Light Valley Solar

Environmental Statement Volume 3

Appendix 2.2: Indicative Engineering Drawings and Sections

Document Reference: EN0110012/APP/LVS/06.03.02.02

February 2026

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

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
Issue 1.0	February 2026	DCO 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

1 275 kV Substation layout and elevation – Solar Development Site 1

REFERENCE DRAWINGS:

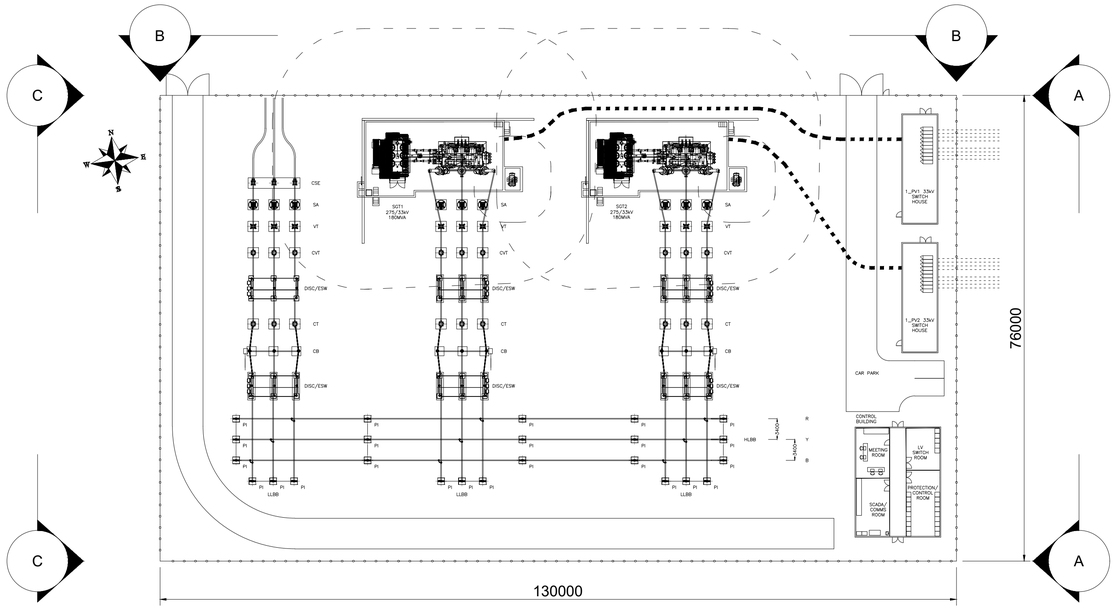
UF00087-8500-0003DS2
UF00087-8300-0012DS2
UF00087-8300-0013DS2
UF00087-8300-0014DS2

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

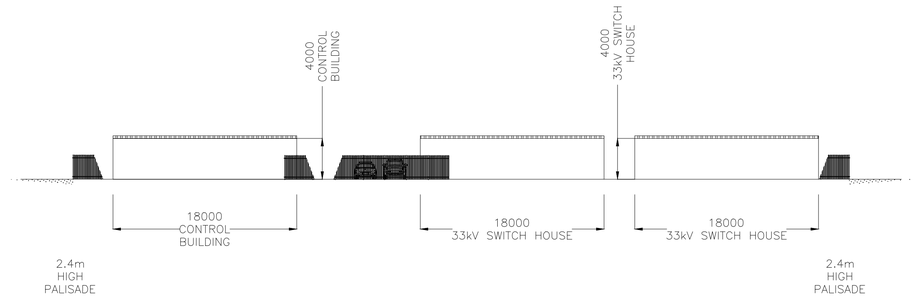
DO NOT SCALE

NOTES:

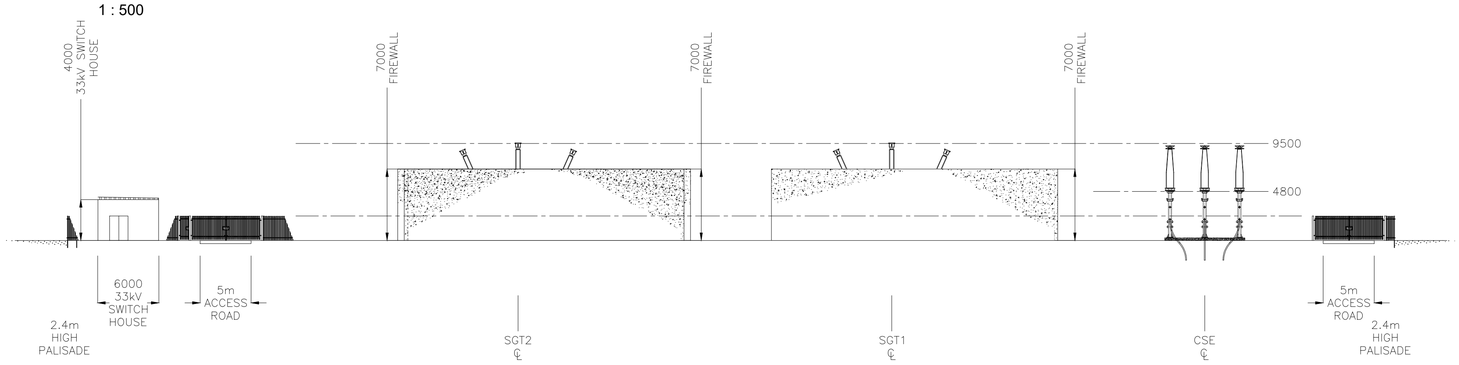
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CIVIL DESIGN ASPECTS ARE INDICATIVE.
3. NO MITIGATION AGAINST FLOOD RISK HAS BEEN INCLUDED FOR SWITCHGEAR STRUCTURES OR BUILDING(S) AND IS SUBJECT TO TOPOGRAPHICAL SURVEY AND FLOOD RISK ASSESSMENT.
4. THE PRESENCE OF EXISTING UTILITIES, BURIED SERVICES, AND UXO ARE TO BE INVESTIGATED.
5. DETAILED SPECIFICATION FOR EQUIPMENT IS TO BE COMPLETED.
6. THE ELECTRICAL CLEARANCES ARE BASED ON BS EN 61936. 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 19m (LxW) x 4.2m AGL
11. MAXIMUM AREA FOR SUBSTATION DEVELOPMENT WITHIN SITE: 130m x 76m (1 Ha)
12. THE REQUIREMENT FOR SHUNT REACTOR EQUIPMENT IS TO BE CONFIRMED & REFLECTED IN LAYOUT AS REQUIRED



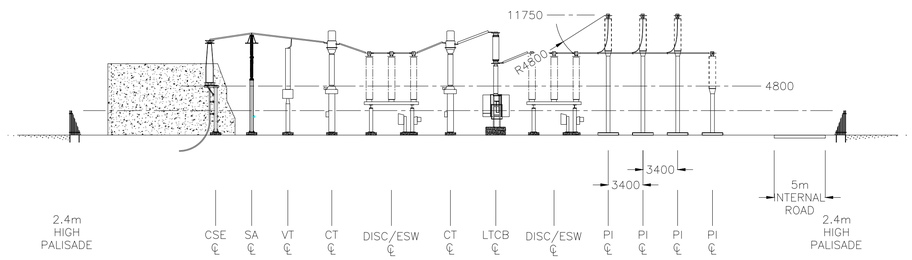
SITE 4 SUBSTATION
PLAN VIEW
1 : 500



SECTION VIEW A-A
1 : 300



SECTION VIEW B-B
1 : 300



SECTION VIEW C-C
1 : 300

INDICATIVE

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

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:	O:\UF00087 - SOLAR & BESS PROJECT\8000 - DRAWINGS\8300 - GA DRAWING\UF00087-8300-0014DS2 R1.0	
OFFICE OF ISSUE:	STOCKPORT	
SHEET SIZE:	A1	SCALE: 500:1, 300:1
DRAWING No.: UF00087-8300-0014DS2 Sheet 1 of 1		REVISION: R1.0

2 275 kV Substation layout and elevation – Solar Development Site 2

REFERENCE DRAWINGS:

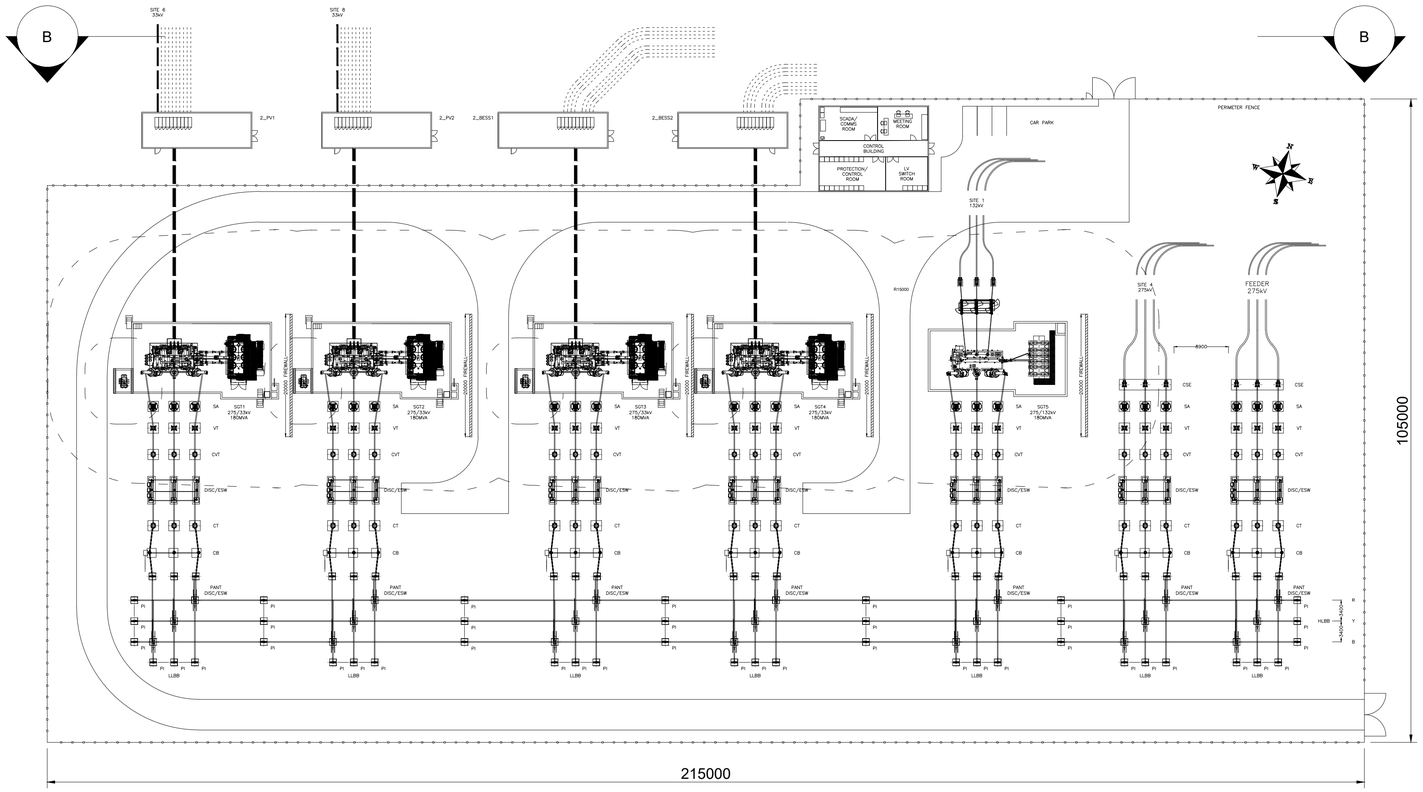
UF00087-8500-0003DS2
UF00087-8300-0012DS2
UF00087-8300-0013DS2
UF00087-8300-0014DS2

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

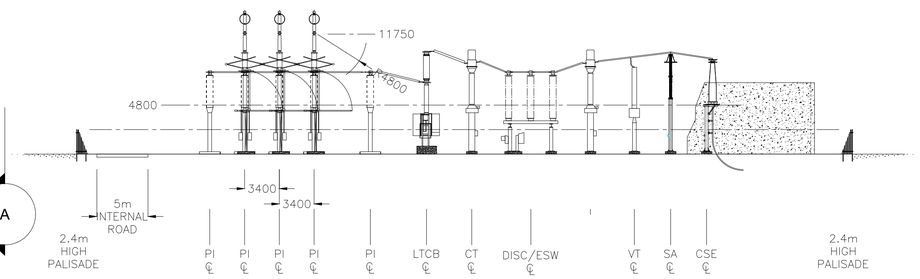
DO NOT SCALE

NOTES:

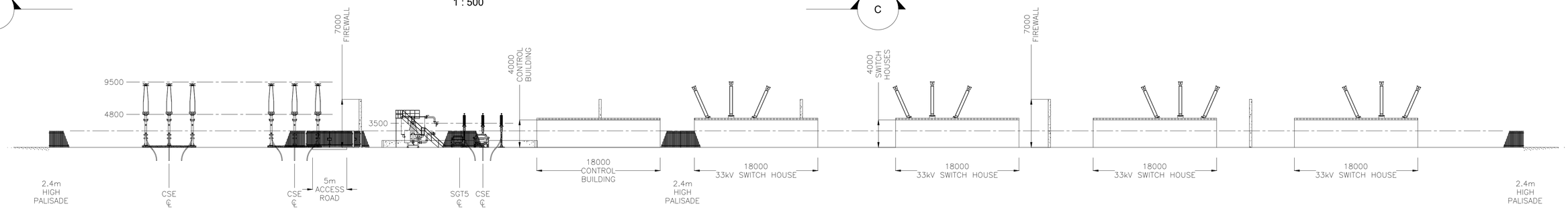
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CIVIL DESIGN ASPECTS ARE INDICATIVE.
3. NO MITIGATION AGAINST FLOOD RISK HAS BEEN INCLUDED FOR SWITCHGEAR STRUCTURES OR BUILDING(S) AND IS SUBJECT TO TOPOGRAPHICAL SURVEY AND FLOOD RISK ASSESSMENT.
4. THE PRESENCE OF EXISTING UTILITIES, BURIED SERVICES, AND UXO ARE TO BE INVESTIGATED.
5. DETAILED SPECIFICATION FOR EQUIPMENT IS TO BE COMPLETED.
6. THE ELECTRICAL CLEARANCES ARE BASED ON BS EN 61936. 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 19m (LxW) x 4.2m AGL
11. MAXIMUM AREA FOR SUBSTATION DEVELOPMENT WITHIN SITE: 292m x 120m (3.5 Ha)
12. WHERE POSSIBLE HIGH LEVEL BUSBARS ARE TO BE SPECIFIED WITH A MAXIMUM HEIGHT OF 12.5m IN ACCORDANCE WITH TS 2.01



SITE 2 SUBSTATION
PLAN VIEW
1 : 500

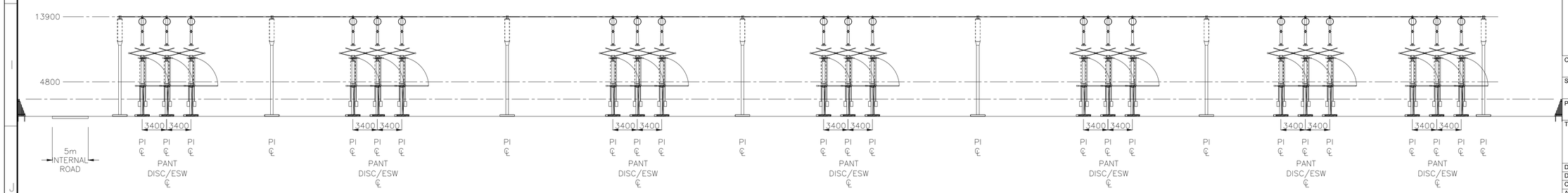


SECTION VIEW A-A
1 : 300



SECTION VIEW B-B
1 : 300

INDICATIVE



SECTION VIEW C-C
1 : 300

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

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 2

PROJECT: LIGHT VALLEY

TITLE: SITE 2 275kV SUBSTATION LAYOUT & ELEVATIONS

DRAWING STATUS:	FOR PLANNING	
DRAWN BY:	DS2	DATE: 19.01.26
CHECKED BY:	DTW	DATE: 02.02.26
APPROVED BY:	DS2	DATE: 02.02.26
FILENAME:	O:\UF00087 - SOLAR & BESS PROJECT\8000 - DRAWINGS\8300 - GA DRAWINGS\UF00087-8300-0013DS2 R1.0	
OFFICE OF ISSUE:	STOCKPORT	
SHEET SIZE:	A1	SCALE: 500:1, 300:1

DRAWING No.: UF00087-8300-0013DS2 Sheet 1 of 1

REVISION: R1.0

3 275 kV Substation layout and elevation – Solar Development Site 4

REFERENCE DRAWINGS:

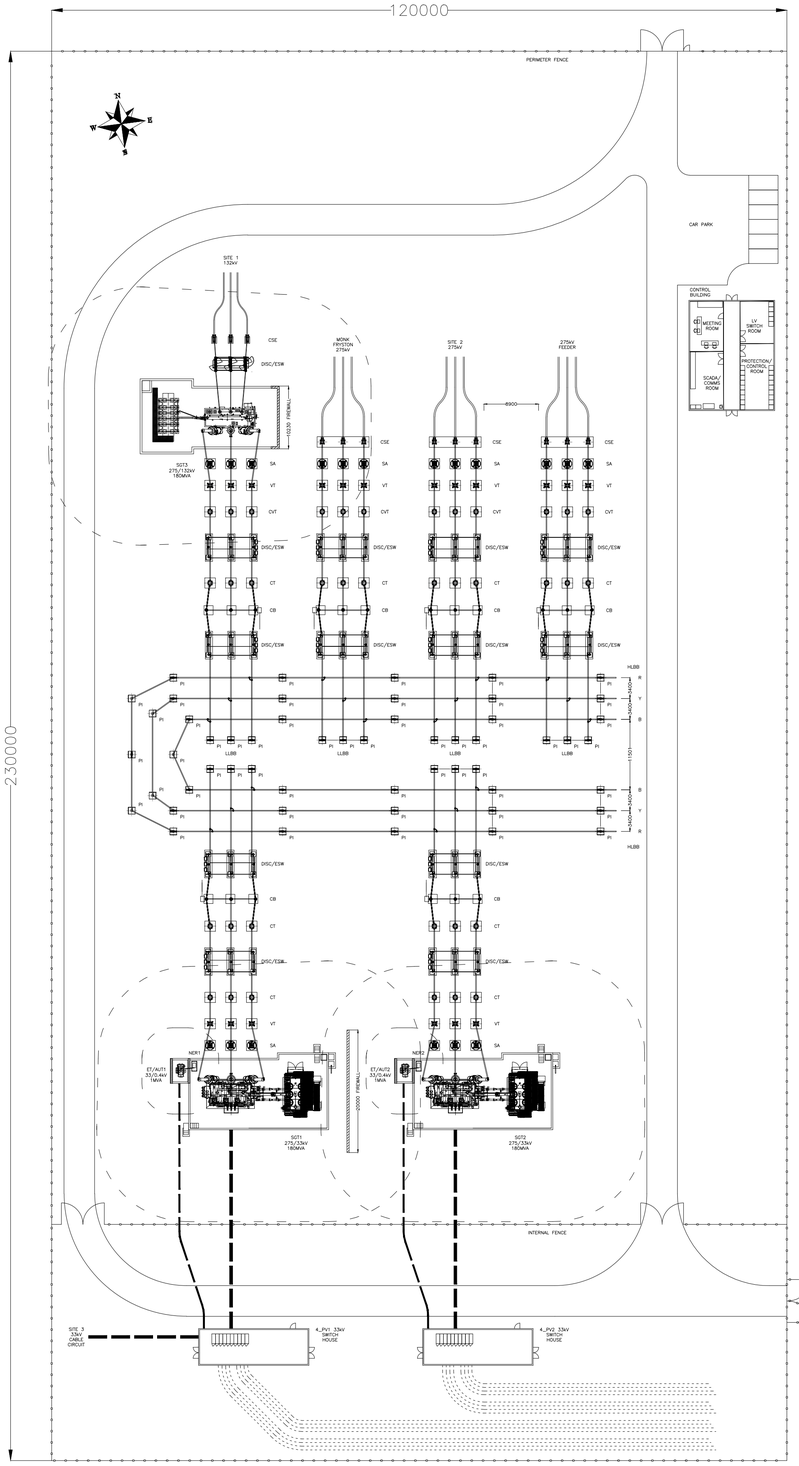
UF00087-8500-0003DS2
UF00087-8300-0012DS2
UF00087-8300-0013DS2
UF00087-8300-0014DS2

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

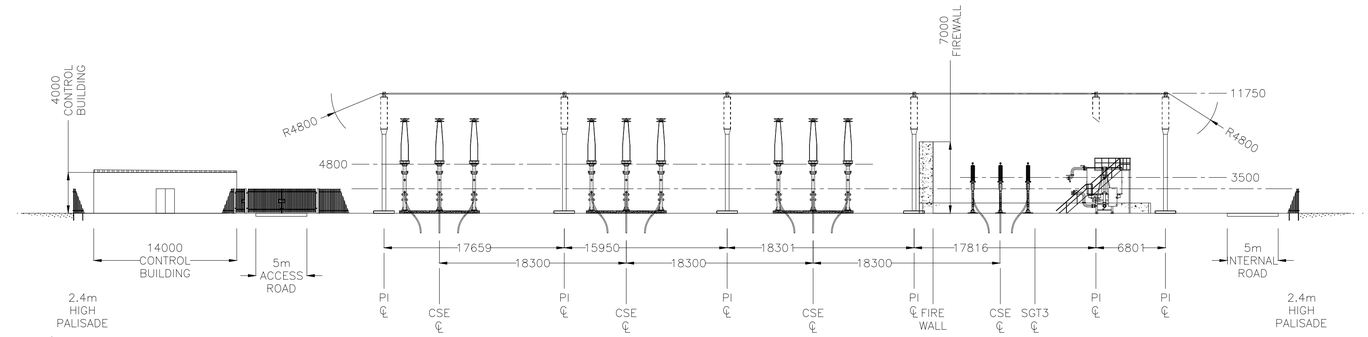
DO NOT SCALE

NOTES:

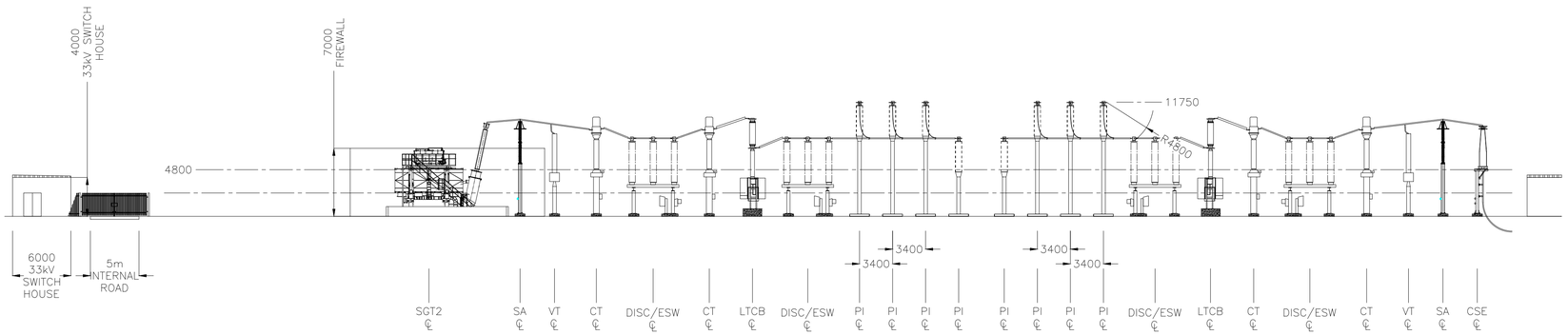
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CIVIL DESIGN ASPECTS ARE INDICATIVE.
3. NO MITIGATION AGAINST FLOOD RISK HAS BEEN INCLUDED FOR SWITCHGEAR STRUCTURES OR BUILDING(S) AND IS SUBJECT TO TOPOGRAPHICAL SURVEY AND FLOOD RISK ASSESSMENT.
4. THE PRESENCE OF EXISTING UTILITIES, BURIED SERVICES, AND UXO ARE TO BE INVESTIGATED.
5. DETAILED SPECIFICATION FOR EQUIPMENT IS TO BE COMPLETED.
6. THE ELECTRICAL CLEARANCES ARE BASED ON BS EN 61936. 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 19m (LxW) x 4.2m AGL
11. MAXIMUM AREA FOR SUBSTATION DEVELOPMENT WITHIN SITE: 292m x 120m (3.5 Ha)



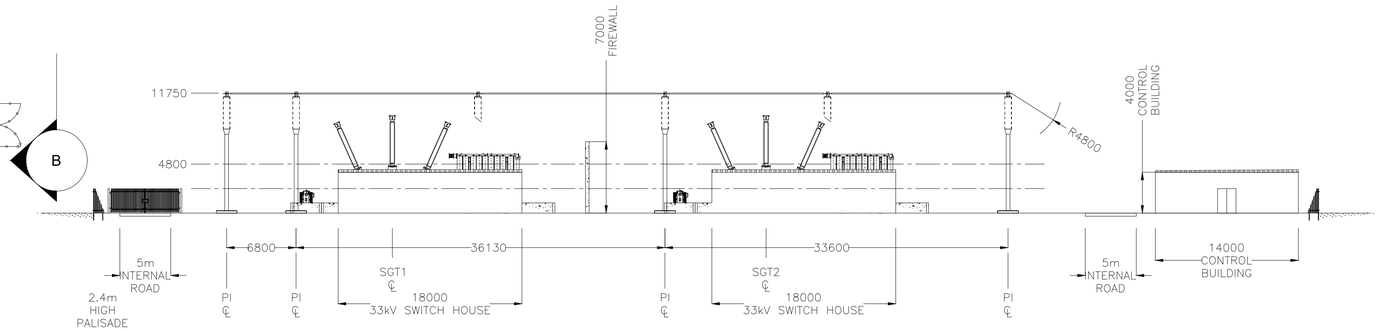
SITE 4 SUBSTATION
PLAN VIEW
1 : 500



SECTION VIEW A-A
1 : 300



SECTION VIEW B-B
1 : 300



SECTION VIEW C-C
1 : 300

INDICATIVE

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

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 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:	O:\UF00087 - SOLAR & BESS PROJECT\8000 - DRAWING\8300 - GA DRAWING\UF00087-8300-0012DS2 R1.0	
OFFICE OF ISSUE:	STOCKPORT	
SHEET SIZE:	A1	SCALE: 500:1, 300:1

DRAWING No.: UF00087-8300-0012DS2 Sheet 1 Of 1

REVISION: R1.0

4 Transformer typical general arrangement

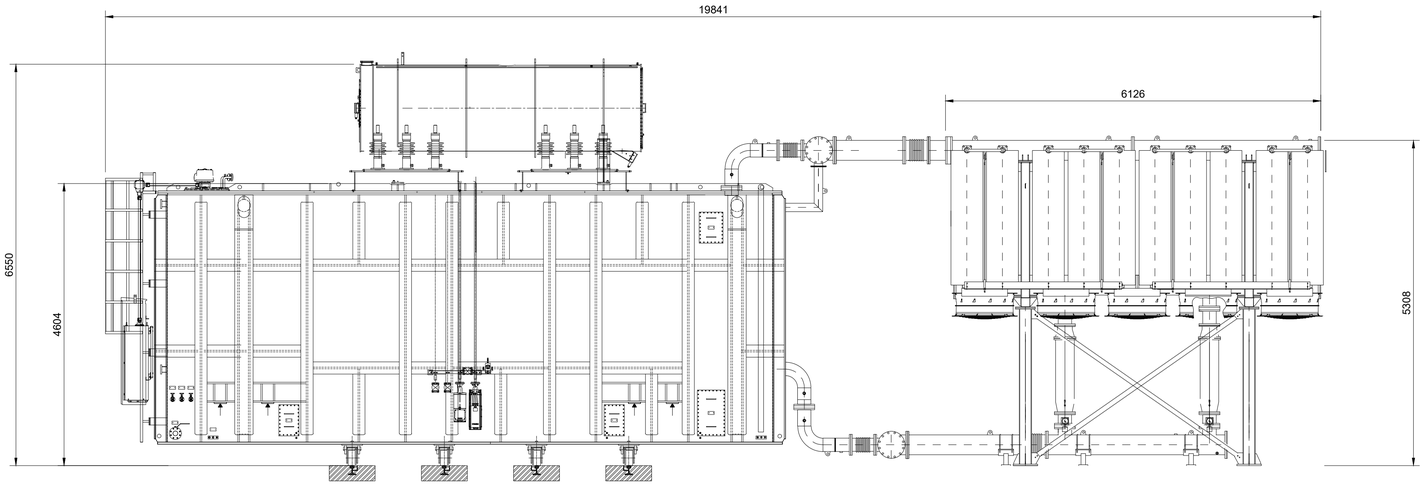
REFERENCE DRAWINGS:

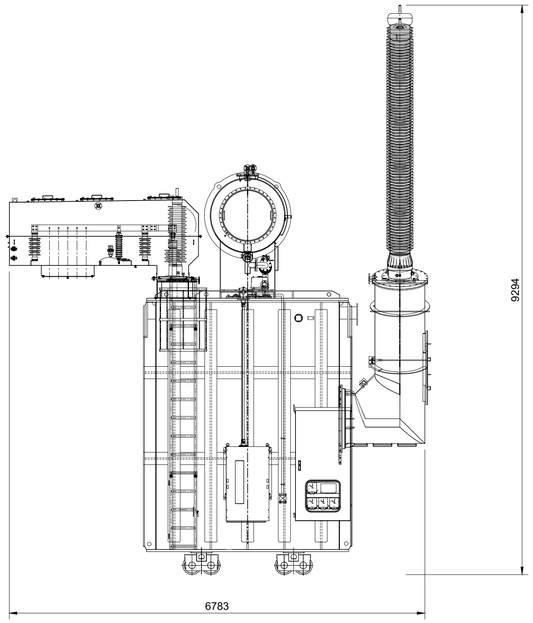
UF00087-8500-0003DS2
UF00087-8300-0012DS2
UF00087-8300-0013DS2
UF00087-8300-0014DS2

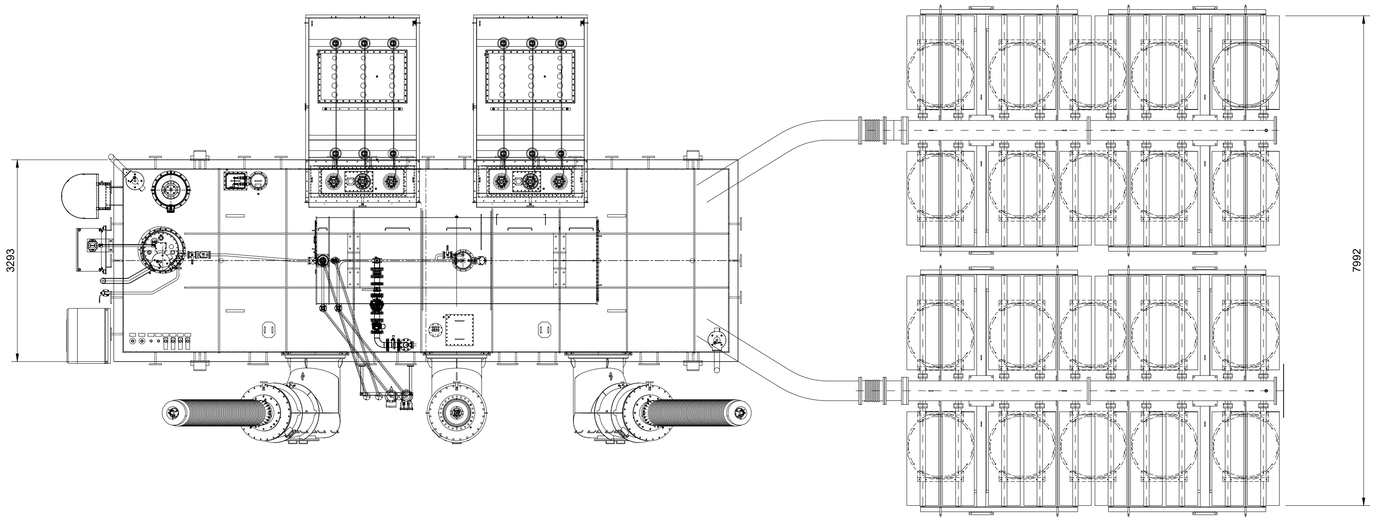
ALL INFORMATION ON THIS DRAWING IS INDICATIVE ONLY, AND MAY BE SUBJECT TO FURTHER DESIGN DEVELOPMENT.

DO NOT SCALE

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. DIMENSIONS ARE INDICATIVE. TRANSFORMER SPECIFICATION AND DESIGN IS TO BE CONFIRMED AND OVERALL DIMENSIONS CONFIRMED.
3. APPROXIMATE EXPECTED TRANSPORT WEIGHT (140-170 TONNES), TO BE CONFIRMED.







INDICATIVE

REV	DETAILS OF REVISION	DRAWN	CHECKED	APPROVED	DATE
R2.0	FOR PLANNING	DS2	DTW	DS2	05.02.26
R1.0	FOR PLANNING	DS2	DTW	DS2	02.02.26

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: -

PROJECT: LIGHT VALLEY

TITLE: 275/33/33 kV 180 MVA ONAF TRANSFORMER TYPICAL GENERAL ARRANGEMENT

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:	C:\UF00087 - SOLAR & BESS PROJECT\8000 - DRAWING\8300 - GA DRAWING\DS\UF00087-8300-0015DS2 R2.0	
OFFICE OF ISSUE:	STOCKPORT	
SHEET SIZE:	A1	SCALE: 100:1

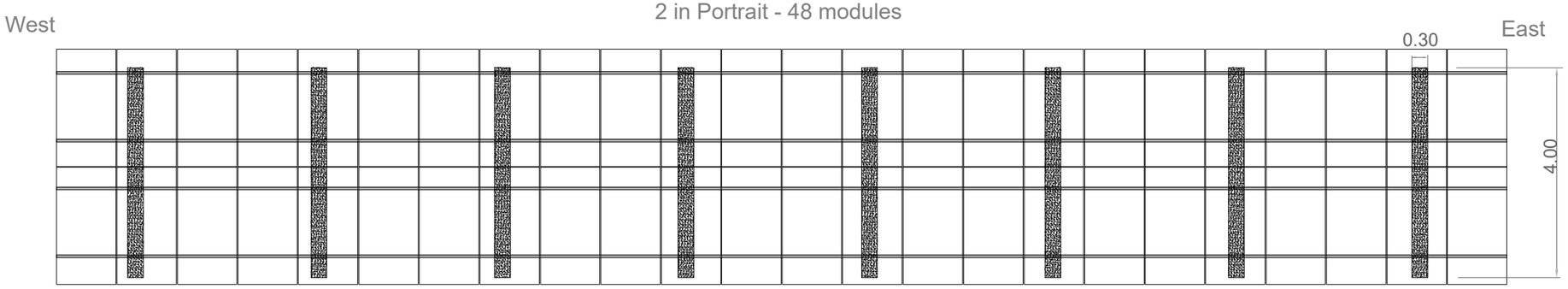
DRAWING No.: UF00087-8300-0015DS2 Sheet 1 Of 1

REVISION: R2.0

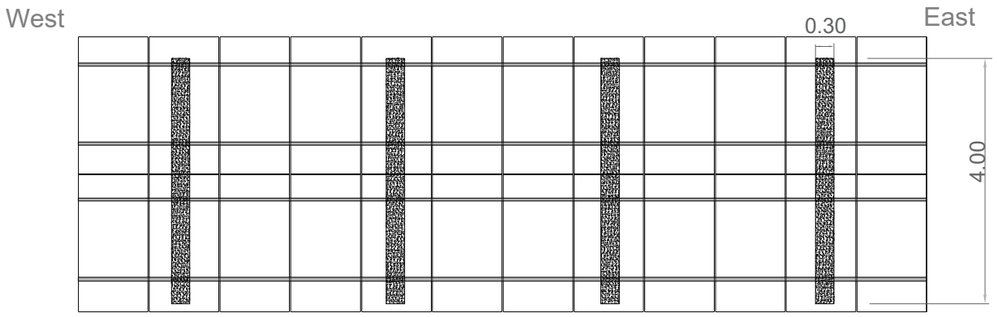
5 Illustrative drawings of Solar PV concrete Feet and Mounting Structure

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

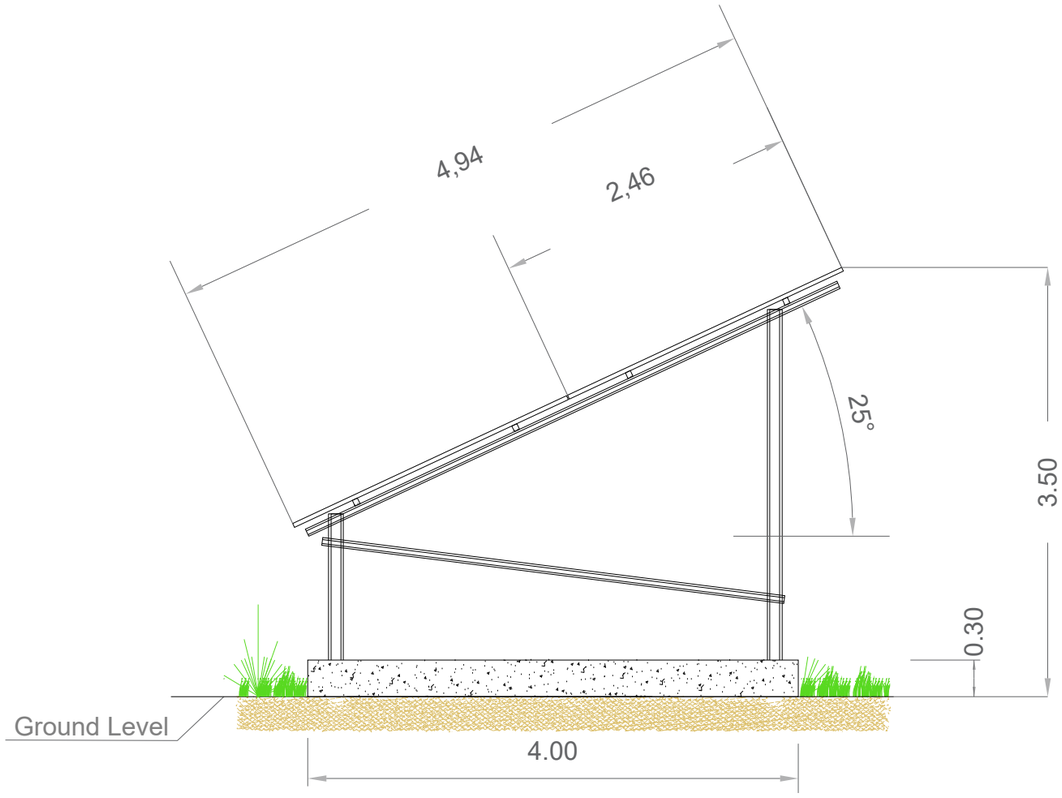
Top View
Scale 1:100
2 in Portrait - 48 modules



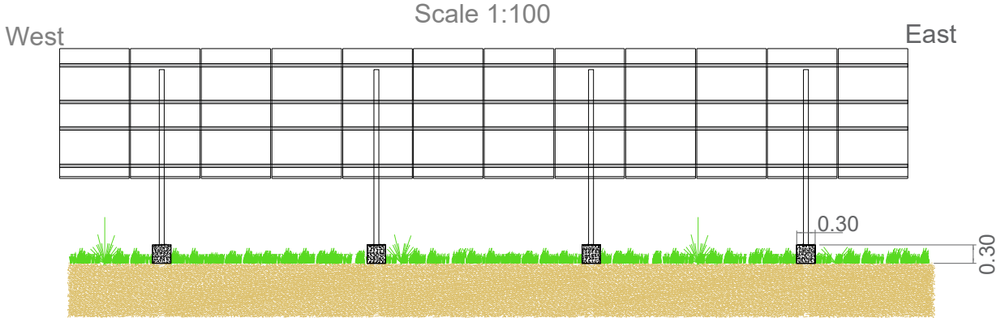
Top View
Scale 1:100
2 in Portrait - 24 modules



Side View
Scale 1:50



Front View
Scale 1:100



General Legend:

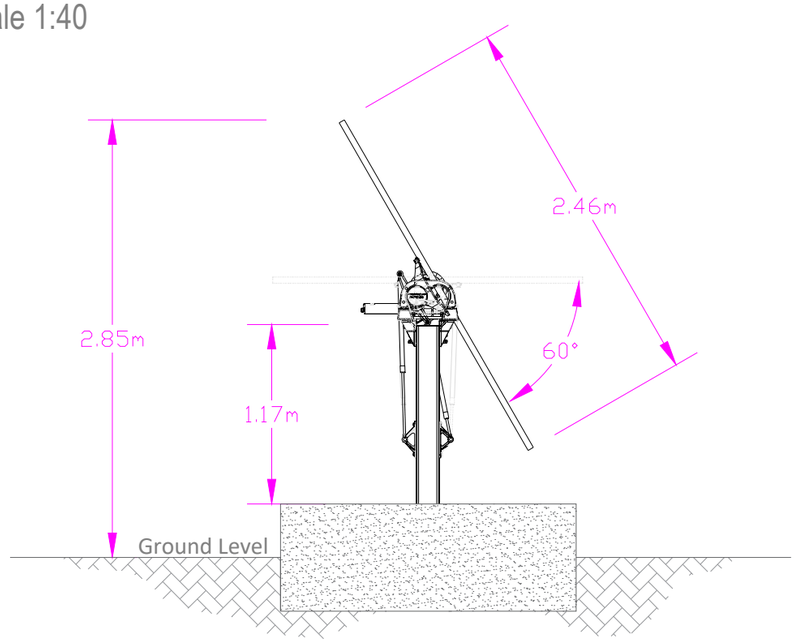
Document Title:	Mounting Structure Details - Fixed Concrete Feet - Side, Front and Top Views
Sheet format:	A3 "420 x 297"
Scale:	Varies

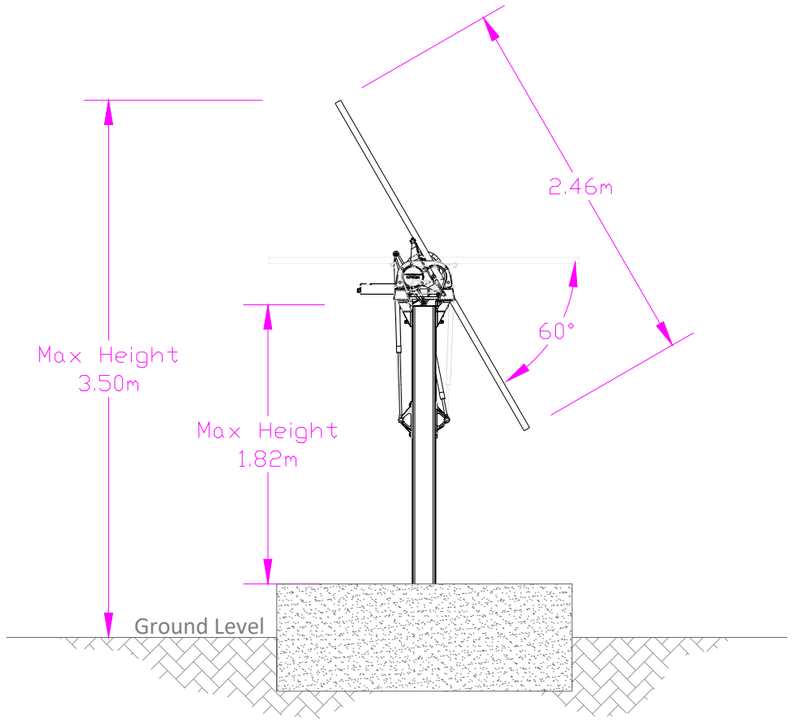
Document amendments:				Comments:
	v.1	22/12/2022	M.N.	

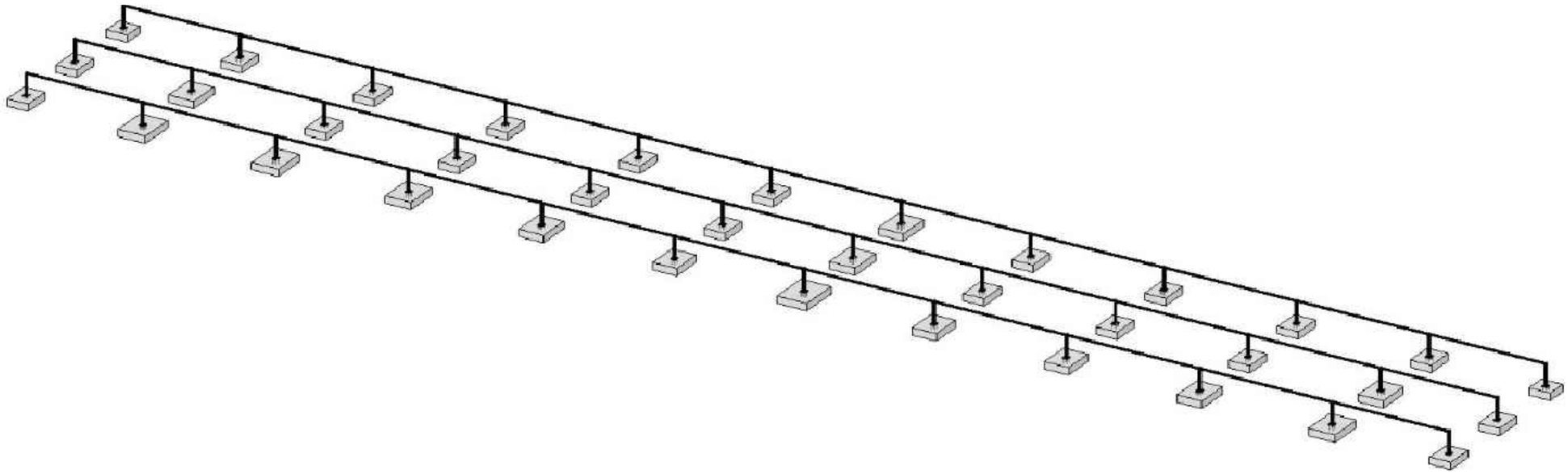
Company: Island GREEN POWER

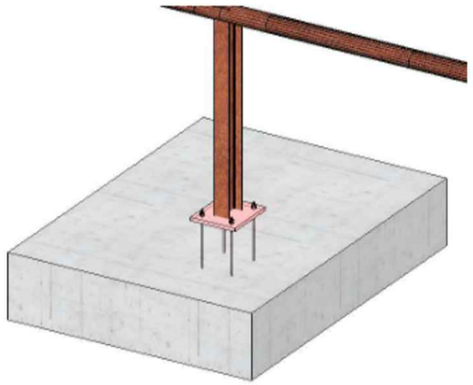
Island Green Power UK Limited
Unit 20.2, Coda Studios
189 Munster Road, London SW6 6AW

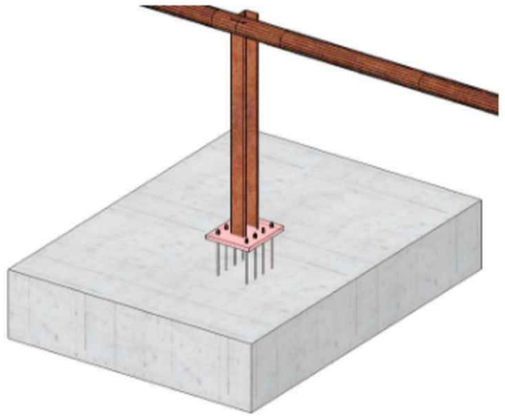
Side View
Scale 1:40











General Legend:

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 Amendments				Comments:
	v.1	21/10/2024	M.N.	

Company:

Island GREEN POWER

Island Green Power UK Limited
Unit 25.7, Coda Studios
189 Munster Road, London SW6 6AW

Light Valley
Solar

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