

Third Revolution Projects

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22nd August 2024

Dear Mark,

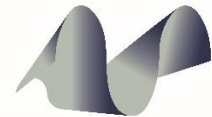
H19-0329-24 – Tydd Solar –Response to Statutory Consultees: LCC Highways Comments

I am writing you on behalf on my client, Pathfinder Clean Energy UKDev Ltd, regarding the above application for a proposed development of a ground-mounted solar array at Land East of Guanockgate Road, Sutton St. Edmund, Spalding, Lincolnshire PE13 4PL. Thank you for providing us the opportunity to respond further to comments from LCC Highways received on 11th June 2024.

The comments from LCC Highways requests additional information and states:

“Having reviewed the Transport and Access Statement by Apex Transport Planning and the Planning Design and Access Statement by PACE, the Highway and Lead Local Flood Authority are of concern with the proposed access arrangements as shown on the swept path analysis for turning movements of HGV's. Although the existing access will be widened to accommodate a 16.5 metre articulated vehicle, they are still unable to negotiate the turning movements without encroaching onto the highway verges on Guanockgate Road causing rutting and deformation of the carriageway edge, which are not shown on the drawings. Over-running of the highway verges will also be created from the HGV movements on the junction of Guanockgate Road and Cross Road as shown on drawing number: C23103-ATP-DR-TP-002. Therefore, in order to mitigate our highway concerns, we would as the applicant to provide a revised drawing showing road widening to Cross Road, Guanockgate Road and the site access to provide sufficient turning movements for all HGV traffic including further swept path analysis.

We are aware that Banksman will be deployed at the site access junction and at the crossroads junction, to ensure that all HGV movements are undertaken safely for the management of site deliveries on arrival and departure. However, the site access road needs to be wide enough to accommodate the safe passage of two HGVs for the first 20 metres. Additionally, the existing access needs to be constructed to the County Councils specification within the limits of the highway boundary and beyond for those first 20 metres to provide safe and suitable access. Therefore, we would ask that the applicant provides a detailed drawing reflecting our comments above. Additionally, any access gated proposed to the entrance of the solar farm at this location need to be set back as a minimum, the length of the longest vehicle to access the site, to allow calling vehicles to manoeuvre off the highway without causing an obstruction to other highway users when opening the gates in the interests of highway safety. We would also ask for a detailed drawing showing the access gates in line with our comments above.



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A swept path analysis for the turning movements of HGV's are to be provided in both directions for the following junction assessments:

- *The B1161 with French Drove*
- *The B1166/Old South Eau Drove with the B1167/French Drove*
- *The B1166/Old South Eau Drove with Broadgate*
- *Broadgate with Cross Road*

Regarding the swept path analysis at the B1166/Old South Eau Drove with Broadgate junction, the Highway Authority are of concern with the vehicle movements from Broadgate turning right on to the B1166/Old South Eau Drove due to restricted visibility splays from the overgrown hedge. Therefore, to mitigate our concerns, we would ask the application how they intend to provide safe and suitable visibility for those movements.

We would ask the applicant to provide a detailed Construction Traffic Management Plan and associated document as specified within the Transport and Access Statement which has not been submitted as part of this application.

We have also shown below LCC Countryside comments and would ask the applicant to provide a response to their concerns:

The proposal affects Sutton St Edmunds Public Footpath No. 8 and Tydd St Mary Public Footpath No. 4. Both routes appear to be accurately incorporated into the development layout. Comments as follows:

'The access track elevation indicates Type 1 will be used as surfacing material and steel plates will be placed over the Type 1 during construction of the solar arrays. Will the public footpath be open during the construction phase? Will the steel plates incorporate an anti-slip feature? Both public footpaths will require closing to enable the construction of the track. What does the developer consider to be 'temporary'?'

Previously, we had discussed with yourself on 20th June that gates are proposed at the entrance to the fields and not across the access track. Appendix A shows the submitted layout plan where the proposed fences and gates can be seen in purple and that there is no gate proposed across the access track until well within the site. As we have heard no further comments regarding this, we consider Highways' questions answered.

Additionally, route analysis of potential passing places along cross road shows that HGVs are able to make the turn at the junction of Cross Road and Guanockgate Road. This additional analysis can be found at Appendix C in drawing ref: C23103-ATP-DR-TP-003.

The proposed site access is already set to be widened enough to accommodate HGVs as in the submitted site layout and the proposed site access drawing at Appendix B. A complete design for the access track will be agreed as part of the section 278 approval following receipt of planning permission.

In order to provide an adequate response to LCC Highways' request for additional information, we have commissioned a qualified transportation specialist to prepare the additional analyses and respond to the points in turn. Their response provides:

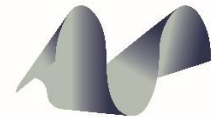
- Swept Path Analysis at the four off-site junction locations requested
- Swept Path Analysis of HGV movements between Cross Road and the site access
- Visibility analysis and proposed mitigation for Broadgate / Old South Eau Bank (B1166)
- Introduction of an alternative route
- Construction Traffic Management Plan (CTMP) at Appendix I

As requested by LCC, additional Swept Path Analysis has been undertaken at the five junctions (four off-site and the site access) located along the proposed construction route as identified by LCC (as shown in Appendix C). This is in addition to the analysis included within the submitted Transport and Access Statement (TAS). The analysis shows a 16.5m long articulated HGV accessing and egressing these locations, which is considered the largest vehicle required to access the site during the construction and decommissioning phases. The analysis for each junction can be found in Appendices D - H.

The findings show that these junctions can accommodate the 16.5m long articulated HGV (referred to as articulated HGV) travelling in both directions. However, the majority of construction vehicles are likely to be rigid HGVs of up to 10m in length, which are capable of transporting all construction materials and components. Only the BESS units and substation components are likely to require transportation by larger articulated vehicles of up to 16.5m in length. These vehicles have been considered as part of the construction routing analysis presented within the TAS.

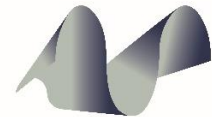
A breakdown of the findings is included below alongside the suggested mitigation measures, where it is considered these are required.

- Location 1 (Appendix D) – Cross Road to Site Access: The analysis shows the articulated HGV stays within the extents of the carriageway when accessing and egressing the site from Cross Road. No widening or mitigation has been identified as being required. As stated in the TAS, the access location will be managed by bankspeople to ensure these movements occur safely. More detail on mitigation measures to accommodate movements appropriately is included within the TAS.
- Location 2 (Appendix E) – Cross Road / Broadgate Junction: The analysis shows the articulated HGV can be accommodated within the extents of the carriageway when accessing and egressing this junction alongside an opposing movement. No widening or mitigation has been identified as being required.
- Location 3 (Appendix F) – Broadgate / Old South Eau Bank (B1166): The analysis shows the articulated HGV can be accommodated within the extents of the carriageway when accessing and egressing this junction alongside an opposing movement. Analysis of the visibility for vehicles emerging from the junction shows visibility distances of approximately 32 metres to the west and 69 metres to the east. These distances are below the recommended level for the 40mph speed limit in this location. As such, it is proposed that construction movements will be managed at this location by a banksperson, to ensure vehicles can appropriately enter and exit the junction without



conflict with oncoming traffic. The proposed location of the banksperson is shown on drawing C23103-ATP-DR-TP008-P01 (Appendix J). This location will enable approximately a 90 metre visibility to the west. This is in accordance with the recommended distance within the DMRB for 40mph speeds (applying 1 step below parameters), and in excess of the recommended distance with MfS2 for 40mph speeds (applying absolute minimum parameters). To the east, the location of the banksperson would allow visibility of at least 250 metres. As such, the provision of a banksperson is considered to be appropriate mitigation in this location, particularly as the temporary construction movements will be managed to and from the junction and along the entire route as part of the CTMP. This is also an existing junction on the highway network and as shown in the TAS, there is no evidence of a specific road safety issue at this location, so although the visibility is below guidance levels, the evidence does not suggest this is unsafe in practice. The publicly available data from the DfT shows one incident occurred at this location in the last 7 years and only two incidents occurred over the entire available 24 year history (1999-2022). The low level of incidents could also relate to the relatively low traffic flows in this location, which minimise the number of occurrences of conflicting vehicle movements.

- Location 4 (Appendix G) – B1166 / French Drove (B1167): The analysis shows the articulated HGV can be accommodated within the extents of the carriageway when accessing and egressing this junction alongside an opposing movement. No widening or mitigation has been identified as being required.
- Location 5 (Appendix F) – French Drove / New Cut (B1167): The analysis shows the articulated HGV can be accommodated within the extents of the carriageway when accessing and egressing this junction. The analysis shows that the articulated HGV would not be able to pass through this junction alongside another vehicle, and would need to give-way accordingly. These roads are not subject to vehicle restrictions, and as such these movements would already occur in this location. It is considered that there is appropriate levels of forward visibility between vehicles at this location given that vehicles will be slowing down to negotiate the corner. Approximately 43 metres forward visibility is available between vehicles approaching from the south and from the point of turning south at the corner, allowing southbound vehicles to slow down and negotiate the junction, if required. There is evidence that forward visibility is possible across New South Eau Drainage channel, allowing a greater level of visibility for vehicles approaching this location. During the construction phase, the majority of the forecast 8 two-way HGV movements are likely to be rigid HGVs of up to 10m in length, which are capable of transporting all construction materials and components. The analysis shows that the 10m long rigid HGVs can be accommodated at this location (see drawing C23103-ATP-DR-TP008-P01 at Appendix L). It is noted that only the BESS units and substation components are likely to require transportation by larger articulated vehicles of up to 16.5m in length. As such, there will only be a low volume of articulated HGVs travelling along this route on any given day, and the likelihood of these articulated vehicles passing background traffic during the interpeak hours will be minimal. Notwithstanding the above, it is proposed that this location can be managed by two qualified bankspeople during delivery times, who will be located either side of the bridge to ensure vehicles



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can safely pass any oncoming traffic. If required, further traffic management can be considered such as stop/go paddle signs operated by the bankspeople. It is considered that this is appropriate to manage the low level of construction vehicle movements predicted during the temporary construction phase, and the boards would only be required 8 times a day during peak construction times (4 vehicles in each direction).

Alternatively, further analysis of the routes shows that there are other options available which would avoid routing through this junction. Following on from the analysis in the TAS, an alternative route is available to the A47 to the south via Murrow (Appendix K). Travelling from the site, vehicles would route via Cross Road, Broadgate, Old South Eau Bank (B1166), and The Bank (B1187), before connecting to the A47 via Gull Road. As stated in the TAS, with the exception of the narrow bridge on the B1167/B1166, the route generally measures between approximately 5.5m – 6.0m, which is considered appropriate for accommodating HGV movements safely. Signs are located on approach to the bridge location notifying drivers of the narrow section and drivers are provided with sufficient visibility to enable them to pass safely. There is no evidence of a road safety issue at this location to suggest an issue with the narrow section, and as such this is considered suitable for use as a construction route. This route would avoid vehicles routing through Junction Location 4 and 5. The alternative route is attached, for consideration by LCC Highways as a route for all construction traffic. This route was discounted due to concerns over the use of Clough Cross Bridge, a grade II listed heritage asset at the confluence of New South Eau Drain and North Level Drain.

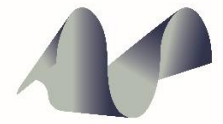
Regarding the comments from LCC Countryside, there are no plans to close or divert any PRoW (including Bridleway 238/13) as part of the proposals, either during the construction or operation phase. The PRoW will remain open and accessible at all times during both the construction and operational phases of the development. An exact design and supplier for the type 1 will be chosen much closer to commencement of development but if requested, non-slip surfaces can be secured via condition. The proposed development has a lifetime of 40 years with an additional year proposed for construction and decommissioning for a total of 42 years.

Taken together, we hope this additional information satisfies the questions of LCC Highways and LCC Countryside. We would also welcome the inclusion of conditions regarding the access and Public Rights of Way in order to alleviate any remaining concerns the consultees might have.

Yours sincerely

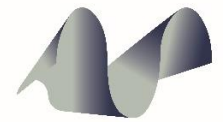
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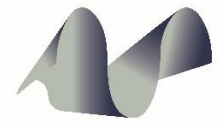
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Appendix A: Proposed Site Layout



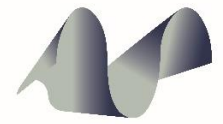
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Appendix B: Site Access Design



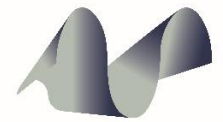
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Appendix C: Off-site Junction Analysis Location Plan



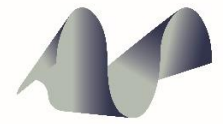
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Appendix D: Swept Path Analysis – Cross Road – Guanockgate Road – Site Access



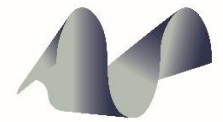
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Appendix E: Swept Path Analysis – Cross Road – Broadgate



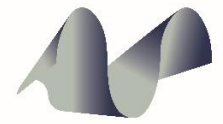
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Appendix F: Swept Path Analysis – French Drove – Old South Eau Bank



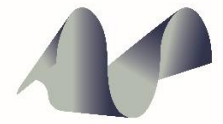
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Appendix G: Swept Path Analysis – B1166 – French Drove



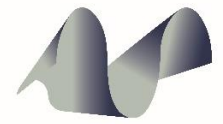
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Appendix H: Swept Path Analysis – French Drove – New Cut (B1167)



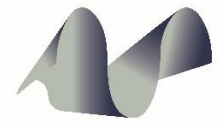
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Appendix I: Construction Traffic Management Plan (CTMP)



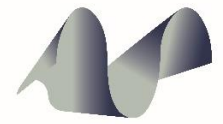
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Appendix J: Location 3 Proposed Banksmen Mitigation Location



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Appendix K: Alternative Construction Route



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Appendix L: Swept Path Analysis – 10m Construction Vehicle