

1. Background to the Easton Estate

The Easton Estate extends to a little under 2,500 acres and generally comprises an undulating high landscape value environment prized for its tranquillity.

There are several County Wildlife Sites, areas of Ancient Woodland and the Honingham Hall Landscape Park NHER No. 44183 (Monument).

The holding is relatively narrow, and the scheme has a disproportionate effect on the estate as it will pass along most of the southern edge through more than 2km of estate land and affecting the remainder where it runs off the estate to the south.

The scheme requires nearly 74 acres of permanent land take, 41 acres of easements and wayleaves and 42 acres of temporary land.

The route passes close to the south of the Honingham Hall Landscape Park and various residential properties on the southern edge of the estate.

2. Mitigation issues

2.1 Reduced land take

The contractors cannot release any land from the temporary use category until they have completed their survey work. As there is a significant area of land acquired between the works and the existing A47, it would be more sensible to use this.

2.2 Embankment/screening

The current road is screened by established high hedges and woodland and is situated at a lower elevation as the ground rises towards the north.

Constructing the road further north requires more land, brings the carriageway further into the estate and elevates it higher onto the plain increasing impact from visibility, noise, reduced tranquillity, and general disturbance. The attached summary noise report indicates some of the impact is not satisfactorily mitigated.

The current scheme has an approximately 2-metre-high embankment on the north side between Honingham village and Wood Lane and no earth bunds between Easton roundabout and Taverham Lane.

Mitigation measures include tree planting which it is suggested will block the traffic and noise within approximately 15 years. The attached noise summary report indicates that additional attenuation is required.

We understand more material will be available and have confirmed the estate request for a 3.5m to 4-metre-high embankment along the northern edge of the works or failing that, between Wood Lane and Honingham Church.

Without further work we can only recommend a similar height bank along the whole route, but we remain flexible about where the screening is required most.

The embankment should be extended to the north of the attenuation lagoon near Hall Farm to screen headlights and visual intrusion as vehicles rise towards Hall Farmhouse, the buildings and the four cottages.

Please could the Inspector ensure the Applicant, Galliford Try and Sweco engages with the estate to establish the most effective use of available material to create a mitigation scheme that suits both the estate and the Applicant.

We reconfirm an offer to the Applicant that the estate is prepared to source material from a large bank of earth at Hall Farm to contribute to this work.

2.3 Re-routed public right of way

The re-routing of the public right of way in part shares a farm track. The owners would like an agreement about hedging and fencing to separate it from the farm traffic.

2.4 Hall Farm Underpass

Hall Farm underpass is 4.5 metres in height. The new underpass needs to be 5 metres in height to enable articulated lorries to access the main farm complex as they must. The alternative will be a new road across the estate from the north running for a minimum of 2 miles.

The public right of way through the underpass should be separated for safety purposes with galvanised steel barriers or similar.

We have provided evidence that the height needs to be 5m.

2.5 Fencing

There are two areas where screening fencing would mitigate impact.

Area 1:

A screen fence situated on the adjacent embankment or the edge of the carriageway and carefully designed is likely to mitigate impact from what is a relatively short section of road.

Area 2:

To benefit the residential properties at Hall Farm a fence should be installed from the edge of the woodland west of Honingham Church to screen headlights and vehicles before the proposed bank has any impact, unless the embankment is made significantly higher.

3. Local road network changes

3.1 Taverham Road/Ringland Road closure

The estate uses Taverham Road/Ringland Road travelling to an isolated block of owned land.

The Estate needs to use the road due to be closed and the suggested alternatives are inadequate.

Agricultural traffic with say 3m attachments or trailers and trailer sprayers cannot take evasive action from oncoming traffic and neither party has anywhere to pull in or reverse to.

Weston Road is a very narrow lane, there is a difficult junction north into Ringland Road and Ringland Hills is too narrow for large agricultural vehicles.

Please could the Inspector ensure that at least the agricultural traffic which can't contend with the alternative road network remains able to pass any temporary or permanent road closure.

3.2 Closure of Church Lane, Lower Easton

The farm has two main premises, Hall Farm, and another at Easton Lodge, comprising the main house, Easton Lodge, a range of farm and estate buildings and several houses.

Access to the premises at Easton Lodge is along Church Lane a short distance from the Easton roundabout which is to be closed.

The alternative is 3.25 kms further along narrow lanes inappropriate for large vehicle access, so Church Lane should be retained, or a private means of access should be enabled by short extension of the Orsted access track.

4. Farming accommodation

There are a few issues that need to be resolved, whether with accommodation works or financial contributions including:

4.1 Concrete pad

The concrete pad near Wood Lane will be severed from the access by the works, so internal roadways are required to be improved or the pad needs to be replaced.

4.2 Farm buildings at Easton Lodge

There is a small but important old-fashioned store at Easton Lodge which will become largely inaccessible with Church Lane being closed and no private access provided. The farm will need to replace the capacity elsewhere.

4.3 Access to land north of works between the current Easton roundabout and Taverham Road.

We have requested access for the farm along the private means of access we understand may be proposed for Orsted from the main eastern Taverham Road junction.

5. Summary

The scheme appears to have advanced further in the DCO process than the Applicant and contractors are prepared for, which may go some way to explain why they are unable to finalise the landscaping and access arrangements.

We wish to work with both the Applicant and the contractors if we are able and the main points at issue for resolution include:

- i. Reducing the temporary land taken
- ii. Agreements about farm access throughout the works as the current access will be severed.
- iii. Increasing the height, even if it means increasing the footprint of the protective embankments, either to a standard height, or if material is limited, to where is most required to afford greatest protection of the amenity of the estate and the properties.
- iv. Continue the embankment beyond the attenuation lagoon south-east of Hall Farm for protection of the houses.
- v. Including more robust screening between the current Easton roundabout and Taverham Road if the addition of embankments is not possible in this location.

- vi. Increasing the Hall Farm underpass to minimum 5m height, with steel fenced separation for the public right of way for safety of users.
- vii. Suggested 3m fencing along two sections of road, whether at highway edge, highway boundary or on retained estate land as best suits the situation.
- viii. Confirmation that the local roads network restrictions will allow for farm access to continue to use these routes in future as the alternatives available are unsuitable.
- ix. The owner needs to be able to access the fields on the north side of the works, so access along the Orsted PMA is required. This has not been discussed or confirmed.
- x. Collaboration about a replacement concrete pad because of the scheme.
- xi. A contribution for building replacement due to the road to Lower Easton being cut off. If the PMA proposed for access to Orsted is extended, this should partly mitigate this issue.
- xii. Discussion and the provision of a made-up footway or path for the diverted public right of way accessed from Hall Farm underpass to prevent shared use with large farm equipment and with hedging to separate the two.

We understand responses to at least some of our enquiries are expected on 1st September, and we hope some of these points can be agreed.

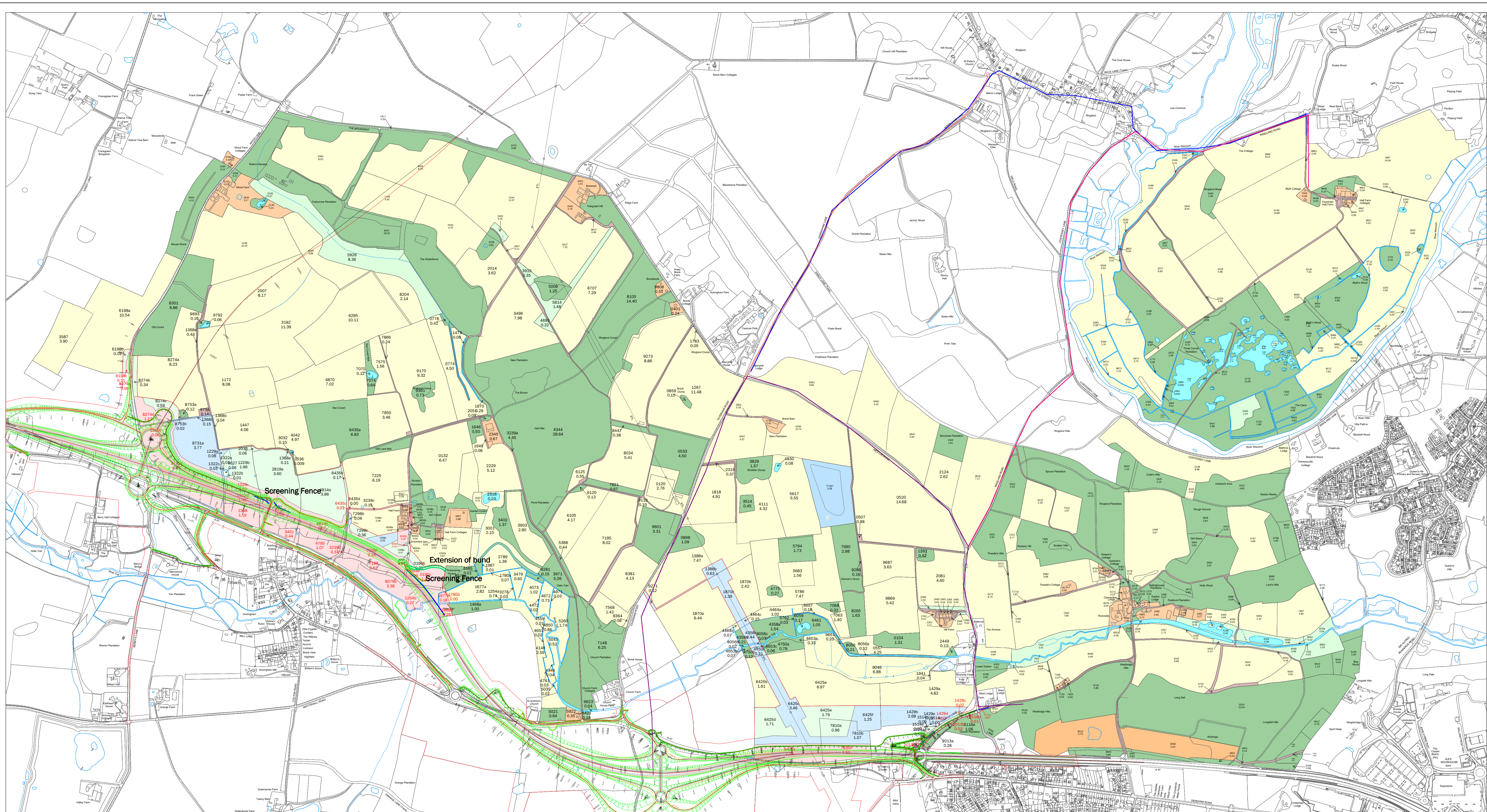
6. Attendance at Hearings

We request the ability to speak at any or all the hearings in conjunction with the client's solicitors Irwin Mitchell LLP and Create Consulting.

Brown & Co
1-09-21

Appendices

Estate Plan with various issues marked for explanation of the text
Extract to show screening fence near Hall Farm underpass
Extract to show screening fence and extended embankment near Hall farm complex
Photos and DMRB standards to demonstrate the need for a 5m high underpass
Summary noise report

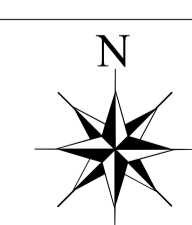


BROWN & CO

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The Easton Estate

SCALE : 1 : 8000 DATE : 31/08/2021

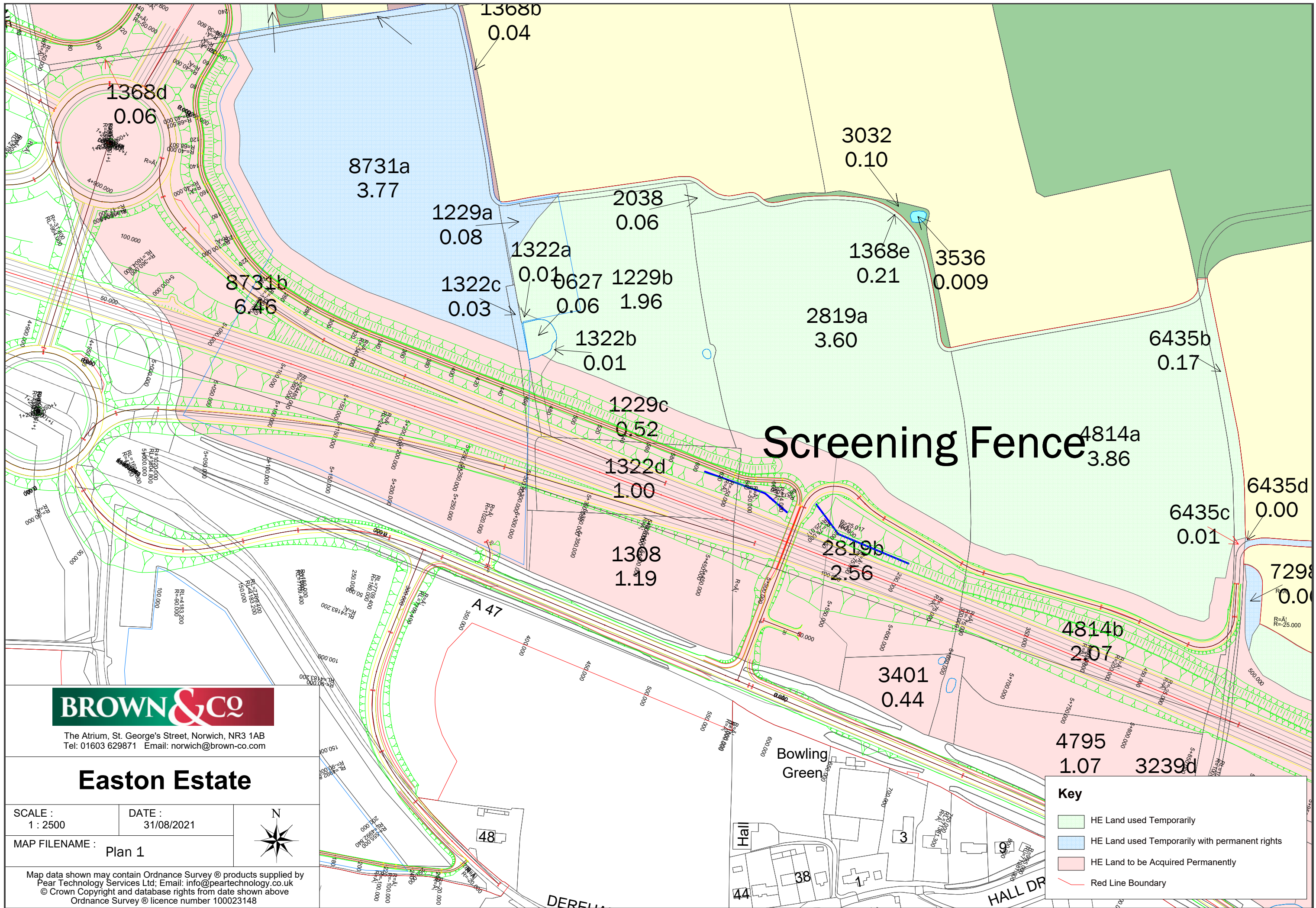


MAP FILENAME : Easton Estate

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Easton Estate

- | | |
|------------------------------------|--|
| Arable | Buildings |
| Marsh | Woodland |
| Plantation on gravel site | Water |
| HE Land used Temporarily | HE Land used Temporarily with permanent rights |
| HE Land to be Acquired Permanently | Road closure points |
| New route to Easton Lodge | New route for offlying land |
| Extension to bunding | Screen Fencing |
| | Red Line Boundary |



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Easton Estate

SCALE : 1 : 2500
 DATE : 31/08/2021

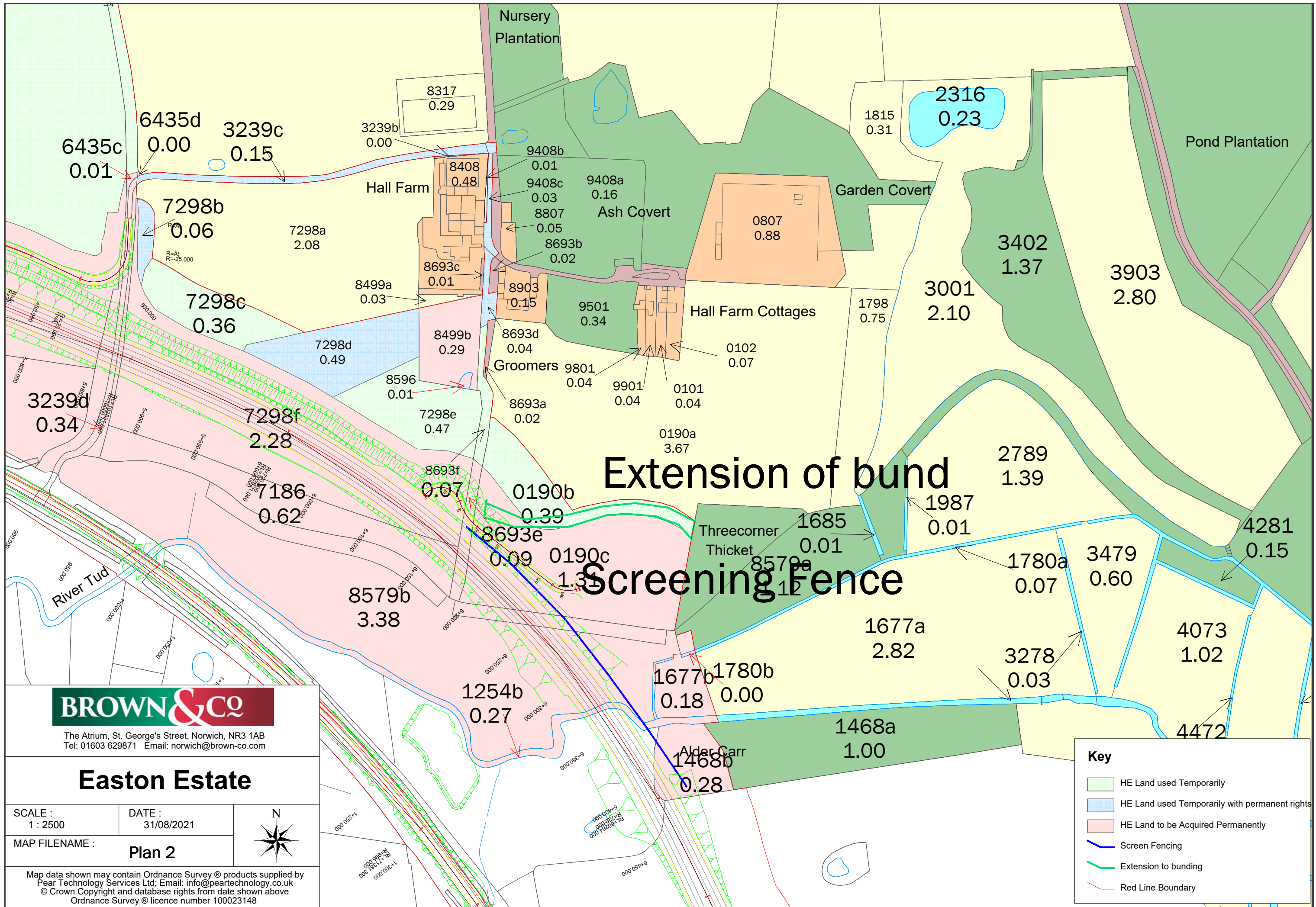
MAP FILENAME : Plan 1



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Key

- HE Land used Temporarily
- HE Land used Temporarily with permanent rights
- HE Land to be Acquired Permanently
- Red Line Boundary



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Easton Estate

SCALE : 1 : 2500
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MAP FILENAME : **Plan 2**

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Minimum cab height 4.54m

Maximum cab height 4.84m



Body height in excess of 4.5m

From: Chris Ward [REDACTED]@asdhalesworth.co.uk>
Sent: 09 April 2021 09:16
To: Charles Birch [REDACTED]@Brown-co.com>
Subject: Underpass

ASD Job: -

ASD Job Title: NDR Link

Charles,

FROM DMRB:

Accommodation underbridges

4.16 Headroom for accommodation underbridges shall be agreed with the landowners and expected users.
of the structure and recorded in a legally enforceable agreement.

4.16.1 The headroom at accommodation bridges should be derived from the following criteria:

- 1) the likely methods of farming in the area;
- 2) the size of the agricultural and maintenance vehicles expected to use the bridge;
- 3) the use of the bridge by walking, cycling, and horse-riding users;
- 4) the use of the bridge for animal access.

NOTE The maximum height of an agricultural vehicle can be up to 4.65 metres except those transporting agricultural baled produce (i.e. hay, silage straw, or animal fodder) which have no height limit.

Possibly min 5m? – 4.65 + clearance.

Hope this helps.

Regards,

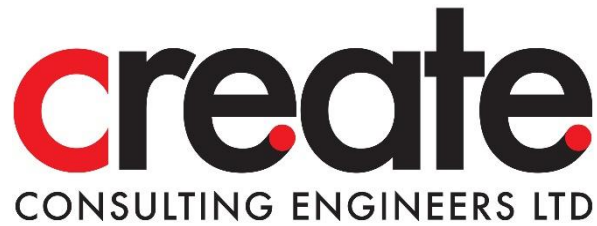
Chris

Civil Engineering Team



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TECHNICAL NOTE

Date: 1st September 2021

File Ref: JB/JPC/P21-2417/01TN – Easton Estate

Subject: The A47 North Tuddenham to Easton Development – Deadline Submission Noise

1.0 DEADLINE 2 SUBMISSION

- 1.1 Create Consulting Engineers Ltd (Create) have been appointed by our Client Mr C Birch of Brown & Co, to provide a written submission in-line with the Planning Inspectorate timescale for The A47 North Tuddenham to Easton Development.
- 1.2 The purpose of this submission is to provide further technical information to inform PINs on the shortfalls within the Environmental Statement Volume 6 relating to noise matters only.
- 1.3 We would urge the Applicant to engage directly and work proactively with our Client given the adverse impact that this proposed development would have on their estate.

2.0 EASTON ESTATE - NOISE

- 2.1 In summary, Create would like to highlight the following points.
- 2.2 The proposed A47 dual carriageway is within close proximity to the Easton Estate and encroaches at some points as can be seen on the following diagram.

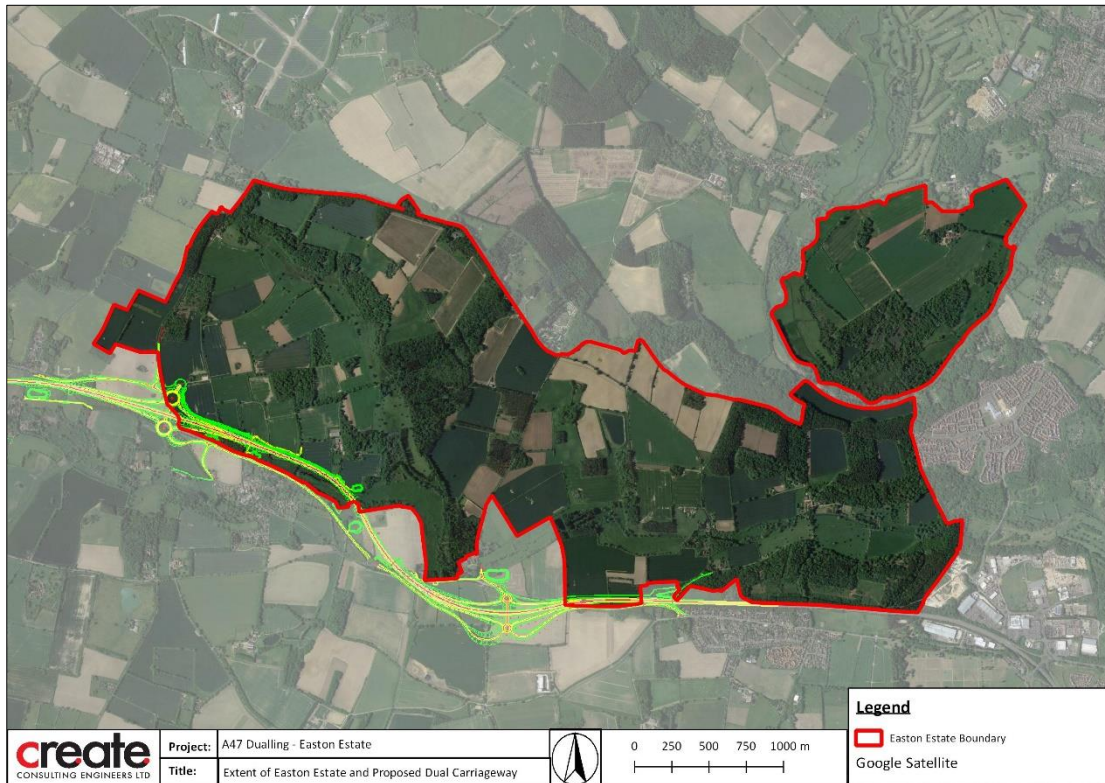


Figure 1: Proposed A47 Dual Carriageway and Easton Estate

- 2.3 The ES details a preliminary assessment of construction noise, undertaken in accordance with Method 1 of BS5228-1:2009+A1:2014 and the DMRB LA111. The aforementioned standard details the acceptable methodologies for the application of noise limit thresholds and the methods for the assessment of construction noise. Method 1: the “ABC Method” has been used by the applicant. Selecting an appropriate threshold level is correct and in accordance with both BS 5228 and the DMRB LA 111 document. We feel however a distinction should be made based on the situational context at this rural location.
- 2.4 Ambient noise monitoring has been undertaken by the applicant, with a view to establishing the ambient sound level banding to assist with the determination of the LOAELs. We are in agreement of the proposed method for agreeing the SOAELs however these do not appear to have been included within the report.
- 2.5 The Assessment provided by the Applicant has proposed operational LOAELs and SOAELs directly in line with Table 3.49.1 of the latest version of the DMRB LA 111. Given the rural location for some of the properties however, we feel that consideration should be given to

the quiet nature of some of these receptors. Paragraph 3.50 of LA 111 states that the LOAELs and SOAELs shall be modified where it is appropriate and merited by local circumstances.

- 2.6 The operational sound levels should be considered against the existing acoustic climate. This is particularly apparent for properties and roads which are away from the main dual carriageway, but would be used as access routes for local traffic or for diversion routes. The noise model prepared by the applicant has shown that these increases in both the short and long term would be significant.
- 2.7 We have overlaid the short-term noise difference contour for the proposed scheme onto an aerial image of the estate to illustrate how the increase in sound levels will impact upon a large degree of the estate.

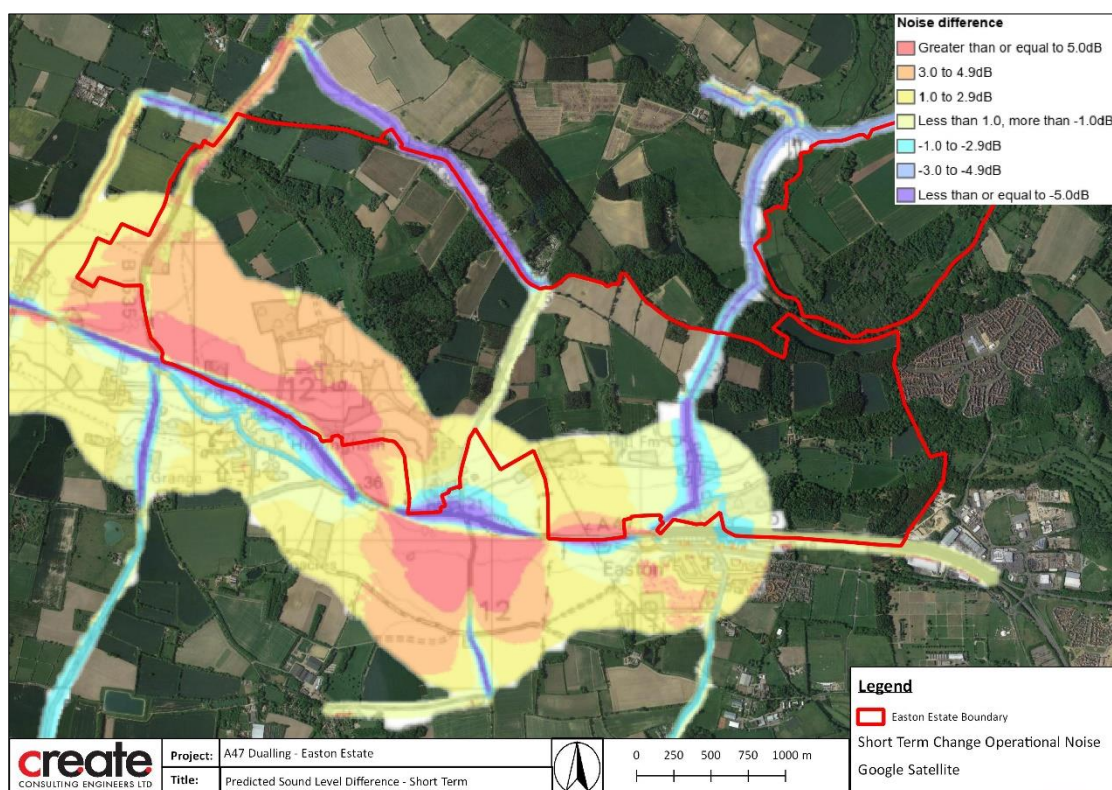


Figure 2: Excerpt of Figure 11.8 From Appendix 6.2 Overlaid With Estate Boundary

- 2.8 Although the majority of the site has been shown to be “Minor or Negligible” it is important to highlight that the calculation area has been restricted to that shown in Figure 2. The proposed usage of Wood Lane would increase the sound levels dramatically for the properties along this route which have been constructed in close proximity to the roadside.
- 2.9 The proposed mitigation does not appear to include any mitigation for this estate, other than low noise road surfacing. The general topography of the site would suggest that the more typical earth bunds and / or acoustic barriers may prove problematic to install, however there are suitable alternative options available to the applicant, other than the “blanket use “ of the Code of Construction Practice (CoCP) and Best Practicable Means (BPM). This is inherently

difficult to police as this would ultimately fall under the requirements of the principal contractor and the applicant could find this difficult to enforce the suitable mitigation.

- 2.10 As can be seen in Figure 3, the proposed construction noise levels during the daytime along the southern boundary of the estate would clearly be audible and considered to be Moderate and Major in some locations. It must be noted that these levels are unmitigated. The mitigated sound levels have been shown in Figure 4.

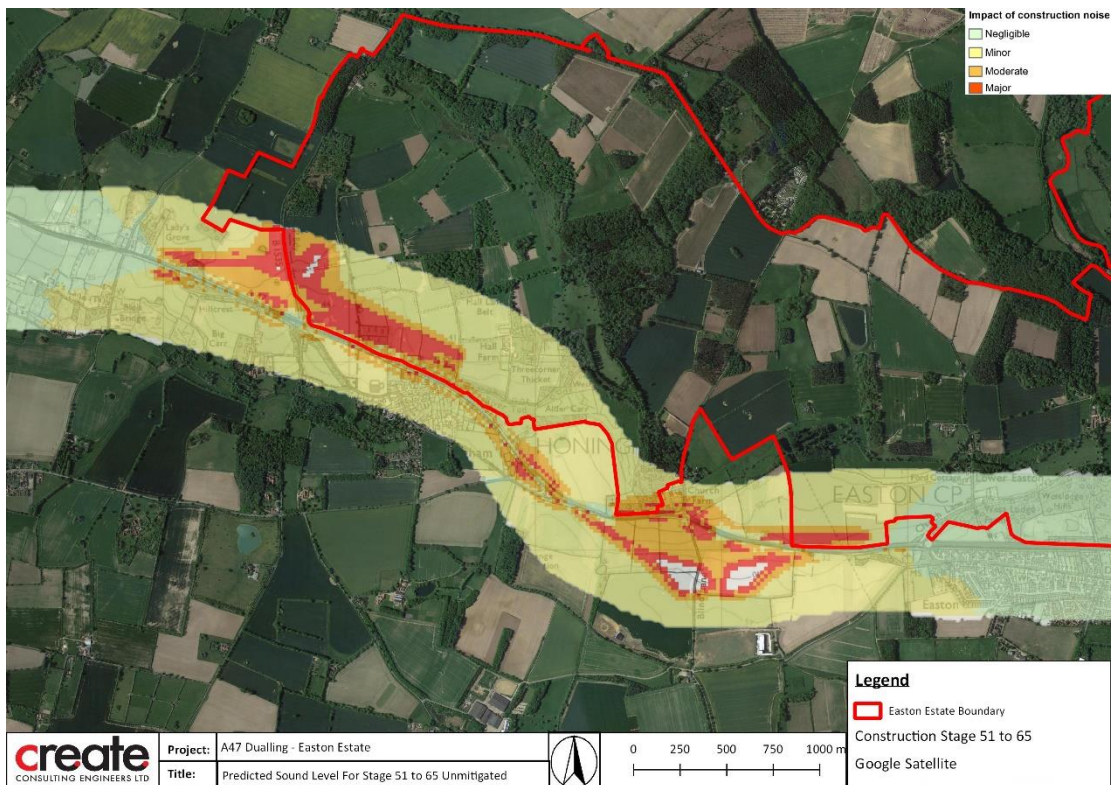


Figure 3: Predicted (Unmitigated) Construction Sound Levels for Stages 51 through to 65

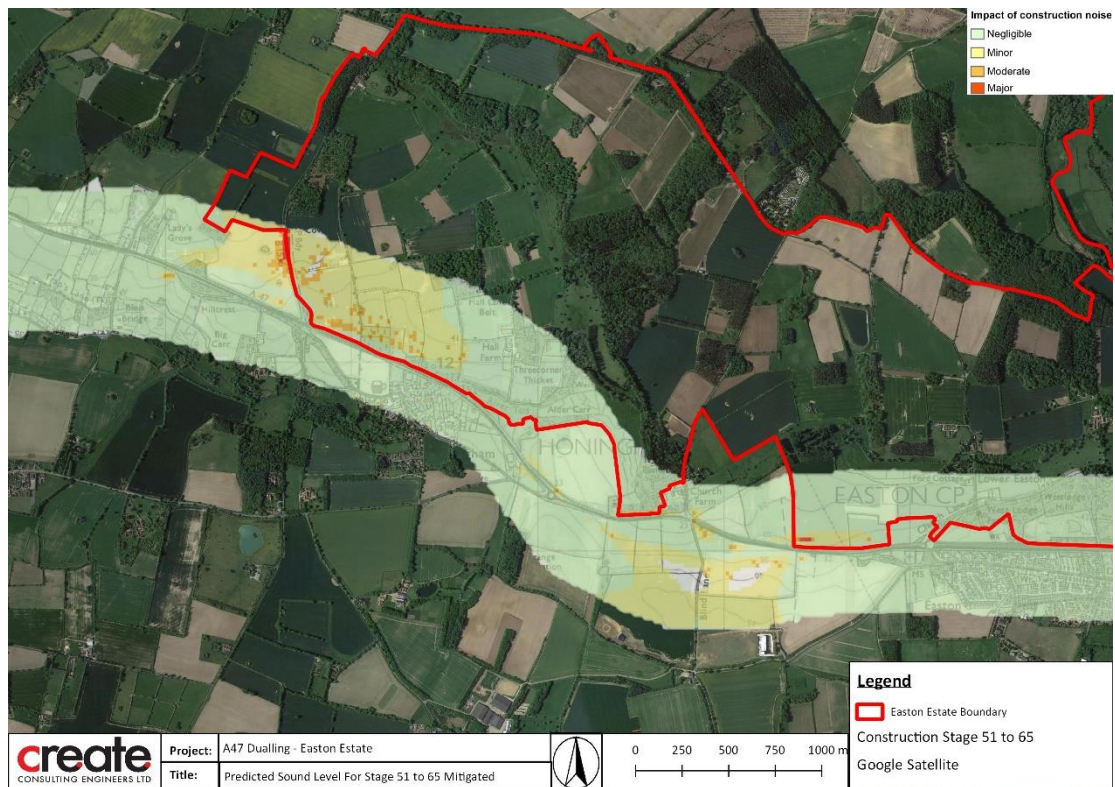


Figure 4: Predicted (Mitigated) Construction Sound Levels for Stages 51 through to 65

- 2.11 Although Figure 4 shows a significant level of reduction, we are concerned as to the realistic reductions that have been modelled, primarily because the applicant appears to have relied upon the successful implementation and following of the CoCP and BPM techniques. These mitigative strategies have also been based on the assumed construction activities and would need to be recalculated once definitive method statements and RAMS have been prepared.
- 2.12 Construction hours would primarily be restricted to daytime hours, however there would be certain works which would need to be undertaken out of hours. The National Grid works have been assumed to be continuous, 24 hours per day, seven days per week for a period of up to three months. This will clearly have a large impact on the estate.
- 2.13 The night-time construction levels have been overlaid in the same manner as previous within Figures 5 and 6. Figure 5 shows the predicted sound level from stages 66 through to 69 during the night-time without mitigation and Figure 6 includes the same but once mitigated.

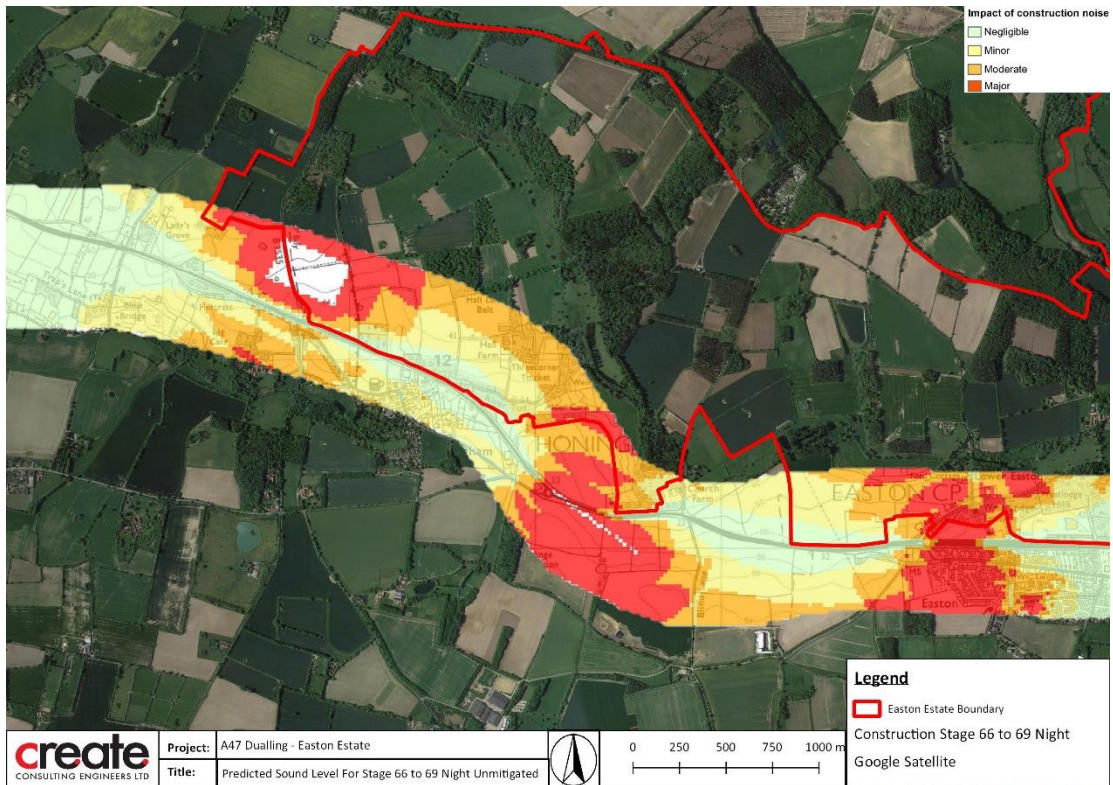


Figure 5: Predicted (Unmitigated) Construction Sound Levels for Stages 66 through to 69 During Night-time

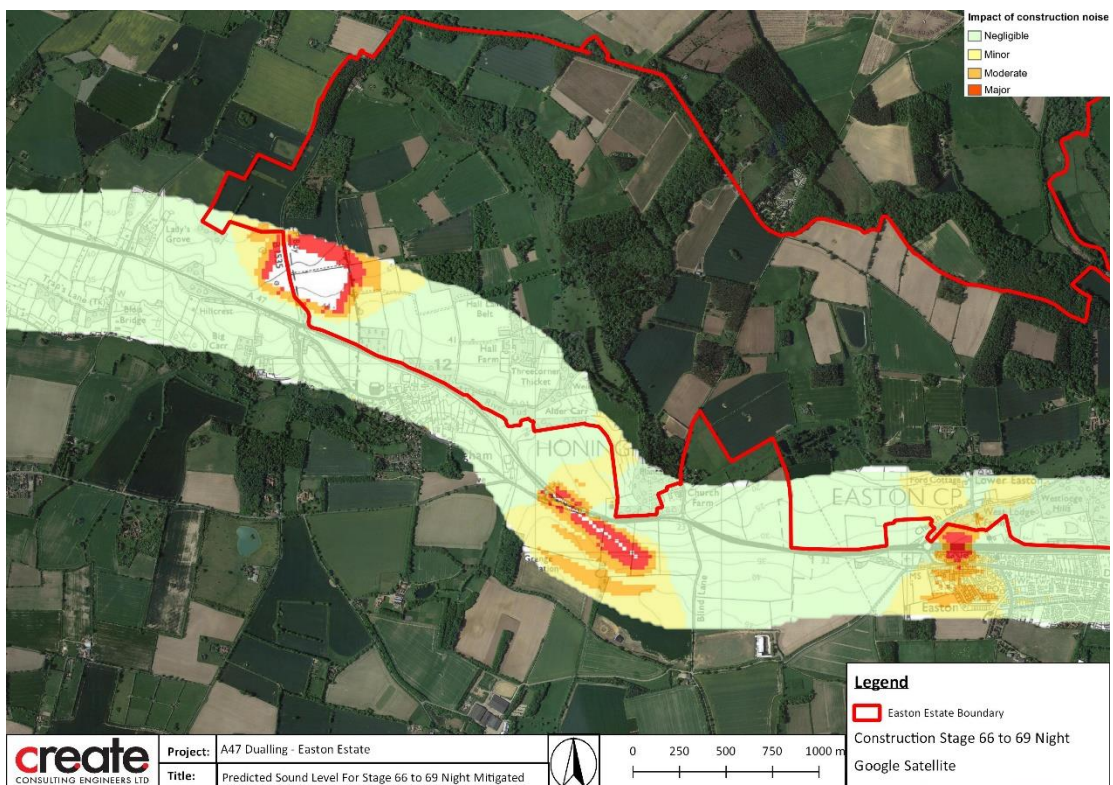


Figure 6: Predicted (Mitigated) Construction Sound Levels for Stages 66 through to 69 During Night-time

- 2.14 The night-time construction levels have been predicted to be considered to be Moderate and Major along the key areas at the southern aspect of the estate. Through the reliance on the CoCP and BPM, we have severe concerns that the sound levels would still be classed as being at significantly high levels.
- 2.15 We are seeking a full and conclusive construction noise and vibration assessment be completed once the method statements have been finalised and suitable noise mitigation be implemented to reduce the impact of the construction noise.
- 2.16 Due to the complex topography at this site, the use of earth bunds and perimeter hoarding are limited at best and would be required to be positioned either close to the receptor or to the noise source to maximise their efficacy. Additional near field screening would be required for some of the noisier plant.
- 2.17 The use of Best Practicable Means (BPM) must be adhered to, which should include the use of mufflers and silencers, nearfield screening, considerate placement of noisy plant, starting ignitions in a synchronised manner and not leaving engines running when not in use. These are examples only and are by no means an exhaustive list.

3.0 CONCLUSIONS

- 3.1 Our Client and Create have raised significant, legitimate concerns with respect to the Applicant's proposals. It is requested that the Applicant responds accordingly which in turn could potentially lead to the introduction of mitigation measures and/or redesigned components of the overall scheme currently being put forward.

Note By: Jody Blacklock - Technical Director