

From: [Matthew Rooke](#)
To: ["Hornsea Project Three"](#)
Subject: Broadland District Council deadline 7 submission
Date: 14 March 2019 17:01:03
Attachments: [HOW03_SoCG_BDC_March 2019 final - deadline 7.docx](#)
[HOW03_SoCG_BDC_March 2019 Annex A final version deadline 7.docx](#)

PINS ref: EN010080

I attach two documents for the District Council's deadline 7 submission, these are:

- A signed Statement of Common Ground, and
- An appendix to the Statement of Common Ground which identifies the summary of comments from the Council's Environmental Health Officer together with the applicant's response, subsequent Council comments and identification of the applicant's on-going position.

In addition the three local authorities (Broadland, South Norfolk and North Norfolk District Council's) had intended to provide a joint response on the revised Outline LP and Outline EMP for deadline 7, unfortunately it has not been possible to co-ordinate a joint response for deadline 7 in the few days since the last ISH. The applicant has agreed to make certain changes to the Outline LP and it is anticipated that once the revised versions are submitted the local authorities will then submit a joint response.

Any issues please contact me.

Regards

Matthew

Matthew Rooke
Planning Manager (West)

t. 01603 430571 e. matthew.rooke@broadland.gov.uk



This email and any attachments are intended for the addressee only and may be confidential. If they come to you in error you must take no action based on them, nor must you copy or show them to anyone. Please advise the sender by replying to this email immediately and then delete the original from your computer. Unless this email relates to Broadland District Council or South Norfolk Council business it will be regarded by the council as personal and will not be authorised by or sent on behalf of the councils. The sender will have sole responsibility for any legal actions or disputes that may arise. We have taken steps to ensure that this email and any attachments are free from known viruses but in keeping with good computing practice, you should ensure they are virus free. Emails sent from and received by members and employees of Broadland District Council and South Norfolk Council may be monitored.

Appendix A to the BDC Statement of Common Ground

The following table provides a summary of comments raised by BDC's Environmental Health Officer to the Applicant, along with responses from the Applicant. Although points relating to proposed uses of the main construction compound and associated traffic flows have been addressed, the Applicant would summarise that the traffic flows along The Street would be limited on a daily basis to 118 HGV movements and 130 staff vehicles (which the Applicant will be including as a maximum threshold within the Outline CTMP at a future examination deadline). As such, should traffic movements associated with a specific activity increase, they would need to do so as a proportion of this total, not as increase on the overall total identified. As such, the mitigation identified by the Applicant is appropriate for a maximum design scenario.

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
<p><i>Temporary Roadway</i></p> <p>The copy spreadsheet at D4 APP 7Annex C JNY8772 allows for 2 x 6m x 0.5 roadways and their removal. This equates to just over half a million tonnes of Type 1 material @1.8t/m3. My understanding (which may be incorrect) is that this type of material is in short supply in the county and that it is not uncommon for Norwegian Granite to be sourced from Great Yarmouth docks for example. I agree that the road thickness is generous and allows for makeup and parking and standing areas but if imported granite is used I am told that the density is nearer to 2.5 tonnes rather than 1.8 tonnes /m3 meaning that HGV movements could be higher and vehicle movements might be increased in urban/industrial port areas.</p> <p>I understand that Orsted want/have to retain flexibility and that Sarah explained that it is possible that the cable corridor might be handed back to landowners in between the 2 construction phases. I do feel however that Orsted must give serious consideration to reducing the number of 2 way moves for the roadway construction which stands at just under 107000 movements with all their attendant noise and pollution.</p>	<p>Suppliers to be utilised for the project will be determined during detailed design. Hornsea Three has allowed for up to two haul roads of 6 m in width, and 0.5 in depth along the onshore cable corridor – this is considered a maximum design scenario. The traffic flows utilised within the assessments, and which have informed the development of the Outline Construction Traffic Management Plan, are based on these maximum design values. For key links which are considered to be particularly sensitive (e.g. Cawston), Hornsea Three will be identifying maximum traffic flows which are permitted on a given day – this will be set out and thus secured through the Outline CTMP (to be submitted at Deadline 8). We will however, communicate the locations and maximum flows with NCC (as local highway authority) and the relevant local planning authority earlier if possible.</p> <p>Given that these flows will be secured through the Outline CTMP, any variation in the specification of the material will not affect the maximum construction traffic flows.</p>	<p>We look forward to receiving details of your maximum traffic flows for Cawston and the Oulton compound as soon as you are able to provide them.</p> <p>We remain disappointed that the applicant is not prepared to consider ways in which the number of HGV movements can be reduced particularly at Cawston and Oulton.</p> <p>I understand that if you have to import a granite based material it may not increase maximum construction flows but it could increase overall movements by 30% due to the higher density of the material</p>	<p>The Applicant is committed to continued engagement with BDC to resolve outstanding clarifications.</p>
<p><i>Cable Ducting</i></p> <p>Sarah confirmed that cable ducting would be used for the whole project. As stated this allows flexibility for cable installation. Please can you confirm whether ducting will be directly delivered to the cable corridor and whether ducting material will be stored at Oulton ?</p>	<p>Hornsea Three has allowed for ducting material to be stored at the main construction compound at Oulton (as set out in paragraph 3.17, second bullet point, of Appendix 20 to Deadline 1, REP1-176) before being transported to the onshore cable corridor. The assessment presented within the Environmental Statement (and subsequent documentation) has been undertaken on this maximum design scenario. However, depending on the approach</p>	<p>We welcome the acknowledgement that it may be possible to deliver ducting directly to the cable corridor but wish the applicant could offer more commitment at this stage</p> <p>We look forward to a response to this</p>	<p>The Applicant is committed to continued engagement with BDC to resolve outstanding clarifications.</p>

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
Is there an opportunity to reduce HGV movements by moving the temporary road way material along the corridor once ducting has been installed in one area to allow access for the next length?	adopted by the contractor (who will be appointed during detailed design), there is potential that ducting would be delivered directly to the relevant section of the onshore cable corridor, or to secondary construction compounds, or storage areas along the onshore cable corridor.	question in due course.	
<i>Sand Cable surround</i> Where will treated sand be obtained and where will it be treated. Will the Oulton compound be used?	Sand to be used within the cable trenches will be delivered directly to the onshore cable corridor (pre-treated) and therefore would not be transported to and from the main construction compound. The Applicant is committed to continued engagement with BDC to resolve outstanding clarifications.	Thankyou for confirming this point.I understand from JNY8772 that the development will require almost 870000 tonnes of cement bound sand which equates to approximately 86000 vehicle movements for the whole corridor.6500 of those movements are predicted to pass through Cawston to serve sections 9 and 10 of the cable corridor. Does the applicant know whether it might be possible to prepare the CBS on the corridor using excavated material from the trenches for example?	The Applicant is committed to continued engagement with BDC to resolve outstanding clarifications.
<i>Subsoil removal</i> Can you confirm that no subsoil will be removed from the cable corridor?	Stripping of subsoil resources along the length of the onshore cable corridor will be limited to the construction of the cable trenches (up to six trenches), HDD entry/exit pits at crossing locations, joint bays and link boxes. Subsoil will then be stored within the onshore cable corridor, alongside the cable trench or excavated location.	Please can you confirm that subsoil will not be removed from the cable corridor as part of the restoration process after storage?	The Applicant can confirm that subsoil would not be removed from the onshore cable corridor as part of the restoration process after storage.
<i>Oulton Compound</i> You confirmed that every cable drum will be delivered to	There is potential for multiple movements associated with each cable drum. Under a maximum design scenario (a worst case), the cable drums will first be delivered to the	Understood We look forward to seeing the movement	

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
<p>Oulton where outer protection would be removed and the drum would be prepared for transport to site. Once the cable has been pulled the empty drum would return to Oulton for collection. So am I correct in assuming 4 HGV movements per drum for 800 drums?</p> <p>I have had a chance to look at D1 App20 now and note that drums and ducting will be stored at Oulton so using D4 App7 Annex C JNY 8772 this will account for 9300 2 way journeys approx. ie 4634 x2. Is my assumption correct please?</p> <p>I have also seen reference in Appendix 20: Main Construction Compound Briefing Note that there could be up to 1121 drums. Has any further work been carried out to calculate a more accurate figure?</p> <p>App 20 states that aggregate will be stored on site. I would have hoped that this could be avoided in order to reduce potential noise and dust issues arising from tipping and reloading. Please can you confirm the quantities of aggregate that will be delivered and taken from the site? 1.6.2.39 of APP 159 makes an assumption that aggregates will not be delivered to Oulton.</p> <p>In App 20 para 3.28 mention is made of WQ 1.11.2 and I wondered whether you could direct me to the submission regarding clarity on fluctuation of traffic flows please. Please can you provide the spreadsheet for vehicle movements at Oulton please?</p>	<p>main construction compound, before being transported to the relevant section of the onshore cable corridor. They may also be transported back to the main construction compound before collection or disposal. The movement of abnormal loads has been incorporated into the total traffic flows assessed for each link.</p> <p>The precise number of abnormal loads will be dependant on the length of section of cable. As set out in Volume 1, Chapter 3: Project Description of the Environmental Statement, the onshore export cables will typically be installed in sections of between 750 and 2,500 m at a time, with each section of cable delivered on a cable drum from which it is spooled out as it is installed. The length of cable sections will be informed by choice of transmission technology, phasing and various parameters at a given location including the distance between committed HDDs, constraints present on site (which may influence the location of joint bays) and the local road network (which may necessitate the use of a smaller cable drum). As such it is not possible to provide a specific number of cable drums. The value provided within Appendix 1 of Deadline 3 (REP-010) was an indicative figure based on approximately 800 m of cable per drum.</p> <p>The shorter the length of cable carried on a single cable drum, the greater the number of abnormal load movements; however, these would not increase the total number of movements and would simply comprise a greater proportion of the maximum traffic flows along The Street on a daily basis. Therefore, it is not considered appropriate to provide a total number of abnormal load movements, as these may change, but it can be confirmed that all traffic flows along The Street would be limited on a daily basis to 118 HGV movements and 130 staff vehicles (which the Applicant will be including as a maximum threshold within the Outline</p>	<p>figures that the examiners asked for at the end of the hearing that took place on the 8th March</p>	

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
	<p>CTMP at a future examination deadline). These movements may occur over the full length of the active use of the main construction compound, which comprises up to 30 months.</p> <p>Although it is correct that aggregate may be stored on the main construction compound, this would be limited to a small quantity of replacement aggregate, should emergency repairs (e.g. to the haul road) be required. The aggregate used for the construction of the haul road within the onshore cable corridor would not be transported to and from, and stored at the main construction compound. As such, as stated within paragraph 1.6.2.39 of APP-159, movements associated with the movement of aggregate for the construction of the haul road and secondary compounds has been scoped out of the transport assessment. Mitigation measures to minimise disturbance to noise sensitive receptors, including those close to the main construction compound, are set out in section 6.2 of the Outline CoCP (REP6-014), which will form the basis of the final CoCP to be submitted and approved by the relevant planning authority under Requirement 17 of the draft DCO. These mitigation measures include the implementation of Best Practicable Means (e.g. where reasonably practicable, the use of quieter alternative methods, plant or equipment; and the use of hoardings, enclosures or acoustic barriers) and agreeing construction noise management measures for specific construction activities with the relevant local authority prior to the start of construction. These measures are considered appropriate to control the noise generated by aggregate handling on a sporadic basis. Notwithstanding this, traffic flows along The Street would be limited on a daily basis to 118 HGV movements and 130 staff vehicles (which the Applicant will be including as a maximum threshold within the Outline CTMP at a future examination deadline).</p> <p>In respect to the total movements to occur along The Street</p>		

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response																													
	<p>as a result of the construction of Hornsea Three, the Applicant can confirm the maximum flows across the full 30 month active use of the main construction compound are as follows:</p> <table><tr><th rowspan="2"></th><th colspan="3">Daily HOW3 movements</th><th rowspan="2">Total duration of compound project life (days)</th><th colspan="3">TOTAL movements</th></tr><tr><th>in</th><th>out</th><th>two-way</th><th>in</th><th>out</th><th>two-way</th></tr><tr><td>Lights</td><td>65</td><td>65</td><td>130</td><td rowspan="2">688</td><td>44,688</td><td>44,688</td><td>89,376</td></tr><tr><td>HGVs</td><td>59</td><td>59</td><td>118</td><td>40,563</td><td>40,563</td><td>81,126</td></tr></table>		Daily HOW3 movements			Total duration of compound project life (days)	TOTAL movements			in	out	two-way	in	out	two-way	Lights	65	65	130	688	44,688	44,688	89,376	HGVs	59	59	118	40,563	40,563	81,126		
	Daily HOW3 movements			Total duration of compound project life (days)	TOTAL movements																											
	in	out	two-way		in	out	two-way																									
Lights	65	65	130	688	44,688	44,688	89,376																									
HGVs	59	59	118		40,563	40,563	81,126																									
<p><i>Old Railway Gatehouse</i></p> <p>I made comments about D6 APP 23</p> <p>It was agreed that a comparison with the recent recommendations of the WHO Europe for traffic noise levels be made so that the existing and predicted noise levels can be compared eg Lden and Lnight? L90 could be helpful as per first sight Cawston information seen on 27th Feb.</p> <p>My view is that measurement rather than prediction is possibly better but is the derived SEL representative of the proposed situation? There may be increased noise associated with passing places and the regrading of approaches.</p> <p>Do the audio recordings provide evidence to suggest that the “hump” in the road is adding to noise levels?</p> <p>My understanding from para 4.24 is that 118 HGV and 130 non HGV is the maximum peak 18hr weekday traffic flow but table 4.6 refers to AAWT which I assumes means Annual Average Weekday Traffic. Please can you clarify.</p> <p>It would be helpful to see the spreadsheet for vehicle</p>	<p>The Applicant is mindful that the guidelines relate to strategic analysis of a population’s response to noise rather than an individual’s response, therefore the guidelines were not previously identified as the most appropriate method to assess the potential effect of Hornsea Three. However, in response to BDC’s request, the Applicant has undertaken a comparison with the recent WHO guidelines and has provided this at Deadline 7 (Appendix 24). Baseline LA90 data has also been provided in this submission at Deadline 7.</p> <p>The location close to the planned Railway Gatehouse passing bay, there is an existing ‘informal’ passing bay which is used already by vehicles waiting to pass at the Gatehouse. The planned passing bay is therefore formalising as existing arrangement, albeit the intensity of the frequency of the event is increasing. Notwithstanding this, in response to concerns raised by BDC, the Applicant has given further consideration to the stop/start of HGVs using the formal passing bays proposed as part of the traffic intervention measures, and has provided this at Deadline 7 (Appendix 24).</p> <p>In respect to noise levels associated with the presence of the ‘hump’ in the road, we have undertaken a review of studies in</p>	<p>Noted.</p> <p>BDC would request clarification on the following two points:</p> <ul style="list-style-type: none">• My understanding from para 4.24 is that 118 HGV and 130 non HGV is the maximum peak 18hr weekday traffic flow but table 4.6 refers to AAWT which I assumes means Annual Average Weekday Traffic. Please can you clarify.• It would be helpful to see the spreadsheet for vehicle traffic movements arriving and departing from Oulton compound with a description of weekday traffic movements over the 30 month period at worst case. This would demonstrate for example whether the assumption at para 5.16 is valid.	<p>The Applicant is committed to continued engagement with BDC to resolve outstanding clarifications.</p>																													

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
<p>traffic movements arriving and departing from Oulton compound with a description of weekday traffic movements over the 30 month period at worst case. This would demonstrate for example whether the assumption at para 5.16 is valid.</p> <p>The cumulative assessment does not use the potato storage movement figures in the Vissim assessment.</p>	<p>relation to the effect of road humps on HGV noise. We will provide further information on this in our clarification note to be submitted at Deadline 7.</p> <p>This approach is consistent with the methodology applied in Volume 6, Annex 8.2: Construction Noise Model Output and the peak weekday traffic flows provide the maximum design scenario.</p> <p>In accordance with the Rochdale Envelope approach, the Applicant has based the assessment of potential significant effects on the maximum design scenario. In respect to traffic movements along The Street (to and from the main construction compound), the Applicant has confirmed that flows would be limited on a daily basis to 118 HGV movements and 130 staff vehicles (which the Applicant will be including as a maximum threshold within the Outline CTMP at a future examination deadline). These movements may occur over the full length of the active use of the main construction compound, which comprises up to 30 months. Although it is noted that these daily movements may be lower during less intense periods of construction, the nature, timing and extent of such fluctuations cannot be confirmed until additional details such as construction programme, number of work fronts, transmission technology and phasing have been determined. The consideration of potential effects, and the identification of required mitigation has therefore been based on the maximum design scenario, and it is on this assessment that BDC should consider the acceptability of the impacts predicted. The Applicant would refer to a response above regarding the total number of movements along The</p>		

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
	<p>Street during the total Hornsea Three construction period.</p> <p>In respect to the cumulative assessment, the Applicant can confirm that the flows from the potato storage development have not been included in the baseline. If the flows associated with this development had been included in the baseline when assessing the impacts over an annual average would have increased the baseline noise levels and thus reduce the noise change impact of Hornsea Project Three (which would not represent a worst case assessment).</p> <p>The Applicant is committed to continued engagement with BDC to resolve outstanding clarifications.</p>		
Is baseline speed data available for passing vehicles ?	<p>The Applicant placed equipment to collect baseline speed data as part of the development of the outline intervention schemes, as detailed in Appendix 1 of Deadline 3 (REP3-010). This indicated that, on 16th October 2019 on the Street (135 m south of Heydon Road), the 85th percentile speeds recorded are as follows:</p> <ul style="list-style-type: none"> - Northbound – 45.1 mph; and - Southbound – 42.2 mph. 	Noted	N/A
Non HGV movements have not been given an SEL figure. Please can you explain.	<p>Two methodologies were used to assess changes in traffic flow. The first was based on CRTN and took into account all construction traffic. This modelling can therefore be summarised as the change in noise that would occur if the hump was not there at the moment or in the future. One of the problems of this method is that it does not take into</p>	Noted	N/A

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
	<p>account the increase in noise due to HGVs caused by the hump in the road. Consequently, we undertook some alternative modelling work to quantify the site specific issue of HGV noise and the road hump. Noise due to non HGV traffic is not affected by the road hump and so the SEL modelling focussed on this issue. In any case, noise due to non HGV traffic is not significant in comparison to noise from HGVs. This is borne out by the predicted increase in noise using the CRTN calculation which shows a much smaller increase in noise than the calculation using the SELs with the road hump.</p>		
<p>Agreed that early morning and late evening cable movements would be considered in the assessment given that Highways desires off peak travel time. Are full drum cables abnormal indivisible loads?</p> <p>Notwithstanding mitigation plans escorted drums HGV speed could be reduced to 20mph if desired whilst passing the crossing cottage.</p>	<p>The Applicant has confirmed to NCC, as highways authority, and BDC, that abnormal loads may move to and from the main construction compound during the core working hours, or outside of the core working hours. In response to concerns raised by BDC regarding the potential for amenity impacts associated with night-time movements of abnormal loads, the Applicant has provided further details in the submission at Deadline 7 (Appendix 24). As noted in ISH9 on 08 March 2019, the Applicant has assessed the noise levels associated with abnormal load deliveries in the scenarios of 50% and 100% of the cable drum deliveries within the night-time hours (23:00 – 07:00) to ensure a maximum design scenario has been assessed. Noise levels associated with day-time deliveries outside of the core working hours (e.g. early evening) are included within the assessment presented in Appendix 23 to Deadline 6 Submission: Construction Traffic Noise and Vibration Assessment at The Old Railway Gatehouse (REP6-037).</p> <p>It is noted that Hornsea Three has agreed to add a commitment within the Outline CTMP which recognises that in some locations, additional management measures may apply to the movement of abnormal loads in close proximity to sensitive receptors. The exact nature of the measures as</p>	<p>BDC will review the submissions made at Deadline 7 in due course.</p> <p>Noted</p>	<p>The Applicant is committed to continued engagement with BDC to resolve any outstanding clarifications.</p> <p>N/A</p>

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
	well as the locations and timings for when they will apply will be agreed with the highway authority and relevant planning authority environmental health officer post-consent as part of the detailed CTMP. This could include further restrictions on speed, lighting etc.		
To summarise: The applicant has used the predictive method (CRTN) and noted its shortcomings. It has also measured results to derive an SEL to calculate an LAEQ 16h. My view is that the measurement method is probably more accurate. I also think that it's possible that the assumptions made in paras 5.16, 5.17 and 5.18 may not be correct and that is the reason for most of my questions.	The Applicant has responded on a point by point basis above. It is considered by the Applicant that the assessment presented at Deadline 6 (REP6-037) and the further clarifications provided at Deadline 7 (Appendix 24) provide an robust assessment of the potential for noise impacts at the Old Railway Gatehouse and have identified appropriate mitigation measures to minimise impacts such that they are not considered significant in EIA terms.	BDC will respond once D7 Appendix 24 has been seen	The Applicant is committed to continued engagement with BDC to resolve any outstanding clarifications.

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
<p><i>Cawston</i></p> <p>Await noise and vibration reports plus traffic movement document not yet received from Paul. Paul has appraised school site and feels it is not necessary to restrict movements at drop off and pickup. So far as SCC goes I feel that we are still in discussion about these issues.</p>	<p>Hornsea Three continues to consider potential noise and vibration impacts within Cawston Village, as this will be affected by the refinements in the Hornsea Three HGV traffic flows, following reduction of the haul road depth . Although the refinement in HGV movements will not have a bearing on the conclusions of the ES or the TA (which continue to represent the maximum design scenario), the revised traffic flows will be used to inform the refinement of the Outline CTMP, and identification of any associated noise and vibration mitigation (if deemed necessary).</p> <p>We have developed a proposed set of management measures which has been subject to consultation with Cawston Parish Council working group, Broadland District Council and Norfolk County Council (submitted as part of REP6-016). We are currently in the process of responding to this feedback and will provide a revised outline scheme at Deadline 7 and share with BDC.</p> <p>Baseline noise and vibration surveys have been undertaken within Cawston Village, as well as an assessment of potential impacts from the traffic movements associated with Hornsea Three. This assessment has concluded that there would be no significant noise and vibration impacts on the residential properties of Cawston Village as a result of Hornsea Three. These findings will be submitted at Deadline 7 and shared with BDC.</p> <p>Hornsea Three continues to engage with Norfolk Vanguard to reach a shared common point of agreement on this cumulative link in order to avoid significant noise and vibration effects on residential receptors. We are committed to continuing this engagement and is confident that a reasonable solution will be reached.</p>	<p>Noted, BDC will review the submissions made at Deadline 7.</p>	<p>The Applicant is committed to continued engagement with BDC to resolve any outstanding clarifications.</p>
<p><i>Other:</i></p>	<p>It is estimated that activities at the main construction</p>	<p>Noted</p>	<p>N/A</p>

Comments made by Broadland District Council	Hornsea Project Three Comments/Response	Subsequent comments made by BDC	Hornsea Three Comments/Response
Duration of the use of the main construction compound	compound associated with Hornsea Three would occur within an eight-year construction window. However, the active use (i.e. delivery of cable drums, regular movements by HGVs etc.) of the main construction compound would be limited to up to 30 months, excluding mobilisation and demobilisation. This could be across a single construction phase, or two construction phases. Should Hornsea Three be delivered across two phases, the main construction compound would be demobilised and not in active use during the 'gap', unless otherwise agreed with the local planning authority (as set in Section 3.8 of Volume 1, Chapter 3: Project Description of the Environmental Statement).		