

Construction Traffic Management Plan

DOCUMENT REF: PELHAM SOLAR LIMITED CTMP – REV 3

Project: Pelham 49.99MW Solar Scheme



1. Introduction

Following the comments submitted by Hertfordshire County Council Highways (19th August 2022) and Essex County Council Highways (10th February 2023), in reference to application S62A/22/0006, the Construction Traffic Management Plan has been amended. The changes relate to providing more detail on how the affected Public Rights of Way will be protected, how Heavy Goods Vehicle (HGV) use of the site access will be managed, the likely number of HGV movements throughout the construction period, identification of an alternative HGV route to and from the site and the proposed mitigation measures along its length, and how the potential cumulative impacts associated with other nearby Battery Storage and Solar Farm proposals will be addressed.

The purpose of this document is to propose how construction traffic including site personnel movements will be safely controlled at the Pelham Solar Site by the developer (Statera Energy) and its sub-contractors.

Whilst the document covers some of the detail that would be expected within a Transport Statement, the main focus is the management of construction traffic throughout the construction phase of the Solar Farm. It should therefore be read as a Construction Traffic Management Plan (CTMP) against which any specific conditions can be applied to ensure the safe management of traffic throughout the construction period.

The site is located to the south of Ginns Road, Berden Farm, Berden, Uttlesford, SG9 0HZ

Site entrance grid ref: X (Easting) = 546183, Y (Northing) = 229662

The site is located in Uttlesford District with the Highway Authority being Essex County Council.

An overview of the site location is shown in **Figure 1** with the layout plan attached as **Appendix 1**.

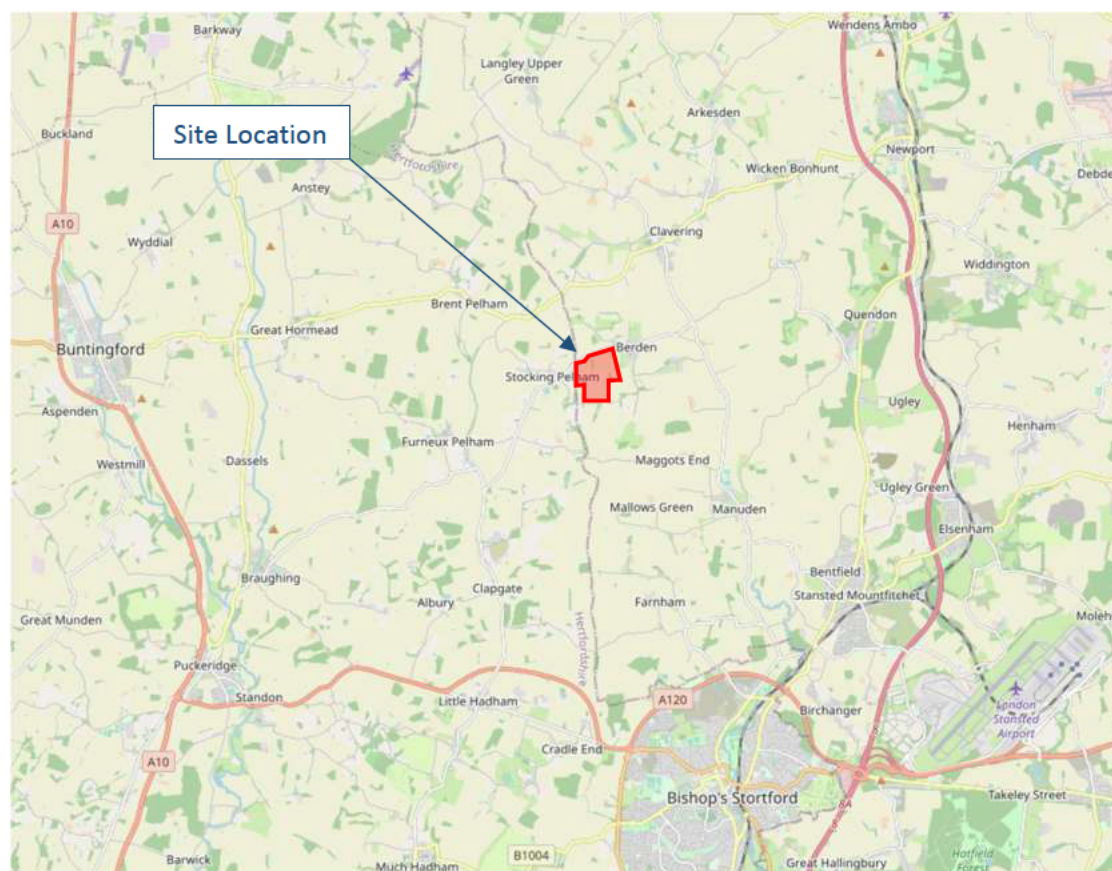


Figure 1: Site Location

Site Working Times (TBC)

It is proposed that construction will be undertaken during the following times:

Day:	Winter working (Oct – Mar):	Summer working:
Monday	07:00 – 18:00	07:00 – 20:00
Tuesday	07:00 – 18:00	07:00 – 20:00
Wednesday	07:00 – 18:00	07:00 – 20:00
Thursday	07:00 – 18:00	07:00 – 20:00
Friday	07:00 – 18:00	07:00 – 20:00
Saturday	07:00 – 13:00	07:00 – 13:00
Sunday	No works	No works
Bank Holidays	No works	No works
Site Security	17:00 – 07:30 every day	19:00 – 07:30 every day

No construction work or construction traffic movements will take place outside of these hours unless such work is associated with an emergency or undertaken with the prior written consent of the Local Planning Authority.

Construction Overview

The development will be subject to a 6-month construction period, which will comprise a relatively intense 2 to 3-month period towards the start during which the on-site access roads and fencing will be erected, and all the solar components will be delivered to the site. The remainder of the period will comprise the construction of the Solar Farm itself.

Up to approximately 50 construction workers are forecast to be on site during the first 2 to 3 months reducing to approximately 20 construction workers over the remainder of the construction period.

An indicative construction programme is attached as **Appendix 2**.

2. Predicted Construction Vehicle Numbers

Heavy Goods Vehicles

The likely number of HGV delivery vehicles per week required to construct the site are shown on the indicative construction programme.

Material quantities have been calculated for the stone required for the on-site access tracks and the fencing materials required for the fences that will surround the three areas of solar panels. These quantities have been used to identify the likely number of delivery vehicle movements required with this totalling approximately 140 loads by 8 wheel tippers (stone) and flat-bed rigid delivery lorries (fencing). It is likely that these materials will be delivered evenly over an approximately 6 week period which equates to 24 loads per week (48 two-way HGVs) or approximately 5 loads per day (10 two-way HGVs).

Statera Energy experience from other similar sites identifies that development of a Solar Farm requires approximately 10 HGV loads per MW of power generation. The 50MW development at Pelham will therefore likely require approximately 500 HGV loads (containers on 16.5m articulated lorries) to deliver the solar panels, mountings and associated electrical equipment. These deliveries will take place evenly over an approximately 8 week period which equates to approximately 62 loads per week (124 two-way HGVs) or approximately 12 loads per day (24 two-way HGVs).

There will likely be an approximately 4 week period during which deliveries of stone and fencing materials and deliveries of the electrical components overlap. Therefore, during this worst-case period, there could be up to 86 loads per week (172 two-way HGVs) or approximately 17 loads per day (34 two-way HGVs).

It should be noted that construction of a Solar Farm does not require equipment to be delivered as an Abnormal Indivisible Load (or similar), i.e., all deliveries can be made using conventional 16.5m articulated lorries or smaller.

Workforce

As previously identified, workforce numbers will vary between approximately 20 and 50 across the construction period. The higher number will be on site when the stone tracks and fencing works overlap with the delivery and erection of the solar panels, with the lower number being typical when erection of the solar panels is the only activity on site. These workforce numbers are also shown on the indicative construction programme (Appendix 2).

Where the workforce will travel from is currently unknown as it will depend on the appointed contractor and the personnel assigned to the site. However, it is anticipated that many of the non-local workforce will stay at local accommodation and be transported to and from the site by minibus and/or van. This is typical of the construction industry where a groundworks 'gang' (or similar) travel together meaning workforce vehicle movements are minimised together with the impact on the highway network. The number of car trips to and from the site will therefore be limited primarily to those associated with site management staff and visitors.

A temporary car parking area (including spaces for minibuses and vans) will be provided within the on-site contractor's compound. This will be of a sufficient size to ensure that all workforce, management and visitor parking demand can be fully accommodated within the site thereby ensuring no parking takes place on the local highway network.

Typical Daily Profile of Construction Traffic Movements

Where possible, deliveries and collections by HGVs will be restricted to weekdays only and between 09:30 and 16:00 (outside of school term) and between 09:30 and 15:00 (during school term). These hours avoid the traditional highway peak hours and help minimise off-site traffic impact. They also avoid the start and end of the school day at Clavering Primary School (08:50 to 15:20) and at Manuden Primary School (08:45 to 15:15) both of which are located beside the proposed construction traffic access route, which itself is discussed in Section 3.

Based on the above, it is possible to identify a typical daily profile of vehicle arrivals and departures through the site access, as shown below.

Time	Workforce Vehicles (cars, vans, minibuses)		Heavy Goods Vehicles (tippers, flat-beds, artics)	
	Arrive	Depart	Arrive	Depart
07:00 – 08:00	13	-	-	-
08:00 – 09:00	-	-	-	-
09:00 – 10:00	-	-	2	-
10:00 – 11:00	2	2	4	2
11:00 – 12:00	-	-	4	4
12:00 – 13:00	-	-	4	4
13:00 – 14:00	4	4	3	4
14:00 – 15:00	-	-	-	3
15:00 – 16:00	-	-	-	-
16:00 – 17:00	-	-	-	-
17:00 – 18:00	-	-	-	-
18:00 – 19:00	-	13	-	-

The above represents the worst-case combination of winter working hours, school term delivery hours and where stone and fencing deliveries overlap with delivery of the solar panels and their mounting etc. It is also based on the maximum workforce of 50 (typical vehicle occupancy assumed to be 4) and allows for occasional car and vehicle movements during welfare breaks (to and from local shops or similar). It is likely to apply to a 3 to 4 week period towards the start of the construction programme only with vehicle movements being less per day and per hour for the remainder of the programme.

Operational Phase

Once operational the site will be unmanned (a passive installation) with post construction activity limited to occasional visits to undertake security checks and routine maintenance. It is unlikely to involve more than 3 or 4 visits by car or small van over a typical week with vehicle access being from Ginns Road via the retained construction access.

Decommissioning

With routine maintenance the solar panels have an operational life of between 35 and 40 years. Once the panels reach the end of their life, or earlier if a term is imposed through planning conditions, the site will be decommissioned with all electrical infrastructure removed and the land returned to agriculture. This is ensured by the temporary nature of the planning consent which in turn means the land will not be classified as previously developed.

It is envisaged that a similar number of vehicle movements would be required to clear the site with these following the same route detailed in the following section.

3. Proposed HGV Route To and From the Site

Route Description

The preferred route to the Pelham Solar construction site is shown in red in **Figure 2**:

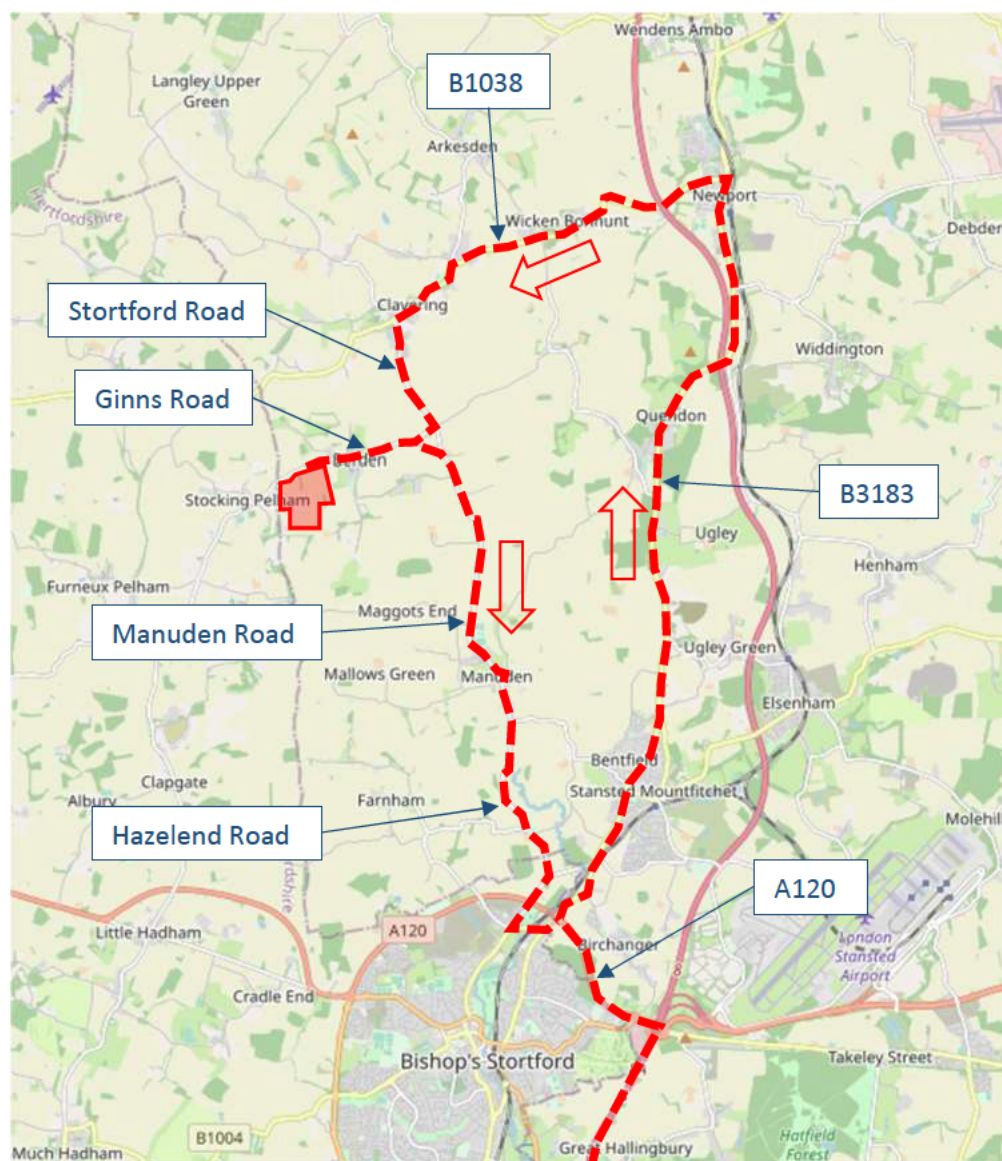


Figure 2: Construction Delivery Route

Construction traffic will come from the M11 with most vehicles travelling from the south. The construction traffic will come off the M11 at Junction 8 and initially follow the A120 towards the west which is a high standard wide single carriageway and acts as a bypass to Bishop's Stortford. Construction traffic will then turn right at a roundabout to follow the B3183 towards the north signposted 'Newport'. The B3183 is a good standard two-way road along its full length between the A120 and Newport.

In the centre of Newport, construction traffic will turn left at a priority junction to head west on the B1038 signposted 'Clavering'. The B1038 is for the most part a good standard two-way road with a width of approximately 6m (with central road markings). Within Clavering there is an approximately 300m section where the carriageway width narrows and there are no road markings however the width remains suitable for two-way vehicle movements.

The Department for Transport 'road traffic statistics' website identifies a count point (No. 951527) on the B1038 between Wicken Bonhunt and Clavering. A manual count in 2019 identified an annual average daily traffic flow (two-way) of 2,884 vehicles of which 7 were identified as buses / coaches, 494 as Light Goods Vehicles (LGVs) and 84 as HGVs. The B1038 is therefore a relatively lightly trafficked road but one regularly used by large goods vehicles.

In the centre of Clavering, construction traffic will turn left at a priority junction to head south on Stortford Road signposted 'Berden'. Stortford Road (becoming Manuden Road further to the south) has a width of between approximately 5m and 5.5m along its length (with central road markings) and benefits from a broadly straight and level alignment which enables good forward visibility.

Approximately 1.5km south of Clavering, construction traffic will turn right at a priority junction signposted 'Berden'. An initial 400m section of 5m to 5.5m carriageway acts as a link to a further priority junction with Ginns Road which itself heads west through Berden and to the site access. Ginns Road is also generally 5m to 5.5m in width with central road markings although there is an approximately 200m section at the eastern end of the village where the carriageway width narrows and there are no road markings.

Traffic flows on Ginns Road to the west of Berden (in the vicinity of the site access) were recorded through a December 2021 Automatic Traffic Counter survey which formed part of the Access Technical Note submitted in support of the planning application. This identified average two-way weekday traffic flows of just under 900 vehicles with only occasional HGVs. Existing traffic flows on Ginns Road can therefore be described as light.

Construction vehicles departing the site will return east through Berden via Ginns Road and Berden Road before turning right at a priority junction (signposted 'Manuden') to head south via Manuden Road. The section of the route between the Berden Road junction and Manuden village is generally a 5m width or greater although there are localised lengths where the width reduces with banks on either side. The carriageway widens as it passes through Manuden with on-street parking occurring in some locations.

South of Manuden, the route continues at between 5m and 5.5m width, narrows when passing through Hazel End, and then widens again before forming the side arm of a priority junction with Hazelend Road / Gipsy Lane. Construction vehicles will turn right at this junction to follow Hazelend Road (5.5m to 6m width) into Bishop's Stortford before taking the first left at a roundabout to follow the good standard Michaels Road and then the B1383 Stansted Road back to the A120.

A one-way routing arrangement to and from the site is considered appropriate as it avoids the need for a large HGV travelling to the site to pass a large HGV travelling from the site over the majority of the route length. This in turn minimises the impact of the construction vehicles on the operation of the wider highway network. The only length of the route where two HGVs may need to pass is the section between the Ginns Road / Berden Road junction and the site access, i.e., approximately 1 mile. This distance will likely take between 3 and 4 minutes for an HGV to travel assuming an average speed of between 15 and 20mph. The likelihood of two HGVs passing over this section can be controlled as discussed in Section 7.

A temporary construction route signage scheme will be in place at the various turning points to ensure drivers know which route to follow. Delivery drivers will also be provided with routing instructions in advance and instructed not to follow 'sat-nav' guidance.

Subject to mitigation (overleaf) the above site access route is considered the most appropriate available.

Route Mitigation

It is acknowledged that the standard of parts of the proposed site access route are not ideal for frequent HGV movements and that mitigation measures are required to prevent adverse impacts on other road traffic. Statera Energy commit to fund and implement the following:

- Provision of temporary advanced warning signage (black wording on yellow sign plate) to advise drivers to expect additional HGV turning movements between the relevant dates. Signage to be erected at the B1383 / B1038 junction in Newport, the B1038 / Stortford Road junction in Clavering, the Ginns Road / Manuden Road junction, the Berden Road / Manuden Road junction, the Hazelend Road / Gipsy Lane junction just north of Bishop's Stortford, the Ginns Lane / The Street junction in Berden and on the eastbound exit from Stocking Pelham. Full details of the wording and locations to be discussed and agreed with the Highway Authority prior to erection.
- A temporary reduction in the speed limit from 60mph to 40mph on Stortford Road / Manuden Road between Clavering and Manuden, on Hazelend Road between Manuden and Hazel End, on Hazelend Road between Hazel End and the Gipsy Lane junction, on Ginns Road between Manuden Road and Berden, on Berden Road between Manuden Road and Ginns Road and on Ginns Road between Berden and Stocking Pelham.
- Provision of temporary advanced warning signage (black on yellow coupled with diagram 562 'hazard' (or similar to be agreed)) on the B1038 approach to the 300m long narrower section of carriageway at the eastern end of Clavering village. This signage would advise eastbound drivers of the increased likelihood of meeting an HGV travelling in the opposite direction.
- Provision of temporary advanced warning signage (same as above) on Manuden Road and Hazelend Road on the northbound approach to narrower sections of the carriageway. Definitive locations to be discussed and agreed with the Highway Authority prior to erection.
- Cutting back roadside vegetation (where possible within the adopted highway) to maximise visibility to and from the junctions between Manuden Road and Ginns Road, Manuden Road and Berden Road, and Ginns Road and Berden Road.
- Provision of additional 'Slow' and 'Large Vehicles Turning' signage on the northbound Manuden Road approach to the Ginns Road junction.
- Provision of temporary traffic signals over an approximately 150m length of Ginns Road between the junction with The Street and the eastern limit of Berden village with the signals being in place over the main period for site deliveries. The carriageway would be reduced to a 3m 'shuttle' traffic lane allowing provision of a parallel safe zone for pedestrians accessing the Village Hall.
- All signage and traffic management would be designed, implemented and maintained by an accredited traffic management sub-contractor with full details discussed with, and approved by the Highway Authority in advance.

Measures to provide information to the local community and to coordinate the arrival and departure times of HGVs are discussed in Section 7.

Road Condition Survey

Statera Energy is willing to accept a planning condition requiring a road condition survey to be undertaken before, during and after construction of the Solar Farm. It is suggested that the full extent and scope of this be discussed and agreed in writing with the Local Planning Authority and Highway Authority prior to undertaking the initial survey. A suggested wording for the condition is given overleaf.

“The development shall not commence unless or until an initial road condition survey has been submitted and approved in writing by the Local Planning Authority. The extent and scope of the survey shall be first agreed with the Local Planning Authority. The condition of the road shall be monitored and reported to the Local Planning Authority every 3 months throughout the construction period of the development and any defects or damage attributable to the construction activity is to be rectified by the developer at their expense within 3 months of the defect being identified.”

The Site Manager will also regularly monitor the condition of the road surface throughout the construction period and effect any temporary reinstatements or similar that may be required to ensure the safe operation of the local highway network.

4. Vehicle Access to the Site

Access to the site will be from the existing private agricultural access off Ginns Road. The existing access track has a concrete apron of approximately 8m width and 5m depth adjacent the Ginns Road carriageway before reverting to a consolidated stone track of approximately 3.25m width through the field itself. It is currently gated at a point approximately 7m back from the edge of carriageway.

It is proposed that the existing access be upgraded to a 5m width with 10m bellmouth radii to facilitate vehicle access during construction of the Solar Farm, as shown on the plan attached as **Appendix 3**. A security gate will be provided at least 17m back from the edge of the Ginns Road carriageway so that an articulated delivery vehicle can wait clear of the public highway should the gate be closed on first arrival. The improved access will also be retained post completion of construction operations to allow for future maintenance access to the Solar Farm site.

A speed survey has identified the higher directional 85th percentile traffic speed on Ginns Lane as being 56.2mph which equates to a desirable minimum stopping sight distance of 181m and an absolute minimum stopping sight distance of 138m. The access plan attached as Appendix 3 identifies that these visibility splays can be provided through removal and management of roadside vegetation. Statera Energy is willing to accept a standard planning condition to ensure the visibility splays are provided and maintained throughout the construction period.

A swept path assessment of the proposed site access junction also forms part of Appendix 3. This shows the turning movements of a 16.5m articulated vehicle (the largest vehicle requiring access to the site) to and from both the east and the west. The plan was prepared prior to the construction delivery route being fixed with the proposed route discussed above now requiring turning movements to and from the east only. The width of Ginns Road requires vehicles undertaking the left turn in and the right turn out to use the full width of the carriageway.

To manage access to the site, advanced 'Works Access', 'Slow' and 'Large Vehicles Turning' signage will be provided in both directions to warn of the presence of the site access and the potential for increased turning movements. This signage will be designed, implemented, and then maintained throughout the construction works by an accredited traffic management signage sub-contractor. The signage arrangements will be discussed and agreed with the Highway Authority prior to their implementation. The temporary speed limit reduction to 40mph on Ginns Road between Stocking Pelham and Berden (as discussed previously) will further assist in ensuring road safety when large vehicles turn in and out of the site.

A Banksman will also be provided at the site access location when HGV movements are expected so that HGV access to the site can be appropriately managed and controlled. The Banksman will not have legal powers to stop through traffic on Ginns Road but will ensure the access within the site is clear when HGVs arrive and only allow HGVs to depart the site when Ginns Road is clear of passing traffic and it is safe to do so. With traffic flows on Ginns Road being less than 900 two-way vehicles per weekday (up to approximately 80 two-way vehicles per hour during times of delivery) there is no requirement for temporary traffic signals or similar. It should also be noted that provision of the visibility splays (as above) will ensure good levels of forward visibility to the site access junction for drivers using Ginns Road.

5. Management of On-Site Areas

Controlled Access

During construction the site will be accessed via a Site Security Checkpoint located beside the Ginns Road construction access. Unrestricted vehicle and/or pedestrian access to the site is not permitted with all members of the workforce required to first go through a Site-Specific Induction, Assessment and Approval process. In the absence of this training and approval, visitors to site will always be escorted by a site member in possession of this training and authorisation.

It is proposed the Pelham Solar Site will be a Safe 6 site and all personnel working or carrying out deliveries to site will require as a minimum Safety Helmet (Hard Hat), Hi-Vis Tabard, Coveralls, Gloves, Light Eye Protection and Safety Boots. For temporary visitors, spare sets of Light Eye Protection and Hard Hats will be provided but it is the expectation that all delivery drivers and similar will have all the equipment with them. It is a requirement that all site personnel and visitors sign in and out of the site on all occasions.

Construction Compound

A temporary compound area will be established next to the site access with this being of a sufficient size to accommodate welfare facilities for the workforce, parking for workforce vehicles, secure storage of materials and the unloading requirements of the delivery vehicles. The area will also be of a size that will allow the largest delivery vehicles to turn such that they can both enter and depart the site in a forward gear. In this way there will be no queuing, parking, unloading or materials storage on the public highway.

The Site Manager or his designated deputy will be responsible for supervising, controlling and monitoring vehicle movements within the site and ensuring that there are suitable arrangements for the safe delivery and collection of vehicle loads. All plant, delivery/collection vehicles and cranes will be supervised by a Banksman when reversing.

Site Access Tracks

3.5m wide tracks will be provided within the site to enable vehicle access to the various areas of solar panel installation. These will be of a sufficient standard for the construction activities and will be retained post construction to allow occasional access for maintenance purposes during the operational stage. Topsoil will be removed before 200mm of 75mm crushed stone is laid and compacted on an appropriate geotextile membrane. **Figure 3** shows a similar access track which has proven to be appropriate on similar sites elsewhere.



Figure 3: Typical On-Site Access Track

Height Restriction Barriers (Goal Posts) will be installed over the access tracks where there is a potential for accidental contact with overhead infrastructure. Similarly, any restricted access areas will be identified and barriered.

Unloading of Larger Elements

The transformer substations (10 No.) and additional substation equipment to connect to the existing off-site electrical network (1 No.) will be delivered directly to the required location within the site and unloaded by crane. The crane requires a swivel radius of at least 6m as shown in **Figure 4**. To facilitate unloading a clear distance of at least 2m will be maintained to neighbouring obstacles such as fences and trees with any overhead power lines also being taken into consideration.

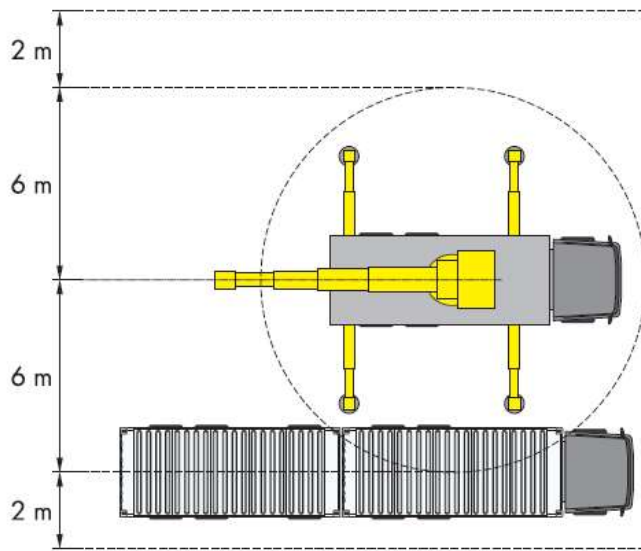


Figure 4: Crane Handling Requirements

Vehicle Wheel Washing Facilities

Solar Farm sites do not require large excavations or similar and therefore do not generate significant volumes of spoil that could otherwise dirty the wheels of construction related vehicles. Delivery and workforce vehicles that enter and depart the site will not be required to travel on unmade ground as all such movements will be contained within the compound area or will follow the site access tracks, both of which will be of a 'stoned' construction. Notwithstanding, all HGVs leaving the site will be inspected by the Banksman prior to departure to ensure that their wheels are sufficiently clean to access the public highway. Wheel washing facilities in the form of a jet washer and water supply will be provided adjacent the site access and used should the need arise.

The Site Manager will monitor the cleanliness of the local highway network on a regular basis and hire a mobile road sweeper should this be found to be necessary.

Site Materials Migrating on to the Public Highway

As above, Solar Farms do not generate significant volumes of waste material which minimises the risk of materials migrating on to the public highway. The site will be controlled by a Site Waste Management Plan (SWMP) which will be submitted to the Local Planning Authority prior to construction. This assist in controlling any residual risks.

The Banksman stationed at the site access will also be tasked with ensuring that the surfacing of the access is kept clear of loose stones and similar. Appropriate equipment will be provided to assist.

6. Public Rights of Way

There are two Public Rights of Way (PRoW) that pass through the site and a further off-site PRoW that could also be impacted by vehicle movements at the site access junction. These are shown on the plans attached as **Appendix 4** and are discussed further below.

It should be noted that the Solar Farm proposals deliver a new permissive path that runs to the south of and parallel to Ginns Road between the existing Public Footpath 5/22 in Berden and the existing Public Footpath 5/27 in Stocking Pelham. This will be implemented at the start of the construction programme and avoid any need for pedestrians to walk along Ginns Road itself when walking between the two settlements. It will also connect with the PRoWs that run through the site and therefore provide a greater choice of walking routes. The path will be 1.8m wide with a 'Hoggin' type finish.

Restricted Byway 5/26 and Public Footpath 5/21

Byway 5/26 runs north-south through the site connecting Ginns Road in the north with Crabbs Green and other off-site elements of the PRoW network to the south. At present users of the Byway must walk along the Ginns Road carriageway to access its northern end however provision of the new permissive path running parallel and to the south of Ginns Road will remove this need with the associated safety benefits that will arise.

Footpath 5/21 runs east-west through the site linking Berden in the east with Byway 5/26 in the west.

The areas of solar panels within the wider site will be within fenced areas clear of the PRoWs themselves and will not have any impact on their usage either during construction or once operational. Construction traffic will however need to cross the PRoWs in one location with this being where Byway 5/26 and Footpath 5/21 meet.

During the construction period, warning signage for pedestrians will be provided on all three PRoW approaches to this crossing point with this signage being as shown in **Figure 5**, or similar to be agreed with the Highway Authority.



Figure 5: Pedestrian Warning Signage

'No Entry to Construction Traffic' signage will also be provided on the PRoWs to avoid their accidental use by construction vehicles.

Gates will be provided where the site access tracks pass through the fenced areas of solar panels. The default position for these gates will be 'closed' with them only being opened when a vehicle needs to pass through before being closed again directly after. In this way vehicle speeds will be very low with drivers and users of the PRowS having time and space to avoid each other while crossing. At times of heavy vehicle usage, the gates will be manned by a Banksman who will hold back vehicles on the access tracks and/or advise pedestrians to wait while vehicles are manoeuvring.

Surfacing of the PRowS at the crossing point will be as per the standard Site Access Tracks discussed previously and as shown in Figure 4. Levels will be maintained flush with the existing ground levels.

Public Footpath 5/62

This Public Footpath runs north from Ginns Road following an agricultural track that is directly opposite the site access. At present users of the Footpath must walk along the Ginns Road carriageway to access its southern end however provision of the new permissive path running parallel and to the south of Ginns Road will remove this need with the associated safety benefits that will arise.

During the construction period, warning signage for pedestrians (as Figure 5) will be provided at the southern end of the Footpath and on the permissive path either side of the access itself. Additional signage will be provided at the southern end of the Footpath advising pedestrians to keep to the western side of the Footpath and construction access and to cross Ginns Road to the permissive path opposite.

Crossing at the western side of the access will allow pedestrians to avoid HGV turning movements that will be to and from the east only. Traffic flows on Ginns Road are low (900 two-way vehicles per day) which ensures appropriate gaps to allow safe pedestrian crossing movements. A Banksman will also be present at the construction access during times of HGV usage and will hold back vehicles on the access and/or advise pedestrians to wait while vehicles are manoeuvring to ensure the safety of users of Public Footpath 5/62.

7. Management of Construction Traffic

Cumulative Impacts

Proposals for a Battery Storage system (UTT/22/1203) to the immediate west of the site and for a Solar Farm (S62A/22/0011) to the south of the site are also currently going through the planning system. These proposals are likely to follow the same general construction access routes and could therefore result in cumulative impacts if constructed at the same time as the Pelham Solar scheme the subject of this CTMP.

It has previously been identified that the peak period for HGV movements to the site is likely to be over the first 10 weeks of the 6 month construction period. The likelihood of similar works being undertaken on the other sites over this same relatively short time period is considered low, however it cannot be discounted completely. It is therefore proposed that Statera Energy initially engage in dialogue with the other Developers to identify their build programmes and, if shown to overlap, that a joint 'Road Booking System' be implemented.

The Booking System will allow the respective Site Managers to discuss and coordinate their HGV movements in advance with the aim of ensuring that total movements on a particular day or across a particular week do not have a significant adverse impact on the shared site access route. It is envisaged that each developer would effectively 'book' particular days for their construction traffic movements with the other developers agreeing to adjust their HGV movements to suit. It would clearly be in all parties' best interest to implement and comply fully with such a system.

Traffic Management Principles

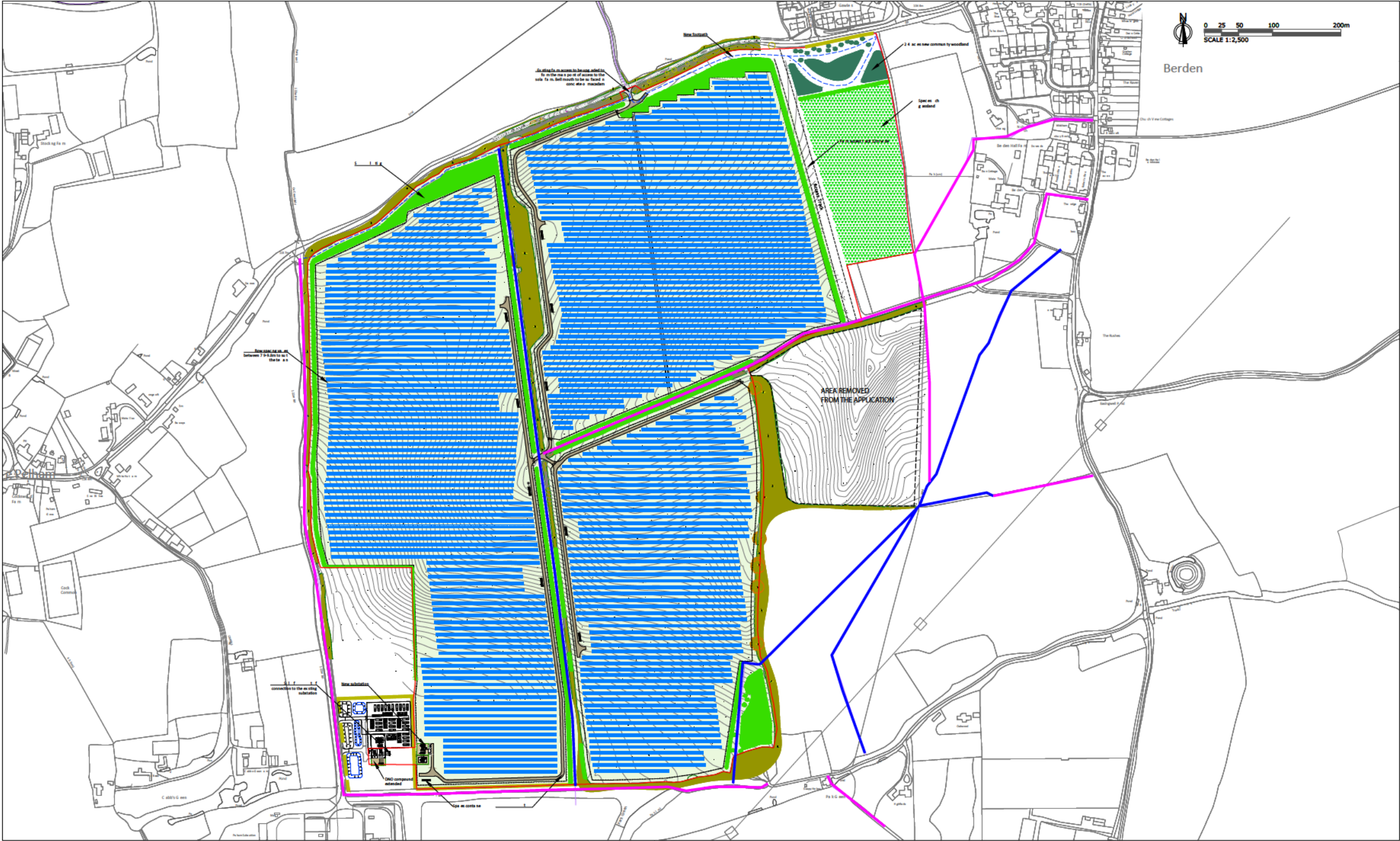
It is important that the interaction between site related traffic and general traffic on the local highway network is managed to maximise construction efficiency and safety while minimising risk, inconvenience and nuisance to the public. This will be achieved through careful management, programming and co-ordination of all construction works and associated traffic accessing the site.

To minimise the impact of construction related traffic on Ginns Road and the wider construction access route, the following traffic management principles will be observed (over and above those discussed previously).

- The access route to and from the site (as identified previously) will be discussed further with, and approved by, the Highway Authority prior to commencement of construction. This will include full details of the location and message given by temporary advanced warning signage, full details of the route mitigation measures to be applied at various locations along the route, and the extents of the temporary speed limit reduction on Stortford Road, Manuden Road, Hazeland Road, Ginns Road and Berden Road.
- The Parish Council's along the construction access route will be contacted once the construction period is known to advise them of increased HGV traffic on the local roads and the relevant dates. Highway Notices will also be erected in the various villages along the route to provide similar information.
- Contact details of the Site Manager will be provided to the Parish Council's such that they can raise any traffic concerns that may arise during the construction period.
- Properties within Berden village will be subject to a 'letter drop' to provide local residents with information on the construction programme and the periods over which HGV access is likely to be required. Residents will be advised and requested not to park vehicles on Ginns Road during these periods.

- The telephone contact number of the Site Manager will be provided at the Ginns Road construction access junction so that any issues relating to vehicle movements can be quickly reported by the public and suitably addressed.
- The Site Manager will be responsible for coordinating delivery vehicle movements to and from the site and assigning these a specific time for arrival. In this way HGV movements will be spread evenly throughout the daily delivery period.
- Delivery drivers will be required to contact the Site Manager (by mobile telephone or similar) whilst on route to confirm their time of arrival and to enable the Banksman to prepare for that arrival. Such contact will also allow the Banksman to hold back any HGV about to depart the site until such time as the inbound HGV has arrived thereby minimising the risk of two opposing HGVs meeting while using the two-way section of the access route through Berden village.
- All materials delivered to the site will be consolidated as far as possible to minimise the overall number of HGV movements required.
- Where possible, drivers will be encouraged to turn off vehicle engines when parked, waiting to unload, or when vehicles are not in use. This will reduce the noise impact on the surrounding area and will result in lower vehicle emissions.
- All large delivery vehicles arriving and departing the site will be appropriately sheeted, netted or strapped to prevent any loss of materials during transit.
- Contractors and sub-contractors will be given an induction by the Site Manager through which the routing requirements and traffic management measures contained within this CTMP will be fully communicated.
- The CTMP will be incorporated as part of the overall Health and Safety policy for the site. Any breach of the principles contained within the document by haulage contractors or their drivers will therefore be subject to a warning with any subsequent breach resulting in a ban from the site.

APPENDIX 1 – Site Layout



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Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

Rev	Description	By	CB	Date



20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rps@rpsgroup.com

Client Berden Solar Ltd

Project Berden Hall Farm Solar Farm
Environmental Statement

Title Layout at ES (Block Plan Rev B)

Status ISSUE

Drawn By JM

PM/Checked By PI

Project Number NP12716

Scale @ A3 See figure

Date Created NOV 2022

Figure Number 2.8

Rev -

rpsgroup.com



- | | | | |
|----------------------------------|---------------------------------------|---------------------------------------|------------------|
| Site boundary | Existing woodland and hedges | New common ty woodland | Footpath |
| Proposed solar panels | New woodland and hedges | Wildflower meadow grassland | Restricted Byway |
| Public Right of Way | Proposed stone access tracks | New public footpath | |
| 2m high post and wire deer fence | Transformer substation (10 no. total) | Area of land omitted from application | |

Revision	Date	Comment
A	06.10.22	Definitive Rights of Way highlighted
B	02.11.22	The scheme has been altered to omit panels in the easternmost field to avoid potential impacts on buried archaeology and the red line has been altered to remove this land from the application.

ON BEHALF
Statera

DATE 28th January 2022
SCALE 1:2,500 @ A1
DWG No 375_MP_03_Rev B
APPROVED CMcD

PROJECT
Proposed Solar Farm,
Stocking Pelham, Essex

TITLE
Block Plan

APPENDIX 2 – Indicative Construction Programme

[illegible]

TOTAL HGVs

10

144

496

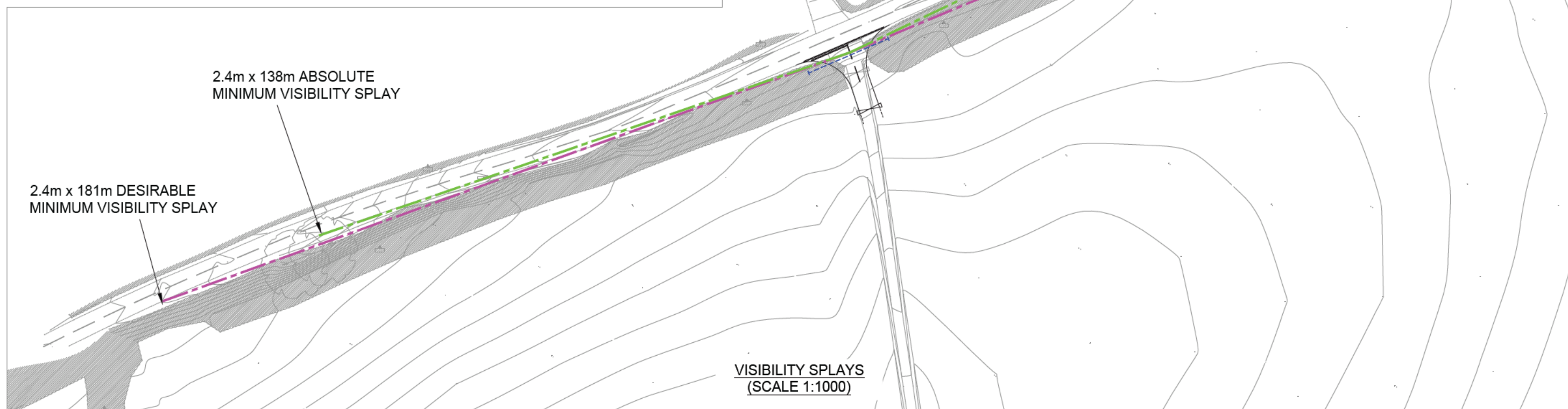
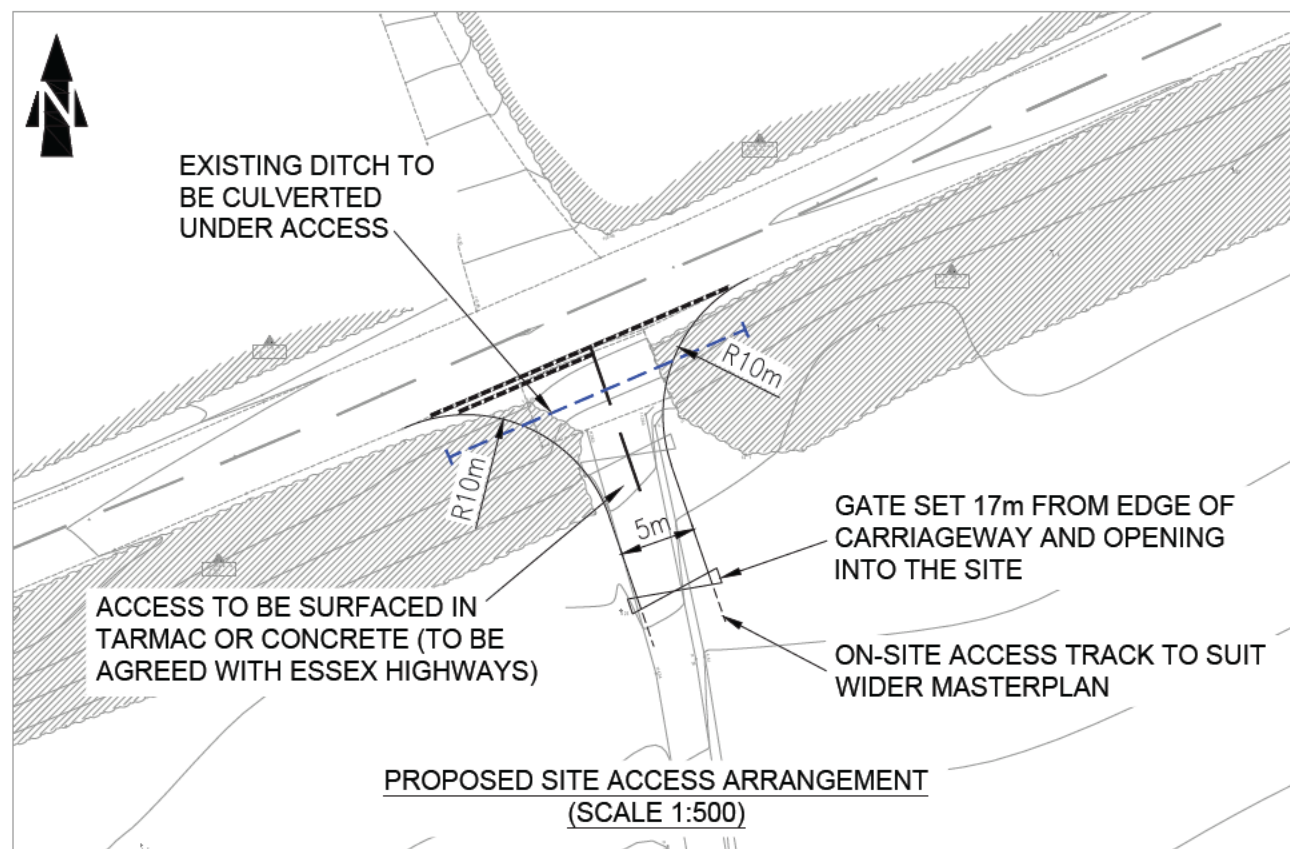
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0

10

[illegible][illegible]

APPENDIX 3 – Construction Site Access Plans



REV	DETAILS	DRAWN	CHECKED	DATE

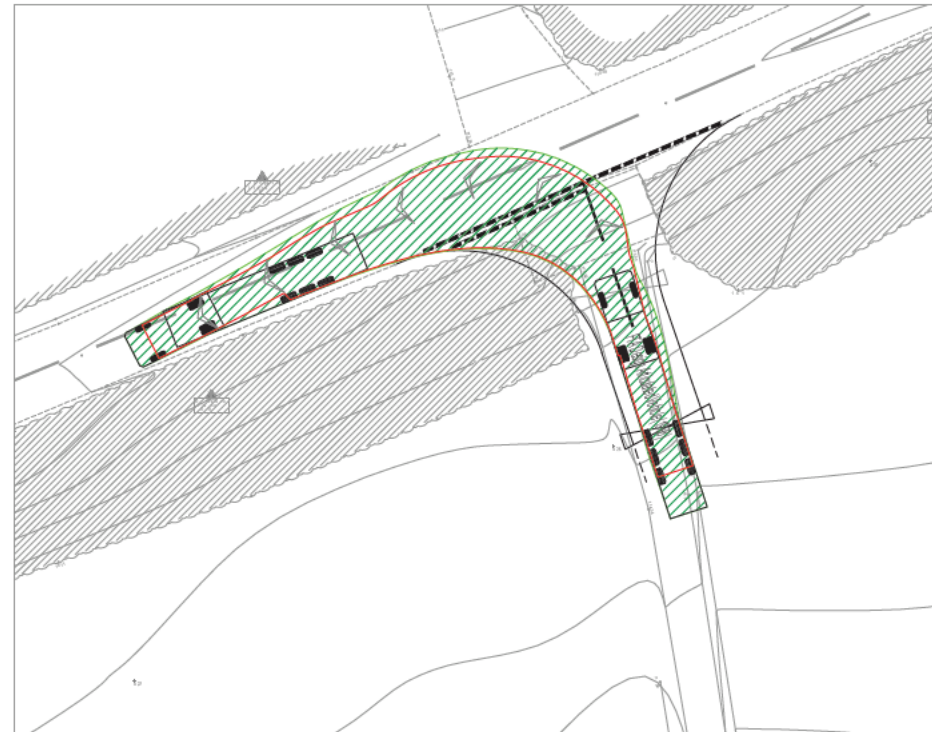
- NOTES:
1. Do not scale from this drawing.
 2. This drawing is for illustrative purposes only and not for construction.
 3. This drawing is to be read and printed in colour.

PROJECT: GINNS ROAD, STOCKING PELHAM				
DRAWING TITLE: PROPOSED SITE ACCESS ARRANGEMENTS				
DRAWN: SLW	CHECKED: CDM	DATE: 16.12.2021	SCALES: As Shown	SHEET SIZE: A3

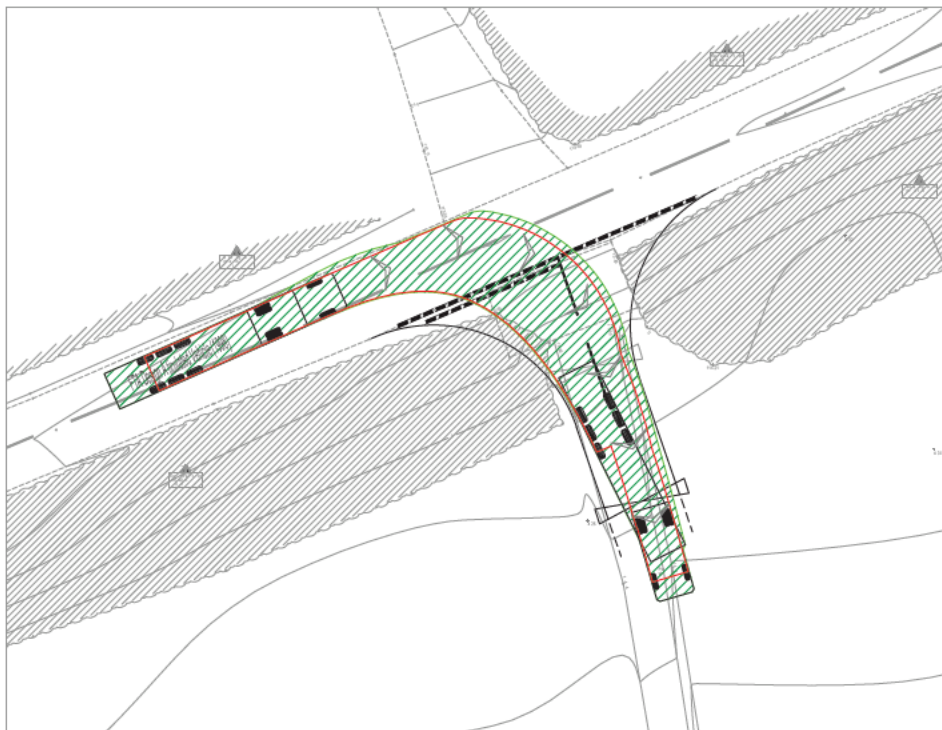
CLIENT: STATERA ENERGY LTD
MILES WHITE TRANSPORT
DRAWING NUMBER: 21120-GA01
REVISION: -



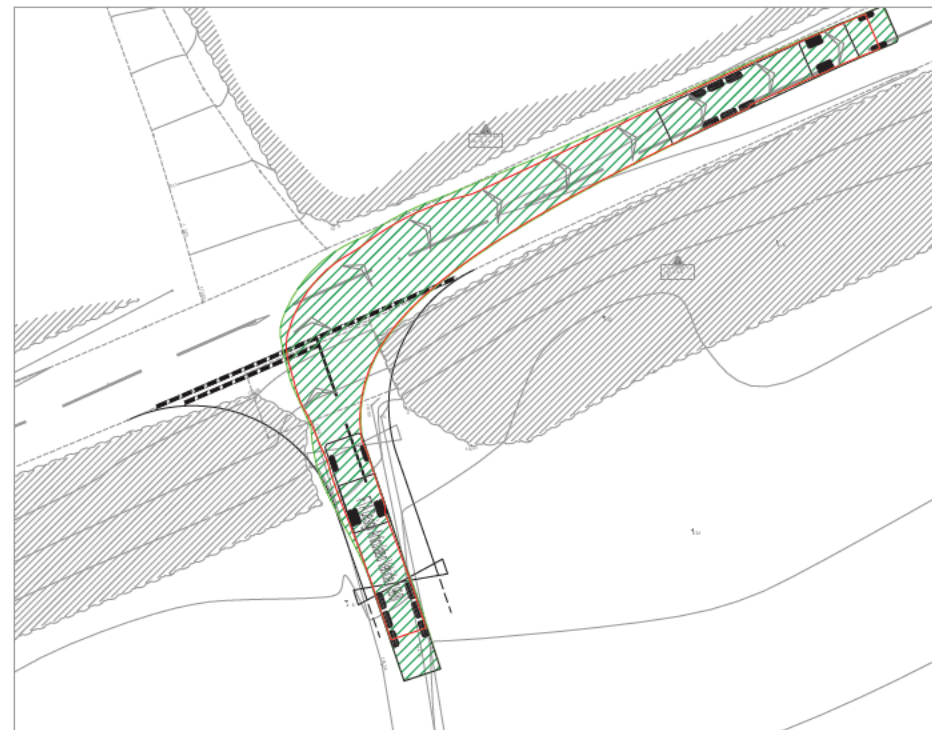
16.5m ARTICULATED VEHICLE
LEFT TURN IN MANOEUVRE



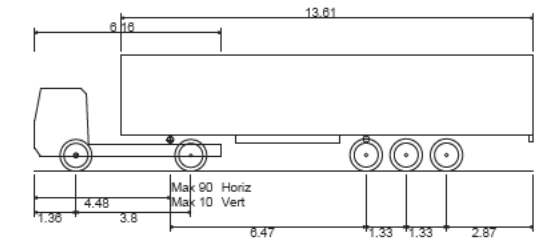
16.5m ARTICULATED VEHICLE
LEFT TURN OUT MANOEUVRE



16.5m ARTICULATED VEHICLE
RIGHT TURN IN MANOEUVRE



16.5m ARTICULATED VEHICLE
RIGHT TURN OUT MANOEUVRE




FTA Design Articulated Vehicle (1998)
Overall Length 16.480m
Overall Width 2.550m
Overall Body Height 3.870m
Min Body Ground Clearance 0.515m
Max Track Width 2.470m
Lock to lock time 3.00s
Kerb to Kerb Turning Radius 6.550m

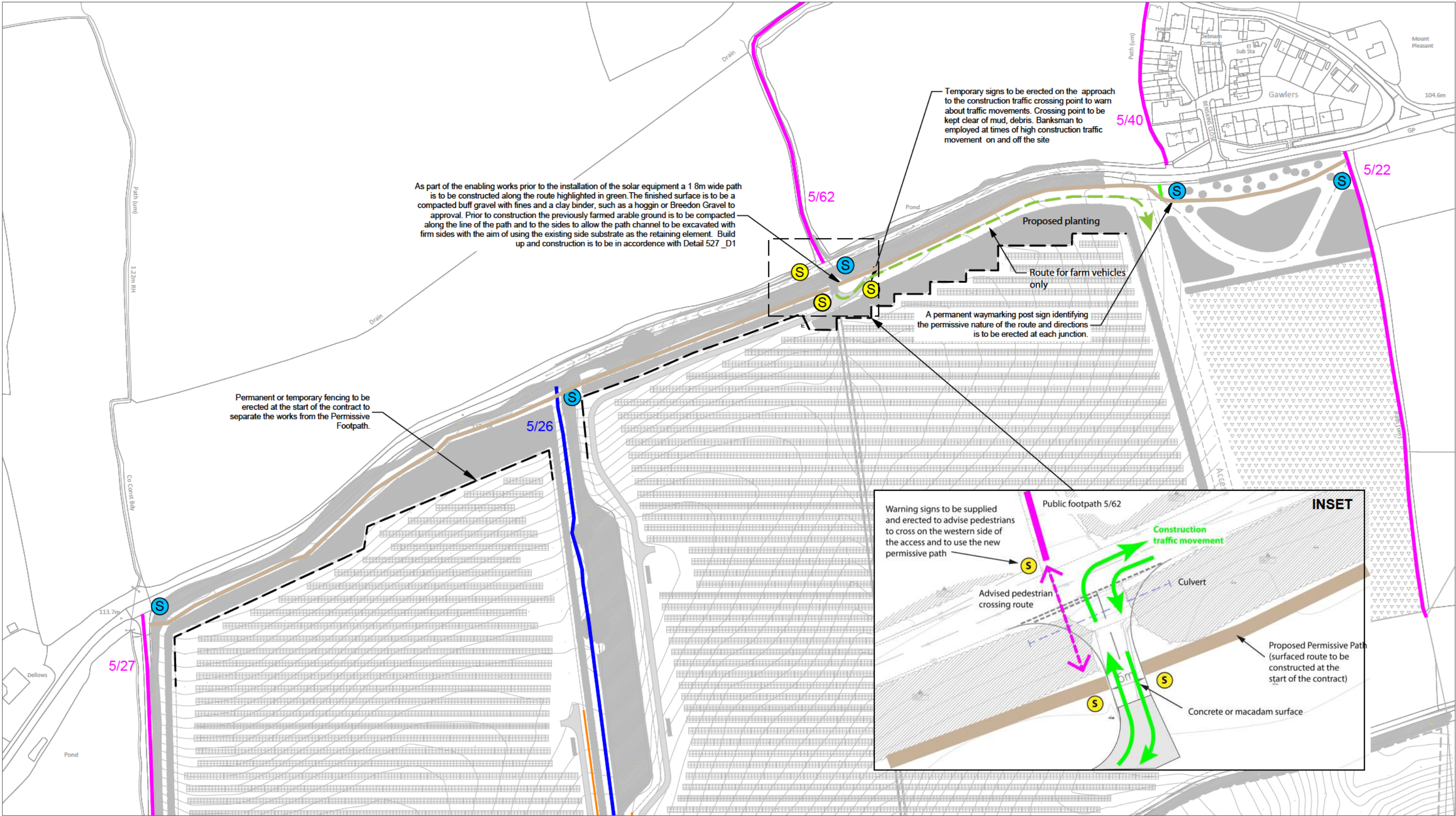
16.5m ARTICULATED VEHICLE PROFILE
(SCALE 1:250)


REV	DETAILS	DRAWN	CHECKED	DATE

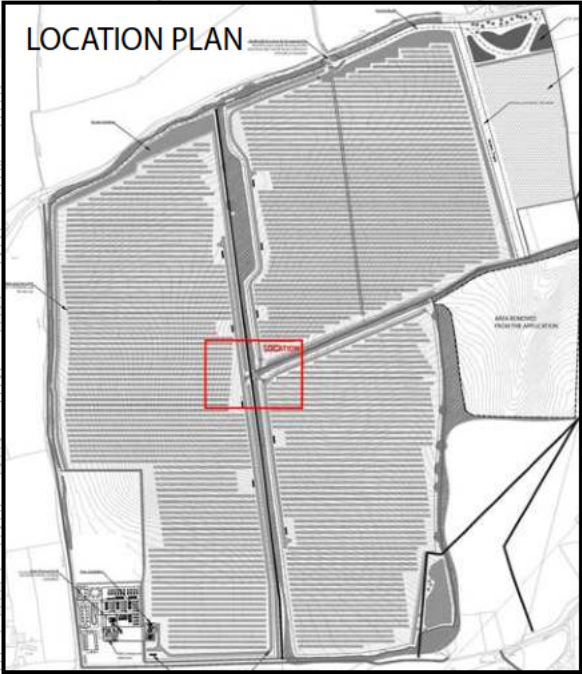
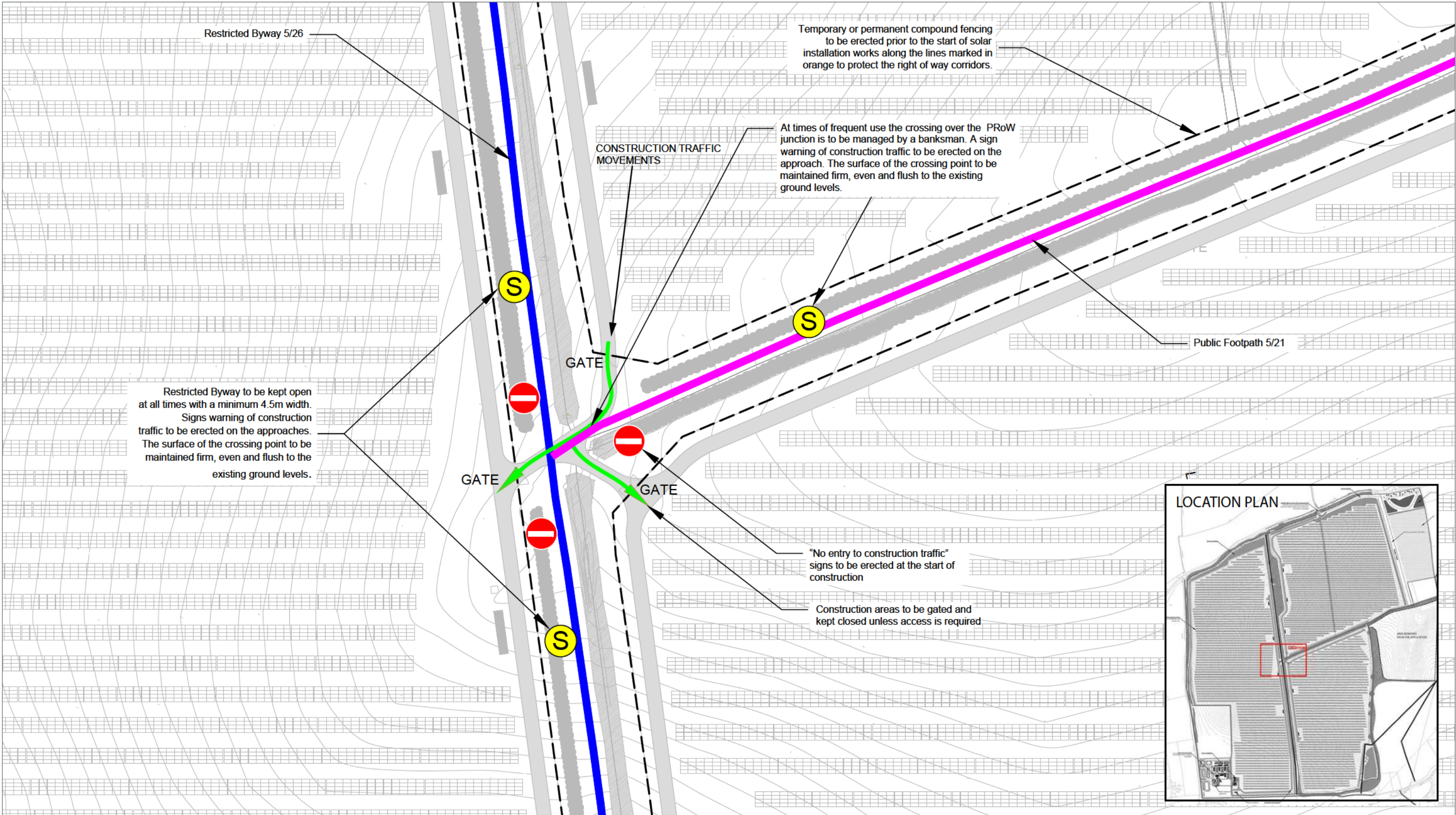
NOTES:
1. Do not scale from this drawing.
2. This drawing is for illustrative purposes only and not for construction.
3. This drawing is to be read and printed in colour.

PROJECT: GINNS ROAD, STOCKING PELHAM				CLIENT: STATERA ENERGY LTD	
DRAWING TITLE: 16.5m ARTICULATED VEHICLE SWEPT PATH ANALYSIS					
DRAWN: SLW	CHECKED: CDM	DATE: 16.12.2021	SCALES: 1:500	SHEET SIZE: A3	DRAWING NUMBER: 21120-SPA01
					REVISION: -

APPENDIX 4 – Public Rights of Way Protection Plans



<div><p>Sightline Landscape, 57 Stirlingale Road, Bath BA2 2NG</p><div><div>M</div><div></div><div></div></div></div>	<div>Notes:</div> <div><div><div>N</div><div><div>0</div><div>25</div><div>50</div><div>100</div><div>150m</div></div><div>SCALE 1:2,500</div></div></div>	<div>Revision</div> <div>-</div>	<div>Date</div> <div>-</div>	<div>Comment</div> <div>-</div>	<div>ON BEHALF</div> <div>Statera</div>	<div>PROJECT</div> <div>Berden Solar</div>
		<div>DATE</div> <div>19th February 2014</div>	<div>SCALE</div> <div>1 : 2,500 @ A3</div>	<div>DWG No</div> <div>SL198_L_X_FP_1</div>	<div>APPROVED</div> <div>CMcD</div>	<div>TITLE</div> <div>Permissive Footpath Plan</div>



Sightline Landscape, 57 Stirlingale Road, Bath BA2 2NG

M
E
W

Notes:



0 5 10 25 50m
SCALE 1:1,000

Revision Date Comment

ON BEHALF

Statera

PROJECT

Berden Solar

DATE 19th February 2014
SCALE 1 : 1,000 @ A3
DWG No SL198_L_X_FP_2
APPROVED CMcD

TITLE
PRoW Management Plan