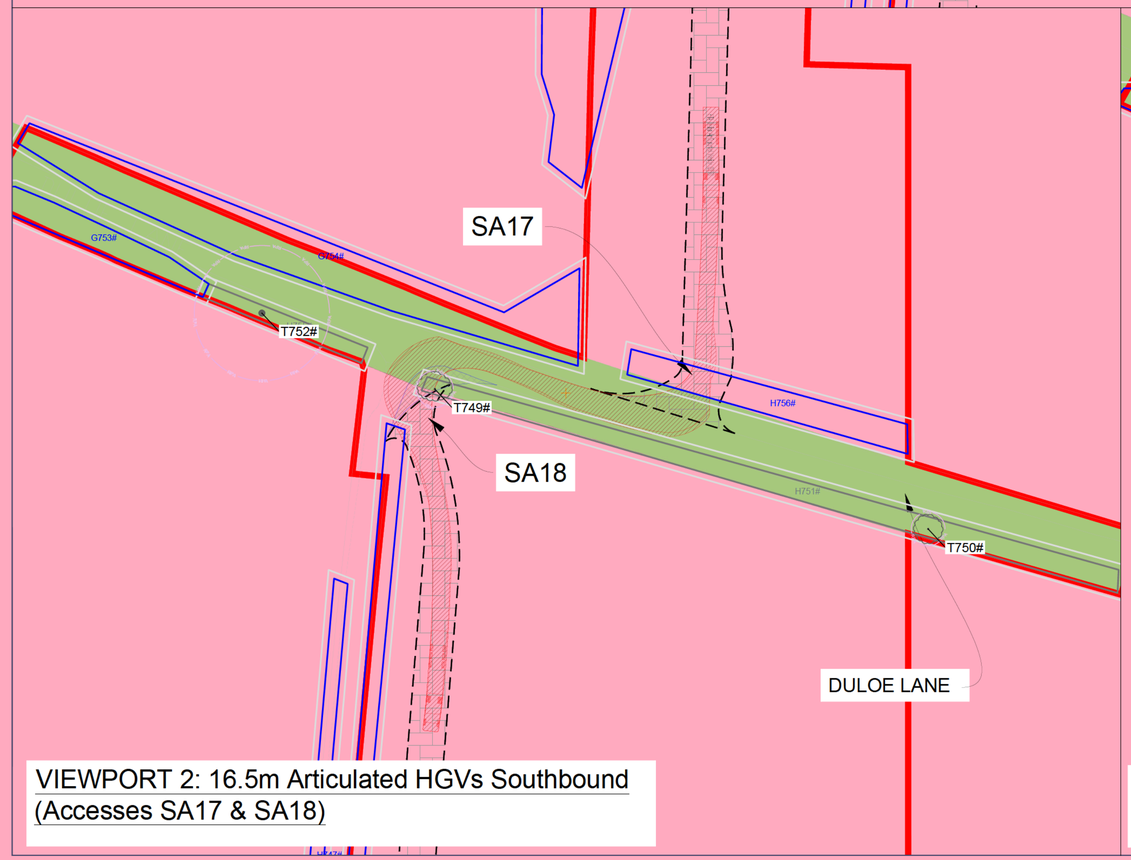
T750#

2.4m x 40m VISIBILITY SPLAYS BASED ON REDUCED TEMPORARY SPEED LIMIT AND DESIRABLE MINIMUM STOPPING SIGHT DISTANCE STANDARDS FROM THE MANUAL FOR STREETS

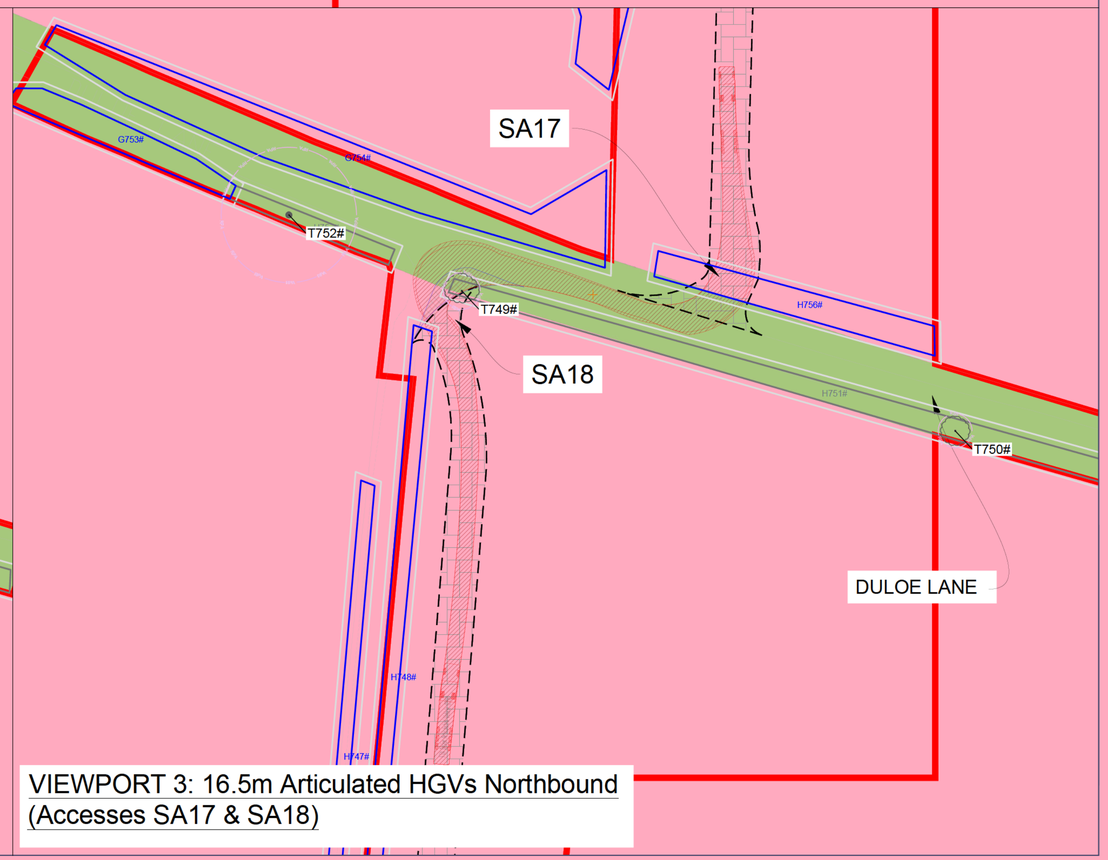
DULOE LANE

TTM12 (TEMPORARY SIGNALS)

VIEWPORT 1: Site Access Arrangement (Accesses SA17 & SA18)



VIEWPORT 2: 16.5m Articulated HGVs Southbound (Accesses SA17 & SA18)



VIEWPORT 3: 16.5m Articulated HGVs Northbound (Accesses SA17 & SA18)

Order Limits

Temporary Access Track - To be used during Construction & Decommissioning Phases only

Visibility Splay

Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council

Extent of Required Temporary Widening of Existing Junction

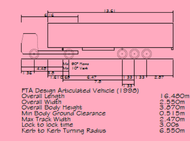
Temporary speed limit

Temporary traffic signals

Indicative Extent of Existing Hedgerow

Existing Trees & Root Protection Area

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Drawing Title
Indicative Site Access Drawings Sheet 13 of 14

Scale
1:500 @A1

Status
DCO Application

APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 13

Rev
P02

Rev	Date	Comment
P01	07/04/2026	Deadline 1
P02	22/05/2026	Deadline 3

2.4m x 82m VISIBILITY SPLAY BASED ON 46.3mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED STOPPING SIGHT DISTANCE STANDARDS FROM THE MfS

2.4m x 88m VISIBILITY SPLAY BASED ON 48.4mph OBSERVED 85TH PERCENTILE SPEED AND INTERPOLATED STOPPING SIGHT DISTANCE STANDARDS FROM THE MfS

TSL7-B (30mph)

TSL7-A (30mph)

TTM13 (TEMPORARY SIGNALS)

EXISTING ACCESS JUNCTION

SA19

SA20

BUSHMEAD ROAD

H744#

H745#

R10.0m

R6.0m

19.0m

R4.0m

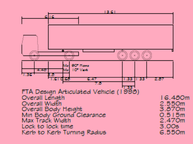
VIEWPORT 1: Site Access Arrangement (Accesses SA19 & SA20)

VIEWPORT 2: 16.5m Articulated HGVs Southbound (Accesses SA19 & SA20)

VIEWPORT 3: 16.5m Articulated HGVs Northbound (Accesses SA19 & SA20)

- Order Limits
- Temporary Access Track - To be used during Construction & Decommissioning Phases only
- Visibility Splay
- Adopted Highway Boundary provided by Cambridgeshire County Council & Bedford Borough Council
- Temporary speed limit
- Temporary traffic signals
- Indicative Extent of Existing Hedgerow
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Sheet 14 of 14

Scale
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Status
DCO Application

APFP Reference
Regulation 5(2)(a)

Submission Reference
EN010141/DR/7.4

Dwg no
Figure 14

Rev
P02