

Light Valley Solar

Environmental Statement Volume 3

Appendix 2.2: Indicative Engineering Drawings and Sections

Document Reference: EN0110012/APP/LVS/06.03.02.02

September 2026
Version 3

APFP Regulation 5(2)(a)
Volume: 6

A stylized graphic in the bottom left corner of the page. It features a large, bright yellow semi-circle representing a sun or a hill, partially obscured by a dark teal semi-circle below it. Below the dark teal shape is a light green semi-circle, and at the bottom is a darker green semi-circle. The overall effect is a layered, abstract landscape.

Light Valley
Solar

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning
(Applications: Prescribed Forms and Procedure) Regulations 2009

Light Valley Solar

DCO Submission

Appendix 2.2: Indicative Engineering Drawings and Sections

Regulation Reference	APFP Regulation 5(2)(a)
Planning Inspectorate Case Reference	EN0110012
Application Document Reference	EN0110012/APP/LVS/06.03.02.02
Author	Light Valley Solar Limited

Version	Date	Status of Version
1.0	February 2026	DCO Submission
2.0	June 2026	Deadline A Submission
3.0	September 2026	Deadline 2 Submission

Contents

1	275 kV Substation Layout and Elevation – Solar Development Site 1	2
2	275 kV Substation Layout and Elevation – Solar Development Site 2	3
3	275 kV Substation Layout and Elevation – Solar Development Site 4	4
4	Transformer Typical General Arrangement	5
5	Illustrative Drawings of Solar PV Concrete Feet and Mounting Structure	6
6	Illustrative Drawing of Conversion Unit	7
7	Illustrative BESS layout	8

1 275 kV Substation Layout and Elevation – Solar Development Site 1

REFERENCE DRAWINGS:

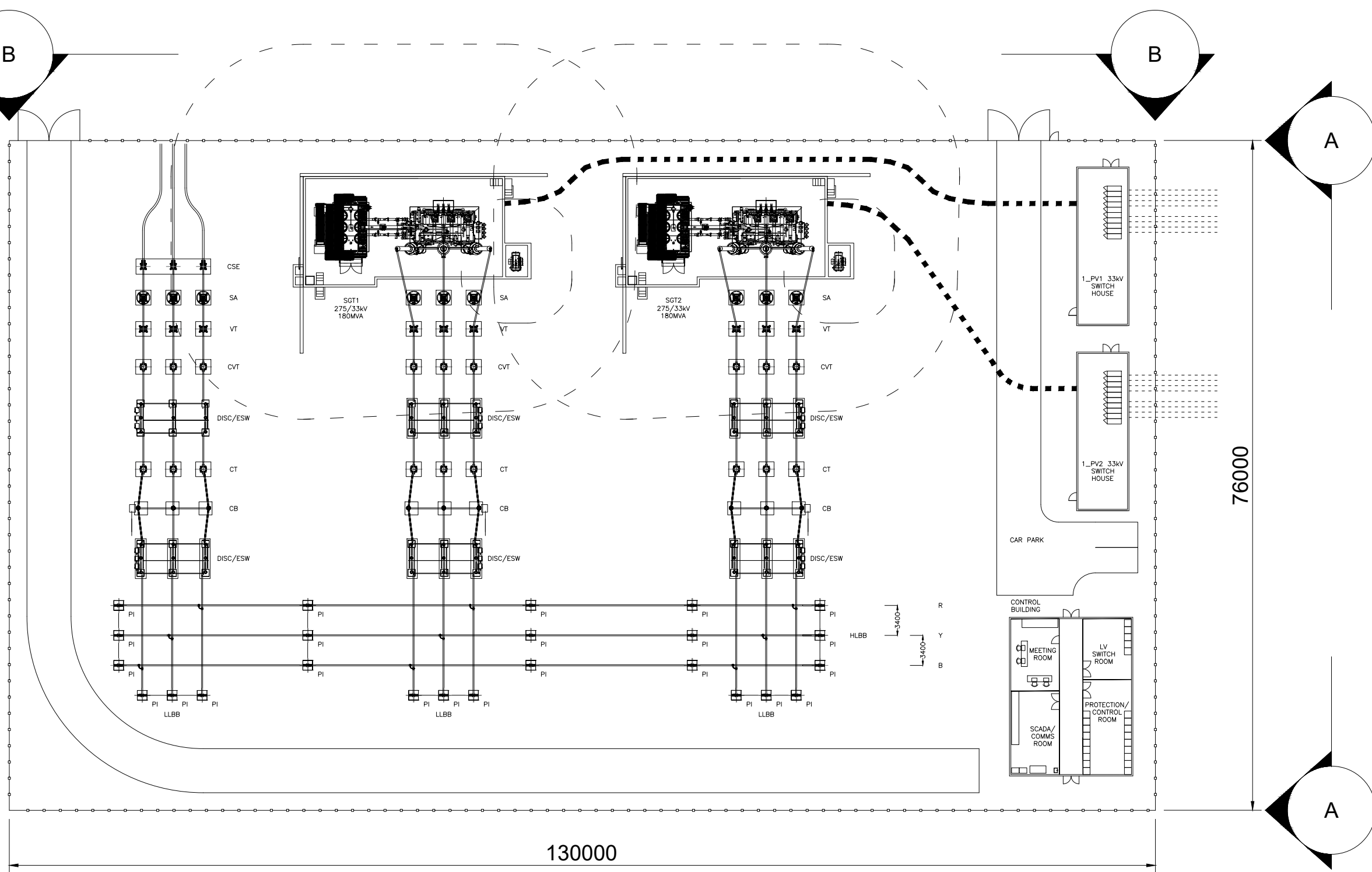
UF00087-8500-0003DS2
UF00087-8300-0012DS2
UF00087-8300-0013DS2
UF00087-8300-0014DS2

ALL INFORMATION ON THIS DRAWING IS INDICATIVE ONLY,
AND MAY BE SUBJECT TO
FURTHER DESIGN DEVELOPMENT.

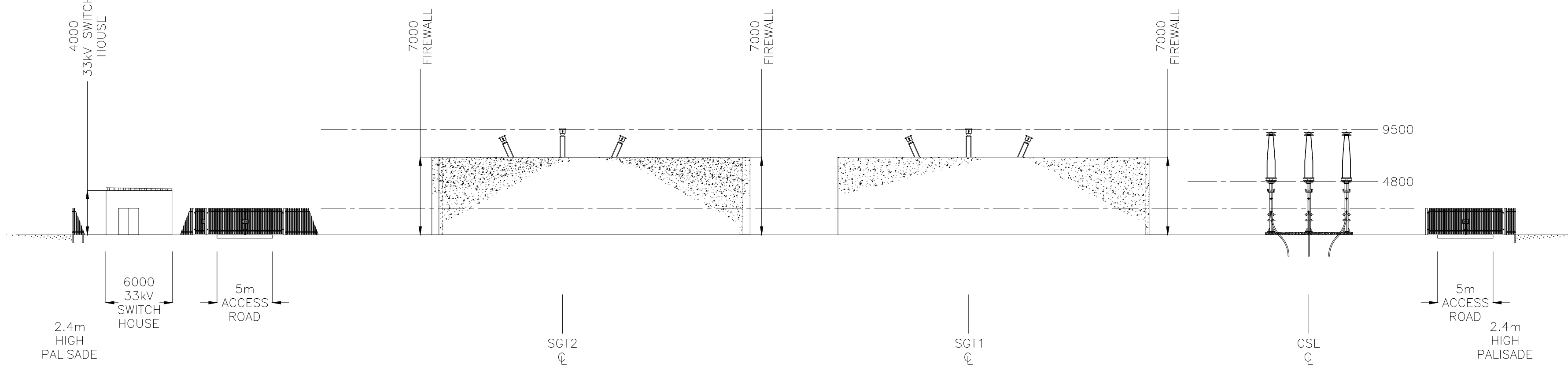
DO NOT SCALE

NOTES:

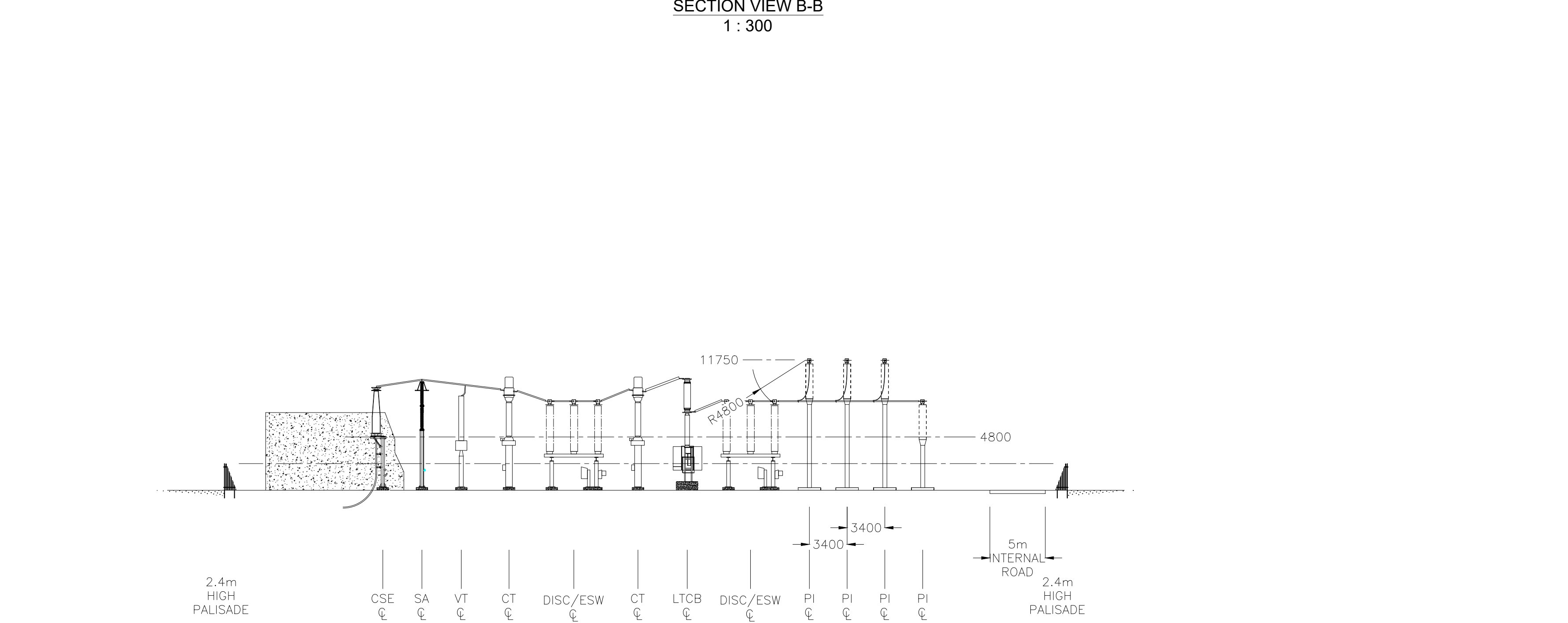
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CIVIL DESIGN ASPECTS ARE INDICATIVE.
3. NO MITIGATION AGAINST FLOOD RISK HAS BEEN INCLUDED FOR SWITCHGEAR STRUCTURES OR BUILDING(S) AND IS SUBJECT TO TOPOGRAPHICAL SURVEY AND FLOOD RISK ASSESSMENT.
4. THE PRESENCE OF EXISTING UTILITIES, BURIED SERVICES, AND UXO ARE TO BE INVESTIGATED.
5. DETAILED SPECIFICATION FOR EQUIPMENT IS TO BE COMPLETED.
6. THE ELECTRICAL CLEARANCES ARE BASED ON BS EN 61836. WHERE APPLICABLE, ELECTRICAL CLEARANCES APPROPRIATE FOR THE CONNECTING TRANSMISSION NETWORK SHOULD BE FOLLOWED.
7. THE PROVISION OF A STANDBY DIESEL GENERATOR AND DNO NETWORK AUXILIARY SUPPLY IS TO BE CONFIRMED AND REFLECTED IN THE LAYOUT AS REQUIRED.
8. THE REQUIREMENT FOR HARMONIC COMPENSATION EQUIPMENT IS TO BE CONFIRMED AND REFLECTED IN THE LAYOUT AS REQUIRED.
9. THE REQUIREMENT FOR ELECTRIC FENCING IS TO BE CONFIRMED AND REFLECTED IN THE LAYOUT AND SECTION VIEWS.
10. MAXIMUM BUILDING DIMENSIONS
CONTROL BUILDING - 15m x 32.5m (LxW) x 4m AGL
33kV SWITCH HOUSES - 7m x 18m (LxW) x 4.2m AGL
MAXIMUM AREA FOR SUBSTATION DEVELOPMENT WITHIN SITE: 130m x 78m (1 Ha)
11. THE REQUIREMENT FOR SHUNT REACTOR EQUIPMENT IS TO BE CONFIRMED & REFLECTED IN LAYOUT AS REQUIRED
- 12.



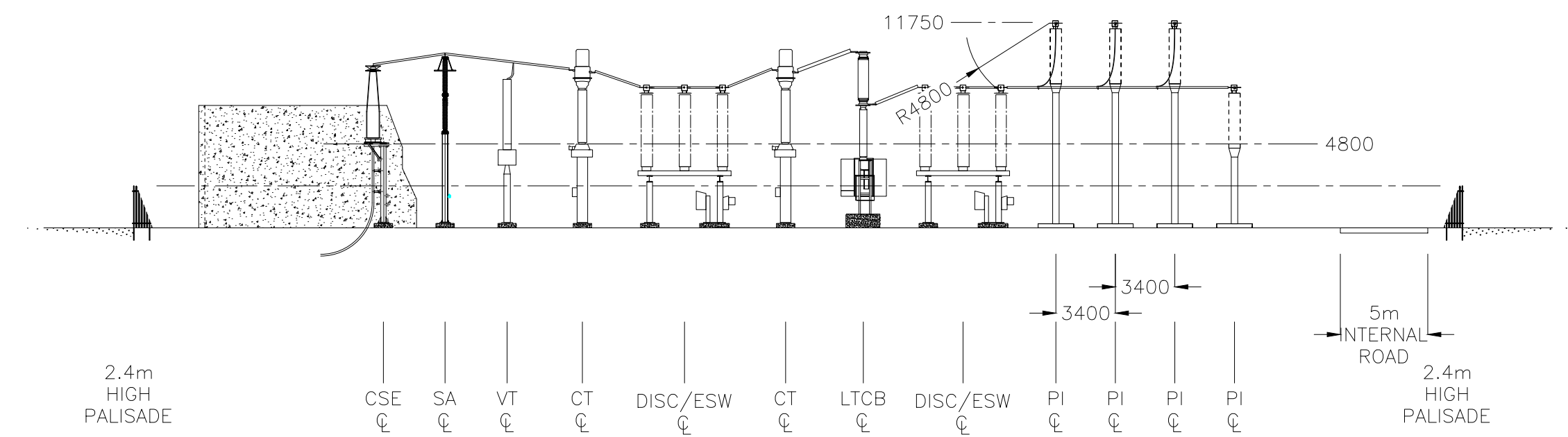
SITE 1 SUBSTATION
PLAN VIEW
1 : 500



SECTION VIEW A-A
1 : 300



SECTION VIEW B-B
1 : 300



SECTION VIEW C-C
1 : 300

INDICATIVE

R2.0	FOR PLANNING	DTW	TJS	IS	25.08.26
R1.0	FOR PLANNING	DS2	DTW	DS2	02.02.26
REV	DETAILS OF REVISION	DRAWN	CHECKED	APPROVED	DATE

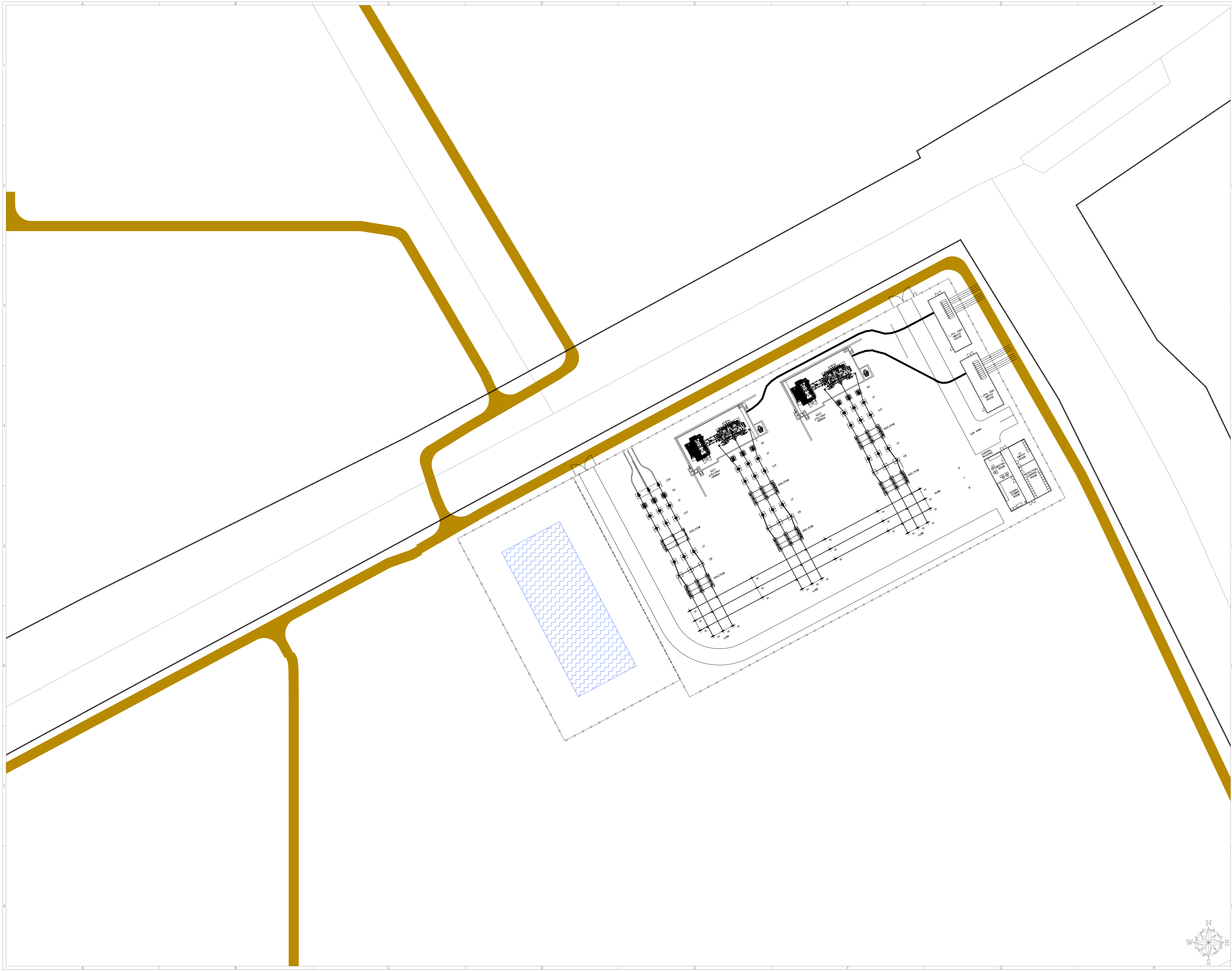
FICHTNER
CONSULTING ENGINEERS LIMITED

Kingsgate, Wellington Road North, Stockport, Cheshire, SK4 1LW
Tel: 0161 476 0032, Website: www.fichtner.co.uk

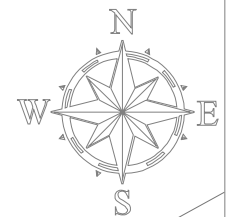
CLIENT: ISLAND GREEN POWER
SITE: SITE 1
PROJECT: LIGHT VALLEY
TITLE: SITE 1
275KV SUBSTATION LAYOUT & ELEVATIONS

DRAWING STATUS:		FOR PLANNING	
DRAWN BY:	DS2	DATE:	02.02.26
CHECKED BY:	DTW	DATE:	02.02.26
APPROVED BY:	DS2	DATE:	02.02.26
FILENAME:	Y:\[REDACTED]\GPIUF00087-8300-0014DS2 R2.0		
OFFICE OF ISSUE:	STOCKPORT		
SHEET SIZE:	A1	SCALE:	500:1, 300:1
DRAWING No.:	UF00087-8300-0014DS2		REVISION:
Sheet 1		Of 1	R2.0

This drawing is an illustrative layout plans and represents only one example of how the Proposed Development could be developed. All site elements including the final attenuation design and feature selection and siting will be confirmed at the detailed design stage

[illegible]

Project:	Light Valley Solar		
Project Location:	-		
Ownership:	Light Valley Solar Limited		
Document Title:	Illustrative layout - Site 1 Substation Drainage		
Sheet format:	A1 "B41 x 594"		Scale:
			1:500
Document amendments:	v.1	28/08/2028	A.S.
			Comments:
Company:	 Island Green Power UK Limited Unit 25.7, Coda Studios 189 Munster Road, London SW6 6AL		

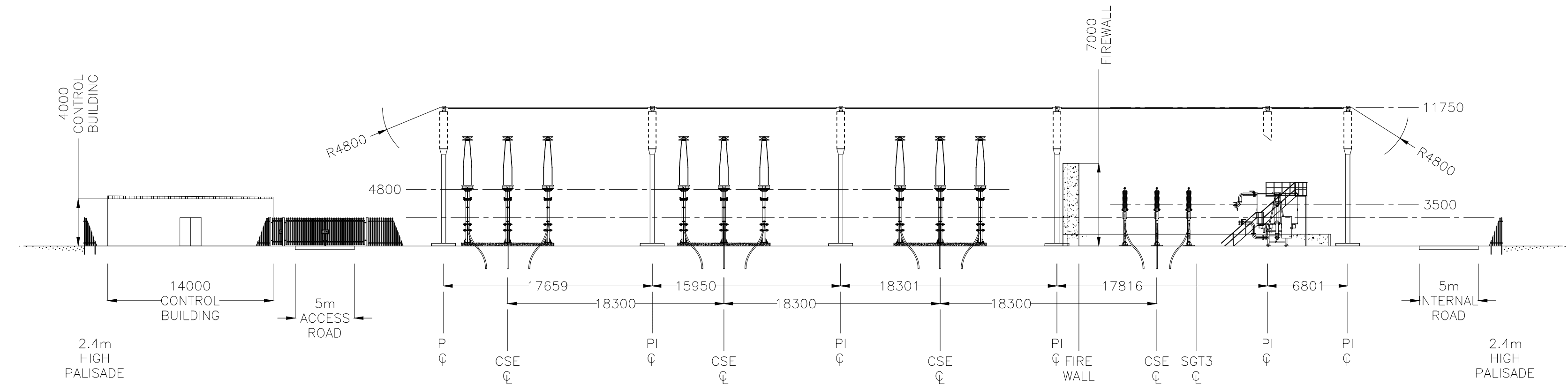
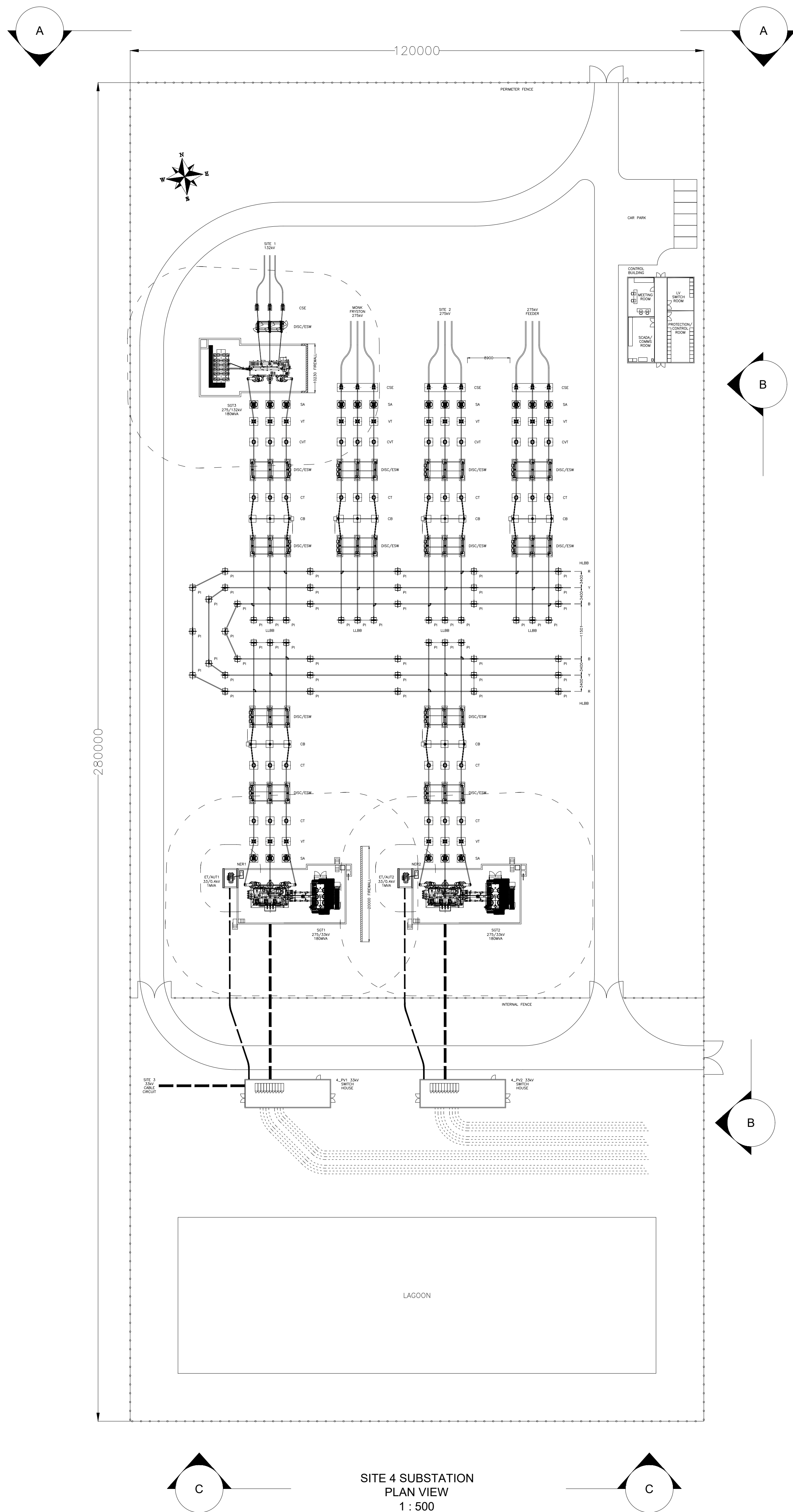


2 275 kV Substation Layout and Elevation – Solar Development Site 2

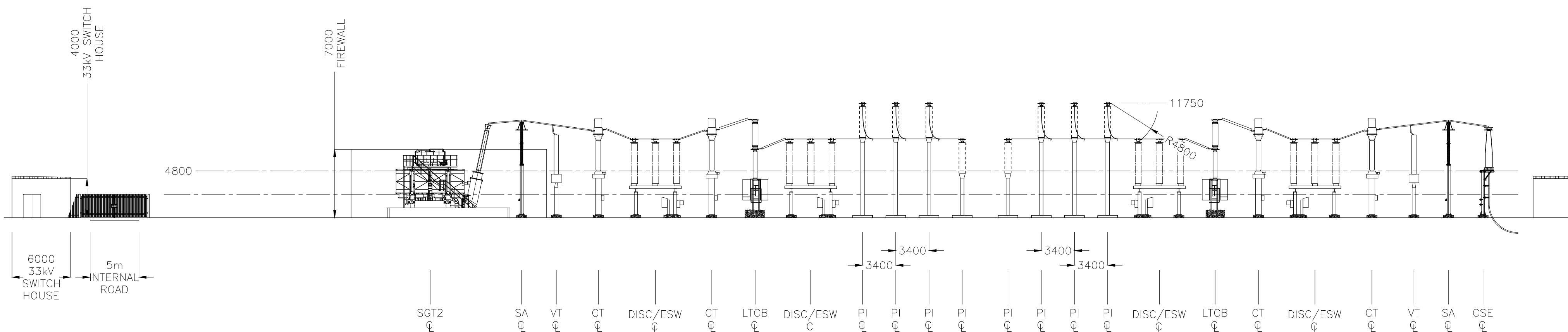
3 275 kV Substation Layout and Elevation – Solar Development Site 4

REFERENCE DRAWINGS:
UF00087-8500-0003DS2
UF00087-8300-0012DS2
UF00087-8300-0013DS2
UF00087-8300-0014DS2

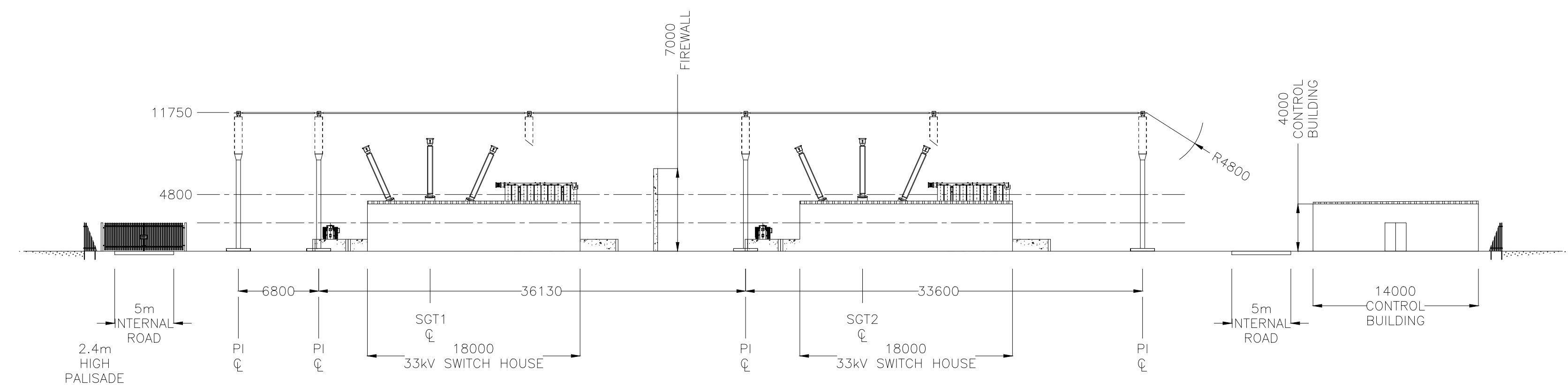
- ALL INFORMATION ON THIS DRAWING IS INDICATIVE ONLY.
AND MAY BE SUBJECT TO
FURTHER DESIGN DEVELOPMENT.
DO NOT SCALE
- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES.
 - ALL CIVIL DESIGN ASPECTS ARE INDICATIVE.
 - NO MITIGATION AGAINST FLOOD RISK HAS BEEN INCLUDED FOR SWITCHGEAR STRUCTURES OR BUILDINGS AND IS SUBJECT TO TOPOGRAPHICAL SURVEY AND FLOOD RISK ASSESSMENT.
 - THE PRESENCE OF EXISTING UTILITIES, BURIED SERVICES, AND LIXIS ARE TO BE INVESTIGATED.
 - DETAILED SPECIFICATION FOR EQUIPMENT IS TO BE COMPLETED.
 - THE ELECTRICAL CLEARANCES ARE BASED ON BS EN 61936 WHERE APPLICABLE. ELECTRICAL CLEARANCES APPROPRIATE FOR THE CONNECTING TRANSMISSION NETWORK SHOULD BE FOLLOWED.
 - THE PROVISION OF A STANDBY DIESEL GENERATOR AND DNO NETWORK AUXILIARY SUPPLY IS TO BE CONFIRMED AND REFLECTED IN THE LAYOUT AS REQUIRED.
 - THE REQUIREMENT FOR HARMONIC COMPENSATION EQUIPMENT IS TO BE CONFIRMED AND REFLECTED IN THE LAYOUT AS REQUIRED.
 - THE REQUIREMENT FOR ELECTRIC FENCING IS TO BE CONFIRMED AND REFLECTED IN THE LAYOUT AND SECTION VIEWS.
 - MAXIMUM BUILDING DIMENSIONS:
CONTROL BUILDING - 15m x 32m (LxW) x 4m AGL
33kV SWITCH HOUSES - 7m x 18m (LxW) x 2m AGL
 - MAXIMUM AREA FOR SUBSTATION DEVELOPMENT WITHIN SITE: 260m x 120m (3.5 Ha)



SECTION VIEW A-A
1 : 300



SECTION VIEW B-B
1 : 300



SECTION VIEW C-C
1 : 300

INDICATIVE

R2.0	FOR PLANNING	DTW	TJS	IS	25.08.26
R1.0	FOR PLANNING	DS2	DTW	DS2	02.02.26
REV.	DETAILS OF REVISION	DRAWN	CHWD	APR	DATE

FICHTNER
CONSULTING ENGINEERS LIMITED

Kingsgate, Wellington Road North,
Stockport, Cheshire, SK4 1LW, UK
Tel: 0161 476 0032
Website: www.fichtner.co.uk

CLIENT: ISLAND GREEN POWER

SITE: SITE 4

PROJECT: LIGHT VALLEY

TITLE: SITE 4
275kV SUBSTATION LAYOUT &
ELEVATIONS

DRAWING STATUS:		FOR PLANNING	
DRAWN BY:	DS2	DATE:	02.02.26
CHECKED BY:	DTW	DATE:	02.02.26
APPROVED BY:	DS2	DATE:	02.02.26
FILENAME:	V:\DAVID WINTERBOTTOM\GUP\UF00087-8300-0012DS2 R2.0		
OFFICE OF ISSUE:	STOCKPORT		
SHEET SIZE:	A0	SCALE:	500:1, 300:1
DRAWING No.:	UF00087-8300-0012DS2		

© Crown copyright Ordnance Survey. Licence No. 100019980

4 Transformer Typical General Arrangement

5 Illustrative Drawings of Solar PV Concrete Feet and Mounting Structure

- 5.1.1 The second figure shown below illustrates the use of one panel '1P' tracker panels with a height of 3.5m. This configuration has been selected for illustrative purposes because it is compatible with concrete footings. In contrast, two panel 2P' tracker panels —up to 4.5m high—are not compatible with the concrete feet.

West



West



West

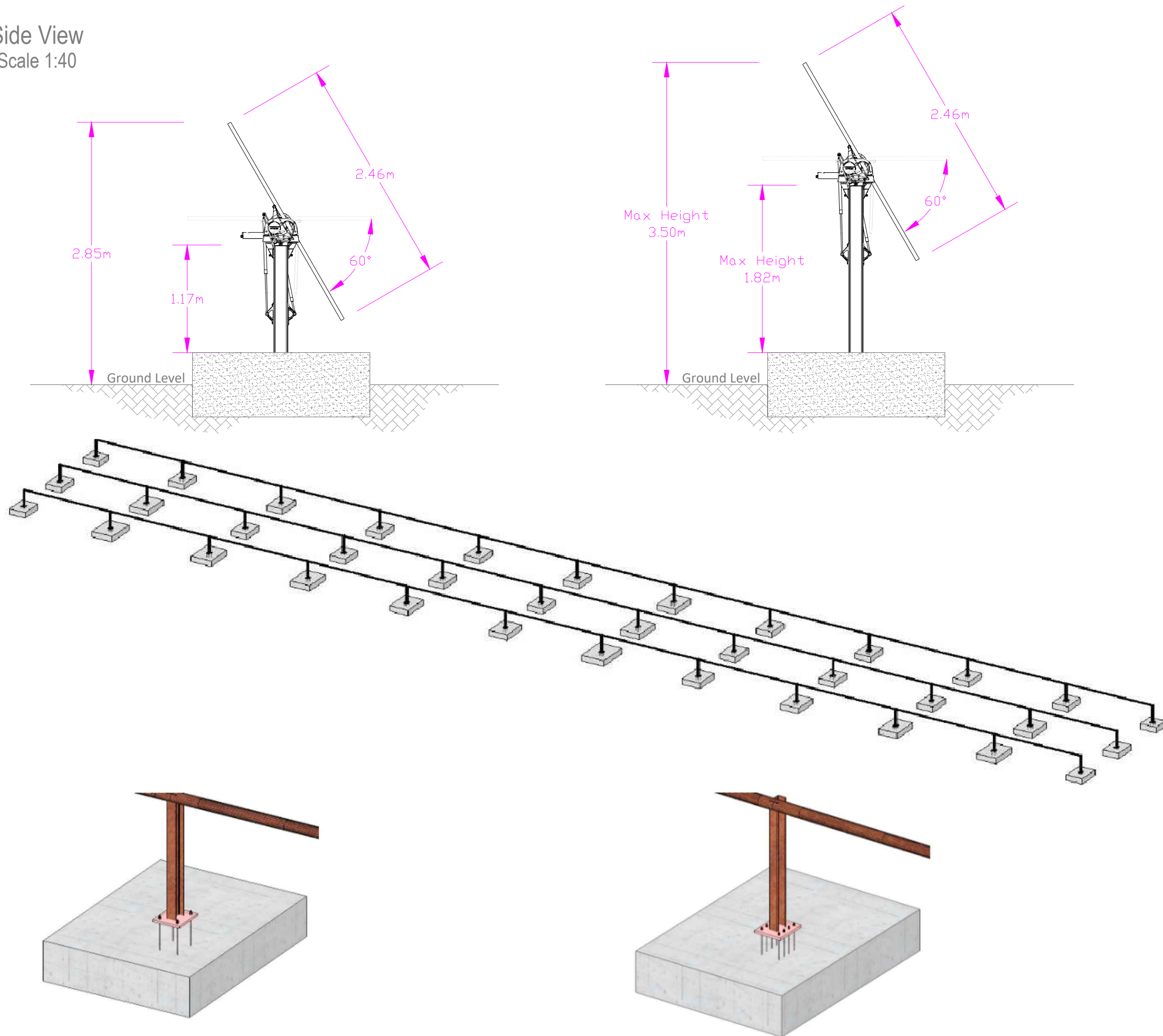


Ground Level

[illegible]

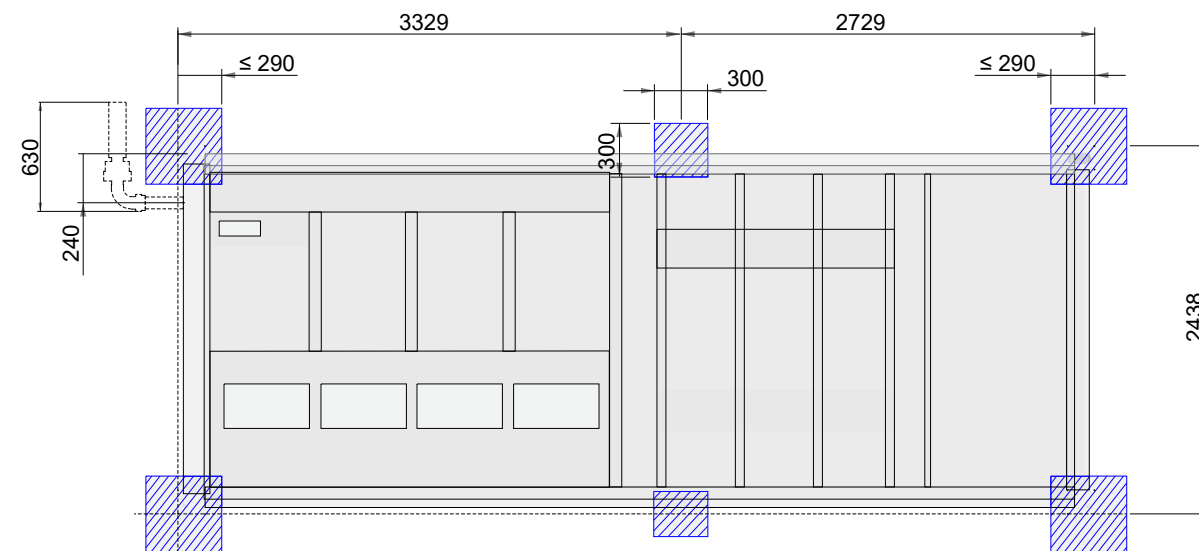
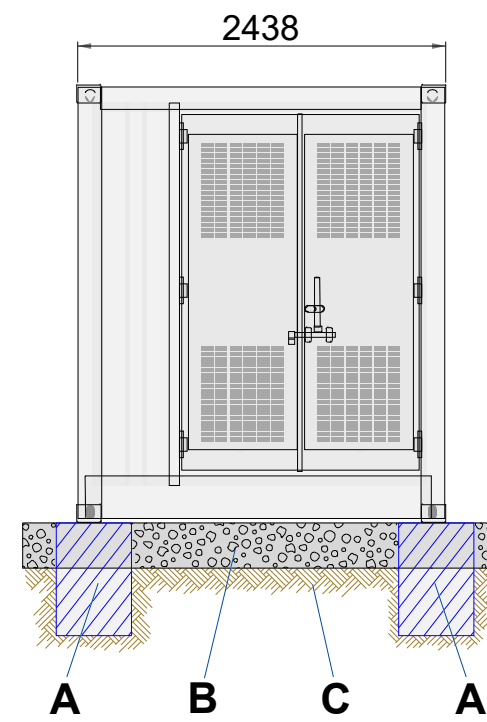
Document Title:	Mounting Structure Details - Fixed Concrete Feet - Side, Front and Top Views		
Sheet format:	A3 "420 x 297"	Scale:	Varies
Document amendments:	v.1	22/12/2022	M.N.
Company:	 	Island Green Power UK Limited Unit 20 22, Code Studio 189 Munster Road, London SW6 6AF	

Side View
Scale 1:40

[illegible]

Project:	Lime Down Solar Park		
Project Location:	Land near Whitley, Melksham, Wiltshire, SN12 8QB, England, United Kingdom		
Ownership:	TBC		
Document Title:	Mounting Structure Details - 1P Tracker - Concrete Feet		
Sheet format:	A3 "420 x 297"	Scale:	Varies
Document enforcements:	v.1 21/10/2024 M.N.	Comments:	
Company:	 Island Green Power UK Limited Unit 25.7, Coda Studios 189 Munster Road, London SW6 6AU		

6 Illustrative Drawing of Conversion Unit

[illegible]

Project:	Light Valley Solar				
Project Location:	Land by West Haddlesley, Selby District of North Yorkshire, YO8 8PY, England				
Ownership:	Light Valley Solar Limited				
Document Title:	Power Conversion Unit				
Sheet format:	A3 "420 x 297"		Scale:	1:50	
Document amendments	v.1	03/03/2025	M.N.	Comments	
Company:	 Island Green Power UK Limited Unit 25.7, Coda Studios 189 Munster Road, London SW6 6AW				

7 Illustrative BESS layout

This drawing is an illustrative layout plans and represents only one example of how the Proposed Development could be developed. All site elements, including the final attenuation design and feature selection and siting will be confirmed at the detailed design stage

General Legend:

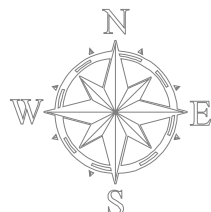
	Proposed Substation Area
	BESS Fence
	Noise Barrier
	Solar PV Fence
	Access Track
	Power Conversion Unit
	ESS Unit
	Water Supply Tank
	BESS Gate
	Fire Hydrant
	Lagoon

LVS - Setbacks

Conversion Unit - BESS	3.5m
Conversion Unit - Road	1.5m
Conversion Unit - Noise Barrier	3.0m
BESS - Noise Barrier	2.0m
BESS - Road	2.1m
BESS Rows (Block)	2.5m
BESS Rows (Adjacent)	2.5m
BESS Blocks	2.5m

Minimum distance between the Individual Battery Units and the

1	BESS Perimeter Fence Line	10.10 m
2	Fire Hydrant/Water Tanks	10.00 m
3	Adjacent Vegetation	17.90 m
4	A63	35.10 m
5	Road via Access Track	25.80 m
6	Residential Receptor	385.40 m
7	Site Access Road Width: 5.0 m	



Document	Version	Date	Author	Comments
	v.2	30/10/2025	A.S.	Noise Barrier Addition
	v.3	08/01/2026	A.C.	Noise Barrier Update
	v.4	20/01/2026	A.C.	Fire Hydrant Update
	v.5	25/08/2026	A.C.	Lagoon Update
	v.6	26/09/2026	A.S.	

Sheet	Format	Scale
	A1 "841 x 594"	1:1000

Document	Title
	Illustrative BESS Layout

Ownership	Light Valley Solar Limited
-----------	----------------------------

Project	Location

Project	Name
	Light Valley Solar



Light Valley
Solar

W: Lightvalleysolar.co.uk
E: info@lightvalleysolar.co.uk