

Runwood Homes

The Whitecroft Care Home,
Stanford Road, Orsett, GRAYS, Essex

Project Reference: 2212-030/TN/01/B

Technical Note – Impact of Lower Thames Crossing Construction Traffic on The Whitecroft Care Home

1 Introduction

- 1.1 Transport Planning Associates (**TPA, we, our, us**) has been commissioned by Runwood Homes Limited (**Runwood Homes**) to review the impact of the construction traffic associated with the proposed A122, Lower Thames Crossing on its The Whitecroft care home (**The Whitecroft**) on Stanford Road in Grays in Essex, and to prepare this Technical Note presenting our findings.
- 1.2 That review has been undertaken by a project team led by Rupert Lyons (**I, my, him**), and this Technical Note has been prepared by him.

My qualifications and experience

- 1.3 I am a transport planning and engineering consultant with a Master of Science degree in Transportation Planning and Engineering from the University of Southampton¹. I am a Chartered Member of The Chartered Institute of Logistics and Transport², and I am a Liveryman of The Worshipful Company of Carmen – the oldest transport society in the world – and a Patron of the London Transport Museum.
- 1.4 In 1997, I became a founding Director of TPA, a practice of consulting transport planners, traffic engineers and infrastructure designers with offices in Bristol, Cambridge, London, Oxford, and Welwyn Garden City. I previously held positions with White Young Green and Ove Arup & Partners, both large multi-disciplinary engineering consultancies.
- 1.5 During the course of my work, I advise developers and promoters of a wide range of commercial, residential and mixed-use development proposals in many regions of the United Kingdom requiring significant

¹ 1997

² 1997

investment in new transport infrastructure and services provision. I frequently appear as an expert witness on transport planning matters at various types of planning inquiries, hearings and examinations.

Summary of my conclusions

- 1.6 Overall, the most significant impact of the construction traffic associated with the proposed A122, Lower Thames Crossing on The Whitecroft will arise from its use of what I refer to as: 'The Stanford Road Compound Northern Haul Road' that lies approximately 60-70m (reducing to 40-50m at the proposed large radius turning circle/ head) east of The Whitecroft's eastern boundary³. It appears to be a cul-de-sac that extends from the western end of Haul Road 4 at the Stanford Road Compound north-westwards towards a realigned Stanford Road (but not intersecting with it).
- 1.7 Its purpose is not obvious or clear from the documents that I have reviewed but Haul Road 4 is required for up to five years and four months (between construction phases 2 and 11)⁴ and there is no reason for me to assume, necessarily, that it will not be required for a similar period albeit does conflict with a proposed landscape bund (so it will have to be removed to facilitate the implementation of that feature).
- 1.8 I note that it is referred to in the documents as: '*Other planned Haul Roads (not included in the model)*' and therein lies the issue. While daily construction vehicle traffic flows by construction phase are provided in the documents, the daily/ weekly construction vehicle flow profile is not provided. It is not, therefore, possible for me to make an evidence-based assessment of the impact of the construction traffic that will use this length of haul road and draw any reliable conclusions concerning the likely impact of such traffic on The Whitecroft (or to inform assessments of other environmental impact factors arising from it, such as noise, air quality and vibration).
- 1.9 For that reason, I conclude that there is insufficient information provided in the documents to enable a proper assessment of the impact of construction traffic on The Whitecroft.
- 1.10 I recommend, therefore, that National Highways be asked to address that in order that such an assessment can be made so that the scope and extent of those impacts are understood.

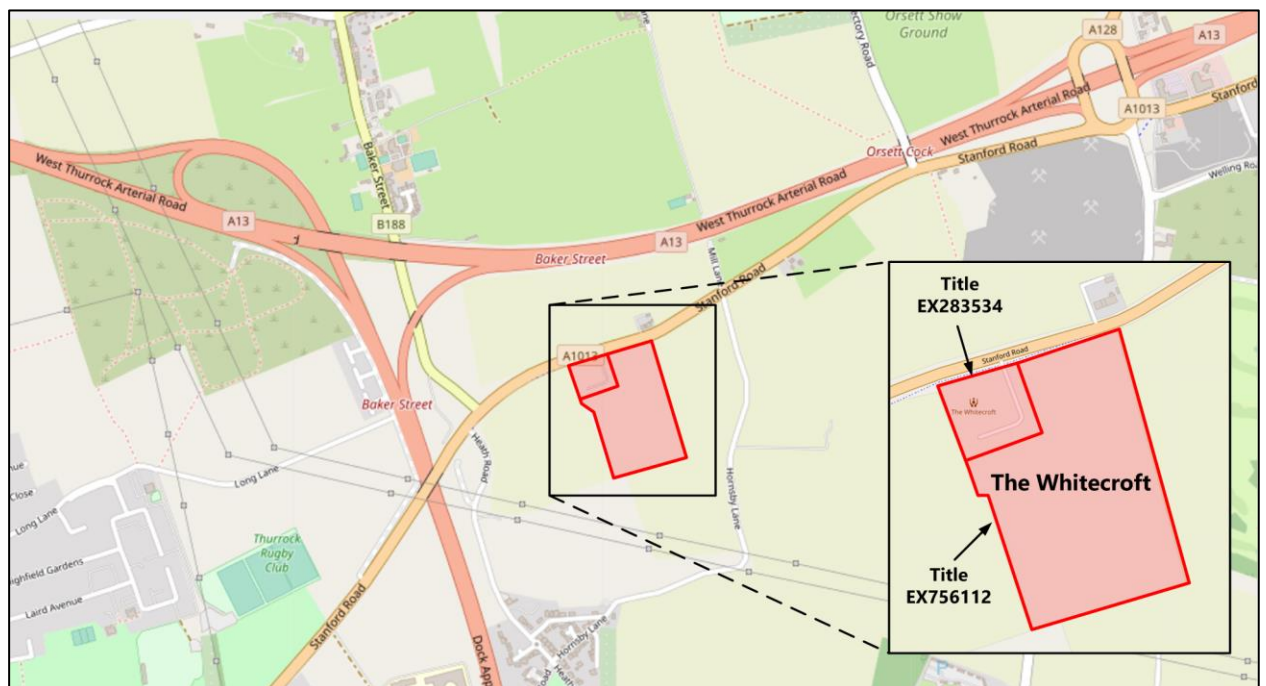
³ See Figure 11

⁴ There is a discrepancy between Table 8.1 (on page 209) of the Transport Assessment and the notes beneath Table 2.5 (on page 41) of Appendix 12.4 to the Environmental Statement

2 The Whitecroft Care Home

- 2.1 The Whitecroft lies adjacent to and south of Stanford Road near Orsett in the district of Thurrock in the County of Essex, approximately 4km east of Grays and 5km west of Stanford-le-Hope. Its location is identified in **Figure 1** (below).

Figure 1 Site Location Plan



Background mapping: © OpenStreetMap contributors

- 2.2 It is owned and operated by Runwood Homes and provides residential care and dementia care with 51 furnished bedrooms for up to 56 individuals⁵.
- 2.3 Table 2.1 (Construction Noise Sensitive Receptors) of Appendix 12.4 – *Construction Noise and Vibration Assessment to National Highways' Environmental Statement* identifies The Whitecroft as a 'sensitive receptor'⁶. Table 2.10 (Predicted Construction Noise Levels and Magnitude of Impact) of that document states that the construction noise impact on The Whitecroft will be 'major' during the day (07:00 to 19:00 weekdays; 07:00 to 13:00 Saturdays) and at night (23:00 to 07:00), and 'minor' during the evenings and weekends (19:00 to 23:00 weekdays; 13:00 to 23:00 Saturdays; 07:00 to 23:00 Sundays)^{7,8}.

⁵ <https://www.runwoodhomes.co.uk/care-homes/care-homes-essex/whitecroft>

⁶ Environmental Statement Appendices, Appendix 12.4 – Construction Noise and Vibration Assessment, NSR ID CN 85, page 5

⁷ Ibid, Receptor ID 85, page 56

⁸ For time periods see Table 2.7, Table E.1 Reproduced from BS5228-1, page 47

Stanford Road

- 2.4 Stanford Road forms part of the A1013, Grays to Stanford-le-Hope road in south Essex. In the vicinity of The Whitecroft, it follows an east-west alignment (approximately) and is parallel to (approximately) and south of the A13, West Thurrock Arterial Road/ Stanford-le-Hope Bypass, between an overbridge of the A1089, Dock Approach Road and the (six-arm) Orsett Cock Roundabout junction with the A13, the A128, Brentwood Road (to the north) and Brentwood Road (to the south). The local Highway Authority is Thurrock Council – a unitary authority.
- 2.5 The Department for Transport's *Guidance on road classification and the primary route network* (March 2012) defines 'A' roads as "major roads intended to provide large-scale transport links within or between areas"⁹.
- 2.6 Notwithstanding its status as an 'A' road, its functionality in Thurrock Council's route hierarchy, and its proximity to the proposed Lower Thames Crossing, Plate 6.1 (The highway network near the Project) of National Highways' *Transport Assessment* of the proposed Lower Thames Crossing identifies Stanford Road as a 'Local Road'¹⁰.
- 2.7 In the vicinity of The Whitecroft, it is a single carriageway road with a carriageway width of 9m (approximately) subject to a 50mph speed limit. Along the southern side of the road, a 2.2-2.5m wide (approximately) shared use footway/ cycleway is provided.
- 2.8 Vehicular access to The Whitecroft access road is provided by way of a priority junction with Stanford Road, with a ghost island right-turning lane. Pedestrian access is provided via the same vehicular access, and a separate gate and entrance is available from the north side of the site, directly from the shared use footway/ cycleway.
- 2.9 In the vicinity of The Whitecroft, Stanford Road has an average annual traffic flow of approximately 12,325 vehicles per day, of which 277 (2.25%) are larger vehicles (either buses, coaches or heavy goods vehicles (HGVs))¹¹.
- 2.10 In Thurrock Council's *Thurrock Traffic Management Plan 2012-2026*, Stanford Road is coloured green on *Map 5: 2025 AM Peak Flow/Capacity – Highway Links and Junctions* that includes for changes in the local highway network and planned growth in jobs and housing meaning that it is forecast to be: "Approaching desired capacity (70% to 85%)" in 2025¹².

⁹ <https://www.gov.uk/government/publications/guidance-on-road-classification-and-the-primary-route-network/guidance-on-road-classification-and-the-primary-route-network>

¹⁰ Transport Assessment, page 57

¹¹ <https://roadtraffic.dft.gov.uk/manualcountpoints/92176>, exact location: 51.49354800, 0.35166904, 2021 estimate

¹² https://www.thurrock.gov.uk/sites/default/files/assets/documents/management_plan.pdf

- 2.11 Similarly, in Plates 6.17 to 6.19 of National Highways' *Transport Assessment*¹³, Stanford Road is identified as having ratios of volume to capacity of '0.0 to 74.99' in the 2016 AM Peak Hour (07:00-08:00), the inter-peak period, and the PM Peak Hour (17:00-18:00).
- 2.12 A review of the CrashMap website (**Figure 2**) reveals that, in the latest five year period available (2017 – 2021), one personal injury collision occurred on Stanford Road within 200m of the site access. This occurred around 150m east of The Whitecroft access on 23 June 2017, involved two cars and resulted in three casualties. Considering its location, it does not appear to be linked to the operation of The Whitecroft access.

Figure 2 Personal Injury Collision data



CrashMap – note: approximate site boundary

3 Application by National Highways for an Order Granting Development Consent for the Lower Thames Crossing Project

- 3.1 On 31 October 2022, National Highways submitted its application for a Development Consent Order (**DCO**) for its A122, Lower Thames Project and it was accepted by The Planning Inspectorate for detailed examination on 28 November¹⁴.
- 3.2 National Highways is the highway, traffic and street authority for England's motorways and certain major A-roads known as the strategic road network (**SRN**). It was established under the Infrastructure Act 2015, and

¹³ Transport Assessment, pages 77 to 79

¹⁴ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001790-221128%20-%20Notification%20of%20decision%20to%20ACCEPT%20application.pdf>

appointed and licensed as a strategic highways company by the Secretary of State for Transport on 1 April 2015¹⁵.

- 3.3 The Lower Thames Crossing project is a proposed new crossing of the River Thames estuary close to the existing Dartford Crossing that will link the counties of Essex and Kent. On the northern side, it would link to the A13 in Thurrock and the M25 in Havering, and on the southern side to the A2 and the M2. It would include the longest road tunnels in the United Kingdom (2.6 miles (4.3km)). It includes 14.3 miles (23.0km) of new roads connecting the M2/A2, A13 and M25, and requires the construction of approximately 50 new bridges and viaducts¹⁶.
- 3.4 National Highways' Transport Assessment anticipates an "opening date for the Project being in 2030" and that construction "may take approximately six years"¹⁷ (i.e. from 2024).
- 3.5 On 9 March 2023, however, a Written Ministerial Statement (**Statement**) was made by the Secretary of State¹⁸ that included the announcement that the Government has rephased construction of the Lower Thames Crossing project by two years. In response, the Examining Authority (**ExA**) requested National Highways' view on the implications of the Statement on, *inter alia*, the application documents¹⁹. National Highways asserts that the "Statement has no material impact on the Application documents" and that the rephrasing "of the commencement of construction does not impact the design" of the Lower Thames Crossing²⁰.

Documents Reviewed

- 3.6 With regard to my review, and insofar as they are relevant to the consideration of the impact of the construction traffic associated with the proposed Lower Thames Crossing on The Whitecroft, the DCO application is supported, *inter alia*, by:-
- the *Draft Development Consent Order* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/3.19)²¹;
 - a *Transport Assessment* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/7.9)²²; that includes:

¹⁵ <https://nationalhighways.co.uk/about-us/corporate-governance/>

¹⁶ <https://nationalhighways.co.uk/our-roads/lower-thames-crossing/what-is-the-lower-thames-crossing/the-lower-thames-crossing-route/>

¹⁷ Transport Assessment, §5.5.7, page 40

¹⁸ [Transport Investment - Hansard - UK Parliament](#)

¹⁹ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-002041-230321_PD_Letter_info_and_changes.pdf

²⁰ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-002051-Response%20to%20Procedural%20Decisions%20of%2021st%20March%202023.pdf>

²¹ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001247-3.1%20Draft%20Development%20Consent%20Order.pdf>

²² <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001481-7.9%20Transport%20Assessment.pdf>

- *Appendix E – Construction Traffic Assessment Supporting Information* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/7.9)²³;
- *Temporary Works Plans Volume C (sheets 21 to 49) (Clean version)* (Version 2.0, dated December 2022 (Application Document Reference: TR010032/APP/2.17)²⁴;
- *Structures Plans Volume A (key plan and sheets 1 to 11)* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/2.13)²⁵;
- *Structures Plans Volume B (sheets 12 to 79)* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/2.13)²⁶;
- *Engineering Drawings and Sections Volume F (A13 junction plan and profiles)* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/2.9)²⁷; and
- *Environment Statement Appendices, Appendix 12.4 – Construction Noise and Vibration Assessment* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/6.3)²⁸

3.7 I have reviewed those documents and note that they refer to the Lower Thames Project as “*the Project*”²⁹ throughout as I will (from hereon) in this Technical Note.

3.8 It is pertinent to note that there appears to be errors in the application documents in respect of the proposed horizontal and vertical alignment of the proposed A13 Westbound to LTC Northbound Overbridge – Work No 7E(v) and in respect of the proposed vertical alignment of the proposed A13 Westbound to A1089 Southbound over A13 Westbound to A122 LTC Overbridge – Work No 7E(vi).

A13 Westbound to LTC Northbound Overbridge – Work No 7E(v)

3.9 This bridge is shown as having a finished road level (**FRL**) of 20.29m above Ordnance Datum (**AOD**) on *Structures Plans 5(2)(o) Structures Location Work No. 7E Sheet 77*³⁰ whereas the profile on *A13 Junction – Plan and Profiles Regulation 5(2)(o) and 6(2) Sheet 9*³¹ gives a proposed level for the carriageway carried by that bridge of 32.30m at chainage 0+500. You can see on that latter drawing where the chainage line deviates from the proposed highway alignment and, I suspect, therein lies the basis of the discrepancy between the drawings.

²³ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001479-7.9%20Transport%20Assessment%20Appendix%20E%20Construction%20Traffic%20Assessment%20Supporting%20Information.pdf>

²⁴ [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001331-2.17%20Temporary%20Works%20Plans%20Volume%20C%20\(sheets%2021%20to%2049\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001331-2.17%20Temporary%20Works%20Plans%20Volume%20C%20(sheets%2021%20to%2049).pdf)

²⁵ [TR010032-001379-2.13 Structures Plans Volume A \(key plan and sheets 1 to 11\).pdf \(planninginspectorate.gov.uk\)](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001379-2.13%20Structures%20Plans%20Volume%20A%20(key%20plan%20and%20sheets%201%20to%2011).pdf)

²⁶ [TR010032-001380-2.13 Structures Plans Volume B \(sheets 12 to 79\).pdf \(planninginspectorate.gov.uk\)](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001380-2.13%20Structures%20Plans%20Volume%20B%20(sheets%2012%20to%2079).pdf)

²⁷ [TR010032-001370-2.9 Engineering Drawings and Sections Volume F \(A13 junction plan and profiles\).pdf \(planninginspectorate.gov.uk\)](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001370-2.9%20Engineering%20Drawings%20and%20Sections%20Volume%20F%20(A13%20junction%20plan%20and%20profiles).pdf)

²⁸ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001454-6.3%20Environmental%20Statement%20Appendix%2012.4%20-%20Construction%20Noise%20and%20Vibration%20Assessment.pdf>

²⁹ Transport Assessment, §1.1.2 (page 1)

³⁰ Application Document Number: TR010032/APP/2.13

³¹ Application Document Number: TR010032/APP/2.9

A13 Westbound to A1089 Southbound over A13 Westbound to A122 LTC Overbridge – Work No 7E(vi)

- 3.10 Similarly, this bridge is shown as having an FRL of 21.94m AOD on *Structures Plans 5(2)(o) Structures Location Work No. 7E Sheet 40*³² whereas the profile on *A13 Junction – Plan and Profiles Regulation 5(2)(o) and 6(2) Sheet 5*³³ gives a proposed level for the carriageway carried by that bridge of 32.60m at chainage 0+100.

Post Open Floor Hearing 2 Action Points

- 3.11 These errors should be corrected before a proper assessment of the impact of the Project on The Whitecroft can be concluded, and I can see that following Open Floor Hearing 2 (**OFH2**) on 28 June 2023, National Highways has been asked to provide additional vertical cross-sections at *“the A13/ A1089/ LTC Baker Street intersection”*³⁴.
- 3.12 Section G-G on the A13-A1089-LTC at Baker Street Junction Plan provided in the Junction Layout Plans, Annotated by the Examining Authority as Guidance to support the post hearing actions for OFH2 (Application Document Reference: TR010032/APP/8.7)³⁵ passes through these two bridges. These errors should be identified and addressed as part of this process.

Other Relevant Documents

- 3.13 I am aware of the following other documents relating to the assessment of construction traffic associated with the Project:
- *Appendix G – Construction Percentage Change in Flows by Phase* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/7.9)³⁶,
 - *Appendix H – Construction Journey Time Maps* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/7.9)³⁷;
 - *Framework Construction Travel Plan* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/7.13)³⁸; and

³² Application Document Number: TR010032/APP/2.13

³³ Application Document Number: TR010032/APP/2.9

³⁴ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-002401-LTC%20-%20OFH2%20Action%20Points%20FINAL.pdf>

³⁵ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-002400-TR01003%20NH%20Junction-layout%20ExA-guidance%20FINAL.pdf>

³⁶ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001476-7.9%20Transport%20Assessment%20Appendix%20G%20Construction%20Percentage%20Change%20in%20Flows%20by%20Phase.pdf>

³⁷ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001477-7.9%20Transport%20Assessment%20Appendix%20H%20Construction%20Journey%20Time%20Maps.pdf>

³⁸ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001499-7.13%20Framework%20Construction%20Travel%20Plan.pdf>

- *Outline Traffic Management Plan for Construction* (Version 1.0, dated October 2022 (Application Document Reference: TR010032/APP/7.14)³⁹,

but I have not reviewed these at the time of writing this Technical Note.

The Route of the Lower Thames Crossing

- 3.14 The alignment of the Project and the route of its associated highway infrastructure is illustrated in Plate 3.1, *Lower Thames Crossing route of the Transport Assessment*⁴⁰ (upon which we have superimposed the location of The Whitecroft), and I have reproduced that in **Figure 3** (overleaf).

³⁹ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010032/TR010032-001503-7.14%20Outline%20Traffic%20Management%20Plan%20for%20Construction.pdf>

⁴⁰ Transport Assessment, page 17

Figure 3 Lower Thames Crossing route

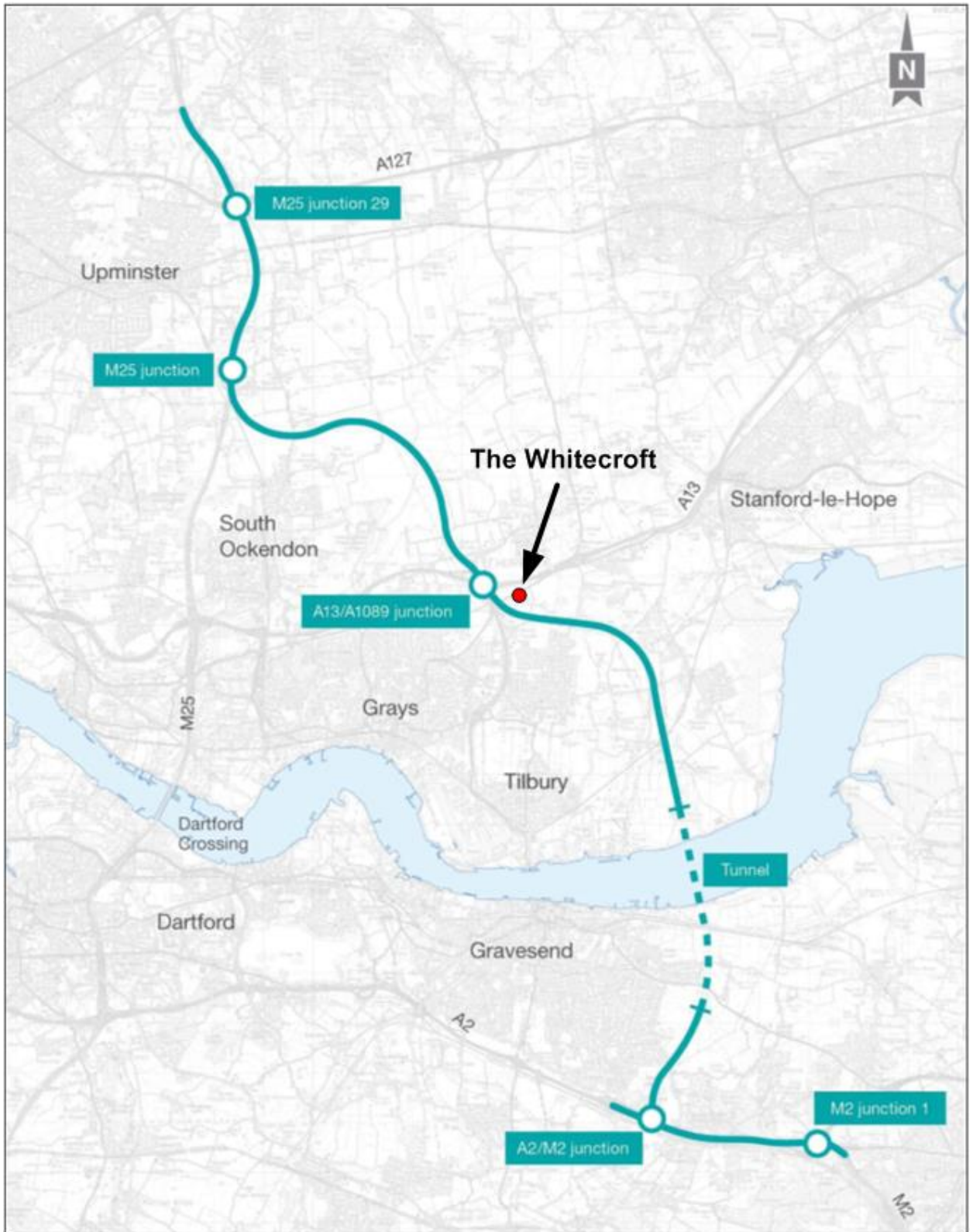


Plate 3.1 of the Transport Assessment

The Construction Periods and its Impacts

- 3.15 In addition to presenting *“the forecast impacts of the Project on the performance of the transport system”*⁴¹, the *Transport Assessment* contends that it also *“reports the impacts of the Project resulting from traffic generated during construction”*⁴² based on an *“assessment of the forecast impacts of construction and construction traffic on the transport network”*⁴³.
- 3.16 In summarising that assessment, National Highways anticipates that following a period of preparatory works (originally) scheduled to take place in 2024, the *“main construction period for the Lower Thames Crossing would start in early 2025, with the road being open for traffic in late 2030”*⁴⁴. It acknowledges, however, that *“as with all large projects there is a level of uncertainty over the construction programme”*⁴⁵.
- 3.17 It further acknowledges that:-
- *“There would be additional vehicles on the network during the construction of the Project” – “primarily vehicles used by the workforce to access the compounds and goods vehicles used for moving materials to and from the site”;*
 - *“There would also be HGV movements associated with the earthworks”*⁴⁶;
 - *“some short-term road closures”*⁴⁷;
 - *“temporary delays due to traffic management measures”;* and
 - *“narrow lane running on the SRN”*⁴⁸ with temporary reduced speed limits.
- 3.18 In respect of its assessment of the impacts during the construction of the Project, chapter 8 (Construction assessment) of the *Transport Assessment* contends to assess the impacts caused by the:-
- *“traffic generated by the Project during construction”;*
 - *“the temporary closure of roads and PRow near the construction compounds and works”;* and
 - the *“traffic management measures implemented on the existing road network during the construction phase”*⁴⁹.
- 3.19 In section 8.3 of the *Transport Assessment* (Networks), National Highways presents *“the proposed location of the construction compounds and the Utility Logistics Hubs (ULH) and the proposed access and egress arrangements for each compound”*⁵⁰.

⁴¹ Ibid, §1.1.3 (page 1)

⁴² Ibid, §1.1.5 (page 1)

⁴³ Ibid, §1.2.2 d. (page 1)

⁴⁴ Ibid, §1.5.1 (page 6)

⁴⁵ Ibid, §1.5.2 (page 6)

⁴⁶ Ibid, §1.5.3 (page 6)

⁴⁷ Ibid, §1.5.4 (page 6)

⁴⁸ Ibid, §1.5.5 (page 6)

⁴⁹ Ibid, §2.1.5 (page 8)

⁵⁰ Ibid, §8.3.1 (page 213)

Stanford Road Compound

- 3.20 Both Plates 8.3, *Construction compounds and Utility Logistics Hubs (2 of 3)* of the *Transport Assessment*⁵¹ (reproduced in **Figure 4** overleaf) and 8.8, *Haul road 3a (between the Station Road and Brentwood Road compounds) haul road 4 (between Brentwood Road and the Standford Road compounds)*⁵² (reproduced in **Figure 5** overleaf) identify the provision of a '*Stanford Road Compound*' in close proximity to The Whitecroft.

⁵¹ Ibid, page 215

⁵² Ibid, page 220

Figure 4 Construction compounds and Utility Logistics Hubs

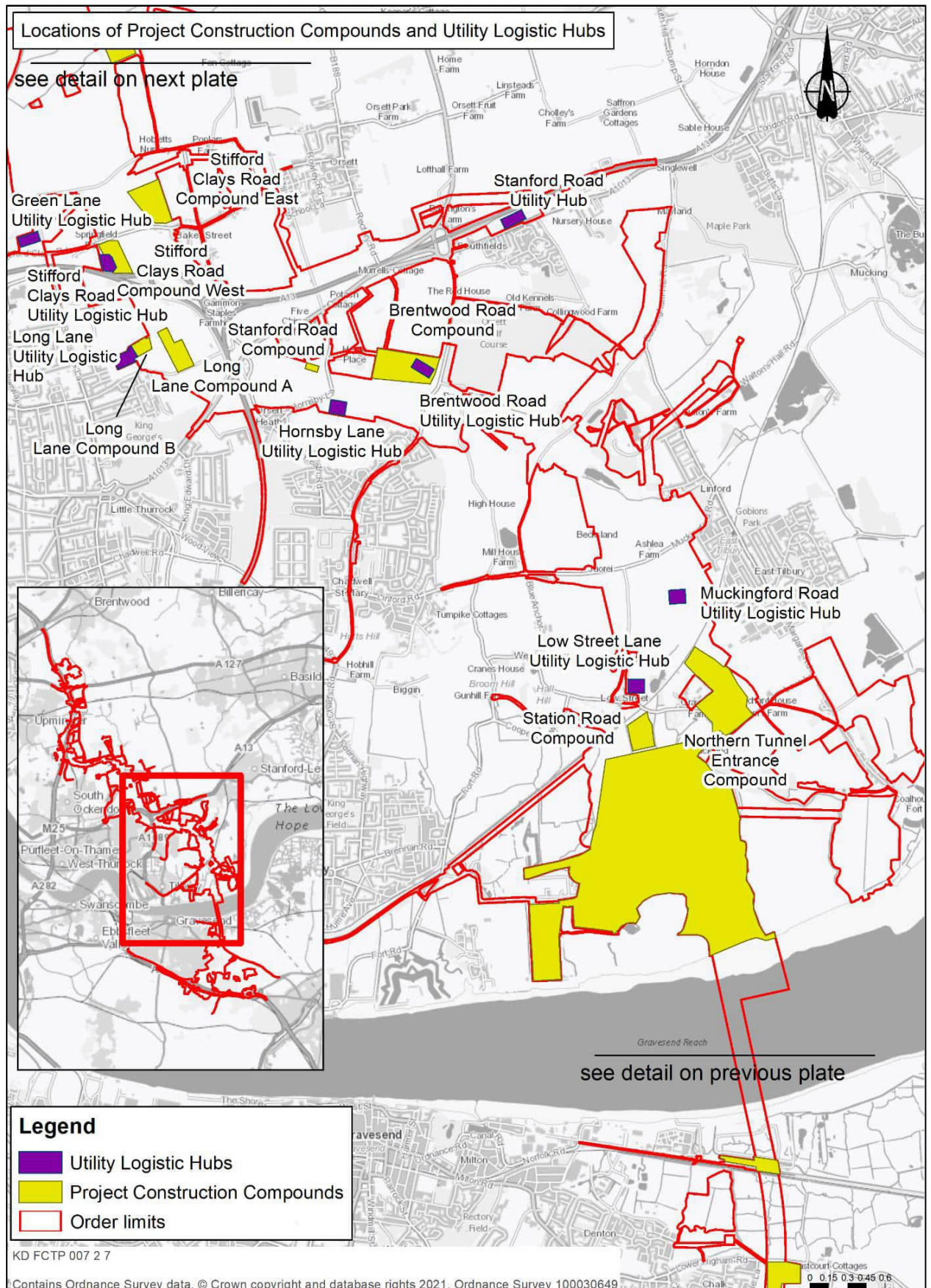


Plate 8.3 of the Transport Assessment

Figure 5 Haul road 3a (between the Station Road and Brentwood Road compounds) haul road 4 (between Brentwood Road and the Stanford Road compounds)

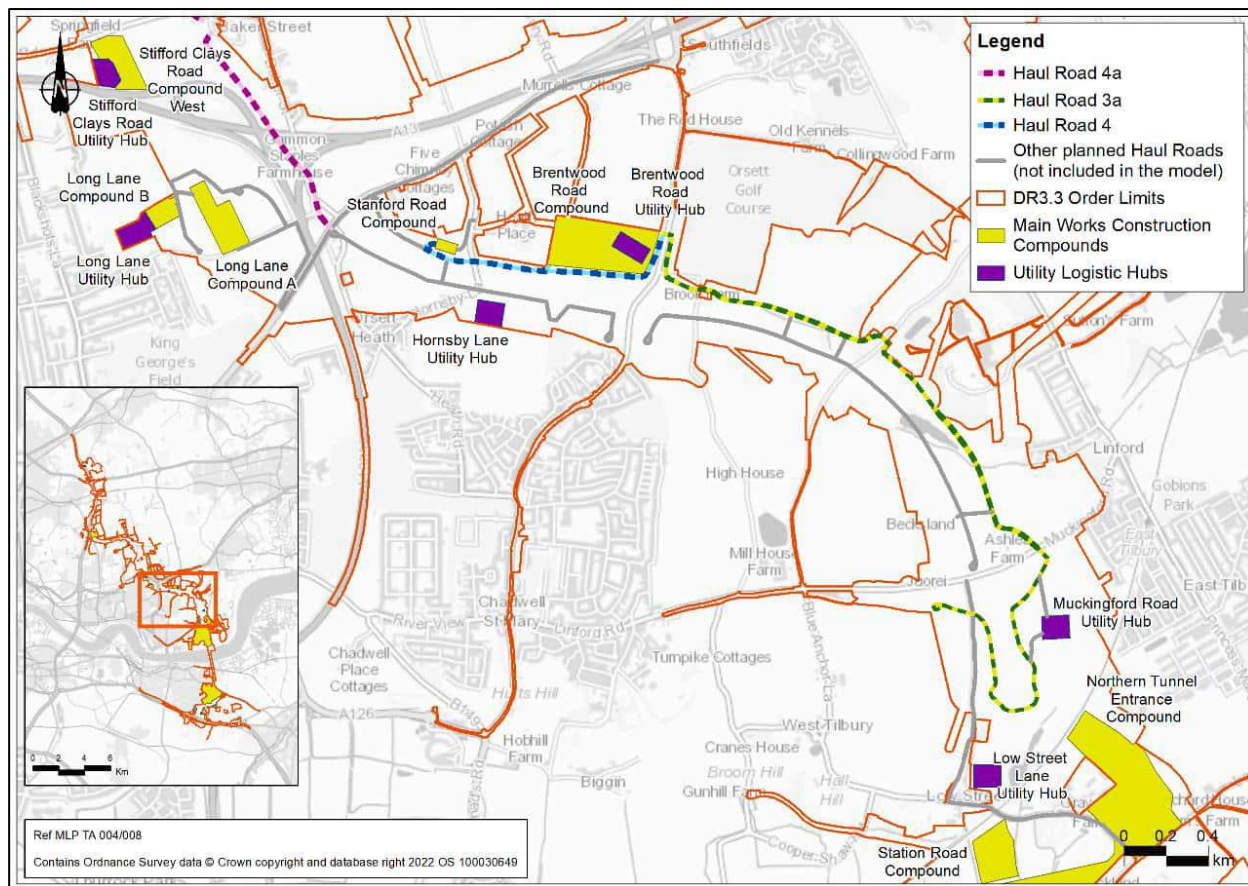


Plate 8.8 of the Transport Assessment

- 3.21 In the *Draft Development Consent Order*, the ‘Stanford Road Compound’ has been allocated the Works No. CA7 and it is described as “a construction compound for main works, located , [sic] of approximately 5,000 square metres”⁵³. Note that this description is incomplete and should be corrected.
- 3.22 It is illustrated at a larger scale in National Highways’ *Temporary Works Plans, Regulation 5(2)(j), Sheet 28* drawing (number HE540039-CJV-BOP-SZZ_GN000000_-DR-CW-70025, Revision P02, dated 19 October 2022) (Temporary Works Plan 28) [**Appendix A**].
- 3.23 With reference to its ‘Legend’, that drawing illustrates the provision of ‘Storage’, ‘Material Storage Areas’, ‘Office/ Welfare’ facilities, and car parking.

⁵³ Draft Development Consent Order, page 113

- 3.24 In Schedule 11, *Land of which temporary possession may be taken*, to the *Draft Development Consent Order*, the 'Stanford Road Compound' is described twice as a "temporary construction compound at surface for facilitating main works"⁵⁴.
- 3.25 Elsewhere, in the *Draft Development Consent Order* Work No. MUT13 is described as "the temporary installation of multi-utilities, to include the installations or diversion of underground utilities connections for the construction areas Work No. CA6, CA7, CA8, CA9, CA10 and Work No. CA11 within a multi-corridor along Marshfoot Road to Brentwood Road, for approximately 5,333 metres in length"⁵⁵.

The Stanford Road Compound Northern Haul Road (adjacent to The Whitecroft)

- 3.26 National Highways defines haul roads as "new link roads between compounds and the existing highway infrastructure", and notes that some of these haul roads "require new temporary priority or signalised junctions to be created to enable construction traffic to access and egress the compounds"⁵⁶.
- 3.27 It should be noted, however, that the 'Stanford Road Compound' lies southeast of The Whitecroft, and Plate 8.8 (**Figure 5**) clearly identifies the provision of a haul road west, south and southeast of The Whitecroft (The Stanford Road Compound Northern Haul Road) that is referred to in the 'Legend' as: 'Other planned Haul Roads (not included in the model)'.
- 3.28 It also indicates that Stanford Road (in the vicinity of The Whitecroft) is intended for use as a haul road that, similarly, is not included in the model.
- 3.29 As I discuss below, this section of haul road does not, in my view, accord with National Highways' definition insofar as it does not provide a link between the 'Stanford Road Compound' and the public highway. It appears to be a cul-de-sac with a turning loop that extends from the western end of Haul Road 4 at the compound north-westwards towards a realigned A1013, Stanford Road (but not intersecting with it).
- 3.30 It is not clear, in fact, or explained anywhere that we have been able to locate what purpose it serves or what types of construction vehicles will use it.
- 3.31 This section of haul road is illustrated at a larger scale in National Highways' *Temporary Works Plans, Regulation 5(2)(j), Sheet 29* drawing (number HE540039-CJV-BOP-SZZ_GN000000_-DR-CW-70026, Revision P02, dated 19 October 2022) (Temporary Works Plan 29) [**Appendix A**].

⁵⁴ Ibid, page 274

⁵⁵ Ibid, page 107

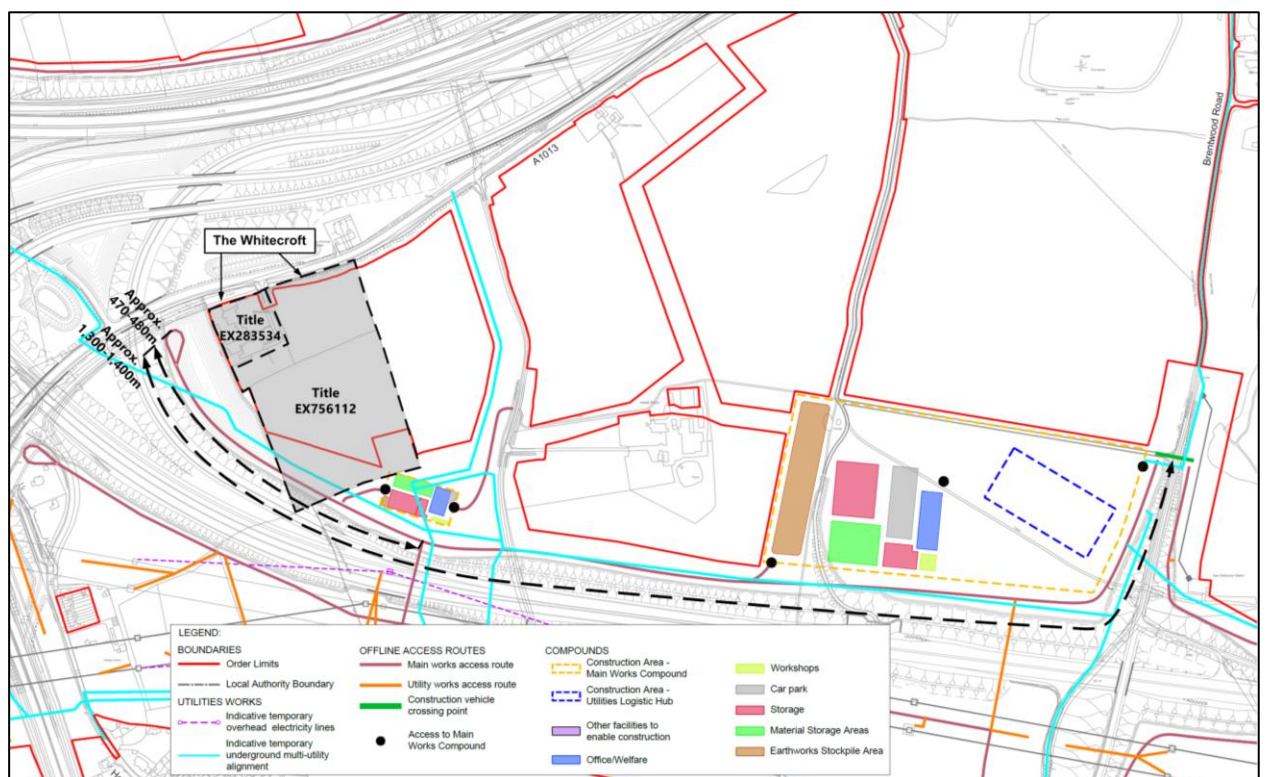
⁵⁶ Transport Assessment, §8.2.8 (pages 209-210)

3.32 In the context of considering the impact of its use on The Whitecroft, that drawing should be read in conjunction with National Highways’:-

- Temporary Works Plan 28 – referred to earlier; and
- *Temporary Works Plans, Regulation 5(2)(j), Sheet 32* drawing (number HE540039-CJV-BOP-SZZ_GN000000_-DR-CW-70029, Revision P02, dated 19 October 2022) [**Appendix A**].

3.33 For ease of reference, we have prepared a composite plan (that I provide in **Figure 6** (below)) that assembles those drawings in the context of The Whitecroft upon which we have overlaid the Title information that we have been provided with by Runwood.

Figure 6 The haul road in the context of The Whitecroft



Background mapping and Legend extracted from Temporary Works Plans 28-29-32, with our notes added

3.34 That clearly shows a length of ‘Main works access route’ (haul road) (approximately 1,300-1,400m long, measured from its connection with Brentwood Road at its eastern end) running north-westwards from the ‘Stanford Road Compound’ towards Stanford Road crossing Title Number EX756112 and terminating at what appears to be a large radius turning circle/ head. It does not intersect with Stanford Road (so it does not accord with National Highways’ own definition of ‘haul road’) and I reiterate, its purpose is not obvious or clear.

3.35 That said, and on the basis that a similar length of haul road is proposed on the south western side of the A122, I think that it is reasonable to assume that this length of haul road is required for the construction of

the bund proposed between The Whitecroft and the A13 westbound slip road to the A122 Lower Thames Crossing southbound and, perhaps, the earthworks required to form the embankment shown on the eastern side of that slip road.

- 3.36 Interestingly, and in the 'Legend', National Highways does not differentiate between 'Haul Road 4' and 'Other planned Haul Roads (not included in the model)', as it does in Plate 8.8 of the *Transport Assessment*. Instead, the 'Legend' on Temporary Works Plan 29 simply refers to 'Main works access route'.
- 3.37 It should be noted that an 'Indicative temporary underground multi-utility alignment' for Work No. MUT13 runs approximately parallel (and east) of the proposed haul road, similarly crossing Title Number EX756112.

4 The Evidence Base

- 4.1 National Highways acknowledges that "the Project would have an impact on some ... users of the highway network due to construction works and the presence of construction traffic on the network"⁵⁷ and it presents an assessment of that impact in chapter 8 of the *Transport Assessment*⁵⁸. Further detail is provided at Appendix E to the *Transport Assessment* (Construction Traffic Supporting Information).

Construction Assessment

- 4.2 It also acknowledges that the "Project's construction programme is complex and involves works associated with both the construction of the new highways and tunnel, and the provision of new, and diversion of, utility connections". It goes on to explain that such work "would result in new, temporary vehicles movements associated with the construction works, as well as changes to existing traffic flows through the introduction of temporary traffic management across the road network"⁵⁹.
- 4.3 The assessment reminds us that:

*"Following DCO Grant there would be preparatory works, referred to in the draft DCO as preliminary works taking place in 2024. The main construction period for the Lower Thames Crossing would start in early 2025, with the road being open for traffic in late 2030"*⁶⁰.

- 4.4 The assessment of the impacts on the performance of the highway network as a result of the construction of the Project have been forecast using output from the Lower Thames Area Model (LTAM) and the main construction period has been divided into 11 phases (between 1 January 2025 and 31 December 2030, based

⁵⁷ Ibid, §8.1.1 (page 205)

⁵⁸ Pages 205-423

⁵⁹ Ibid, §8.1.4 (page 205)

⁶⁰ Ibid, §8.1.5 (page 205)

on the proposed construction programme⁶¹) with “a reasonably worst case construction scenario for each modelled time period”⁶².

- 4.5 It should be remembered, however, that the delay announced in the Statement means that the construction period is likely to now be between 1 January 2027 and 31 December 2032, with preliminary works taking place in 2026.
- 4.6 It is noteworthy that the preparatory/ preliminary works “are not considered to be significant in traffic terms and so do not form part of the assessment”⁶³. Further, that the “number of construction related vehicle movements have been averaged over each phase, so that the LTAM forecasts the average conditions within each phase”⁶⁴.

Stanford Road Compound

- 4.7 As discussed earlier, and *inter alia*, Plate 8.8 (**Figure 5**) identifies the provision of:-
- a ‘Stanford Road Compound’ (in close proximity to The Whitecroft);
 - Haul Road 4; and
 - The Stanford Road Compound Northern Haul Road.
- 4.8 Table 8.3 (Programme of haul road availability in the LTAM)⁶⁵ indicates that ‘Haul Road 4’ will be available for use between Phases 2 and 11 (i.e. between 1 September 2025 and 31 December 2030; five years and four months⁶⁶). Now likely to be between 1 September 2027 and 31 December 2030, following the Statement.
- 4.9 There is, however, a disconnect between the information provided in Table 8.1 (Construction modelling phases) of the *Transport Assessment*⁶⁷ that schedules construction phases totalling 72 months (six years) and the information provided in the notes to Table 2.5 (Daily Haulage Movements Assumptions by Construction Phase) of Appendix 12.4 to the *Environmental Statement*⁶⁸ that schedules construction phases totalling 60 months. The discrepancy relates to the stated duration of Phase 11. The *Transport Assessment* gives the duration of Phase 11 at 17 months (between 1 August 2029 and 31 December 2030 whereas, the Appendix 12.4 of the *Environmental Statement* gives the duration of Phase 11 as five months (between ‘Construction Month 56’ and ‘Construction Month 60’).

⁶¹ Ibid, Table 8.1 Construction modelling phases (page 209)

⁶² Ibid, §8.1.7 c (page 206)

⁶³ Ibid, §8.2.1 (page 208)

⁶⁴ Ibid, §8.2.5 (page 209)

⁶⁵ Ibid, page 217

⁶⁶ Determined with reference to Table 8.1 (Construction modelling phases) on page 209

⁶⁷ Ditto

⁶⁸ Environmental Statement Appendices, Appendix 12.4 – Construction Noise and Vibration Assessment, page 41

- 4.10 While National Highways should be asked to correct this discrepancy, albeit in the context of the impact of construction traffic on The Whitecroft it is unlikely to be significant.
- 4.11 National Highways explains that each *“construction compound would be provided with a preliminary access and egress arrangement”*⁶⁹. It goes on to provide a detailed description of each of the individual traffic management measures associated with the construction of the Project, noting that some traffic management measures *“have not been included in the LTAM if they [are] ... of a short duration compared to the length of the construction model phase in which they occur”*⁷⁰.
- 4.12 Table 8.5 (Traffic management measures excluded from the analysis)⁷¹ identifies that the A1013 (Stanford Road) will be closed for a short duration at nights and weekends to:-
- carry out nearby works and modifications to local utility networks and installation of temporary connections to the Stanford Road compound (ID ref: RNTM26); and to
 - carry out nearby works (ID ref: RNTM28).
- 4.13 National Highways explains that it has assumed⁷² that *“at compounds with 50 – 100 workers, the number of cars would be 80% of the number of workers”*⁷³ and that ‘modal share’ is attributed to the Stanford Road compound, and Hornsby Lane Utility Hub in Table 8.18 (Modal share assumptions by compound/ ULH)⁷⁴. It is, therefore, reasonable to assume that between 40 and 80 car parking spaces are to be provided, albeit is not clear how that divides between the *‘Stanford Road Compound’* and the Hornsby Lane Utility Hub.

The Stanford Road Compound Northern Haul Road (adjacent to The Whitecroft)

- 4.14 Notwithstanding that Haul Road 4 and The Stanford Road Compound Northern Haul Road are separately identified in the Transport Assessment⁷⁵, they are combined and identified as Link 34 in Plate 2.3, *Haul Route Locations* of Appendix 12.4 – *Construction Noise and Vibration Assessment* to the *Environmental Statement*⁷⁶ (reproduced in **Figure 7** overleaf).

⁶⁹ Ibid, §8.4.1 (page 224)

⁷⁰ Ibid, §8.4.4 (page 225)

⁷¹ Ibid, pages 226-233

⁷² Based upon an assumed number of parking spaces and the likely vehicle occupancy

⁷³ Ibid, §8.6.31 b. (page 272)

⁷⁴ On page 272

⁷⁵ See Figure 5/ Plate 8.8 of the Transport Assessment

⁷⁶ Environmental Statement Appendices, Appendix 12.4 – Construction Noise and Vibration Assessment, NSR ID CN 85, page 5

Figure 7 Haul Road 4 and Stanford Road Compound Northern Haul Road – Link ID 34

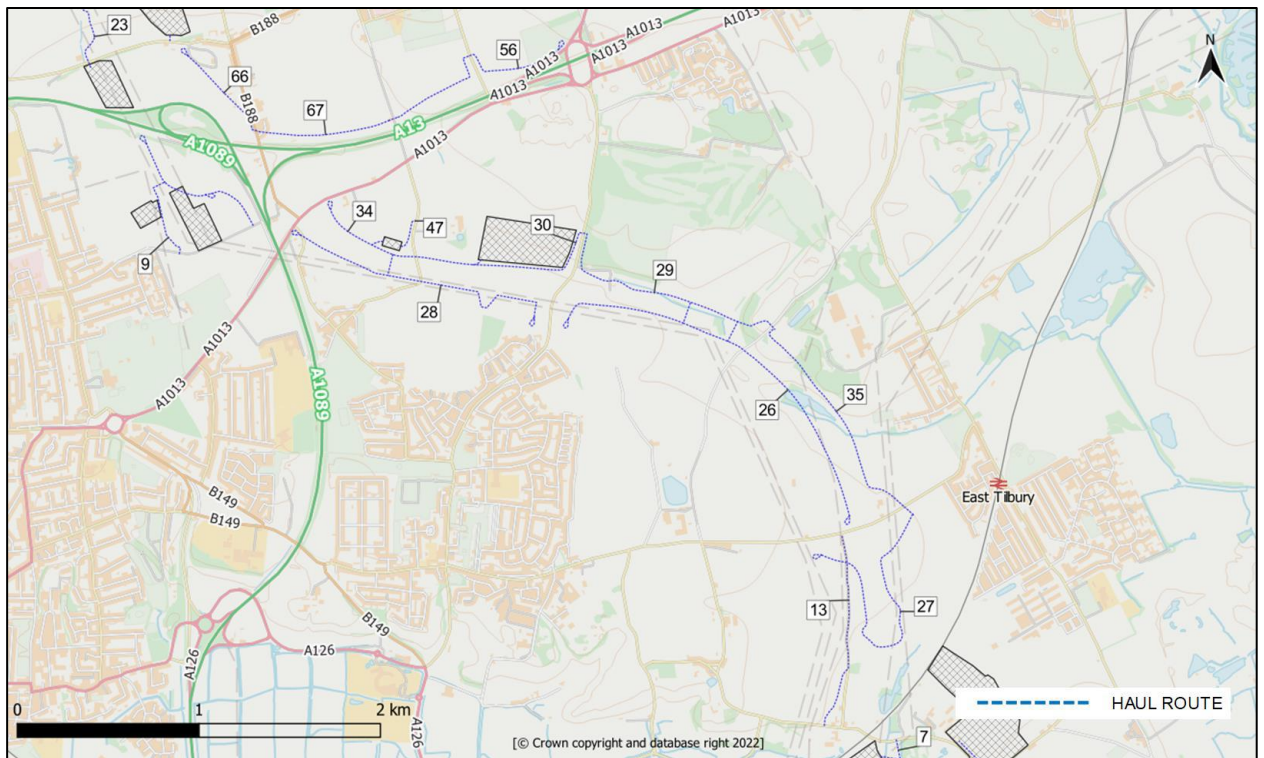


Plate 2.3 of Appendix 12.4 to the Environmental Statement

- 4.15 Table 2.5 (Daily Haulage Movements Assumptions by Construction Phase) provides the “haul route movements that has been assumed for the prediction of construction noise from the Project”⁷⁷ but it is not clear what type of construction vehicles those are.
- 4.16 A relevant extract from that table is provided in my **Table 1** (overleaf).

⁷⁷ Ibid, §2.1.8 (page 8)

Table 1 Extract from Table 2.5 (Daily Haulage Movements Assumptions by Construction Phase) from Appendix 12.4 to the Environmental Statement for Haul Road Link ID 34

Link ID	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	Phase 9	Phase 10	Phase 11
34	0	10	12	11	56	121	75	15	5	5	1

Note: Phase 2 = Construction Month (CM) 9 to CM 14 = 6 months
 Phase 3 = CM 15 to CM 17 = 3 months; 9 months (cumulatively)
 Phase 4 = CM 18 to CM 22 = 5 months; 1 year, 2 months (cumulatively)
 Phase 5 = CM 23 to CM 27 = 5 months; 1 year, 7 months (cumulatively)
 Phase 6 = CM 28 to CM 32 = 5 months; 2 years (cumulatively)
 Phase 7 = CM 33 to CM 39 = 7 months, 2 years, 7 months (cumulatively)
 Phase 8 = CM 40 to CM 47 = 8 months, 3 years, 3 months (cumulatively)
 Phase 9 = CM 48 to CM 51 = 4 months, 3 years, 7 months (cumulatively)
 Phase 10 = CM 52 to CM 55 = 4 months, 3 years, 11 months (cumulatively)
 Phase 11 = CM 56 to CM 60 = 5 months, 4 years, 4 months (cumulatively)

4.17 It is apparent from my Table 1 that Haul Road 4 and The Stanford Road Compound Northern Haul Road (adjacent to The Whitecroft) will be in daily use for a continual period of four years and four months. That use commences at ‘Construction Month 9’ with 10 construction vehicles per day, rises and peaks during ‘Construction Month 28’ to ‘Construction Month 32’ with 121 constructions vehicle per day (for five months) and then declines to ‘Construction Month 56’ to ‘Construction Month 60’ to 1 construction vehicle per day. What is not clear is whether, or not, there is any differentiation between construction vehicle traffic on Haul Road 4 and on The Stanford Road Compound Northern Haul Road.

4.18 The daily/ weekly construction vehicle flow profile is not provided (so it is not possible to determine whether the flow of construction vehicles is evenly spaced out during the day, evening, night (during weekdays and at weekends), or whether they are platooned during specific time periods).

Impact of Construction Vehicles on The Whitecroft

4.19 Existing and proposed westerly views from inside the boundary of The Whitecroft, provided in the consultation material for the DCO, are illustrated **Figure 8** and **Figure 9** respectively.

Figure 8 Existing Westerly View from The Whitecroft



Source: <https://ltcconsultation2022.nationalhighways.co.uk/image-library/>

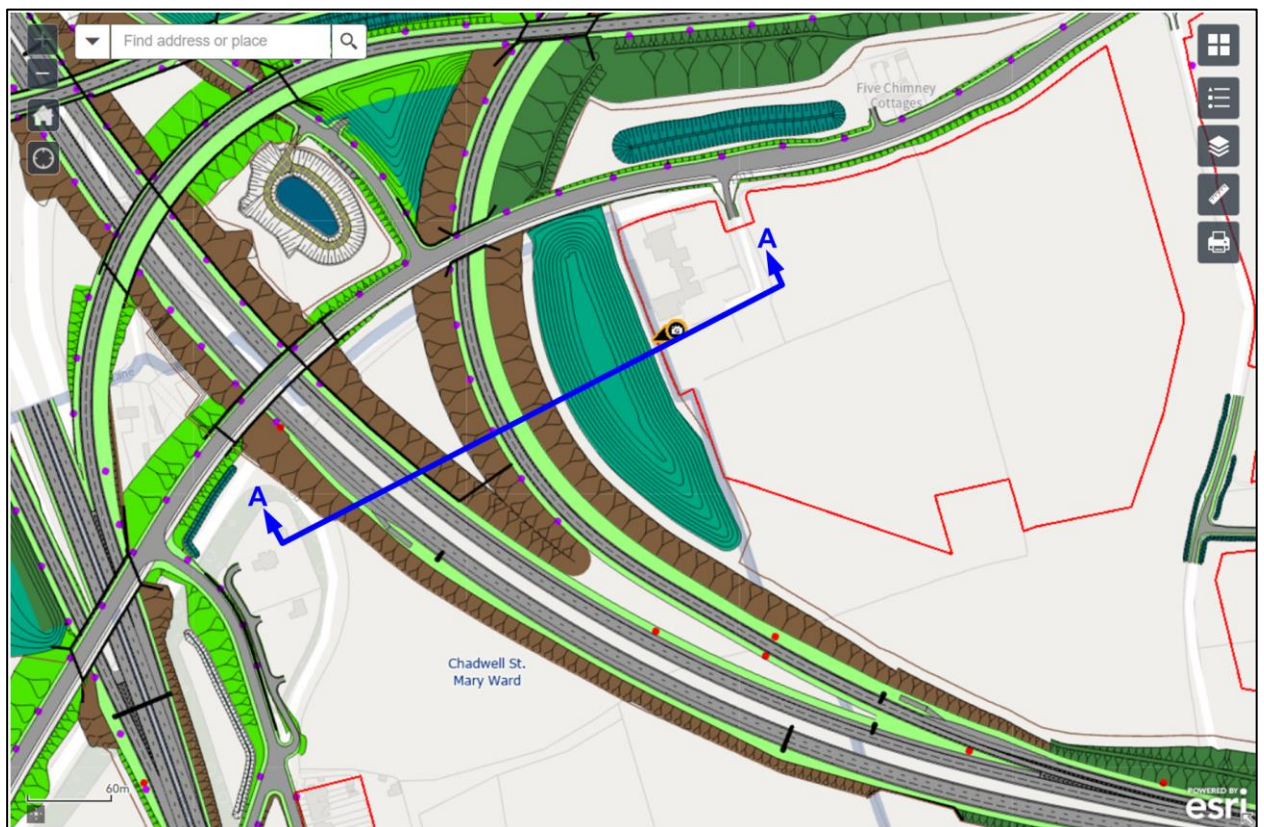
Figure 9 Proposed Westerly View from The Whitecroft



Source: <https://ltcconsultation2022.nationalhighways.co.uk/image-library/>

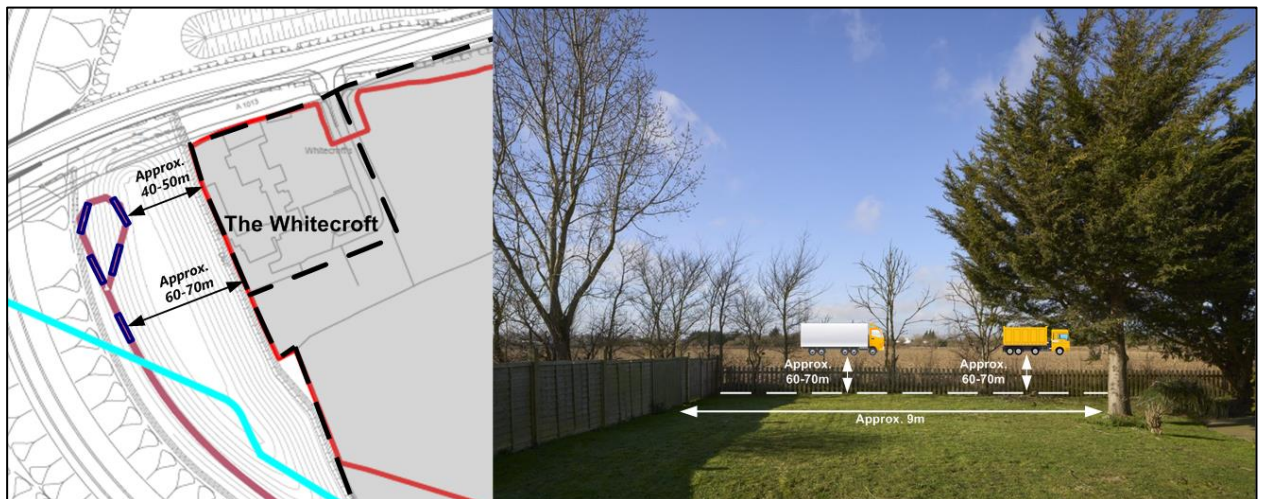
- 4.20 A plan illustrating the proposed general arrangement and landscape strategy (and identifying the location of the viewpoint of these images), extracted from the DCO's consultation website⁷⁸, is provided in **(Figure 10)**.

⁷⁸ <https://ltcconsultation2022.nationalhighways.co.uk/map/>

Figure 10 Proposed General Arrangement in the vicinity of The Whitecroft

Source: <https://ltcconsultation2022.nationalhighways.co.uk/map/>

- 4.21 It is not clear from the documents that we have reviewed at what point in the construction programme that the length of the Stanford Road Compound Haul Road is removed and replaced with the landscaped bund proposed. While it is reasonable to assume that the latter replaces the former (i.e. that they cannot (and will not) by the end of the construction period be *in situ* simultaneously). What is clear from my Table 1 is that National Highways anticipates that the daily use of the haul road by construction vehicles only diminishes to a low level in the final phase (11, 'Construction Month 56' to 'Construction Month 60').
- 4.22 Similarly, National Highways does not provide the vertical alignment of the haul road or a cross-section (such as A-A marked on Figure 10 above) so it is not clear, therefore, whether or not, the existing westerly view from The Whitecroft will include sight of the haul road. It is, however and in my view, reasonable to assume that it will include sight of the construction vehicles trafficking it.
- 4.23 In an effort to gain an understanding what that impact may be, we have produced **Figure 11** (using a plan and a picture submitted as part of the DCO) illustrating HGVs using the haul road immediately west of the site.

Figure 11 Proposed General Arrangement in the vicinity of The Whitecroft

Uses plan (**Figure 6**) and photo (**Figure 8**) included in the submitted evidence

Fly-through video

- 4.24 I note also, that a fly-through video that illustrates the route of the Lower Thames Crossing has recently (9 January) been published. The website indicates that:

"The new fly-through shows a bird's eye view of the proposed Lower Thames Crossing, [...] uses a 3D computer model of the new road blended with real video footage to show how the route has been designed to sit sensitively in the landscape with 80% of the road below ground level through the use of cuttings, embankments and the tunnel. The video also shows the scale of proposed planting and public open space, including two new public parks, seven green bridges and over one million extra trees"⁷⁹.

- 4.25 A screenshot illustrating a bird's eye view of the proposed interchange around The Whitecroft (here, in the bottom right corner) is reproduced as follows (**Figure 12**).

⁷⁹ <https://nationalhighways.co.uk/our-roads/lower-thames-crossing/news-and-media/news/new-video-fly-through-and-planning-process-opens/>

Figure 12 Screenshot of the fly-through video illustrating the interchange around The Whitecroft



Source: <https://nationalhighways.co.uk/our-roads/lower-thames-crossing/news-and-media/news/new-video-fly-through-and-planning-process-opens/>

Other Traffic Management Measures in the vicinity of The Whitecroft Required to Facilitate Construction

- 4.26 The documents also identify that Stanford Road will be subject to a contraflow arrangement for one month (approximately) for the:-
- construction of a new permanent access and modifications to local utility networks (ID ref: RNTM14).
- 4.27 Tables 8.9 (Traffic measures and network changes modelled in Phase 4)⁸⁰ and 8.10 (Traffic measures and network changes modelled in Phase 5)⁸¹, and Plates 8.16 (Map of traffic measures and network changes modelled in Phase 4)⁸² and 8.17 (Map of traffic measures and network changes modelled in Phase 5)⁸³, identify the implementation of a contraflow arrangement on the A1013 (ID Ref: RNTM23). Phases 4 and 5 are scheduled to last between 1 June 2026 and 31 March 2027 (ten months). Now likely to be between 1 June 2028 and 31 March 2029, following the Statement.

⁸⁰ Ibid, pages 243-244

⁸¹ Ibid, pages 246-247

⁸² On page 245

⁸³ On page 248

- 4.28 Tables 8.10, 8.11 (Traffic measures and network changes modelled in Phase 6)⁸⁴, 8.12 (Traffic measures and network changes modelled in Phase 7)⁸⁵, 8.13 (Traffic measures and network changes modelled in Phase 8)⁸⁶, and 8.14 (Traffic measures and network changes modelled in Phase 9)⁸⁷, and Plates 8.17, 8.18 (Map of traffic measures and network changes modelled in Phase 6)⁸⁸, 8.19 (Map of traffic measures and network changes modelled in Phase 7)⁸⁹, 8.20 (Map of traffic measures and network changes modelled in Phase 8)⁹⁰, and 8.21 (Map of traffic measures and network changes modelled in Phase 9)⁹¹, identify the provision of a crossing point on the A1013 (ID Ref: RNTM108). Phases 5 to 9 are scheduled to last between 1 November 2026 and 31 March 2029 (two years, five months). Now likely to be between 1 November 2028 and 31 March 2031, following the Statement.
- 4.29 Tables 8.10, 8.11, 8.12, 8.13, 8.14, 8.15 (Traffic measures and network changes modelled in Phase 10)⁹², and 8.16 (Traffic measures and network changes modelled in Phase 11)⁹³, and Plates 8.17, 8.18, 8.19, 8.20, 8.21, 8.22 (Map of traffic measures and network changes modelled in Phase 10)⁹⁴, 8.23 (Map of traffic measures and network changes modelled in Phase 11)⁹⁵ also identify a switchover⁹⁶ on Heath Road and the A1013 (ID Ref: RNTM84). Phases 5 to 11 are scheduled to last between 1 November 2026 and 31 December 2030 (four years, two months). Now likely to be between 1 November 2028 and 31 December 2032, following the Statement.

Construction Traffic Assessment Supporting Information

Stanford Road Compound

- 4.30 The proposed access and egress arrangements for the Stanford Road Compound are illustrated in Plate 1.7 (Stanford Road Compound and Hornsby Lane Utility Hub access and egress arrangements)⁹⁷. National Highways explains that:

"In phase 1 access and egress for both all vehicles would be via Hornsby Lane, which would be closed after that phase. In phases 2-11, the haul road between Brentwood Road and the Stanford Road compound would be available and HGVs would use a direct access onto the haul road and then

⁸⁴ On pages 249-250

⁸⁵ On pages 252-253

⁸⁶ On pages 255-256

⁸⁷ On pages 258-259

⁸⁸ On page 251

⁸⁹ On page 254

⁹⁰ On page 257

⁹¹ On page 260

⁹² On pages 261-262

⁹³ On pages 264-265

⁹⁴ On page 263

⁹⁵ On page 266

⁹⁶ A 'switchover' is an event in which an existing road link is closed and a new road opened in its place on a new permanent realignment (as opposed to a temporary realignment, which would only be in place for a limited period during construction)

⁹⁷ On page 8

*Brentwood Road. Staff would continue to use Hornsby Lane throughout the entire construction programme*⁹⁸.

- 4.31 Plate 1.7 does however indicate the provision of a haul road from the Stanford Road Compound northwards adjacent to the western and southwestern boundary of The Whitecroft to, what appears to be, a vehicle turning facility. As with the *Transport Assessment*, National Highways does not explain the purpose of this haul road.

Transport Assessment

- 4.32 Under the sub-heading '*Bus and coach networks*', Table 6.8 (Buses along affected routes), identifies the A1013 as a route along which the frequency of bus services "*may be affected during the construction of the Project or once it is operational*"⁹⁹.
- 4.33 National Highways selected 28 routes for its appraisal of the impact of the Project¹⁰⁰, identified in Plate 7.37 (Journey time routes)¹⁰¹. Route 14 (A1013) runs past The Whitecroft. It forecasts that in the AM Peak Period in 2030 eastbound journey times will increase by between 1.6% and 2.3% (in the low growth and high growth scenarios respectively) and that westbound journey times will decrease by between 0.8% and 1.1% (in the core growth and low growth scenarios respectively)¹⁰².
- 4.34 Similarly, it forecasts that in the inter peak period in 2030, eastbound journey times will decrease by between 0.8% and 1.4% (in the core growth and high growth scenarios respectively) and that westbound journey times will increase by between 1.6% and 2.3% (in the low growth and high growth scenarios respectively)¹⁰³. It forecasts that in the PM Peak Period in 2030 eastbound journey times will increase by between 1.6% and 2.1% (in the low growth and high growth scenarios respectively) and that westbound journey times will increase by between 1.3% and 2.6% (in the low growth and high growth scenarios respectively)¹⁰⁴.
- 4.35 I note also that the existing bus stops either side of The Whitecroft (in the vicinity of Rectory Road to the east and Heath Road to the west) are identified for relocation. The pair of bus stops in the vicinity of Heath Road are identified for relocation "*approximately 400m to the east along the A1013*"¹⁰⁵. That would relocate them within close proximity of The Whitecroft Access Junction.

⁹⁸ Construction Traffic Assessment Supporting Information, §1.1.15 (page 8)

⁹⁹ On pages 96-97

¹⁰⁰ Ibid, §7.7.1 (page 171)

¹⁰¹ On page 172

¹⁰² Ibid, Table 7.11 – Journey time comparison, Do Minimum and Do Something Scenarios, AM Peak, 2030 (pages 173-176)

¹⁰³ Ibid, Table 7.12 – Journey time comparison, Do Minimum and Do Something Scenarios, Inter-Peak, 2030 (pages 177-180)

¹⁰⁴ Ibid, Table 7.13 – Journey time comparison, Do Minimum and Do Something Scenarios, PM Peak, 2030 (pages 181-184)

¹⁰⁵ Ibid, §7.11.1 (page 186)

- 4.36 I note also that a new Pegasus Crossing of Stanford Road is to be provided at the Rectory Road Junction and that a traffic signal controlled crossing of the road is to be provided at the Baker Street Junction¹⁰⁶.
- 4.37 Overall, and in Thurrock, National Highways asserts that these improvements will improve “*commuter cycle routes along A1013 between Standford-le Hope [sic], Orsett and Little Thurrock*”¹⁰⁷.

5 Conclusions and Recommendations

- 5.1 Overall, the most significant impact of the construction traffic associated with the proposed A122, Lower Thames Crossing on The Whitecroft will arise from its use of what I refer to as: ‘The Stanford Road Compound Northern Haul Road’ that lies approximately 60-70m (reducing to 40-50m at the proposed large radius turning circle/ head) east of The Whitecroft’s eastern boundary¹⁰⁸. It appears to be a cul-de-sac that extends for approximately 470-480m from the western end of Haul Road 4 at the Stanford Road Compound north-westwards towards a realigned Stanford Road (but not intersecting with it).
- 5.2 Its purpose is not obvious or clear from the documents that I have reviewed but Haul Road 4 is required for up to five years and three months (between construction phases 2 and 11)¹⁰⁹ and there is no reason for me to assume, necessarily, that it will not be required for a similar period albeit does conflict with a proposed landscape bund (so it will have to be removed to facilitate the implementation of that feature).
- 5.3 As it acknowledges, National Highways’ *Transport Assessment* provides an “*assessment of the forecast impacts of construction and construction traffic on the transport network*”¹¹⁰. Consequently, National Highways does not make any assessment of such impacts on The Whitecroft. It is not clear whether, or not, the existing westerly view from The Whitecroft will include sight of the Stanford Road Compound Northern Haul Road but, it is reasonable to assume that it will include sight of the construction vehicles trafficking it.
- 5.4 The Stanford Road Compound is “*a construction compound for main works*”¹¹¹ for the provision of ‘Storage’, ‘Material Storage Areas’, ‘Office/ Welfare’ facilities and, in my assessment, between 40 and 80 car parking spaces. Haul Road 4 will be available for use between Phases 2 and 11 (now likely to be between 1 September 2027 and 31 December 2030, following the Statement).
- 5.5 The Stanford Road Compound Northern Haul Road is referred to in the documents as: ‘*Other planned Haul Roads (not included in the model)*’ and therein lies the issue. While daily construction vehicle traffic flows by construction phase are provided in the appendices to the *Environmental Statement*, the daily/ weekly

¹⁰⁶ Ibid, §7.12.33 (page 200)

¹⁰⁷ Ibid, §7.12.51 e (page 203)

¹⁰⁸ See Figure 10

¹⁰⁹ There is a discrepancy between Table 8.1 (on page 209) of the Transport Assessment and the notes beneath Table 2.5 (on page 41) of Appendix 12.4 to the Environmental Statement

¹¹⁰ Transport Assessment, §1.2.2 d. (page 1)

¹¹¹ Draft Development Consent Order, page 113

construction vehicle flow profile is not provided. It is not, therefore, possible for me to make an evidence-based assessment of the impact of the construction traffic that will use this length of haul road and draw any reliable conclusions concerning the likely impact of such traffic on The Whitecroft (or to inform assessments of other environmental impact factors arising from it, such as noise, air quality and vibration).

- 5.6 For that reason, I conclude that there is insufficient information provided in the documents to enable a proper assessment of the impact of construction traffic on The Whitecroft.
- 5.7 I recommend, therefore, that National Highways be asked to address that in order that such an assessment can be made so that the scope and extent of those impacts are understood.

Document Management

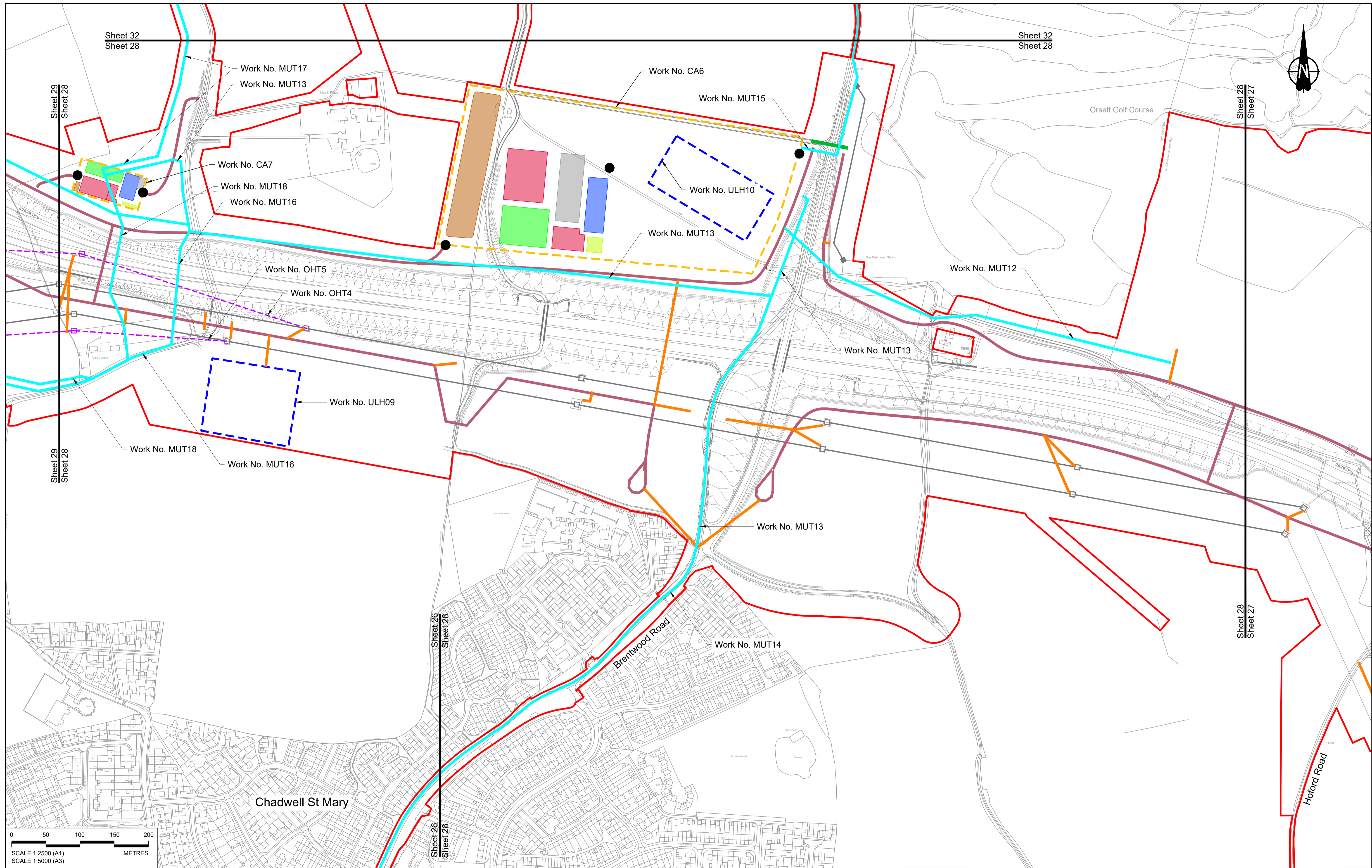
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Document Review

	Status	Author	Checker	Approver	Date
01	Issue	RTBL	GDG	RTBL	12 07 23
A	Issue	RTBL	GDG	RTBL	17 07 23
B	Issue	RTBL	GDG	RTBL	17 07 23

APPENDIX A



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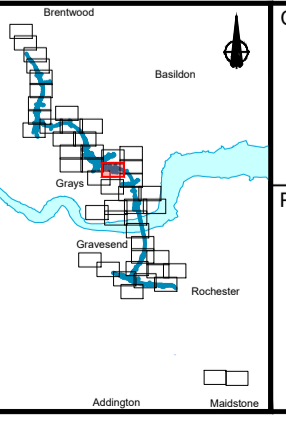
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd
P01	S8	19/10/2022	DCO Application	MS	RO	ASB
P02	S8	14/12/2022	Revision following S51 advice	MS	RO	ASB

NOTES:

- The proposed works shown are illustrative only and will be subject to change as part of detailed design development. Any changes will be limited to being within the constraints included in the Development Consent Order (application document reference TR010032/APP/3.1), including the Traffic Management Plan approved under Requirement 10 of Schedule 2.
- These plans should be read in conjunction with Schedule 1 (Authorised Development) of the Development Consent Order (application document reference TR010032/APP/3.1).
- Proposed works are shown adjacent to the Order Limits to provide greater visual clarity of the extent of the work, but could extend to the Order Limits as well.

LEGEND:

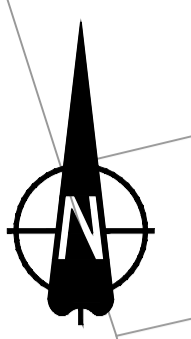
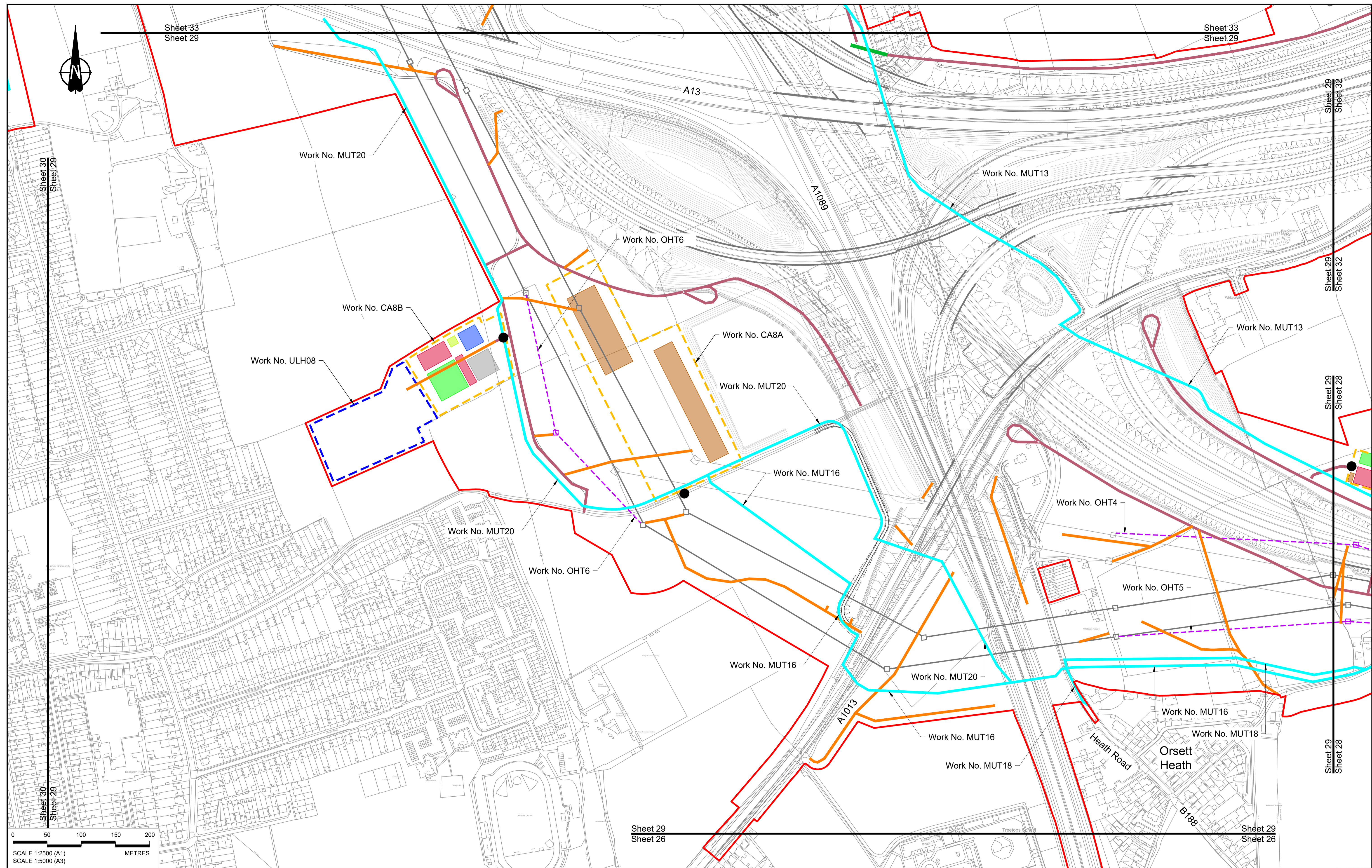
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Local Authority Boundary	Utility works access route	Construction Area - Utilities Logistic Hub	Indicative temporary underground multi-utility alignment
	Construction vehicle crossing point	Other facilities to enable construction	
	Access to Main Works Compound	Workshops	
		Car park	
		Storage	
		Material Storage Areas	
		Earthworks Stockpile Area	
		Office/Welfare	



Client: **national highways**

Project: **LOWER THAMES CROSSING**

Status	DCO Application	Original Size	A1	Revision	P02
Application Document Number	TR010032/APP/2.17	Scale	1:2500		
Drawing title	TEMPORARY WORKS PLANS REGULATION 5(2)(j) SHEET 28				
Drawing Number	HE540039-CJV-BOP-SZZ_GN000000_-DR-CW-70025				



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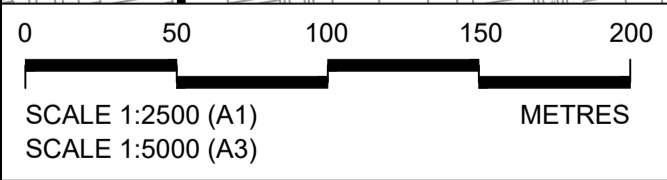
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P01	S8	19/10/2022	DCO Application	MS	RO	ASB
P02	S8	14/12/2022	Revision following S51 advice	MS	RO	ASB
Rev	Status	Rev. Date	Purpose of revision	Drawn	Check'd	Appr'd

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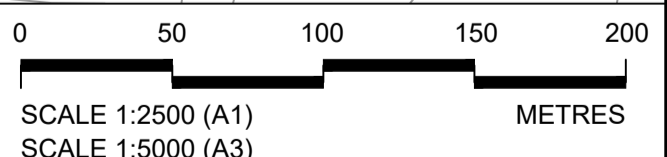
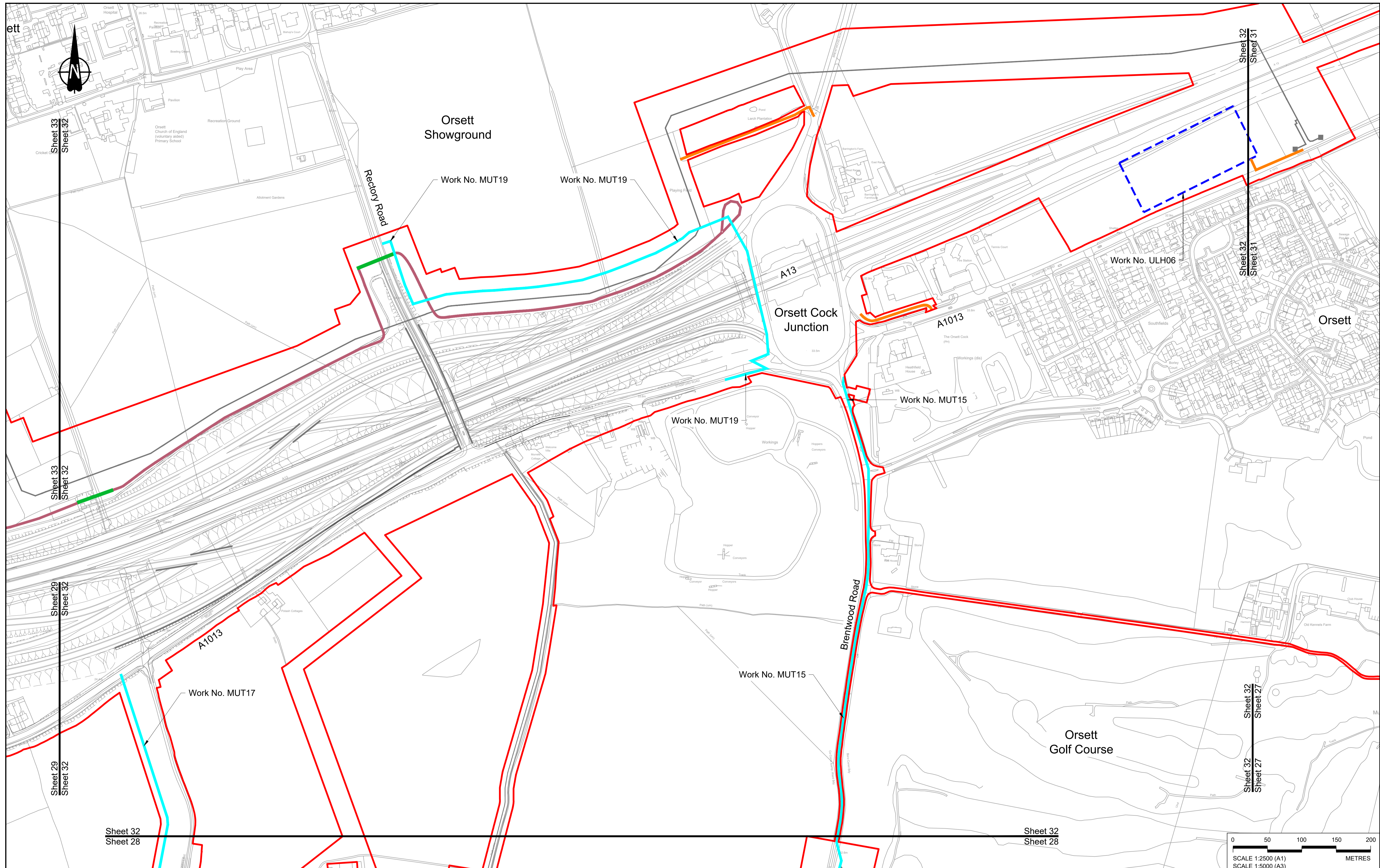
LEGEND:		OFFLINE ACCESS ROUTES		COMPOUNDS			
BOUNDARIES		Main works access route		Construction Area - Main Works Compound		Workshops	
Order Limits		Utility works access route		Construction Area - Utilities Logistic Hub		Car park	
Local Authority Boundary		Construction vehicle crossing point		Other facilities to enable construction		Storage	
UTILITIES WORKS		Access to Main Works Compound		Office/Welfare		Material Storage Areas	
Indicative temporary overhead electricity lines						Earthworks Stockpile Area	
Indicative temporary underground multi-utility alignment							

Client

Project

LOWER THAMES CROSSING

Status	DCO Application	Original Size	Revision
Application Document Number	TR010032/APP/2.17	A1	P02
Drawing title	TEMPORARY WORKS PLANS REGULATION 5(2)(j) SHEET 29		
Drawing Number	HE540039-CJV-BOP-SZZ_GN000000_-DR-CW-70026		
		Scale	1:2500



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Rev	Status	Rev. Date	Purpose of revision	Drawn	Check'd	Apprv'd
P01	S8	19/10/2022	DCO Application	MS	RO	ASB
P02	S8	14/12/2022	Revision following S51 advice	MS	RO	ASB

NOTES:

The proposed works shown are illustrative only and will be subject to change as part of detailed design development. Any changes will be limited to being within the constraints included in the Development Consent Order (application document reference TR010032/APP/3.1), including the Traffic Management Plan approved under Requirement 10 of Schedule 2.

These plans should be read in conjunction with Schedule 1 (Authorised Development) of the Development Consent Order (application document reference TR010032/APP/3.1). Proposed works are shown adjacent to the Order Limits to provide greater visual clarity of the extent of the work, but could extend to the Order Limits as well.

LEGEND:

BOUNDARIES

- Order Limits
- Local Authority Boundary

UTILITIES WORKS

- Indicative temporary overhead electricity lines
- Indicative temporary underground multi-utility alignment

OFFLINE ACCESS ROUTES

- Main works access route
- Utility works access route
- Construction vehicle crossing point
- Access to Main Works Compound

COMPOUNDS

- Construction Area - Main Works Compound
- Construction Area - Utilities Logistic Hub
- Other facilities to enable construction
- Office/Welfare

Workshops

- Car park
- Storage
- Material Storage Areas
- Earthworks Stockpile Area

Client: **national highways**

Project: **LOWER THAMES CROSSING**

Status: **DCO Application**

Application Document Number: **TR010032/APP/2.17**

Drawing title: **TEMPORARY WORKS PLANS REGULATION 5(2)(j) SHEET 32**

Drawing Number: **HE540039-CJV-BOP-SZZ_GN000000_-DR-CW-70029**

Original Size: **A1** | Revision: **P02**
Scale: 1:2500

HE540039-CJV-BOP-SZZ_GN000000_-DR-CW-70029.dwg