

Lower Thames Crossing Examining Authority

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Submitted online

15th December 2023

Dear Sirs,

**Lower Thames Crossing – Planning Inspectorate Ref: TR010032:
Further Submissions on behalf of Mrs J. Carver, of Franks Farm, St Mary’s Lane,
Cranham, Upminster, RM14 3NU (Interested Party Refs: LTC-AP1205 and
20035706)**

**Requested Amendments to Document 7.21: Stakeholder Actions and
Commitments Register and Document 6.2 Environmental Statement Figures,
Figure 2.4 – Environmental Masterplan Section 14 (10 of 10)**

1. Further to our previous written submissions dated 19th September 2023 and 17th November 2023, on behalf of Mrs Carver we write to set out our unresolved objections and requested compensatory and mitigation measures concerning the impacts of the DCO scheme on Franks Farm. Also, if the Examining Authority (ExA) is minded to recommend approval of the DCO, we also request that our identified measures are considered for inclusion within any recommendation to the Secretary of State for Transport. It is considered that without the requested measures, the proposed development would fall short of relevant planning policy requirements.

Background

2. The background to Mrs Carver’s position is set out in our letter dated 19th September 2023. In summary, Mrs Carver does not contest the need for the development in the national interest. However, the proposed development involves the permanent and temporary acquisition of approximately 3.6 hectares (8.8 acres) of her Estate at Franks Farm including the removal of approximately 1.83 hectares (4.5 acres) of purpose-planted established woodland on the eastern and south-eastern boundaries, which provides an effective screen to the M25 motorway.
3. The highway works would involve an incursion into the property of between approximately 17.7 metres (at the northern end) and 50.28 metres (at the southern end) as shown on the submitted plans within the associated photograph schedule at **Appendix 1** to this submission.

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4. The land acquisition and works are required to accommodate the proposed new carriageway and embankments etc associated with the intended Lower Thames Crossing (LTC) route where it merges with the M25 and to also allow for an extended junction with the A127 at Junction 29. The LTC Team has confirmed that the height of the existing motorway carriageway is 19 metres AOD, which is 8 to 9 metres above the surrounding ground level. This is proposed to be raised by a further 1.5 metres as part of the works.
5. Notwithstanding the current impacts experienced as a result of the M25, the consequential impact of the proposed development will undoubtedly have a profound effect on the amenity and quality of life enjoyed by Mrs Carver at Franks Farm both at the construction and operational phases. The visual impacts of the development, including the removal of woodland, should not be underestimated and the photograph schedule and viewpoint plans of the existing woodland at **Appendix 1** speak volumes in themselves. Much of this area contains densely planted tree cover, as viewed by the Examiners on the accompanied site visit held on 14th September 2023.
6. The level of existing tree cover purposely planted by Mrs Carver is extensive and is performing its intended screening function exceptionally well. However, the extent of tree removal and encroachment of the extended highway (including embankment works and approximately 200 metres of vertical sided retaining wall) into the property will again expose the entire 500m length of Franks Farm's eastern boundary to the Motorway. This would result in a significant negative and degraded outlook from the property and its setting as a residence and Grade II listed heritage asset, along with an associated loss of privacy and security.
7. Despite the significant impact of the loss of woodland and an acknowledged need to provide some form of replacement planting, unfortunately the principle of establishing a new dense woodland has not been fully agreed with National Highways (NH).
8. Noise levels above accepted standards for residential exposure are also expected to continue to be breached at both the construction and operational stages of the development and, therefore, there is a need to secure appropriate compensatory measures to mitigate these significant impacts.
9. There are other outstanding matters yet to be resolved, which are summarised below and included in our draft updated Stakeholder Actions and Commitments Register (SACR) schedule for Franks Farm.
10. A series of meetings with the LTC team at National Highways (NH) prior to and post various hearing sessions have taken place with LPP. However, whilst a number of matters have been clarified, there remain some significant outstanding issues, which we would request the ExA to consider and address as part of its assessment of the DCO as set out below.

Planning Policy Context and Position

11. It is understood that when considering the merits of the DCO as a Nationally Significant Infrastructure Project (NSIP) and determining the application itself, the applicant and decision maker should have regard to and take into account the policies set out in National Policy Statement for National Networks (2014) (NPSNN). In turn, and as set out in paragraph 1.18 of the NPSNN, the NPPF is identified as likely to be an important and relevant consideration in decisions on NSIPs, but only to the extent that it is relevant to that project. The NPSNN also states at paragraph 3.3 that, when delivering new schemes, the Government expects applicants to avoid and mitigate environmental and social impacts in line with the principles set out in the NPPF and the Government's planning guidance.

12. The requested compensatory measures identified in this submission would, in our view, be necessary to help ensure consistency and compliance with the requirements of the following NPPF policies:
- Paragraphs 145 - concerning the retention and enhancement of Green Belt landscapes and visual amenity;
 - Paragraph 185 - concerning the need to ensure development is appropriate for its location taking account of the likely effects of pollution on health and living conditions by mitigating and reducing to a minimum, potential adverse impacts resulting from noise from new development – and to avoid noise giving rise to significant adverse impacts on health and the quality of life; and
 - Paragraphs 197 a) & c) concerning the desirability of sustaining and enhancing the significance of heritage assets in line with the statutory preservation test set out in Section 66(1) of the Planning (Listed Buildings & Conservation Areas) Act 1990.
13. With the above planning policy context in mind, it is considered that the proposed development, in respect of the section affecting Franks Farm, falls short of meeting the planning policy requirements concerning the provision for adequate mitigation to address identified and acknowledged adverse landscape, noise pollution, heritage asset setting and residential amenity (including privacy and security) impacts. However, the compensatory measures requested within this submission would help to offset the impacts of the proposed development on Franks Farm, consistent with relevant planning policy requirements.

Matters to be Determined and Agreed

14. As mentioned above, a series of meetings with the LTC team at National Highways (NH) prior to and post various hearing sessions have taken place with LPP. However, whilst a number of matters have been clarified, there remain some significant outstanding issues, which we would request the ExA to consider and address as part of its assessment of the DCO as set out below.

Suitable Replacement Woodland Planting (SACR Ref. 011 & 11a)

15. Notwithstanding the impact of the loss of woodland referred to above, and an acknowledged need to provide replacement planting, unfortunately the principle of the new woodland planting has not been fully agreed with NH.
16. NH officers have said that the principle of agreeing to woodland planting could be dealt with at the detailed design stage. However, in the interest of establishing some certainty and consistency with other parts of the scheme there needs to be a commitment within the SACR and Environmental Masterplan to providing woodland planting to reflect the existing character and density currently in situ. This needs to be applied to the new embankments abutting the eastern boundary to the retained land at Franks Farm.
17. In addition, as NH are not prepared to provide a green wall to the 200 metre length of retaining wall east of the courtyard area, or provide for a replacement barn to screen the retaining wall 'cliff face', a commitment is required to provide semi mature and mature dense woodland planting for the level area in between, which varies in depth from 8.85 metres to 13.88 metres.

18. Without such a commitment, there would be no suitable reference document or commitment to refer to at the subsequent detailed design stage, leaving an unsatisfactory, uncertain and ambiguous position for Mrs Carver. It should be noted that the Environmental Masterplan currently indicates shrub planting with intermittent trees in these areas, which is considered to be inappropriate and inadequate, given the current level of woodland screening and the scale and height of the retaining wall and embankment as proposed (i.e. approximately 10.5 metres above local ground level).
19. Therefore, to address this issue, it is requested that the SACR is amended to include reference to a commitment to provide and maintain a dense cover of woodland planting to reflect the characteristics of the existing woodland (being both lost and retained) and the further open area between the proposed retaining wall and edge of the retained land to the west adjacent to the farm courtyard. The proposed amendments are set out in the working-draft SACR document at **Appendix 4**.
20. In addition to the SACR, it is requested that the Environmental Masterplan Section 14 (10 of 10) (Ref. REP2-031) is amended to indicate dense woodland planting on the area of land in question on the plan and referenced in the Legend too. A proposed adaptation to the masterplan is provided at **Appendix 2**.

Suitable Acoustic Compensation (Construction & Operational Stages) – SACR Refs. 014 & 015

Operational Stage - SACR Ref. 014

21. Notwithstanding the acknowledged noise impacts to be experienced at Franks Farm at the operational stage, which will fall short of accepted standards of noise exposure for residential property, NH has been unwilling to provide the requested noise mitigation measure comprising an acoustic fence to the top edge of the new embankment. Although NH has acknowledged this measure would have a beneficial impact on the occupants of Franks Farm as sensitive receptors, such provision was said to be not cost effective.
22. It is not clear what the cost consideration criteria or threshold is for this type of measure is, but it seems to be very much a subjective matter and the cost of such provision does not seem to be a planning policy consideration, when considering the impact on an individual's quality of life.
23. Further advice on noise impact and mitigation has been sought by acoustic consultants Sharps Redmore (SR) who concluded in its Technical Note (see **Appendix 3**) that the provision of acoustic fencing would be appropriate in this instance, which would also be consistent with the policy aims of the National Policy Statement for National Networks (NPSNN). SR have also subsequently advised that such a screen along the eastern boundary of the site will, as required by Section 5.195 of the NPSNN, contribute to improvements to the health and quality of life of Franks Farm's occupiers who have suffered a deterioration in living conditions as a result of previous widening of the M25.
24. The acoustic fencing could also serve an additional purpose of providing privacy and security to Franks Farm, which would otherwise become visually exposed from the top of the embankment. It should also be noted that the new height of the embankment would also encroach further into the property, thereby exacerbating the situation.
25. It is, therefore, requested that an acoustic fence is provided as part of the compensatory measures as included in the draft SACR schedule at **Appendix 4**. Also, in the event that the ExA does not consider that an acoustic barrier should be provided, it is requested that, as a fall back, a 2 metre close boarded

fence should be provided along the top of the embankment for the entire 500 metre length to provide for privacy and security and hopefully some respite from the excessive noise levels.

Construction Phase – SACR Ref. 015

26. At the construction stage there will be an acknowledged significant impact on the level of noise disturbance experienced at Franks Farm, with the extent of mitigation at this stage being uncertain. Consequently, to reduce noise levels at this stage SR recommended a trenchless installation at work no.MU83 is carried out inside a temporary acoustic enclosure/ building with adequate ventilation and robust implementation of BPM measures (NV007). SR estimated that the BPM measures will reduce noise levels by around 10 dB and the acoustic enclosure around 15 dB (based on BS 5228-1). This proposed measure has, therefore, been included within our proposed SACR at **Appendix 4**.
27. Temporary Accommodation - NH has clarified that the provision of temporary accommodation is dealt with elsewhere in the DCO and, therefore, considered that there was no need to duplicate such provision in the SACR. However, the precise references or assurances have not been received and therefore, the requested provision as advised by SR is included in our proposed SACR list (Ref. 015) at **Appendix 4**.

Other Matters to be Resolved

Drainage Pond Land – SACR Ref 010 & 010a

28. There is a commitment to use reasonable endeavours to minimise the permanent land acquisition associated with the drainage pond at Franks Farm.
29. There is also a commitment to use reasonable endeavours to minimise the removal of existing trees and hedgerows at Franks Farm. NH confirmed that replacement planting following failures is a general commitment with in the DCO and, therefore, does not need to be replicated in the SACR.
30. NH have additionally agreed to a commitment to provide a timber post-and-rail stock-proof fence to the field boundaries where hedgerows, trees and fencing are to be removed, to help compensate for the loss of established hedgerows around fields that currently contain livestock. The fencing needs to be provided prior to the land being first occupied by NH to avoid any potential break in the use of the paddocks for containing livestock. Replacement tree and hedgerow planting also needs to be provided.

Treatment of Felled Trees & Boundary Treatment – SACR Ref. 011

31. In addition to a replacement planting scheme within SACR Ref. 011 referred to above, there is a proposed commitment to allow Mrs Carver to retain the timber from the trunks of the felled trees, which would be cut into sizeable lengths and stacked at an agreed location with the retained property, with the branches removed from the trunks and taken away from the site by the appointed contractor.
32. For completeness, it is requested that a further commitment is included to provide a timber post-and-rail stock-proof fence to the new eastern field boundaries within areas 44-21 and 44-32 where trees are to be removed, to provide for a suitable new boundary with the extended highway. The fencing would need to be provided prior to the land being first occupied by NH to avoid any potential break in the use of the paddocks for containing livestock.

Retaining Wall Treatment – SACR Ref. 011a

33. The previous request for a green wall has been dropped in favour of the provision of a dense woodland tree belt in the area to the west of the proposed wall. Please note that, if provision of the requested woodland planting is not agreed here, we request that a green wall approach to the retaining wall is included within the DCO.

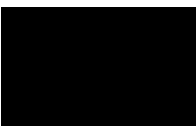
Retention of Vegetation on Land Required for Temporary Possession (Plot 44-07) - SACR Ref. 012

34. There is a commitment to minimise the loss of trees and hedgerows along the field boundaries to the part of the paddock required for temporary storage, laydown areas and working space. However, there is a need to agree the duration of possession of this area preferably through a licence agreement, which remains unresolved.

Replacement Water Treatment Plant – SACR Ref. 013

35. There is a commitment to replace the existing water treatment plant if it needs to be decommissioned. However, there needs to be suitable wording to allow for there to be a continual water treatment plant to remain in operation to serve Franks Farm as suggested in the SACR schedule.
36. As explained above, a series of follow-up meetings have occurred with NH, although due to time constraints experienced by the LTC Team, not all of the above matters have been fully resolved by the final submission deadline on 15th December 2023. Therefore, the unresolved matters, which we are requesting the ExA to address as part of the determination process are also referred to in our draft SACR document at **Appendix 4**.
37. We trust you will find this submission to be helpful in your consideration of the DCO application and we would of course be content to clarify any of the points further if and when needed.

Yours faithfully



John Lawson
Lawson Planning Partnership Ltd

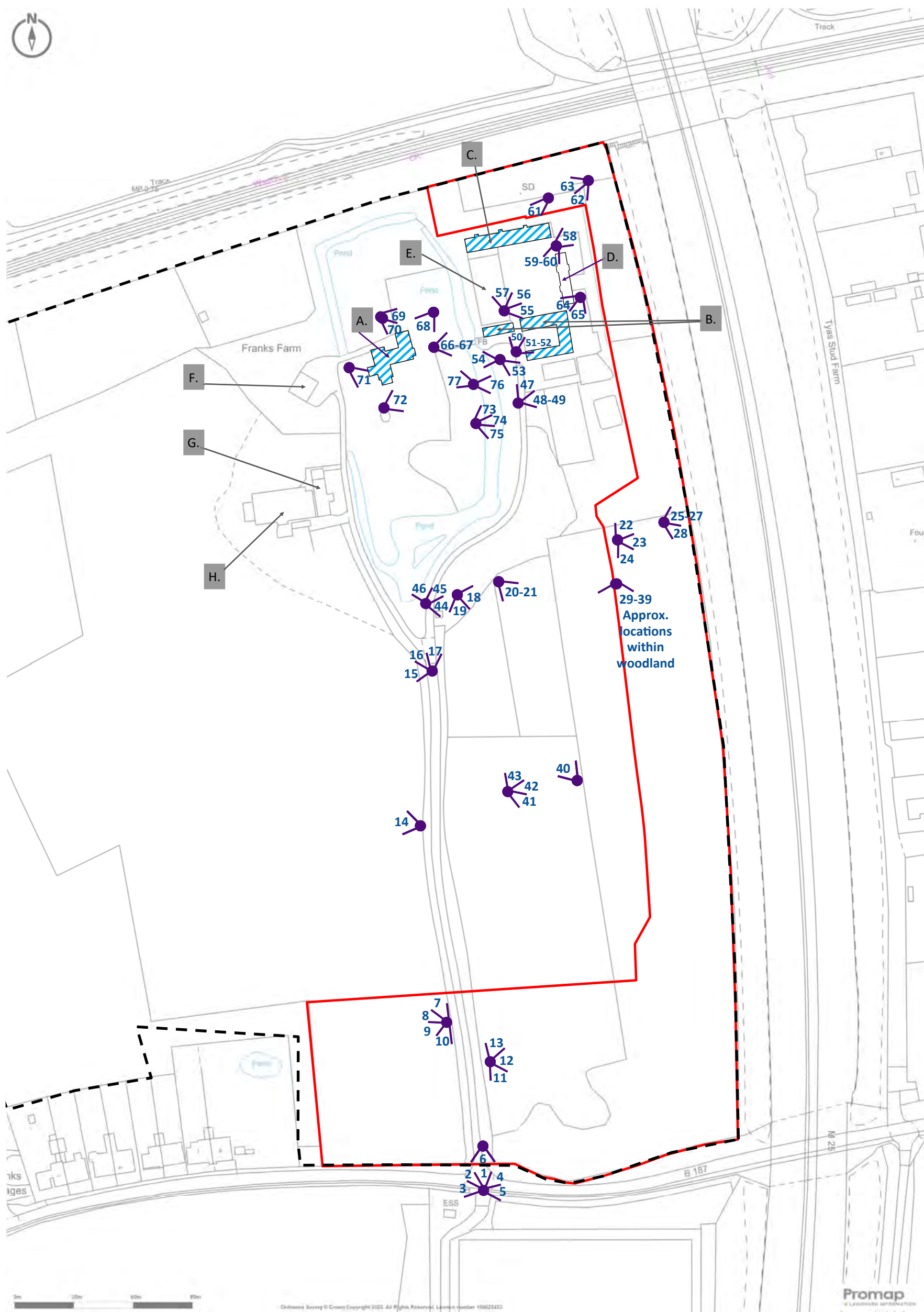
Encs (LPP Photographic survey & viewpoint plan, Extract from 7.21 Stakeholder Actions and Commitments Register (Clean version) LPP Comments 14.12.23), extract from Environmental Masterplan Section 14 Sheets 1 & 2 (adapted by LPP)

Cc: Sarah Collins and Anne Richards – LTC National Highways
Heidi Smith - Sworders Chartered Surveyors
Mrs J Carver



Appendix 1

Photographic Survey of Franks Farm Estate & Viewpoints Plans



Aerial Viewpoints Plan
(see accompanying Photographic Schedule)

Franks Farm, St Mary's Lane, Cranham:

Lower Thames Crossing

Client: Mrs J. Carver

Date drawn: 24/10/2023

Survey date: 17/10/2023

Drawing no. LPP/147/23/LTC03

Scale: 1:2000 at A3 size

Do not scale

- Key:**
- Franks Farm Curtilage
 - Order Limits/ LTC Application Boundary
 - Grade II Listed Buildings/Curtilage Buildings
 - 1 Photographic Viewpoint

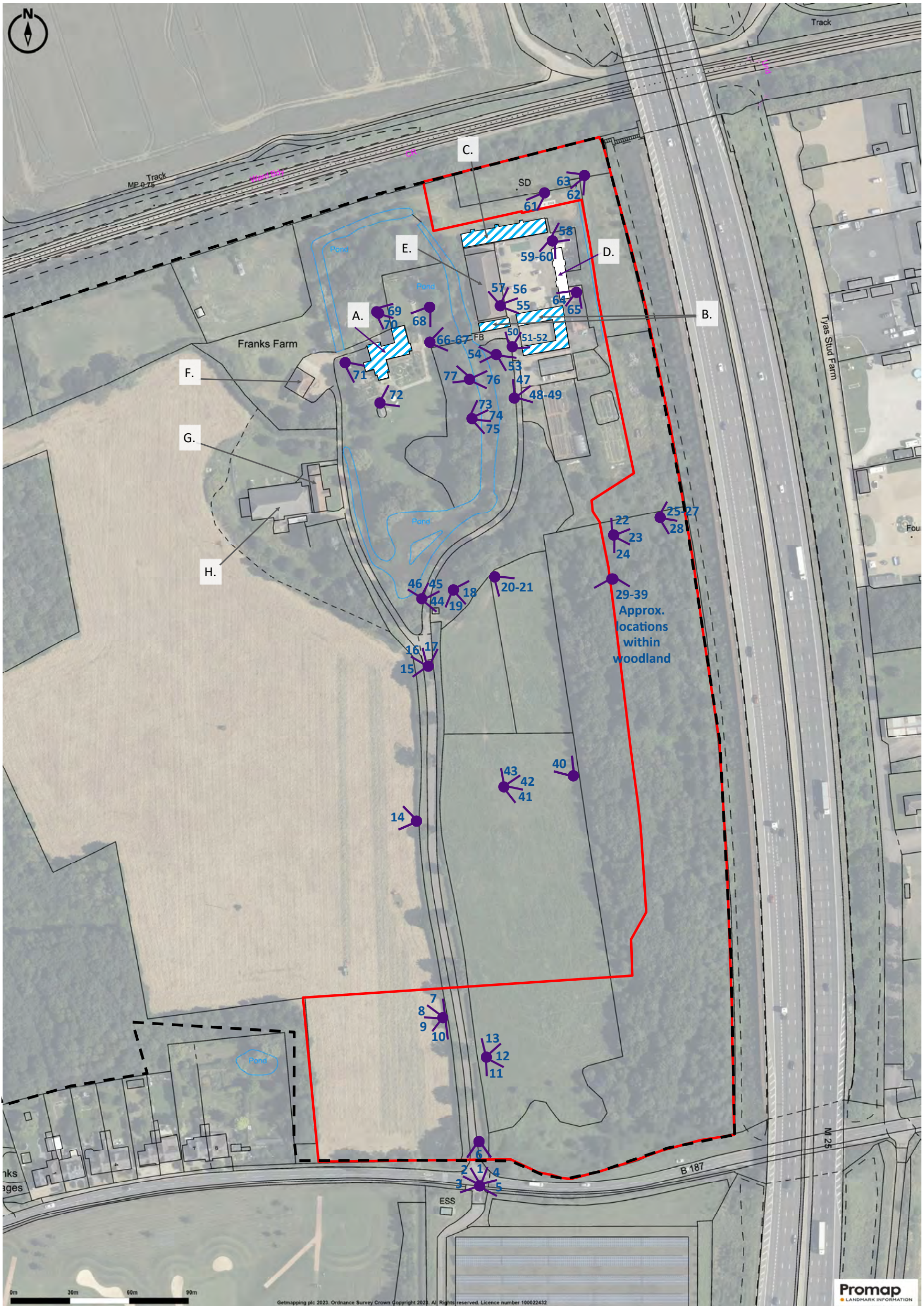
- A. Franks Farmhouse
- B. Buildings Consented for Use Class E Office & Leisure Uses (refs. L0003.22/P0269.22)
- C. Existing Gymnasium/Fitness Centre (ref. LHC E0029.21)
Current C/U application for Offices (refs. L0007.23/P1359.23)
- D. Proposed Reinstated Barn
- E. Use Class E/B Commercial Building (ref. P0451.12)
- F. Existing cartlodge
- G. Existing gymnasium
- H. Existing swimming pool building

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Viewpoint 1



Viewpoint 2



Viewpoint 3



Viewpoint 4



Viewpoint 5



Viewpoint 6



Viewpoint 7



Viewpoint 8



Viewpoint 9



Viewpoint 10



Viewpoint 11



Viewpoint 12



Viewpoint 13



Viewpoint 14



Viewpoint 15



Viewpoint 16



Viewpoint 17



Viewpoint 18



Viewpoint 19



Viewpoint 20



Viewpoint 21



Viewpoint 22



Viewpoint 23



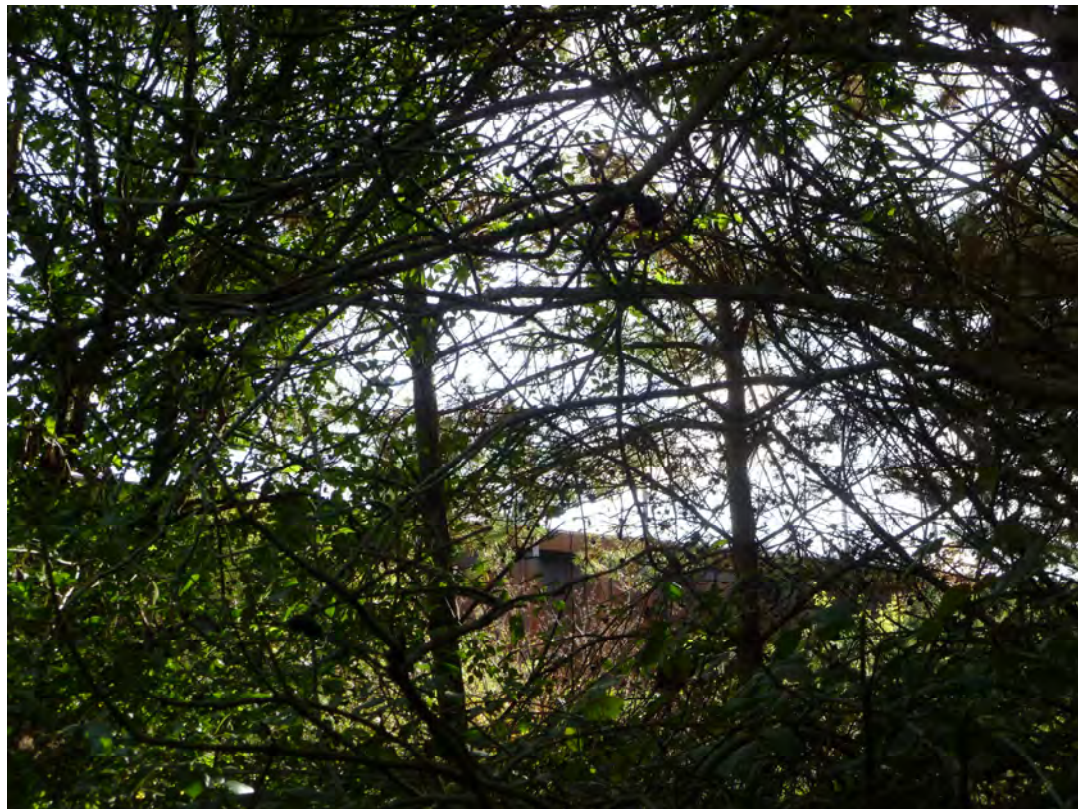
Viewpoint 24



Viewpoint 25



Viewpoint 26



Viewpoint 27



Viewpoint 28



Viewpoint 29



Viewpoint 30



Viewpoint 31



Viewpoint 32



Viewpoint 33



Viewpoint 34



Viewpoint 35



Viewpoint 36



Viewpoint 37



Viewpoint 38



Viewpoint 39



Viewpoint 40



Viewpoint 41



Viewpoint 42



Viewpoint 43



Viewpoint 44



Viewpoint 45



Viewpoint 46



Viewpoint 47



Viewpoint 48



Viewpoint 49



Viewpoint 50



Viewpoint 51



Viewpoint 52



Viewpoint 53



Viewpoint 54



Viewpoint 55



Viewpoint 56



Viewpoint 57



Viewpoint 58



Viewpoint 59



Viewpoint 60



Viewpoint 61



Viewpoint 62



Viewpoint 63



Viewpoint 64



Viewpoint 65



Viewpoint 66



Viewpoint 67



Viewpoint 68



Viewpoint 69



Viewpoint 70



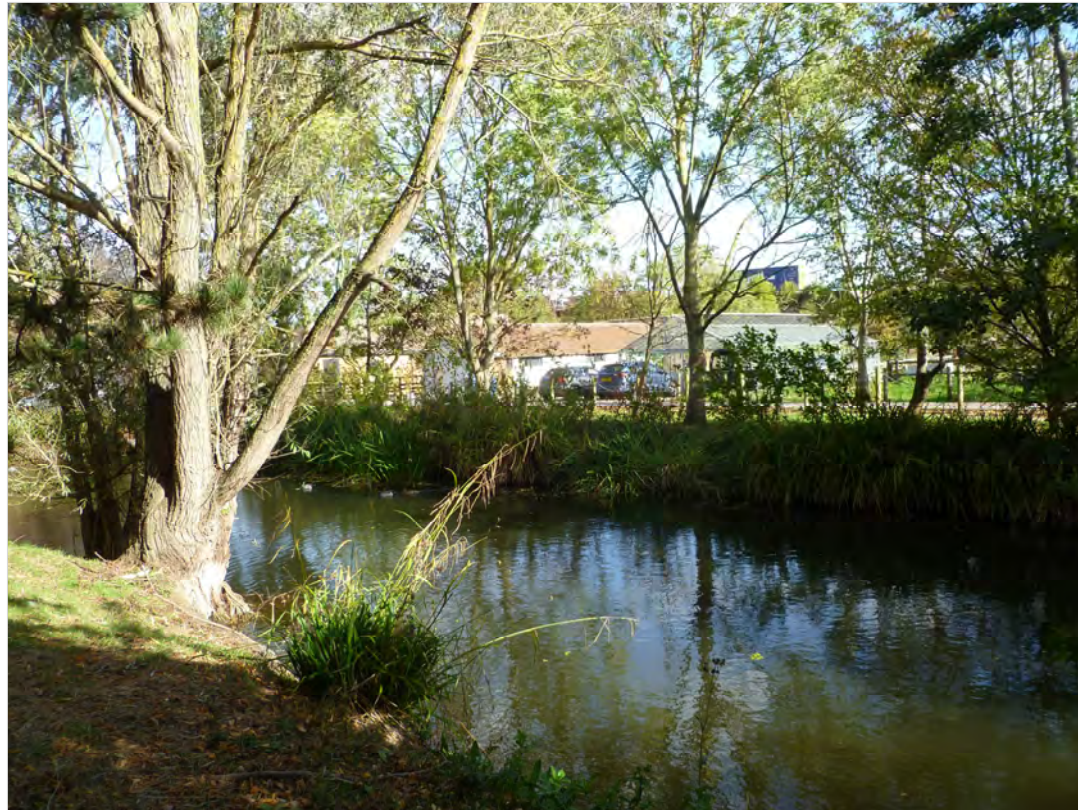
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Viewpoint 72



Viewpoint 73



Viewpoint 74



Viewpoint 75



Viewpoint 76

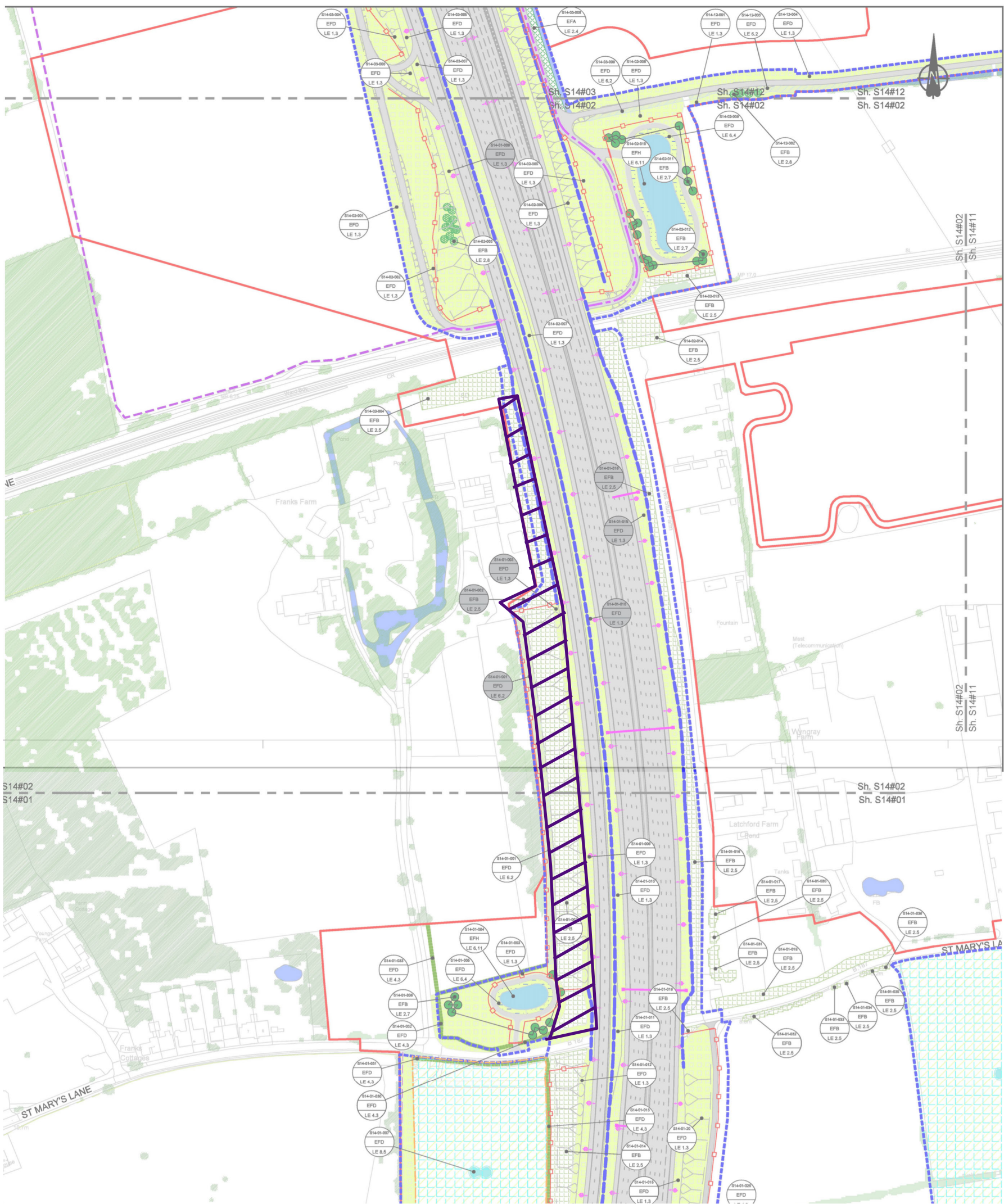


Viewpoint 77



Appendix 2

LPP Adaptation of Environmental Masterplan Section 14 Sheets 1&2



Annotated Environmental Masterplan (Section 14, Sheets 1 & 2)

Adapted from National Highways plans:

HE540039-CJV-EGN-SZZ_EN000000_Z-DR-ZZ-00001 Legend
 HE540039-CJV-EGN-S14_EN000000_Z-DR-ZZ-00002 Section 14 Sheet 1
 HE540039-CJV-EGN-S14_EN000000_Z-DR-ZZ-00003 Section 14 Sheet 2

Franks Farm, St Mary's Lane, Cranham:

Lower Thames Crossing










Client: Mrs J. Carver

Date drawn: 15/12/2023

Drawing no. LPP/147/23/LTC04

Do not scale

Planting (LE 2)

-  LE 2.1 Woodland
-  LE 2.11 Woodland With Non-Native Species
-  LE 2.14 Wet / Carr Woodland
-  LE 2.2 Woodland Edge
-  LE 2.22 Scrub Woodland
-  LE 2.4 Linear Belt of Shrubs and Trees
-  ~~LE 2.5 Scrubs With Intermittent Trees~~ Amended to read: LE 2.1A 'Dense Woodland Planting'
-  LE 2.7 Scattered Trees
-  LE 2.8 Scrub / Scattered Scrub

Hedges (LE 4)

-  LE 4.3 Native Species Hedge (untrimsed)
-  LE 4.4 Native Hedgerow With Trees

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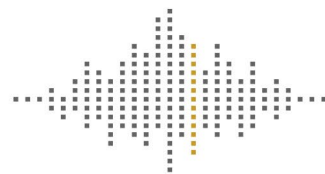
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Appendix 3

Sharps Redmore (Acoustic Consultants) Technical Note 1 (12th September 2023)



Reference: Lower Thames Crossing – Noise and Vibration

Project No: 2321638

Date: 12 September 2023

Technical note 1

Sharps Redmore (SR) has previously provided comments on the noise and vibration assessment (ES Chapter 12) carried out at part of the Lower Thames Crossing (LTC) Development Consent Order (DCO).

These comments were included in a report dated 23 May 2023 (SR report) and summarised in the letter from Lawson Planning Partnership LLP dated 28 June 2023, which was submitted on behalf of Mrs J Calver of Franks Farm, St Marys Lane, Cranham.

National Highways (NH) have responded and their comments are included in the Lower Thames Crossing, document 9.53 'Comments on WR's – Appendix F – Landowners.¹ The purpose of this note is to respond to comments made in this document (REP1-389).

Point 2: Baseline Noise Levels.

SR would accept that in relation to the assessment of road traffic noise, the use of computer modelling based on traffic flows, is the preferred method to predict noise levels.

The comments in relation to the baseline survey is relevant to the assessment of construction noise, where the noise limits in BS 5228 are based on existing ambient noise levels. (Table E.1 BS 5228). Reference is made in the NH Response to Table 2.8 of ES Appendix 12.4 Construction Noise and Vibration Assessment and the daytime measurements carried out at noise monitoring location A-NML 27 which have been used to set the LOAEL and SOAEL for construction noise.

Although no night time measurements were recorded at A-NML-27 it is noted that in Table 2.8 measured noise levels of 44.9 dB are recorded. It is unclear where this level has been derived from and should be confirmed.

Point 3: Construction Noise

With regard to construction noise as outlined within the SR Report the main consideration is the noise impact from night time activity. The NH response refers to the assessment within ES Chapter 12: Noise and Vibration which concludes following mitigation the noise impact from night time construction noise at Franks Farm (Receptor CN134) will be reduced from 'major' to an acceptable level below the significant observed adverse effect level (SOAEL). The mitigation measures are set out in ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental

¹ Planning Inspectorate Scheme Ref:TR010032, Document reference TR010032/EXAM/9.53

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Company Consultant TL Redmore BEng, MSc, PhD, MIOA



Management Plan. These mitigation measures including NV001, NV002 and NV004 refer to the guidance in BS 5228 (NV001), preparation of Noise and Vibration Management Plan (NVMP) (NV002) and the application for prior consents (NV004) under the Control of Pollution Act 1990. The impact of these mitigation measures have not been quantified and relate to management controls rather than any physical measures.

The impact of construction noise at Franks Farm is specifically referred to in Table 12.35 of the ES Chapter 12, where it is advised that the unmitigated reasonable worst case construction noise levels will have a 'moderate or greater impact during the evening and night-time periods. Where reference is made to greater than moderate impacts it is assumed that this is 'major' as outlined in section on construction noise impact criteria within the ES Chapter. It is reported that there would be a maximum exceedance of 3.3 dB(A) above evening SOAEL and 13.2 dB(A) above night time period SOAEL.

As advised the main consideration is in relation to night time construction noise, using the noise levels predicted in Appendix 12.4 Construction Noise and Vibration Assessment for Franks Farm (CN 134) the SOAEL will be exceeded by around 13dB for 10 consecutive months (Months 3- 13), 5 dB (months 18 – 23), and 6dB (month 45). It is evident that without mitigation noise level from night time construction work will cause a major impact for 11 consecutive months. Therefore, to reduce noise levels it is recommended that the trenchless installation at work no.MU83 is carried out inside a temporary acoustic enclosure/building with adequate ventilation and robust implementation of BPM measures (NV007). It is suggested that the BPM measures will reduce noise levels by around 10 dB and the acoustic enclosure around 15 dB (based on BS 5228-1).

In relation to the acoustic enclosure the advice in BS 5228-1 is that an enclosure will reduce noise levels from up to (SR emphasis) 15 dB. In addition, it is not possible with any degree of accuracy to quantify the impact of the BPM measures as set out in NV007.

It is advised in paragraph 2.2.8 of Appendix 12.4 Construction Noise and Vibration Assessment that a significant adverse effect (the test in the section 5.195 of the NPSNN) will occur where noise levels will exceed the SOAEL for (a) 10 or more days or nights in any 15 consecutive days or nights or (b) a total number of days exceeding 40 in any consecutive months.

As advised above it has been predicted that noise levels will exceed Franks Farm (CN134) by more than 13dB for 10 consecutive months. Therefore, to avoid significant adverse impact, as suggested in the ES Chapter 12, it will be necessary to reduce noise levels by at least 13dB during this period. It is SR's view that based on the mitigation measures proposed, this is highly optimistic, and that even with the mitigation measures, there will be a significant adverse residual impact at Franks Farm from night time construction activity in contradiction to the policy aims of the NPSNN.

Point 4 &5 – Operational Noise

It is accepted that the assessment of noise Design Manual for Roads and Bridges (DMRB) LA111 is not based upon internal noise level within BS 8233:2014. SR also has no comments to make in relation to the assessment of road traffic noise and as advised in the conclusions of the SR report it is agreed that based on this assessment there will be a slight reduction in short-term and long-term noise levels.

However, BS 8233 does provide useful guidance on suitable noise levels for residential properties. The guidance levels in the document (Table 4) are based on a wide body of research including the World Health Organisation (WHO). It is evident from the survey carried out by SR and the noise assessment (ES Chapter 12) that noise levels at Franks Farm are significantly above the recommended criteria in BS 8233:2014. SR are advised the Mrs Carver has lived in the property since 1980's and as result of the previous widening of the M25 and increased traffic has since a gradual deterioration in quality of life resulting from increased noise levels.

Section 5.195 of the NPSNN requires that developments should *“contribute to improvements to health and quality of life through the effective management and control of noise.”* It is SR's view that the proposed development is an opportunity, through the use of acoustic screening along the boundary of the new carriageway, to reduce noise levels and in line with the policy aims of the NPSNN to improve health and quality of life.

Gary King MIOA MCIEH

Director

 [@sharpsredmore.co.uk](mailto:gary.king@sharpsredmore.co.uk)



Appendix 4

**Extract from 7.21 Stakeholder Actions and Commitments Register (Clean version)
LPP Comments 15.12.23**

(See separate Word document)