

Lee Kendall

From: Phil Roden
Sent: 13 October 2022 09:16
To: Shaun Greaves
Cc: Matthew.Armstrong@hertfordshire.gov.uk; Lee Kendall
Subject: FW: 21/03380/FP at Land To The North And East Of Great Wymondley, Hertfordshire - HCC Ref NH/10262/2021
Attachments: 3004-01-D04 Proposed Passing Place and Visibility Splays.pdf; 3004-01-D05 Forward Visibility Splays.pdf; 3004-01-ATR03 - Swept Path Assessment - Northern Access.pdf

Shaun,

Further to recent discussions with the Local Highway Authority (LHA) at Herts County Council (HCC), please find attached the following drawings:-

3004-01-D04 – Proposed Passing Place and Visibility Splays

3004-01-D05 – Forward Visibility Splays

3004-01-ATR03 – Swept Path Assessment

These drawings supercede those submitted with the application in the Appendices to the Transport Statement (TS), and should therefore formally be substituted for those drawings, and form part of the approved list of plans in any grant of planning permission that your council may be minded to issue.

For the record, the discussions with the LHA can be summarised as follows:-

13th July 2022:

AXIS provided a technical note response to the LHA's comments dated 16th Dec 2021 and 8th June 2022, responding to queries regarding the access junction geometry, visibility splays, swept path assessments, parking, servicing, the CTMP, and glint and glare effects. An updated TS was submitted at this time.

15th August 2022:

The LHA provided a response to the LPA which was subsequently forwarded to AXIS for comment. The comments included a number of points summarised below:

- The provided visibility splays showed visibility to the nearside edge of carriageway. The LHA indicated that the full visibility splay should be provided, ensuring both the nearside and far-side carriageway are visible from the northern site access. This was justified by suggesting that a motorcyclist approaching the site from the east or overtaking a car from the west would travel more closely to the offside kerb.
- The LHA suggested that the standard deviation between the 85th percentile and mean speed of the traffic survey data undertaken by AXIS was high. The LHA indicated that the spread of measured speed was high and therefore that the visibility splays might need to be based on something higher than 85th percentile vehicle speeds.
- The LHA suggested that an on-site audit of Gravely Lane should be conducted in order to ascertain the widths of the road and to show that two HGVs may pass by one another along Gravely Lane to the east of the proposed accesses.
- The LHA questioned if a passing place would be needed to provide two-way HGV traffic.
- The above issues meant that access for HGVs during the construction phase could not be considered in a Construction Traffic Management Plan (CTMP) secured by condition, rather the site access arrangements (including access by HGVs and visibility splays) would need to be considered prior to the granting of any planning permission.

26th August 2022:

AXIS provided a response to the LHA concerns dated on 15th August. The response is summarised below:

- A review of the ATC speed data was undertaken. The analysis indicated that the standard deviation of the survey data was within an acceptable parameter (based on DMRB criterion) and that use of an 85th percentile vehicle speed to inform stopping sight distance (SSD) was therefore appropriate. In order to add an additional degree of robustness to the visibility splays, an alternative 'statistical formula' method of deriving the 85th percentile vehicle speed was used (per DMRB CA 185). This resulted in a slightly greater 85th percentile vehicle speed of 50mph westbound and 41mph eastbound. The resulting SSD suggested that drivers at the northern site access should ideally be able to see 105m to the west and 148m to the east along Graveley Lane.
- AXIS obtained adopted highway boundary information from HCC which showed that the adopted highway accords with the highway verge on Graveley Lane. It was found that the revised visibility splays from the northern access lay within this boundary.
- The accuracy of the OS mapping utilised within the submitted drawings was compared against satellite imagery. Any discrepancies between the OS mapping and satellite imagery were amended in the interests of accuracy.
- It was noted at this point that the off-side edge of carriageway was not entirely visible from a 2.4m setback distance, however it was suggested that a motorcycle, for example, would still be visible given a reasonable separable distance between the edge of the carriageway and the path of any approaching motorcycle. From a position 4.5m back of the northern site access give way line, it would be possible to see the entire far-side carriageway. It was noted that any drivers approaching the give way line of the site access would be looking in each direction as they slowed down towards the give way line, and would therefore be afforded a slightly greater view of any oncoming traffic across the full width of the road. It was also noted that the eye-height of a HGV driver would be considerably higher than that of a car driver, and would over sail the surrounding hedgerows, particularly as they would be cut back and maintained to provide the proposed visibility splays.
- In order to demonstrate the sections of Graveley Lane that would allow two-way HGV traffic, a swept path analysis drawing was prepared over the entire length of the lane between the northern site access and the junction with the B197 High St. The swept path analysis indicated that there was a limited length of Graveley Lane east of the northern site access where two-way HGV movement would not be possible.
- To address the section where two-way movement would not be possible, a new passing place was proposed on the northern side of Graveley Lane, thus according with the LHA's suggestion.

A revised drawing was provided to the LHA with revised visibility splays and a proposed passing place in accordance with the outcome of the above. This resulted in the need to relocate the proposed northern site access some 32m east of where it was shown in the previous suite of drawings.

6th September 2022:

The LHA responded to AXIS's comments (provided 26th August). The response is summarised below:

- The LHA reiterated that a site audit of Graveley Lane would be required and that the use of satellite imagery did not form a suitable alternative / augment to OS mapping due to the potential for some distortion in aerial imagery. The tracking provided of the length of Graveley Lane was welcomed, however the LHA indicated that it may not provide an accurate representation of the road due to the lack of on-site measurements. The LHA therefore suggested that measurements at regular intervals should be undertaken on Graveley Lane.
- The LHA expressed concern over the impact on vegetation and biodiversity both due to the provision of the proposed passing place in the highway verge and the need to remove vegetation to maintain the proposed visibility splays. The LHA included a number of on-site images showing the extent to which the surrounding highway verge would potentially be affected and the observation that vegetation was higher on the highway verge than it might otherwise appear from Google Streetview imagery.
- It was suggested that the LHA now have greater remit to protect vegetation and biodiversity, although The LHA conceded that this would need to be weighed against the benefits of a new solar energy development.

8th September 2022:

A site visit was undertaken to take spot measurements and widths of Gravely Lane between the proposed northern site access and the B197. These were undertaken at 10m intervals along the length of the proposed visibility splays and at 50m intervals thereafter.

26th September 2022:

AXIS provided an email response to the 6th September LHA comments, as summarised below:

- The on-site observations indicated that Gravely Lane is consistently greater than 6m in width for the majority of its length, which provides adequate width to allow two HGVs to pass one another. There is a short (circa 50m long) section of road to the east of the proposed site access which narrows to a pinch point of 4.8m wide. The narrowest section of Gravely Lane coincides with the location of the proposed site access, which would feature localised widening with the introduction of the site access. The proposed passing place on the northern side of Gravely Lane (located to the east of the narrower section of Graveley Lane) will therefore provide a suitable facility for HGVs to pass one-another along the constrained section.
- It was suggested that following the site visit, the impact of visibility splays and the passing place on surrounding vegetation would be minimal, with the removal of a remnant section of hedge and cutting back of the grass verge which appeared to be overgrown. There were some isolated trees, however trunk measurement indicated that these trees would qualify as 'isolated slim objects' under the definition set out in DMRB CD109, and would not therefore need to be removed to allow the required visibility.
- The adopted highway plan was provided and it was noted that the applicant owns a portion of the area affected by the visibility splays and would therefore be capable of maintaining the vegetation within their ownership. It was stated that trimming of the grass in the verge within the adopted highway boundary to approximately 0.8m height for the short duration of the construction programme would not present a material impact on biodiversity.

5th October 2022:

The LHA requested additional details of the proposed site access arrangements, as summarised below:

- The LHA requested a more detailed plan of the proposed passing bay, including dimensions and forward visibility splays in both directions.
- It was noted that HGVs would be required to swing out into the opposite carriageway to make the turn out of and into the proposed northern and southern accesses respectively. The LHA therefore requested that forward visibility splays were prepared to ensure that approaching vehicles could observe these manoeuvres and slow down on the approach to the site access.
- The LHA indicated that with the additional information that had been prepared to date, and upon confirmation that the requested forward visibility splays could be achieved, it may be possible to satisfactorily apply and accept the provision of a pre-commencement CTMP.

10th October 2022:

AXIS submitted further drawings which demonstrated the proposed passing bay dimensions and forward visibility splays for the proposed passing place and HGV manoeuvres, as requested by the LHA on 5th October.

12th October 2022:

The LHA indicated that the latest drawings were satisfactory and that a revised consultation response would be provided formally removing the LHA objection to the proposal.

I trust that the provided information will be forward the HCC Highways for their formal consultation response and that this will enable North Hertfordshire to determine the planning application at the next available planning committee. If you have any queries do not hesitate to contact me.

Regards,

Lee Kendall

Technical Director



leekendall@axisped.co.uk

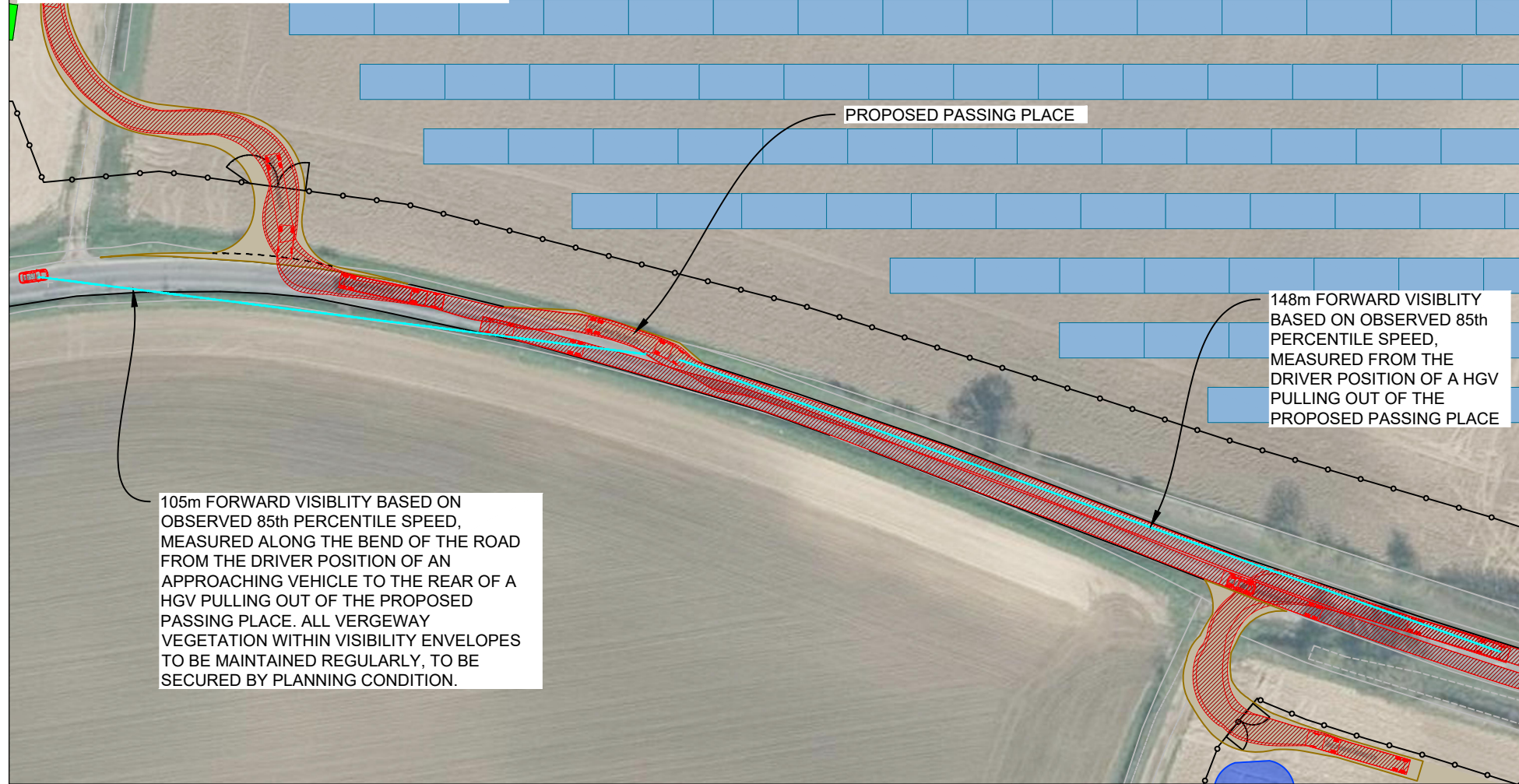
T: 0844 8700 007* | M: 07974 686045

Camellia House, 76 Water Lane, Wilmslow, Cheshire, SK9 5BB

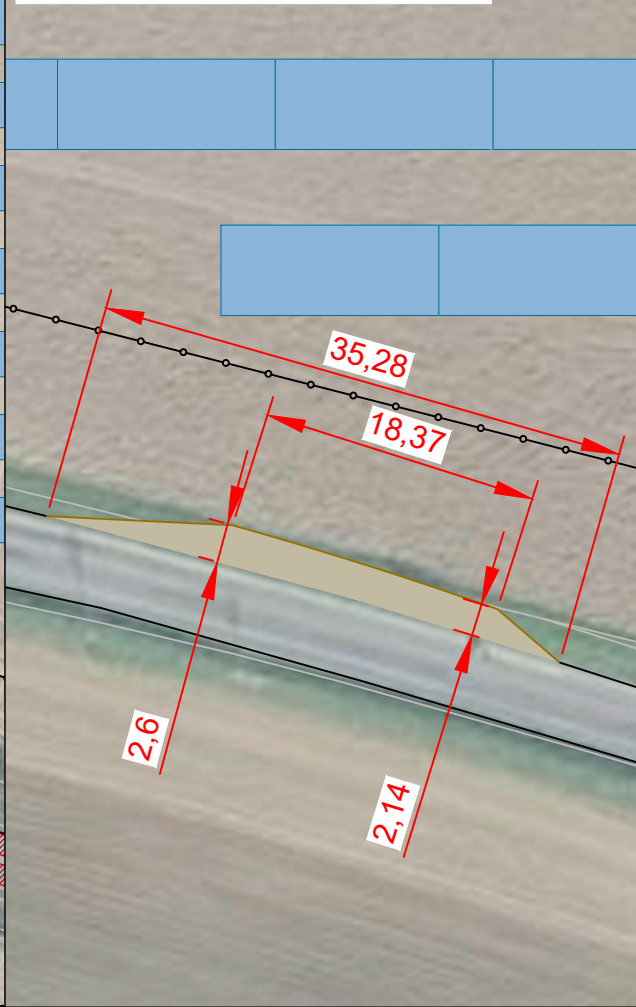
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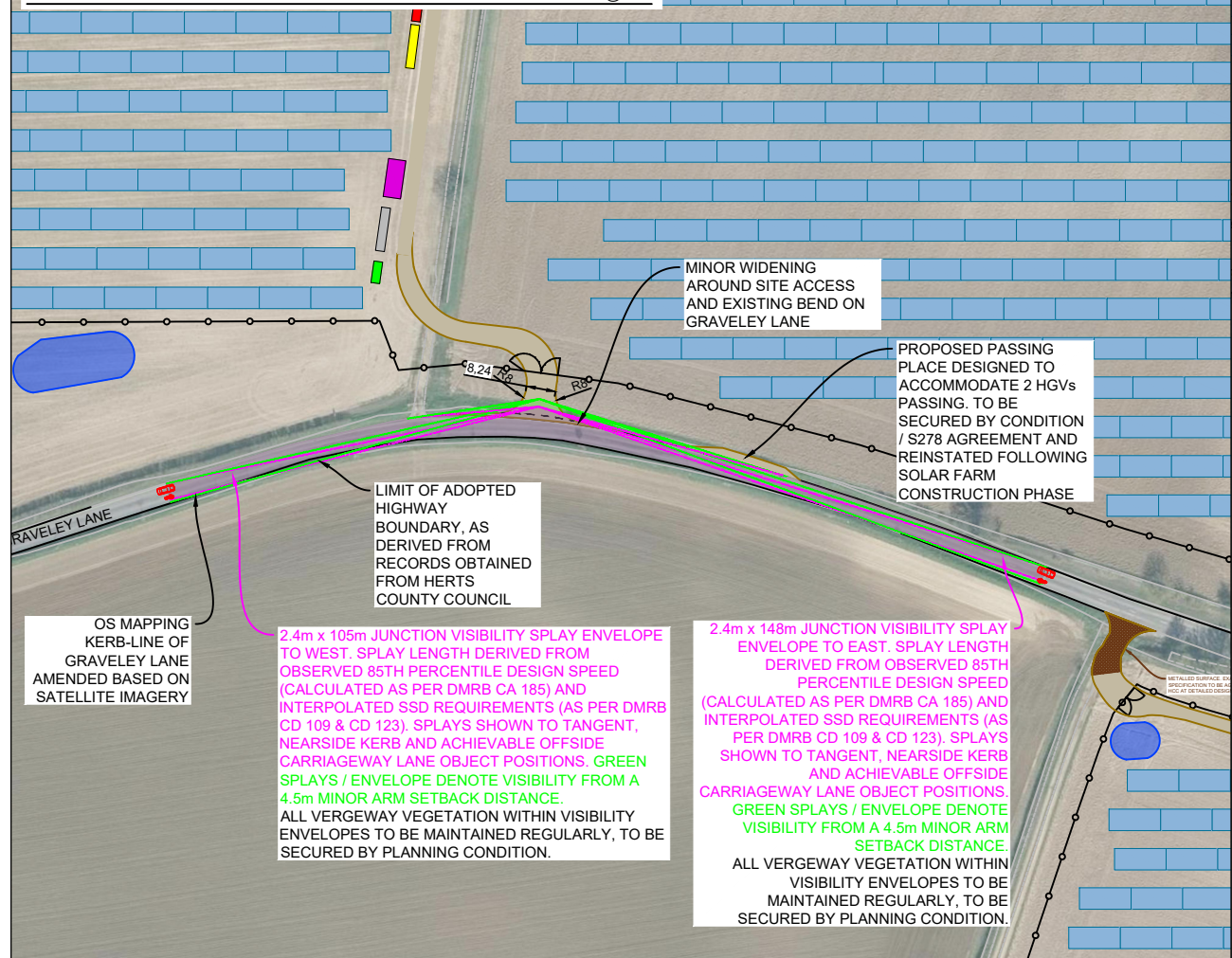
PASSING PLACE FORWARD VISIBILITY SPLAYS - 1:1000@A3



PROPOSED PASSING PLACE - 1:500@A3



NORTHERN ACCESS JUNCTION VISIBILITY SPLAYS - 1:2000@A3



SOUTHERN ACCESS JUNCTION VISIBILITY SPLAYS - 1:2000@A3



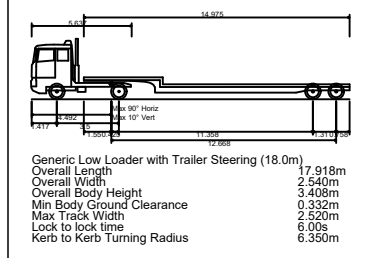
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Revision History

| Revision | Date |
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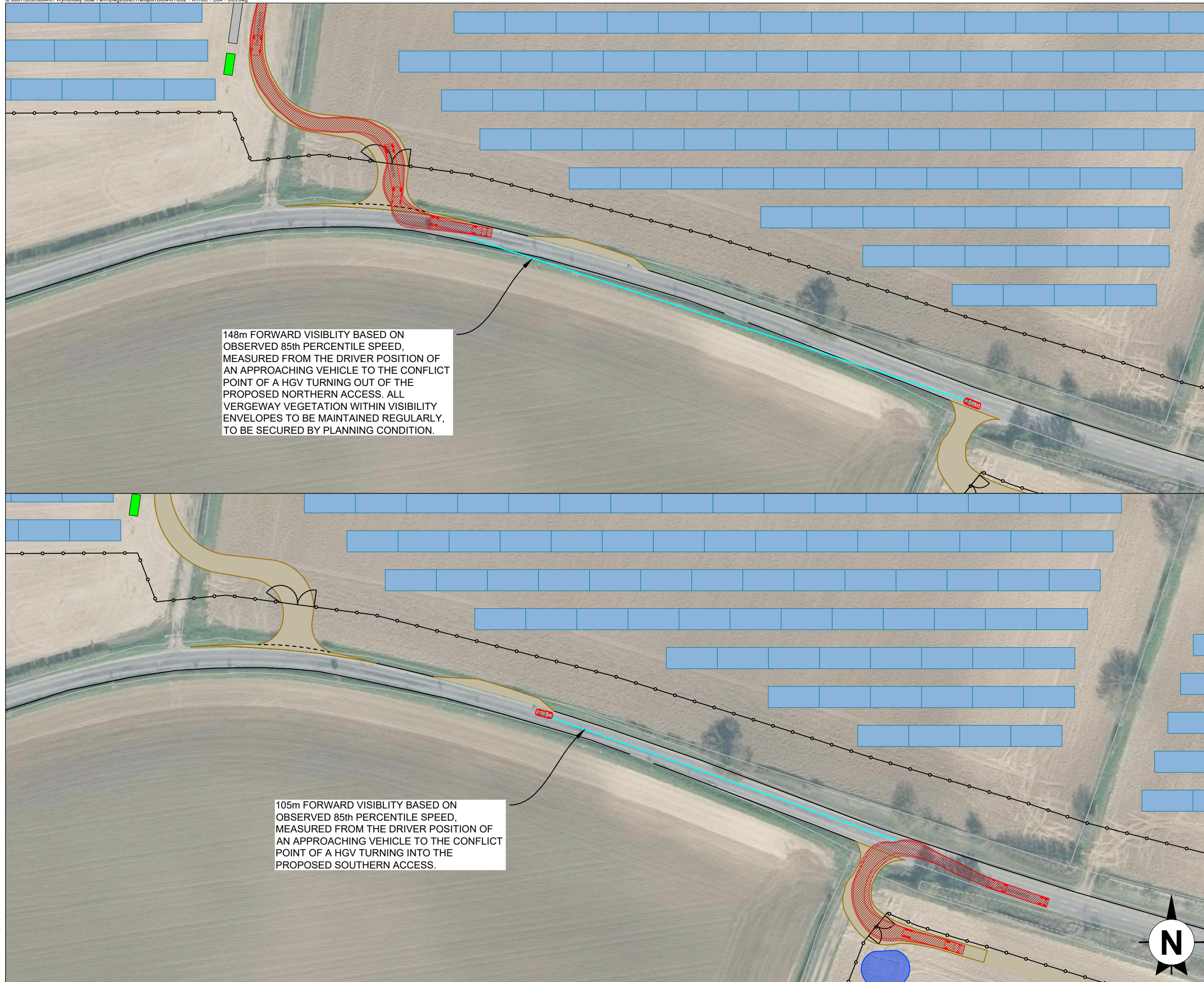
VEHICLE USED IN TRACKING:



Generic Low Loader with Trailer Steering (18.0m)

Overall Length 17.918m
Overall Width 2.540m
Overall Body Height 3.408m
Min Body Ground Clearance 0.332m
Max Track Width 2.520m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.350m

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| Chester Office West House Bldg Breton Chester CH4 8DH | South Manchester Office Canalside House 7th Water Lane Worsley SK3 8LL | axis 0844 8700 007 - www.axisped.co.uk |
| client: AGR 4 SOLAR LIMITED | | |
| project: PRIORITY FARM SOLAR ARRAY | | |
| drawing title: PROPOSED PASSING PLACE AND JUNCTION VISIBILITY SPLAYS | | |
| date: 06.10.22 | drawn by: JW | checked: LK |
| drawing number: 3004-01-D04 | status: PRELIM | rev: |
| scale(s): AS INDICATED@A3 | | |
| planning environment design | | |



148m FORWARD VISIBILITY BASED ON OBSERVED 85th PERCENTILE SPEED, MEASURED FROM THE DRIVER POSITION OF AN APPROACHING VEHICLE TO THE CONFLICT POINT OF A HGV TURNING OUT OF THE PROPOSED NORTHERN ACCESS. ALL VERGEWAY VEGETATION WITHIN VISIBILITY ENVELOPES TO BE MAINTAINED REGULARLY, TO BE SECURED BY PLANNING CONDITION.

105m FORWARD VISIBILITY BASED ON OBSERVED 85th PERCENTILE SPEED, MEASURED FROM THE DRIVER POSITION OF AN APPROACHING VEHICLE TO THE CONFLICT POINT OF A HGV TURNING INTO THE PROPOSED SOUTHERN ACCESS.

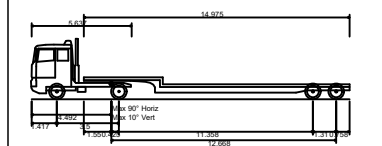
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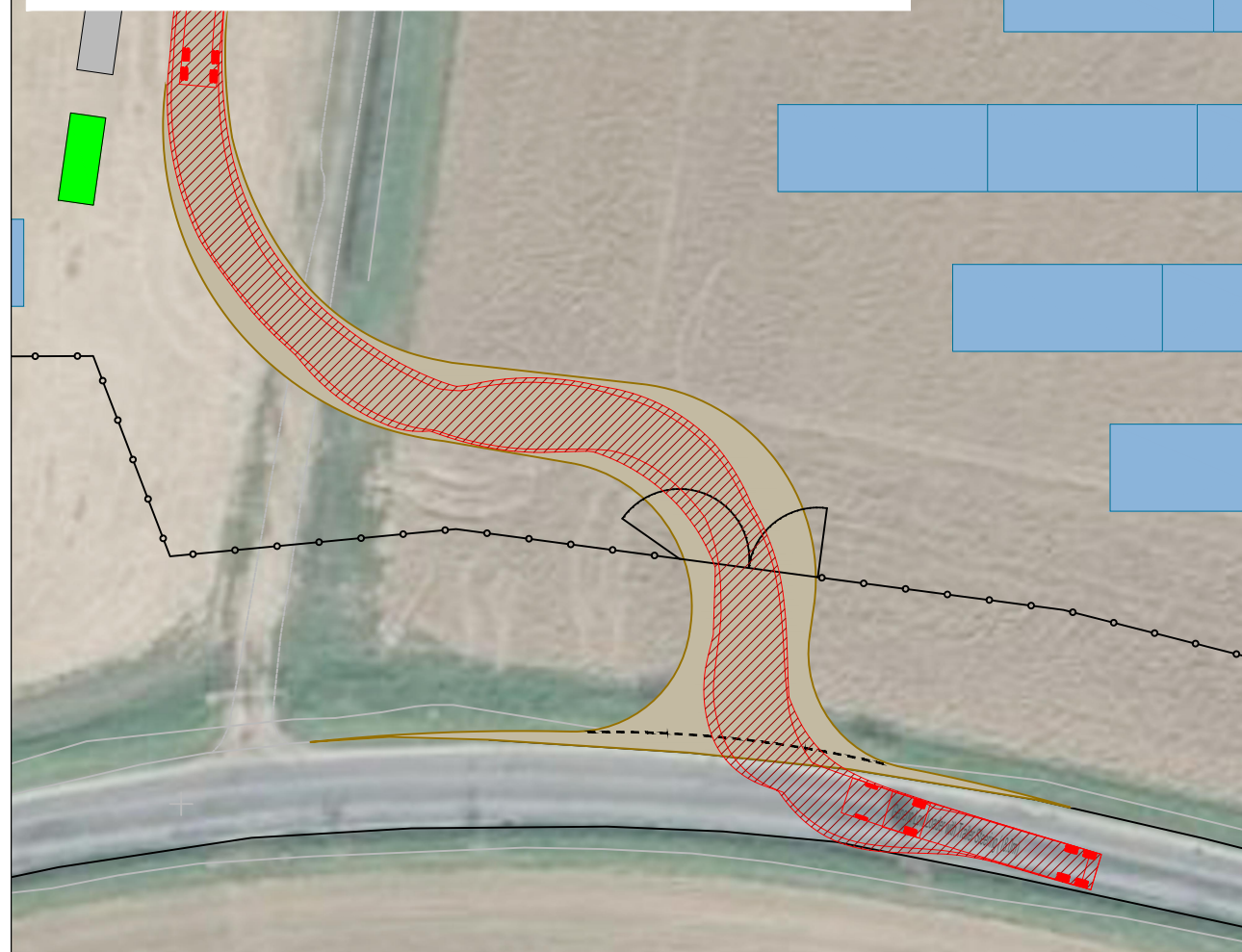
Generic Low Loader with Trailer Steering (18.0m)
 Overall Length 17.918m
 Overall Width 2.540m
 Overall Body Height 3.408m
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 Kerb to Kerb Turning Radius 6.350m

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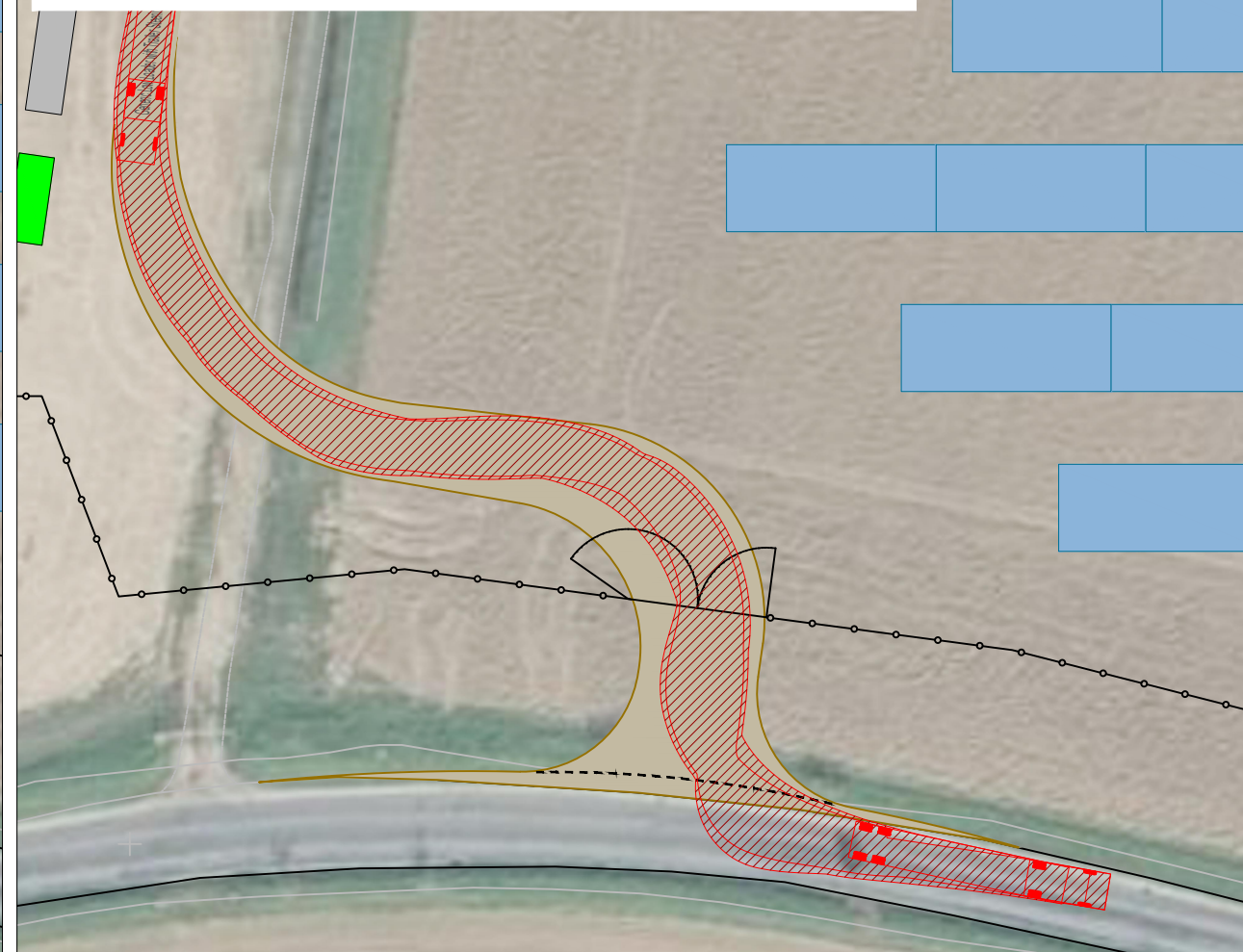
FORWARD VISIBILITY

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| client: AGR 4 SOLAR LIMITED | | |
| project: PRIORITY FARM SOLAR ARRAY | | |
| drawing title: FORWARD VISIBILITY | | |
| date: 06.10.22 | drawing number: 3004-01-D05 | drawn by: JW checked: LK |
| scale(s): 1:1000@A3 | status: PRELIM | rev: |
| planning environment design | | |

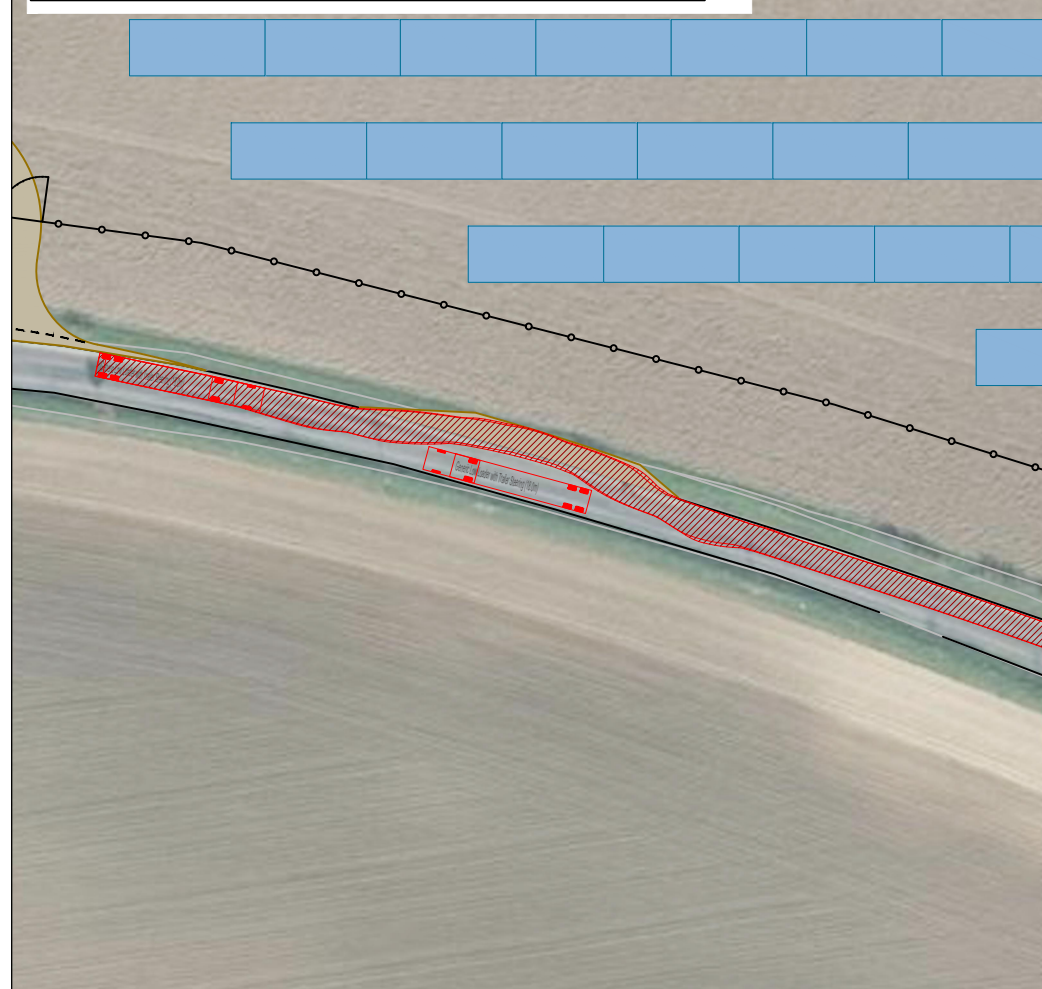
VIEWPORT 1 - NORTHERN PARCEL - ACCESS (1:500@A3)



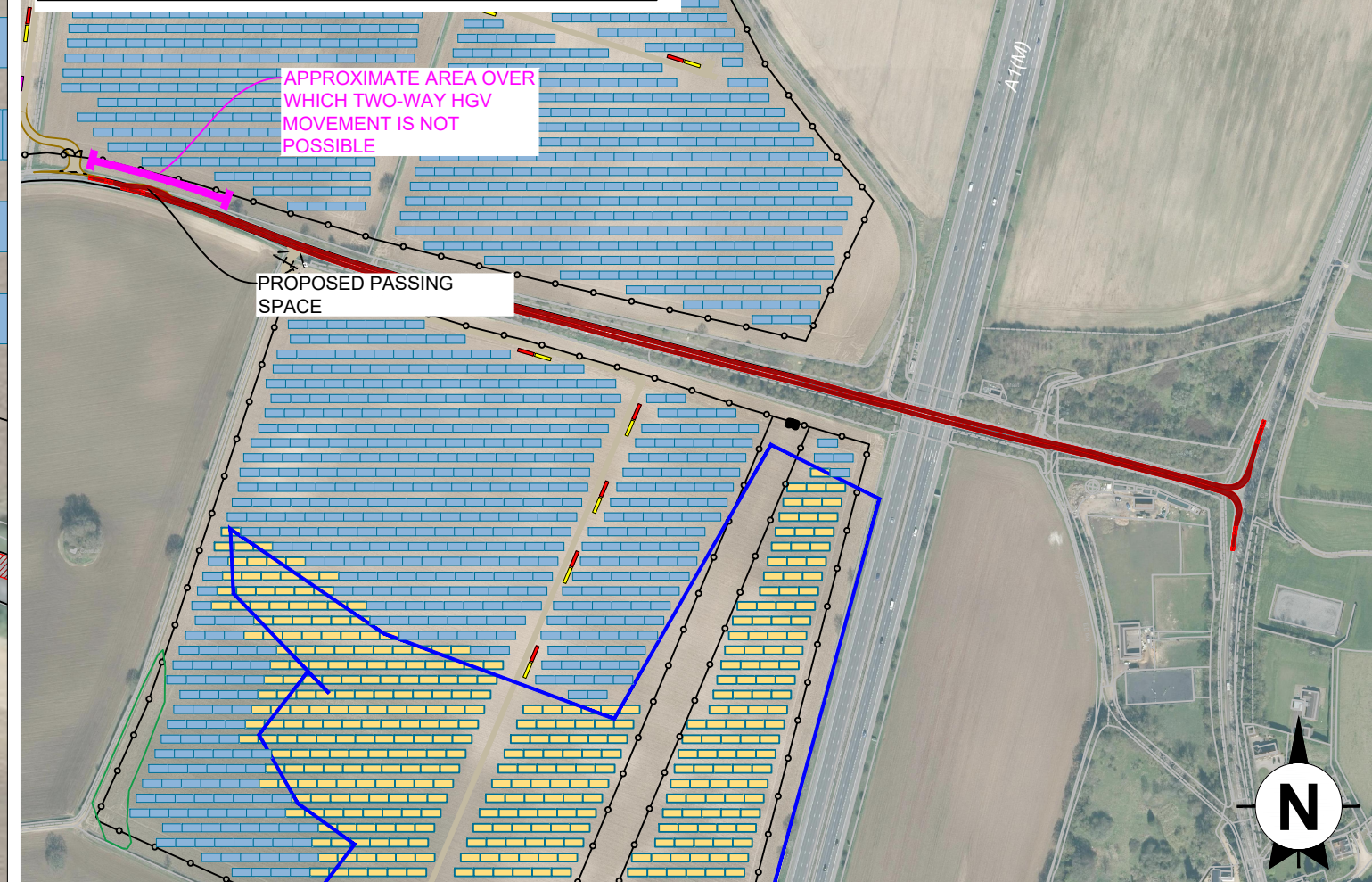
VIEWPORT 2 - NORTHERN PARCEL - EGRESS (1:500@A3)



VIEWPORT 3 - PASSING PLACE (1:500@A3)



VIEWPORT 4 - GRAVELEY LANE (1:5000@A3)



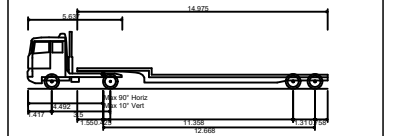
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Revision History

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VEHICLES USED IN TRACKING:



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| Generic Low Loader with Trailer Steering (18.0m) | 17.918m |
| Overall Length | 2.540m |
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| Kerb to Kerb Turning Radius | |

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| client: AGR 4 SOLAR LIMITED | | |
| project: PRIORITY FARM SOLAR ARRAY | | |
| drawing title: SWEEP PATH ASSESSMENT - REVISED NORTHERN ACCESS AND GRAVELEY LANE | | |
| date: AUG 22 | drawn by: LK | checked: LK |
| drawing number: 3001-01-ATRO3 | status: Prelim | |
| scale(s): A5 STATED@A3 | rev: | |
| planning environment design | | |