AENC-ARC-ENV-REP-0007

Norwich to Tilbury

Volume 7: Other Documents

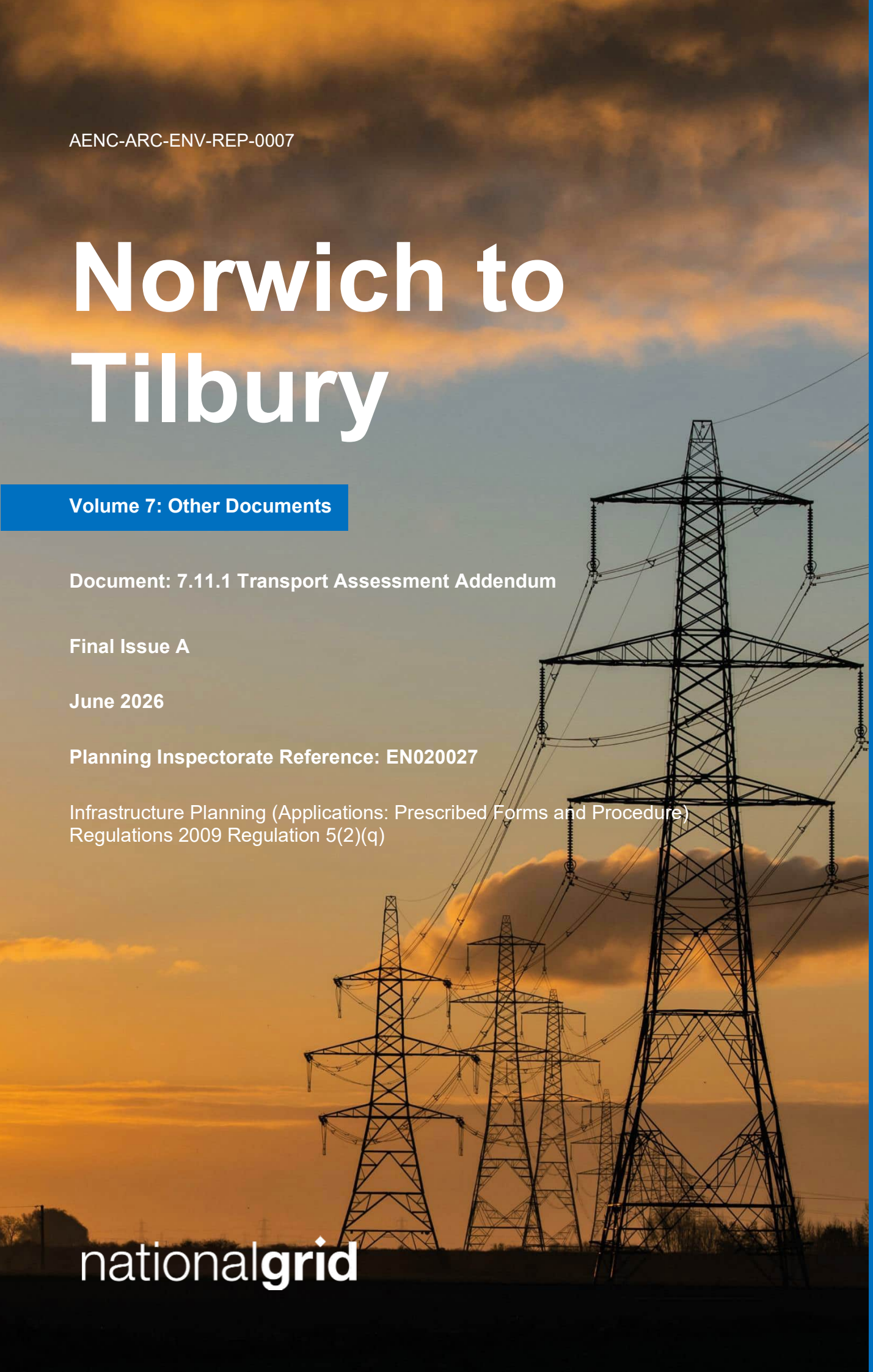
Document: 7.11.1 Transport Assessment Addendum

Final Issue A

June 2026

Planning Inspectorate Reference: EN020027

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



nationalgrid

Contents

1.	**Introduction**	**1**
2.	**Policy and Guidance**	**2**
3.	**Collision Analysis**	**4**
3.1	Background	4
3.2	Primary Access Routes	5
3.3	MRN and SRN Junctions	6
4.	**Committed Developments**	**7**
4.1	Pre DCO Submission	7
4.2	Post DCO Submission	7
4.3	NSIP Cumulative Impact	10
5.	**Modelling Review and Update**	**12**

Abbreviations 14
Glossary 15

Appendix A. Collision Data
Appendix B. Update on Committed Developments
Appendix C. Junction Modelling Update Technical Notes

1. Introduction

1.1.1 This document (**Document AENC-ARC-ENV-REP-0007**) provides an addendum to **7.11 Transport Assessment [APP-333]**, which was submitted to support the application for development consent under the Planning Act 2008 for the Norwich to Tilbury Project, accepted on September 2025. This addendum also provides an update to information provided within:

- **7.11 Transport Assessment - Appendix D - Committed Developments [APP-337]**
- **7.11 Transport Assessment - Appendix E - LRN AM and PM Peak Construction Traffic Committed Development Impacts [APP-334]**.

1.1.2 The purpose of this Transport Assessment Addendum is to summarise the information and assessments undertaken since National Grid's application for development consent, which has been requested by National Highways and Local Highway Authorities (LHAs) (Norfolk County Council, Suffolk County Council, Essex County Council and Thurrock Council) through continued engagement with National Grid. The information provided within this addendum does not change the findings of the assessments undertaken within **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271].**

1.1.3 The structure of this addendum is as follows:

- Section 2: Policy Review - Provides an update of any policy changes since submission and provides acknowledgement that policy and guidance outlined by LHAs within their Local Impact Reports (LIRs) have been reviewed and taken into consideration where appropriate.
- Section 3: Collision Analysis - Provides a supplementary review of the latest available three-year (for local roads) and five-year (for major and strategic roads) Stats 19 collision data along PARs and at junctions. This was at the request of Norfolk County Council, Essex County Council and National Highways, and excludes data obtained during Covid-19 restrictions and presents whether there are any changes to collision patterns/clusters based on the latest data from 2024 and 2025 and provides more information on causation as part of a due diligence exercise.
- Section 4: Committed Developments - Provides a supplementary review of any developments that were not included within the initial review of traffic and Transport Assessment within the TA/ES submitted as part of the DCO but have been requested by a description and review of further planning applications identified by LHAs and NH planning
- Section 5: Modelling Review and Update – Provides a summary of the updates to modelling assessments undertaken at junctions in response to engagement with Local Highway Authorities and National Highways and updates to information on committed developments.

2. Policy and Guidance

2.1.1 This section provides an overview of any known updated policy and guidance in relation to the assessment on transport impacts as a result of the Project as of April 2026.

2.1.2 Section 3 of **7.11 Transport Assessment [APP-333]** provides a high-level summary of the key relevant policy context relating to transport for the Project at the national, regional, and local levels. Further information regarding planning policy can be found in **6.2 Environmental Statement Chapter 2 - Key Legislation and Planning Policy Context [APP-126], 5.6 Planning Statement [APP-085], 5.7 Policy Compliance Document [APP-086]** submitted as part of the DCO application.

2.1.3 **The Policy Compliance Document [APP-086]** includes an assessment of the Project against relevant National Policy Statements (NPSs), National Planning Policy Framework (NPPF) and local development plan policies which were in place on or before 1 April 2025. An NPS Tracker, has been prepared which sets out the changes/modifications to any relevant updated NPS, any other new government policy intentions for energy and critical energy infrastructure that are not addressed within the NPSs, and provides updates in regard to the draft NPPF (published December 2025).

2.1.4 In April 2025, the government launched a consultation on proposed changes to EN-1, EN-3 and EN-5 that ended on 29 May 2025. The updated NPSs were subsequently published in November 2025 and came into force on 6 January 2026. As such, Section 5.14 of 8.4.2 Policy Compliance Tracker incorporates an assessment of the Project against the following policy documents in relation to Traffic and Transport:

- Overarching National Policy Statement for Energy (EN-1) (DESNZ, 2026a)
- National Policy Statement for Electricity Networks Infrastructure (EN-5) (DESNZ, 2026b)

2.1.5 Para. 1.6.3 of EN-1 notes that “the 2025 amendments will therefore have effect only in relation to those applications for development consent accepted for examination after the final publication of those amendments. However, any emerging draft NPSs (or those designated but not yet having effect) are potentially capable of being important and relevant considerations in the decision-making process." Therefore, as part of due diligence, a review of the updated EN-1 and EN-5 policies (published in November 2025) has been undertaken to understand any notable changes.

2.1.6 It was found that the policies maintain the assessment principles and generic impact considerations outlined in the previous version of the EN-1 and EN-5 (2024), ensuring continuity in evaluating environmental and traffic effects. It includes the same policy requirements as in the previous version, except there is additional text on including a vision led approach in relation to the assessment of potential transport impacts within the ES and in Travel Plan requirements. **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271]** are considered to be in compliance with these Policy’s.

2.1.7 A review of the updated EN-1 concluded that the proposed traffic and transport assessment, routing strategy and approach to mitigation complies with Paragraph 5.14.12 of EN-1 (2024) which states that any mitigation (including re-routeing traffic) is only appropriate if it is feasible and operationally reasonable.

2.1.8 Within **Suffolk County Council, Babergh District Council and Mid Suffolk District Council Local Impact Report [REP1-178]** it was raised that National Grid had not made reference within Section 3.7 of **7.11 Transport Assessment [APP-333]** to Suffolk's published guidance on the transport aspects relevant to NSIPS**.** National Grid can confirm that the supplementary guidance for NSIP developers and project promoters has been considered when undertaking the assessments within **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271]** but was omitted in error. National Grid considers that it has undertaken an appropriate assessment of the Project's traffic and transport impacts in line with current guidance and best practice.

2.1.9 A review of the local policy context considered by the Project is provided within Section 3 of **7.11 Transport Assessment [APP-333].** Within **Thurrock Council Local Impact Report [REP1-187]** it was identified that although reference is made to the Thurrock Transport Strategy 2013-2026 (Thurrock Council, 2022), no reference was made to the emerging Thurrock Transport Strategy 2026-2040 (to be adopted mid-2026), and Thurrock Local Transport Plan Vision 2050 (adopted February 2023).

2.1.10 National Grid can confirm that all relevant transport strategy, policy and guidance were reviewed and agreed by Thurrock Council following their review of the Draft Transport Assessment in February 2025

2.1.11 The Emerging Thurrock Transport Strategy 2026-2040 was published in November 2025 and was under consultation until February 2026, post Development Consent Order submission. The Transport Strategy establishes a broader long-term plan for transport and investment in Thurrock in terms of sustainable developments and improved infrastructure, leading to economic growth. A number of major transport schemes are proposed which are necessary to address the challenges and opportunities facing Thurrock, to help achieve the vision, goals and policies. Projects include new bridges, road links, bus station interchanges, active travel links and placemaking. The Transport Strategy is therefore not specifically relatable to the Project due to the temporary nature of the impact expected. The Applicant will continue to engage with Thurrock Council to understand any impact to the assessment of the Primary Access Routes (PARs) related to the goals and major schemes provided within the Emerging Thurrock Transport Strategy 2026-2040.

2.1.12 The Thurrock Local Transport Plan Vision 2050 aims to create a sustainable, integrated transport network that enhances connectivity, supports economic growth, and promotes environmentally friendly travel options. The plan was reviewed but was not explicitly referenced within the **7.11 Transport Assessment [APP-333]** as the vision establishes a broader long-term plan for transport in Thurrock and it is not specifically relatable to the Project due to the temporary nature of the impact.

3. Collision Analysis

3.1 Background

3.1.1 A review of baseline personal injury collision data on the roads links forming the PARs, and the junctions that connect the PARs with the Strategic Road Network (SRN) and Major Road Network (MRN) is presented within Section 4.4 of **7.11 Transport Assessment [APP-333]** and Section 16.5 of **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271]**. For the PARs on the local highway network the latest three-year personal injury collision data (2021-2023) was obtained from DfT Road Safety Data. For junctions on the Strategic Road Network (SRN) and Major Road Network (MRN), five-year data was obtained for the period 2019 to 2023, but with the exclusion of 2020 data due to COVID-19 restrictions. Assessment periods were based on standard practice used on similar energy infrastructure projects.

3.1.2 Following the submission of the DCO, comments were received from Norfolk County Council, Essex County Council and National Highways in their Relevant Representations, RR-2657 and RR-2753 respectively on the collision analysis undertaken within **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271].** Their responses are detailed below:

- Norfolk County Council (NCC), Paragraph 12.8: “Accident data referred to in the ES27 appear to date from 2019 (i.e. pre-covid). Given the observed changes to working and travelling patterns since covid, NCC would request that more recent data is used.”
- National Highways (NH), Paragraph 4.2.13: “Personal Injury Collision (PIC) data for the SRN has been obtained from DfT Road Safety Data for the four-year period 2019, 2021-2023 at the SRN junctions included in the assessment. NH observes that this timeframe does not include a full five-year period. The Applicant is requested to adopt the standard approach for the PIC analysis to cover a full 60-month period, excluding data gathered between March 2020 and September 2021 (when periods of COVID-19 lockdowns were in place), to better reflect 'normal' road conditions. The analysis of PIC data within the TA notes collision clusters at A14 Junction 50, A14 Junction 52, A14 Junction 55, and A12 Junction 26 where there are notable bends in the road alignment. This analysis could indicate underlying issues with the road layout at these junctions. NH requests that the Applicant investigates any causation factors in the road layout. The PIC analysis should also include any SRN junctions forecast to experience a material increase (>30/peak hour) in traffic flows from the proposed development.”

3.1.3 A technical note is provided within Appendix A which presents the findings of the supplementary review of collision data and includes an update on the assessment of the road collisions presented within **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]** and **7.11 Transport Assessment [APP-333]**. The assessment has been completed post-DCO submission with the latest DfT Road Safety Data available to identify any further collision clusters and/or any changes to the conclusions from the **7.11 Transport Assessment [APP-333]** and the **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]**.

3.1.4 The following time periods have been analysed:

- The latest available three-year period for Personal Injury Collisions (PICs) on the PARs. The analysed period comprises July 2022 to June 2025 and was confirmed as appropriate by Norfolk County Council.
- An analysis of the latest five-year collision data on the SRN and MRN junctions that connect with the PARs has been carried out. National Highways confirmed in February 2026 that PICs should be analysed for a full 60-month period excluding the period between March 2020 and September 2021. The data then comprises all collisions recorded between January 2019 and June 2025 excluding the period between March 2020 to September 2021.

3.1.5 The assessment has been undertaken using the same methodology as set out within Section 4.4 of **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]**. This included the identification of collision clusters, identification of patterns to establish any area of safety concerns and analysis of collisions involving WCH at both PARs and junctions. In addition, a comparison of the collision rate of PIC per annum (p.a.) per billion vehicle km with the national average was undertaken along the PARs.

3.2 Primary Access Routes

3.2.1 In general, collisions along the PARs appear to be spread throughout the Study Area, rather than in a specific location on any one road link. This conclusion was also noted within the previous assessment reported within **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271].**

3.2.2 Two further collision clusters were identified along the PARs and connecting LRN junctions:

- A1066 Thetford Road (PAR 9);
- A134 Northern Approach Road/Boxted Road roundabout (Site 45).

3.2.3 The analysis on the road links forming the PARs shows that in general the collisions happened during daylight hours, with fine weather conditions and with a dry road surface. No specific collision patterns were identified based on conditions.

3.2.4 The comparison of the road links forming the PARs with the collision rate of PIC per annum (p.a.) per billion vehicle km show that in general most of the road links forming part of the PARs have an collision rate below or similar to the national collision rate per billion vehicle kilometres, with only 17 links with an annual collision rate higher than the national average.

3.2.5 In locations where the collision rate exceeds the national average, these can be influenced by various factors and should be interpreted with caution. In general, these collisions do not suggest a significant pattern or a presence of a hotspot on PARs therefore it is reasonable to conclude that the Project would not have any substantial adverse impact on road safety along the PARs. The conclusions reported within **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]** therefore remain valid.

3.3 MRN and SRN Junctions

3.3.1 The collision data on the SRN and MRN junctions within the Study Area has been carried out for a full 60-month period (5 years) excluding the period between March 2020 and September 2021, that is between January 2019 and June 2025.

3.3.2 The following collision clusters have been identified at the SRN/MRN junctions which were identified within **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]**:

- A47 Norwich Southern Bypass/ A140 Ipswich Road (Site 1);
- A14 J50 Cedars Interchange (Site 21);
- A14 J52 Claydon Roundabout (Site 26).;
- A14 J55 Copdock Interchange (Site 29);
- A120 J29 Ardleigh Crown Interchange (Site 38);
- A12 J26 Eight Ash Green Interchange (Site 46);
- A12 J25 Marks Tey Interchange;
- A127 / A176 Interchange (site 73);
- A127 / A128 Interchange (Site 84);
- A13 Orsett Cock Roundabout (Site 88);
- A140 Stoke Ash (Site 35);
- A120 Braintree Bypass / B1018 Braintree Road (Site 48);
- A120/A131 Great Notley Bypass (Site 56);
- A12 J15 Webbs Farm Interchange (Site 62);
- A1089 Asda Roundabout (Site 89);
- M25 J30 (Site 90).

3.3.3 No new collision clusters were identified from the latest collision analysis at of SRN and MRN junctions. The findings of the original collision analysis within **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]** remains valid.

3.3.4 As established within the **7.3 Outline Construction Traffic Management Plan Revision C**, within the Driver Information Pack locations of collisions clusters would be identified to raise driver's awareness of potential road safety concerns, particularly noting where collisions involving pedestrians or cyclists have been identified. The Driver Information Pack will be updated in regular intervals, and this would include an update to recorded personal injury collision data.

4. Committed Developments

4.1 Pre DCO Submission

4.1.1 Within Section 5.4 of **7.11 Transport Assessment [APP-333],** a review of all committed and other developments identified within the long and short planning lists was undertaken to understand the impact of any likely cumulative transport effects with the Project during peak hours.

4.1.2 This review also helped inform the daily cumulative impact assessment of the worst case peak construction flows within **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]**.

4.2 Post DCO Submission

4.2.1 Following the submission of the DCO application further engagement with local highway authorities and National Highways has been undertaken. This consultation identified a number of additional projects that may impact the peak construction phase of the Norwich to Tilbury Project. This includes additional developments identified by Essex County Council post DCO submission through their review of the list of developments presented within the draft Transport Assessment submitted by National Grid to all LHAs for review in February 2025.

4.2.2 In addition, a number of Nationally Significant Infrastructure Projects (NSIPs) were identified by National Highways for review following DCO submission, that are located outside the Project Study Area Zone of Influence (ZoI) as agreed at scoping stage. However, National Grid notes that these NSIPs may impact the sections of the SRN the Project could use for material delivery. As a result, an assessment of the combined impact has been undertaken on the SRN connecting to the PARs.

4.2.3 For the DCO submission, a cut-off date of 1st April 2025 was applied to define the long list of other existing and, or approved developments for the Cumulative Effects Assessment, allowing sufficient time to complete the assessment before submission. The Planning Inspectorate's Advice Note – Nationally Significant Infrastructure Projects: Advice on Cumulative Effects (2025) states: *'Applicants should state the assessment cut-off date in the Environmental Statement. Where new other existing and, or approved development comes forward following the cut-off date, the Examining Authority may request additional information during the examination in relation to effects arising. The applicant may need to conduct additional assessments to reduce delays and questions during examination'.* Following submission, the long list has been reviewed and updated to include additional developments identified after the 1st April 2025 cut-off up to the 31st January 2026 in line with the Planning Inspectorate's Advice Note.

4.2.4 The updated long list of other existing and, or approved development is reported in Appendix A – 6.17.A2 Environmental Statement Appendix 17.2 – Long List and Short List of Other Developments (Revision B) in **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects – Response Update [REP4-163]** submitted at Deadline 4. The update also included:

- Other existing and, or approved developments assessed within the ES, but for which there is now additional information (e.g., changes to timeframes for construction and operation) as outlined in Table 2.1 of **8.4.3 Report on Interrelationship with Other Infrastructure Projects (Revision B)**. An example of this is where updated construction traffic flows were provided for the Lower Thames Crossing (LTC) project, taking into consideration the programme delay on the LTC project.
- Removal from the long list of other existing and, or approved developments assessed within the ES, that have been withdrawn or are no longer being progressed as outlined in Table 2.1 of **8.4.3 Report on Interrelationship with Other Infrastructure Projects (Revision B)**.

4.2.5 A study area of 3km was used to identify the long list of other existing and, or approved developments included within **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects Response Update [REP4-163]** in accordance with **6.19 Scoping Report** - including appendices B to K **(Final Issue A) [APP-296].** For this assessment, all new developments and updates to existing planning applications have been considered and screened as originally set out in Section 5.4 of **7.11 Transport Assessment [APP-333**], which includes developments beyond the 3km Study Area used for the cumulative effects assessment as detailed in **6.17 Environmental Statement Chapter 17 – Cumulative Effects (Final Issue A) [APP-281]** and **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects Response Update (Final Issue A) [REP4-163]** . For clarity, the criteria included:

- General criteria for developments to be included:
  - Development is either committed (gained planning approval) or an active large scale project requiring EIA (where scoping has been submitted) or large scale development where a decision is pending
  - Development is likely to generate traffic trips that are expected to significantly impact the PAR(s) and/or assessed junction(s)
  - Traffic generated is likely to route along Project PAR(s) and/or through assessed junction(s)
  - Construction (or operation if development not included in TEMPro) traffic trips are likely to occur during the Project peak construction period
  - Construction traffic details are publicly available and provided on the relevant local authority planning portal.
- General criteria for developments to be excluded:
  - Development is unlikely to generate additional traffic trips that would impact the PAR(s) and/or assessed junction(s) significantly (e.g. improvement works to a single dwelling)
  - Development traffic trips unlikely to route along Project PAR(s) and/or through assessed junction(s)
  - No construction programme or details publicly available on the relevant local authority planning portal
  - Development application is Withdrawn or Refused

- Committed development is already included in TEMPro (check is made to confirm if the site is included in the TEMPro National Trip End Model (NTEM) dataset v7.2), by reviewing the NTEM Planning Data Version 7.2 Guidance Note (DfT, 2017). This applies to committed developments that appear to be complete/operational (based on evidence such as satellite imagery). Should they be part of their associated local plan, these committed developments are then excluded to avoid any double counting.

4.2.6 A full summary of this review is provided within Appendix B noting the anticipated impact on traffic flows resulting from the inclusion of additional committed developments on the PARs and at junctions. It also includes relevant updates to developments that were identified since the 1st April 2025 cut-off for the ES and TA assessments until 31st January 2026 in alignment with Appendix A – 6.17.A2 Environmental Statement Appendix 17.2 – Long List and Short List of Other Developments (Revision B) in **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects - Response Update [REP4-163]** submitted for Deadline 4.

4.2.7 From this review, the majority of other developments have been excluded as they do not meet the criteria for inclusion. Only four developments were found to meet the criteria for inclusion, all of which did not change the findings of the assessments presented within **6.16.A4 ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275]** and the **7.11 Transport Assessment (TA) [APP-333]** as detailed below.

- 2024/3817 (South Norfolk Council) - Land to the North of Station Road Tivetshall St Margaret Norfolk, a solar photovoltaic farm development. The construction of this development is likely to overlap with the Project construction activity. The construction traffic has therefore been included to update the assessment for the adjacent PAR 7 – Station Road / B1134 Long Row.
- DC/22/06288 (Babergh and Mid Suffolk District Councils) – Port One Business and Logistics Park. The southern part of this development site, which the application relates to is not allocated as a Strategic Employment site. This development is likely to be complete and operational during the peak Project construction activity. The operational traffic has therefore been included to update the assessment for the adjacent PAR 20 - Bramford Road, Site 26 A14 Claydon roundabout and Site 27 - B1113 Bramford Road / Bramford Road.
- 19/01725/OUT (Basildon District Council) – Land North of London Road. The construction of this development is likely to overlap with the peak Project construction years 2028-2029. The construction traffic has therefore been included to update the assessment for the adjacent PAR 59 – A129 London Road.
- 23/02807/OUT (Braintree District Council) – Land West of Horizon 120 Phase 2. Associated application to discharge a condition 25/02117/DAC provides the Construction Phase Plan which states a completion date of July 2026. The development will likely be operational during the Project construction peak year. The operational traffic has therefore been included to update the assessment for the adjacent PAR 44 – A131 Great Notley Bypass, Site 56 – A120 Braintree Bypass / A131 Great Notley Bypass roundabout.

4.3 NSIP Cumulative Impact

4.3.1 Suffolk County Council, Thurrock Council, and National Highways raised concerns about the cumulative impact of the Project when considered alongside other Nationally Significant Infrastructure Projects (NSIPs), or other large DCO projects, outside of our assessed peak construction activity. Specifically, they questioned whether the assessment accounted for situations where peak construction periods from other projects might overlap with the Project's own construction activities. Their concern is that such overlap could lead to higher levels of traffic than those evaluated in the DCO submission, potentially resulting in a worse traffic scenario than currently assessed. A review has been undertaken using the latest available information for all Projects and is summarised below.

Cumulative Impact of Construction Traffic

4.3.2 The construction schedule/programmes for the identified NSIPs/DCOs that were considered relevant to Traffic and Transport were reviewed based on their submitted information on the associated Planning website as detailed within Section B.3 in Appendix B.

4.3.3 At the request of National Highways and Local Highway Authorities, an assessment was undertaken to consider the overlap of construction peak periods between the Project and relevant NSIP/DCOs.

4.3.4 The reviewed NSIP/DCOs are shown in Table B along with the expected Link PAR or Strategic Road Network that may coincide with the Project construction traffic. This includes:

- EN010092 Thurrock Flexible Generation Plant. North of the existing Tilbury National Grid substation
- EN010109 Sheringham and Dudgeon Extension Projects. SEP is to the north and east of Sheringham Shoal OFW. DEP is north and southeast of Dudgeon OFW
- EN010119 North Falls Offshore Wind Farm
- EN010115 Five Estuaries offshore wind farm
- EN020002 Bramford to Twinstead Reinforcement - Overhead Transmission Lines
- EN010079 Norfolk Vanguard
- EN010087 Norfolk Boreas
- 21/01792/VOC Bathside Bay Stour Road Harwich Essex CO12 3HF
- 23/01594/FULL Freeport East Harwich (Green Energy Centre)

4.3.5 For the review of the impact to PARs, where the NSIPs/DCO overlap with the Project, it was identified that there is no change to the findings reported within **6.16 Environmental Statement Chapter 16 – Traffic and Transport [APP-271].**

4.3.6 For the review of the SRN, where the NSIPs/DCO overlap with the Project, the combined 12-hour traffic flow has been used to assess the forecast changes to the future baseline. Although the peak year is consistent for the A13 and A120, it was identified that the highest combined traffic flows occurred in a separate month than the Project construction peak. However, the difference in traffic flow is negligible at 0.5% and therefore comparable with the total Project peak and combined NSIP/DCO flows.

4.3.7 Table B.22 within Appendix B presents the findings of the review of the SRN identifying the combined total percentage increase from the future 2028 baseline. It is identified that the Project would represent a small increase in traffic flow along the SRN, the highest increase on the A140 at 5.3%. When combined with other NSIPs/DCOs, it can be seen the highest increase would be 7.4% and would also be on the A140. It is not considered that the SRN is sensitive in the reviewed locations, therefore this increase is unlikely to have a significant impact on operational movements, and no mitigation is deemed required. The estimated construction traffic movements for each of the SRN considered are shown in Figure B.1 to Figure B.5.

Cumulative impact of Construction Staff

4.3.8 A review of the overlap of NSIP construction worker profiles and for the Norwich to Tilbury Project was undertaken to assess whether there would be a new combined peak identified as a result of the travel patterns of staff workers arriving to Project sites either, before or after the main working hours (07:00-19:00).

4.3.9 In general, it was found that no new peaks were identified. The exception to this is movements within Thurrock associated with the LTC Project and in Norfolk associated with the Sheringham and Dudgeon Extension Projects. For LTC, this shift in peak hour is a direct result of the sizeable increase in traffic movements associated with the movements on Buckingham Hill Road and Brentwood Road, rather than staff arriving and departing to the Norwich to Tilbury Project, whose movements will be notably lower during these peak hours. In Norfolk, Mangreen Lane would also see a change to peak hours to before and after the working hours (07:00-19:00) due to staff movements associated with the Sheringham and Dudgeon Extension Projects staff movements.

5. Modelling Review and Update

5.1.1 Between April and August 2025 National Grid held meetings with all Local Highways Authorities and National Highways (NH) regarding the **7.11 Transport Assessment [APP-333]** and modelling assessments undertaken at those junctions likely to be sensitive to a change in traffic flows as a result of the peak construction activity associated with the Norwich to Tilbury Project.

5.1.2 As a result of the feedback received by the LHAs and NH on the transport models undertaken to date in support of the **7.11 Transport Assessment [APP-333]**, and through further engagement after the application for development consent, the following junctions have been reviewed and the modelling updated where required:

Norfolk:

- Site 1 - A47 Norwich Southern Bypass / A140 Ipswich Rd Grade-separated roundabout
- Site 12 - A11 Thetford Bypass / A134 / A1066 (Mundford Road) Roundabout

Suffolk:

- Site 25 - A1120 / B1113 Needham Rd
- Site 26 - A14 J52 Claydon roundabout
- Site 27 - B1113 Bramford Rd / Bramford Rd
- Site 29 - A12 Copdock Interchange
- Site 31 - A1214 London Rd / A1071
- Site 32 - A1071 / B1113 Swan Hill Roundabout

Essex:

- Site 38 - A120 Ardleigh Crown Interchange
- Site 40 - A12 Severalls Interchange
- Site 41 - A1341 Via Urbis Romanae/United Way
- Site 44 - A1341 Via Urbis Romanae/A134 Northern Approach Rd
- Site 46 - A12 Junction 26
- Site 48 - A120 Braintree Bypass/B1018 Braintree Rd

Thurrock:

- Site 85 - A1013 Stanford Road / Buckingham Hill Road
- Site 89 - A1089 / Thurrock Park Way / Dock Road (ASDA Roundabout)
- Site 90 – M25 Junction 30

5.1.3 This review and update of junction modelling was undertaken where:

- Baseline data obtained post DCO submission has been used to validate the findings relating to junctions where the LHA/NH commented that the recorded baseline conditions were different to their understanding of typical peak conditions
- The review of other/committed developments post DCO identified flows to be included or amended at junctions based on updated status/available data (two junctions within Essex identified)
- Future baseline highway layout will change as a result of improvements provided by other committed developments that were not identified prior to the cut-off date of 1st April 2025 for committed developments (two junctions identified and modelled in Suffolk - Site 32 A1071 / B1113 Swan Hill roundabout and Site 31 A1214 London Rd / A1071)
- Technical comments received by LHA/NH on modelling files and associated background information

5.1.4 Technical Notes have been prepared for all LHAs and NH presenting the findings of the updated assessments and are provided within Appendix C.

5.1.5 Where validation of baseline models was requested through engagement with LHA/NH, a review of the latest survey traffic data obtained in November 2025 was compared with the original traffic survey data obtained in 2024. Where the traffic flow data did not show any evidence of a significant change, the junction was not subject to remodelling. As such the original results within **7.11 Transport Assessment [APP-333]** are considered robust and remain valid.

5.1.6 From the review, it was determined that the junction models for the following sites required updating:

- Site 27 - B1113 Bramford Rd / Bramford Rd
- Site 31 - A1214 London Rd / A1071
- Site 32 - A1071 / B1113 Swan Hill Roundabout
- Site 48 - A120 Braintree Bypass/B1018 Braintree Rd
- Site 85 - A1013 Stanford Road / Buckingham Hill Road
- Site 89 - A1089 / Thurrock Park Way / Dock Road (ASDA Roundabout)
- Site 90 – M25 Junction 30

5.1.7 The findings of the updated modelling undertaken within Norfolk, Suffolk and Essex identified there would be no notable change to the operation of the junctions as reported within Section 7 of **7.11 Transport Assessment [APP-333]**. Furthermore, where mitigation has been proposed this remains valid as reported within Section 7.11 of **7.11 Transport Assessment [APP-333]** and Section 5.9 of **7.3 Outline Construction Traffic Management Plan Rev [REP3-028]**.

Abbreviations

Abbreviation	Full Reference
LHA	Local Highway Authority
NH	National Highways
NSIP	Nationally Significant Infrastructure Project
DCO	Development Consent Order
PAR	Project Access Route
SRN	Strategic Road Network
TA	Transport Assessment
ES	Environmental Statement
TEMPro	Trip End Model Presentation Program
NTEM	National Trip End Model
NPS	National Policy Statement
NPPF	National Planning Policy Framework
EIA	Environmental Impact Assessment
LTC	Lower Thames Crossing
SEP	Sheringham Extension Project
DEP	Dudgeon Extension Project
APP	Application (used in DCO document reference, e.g., APP-333)
REP	Representation (used in DCO document reference, e.g., REP4-163)

Glossary

Term	Description
Amenity	A term used to describe the character or attractiveness of an area. The assessment of amenity considers landscape and visual, noise and vibration, and traffic and transport effects.
Committed development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the Project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process.
Cumulative effects	The assessment of the impact on the environment which results from the incremental impact of an action when added to other past, present or reasonably foreseeable actions regardless of what agency or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Embedded design measures	Mitigation measures are those that are intrinsic to and built into the design of the Project.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Heavy Goods Vehicle	A motor vehicle with a gross vehicle weight (GVW) of more than 3.5 tonnes, used for transporting goods. This includes lorries, articulated trucks, and other large freight vehicles.
Kilometre	1,000 metres
Light Goods Vehicles	Goods vehicle weighing 3.5 tonnes or less.
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Major Road Network	Middle tier of the country's busiest and most economically important local authority 'A' roads, sitting between the national Strategic Road Network and the rest of the local road network.

Term	Description
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
National Planning Policy Framework	The National Planning Policy Framework is a key part of the government's reforms to make the planning system less complex and more accessible. It vastly simplifies the number of policy pages about planning. The planning practice guidance to support the framework is published online and regularly updated.
Nationally Significant Infrastructure Project	Typically a large scale development of national importance that requires development consent from the Secretary of State, under the Planning Act 2008.
Primary Access Routes	These are the roads on the local road network that would be used by construction vehicles between the strategic road network and the access points within the Order Limits.
Project Section	Geographical 'sections' have been identified that break the Project down into smaller units for ease of description within the documentation. These Project Sections are broken down into eight sections based largely on Local Planning Authority boundaries.
Scoping	Scoping is the process of determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Scoping Report	Report determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Significance	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.
Strategic Road Network	Network of motorways and major A roads managed by National Highways
Transport Assessment	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).
Zone of Influence	The defined geographic

Appendix A. Collision Data

nationalgrid

Contents

Appendix A Collision data analysis 1

A.1 Introduction 1

A.2 Road safety - Local Road Network 2

A.3 Strategic Road Network 13

Table A.1 - Primary Access Routes – Personal Injury Collisions July 2022-June 2025 3
Table A.2 - Primary Access Routes – Conditions data summary (July 2022-June 2025) 7
Table A.3 - Collision data review 8
Table A.4 – LRN Junctions – Collisions involving WCH 12
Table A.5 – Light conditions, weather conditions and road surface conditions 16
Table A.6 – Accident rate per billion vehicle kilometres estimated with the latest three-year personal injury collision data July 2022 – June 2025 on the road links forming the Primary Access Routes. 25
Table A.7 – Collision data involving pedestrian and cyclist casualties for the latest three-year July 2022 – June 2025 PIC data on the road links forming the Primary Access Routes. 30
Table A.8 – Personal Injury Collision data for the latest three-year July 2022 – June 2025 at the junctions on the road links forming the Primary Access Routes. 36
Table A.9 – Personal Injury Collisions 2019-2025 (Excluding March 2020 to September 2021) at the Strategic Road Network and Major Road Network junctions connecting to the Primary Access Routes. 42

Abbreviations 44
Glossary 45
Bibliography 47

Appendix A
Collision data analysis

A.1 Introduction

A.1.1 National Grid Electricity Transmission plc (National Grid) is making an application for development consent to upgrade the electricity transmission system in East Anglia between Norwich and Tilbury, which comprises reinforcement of the electricity transmission network between the existing Norwich Main Substation in Norfolk and Tilbury Substation in Essex, via Bramford Substation, the proposed East Anglia Connection Node (EACN) Substation and the proposed Tilbury North Substation.

A.1.2 An Environmental Statement (ES) and a Transport Assessment (TA) had been prepared and submitted to support the Development Consent Order (DCO) application for the Project under the Planning Act 2008. The assessment presented within **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271]** and **7.11 Transport Assessment [APP-333]** includes an assessment of the road collision data on the road links forming the Primary Access Routes (PARs), and the junctions that connect the PARs with the Strategic Road Network (SRN) and Major Road Network (MRN).

A.1.3 This Appendix has been prepared to respond to comments received from National Highways and Norfolk County Council in their Relevant Representations, RR-2657 and RR-2753 respectively.

- Norfolk County Council (NCC), Paragraph 12.8: "*Accident data referred to in the ES27 appear to date from 2019 (i.e. pre-covid). Given the observed changes to working and travelling patterns since covid, NCC would request that more recent data is used.*"
- National Highways (NH), Paragraph 4.2.13: "*Personal Injury Collision (PIC) data for the SRN has been obtained from DfT Road Safety Data for the four-year period 2019, 2021-2023 at the SRN junctions included in the assessment. NH observes that this timeframe does not include a full five-year period. The Applicant is requested to adopt the standard approach for the PIC analysis to cover a full 60-month period, excluding data gathered between March 2020 and September 2021 (when periods of COVID-19 lockdowns were in place), to better reflect 'normal' road conditions. The analysis of PIC data within the TA notes collision clusters at A14 Junction 50, A14 Junction 52, A14 Junction 55, and A12 Junction 26 where there are notable bends in the road alignment. This analysis could indicate underlying issues with the road layout at these junctions. NH requests that the Applicant investigates any causation factors in the road layout. The PIC analysis should also include any SRN junctions forecast to experience a material increase (>30/peak hour) in traffic flows from the proposed development.*"

A.1.4 The purpose of this Appendix is to provide an update on the assessment of the road collisions presented within **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]** and **7.11 Transport Assessment [APP-333]**. The assessment has been completed post-DCO submission with the latest DfT Road Safety Data available to identify any further collision clusters and/or any changes to the conclusions from the **7.11 Transport Assessment [APP-333]** and the **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]**.

A.1.5 The latest STATS19 data available comprises collision data for 2024 that was published during September 2025, and latest provisional data for the first half of 2025, available from November 2025. Final data for 2025 is expected to be published in September 2026 and has therefore not been included in this Appendix.

A.1.6 This Appendix includes an analysis of the latest available three-year period for Personal Injury Collisions (PICs) on all PARs to provide a consistent approach across all regions. The analysed period comprises July 2022 to June 2025 and therefore excludes the Covid-19 period, as requested by Norfolk County Council.

A.1.7 Additionally, the analysis of the latest five-year collision data on the SRN and MRN junctions that connect with the PARs has been carried out. National Highways confirmed in February 2026 that PICs should be analysed for a full 60-month period excluding the period between March 2020 and September 2021. The data then comprises all collisions recorded between January 2019 and June 2025 excluding the period between March 2020 to September 2021.

A.1.8 The scope of the assessment includes:

- Identification of collision clusters, determined by the following assessment criteria outlined within **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]**;
- A location where six or more injury collisions have occurred within a junction or a 100 m section of road;
- A location with three or more fatal and/or serious collisions happening either within a junction or within a 100 m section of road.;
- Assessment of the collision data along the full length of the links to identify patterns in collision locations in order to establish any areas of safety concerns, including an analysis of the road conditions and a comparison with national statistics;
- Assessment of collisions involving pedestrians, cyclists and horse-riders.

A.2 Road Safety - Local Road Network

A.2.1 An analysis of the latest available three-year period PICs on the PARs has been carried out post DCO submission with the latest DfT Road Safety Data. The analysed period comprises July 2022 to June 2025 and therefore excludes the Covid-19 period. Collisions are presented on the updated Figure 4: Transport Assessment – Personal Injury Collision Data Revision B.

A.2.2 The following changes to the collision analysis reported within **7.11 Transport Assessment [APP-333]** have been identified on the PARs and the junctions along the Local Road Network:

- B1018 Witham Road (PAR 41). There is no longer a collision cluster on this PAR. To the south of the junction with Temple Lane there is only one slight collision recorded and therefore no longer classifies as a collision cluster;
- Site 68 - A1016 Waterhouse Lane/A1060 Rainsford Road. The number of collisions recorded at the junction has been reduced to five (two serious and three slight) and therefore no longer classifies as a collision cluster site.

A.2.3 Within the Study Area, a total of 169 collisions were reported on the road links forming the PARs over the three-year period July 2022 to June 2025. From these collisions, 1131 were classified as slight, 51 as serious and five as fatal. Therefore, there has been an increase in the total number of PICs recorded on the PARs as detailed in Table A.1.

A.2.4 The following locations, already identified within the **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271],** have been classified as collision clusters:

- A1066 Thetford Road (PAR 9). To the east of the junction with Brettenham Road, a total of one fatal and three serious collisions were recorded within a 100 m stretch. None of these collisions involved a pedestrian or cyclist;
- A134 Northern Approach Road/Boxted Road roundabout (Site 45). A total of five collisions were recorded, not concentrated at any specific location. Three of these collisions were classified as serious in severity, and two as slight. Three of these collisions involved cyclists, of which two were serious in severity and one slight in severity.

Table A.1 Primary Access Routes – Personal Injury Collisions July 2022-June 2025

Project Section	Location	Severity				TA	
		Fatal	Serious	Slight	Total	Total	Diff
A	Link PAR 1 - A140 Ipswich Rd	0	0	0	0	0	0
A	Link PAR 2 - Mangreen Ln	0	0	0	0	0	0
A	Link PAR 3 - Stansfield Rd/Wymondham Rd	0	1	1	2	3	-1
A	Link PAR 4 - B1113	0	0	0	0	0	0
A	Link PAR 5 - Wymondham Rd	0	0	0	0	0	0
A	Link PAR 6 - Fundenhall Rd	0	0	0	0	0	0
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	0	0	3	3	1	2
A	Link PAR 8 – A1066/A1066 Victoria Rd/A1066 Park Rd/A1066 High Rd	0	3	7	10	8	2
A	Link PAR 9 - A1066 High Rd/A1066 Low Rd/A1066 Diss Rd/A1066 The Street/A1066 Thetford Rd/A1066 Hurth Way/A1066 Mundford Rd (alternative)	2	8	7	17	14	3
B	Link PAR 10 - A143 Old Bury Rd	0	1	0	1	5	-4
B	Link PAR 11 - Lion Rd	0	0	0	0	1	-1

Project Section	Location	Severity				TA	
		Fatal	Serious	Slight	Total	Total	Diff
B	Link PAR 12 - B1113 Finningham Rd/B1113 Walsham Rd	1	0	2	3	1	2
B	Link PAR 13 - Wickham Rd	0	0	0	0	1	-1
B	Link PAR 14 - Eastland Ln	0	0	0	0	0	0
B	Link PAR 15 - Thornham Rd	0	0	0	0	0	0
B	Link PAR 16 - A1120 Church Rd/A1120 Bell's Ln	0	1	3	4	3	1
B	Link PAR 17 - A1120 south of A14 J50	0	0	0	0	0	0
B	Link PAR 18 - Mill Ln	0	0	2	2	2	0
B	Link PAR 19 - B1113 Needham Rd/B1113 Stowmarket Rd	0	1	1	2	3	-1
B	Link PAR 20 - B1113 Bramford Rd/B1113 Loraine Way	0	1	1	2	1	1
B	Link PAR 21 - Bullen Ln	0	0	0	0	0	0
C	Link PAR 22 - A1214 London Rd	0	2	1	3	2	1
C	Link PAR 23 - A1071	0	0	0	0	1	-1
C	Link PAR 24 - B1070 Hadleigh Rd	0	0	0	0	0	0
C	Link PAR 25 - B1070	0	0	1	1	0	1
C	Link PAR 26 - Ipswich Rd	0	0	1	1	0	1
C	Link PAR 27 - Birchwood Rd	0	0	0	0	0	0
C	Link PAR 28 - Wick Rd/Grove Hill	0	0	0	0	0	0
C	Link PAR 29 - Perry Ln	0	0	0	0	0	0
C	Link PAR 30 - Bentley Rd	0	1	0	1	1	0
C	Link PAR 31 - Ardleigh Rd/Little Bromley Rd	0	0	0	0	0	0
C	Link PAR 32 - Wick Ln	0	0	0	0	0	0
C	Link PAR 33 - Old Ipswich Rd	0	0	2	2	3	-1
C	Link PAR 34 - Turnpike Close	0	0	0	0	0	0
D	Link PAR 35 - A1341 Via Urbis Romanae	0	0	2	2	4	-2
D	Link PAR 36 - A134 Northern Approach Rd/A134 Wildeve	0	1	2	3	4	-1

Project Section	Location	Severity				TA	
		Fatal	Serious	Slight	Total	Total	Diff
	Avenue/A134 Nayland Rd/A134 The Causeway						
D	Link PAR 37 - A1124 Halsted Rd	0	1	6	7	4	3
D	Link PAR 38 - Mill Rd	0	0	0	0	0	0
D	Link PAR 39 - Great Tey Rd	0	0	0	0	0	0
E	Link PAR 40 - A120 Colchester Rd	0	2	8	10	12	-2
E	Link PAR 41 - B1018 Braintree Rd/B1018 Witham Rd	0	2	6	8	10	-2
E	Link PAR 42 - B1389 Hatfield Rd	0	3	3	6	3	3
E	Link PAR 43 - Spinks Ln/Highfields Rd/Spa Rd/Flora Rd/Faulkbourne Rd/Church Hill	0	0	4	4	5	-1
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	0	2	4	6	4	2
F	Link PAR 45 - B1008 Essex Regiment Way	0	0	2	2	1	1
F	Link PAR 46 - B1008 Braintree Rd/B1008 Main Rd	0	0	1	1	1	0
F	Link PAR 47 - Chatham Hall Ln	0	0	0	0	0	0
F	Link PAR 48 - Chelmsford Rd	0	0	0	0	0	0
F	Link PAR 49 - A414 Three Mile Hill/A1114 London Rd	0	4	6	10	3	7
F	Link PAR 50 - A1016 Waterhouse Ln/A1016 Rainsford Ln	0	1	6	7	10	-3
F	Link PAR 51 - A1060 Rainsford Rd/A1060 Roxwell Rd	0	3	7	10	10	0
F	Link PAR 52 - Vicarage Rd	0	0	0	0	0	0
F	Link PAR 53 - A414 Greenbury Way/A414 Ongar Rd	2	1	3	6	4	2
G	Link PAR 54 - B1002 Main Rd	0	3	1	4	3	1
G	Link PAR 55 - Wantz Rd	0	0	0	0	0	0
G	Link PAR 56 - Ivy Barns Ln	0	0	0	0	0	0
G	Link PAR 57 - Church Ln	0	0	0	0	0	0

Project Section	Location	Severity				TA	
		Fatal	Serious	Slight	Total	Total	Diff
G	Link PAR 58 - A176 Noak Hill Rd/A176 Laindon Rd/A129 Southend Rd	0	1	10	11	10	1
G	Link PAR 59 - A129 Sun Street/A129 London Rd/A129 Rayleigh Rd	0	0	1	1	1	0
G	Link PAR 60 - Dunton Rd/Brentwood Rd	0	1	0	1	2	-1
G	Link PAR 61 - B148 West Mayne	0	0	0	0	0	0
G	Link PAR 62 - Lower Dunton Rd	0	0	0	0	0	0
H	Link PAR 63 - A128 Brentwood Rd	0	3	5	8	9	-1
H	Link PAR 64 - A1013 Stanford Rd (east of Orsett Cock Roundabout)	0	0	1	1	1	0
H	Link PAR 65 - Buckingham Hill Rd	0	0	0	0	0	0
H	Link PAR 66 - Brentwood Rd	0	1	0	1	1	0
H	Link PAR 67 - A1013 Stanford Rd (west of Orsett Cock Roundabout)	0	0	2	2	4	-2
H	Link PAR 68 - Heath Rd	0	0	0	0	0	0
H	Link PAR 69 - Chadwell Hill	0	0	0	0	1	-1
H	Link PAR 70 - Linford Rd	0	0	1	1	0	1
H	Link PAR 71 - Muckingford Rd	0	3	0	3	4	-1
	Total	**5**	**51**	**113**	**169**	**161**	**8**

A.2.5 From the analysis it is worth noting that there have been several fatal collisions recorded on the following PARs:

- A1066 Thetford Road (PAR 9). There are two fatal collisions recorded (2024), one located approximately 600m to the east of A1066/The Street and the other one located to the east of the junction with Brettenham Road. All these collisions involved only one vehicle (a car).

  Additionally, there is one fatal collision recorded at a junction, approximately 1Km to the east of the A1066/A1088 Euston Road roundabout, involving a motorcycle over 500cc.

  The collisions to the east of A1066/A1088 Euston Road and to the east of A1066/The Street are isolated but the collision to the east of the junction with Brettenham Road is within a collision cluster. None of these collisions involved a pedestrian or cyclist;
- B1113 Finningham Road (PAR 12). One fatal collision was recorded north of the connection to the Public Rights of Way W-267/002/0 and W-267/003/0,

involving only a motorcycle over 500cc (2025). The collision is isolated and did not involve a pedestrian or cyclist;

- A414 Greenbury Way (PAR 53). There is one fatal collision located in the vicinity of Ongar Road (2024) that involved a head-on collision between a car and one HGV (7.5T or over). There is another fatal collision located approximately 50m to the west of footpath Writtle 18, that involved a head-on collision between two cars (2023).

  Additionally, there is one fatal collision recorded at a junction to access the Shakestones Business Centre (2024). The collision involved a motorcycle over 500cc that hit one HGV (over 3.5T and under 7.5T) that was turning right.

  These collisions are isolated and did not involve a pedestrian or cyclist.

A.2.6 The collision data has been analysed along the PARs in order to establish any areas of safety concerns related to light conditions, weather conditions and road surface conditions for the three-year period July 2022 to June 2025. A comparison with the data presented within **6.16.A2 Environmental Statement Appendix 16.2 - Traffic and Transport Baseline Conditions [APP-273]** is shown in Table A.2. There are no substantial changes to the conditions in which the collisions occurred. In general collisions happened during daylight hours or with lights lit, with fine weather conditions and with a dry road surface. No specific collision patterns were identified based on conditions. Full details can be found within Table A.5.

Table A.2 Primary Access Routes – Conditions data summary (July 2022-June 2025)

Conditions		2021-2023	July 2022-June 2025
Light conditions	Daylight	73%	73%
	Darkness - lights lit	11%	11%
	Darkness - lights unlit	0%	1%
	Darkness - no lighting	16%	15%
	Darkness - lighting unknown	1%	1%
Weather conditions	Fine no high winds	87%	84%
	Raining	9%	10%
	Snowing	1%	1%
	Fog or mist	1%	2%
	Other	1%	1%
Surface conditions	Dry	71%	71%
	Other	29%	29%

A.2.7 A summary of the collision data reviewed for each section is presented in Table A.3.

Table A.3 Collision data review

Project Section	Region	Description
A	Norfolk	There were 32 collisions reported, of which 18 were slight, 12 were serious and two were fatal. 81% of those collisions happened during daylight or with lights lit, and in 75% of them the road surface was dry. 81% of the collisions happened with fine weather conditions, 13% with rainy conditions and the rest with fog or mist.
B	Suffolk	There were 14 collisions reported, of which nine were slight, four were serious and one was fatal. 79% of those collisions happened during daylight or with lights lit, and in 71% of them the road surface was dry. 86% of the collisions happened with fine weather conditions and the rest with rain or snow.
C	Suffolk	There were eight collisions reported, of which fiver were slight and three serious. 88% of those collisions happened during daylight or with lights lit, and in 50% of them the road surface was dry. 88% the collisions happened with fine weather conditions and the rest with rainy conditions.
D	Essex	There were 22 collisions reported, of which 18 were slight and four were serious. 91% of those collisions happened during daylight or with lights lit, and in 82% of them the road surface was dry. 73% of the collisions happened with fine weather conditions, 14% with rainy conditions and the rest with fog, mist or other conditions.
E	Essex	There were 23 collisions reported, of which 17 were slight and six were serious. 78% of those collisions happened during daylight or with lights lit, and in 57% of them the road surface was dry. 87% of the collisions happened with fine weather conditions and the rest with rainy conditions.
F	Essex	There were 37 collisions reported, of which 25 were slight, 10 were serious and two were a fatal collision. 86% of those collisions happened during daylight or with lights lit, and in 84% of them the road surface was dry. 95% of the collisions happened with fine weather conditions, and the rest with rainy conditions.
G	Essex	There were 17 collisions reported, of which 12 were slight and five were serious collisions. 94% of those collisions happened during daylight or with lights lit, and in 65% of them the road surface was dry. 71% of the collisions happened with fine weather conditions, 18% with rainy conditions and the rest with other conditions.
H	Thurrock	There were 16 collisions reported, of which nine were slight and seven were serious collisions. 69% of those collisions happened during daylight or with lights lit, and in 56% of them the road surface was dry. 88% of the collisions happened with fine weather conditions and the rest with rainy conditions.

A.2.8 As identified within the **6.16 Environmental Assessment Chapter 16 – Traffic and Transport [APP-271]** and **7.11 Transport Assessment [APP-333],** most of the road links forming PARs have a collision rate below or similar to the national collision rate per billion vehicle kilometres. The results are presented in Table A.6.

A.2.9 The updated national collision rate per billion vehicle kilometres for 2024, as per DfT Table RAS0302: Reported Road Collision and Casualty Numbers and Rates by Severity, Road Type (urban and rural) and Class, Great Britain, are:

- Urban A roads: 360
- Urban Other roads: 344
- Rural A roads: 99
- Rural Other roads: 184.

A.2.10 The comparison of the road links forming the PARs with the collision rate of personal injury collisions (PIC) per annum (p.a.) per billion vehicle kilometres for the period July 2022 to June 2025 shows that there are 13 links with an annual collision rate higher than or similar to the national average, listed below:

- A1066 High Rd/A1066 Low Rd/A1066 Diss Rd/A1066 The Street/A1066 Thetford Rd/A1066 Hurth Way/A1066 Mundford Rd (Link PAR 9), where there are five slight, eight serious and two fatal collisions registered within the rural section of the PAR;
- A1120 Church Rd/A1120 Bell's Ln (Link PAR 16), B1113 Bramford Rd / B1113 Loraine Way (Link PAR 20) and Old Ipswich Rd (Link PAR 33), where the estimated number of total collisions considering a PIC p.a. per billion vehicle km equal to the national average for those roads is similar to the existing recorded collisions on these links. There are only two collisions recorded at each one of these road links;
- Mill Lane (Link PAR 18), with two recorded collisions classified as slight. The total daily traffic is under 1,000 vehicles, which might distort the annual collision rate value;
- Bentley Road (Link PAR 30), where the estimated number of total collisions considering a PIC p.a. per billion vehicle km equal to the national average for those roads is similar to the existing recorded collisions on these links. There is only one collision recorded at each one of these road links;
- B1070 Hadleigh Road (Link PAR 25), Ipswich Rd (Link PAR 26), B1008 Essex Regiment Way (Link PAR 45) and Dunton Road/Brentwood Road (Link PAR 60) where the length of these road links is relatively short with 1 km or less which might distort the annual collision rate values. These road links have only one or two collisions recorded;
- A1124 Halsted Rd (Link PAR 37), with five collisions recorded as slight;
- A176 Noak Hill Road/A176 Laindon Road/A129 Southend Road (Link PAR 58), where the collision rate is similar to the national average;
- Muckingford Road (Link PAR 71), with three collisions recorded as serious.

A.2.11 Where the collision rates exceed the national average, these can be influenced by various factors and should be interpreted with caution. For those road links where there are only one or two recorded collisions and the length of the section at the PAR is relatively short no significant pattern or a presence of a hotspot have been identified on those road links.

A.2.12 On Mill Lane, the low baseline traffic volume should be considered in relation to the number of collisions (two). These collisions do not suggest a significant pattern or a presence of a hotspot on this link and should be interpreted with caution.

A.2.13 An analysis of the collisions involving walkers, cyclists or horse-riders (WCH) indicates that, on the road links forming the PARs over the three-year period July 2022 – June 2025, there has been an increase collisions involving pedestrians and cyclists. There were 15 collisions recorded as involving pedestrians and 8 collisions recorded involving cyclists. The data can be found within Table A.7.

Section A

A.2.14 There are three slight and one serious collision involving pedestrians registered in A1066/A1066 Victoria Road/A1066 Park Road/A1066 High Road (Link PAR 8). The data indicates that in two of these collisions the pedestrian were crossing the carriageway, one at a pedestrian crossing near the Tesco roundabout (2024) and the other one to the east of the junction with Denmark Lane (2025). In the other two, the pedestrians were on the footway or the carriageway (2024).

Section B

A.2.15 There is one slight collision involving pedestrians registered on A1120 Church Road/A1120 Bell's Lane (Link PAR 16) in 2025. The data indicates that the pedestrian was crossing within 50m of a pedestrian crossing, to the east of Thorney Green.

Section C

A.2.16 There is one serious collision involving cyclists recorded on Bentley Road (Link PAR 30) in 2023, where the data indicates that the cyclist was hit by the car when overtaking.

A.2.17 One serious collision involving cyclists was recorded on Old Ipswich Road (Link PAR 33) in 2025. The data indicates that the cyclist had turned right and was hit by a car that was approaching the junction in the vicinity of The Crown.

Section D

A.2.18 There is one slight collision involving pedestrians on A134 Northern Approach Road / A134 Wildeve Avenue / A134 Nayland Road / A134 The Causeway (Link PAR 36) that was recorded in 2022. The data indicates that the pedestrian was crossing the carriageway at the signalised pedestrian crossing located east of A134 Northern Approach Road/Boxted Road roundabout (Site 45).

A.2.19 A slight collision involving pedestrians was registered on A1124 Halsted Road (Link PAR 37) in 2025. The data indicates that the pedestrian was crossing the carriageway at an uncontrolled pedestrian crossing to the east of Turkey Cock Lane.

Section E

A.2.20 There is one slight collision involving a pedestrian on the B1018 Braintree Rd / B1018 Witham Rd (Link PAR 41) that was recorded in 2022. The data indicates that the pedestrian was standing in the carriageway, not crossing.

A.2.21 There is one slight collision involving cyclists on B1389 Hatfield Road (Link PAR 42) in 2025. The data indicates that it was a frontal collision involving two cyclists and that the collision occurred in the path adjacent to the A12 SB onslip road, outside of the main carriageway.

A.2.22 One slight and two serious collisions were recorded on B1389 Hatfield Road (Link PAR 42) that involved pedestrians. The data indicates that in one slight collision the pedestrian was crossing on the uncontrolled crossing between Witham Lodge Green and Graham Brown Walk (2024), in one serious collision the pedestrian was in the carriageway not crossing to the south of Maltings Lane (2024) and in the other serious collision the pedestrian was in the footway or verge of the A12 NB offslip road (2025).

A.2.23 A slight collision involving cyclists was recorded on Spinks Lane/Highfields Road/Spa Road/Flora Road/Faulkbourne Road/Church Hill (Link PAR 43) in 2024. The data indicates that it was a rear-end collision where the cyclist was hit by car that was moving off the carriageway in the car park access to Witham Leisure Centre.

A.2.24 One slight collision involving pedestrians was recorded on Spinks Lane/Highfields Road/Spa Road/Flora Road/Faulkbourne Road/Church Hill (Link PAR 43) in 2024. The data indicates that the pedestrian was crossing at the formal pedestrian crossing on Spinks Lane between Adult Community Learning Witham and Maltings Academy.

A.2.25 There is one slight collision involving cyclists on A131 Great Leighs Bypass / A131 Braintree Road (Link PAR 44) in 2024, where the cyclist was hit by a car when crossing the A131 Great Notley Bypass on the signalised crossing north of Cuckoo Wood Roundabout.

Section F

A.2.26 One slight collision involving a cyclist on B1008 Braintree Road/B1008 Main Road (Link PAR 46) where further details are unknown was recorded in 2023.

A.2.27 One serious and two slight collisions involving pedestrians were recorded on A1016 Waterhouse Lane/A1016 Rainsford Lane (Link PAR 50). There is one slight collision in the vicinity of the uncontrolled crossing on A1016 Rainsford Lane north of Rainsford Lane (2023), one serious collision at the signalised pedestrian crossing in A1016 Waterhouse Lane north of Forest Drive (2022), and one slight collision on the section between Beeches Road and Meteor Way where the pedestrian was crossing in the centre of the carriageway away from a refuge, island or central reservation (2022).

A.2.28 One serious collision involving a cyclist on A1060 Rainsford Road / A1060 Roxwell Road (Link PAR 51) was recorded in 2023 where the data indicates that the cyclist was hit by an HGV when crossing in the vicinity of the Tower Gardens Car Park.

A.2.29 There is one slight collision involving cyclists on A176 Noak Hill Road / A176 Laindon Road / A129 Southend Road (Link PAR 58) in 2024, where the cyclist was hit by the car when overtaking.

Section H

A.2.30 One serious collision involving cyclists was registered on Muckingford Road (Link PAR 71) in 2024. The data indicates that it was a rear-end collision when both the cyclist and the car were going ahead.

A.2.31 Table A.4 presents collisions involving pedestrians and cyclists at junctions along the PARs.

Table A.4 LRN Junctions – Collisions involving WCH

Section	Location	Description
A	Stansfield Road/Wymondham Road (Link PAR 3)/Hethel Road	One slight collision involving cyclists (2024). The data indicates that the cyclist was hit while waiting to turn right by a car entering the main road
A	B1113/ Wymondham Road (Site 3)	One slight collision involving cyclists (2024). The data indicates that two cyclists on the B1113 were hit by a car that was turning right from Wymondham Road
A	A1066 Victoria Road/B1077 Stunston Road (Site 6)	One serious (2025) and one slight collision (2023) involving cyclists. In the slight collision the data indicates that the cyclist was hit by a car that was turning right from A1066 Victoria Road onto B1077 Stunston Road. In the serious collision the cyclist hit a car while both were entering the main road
D	A1341 Via Urbis Romanae / Whitmore Dr (Site 43)	One slight and one serious collision involving cyclists (2024). The data indicates that in the slight collision the cyclist was hit by a car that was reversing to enter the main road and in the serious collision, the cyclist was hit by a car while accessing the controlled crossing
D	A134 Northern Approach Rd/Boxted Rd roundabout (Site 45)	One slight collision (2023) and two serious collisions (2023 and 2024) involving cyclists. The data indicates that in one serious collision a cyclist leaving the roundabout has hit by a car when the driver was entering (2023) and in the other the cyclist hit a car while both drivers were going ahead in the circulatory (2024). The details of the slight collision are unknown
E	A131 Great Notley Bypass (Links PAR 44)/Bridge End Lane roundabout	One slight collision involving cyclists (2023) . The data indicates that the cyclist was hit by a car already in the circulatory after entering the roundabout from the west approach
E	A131 Great Notley Bypass/London Road (Site 57)	One slight collision involving cyclists (2024). The data indicates that the cyclist hit a car when the car was slowing down to exit the roundabout
F	B1008 Main Rd/ The Street/Chelmsford (Site 61)	One slight collision involving cyclists (2024). The data indicates that a cyclist was hit by a bus/coach when both vehicles were turning right from Chelmsford Road
F	A414 Three Mile Hill / A1114 London Rd (Site 63)	One serious collision involving cyclists (2023). The data indicates that the cyclist was hit by a motorcycle entering the roundabout from A414 Three Mile Hill
F	A1016 Waterhouse Lane/A1060 Rainsford Road (Site 68)	One slight collision involving pedestrians (2024) where the data indicates that the pedestrian was crossing the carriageway away from a crossing facility

Section	Location	Description
G	A129 Southend Rd / A129 Sun Street (Site 79)	One slight collision involving pedestrians (2024) where the data indicates that the pedestrian was crossing the carriageway away from a crossing facility
G	A129 Sun Street/A176 Laindon Road (Site 80)	One slight collision involving cyclists (2023). The data indicates that the cyclist was hit by a car when both vehicles were entering the roundabout
H	A128 Brentwood Road (Link PAR 63)/Conway's Road	One serious collision involving pedestrians (2022) where the data indicates that the pedestrian was standing the carriageway but not crossing

A.3 Strategic Road Network

A.3.1 The analysis of the latest five-year collision data on the SRN and MRN junctions has been carried out to identify any changes to the collision clusters identified within **7.11 Transport Assessment [APP-333]** for a full 60-month period excluding the period between March 2020 and September 2021, that is between January 2019 and June 2025. The number of collisions at each junction can be found within Table A.9 and collisions are presented on the updated Figure 4: Transport Assessment – Personal Injury Collision Data Revision B.

A.3.2 The following collision clusters were identified in the SRN/MRN junctions that connect to the PARs in the **7.11 Transport Assessment [APP-333]** and within **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271]**:

- A47 Norwich Southern Bypass/ A140 Ipswich Road (Site 1). A total of nine collisions has been recorded at this junction, not concentrated at any particular location but with all collisions occurring at or in the vicinity of the entries/exits to the circulatory. All these collisions have been classified as slight in severity.

  Two slight collisions involved a cyclist casualty (2024). The data indicates that in one collision the cyclist was hit by a car that was entering the roundabout when crossing the uncontrolled crossing on the eastern arm and in the other one the cyclist was hit by a car when crossing the uncontrolled crossing on the Park and Ride exit;

- A14 J50 Cedars Interchange (Site 21). A total of 13 collisions has been recorded at this junction, two of which have been classified as serious in severity, and the remainder as slight in severity. In general, the collisions were recorded at or in the vicinity of the entries/exits to the circulatory. On the A14 off-slip (eastern arm), four collisions were recorded: one of serious severity (recorded in 2024) and three of slight severity (recorded in 2023 and 2025). None of these collisions involved pedestrians or cyclists;

- A14 J52 Claydon Roundabout (Site 26). A total of 13 collisions has been recorded at this junction, all of which were classified as slight in severity. In general, the collisions were recorded at or in the vicinity of the entries/exits to the circulatory. On the A14 off-slip (southern arm), six collisions were recorded on the approach to the junction. None of these collisions involved pedestrians or cyclists;

- A14 J55 Copdock Interchange (Site 29). A total of 21 collisions has been recorded at this junction, with one fatal collision (2024) and the remainder as slight in severity. In general, the collisions were recorded at or in the vicinity of the entries/exits to the circulatory. On the A1214 London Road approach (Link PAR 22), three collisions of slight severity were recorded. The fatal casualty was recorded within the roundabout in the vicinity of the A12 approach. None of these collisions involved pedestrians or cyclists;
- A120 Ardleigh Crown Interchange (Site 38). A total of nine collisions has been recorded at this junction, of which one has been classified as serious in severity, and the remainder as slight in severity. These collisions were not concentrated at any one location but with all collisions occurring at or in the vicinity of the entries/exits to the circulatory. None of these collisions involved pedestrians or cyclists;
- A12 Eight Ash Green Interchange (Site 46). A total of 11 collisions has been recorded at this junction, of which one have been classified as serious in severity, and the remainder as slight in severity. These collisions were not concentrated at any one location but with all collisions occurring at or in the vicinity of the entries/exits to the circulatory. None of these collisions involved pedestrians or cyclists;
- A12 J25 Marks Tey Interchange. A total of 12 collisions has been recorded at this junction, of which one has been classified as fatal (2019), two as serious in severity, and the remainder as slight in severity. Most of the collisions were recorded at or in the vicinity of the entries/exits to both roundabouts.

  Additionally, there were three collisions occurring at the section of road between Marks Tey and Prince of Wales roundabouts. Two of these collisions involved WCH: one of these collisions involved a pedestrian casualty (2022), and the other involved a cyclist casualty (2021). Both collisions were recorded on the A120 on the section fronting Marks Tey Railway Station, at the controlled crossing facilities;
- A120 Galleys Corner Roundabout (Site 48). A total of 26 collisions recorded at this junction. Two of these collisions were classified as serious, and the remaining were classified as slight in severity. There is a notable collision pattern of six collision on the circulatory/B1018 exit (Link PAR 41), one of which are serious in severity, and five of which were classified as slight in severity. None of these collisions involved pedestrians or cyclists;
- A127 Southern Arterial Road/A176 Noak Hill Road Interchange (site 73). A total of 15 collisions has been recorded at this junction, not concentrated at any one location. Two of these collisions were classified as serious in severity, and the remainder were classified as slight in severity.

  One of these serious collisions involved a pedestrian at the controlled crossing facility located to the west of the southern roundabout (2023);
- A127 Southern Arterial Road/A128 Tilbury Road Interchange (Site 84). A total of 14 collisions has been recorded at this junction, not concentrated at any one location but with all collisions occurring at or in the vicinity of the entries/exits to the circulatory. Two of these collisions were classified as serious in severity, and the remainder as slight in severity. None of these collisions involved pedestrians or cyclists;

- A13 Orsett Cock Roundabout (Site 88). A total of 17 collisions has been recorded at this junction; however, they were not concentrated at any one location but with all collisions occurring at or in the vicinity of the entries/exits to the circulatory. Two of these collisions have been classified as serious in severity, and the remainder as slight in severity.

  There is one slight collision involving pedestrians on the A1013 Stanford Road east approach where the pedestrian was standing in the carriageway, not crossing (2023);

A.3.3 In the **7.11 Transport Assessment [APP-333]** only SRN and MRN junctions that connect with the PARs were reported. However, there were some other collision clusters within the Study Area not initially reported that are classified as collision clusters considering the period between January 2019 and June 2025 (excluding March 2020 to September 2021). These junctions are:

- A140 Stoke Ash (Site 35). A total of seven collisions has been recorded at this junction, with one classified as serious and the remainder slight in severity. These collisions involved more than one vehicle and were rear-end collisions with vehicles slowing down when approaching to the junction or a collision between vehicles turning from the side roads onto the A140 and vehicles already in the A140. None of these collisions involved pedestrians or cyclists;
- A1089 Asda Roundabout (Site 89). A total of 10 collisions has been recorded at this junction, mainly located between the Dock Road access and the A1089 St Andrews Road southbound exit with one serious and five slight collisions at this location. Three of these collisions were classified as serious in severity, and the remainder as slight in severity.

  Two serious collisions involved pedestrians, one at the footway between Dock Road and A1089 St Andrews Road southbound exit (2024) and the other one in the uncontrolled crossing at the southern arm of the junction (2025);
- M25 J30 (Site 90). A total of 31 collisions has been recorded, with one fatal (2024), three serious and the remainder classified as slight in severity. These collisions were not concentrated at any one location but with most of the collisions occurring at or in the vicinity of the entries/exits to the circulatory. The fatal casualty was recorded within the roundabout in the vicinity of the southern access. None of these collisions involved pedestrians or cyclists.

A.3.4 No other changes to the findings presented for the SRN/MRN junctions within **7.11 Transport Assessment [APP-333]** have been identified.

Table A.5 Light conditions, weather conditions and road surface conditions

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 1 - A140 Ipswich Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 2 - Mangreen Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 3 - Stansfield Rd / Wymondham Rd	0	0	2	0	2	0	0	0	0	0	2	0	0	0	0	0
Link PAR 4 - B1113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 5 - Wymondham Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 6 - Fundenhall Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 7 - B1134 Station Rd / B1134 Long Row	3	0	0	0	3	0	0	0	0	0	2	1	0	0	0	0
Link PAR 8 - A1066 Victoria Rd / A1066 Park Rd / A1066 High Rd	8	2	0	0	10	0	0	0	0	0	9	1	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 9 - A1066 High Rd / A1066 Low Rd / A1066 Diss Rd /A1066 The Street / A1066 Thetford Rd / A1066 Hurth Way / A1066 Mundford Rd (alternative)	13	0	4	0	11	1	4	0	1	0	11	6	0	0	0	0
Link PAR 10 - A143 Old Bury Rd	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
Link PAR 11 - Lion Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 12 - B1113 Finningham Rd / B1113 Walsham Rd	3	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0
Link PAR 13 - Wickham Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 14 - Eastland Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 15 - Thornham Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 16 - A1120 Church Rd / A1120 Bell's Ln	1	2	1	0	4	0	0	0	0	0	3	1	0	0	0	0
Link PAR 17 - A1120 south of A14 J50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 18 - Mill Ln	1	0	1	0	2	0	0	0	0	0	1	1	0	0	0	0
Link PAR 19 - B1113 Needham Rd / B1113 Stowmarket Rd	2	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0
Link PAR 20 - B1113 Bramford Rd / B1113 Loraine Way	1	1	0	0	2	0	0	0	0	0	2	0	0	0	0	0
Link PAR 21 - Bullen Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 22 - A1214 London Rd	1	2	0	0	2	0	1	0	0	0	1	2	0	0	0	0
Link PAR 23 - A1071	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 24 - B1070 (A12 access)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 25 - B1070 Hadleigh Rd	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Link PAR 26 - Ipswich Rd	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Link PAR 27 - Birchwood Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 28 - Wick Rd / Grove Hill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 29 - Perry Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 30 - Bentley Rd	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
Link PAR 31 - Ardleigh Rd / Little Bromley Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 32 - Wick Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 33 - Old Ipswich Rd	1	0	1	0	2	0	0	0	0	0	1	1	0	0	0	0
Link PAR 34 - Turnpike Close	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 35 - A1341 Via Urbis Romanae	2	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0
Link PAR 36 - A134 Northern Approach Rd / A134 Wildeve Avenue / A134 Nayland Rd / A134 The Causeway	2	0	1	0	2	0	1	0	0	0	2	1	0	0	0	0
Link PAR 37 - A1124 Halsted Rd	5	2	0	0	3	0	1	0	2	1	6	1	0	0	0	0
Link PAR 38 - Mill Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 39 - Great Tey Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 40 - A120 Colchester Rd	9	0	1	0	9	0	1	0	0	0	8	2	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 41 - B1018 Braintree Rd / B1018 Witham Rd	6	1	1	0	8	0	0	0	0	0	5	2	0	1	0	0
Link PAR 42 - B1389 Hatfield Rd	3	2	1	0	6	0	0	0	0	0	4	2	0	0	0	0
Link PAR 43 - Spinks Ln / Highfields Rd / Spa Rd / Flora Rd / Faulkbourne Rd / Church Hill	3	0	1	0	2	0	0	0	0	2	2	1	0	0	0	1
Link PAR 44 - A131 Great Notley Bypass / A131 Great Leighs Bypass / A131 Braintree Rd	4	0	2	0	5	0	1	0	0	0	3	3	0	0	0	0
Link PAR 45 - B1008 Essex Regiment Way	2	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0
Link PAR 46 - B1008 Braintree Rd / B1008 Main Rd	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 47 - Chatham Hall Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 48 - Chelmsford Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 49 - A414 Three Mill Hill / A1114 London Rd	7	0	3	0	9	0	1	0	0	0	9	1	0	0	0	0
Link PAR 50 - A1016 Waterhouse Ln / A1016 Rainsford Ln	6	1	0	0	7	0	0	0	0	0	6	1	0	0	0	0
Link PAR 51 - A1060 Rainsford Rd / A1060 Roxwell Rd	9	1	0	0	9	0	1	0	0	0	9	1	0	0	0	0
Link PAR 52 - Vicarage Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 53 - A414 Greenbury Way / A414 Ongar Rd	5	0	1	0	6	0	0	0	0	0	5	1	0	0	0	0
Link PAR 54 - B1002 Main Rd	2	1	1	0	2	0	1	0	0	1	2	2	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 55 - Wantz Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 56 - Ivy Barns Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 57 - Church Ln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 58 - A176 Noak Hill Rd / A176 Laindon Rd / A129 Southend Rd	9	2	0	0	8	0	2	0	0	1	7	4	0	0	0	0
Link PAR 59 - A129 Sun Street / A129 London Rd / A129 Rayleigh Rd	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Link PAR 60 - Dunton Rd / Brentwood Rd	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Link PAR 61 - B148 West Mayne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 62 - Lower Dunton Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location	Light Conditions				Weather Conditions						Road Surface Conditions					
	Daylight	Darkness - Lights Lit	Darkness - Lights Unlit / No Lighting	Darkness - lighting unknown	Fine No High Winds	Fine High Wind	Raining	Snowing	Fog or Mist	Other	Dry	Wet or Damp	Snow	Frost or ice	Flood over 3cm. Deep	Unknown
Link PAR 63 - A128 Brentwood Rd	7	0	1	0	7	0	1	0	0	0	4	4	0	0	0	0
Link PAR 64 - A1013 Stanford Road (east of Orsett Roundabout)	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
Link PAR 65 - Buckingham Hill Rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 66 - Brentwood Road	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0
Link PAR 67 - A1013 Stanford Road (west of Orsett Roundabout)	1	1	0	0	2	0	0	0	0	0	1	1	0	0	0	0
Link PAR 68 - Heath Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 69 - Chadwell Hill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 70 - Linford Road	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Link PAR 71 - Muckingford Road	1	0	2	0	3	0	0	0	0	0	2	1	0	0	0	0

Table A.6 Accident rate per billion vehicle kilometres estimated with the latest three-year personal injury collision data July 2022 – June 2025 on the road links forming the Primary Access Routes.

Location	Road type	Severity				PIA p.a.	Length (Km)	Estimated annual flow	PIA p.a. Billion Vehicle Km	PIA p.a. Billion Vehicle Km – National Average
		Slight	Serious	Fatal	Total					
Link PAR 1 - A140 Ipswich Rd	Rural A road	0	0	0	0	0.00	0.913	8,514,303	0	99
Link PAR 2 - Mangreen Ln	Rural Other	0	0	0	0	0.00	0.074	100,636	0	184
Link PAR 3 - Stansfield Rd / Wymondham Rd	Rural Other	1	1	0	2	0.67	5.122	1,883,452	69	184
Link PAR 4 - B1113	Rural Other	0	0	0	0	0.00	3.852	1,518,765	0	184
Link PAR 5 - Wymondham Rd	Rural Other	0	0	0	0	0.00	1.513	435,810	0	184
Link PAR 6 - Fundenhall Rd	Rural Other	0	0	0	0	0.00	0.479	580,454	0	184
Link PAR 7 - B1134 Station Rd / B1134 Long Row	Rural Other	3	0	0	3	1.00	7.466	850,763	157	184
Link PAR 8 - A1066 Victoria Rd / A1066 Park Rd / A1066 High Rd	Urban A road	7	3	0	10	3.33	3.955	4,955,118	170	360
	Rural A road	0	0	0	0	0.00	2.278	3,203,423	0	99
Link PAR 9 - A1066 High Rd / A1066 Low Rd / A1066 Diss Rd /A1066 The Street / A1066 Thetford Rd / A1066 Hurth Way / A1066 Mundford Rd (alternative)	Urban A road	2	0	0	2	0.67	3.167	4,292,035	49	360
	Rural A road	5	8	2	15	5.00	21.897	1,553,805	**147**	99
Link PAR 10 - A143 Old Bury Rd	Rural A road	0	1	0	1	0.33	5.401	2,711,585	23	99
Link PAR 11 - Lion Rd	Rural Other	0	0	0	0	0.00	0.981	1,167,322	0	184
Link PAR 12 - B1113 Finningham Rd / B1113 Walsham Rd	Rural Other	2	0	1	3	1.00	6.65	844,506	178	184

Location	Road type	Severity				PIA p.a.	Length (Km)	Estimated annual flow	PIA p.a. Billion Vehicle Km	PIA p.a. Billion Vehicle Km – National Average
		Slight	Serious	Fatal	Total					
Link PAR 13 - Wickham Rd	Rural Other	0	0	0	0	0.00	1.25	709,013	0	184
Link PAR 14 - Eastland Ln	Rural Other	0	0	0	0	0.00	0.115	13,609	0	184
Link PAR 15 - Thornham Rd	Rural Other	0	0	0	0	0.00	0.45	368,546	0	184
Link PAR 16 - A1120 Church Rd / A1120 Bell's Ln	Urban A road	1	1	0	2	0.67	1.259			360
	Rural A road	2	0	0	2	0.67	2.199	2,217,740	**137**	99
Link PAR 17 - A1120 south of A14 J50	Rural A road	0	0	0	0	0.00	1.622	951,281	0	99
Link PAR 18 - Mill Ln	Rural Other	2	0	0	2	0.67	2.15	351,964	**881**	184
Link PAR 19 - B1113 Needham Rd / B1113 Stowmarket Rd	Rural Other	1	1	0	2	0.67	2.037	3,493,050	94	184
Link PAR 20 - B1113 Bramford Rd / B1113 Loraine Way	Rural Other	1	1	0	2	0.67	3.65	876,000	**209**	184
Link PAR 21 - Bullen Ln	Rural Other	0	0	0	0	0.00	1.947	25,550	0	184
Link PAR 22 - A1214 London Rd	Urban A road	1	2	0	3	1.00	1.321	6,637,160	114	360
Link PAR 23 - A1071	Rural A road	0	0	0	0	0.00	3.209	587,624	0	99
Link PAR 24 - B1070 (A12 access)	Rural Other	0	0	0	0	0.00	0.295	1,788,761	0	184
Link PAR 25 - B1070 Hadleigh Rd	Rural Other	1	0	0	1	0.33	0.129	2,144,740	**1205**	184
Link PAR 26 - Ipswich Rd	Rural Other	1	0	0	1	0.33	1.169	767,178	**372**	184
Link PAR 27 - Birchwood Rd	Rural Other	0	0	0	0	0.00	1.674	1,303,624	0	184

Location	Road type	Severity				PIA p.a.	Length (Km)	Estimated annual flow	PIA p.a. Billion Vehicle Km	PIA p.a. Billion Vehicle Km – National Average
		Slight	Serious	Fatal	Total					
Link PAR 28 - Wick Rd / Grove Hill	Urban Other	0	0	0	0	0.00	0.365	562,100	0	344
Link PAR 29 - Perry Ln	Rural Other	0	0	0	0	0.00	0.057	45,104	0	184
Link PAR 30 - Bentley Rd	Rural Other	0	1	0	1	0.33	2.326	414,645	**346**	184
Link PAR 31 - Ardleigh Rd / Little Bromley Rd	Rural Other	0	0	0	0	0.00	0.977	39,055	0	184
Link PAR 32 - Wick Ln	Rural Other	0	0	0	0	0.00	0.327	481,956	0	184
Link PAR 33 - Old Ipswich Rd	Rural Other	2	0	0	2	0.67	2.657	952,363	**263**	184
Link PAR 34 - Turnpike Close	Rural Other	0	0	0	0	0.00	0.238	159,922	0	184
Link PAR 35 - A1341 Via Urbis Romanae	Urban A road	2	0	0	2	0.67	1.336	6,138,779	81	360
Link PAR 36 - A134 Northern Approach Rd / A134 Wildeve Avenue / A134 Nayland Rd / A134 The Causeway	Urban A road	2	1	0	3	1.00	1.812	4,393,505	126	360
	Rural A road	0	0	0	0	0.00	1.794	3,153,105	0	99
Link PAR 37 - A1124 Halsted Rd	Urban A road	1	1	0	2	0.67	0.438			360
	Rural A road	5	0	0	5	1.67	2.77	3,654,745	**165**	99
Link PAR 38 - Mill Rd	Rural Other	0	0	0	0	0.00	0.364	842,420	0	184
Link PAR 39 - Great Tey Rd	Rural Other	0	0	0	0	0.00	0.88	795,335	0	184
Link PAR 40 - A120 Colchester Rd	Rural A road	8	2	0	10	3.33	5.269	7,045,960	90	99
Link PAR 41 - B1018 Braintree Rd / B1018 Witham Rd	Urban Other	2	0	0	2	0.67	0.871			344
	Rural Other	4	2	0	6	2.00	4.313	4,997,945	93	184

Location	Road type	Severity				PIA p.a.	Length (Km)	Estimated annual flow	PIA p.a. Billion Vehicle Km	PIA p.a. Billion Vehicle Km – National Average
		Slight	Serious	Fatal	Total					
Link PAR 42 - B1389 Hatfield Rd	Urban Other	2	2	0	4	1.33	1.447	5,839,426	158	344
	Rural Other	1	1	0	2	0.67	1.161			184
Link PAR 43 - Spinks Ln / Highfields Rd / Spa Rd / Flora Rd / Faulkbourne Rd / Church Hill	Urban Other	3	0	0	3	1.00	2.119	3,720,497	127	344
	Rural Other	1	0	0	1	0.33	2.762	1,983,201	61	184
Link PAR 44 - A131 Great Notley Bypass / A131 Great Leighs Bypass / A131 Braintree Rd	Rural A road	0	1	0	1	0.33	7.182	8,684,445	5	99
	Rural A road	4	1	0	5	1.67	2.792	7,186,746	83	99
Link PAR 45 - B1008 Essex Regiment Way	Rural Other	2	0	0	2	0.67	0.331	265,355	**7590**	184
Link PAR 46 - B1008 Braintree Rd / B1008 Main Rd	Rural Other	1	0	0	1	0.33	1.556	4,941,631	43	184
Link PAR 47 - Chatham Hall Ln	Rural Other	0	0	0	0	0.00	0.155	127,124	0	184
Link PAR 48 - Chelmsford Rd	Rural Other	0	0	0	0	0.00	0.478	1,143,493	0	184
Link PAR 49 - A414 Three Mill Hill / A1114 London Rd	Rural A road	6	4	0	10	3.33	3.455	9,837,480	98	99
Link PAR 50 - A1016 Waterhouse Ln / A1016 Rainsford Ln	Urban A road	6	1	0	7	2.33	2.258	11,597,023	89	360
Link PAR 51 - A1060 Rainsford Rd / A1060 Roxwell Rd	Urban A road	4	1	0	5	1.67	1.514	5,240,670	210	360
	Rural A road	3	2	0	5	1.67	2.953	6,440,425	88	99
Link PAR 52 - Vicarage Rd	Rural Other	0	0	0	0	0.00	0.126	613,565	0	184

Location	Road type	Severity				PIA p.a.	Length (Km)	Estimated annual flow	PIA p.a. Billion Vehicle Km	PIA p.a. Billion Vehicle Km – National Average
		Slight	Serious	Fatal	Total					
Link PAR 53 - A414 Greenbury Way / A414 Ongar Rd	Rural A road	3	1	2	6	2.00	4.184	5,307,439	90	99
Link PAR 54 - B1002 Main Rd	Urban Other	0	2	0	2	0.67	0.535			344
	Rural Other	1	1	0	2	0.67	2.304	2,443,675	118	184
Link PAR 55 - Wantz Rd	Rural Other	0	0	0	0	0.00	0.507	1,644,951	0	184
Link PAR 56 - Ivy Barns Ln	Rural Other	0	0	0	0	0.00	0.593	383,771	0	184
Link PAR 57 - Church Ln	Rural Other	0	0	0	0	0.00	0.095	18,719	0	184
Link PAR 58 - A176 Noak Hill Rd / A176 Laindon Rd / A129 Southend Rd	Urban A road	4	0	0	4	1.33	2.461	4,611,801	117	360
	Rural A road	6	1	0	7	2.33	3.375	6,247,523	111	99
Link PAR 59 - A129 Sun Street / A129 London Rd / A129 Rayleigh Rd	Urban A road	0	0	0	0	0.00	1.226	4,609,767	0	360
	Rural A road	1	0	0	1	0.33	1.98	5,178,933	33	99
Link PAR 60 - Dunton Rd / Brentwood Rd	Rural Other	0	1	0	1	0.33	0.279	522,315	**2287**	184
Link PAR 61 - B148 West Mayne	Rural Other	0	0	0	0	0.00	0.195	6,847,504	0	184
Link PAR 62 - Lower Dunton Rd	Rural Other	0	0	0	0	0.00	0.273	1,671,335	0	184
Link PAR 63 - A128 Brentwood Rd	Rural Other	5	3	0	8	2.67	8.328	4,473,805	72	184
Link PAR 64 - A1013 Stanford Road (east of Orsett Roundabout)	Urban A road	1	0	0	1	0.33	1.894	3,871,920	45	360
Link PAR 65 - Buckingham Hill Rd	Rural Other	0	0	0	0	0.00	1.474	3,324,785	0	184

Location	Road type	Severity				PIA p.a.	Length (Km)	Estimated annual flow	PIA p.a. Billion Vehicle Km	PIA p.a. Billion Vehicle Km – National Average
		Slight	Serious	Fatal	Total					
Link PAR 66 - Brentwood Road	Rural Other	0	1	0	1	0.33	1.029	4,763,390	68	184
Link PAR 67 - A1013 Stanford Road (west of Orsett Roundabout)	Urban A road	2	0	0	2	0.67	2.182	5,549,765	55	360
Link PAR 68 - Heath Road	Rural Other	0	0	0	0	0.00	0.198	1,198,973	0	184
Link PAR 69 - Chadwell Hill	Urban Other	0	0	0	0	0.00	0.583	3,172,215	0	344
Link PAR 70 - Linford Road	Urban Other	1	0	0	1	0.33	0.582	2,399,510	239	344
Link PAR 71 - Muckingford Road	Rural Other	0	3	0	3	1.00	1.175	1,634,105	**521**	184

Table A.7 Collision data involving pedestrian and cyclist casualties for the latest three-year July 2022 – June 2025 PIC data on the road links forming the Primary Access Routes.

Location	Cyclists						Pedestrians					
	Slight	Serious	Fatal	Total	Total TA	Difference	Slight	Serious	Fatal	Total	Total TA	Difference
Link PAR 1 - A140 Ipswich Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 2 - Mangreen Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 3 - Stansfield Rd / Wymondham Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 4 - B1113	0	0	0	0	0	0	0	0	0	0	0	0

Location	Cyclists						Pedestrians					
	Slight	Serious	Fatal	Total	Total TA	Difference	Slight	Serious	Fatal	Total	Total TA	Difference
Link PAR 5 - Wymondham Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 6 - Fundenhall Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 7 - B1134 Station Rd / B1134 Long Row	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 8 - A1066 Victoria Rd / A1066 Park Rd / A1066 High Rd	0	0	0	0	0	0	3*	1	0	4	1	3
Link PAR 9 - A1066 High Rd / A1066 Low Rd / A1066 Diss Rd /A1066 The Street / A1066 Thetford Rd / A1066 Hurth Way / A1066 Mundford Rd (alternative)	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 10 - A143 Old Bury Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 11 - Lion Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 12 - B1113 Finningham Rd / B1113 Walsham Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 13 - Wickham Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 14 - Eastland Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 15 - Thornham Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 16 - A1120 Church Rd / A1120 Bell’s Ln	0	0	0	0	0	0	1*	0	0	1	1	0
Link PAR 17 - A1120 south of A14 J50	0	0	0	0	0	0	0	0	0	0	0	0

Location	Cyclists						Pedestrians					
	Slight	Serious	Fatal	Total	Total TA	Difference	Slight	Serious	Fatal	Total	Total TA	Difference
Link PAR 18 - Mill Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 19 - B1113 Needham Rd / B1113 Stowmarket Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 20 - B1113 Bramford Rd / B1113 Loraine Way	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 21 - Bullen Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 22 - A1214 London Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 23 - A1071	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 24 - B1070 (A12 access)	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 25 - B1070 Hadleigh Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 26 - Ipswich Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 27 - Birchwood Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 28 - Wick Rd / Grove Hill	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 29 - Perry Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 30 - Bentley Rd	0	1	0	1	1	0	0	0	0	0	0	0
Link PAR 31 - Ardleigh Rd / Little Bromley Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 32 - Wick Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 33 - Old Ipswich Rd	0	1*	0	1	0	0	0	0	0	0	0	0

Location	Cyclists						Pedestrians					
	Slight	Serious	Fatal	Total	Total TA	Difference	Slight	Serious	Fatal	Total	Total TA	Difference
Link PAR 34 - Turnpike Close	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 35 - A1341 Via Urbis Romanae	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 36 - A134 Northern Approach Rd / A134 Wildeve Avenue / A134 Nayland Rd / A134 The Causeway	0	0	0	0	0	0	1	0	0	1	2	-1
Link PAR 37 - A1124 Halsted Rd	0	0	0	0	0	0	1*	0	0	1	0	1
Link PAR 38 - Mill Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 39 - Great Tey Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 40 - A120 Colchester Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 41 - B1018 Braintree Rd / B1018 Witham Rd	0	0	0	0	1	-1	1	0	0	1	1	0
Link PAR 42 - B1389 Hatfield Rd	1*	0	0	1	0	1	1*	2*	0	3	0	3
Link PAR 43 - Spinks Ln / Highfields Rd / Spa Rd / Flora Rd / Faulkbourne Rd / Church Hill	1*	0	0	1	0	1	1*	0	0	1	2	-1
Link PAR 44 - A131 Great Notley Bypass / A131 Great Leighs Bypass / A131 Braintree Rd	1*	0	0	1	0	1	0	0	0	0	0	0
Link PAR 45 - B1008 Essex Regiment Way	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 46 - B1008 Braintree Rd / B1008 Main Rd	1	0	0	1	1	0	0	0	0	0	0	0

Location	Cyclists						Pedestrians					
	Slight	Serious	Fatal	Total	Total TA	Difference	Slight	Serious	Fatal	Total	Total TA	Difference
Link PAR 47 - Chatham Hall Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 48 - Chelmsford Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 49 - A414 Three Mill Hill / A1114 London Rd	0	0	0	0	1	-1	0	0	0	0	0	0
Link PAR 50 - A1016 Waterhouse Ln / A1016 Rainsford Ln	0	0	0	0	0	0	2	1	0	3	5	-2
Link PAR 51 - A1060 Rainsford Rd / A1060 Roxwell Rd	0	1	0	1	1	0	0	0	0	0	0	0
Link PAR 52 - Vicarage Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 53 - A414 Greenbury Way / A414 Ongar Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 54 - B1002 Main Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 55 - Wantz Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 56 - Ivy Barns Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 57 - Church Ln	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 58 - A176 Noak Hill Rd / A176 Laindon Rd / A129 Southend Rd	1*	0	0	1	0	1	0	0	0	0	1	-1
Link PAR 59 - A129 Sun Street / A129 London Rd / A129 Rayleigh Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 60 - Dunton Rd / Brentwood Rd	0	0	0	0	0	0	0	0	0	0	0	0

Location	Cyclists						Pedestrians					
	Slight	Serious	Fatal	Total	Total TA	Difference	Slight	Serious	Fatal	Total	Total TA	Difference
Link PAR 61 - B148 West Mayne	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 62 - Lower Dunton Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 63 - A128 Brentwood Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 64 - A1013 Stanford Road (east of Orsett Roundabout)	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 65 - Buckingham Hill Rd	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 66 - Brentwood Road	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 67 - A1013 Stanford Road (west of Orsett Roundabout)	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 68 - Heath Road	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 69 - Chadwell Hill	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 70 - Linford Road	0	0	0	0	0	0	0	0	0	0	0	0
Link PAR 71 - Muckingford Road	0	1*	0	1	0	1	0	0	0	0	0	0
Total	**5**	**3**	**0**	**8**	**5**	**3**	**11**	**4**	**0**	**15**	**13**	**2**

Table A.8 Personal Injury Collision data for the latest three-year July 2022 – June 2025 at the junctions on the road links forming the Primary Access Routes.

Location	HA	2021	2022	2023	July-Dec 2022	2023	2024	Jan-Jun 2025	36-month period 2021-2023	36-month period 2022-2025	Collision cluster	Is there a change from TA?
Site 2 - A140 Ipswich Rd / Mangreen Lane	Norfolk	0	0	0	0	0	0	0	0	0	No	No
Site 3 - B1113/ Wymondham Rd	Norfolk	0	1	0	1	0	1	0	1	2	No	No
Site 4 - A140 Ipswich Rd / B1134 Station Road	Norfolk	0	0	0	0	0	0	0	0	0	No	No
Site 5 - A140 Ipswich Rd / A1066 Diss Road	Norfolk	0	0	1	0	1	0	0	1	1	No	No
Site 6 - A1066 Victoria Rd / B1077 Stunston Rd	Norfolk	0	0	2	0	2	0	1	2	3 (2 serious and 1 slight)	No	No
Site 7 - A1066 Victoria Rd / Tesco access	Norfolk	0	0	1	0	1	0	0	1	1	No	No
Site 8 - A1066 Victoria Rd / Morrisons access	Norfolk	0	0	0	0	0	0	0	0	0	No	No
Site 9 - A1066 Park Rd / Denmark St	Norfolk	0	1	1	1	1	0	1	2	3 (1 serious and 2 slight)	No	No
Site 10 - A1066 Park Rd / Denmark St	Norfolk	0	0	0	0	0	1	0	0	1	No	No
Site 11 - A1066 High Road / Old High Road	Norfolk	0	0	0	0	0	0	0	0	0	No	No
Site 12 - A11 Thetford Bypass / A1066 Mundford Road	Norfolk	0	0	1	0	1	3	1	1	5 (all slight)	No	No

Location	HA	2021	2022	2023	July-Dec 2022	2023	2024	Jan-Jun 2025	36-month period 2021-2023	36-month period 2022-2025	Collision cluster	Is there a change from TA?
Site 13 - A1066 Mundford Road / Wyatt Way	Norfolk	0	0	0	0	0	0	0	0	0	No	No
Site 14 - A1066 Mundford Road / A1075 Norwich Road	Norfolk	0	1	0	1	0	3	0	1	4 (all slight)	No	No
Site 15 - A1066 Hurth Way / A1066 Thetford Road	Norfolk	1	0	0	0	0	0	0	1	0	No	No
Site 16 - A140 Ipswich Rd / A143 Old Bury Road	Suffolk	1	1	0	0	0	1	1	2	2	No	No
Site 17 - A143 Old Bury Rd / B1077 Stunston Rd	Suffolk	0	1	0	0	0	2	0	1	2	No	No
Site 18 - A143 Old Bury Rd / Lion Rd	Suffolk	1	1	0	1	0	0	0	2	1	No	No
Site 19 - A143 / B1113 Finningham Road	Suffolk	1	0	0	0	0	1	0	1	1	No	No
Site 20 - B1113 Walsham Rd / Wickham Rd	Suffolk	0	0	0	0	0	0	0	0	0	No	No
Site 22 - A1120 Church Rd / B1115 Stowmarket Rd	Suffolk	0	0	0	0	0	0	0	0	0	No	No
Site 23 - A1120 Church Rd / Thorney Green	Suffolk	0	0	0	0	0	0	0	0	0	No	No
Site 24 - A1120 / Gun Cotton Way	Suffolk	1	0	0	0	0	0	0	1	0	No	No
Site 25 - A1120 / B1113 Needham Rd	Suffolk	0	0	1	0	1	1	0	1	2	No	No

Location	HA	2021	2022	2023	July-Dec 2022	2023	2024	Jan-Jun 2025	36-month period 2021-2023	36-month period 2022-2025	Collision cluster	Is there a change from TA?
Site 27 - B1113 Bramford Rd / Bramford Rd	Suffolk	1	0	0	0	0	1	0	1	1	No	No
Site 28 - B1113 Loraine Way / B1067 The Street	Suffolk	0	0	0	0	0	0	1	0	1	No	No
Site 30 - A1214 London Rd / Scrivener Dr	Suffolk	0	3	0	0	0	0	0	3	0	No	No
Site 31 - A1214 London Rd / A1071	Suffolk	0	2	2	1	2	1	1	4	5 (1 serious and 4 slight)	No	No
Site 32 - A1071 / B1113 Swan Hill	Suffolk	1	2	0	2	0	0	1	3	3 (all slight)	No	No
Site 37 - Wick Rd / St. Margaret's Cross	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 41 - A1341 Via Urbis Romanae / United Way	Essex	1	0	0	0	0	0	0	1	0	No	No
Site 42 - A1341 Via Urbis Romanae / Olympic Blv	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 43 - A1341 Via Urbis Romanae / Whitmore Dr	Essex	1	0	1	0	1	2	1	2	4 (2 serious and 2 slight)	No	No
Site 44 - A1341 Via Urbis Romanae / A134 Northern Approach Rd	Essex	0	1	0	0	0	0	0	1	0	No	No
Site 45 - A134 Northern Approach Rd / Boxted Rd	Essex	1	1	2	0	2	3	0	4 (3 serious and 1 slight)	5 (3 serious and 2 slight)	Yes	No

Location	HA	2021	2022	2023	July-Dec 2022	2023	2024	Jan-Jun 2025	36-month period 2021-2023	36-month period 2022-2025	Collision cluster	Is there a change from TA?
Site 49 - B1018 Braintree Rd / Millenium Way	Essex	1	0	0	0	0	0	0	1	0	No	No
Site 50 - B1389 Hatfield Road / Spinks Lane	Essex	1	0	1	0	1	0	0	2	1	No	No
Site 51 - Spinks Ln / Highfields Rd	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 52 - Highfields Rd / Guithavon Rd	Essex	1	0	0	0	0	0	0	1	0	No	No
Site 53 - Spa Rd / Highfields Rd	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 54 - Spa Rd / Humber Rd	Essex	0	0	0	0	0	2	0	0	2	No	No
Site 55 - Spa Rd / Powers Hall End	Essex	0	0	0	0	0	0	1	0	1	No	No
Site 57 - A131 Great Notley Bypass / London Rd	Essex	1	1	2	1	2	1	0	4	4 (2 serious and 2 slight)	No	No
Site 58 - A131 Great Notley Bypass / Main Rd	Essex	0	2	0	2	0	1	0	2	3 (2 serious and 1 slight)	No	No
Site 59 - A131 Braintree Rd/ B1008 Essex Regiment Way	Essex	0	0	1	0	1	2	2	1	5 (1 serious and 4 slight)	No	No
Site 60 - B1008 Main Rd/ Chatham Hall Ln	Essex	0	1	1	1	1	0	0	2	2	No	No
Site 61 - B1008 Main Rd/ The Street / Chelmsford	Essex	0	0	1	0	1	2	1	1	4 (1 serious and 3 slight)	No	No

Location	HA	2021	2022	2023	July-Dec 2022	2023	2024	Jan-Jun 2025	36-month period 2021-2023	36-month period 2022-2025	Collision cluster	Is there a change from TA?
Site 63 - A414 Three Mile Hill / A1114 London Rd	Essex	0	0	1	0	1	1	0	1	2	No	No
Site 64 - A1114 London Rd / A1016 Westway	Essex	0	1	1	0	1	2	0	2	3 (all slight)	No	No
Site 65 - A1016 Westway / Writtle Rd	Essex	0	0	1	0	1	0	1	1	2	No	No
Site 66 - A1016 Waterhouse Ln / Forest Dr	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 67 - A1016 Waterhouse Ln / Beeches Rd	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 68 - A1016 Waterhouse Ln / A1060 Rainsford Rd	Essex	5	3	2	2	2	1	0	10	5 (2 serious and 3 slight)	No	Yes
Site 69 - A1060 Roxwell Rd / Lordship Rd	Essex	0	0	0	0	0	0	1	0	1	No	No
Site 70 - A1060 Rainsford Rd / Park Avenue	Essex	1	0	0	0	0	0	0	1	0	No	No
Site 71 - A414 Greenbury Way / Highwood Road	Essex	1	0	0	0	0	0	0	1	0	No	No
Site 72 - B1002 Main Rd / Wantz Rd	Essex	0	0	0	0	0	1	0	0	1	No	No
Site 74 - A176 Noak Hill Rd / Wash Rd	Essex	0	0	1	0	1	0	1	1	2	No	No

Location	HA	2021	2022	2023	July-Dec 2022	2023	2024	Jan-Jun 2025	36-month period 2021-2023	36-month period 2022-2025	Collision cluster	Is there a change from TA?
Site 75 - A176 Noak Hill Rd / Church St	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 76 - A176 Noak Hill Rd / Laindon Common Rd	Essex	0	0	0	0	0	0	0	0	0	No	No
Site 77 - A176 Noak Hill Road / A176 Laindon Road	Essex	0	0	1	0	1	0	0	1	1	No	No
Site 78 - A176 / A129 Southend Road	Essex	0	1	0	1	0	0	0	1	1	No	No
Site 79 - A129 Southend Road / A129 Sun Street	Essex	0	0	0	0	0	1	0	0	1	No	No
Site 80 - A129 Sun Street / A176 Laindon Road	Essex	0	0	1	0	1	2	0	1	3 (all slight)	No	No
Site 81 - A129 London Road / Western Road	Essex	0	1	0	1	0	1	1	1	3 (2 serious and 1 slight)	No	No
Site 82 - A129 London Road / Mountessing Road	Essex	1	0	0	0	0	0	0	1	0	No	No
Site 88 - A1013 Stanford Road / Buckingham Hill Road	Thurrock	0	0	0	0	0	0	0	0	0	No	No

Table A.9 Personal Injury Collisions 2019-2025 (Excluding March 2020 to September 2021) at the Strategic Road Network and Major Road Network junctions connecting to the Primary Access Routes.

Location	HA	2019	Jan-Feb 2020	Sep-Dec 2021	2022	2023	2024	Jan-Jun 2025	60-month period 2019-2023 (TA)	60-month period 2019-2025	Collision cluster	Is there a change from TA?
Site 1 - A47/A140	NH/Norfolk	3	0	0	1	1	3	1	6	9	Yes	No
Site 4 - A140/B1134	Norfolk	1	0	0	0	0	0	0	1	1	No	No
Site 5 - A140/A1066	Norfolk	2	0	0	0	1	0	0	3	3	No	No
Site 12 - A11/A1066	NH/Norfolk	0	0	0	0	1	3	1	1	5 (all slight)	No	No
Site 16 - A140/A143	Suffolk	1	0	0	1	0	2	1	3	5 (2 serious and 3 slight)	No	No
Site 21 - A14 J50 Cedars Interchange	NH/Suffolk	2	0	1	2	4	3	1	11	13	Yes	No
Site 26 - A14 J52 Claydon Roundabout	NH/Suffolk	0	0	1	5	1	3	3	8	13	Yes	No
Site 29 - A14 J55 Copdock Interchange	NH/Suffolk	4	0	1	6	4	2	4	16	21	Yes	No
Site 33 - A12/B1070 (only PAR access)	NH/Suffolk	0	0	0	0	1	0	0	1	1	No	No
Site 35 - A140 Stoke Ash	Suffolk	3	0	0	1	1	2	0	6	7	Yes	No*
Site 36 - A12/Birchwood Road	NH/Essex	0	0	0	2	0	0	0	2	2	No	No
Site 38 - A120 Ardleigh Crown Interchange	NH/Essex	4	0	0	2	1	0	2	9	9	Yes	No
Site 39 - A120/Bentley Road (only PAR access)	NH/Essex	0	0	0	0	0	0	0	0	0	No	No

Location	HA	2019	Jan-Feb 2020	Sep-Dec 2021	2022	2023	2024	Jan-Jun 2025	60-month period 2019-2023 (TA)	60-month period 2019-2025	Collision cluster	Is there a change from TA?
Site 40 - A12 Severalls Interchange	NH/Essex	1	0	0	0	0	1	0	1	2	No	No
Site 46 - A12 J26 Eight Ash Green Interchange	NH/Essex	2	0	1	4	1	2	1	12	11	Yes	No
A12 J25 Marks Tey Interchange	NH/Essex	5	0	1	3	1	2	0	12	12	Yes	No
Site 47 - A120/Great Tey Road	NH/Essex	1	0	0	1	0	0	0	2	2	No	No
Site 48 - A120/B1018 Galleys Corner	NH/Essex	3	0	2	7	6	7	1	24	26	Yes	No
Site 56 - A120/A131 Great Notley Bypass	NH/Essex	0	0	1	1	0	1	0	4	3	No	No
Site 62 - A12 J15 Webbs Farm Interchange	NH/Essex	1	0	0	0	0	2	0	6	3	No	No
Site 73 - A127/A176	NH/Essex	3	1	0	2	4	5	0	15	15	Yes	No
Site 83 - A127 Southend Arterial Rd / B148 West Mayne	NH/Essex	0	0	0	2	2	0	0	5 (1 serious and 4 slight)	4 (1 serious and 3 slight)	No	No
Site 84 - A127/A128	NH/Essex	4	1	0	1	4	3	1	10	14	Yes	No
Site 88 – A13 Orsett Cock Roundabout	Thurrock	4	2	0	3	4	3	1	15	17	Yes	No
Site 89 - A1089 Asda Roundabout	NH/Thurrock	2	0	1	1	2	3	1	7	10	Yes	No*
Site 90 - M25 J30	NH	12	0	3	4	7	4	1	28	31	Yes	No*

** Only SRN/MRN junctions connecting to PARs reported in the TA but identified as collision cluster for the 60-month period 2019-2023*

Abbreviations

Abbreviation	Full Reference
DCO	Development Consent Order
DfT	Department for Transport
EIA	Environmental Impact Assessment
ES	Environmental Statement
LHA	Local Highway Authority
LIR	Local Impact Report
LRN	Local Road Network
LTC	Lower Thames Crossing
MRN	Major Road Network
NH	National Highways
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PAR	Primary Access Routes
PIC	Personal Injury Collisions
SRN	Strategic Road Network
TA	Transport Assessment
WCH	Walkers, cyclists and horse riders

Glossary

Term	Description
Committed development	A development that has full or outline planning permission, or is allocated in an adopted development plan
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the Project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Environmental Impact Assessment (EIA)	An assessment of the likely effects of a development project on the environment, which is reported in an Environmental Statement that is publicised and consulted on and taken into account in the decision on whether a project should proceed.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Local Highway Authority	The public authority whose duty it is to maintain and protect the safety and usability of public roads.
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Magnitude of change	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.
Major Road Network	Routes in the middle tier of the road network (between the SRN and LRN), as defined by the Department for Transport. MRNs are managed by the Local Highway Authorities. For the Project, the Local Highway Authorities are Thurrock Council and Essex, Suffolk and Norfolk County Councils
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Nationally Significant Infrastructure Project	Typically a large scale development of national importance that requires development consent from the Secretary of State, under the Planning Act 2008.

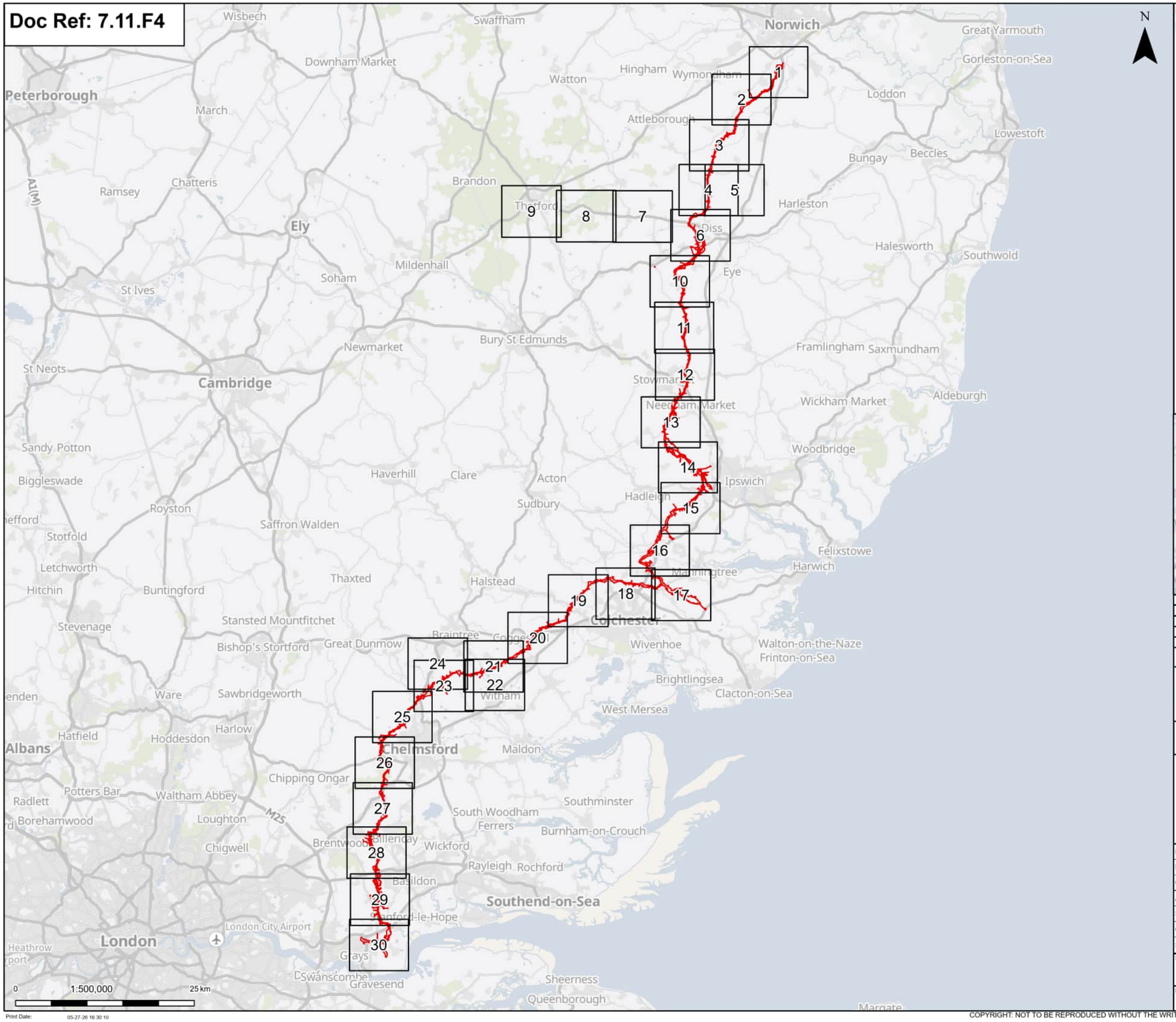
Term	Description
Primary Access Routes	Access routes on the public highway designated for use by construction vehicles (typically for HGVs) to travel from the strategic road network / major road network to the site access point
Site access points	The location on a PAR where construction vehicles will transition between the public highway and haul roads/working areas
Strategic Road Network	Comprises the motorway and trunk road network, managed by National Highways, as defined by the Department for Transport
Transport Assessment	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).

Bibliography

Ref 1 Department for Transport (2025) Road traffic statistics - *Road accidents*

Ref 2 Institute of Environmental Management and Assessment (IEMA) (2023) *IEMA Guidelines: Environmental Assessment of Traffic and Movement* (EATM)

Doc Ref: 7.11.F4



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data Overview

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:500,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

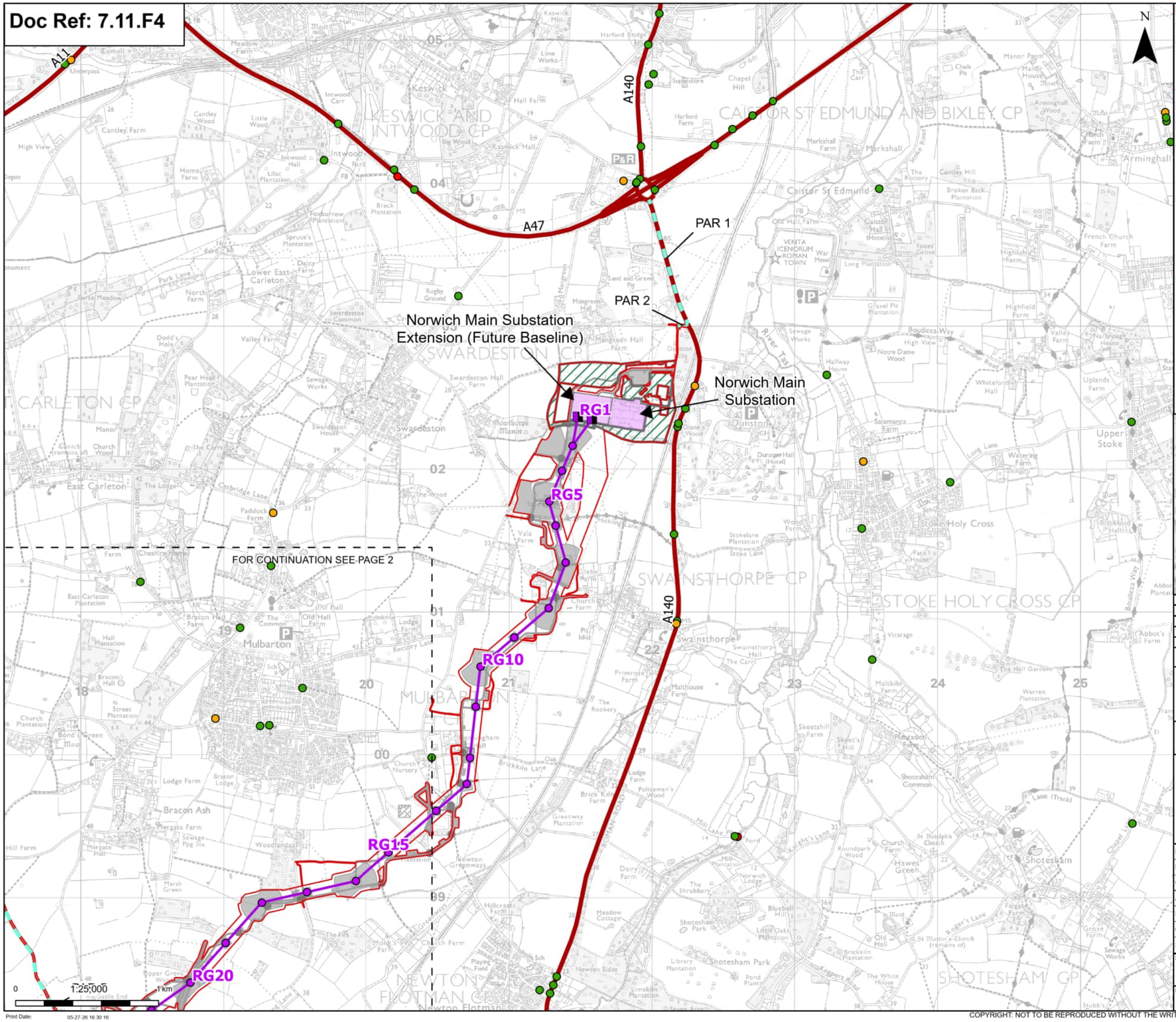
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:30:10

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



Order limits

Sheet index cutline

Proposed project design details

Proposed full line tension gantry

Proposed standard lattice pylon location

Proposed overhead line alignment

Norwich Main Substation

Norwich Main Substation Extension (future baseline)

Environmental area

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal

Serious

Slight

Primary Access Route

Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK

Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data Page 1 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

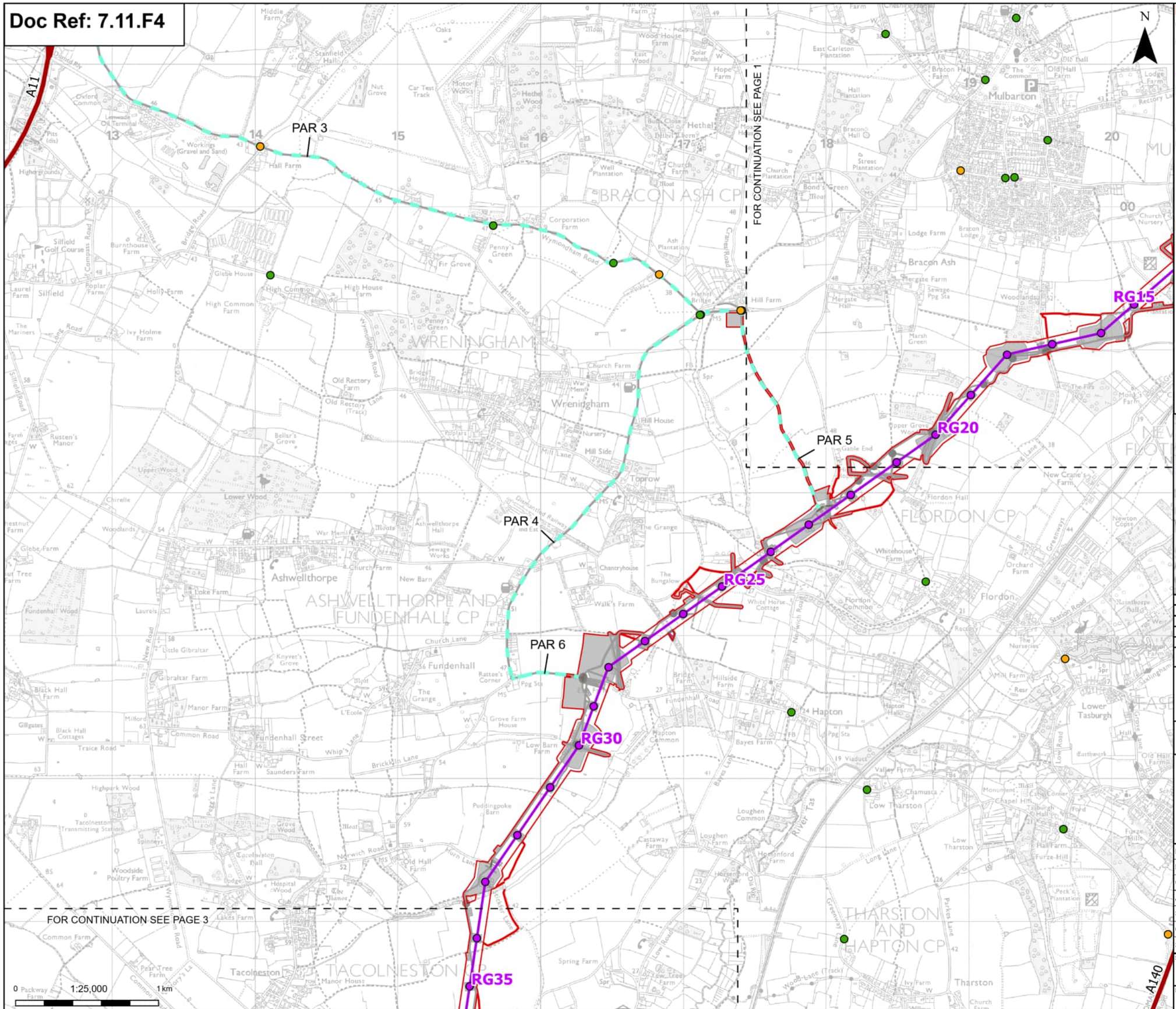
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:30:16

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



Order limits

Sheet index cutline

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal

Serious

Slight

Primary Access Route

Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 2 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

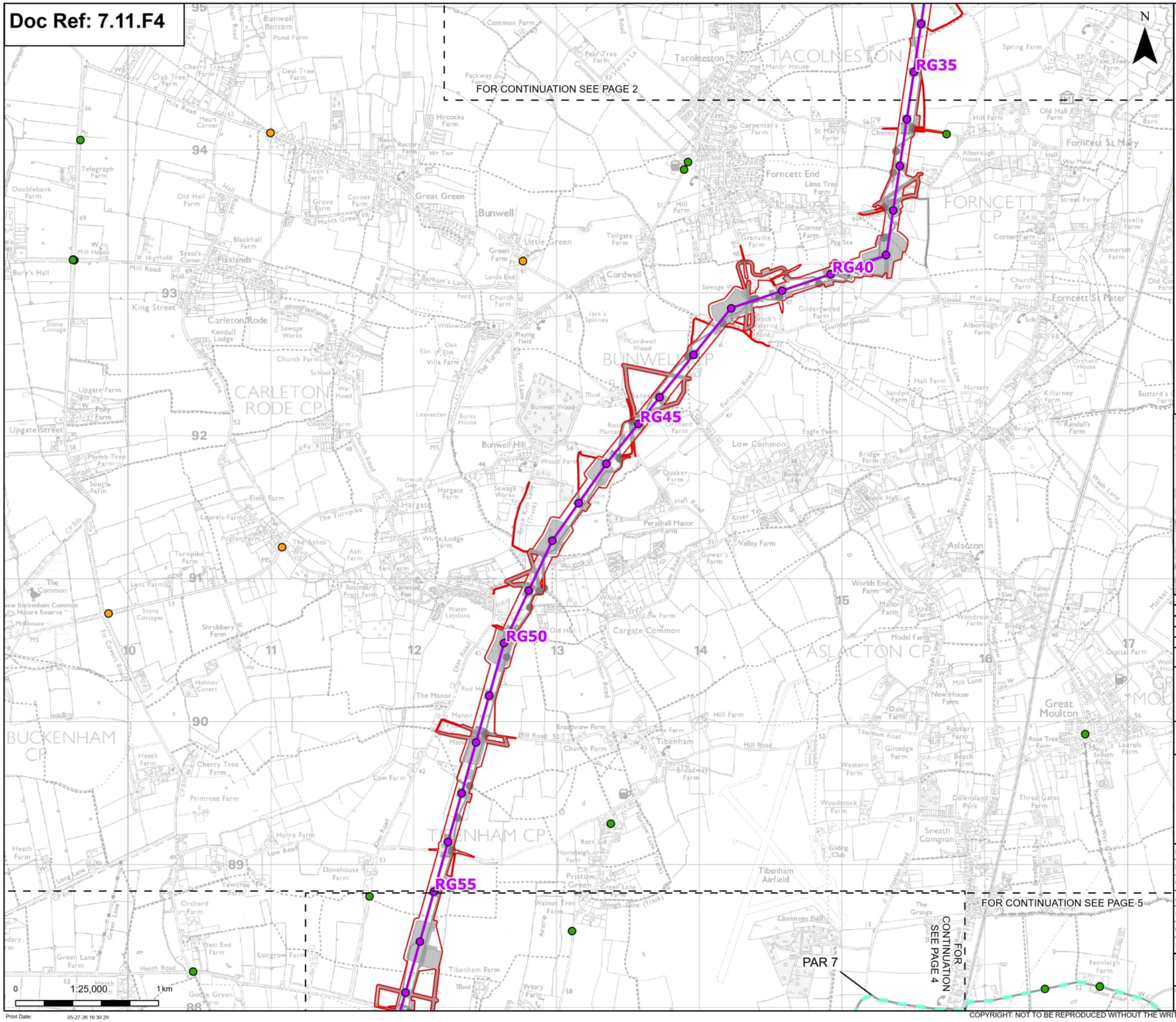
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:30:23

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



Order limits

Sheet index cutline

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Serious

Slight

Primary Access Route

Bellmouth junction

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 3 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

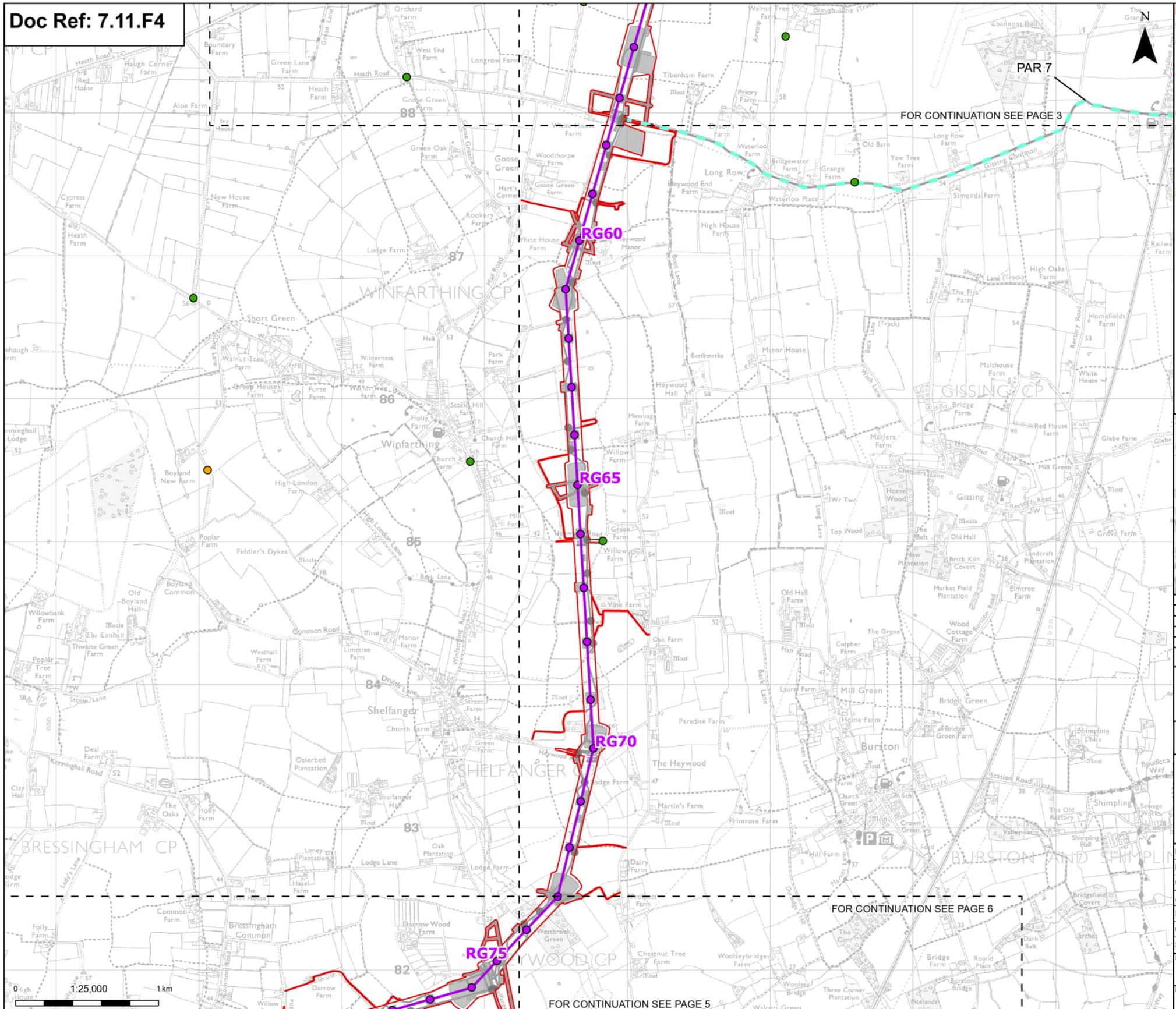
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

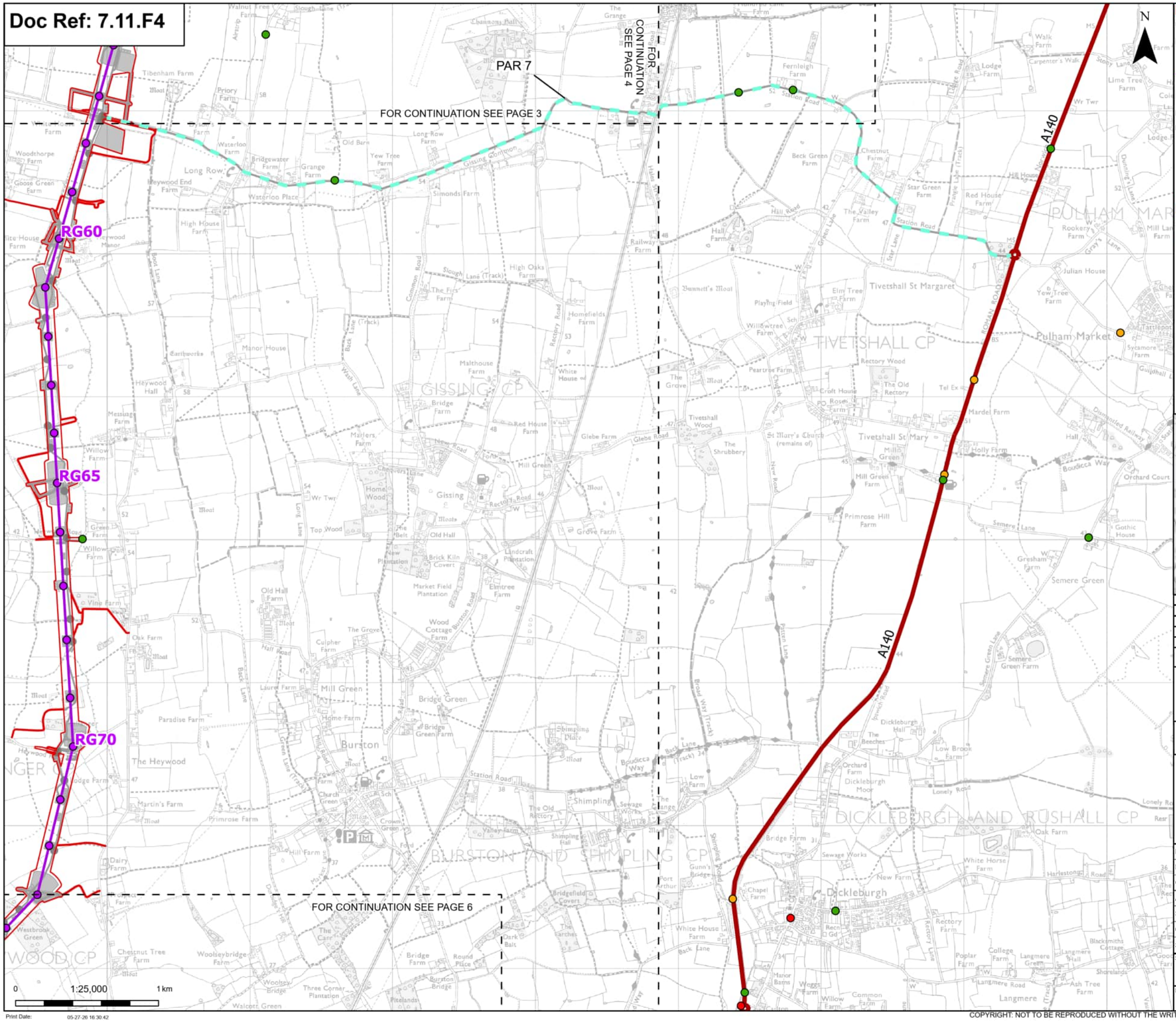
Print Date: 05-27-26 16:30:29

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

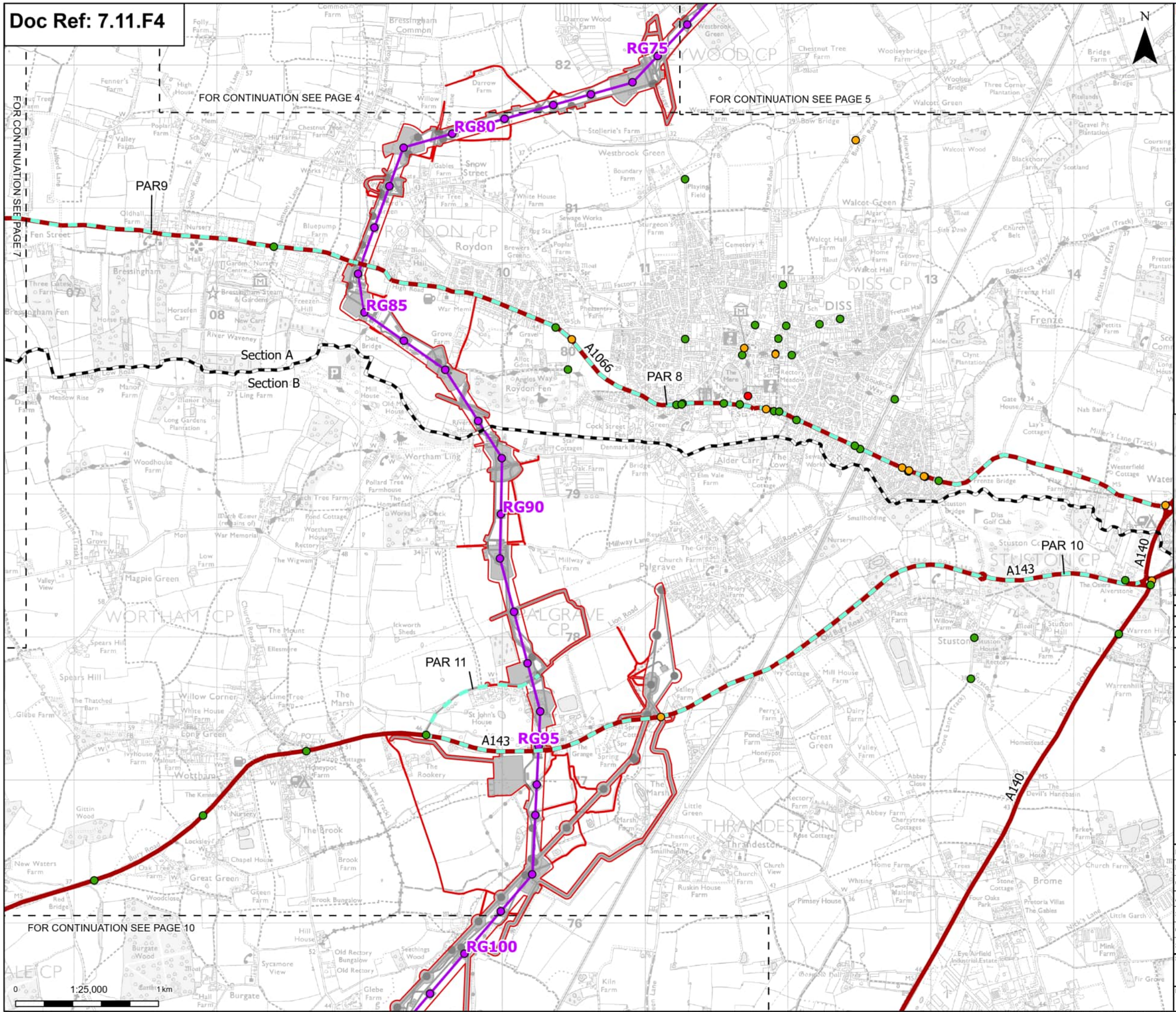
Doc Ref: 7.11.F4


RG60
RG65
RG70
RG75
PAR 7
FOR CONTINUATION SEE PAGE 3
FOR CONTINUATION SEE PAGE 5
FOR CONTINUATION SEE PAGE 6
WINFARTHING CP
GISSING CP
BRESSINGHAM CP
SHELFANGER CP
BURSTON AND SHIMPLING
Winfarthing
Shelfanger
Bressingham
Gissing
Burston
Mill Green
Bridge Green
Short Green
Goose Green
Boyland Common
Bressingham Common
Gissing Common
Long Row
Waterloo Place
Stoney Lane
Lodge Lane
Common Road
Hall Road
Boot Lane
Rectory Road
Station Road
Church Farm
Manor House
Heywood Hall
The Heywood
Paradise Farm
Primrose Farm
Martin's Farm
Dairy Farm
Hill Farm
Laurel Farm
Home Farm
Bridge Farm
Mariners Farm
Malthouse Farm
High Oaks Farm
Homefields Farm
Simonds Farm
Grange Farm
Bridgewater Farm
Waterloo Farm
Priory Farm
Tibenham Farm
Longrow Farm
Walnut Tree Farm
Woodthorpe Farm
Goose Green Farm
Rookery Farm
New House Farm
Lodge Farm
Park Farm
Wilderness Farm
Furze Farm
Green House Farm
Walnut Tree Farm
Stock Hill Farm
Church Hill Farm
Holly Farm
Willow Farm
High London Farm
Boyland New Farm
Poplar Farm
Fiddler's Dykes
Old Boyland Hall
Thwaite Green Farm
Limetree Farm
Manor Farm
Westhall Farm
Street Farm
Osierbed Plantation
Shelfanger Hall
Oak Plantation
Loney Plantation
Hazel Farm
Darrow Wood Farm
Darrow Farm
Westbrook Green
Chestnut Tree Farm
Woolseybridge Farm
Three Corner Plantation
Oak Farm
Vine Farm
Old Hall Farm
Elmtree Farm
Wood Cottage Farm
Market Field Plantation
Brick Kiln Covert
New Plantation
Home Wood
Top Wood
Earthworks
Messuage Farm
Mill Farm
Green Farm
Willow Farm
Aloe Farm
Heath Farm
Haugh Corner Farm
Boundary Farm
Orchard Farm
West End Farm
Green Lane Farm
Goose Green Farm
Green Oak Farm
Ivy House
Cypress Farm
Red House
Heath Road
Konninghall Road
Deal Farm
Clay Hall
The Oaks
Holly Farm
Folly Farm
Common Farm
Poplar Tree Farm
Willowbank Farm
Old Boyland Hall
The Conbait
Moats
Stone Lane
Druidy Lane
Lady's Lane
Hall Farm
Hall Farm
Hall Farm

Doc Ref: 7.11.F4


PAR 7
FOR CONTINUATION SEE PAGE 3
FOR CONTINUATION SEE PAGE 4
FOR CONTINUATION SEE PAGE 6
RG60
RG65
RG70
A140
A140
N
0
1:25,000
1 km
Tibenham Farm
Priory Farm
Woodthorpe Farm
Goose Green Farm
Heywood End Farm
Long Row
Waterloo Farm
Bridgewater Farm
Grange Farm
Old Barn
Yew Tree Farm
Long Row Farm
Gissing Common
Simonds Farm
Waterloo Place
High House Farm
Heywood Manor
Manor House
Earthworks
Heywood Hall
Messing Farm
Willow Farm
Marlers Farm
Bridge Farm
Malthouse Farm
The Firs Farm
High Oaks Farm
Homefields Farm
Slough Lane (Track)
Common Road
Rectory Road
Back Lane (Track)
Wash Lane
Red House Farm
New Road
Glebe Farm
Glebe Road
Mill Green
Chequers Lane
Home Wood
Gissing
Rectory Road
Top Wood
Green Farm
Wr Twr
Old Hall
Brick Kiln Covert
Landcraft Plantation
Elmtree Farm
Market Field Plantation
Wood Cottage Farm
Burston Road
Oak Farm
The Grove
Culpher Farm
Hall Road
Laurel Farm
Mill Green
Bridge Green
Bridge Green Farm
Home Farm
Paradise Farm
Burston
The Heywood
Church Green
Crown Green
Martin's Farm
Primrose Farm
Dairy Farm
Hill Farm
Valley Farm
Shimpling Hall
Shimpling Place
Shimpling
Sewage Works
The Old Rectory
Boudicca Way
Station Road
Low Farm
Back Lane (Track)
Broad Way (Track)
Shimpling Road
Bridge Farm
Port Arthur
Gunn's Bridge
Chapel Farm
Dickleburgh
White House Farm
Back Lane
New Farm
Rectory Farm
Poplar Farm
College Farm
Langmere Green
Langmere Hall
Langmere Road
Langmere (Track)
Ash Tree Farm
Blacksmiths Cottage
Shorelands
Semere Green Farm
Semere Green
Semere Lane
Gresham Farm
Gothic House
Dickleburgh Hall
The Beeches
Orchard Farm
Dickleburgh Moor
Low Brook Farm
Lonely Road
Oak Farm
White Horse Farm
Harleston Road
Bridge Farm
Sewage Works
Manor Barns
Willow Farm
Common Farm
Westbrook Green
Chestnut Tree Farm
Woolseybridge Farm
Woolsey Bridge
Three Corner Plantation
Pitelands
Walcott Green
Bridge Farm
Round Place
Burston Bridge
Dark Belt
The Carrs
The Larches
Bridgefield Covers
Pulham Market
Julian House
Yew Tree Farm
Tattlepot
Sycamore Farm
Guildhall Lane
Tivetshall St Margaret
Tivetshall St Mary
TIVETSHALL CP
GISSING CP
PULHAM MARKET
DICKLEBURGH AND RUSHALL CP
BURSTON AND SHIMPLING CP
WOOD CP
Bunnett's Moat
Playing Field
Willowtree Farm
Elm Tree Farm
Peartree Farm
Rectory Wood
The Old Rectory
Croft House
Rose Farm
The Grove
Tivetshall Wood
The Shrubbery
St Mary's Church (remains of)
Mill Green
Mill Green Farm
Primrose Hill Farm
Mardel Farm
Holly Farm
Boudicca Way
Orchard Court
Gothic House
Fernleigh Farm
Station Road
Beck Green Farm
Chestnut Farm
Star Green Farm
Red House Farm
The Valley Farm
Hall Farm
Railway Farm
Hall Road
Green Lane
Pringle Lane (Track)
Lodge Road
Lodge Farm
Walk Farm
Carpenter's Walk
Stony Lane
Lime Tree Farm
Dunning's Lane
Rookery Farm
Gray's Lane
Mill Lane Farm
Julian House
Yew Tree Farm
Tattlepot
Sycamore Farm
Guildhall Lane
Tel Ex
Disused Railway
Boudicca Way
Orchard Court
Gothic House
Semere Lane
Gresham Farm
Semere Green
Semere Green Farm
Langmere Road
Langmere (Track)
Ash Tree Farm
Blacksmiths Cottage
Shorelands
Langmere Hall
Langmere Green
College Farm
Poplar Farm
Rectory Farm
Rectory Lane
New Farm
Dickleburgh
Chapel Farm
White House Farm
Back Lane
Bridge Farm
Sewage Works
Oak Farm
White Horse Farm
Harleston Road
Lonely Road
Low Brook Farm
Dickleburgh Moor
Orchard Farm
Dickleburgh Hall
The Beeches
Semere Green Lane
Semere Green Farm
Semere Green
Broad Way (Track)
Shimpling Road
Bridge Farm
Sewage Works
Manor Barns
Willow Farm
Common

Doc Ref: 7.11.F4



Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0. © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 6 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

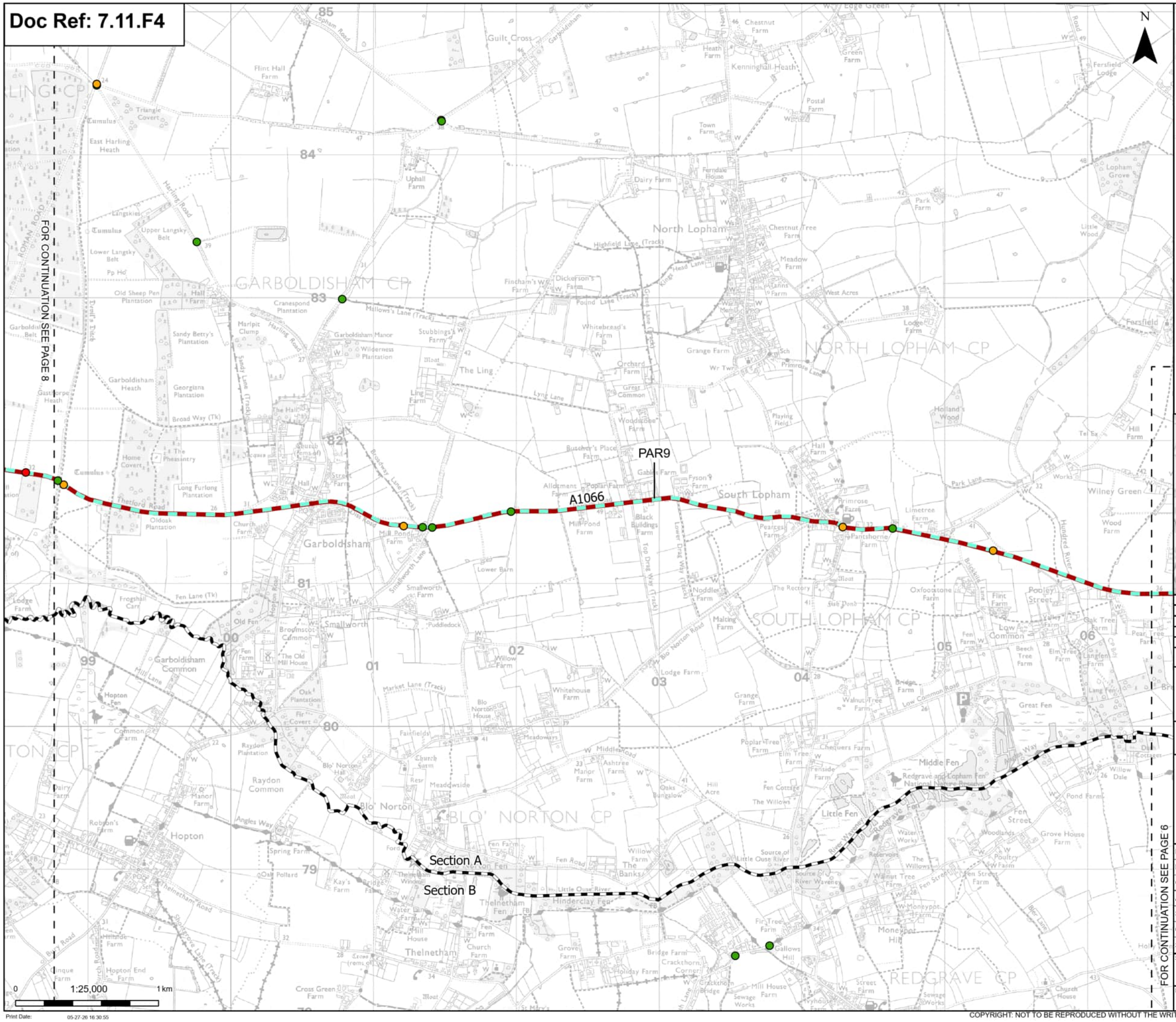
Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397
Revision: B

Print Date: 05-27-26 16:30:49

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



Sheet index cutline
Project section line

Discipline specific constraints

Road collisions (July 2022 - June 2025)

- Fatal
- Serious
- Slight
- Primary Access Route

Strategic road network

- A Road

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0. © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data Page 7 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

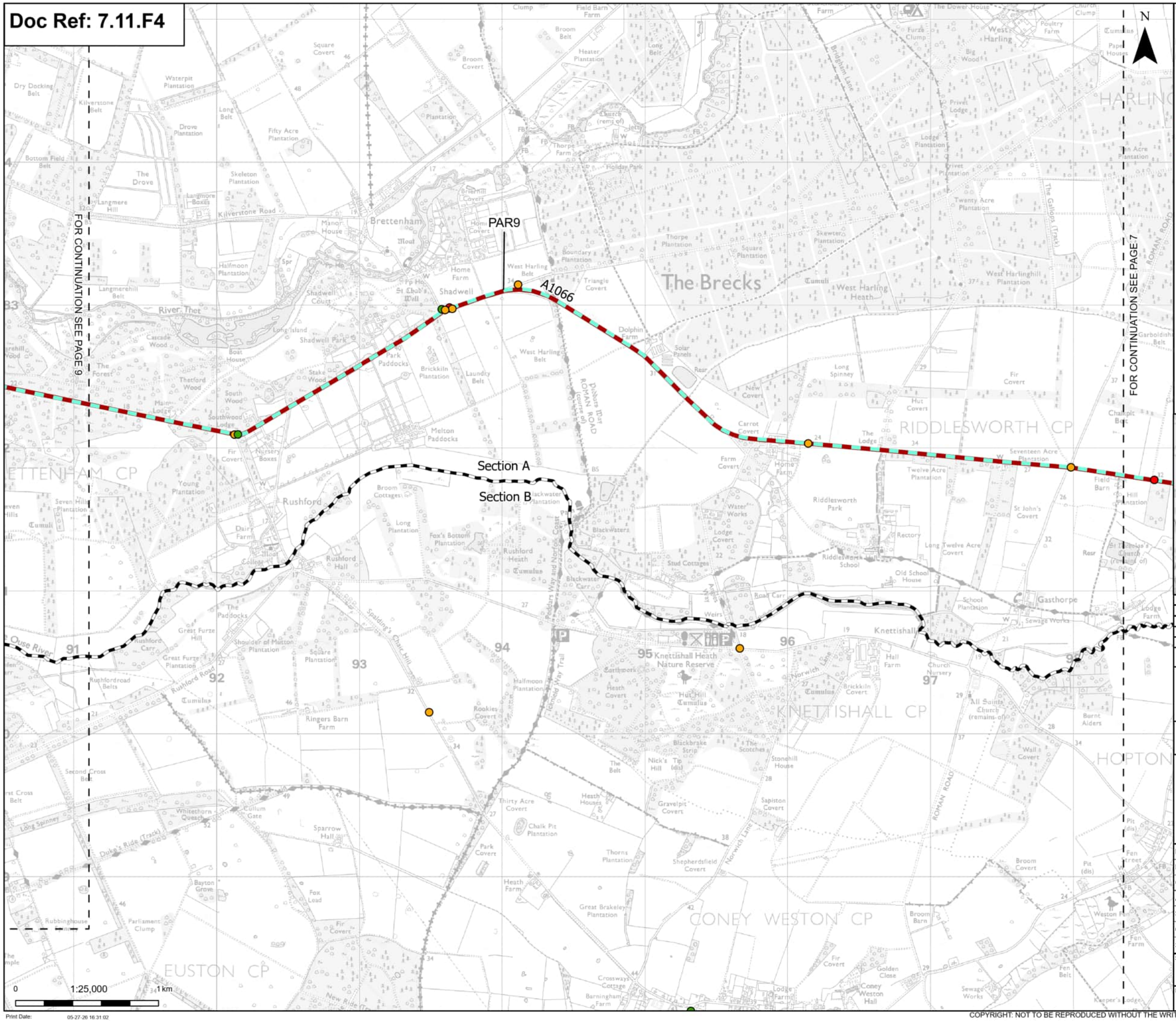
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

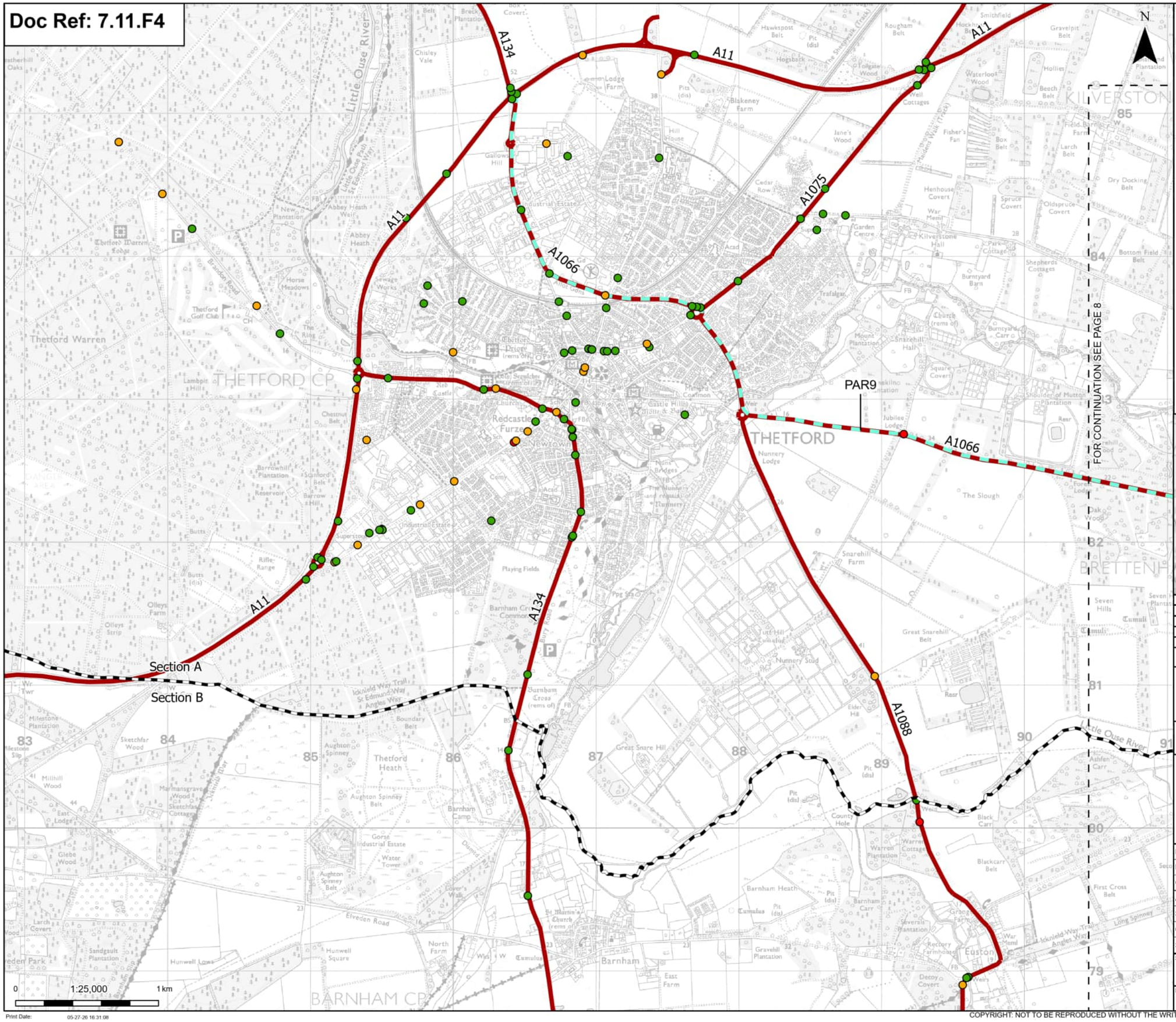
Print Date: 05-27-26 16:30:55

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4


PAR9
A1066
Section A
Section B
FOR CONTINUATION SEE PAGE 9
FOR CONTINUATION SEE PAGE 7
Brettenham
Shadwell
The Brecks
RIDDLESWORTH CP
KNETTISHALL CP
CONEY WESTON CP
EUSTON CP
HOPTON
Rushford
Knettishall
Knettishall Heath Nature Reserve
River Thet
Ouse River
Kilverstone Road
Rushford Road
Norwich Lane
ROMAN ROAD
Dibbers Dyr ROMAN ROAD (course of)
Icknield Way Trail
Peddars Way and Norfolk Coast Path
Dolphin Farm
Shadwell Park
Rushford Hall
Ringers Barn Farm
Sparrow Hall
Gasthorpe
Riddlesworth Park
Riddlesworth School
Old School House
Lodge Farm
Hall Farm
Church Nursery
Coney Weston Hall
Golden Close
Fen Farm
Fen Street
Broom Barn
Broom Covert
Sewage Works
Water Works
Rectory
Stonehill House
Gravelpit Covert
Shepherdsfield Covert
Thorns Plantation
Chalk Pit Plantation
Thirty Acre Covert
Sapiston Covert
Wall Covert
Burnt Alders
All Saints Church (remains of)
Church (rems of)
Crossways Cottage
Barningham Farm
Great Brakeley Plantation
Heath Farm
Heath Houses
Park Covert
Fir Covert
Hut Covert
Carrot Covert
New Covert
Long Spinney
Twelve Acre Plantation
Seventeen Acre Plantation
Field Barn
Hill Plantation
Chalkpit Belt
Garboldisham Belt
Rushford Belts
Second Cross Belt
Long Spinney
Dukes Ride (Track)
Rubbinghouse Plantation
Parliament Clump
Bayton Grove
Fox Lead
Whitethorn Quench
Cullum Gate
Rushford Carr
Great Furze Hill
Great Furze Plantation
Shoulder of Mutton Plantation
Square Plantation
Halfmoon Plantation
Rookies Covert
Earthwork Heath Covert
Hut Hill Tumulus
Blackbrake Strip
The Belt
Nick's Tip (dis)
Pit (dis)
Tumuli
Cascade Wood
Boat House
Long Island
Stake Wood
Brickkiln Plantation
Laundry Belt
Melton Paddocks
Park Paddocks
Shadwell Court
Home Farm
Manor House
Moat
St Thob's Well
Pp Ho
Briermill Covert
Home Covert
Halfmoon Plantation
Boundary Plantation
Triangle Covert
West Harling Belt
West Harling Heath
West Harlinghill Plantation
Thorpe Plantation
Skeyton Plantation
Square Plantation
Twenty Acre Plantation
Lodge Plantation
Privet Plantation
Privet Lodge
Big Wood
Furze Clump
Poultry Farm
Pagehouses
Cumulus
Church Clump
The Dower House
Bridgham Lane
The Gallops (Track)
Roman Road
Solar Panels
Rear
Lodge
Farm Covert
Home Farm
Water Works
Stud Cottages
Blackwaters
Rushford Heath Tumulus
Fox's Bottom Plantation
Long Plantation
Dairy Farm
College
The Paddocks
Shadwell Park
Park Paddocks
Brickkiln Plantation
Laundry Belt
Melton Paddocks
Nursery Boxes
Fir Covert
Young Plantation
Seven Hills Plantation
Cumuli
Dry Docking Belt
Waterpit Plantation
Kilverstone Belt
Drove Plantation
Fifty Acre Plantation
Bottom Field Belt
The Drove
Skeleton Plantation
Langmere Boxes
Langmere Hill
Halfmoon Plantation
Langmerehill Belt
The Forest
Thetford Wood
South Wood
Southwood Lodge
Main Lodge
Square Covert
Broom Belt
Heater Plantation
Long Belt
Broom Covert
Church (rems of)
Thorpe Farm
Holiday Park
Fp Ho
Spr
Shadwell
Home Farm
Triangle Covert
West Harling Belt
Dolphin Farm
Rear
Solar Panels
Long Spinney
Fir Covert
New Covert
Hut Covert
Carrot Covert
The Lodge
Twelve Acre Plantation
Seventeen Acre Plantation
Field Barn
Hill Plantation
Chalkpit Belt
Garboldisham Belt
Farm Covert
Home Farm
Water Works
Riddlesworth Park
Riddlesworth School
Old School House
Rectory
Long Twelve Acre Covert
St John's Covert
Rear
Church (rems of)
Gasthorpe
School Plantation
Sewage Works
Lodge Farm
Knettishall
Hall Farm
Church Nursery
All Saints Church (remains of)
Burnt Alders
Wall Covert
Broom Covert
Pit (dis)
Fen Street
Fen Farm
Fen Belt
Weston
Golden Close
Coney Weston Hall
Sewage Works
Keeper's Lodge
Lodge Farm
Crossways Cottage
Barningham Farm
Great Brakeley Plantation
Heath Farm
Heath Houses
Park Covert
Fir Covert
Thorns Plantation
Chalk Pit Plantation
Thirty Acre Covert
Sapiston Covert
Gravelpit Covert
Shepherdsfield Covert
Wall Covert
Burnt Alders
All Saints Church (remains of)
Stonehill House
Blackbrake Strip
The Belt
Nick's Tip (dis)
Pit (dis)
Tumuli
Cullum Gate
Whitethorn Quench
Sparrow Hall
Bayton Grove
Fox Lead
Rubbinghouse Plantation
Parliament Clump
Rushford Carr
Great Furze Hill
Great Furze Plantation
Shoulder of Mutton Plantation
Square Plantation
Halfmoon Plantation
Rookies Covert
Earthwork Heath Covert
Hut Hill Tumulus
Second Cross Belt
Long Spinney
Dukes Ride (Track)
Rushford Belts
Rushford Road
Ringers Barn Farm
Rushford Hall
Dairy Farm
College
The Paddocks
Rushford Carr
Great Furze Hill
Great Furze Plantation
Shoulder of Mutton Plantation
Square Plantation
Halfmoon Plantation
Rookies Covert
Earthwork Heath Covert
Hut Hill Tumulus
Blackbrake Strip
The Belt
Nick's Tip (dis)
Pit (dis)
Tumuli
Cullum Gate
Whitethorn Quench
Sparrow Hall
Bayton Grove
Fox Lead
Rubbinghouse Plantation
Parliament Clump

Doc Ref: 7.11.F4



Sheet index cutline

Project section line

Discipline specific constraints

Road collisions (July 2022 - June 2025)

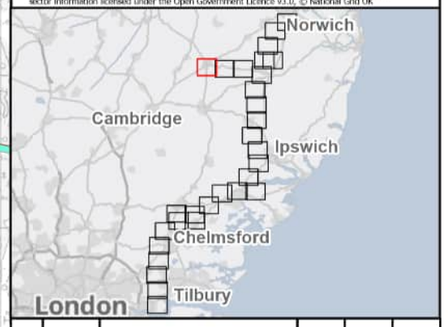
- Fatal
- Serious
- Slight

Primary Access Route

Strategic road network

- A Road

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0. © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

PROJECT:
nationalgrid Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 9 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

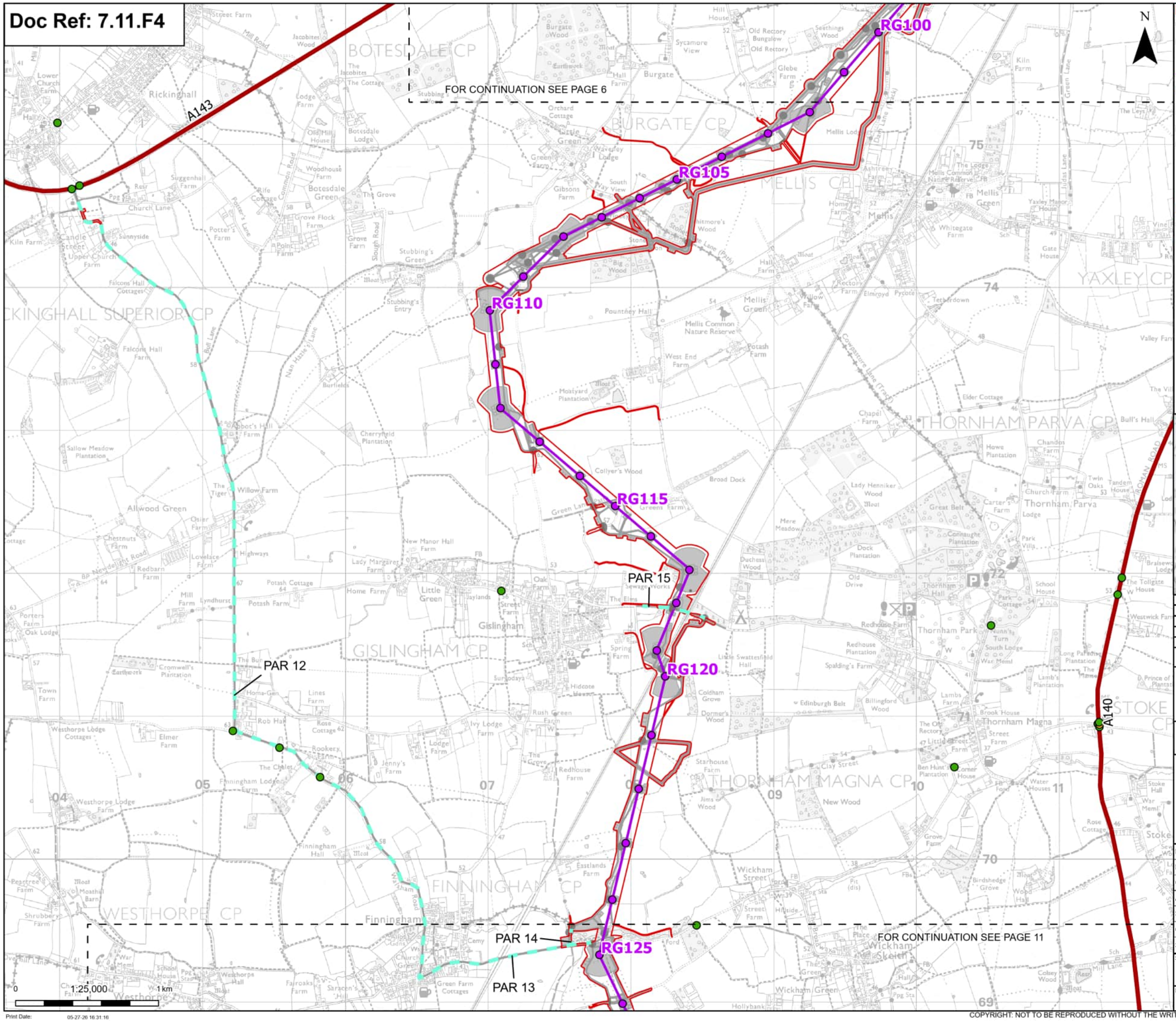
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:31:08

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



N

Order limits

Sheet index cutline

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Serious

Slight

Primary Access Route

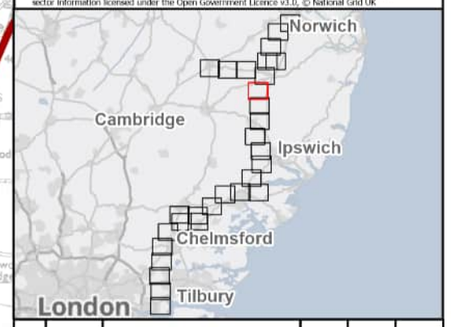
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 10 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:31:16

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

PAR 14

PAR 13

RG125

RG130

RG135

RG140

RG145

FOR CONTINUATION SEE PAGE 10

FOR CONTINUATION SEE PAGE 12

Westhorpe

Wyverstone

Bacton

Cotton

Wickham Skeith

Thwaite

Mendlesham

A140

0 1:25,000 1 km

Print Date: 05-27-26 16:31:23

Order limits

Sheet index cutline

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal

Serious

Slight

Primary Access Route

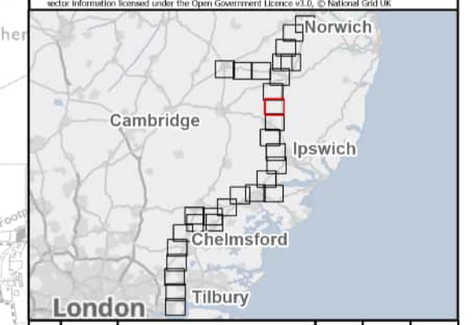
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 11 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

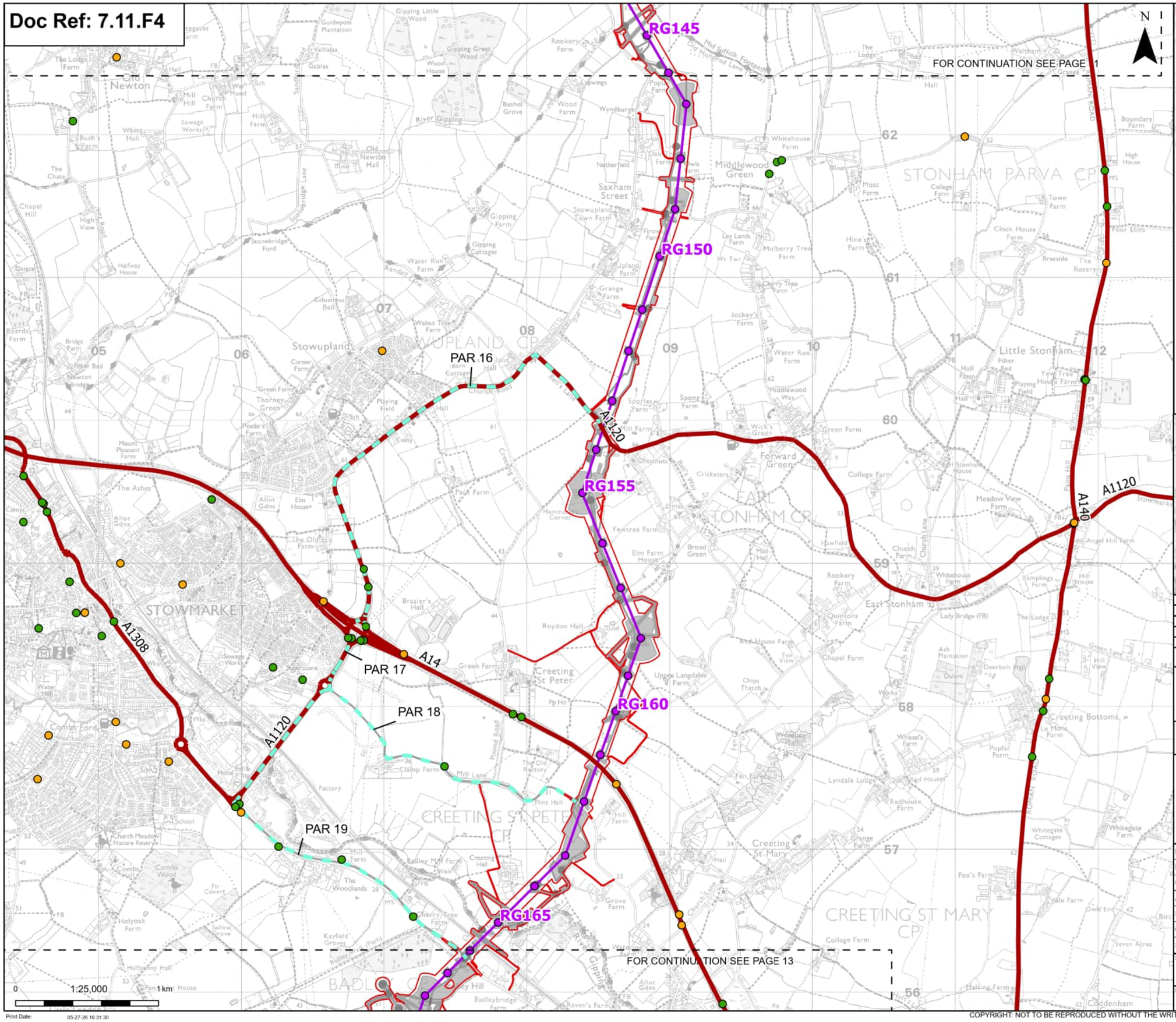
Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



N

Order limits

Sheet index cutline

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Serious

Slight

Primary Access Route

Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 12 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:31:30

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

FOR CONTINUATION SEE PAGE 12

FOR CONTINUATION SEE PAGE 14

RG170

RG175

RG180

RG185

RG190

A14

N

0 1:25,000 1 km

Print Date: 05-27-26 16:31:38

Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

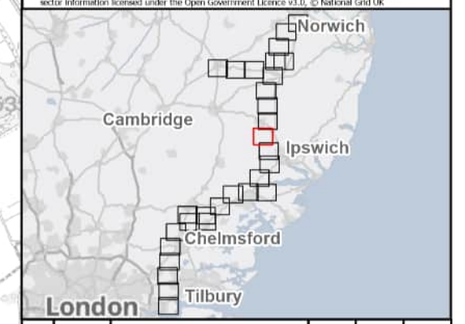
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 13 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397 Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

RG190
RG195
RG200
RG205
RG210
JC1
JC5
JC10
JC15
PAR 20
PAR 21
PAR 23
Section B
Section C
Bramford Substation
Proposed substation extension
FOR CONTINUATION SEE PAGE 13
FOR CONTINUATION SEE PAGE 15
A14
A1071
NETTLESTEAD CP
LITTLE BLAKENHAM CP
ELMSETT CP
BRAMFORD CP
FLOWTON CP
BURSTALL CP
SPROUGHTON CP
HINTLESHAM CP
0 1:25,000 1 km

N

- Order limits
- Sheet index cutline
- Project section line

Proposed project design details

- Proposed full line tension gantry
- Proposed low duty gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Bramford Substation
- Bramford Substation Extension
- Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

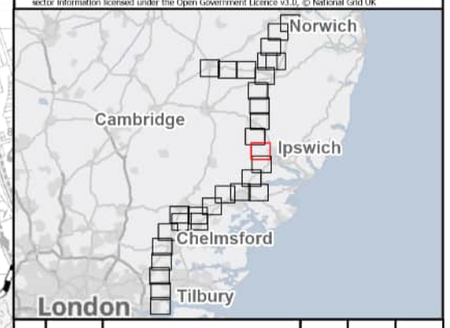
- Serious
- Slight
- Primary Access Route
- Bellmouth junction

Strategic road network

- A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 14 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

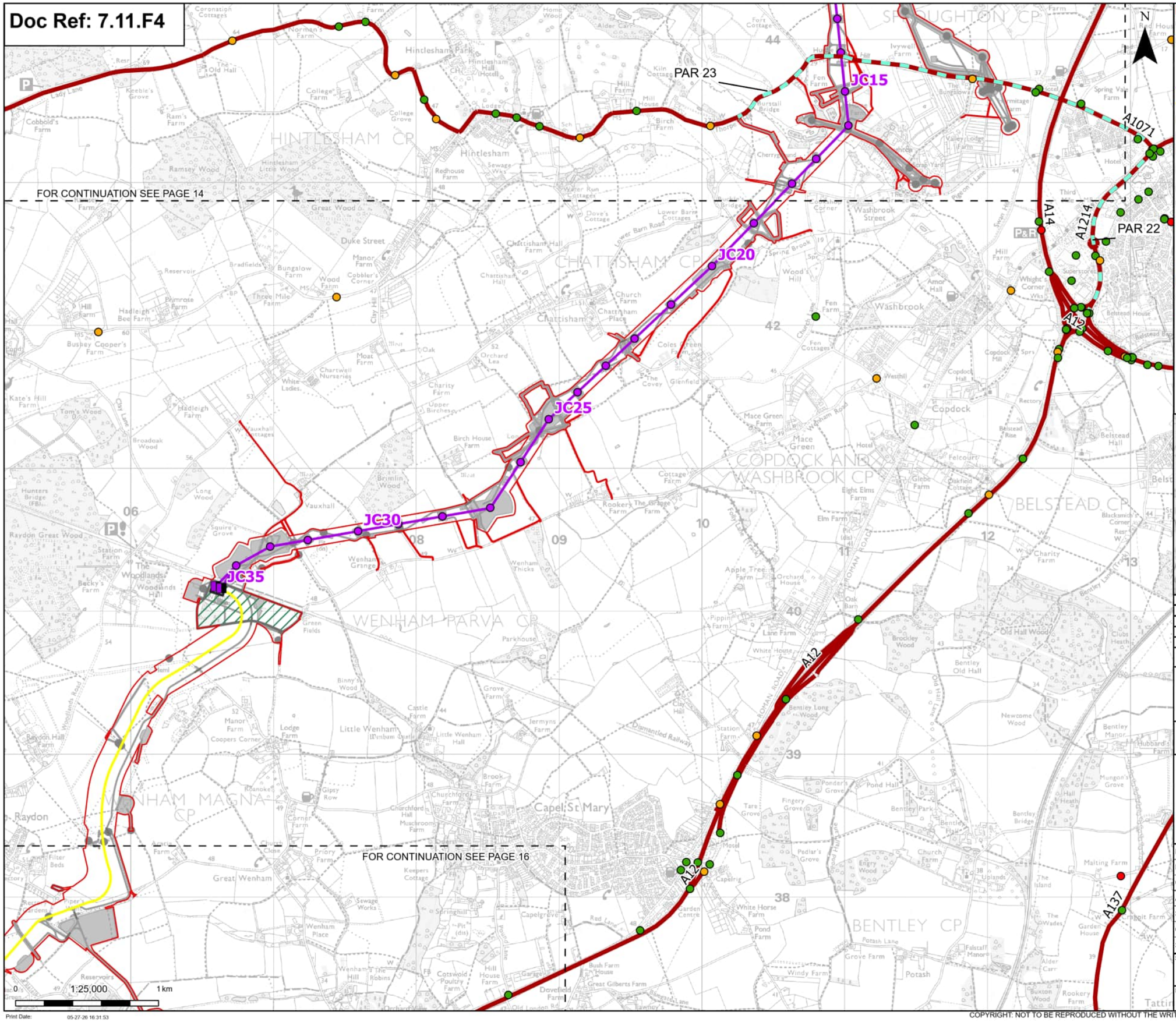
Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397 Revision: B

Print Date: 05-27-26 16:31:45

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



Order limits

Sheet index cutline

Proposed project design details

Proposed full line tension gantry

Proposed standard lattice pylon location

Proposed overhead line alignment

Proposed underground cable alignment

Proposed cable sealing end compound (CSEC)

Environmental area

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal

Serious

Slight

Primary Access Route

Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 15 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:31:53

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

Trenchless Crossing: Higham Road

Trenchless Crossing: River Stour (north part)

Trenchless Crossing: River Stour (south part)

Trenchless Crossing: A12 highway crossing

PAR 24

PAR 25

PAR 26

PAR 27

PAR 28

PAR 29

A12

FOR CONTINUATION SEE PAGE 15

FOR CONTINUATION SEE PAGE 18

FOR CONTINUATION SEE PAGE 17

Section C
Section D

0 1:25,000 1 km

N

Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed underground cable alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 16 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

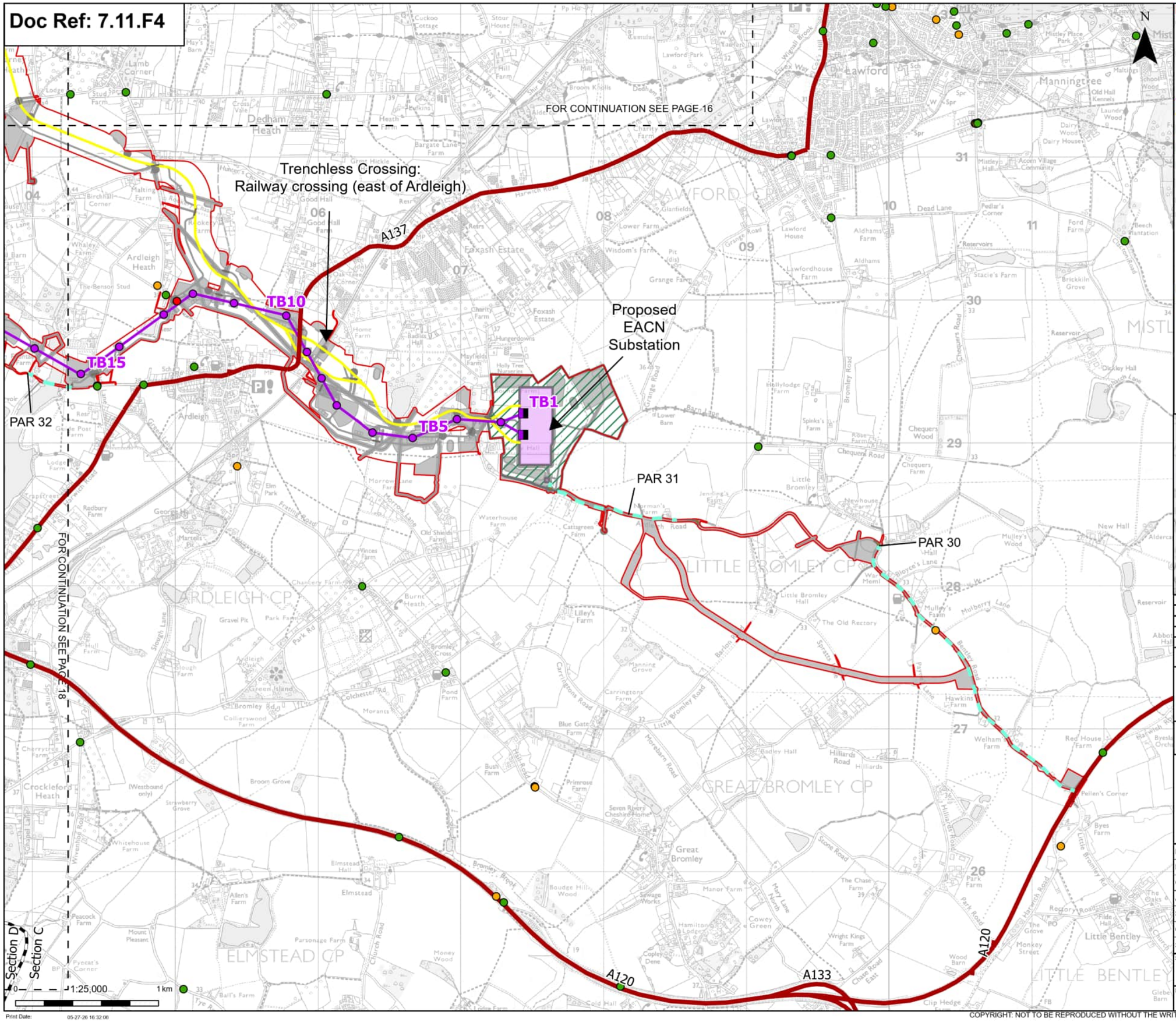
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:32:00

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed full line tension gantry
Proposed standard lattice pylon location
Proposed overhead line alignment
Proposed underground cable alignment
Proposed DNO Substation
Proposed East Anglia Connection Node Substation (EACN)
Environmental area
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

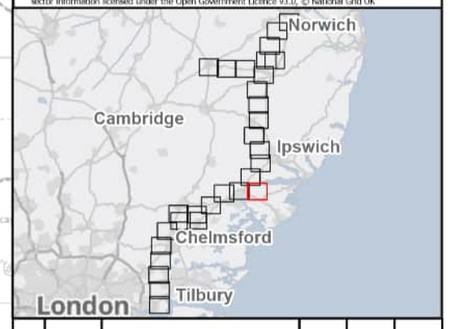
Fatal
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 17 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397
Revision: B

Print Date: 05-27-26 16:32:06

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

Trenchless Crossing:
A12 highway crossing

PAR 29
PAR 28
PAR 27
PAR 34
PAR 33
PAR 32
PAR 36
PAR 35

TB30
TB25
TB20

Section C
Section D

FOR CONTINUATION SEE PAGE 16
FOR CONTINUATION SEE PAGE 19
FOR CONTINUATION SEE PAGE 17

A12
A134
A1341
A133
A1232
A120
A137

N

0 1:25,000 1 km

Print Date: 05-27-26 16:32:15

Order limits
Sheet index cutline
Project section line

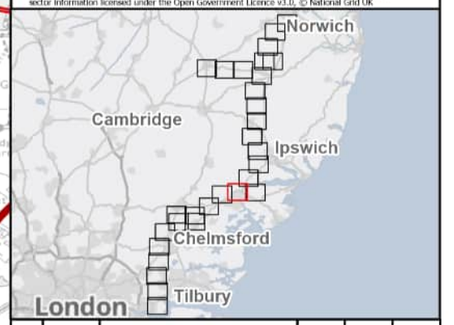
Proposed project design details
Proposed full line tension gantry
Proposed standard lattice pylon location
Proposed overhead line alignment
Proposed underground cable alignment
Proposed cable sealing end compound (CSEC)
Environmental area
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
Road collisions (July 2022 - June 2025)
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network
A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT:
Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 18 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397
Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

TB35
TB40
TB45
TB50
TB55
TB60
PAR 38
PAR 37
A1124
A12
A133
FOR CONTINUATION SEE PAGE 20
FOR CONTINUATION SEE PAGE 18
MOUNT BURES CP
FORDHAM CP
WEST BERGHOLT CP
ALDHAM CP
EIGHT ASH GREEN CP
GREAT HORKESLEY CP

N

0 1:25,000 1 km

Print Date: 05-27-26 16:32:22

Order limits
Sheet index cutline

Proposed project design details
- Proposed full line tension gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

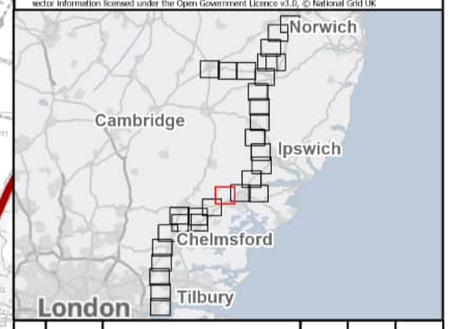
Discipline specific constraints

Road collisions (July 2022 - June 2025)
- Fatal
- Serious
- Slight
- Primary Access Route
- Bellmouth junction

Strategic road network
- A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 19 of 30

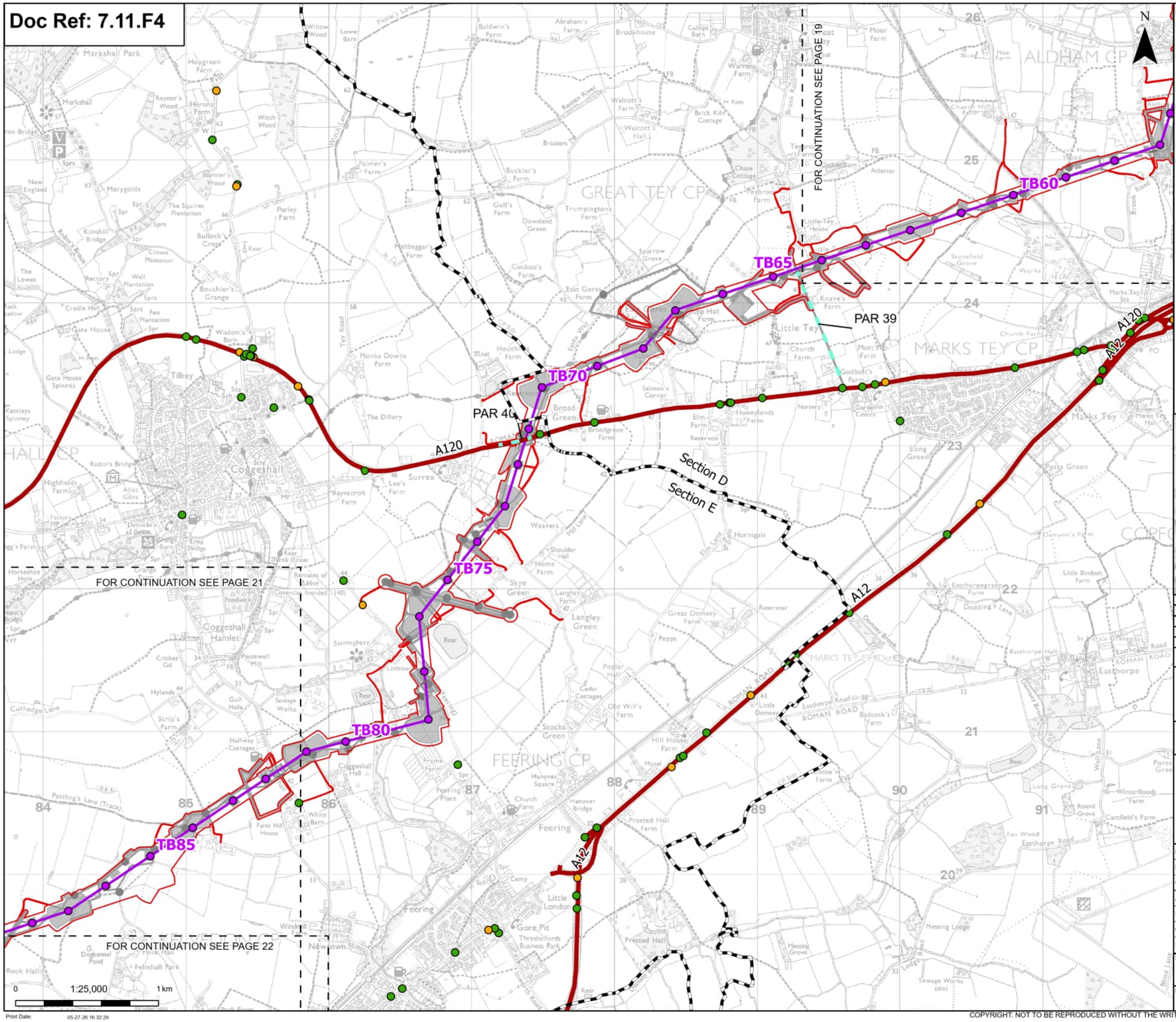
Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397
Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4



Order limits

Sheet index cutline

Project section line

Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Serious

Slight

Primary Access Route

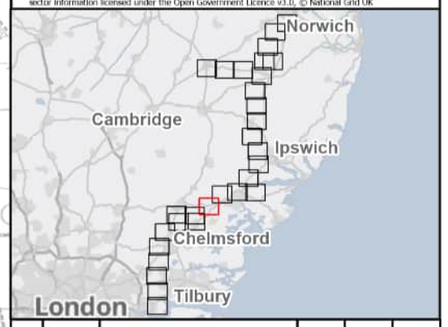
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 20 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:32:29

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

TB85
TB90
TB95
TB100
TB105
PAR 41
PAR 43
A12
FOR CONTINUATION SEE PAGE 22
FOR CONTINUATION SEE PAGE 20
FOR CONTINUATION SEE PAGE 24
FOR CONTINUATION SEE PAGE 23
CRESSING CP
SILVER END CP
RIVENHALL CP
FAULKBOURNE CP
WITHAM
Silver End
Rivenhall End
Tye Green
Hawbush Green
Cressing
Rivenhall
Faulkbourne
White Notley
Braxted Park
Great B
Goggeshall Hamlet
Lanham Green
Clapdog Green
Lanham Manor Farm
Curd Hall Farm
Haywards Farm
Cuthedge Lane
Pantling's Lane (Track)
Scrip's Farm
Pointwell Mill
Gull Hole
Halfway Cottages
Farm Hill House
Upney Wood
Storey's Wood
Cutley's Wood
Dorkennel Pond
Felix Hall
Felixhall Park
Park Farm
Rolleylane
Lingwoods
Churchill
Cotcroft Cottage
Felix Place
Hylands
Cricket Gd
Sand and Gravel
Jubilee Plantation
Gosling's Farm
Link's Wood
Herons Farm
Deeks Cottage
Workings
Woodhouse Farm
Allshot's Farm
Wayfarers Site
Sheepcotes Farm
Rolphs Farmhouse
Egypts Farm
Wright's Farm
Schills Farm
Ashes Farm
Lanham Manor Farm
Garden Centre
Stacey's
Almshouses
Jeffrey's Farm
Mill Lane
Stubble's Farm
Newbarns Farm
Council Houses
New House
Sheepcote Wood
Adams's Wood
Brook Farm
Bower Hall
Western Rd
Parkgate Road
Parkgate Farm
Park House
Rivenhall Place
Landsfield Spring
Rook Hall
Leaping's
Hollow Road
Hydraulic Ram
Hungry Hall
Godfry's
Whiteways
Mount Pleasant
Grove Cottages
Faulkbourne Hall
Troys Hall
Troys Wood
Blue House
Troys Farm
Home Farm
Warren Farm
The Old Rectory
Nuttree Wood
Ardley Wood
Powers Hall
Powers Hall End
Sewage Works
Stansfield's Farm
Fambridge Hall
Cressing Temple
Old Court Room
Church Road Cottages
Barrowfield Wood
Rivenhall Hall
Rivenhall Thicks
Tarecroft Wood
ROMAN SETTLEMENT (site of)
Church Road
Rectory Lane
Creasing Road
Rickstone's Farm
Rivenhall Oaks Golf Centre
Playing Field
Elm Hall Cottages
The Old Rectory
Globe Inn
Stovern's Hall
Hoo Hall
Hare Lodge
Dole Farm
Kelvedon Park
Rivenhall Bridge
Brickhouse Farm
The Glebe House
Rose Cottage
Appleford Farm
Mason's Plantation
Whitelands
The Hatchm's
Coleman's Farm
Coleman's Bridge
Commodity House
Workhouse Plantation
The Lake
The Mount
Elm Springs
Hamilton's Bridge
Crabb's Farm
Crabb's Lane
Clark's Farm
Snivellers Lane
Church Hall Farm
Pondwick
Nunn's Bridge
Essex Way
Ashes Road
Polecat Road
Church Road
Wr Twr
Pp Ho
Liby
Sch
Spr
FB
Vic
CH
Pit (dis)
Works (dis)
Recn Gd
Cemy
Acad
Resr
Hall
Farm
Cott
Hotel
Inn
Mill
Hill
Wood
Lane
Road
Bridge
Junction
Station
Temple
Hollow
Rolleylane
Order limits
Sheet index cutline
Proposed project design details
Proposed standard lattice pylon location
Proposed overhead line alignment
Other temporary and permanent construction and operational works
Discipline specific constraints
Road collisions (July 2022 - June 2025)
Fatal
Serious
Slight
Primary Access Route
Bellmouth junction
Strategic road network
A Road
Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).
N
0
1:25,000
1 km
Print Date: 05-27-26 16:32:36
Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK
Norwich
Cambridge
Ipswich
Chelmsford
Tilbury
London

Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 21 of 30

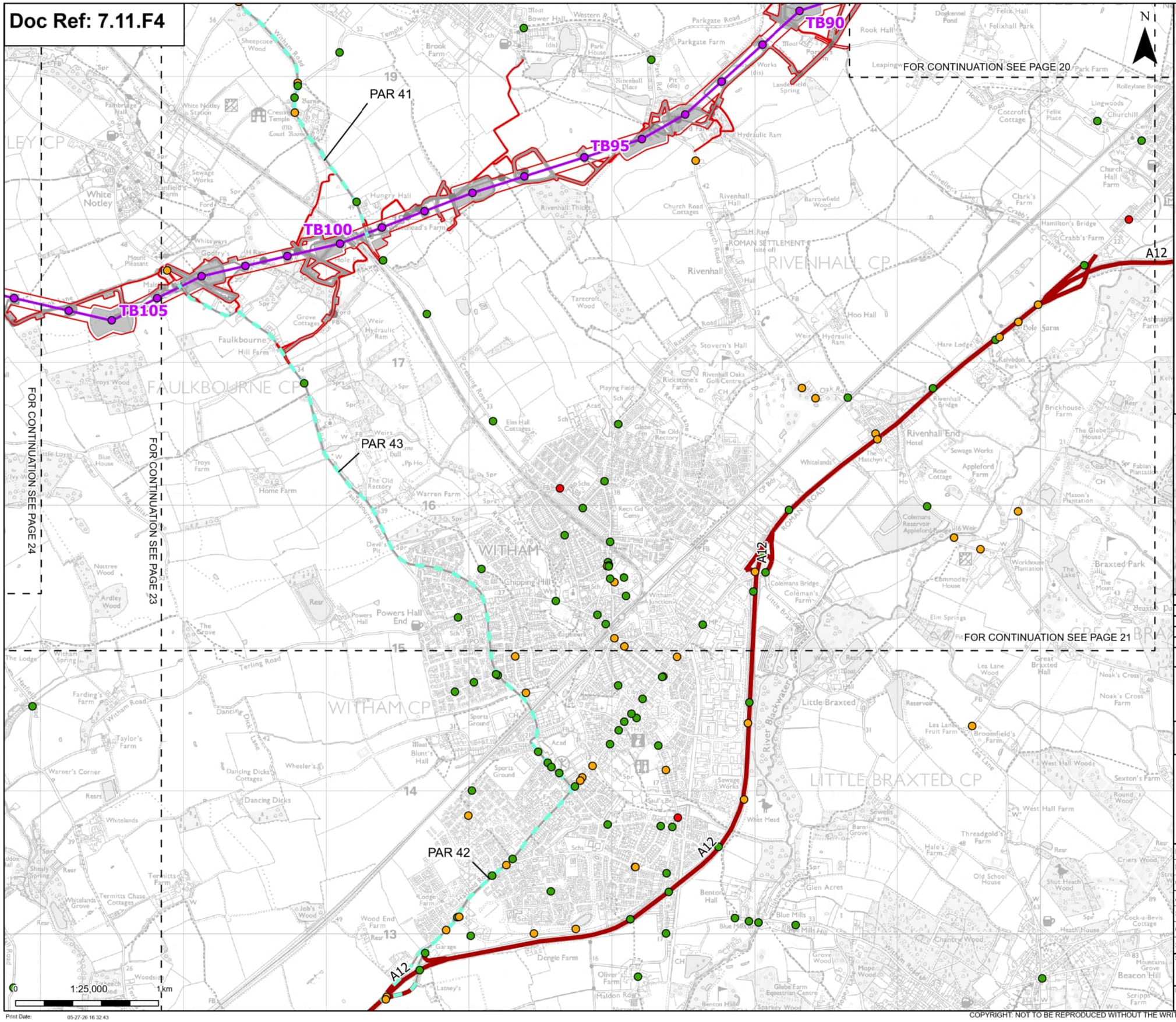
Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

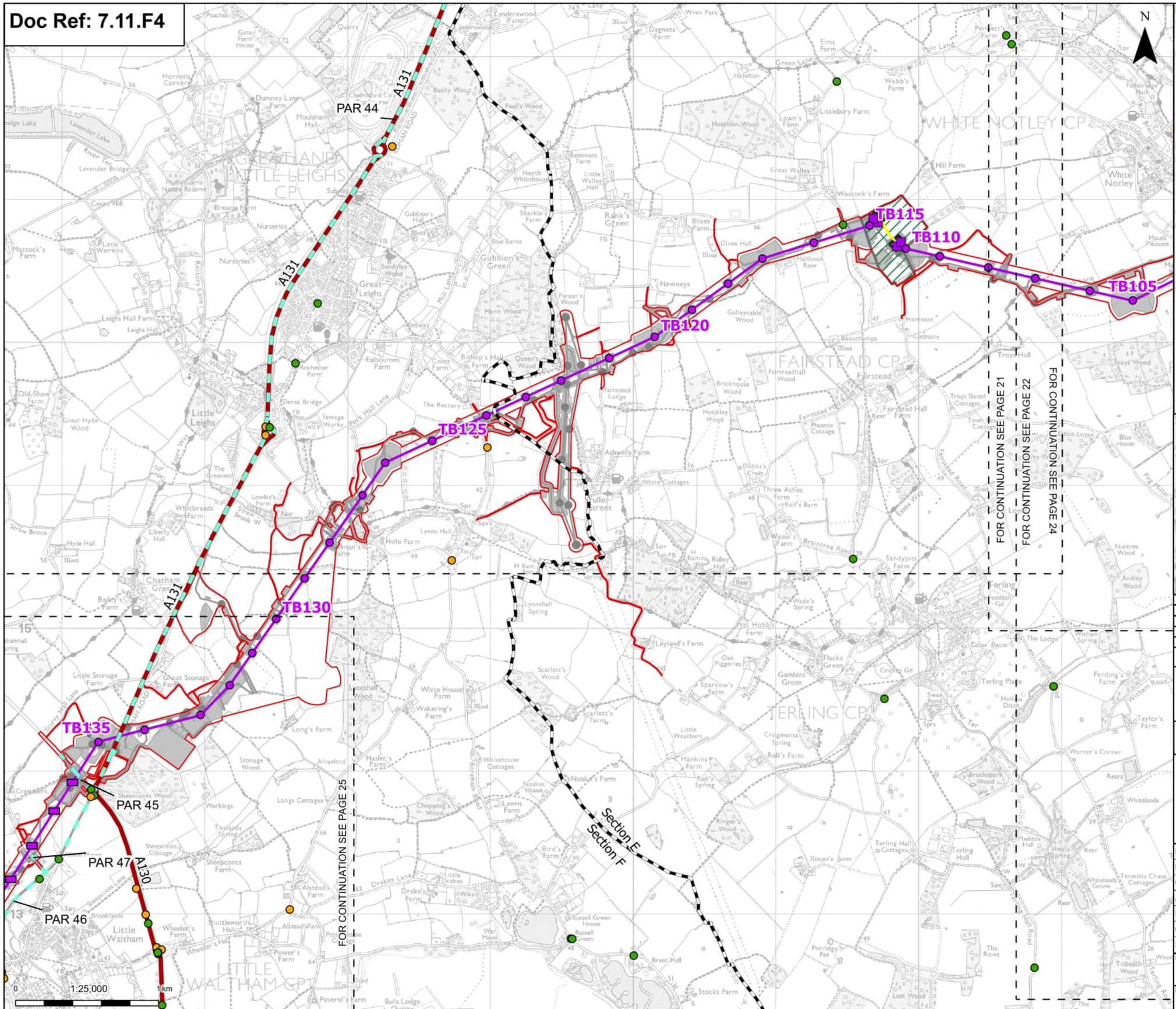
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397
Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4


TB90
TB95
TB100
TB105
PAR 41
PAR 42
PAR 43
A12
FOR CONTINUATION SEE PAGE 20
FOR CONTINUATION SEE PAGE 21
FOR CONTINUATION SEE PAGE 23
FOR CONTINUATION SEE PAGE 24
WITHAM
WITHAM CP
FAULKBOURNE CP
RIVENHALL CP
LITTLE BRAXTED CP
ROMAN SETTLEMENT (site of)
Rivenhall
Rivenhall End
White Notley
Faulkbourne
Witham
Braxted Park
Hamilton's Bridge
Hare Lodge
Hoo Hall
Stovern's Hall
Rivenhall Oaks Golf Centre
Rivenhall Bridge
Hydraulic Ram
Weir Hydraulic Ram
Parkgate Road
Parkgate Farm
Rook Hall
Rivenhall Place
Rivenhall Hall
Church Road Cottages
Barrowfield Wood
Rivenhall Thicks
Tarecroft Wood
Hungry Hall
Whitegates
Godfry's
Mount Pleasant
Grove Cottage
Faulkbourne Hall Farm
Troys Wood
Troys Farm
Blue House
Home Farm
Nuttree Wood
Ardley Wood
Powers Hall End
Warren Farm
Chipping Hill
Witham Junction
Coleman's Bridge
Coleman's Reservoir
Appleford Farm
Rose Cottage
Commodity House
Workhouse Plantation
Elm Springs
Great Braxted Hall
Lea Lane Wood
Lea Lane Fruit Farm
Broomfield's Farm
Noak's Cross
Noak's Cross Farm
West Hall Wood
West Hall Farm
Sexton's Farm
Threadgold's Farm
Hale's Farm
Old School House
Shut Heath Wood
Heath House
Cock-a-Bevis Cottage
Beacon Hill
Scripps Farm
Glen Acres
Bentons Hall
Blue Mills
Blue Mills Hill
Chantry Wood
Grove Wood
Mope Wood
Dengie Farm
Olivers Farm
Maldon Road
Latney's
Wood End Farm
Termitts Chase Cottages
Whitelands Grove
Shealy Spring
Farding's Farm
Taylor's Farm
Warner's Corner
Dancing Dicks Cottages
Dancing Dicks
Wheeler's
Blunt's Hall
Sports Ground
Sewage Works
Brickhouse Farm
The Glebe House
Kelvedon Park
Pole Barn
Ashman Farm
Crabb's Farm
Clark's Farm
Crabb's Lane
Crane's Lane
Felix Hall
Felixhall Park
Doggkennel Pond
Park Farm
Rolleylane Bridge
Lingwoods
Churchill
Coccroft Cottage
Felix Place
Church Hall Farm
Snivellers Lane
Hollow Road
Landermere Spring
Moat
Bower Hall
Western Road
Temple Lane
Brook Farm
Park House
Pit (dis)
Works (dis)
Sheepcote Wood
William Road
Fambridge Hall
White Notley Station
Cressing Temple
Old Court Room
Sewage Works
Stanfield's Farm
Ford
Spr
Sch
Resr
FB
CH
Recn Gd
Cemy
Pp Ho
Barns
Hall
Rectory Lane
Crescent Road
Elm Hall Cottages
Playing Field
Acad
Glebe Fm
The Old Rectory
Oak Rd
Whitelands
The Matchyn's
Rose Cottage
Appleford Farm
Coleman's Reservoir
Colemans Bridge
Little Braxted
River Blackwater
Reservoir
Broomfield's Farm
Lea Lane Fruit Farm
Lea Lane
West Hall Wood
Sexton's Farm
West Hall

Doc Ref: 7.11.F4



Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed low duty gantry
Proposed low height pylon location
Proposed standard lattice pylon location
Proposed overhead line alignment
Proposed underground cable alignment
Proposed cable sealing end compound (CSEC)
Environmental area
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

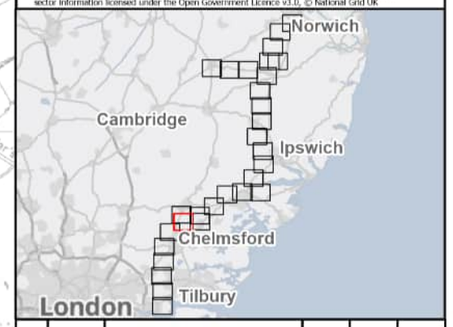
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 23 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

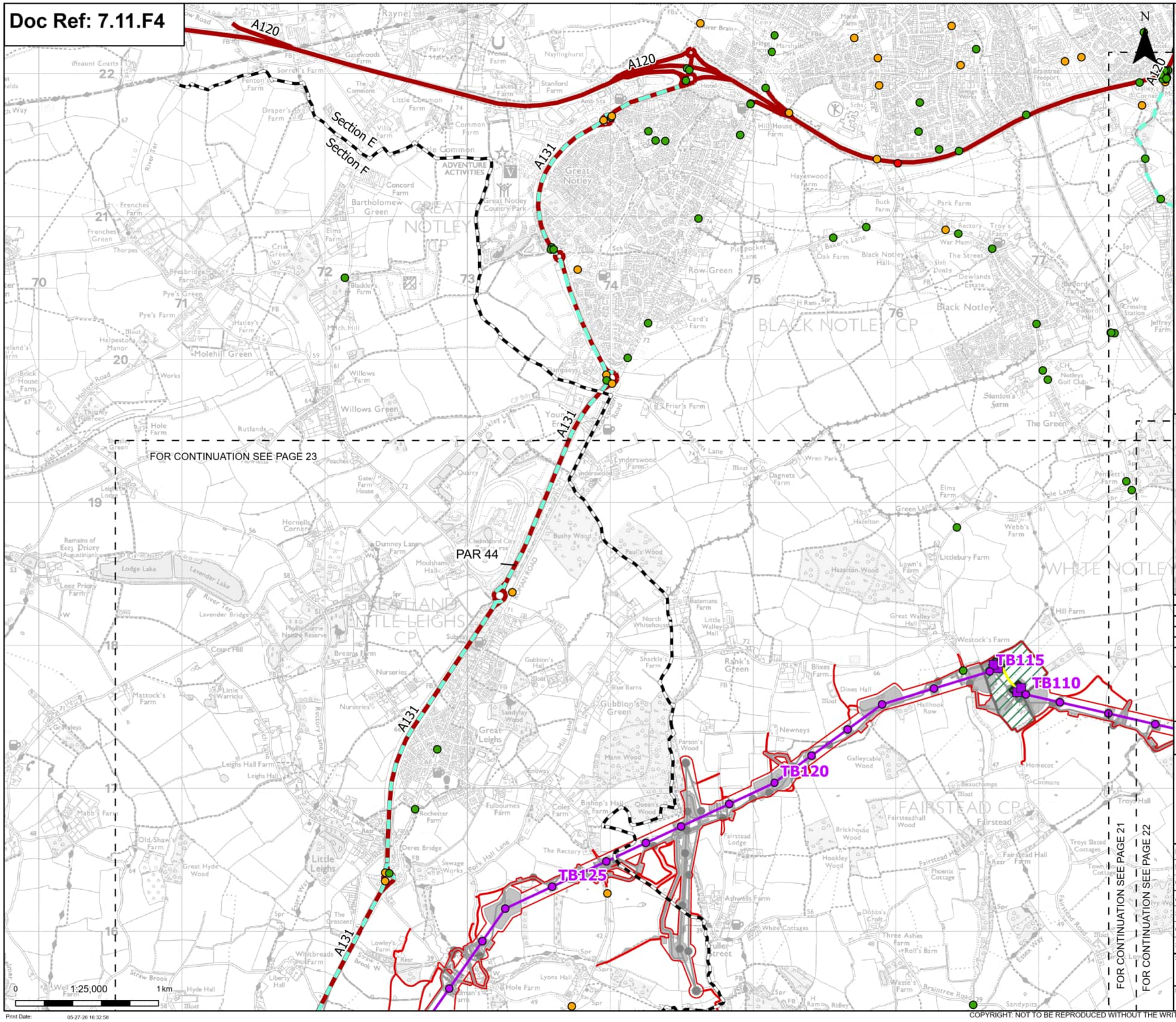
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:32:50

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4





- Order limits
- Sheet index cutline
- Project section line

Proposed project design details

- Proposed low duty gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

- Fatal
- Serious
- Slight
- Primary Access Route
- Bellmouth junction

Strategic road network

- A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK

Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 24 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

Print Date: 05-27-26 16:32:58

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

TB135
TB140
TB145
TB150
TB155
TB160
PAR 45
PAR 46
PAR 47
PAR 48
PAR 52
A131
A130
A1060
A1016
A138
FOR CONTINUATION SEE PAGE 23
FOR CONTINUATION SEE PAGE 26
PLESHEY CP
MASHBURY CP
CHIGNALL CP
GREAT WALTHAM CP
LITTLE WALTHAM CP
BROOMFIELD CP
Great Waltham
Little Waltham
Chignall Smealy
Chignall St James
Springfield
Broomfield
Chelmsford
Braintree
Pleshey
Mashbury
Chignall
Fanner's Green
Broad's Green
Howe Street
Scot's Green
Brettons
Sheepcotes Green
Little Stonage Farm
Great Stonage Farm
Sheepcotes Farm
Little Waltham
Broomfield Hall
Springfield Hall Park
Meadows Nature Reserve
Sheepcotes Wood
Stonage Wood
Longs Cottages
Alstead's Farm
Shuttleworth Hall
Power's Farm
Pratt's Farm
Sand & Gravel Pit
Blasford Hill
Butlers Farm
Woodhall Farm
Gray's Farm
Langleys Farm
Maple View
Howletts Hall
Nightingale Wood
Osiers Reservoirs
Ash Tree Farm
Thatcher's Farm
Ropers House
Gallows Hill
Greenwich Terrace
Boyton Hall
Little Boyton Hall
Chignall Hall
Chignall Hall Chase Cottages
Stevens Farm
Brettons Hall Farm
Brickbarns Cottages
Settling Pond
Sand & Gravel Pit
Beaumont Cotes
Broom Wood
Priors
Chobbing's Farm
Scravels
Roselawn Farm
Campion Farm
Woolpit's Farm
Gardener's Farm
Parsonage Green
Broomfield Place
Allot Gdns
New Barns
Pol Sta
Sch
Spr
Reservoir
Rest
Ford
Moat
Motte & Bailey
Earthwork
Dropshots
Oak Hall Tel Ex
Bury Farm
Pleshey Bridge
Essex Way
Walthambury Brook
Walthambury Farm
Waltham Bury
Bury Hall
Bury Lane
Bury Lodge
Barrack Lane
Deer Park
Fitzjohn's Wood
Sitjohn's Farm
Highfield Spring
Linsteads
Jacobs
Ducker's Lane
Mashbury Road
Israel's Farm
Barns Hall
Wart Cottages
Fridays
Mashbury House
Hall Acre
Gatehouse
The Chase
Shop Cottages
Mashbury Hall
The Bells
Hoddock's Wood
Beadle's Hall
Walnut Tree Farm
Fanner's Farm
Mansion Cottage
Blatche's Wood
Barnett's Farm
Queens Orchard
Humphrey's Farm
Breed's Farm
Breeds
High Houses
De Lancey Cottages
Straights
Reservoir
Saffron Trail
Centenary Circle
Stacey's Farm
Woodside
Bushy Wood
Border Wood
Margaret Wood Farm
Sparrowhawk Wood
Merefields
Kolphs Farm
Little Waltham Meadows Nature Reserve
Little Channels Golf Course
Montpelier Farm
Sports Ground
Woodhouse Lane
The Linden Centre
Hospital
Wood House
Croston's Hill
Parsonage Bridge
Rectory Farm
Waltham House
Park Farm
Chatham Hall
Chatham Spring
Deer Park
Sorrells
Crewsnells
Workings
Titelspots Spring
Brookfields
Wheeler's Farm
Wheeler's Hill
Alstead's Farm
Poste Cott
Peverel
Merry Lane
Pratt's Farm
Pratt's Cotts
Channels Drive
Belsteads
Hotel
Park Farm
Hill House
Hill View
Woolpit's Farm
Gardener's Farm
Ambrose Stile
Springfield Hall
Springfield Hall Park
River Chelmer
Oxley Lane
Little Waltham Lodge
Little Waltham Spring
Sandon Brook
Sandon Brook Trail
Essex Way
Fitzandrews Farm
Parsonage Bridge
Rectory Farm
Howe Street
Waltham House
Park Farm
Chatham Hall
Chatham Spring
Deer Park
Sorrells
Crewsnells
Workings
Titelspots Spring
Brookfields
Wheeler's Farm
Wheeler's Hill
Alstead's Farm
Poste Cott
Peverel
Merry Lane
Pratt's Farm
Pratt's Cotts
Channels Drive
Belsteads
Hotel
Park Farm
Hill House
Hill View
Woolpit's Farm
Gardener's Farm
Ambrose Stile
Springfield Hall
Springfield Hall Park
River Chelmer
Oxley Lane
Little Waltham Lodge
Little Waltham Spring
Sandon Brook
Sandon Brook Trail
Essex Way

N

0 1:25,000 1 km

Print Date: 05-27-26 16:33:05

Order limits
Sheet index cutline

Proposed project design details

Proposed low height pylon location
Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 25 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397 Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

TB160
PAR 52
TB165
PAR 51
A1060
FOR CONTINUATION SEE PAGE 25
PAR 50
A1060
A1016
TB170
PAR 53
A414
A1114
A414
TB175
A414
TB180
PAR 49
A12
A414
PAR 56
PAR 55
Section F A12
Section G
PAR 54
A12
FOR CONTINUATION SEE PAGE 27

0 1:25,000 1 km

Print Date: 05-27-26 16:33 12

N

Order limits
Sheet index cutline
Project section line

Proposed project design details

Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 26 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397
Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

FOR CONTINUATION SEE PAGE 26

FOR CONTINUATION SEE PAGE 28

PAR 56
PAR 55
PAR 54
PAR 57
Section F
Section G
TB185
TB190
TB195
TB200
TB205
A12
A1023
A129
INGATESTONE AND FRYERNING CP
MARGARETTING CP
MOUNTNESSING CP
BILLERICAY CP
STOCK CP
Ingatestone
Fryerning
Margaretting
Mountnessing
Stock
Billericay

N

0 1:25,000 1km

Print Date: 05-27-26 16:33:16

Order limits
Sheet index cutline
Project section line

Proposed project design details
Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
Road collisions (July 2022 - June 2025)
Fatal
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network
A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0. © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 27 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

FOR CONTINUATION SEE PAGE 27

FOR CONTINUATION SEE PAGE 29

TB205
TB210
TB215
TB220
TB225

PAR 59
PAR 58
PAR 60
PAR 61
PAR 62

A129
A176
A128
A127

0 1:25,000 1km

N

Order limits
Sheet index cutline

Proposed project design details
Proposed standard lattice pylon location
Proposed overhead line alignment
Other temporary and permanent construction and operational works

Discipline specific constraints
Road collisions (July 2022 - June 2025)
Fatal
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network
A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 28 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397
Revision: B

Print Date: 05-27-26 16:33:22

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

FOR CONTINUATION SEE PAGE 28

FOR CONTINUATION SEE PAGE 30

TB230

TB235

TB240

TB245

TB250

PAR 63

Section G

Section H

A128

A13

A1014

A1013

0 1:25,000 1 km

Print Date: 05-27-26 16:33:27

- Order limits
- Sheet index cutline
- Project section line

Proposed project design details

- Proposed low height pylon location
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

- Serious
- Slight
- Primary Access Route
- Bellmouth junction

Strategic road network

- A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0. © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 29 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F4

FOR CONTINUATION SEE PAGE 29

TB250
TB255
TB260
PAR 65
PAR 64
PAR 67
PAR 66
PAR 68
PAR 71
PAR 70
PAR 69
YYJ115
ZB20
YYJ120
ZB15RA
ZB15RB
ZB15RC
YYJ125R
ZB10
YYJ130
Proposed Tilbury North Substation
A13
A1014
A128
A1013
A1089
A126
THURROCK
GRAYS
TILBURY
Orsett
Southfields
Chadwell St Mary
Little Thurrock
West Tilbury
East Tilbury
Linford
Mucking
Mucking Marshes
East Tilbury Marshes
Tilbury Marshes
Orsett Heath
Sockett's Heath
Orsett Golf Club
Thurrock Thamesside Nature Park
0 1:25,000 1 km

Print Date: 05-27-26 16:33:32

N

Order limits
Sheet index cutline

Proposed project design details

Proposed full line tension gantry
Proposed low duty gantry
Existing pylon (modify)
Proposed standard lattice pylon location
Proposed overhead line alignment
Proposed underground cable alignment
Proposed Tilbury North Substation
Proposed cable sealing end compound (CSEC)
Environmental area
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints

Road collisions (July 2022 - June 2025)

Fatal
Serious
Slight
Primary Access Route
Bellmouth junction

Strategic road network

A Road

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1), 4.2 (document reference 6.4.F2) and the Access, Rights of Way & Public Rights of Navigation Plans Regulation 5(2)(k) (document reference 2.5).

Notes: © Crown copyright and database rights 2024 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	May 2026	FOR DCO APPLICATION	KF	AF	KB
A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 4 - Transport Assessment - Personal Injury Collision Data
Page 30 of 30

Designed	S. Thirlwell	Date	May 26
Drawn	K. Fischer	Date	May 26
Checked	A. Fell	Date	May 26
Approved	K. Burrows	Date	May 26
Scale:	1:25,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00397

Revision: B

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Appendix B. Update on Committed Developments

nationalgrid

Contents

Appendix B Update on Committed Developments B1

B.1 Introduction B1
B.2 Overview of Committed Developments B2
B.3 Updated Assessment B104
B.4 NSIP/DCO Assessment B117

Table B.1 List of committed developments and transport schemes under consideration (NSIPs/DCOs) B3
Table B.3 List of committed developments and transport schemes under consideration (Suffolk) B19
Table B.4 List of committed developments and transport schemes under consideration (Essex) B36
Table B.5 List of committed developments and transport schemes under consideration (Thurrock) B86
Table B.6 List of committed developments and transport schemes under consideration (Local Plan Allocations) B102
Table B.7 Norfolk 2024/3817 Land To The North Of Station Road Tivetshall St Margaret Norfolk B104
Table B.8 Suffolk DC/22/06288 Port One Business and Logistics Park Bramford Road (Extension only) B104
Table B.9 Essex 19/01725/OUT Land North Of London Road Billericay Essex B105
Table B.10 Essex 23/02807/OUT Land West Of Horizon 120 Phase 2 Horizon Boulevard Great Notley Braintree Essex B105
Table B.11 Preliminary Construction Effects B106
Table B.12 Significance of Effect Driver and Passenger Delay B107
Table B.13 Significance of Effect Pedestrians, cyclists and horse rider - Severance B107
Table B.14 Significance of Effect Pedestrians, cyclists and horse rider – Amenity B108
Table B.15 Significance of Effect Pedestrians, cyclists and horse rider – Fear and Intimidation B108
Table B.16 Preliminary Construction Effects (LTC) B110
Table B.17 Significance of Effect Driver and Passenger Delay (LTC) B111
Table B.18 Significance of Effect Pedestrians, cyclists and horse rider – Severance (LTC) B112
Table B.19 Significance of Effect Pedestrians, cyclists and horse rider – Amenity (LTC) B113
Table B.20 Significance of Effect Pedestrians, cyclists and horse rider – Fear and Intimidation (LTC) 116
Table B.21 NSIPs/DCOs reviewed on request from NH and LHAs B117
Table B.22 NSIPs/DCOs and the Project % impact on SRN at the combined peak B119

Abbreviations B125
Glossary B126
Bibliography B128

Appendix B
Update on Committed Developments

B.1 Introduction

B.1.1 This document has been prepared as part of the Appendix to the Addendum of **7.11 Transport Assessment (TA) [APP-333]** for Norwich to Tilbury (the 'Project'), submitted as part of the Development Consent Order (DCO) application.

B.1.2 A review of the status of all committed developments and 'other' projects included within the assessment of cumulative impact in relation to the **7.11 Transport Assessment (TA) [APP_333]** and **6.16 Environmental Statement (ES) Chapter 16 - Traffic and Transport [APP-271]** has been undertaken as requested as part of the examination.

B.1.3 In addition, any new committed developments and 'other' projects where planning applications have been submitted since the 1st April 2025 cut-off date, up to the 31st January 2026 have been included in the updated Long List and Short List of Other Developments – Appendix A – 6.17.A2 Environmental Statement Appendix 17.2 – Long List and Short List of Other Developments (Revision B) in **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects Response Update [REP4-163]** submitted at Deadline 4. This includes a review of NSIPs and 'other' projects identified through on-going engagement with the Local Highway Authorities (LHAs) or National Highways (NH). A study area of 3km was used to identify the long list of other existing and, or approved developments included within **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects Response Update [REP4-163]** in accordance with **6.19 Scoping Report - including appendices B to K (Final Issue A) [APP-296]**. This list of Committed Developments also includes additional developments beyond 3km where they meet the criteria outlined in **7.11 Transport Assessment (TA) [APP-333]** for the assessment of cumulative traffic and transport effects (e.g. if a Project Primary Access Route (PAR) is located outside of the 3km Study Area).

B.1.4 A summary of the status of each development is provided within Table B.1 to Table B.6, noting any changes to those reported within the **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Statement (ES) Chapter 16 - Traffic and Transport [APP-271]** relevant to Primary Access Routes or junctions modelled.

B.1.5 The review in this document has been produced in coordination with Appendix A - **Appendix 6.17.A2 Environmental Statement (ES) Chapter 17 – Long List and Short List of Other Developments (Revision B)** of **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects – Response Update [REP4-163]**.

B.1.6 Section B.2 sets out all the committed developments considered from a Traffic and Transport perspective, and Section B.3 provides an updated assessment that includes the committed developments that have been identified to meet the criteria for inclusion since the 1st April 2025 cut-off date and any developments where updated information has been obtained. All committed developments that have been reviewed are presented on the updated Figure 5: Transport Assessment Committed Development Revision B, which identifies which developments have been excluded or included.

B.1.7 Section B.4 provides an analysis for NSIPs/DCOs at the requested of National Highways and Local Highway Authorities which considers the overlap of construction peak periods.

B.2 Overview of Committed Developments

B.2.1 Table B.1 to Table B. 6 presents an updated list of committed developments and transport schemes that are considered in the assessment of traffic and transport on the road links and junctions forming the Primary Access Routes (PARs). This includes those developments considered in the DCO submission and additional developments as described in Section B.1. The developments have been split into NSIP/DCOs, planning applications within the relevant Local Highway Authority Norfolk, Suffolk, Essex, Thurrock, and finally where applications are specifically related to local plan allocations.

B.2.2 Note this list is specific for traffic and transport and therefore may differ to the updated Long List and Short List of Other Developments – **6.17.A2 Environmental Statement (ES) Chapter 17 – Cumulative Effects - Appendix 17.2 Revision B [REP4-163]** to include developments beyond the 3km Study Area where they meet the criteria for the assessment of traffic and transport cumulative effects. Where it states “Not included in DCO submission” in the Comments column in Table B.1 to Table B.6, this refers to the traffic and transport Chapters of the DCO submission.

B.2.3 It should be noted that the review may highlight PARs and junctions that may be impacted either by new developments or a change in planning status of a previously assessed development.

Table B.1 List of committed developments and transport schemes under consideration (NSIPs/DCOs)

Application Reference	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
TR010037	A47- A11 Thickthorn Junction. Approx 5.5 km southwest of Norwich City Centre	Improvement of interchange between A47 and A11, improving access to Norwich.	Granted	No Change	EXCLUDE: Granted in Oct 2022 with change notice in July 2023. Scheme does not appear under construction. Does not fall on PARs. Consideration of works to be noted should they coincide with Project peak construction activity.	No Change	
EN0110014	East Pye Solar. Located south of Norwich and north of Harleston. The solar sites are concentrated east of Long Stratton, with an additional cluster located south of Great Moulton.	The project comprises the construction, operation, maintenance and decommissioning of a solar photovoltaic (PV) electricity generating station and associated development, including a Battery Energy Storage System (BESS), ancillary infrastructure, customer substations and Grid Connection Infrastructure (including a new National Grid Substation). The project will have a generating capacity of 500 MW	Pre-application	Accepted for Examination (02.04.2026)	EXCLUDE: In the scoping opinion, it has been stated that that construction would last 24 months, but programme would be developed for the Environmental Statement (ES). They do not appear to have included the commencement year, only stating it would be after the Long Stratton Bypass (2025). Indicative trip generations have been provided however, they have not yet been distributed onto individual links.	No Change	This development considers the Project as a cumulative scheme. The peak construction year identified for the Scheme is 2029, not expecting to overlap with the Project. This is reported in the ES: Appendix 11.1 – Transport Assessment (dated 03.2026)
EN010109	Sheringham and Dudgeon Extension Projects. SEP is to the north and east of Sheringham Shoal OFW. DEP is north and southeast of Dudgeon OFW	Sheringham Extension Project (SEP) has maximum installed capacity of 317 MW. Dudgeon Extension Project (DEP) has maximum installed capacity of 402 MW. Joint export cable system, offshore and onshore, connecting to national grid transmission network at Norwich Main Substation	Decision	Approved	INCLUDE: Start of construction planned for 2025 with either a 3yr (single phase) or 8yr (two phase) programme. Potential for construction overlap with Project peak construction activity. Average day flows to be used.	No Change	
EN010080	Hornsea Project Three Offshore Windfarm	Development of the Hornsea Project Three offshore wind farm with an approximate capacity of up to 2,400 MW off the coast of Norfolk. This is within the area known as Zone 4, under the Round 3 offshore wind licensing arrangements established by The Crown Estate.	Approved	No change	N/A	EXCLUDE: Indicative construction phase for onshore works from 2023 to 2026, therefore no overlap with the Project. (Data Source: Hornsea Project Three Offshore Windfarm Community Newsletter (February 2026))	Not included in DCO submission, however, should be excluded due to construction not overlapping with the Project.
EN010077	East Anglia One North Offshore Wind farm	Offshore windfarm in the southern North Sea approximately 37.7 km from the Suffolk coast at its nearest point to Lowestoft	Approved	No change	EXCLUDE: Planning consent awarded in 2022. There is not expected overlap of construction traffic with the PARs of the Project	No change	

Application Reference	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
EN010078	East Anglia Two Offshore Wind farm	Offshore windfarm in the southern North Sea approximately 32.6 km from the Suffolk coast at its nearest point off Southwold and 37.5 km to Lowestoft. The project is anticipated to have an operational capacity of up to 960 MW which is enough to power the equivalent of around 950,000 homes.	Approved	No change	EXCLUDE: Planning consent awarded in 2022. There is not expected overlap of construction traffic with the PARs of the Project	No change	
EN010056	East Anglia Three (Tye Lane Bramford Suffolk) – closest point	Offshore windfarm approximately 69 km from the Suffolk coast and an onshore cable route to transport energy to a convertor station in Bramford	Approved	No change	EXCLUDE: Planning consent awarded in 2017 and construction commenced in 2022. This proposed development will be operational before 2027. No significant traffic impacts are anticipated during the operational phases of this development	No change	
EN020002	Bramford to Twinstead Reinforcement - Overhead Transmission Lines	Construction and operation of a new double circuit electricity transmission network reinforcement of c.29 km, consisting of overhead lines, underground cables, a grid supply point substation and associated development.	Granted	No change	INCLUDE: Granted Dec 2024 at post decision stage. Construction to be completed in 2028. This would coincide with Project peak construction activity.	No change	
EN010012	Sizewell C, Leiston, Suffolk, New nuclear power station	The proposed Sizewell C nuclear power station would comprise two UK European Pressurised Reactor (EPR)™ units, as shown on Plate 1.1, with an expected net electrical output of approximately 1,670 MW per unit, giving a total site capacity of approximately 3,340 MW	Granted	No change	EXCLUDE: Granted July 2022. Peak construction year 2028. Does not overlap with the PARs for Project. However, noted that the Strategic Road Network (SRN) may have cumulative effect on A12 but does not impact junctions to be assessed.	No change	
EN020033	Euro-link/ Lion Link Project	A proposed electricity link between Great Britain and the Netherlands that will supply up to 1.8 gigawatts (GW) of electricity and will connect to Dutch offshore wind via an offshore converter platform in Dutch waters. It is proposed that the project would involve the construction of a converter station and the installation of offshore and onshore underground high voltage direct current cables (HVDC) to the onshore converter station and underground alternating current cables (HVAC) between the converter station and the proposed Friston Substation.	Pre-application	No change	EXCLUDE: Scoping report was submitted in March 2024. No construction details provided. Anticipated to take place between 2026 and 2030 with use of 2028 as the future baseline assessment year. Although this may coincide with the Project peak construction activity, there is insufficient details to include within assessment.	No change	
EN020026	Sea Link Project	The Sea Link project is a consists of; 1. Constructing a new converter station within 5 km of the proposed Friston Substation then HVAC underground cables between	Pre-application	Examination	EXCLUDE: Subject to gaining development consent, construction works would be expected to start in 2026 and be completed by 2030. No	No change: EXCLUDE: Further construction information has been provided in April 2026	Noting that new information for this project has been made available in

Application Reference	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		the substation and a converter station and then HVDC underground cables between the converter station and the coast. 2. Constructing a new offshore HVDC cable between Suffolk and Kent. 3. Constructing a new converter station within 5 km of the existing Richborough Substation with HVDC underground cables between the converter station and the coast at Pegwell Bay.			further construction details provided. Although this may coincide with the Project peak construction activity, there is insufficient details to include within assessment.	including the Appendix 2.7.A Transport Assessment Note. The potential construction traffic overlap with the Project is on the SRN on the A14, the peak daily vehicle movement estimated from the study area onto the A14 Junction 58 is 344, this is considered not expected to have an impact on the SRN. For reference, the closest junction that the Project has assessed and adjacent to PAR 22 is A14 Junction 55 (7.11 Transport Assessment reference Site 29), which is 3 junctions away, where there is opportunity for the application traffic to disperse further on the highway network.	April 2026. Although this is post 31.01.2026 this information has been considered and reviewed as it is a DCO project.
EN010106	Sunnica solar farm, near Newmarket	The installation of solar photovoltaic generating panels and electrical battery storage technology on Sunnica East and Sunnica West, and associated infrastructure for connection to the national grid, including an extension to the Burwell National Grid Substation.	Granted	No change	EXCLUDE: Granted July 2024. Peak construction was identified as 2023 assumed start in 2025 with 24 month construction programme. Operational flows would coincide with Project peak construction activity. Operational flows considered to be not significant with minimal sites for maintenance.	No change	
N/A	Nautilus Interconnector (East Suffolk)– connection of offshore wind between the UK and Belgium	Nautilus Interconnector is a proposed second Interconnector between Great Britain and Belgium.	Withdrawn	No change	EXCLUDE	No change	
EN010115	Five Estuaries offshore wind farm	Proposed extension to the operational Galloper Offshore Wind Farm, located 30 km off the coast of Suffolk. Five Estuaries offshore windfarm has been allocated the same grid connection point to the North Falls offshore wind farm by National Grid Electricity Transmission, the East Anglia Connection Node (EACN)	Pre-application	Granted (26.01.2026)	INCLUDE: If approval is granted, Five Estuaries is proposed to start work in 2027 and become operational in 2030. The substations for both developments would be in proximity to (and connected to via underground cables) the EACN Substation. A haul road is proposed, and it has been	No change	

Application Reference	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Substation that is part of the Norwich to Tilbury project.			agreed that this would be utilised by the Project. Worst-case flows are with North Falls (Scenario 1).		
EN010118	Longfield Solar Farm	Construction, operation (maintenance), and decommissioning of a solar photovoltaic (PV) array electricity generating facility and energy storage facility with a total capacity exceeding 50 MW and export connection to the National Grid, including extension of the existing Bulls Lodge Substation	Granted	No change	EXCLUDE: Baseline scenario for construction (2025) and operational assessment year (2026) would not coincide with Project peak construction activity. Operational flows considered to be not significant with minimal sites visits for maintenance.	No change	
EN010138	Rivenhall Integrated Waste Management Facility (IWMF) and Energy Centre. Located on land at the former Rivenhall Airfield	Extension to generating station to enable electrical generating capacity of up to 65 MW together with associated development	Granted	No change	EXCLUDE: Granted in Dec 2024. The total number of vehicle movements would not be changed by the Proposed Development.	No change	
20/01905/OBS4	Development Consent for the A12 Chelmsford to A120 Widening Scheme (the Proposed Development)	Development Consent for the A12 Chelmsford to A120 Widening Scheme (the Proposed Development)	Granted	No change	EXCLUDE: Granted Jan 2024. Proposed construction completion by 2027 prior to Project peak construction activity. A12 noted increase of 10% Annual Average Daily Traffic (AADT) in 2027 from development traffic. This scheme has been cancelled (July 2025)	No change	
TR010032	Lower Thames Crossing (LTC)	New road crossing connecting Kent, Thurrock and Essex. Approximately 14.5 miles (23 km) in length, it will connect to the existing road network from the A2/M2 to the M25 with two tunnels (one southbound and one northbound) running beneath the River Thames	Granted	No change	INCLUDE: High certainty given government's endorsement of the scheme and as National Highways see this as a scheme already committed through DCO. Construction flows would therefore coincide with Project peak construction activity. Latest construction programme to be used within assessments and trip generation provided by LTC Project Team	No change	New traffic information for this development has been shared with the Project team in October 2025 from LTC. The construction effect of the associated PARs has been re-assessed based on these new values. The result of the reassessment of effects concludes that there would be no change to the assessment presented in **ES Appendix 16.4: Traffic and**

Application Reference	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							Transport Construction Effects [APP-275], and no additional significant effects have been identified. The impact assessment of the associated junctions has been re-assessed and the results are reported Appendix C of the **Addendum to 7.11 Transport Assessment [APP-333] [AENC-ARC-ENV-REP-0007].**
EN010092	Thurrock Flexible Generation Plant. North of the existing Tilbury National Grid substation	Construction and operation of Gas Reciprocating engines with up to 600 MW electrical capacity and Battery Storage with up to 150 MW electrical capacity	Granted	No change	INCLUDE: Construction start year was proposed as 2022. However, this has been delayed. The minimum construction period for a single-phase (three proposed) development is expected to be 12 months and maximum 24 months. Construction may last between four and a half to six years. Each phase may be back to back or there may be a gap of around nine months between phases, depending on market conditions. Construction traffic does not overlap on Project PARs. However, cumulative flow could occur at the Asda Roundabout, M25 J30 and potentially the Orsett Cock Roundabout. Junction modelling to take account construction flows	No change	
EN010119	North Falls Offshore Wind Farm	An offshore wind farm in the southern North Sea approximately 24.5 km from its nearest point at the Port of Lowestoft. North Falls offshore wind farm has been allocated the same grid connection point to the Five Estuaries offshore wind farm by National Grid Electricity Transmission, the EACN Substation that is part of the Norwich to Tilbury project.	Pre-application	Decision	INCLUDE: If approval is granted, North Falls is proposed to start work in 2027 and become operational in 2030. The substations for both developments would be in proximity to (and connected to via underground cables) the EACN Substation. A haul road is proposed, and it has been agreed that this would be utilised by the Project. Worst-case flows are with Five Estuaries (Scenario 2)	No change	

Application Reference	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
EN010079	Norfolk Vanguard	A proposed offshore windfarm with an approximate capacity of 1800MW off the coast of Norfolk. The centre of Norfolk Vanguard West is 67km from the Bacton coast and 63km from the Gorleston coast at their nearest point. The centre of Norfolk Vanguard East is 98km from the Bacton coast and 86km from the Gorleston coast at their nearest point. Norfolk Vanguard West is approximately 295km2, Norfolk Vanguard East being 297km2.	Granted	No change	N/A	EXCLUDE: The Heavy Goods Vehicle construction routes for both the Norfolk Vanguard and Boreas Wind Farms projects overlap with the Strategic Road Network used by the Project, most notably for the multi-modal assessment. The construction of the Norfolk Vanguard project started in 2023 and is expected to be completed by 2028 prior to the Project's peak construction. These developments would therefore be excluded from the Project's cumulative assessment as daily movements, where overlapping, would not be significant.	Not included in DCO submission, however this DCO was raised in the Relevant Representation by National Highways, see the response in "Summary of Highways Consideration post DCO" in the prior column. This development has been reviewed along with other NSIPs/DCOs at the request of NH and LHAs, this is reported in Section B.4.
EN010087	Norfolk Boreas	Offshore Wind Farm (Power Station) - Maximum Capacity 1.8GW also associated infrastructure required to export the electricity to the National Grid substation at Necton in Norfolk	Granted	No change	N/A	EXCLUDE: The Heavy Goods Vehicle construction routes for both the Norfolk Vanguard and Boreas Wind Farms projects overlap with the Strategic Road Network used by the Project, most notably for the multi-modal assessment. For the Boreas Wind Farms Project, the indicative Construction Programme indicates construction would end by 2027. These developments would therefore be excluded from the Project's cumulative assessment as daily movements, where	Not included in DCO submission, however this DCO was raised in the Relevant Representation by National Highways, see the response in "Summary of Highways Consideration post DCO" in the prior column. This development has been reviewed along with other NSIPs/DCOs at the request of NH and LHAs, this is reported in Section B.4.

Application Reference	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
						overlapping, would not be significant.	
EN0210009	Tarchon Interconnector Project	A proposed electricity interconnector between Essex, in East Anglia, United Kingdom, and Niederlangen, in Lower Saxony, Germany.	N/A	Pre-application	N/A	EXCLUDE: The application is expected to be submitted January 2028. It is expected that the Project will be considered as a committed development in their application.	Not included in DCO submission as this development was submitted post the Project submission.
EN0110019	EcoPower Suffolk Solar	A Solar Farm with an anticipated generating capacity of up to 300MW, comprising photovoltaic (PV) solar panels, a Battery Energy Storage System (BESS), and associated development, with a planned connection to the existing National Grid electricity substation at Leys Lane, Yaxley, Suffolk.	N/A	Pre-application	N/A	EXCLUDE: The application is expected to be submitted January 2027. It is expected that the Project will be considered as a committed development in their application.	Not included in DCO submission as this development was submitted post the Project submission.
N/A	Tasway Energy Park	N/A	N/A	Not yet available on Planning Inspectorate Portal	N/A	EXCLUDE: It is expected that the Project will be considered as a committed development in their application.	Not included in DCO submission as this development was submitted post the Project submission.

Table B.2 List of committed developments and transport schemes under consideration (Norfolk)

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
FUL/2023/0027	Norfolk County Council	Quarry, Ipswich Road, Dunston, NR14 8DD	Continued use of land for recycling and highways depot without compliance with condition 2 (timescales) of permission reference FUL/2020/0078 to enable continuation of use until 30 June 2033 and restoration by 31 December 2033.	Valid/Pending	No Change (Checked 24.03.26)	EXCLUDE: As this would be a continuation of current traffic conditions until after our assessment period.	No change	
FUL/2023/0039	Norfolk County Council	Quarry Ipswich Road Dunston Norfolk	Non-compliance with conditions 2 and 29 of permission reference C/7/2016/7013 to extend deadline for restoration of the site until 31 December 2028	Valid/Pending	No Change (Checked 24.03.26)	EXCLUDE: As this would be a continuation of current traffic conditions until 2028.	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
2021/2495	South Norfolk Council	Land North and South of Brick Kiln Lane Swainsthorpe Norfolk	Installation of a solar farm comprising: ground mounted solar panels, access tracks; inverter/transformers, substation; storage, spare parts and welfare cabins, underground cables and conduits, perimeter fence; CCTV equipment, temporary new site entrance and access track, temporary construction compounds, and associated infrastructure and planting scheme. Application is accompanied by an environmental statement	Approved	No Change	EXCLUDE: Approved Aug 2022 - based on this construction should commence by summer 2025. The solar farm would take 6 months to construct so should be fully constructed prior to peak Project construction activity. Operational traffic minimal - once a month, 3-4 personnel.	No Change	
2021/2645	South Norfolk Council	Land North of Stoke Lane Dunston Norfolk	The installation and operation of a Battery Energy Storage System to provide standby emergency electricity for National Grid in times of high electricity demand or when renewable energy projects are unable to fulfil demand. This would be for the installation of 130 megawatts (MW) of modular battery units with ancillary equipment, including power conversion units, 132 kV transformer compound, metering cabinet, switchroom, DNO control room and welfare container	Approved	No Change	EXCLUDE: Approval with Conditions Sept 2022 - based on this construction should commence by Sept 2025 and the estimated construction time is 9 months therefore it should be fully constructed prior to Project peak construction activity. Minimal operational traffic anticipated.	No Change	
2021/2579	South Norfolk Council	Land to East of Norwich Road Bracon Ash Norfolk	The application seeks full planning approval for a residential development of 23 dwellings, comprising open market and affordable housing, together with associated highway access, public open space and landscaping on land to the East of Norwich Road, Bracon Ash	Pending Consideration	No Change (Checked 24.03.26)	EXCLUDE: Planning application was submitted in Nov 2021.Consultation in Spring/Summer 2024 was undertaken. No information regarding the construction traffic or commencement year/duration of programme if approved. Based on size of development, construction and operational traffic would be minimal, thus not significant.	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
2021/2782	South Norfolk Council	Land East of Shelfanger Road and West of Heywood Road Diss Norfolk	The erection of up to 179 dwellings, 0.64 ha of land for the future extension of Diss Cemetery, a new road linking Shelfanger Road and Heywood Road/Burston Road, public open space and associated infrastructure and landscaping	Approved	No Change	EXCLUDE: Approved in Jan 2024. Based on the assessment being 2026 future baseline plus development, it can be assumed that the development would be constructed prior to Project peak. Operational traffic flows would coincide with the Project peak construction activity; however, this should be captured within the TEMPro growth factor	No Change	
2017/1888	South Norfolk Council	Land North of Frenze Hall Lane Diss Norfolk	Discharge of Condition 20 (Off-site highway improvements) of 2016/1566 - A residential development comprising 136no. dwelling houses with associated accesses, car parking, refuse and recycling provision and landscaping	Approved	No Change	EXCLUDE: Approved in Feb 2018 - based on google imagery the development has been constructed and operational - baseline traffic surveys would have included the associated operational traffic.	No Change	
2017/2162	South Norfolk Council	Land South of Stoke Holy Cross Primary School Five Acres Stoke Holy Cross Norfolk	Discharge of Conditions 5, 6, 7, 8, 9, 10, 12, 13, 14 and 15 of 2016/2153 - (i) Construction of 53 dwellings (including 17 affordable units), access road, parking, garaging, footpaths and cycle paths walling and fencing, landscaping, public open space and associated infrastructure (ii) change of use of former agricultural land to provide extended primary school grounds and construction of 1.8 m high perimeter fence, pedestrian access, and associated hard and soft landscaping	Approved	No Change	EXCLUDE: Approved in Sep 2018 - based on google imagery the development has been constructed and operational - baseline traffic surveys would have included operational traffic (10 visits a year for maintenance).	No Change	
2022/0867	South Norfolk Council	Land East of Main Road Swardeston Norfolk	Construction and operation of Energy Balancing Infrastructure (EBI) comprising energy storage technology, to form up to two areas of modular or containerised structures. To	Approved	No Change	EXCLUDE: Approved Jan 2023 - it is expected that construction for the EBI would likely finish by 2026 prior to the Project peak construction activity.	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			include containerised or modular battery array, transformers and inverter area, switchgear and control room building(s), connection of EBI plant to the Hornsea Three Onshore Converter Station (ONCS), required access and internal roads, drainage systems, perimeter and internal fences, and required external lighting and lightning pylons. Development is located within the Hornsea Three ONCS area as consented by the Hornsea Project Three Offshore Wind Farm Development Consent Order (DCO) in December 2020. The application is accompanied by an environmental statement			Operational traffic would not be significant and maintenance only.		
2023/0617	South Norfolk Council	Land North of Hickling Lane Swainsthorpe Norfolk	Construction and operation of a battery storage facility, underground cabling, fencing, drainage infrastructure, landscape planting and site access road on land to the north of Hickling Lane and up towards the Norwich National Grid Substation	Approved	No Change	EXCLUDE: Approved Sept 2023 - construction has not yet commenced based on google imagery. Based on approval year construction should commence in Sept 2026. This would take 14 months to construct ending 2027 with peak activity within first few months during site set up (6-8 Heavy Goods Vehicles (HGV) and 8 Light Goods Vehicles (LGV) movements an hour). Therefore, it can be assumed construction activity would not coincide with the Project construction peak. Operational traffic will not be significant with maintenance visits only.	No Change	
2023/3858	South Norfolk Council	Land at Norwich Main Substation Mangreen Hall Lane	Underground point of connection cables (for battery storage development) located beneath non-operational land	Approval with condition	No Change	EXCLUDE: Approved Dec 2024 - connects to the planning application	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Dunston Norfolk NR14 8PH	within the Norwich National Grid Main Substation.			2023/0617 and refers to relocated cable route.		
2024/0558	South Norfolk Council	Land East of Norwich Road Scole Norfolk	1. Full planning application for 106no. residential dwellings (including affordable homes), garages, parking, vehicular access onto Norwich Road, open spaces, landscaping, drainage and other associated infrastructure. 2. Outline planning application for a phased development of 6no. self-build plots.	Pending Decision	Approved with conditions	EXCLUDE: Minimal flows expected at the A140 Ipswich. Impact would not be significant, therefore, has not been included.	No Change	
3PL/2011/0805/O	Breckland Council	Croxton Road, Croxton, Norfolk,	Comprehensive mixed use urban extension (up to 5000 dwellings, 22.5 ha of employment land, local centres, 3 primary schools, green infrastructure, playing fields, other amenity areas & means of access)	Granted with conditions	No Change	EXCLUDE: A review of the annual monitoring report for Norfolk has been undertaken to determine whether this development has been accounted for in the Local Plan and TEMPro. This review concluded that the development has been captured within the Local Plan and TEMPro. Therefore, the anticipated flows have already been captured in the baseline.	No Change	
2021/2083	South Norfolk Council	Land West of East Carleton Road Bracon Ash Norfolk - Mr David Bryson	Screening Opinion for solar farm - installation and operation of 27 MWp ground-mounted solar photovoltaic panels and associated infrastructure over an area of approximately 30 ha.	Approved	No Change	EXCLUDE: Planning application is for a scoping opinion - approved in September 2021. The construction phase of the Proposed Development is anticipated to last 20 weeks. During this time, vehicle movements are expected to comprise 10 car and 7 LGV trips, arriving in the morning and leaving in the evening. With regards to HGV movements, there is expected to be 4 tipper or small articulated vehicles per day – 8 two-way vehicle trips. No	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
						programme provided; however, construction and operational traffic will not be significant.		
2023/1095	South Norfolk Council	Land North Of Hickling Lane Swainsthorpe Norfolk – Novus Renewable Services Ltd	Request for Screening Opinion under the Town and Country Planning (EIA) Regulations 2017 in relation to proposed development of an Energy Storage System (ESS) and associated electrical infrastructure.	Decided - EIA Not Required	No Change	EXCLUDE: Planning application does not contain details regarding construction traffic numbers or a programme. Additionally, National Highways response to this planning application states 'Should a formal planning application be submitted, a full Transport statement will be required, principally for the construction traffic'.	No Change	
2023/0655	South Norfolk Council	Land Rear Of For Farmers Industrial Estate Mill Road Burston Norfolk – Cameron Brook	Installation of solar PV systems	Approved	No Change	EXCLUDE: Approved April 2024 - The deliveries outlined in the Transport Statement of this planning application highlights that the traffic generated during the construction period will not have a discernible impact on the safe operation of the local highway network. It states that construction traffic will be spread across the construction programme and are unlikely to conceded two HGV movements a day. It is anticipated that staff vehicle movements will be in the region of 14 two-way movements a day, which will primarily occur outside of the normal highway peak hours.	No Change	
2023/3075	South Norfolk Council	Norwich Main Substation Mangreen Hall Lane Dunston Norfolk NR14 8PG – National Grid	Screening Opinion for a new national grid electricity transmission substation.	Decided - EIA Required	No Change	EXCLUDE: Planning application is a scoping opinion - decision that an EIA will be required. Note this links to planning application 2023/3858.	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
						Peak construction year assessed does not coincide with the Project peak construction year.		
2023/1055	South Norfolk Council	Land off Marsh Lane Bracon Ash Norfolk – Ralos Projects Ltd	Ground mounted solar panel array and ancillary equipment.	Pending	Approval with Conditions	EXCLUDE: Submitted April 2023, with decision pending. In the CTMP, the construction will take approximately 4-5 months. For the initial week of construction, 2-3 No. HGV movements per day would be expected while the main bulk of materials are delivered to site. For the remainder of construction, 1No. HGV movement is anticipated per day. Once the solar array is operational it can be managed remotely, as explained in the Transport Statement, and would only require infrequent maintenance visits by an operative in a van which we estimate to be approximately 4 days per annum. Therefore, the traffic generated during the construction period will not have a discernible impact on the safe operation of the local highway network.	No Change	
2024/1336	South Norfolk Council	Land at Norwich Main Substation Mangreen Hall Lane Dunston Norfolk NR14 8PH - National Grid Electricity Transmission	Extension of the existing Norwich Main 400 kV Substation to the west and includes associated temporary access roads. Works include: Extension of the existing substation platform to the west by approximately 250 m x 188 m. Extension of main and reserve busbar to accommodate addition of customer bays. New bus sections. Bus couplers and circuit breakers. Infrastructure works for customer connections.	Approved	No Change	EXCLUDE: Approved September 2024. Peak construction year assessed does not coincide with the Project peak construction year.	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			Extension of substation perimeter to accommodate the new infrastructure and the delivery of a minimum of 10% biodiversity net gain, linked with the proposed Landscape Mitigation Strategy.					
2021/0569	South Norfolk Council	Land East Of Cranes Road Hethel Norfolk.	Proposed Development for installation and operation of ground-mounted solar farm and energy storage system. together with inverter platforms; control room; DNO station; storage containers; battery storage; security fencing & CCTV; temporary construction compound; and enhanced landscaping & ecological management.	Approved	No Change	EXCLUDE: Granted Dec 2021 – Minimal traffic flows associated with the development for a duration of 20 weeks. Traffic flows associated with this planning application does not affect the PARs associated with the Project. Insufficient information in terms of the traffic distribution along the road network beyond the B1113.	No Change	
2025/0806	South Norfolk Council	Land West Of Wymondham Road Bracon Ash Norfolk	The installation of a Battery Energy Storage System (BESS) including associated infrastructure and landscaping	Pending	No Change	EXCLUDE: Pending consideration – construction and operational flows generated by this development, are anticipated to be low.	No Change	
2024/3750	South Norfolk Council	Hall Farm Land North Of Hickling Lane Swainsthorpe Norfolk NR14 8DS.	The development of a 400 MW Energy Storage System, including a 132-400 kV substation and associated infrastructure.	Pending	Approval with Conditions	EXCLUDE: Pending consideration – HGV construction and operational flows generated by this development, are anticipated to be low. In terms of the traffic flows associated with the construction workers, the location of where construction workers will travel from is unknown at this stage as it will depend on the appointed Main Works Contractor(s).	No Change	
2023/2037	South Norfolk Council	Land West Of Hethel Engineering Centre	Hybrid Application: 1) Outline planning application (including access and scale) for the	Approved	No Change	EXCLUDE: Approved with condition in October 2024. Access would be via would	No Change	

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Chapman Way Hethel Norfolk	development of modern facilities to support Lotus' production requirements. Proposals include new manufacturing (B2), production (B2), logistics (B8) and office (E(g)) buildings. (Note: Logistics B8 is purely for Lotus requirements only). 2) Full application for new road infrastructure to facilitate masterplan and improve access by mitigating width restrictions to Potash Lane.			be accessed via our PAR B1135 Wymondham Road and anticipated to be operational in 2026. However, this should be captured within the TEMPro growth factor		
2018/0112	South Norfolk Council	Land West of The A140 Long Stratton Norfolk	Land West of the A140: Hybrid Application on 40.8 hectares of land to the west of the A140 seeking outline planning permission for 387 no. dwellings and 1.5 hectares of Class B1 employment land, associated infrastructure and public open space. Together with application for full planning permission for a western relief road (including a roundabout access at the north to the A140 and a priority junction access to Swan Lane at the south) and with phase 1 housing consisting of 213 no. dwellings, associated infrastructure and public open space.	Granted (Approval with Conditions)	No Change	INCLUDE: Development is expected to be built and fully operational in 2026. Therefore, as flows would not have been captured in the baseline or in TEMPro, they would need to be added.	No Change	
2024/3817	South Norfolk Council	Land To the North of Station Road Tivetshall St Margaret Norfolk	Solar photovoltaic (PV) farm development with ancillary infrastructure, security fencing and access	Approved	No Change	N/A	INCLUDE: Construction programme of 6 months. No construction date provided. However, assume will be constructed within 3 years of application submitted based on standard time period before planning permission lapses, therefore construction traffic (flows that cover 24 out of 26 week	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**. The application was submitted before the 1st April 2025 cut-off date. The construction effect of the associated PAR (PAR

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							construction programme) to be included.	7) has been re-assessed, and the results are reported in Section B.3. The result of the reassessment of effects concludes that there would be no change to the assessment presented in **ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275]**, and no additional significant effects have been identified.
2022/1344	South Norfolk Council	Land East Of Vinces Road Diss Norfolk	Residential development with associated access, landscaping, surface water attenuation and parking	Approved	No change	N/A	EXCLUDE: No construction programme or construction traffic information provided. Based on operational traffic trips generated the development is unlikely to generate significant impact on the highway network.	Not included in DCO submission – however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
2025/2000	South Norfolk Council	Land South Of Semere Lane Dickleburgh Norfolk	Installation and operation of a solar farm together with all associated infrastructure, works and equipment, including landscape and ecological enhancement and access for a temporary period of 40 years.	N/A	Pending (checked 30.04.2026)	N/A	EXCLUDE: No construction dates provided, so cannot determine any overlap with the Project. However, the CTMP states construction over 6 months, of which months 1 and two will generate an average of 24 to 26 HGV movements per day, this is equivalent to 3 per hour (construction hours of operation 08:00-18:00). Construction workers (up to 40) are anticipated to be shuttled to site via mini bus. As such, the site is not expected to have	Not included in DCO submission as it was submitted post DCO submission cut-off date.

Application Reference	Local Planning Authority (LPA)	Location/area/Name	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							material impact on the highway network.	
2025/3931	South Norfolk Council	Tas Valley Mushrooms Bungalow The Street Flordon Norfolk NR15 1RN	Non material amendment of 2018/1318 - Change description from "Erection of 7 plastic covered growing tunnels" to "Erection of 7 growing tunnels"2025/3931	N/A	Approval with no Conditions	N/A	EXCLUDE: Expected uplift in traffic generated by the site is expected to be 8 vehicles per day. Development is unlikely to generate significant impact on the highway network.	Not included in DCO submission as was submitted post DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163].**
2025/2275	South Norfolk Council	Land East Of Mulbarton Road Keswick Norfolk	Construction and operation of a Battery Energy Storage System (BESS) and associated infrastructure including battery container units, medium voltage stations, 400/132/33kV substation, 2 No. 33kV customer substation, DNO control room, storage and welfare	N/A	Pending (checked 30.04.2026)	N/A	EXCLUDE: No construction dates provided, so cannot determine any overlap with the Project. However, the Outline Construction Management Plan indicates for construction (14-20 months), there will be up to 60 daily two-way staff trips. The maximum HGV movements to occur are 20 two-way trips per day. The Transport Statement indicates the worst case HGV peak would likely last two to three weeks. Based on the above, the construction of the development is unlikely to generate significant impact on the highway network.	Not included in DCO submission as was submitted post DCO submission – however was considered in in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Table B.3 List of committed developments and transport schemes under consideration (Suffolk)

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
SCC/0105/22B	Suffolk County Council	Brockley Wood Land off A12, Belstead, Suffolk, IP8 3JS	Extraction, processing and sale of sand and gravel, processing of inert waste materials and concrete batching with associated plant and related sales, associated access works, phased restoration using inert recovered materials and aftercare plan	Pending	Approved	INCLUDE: Application submitted in Sept 2022 - Based on the TA, the development should be operational in 2026 - therefore, operational traffic would coincide with Project peak construction activity.	No change	
DC/21/03287	Babergh and Mid Suffolk District Council	Land North West of Stowupland Road Stowmarket Suffolk IP14 5AN	Full Planning Application - Residential Development of 258 no. dwellings (91 no. affordable) with new public open space, landscaping, access and associated infrastructure	Approved	No change	INCLUDE: Approved April 2023 - Based on the assumption that the development would be constructed and operational by 2027, operational traffic would coincide with the Project peak construction activity.	No change	
DC/20/01036	Babergh and Mid Suffolk District Council	Ashes Farm Newton Road Stowmarket Suffolk IP14 5AD	Application for Outline Planning Permission (Access to be considered) - Erection of up to 300 No dwellings, new vehicular access, landscaping, open space and drainage infrastructure	Approved	No change	INCLUDE: Approved Sep 2023 - 2024 future year has been used, however, google maps satellite imagery suggests construction is yet to commence. It can be assumed that by the time the Project peak construction activity occurs, this development would be constructed and operational.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
DC/22/00683	Babergh and Mid Suffolk District Councils	Land South of Tye Lane Bramford (Part in the Parishes of Flowton and Burstall)	Full Planning Application - Installation of a solar array, battery energy storage system and associated infrastructure and construction of vehicular accesses and roadways	Withdrawn	No change	EXCLUDE: Application was withdrawn in May 2024	No change	
DC/21/06605	Babergh and Mid Suffolk District Councils	Land to the Rear of Ceva Logistics Norwich Road Mendlesham (In the Parish of Wetheringsett Cum Brockford) IP14 5NA	Planning Application - Erection of three warehouse units and external storage area (use class B8), new access from Norwich Road, parking, associated drainage and landscaping.	Approved	No change	EXCLUDE: Approved Sep 2022 with construction activity expected to finish in 2023. However, based on google imagery and OS mapping the development does not appear to have been built yet. Uncertainty and associated flows are minimal therefore not included in the Project.	No change	
DC/17/05687	Babergh and Mid Suffolk District Councils	Former Sugar Beet Factory Sproughton Road Sproughton Ipswich IP1 5AL	Outline Planning Application - Development of an Enterprise Park comprising up to 90,000 sqm GIA of employment floorspace (B1/B2/B8), 9,000 sqm GIA of motor vehicle sales (sui generis), a local centre (accommodating with up to 1,250 sqm NIA of retail floorspace including local retail and services (A1 and A2) restaurants, pubs and takeaways (A3, A4, A5) together with an 80-bed hotel (C1); new and improved access from Sproughton Road; together with the provision of landscaping, infrastructure (including movement (highways, parking, cycle and pedestrian	Approved	No change	EXCLUDE: Approved Dec 2018 - assessment has been undertaken for 2031 to align with the horizon year for the Local Plan Assessment. Based on google view large sections of the development have been constructed and are operational. Therefore, these flows would be accounted for in the baseline traffic flows. Additionally, as the development is	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			routes), utilities (including gas, electricity, water, sewerage, telecommunications) and sustainable drainage systems), and engineering works (including demolition of existing structures and buildings, breaking-up and recycling of hardstanding and ground remodelling and enabling works)			included in the local plan, it has been assumed that these would be accounted for by the TEMPro growth factor.		
DC/21/02671	Babergh and Mid Suffolk District Councils	Land North of The A1071, Ipswich (Wolsey Grange)	Outline planning permission (some matters reserved, access to be considered) Town and Country Planning Act 1990 - Erection of up to 750 No. dwellings, and up to 3 ha of primary education land, public open space, Sustainable Drainage Systems (SuDS), landscaping and highway improvements (accompanied by EIA Statement)	Approved	No change	INCLUDE: Approved Sep 2023 - Rate of construction 75 units per year starting in 2026 (construction phase period is 10 years). Construction and operational traffic would need to be included in the cumulative assessment.	No change	
DC/21/05110	Babergh and Mid Suffolk District Councils	Land To the South of Thompson and Morgan Poplar Lane Sproughton Suffolk	Hybrid Application. Outline Planning Application for Interchange 55 comprising predominantly industrial (B2 use) and warehousing (B8 use) and prospective offices, research and light industry (E(g) (I, ii, iii) uses) buildings. Full Planning Application for access to the development and associated landscaping	Approved	No change	INCLUDE: Approved in Dec 2022 - Assessment was undertaken for 2025, therefore it can be assumed that the site should be constructed, and that operational traffic would coincide with the Project peak construction activity.	No change	
DC/21/00060	Babergh and Mid Suffolk District Councils	Land To the East of The Channel, Burstall Hill	Full Planning Application - Installation of renewable led energy generating station comprising ground-mounted photovoltaic solar arrays and battery-based electricity	Approved	No change	EXCLUDE: Approved Feb 2023 - based on this it is assumed that construction would commence	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			storage containers together with substation, inverter/transformer stations, site accesses, internal access tracks, security measures, access gates, other ancillary infrastructure, landscaping and biodiversity enhancements including Nature Areas			in Feb 2026, and completed in 40 weeks, which would be prior to the Project peak construction activity. Operational traffic is not significant with 3-5 deliveries a day.		
DC/20/05590	Babergh and Mid Suffolk District Councils	Holton Hall Farm Hadleigh Road Holton St Mary Suffolk CO7 6NN	Planning Application. Erection of a 28 No. bedroom community care, rehabilitation and respite centre following removal of existing caravan park buildings and relocation of 4no static homes.	Pending	Granted	EXCLUDE: Application was submitted in Dec 2020 - Construction commencement year is uncertain, but duration would take 2-3 months. Operational traffic would be minimal with an average of one vehicular movement every 10-15 minutes during the AM and PM peak hours.	No change	
DC/21/06346	Babergh and Mid Suffolk District Councils	Land Northwest of Moores Lane East Bergholt Suffolk	Application for a Lawful Development Certificate for a Proposed Use or Development. Town and Country Planning Act 1990: Section 192, as amended by Section 10 of the Planning and Compensation Act 1991. Town and Country Planning (General Management Procedure) (England) Order 2015 - Confirmation sought that following the implementation of planning application B/15/00673 (Erection of 144 dwellings including 360 sqm of single storey courtyard development to contain 4 B1	Decided – was lawful	No change	INCLUDE: Decided Feb 2022 - Based on google imagery the site is currently under construction. Assessment for the development traffic has been undertaken for 2025; therefore, it can be assumed that the site would be fully operational and would coincide with the Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			(business) units, public open space, associated landscaping and infrastructure) through the laying out and construction of a part of a road and the discharge of relevant pre-commencement conditions and planning obligations for Phase 0 continuation and completion of development of Phase 0 in accordance with the approved plans will be lawful. As such, these commencement works mean that the planning permission is now extant and will not lapse or expire					
DC/21/06805	Babergh and Mid Suffolk District Councils	Land East of the Constable Country Medical Centre Heath Road East Bergholt Suffolk	Application under Section 73 of The Town and Country Planning Act 1990 - Variation of Condition 7 (Restriction On Operation Times) and Condition 8 (Restriction On Construction Times) of Reserved Matters Approval DC/20/04663 Dated: 08/12/2021 (Outline Planning Permission B/16/01092 - Mixed-use development including up to 75 dwellings, a preschool and a neighbourhood hub, comprising a swimming pool, office space and a local shop, public open space, and associated infrastructure and landscaping as amended by drawings received on 11th November 2016 (omission of school land)) to allow amendment to Operation Times and Construction Times	Approved	No change	INCLUDE: Evidence of construction on google imagery therefore assumption made that operational traffic would coincide with Project peak construction activity.	No change	
DC/22/06309	Babergh and Mid Suffolk	Anglian Water services Bury to	Cross Boundary - Hybrid Planning Application - Full Application for Bury St	Approved	No change	EXCLUDE: approval given in Oct 2023 and	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
	District Councils	Colchester Pipeline	Edmunds to Colchester 69k Pipeline Scheme and associated above ground infrastructure at Raydon Water and Rushbrooke Water Treatment Works, Raydon Tee Chemical Dosing Site and Wherstead Water Reservoir. Outline Application for above ground infrastructure at Little Saxham Water Reservoir, Little Whelnetham, Nedging Tye Water Reservoir, Hadleigh Water Reservoir and Great Horkesley with all matters reserved except for Access (accompanied by EIA Statement)			assumed main construction works would be completed over a period of 15 months. Therefore, would not coincide with the Project peak construction activity. Minimal operational traffic with 1 HGV and 2 LGV movements.		
DC/22/06200	Babergh and Mid Suffolk District Councils	Land South West of Rendall Lane Stowupland Suffolk	Full Planning Application - Erection of a Factory (B2 - General Industrial) with offices	Pending	Refused and Appeal Withdrawn	EXCLUDE: Submitted in Dec 2022 and limited details provided on operational traffic, although noted that there would be a reduction of movements compared to the existing usage. No details provided on construction flows.	No change	
DC/23/04729	Babergh and Mid Suffolk District Councils	Bramford Solar Farm and Battery Storage Facility and on Adjoining Land, Land East of The Channel, Burstall, (Part in The Parish of Bramford) IP8 4JL	Cross Boundary Planning Application – Installation of underground cable	Approved	No change	EXCLUDE: Approved Jan 2024. No construction related traffic documents identified on construction flows. Assumed would be constructed prior to Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
DC/23/04644	Babergh and Mid Suffolk District Councils	Land West of Blacksmiths Lane Earl Stonham	Planning Application – Erection of a Solar Photovoltaic Farm with associated substations and other supporting infrastructure including inverters and transformers, fencing, CCTV, and landscaping.	Awaiting decision	Granted (08.08.2025)	EXCLUDE: Submitted 2023 with planned construction over a 9 month period. Solar farm would generate minimal construction flows, around 5 to 6 HGVs a day with minimal maintenance visits throughout the year. Should this overlap with Project peak construction activity these flows are not considered significant.	No change	
DC/23/05426	Babergh and Mid Suffolk District Councils	Land North of Lion Road Palgrave Part in The Parishes of Wortham and Diss	Cross Boundary Planning Application - Installation of a solar farm comprising: ground mounted fixed tilt bifacial solar panels; access tracks; string inverters; transformers; electrical connection compound; storage containers; underground cables and conduits; perimeter fence; temporary construction compound and associated infrastructure and planting scheme. (EIA Development)	Awaiting decision	Granted (13.08.2025)	EXCLUDE: Submitted in Nov 2023. Unclear when construction would commence and if there would be an overlap with Project peak construction activity. Peak activity would occur during months 2 to 8 with an average of 9/10 HGV movements a day. During normal operations, personnel would visit the site approximately once a month, in a light van or four-wheel drive vehicle. Assumption made that flows are not significant.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
DC/21/02867	Babergh and Mid Suffolk District Councils	Land North Of A143 Palgrave Suffolk IP22 1AZ	EIA Screening Opinion Request for a proposed 90 ha Solar Farm.	Decided - EIA not required	No change	EXCLUDE: Based on the transport assessment, the Proposed Development should be operational in 2026. Therefore, operational traffic will coincide with the Project peak construction activity.	No change	
DC/21/06273	Babergh and Mid Suffolk District Councils	Land Off Old Station Road And Glebe Way Mendlesham Stowmarket IP14 5RT	Application for Outline Planning Permission (access to be considered) Town and Country Planning - Erection of up to 40 No. dwellings (including 14 No. affordable homes and self-build plots); and construction of 2 no. new accesses to Old Station Road and Glebe Way.	Pending	Withdrawn	EXCLUDE: Planning application submitted on April 2021 - awaiting decision. No traffic related documents available to inform our assessment.	N/A	
DC/24/04832	Babergh and Mid Suffolk District Councils	Land South Of Glebe Way Mendlesham Suffolk	Hybrid Application: (i) Full Planning Application for the construction of 76no dwellings (including 27no affordable local needs dwellings), link road between Old Station Road and Glebe Way, access roads, vehicular accesses, parking, garaging, public open space, landscaping, ecological enhancement areas, sustainable drainage and associated infrastructure. (ii) Outline Planning Application for 2no Self Build plots with all matters reserved save for access.	Awaiting Decision	No change	N/A	EXCLUDE: No construction traffic information available. Future baseline in Transport Assessment uses 2029 as future baseline, indicating operational by then (the Project Construction peak). The operational trip generation shows 52 two-way trips in the AM and PM peak hours. Should these overlap with the Project peak, these flows are not considered significant.	Not included in DCO submission however was considered in the **6.17.1 Environmental Statement Chapter 17 – Cumulative Effects – Response Update [REP4-163].** This is partially the same site as withdrawn application DC/21/06273.
DC/23/05819	Babergh and Mid Suffolk	The East Anglia Three Offshore Windfarm Order	Approval of Details reserved by Requirement 14: Onshore Cable Route Landscape Management Plan (Work	Approved	No change	EXCLUDE: Planning application relates to East Anglia	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
	District Councils	2017 Tye Lane Bramford Suffolk	No.s 5B to 20, 25 to 28, 41 and 52 to 61 pursuant to The East Anglia THREE Offshore Wind Farm Order 2017.			Three - construction commenced in July 2022 and should not coincide with the Project construction peak activity.		
DC/24/01153	Babergh and Mid Suffolk District Councils	Gateway 14 (1600), Land Between The A1120 And A14 Creeting St Peter Stowmarket Suffolk	Application for Reserved Matters following Outline Approval of DC/21/00407 Town and Country Planning (Development Management Procedure)(England) Order 2015 (as amended) - Submission of details for Appearance, Landscaping, Layout and Scale for the erection of buildings comprising commercial and employment use, open space and landscaping, car and cycle parking, highway works and other associated works, accompanied by EIA Statement (Gateway 14 - 1600).	Approved	No change	EXCLUDE: Granted July 2024. Access to the wider highway network is via the A1120 to/from the A14 at Junction 50 to the north. To the south the A1120 provides access to the A1308 (for central Stowmarket) and the B1113 (for Needham Market). It is a development by Gateway 14 Ltd (wholly owned by Mid Suffolk District Council) and Jaynic. Therefore, should be captured within TEMPro.	No change	
DC/20/05895	Babergh and Mid Suffolk District Councils	Land To The South Of Church Farm, Somersham, And Land To The East Of The Channel, Burstall, In Suffolk	Full Planning Application - Installation of renewable energy generating station, comprising ground-mounted photovoltaic solar arrays and battery-based electricity storage containers together with substation, inverter/transformer stations, site accesses, internal access tracks, security measures, access gates, other ancillary infrastructure, landscaping and biodiversity enhancements including Nature Areas.	Approved	No change	EXCLUDE: Granted Feb 2023 - It is expected that there will be approximately four to five HGVs accessing the Site each day during the construction phase. There will also be construction workers arriving at the Site in the morning and departing in the	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
						evening, although the numbers involved are forecast to be relatively low and will occur outside of peak hours.		
DC/22/00828	Babergh and Mid Suffolk District Councils	Former Sugar Beet Factory Sproughton Road Sproughton Suffolk	Application for approval of Reserved Matters following Outline Planning Permission DC/17/05687 dated: 03/12/2018 - Access, Appearance, Landscaping, Layout and Scale for construction of a further phase of infrastructure (Phase 2B) including 510 m of new roads, footway/cycleway, associated landscaping, access bell mouths and utilities (including gas, water, electricity, communications, drainage, sewerage and construction of new pumping station) for Development Areas 7, Part 6b, 9, 11, 12, 13, 15 and 17, 18 and Part 19.	Approved	No change	EXCLUDE: Assessment has been undertaken for 2031 to align with the horizon year for the Local Plan Assessment. Based on google view large sections of the development have been constructed and are operational. Therefore, these flows will be accounted for in the baseline traffic flows. Additionally, as the development is included in the local plan, it has been assumed that these would be accounted for by the TEMPro growth factor.	No change	
DC/22/02667	Babergh and Mid Suffolk District Councils	Grange Farm Old Bury Road Palgrave Suffolk IP22 1AZ	Planning Application - Mixed use development comprising installation of a ground mounted solar photovoltaic (PV) farm; along with continued agricultural use, ancillary infrastructure, substation, security fencing, landscaping provision, ecological enhancements and associated works.	Approved	No change	EXCLUDE: Granted November 2023 - construction year / programme does is not stated within the Transport Statement / CTMP. Minimal traffic flows over a short period of time, and no clear construction year /	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
						programme, therefore, has been excluded from assessment.		
DC/23/02118	Babergh and Mid Suffolk District Councils	Land To The South Of Church Farm, Somersham IP8 4PN And Land To The East Of The Channel, Burstall Suffolk IP8 4JL	Planning Application - Installation of renewable led energy generating station comprising ground-mounted photovoltaic solar arrays and battery-based electricity storage containers together with substation, inverter/transformer stations, site accesses, internal access tracks, security measures, access gates, other ancillary infrastructure, landscaping and biodiversity enhancements including Nature Areas ('Free Go' application following refusal of MSDC Ref: DC/20/05895)(accompanied by EIA Statement).	Granted	No change	EXCLUDE - Granted September 2023 - construction year / programme does not appear to be mentioned - The construction of the Proposed Development would take place over approximately nine months. Minimal traffic flows over a short period of time, and no clear construction year / programme, therefore, has been EXCLUDED from assessment.	No change	
DC/23/02362	Babergh and Mid Suffolk District Councils	Marsh Lane Solar Farm At Land North Of Lion Road Palgrave Suffolk	Request for a Scoping Opinion under Regulation 15 of the Town and Country Planning (EIA) Regulations 2017- Proposed solar farm and associated infrastructure.	Decided – EIA Not Required	No change	EXCLUDE: In June 2023 decision was that an EIA would be required. No traffic related documents forming part of this application.	No change	
DC/24/05090	Babergh and Mid Suffolk District Councils	Land Adjacent To Bullen Lane Bramford IP8 4JN	Planning Application. Construction, operation and maintenance of a Battery Energy Storage System (BESS) with associated infrastructure and works including highway access, landscaping and biodiversity enhancements	Approved	No change	EXCLUDE: Granted March 2025 - In terms of construction traffic, on average there will be a maximum of two HGV deliveries and 10 LGVs visiting the Site per day. In terms of the traffic flows associated with the	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
						construction workers, the location of where construction workers will travel from is unknown at this stage as it will depend on the appointed Main Works Contractor(s). Once operational, the Site will be unmanned with operational activities limited to very occasional visits for maintenance.		
DC/21/03005	Babergh and Mid Suffolk District Councils	Land East Of Gables Farm Bramford Road Bramford Suffolk IP8 4AX	Environmental Impact Assessment Screening Opinion Request for 115no dwelling development under Regulation 6 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017	Decided – EIA Not Required	No change	EXCLUDE: Decision that no EIA is required was given on June 2021 – no traffic related documents associated with this planning application.	No change	
DC/24/05535	Babergh and Mid Suffolk District Councils	Land South Of Eye Airfield Industrial Estate Castleton Way Yaxley Suffolk IP23 8AW	Full Planning Application - Erection of a Battery Energy Storage System and associated infrastructure including access, drainage, landscaping and other incidental works.	Pending	Granted (04.07.2025)	EXCLUDE: Awaiting decision – construction route does not coincide with the Project PARs.	No change	
DC/20/01435	Babergh and Mid Suffolk District Councils	Land South East Of Gipping Road Stowupland Suffolk	Outline Planning Application (All matters reserved) Erection of up to 80 dwellings	Approved	No change	EXCLUDE: Granted Oct 2020 – assessment year for operation is 2025. Additionally, based on google satellite imagery it appears the site has been constructed, therefore, associated flows	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
						around the local road network would have been captured within the baseline.		
DC/21/01320	Babergh and Mid Suffolk District Councils	Land East of Hadleigh Road Somersham Suffolk	Use of land as private smallholding/kitchen garden and for the keeping of horses. Construction of riding arena, stables, borehole and shed, polytunnels, pig pen, chicken coop and fencing/gates. Siting of 3no. storage containers.	Approved	No change	EXCLUDE: Granted Jul 2021 – Change of use with limited associated flows and a notable distance from Primary Access Routes. No likely significant impact expected.	No change	
DC/22/06288	Babergh and Mid Suffolk District Councils	Port One Business and Logistics Park Bramford Road Little Blakenham Part in the Parish of Great Blakenham	Hybrid Planning Application 1. Full Planning Application. Erection of 3no warehouses and new vehicular access. Extension of estate roads, boundary landscaping, nature reserve and SUDS. 2. Outline Planning Application. (Access to be considered) for further estate roads and 6no warehouse plots.	Approved	No change	N/A	INCLUDE: Transport Assessment assumes opening year of 2025. Evidence from google satellite imagery indicates construction has commenced, construction therefore likely to be completed prior to peak Project construction activity. The southern part of the development site is not allocated as Strategic Employment site, therefore, operational traffic to be included.	Not included in DCO submission, however, **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**. The application was submitted before the 1st April 2025 cut-off date.. The construction effect of the associated PAR (PAR 20) has been re-assessed and the results are reported in Section B.3. The result of the reassessment of effects concludes that there would be no change to the assessment presented in **6.16.A4 ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275]**, and no additional significant

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								effects have been identified. The impact of the associated junctions Site 26 and Site 27 has been re-assessed and the results are reported in Appendix C of the Addendum to **7.11 Transport Assessment [APP-333] [AENC-ARC-ENV-REP-0007]**. The result of the reassessment of junction capacity concludes that there would be no change to the assessment presented in **7.11 Transport Assessment (TA) [APP-333].**
2025/3624	South Norfolk Council	Gilderswood Farm Gilderswood Lane Forncett St Peter Norfolk NR16 1LN	Construction of a lake with ancillary landscaping	N/A	Pending consideration (checked 01.05.2026)	N/A	EXCLUDE: No specific construction or traffic information. NCC officer comments indicates that spoil from development will not be transported away from site. It is assumed that development will unlikely generate significant impact on the highway network.	Not included in DCO submission as was submitted post DCO submission– however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
DC/25/03257	Babergh and Mid Suffolk District Council	Land At Stone Cottages Bury Road Botesdale IP22 1QH	Planning Application - Construction of ground mounted solar panel arrays and associated infrastructure which will have the ability to export 49.9MW (AC) electricity. Construction of new vehicular access. (EIA Development)	N/A	Awaiting decision	N/A	EXCLUDE: No construction dates provided, so cannot determine any overlap with the Project. However, the CTMP states construction over 6 months, of which months 1 and two will generate an average of 24 to 26	Not included in DCO submission as was submitted post DCO submission– however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							HGV movements per day, this is equivalent to 3 per hour (construction hours of operation 08:00-18:00). Construction workers (up to 40) are anticipated to be shuttled to site via mini bus. As such, the site is not expected to have a material impact on the highway network.	**Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
DC/25/02562	Babergh and Mid Suffolk District Council	Land East Of Mellis Road Approximately 470 M West Of Yaxley Substation IP21 4BT	EIA Screening Opinion - A Battery Energy Storage System (BESS) with a storage capacity of up to 300 megawatts (MW)	N/A	EIA Required	N/A	EXCLUDE: No information regarding proposed construction year. It is expected that the EIA associated with the future application will need to consider the Project as a committed development.	Not included in DCO submission as was submitted post April 2025– however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
DC/25/02824	Babergh and Mid Suffolk District Council	Land West Of A140 Red House Farm Yaxley IP23 8BH	Planning Application. Construction and operation of a Battery Energy Storage System, together with related infrastructure, access, drainage, landscaping and other associated works.	N/A	Awaiting decision	N/A	EXCLUDE: No information regarding construction programme date, therefore cannot determine any overlap with the Project. Estimated daily vehicular two-way trips are 129, with 29 of these being HGV. As such, the site is not expected to have a material impact on the highway network.	Not included in DCO submission as was submitted post April 2025– however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
DC/25/02114	Babergh and Mid Suffolk	Brockley Wood Land Off A12	Consultation on application received by Suffolk County Council - Extraction,	N/A	Objection raised	N/A	EXCLUDE: No transport information provided.	Not included in DCO submission as was submitted post April

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
	District Council	Belstead Suffolk IP8 3JS	processing and sale of sand and gravel, processing of inert waste materials with associated plant and related sales, access works, phased restoration using inert recovered materials and aftercare plan -re-consultation as new information received.					2025– however was considered in Long **6.17.A2 List and Short List of Other Developments ES Chapter 17 - Cumulative Effects - Appendix 17.2 Revision [REP4-163].**
DC/25/03046	Babergh and Mid Suffolk District Council	Former Toys R Us Store Copdock Interchange Pinewood IP8 3TT	Planning Application. Refurbishment and extension of existing retail unit, widening of range of goods restrictions to include the sale of comparison and convenience goods (including food and drink), reconfiguration of car park including provision of EV charging spaces and cycle parking, amendments to landscaping and associated works.	N/A	Awaiting decision (checked 01.05.2026)	N/A	EXCLUDE: Future year assessed in the TA is 2030, indicating the proposed opening year. However, no construction programme or construction traffic information is provided. Mitigation is also proposed for Copdock Interchange and A1214/Scrivener Drive junction.	Not included in DCO submission as was submitted post DCO submission cut off date – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
DC/25/05021	Babergh and Mid Suffolk District Council	Cranswick House Oaksmere Business Park Eye Airfield Industrial Estate Yaxley IP23 8BW	Request for Screening Opinion pursuant to The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 - The installation of one wind turbine of approximately 125-130m height to tip alongside foundations, underground cables and ancillary works.	N/A	EIA Required	N/A	EXCLUDE: As the application is submitted following the Project DCO submission, it is expected that the EIA associated with the future application will need to consider the Project as a committed development.	Not included in DCO submission as was submitted post April 2025– however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
DC/25/05508	Babergh and Mid Suffolk District Council	Land To The South Of Thompson And Morgan Poplar Lane Sproughton Suffolk	Submission of Details Application (Application for approval of Reserved Matters in part) for Outline Planning Permission DC/21/05110 dated 22/12/2022 - Town and	N/A	Granted	N/A	EXCLUDE: Related application DC/21/05110 has been included.	Not included in DCO submission as was submitted post April 2025– however was considered in **6.17.1 Environmental Statement Chapter 17 -**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			Country Planning (Development Planning Procedure) (England) Order 2015 (as amended) - Hybrid Application. Outline Planning Application for Interchange 55 comprising predominantly industrial (B2 use) and warehousing (B8 use) and prospective offices, research and light industry (E(g) (i, ii, iii) uses) buildings. Full Planning Application for access to the development and associated landscaping. - Details of Access in relation to Phase 1 infrastructure, incorporating access and drainage to the first two development plots.					**Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**. The related application DC/21/05110 has already been included in DCO Submission.

Table B.4 List of committed developments and transport schemes under consideration (Essex)

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
21/01765/FULL	Basildon Borough Council	Highways Land, Dunton Road, Dunton, Basildon, Essex	Installation of underground cables and associated works between Crouch Solar Farm and Lower Dunton Road Substation (inclusive only of the area falling within Basildon administrative area) (Dunton Road and Lower Dunton Road)	Granted	No change	EXCLUDE: Works are associated with Crouch Solar Farm which has been constructed. Minimal operation flows anticipated with regard to this application.	No change	
24/00004/OUT	Basildon Borough Council	Land South of London Road Billericay	Hybrid planning application comprising detailed planning permission for a new food store (Use Class E) with access, car parking, landscaping and other associated works; and outline planning permission (all matters reserved except means of access) for the	Awaiting decision	No change	EXCLUDE: Submitted Jan 2024 with proposed construction works completed by 2029. Potential for overlap with Project peak construction due to delayed start. However, no details provided on construction programme or flows.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			erection of up to 130 dwellings (Use Class C3) (including market, affordable and self-build custom build dwellings) with access, parking, public open space and associated landscaping and infrastructure works.					
21/01783/LDO	Braintree District Council	Horizon 120 Business Park Off A131 London Road Great Notley Essex	Proposed Local Development Order for the creation of a Business and Innovation Park comprising E(g)(i) (Office); E(g)(ii) (Research and Development); E(g)(iii) (Industrial Process); B2 (General Industrial) and B8 (Storage or Distribution) uses, and within Zone A of the proposed development a C1 (Hotel) (maximum 120 bed spaces); and buildings within the Horizon Hub area where the following uses will be permitted, subject to restrictions on internal floor area: E(a) (Shop; maximum 300sq.m); E(b) (Restaurant and Cafe; maximum 200sq.m); Gymnasium within Use Class E(d) (maximum 700sq.m.); Ecafé (Medical or Health Services; maximum 150sq.m.); Early Years Childcare, Day Nursery or Preschool within Use Class E(f) (maximum 350sq.m); 250sq.m for Sui Generis Event Space (excluding such space within a building principally used as a C1 Hotel); Sui Generis Bus Depot including welfare facilities; and associated structural landscaping and infrastructure – Amendments to the Approved Local Development Order (LDO) and	Granted	No change	INCLUDE: Granted in Aug 2021.Completion of the site is identified as 2030, however the start of construction delay by one year due to approval. Assumed 80% of operational trips identified within TA would coincide with the Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			Proposed Horizon 120 Wayfinding Strategy					
19/00739/REM	Braintree District Council	Land Adjacent to Braintree Road Cressing Essex	Development of up to 225 residential dwellings; associated access (including provision of a new roundabout on Braintree Road); public open space; play space; pedestrian and cycle links; landscaping; and provision of land for expansion of Cressing Primary School	Granted	No change	EXCLUDED: Granted Sep 2019 and shown as constructed on google imagery. Operational flows would have been captured within survey data.	No change	
21/03214/REM	Braintree District Council	Land Opposite Sandiacres Long Green Cressing Essex	Application for the approval of reserved matters (in respect of layout, scale, appearance and landscaping) pursuant to outline planning permission 18/00549/OUT granted 14.12.2020 (Allowed on appeal) for 250 dwellings, open space and associated ancillary works	Granted	No change	INCLUDE: Granted in March 2023. Construction has started as shown on google imagery and assumed to finish 2029 due to delayed start. Operational flows are likely to coincide with Project peak construction activity.	No change	
21/03735/FUL	Braintree District Council	Land West of Park Road Rivenhall Essex	Installation of solar farm and associated development.	Appeal Allowed	No change	EXCLUDE: Approval July 2023. 16 week construction programme. Construction does not appear to have started on google imagery. Construction flows are likely to be 44 HGV two-way movements. Assumed would be constructed prior to Project peak construction activity. Operational traffic is minimal with 2LGV/car visits per month for maintenance. Flows have been captured within TEMPro growth Factor.	No change	
21/01878/FUL	Braintree District Council	Land East of Periwinkle Hall Links Road Perry Green Bradwell Essex	Construction and operation of a solar photovoltaic farm, with battery storage and other associated infrastructure, including inverters, security cameras, fencing, access tracks and landscaping.	Granted	No change	EXCLUDE: Approval Dec 2021. 16 week construction programme. Construction appears to have been completed. Construction flows are likely to be 12 HGV two-way movements and 50 LGV/car two-way movements. Assumed would be constructed prior to Project peak construction activity. Operational traffic is minimal with 2 LGV visits per year.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
17/01979/OUT	Braintree District Council	Land Cranes Lane Kelvedon Essex	Outline planning permission for up to 125 dwellings and up to 2000 m^2 of employment floorspace (Class B1).	Pending	No change	EXCLUDE: Application was submitted in 2017 and is still pending. No construction programme provided. Insufficient details to understand if there would be an overlap with Project peak construction activity.	No change	
21/03579/OUT	Braintree District Council	Land South West of Coggeshall Road Kelvedon Essex	Outline planning application (with all matters reserved apart from access) for up to 600 dwellings, including up to 75 units sheltered housing accommodation, the proposed provision of a primary school, and provision of public open space including associated landscape planting with associated infrastructure, drainage measures, earthworks and provision of new footpath/cycleway route towards Coggeshall.	Pending	No change	EXCLUDE: Submitted 2021, start date initially programmed for completion of phase 1 2026 and full operation by 2030. Consultation comments noted Feb 2025. Unlikely to coincide with Project peak construction activity.	No change	
22/01530/VAR	Braintree District Council	Land North of Colchester Road Coggeshall Essex	Variation of Condition 7 (Prior to first occupation) following grant of planning permission 19/02072/VAR Approved 16/019/2020 to vary planning permission 17/02246/OUT for: Outline application for the construction of up to 300 dwellings (including up to 40% affordable) nursery/community facilities (420 m^2) and provision of access, roads, drainage infrastructure, open space and strategic landscaping. Demolition of existing garage/ workshop building. Variation would allow condition to read: - 'Prior to the occupation of the 100th dwelling, the improvement work shown in outline on WSP Drawing Number 26359-SK-04 P01 Colchester Road Coggeshall Off Site Highways Works dated October 2018	Application Granted with S106	No change	INCLUDE: Granted in April 2019. Google imagery shows construction work in 2023. Worst-case assume overlap of operational traffic with Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			shall be completed in accordance with a detailed scheme submitted for approval by the Local Planning Authority in consultation with Highways England.'					
21/01525/OUT	Brentwood Borough Council	Entire Land East of A128 South of A127 Tilbury Road West Horndon Essex	Additional submission following EIA Regulation 25 information request: (Shortened description). Please refer to the application form for full description) Outline application with all matters reserved apart from Access, for: the construction of a Garden Community which includes up to 3,700 dwellings, 3 care homes, 5 gypsy/travellers pitches, secondary and primary schools, children's nurseries and creches. Employment hub, village centre and neighbourhood hubs, mobility hub, community sports hub, football, hub, cricket ground, green and blue infrastructure, sustainable drainage system, accesses to A128 Tilbury Road, footpath and cycle link to the A127 and other associated infrastructure and works including noise barrier, demolition of structures and undergrounding of the overhead lines	Pending consideration	No change	EXCLUDE: Submitted Sept 202 1 and documents being submitted in Feb 2025. Uncertainty on when the construction programme would commence, and no flows provided. Operation scenario tested was for 2033 therefore would not overlap with Project peak construction activity.	No change	
22/00667/FUL	Brentwood Borough Council	Park Farm Dunton Road Herongate Brentwood Essex CM13 3SG	Variation of condition 7 of application 21/00834/FUL (Construction and operation of a solar farm together with all associated works, equipment and necessary infrastructure) for the re-wording of condition 7	Granted	No change	EXCLUDED: Solar farm has been constructed. Operational traffic of up to 8 two-way vehicle movements a month, therefore not significant.	No change	
21/00834/FUL	Brentwood Borough Council	Park Farm Dunton Road Herongate	Construction and operation of a solar farm together with all	Granted	No change	EXCLUDED: Solar farm has been constructed. Operational traffic of up to 8	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Brentwood Essex CM13 3SG	associated works, equipment and necessary infrastructure			two-way vehicle movements a month, therefore not significant.		
22/00047/FUL	Brentwood Borough Council	Havering Grove Farm 552A Rayleigh Road Hutton Brentwood Essex CM13 1SG	Demolition of existing commercial buildings and hardstanding and cessation of outside storage uses and replacement with construction of four residential dwellings together with associated landscaping and access.	Granted	No change	EXCLUDED: Accepted in July 2022. Change in use does not appear to have been undertaken from google imagery search. No construction flow provided. Minimal traffic flows from proposed housing therefore not significant.	No change	
20/00001/MAS	Chelmsford City Council	Strategic Growth Site North of Woodhouse Lane, Broomfield, Chelmsford, Essex	Masterplan for around 450 new homes, neighbourhood centre, early years and childcare facility, local open space and associated access and highway infrastructure including a new access into Broomfield Hospital	Granted	No change	EXCLUDED: Granted in 2020 and completion of construction was identified as 2028. Construction does not appear to have been started from google imagery search, therefore operational traffic unlikely to coincide with Project peak construction activity. Construction flows have not been provided therefore overlap cannot be assessed.	No change	
20/02064/OUT	Chelmsford City Council	Strategic Growth Site North of Woodhouse Lane, Broomfield, Chelmsford, Essex	Outline application for residential development for up to 512 dwellings including affordable housing and custom build homes (Use Class C3), Local Centre (Use Classes E, F.1 and F.2), formal and informal open space, and associated infrastructure. All matters reserved except for primary access.	Pending	Application Permitted	INCLUDE: Completion of development was planned for 2028, however application still pending. Construction flows may likely coincide with Project peak construction activity.	No change	
22/00284/CM	Chelmsford City Council	Quarry And Premises, Moulsham Hall Lane, Great Leighs, Chelmsford, Essex	Continuation of development without compliance with condition 3 (applications details) and condition 74 (restoration timescale for original quarry area) of planning permission ESS/42/17/CHL to allow provision of a larger mineral and waste processing area and delay in the removal of the existing processing plant and restoration of the original quarry; and installation of additional mineral and waste	No Further Action	No change	EXCLUDE	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			processing facilities and provision of a new portal framed workshop. ESS/42/17/CHL is the extant planning permission for Extraction of an estimated reserve of 2.8 million tonnes of sand and gravel (from sites A38 and A39 as identified in the Minerals Local Plan 2014) and retention of existing access onto the A131, retention of existing sand and gravel processing plant (to be relocated within site A38), progressive restoration to agriculture using inert fill, installation of inert recycling facility, including screening and crushing to recover secondary aggregate					
23/01583/FUL	Chelmsford City Council	Strategic Growth Site 7A Moulsham Hall Lane Great L Fights Chelmsford Essex	Hybrid planning application for EIA (Environmental Impact Assessment) development to include: 1. Outline application with all matters reserved for residential development of up to 800 homes (Use Class C3) separate affordable and self/custom-build homes; a Neighbourhood Centre comprising commercial, business and service (Use Class E) of which the anchor retail store is not more than 500sqm (GIA); medical services (Use Class E café), a children's separate (Use Class E(f)) and a residential care home (Use Class C2) of up to 80 beds; a new primary school (Use Class F1); landscaping works, provision of strategic and local open space; biodiversity enhancements, all associated highways infrastructure, pedestrian,	Pending	No change	INCLUDE: Submitted Oct 2023. Potential for construction to overlap with Project peak construction activity. Peak construction flows provided and used as worst-case.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			cycle, PROW and bridleway routes; drainage infrastructure and all associated ancillary works including services and utilities. 2. Full application for the principal means of vehicular access to the site, on site highways works, surface water attenuation basins and associated ancillary works including services and utilities.					
182723	Colchester City Council	Langham Oaks, School Road, Langham Colchester CO4 5PA	Full application for the erection of a new two storey school containing teaching and residential accommodation and demolition of single storey rear extensions at Langham Oaks School, School Road, Langham, Colchester, CO4 5PA	Approved	No change	EXCLUDE: Construction completed. No significant change to operational flows as a result of the changes. No change to pupil numbers and staff levels to increase by 2 members.	No change	
223183	Colchester City Council	Anglian Water Pipeline, Dedham to Great Horkesley	Proposed hybrid planning application for section of the proposed Bury St Edmunds to Colchester Pipeline Scheme with full planning consent sought for a pipeline and associated above ground infrastructure; and outline consent for above ground infrastructure	Approved	No change	EXCLUDE: Approved 2023. Assumed to have been completed prior to Project peak construction activity. No operational flows provided, however assumed this would be infrequent and for maintenance.	No change	
231640	Colchester City Council	Land off, Hall Road, Copford Colchester	Creation of 50 no. two, three, four and five bedroom houses and associated infrastructure, plus public open space in the centre of the site and access works on Hall Road.	Approved	No change	EXCLUDE: Approved Dec 2024 and construction has started. Construction programme 12-18 months therefore operational flows would coincide with Project peak construction activity. However, flow considered not significant.	No change	
232762	Colchester City Council	Tey Brook Centre Brook Road Great Tay Essex CO6 1JE	Erection of 1no. Employment Units Class E, g (ii) and (iii), B2 and B8 use.	Pending	Approved	EXCLUDE: Approved April 2024. Construction programme over 3 years. Therefore, operational flows would coincide with Project peak construction activity. However, flow considered not significant.	No change	
ESS/36/21/BTE	Essex County Council	Land at: Colemans Farm Quarry, Little Braxted Lane,	Proposed western extension to the current site using existing approved facilities (site access,	Granted	No change	EXCLUDE: Granted Jan 2023. Appears to be operational from google imagery. Therefore, operational flows would	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
	(Minerals & Waste)	Rivenhall, Witham, Essex, CM8 3EX	plant site, mineral processing plant and other ancillary facilities); including for the diversion of the Burghey Brook; with restoration to arable land using imported inert restoration materials, and on-site materials in advance of the A12 road widening and improvement national infrastructure project			coincide with Project peak construction activity. However, flow considered not significant (4 HGV's an hour on to A12).		
CC/CHL/85/21	Essex County Council (Minerals & Waste)	Land between Beaulieu Park (north of Generals Lane), Boreham Parish, and Deres Bridge Roundabout on A131, Great & Little Leighs Parish, to the north-east of Chelmsford.	Chelmsford Northeast Bypass (CNEB): A single carriageway road between Roundabout 4 of the Beaulieu Park Radial Distributor Road (RDR1) and a new roundabout on the A131 at Chatham Green plus dualling of the existing A131 between Chatham Green and Deres Bridge roundabout. With one intermediate roundabout, 3 road overbridges and 1 pedestrian/cycle/horse overbridge. Together with other associated works and landscaping.	Granted	No change	INCLUDE: Granted April 2022 and phase 1 construction to be completed 2025. Therefore, operational flows would coincide with Project peak construction activity. It is understood that there would be an increase in baseline traffic flow from CNEB on the A131, however only a range is provided for peak hours. Therefore, as a worst-case, the future baseline has been retained in the assessment.	No change	
ESS/61/21/CHL	Essex County Council (Minerals & Waste)	Land adjacent to Chelmsford City Racecourse, Great Leighs, Chelmsford, CM3 1QP	Pyrolysis Plant to generate electricity from imported solid recovered fuel, associated building and offices	Granted	No change	EXCLUDE: Granted in Sep 2021. Construction appears to have started on google imagery. operational flows would coincide with Project peak construction activity. However, flow considered not significant (1-2 HGV's a day and 18 two-way movements in peak hours).	No change	
ESS/77/20/CHL	Essex County Council (Minerals & Waste)	Land south of A1060 (Salt's Green), Chalk End, Roxwell, Chelmsford, CM1 4NJ	Sand and gravel quarry and associated works/development including formation of new access and mobile plant area; together with the importation of inert material to facilitate site restoration	Granted	No change	EXCLUDE: Granted Feb 2022. Operational flows would coincide with Project peak construction activity. However, flows are noted as being reduced, therefore considered not significant.	No change	
ESS/01/18/CHL	Essex County Council	Land at Sheepcotes Farm, Sheepcotes Lane,	The construction of an agricultural reservoir involving the extraction, processing and exportation of sand and gravel	Granted	No change	EXCLUDE: Granted July 2019. Appears operation on google imagery. Therefore, operational flows would coincide with Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
	(Minerals & Waste)	Little Waltham, CM3 3LU	and soils; the erection and use of an on-site processing plant with ancillary facilities; and highway and access improvements. Together with the construction of an associated irrigation pipeline from the proposed abstraction point (River Chelmer at Langleys, Great Waltham)			However, flow considered not significant (3-4 HGVs an hour)		
CC/CHL/07/17	Essex County Council (Minerals & Waste)	Beaulieu Park Education Campus Site, Beaulieu, Chelmsford	Proposed development of the Beaulieu Park Schools Campus, consisting of a 1200 place three storey Secondary School, 420 place two storey Primary School, 56 place single storey Nursery, Sports Hall with associated community facilities, hard and soft play areas, means of enclosure, landscaping, car parking, bicycle and scooter parking and associated infrastructure on a site of approx. 11.8 ha on land to the north-east of the junction of White Hart Lane (A130) and Essex Regiment Way, with vehicular access from Armistice Avenue and pedestrian access via Beaulieu Square, Chelmsford	Granted	No change	EXCLUDE: Granted April 2017 and appears constructed on google imagery. Therefore, operational flows would coincide with Project peak construction activity. However, development flows would be captured in baseline surveys.	No change	
CC/TEN/31/21	Essex County Council (Minerals & Waste)	Land between the A120 and A133, to the east of Colchester and west of Elmstead Market	New link road between the existing A120 and A133 inclusive of a grade separated dumbbell junction at the A120, with new accesses to an existing petrol station (Ardleigh South Services) and Colchester Waste Transfer Station; a new roundabout at the junction with the A133; and two intermediate roundabouts along the link road. Together with other associated works and landscaping	Granted	No change	INCLUDE: Granted Nov 2021 and construction work for the first phase has started with completion due 2026. Therefore, the Link Road would be operational and coincide with Project peak construction flows. Increase of flows noted at A120 Ardleigh Crown Interchange.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
22/00539/**FULL**	Colchester City Council	20 Harwich Road Ardleigh Colchester Essex CO7 7LT	20 Harwich Road Ardleigh Colchester Essex CO7 7LT - Demolition of existing industrial units and erection of bespoke administration building with associated parking, landscaping and boundary treatments.	Approved	No change	EXCLUDE: Approved May 2022. Lack of information / details for construction or operational flows. However not expected to have significant impact to baseline flows.	No change	
22/00121/FUL	Colchester City Council	DTE Scaffolding Old Ipswich Road Ardleigh Colchester Essex CO7 7QR	DTE Scaffolding Old Ipswich Road Ardleigh Colchester Essex CO7 7QR - Proposed erection of 2 no. detached single storey buildings forming 10 no. commercial units Class E, B2 and B8 uses.	Approved	No change	EXCLUDE: Approved Jan 2023. Lack of information / details for construction or operational flows. However not expected to have significant impact to baseline flows.	No change	
21/02070/FUL	Tendring District Council	Land adjacent to Lawford Grid Substation Ardleigh Road Little Bromley Essex CO11 2QB	Construction and operation of a 50 MW Battery Energy Storage System, and related infrastructure with associated access, landscaping and drainage	Approved	No change	EXCLUDE: Approved Sept 2022 appears to have been constructed. Operational traffic is minimal for maintenance with 1-2 LGV visits per month therefore not significant.	No change	
21/00688/FUL	Tendring District Council	Mulley's Farm Bentley Road Little Bromley Manningtree Essex CO11 2PL	Mulley's Farm Bentley Road Little Bromley Manningtree Essex CO11 2PL - Variation of Condition 4 (External Access to Formal Parking Area) of Planning Application ref: 18/01888/FUL, granted under appeal ref: APP/P1560/W/20/3250989 (Change of use of agricultural and storage buildings to mixed open use (B1, B2 and B8) and the erection of an extension following the removal of a lean-to structure) to provide a more practical design solution.	Approved	No change	EXCLUDE: Approved Oct 2022. assumes works undertaken and included in baseline flows. Flows unlikely to be significant and similar to existing.	No change	
20/00704/FUL	Tendering District Council	Badley Hall Little Bromley Road Ardleigh Colchester Essex CO7 7NF	Change of use of and alterations to agricultural storage buildings to B1(a), B1(c) and B8 uses with associated parking and installation of package treatment plant.	Approved	No change	EXCLUDING: Approved April 2021 assumes works undertaken and included in baseline flows. Flows unlikely to be significant and similar to existing.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
22/00006/LUEX	Colchester City Council	Ardleigh Caravan and Camping Park Dead Lane Ardleigh Essex CO7 7RH	Proposed continued additional use of the land with pitches for up to 14 touring caravans for holiday and recreational purposes between 1st March and 31st October in any year.	Lawful use certificate granted	No change	EXCLUDE: Granted in Feb 2022. Application is for the continuation of the additional use of land; therefore, operational use should be already captured in baseline flows.	No change	
21/01184/LUEX	Colchester City Council	Ardleigh Caravan and Camping Park Dead Lane Ardleigh Essex CO7 7RH	Lawful development certificate for the storage only (not for occupation) of up to 250 (maximum) motorhomes/towed caravans. Proposed continued additional use of the land with pitches for up to 14 touring caravans for holiday and recreational purposes between 1st March and 31st October in any year.	Lawful use certificate granted	No change	EXCLUDE: Granted in Feb 2022. Application is for the continuation of the additional use of land. Storage only and not for not for occupation, therefore, should not produce additional operational flows.	No change	
20/01582/AGRIC	Colchester City Council	Wick Farm Wick Lane Ardleigh Colchester Essex CO7 7RE	Proposed agricultural irrigation reservoir.	Approved	No change	EXCLUDE: Approved in 2020. Based on google imagery this has been constructed.	No change	
20/00594/FUL	Colchester City Council	Land adjoining Ipswich Road and Wick Lane Ardleigh Essex CO7 7QL	Full planning for food storage and distribution facility and associated parking, logistics yard and offices (re-consultation: Supplementary Sequential Test Statement received 23/03/2022).	Approved subject to S.106	No change	INCLUDE: Approved July 2023 to be operational in 2027. Operational traffic to coincide with Project peak construction activity.	No change	
20/01783/FUL	Colchester City Council	Systematic Business Park Old Ipswich Road Ardleigh Essex CO7 7QL	Construction of up to 30 ‘start-up’ business units under flexible E(g), B2 and B8 use and associated development. (Additional application associated with Site - 22/01340/FUL Crown Business Centre Old Ipswich Road Ardleigh Colchester Essex CO7 7QR - Proposed erection of B8 storage and distribution units with ancillary mezzanine office space and associated access amendments, parking and landscaping.)	Approved	No change	INCLUDE: Approved Dec 2021. Appears constructed from google imagery but unknown when completed. Operational flows would coincide with Project peak.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
23/00136/FUL	Colchester City Council	Crown Business Centre Old Ipswich Road Ardleigh Colchester Essex CO7 7QR	Proposed erection of B8 storage and distribution units with ancillary mezzanine office space and associated access amendments, parking and landscaping.	Approved	No change	INCLUDE: Approved Dec 2021. Based on google imagery the site appears under construction. Operational flows would coincide with Project peak construction activity. However, the development predicted flows are expected to be reduced therefore have been removed from future baseline.	No change	
23/01033/ DETAIL	Colchester City Council	Crown Quarry Old Ipswich Road Ardleigh Essex CO7 7QR	Reserved Matters Application for Access, Appearance, Landscaping, Layout and Scale following Outline Planning Permission 19/01939/OUT (for a business park development comprising of B1, B2 and B8 storage, the construction of a new internal access from the existing access road, relocation of the existing temporary quarry office to a new building together with associated car / cycle parking).	Reserved Matters Approved	No change	INCLUDE: Approved Oct 2023. Appears to be constructed on google imagery and operational. Operational flows would coincide with Project. Flows to be included within as baseline data collected prior to this.	No change	
23/01800/AGRIC	Colchester City Council	Wick Farm Wick Lane Ardleigh Colchester Essex CO7 7RE	Prior Approval Application under Part 6, Schedule 2 of the Town and Country Planning (General Permitted Development) (England) order 2015 (as amended) for a new general purpose agricultural store.	Decided – Prior Approval not required	No change	EXCLUDE: Decided 2024. Insufficient traffic related information provided to include within assessment. Unlikely to generate significant operational flows.	No change	
23/01763/FUL	Tendering District Council	The Pod Old Ipswich Road Ardleigh Colchester Essex CO7 7QL	New storage unit within the southwest corner of the existing workshop.	Approved	No change	EXCLUDE: Decided Jan 2024. Insufficient traffic related information provided to include within assessment. Unlikely to generate significant operational flows.	No change	
ESS/01/18/CHL/NMA1	Essex County Council (Minerals & Waste)	Land at Sheepcotes Farm, Sheepcotes Lane, Little Waltham, CM3 3LU	Non-material amendment to planning application ref: ESS/01/18/CHL (Construction of an agricultural reservoir) seeking a revised alignment of the site access road	Approved	No change	EXCLUDE: Links to planning application ESS/01/18/CHL - granted July 2019. Appears operational on google imagery. Therefore, operational flows would coincide with the Project peak construction activity, although flows should be accounted for in baseline flows. However, flow considered not significant (3-4 HGVs an hour).	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
ESS/29/20/TEN	Essex County Council (Minerals & Waste)	Land at Martells Quarry, Slough Lane, Ardleigh, Essex, CO7 7RU - Sewells Reservoir Construction Limited	Proposed western extension to Martells Quarry for the extraction, processing, sale and distribution of silica sand and gravel, and subsequent restoration using inert materials along with the creation of a new access.	Approved	No change	EXCLUDE: granted September 2021. Specific details for the regarding distribution beyond Slough Lane are not sufficient for cumulative assessment.	No change	
ESS/08/24/BTE/SPO	Essex County Council (Minerals & Waste)	Land forming part of the Rivenhall Airfield/Bradwell Quarry, Coggeshall Road (A120), Braintree.	Erection of up to 45 hectares of low carbon greenhouses, with associated solar renewable energy provision, conversion of the existing Rivenhall RAF hangar to a vertical farm and associated supporting infrastructure including offices, packhouses, boiler houses, heat stores, day tanks, CO2 balloons and lagoons for drainage, irrigation and biodiversity.	Approved	No change	EXCLUDE: granted March 2024. This is a scoping onion which does not contain sufficient details to include within our assessment.	No change	
CC/CHL/30/23/ SO	Essex County Council (Minerals & Waste)	Chelmer Valley Park and Ride, Pratt's Farm Lane, Little Waltham, Chelmsford.	EIA Screening Opinion: Proposed expansion of Chelmer Valley Park and Ride together with associated works including changes to the internal site configuration, provision of additional landscaping and an attenuation pond	Approved	No change	EXCLUDE: granted May 2023. This is a scoping onion which does not contain sufficient details to include within our assessment.	No change	
CC/CHL/110/23	Essex County Council (Minerals & Waste)	Chelmer Valley Park and Ride, Pratt's Farm Lane, Little Waltham, Chelmsford.	Expansion and enhancement of Chelmer Valley Park and Ride, including an expansion of the car parking area to the north and east, pedestrian and cyclist improvements and the construction of a new substation. Together with other associated development, works and landscaping.	Approved	No change	EXCLUDE: granted November 2024. Within documents is stats that there is no change in traffic flows expected in the 2027 opening year during any time period as the site has not yet reached capacity.	No change	
ESS/51/24/BTE/SPO	Essex County Council (Minerals & Waste)	Land at Rivenhall Airfield Coggeshall Road, Braintree, CO5 9DF.	EIA Scoping Opinion Request for the following applications which are proposed to be submitted together: - Non-Material Amendment	Approved	No change	EXCLUDE: granted October 2024. This is a scoping onion which does not contain sufficient details to include within our assessment.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			Application that would amend the wording of the description of development to move specific reference to the materials processed in the consented IWMF into relevant Condition(s) of the Planning Permission of the IWMF (ESS/39/23/BTE). - A Variation Application of ESS/39/23/BTE/“slot out” application to create a blank area within the IWMF footprint by reconfiguring the proposed layout of the consented IWMF elements. The Variation Application would not remove any element of the consented IWMF. The Variation Application would also provide for the import of bulky waste for treatment in the Materials Recovery Facility (MRF), provide details of the phasing of the development of the IWMF and propose other minor design changes. - An Outline Planning Application that proposes a Carbon Capture Use and Storage plant with Heat Offtake (CCUS-HO) within the blank area created by the Variation Application/”slot out” application.					
ESS/24/25/BTE	Essex County Council (Minerals & Waste)	Land at Rivenhall Airfield, Coggeshall Road, Braintree, CO5 9DF.	Outline Planning Permission with all matters reserved (except for access) for the construction of a Carbon Capture, Usage and Storage Plant and Heat Offtake (‘CCUS-HO’) and associated stack, external pipelines, electrical cables, and landscaping works.	Pending	No change	EXCLUDE: Associated traffic flows would not affect our PARs or connecting links.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
20/00480/ DETAIL	Tendring District Council	Land East of Bromley Road Lawford Essex CO11 2HS	Reserved matters application with details of appearance, landscaping, layout and scale pursuant to Phase 3 of outline permission (15/00876/OUT) including 100 dwellings, associated hardstanding, boundary treatments, landscaping and drainage.	Approved	No change	EXCLUDE: granted December 2020. No traffic and transport documents associated with this planning application.	No change	
20/00547/OUT	Tendring District Council	Hamilton Lodge Parsons Hill Great Bromley Colchester Essex CO7 7JB.	Hybrid Application for Outline application for residential development including: 67 dwellings including up to 30% as affordable housing and all necessary access roads (Outline), All associated amenity space, landscaping, parking, servicing, utilities, footpath and cycle links, on-site drainage, and infrastructure works including gas and electricity apparatus (Outline), Residential development for 12 dwellings (Use Class C3) and associated access roads including formation of new junction to Parsons Hill (Detail), Formal and informal open space including village green and meadow (Use Class D2) including landscaping, parking, servicing, utilities, footpath links (Detail).	Approved	No change	EXCLUDE: granted February 2022. No traffic and transport documents associated with this planning application.	No change	
20/00782/OUT	Tendring District Council	Land South of Long Road Lawford Essex CO11 2HS.	Outline planning with all matters reserved except for access for up to 76 no. dwellings and associated roads, hardstanding, fencing, outbuildings and drainage.	Approved	No change	EXCLUDE: Granted May 2021 - assessed 2029 future year. Therefore, does not coincide with the Project construction peak activity for the affected PARs/junctions.	No change	
21/00197/ DETAIL	Tendring District Council	Land to The South of Long Road and to West of Clacton Road Mistley Essex CO11 2HN.	Reserved matters application with details of appearance, landscaping, layout and scale pursuant to the residential element of outline permission (17/01181/OUT - Approved	Approved	No change	EXCLUDE: Granted December 2021 - No traffic and transport documents associated with this planning application.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			under appeal APP/P1560/W/19/3220201 and separately 21/00213/OUT) including up to 485 dwellings, up to 2 hectares of employment land (A2/A3/B1/B2; B8; D1 uses), with associated public open space and infrastructure.					
21/02042/ EIASCR	Tendering District Council	Land adjoining Ipswich Road and Wick Lane Ardleigh Essex CO7 7QL	EIA Screening request for proposed food storage and distribution facility and associated parking, logistics yard and offices.	Closed	No change	This planning application has been excluded within the Traffic and Transport cumulative assessment as of Feb 2022 the application was closed.	No change	
22/00958/FUL	Tendring District Council	Land South of Long Road Mistley Essex CO11 2HN	Proposed local convenience store and 80 no. dwellings and associated roads, hardstanding, fencing, outbuildings and drainage.	Approved	No change	EXCLUDE: Granted March 2023. The flows associated with this planning application would not affect our PARs or connecting links associated with the Project.	No change	
24/00255/FUL	Colchester City Council	Gods House Farm Harts Lane Ardleigh Colchester Essex CO7 7QQ.	Planning Application - Construction of one x 2 bedroom and two x 3 bedroom dwellings with associated boundary treatments, hard and soft landscaping and EV charging points (in lieu of Class Q prior approval for one x 1 bedroom, one x 2 bedroom and one x 3 bedroom dwellings). Re-Submission of withdrawn application - 23/01152/FUL.	Approved	No change	EXCLUDE: Granted May 2024. No traffic and transport documents associated with this planning application.	No change	
231153	Colchester City Council	Land to the east of, Newbarn Road, Great Tey.	Erection of 30 dwellings and 1 ha of public open space and access from Newbarn Road.	Approved	No change	EXCLUDE: Granted December 2023. No traffic and transport documents associated with this planning application	No change	
231776	Colchester City Council	Land South of, School Road, Langham Colchester, CO4 5PA - Rose Builders – Mr Will Vote	Outline application for erection of 30 houses with a new access onto School Road, Langham. All matters reserved.	Approved	No change	EXCLUDE: Granted August 2023. No traffic and transport documents associated with this planning application	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
240279	Colchester City Council	Last East of, Fiddlers Hill, Fordham Heath Colchester.	The restoration of wetland features and habitats at Fiddler's Hill Meadow through naturalising the river with its floodplain by lowering the river bank at two locations (maximum 60cm deep) and the excavation of very shallow scrapes (maximum 30 cm deep) and ponds (maximum 90 cm deep). Extension of fen habitat (maximum 30 m deep), tree planting and the installation of interpretation boards. Re-use of excavated soil on site outside of the flood zone to extend scrub, hedgerow and woodland habitats.	Approved	No change	EXCLUDE: Granted January 2025. No traffic and transport documents associated with this planning application.	No change	
200995	Colchester City Council	Land to the rear of 306 to, 314 London Road, Stanway Colchester CO3 8LT.	Phased construction of 31 single and two bedroom Almshouses in one and two storey configurations with associated access, parking and external works. Demolition of existing alms houses.	Pending	No change	EXCLUDE: No traffic and transport documents associated with this planning application.	No change	
201503	Colchester City Council	Land to North/South of, Tollgate West, Stanway Essex.	Application for approval of reserved matters following outline approval (193133).	Approved	No change	EXCLUDE: Granted October 2020. No traffic and transport documents associated with this planning application.	No change	
201686	Colchester City Council	Land south of West Bergholt Cricket Club, Colchester Road, West Bergholt Colchester.	Outline application for up to 18 dwellings with access to be determined and all other matters reserved.	Approved	No change	EXCLUDE: granted December 2021. Traffic flows associated with this planning application does not affect the PARs or connecting links associated with the Project.	No change	
250273	Colchester City Council	Land Adjacent To 32, Colchester Road, West Bergholt Essex CO6 3JG.	Full application for 61 dwellings and associated roads, hardstanding, fencing, outbuildings, drainage, pump station and electrical substation.	Pending	No change	EXCLUDE: Traffic impact assessment was undertaken for 2029 on Colchester Road site access. No additional information on how it is distributed along the network.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
250545	Colchester City Council	Land North of, Coach Road, Great Horkesley Colchester.	Outline planning permission (all matters reserved, except for access) for up to 150 dwellings (including affordable housing), a car park, public open space, landscaping, children's play area, sustainable drainage, infrastructure and all other associated infrastructure	Pending	No change	EXCLUDE: Development assessment year is 2030, therefore, does not coincide with the Project peak construction activity.	No change	
21/00850/OUT	Braintree District Council	Land West Of Boars Tye Road Silver End Essex.	Outline planning permission with all matters reserved apart from access, for up to 94 dwellings and new landscaping, open space, access, land for allotments and associated infrastructure.	Approved	No change	EXCLUDE: Appeal approved October 2021 - year tested to be operational is 2026, therefore would ideally need to be included within our baseline. However, the traffic distribution provided is only along Boars Tye Road (access location) towards Galleys Croner, thus the distribution along the highways network beyond this is not known. Consequently, the information provided is insufficient to be accurately included within the cumulative assessment	No change	
24/02673/FUL	Braintree District Council	Land South West Of Cressing Temple Witham Road Cressing Essex.	Solar Farm with up to 13.8 MWac of export capacity, comprising the installation of solar photovoltaic panels and associated infrastructure including customer substation, DNO substation, inverter and transformer substations, customer cabin, spare parts container, storage containers, maintenance tracks, fencing, security cameras, landscape planting, swales and associated works including grid connection.	Approved	No change	EXCLUDE: Granted June 2025 - construction year / programme is not mentioned. The construction period will last approximately four and a half months (18 weeks). Minimal flows associated with the development, with construction worker trips to be finalised.	No change	
22/01324/EIASO	Chelmsford City Council	Zone 3, Chelmsford Garden Community, Beaulieu Parkway, Chelmsford.	Chelmsford Garden Community – Zone 3 (Halley Developments) – Request for an EIA Scoping Opinion for an outline planning application with all matters reserved, for a mixed-use garden community comprising up to 1,500 dwellings and up to 100 units	Decision – EIA Required	No change	EXCLUDE: Decision that EIA is required decided on September 2022 - details are only for a scoping report. Therefore, insufficient to be included within our assessment.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			of retirement accommodation, public open space including the Channels Discovery Park, formal sports pitch provision and pavilion, new roadways, pedestrian and cycle routes, access roads, transport infrastructure including buses, bus gates and connections to mobility hubs, diversion of some existing Public Rights of Way and the stopping up of some lengths of public highway.					
21/02050/CM	Chelmsford City Council	Broomfield Hospital, Hospital Approach Broomfield Chelmsford CM1 7ET.	CNEB: A single carriageway road between Roundabout 4 of the Beaulieu Park Radial Distributor Road (RDR1) and a new roundabout on the A131 at Chatham Green plus dualling of the existing A131 between Chatham Green and Deres Bridge roundabout. With one intermediate roundabout, 3 road overbridges and 1 pedestrian/cycle/horse overbridge. Together with other associated works and landscaping.	Unknown	No change	EXCLUDE: decision was issued April 2022. No traffic and transport related documents.	No change	
21/02490/OUT	Chelmsford City Council	Banters Field Main Road Great Leighs Chelmsford Essex.	Application for outline planning permission for the development of an integrated retirement community comprising up to 190 units (C2 use) with all matters reserved except for access.	Pending	No change	EXCLUDE: assessed 2027 as the future year. Traffic flows associated with this planning application are minimal.	No change	
22/01113/SCOPE	Chelmsford City Council	Land At Moulsham Hall Moulsham Hall Lane Great Leighs Chelmsford Essex.	Scoping opinion for the proposed development at Strategic Growth Site 7a: Great Leighs - Land at Moulsham Hill.	Pending	No change	EXCLUDE: planning documents are only sufficient for a scoping report. Therefore, insufficient to be included within our assessment.	No change	
24/00695/FUL	Chelmsford City Council	Land South East Of Banters Lane Business Park Banters Lane	Construction of 105 residential dwellings including affordable housing and custom build housing (Use Class C3) and	Pending	No change	EXCLUDE: the traffic assessment was undertaken for the future year of 2041. The flows associated with this planning	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Great Leighs Chelmsford.	principal means of site access, provision of resident's and visitor car parking, open space including children's play space, a new shared pedestrian/cycle route, enhancements to existing routes, hard and soft landscaping, highways works, new drainage basin, and all associated infrastructure works			application are not anticipated to coincide with the Project peak construction activity.		
23/01751/OUT	Chelmsford City Council	Zone 2 Chelmsford Garden Community Beaulieu Parkway Chelmsford.	Outline planning consent for a mixed use Garden Community to be delivered in severable phases with all matters reserved (save for where full details are submitted for a new access junction from Beaulieu Parkway - RDR1) for residential development; mixed use development comprising employment, commercial, retail, leisure, community and education facilities; specialist residential accommodation for the elderly; serviced land for a travelling show people site; green and blue infrastructure including a new Nature Park, public open space and sports facilities; sustainable transport infrastructure including two active travel bridges crossing Chelmsford North East Bypass; new highways including part of the Northern Radial Distributor Road; utility and infrastructure work; site restoration and preparation works and demolition of structures; and associated and ancillary development.	Pending	No change	EXCLUDE: the traffic assessment was undertaken for the future year of 2041. The flows associated with this planning application are not anticipated to coincide with the Project peak construction activity.	No change	
23/00124/OUT	Chelmsford City Council	Zone 3 Chelmsford Garden Community Beaulieu Parkway Chelmsford	Application for Hybrid planning permission at Powers Farm, Chelmsford; Outline Planning Permission with all matters reserved	Pending	No change	EXCLUDE: the traffic assessment was undertaken for the future year of 2041. The flows associated with this planning application are not anticipated to coincide with the Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			except means of accesses from/to the proposed Northern Radial Distributor Road (NRDR). Residential development of up to 1250 units, which comprises market/affordable and single family rental / Build to Rent. Provision of Discovery Park North which will include open space, landscaping, formal sports pitches, pavilion and associated car parking. Internal vehicular carriageways, footways, cycleways and all pedestrian routes with associated landscaping and green infrastructure. Phased development (each and every phase (and/or sub-phase) being a separate and severable part of the development. Detailed planning permission for two spine roads north/south carriageway(s), cycleway(s) and footway(s) from/to the proposed Northern Radial Distributor Road North (NRDR) and one east/west spine road to Great Belsteads Village. Drainage and SUDs throughout the development with all associated engineering works including strategic ground re-profiling, stockpiling, and below ground works					
21/01545/OUT	Chelmsford City Council	Land North Of Warren House Roxwell Road Writtle.	Outline application for Strategic Growth Site 2 comprising up to 880 new homes, primary school with co-located early years and childcare nursery, travelling showpersons site for five serviced plots, sports facilities including a pavilion/community	Pending	No change	EXCLUDE: the traffic assessment was undertaken for the future year of 2032. The flows associated with this planning application are not anticipated to coincide with the Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			centre, neighbourhood centre (including retail, community, healthcare, office and residential uses), plus associated landscaping and habitat creation, public open space and play facilities, roads and infrastructure (all matters reserved except access), together with a detailed scheme in the south east corner for Phase 1A comprising 311 no. houses plus associated roads, parking and infrastructure (Landscaping reserved for Phase 1A).					
23/01519/FULL	Basildon Borough Council	Land Lying To The West Of Heath Close Billericay Essex.	Erection of 32no. Houses and a 30 unit sheltered housing facility with associated access and a pumping station.	Pending	No change	EXCLUDE: opening year and trip distribution along the highway network is unclear. The information provided is insufficient to be accurately included within the cumulative assessment	No change	
24/00729/FULL	Basildon Borough Council	Land To The East Of Lower Dunton Road Dunton Basildon Essex.	Redevelopment of the site to provide 146 residential dwellings (Class C3); provision of strategic landscape; provision of new vehicular and pedestrian access routes and associated infrastructure.	Pending	No change	EXCLUDE: Assessed years for traffic flows are 2029 and 2034 which are outside the the Project construction peak activity.	No change	
20/01614/OUT	Basildon Borough Council	Land North Of Kennel Lane Billericay Essex.	Outline planning application with all matters reserved, except means of access, for the erection of up to 200 homes; new vehicular access comprising a new arm off the Laindon Road, A176 and Noak Hill Road roundabout; realignment of Kennel Lane to join the new access and associated closure of the Kennel Lane spur; together with car parking, landscaping, surface water drainage basins and associated works.	Pending	Unknown	EXCLUDE: Assessed years for traffic flows are 2029 which is outside the the Project construction peak activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
21/00758/FULL	Basildon Borough Council	Crouch Solar Farm Site Dunton Road Dunton Basildon Essex.	Construction and operation of a solar farm together with all associated works, equipment and necessary infrastructure.	Approved	No change	EXCLUDE: Granted Jan 2022 - Crouch Solar Farm which has been constructed. Minimal operation flows anticipated with regard to this application.	No change	
22/00748/FULL	Basildon Borough Council	Test Track At Ford Research And Engineering Centre West Mayne Dunton Basildon Essex.	Construction of a solar farm of 4.5 MWp comprising of ground mounted solar panels and associated works along the test track at Ford Research and Development Centre.	Approved	No change	EXCLUDE: Granted February 2023 - no traffic assessments included within the planning application. Therefore, insufficient information available to be included within our assessment.	No change	
24/01239/FULL	Basildon Borough Council	Land At Lower Dunton Road Langdon Hills Basildon Essex.	Proposed up to 368 MW battery storage facility (BESS) and associated infrastructure including cabling, boundary treatment and access works.	Pending	No change	EXCLUDE: Awaiting decision - does not affect PARs and traffic distribution along the A13 is not provided. However, daily construction flows are anticipated to be low (4 delivery vehicles per day, peak of 20 staff will be employed at the construction site although most will travel to site via minibuses). Once operational the site will generate a single maintenance vehicle every one or two weeks. The vehicle will be a transit sized van.	No change	
24/00762/OUT	Basildon Borough Council	Land West Of Laindon Road Billericay Essex.	Outline application with all matters reserved except access onto Laindon Road for the erection of up to 250 homes; new vehicular access off Laindon Road; new pedestrian and cycle access points; together with car parking, landscaping / green infrastructure, surface water drainage basins and associated works.	Approved	No change	EXCLUDE: Granted April 2025. Assessment was undertaken at junctions, however, the appendices containing the information we would need to include within our assessment does not appear to have been uploaded/submitted within the planning application.	No change	
25/00464/OUT	Basildon Borough Council	Land At Greens Farm Lane Billericay Essex.	Outline planning application with all matters reserved except for access, for the construction of up to 310 residential dwellings within two separate parcels of land - Northern Parcel - up to 255 dwellings including affordable housing, together with vehicular access from Greens Farm Lane, pedestrian/cycle	Pending	No change	EXCLUDE: Awaiting decision. Transport assessment was undertaken for the years 2029 and 2034.It does not appear to affect the Project PARs. Additionally, the traffic information provided is insufficient to be applied to our cumulative assessment.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			access from Outwood Common Road, a sustainable drainage system with associated earthworks; a circa 8.7 hectares of parkland together with other incidental green spaces (including for recreation, play space and biodiversity), internal footways, cycleways roads, utility buildings and ancillary structures. Southern Parcel - up to 55 dwellings including affordable housing, together with vehicular access from Greens Farm Lane, a sustainable drainage system with associated earthworks; incidental green spaces (including for play space and biodiversity), internal footways, cycleway, roads, utility buildings and ancillary structures.					
25/00500/ SCOPE	Basildon Borough Council	Land North And South Of Dunton Road Laindon Essex.	EIA Scoping Opinion Request for a residential led mixed use development. The Proposed Development will comprise up to 1,100 residential dwellings, a local centre comprising business, retail, leisure, sports and hot food takeaway uses, community uses, a Primary School, public open space, vehicular accesses and associated infrastructure groundworks and engineering operations.	Closed	No change	EXCLUDE: This planning application has been excluded within the Traffic and Transport cumulative assessment. Application closed May 2025.	No change	
25/00541/OUT	Basildon Borough Council	Land West Of Mandeville Way Laindon Basildon Essex.	Outline Planning Application (all matters reserved except for means of vehicular access into the site from Mandeville Way and Lower Dunton Road) for residential development of up to 375 dwellings (Use Class C3) and an early years childcare facility (Use Class E),	Pending	No change	EXCLUDE: Awaiting decision - the future baseline is 2030 which does not coincide with the the Project construction peak activity	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			together with car parking, public open space, landscaping, drainage, and other associated works.					
19/00782/EIASO	Brentwood Borough Council	Horndon Industrial Park Station Road West Horndon Essex	EIA – Screening Opinion – Development of the site to include a mixed-use, residential led scheme including the provision of up to 750 new residential units (comprising a mixture of houses and apartments) with approximately 2700 m^2 of retail/A1/A2/A3/A4/A5/D1/D2 and B class employment within existing buildings (Clocktower House and Systems House) that will be retained and refurbished.	Decided – EIA Not Required	No change	EXCLUDE: Decided on June 2019, that the planning application is not an EIA development. No traffic related documents contained within the planning application.	No change	
21/01939/EIASO	Brentwood Borough Council	Officers Meadow Chelmsford Road Shenfield Essex	EIA – Screening development for a proposed development comprising up to 825 residential dwellings, a residential care home, co-located primary school and early years and childcare nursery and employment land.	Decided – EIA Not Required	No change	EXCLUDE: Decided no EIA required Dec 2021. No traffic related documents associated with this planning application.	No change	
23/01393/EIASO	Brentwood Borough Council	Land to the South of West Horndon Railway Station Station Approach West Horndon Brentwood Essex CM13 3TZ - James Jaulim	EIA Scoping Opinion for the proposed development at land within and south of West Horndon Station.	Decided – EIA Not Required	No change	Scoping opinion issued in Dec 2023. No traffic related documents associated with this planning application.	No change	
24/01263/FUL	Basildon Borough Council	Land Adjacent To Billericay Power Generation.	Construction and operation of a Solar PV Farm together with ancillary infrastructure and equipment, landscaping and access.	Approved	No change	EXCLUDE: granted April 2025. Construction route does not coincide with our PARs or connecting links. Minimal traffic associated with the operational phase.	No change	
24/02658/FUL	Braintree District Council	Proposed Solar Farm Land East Of Littlebury	Installation of Solar Farm with Associated works	Granted	No change	EXCLUDE: Granted in Apr 2025 with construction likely in 2026. First month of construction period will have highest vehicle movements during site set up Minimal impact on traffic with predicted	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Coggeshall Road Feering Essex				flows of eight movements expected and unlikely to coincide with Project peak construction traffic.		
18/00254/FUL	Chelmsford City Council	Land South West of Spinney House Cow Watering Lane Writtle Chelmsford Essex	Change of use of land to equestrian grazing and construction of permeable all-weather access tracks | Land South West Of Spinney House Cow Watering Lane Writtle Chelmsford Essex	Granted	No change	EXCLUDE: Permitted in 2018 therefore expected to be operational and movements included within baseline traffic flows.	No change	
19/01725/OUT	Basildon Borough Council	Land North of London Road Billericay Essex	Outline Planning Application with all matters reserved except access for the development of the site to provide up to 480 new homes, with primary access from London Road and secondary access from Mountnessing Road, with associated infrastructure, landscaping, open space and drainage	Pending	Granted 10.04.2026	N/A	INCLUDE: In the peak Project construction years 2028-2029 this development would be under construction and this traffic is not included in the TEMPro growth factors.	Not included in DCO submission, however, was raised by Essex County Council (August 2025). The application was submitted before the 1st April 2025 cut-off date. The construction effect of the associated PAR (PAR 59) has been re-assessed, and the results are reported in Section B.3. The result of the reassessment of effects concludes that there would be no change to the assessment presented in **6.16.A4 ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275]**, and no additional significant effects have been identified.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
23/02807/OUT	Braintree District Council	Land West of Horizon 120 Phase 2 Horizon Boulevard Great Notley Braintree Essex	Hybrid Planning application for part full, part outline consent for up to 55,000sqm of employment floorspace. Full planning permission for a 15,925sqm (GEA) building for Storage and Distribution (Use class B8), with ancillary office (Use class E(g)(i)) and associated amenity space landscaping, car and cycle parking, refuse storage, servicing area, and other associated infrastructure works. Outline planning permission (with all matters reserved) for up to 39,075sqm of employment space for Research and Development (E(g)(ii)), and/or Industrial Process (E(g)(iii)), and/or General industrial (B2), and/or Storage or distribution (B8) with ancillary office (Use class E(g)(i)) with all associated access, servicing, parking, drainage infrastructure, landscaping, open space and utilities infrastructure	Application Permitted With s106	Application GRANTED with S106	N/A	INCLUDE: Development's TA uses 2029 as a future baseline. However, recent associated application to discharge a condition 25/02117/DAC provides the Construction Phase Plan which states a completion date of July 2026. The development will therefore likely be operational during the Project construction peak year. Operational traffic flows are to be included.	Not included in DCO submission, however, was raised by Essex County Council (August 2025). The application was submitted before the 1st April 2025 cut-off date. The construction effect of the associated PAR (PAR 44) has been re-assessed, and the results are reported in Section B.3. The result of the reassessment of effects concludes that there would be no change to the assessment presented in **6.16.A4 ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275]**, and no additional significant effects have been identified. The junction capacity of the associated junction Site 56 has been re-assessed and the results are reported in Appendix C of the Addendum to **7.11 Transport Assessment [APP-333]**. The result of the

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								reassessment of effects concludes that there would be no change to the assessment presented in **7.11 Transport Assessment (TA) [APP-333]**.
ESS/81/23/CHL	Essex County Council	Land at Russell Green, Boreham Road, Chelmsford	Importation of 85,000 tonnes of inert waste material to stabilise former quarry face and restore former mineral site to a landscaped habitat mosaic and pond with associated improvements to existing site access.	Approved	No change	N/A	EXCLUDE: No information regarding the construction commencement, however, the Transport Statement reports an average of 12 HGVs movements (6 in and 6 out) per hour for the works, over a course of a seven - month period. The CTMP for the updated application for the development (ESS/81/23/CHL/13/1) indicates that construction vehicles would access the site from the A12 via A131 Essex Regiment Way therefore would not overlap with the nearby Project PAR.	Not included in DCO submission – however was considered in **6.17.A2 Environmental Statement Appendix 17.2 - Long List and Short List of Other Developments (Final Issue A) [APP-283].**
213047	Colchester City Council	Land West of Lakelands, Stanway Western Bypass, Western Approach Stanway	Outline planning application with all matters reserved except access is sought for development of up to 225 dwellings (Use Class C3), play areas, landscaping, public footpaths and car parking.	Approved - Conditional	No change	N/A	EXCLUDE: Future assessment year of 2026 used (5 years post the 2021 application submission date). No construction programme or construction details provided, therefore excluded.	Not included in DCO submission – however was considered in **6.17.A2 Environmental Statement Appendix 17.2 - Long List and Short List of Other Developments**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								(Final Issue A) [APP-283].
20/00128/OUT	Braintree District Council	Land North of Colchester Road Witham Essex	Outline planning permission for B2 (General Industry), B8 (Storage and Distribution) and Class E(g) (iii) (Light Industrial) use, and for future development of buildings up to a maximum building height to ridge of 43.00 Above Ordnance Datum (AOD), comprising a maximum gross internal floor space of 15,470 square metres, (166,518 square feet) with associated service yards, HGV and trailer parking, car parking provision, new service road and access onto Eastways (all matters reserved except Access and Scale).	Approved	No change	N/A	EXCLUDE: Transport Assessment uses the year 2025 for operational development flow. Although this would coincide with the Project peak construction activity, operational flows beyond access to Colchester Road for staff have not been identified and therefore cannot be assigned on Project PARs.	Not included in DCO submission – however was considered in **6.17.A2 Environmental Statement Appendix 17.2 - Long List and Short List of Other Developments (Final Issue A) [APP-283]**.
21/00031/OUT	Braintree District Council	Land At Burghey Brook Farm London Road Rivenhall End Rivenhall Essex	Outline Planning Permission with all matters reserved for the demolition of the existing dwelling and buildings on the site and the erection of B2/B8 Industrial and Distribution units with associated parking, servicing and landscaping.	Approved	No change	N/A	EXCLUDE: Transport Assessment uses the year 2025 for operational development flow. Although this would coincide with the Project peak construction activity, operational flows beyond access to Colchester Road for staff have not been identified and therefore cannot be assigned on Project PARs..	Not included in DCO submission – however was considered in **6.17.A2 Environmental Statement Appendix 17.2 - Long List and Short List of Other Developments (Final Issue A) [APP-283]**.
24/00980/OUT	Basildon Borough Council	Land South Of London Road Billericay Essex	Demolition of existing buildings; Outline planning permission (all matters reserved except means of access) for the erection of up to 130 dwellings (Use Class C3) (including market and affordable dwellings) with	Awaiting decision	No change	N/A	EXCLUDE: The Transport Assessment assumes the development to be operational in 2029. Therefore, during the peak Project construction year	Not included in DCO submission – however was raised by Essex County Council (August 2025).

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			access, parking, public open space and associated landscaping and infrastructure works				(2028) this development would be under construction. However, the development is awaiting decision and no construction details are provided.	
19/01896/OUT	Braintree District Council	Land North Of Woodend Farm Hatfield Road Witham Essex	Application for Outline Planning Permission with all matters reserved for up to 400 residential dwellings and day nursery with all associated access, servicing, parking, drainage infrastructure, landscaping, open space and utilities infrastructure.	Approved	No change	N/A	EXCLUDE: Transport Assessment assumes future baseline as 2026. However, related application 25/00492/DAC shows traffic management phasing plans to take 15 months (currently pending consideration), assuming construction works to site will not proceed until highway scheme is complete to allow access. Although development construction may overlap with the Project peak construction year, no construction information has been provided.	Not included in DCO submission – however was raised by Essex County Council (August 2025).
211788	Colchester City Council	Land north of Old London Road adj, 228 Old London Road, Marks Tey CO6 1HD	Development of the site for commercial, business and service (Class E c) and g)), general industrial (Class B2) and storage and distribution(Class B8) purposes with associated access, parking and landscaping, including diversion of a public right of way.	Pending	Application Valid N/A		EXCLUDE: No construction programme or construction traffic information provided. Traffic associated with the development is not expected to overlap with the Project PARs.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								(Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163].
25/00457/EIASO	Brentwood Borough Council	Fitzwalters Farm Roman Road Shenfield Essex CM15 8SG	Installation of a solar PV farm and Battery Energy Storage System (BESS) together with associated works and access arrangements	Non EIA	No change	N/A	EXCLUDE: As application is for a screening opinion, no construction programme or construction information provided.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
ESS/07/24/TEN	Essex County Council	Martells Quarry, Slough Lane, Ardleigh, CO7 7RU	The installation and use of a sand drying plant together with the erection and use of a building for sand bagging and storage operations with associated access onto the highway	Approved	No change	N/A	EXCLUDE: Traffic associated with development unlikely to overlap with the Project PARs and junctions assessed due to location.	Not included in DCO submission – however was considered in the **6.17.A2 Environmental Statement Appendix 17.2 - Long List and Short List of Other Developments (Final Issue A) [APP-283].**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
21/01792/VOC	Tendring District Council	Bathside Bay Stour Road Harwich Essex CO12 3HF	Variation of condition 20 of application 10/00203/FUL to not release HPUK from the requirement to secure the prior approval and installation of operational lighting, but to defer submission, approval and installation in respect of these details prior to any operation of the SBH. The application sets out the proposed amended wording for this condition.	Approval - Full	No change	N/A	EXCLUDE: The construction of the Bathside Bay Container Terminal (BBCT) was anticipated to start in 2024 with Green Energy Hub operation commencing in 2026 (at the earliest). The application for BBCT's Environmental Statement (ES) outlines that 'Due to the A120 being a large A-road with little interaction with local sensitive receptors, the impacts of severance, amenity and highway geometry are considered to be not significant and are scoped out of this assessment'. Furthermore, the ES states regarding highways safety that the impacts on highway safety are negligible, i.e. the low magnitude flows are unlikely to lead to cumulative effects. Therefore, this development would have been excluded from the Project assessment due to traffic flows being not significant.	Not included in DCO submission, however this DCO was raised in the Relevant Representation by National Highways. This development has been reviewed along with other NSIPs/DCOs at the request of NH and LHAs, this is reported in Section B.4.
ESS/75/25/COL	Essex County Council	Greenacres Warehouse, Packards Lane, Wormingford, Essex, CO6 3AH	Continuation of waste handling without compliance with Condition 2 (F) (iii) (Approved Details – Transport Statement) and 15 (Waste Types) of	N/A	Pending	N/A	EXCLUDE: Proposals will increase HGV movements by 100 per day, on weekdays between 07:30 and	Not included in DCO submission as was submitted post DCO submission–

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			Planning permission ESS/09/18/COL that was for the Erection of Clean Materials Recycling Facility including an increase in HGV movements and waste throughput to now allow for inclusion of the word “municipal” waste as a waste type together with a revised road access junction design. Land at Greenacres, Packards Lane, Wormingford.				18:30. Currently up to 150 movements per day are permitted. Vehicle routing would include A1124 Halstead Road and the A12 to access/egress the site. No timescales for development are included. However, 100 daily HGVs equates to an average of 9 movements per hour, this is unlikely to significantly impact the project, should there be overlap due to multi routes providing access to and from the site.	however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
ESS/28/25/BTE	Essex County Council	Land forming part of Rivenhall airfield, Bradwell Quarry, Coggeshall Road (A120), Braintree.	Erection of low carbon greenhouses, alterations to the existing Rivenhall hangar to support a vertical farm, associated solar renewable energy generation and supporting enabling and infrastructure works.	N/A	Pending	N/A	EXCLUDE: The Transport Assessment (dated 2024) states that the site is expected to be operational in 2026. As the application is pending, the expected operational year anticipated to be two years from present year (2026), which would be 2028. It has been demonstrated in the TA that as a worst case, the daily operational trips would have increase the traffic flow at the A120 / A131 / B1256 roundabout junction on the SRN of +1.7%, which is considered minimal.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
ESS/31/25/BTE	Essex County Council	Bradwell Quarry, Church Road, Bradwell, Essex, CM77 8EP	Continuation of development permitted by ESS/12/20/BTE without compliance with conditions 2, 12, 17, 32, 33, 39, 47, 53, 60 and 62 to allow changes to: the internal haul road; contractors' compound; water and silt management; areas of biodiversity; and restoration and aftercare schemes. ESS/12/20/BTE was planning permission for "Extraction of 6.5 million tonnes of sand and gravel (from Site A7 as identified in the Essex Minerals Local Plan 2014) including the retention of the existing access onto the A120, the processing plant (including sand and gravel washing plant), office and weighbridge, ready mix concrete plant, bagging unit, DSM plant, water and silt management systems. In addition, extension of the internal haul road into Site A7 and access for private and support vehicles to the Site A7 contractors' compound via Woodhouse Lane and Cuthedge Lane. Restoration of Site A7 to agriculture and biodiversity (species rich grassland and wetland)."	N/A	Pending	N/A	EXCLUDE: This is related to ESS/28/25/BTE, and the traffic information provided is the same.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01056/FUL	Tendring District Council	Land North of A120 Horsley Cross Essex CO11 2PB	Application for Full Planning - Solar Farm and Battery Energy Storage System (BESS) with associated substation, access tracks and equipment.	N/A	Awaiting decision (06.05.2026)	N/A	EXCLUDE: No construction date provided. CTMP states Construction to be over 6 months, with peak HGV movements of 14 (daily). Construction workforce circa 20 at any one time. This is unlikely to significantly impact the Project	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							even if the construction periods overlap.	**Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01368/FUL	Tendring District Council	Martells Quarry Slough Lane Ardleigh Colchester Essex CO7 7RU	Planning Application - Installation and operation of ground mounted solar array.	N/A	Approved	N/A	EXCLUDE: No construction date provided. However, CTMP indicates construction to be four months with HGV movements at 2 per day. This is unlikely to significantly impact the Project even if the construction periods overlap.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01445/FUL	Tendring District Council	Land adjacent to Old Ipswich Road North of Crown Quarry Access Ardleigh CO7 7QR	Planning Application - Erection of an asphalt plant, ancillary facilities, together with the use of an existing access road.	N/A	Awaiting decision (checked 01.05.2025)	N/A	EXCLUDE: No construction date or construction details provided. However, Transport Statement indicates its operation would generate a maximum of 6 HGV movements an hour. This is unlikely to significantly impact the highway network should the operation coincide with the	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A),**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							Project construction peak.	**Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01249/FUL	Tendring District Council	Peake Fruit Ltd Home Farm Lane Ardleigh Essex CO7 7NA	Planning Application - Proposed new extension to existing grading hall.	N/A	Awaiting decision	N/A	EXCLUDE: No construction date provided. However, Transport Statement indicates no change of HGV movements for future operation compared to existing.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
252596	Colchester City Council	Between Via Urbis Romanae & Mill Road, Land South of, Axial Way, Colchester	Reserved Matters application relating to the erection of 330 residential units on the Unrestricted Housing Land, and seeks approvalof all outstanding reserved matters which relate to: - Appearance - Layout - Landscaping - Scale	N/A	Pending decision	N/A	EXCLUDE: Related to 190665. The ES Traffic and Transport chapter indicates the development was to commence in September 2019, the average number of daily vehicle movements associated with construction is 76 of which 48 are HGVs. This is unlikely to significantly impact the highway network should the operation coincide with the	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							Project construction peak.	**Statement Appendix 17.2 (Revision B)) [REP4-163]**.
251595	Colchester City Council	Land to the East of, Nayland Road, Great Horkesley Colchester CO6 4ET	Application for approval of reserved matters following outline approval 230625	N/A	Approve conditional	N/A	EXCLUDE: Related to 230625 (Outline planning application for 100 no. dwellings). No construction traffic or programme information provided.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
260056	Colchester City Council	Land North of, Wyvern Farm, London Road, Stanway Colchester	Application for Approval of Reserved Matters (relating to appearance, landscaping, layout and scale) for 526 dwellings, open space, drainage, infrastructure and associated ancillary works pursuant to Outline planning permission 212507	N/A	Pending decision	N/A	EXCLUDE: Refer to related 212507.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								(Revision B)) [REP4-163].
250833	Colchester City Council	Land off, Halstead Road, Aldham	EIA Screening Opinion	N/A	Pending decision	N/A	EXCLUDE: The screening document has included the Project (referred as 221119) as a development of relevant nature to cause in-combination effects with the application.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/00911/REM	Braintree District Council	Land West Of Horizon 120 Phase 2 Horizon Boulevard Great Notley Braintree Essex	Outline element of the Hybrid planning consent 23/02807/OUT (granted 31.07.2024) for the erection of three commercial buildings with a total GEA of 37,637sqm for Storage or Distribution (Use class B8) and/or General industrial (Use class B2), with ancillary office (Use class E(g)(i)), and approval of conditions O4 (Phasing Plan), O10 (Drainage), O22 (Noise Impact Assessment), O29 (Biodiversity Enhancement Strategy), O33 (Building Maintenance) and O34 (Energy Strategy) attached to application 23/02807/OUT.	N/A	Granted	N/A	INCLUDED: Related to 23/02807/OUT.	Not included in DCO – however, related to 23/02807/OUT, which was raised by Essex County Council (August 2025).

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
25/00982/OUT	Braintree District Council	Land North Of Maldon Road Hatfield Peverel Essex	Outline planning application with all matters reserved except for access for the demolition of the existing buildings and for the erection of up to 103 dwellings, including affordable housing, with public open space, structural planting & landscaping and Sustainable Urban Drainage System.	N/A	Granted with S106	N/A	EXCLUDE: No construction details provided. Transport Assessment uses 2029 as the development opening year. Development trips are estimated to be 51 and 50 two way trips during the AM and PM peak. The development flows are not predicted to travel along the Project PARs therefore no impact.	Not included in DCO submission as was submitted post DCO submission cut-off date.
25/01534/FUL	Braintree District Council	Gershwin Park Land North East Of Reid Road Witham Essex	Development to include erection of 264sqm of neighbourhood retail units (Class E), a 72-bed care home (Class C2) and 65 No. residential retirement dwellings and apartments (Class C3), alongside access, parking, landscaping and other associated works.	N/A	Pending decision	N/A	EXCLUDE: No construction details provided. Two-way Vehicle trips associated with completed development is 20 and 18 during the AM and PM peak. The commercial units are anticipated to be associated with the residential use, with limited external trips generated.	Not included in DCO submission as was submitted post DCO submission cut-off date.
25/01466/SCR	Braintree District Council	Land North Of Rayne Lodge Rayne Road Braintree Essex	Town & Country Planning Act 1990 (as amended), Town & Country Planning (Environmental Impact Assessment) Regulations 2017 - Screening Request (Regulation 6) -Nine commercial buildings (containing 18-units) delivering up to 31,000 sqm of floorspace, with car parking, access, and a landscaping buffer to the south.	N/A	Adopted	N/A	EXCLUDE: As application is for a screening opinion, no construction programme or construction information provided. The application will be supported by a Transport Assessment to determine the impact on the highways network.	Not included in DCO submission as was submitted post DCO submission cut-off date.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
25/02846/OUT	Braintree District Council	Land South Of Witham Road Cressing Essex	Outline application with all matters reserved for up to 120 dwellings including affordable homes, public open space including equipped play trail, landscaping, sustainable drainage system, vehicular access from Braintree Road and all associated infrastructure and development.	N/A	Pending decision	N/A	EXCLUDE: The Transport Assessment assumes development is operational in 2030. However, no construction programme or traffic information is provided. A response from ECC Highways has requested a Construction Traffic Management Plan to be submitted prior to commencement to review any impact on the highway network. Therefore, no construction flows are available.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
26/00204/REM	Braintree District Council	Land North Of London Road Kelvedon Essex	Application for the approval of Reserved Matters (Access, Appearance, Landscaping, Layout, Scale) for the erection of an Early Years and Childcare Facility and associated development, pursuant to outline planning permission 17/00679/OUT and as varied by application 24/02383/VAR for: Outline planning permission, with all matters reserved for a mixed use neighbourhood development comprising up to 300 dwellings, health centre, local retail area, care home, an early years and childcare facility, open space and landscape buffers, and supporting infrastructure that includes sustainable drainage and two accesses from London Road.	N/A	Pending consideration	N/A	EXCLUDE: Original 17/00679/OUT application Transport Assessment (dated 2021) assumed opening year 2023. As the Reserved Matter is submitted presently (2026), it is anticipated the development will now be operational in 2028. No construction programme or traffic details provided.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
26/00119/OUT	Braintree District Council	Land At Inworth Road Feering Essex	Outline application with all matters reserved except access for a mixed use development, in several phases, comprising: up to 835 homes including affordable and market housing (Use Class C3); a new retirement / Care Home (Use Class C2/C3); a new mixed use centre comprising retail and commercial floorspace and civic public realm (Use Class (E(a),(b),(c),(d),(e),(g)(i),C3 and Sui Generis) and a mobility hub; a community-hub comprising a village hall (Use Class F), early-years nursery Use Class E (f), a mobility hub, and/or retail/commercial floorspace (Use Class E (a) and (b)); employment provision (Use Class B2, B8 and/or E(g)) and/or hotel (C1); sports pitches and new pavilion (Use Class F2(c)); a new 2FE primary school with early years provision; a burial ground; open space; play provision; landscape buffers; creation of two vehicular access points onto London Road, one vehicular access point on to Coggeshall Road and five vehicular access points onto Inworth Road and supporting infrastructure including sustainable drainage, and a new link road connection between Inworth Road and London Road. The application is subject to the submission of an Environmental Statement pursuant to the Town and Country Planning (Environmental Impact Assessment) Regulations 2017	N/A	Pending consideration	N/A	EXCLUDE: The ES Traffic and Transport chapter indicates construction commencement year of 2027, the assessment indicates up to 9 daily HGV construction movements. This is considered minimal. The peak construction year is expected in 2032 which does not overlap with the Project peak.	Not included in DCO submission as was submitted post DCO submission– however was considered in the **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
25/00646/EIASO	Chelmsford City Council	Land At Andrews Place Chelmsford	Proposed residential development comprising up to 250 homes	N/A	Not EIA	N/A	EXCLUDE: This is for a Screening Opinion, see related 26_00404_FUL.	Not included in DCO submission as was submitted post DCO submission cut-off date.
25/00363/FUL	Chelmsford City Council	Land And Building Adjacent 9 Springfield Road Chelmsford	Partial demolition of existing building and erection of a building comprising 181 purpose-built co-living accommodation units (Sui Generis), plant, car and cycle parking, landscaping and associated works.	N/A	Pending decision	N/A	EXCLUDE: No construction programme is provided; however the Construction Logistics Plan anticipates construction vehicles to be up to 30 (60 movements) per day during construction peak. It cannot be determined if the construction of this site will coincide with the Project construction peak, however, this level of traffic is not considered to be significant.	Not included in DCO submission as was submitted post DCO submission cut-off date.
25/00274/FUL	Chelmsford City Council	Rivermead Industrial Estate Bishop Hall Lane Chelmsford	Demolition of existing buildings and redevelopment of site to provide hotel (C1), office space (E(g)(i)) including workplace day childcare, restaurant (E(b)), and student accommodation (sui generis) with ancillary spaces. Erection of new pedestrian bridges, associated parking provision, infrastructure, hard and soft landscaping.	N/A	Approved	N/A	EXCLUDE: No construction programme or construction traffic details provided. The officer report states: “The Local Highway Authority has requested a condition to manage the impact of construction works. Given the scale and location of the development, this is considered a reasonable request and a planning condition will be added.”	Not included in DCO submission as was submitted post DCO submission cut-off date.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
26/00137/EIASO	Chelmsford City Council	Land East Of Chatley House 52 Main Road Great Leighs Chelmsford Essex	EIA Screening Opinion for Outline planning application with all matters reserved except for access, for up to 160 dwellings (including affordable housing), public open space, landscaping, children's play area and all other associated infrastructure	N/A	Pending consideration	N/A	EXCLUDE: This is for a Screening Opinion, no construction information provided. However, the Project has been identified within the cumulative effects section, and hence it is expected that any future application will take account of the Project traffic.	Not included in DCO submission as was submitted post DCO submission cut-off date.
25/00449/FULL	Basildon Borough Council	Royale Dunton Court Lower Dunton Road Dunton Basildon Essex	Royale Dunton Court Lower Dunton Road Dunton Basildon Change of use from caravan storage area to caravan park for the siting of 70 residential park homes and associated ancillary works including parking and landscaping	N/A	Awaiting decision	N/A	EXCLUDE: No construction programme or construction traffic details provided. The Transport Statement provided, mentions construction traffic; however, no figures were presented. The proposed extension would result in 231 daily two-way movements. It cannot be determined if the construction peak of this site will coincide with the Project construction peak.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/00788/SCREEN	Basildon Borough Council	Kingsmans Farm Tye Common Road Billericay Essex CM12 9PZ	EIA Screening Opinion under Regulation 6 for up to 200 homes	N/A	EIA not required	N/A	EXCLUDE: No construction programme, construction traffic or operational traffic details provided. It cannot be determined if the construction or operational peak of this site will coincide with the Project construction peak.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								Environmental Statement Appendix 17.2 (Revision B)) [REP4-163].
25/01119/SCOPE	Basildon Borough Council	Land South Of Great Burstead Southend Road Billericay Essex	EIA Scoping Opinion Request for a residential-led development delivering up to 1,500 homes with associated access and supporting infrastructure.	N/A	EIA required	N/A	EXCLUDE: No construction programme, construction traffic or operational traffic details provided. It cannot be determined if the construction or operational peak of this site will coincide with the Project construction peak.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01058/SCREEN	Basildon Borough Council	Land West Of Laindon Road Billericay Essex	EIA - Screening opinion for Land West of Laindon Road (Phase 2) - For up to 450 dwellings and public open space, including childrens play areas, parks and informal open space.	N/A	EIA not required	N/A	EXCLUDE: No construction programme, construction traffic or operational traffic details provided. It cannot be determined if the construction or operational peak of this site will coincide with the Project construction peak.	Not included in DCO submission as was submitted post DCO submission cut-off date.
25/00797/SCOPE	Basildon Borough Council	Land East Of Southend Road Great Burstead Billericay Essex	EIA Scoping Opinion for residential led development. delivering in the region of 1.100 homes, along with a range of compatible supporting non-residential uses (yet to be defined), infrastructure and landscaping.	N/A	EIA required	N/A	EXCLUDE: No construction programme, construction traffic or operational traffic details provided. It cannot be determined if the construction or operational peak of this site will coincide	Not included in DCO submission as was submitted post DCO submission cut-off date.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							with the Project construction peak.	
25/01214/OUT	Basildon Borough Council	Land West Of Tye Common Road Little Burstead Billericay Essex	Outline planning application with all matters reserved except for access for the construction of up to 175 residential dwellings, vehicular access off Tye Common Road, pedestrian and cyclist access off Tye Common Road and Blunts Wall Road and the provision of public open space with associated landscape planting, associated infrastructure, drainage measures, earthworks and all other associated works	N/A	Awaiting decision	N/A	EXCLUDE: No construction programme, construction traffic details provided. The Transport Assessment provided, mentions that the proposed 175 dwellings would generate 92 two-way total vehicle trips in the AM peak hour and 89 two-way total vehicle trips in the PM peak hour. It is anticipated that the first year of full occupation will be by 2030 (outside of the project's peak construction year). It cannot be determined if the construction peak of this site will coincide with the Project construction peak.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01322/FULL	Basildon Borough Council	66 - 88 Laindon Road Billericay Essex	Replacement of previous two / three storey building, and construction of new three storey residential building providing a total of 32 apartments and associated access, parking, refuse, drainage, landscaping, and other infrastructure works.	N/A	Awaiting decision	N/A	EXCLUDE: No construction programme, construction traffic details provided. The Transport Note provided, mentions that the proposed development is expected to generate a net reduction in daily trips and PM peak hour trips compared to the existing site. There is a slightly greater reduction with the	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							latest scheme showing a reduction of 30 two-way vehicle trips in the PM peak (compared to 28 previously) and 272 daily trips (compared to 263 previously). The site is expected to generate an additional 8 two-way vehicle trips during the AM weekday hours (compared to 9 vehicles in the previous application).	**(Revision B)) [REP4-163]**.
25/01466/OUT	Basildon Borough Council	Land At Foots Farm Southend Road Great Burstead Billericay Essex	Outline Planning Application (with all matters reserved except for access) for the residential led development, delivering in the region of 1,100 homes, along with a range of compatible supporting non-residential uses (Use Class E), provision of Gypsy and Traveller Pitches and associated amenity, infrastructure and landscaping.	N/A	Awaiting decision	N/A	EXCLUDE: ES Volume 1 states that the estimated construction programme is projected to be circa 8-10 years, from start on site to completion. Construction is likely to take place on-site between 2026 and 2035 which would overlap with Project peak construction activity. Table 7.13 states 314 two way trips (AADT) for LDVs and 63 two way trips (AADT) for HDVs during their peak activity. Although the construction route does not overlap with the Project's PARs, the route proposes to pass through a junction that has been modelled in the DCO submission	Not included in DCO submission as was submitted post DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							(referenced as Site 73, assessed in 7.11 Transport Assessment [APP-333]) which has an associated PAR along the western arm of the junction. This junction would operate within capacity with the Project's peak construction traffic flows. Should the developments overlap (currently there is insufficient information on when the developments peak construction period will take place), then the operation of the junction may be impacted.	
25/01517/OUT	Basildon Borough Council	Land At Outwood Common Road Billericay Essex CM11 1HA	Outline Planning Application (all matters reserved except for vehicular access onto Outwood Common Road) for the erection of up to 300 dwellings (Use Class C3), parking, additional pedestrian connections and works to enhance public rights of way, public open space (including childrens play areas) and landscaping, sustainable urban drainage, and associated infrastructure and works, including emergency vehicular access.	NA	Awaiting decision	NA	EXCLUDE: No construction programme, or construction traffic details provided. 2030 has been selected as the assessment year, indicating development operational by then. It cannot be determined if the construction peak of this site will coincide with the Project construction peak.	Not included in DCO submission as was submitted post DCO submission cut-off date – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
25/01584/FULL	Basildon Borough Council	Land To The Rear Of 41 To 65 Potash Road Billericay Essex	Demolition of two dwellinghouses at Nos. 41 and 65 Potash Road including ancillary buildings on land to the rear and erection of 133 dwellings, together with an open pavilion structure for community use, pump house, car parking, landscaping, surface water drainage basins and associated works.	NA	Awaiting decision	NA	EXCLUDE: No construction programme or construction traffic details provided. Therefore, it cannot be determined if the construction peak of this development will coincide with the Project construction peak. The location of the site is over 3km away from the PAR 58 and PAR 59. Traffic flows related to this development are unlikely to overlap with PARS or will be diluted through the network.	Not included in DCO submission as was submitted post DCO submission cut-off date – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/00575/OUT	Basildon Borough Council	Magdalen Lodge Potash Road Billericay Essex CM11 1HG	Outline planning application for up to 49No. residential dwellings (including affordable housing), with all matters reserved except for access. Creation of a new access from Potash Road	NA	Awaiting decision	NA	EXCLUDE: No construction programme or construction traffic details provided. Therefore, it cannot be determined if the construction peak of this development will coincide with the Project construction peak. The location of the site is over 3km away from the PAR 58 and PAR 59. Traffic flows related to this development are unlikely to overlap with PARS or will be diluted through the network.	Not included in DCO submission as was submitted post DCO submission cut-off date – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
25/01451/OUT	Basildon Borough Council	Land West Of Laindon Road Billericay Essex	Outline application with all matters reserved except access onto Laindon Road for the erection of up to 420 homes, including up to 500sqm of non-residential floorspace; new vehicular access off Laindon Road; new pedestrian and cycle access points; together with car parking, landscaping / green infrastructure, surface water drainage basins, and associated works.	NA	Awaiting decision	N/A	EXCLUDE: Based on the Transport Assessment, the design year is 2030, assuming when the site is operational. Construction traffic could therefore overlap with the Project construction peak. However, no construction programme or construction traffic details are provided with the application. Therefore, an assessment cannot be undertaken.	Not included in DCO submission as was submitted post DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01352/SCREEN	Basildon Borough Council	Land To The Rear Of 41 To 65 Potash Road Billericay Essex	EIA Screening Opinion - Construction of circa 150 residential dwellings predominantly 2 storeys high with associated ancillary works including car parking, landscaping, surface water drainage basins and associated works.	NA	EIA not required	N/A	EXCLUDE: No construction programme, construction traffic or operational traffic details provided. It cannot be determined if the construction or operational peak of this site will coincide with the Project construction peak. However, the location of the site is over 3km away from the PARs and therefore traffic related to this development unlikely to overlap with Project construction traffic	Not included in DCO submission as was submitted post DCO submission cut-off date – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
25/00457/EIASO	Brentwood Borough Council	Fitzwalters Farm Roman Road Shenfield Essex CM15 8SG	Installation of a solar PV farm and Battery Energy Storage System (BESS) together with associated works and access arrangements	N/A	Not EIA development	N/A	EXCLUDE: No construction details provided.	Not included in DCO submission as was submitted post DCO submission cut-off date – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Table B.5 List of committed developments and transport schemes under consideration (Thurrock)

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
06/00663/TTGCND	Thurrock Council	Cory Waste Management Mucking Wharf Road Stanford Le Hope Essex SS17 0RN	Proposals for the restoration of the former sand and gravel working site without complying with conditions 2, 4,14,42 and 43 of planning permission APP/M1595/A/00/1035822 granted by the Secretary of State on appeal on 20 September 2001(which in turn was a planning permission to develop the site without complying with conditions 1, 6, 7, 8 and 9 of planning permission THU/806/85 dated 9 June 1986). It is proposed that modified conditions should be submitted for the above conditions	Approved	No change	EXCLUDE: The proposal is deemed to have already been completed (assessment years of 2008 and 2011 within ES).	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
21/01812/FUL	Thurrock Council	Land Adjacent and to the Rear of The George and Dragon East Tilbury Road Linford Essex	Detailed planning application for the construction of 230 affordable dwellings with associated parking, access, landscaping, open space and infrastructure	Approved	No change	INCLUDE: Development planned to be fully operational in 2026. Therefore, operational traffic would overlap with Project peak construction activities.	No change	
20/01491/FUL	Thurrock Council	Sub Station Lower Dunton Road Bulphan Essex	Battery energy storage facility with associated access road, security fence and infrastructure	Approved	No change	EXCLUDE: Evidence of construction on site using Google Street view. 20 week construction programme. Unlikely to overlap with Project peak construction activity. Also noted that minimal impact on traffic with predicted flows averaging at around 2 HGVs per day for the majority of the construction period, with eight to ten staff vehicles per day.	No change	
19/01709/FUL	Thurrock Council	Ingrebourne Valley Ltd Orsett Quarry Buckingham Hill Road Linford Essex SS17 0PP	Mineral extraction and processing at Orsett Quarry and extension into adjoining land at Walton's Hall Farm, erection of a processing plant and ancillary activities, importation and treatment of reclamation material with progressive restoration to farmland with landscape planting [Revised plans and documents]	Awaiting decision	Permission Refused	INCLUDE: It is intended that the extraction/importation works would take approximately 23 years from 2019 in total to complete. Anticipated that there would be an overlap with Project peak construction activity.	No change	As the application has now been refused, the assessment in the DCO submission provides a worst-case scenario by including this development traffic.
19/00052/CV	Thurrock Council	National Power PLC Tilbury Power Station Fort Road Tilbury Essex RM18 8UJ	Application for the variation of conditions No. 3 (Restoration Date) to allow extension of time to complete works, 4 (Phasing Strategy Area A2) and 5 (Phasing Strategy Area B) of Application Reference Number: 13/00497/FUL (Recovery for beneficial use of pulverised fuel ash deposited on Tilbury Power Station ash disposal site areas A2, A3 and B)	Awaiting decision	No change	INCLUDE (Multi-modal sensitivity test only): Construction route via Tilbury Port/ Fort Road therefore does not overlap with PARs to North Tilbury construction peak activities.	No change	
23/00254/ CONDC	Thurrock Council	Units 1 To 4 Coward Industrial Estate St	Application for the approval of details reserved by condition no. 5 (CEMP) of planning permission ref.	Awaiting decision	No change	EXCLUDE: Reduction in operational traffic (decrease of 12 movements).	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Johns Road Chadwell St Mary Essex	22/00321/FUL (Alteration to units 1-4 to form 5 units within the existing footprint of the building by reconfiguring the parenting party walls. New roof cladding and wall cladding to the front elevation. Existing wall cladding at the side and rear elevations to be repaired and redecorated. New windows and fire doors, with accessible toilets. Creation of 25 additional parking spaces.) | Units 1 To 4 Coward Industrial Estate St Johns Road Chadwell St Mary Essex			Construction deemed negligible based on the size of the proposed scheme.		
23/00257/NMA	Thurrock Council	Land Adjacent Blackshots Stadium and Stanford Road Grays Essex	Application for Non-Material Amendments relating to the installation of additional plant, minor landscaping and boundary revisions and minor elevational changes of planning permission 21/01309/FUL [Development of a new secondary school with associated sports facilities, access, parking, highway improvements, landscaping and ancillary works]	Approved	No change	INCLUDE: Development is expected to be built and fully operational in 2026. Operational traffic to include in the cumulative assessment for both PARs and Junction Modelling.	No change	
23/00554/FUL	Thurrock Council	Berth 40A Tilbury Freeport Tilbury Essex RM18 7EH	Construction and operation of a cementitious products importation, manufacture and distribution facility.	Approved	No change	INCLUDE (Multi-modal sensitivity test only): Construction route does not overlap with PARs to North Tilbury construction peak activities.	No change	
23/01255/OUT	Thurrock Council	Land Adjacent Bulgenen House and Wick Place Cottage Brentwood Road Bulphan Essex	Outline planning application (with all matters reserved) for the erection of a Crematorium including a wetland sequestration area.	Refused	No change	EXCLUDE: Refused Oct 2024.	No change	
23/01502/FUL	Thurrock Council	Land to the South of National Grids Electrical Substation for New Cable Tunnel Fort Road Tilbury Essex	Proposed construction a new cable tunnel beneath the River Thames between Tilbury and Gravesend to provide additional transmission capacity. Above-ground infrastructure in the form of a new CSE compound and a new head house building along with associated electricity infrastructure, access, parking, boundary	Approved	No change	INCLUDE (Multi-modal sensitivity test only): Construction route does not overlap with PARs to North Tilbury construction peak activities.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			treatment and two overhead gantry structures for future overhead lines. Temporary compound for the duration of the project to provide parking, staff welfare facilities, delivery vehicle parking, and equipment and machinery storage, including boundary treatment and lighting.					
18/01307/FUL	Thurrock Council	Land Adjacent Tilbury Power Station Fort Road Tilbury Essex	The recovery of Pulverised Fuel Ash from Area C1 and C2 of Ash Fields using the temporary load out area and access to Station Road (Permitted under consent 18/00458/FUL) and the access via the Power Station Complex (when available) | Land Adjacent Tilbury Power Station Fort Road Tilbury Essex	Awaiting Decision	No change	EXCLUDE: Construction route does not overlap with PARs to North Tilbury construction peak activities. Although consideration given for Multi-Modal assessment and use of Tilbury Port.	No change	
19/00051/CV	Thurrock Council	Land Adjacent Tilbury Power Station Fort Road Tilbury Essex	Application for the variation of conditions no 9 (Timescales) [to Extend time period for completion from 31.12.2019 to 31.12.2032] and no 11 (Plans) [To alter phasing of restoration] of planning permission ref 17/00412/FUL (Continued re-profiling of the site to 9 metres AOD using inert reclamation material imported by river, in place of Pulverised Fuel Ash from the adjacent now redundant Power Station) | Land Adjacent Tilbury Power Station Fort Road Tilbury Essex	Awaiting Decision	No change	EXCLUDE: Construction route does not overlap with PARs to North Tilbury construction peak activities. Although consideration given for Multi-Modal assessment and use of Tilbury Port.	No change	
24/00332/FUL	Thurrock Council	Sports Ground and Former Firemans Club Purfleet Road Aveley Essex	Development comprising the demolition of existing buildings and structures and redevelopment of the site to provide 43,640 sqm employment development (flexible B2/B8 use with ancillary B1 office); provision of new vehicular, cycle and pedestrian access routes; staff and HGV parking and associated infrastructure. | Sports Ground and Former Fireman's Club Purfleet Road Aveley Essex	Awaiting Decision	Refused	INCLUDE: Construction to be completed 2027. Operational flows would coincide with Project peak construction traffic.		As the application has now been refused, the assessment in the DCO submission provides a worst-case scenario by including this development traffic.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
15/00205/OUT	Thurrock Council	Land Adjacent A13 Railway Line and Southend Road Corringham Essex	Outline planning application [all matters reserved except means of access to the site] for [a] up to 750 residential units, [b] local centre [up to 500 sq. M of retail and community uses Use Classes A1 shops, A3 restaurants and cafes, D1 non-residential institution], [c] formation of vehicular, cycle and pedestrian accesses from Southend Road together with its partial realignment and formation of a roundabout, formation of vehicular, pedestrian and cycle access from Lampits Hill, formation of... | Land Adjacent A13 Railway Line And Southend Road Corringham Essex	Awaiting Decision	Withdrawn (29.05.2025)	EXCLUDE: Uncertainty on start date for construction and overlap with Project peak construction activity. Construction/operational movements do not appear to use PAR for Project. Trip distribution hasn't been provided beyond A13 WB on slip form Southend Road.	No Change	
16/01232/OUT	Thurrock Council	Land for Development Muckingford Road Linford Essex	Application for outline planning permission with some matters (appearance, landscaping, layout and scale) reserved: Proposed development of up to 830 dwellings (Use Class C3) if the LTC is constructed (scenario 1) or up to 1,000 dwellings (Use Class C3) if the LTC does not proceed (scenario 2), a new local road network including a vehicular / pedestrian railway crossing, a primary school, local centre and new areas of open space, including formal recreation. | Land For Development Muckingford Road Linford Essex	Approved	No change	INCLUDE: Phase 1 would occur at same time as construction Project peak construction activities. Construction traffic not provided, but understood that no HGVs would arrive during AM and PM peak hours.	No change	
21/00754/MIN	Thurrock Council	Recycled In Orsett Ltd Stanford Road Orsett Essex RM16 3BB	Application for the variation of condition no's 6 (Plans),10 (Vehicle Movements) and 33 (Landform) of planning permission ref. 14/01316/MIN (Continuation of extraction of minerals (Old Haven Sand - also known by the brand name Thanet Sand) remaining from the cessation of planning permission ref: 00/00890/CONDC (pursuant to planning permission ref: THU/400/84) for a 10 year	Awaiting Decision	No change	INCLUDE: Initially works were anticipated to start in 2021, with restoration to be completed by 2026 (5-year period). HSE 'Do Not Advise Against' in Feb 2023 - therefore if works are yet to start and are likely to take 5-years, robust case would mean there may be an overlap with Project peak construction activity.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			period (until 2025) together with the subsequent restoration, retention of access, retention of and phased relocation of a... | Recycled In Orsett Ltd Stanford Road Orsett Essex RM16 3BB					
18/01404/OUT	Thurrock Council	DP World London Gateway Logistics Park London Gateway Drive Stanford Le Hope Essex	Thames Enterprise Park - Outline planning permission with all matters (except for access) reserved for the demolition, phased remediation and redevelopment of 164 hectares of former Coryton Oil Refinery to provide up to 345,500 sq. m of commercial development including Manufacturing; Storage, Distribution & Logistics (Use Class B2/B8); Energy & Waste related facilities (Use Class Sui Generis); A Central Hub incorporating a range of active uses (Research & Development, leisure, education, hotel and conferencing facilities) (Use Classes B1(b), D1, D2, C1) and ancillary retail/leisure/community facilities (Use Classes A3, D2 & Sui Generis), as well as additional land set aside for a Rail Freight Terminal; Up to 20 Hectares of Open Storage (Use Class B8); Energy Centre; Lorry Parking Facilities; structural landscaping; car parking, new road and access facilities; vehicular, pedestrian and cycle crossing over Shellhaven Creek; pedestrian crossing facilities to existing and proposed estate roads; retention of existing jetties; and associated infrastructure works.	Awaiting Decision	No change	INCLUDE: Within the Thames Enterprise Park ES Addendum it states that the development would be constructed 2022 to 2035. However, as a decision is still pending, the actual start date is currently unknown but an assumption of a movement of the programme to start this year would mean the time period would be 2025 to 2038 which may overlap with the peak years for Project (A1013 potentially). Therefore, flows have been added accordingly to the PARs and junction models.	No change	
24/00984/LDO	Thurrock Council	DP World London Gateway Logistics Park London Gateway Drive Stanford Le Hope Essex	London Gateway - 24/00984/LDO | Notice is given that Thurrock Council proposes to make the London Gateway Logistics Park Local Development Order 2 (2025) (LDO2) granting planning permission for up to 733,776sqm of	Approved	No change	INCLUDE: The site would not be complete until after the peak years for Project (2035). This development is noted as being within the local development plan and construction traffic associated	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			commercial and amenity floorspace of which 412,326 sqm is already consented by previous LDOs for the site. In November 2013 the Council made the London Gateway Logistics Park Local Development Order (2013) which permitted up to 829,700sqm of commercial floorspace. It expired in early November 2023 with 337,225sqm. DP World London Gateway Logistics Park London Gateway Drive Stanford Le Hope Essex			with the LG Local Development Order that may travel along the A1013 should be accounted for within the TEMPRO growth factor. However, this site was requested to be included by Thurrock Council.		
24/01321/ PASOL	Thurrock Council	Tilbury Green Power Port Of Tilbury, Tilbury Freeport Tilbury Essex RM18 7NU	Installation of solar PV panels on rooftops of two buildings within the Tilbury Green Power Station.	Prior Approval Granted	No change	EXCLUDE: No traffic related documents available on the portal. However, it is linked to planning application 23/00237/CONDC which details the anticipated vehicle movements on the SRN which could overlap with the Project peak construction activity.	No change	
19/01524/SCR	Thurrock Council	Langdon Hills Golf And Country Club Lower Dunton Road Bulphan Essex RM14 3TY.	Hybrid application for the redevelopment of Langdon Hills Golf and Country Club. Detailed approval sought for: a new golf academy (with driving range, tuition space and function space for 150 guests) a redesigned club house (with wellness mindfulness centre, reception space, restaurant space, bar space, function space (for 250 guests), shop, storage space, gym, swimming pool and spa, changing rooms, office space; kitchens and food preparation areas and other ancillary space). The creation of a new health led community to include, 85 no. bungalows for the over 55s (Use Class C2) 36 no. apartments for the over 55s (use Class C2) 42 no. extra care apartments and a 64 bed care home (Use Class C2), and 4 no. key worker apartments.	Approved	No change	EXCLUDE: Granted October 2019. Details are only for a scoping report. Therefore, insufficient to be included within the Traffic and Transport cumulative assessment.	No change	See related 19/01662/FUL

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			Demolition of existing buildings (clubhouse, hotel and green keepers building) and supporting infrastructure to include, a reconfigured main car park, a new car park for the golf academy, new vehicular access from Lower Dunton Road, landscaping, new bowling green, new walkways, a new bus stop to serve Langdon Hills Golf Club St Lukes Hospice, erection of a security gatehouse and surveillance. Outline approval sought for, a new quick play golf course, up to 12 no. apartments (Use Class C3) and a new redesigned green keepers building.					
21/00781/SCR	Thurrock Council	Gothards Field Rear Of The George And Dragon East Tilbury Road Linford Essex SS17 0QT.	Request for an EIA screening opinion: Residential-led development of the 9.5 hectare site to provide up to 230 dwellings, with associated access, landscaping and open space provision	Decision – EIA Not Required	No change	EXCLUDE: Details are only for a scoping report. Therefore, insufficient to be included within the Traffic and Transport cumulative assessment. However, associated planning application 21/01812/FUL has been included within the Traffic and Transport cumulative assessment. Development planned to be fully operational in 2026. Therefore, operational traffic will overlap with the Project peak construction activities.	No change	
18/00549/SCO	Thurrock Council	Tilbury Energy Centre Fort Road Tilbury Essex.	Planning Inspectorate Consultation to the Local Planning Authority for an EIA Scoping opinion for a future Development Consent Order to develop a new Combined Cycle Gas Power Station with a generating capacity up to 2500 megawatts (MW), Open Cycle Gas Turbines with a generating capacity up to 300 MW and an energy storage facility, all on the Tilbury Power Station site.	Decision – EIA Not Required	No change	EXCLUDE: Decision that EIA is required in May 2018 - details are only for a scoping report. Therefore, insufficient to be included within our assessment.	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
22/00812/SCR	Thurrock Council	Thurrock Flexible Generation Plant Fort Road Tilbury Essex.	Request for EIA Screening Opinion with regard to the proposed development of Thurrock Hydrogen Plant, a facility for the production of hydrogen by electrolysis, on land southwest of Station Road in Tilbury, Thurrock.	Decision – EIA Not Required	No change	EXCLUDE: Decided that EIA is not required in July 2022 - details are only for a screening report. Therefore, insufficient to be included within our assessment.	No change	
23/00897/SCO	Thurrock Council	Land Adjacent Sandown Road Collingwood Farm Quarry And East Quarry Stanford Road Orsett Essex.	Request for a Scoping Opinion pursuant to Part 4(15) of the Town and Country Planning (EIA) Regulations 2017: Proposed residential-led mixed-use development comprising of approximately 775 residential dwellings (Class C3), with a new village centre and public square; land for a junior school; sports pitches; external amenity spaces; eco-parkland for informal recreation and nature conservation; new pedestrian routes and cycleway connections; landscaping; and associated works.	Decision – EIA Not Required	No change	EXCLUDE: Decision that EIA is required in August 2023 - details are only for a scoping report. Therefore, insufficient to be included within the Traffic and Transport cumulative assessment.	No change	
23/01321/SCO	Thurrock Council	Land South Of Borough Boundary And East Of Dunnings Lane West Horndon Essex	Request for a Scoping Opinion pursuant to Part 4(15) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017: Proposed development of up to 2,000 homes; up to 1,500 sqm of commercial/retail floorspace; a primary and secondary school; open space, including landscaping and greenspace; and enabling infrastructure to accommodate the proposed development comprising the access and road from the A128, along with associated infrastructure and amenities; highway works; together with all associated works, including temporary meanwhile uses.	Decision – EIA Not Required	No change	EXCLUDE: Decision that EIA is required in January 2024 - details are only for a scoping report. Therefore, insufficient to be included within the Traffic and Transport cumulative assessment.	No change	
24/01051/OUT	Thurrock Council	Land South of Borough Boundary and East of Dunnings	Outline planning application with all matters reserved except access, for the creation of a new settlement and multi modal transport hub	Pending	No change	EXCLUDE: Awaiting decision - the future year of 2036 was used for the assessment; therefore, it does not coincide	No change	

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
		Lane West Horndon Essex	adjacent to West Horndon Railway Station. The new settlement would include a range of interdependent uses to create a sustainable new settlement including community uses (Use Class F1 & F2), primary school (Use Class F1), hotel (Class C1), commercial uses (Use Class E), general industrial & storage (Class B2 & B8), care home and Integrated Retirement Community (Class C2); mixed tenure residential development comprising up to 2,100 dwellings (Use Class C3), a new bus and active travel route over St Marys Lane road bridge, enhancements to the Freshwell Gardens underpass, open space and public realm; new planting and landscaping, ecological enhancement works; sustainable urban drainage systems; creation of new vehicular and pedestrian accesses into the site from the A128, creation of a new vehicular, pedestrian and cycle network within the site; improvements to the existing highway and local road network; lighting; engineering works, meanwhile uses and infrastructure and associated facilities, including demolition of all existing buildings on site.			with the Project construction peak activity.		
25/00333/SCO	Thurrock Council	Land East Of Chadwell St Mary Brentwood Road Chadwell St Mary Essex.	Request for an EIA Scoping Opinion for residential development of up to 1,500 dwellings.	Decided – EIA Required	No change	EXCLUDE: Decision that EIA is required in April 2025 - details are only for a scoping report. Therefore, insufficient to be included within our assessment. No construction year or opening year has been included.	No change	N/A
24/01023/SCO	Thurrock Council	Land Part Of Tilbury Energy Centre (Tilbury 3) Fort Road Tilbury Essex	Request for Scoping Opinion - Regulation 15 Of The Town And Country Planning (EIA) Regulations 2017 (As Amended) at	Decision – EIA required	No change	N/A	EXCLUDE: Decision that EIA is required decided on November 2024 - details are only for a scoping report.	Not included in DCO submission – however was considered in

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			Land At Tilbury3, Port Of Tilbury London Limited (PotII).				Therefore, insufficient to be included within our assessment.	**6.17.A2 Environmental Statement Appendix 17.2 - Long List and Short List of Other Developments (Final Issue A) [APP-283]**.
25/00977/CONDC	Thurrock Council	Langdon Hills Golf And Country Club Lower Dunton Road Bulphan Essex RM14 3TY	Application for the approval of details reserved by condition no. 64 (Construction Environmental Management Plan (CEMP).) of planning permission ref. 19/01662/FUL (Hybrid application for the redevelopment of Langdon Hills Golf and Country Club.	N/A	Unknown – Advice Given	N/A	EXCLUDE: The construction schedule in the CEMP indicates that any potential overlap with the Project would be Phase 4 - Q2 2027 - Q4 2028. For all phases (which do not overlap), the peak daily HGV is maximum 30, equating to 60 movements. Across the typical weekday working hours of 08:00-18:00, with school hour restriction, this equates to 7 HGV movements an hour on average. The operational traffic generated by this development is also expected to be limited (see related 19/01662/FUL), should construction traffic coincide with prior phases being complete and operational. Existing operational trips to the golf course would already be included within baseline traffic data.	Not included in DCO submission only submitted post DCO submission. Related 19/01524/SCR was raised by Thurrock Council in April 2026 to indicate potential for Inclusion.
25/00464/OUT	Thurrock Council	Land East Of Rectory Road And South Of Prince Charles Avenue Orsett Essex	Outline application (with all matters reserved except for vehicular access off Rectory Road) for residential-led development of up	N/A	Awaiting Decision	N/A	EXCLUDE: No construction programme or construction details provided. However,	Not included in DCO submission – however was

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
			to 187 dwellings (Use Class C3), including affordable housing and self-build plots, public open space, landscaping, attenuation and infrastructure works, and an extension of the Orsett Recreation Ground (Use Class F2(c)) and associated infrastructure				National Highways response includes a condition to coordinate the construction activities with the LTC team. During the Project construction peak, assume Project team will also coordinate with the LTC team.	considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/00598/FUL	Thurrock Council	Land Part Of Tilbury Energy Centre (Tilbury 3) Fort Road Tilbury Essex	Hybrid planning application, comprising (1) in the Outline element the following phased development: B2 General Industrial and B8 Storage & Distribution including external storage and ancillary offices, Port-related uses including general haulier parking and a CMAT (Construction Materials and Aggregates Terminal); AND (2) in the Full element the following enabling infrastructure and other works: access and Port estate roads, a rail terminal connecting to the Tilbury2 railway siding, land re-grading and development platforms, utilities, drainage and ecological mitigation.	N/A	Awaiting decision	N/A	EXCLUDE: Some construction programme and traffic details provided in OCTMP. Construction expected 2027 to 2030, overlapping with the Project construction peak. Estimated typical construction traffic is 480 daily vehicle movements, of which 30 are anticipated to be HGV. Traffic route is to pass through the Asda Roundabout A1089 Dock Approach Road / Thurrock Parkway (referenced as Site 89, assessed in 7.11 Transport Assessment [APP-333] which is part of sensitivity testing for the Project multimodal scenario). This junction is predicted to be very sensitive in the future baseline although the Project construction flows would not have a materially detrimental	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							impact upon the operation of the junction. Therefore, the development's appointed Contractor (s) would need to consider the impact at the junction when the peak construction traffic movements, construction methods, and detailed programming of the development works are sufficiently progressed.	
25/00801/DMI	Thurrock Council	Bevan House And Morrison House Jesmond Road Grays Essex	Proposed demolition of 168 residential flats within Keir Hardie House, Bevan House and Morrison House (three 12-storey tower blocks), and 168 associated single-storey garages.	N/A	Prior Approval Granted	N/A	EXCLUDE: Method statement does not include demolition programme, so cannot be determined if will overlap with Project construction peak. However, daily HGV movement is expected to be 15, hence not considered significant.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/00781/OUT	Thurrock Council	Land (Sites A B And C) Adjacent A13 A1012 Long Lane And Stifford Clays Road Stifford Clays Grays Essex	Outline application (all matters reserved except for access) for residential development together with public open space and supporting on-site infrastructure.	N/A	Awaiting decision	N/A	EXCLUDE: The Transport ES Chapter assumes 2028 as opening year as worst case. The junctions assessed in the TA do not overlap with those assessed for the Project, hence assume limited traffic overlap with the Project.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects -**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163].
25/01031/SCR	Thurrock Council	Land To West Of Turnpike Lane And South Of Linford Road Chadwell St Mary Essex	Request for Environmental Impact Assessment (EIA) Screening Opinion: 25/30032/PMAJ - Residential Development (Up to 99 units)	N/A	Advice given	N/A	EXCLUDE: As application is a screening opinion, no construction details provided.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/00969/SCR	Thurrock Council	Land To The North Of Godman Road Cedar Road Barry Close And Adjacent Heath Road Chadwell St Mary Essex	EIA screening opinion application with respect to land north of Chadwell St Mary, Thurrock, regarding the proposed development of approximately 350 new homes with associated access, landscaping and infrastructure.	N/A	EIA not required	N/A	EXCLUDE: No construction programme or construction traffic details provided. Construction management will be outlined in the CEMP.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2**

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
								Environmental Statement Appendix 17.2 (Revision B)) [REP4-163].
25/00845/OUT	Thurrock Council	Land Adjacent St Cleres School Railway Line and Butts Lane Stanford Le Hope Essex	Outline planning application with all matters reserved, except means of access, for the erection of up to 121 homes (Use Class C3) (including a mix of market and affordable dwellings), associated car parking, open space, hard and soft landscaping, biodiversity enhancements, boundary treatments, surface water drainage basins and associated works.	N/A	Awaiting decision	N/A	EXCLUDE: The Outline Construction Management Plan indicates construction period to be between 2027 and 2031. However, no vehicle traffic details are provided – these will be within the full future CTMP once the contractor has been appointed.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/00850/DMI	Thurrock Council	Cadent Gas Ltd Gas Distribution Station Robinson Road Horndon On The Hill Essex SS17 8PU	Prior Approval for the demolition and removal of redundant buildings within the associated gas compound.	N/A	Prior approval granted	N/A	EXCLUDE: Traffic management and environmental monitoring plan indicates an additional 3 HGV loads a day, therefore any impact will be negligible.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
25/01276/FUL	Thurrock Council	Land Adjacent Biggin Lane And Chadwell Hill Chadwell St Mary Essex	Erection of 116 residential dwellings, and provision of associated infrastructure including access roads, car parking, public open space and landscaping	N/A	Awaiting decision	N/A	EXCLUDE: Construction due to take 3-4 years with completion due by early 2030.No construction traffic details provided, however National Highways consultee comment recommends a condition for the provision of a CTMP prior to commencement of development to management any interactions arising from overlap between construction programmes – however, this is primarily in relation to LTC.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
25/01234/FUL	Thurrock Council	Land Adjacent Dell Road And Orsett Road Grays Essex	Construction of an 82 bed care home, including access, landscaping, amenity areas and other associated works	N/A	Approved	N/A	EXCLUDE: Construction and Environmental Management Plan indicates construction to be from 2026 for 24 months (granted in late Feb 2026) and building works appear to have not commenced. Therefore, the construction of the development is likely to overlap with the Project peak construction activity (two weeks in 2028). The preferred route to the development would overlap with PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout). However, the average construction HGV traffic for the development will be between eight and 15 movements per day	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.

Application Reference	Local Planning Authority (LPA)	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
							and up to 30 LGV movements a day. Hence construction traffic from this development is not considered significant with only four movements an hour expected on PAR 67.	
25/01007/SCR	Thurrock Council	Land To West Of Turnpike Lane And South Of Linford Road Chadwell St Mary Essex	Outline planning permission with all matters reserved except for access for the demolition of existing buildings and the construction of Residential Development (Up to 99 units)	N/A	EIA not required	N/A	EXCLUDE: Related 25/01031/SCR	Not included in DCO submission as was submitted post DCO submission cut-off date.

Table B.6 List of committed developments and transport schemes under consideration (Local Plan Allocations)

Application Reference	Emerging Allocation	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
192151	Colchester City Council Preferred Options Local Plan Regulation 18 (November 2026)	Lodge Lane, Langham	Outline application for up to 3,000sqm of office floorspace approved August 2020. Policy PEP10. Safeguarded for employment uses in accordance with Policy E1s	N/A	Approve Conditional	N/A	EXCLUDE: Workplace travel plan has been submitted as part of application 252145 in October 2025. The document states that the development is to be complete on 1st May 2026. This will be before the Project construction peak. However, the Transport Statement (2019) estimates 165 daily one-way car trips by employees. These trips are likely to coincide with PAR 33 and PAR 34. However, the distributions and timings of these trips are not provided.	Not included in DCO submission – however was considered in **6.17.1 Environmental Statement Chapter 17 - Cumulative Effects - Response update (Final Issue A), Appendix A (6.17.A2 Environmental Statement Appendix 17.2 (Revision B)) [REP4-163]**.
211610	Colchester City Council	Land South of Tollgate West	Application a hybrid mixed use development, outline permission for	N/A	Approved Conditional	N/A	EXCLUDE:	Not included in DCO

Application Reference	Emerging Allocation	Location/ LPA area	Description	Status at DCO	Status post DCO	Summary of Highways Consideration at DCO	Summary of Highways Consideration post DCO	Comments
	Preferred Options Local Plan Regulation 18 (November 2026)		flexible use classes E, F1, F2 and C1, uses to allow for cinema, indoor bowling, indoor golf, drinking establishments, drive-thrus, take-aways, amusement arcade, nightclub, venue for live music, casino, bingo hall, and/or dance hall and full permission for the erection of new buildings to accommodate flexible use classes E, B2, B8 and/or uses to allow for dark kitchen, laundrette, drinking establishments, take-aways &/or data centre approved December 2023. Policy PEP3: Allocation for employment uses in accordance with Policy E1				Satellite imagery indicates that the site has been bound by hording for a notable period of time and it is unclear whether construction works have already commenced, which are approximately for two years. The development construction is therefore likely to overlap with the Project peak construction activity (one week in 2028). However, no construction details are provided to allow for an assessment. Furthermore, development construction traffic is unlikely to overlap with the closest PAR 37 - A1124 Halsted Road and would route via the SRN on the A12. The closest junction for the development to access the SRN is A12 J26 Eight Ash Green Interchange (referenced as Site 46, assessed in **7.11 Transport Assessment [APP-333]**). This junction operates within capacity for all scenarios assessed and therefore is not impacted by the Project peak construction traffic movements. As no construction details are publicly available for the development an assessment cannot be undertaken on the combined effects.	submission – however was considered in **6.17.A2 Environmental Statement Appendix 17.2 - Long List and Short List of Other Developments (Final Issue A) [APP-283].**

B.3 Updated Assessment

Committed Developments

B.3.1 From the review undertaken within Section B.2, it was identified that the following committed developments, identified since the submission of the DCO application, meet the criteria for inclusion within the cumulative assessment.

- 2024/3817 (South Norfolk Council)
- DC/22/06288 (Babergh and Mid Suffolk District Councils)
- 19/01725/OUT (Basildon District Council)
- 23/02807/OUT (Braintree District Council)

B.3.2 An updated assessment on the associated PARs used by the above developments has been undertaken using the respective traffic flow movements shown within Table B.7 to Table B.10.

Table B.7 Norfolk 2024/3817 Land To The North Of Station Road Tivetshall St Margaret Norfolk

PAR / Site	Link / Junction Description	AM Peak		PM Peak		Daily (07:00-19:00)	
		Total	HGV	Total	HGV	Total	HGV
PAR 7	B1134 Station Road/B1134 Long Row	n/a	n/a	n/a	n/a	28	28

Table B.8 Suffolk DC/22/06288 Port One Business and Logistics Park Bramford Road (Extension only)

PAR	Link Description	AM Peak		PM Peak		Daily (07:00-19:00)	
		Total	HGV	Total	HGV	Total	HGV
PAR 20	Bramford Road	271	118	283	110	3058	1257
Site 26	A14 Claydon roundabout	254	118	266	110	n/a	n/a
Site 27	B1113 Bramford Road / Bramford Road	255	118	283	110	n/a	n/a

NB. Site 26 flows derived from flow diagrams in TA Appendix I and applying ratio between Extension traffic movements (Table at para. 4.4) and the Port One traffic movements (Table at para 4.5). Daily traffic flow based on TRICs daily profile (from prior Port One application DC/20/01175) where AM and PM peak hour is 18.1% of daily (07:00-19:00) 12-hour flow.

Table B.9 Essex 19/01725/OUT Land North Of London Road Billericay Essex

PAR / Site	Link / Junction Description	AM Peak		PM Peak		Daily (07:00-19:00)	
		Total	HGV	Total	HGV	Total	HGV
PAR 59	A129 – London Road	n/a	n/a	n/a	n/a	182	14

Table B.10 Essex 23/02807/OUT Land West Of Horizon 120 Phase 2 Horizon Boulevard Great Notley Braintree Essex

PAR / Site	Link / Junction Description	AM Peak		PM Peak		Daily (07:00-19:00)	
		Total	HGV	Total	HGV	Total	HGV
PAR 44	A131 – Great Notley Bypass	213	0	197	0	2060	173
Site 56	A120 Braintree Bypass / A131 Great Notley Bypass roundabout	124	0	113	0	n/a	n/a

NB. Daily vehicles are calculated using TRICs profile based on peak hour flows for Industrial Unit land use approved by original consented 10/00001/LDO application that precedes 23/02807 for categories Vehicles and OGVs. This assumes peak hour traffic accounts for 19.9% and 18.5% of traffic between 07:00 and 19:00 for all vehicles and OGVs respectively. HGV numbers derived from TRICs profile for Industrial Unit land use approved by original consented 10/00001/LDO application that precedes 23/02807 by seeking the proportion of "OGV" trips within the total "Vehicle" trips between 07:00 and 19:00, this is found to be 8.4%.

B.3.3 The results of the updated assessment and the significance of effects on the relevant PARs as a result of the updated traffic volumes that include the additional committed development traffic is presented in Table B.11 to Table B.15.

B.3.4 The following effects have been reviewed:

- Preliminary Construction Effects
- Driver Delay and Public Transport Delay to Passengers
- Pedestrians, Cyclists and Horse-Riders - Severance
- Pedestrians, Cyclists and Horse-Riders – Amenity
- Pedestrians, Cyclists and Horse-Riders – Fear and Intimidation.

B.3.5 Any change in the Tables compared to those reported in the **ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275]** are shown in red, with original values in (brackets) for ease of comparison.

B.3.6 The result of the updated assessment of effects shows that the outcomes remain unchanged when compared to the results reported in the **ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275],** and no additional significant effects have been identified.

B.3.7 Where there have been changes to the AM and PM peak hour traffic flows assigned to junctions shown within Table B.7 to Table B.10 assessed within the **7.11 Transport Assessment [APP-333],** details of the updated impact assessment at junctions can be found in **Appendix C** of the **Addendum** to **7.11 Transport Assessment [APP-333]**.

Table B.11 Preliminary Construction Effects

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
A	Link PAR 7 - B1134 Station Road/B1134 Long Row	Site Bell 4a	2028	2	151	2,140	364 (336)	448 (420)	515 (487)	2,588 (2560)	241% (223%)	21% (20%)	Not Sensitive	Yes	Rule 1
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	ID07085_57	2028	1	1,315	3,527	1,713 (456)	3,659 (601)	3,028 (1,771)	7,186 (4,128)	130% (35%)	104% (17%)	Sensitive	Yes	Rule 2
		ID07085_56	2028	1	241	812	456	601	697	1,413	190%	74%			
E	Link PAR 44 - A131 Great Notley Bypass/	Site 132	2028	1	845	17,796	739 (566)	5931 (3,871)	1,584 (1,411)	23,727 (21,667)	87% (67%)	33% (22%)	Sensitive	Yes	Rule 2
F		90323	2028	1	735	21,505	505 (332)	5,449 (3,389)	1,240 (1,067)	25,954 (24,894)	69% (45%)	25% (16%)			
G	Link PAR 59 - A129 London Road	Site 145	2028	7	124	10,846	101 (87)	284 (104)	225 (211)	11,132 (10,950)	81% (70%)	3% (1%)	Sensitive	Yes	Rule 2
		77136	2028	7	135	11,984	188 (174)	390 (208)	323 (309)	12,374 (12,192)	140% (129%)	3% (2%)			
		46687	2028	7	108	13,045	188 (174)	390 (208)	296 (282)	13,435 (13,253)	175% (162%)	3% (2%)			
		Site Bell 43a	2028	7	379	12,604	188 (174)	390 (208)	567 (553)	12,994 (12,812)	50% (46%)	3% (2%)			

Table B.12 Significance of Effect Driver and Passenger Delay

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
A	Link PAR 7 - B1134 Station Road/B1134 Long Row	Low	No sensitive receptors, some sections of narrow carriageway for construction vehicles.	241% (223%)	21% (20%)	Minor	Slight	Not Significant (No change)	Future baseline HGV traffic flow is notably low and total traffic % increase is well below 30% threshold. Magnitude of impact has therefore been adjusted from Major to Minor.
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	Low	Low sensitive receptors. There are several kerbside bus stops along the road and the bus frequency is low with some school bus routes.	130% 190%	104% 74%	Major	Slight	Not Significant (No Change)	Future baseline total and HGV traffic flow is notably low on a section of this road link. However, magnitude of impact to remain at Major to be robust over full link road.
E	Link PAR 44 - A131 Great Notley Bypass/	Low	High sensitive receptors. There are several lay-by bus stops along the road and frequency is high.	87% (67%)	33% (22%)	Major (Moderate)	Slight	Not Significant (No Change)	n/a
G	Link PAR 59 - A129 London Road	High	High sensitive receptors. There are several kerbside bus stops and bus frequency is high. Capacity issues identified.	175% (162%)	3% (2%)	Major	Large	Significant (No Change)	Future baseline HGV traffic flow is notably low. Although total traffic % change lower than threshold of 10% this is a residential area where traffic congestion already noted at peak times. Magnitude of impact to remain as Major to be robust.

Table B.13 Significance of Effect Pedestrians, cyclists and horse rider - Severance

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	None	Negligible	241% (223%)	21% (20%)	Negligible	Neutral	Not Significant (No Change)	N/A
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	NCN Route 48 crosses the B1113 Loraine Way between Tye Lane and The Street with an informal crossing.	Low	130% 190%	104% 74%	Major (Moderate)	Slight	Not Significant (No Change)	N/A
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	There are various uncontrolled and signalised crossings.	Low	87% (67%)	33% (22%)	Minor (Negligible)	Slight	Not Significant (No Change)	N/A
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	There are various formal and informal crossings.	High	175% (162%)	3% (2%)	Major	Slight	Not Significant (No Change)	N/A

Table B.14 Significance of Effect Pedestrians, cyclists and horse rider – Amenity

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	None	Negligible	241% (223%)	21% (20%)	Major	Slight	Not Significant (No Change)	N/A	N/A
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	Footway located in at least one side of the road link between Broomvale House and Sterling Suffolk Limited, and between Somersham Road and Bullen Lane. In general, the width is appropriate but in some sections it is narrow although there is a buffer between it and the carriageway.	Low	130% 190%	104% 74%	Major	Slight	Not Significant (No Change)	N/A	N/A
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	Footway on lay-by parkings and at the bus stops in A131 Braintree Road, allowing connection to Strawbrookhill via PRoW 221_69 and to Chatham Green	Low	87% (67%)	33% (22%)	Moderate	Slight	Not Significant (No Change)	N/A	N/A
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	In the A129 Sun Street there is a Footway on both sides of the road in A129 Sun Street. Footway on one or both sides of the road for the rest of the road link.	High	175% (162%)	3% (2%)	Major (Minor)	Slight	Not Significant (No Change)	Existing good pedestrian, cyclist and horse-rider provision and not significant increase of traffic. The high % increase of HGVs is due to the low number of baseline HGV traffic.	Construction traffic relatively low with an additional 18 + 18 vehicles an hour predicted. Magnitude of impact has been adjusted from Major to Minor due to the change in total vehicles being low with the total increase of traffic under 10% in a sensitive road.

Table B.15 Significance of Effect Pedestrians, cyclists and horse rider – Fear and Intimidation

Project Section	Road ID	Receptor Sensitivity	Baseline Level of Fear and Intimidation	Future Level of Fear and Intimidation	Magnitude of Impact	Significance of Effect	Significance	Comments
A	Link PAR 7 - B1134 Station Rd/B1134 Long Row	Negligible	Moderate	Moderate	Negligible	Neutral	Not Significant	N/A
B	Link PAR 20 - B1113 Bramford Road/B1113 Loraine Way	Low	Moderate	Great (Moderate)	Negligible	Slight	Not Significant (No Change)	N/A
E/F	Link PAR 44 - A131 Great Notley Bypass/A131 Great Leighs Bypass/A131 Braintree Rd	Low	Great	Great	Negligible	Slight	Not Significant	N/A
G	Link PAR 59 - A129 Sun Street/A129 London Road/A129 Rayleigh Road	High	Moderate	Moderate	Negligible	Slight	Not Significant	N/A

Developments with Updated Information

B.3.8 Further engagement with the LTC Project Team identified that traffic flows and assumptions used within the **7.11 Transport Assessment [APP-333]** and **6.16 Environmental Statement Chapter 16 - Traffic and Transport [APP-271]** did not fully represent the increase in daily traffic associated with the LTC development during our peak construction activities due to the change in the programme as a result of the delayed approval of the Project. Following submission of the DCO, the LTC Project provided traffic movements (in October 2025) from their own strategic model within the Study Area.

B.3.9 An updated assessment on the impact on PARs within Thurrock was requested by Thurrock Council taking into consideration the overlay of the Project and the latest LTC construction programme. This ensured that the combined peak activity was identified. The updated assessment followed the same methodology for assessment of traffic and transport significance of effects included in the **ES Chapter 16: Traffic and Transport [APP-271]**.

B.3.10 The update to the assessment has considered a revised daily construction traffic profile which reflects the overlap of construction activities from both projects between 2027 and 2031. This combined daily construction traffic profile identifies the worst-day during peak construction as a result of the overlap of the two projects. This revised worst-case day has been used as the basis for updated assessment.

B.3.11 The results of the updated LTC assessment and the significance of effects on the relevant PARs as a result of the updated traffic volumes that include the updated LTC flows is presented in Table B.16 to Table B.20.

B.3.12 The following effects have been reviewed:

- Preliminary Construction Effects
- Driver Delay and Public Transport Delay to Passengers
- Pedestrians, Cyclists and Horse-Riders - Severance
- Pedestrians, Cyclists and Horse-Riders – Amenity
- Pedestrians, Cyclists and Horse-Riders – Fear and Intimidation.

B.3.13 Any change in the Tables compared to those reported in the **ES Appendix 16.4: Traffic and Transport Construction Effects [APP-275]** are shown in red, with original values in (brackets) for ease of comparison.

B.3.14 The assessment of significance of effects with the revised flows indicates that there would be no additional significant effects to those presented in **the ES Chapter 16: Traffic and Transport [APP-271]** and the conclusions remain valid.

B.3.15 On those junctions where there have been changes to the traffic flows assigned to junctions assessed within the **7.11 Transport Assessment [APP-333]**, details of the impact assessment at junctions can be found within **Appendix C** of the **Addendum** to **7.11 Transport Assessment [APP-333]**.

Table B.16 Preliminary Construction Effects (LTC)

Project Section	Road ID	Survey Site	Peak Construction Year	Duration peak (weeks)	Future Baseline 12 hr Weekday Flows (07:00-19:00)		Committed Development + Project Development Construction Traffic Flows, Per Day		Future Baseline + Committed Development + Project Development 12 hr Weekday Flows (07:00 - 19:00)		% Increase in 12 hr Weekday Flows (07:00 - 19:00)		Road sensitivity	Assessment Required	Rule criteria
					HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles	HGV	Total Vehicles			
H	Link PAR 63 - A128 Brentwood Road	NDC 25a	2028	3 (9)	1,405	11,078	206 (180)	1,274 (214)	1,611 (1,585)	12,353 (11,292)	15% (13%)	12% (2%)	Sensitive	Yes	Rule 2
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Roundabout)	92177	2028	3 (4)	402	9,772	430 (502)	1,502 (1,527)	832 (904)	11,274 (11,299)	107% (125%)	15% (16%)	Sensitive	Yes	Rule 2
H	Link PAR 65 - Buckingham Hill Road	NDC 8a	2028	3 (4)	617	8,391	534 (658)	3,123 (2,144)	1,151 (1,275)	11,514 (10,535)	87% (107%)	37% (26%)	Sensitive	Yes	Rule 2
H	Link PAR 66 - Brentwood Road	Link PAR 68	2028	1	162	11,777	438 (484)	1,976 (1,058)	600 (646)	13,753 (12,835)	270% (299%)	17% (9%)	Sensitive	Yes	Rule 2
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Roundabout)	Link PAR 69	2028	2	591	13,722	603 (554)	1,040 (834)	1,194 (1,145)	14,762 (14,556)	102% (94%)	8% (6%)	Sensitive	Yes	Rule 2
H	Link PAR 68 - Heath Road	Link PAR 70	2028	2	17	2,964	448	658 (564)	465	3,622 (3,528)	2676%	22% (19%)	Sensitive	Yes	Rule 2
H	Link PAR 69 - Chadwell Hill	Link PAR 71	2029 (2028)	2 (1)	753 (745)	7,930 (7,843)	0	1,714 (116)	753 (745)	9,644 (7,959)	0%	22% (1%)	Sensitive	Yes (No)	Rule 2
H	Link PAR 70 - Linford Road	Link PAR 72	2029 (2028)	2 (1)	189 (187)	5,999 (5,933)	0	4,988 (116)	189 (187)	10,987 (6,049)	0%	83% (2%)	Sensitive	Yes (No)	Rule 2
H	Link PAR 71 - Muckingford Road	NDC Site 40b	2029 (2028)	2 (1)	414 (410)	4,085 (4,040)	0	4,986 (116)	414 (410)	9,071 (4,156)	0%	122% (3%)	Not sensitive	Yes (No)	Rule 1

Table B.17 Significance of Effect Driver and Passenger Delay (LTC)

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
H	Link PAR 63 - A128 Brentwood Road	Low	No sensitive receptors. There are several kerbside and lay-by bus stops and frequency is low.	15% (13%)	12% (2%)	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	Medium	Low sensitive receptors. There are several kerbside and lay-by bus stops and frequency is low. Sensitivity has been classified as Medium because there is a school bus route.	107% (125%)	15% (16%)	**Major**	**Moderate**	**Significant**	Total duration is short term (i.e. three weeks). The A1013 Stanford Road/Buckingham Hill Road junction model has been updated with the latest traffic flows and the Orsett Cock roundabout updated modelling is currently being undertaken.
H	Link PAR 65 - Buckingham Hill Road	High	Low sensitive receptors. There are several kerbside bus stops and bus frequency is high. Sensitivity has been classified as High because there are several school bus routes.	87% (107%)	37% (26%)	**Moderate (Major)**	**Moderate (Large)**	**Significant**	Total duration is short term (i.e. three weeks). The junction in the road link (A1013 Stanford Road/Buckingham Hill Road) has been modelled with revised flows.
H	Link PAR 66 - Brentwood Road	Medium	Low sensitive receptors, capacity issues identified.	270% (299%)	17% (9%)	**Major (Moderate)**	**Large (Moderate)**	**Significant**	Total duration is short term (i.e. one week). The Orsett Cock roundabout updated modelling in the road link is currently being undertaken.
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	High	High sensitive receptors. Capacity issues identified. Bus stops present.	102% (94%)	8% (6%)	**Moderate (Minor)**	**Moderate**	**Significant**	Future baseline HGV traffic flow is notably low. Total traffic % increase is below the 10% threshold. Magnitude of impact has therefore been adjusted from Major to Moderate. Total duration is short term (i.e. two weeks). The Orsett Cock roundabout updated modelling in the road link is currently being undertaken.
H	Link PAR 68 - Heath Road	Low	No sensitive receptors. No public transport.	2676%	22% (19%)	**Major**	**Slight**	**Not Significant**	Future baseline HGV traffic flow is notably low
H	Link PAR 69 - Chadwell Hill	High	High sensitive receptors. Capacity issues identified	0%	22% (1%)	**Negligible ()**	**Slight ()**	**Not Significant ()**	Total duration is short term (i.e. two weeks). No assessment undertaken on this PAR as it did not exceed the threshold criteria.

Project Section	Road ID	Receptor Sensitivity	Basis for Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact (Total vehicles)	Significance of Effect	Significance	Comments
H	Link PAR 70 - Linford Road	High	High sensitive receptors. Capacity issues identified	0%	83% (2%)	**Minor** ()	**Slight** ()	**Not Significant** ()	Total duration is short term (i.e. two weeks). The significant increase in traffic is due to the LTC workforce, with the 99% of the Committed Development traffic. Magnitude of impact has been adjusted from Moderate to Minor. No assessment undertaken on this PAR as it did not exceed the threshold criteria.
H	Link PAR 71 - Muckingford Road	Low	No sensitive receptors. No public transport	0%	122% (3%)	**Minor** ()	**Slight** ()	**Not Significant** ()	Total duration is short term (i.e. two weeks). The significant increase in traffic is due to the LTC workforce, with the 99% of the Committed Development traffic. Magnitude of impact has been adjusted from Major to Minor. No assessment undertaken on this PAR as it did not exceed the threshold criteria.

Table B.18 Significance of Effect Pedestrians, cyclists and horse rider – Severance (LTC)

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
H	Link PAR 63 - A128 Brentwood Road	Footway only.	High	15% (13%)	12% (2%)	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	Footway and shared footway/cycleway only.	High	107% (125%)	15% (16%)	**Negligible**	**Slight**	**Not Significant**	Concerns of safety raised by Local Authority at the location where people cross to accessing to McDonald's on the A13. A mitigation has been proposed at this location: Within Outline Construction Traffic Management Plan (CTMP) (document reference 7.3) - Driver information pack identifying potential hazard location where pedestrians may be crossing the carriageway away from designated crossing point
H	Link PAR 65 - Buckingham Hill Road	There is a signalised pedestrian/cyclist crossing at the A1013 Stanford Road junction.	High	87% (107%)	37% (26%)	**Minor (Negligible)**	**Slight**	**Not Significant**	There is a PRoWs crossing, safety concerns have been raised at this location as this route is already heavily used by HGVs. A mitigation has been proposed at this location: Within Outline CTMP (document reference 7.3) – Driver information pack identifying locations where pedestrians may be walking on verge and crossing the carriageway Ensure adjacent vegetation is maintained to allow visibility

Project Section	Road ID	Pedestrian, cyclist and horse-rider Crossing Provision	Receptor Sensitivity	HGVs % Change	Total vehicles % Change	Magnitude of Impact (total vehicles)	Significance of Effect	Significance	Comments
H	Link PAR 66 - Brentwood Road	Footway only.	Medium	270% (299%)	17% (9%)	**Negligible**	**Slight**	**Not Significant**	Safety concerns have been raised at the crossing of pedestrians and cyclists on the approach to Orsett Cock Roundabout. A mitigation has been proposed at this location: Within Outline CTMP (document reference 7.3) – Driver information pack identifying potential hazard location where pedestrians/cyclists are crossing the carriageway
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	Uncontrolled crossings.	High	102% (94%)	8% (6%)	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 68 - Heath Road	Footway only	High	2676%	22% (19%)	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 69 - Chadwell Hill	Shared footway/cycleway on both sides of the road, with uncontrolled crossing at the A126 Marshfoot Road roundabout	High	0%	22% (1%)	**Negligible** ()	**Slight** ()	**Not Significant** ()	No assessment undertaken on this PAR as it did not exceed the threshold criteria.
H	Link PAR 70 - Linford Road	Footway in one or both sides of the road, with several uncontrolled crossings	High	0%	83% (2%)	**Minor** ()	**Slight** ()	**Not Significant** ()	Total duration is short term (i.e. two weeks). The significant increase in traffic is due to the LTC workforce, with the 99% of the Committed Development traffic. Magnitude of impact has been adjusted from Moderate to Minor. No assessment undertaken on this PAR as it did not exceed the threshold criteria.
H	Link PAR 71 - Muckingford Road	None	Low	0%	122% (3%)	**Major** ()	**Slight** ()	**Not Significant** ()	No assessment undertaken on this PAR as it did not exceed the threshold criteria.

Table B.19 Significance of Effect Pedestrians, cyclists and horse rider – Amenity (LTC)

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
H	Link PAR 63 - A128 Brentwood Road	Footway on the bus stops at the Halway House. Unpaved footway on the western side between Tilbury Road and Station Road. Footway on the western side between Brentwood Road and Church Road, that is narrow in some sections although there is	High	15% (13%)	12% (2%)	Negligible	Slight	**Not Significant**	N/A	N/A

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
		a separation buffer from the carriageway. Unsegregated cycle lane approximately between Orsett Hall and the south of Orsett Road, on both sides of the carriageway.								
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	Shared footway/cycleway on the southern side and a footway on the northern side in the approach to the A13 Stanford-le-Hope Bypass roundabout and at the bus stops.	High	107% (125%)	15% (16%)	**Minor**	**Slight**	**Not Significant**	The pedestrian, cyclist and horse-rider provision is adequate. Mitigation proposed for pedestrian, cyclist and horse-rider severance at this location. Magnitude of impact has been adjusted from Major to Minor as a result of mitigation.	N/A
H	Link PAR 65 - Buckingham Hill Road	None	High	87% (107%)	37% (26%)	**Moderate**	**Moderate**	**Significant**	A mitigation has been proposed at this location. Refer to Table A16.4.4 Significance of Effect Pedestrian, cyclist and horse-rider Severance	N/A
H	Link PAR 66 - Brentwood Road	Footway between Orsett Cock Roundabout and Welling Road on the east side.	Medium	270% (299%)	17% (9%)	**Moderate**	**Moderate**	**Significant**	The pedestrian, cyclist and horse-rider provision is adequate. Mitigation proposed for pedestrian, cyclist and horse-rider severance at this location. Magnitude of impact has been adjusted from Major to Moderate as a result of mitigation.	N/A
H	Link PAR 67 - A1013 Stanford Road (west of	Shared footway/cycleway and presence of footways. Cyclists are required to dismount when	High	102% (94%)	8% (6%)	**Minor**	**Slight**	**Not Significant**	Cyclists are required to join carriageway at the A1013 Standford	Within the Outline CTMP (document reference 7.3) – Driver information pack will identify NCN location and warning of off carriageway section

Project Section	Road ID	Pedestrian, cyclist and horse-rider Provision	Receptor Sensitivity	HGVs % Change	Total Vehicles % Change	Magnitude of Impact	Significance of Effect	Significance	Comments	Potential Mitigation
	Orsett Cock Roundabout)	travelling along the overbridge over A1089.							Rd overbridge over A1089.	over bridge where higher number of cyclists may be on the carriageway. Warning signage to provided. Magnitude of impact has been adjusted from Major to Minor as a result of mitigation
H	Link PAR 68 - Heath Road	Footway on the western side. Main route for a school located south of the road link.	High	2676%	22% (19%)	**Minor**	**Slight**	**Not Significant**	This road link is a school route between the bus stops at A1013 Stanford Road and schools located in Chadwell St. Mary, with an adequate pedestrian, cyclist and horse-rider provision. The PAR at this location is for a short section and the bellmouth access is located on the opposite side of the footway, on the east side.	Within the CTMP the Driver information pack will identify school routes. Magnitude of impact has been adjusted from Major to Minor as a result of mitigation
H	Link PAR 69 - Chadwell Hill	Shared footway/cycleway on both sides of the road, with uncontrolled crossing at the A126 Marshfoot Road roundabout	High	0%	22% (1%)	**Negligible** ()	**Slight** ()	**Not Significant** ()	N/A	No assessment undertaken on this PAR as it did not exceed the threshold criteria.
H	Link PAR 70 - Linford Road	Footway in one or both sides of the road, with several uncontrolled crossings	High	0%	83% (2%)	**Minor** ()	**Slight** ()	**Not Significant** ()	Total duration is short term (i.e. two weeks)	Magnitude of impact has been adjusted from Moderate to Minor as the increase in traffic is mainly due to the LTC workforce and total duration is short term. No assessment undertaken on this PAR as it did not exceed the threshold criteria.
H	Link PAR 71 - Muckingford Road	None	Low	0%	122% (3%)	**Major** ()	**Slight** ()	**Not Significant** ()	N/A	No assessment undertaken on this PAR as it did not exceed the threshold criteria.

Table B.20 Significance of Effect Pedestrians, cyclists and horse rider – Fear and Intimidation (LTC)

Project Section	Road ID	Receptor Sensitivity	Baseline Level of Fear and Intimidation	Future Level of Fear and Intimidation	Magnitude of Impact	Significance of Effect	Significance	Comments
H	Link PAR 63 - A128 Brentwood Road	High	Great	Great	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 64 - A1013 Stanford Road (east of Orsett Cock Roundabout)	High	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 65 - Buckingham Hill Road	High	Moderate	Great	**Moderate**	**Large**	**Significant**	Refer to Table A16.4.5 - Significance of Effect Pedestrian, Cyclist and Horse-rider Amenity
H	Link PAR 66 - Brentwood Road	Medium	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 67 - A1013 Stanford Road (west of Orsett Cock Roundabout)	High	Moderate	Great	**Moderate**	**Large**	**Significant**	Refer to Table A16.4.5 - Significance of Effect Pedestrian, Cyclist and Horse-rider Amenity
H	Link PAR 68 - Heath Road	High	Small	Small	**Negligible**	**Slight**	**Not Significant**	N/A
H	Link PAR 69 - Chadwell Hill	High	Small	Moderate	**Negligible**	**Slight**	**Not Significant**	No assessment undertaken on this PAR as it did not exceed the threshold criteria.
H	Link PAR 70 - Linford Road	High	Small	Moderate	**Negligible**	**Slight**	**Not Significant**	No assessment undertaken on this PAR as it did not exceed the threshold criteria.
H	Link PAR 71 - Muckingford Road	Low	Moderate	Moderate	**Negligible**	**Slight**	**Not Significant**	No assessment undertaken on this PAR as it did not exceed the threshold criteria.

B.4 NSIP/DCO Assessment

B.4.1 At the request of National Highways (NH) and Local Highway Authorities (LHAs), an assessment was undertaken to consider the overlap of construction peak periods between the Project and relevant NSIP/DCOs.

B.4.2 The NSIPs/DCOs identified to be reviewed are shown in Table B.21 along with the expected Link PAR or Strategic Road Network that may coincide with the Project construction traffic.

Table B.21 NSIPs/DCOs reviewed on request from NH and LHAs

Application Reference	Description	Submitted TA and ES	Relevant Link PAR or SRN
EN010092	Thurrock Flexible Generation Plant. North of the existing Tilbury National Grid substation	Included	SRN A13
EN010109	Sheringham and Dudgeon Extension Projects. SEP is to the north and east of Sheringham Shoal OFW. DEP is north and southeast of Dudgeon OFW	Included	Link PAR 2 SRN A11, A47, A140
EN010119	North Falls Offshore Wind Farm	Included	Link PAR 30 SRN A13
EN010115	Five Estuaries offshore wind farm	Included	Link PAR 30 SRN A120
EN020002	Bramford to Twinstead Reinforcement - Overhead Transmission Lines	Included	Link PAR 20, 21, 22, 23
EN010079*	Norfolk Vanguard	Not Included	SRN A47
EN010087*	Norfolk Boreas	Not Included	SRN A47
21/01792/VOC^	Bathside Bay Stour Road Harwich Essex CO12 3HF	Not Included	SRN A120
23/01594/FULL[1]	Freeport East Harwich (Green Energy Centre)[1]	Not Included	SRN A120

**The reasons these sites have not been included in the submitted TA and ES are set out below (as stated in Table B.1). The construction of the Norfolk Vanguard project started in 2023 and is expected to be completed by 2028 prior to the Project's peak construction. For the Boreas Wind Farms Project, the indicative Construction Programme indicates construction would end by 2027.*

^Although not a NSIP or DCO, this was requested to be included in this NSIP/DCO review by NH. However, it has not been included in the submitted TA and ES as set out in below (as stated in Table B.4). The application documents indicate that the traffic flows generated by the development would not be significant.

[1]This application is regarding the temporary use of the development site associated with application 21/01792/VOC, hence has been included for this NSIP/DCO review alongside 21/01792/VOC.

B.4.3 The construction schedule/programmes for the identified NSIPs/DCOs that were considered relevant were included within **7.11 Transport Assessment [APP-333] and 6.16 Environmental Statement Chapter 16 – Traffic and Transport [APP-271]**. This was based on publicly available information found on the associated

Planning websites. For all PARs that were reviewed, it was found that the peak construction periods for the NSIPs/DCOs overlap with the Project construction peak year of 2028.

B.4.4 For the review of the PARs in Table B.21 it was found that there is no change to the findings reported within **6.16 Environmental Statement Chapter 16 – Traffic and Transport [APP-271]**.

B.4.5 For the review of the SRN, where the NSIPs/DCOs overlap with the Project, the combined 12-hour traffic flow has been used to assess the forecast changes to the future baseline. Although the peak year is consistent for the A13 and A120, it was identified that the highest combined traffic flows occurred in a separate month than the Project construction peak. However, the difference in traffic flow is negligible at 0.5% and therefore comparable with the total Project peak and combined NSIP/DCO flows.

B.4.6 Table B.22 presents the findings of the review identifying the combined total percentage increase from the future 2028 baseline. It is identified that the Project would represent a small increase in traffic flow along the SRN, the highest increase on the A140 at 5.3%. When combined with other NSIPs/DCOs, it can be seen the highest increase would be 7.4% and would also be on the A140. It is not considered that the SRN is sensitive in these locations therefore this increase is unlikely to have a significant impact on operational movements and no mitigation is deemed required. The estimated construction traffic movements for each of the SRN considered are shown in Figure B.1 to Figure B.5.

Table B.22 NSIPs/DCOs and the Project % impact on SRN at the combined peak

		Daily 12 Hour Construction Traffic Flow			SRN Forecast Daily 12 Hour Flow (Year)	% impact	
SRN	**NSIP/DCO**	**The Project**	**Combined NSIP/DCO**	**The Project and Combined NSIP/DCO**		**The Project**	**The Project and Combined NSIP/DCO**
A11 (B1135 to A47)	EN010109 Sheringham and Dudgeon Extension Projects.	1596	209	1805	39134 (2027)	4.1%	4.6%
A13 (west of A128)	EN010092 Thurrock Flexible Generation Plant. EN010119 North Falls Offshore Wind Farm.	1144	2570	3714	68262 (2028)	1.7%	5.4%
A47 (west of A140)	EN010109 Sheringham and Dudgeon Extension Projects. EN010079 Norfolk Vanguard EN010087 Norfolk Boreas	935	356	1291	51638 (2028)	1.8%	2.5%
A120 (west of Bentley Road)	EN010115 Five Estuaries offshore wind farm. 21/01792/VOC Bathside Bay. 23/01594/FULL Freeport East Harwich.	788	1445	2233	35401 (2028)	2.2%	6.3%
A140	EN010109 Sheringham and Dudgeon Extension Projects.	935	361	1296	17499 (2028)	5.3%	7.4%

Figure B.1 Estimated Daily 12-Hour DCO Construction Traffic Profile for SRN A11

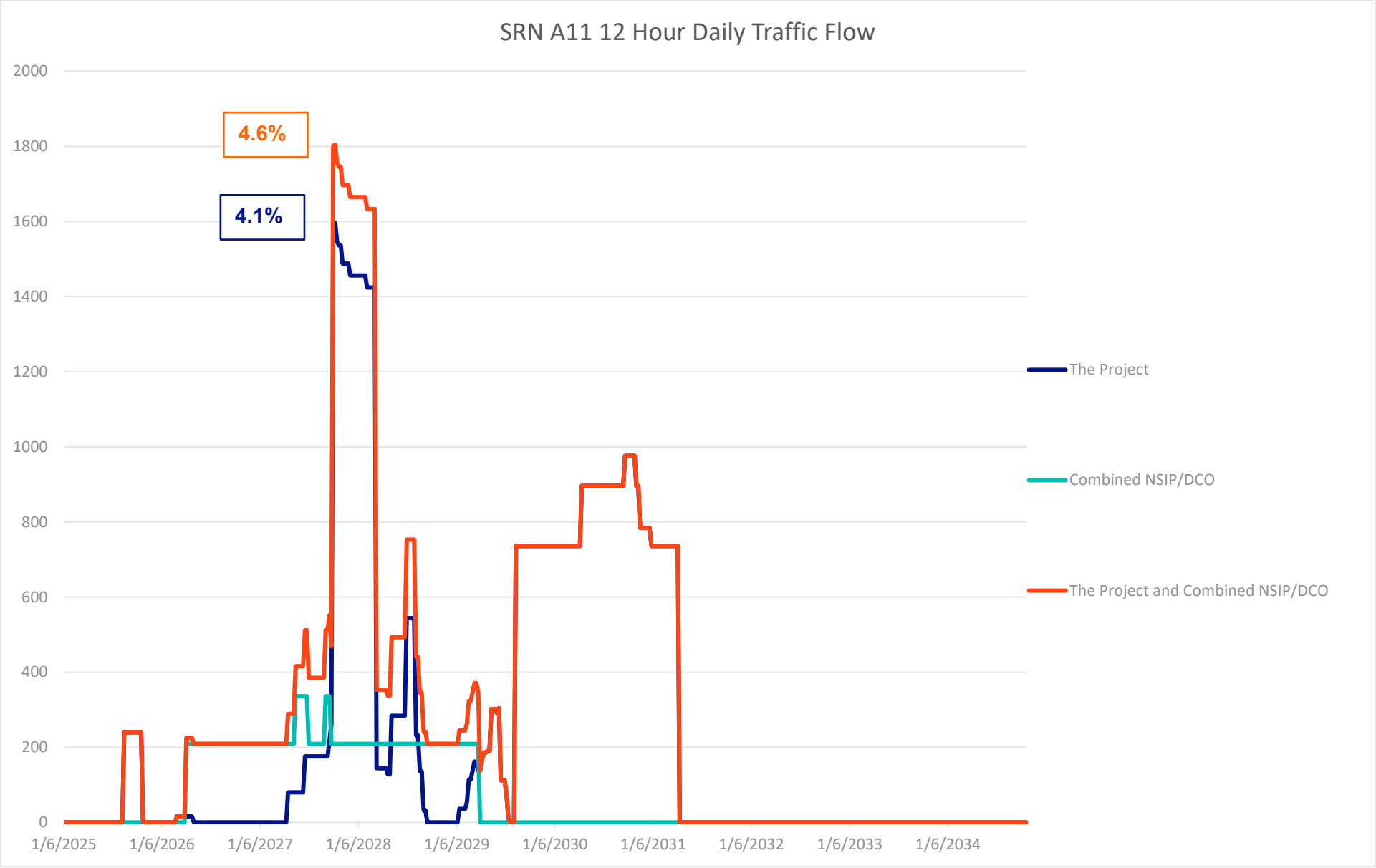


Figure B.2 Estimated Daily 12-Hour DCO Construction Traffic Profile for SRN A13

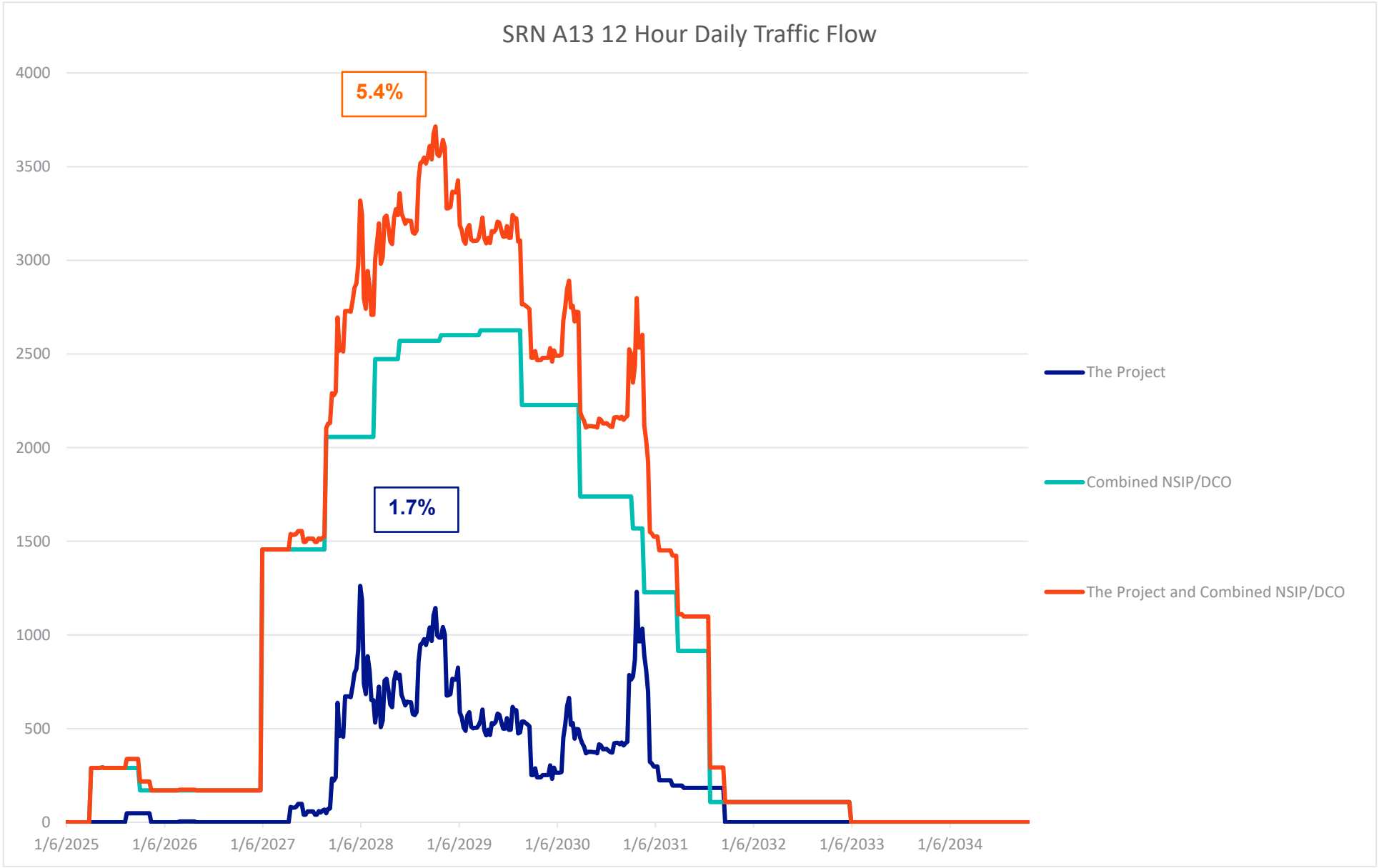


Figure B.3 Estimated Daily 12-Hour DCO Construction Traffic Profile for SRN A147

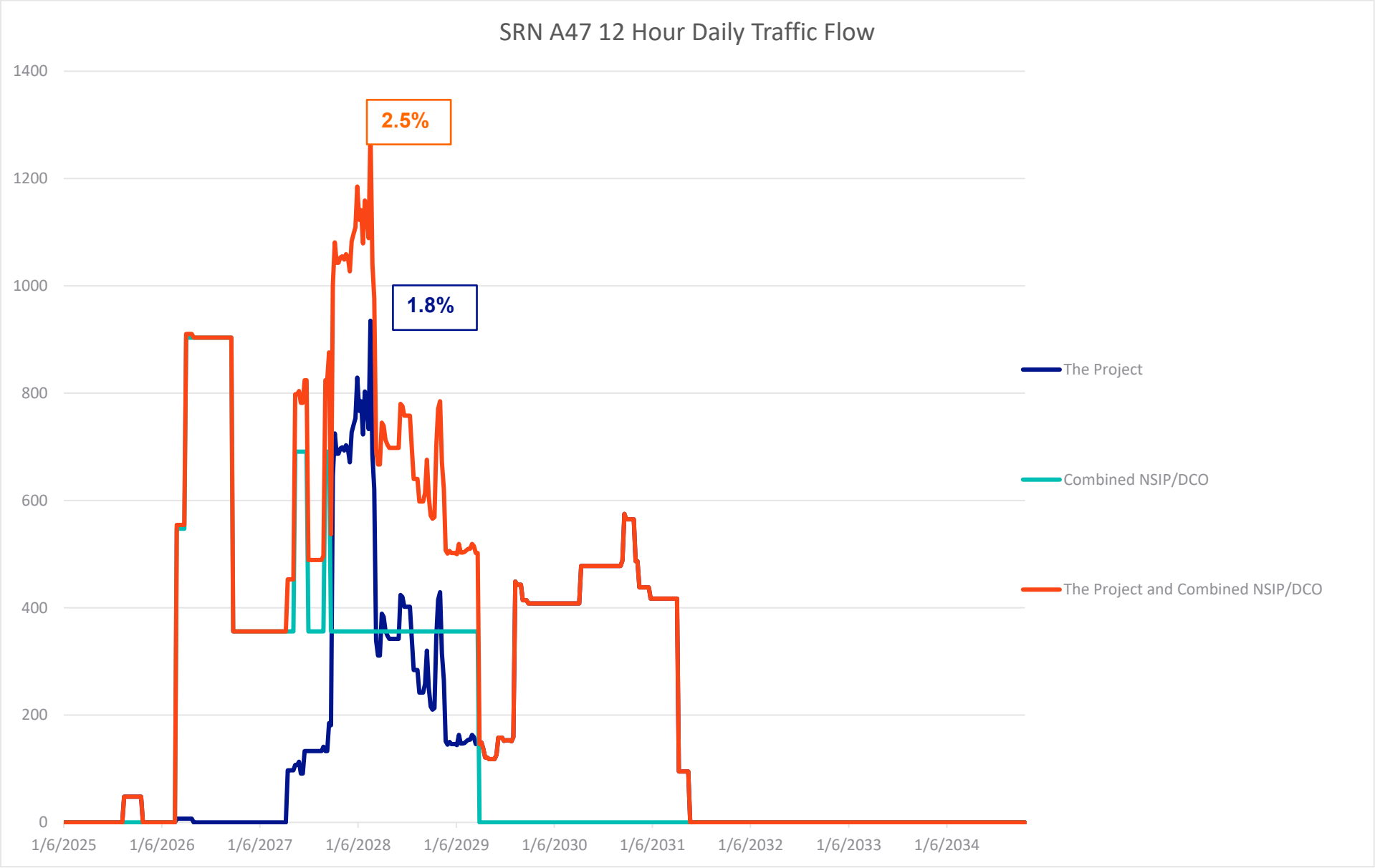


Figure B.4 Estimated Daily 12-Hour DCO Construction Traffic Profile for SRN A120

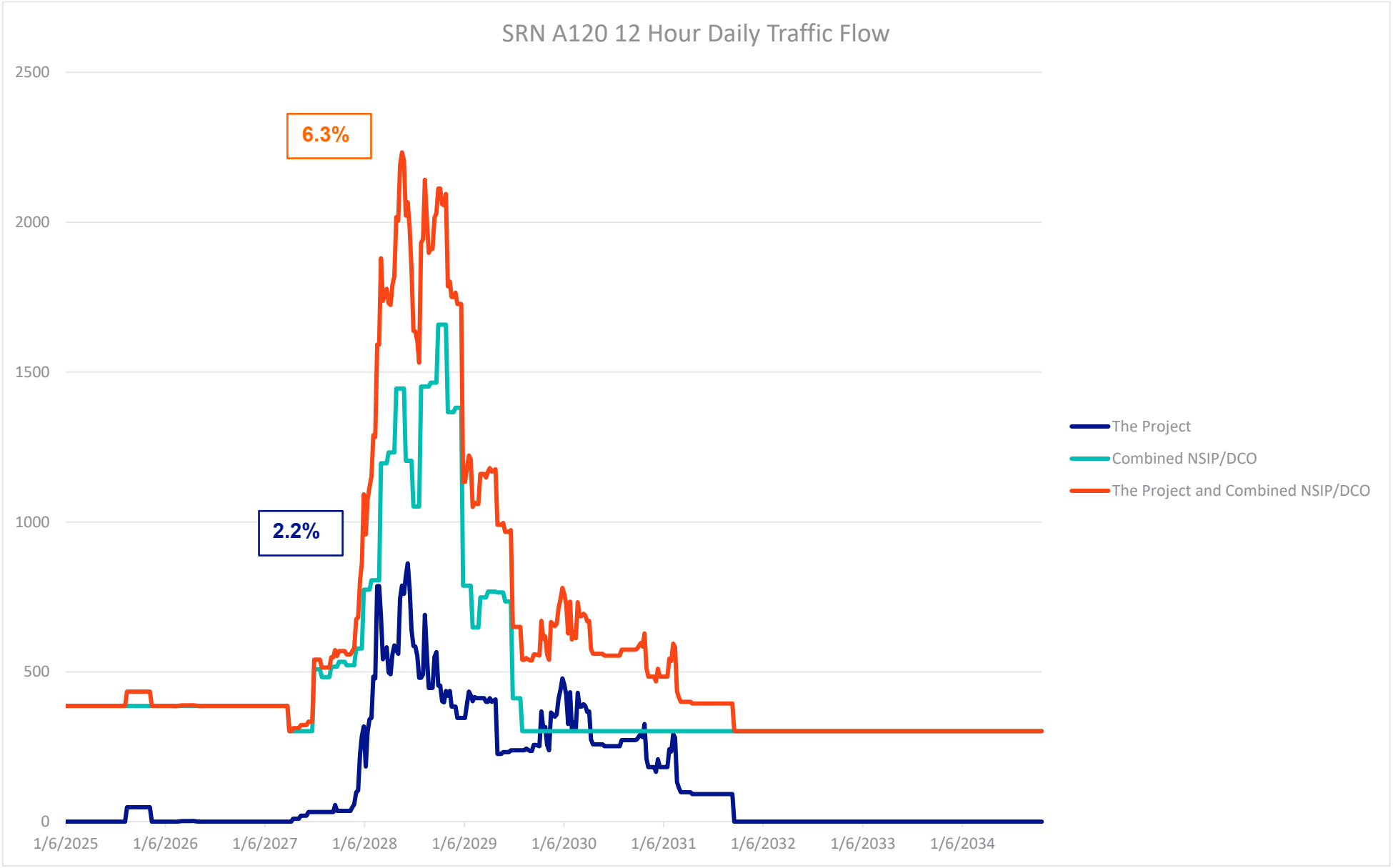
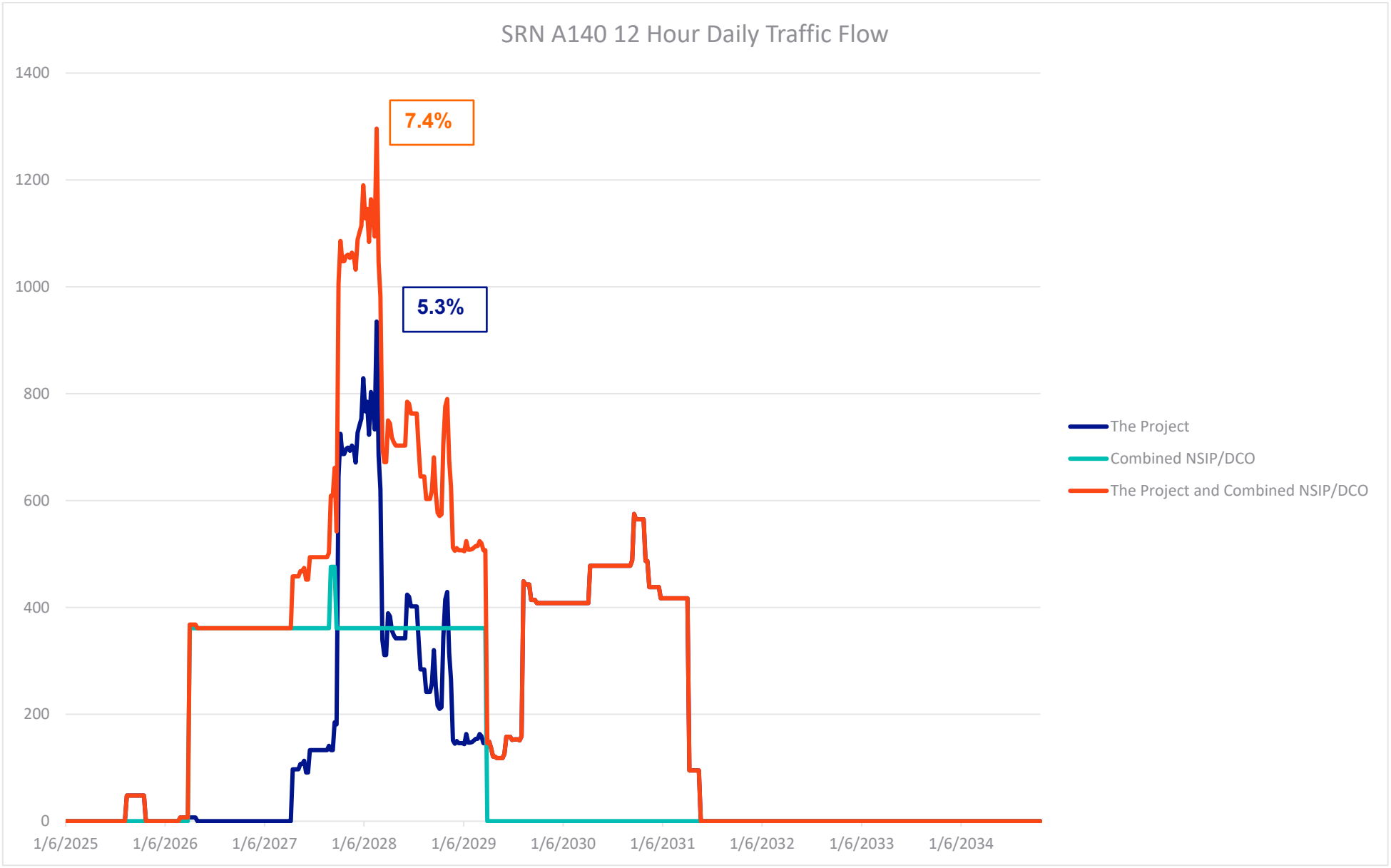


Figure B.5 Estimated Daily 12-Hour DCO Construction Traffic Profile for SRN A140



Abbreviations

Abbreviation	Full Reference
AADT	Annual Average Daily Traffic
BESS	Battery Energy Storage System
CNEB	Chelmsford Northeast Bypass
DCO	Development Consent Order
DEP	Dudgeon Extension Project
EACN	East Anglia Connection Node
EIA	Environmental Impact Assessment
ES	Environmental Statement
ESS	Energy Storage System
GW	Gigawatts
HGV	Heavy Goods Vehicle
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IWMF	Integrated Waste Management Facility
km	Kilometre
kV	Kilovolt
LGV	Light Goods Vehicle
LPA	Local Planning Authority
LTC	Lower Thames Crossing
MW	Megawatts
NRDR	Northern Radial Distributor Road
PAR	Primary Access Routes
PV	Photovoltaic
SEP	Sheringham Extension Project
SRN	Strategic Road Network
SuDS	Sustainable Drainage Systems
TA	Transport Assessment

Glossary

Term	Definition
Annual Average Daily Traffic flow	24-hour traffic count data averaged for all the days in the year, i.e. the total traffic flow on a road for a year divided 365.
Cable	An insulated conductor designed for underground installation.
Committed development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the Project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Environmental Impact Assessment (EIA)	An assessment of the likely effects of a development project on the environment, which is reported in an Environmental Statement that is publicised and consulted on and taken into account in the decision on whether a project should proceed.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Heavy Goods Vehicle	Goods vehicles weighing more than 3,500 kg.
Kilometre	1,000 metres
Light Goods Vehicles	Goods vehicle weighing 3,500 kg or less.
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Nationally Significant Infrastructure Project	Typically a large scale development of national importance that requires development consent from the Secretary of State, under the Planning Act 2008.
Primary Access Routes	Access routes on the public highway designated for use by construction vehicles (typically for HGVs) to travel from the strategic road network / major road network to the site access point.
Scoping Report	Report determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Substation	Substations are used to control the flow of power through the electricity system. They are also used to change (or transform) the voltage from

Term	Definition
	a higher to lower voltage to allow it to be transmitted to local homes and businesses.
Transport Assessment	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).

Bibliography

Babergh and Mid Suffolk District Councils Planning Portal (2025) (Online: https://planning.baberghmidsuffolk.gov.uk/online-applications)

Basildon Council Planning portal (2025) (online: https://planning.basildon.gov.uk/online-applications)

Braintree District Council Planning Portal (2025) (Online: https://publicaccess.braintree.gov.uk/online-applications)

Brentwood Borough Council Planning Portal (2025) (Online: https://publicaccess.brentwood.gov.uk/online-applications)

Chelmsford City Council Planning Portal (2025) (Online: https://planning.chelmsford.gov.uk/planning)

Colchester City Council Planning Portal (2025) *(Online: Planning Search Result Details · Colchester City Council)*

Essex County Council Planning Portal (2025) *(Online - Available at: www.planning.essex.gov.uk)*

Norfolk County Council Planning Portal (2025) *(Online - Available at: www.norfolk.gov.uk/planning)*

Planning Inspectorate Nationally Significant Infrastructure Projects (NSIPs) *(Online at: https://national-infrastructure-consenting.planninginspectorate.gov.uk/)*

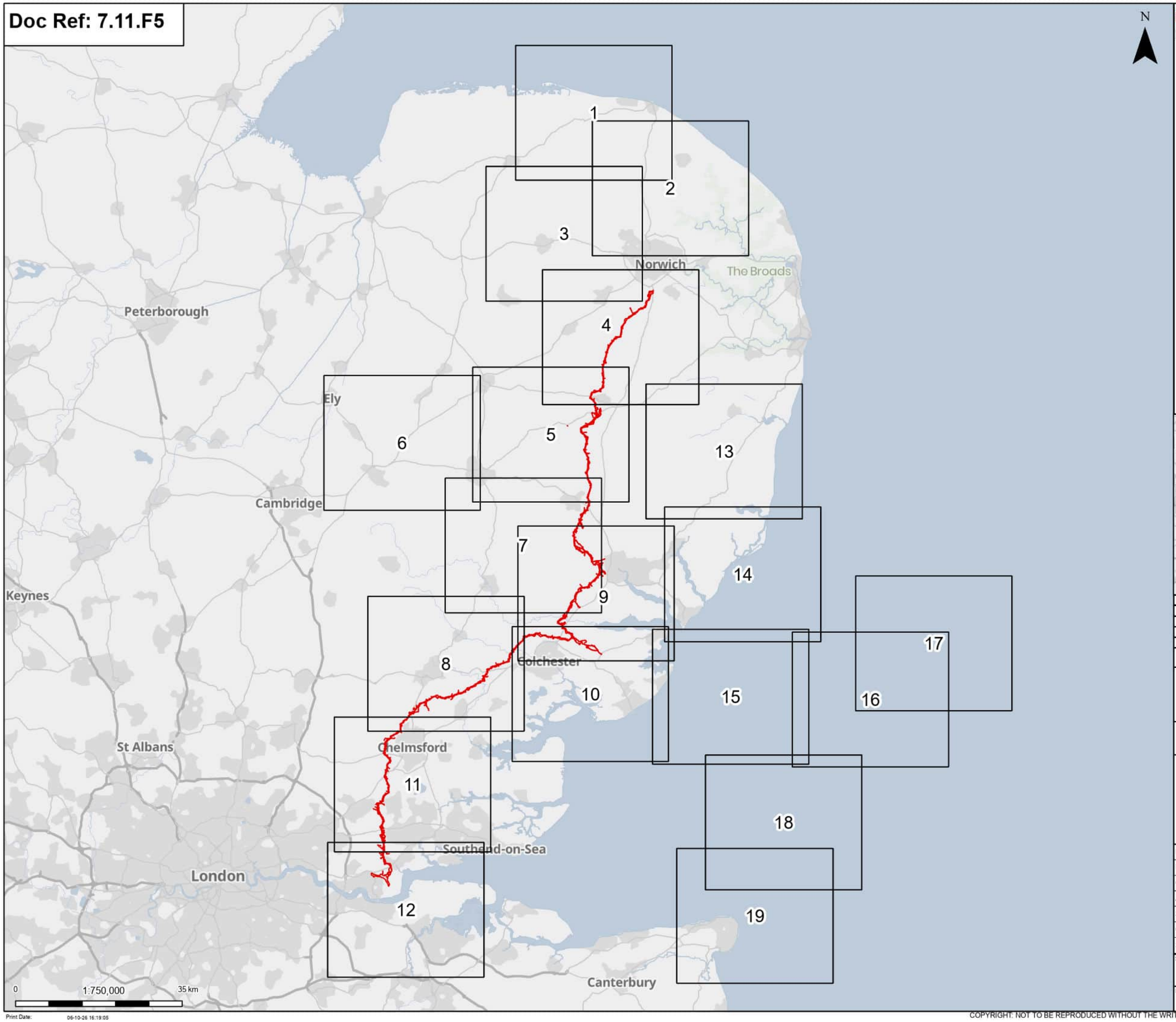
Suffolk County Council (2025) *(Online at: www.suffolk.gov.uk/planning-waste-and-environment/planning-applications*

South Norfolk & Broadland District Councils' Planning Portal (2025) (Online: https://info.southnorfolkandbroadland.gov.uk/online-applications)

Tendering District Council Planning portal (2025) (*Online: https://www.tendringdc.gov.uk/content/view-planning-applications-and-comment)*

Thurrock Council Planning Portal *(2025) (Online at: www.thurrock.gov.uk/planning-applications)*

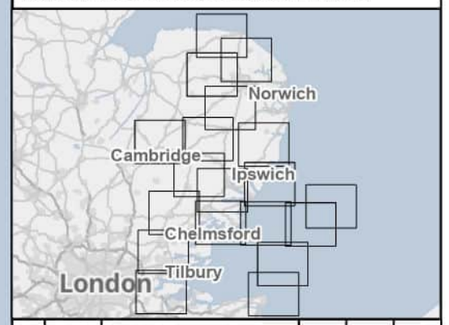
Doc Ref: 7.11.F5



Order limits

Pages

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development Overview

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:750,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

Print Date: 06-10-26 16:19:05

COPYRIGHT. NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

N

Sheet index cutline

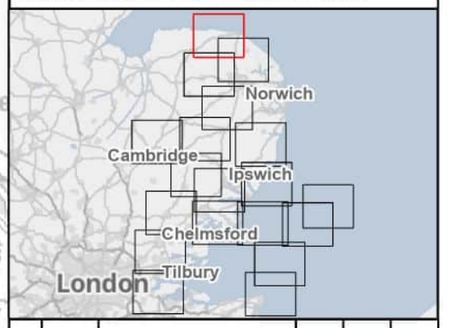
Discipline specific constraints

Planning application

Exclude

Include

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



FOR CONTINUATION SEE PAGE 2

EN010109

FOR CONTINUATION SEE PAGE 3

0 1:100,000 5 km

Print Date: 06-10-26 16:19:29

Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 1 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

EN010109

FOR CONTINUATION SEE PAGE 1

FOR CONTINUATION SEE PAGE 3

N

Sheet index cutline

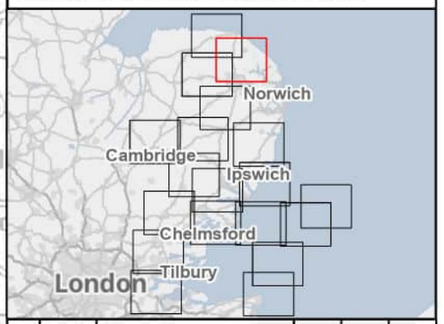
Discipline specific constraints

Planning application

Exclude

Include

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 2 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

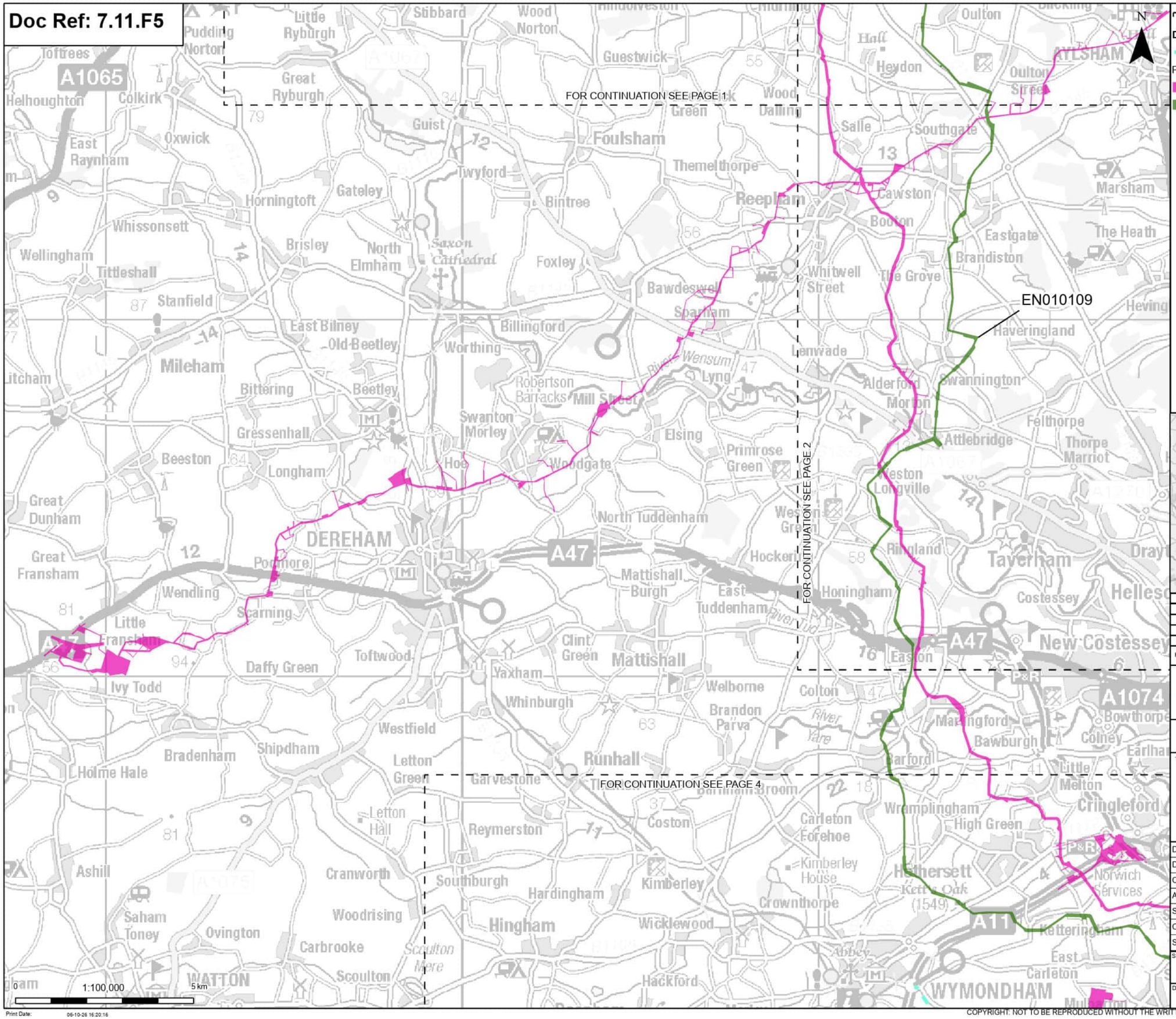
Revision: A

0 1:100,000 5 km

Print Date: 06-10-26 16:19:53

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Sheet index cutline

Discipline specific constraints

Primary Access Route

Planning application

Exclude

Include

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK

Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 3 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

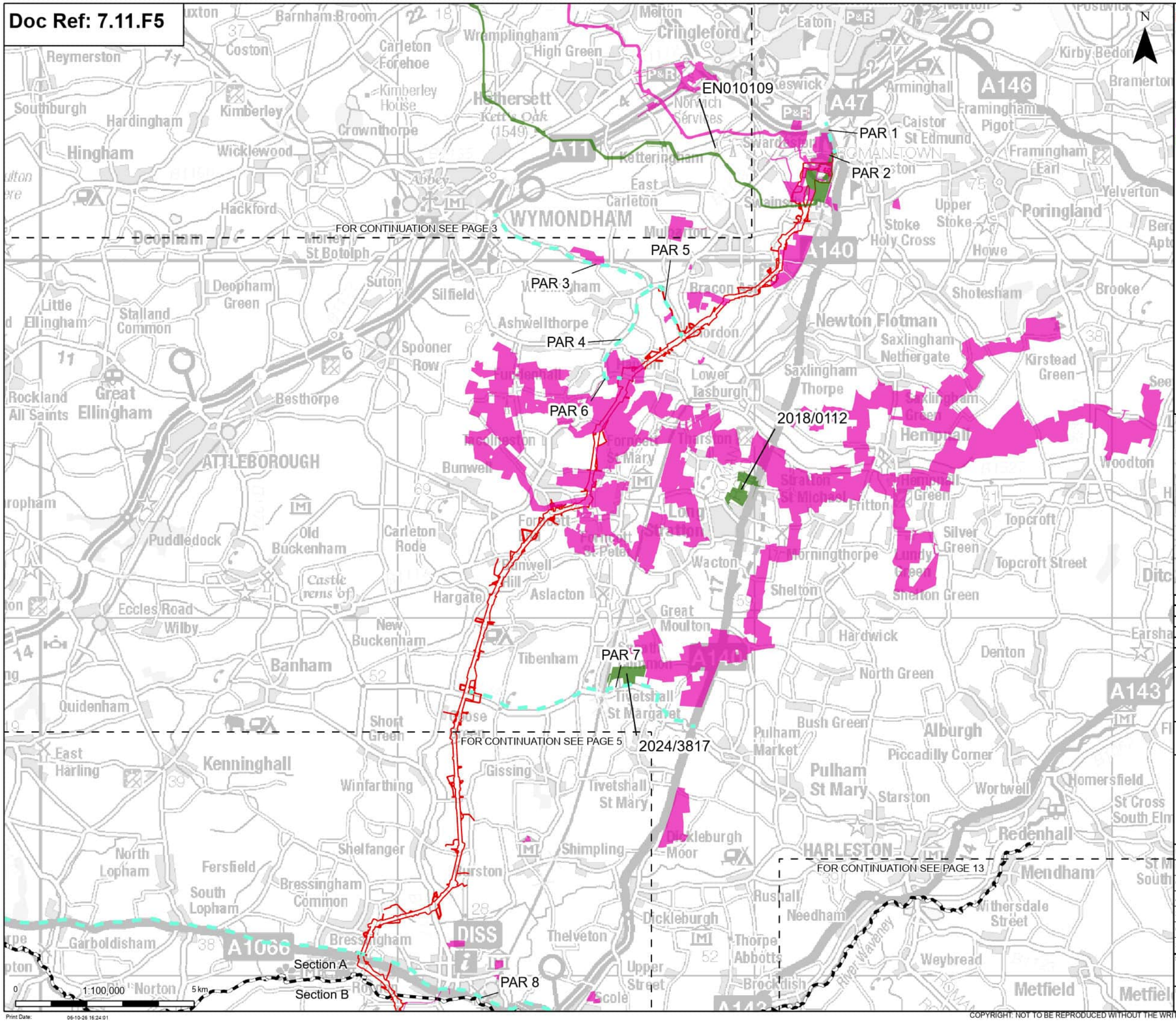
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

Print Date: 06-10-26 16:20:16

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Order limits
Sheet index cutline
Project section line

Discipline specific constraints

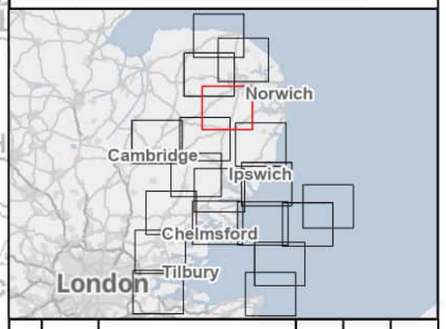
Primary Access Route

Planning application

Exclude
Include

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

PROJECT:
nationalgrid Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 4 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

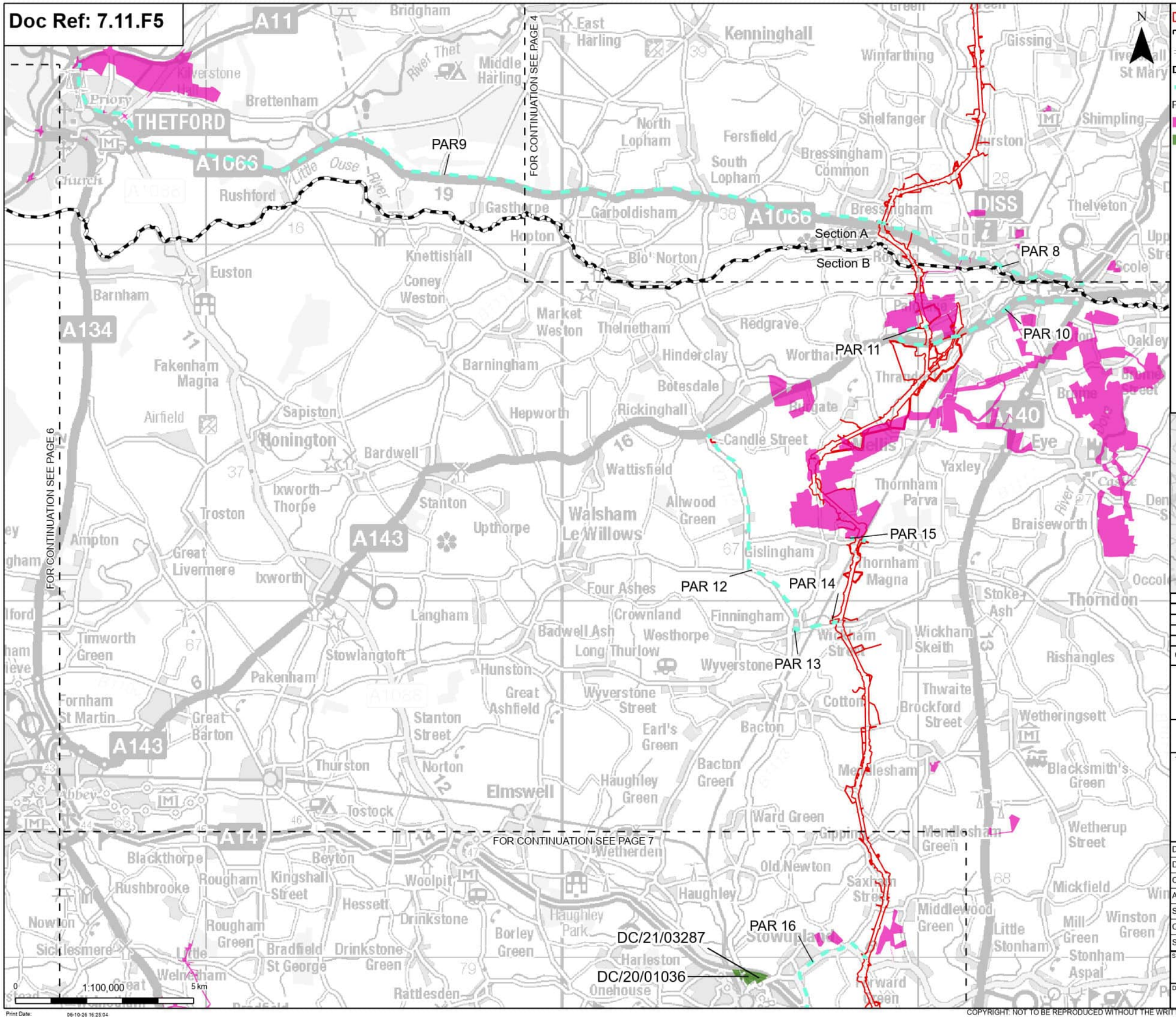
Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

Print Date: 06-10-26 16:24:01

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Order limits
Sheet index cutline
Project section line

Discipline specific constraints

Primary Access Route

Planning application

Exclude
Include

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK

Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 5 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

Print Date: 06-10-26 16:25:04

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

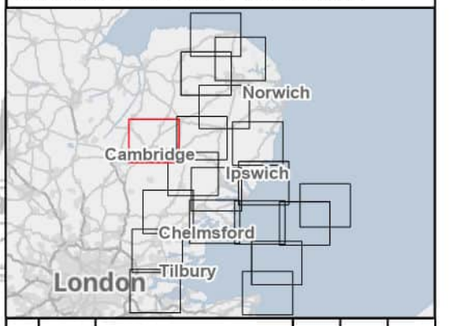
Sheet index cutline
Project section line
Discipline specific constraints
Planning application
Exclude

Section A
Section B

FOR CONTINUATION SEE PAGE 5

FOR CONTINUATION SEE PAGE 7

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 6 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

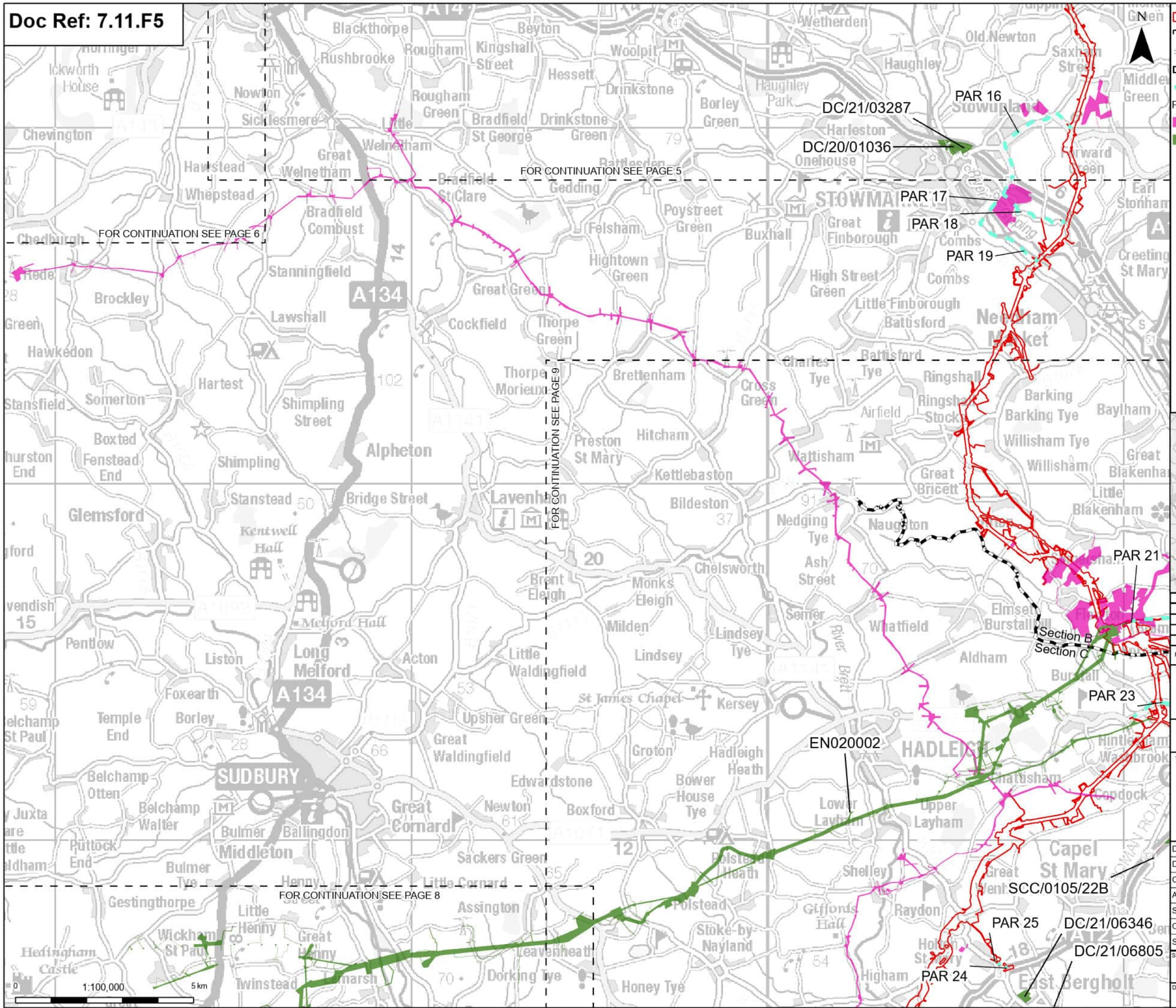
Revision: A

0 1:100,000 5 km

Print Date: 06-10-26 16:25:16

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Order limits
Sheet index cutline
Project section line

Discipline specific constraints

Primary Access Route

Planning application

Exclude
Include

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK

Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 7 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

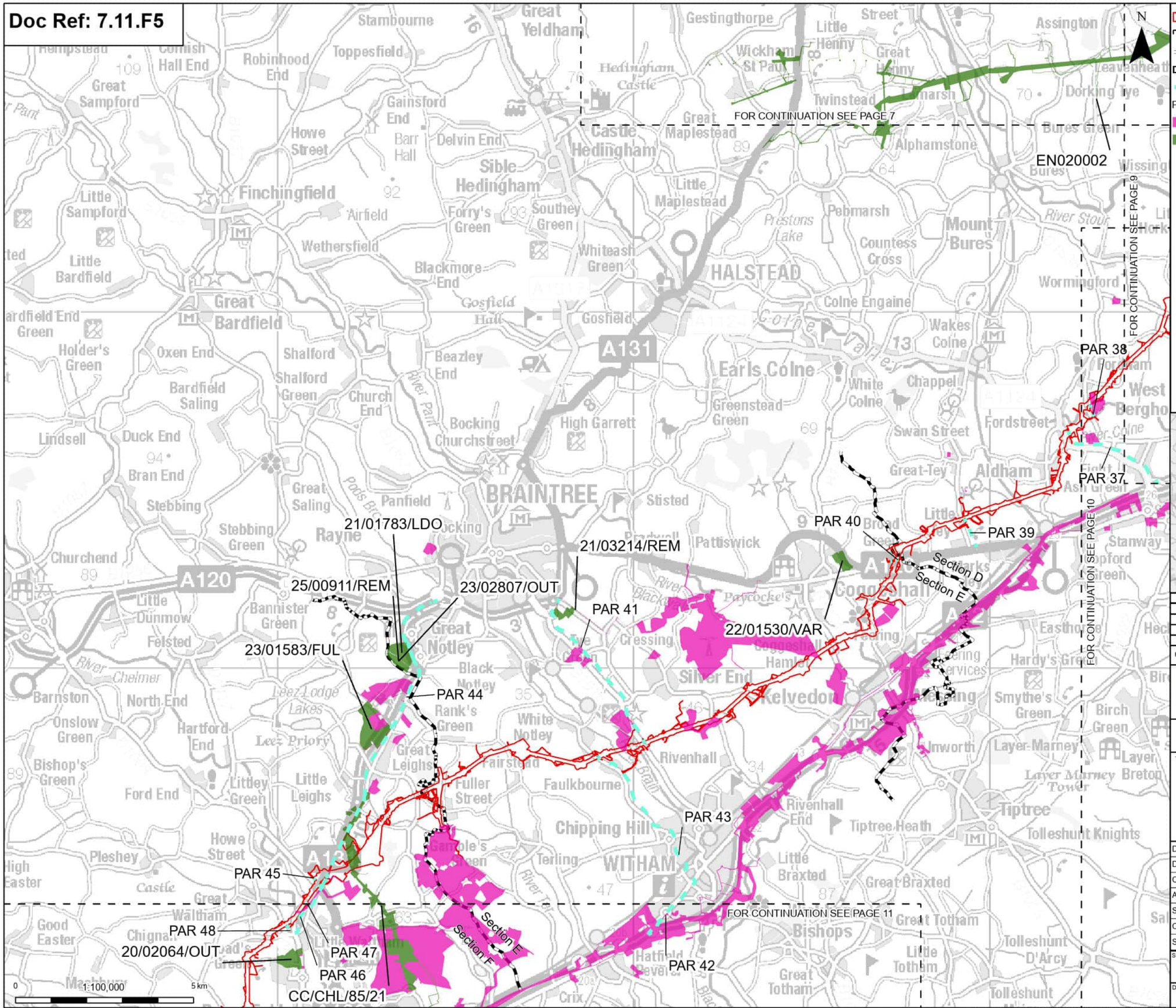
Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

Print Date: 06-10-26 16:26:56

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Order limits
Sheet index cutline
Project section line

Discipline specific constraints

Primary Access Route

Planning application

Exclude
Include

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK

Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 8 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

Print Date: 06-10-26 16:27:58

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

DC/22/06288
PAR 20
PAR 21
EN020002
Section B
Section C
DC/21/02671
PAR 23
PAR 22
DC/21/05110
SCC/0105/22B
PAR 25
DC/21/06346
PAR 24
DC/21/06805
PAR 26
20/01783/FUL
Section C
Section D
PAR 29
PAR 28
PAR 27
PAR 34
23/01033/DETAIL
PAR 36
PAR 33
PAR 32
20/00594/FUL
23/00136/FUL
PAR 35
EN010115
PAR 31
PAR 30
EN010119
CC/TEN/31/21

FOR CONTINUATION SEE PAGE 7
FOR CONTINUATION SEE PAGE 8
FOR CONTINUATION SEE PAGE 10
FOR CONTINUATION SEE PAGE 14
FOR CONTINUATION SEE PAGE 15

0 1:100,000 5 km

Print Date: 06-10-26 16:29:14

N

- Order limits
- Sheet index cutline
- Project section line

Discipline specific constraints

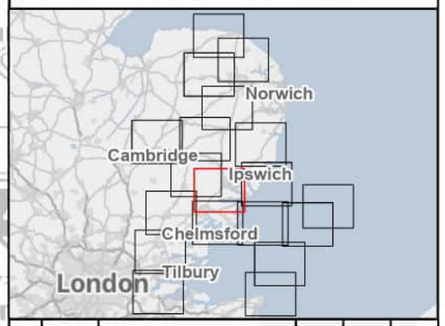
- Primary Access Route

Planning application

- Exclude
- Include

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 9 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description: Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

COPYRIGHT. NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

20/01783/FUL
PAR 29
PAR 28
PAR 27
PAR 34
23/01033/DETAIL
PAR 38
PAR 36
PAR 33
PAR 32
20/00594/FUL
23/00136/FUL
PAR 35
PAR 31
PAR 30
EN010119
CC/TEN/31/21
PAR 37
FOR CONTINUATION SEE PAGE 9
FOR CONTINUATION SEE PAGE 14
FOR CONTINUATION SEE PAGE 8
FOR CONTINUATION SEE PAGE 15
EN010115
CLACTON-ON-SEA
COLCHESTER
WIVENHOE
BRIGHTLINGSEA
WEST MERSEA
MERSEA ISLAND
Mistley
Manningtree
Bradfield
Bradfield Heath
Ramsey
Wix
Great Oakley
Little Bentley
Tendring
Beaumont
Thorpe-le-Soken
Kirby-le-Soken
Weeley
Weeley Heath
Great Bentley
Frating Green
Alresford
Fingringhoe
Thorrington
Aingers Green
Little Clacton
Great Clacton
Holland-on-Sea
Point Clear
St Osyth
St Osyth Marsh
Seawick
Jaywick
Colne Point
Mersea Flats
East Mersea
Peldon
Great Wigborough
Salcott
Copt Hall
Abberton Reservoir
Langenhoe
Layer de la Haye
Layer Breton
Birch Green
Stanway
Copford Green
Beacon End
Shrub End
Old Heath
Rowhedge
Blackheath
Fordbridge
Roman River
Abberton
River Colne
Virley Channel
The Nass
Tollesbury
England Coast Path
Bradwell Waterside
Bradwell on Sea
Sales Point
St Peter's Flat
Chapel
Dengie Flat
St Lawrence
Tumulus
Horkesley
Lamarsh
Cornard
Foxash
Lawford
Mile End
Fox Street
Horsley Cross
Great Horkesley
Little Horkesley
Dedham Heath
Wrabness
Parkeston
Harwich
Horsey Island
Stoke Green
Ford Water
Holland Water
A12
A120
A133
A1232
A414
A131
A1124
A1023
A1060
A1071
A1070
A1021
A1022
A1017
A1016
A1015
A1014
A1013
A1012
A1011
A1010
A1009
A1008
A1007
A1006
A1005
A1004
A1003
A1002
A1001
A1000
A999
A998
A997
A996
A995
A994
A993
A992
A991
A990
A989
A988
A987
A986
A985
A984
A983
A982
A981
A980
A979
A978
A977
A976
A975
A974
A973
A972
A971
A970
A969
A968
A967
A966
A965
A964
A963
A962
A961
A960
A959
A958
A957
A956
A955
A954
A953
A952
A951
A950
A949
A948
A947
A946
A945
A944
A943
A942
A941
A940
A939
A938
A937
A936
A935
A934
A933
A932
A931
A930
A929
A928
A927
A926
A925
A924
A923
A922
A921
A920
A919
A918
A917
A916
A915
A914
A913
A912
A911
A910
A909
A908
A907
A906
A905
A904
A903
A902
A901
A900
A899
A898
A897
A896
A895
A894
A893
A892
A891
A890
A889
A888
A887
A886
A885
A884
A883
A882
A881
A880
A879
A878
A877
A876
A875
A874
A873
A872
A871
A870
A869
A868
A867
A866
A865
A864
A863
A862
A861
A860
A859
A858
A857
A856
A855
A854
A853
A852
A851
A850
A849
A848
A847
A846
A845
A844
A843
A842
A841
A840
A839
A838
A837
A836
A835
A834
A833
A832
A831
A830
A829
A828
A827
A826
A825
A824
A823
A822
A821
A820
A819
A818
A817
A816
A815
A814
A813
A812
A811
A810
A809
A808
A807
A806
A805
A804
A803
A802
A801
A800
A799
A798
A797
A796
A795
A794
A793
A792
A791
A790
A789
A788
A787
A786
A785
A784
A783
A782
A781
A780
A779
A778
A777
A776
A775
A774
A773
A772
A771
A770
A769
A768
A767
A766
A765
A764
A763
A762
A761
A760
A759
A758
A757
A756
A755
A754
A753
A752
A751
A750
A749
A748
A747
A746
A745
A744
A743
A742
A741
A740
A739
A738
A737
A736
A735
A734
A733
A732
A731
A730
A729
A728
A727
A726
A725
A724
A723
A722
A721
A720
A719
A718
A717
A716
A715
A714
A713
A712
A711
A710
A709
A708
A707
A706
A705
A704
A703
A702
A701
A700
A699
A698
A697
A696
A695
A694
A693
A692
A691
A690
A689
A688
A687
A686
A685
A684
A683
A682
A681
A680
A679
A678
A677
A676
A675
A674
A673
A672
A671
A670
A669
A668
A667
A666
A665
A664
A663
A662
A661
A660
A659
A658
A657
A656
A655
A654
A653
A652
A651
A650
A649
A648
A647
A646
A645
A644
A643
A642
A641
A640
A639
A638
A637
A636
A635
A634
A633
A632
A631
A630
A629
A628
A627
A626
A625
A624
A623
A622
A621
A620
A619
A618
A617
A616
A615
A614
A613
A612
A611
A610
A609
A608
A607
A606
A605
A604
A603
A602
A601
A600
A599
A598
A597
A596
A595
A594
A593
A592
A591
A590
A589
A588
A587
A586
A585
A584
A583
A582
A581
A580
A579
A578
A577
A576
A575
A574
A573
A572
A571
A570
A569
A568
A567
A566
A565
A564
A563
A562
A561
A560
A559
A558
A557
A556
A555
A554
A553
A552
A551
A550
A549
A548
A547
A546
A545
A544
A543
A542
A541
A540
A539
A538
A537
A536
A535
A534
A533
A532
A531
A530
A529
A528
A527
A526
A525
A524
A523
A522
A521
A520
A519
A518
A517
A516
A515
A514
A513
A512
A511
A510
A509
A508
A507
A506
A505
A504
A503
A502
A501
A500
A499
A498
A497
A496
A495
A494
A493
A492
A491
A490
A489
A488
A487
A486
A485
A484
A483
A482
A481
A480
A479
A478
A477
A476
A475
A474
A473
A472
A471
A470
A469
A468
A467
A466
A465
A464
A463
A462
A461
A460
A459
A458
A457
A456
A455
A454
A453
A452
A451
A450
A449
A448
A447
A446
A445
A444
A443
A442
A441
A440
A439
A438
A437
A436
A435
A434
A433
A432
A431
A430
A429
A428
A427
A426
A425
A424
A423
A422
A421
A420
A419
A418
A417
A416
A415
A414
A413
A412
A411
A410
A409
A408
A407
A406
A405
A404
A403
A402
A401
A400
A399
A398
A397
A396
A395
A394
A393
A392
A391
A390
A389
A388
A387
A386
A385
A384
A383
A382
A381
A380
A379
A378
A377
A376
A375
A374
A373
A372
A371
A370
A369
A368
A367
A366
A365
A364
A363
A362
A361
A360
A359
A358
A357
A356
A355
A354
A353
A352
A351
A350
A349
A348
A347
A346
A345
A344
A343
A342
A341
A340
A339
A338
A337
A336
A335
A334
A333
A332
A331
A330
A329
A328
A327
A326
A325
A324
A323
A322
A321
A320
A319
A318
A317
A316
A315
A314
A313
A312
A311
A310
A309
A308
A307
A306
A305
A304
A303
A302
A301
A300
A299
A298
A297
A296
A295
A294
A293
A292
A291
A290
A289
A288
A287
A286
A285
A284
A283
A282
A281
A280
A279
A278
A277
A276
A275
A274
A273
A272
A271
A270
A269
A268
A267
A266
A265
A264
A263
A262
A261
A260
A259
A258
A257
A256
A255
A254
A253
A252
A251
A250
A249
A248
A247
A246
A245
A244
A243
A242
A241
A240
A239
A238
A237
A236
A235
A234
A233
A232
A231
A230
A229
A228
A227
A226
A225
A224
A223
A222
A221
A220
A219
A218
A217
A216
A215
A214
A213
A212
A211
A210
A209
A208
A207
A206
A205
A204
A203
A202
A201
A200
A199
A198
A197
A196
A195
A194
A193
A192
A191
A190
A189
A188
A187
A186
A185
A184
A183
A182
A181
A180
A179
A178
A177
A176
A175
A174
A173
A172
A171
A170
A169
A168
A167
A166
A165
A164
A163
A162
A161
A160
A159
A158
A157
A156
A155
A154
A153
A152
A151
A150
A149
A148
A147
A146
A145
A144
A143
A142
A141
A140
A139
A138
A137
A136
A135
A134
A133
A132
A131
A130
A129
A128
A127
A126
A125
A124
A123
A122
A121
A120
A119
A118
A117
A116
A115
A114
A113
A112
A111
A110
A109
A108
A107
A106
A105
A104
A103
A102
A101
A100
A99
A98
A97
A96
A95
A94
A93
A92
A91
A90
A89
A88
A87
A86
A85
A84
A83
A82
A81
A80
A79
A78
A77
A76
A75
A74
A73
A72
A71
A70
A69
A68
A67
A66
A65
A64
A63
A62
A61
A60
A59
A58
A57
A56
A55
A54
A53
A52
A51
A50
A49
A48
A47
A46
A45
A44
A43
A42
A41
A40
A39
A38
A37
A36
A35
A34
A33
A32
A31
A30
A29
A28
A27
A26
A25
A24
A23
A22
A21
A20
A19
A18
A17
A16
A15
A14
A13
A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
A0

Order limits
Sheet index cutline
Project section line

Discipline specific constraints

Primary Access Route

Planning application

Exclude
Include

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK

Norwich
Cambridge
Ipswich
Chelmsford
Tilbury
London

Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 10 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

0 1:100,000 5 km

Print Date: 06-10-26 16:29:42

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

PAR 48
PAR 47
PAR 46
PAR 42
Section E
Section F
FOR CONTINUATION SEE PAGE 8
CC/CHL/85/21
20/02064/OUT
PAR 52
PAR 51
PAR 53
PAR 50
PAR 49
PAR 56
PAR 55
PAR 54
PAR 57
Section F
Section G
19/01725/OUT
24/00332/FUL
PAR 59
PAR 58
TR010032
PAR 60
PAR 61
PAR 62
FOR CONTINUATION SEE PAGE 12
Section G
Section H

CHELMSFORD
BRENTWOOD
BILLERICAY
WICKFORD
BASILDON
RAYLEIGH
MALDON
Danbury
Great Baddow
Galleywood
Boreham
Runwell
Hullbridge
Hockley
Bicknacre
Woodham Walter
Woodham Mortimer
Hazeleigh
Woodham Ferrers
South Woodham Ferrers
Rettendon
Rettendon Place
Great Totham
Wickham Bishops
Langford
Ulting
Little Baddow
Sandon
Widford
Chignall Smealy
Mashbury
Boyton Cross
Chignall St James
Roxwell
Willingale
Cooksmill Green
Fyfield
Pickerells
Shellow Bowells
Chalk End
Beauchamp Roding
Berners Roding
Abbess Roding
Norton Mandeville
Norton Heath
Loves Green
High Ongar
CHIPPING ONGAR
Nine Ashes
Blackmore
Beggar Hill
Stondon Massey
Mill Green
Fryerning
Wyatt's Green
Ingatestone
Doddinghurst
Stock
Heybridge
Mountnessing
Ramsden Heath
Downham
Ramsden Bellhouse
Brock Hill
South Hanningfield
West Hanningfield
Hanningfield Reservoir
Shenfield
Hutton
Ingrave
Brook Street
Herongate
Great Warley
Little Warley
Childerditch
Dunton Bridge
Great Burstead
Little Burstead
Crays Hill
Nevendon
Shotgate
Basildon
Laindon
Vange
Pitsea
Bowers Gifford
North Benfleet
South Benfleet
Thundersley
Daws Heath
Hadleigh
Eastwood
Leigh-on-Sea
Prittlewell
Castle
Hawkwell
Rochford
Cranham
Upminster
Bulphan
Great Canney
Cold Norton
Purleigh
Rudley Green
Cock Clarks
East Hanningfield
Howe Green
Stow Maries
North Fambridge
South Fambridge
River Crouch
Battlesbridge
Rawreth
Crix
Blackwater
River Chelmer
Services
Edney Common
Pilgrims Hatch
South Weald
Harold Wood
Good Easter
Margaret Roding
Waltham
Broad Green
Great Dunmow

A130
A12
A414
A127
M25
A1114
A1016
A1245
A132
A1023
A1015
A1128
A124
A123

0 1:100,000 5 km

Print Date: 06-10-26 16:30:06

Order limits
Sheet index cutline
Project section line

Discipline specific constraints

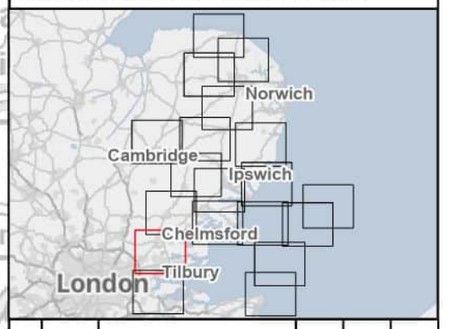
Primary Access Route

Planning application

Exclude
Include

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 11 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

Section G

Section H FOR CONTINUATION SEE PAGE 11

PAR 63

PAR 64

PAR 67

PAR 65

21/00754/MIN

PAR 68

PAR 66

23/00257/NMA

PAR 70

PAR 69

PAR 71

23/00554/FUL

19/00052/CV

24/00984/LDO

18/01404/OUT

19/01709/FUL

21/01812/FUL

16/01232/OUT

TR010032

23/01502/FUL

EN010092

CANVEY ISLAND

Corringham

Fobbing

Stanford-le-Hope

Mucking

Linford

Thames Haven

Container Terminal

Blyth Sands

England Coast Path

Allhallows-on-Sea

Halstow Marshes

St Mary's Marshes

St Mary Hoo

Allhallows

Lower Stoke

High Halstow

Cliffe

Cliffe Fort

Cooling

Church Street

Stoke

Chapman Sands

Leigh Beck

Depot

Leigh-on-Sea

Westcliff-on-Sea

Castle

Canvey Island

Aveley

Purfleet-on-Thames

West Thurrock

Dartford Crossing

Tolls

Greenhithe

Power Sta

GRAYS

SWANSCOMBE

NORTHFLEET

GRAVESEND

Tilbury

Lakeside

Ockenden

South Ockendon

North Stifford

Chalk

Lower Higham

Higham

Singlewell

Shorne

Thong

Chattenden

Wainscott

Hoo St Werburgh

Cliffe Woods

Lower Upnor

Upper Upnor

Hoo Fort

Frindsbury

Strood

Temple Manor

ROCHESTER

Borstal

CHATHAM

GILLINGHAM

Luton

Brompton

Grange

Upchurch

Rainham

Wigmore

Medway Services

Hartlip

Newington

Capstone

Wouldham

Walderslade

Blue Bell Hill

Kit Coty House

Burham

Snodland

Eccles

Aylesford

New Hythe

Addington

Bredhurst

Stockbury

Services

Ind Est

Power Stations

Bulphan

Fobbing

Corringham

Stanford-le-Hope

Mucking

Linford

Thames Haven

Container Terminal

Blyth Sands

England Coast Path

Allhallows-on-Sea

Halstow Marshes

St Mary's Marshes

St Mary Hoo

Allhallows

Lower Stoke

High Halstow

Cliffe

Cliffe Fort

Cooling

Church Street

Stoke

Chapman Sands

Leigh Beck

Depot

Leigh-on-Sea

Westcliff-on-Sea

Castle

Canvey Island

Aveley

Purfleet-on-Thames

West Thurrock

Dartford Crossing

Tolls

Greenhithe

Power Sta

GRAYS

SWANSCOMBE

NORTHFLEET

GRAVESEND

Tilbury

Lakeside

Ockenden

South Ockendon

North Stifford

Chalk

Lower Higham

Higham

Singlewell

Shorne

Thong

Chattenden

Wainscott

Hoo St Werburgh

Cliffe Woods

Lower Upnor

Upper Upnor

Hoo Fort

Frindsbury

Strood

Temple Manor

ROCHESTER

Borstal

CHATHAM

GILLINGHAM

Luton

Brompton

Grange

Upchurch

Rainham

Wigmore

Medway Services

Hartlip

Newington

Capstone

Wouldham

Walderslade

Blue Bell Hill

Kit Coty House

Burham

Snodland

Eccles

Aylesford

New Hythe

Addington

Bredhurst

Stockbury

Services

Ind Est

Power Stations

Bulphan

Bluewater Retail Centre

Bean

Lane End

Betsham

Darenth

Southfleet

Hook Green

Longfield

Istead Rise

Sole Street

Cobham Hall

Cobham

New Barn

Owletts

Sutton at Hone

South Darenth

Horton Kirby

Hartley

Meopham Station

Camer

Cuxton

Luddesdown

Meopham

Halling

South Street

Upper Halling

New Ash Green

Fawkham Green

Ash

Ridley

Brands Hatch

Culverstone Green

Harvel

Vigo Village

Holborough

Stansted

Fairseat

Trottiscliffe

Birling

Ryarsh

Wrotham

Eynsford

West Kingsdown

North Downs Way

Bluewater Retail Centre

Bean

Lane End

Betsham

Darenth

Southfleet

Hook Green

Longfield

Istead Rise

Sole Street

Cobham Hall

Cobham

New Barn

Owletts

Sutton at Hone

South Darenth

Horton Kirby

Hartley

Meopham Station

Camer

Cuxton

Luddesdown

Meopham

Halling

South Street

Upper Halling

New Ash Green

Fawkham Green

Ash

Ridley

Brands Hatch

Culverstone Green

Harvel

Vigo Village

Holborough

Stansted

Fairseat

Trottiscliffe

Birling

Ryarsh

Wrotham

Eynsford

West Kingsdown

North Downs Way

A13

A2

M20

A228

A249

M2

A1014

A227

A226

A289

A25

A25

A25

Doc Ref: 7.11.F5

FOR CONTINUATION SEE PAGE 4

FOR CONTINUATION SEE PAGE 14

N

0 5 km

1:100,000

Sheet index cutline

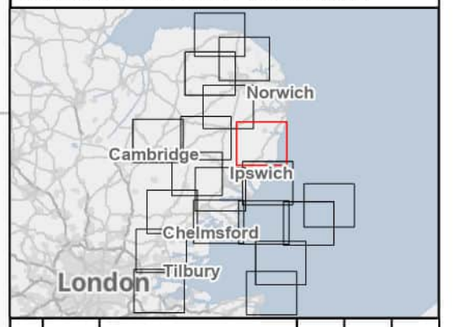
Project section line

Discipline specific constraints

Planning application

Exclude

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 13 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

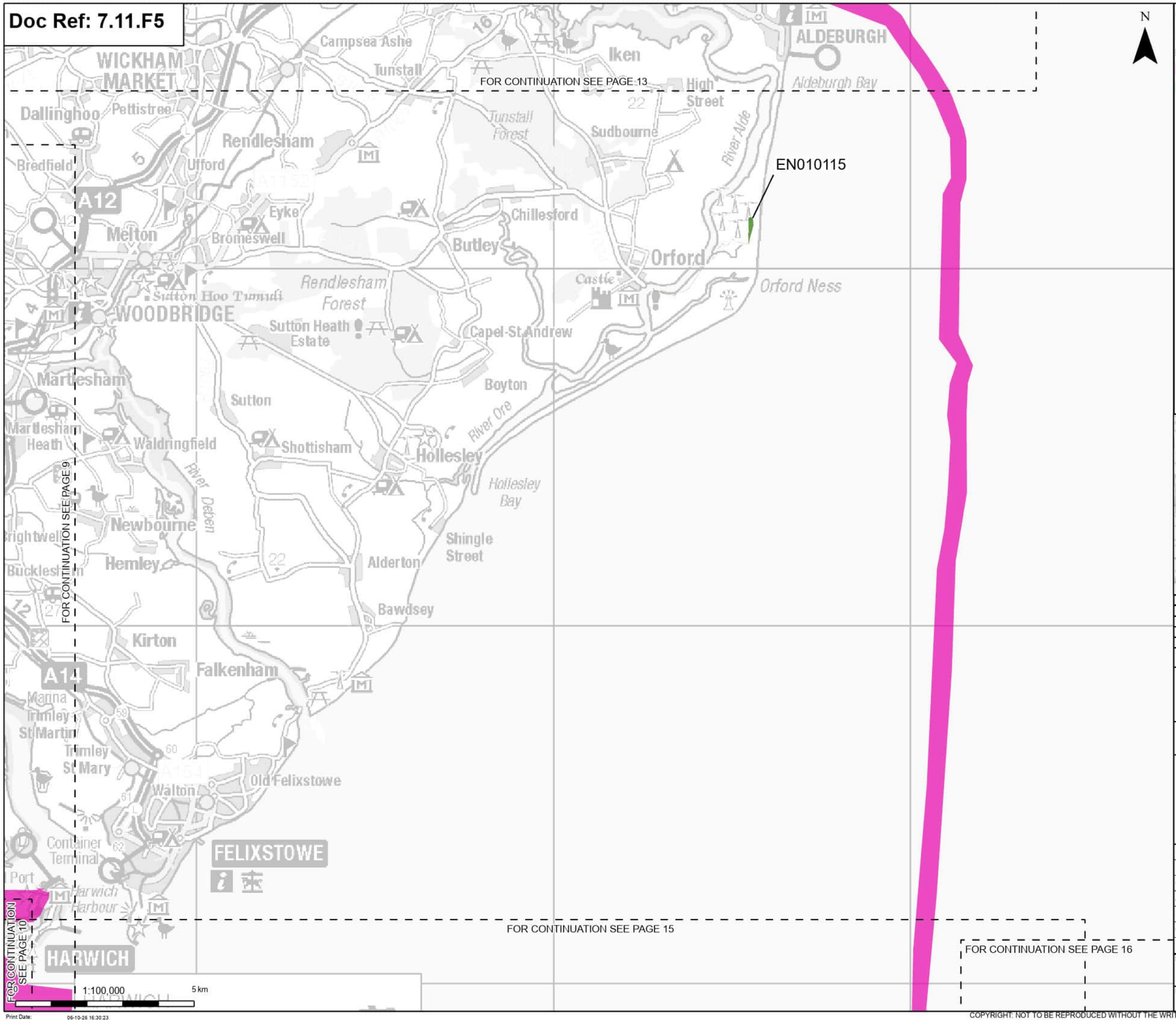
Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

Print Date: 06-10-26 16:30:20

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 14 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

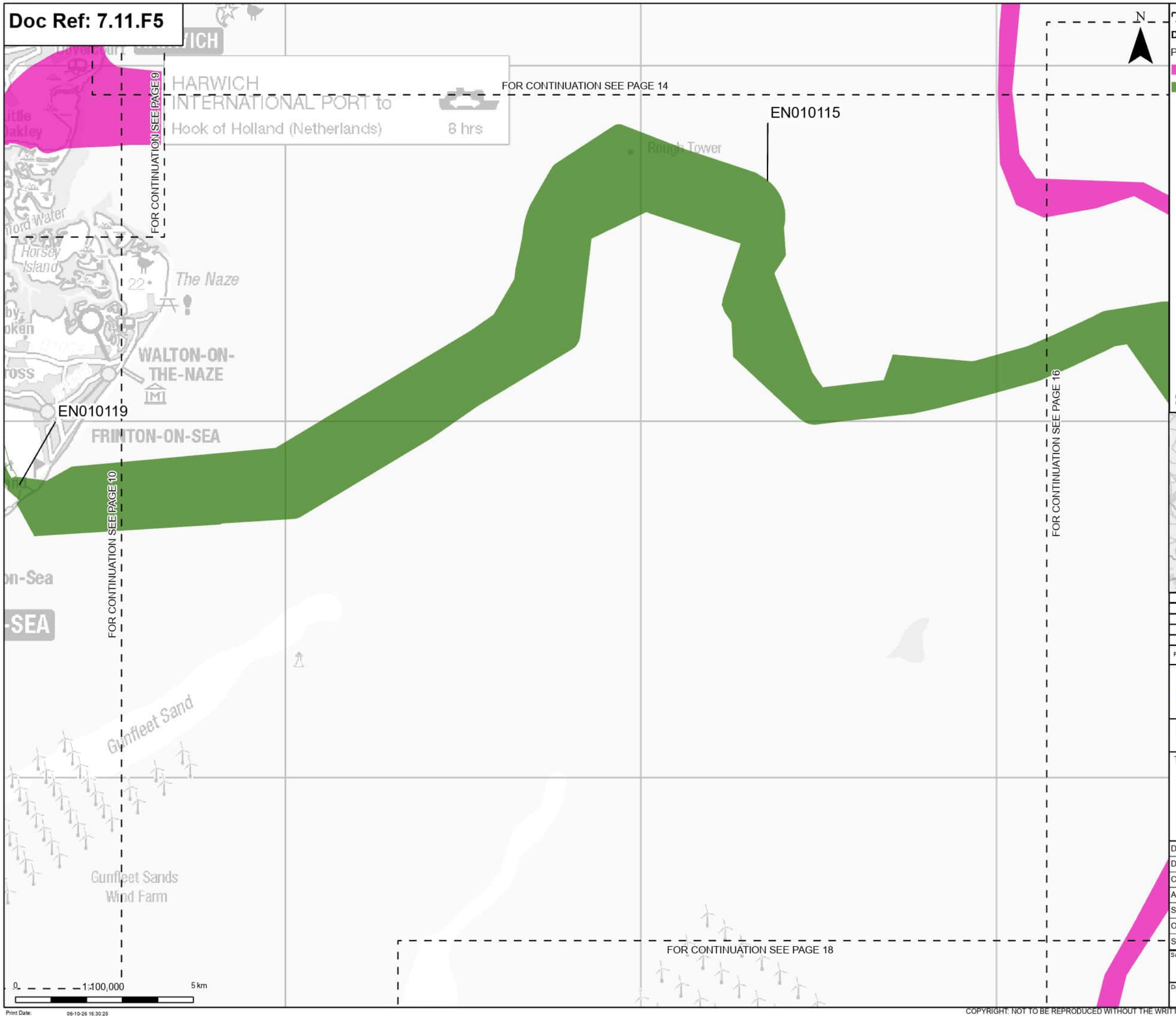
Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398
Revision: A

Print Date: 06-10-26 16:30:23

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Sheet index cutline

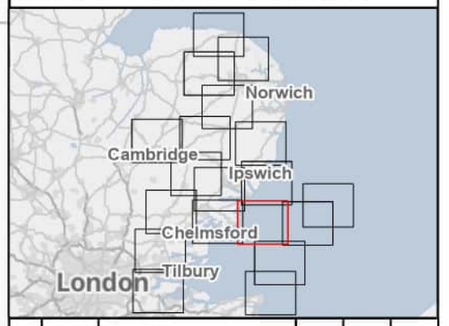
Discipline specific constraints

Planning application

Exclude

Include

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 15 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

Print Date: 06-10-26 16:30:25

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

FOR CONTINUATION SEE PAGE 14

FOR CONTINUATION SEE PAGE 15

FOR CONTINUATION SEE PAGE 17

FOR CONTINUATION SEE PAGE 18

N

EN010115

Sunk

Greater Gabbard Wind Farm

Galloper Wind Farm

0 1:100,000 5 km

Print Date: 06-10-26 16:30:27

Sheet index cutline

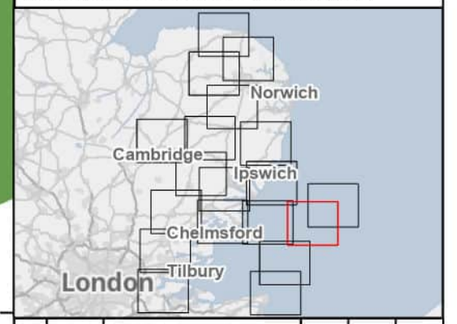
Discipline specific constraints

Planning application

Exclude

Include

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 16 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

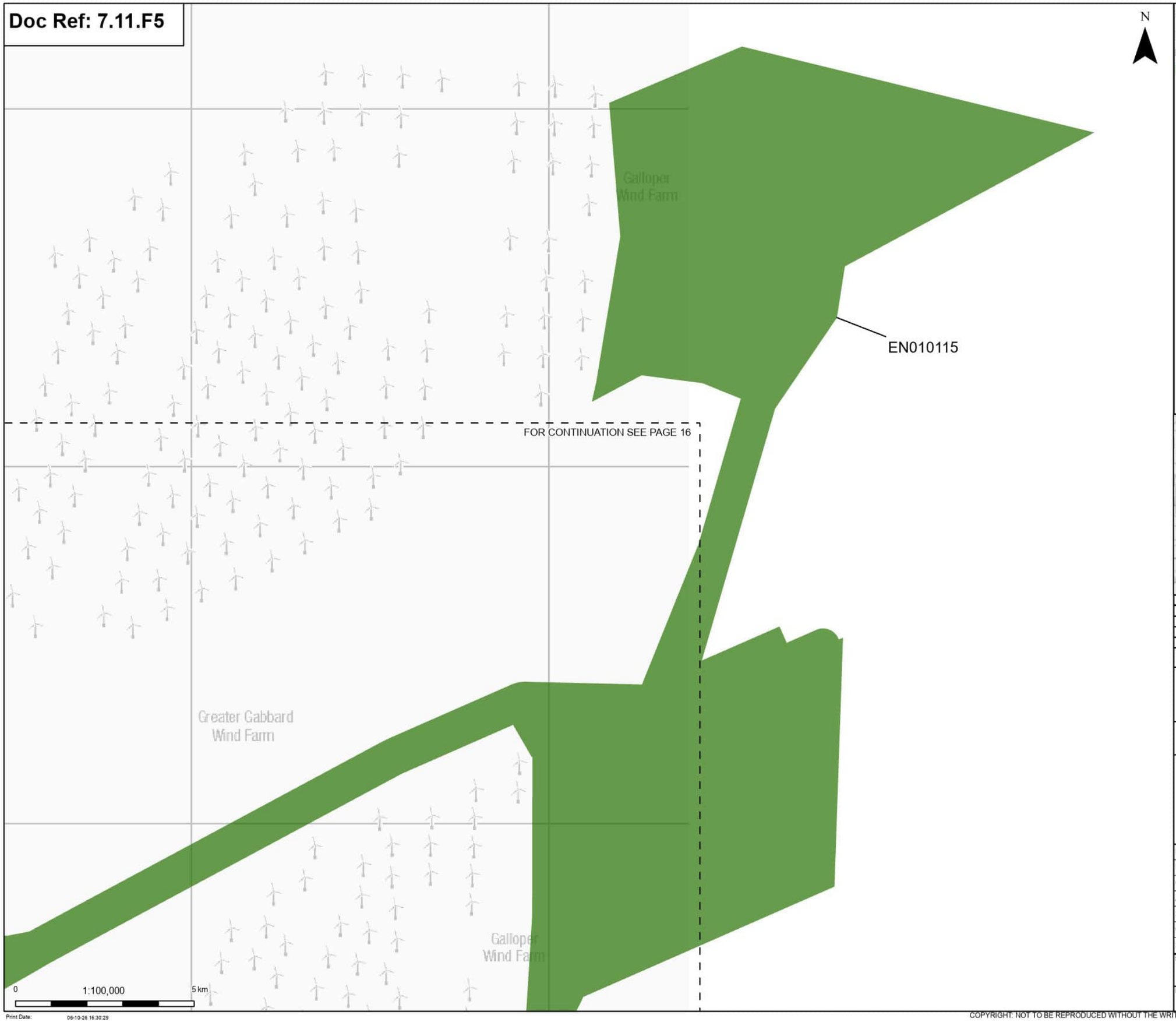
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



N

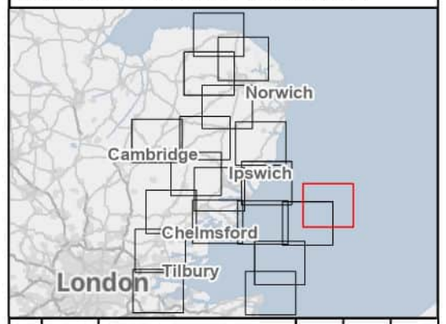
Sheet index cutline

Discipline specific constraints

Planning application

Include

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 17 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

Print Date: 06-10-26 16:30:29

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5

FOR CONTINUATION SEE PAGE 15

FOR CONTINUATION SEE PAGE 16

FOR CONTINUATION SEE PAGE 19

London Array Wind Farm

Thanet Wind Farm

N

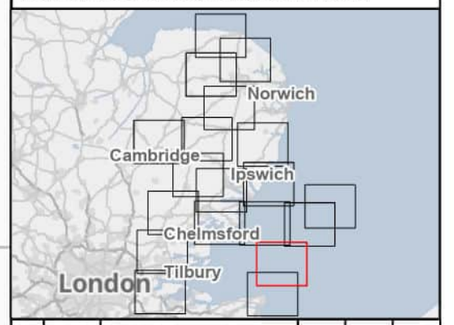
Sheet index cutline

Discipline specific constraints

Planning application

Exclude

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 18 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

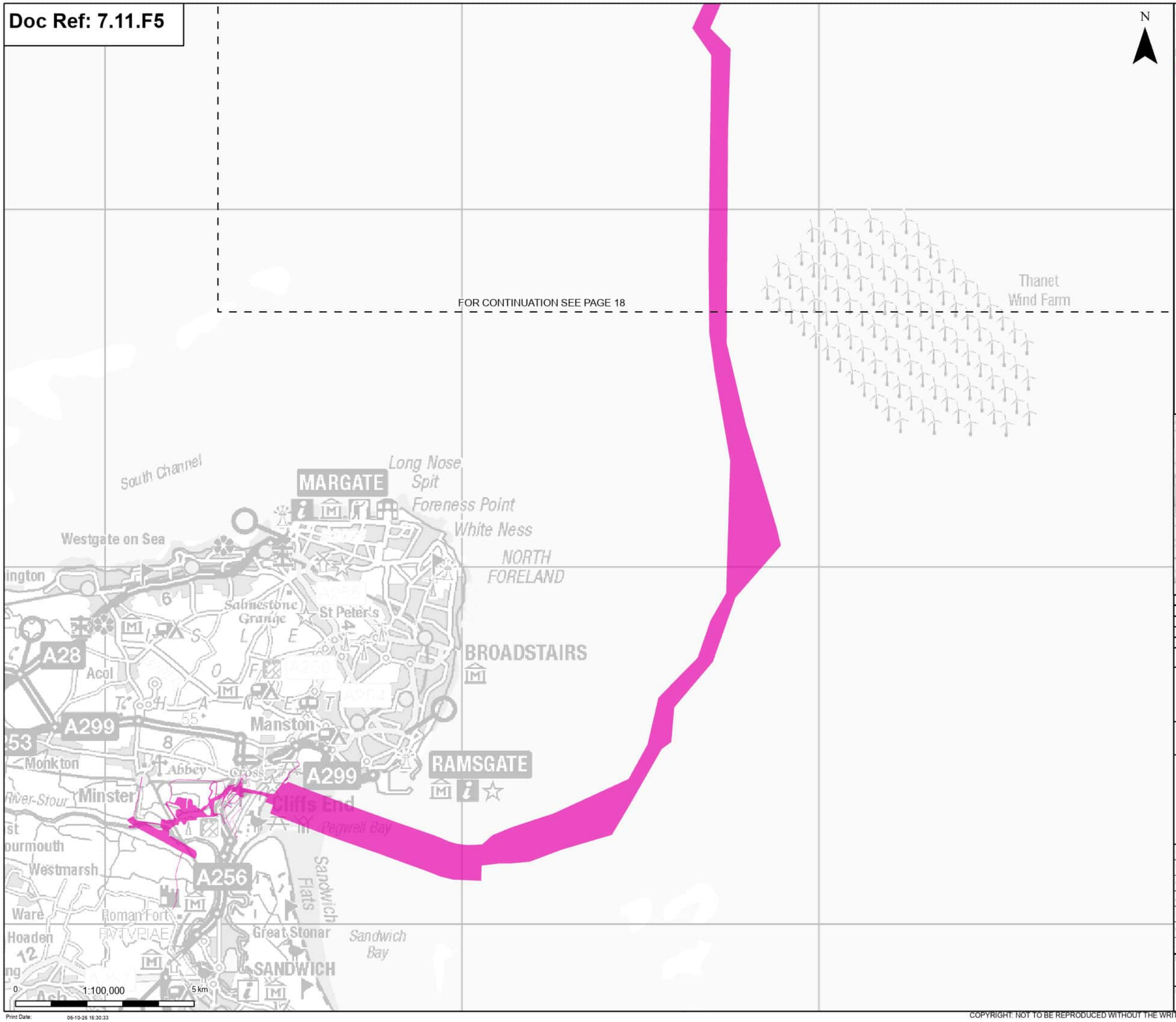
Revision: A

0 1:100,000 5 km

Print Date: 06-10-26 16:30:31

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

Doc Ref: 7.11.F5



Print Date: 06-10-26 16:30:33

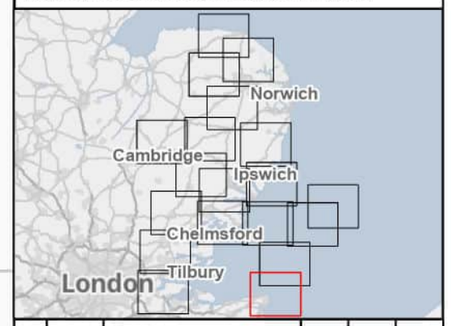
Sheet index cutline

Discipline specific constraints

Planning application

Exclude

Notes: © Crown copyright and database rights 2025 Ordnance Survey AC0000808122, Contains public sector information licensed under the Open Government Licence v3.0, © National Grid UK



Rev	Date	Description	Drawn	Check	Approv
B	June 2026	FOR DCO APPLICATION	NB	AF	KB
A	Aug 2025	FOR DCO APPLICATION	MP	AF	KB

nationalgrid

PROJECT: Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)

Title:

Figure 5 - Transport Assessment - Committed Development
Page 19 of 19

Designed	S. Thirlwell	Date	June 2026
Drawn	N. Banu	Date	June 2026
Checked	A. Fell	Date	June 2026
Approved	K. Burrows	Date	June 2026
Scale:	1:100,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:

Accepted as Concept Stage

Drawing Number: 10059280-ARC-EGN-ZZ-DR-ZZ-00398

Revision: A

COPYRIGHT: NOT TO BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF NATIONAL GRID ELECTRICITY TRANSMISSION Plc

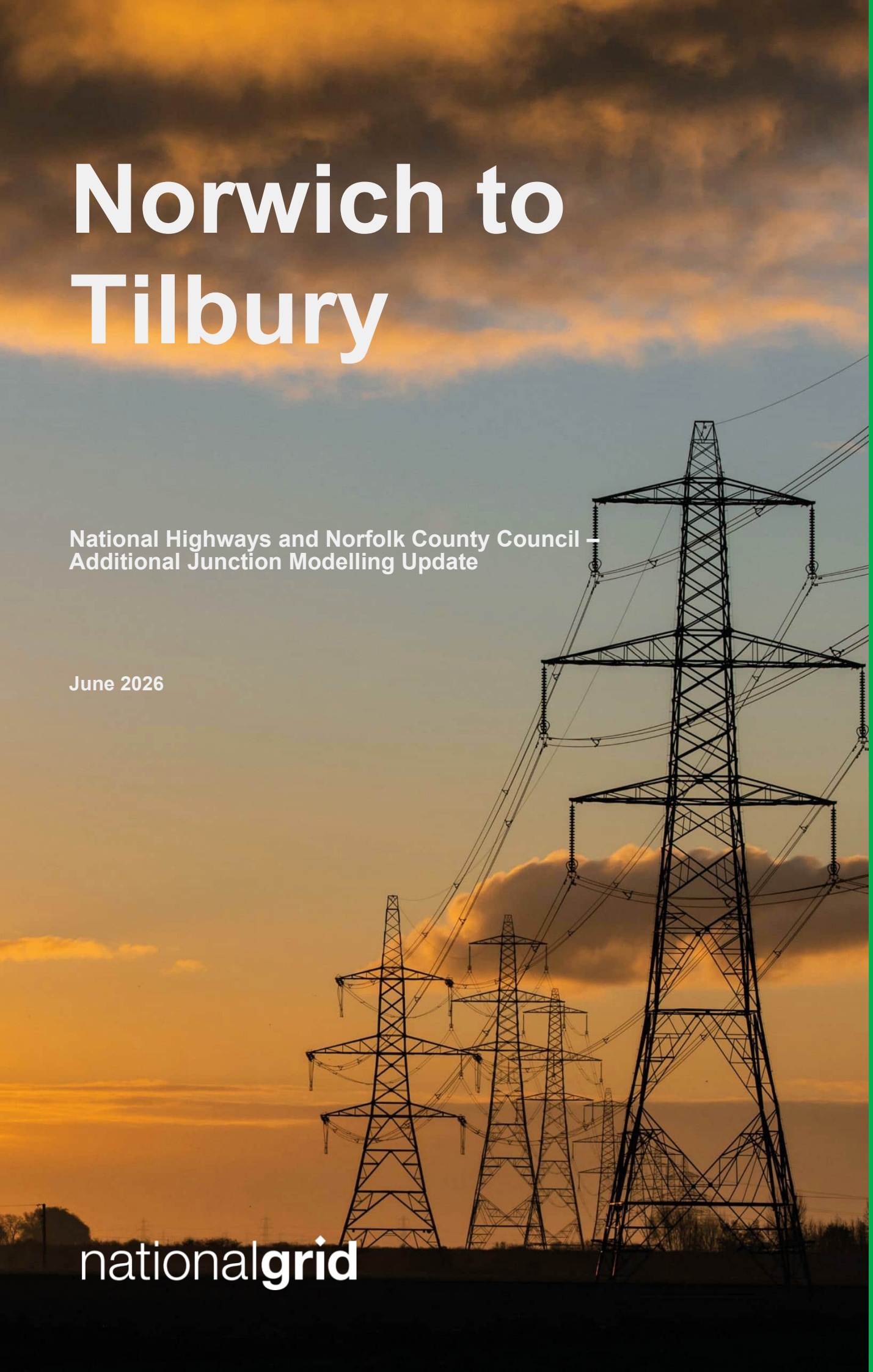
Appendix C. Junction Modelling Update Technical Notes

nationalgrid

Norwich to Tilbury

National Highways and Norfolk County Council – Additional Junction Modelling Update

June 2026



nationalgrid

Contents

1. Introduction 2

1.1 Background 2

1.2 Purpose of this Technical Note 3

2. Additional Junction Modelling Post DCO Submission 4

2.2 Site 1 – A47 Norwich Southern Bypass/ A140 Ipswich Rd Grade-separated roundabout 5

2.3 Site 12 – A11 Thetford Bypass / A134 / A1066 (Mundford Road) Roundabout 6

3. Overview of Mitigation 7

Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333) 7

Figure 2.1 Site 1 Total Junction Flow Comparison Chart 5

Abbreviations 8
Glossary 9
Bibliography 10

Appendix A Consultation on the junction modelling and mitigation
Appendix B Traffic Models and Outputs (Available Electronically upon Request)

1. Introduction

1.1 Background

1.1.1 Between April and August 2025 National Grid held meetings with all Local Highways Authorities and National Highways (NH) regarding the Transport Assessment (TA) (APP-333) and modelling assessments undertaken at junctions that are likely to be sensitive to a change in traffic flows as a result of the peak construction activity associated with the Norwich to Tilbury Project.

1.1.2 Where possible feedback received from Norfolk County Council (NCC)/NH was considered as detailed within 7.11 TA Appendix B – Consultation on the scope of the Assessment (APP-335) and shown in Appendix A of this technical note. The main topics that were considered are as follows:

- During the thematic group meetings between March and April 2024, National Grid shared the list of sensitive junctions that were identified for assessment within the TA (AP-333). Feedback was requested from NCC and NH to provide any additional junction that needed to be included in the assessment. They provided comments based on their local knowledge and concerns regarding junction capacity and road safety.
- During the thematic group meetings between September and October 2024 the proposed structure of the TA (APP-333) and modelling methodology were presented. NCC/NH agreed with the proposed methodology and structure of the TA.
- In January and February 2025, National Grid shared with the NCC/NH the junctions where proposed mitigation was required and arranged separate meetings to go through the junction modelling results and proposed mitigation.
- A draft version of the TA (APP-333) was shared with NCC and NH in February 2025 and feedback requested. Comments were received from NCC at the end of February and from NH in April 2025 and changes incorporated into the TA (APP-333).
- Meetings with NCC and NH were held between April and June 2025 to present the results of the junction modelling and proposed initial mitigation. There was agreement in principle of the additional mitigation in most locations subject to review of modelling files.
- Junction models were shared with NCC and NH in June 2025 to request feedback.
- Engagement with the NCC//NH between March 2024 and DCO submission August 2025 provided identification of additional planning applications. Development flows were reviewed to identify if they should be included in the assessment.

1.2 Purpose of this Technical Note

1.2.1 As a result of feedback received by NCC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post Development Consent Order (DCO) submission. This additional modelling was undertaken where NCC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not reflect accurate baseline operation.

1.2.2 This report has been prepared to address comments received from National Highways on the submitted transport modelling, as set out in Technical Notes TN03 (19th December 2025) and TN04 (10th February 2026). The purpose of this document is to also summarise the clarifications provided, describe any agreed amendments to the modelling approach and assumptions, and present updated modelling results where changes to the models have been implemented in response to National Highways' comments and from NCC.

1.2.3 The results of the additional modelling are presented within Section 2 of this technical note. Section 3 provides a summary of any changes required to the proposed mitigation identified within the TA (APP-333) as a result of the updated junction modelling. Traffic models and outputs are available electronically upon request as part of Appendix B.

2. Additional Junction Modelling Post DCO Submission

2.1.1 As a result of feedback received by NCC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post DCO submission.

2.1.2 The results of the junction modelling are presented below.

2.1.3 At the following junctions NCC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not appear to represent their understanding of current baseline conditions:

- Site 1 - A47 Norwich Southern Bypass/ A140 Ipswich Rd Grade-separated roundabout
- Site 12 - A11 Thetford Bypass / A134 / A1066 (Mundford Road) Roundabout

2.1.4 It is understood that the reason for this difference may be because these current conditions might not have been captured on the day when the traffic survey was undertaken. Therefore, this feedback was noted, and the junctions were resurveyed to confirm that observed conditions are accurately represented within the TA (APP-333). The additional traffic survey data was obtained in November 2025 on a typical weekday under normal traffic conditions and time period as the previous survey data obtained in 2024.

2.1.5 Before the junction modelling was re-run at the sites, a review of the latest survey traffic data obtained in November 2025 was compared with the original traffic survey data obtained in 2024. Where the traffic flow data did not show any evidence of a significant change the junction was not subject to remodelling. As such the original results within the TA (APP-333) were considered robust and remain valid.

2.1.6 Where junction modelling was rerun, the same scenarios within the TA (APP-333) were used (based on the existing highway layout):

- 2024 base year (survey year)
- Future Base year (TEMPro growth applied to the 2024 base year). The future base year was estimated individually for each site and was based on the worst-case peak period for the Project at each particular location
- Future Base + Committed Development year
- Future Base + Committed Development + Project worst case construction traffic.

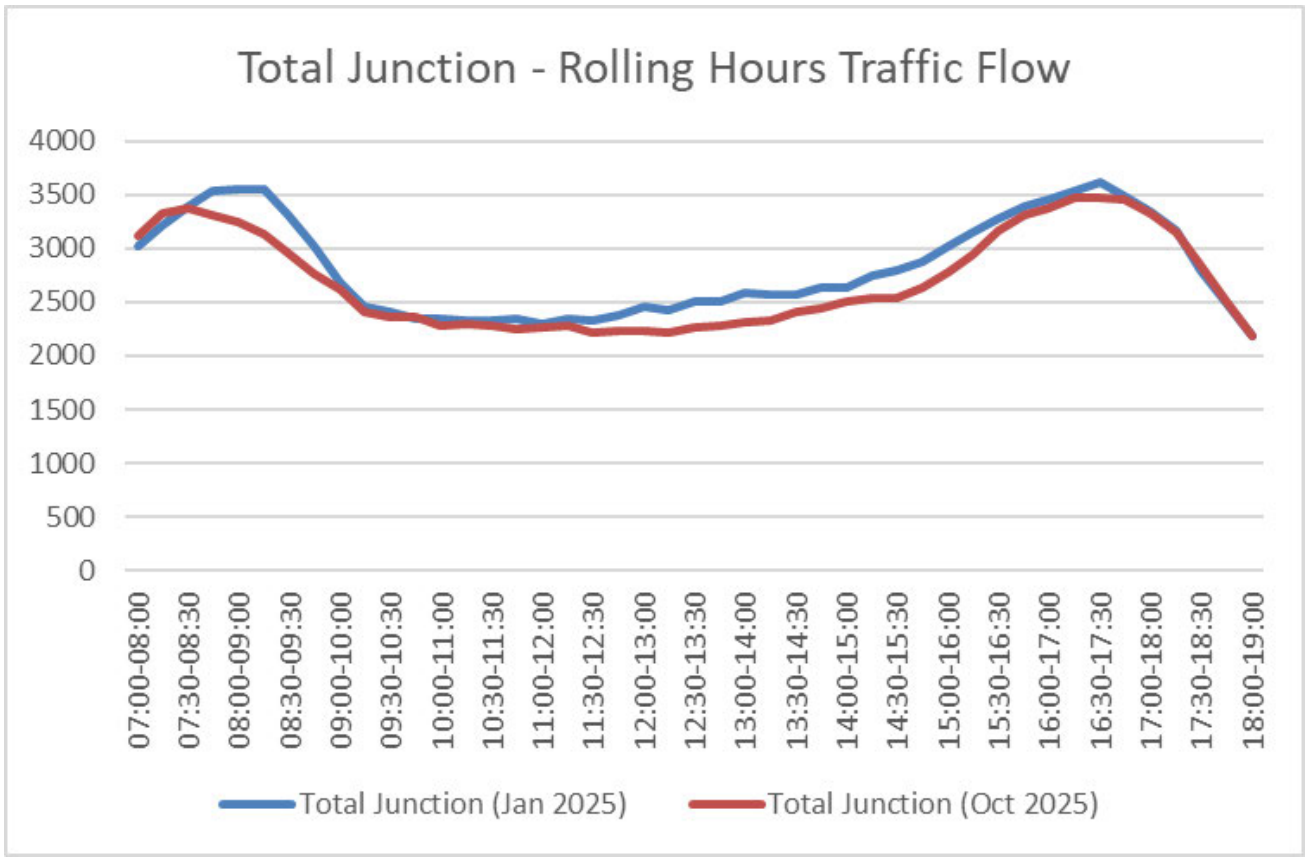
2.2 Site 1 – A47 Norwich Southern Bypass/ A140 Ipswich Rd Grade-separated roundabout

2.2.1 NH and Norfolk County Council provided feedback on the operation presented from the base model of Site 1- A47 Norwich Southern Bypass/ A140 Ipswich Rd Grade-separated roundabout. The site was then resurveyed in October 2025.

2.2.2 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in Figure 2.1, the re-survey traffic profile for Site 1 remains broadly comparable with the original survey in terms of overall demand patterns and peak timing, with the original survey representing the higher demand condition. This indicates that the base model remains appropriate for representing a conservative demand profile at the junction. There is day-to-day and seasonal variability in operational performance and queueing that is not fully captured by a single survey day or base model.

2.2.3 The junction was identified as sensitive during peak periods within the Transport Assessment (APP-333), and the Project mitigation strategy therefore focuses on operational management measures (including temporary warning signage and traffic management) to manage short-term variability during peak construction activity. On this basis and noting the temporary and limited scale of Project construction traffic relative to baseline demand, the conclusions of the TA remain valid.

Figure 2.1 Site 1 Total Junction Flow Comparison Chart



2.3 Site 12 – A11 Thetford Bypass / A134 / A1066 (Mundford Road) Roundabout

Key Outcomes

- Peak-hour construction traffic diversion assumptions have been fully incorporated.
- A robust worst-case assumption of 100% HGV diversion via the A11 has been tested.
- The modelling therefore fully reflects the potential impact of construction routing during peak periods.
- It represents the worst case scenario and therefore no additional modelling scenarios are required.

2.3.1 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of A120 Braintree Bypass / B1018 Braintree Rd Roundabout (Site 12).

2.3.2 Based on information provided by Primary Access Routes (PARs) for N2T construction traffic, during peak periods all HGVs that would otherwise route through Diss are expected to divert via the A11 / A134 / Mundford Road (Site 12) roundabout. The comment queried that it is unclear from the Outline Construction Traffic Management Plan (OCTMP) whether the impact of this peak-hour diversion has been incorporated into the junction modelling at Site 12, and this should be confirmed.

2.3.3 The junction modelling for the A11 / A134 / Mundford Road (Site 12) roundabout has accounted for the peak-hour diversion scenario. Specifically, the assessment tested and assumed 100% of HGV traffic is routed through the A11 (Thetford) rather than through Diss. Accordingly, the impact of peak hour diversions has been fully considered within the modelling. The traffic modelling therefore represents the worst-case scenario with 100% of HGVs routed through this location, no further scenario testing would be required as these would only reflect lower levels of demand.

3. Overview of Mitigation

3.1.1 As described in the TA (APP-333) the junction modelling undertaken presented the worst-case peak construction traffic which is generally only expected to occur for a short duration (e.g. one week). Based on the results of the junction capacity assessments during the AM and PM peak hours, mitigation was identified where possible for junctions during the construction period.

3.1.2 The results of the junction review and remodelling presented in Section 2 indicate that no additional mitigation beyond that identified in the TA (APP-333) is anticipated.

3.1.3 A summary of the proposed mitigation is shown below in Table 3.1 for SRN junctions and MRN junctions, which have previously been discussed with NCC/NH before DCO submission. Where highlighted in red, agreement on mitigation is still pending and further engagement with NCC/NH is required.

Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333)

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
Section A	Norfolk	Site 1	A47 Norwich Southern Bypass/ A140 Ipswich Rd	Priority Roundabout	Temporary signage to warn general traffic of peak hour congestion	No Change
	Norfolk	Site 12	A11 Thetford Bypass / A1066 Mundford Road	Priority Roundabout	No mitigation proposed	No Change

Abbreviations

Abbreviation	Full Reference
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
ES	Environmental Statement
IEMA	Institute of Environmental Management and Assessment
LHA	Local Highway Authority
LRN	Local Road Network
LTC	Lower Thames Crossing
MCC	Manual Classified Counts
MRN	Major Road Network
PAR	Primary Access Routes
SRN	Strategic Road Network
TA	Transport Assessment
TAG	Transport Analysis Guidance
V/C	Volume to capacity

Glossary

Term	Description
Committed development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Development Consent Order (DCO)	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Local Highway Authority (LHA)	The public authority whose duty it is to maintain and protect the safety and usability of public roads.
Major Road Network (MRN)	Routes in the middle tier of the road network (between the SRN and LRN), as defined by the Department for Transport. MRNs are managed by the Local Highway Authoritiess. For the Project, the Local Highway Authorities are Thurrock Council and Essex, Suffolk and Norfolk County Councils
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Primary Access Routes	Access routes on the public highway designated for use by construction vehicles (typically for HGVs) to travel from the strategic road network / major road network to the site access point.
Ratio of Flow to Capacity (RFC)	A measurement used to determine how bust an approach is at an unsignalised junction.
Strategic Road Network (SRN)	Comprises the motorway and trunk road network, managed by National Highways, as defined by the Department for Transport
Transport Assessment (TA)	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).

Bibliography

Websites

Department for Communities and Local Government (2014) *Travel Plans, Transport Assessments and Statements.* Available at https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

Department for Energy Security and Net Zero (2024a) *Overarching National Policy Statement for Energy (EN-1).* Available at https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1

Department for Transport (2024) *Transport Analysis Guidance*, Available at https://www.gov.uk/guidance/transport-analysis-guidance-tag

Institute of Environmental Management and Assessment (IEMA) (2023) *IEMA Guidelines: Environmental Assessment of Traffic and Movement*

National Highways (2023) *Design Manual for Roads and Bridges (DMRB) CD 116 Geometric Design of Roundabouts*. Available at: [redacted]

TEMPro (Trip End Model Presentation Program) software. Available at https://www.gov.uk/government/publications/tempro-downloads

Appendix A. Consultation on the junction modelling and mitigation

nationalgrid

Appendix A
Consultation on the junction modelling and mitigation

A.1.1 The engagement undertaken during the development of the TA (document reference 7.11) that is relevant to junction modelling and mitigation is presented in Table B-1.

Table B-1 Engagement undertaken relevant to the junction modelling and mitigation

Reference	Summary of discussions	National Grid's Response
Transport Working Group Meeting (Norfolk, Essex, Suffolk and Thurrock) April 2024	Suffolk County Council raised concerns at A140 Stoke Ash junction, noting the accident history in this location, and it was requested to be included in the assessment.	The Stoke Ash Workhouse Road junction has been reviewed and modelling results presented within section 7 of the TA (document reference 7.11).
Transport Working Group Regional Meeting (Norfolk) June 2024	Concerns raised over the route on the A1066 through Diss, and a preference to use the A1066 through Thetford as much as possible where the Local Highway Authority has not raised any concerns regarding sensitive junctions.	An alternative PAR west of Thetford has been assessed within the TA (document reference 7.11) to reduce the impact of the construction route through Diss. During peak hours construction traffic would be routed 100% through Thetford. Outside of these hours construction traffic would be split 50/50 and routed through both Diss and Thetford. Discussions have taken place with Norfolk County Council to agree this distribution of construction traffic based on the results of traffic modelling undertaken
Transport Working Group Regional Meeting (Norfolk) September 2024	General structure and content of TA was presented by National Grid and considered appropriate by Norfolk. Provided an overview of the initial capacity assessment methodology using.	Structure and modelling methodology has been used to develop the TA (document reference 7.11). A draft version of the TA (document reference 7.11) was submitted for comment in March 2025, and a response was provided by Norfolk.
Transport Working Group Meeting (Norfolk, Essex, Suffolk, Thurrock, National Highways)	National Grid presented a draft of TA. Ran through methodology of junction sifting process, junction assessment methodology and cumulative assessment.	Workshops with Norfolk undertaken to assess all mitigation on a case-by-case basis.

Reference	Summary of discussions	National Grid's Response
January 2025		
Transport Working Group Regional Meeting (Norfolk) January 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects for junctions and PARs predominately where Walkers, cyclists and horse riders (WCH) Amenity raised from detailed assessment within the ES (Volume 6 of the DCO application). Approach to mitigation agreed in principle but would require site specific measures to be identified based on future traffic conditions.	Mitigation workshops with Suffolk undertaken to assess all mitigation at the junctions and PARs on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3).
Transport Working Group Regional Meeting (Norfolk) March 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects on PARs predominately for WCH Amenity. Approach to mitigation agreed in principle.	The TA (document reference 7.11) provides a summary of the IEMA mitigation which included standard mitigation outlined within the Outline CTMP (document reference 7.3) and additional mitigation detailed within ES Chapter 16: traffic and transport (document reference 6.16).
Feedback on Transport Assessment (Norfolk) April 2025	National Grid presented a draft TA report and ran through comments received by Norfolk. This included core working hours being beyond acceptability, work outside of peak hours, supports stance to use Thetford as a construction access route, review of collision clusters needed, breakdown per county for tables requested, further details on peak duration and outside of peak movements and durations and additional developments provided for review.	Feedback received from Norfolk was reviewed at the meeting and has been incorporated in to the TA (document reference 7.11) in all relevant sections
Junction Modelling and Mitigation (Norfolk) April 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Request to discuss the need to avoid the A47 / A140 Ipswich Road roundabout during the AM peak hours with National Highways. In the A11 /	Findings of the junction modelling can be found within section 7 of the TA (document reference 7.11). A meeting with National Highways was held in May 2025 where the results of the junction modelling of the A47/A140 Ipswich Road and A11/A1066 roundabouts were discussed. Additional environmental mitigation as a result of the initial

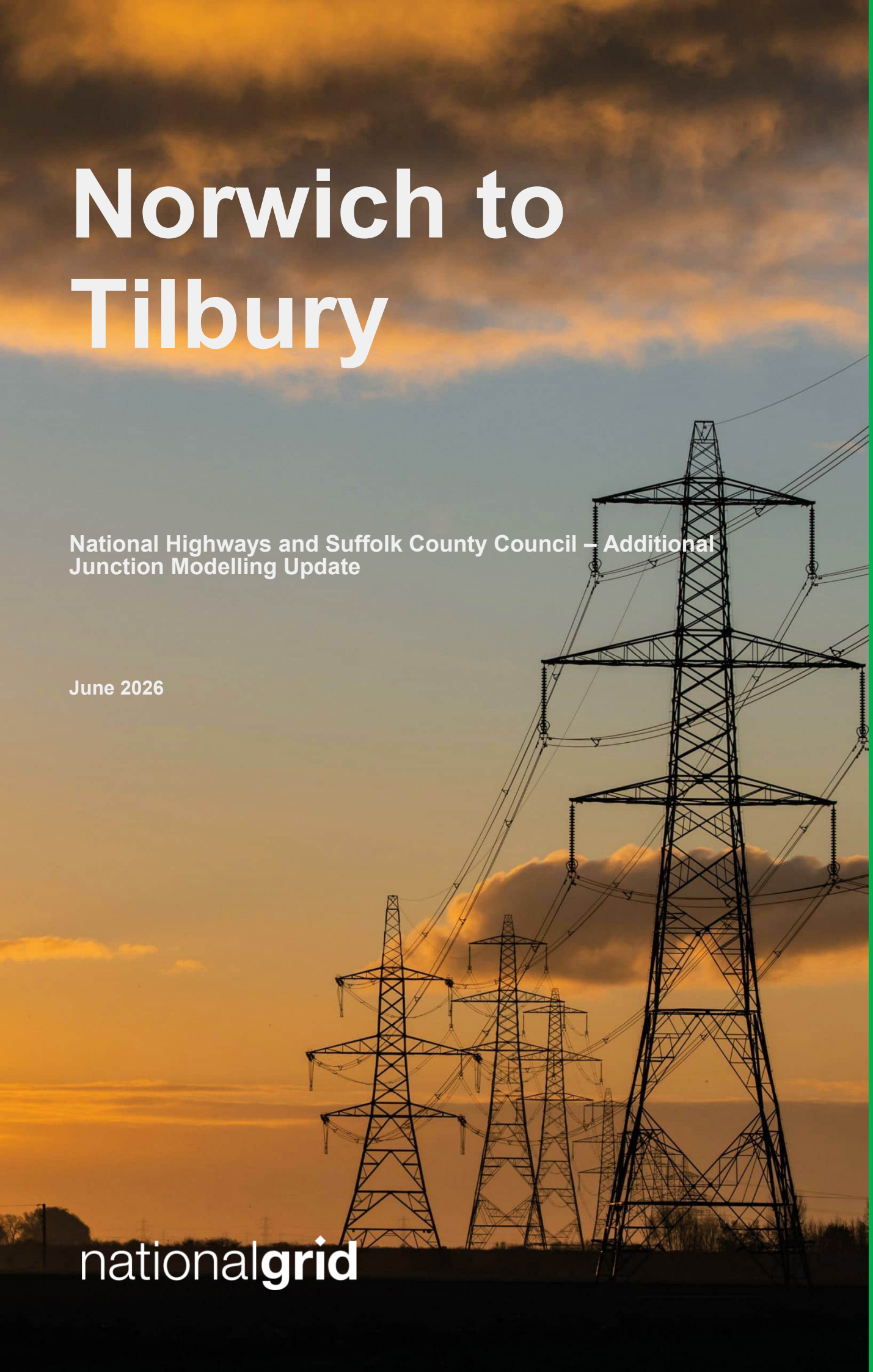
Reference	Summary of discussions	National Grid's Response
	A1066 roundabout it could be necessary to avoid peak hours. The baseline scenario is already over capacity with delays at Diss, but they want to explore the possibility of not adding more issues to the road. This applies to WCH amenity, crossings of schools, etc. Suggested to explore the off peak baseline flows and a comparison with the peak hour flows.	IEMA assessment are presented in ES Chapter 16: Traffic and Transport (document 6.16).

Appendix B
Traffic Models and Outputs (Available Electronically upon Request)

Norwich to Tilbury

National Highways and Suffolk County Council – Additional Junction Modelling Update

June 2026



nationalgrid

Contents

1. Introduction 3

1.1 Background 3

1.2 Purpose of this Technical Note 4

2. Additional Junction Modelling Post DCO Submission 5

2.2 Site 25 - A1120 / B1113 Needham Rd 6

2.3 Site 26 - A14 J52 Claydon roundabout 7

2.4 Site 27 - B1113 Bramford Rd / Bramford Rd 9

2.5 Site 29 - A12 Copdock Interchange 10

2.6 Site 31 - A1214 London Rd / A1071 19

2.7 Site 32 - A1071 / B1113 Swan Hill Roundabout 26

3. Overview of Mitigation 29

Table 2.1 2025 Queue Length Surveys vs Original 2024 Base Model Queues. 7
Table 2.2 Site 26 A14 J52 Claydon Roundabout Capacity Assessment 8
Table 2.3 Site 27 A1214 London Rd / A1071 Junction Capacity Assessment 10
Table 2.4 Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with excess queue limits (DM results) 13
Table 2.5 Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with excess queue limits (DM results) 14
Table 2.6 Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits (DS results) 15
Table 2.7 Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits (DS results) 16
Table 2.8 Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results) 17
Table 2.9 Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results) 18
Table 2.10 Site 31 J1: Proposed Poplar Lane Junction Capacity Assessment 20
Table 2.11 Site 31 J2: A1214 London Rd / A1071 Junction Capacity Assessment 21
Table 2.12 Site 31 J1: A1214 London Rd / A1071 Junction Capacity Assessment DS for Mitigation 23
Table 2.13 Site 31 J2: A1214 London Rd / A1071 Junction Capacity Assessment DS for Mitigation 24
Table 2.14 Site 32 Proposed A1071 / B1113 Swan Hill Roundabout Capacity Assessment 27
Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333) 29
Table 3.2 LRN Proposed Junction Mitigation within TA (APP-333) 29

Figure 2.1 Site 25 Total Junction Flow comparison chart 6
Figure 2.2 Site 27 Proposed Preliminary Design as a part of the Port One Business Park Transport Assessment (DC/22/06288) 9
Figure 2.3 Site 31 Proposed Design Drawing 19
Figure 2.4 Site 32 Proposed design drawing 27

Abbreviations 31
Glossary 32
Bibliography 33

Appendix A Consultation on the junction modelling and mitigation
Appendix B Traffic Models and Outputs (Available Electronically upon Request)

1. Introduction

1.1 Background

1.1.1 Between April and August 2025 National Grid held meetings with all Local Highways Authorities and National Highways (NH) regarding the Transport Assessment (TA) (APP-333) and modelling assessments undertaken at junctions that are likely to be sensitive to a change in traffic flows as a result of the peak construction activity associated with the Norwich to Tilbury Project.

1.1.2 Where possible feedback received from Suffolk County Council (SCC)/NH was considered as detailed within 7.11 TA Appendix B – Consultation on the scope of the Assessment (APP-335) and shown in Appendix A of this technical note. The main topics that were considered are as follows:

- During the thematic group meetings between March and April 2024, National Grid shared the list of sensitive junctions that were identified for assessment within the TA (AP-333). Feedback was requested from SCC and NH to provide any additional junction that needed to be included in the assessment. They provided comments based on their local knowledge and concerns regarding junction capacity and road safety.
- During the thematic group meetings between September and October 2024 the proposed structure of the TA (APP-333) and modelling methodology were presented. SCC/NH agreed with the proposed methodology and structure of the TA.
- In January and February 2025, National Grid shared with the SCC/NH the junctions where proposed mitigation was required and arranged separate meetings to go through the junction modelling results and proposed mitigation.
- A draft version of the TA (APP-333) was shared with SCC and NH in February 2025 and feedback requested. Comments were received from SCC at the end of February and from NH in April 2025 and changes incorporated into the TA (APP-333).
- Meetings with SCC and NH were held between April and June 2025 to present the results of the junction modelling and proposed initial mitigation. There was agreement in principle of the additional mitigation in most locations subject to review of modelling files.
- Junction models were shared with SCC and NH in June 2025 to request feedback.
- Engagement with the SCC//NH between March 2024 and DCO submission August 2025 provided identification of additional planning applications. Development flows were reviewed to identify if they should be included in the assessment.

1.2 Purpose of this Technical Note

1.2.1 As a result of feedback received by SCC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post Development Consent Order (DCO) submission. This additional modelling was undertaken where SCC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not reflect accurate baseline operation.

1.2.2 This report has been prepared to address comments received from National Highways on the submitted transport modelling, as set out in Technical Notes TN03 (19th December 2025) and TN04 (10th February 2026). The purpose of this document is to also summarise the clarifications provided, describe any agreed amendments to the modelling approach and assumptions, and present updated modelling results where changes to the models have been implemented in response to National Highways' comments.

1.2.3 The results of the additional modelling are presented within Section 2 of this technical note. Section 3 provides a summary of any changes required to the proposed mitigation identified within the TA (APP-333) as a result of the updated junction modelling. Traffic models and outputs are available as part of Appendix B.

2. Additional Junction Modelling Post DCO Submission

2.1.1 As a result of feedback received by SCC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post DCO submission.

2.1.2 The results of the junction modelling are presented below.

2.1.3 At the following junctions SCC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not appear to represent their understanding of current baseline conditions:

- Site 25 - A1120 / B1113 Needham Rd
- Site 26 - A14 J52 Claydon roundabout
- Site 27 - B1113 Bramford Rd / Bramford Rd
- Site 29 - A12 Copdock Interchange
- Site 31 - A1214 London Rd / A1071
- Site 32 - A1071 / B1113 Swan Hill Roundabout

2.1.4 It is understood that the reason for this difference may be because these current conditions might not have been captured on the day when the traffic survey was undertaken. Therefore, this feedback was noted, and the junctions were resurveyed to confirm that observed conditions are accurately represented within the TA (APP-333). The additional traffic survey data was obtained in November 2025 on a typical weekday under normal traffic conditions and time period as the previous survey data obtained in 2024.

2.1.5 Before the junction modelling was re-run at the sites, a review of the latest survey traffic data obtained in November 2025 was compared with the original traffic survey data obtained in 2024. Where the traffic flow data did not show any evidence of a significant change the junction was not subject to remodelling. As such the original results within the TA (APP-333) were considered robust and remain valid.

2.1.6 Where junction modelling was rerun, the same scenarios within the TA (APP-333) were used (based on the existing highway layout):

- 2024 base year (survey year)
- Future Base year (TEMPro growth applied to the 2024 base year). The future base year was estimated individually for each site and was based on the worst-case peak period for the Project at each particular location
- Future Base + Committed Development year
- Future Base + Committed Development + Project worst case construction traffic.

2.2 Site 25 - A1120 / B1113 Needham Rd

Site 25 - A1120 / B1113 Needham Rd

2.2.1 Suffolk County Council provided feedback on the operation presented from the base model of Site 25 - A1120 / B1113 Needham Rd. The site was then resurveyed in October 2025.

2.2.2 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in Figure 2.1, the total junction flows for Site 25 show a highly consistent volumes across both surveys for the entire day, with near-identical AM and PM peak magnitudes and timing, as well as similar interpeak volumes for total junction flow. The differences observed are deemed minor, with no major anomalies or shifts in demand pattern, indicating that traffic demand at this junction has remained stable. Therefore, the original modelling remains representative, and no remodelling is required. The Transport Assessment (App-333) results can be referenced as the basis for the modelling results for this site. An additional review of queue length data, shown in Table 2.1, at locations with consistent survey coverage between 2024 and 2025 shows that the 2024 base model provides a good representation of observed on-site conditions. On this basis, no further remodelling of the junction has been undertaken.

Figure 2.1 Site 25 Total Junction Flow comparison chart

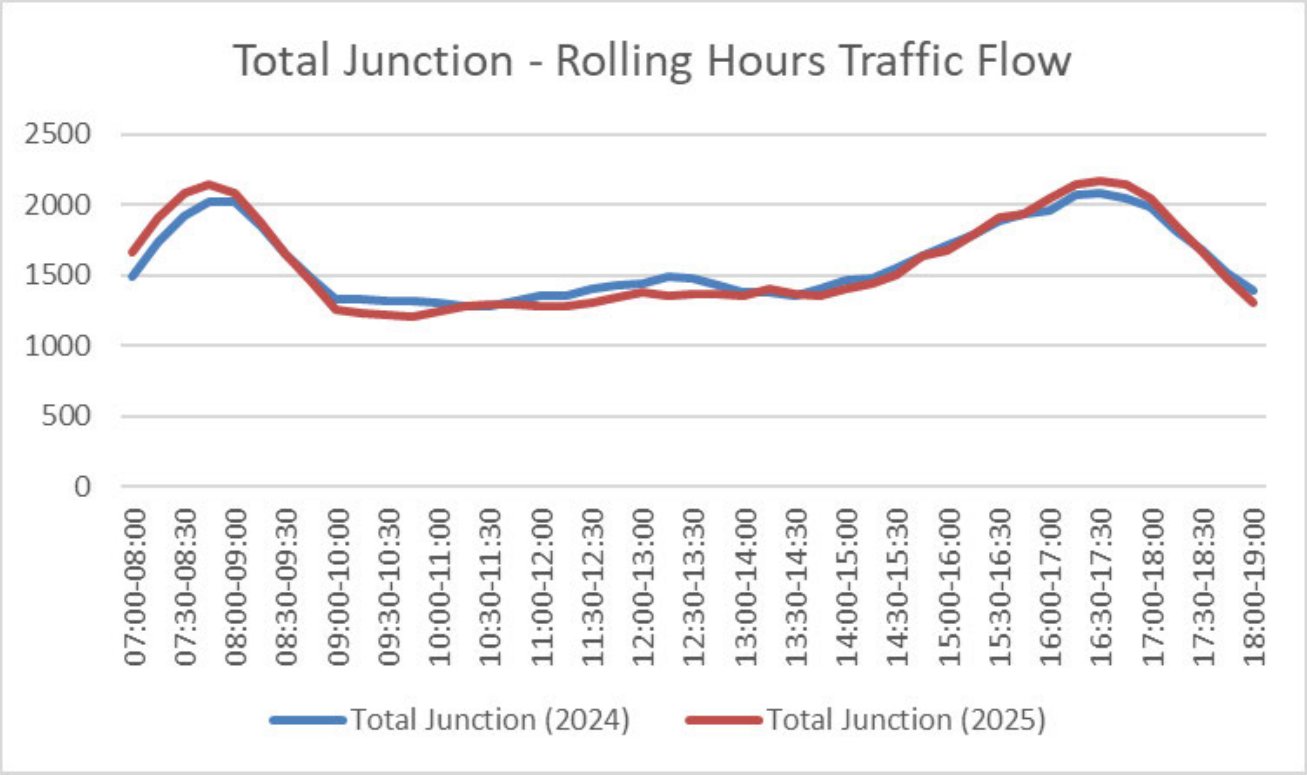


Table 2.1 2025 Queue Length Surveys vs Original 2024 Base Model Queues.

Approach	AM (8:00 to 9:00)		PM (16:30 to 17:30)	
	2024 Model Queues (PCU)	2025 Average Observed Queues (PCUs)	2024 Model Queues (PCU)	2025 Average Observed Queues (PCUs)
Access Road (N) Ahead U-Turn	0.9	1.75	1.3	2
A1120 (NE) Left	5.3	6	5.5	5
A1120 (NE) Right	11.2	10.25	12.3	12
B1113 Needham Road (SE) Ahead Lane 1	2.8	4	3.5	4
B1113 Needham Road (SE) Ahead Lane 2	2.8	3.25	3.5	4
B1113 Needham Road (SE) Right	7.3	10.5	8.2	15
B1113 Needham Road (NW) U-Turn Left	13.8	11	9.4	10
B1113 Needham Road (NW) Ahead	4	4	4	4

2.3 Site 26 - A14 J52 Claydon roundabout

2.3.1 Following a review of an updated 'Long List of other Developments' provided by the Arcadis Planning Team in August 2025, the additional committed development of Port One Business Park (planning reference DC/22/06288) was identified to meet the criteria to be included as a committed development.

2.3.2 The Port One Business Park development traffic is expected to pass through Site 26 - A14 J52 Claydon roundabout. The traffic modelling for Site 26 has been updated to include the peak hour traffic flow from this development.

2.3.3 The updated results with the additional committed development flows and network changes are presented in Table 2.2. The results indicate that the junction is predicted to operate well within capacity in all forecast scenarios with no significant delays. The addition of the Project traffic has a negligible impact on junction capacity and the conclusions from the Transport Assessment (App-333) remain valid.

Table 2.2 Site 26 A14 J52 Claydon Roundabout Capacity Assessment

Approach	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Base 2024						
Arm 1	0.6	4.79	0.35	0.4	4.43	0.28
Arm 2	0.8	3.59	0.45	0.9	4.05	0.49
Arm 3	1.0	3.84	0.47	1.0	3.79	0.50
Arm 4	0.1	3.02	0.09	0.2	3.55	0.14
Arm 5	1.7	5.08	0.60	1.5	5.03	0.60
Future Base						
Arm 1	0.7	5.24	0.38	0.5	4.79	0.31
Arm 2	1.0	3.89	0.48	1.1	4.47	0.52
Arm 3	1.1	4.14	0.50	1.2	4.12	0.53
Arm 4	0.1	3.16	0.09	0.2	3.76	0.15
Arm 5	1.9	5.6	0.64	1.8	5.61	0.64
Future Base plus Committed Developments						
Arm 1	1.1	7.58	0.49	0.7	6.58	0.39
Arm 2	1.3	5.18	0.55	1.5	6.30	0.61
Arm 3	1.8	5.68	0.61	1.9	5.73	0.64
Arm 4	0.1	3.77	0.11	0.2	4.49	0.18
Arm 5	3.6	8.72	0.76	3.6	9.11	0.78
Future Base plus Committed Developments and Project						
Arm 1	1.6	9.37	0.59	0.9	7.26	0.43
Arm 2	1.4	5.91	0.58	1.6	6.69	0.62
Arm 3	2.1	6.64	0.65	2	6.10	0.65
Arm 4	0.1	4.06	0.12	0.2	4.62	0.18
Arm 5	4.1	9.56	0.78	4.1	10.12	0.80

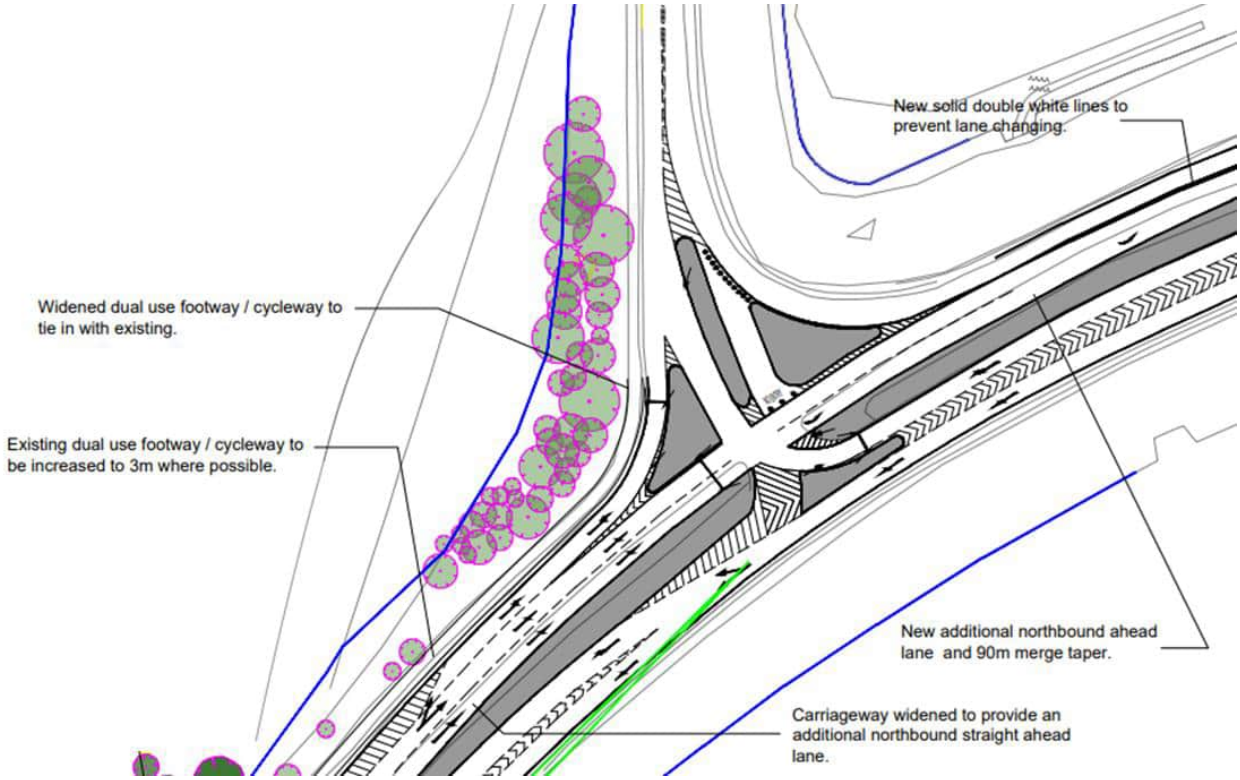
2.4 Site 27 - B1113 Bramford Rd / Bramford Rd

2.4.1 Following a review of an updated 'Long List of other Developments' provided by the Arcadis Planning Team in August 2025, the additional committed development of Port One Business Park (planning reference DC/22/06288) was identified to meet the criteria to be included in as a committed development.

2.4.2 The Port One Business Park development traffic is expected to pass through Site 27 - B1113 Bramford Rd / Bramford Rd.

2.4.3 The traffic modelling for Site 27 has been updated to include the peak hour traffic flow from this development. This development also proposes upgrades to the network at this junction as shown Figure 2.2.

Figure 2.2 Site 27 Proposed Preliminary Design as a part of the Port One Business Park Transport Assessment (DC/22/06288)



2.4.4 The updated results with the additional committed development flows and network changes are presented in Table 2.3. The results indicate that the junction is predicted to operate well within capacity in all forecast scenarios. The addition of the Project traffic has a negligible impact on junction capacity and the conclusions from the Transport Assessment (App-333) remain valid.

Table 2.3 Site 27 A1214 London Rd / A1071 Junction Capacity Assessment

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
2024 Base							
2/1	B1113 Bramford Road WB Ahead	0.1	1.3	20.4%	0.2	1.3	23.2%
2/2	B1113 Bramford Road WB Right	5.5	15.4	63.2%	6.2	15.2	67.9%
3/2+3/1	B1113 Bramford Road EB Left Ahead	1.6	13.0	29.5 : 23.8%	1.1	13.0	22.8 : 23.4%
Future Base							
2/1	B1113 Bramford Road WB Ahead	0.1	1.3	21.3%	0.2	1.3	24.3%
2/2	B1113 Bramford Road WB Right	4.5	9.5	51.2%	5.4	11.1	60.4%
3/2+3/1	B1113 Bramford Road EB Left Ahead	2.2	20.0	53.0 : 40.4%	1.4	16.8	32.8 : 33.6%
Future Base plus Committed Developments							
2/1	B1113 Bramford Road WB Ahead	0.3	1.5	33.5%	0.3	1.6	35.9%
2/2	B1113 Bramford Road WB Right	5.5	13.2	61.0%	5.6	11.3	61.9%
3/2+3/1	B1113 Bramford Road EB Left Ahead	3.7	19.9	61.7 : 61.7%	2.9	18.7	62.9 : 38.2%
Future Base plus Committed Developments and Project							
2/1	B1113 Bramford Road WB Ahead	0.3	1.6	37.4%	0.3	1.6	38.2%
2/2	B1113 Bramford Road WB Right	5.9	14.7	64.4%	6.1	12.8	65.2%
3/2+3/1	B1113 Bramford Road EB Left Ahead	3.7	18.5	60.0 : 60.0%	3.3	19.0	62.3 : 49.5%

2.5 Site 29 - A12 Copdock Interchange

2.5.1 NH and Suffolk County Council provided feedback on the operation presented from the base model of Site 29 - A14 J55 Copdock Interchange. The site and mid links between this junction and A1214 / Scrivener Drive roundabout could not be resurveyed due to ongoing roadworks at and around this location in October and November 2025 at the time of the survey campaign. Further engagement with the NH and Suffolk County Council will be undertaken.

Key Outcomes

- The modelling has been updated to reflect the agreed mitigation layout.
- Excess queue limits have been applied in accordance with LinSig guidance.

- The Do-Minimum scenario identifies limited capacity exceedances in future-year conditions.
- The Do-Something mitigation scheme operates within practical capacity across all tested scenarios.
- The proposed mitigation remains appropriate and effective.

2.5.2 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of Copdock Interchange (Site 29).

2.5.3 These comments related to the representation of the proposed mitigation scheme within the Do-Something (DS) scenario, specifically concerning the movement from Arm 3 Lane 3 to Arm 8 Lane 1. National Highways noted that, as the DS model reflects the proposed mitigation layout, the previous recommendation for the DS model to replicate the Do-Minimum (DM) arrangement for this movement was no longer considered applicable. Further comments were also provided in relation to lane lengths and junction geometry, particularly regarding the available storage capacity on circulatory links. In response, it was agreed that the application of an excess queue limit check represents a reasonable approach to address these concerns.

2.5.4 The modelling for Site 29 has therefore been reviewed and updated where necessary to reflect the agreed approach. The following modelling results summarise the amendments made and present the corresponding updated modelling results.

2.5.5 Excess queue limits have been applied only to those circulatory lanes where Modelled Mean Maximum Queues (MMQs) are predicted to reach or exceed 75% of the available lane storage length. This approach is consistent with guidance set out in the LinSig User Guide, which recommends that excess queue limits are typically set at approximately 75% of the available queuing space.

2.5.6 The application of excess queue limits prevents unrealistically long queues from forming within the model and provides a more realistic representation of how congestion would propagate through the junction in practice.

2.5.7 Excess queue limits have been implemented for all future year scenarios; however, they have not been applied to the Base model to maintain consistency with the validated model calibration against observed DoS conditions. The introduction of Excess Queue Limits (EQLs) on selected circulatory lanes has resulted in changes to the Degree of Saturation (DoS) on certain entry arms. This reflects the representation of finite storage within the LinSig model, whereby entry flows are constrained once queues reach the defined storage threshold. These changes represent a redistribution of available capacity within the junction rather than any change in traffic demand or signal control and are considered to provide a more realistic representation of future operational conditions.

2.5.8 Table 2.4 - Table 2.9 suggests that the implementation of Excess Queue limits results in both increases and decreases in capacity across multiple entry lanes, though the overall impact on capacity is generally limited. A notable exception is shown in Table 2.4, where the DoS for the A1214 (SB) Ahead Left lane exceeds practical capacity (98.5%) in the 'FB+CD+Project PM 85th %' scenario. Prior to the introduction of Excess Queue limits, this lane operated within practical capacity (DoS below 90%), indicating that the limits on the circulatory lane reduced the available capacity and green time for this movement. While this change pushes the lane above practical capacity in the DM model, all lanes in the DS mitigation model remain within

practical capacity across all scenarios, even with the application of the excess queue limits in the model.

2.5.9 In summary, while limited exceedances of practical capacity are identified under Do-Minimum conditions, these are addressed through the proposed mitigation. All movements within the Do-Something layout operate within practical capacity across all future-year scenarios, confirming that the mitigation proposed in the TA (APP-333) remains appropriate and should be retained.

Table 2.4 Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with excess queue limits (DM results)

Lane Description	Forecast AM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %
A1214 (SB) Ahead Left	82.8 : 82.8%	94.1 : 94.1%	82.5 : 82.5%	11.5	18.8	11.2	26.1	47.6	25.2
A1214 (SB) Ahead	56.5%	73.1%	54.4%	7.1	10.2	6.7	22.2	32.0	21.2
A14 (WB) Left	61.1%	84.4%	85.0%	7.4	12.6	11.7	23.6	40.6	38.0
A14 (WB) Ahead Left	84.9 : 56.6%	84.7 : 65.5%	80.3 : 64.1%	11.6	11.5	9.7	22.6	28.3	24.6
A12 (NB) Ahead Left	87.5 : 87.5%	96.4 : 96.4%	93.1 : 93.1%	17.6	34.7	24.4	14.6	31.5	22.0
A12 (NB) Ahead	72.8%	77.0%	78.6%	13.0	16.2	15.3	11.3	12.6	13.2
A14 EB Off Slip Left	40.6 : 40.6%	37.3 : 37.3%	39.8 : 39.8%	4.1	4.5	4.1	19.4	18.2	18.1
A14 EB Off Slip Ahead	84.1 : 79.6%	94.1 : 84.5%	92.7 : 92.3%	11.7	18.1	16.9	27.5	31.5	35.4

Table 2.5 Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with excess queue limits (DM results)

Lane Description	Forecast PM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD PM	FB+CD+ Project PM	FB+CD+ Project PM 85th %	FB+CD PM	FB+CD+ Project PM	FB+CD+ Project PM 85th %	FB+CD PM	FB+CD+ Project PM	FB+CD+ Project PM 85th %
A1214 (SB) Ahead Left	78.1 : 78.1%	86.6 : 86.6%	98.5 : 98.5%	9.3	13.3	20.8	22.9	31.5	65.6
A1214 (SB) Ahead	50.40%	61.80%	79.20%	6.3	8.1	7.8	20.3	26.2	36.4
A14 (WB) Left	61.30%	78.40%	85.20%	7.4	10.7	10.5	23.6	34.2	36.5
A14 (WB) Ahead Left	83.6 : 60.6%	84.8 : 68.3%	83.7 : 70.7%	11.4	11.6	9.3	22.8	27.6	24.0
A12 (NB) Ahead Left	85.3 : 85.3%	99.5 : 99.5%	98.3 : 98.3%	13.5	45.0	34.3	13.6	49.4	38.1
A12 (NB) Ahead	76.20%	84.90%	75.50%	14.4	20.2	12.2	13.6	16.4	11.7
A14 EB Off Slip Left	39.7 : 39.7%	43.5 : 43.5%	41.3 : 41.3%	4.1	4.9	3.8	18.6	20.7	16.4
A14 EB Off Slip Ahead	80.1 : 84.0%	98.8 : 99.2%	89.3 : 89.9%	12.1	28.3	13.4	26.7	64.0	29.1

Table 2.6 Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits (DS results)

Lane Description	Forecast AM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %
A1214 (SB) Ahead Left	82.8 : 82.8%	89.2 : 89.2%	87.3 : 87.3%	11.5	14.4	14.7	26.1	36.3	31.6
A1214 (SB) Ahead	56.5%	64.7%	53.2%	7.1	8.5	7.1	22.2	29.1	23.8
A14 (WB) Left	61.1%	88.9%	84.2%	7.4	13.8	12.5	23.6	48.5	40.4
A14 (WB) Ahead Left	84.9 : 56.6%	88.2 : 68.6%	84.8 : 65.5%	11.6	11.9	11.6	22.6	30.3	28.3
A12 (NB) Ahead Left	87.5 : 87.5%	88.3 : 88.3%	87.0 : 87.0%	17.6	14.7	14.2	14.6	14.2	14.0
A12 (NB) Ahead	72.8%	74.6%	73.7%	13.0	15.0	14.8	11.3	12.4	12.8
A14 EB Off Slip Left	40.6 : 40.6%	37.3 : 37.3%	36.5 : 36.5%	4.1	4.5	4.4	19.4	18.2	18.1
A14 EB Off Slip Ahead	84.1 : 79.6%	89.2 : 89.4%	83.9 : 85.8%	11.7	17.0	15.0	27.5	31.4	28.0

Table 2.7 Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits (DS results)

Lane Description	Forecast PM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD PM	FB+CD+ Project PM (DS)	FB+CD+ Project PM 85th % (DS)	FB+CD PM	FB+CD+ Project PM (DS)	FB+CD+ Project PM 85th % (DS)	FB+CD PM	FB+CD+ Project PM (DS)	FB+CD+ Project PM 85th % (DS)
A1214 (SB) Ahead Left	73.9 : 73.9%	79.4 : 79.4%	81.0 : 81.0%	8.7	9.1	10.7	20.0	21.6	27.2
A1214 (SB) Ahead	46.5%	53.0%	57.6%	5.9	5.7	7.9	18.1	19.1	24.6
A14 (WB) Left	64.1%	84.0%	84.0%	7.7	10.2	12.8	25.2	35.2	38.9
A14 (WB) Ahead Left	87.4 : 63.4%	84.9 : 70.7%	76.5 : 67.2%	12.0	9.5	10.3	24.5	24.2	26.4
A12 (NB) Ahead Left	83.7 : 83.7%	89.4 : 89.4%	89.2 : 89.2%	12.0	12.0	16.3	12.2	14.7	15.6
A12 (NB) Ahead	74.4%	86.3%	79.3%	13.7	17.2	17.2	12.4	17.5	14.7
A14 EB Off Slip Left	39.7 : 39.7%	38.2 : 38.2%	37.4 : 37.4%	4.1	3.6	4.5	18.6	14.6	18.2
A14 EB Off Slip Ahead	80.1 : 84.0%	86.2 : 87.3%	80.7 : 81.4%	12.1	13.0	13.4	26.7	24.6	26.2

Table 2.8 Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results)

Lane Description	Forecast AM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD AM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+ CD AM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+ CD AM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)
A1214 (SB) Ahead Left	82.8 : 82.8%	86.9 : 86.9%	86.5 : 86.5%	11.5	12.7	12.3	26.1	30.0	29.7
A1214 (SB) Ahead	56.5%	51.3%	52.3%	7.1	6.1	6.3	22.2	22.6	22.8
A14 (WB) Left	61.1%	80.7%	83.3%	7.4	10.9	11.7	23.6	34.3	36.5
A14 (WB) Ahead Left	84.9 : 56.6%	82.2 : 65.6%	81.8 : 65.6%	11.6	10.5	10.4	22.6	25.3	25.3
A12 (NB) Ahead Left	87.5 : 87.5%	82.0 : 82.0%	82.0 : 82.0%	17.6	9.4	9.4	14.6	12.3	12.3
A12 (NB) Ahead	72.8%	77.2%	78.2%	13.0	15.0	15.3	11.3	14.5	14.9
A14 EB Off Slip Left	40.6 : 40.6%	36.0 : 36.0%	37.6 : 37.6%	4.1	3.9	4.0	19.4	17.2	18.1
A14 EB Off Slip Ahead	84.1 : 79.6%	84.6 : 85.9%	88.4 : 88.2%	11.7	13.9	14.7	27.5	27.2	30.4

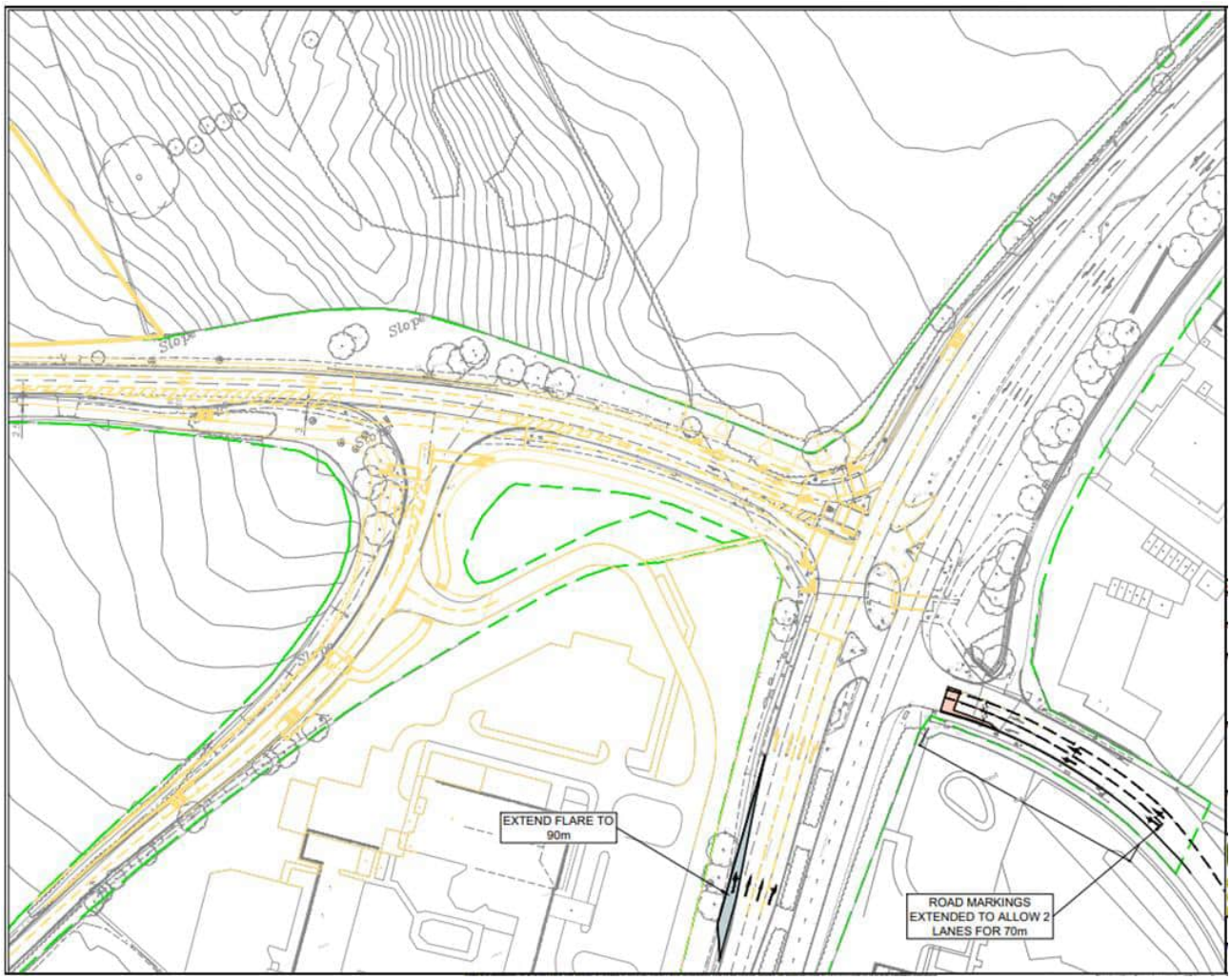
Table 2.9 Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results)

Lane Description	Forecast PM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD PM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+CD PM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+CD PM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)
A1214 (SB) Ahead Left	73.9 : 73.9%	75.1 : 75.1%	80.7 : 80.7%	8.7	8.5	9.6	20.0	21.9	25.6
A1214 (SB) Ahead	46.5%	53.6%	57.9%	5.9	6.8	7.1	18.1	20.8	23.3
A14 (WB) Left	64.1%	77.9%	80.2%	7.7	10.2	10.8	25.2	31.7	33.3
A14 (WB) Ahead Left	87.4 : 63.4%	81.4 : 69.1%	81.1 : 69.1%	12.0	10.5	10.4	24.5	25.1	25.0
A12 (NB) Ahead Left	83.7 : 83.7%	89.8 : 89.8%	88.0 : 88.0%	12.0	15.7	13.2	12.2	16.2	14.7
A12 (NB) Ahead	74.4%	78.5%	80.1%	13.7	15.3	16.1	12.4	14.4	15.1
A14 EB Off Slip Left	39.7 : 39.7%	39.7 : 39.7%	39.7 : 39.7%	4.1	4.1	4.1	18.6	18.6	18.6
A14 EB Off Slip Ahead	80.1 : 84.0%	83.0 : 81.1%	76.6 : 87.5%	12.1	11.8	12.7	26.7	26.7	26.7

2.6 Site 31 - A1214 London Rd / A1071

2.6.1 The planning application Land north of the A1071 (DC/21/02671), included as committed development in the Transport Assessment (APP-333), provided an upgrade of Site 31 – A1214 London Rd / A1071. This Site 31 has been modelled in the future year scenarios with the proposed highway layout. The proposed upgrades to the network are shown in Figure 2.3.

Figure 2.3 Site 31 Proposed Design Drawing



2.6.2 The assessment for Site 31 is based on the proposed LinSig model that was developed as part of the planning application for Land north of the A1071 (DC/21/02671). This model was used to reflect the proposed highway junction configuration as it includes the adjacent junction (A1071/Poplar Lane).

2.6.3 The LinSig model from the planning application was then replicated within LinSig and populated with the flows presented in the Transport Assessment (APP-333).

2.6.4 The results for the proposed LinSig model for Site 31 are presented for two connected junctions, with Junction 1 being the Poplar Lane junction and Junction 2 being the A1214 London Road / A1071 junction, as shown in Table 2.10 and Table 2.11 respectively. The results for the J2: A1214 London Road / A1071 Junction

displayed in Table 2.11 shows that the junction operates within practical capacity for all lanes in both the AM and PM peak periods in the Base scenario. All lanes continue to operate within practical capacity for all future scenarios in the AM peak, however lanes A1214 London Road WB Ahead Left (1/1+1/2), Scrivener Drive NB Left Ahead Right (2/2+2/1), A1071 SB Right Left Ahead (4/2+4/1) and A1071 SB Right (4/3) operate above practical capacity for the future scenarios in the PM peak. From these lanes A1071 SB Right Left Ahead (4/2+4/1) has the highest DoS value of 93.1% with queues and delays of 15.5 PCU and 83.4 seconds respectively.

2.6.5 The results for the J1: Poplar Lane Junction displayed in Table 2.10 indicate that the junction is predicted to operate well within capacity in all forecast scenarios.

Table 2.10 Site 31 J1: Proposed Poplar Lane Junction Capacity Assessment

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
Base 2019							
1/1+1/2	A1071 SB Ahead Right	4.0	10.4	32.5 : 32.5%	6.6	4.5	37.1 : 37.1%
2/1	A1071 NB Ahead Left	0.7	6.7	5.5%	8.1	0.2	2.4%
2/2	A1071 NB Ahead	1.1	2.2	41.4%	10.7	4.0	37.0%
3/2+3/1	Poplar Lane Right Left	2.7	61.9	40.3 : 40.3%	9.6	2.2	33.6 : 33.6%
Future Base							
1/1+1/2	A1071 SB Ahead Right	5.0	11.7	39.9 : 39.9%	9.5	4.8	39.6 : 39.6%
2/1	A1071 NB Ahead Left	0.8	7.0	6.3%	10.1	0.4	2.7%
2/2	A1071 NB Ahead	1.6	2.4	44.6%	11.5	0.8	49.6%
3/2+3/1	Poplar Lane Right Left	3.0	58.9	40.5 : 40.5%	12.2	2.6	40.1 : 40.1%
Future Base plus Committed Developments							
1/1+1/2	A1071 SB Ahead Right	5.1	11.0	41.8 : 41.8%	10.1	4.5	39.9 : 39.9%
2/1	A1071 NB Ahead Left	0.7	5.9	6.2%	10.7	0.4	2.7%
2/2	A1071 NB Ahead	1.6	2.3	44.6%	11.8	0.9	51.4%
3/2+3/1	Poplar Lane Right Left	3.2	63.3	45.5 : 45.5%	12.9	2.6	40.1 : 40.1%
Future Base plus Committed Developments and Project							

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
1/1+1/2	A1071 SB Ahead Right	5.6	12.2	45.0 : 45.0%	9.9	5.3	43.3 : 43.3%
2/1	A1071 NB Ahead Left	0.8	7.5	6.3%	10.6	0.4	2.7%
2/2	A1071 NB Ahead	1.2	2.5	48.1%	12.4	0.8	53.8%
3/2+3/1	Poplar Lane Right Left	3.0	58.9	40.5 : 40.5%	14.5	2.6	40.1 : 40.1%

2.6.6 The results for the J2: A1214 London Road / A1071 Junction displayed in Table 2.11 shows that the junction operates within practical capacity for all lanes in both the AM and PM peak periods in the Base scenario. All lanes continue to operate within practical capacity for all future scenarios in the AM peak, however lanes A1214 London Road WB Ahead Left (1/1+1/2), Scrivener Drive NB Left Ahead Right (2/2+2/1), A1071 SB Right Left Ahead (4/2+4/1) and A1071 SB Right (4/3) operate above practical capacity for the future scenarios in the PM peak. From these lanes Scrivener Drive NB Left Ahead Right (2/2+2/1) has the highest DoS value of 95.7% with queues and delays of 16.9 PCU and 113.2 seconds respectively.

Table 2.11 Site 31 J2: A1214 London Rd / A1071 Junction Capacity Assessment

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
Base 2019							
1/1+1/2	A1214 London Road WB Ahead Left	6.6	35.8	38.5%	8.8	36.1	47.4%
1/3	A1214 London Road WB Right	8.1	52.5	76.5 : 76.5%	9.3	42.3	51.6 : 71.0%
2/2+2/1	Scrivener Drive NB Left Ahead Right	10.7	57.2	74.7 : 74.7%	7.4	65.3	68.3 : 68.3%
3/1	A1214 London Road EB Left	9.6	48.3	67.0 : 67.0%	7.9	44.5	56.7 : 56.7%
3/3+3/2	A1214 London Road EB Ahead	6.0	46.0	42.8%	6.9	46.2	47.6%
3/4	A1214 London Road EB Right	0.3	66.8	6.6%	0.8	68.7	16.8%
4/2+4/1	A1071 SB Right Left Ahead	8.1	51.2	75.4 : 75.4%	9.4	45.0	71.9 : 71.9%
4/3	A1071 SB Right	6.9	60.3	64.1%	8.3	51.1	63.7%
Future Base							
1/1+1/2	A1214 London Road WB Ahead Left	9.5	40.7	53.4%	8.5	38.7	48.4%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
1/3	A1214 London Road WB Right	10.1	46.0	56.0 : 78.9%	9.1	45.7	51.4 : 85.1%
2/2+2/1	Scrivener Drive NB Left Ahead Right	11.5	67.3	80.5 : 80.5%	12.9	70.9	84.0 : 84.0%
3/1	A1214 London Road EB Left	12.2	56.2	80.0 : 80.0%	13.9	58.5	84.5 : 84.5%
3/3+3/2	A1214 London Road EB Ahead	5.5	46.6	41.0%	6.7	47.1	47.4%
3/4	A1214 London Road EB Right	0.4	67.2	8.8%	2.3	77.1	43.9%
4/2+4/1	A1071 SB Right Left Ahead	10.6	51.3	79.1 : 79.1%	12.0	63.1	85.6 : 85.6%
4/3	A1071 SB Right	9.4	57.8	71.5%	10.4	68.1	80.1%
Future Base plus Committed Developments							
1/1+1/2	A1214 London Road WB Ahead Left	10.1	41.3	55.8%	8.9	39.0	49.7%
1/3	A1214 London Road WB Right	10.7	46.4	58.5 : 79.3%	9.5	46.0	53.0 : 86.5%
2/2+2/1	Scrivener Drive NB Left Ahead Right	11.8	68.9	81.9 : 81.9%	13.7	79.4	87.7 : 87.7%
3/1	A1214 London Road EB Left	12.9	57.9	82.5 : 82.5%	15.3	59.8	86.8 : 86.8%
3/3+3/2	A1214 London Road EB Ahead	6.1	47.4	44.6%	7.4	47.0	50.8%
3/4	A1214 London Road EB Right	0.4	67.2	8.8%	2.2	72.0	39.0%
4/2+4/1	A1071 SB Right Left Ahead	12.0	57.1	83.8 : 83.8%	12.6	67.6	86.6 : 86.6%
4/3	A1071 SB Right	10.7	62.9	77.8%	11.9	73.8	85.8%
Future Base plus Committed Developments and Project							
1/1+1/2	A1214 London Road WB Ahead Left	9.9	40.1	54.4%	8.8	37.9	48.5%
1/3	A1214 London Road WB Right	10.6	46.3	57.4 : 85.4%	9.4	45.3	52.1 : 86.5%
2/2+2/1	Scrivener Drive NB Left Ahead Right	12.4	75.9	85.4 : 85.4%	14.9	92.0	91.6 : 91.6%
3/1	A1214 London Road EB Left	14.5	58.6	85.0 : 85.0%	18.3	68.3	91.9 : 91.9%
3/3+3/2	A1214 London Road EB Ahead	5.9	44.8	41.5%	7.3	45.6	49.1%
3/4	A1214 London Road EB Right	0.4	67.2	8.8%	2.2	72.0	39.0%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
4/2+4/1	A1071 SB Right Left Ahead	13.6	63.9	87.9 : 87.9%	15.5	83.4	93.1 : 93.1%
4/3	A1071 SB Right	12.1	69.2	83.6%	13.4	87.3	90.1%

2.6.7 Cycle time optimisation has been applied to the FB+CD+ Project PM scenario and increasing the cycle time from 120 to 142 seconds would result in it operating within practical capacity with the predicted Project construction traffic. Given the temporary nature of the construction traffic, it is considered reasonable for the junction to operate with a slightly longer cycle time for the duration of the construction period.

2.6.8 An additional improvement at the junction which could be considered is to updated the signal controller, intergreens, phase delays and road markings. This would result in all future scenarios operating within practical capacity without the need to increase the cycle time. The key improvements would be to update the staging, road markings and phase delays and. The results are presented in Table 2.12 and Table 2.13.

2.6.9 These measures represent operational signal optimisation within the scope of mitigation already identified in the TA (APP-333), rather than additional physical mitigation

Table 2.12 Site 31 J1: A1214 London Rd / A1071 Junction Capacity Assessment DS for Mitigation

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
Base 2019							
1/1+1/2	A1071 SB Ahead Right	4.2	10.4	32.8 : 32.8%	4.7	4.5	37.1 : 37.1%
2/1	A1071 NB Ahead Left	0.6	4.5	4.4%	15.4	0.4	2.1%
2/2	A1071 NB Ahead	5.9	9.1	32.9%	126.6	4.9	32.9%
3/2+3/1	Poplar Lane Right Left	2.7	61.9	40.3 : 40.3%	6.7	2.2	33.6 : 33.6%
Future Base							
1/1+1/2	A1071 SB Ahead Right	5.2	12.7	40.8 : 40.8%	7.2	4.6	38.8 : 38.8%
2/1	A1071 NB Ahead Left	0.9	7.6	6.4%	7.0	0.4	2.6%
2/2	A1071 NB Ahead	2.7	3.1	45.6%	11.1	1.2	48.5%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
3/2+3/1	Poplar Lane Right Left	2.9	55.4	36.5 : 36.5%	10.9	2.7	44.4 : 44.4%
Future Base plus Committed Developments							
1/1+1/2	A1071 SB Ahead Right	5.1	11.1	41.8 : 41.8%	8.4	4.1	38.7 : 38.7%
2/1	A1071 NB Ahead Left	0.9	6.8	6.2%	7.5	0.4	2.6%
2/2	A1071 NB Ahead	1.1	2.5	44.6%	11.4	0.8	49.7%
3/2+3/1	Poplar Lane Right Left	3.2	63.3	45.5 : 45.5%	11.5	2.7	47.9 : 47.9%
Future Base plus Committed Developments and Project							
1/1+1/2	A1071 SB Ahead Right	5.4	11.3	44.0 : 44.0%	8.4	4.9	42.1 : 42.1%
2/1	A1071 NB Ahead Left	0.9	6.9	6.2%	7.5	0.4	2.6%
2/2	A1071 NB Ahead	1.1	2.5	47.0%	11.8	0.9	52.0%
3/2+3/1	Poplar Lane Right Left	3.2	63.3	45.5 : 45.5%	13.5	2.7	47.9 : 47.9%

Table 2.13 Site 31 J2: A1214 London Rd / A1071 Junction Capacity Assessment DS for Mitigation

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
Base 2019							
1/1+1/2	A1214 London Road WB Ahead Left	4.7	18.6	34.9 : 34.9%	6.4	19.7	45.2 : 45.3%
1/3	A1214 London Road WB Right	15.4	236.3	104.4%	14.6	224.1	103.2%
2/2+2/1	Scrivener Drive NB Left Ahead Right	126.6	1215.7	240.8 : 240.8%	51.2	831.5	162.1 : 162.1%
3/1	A1214 London Road EB Left	6.7	27.2	36.8%	5.7	26.4	32.3%
3/3+3/2	A1214 London Road EB Ahead	4.4	24.0	29.7 : 29.7%	5.1	24.5	34.2 : 34.2%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
3/4	A1214 London Road EB Right	0.3	66.8	6.6%	0.8	68.7	16.8%
4/2+4/1	A1071 SB Right Left Ahead	7.3	47.6	64.4 : 64.4%	9.3	49.5	71.9 : 71.9%
4/3	A1071 SB Right	6.2	55.8	50.0%	8.3	53.6	63.7%
Future Base							
1/1+1/2	A1214 London Road WB Ahead Left	7.2	34.7	73.1 : 73.2%	6.4	31.3	68.2 : 68.0%
1/3	A1214 London Road WB Right	7.0	77.9	73.6%	8.0	85.0	79.5%
2/2+2/1	Scrivener Drive NB Left Ahead Right	11.1	62.8	77.3 : 77.3%	12.3	65.3	80.8 : 80.8%
3/1	A1214 London Road EB Left	10.9	52.7	69.7%	12.5	56.9	76.3%
3/3+3/2	A1214 London Road EB Ahead	5.2	39.2	36.5 : 36.5%	6.4	40.3	43.8 : 43.8%
3/4	A1214 London Road EB Right	0.4	67.2	8.8%	2.3	77.1	43.9%
4/2+4/1	A1071 SB Right Left Ahead	10.5	52.4	78.8 : 78.8%	11.4	59.8	82.6 : 82.6%
4/3	A1071 SB Right	9.4	58.8	71.7%	10.0	63.6	76.4%
Future Base plus Committed Developments							
1/1+1/2	A1214 London Road WB Ahead Left	8.4	39.2	79.5 : 79.4%	6.6	32.5	70.0 : 70.2%
1/3	A1214 London Road WB Right	7.5	87.7	79.3%	8.2	86.9	80.7%
2/2+2/1	Scrivener Drive NB Left Ahead Right	11.4	64.0	78.6 : 78.6%	12.4	65.6	81.0 : 81.0%
3/1	A1214 London Road EB Left	11.5	53.9	71.8%	13.9	61.3	81.2%
3/3+3/2	A1214 London Road EB Ahead	5.7	39.7	39.7 : 39.7%	7.3	41.1	48.6 : 48.6%
3/4	A1214 London Road EB Right	0.4	67.2	8.8%	2.3	77.1	43.9%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
4/2+4/1	A1071 SB Right Left Ahead	11.5	54.9	81.0 : 81.0%	11.9	64.3	83.5 : 83.5%
4/3	A1071 SB Right	10.3	59.6	74.6%	11.2	66.5	81.9%
Future Base plus Committed Developments and Project							
1/1+1/2	A1214 London Road WB Ahead Left	8.4	39.6	79.5 : 79.4%	6.8	30.8	70.0 : 70.2%
1/3	A1214 London Road WB Right	7.5	87.7	79.3%	9.0	102.4	86.5%
2/2+2/1	Scrivener Drive NB Left Ahead Right	11.8	68.9	81.9 : 81.9%	13.0	71.3	84.2 : 84.2%
3/1	A1214 London Road EB Left	13.5	59.6	79.5%	16.1	66.6	86.1%
3/3+3/2	A1214 London Road EB Ahead	5.7	39.7	39.7 : 39.7%	7.2	40.2	47.8 : 47.8%
3/4	A1214 London Road EB Right	0.4	67.2	8.8%	2.3	77.1	43.9%
4/2+4/1	A1071 SB Right Left Ahead	12.4	55.5	82.4 : 82.4%	13.3	65.7	86.8 : 86.8%
4/3	A1071 SB Right	11.1	59.5	76.7%	11.7	68.0	81.9%

2.7 Site 32 - A1071 / B1113 Swan Hill Roundabout

2.7.1 The planning application Land north of the A1071 (DC/21/02671), included as committed development in the Transport Assessment (APP-333), provided an upgrade of Site 32 - A1071 / B1113 Swan Hill Roundabout. This Site 32 has been modelled in the future year scenarios with the proposed highway layout. The proposed upgrades to the network are shown Figure 2.4.

2.7.2 The assessment for Site 32 is based on the proposed LinSig model that was developed as part of the planning application for Land north of the A1071 (DC/21/02671). This model was used to reflect the proposed highway junction configuration for the A1071/B1113 Swan Hill junction.

2.7.3 The LinSig model from the planning application was then replicated within LinSig including junction geometry, signal staging, phasing and intergreens, and populated with the flows presented in the Transport Assessment (APP-333).

2.7.4 The results are presented in Table 2.14. The results indicate that the junction is predicted to operate within capacity in all forecast scenarios.

Figure 2.4 Site 32 Proposed design drawing

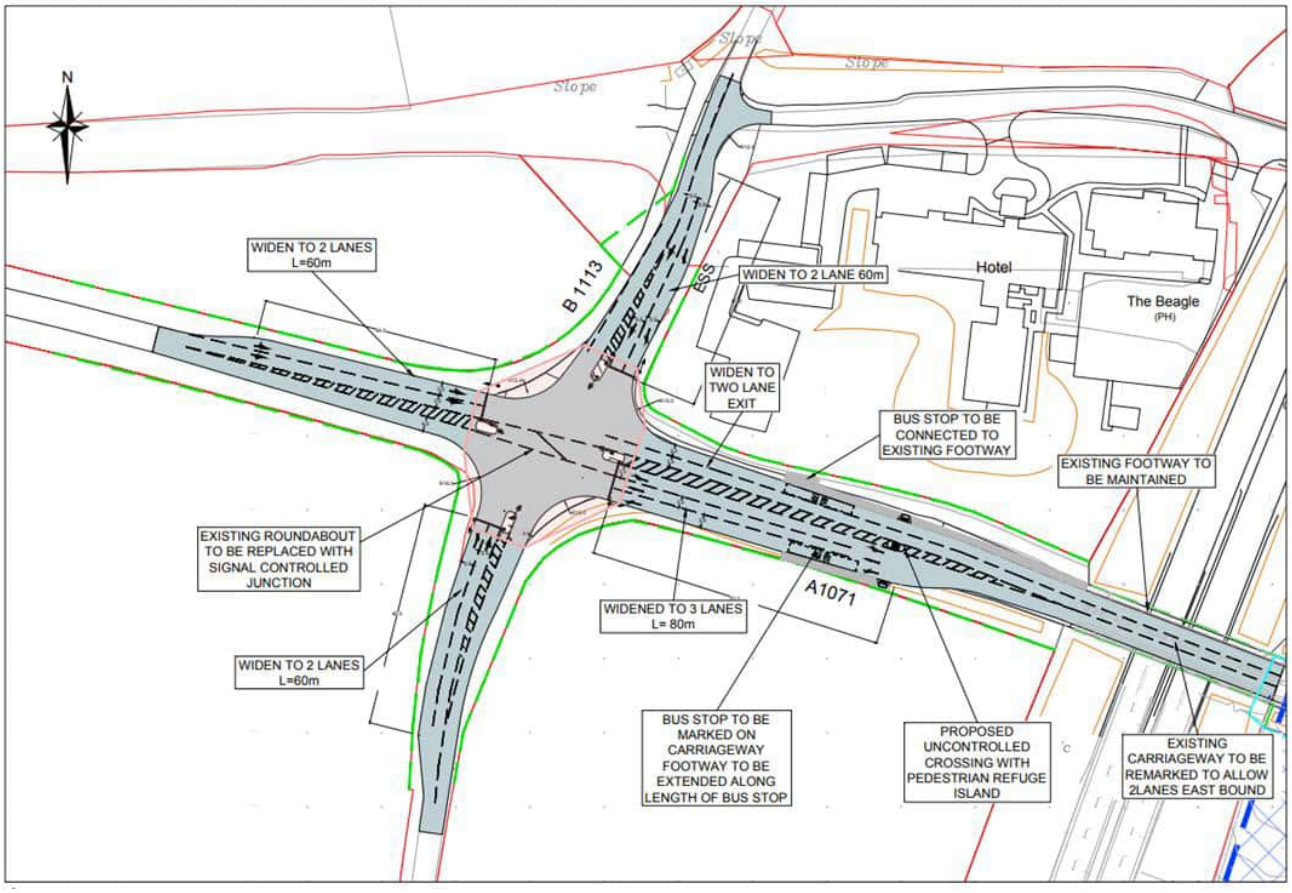


Table 2.14 Site 32 Proposed A1071 / B1113 Swan Hill Roundabout Capacity Assessment

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
2024 Base							
1/2+1/1	B113 SB Left Ahead Right	5.0	31.8	75.7 : 75.7%	5.8	34.1	60.8 : 60.8%
3/1	A1071 WB Left	0.8	14.3	10.7%	2.3	14.7	17.8%
3/2+3/3	A1071 WB Ahead Right	8.4	22.9	72.9 : 72.9%	8.9	20.3	60.2 : 60.2%
5/2+5/1	Swan Hill NB Right Left Ahead	6.4	28.8	75.8 : 75.8%	4.8	39.5	56.7 : 56.7%
7/2+7/1	A1071 EB Ahead Right Left	5.2	27.3	69.1 : 69.2%	5.0	22.0	47.1 : 47.1%
Future Base							
1/2+1/1	B113 SB Left Ahead Right	5.3	33.1	77.9 : 77.9%	5.9	32.8	59.4 : 59.4%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
2/1	A1071 E Exit	0.8	14.3	11.0%	2.4	14.8	18.4%
2/2	A1071 E Exit	8.8	23.8	75.3 : 75.3%	9.5	20.7	62.3 : 62.3%
3/1	A1071 WB Left	6.9	29.9	78.2 : 78.2%	5.2	42.3	62.7 : 62.7%
3/2+3/3	A1071 WB Ahead Right	5.4	28.0	71.6 : 71.4%	5.2	22.2	48.6 : 48.6%
Future Base plus Committed Developments							
1/2+1/1	B113 SB Left Ahead Right	5.8	34.6	73.1 : 73.1%	6.1	34.4	62.8 : 62.8%
2/1	A1071 E Exit	1.0	15.9	10.8%	2.4	14.2	18.2%
2/2	A1071 E Exit	10.4	26.1	74.5 : 74.5%	9.5	20.2	62.3 : 62.3%
3/1	A1071 WB Left	8.0	33.2	76.5 : 76.5%	5.2	42.2	62.7 : 62.7%
3/2+3/3	A1071 WB Ahead Right	5.9	26.5	60.1 : 60.1%	5.4	21.6	49.4 : 49.4%
Future Base plus Committed Developments and Project							
1/2+1/1	B113 SB Left Ahead Right	6.1	36.9	75.2 : 75.2%	6.1	34.4	62.8 : 62.8%
2/1	A1071 E Exit	1.0	15.4	10.4%	2.4	14.2	18.2%
2/2	A1071 E Exit	11.5	26.8	77.0 : 77.0%	10.4	21.0	66.1 : 66.1%
3/1	A1071 WB Left	8.5	35.6	78.6 : 78.6%	5.2	42.2	62.7 : 62.7%
3/2+3/3	A1071 WB Ahead Right	6.4	26.2	62.1 : 62.1%	5.8	22.0	52.4 : 52.4%

3. Overview of Mitigation

3.1.1 As described in the TA (APP-333) the junction modelling undertaken presented the worst-case peak construction traffic which is generally only expected to occur for a short duration (e.g. one week). Based on the results of the junction capacity assessments during the AM and PM peak hours, mitigation was identified where possible for junctions during the construction period.

3.1.2 The results of the junction review and remodelling presented in Section 2 indicate that no additional mitigation beyond that identified in the TA (APP-333) is anticipated.

3.1.3 A summary of the proposed mitigation is shown below in Table 3.1 for SRN junctions and Table 3.2 for LRN/MRN junctions, which have previously been discussed with SCC/NH before DCO submission. Where highlighted in red, agreement on mitigation is still pending and further engagement with SCC/NH is required.

Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333)

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
Section B	Suffolk	Site 26	A14 J52 Claydon Roundabout	Roundabout	No mitigation proposed	No Change
Section C	Suffolk	Site 29	A14 J55 Copdock Interchange	Signalised roundabout	Change to lane and destination arrow markings on the A1214 and A12 approaches to the roundabout, and on the circulatory carriageway	No Change

Table 3.2 LRN Proposed Junction Mitigation within TA (APP-333)

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
Section B	Suffolk	Site 25	A1120 / B1113 Needham Rd	Signalised roundabout	Signal optimisation	No Change
	Suffolk	Site 27	B1113 Bramford Rd / Bramford Rd	Partially signalised Junction	Signal optimisation	No Change
Section C	Suffolk	Site 31	A1214 London Rd / A1071	Signalised T-Junction	Rationalise Intergreens, add phase delays	No Change

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
					and signal optimisation	
	Suffolk	Site 32	A1071 / B1113 Swan Hill	Priority Roundabout	Rationalise Intergreens and add phase delays and signal optimisation	No Change

Abbreviations

Abbreviation	Full Reference
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
ES	Environmental Statement
IEMA	Institute of Environmental Management and Assessment
LHA	Local Highway Authority
LRN	Local Road Network
LTC	Lower Thames Crossing
MCC	Manual Classified Counts
MRN	Major Road Network
PAR	Primary Access Routes
SRN	Strategic Road Network
TA	Transport Assessment
TAG	Transport Analysis Guidance
V/C	Volume to capacity

Glossary

Term	Description
Committed development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Development Consent Order (DCO)	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Local Highway Authority (LHA)	The public authority whose duty it is to maintain and protect the safety and usability of public roads.
Major Road Network (MRN)	Routes in the middle tier of the road network (between the SRN and LRN), as defined by the Department for Transport. MRNs are managed by the Local Highway Authoritiess. For the Project, the Local Highway Authorities are Thurrock Council and Essex, Suffolk and Norfolk County Councils
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Primary Access Routes	Access routes on the public highway designated for use by construction vehicles (typically for HGVs) to travel from the strategic road network / major road network to the site access point.
Ratio of Flow to Capacity (RFC)	A measurement used to determine how bust an approach is at an unsignalised junction.
Strategic Road Network (SRN)	Comprises the motorway and trunk road network, managed by National Highways, as defined by the Department for Transport
Transport Assessment (TA)	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).

Bibliography

Websites

Department for Communities and Local Government (2014) *Travel Plans, Transport Assessments and Statements.* Available at https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

Department for Energy Security and Net Zero (2024a) *Overarching National Policy Statement for Energy (EN-1).* Available at https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1

Department for Transport (2024) *Transport Analysis Guidance*, Available at https://www.gov.uk/guidance/transport-analysis-guidance-tag

Institute of Environmental Management and Assessment (IEMA) (2023) *IEMA Guidelines: Environmental Assessment of Traffic and Movement*

National Highways (2023) *Design Manual for Roads and Bridges (DMRB) CD 116 Geometric Design of Roundabouts*. Available at [redacted]

TEMPro (Trip End Model Presentation Program) software. Available at https://www.gov.uk/government/publications/tempro-downloads

Appendix A. Consultation on the junction modelling and mitigation

nationalgrid

Appendix A
Consultation on the junction modelling and mitigation

A.1.1 The engagement undertaken during the development of the TA (document reference 7.11) that is relevant to junction modelling and mitigation is presented in Table B-1.

Table B-1 Engagement undertaken relevant to the junction modelling and mitigation

Reference	Summary of discussions	National Grid's Response
Transport Working Group Meeting (Norfolk, Essex, Suffolk and Thurrock) April 2024	Suffolk County Council raised concerns at A140 Stoke Ash junction, noting the accident history in this location, and it was requested to be included in the assessment.	The Stoke Ash Workhouse Road junction has been reviewed and modelling results presented within section 7 of the TA (document reference 7.11).
Transport Working Group Regional Meeting (Suffolk) July 2024	It was noted that the Beagle Roundabout may be replaced in future with a signalised junction as part of a nearby residential development and should be considered within the cumulative assessment.	Consideration has been given to the Beagle roundabout (A1071 / B1113) and potential impact. The junction has been modelled with the new highway layout and details presented in the Additional junction modelling section
Transport Working Group Regional Meeting (Suffolk) September 2024	General structure and content of TA was presented by National Grid and considered appropriate by Suffolk. Provided an overview of the initial capacity assessment methodology using.	Structure and modelling methodology has been used to develop the TA (document reference 7.11), and a draft was submitted for comment in March 2025.
Transport Working Group Meeting (Norfolk, Essex, Suffolk, Thurrock, National Highways) January 2025	National Grid presented a draft of TA. Ran through methodology of junction sifting process, junction assessment methodology and cumulative assessment.	Workshops with Norfolk undertaken to assess all mitigation on a case-by-case basis.
Transport Working Group Regional Meeting (Suffolk) January 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects for junctions and PARs predominately where WCH Amenity raised from detailed assessment within the ES (Volume 6 of the DCO application). Approach to mitigation agreed in principle but would require	Mitigation workshops with Thurrock undertaken to assess all mitigation at the junctions and PARs on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3). Embedded, standard and additional mitigation measures

Reference	Summary of discussions	National Grid's Response
	site specific measures to be identified based on future traffic conditions.	have been outlined in ES Chapter 16: Traffic and Transport (document reference 6.16). RAG strategy was used to prioritise order of junctions and mitigation required.
Transport Working Group Regional Meeting (Suffolk) March 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects for junctions and PARs predominately where WCH Amenity raised from detailed assessment within the ES Chapter 16: Traffic and Transport (reference 6.16). Approach to mitigation agreed in principle but would require site specific measures to be reviewed by Suffolk against receptor sensitivity for each PAR.	Details of proposed mitigation and sensitivities were provided to Suffolk, and details are provided within the TA and the ES Chapter 16: Traffic and Transport (document reference 6.16).
Transport Working Group Regional Meeting (Suffolk) April 2025	National Grid presented draft of TA. Ran through some sections where they have comments including the operation and decommissioning. Interest in AIL strategy to demonstrate a feasible route has been assessed and decommissioning of the CSE compound and substations and they are critical and need to be addressed in the future. Cumulative impacts on the A140 of solar farms, although still in early stages of the planning. They want to see evidence of car sharing ratios. There are concerns of creating a new peak with the cumulative developments happening at the same time. Pushed back against the working shift patterns for Sundays and Bank Holidays. They consider it is better to undertake a full working day on Saturday to avoid inter peak hours on Saturday. Raised awareness of avoiding blocking back on the A143 Old Bury Road bellmouth junctions.	Additional environmental mitigation as a result of the initial IEMA assessment are presented in ES Chapter 6: Traffic and Transport (document reference 6.16). The Outline PRoW Management Plan (document reference 7.6) has been prepared to set out the proposed approach to the management of PRoWs during construction of the Project. The Outline CTMP (document reference 7.3) describes how compliance on construction flows will be monitored and managed with engagement with Local Highway Authorities.

Reference	Summary of discussions	National Grid's Response
	Safety concerns raised if PRoWs are closed and users diverted via the road. They want to see control of the HGV arrivals, to comply with the flat profile and avoid a front load in the morning.	
Transport Working Group Regional Meeting (Suffolk) May 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Approach and findings of results agreed in principle but request for time to further review the findings of the assessment modelling and to review existing baseline. National Grid presented the proposed additional environmental mitigation measures following the ES assessment of effects on PARs, in relation to Pedestrian, cyclist and horse-rider amenity. Approach to mitigation agreed in principle but request for time to further review the proposals was requested.	Findings of the junction assessments based on strategy and approach presented to Suffolk can be found within Section 6 and 7 of the TA. Additional environmental mitigation as a result of the initial IEMA assessment are presented in ES Chapter 16: Traffic and Transport (document reference 6.16).
Transport Working Group Regional Meeting (Suffolk) May 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Review of blocking back between junctions, weekday/weekend traffic flow profile and committed developments was requested. Further modelling of off-peak traffic conditions at Site 22: A1120 Church Road / B1115 Stowmarket Road to avoid peak hours and school drop-off/pickup during term time to be undertaken. Approach and findings of results agreed in principle but request for time to further review the findings of the	Findings of the junction assessments based on strategy and approach presented to Suffolk can be found within Section 6 and 7 of the TA. Suffolk were provided with modelling results to allow for a technical review to be undertaken.

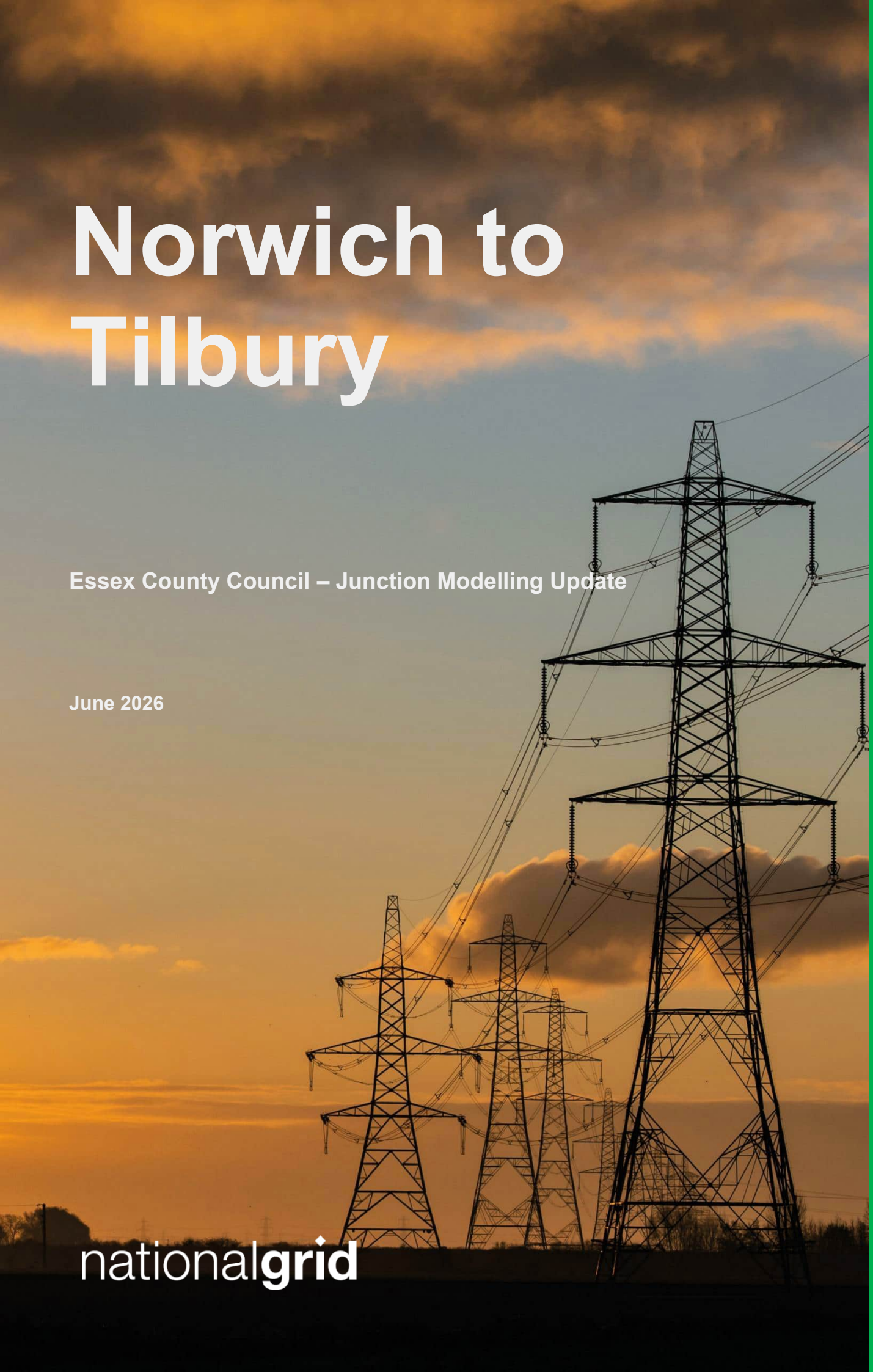
Reference	Summary of discussions	National Grid's Response
	assessment modelling and to review existing baseline.	
Transport Working Group Regional Meeting (Suffolk) June 2025	National Grid presented findings of the review of blocking back between junctions, weekday/weekend traffic flow profile, committed developments and off-peak modelling at the A1120 Church Road / B1115 Stowmarket Road junction to avoid peak hours and school drop-off and pick-up hours. Findings of results agreed in principle but request for time to further review the findings of the assessment modelling and to review existing baseline.	Findings of the junction assessments based on strategy and approach presented to Suffolk can be found within Section 6 and 7 of the TA (document reference 7.11). Suffolk have been provided with modelling results to allow for a technical review to be undertaken.

Appendix B
Traffic Models and Outputs (Available Electronically upon Request)

Norwich to Tilbury

Essex County Council – Junction Modelling Update

June 2026



nationalgrid

Contents

1. Introduction 3

1.1 Background 3

1.2 Purpose of this Technical Note 4

2. Additional Junction Modelling Post DCO Submission 5

2.2 Site 38 - A120 Ardleigh Crown Interchange 6

2.3 Site 40 - A12 Severalls Interchange 7

2.4 Site 41 – A1341 Via Urbis Romanae/United Way 8

2.5 Site 44 - A1341 Via Urbis Romanae / A134 Northern Approach Rd 10

2.6 Site 46 – A12 Junction 26 12

2.7 Site 48 - A120 Braintree Bypass / B1018 Braintree Rd Roundabout 15

2.8 Site 56 – A120 Braintree Bypass / A131 Great Notley Bypass roundabout 22

3. Overview of Mitigation 24

Table 2.1 Site 38 2025 Queue Length Data vs 2024 Modelled Queues 7
Table 2.2 Worst Case Peak Traffic Demand Comparison (%) 9
Table 2.3 Site 41 2025 Queue Length Data vs 2024 Modelled Queues 10
Table 2.4 Site 44 2025 Queue Length Data vs 2024 Modelled Queues 11
Table 2.5 Site 46 Peak Construction Vehicle Impact on Total Junction Traffic 15
Table 2.6 Site 46 Average Construction Vehicle Impact on Total Junction Traffic 15
Table 2.7 Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment AM Peak Model Comparison 17
Table 2.8 Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment PM Peak Model Comparison 18
Table 2.9 Construction Vehicle Impact on Total Junction Traffic Site 48 21
Table 2.10 Site 49 Average Construction Vehicle Impact on Total Junction Traffic 21
Table 2.11 Site 56 A120 Braintree Bypass / A131 Great Notley Bypass Roundabout Capacity Assessment 22
Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333) 24
Table 3.2 LRN Proposed Junction Mitigation within TA (APP-333) 25

Figure 2.1 Site 38 Total Junction Flow Comparison Chart 6
Figure 2.2 Site 40 Total Junction Flow Comparison Chart 8
Figure 2.3 Site 41 Total Junction Flow Comparison Chart 10
Figure 2.4 Site 44 Total Junction Flow Comparison Chart 11
Figure 2.5 Site 46 AM Construction Volumes 14
Figure 2.6 Site 46 PM Construction Volumes 14
Figure 2.7 Site 48 Total Junction Flow Comparison Chart 16
Figure 2.8 Site 48 AM Construction Volumes 20
Figure 2.9 Site 48 PM Construction Volumes 20

Abbreviations 26
Glossary 27
Bibliography 28

Appendix A Consultation on the junction modelling and mitigation
Appendix B Traffic Model Files and Outputs (Available Electronically)

1. Introduction

1.1 Background

1.1.1 Between April and August 2025 National Grid held meetings with all Local Highways Authorities and National Highways (NH) regarding the Transport Assessment (TA) (APP-333) and modelling assessments undertaken at those junction likely to be sensitive to a change in traffic flows as a result of the peak construction activity associated with the Norwich to Tilbury Project.

1.1.2 Where possible feedback received from Essex County Council (ECC)/NH was considered as detailed within 7.11 TA Appendix B – Consultation on the scope of the Assessment (APP-335) and shown in Appendix A of this technical note. The main ers that were considered are as follows:

- During the thematic group meetings between March and April 2024, National Grid shared the list of sensitive junctions that were identified for assessment within the TA (AP-333). Feedback was requested from ECC and NH to provide any additional junction that needed to be included in the assessment. They provided comments based on their local knowledge and concerns regarding junction capacity and road safety;
- During the thematic group meetings between September and October 2024 the proposed structure of the TA (APP-333) and modelling methodology were presented. ECC/NH agreed with the proposed methodology and structure of the TA;
- In January and February 2025, National Grid shared with the ECC/NH the junctions where proposed mitigation was required and arranged separate meetings to go through the junction modelling results and proposed mitigation;
- A draft version of the TA (APP-333) was shared with ECC and NH in February 2025 and feedback requested. Comments were received from ECC at the end of February and from NH in April 2025 and changes incorporated into the TA (APP-333);
- Meetings with ECC and NH were held between April and June 2025 to present the results of the junction modelling and proposed initial mitigation. There was agreement in principle of the additional mitigation in most locations subject to review of modelling files;
- Junction models were shared with ECC and NH in June 2025 to request feedback.
- Engagement with the ECC//NH between March 2024 and DCO submission August 2025 provided identification of additional planning applications. Development flows were reviewed to identify if they should be included in the assessment.

1.2 Purpose of this Technical Note

1.2.1 As a result of feedback received by ECC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post Development Consent Order (DCO) submission. This additional modelling was undertaken where ECC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not reflect accurate baseline operation.

1.2.2 Furthermore, a review was undertaken on additional committed developments provided to National Grid by ECC post DCO submission. It was found that Site 56 - A120 Braintree Bypass / A131 Great Notley Bypass roundabout would see additional traffic from the Horizon 120, Phase 2, Great Notley, Braintree (planning reference 23/02807/OUT). As such the junction modelling for this site has been rerun.

1.2.3 National Grid were also informed by ECC that the following two junctions (closely connected) would be subject to a proposed highway layout change for the future scenarios relating to separate planning application made by others:

- Site 40 - A12 Severalls Interchange (awaiting details)
- Site 41 - A1341 Via Urbis Romanae/United Way (awaiting details)

1.2.4 A proposed signalised junction mitigation scheme is being considered for these two sites and adjacent junctions. At the time of writing, the proposed layout options are being drafted by Aecom but have not been provided to Arcadis, therefore the potential impacts of routing additional Project traffic through these junctions have not been assessed or presented. Further engagement with Aecom will be undertaken with ECC/NH. However, additional traffic surveys for these sites were obtained in November 2025 and a comparison with the previous survey data undertaken as part of additional validation.

1.2.5 The results of the additional modelling are presented within Section 2 of this technical note. Section 3 provides a summary of any changes required to the proposed mitigation identified within the TA (APP-333) as a result of the updated junction modelling. Traffic model files and outputs are available electronically as part of Appendix B.

2. Additional Junction Modelling Post DCO Submission

2.1.1 As a result of feedback received by ECC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post DCO submission.

2.1.2 Following the submission of the reviewed list of committed developments from ECC post DCO submission, it was identified the junction modelling for Site 56 - A120 Braintree Bypass / A131 Great Notley Bypass roundabout needed to be rerun to fully assess the cumulative impact of the Project. The results of the junction modelling are presented below.

2.1.3 At the following junctions ECC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not appear to represent their understanding of current baseline conditions:

- Site 38 - A120 Ardleigh Crown Interchange
- Site 40 - A12 Severalls Interchange
- Site 41 - A1341 Via Urbis Romanae/United Way
- Site 44 - A1341 Via Urbis Romanae/A134 Northern Approach Rd
- Site 46 - A12 Junction 26
- Site 48 - A120 Braintree Bypass/B1018 Braintree Rd

2.1.4 It is understood that the reason for this difference may be because these current conditions might not have been captured on the day when the traffic survey was undertaken. Therefore, this feedback was noted, and the junctions were resurveyed to confirm that observed conditions are accurately represented within the TA (APP-333). The additional traffic survey data was obtained in November 2025 on a typical weekday under normal traffic conditions and time period as the previous survey data obtained in 2024.

2.1.5 Before the junction modelling was re-run at the sites a review of the latest survey traffic data obtained in November 2025 was compared with the original traffic survey data obtained in 2024. Where the traffic flow data did not show any evidence of a significant change the junction was not subject to remodelling. As such the original results within the TA (APP-333) were considered robust and remain valid.

2.1.6 Where junction modelling was rerun, the same scenarios within the TA (APP-333) were used (based on the existing highway layout):

- 2024 base year (survey year)
- Future Base year (TEMPro growth applied to the 2024 base year). The future base year was estimated individually for each site and was based on the worst-case peak period for the Project at each particular location
- Future Base + Committed Development year

- Future Base + Committed Development + Project worst case construction traffic.

2.2 Site 38 - A120 Ardleigh Crown Interchange

2.2.1 NH provided feedback on the operation presented from the base model of Site 38 - A120 Ardleigh Crown Interchange. The site was then resurveyed in November 2025.

2.2.2 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in

2.2.3 Figure 2.1, the total junction flows for Site 38 show highly consistent volumes across both surveys for the entire day, with near-identical AM and PM peak magnitudes and timing, as well as similar interpeak volumes for total junction flow. The differences observed are deemed minor, with no major anomalies or shifts in demand pattern, indicating that traffic demand at this junction has remained stable. Therefore, the original modelling remains representative, and no remodelling is required. The Transport Assessment (APP-333) results can be referenced as the basis for the modelling results for this site. An additional review of queue length data (Table 2.1) at locations with consistent survey coverage between 2024 and 2025 shows that the 2024 base model provides a good representation of observed on-site conditions. On this basis, no further remodelling of the junction has been undertaken.

Figure 2.1 Site 38 Total Junction Flow Comparison Chart

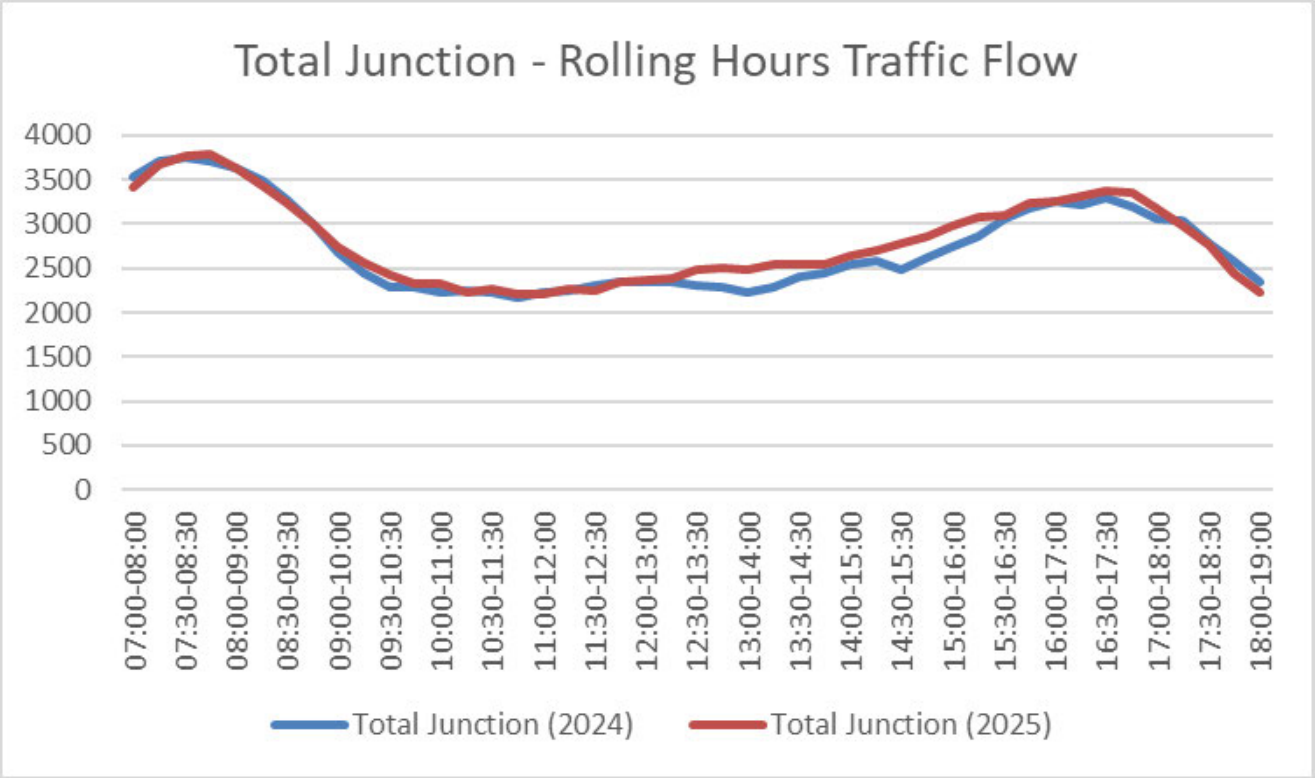


Table 2.1 Site 38 2025 Queue Length Data vs 2024 Modelled Queues

Modelled Lane Number	Approach Name	AM (7:30 to 8:30)		PM (16:30 to 17:30)	
		Model Queues (PCU)	Average Observed Queues	Model Queues (PCU)	Average Observed Queues
1/2+1/1	A12 (SB) Ahead Left	1	3	2.6	5
1/3	A12 (SB) Ahead	0.6	5	0.4	3
2/1	A120 (WB) Ahead Left	16.8	13	3.4	3
2/2	A120 (WB) Ahead	13.3	11	6.3	6
3/1	A1232 Ipswich Road (NB) Left	1.2	3	0.2	2
3/2	A1232 Ipswich Road (NB) Ahead	8.6	13	3.4	5
3/3	A1232 Ipswich Road (NB) Ahead	8.7	6	3.9	7
4/1	A120 (EB) Ahead Left	1.1	9	1	9

2.2.4 The junction assessment presented for Site 38 in the TA (APP-333) indicated that this site would operate above capacity in all scenarios.

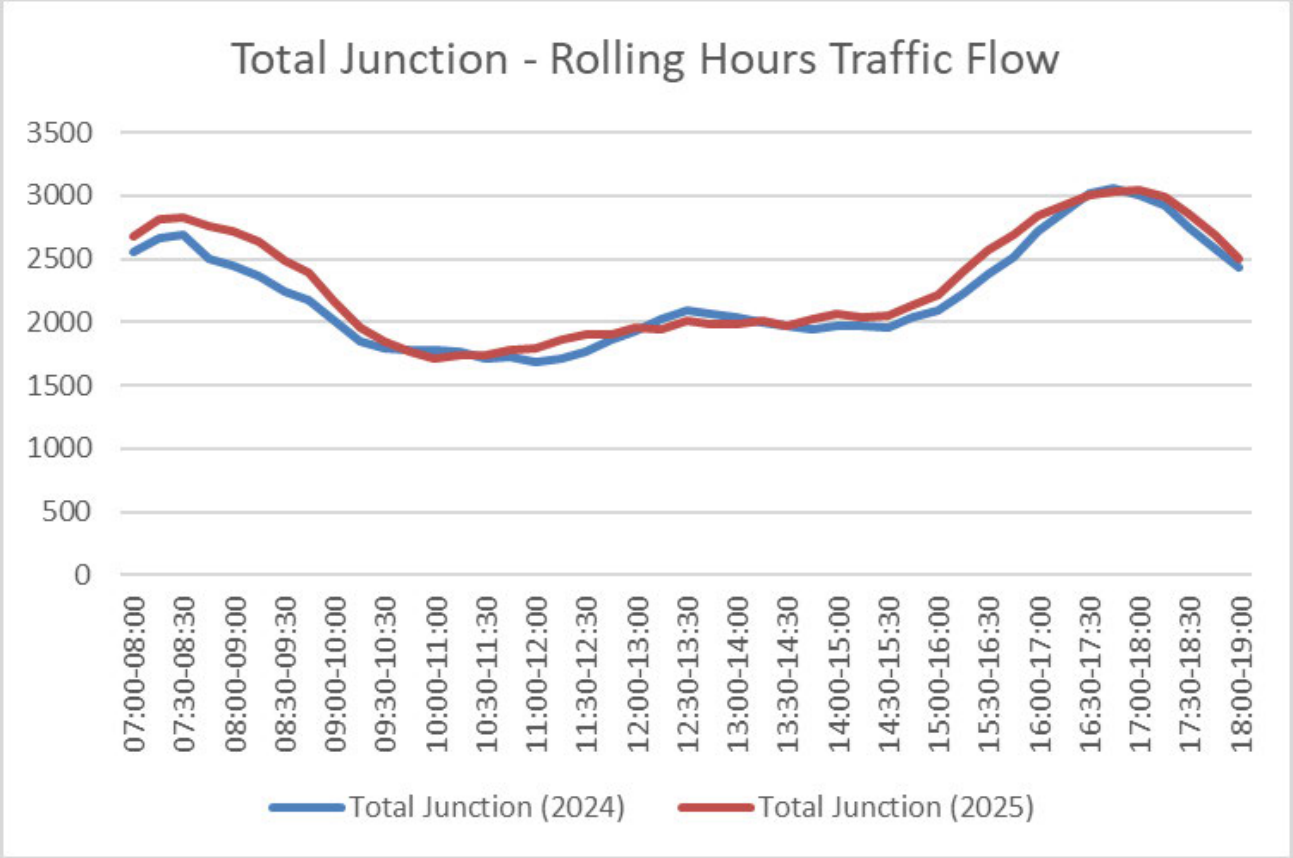
2.2.5 A further meeting with both Essex County Council Local Highway Officers and NH to determine the feasibility of potential mitigation options to improve junction operation is to be arranged for this junction. No additional modelling with mitigation options has been carried out for Site 38 at this stage.

2.3 Site 40 - A12 Severalls Interchange

2.3.1 NH provided feedback on the operation presented from the base model of Site 40 - A12 Severalls Interchange. The site was then resurveyed in October 2025.

2.3.2 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in Figure 2.2, the total junction flows for Site 40 show a highly consistent volumes across both surveys for the entire day, with similar AM and PM peak magnitudes and timing, as well as similar interpeak volumes for total junction flow. The differences observed are deemed minor, with no major anomalies or shifts in demand pattern, indicating that traffic demand at this junction has remained stable. Therefore, the original modelling remains representative, and no remodelling is required. The TA (APP-333) results can be referenced as the basis for the modelling results for this site.

Figure 2.2 Site 40 Total Junction Flow Comparison Chart



2.4 Site 41 – A1341 Via Urbis Romanae/United Way

2.4.1 NH provided feedback on the operation presented from the base model of Site 41 – A1341 Via Urbis Romanae/United Way. The site was then resurveyed in October 2025.

2.4.2 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in Figure 2.3, the total junction flows for Site 41 show a highly consistent volumes across both surveys for the entire day, with near-identical AM and PM peak magnitudes and timing, as well as similar interpeak volumes for total junction flow. The differences observed are deemed minor, with no major anomalies or shifts in demand pattern, indicating that traffic demand at this junction has remained stable. Therefore, the original modelling remains representative, and no remodelling is required. The Transport Assessment (TA) results can be referenced as the basis for the modelling results for this site. An additional review of queue length data (Table 2.3) at locations with consistent survey coverage between 2024 and 2025 shows that the 2024 base model provides a good representation of observed on-site conditions. On this basis, no further remodelling of the junction has been undertaken.

2.4.3 There is a committed highway intervention as part of the Colchester Northern Gateway, in which a signalised junction mitigation scheme is proposed for Sites 40, 41 and adjacent junctions.

2.4.4 A comparison has been undertaken between the Norwich to Tilbury (N2T) temporary construction phase worst-case traffic flows and the 2033 ultimate buildout flows associated with the approved planning applications at Sites 40 and 41.

2.4.5 The comparison, shown in Table 2.2, is based on peak-hour turning movement demands at the relevant junctions, using the N2T temporary construction 'worst case' and the 2033 'ultimate buildout' design year demands associated with the consented development

2.4.6 This analysis demonstrates that the N2T worst-case flows are consistently lower than the design flows for the proposed highway interventions at each junction. Specifically, at Site 40 (A12 / Cuckoo Farm Way / Via Urbis Romanae junction), the N2T flows are approximately 24% lower in the AM peak and 20% lower in the PM peak than the 2033 design year flows. At Site 41 (Axial Way / Via Urbis Romanae junction), the N2T flows are approximately 36% lower in the AM peak and 28% lower in the PM peak.

Table 2.2 Worst Case Peak Traffic Demand Comparison (%)

Junction	Period	N2T worst case (% lower than 2033 design flows)
Site 40 (Colchester Northern Gateway - A12)	AM Peak	24% lower
Site 40 (Colchester Northern Gateway - A12)	PM Peak	20% lower
Site 41 (Colchester Northern Gateway - Via Urbis Romanae)	AM Peak	36% lower
Site 41 (Colchester Northern Gateway - Via Urbis Romanae)	PM Peak	28% lower

2.4.7 Given that the temporary construction traffic will cease prior to the 2033 forecast year for which the junction upgrades have been designed, and that the N2T traffic demands fall within the design envelope of the committed highway improvements (being 20–36% below the ultimate capacity requirement), it is considered that the proposed junction upgrades will have sufficient capacity to accommodate the temporary construction traffic impacts without the need for additional mitigation. While detailed traffic modelling using the designer's junction models was not possible within the assessment timeframe, the flow comparison provides robust indication that the committed infrastructure can accommodate the N2T construction phase traffic.

Figure 2.3 Site 41 Total Junction Flow Comparison Chart

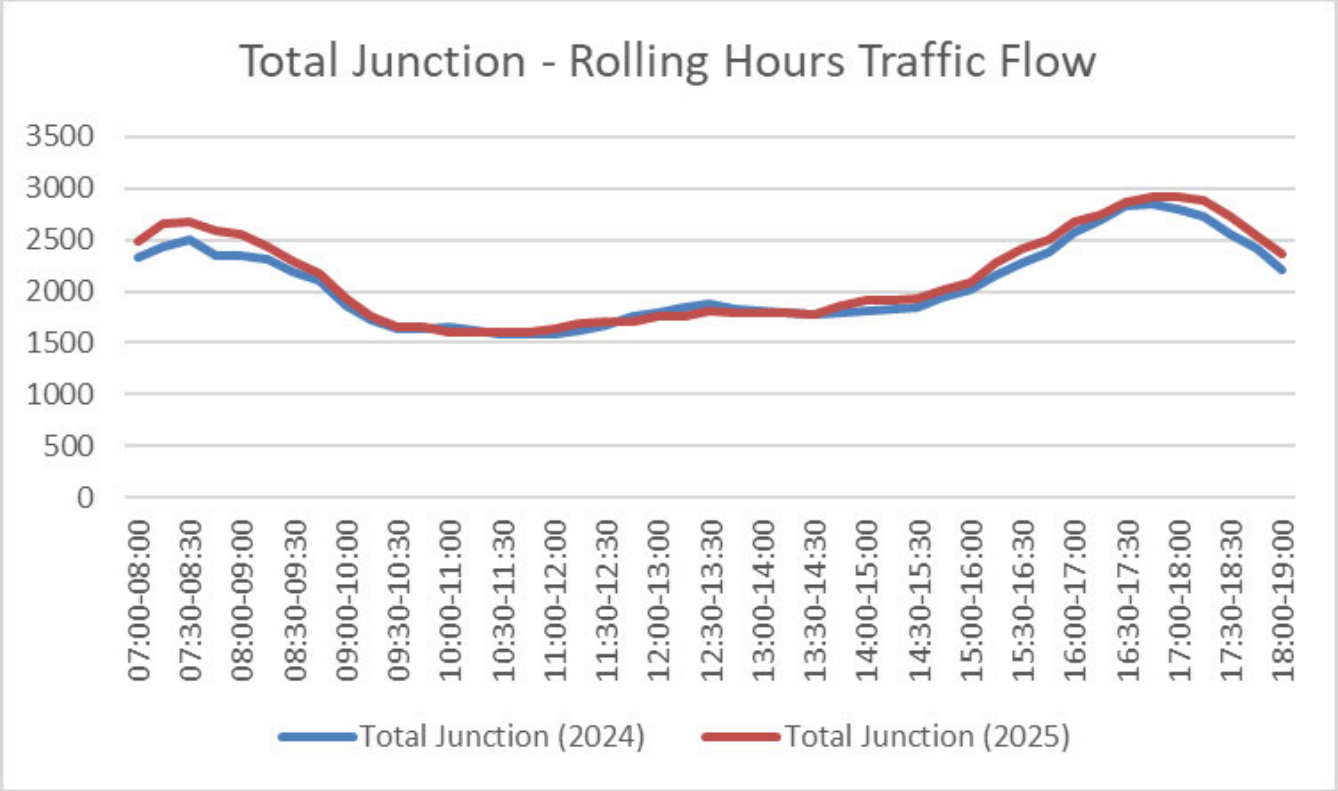


Table 2.3 Site 41 2025 Queue Length Data vs 2024 Modelled Queues

Arm Number	AM (7:30 to 8:30)		PM (16:45 to 17:45)	
	Model Queues (PCU)	Average Observed Queues	Model Queues (PCU)	Average Observed Queues
Arm 1	1.2	3	3.3	6
Arm 2	2.5	3	2.7	6
Arm 3	0.2	1	0.3	1
Arm 4	1.5	4	1.4	1

2.5 Site 44 - A1341 Via Urbis Romanae / A134 Northern Approach Rd

2.5.1 Essex County Council provided feedback on the operation presented from the base model of Site 44 - A1341 Via Urbis Romanae / A134 Northern Approach Rd. The site was then resurveyed in October 2025.

2.5.2 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in 4, the total junction flows for Site 44 show a highly consistent volumes across both surveys for the entire day, with near-identical AM and PM peak

magnitudes and timing, as well as similar interpeak volumes for total junction flow. The differences observed are deemed minor, with no major anomalies or shifts in demand pattern, indicating that traffic demand at this junction has remained stable. Therefore, the original modelling remains representative, and no remodelling is required. The Transport Assessment (APP-333) results can be referenced as the basis for the modelling results for this site. An additional review of queue length data (Table 2.4) at locations with consistent survey coverage between 2024 and 2025 shows that the 2024 base model provides a good representation of observed on-site conditions. On this basis, no further remodelling of the junction has been undertaken.

Figure 2.4 Site 44 Total Junction Flow Comparison Chart

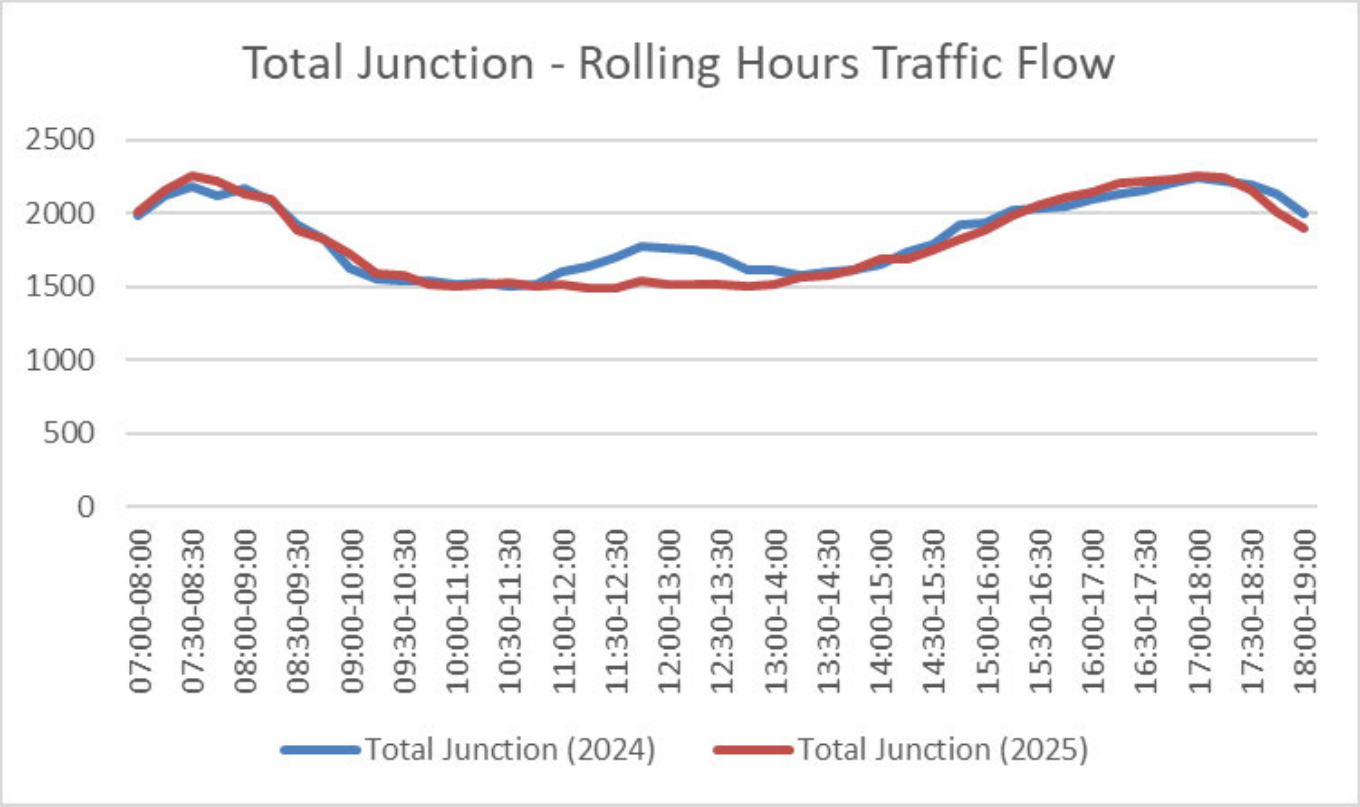


Table 2.4 Site 44 2025 Queue Length Data vs 2024 Modelled Queues

Lane Number	Approach Name	AM (7:30 to 8:30)		PM (17:00 to 18:00)	
		Model Queues (PCU)	Average Observed Queues	Model Queues (PCU)	Average Observed Queues
1/1	Via Urbis Romanae SB Ahead	7.6	9	7.5	6
1/2+1/3	Via Urbis Romanae SB Ahead Right	5.7	5	6.5	3
2/1	Via Urbis Romanae WB Left	0.4	1	0.6	1
2/2	Via Urbis Romanae WB Ahead	0	9	0	0

Lane Number	Approach Name	AM (7:30 to 8:30)		PM (17:00 to 18:00)	
		Model Queues (PCU)	Average Observed Queues	Model Queues (PCU)	Average Observed Queues
3/2+3/1	A134 Northern Approach Road Ahead	4.5	3	6.2	4
3/3	A134 Northern Approach Road Ahead	4.8	3	6.6	4
4/2+4/1	A134 Northern Approach Road NB Ahead Left	3.5	8	5	7
4/3	A134 Northern Approach Road NB Ahead	0.1		0.1	
5/2+5/1	A134 Northern Approach Road EB Right Left	8.4	8	8.1	6

2.6 Site 46 – A12 Junction 26

Key Outcomes

- Construction traffic volumes are low in magnitude and duration.
- Two short-term peaks are observed, with maximum flows of 42 vehicles in the AM peak and PM peak.
- Peak project construction traffic represents approximately 1.0% of total junction flow in both the AM and PM peak hours.
- Average project construction traffic across the construction timeline represents approximately 0.4% of total junction flow in both the AM and PM peak hours.
- Construction traffic would have a negligible impact on junction operation.
- LinSig remains an appropriate modelling tool for this junction.

2.6.1 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of A12 Junction 26 (Site 46).

2.6.2 The comment notes that notes that paragraph 4.3.2 of Document: 7.11 Transport Assessment states that manual classified counts were undertaken at SRN junctions in October / November 2024 and May 2025. From street view imagery, roadworks can be seen on the A12 in the vicinity of A12 Junction 26 from November 2022, whilst National Highways state that the roadworks were complete by 6th October 2025. As such, AECOM recommends that evidence should be provided that shows that traffic flows observed at A12 Junction 26 have not been severely impacted by the roadworks on the A12.

2.6.3 In response, a review of camera footage confirmed that no roadworks were present on the circulatory carriageway or at the stop line. Therefore, the general operation of the junction would remain unaffected.

2.6.4 Additional comments state that in order to understand the likely severity/ duration of potential impacts, it is recommended that the number of vehicles using the junction in the (network) peak hours should be quantified throughout the span of the construction period to provide an understanding of the development impact beyond the peak construction period, and to understand for how long there may be a significant impact on the junction. This is to understand whether LinSig is the appropriate modelling tool to be used in this instance.

2.6.5 Table 2.5 compares the AM and PM network peak volume of vehicles during the construction period to the AM and PM total junction volume peaks. The table implies network peak construction traffic (on the 06/12/2027) associated with the Project is forecast to account for approximately 1.0% of the total junction flow during both the AM and PM peak hours, representing a very small proportion of overall traffic demand.

2.6.6 Table 2.6 compares the average daily volume of vehicles during periods when construction activity is taking place to the AM and PM total junction peak volumes. It should be noted that the average has been taken from days where the majority of construction traffic is present (12/04/2027 – 22/09/2031). The table implies construction traffic associated with the Project is forecast to account for approximately 0.4% of the total junction flow during both the AM and PM peak hours, representing an even small proportion of overall traffic demand over the construction timeline.

2.6.7 Figure 2.5 and Figure 2.6 displays the total junction traffic volumes for Site 46 during the construction period for the AM and PM peak periods, respectively. Both figures indicate two distinct peaks in vehicle activity, with maximum flows of 42 vehicles and 23 vehicles in both the AM and PM peaks. Given the relatively low magnitude of these flows, it is considered that construction period traffic will have a negligible impact on junction performance and will not significantly affect its operation. Therefore, LinSig remains as the appropriate tool to be used to model this junction.

2.6.8 This confirms that the severity and duration of construction impacts would be negligible and not sufficient to warrant alternative modelling approaches.

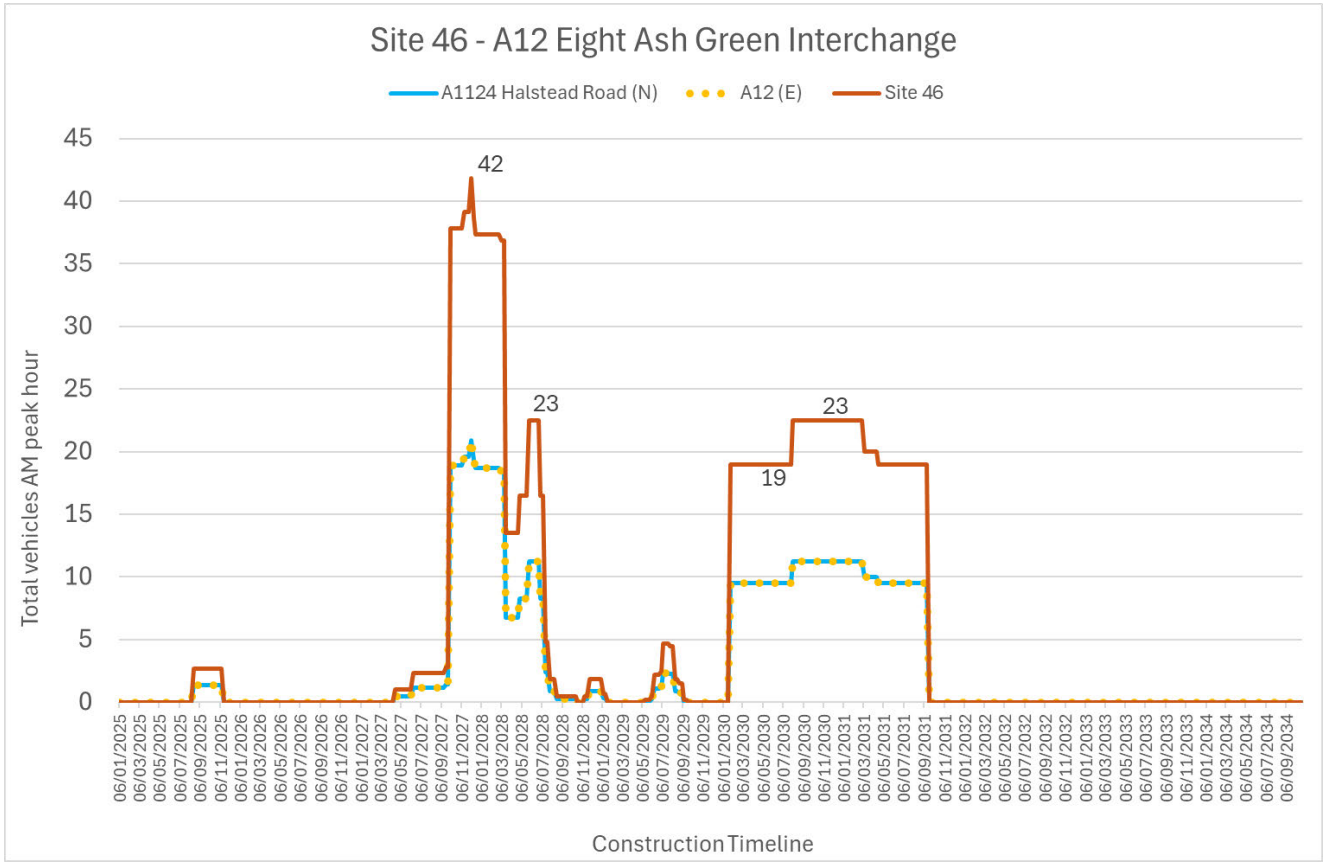


Figure 2.5 Site 46 AM Construction Volumes

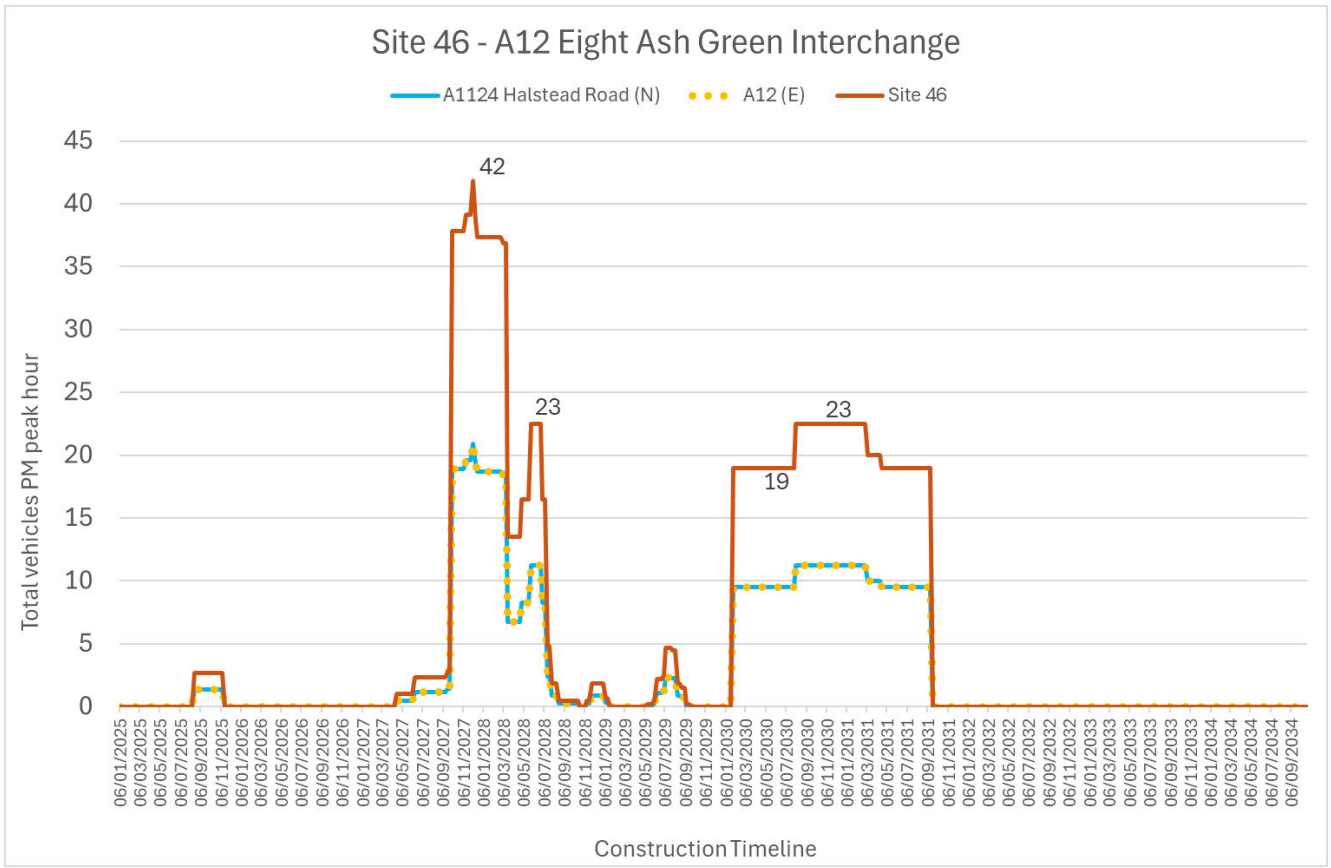


Figure 2.6 Site 46 PM Construction Volumes

Table 2.5 Site 46 Peak Construction Vehicle Impact on Total Junction Traffic

	Peak Construction Traffic Volume during Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:45 - 08:45)	42	4011.0	1.0%
PM Peak (16:30 - 17:30)	42	4235.0	1.0%

Table 2.6 Site 46 Average Construction Vehicle Impact on Total Junction Traffic

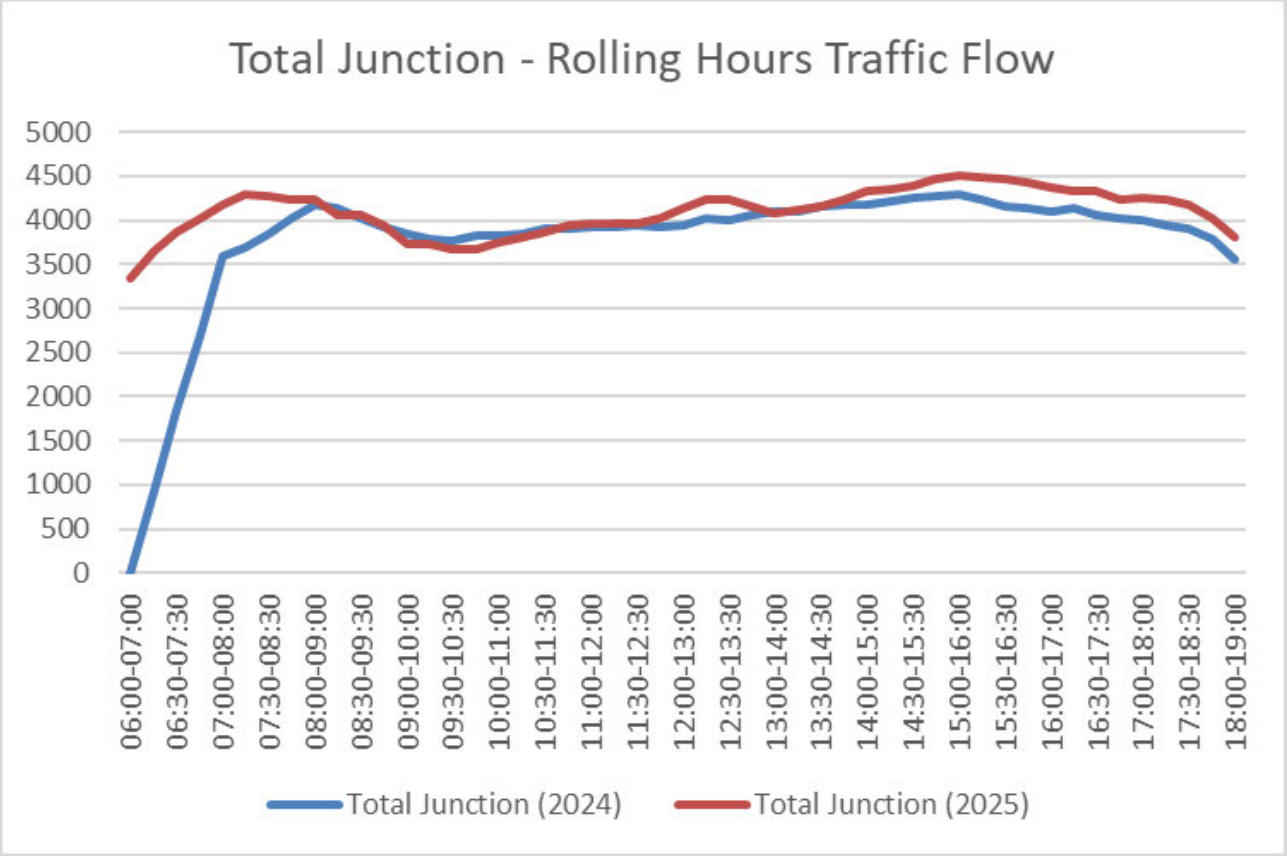
	Average Construction Traffic Volume over the Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:45 - 08:45)	17	4011.0	0.4%
PM Peak (16:30 - 17:30)	17	4235.0	0.4%

2.7 Site 48 - A120 Braintree Bypass / B1018 Braintree Rd Roundabout

2.7.1 NH and Essex County Council provided feedback on the operation presented from the base model of Site 48 - A120 Braintree Bypass / B1018 Braintree Rd Roundabout. The site was then resurveyed in November 2025.

2.7.2 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in Figure 2.7, the total junction flows for Site 48 show a consistent volume across both surveys for the entire day, with near-identical PM peak magnitudes and timing, as well as similar interpeak volumes for total junction flow. However, a difference of approximately 600 PCU is observed in the AM peak when comparing the original survey data with the re-surveyed data displayed in Figure 2.7. Given the scale of this discrepancy, the site was remodelled to ensure the assessment accurately reflects current traffic conditions.

Figure 2.7 Site 48 Total Junction Flow Comparison Chart



2.7.3 The junction capacity assessment for the re-surveyed model, as presented in Table 2.7 and Table 2.8, indicates that in the 2025 Base scenario the A120 (NE) and Long Green (E) approaches operate above theoretical capacity in the AM peak, with RFCs of 1.01 and 1.09 respectively. The Long Green (E) arm is the most constrained in this scenario, experiencing a queue of 20.5 PCU and a delay of 133.03 seconds. These capacity issues persist and intensify in future scenarios. Under the Future Base scenario, the Long Green (E) arm operates at an RFC of 1.17, with delays increasing to 199.47 seconds, while the A120 (NE) arm continues to operate above capacity with an RFC of 1.03.

2.7.4 With the inclusion of committed development traffic, operational performance deteriorates further. In the Future Base plus Committed Development scenario, the Long Green (E) arm operates at 1.25 RFC, generating queues of 51.7 PCU and delays of 335.83 seconds, while the A120 (NE) arm operates at 1.04 RFC. The greatest level of congestion is observed in the Future Base plus Committed Development and Project scenario, where the Long Green (E) arm operates well above theoretical capacity at an RFC of 1.47, with queues of 83.7 PCU and delays of 671.03 seconds. In the same scenario, the A120 (NE) arm also operates above capacity at an RFC of 1.10, with queues of 54.0 PCU and delays of 112.89 seconds. The Cressing Road (NW) approach becomes increasingly constrained in future scenarios, operating marginally above practical capacity in the Future Base scenario (RFC 0.97) and above theoretical capacity in the Future Base plus Committed Development and Project scenario, with an RFC of 1.09, queues of 35.7 PCU, and delays of 226.39 seconds. All remaining approaches operate within practical capacity across all assessed scenarios.

Table 2.7 Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment AM Peak Model Comparison

Approach	AM Peak (2025 Model)			AM Peak (2024 Model)		
	Queue Length (PCU)	Delay (s)	RFC	Queue Length (PCU)	Delay (s)	RFC
2025 Base						
A120 (NE)	23.5	43.56	1.01	11.1	27.15	0.93
Long Green (E)	20.5	133.03	1.09	17.0	118.56	1.08
B1018 (S)	3.1	15.13	0.76	1.7	10.19	0.62
A120 (W)	1.8	3.51	0.62	1.8	3.75	0.63
Cressing Road (NW)	8.2	52.51	0.92	4.3	28.66	0.82
Future Base						
A120 (NE)	30.4	52.67	1.03	17.1	41.18	0.97
Long Green (E)	31.2	199.47	1.17	40.5	387.50	1.21
B1018 (S)	3.4	16.53	0.78	2.0	11.40	0.65
A120 (W)	1.9	3.62	0.63	2.0	3.97	0.65
Cressing Road (NW)	11.5	70.66	0.97	6.4	41.90	0.88
Future Base plus Committed Developments						
A120 (NE)	33.1	56.16	1.04	18.9	45.09	0.98
Long Green (E)	51.7	335.83	1.25	69.8	648.40	1.29
B1018 (S)	4.0	18.64	0.8	2.3	12.50	0.69
A120 (W)	1.9	3.71	0.64	2.1	4.05	0.66
Cressing Road (NW)	13.8	83.51	0.99	7.4	48.67	0.90
Future Base plus Committed Developments and Project						
A120 (NE)	54.0	112.89	1.1	45.4	86.80	1.04
Long Green (E)	83.7	671.03	1.47	112.9	1119.36	1.46
B1018 (S)	5.1	23.22	0.84	2.6	14.17	0.72
A120 (W)	2.3	4.22	0.68	2.5	4.65	0.70
Cressing Road (NW)	35.7	226.39	1.09	19.9	127.25	0.99

Table 2.8 Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment PM Peak Model Comparison

Approach	PM Peak (2025 Model)			PM Peak (2024 Model)		
	Queue Length (PCU)	Delay (s)	RFC	Queue Length (PCU)	Delay (s)	RFC
2025 Base						
A120 (NE)	2.1	5.2	0.67	2.3	5.57	0.68
Long Green (E)	2.4	22.49	0.7	1.2	15.16	0.55
B1018 (S)	2.6	9.26	0.72	1.8	6.86	0.64
A120 (W)	2.6	4.81	0.71	1.9	4.00	0.63
Cressing Road (NW)	9.7	75.75	0.99	3.2	27.21	0.77
Future Base						
A120 (NE)	2.3	5.47	0.69	2.6	6.18	0.71
Long Green (E)	2.8	26.19	0.74	1.5	18.36	0.60
B1018 (S)	2.9	10.11	0.74	2.1	7.65	0.68
A120 (W)	2.8	5.09	0.73	2.1	4.31	0.66
Cressing Road (NW)	14.5	104.54	1.06	5.0	42.32	0.85
Future Base plus Committed Developments and Project						
A120 (NE)	2.4	5.73	0.70	2.7	6.50	0.73
Long Green (E)	3.4	30.84	0.78	1.8	20.86	0.64
B1018 (S)	3.1	10.6	0.76	2.2	7.94	0.69
A120 (W)	2.9	5.33	0.74	2.2	4.47	0.67
Cressing Road (NW)	18.7	130.49	1.12	6.3	53.57	0.89
Future Base plus Committed Developments						
A120 (NE)	3.0	6.91	0.74	3.4	7.68	0.76
Long Green (E)	5.0	46.14	0.85	2.4	28.90	0.72
B1018 (S)	3.8	12.77	0.80	2.6	9.14	0.72
A120 (W)	3.6	6.2	0.77	2.6	5.06	0.71
Cressing Road (NW)	33.9	353.71	1.29	13.8	113.68	0.98

2.7.5 A comparison of the re-surveyed and original LinSig model outputs shown in Table 2.7 and Table 2.8 indicates that both datasets demonstrate consistent operational trends across all assessed scenarios. In both models, the same approaches operate at or above practical capacity during the AM peak, with RFC values (typically exceeding practical and theoretical capacities), substantial queue lengths, and significant delays occurring on the same arms. The re-surveyed model results are marginally worse, with slightly higher RFCs, queues, and delays. The PM peak results in both models show comparatively better operation, with lower RFCs and shorter queues across most approaches. Therefore, the conclusions from the Transport Assessment (APP-333) remain valid.

2.7.6 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of A120 Braintree Bypass / B1018 Braintree Rd Roundabout (Site 48).

2.7.7 The comment states that the impact of the proposed development due to construction is temporary. However, due to the magnitude of the impact, there is the potential for a severe cumulative impact at this junction (and at the A120 / A131 Marks Farm and B1018 / Millenium Way roundabouts) that may not be fully understood through the use of an ARCADY model.

2.7.8 Table 2.9 compares the AM and PM network peak volume of vehicles during the construction period to the AM and PM total junction volume peaks. The table implies the network peak construction traffic (on the 14/10/2030) associated with the Project is forecast to account for approximately 2.8% of the total junction flow during both the AM and PM peak hours, representing a very small proportion of overall traffic demand.

2.7.9 Table 2.10 compares the average daily volume of vehicles during periods when construction activity is taking place to the AM and PM total junction peak volumes. The table implies construction traffic associated with the Project is forecast to account for approximately 2.82% and 2.42% of the total junction flow during both the AM and PM peak hours, representing an even small proportion of overall traffic demand over the construction timeline.

2.7.10 The construction traffic profiles, shown in Figure 2.8 and Figure 2.9, indicates several short-term peaks in vehicle activity during the construction period; however, these peaks are not sustained for prolonged durations. Given the relatively low magnitude and temporary nature of construction flows, it is considered reasonable to manage potential effects through operational measures, including the use of Variable Message Signs (VMS) and advance communication with local residents to provide awareness of potential short-duration disruptions during peak construction periods.

Figure 2.8 Site 48 AM Construction Volumes

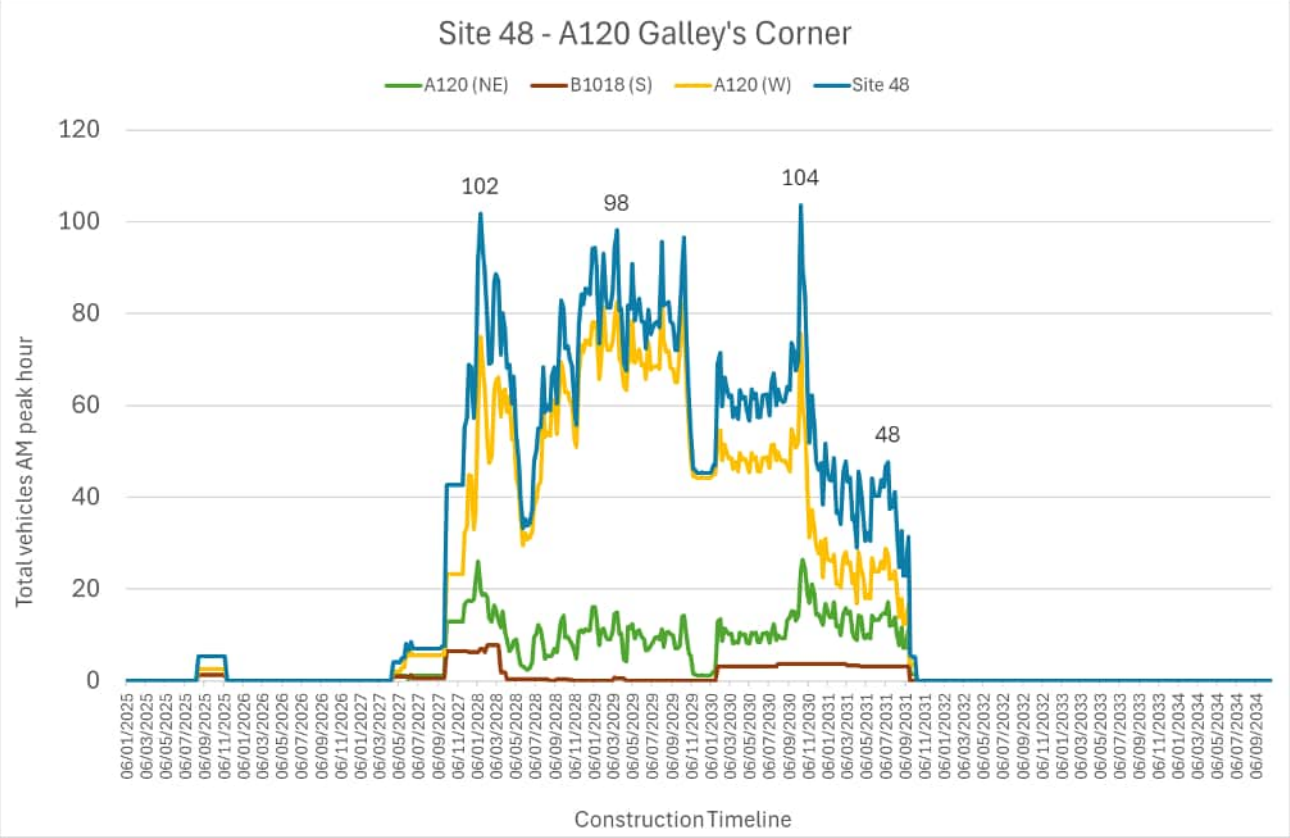


Figure 2.9 Site 48 PM Construction Volumes

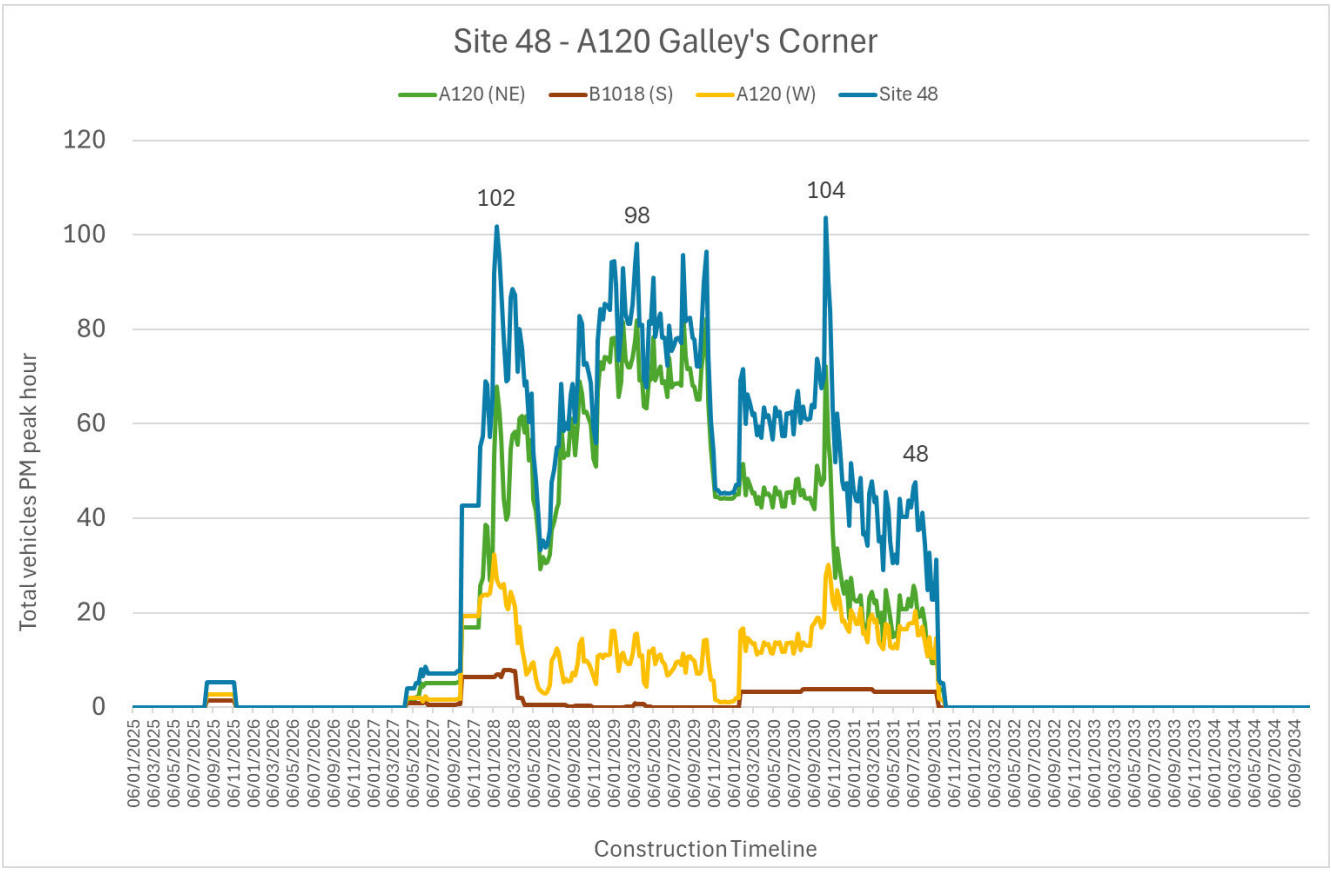


Table 2.9 Construction Vehicle Impact on Total Junction Traffic Site 48

	Peak Construction Traffic Volume during Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:15 - 08:15)	104	3689	2.82%
PM Peak (15:00 - 16:00)	104	4300	2.42%

Table 2.10 Site 49 Average Construction Vehicle Impact on Total Junction Traffic

	Average Construction Traffic Volume over the Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:15 - 08:15)	12	2021	0.59%
PM Peak (15:00 - 16:00)	12	1899	0.63%

Key Outcomes

- Updated post-DCO traffic surveys (November 2025) confirm that the junction operates over capacity in the Base and Do-Minimum scenarios.
- Junction performance issues are inherent to baseline and committed development conditions.
- Peak project construction traffic represents approximately 2.82% of total junction flow in both the AM and PM peak hours.
- Average project construction traffic across the construction timeline represents approximately 0.63% of total junction flow in both the AM and PM peak hours.
- The Project does not materially alter junction performance or capacity.
- Any short-term construction impacts are temporary and can be managed through operational measures.

2.8 Site 56 – A120 Braintree Bypass / A131 Great Notley Bypass roundabout

2.8.1 Following the review of the draft TA submitted in February 2025 by ECC the additional committed development of Horizon 120, Phase 2, Great Notley, Braintree (planning reference 23/02807/OUT) was identified to meet the criteria to be included as a committed development.

2.8.2 The updated results with the additional committed development flows and network changes are presented in Table 2.11. The results indicate that the junction is predicted to operate well within capacity in all forecast scenarios with no significant delays. The addition of the Project traffic has a negligible impact on junction capacity and the conclusions from the TA (APP-333) remain valid.

Table 2.11 Site 56 A120 Braintree Bypass / A131 Great Notley Bypass Roundabout Capacity Assessment

Approach	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)
Base 2024								
Junction 1 - Arm A	2.1	8.32	0.68	6.14	1.5	6.9	0.6	6.12
Junction 1 - Arm C	1.1	3.45	0.51		0.9	3.14	0.47	
Junction 1 - Arm D	1.3	7.49	0.52		1.9	8.8	0.65	
Junction 2 - Arm A	1.3	4.13	0.56	3.83	1.1	3.83	0.52	3.3
Junction 2 - Arm B	0.8	4.85	0.45		0.6	4.36	0.34	
Junction 2 - Arm C	0.6	4.79	0.36		0.2	3.71	0.18	
Junction 2 - Arm D	0.7	2.47	0.41		0.7	2.28	0.41	
Future Base								
Junction 1 - Arm A	2.4	9.16	0.71	6.63	1.7	7.44	0.62	6.67
Junction 1 - Arm C	1.1	3.58	0.53		0.9	3.24	0.48	
Junction 1 - Arm D	1.4	8.06	0.55		2.2	9.87	0.69	
Junction 2 - Arm A	1.4	4.32	0.58	4.01	1.2	3.99	0.54	3.42
Junction 2 - Arm B	0.9	5.11	0.47		0.6	4.56	0.36	
Junction 2 - Arm C	0.6	5.04	0.38		0.2	3.82	0.19	
Junction 2 - Arm D	0.8	2.56	0.43		0.7	2.35	0.42	
Future Base plus Committed Developments								
Junction 1 - Arm A	2.9	10.6	0.75	7.26	2.0	8.76	0.66	8.21

Approach	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)
Junction 1 - Arm C	1.2	3.7	0.55		1.3	3.8	0.56	
Junction 1 - Arm D	1.5	8.44	0.57		2.9	13.38	0.75	
Junction 2 - Arm A	1.6	4.62	0.6	4.54	1.3	4.18	0.55	3.62
Junction 2 - Arm B	1.3	6.47	0.57		0.7	4.78	0.38	
Junction 2 - Arm C	0.7	5.73	0.41		0.2	3.87	0.19	
Junction 2 - Arm D	0.8	2.64	0.45		1.0	2.75	0.51	
Future Base plus Committed Developments and Project								
Junction 1 - Arm A	3.5	13.04	0.78	9.01	2.0	8.9	0.67	8.8
Junction 1 - Arm C	1.2	3.67	0.54		1.1	3.53	0.53	
Junction 1 - Arm D	2.4	11.6	0.7		3.5	14.71	0.78	
Junction 2 - Arm A	2.2	5.68	0.67	4.94	1.5	4.52	0.58	3.71
Junction 2 - Arm B	1.3	6.65	0.56		0.7	4.98	0.39	
Junction 2 - Arm C	0.7	6.17	0.42		0.3	4	0.2	
Junction 2 - Arm D	0.8	2.62	0.44		0.9	2.57	0.47	

3. Overview of Mitigation

3.1.1 As described in the TA (APP-333) the junction modelling undertaken presented the worst-case peak construction traffic which is generally only expected to occur for a short duration (e.g. one week). Based on the results of the junction capacity assessments during the AM and PM peak hours, mitigation was identified where possible for junctions during the construction period.

3.1.2 The results of the junction review and remodelling presented in Section 2 indicate that no additional mitigation beyond that identified in the TA (AP-333) is anticipated.

3.1.3 A summary of the proposed mitigation is shown below in Table 3.1 for LRN junctions and Table 3.2 for SRN/MRN junctions, which have previously been discussed with ECC/NH before DCO submission. Where highlighted in red, agreement on mitigation is still pending and further engagement with ECC/NH is required.

Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333)

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
Section D	Essex	Site 38	A120 Ardleigh Crown Interchange	Partially Signalised Roundabout	Further discussions to be undertaken with ECC/NH	No Change
	Essex	Site 40	A12 Severalls Interchange	Priority Double Roundabout	No mitigation proposed but note change to junction layout proposed by other and modelling of junction yet to be completed as awaiting files/updated design drawing from Aecom.	No Change
Section E	Essex	Site 48	A120 Braintree Bypass / B1018 Braintree Rd	Priority Roundabout	Monitor operation of junction Temporary signage to warn general traffic of peak hour congestion	No Change
	Essex	Site 56	A120 Braintree Bypass / A131 Great Notley Bypass	Priority Roundabout	No mitigation proposed	No Change

Table 3.2 LRN Proposed Junction Mitigation within TA (APP-333)

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
Section D	Essex	Site 41	A1341 Via Urbis Romanae / United Way	Priority Roundabout	No mitigation proposed (see Site 40)	No Change
	Essex	Site 44	A1341 Via Urbis Romanae / A134 Northern Approach Rd	Signalised Junction	Update to intergreens and phase delays and optimise signal timings	No Change

Abbreviations

Abbreviation	Full Reference
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
ES	Environmental Statement
IEMA	Institute of Environmental Management and Assessment
LHA	Local Highway Authority
LRN	Local Road Network
LTC	Lower Thames Crossing
MCC	Manual Classified Counts
MRN	Major Road Network
PAR	Primary Access Routes
SRN	Strategic Road Network
TA	Transport Assessment
TAG	Transport Analysis Guidance
V/C	Volume to capacity

Glossary

Term	Description
Committed development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Development Consent Order (DCO)	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Local Highway Authority (LHA)	The public authority whose duty it is to maintain and protect the safety and usability of public roads.
Major Road Network (MRN)	Routes in the middle tier of the road network (between the SRN and LRN), as defined by the Department for Transport. MRNs are managed by the Local Highway Authoritiess. For the Project, the Local Highway Authorities are Thurrock Council and Essex, Suffolk and Norfolk County Councils
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Primary Access Routes	Access routes on the public highway designated for use by construction vehicles (typically for HGVs) to travel from the strategic road network / major road network to the site access point.
Ratio of Flow to Capacity (RFC)	A measurement used to determine how bust an approach is at an unsignalised junction.
Strategic Road Network (SRN)	Comprises the motorway and trunk road network, managed by National Highways, as defined by the Department for Transport
Transport Assessment (TA)	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).

Bibliography

Websites

Department for Communities and Local Government (2014) *Travel Plans, Transport Assessments and Statements.* Available at https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

Department for Energy Security and Net Zero (2024a) *Overarching National Policy Statement for Energy (EN-1).* Available at https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1

Department for Transport (2024) *Transport Analysis Guidance*, Available at https://www.gov.uk/guidance/transport-analysis-guidance-tag

Institute of Environmental Management and Assessment (IEMA) (2023) *IEMA Guidelines: Environmental Assessment of Traffic and Movement*

National Highways (2023) *Design Manual for Roads and Bridges (DMRB) CD 116 Geometric Design of Roundabouts*. Available at: [redacted]

TEMPro (Trip End Model Presentation Program) software. Available at https://www.gov.uk/government/publications/tempro-downloads

Appendix A. Consultation on the junction modelling and mitigation

nationalgrid

Appendix A
Consultation on the junction modelling and mitigation

A.1.1 The engagement undertaken during the development of the TA (document reference 7.11) that is relevant to junction modelling and mitigation is presented in Table B-1.

Table B-1 Engagement undertaken relevant to the junction modelling and mitigation

Reference	Summary of discussions	National Grid's Response
Transport Working Group Meeting (Norfolk, Essex, Suffolk and Thurrock) April 2024	Suffolk County Council raised concerns at A140 Stoke Ash junction, noting the accident history in this location, and it was requested to be included in the assessment.	The Stoke Ash Workhouse Road junction has been reviewed and modelling results presented within section 7 of the TA (document reference 7.11).
Transport Working Group Regional Meeting (Essex) June 2024	Reviewed list of sensitive junctions provided in previous meetings and has requested to include the A1060 / Park Avenue junction in Chelmsford in the assessment.	The A1060/Park Avenue junction has been included within the junction modelling and results presented within section 7 of the TA (document reference 7.11)
Transport Working Group Regional Meeting (Essex) October 2024	General structure and content of TA was presented by National Grid and considered appropriate by Essex. Provided an overview of the initial capacity assessment methodology using.	Structure and modelling methodology has been used to develop the TA (document reference 7.11). A draft version of the TA (document reference 7.11) was submitted for comment in March 2025, and a response was provided by Essex.
Transport Working Group Meeting (Norfolk, Essex, Suffolk, Thurrock, National Highways) January 2025	National Grid presented a draft of TA. Ran through methodology of junction sifting process, junction assessment methodology and cumulative assessment.	Workshops with Norfolk undertaken to assess all mitigation on a case-by-case basis.
Transport Working Group Regional Meeting (Essex) February 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects for junctions and PARs predominately where WCH Amenity raised from detailed assessment within the ES (Volume 6 of the DCO application). Approach to mitigation agreed in principle but would require	Mitigation workshops with Essex undertaken to assess all mitigation at the junctions and PARs on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3). RAG strategy was used to prioritise order of junctions and mitigation required.

Reference	Summary of discussions	National Grid's Response
	site specific measures to be identified based on future traffic conditions. RAG strategy presented for junction mitigation. The RAG strategy would help to focus on key junctions in terms of the likely mitigation required to ensure sufficient time is allowed to develop and discuss proportionate measures prior to the submission of the DCO. RAG strategy agreed in principle. Mitigation measures may be informed by feasibility studies previously undertaken by Essex.	
Transport Working Group Regional Meeting (Essex) April 2025	National Grid presented a draft TA report and ran through comments received by Essex. This included core working hours being beyond acceptability, details on bellmouths requested, queries on Outline CTMP and Outline CWTP regarding staff/visitor trips, detail requested on trip generation, review of collision clusters needed, sensitivity of some PARs in relation to construction movements at peak times, Further review of V/C ratio requested and parking and loading assessment should be undertaken on a case-by-case basis. Cumulative developments to be confirmed by Essex	Feedback received from Essex was reviewed at the meeting and has been incorporated in to the TA (document reference 7.11) in all relevant sections. Details on Cumulative developments and V/C ratio were provided for review by Essex.
Transport Working Group Regional Meeting (Essex) June 2025	National Grid presented results of the junction modelling assessments to the area engineers. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Approach and findings of results agreed in principle but request for time to further review the findings of the assessment modelling and to review existing baseline.	Findings of the junction assessments based on strategy and approach, and proposed mitigation can be found within Section 6 and 7 of the TA (document reference 7.11). Essex have been provided with modelling results to allow for a technical review to be undertaken.
Transport Working Group Regional Meeting (Essex) June 2025	National Grid presented the trip generation and assignment for the Project to Essex. Essex note that in principle the approach and	Findings of the junction assessments based on strategy and methodology presented to Essex can be found within Section

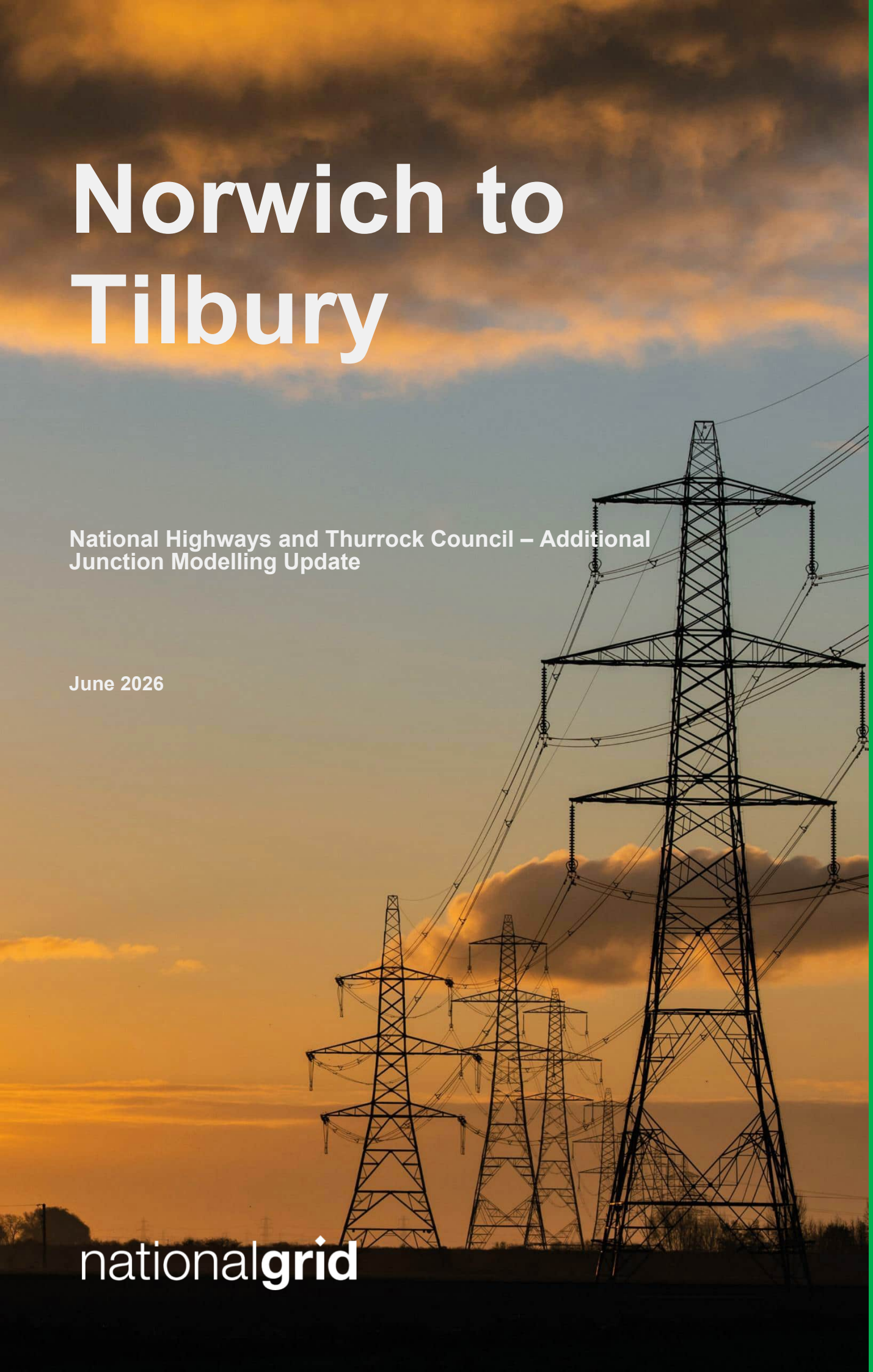
Reference	Summary of discussions	National Grid's Response
	methodology used was acceptable including the use of the V/C ratio for junction selection.	6 and 7 of the TA (document reference 7.11).

Appendix B
Traffic Model Files and Outputs (Available Electronically)

Norwich to Tilbury

National Highways and Thurrock Council – Additional Junction Modelling Update

June 2026



nationalgrid

Contents

1. Introduction 2

1.1 Background 2

1.2 Purpose of this Technical Note 3

2. Additional Junction Modelling Post DCO Submission 4

2.2 Site 85 – A1013 Stanford Road / Buckingham Hill Road 4

2.3 Site 89 – A1089 / Thurrock Park Way / Dock Road (ASDA Roundabout) 6

2.4 Site 90 – M25 Junction 30 10

3. Overview of Mitigation 15

Table 2.1 Site 85 A1013 Stanford Road / Buckingham Hill Road roundabout Capacity Assessment 5
Table 2.2 Site 89 ASDA Roundabout A1089 Dock Approach Road / Thurrock Parkway Junction Capacity Assessment 7
Table 2.3 Site 90 M25 J30 roundabout capacity assessment 11
Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333) 15
Table 3.2 LRN Proposed Junction Mitigation within TA (APP-333) 15

Abbreviations 16
Glossary 17
Bibliography 18

Appendix A Consultation on the junction modelling and mitigation
Appendix B Traffic Models and Outputs (Available Electronically upon Request)

1. Introduction

1.1 Background

1.1.1 Between April and August 2025 National Grid held meetings with all Local Highways Authorities and National Highways (NH) regarding the Transport Assessment (TA) (APP-333) and modelling assessments undertaken at junctions that are likely to be sensitive to a change in traffic flows as a result of the peak construction activity associated with the Norwich to Tilbury Project.

1.1.2 Where possible feedback received from Thurrock Council (TC)/NH was considered as detailed within 7.11 TA Appendix B – Consultation on the scope of the Assessment (APP-335) and shown in Appendix A of this technical note. The main topics that were considered are as follows:

- During the thematic group meetings between March and April 2024, National Grid shared the list of sensitive junctions that were identified for assessment within the TA (AP-333). Feedback was requested from TC and NH to provide any additional junction that needed to be included in the assessment. They provided comments based on their local knowledge and concerns regarding junction capacity and road safety.
- During the thematic group meetings between September and October 2024 the proposed structure of the TA (APP-333) and modelling methodology were presented. TC/NH agreed with the proposed methodology and structure of the TA.
- In January and February 2025, National Grid shared with the TC/NH the junctions where proposed mitigation was required and arranged separate meetings to go through the junction modelling results and proposed mitigation.
- A draft version of the TA (APP-333) was shared with TC and NH in February 2025 and feedback requested. Comments were received from TC at the end of February and from NH in April 2025 and changes incorporated into the TA (APP-333).
- Meetings with TC and NH were held between April and June 2025 to present the results of the junction modelling and proposed initial mitigation. There was agreement in principle of the additional mitigation in most locations subject to review of modelling files.
- Junction models were shared with TC and NH in June 2025 to request feedback.
- Engagement with the TC//NH between March 2024 and DCO submission August 2025 provided identification of additional planning applications. Development flows were reviewed to identify if they should be included in the assessment.

1.1.3 The modelling work associated with Site 88 - Orsett Cock A13 Stanford le Hope Bypass / A1013 Stanford Rd is to be undertaken following further engagement with TC and the LTC Project Team.

1.2 Purpose of this Technical Note

1.2.1 As a result of feedback received by TC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post Development Consent Order (DCO) submission. This additional modelling was undertaken where TC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not reflect accurate baseline operation.

1.2.2 This report has been prepared to address comments received from National Highways on the submitted transport modelling, as set out in Technical Notes TN03 (19th December 2025) and TN04 (10th February 2026). The purpose of this document is to also summarise the clarifications provided, describe any agreed amendments to the modelling approach and assumptions, and present updated modelling results where changes to the models have been implemented in response to National Highways' and TC's comments.

1.2.3 The results of the additional modelling are presented within Section 2 of this technical note. Section 3 provides a summary of any changes required to the proposed mitigation identified within the TA (APP-333) as a result of the updated junction modelling. Traffic models and outputs are available upon request as part of Appendix B.

2. Additional Junction Modelling Post DCO Submission

2.1.1 As a result of feedback received by TC and NH on the modelling work undertaken to date in support of the TA (APP-333), a number of junctions have been remodelled post DCO submission.

2.1.2 The results of the junction modelling are presented below.

2.1.3 At the following junctions TC/NH raised the issue that the baseline scenario models presented in the TA (APP-333) did not appear to represent their understanding of current baseline conditions:

- Site 85 - A1013 Stanford Road / Buckingham Hill Road
- Site 89 - A1089 / Thurrock Park Way / Dock Road (ASDA Roundabout)
- Site 90 – M25 Junction 30

2.1.4 It is understood that the reason for this difference may be because these current conditions might not have been captured on the day when the traffic survey was undertaken. Therefore, this feedback was noted, and the junctions were resurveyed to confirm that observed conditions are accurately represented within the TA (APP-333). The additional traffic survey data was obtained in November 2025 on a typical weekday under normal traffic conditions and time period as the previous survey data obtained in 2024.

2.1.5 Before the junction modelling was re-run at the sites, a review of the latest survey traffic data obtained in November 2025 was compared with the original traffic survey data obtained in 2024. Where the traffic flow data did not show any evidence of a significant change the junction was not subject to remodelling. As such the original results within the TA (APP-333) were considered robust and remain valid.

2.1.6 Where junction modelling was rerun, the same scenarios within the TA (APP-333) were used (based on the existing highway layout):

- 2024 base year (survey year)
- Future Base year (TEMPro growth applied to the 2024 base year). The future base year was estimated individually for each site and was based on the worst-case peak period for the Project at each particular location
- Future Base + Committed Development year
- Future Base + Committed Development + Project worst case construction traffic.

2.2 Site 85 – A1013 Stanford Road / Buckingham Hill Road

2.2.1 Following a review of the LTC flows, Site 85 - A1013 Stanford Road / Buckingham Hill Road has been modelled to reflect the revised LTC flows.

2.2.2 Following the updated modelling using the revised LTC flows, the results are presented in Table 2.1. The results indicate that the junction is predicted to operate well within capacity in all forecast scenarios, with the highest DoS, Queue length and Delay observed at 80.2%, 7.7 PCU and 30.4 seconds respectively in the FB+CD+ Project PM scenario. The conclusions from the Transport Assessment (App-333) remain valid.

Table 2.1 Site 85 A1013 Stanford Road / Buckingham Hill Road roundabout Capacity Assessment

Approach	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
2024 Base							
1/1+1/2	A1013 Stanford Road EB Ahead Right	1.9	13.7	34.8 : 34.8%	4.1	16.7	60.5 : 60.5%
4/2+4/1	A1013 Stanford Road WB Ahead Left	3.7	21.5	56.4 : 40.9%	3.1	15.1	31.0 : 31.0%
6/1+6/2	Buckingham Hill Road Right Left	2.8	13.8	24.7 : 50.1%	3.4	27.9	54.8 : 54.8%
Future Base							
1/1+1/2	A1013 Stanford Road EB Ahead Right	2.3	17.6	49.9 : 49.9%	3.8	13.9	46.9 : 46.9%
4/2+4/1	A1013 Stanford Road WB Ahead Left	3.6	19.6	50.6 : 47.2%	3.9	22.1	43.4 : 45.7%
6/1+6/2	Buckingham Hill Road Right Left	2.9	13.8	24.0 : 48.4%	3.3	22.6	45.4 : 45.4%
Future Base plus Committed Developments							
1/1+1/2	A1013 Stanford Road EB Ahead Right	3.2	22.3	63.4 : 63.4%	5.5	17.4	62.4 : 62.4%
4/2+4/1	A1013 Stanford Road WB Ahead Left	4.9	23.6	60.4 : 72.0%	5.4	25.5	60.9 : 60.9%
6/1+6/2	Buckingham Hill Road Right Left	4.9	14.5	38.0 : 68.0%	7.0	29.3	74.9 : 74.9%
Future Base plus Committed Developments and Project							

Approach	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
1/1+1/2	A1013 Stanford Road EB Ahead Right	5.3	27.7	77.4 : 77.4%	5.5	16.2	61.0 : 61.0%
4/2+4/1	A1013 Stanford Road WB Ahead Left	5.4	26.5	66.1 : 78.8%	5.7	27.3	64.6 : 64.6%
6/1+6/2	Buckingham Hill Road Right Left	5.1	14.4	37.8 : 72.9%	7.7	30.4	80.2 : 80.2%

2.3 Site 89 – A1089 / Thurrock Park Way / Dock Road (ASDA Roundabout)

Key Outcomes

- The junction has been remodelled to reflect revised LTC flows and agreed committed development assumptions.
- Future-year operation is sensitive to background and committed development traffic.
- The addition of Project traffic results in only a small increase in RFC values.
- No additional Project-specific mitigation is required.

2.3.1 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of Asda Roundabout (Site 89).

2.3.2 These comments related to providing a version of the model incorporated the Future Base + Committed Development + Project Scenarios and tested following agreement of the trip generation, trip distribution, and trip assignment.

2.3.3 The roundabout geometries within the model are consistent with those used in the most recent ASDA roundabout construction impact assessment (November 2023), which forms the latest submission to the LTC Planning Inspectorate.

2.3.4 Following a review of the LTC flows, Site 89 - Asda Roundabout - A1089 Dock Approach Road / Thurrock Parkway has been modelled to reflect the revised LTC flows.

2.3.5 This junction was modelled as part of the multi-modal flow scenarios. In both scenarios the Project vehicles follow the same routing, but Scenario 1 carried 20 PCU fewer than Scenario 2 in both the AM and PM peak hours.

2.3.6 The traffic modelling has been updated to reflect these revised flows and to provide outputs for all Scenario combinations. The updated results, incorporating the additional committed development and Project flows, are presented in

2.3.7 Table 2.2.

2.3.8 Overall, the junction shows similar patterns to those identified in the submitted TA (AP-333). Both committed development Scenarios, reflecting different LTC traffic assumptions, indicate that the junction is highly sensitive in the future-year scenarios. When Project traffic is added, the combination of committed development Scenario 2 with Project flows Scenario 1 produces the lowest queues, delays, and RFC values. However, in this scenario, the same arms operate over capacity as those identified in the worst-case combination of committed development Scenario 1 with Project flows Scenario 2.

2.3.9 Given the small increase in RFC values attributable to the Project, with a maximum increase of up only 0.06 RFC observed on the A1089 St Andrew's Road across all scenarios, and the sensitivity already driven by committed development assumptions, no Project-specific mitigation is considered necessary or proportionate at this stage.

Table 2.2 Site 89 ASDA Roundabout A1089 Dock Approach Road / Thurrock Parkway Junction Capacity Assessment

Approach	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Base						
A - A1089 Dock Road North	23.1	33.69	0.99	7.1	14.95	0.84
B - Amazon UK Service Access	0.2	9.18	0.08	0.2	7.93	0.11
C - Dock Road South	1.6	9.40	0.60	1.1	6.91	0.52
D - A1089 St Andrew's Road	1.6	5.97	0.49	4.1	9.79	0.76
E - Thurrock Park Way	0.8	6.02	0.40	2.8	14.54	0.73
Future Base						
A - A1089 Dock Road North	40.2	50.45	1.04	10.1	20.71	0.89
B - Amazon UK Service Access	0.2	9.69	0.09	0.2	8.32	0.12
C - Dock Road South	1.8	10.53	0.64	1.3	7.78	0.56
D - A1089 St Andrew's Road	1.8	6.32	0.52	5.4	12.28	0.81
E - Thurrock Park Way	0.9	6.43	0.43	4.1	19.64	0.81
Future Base plus Committed Developments Scn1						

Approach	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A - A1089 Dock Road North	529.3	872.06	1.35	223.1	376.70	1.12
B - Amazon UK Service Access	0.2	10.80	0.11	0.3	10.25	0.15
C - Dock Road South	2.5	14.59	0.71	1.9	11.13	0.65
D - A1089 St Andrew's Road	7.1	16.94	0.81	63.9	87.83	1.09
E - Thurrock Park Way	1.4	10.07	0.56	12.7	51.88	0.99
Future Base plus Committed Developments Scn2						
A - A1089 Dock Road North	445.4	724.99	1.32	196.2	324.21	1.11
B - Amazon UK Service Access	0.2	10.79	0.11	0.3	10.17	0.15
C - Dock Road South	2.4	14.26	0.71	1.8	11.01	0.64
D - A1089 St Andrew's Road	5.8	14.40	0.77	51.9	73.66	1.06
E - Thurrock Park Way	1.4	9.54	0.54	12.8	51.77	0.99
Future Base plus Committed Developments (Scn1) and Project (Scn1)						
A - A1089 Dock Road North	600.6	979.32	1.37	276.8	473.84	1.15
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.33	0.15
C - Dock Road South	2.6	14.92	0.72	1.9	11.31	0.65
D - A1089 St Andrew's Road	8.2	19.03	0.83	77.9	104.23	1.11
E - Thurrock Park Way	1.5	10.62	0.57	13.4	54.41	0.99
Future Base plus Committed Developments (Scn2) and Project (Scn2)						
A - A1089 Dock Road North	530.5	873.41	1.35	265.1	455.22	1.14
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.31	0.15

Approach	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
C - Dock Road South	2.5	14.54	0.71	1.9	11.28	0.65
D - A1089 St Andrew's Road	7.0	16.57	0.80	69.7	93.86	1.10
E - Thurrock Park Way	1.4	10.14	0.56	13.9	56.07	1.00
Future Base plus Committed Developments (Scn1) and Project (Scn2)						
A - A1089 Dock Road North	629.2	1023.76	1.38	303.8	516.49	1.16
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.36	0.15
C - Dock Road South	2.6	15.05	0.72	1.9	11.38	0.65
D - A1089 St Andrew's Road	8.7	20.04	0.84	84.0	116.24	1.12
E - Thurrock Park Way	1.6	10.83	0.58	13.6	55.46	1.00
Future Base plus Committed Developments (Scn2) and Project (Scn1)						
A - A1089 Dock Road North	504.6	830.77	1.34	240.3	411.39	1.13
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.28	0.15
C - Dock Road South	2.5	14.46	0.71	1.9	11.20	0.65
D - A1089 St Andrew's Road	6.6	15.86	0.80	64.3	87.72	1.09
E - Thurrock Park Way	1.4	9.95	0.55	13.5	54.78	0.99

2.4 Site 90 – M25 Junction 30

Key Outcomes

- Several movements operate at or above practical capacity in the Base scenario.
- Congestion worsens in future-year scenarios due to background and committed development growth.
- The Project does not introduce new capacity failures or materially change the nature of congestion.
- Oversaturation at the junction is not attributable to Project traffic.

2.4.1 During the development of the TA (APP-333), it was not possible to survey Site 90 – M25 J30 due to the extended time required to obtain the necessary permits to undertake the MCC in the M25 J30. As a result, this site was commissioned post DCO and surveyed in October 2025.

2.4.2 Furthermore, following a review of the LTC flows, Site 90 has been modelled to reflect the revised LTC flows.

2.4.3 The re-surveyed traffic results summary shown in Table 2.3 indicates that some lanes across the junction are operating within practical capacity in the Base scenario and continue to operate at this level across all forecast scenarios. However, several lanes are operating at or above practical capacity in the Base scenario, with levels of oversaturation worsening in the forecast scenarios.

2.4.4 Across all scenarios, the M25 northbound off-slip lanes (Lanes 3/1+3/2 and 3/3) seem to operate either above practical or theoretical capacity across all forecast year scenarios in both the AM and PM peaks. These lanes deteriorate significantly in the FB+CD WD and FB+CD+ Project WD scenarios, where Lane 3/3 reaches 124.6% DoS in the AM peak (queues of 211.2 PCU and delays of 422.6 seconds) and remains above theoretical capacity in the PM peak at 119.5% DoS.

2.4.5 The M25 northbound off-slip, the Mardyke Junction westbound approaches (Lanes 7/1, 7/2 and 7/3) and southbound approaches (Lanes 6/1 and 6/2) mostly remain within practical capacity in the Base scenarios for both the AM and PM peaks. All of these lanes become oversaturated, operating above both practical and theoretical capacity, with correspondingly higher queues and delays observed. For the Mardyke Junction westbound approaches (Lanes 7/1, 7/2 and 7/3), the greatest level of oversaturation is observed in the AM peak under the FB+CD+ Project WD forecast scenario, with Lane 7/2 operating at a DoS of 119.9%, with queues of 84.4 PCU and delays of 388.6 seconds. For the Mardyke Junction westbound approaches (Lanes 6/1 and 6/2), the greatest levels of oversaturation observed in the PM peak under the FB+CD+ Project WD forecast scenario, with Lane 6/1 operating at a maximum DoS of 112.8%, with queues of 95.7 PCU and delays of 262.9 seconds.

2.4.6 The A13 westbound off-slip Arm 2, (Lanes 2/1+2/2 and 2/4+2/3) mostly remain within practical capacity in the Base scenarios for both the AM and PM peaks. All these lanes become oversaturated, operating above both practical and theoretical capacity, with correspondingly higher queues and delays observed in forecast scenarios. The greatest level of oversaturation is observed in the PM peak under the FB+CD+ Project WD forecast scenario, with Lane 2/4+2/3 operating at a DoS of 114.1%, with queues of 126.2 PCU and delays of 278.3 seconds.

2.4.7 While a number of movements are forecast to operate above practical and theoretical capacity, these conditions are present in baseline scenarios and worsen primarily due to background and committed development growth. The Project does not introduce new capacity constraints nor materially alter junction performance at this location. It is recommended that signal and cycle time optimisation be considered at the junction.

Table 2.3 Site 90 M25 J30 roundabout capacity assessment

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
Base 2025							
1/1	M25 SB Off Slip Left	1.1	3.1	68.5%	1.2	3.2	69.8%
1/2	M25 SB Off Slip Ahead Left	14.3	46.3	79.1%	18.5	65.1	90.9%
1/3+1/4	M25 SB Off Slip Ahead	14.1	42.6	84.0%	17.4	43.9	89.0%
2/1+2/2	A13 WB Off Slip Left	20.6	47.8	91.0%	18.8	46.9	88.2%
2/4+2/3	A13 WB Off Slip Ahead	14.7	40.2	80.3%	20.0	56.2	91.8%
3/1+3/2	M25 NB Off Slip Ahead Left	51.6	71.1	100.2%	48.0	66.4	99.7%
3/3	M25 NB Off Slip Ahead	51.2	74.9	100.3%	50.8	76.7	100.3%
4/1	A13 EB Off Slip Left	0.3	1.5	35.5%	0.8	2.4	60.2%
4/2	A13 EB Off Slip Ahead	11.9	50.0	76.8%	23.8	112.6	99.1%
4/3	A13 EB Off Slip Ahead	13.7	54.2	81.3%	25.1	102.7	98.4%
5/1	Mardyke Junction EB Ahead	14.4	19.0	48.3%	20.2	31.2	65.9%
5/2	Mardyke Junction EB Right Ahead	8.9	10.1	59.5%	16.8	19.3	78.6%
5/3	Mardyke Junction EB Right	0.3	2.1	33.3%	0.5	2.9	44.9%
6/1	Mardyke Junction SB Ahead	14.2	14.3	70.3%	18.1	17.0	82.7%
6/2	Mardyke Junction SB Right Ahead	14.2	12.1	63.1%	18.9	15.2	79.6%
6/3	Mardyke Junction SB Right	2.4	8.9	37.0%	2.4	7.9	40.8%
7/1	Mardyke Junction WB Ahead	19.2	44.5	85.1%	21.7	51.9	89.4%
7/2	Mardyke Junction WB Right Ahead	18.6	32.4	85.6%	30.0	79.2	99.2%
7/3	Mardyke Junction WB Right	3.8	23.5	79.7%	4.1	23.1	82.6%
8/1	Mardyke Junction NB Ahead	13.0	9.9	48.7%	14.8	10.4	59.5%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
8/2	Mardyke Junction NB Right Ahead	17.7	12.4	53.4%	25.8	21.1	76.1%
8/3	Mardyke Junction NB Right	9.6	14.9	60.1%	10.9	18.2	60.5%
Future Baseline							
1/1	M25 SB Off Slip Left	1.2	3.3	71.2%	1.3	3.5	72.7%
1/2	M25 SB Off Slip Ahead Left	11.7	32.7	63.0%	16.8	48.9	84.2%
1/3+1/4	M25 SB Off Slip Ahead	12.7	33.2	77.8%	16.1	38.7	87.4%
2/1+2/2	A13 WB Off Slip Left	17.9	33.2	83.7%	15.9	35.3	78.6%
2/4+2/3	A13 WB Off Slip Ahead	12.9	29.5	71.3%	21.8	53.7	92.7%
3/1+3/2	M25 NB Off Slip Ahead Left	52.2	65.5	99.9%	81.4	149.3	106.0%
3/3	M25 NB Off Slip Ahead	47.4	59.4	98.8%	59.0	93.2	101.9%
4/1	A13 EB Off Slip Left	0.3	1.5	36.8%	0.8	2.5	62.7%
4/2	A13 EB Off Slip Ahead	11.4	40.4	68.3%	16.4	54.4	85.9%
4/3	A13 EB Off Slip Ahead	12.3	41.6	69.5%	18.5	53.5	86.8%
5/1	Mardyke Junction EB Ahead	7.4	16.8	48.8%	25.0	32.0	71.3%
5/2	Mardyke Junction EB Right Ahead	20.7	22.4	78.7%	19.9	29.8	88.6%
5/3	Mardyke Junction EB Right	12.7	12.6	38.6%	1.9	7.2	50.8%
6/1	Mardyke Junction SB Ahead	17.6	25.4	83.6%	24.6	32.3	94.2%
6/2	Mardyke Junction SB Right Ahead	14.5	18.1	80.0%	27.3	25.3	91.9%
6/3	Mardyke Junction SB Right	14.0	21.4	45.7%	2.8	9.7	45.5%
7/1	Mardyke Junction WB Ahead	25.6	73.2	99.5%	37.2	125.6	102.5%
7/2	Mardyke Junction WB Right Ahead	26.9	88.8	98.2%	34.3	116.2	102.1%
7/3	Mardyke Junction WB Right	19.5	79.6	92.3%	23.4	90.5	98.3%
8/1	Mardyke Junction NB Ahead	16.2	12.6	53.8%	16.4	16.5	61.0%
8/2	Mardyke Junction NB Right Ahead	19.4	10.2	59.8%	31.7	40.0	88.2%
8/3	Mardyke Junction NB Right	18.1	26.4	68.9%	9.4	11.8	68.1%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
Future Base plus Committed Developments							
1/1	M25 SB Off Slip Left	4.3	9.3	90.1%	2.4	5.5	82.8%
1/2	M25 SB Off Slip Ahead Left	10.9	39.7	66.6%	17.2	54.3	86.7%
1/3+1/4	M25 SB Off Slip Ahead	13.1	40.7	81.1%	18.7	42.5	89.3%
2/1+2/2	A13 WB Off Slip Left	42.9	63.0	99.2%	38.1	63.3	98.6%
2/4+2/3	A13 WB Off Slip Ahead	15.2	27.8	79.8%	99.6	221.2	110.0%
3/1+3/2	M25 NB Off Slip Ahead Left	124.6	227.2	111.0%	136.2	290.5	115.1%
3/3	M25 NB Off Slip Ahead	211.2	422.6	124.6%	160.0	348.1	119.1%
4/1	A13 EB Off Slip Left	0.3	1.6	39.5%	0.7	2.2	57.2%
4/2	A13 EB Off Slip Ahead	16.3	49.7	83.9%	18.2	64.2	90.5%
4/3	A13 EB Off Slip Ahead	16.7	48.9	82.9%	20.5	63.2	91.3%
5/1	Mardyke Junction EB Ahead	21.1	17.6	54.7%	26.1	31.5	71.5%
5/2	Mardyke Junction EB Right Ahead	20.8	19.1	83.1%	19.8	27.9	88.2%
5/3	Mardyke Junction EB Right	2.4	7.5	42.2%	1.7	6.1	49.8%
6/1	Mardyke Junction SB Ahead	41.8	74.0	100.1%	75.5	178.7	107.9%
6/2	Mardyke Junction SB Right Ahead	35.0	48.5	96.7%	66.9	140.4	105.3%
6/3	Mardyke Junction SB Right	2.4	12.3	48.0%	2.0	8.6	53.5%
7/1	Mardyke Junction WB Ahead	74.7	351.5	117.8%	23.2	50.4	92.9%
7/2	Mardyke Junction WB Right Ahead	81.5	364.0	119.9%	75.8	307.9	115.4%
7/3	Mardyke Junction WB Right	70.5	345.9	118.6%	75.3	317.2	115.1%
8/1	Mardyke Junction NB Ahead	18.2	21.1	57.8%	14.6	19.6	55.4%
8/2	Mardyke Junction NB Right Ahead	20.0	23.2	58.9%	33.5	41.0	89.8%
8/3	Mardyke Junction NB Right	25.0	23.5	89.5%	9.1	11.9	71.1%
Future Base plus Committed Developments and Project							
1/1	M25 SB Off Slip Left	6.6	13.7	93.7%	2.4	5.7	83.2%
1/2	M25 SB Off Slip Ahead Left	11.2	41.4	68.7%	17.2	54.3	86.7%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
1/3+1/4	M25 SB Off Slip Ahead	13.5	42.7	82.9%	18.6	42.3	89.2%
2/1+2/2	A13 WB Off Slip Left	42.9	63.0	99.2%	30.0	48.2	96.0%
2/4+2/3	A13 WB Off Slip Ahead	15.5	28.2	80.6%	126.2	278.3	114.1%
3/1+3/2	M25 NB Off Slip Ahead Left	124.6	220.7	111.0%	155.4	337.3	118.5%
3/3	M25 NB Off Slip Ahead	209.8	409.7	124.6%	159.9	351.8	119.5%
4/1	A13 EB Off Slip Left	0.3	1.6	39.5%	0.7	2.2	57.2%
4/2	A13 EB Off Slip Ahead	17.1	54.1	86.5%	18.2	64.2	90.5%
4/3	A13 EB Off Slip Ahead	17.5	53.0	85.6%	20.5	63.2	91.3%
5/1	Mardyke Junction EB Ahead	20.9	19.7	53.8%	19.1	9.9	70.9%
5/2	Mardyke Junction EB Right Ahead	20.3	18.2	81.8%	27.2	27.2	87.9%
5/3	Mardyke Junction EB Right	2.3	7.1	41.5%	17.1	22.5	49.8%
6/1	Mardyke Junction SB Ahead	41.8	73.7	100.1%	95.7	262.9	112.8%
6/2	Mardyke Junction SB Right Ahead	34.8	47.5	96.6%	88.1	227.8	110.2%
6/3	Mardyke Junction SB Right	2.3	12.0	48.1%	2.0	9.2	55.8%
7/1	Mardyke Junction WB Ahead	76.3	378.2	117.8%	18.8	39.0	83.2%
7/2	Mardyke Junction WB Right Ahead	84.4	388.6	119.9%	61.6	226.9	110.5%
7/3	Mardyke Junction WB Right	77.1	386.0	120.0%	80.6	314.2	115.9%
8/1	Mardyke Junction NB Ahead	7.6	9.5	57.0%	10.9	13.5	55.5%
8/2	Mardyke Junction NB Right Ahead	5.7	7.8	58.0%	19.0	25.9	90.8%
8/3	Mardyke Junction NB Right	27.3	36.6	88.0%	26.3	35.9	71.0%

3. Overview of Mitigation

3.1.1 As described in the TA (APP-333) the junction modelling undertaken presented the worst-case peak construction traffic which is generally only expected to occur for a short duration (e.g. one week). Based on the results of the junction capacity assessments during the AM and PM peak hours, mitigation was identified where possible for junctions during the construction period.

3.1.2 The results of the junction review and remodelling presented in Section 2 indicate that no additional mitigation beyond that identified in the TA (APP-333) is anticipated.

3.1.3 A summary of the proposed mitigation is shown below in Table 3.1 for SRN junctions and Table 3.2 for LRN/MRN junctions, which have previously been discussed with TC/NH before DCO submission. Where highlighted in red, agreement on mitigation is still pending and further engagement with TC/NH is required.

Table 3.1 SRN/MRN Proposed Junction Mitigation within TA (APP-333)

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
Section H	Thurrock	Site 89	A1089 Dock Approach Road / Thurrock Parkway (Asda Roundabout)	Roundabout	No mitigation proposed	No Change
	Thurrock	Site 90	M25 J30	Signalised Roundabout	Signal Optimisation	No Change

Table 3.2 LRN Proposed Junction Mitigation within TA (APP-333)

Project Section	Region	Site No.	Junction	Junction Type	Mitigation (DCO)	Mitigation (Post DCO)
Section H	Thurrock	Site 85	A1013 Stanford Road / Buckingham Hill Road	Signalised T-junction	Signal optimisation	No Change

Abbreviations

Abbreviation	Full Reference
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
ES	Environmental Statement
IEMA	Institute of Environmental Management and Assessment
LHA	Local Highway Authority
LRN	Local Road Network
LTC	Lower Thames Crossing
MCC	Manual Classified Counts
MRN	Major Road Network
PAR	Primary Access Routes
SRN	Strategic Road Network
TA	Transport Assessment
TAG	Transport Analysis Guidance
V/C	Volume to capacity

Glossary

Term	Description
Committed development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Development Consent Order (DCO)	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Local Highway Authority (LHA)	The public authority whose duty it is to maintain and protect the safety and usability of public roads.
Major Road Network (MRN)	Routes in the middle tier of the road network (between the SRN and LRN), as defined by the Department for Transport. MRNs are managed by the Local Highway Authoritiess. For the Project, the Local Highway Authorities are Thurrock Council and Essex, Suffolk and Norfolk County Councils
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Primary Access Routes	Access routes on the public highway designated for use by construction vehicles (typically for HGVs) to travel from the strategic road network / major road network to the site access point.
Ratio of Flow to Capacity (RFC)	A measurement used to determine how bust an approach is at an unsignalised junction.
Strategic Road Network (SRN)	Comprises the motorway and trunk road network, managed by National Highways, as defined by the Department for Transport
Transport Assessment (TA)	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).

Bibliography

Websites

Department for Communities and Local Government (2014) *Travel Plans, Transport Assessments and Statements.* Available at https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

Department for Energy Security and Net Zero (2024a) *Overarching National Policy Statement for Energy (EN-1).* Available at https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1

Department for Transport (2024) *Transport Analysis Guidance*, Available at https://www.gov.uk/guidance/transport-analysis-guidance-tag

Institute of Environmental Management and Assessment (IEMA) (2023) *IEMA Guidelines: Environmental Assessment of Traffic and Movement*

National Highways (2023) *Design Manual for Roads and Bridges (DMRB) CD 116 Geometric Design of Roundabouts*. Available at: h[redacted]

TEMPro (Trip End Model Presentation Program) software. Available at https://www.gov.uk/government/publications/tempro-downloads

Appendix A. Consultation on the junction modelling and mitigation

nationalgrid

Appendix A
Consultation on the junction modelling and mitigation

A.1.1 The engagement undertaken during the development of the TA (document reference 7.11) that is relevant to junction modelling and mitigation is presented in Table B-1.

Table B-1 Engagement undertaken relevant to the junction modelling and mitigation

Reference	Summary of discussions	National Grid's Response
Transport Working Group Regional Meeting (Thurrock) March 2024	Routeing of traffic on the Strategic Road Network (SRN), noting the A1089 Asda Roundabout on the access to the Port of Tilbury to be a particular area of concern due to potential knock-on effects of congestion at this junction on other parts of the road network in Thurrock. Other junctions have been raised as particularly sensitive and should be considered for traffic modelling: • M25 Junction 30 • A13 Orsett Cock Interchange • A1013 Stanford Road / Buckingham Hill Road. National Highways pointed that the SRN in the area is sensitive and would be looking to see full impact assessments for junctions	The A1089 Asda Roundabout has been considered within the TA (document reference 7.11) as part of the multi-modal sensitivity assessment. The M25 J30, A13 Orsett Cock Interchange, and A1013 Stanford Road / Buckingham Hill Road junctions have all been assessed within the TA (document reference 7.11) as agreed with Thurrock.
Transport Working Group Meeting (Norfolk, Essex, Suffolk and Thurrock) April 2024	Suffolk County Council raised concerns at A140 Stoke Ash junction, noting the accident history in this location, and it was requested to be included in the assessment.	The Stoke Ash Workhouse Road junction has been reviewed and modelling results presented within section 7 of the TA (document reference 7.11).
Transport Working Group Regional Meeting (Thurrock) October 2024	General structure and content of TA was presented National Grid and considered appropriate by Thurrock. Provided an overview of the initial capacity assessment methodology using.	Structure and modelling methodology has been used to develop the TA (document reference 7.11). A draft version of the TA (document reference 7.11) was submitted for comment in March 2025, and a response was provided by Essex.

Reference	Summary of discussions	National Grid's Response
Transport Working Group Meeting (Norfolk, Essex, Suffolk, Thurrock, National Highways) January 2025	National Grid presented a draft of TA. Ran through methodology of junction sifting process, junction assessment methodology and cumulative assessment.	Workshops with Norfolk undertaken to assess all mitigation on a case-by-case basis.
Transport Working Group Regional Meeting (Thurrock) February 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects for junctions and PARs predominately where WCH Amenity raised from detailed assessment within the ES (Volume 6 of the DCO application). Approach to mitigation agreed in principle but would require site specific measures to be identified based on future traffic conditions. Red Amber Green (RAG) strategy presented for junction mitigation. The RAG strategy would help to focus on key junctions in terms of the likely mitigation required to ensure sufficient time is allowed to develop and discuss proportionate measures prior to the submission of the DCO. RAG strategy agreed in principle.	Mitigation workshops with Essex undertaken to assess all mitigation at the junctions and PARs on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3). RAG strategy was used to prioritise order of junctions and mitigation required.
Transport Working Group Regional Meeting (Thurrock) March 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects on PARs predominately for WCH Amenity where large or moderate significance of effect was identified. Request to consider mitigation for some additional locations i.e. the uncontrolled crossings as part of the WCH severance assessment due to safety concerns. Approach to mitigation agreed in principle but a review of the sensitivity of some PARs need to be carried out, i.e. Heath Road, A1013 Stanford Road and Buckingham Hill Road.	Review of sensitivity of PARs undertaken and presented within ES Chapter 16: Traffic and Transport (document reference 6.16). A review of uncontrolled formal and informal crossing for pedestrians was undertaken within the TA (document reference 7.11) and ES (Volume 6 of the DCO application) as requested by Thurrock. This included Buckingham Hill Road, Hoford Road and A1013 Standford Road. Standard mitigation is outlined within the Outline CTMP (document reference 7.3) and additional mitigation detailed within ES Chapter 16: traffic and transport (document reference 6.16).

Reference	Summary of discussions	National Grid's Response
		The TA (document reference 7.11) provides a summary of mitigation required for the Project.
Transport Working Group Regional Meeting (Thurrock) March 2025	National Grid presented a draft TA report and noted suggested changes by Thurrock. This included making it clear the split between HGV/LGVs, adding in reference to additional mitigation, review of additional developments as part of cumulative assessment were provided.	Feedback received from Thurrock was reviewed at the meeting and has been incorporated in to the TA (document reference 7.11) in all relevant sections.
Transport Working Group Regional Meeting (Thurrock) April 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Approach and findings of results need to be reviewed following submission of modelling results for each junction. National Grid presented the proposed additional environmental mitigation measures following the ES assessment of effects on PARs, in relation to Pedestrian, cyclist and horse-rider amenity and Pedestrian, cyclist and horse-rider severance.	Modelling results were submitted to Thurrock for technical review. Findings of the junction modelling can be found within section 7 of the TA (document reference 7.11). Additional environmental mitigation as a result of the initial IEMA assessment are presented in ES Chapter 16: Traffic and Transport (document reference 6.16).
Transport Working Group Regional Meeting (National Highways and Thurrock) May 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Approach and findings of results agreed in principle but request for time to further review the findings of the assessment modelling and to review existing baseline. National Highways requested a check on cumulative developments associated with the junctions, particularly at the A14 J55 Copdock Interchange. Noted that proposed upgrade to junction unlikely to occur	Findings of the junction assessments based on strategy and approach presented to Suffolk can be found within Section 6 and 7 of the TA (document reference 7.11). Thurrock and National Highways have been provided with modelling results to allow for a technical review to be undertaken. Additional environmental mitigation as a result of the initial IEMA assessment are presented in ES Chapter 16: Traffic and Transport (document reference 6.16).

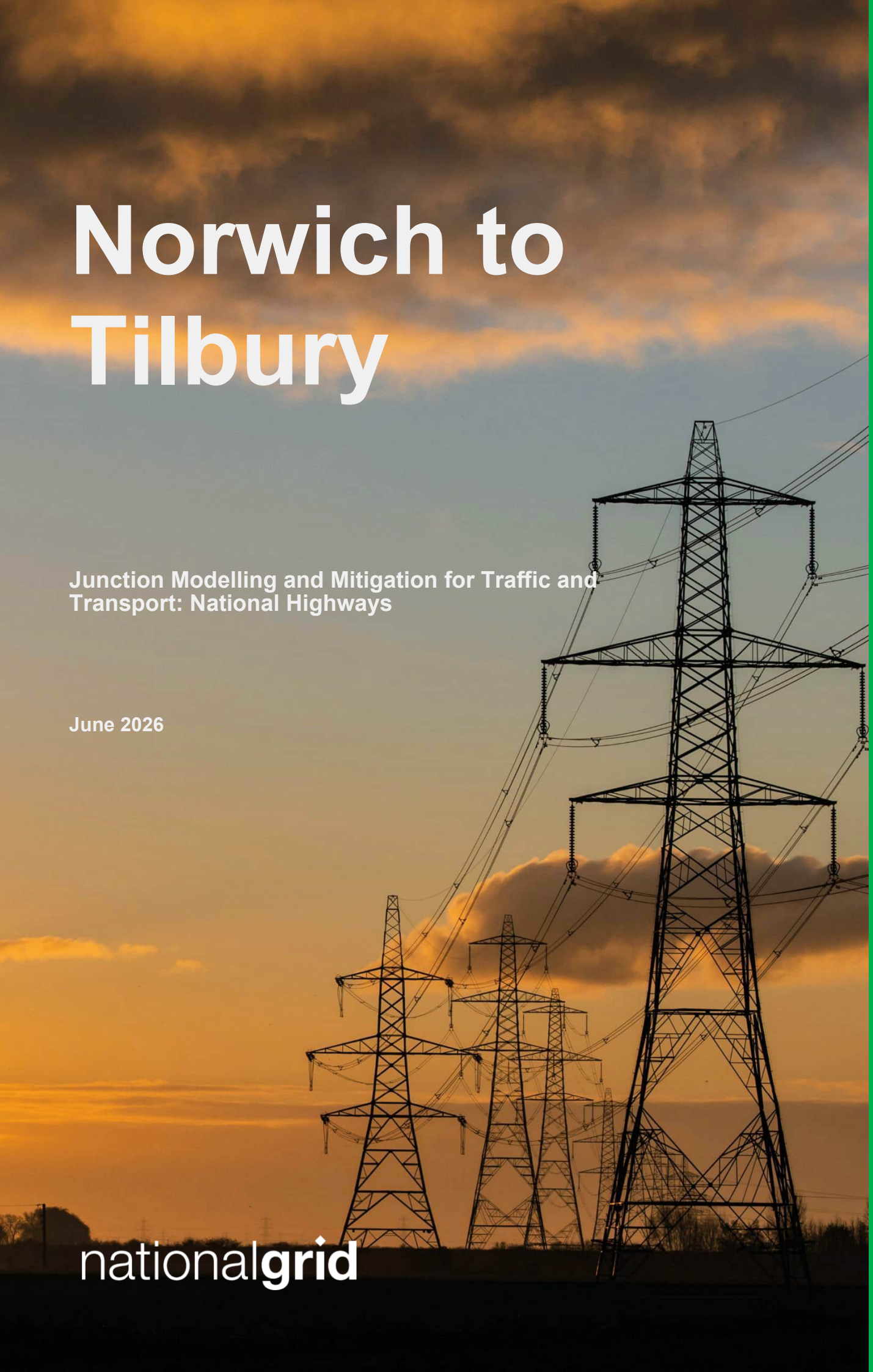
Reference	Summary of discussions	National Grid's Response
	before the Project peak construction year. National Highways to investigate baseline conditions at the A47 Norwich Southern Bypass / A140 Ipswich Rd junction where the assessment may not necessarily represent existing capacity. In addition, review of available baseline and recent modelling on all junctions to be undertaken, particularly at the A120 Braintree Bypass / B1018 Braintree Rd junction Thurrock noted that surrounding businesses would be interested in the Asda roundabout modelling assessment to ensure there would be no significant impact to their operations.	

Appendix B
Traffic Models and Outputs (Available Electronically upon Request)

Norwich to Tilbury

Junction Modelling and Mitigation for Traffic and Transport: National Highways

June 2026



nationalgrid

Contents

1. Executive Summary 4

1.1 Introduction 4

1.2 Purpose of this note 4

1.3 Scope of Technical Note 4

1.4 Key Outcomes 4

2. Modelling Updates 6

2.1 Unsignalised Junctions 6

2.2 Signalised Junctions 15

3. Summary and Conclusions 34

Table 2.1 - Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment AM Peak Model Comparison 8

Table 2.2 - Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment PM Peak Model Comparison 9

Table 2.3 – Site 48 Construction Vehicle Impact on Total Junction Traffic 12

Table 2.4 - Site 49 Average Construction Vehicle Impact on Total Junction Traffic 12

Table 2.5 - Site 89 ASDA Roundabout A1089 Dock Approach Road / Thurrock Parkway Junction Capacity Assessment 13

Table 2.6 - RAG Assessment Criteria 16

Table 2.7 - Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with excess queue limits (DM results) 18

Table 2.8 - Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with excess queue limits (DM results) 19

Table 2.9 - Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits (DS results) 20

Table 2.10 - Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits (DS results) 21

Table 2.11 - Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results) 22

Table 2.12 - Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results) 24

Table 2.13 - Site 46 Peak Construction Vehicle Impact on Total Junction Traffic 27

Table 2.14 - Site 46 Average Construction Vehicle Impact on Total Junction Traffic 27

Table 2.15 - Site 90 M25 J30 roundabout capacity assessment 29

Figure 2.1 - Site 48 Total Junction Flow Comparison Chart 7

Figure 2.2 - Site 48 AM Construction Volumes 11

Figure 2.3 - Site 48 PM Construction Volumes 11

Figure 2.4 - Site 46 AM Construction Volumes 26

Figure 2.5 - Site 46 PM Construction Volumes 27

Appendix A Traffic Models and Outputs

1. Executive Summary

1.1 Introduction

National Grid Electricity Transmission plc (National Grid) is making an application for development consent to upgrade the electricity transmission system in East Anglia between Norwich and Tilbury, which comprises reinforcement of the electricity transmission network between the existing Norwich Main Substation in Norfolk and Tilbury Substation in Essex, via Bramford Substation, the proposed East Anglia Connection Node (EACN) Substation and the proposed Tilbury North Substation.

A Transport Assessment (TA) has been prepared and submitted to support the Development Consent Order (DCO) application for the Project under the Planning Act 2008. The TA includes an assessment of the potential traffic and transport effects associated with construction activities, including the use of key links and junctions on the Strategic Road Network (SRN).

1.2 Purpose of this note

This Technical Note has been prepared to respond to comments received from National Highways on the submitted transport modelling, as set out in their Technical Notes TN03 (19th December 2025) and TN04 (10th February 2026). The purpose of this document is to summarise the clarifications provided, describe any agreed amendments to the modelling approach and assumptions, and present updated modelling results where changes to the models have been implemented in response to National Highways' comments.

1.3 Scope of Technical Note

The scope of this Technical Note is limited to the junction models located on, or affecting, the Strategic Road Network that were subject to National Highways' review. These comprise:

- A11 Thetford Bypass / A134 / A1066 (Mundford Road) Roundabout (Site 12)
- A120 / Long Green / B1018 / Cressing Road Junction (Galley's Corner – Site 48)
- A1089 / Thurrock Park Way / Dock Road (ASDA Roundabout – Site 89)
- A14 Junction 55 (Copdock Interchange – Site 29)
- A12 Junction 26 (Site 46)
- M25 Junction 30 (Site 90)

1.4 Key Outcomes

This Technical Note responds to comments raised by National Highways within Technical Notes TN03 and TN04. The key outcomes are summarised as follows:

- The junction modelling has been updated and clarified in accordance with National Highways' comments, including revised assumptions, updated traffic surveys, and amended modelling approaches where agreed.

- For Site 12, the peak-hour diversion of construction HGV traffic, that would have previously routed through Diss would now route via A11 / A134 / Mundford Road (Site 12) roundabout. This has been fully accounted for, with a robust worst-case assumption of 100% HGV diversion via the A11.
- At Site 48 (Galley's Corner), updated post-DCO surveys confirm that the junction operates over capacity in the Base and Do-Minimum scenarios, with Project traffic representing approximately 2.8% of peak hour demand and would not result in severe impacts to junction performance.
- Updated modelling at Site 89 demonstrates that while future-year operation is sensitive to committed development assumptions, the addition of Project traffic results in only a marginal change in performance and does not necessitate mitigation.
- At Copdock Interchange (Site 29), the application of excess queue limits has demonstrated that the proposed mitigation continues to operate as intended and remains appropriate.
- Construction traffic volumes at Site 46 are low in magnitude and duration, confirming that the Project would have a negligible impact on junction operation.
- For Site 90 (M25 Junction 30), forecast congestion is driven by baseline and committed development growth, with the Project not introducing new or materially worse capacity constraints.

2. Modelling Updates

2.1 Unsignalised Junctions

Site 12 – A11 Thetford Bypass / A134 / A1066 (Mundford Road) Roundabout

Key Outcomes

- Peak-hour construction traffic diversion assumptions have been fully incorporated.
- A robust worst-case assumption of 100% HGV diversion that would have previously routed through Diss would now route via A11 / A134 / Mundford Road (Site 12) roundabout has been tested.
- The modelling therefore fully reflects the potential impact of construction routing during peak periods.

2.1.1 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of A120 Braintree Bypass / B1018 Braintree Rd Roundabout (Site 12).

2.1.2 During peak periods all HGVs that would otherwise route through Diss are expected to divert via the A11 / A134 / Mundford Road (Site 12) roundabout. The comment queried that it is unclear from the OCTMP whether the impact of this peak-hour diversion has been incorporated into the junction modelling at Site 12, and this should be confirmed.

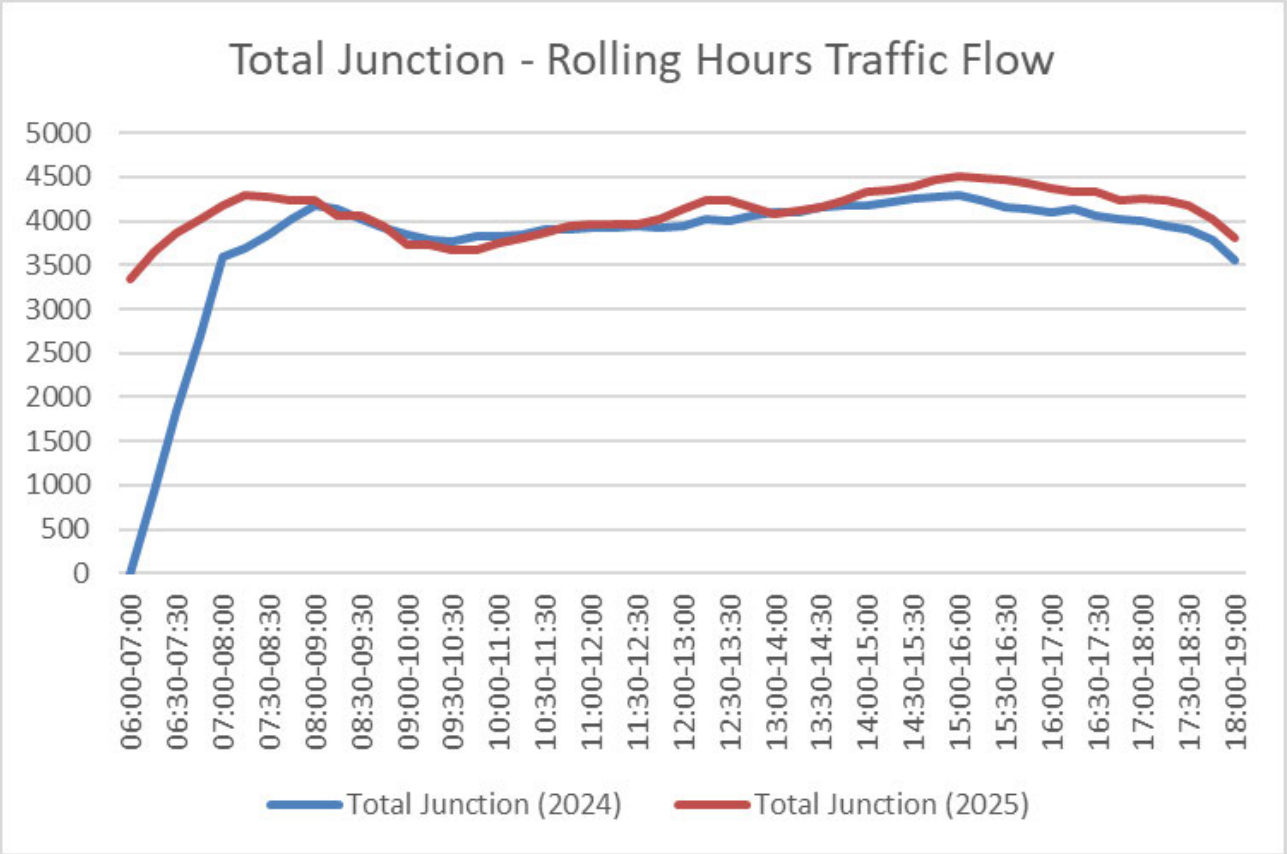
2.1.3 The junction modelling for the A11 / A134 / Mundford Road (Site 12) roundabout has accounted for the peak-hour diversion scenario. Specifically, the assessment tested and assumed 100% of HGV traffic is routed through the A11 (Thetford) rather than through Diss. Accordingly, the impact of peak hour diversions has been fully considered within the modelling.

- **Site 48 – A120 / Long Green / B1018 / Cressing Road Junction (Galley's Corner)**

2.1.4 NH and Essex County Council provided feedback on the operation presented from the base model of Site 48 - A120 Braintree Bypass / B1018 Braintree Rd Roundabout. The site was then resurveyed in November 2025.

2.1.5 Based on the comparison of the original (blue line) and re-surveyed (red line) traffic data displayed in Figure 2.1, the total junction flows for Site 48 show a consistent volume across both surveys for the entire day, with near-identical PM peak magnitudes and timing, as well as similar interpeak volumes for total junction flow. However, a difference of approximately 600 PCU is observed in the AM peak when comparing the original survey data with the re-surveyed data displayed in Figure 2.1. Given the scale of this discrepancy, the site was remodelled to ensure the assessment accurately reflects current traffic conditions.

Figure 2.1 - Site 48 Total Junction Flow Comparison Chart



2.1.6 The junction capacity assessment for the re-surveyed model, as presented in Figure 2.2 and Figure 2.3, indicates that in the 2025 Base scenario the A120 (NE) and Long Green (E) approaches operate above theoretical capacity in the AM peak, with RFCs of 1.01 and 1.09 respectively. The Long Green (E) arm is the most constrained in this scenario, experiencing a queue of 20.5 PCU and a delay of 133.03 seconds. These capacity issues persist and intensify in future scenarios. Under the Future Base scenario, the Long Green (E) arm operates at an RFC of 1.17, with delays increasing to 199.47 seconds, while the A120 (NE) arm continues to operate above capacity with an RFC of 1.03.

2.1.7 With the inclusion of committed development traffic, operational performance deteriorates further. In the Future Base plus Committed Development scenario, the Long Green (E) arm operates at 1.25 RFC, generating queues of 51.7 PCU and delays of 335.83 seconds, while the A120 (NE) arm operates at 1.04 RFC. The greatest level of congestion is observed in the Future Base plus Committed Development and Project scenario, where the Long Green (E) arm operates well above theoretical capacity at an RFC of 1.47, with queues of 83.7 PCU and delays of 671.03 seconds. In the same scenario, the A120 (NE) arm also operates above capacity at an RFC of 1.10, with queues of 54.0 PCU and delays of 112.89 seconds. The Cressing Road (NW) approach becomes increasingly constrained in future scenarios, operating marginally above practical capacity in the Future Base scenario (RFC 0.97) and above theoretical capacity in the Future Base plus Committed Development and Project scenario, with an RFC of 1.09, queues of 35.7 PCU, and delays of 226.39 seconds. All remaining approaches operate within practical capacity across all assessed scenarios.

Table 2.1 - Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment AM Peak Model Comparison

Approach	AM Peak (2025 Model)			AM Peak (2024 Model)		
	Queue Length (PCU)	Delay (s)	RFC	Queue Length (PCU)	Delay (s)	RFC
2025 Base						
A120 (NE)	23.5	43.56	1.01	11.1	27.15	0.93
Long Green (E)	20.5	133.03	1.09	17.0	118.56	1.08
B1018 (S)	3.1	15.13	0.76	1.7	10.19	0.62
A120 (W)	1.8	3.51	0.62	1.8	3.75	0.63
Cressing Road (NW)	8.2	52.51	0.92	4.3	28.66	0.82
Future Base						
A120 (NE)	30.4	52.67	1.03	17.1	41.18	0.97
Long Green (E)	31.2	199.47	1.17	40.5	387.50	1.21
B1018 (S)	3.4	16.53	0.78	2.0	11.40	0.65
A120 (W)	1.9	3.62	0.63	2.0	3.97	0.65
Cressing Road (NW)	11.5	70.66	0.97	6.4	41.90	0.88
Future Base plus Committed Developments						
A120 (NE)	33.1	56.16	1.04	18.9	45.09	0.98
Long Green (E)	51.7	335.83	1.25	69.8	648.40	1.29
B1018 (S)	4.0	18.64	0.8	2.3	12.50	0.69
A120 (W)	1.9	3.71	0.64	2.1	4.05	0.66
Cressing Road (NW)	13.8	83.51	0.99	7.4	48.67	0.90
Future Base plus Committed Developments and Project						
A120 (NE)	54.0	112.89	1.10	45.4	86.80	1.04
Long Green (E)	83.7	671.03	1.47	112.9	1119.36	1.46
B1018 (S)	5.1	23.22	0.84	2.6	14.17	0.72
A120 (W)	2.3	4.22	0.68	2.5	4.65	0.70
Cressing Road (NW)	35.7	226.39	1.09	19.9	127.25	0.99

Table 2.2 - Site 48 A120 Braintree Bypass / B1018 Braintree Rd roundabout capacity assessment PM Peak Model Comparison

Approach	PM Peak (2025 Model)			PM Peak (2024 Model)		
	Queue Length (PCU)	Delay (s)	RFC	Queue Length (PCU)	Delay (s)	RFC
2025 Base						
A120 (NE)	2.1	5.2	0.67	2.3	5.57	0.68
Long Green (E)	2.4	22.49	0.7	1.2	15.16	0.55
B1018 (S)	2.6	9.26	0.72	1.8	6.86	0.64
A120 (W)	2.6	4.81	0.71	1.9	4.00	0.63
Cressing Road (NW)	9.7	75.75	0.99	3.2	27.21	0.77
Future Base						
A120 (NE)	2.3	5.47	0.69	2.6	6.18	0.71
Long Green (E)	2.8	26.19	0.74	1.5	18.36	0.60
B1018 (S)	2.9	10.11	0.74	2.1	7.65	0.68
A120 (W)	2.8	5.09	0.73	2.1	4.31	0.66
Cressing Road (NW)	14.5	104.54	1.06	5.0	42.32	0.85
Future Base plus Committed Developments						
A120 (NE)	2.4	5.73	0.70	2.7	6.50	0.73
Long Green (E)	3.4	30.84	0.78	1.8	20.86	0.64
B1018 (S)	3.1	10.6	0.76	2.2	7.94	0.69
A120 (W)	2.9	5.33	0.74	2.2	4.47	0.67
Cressing Road (NW)	18.7	130.49	1.12	6.3	53.57	0.89
Future Base plus Committed Developments and Project						
A120 (NE)	3.0	6.91	0.74	3.4	7.68	0.76
Long Green (E)	5.0	46.14	0.85	2.4	28.90	0.72
B1018 (S)	3.8	12.77	0.80	2.6	9.14	0.72
A120 (W)	3.6	6.2	0.77	2.6	5.06	0.71
Cressing Road (NW)	33.9	353.71	1.29	13.8	113.68	0.98

2.1.8 A comparison of the re-surveyed and original LinSig model outputs shown in Figure 2.4 and Table 2.2 indicates that both datasets demonstrate consistent operational trends across all assessed scenarios. In both models, the same approaches operate at or above practical capacity during the AM peak, with RFC values (typically exceeding practical and theoretical capacities), substantial queue

lengths, and significant delays occurring on the same arms. The re-surveyed model results are marginally worse, with slightly higher RFCs, queues, and delays. The PM peak results in both models show comparatively better operation, with lower RFCs and shorter queues across most approaches. Therefore, the conclusions from the TA (APP-333) remain valid.

Key Outcomes

- Updated post-DCO traffic surveys (November 2025) confirm that the junction operates over capacity in the Base and Do-Minimum scenarios.
- Junction performance issues are inherent to baseline and committed development conditions.
- Peak project construction traffic represents approximately 2.8% of total junction flow in both the AM and PM peak hours.
- Average project construction traffic across the construction timeline represents approximately 0.63% of total junction flow in both the AM and PM peak hours.
- The Project does not materially alter junction performance or capacity.
- Any short-term construction impacts are temporary and can be managed through operational measures.

2.1.9 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of A120 Braintree Bypass / B1018 Braintree Rd Roundabout (Site 48).

2.1.10 The comment states that the impact of the proposed development due to construction is temporary. However, due to the magnitude of the impact, there is the potential for a severe cumulative impact at this junction (and at the A120 / A131 Marks Farm and B1018 / Millenium Way roundabouts) that may not be fully understood through the use of an ARCADY model.

2.1.11 Table 2.3 compares the AM and PM network peak volume of vehicles during the construction period to the AM and PM total junction volume peaks. The table implies the network peak construction traffic (on the 14/10/2030) associated with the Project is forecast to account for approximately 2.8% of the total junction flow during both the AM and PM peak hours, representing a very small proportion of overall traffic demand.

2.1.12 Table 2.4 compares the average daily volume of vehicles during periods when construction activity is taking place to the AM and PM total junction peak volumes. The table implies construction traffic associated with the Project is forecast to account for approximately 2.82% and 2.42% of the total junction flow during both the AM and PM peak hours, representing an even small proportion of overall traffic demand over the construction timeline.

2.1.13 Figure 2.2 and Figure 2.3 construction traffic profile indicates several short-term peaks in vehicle activity during the construction period; however, these peaks are not sustained for prolonged durations. Given the relatively low magnitude and temporary nature of construction flows, it is considered reasonable to manage potential effects through operational measures, including the use of Variable Message Signs (VMS) and advance communication with local residents to provide awareness of potential short-duration disruptions during peak construction periods.

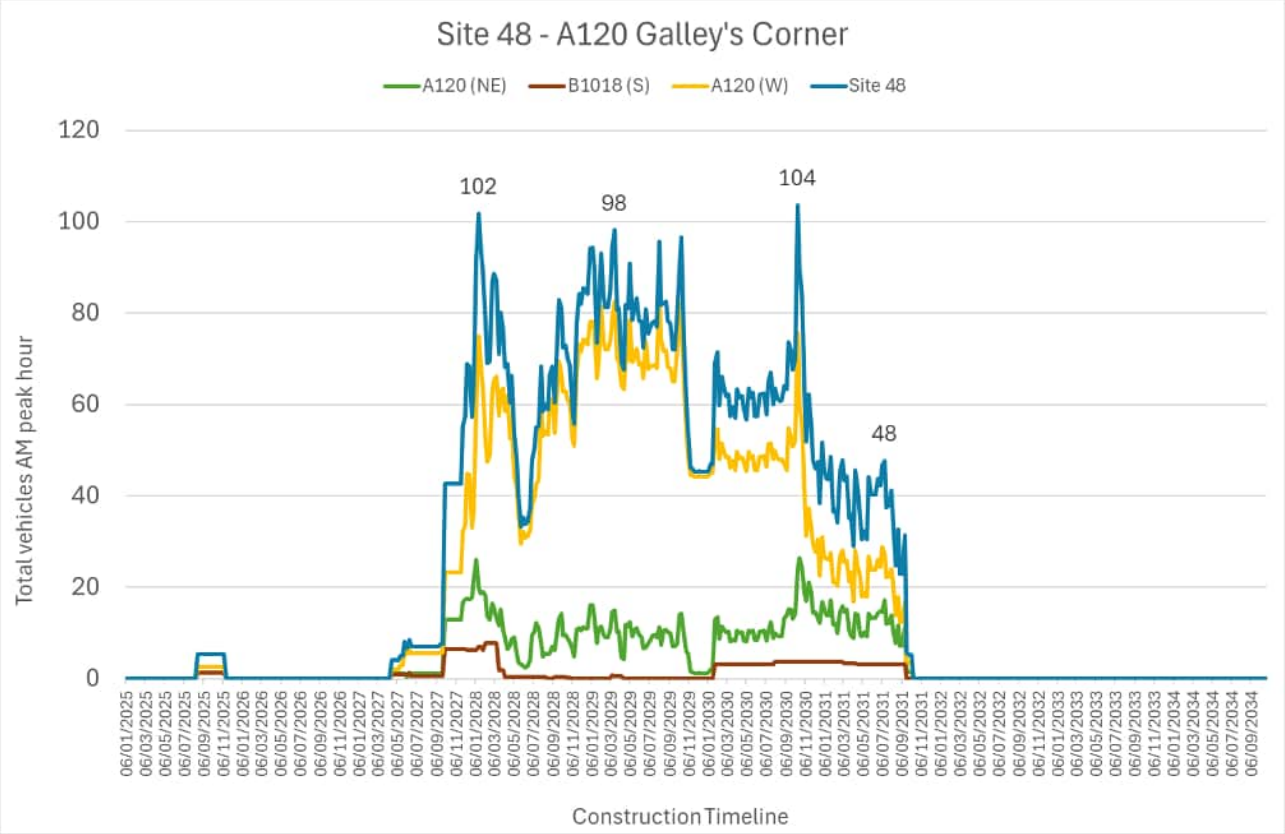


Figure 2.2 - Site 48 AM Construction Volumes

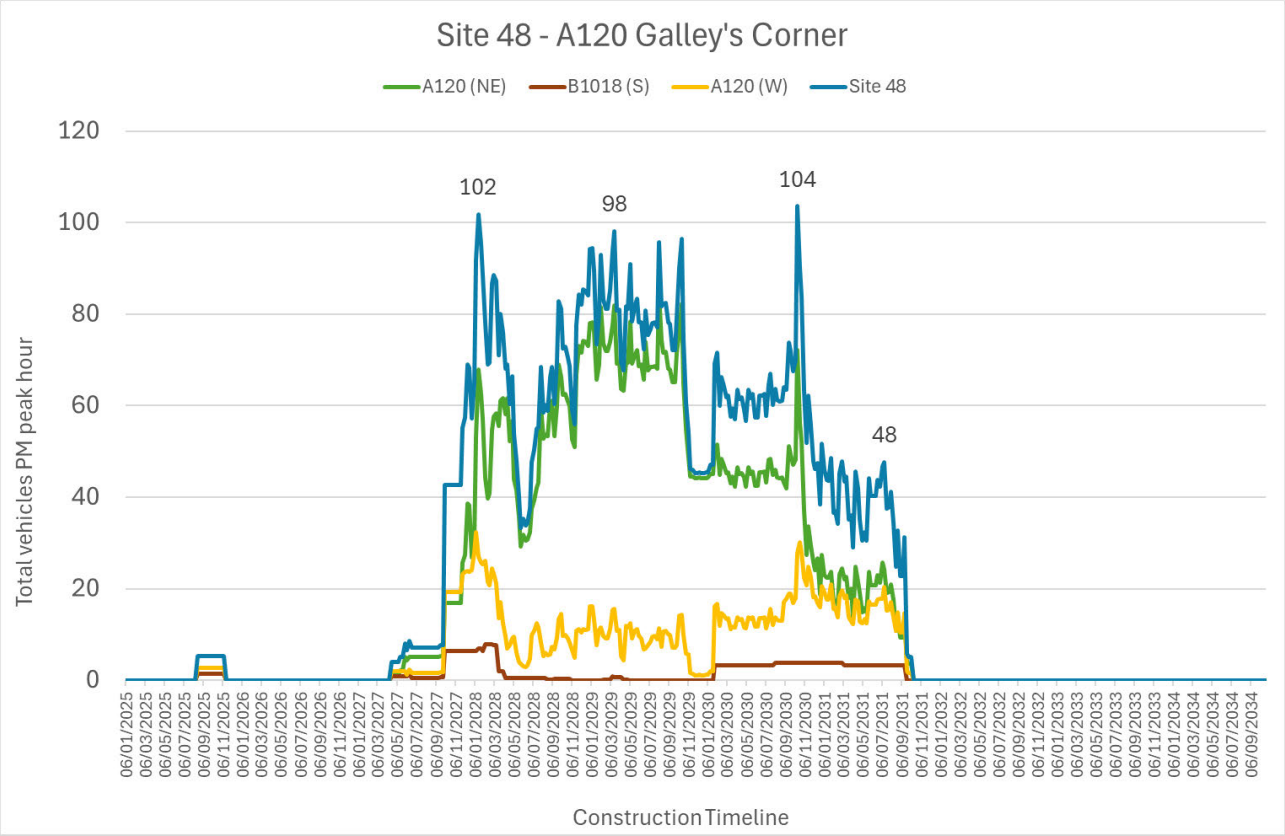


Figure 2.3 - Site 48 PM Construction Volumes

Table 2.3 – Site 48 Construction Vehicle Impact on Total Junction Traffic

	Peak Construction Traffic Volume during Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:15 - 08:15)	104	3689	2.82%
PM Peak (15:00 - 16:00)	104	4300	2.42%

Table 2.4 - Site 49 Average Construction Vehicle Impact on Total Junction Traffic

	Average Construction Traffic Volume over the Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:15 - 08:15)	12	2021	0.59%
PM Peak (15:00 - 16:00)	12	1899	0.63%

Site 89 – Asda Roundabout - A1089 Dock Approach Road / Thurrock Parkway

Key Outcomes

- The junction has been remodelled to reflect revised LTC flows and agreed committed development assumptions.
- Future-year operation is sensitive to background and committed development traffic.
- The addition of Project traffic results in only a small increase in RFC values.
- No additional Project-specific mitigation is required.

2.1.14 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of Asda Roundabout (Site 89).

2.1.15 These comments related to providing a version of the model incorporated the Future Base + Committed Development + Project Scenarios and tested following agreement of the trip generation, trip distribution, and trip assignment.

2.1.16 Following a review of the LTC flows, Site 89 - Asda Roundabout - A1089 Dock Approach Road / Thurrock Parkway has been modelled to reflect the revised LTC flows.

2.1.17 This junction was modelled as part of the multi-modal flow scenarios. In both scenarios the Project vehicles follow the same routing, but Scenario 1 carried 20 PCU fewer than Scenario 2 in both the AM and PM peak hours.

2.1.18 The traffic modelling has been updated to reflect these revised flows and to provide outputs for all Scenario combinations. The updated results, incorporating the additional committed development and Project flows, are presented in Table 2.5.

2.1.19 Overall, the junction shows similar patterns to those identified in the submitted TA (AP-333). Both committed development Scenarios, reflecting different LTC traffic assumptions, indicate that the junction is highly sensitive in the future-year scenarios. When Project traffic is added, the combination of committed development Scenario 2 with Project flows Scenario 1 produces the lowest queues, delays, and RFC values. However, in this scenario, the same arms operate over capacity as those identified in the worst-case combination of committed development Scenario 1 with Project flows Scenario 2.

2.1.20 Given the small increase in RFC values attributable to the Project, with a maximum increase of up only 0.06 RFC observed on the A1089 St Andrew's Road across all scenarios, and the sensitivity already driven by committed development assumptions, no Project-specific mitigation is considered necessary or proportionate at this stage.

Table 2.5 - Site 89 ASDA Roundabout A1089 Dock Approach Road / Thurrock Parkway Junction Capacity Assessment

Approach	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Base						
A - A1089 Dock Road North	23.1	33.69	0.99	7.1	14.95	0.84
B - Amazon UK Service Access	0.2	9.18	0.08	0.2	7.93	0.11
C - Dock Road South	1.6	9.40	0.60	1.1	6.91	0.52
D - A1089 St Andrew's Road	1.6	5.97	0.49	4.1	9.79	0.76
E - Thurrock Park Way	0.8	6.02	0.40	2.8	14.54	0.73
Future Base						
A - A1089 Dock Road North	40.2	50.45	1.04	10.1	20.71	0.89
B - Amazon UK Service Access	0.2	9.69	0.09	0.2	8.32	0.12
C - Dock Road South	1.8	10.53	0.64	1.3	7.78	0.56

Approach	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
D - A1089 St Andrew's Road	1.8	6.32	0.52	5.4	12.28	0.81
E - Thurrock Park Way	0.9	6.43	0.43	4.1	19.64	0.81
Future Base plus Committed Developments Scn1						
A - A1089 Dock Road North	529.3	872.06	1.35	223.1	376.70	1.12
B - Amazon UK Service Access	0.2	10.80	0.11	0.3	10.25	0.15
C - Dock Road South	2.5	14.59	0.71	1.9	11.13	0.65
D - A1089 St Andrew's Road	7.1	16.94	0.81	63.9	87.83	1.09
E - Thurrock Park Way	1.4	10.07	0.56	12.7	51.88	0.99
Future Base plus Committed Developments Scn2						
A - A1089 Dock Road North	445.4	724.99	1.32	196.2	324.21	1.11
B - Amazon UK Service Access	0.2	10.79	0.11	0.3	10.17	0.15
C - Dock Road South	2.4	14.26	0.71	1.8	11.01	0.64
D - A1089 St Andrew's Road	5.8	14.40	0.77	51.9	73.66	1.06
E - Thurrock Park Way	1.4	9.54	0.54	12.8	51.77	0.99
Future Base plus Committed Developments (Scn1) and Project (Scn1)						
A - A1089 Dock Road North	600.6	979.32	1.37	276.8	473.84	1.15
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.33	0.15
C - Dock Road South	2.6	14.92	0.72	1.9	11.31	0.65
D - A1089 St Andrew's Road	8.2	19.03	0.83	77.9	104.23	1.11
E - Thurrock Park Way	1.5	10.62	0.57	13.4	54.41	0.99
Future Base plus Committed Developments (Scn2) and Project (Scn2)						

Approach	AM Peak			PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
A - A1089 Dock Road North	530.5	873.41	1.35	265.1	455.22	1.14
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.31	0.15
C - Dock Road South	2.5	14.54	0.71	1.9	11.28	0.65
D - A1089 St Andrew's Road	7.0	16.57	0.80	69.7	93.86	1.10
E - Thurrock Park Way	1.4	10.14	0.56	13.9	56.07	1.00
Future Base plus Committed Developments (Scn1) and Project (Scn2)						
A - A1089 Dock Road North	629.2	1023.76	1.38	303.8	516.49	1.16
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.36	0.15
C - Dock Road South	2.6	15.05	0.72	1.9	11.38	0.65
D - A1089 St Andrew's Road	8.7	20.04	0.84	84.0	116.24	1.12
E - Thurrock Park Way	1.6	10.83	0.58	13.6	55.46	1.00
Future Base plus Committed Developments (Scn2) and Project (Scn1)						
A - A1089 Dock Road North	504.6	830.77	1.34	240.3	411.39	1.13
B - Amazon UK Service Access	0.2	10.77	0.10	0.3	10.28	0.15
C - Dock Road South	2.5	14.46	0.71	1.9	11.20	0.65
D - A1089 St Andrew's Road	6.6	15.86	0.80	64.3	87.72	1.09
E - Thurrock Park Way	1.4	9.95	0.55	13.5	54.78	0.99

2.2 Signalised Junctions

2.2.1 A RAG assessment, shown in Table 2.6, was used to interpret and display free-flow, saturated and oversaturated network conditions. Anything less than 85% of capacity has been considered free flow, between 85% and 100% is considered saturated and anything above 100% is considered oversaturated. For signalised

junctions assessed using LinSig, the threshold is increased from 85% to 90% with respect to the degree of saturation (DoS).

Table 2.6 - RAG Assessment Criteria

Free flow (within Practical Capacity)	Saturated (above Practical Capacity)	Oversaturated (above Theoretical Capacity)
< 90% (LinSig DoS)	90% - 100% (LinSig DoS)	> 100% (LinSig DoS)

Site 29 – A14 J55 Copdock Interchange

Key Outcomes

- The modelling has been updated to reflect the agreed mitigation layout.
- Excess queue limits have been applied in accordance with LinSig guidance.
- The Do-Minimum scenario identifies limited capacity exceedances in future-year conditions.
- The Do-Something mitigation scheme operates within practical capacity across all tested scenarios.
- The proposed mitigation remains appropriate and effective.

2.2.2 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of Copdock Interchange (Site 29).

2.2.3 These comments related to the representation of the proposed mitigation scheme within the Do-Something (DS) scenario, specifically concerning the movement from Arm 3 Lane 3 to Arm 8 Lane 1. National Highways noted that, as the DS model reflects the proposed mitigation layout, the previous recommendation for the DS model to replicate the Do-Minimum (DM) arrangement for this movement was no longer considered applicable. Further comments were also provided in relation to lane lengths and junction geometry, particularly regarding the available storage capacity on circulatory links. In response, it was agreed that the application of an excess queue limit check represents a reasonable approach to address these concerns.

2.2.4 The modelling for Site 29 has therefore been reviewed and updated where necessary to reflect the agreed approach. The following modelling results summarise the amendments made and present the corresponding updated modelling results.

2.2.5 Excess queue limits have been applied only to those circulatory lanes where Modelled Mean Maximum Queues (MMQs) are predicted to reach or exceed 75% of the available lane storage length. This approach is consistent with guidance set out in the LinSig User Guide, which recommends that excess queue limits are typically set at approximately 75% of the available queuing space.

2.2.6 Excess queue limits have been implemented for all future year scenarios; however, they have not been applied to the Base model to maintain consistency with the validated model calibration against observed DoS conditions. The introduction of Excess Queue Limits (EQLs) on selected circulatory lanes has resulted in changes to the Degree of Saturation (DoS) on certain entry arms. This reflects the representation of finite storage within the LinSig model, whereby entry

flows are constrained once queues reach the defined storage threshold. These changes represent a redistribution of available capacity within the junction rather than any change in traffic demand or signal control and are considered to provide a more realistic representation of future operational conditions.

2.2.7 Table 2.7- Table 2.15 suggests that the implementation of Excess Queue Limits in the model had a minor impact on capacity outputs. A notable exception is shown in Table 2.7, where the DoS for the A1214 (SB) Ahead Left lane exceeds practical capacity (98.5%) in the 'FB+CD+Project PM 85th %' scenario. Prior to the introduction of Excess Queue limits, this lane operated within practical capacity (DoS below 90%), indicating that the limits on the circulatory lane reduced the available capacity and green time for this movement. While this change pushes the lane above practical capacity in the DM model, all lanes in the DS mitigation model remain within practical capacity across all scenarios, even with the application of the excess queue limits in the model.

2.2.8 While limited exceedances of practical capacity are identified in the Do-Minimum scenario, all movements within the Do-Something mitigation layout operate within practical capacity across all future-year scenarios. This confirms that the proposed mitigation remains suitable and should be retained. It is therefore considered that the proposed mitigation at this location be carried forward.

Table 2.7 - Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with excess queue limits (DM results)

Lane Description	Forecast AM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %
A1214 (SB) Ahead Left	82.8 : 82.8%	94.1 : 94.1%	82.5 : 82.5%	11.5	18.8	11.2	26.1	47.6	25.2
A1214 (SB) Ahead	56.5%	73.1%	54.4%	7.1	10.2	6.7	22.2	32.0	21.2
A14 (WB) Left	61.1%	84.4%	85.0%	7.4	12.6	11.7	23.6	40.6	38.0
A14 (WB) Ahead Left	84.9 : 56.6%	84.7 : 65.5%	80.3 : 64.1%	11.6	11.5	9.7	22.6	28.3	24.6
A12 (NB) Ahead Left	87.5 : 87.5%	96.4 : 96.4%	93.1 : 93.1%	17.6	34.7	24.4	14.6	31.5	22.0
A12 (NB) Ahead	72.8%	77.0%	78.6%	13.0	16.2	15.3	11.3	12.6	13.2
A14 EB Off Slip Left	40.6 : 40.6%	37.3 : 37.3%	39.8 : 39.8%	4.1	4.5	4.1	19.4	18.2	18.1
A14 EB Off Slip Ahead	84.1 : 79.6%	94.1 : 84.5%	92.7 : 92.3%	11.7	18.1	16.9	27.5	31.5	35.4

Table 2.8 - Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with excess queue limits (DM results)

Lane Description	Forecast PM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD PM	FB+CD+ Project PM	FB+CD+ Project PM 85th %	FB+CD PM	FB+CD+ Project PM	FB+CD+ Project PM 85th %	FB+CD PM	FB+CD+ Project PM	FB+CD+ Project PM 85th %
A1214 (SB) Ahead Left	78.1 : 78.1%	86.6 : 86.6%	98.5 : 98.5%	9.3	13.3	20.8	22.9	31.5	65.6
A1214 (SB) Ahead	50.40%	61.80%	79.20%	6.3	8.1	7.8	20.3	26.2	36.4
A14 (WB) Left	61.30%	78.40%	85.20%	7.4	10.7	10.5	23.6	34.2	36.5
A14 (WB) Ahead Left	83.6 : 60.6%	84.8 : 68.3%	83.7 : 70.7%	11.4	11.6	9.3	22.8	27.6	24.0
A12 (NB) Ahead Left	85.3 : 85.3%	99.5 : 99.5%	98.3 : 98.3%	13.5	45.0	34.3	13.6	49.4	38.1
A12 (NB) Ahead	76.20%	84.90%	75.50%	14.4	20.2	12.2	13.6	16.4	11.7
A14 EB Off Slip Left	39.7 : 39.7%	43.5 : 43.5%	41.3 : 41.3%	4.1	4.9	3.8	18.6	20.7	16.4

A14 EB Off Slip Ahead	80.1 : 84.0%	98.8 : 99.2%	89.3 : 89.9%	12.1	28.3	13.4	26.7	64.0	29.1

Table 2.9 - Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits (DS results)

Lane Description	Forecast AM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %	FB+CD AM	FB+CD+ Project AM	FB+CD+ Project AM 85th %
A1214 (SB) Ahead Left	82.8 : 82.8%	89.2 : 89.2%	87.3 : 87.3%	11.5	14.4	14.7	26.1	36.3	31.6
A1214 (SB) Ahead	56.5%	64.7%	53.2%	7.1	8.5	7.1	22.2	29.1	23.8
A14 (WB) Left	61.1%	88.9%	84.2%	7.4	13.8	12.5	23.6	48.5	40.4
A14 (WB) Ahead Left	84.9 : 56.6%	88.2 : 68.6%	84.8 : 65.5%	11.6	11.9	11.6	22.6	30.3	28.3
A12 (NB) Ahead Left	87.5 : 87.5%	88.3 : 88.3%	87.0 : 87.0%	17.6	14.7	14.2	14.6	14.2	14.0
A12 (NB) Ahead	72.8%	74.6%	73.7%	13.0	15.0	14.8	11.3	12.4	12.8

A14 EB Off Slip Left	40.6 : 40.6%	37.3 : 37.3%	36.5 : 36.5%	4.1	4.5	4.4	19.4	18.2	18.1
A14 EB Off Slip Ahead	84.1 : 79.6%	89.2 : 89.4%	83.9 : 85.8%	11.7	17.0	15.0	27.5	31.4	28.0

Table 2.10 - Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits (DS results)

Lane Description	Forecast PM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD PM	FB+CD+ Project PM (DS)	FB+CD+ Project PM 85th % (DS)	FB+CD PM	FB+CD+ Project PM (DS)	FB+CD+ Project PM 85th % (DS)	FB+CD PM	FB+CD+ Project PM (DS)	FB+CD+ Project PM 85th % (DS)
A1214 (SB) Ahead Left	73.9 : 73.9%	79.4 : 79.4%	81.0 : 81.0%	8.7	9.1	10.7	20.0	21.6	27.2
A1214 (SB) Ahead	46.5%	53.0%	57.6%	5.9	5.7	7.9	18.1	19.1	24.6
A14 (WB) Left	64.1%	84.0%	84.0%	7.7	10.2	12.8	25.2	35.2	38.9
A14 (WB) Ahead Left	87.4 : 63.4%	84.9 : 70.7%	76.5 : 67.2%	12.0	9.5	10.3	24.5	24.2	26.4
A12 (NB) Ahead Left	83.7 : 83.7%	89.4 : 89.4%	89.2 : 89.2%	12.0	12.0	16.3	12.2	14.7	15.6

A12 (NB) Ahead	74.4%	86.3%	79.3%	13.7	17.2	17.2	12.4	17.5	14.7
A14 EB Off Slip Left	39.7 : 39.7%	38.2 : 38.2%	37.4 : 37.4%	4.1	3.6	4.5	18.6	14.6	18.2
A14 EB Off Slip Ahead	80.1 : 84.0%	86.2 : 87.3%	80.7 : 81.4%	12.1	13.0	13.4	26.7	24.6	26.2

Table 2.11 - Site 29 A14 J55 Copdock Interchange AM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results)

Lane Description	Forecast AM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD AM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+CD AM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+CD AM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)
A1214 (SB) Ahead Left	82.8 : 82.8%	86.9 : 86.9%	86.5 : 86.5%	11.5	12.7	12.3	26.1	30.0	29.7
A1214 (SB) Ahead	56.5%	51.3%	52.3%	7.1	6.1	6.3	22.2	22.6	22.8
A14 (WB) Left	61.1%	80.7%	83.3%	7.4	10.9	11.7	23.6	34.3	36.5
A14 (WB) Ahead Left	84.9 : 56.6%	82.2 : 65.6%	81.8 : 65.6%	11.6	10.5	10.4	22.6	25.3	25.3
A12 (NB) Ahead Left	87.5 : 87.5%	82.0 : 82.0%	82.0 : 82.0%	17.6	9.4	9.4	14.6	12.3	12.3

A12 (NB) Ahead	72.8%	77.2%	78.2%	13.0	15.0	15.3	11.3	14.5	14.9
A14 EB Off Slip Left	40.6 : 40.6%	36.0 : 36.0%	37.6 : 37.6%	4.1	3.9	4.0	19.4	17.2	18.1
A14 EB Off Slip Ahead	84.1 : 79.6%	84.6 : 85.9%	88.4 : 88.2%	11.7	13.9	14.7	27.5	27.2	30.4

Table 2.12 - Site 29 A14 J55 Copdock Interchange PM peak capacity assessment with recommendations and excess queue limits - multi-modal scenarios (DS multimodal results)

Lane Description	Forecast PM Peak Hour								
	Dos (%)			Av. Queues (PCUs)			Delay (s/PCU)		
	FB+CD PM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+CD PM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)	FB+CD PM	Multimodal scenario 1 (DS)	Multimodal scenario 2 (DS)
A1214 (SB) Ahead Left	73.9 : 73.9%	75.1 : 75.1%	80.7 : 80.7%	8.7	8.5	9.6	20.0	21.9	25.6
A1214 (SB) Ahead	46.5%	53.6%	57.9%	5.9	6.8	7.1	18.1	20.8	23.3
A14 (WB) Left	64.1%	77.9%	80.2%	7.7	10.2	10.8	25.2	31.7	33.3
A14 (WB) Ahead Left	87.4 : 63.4%	81.4 : 69.1%	81.1 : 69.1%	12.0	10.5	10.4	24.5	25.1	25.0
A12 (NB) Ahead Left	83.7 : 83.7%	89.8 : 89.8%	88.0 : 88.0%	12.0	15.7	13.2	12.2	16.2	14.7
A12 (NB) Ahead	74.4%	78.5%	80.1%	13.7	15.3	16.1	12.4	14.4	15.1
A14 EB Off Slip Left	39.7 : 39.7%	39.7 : 39.7%	39.7 : 39.7%	4.1	4.1	4.1	18.6	18.6	18.6
A14 EB Off Slip Ahead	80.1 : 84.0%	83.0 : 81.1%	76.6 : 87.5%	12.1	11.8	12.7	26.7	26.7	26.7

Site 46 – A12 Junction 26

Key Outcomes

- Construction traffic volumes are low in magnitude and duration.
- Two short-term peaks are observed, with maximum flows of 42 vehicles in the AM peak and PM peak.
- Peak project construction traffic represents approximately 1.0% of total junction flow in both the AM and PM peak hours.
- Average project construction traffic across the construction timeline represents approximately 0.4% of total junction flow in both the AM and PM peak hours.
- Construction traffic would have a negligible impact on junction operation.
- LinSig remains an appropriate modelling tool for this junction.

2.2.9 Comments were received from National Highways within Technical Note TN04 in relation to the previously submitted modelling of A12 Junction 26 (Site 46).

2.2.10 The comment notes that notes that paragraph 4.3.2 of Document: 7.11 Transport Assessment states that manual classified counts were undertaken at SRN junctions in October / November 2024 and May 2025. From street view imagery, roadworks can be seen on the A12 in the vicinity of A12 Junction 26 from November 2022, whilst National Highways state that the roadworks were complete by 6th October 2025. As such, AECOM recommends that evidence should be provided that shows that traffic flows observed at A12 Junction 26 have not been severely impacted by the roadworks on the A12.

2.2.11 In response, a review of camera footage confirmed that no roadworks were present on the circulatory carriageway or at the stop line. Therefore, the general operation of the junction would remain unaffected.

2.2.12 Additional comments state that in order to understand the likely severity/ duration of potential impacts, it is recommended that the number of vehicles using the junction in the (network) peak hours should be quantified throughout the span of the construction period to provide an understanding of the development impact beyond the peak construction period, and to understand for how long there may be a significant impact on the junction. This is to understand whether LinSig is the appropriate modelling tool to be used in this instance.

2.2.13 Table 2.13 compares the AM and PM network peak volume of vehicles during the construction period to the AM and PM total junction volume peaks. The table implies network peak construction traffic (on the 06/12/2027) associated with the Project is forecast to account for approximately 1.0% of the total junction flow during both the AM and PM peak hours, representing a very small proportion of overall traffic demand.

2.2.14 Table 2.14 compares the average daily volume of vehicles during periods when construction activity is taking place to the AM and PM total junction peak volumes. It should be noted that the average has been taken from days where the majority of construction traffic is present (12/04/2027 – 22/09/2031). The table implies construction traffic associated with the Project is forecast to account for approximately 0.4% of the total junction flow during both the AM and PM peak hours, representing an even small proportion of overall traffic demand over the construction timeline.

2.2.15 Figure 2.4 and Figure 2.5 displays the total junction traffic volumes for Site 46 during the construction period for the AM and PM peak periods, respectively. Both figures indicate two distinct peaks in vehicle activity, with maximum flows of 42 vehicles and 23 vehicles in both the AM and PM peaks. Given the relatively low magnitude of these flows, it is considered that construction period traffic will have a negligible impact on junction performance and will not significantly affect its operation. Therefore, LinSig remains as the appropriate tool to be used to model this junction.

2.2.16 This confirms that the severity and duration of construction impacts would be negligible and not sufficient to warrant alternative modelling approaches.

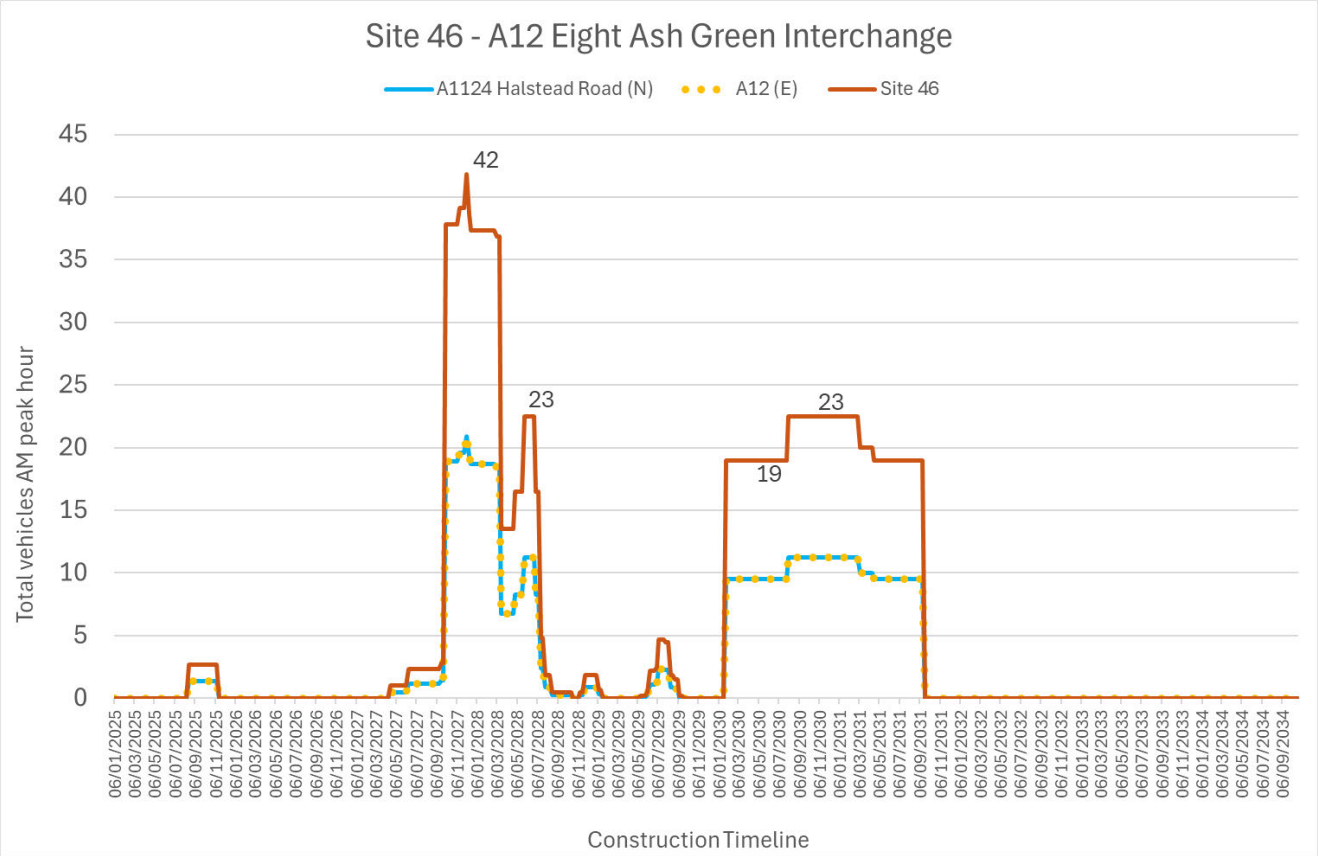


Figure 2.4 - Site 46 AM Construction Volumes

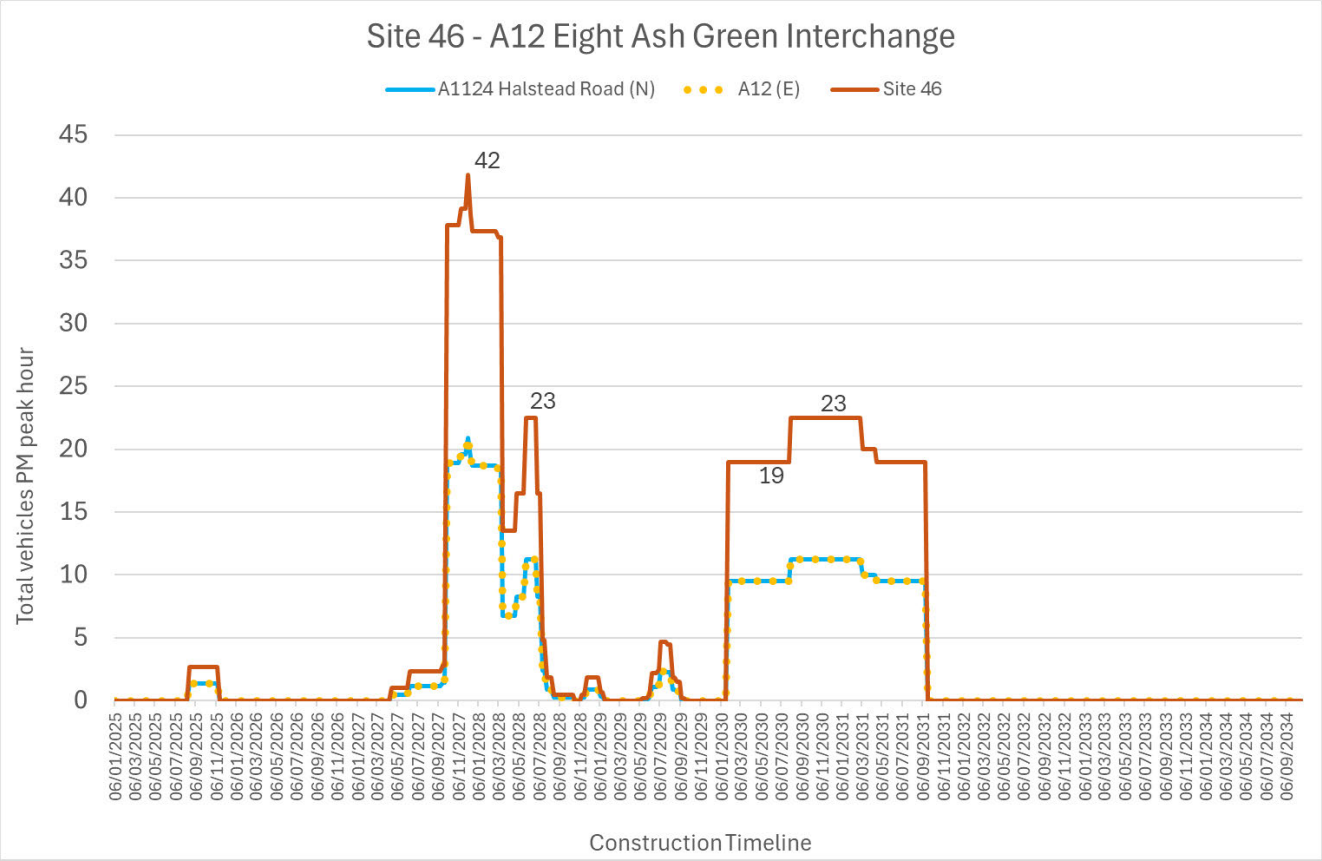


Figure 2.5 - Site 46 PM Construction Volumes

Table 2.13 - Site 46 Peak Construction Vehicle Impact on Total Junction Traffic

	Peak Construction Traffic Volume during Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:45 - 08:45)	42	4011.0	**1.0%**
PM Peak (16:30 - 17:30)	42	4235.0	**1.0%**

Table 2.14 - Site 46 Average Construction Vehicle Impact on Total Junction Traffic

	Average Construction Traffic Volume over the Construction Period (Veh)	Total junction volume/Peak hour (Veh)	Construction Traffic as a Proportion of Total Junction Flow
AM Peak (07:45 - 08:45)	17	4011.0	**0.4%**
PM Peak (16:30 - 17:30)	17	4235.0	**0.4%**

Site 90 – M25 J30

Key Outcomes

- Several movements operate at or above practical capacity in the Base scenario.
- Congestion worsens in future-year scenarios due to background and committed development growth.
- The Project does not introduce new capacity issues and would not result in severe impact.
- Oversaturation at the junction is not attributable to Project traffic.

2.2.17 During the development of the TA (APP-333), it was not possible to survey Site 90 – M25 J30 due to the extended time required to obtain the necessary permits to undertake the MCC in the M25 J30. As a result, this site was commissioned post DCO and surveyed in October 2025.

2.2.18 Furthermore, following a review of the LTC flows, Site 90 has been modelled to reflect the revised LTC flows.

2.2.19 The re-surveyed traffic results summary shown in Table 2.15 indicates that some lanes across the junction are operating within practical capacity in the Base scenario and continue to operate at this level across all forecast scenarios. However, several lanes are operating at or above practical and theoretical capacity in the Base scenario, with levels of oversaturation worsening in the forecast scenarios.

2.2.20 Across all scenarios, the M25 northbound off-slip lanes (Lanes 3/1+3/2 and 3/3) seem to operate either above practical or theoretical capacity across all forecast year scenarios in both the AM and PM peaks. These lanes deteriorate significantly in the FB+CD WD and FB+CD+ Project WD scenarios, where Lane 3/3 reaches 124.6% DoS in the AM peak (queues of 211.2 PCU and delays of 422.6 seconds) and remains above theoretical capacity in the PM peak at 119.5% DoS.

2.2.21 The M25 northbound off-slip, the Mardyke Junction westbound approaches (Lanes 7/1, 7/2 and 7/3) and southbound approaches (Lanes 6/1 and 6/2) mostly remain within practical capacity in the Base scenarios for both the AM and PM peaks. All of these lanes become oversaturated, operating above both practical and theoretical capacity, with correspondingly higher queues and delays observed. For the Mardyke Junction westbound approaches (Lanes 7/1, 7/2 and 7/3), the greatest level of oversaturation is observed in the AM peak under the FB+CD+ Project WD forecast scenario, with Lane 7/2 operating at a DoS of 119.9%, with queues of 84.4 PCU and delays of 388.6 seconds. For the Mardyke Junction westbound approaches (Lanes 6/1 and 6/2), the greatest levels of oversaturation observed in the PM peak under the FB+CD+ Project WD forecast scenario, with Lane 6/1 operating at a maximum DoS of 112.8%, with queues of 95.7 PCU and delays of 262.9 seconds.

2.2.22 The A13 westbound off-slip Arm 2, (Lanes 2/1+2/2 and 2/4+2/3) mostly remain within practical capacity in the Base scenarios for both the AM and PM peaks. All these lanes become oversaturated, operating above both practical and theoretical capacity, with correspondingly higher queues and delays observed in forecast scenarios. The greatest level of oversaturation is observed in the PM peak under the FB+CD+ Project WD forecast scenario, with Lane 2/4+2/3 operating at a DoS of 114.1%, with queues of 126.2 PCU and delays of 278.3 seconds.

2.2.23 While a number of movements are forecast to operate above practical and theoretical capacity, these conditions are present in baseline scenarios and worsen primarily due to background and committed development growth. The Project does not introduce new capacity constraints nor materially alter junction performance at this location.

Table 2.15 - Site 90 M25 J30 roundabout capacity assessment

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
Base 2025							
1/1	M25 SB Off Slip Left	1.1	3.1	68.5%	1.2	3.2	69.8%
1/2	M25 SB Off Slip Ahead Left	14.3	46.3	79.1%	18.5	65.1	90.9%
1/3+1/4	M25 SB Off Slip Ahead	14.1	42.6	84.0%	17.4	43.9	89.0%
2/1+2/2	A13 WB Off Slip Left	20.6	47.8	91.0%	18.8	46.9	88.2%
2/4+2/3	A13 WB Off Slip Ahead	14.7	40.2	80.3%	20.0	56.2	91.8%
3/1+3/2	M25 NB Off Slip Ahead Left	51.6	71.1	100.2 %	48.0	66.4	99.7%
3/3	M25 NB Off Slip Ahead	51.2	74.9	100.3 %	50.8	76.7	100.3 %
4/1	A13 EB Off Slip Left	0.3	1.5	35.5%	0.8	2.4	60.2%
4/2	A13 EB Off Slip Ahead	11.9	50.0	76.8%	23.8	112.6	99.1%
4/3	A13 EB Off Slip Ahead	13.7	54.2	81.3%	25.1	102.7	98.4%
5/1	Mardyke Junction EB Ahead	14.4	19.0	48.3%	20.2	31.2	65.9%
5/2	Mardyke Junction EB Right Ahead	8.9	10.1	59.5%	16.8	19.3	78.6%
5/3	Mardyke Junction EB Right	0.3	2.1	33.3%	0.5	2.9	44.9%
6/1	Mardyke Junction SB Ahead	14.2	14.3	70.3%	18.1	17.0	82.7%
6/2	Mardyke Junction SB Right Ahead	14.2	12.1	63.1%	18.9	15.2	79.6%
6/3	Mardyke Junction SB Right	2.4	8.9	37.0%	2.4	7.9	40.8%
7/1	Mardyke Junction WB Ahead	19.2	44.5	85.1%	21.7	51.9	89.4%
7/2	Mardyke Junction WB Right Ahead	18.6	32.4	85.6%	30.0	79.2	99.2%
7/3	Mardyke Junction WB Right	3.8	23.5	79.7%	4.1	23.1	82.6%
8/1	Mardyke Junction NB Ahead	13.0	9.9	48.7%	14.8	10.4	59.5%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
8/2	Mardyke Junction NB Right Ahead	17.7	12.4	53.4%	25.8	21.1	76.1%
8/3	Mardyke Junction NB Right	9.6	14.9	60.1%	10.9	18.2	60.5%
Future Baseline							
1/1	M25 SB Off Slip Left	1.2	3.3	71.2%	1.3	3.5	72.7%
1/2	M25 SB Off Slip Ahead Left	11.7	32.7	63.0%	16.8	48.9	84.2%
1/3+1/4	M25 SB Off Slip Ahead	12.7	33.2	77.8%	16.1	38.7	87.4%
2/1+2/2	A13 WB Off Slip Left	17.9	33.2	83.7%	15.9	35.3	78.6%
2/4+2/3	A13 WB Off Slip Ahead	12.9	29.5	71.3%	21.8	53.7	92.7%
3/1+3/2	M25 NB Off Slip Ahead Left	52.2	65.5	99.9%	81.4	149.3	106.0 %
3/3	M25 NB Off Slip Ahead	47.4	59.4	98.8%	59.0	93.2	101.9 %
4/1	A13 EB Off Slip Left	0.3	1.5	36.8%	0.8	2.5	62.7%
4/2	A13 EB Off Slip Ahead	11.4	40.4	68.3%	16.4	54.4	85.9%
4/3	A13 EB Off Slip Ahead	12.3	41.6	69.5%	18.5	53.5	86.8%
5/1	Mardyke Junction EB Ahead	7.4	16.8	48.8%	25.0	32.0	71.3%
5/2	Mardyke Junction EB Right Ahead	20.7	22.4	78.7%	19.9	29.8	88.6%
5/3	Mardyke Junction EB Right	12.7	12.6	38.6%	1.9	7.2	50.8%
6/1	Mardyke Junction SB Ahead	17.6	25.4	83.6%	24.6	32.3	94.2%
6/2	Mardyke Junction SB Right Ahead	14.5	18.1	80.0%	27.3	25.3	91.9%
6/3	Mardyke Junction SB Right	14.0	21.4	45.7%	2.8	9.7	45.5%
7/1	Mardyke Junction WB Ahead	25.6	73.2	99.5%	37.2	125.6	102.5 %
7/2	Mardyke Junction WB Right Ahead	26.9	88.8	98.2%	34.3	116.2	102.1 %
7/3	Mardyke Junction WB Right	19.5	79.6	92.3%	23.4	90.5	98.3%
8/1	Mardyke Junction NB Ahead	16.2	12.6	53.8%	16.4	16.5	61.0%
8/2	Mardyke Junction NB Right Ahead	19.4	10.2	59.8%	31.7	40.0	88.2%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
8/3	Mardyke Junction NB Right	18.1	26.4	68.9%	9.4	11.8	68.1%
Future Base plus Committed Developments							
1/1	M25 SB Off Slip Left	4.3	9.3	90.1%	2.4	5.5	82.8%
1/2	M25 SB Off Slip Ahead Left	10.9	39.7	66.6%	17.2	54.3	86.7%
1/3+1/4	M25 SB Off Slip Ahead	13.1	40.7	81.1%	18.7	42.5	89.3%
2/1+2/2	A13 WB Off Slip Left	42.9	63.0	99.2%	38.1	63.3	98.6%
2/4+2/3	A13 WB Off Slip Ahead	15.2	27.8	79.8%	99.6	221.2	110.0 %
3/1+3/2	M25 NB Off Slip Ahead Left	124.6	227.2	111.0 %	136.2	290.5	115.1 %
3/3	M25 NB Off Slip Ahead	211.2	422.6	124.6 %	160.0	348.1	119.1 %
4/1	A13 EB Off Slip Left	0.3	1.6	39.5%	0.7	2.2	57.2%
4/2	A13 EB Off Slip Ahead	16.3	49.7	83.9%	18.2	64.2	90.5%
4/3	A13 EB Off Slip Ahead	16.7	48.9	82.9%	20.5	63.2	91.3%
5/1	Mardyke Junction EB Ahead	21.1	17.6	54.7%	26.1	31.5	71.5%
5/2	Mardyke Junction EB Right Ahead	20.8	19.1	83.1%	19.8	27.9	88.2%
5/3	Mardyke Junction EB Right	2.4	7.5	42.2%	1.7	6.1	49.8%
6/1	Mardyke Junction SB Ahead	41.8	74.0	100.1 %	75.5	178.7	107.9 %
6/2	Mardyke Junction SB Right Ahead	35.0	48.5	96.7%	66.9	140.4	105.3 %
6/3	Mardyke Junction SB Right	2.4	12.3	48.0%	2.0	8.6	53.5%
7/1	Mardyke Junction WB Ahead	74.7	351.5	117.8 %	23.2	50.4	92.9%
7/2	Mardyke Junction WB Right Ahead	81.5	364.0	119.9 %	75.8	307.9	115.4 %
7/3	Mardyke Junction WB Right	70.5	345.9	118.6 %	75.3	317.2	115.1 %
8/1	Mardyke Junction NB Ahead	18.2	21.1	57.8%	14.6	19.6	55.4%
8/2	Mardyke Junction NB Right Ahead	20.0	23.2	58.9%	33.5	41.0	89.8%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
8/3	Mardyke Junction NB Right	25.0	23.5	89.5%	9.1	11.9	71.1%
Future Base plus Committed Developments and Project							
1/1	M25 SB Off Slip Left	6.6	13.7	93.7%	2.4	5.7	83.2%
1/2	M25 SB Off Slip Ahead Left	11.2	41.4	68.7%	17.2	54.3	86.7%
1/3+1/4	M25 SB Off Slip Ahead	13.5	42.7	82.9%	18.6	42.3	89.2%
2/1+2/2	A13 WB Off Slip Left	42.9	63.0	99.2%	30.0	48.2	96.0%
2/4+2/3	A13 WB Off Slip Ahead	15.5	28.2	80.6%	126.2	278.3	114.1 %
3/1+3/2	M25 NB Off Slip Ahead Left	124.6	220.7	111.0 %	155.4	337.3	118.5 %
3/3	M25 NB Off Slip Ahead	209.8	409.7	124.6 %	159.9	351.8	119.5 %
4/1	A13 EB Off Slip Left	0.3	1.6	39.5%	0.7	2.2	57.2%
4/2	A13 EB Off Slip Ahead	17.1	54.1	86.5%	18.2	64.2	90.5%
4/3	A13 EB Off Slip Ahead	17.5	53.0	85.6%	20.5	63.2	91.3%
5/1	Mardyke Junction EB Ahead	20.9	19.7	53.8%	19.1	9.9	70.9%
5/2	Mardyke Junction EB Right Ahead	20.3	18.2	81.8%	27.2	27.2	87.9%
5/3	Mardyke Junction EB Right	2.3	7.1	41.5%	17.1	22.5	49.8%
6/1	Mardyke Junction SB Ahead	41.8	73.7	100.1 %	95.7	262.9	112.8 %
6/2	Mardyke Junction SB Right Ahead	34.8	47.5	96.6%	88.1	227.8	110.2 %
6/3	Mardyke Junction SB Right	2.3	12.0	48.1%	2.0	9.2	55.8%
7/1	Mardyke Junction WB Ahead	76.3	378.2	117.8 %	18.8	39.0	83.2%
7/2	Mardyke Junction WB Right Ahead	84.4	388.6	119.9 %	61.6	226.9	110.5 %
7/3	Mardyke Junction WB Right	77.1	386.0	120.0 %	80.6	314.2	115.9 %
8/1	Mardyke Junction NB Ahead	7.6	9.5	57.0%	10.9	13.5	55.5%
8/2	Mardyke Junction NB Right Ahead	5.7	7.8	58.0%	19.0	25.9	90.8%

LinSig Lane Number	Name	AM Peak Hour			PM Peak Hour		
		Queue (PCU)	Delay (s)	DoS (%)	Queue (PCU)	Delay (s)	DoS (%)
8/3	Mardyke Junction NB Right	27.3	36.6	88.0%	26.3	35.9	71.0%

3. Summary and Conclusions

3.1.1 This Technical Note has been prepared to respond to comments raised by National Highways on the submitted Transport Assessment modelling. The updated assessments demonstrate that, across the reviewed junctions, forecast operational constraints are largely driven by baseline conditions and committed development growth rather than the Norwich to Tilbury Project.

3.1.2 Where modelling updates have been undertaken, these confirm that Project construction traffic represents a small proportion of total junction demand and does not materially alter operational performance. At locations where mitigation has been proposed, updated modelling confirms that these measures remain effective and appropriate. At other locations, any potential impacts are temporary and short-term in nature.

3.1.3 On this basis, it is concluded that the updated modelling responds to National Highways' TN04 comments and that the Project would not result in severe impacts on the Strategic Road Network.

Appendix A. Traffic Models and Outputs

Appendix A
Traffic Models and Outputs

(Available Electronically upon Request)

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com