

National Grid
Cable Tunnel Replacement
Project
Environmental Statement
Volume VI

Appendix 18.2 Transport
Scoping Meeting Minutes -
Gravesend

December 2023



Quality information

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1 Transport Scope with Kent County Council – Meeting Minutes

Date: 15 September 2023 10:30-11:30

Attendees:

Kate McGregor – National Grid

Helen Travers - AECOM

Mark Watson – AECOM

Tom Walker - AECOM

Adrian Simms – TTC

Angela Coull – Kent County Council

David Barton – Kent County Council

Project Overview / Introduction

- KM: introduces the project location, proposed solution and consideration of alternatives, sensitivities, timescales and the recent decision to submit a planning application with EIA. Also explained that equivalent meeting was held last week with Thurrock Council & National Highways.
- KM: also noted the strong preference to use the river to take arisings away from site, discussions with RSBP ongoing for infilling local saline lagoons – agreements not in place but hope that this will materialise.
- MW: provided overview of the meeting and project update since EIA screening (please see presentation slides).
- MW: Clarified that Thurrock Council EIA Screening opinion confirmed that the Project was not expected to result in significant effects therefore EIA not required. Gravesham Council concluded an EIA was required due to ecological and heritage aspects therefore, for completeness, EIA for both sites will accompany the application. Planning application to be submitted end of this year.
- MW: Construction phase programme, staff numbers, occupancy factor explained, working hours and construction routes explained. (Please see slides).
- DB: explained that PRowS are covered by a different team at Kent CC and contact details will be shared, important they are consulted regarding the NCN/Sustrans route.
- MW: explained we are looking in to avoiding school hours for HGV movements

ES Transport Assessment Study Area

- MW: seeking to agree study area (presented on slide 16)
- DB: queried the route which goes through Gravesham town centre ('orange route')

- AS: shared figure 4.3 within Outline CTMP which shows this route. Explained various routes went through a RAG assessment – open to discussion on the green and orange route presented.
- DB: Stated orange route is impractical, due to likely holds up through Gravesham town centre (KM added there is also a AQMA). There would be less issues on the green route via the A226. Lower Thames Crossing will be using this route so road management will be needed. It was broadly concluded by all that the green route would be used
- AC: Advised that LTC are to use the A226 as well and if the two projects coincide, road management would be in place by LTC. Other projects in the area are also utilising A226 (Ebbsfleet Central and Thamesway Junction Upgrades).
- ***Study area agreed with Kent County Council as per A226, as shown on slide 16.**

Traffic Movements, Shaft Spoil

- AS: Advised that tunnel spoil will be removed on the Tilbury side, hopefully via river, however the shaft spoil will need to be removed on the Gravesham side via the road network.
- DB: Advised that the Thames and Canal Road is a private road (owned by Network Rail) and so Kent CC do not have any comment on this.
- AS: advised an initial idea on the Thames and Canal Road (which is also a PRow/NCN route) is to keep it open and manage it. A diversion would be approximately 7km. A 900m stretch would be affected. Early ideas are to use marshals at either end to halt construction traffic to allow cyclists/pedestrians through. KCC to provide details of PRow Officer / Local Bicycle Groups
- DB/AC: queried whether this would be practical i.e. in summer when the route is busiest, it could disrupt project timeframes.
- AS: confirmed this would be looked in to in more detail and in consultation with Kent's PRow team and Sustrans.
- DB: advised that the Parish Council should also be consulted on this.
- DB: queried whether the Thames and Canal Road owner (Network Rail) is being consulted
- KM: confirmed Network Rail is being consulted
- AC: advised that Kent's travel team may have some data on usage of the PRow.
- DB: queried whether why the CTMP is only outline and not final when going to planning.
- AS: advised that it will remain outline until the contractor is on board to finalise.
- DN: raised concerns on this that it could change substantially

ES Chapter

- AC: queried the 'fewer than 30 additional vehicles = negligible magnitude of change', whether that is part of the latest guidance or something AECOM use.
- MW: confirmed this is a criteria AECOM use and has been agreed in other similar ES work and is based on historic transport assessment guidance
- AC: no further issue
- DB: Albion Waterside – no other information can be provided by Kent CC other than it gained consent in 2021. No 'programme' therefore. Can confirm there are a lot of conditions to discharge and the s106 has not yet been submitted/started negotiations. It should be noted that extra lanes, traffic signals, central reservation removal and more at Milton Rd/ Ordnance Road junction would be part of the development.

Transport Assessment (TA)

- MW: queried the necessity of the inclusion of a separate TA in additional to the ES chapter and CTMP as this can result in the various reports becoming repetitive/ duplicating – suggested (as agreed with Thurrock on this project) that it would be preferable to having a ‘technical note TA’ which signposts where the relevant information is within the ES Chapter and the CTMP
- DB: Confirmed no issue in the TA being an appendix *Post Meeting Note: We would reiterate the suggestion that a technical note signposting the TA elements locations within the CTMP and ES (rather than a separate TA appendix) would constitute the best way forward here – can this approach be confirmed by KCC please?
- DB: queried that there was no mention of a travel plan for construction works – this should be included. Happy this doesn’t need to be stand alone and can be incorporated in to the ES or the CTMP.

CTMP + Abnormal Load Assessment Report (ALAR)

- AS: The ALAR covers the removal of the TBM from the Gravesend side. There is one pinch point where a junction would need to be revised.
- AC: Advised that Kent CC has a consultant on abnormal loads. KCC to provide contact details.
- AS: explained the TBM would likely be dismantled into sections, but the ALAR has assumed 5 abnormal loads required. Input from Morgan Sindall to confirm method of removal of TBM and frequency of movements (e.g. convoy?)
- AC: queried whether these 5 abnormal loads would leave the site in tandem or whether any junction route/ amendments (Milton Rd/ Ordnance Rd was mentioned explicitly) would be required to be in place for multiple days at a time.
- AS / KM: to take away and advise. (AS to update CMTP Fig 4.3 and haulage route section – this would be issued as Rev E).
- AC: queried whether TBM can be reversed and removed Tilbury side
- KM: confirmed this couldn’t happen as tunnel segments are put in place behind the TBM so tunnel too narrow to reverse it back. Also, can’t be buried and ‘left’ in situ.
- DB: queried whether the TBM could be removed via river
- KM: confirmed this would require a new jetty and due to ecological sensitivities would be hard to consent.

AOB/Questions

- AC: Census data 2021 taken during covid has been used. Requested that this is compared/ sense checked to 2011.
- AC: Advised that as staff must arrive at 7-8am (ie. the ‘shoulder peak’) – Ordnance Road is very busy at this peak time.
- DB: confirmed a contact for the Kent CC PRoW team will be provided
- KM: stated that decommissioning of the existing infrastructure (tunnel, head house and cable sealing end) is not within the scope of this project

2 Scoping Presentation Slides

TKRE Cable Tunnel Replacement Project

Transport Scoping Meeting
Kent County Council
15 September 2023

Agenda

- 01 Meeting Purpose
- 02 Screening Opinion Feedback
- 03 Project Update
- 04 Proposed Development Parameters
- 05 Deliverables
- 06 Environmental Statement
- 07 Transport Assessment
- 08 Outline Construction Traffic Management Plan
- 09 Programme
- 10 AOB/Questions

Meeting Purpose

Meeting Purpose

- To provide a project update since the EIA Screening Report was issued (June 2023) and EIA Scoping Opinions received (July/August 2023)
- To review and agree the approach of the Environmental Statement (ES) Traffic & Transport chapter and the supporting deliverables

Screening Opinion Feedback

Thurrock Council

- Characteristics of the development – the proposal would not give rise to any significant impacts, any significant cumulative impacts or any significant increased risk of accidents or disasters
- Location of development – land uses on the site are considered to be of a relatively low environmental sensitivity
- Potential impact – the proposed development would be unlikely to give rise to significant effects at any scale
- Conclusion – overall, the local planning authority considers that *“the proposal would not result in significant effects and therefore an EIA is not required for this proposed development.”*

Gravesham Borough Council

“Fortunately, this proposal has most of the work being conducted from the Tilbury side of the river, with the spoil from one shaft and the tunnel being removed via the north portal. Similarly, materials for construction of the shaft and tunnel will arrive from the north as will the Tunnel Boring Machine.

*The only traffic generation in Gravesend will be in the construction of the southern shaft and the necessary buildings and pylons to receive the cables and connect to the overhead wire system in Gravesend. Plus, the removal of the Tunnel Boring Machine. **This level of traffic would not be considered significant, but could involve some abnormal loads which will require careful management.***

*Given the anticipated time of construction, there could be conflict with the redevelopment at the Canal Basin and Albion Waterside (Application 20210270), as well as the Lower Thames Crossing and **the applicant will need to carefully manage the development and its deliveries and waste removal to minimise any adverse impacts that may be caused by delays outside his control.***

It would be desirable that no HGV movements should take place during school arrival and leaving times at Chantry Community Academy due to the age of the children, and parental parking.”

Kent County Council (KCC)

KCC Highways

“A full Transport Assessment covering the impact on the nearby local highway network should be submitted in support of any application so that it may be assessed by the Local Highway Authority.”

KCC Public Rights of Way

- Public Rights of Way (PRoW) Footpaths NG1 and NH2 lay north and south of the site respectively
- No works can be undertaken on a PRoW without the express consent of the Highways Authority
- Should any temporary closure(s) be required to ensure public safety then the duration of the closure should be kept to a minimum with alternative route(s) provided for the duration.
- PRoW must not be stopped up, diverted, obstructed, or the surface disturbed.
- There must be no encroachment on the current width of PRoW
- No furniture or fixtures may be erected on or across PRoW without consent.

Conclusion (Gravesham Borough Council)

*“Having assessed the available evidence it is the Local Planning Authority’s opinion that the proposal is EIA development and that accordingly an **Environmental Statement is required to accompany a planning application**, please refer to the Screening Matrix in Appendix 1 for full details.*

*Given the nature of the development, the location and sensitivity of the area and the likely potential impact outlined in respect of biodiversity and ecology, geology and hydrology, noise and vibration, heritage and archaeology, landscape/townscape and visual effects, **transport and access** and cumulative impacts, it is considered that the proposal would be likely to have a significant impact on the environment. **Gravesham Borough Council therefore concludes that the development is EIA development and that an EIA is therefore required.**”*

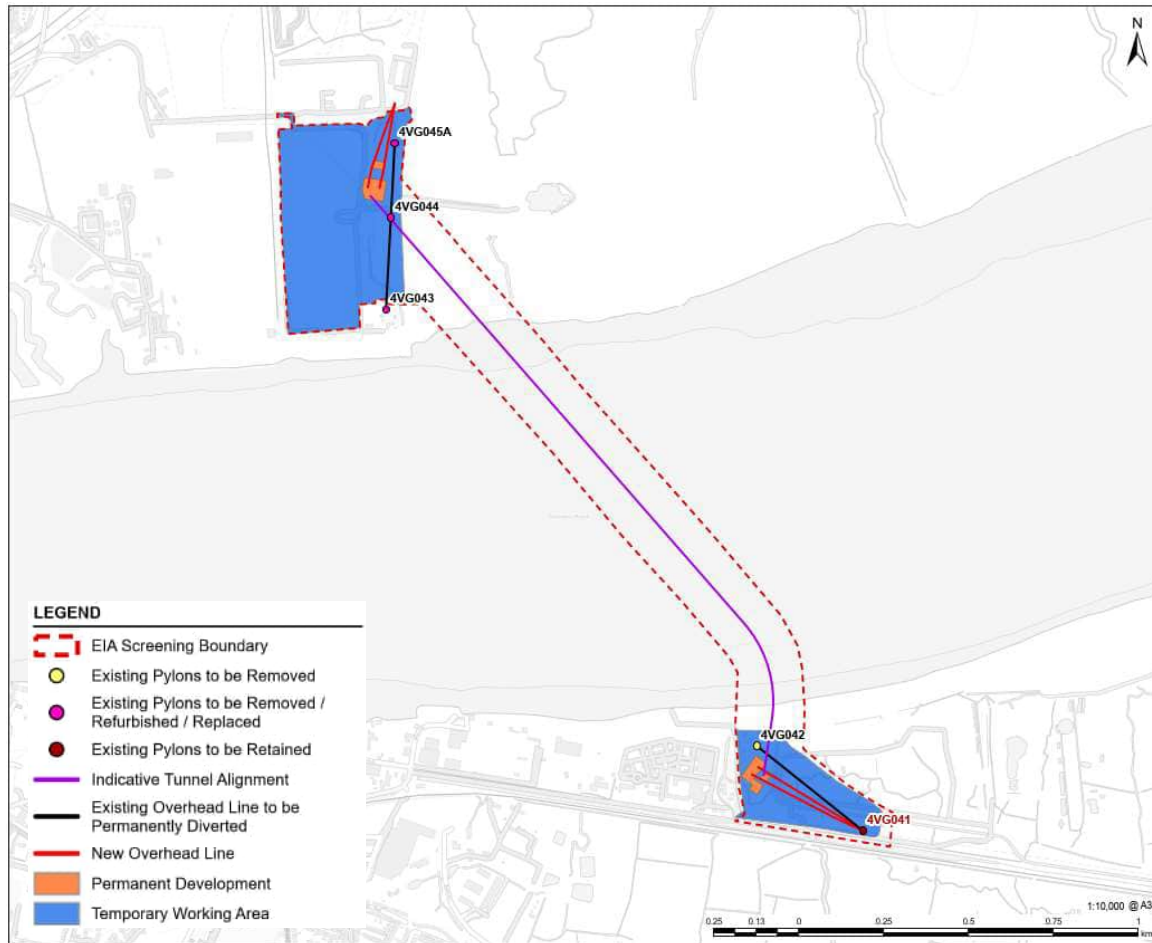
Project Update Since Screening

Project Update

- EIA Screening Report submitted on 2 June 2023
- EIA Screening Opinion:
 - Thurrock Council (7 July 2023) – an EIA is not required
 - Gravesham Borough Council (3 August 2023) – an EIA is required
- ES to be prepared for both Thurrock and Gravesham (separate volumes)
- Further consultation:
 - Meeting with Thurrock Council and National Highways on 6 September
 - Meeting with Kent County Council Highways on 15 September
- Planning application and ES to be submitted towards the end of 2023.

Proposed Development Parameters

Project Summary and Site Location



Transmission network in the east coast of England expected to experience a large increase in renewable and low carbon energy generation, together with three interconnectors from the continent.

The Tilbury to Grain and Tilbury to Kingsnorth (TKRE) 400 kilovolt (kV) circuits will be significantly overloaded in their current capacity (predominantly overhead line) and require upgrading.

The Proposed Development comprises the replacement of the TKRE 400 kV circuits beneath the River Thames, with new cables to be installed within a new tunnel (preferred option).

New infrastructure is also proposed either side of the River Thames in Tilbury and Gravesend comprising:

- Two new headhouses;
- Two Sealing End Compounds (SECs); and
- Overhead line re-stringing to connect the existing overhead lines to each of the new SECs.

Proposed Development – Key Parameters (Gravesham)

Construction Phase

- Programme: 2025 Q1 to 2029 Q1 (46 months)
- Peak year: 2026 (staff and HGVs combined)
- Staff: 40 daily workers at peak (2026)
- Staff vehicles: 1.5 occupancy factor (typically adopted, car sharing to be encouraged)
- HGVs: 64 daily (two-way) HGV movements at peak (2026), circa. 34 on average
- Abnormal Indivisible Loads (AILs):
 - 5 x TBM (1-week period)
 - No cable drums (all via the north in Thurrock)

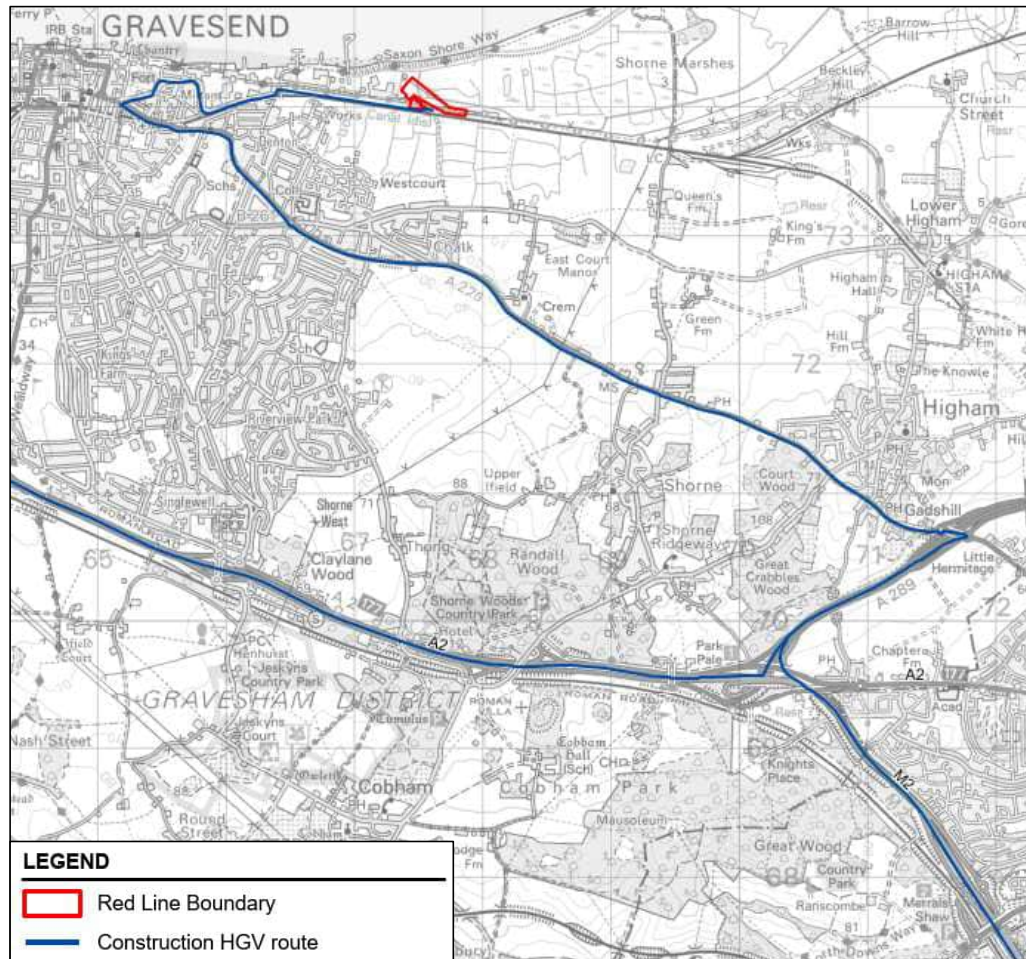
Operational Phase

“During normal operation of the Proposed Development, the only traffic generated would be associated with infrequent repair and routine maintenance works. Therefore, additional traffic movements during the operational phase are not anticipated to have a significant effect on the transport network or receptors.”

Proposed Development – Construction – Key Parameters (Gravesham)

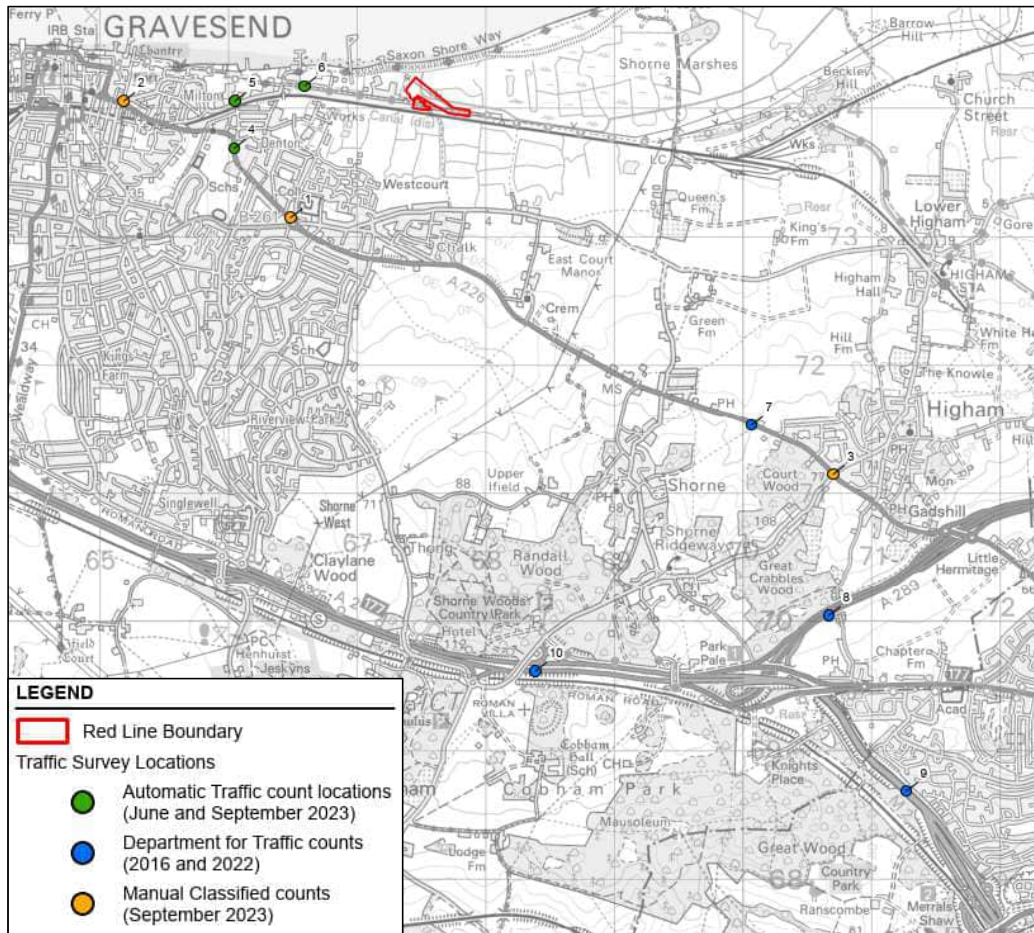
- Assessment scenario – peak construction phase (2026)
- Working hours
 - Tunnelling Phase: 24/7 (Tilbury Port has weekend operation) – from Tilbury side, but TBM exits Gravesham side (AIL)
 - Remaining Construction Activities: 08:00-18:00 Monday-Sunday
- Travel patterns:
 - Construction staff, majority to arrive 07:00-08:00 and depart 18:00-19:00 ('shoulder peaks')
 - HGVs to travel between 08:00-18:00 (10 hours, circa. 6 vehicles per hour)
 - Development peak hours expected to be based on construction staff
- Access to be taken via Thames and Medway Canal Road

Proposed Construction Vehicle Routes & Study Area (Gravesend)



- Construction vehicle routing:
 - M2/A2 – A289 – A226 – Ordnance Road – Canal Road – Norfolk Road – Mark Lane – Thames and Medway Canal Road
- This forms the proposed study area for reviewing the potential impact of the proposals on the surrounding highway network, to be informed by:
 - Traffic count data (see next slide)
 - Personal Injury Accident data
- Study area to be agreed

Traffic Surveys (Gravesend)



- Proposed survey scope shared with KCC on 23rd August
- Feedback received (29th August):
 - Additional MCC at Gravesend Road (A226) / Pear Tree Lane junction (Location 3), as DfT count (Location 7) is 2016 (out of date)
- Survey scope updated accordingly
- Traffic surveys being carried out this week:
 - MCCs – Thursday 14th September
 - ATCs – Lay 11th September, for data collection 12th – 18th September

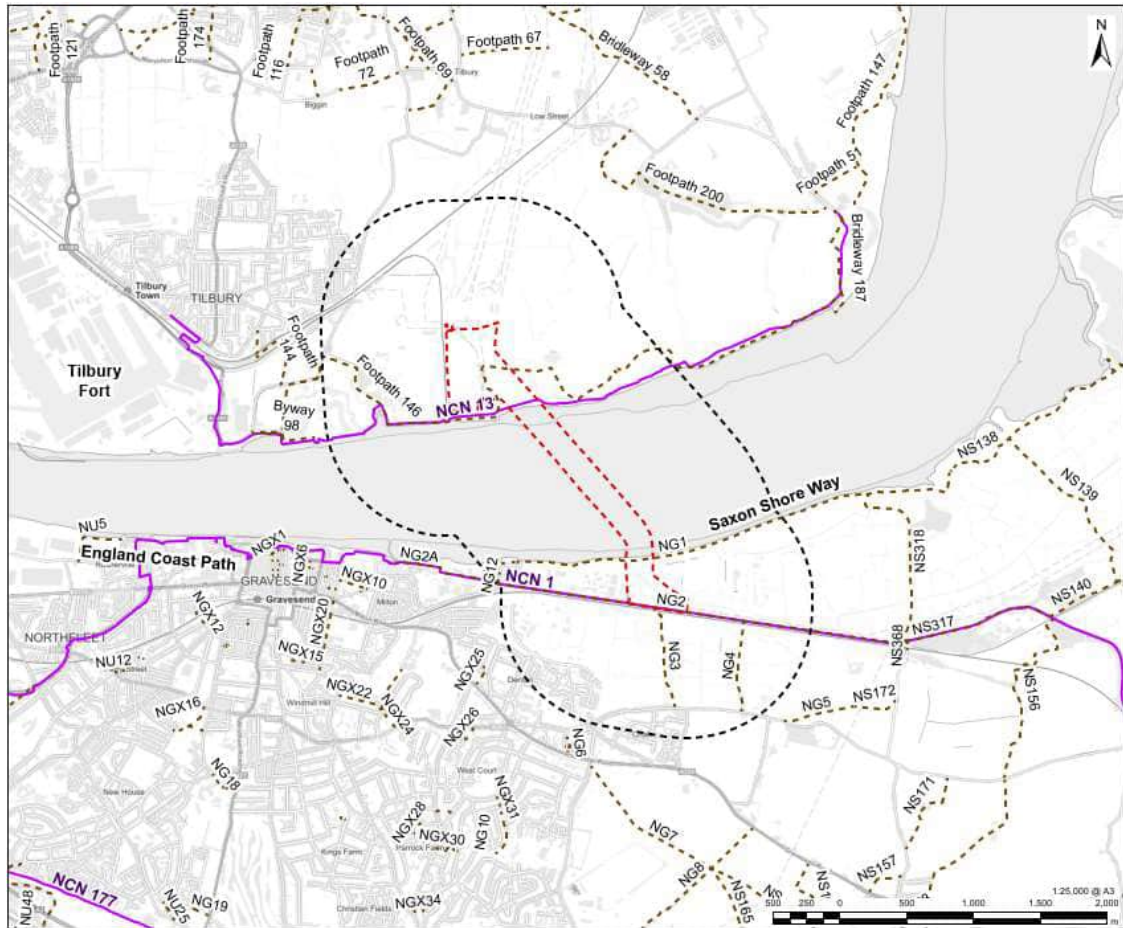
Initial Impact Assessment (Gravesham)

- Baseline data from recent DfT traffic counts (2022) and MCCs/ATCs (2023)
- TEMPro to growth baseline data to 2026 (peak year)
- Trip Generation:
 - 27 daily construction staff vehicles (54 two-way movements)
 - 32 daily HGVs (64 two-way movements)
- Trip Distribution:
 - Staff: 2021 Census (TS060 – Industry, F: Construction), 60-minute catchment, 'Distance decay'
 - A2 (West): 76% (parts of the southeast in Kent, as well as London and Essex)
 - M2 (East): 24% (other parts of the southeast in Kent)
 - HGVs:
 - A2 (West): 50% (areas closer to London and accessed via the M25)
 - M2 (East): 50% (areas within Kent to the southeast)

Initial Impact Assessment (Gravesham)

- No impacts expected along the M2, A2 or A289:
 - <1% increase in total vehicles (daily and peak hours)
- A226:
 - 27 staff vehicles = 3% increase in total vehicles (peak hours)
 - 136 two-way movements = 1% increase in total vehicles (daily)
 - 64 two-way HGVs = c. 25% increase in HGVs compared to baseline HGVs (daily)
- Ordnance Road, Canal Road, Norfolk Road and Mark Lane
 - TBC following survey data
- Thames and Medway Canal Road
 - 27 staff vehicles = 29% (AM) / 88% (PM) increase in total vehicles (peak hours)
 - 136 two-way movements = 22% increase in total vehicles (daily)
 - 12 two-way HGVs (baseline) + 64 two-way HGVs (proposed) = 76 two-way HGVs (total)

Walking and Cycling Routes (Gravesham)



Measures such as temporarily diverting/ physically separating routes from construction works where necessary, so that users can continue to use these safely:

- PRow NG1 (Footpath)/ England Coast Path/ Saxon Shore Way (same route)
- Cyclists using NCN Route 1 – management needed when this route is used by construction vehicles
- Users of PRow NG2 (Footpath) – management needed when construction vehicles turn in/ out of the site (across this route).

Deliverables

Transport Deliverables (Construction Focus)

- ES Traffic & Transport Chapters (AECOM):
 - **Volume 1** – Front end chapters
 - **Volume 2** – Thurrock Technical Chapters
 - **Volume 3** – Gravesham Technical Chapters
 - **Volume 4** – Appendices
 - **Volume 5** – Overall Summary
- Transport Assessment (TA)
- Outline CTMP + Abnormal Load Assessment Report (ttc)

Environmental Statement (ES)

Chapter Structure

- Introduction
- Relevant Legislation, Policy and Guidance
- Scope and Methodology
- Consultation Undertaken
- Baseline Environment
- Key Parameters for Appraisal
- Mitigation
- Potential Impacts
- Appraisal of Effects
- Cumulative Effects
- Summary

Key Points

- Baseline conditions – this will also include a section on future baseline
- Study area – as per earlier slides
- Scenarios – peak construction phase (2026)
- The 2023 IEMA guidelines set out two rules in identifying potential links for analysis:
 - **Rule 1:** include highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%); and
 - **Rule 2:** include any other specifically sensitive areas (e.g. accident black spots, conservation areas, hospitals, links with high pedestrian flows etc.) where traffic flows have increased by 10% or more.
- <30 additional movements/hour = negligible magnitude

Key Points

- Assessment Criteria:
 - Severance
 - Pedestrian Delay
 - Non-Motorised User Amenity
 - Fear & Intimidation
 - Driver Delay
 - Road Safety
 - Hazardous/Large Loads
- EIA Mitigation – categorised as follows:
 - **Embedded Measures:** These are intrinsic to and built into the design. They include the avoidance of designated sites through sensitive routing, siting and design. These also include good practice measures that are included within the CEMP and Outline CTMP.
 - **Mitigation Measures:** These are measures over and above embedded measures, for example anything that has been added to the design purely to mitigate an effect. These are likely to be limited for a project of this nature.

Key Points

- Impact Assessment with Embedded Measures
- Impact Assessment with Additional Mitigation if required (Residual Effects)
- Cumulative Schemes
 - Lower Thames Crossing (TR010032) – reviewed at Screening
 - Albion Waterside (20210270) – additional scheme, [programme?](#)

Transport Assessment (TA)

Transport Assessment

- Focus of the assessment will be the construction phase
- Typical approach/ scope:

- Site location and existing use
- Policy context
- Accessibility appraisal
- Development proposal
- Trip attraction and distribution
- Committed developments
- Assessment methodology
- Highway assessment
- Pedestrians and cyclists

Approach to be agreed:

- 1) Standalone TA; OR
- 2) A short note with any TA-specific content if not covered elsewhere, sign-posting the remaining TA components (ES/ CTMP) to minimise document crossover

The 2nd approach is being adopted for Thurrock (agreed during scoping)

Outline Construction Traffic Management Plan

Outline CTMP

Structure:

- Introduction
- Development Proposals
- Policy Context
- Access Route Strategy
- Construction Programme & Traffic Movements
- Temporary Traffic Management Measures
- Signage Principles
- Monitoring & Enforcement

Abnormal Load Assessment Report:

- Legislative and Procedural Guidelines
- AIL Types and Transfer Vehicle Specifications
- Route Options, Appraisal and Assessment (Swept Path Analysis)
- Management Strategy

Programme

Current Programme

- **June 2023** – EIA Screening Report submitted
- **July-August 2023** – EIA Screening Opinions received
- **September–October 2023** – Review of feedback, scoping discussions and ES preparation
- **Late 2023** – Planning submission.

AOB / Questions

