Sirius Planning Ltd

Proposed Solar Farm and BESS Main Road, Kelham, Newark-on-Trent

Construction Traffic Management Plan

sanderson associates consulting engineers

Control Sheet

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Acknowledgements

The ‘rowmaps.com’ website has been used to inform this report on the presence of public rights of way in the vicinity of the site.

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1. Introduction

1.1 Sanderson Associates Consulting Engineers has been appointed by Sirius Planning Ltd to prepare this Construction Traffic Method Plan (CTMP), to support the planning application for a solar farm and Battery Energy Storage System (BESS) on land off Main Street, Kelham, Newark-on-Trent.

1.2 This CTMP has been produced to set out the current and proposed access arrangements to the application site, the anticipated construction programme, construction vehicle numbers and routing of deliveries, construction worker numbers and the proposed hours of construction.

1.3 This CTMP should be read in conjunction with the Transport Statement prepared by Sanderson Associates Consulting Engineers.

1.4 This CTMP has been prepared following a meeting with Nottinghamshire County Council (NCC) on Friday 10 May 2024. Requirements for the construction period together with the potential traffic impact were discussed.

1.5 It should be noted that a more detailed CTMP will be submitted following the granting of planning permission, with specific details to be addressed in the detailed submission, which have only been outlined in this document at this stage.

1.6 Development Overview

1.6.1 It is proposed to construct a 49.9MW solar farm and a 50MW battery energy storage system (BESS), on land to the West of Main Road, Kelham, with the proposed access being from the A617.

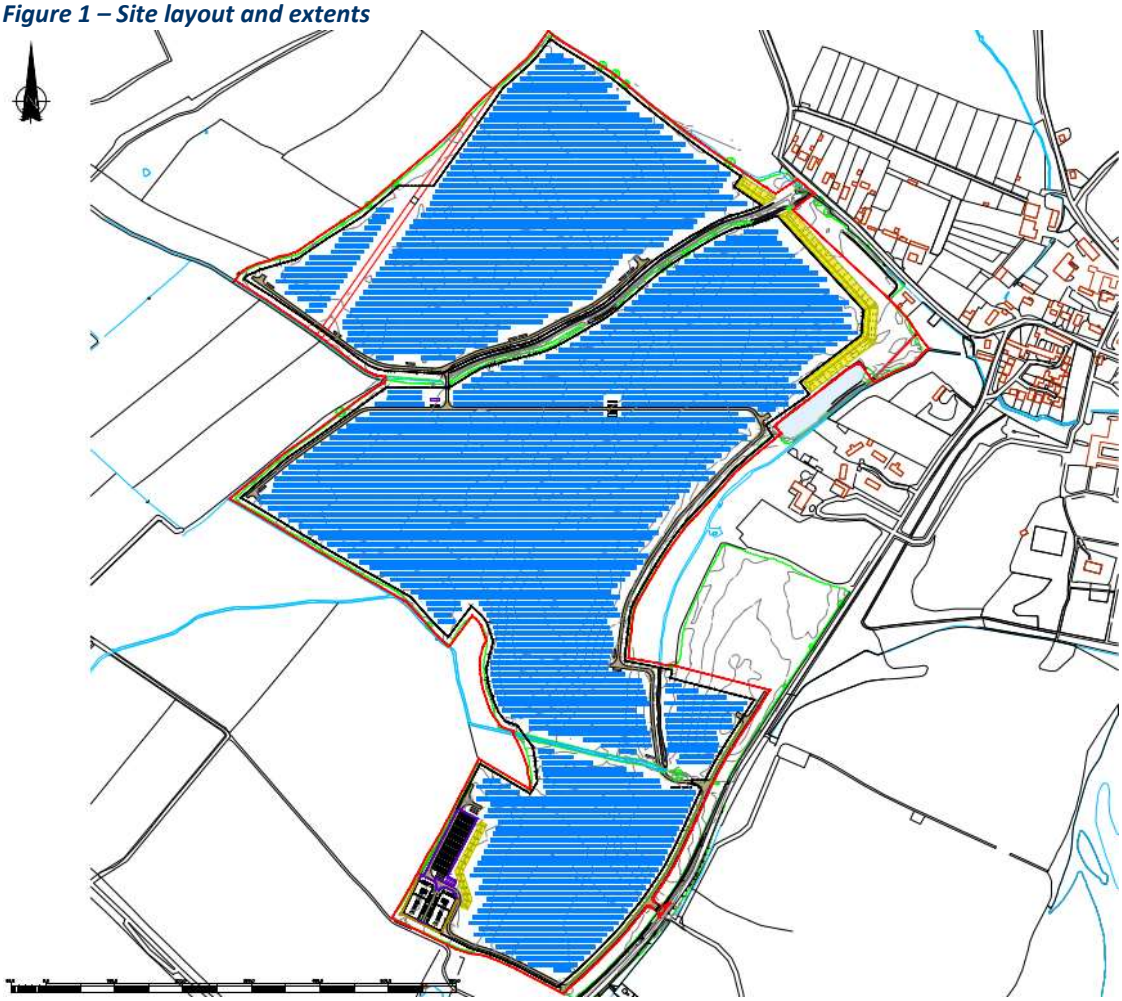
1.6.2 The proposed solar farm and BESS development compound covers an area of circa 65ha, although the planning application boundary (cable runs etc.) measures c.71ha.

2. The Site and Surroundings

2.1 Introduction

2.1.1 The application site is currently maintained agricultural land within the open countryside, between the villages of Kelham (to the east) and Averham (to the south). The site is located the west of the A617 principal road, which links Newark-on-Trent to Chesterfield. An extract of the site layout is shown at **Figure 1**.

Figure 1 – Site layout and extents



2.1.2 The site is bounded by:

- North: Agricultural fields and Broadgate Lane and broadleaved woodland
- East Main Road, The Renaissance at Kelham Hall, St. Wilfred's Church and the River Trent
- South: Agricultural fields and Averham
- West Agricultural fields

2.2 Designations

2.2.1 **Figure 2** is an extract from the 'rowmaps.com' website, a link to which is provided on the Nottinghamshire County Council website.

Figure 2 – Extract of rowmaps.com

2.2.2 This shows that a footpath crosses the site. In addition, a permissive bridleway is proposed around the perimeter of the site. 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.

2.2.3 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.

2.2.4 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.

2.3 Local Highway Network

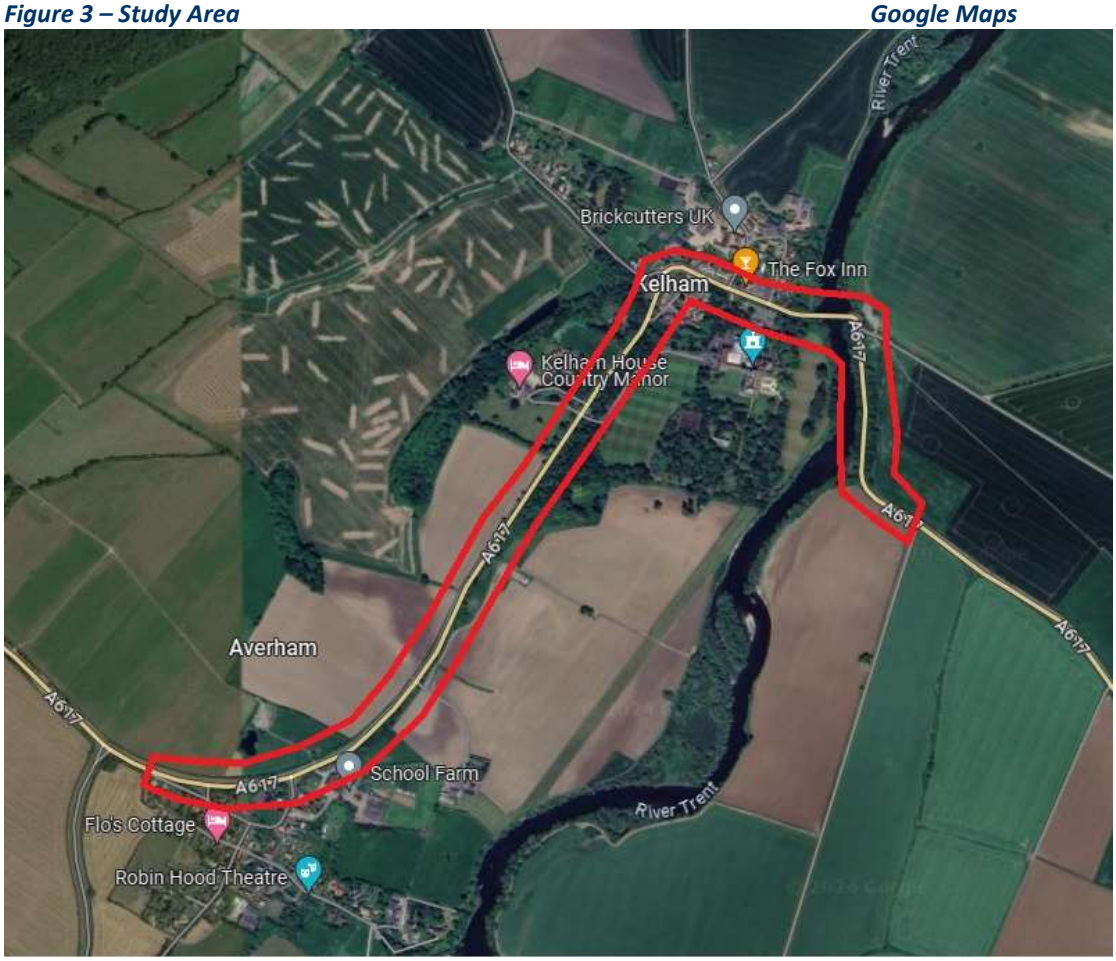
2.3.1 The site access is located on the A617. The A617 is subject to a 50mph speed limit across the site frontage. A footway is present on the site side of the carriageway, measuring approximately 1.5m in width. There is also street lighting present along the A617.

2.3.2 The carriageway is approximately 7.0m in width and connects the site to Kelham in the north east and Averham to the south.

2.4 Local Highway Safety

2.4.1 In line with formal consultation responses from NCC a revised assessment of personal injury accidents on the local highway network in the vicinity of the application site, which would be used by construction traffic, has been undertaken. This revised assessment is based on STATS19 data obtained from Via East Midlands (ViaEM) and covers the most recent five-year period available (1/1/2019 to 31/12/2023). **Figure 3**, below, shows the extent of the study area which has been extended from the original assessment contained within the Transport Statement. A detailed review of the recorded personal injury accidents is provided in the following paragraphs and the data obtained from NCC is attached at **Appendix A**.

Figure 3 – Study Area ***Google Maps***



2.4.2 In the last 5 year period there have been a total of eleven (11) incidents recorded within the study area. Six (6) of these have been categorised as being slight in severity; four (4) categorised as being serious and one (1) recorded as a fatal incident. The Severity Plot Diagram attached at **Appendix A** demonstrates the location and severity of each incident and a summary of each is provided below and overleaf:-

→ Incident reference 2B177420 took place on Friday 18 December 2020 at 06:19 on the A617 to the south east of the junction with Staythorpe Lane. The weather is recorded as rain and the road surface as being wet. As vehicle 1 (car) was travelling north-west to south-east and approaching a left hand bend the car left the carriageway and collided

with a wall or fence. There are no other contributory factors provided and the incident was classified as slight in severity.

- Incident reference 2B030323 took place on Tuesday 21 February 2023 at 08:40 on the A617 at the junction of Staythorpe Lane. The weather conditions are recorded as fine and dry. Vehicle 1 (a pedal cycle) was travelling north east to south west along the A617 when the incident occurred. From the contributory factors recorded it appears that a dislodged load was the cause of the incident which was classified as serious.
- Incident reference 2B186923 took place on 28 November 2023 at 06:15 on the A617 along the site frontage. The weather conditions are recorded as fine with the road surface as icy. Vehicle 1 (car) was travelling north-east to south-west when it left the road and overturned before landing in a ditch. From the contributory factors recorded it would appear that there was mud on the road which, taking into account the already icy road surface, may have influenced the incident which was classified as serious.
- Incident reference 2B085223 took place on Tuesday 11 July 2023 at 07:05 on the A617 along the site frontage. The weather conditions were fine and the road surface dry. Two vehicles (both cars) were involved in the incident which was *classified as fatal*. Vehicle 1 was travelling south-west to north-east and Vehicle 2 was travelling north-east to south-west i.e. in opposing directions. The incident records both cars impacted at the front which indicates a head-on collision, however, no further contributory factors are recorded.
- Incident reference 2B150919 took place on Friday 30 August 2019 at 13:36 on the A617 to the north of the development site. The weather conditions are recorded as fine and the road surface dry. Vehicle 1 (car) was travelling north-east to south-west when it left the carriageway on its nearside before colliding with a wall or fence. No contributory factors are provided and the incident was classified as serious.
- Incident reference 2B012520 took place on Sunday 9 February 2020 at 07:49 on the A617 between the two bends in the road to the north of the development site. The weather conditions are recorded as fine but windy and the road surface as wet. Vehicle 1 (car) was travelling south-east to north-west when it skidded and left the carriageway on its nearside. From the contributory factors provided it would appear that there was mud on the road at the time of the incident which was classified as serious. It is, however, noted that the accident details state the speed limit on the A617 at this location as 60mph. this is incorrect. The speed limit between the two bends on the A617 is 30mph.
- Incident 2B036623 on Friday 17 March 2023 at 15:00 on the A617 east of the River Trent. The weather conditions are recorded as fine with the road surface dry. Two vehicles (both cars) were involved in the incident which was classified as slight. Both vehicles were traveling south to north Vehicle 2 in front of Vehicle 1 when it would appear that a rear-end shunt took place. No contributory factors are provided.
- Incident 2B018623 on Tuesday 7 February 2023 at 09:51 on the A617 east of the River Trent. The weather conditions are recorded as fine with the road surface wet. Two vehicles (both cars) were involved in the incident which was classified as slight. Both vehicles were traveling south to north Vehicle 2 in front of Vehicle 1 when it would appear

that a rear-end shunt took place. In terms of recorded contributory factors it would appear that an animal in the road may have caused one of the drivers to brake sharply.

- Incident 2B179323 on Wednesday 15 November 2023 at 08:04 on the A617 east of the River Trent. The weather conditions are recorded as fine with the road surface wet. Three vehicles (all cars) were involved in the incident which was classified as slight. All three vehicles were traveling south to north Vehicle 2 in front of Vehicle 2 with Vehicle 1 at the rear when it would appear that a rear-end shunt took place. No contributory factors are provided.
- Incident reference 2B014349 took place on Sunday 3 February 2019 at 12:54 on the A617 to the east of the River Trent. The weather conditions are recorded as fine and the road surface as dry. Vehicle 1 (car) was travelling north to south-east when it left the carriageway in its nearside and overturned before colliding with a tree. No contributory factors are provided.
- Incident reference 2B127919 took place on Wednesday 10 July 2019 at 16:05 on the A617 to the east of the River Trent. Vehicle 1 (motorcycle) was travelling south-east to north-west when it collided with an object in the road. The incident was classified as slight.

2.4.3 The incidents can be summarised as follows: 5x single vehicle left the carriageway, 3x rear shunt, 1x head-on, 2x collided with unknown object. One of these incidents involved a pedal cycle, one a motorcycle and the rest were cars, no incidents involved HGVs.

2.4.4 The five incidents where a single car left the carriageway all occurred in different locations within the study area suggesting that they were a result of drivers not driving with due care and attention to the road and driving conditions.

2.4.5 The three rear shunt incidents all occurred in a similar location on approach to Kelham Bridge from the south. This suggests that these incidents were as a result of drivers not driving with due care and attention to vehicles slowing for the change in speed limit (from 50mph to 30mph) and bend ahead.

2.4.6 The two incidents involving a pedal cycle and motorcycle colliding with unknown objects can only be assumed to be freak occurrences and they happened in different locations.

2.4.7 The head-on collision that resulted in a fatality is unfortunate however there is no information within the report provided that suggests why this occurred and it took place on a straight section of road.

2.4.8 In summary, it is not considered that the road traffic incident review has highlighted any deficiencies in the highway network, with the majority of incidents arising due to drivers not exercising due care and attention. In relation to NPPF paragraph 117, it is not considered that the development proposals would have an unacceptable impact on highway safety.

2.4.9 Notwithstanding the outcome of the above personal injury accident analysis and the previous assessment within the Transport Statement, it is recognised that the construction phase of the development will increase the total number of vehicles on the local highway network and in particular the number of HGVs. With this in mind, a detailed Highway Safety Signage Strategy will be provided as part of the detailed CTMP. This will include a Temporary Signage Strategy which will be implemented along the routes to the development areas, warning other road users, cyclists and pedestrians of the presence of construction vehicles. This will be agreed in consultation with the Local Planning and Highway Authority.

2.4.10 In addition to the proposed signage strategies, drivers bringing materials to the site will be given specific instructions on which routes they are to use, in accordance with the agreed vehicle routing plans. Any deviation away from these agreed routes will be dealt with by the contractor.

3. The Proposed Development

3.1 Outline of the Proposal

3.1.1 The proposed solar farm and BESS development compound covers an area of circa 65ha (although the planning application boundary (cable runs etc.) measure c.71ha) and will comprise of the following, with a site layout plan (**Drawing HC1002/05/03 R2**) attached at **Appendix B.**

- Photovoltaic (PV) Panels – arranged in rows in an east-west alignment and angled between 10° and 35° to the horizontal and orientate south. Each panel would measure approximately 0.8m-1.2m wide and 1.6m-2.0m in length. Proposed ratio of between 40% to 60% ground cover;
- Mounting frames – matt finished small section metal structure; Maximum height of 2m above ground level. Lowest part of the panel would measure approximately 0.8-metre above ground level. Rows of panels would be set to between 4-metres and 6-metres apart to avoid overshadowing and allow for scheduled maintenance;
- Battery Energy Storage System Compound - Located towards the southern end of the site, measuring approximately 1.0 hectare. Batteries accommodated in steel containers;
- Inverters (accommodated on the mounting frames) and transformers (housed in prefabricated containers) and associated cabling (largely below ground); Transformer and substations typically 3-metres in height.
- Two 132kV Distribution Network operator (DNO) substations, DNO meter point, customer substation and system - The proposed point of connection would be Staythorpe Substation, which is approximately 1.4km to the south of the proposal site. A below ground cable would connect the facility to the point of connection;
- Scheme of landscaping and biodiversity enhancement;
- Deer fencing (approximately 2m high)
- Infra-red CCTV (CCTV cameras would operate using motion sensors and be positioned inward only to ensure privacy to neighbouring land and property)
- Temporary set down areas towards the southern part of the site near existing field/ proposed access to accommodate deliveries of materials and equipment during construction phase and staff parking;
- Internal service roads approximately 4m wide, comprised of compacted crushed stone

3.2 Temporary Works

3.2.1 An initial temporary set down area will be created within the site during the construction phase of the development to allow for equipment to be loaded/unloaded.

3.2.2 A plan showing the initial temporary set down area is included at **Appendix B**, which indicates the areas which will be designated for material loading/unloading and those areas which will be dedicated for parking operatives' vehicles. It demonstrates that there is adequate parking provided to accommodate the expected number of vehicles requiring parking each day. An over flow parking area for 30 plus vehicles is identified on Drawing 153626-011 at Appendix C which will ensure that there will not be an overspill of parking onto the adjacent highway network at any time during the construction period.

3.2.3 The final stages of the temporary works will include for the a reduced set down area, which will allow for the final solar panels to be installed in the area that the initial compound area will be located. The reduced set down area, which is as indicated on Drawing 153626-012 at Appendix C, will cater for a reduced number of cabins and 25m turning circle for delivery vehicles. This arrangement will also provide a total of 28 construction staff parking spaces. It is considered that this level of parking will be adequate for the reduced numbers of staff on site and parking will not overspill onto the adjacent highway network.

3.2.4 The existing field access that will be used to access the site is to be improved, as shown on **Drawing 153626-001E** included at **Appendix C**, to facilitate the required vehicles. Appropriate signage will be provided to warn road users, cyclists and pedestrians of the presence of construction vehicles.

3.2.5 It is expected that the access improvement works, Enabling Works, will be subject to the requirements of S278 of the Highways Act 1980 and as such Temporary Traffic Management (TTM) will be required during the construction works within the adopted highway. It is likely that this TTM will take the form of temporary traffic signals to enable a safe working area to be created. A detailed scheme of associated signage and cones/barriers to control the flow of vehicles through the roadworks will be agreed with the Highway Authority and provided in accordance with Traffic Signs Regulation & General Directions 2019 and Chapter 8 Guidelines.

3.2.6 **Drawing 153626-006B**, included at **Appendix C**, demonstrates that an 18.5m articulated vehicle is able to access the setting down area, manoeuvre and leave the site in a forward gear, whilst not needing to cross into an opposing traffic lane.

3.2.7 The set down areas will be secured and will have temporary security lighting which will be sympathetically designed to suit the rural context of the site.

3.2.8 The set down compound will incorporate the storage of equipment and materials. Temporary portacabins are required for welfare facilities such as offices, toilets, canteen and storage and each will be between 6-8.5m in length and up to 3m in height.

3.3 Proposed Vehicle Routing and Access to the Site

3.3.1 As the site access is located on the A617, deliveries and construction staff will ultimately operate via Main Road (A617). **Drawing 153626-008**, attached at **Appendix C**, shows the proposed vehicle routes. The primary 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. It is considered that the majority of vehicles will take access from the A1 to the east, utilising the A46 and then A617. Vehicles accessing the site to bring in stone etc. will have the opportunity to access the site from the west along the A617, if materials are sourced from the surrounding area.

3.3.2 The A617 is subjected to a 50mph speed limit across the site frontage. A footway is present on the site side of the carriageway, measuring approximately 1.5m in width. There is also street lighting present along the A617.

3.3.3 The carriageway is approximately 7.0m in width and connects the site to Kelham in the north east and Averham to the south.

3.3.4 **Drawing 153626-002D**, attached at **Appendix C**, shows the proposed access and demonstrates visibility splays of 2.4m by 160m in both directions which is in accordance with DMRB for a 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 R2 included at **Appendix B**, to provide unrestricted visibility for emerging vehicles. In addition, hedgerows will be maintained to keep 1m clearance to the visibility splay lines to allow for future growth.

3.3.5 Gates to secure the site are proposed to be set back from the carriageway which will allow an 18.5m articulated vehicle to wait clear of the carriageway. However, the most common vehicle to access the site would likely be a 16.5m articulated vehicle on a daily basis. If any abnormal loads with escort vehicles are required to access the site these will be planned in advance and therefore there will be an operative on site to receive the delivery having already opened the gate to allow access.

3.3.6 The field access further north on the A617 falls outside the planning application red line boundary and will continue to serve the field that is not within the application site. It is understood that National Highways intend to use the Redhouse Field access as part of the proposed flood compensation engineering works. As such it would be inappropriate for the access to be stopped up as part of the Kelham Solar Farm and BESS application whilst the A46 Newark Bypass application is being determined."

3.3.7 It is not considered that the retention of this field access would cause confusion for those accessing the application site as the improved access will be clearly visible and all haulage companies involved in the scheme will be provided with logistics instructions.

3.3.8 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 drains within the site. Access is, therefore, required by the Internal Drainage Board (IDB) to inspect and maintain their asset which cannot be restricted. It also forms part of a Public Right of Way, as shown in Figure 2.

3.3.9 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. Such measures include:

- Providing information on site access and parking within the constructor induction process
- Site management carrying out inspections to prevent off-site parking

4. Construction Operations

4.1 Introduction

4.1.1 The main traffic and transport related effects will be associated with the movement of HGVs to and from the site during the construction phase of the development. This section of the CTMP sets out the predicted impacts resulting from construction traffic related to the proposed development.

4.2 Access Arrangements

4.2.1 The site is currently accessed from Main Road (A617) to the south east, via an existing agricultural access. The application site will utilise this existing access point, which will be improved to fall in line with DMRB, opposite the access road to Rectory Farm. The proposed access off the A617 will be used during the construction phase of the solar farm and BESS. Attached at **Appendix C**, is Drawing 153626-001E which illustrates the proposed access design from Main Road and the associated vehicle tracking of an 18.5m maximum legal length HGV entering and egressing the site.

4.2.2 Within the site, set down areas will be constructed from compacted crushed stone. Top and subsoils will be removed prior to creation of the set down areas. Internal service roads will be similarly constructed to allow vehicular access within the site.

4.2.3 The majority of equipment and materials required for the construction of a solar farm is modular. However, some items are delivered to site pre-assembled such as transformers, substations and switchgear cabins. These items can be delivered singularly on a 10m rigid HGV. If larger lifting equipment is required to unload these items, then temporary modular crane towers will be constructed on site as necessary.

4.2.4 Once operational, the proposed development will be unmanned and traffic generation will be minimal primarily for occasional maintenance and inspection visits which would generally take place once a month on average.

4.2.5 The significantly improved access will be more visible to road users and will have a negligible level of activity which is considered to be comparable to, if not lower than, the existing agricultural use of the land. The proposals will also remove the need for slow moving agricultural vehicles accessing and egressing the site on a regular basis.

4.2.6 Main Road is accessed by Cattle Market Roundabout, located approximately 2.5km to the east. Main Road is a single carriageway road, subject to a 50mph speed limit and provides access between Kelham, Averham and other villages to the west. It is considered to be of sufficient standard to fulfil the access requirements of the development proposals throughout the construction and operational periods.

4.3 Hours of Operation

4.3.1 It is proposed that during the construction phase of the development, when there is likely to be the most impact on the surrounding highway network, the site would have the following hours of operation:

- Monday to Friday 08:00 to 18:00
- Saturdays 08:00 to 16:00

4.3.2 Deliveries will be carried out within the hours above. Under exceptional circumstances, both working and deliveries outside of these hours may be required. In these cases, prior permission will be sought from Newark and Sherwood District Council.

4.4 Staff Movements

4.4.1 It is estimated the 50 members of staff will be on site during the construction period, depending on the phases of the construction schedule. It is envisaged that staff trips will be made by mini-buses and/or transit vans with a 'crew cab' with an expected minimum capacity of 6 persons. All vehicle parking will be provided within the temporary construction compound, there will be no parking on the public highway.

4.4.2 The anticipated number of staff movements per day is set out in further detail in this section.

4.4.3 The contractor will aim to manage staff movements at the start/end of shifts to ensure that all vehicles associated with the site are not released onto the local highway network at the same time. This could involve releasing a small number of vehicles in five-minute intervals and asking for vehicles to arrive in five-minute intervals at the start of the day.

4.5 Proposed Vehicle Movements

4.5.1 The construction of the proposed solar farm and BESS is expected to last around 6 to 12 months, however, the majority of vehicle movements, associated with the arrival and departure of site staff and the delivery of equipment and construction materials, will occur within the first six months. The remaining 6 months will be commissioning and 'snagging' works which typically do not generate HGV movements

4.5.2 Following construction, as set out previously, it is expected that the only vehicle movements will be concerned with maintenance of the site.

4.5.3 **Table 1**, below, shows the expected vehicle movements during the construction phase. This is subject to change when a contractor is appointed, and a construction phasing plan and timetable is drawn up.

Table 1 – Indicative Vehicle Deliveries during Construction Phase

Construction Activity	Month						
	1	2	3	4	5	6	Total
Delivery of plant, equipment and materials (Assumes 6,800m^3 of stone. 1.4t per cubic m, at 20t per load)	120	120	160	60	40	40	**540**
Erection of security fencing and construction compound	30	30	30				**90**
Cabling on site		15		15			**30**
Delivery of inverters, transformer & control equipment, Water Tank 285 inverters over 3 shipping containers, 16 transformers and 5 spares/switch room cabins			10	10	10		**30**
Delivery of frames & support posts 2,317 frames to be imported to site. Approx 30 frames per delivery	20	20	20	20			**80**
Delivery of PV panels 1 cluster per 2 deliveries	16	25	25	25	25		**116**
Substations				20		20	**40**
BESS Transformers and Inverters 1 cluster per 2 deliveries				19	9		**18**
Delivery of battery units 1 cluster per 2 deliveries				18	18		**36**
Removal of plant and equipment						45	**45**
Total	**186**	**210**	**245**	**177**	**102**	**105**	**1,025**

4.5.4 It is anticipated that the construction phase will generate approximately 1,025 deliveries to site, or 2,050 individual movements (in and out). The third month will see the highest number of deliveries to site at 245.

4.5.5 Assuming a 6-month construction period and a 6-day working week (156 days total) on average this equates to approximately 7 deliveries a day. Although the number of deliveries on average appears low, this is because the deliveries are to be phased to reflect when materials and equipment are needed (based on a "just in time" approach), to avoid having to store materials and equipment on site for unnecessarily long periods.

4.5.6 The majority of deliveries will be made during the beginning of construction works as site preparation works are carried out, and towards the end when the electrical infrastructure and equipment is delivered.

4.5.7 HGV movements will be generated through the import of fencing, cabling, crushed stone for the tracks and passing places, inverters, transformers, control cabins, battery containers and customer substation. The largest vehicles across the site will be a 16.6m articulated lorry. The design of the internal roads allows sufficient space for these vehicles to manoeuvre.

4.5.8 In addition to the expected number of HGVs, there will be staff working on the site, who will most likely arrive before the operating hours of the site (before 08:00) and depart after the site closes each day (after 18:00). As set out previously, there is expected to be up 50 staff on site at the peak of construction. Workers will access the site using minibuses/vans containing a 'crew cab' with an expected minimum capacity of 6 persons.

4.5.9 Given the above, there could be up to 9 vehicles arriving to the site in a morning and 9 vehicles departing in an evening. Parking, totalling 20 spaces, is provided within the set down area to accommodate these vehicles.

4.5.10 Therefore, it is estimated that in the hour preceding the opening of the site each day there would be approximately 9 transit vans arriving at the site. There would be corresponding departure trips in the hour following the closure of the site each day. Given the highly trafficked nature of the A617, the contribution to existing traffic flows from the proposal will be negligible.

4.5.11 It is recognised that the construction phase of the development will increase the total number of vehicles on the local highway network and in particular the number of HGVs. With this in mind, a detailed Highway Safety Signage Strategy will be provided as part of the detailed CTMP. This will include a Temporary Signage Strategy which will be implemented along the routes to the site, warning other road users, cyclists and pedestrians of the presence of construction vehicles. This will be agreed in consultation with the Local Planning and Highway Authority.

4.5.12 With regards access through Kelham, specifically at the bend adjacent to the junction with Broadgate Lane and that adjacent to Kelham Bridge, it is it is proposed that procedures will be in place to control the arrivals of deliveries to the site as the on-site operatives will only be able to administer and unload one of these large vehicles at a time. As such, the timing of the vehicles will prevent these vehicles from meeting at the bends in question.

4.5.13 In addition, deliveries will not take place during peak hours (08:00-09:30 and 16:30-18:00) or during hours of darkness, as requested by NCC, due to their concerns regarding visibility at Kelham Bridge. Vegetation within the highway boundary on the inside of the bend at the eastern end of Kelham Bridge will be removed/trimmed as necessary to provide the best possible visibility.

4.5.14 Upon appointment, the principal contractor will engage with their counterparts for other similar schemes in the area with the aim of organising deliveries to each site so as to avoid conflictions and minimise the impact in locations such as Kelham Bridge.

4.6 Abnormal Loads

4.6.1 It is not anticipated that any abnormal loads will be required to access the site. However, if the need does arise, the Highway Authority will be notified in advance as required by legislation. Such vehicles would also be accompanied by an escort vehicle as appropriate.

4.7 Proposed Mitigation Measures

4.7.1 The extent of proposed mitigation measures will be dependent on the appointed contractor for the construction of the facility. However, below are several broad measures that could be readily implemented:

- The use of a banksman to help guide deliveries into sites;
- Advisory temporary signage on the highway for works in the area;
- Temporary signage along the proposed routes to ensure deliveries follow agreed routes;
- Provide sufficient parking areas within the plots and adjacent to the temporary construction compound so there is no parking on the highway or potential blockage to access tracks;
- Vehicles carrying loose material shall be sheeted;
- The use of bowsers/sprays as necessary during dry conditions to prevent dust and the use of wheel cleaning facilities to prevent transfer on to the highway as required;
- Secure the site to prevent unauthorised access;
- Regularly monitor the condition of the highway for spoil transfer or damage and rectify as required;
- Contact local residents prior to construction works commencing advising of anticipated duration and a contact number to advise of any issues/concerns; and
- Turning engines off when not in use.

4.7.2 The access will have the following measures in place in order to ensure the minimum possible impact on the surrounding highway network:

- Hard standing
- Wheel washing facilities
- Brushes and water supply to clean vehicles before they enter the leave site and enter onto the highway
- Mud on road warning signs in case of an incident
- Site Safety reminder signs on each exit to remind drivers clean their vehicles and ensure that mud is not deposited on the highway
- Appoint a Local Sweeper Company that can attend site in sufficient time in order to deal with incidents
- The site contractor to identify a site operative that will take responsibility for mud on road issues that the public and the Authority can contact immediately if or when there are issues
- The site contractor will clean all loose stones from the highway each time a vehicle exits

4.7.3 A package of minimum mitigation measures that shall be implemented across the development areas, shall be agreed as part of the final/detailed CTMP, which is to be agreed before the construction phase commences.

4.7.4 A full highway safety signage strategy will be agreed with the Local Authority and implemented by a competent and professional Traffic Management Company.

4.7.5 The detailed CTMP will include a communication plan, detailing how the applicant intends to consult, liaise and take on board the views and concerns of the affected Communities, Community Councils and Local Members.

4.8 Engagement with the Council

4.8.1 If considered necessary a series of meetings will be held between the developer, contractors, haulage contractors and the Council as Highway Authority to discuss progress and any issues which arise during the construction phase. In such circumstances the following meetings may be appropriate but will be agreed with the local planning and highway authorities and National Highways as necessary:

- Initial introductory meeting approximately 2 weeks before work commences on site
- Second meeting two weeks after works have commenced to discuss progress, concerns and any ongoing issues.
- Monthly follow up meetings whilst works are ongoing on site.
- Final meeting within 2 weeks of the works being completed.

4.9 Haulage Contractor

4.9.1 At this point, a haulage contractor has yet to be appointed. Details of the appointed contractor will be provided in the detailed CTMP to be submitted at a later date. Notwithstanding this, the appointed haulage contractor will be made of the committed provisions as follows:

- The developer must ensure that the Haulage Contractor provides clear and detailed instruction to each and every driver on the route that they are expected to take to reach their destination.
- The developer must ensure the Haulage Company provides clear and detailed instruction to each and every driver not to follow Satellite Navigation devices onto backroads which do not form part of the pre agreed official transportation routes.
- The developer must ensure that the Haulage Company provides clear and detailed instruction to each and every haulage driver to advise the developer if they cause damage to highway verges, ditches, signs or if they cause mud or debris to spill onto the highway. The developer must take immediate action to rectify any issues.
- The developer must provide the name and contact details of an onsite operative that the Authority and / or the public can telephone whenever there is an incident involving the haulage contractor on the highway.

4.10 Highway Management and Private Boundary Plan

4.10.1 The detailed CTMP will include details of the areas of land managed by the Highway Authority and areas of land which fall within private ownership, including confirming the following:

- A road condition survey will be undertaken pre commencement on site and following completion of all works. The extent of the condition survey is identified on Drawing 153626-010 at **Appendix C**.

- Details of how all roads will be kept mud free at all times, assurances on what methods they intend to employ to clean vehicles before they leave site and enter the highway.
- Details of how they intend to maintain the highway verges if they are damaged by site or delivery vehicles,
- Assurances that potholes will be filled and carry out temporary repairs to the carriageway as a result of their activities.
- Details of how boundary walls will not be damaged and if they are how they will be rebuilt.

5. Operational and Decommissioning Phases

5.1 Post-Construction

5.1.1 It is anticipated that on completion of the solar farm, BESS and ancillary infrastructure, all temporary works and construction compound will be removed off site. It is anticipated that this may take up to one month.

5.2 Operational Phase

5.2.1 Once operational, the solar farm and BESS will be unmanned and access for occasional maintenance will be typically made by light goods vehicles, e.g. vans or 4x4 vehicles. Maintenance will typically occur once a month.

5.2.2 Solar farms and BESS developments require little maintenance, the majority of monitoring of such sites is undertaken remotely and there will be no need for everyday inspection of the site.

5.2.3 There will be no public access into the site. However, a permissive bridleway is proposed around the perimeter of the site. There is also an existing PRoW that crosses the site. These public areas will be securely fenced.

5.2.4 Internal access roads will be maintained throughout the life of the proposed development.

5.3 Decommissioning

5.3.1 After 40 years of operational life the solar farm and BESS will be decommissioned and returned to its former agricultural use. It is anticipated that a similar amount of time and type of vehicle will be required to decommission the facility as that to construct it. Furthermore, the level of vehicle movements to decommission the site will be similar to the number of deliveries to site for the construction phase.

5.3.2 Prior to the decommissioning phase a detailed assessment will be undertaken to confirm the most suitable routes for vehicles accessing the site.

6. Summary and Conclusions

6.1 Sirius Planning Ltd (on behalf of their client) is seeking to construct and operate a solar farm and Battery Energy Storage System (BESS) on land off Main Road, Kelham, Newark-on-Trent.

6.2 Deliveries will be made to the temporary set down area. Over the 6-month construction phase it is estimated that 1,025 deliveries or 2,050 individual movements will be made to the site. This figure does not include the vehicle movements associated with construction site staff.

6.3 Although the construction phase will be temporary, a package of measures will be put in place to ensure the safety of highway users and delivery vehicles. On the basis of the trip generation outlined above, when viewed against recorded vehicle flows on the A617, and given the temporary nature of the construction works, it is expected that the construction of the proposed solar farm and BESS will have minimal impact on the local highway network and is therefore suitable.

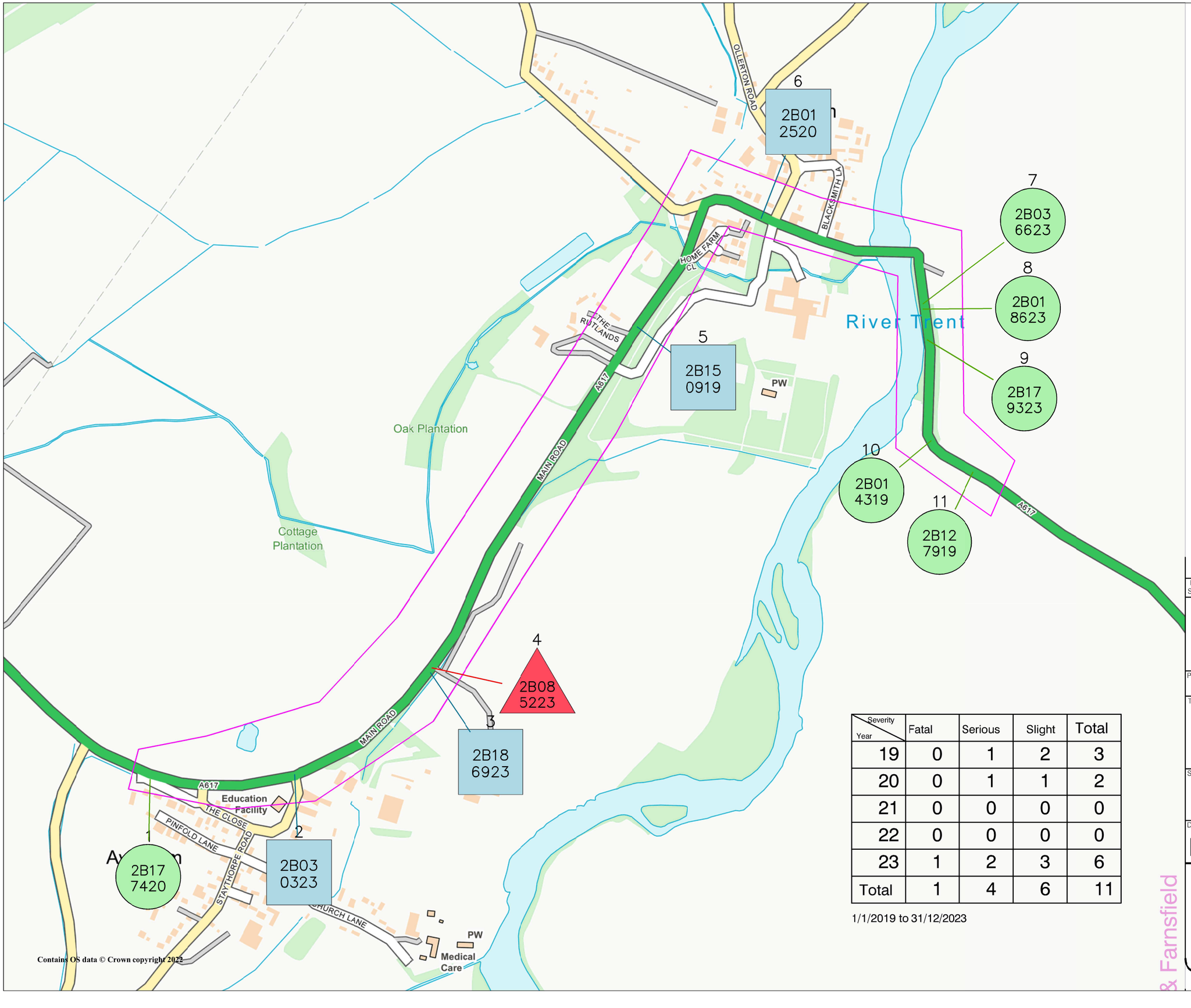
6.4 The access improvement works, Enabling Works, will be subject to the requirements of S278 of the Highways Act 1980 and as such Temporary Traffic Management (TTM) will be required during the construction works within the adopted highway. It is likely that this TTM will take the form of temporary traffic signals to enable a safe working area to be created. Whilst a detailed scheme of associated signage and cones/barriers to control the flow of vehicles through the roadworks will be agreed with the Highway Authority and provided in accordance with Traffic Signs Regulation & General Directions 2019 and Chapter 8 Guidelines.

6.5 After commissioning, the site will only be visited during routine maintenance checks as required on an ad hoc basis.

Appendix A

Via East Midlands – Accident Reports

Via East Midlands – Severity Report



Severity / Year	Fatal	Serious	Slight	Total
19	0	1	2	3
20	0	1	1	2
21	0	0	0	0
22	0	0	0	0
23	1	2	3	6
Total	1	4	6	11

1/1/2019 to 31/12/2023

Key

64 2B21 0616 — Slight

59 2B06 5118 — Serious

37 2B24 9614 — Fatal

Last two digits of the accident number refers to the year of the accident

Rev Status	Description	Drawn	Ch'kd	Auth	Date

A617 KELHAM

Property No.

Project No. DR4805

Title

REPORTED INJURY ACCIDENTS 1/1/2019 TO 31/12/23

Scale N.T.S.

Drawn DB Date 15/3/24

Ch'kd Date

Auth Traced

Drawing No. DR4805 SEV PLOT Rev

via
www.viaem.co.uk | Tel 01623 873873
Bilsthorpe Depot, Bilsthorpe Business Park,
Bilsthorpe,Nottinghamshire NG22 8ST

Accident Details Report

Total number of reports = **11**

Total number of pages (including this page) = **13**

ROAD TRAFFIC INJURY ACCIDENT RECORDS - DISCLAIMER

These details are a record of the personal injury accidents reported to the Police. Every endeavour is made to ensure the accuracy and completeness of these records, which have been transcribed from the original Police Reports. The data is then entered and held on computer.

Occasions may arise when information from the Police, relevant to a particular accident, may not be available for several months and will therefore not be included.

No. 1	District Newark and Sherwood	Accident Details	VRUs	Grid Reference 476227 / 354674
SEVERITY **SLIGHT**	Ref.No 2B177420			Police Officer Attend: Yes

Date	18/12/2020	Day Friday	ROAD A617
Time	06:19		LOCATION A617 MAIN ROAD (BEND), 88 metres southeast of STAYTHORPE ROAD, AVERHAM
Weather	Rain		
Road Surface	Wet		
Street Lighting	Dark/lights lit		

Speed Limit	50 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS: None
Carriageway	Single c'way		CARRIAGEWAY HAZARDS: None
Lane markings	Centre/hazard line		
Junction Detail	Not at or within 20m of junction		
Junction Control			
2nd Road Number			
Pedestrian Facilities and	No Human control within 50m No crossing facility within 50m		

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Car		
Manoeuvre	Going ahead left hand bend				
Direction from	North west to South east	Towing?	No		
Skidded	Overturned				
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Left c'way Offside				
Hit object in c'way?	None				
Hit object off c'way?	Wall or fence				
First point of impact	Front				
Drivers age	43 yrs	Sex	Male	Other veh.hit (ref.) 0	Hit and run No
Foreign vehicle	Not foreign				Breath test Negative
Journey purpose	Commuting to/from work				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	1
Severity	**SLIGHT**	Age	43 yrs	Sex	Male
Car Passenger?	No	PSV Passenger?	No		
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

No. 2	District Newark and Sherwood	# Accident Details	VRUs	Grid Reference 476495 / 354683
SEVERITY **SERIOUS**	Ref.No 2B030323		**Pedal Cycle**	Police Officer Attend: No - reported over the counter

Date	21/02/2023	Day Tuesday	
Time	08:40		
Weather	Fine		
Road Surface	Dry		
Street Lighting	Daylight		

ROAD A617

LOCATION A617 MAIN ROAD, at its Junction with U/C STAYTHORPE ROAD/THE CLOSE, AVERHAM

SITE DETAILS	
Speed Limit	50 MPH
Carriageway	Single c'way
Lane markings	Centre/hazard line
Junction Detail	T or Staggered junction
Junction Control	Give way sign or uncontrolled
2nd Road Number	U
Pedestrian Facilities	No Human control within 50m
and	No crossing facility within 50m

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

Dislodged load

VEHICLES INVOLVED 1

Veh.No. 1 Vehicle type Pedal Cycle
Manoeuvre Going ahead other
Direction from North east to South west Towing? No
Skidded Yes
Veh location at impact (restricted lane) On main carriageway
Junct. location of veh. at 1st impact Mid junction
Veh left carriageway? Did not leave c'way
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Drivers age 47 yrs Sex Male Other veh.hit (ref.) 0 Hit and run No
Foreign vehicle Not foreign Breath test Not applicable
Journey purpose Commuting to/from work

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity **SERIOUS** Age 47 yrs Sex Male
Car Passenger? No PSV Passenger? No
Ped Movement Not a pedestrian
Ped location Not a pedestrian
Ped Direction to Not a pedestrian
School Pupil Other
Roadworker injured No

No. 3	District Newark and Sherwood	Accident Details	VRUs	Grid Reference 476747 / 354872
SEVERITY **SERIOUS**	Ref.No 2B186923			Police Officer Attend: Yes

Date	28/11/2023	Day Tuesday	ROAD A617
Time	06:15		LOCATION A617 MAIN ROAD, 308 metres northeast of STAYTHORPE ROAD, AVERHAM
Weather	Fine		
Road Surface	Ice		
Street Lighting	Dark/no lights		

Speed Limit	50 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS: Mud
Carriageway	Single c'way		CARRIAGEWAY HAZARDS: None
Lane markings	Centre/hazard line		
Junction Detail	Not at or within 20m of junction		
Junction Control			
2nd Road Number			
Pedestrian Facilities	No Human control within 50m		
and	No crossing facility within 50m		

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Car		
Manoeuvre	Going ahead other				
Direction from	North east to South west	Towing?	No		
Skidded	Yes & Overturned				
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Left c'way near-side				
Hit object in c'way?	Kerb				
Hit object off c'way?	Entered ditch				
First point of impact	Front				
Drivers age	57 yrs	Sex	Female	Other veh.hit (ref.)	0
Foreign vehicle	Not foreign			Hit and run	No
Journey purpose	Commuting to/from work			Breath test	Negative

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	1
Severity	**SERIOUS**	Age	57 yrs	Sex	Female
Car Passenger?	No	PSV Passenger?	No		
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

No. 4	District Newark and Sherwood	# Accident Details	VRUs	Grid Reference 476750 / 354881
SEVERITY **FATAL**	Ref.No 2B085223			Police Officer Attend: Yes

Date	11/07/2023	Day Tuesday	ROAD A617
Time	07:05		LOCATION A617 MAIN ROAD, 498 metres northeast of THE CLOSE, AVERHAM
Weather	Fine		
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS	
Speed Limit	50 MPH
Carriageway	Single c'way
Lane markings	Centre/hazard line
Junction Detail	Not at or within 20m of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	No Human control within 50m
and	No crossing facility within 50m

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car
Manoeuvre Going ahead other
Direction from South west to North east Towing? No
Skidded No
Veh location at impact (restricted lane) On main carriageway
Junct. location of veh. at 1st impact Not at junction
Veh left carriageway? Left c'way near-side
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Drivers age 43 yrs Sex Male Other veh.hit (ref.) 2 Hit and run No
Foreign vehicle Not foreign Breath test Not provided
Journey purpose

Veh.No. 2 Vehicle type Car
Manoeuvre Going ahead other
Direction from North east to South west Towing? No
Skidded No
Veh location at impact (restricted lane) On main carriageway
Junct. location of veh. at 1st impact Not at junction
Veh left carriageway? Did not leave c'way
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Drivers age 19 yrs Sex Male Other veh.hit (ref.) 1 Hit and run No
Foreign vehicle Not foreign Breath test Not provided
Journey purpose

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity **SERIOUS** Age 43 yrs Sex Male
Car Passenger? No PSV Passenger? No
Ped Movement Not a pedestrian
Ped location Not a pedestrian
Ped Direction to Not a pedestrian
School Pupil Other
Roadworker injured No

Cas No 2 Cas Class Driver or Rider Veh ref No 2
Severity **FATAL** Age 19 yrs Sex Male
Car Passenger? No PSV Passenger? No
Ped Movement Not a pedestrian
Ped location Not a pedestrian
Ped Direction to Not a pedestrian
School Pupil Other
Roadworker injured No

No. 5	District Newark and Sherwood	Accident Details	VRUs	Grid Reference 477131 / 355513
SEVERITY **SERIOUS**	Ref.No 2B150919			Police Officer Attend: Yes

Date	30/08/2019	Day Friday	ROAD A617
Time	13:36		LOCATION A617 MAIN ROAD, 73 metres northeast of PVTE ENT/EXIT KELHAM HOUSE COUNTRY MANOR HOTEL, KELHAM
Weather	Fine		
Road Surface	Dry		
Street Lighting	Daylight		

Speed Limit	30 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS: None
Carriageway	Single c'way		CARRIAGEWAY HAZARDS: None
Lane markings	Centre/hazard line		
Junction Detail	Not at or within 20m of junction		
Junction Control			
2nd Road Number			
Pedestrian Facilities and	No Human control within 50m No crossing facility within 50m		

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Car		
Manoeuvre	Going ahead other				
Direction from	North east to South west	Towing?	No		
Skidded	No				
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Left c'way near-side				
Hit object in c'way?	None				
Hit object off c'way?	Wall or fence				
First point of impact	Front				
Drivers age	81 yrs	Sex	Male	Other veh.hit (ref.) 0	Hit and run No
Foreign vehicle	Not foreign				Breath test Not requested
Journey purpose	Other/Not known				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	1
Severity	**SERIOUS**	Age	81 yrs	Sex	Male
Car Passenger?	No	PSV Passenger?	No		
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

No. 6	District Newark and Sherwood	Accident Details	VRUs	Grid Reference 477361 / 355714
SEVERITY **SERIOUS**	Ref.No 2B012520			Police Officer Attend: Yes

Date	09/02/2020	Day Sunday	ROAD A617
Time	07:49		LOCATION A617, 46 metres west of OLLERTON ROAD, KELHAM
Weather	Fine Wind		
Road Surface	Wet		
Street Lighting	Daylight		

Speed Limit	60 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS: Mud
Carriageway	Single c'way		CARRIAGEWAY HAZARDS: None
Lane markings	Centre/hazard line		
Junction Detail	Not at or within 20m of junction		
Junction Control			
2nd Road Number			
Pedestrian Facilities	No Human control within 50m		
and	No crossing facility within 50m		

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Car		
Manoeuvre	Going ahead other				
Direction from	South east to North west	Towing?	No		
Skidded	Yes				
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Left c'way near-side				
Hit object in c'way?	None				
Hit object off c'way?	Wall or fence				
First point of impact	Nearside				
Drivers age	24 yrs	Sex	Male	Other veh.hit (ref.) 0	Hit and run No
Foreign vehicle	Not foreign				Breath test Negative
Journey purpose	Journey as part of work				

CASUALTIES INVOLVED 1

Cas No	1	Cas Class	Driver or Rider	Veh ref No	1
Severity	**SERIOUS**	Age	24 yrs	Sex	Male
Car Passenger?	No	PSV Passenger?	No		
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

No. 7	District Newark and Sherwood	Accident Details	VRUs	Grid Reference 477661 / 355556
SEVERITY **SLIGHT**	Ref.No 2B036623			Police Officer Attend: Yes

Date	17/03/2023	Day Friday	ROAD A617
Time	15:00		LOCATION A617 KELHAM ROAD, 95 metres south of KELHAM LANE, KELHAM
Weather	Fine		
Road Surface	Dry		
Street Lighting	Daylight		

SITE DETAILS	
Speed Limit	50 MPH
Carriageway	Single c'way
Lane markings	Centre/hazard line
Junction Detail	Not at or within 20m of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	No Human control within 50m
and	No crossing facility within 50m

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

None

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car
Manoeuvre Going ahead other
Direction from South to North Towing? No
Skidded No
Veh location at impact (restricted lane) On main carriageway
Junct. location of veh. at 1st impact Not at junction
Veh left carriageway? Did not leave c'way
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Drivers age 17 yrs Sex Male Other veh.hit (ref.) 2 Hit and run No
Foreign vehicle Not foreign Breath test Not requested
Journey purpose Other/Not known

Veh.No. 2 Vehicle type Car
Manoeuvre Stopping
Direction from South to North Towing? No
Skidded No
Veh location at impact (restricted lane) On main carriageway
Junct. location of veh. at 1st impact Not at junction
Veh left carriageway? Did not leave c'way
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Drivers age 69 yrs Sex Male Other veh.hit (ref.) 1 Hit and run No
Foreign vehicle Not foreign Breath test Not requested
Journey purpose Other/Not known

CASUALTIES INVOLVED 1

Cas No 1 Cas Class Driver or Rider Veh ref No 1
Severity **SLIGHT** Age 17 yrs Sex Male
Car Passenger? No PSV Passenger? No
Ped Movement Not a pedestrian
Ped location Not a pedestrian
Ped Direction to Not a pedestrian
School Pupil Other
Roadworker injured No

No. 8	District Newark and Sherwood	Accident Details	VRUs	Grid Reference 477661 / 355546
SEVERITY SLIGHT	Ref.No 2B018623			Police Officer Attend: Yes

Date	07/02/2023	Day Tuesday	ROAD A617
Time	09:51		LOCATION A617 KELHAM ROAD, 78 metres south of KELHAM LANE, KELHAM
Weather	Fine		
Road Surface	Wet		
Street Lighting	Daylight		

SITE DETAILS	
Speed Limit	30 MPH
Carriageway	Single c'way
Lane markings	Centre/hazard line
Junction Detail	Not at or within 20m of junction
Junction Control	
2nd Road Number	
Pedestrian Facilities	No Human control within 50m
and	No crossing facility within 50m

SPECIAL SITE CONDITIONS

None

CARRIAGEWAY HAZARDS

Animal in c'way

VEHICLES INVOLVED 2

Veh.No. 1 Vehicle type Car
Manoeuvre Going ahead other
Direction from South to North Towing? No
Skidded Yes
Veh location at impact (restricted lane) On main carriageway
Junct. location of veh. at 1st impact Not at junction
Veh left carriageway? Did not leave c'way
Hit object in c'way? None
Hit object off c'way? None
First point of impact Front
Drivers age 52 yrs Sex Male Other veh.hit (ref.) 2 Hit and run No
Foreign vehicle Not foreign Breath test Negative
Journey purpose Other/Not known

Veh.No. 2 Vehicle type Car
Manoeuvre Going ahead other
Direction from South to North Towing? No
Skidded No
Veh location at impact (restricted lane) On main carriageway
Junct. location of veh. at 1st impact Not at junction
Veh left carriageway? Did not leave c'way
Hit object in c'way? None
Hit object off c'way? None
First point of impact Back
Drivers age 32 yrs Sex Male Other veh.hit (ref.) 1 Hit and run No
Foreign vehicle Not foreign Breath test Negative
Journey purpose

CASUALTIES INVOLVED 2

Cas No 1 Cas Class Driver or Rider Veh ref No 2
Severity SLIGHT Age 32 yrs Sex Male
Car Passenger? No PSV Passenger? No
Ped Movement Not a pedestrian
Ped location Not a pedestrian
Ped Direction to Not a pedestrian
School Pupil Other
Roadworker injured No

Cas No 2 Cas Class Driver or Rider Veh ref No 1
Severity SLIGHT Age 52 yrs Sex Male
Car Passenger? No PSV Passenger? No
Ped Movement Not a pedestrian
Ped location Not a pedestrian
Ped Direction to Not a pedestrian
School Pupil Other
Roadworker injured No

No. 9	District Newark and Sherwood		VRUs	Grid Reference 477669 / 355489
SEVERITY **SLIGHT**	Ref.No 2B179323	**Accident Details**		Police Officer Attend: Yes

Date	15/11/2023	Day Wednesday	ROAD A617
Time	08:04		LOCATION A617 KELHAM ROAD, 132 metres south of KELHAM LANE, KELHAM
Weather	Fine		
Road Surface	Wet		
Street Lighting	Daylight		

Speed Limit	50 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS: None
Carriageway	Single c'way		CARRIAGEWAY HAZARDS: None
Lane markings	Centre/hazard line		
Junction Detail	Not at or within 20m of junction		
Junction Control			
2nd Road Number			
Pedestrian Facilities	No Human control within 50m		
and	No crossing facility within 50m		

VEHICLES INVOLVED 3

Veh.No. 1	Vehicle type Car				
Manoeuvre	Going ahead other				
Direction from South to North		Towing? No			
Skidded No					
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Did not leave c'way				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Front				
Drivers age 65 yrs	Sex Male	Other veh.hit (ref.) 2		Hit and run No	
Foreign vehicle	Not foreign			Breath test Negative	
Journey purpose					

Veh.No. 2	Vehicle type Car				
Manoeuvre	Stopping				
Direction from South to North		Towing? No			
Skidded No					
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Did not leave c'way				
Hit object in c'way?	None				
Hit object off c'way?	None				
First point of impact	Back				
Drivers age 37 yrs	Sex Female	Other veh.hit (ref.) 1		Hit and run No	
Foreign vehicle	Not foreign			Breath test Negative	
Journey purpose					

CASUALTIES INVOLVED 1

Cas No 1	Cas Class Driver or Rider			Veh ref No 1	
Severity **SLIGHT**	Age 65 yrs	Sex Male			
Car Passenger? No		PSV Passenger? No			
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

Veh.No.	3	Vehicle type	Car		
Manoeuvre		Stopping			
Direction from	South to North		Towing?	No	
Skidded	No				
Veh location at impact (restricted lane)		On main carriageway			
Junct. location of veh. at 1st impact		Not at junction			
Veh left carriageway?		Did not leave c'way			
Hit object in c'way?		None			
Hit object off c'way?		None			
First point of impact		Back			
Drivers age	35 yrs	Sex	Male	Other veh.hit (ref.)	2
Foreign vehicle		Not foreign			
Journey purpose					

Hit and run No
Breath test Negative

No. **10**	District Newark and Sherwood	**Accident Details**	VRUs	Grid Reference 477676 / 355302
SEVERITY **SLIGHT**	Ref.No 2B014319			Police Officer Attend: Yes

Date	03/02/2019	Day Sunday	ROAD A617
Time	12:54		LOCATION A617 KELHAM ROAD BEND, 320 metres from KELHAM BRIDGE, KELHAM
Weather	Fine		
Road Surface	Dry		
Street Lighting	Daylight		

Speed Limit	50 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS: None
Carriageway	Single c'way		CARRIAGEWAY HAZARDS: None
Lane markings	Centre/hazard line		
Junction Detail	Not at or within 20m of junction		
Junction Control			
2nd Road Number			
Pedestrian Facilities	No Human control within 50m		
and	No crossing facility within 50m		

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	Car		
Manoeuvre	Going ahead left hand bend				
Direction from	North to South east		Towing?	No	
Skidded	Overturned				
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Left c'way near-side				
Hit object in c'way?	Kerb				
Hit object off c'way?	Tree				
First point of impact	Nearside				
Drivers age	18 yrs	Sex	Male	Other veh.hit (ref.) 0	Hit and run No
Foreign vehicle	Not foreign				Breath test Negative
Journey purpose	Other/Not known				

CASUALTIES INVOLVED 2

Cas No	1	Cas Class	Passenger	Veh ref No	1
Severity	**SLIGHT**	Age	18 yrs	Sex	Female
Car Passenger?	Rear	PSV Passenger?	No		
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

Cas No	2	Cas Class	Passenger	Veh ref No	1
Severity	**SLIGHT**	Age	18 yrs	Sex	Male
Car Passenger?	Rear	PSV Passenger?	No		
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

No. **11**	District Newark and Sherwood	**Accident Details**	VRUs **Motorcycle**	Grid Reference 477754 / 355244
SEVERITY **SLIGHT**	Ref.No 2B127919			Police Officer Attend: Yes

Date	10/07/2019	Day Wednesday	ROAD A617
Time	16:05		LOCATION A617 KELHAM ROAD, 413 metres southeast of KELHAM LANE, KELHAM
Weather	Fine		
Road Surface	Dry		
Street Lighting	Daylight		

Speed Limit	50 MPH	SITE DETAILS	SPECIAL SITE CONDITIONS: None
Carriageway	Single c'way		CARRIAGEWAY HAZARDS: Other object
Lane markings	Centre/hazard line		
Junction Detail	Not at or within 20m of junction		
Junction Control			
2nd Road Number			
Pedestrian Facilities	No Human control within 50m		
and	No crossing facility within 50m		

VEHICLES INVOLVED 1

Veh.No.	1	Vehicle type	M/cycle 50 - 125cc		
Manoeuvre	Going ahead other				
Direction from	South east to North west	Towing?	No		
Skidded	No				
Veh location at impact (restricted lane)	On main carriageway				
Junct. location of veh. at 1st impact	Not at junction				
Veh left carriageway?	Did not leave c'way				
Hit object in c'way?	Other object				
Hit object off c'way?	None				
First point of impact	Front				
Drivers age	21 yrs	Sex	Male	Other veh.hit (ref.) 0	Hit and run No
Foreign vehicle	Not foreign				Breath test Negative
Journey purpose					

CASUALTIES INVOLVED 1

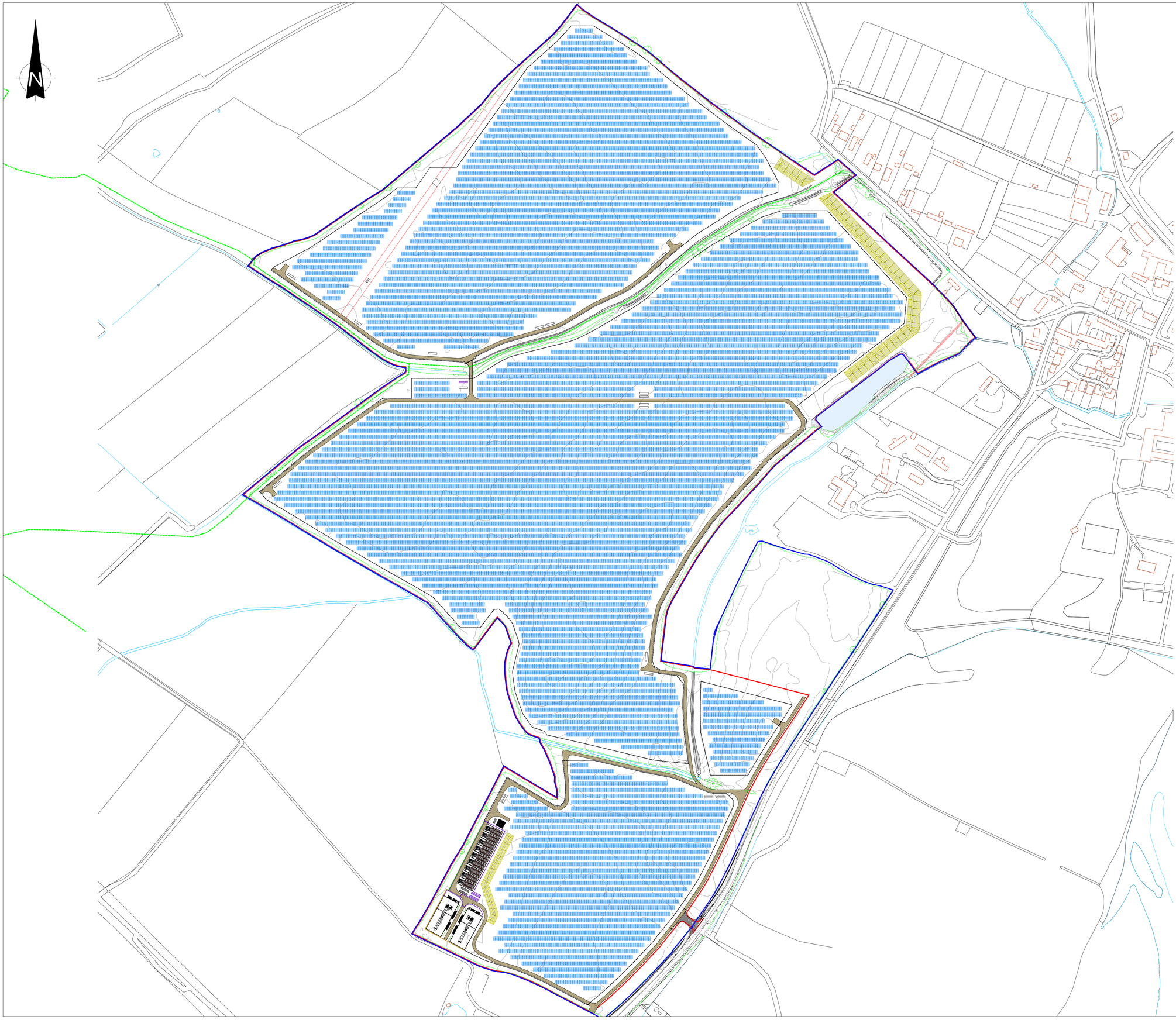
Cas No	1	Cas Class	Driver or Rider	Veh ref No	1
Severity	**SLIGHT**	Age	21 yrs	Sex	Male
Car Passenger?	No	PSV Passenger?	No		
Ped Movement	Not a pedestrian				
Ped location	Not a pedestrian				
Ped Direction to	Not a pedestrian				
School Pupil	Other				
Roadworker injured	No				

Appendix B

Site Layout Plan

Proposed Set Down and Parking Areas

Translocated Hedge Drawing



KEY

- LAND UNDER THE CONTROL OF THE APPLICANT
- 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 FIREWATER PUMPHOUSE
- PROPOSED FIREWATER TANK
- PROPOSED DNO CABIN
- PROPOSED DNO SWITCHROOM
- PROPOSED DNO MAST (subject to DNO confirmation)
- PROPOSED 132kV SUBSTATION

REV	DESCRIPTION	DATE	BY
2	SITE LAYOUT AMENDED. LAND UNDER THE CONTROL OF THE APPLICANT ADDED.	6/6/24	S.T
1	SITE LAYOUT AMENDED.	27/3/24	S.T

CLIENT

ASSURED ASSET SOLAR 2 LIMITED

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

JOB TITLE

KELHAM SOLAR FARM AND BESS

DRAWING TITLE

SITE LAYOUT

DRAWN	DATE	APPROVED	DATE
S.T	17/6/2024	J.C	17/6/2024

SCALE	SHEET	DRAWING NUMBER	REVISION
1:2500	A1L	HC1002/05/03	2

KEY

- LAND UNDER THE CONTROL OF THE APPLICANT
- 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
1	SITE LAYOUT AMENDED. LAND UNDER THE CONTROL OF THE APPLICANT ADDED.	6/6/24	S.T

CLIENT

ASSURED ASSET SOLAR 2 LIMITED

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

JOB TITLE

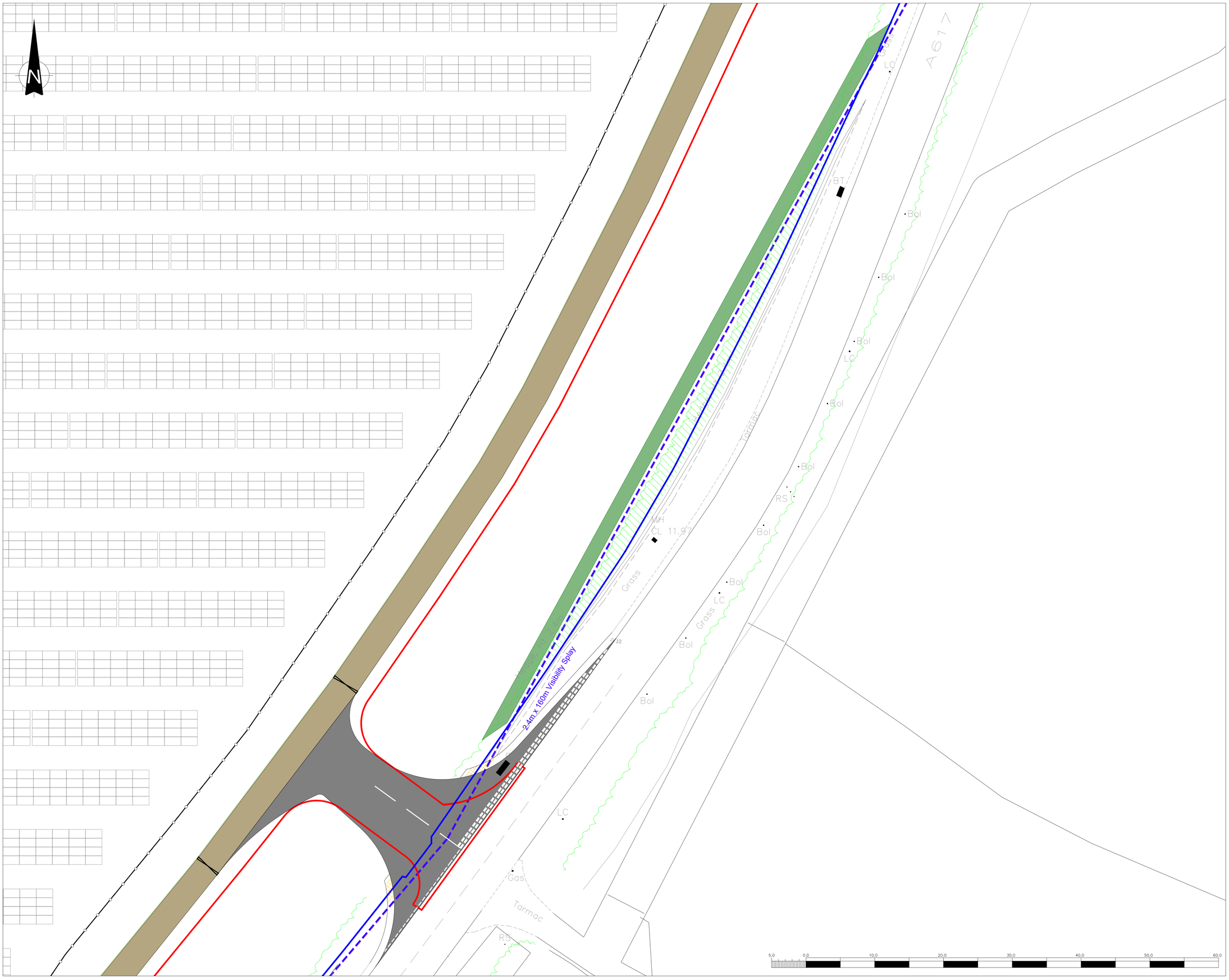
KELHAM SOLAR FARM AND BESS

DRAWING TITLE

TEMPORARY SITE SET DOWN AREA DETAILS

DRAWN	DATE	APPROVED	DATE
S.T	17/6/2024	J.C	17/6/2024

SCALE	SHEET	DRAWING NUMBER	REVISION
1:1000	A1L	HC1002/05/25	1



KEY

- LAND UNDER THE CONTROL OF THE APPLICANT
- SITE BOUNDARY
- EXISTING HEDGES
- EXISTING TREES
- PROPOSED PV PANELS
- PROPOSED 2.0m HIGH DEER FENCE
- PROPOSED ACCESS TRACKS
- PROPOSED ACCESS TARMAC BELLMOUTH
- EXISTING HEDGE TO BE RELOCATED
- RELOCATED HEDGE TO BE JOINED TO EXISTING
- 2.4m x 160m ACCESS VISIBILITY SPLAY

REV	DESCRIPTION	DATE	BY
2	SITE LAYOUT AMENDED. LAND UNDER THE CONTROL OF THE APPLICANT ADDED.	6/6/24	S.T
1	ACCESS AMENDED.	6/1/24	S.T

CLIENT

ASSURED ASSET SOLAR 2 LIMITED

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

JOB TITLE

KELHAM SOLAR FARM AND BESS

DRAWING TITLE

TRANSLOCATED HEDGEROW PLAN

DRAWN	DATE	APPROVED	DATE
S.T	17/6/2024	C.N	17/6/2024

SCALE	SHEET	DRAWING NUMBER	REVISION
1:250	A1L	HC1002/05/29	2

5.0 0.0 10.0 20.0 30.0 40.0 50.0 60.0

Appendix C

Drawing 153626-001E - Proposed Access Design

Drawing 153626-002D - Visibility Splays from Proposed Access

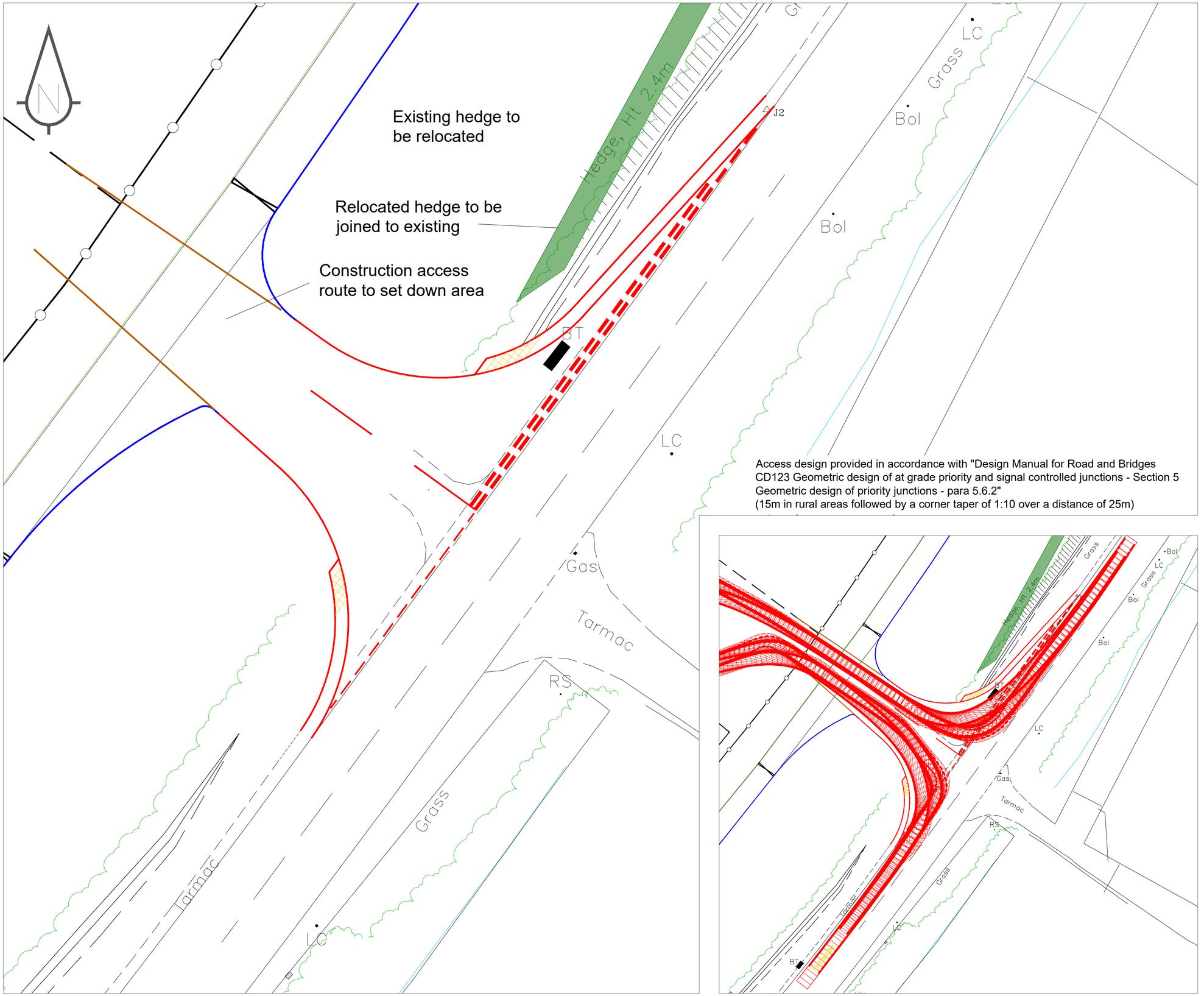
Drawing 153626-006B - 18.5m Articulated Vehicle Swept Path Analysis

Drawing 153626-008 - Vehicle Routes

Drawing 153626-010 - Extent of Condition Survey

Drawing 153626-011 – Proposed Overflow Parking Area

Drawing 153626-012 – Reduced Set Down Area



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.2 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.
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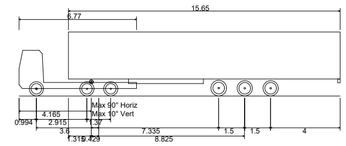

18.5m Articulated Vehicle

Overall Length	18.500m
Overall Width	2.550m
Overall Body Height	3.692m
Min Body Ground Clearance	0.426m
Max Track Width	2.550m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.450m

Rev	Amendment	Drawn	Date	Checked
E	Amended gate location	SB	June 24	KS
D	Amended to show 18.5m vehicle	CP	Mar 24	KS
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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Client

Sirius Planning Ltd

Project Title

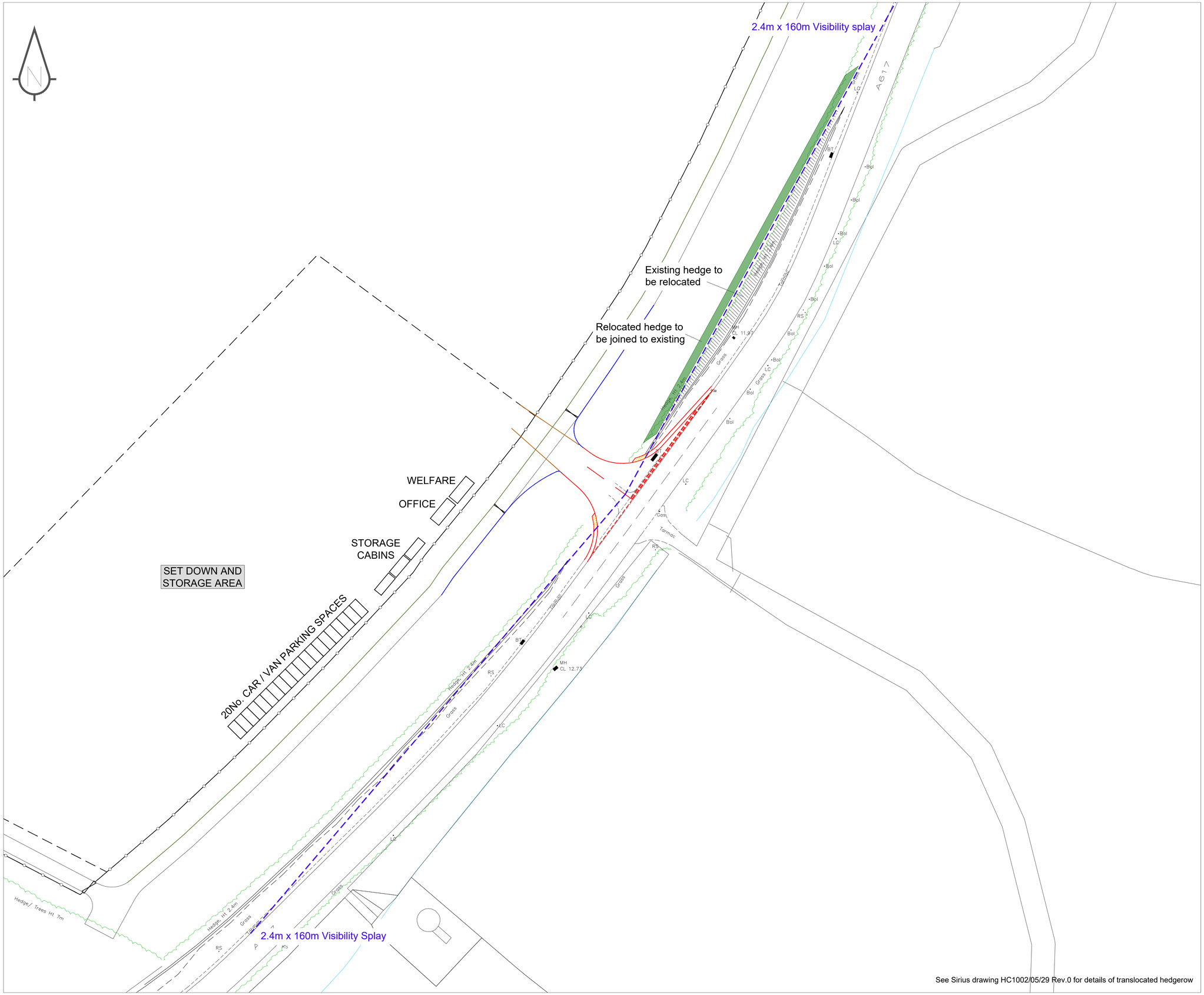
Main Road,
Kelham,
Newark-on-Trent

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	Rev
		153626-001	E

FILE REF:



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Rev	Amendment	Drawn	Date	Checked
D	Amended gate locations	SB	June 2024	KS
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

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Client

Sirius Planning Ltd

Project Title

Main Road,
Kelham,
Newark-on-Trent

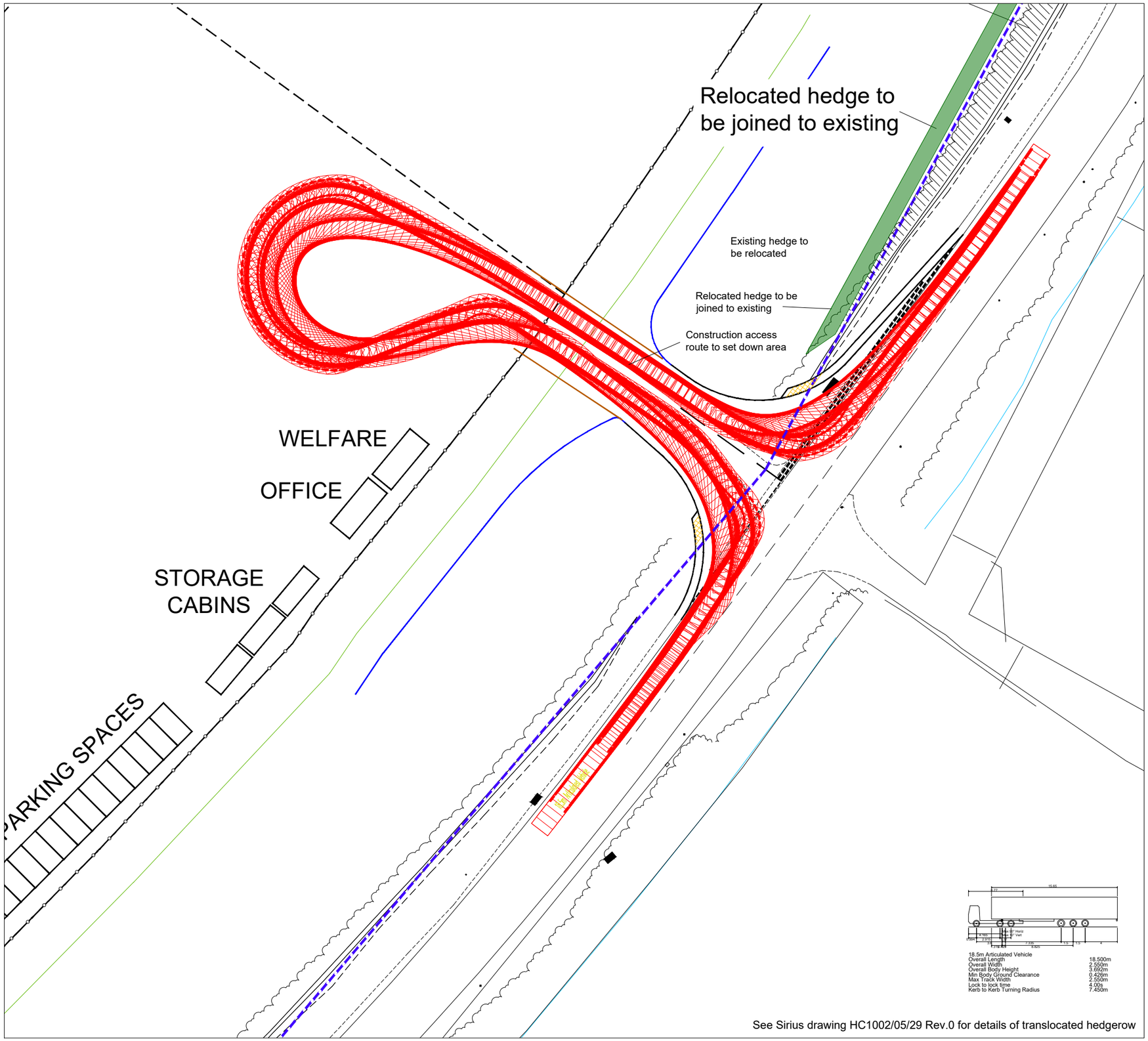
Drawing Title

Visibility Splays from Proposed Access

Scale	Drawn By
1:500	LY
Drawing Size: A1	Checked By: KS
Date: June 2023	Approved By: KS

Drawing Number	Rev
153626-002	D

FILE REF:



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

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Access onto A617

Temporary Access Road

Permanent Access Road

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

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Project Name

Main Street
Kelham

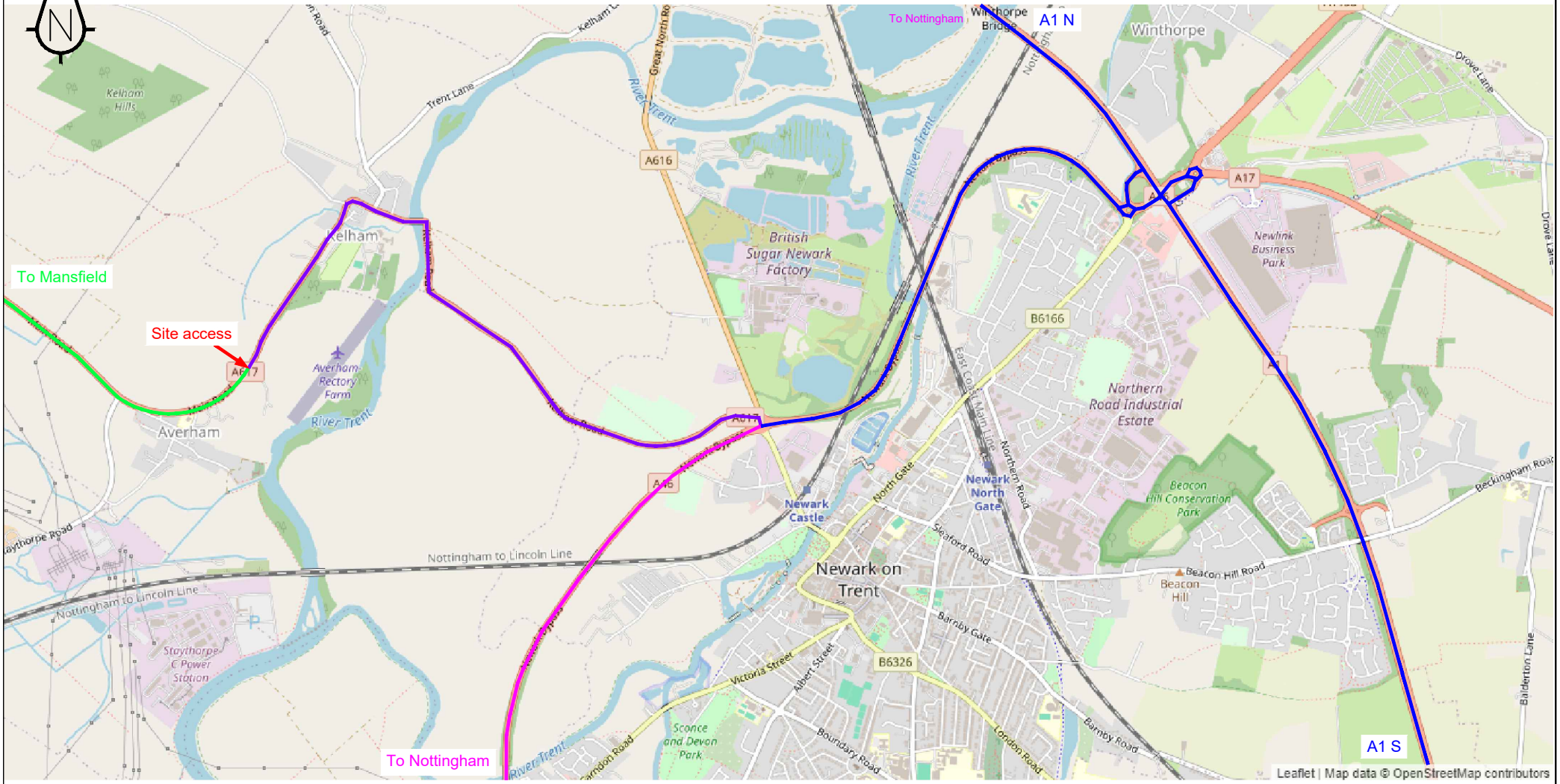
Drawing Title

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	B

FILE REF:



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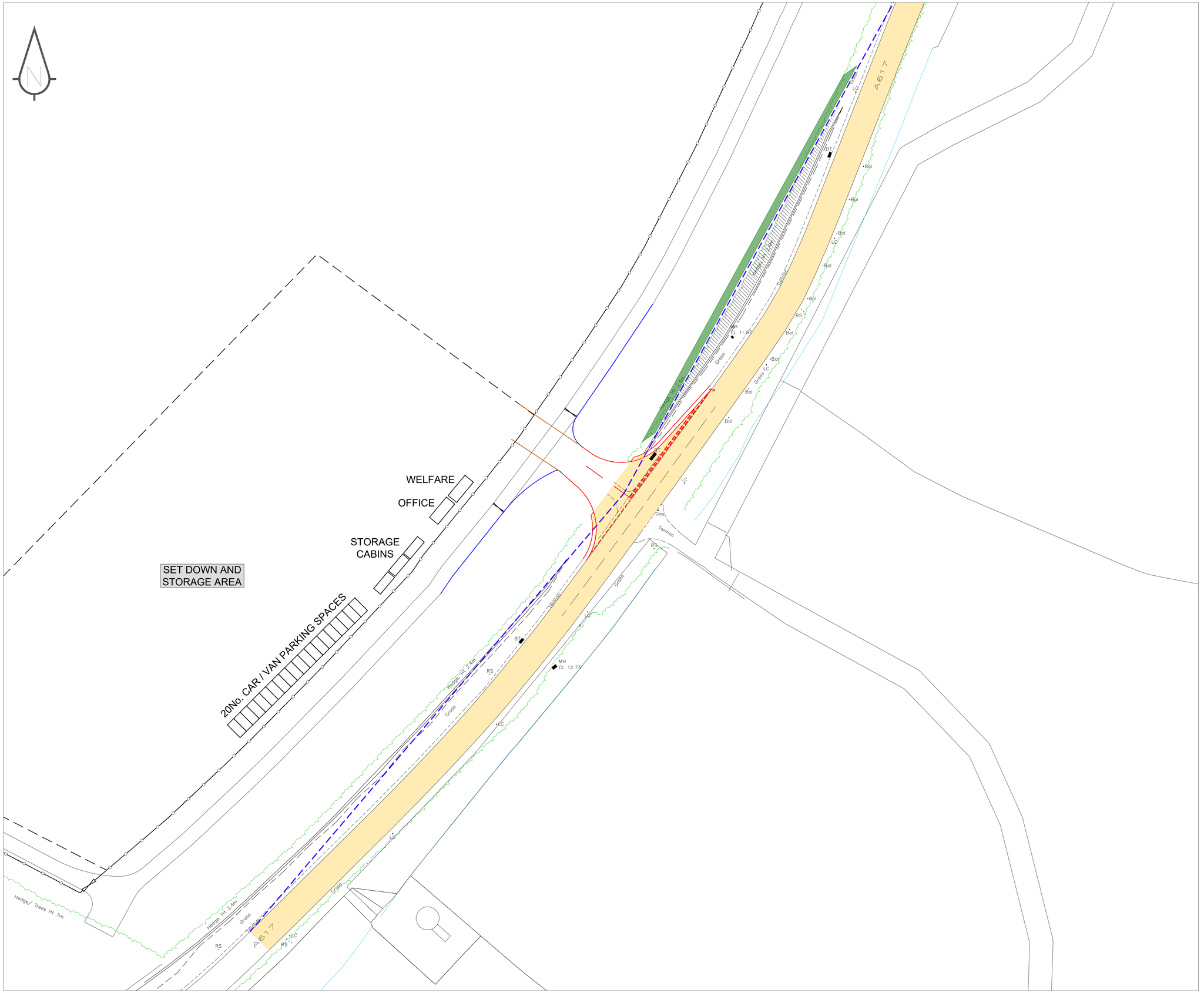
Main Road Kelham Newark

Vehicle Routing

Drawn	Scale	
CP	NTS	
Checked	Date	
KS	December 2023	
Approved	Drawing Number	Size
KS	153626-008	A4



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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.

Condition Survey Extents

Rev	Amendment	Drawn	Date	Checked

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Client
Sirius Planning Ltd

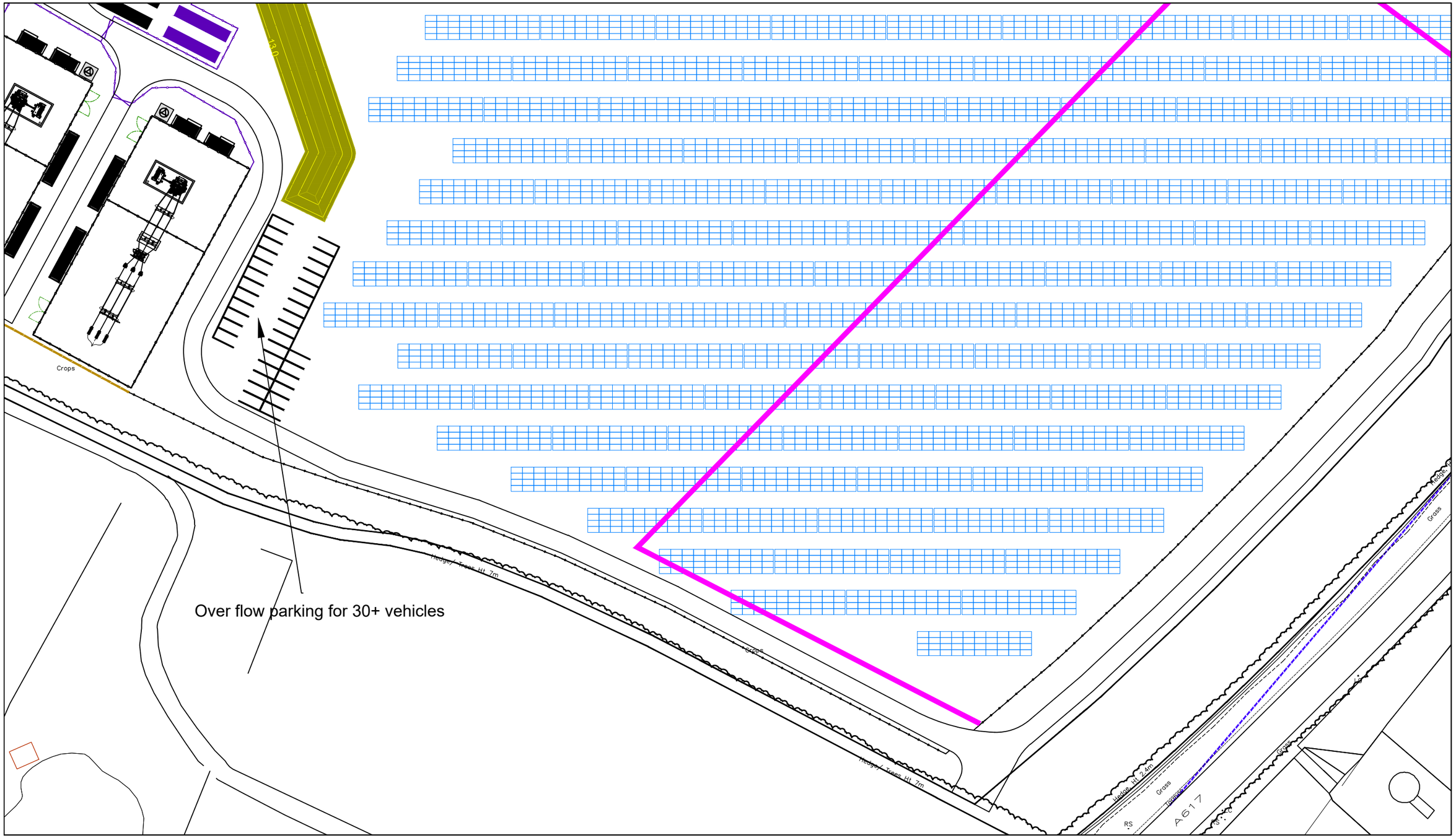
Project Title
Main Road,
Kelham,
Newark-on-Trent

Drawing Title
Condition Survey Extents

Scale	Drawn By
1:500	SB
Drawing Size	**Checked By**
A1	KS
Date	**Approved By**
June 2024	KS

Drawing Number	Rev
153626-010	

FILE REF:



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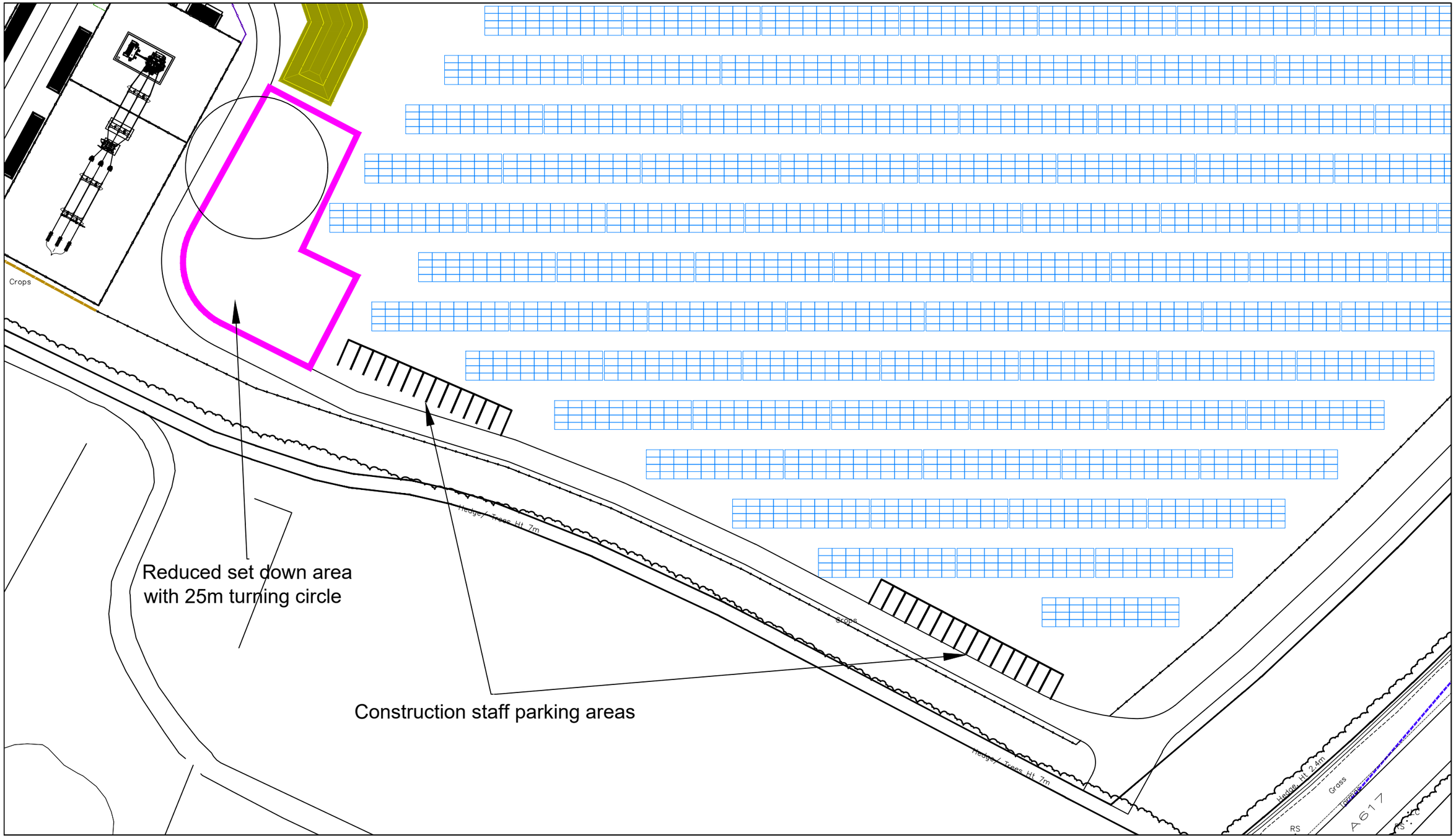
Main Road, Kelham, Newark-on-Trent

Overflow Parking

Rev	Amendment	Drawn	Date	Checked

Scale	NTS	Drawn By	SB
Drawing Size	A3	Checked By	KS
Date	June 2024	Approved By	KS
	Drawing Number 153626-011		Rev

FILE REF:



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Main Road, Kelham, Newark-on-Trent

Reduced Set Down Area

Rev	Amendment	Drawn	Date	Checked

Scale	NTS	Drawn By	SB
Drawing Size	A3	Checked By	KS
Date	June 2024	Approved By	KS
	Drawing Number 153626-012		Rev

FILE REF:

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