

Project	Proposed Solar Farm and BESS – Land off Main Road, Kelham, Nottinghamshire	Document No	153626-005-03
Subject	Technical Note – Response to Consultation Responses from Nottinghamshire County Council Highways and National Highways		

Overview

Formal consultation comments were made by Nottinghamshire County Council's Highways Development Control Team on 31 October 2023. A copy of the consultation response is attached at **Appendix A**.

Subsequent to this a separate consultation response, dated 7 November 2023, was provided by National Highways. A copy of this document is attached at **Appendix B**.

This Technical Note has been prepared to respond to the consultation comments and provide the additional information requested where necessary.

Comments from Nottinghamshire County Council

Site Access Geometry

- 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.
- Provide swept path analysis of 18.5m long articulated vehicles
- Consider access by abnormal loads
- Relocate gate to allow longer vehicles to wait clear of the access.
- Suggest stopping-up and reinstatement of access points other than main access.

Sanderson Associates Response

Drawing 153626-001 Rev C, attached at **Appendix C**, has been prepared which sets out the revised access arrangement to the site from the A617. This arrangement incorporates the corner tapers as set out in CD123 (sections 5.5 and 5.6).

The drawing also demonstrates the swept path analysis of an 18.5m long articulated vehicle as requested.

With regards to potential access to the site by abnormal loads the applicant, Assured Asset Solar 2 Ltd, has extensive experience in developing sites of this nature and has confirmed that no such vehicles are anticipated as requiring access to the site.

We would, however, advise that if it transpires at some point in the future that such vehicles are required to access the site these will only be made by prior appointment only and will arrive under appropriate escort and such occurrences will be notified to the Local Highway Authority.

Drawing 153626-001 Rev C shows a relocated gate position which will allow an 18.5m long articulated vehicle to enter the access and stand clear of the highway should the gate be closed upon arrival.

With regards to the request that other access to the site from Broadgate Lane and elsewhere on the A617 should be stopped-up and reinstated to prevent vehicle use we would advise that the access further north on the A617 falls outside the planning application red line boundary and as such cannot be affected by the development proposals.

The access to the site from Broadgate Lane cannot be closed to vehicle traffic as there are access rights in place in connection with the drain within the site. Access is, therefore, required by the Internal Drainage Board (IDB) to inspect and maintain their asset which cannot be restricted.

It should, however, be noted that unrestricted access will not be available to the site from Broadgate Lane and that measures will be implemented to control access from this location.

Site Access Visibility

- Visibility splays to full DMRB standards should be provided

Sanderson Associates Response

Drawing 153626-002 Rev C, also attached at Appendix C, sets out revised visibility splays which meet the DMRB CD109 standards of 2.4m by 160m which are commensurate with the 50mph posted speed limit.

It is proposed that the existing hedgerow along the site frontage to the A617 will be translocated, as shown on Drawing HC1002/05/29 R0 included at Appendix E, to provide unrestricted visibility for emerging vehicles.

The translocated hedge is also shown on Drawings 153626-001 Rev C and 153626-002 Rev C for clarity.

Traffic Impact – Highway Capacity

- Provide supporting information on construction related traffic generations.

Sanderson Associates Response

The applicant, Assured Asset Solar 2 Ltd, has extensive experience in developing sites of this nature and has provided the construction traffic data included within the Transport Assessment.

This is based on their experience of other developments and sets out the expected level of vehicle activity required to bring the necessary construction materials to site.

A similar approach has been taken in terms of construction worker travel arrangements. The applicant has advised that the workforce typically employed on these projects stay locally to the project during the working week and typically travel together to the site on a daily basis. Drawing HC1002/05/25 R0, included at Appendix E, shows sufficient space for construction phase operatives parking within the temporary set down area.

Traffic Impact – Road Safety

- Provide swept path analysis of bends on A617
- Update accident analysis to include 2022 data and 2023 where possible

Sanderson Associates Response

Swept path analysis has been undertaken of the bends on the A617 utilising an 18.5m articulated vehicle, see Drawing 153626-007 at Appendix C. This has been carried out on OS data as the only information available at this time. However, it is acknowledged that inaccuracies are inherent within OS data. This is particularly evident on Kelham Bridge which, on Google, appears to have a minimum carriageway width of approximately 5.0m whereas the OS data is showing it at 4.35-4.6m.

It is not possible for two 18.5m vehicles to pass each other at either bend. However, a car can pass the HGV at the western bend. On the eastern bend, a car travelling north/westbound would be able to see an HGV approaching in the opposite direction at a distance of 43m, appropriate for the 30mph speed limit of the road. Although this sight line passes over the bridge wall, the HGV is of such size that it would be clearly visible. The car would then be able to stop and wait, as shown on the drawing, allowing the HGV to pass. Likewise, a car travelling east/southbound would be able to see an HGV approaching, again at a distance of 43m, and could wait on the bridge to allow it to pass (based on the carriageway width being 5.0m, added in blue on the drawing, rather than the narrower width shown on the OS data). It is considered that this is an acceptable arrangement given the average of five deliveries a day associated with the construction of the site.

It is also noted that there are signs on both approaches to Kelham Bridge advising drivers of “oncoming vehicles in middle of road”, as shown in Figures 1 and 2 overleaf. Therefore, it is clearly acknowledged that the road layout requires some vehicles to pass onto the opposite side of the road to navigate the bend.

Figure 1 – Signs on north/westbound approach to Kelham Bridge



Figure 2 – Signs on eastbound approach to Kelham Bridge



Furthermore, the ATC undertaken on the A617 Main Road in March 2023 shows existing HGV (OGV2) proportions of 2.17% (southwest bound) and 2.14% (northeast bound), during the 7am-7pm period when the site construction would take place. Therefore, large vehicles utilise the road on a day-to-day basis with no arising issues. The Crashmap database shows that no incidents involving this type of vehicle have been recorded at either of the bends in the most recent five-year period available.

The Crashmap database has been investigated and 2022 data is now available, therefore the analysis has been updated as follows.

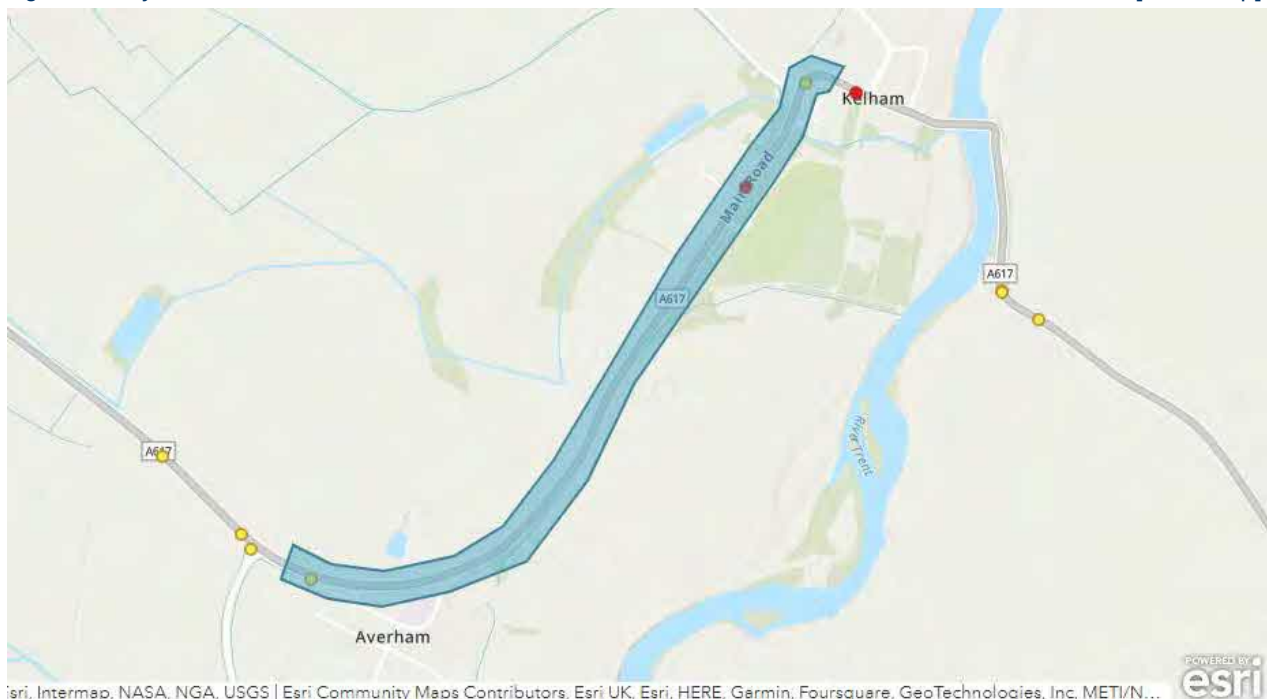
National guidance states that Transport Statements should include, “an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area.”

Whilst the local network is not considered to be a ‘high accident area’, in order to provide a robust assessment, the most recent 5-year period has been considered.

Road traffic collision data has been obtained from the Crashmap database for the most recent five-year period available (January 2018 – December 2022). The incident plot diagram within the vicinity of the site is shown in Figure 3 with the study area highlighted in blue.

Figure 3 – 5-year Road Traffic Collision Record

[Crashmap]



The assessment shows that three accidents (1 ‘serious’ and 2 ‘slight’ in nature) have occurred in the study area over the five-year period. The full reports can be viewed at Appendix D, and a summary of the incidents is as follows:

Incident Reference: 201831B174718 – occurred Monday 1 January, 2018 at 4:20PM in dry conditions. A motorcycle and a car, travelling in opposite directions at the northern bend on the A617, collided and the rider of the motorcycle experienced slight injuries.

Incident Reference: 201931B150919 – occurred Friday 30 August, 2019 at 1:36PM in dry conditions. An elderly driver in a car was proceeding normally along the carriageway when they collided with a wall or fence, inflicting serious injuries upon themselves.

Incident Reference: 202031B177420 – occurred Friday 18 December, 2020 at 6:19AM in wet or damp conditions. A car was proceeding normally along the carriageway, on a left-hand bend and collided with a wall or fence off the carriageway, resulting in the driver experiencing slight injuries.

Given the busy nature of the A617, (Annual Average Daily Flow of 15196 (2018), recorded to the west of the site), three accidents occurring within a five-year period does not allude to a deficiency within the highway network. The accidents occurred due to driver error and therefore, during the construction phase of the solar farm and BESS site, the accidents are not likely to be exacerbated.

Parking

- Confirm arrangements for site construction staff

Sanderson Associates Response

Sirius Drawing HC1002/05/25 Revision 0, attached at Appendix E, shows the parking arrangements within the proposed set down and storage area. A total of 20 car/van parking spaces are proposed within this designated areas along with welfare and office facilities and storage cabins.

Public Rights of Way

- Confirm arrangements to ensure safe use of PRoW during construction.

Sanderson Associates Response

During both construction and operational periods of the development the Public Rights of Way within the development site will be protected by fencing. This will prevent vehicle access across the footpaths in question and will provide a safe area for users.

During the construction phase, the point at which vehicles will need to cross the PRoW to access the northern part of the site will be manned by an operative acting as a Banksman. Vehicles will be required to wait with priority given to those using the PRoW. Outside operational hours, gates will be placed across the vehicle route. During the operational phase, the gates will remain in place, vehicular access will only be required by a light vehicle approximately once a month and the PRoW will be crossed with great care.

The protective fencing and gates will be erected prior to the commencement of any works to construct the solar farm equipment or the BESS and will be inspected on a regular basis and maintained throughout the lifetime of the development.

It is, however, suggested that an appropriately worded condition be imposed requiring further details of the proposed fencing etc. to be submitted for approval

Stage One Road Safety Audit Brief

- Update previously provided audit brief to take into account changes to proposals in line with earlier comments

Sanderson Associates Response

A revised Stage 1 Road Safety Audit Brief has been prepared and is provided under separate cover.

On-Site Access

- Provide details to confirm how long vehicles will manoeuvre within the site.

Sanderson Associates Response

Drawing 153626-006 Rev A, attached at Appendix C, demonstrates the vehicle swept path of an 18.5m long articulated vehicle within the set down area. Larger vehicles will all enter this area to unload with plant and materials being transferred to other areas of the site on smaller vehicles.

Whilst there will be no requirements for large vehicles to traverse the site Drawing 153626-009 Rev B, attached at Appendix C, demonstrates that an articulated vehicle can enter the site and turn to the left to negotiate the perimeter access road if absolutely necessary and similarly manoeuvre from the other side of the one-way perimeter access road to leave the site via the main access.

Emergency Access

- Note for LPA

Construction Management Plan

- A CMP will be needed

Sanderson Associates Response

It is suggested that this document is conditioned for future submission.

Highway Condition Survey

- Surveys of the existing condition of the local highway network will be needed prior to commencement of development

Sanderson Associates Response

It is considered that the requirement to undertake condition surveys of the highway is not commensurate with the level of vehicle generations predicted to arise from the construction phase when compared to existing vehicle numbers on the A617.

The average daily two-way HGV movements predicted to be generated by the site during the construction phase is 10.

The ATC data included in the Transport Statement shows average two-way flows on the A617 of 15,774 vehicles, of which 2,784 (17.6%) are OGV1/OGV2/PSV.

Comments from National Highways

Traffic Impact – Construction Phase

- Clarify construction traffic routing
- Provide further explanation on construction traffic levels
- Provide further information on construction staff travel

Sanderson Associates Response

Drawing 153626-008, attached at Appendix C, sets out the most likely vehicle routing for construction related vehicles. Many of the routes to the site are via “A” roads which form part of the Strategic Road Network (A1) and Principal Road Network and as such are designed for use by all vehicle types.

The matter of construction traffic levels and construction staff travel has been considered earlier in this report in response to comments made by NCC.

Acknowledgements

N/A

Issue Record

Issue Status	Prepared by	Checked by	Approved by	Date
01 Final	K Smith	S Burkinshaw	K Smith	21 December 2023
02 Final	C Pulling	K Smith	K Smith	23 January 2024
03 Final	C Pulling	K Smith	K Smith	8 February 2024

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Appendix A

Nottinghamshire County Council Highways Consultation Response 31/10/2023

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



Appendix B

National Highways Consultation Response 7/11/2023



National Highways Planning Response (NHPR 22-12) Formal Recommendation to an Application for Planning Permission

From: Andy Jinks (Regional Director)
Operations Directorate
Midlands Region
National Highways
[REDACTED]

To: Newark & Sherwood District Council

CC: [REDACTED]

Council's Reference: 23/01837/FULM

Location: Land to the West of Main Street Kelham

Proposal: Proposed ground mounted photo voltaic solar farm and battery energy storage system with associated equipment, infrastructure, grid connection and ancillary work.

National Highways Ref:

Referring to the consultation on a planning application dated **1st November 2023** referenced above, in the vicinity of the **A46 and A1 trunk roads** that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

- ~~a) offer no objection (see reasons at Annex A);~~
- ~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~
- c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);
- ~~d) recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.¹

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the [Town and Country Planning \(Development Affecting Trunk Roads\) Direction 2018](#), via [REDACTED] and may not determine the application until the consultation process is complete.

The Local Planning Authority must also copy any consultation under the 2018 Direction to [REDACTED]

Signature:

Date: 7 November 2023

[REDACTED]

Name: Catherine Townend

Position: Spatial Planner

National Highways

The Cube | 199 Wharfside Street | Birmingham | B1 1RN

[REDACTED]

¹ Where relevant, further information will be provided within Annex A.

Annex A National Highway's assessment of the proposed development

This response represents our formal recommendations and has been prepared by Catherine Townend, Spatial Planner for National Highways.

National Highways (formally Highways England) has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

National Highways considers planning applications for new developments under the requirements of the National Planning Policy Framework (NPPF) and DfT Circular 01/2022: The Strategic Road Network and The Delivery of Sustainable Development ("the Circular"). The latter document sets out our policy on sustainable development and our approach to proposals which may have an impact on our network.

The SRN in the vicinity of the proposed development is the A46 and A1 trunk roads.

Development Proposal

The development proposal is for a solar farm and battery energy storage system with an export capacity of 49.9MW of electricity. The site measures approximately 65 ha and is located to the west of the village of Kelham, near Newark, Nottinghamshire.

The site is approximately 2.5km from the nearest access onto the SRN at the A46/A617 roundabout. The A1 trunk road is approximately 4.5 km to the east of the site.

National Highways has not been consulted on any pre-application for this proposal.

Access

The immediate vehicular access is proposed to be taken from the A617. National Highways is not responsible for this road and as such we have no comments to make on this access proposal.

Traffic Impact – Operational Phase

It is understood that once operational, the site will be managed remotely with monthly maintenance checks. National Highways considers that the traffic impact on our network once operational will be negligible and we have no further comments to make.

Traffic Impact – Construction Phase

According to the Transport Statement, construction is expected to take place during the hours of 0800 to 1800 (Monday to Friday) and 0800 to 1600 hours (Saturday), with deliveries arriving between those times. Construction is expected to last around 6 to 12 months with the majority of vehicle movements carried out within the first six months.

The TS suggests that approximately 790 deliveries will take place between the first six months of construction, constituting 1,580 individual vehicles movements. The highest number of deliveries is expected to take place in the first month (225 deliveries). The transport statement has equated this to approximately five deliveries per day (10 vehicle movements), based on a six-day working week.

The TS does not contain any further detail relating to the routing of construction traffic. Given the proximity of the site to the A46 and A1 trunk roads, it could be assumed that construction traffic will utilise the SRN. Clarification on traffic routing should therefore be provided.

Notwithstanding the above, based on the projected daily vehicle movements associated with deliveries, this level of increase in traffic is unlikely to have a material impact on the SRN. Nonetheless, it is unclear how these figures have been generated and further explanation should be given.

In terms of staff movements, the Transport Statement states that construction will employ approximately 50 staff members who will be transported to/from the site in a 'crew cab'. It is unclear how this would work in practice and further information should be provided.

At present, without further evidence/detail as set out above, it is unclear how traffic generation associated with the construction of this development will impact the SRN.

Abnormal Loads

The Transport Statement does not refer to the need for abnormal loads movements. Nonetheless, the applicant should be made aware of National Highways process for managing the movement of abnormal loads on our network. More information on this can be found [here](#).

Construction Traffic Management Plan

A construction traffic management plan should be submitted by the applicant which clearly sets out how the impact of construction traffic on the surrounding highway network will be managed and minimised.

Boundary and other impacts

The site does not share a common boundary with the SRN and as such, we have no comments to make on potential boundary issues.

Notwithstanding this, National Highways are currently planning major improvement works to the A46 Newark bypass which will widen the existing single carriageway to a dual carriageway, to provide two lanes in each direction between Farndon and Winthorpe roundabouts.

In connection with these improvements, National Highways' A46 Newark Bypass project team are planning some flood plain compensation works which are adjacent to the solar farm site. In light of this, the team have been engaging with the relevant landowners and Assured Asset Solar 2 Ltd (AAS2), promoting the solar farm development.

These discussions have resulted in an outline Heads of Terms being developed between the landowner, AAS2 and National Highways to ensure that the A46 Newark Bypass project does not prevent them from carrying out their works and vice versa. As construction programmes are further developed, agreements for construction access will be reached during future engagement between both parties.

Considering the above, when the other outstanding matters mentioned earlier are resolved, we will be requesting that any planning consent makes reference to the Heads of Terms with National Highways, as described above.

Recommendation

In light of the above, we recommend that this planning application not be determined for a period of three months from the date of this letter whilst further information is provided.

Standing advice to the local planning authority

The Climate Change Committee's [2022 Report to Parliament](#) notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs 73 and 105 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 104 and 110 advise that appropriate opportunities to promote walking, cycling and public transport should be taken up.

Moreover, the build clever and build efficiently criteria as set out in clause 6.1.4 of [PAS2080](#) promote the use of low carbon materials and products, innovative design solutions and construction methods to minimise resource consumption.

These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon.

Appendix C

Drawing 1536206-001 Rev C – Proposed Site Access and HGV Swept Path

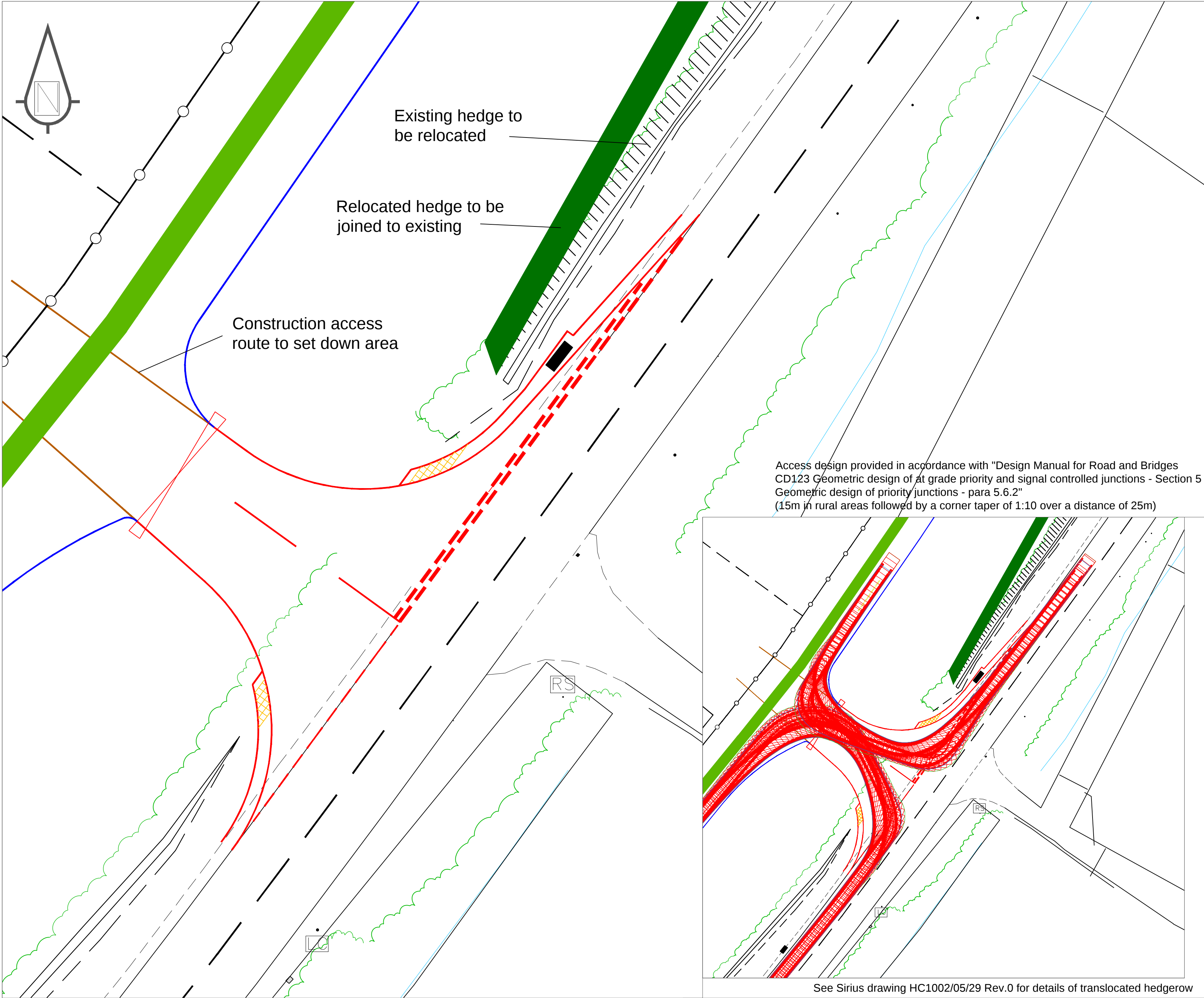
Drawing 153626-002 Rev C – Proposed Visibility Splays

Drawing 153626-007 – Swept Path Analysis of A617 Bends

Drawing 153626-006 Rev A – Swept Path Analysis of HGV in Set Down Area

Drawing 153626-009 Rev B – Access Arrangement

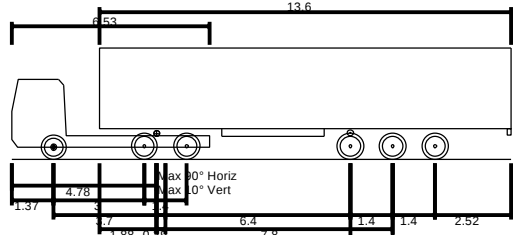
Drawing 153626-008 – Construction Traffic Routeing



Access design provided in accordance with "Design Manual for Road and Bridges CD123 Geometric design of at grade priority and signal controlled junctions - Section 5 Geometric design of priority junctions - para 5.6.2" (15m in rural areas followed by a corner taper of 1:10 over a distance of 25m)

See Sirius drawing HC1002/05/29 Rev.0 for details of translocated hedgerow

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- Service connections are not shown but their presence should be anticipated.
- Reference to any third party equipment shown on this drawing was only relevant at the time the drawing was prepared.
- It is the client's responsibility to ensure that any equipment ordered meets the design.



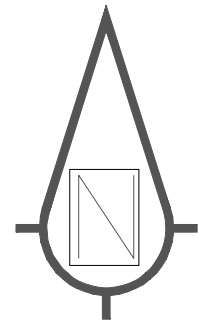
Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

Rev	Amendment	Drawn	Date	Checked
C	Amended to show relocated hedge	CP	Feb 24	KS
B	Amended following Highway Authority comments	SB	Nov 23	KS
A	Amended following Stage 1 RSA	SB	Aug 23	KS



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F 01924 844081 www.sandersonassociates.co.uk

Client	Sirius Planning Ltd			
Project Title	Main Road, Kelham, Newark-on-Trent			
Drawing Title	Proposed Access Design with Max Legal Length HGV Vehicle Tracking			
Scale	1:200	Drawn By	LY	
Drawing Size	A2	Checked By	KS	
Date	June 2023	Approved By	KS	
Drawing Number	153626-001			Rev C



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- Service connections are not shown but their presence should be anticipated.
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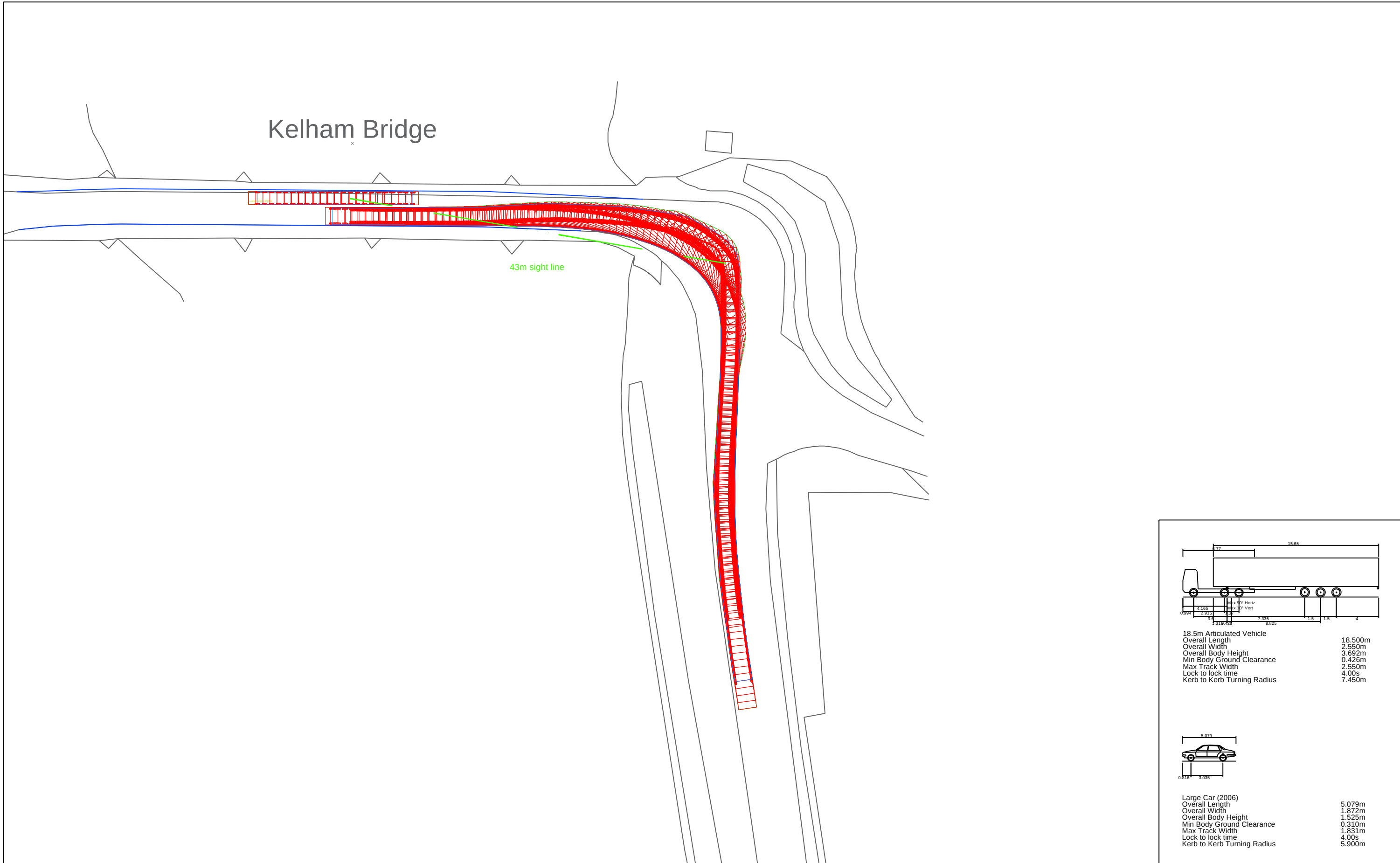
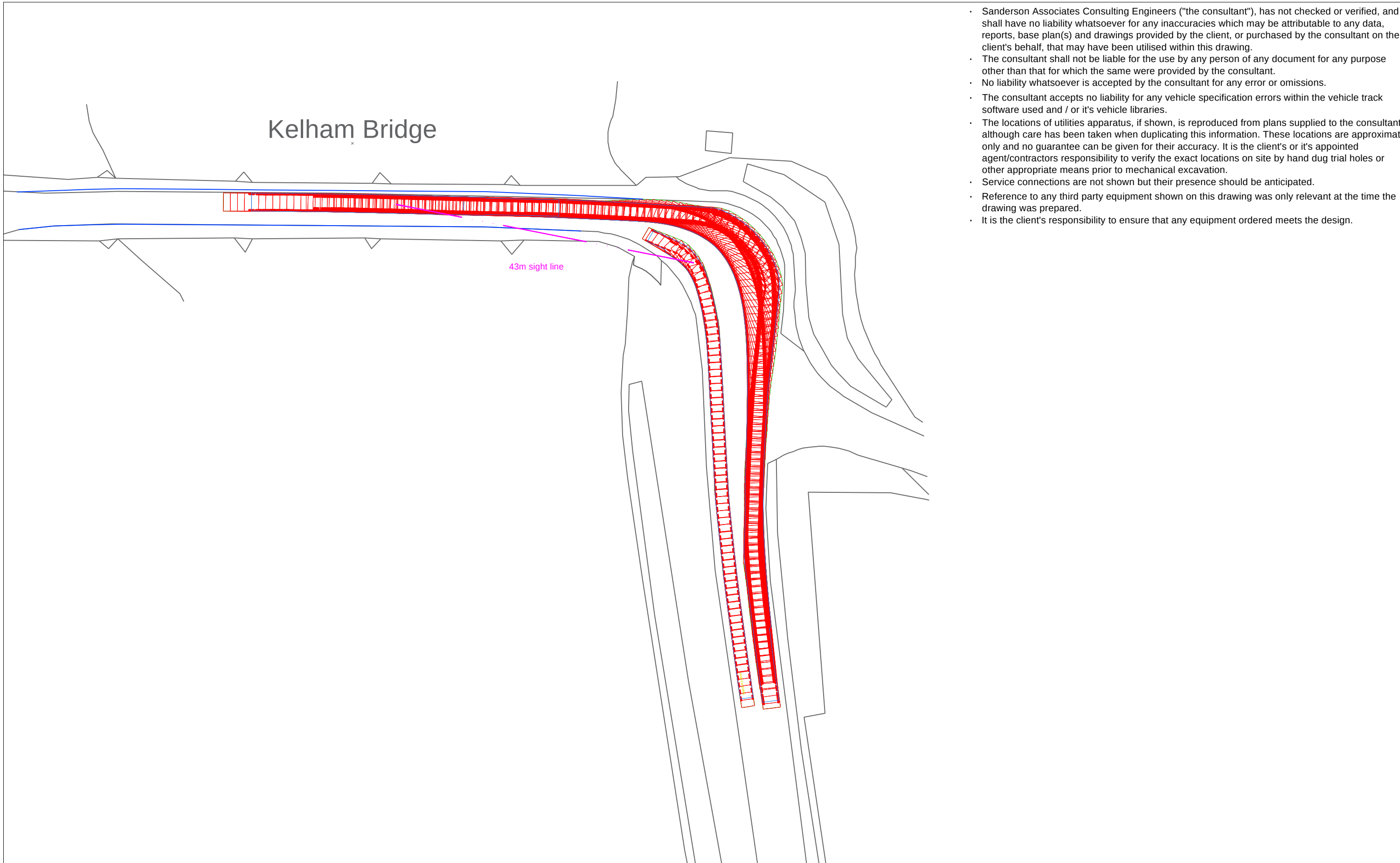
C	Amended to show relocated hedge	CP	Feb 2024	KS
B	Amended following Highway Authority comments	SB	Nov 2023	KS
A	Amended following Stage 1 RSA	SB	Aug 2023	KS
Rev	Amendment	Drawn	Date	Checked



Highways | Traffic | Transportation | Water

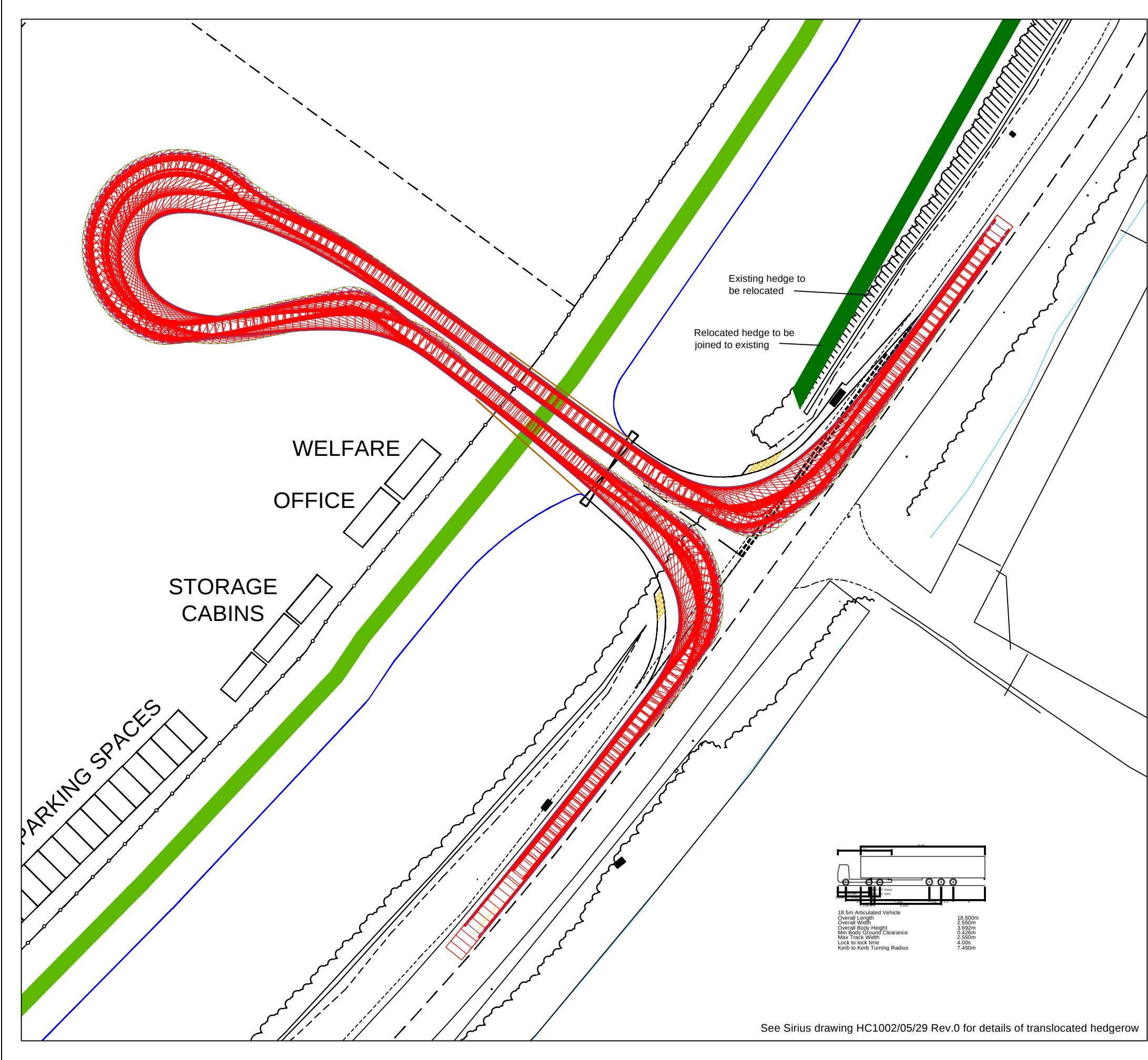
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Client	
Sirius Planning Ltd	
Project Title	
Main Road, Kelham, Newark-on-Trent	
Drawing Title	
Visibility Splays from Proposed Access	
Scale	Drawn By
1:500	LY
Drawing Size	Checked By
A1	KS
Date	Approved By
June 2023	KS
Drawing Number	Rev
153626-002	C



18.5m Articulated Vehicle	18.200m
Overall Length	2.500m
Overall Width	3.650m
Overall Body Height	1.525m
Min Body Ground Clearance	0.425m
Max Track Width	2.500m
Lock to lock time	4.000s
Kerb to Kerb Turning Radius	7.450m
Large Car (2005)	5.079m
Overall Length	1.872m
Overall Width	1.525m
Overall Body Height	0.310m
Min Body Ground Clearance	1.872m
Max Track Width	4.000s
Lock to lock time	5.900m
Kerb to Kerb Turning Radius	

sa sanderson associates consulting engineers Highways Traffic Transportation Water T 01924 844080 mail@sandersonassociates.co.uk F 01924 844081 www.sandersonassociates.co.uk	Client Sirius Planning Ltd	Project Title Main Road, Kelham, Newark-on-Trent	Drawing Title Swept Path Analysis – A617	Rev	Amendment	Drawn	Date	Checked	Scale 1:500	Drawn By CP	
									Drawing Size A1	Checked By KS	
									Date December 2023	Approved By KS	
									Drawing Number 153626-007		Rev =



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Access onto A617				
Temporary Access Road				
Permanent Access Road				
A	Amended to show relocated hedge	CP	Feb 24	KS
Rev	Amendment	Drawn	Date	Checked

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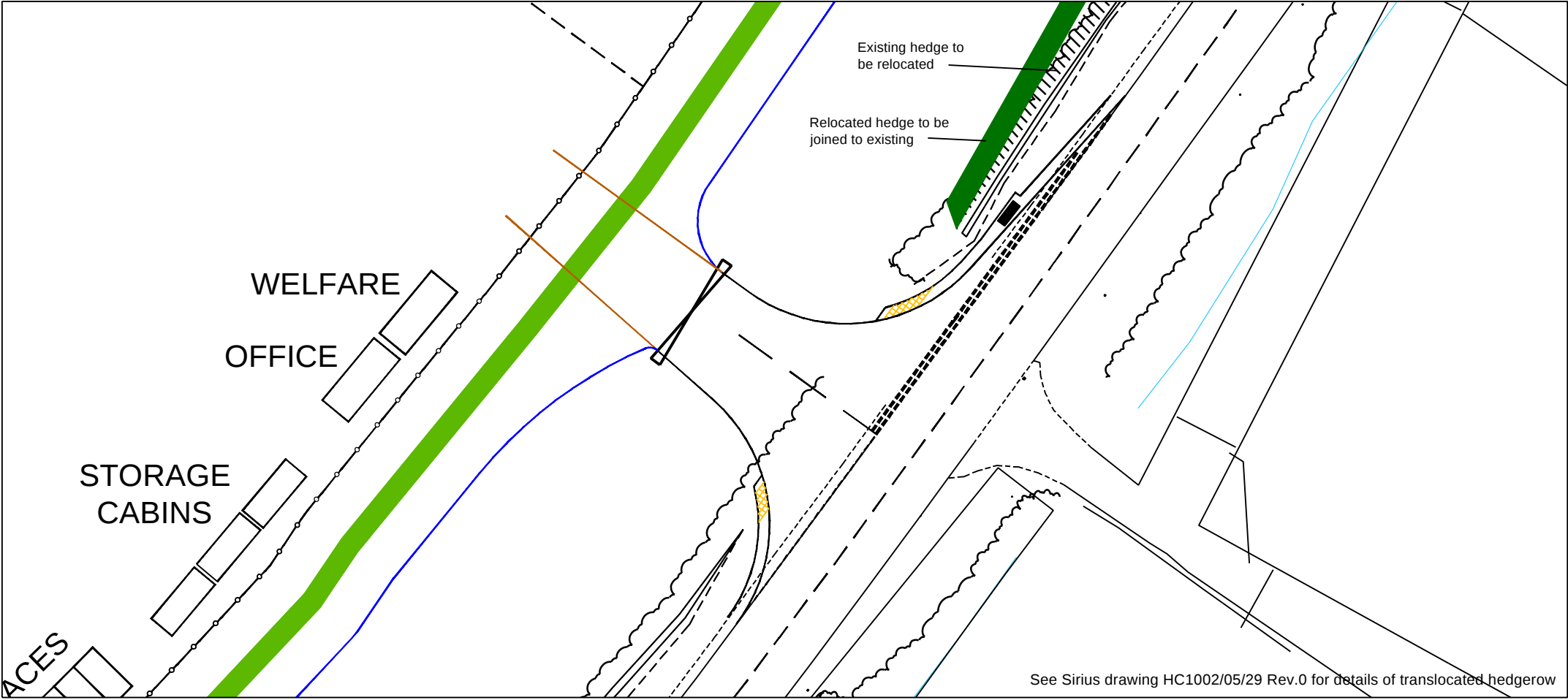
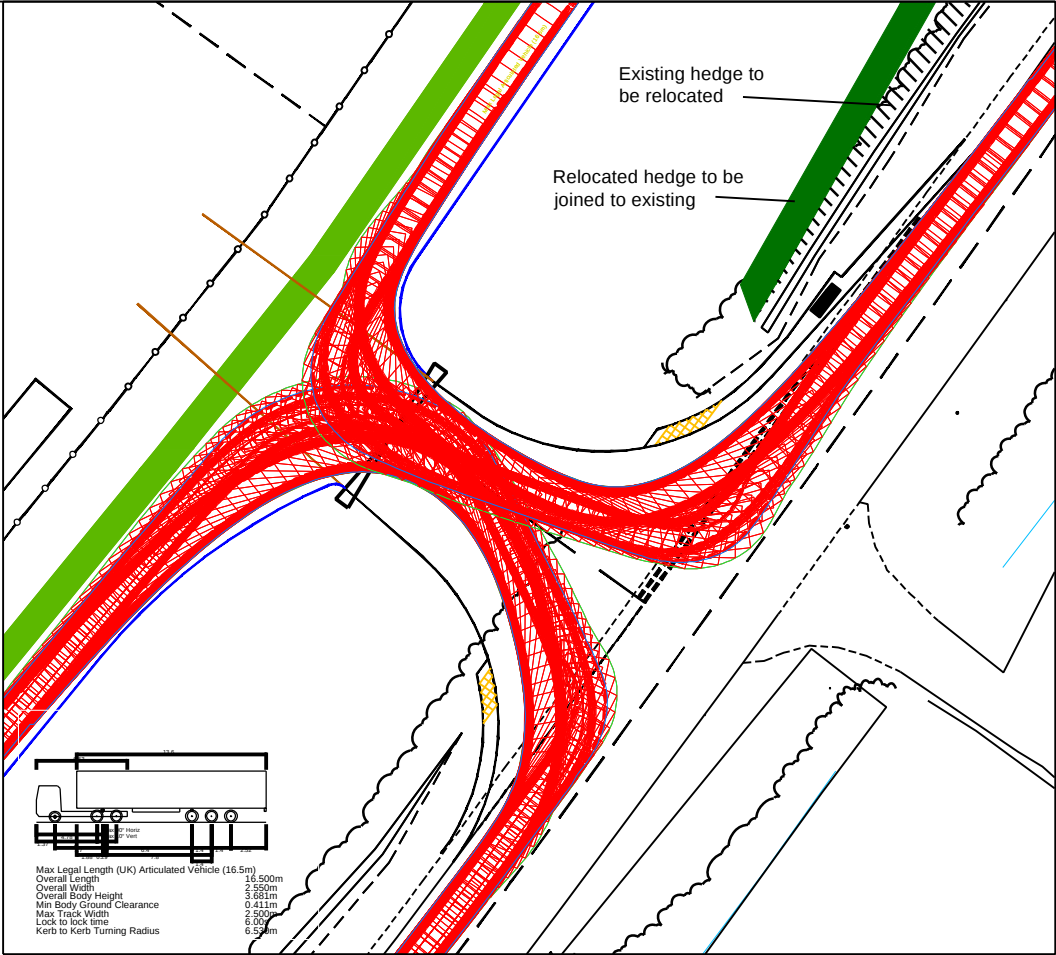
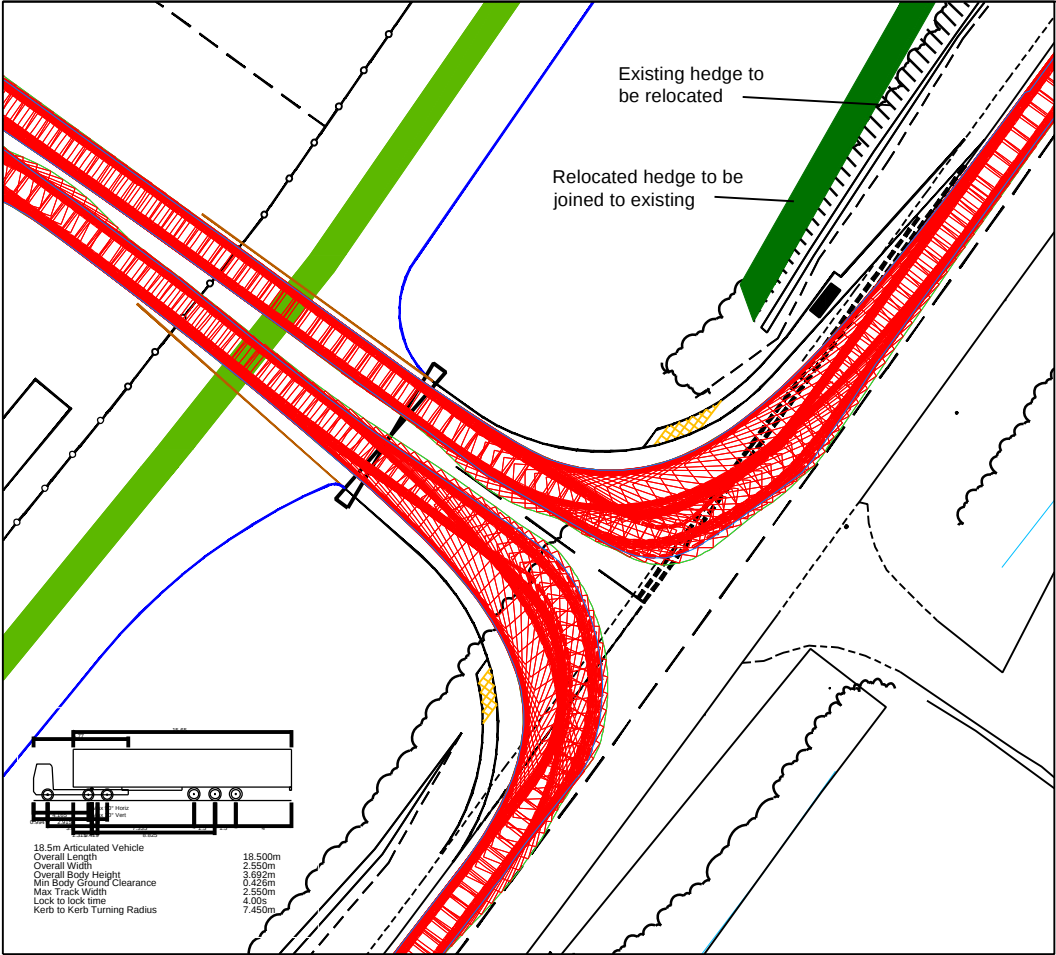
Project Name

Main Street
Kelham

Drawing Title

18.5m Articulated Vehicle
Swept Path Analysis

Scale	1:500	Drawn By	SB
Drawing Size	A3	Checked By	KS
Date	Dec 2023	Approved By	KS
Drawing Number		Rev	
153626-006		A	



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Access onto A617

Temporary Access Road

Permanent Access Road

B	Amended to show relocated hedge	CP	Feb 24	KS
A	Layout Amended	SB	Feb 24	KS
Rev	Amendment	Drawn	Date	Checked



Highways | Traffic | Transportation | Water

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Project Name		Main Street Kelham		
Drawing Title		Access Arrangement		
Scale	1:500	Drawn By	SB	
Drawing Size	A3	Checked By	KS	
Date	Jan 2024	Approved By	KS	
Drawing Number		153626-009		Rev B



Appendix D

Crashmap Report



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J	LI	, EE *B +	- LI	TB EE RB *BC R EE)	BG EBGR	U + S EE EE		K+))) +BC*) S EE +FB
J	JJ	, EE *B +	- LI	QBRB* *EC* EE EE	BG EBGR	KH		KBC* (CF+)) S EE +E+ D) +BC*)

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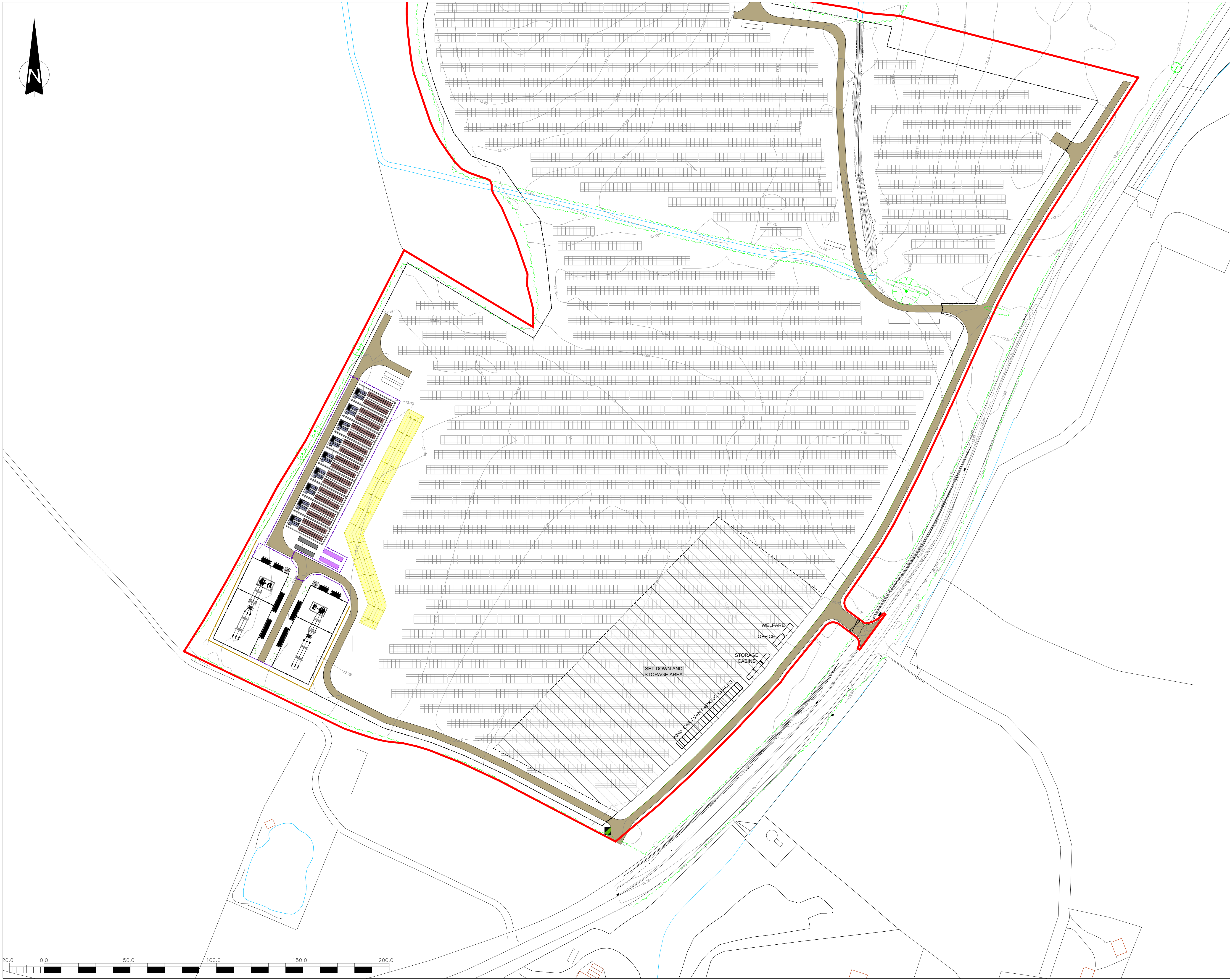
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		1	1	1	2345 6 78354 9:;5:<	2 6@@:3	2	2	8@4 4A<5:8B @A< A53@ _ _5:@ 5 53@ _ _535>:3C 53@ 5D6E 11FJ 11	



Appendix E

Sirius Planning Drawing - HC1002/05/25 Rev 0

Sirius Planning Drawing – HC1002/05/29 Rev 0



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KEY

- SITE BOUNDARY
- GROUND CONTOURS WITH EXISTING BUND REMOVED
- EXISTING OVERHEAD CABLES
- EXISTING HEDGES
- EXISTING TREES
- PROPOSED PV PANELS
- PROPOSED 2.4m HIGH PALADIN FENCE
- PROPOSED 2.4m HIGH PALISADE FENCE
- PROPOSED 2.0m HIGH DEER FENCE
- PROPOSED 4m HIGH ACOUSTIC FENCE
- PROPOSED 2m HIGH CLOSE BOARDED TIMBER FENCE
- PROPOSED ACCESS TRACKS
- PROPOSED SCREENING BUND
- PROPOSED TRANSFORMER
- PROPOSED SWITCHROOM
- PROPOSED SPARES CABIN
- PROPOSED BATTERY, TRANSFORMER AND INVERTER
- PROPOSED DNO CABIN
- PROPOSED DNO SWITCHROOM
- PROPOSED DNO MAST (subject to DNO confirmation)
- PROPOSED 132KV SUBSTATION

REV	DESCRIPTION	DATE	BY

CLIENT

**ASSURED ASSET
SOLAR 2 LIMITED**



4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

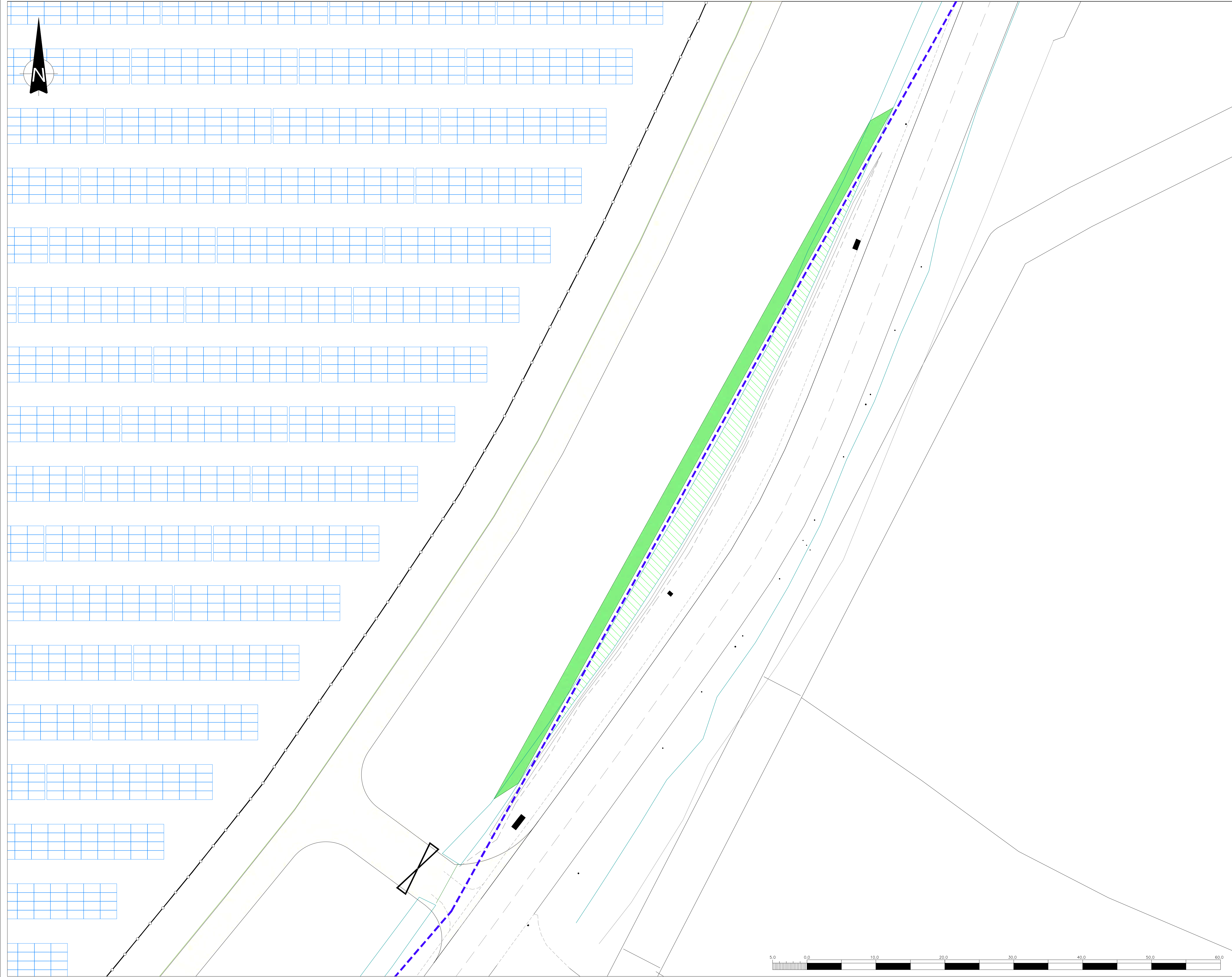
JOB TITLE

KELHAM SOLAR FARM AND BESS

DRAWING TITLE

**TEMPORARY SITE SET
DOWN AREA DETAILS**

DRAWN	DATE	APPROVED	DATE
S.T	11/10/2023	J.C	11/10/2023
SCALE	SHEET	DRAWING NUMBER	REVISION
1:1000	A1L	HC1002/05/25	0



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- KEY**
- GROUND CONTOURS
 - EXISTING HEDGES
 - EXISTING TREES
 - PROPOSED PV PANELS
 - PROPOSED 2.0m HIGH DEER FENCE
 - PROPOSED ACCESS TRACKS
 - EXISTING HEDGE TO BE REMOVED
 - PROPOSED HEDGE TO BE JOINED TO EXISTING
 - ACCESS VISIBILITY SPLAY

REV	DESCRIPTION	DATE	BY
-----	-------------	------	----

CLIENT

**ASSURED ASSET
SOLAR 2 LIMITED**



JOB TITLE

KELHAM SOLAR FARM AND BESS

DRAWING TITLE

**TRANSLOCATED HEDGEROW
PLAN**

DRAWN S.T	DATE 21/11/2023	APPROVED C.N	DATE 21/11/2023
SCALE 1:250	SHEET A1L	DRAWING NUMBER HC1002/05/29	REVISION 0