

Lower Thames Crossing TR010032

Post-events (w/c 4 and 11 September) submission

Thames Crossing Action Group

Unique Reference: 20035660

DEADLINE 4 (19th September 2023) / Submitted 19th September

Introduction

1. Thames Crossing Action Group represent those who are opposed to the proposed LTC.
2. Please accept this as our post-events combined submission. We have included a table of contents on the following page to assist in navigation.

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Comments

Issue Specific Hearing 3 (ISH3)

3. Our summary for ISH3: Project Design that took place on Tues 5th September 2023.

Visual representations

4. Whilst we appreciate the ExA requesting visualisations illustrating the physical layout and functionality of the main intersections proposed as part of the LTC, we, and we believe others, were surprised at the basic level of the visualisations, and had expected far more detail and actual visualisations of intersections rather than just basic map images.
5. Slides 4-13 in – 9.96 Visual Representation of A13/A1089/LTC Intersection [[AS-146](#)] do not include any labelling to detail what is actually being shown.
6. This document also labels some slides incorrectly. In some slides Stifford Clays is wrongly labelled as Little Thurrock.
7. Point A on some maps is labelled as Little Thurrock, which again is actually between Stifford Clays and North Stifford, and appears to be near to what is locally known as the Stifford Clays roundabout. It is nowhere near Little Thurrock.
8. Point E on some maps is also labelled as Little Thurrock, when most locals would probably refer to the area as Blackshots or Deneholes/Daneholes.
9. When people who have lived in the area for over 50 years struggled to recognise what was being presented due to the errors in the labelling it goes to show firstly how misleading the information NH present can be, and secondly, suggests that NH do not know enough about our area even after many years of working on a project that would greatly impact the area and our communities.
10. To clarify wrongly labelling areas is something we have had to pull NH up on during consultations on numerous occasions over the years, including labelling

Stifford Clays as Little Thurrock, but clearly they still either haven't been reading and taking our representations to consultations seriously, and/or just don't care enough to get it right. We note that the erroneous labelling is also still present in other maps such as the Land Plans and General Arrangement maps within the DCO application documents.

11. The visuals fail to show the routing that local traffic including from Orsett and A128 traffic would take to the LTC, via the Stanford Detour.
12. Does not show the number of lanes that would highlight the A13 dropping to 2 lanes in each direction, creating a bottleneck.
13. The visuals also fail to show the routing for M25 J30 to LTC for when there are incidents at the Dartford Crossing QE2 Bridge, via the Stanford Detour.
14. The visuals also fail to show the routing from LTC to M25 J30 for when there are incidents at the Dartford Crossing Tunnels, via the Orsett Cock U-turn.
15. Similarly, [\[AS-145\]](#) does not show the number of lanes dropping from 4 to 2 on the A2 for a section in each direction. Nor does it show that there would be just one single lane from A2 coastbound onto LTC.
16. Likewise, [\[AS-147\]](#) does not highlight the number of lanes on M25 and LTC south to clearly show the bottleneck, particularly when there are incidents on the M25 or Dartford Crossing QE2 Bridge.
17. We highlight in case helpful to the ExA that during consultation NH provided charts that showed which connections were and were not possible for each intersection. It may assist the ExA and others if NH were to submit or signpost (if already available in the application) such charts.
18. We share this one as an example of the kind of chart we are referring to:

Your direct connections	Starting location											
	LTC northbound	LTC southbound	M2 eastbound	M2 westbound	A2 eastbound	A2 westbound	Gravesend East eastbound	Gravesend East westbound	A289 eastbound	A289 westbound	Brewers Road eastbound	Brewers Road westbound
LTC northbound			X	X	X	X	X	X	X	X	X	X
LTC southbound			✓	X	✓	✓	X	✓	✓	X	X	✓
M2 eastbound	X	X			X	X	X	X	X	X	X	X
M2 westbound	✓	X			X	✓	X	✓	✓	X	✓	X
A2 eastbound	✓	X	✓	X			✓	X	✓	X	✓	X
A2 westbound	✓	X	X	X			X	✓	X	X	✓	X
Gravesend East eastbound	✓	X	✓	X	✓	X			✓	X	✓	X
Gravesend East westbound	X	X	X	X	X	✓			X	X	X	X
A289 eastbound	X	X	X	X	X	X	X				X	X
A289 westbound	✓	X	✓	X	X	✓	X	✓			X	✓
Brewers Road eastbound	X	X	✓	X	✓	X	X	X	✓	X		
Brewers Road westbound	✓	X	X	X	X	✓	X	✓	X	X		

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All Intersections

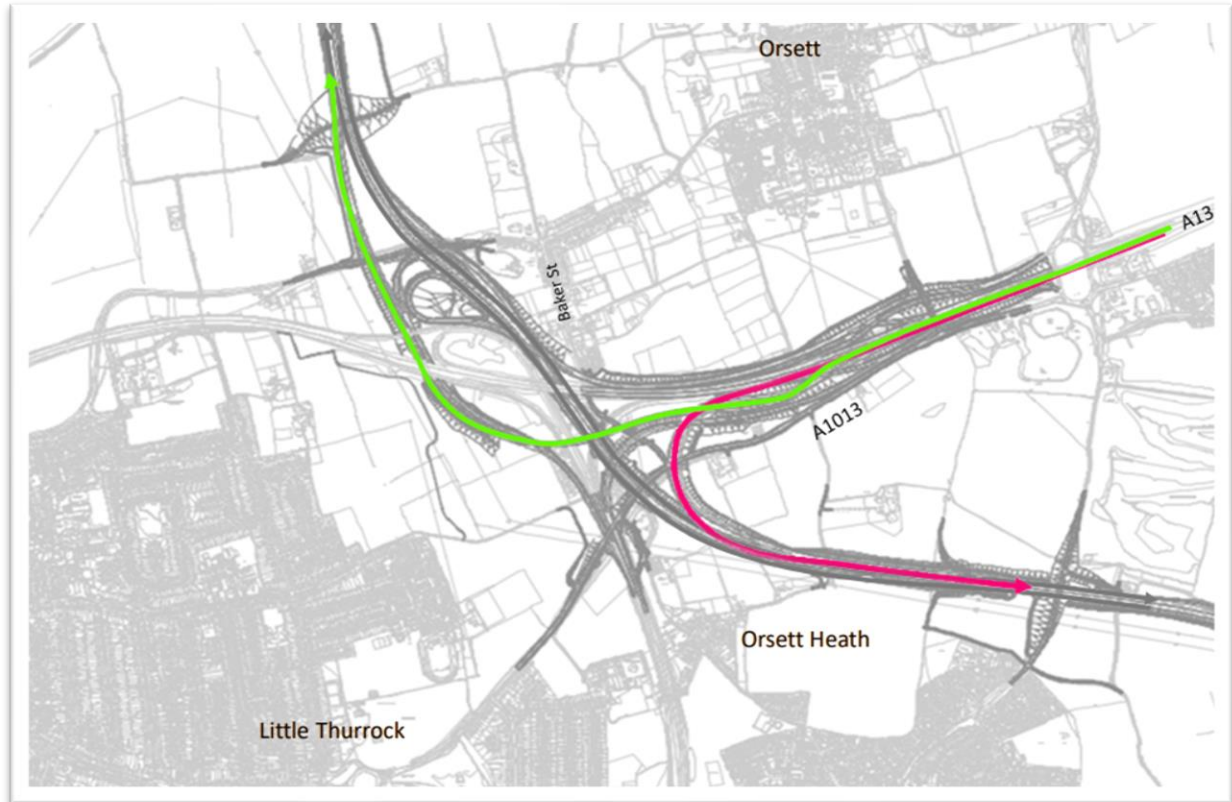
19. We felt it might be helpful to cover issues and concerns that we feel are relevant to all three intersection areas, rather than repeat ourselves on such matters in all three of the intersection areas.

20. We will also highlight any other issues/concerns that are specific to a particular intersection separately below under the heading of the specific intersection.

Signage

21. We have serious concerns that all the intersections are complex in one way or another, and that a considerable amount of signage would be needed, not only for directions, but also for charging info etc.

22. The more signage the attention is needed from users, this could add to traffic slowing down to read and make decisions, and confusion and last minute decision being made that could lead to accidents/incidents. Thus it is not in keeping with improving resilience and traffic flow.
23. In regard to users finding their way this would be in general rather confusing, and when one wrong turn is taken it may be even more confusing to then correct the mistake and find your way back to where you want to go.
24. Not only that but the routes to correct and get back to where you want to go can be very long, and even end up involving having to pay the user charge twice (once each way).
25. If per mile driving is introduced these long detour/routes will also not be affordable for users who would have to travel many miles to get back on track.
26. In addition to the example Miss Laver covered in the hearing, we'd like to highlight the following, but stress that this is not the limit of the potential issue.
27. When traffic joins the LTC from the A13 westbound, the connecting roads split as to whether heading north or south. This can be seen on the map below, which we put together from the 9.96 Visual Representation of A13/A1089/LTC Intersection [[AS-146](#)]



28. The map above is of the A13/A1089/LTC junction, and we have overlaid the A13 westbound to LTC South in the red colour, and the A13 westbound to LTC North in green.

29. As you can see if you wanted to head south of the LTC you would need to bear to the right of the split in the connecting road, which goes against instinct when you are in reality heading to your left (south). Similarly, if you want to head north on the LTC you'd need to bear to the left of the split in the connecting road, which again goes against instinct when you are in reality heading to your right (north).

30. So, if going on instinct at a complex junction like this it could be easy for someone to take a wrong turn and end up travelling in the wrong direction, the question is what are the consequences of this happening?

31. If you ended up heading south when you want to go north, the first thing to note is that you would end up paying user charges both ways to cross the river to enable you to get back on track. Next would be that once through the LTC tunnel you would be heading towards the A2/M2 junction and have to then work out either how you utilise the complex junction there to attempt some

kind of u-turn which would be more like an x,y,z-turn via many roundabouts, connections and detours. Or alternatively, many would likely just head west on the A2 and go to the Dartford Crossing following signs for the M25. This not only adds many miles onto the journey, it adds to the cost, pollution, time travelled, and does nothing to ease pressure at the Dartford Crossing. It would also be very stressful for the user.

32. If you ended up heading north when you wanted to travel south, you would go up to the LTC/M25 junction. At this point there would be two options, joining the new parallel road or joining the M25 anticlockwise. If you joined the parallel road you could go through to the A127/M25 junction 29 and use the roundabout there to u-turn and either take the LTC southbound, or continue and use the Dartford Crossing if you've been put off of the LTC due to the bad experience so far. If you left the LTC north and joined the M25 instead, possibly unsure of where the new parallel road went, you'd have to travel all the way to junction 28 to turn around and try and get back on track.
33. There are plenty of other examples where the complexity of the proposed junctions would cause issues with navigation, and we believe that in addition to all the above (longer journey, more pollution, cost, stress etc) this would also increase the risk of accidents/incidents.
34. We agree and have previously commented on concerns about the increase in incidents, the lack of viable connectivity for public transport and the fact there would be no provision for active travel.
35. As we commented during the hearings, all aspects of the design as discussed at ISH3 clearly highlight the amount of issues and level of concerns in regard to all aspects of the main intersections and bits in between. For us this clearly shows that the proposed LTC is the wrong crossing in the wrong location.

Design mitigations

36. Have sufficient measures been taken to “meet the principal objectives of the scheme by eliminating or substantially mitigating the identified problems by

improving operational conditions and simultaneously minimising adverse impacts” in this location? (NNNPS paragraph 4.31)¹

4.31 A good design should meet the principal objectives of the scheme by eliminating or substantially mitigating the identified problems by improving operational conditions and simultaneously minimising adverse impacts. It should also mitigate any existing adverse impacts wherever possible, for example, in relation to safety or the environment. A good design will also be one that sustains the improvements to operational efficiency for as many years as is practicable, taking into account capital cost, economics and environmental impacts.

37. In regard to also mitigating any existing adverse impacts wherever possible.

The areas impacted by the proposed LTC already suffer adverse impacts from the existing road network, particularly the Dartford Crossing, M25, A13, A2, A1089. Not only would the proposed LTC not mitigate against existing adverse impacts, it would worsen them.

38. NH have also been playing down things like air and noise pollution, by saying the changes are negligible because some areas already suffer with air and noise pollution, so they don't consider it a problem.

A2/M2/LTC Intersection

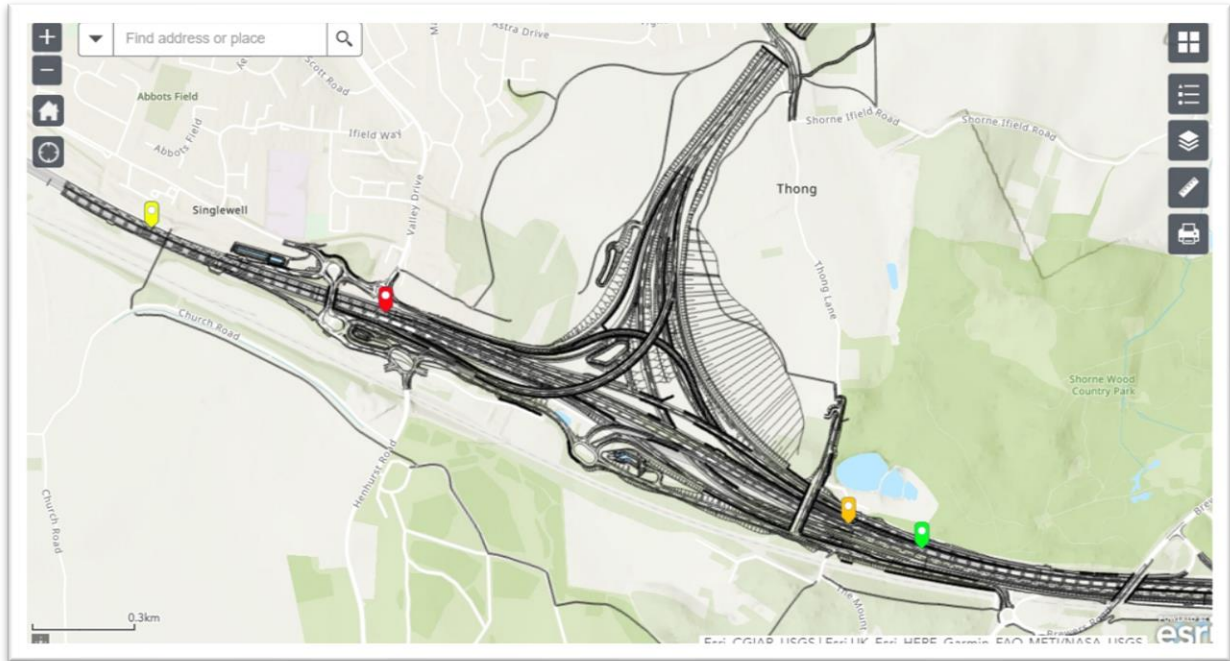
39. We are concerned that the A2 would drop from 4 lanes to 2 for a section in each direction, if the LTC goes ahead.

A2 bottleneck Coastbound on the A2

40. If the LTC goes ahead then the A2 coastbound would drop to just 2 lanes for a section coastbound near Nells Cafe.

1

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/387223/npsnn-web.pdf



41. From left to right - The yellow marker shows where the lane markings separate the road with just 2 lanes to the right for the A2, and the 2 lanes to the left for local access and LTC access routes. The red marker is where the A2 would become just 2 lanes. The orange marker shows where the A2 becomes 3 lanes, and the green marker where the A2 would be back up to 4 lanes.

A2 bottleneck London bound on the A2



42. From right to left - The yellow marker shows where the lane markings separate the road with just 2 lanes to the right for the A2, and the 2 lanes to the left for LTC access route. The red marker shows where the A2 drops to 2 lanes. The orange markers highlight where A2 goes to 3 lanes. And the green marker is where the A2 would again be 4 lanes.

43. None of the above seems to suggest that traffic would flow smoothly at the best of times, let alone when there are incidents.

44. The A2 was previously widened due to congestion. One of the scheme objectives for the widening was to provide a consistent standard of four-lane dual carriageway from the M25 to the M2 at Junction 4, as per paragraph 1.10 of the Post opening Project Evaluation (POPE) for the A2 Bean – Cobham (Phase 2)²

45. This A2 widening project was a Highways England (now known as National Highways – The applicant in this DCO application) project. The works were carried out by Skanska, who co-incidentally have also been named preferred

bidder for the Kent roads contract for the proposed LTC³. So, the company who widened the A2 in this area from 3 lanes to 4 would also be responsible for the work that reduces it from 4 lanes to 2.

46. Paragraph 1.10 of the same document shows other scheme objectives as per screen capture below:

1.11 Phase 2 of the scheme also aimed to achieve the following objectives, which were sourced from the Environmental Statement, Inspector's Report and Stage 3 Scheme Assessment Report at the OYA stage:

- **Reduce journey times** and improve reliability;
- Provide **enhanced access** to the major regeneration area of Kent Thames-side and other regeneration areas in North and East Kent allowing access to Channel crossings;
- **Facilitate access** to Ebbsfleet International Rail Station from the national motorway and trunk road network;
- **Reduce the environmental impact** of the widened trunk road where practicable, particularly on the adjacent residential areas of Gravesend;
- Provide **safe and appropriate access** across and along the trunk road for non-motorised users;
- **Increase capacity** on road to cope with forecast increase in traffic flows on the road and major new developments planned in the region;
- **Improve safety** through improving junctions;
- To be part of and to **support** the other elements of an integrated and sustainable public transport based strategy for the Kent Thameside regeneration area; and
- **Reduce noise and improve local air quality** by moving the A2 away from residential areas.

47. We do have to question how proposing reducing the A2 and creating such a bottleneck can be considered acceptable or viable for such a busy road, particularly when there is so much other proposed development in the area which would also result in an increase of traffic.

48. How can it be considered value for money or acceptable to undo the works that have previously been carried out to widen the A2?

49. The summary of Scheme Impacts in the same document has been screen captured and pasted below.

³ <https://nationalhighways.co.uk/our-roads/lower-thames-crossing/news-and-media/news/skanska-named-preferred-bidder-for-lower-thames-crossing-kent-roads-contract/>

Summary of Scheme Impacts

Traffic

- Average daily traffic flows on the A2 have increased by as much as 18% five years after the opening of the scheme.
- In contrast, traffic flows have decreased along the M20. This suggests some re-routing of traffic from the M20 on to the A2. However, several other schemes have been constructed in the vicinity so impacts should not be overstated.
- Traffic flow increases on the A2 were higher than forecast, which may also have been affected by nearby schemes or due to an underestimation in traffic growth prior to construction.
- Journey times have decreased in both directions on the A2 and across all time periods (AM peak, inter-peak and PM peak), with savings as high as three minutes.

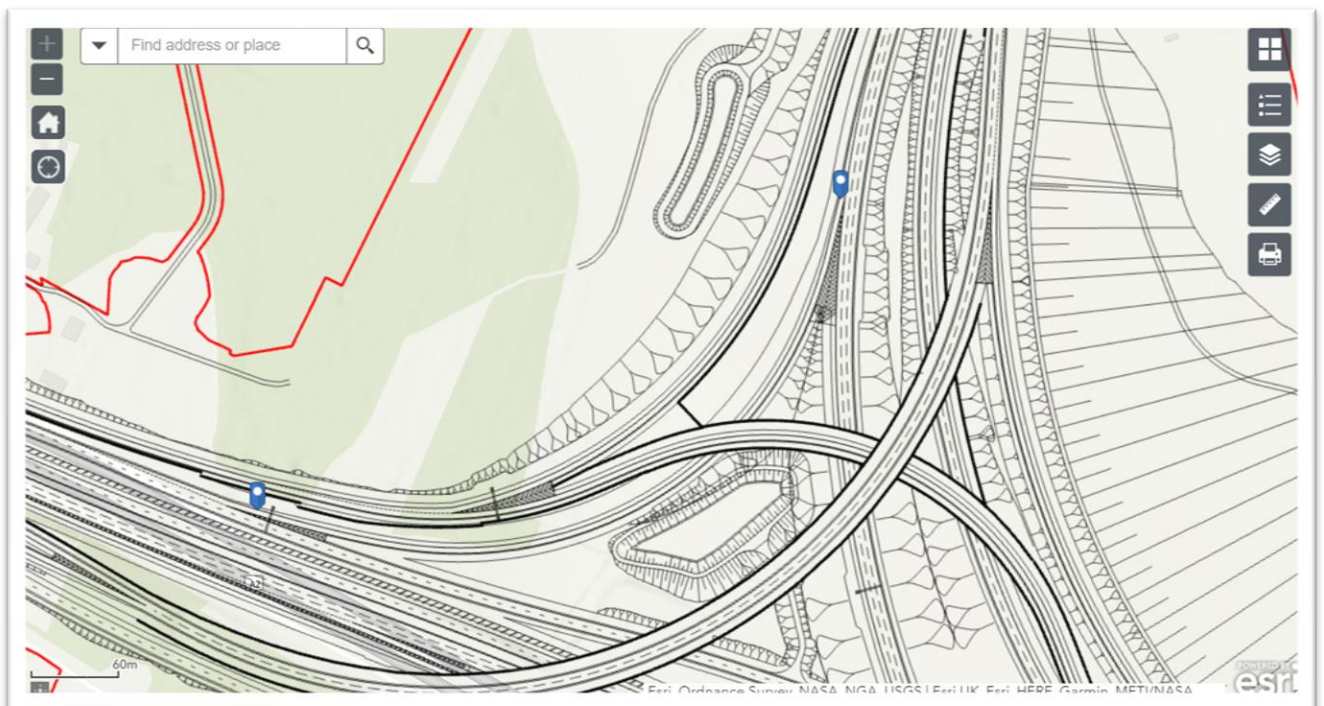
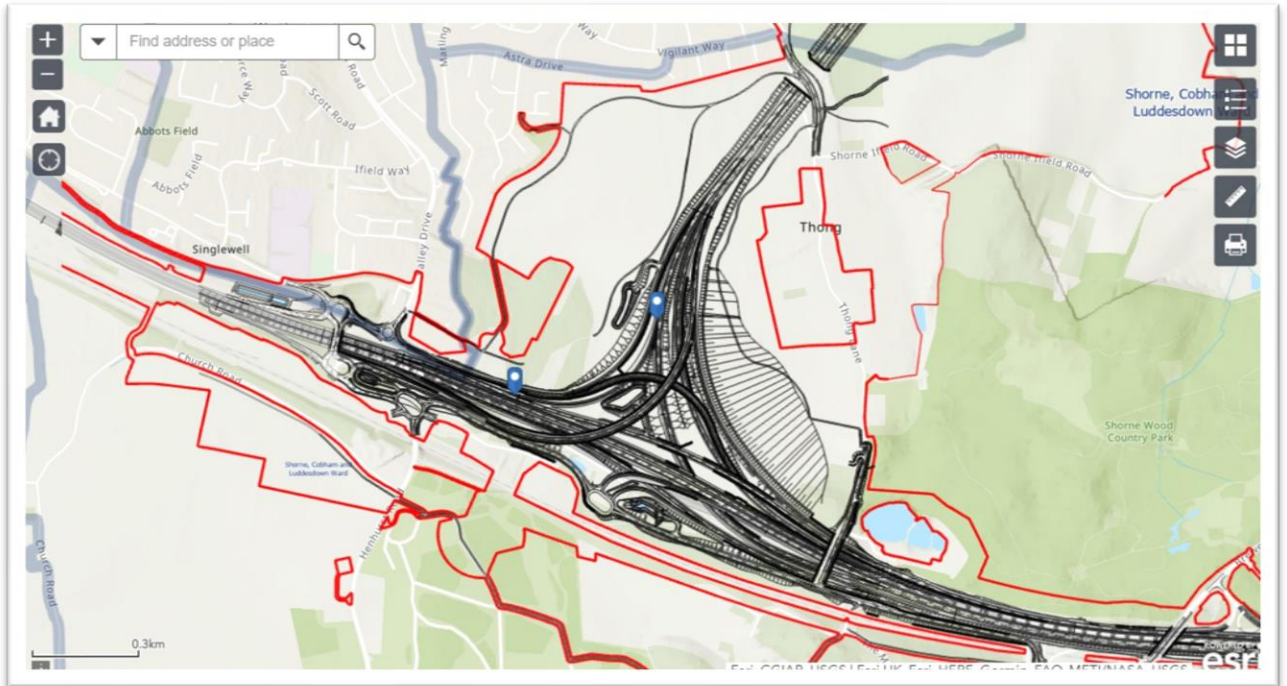
50. This shows that traffic increased on the A2 but decreased along the M20 suggesting some re-routing of traffic from the M20 onto the A2. We have concerns that, if the LTC goes ahead, and the A2 drops to 2 lanes for a section in each direction, traffic would re-route to the M20 and/or other routes.

51. The above also highlights that traffic forecast may have been underestimated for this scheme too, which does nothing to reassure us that the applicant's forecast for the proposed LTC can or should be trusted as reliable either.

52. We do not feel that such lane reduction, creating a bottleneck should be considered acceptable, not that it would improve resilience and traffic flow on the road network.

53. As we have previously highlighted from paragraph 19 in our Written Rep [\[REP1-425\]](#) we also have concern about the fact there would be just one single lane from the A2 coastbound to the LTC, which would be even more of an issue when there is an incident at the Dartford Tunnels and traffic attempts to migrate to the LTC.

54. The two images show the section we refer to, with the second one zoomed in to show more detail of the single lane.



55. Whilst the proposed LTC intersection south of the river is described as the A2/M2 Intersection, the reality would be that traffic using the M20, including from the Port of Dover, would all need to find a route from the M20 to M2/A2 to reach the LTC, which would likely be via Blue Bell Hill/A229.

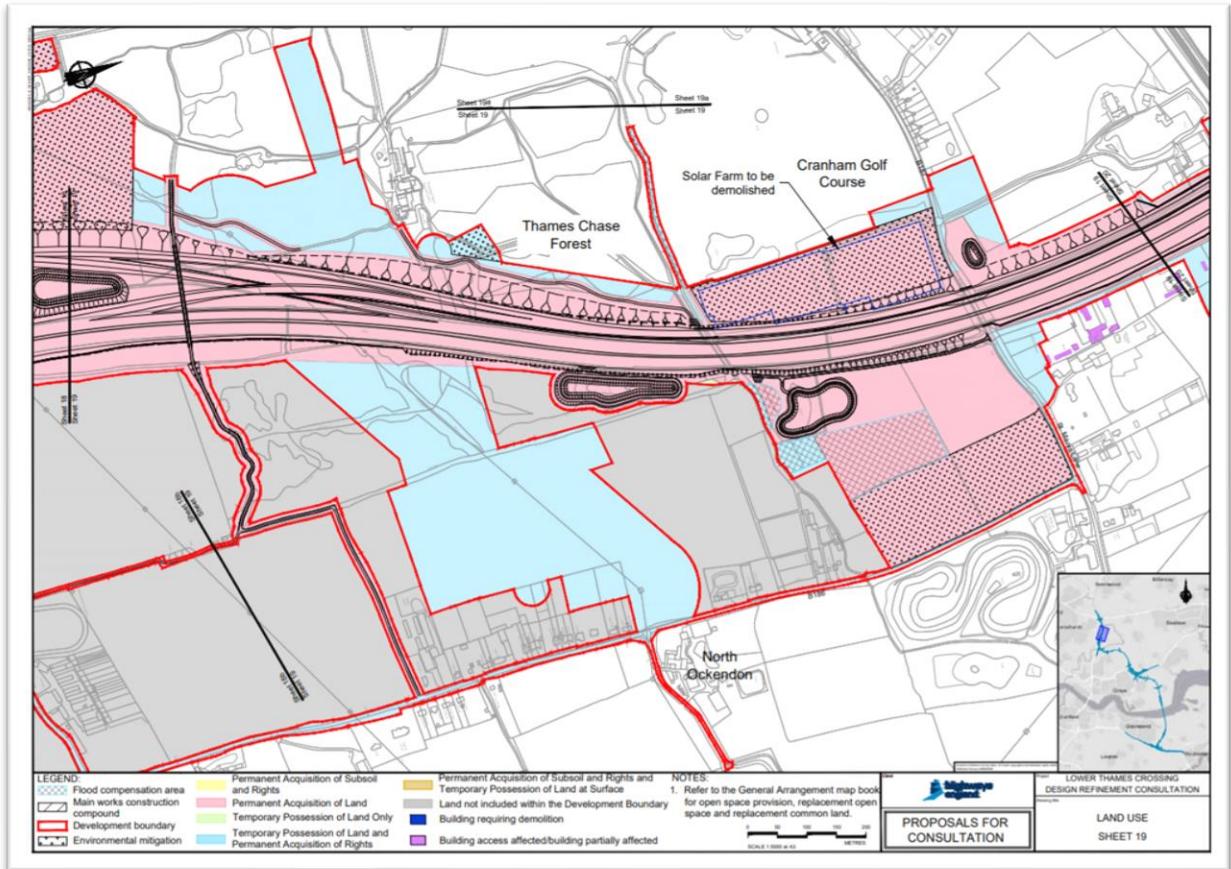
56. Improvements to Blue Bell Hill to accommodate this connection route were originally considered in the Route C Variant at route choice stage, as per from paragraph 264 of our Written Rep [[REP1-425](#)]. Our concern is that this connection is not being considered as part of the southern intersection/connection despite it being a large adverse impact.
57. What happens if the Blue Bell Hill improvements, which are now being progressed as a separate standalone project do not go ahead? There are no guarantees that funding will be found, and the traffic that the LTC would generate using Blue Bell Hill would be an adverse impact for sure. This is as previously stated a false economy that has not been properly reflected in the LTC project.
58. We also have serious concerns in regard to the Thong Lane South green bridge, and the fact it would create a T-junction with a very busy Darnley Lodge Lane, as part of the intersection, as per from paragraph 160 in our Written Rep [[REP1-425](#)], and as discussed at ISH6.

A13/A1089/LTC Intersection

59. In regard to this intersection specifically, we make comment of concerns about the impact to the Gammon Field Travellers Site, which NH failed to identify when highlighting the major impacts in this vicinity, instead they chose to highlight the impacts to Baker Street. The impacts to all areas are significant, we have to question why they did not also mention the travellers site, since it would be so greatly impacted. As noted in the hearing we represent all those who are opposed to the proposed LTC, and some of our supporters are residents at this site, so it would have been remiss of us not to highlight this as a point of concern.
60. In our communications with some of the residents of Gammon Field travellers' site, we have been told that they do not feel confident in what is going on, and that there has been a lack of meaningful engagement and communication from NH, and that residents have very little info about what is going on. The last time NH went to the site was January 2022.
61. We commented on NH comment that the M25 would be the preferred route for traffic wanting to reach the A1089. If that truly were the preferred route

why are the Port of Tilbury and others progressing the Tilbury Link Road as a separate stand alone project because NH removed it from the LTC scheme? NH stating that the Dartford Crossing would remain a preferred route also shows that in this regard it fails against the scheme objective to reduce traffic at the current crossing. Plus as we know from other evidence the current crossing would still be over design capacity, if the LTC goes ahead, so suggesting traffic would prefer to use the current crossing to the A1089 should not be a given either, as they would either be adding further to the congestion, or surely would use the LTC to avoid the congestion.

62. Also, in regard to the Tilbury Link Road, we are not convinced that the proposed Operations and Emergency Access Point would be workable without considerable additional work. We have previously commented on this from paragraph 44 in Appendix A of our Written Representation [[REP1-425](#)].
63. There would be no direct access to the LTC for most in Thurrock due to the lack of adequate connections, instead many would have to take the Stanford Detour. We are obviously completely opposed to the proposed LTC, but were it to go ahead, we would suffer from all the adverse impacts and not even have access to use it for those that might want, meaning many would still be stuck with using the Dartford Crossing or a long detour.
64. There would also be a lack of adequate connections for movements such as (but not limited to) from the A13 eastbound to the LTC, from the LTC to the A13 westbound, and from the LTC to A1089 (without going via Orsett Cock).
65. This could be an issue, particularly for locals all the time, but particularly for all users when there are incidents at either crossing and traffic needs to migrate between the two. We highlighted some of our concerns about this from paragraph 12 in Appendix A of our Written Representation [[REP1-425](#)].
66. We also highlighted concerns about sections in each direction of the A13 dropping from 3 lanes to 2, especially since the A13 has only just recently been widened to ensure there would be 3 lanes between the M25 and A1014 in both directions.
67. Please excuse that the map below does not show the update to the Orsett Cock to A1089 change, this was captured from the LTC interactive map prior



70. We also felt it may be helpful to share this satellite image from Google maps to show the solar farm in situ.



71. And as seen from the side of the M25 (below)



72. How can destroying a working solar farm be considered environmental mitigation? Also, how does destroying a solar farm assist at a time when we have an energy shortage, and more will be needed for powering vehicles, and the LTC would create additional traffic and therefore demand on energy because of induced demand from the road, if it goes ahead.

73. Thames Chase Community Woodland was planted by the local community/volunteers as a form of mitigation/compensation for the M25. For it to now be under threat from yet another road project is unacceptable.

74. It was highlighted at the hearing that there would be an impact on Corbets Tey Crematorium, due to closures/diversions for Ockendon Road etc, which we share concerns about. We also highlighted that school children in this area would also be specifically hard hit by long diversions due to road closures during construction if LTC goes ahead. Longer journeys to school, due to long diversions, would result in children being more tired and less productive due to earlier starts and getting home later, stress about getting to and from school. Considering the length of estimated construction time this could have a considerable impact on a child's schooling and overall time at school.

75. An additional concern in regard to road closures and diversions during construction if the proposed LTC goes ahead, is the fact that the closure of North Road would force people into the ULEZ, and result in some having

additional costs associated with that charge.

76. As our comments move more towards the connectivity between the intersections, we also express our concerns over the fact that NH propose water vole habitat in the Mardyke Valley, which we know from researching other local planning applications is known habitat for Mink, which are a main predator of water vole. How can translocating a protect species like water vole into habitat known for their main predator be considered acceptable?
77. Also, across the Mardyke Valley we have concerns about the proposed route in regard to weather. There is a reason that historically windmills were built across this valley and that of course was because of the wind! Whilst many of the windmills are no longer present, the wind most definitely still blows across the fens.
78. Additionally, fog is often experienced across the fens too, as can be seen from the photos below, which were taken a couple of days after this hearing to show how visibility across the fens can get when foggy.
79. The first photo shows a view from the junction of Green Lane and Fen Lane in Orsett, Essex looking across towards South Ockendon in the direction of the landfill and solar farms. The top foggy photo was taken just after 7am on 7th September. The bottom photo was taken around 5pm on the 12th September to allow comparison of what the view should look like minus fog.



80. The additional photos below are from the same position but looking out across the farmers field towards Stifford Clays Rd and Stifford Clays/North

Stifford direction. The top photo taken around 7am on 7th September showing fog. The bottom photo taken around 5pm on the 12th September showing the clear view for comparison.



81. We do have video evidence of the fog on 7th September which can be submitted upon request, but we are initially offering photos for ease of sharing.
82. As mentioned in the hearing we also have concerns about the fact that the road between South and North Ockendon in the vicinity of the North Road 'green' bridge has been raised within the cutting, which according to NH reduces carbon emissions. However, our concerns are how raising the road would worsen impacts to residents in the vicinity in regard to pollution. We know that Shorne Country Park requested the road be lowered in the woodlands vicinity to reduce pollution impacts to the woodland. Why has the road been raised higher than it has been lowered to for Shorne?

Additional note on LTN1/20

83. We acknowledge that NH have now finally, in the hearing, confirmed that the LTC would be in accordance with LTN1/20, as this is something people have been trying to get an answer on for a long while now.
84. However, commenting on the south side of the river, as an example, the type of crossing to be used in the western end of the development area is something cycle groups have been pushing for details on. People who cycle are like HGV's in that they do not like stopping and do not like standing still. Both HGV's and cycle riders use a lot of energy to get moving and in cold weather people who cycle wear enough cloths to keep warm enough when they are riding so get cold quickly when standing still. Cycle groups for this reason have asked for people who cycle to be given priority at junctions, accepting on the A2 on and off slip roads there will have to be some compromise.
85. Where horse riders, pedestrians and cyclists will share the same path is of major concern as there are serious safety concerns over this issue. Cycles and horses do not mix well, the most obvious reason being that horses can easily get spooked, which can put them and the riders of both the horse and cycle at risk.

86. Additionally, horses and cycles tend to need different surfaces to move along to suit their very different needs. Hard surfaces for cycles, and softer surfaces for horses to avoid damaging their legs on hard surfaces for example.
87. The other major concern is the N177 diversion route which will go through Ashenbank Woods and Jeskyns Community Woodland. NH have never accepted that this is a commuter route and have refused to look at alternative routes which would be flatter and could have lighting. As things stand N177 will be closed for five years as a viable cycling route for all but the fittest leisure riders in daylight which should not happen. This could result in people stopping cycling and using their cars instead which is against government policy.
88. Going over the bridge over HS1 (south of Hares bridge which goes over the A2) people who cycle will be required to dismount which means that the N177 cycle route will be broken which is against LTN 1/20 and the DFT Gear change policy documents.
89. Please consider the above as examples, rather than an extensive detailing. We would be happy to go into a bit more detail if needed, but also believe that there should be cycle groups and others also making representations on these kind of aspects.

Issue Specific Hearing 4 (ISH4)

90. We wish to comment on ISH3: Project Design that took place on Wednesday 6th September 2023.

Traffic Modelling

91. We too believe there would be issues with the A13/Orsett Cock/Stanford Detour, if the proposed LTC goes ahead.

92. During regular operations:

- A13 eastbound traffic wishing to join the LTC would have to take the Stanford Detour, adding further pressure to the A13 and A1014 junction.
- A128 traffic wishing to join the LTC would have to take the Stanford Detour, adding further pressure to the A13 and A1014 junction.
- LTC traffic joining the A13 eastbound would soon back up and also use the Orsett Cock to get to the A13 eastbound, adding further pressure to an already busy roundabout/junction.
- LTC traffic joining the A13 westbound would need to use the Orsett Cock to U-turn , adding further pressure to an already busy roundabout/junction.
- Traffic wishing to access the A1089 southbound from the LTC, A128, A13 eastbound, and local road network would all need to use the Orsett Cock to reach the proposed new slip road to the A1089, adding further pressure to an already busy roundabout/junction.

93. All of the above would impact traffic flow, journey times, and local communities (air, noise pollution etc). As the slip roads connecting the LTC to the A13 and Orsett Cock become busier and slow down, traffic will take whichever route is moving better at the time. This will either add additional traffic to the Orsett Cock, or additional traffic using the Stanford Detour.

94. In addition, with the complexity of the LTC/A13 junction and limited connections there would also very likely be traffic that takes wrong turnings adding to issues, and the potential for accidents/incidents as traffic slows to

work out where they are going, or as they make last minute or wrong decisions.

95. During times when there are incidents at either the Dartford Crossing or LTC:

96. When there is an incident at the QE2 Bridge, traffic coming off the M25 onto the A13 eastbound would all need to take the Stanford Detour.

97. If instead traffic tries to come off the M25 onto the LTC directly, the M25 at this point would be 5 lanes going onto 2 lanes southbound on the LTC until just past the A13. As traffic starts to back up on the M25 due to the built-in bottleneck drivers would start to use the A127 eastbound to try and reach the LTC via the A128 or other local roads. Any such rat running would result in traffic needing to take the Stanford Detour.

98. When there is an incident on the LTC southbound between the A13 and the A2. Traffic travelling down the LTC southbound from the M25 would come off at the A13 to try and reach the Dartford Crossing. It would have to U-turn via the Orsett Cock roundabout, adding further pressure on the busy junction. If traffic on the LTC between the A13 and A2 is turned around by NH, it too would all have to U-turn via the Orsett Cock roundabout to get to the Dartford Crossing, again adding further pressure on the busy junction. When traffic is trying to reach the Dartford Crossing it would very likely soon start rat running by any means possible on the local road network.

99. When there is an incident on the LTC southbound between the M25 and A13, it would not take long for the traffic to back up onto the M25, since the M25 would be 5 lanes wide at this point and the LTC southbound would be 2 lanes. How long before the M25 to the Dartford Crossing is congested? How much traffic would try to cut down the A13 eastbound to get back on the LTC, only to find it has to take the Stanford Detour? How much traffic would try coming off the M25 onto the A127 to cut down the A128 to try and reach the LTC, again having to take the Stanford Detour?

100. Paragraph A.1.10 [\[REP2-050\]](#) states that M25 traffic would use the M25 to A13 eastbound to A1089 route rather than use the LTC to reach the A1089. This suggested routing does not support the objective of reducing traffic in the

vicinity of the Dartford Crossing. It also doesn't take into account how traffic would behave when traffic is slow or there is an incident at the Dartford Crossing, which would still be over design capacity and therefore suffering with congestion and incidents. Many drivers knowing the risk of going near the Dartford Crossing would be likely to avoid going near the Dartford Crossing given the opportunity.

101. It should also be noted that the comparisons in journey times and distances that NH make in the same document paragraphs A.1.12, A.1.13 highlight the poor design of the proposed LTC, since such traffic would literally pass the top of the A1089 enroute, but rather than there be a way for traffic to join the A1089 at this point, it would have to detour the extra distance via the Orsett Cock. The reason there is not such a junction/connection is because of the limited space. This again highlights that the proposed LTC is the wrong crossing in the wrong location, as there is simply not the space to incorporate such a route adequately.
102. Additionally, it leads to questions as to why the Tilbury Link Road was removed from the LTC design? Again, we highlight that this is being progressed as a separate standalone project, which is a false economy. *(We clarify again, as we have previously, comments about the Tilbury Link Road inclusion should not be considered support of such a proposal, we are simply highlighting the inadequacies of the proposed LTC).*
103. In paragraph A.1.21 NH state that they have made provision for a future connection for Tilbury Link Road by adding the operational and emergency access into the design. Please see paragraphs 44-54 of our Written Representation [[REP1-425](#)] for further comments on this.
104. We would conclude that the impacts on Orsett Cock, the A13 and A1014 junction are not limited to adverse impacts on the ports, but also to the wider communities and road users. It is quite clear that the proposed use of the Orsett Cock to enable the LTC to operate would have adverse impacts on the local road network and surrounding communities.
 - i. Applicant to explain its approach to modelling uncertainties and whether any additional work is necessary in light of the recent publication of the "TAG Unit M4 – Forecasting and Uncertainty".

105. It appears to us that TAG Unit M4 – Forecasting and Uncertainty⁴ was last updated on 31 May 2023, and that the version used in the LTC DCO application was a May 2019 version.
106. Paragraph 4.1.6 of 7.7 Combined Modelling and Appraisal Report - Appendix C - Transport Forecasting Package [APP-522] states that the final date for the receipt of information was 30 September 2021, which was over a year prior to the LTC DCO application being resubmitted.
107. Paragraph 4.1.8 of the same document highlights that highway schemes on the strategic road network have been obtained from NH and specific schemes included comprise those identified in the Road Investment Strategies 1 and 2 (RIS1:2015-2020 and RIS2:2020-2025), and Junction Improvement Programme (JIP);
108. We question how reliable this will be for a project that wouldn't open until RIS4(2030-2035) if it goes ahead, as it appears no assessment of RIS3 pipeline projects is being considered. Bearing in mind there have already been a number of road projects identified as being needed as a direct result of the proposed LTC, if it goes ahead, surely more consideration needs to be given to such matters?
109. TAG Unit M4⁵ highlights the importance of the Uncertainty Log which can be found in Annex A of 7.7 Combined Modelling and Appraisal Report - Appendix C - Transport Forecasting Package Annexes [APP-523]
110. The Developments section of the Uncertainty Log is poorly laid out with no apparent order. To begin with it appears they have been ordered by Borough/District, but it then becomes apparent that is not the case and they can be quite random, so reviewing the information is more time consuming and tricky that it need be, because of this inadequacy.

⁴ <https://www.gov.uk/government/publications/tag-unit-m4-forecasting-and-uncertainty#full-publication-update-history>

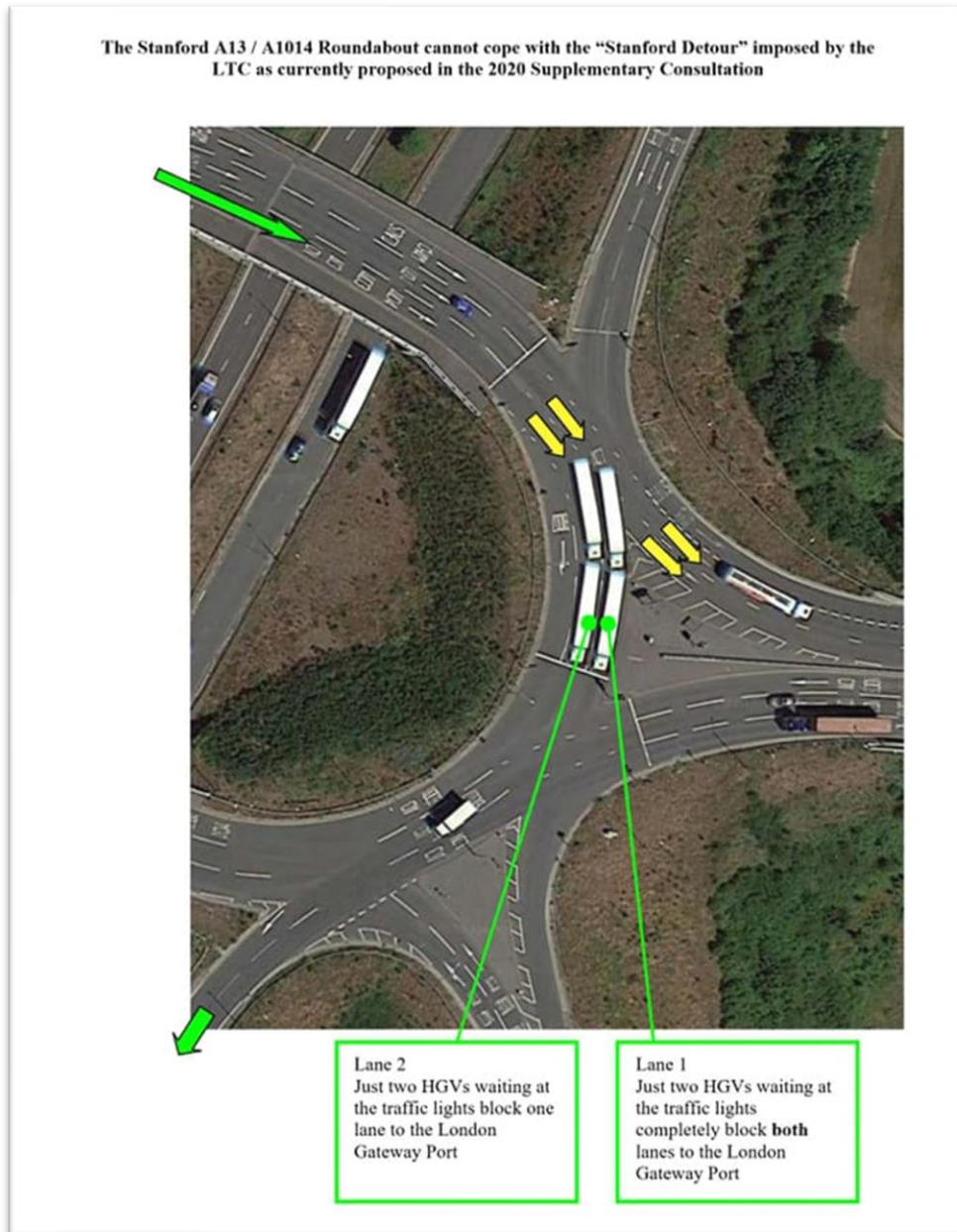
⁵

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1161977/tag-unit-m4-forecasting-and-uncertainty.pdf

111. Having done our best to review the log (with the limited time and resources we have) we note that it doesn't seem that the Port of Tilbury/Freeport expansion plans have been included in the Uncertainty Log, with such an obvious omission we wonder what else may be missing. We know of at least one housing development in Thurrock that doesn't appear to be included.
112. NH are very aware of the plans for the Port of Tilbury to expand further, as that is what prompted the LTC Local Refinement Consultation.
113. In the Highways section of the Uncertainty Log there appear to be road projects like the Tilbury Link Road, Blue Bell Hill improvements, A2 near Dover dualing that have not been included, and the period covered in regard to planned highways is, as already highlighted, not that reliable or realistic.
114. In addition, the log contains 'Smart' Motorways such as the M25 junction 10-16⁶, which has now been scrapped as per Government's decision to scrap new 'smart' motorways.
115. We consider all these kind of issues relevant and that they highlight the need for the associated documents to be reassessed and updated, particularly with the update to TAG Unit M4 too.
116. At the hearing we commented that whilst agenda item 3 may reference DP World we wished to highlight that the intersection and associated traffic would also have an adverse impact on the local communities.
117. We do not believe that the low traffic figures NH estimate would use the Stanford Detour is realistic. It also only focused on traffic from the A128 to the LTC, and didn't take other traffic from areas in Thurrock attempting to join the LTC. Not did it take into account the traffic needing to use the Stanford Detour when there are incidents at the current crossing. We highlighted that what NH consider unusual circumstance we and those we represent consider to be normal in the real world.

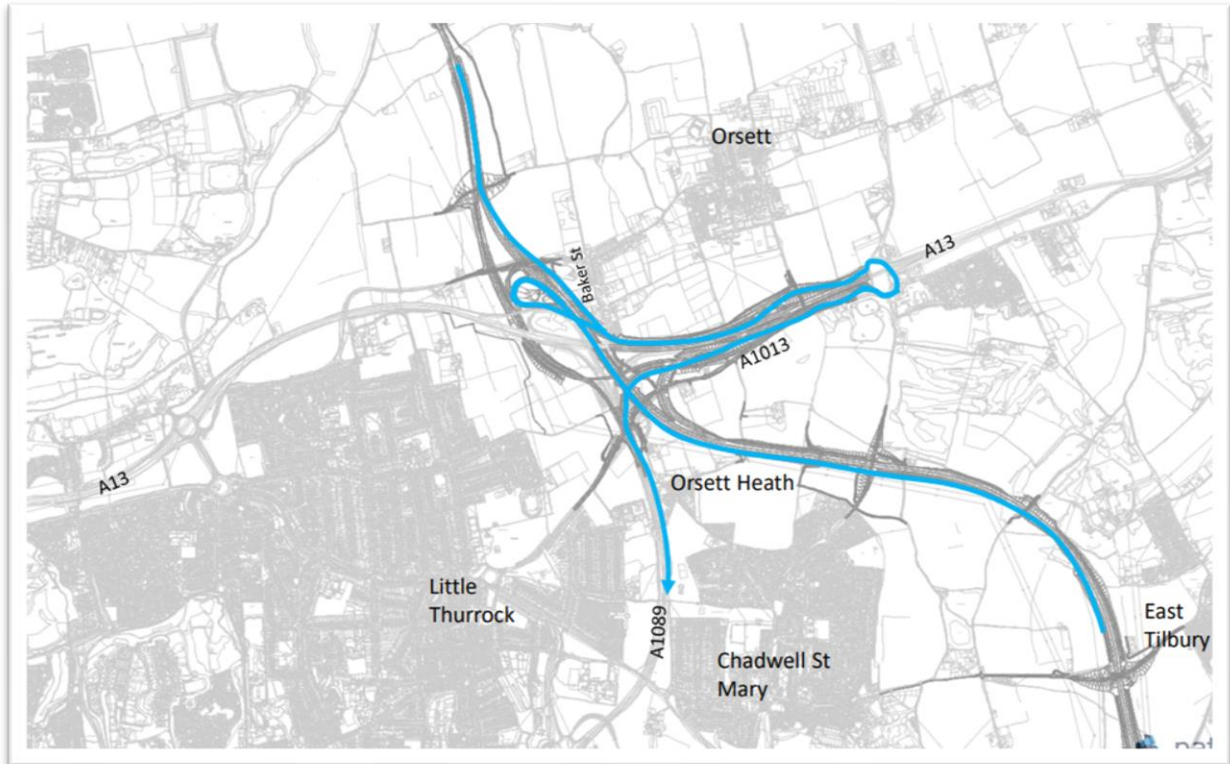
⁶ <https://nationalhighways.co.uk/our-roads/south-east/m25-junction-10-to-junction-16-smart-motorway/>

118. We also agree with comments made in regard to the fact that it only takes a couple of HGVs in each lane to block access to the Manorway, on the A13/Stanford/A1014/Manorway roundabout, as can be seen in the image below.



119. We support Thurrock in their comments that they have been asking for information, but that NH have been refusing and delaying providing it, and explained our involvement in the LTC Task Force. From our seat on this committee we are very aware of the lack of meaningful engagement between NH, Thurrock Council and others.

120. As a reminder, LTC Task Force is a Thurrock Council organised monthly meeting that started in Sept 2017 in an attempt to improve communication and engagement between the council, NH, and local communities. TCAG have had a seat on the committee since the first meeting.
121. We completely support Professor Phil Goodwin's oral representation on behalf of Thurrock Council, having previously discussed such matters, particularly highlighting the fact that NH induced demand predictions do not include LGV and HGV, as per our [\[REP3-205\]](#) from paragraph 34 with particular attention to paragraph 42. We appreciate the ExA putting an action against NH to respond in detail to Professor Goodwin's comments, and will be reviewing their response in due course.
122. NH stated that what DPWorld were requesting in regard to modelling could not be carried out for individual junctions as it would throw other sections out. However, we would argue that the issues raised by DPWorld are likely relevant and needed across the whole proposed route. The LTC is quite a unique case because of the need to cross the river and the fact that these roads/crossings are busier than other routes for HGVs. Therefore, more unique and specific modelling is needed and should be carried out.
123. Like others, we too believe that the 2016 LTAM is out of date, and the fact that NH are updating LTAM for the Full Business Case suggests this is relevant and should be addressed sooner rather than later, and considered within the examination.
124. We do not agree with NH comment about characterisation of the Orsett Cock being referred to as a u-turn. If traffic has to utilise this local road network junction in order for the LTC to operate then it is essentially being used as a u-turn and part of the scheme. You only have to look on the route map to see how close the LTC comes to the A1089 and the fact traffic would have to pass it, and go to the Orsett Cock to turn around and get back to the A1089, which to us and others is seen as a u-turn. We consider this to be a traffic movement that is being generated due to the project's poor design. This can be seen in the image below.



125. We also share concerns about accessibility for and pressures on the emergency services as a direct result of the LTC, if it goes ahead.

126. Mitigation considerations are limited, and don't appear to consider things like the fact that the proposed LTC would go against attempts to clean up the air with the expansion of ULEZ, as the LTC is exempt from ULEZ.

127. It is very apparent that we and many others have serious concerns about traffic and transportation and the poor design of the proposed LTC. There are still clearly areas of serious disagreement between NH and other parties.

128. The reason why NH continue to push ahead with their own agenda for LTC so hard is that failure to deliver the scheme successfully is an existential threat to the organisation (as reported in their own Annual Report and Accounts). Plus any failures in the design simply result in future work for them, and future proof their existence and jobs.

129. We can all see and identify the issues and concerns, and we need and deserve better than what NH are proposing.

Open Floor Hearing 4 (OFH4)

130. We note that the topic of the spoil contract came up during OFH4, and would like to share the following comments on this topic.
131. We note that in the notice⁷ about this contract being awarded it states, *“The award will consist of two contracts which together cover the scope of the PIN: (i) an enabling works contract to allow site preparation necessary to prepare the site and to carry out the spoil disposal services to take place prior to the DCO being granted (value up to c. £1m); and (ii) a spoil disposal services contract.”*
132. As above the first part of the contract is considered enabling works.⁸ The second being for spoil disposal.⁹
133. Firstly, we question why any works would or can take place prior to the DCO being granted?
134. Secondly, we question the reference to removal of spoil when the tunnelling spoil is largely supposed to be dumped in the vicinity of the tunnel portals, in the so called ‘parks’?
135. Thirdly, we question contracts being awarded so early, this one dates back to April 2021, way before the DCO application had been successfully submitted.
136. We too have concerns that there was only one company that was considered for this contract. This and the timing is particularly relevant now that Government have announced the two year rephase.
137. Even if there had only been one company back then in a position to be considered a suitable contractor, what is to say that if the same exercise was run again now, or closer to the start of construction, if the DCO is granted, that the outcome would not be different?

⁷ <https://www.find-tender.service.gov.uk/Notice/008811-2021#:~:text=The%20award%20will,disposal%20services%20contract.>

⁸ <https://www.find-tender.service.gov.uk/Notice/018829-2021>

⁹ <https://www.find-tender.service.gov.uk/Notice/008811-2021>

138. Other companies may not have tendered due to the estimated timing of the contract, as they already had other work confirmed. Or companies may now be in a position to have gained experience, growth, other requirements that would now put them in the running.
139. When it comes to spending public money how can the above be considered acceptable? NH have a responsibility for the use of public money, and this shows that they are spending large amounts of public money and awarding contracts in what we consider to be a very questionable manner.
140. Moving onto Mr Gordon Pratt's comments about Kenex Tram, we are aware of this project and whilst we reference it in other representations, and will particularly make reference to it in our submissions to the first written questions from the ExA.
141. As Mr Gordon Pratt commented his project is estimated to take around 10% of the cars away from the Dartford Crossing for a cost much less than the proposed LTC, which just goes to show how other alternatives have not been adequately considered, or indeed considered cumulatively rather than having to be served by one means.

Issue Specific Hearing 5 (OFH5)

142. We wish to comment on iSH3: Project Design that took place on Thursday 7th September 2023.

Limits of deviation

143. We have concerns about deviation impacts on potential flooding and how that impacts the water flow and bottom of the river etc, changing the flow of the water and how that impacts the shape of the river.
144. The water flow not only impacts where the river can potential flood, but also the erosion of the river bank, which is already an issue in regard to the historic landfill sites in Thurrock, increasing the risk of erosion and pollution.
145. We question whether the minimum level of cover and scour would impact the river bed habitat and any creatures that may live and forage there? The Thames is one of only five known nursery grounds for Dover Sole in the UK. The Thames is also home to endangered species such as European eels, seabass, flounder, and smelt. The Thames is used as a nursery habitat, and a pathway between freshwater habitats and the open seas – making this area absolutely vital to the success of UK fish species and their conservation.
146. Not only that but we have concern that the limits of deviation and tunnelling general have potential risks in regard to similar incidents as occurred on HS2 with sink holes and bubbling instances on the surface above tunnelling. These issues and incidents we believe have been attributed to the chalky ground which is similar to in our area.
147. We would also like to note that it is not right that whilst NH seem happy to accommodate the ports with future proofing for river protections, they refuse to better acknowledge and accommodate protections/operations for our local road network and communities.

Tunnel Boring Methodology

148. In regard to whether 1 or 2 Tunnel Boring Machines (TBM) are used we are not convinced by the argument that there would be no difference in impacts. We would also question how reliable assessment of cost and BCR can be with so many unknowns.
149. Water would need to be bought from the north of the river to the south for the TBM if only one was used, as NH have confirmed to us that the water source would always come from the north.
150. There must be additional impacts from having to pump water and slurry back and forth if only one TBM were used.
151. Tunnel segments would also need to be transported from north to south if only one TBM were used.
152. We simply do not believe that all of this and likely other aspects would not impact further, with noise pollution, pumps, additional vehicle movements or conveyor belts needing to be running to transport things back and forth.
153. We share concerns about running 2 TBM side by side and how that may cause instability.
154. There is also the matter of uncertainty and the worry that brings for residents in the vicinity. As mentioned below we have already experienced issues from NH/LTC and their contractors so we have very little if any confidence and trust in them, for what would be such a long time frame, if the LTC goes ahead.
155. And finally, if NH are declaring that the proposed LTC is a pathfinder project, and that they are working to reduce carbon wherever possible, why if we are supposed to believe that using 1 TBM rather than 2 would reduce carbon emissions, are NH reserving the right to use 2 TBMs?
156. To clarify we don't believe only using 1 TBM would necessarily reduce carbon emissions, but since that is what NH claim why do they need to

reserve the right to use 2 when they are supposed to be doing all they can to reduce emissions?

Monitoring

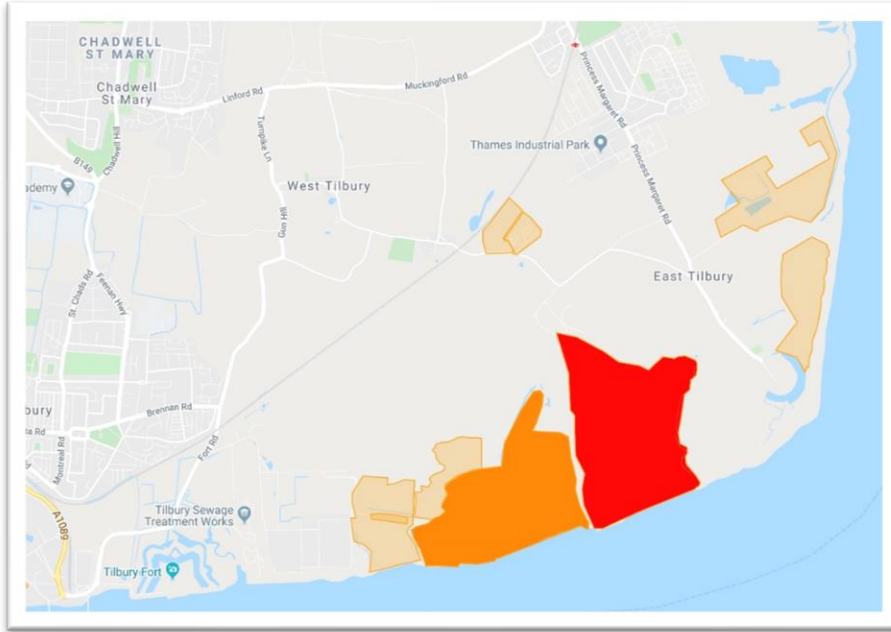
157. We believe that far too much is being left up to contractors, if the project goes ahead. This gives us no confidence, particularly as we have already experienced so many issues that have been down to contractors during the ground investigations.
158. We have experienced contractors hitting a gas main in Kent during ground investigations. Contractors were not acting responsibly during covid lockdown, which lead to concerns about the additional risk they were placing on workers and our communities. We experienced workers urinating in public. Vehicles being parked on footpaths and cycle routes. A resident's fence being hit by a vehicle. Lighting causing glare issues to surrounding residents and nearby road users. Noise issues from compounds. Rubbish in fields that is believed to have come from compounds. To name but a few examples.
159. We would request that if the LTC goes ahead there needs to be provision put in place to ensure that there would be adequate communication, engagement, and procedures in place to allow residents to report issues and for them to be handled efficiently and effectively.
160. Additionally, in the hearing NH referred to the 'unusual rainfall' of late. We would draw attention to the fact that what they refer to as unusual is becoming more the norm due to climate change, and that they cannot and should not just focus on what has historically be the norm, they should be ensuring they consider and prepare taking climate change into account.

Landfill sites

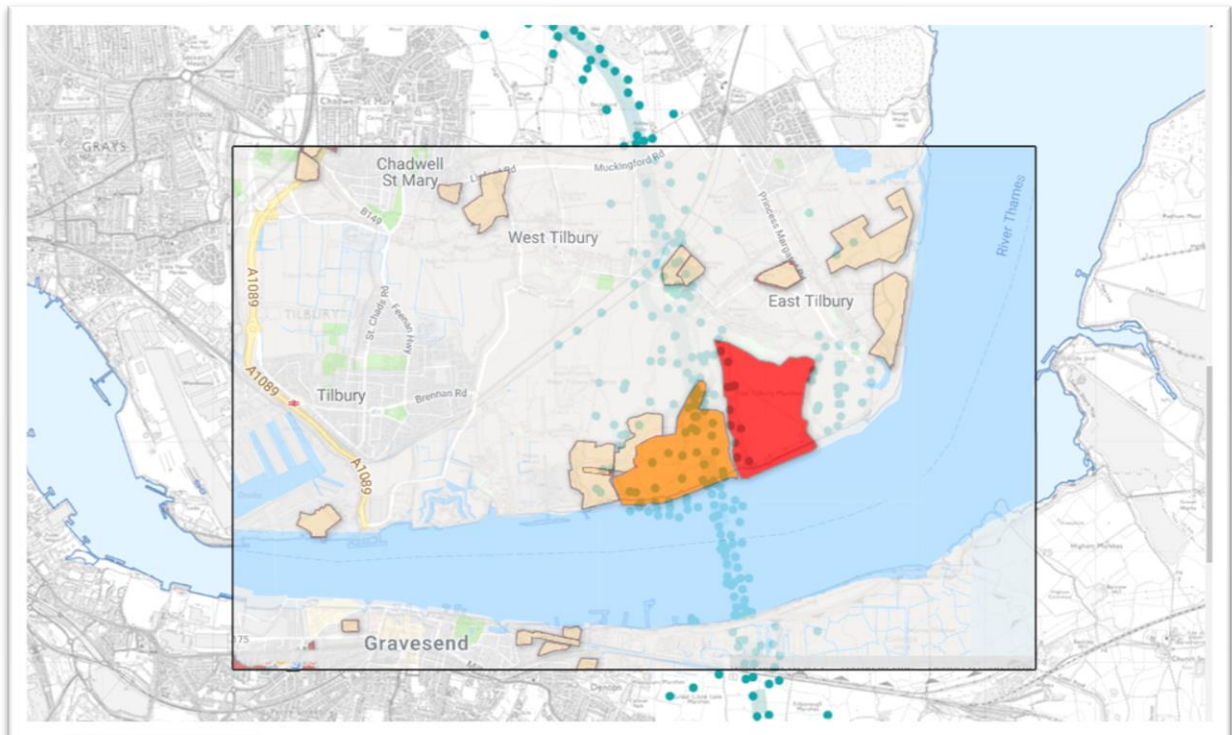
161. We have concerns over the risk of contamination from the historic landfill sites, and wish to note that there is actually more than the one landfill site that was mentioned by NH at the hearing.

162. Datasets include sites that existed before landfills were regulated. Much of the pre-licensing data was derived from a national survey in the early 1990s so it may be incomplete.¹⁰
163. With the names of the two historic landfill sites right next to each other being so similar we are concerned about how much reliable information/data is available, and the overall general lack of data available, and what the consequences could be.
164. Locals who have been in the area long enough to know first hand have voiced serious concerns to us in regard to the risks of disturbing the historic landfill sites.
165. In the map below the red area is known as East Tilbury Marshes landfill site. It has been listed with a first input date of 31/12/1932, and a last input date of 31/12/1991. This is the site that has featured on the news and in documentaries as being a toxic historic landfill site that is polluting the River Thames due to coastal erosion. NH have said they are avoiding the East Tilbury Marshes landfill site.
166. The dark orange area is known as East Tilbury landfill site. It has been listed with a first input date as <null> (meaning there is no date on record), and a last input date of 31/12/1958.

¹⁰ <https://www.data.gov.uk/dataset/17edf94f-6de3-4034-b66b-004ebd0dd010/historic-landfill-sites>



167. We have previously asked NH if they could provide us with a map showing the historic landfill sites, with the LTC route/order limits overlaid, but they said that whilst they have the necessary maps for their own needs what we were asking for was not available for the public and suggested we create our own overlaid maps. The map below is what we created at this time using the landfill map and the blue dots representing the Ground Investigation site locations.



Fire risk

168. As well as concerns about the risk of fire in the tunnels during operation, if the proposed LTC goes ahead, there are increasing questions being asked about the risk of fire from Battery Electric Vehicles (BEVs) if NH start using such vehicles for construction of the tunnels.
169. We know there was at least one fire during construction of the Silvertown Tunnel, fair enough it was a conveyor belt rather than a vehicle, but it does show that fires do occur during these kind of projects.
170. What assessments have NH carried out in this regard? What precautions would be taken? What impact could this have on our emergency services, as BEV/EV fires need additional fire engines to attend due to the nature of BEV/EV fires, how long they take, how much harder they are to extinguish, and the risk of them reigniting. We are after all talking about machines that are currently prototypes, so have no proven track record.

Unexploded ordnance

171. We do not believe that the desk studies for UXO are sufficient, and certainly offer no reassurances to communities.
172. As mentioned in the hearing, it is not just the UXO individually that are of course a concern, but also the risk of trigger events whereby one UXO could trigger others. With the SS Richard Montgomery not that far down river this could have serious consequences, and we feel definitely should be given better consideration than NH have given so far.
173. We have previously highlighted our concerns in regard to UXO from paragraph 81 of Appendix A in our Written Representation [[REP1-425](#)].
174. As also raised NH have been cherry picking what they respond to during the examination and to date we are not aware of them commenting on ours and others concerns in regard to evidence provided in regard to UXO is an acceptable and adequate manner.

Construction Compound Matters

175. Whilst we acknowledge that Item 7 has been left for written or a future hearing, or a mix of both. We will simply comment that we do have serious concerns about the effect of noise, vibration and other disturbances on the local community, along with the affect of the proposed onsite accommodation and related management of potential socio-economic impacts.

176. We would like to highlight that ISH5 focused on tunnelling under the river, but we'd also like to draw attention and question the tunnelling under the M25 and railway line, and ask how stable this tunnelling would be, and what risk assessment has been carried out in this regard, especially following the sink holes and bubbling on the HS2 project, and the obvious serious level of risk in this section of the route tunnelling with the M25 and railway line being so busy.

Issue Specific Hearing 6 (OFH6)

177. We wish to comment on iSH3: Project Design that took place on Friday 8th September 2023.

Mitigation, Compensation and Enhancement

178. We question how the fact that surveys are still be carried out can be adequate and acceptable. What evidence is there to back up NH claims that what is being presented in the application will be sufficient to cover worst case scenario? We and others have already voiced concerns over the ecology surveys and how out of date and inadequate they are.
179. As others mentioned in the hearing, we also believe it would be helpful for there to be a mitigation route map available, as it is so difficult to review what is needed to be able to decide what mitigation/compensation is for what impact etc.
180. We understand that is something that NH will now be submitting and will reserve our right to comment further when we have had a chance to review.
181. On the topic of mitigation/compensation we would also add though that we do not believe there is any mitigation/compensation for the impacts to agricultural land. We appreciate that more information on agricultural land has been requested in ExQ1, so will again monitor NH response to that. At a time of food security concerns and issues, we simply cannot afford to be losing so much land, or for the surrounding agricultural land to be adversely impacted.
182. When considering Biodiversity Net Gain (BNG) we, as humans, need to remember that we are part of biodiversity, and not consider it to be something that purely is relevant to other creatures. Just as other creatures need a healthy and sustainable habitat and food and water supply etc, so do we.

183. As a project that declares it is the greenest road every built in the UK, and has been given a title of pathfinder project, we question why NH are not attempting to lead the way in regard to BNG.
184. This is of particular note with the new legal requirements coming in from Nov 2025, especially when you consider that construction of the LTC, if permission, is granted would not be until mid 2026.
185. Our country is one of the most nature depleted countries in the world, surely a pathfinder project that professes to be the greenest road every built in the UK should be doing more?
186. NH state that as it is not yet a legal requirement for them to meet 10% for BNG it is hard for them to lead the way, but surely the fact they have been deemed a pathfinder project should mean government are looking to them to lead the way, and special consideration could be sought/granted.
187. It seems that NH are happy to promote LTC being the greenest road every built in the UK when it suits their needs and wants to promote the project, which we more often than not deem greenwashing, but when there is an opportunity to put their money where their mouth is they back away. We believe this could be to do with the fact that the it would push the cost of the project up and further reduce the BCR.

Double counting

188. As we commented during the hearing we have serious concerns about NH double counting, and present the following evidence to highlight such creative accounting at the Hole Farm Community Woodland site as an example.
189. Paragraphs 7.2 and 7.3 captured and pasted below from the 'Hole Farm Community Woodland Planning Statement'¹¹ which has been submitted as part of the Planning Application to Brentwood Borough Council.

¹¹ https://publicaccess.brentwood.gov.uk/online-applications/files/8C387D6E115F459284E2B589746441D9/pdf/23_00862_FUL-PLANNING_STATEMENT-1014338.pdf

The Need for the Project

- 7.2 The Project meets a range of needs in contributing towards local and national government objectives regarding habitat creation, climate mitigation and improving public health and wellbeing through the provision of new green infrastructure in line with aspirations of the Thames Chase Plan.
- 7.3 The Project also meets the need of providing suitable mitigation and compensation for the LTC scheme; however, it is highlighted that the Project will proceed whether or not the Development Consent Order for the LTC scheme is granted.

190. In this instance 'The Project' refers to the Hole Farm project being proposed in the planning application to Brentwood Borough Council, not the proposed LTC.
191. We believe that the above info shows that National Highways are attempting to double count Hole Farm Community Woodland.
192. Paragraph 7.3 specifically states that Hole Farm Community Woodland meets the need of providing suitable mitigation and compensation for the LTC scheme, but that it will proceed whether the LTC is granted permission or not.
193. Paragraph 3.5 states that Forestry England's objectives for the site are to increase biodiversity. This again shows that biodiversity net gain at the site is something that would be progressed regardless of the proposed LTC, and is also being managed by Forestry England, rather than National Highways.
194. Paragraph 3.6 goes on to state that National Highways may temporarily utilise part of the site as a tree nursery to grow trees for planting on the wider LTC scheme, and that following this the area would be planted as per the plans for the community woodland and passed back to Forestry England to manage. Again, highlighting that the site is being utilised and passed back.
195. 'Landscape concept' under paragraph 3.58 of the same document states that the aim of Hole Farm Community Woodland, 'the project' as per the planning application to Brentwood Borough Council, is to deliver a significant uplift in biodiversity and quality.
196. Paragraphs 1.19 to 1.30 in the document cover aspects of the relationship to the Lower Thames Crossing Proposal.

197. These include details of what is proposed for environmental mitigation and compensation, and also that the retained and new habitats would be taken into account in the BNG metric for the LTC project.

198. Habitats/ponds already in existence shouldn't be considered biodiversity net gain either as they already exist. Biodiversity improvements from another project should not be counted in the BNG metric for the LTC. Mitigation and compensation should not be things that will be done regardless, as is the case with Hole Farm Community Woodland which is being progressed regardless of whether the LTC is granted DCO or not.

199. As a slight aside, we also question why one of the documents in the planning application to Brentwood Borough Council has been titled '6314_101 CAR PARK LAYOUT LOWER THAMES CROSSING'¹² This seems questionable to say the least.



¹² https://publicaccess.brentwood.gov.uk/online-applications/files/EA3DE26F1E5F6E73BB5CA55B3DB7BFA1/pdf/23_00862_FUL-6314_101_CAR_PARK_LAYOUT_LOWER_THAMES_CROSSING-1012393.pdf

200. We acknowledge the action placed on NH to submit the Hole Farm Community Woodland planning application documents, after the discussion at the hearing.
201. As suggested by Mr Smith, we will monitor NH's D4 submissions, and follow up as necessary.

Green Bridges

202. As already highlighted from paragraph 160 in Appendix A of our Written Representation [[REP1-425](#)] we have concerns about the proposed 'green' bridges, and draw particular attention to the Thong Lane South 'green' bridge which would result in a T-junction with what would be a very busy Darnley Lodge Lane.
203. NH also commented that this bridge is currently considered a 'grey bridge', and they consider the proposed 'green' bridge would be an improvement for wildlife.
204. However, we would like to highlight that the current bridge and route is not as busy as it would be, if the LTC goes ahead, and does not currently lead to a busy T-junction.
205. We have captured the following views below from Google Maps:
206. North of the A2 on Darnley Lodge Lane looking north (below)



207. North of the A2 on Darnley Lodge Lane looking south (below)



208. South of the A2 on Darnley Lodge Lane looking north (below)



209. South of the A2 on Darnley Lodge Lane looking south (below)



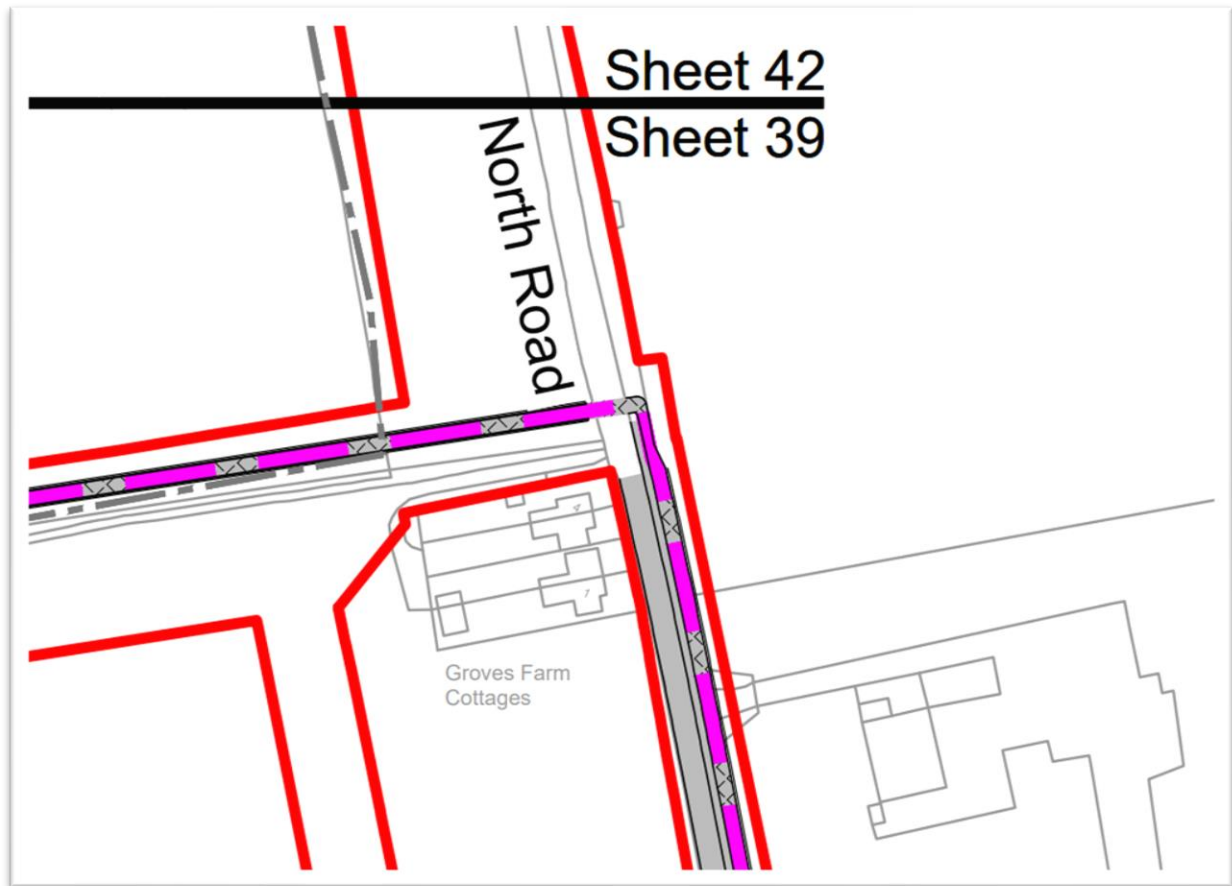
210. The only section of the crossing over the A2 currently that is 'grey' rather than 'green' is the stretch over the A2 which has a pavement each side to allow safe passage.
211. As Miss Laver would say, "if I were a hedgehog" I'd prefer to be using the bridge as it is now, rather than as is being proposed by NH to be safer, if the LTC goes ahead.
212. NH even said they appreciated the issue of the 'green' bridge T-junction being brought to their attention. We find it disgraceful and completely unacceptable that NH need something that is so obvious to be brought to their attention. We have to wonder what those who have designed and advised on this 'green' bridge were thinking, as clearly the proposed T-junction would be a serious issue, both for wildlife and active travel. We again consider promotion of 'green' bridges to be just one of many many attempts to greenwash the hugely destructive and harmful proposed LTC.

WCH routes/Green Bridges

213. Additionally, we have concerns that the North Road 'green' bridge in South Ockendon lacks safety provisions for walkers, cyclists, horse riders. The new WCH route runs north-south on the east side of North Road, behind the existing wooded copse, then across what would be the North Road 'green' bridge. To the north side of the bridge the WCH route turns either east or west, but there is no safe crossing included in the proposed design. This would leave users of the WCH route having to cross a very busy road that is used by cars, buses, HGVs near to the bridge which could also result in limited visibility of those crossing, both for them and of them by other road users.
214. The image capture from 9.60 Supplementary Walking, Cycling and Horse Riding (WCH) Maps (Volume C) [[REP2-074](#)] highlights the section to which we refer.




215. This can also be seen in Sheet 39 of 2.5 General Arrangement Plans (Volume C) (Sheets 21 to 49) [\[APP-017\]](#) which further details which side of the road the WCH path runs. It even appears to show that it crosses the road, despite there being no safe crossing at this location. We have screen captured and pasted below the section to help highlight this.



Wildlife connectivity

216. We have previously questioned NH as to placing wildlife tunnels under sections of the proposed route to provide additional connectivity for wildlife, as has been done on some other NH road projects, such as the A14. To date we have not heard a good reason as to why this should not be considered as an additional measure.
217. In regard to the specific question about which wildlife the 'green' bridges have been designed for, NH mentioned bats on numerous occasions.
218. In the A47 North Tuddenham to Easton Dualling DCO, NH admitted that there is no proven mitigation for bats when it comes to new roads. We have captured this from points 17 and 18 of the A47 North Tuddenham to Easton

Dualling DCO document - Deadline 7 Submission - 9.29 Applicant's Written Summary of Oral Submissions at ISH3 REP7-017 ¹³

A47 North Tuddenham to Easton Dualling Applicant's Written Summary of Oral Submissions at ISH3			
Ref	Questions / Issues Raised at ISH3 and Hearing Action Points	Summary of Applicant's Response at ISH3	Applicant's Written Response
	decision was made on the road.	Management Plan' in the Environmental Management Plan (EMP) (APP-143) secured through dDCO Requirement 4.	
17.	Richard Hawker representing WVA stated that he had read that mitigation measure for bat crossings had been unsuccessful.	The Applicant reasserted that it is best practice to update surveys to make sure they have best evidence base possible. The Applicant agreed with Mr Hawker's point that there is not an evidence base to draw upon that shows mitigation can be successful, but it is a primary reason why the Applicant has assessed the impact on barbastelle bats as being "large adverse". Part of the reason for updating the survey data this year and onwards and why post-development monitoring is recommended is to add and contribute to that evidence base nationally.	The Applicant has no further submissions to make.
18.	Dr Andrew Boswell represent CEPP expressed that he was concerned that the evidence base is still being collected. He expressed understanding that certain information is needed to make a decision on the DCO, but he queried what would happen should information come out that deems mitigation is inadequate in light of the new information. The ExA also asked for clarity in the light of Dr Boswell's comments but also Richard	The Applicant explained the evidence base for the effectiveness of the mitigation simply is not available and that this is an industry-wide issue, not specific to this scheme. However, the Applicant explained that the evidence for bats actually crossing the roads is different and that there is enough evidence to be sure on those points (and to carry out the assessment). The Applicant reasserted that the recent survey data is sufficiently robust for informing the DCO application. It was done in line with the best practice guidelines and the Applicant has consulted with the person developing methodology for bats crossing roads and is confident in it. The updated surveys will inform the detailed design which will include survey data and will be set out in the Environmental Management Plan (EMP) (APP-143).	The Applicant has no further submissions to make.

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Road closures

219. We would just like to add, in response to NH comments in regard to them not considering it viable to close the A2 to enable widening of bridges over the A2. Whilst we of course understand how busy the A2 is, and that it is part of the Strategic Road Network, we also draw attention to the fact that for residents their local roads are equally vital routes for them on a day to day basis, and NH don't seem to be as concerned about the impacts the road closures on our local roads will have on us.

Maintenance and Monitoring

220. We are very concerned about this aspect for the Green Bridges and the project as a whole, particularly following recent news/evidence of such a high

¹³ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010038/TR010038-001504-HE%20-%209%209.29%20Applicant's%20Written%20Summary%20of%20Oral%20Submissions%20at%20ISH3.pdf>

failure rate in regard to tree planting by NH on other projects.

221. More than 400,000 trees planted as part of a national roadwork scheme have died within five years, figures show.
222. National Highways carried out nearly 40 big projects across England to compensate for mature trees felled by roadworks.
223. But figures obtained by a freedom of information request revealed that an average of 30.4 per cent of the saplings have died across nine projects, The Times reported.
224. The government-owned company was only able to provide figures for nine of its 38 big road projects, meaning the number of dead trees is likely higher.
225. We also question, how much water would be needed for all the planting and what impact that could have on local water supply since hose pipe bans/water shortages are becoming more common place now?
226. Additionally, we question how much growth of the green planting would be allowed due to visibility requirements for drivers etc. How large can any growth be due to risk of falling on roads etc?

Ancient Woodland impact

227. A special note on this postponed item agenda, as we would like to signpost you to the section of this combined post-events submission subtitled Accompanied Site Inspection 2 which took place and included a visit to The Wilderness.

Nitrogen Deposition Compensation

228. Like others we too have questions and concerns about the nitrogen deposition. We question exactly what land is for what compensation and whether it would be adequate. As per from paragraph 129 in Appendix A of our Written Representation [[REP1-425](#)].

229. We share concerns that something doesn't sit right with the Burham site not being included in the public consultation, yet NH added it between the consultation and DCO application being submitted, only to then remove it. If it were deemed necessary to include for the DCO application then it should need to be replaced, as it's inclusion would mean it was deemed necessary in light of the fact that only necessary/essential land can be compulsory purchased.
230. We also still question whether NH are adequately assessing the nitrogen deposition in this vicinity, and whether it includes the fact that the Burham site is now a Countryside Stewardship project, but that there are no guarantees about the longevity of such a stewardship, and it definitely should not count towards LTC mitigation/compensation.
231. Additionally, we question how the land take for nitrogen deposition for the LTC near Blue Bell Hill may or may not impact Kent County Council's ability to provide environmental mitigation for the Blue Bell Hill Improvements, that in part would be needed as a direct result of the proposed LTC. There must after all be limited land available in the area for such purposes.

Other postponed agenda items

232. We will monitor the upcoming future hearings and written questions in regard to any of the postponed agenda items and comment as needed at the appropriate time.

Issue Specific Hearing 7 (ISH7)

233. We wish to comment on iSH3: Project Design that took place on Monday 11th September 2023.

ExA's Questions on the dDCO

234. We definitely question the dDCO wording and share concerns in regard to start/commence as discussed at the hearing.

235. We also question and have concerns about the discussion regarding side agreements, and how if these were included into the project officially they would have further impact on the already low BCR. If side agreements are being made that bypass inclusion in the assessment of the cost and BCR of the project we seriously object, as it is another form of creative accounting and false economy.

236. In regard to NH comments that local highways authorities would be able to apply to Government for additional funding for maintenance that is needed as a result of the LTC, we share concerns that the London Borough of Havering would not be in a position to do this, so this matter needs to be properly addressed.

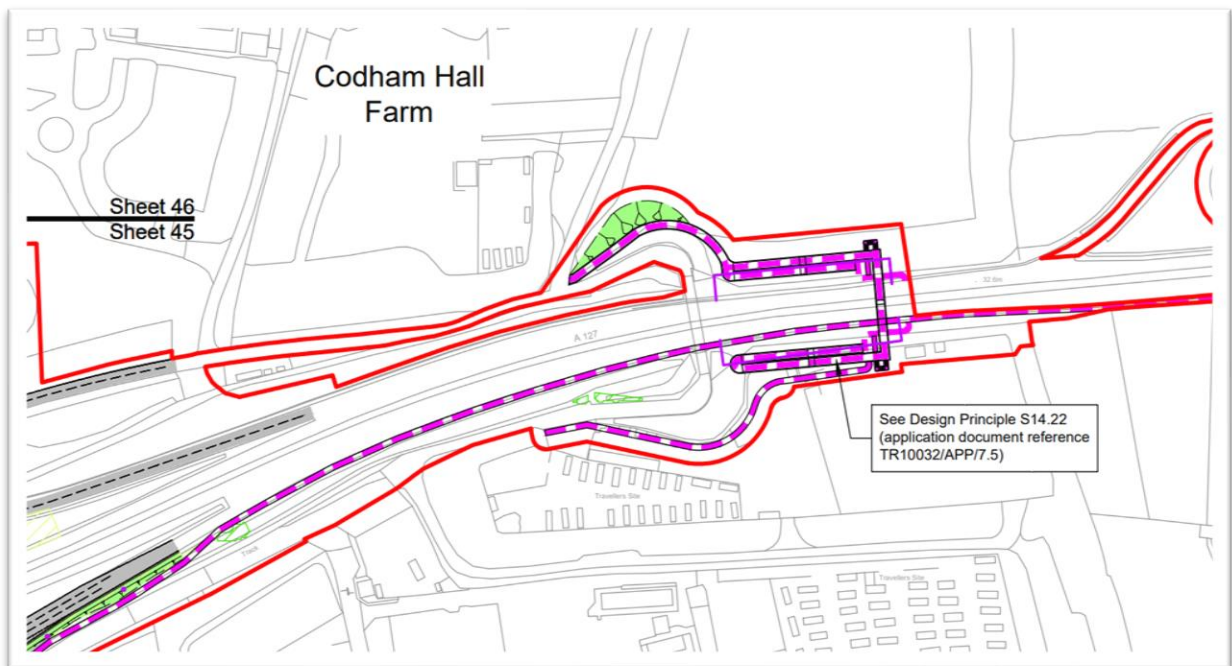
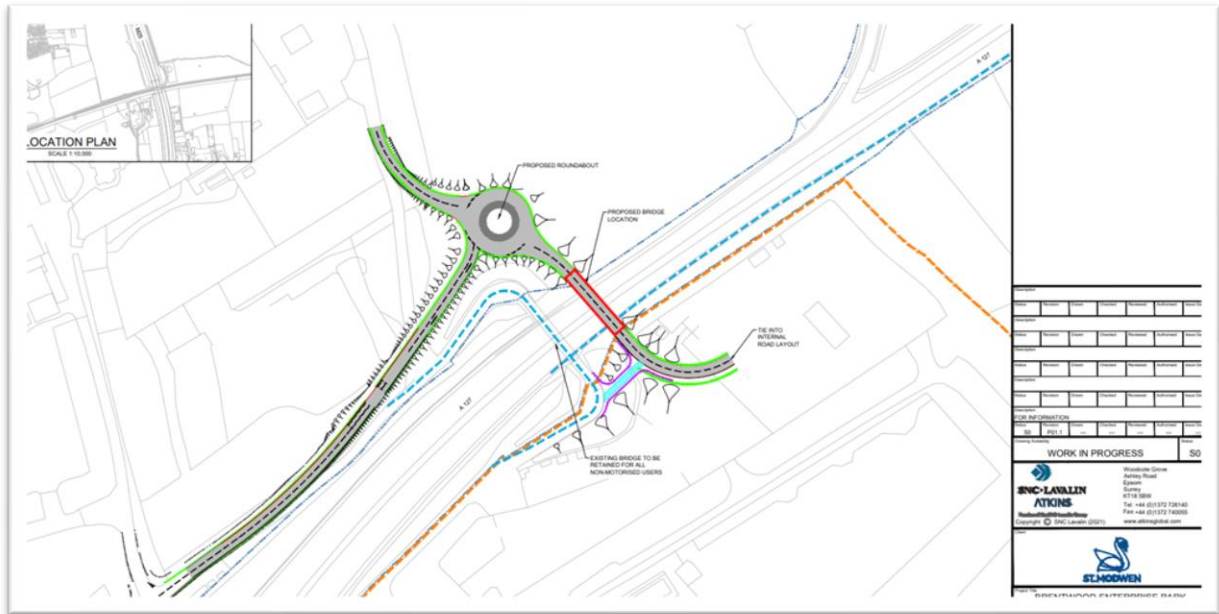
237. Additionally, there has been more reporting recently that the number of miles of road in England resurfaced or given life-extending treatment is at its lowest point in five years, according to an analysis of government data by the RAC. Some have gone so far as to say that stretches of highways could eventually be closed over structural integrity fears, which of course does nothing to improve resilience and congestion issues.

238. We also note that in a Transport Select Committee oral evidence session for their inquiry, it was highlighted about the lack of funding for roads and the urgent need for most investment into aging infrastructure and repairing and maintaining our roads.

239. Just because NH say that local highways authorities would be able to request additional funding doesn't mean it is guaranteed to be available and provided.

240. On the particular topic of the bridges across the A127 that was discussed in the hearing. We have had numerous people contact us voicing concerns about this aspect of the LTC project.
241. The fact the left-hand filter lanes to the south of the A127/M25/LTC parallel road would stop WCH crossing at this point as they currently do, has resulted in NH adding the two bridges each side of this junction saying users would be able to cross from south to north, cross the roundabout to the north, and then cross back north to south at the other side. This highlights the importance and necessity of both bridges for such a journey to be possible.
242. NH have been actively promoting the WCH routes, despite many of them not offering any real connectivity, and some being realigned despite NH attempting to claim them as 'new' routes.
243. In regard to questions about whether the bridges are required and appropriate we would comment that yes something is needed to allow the active travel east to west and vice versa on the A127. Also, that it was NH that suggested the bridges that they have been actively promoting to try and put a positive spin on the project.
244. Clearly the A127 is a busy road so any alternative option would need to take that into account, both for the safety of active travel and also for the traffic flow on the A127.
245. We also draw further attention to another planning application in regard to Brentwood Enterprise Park which was mentioned at the hearing. We feel this particularly relevant as it involves a bridge across the A127 right next to an existing bridge that would be retained for non-motorised users, and right next to one of the proposed LTC bridges across the A127.
246. This is also relevant to Additional Submissions - 10.25 Third Notification of Proposed Changes to the Planning Inspectorate - Accepted at the discretion of the Examining Authority [[AS-090](#)] which mentions a conflict between the planning application for Brentwood Enterprise Park and the proposed LTC.

247. The captured image below can be found online¹⁴ as part of the planning application 22/00402/FUL¹⁵ to Brentwood Borough Council.



248. The captured image above it taken from sheet 45 of the LTC General Arrangements Plans (Volume C) [APP-017].

¹⁴ https://publicaccess.brentwood.gov.uk/online-applications/files/A4A222081866BCCD6BB8E684B8DEF110/pdf/22_00402_FUL-ZZ-DR-CB-000010_C02_PROPOSED_OVER_BRIDGE_PLANNING_LAYOUT_1_OF_2-926976.pdf

¹⁵ <https://publicaccess.brentwood.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=R8J85QDJ00500>

249. Finally for this hearing, we note with interest comments by Kent County Council regarding the fact that NH are using the Black Cat DCO as an example in way to go against what most of the rest of us are saying, yet when they were actually during the Black Cat DCO they were against what they are now attempting to sell on the LTC project!
250. We agree with Thurrock Council and we also do not believe that the proposed LTC is consentable.

Accompanied Site Inspection 2 (ASI2)

251. We wish to comment on ASI2 that took place on Wednesday 13th September 2023, and in particular the visit to The Wilderness.
252. In light of the relevant agenda item on The Wilderness at ISH6 being postponed, we felt it would be helpful for us to share details that we shared at ASI2 that has yet to be submitted as evidence to the examination. We hope that it will be helpful that we present this now, rather than waiting for the postponed agenda item to be rescheduled.

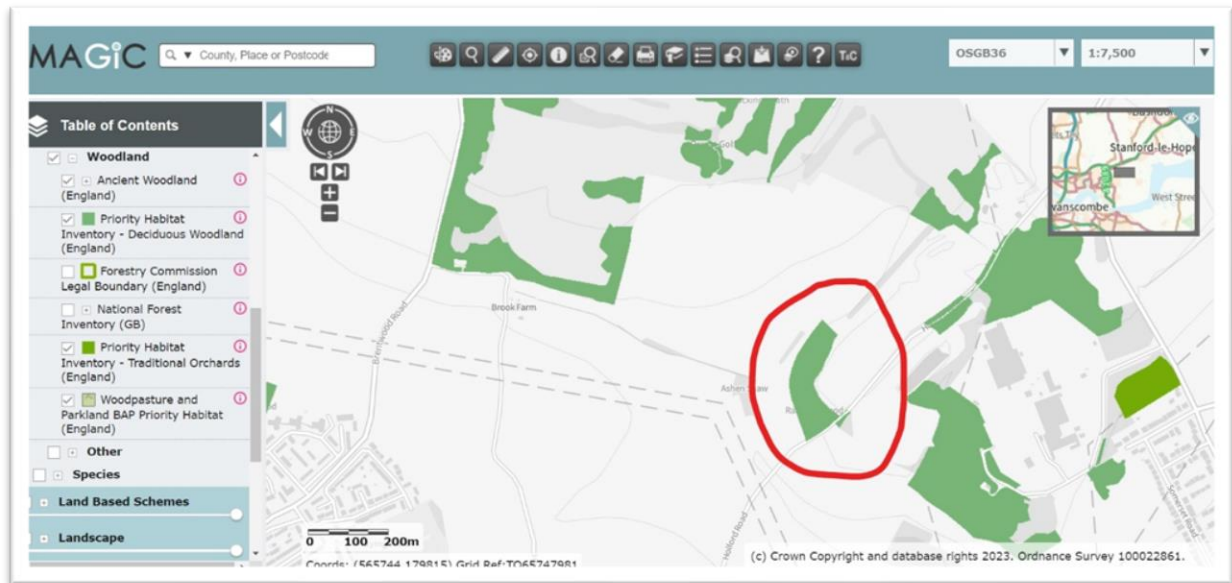
The Wilderness Ancient Woodland

253. Government advice for making planning decisions in regard to Ancient Woodland, ancient trees and veteran trees ¹⁶ states that an Ancient Woodland is “any area that’s been wooded continuously since at least 1600AD”.
254. “It includes: ... ancient semi-natural woodland mainly made up of trees and shrubs native to the site, usually arising from natural regeneration.”
255. The same document signposts to Defra’s Magic Map¹⁷, where Rainbow Wood seen captured below, circled in red.

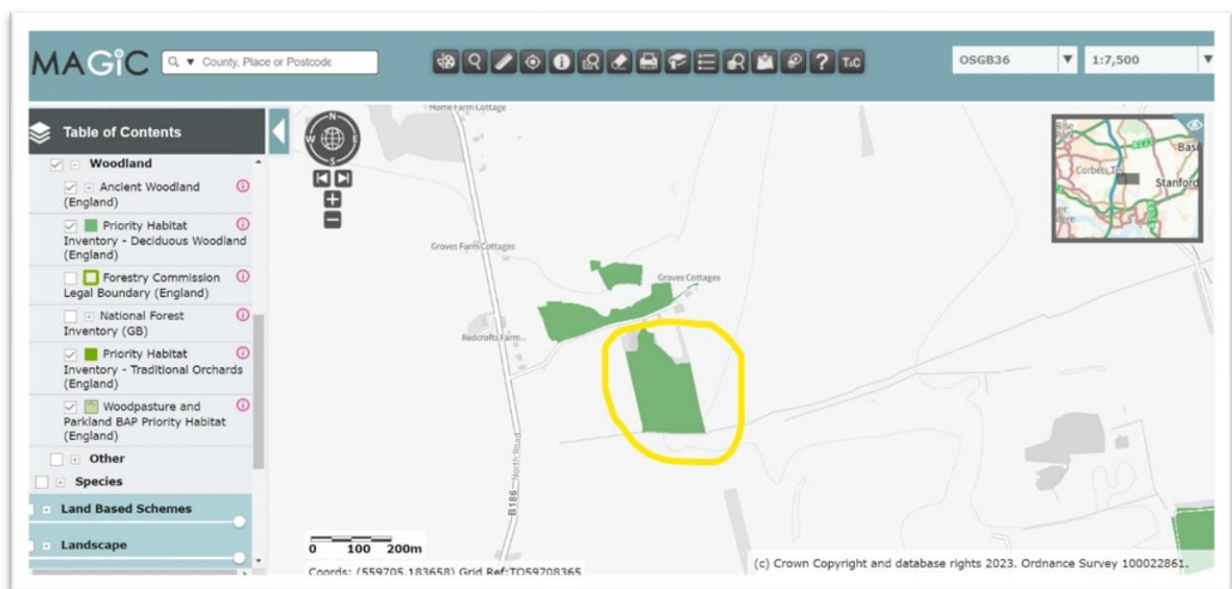
¹⁶ <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

¹⁷

<http://magic.gov.uk/MagicMap.aspx?chosenLayers=ancwoodIndex,bapdecIndex,orchardIndex,bapwoodIndex,backdropDIndex,backdropIndex,europaIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=207763:417195:576753:592195&useDefaultbackgroundMapping=false>



256. And The Wilderness captured below, circled in yellow



257. Both are the same category according to the legend on Magic Map. Yet Rainbow Wood is being considered as Ancient Woodland by National Highways in regard to the proposed LTC.

258. Why is this? Does it have anything to do with the fact that it is more convenient for NH not to consider The Wilderness as Ancient Woodland as they are so limited on options for this section of the route, due to the nearby landfill that would be a big expensive issue to deal with if they were to avoid The Wilderness?

259. As has been acknowledged Ancient Woodland needs to have been continuously wooded since 1600AD. However, finding evidence by locating records/maps that far back to prove this is extremely challenging, largely due to the fact that maps were not readily available in this time. Back then maps were for the rich, and did not include the detail that maps of today do where we can zoom in on satellite images. Smaller woodlands, like The Wilderness would be even less likely to have such records/maps.
260. That said we have managed, with help, to locate a map dating back to 1767 that shows The Wilderness. We also highlight that as places were generally named in a very descriptive way back then, it is highly likely that a woodland named The Wilderness in 1767 was not a few new saplings that had just been planted.
261. We presented evidence about The Wilderness in our Written Representation [[REP-425](#)] including Appendix C.
262. Natural England who consider woodlands for the Ancient Woodland Inventory said that LIDAR suggested possible disturbances in the southern section of The Wilderness (as per paragraph 41 of Appendix C).
263. We have presented evidence that the natural spring and watercourses naturally flow to the area in question and that any disturbance could just be due to natural water flows. In fact such occurrences could be what prompted the owners back then to add the ornamental ponds in the northern section of The Wilderness to reduce/control the natural water flow in to ponds rather than it all ending up in the southern section of woodland.
264. The southern most area of The Wilderness is where many of the ancient woodland indicators can still be found, including Spindle, Lime, bluebells, red campion, which suggests that the natural environment in this area is still in keeping with what is expected for Ancient Woodland.

NH contractor names The Wilderness as ancient woodland in article

265. In September 2022 industry publication UK Construction ran an article titled 'Greener Infrastructure'. The article was an interview with Keith Bowers, Engineering Director at COWI, with particular reference made to the

proposed LTC.

266. The article included the following, *“The Lower Thames Crossing is being developed to boost trade and travel by almost doubling road crossings across the Thames while simultaneously benefiting biodiversity, the climate, and communities across every aspect of construction.*

*It was conceived to protect and enhance local biodiversity from the outset. Designers opted to build the UK’s longest road tunnel to bore underneath the Thames Estuary and Marshes Ramsar site, an internationally protected breeding and feeding ground for wildfowl. As part of the engineering design, COWI worked with the projects design team to repeatedly revise the route to mitigate impacts on other protected areas from ancient woodlands to wetlands including six Sites of Special Scientific Interest (SSSIs). **For example, watercourse diversions were altered and retaining walls relocated to help protect The Wilderness, an ancient woodland with many rare bat species**”*

267. We have highlighted the bold and underlining to the above quote to highlight the most relevant section regarding The Wilderness.

268. In October 2022 we questioned NH whether they were now considering The Wilderness to be ancient woodland, and received the following response, *“I can confirm this was an error in the drafting of the article and the Wilderness is not ancient woodland. We have raised this with COWI who produced the article, which has now been corrected.”*

269. Indeed, the article was edited, but the original can still be viewed as evidence on the web archive¹⁸.

270. However, we would question why as recently as September 2022, just before the LTC DCO application was resubmitted COWI who are working on the project were clearly under the impression that The Wilderness was ancient woodland?

271. We do also have to wonder whether the article would have been ‘corrected’ if we hadn’t questioned NH about this. Also, whether this was an

18

<https://web.archive.org/web/20220909050956/https://www.ukconstructionmedia.co.uk/features/sustainability/greener-infrastructure/>

attempt to further greenwash the hugely destructive and harmful LTC?

272. This is another example of things not sitting right, either the contractor wasn't as familiar as they should be with the project, and/or NH don't want to acknowledge that The Wilderness should be considered ancient woodland, and/or this was another attempt to greenwash.

The Wilderness added to Long Established Woodland Inventory

273. Since submitting our Written Representation, we have recently had further communications with Natural England who have now confirmed that whilst there is still not sufficient evidence to award The Wilderness Ancient Woodland status, it has been added to the new Long Established Woodland Inventory.

274. This is a new designation and inventory, so new it is yet to be published, but we have had written confirmation from Natural England that the area highlighted in the map below (that NE sent us via email) has officially been added to the Long Established Woodland Inventory.



275. Long established woodland is a new category of woodland identified in the England Tree Strategy and most recently in Keepers of Time woodland policy document¹⁹.
276. Long established woodland is such a new designation it doesn't currently have any specific protections, but falls between ancient woodland and other semi-natural woodland habitat in the hierarchy of value detailed in the above policy.
277. Keepers of Time woodland policy details Long Established Woodland thus "Long established woodland has been present since at least 1893. While not ancient, these woodlands are still very important. They have had many decades to develop rich biodiversity and they often contain important old-growth features and deliver a range of ecosystem services."
278. The evidence we have provided Natural England pre-dates this requirement by over 125 years.
279. The reason for the new woodland designation being introduced was to recognise their important ecological and societal value.
280. We therefore believe that The Wilderness should be recognised as the irreplaceable woodland that it is. It is a magical woodland that is highly valuable in biodiversity and heritage terms. As one of the first woodlands to be added to the new Long Established Woodland Inventory it most certainly should not be destroyed by the unfit for purpose LTC.
281. After all the Keepers of Time: Ancient and native woodland and trees policy in England states that Government had identified a number of actions they are taking or will take in the short term to achieve the principals and strategic objectives of the policy.
282. This includes: recognising the value of and protecting long established woodland.

¹⁹ <https://www.gov.uk/government/publications/keepers-of-time-ancient-and-native-woodland-and-trees-policy-in-england>

283. Surely a project that is being claimed to be the 'greenest road every built in the UK' should not be destroying one of the first woodlands in the country to be awarded Long Established Woodland status?

The Wilderness – additional evidence

284. We would also like to take this opportunity to draw attention to some additional ecology evidence that we have recently obtained.
285. In the last few days Earthstar fungus has been recorded in The Wilderness, in an area near to the bee hives. We believe that whilst widespread this fungus is not common in England.



Independent bat surveys

286. We have also recently been provided with details of independent bat surveys that have been carried out on a number of dates since 2019, by a consultant ecologist and committee member of Essex Bat Group, who has

significant experience in bat ecology and holds a number of different bat licences.

287. During these surveys they noted a total of eight species utilising the woodland. This is significant as to date there are only 10 confirmed species within Essex and to have eight of them utilising a woodland, particularly one that's isolated, such as The Wilderness, shows the significance of this habitat for bat populations. The fact that the woodland doesn't have public access and the light touch on management the ecologist thinks significantly adds to the value of this woodland for wildlife, notably bats. It really is rather unique. There is far less disturbance than in woodlands with public access and reduced footfall has allowed the retention of large areas standing dead wood and decaying trees that in a woodland with public access would likely require removal due to the risk of harm from tree failure. Loss of the woodland would likely result in the loss a valuable habitat suspected to be relied upon by foraging bats at a population level. The ecologist is also confident that there are numerous bat roosts present within the woodland as it is littered with potential roosting features, largely due to the reasons stated above.

288. Bat species confirmed present:

- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Daubenton's Bat (*Myotis daubentonii*)
- Natterer's Bat (*Myotis nattereri*)
- Noctule (*Nyctalus noctula*)
- Leisler's Bat (*Nyctalus leisleri*)
- Serotine (*Eptesicus serotinus*)
- Brown Long-eared Bat: (*Plecotus auritus*)

289. We have been provided with more detailed data and links to map plotting that can be shared upon request if needed.

290. We believe this further shows the value and importance of The Wilderness, and further reason why it should not be destroyed and impacted by the proposed LTC.