

Green Hill Solar Farm

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Applicant Response to Stop Green Hill Solar Written Transport Response

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Issue Sheet

Report Prepared for: Green Hill Solar Farm

Examination Deadline 6

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1 Introduction

- 1.1.1 This note has been prepared following the submission of a written representation made by Stop Green Hill Solar (SGHS) dated 10 March 2026. This submission was shared with the Applicant following Issue Specific Hearing 5, and the Applicant understands that SGHS will be submitting it into the Examination at Deadline 6.
- 1.1.2 The representation raises a number of questions relating to forecast traffic movements and their management, making comparison to the transport information provided within the Environmental Statement for the Cottam Solar Project.
- 1.1.3 A number of the issues raised appear to relate to a common misinterpretation of how the Transport Assessment has been carried out. In order to effectively respond to these concerns, the approach to the assessment has been clarified.

1.2 Approach to assessment

- 1.2.1 The Transport Assessment seeks to understand whether there is capacity on the highway network in the vicinity of a major project to accommodate the volumes of traffic required for construction. The number of construction vehicles will fluctuate across the construction period, with some activities, for example initial site set up, requiring a larger number of vehicles to access a Site each day. The worst case scenario in terms of potential effects on the public highway is therefore the peak of HGV activity, as effects such as driver delay occur when volumes of traffic on the highway are increased. It is therefore important to identify whether the peak construction traffic flows will result in environmental effects, as a worse case than the lower construction traffic flows that would occur outside of these peak periods.
- 1.2.2 Peak HGV activity has been identified through the indicative programme as being associated with the delivery of Solar modules. The expected HGV deliveries for modules and forecast period has been used to identify the peak period daily HGV movement for each Site. These peak periods are greater than the typical, average profile that might be expected across the entire construction period. This approach ensures that the worst case effects associated with the highest volume of HGV traffic is assessed, associated with the peak construction periods for each part of the Scheme during the construction phase.
- 1.2.3 This reasonable worst case assessment ensures that the worst case traffic effects of the Scheme are assessed, rather than the average effects that would occur outside of these peaks.
- 1.2.4 To provide an indication of the likely overall HGV movements associated with the solar array aspects of the Scheme, forecasts were made against the main construction elements of the scheme including modules, landscaping and access tracks. These construction elements include more detailed aspects such as fencing and groundworks. The underlying assumptions as to the HGV forecasts for these elements has been estimated using figures drawn from other projects, including the Cottam Solar Project.



- 1.2.5 The total number of HGVs is set out in the assessment to illustrate the likely number of HGV movements on a typical day, and to provide comfort that the peak of likely HGV movements have been assessed. The total number of HGVs is provided indicatively to aid understanding that daily HGV movements will be lower than what has been assessed.
- 1.2.6 This approach has been agreed by National Highways, West Northamptonshire Council, North Northamptonshire Council and Milton Keynes City Council in their respective roles as the highway authority for the highway network assessed as part of the Scheme.



2 Comparisons Cottam vs Green Hill Solar

- 2.1.1 Green Hill Solar Farm is a smaller scale scheme than Cottam Solar Project. Cottam Solar Project is designed to provide 600MW of output compared to Green Hill Solar Farm providing 500MW. There are other differences between the projects that affect the likely estimated peak vehicle movement numbers, including that Cottam Solar Project is located across four Sites with the peak number of HGVs at each access point varying to reflect the construction requirements for the part of the project accessed at each location.
- 2.1.2 Accordingly, variations and differences in total forecast vehicle movement numbers would be expected. In particular, it is important to note that the anticipated construction duration for each Site is provided to illustrate the period over which the average daily number of HGV movements would apply; however, construction across the Sites will occur concurrently and the durations for each Site should not be aggregated.
- 2.1.3 An element of flexibility is built into the assessment to recognise that a complete construction programme is not yet known, with the transport assessment assuming, at peak, a greater number of workers than will be working on the Scheme at any one time. This approach recognises that there will be overlapping construction of Sites, and that it is not known at this stage where construction workers will be located at any given time, thereby ensuring the worst-case scenario is assessed.
- 2.1.4 As Green Hill comprises a larger number of solar Sites than the Cottam Solar Project, the aggregate of the individual Site construction durations results in a larger total number of working days; however this reflects the concurrent nature of the construction programme rather than an increase in overall construction activity.
- 2.1.5 The comparison to Cottam Solar Project was made to ensure the daily peak assessments, i.e. those used to assess the traffic effects, were broadly consistent. The comparison of peak daily HGV movements across the two schemes are broadly consistent.

2.2 Calculations of aggregates

- 2.2.1 As noted above, each Scheme will differ in terms of the extent of access tracks required, the ability to utilise existing farm tracks, and the flexibility within each Site for where access tracks may be located. In addition, the Transport Assessment focuses on the peak construction vehicles for the assessment, with the total number of HGVs provided to help illustrate and provide context for how that peak compares to more typical construction traffic volumes within the assessment.
- 2.2.2 Accordingly, it is not possible to draw a direct comparison between the estimated total number of aggregate deliveries between Schemes. The total number is illustrative, as effects relating to construction traffic would be at or below the levels identified for peak construction flows, irrespective of the total number of vehicles or construction duration. This is because the assessment looks at the capacity of the road network to accommodate additional construction vehicles associated with the Scheme on a daily basis.



2.3 Construction compounds and Shuttle bus use

- 2.3.1 As explained above, the peak daily HGV movements associated with each part of the Scheme have been identified for the purposes of the assessment. This peak allows for the construction of compounds associated with the Scheme. This approach enables a robust assessment of transport effects, whilst retaining flexibility for total vehicle numbers to fluctuate based on the detailed design of the Scheme.
- 2.3.2 The Transport Technical Note Shuttle Bus Service Supporting Document [**REP3-080**] outlines the approach towards the use of shuttle buses. The document outlines the reasons why shuttle buses are necessary including:
- Not all construction workers having access to a vehicle and require an alternative means to access the workplace.
 - The rural location of the Sites that comprise the Scheme is such that direct access by public transport is limited.
 - The need to minimise the effect of the development on the highway network.
 - It would not be appropriate to construct vehicle parking areas at a scale which would allow for all workers to travel to the Sites by private vehicles.
- 2.3.3 The document outlines the approach that will be taken for the Scheme and references other Solar Farm schemes where shuttle buses also form part the management of construction movements.
- 2.3.4 ES Chapter 13: Transport and Access (Revision A) [**REP2-003**] sets out at paragraph 13.8.23, how shuttle bus use has been incorporated into the assessment. On average, each shuttle bus is assumed to accommodate 15 workers, and between 40% and 60% of construction workers across the Scheme Sites are expected to arrive by shuttle bus. This is considered a reasonable proportion of workers, reflecting that some workers will travel to Site directly, whilst locations such as temporary accommodation and railway stations lend themselves towards shuttle bus use.
- 2.3.5 In addition to the use of shuttle buses, for construction workers who do drive to individual construction areas within the scheme, an element of lift sharing would be usual and is expected. An occupancy of 1.5 workers per vehicle has been assumed and will reduce overall parking demand and provide a further alternative for travel for those who do not have access to a vehicle. The Construction Worker Travel Plan, secured within the outline Construction Transport Management Plan [**EX6/GH7.9_C**], will include measures to encourage car sharing and has the objectives of reducing single occupancy car travel and increasing shuttle bus use, as well as knowledge of existing public transport and active travel opportunities.
- 2.3.6 The peak number of workers is expected to be 787 workers spread across the Scheme. The Transport Assessment has assessed a higher number of workers as the peak in order to account for the grouping of sites across the North, Central and South areas where these represent different sections of the highway network. This reflects the need for flexibility as the construction programme for the Sites will be confirmed as part of detailed design, as it is not known at this stage where construction workers will be located at any given time.



2.4 Cable corridor

- 2.4.1 A separate assessment of peak movements associated with the cable corridor construction has been undertaken. The peak daily movements reported and assessed are in addition to those reported for Solar Array Sites.
- 2.4.2 As with the construction of the Green Hill Solar Farm, the peak assessments represent the expected greatest daily volumes of traffic during construction against which traffic effects have been assessed. This approach allows for fluctuations in construction traffic from the detailed design of the Scheme, for example if a decision is made to make greater use of HDD and reduce the extent of the haul road that will be temporarily installed adjacent to open cut trenches. It is anticipated that the construction traffic movements on a typical day will be lower than the assessed peak.
- 2.4.3 Whilst the peak construction traffic associated with the Cable Route Corridor has been identified separately, the assessment has considered the transport effects for each road link based on construction traffic to the solar Sites and the Cable Route Corridor. The assessment has assumed that peak construction at the Sites will coincide with peak construction on the Cable Route Corridor, to ensure that the worst case maximum construction traffic flows have been assessed for each link.
- 2.4.4 Wheel washing is a management measure identified in the Outline Construction Traffic Management Plan (Revision C) [EX6/GH7.9_C] and the precise use of these measures will be agreed with the highway authority as part of the detailed management plans.
- 2.4.5 Access points are shown to accommodate movements associated with the delivery of cable drum deliveries. Deliveries directly from the highway may be undertaken where agreed with the relevant highway authority, but this is not anticipated and the accesses have been identified on the basis that they can accommodate, or can be upgraded to accommodate, delivery vehicles leaving the highway before unloading takes place.

2.5 Misc other vehicles

- 2.5.1 It is recognised that not every type of vehicle associated with the Scheme has been listed within ES Chapter 13: Transport and Access [REP2-003] and the Transport Assessment [REP3-036; REP3-038; REP3-040]. The approach of identifying the peak transport movements enables a robust assessment of the worst-case transport effects of the Scheme without requiring a detailed understanding of the total numbers of each type of vehicle – something that would not be known until the detailed design of the Scheme is completed.
- 2.5.2 Using water tankers as an example, these typically have a capacity of between 18,000 and 32,000 litres. This equates to between 1055 and 593 deliveries across the Scheme during the entire 24 month anticipated construction phase – or 1 to 1.5 tankers per day being delivered to the Scheme. This is a proportionately low number of deliveries and has been factored into the calculation of the peak construction vehicles for the Scheme.



2.5.3 In respect of the concern that article 17 (discharge of water) would be used to discharge water and potentially contaminate watercourses, please refer to the Written Summary of the Applicants Oral Submissions at Issue Specific Hearing 6 [EX6/GH8.1.45]. This article permits the discharge of clean water only, and requires the permission of the owner of the receiving watercourse or sewer.

2.6 Replacement phase

2.6.1 SGHS raises the question over the length of time it may take to replace the BESS equipment and clarify why HGV movements are expected to be greater for this aspect of the scheme compared to the construction phase.

2.6.2 The programme for replacement is not yet known. This will be confirmed at the time of replacement with the management of vehicle movements confirmed through a detailed Operational Traffic Management Plan, secured by Requirement 16 in Schedule 2 to the draft DCO [EX6/GH3.1_E]. Please refer to the outline Operational Traffic Management Plan [REP3-064].

2.6.3 In order to ensure that the assessment of vehicles associated with the scheduled replacement of panels and BESS, the Applicant has assumed that the delivery of new materials will be wholly separate from movements to remove old equipment from the Sites. As a result, HGV movements associated with the BESS are greater during the replacement phase than during the construction phase due to the assumption that each vehicle will arrive empty to remove equipment to be replaced. Similarly, vehicles delivering new equipment are assumed to depart the Site empty after making the delivery.

2.6.4 In respect of the Solar Sites, the same assumption is made; however the overall number of HGVs is lower as the movements associated with constructing the substations, access tracks and solar mounting structures are not replicated during the replacement period.

2.6.5 In practice, HGVs will be used to both deliver new equipment and collect old equipment as much as practicable, as this is more efficient and cost-effective.

2.7 Grendon Football club near Yardley compound

2.7.1 The Outline Construction Traffic Management Plan [EX6/GH7.9_C] makes a commitment towards ensuring travel is restricted during school drop off and pick up times (typically 08:00-09:00 and 15:00-16:00). This will relate to specific elements of the scheme where such considerations are relevant. The outline Construction Traffic Management Plan has been updated to highlight the location of Grendon Football club, to ensure that appropriate restrictions are included in the detailed Construction Traffic Management Plan to be approved under Requirement 15 in Schedule 2 to the draft DCO [EX6/GH3.1_E]. This approach will be taken in relation to any such community asset in the vicinity of the Scheme.



3 Summary

- 3.1.1 Section 6.2 of the Outline Construction Traffic Management Plan **[EX6/GH7.9_C]** confirms that construction activities will be carried out Monday to Friday 07:00-18:00 and between 08:00 and 13:30 on Saturdays, which constitute the core working hours (excluding any start-up and shut down works). Sunday working is not proposed. Some activities may be required outside of these times, such as continuous HDD or the delivery of abnormal loads. The programming of abnormal load deliveries will be agreed with the relevant highway authorities and the police, with consideration given to requirements for safety and minimising disruption to ordinary traffic.
- 3.1.2 For the reasons set out above, the Applicant is confident that its assessment has appropriately considered the realistic worst case scenario for transport effects, being the period during which the greatest volume of construction vehicles may be present on the public highway at any one time. The total number of HGVs is provided indicatively to help illustrate that typical construction traffic volumes will be lower than the assessed peak. It will not be possible to reliably ascertain the total number of HGVs until detailed design has been completed. For these reasons, the assessment focuses on the peak construction traffic that could occur during construction of the Scheme, with the resulting effects assessed by reference to the maximum volume of additional traffic on the highway network rather than the absolute total number of HGVs.