



JBM Solar Projects 8 Ltd

Padbury Brook Solar Farm

Transport Statement

111299

NOVEMBER 2022





RSK GENERAL NOTES

Project No.: 111299-TS (0.1)

Title: Padbury Brook Solar Farm, Transport Statement

Client: JBM Solar Projects 8 Ltd

Date: 15 November 2022

Office: Manchester

Status: Final

Author	<u>S Ferguson</u>	Reviewer	<u>I Wickett</u>
Date:	<u>15/11/2022</u>	Date:	<u>15/11/2022</u>

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1 INTRODUCTION

RSK has been instructed by JBM Solar Projects 8 Ltd to produce a Transport Statement (TS) for the proposed erection of a 44 MW Solar PV Array and Battery Storage Development at land near Stratton Audley, Cherwell District, Oxfordshire.

1.1 Site location

The application site is located approximately 1km north of Stratton Audley and 6km north of Bicester within the Cherwell District, Oxfordshire. The site is bounded by agricultural land and has an area of 59.4 hectares.

The site location can be seen locally in Figure 1.1 below.

Figure 1.1: Site location plan



Source: Google 2022

1.2 Purpose and Structure of report

This report describes the effects that the construction phase of the proposed solar farm is likely to have on traffic flows within the local highway network. The measures outlined in this TS will also be supported by a Construction Traffic Management Plan (CTMP), which is appended to this document (Appendix 4).

Once operational, it is anticipated that the site will be unmanned and only encounter low levels of traffic with a maximum of one or two visits per month for regular maintenance and inspection purposes. Therefore, there will be no long-term operational changes occurring as a result of the development.

The following report summarises the findings of this study and is structured as follows:

- Chapter 2 describes the existing highway network and baseline traffic conditions;
- Chapter 3 details the development proposals, including the site access arrangements and the primary route for construction traffic;
- Chapter 4 discusses the possible environmental impacts of the development; and
- Chapter 5 provides our summary and conclusions.

2 BASELINE CONTEXT

2.1 Surrounding highway network

It is proposed that the site will be accessed from an existing farm access off an unnamed road which bounds the southern portion of the site. The closest roads to the site which form part of the strategic highway network include the M40 and the A421, offering the primary route for construction traffic accessing the development. It is anticipated that 50% of construction traffic will originate from the M40, and 50% from the A421. It is anticipated that the largest volume of traffic will be associated with the construction phase of the project, and will take the following routes:

2.1.1 M40 construction traffic route

- Loads will leave the M40 at junction 9, and take the third exit onto the A41
- Traffic should continue on the A41 for approximately 5.5 km, following the signs for Aylesbury and Bicester at the first roundabout, and following signs for Aylesbury at the second
- At the third roundabout, loads will leave the A41 and take the second exit towards the A4421
- Traffic should travel along the A4421 as part of Bicester's eastern ring road, for approximately 4km, following directions to remain on the A4421 at each of the 5 roundabouts along this stretch
- Loads should then journey northbound for approximately 4km before turning right onto the unnamed access road
- Finally, loads will travel along this road, continuing straight at the cross-roads with Mill Road, and turn left into the site

The same route should be used by construction traffic when leaving the site, but in reverse.

2.1.2 A421 construction traffic route

- Loads will leave the A421 and take the exit towards Bicester
- Traffic will then continue southbound for approximately 5.5km before turning left onto the unnamed access road
- Finally, loads will travel along this road, continuing straight at the cross-roads with Mill Road, and turn left into the site

The same route should be used by construction traffic when leaving the site, but in reverse.

2.1.3 Unnamed access road

The unnamed access road is a rural road that bounds the southern portion of the site. The road is single-track (with passing places) and runs in an east-west direction. To the west, the road links to the A4421, and to the east, the road journeys towards Pembridge Farm. Within the site vicinity, the road operates at national speed limit and is approximately 6m in width.

2.1.4 A4421

The A4421 is a two-way single carriageway (with a small section of dual-carriageway at its southern end) which runs in a north-south direction and forms the eastern part of Bicester's ring road. To the south, the road connects to the A41, and to the north, the road connects to the A421.

In the context of the development, the road is accessible to the west of the site, connecting to the unnamed access road via a priority junction. The road also operates at 50mph.

2.1.5 A421

The A421 is a two-way road, with sections of dual and single carriageway, and is located to the north of the proposed development. The road runs in an east-west direction, connecting to the A43 to the west, and the M1 at junction 13 to the east. The road also operates at national speed limit.

2.1.6 A41

Within the vicinity of the site, the A41 is a two-way single carriageway (although has sections of dual carriageway) and is located to the south of the proposed development. The road runs in a north-west to south-east direction and runs between London and Birkenhead. Local to the site, the road connects to the M40 at junction 9 and the A34 at a four-arm roundabout, approximately 10km south-west of the development. The road also operates at national speed limit.

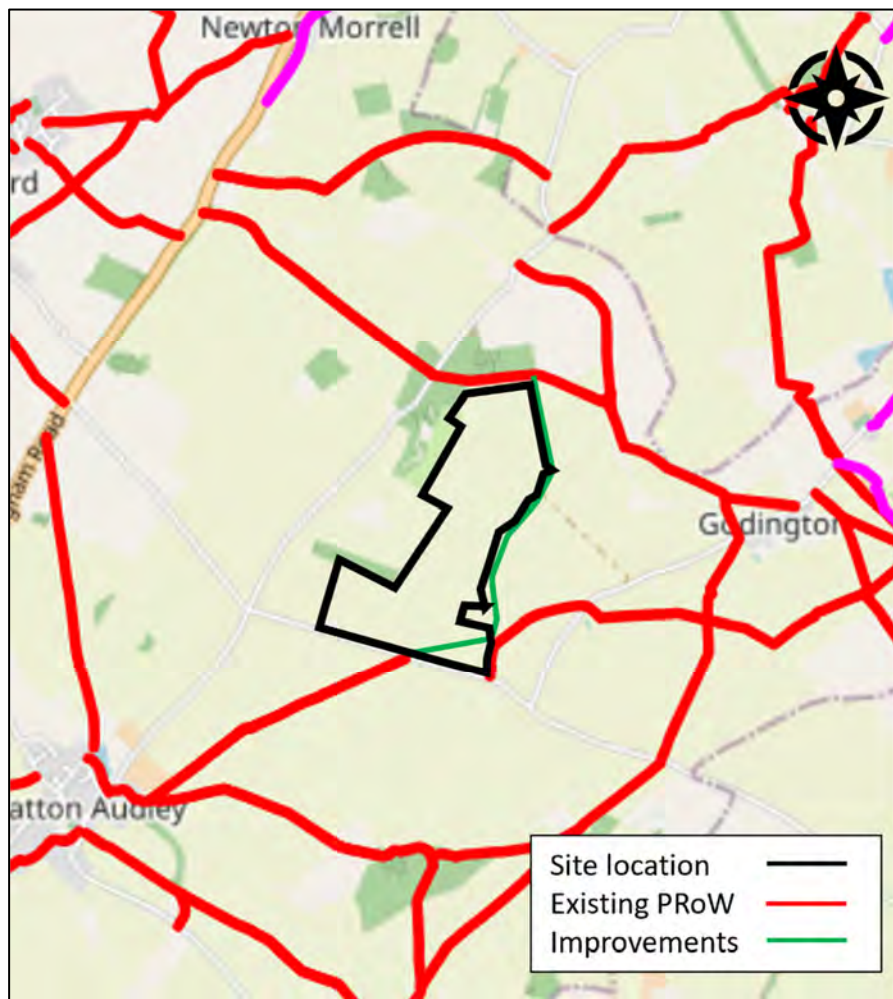
2.1.7 M40

The M40 is a motorway that connects London, Oxford and Birmingham and is located approximately 10km south-west of the site at junction 9. The road therefore offers an important connection to the wider highway network.

2.2 Public Rights of Way

There are existing Public Rights of Way (PRoWs) within the vicinity of the site. These can be seen in Figure 2.1 below. It should be noted that the proposed development provides a potential opportunity to improve the local provision by creating a new footpath link between the footpaths to the north and south of the site. The potential improvements are highlighted in green.

Figure 2.1 Local PRoWs



Contains Open Street Map data © Crown copyright and database right 2022

2.3 Accident analysis

A review of accident data covering the most recent 5-year period available using DfT collated data has been undertaken. This covers the years 2017-2021 and provides GIS-based data, including the date of the accident, the number of vehicles involved, the number of casualties and the severity of any injuries resulting from the incident.

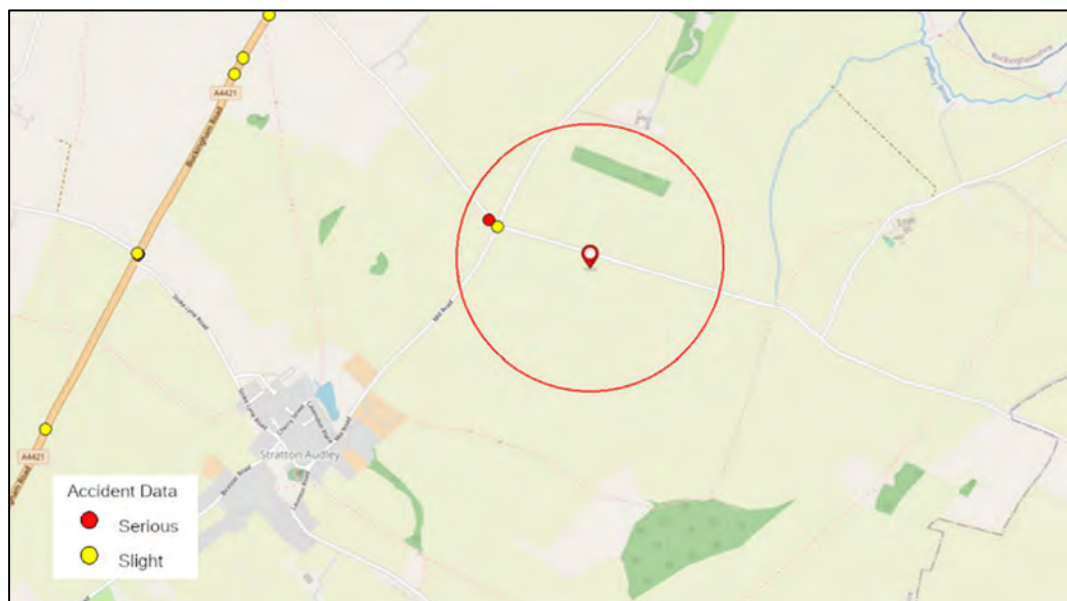
The study area (displayed in Figure 2.2 below) is a 500m buffer positioned from the indicative location of the site access, and includes a total of two accidents, both occurring on the cross-roads with Mill Road to the west of the site. One was classified as serious, and the other classified as slight in severity.

The serious incident occurred in 2021. As a motorcyclist was going ahead at a right-hand bend, they suffered a serious injury at the motorcyclists nearside.

The slight incident occurred in 2019 during wet conditions. As a car was going ahead, another car was going ahead at a right-hand bend. This resulted in a front-nearside collision and slight injuries to one of the drivers.

Overall, the data shows that there are no existing highway safety issues that would impact the development. It is also important to note that one of the incidents occurred in adverse conditions which would have increased vehicle stopping distances, hence increasing the likelihood of a crash.

Figure 2.2 Accident analysis study area



Source: ArcGIS

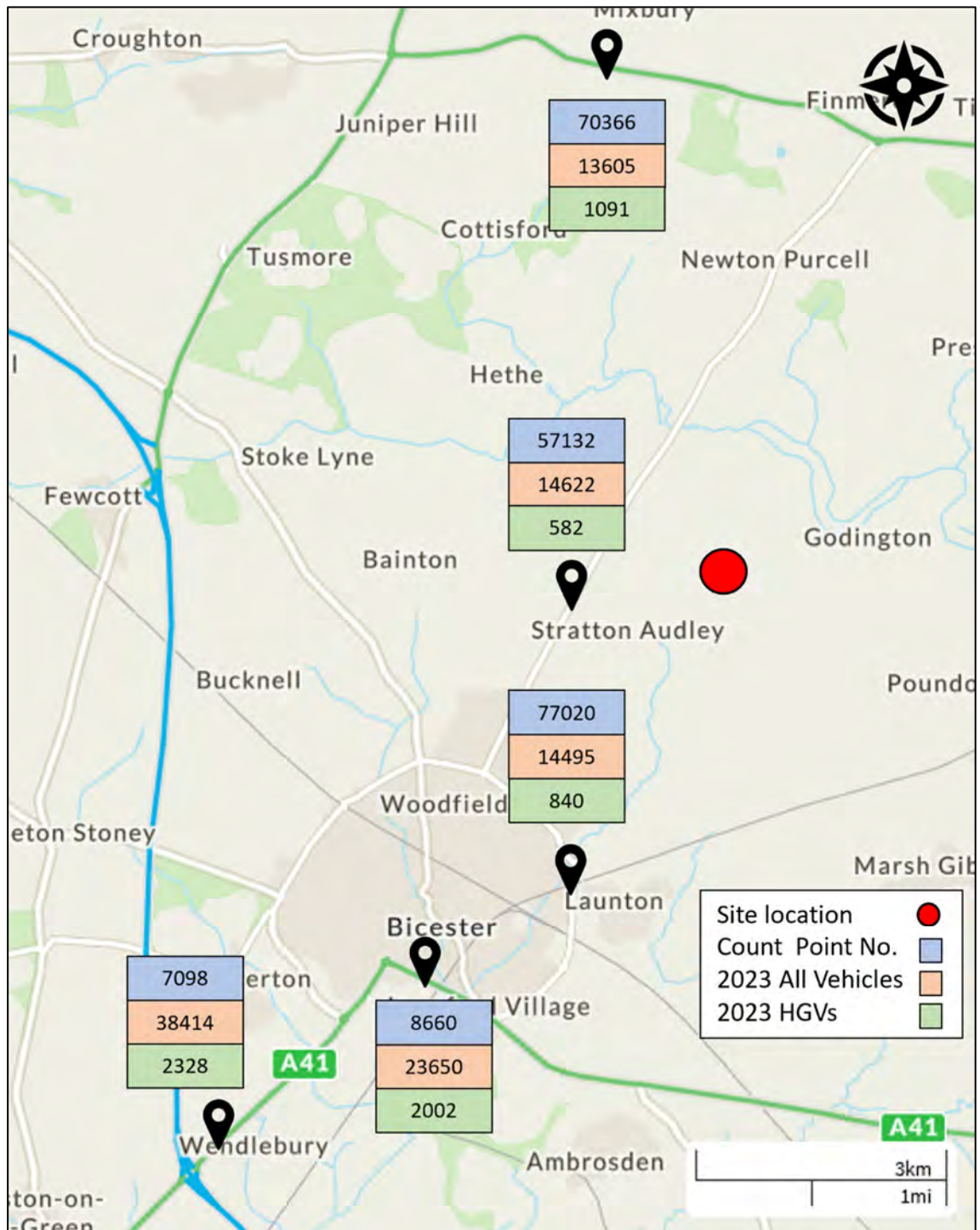
2.4 Existing traffic

In order to consider the possible effects of construction traffic on local traffic, Department for Transport (DfT) traffic data has been examined. There are five count point locations, which can be seen in Figure 2.3 overleaf.

DfT traffic flows have been extracted for the year 2018 and 2016 (as these are the years that count data is available). To provide robust baseline data for this assessment, the data has been forecasted to 2023 – as this is the likely year of construction - using TEMPro growth factors for the local area.

Figure 2.3 below highlights where each count point is located, whilst Table 2.1 summarises these results.

Figure 2.3 Count point locations



Contains Ordnance Survey data © Crown copyright and database right 2022

Table 2.1 DfT traffic flows

Count Point Location	DfT Baseline Flows			2023 Forecasted		
	All vehicles	Total HGVs	% HGVs	All vehicles	Total HGVs	% HGVs
A4421 N (Count Point No. 57132)	13204	526	4%	14622	582	4%
A4421 S (Count Point No. 77020)	12673	734	6%	14495	840	6%
A41 N (Count Point No. 8660)	21727	1839	8%	23650	2002	8%
A41 S (Count Point No. 7098)	34748	2106	6%	38414	2328	6%
A421 (Count Point No. 70366)	11686	937	8%	13605	1091	8%

3 PROPOSED DEVELOPMENT

The development involves the installation and operation of a renewable energy generating station comprising ground-mounted photovoltaic solar arrays and battery storage containers, together with substation, switchgear container, inverter/transformer units, Site access, internal access tracks, security measures, access gates, other ancillary infrastructure and landscaping and biodiversity enhancements. A temporary construction compound will also be erected, located to the south of the site, to the north of the site access.

3.1 Site access

The site will be served by an existing access off an unnamed road which bounds the southern portion of the site. It is proposed that a temporary speed reduction of 40mph during the construction period is put in place as well as provide a banksman in order to guide the construction vehicles out of the site. This will achieve the required visibility along the site frontage without the need for significant hedgerow removal. The indicative access junction, Swept Path Analysis and visibility drawings are illustrated at Appendix 3.

The traffic generated as a result of the development during its operational phase will be similar to the existing volume of agricultural traffic as it will require infrequent maintenance and monitoring visits. As part of the proposals, the site would include a temporary construction compound, located to the north of the site access.

During construction, the access will be managed to ensure that no conflicts occur between incoming and outgoing vehicles. The dominant type of material arriving at site will be the solar panel modules, which will arrive via a single transport provider and at a rate that matches the rate of installation to avoid stockpiling on site. This will result in a 'drip feed' of HGVs to and from the site, evenly spaced and with adequate time between deliveries to avoid two-way construction traffic along the approach roads.

3.2 Construction traffic

Construction traffic associated with the development will comprise HGVs delivering construction materials and installation components associated with the solar array and other vehicles associated with staff and visitors.

Traffic volumes are quoted as two-way, which refers to the total two-way movement of vehicles on a specific road link or at the site. For example, 10 arrivals and 10 departures equal 20 two-way movements.

3.3 Construction programme

It is envisaged that the construction works will take 6 months, with 22 working days per month. It is anticipated that HGV traffic volumes will be highest during months 1, 3, 4 and 6, with the lowest volumes of HGV traffic in month 5.

The construction process is relatively simple and repetitive with off-site pre-fabrication and assembly, allowing large volumes of modules to be installed on a daily basis. This minimises the number of deliveries to site and maximises control over vehicles travelling to and from site.

3.3.1 Site mobilisation and demobilisation

The site will initially require delivery of plant, equipment, construction materials and welfare units, in preparation to build the site compound. It is envisaged that this will generate around 30 HGV movements (two-way) in the first month. Upon completion of works the site will be demobilised generating another 30 two-way vehicle movements during the last month of the programme.

3.3.2 Access tracks and construction compound

The proposals will comprise the construction of internal access tracks to enable construction and future maintenance, and the construction of a temporary site compound.

The construction compound will provide adequate space for car parking, storage of materials, welfare/offices and unloading. In addition, access tracks would be constructed within the site to provide vehicular access for the panel installation. During the operation of the site, no car parking spaces will be required as there will be infrequent visits to the site for maintenance purposes only. It is anticipated that maintenance vehicles will use the access tracks to reach the different sections of the solar farm.

The total access track area will be approximately 11,000m². The access track will be, on average, 4m wide and constructed to a depth of 0.25m. This equates to a volume of 2,750m³ of required aggregate type 1. In addition, the estimated temporary site compound area is 5,625m², which will also be constructed to a depth of 0.25m, equating to a volume of around 1,406m³ of aggregate type 1. Therefore, the total estimated combined volume is 4,156m³ which will be transported to the site in tipper trucks with capacity for 15m³. This equates to a total of 558 two-way vehicle movements spread out across the first three months of the programme, or around 186 two-way vehicle movements for each of these months. There will also be an additional 188 two-way vehicle movements in month 6 to account for the deconstruction of the temporary site compound.

During construction, the access will be managed to ensure that no conflicts occur between incoming and outgoing vehicles.

3.3.3 DNO buildings and cabling

DNO buildings will be constructed once the construction works associated with access track and site compound are completed. This is estimated to be in the second and third months of the programme. A total of 42 two-way HGV movements will be required for the transportation of concrete, plant, electrical equipment and cabling.

3.3.4 Panel frames and transformer inverters

Prior to the installation of the solar panels, frames and transformer inverters would need to be installed. This will take place across two months and each month will require a total of 63 two-way HGV movements. This equates to 126 two-way HGV movements across the two months.

3.3.5 Solar panels

The dominant type of material arriving at site will be the solar panel modules, which will arrive via a single transport provider and at a rate that matches the rate of installation to avoid stockpiling on site. This will result in a 'drip feed' of HGVs to and from the site, evenly spaced and with adequate time between deliveries to avoid two-way construction traffic along the approach roads. The transport and installation of solar panels will require two months.

It is anticipated that a total of 366 HGV two-way movements will be required for delivery of the panels, spread across two months. This equates to 183 HGV two-way movements in each month.

3.3.6 Fuel deliveries

Fuel deliveries will take place with one tanker travelling to the site every month for the duration of the programme. This equates to 2 vehicle movements (two-way) each month.

3.3.7 Staff and visitors

The number of staff and visitors will change throughout the programme with more staff being required during the peak of the construction. It is anticipated that general operatives will be transported to the site by minibus (assumed capacity of 8 general operatives) and that car trips will be limited to senior staff. Around 10 workers will be required on site during the mobilisation/demobilisation stages. Therefore, using the assumptions above, this will generate a total of 132 two-way vehicle movements per month. The remainder of the programme is anticipated to require 20 workers which, based on the above, equates to 264 two-way vehicle movements per month.

3.4 HGV construction traffic volume

Overall, it is anticipated that the programme will generate a maximum of 272 HGV vehicle movements during the third month of the programme. This equates to an average of 13 daily movements in that month. The peak of the HGV construction traffic will take place over months 1, 3, 4 and 6 of the programme and will result in an average 239 of total vehicle movements (two-way) per month or 11 movements per day.

A summary of the anticipated HGV movements associated with the construction programme is shown in Table 3.1 below.

Table 3.1 Anticipated HGV movements (two-way)

Activity	Programme month						Total
	1	2	3	4	5	6	
Site mobilisation	30						30
Access tracks & site compound	186	186	186			188	746
Substation and cabling		21	21				42
Frames and inverters			63	63			126
Solar panels				183	183		366
Site demobilisation						30	30
Fuel deliveries	2	2	2	2	2	2	12
Total per month	218	209	272	248	185	220	1352
Daily average	10	10	13	12	9	10	64

3.5 Operational Traffic

Once operational, the site will encounter low levels of traffic for regular maintenance purposes only. Therefore, it is anticipated that there will be no long-term traffic impact as a result of the proposed development.

4 ENVIRONMENTAL ASSESSEMENT

4.1 Methodology

To assess the likely effect of construction traffic on the local area, the *Guidelines for the Environmental Assessment of Roads Traffic (GEART, 1993)* is considered. As described in Chapter 2, traffic count data from the DfT has been utilised as baseline data.

Information provided by the applicant indicates the predicted traffic generated for the construction phase based on workers and HGV movements. This data has been compared to the DfT data to calculate a percentage change in traffic during the anticipated 16-week construction phase where workers and HGV movements are predicted to peak.

4.2 Construction impacts

4.2.1 Traffic Flows

The rural nature of the road network surrounding the site is factored into the construction traffic impacts, and as such, a specific HGV route has been developed. It is possible to assess the likely impact of construction traffic along this route by comparing the baseline traffic data with the construction traffic data.

These figures have been calculated to give a daily flow. The results of these calculations are as follows;

- Average number of worker movements over 6 months = 10 p/d two-way
- Average number of HGV movements for 16 weeks = 11 p/d two-way

The projected increase in traffic flow along the proposed HGV route from the site is summarised in Table 4.1 overleaf.

Table 4.1 Construction traffic impact estimates

Location	Total All Vehicles	Total HGV Movements	All vehicles % Change	HGV % Change
A4421 N (Count Point No. 57132)	14643 (+11)	594 (+21)	0.1%	2%
A4421 S (Count Point No. 77020)	14517 (+11)	851 (+21)	0.1%	1%
A41 N (Count Point No. 8660)	23671 (+11)	2013 (+21)	0.1%	1%
A41 S (Count Point No. 7098)	38435 (+11)	2339 (+21)	0.1%	0.5%
A421 (Count Point No. 20366)	13626 (+11)	1102 (+21)	0.2%	1%

GEART recognises that the day-to-day variation of traffic on a road is frequently plus or minus 10 per cent. It should therefore be assumed that a projected change in traffic of less than 10 per cent creates no detrimental environmental impact. A 30 per cent change in traffic flow (or HGV flow) represents a reasonable threshold for assessing traffic flow impacts on link roads.

All of the count points exhibit a percentage increase of less than 10%, meaning no further assessment is required.

4.3 Mitigation

4.3.1 Construction

Although there is no discernible effect on the strategic network as a result of the construction stage, a construction traffic management plan (CTMP) will be developed to ensure that HGV's only use appropriate routes to access the site.

In addition to traffic management measures, where there are likely to be impacts to non-motorised users, such as public rights of way crossing access routes, additional signage will be erected to raise awareness for both users and drivers of vehicles. Signage will be erected at the start and end of each road being used by construction traffic to highlight the use by HGVs.

4.3.2 Operation

The operational stage of the project will not lead to any significant increase in traffic compared to existing levels.

5 SUMMARY

RSK has been instructed by ADAS on behalf of JBM Solar Projects 8 Ltd to produce a Transport Statement for the proposed erection of a Solar PV Array of up to 44 MW at land near Stratton Audley, Cherwell District, Oxfordshire.

This assessment provides a summary of the likely increase in traffic flows during the construction and operational periods of the solar farm. Utilising existing traffic data and construction traffic data provided by the client, it is considered this development will have a negligible effect on the local road network.

A number of traffic management measures are available to mitigate the impact of construction traffic during the relatively short 6-month period, which will be adequately secured through a Construction Traffic Management Plan.

The existing strategic road network has sufficient capacity to overcome any concerns raised over temporary increases in HGV and non-HGV construction traffic movements generated during the construction period.

On the above basis, the proposed development is acceptable from a transport perspective.



APPENDIX 1

SITE PLAN

SOFT LANDSCAPE KEY

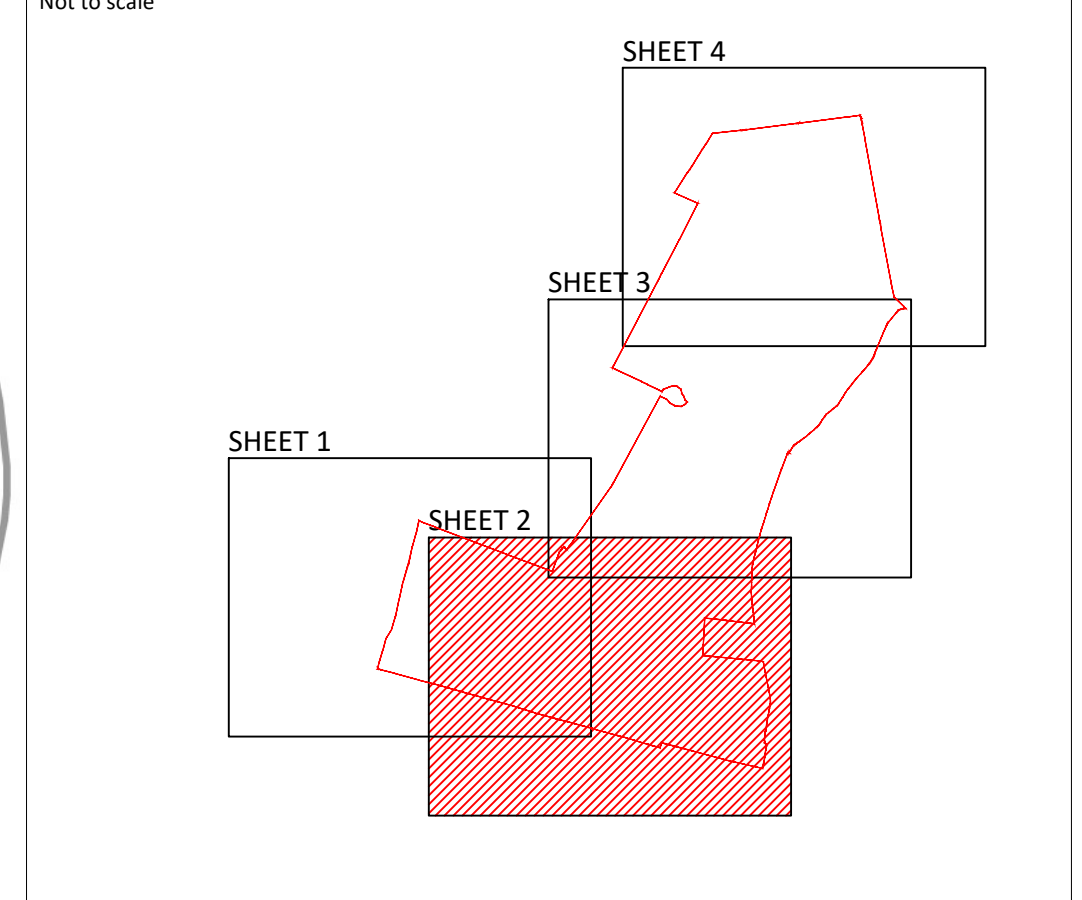
[Red line]	Planning boundary			
[Green area]	Existing trees and vegetation (Showing canopy elements)			
[Green circle]	PROPOSED TREES			
[Green circle]	Species	Common Name		
[Green circle]	Acer platanoides	Field Maple		
[Green circle]	Prunus domestica	Stone Peach		
[Green circle]	Malus domestica	Crab Apple		
[Green circle]	Malus domestica	Apple		
[Green circle]	Prunus domestica	Plum		
[Green circle]	Prunus domestica	Soft Plum		
[Green circle]	Prunus domestica	London Pride		
[Green circle]	Prunus domestica	Wild Cherry		
[Green circle]	Quercus robur	Oak		
[Green circle]	Salix caprea	Willow		
[Green circle]	Salix caprea	Willow		
[Green circle]	Proposed Hedgerow planting	Species	Common Name	Mix %
[Green circle]	Acer platanoides	Field Maple	5	
[Green circle]	Cornus sanguinea	Dogwood	5	
[Green circle]	Cornus sanguinea	Hornbeam	5	
[Green circle]	Crataegus monogyna	Hawthorn	50	
[Green circle]	Crataegus monogyna	Spindle	5	
[Green circle]	Prunus domestica	Plum	5	
[Green circle]	Prunus domestica	Blackthorn	5	
[Green circle]	Viburnum opulus	Guelder Rose	2	
[Green circle]	Grassing Meadow Mix - Habitat Aid 'Grassing Meadow Seed Mix' or similar approved Agri-Env			
[Green circle]	Species Rich Grassland - Emergent EHS 'Species Rich Meadow Mix' - Sown at 4g/m ²			
[Green circle]	100 Metre Buffer			
[Blue line]	Overhead Line			
[Blue line]	Solar Panels			
[Blue line]	For details of solar equipment and layout, please see Engineers Specification			
[Icon]	CCTV			
[Icon]	Inverter			
[Icon]	Spare Container			
[Icon]	Substation			
[Icon]	Inverter Containers			
[Icon]	Maintenance Track			
[Icon]	Steel Fence			
[Icon]	Proposed Footpath			
[Icon]	Existing Footpath			
[Icon]	Permissive Footpath			

NOTE:
No dimensions are to be scaled from this drawing.
Existing vegetation to be enhanced and strengthened. Exact locations/specifications of planting will be agreed via planning conditions / the final conditioned LDM.
Please Note: Some of the layers shown in the key above may not appear within each layout.

Mature Trees to be planted at 20m centres.

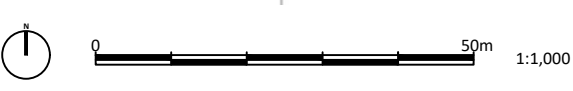
Mature Trees to be planted at 20m centres.

SHEET LOCATION PLAN



Tenth Issue	Amendments to planting	23/11/22
Ninth Issue	Amendments to layout and planting	22/11/22
Eighth Issue	Amendments to planting	18/11/22
Seventh Issue	Amendments to planting	09/11/22
Sixth Issue	Amendments to planting	08/11/22
Fifth Issue	Amendments to planting	04/11/22
Fourth Issue	Alignment to new layout	25/10/22
Third Issue	Amendments to planting	09/09/22
Second Issue	Alignment to new layout	07/09/22
First Issue	Issue Details	26/07/22
Rev		Date

Client: JBM
Project: Padbury
Drawing Title: Site Layout Plan - 2 of 4
Drawing No: 1051745-ADAS-XXX-XX-DR-PL-8002
Scale: 1:1000 at A1
Date: 26/07/22
Drawn by: A.F.
Checked by: D.H.





APPENDIX 2

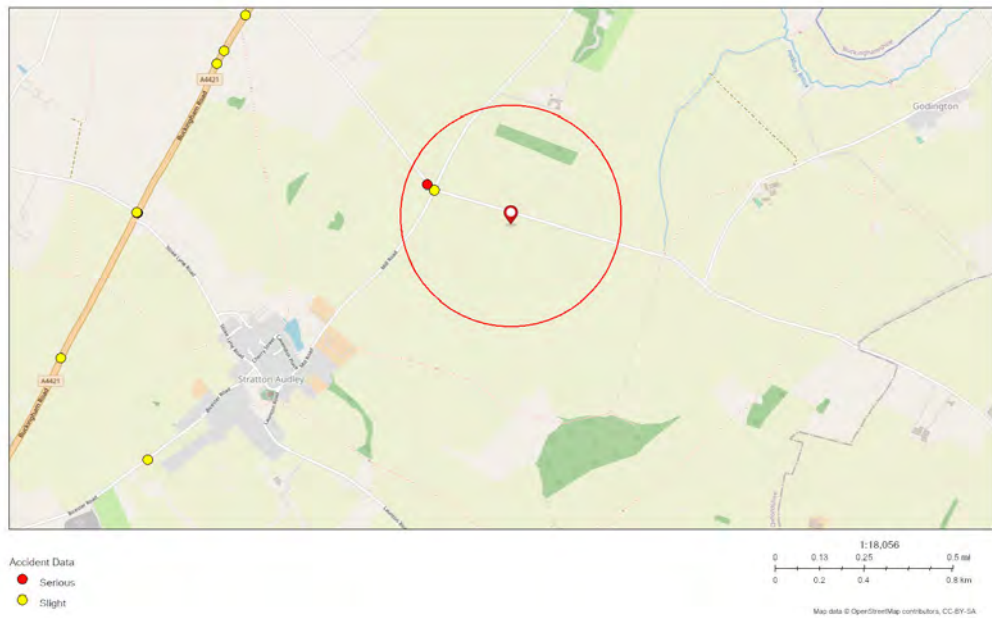
ACCIDENT SCREENING REPORT

Screening Report

Area of Interest (AOI) Information

Area : 783,627.17 m²

Nov 15 2022 15:02:15 Greenwich Mean Time



Summary

Name	Count	Area(m ²)	Length(m)
Accident Data	2	N/A	N/A
Vehicle Data	3	N/A	N/A
Casualty Data	2	N/A	N/A

Accident Data

#	Easting	Northing	Year	Accident Severity	Number of Vehicles	Number of Casualties	Date	Day of Week
1	461587	226966	2019	Slight	2	1	04/02/2019	Monday
2	461555	226992	2021	Serious	1	1	02/07/2021	Friday

#	Time	Local Authority Highway	Road Class	Road_Number	Road Type	Speed limit	Junction Detail	Junction Control
1	4:00 PM	Oxfordshire	Unclassified	0	Single carriageway	60	Crossroads	Give way or uncontrolled
2	6:05 PM	Oxfordshire	Unclassified	0	Single carriageway	60	Crossroads	Give way or uncontrolled

#	Light Conditions	Weather Conditions	Road Surface Conditions	Special Conditions at Site	Carriageway Hazards	Urban or Rural Area	Pedestrian Crossing - Human Control	Pedestrian Crossing - Physical Facilities
1	Daylight	Fine no high winds	Wet or damp	None	None	Rural	None within 50 metres	No physical crossing facilities within 50 metres
2	Daylight	Fine no high winds	Dry	None	None	Rural	None within 50 metres	No physical crossing facilities within 50 metres

#	Did Police Officer Attend Scene of Accident	Accident Reference	Category	Count
1	No - accident was reported using a self completion form (self rep only)	430039228	Accident	1
2	Yes	430292385	Accident	1

Vehicle Data

#	Year	Category	Vehicle Reference	Vehicle Type	Towing and Articulation	Vehicle Manoeuvre	Vehicle Location - Restricted Lane	Junction Location
1	2,019	Vehicle	1	Car	No tow/articulation	Going ahead other	On main c'way - not in restricted lane	Entering main road
2	2,019	Vehicle	2	Car	No tow/articulation	Going ahead right-hand bend	On main c'way - not in restricted lane	Mid Junction - on roundabout or on main road
3	2,021	Vehicle	1	Motorcycle over 500cc	No tow/articulation	Going ahead right-hand bend	On main c'way - not in restricted lane	Cleared junction or waiting/parked at junction exit

#	Skidding and Overturning	Hit Object in Carriageway	1st Point of Impact	Journey Purpose of Driver	Sex of Driver	Age Band of Driver	Age of Vehicle	Driver Home Area Type	Accident Reference	Count
1	None	None	Front	Not known	Male	46 - 55	-1	Data missing or out of range	430039228	1
2	None	None	Nearside	Commuting to/from work	Female	36 - 45	-1	Rural	430039228	1
3	None	None	Nearside	Commuting to/from work	Male	46 - 55	5	Rural	430292385	1

Casualty Data

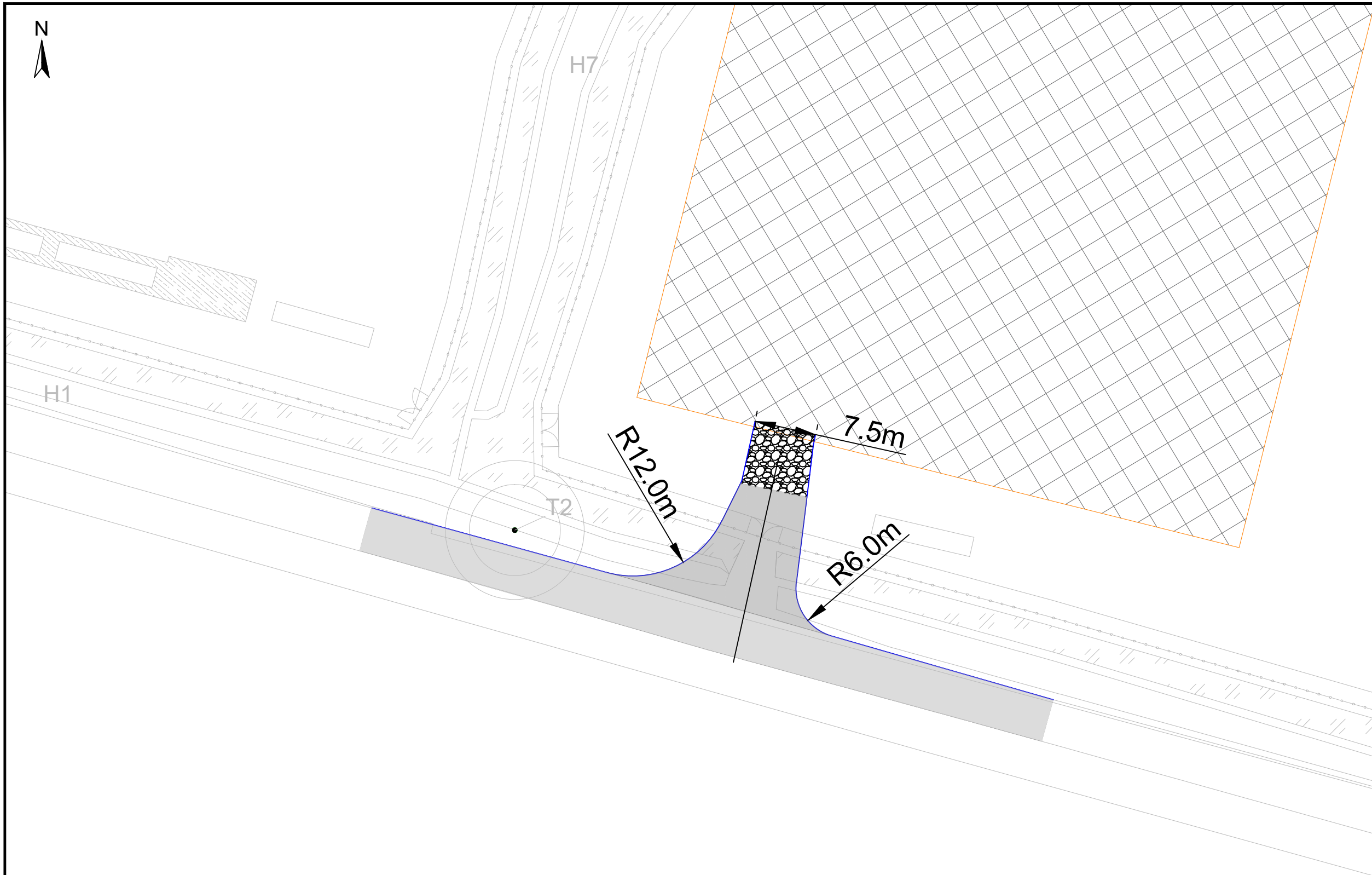
#	Year	Category	Vehicle Reference	Casualty Reference	Casualty Class	Sex of Casualty	Age Band of Casualty	Casualty Severity
1	2,019	Casualty	2	1	Driver or rider	Female	36 - 45	Slight
2	2,021	Casualty	1	1	Driver or rider	Male	46 - 55	Serious

#	Pedestrian Location	Pedestrian Movement	Car Passenger	Bus or Coach Passenger	Pedestrian Road Maintenance Worker	Casualty Type	Accident_Reference	Count
1	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	430039228	1
2	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Motorcycle over 500cc rider or passenger	430292385	1







APPENDIX 3

ACCESS ARRANGEMENTS



Legend

-  Proposed Kerbline
-  Existing Carriageway
-  Bound Surfacing (first 15m)
-  Unbound surfacing

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
A	15/11/22	Background Mapping Updated	JW	SF	IW



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Client

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Project Title

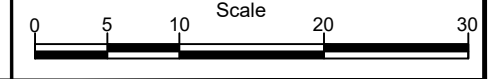
Padbury Brook Solar Farm

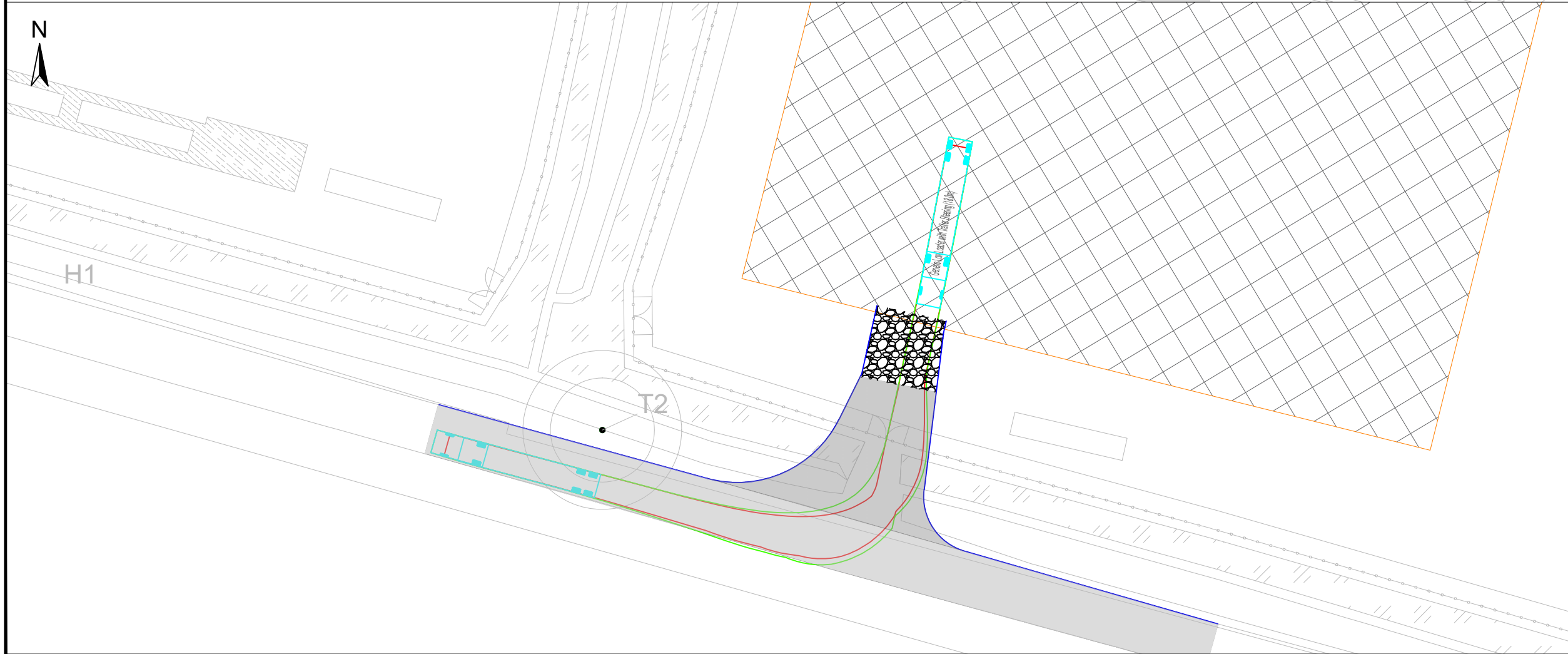
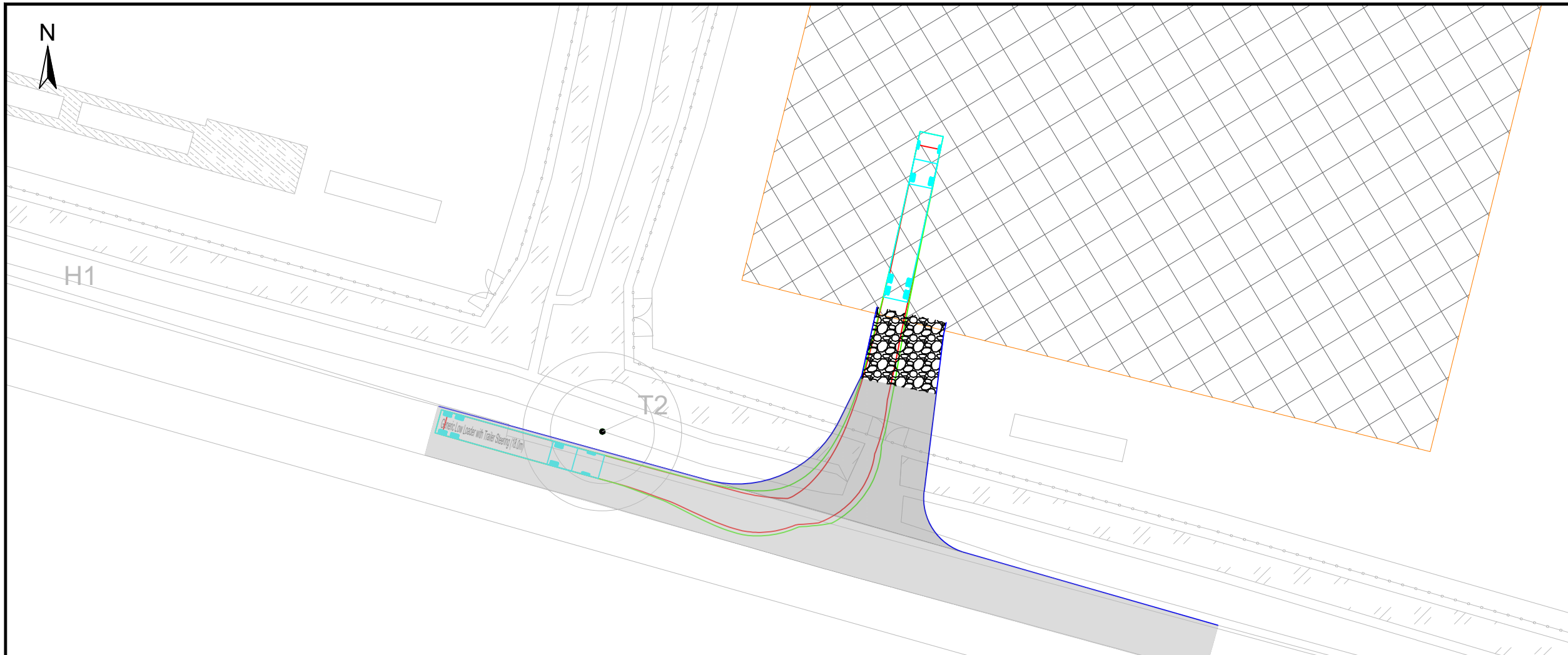
Drawing Title

Indicative Access Junction

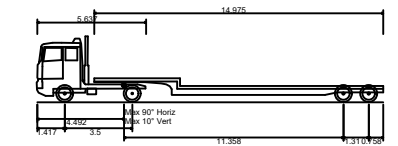
Drawn	Date	Checked	Date	Approved	Date
JW	03/10/22	SF	03/10/22	JH	03/10/22
Scale	1:500_XREF	Orig Size	A3	Dimensions	METRES
Project No.	111299		Drawing File		

Drawing No.	111299-10-01	Rev.	—
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Legend



Generic Low Loader with Trailer Steering (18.0m)	
Overall Length	17.918m
Overall Width	2.540m
Overall Body Height	3.408m
Min Body Ground Clearance	0.332m
Max Track Width	2.520m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.350m

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
A	15/11/22	Background Mapping Updated	JW	SF	IW



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Project Title

Padbury Brook Solar Farm

Drawing Title

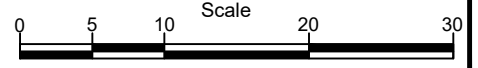
**Indicative Access Junction
Swept Path Analysis
Generic Low Loader (18m)**

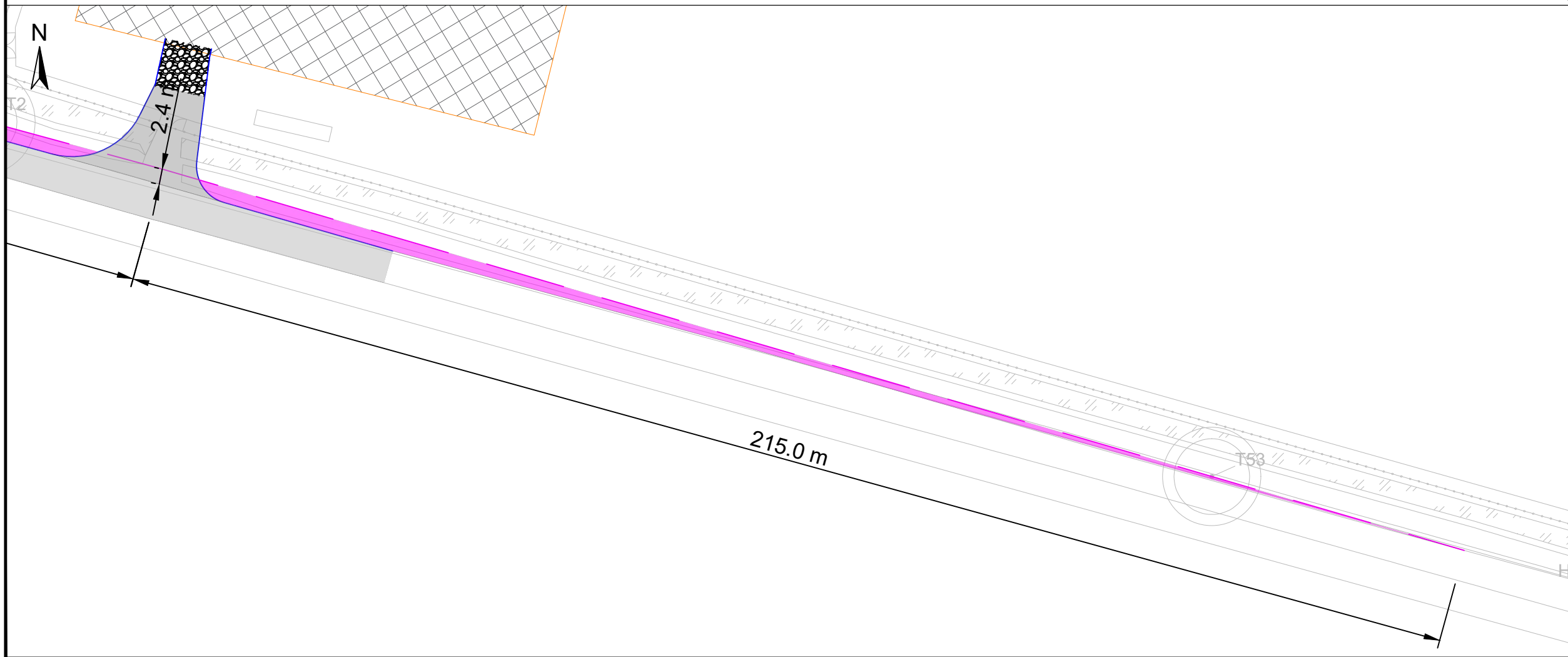
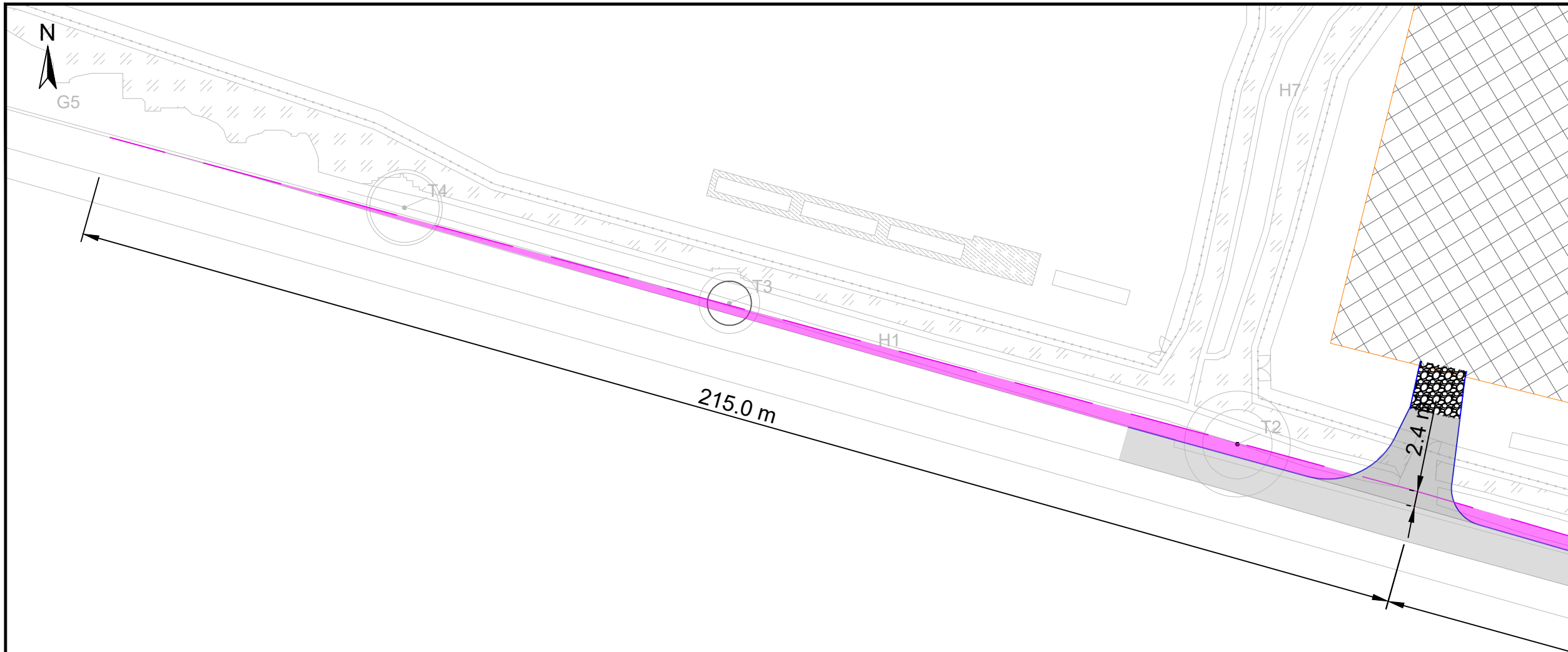
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JW	03/10/22	SF	03/10/22	JH	03/10/22

Scale	Orig Size	Dimensions
1:500_XREF	A3	METRES

Project No.	Drawing File
111299	

Drawing No.	Rev.
111299-10-02	A





Legend

- Proposed Kerbline
- Existing Carriageway
- Bound Surfacing (first 15m)
- Unbound Surfacing
- Area to be kept clear of obstructions (2.4m x 215m)
- Visibility Splay 2.4m x 215.0m

A	15/11/22	Background Mapping Updated	JW	SF	IW
Rev.	Date	Amendment	Drawn	Chkd.	Appd.



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Project Title

Padbury Brook Solar Farm

Drawing Title

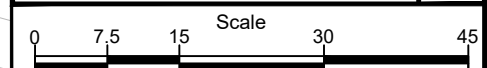
**Indicative Access Junction
Visibility Splay
2.4m x 215m**

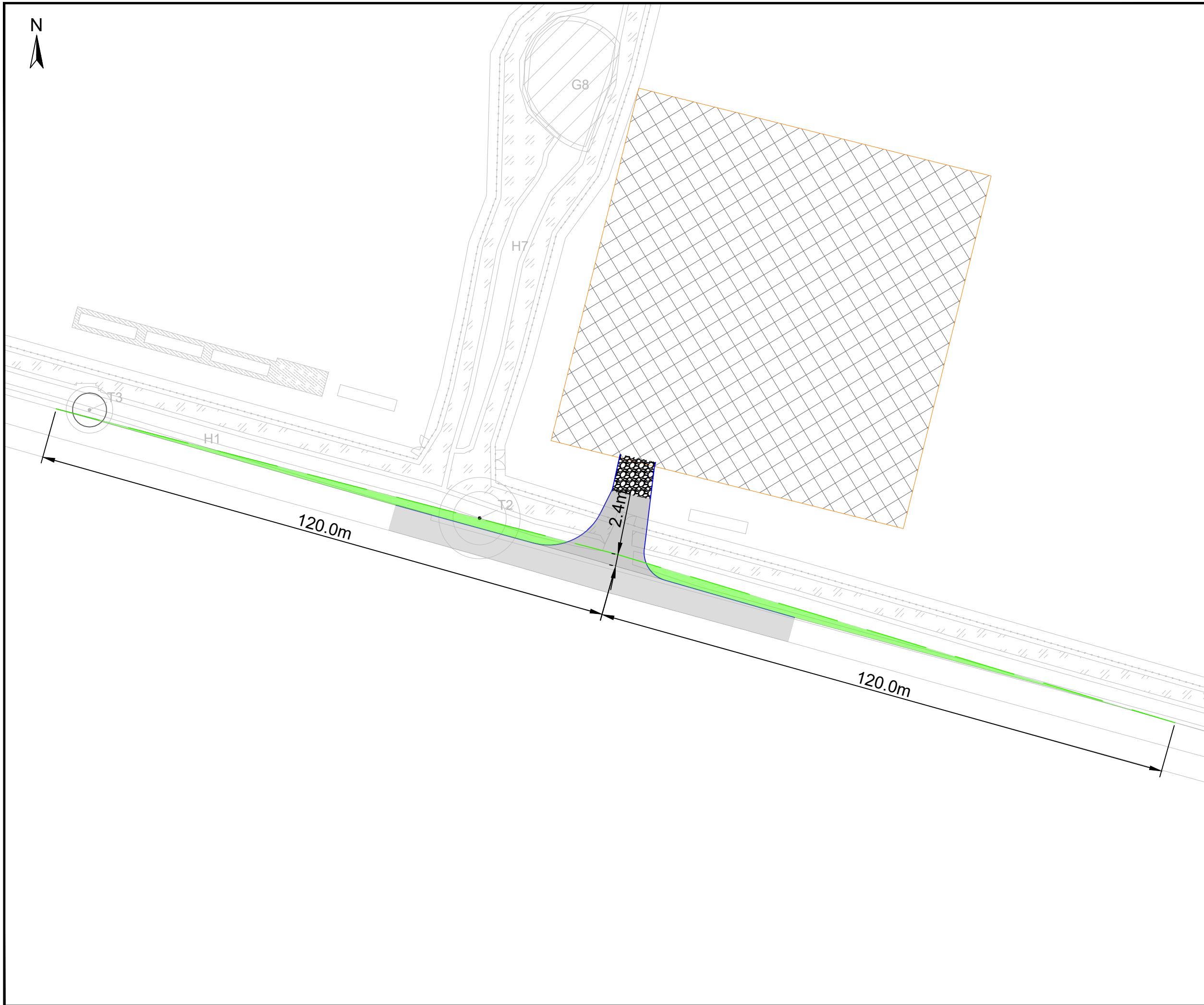
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JW	03/10/22	SF	03/10/22	JH	03/10/22

Scale	Orig Size	Dimensions
1:750	A3	METRES

Project No.	Drawing File
111299	

Drawing No.	Rev.
111299-10-03	A





Legend

- Proposed Kerbline
- Existing Carriageway
- Bound Surfacing (first 15m)
- Unbound Surfacing
- Area to be kept clear of obstructions (2.4m x 120.0m)
- Visibility Splay 2.4m x 120.0m

Rev.	Date	Amendment	Drawn	Chkd.	Appd.



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Project Title

Padbury Brook Solar Farm

Drawing Title

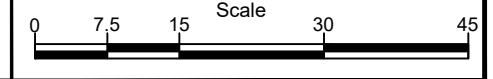
**Indicative Access Junction
Visibility Splay
2.4m x 120m**

Drawn	Date	Checked	Date	Approved	Date
JW	15/11/22	SF	15/11/22	IW	15/11/22

Scale	Orig Size	Dimensions
1:750	A3	METRES

Project No.	Drawing File
111299	

Drawing No.	Rev.
111299-10-04	





APPENDIX 4 CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Construction Traffic Management Plan



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Padbury Brook Solar Farm

Our reference: 111299-CTMP-Rev01

Author: S Ferguson

Date: 15/11/2022

Reviewed: I Wickett

Date: 15/11/2022

RSK has been instructed by JBM Solar Projects 8 Ltd to produce a Construction Traffic Management Plan (CTMP) for the proposed erection of a Solar PV Array of up to 44 MW at land near Stratton Audley, Cherwell District, Oxfordshire.

The application site is located approximately 1km north of Stratton Audley and 6km north of Bicester within the Cherwell District, Oxfordshire. The site is bounded by undeveloped/agricultural land and has a site area of 59.4 hectares.

Purpose of the CTMP

The construction process of the solar farm will require the movement of large equipment and materials to the site as well as staff movements. This CTMP outlines the management of these movements and the interaction with the surrounding road network during the stages of the process.

The objectives of this CTMP shall be to:

- Ensure safe vehicular and pedestrian access and egress at all times;
- Minimise the impact of traffic by identifying clear controls on routes for large goods vehicles, vehicle types, vehicle quantities and hours of site operations and delivery times;

Responsibilities

It is the responsibility of the Project Manager to ensure this plan is communicated to the Principal Contractor. The Principal Contractor must follow this plan and ensure that they communicate this to their own employees and contractors. Any deviation from this plan by the Principal Contractor must be justified by risk assessment and communicated to the Project Manager.

Frequency and duration of vehicle movements

Construction Traffic

It is envisaged that the construction phase would require up to 13 two-way HGV movements a day, with roughly 10 two-way daily worker movements on site on average. The construction period is expected to be around 6 months with a peak of HGVs during months 1, 3, 4 and 6.



Vehicle movements associated with construction workers are assumed to occur between 6.00am – 7.00am and in the three hours up to the end of the working day plus one hour after (4.00pm – 8.00pm), from Monday to Friday. Traffic associated with workers has therefore been distributed equally across these time periods. On rare occasions some works will be completed outside of the normal working hours, which means that some workers may leave later in the evenings. However, this would involve a small workforce and only occur for short periods. HGV deliveries will be scheduled between 7.00am and 6.00pm. General operatives will also be transported to the site via minibus, and car trips limited to senior staff.

Operational Traffic

The operational stage of the project will only require occasional maintenance visits and therefore not lead to any significant increase in traffic compared to existing levels, and it is not necessary to monitor the impact.

Traffic route assessment

Construction traffic will use the main strategic roads close to the site, with a route appraisal undertaken in order to avoid passing through nearby residential areas and other sensitive receptors as best possible. It is anticipated that 50% of construction traffic will originate from the M40, and 50% from the A421.

For construction traffic originating from the M40:

- Loads will leave the M40 at junction 9, and take the third exit onto the A41
- Traffic should continue on the A41 for approximately 5.5 km, following the signs for Aylesbury and Bicester at the first roundabout, and following signs for Aylesbury at the second
- At the third roundabout, loads will leave the A41 and take the second exit towards the A4421
- Traffic should travel along the A4421 as part of Bicester's eastern ring road, for approximately 4km, following directions to remain on the A4421 at each of the 5 roundabouts along this stretch
- Loads should then journey northbound for approximately 4km before turning right onto the unnamed access road
- Finally, loads will travel along this road, continuing straight at the cross-roads with Mill Road, and turn left into the site

The same route should be used by construction traffic when leaving the site, but in reverse.

For construction traffic originating from the A421:

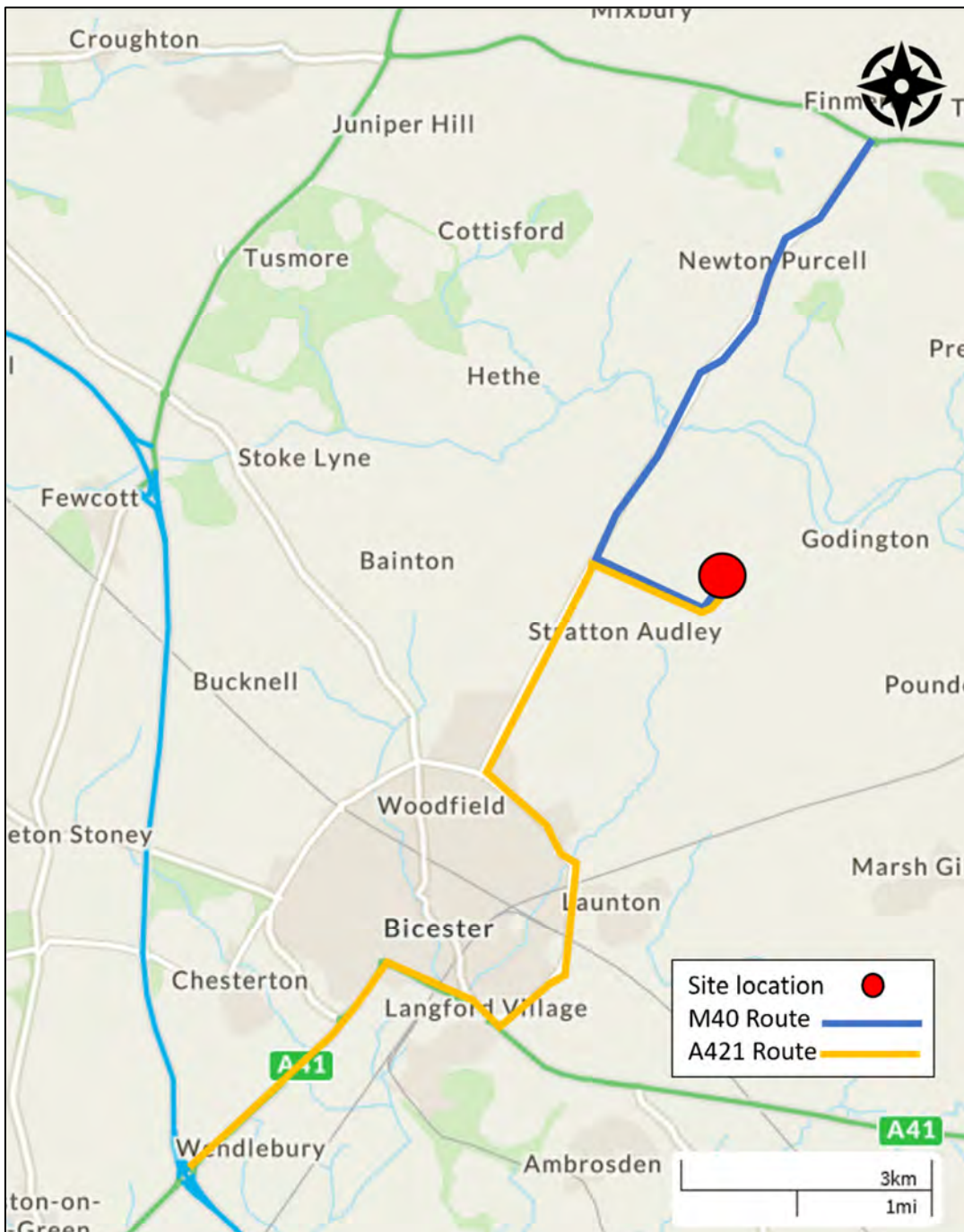
- Loads will leave the A421 and take the exit towards Bicester
- Traffic will then continue southbound for approximately 5.5km before turning left onto the unnamed access road

- Finally, loads will travel along this road, continuing straight at the cross-roads with Mill Road, and turn left into the site

The same route should be used by construction traffic when leaving the site, but in reverse.

The plan below details the primary routes construction traffic should take, as described above, in order to reach the site.

Figure 1 Construction traffic route plan



Traffic Management measures

During peak periods of construction traffic, it may be necessary to implement traffic management measures to control vehicle movements in order to avoid two-way conflicts. This can take a number of forms, including the following:

- Control of timing of deliveries with suppliers
- Holding vehicles at a specific location
- Temporary traffic signals
- Stop / Go boards
- Traffic marshals
- Short duration (15 minutes) road closures

These measures can be adopted to suit the appropriate circumstances and traffic volumes. The available options will be discussed with the highway authority and any implementation agreed before commencement of construction in line with standard streetworks processes. However, it is advised that a banksman will be put in place at the site access in order to guide the construction vehicles out of the site. Signage will also be positioned at the road verges to advise construction traffic when accessing the site.

Peak traffic proposals

During the construction period, HGVs travelling towards the site will stop in a pre-arranged location where they will call the site operatives to find out when they are permitted to enter the site. This will reduce the number of potential vehicle conflicts and allow a convoy of vehicles to approach the site, if the frequency of vehicles is high. Site operatives will be positioned along the unnamed access road to assist construction traffic with stop/go boards. A similar arrangement will be implemented for vehicles leaving the site, holding them within the site until the road is clear, again allowing a convoy of vehicles to travel along the unnamed access road.

Pre- / Post Construction Condition Surveys

Pre-construction and post construction condition surveys of the unnamed access road will be carried out under a section 59 agreement with Oxfordshire County Council. This will include a provision for any ongoing maintenance and repair to the highway required as a result of the increased usage during construction.

Section 59 Agreements will be in place before the road is used by HGV construction traffic. Remediation required on this road as a direct result of HGV construction traffic will be underwritten by JBM Solar Projects 8 Ltd and its contractors once construction works are complete. The extent of the survey will cover the entire site frontage and up to the junction with the A4421.

Signage

The Principal Contractor will be responsible for the implementation, management and control of measures for traffic management and control throughout the extent and duration of the works. For these works, this is expected to comprise traffic signs, barriers, and such other measures necessary.

All temporary traffic signs will be provided in accordance with the Traffic Signs Regulations and General Directions 2016 in locations agreed with and by the relevant Authority.

Non-motorised users

Where there are likely to be impacts to non-motorised users, such as public rights of way crossing access routes, additional signage will be erected to raise awareness for both users and drivers of vehicles. Signage will also be erected at the start and end of each road being used by construction traffic to highlight the use by HGVs.

Maintenance of the Highway

The public highway in the vicinity of access points will be cleaned regularly using road sweepers, when required. These will complement the provision of on-site wheel washing facilities, where appropriate. The extent and frequency of road sweeping will be reviewed regularly and agreed with Oxfordshire County Council to ensure highways are kept clear of mud.

Pre-construction and post construction condition surveys, under a section 59 agreement, and any required ongoing associated maintenance, will be carried out as discussed earlier.

Construction Compound and Parking

Construction Compound

A temporary site compound will be constructed to provide site facilities for the workforce and allow construction materials to be stored safely and securely near the works.

The compound will be used for the whole duration of the construction period and will provide a base from which the construction activities will be managed. It is anticipated that site compound will include:

- Office space;
- Laydown areas;
- Car Parking for construction workers;
- Parking and unloading areas for HGVs;
- Waste storage facilities; and
- Welfare facilities.



Construction traffic shall utilise the construction traffic access route, described in the section 'Traffic route assessment' in figure 1.

Car Parking

Sufficient parking on-site will be provided by the Principal Contractor for associated personnel. Parking facilities will be restricted to the temporary compound. Parking on the road verges will be strictly prohibited. The Principal Contractor will be required to monitor and take necessary action to prevent site vehicles parking outside of the agreed parking positions.

Monitoring and review of the CTMP

The CTMP will be reviewed and updated by the Principal Contractor on a regular basis. The Principal Contractor will manage public relations with local residents around the site that may be affected by noise or other amenity aspects caused by the construction works associated with the project. This will necessitate the appointment of a Transport Coordinator from within the Principal Contractor's staff to liaise with all stakeholders to ensure that the CTMP will be compatible and effectively managed alongside local authority policies.

The Transport Coordinator will be responsible for the day-to-day management of the CTMP and will be the first point of contact for site issues. They will also respond to any questions or queries about the development and instigate such responses and, if deemed necessary, such mitigation measures as may be necessary to resolve traffic issues connected with the construction work.

The Transport Coordinator will monitor and review the effectiveness of the CTMP and prepare regular updates to the planning authority and the Highway authority if requested. The Transport Coordinator shall be responsible for informing and updating the supply chain and local community and residents to raise awareness and present the Principal Contractors commitment to using safe and efficient construction vehicle practices. This commitment will be communicated to all parts of the supply chain involved in the development and to all third parties who may be affected by the transport provisions for the decommissioning site works.