West Burton Solar Project

Environmental Statement

Appendix 14.2: Construction Traffic Management Plan Revision BD (Tracked)

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A Planning Application by

WEST BURTON SOLAR PROJECT LIMITED

In respect of

West Burton Solar Project, LINCOLNSHIRE AND NOTTINGHAMSHIRE

Outline Construction Traffic Management Plan

January February 2024



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Document Management

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1 Introduction

- 1.1 This Outline Construction Traffic Management Plan (CTMP) has been prepared by Transport Planning Associates (TPA) on behalf of West Burton Solar Project Limited (the 'Applicant') in relation to an application for a Development Consent Order (DCO) for the West Burton Solar Project (hereafter referred to as the 'Scheme').
- 1.2 The Scheme is situated within the jurisdiction of West Lindsey District Council, who act as the local planning authority. Lincolnshire County Council is the highway authority. A section of the Cable Route Corridor is located within the jurisdiction of Bassetlaw District Council. Nottinghamshire County Council is the highway authority here.

The Scheme

- 1.3 The Scheme will comprise the construction, operation, maintenance, and decommissioning of a solar photovoltaic (PV) array electricity generating station and Energy Storage Facility with a total capacity exceeding 50 megawatts (MW), and export connection to the National Grid. The grid connection point will be at the National Grid substation at West Burton Power Station.
- 1.4 The Order Limits are shown in the **Location Plan** [EX4/WB2.1_BEN010132/CR1/WB2.1_A]. This is shown in **Appendix A.**

This Document

- 1.5 This Outline CTMP provides a framework for the management of construction vehicle movements to and from the Site, to ensure that the effect of the construction phase on the local highway network is minimised. It is an evolving document that will be updated prior to construction to reflect any considerations made during the DCO process, and to add detail that arises from the post-determination procurement and Engineering Principal Contractor (EPC) appointment. A Final CTMP, substantially in the same form as this Outline CTMP, will be approved by the relevant planning authorities in consultation with the Local Highway Authorities prior to construction commencing.
- 1.6 The CTMP has the following objectives:
 - Minimise the number of HGVs and other vehicles on the local road network that are associated with the construction of the Scheme;
 - Ensure the safe movement of equipment, material and construction workers;
 - Minimise the effects of construction traffic on the local community; and
 - Set out measures to be adhered to by all associated with the construction of the Scheme.

- 1.7 This CTMP is structured as follows:
 - Construction methodology;
 - Site access;
 - Construction vehicle trip generation;
 - Construction vehicle routing;
 - Abnormal load movement; and
 - Mitigation and management measures.
- 1.8 It will be the responsibility of the undertaker to ensure that the appointed contractor complies with all statutory regulations and guidelines in relation to construction and movement activities.
- 1.9 This Outline CTMP has been prepared following various stages of consultation, and through discussions with officers at Lincolnshire County Council. It should be read in conjunction with Chapter 14 of the Environmental Statement [APP-052], and the Transport Assessment at Appendix 14.1 [EX4/WB6.3.14.1 CEN010132/CR1/WB6.3.14.1_B].

2 Construction Works

- 2.1 This section provides an overview of the Scheme and the construction programme.
- 2.2 A full overview of the Scheme can be found in ES Chapter 3 on the 'Order Limits' [APP-041EN010132/APP/WB6.2.3], and ES Chapter 4 on the 'Scheme Description' [APP-042APP-041]. Additional information on the Grid Connection can be found in the 'Grid Connection Statement' [APP-316042]

Solar Array Works Area

- 2.3 The main element of the Scheme comprises three Sites that will accommodate the solar arrays. These are referred to as:
 - West Burton 1 91.32 ha, made up of a tight cluster of fields within an area of countryside to the northeast of the village of Broxholme.;
 - **West Burton 2** 306.98 ha, located to the west of West Burton 1 and within an area of countryside to the north of Saxilby; and
 - West Burton 3 370.78 ha, located to the northwest of West Burton 2 and is split over the Lincoln to Gainsborough railway line. West Burton 3 is bounded by the A1500 to the north.
- 2.4 The key equipment with the Solar Array Works Areas are:
 - Solar PV Panels to convert sunlight into electrical current;
 - Mounting Structures Solar PV Panels will be mounted on a metal assembly of PV Mounting Structures. This includes metal rails to directly support the PV Panels, which themselves are supported by larger metal frames which are fixed on top of metal piles;
 - Conversion Units The Conversion Units incorporate inverters, transformers and switchgear
 and are required to manage the electricity generated by the PV Panels;
 - Electric Cabling Electrical cabling will be required as part of the Generating Stations to connect PV Panels to the Conversion Units.

Energy Storage System

- 2.5 An Energy Storage System (also referred to as BESS) will be located in West Burton 3.
- 2.6 The BESS is designed to provide peak generation and grid balancing services to the electricity grid by allowing excess electricity generated either from the solar PV panels, or imported from the electricity grid, to be stored in batteries and dispatched when required.

Substations

2.7 Substations will be required at each Solar Farm Site. The substations will consist of electrical infrastructure such as the transformers, switchgear and metering equipment required to facilitate the export of electricity from each respective site.

Grid Connection

- 2.8 The electricity generated by the Scheme will be exported to the National Grid substation at West Burton Power Station via a number of electrical cables sited within the defined Cable Route Corridor. These connections will also facilitate the import of electricity to be stored within the energy storage system at West Burton 3.
- 2.9 The Cable Route Corridor will be approximately 21.3km in length and is directed across open countryside. It will require crossings of railways, watercourses, various utilities, Public Rights of Way (ProW) and roads. The construction of the Grid Connection Route includes the following elements:
 - Construction of Haul Road and Laydown Areas;
 - Open Cut Excavation;
 - Construction of Joint Bays; and
 - Cabling/Jointing.
- 2.10 The cable route corridor will be built out in sections over a 20-month period, with each section requiring a number of site accesses which will be in use simultaneously. It has been estimated that each section will be approximately 4.4km. Each section will take approximately 90 working days to construct.

Other Works

Contractors Compound

- 2.11 Construction compounds will be set up within each area. These will accommodate storage, parking, offices and welfare facilities.
- 2.12 Appropriate parking will be provided within each construction compound. No parking by contractors, visitors or delivery vehicles will be permitted on the local highway network or the Site access road at any time during the construction phase, and visitors will be advised of the parking arrangements in advance of travelling to the Site. The Site Manager will monitor that parking is taking place in the designated area on a regular basis.

Internal Routing

- 2.13 The Scheme will include internal access roads throughout the Site allowing for the movement of construction and maintenance vehicles. The internal access road will be completed during the initial stages of construction so that temporary haul routes are not necessary.
- 2.14 Appropriate turning areas will be provided in the vicinity of the internal access road to ensure all vehicles egress the Site in a forward gear.
- 2.15 A wheel washing facility will be provided at the end of each access road, ahead of the egress onto the local highway network.
- 2.16 Other works include the following:
 - Fencing, security and lighting;
 - Landscaping; and
 - Surface water drainage.

Security

2.17 The Site will be secured at all times via a perimeter fence or temporary fencing. CCTV will be operational within the construction compound. All new access tracks will be secured by gates, which will be set back from the public highway. Where existing access tracks are used that also provide access to residential properties, appropriate security measures will be put in place in consultation with the relevant property owner(s).

Construction Programme

2.18 The construction programme is anticipated to last approximately 24 months. The indicative construction programme is summarised in **Table 2.1**.

Table 2.1 Indicative Construction Programme

Site/Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
West Burton 1																								
West Burton 2																								
West Burton 3																								
BESS																								
Grid Connect																								

3 Construction Site Access Arrangements

- 3.1 This section summarises the accesses that will be used during the construction phase of the Scheme. Indicative Access Arrangement Drawings are shown within **Appendix B** and **Appendix C**.
- 3.2 Any access that is temporarily created for the construction period will be restored to its original condition post-construction.

West Burton 1, 2, and 3

- 3.3 There will be a total of eight access points for West Burton 1, 2, and 3. The access locations, as follows, are shown in **Figure 3.1**. Access 6 is for operational purposes only, and will not be used during the construction phase.
 - Access 1: Unclassified Road, 880m south of A1500 junction;
 - Access 2: Unclassified Road, 1,200m south of A1500 junction;
 - Access 3: B1241 (Sturton Road), south of Levertons Caravan Storage;
 - Access 4: B1241 (Sturton Road), north of Levertons Caravan Storage;
 - Access 5: B1241 (Sturton Road), adj to Ingleby Hall Livery;
 - Access 6: Skyes Lane (Operational Only)
 - Access 7: A1500, east of the train line;
 - Access 8: A1500, west of the train line; and

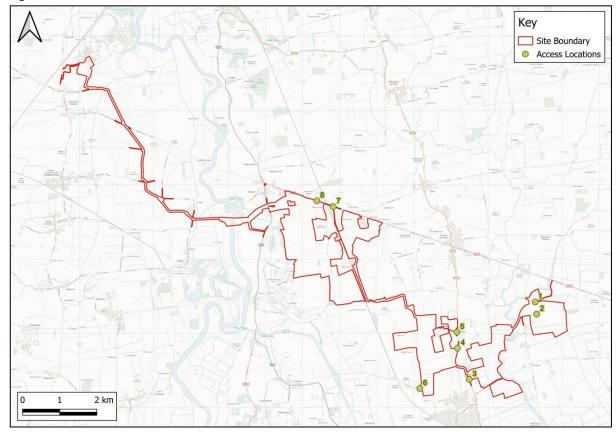


Figure 3.1 Access Locations – West Burton 1, 2, and 3

Cable Route Corridor

- 3.4 For the construction of the Cable Route Corridor, 20 temporary accesses are required, approximately one every kilometre. The locations of these accesses are shown in **Figure 3.2**.
 - Access 100 Gainsborough Road/West Burton Power Station;
 - Access 101 Gainsborough Road;
 - Access 102 Common Lane;
 - Access 103 Littleborough Road;
 - Access 104 Three Leys Lane/Fenton Lane;
 - Access 105 Northfield Road (north);
 - Access 106 Northfield Road (south);
 - Access 107 Coates Road;
 - Access 108 Headstead Bank/Coates Road;
 - Access 110 A156;
 - Access 111 A156;
 - Access 112 A1500 Stow Park Road;
 - Access 113 A1500 Stow Park Road;
 - Access 114 Cowdale Lane (north);
 - Access 115 Cowdale Lane (south);
 - Access 116 Sturton Road;
 - Access 117 Sturton Road;
 - Access 118 Unclassified road south of the A1500;

Access 119 – Unclassified road south of the A1500.

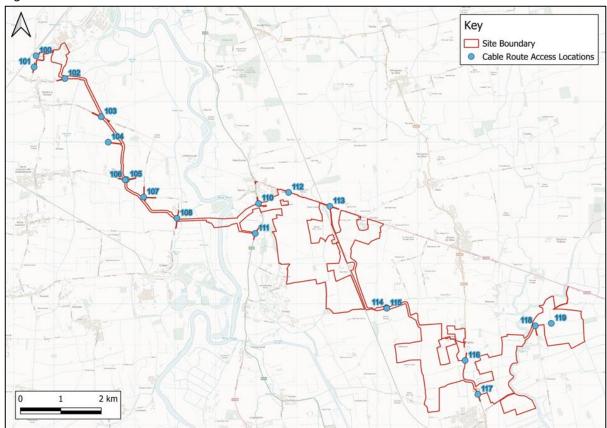


Figure 3.2 Access Locations – Cable Route Corridor

Detailed Design

- 3.5 Prior to carrying out any works to the public highway pursuant to Articles 9, 10, 11 and 13 of the DCO, the detailed design of such works must be submitted to the highway authority for approval (either as part of the CTMP or separately) and include:
 - A programme for the works, method statement and any traffic management proposals;
 - Detailed technical drawings;
 - Any health and safety documentation required under the CDM Regulations;
 - Stage 1/2 Safety Audit; and
 - Details of the contractor.
- 3.6 For the shared accesses along the shared section of the Cable Route Corridor (shared between the Cottam, West Burton and Gate Burton Schemes) approval will only be required under one Scheme for each access. Therefore, if the access is approved for use by one Scheme, it is deemed suitable for use by the other Schemes without additional approval.

- 3.7 The Applicant agrees to pay Lincolnshire County Council (LCC) for the technical approval process at the time the approval is sought, in line with LCC's costs for accesses of the nature proposed. The current LCC costs are:
 - Heavy Duty Access Crossing £912
 - Minor Works Permit £2,500.
- 3.8 Exact costs will be agreed with LCC through the Final CTMP, and will reflect the standard LCC costs for the above types of works at the time approval is sought.
- 3.9 The Final CTMP will confirm the process and which departments at LCC the detailed design drawings will be issued to.

Traffic Management/Regulation Measures

3.63.10 Details of the form and proposed locations of any signs or signals to be placed on a public highway pursuant to Article 15 of the DCO will be submitted to the traffic authority in advance of being placed (either as part of the CTMP or separately).

Management of Accesses

- 3.73.11 All construction vehicles will access and egress the Site in a forward gear.
- 3.83.12 A booking system will be set up to manage arrivals and departures at each access. The intention of this procedure is to avoid instances of HGVs passing each other in opposite directions on the local roads surrounding the Site.
- 3.93.13 Banksmen will be deployed at each access whenever construction vehicles are accessing or egressing each Site. This will ensure the safe movement of construction vehicles in and out of the accesses.
- 3.103.14 Temporary signage will be erected in the vicinity of the accesses during the construction phase. Diagram 7301 'WORKS TRAFFIC' in the Traffic Signs Regulations and General Directions (TSRGD) will be used to indicate the access and will read 'WORKS TRAFFIC LARGE VEHICLE TURNING'. These signs will be white text and red background 1050 x 750 mm mounted in 'A' frames. The temporary signs will be in place for the duration of the construction phase.

3.113.15 Accesses 110 -112 form part of the Shared Cable Route Corridor between the Scheme, Gate Burton Scheme and Cottam Scheme. If the construction periods for the respective schemes overlap, including within the Shared Cable Route Corridor, a Joint Construction Traffic Management Plan (Joint CTMP) could be produced. This will set out construction traffic management and control measures relevant to those areas where the construction vehicle routes for the respective schemes overlap, to reduce and manage any potential cumulative effects.

4 Construction Vehicle Trip Generation

4.1 The section sets out the trip generation associated with the construction, operation, and decommissioning phase of the Scheme.

West Burton 1, 2, and 3

- 4.2 **Table 4.1** sets out a summary of the HGV movements that will be associated with the construction phase of the Scheme. The vast majority of deliveries by HGV will be by 16.5m articulated vehicles or 8-10m rigid vehicles. However, there will be a small number of abnormal load deliveries associated with the substation transformers. Abnormal load movements are discussed separately in **Section 6**.
- 4.3 It is expected that there will be a relatively flat profile of deliveries throughout the construction period. Therefore, an average number of deliveries per day has been calculated based on the length of the construction period. A 50% uplift on these numbers has been applied to provide a forecast of the peak number of daily deliveries.

Table 4.1 West Burton 1, 2, and 3: Anticipated Construction Deliveries (HGV)

Construction Activity	Vehicle Size (Max)	West Burton 1	West Burton 2	West Burton 3	Total
Construction Period (Working	g Days)	238	471	520	520
Modules and Mounting Structures	16.5m Articulated	490	960	1,830	3,280
Power Stations	16.5m Articulated	10	20	30	60
Access Track	10m Tipper	80	280	550	910
General (Fencing, Landscaping, etc.)	10m Rigid	280	950	1,250	2,480
Energy Storage System	16.5m Articulated	-	-	200	200
Total		860	2,210	3,860	6,930
Average per Day		4	5	7	16
Total Movements (Arrivals + De	epartures)	1,720	4,420	7,720	13,860
Average Movements per	Day	8	10	14	32
Average Arrivals per Day (Peak Perio	od – Plus 50%)	5	7	11	23
Average Movements per Day (Peak Pe	riod – Plus 50%)	10	14	22	46

West Burton 1, 2, and 3 - Cars/LGVs

- 4.4 On an average day, there is expected to be 375 workers spread across the Site (360 associated with the solar array element, and 15 associated with the BESS at West Burton 3). On a peak day, this could increase to 455 construction workers (440 associated with the solar array element, and 15 associated with the BESS at West Burton 3).
- 4.5 A Construction Worker Travel Plan has been prepared. This is shown in **Appendix D**. This is discussed further in **Section 9**. The Travel Plan includes a measure for the provision of shuttle buses to transport construction workers to and from the Site. This is particularly important for non-local workers, who will stay in local accommodation and be transported to the Site. It can also be utilised by other workers as appropriate. It is expected that a mixture of coaches and minibuses will be used. On average, it is expected that a shuttle bus will be able to accommodate 20 workers. In addition, workers who drive will be encouraged to car share where possible.
- 4.6 With this in mind, it is assumed that 50% of workers will arrive by shuttle bus. The remainder will arrive by car with an assumed 1.5 construction workers per car.
- 4.7 Based on 455 construction workers (including 15 at the Energy Storage System), the forecast number of cars/LGVs are set out in **Table 4.2**.

Table 4.2 Construction Workers

Construction Activity	West Burton 1, 2, 3 and BESS
Construction Workers (Busy Day)	455
Shuttle Bus	11*
Car	152*
Total (Arrivals)	163
Total Movements (Arrivals + Departures)	326

^{*}Rounded to nearest number

Construction Phase: Cable Route Corridor

4.8 For the construction of the Cable Route Corridor, 19 temporary accesses are required, approximately one every kilometre. It is forecast that each access will generate up to eight arrivals and eight departures per day for the delivery of material and equipment. Around half of these will be HGV trips

and half LGV trips. There will also be around 10 construction workers per access, arriving by car and shuttle bus. Therefore, the cable route corridor will generate the following trips per day:

- Material and equipment:
 - HGV 16 deliveries (32 movements) spread over four accesses;
 - LGV 16 deliveries (32 movements) spread over four accesses;
- Construction worker arrivals (car or shuttle bus) 40 arrivals (80 movements) spread over four accesses. As there are fewer construction workers than for the solar array sites, spread over a number of accesses, it is assumed that all workers will arrive by private car as a worst-case scenario.
- 4.9 HGV trips will largely consist of 10m tipper trucks. However, there will be a number of abnormal load movements associated with cable drum deliveries. This is discussed further in **Section 6**.

Timings of Construction Vehicle Movements

- 4.10 Deliveries by HGV will be coordinated through a booking system to avoid travel during the network peak hours, where possible. Therefore, deliveries will be scheduled for between 09:30 and 16:30 where possible.
- 4.11 Construction worker shifts will be schedule so that workers are not traveling during the network peak hours of 08:00-09:00 and 17:00-18:00.
- 4.12 Therefore, there should be limited or no construction vehicle movement between 08:00-09:00 and 17:00-18:00.

Summary

- 4.13 On a peak day during the construction phase, the following movements could be generated:
 - West Burton 1, 2, 3 and BESS
 - HGV 23 (46 total movements)
 - Car/Shuttle associated with construction workers 163 (326 total movements)
 - Cable Route Corridor
 - HGV 16 (32 total movements)
 - LGV 16 (32 total movements)
 - Car/Shuttle associated with construction workers 40 (80 total movements)

5 Construction Vehicle Routing

5.1 This section provides details of the construction vehicle routes to each access of the Scheme. Drivers will be made aware of the route to each access in advance of driving to the Site. The selected routes are considered the most appropriate to each access.

West Burton 1

5.2 The construction vehicle route for West Burton 1 is shown in **Figure 5.1**.

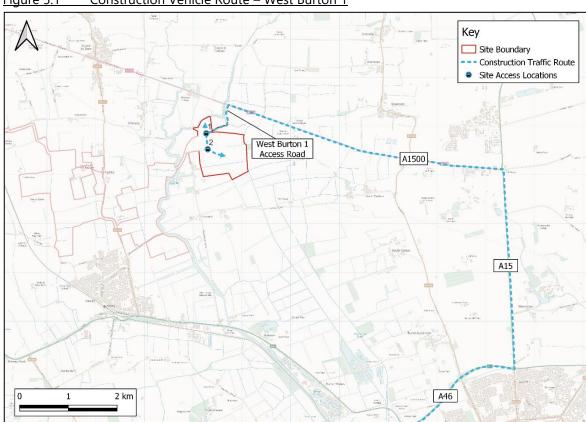


Figure 5.1 Construction Vehicle Route – West Burton 1

- 5.3 The route to the construction accesses for West Burton 1 is:
 - Access 1 and 2: A15 → A1500 Till Bridge Lane → Unclassified Rural Road south of the A1500 (West Burton 1 Access Road) → Accesses

West Burton 2

5.4 The construction vehicle route for West Burton 2 is shown in Figure 5.2.

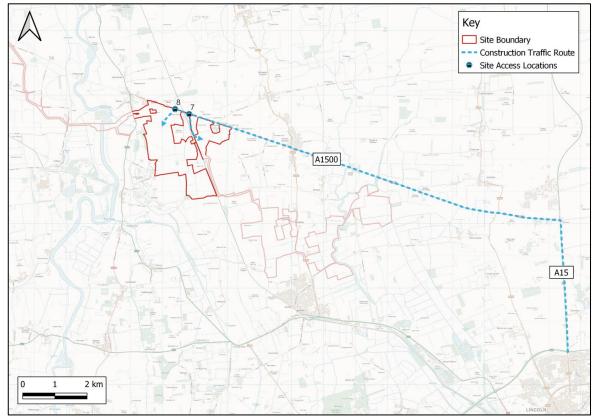
Key Site Boundary Construction Traffic Route Site Access Locations B1241 Sturton Road B1241 Mill A57 2 km

Figure 5.2 Construction Vehicle Route - West Burton 2

- 5.5 The route to the construction accesses for West Burton 2 are:
 - **Access 3, 4 and 5**: A46 → A57 Lincoln Road → B1241 Mill Lane → Accesses

West Burton 3

5.6 The construction vehicle route for West Burton 3 is shown in **Figure 5.3**.



<u>Figure 5.3</u> Construction Vehicle Route – West Burton 3

- 5.7 The route to the construction accesses for West Burton 3 is:
 - Accesses 7 and 8: A15 → A1500 Till Bridge Lane → Accesses

Cable Route Corridor

- 5.8 A summary of the construction vehicle routes for each access for the Cable Route Corridor is set out below and shown in **Figure 5.4**.
 - Grid Connection Access 100 and 101 A614 → A631 → Sturton Road/Gainsborough Road
 - Grid Connection Access 102 A614 → A631 → Sturton Road/Gainsborough Road → Station Road → North Street → Common Lane
 - Grid Connection Access 103 A614 → A631 → Sturton Road/Gainsborough Road → Station
 Road → Cross Street → Church Street → Littleborough Road
 - Grid Connection Access 104 A614 → A631 → Sturton Road/Gainsborough Road → Station Road → Cross Street → Sturton Road → Three Leys Lane/Fenton Lane
 - Grid Connection Access 105 A614 → A631 → Sturton Road/Gainsborough Road → Station Road → Cross Street → Church Street → Littleborough Road → Thornhill Lane → Northfield Road (north)
 - Grid Connection Access 106 A614 → A631 → Sturton Road/Gainsborough Road → Station Road → Cross Street → Church Street → Littleborough Road → Thornhill Lane → Northfield Road (south)

- Grid Connection Access 107 A614 → A631 → Sturton Road/Gainsborough Road → Station Road → Cross Street → Sturton Road → Main Street → North Leys Road → Coates Road
- Grid Connection Access 108 A46 → A57 → Laneham Road → Cocking Lane → Town Street → Leverton Road → Town Street → Cottam Road → Broad Lane → Headstead Bank
- **Grid Connection Access 110** A15 → A1500 Till Bridge Lane → A156 Main Street
- Grid Connection Access 111 A15 → A1500 Till Bridge Lane → A156 Main Street
- Grid Connection Access 112 A15 → A1500 Till Bridge Lane
- Grid Connection Access 113 A15 → A1500 Till Bridge Lane → Stow Park Road
- Grid Connection Access 114 A15 → A1500 Till Bridge Lane → B1241 Sturton Road → Cowdale Lane (north)
- Grid Connection Access 115 A15 → A1500 Till Bridge Lane → B1241 Sturton Road →
 Cowdale Lane (south)
- **Grid Connection Access 116** A46 → A57 → B1241 Sturton Road
- Grid Connection Access 117 A46 → A57 → B1241 Sturton Road
- Grid Connection Access 118 A15 → A1500 Till Bridge Lane → Unclassified road south of A1500
- Grid Connection Access 118 A15 → A1500 Till Bridge Lane → Unclassified road south of A1500
- Grid Connection Access 119 A15 → A1500 Till Bridge Lane → Unclassified road south of A1500

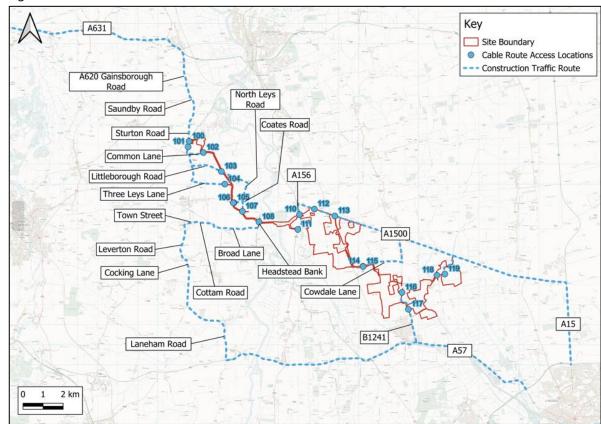


Figure 5.4 Construction Vehicle Route – Cable Route Corridor

Route Signage

- 5.9 Temporary road signing will be implemented along the designated routes to inform background traffic of the ongoing construction works and to direct construction traffic to and from the Site. The signs will be located at key points along the route, including junctions.
- 5.10 All signage will be compliant with Chapter 8 of the Traffic Signs Manual where applicable. The following points will be considered when locating signage:
 - The position of the sign in relation to the highway;
 - Possible distraction to drivers; and
 - The proximity to junctions and roundabouts.
- 5.11 The signage strategy will be agreed with the local highway authority through the final CTMP.

Management of Deliveries

- 5.12 Due to the relatively low number of vehicles associated with the construction phase there is not anticipated to be any significant delay to background traffic.
- 5.13 All deliveries will be scheduled in advance using a booking system. Drivers will be instructed to stop in an appropriate layby and make contact if they are likely to miss their allotted slot to allow the schedule to be adapted in as much as possible. The intention of this procedure is to avoid instances of HGVs passing each other in opposite directions on the local roads surrounding the Site.

Procedure for Arrival to Site

- Drivers to be notified of scheduled arrival time ahead of delivery to the Site and which access/route to use;
- When the delivery vehicle is due the banksmen will be mobilised and will go to position at the relevant Site access;
- The driver will be informed that the operators are in place and it is appropriate to travel to the Site via the agreed route;
- All operatives will communicate with each other, as necessary; and
- Banksmen will assist HGV's to manoeuvre from the public highway into the Site accesses, but will not direct general traffic.
- 5.14 The following procedure will be initiated when HGVs are leaving the Site:

Procedure for Leaving the Site

 Before drivers depart, the Site Manager will be notified. They will then mobilise the banksmen at the relevant Site access;

- Drivers will be advised when the banksmen are in place; and
- Banksmen will guide the drivers exiting the Site on to the public highway.
- 5.15 Mitigation measures will be provided throughout the construction phase and are discussed in more detail in **Chapter 7**.

6 Abnormal Loads

- 6.1 There will be a number of abnormal load movements associated with the construction of the Scheme.
- 6.2 Abnormal load specialists 'Wynns' have prepared a report detailing the required movements. This is shown in Appendix F of the Transport Assessment [EX4/WB6.3.14.1 CEN010132/CR1/C6.3.14.1_B].

Trip Generation and Access

West Burton 1, 2, and 3

6.3 The Abnormal Load movements associated with the substation and their access are summarised in **Table 6.1**.

Table 6.1 Abnormal Load Movements

Substation Location	Transformer Dimensions (Length/Width/Height)	Vehicle Type	Access	Frequency
West Burton 1	7.90m/4.86m/4.50m 100 tonnes	5 axle bed with 5 axle draw bar trailer (approx. 36m in length)	Access 2	1
West Burton 2	7.90m/4.86m/4.50m 100 tonnes	5 axle bed with 5 axle draw bar trailer (approx. 36m in length)	Access 4	2
West Burton 3	7.24m/5.00m/4.78m 157 tonnes	16 axle girder frame (approx. 70m in length)	Access 8	4

Cable Route Corridor

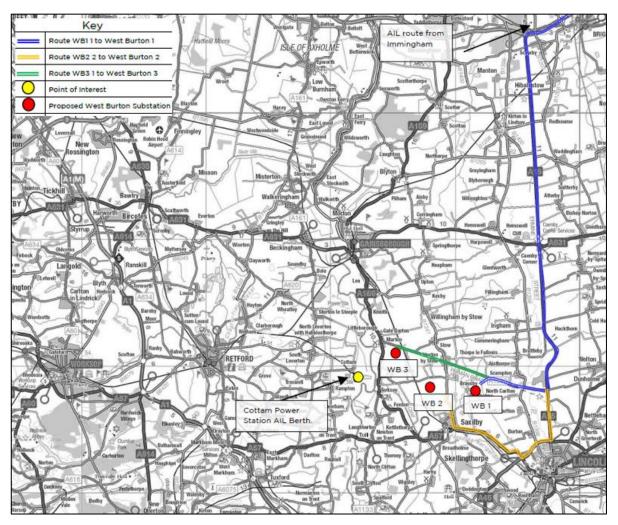
- 6.4 The 30 tonne cable drum will be delivered on a Cable Reel Trailer. This vehicle is classified as an abnormal load. However, the vehicle is not nearly as big as those required to deliver the transformers at 26m in length.
- 6.5 Each section of the Cable Route will require around 100 cable drum deliveries (around 25 per access).
- 6.6 The Cable Reel Trailer and vehicle will get as close to the relevant access location as possible. From here, the cable drum will be unloaded and towed along the haulage road to the appropriate location for installation. This will be managed through banksmen and/or traffic marshalls.

Routes for Abnormal Load Movements

West Burton 1, 2, and 3

- 6.7 Loads will be transported by river to the Immingham Docks. From here they will use the A160, A180 and M180 to reach the A15. From the A15, the routes to the relevant substations within each Site are as follows:
 - West Burton 1: A15 → A1500 Till Bridge Lane → West Burton 1 Access Road;
 - West Burton 2: A15 → A46 → A57 → B1241;
 - West Burton 3: A15 → A1500 Till Bridge Lane
- 6.8 These routes are shown in **Figure 6.1**.

Figure 6.1 Abnormal Load Movements



Cable Route Corridor

6.9 Wynns has undertaken analysis of the routes to the Cable Route Corridor, as set out Section 5. They have concluded that all accesses are accessible by the Cable Reel Trailer, except for Access 104. This access will not be used for abnormal load movements and the haul road within the Cable Route Corridor will be used to access the cable joint bays from alternative accesses.

Management and Measures

West Burton 1, 2, and 3

6.10 Traffic management will be in places for all 10 abnormal load movements destined for the Sites.

"AILs will take up the entire road width on the final approaches to all sites and careful traffic management will need to be agreed with Lincolnshire Police in terms of escort requirements. It is possible that detailed traffic management options including Temporary Traffic Regulation Orders (TTRO) will be required by the police or highway authority although no such requirement has been highlighted as necessary to date in their responses to the route enquires. It will be agreed by the appointed haulage contractor prior to movement".

- 6.11 The exact nature of the traffic management will be agreed with the local highway authority and police prior to the movement taking place.
- 6.12 For the structure reviews, should any issue arise, the following measures will be explored:
 - Alternative trailer arrangements to spread the load;
 - Temporary or permanent relieving measures.
- 6.13 Where appropriate, the temporary laying of steel plates or timbers will be undertaken to protect verges and kerbs.

Cable Route Corridor

6.14 Traffic management will also be in place for abnormal load movements associated with the Cable Route Corridor. Again, the exact nature of the traffic management will be agreed with the local highway authority and police prior to the movement taking place.

7 Construction Traffic Mitigation and Management Measures

- 7.1 The contractor will introduce measures to minimise the impact resulting from construction activities. It will be the responsibility of the Project Manager and Site Manager to oversee the implementation of the mitigation and management measures.
- 7.2 The measures are set out below.

Public Rights of Way

- (i) A Public Right of Way Management Plan will be implemented during the construction phase of the Scheme. An Outline Public Right of Way Management Plan is included at Appendix 14.3 of the Environmental Statement [EX4/WB6.3.14.3 DENO10132/CR1/C6.3.14.3_C]. Where a vehicle track crosses a Public Right of Way, the following measures will be implemented:
 - A widened access track to ensure vehicles can pass PRoW users safely (including cyclists and equestrians);
 - The provision of banksmen at either end of the PRoW, to hold vehicles if a PRoW user is present and advise PRoW users of the potential for construction vehicles to be present;
 - Speeds to be limited to 10mph;
 - Drivers will stop and give-way to any PRoW user (in particular for equestrians) that they encounter;
 - Appropriate signage will be installed along the PRoW to make PRoW users aware of the construction activity. This will include information on construction times and contact details for a public liaison officer;
 - The PRoW will be kept clear of construction vehicles and apparatus outside of permitted construction hours so far as is practicable to do so;
 - Any damage to the surface of the footpath/bridleway will be repaired as soon as practicable. The surface will be returned to its original condition following completion of construction.

Specific Highway Measures

- (ii) Where existing accesses are utilised, these will be widened and formalised as appropriate. Visibility splays will be kept clear throughout the construction period;
- (iii) On narrower sections on the highway, temporary pass-by bays will be created.

Traffic Management

(iv) Traffic management for abnormal load movements will be agreed with the local highway authority and police prior to the abnormal load movements taking place.

Signage

- (v) Signs to direct construction vehicles associated with the development will be installed along the construction traffic route. Delivery drivers, contractors and visitors will be provided with a route plan in advance of delivering to Site to ensure that vehicles follow the identified route. The signage strategy will be agreed with the local highway authorities prior through the Final CTMP:
- (vi) All signage on the designated route will be inspected daily by the Site Manager, to ensure they are kept in a well maintained condition and located in safe and appropriate locations;

Vehicle Movement

- (vii) Construction deliveries by HGV will be coordinated to arrive/depart between 09:30-16:30 to avoid the network peak hours of 08:00-09:00 and 17:00-18:00.
- (viii) Banksmen will be provided at the Site accesses to indicate to construction traffic when it is safe for them to enter and exit the Site;
- (ix) A Construction Worker Travel Plan will be implemented, to encourage construction workers to travel to the Site via sustainable travel, where possible. Measures include the provision of a shuttle bus and a car sharing scheme. Shifts will be organised to avoid construction worker movement between 08:00-09:00 and 17:00-18:00;
- (x) The management associated with Abnormal Load movements will be agreed with the local highway authority and the police prior to the delivery;

Booking System

(xi) A booking system will be set up to manage arrivals and departures to the Site. A log will be kept as part of the booking system. The intention of this procedure is to avoid instances of HGVs passing each other in opposite directions on the local roads surrounding the Site.

Parking

(xii) Advisory signs informing contractors and visitors that parking is not permitted on-street in the vicinity of the Site or on the Site access road. Contractors and visitors will be advised that parking facilities will be provided on-Site in advance of visiting the Site and that they should not park on-street;

Wheel Wash Facility

- (xiii) A wheel washing facility will be provided at each access. This will be located at the end of each access road, ahead of the egress onto the local highway network;
- (xiv) A visual inspection of vehicles will be undertaken before they depart the Site, to ensure that they are not carrying any residual debris onto the highway;
- (xv) If required, a road sweeper will be provided for the area surrounding access to alleviate any residual debris generated during the construction phase, as required;

Noise Reduction and Air Quality

- (xvi) When on Site and when not in use, vehicle engines will be switched off;
- (xvii) Vehicles carrying material off-Site will be sheeted to prevent the spread of dust;
- (xviii) In dry conditions, areas near to the Site access will be sprayed with water supplied to prevent the spread of dust;

Site Security

(xix) The Site will be secured at all times via a perimeter fence or temporary fencing. CCTV will be operational within the construction compound. All new access tracks will be secured by gates, which will be set back from the public highway. Where existing access tracks are used that also provide access to residential properties, appropriate security measures will be put in place in consultation with the relevant property owner(s);

Road Condition Survey

- (xx) A pre-construction road condition survey will be carried out on the local highway network via video two weeks before the construction phase commences. The extent of the survey will be agreed with the local highway authority prior to commencement. Once construction is complete, a post-construction condition survey will be undertaken in order to identify any additional defects that can reasonably be attributable to construction activities at the Site. Any identified highways defects resulting from construction activities associated with the Site will be corrected to the satisfaction of the local highway authority.
- (xxi) A separate road condition survey will be undertaken on any private road affected by the Scheme. Any identified defects in the private road resulting from construction activities will be corrected to the reasonable satisfaction of the owner.

Community Engagement

- (xxii) The details of the Construction Site Manager will be provided to the local highway authority in advance of any work being carried out.
- (xxiii) The Construction Site Manager's details will also be provided on a Site-board at the Site accesses. If anyone in the local community has any issues during the construction phase, the Site Manager will be available to discuss.

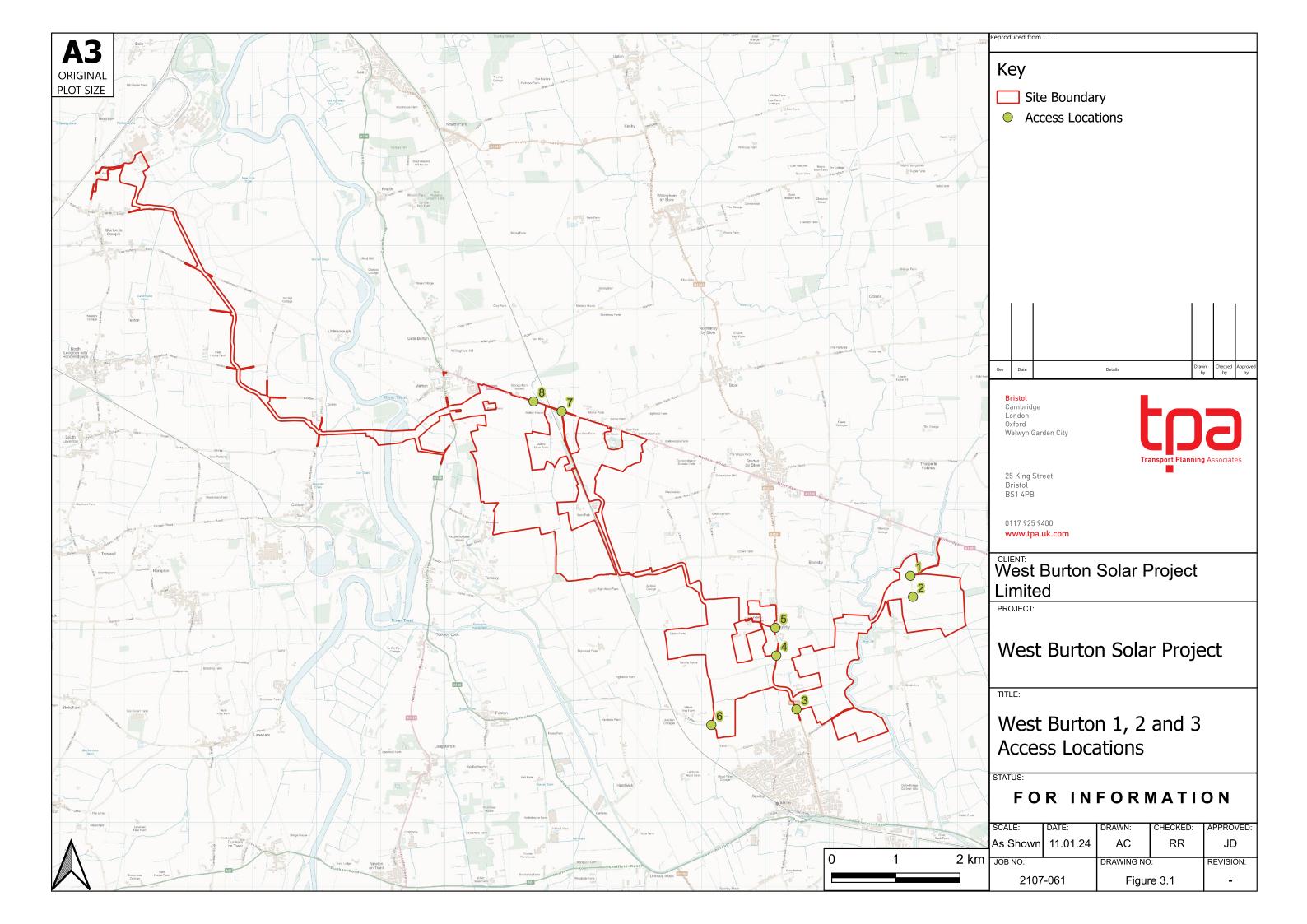
Monitoring

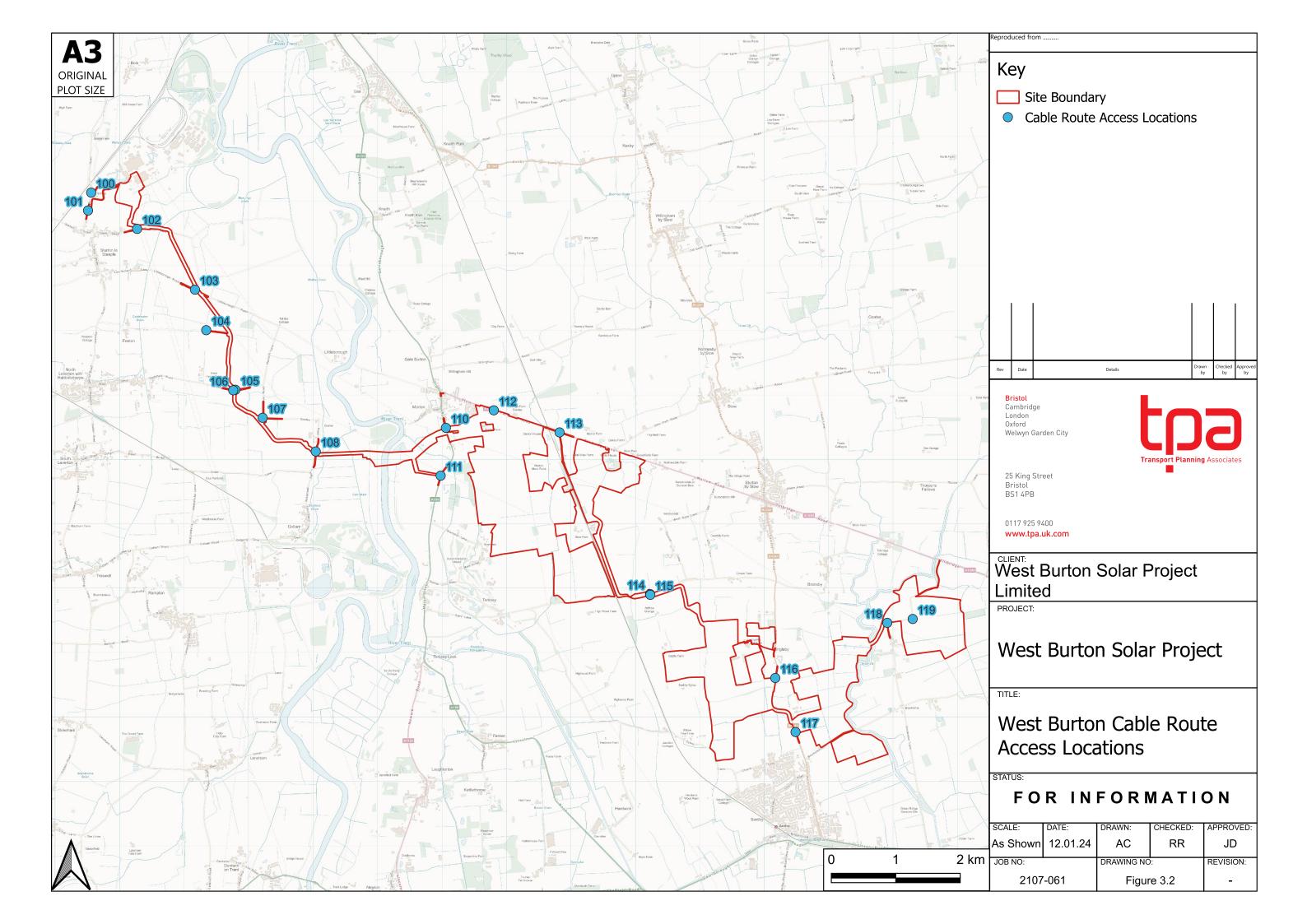
(xxiv) Any unforeseen issues that arise in relation to construction vehicle movement will be logged by the Site Manager. If necessary, the issues will be discussed with the local highway authority so that they can be resolved as appropriate.

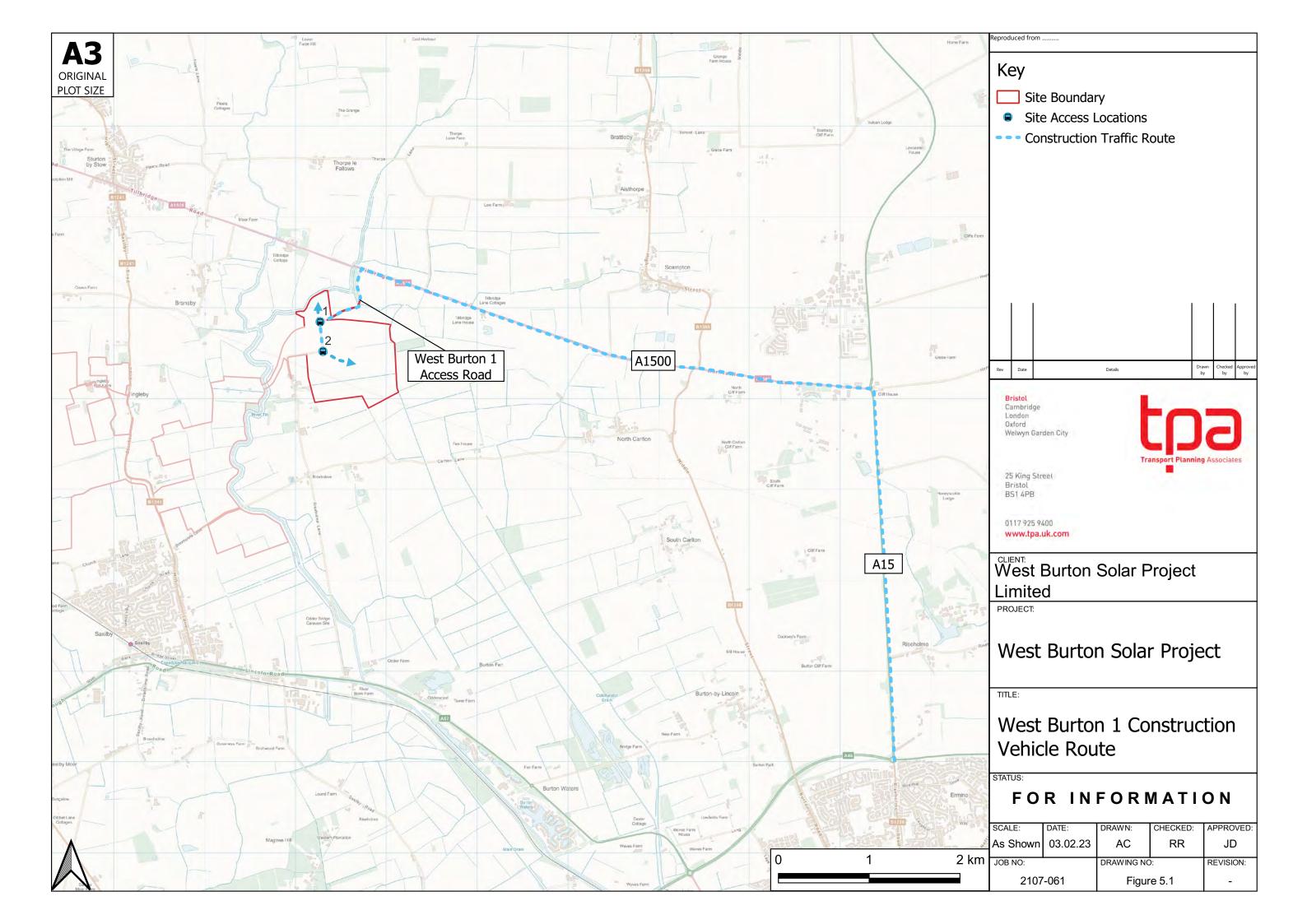
Joint CTMP

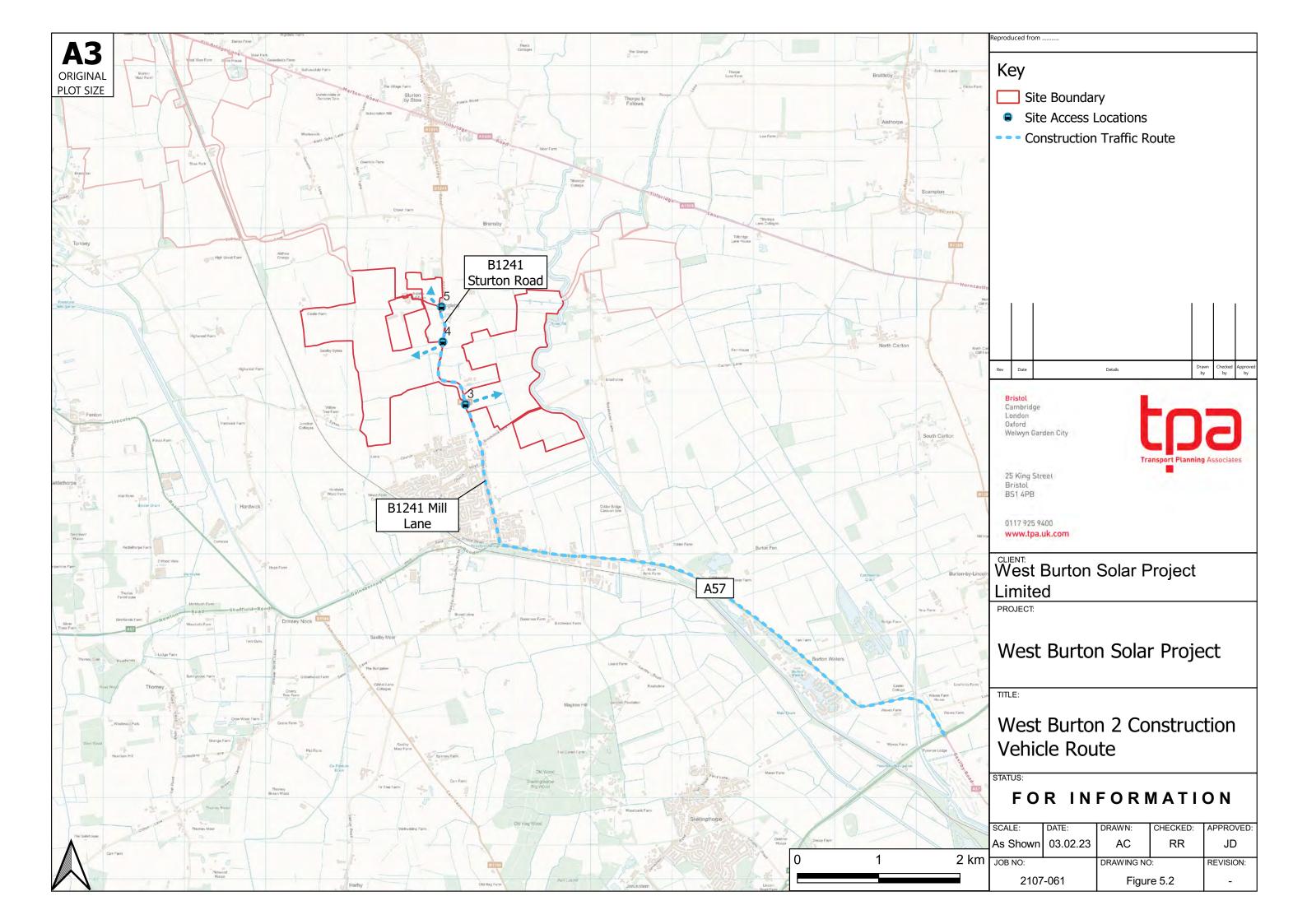
in the event that the construction schedules associated with this Scheme and other schemes in the area overlap (being the Cottam Solar Project, the Gate Burton Solar Project, and the Tillbridge Solar Project), a joint Construction Traffic Management Plan (Joint CTMP) could be produced. Other schemes that come forward in the area could be included as appropriate. The Joint CTMP would set out construction traffic management and control measures relevant to those areas where the construction vehicle routes for the schemes would overlap, to reduce and manage any potential cumulative effects. This is particularly relevant to the Shared Cable Route Corridor with the Cottam and Gate Burton projects. The Joint CTMP would be agreed with the relevant authorities prior to commencement of construction.

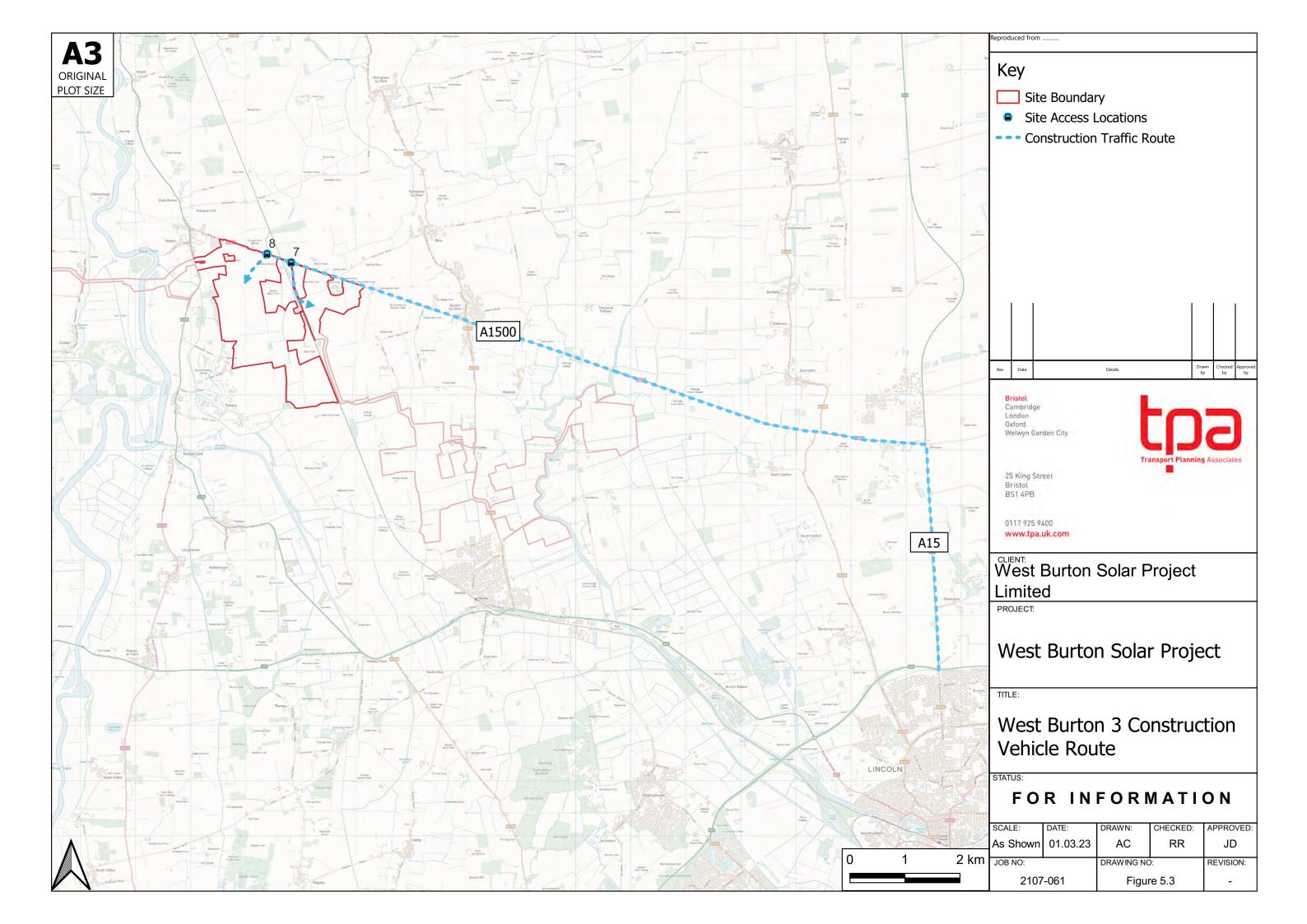
FIGURES

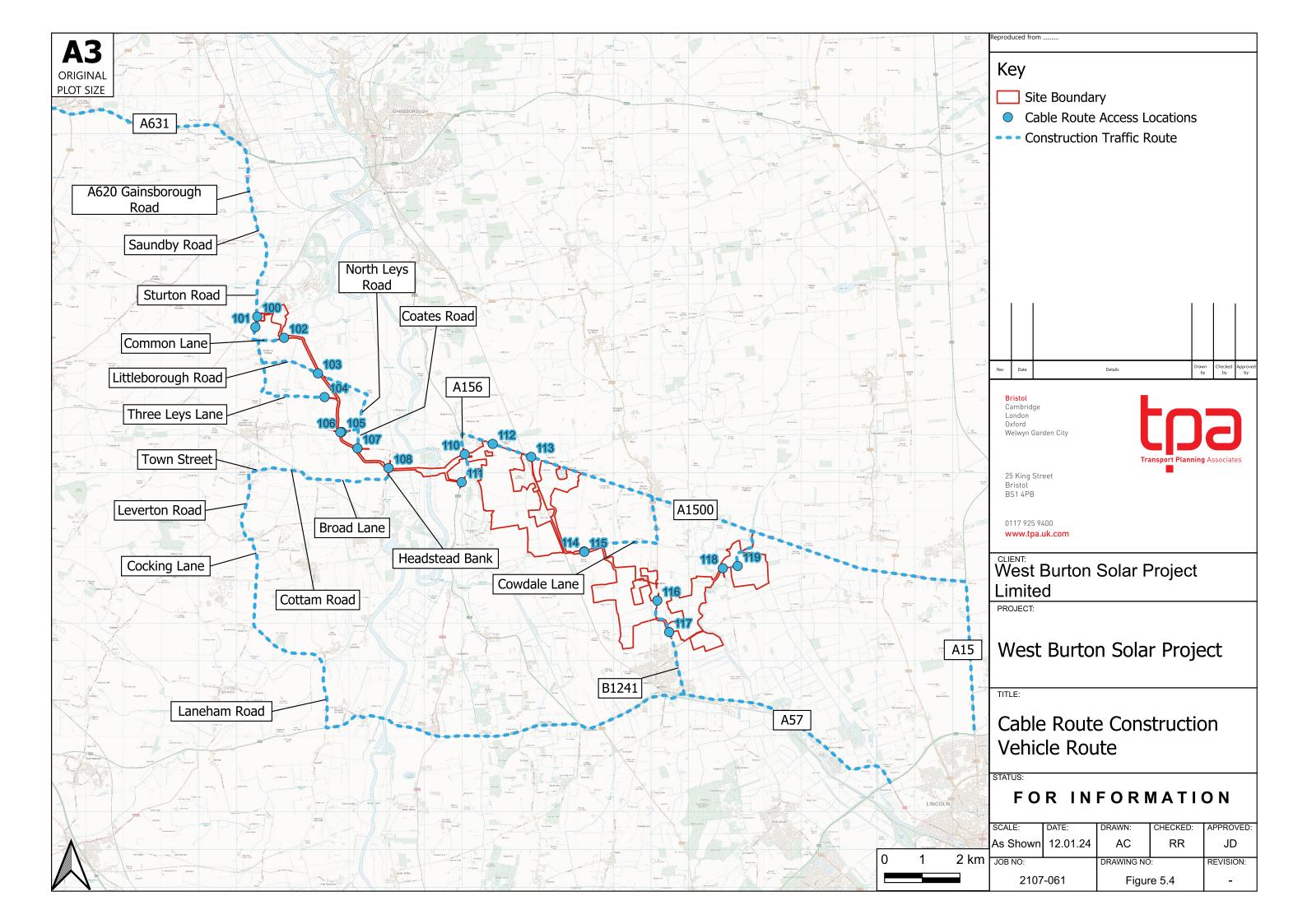




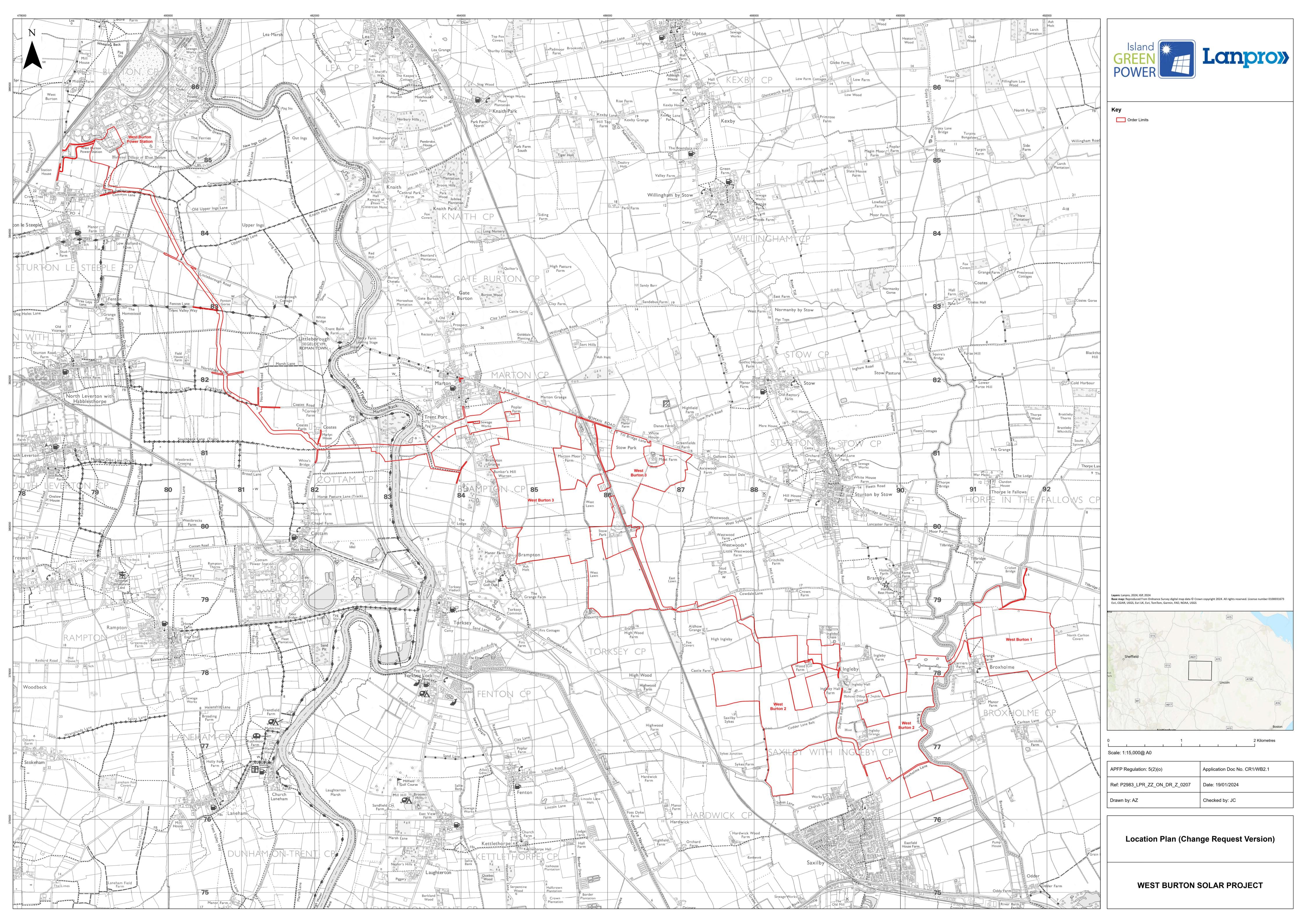




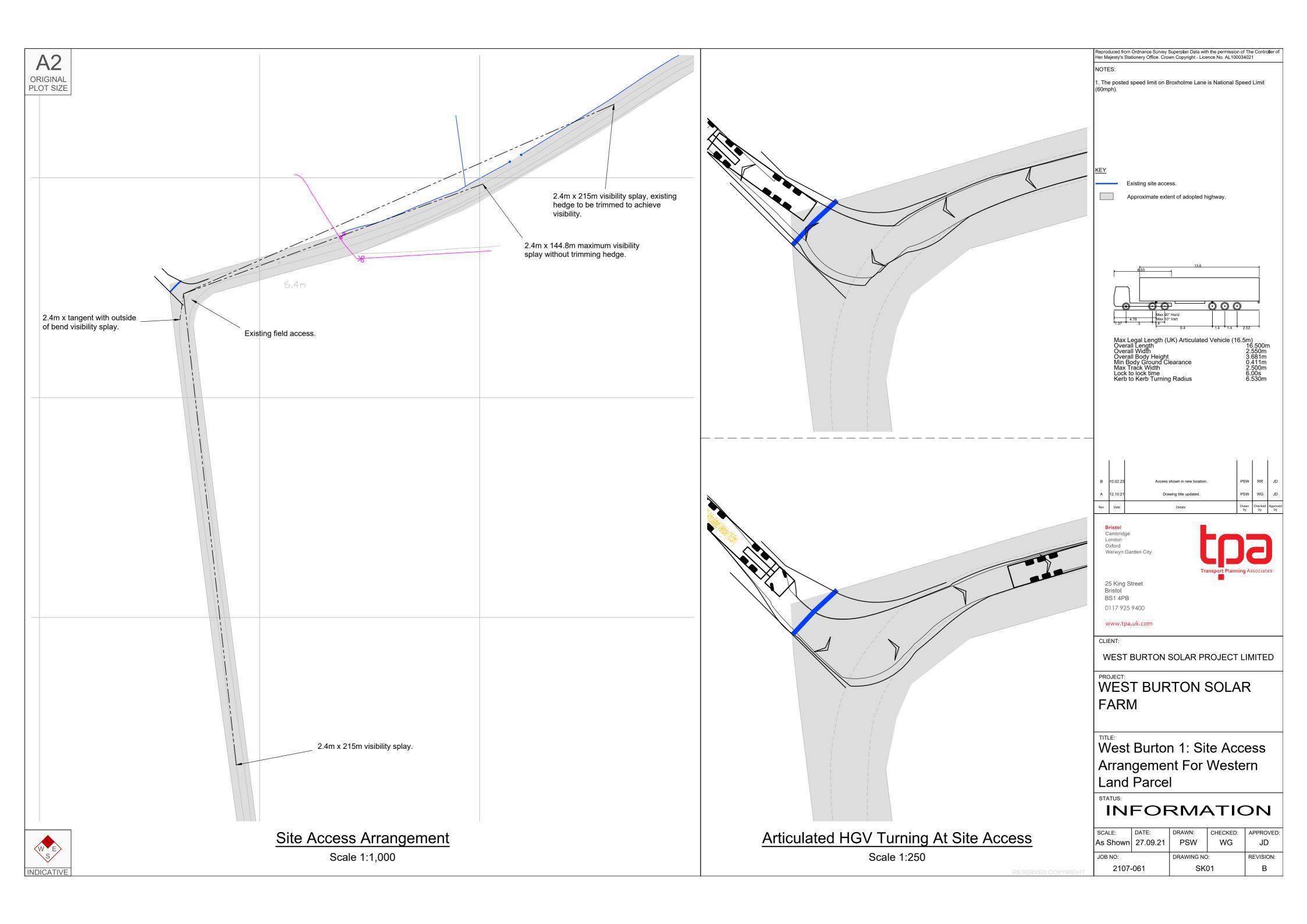


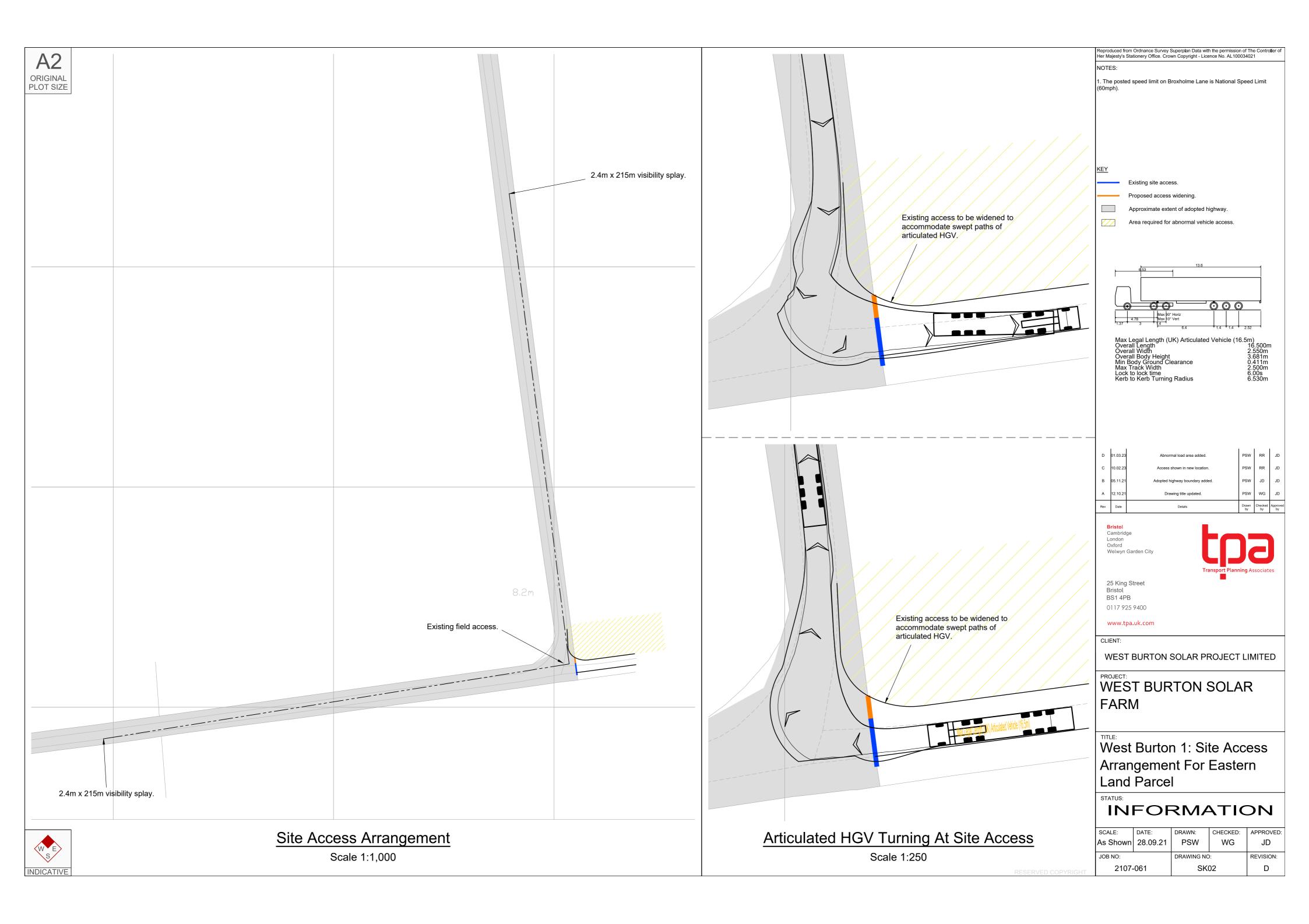


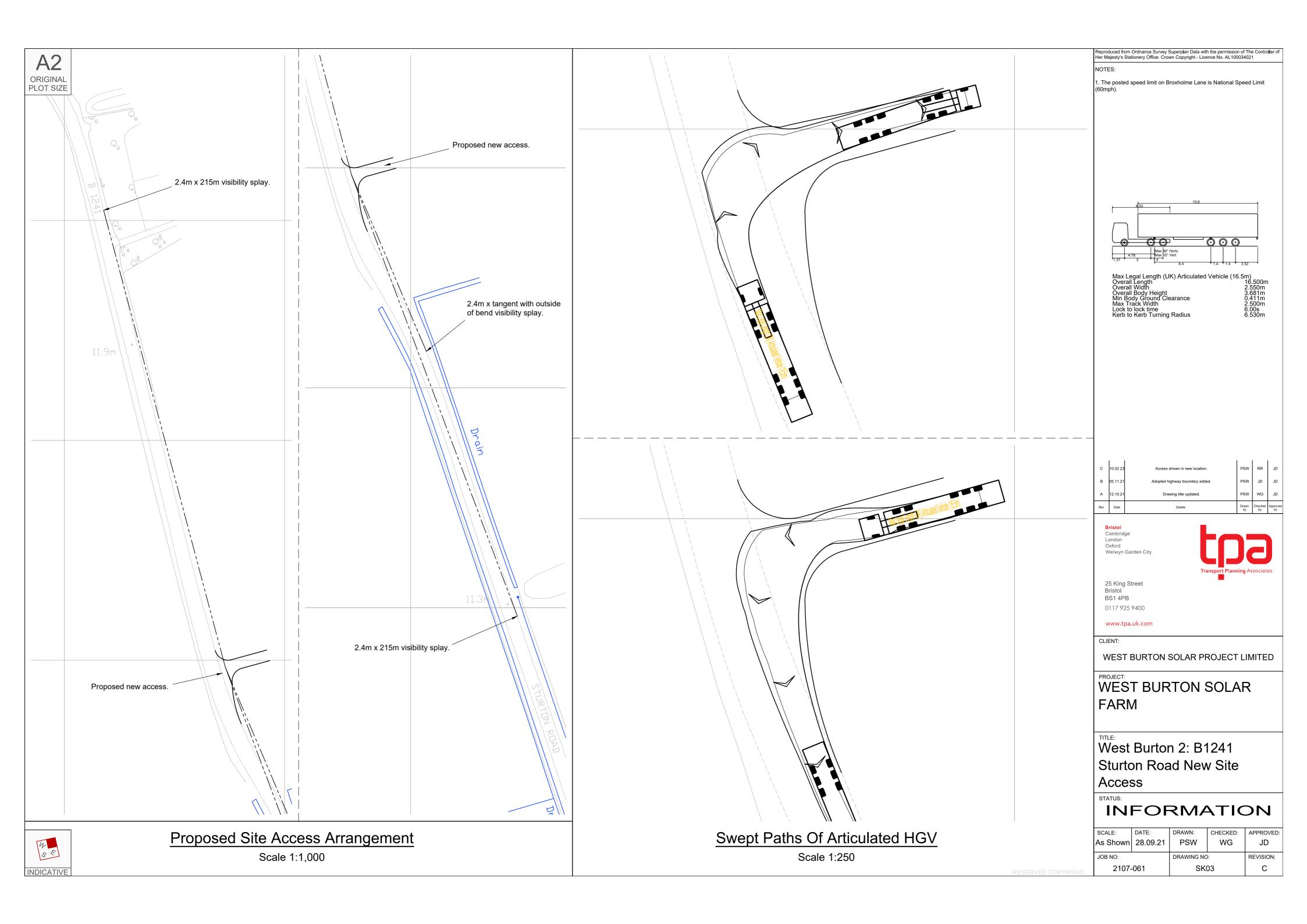
APPENDIX A

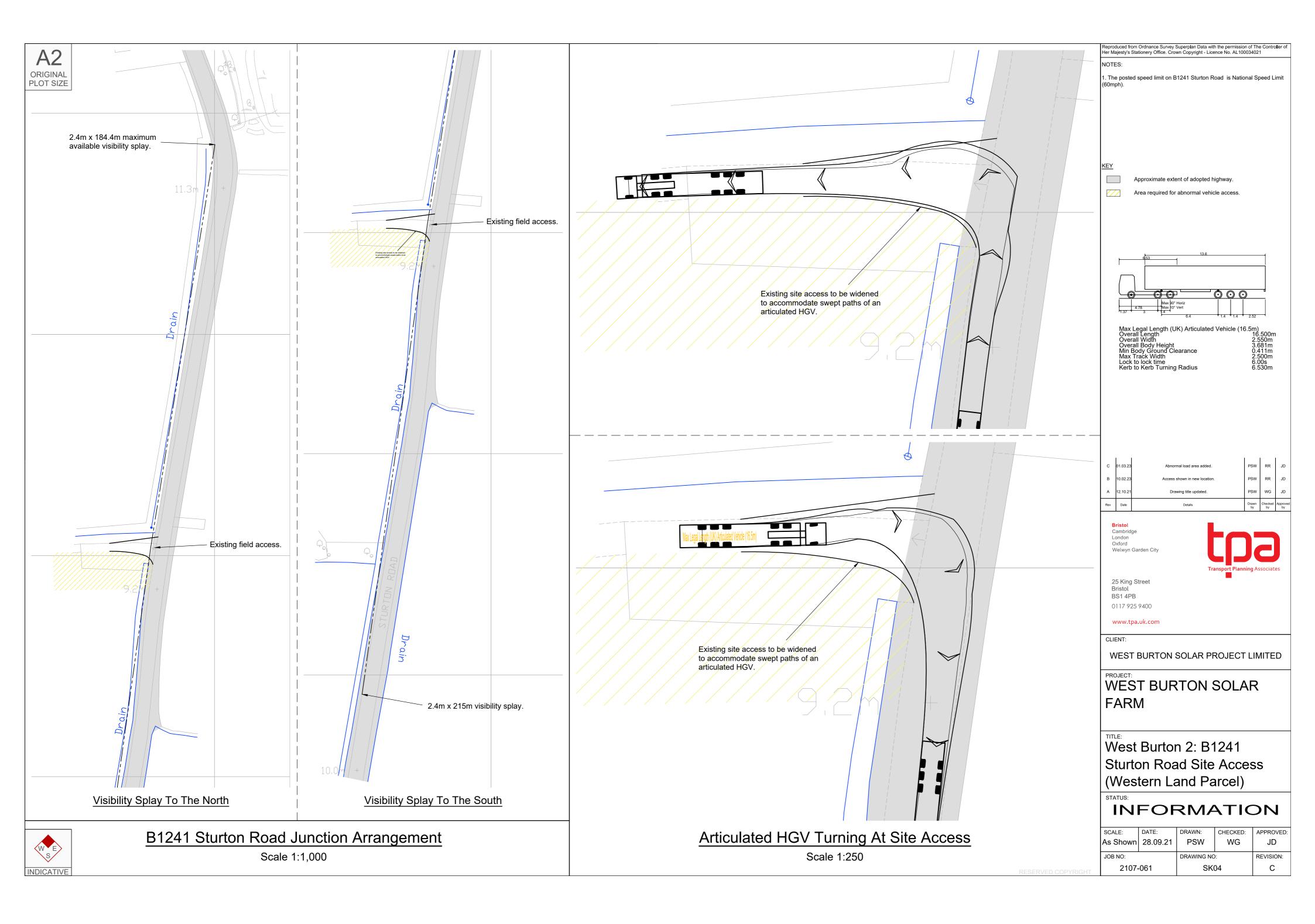


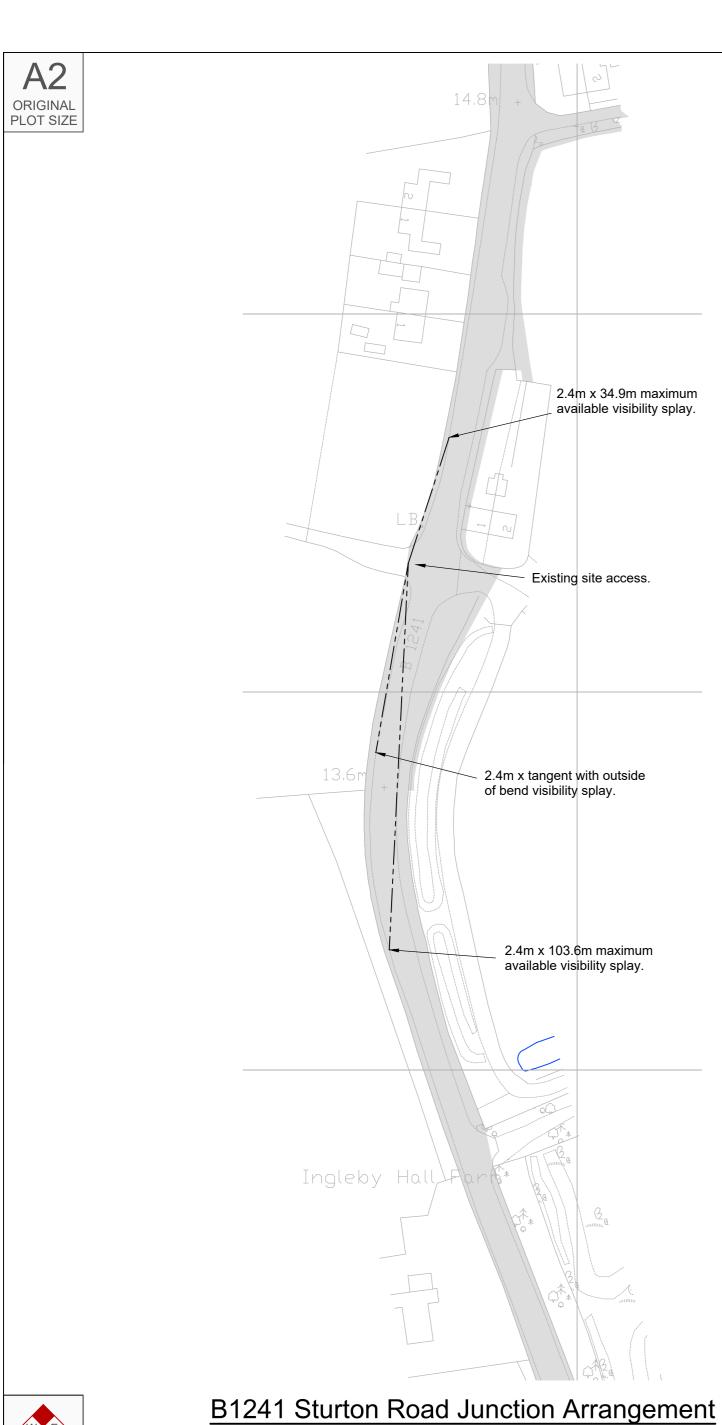
APPENDIX B



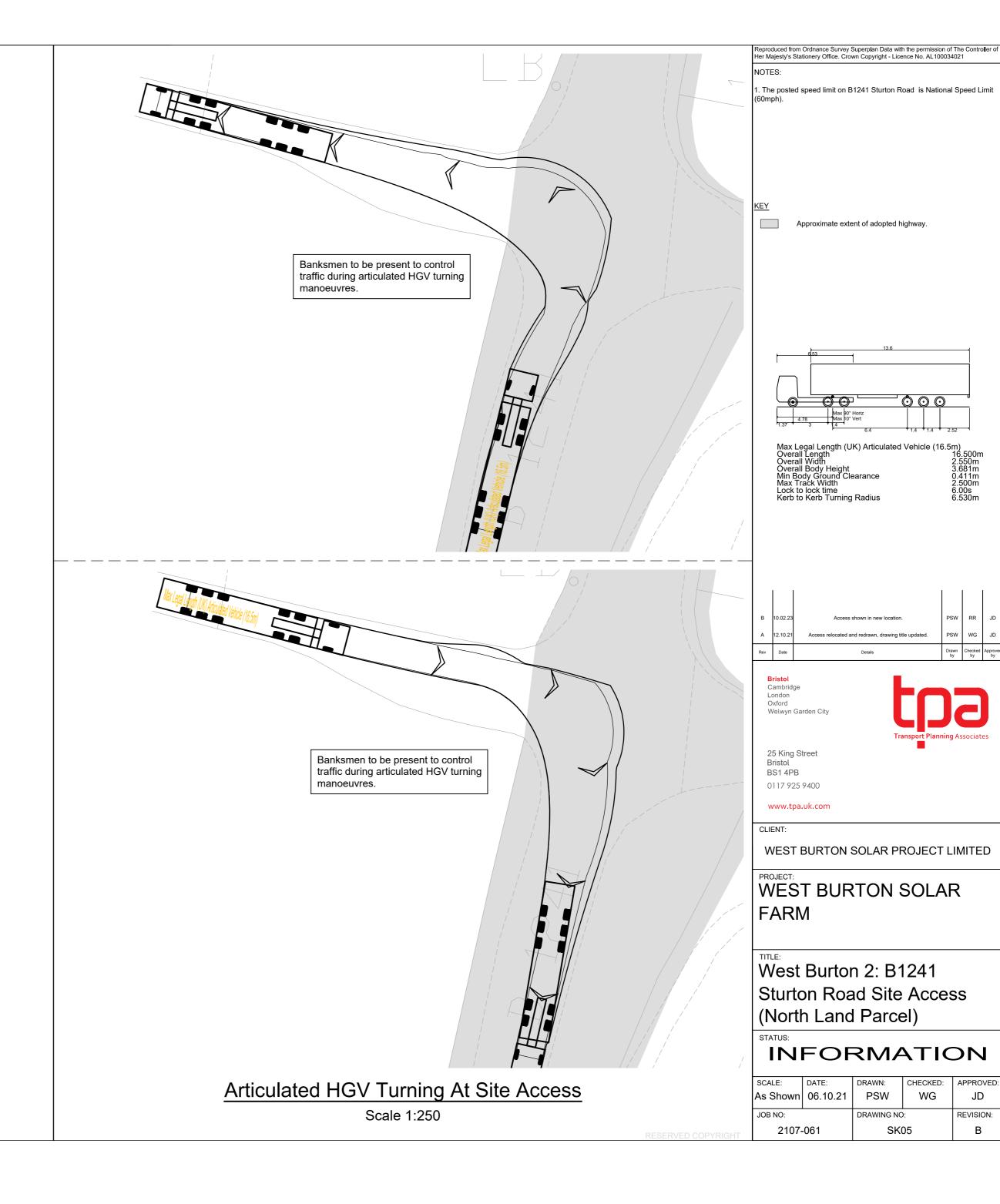








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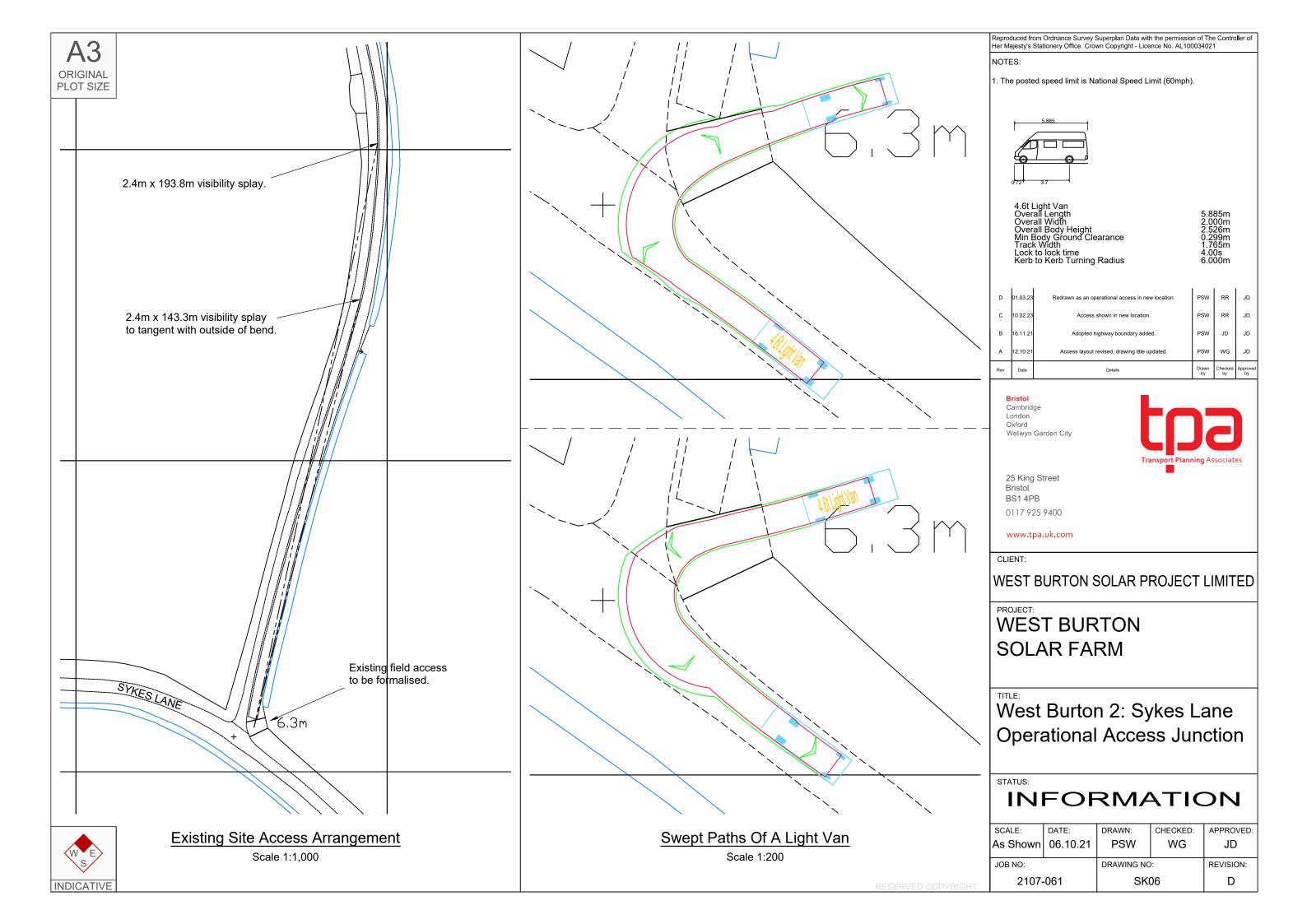
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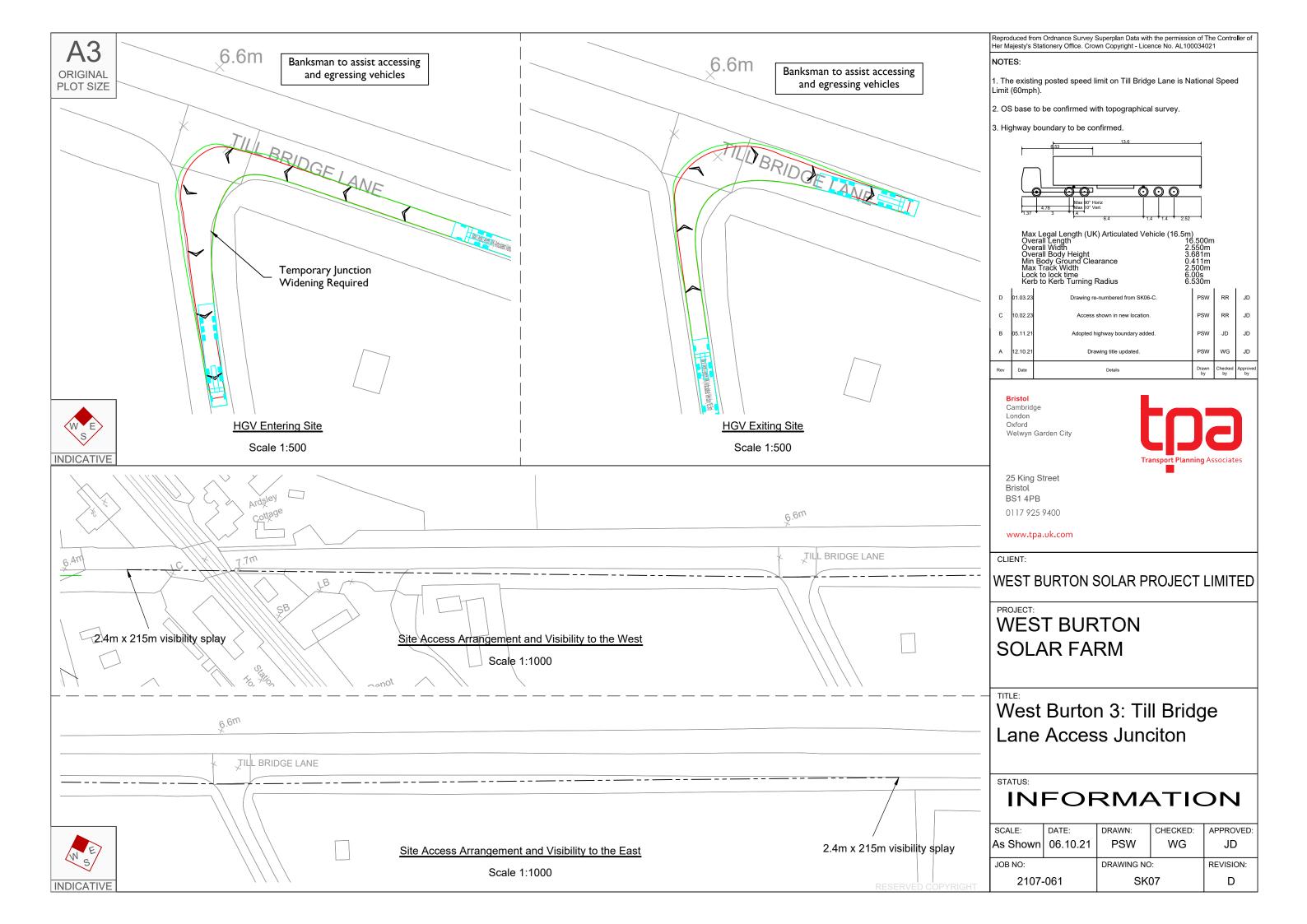
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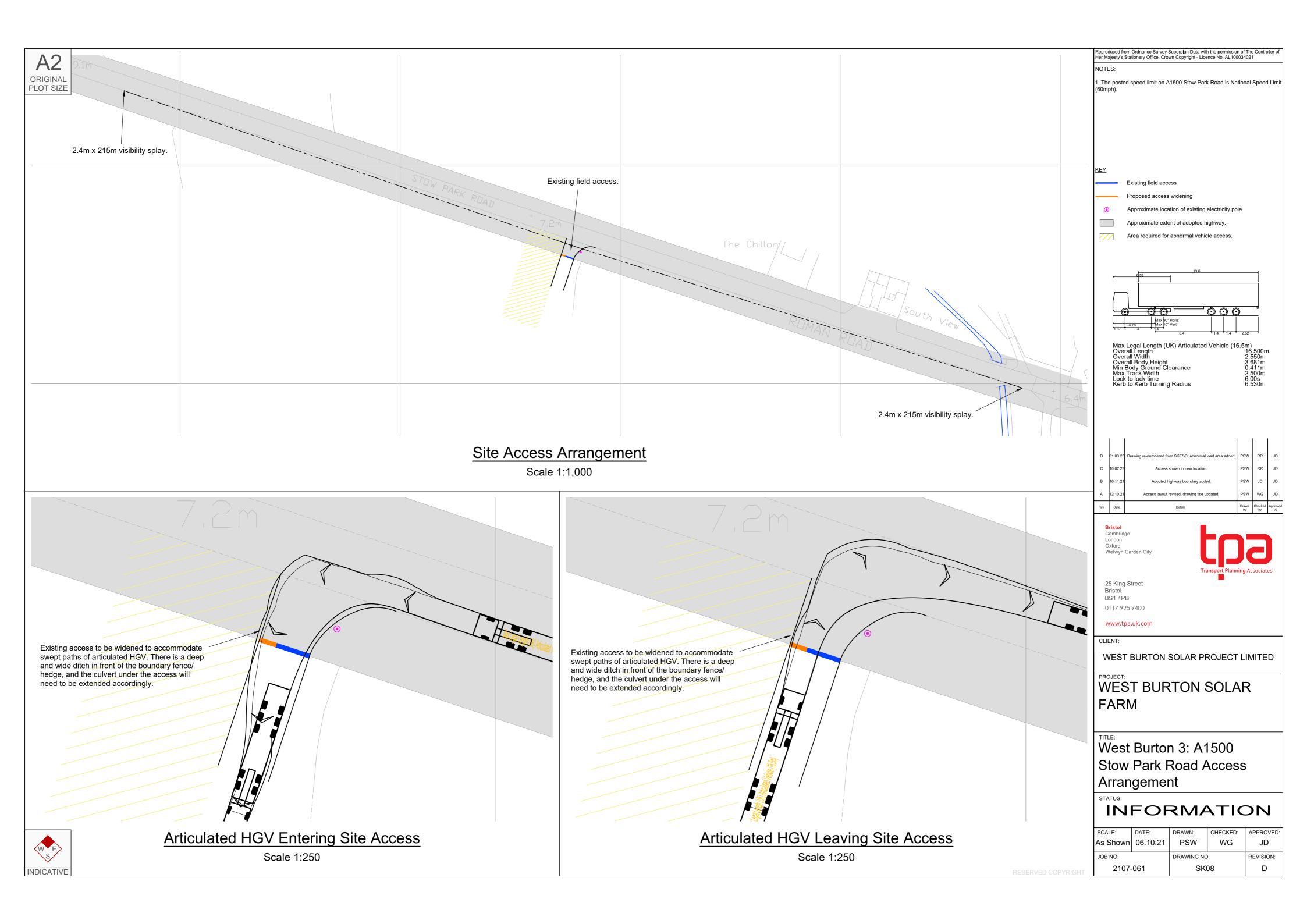
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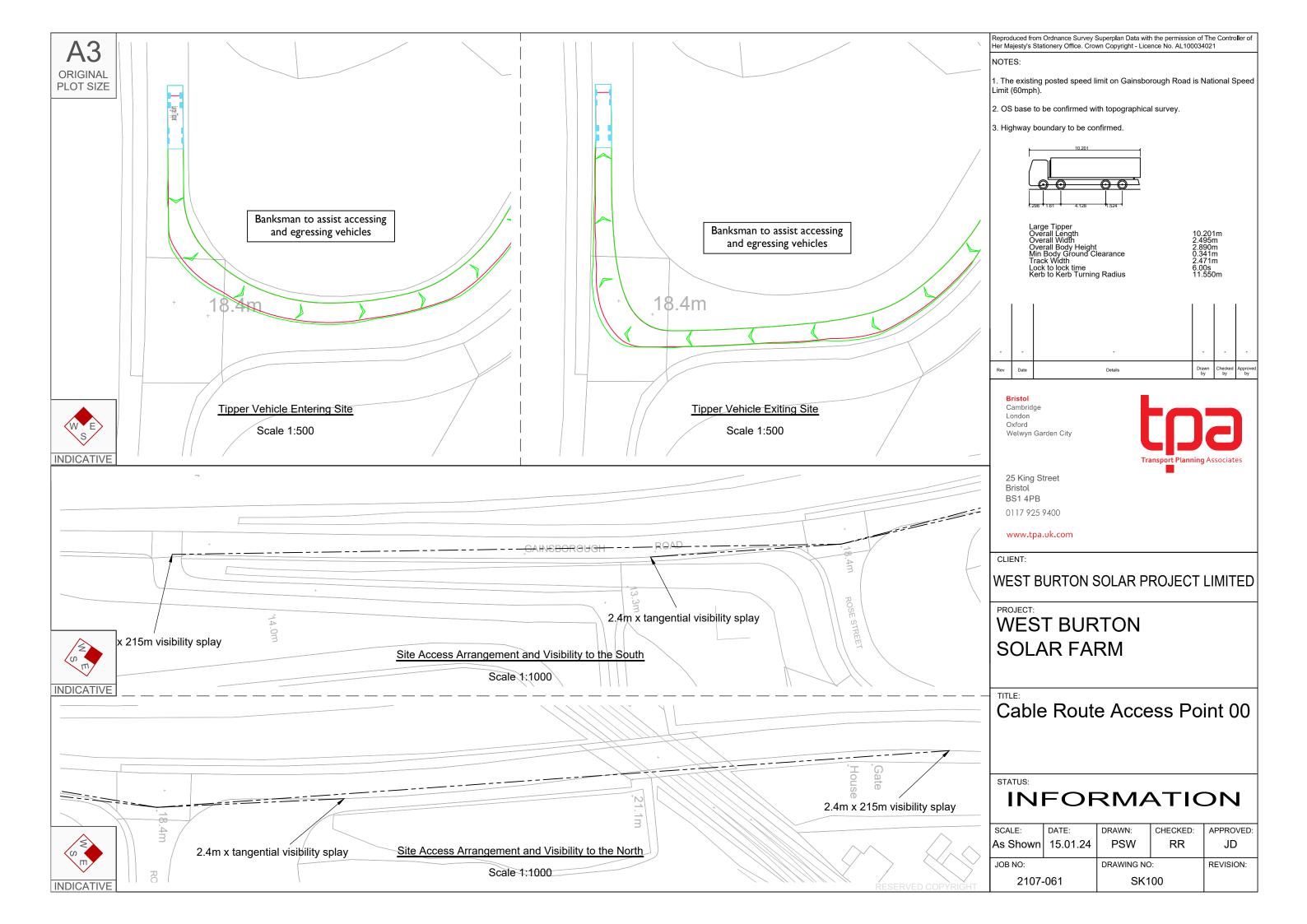


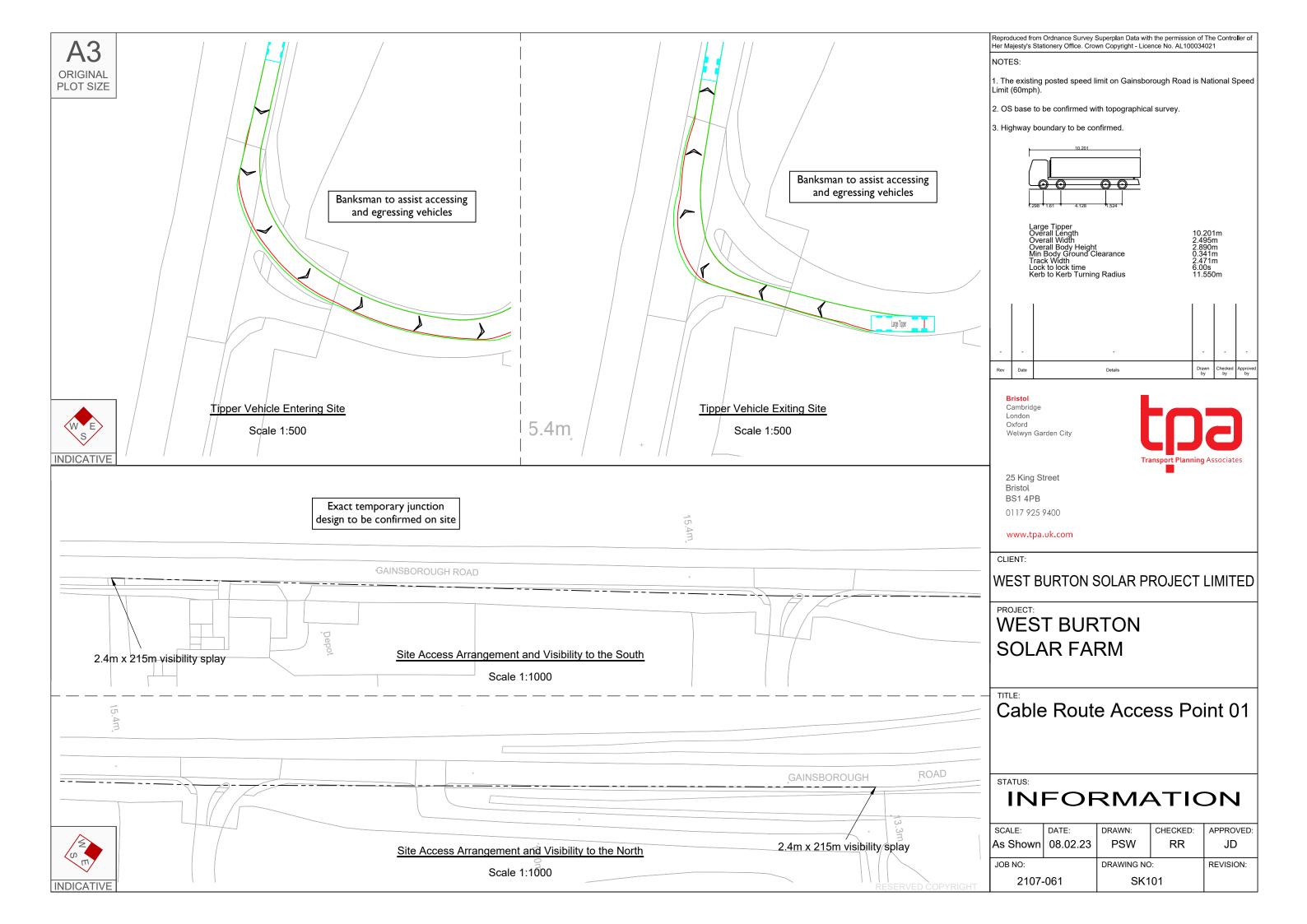


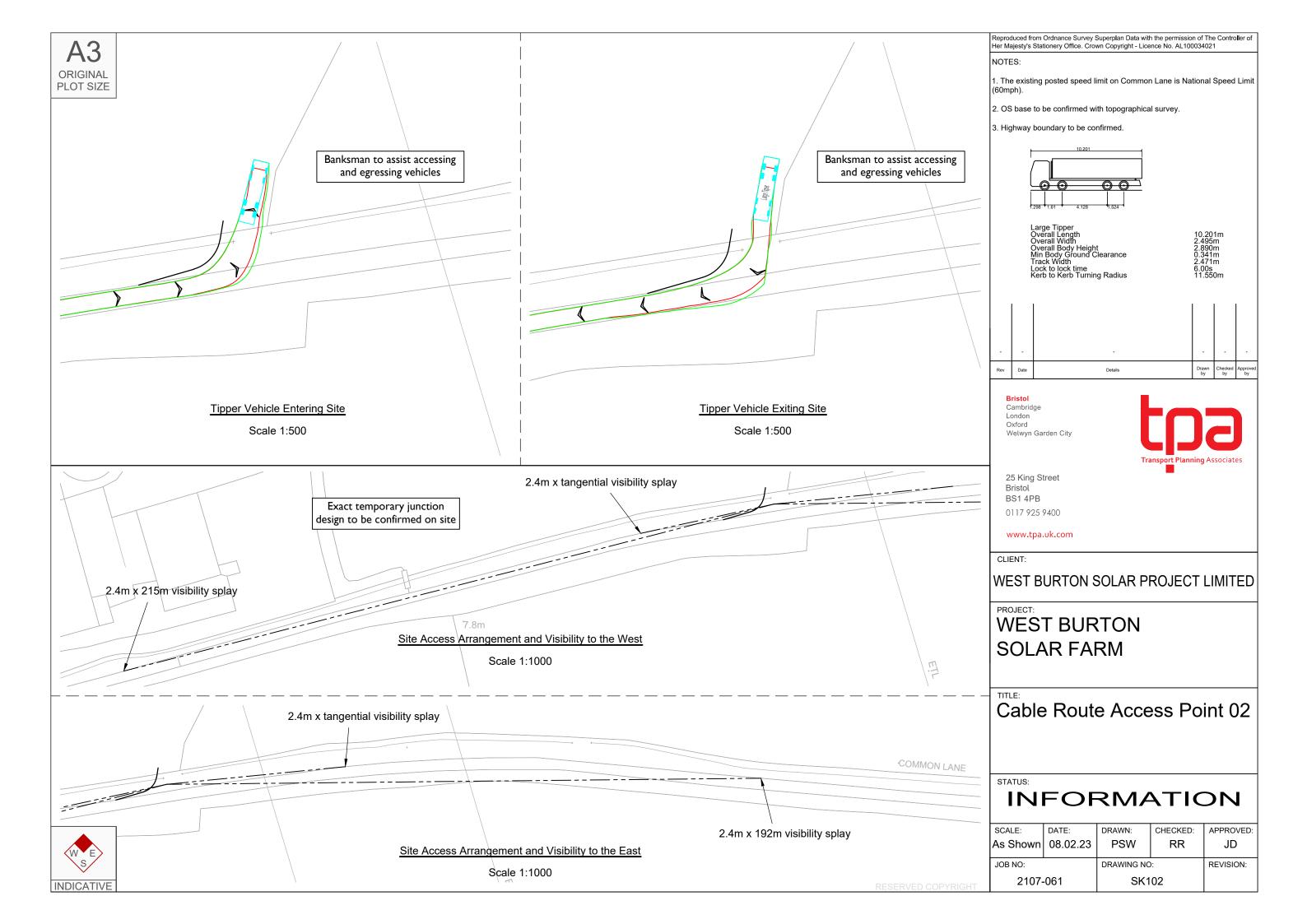


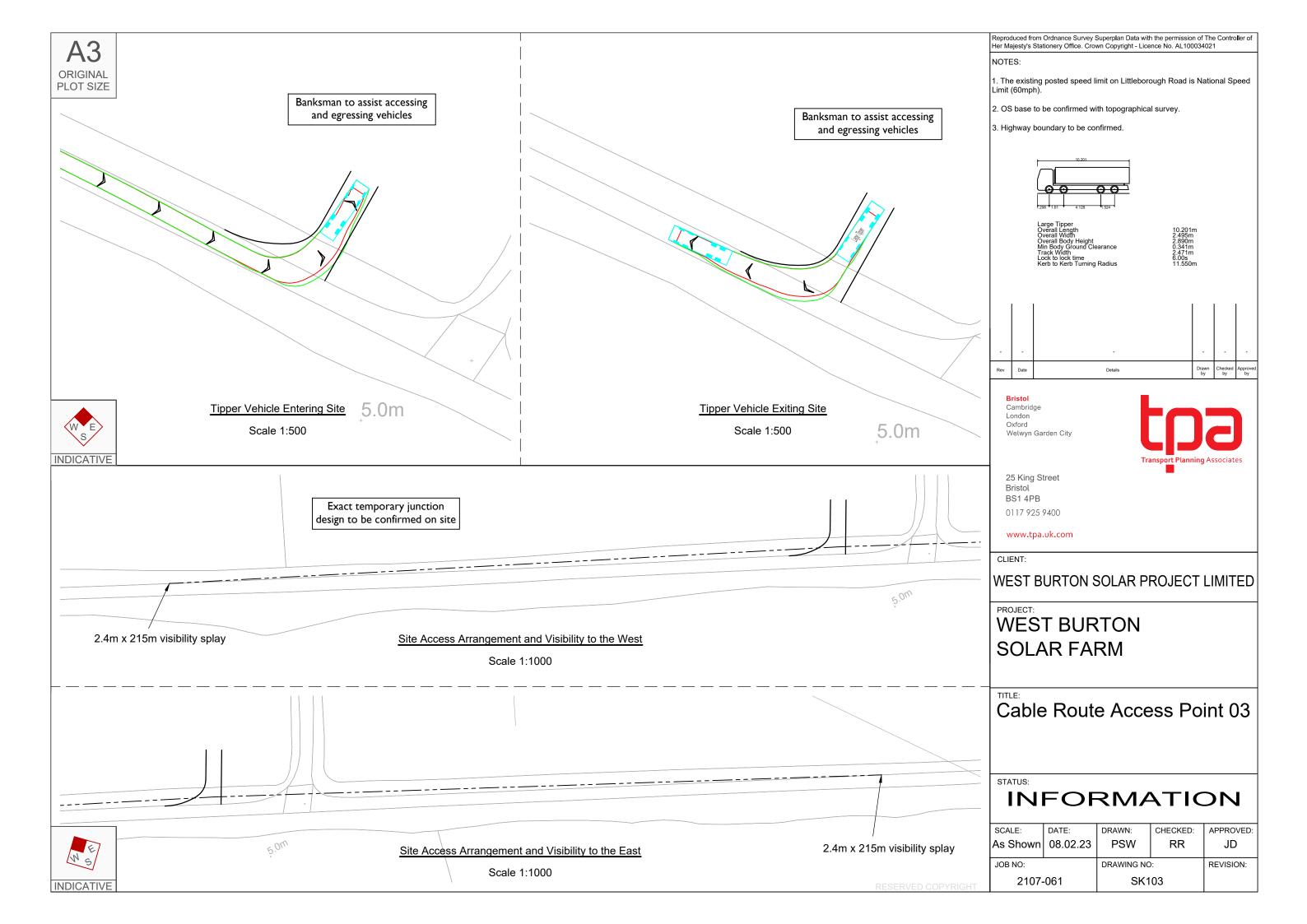


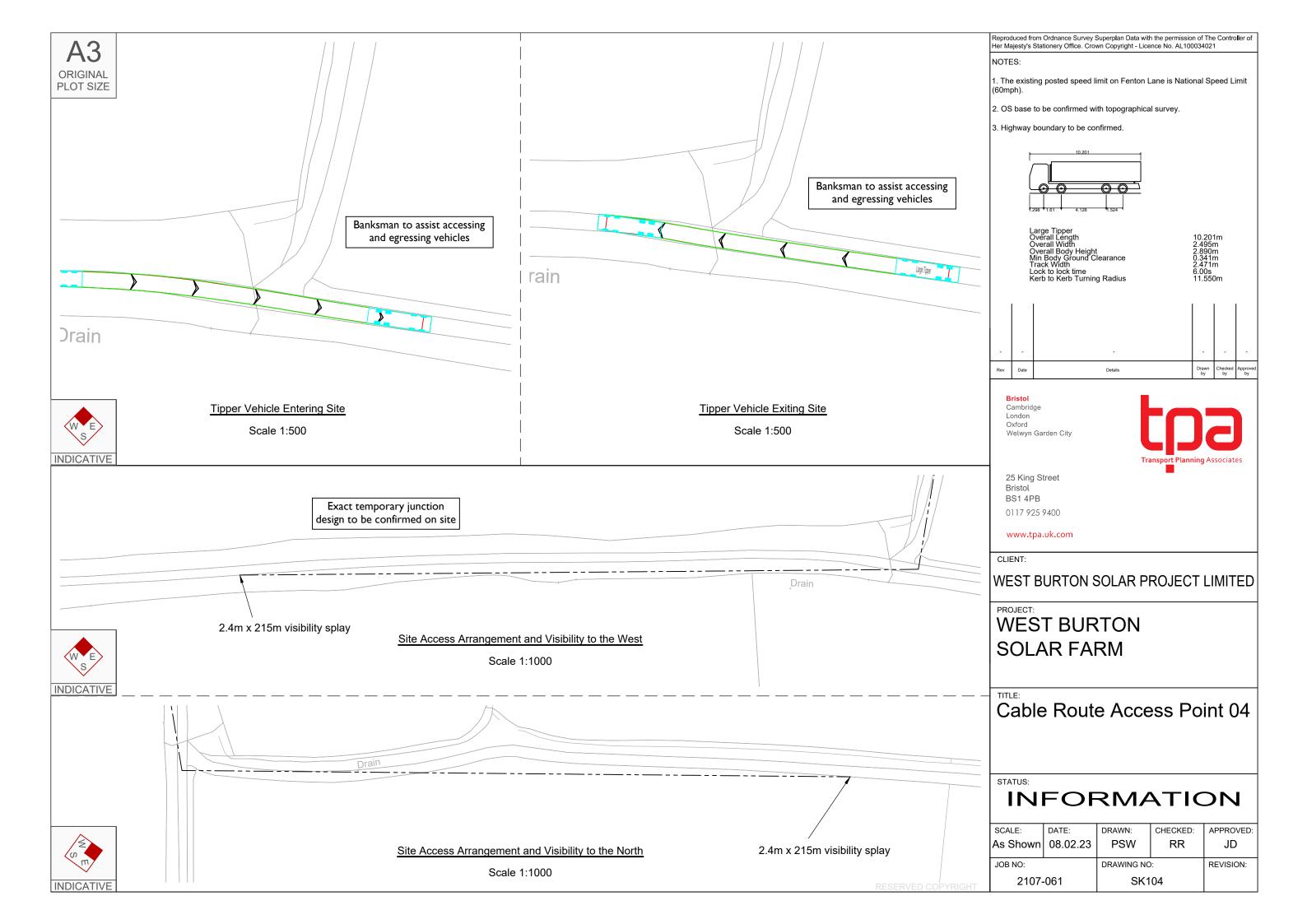
APPENDIX C

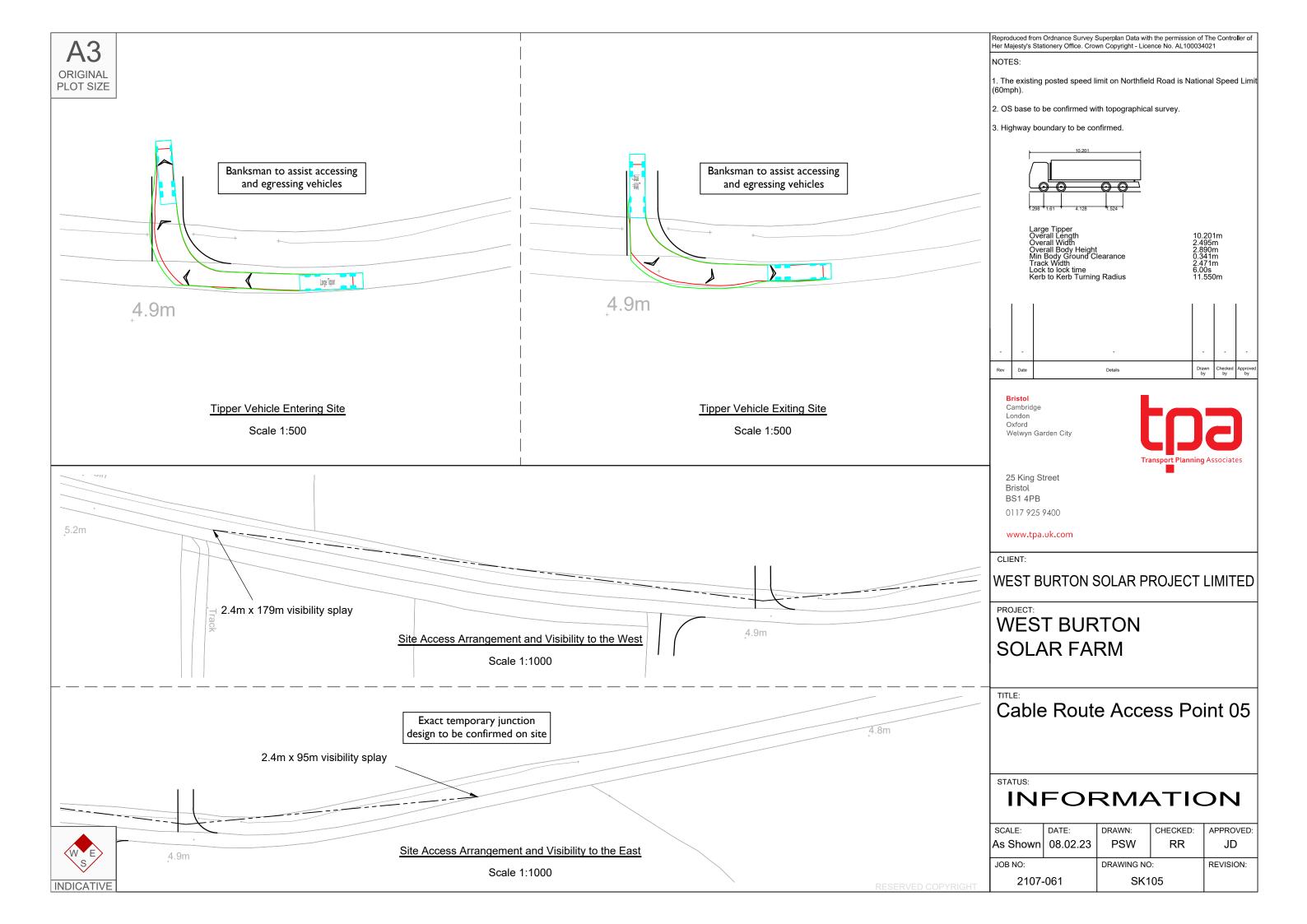


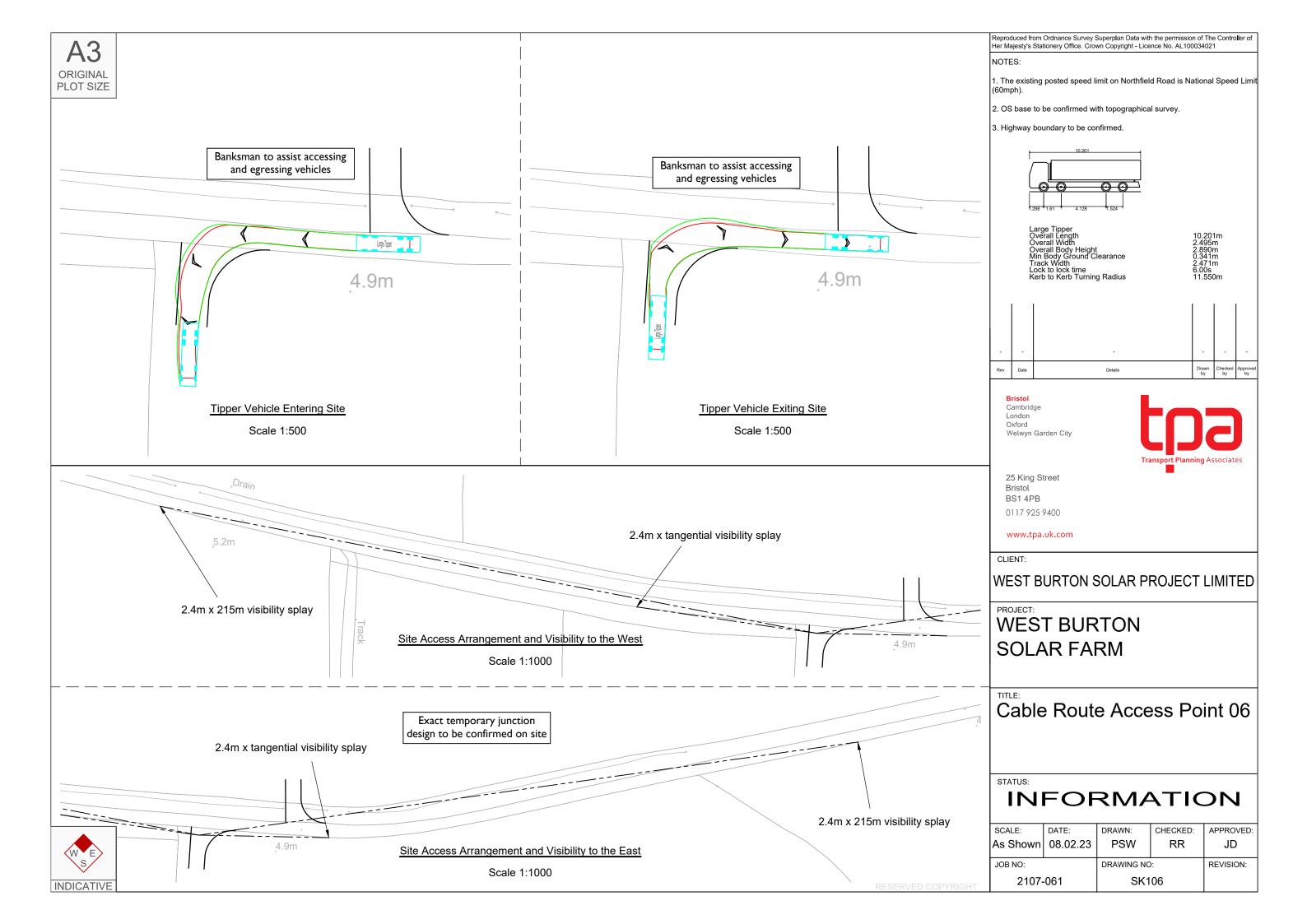


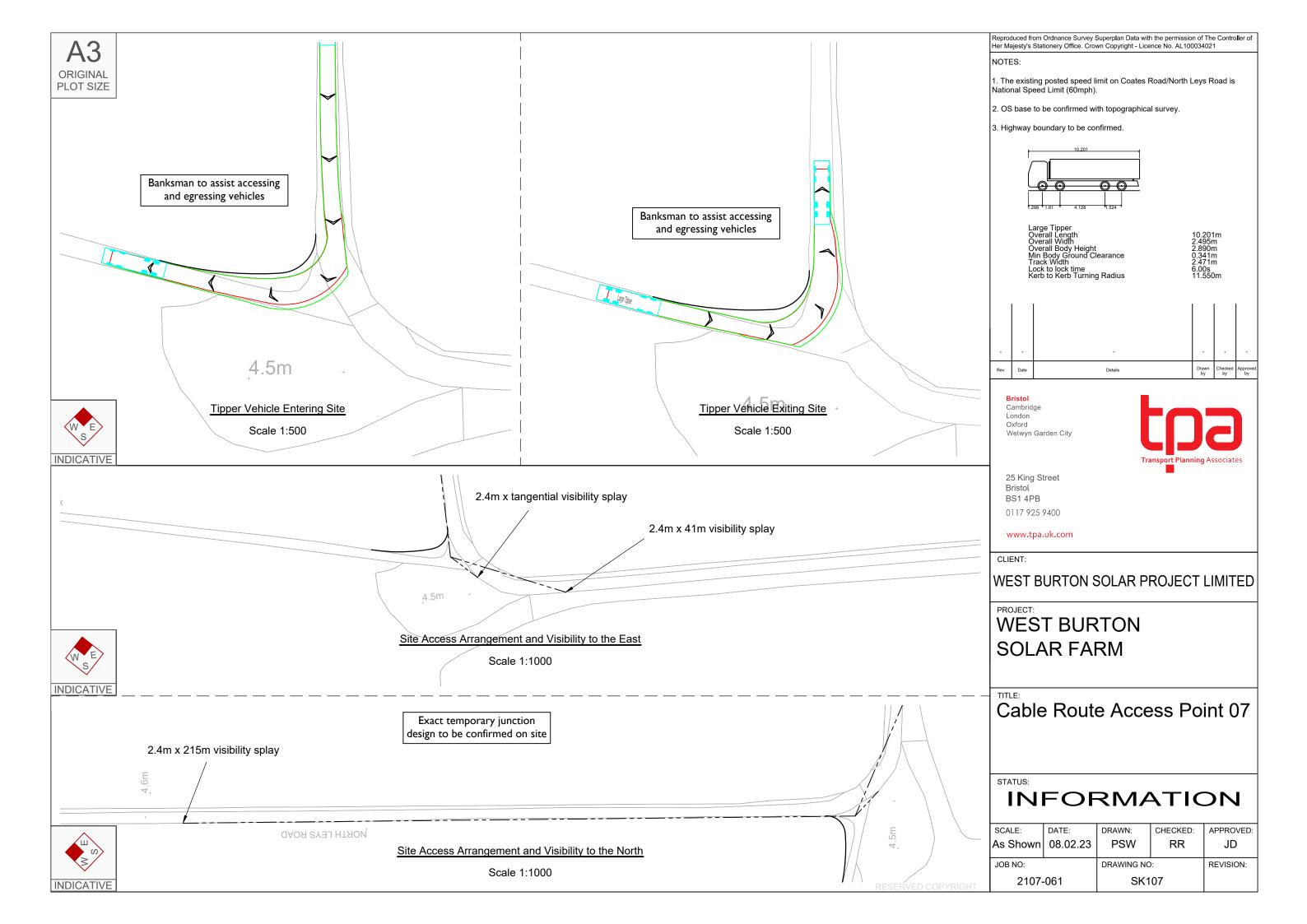


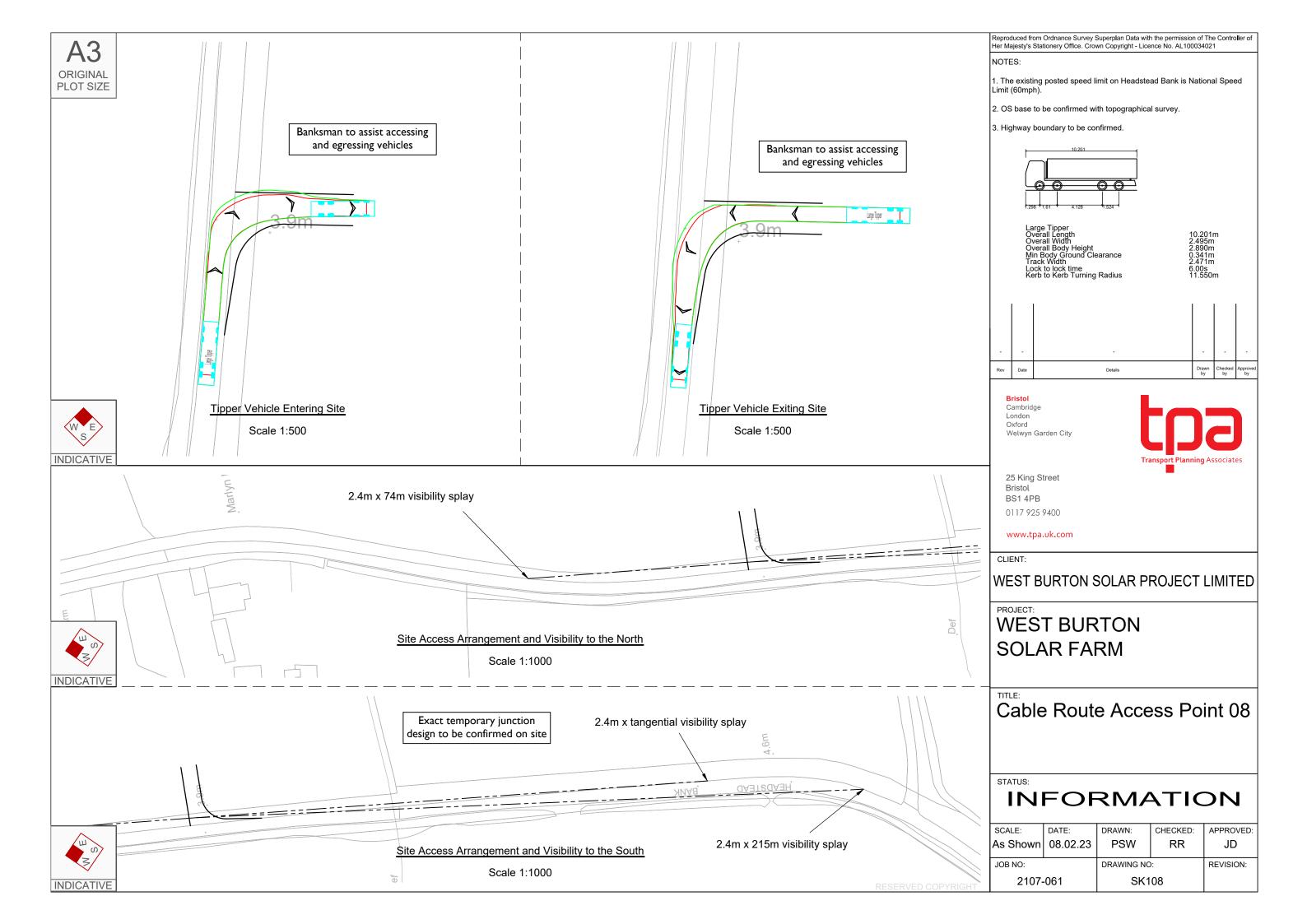


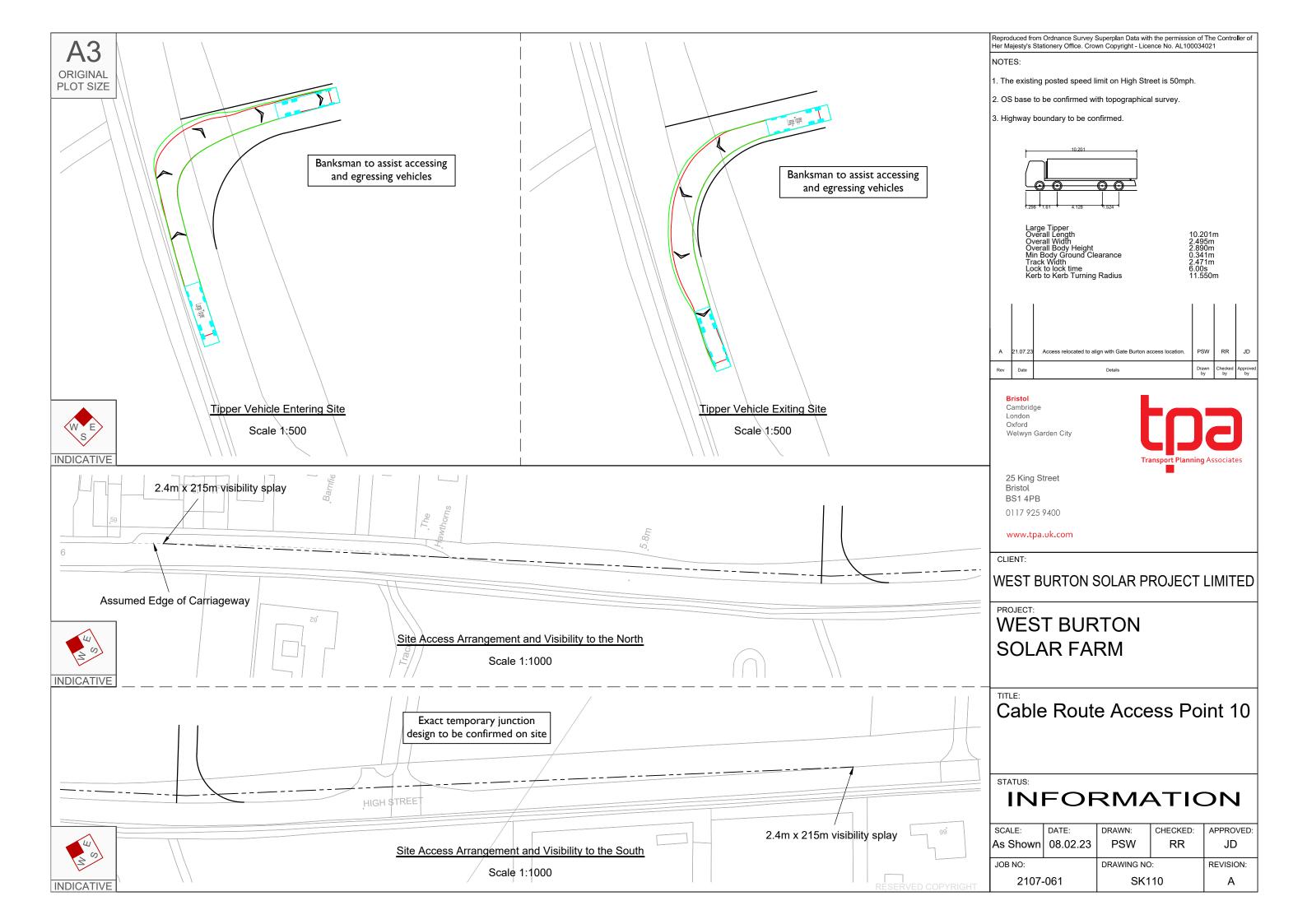


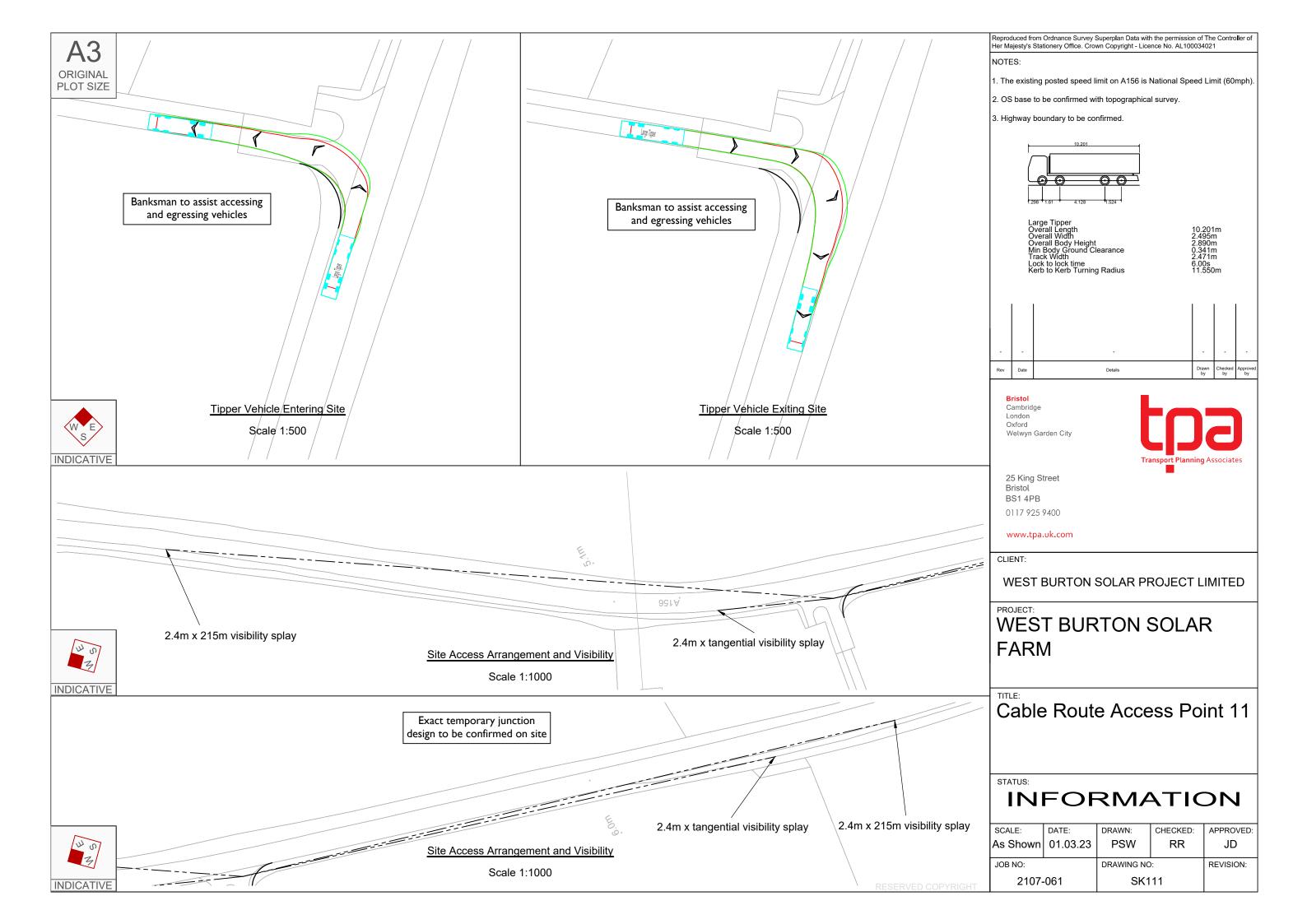


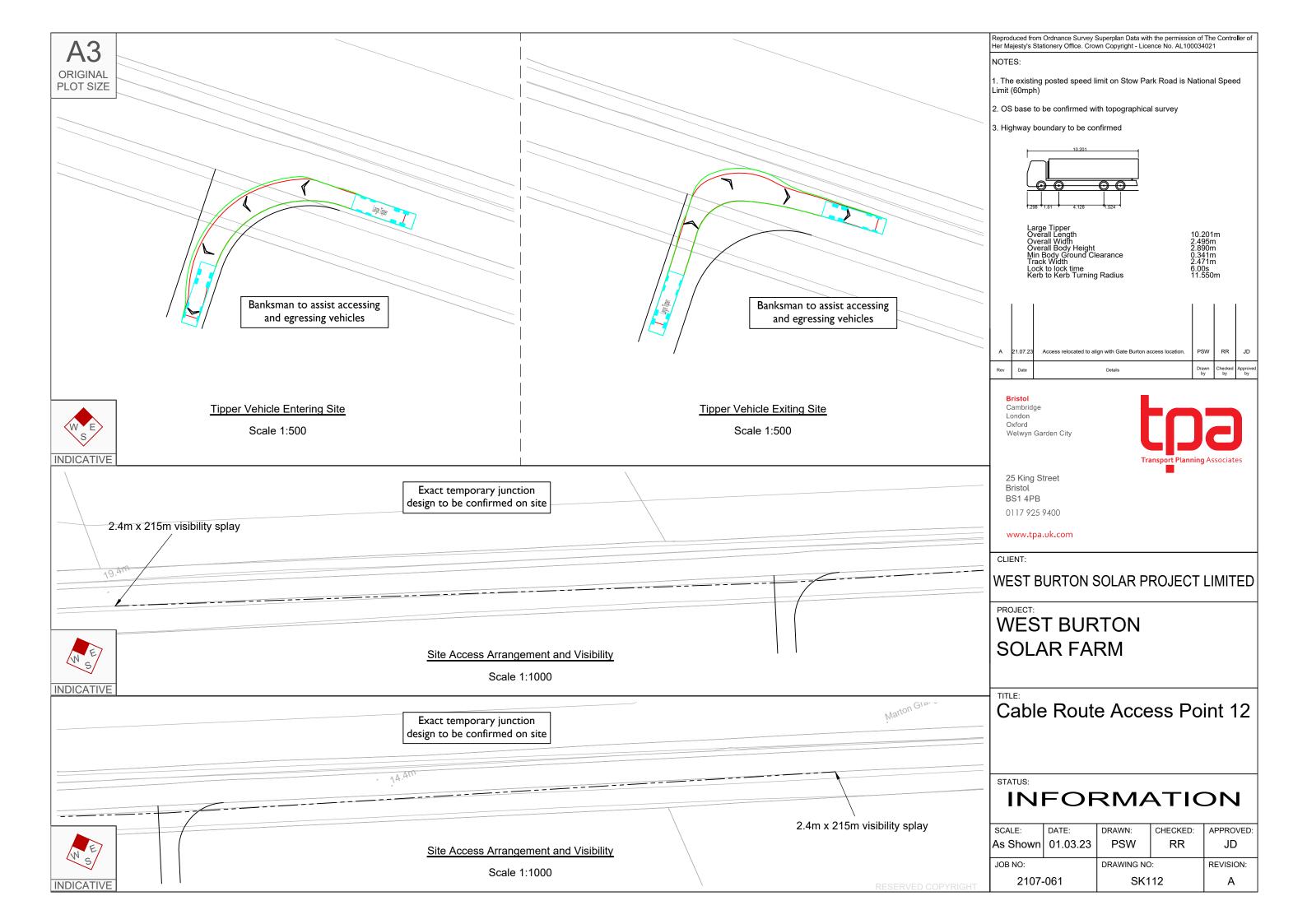


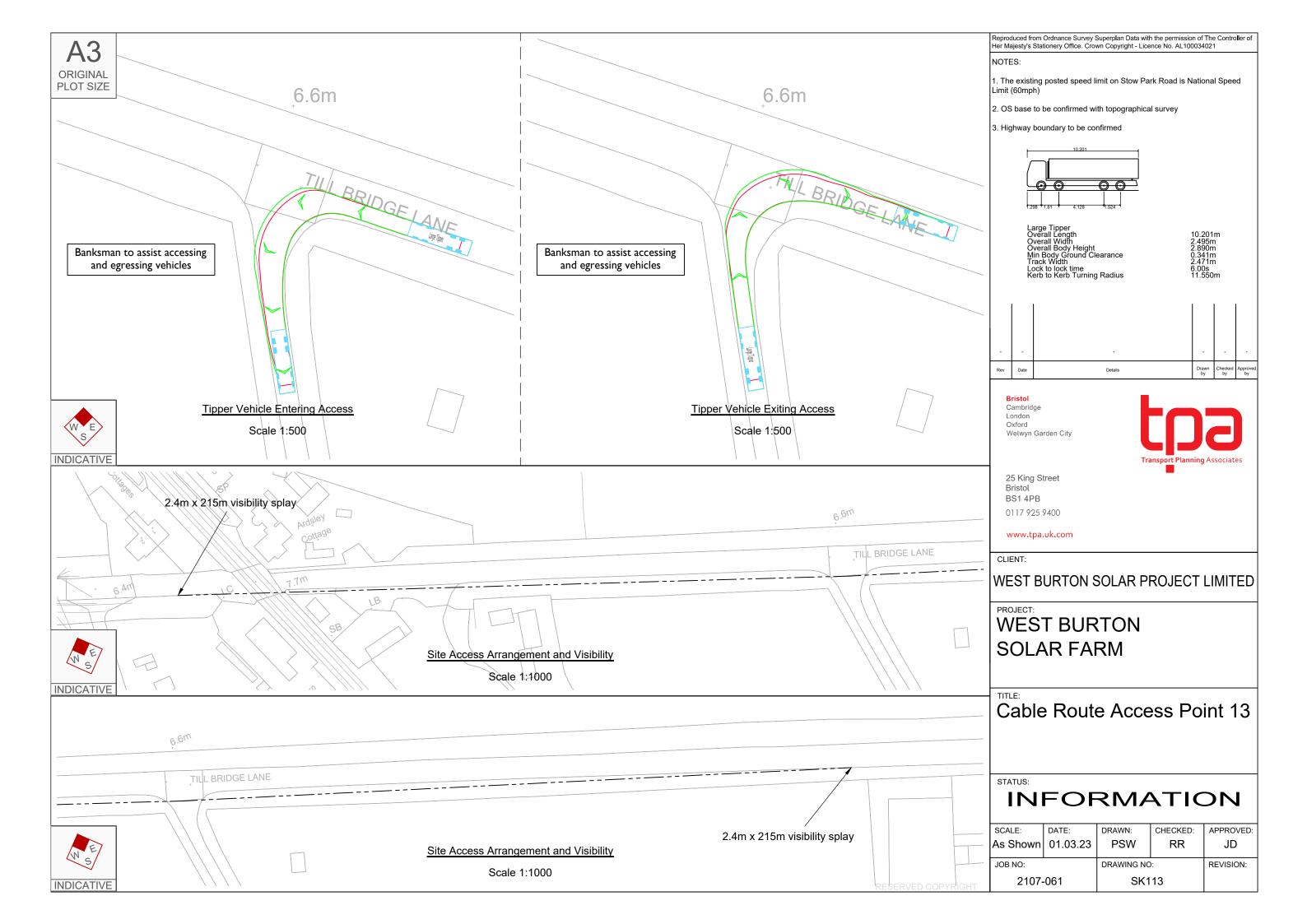


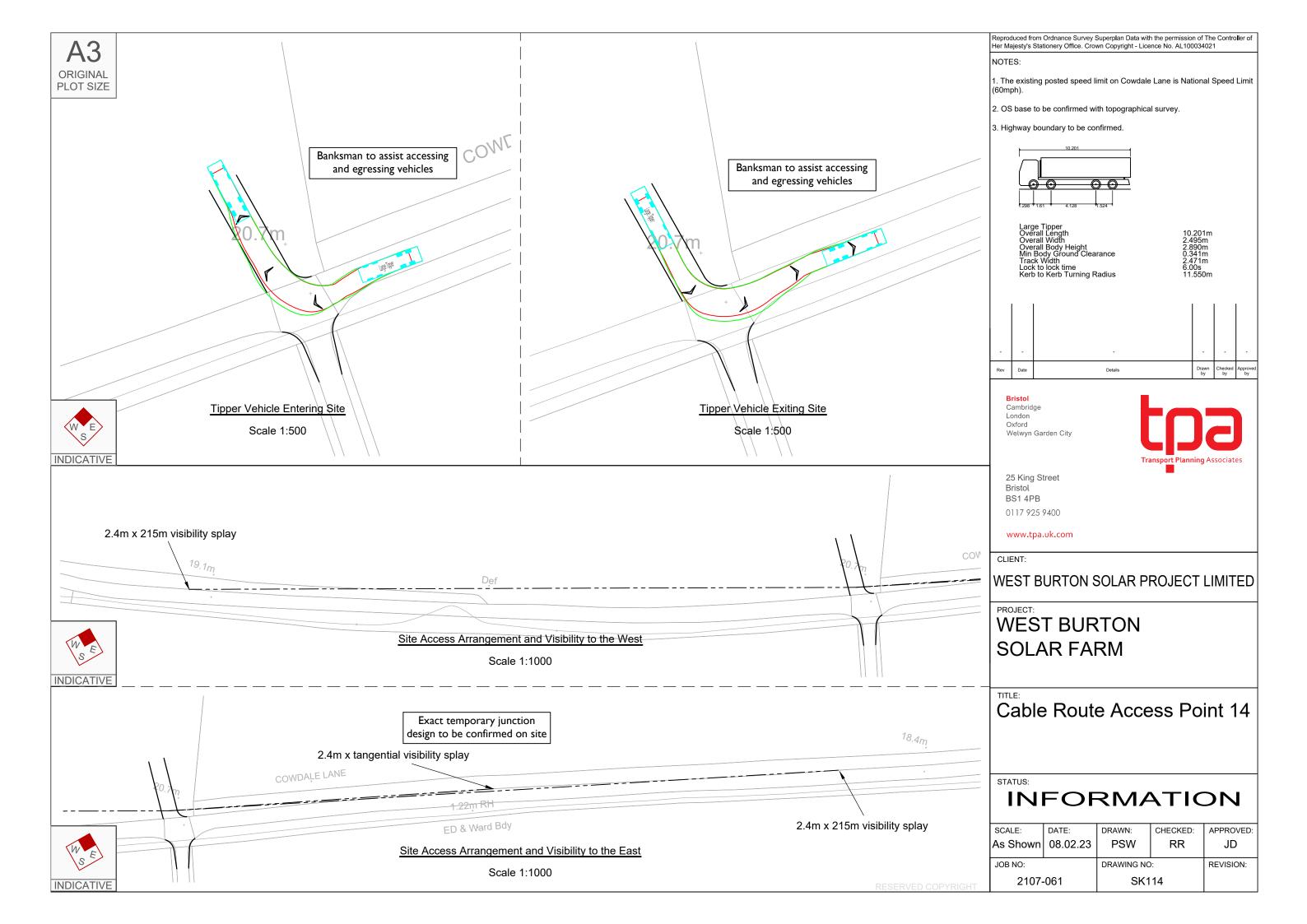


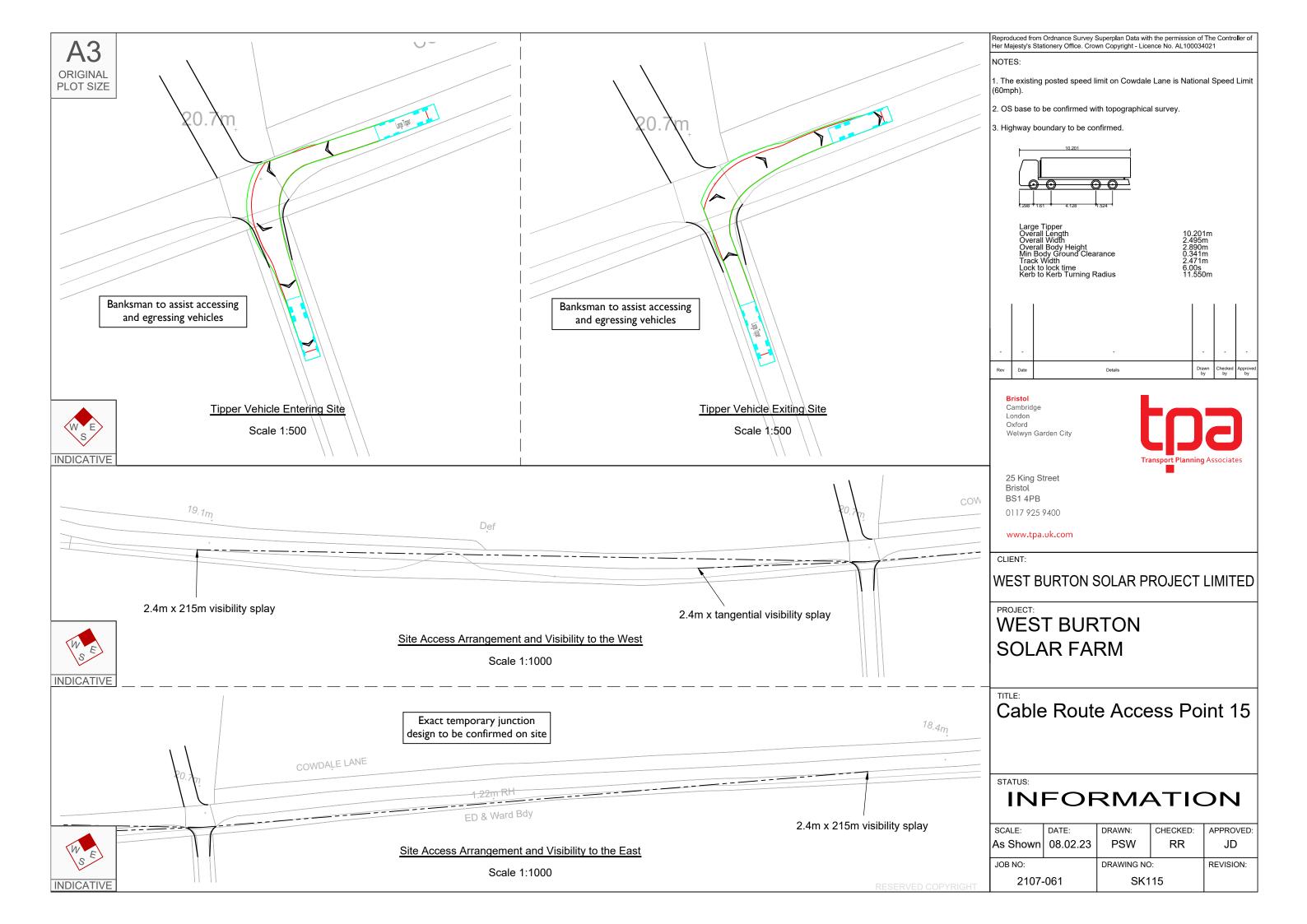


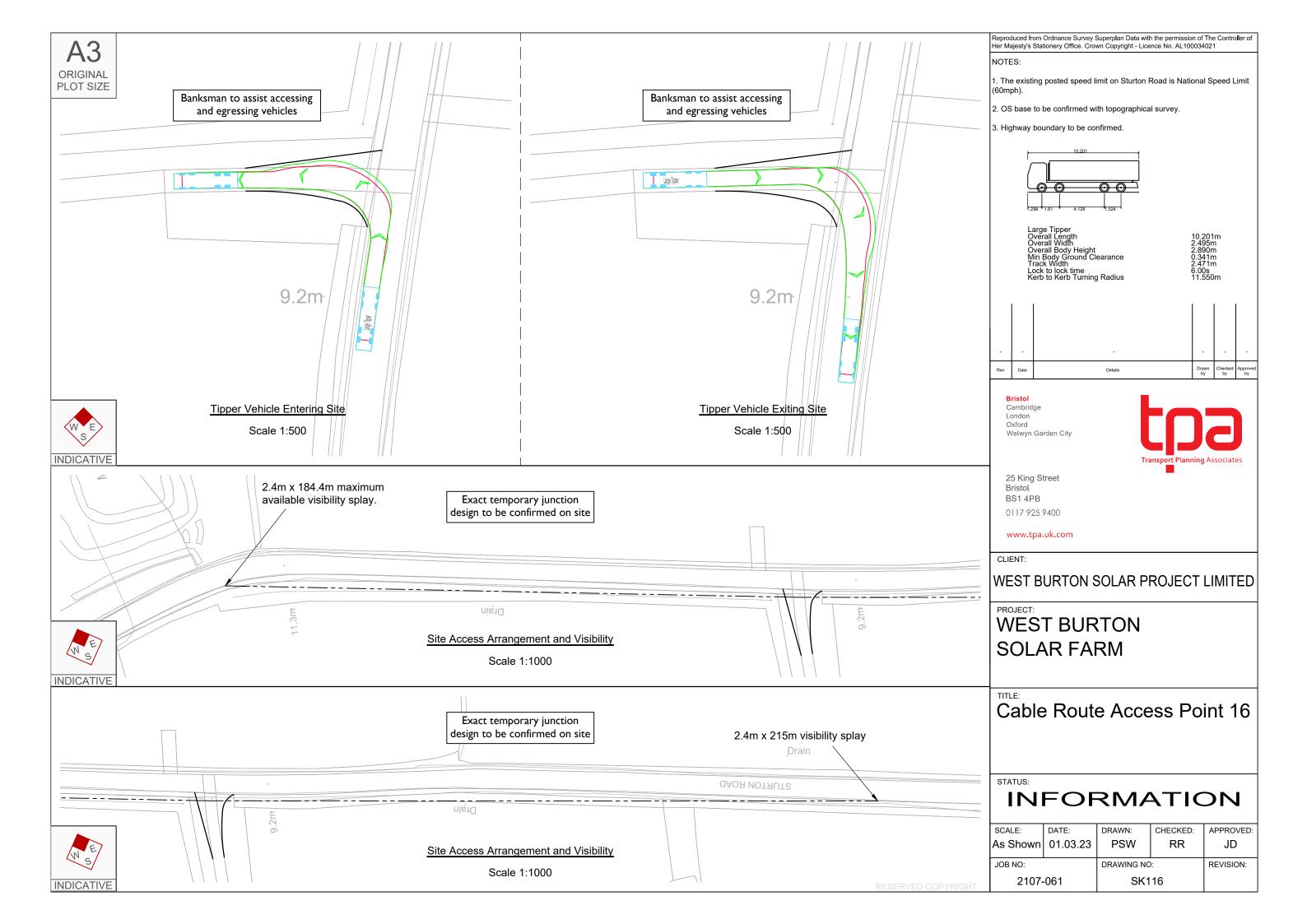


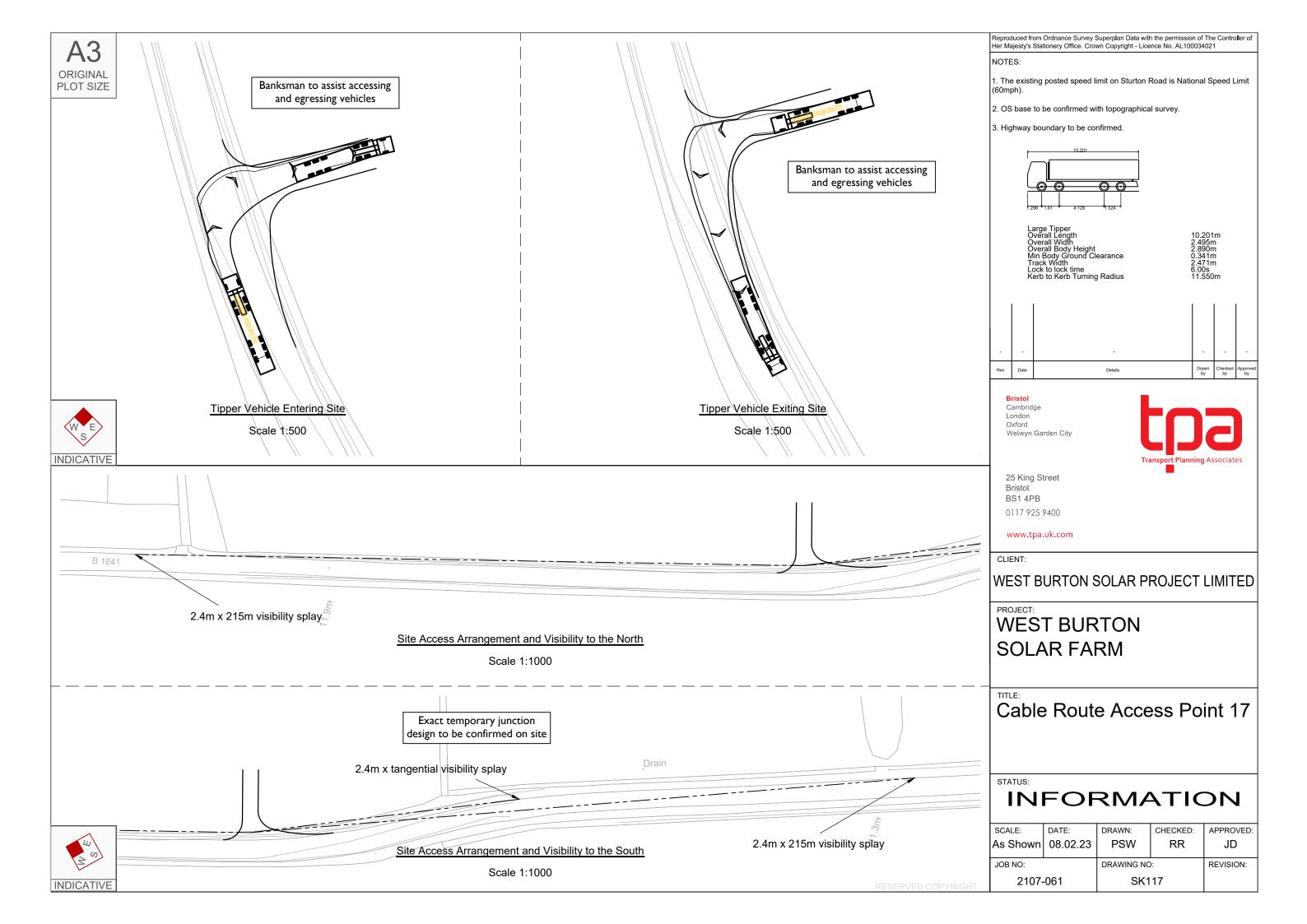


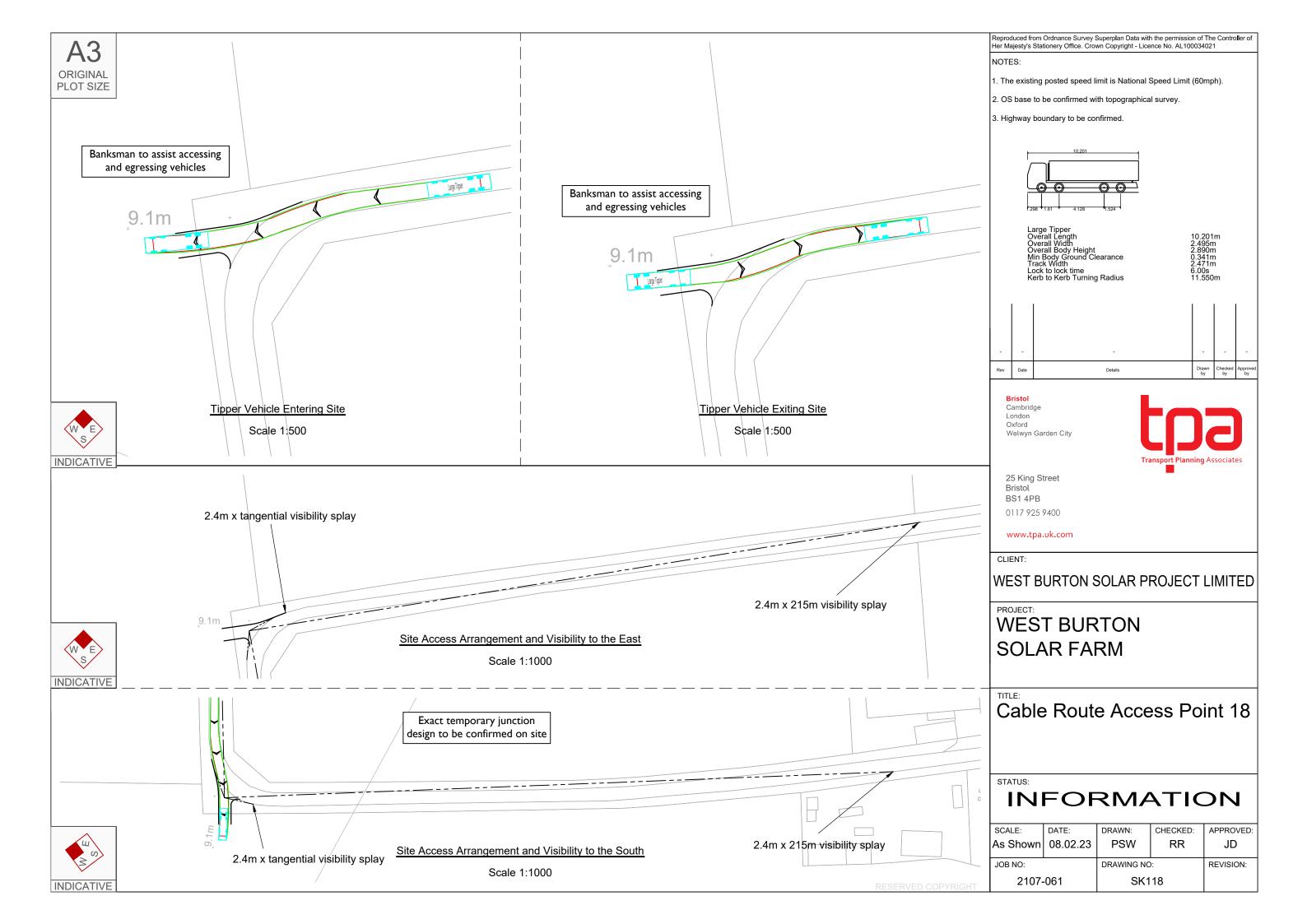


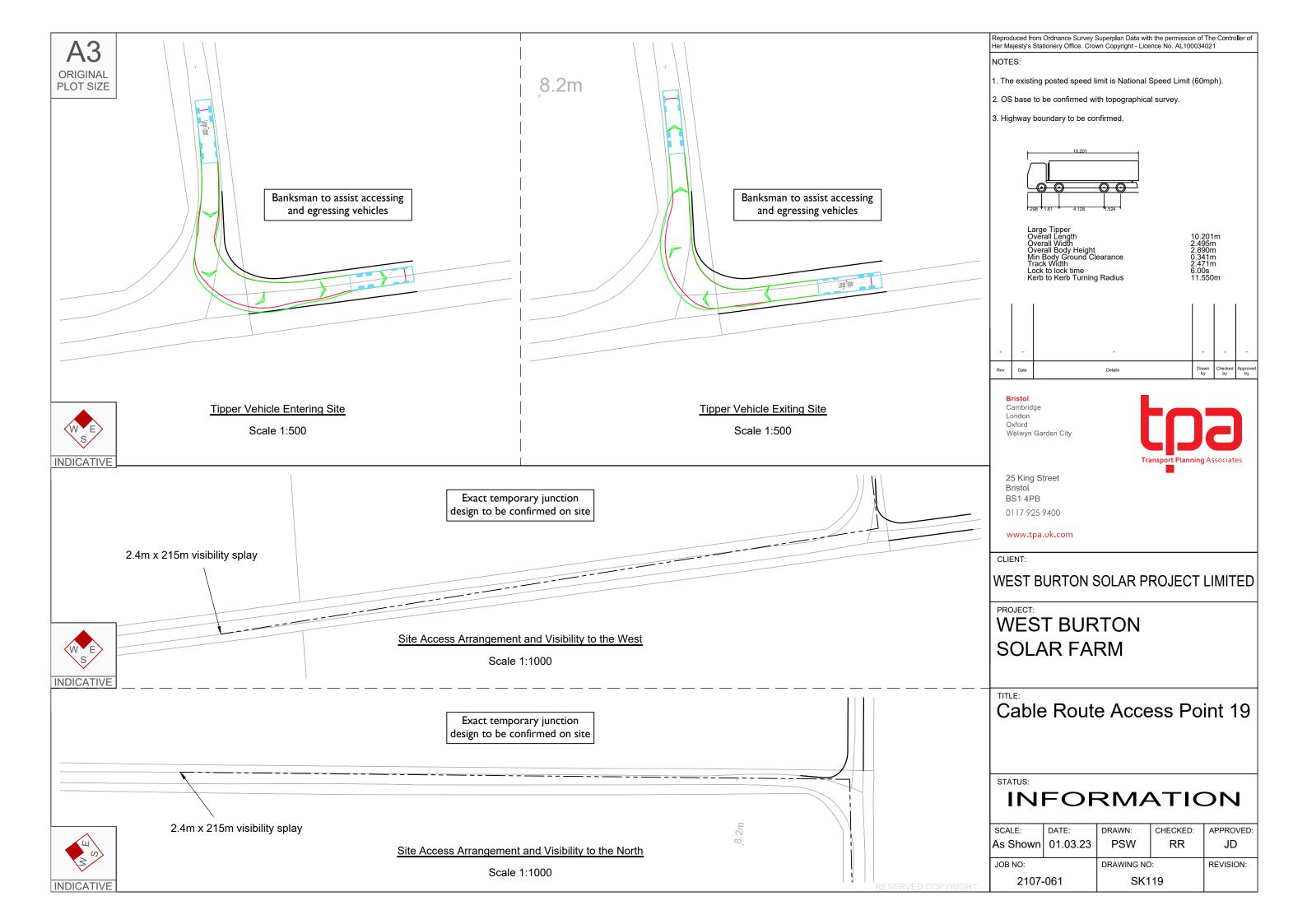












APPENDIX D



West Burton Solar Projects Ltd

West Burton Solar Project, Lincolnshire and Nottinghamshire

Project Reference: 2107-061/TN/01

Construction Worker Travel Plan

25 King Street Bristol BS1 4PB

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1 Introduction

1.1 This Construction Worker Travel Plan (CWTP) has been prepared by Transport Planning Associates (TPA) on behalf of West Burton Solar Project Ltd (the 'Applicant') in relation to an application for a Development Consent Order (DCO) for West Burton Solar Project (hereafter referred to as the 'Scheme'). It supports the Construction Traffic Management Plan which forms **Appendix 14.2** of the **Environmental Statement**. It has been prepared to encourage construction workers to travel to the Site via sustainable modes of transport, where possible, during the construction phase of the proposed development.

Aims and Objectives

- 1.2 Travel planning presents the opportunity to raise awareness of the consequences of travel choices, the benefits of alternatives and the opportunity to minimise the impact of motorised travel on the environment. A Travel Plan can bring the following benefits:
 - To the individual through improved health, reduced stress and cost savings;
 - To the community by the developer demonstrating commitment to environmental priorities and setting an example to others; and
 - To the environment through improved local air quality with less noise, dirt and fumes, which can contribute to other national and global improvements.
- 1.3 The core aims of this Construction Worker Travel Plan are to:
 - Set out the objectives of travel planning at the Site;
 - Set out information on the accessibility of the Site by non-car modes of transport;
 - Set out initiatives and measures to promote accessibility by non-car modes, including the proposed construction worker minibus arrangement; and
 - Set out the management requirements of the Travel Plan.

- 1.4 The following key aims and objectives are identified:
 - To reduce single occupancy car travel by construction workers;
 - To increase car sharing and minibus use;
 - To increase knowledge of the public transport opportunities available to construction workers.
- 1.5 The remainder of this travel plan includes the following Chapters:
 - Chapter 2: Management Strategy; and
 - Chapter 3: Measures.

2 Management Strategy

Roles and Responsibilities

- 2.1 A Travel Plan Coordinator (TPC) will be to be appointed to oversee the implementation of this Travel Plan. The TPC will be responsible for overseeing the implementation of measures and ensuring the objectives set out in **Chapter 1** are achieved.
- 2.2 The responsibilities of the TPC will comprise, but not necessarily be limited to, the following:
 - Implement measures set out in the Travel Plan;
 - Raise awareness of the Travel Plan; and
 - Provide advice to construction workers regarding sustainable travel.
- 2.3 It is anticipated that the TPC will be the Construction Site Manager (CSM) or a member of the project management team.

3 Measures

3.1 A number of measures have been identified that will be implemented in order to help achieve the objectives of this Travel Plan. The main objective is to reduce single occupancy vehicle travel to the Site by construction workers. A summary of the proposed measures is provided in **Table 3.1** below.

<u>Table 3.1 Proposed Travel Plan Measures</u>

Item	Measure	Responsible
1	Establish car shame scheme for construction workers, including a 'guaranteed lift home' policy (details below).	TPC
2	Arrange on-site facilities for workers, such as storage lockers for equipment.	Contractor
3	Provide a map with identified cycling routes to the Site on a noticeboard in communal areas.	TPC
4	Provide bus timetable information and bus routes to the Site on a noticeboard in communal areas.	TPC
5	Provide emergency cycle repair kit on-site.	TPC
6	Provision of construction worker shuttlebus (details below).	Contractor
7	Encourage travel outside of highway network peak hours.	TPC
8	Encourage use of electric vehicles (EV).	TPC
9	Appointment of Travel Plan Coordinator.	Project Management Team

3.2 The measures outlined in **Table 3.1** will be continuously reviewed by the TPC to ensure they remain effective in encouraging travel to the Site by non-car modes.

Car Share Scheme

3.3 There is potential for car sharing to also occur between construction workers, especially if they are travelling from the same origin place to the Site.

- 3.4 The TPC will be responsible for determining which staff members may benefit from car sharing and form car sharing group for the Site for workers to communicate availability and schedule car shares between each other.
- 3.5 The TPC will promote a car-sharing scheme throughout the construction program. The TPC would also make construction workers aware of existing car sharing schemes such as liftshare.com/uk.

Construction Worker Shuttlebus

3.6 It is anticipated the majority of non-local construction workers will stay at local accommodation and be transported to Site by shuttlebus. This can be used by local workforce as well. This aids to further reduce single occupancy vehicle travel to the Site, the appointed contractor and TPC will be responsible for organising a shuttlebus for construction workers.

Monitoring

3.7 The uptake of travel plan measures will be continuously monitored by the TPC. Additional measures will be provided as appropriate.