

Our ref: **CEB/GL/029196**

1st September 2021

The Examining Authority
A47 North Tuddenham to Easton Road Improvement
Scheme
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6 PN

Version 2 with additional noise report

Dear Sir

Easton Estate – A47 Easton to North Tuddenham Road Improvement Scheme

We write on behalf of Georg Gundersen, managing director and Alex and Dorthe Gundersen, the owners of Honingham Aktieselskab, the company that owns the Easton Estate following our Relevant Representation in relation to the A47 Easton to North Tuddenham Road Improvement Scheme.

We are aware that comments on behalf of the estate will be focused on their interests which may be contrary to other views. However, we can only represent the Easton estate and do not seek to compare this with other property interests. There is a proposal to realign the route further north into the estate to take yet more land and we would prefer this not to arise bearing in mind the significant land take and impact already envisaged. Ideally the scheme would not take any estate land at all.

We welcome improved collaboration as feedback is poor and there have been few material accommodations confirmed following discussions and requests. There have been developments as surveys and appraisals have been obtained, but few if any have been discussed with the estate.

It appears that the DCO is being progressed without the applicant having sufficient information to agree details. We request that as this detail emerges and the applicant can finally enter detailed deliberations, that they do so in a spirit of collaboration as the owners of the property affected will remain long after the applicant and the consulting team have moved on.

We write to clarify issues needing to be addressed and hope the Inspector might persuade the Applicant to become more collaborative. We welcome discussions to finalise A Statement of Common Ground.

We understand there is a proposal for further route changes on behalf of Mr Meynell. While we are pleased for Mr Meynell to be able to lodge proposals, we would welcome reassurance that if the new proposals are considered in substance, they will be properly consulted on.

1. Background to the Easton Estate

The Easton Estate is shown albeit at small scale on the plan in the Appendices. It extends to a little under 2,500 acres of mixed arable, woodland, marshland, and buildings. The estate generally comprises an undulating high landscape value environment prized for its tranquillity.

There are several County Wildlife Sites including several newly identified sites, areas of Ancient Woodland and the Honingham Hall Landscape Park NHER No. 44183 (Monument). During deliberations about both

these works and the proposed Norwich Western Link, the owners have been able to confirm to both Norfolk County Council and the Applicant in early representations that the property is exceptional in terms of flora and landscape. We will be pleased to elaborate on these points with the owner's consultants The Landscape Partnership if it would assist but, in any case, a visit is encouraged.

The holding is relatively narrow, so 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. It is important to reduce the impact of the scheme on these receptors and to protect the general tranquillity within the estate which is important.

We have received summary advice from Messrs Create Consulting to the effect that further noise mitigation is required. This and the visual mitigation could sensibly be combined.

2. Mitigation issues

2.1 Reduced land take

Having tried to persuade the Applicant to realign the route to the south more in keeping with the original route alongside the A47, the estate has had grudgingly to accept the current alignment but remains concerned that it is more difficult to mitigate the damage on this alignment.

Throughout the survey process land has not been well reinstated so we aren't optimistic that the future will be different.

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

The added advantage of use of other land is that the Applicant can reinstate their own land rather than leaving landowners to reinstate land almost certainly very badly affected by the scheme. These poorly undertaken reinstatement works impact significantly upon ongoing agricultural activities and finances where the Applicant does not have the same financial pressures as the land in question is likely to be used for landscaping rather than financial return.

2.2 Embankment/screening

The current road is screened by established high hedges and woodland and is situated at a much lower elevation. Although the noise from the A47 is significant in places, the road is not visible, and the noise dissipates as you penetrate northwards away from it.

Locating the road further north not only requires more land and brings the carriageway further into the estate but also elevates it higher onto the plain leading to significantly greater impact from visibility, noise, reduced tranquillity, and general disturbance. This is demonstrated in the report from create attached.

As it became clear the route was not to be realigned to the south, we have requested significant embankments combined with cutting in of the carriage way.

The current scheme has we understand an approximately 2-metre-high embankment on the north side between Honingham village and Wood Lane, but no earth works screening between Easton roundabout and Taverham Lane.

Mitigation measures include tree planting which it is suggested will block much of the traffic and noise from view within approximately 15 years. However, we are aware that 15 years is a long time, and that tree cover does not screen visual intrusion or noise to the same extent as a bank.

Having repeatedly requested detailed drawings for the scheme works and levels, the Applicant kindly provided these recently, since when we have endeavoured to establish the sections of the road which will cause the greatest intrusion. Without this detail we can only recommend a similar height bank along the whole route, but we remain flexible about where the screening is required most.

We are advised that the Development Consent Order has been drafted to enable the height of embankments to be increased to cater for extra material and for the footprint to be enlarged if further estate land is required from within the red line to enable higher banks. The estate is willing for more land to be used to enable increased protection from the use of the works.

We understand it is likely that more material will be available, so we have confirmed that the estate would be very pleased to receive a 3.5 to 4-metre-high embankment along the entire southern edge, or failing that, between Wood Lane and Honingham Church at least.

If no embankment is possible on the north side of the works between Lower Easton and Taverham Road, we would welcome more robust landscape planting and particularly a mechanism to screen the very high new overbridge which will overlook this section of the farm.

On a detailed point, the embankment should be realigned to the north of the attenuation lagoon near Hall Farm to screen headlights and visual intrusion as vehicles travel in a north westerly direction towards the higher elevation of the road immediately south of Hall Farmhouse, 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. To date we suspect the views of the estate have led to internal deliberations within the Applicant team but with no outwards discussion on this point.

We wish to 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 is a concern as it in part shares a farm track. We would welcome discussion about the specification of the path and an agreement about hedging and fencing to separate it from the farm traffic and general access routes.

2.4 Hall Farm Underpass

The scheme drawings show an underpass of 4.5 metres in height. The estate advised the Applicant in early discussions that the new underpass needs to be 5 metres in height to enable articulated lorries to access the main farm complex as they must.

The proposal is to separate the public right of way for safety purposes, and this should be with galvanised steel barriers or similar.

Access to the estate is currently unrestricted in height terms and many vehicles, such as straw trailers, are significantly higher than 5 metres.

We haven't pressed for unrestricted height, whether we should have because the most important issue in this respect is to allow articulated lorries into the farm complex. The alternative will be a new road across the estate from the north running for a minimum of 2 miles at significant cost.

We understand unofficially that this request may be accommodated, but it would be helpful for the Applicant to confirm this so we can discuss other things.

We have provided photographic evidence that the height of an articulated lorry is 4.65 metres and an extract from the DMRB standards which indicates that an access underpass should be 5 metres in height in the Appendices. We assume the Applicant is aware of this.

2.5 Fencing

There are two areas we are aware of where screening fencing could add significantly to mitigation measures, but until now the Applicant has declined to discuss them. These are shown approximately in the Appendices.

Area 1:

Hall Farm underpass is situated across a low area in the landscape, so the carriageway will be elevated leaving the estate and the carriageway highly visible. We understand the Applicant doesn't intend to overlap embankments around the access to screen this elevated section, possibly for wildlife reasons.

We have been advised it is not possible to construct a fence on the edge of the carriageway due to wind loading, but a higher-than-normal solid edged safety barrier or 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:

A second area which would benefit the residential properties at Hall Farm significantly is from the edge of the woodland west of Honingham Church, traveling west bound directly on the north side of the works.

This would screen headlights and vehicles before the proposed bank has any impact unless the embankment is made significantly taller.

As mentioned earlier, ideally the embankment would be realigned to the north of the attenuation lagoon near Hall Farm to protect Hall Farmhouse, the buildings and the four cottages.

3. Local road network changes

3.1 Taverham Road/Ringland Road closure

The estate and other businesses use Taverham Road/Ringland Road in the normal course of their farm activities, travelling from one block of owned farmland to another. The estate plan shows the separated parcel of land to the north.

The Applicant has determined to close this link in the final 12 months of the period of works and states the future responsibility for whether the closure remains will rest with Norfolk County Council.

It is difficult to know whether this is a reasonable proposition, to close a local road some distance away from the works and transfer the obligation for the impact of the action to another party because the road falls within the recipient's remit.

However, the farm needs to use the road due to be closed. The suggested alternatives are inadequate, but the applicant has not been prepared to discuss this point.

A simple inspection makes it clear that 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.

On the plan attached in the appendices, the current route is shown with a purple line progressing northwards to Ringland village along the blue route. The alternative turns east along the purple line and then north on the pink line.

The turn east into Weston Road leads to a very narrow lane, with a particularly difficult junction to turn north into Ringland Road and pass over Ringland Hills which 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 as discussed before, 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 itself is along Church Lane, immediately accessible from the Easton roundabout which is to be closed. This is shown with a short blue line which takes less than 1 minute to travel safely along.

The alternative is a full 3.25 kms further and far narrower and more tortuous, shown by the long purple route north along Taverham Road, east into Weston Road and then south. This is much longer and much less safe for any vehicle type.

We don't suggest property values are a matter for the Examination, but highways safety and the resulting impact of closing the link should be and due to the length of the intended extra journey time and the narrower lanes, this closure is likely to cause increased incidents as well as affecting the property value significantly.

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 either internal roadways are required to be improved or the pad needs to be replaced.

4.2 Farm buildings at Easton Lodge

Even though the designers have stated the local road network is not suitable for agricultural use, it is the only road network the estate can use. There is a small but important old-fashioned store at Easton Lodge which will become largely inaccessible with the link to the current Easton roundabout being severed 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.

It would require a limited extension to continue the PMA to Church Lane which would enable the highways authority to maintain restrictions on local traffic cutting through the area but would ensure the estate could remove some of the larger farm vehicles from the network that the applicant suggests is unsuitable for farm vehicles.

5. Summary

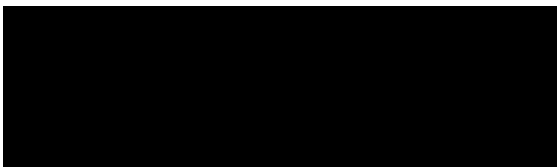
The scheme appears to have advanced further in the DCO process than the Applicant and contractors are prepared for, which may go some way to explain why they are unable to finalise the landscaping and access arrangements.

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 visual and noise 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. However, we request the ability to speak at any or all the hearings in conjunction with the client's solicitors Irwin Mitchell LLP.

Yours sincerely



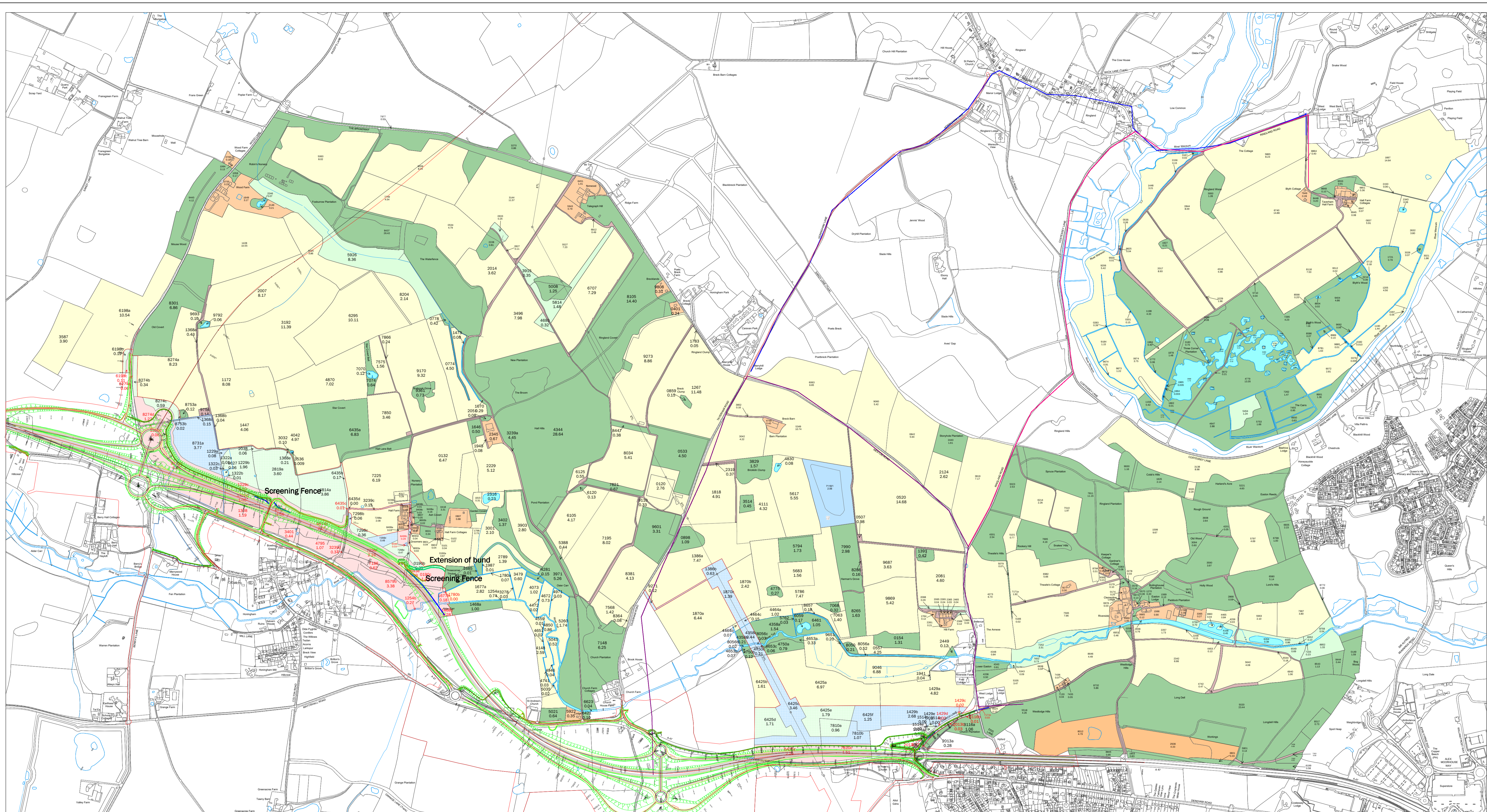
Charles E Birch FRICS FAAV
Partner – Land Agency
For and on behalf of Brown & Co –
Property and Business Consultants LLP

cc. James Pavey Esq; Irwin Mitchell LLP

Enclosures:

- Estate plan highlighting various points
- Extract showing screen fencing
- Extract showing extended bund and screen fencing
- Photos showing articulated lorry height
- Extract from DMRB standards

Estate plan highlighting various points

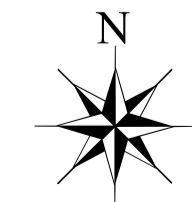


BROWN & CO

The Atrium, St. George's Street, Norwich, NR3 1AB
 Tel: [REDACTED] Email: norwich@brown-co.com

The Easton Estate

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



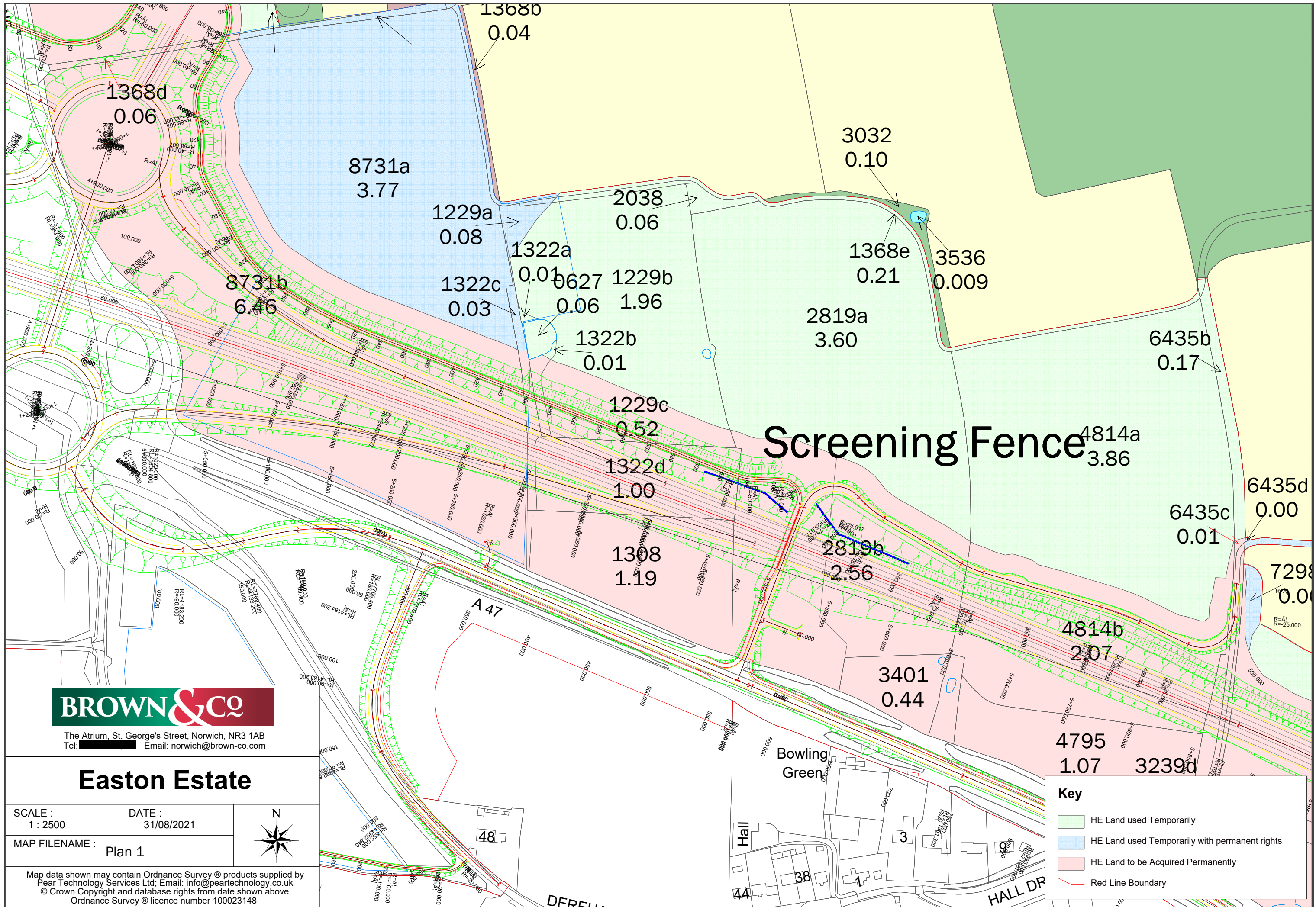
MAP FILENAME : Easton Estate

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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 |

Plan extract showing screen fencing



Screening Fence

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Easton Estate

SCALE : 1 : 2500 DATE : 31/08/2021
 MAP FILENAME : Plan 1

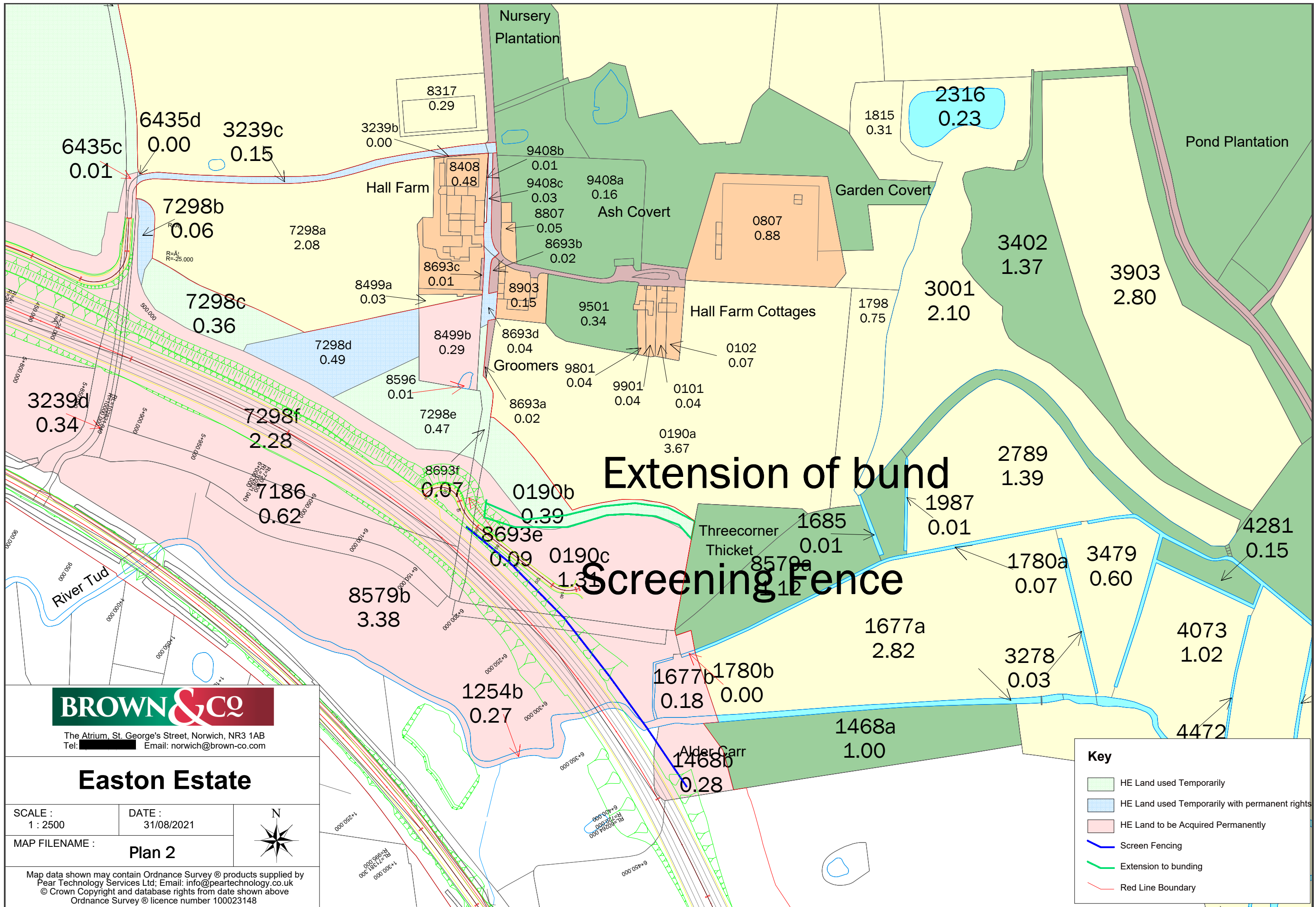


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Key

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

Plan extract showing extended bund and screen
fencing



Extension of bund
Screening Fence

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Easton Estate

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



MAP FILENAME : **Plan 2**

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Key

- HE Land used Temporarily
- HE Land used Temporarily with permanent rights
- HE Land to be Acquired Permanently
- Screen Fencing
- Extension to bunding
- Red Line Boundary

Photos showing articulated lorry height & extract from DMRB standards



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



Tel: [REDACTED] email: enquiries@ASD-consultants.co.uk web: www.ASD-consultants.co.uk

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Noise report



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.

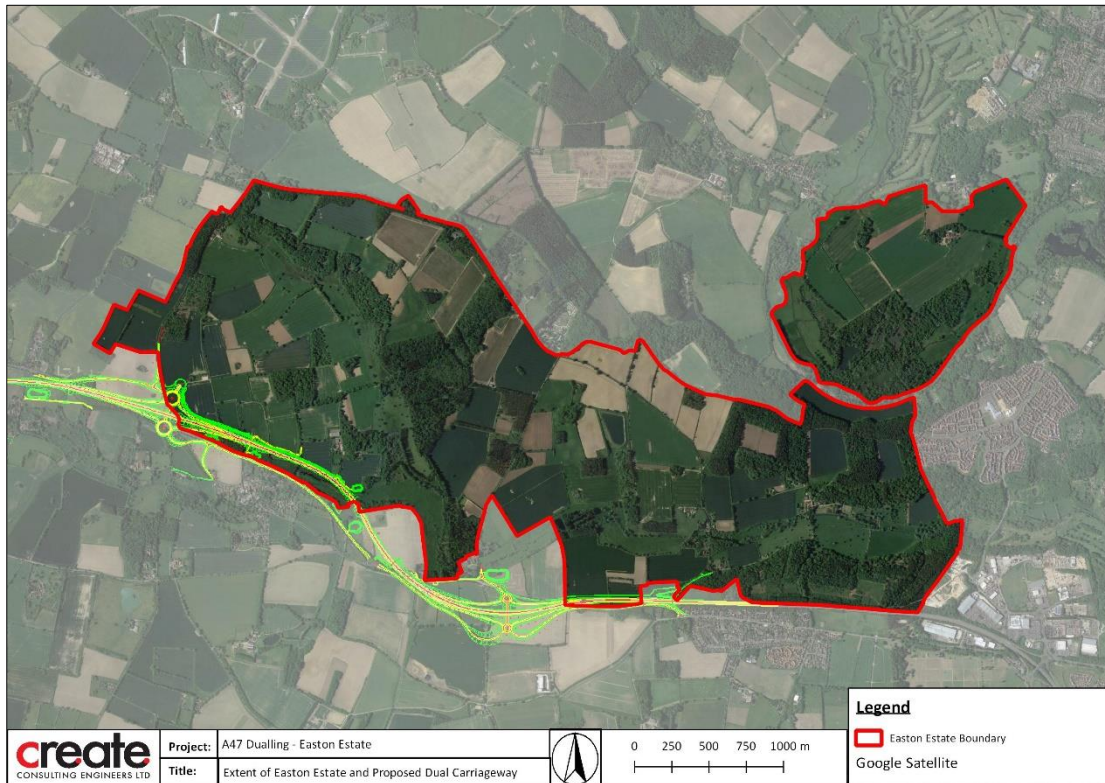


Figure 1: Proposed A47 Dual Carriageway and Easton Estate

- 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.

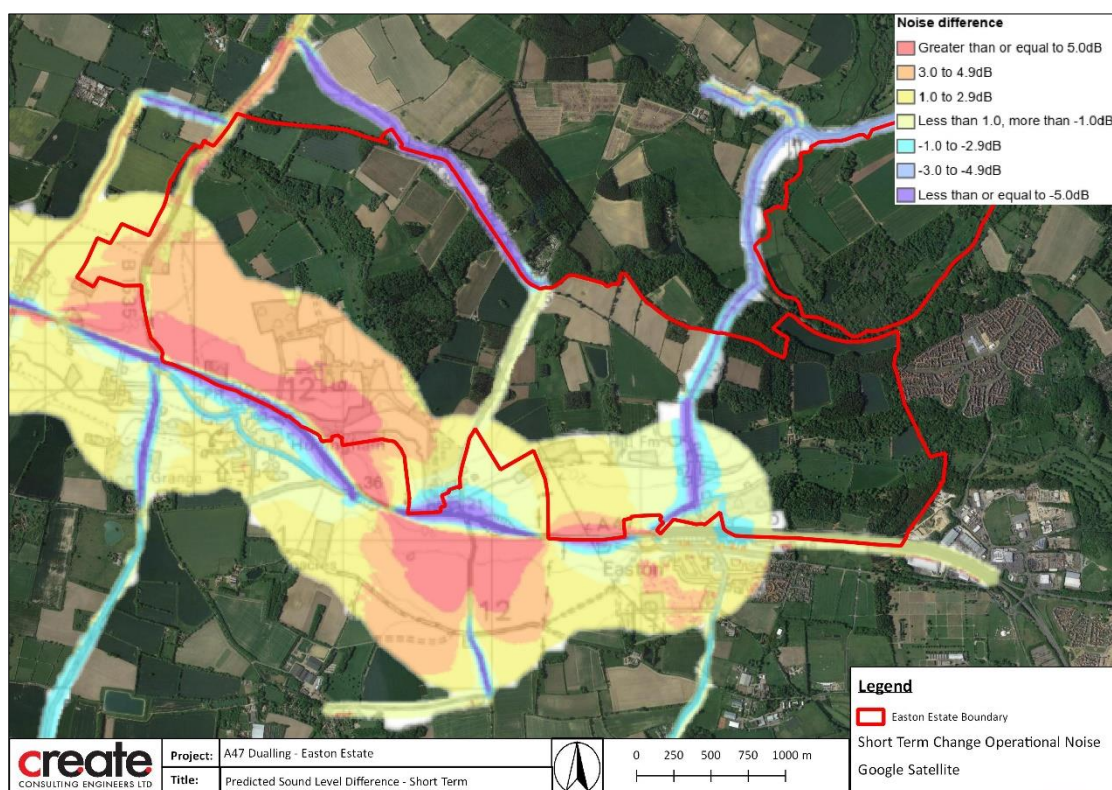


Figure 2: Excerpt of Figure 11.8 From Appendix 6.2 Overlaid With Estate Boundary

- 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.

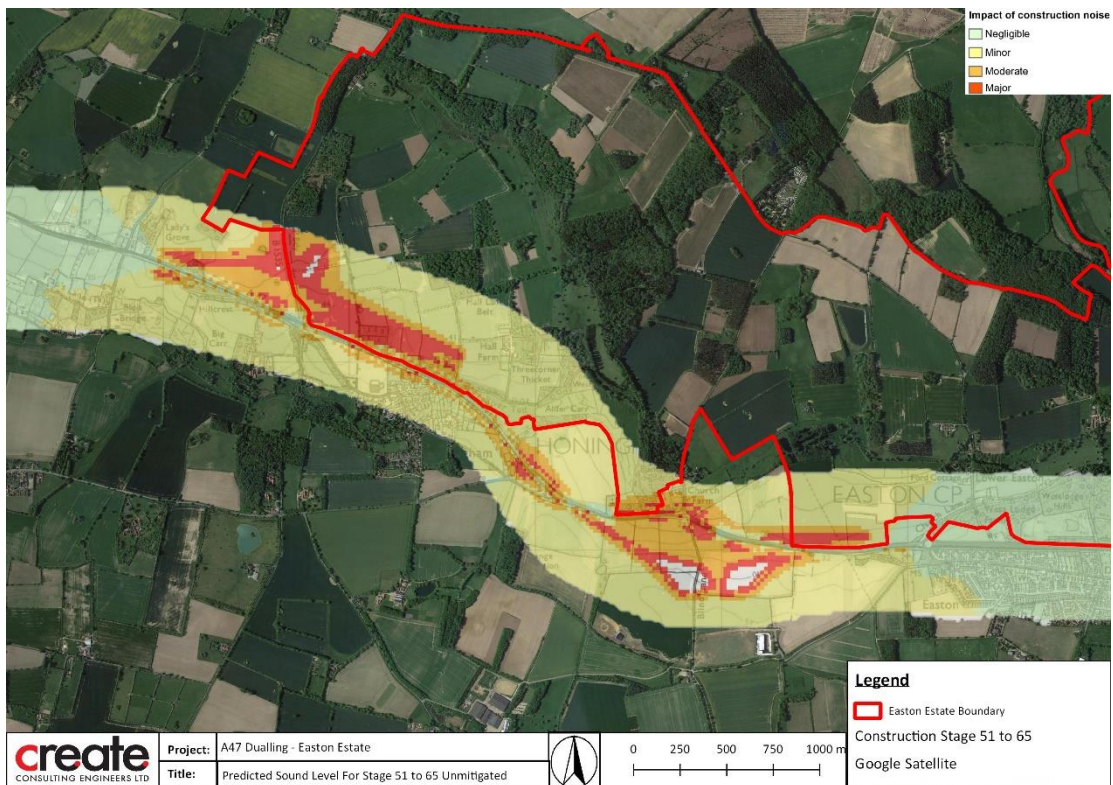


Figure 3: Predicted (Unmitigated) Construction Sound Levels for Stages 51 through to 65

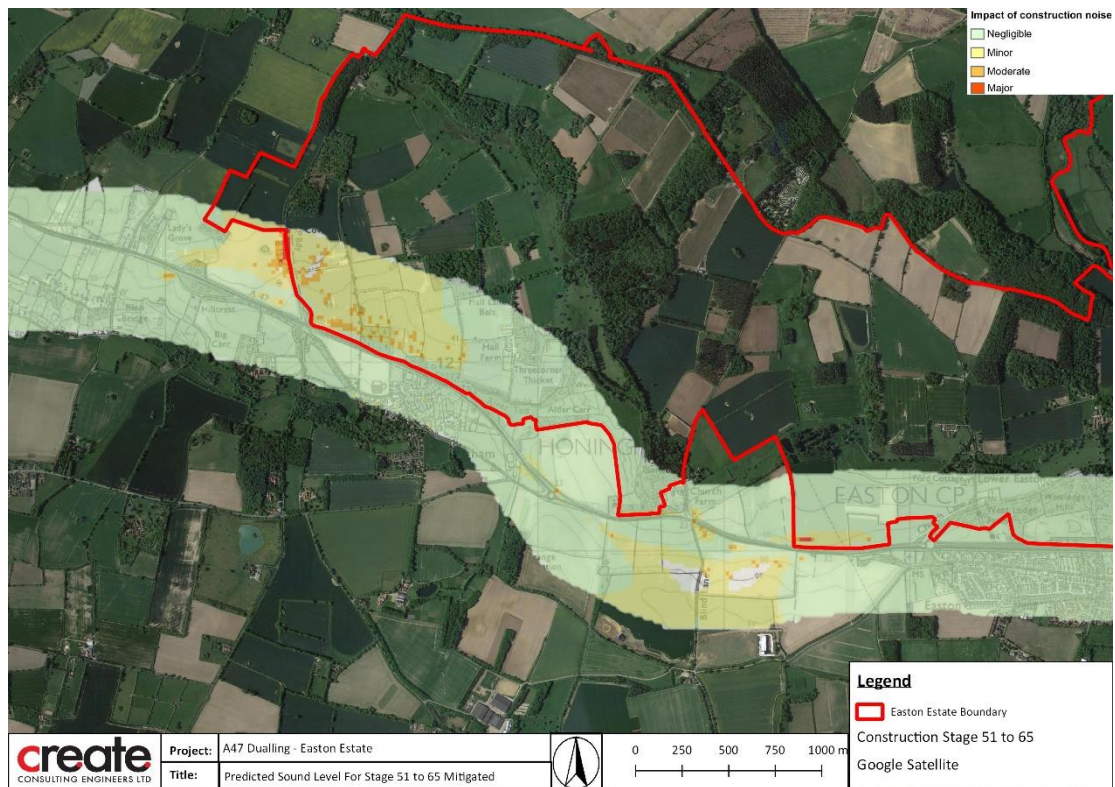


Figure 4: Predicted (Mitigated) Construction Sound Levels for Stages 51 through to 65

- 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.

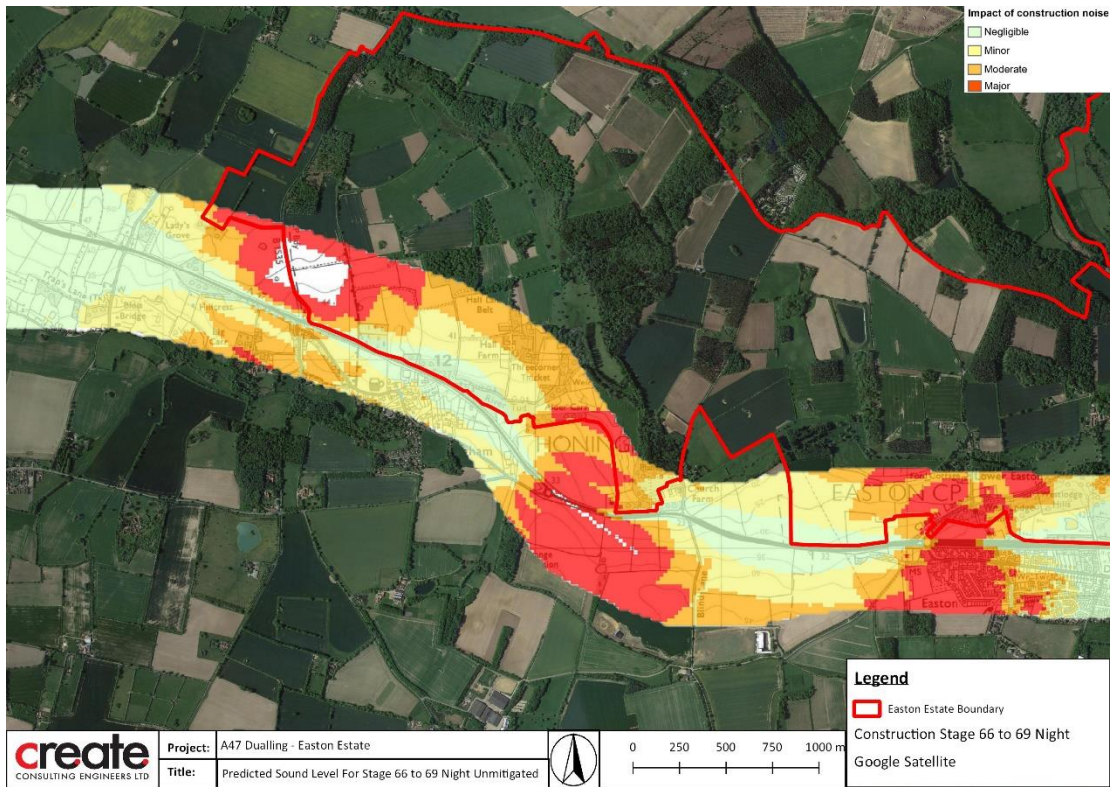


Figure 5: Predicted (Unmitigated) Construction Sound Levels for Stages 66 through to 69 During Night-time

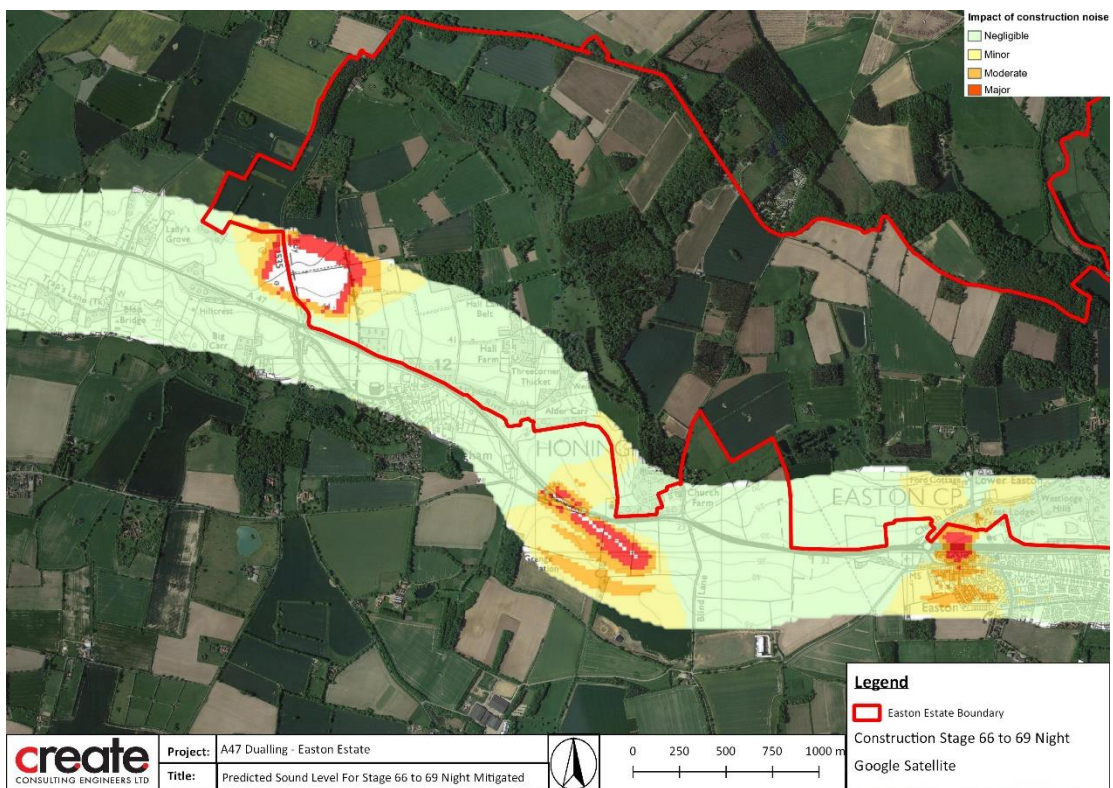


Figure 6: Predicted (Mitigated) Construction Sound Levels for Stages 66 through to 69 During Night-time

- 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