

TOWN AND COUNTRY PLANNING ACT**HIGHWAY REPORT ON PROPOSALS FOR DEVELOPMENT**

DISTRICT:	Newark	Date received	24/10/2023
OFFICER:	Amy Davies		
PROPOSAL:	Proposed ground mounted photo voltaic solar farm and battery energy storage system with associated equipment, infrastructure, grid connection and ancillary work.	D.C. No.	N/23/01837/FULM
LOCATION:	Land To The West Of Main Street Kelham		
APPLICANT:	Assured Asset Solar 2 Ltd - Mr Innes		

These highway observations relate to the planning application for a proposed solar farm and battery energy storage system (BESS) on land west of the A617 Main Road, Kelham.

Pre-application advice was provided under PREAPM/00198/2022 on 28/7/22.

Site Access Geometry

The sole means of vehicular access to the site is taken from the A617. The site access proposal is illustrated on drawing number 153626-001A, appended to the Transport Statement (TS).

As currently shown, the proposed site access geometry is not acceptable to the highway authority. It does not accord with the geometric requirements set out in the Design Manual for Roads and Bridges (DMRB) as it does not include the necessary corner taper on the entry into the site.

Drawing number 153626-001A shows swept paths for a 16.5m long articulated vehicle. In 2023, the maximum permissible length of an articulated HGV became 18.55m. Swept paths will be needed to show that the proposed access can accommodate such longer vehicles. Access by any abnormal loads will also have to be considered.

Sirius Planning drawing number HC1002/05/23 also illustrates access details, for which the above comments also apply. In addition, that drawing shows a proposed gate on the site access road located a short distance from the highway boundary. Any such gate will need to be set back to allow long vehicles to wait on the access clear of the highway. 30m is recommended to accommodate an abnormal load and escort vehicle. The site access road should be hard-surfaced over at least this distance.

Vehicular accesses, other than the main site access onto the A617, for example onto Broadgate Lane and elsewhere along the A617, should be stopped-up and reinstated to verge/footway to prevent vehicular use.

Site Access Visibility

The visibility stopping sight distances (SSDs) shown in Table 5 of the TS are obtained by calculation, not by reference to the Design Manual for Roads and Bridges (DMRB; CD109, Highway Link Design). The A617 is a rural classified road for which estimating SSDs by calculation is not acceptable to the highway authority. The splay in Table 5 of the TS are not therefore accepted.

The relevant SSDs within the 50mph speed limit on the A617 are those shown in para 4.2.2 of the TS i.e. 160m. Such SSDs cannot be achieved from the existing site access onto the A617.

The applicant considers that retention of the existing hedgerow along the A617 site frontage is necessary, in relation to its perceived role in mitigating the landscape impact of the proposed development, and proposes that the hedgerow should not be removed to facilitate visibility splays. This results in a site access scheme that cannot meet the necessary visibility splay standards within the existing 50mph speed limit on the A617.

The applicant therefore proposes a reduction in the speed limit to 40mph during the construction phase of the proposed development, to seek to ensure that speeds are controlled to levels which would support the available visibility at the site access.

Such a reduction in speed limit is not acceptable to the highway authority as a matter of principle. It should not be necessary, the normal approach being to provide an access scheme that meets relevant standards. Nor is it considered practicable, since enforcement is unlikely over the proposed short length of 40mph speed limit and may not result in traffic speeds which would support the available visibility distances. A reduction in speed limit would disbenefit all traffic on the A617.

The applicant's landscape appraisal notes that the existing hedgerow along the eastern site frontage to the A617 is gappy. It has limited effect in mitigating the landscape impact of the proposed development. The landscape assessment and masterplan both refer to hedgerow planting alongside the internal site access road, which runs parallel to the A617. The assessment confirms that such planting would mitigate the visual impact of the proposed development by substantially screening low level views into the site from the A617. This would offset impacts associated with the necessary hedgerow removal along the A617 to provide an access that meets visibility splay standards.

The TS and drawing number 153626-005A suggest that visibility splays of 2.4m x 96m can be achieved at the site access and would accord with the DMRB visibility splay requirements within the proposed 40mph speed limit. However, the DMRB stopping sight distance requirement for a 40mph speed limit (70kph design speed) is 120m. Consequently, the 2.4m x 96m splays illustrated on drawing number 153626-005A would not meet the DMRB standard even with a reduction in the speed limit to 40mph. However, such splays do confirm how much the achievable level of visibility departs from the required value within the 50mph speed limit.

Although the improved access would be lightly trafficked following the construction phase it will still be used for maintenance access, leaving an arrangement which would, without hedgerow removal and/or control, have visibility splays well below those required within the 50mph speed limit.

The current access proposal is therefore not acceptable to the highway authority on road safety grounds due to the lack of side road visibility.

The applicant should reassess the site access design, and/or its location, to provide a scheme which meets the necessary visibility splay requirements (2.4m x 160m visibility splays) without reducing the speed limit on the A617. An alternative location for the proposed site access could be considered. This may be further north along the A617 rather than, as shown, on the inside of the bend on the A617 which exacerbates the impact of visibility splays on the hedgerow. Such an alternative location may reduce the extent of impact on the existing roadside hedgerow. Opportunities for planting new hedgerows behind the necessary visibility splays should also be considered.

Visibility splays shown on the topographical survey base may not be achievable in practice as the survey will not accurately show the width/height of the hedgerow along its length. The impact of splays on the A617 hedgerow will need to be determined on-site.

Traffic Impact – Highway Capacity

It is not possible to check the estimates of construction-related traffic which are presented in the TS, as there is no supporting information to show how such estimates have been produced.

The applicant suggests that construction staff could be transported to and from the site by means of a “crew car”. However, such a proposal is unlikely to be practicable given the likely diverse origins and destinations of staff. Most site staff would be likely to travel to/from the site by private car as the opportunities for travel by sustainable means are limited.

The applicant should provide details of the calculation of development traffic so that the estimates can be checked. The applicant should also provide estimates of construction staff numbers, which may vary during the construction programme, their associated traffic movements, and car parking demand.

Only once such information is available will it be possible to fully assess the likely impact of the proposed development on highway capacity.

Traffic Impact – Road Safety

The TS includes an incident plot which illustrates more than the four incidents that are referred to in the TS text. The applicant should clarify the incident references referred to in the TS text, which do not all match those shown on the incident plot.

Two of the incidents occurred at the same location i.e. one of the bends to the east of Kelham. Both involved vehicles travelling in opposite directions.

Conditions at the bends on the A617 at Kelham are of concern and the applicant should consider the impact of the proposed development traffic, particularly HGVs and any abnormal loads, at these locations. Swept path plots to demonstrate that long vehicles can pass each other in opposite directions would be useful at these locations.

The incident data is provided for the period January 2017 to the end of December 2021, including periods during lockdowns. The applicant should determine whether data is available during 2022 and 2023 and update the analysis as appropriate.

Parking

No proposals are made for parking for site construction staff. Given that most staff would likely arrive by car, on-site parking provision will be needed during the construction phase to prevent on-street parking along the A617 and/or within Kelham and Averham. Details should be provided.

Public Rights of Way

Proposals will be needed to ensure that users of the public right of way through the site are safe and not inconvenienced during construction. Details should be provided.

Stage One Road Safety Audit Brief

The stage one road safety audit brief will need to be updated to reflect changes to the TS which arise from the above comments. The highway authority has not therefore considered the stage one road safety audit brief at this stage.

On-Site Access

The applicant should provide details which confirm how long vehicles will manoeuvre on the on-site service access tracks and within loading/unloading areas.

Emergency Access

The local planning authority are advised to consult Nottinghamshire Fire and Rescue over emergency access, including access to the BESS facility.

Construction Traffic Management Plan

A construction traffic management plan will be needed.

Highway Condition Survey

Surveys of the existing condition of the local highway network will be needed prior to commencement of development. Such surveys would be repeated after construction is completed and the applicant will be expected to implement measures to address any identified dilapidation issues.

Planning Conditions

Planning conditions will be needed to address highway matters. However, having regard to the above issues, the highway authority is not able to recommend conditions at this stage.

Conclusion

Having regard to the above observations, the highway authority currently OBJECTS to the proposed development on highway safety grounds.

The highway authority will consider this stance should further information be submitted by the applicant which addresses the above issues.

SD; NCC HDC; 31/10/23