

Technical Note

Project: Clump Farm

Subject: Construction Traffic Management Plan

Client:	Clump Farm Solar Ltd		
Project No:	09885	Version:	A
Document Ref:	09885-0-TP-TN-0001	Author:	DRT
Date:	10/02/2026	Approved:	DRT

I Introduction

- 1.1.1 PJA (formerly Key Transport Consultants Ltd) have been commissioned by Clump Farm Solar Ltd to prepare a Construction Traffic Management Plan (CTMP) for the construction vehicles associated with a proposed 49.99mw solar farm at Land at Clump Farm, Leicester Road, Earl Shilton.
- 1.1.2 The site comprises of open fields and is located around 3km to the northeast of the town of Earl Shilton, which in itself is located some 14km southwest of Leicester.
- 1.1.3 The report continues in Section 2 with a brief description of the existing site and local highway network. The proposed development is outlined in Section 3, and the development phases described in Section 4.
- 1.1.4 The construction access route is set out in Section 5 and traffic analysis of the construction traffic is in Section 6. Finally, conclusions are drawn in Section 7.

2 Existing site

- 2.1.1 The existing site is currently open fields and is located around 3km to the northeast of Earl Shilton, which in turn is located some 14km southwest of Leicester, as shown on Figures 1 and 2 below.

Figure 1: Site Location Plan

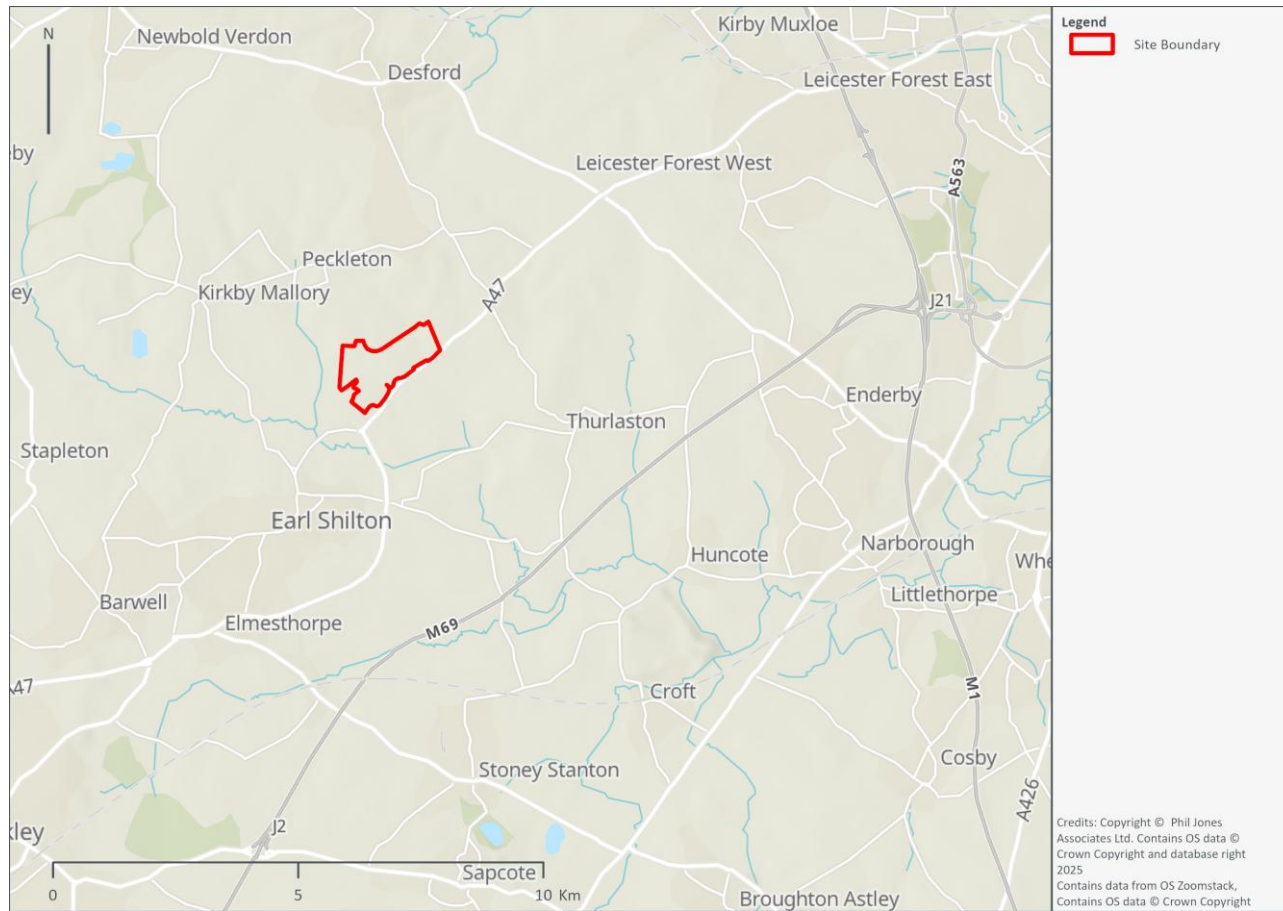
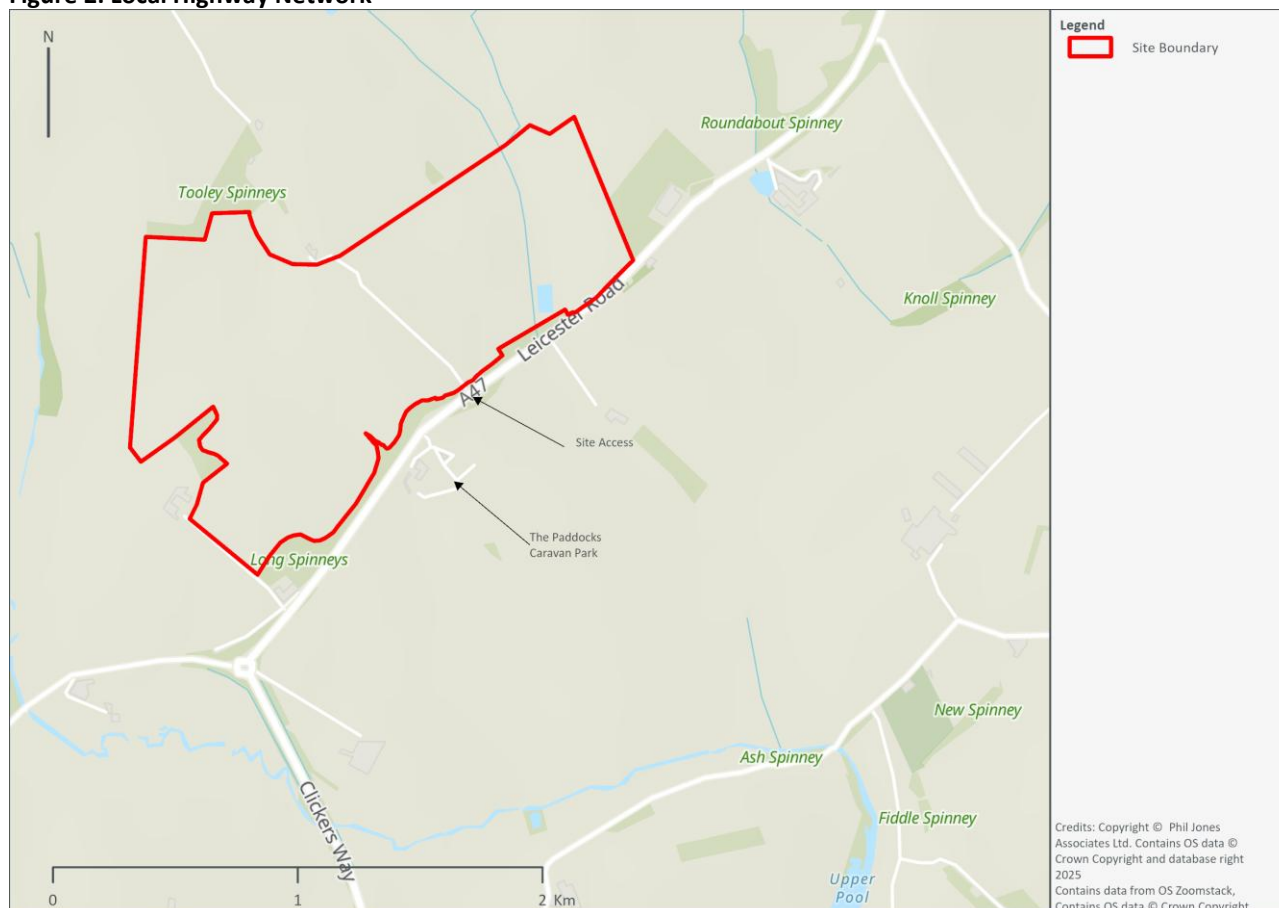


Figure 2: Local Highway Network



2.1.2 The site is bounded by the A47 Leicester Road to the south and fields on all other sides.

2.1.3 The A47 links south Nuneaton to the west via Hinkley and Earl Shilton to Leicester to the east and on to Peterborough and Norwich. To the south, the A47 joins a three-arm roundabout to the northeast of Earl Shilton. From there it bypasses the centre of Earl Shilton and Hinkley and joins the A5 at a roundabout junction, which provides access to the M69 to the south and the M42 to the north.

2.1.4 To the east, the A47 crosses under the M1, and from there, access onto the M1 is either via the A46 to the north or A563 to the south.

2.1.5 The proposed access to the site would be the existing access and would be directly onto the A47.

I Proposed development

- 1.1.1 The proposed development is for a circa 49.99 MW solar farm, consisting of photovoltaic panels together with inverters, private switchgear and spares container.
- 1.1.2 The solar panels will be attached on metal structures to align south towards the sun. These structures are supported by posts pile driven into the ground.
- 1.1.3 The entire site would be surrounded by stock proof fencing, with CCTV cameras to enable the site to be monitored remotely.
- 1.1.4 The area below the panels would remain grass and would be available for sheep grazing.
- 1.1.5 The proposed site layout is included as Appendix A.

2 Development Phases

- 2.1.1 There are three distinct phases to the running of the solar farm. The first being the construction phase when the panels are being installed, the second is when they are operational, and the final stage during decommissioning and the site is fully restored.

2.2 Construction Phase

- 2.2.1 The construction phase is likely to last for approximately 28 weeks. This phase is likely to generate the most vehicle movements, and as such, the traffic is broken down in Section 6.

2.3 Operational Phase

- 2.3.1 The solar park is controlled remotely, and therefore no permanent onsite staff are required. Access will be required by light vehicles for maintenance, and the access track will be used for parking.
- 2.3.2 The site will be fenced and not open to the general public. The grass will be cut once or twice a year, and the site could be used for sheep farming. Traffic generated as a result of grass cutting/grazing would be similar to previous agricultural use.

2.4 Decommissioning Phase

- 2.4.1 The operational phase of the solar park is at least 40 years, but decommissioning will be planned from the start.
- 2.4.2 Decommissioning will be completed in the opposite sequence to construction. As all material would be removed from site, the vehicle movements would be similar to construction traffic.

2.4.3 Upon decommissioning, the site is returned as agricultural land.

3 Construction Access

3.1.1 As described previously, access to the site is from the A47.

3.1.2 The A47 is subject to a 50mph speed limit at the proposed site access. Therefore, the appropriate visibility splays are 160m in each direction from a setback of 2.4m, as shown on Figure 3. It is proposed to use the existing farm access, shown on the photograph below.

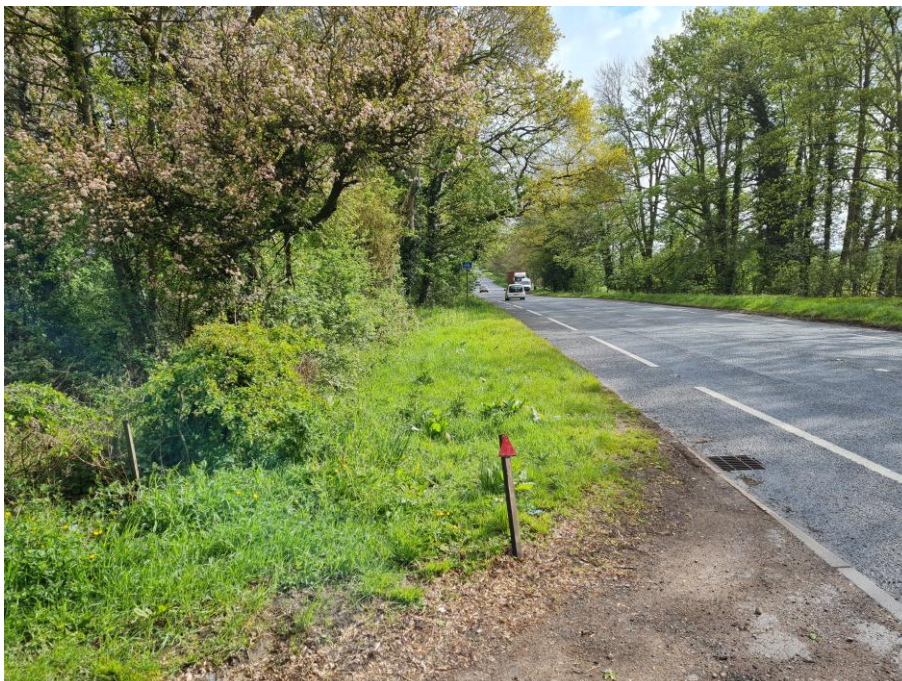


3.1.3 The A47 includes advisory cycle lanes shown in the photographs above and below, which will have the effect of causing vehicles to drive away from the kerb. These have not been included in the visibility splay drawings.

3.1.4 The photograph below is taken from the access, 2.4m from the edge of carriageway looking west. The HGV in the distance is parked in the lay-by.



3.1.5 The photograph below is taken from the same location looking east.



3.1.6 The first section of the access would be hard surfaced to reduce the risk of mud on the highway.

3.1.7 The layout of the site compound would allow these lorries to turn, and therefore enter and exit the site in a forward gear. The access and visibility splays are shown on drawing 09885-0-TO-DR-0001. They also include the vehicle swept path plots for the largest vehicle that would use the site access regularly.

3.1.8 The photograph below is from another similar size solar site under construction to give a scale to the compound.



3.1.9 The compound and access would be gravel surfaced and “clean”, with material moved from the compound to the construction site by vehicles that would remain on-site. The photograph below shows the same site, and shows that access to the construction area is closed from the road, with access from the site compound, and the site access remaining clear of mud.



- 3.1.10 Drivers delivering to the site would be advised of the delivery hours. Most deliveries are expected from the motorway network from the M69 and then via the A5 and A47.
- 3.1.11 Local signing will be installed to both give delivery drivers advance notice of the access, but also to warn other road users of the possibility of HGVs making the turn in and out of the site. To minimise delays to other road users, right turns into the site would be prohibited, and vehicles approaching from the east would be required to U-turn at the roundabout to the south.
- 3.1.12 A banksman would be positioned at the access to assist with HGVs entering and leaving the site.
- 3.1.13 On site construction roads would be up to 4m wide.

3.2 Hours of Construction

- 3.2.1 Construction on site will take place from 07:00 to 18:00 Monday to Friday and 08:00 to 12:00 on Saturdays.
- 3.2.2 All HGV deliveries are expected to arrive Monday to Friday. No construction work or deliveries are programmed to take place outside of these hours, except in emergency or exceptional cases.

3.3 Site Compound

3.3.1 All temporary construction facilities will be set up in a temporary construction compound within the site. The facilities will include:

- Site Office
- Storage
- Welfare (Canteen, drying room, personal storage, toilets)
- Generator
- Water Bowser
- Parking Area
- Materials handling and storage area (temporary metal/plastic plate surfacing)

3.3.2 As the compound and access route would be on the clean side of the operation, there is no need for a drive-through wheel wash facility. Instead, a pressure washer and brushes would be provided at the exit of the compound onto the farm access track, which is an existing surfaced track. Individual drivers would be responsible for checking the state of their vehicles before leaving, and be responsible for cleaning.

3.3.3 The site manager would monitor the access track and A47 Hinckley Road and if necessary, a road sweeper will be used should any mud track onto the public highway.

4 Traffic analysis

4.1 Construction Vehicles

4.1.1 Vehicles travelling to the site are broken down into three main groups of construction vehicles, materials/waste, and construction staff.

4.1.2 Construction vehicles and welfare units would be driven/delivered to the site at the start of construction, and removed once the panels have been installed, and therefore would generate just one movement each way at the start and end of the construction period. Construction traffic would consist of:

- 4WD forklift
- excavator for trenching
- piling machine

- crane

4.1.3 The major component of materials is the solar panels and the associated mounting system. Other items include switchgear, inverters and fencing. Items include:

- solar panels and frames
- inverters/transformers
- switchgear
- cables
- fencing
- surfacing materials
- site compound equipment

4.1.4 The estimated vehicle numbers are shown on the table below, and broken down into more detail in the table in Appendix B. Note that the table provides an estimate, and does not consider holidays or delays due to weather, materials shortages etc.

Item	Vehicle Type	Quantity
Solar Panels, Piles, Framing	HGV	340
Invertors/Transformers etc	HGV	62
Waste Management	HGV	200
40 Tonne Crane		1
Plant/Welfare Units	Low-loader/HGV	38
Concrete and Aggregate	10-20t trucks	50
Fencing	HGVs	40
Access Track Materials	HGVs	40
Small Deliveries	10t truck	26
TOTAL		797

4.1.5 Deliveries would vary in the amount per day during the construction period, with the average around 5 HGVs during the main construction phase. Higher flows are estimated in the initial and end weeks of the construction programme as the site is established and then plant/equipment removed at the end.

4.1.6 Deliveries would be scheduled to arrive at the site between 08:00 to 18:00 from Monday to Friday.

4.2 Construction Workforce

- 4.2.1 The maximum number of personnel on site at any time would be around 60. There will be sufficient space within the site for parking, so no vehicles will be parked on the A47.
- 4.2.2 The contractor will investigate providing a mini-bus shuttle service from nearby towns/stations to reduce vehicle movements and will promote car sharing.

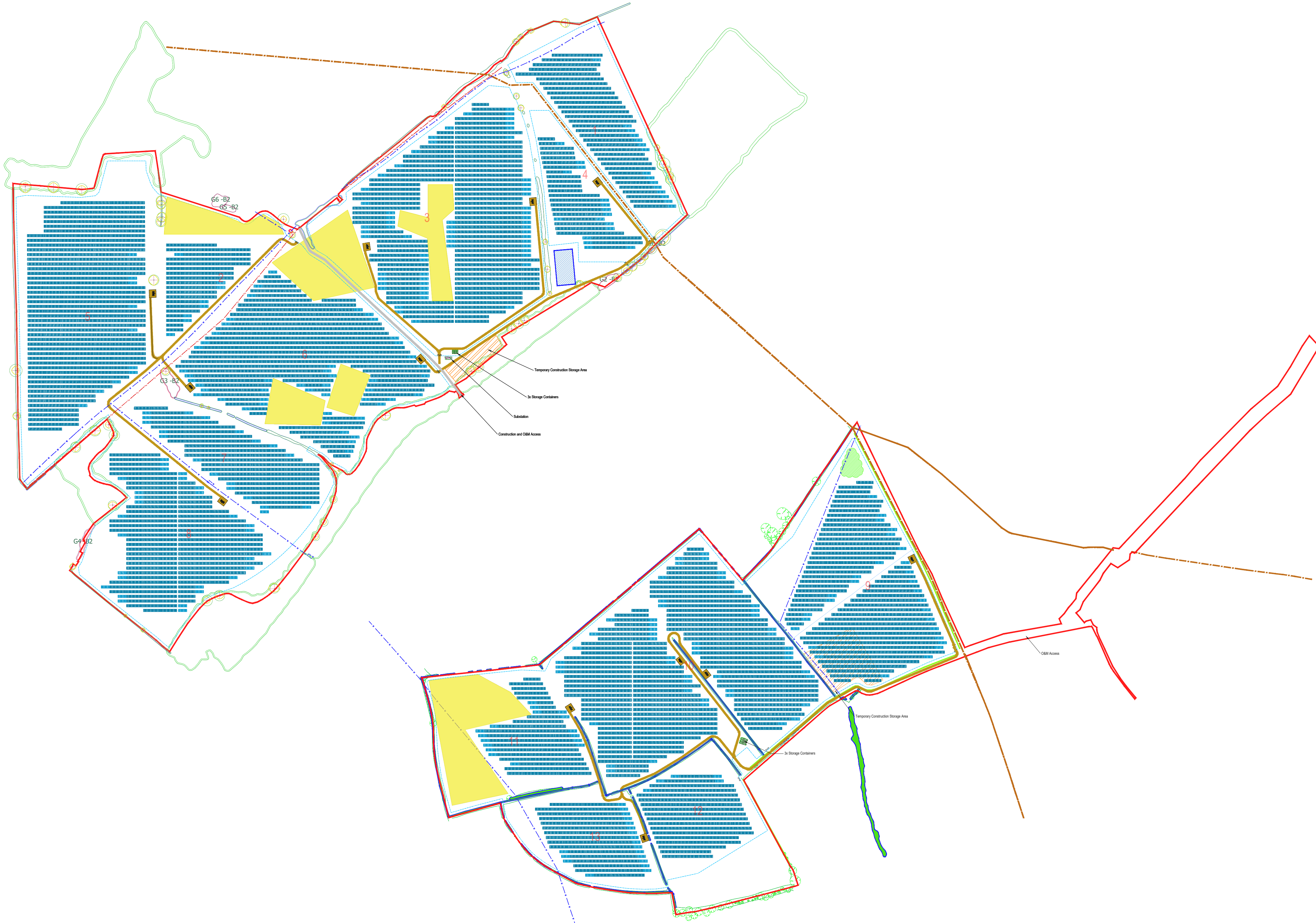
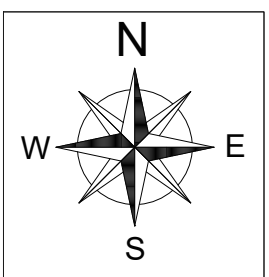
4.3 Operational Traffic

- 4.3.1 Routine traffic would consist of one small van every week. Access would be via the existing access to Clump Farm, which has suitable visibility.

5 Conclusions

- 5.1.1 The construction phase is estimated to last approximately 28 weeks, and at its peak, there would be an average of around five HGVs to the site each day.
- 5.1.2 The proposed access point has sufficient visibility for the speed of the road, and the access has been checked using swept path software.
- 5.1.3 Once operational, the site would generate very little traffic.

Appendix A Site Layout



PV Module
JA Solar - JAM66D50-645/GB
645 Wp

Table with 1 string
26 modules

Table with 2 strings
52 modules

Site Boundary

Transformer Station
MVS8960-LV

Transformer Station
MVS4480-LV

Fence

Gate

Public Footpath

Water Main Pipe

Electrical Cable (LV)

Unidentified Service

Archeological Zone

Existing Hedgerow

Existing Road

Internal Road

MAIN DATA PV Clump/Hill Farm

AC Power 61'248,00 kW @30°C
DC Power 77'024,61 kWp
PV Module 119418

JA Solar -JAM66D50-645/GB
@STC: P = 645 Wp
V_{oc} = 49,96 V
I_{sc} = 16,53 A
V_{mp} = 40,36 V
I_{mp} = 15,74 A
Efficiency 23,9 %
n. PV modules:119418

Strings 4593
26 modules in series Table 2x26: 2133
Table 2x13: 327

Inverter 174 SG350HX
DC: V_{in} = 1,500V
V_{max} = 500-1,500V
I_{max} = 30A*16
AC: P =352kVA@30°C
V = 850V, 3W+PE (3P)
f = 50/60Hz
pf = 0.8cap... 0.8ind
THDi = <3%

Transformer station MV/LV 2 Type Sungrow MVS8960-LV
10 Type Sungrow MVS4480-LV

No.	645W_2x13_PD	645W_2x26_PD	Modules	Area coverage, %	GCR	Capacity, kWh	Covered Area, m²
1	15	105	5850	36,761	0,563	3773,250	15163,511
2	8	56	3120	26,172	0,563	2012,400	8287,206
3	61	286	16458	35,977	0,563	10615,410	42659,165
4	16	56	3328	33,057	0,563	2146,560	8626,017
5	10	289	15288	41,309	0,563	9860,750	39628,621
6	48	248	14144	36,843	0,563	9122,880	36661,472
7	19	104	5902	37,925	0,563	3806,790	15298,124
8	29	184	10322	41,394	0,563	6657,690	26755,059
9	29	215	11034	40,787	0,563	7697,430	30933,634
10	51	359	19994	40,836	0,563	12896,130	51825,522
11	17	70	4082	20,12	0,563	2632,890	10580,467
12	5	89	4758	37,887	0,563	3068,910	12333,313
13	19	72	4238	35,632	0,563	2733,510	10984,756
Total	327	2133	119418	35,762	0,563	77024,610	309536,866

CLUMP AND HILL SOLAR FARM, LEICESTERSHIRE
Hinckley & Bosworth Borough Council
Blaby District Council

Installation of a solar photovoltaic array/solar with associated infrastructure
77 MWdc

GENERAL CONTRACTOR

 **SUNNERG** | ENERGY & FACILITY MANAGEMENT

SUNNERG LTD
46 Nova Road, Croydon
England, CR0 2TL

26S002

PROJECT ☐ Executive ☒ As-built

EPC Proposed Layout

SCALE 1:4000 FORMAT FORMAT PAG. 1 OF 1

DESIGNED BY A.BRUNO VERIFIED BY G.LIPARI APPROVED BY G.GABELLONE

REV	DATE	STATE	COMMENTS
0	09/02/2026	--	FIRST EMISSION
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DESIGNER

A176 LAB
Think different project

A176LAB srl
Via Madonna dell'Atmore n. 23
91011 Alcamo (TP)
P.IVA 02812750814
Ing. Giovanni Gabbellone

CLIENT

CLUMP FARM SOLAR LIMITED
Ground Floor, Ibis House, Ibis Court
Warrington - WA1 1RL
CRN 12368142

Appendix B Estimated HGV flows

	Week																													
Delivery	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	TOTAL	
Solar Panels							10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				190	
Inverter													1	1															2	
Transformers																10													10	
Strcutures		24	24	22	22	20	20	18																					150	
Cables				8	6	6	6	6	6	6	6																		50	
Waste Management	6				2	5	2	5	5	5	5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	200	
Crane																2													2	
Plant/Welfare	13				2					2				2												2	2	15	38	
Concrete/aggregate	15	15	15											5															50	
Fencing		5	5	5	5	5	5	5	5																				40	
Access Track Materials	10	10																										20	40	
Small Deliveries	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			26	
																													798	TOTAL
Average per day	8	10	8	7	7	7	8	8	5	4	4	3	4	5	4	6	4	4	4	4	4	4	4	4	4	2	2	8		

TOTAL