

**PELHAM SPRING SOLAR FARM
ENVIRONMENTAL STATEMENT
NON-TECHNICAL SUMMARY**

On behalf of Low Carbon Solar Park 6 Limited

Date: January 2023



Document Management.

Version	Date	Author	Checked/ Approved by:	Reason for revision

CONTENTS:

Page No:

1. INTRODUCTION	1
2. DEVELOPMENT SITE	3
3. DEVELOPMENT PROPOSAL	4
4. LANDSCAPE AND VISUAL	7
5. SOCIO ECONOMIC CONSIDERATIONS	15
6. MISCELLANEOUS MATTERS	17

APPENDICES:

APPENDIX 1:	SITE LOCATION PLAN
APPENDIX 2:	PLANNING APPLICATION DRAWINGS

1. INTRODUCTION

- 1.1 This Environmental Statement Non-Technical Summary supports a planning application submitted to The Planning Inspectorate on behalf of the Secretary of State under the provisions of Section 62A of the Town and Country Planning Act 1990.
- 1.2 The development is for the construction, operation, management and decommissioning of a ground mounted solar farm and battery storage facility. The site comprises a collection of medium scale geometrical and irregular fields located at Maggots End, c. 0.8km to the south of Berden, c.1.2km to the north west of Manuden and c. 6km to the north of Bishop's Stortford.
- 1.3 The site location plan is provided at Appendix 1.
- 1.4 The Environmental Statement has been managed and coordinated by Pegasus Group on behalf of Low Carbon Solar Park 6 Limited ("The Applicant").
- 1.5 Low Carbon Solar Park 6 Limited is a special purpose vehicle belonging to Low Carbon Limited. Low Carbon is a privately-owned UK investment and asset management company founded in 2011. They are committed to making a positive and significant impact on climate change by investing in large-scale renewable energy projects.

What is Environmental Impact Assessment (EIA) and Environmental Statement?

- 1.6 EIA is a systematic and objective process through which the possible significant environmental effects of a project can be identified, assessed and, (in the case of significant adverse impacts) mitigated insofar as reasonably practicable. This process and its outcomes are then reported in the Environmental Statement to decision makers, and their advisors and the public. The Non-Technical Summary is provided to allow a wider public understanding of the environmental effects of the project.
- 1.7 The Environmental Statement has been prepared by competent experts. This NTS covers all disciplines assessed in the Environmental Statement. These are landscape and visual impacts; socio economic impacts and an assessment of the

likely significant effects resulting from potential accidents or disasters applicable to the scheme.

2. DEVELOPMENT SITE

- 2.1 The development site is located on agricultural managed fields located between Stocking Pelham to the north west, Berden to the north, and Manuden to the south east. The nearest group of dwellings is located in the hamlet of Brick House End to the west. Battles Hall and other properties in Maggot's End sit to the south east of the site, and along Maggot's End Road leading west from Manuden to East End and then Stocking Pelham. Blaking's Lane forms, in part, the site's northern edge and coincides with Public Right of Way (PRoW) Public Footpath FP 5-12. A number of other PRoWs cross the site or pass in very close proximity, linking Battle's Hall and Maggot's End Road with Brick House End. The agricultural fields are partially bounded by a network of hedgerows, ditches and broadleaved woodland.
- 2.2 Broadly speaking, the site is enclosed to the north by Blaking's Lane and associated vegetation, Battle's Wood to the east, boundary hedgerows and hedgerow trees to the south, and Pump Spring woodland, which compartmentalise the site and visually separates its western most part. The Pelham Spring Electricity Substation is located to the west. Tree vegetation that encloses the Substation provides screening to the west.
- 2.3 The proposed development, broadly speaking, can be divided into two areas which reflects the compartmentalised character of the site. The eastern part is largely located between The Crump, Brick House End, and Battle's Hall; with its western part located between Pump Spring woodland and the Pelham Spring Electricity Substation.
- 2.4 The eastern part of the proposed development is enclosed to the west and east by tree and hedgerow vegetation, effectively preventing any views in or out. Furthermore, the northern perimeter of the site is marked by a strong line of vegetation associated with Blaking's Lane, which coupled with the gently rising topography completely separates the site from the landscape to the north and the neighbouring The Crump.
- 2.5 The development site falls across two parish councils. Most of the site, comprising the southern section, is located within the Manuden Parish. The northern part of the site is located within Berden Parish.

3. DEVELOPMENT PROPOSAL

- 3.1 There is a plethora of Government legislation, guidance and policy which support the transition to a low carbon future and the continued roll out of renewables and low carbon energy and associated infrastructure. The background to the drive to increase the use of renewable sources of energy has its roots in the recognition that the burning of fossil fuels has an adverse effect on the climate of the world as a whole and that global measures are required to deal with it.
- 3.2 The main element of the proposal is the construction, operation, maintenance and decommissioning of a ground mounted solar farm. The solar farm will include a battery storage facility. An operational lifespan of 40 years is sought after which the development will be decommissioned. A new substation compound will serve the development, and this will be required for the duration of the development. The proposed battery units are within a single compound, adjoining the substation compound.
- 3.3 The need for flexibility in design, layout and technology is required to address uncertainties inherent to the development. This is very pertinent to solar development due to the rapid pace of change in module technology and commercial availability. The applicant has therefore sought to incorporate sufficient design flexibility. This relates to the dimensions and layout of structures forming part of the scheme, including the precise layout of the site and the height of the solar panels. The Proposed Development has therefore been assessed based on the Rochdale Envelope approach, i.e., a maximum design scenario and height parameters in order to allow for design flexibility, while ensuring that all potentially significant effects (positive or adverse) have been identified and assessed. In determining the level of residual effects, all mitigation measures are taken into account.
- 3.4 The layout is provided at Appendix 2.
- 3.5 It is anticipated that the solar farm will take approximately 20 weeks (5 months) to complete. This includes the preparation of the site, the temporary access track, erection of security fencing, assembly and erection of the PV strings, installation of the inverters and grid connection. Vehicular access to the site during the construction phase is proposed via an existing agricultural access from Manuden Road to the east of the site. The access currently serves farmland and agricultural buildings and is already in use by large and relatively slow moving vehicles on a

regular basis. This access point will be improved to provide a temporary construction access.

3.6 The scheme is an example of a development which presents considerable opportunity for landscape and biodiversity mitigation and enhancement. The objectives for biodiversity are: -

- Retain and protect existing habitats of local value within and adjacent to the site during construction and operation, specifically hedgerows, woodland, trees and watercourses.
- Identify protected or notable species that may be present and potentially affected by the proposed development, and incorporate suitable avoidance, protection and mitigation measures to ensure their continued favourable conservation status;
- Provide habitat and landscape enhancements through new planting and creation of connected habitat linked to the wider area, using native species appropriate to the locality;
- Provide opportunities for wider species diversity through planting and seeding, including hedgerow creation and infilling and creation of a diverse wildflower meadow/butterfly grassland; and,
- Providing additional nesting and refuge/overwintering habitat for wildlife such as reptiles invertebrates and small mammals with habitat piles/hibernacula, as well as barn owl, bat and bird boxes where appropriate.

Alternatives

3.7 With regards to renewable energy, the principal methods of considering alternatives is through the site selection process and the establishment of a site which is both technically feasible and which minimises potential environmental impacts. Alternative energy generating solution is also a material consideration together with the 'do nothing' approach.

3.8 It is regarded as best practice within the EIA to consider the 'do nothing' alternative. The 'do nothing' option would entail leaving the development site in its current condition and it is assumed that the current land use would remain as it is,

that is, available for agricultural use. It is an obvious statement that any impacts associated with the proposed development would therefore not occur. However, the 'do nothing' option will result in the loss of potential renewable energy source proposed by the development proposal. Other benefits that would not be secured are farm diversification and biodiversity enhancements.

- 3.9 The principal methods of considering alternatives has been through the site selection process. Given the technical constraints in choosing a suitable site adjacent to the point of connection to the Pelham Substation, no reasonable alternative sites of appropriate size have been identified by the Applicant which could more suitably accommodate the development proposal within close proximity of the point of connection. Accordingly, there is no alternative which would be capable of delivering similar benefits. In terms of alternatives, there are no brownfield sites of adequate size that can accommodate the development proposal within 4km of the point of connection; there are no 'non-agricultural' sites available that could accommodate the development proposal within 4km of the point of connection.

4. LANDSCAPE AND VISUAL

4.1 The Landscape and Visual Impact Chapter of the Environmental Statement has considered the potential effects of the scheme on the existing landscape character, landscape components and features, and visual amenity. The Proposed Development has been assessed based on the Rochdale Envelope approach, i.e., a maximum design scenario and height parameters in order to allow for design flexibility, while ensuring that all potentially significant effects (positive or adverse) have been identified and assessed. In determining the level of residual effects, all mitigation measures are taken into account.

Context

4.2 The Application Site lies within an area of undesignated undulating, predominantly pastoral landscape, interspersed with frequently occurring woodland blocks, mature trees and hedgerows. This vegetation and subtle changes in topography combine to limit or expose views towards parts of the Application Site from different directions, and the effect which has been used to guide the extent and design of the Proposed Development. The ruralness of the area compromised by the existing large scale Stocking Pelham Substation and large scale high voltage pylons and overhead cables.

4.3 The Proposed Development is not located within any national statutory protected landscape designations. It does not lie within any regional or local non-statutory landscape designations, either. Natural England has identified 159 geographical areas of similar landscape character known as National Character Areas (NCAs). This mapping, sometimes described as 'The Character of England Map', provides a description of landscape character at the national scale. It is considered that whilst the NCAs provide a national spatial framework, the scale of the mapping and information is of limited use at the local scale. The Application Site is located within the South Suffolk and North Essex Clayland (NCA 86), as identified by Natural England.

4.4 At a county level, the landscape around the Application Site is described and analysed in the Essex Landscape Character Assessment, published in 2003 by Essex County Council. According to the published Assessment, the Application Site falls within the southern end of the Chalk Upland Landscapes Landscape Character Type (LCT) A, and its North West Essex Chalk Farmland (A1) Landscape Character Area (LCA).

4.5 At the district level, Uttlesford District Council published its own landscape character assessment titled Braintree, Brentwood, Chelmsford, Maldon and Uttlesford Landscape Character Assessments. According to the published assessment, the Application Site is located within H4 'Berden and Farnham Chalk Upland' Landscape Character Area (LCA), part of Landscape Character Type (LCT) H 'Chalk Upland Landscapes'.

Landscape Value

4.6 The landscape is not subject to any statutory or non-statutory landscape designations. The Application Site represents a typical example of a managed agricultural landscape. The landscape is therefore not of high value landscape in the context of the National Planning Policy Framework. The condition of the landscape appears to be good, and this is confirmed in the published landscape character assessment.

4.7 In terms of its scenic qualities, the Application Site is a pleasant and attractive, but unremarkable area that is generally seen in isolation and visually separate from the wider landscape. Views from the eastern study area include some of the properties in Maggot's End, but the Application Site is almost imperceptible. In short, the Application Site and its immediate environs are not seen in the context of the River Stort valley landscape, located further east.

4.8 The undulating topography around the Application Site offers locally elevated and medium range views; and these are characterised by a combination of wooded horizons with frequent tree cover, with the landform often foreshortening the views and reducing the appreciation of the local field pattern.

Mitigation

4.9 The layout of the scheme has been subject to a number of changes, as a result of the iterative design process informed by preliminary findings of the landscape and visual assessment, heritage, and other disciplines.

4.10 In addition, the currently proposed layout responds to the feedback provided by the Council as part of the pre-application consultation received in April and late June 2022; and aims to address the Council's concerns in relation to the previous scheme submitted by Low Carbon Solar Park 6 Limited on the same site and subject to refused planning application UTT/21/3356/FUL.

-
- 4.11 The proposed layout incorporates a number of built in mitigation measures such as offset from boundary vegetation, reduction in the extent of the Application Site: offset from Maggot's End Road and Battle's Hall, and refinements to the layout to provide visual separation from the adjacent PRoWs. These refinements, part of the iterative design process, respond to the on-site analysis and preliminary LVIA work carried out in winter 2020 and spring/summer of 2021.
- 4.12 The primary objective of the proposed planting was to strengthen the existing landscape framework associated with the Application Site whilst visually enclosing it to reduce the inter-visibility with close to very close visual receptors.
- 4.13 During the on-site survey, it was noted that there are a number of overgrown hedgerows with hedgerow trees around the Application Site that resemble tree lines. In addition, some of the better maintained hedgerows along public highways and field boundaries are also reasonably high. It is therefore appropriate, and in keeping with the existing landscape character, for the retained and proposed hedgerows (once established) to be maintained at approx. 3m height.
- 4.14 By offsetting the proposed panels from the boundaries, the Proposed Development avoids any direct effect upon the Root Protection Areas associated with the existing boundary vegetation, and in particular the heavily vegetated northern and north eastern boundary and adjacent woodlands. The relatively wide buffers also provide a generous maintenance zone and help avoid any health and safety risks which could result in future tree works.
- 4.15 With regards to Public Footpaths which cross the Application Site, these PRoWs would be bordered by new hedgerows and hedgerow trees. The physical alignment of these Public Footpaths would be retained. The new 'green corridor' would be relatively wide, approx. 10m wide, to avoid creating a tunnel effect. Such design device is becoming a standard approach across the country with various local planning authorities accepting such design solutions as appropriate and acceptable.
- 4.16 As part of the iterative design process carried out in 2021, the two large scale arable fields located along the northern side of Maggot's End Road and west of Battle's Hall, have been excluded from development. This change addresses the identified issue around visual amenity of road users, PRoW users to the south including Public Footpath 39-7, and residents of Battle's Hall and Battle's Hall Barns. The visual amenity of users associated with Public Footpaths 5-15 and 5-14 has

also been considered with the fields located immediately to the south east of Brick House End removed from development.

- 4.17 Following the discussion and pre-application advice from the Council’s heritage and landscape officers, in May and June 2022, the extent of solar modules in the eastern part of the Proposed Development was reduced, to minimise the adverse effects on the local landscape character and visual amenity associated with the nearby PRowS.

Additional Mitigation

- 4.18 As well as retaining all trees and hedgerows within, and around the periphery of the Application Site, landscape enhancements as set out in Table below 6.3 are proposed to strengthen the landscape structure whilst reducing any visual effects arising from the Proposed Development.

Table: Landscape Mitigation

Ref	Measure to avoid, reduce or manage any adverse effects and/or to deliver beneficial effects	How the measure would be secured	
		By Design	By Planning Condition
1	Protection and retention of existing mature trees and hedgerows within the Application Site and along its boundaries during construction in accordance with Construction Environmental Management Plan (CEMP).	✓	✓
2	Protection and retention of existing mature trees and hedgerows within the Application Site and along its boundaries during operation in accordance with Landscape and Ecological Management Plan (LEMP).	✓	✓
3	Sensitive location of the substation to screen and anchor it within the landscape.	✓	
4	Establish and maintain an approximately 5m deep woodland planting along Blaking’s Lane to enhance screening during construction and operation in accordance with LEMP and CEMP.	✓	✓
5	Establish and maintain a small clump of native woodland planting to the west of Development Zone 2 to enhance screening during construction and operation in accordance with LEMP and CEMP.	✓	✓
6	Where necessary, repair external hedgerows including additional tree planting along the perimeter of the Proposed Development including the	✓	✓

Ref	Measure to avoid, reduce or manage any adverse effects and/or to deliver beneficial effects	How the measure would be secured	
		By Design	By Planning Condition
	vegetation along PRowS and Blaking's Lane. Manage hedgerow to a height of approximately 3m height during operation.		
7	Introduce small scale and large scale / woodland scale legacy trees along the perimeter of the Proposed Development, to strengthen the landscape framework, connect habitats, and increase the screening.	✓	✓
8	Retained areas of grassland meadow and skylark conservation area within the fields to be positively managed for nature conservation where possible through low level grazing or mowing) during operation in accordance with LEMP.	✓	✓

Enhancements

4.19 The Application Site and surrounding landscape displays a high level of mature tree and hedgerow cover which limits the extent of the Application Site that is visible from any representative viewpoint. Therefore, it is not considered on landscape and visual grounds to be necessary or appropriate for additional tree or hedgerow planting to be incorporated into the Proposed Development over and above that identified for mitigation.

Effects During Construction

4.20 The Environmental Statement identifies there would be no significant adverse effects upon any landscape features associated with the Application Site. There would be no significant adverse effects upon the local landscape or any NCAs, LCTS, or LCAs associated with the study area. Turning to visual effects, with the exception of residents at Brick House End Cottages No.1 and No.2 and Rose Garth no other residential receptors have been assessed as gaining direct or relatively unrestricted views of the construction stage across the majority of the Application Site. For these three dwellings, the construction stage is likely to bring about a high degree of change and major adverse yet temporary and reversible effects.

Effects During Operation

- 4.21 The Proposed Development has been assessed as resulting in a high magnitude of change, and major beneficial significant effect upon the hedgerow and hedgerow tree resource within the Application Site during the operational stage of the Proposed Development. No other landscape features associated with the Application Site would be significantly affected by the operational stage of the Proposed Development.
- 4.22 With regards to the landscape character effects, none of the character areas associated with the study area have been assessed as subject to any significant landscape character effects.
- 4.23 Based on the viewpoint assessment and site visits it transpires that the Proposed Development has been redesigned to be well contained, taking advantage of the topographical variations in the local landscape, vegetative screening such as tree belts and woodlands, and roadside vegetation across the landscape. The majority of the identified and assessed visual receptors are close to very close range, often located within the Application Site or along its perimeter. It is therefore worth reiterating that the selected viewpoints and analysed receptors are those which are located in close or very close proximity to the site where a higher degree of change is to be expected.

Decommissioning

- 4.24 It is anticipated that decommissioning would be a reversal of the construction phase, comprising similar construction plant, traffic, and activities as the arrays, fencing etc. are dismantled. The DNO substation would be potentially retained (on the assumption it will be adopted by a statutory undertaker), but all other materials and structures would be removed, and the Application Site would be 'made-good' and returned to pre-development agricultural uses. All existing healthy mature trees and hedgerows would be retained and managed to maintain these landscape features and appropriate levels of visual enclosure and screening.

Cumulative Effects

- 4.25 The review of the nearby and more distant cumulative scheme has revealed that only two schemes are relevant to this LVIA: the cumulative Solar Farm near Stocking Pelham and cumulative Stocking Pelham BESS.

- 4.26 On balance, the LVIA has concluded that, assuming the cumulative Solar Farm near Stocking Pelham and cumulative Stocking Pelham BESS have already been constructed, with the existing Stocking Pelham Substation and large scale pylons exerting a strong influence over the local landscape, the addition of the Proposed Development would bring about a highly localised high degree of change and major significant cumulative landscape character effects. Such effects would be limited to the landscape associated with the Proposed Development, the two cumulative sites, and the existing infrastructure, i.e., the landscape between Stocking Pelham and the existing Stocking Pelham Substation to the west and north west, Pelham Road to the north, Berden and The Street to the north east, Blaking's Lane and Battle's Wood to the east and south east, Maggot's End Road to the south and south west.
- 4.27 Beyond this immediate area, the landscape has been assessed as not subject to any significant effects.
- 4.28 The cumulative assessment has also included the visual receptors, viewpoints and PRoWs associated with the Application Site. The assessment has concluded that there is no potential for any simultaneous or in succession views of the Proposed Development and the identified cumulative schemes from the local PRoWs due to the lack of any inter-visibility.
- 4.29 The assessment, however, has identified that some of those PRoWs have the potential to offer sequential cumulative views with the receptors travelling across the local landscape and between the settlements. The PRoWs radiate away from the settlements and cross the landscape in various directions and alignments, offering a variety of visual experiences, a sense of enclosure and appreciation of the surrounding area. In the majority of cases, views from those PRoWs have been judged to be affected by the visibility of the existing Stocking Pelham Substation and large scale high voltage pylons, and the presence of the cumulative schemes. The cumulative Solar Farm near Stocking Pelham is expected to exert a considerably higher degree of influence when compared with the strongly enclosed small scale cumulative Stocking Pelham BESS.
- 4.30 The assessment concluded that the Proposed Development would bring about a high degree of change at Year 1 upon the users travelling along the PRoWs between the settlements of Stocking Pelham, Berden and/or Maggot's End.

- 4.31 No other visual receptors have been considered to be subject to significant cumulative visual effects.
- 4.32 Overall, it is considered that the Proposed Development could be successfully accommodated within the Application Site and could be effectively integrated and assimilated into the and surrounding landscape without unacceptable temporary but long-term residual effects on landscape character or visual amenity as a whole. The combination of undulating topography and strong landscape framework around the Proposed Development creates a discrete pocket of land characterised by a limited level of inter-visibility with its wider surroundings. The proposed planting would help contribute to the character of the local area partially offsetting the adverse effects, which only occur locally and affect a very limited number of visual receptors.

5. Socio Economic Considerations

5.1 Uttlesford experienced population growth of 14.1% between 2011 and 2021 (11,308 additional people), and in East Hertfordshire there was a relatively lower population growth of 8.7% (12,005 additional people). Relative to the benchmark areas of East of England and England and Wales, Uttlesford and East Hertfordshire's population grew at a faster rate over this timeframe. Employment growth in Uttlesford between 2015 and 2021 has been strong with 9.8% increase in job numbers, especially when compared to the picture at a regional and national level (7.6% and 5.3% respectively). In the same time period, East Hertfordshire saw jobs growth of 7.8%. The construction sector, which is likely to see increased employment opportunities during the Proposed Development's build phase represents 6.5% of total employment in Uttlesford and 6.6% of total employment in East Hertfordshire, which is above the proportion of total jobs at the regional scale (6.1%) and Great Britain (5%). Both Uttlesford and East Hertfordshire have a net outflow of commuters.

Likely Significant Effects

5.2 In respect of the construction phase, the assessment indicates that the Proposed Development will have the following temporary effects:

- 117 direct and indirect/induced construction jobs and indirect/induced supply chain jobs at peak times over the 5-month construction programme.
- Up to £3.6million of gross value added over the 5-month construction programme.

5.3 In EIA terms, these impacts are considered to have a minor beneficial effect in the short-term.

5.4 Regarding the operational phase, the assessment suggests that the Proposed Development will have the following permanent effects:

- 5 net additional jobs in the Uttlesford economy.
- £0.27million of gross value added per annum in the Uttlesford economy or £6million over 40-year operational lifespan (present value).

- £165,120 per annum of business rates or £3.7million over the expected lifetime of the solar park (circa 40 years).

5.5 The significance of the permanent jobs and GVA is negligible beneficial and the significance of the business rates is minor to moderate beneficial. None of these effects are significant in EIA terms.

Mitigation and Enhancement

5.6 It has been found that no mitigation is required for socioeconomic effects created by the Proposed Development.

Conclusion

5.7 Overall the Proposed Development provides positive socio-economic effects.

6. MISCELLANEOUS MATTERS

- 6.1 The Environmental Statement includes a description and assessment of the likely significant effects resulting from potential accidents or disasters applicable to the development proposal. For the purpose of the assessment, major accident or disaster has been defined as an event that threatens immediate or delayed loss of life or permanent injury/or serious long lasting or permanent damage to the environment and requires the use of resources beyond those of the Applicant to manage. These could be internal to the proposed development or an external event that could affect the proposed scheme. Disaster has been defined as a naturally occurring phenomenon such as an extreme weather event (e.g. storm or flood) or ground related hazard events (e.g. subsistence or landslides). Major events therefore includes both man-made and naturally occurring events.
- 6.2 The risk both to construction workers and the general public is low and not significant during the construction and decommissioning phases. This would be regulated by the Health and Safety Regulations and the construction (Design and Management) Regulations 2015. The construction of the Development would be managed in accordance with the Health and Safety at Work Act 1974 and would comply with all other relevant Health and Safety Regulations, including the Construction (Health, Safety and Welfare) Regulations 1996 and Electricity Safety, Quality and Continuity Regulations 2002.
- 6.3 When operational the majority of the scheme comprises solar PV modules which are inert. Electrical infrastructure will be located across the development, in the form of inverters, transformers and cabling, all of which will be subject to routine maintenance such that it is not considered to pose a significant risk to creating an accident or disaster. Likewise, the battery storage facility is not considered to pose a significant risk to creating an accident or disaster
- 6.4 The Environmental Statement also includes a description of the likely significant effects the development proposal has on climate and the vulnerability of the project to climate change. With regards to vulnerability to climate change, the solar modules are designed to capture the sun's energy and therefore built to withstand extreme climatic conditions and are purposefully located in open locations. The site is not located within a costal location and as such is not at risk to any changes to the sea level. The framework holding the modules are driven into the ground at an appropriate depth which responds to site specific ground conditions and are

designed to accommodate the predicted relatively small change in wind speed during the lifespan of the development.

- 6.5 Turning to waste, given the nature of the Development and the construction process no significant quantities of waste are anticipated. The majority of construction equipment will be delivered to site for assembly and installation (mounting structures) and connection (solar panels).

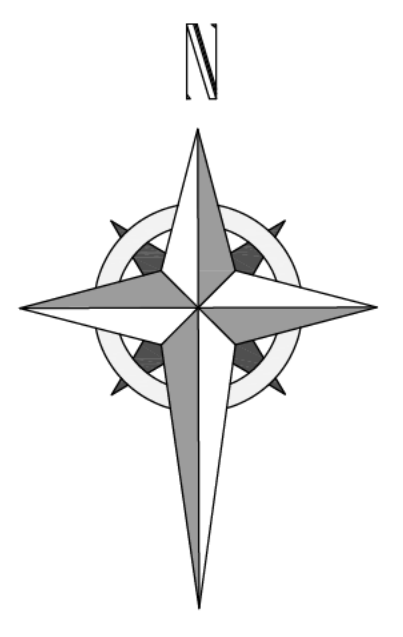
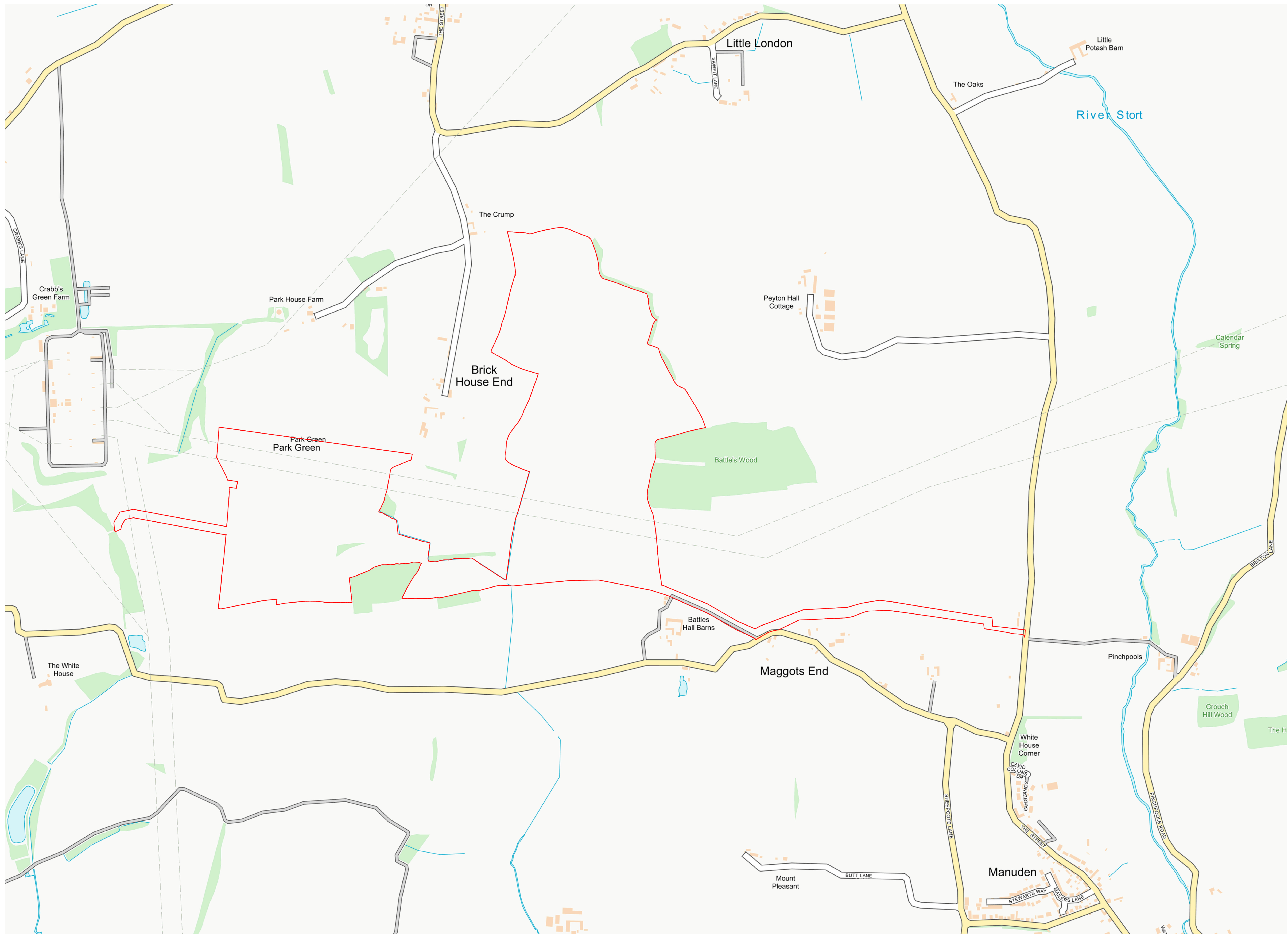
APPENDIX 1

SITE LOCATION PLAN

This drawing is the property of Low Carbon and must not be reproduced in whole or in part or used for any purpose without their written permission.
All dimensions are to be confirmed on site prior to commencement of work.

Revisions:				
Number	Date	Revision Notes	Drawn	Checked
01	17.02.21	Final Issue	LM	LM
02	02.01.21	Revised	LM	LM
03	29.08.21	Amendment to Red Line	LM	LM
04	04.09.21	Update to Red Line	LM	LM
05	18.11.21	Revised	LM	LM
06	07.08.22	Amendment to Red Line	LM	LM
09	31.08.22	Amendment to Red Line	LM	LM

LEGEND:
SITE LOCATION



Total RLB: 76.39 Ha

Status: **PLANNING**

Project: **Pelham Spring Solar Farm**



2nd Floor 28-29a Queens, 5-7 Carlton Gardens
London W1R 4AG
Tel: 4420207 4395700
info@lowcarbon.com www.lowcarbon.com

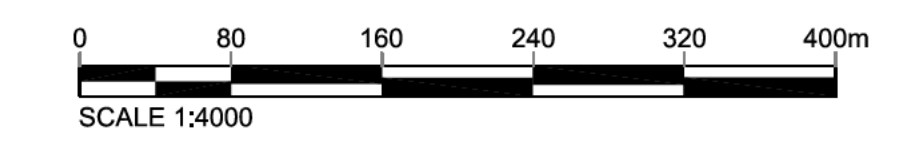
Drawing Title: **Pelham Spring Site Location Plan**

Drawn: HN | Checked: LM | First Issued: 17.02.2021

Project Code: LCS032-SP-01 | Drawing Number:

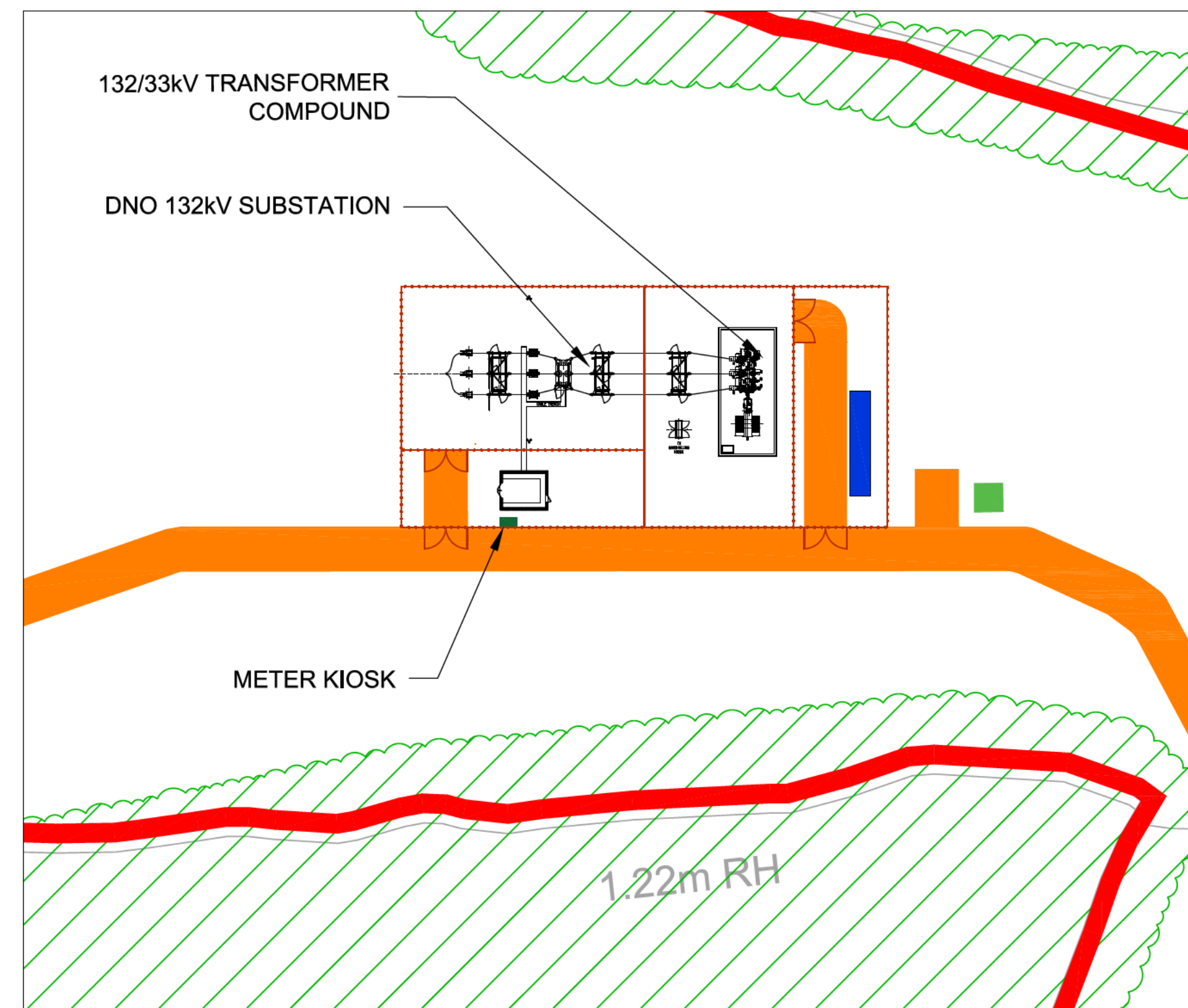
Sheet Size: A0 | Scale: 1:4000 | Revision: 09

1 PELHAM SPRING SITE LOCATION PLAN
Scale: 1:4000@A0

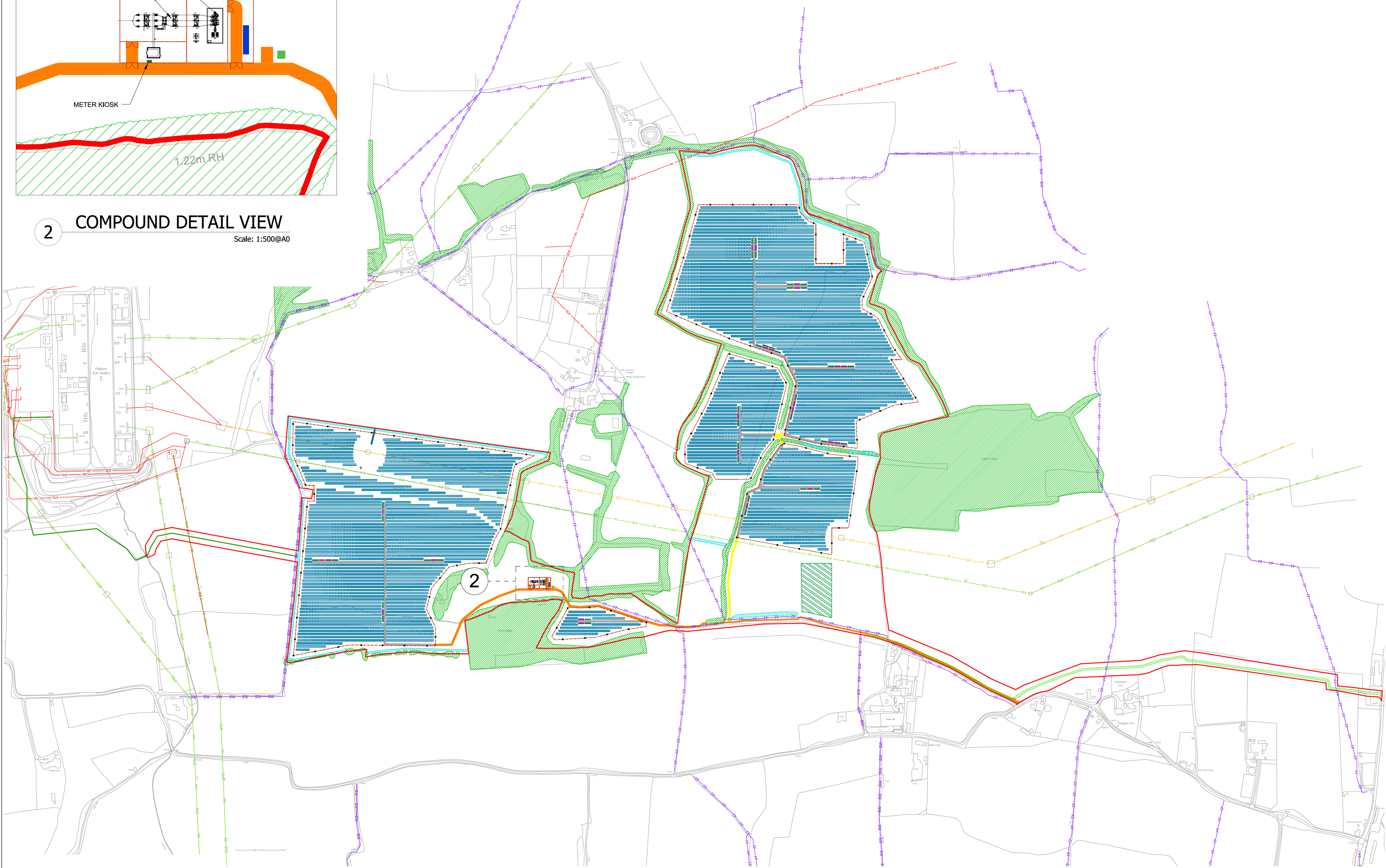


APPENDIX 2

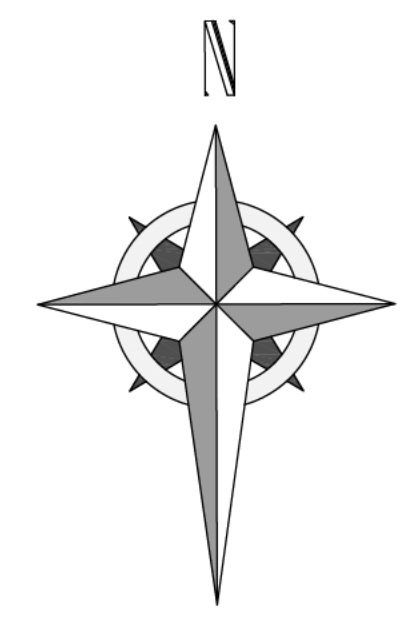
PLANNING APPLICATION DRAWINGS



2 COMPOUND DETAIL VIEW
Scale: 1:500@A0



1 PELHAM SPRING SOLAR FARM INDICATIVE SITE LAYOUT
Scale: 1:3000@A0



The drawing is the property of Low Carbon and shall not be reproduced in whole or in part or used in any manner without their written permission.
All dimensions are to be confirmed on site prior to commencement of work.

Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	23.11.2020	Final Issue	PL	LM
02	16.03.21	Revised	PL	LM
03	23.03.21	Revised	PL	LM
04	16.03.21	Revised	PL	LM
05	23.03.21	Revised	PL	LM
06	23.03.21	Revised	PL	LM
07	23.03.21	Revised	PL	LM
08	23.03.21	Revised	PL	LM
09	23.03.21	Revised	PL	LM
10	23.03.21	Revised	PL	LM
11	16.04.21	Revised	PL	LM
12	07.08.21	Additional Percol Included	MC	LM
13	23.09.21	Updated to add comments	SC	HJ
14	23.09.21	Revised	PL	HJ
15	23.09.21	Revised	PL	HJ
16	23.09.21	Revised	PL	HJ
17	23.09.21	Revised	PL	HJ
18	23.09.21	Revised	PL	HJ
19	23.09.21	Revised	PL	HJ
20	23.09.21	Revised	PL	HJ
21	18.11.21	Soils Updated	MC	HJ
22	18.11.21	Revised	PL	HJ
23	12.01.22	Revised	PL	HJ
24	01.05.22	Amendment to Red Line	PL	HJ
25	31.05.22	Red Line & Construction Access Amendment	AK	HJ

LEGEND:

- PROPOSED SITE
- DNO ACCESS
- CONSTRUCTION AND MAINTENANCE ACCESS
- CONSTRUCTION ACCESS
- SITE ACCESS
- NATIONAL GRID ACCESS
- PERMETER FENCING LINE
- PROPOSED CABLE ROUTE
- TEMPORARY COMPOUND AREA

SOLAR SITE INFRASTRUCTURE:

- DNO LV SUBSTATION
- CUSTOMER SWITCHGEAR
- SOLAR PANEL MODULES (PITCH 7m) P:3 x S:5m
- METER KIOSK
- SECURITY GATE
- CCTV CAMERA
- INVERTER
- BATTERY

ENVIRONMENT

- EXISTING VEGETATION
- PROPOSED VEGETATION
- BRIDLEWAY
- FOOTPATH
- BYWAY
- BYWAY

SERVICES:

- OH ELEC CABLE
- UG ELEC CABLE
- UKPN WAYLEAVE

Status: **PLANNING**

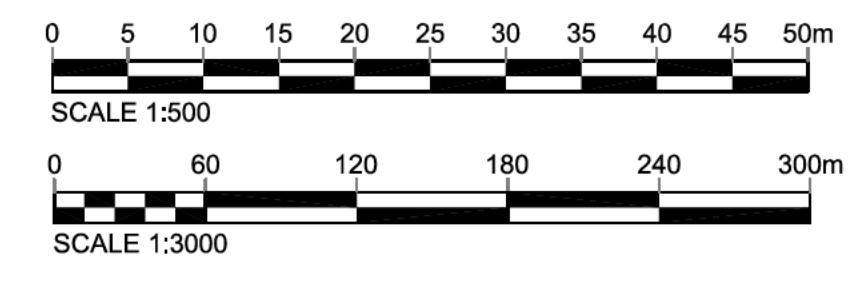
Project: **Pelham Spring Solar Farm**

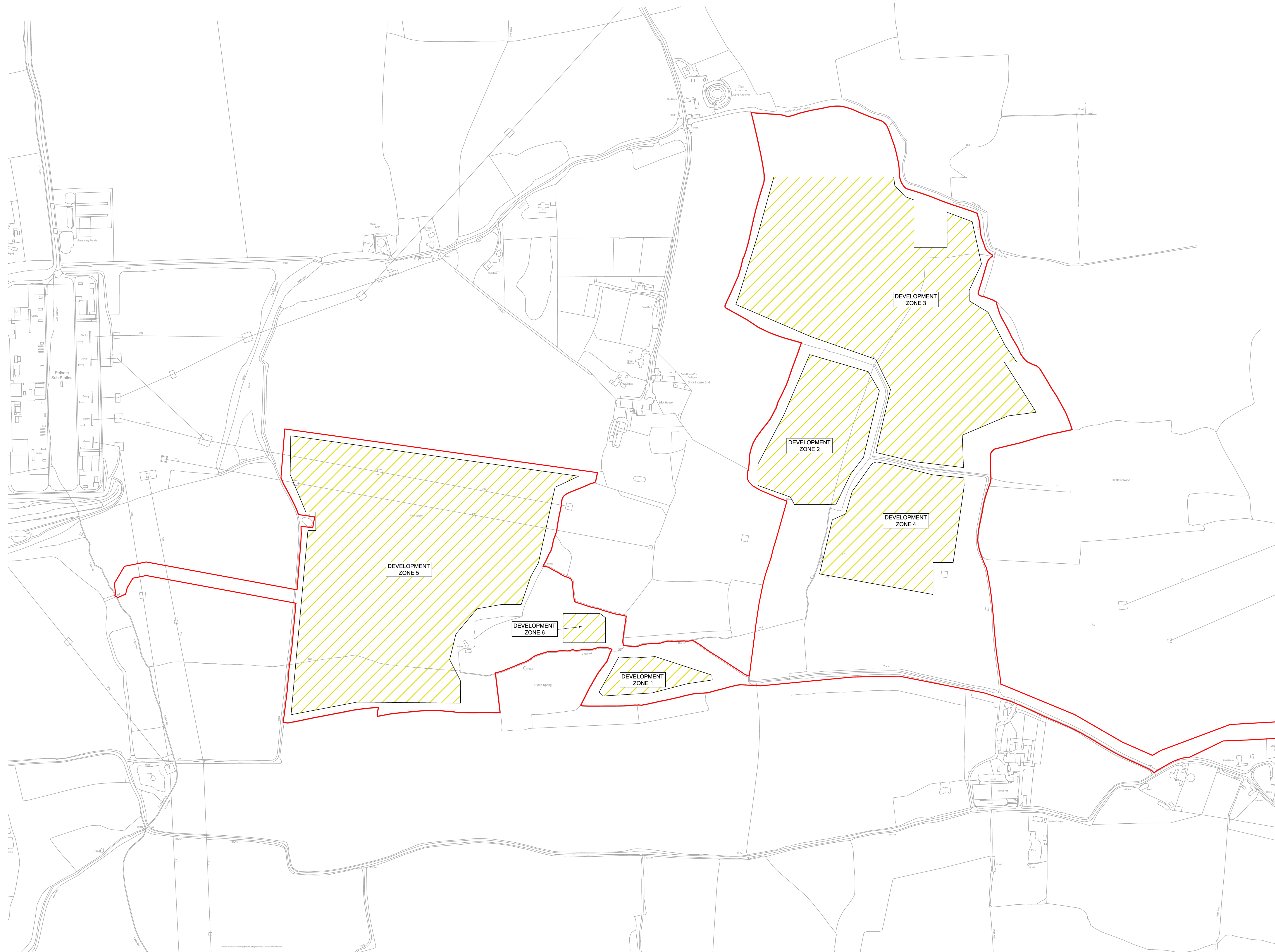
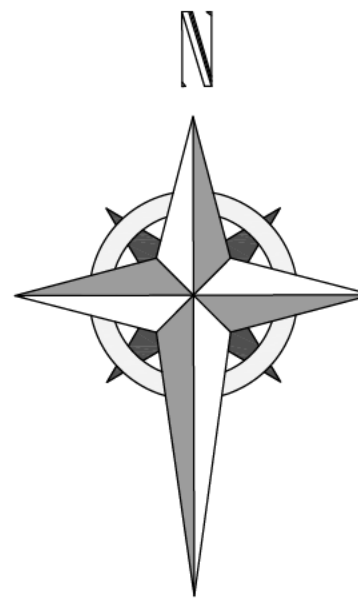
2nd Floor Billing Square, 57 Carlton Gardens
London SW1Y 4AG
Tel: +44(0)207 4500100
enquiries@lowcarbon.com www.lowcarbon.com

Drawn: **PL** Checked: **LM** First Issue: **23.11.2020**

Project Code: **LCS032- PLE-01** Drawing Number: **25**

Sheet Size: **A0** Scale: **A:N** Revision: **25**





This drawing is the property of Low Carbon and must not be reproduced in whole or in part or used in any manner without their written permission.
All dimensions are to be confirmed on site prior to commencement of work.

Revision	Date	Revision Notes	Drawn	Checked	Approved
01	23.07.20	Final Issue	PL	TS	R
02	23.08.20	Revised	PL	TS	R
03	23.11.20	Revised	PL	TS	R
04	02.01.21	Revised	PL	TS	R
05	02.01.21	Updated Zones	PL	TS	R
06	15.02.21	Revised	PL	TS	R
07	23.03.21	Updated Zones	PL	TS	R
08	23.03.21	Updated Zones	PL	TS	R
09	23.03.21	Updated Zones	PL	TS	R
10	02.07.21	Updated Zones	PL	TS	R
11	02.07.21	Updated Zones	PL	TS	R
12	02.07.21	Updated Road Lines	PL	TS	R
13	23.08.21	Updated Road Lines, Updated Zones	PL	TS	R
14	23.08.21	Updated Zones	PL	TS	R
15	15.10.21	Revised	PL	TS	R
16	15.10.21	Amendments to Road Lines	PL	TS	R
17	15.10.21	Updated Zones	PL	TS	R
18	15.10.21	Development Zones & Updated Road Lines Amended	PL	TS	R
19	23.08.22		PL	TS	R
20	23.08.22		PL	TS	R

LEGEND:

— PROPOSED SITE

▨ DEVELOPMENT ZONE

Status: **PLANNING**

Project: **Pelham Spring Solar Farm**



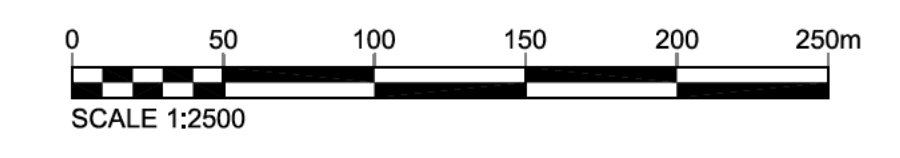
2nd Floor Stirling Square, 5-7 Colton Gardens
London SE11 4AD
Tel: +44(0)207 4062700
enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **Pelham Spring Development Zone Plan**

Drawn: PL Checked: TS First Issued: 22.07.2020

Project Code: LCS032- DZ-01 Drawing Number:

Sheet Size: A0 Scale: 1:2500 Revisions: 20

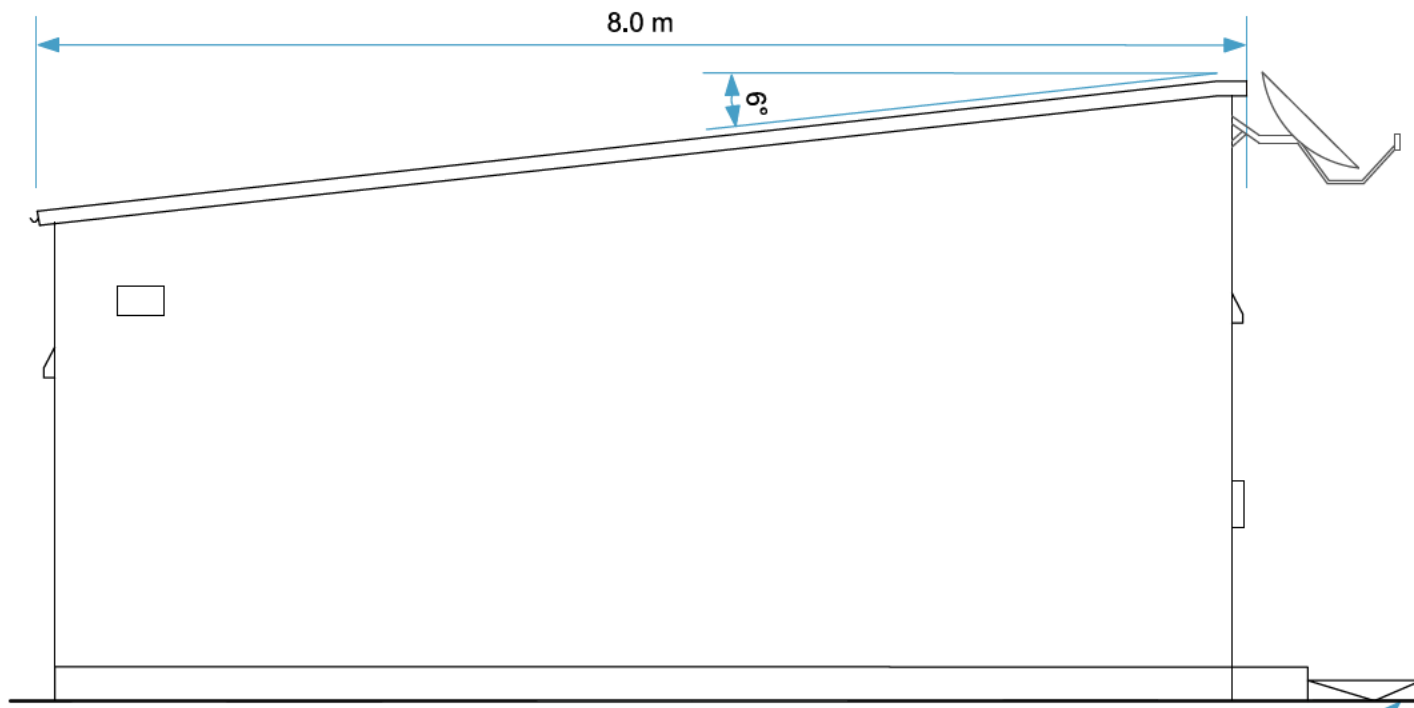


This drawing is the copyright of Low Carbon and must not be reproduced whole or in part or used in any manner without their written permission.
 Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

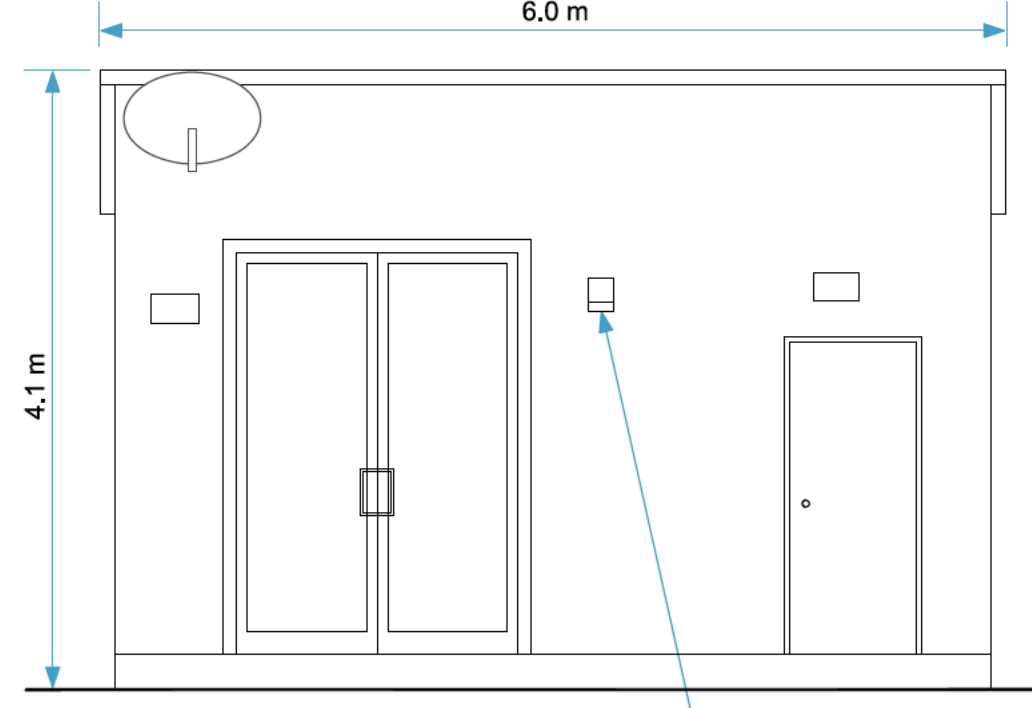
Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL
02	10.08.20	Revised	HN	IL

NOTES:

NB: DNO cabin dimensions will vary, dependant on network operator design requirements, selected at the detailed design stage. Measurements are indicative only.

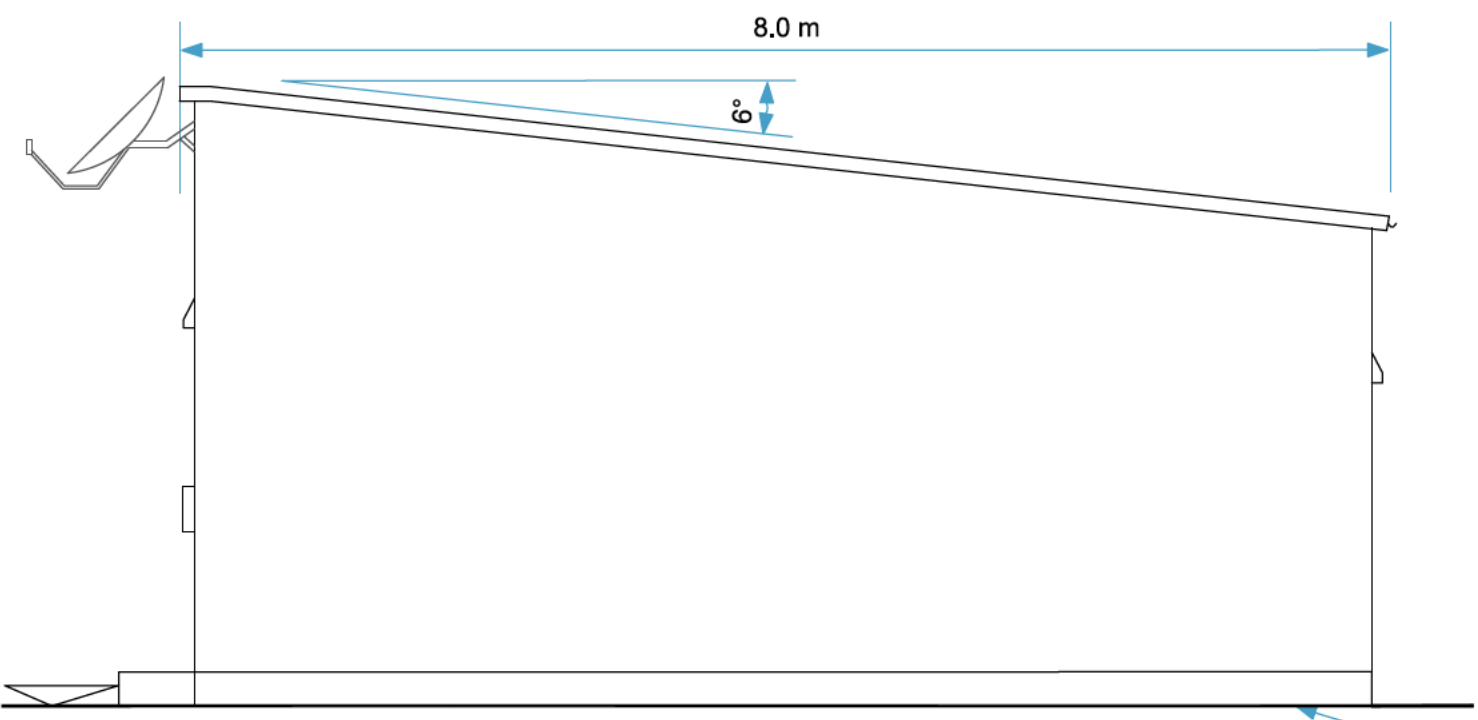


Left Elevation

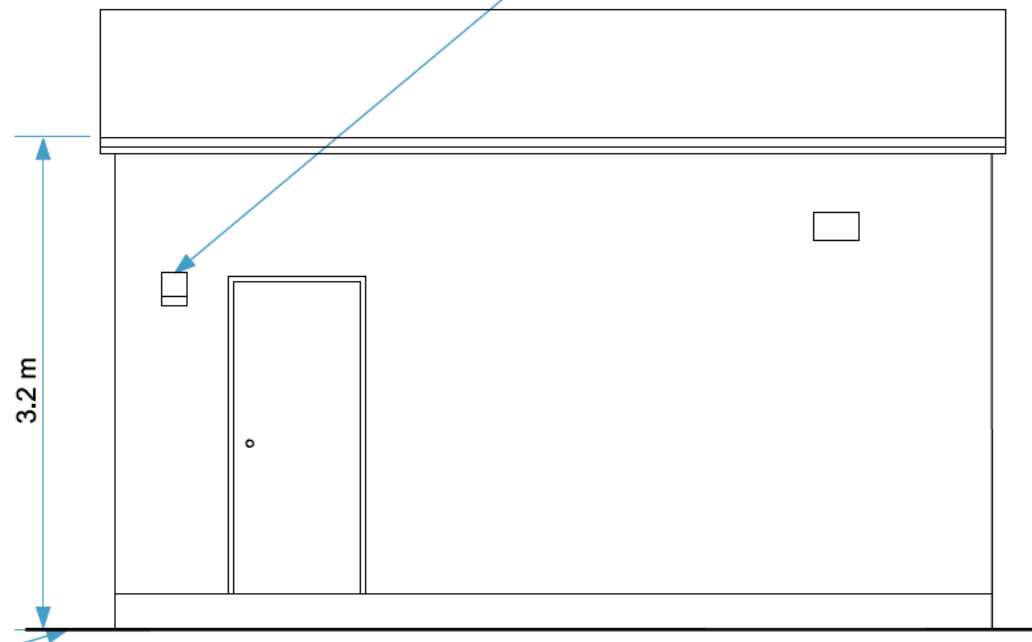


Front Elevation

Bulk Head Light



Right Elevation



Rear Elevation

Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
 Tel: +44(0)207 4090700
 enquiry@lowcarbon.com www.lowcarbon.com

Drawing Title: **DNO Substation Elevations and Dimensions Plan**

Drawn: HN Checked: IL First Issued: 23.07.2020

Project Code: LCS- Drawing Number: SD-01

Sheet Size: A3 Scale: 1:50 Revision: 02



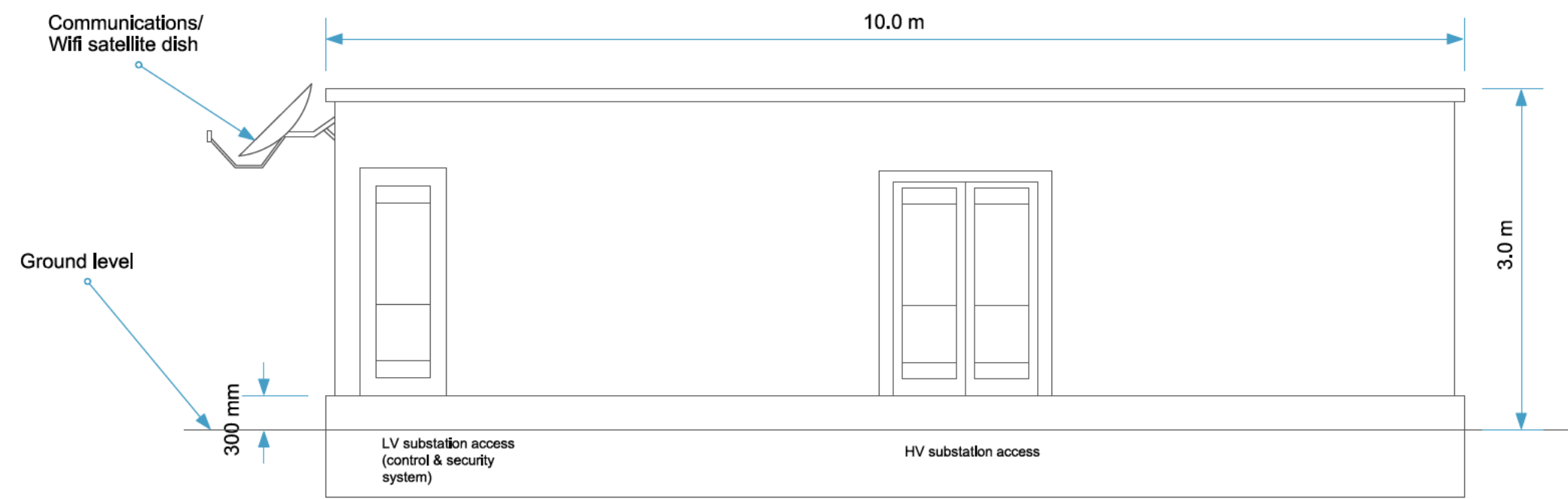
This drawing is the copyright of Low Carbon and must not be reproduced whole or in part or used in any manner without their written permission.
 Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

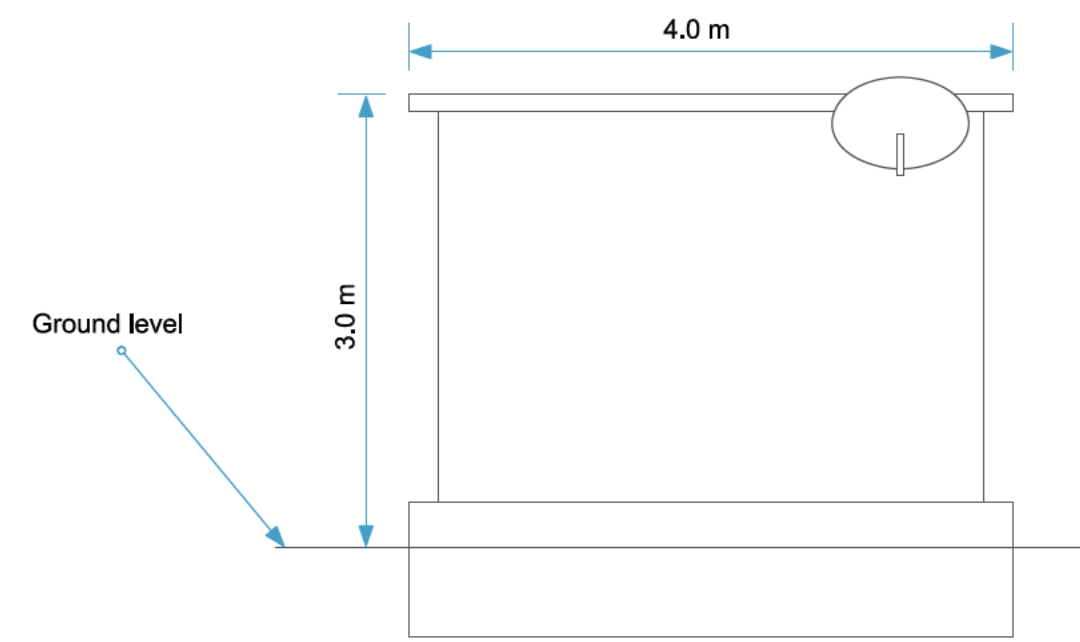
Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL
02	10.08.20	Revised	HN	IL

NOTES:

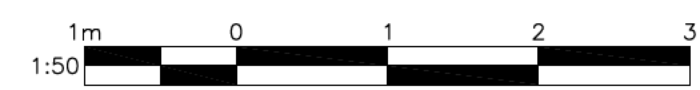
NB: Customer Substation dimensions will vary, dependant on manufacturers selected at the detailed design stage. Measurements are indicative only.



Front Elevation



Side Elevation



Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
 Tel: +44(0)207 4096700
 enquiry@lowcarbon.com www.lowcarbon.com

Drawing Title: **Customer Substation Elevations and Dimensions Plan**

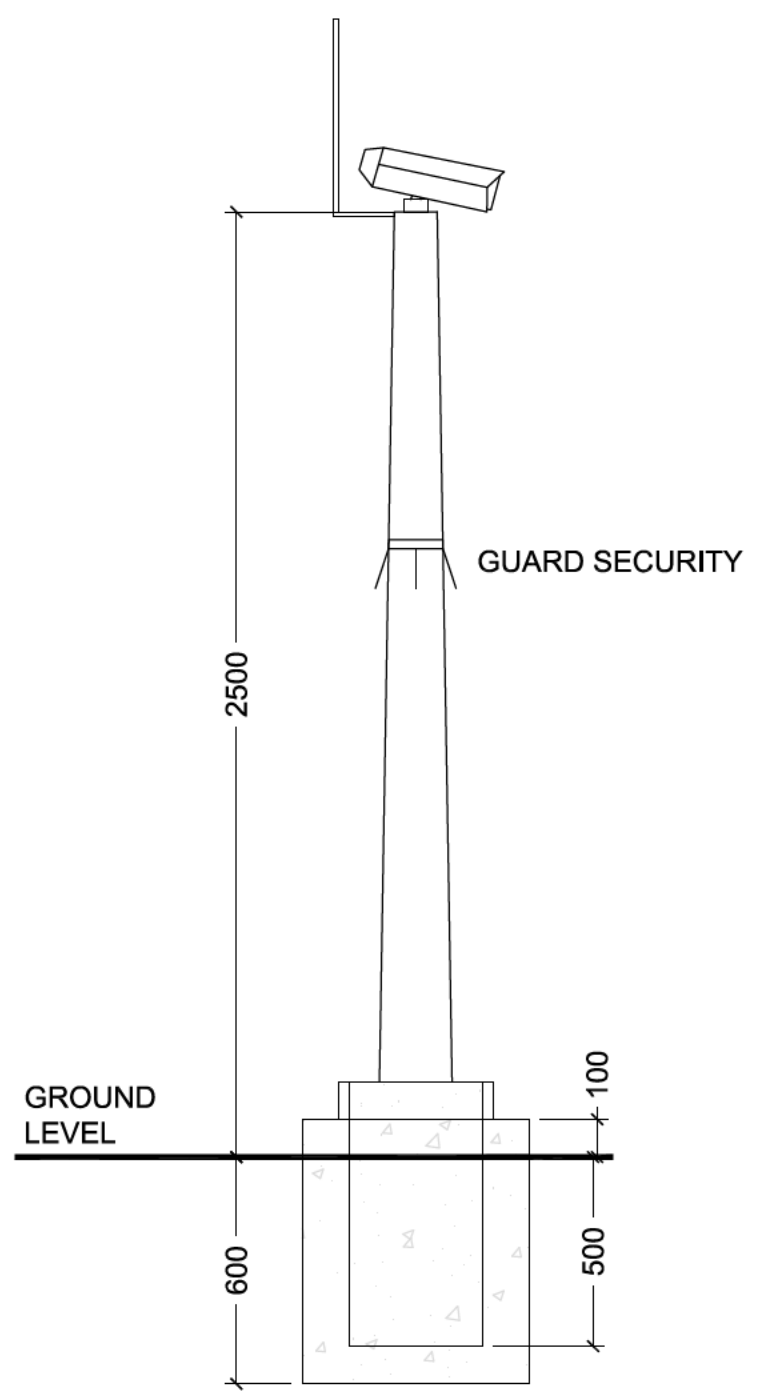
Drawn: HN	Checked: IL	First Issued: 23.07.2020
Project Code: LCS-	Drawing Number: SD-02	
Sheet Size: A3	Scale: 1:50	Revision: 02

This drawing is the copyright of Low Carbon and must not be reproduced in whole or in part or used in any manner without their permission.
 Scale dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL

NOTES:



STANDARD CAMERA POST

Status: **FOR PLANNING**



13 Berkeley Street, London W1J 6EU
 Tel: +44(0)207 4080700
 enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **Indicative CCTV Post - Standard Drawings**

Drawn: HN	Checked: IL	First Issued: 23.07.2020
Project Code: LCS-	Drawing Number: SD-03	
Sheet Size: A3	Scale: 1:20	Revision: 01

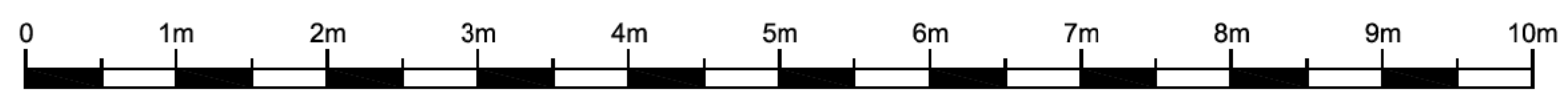
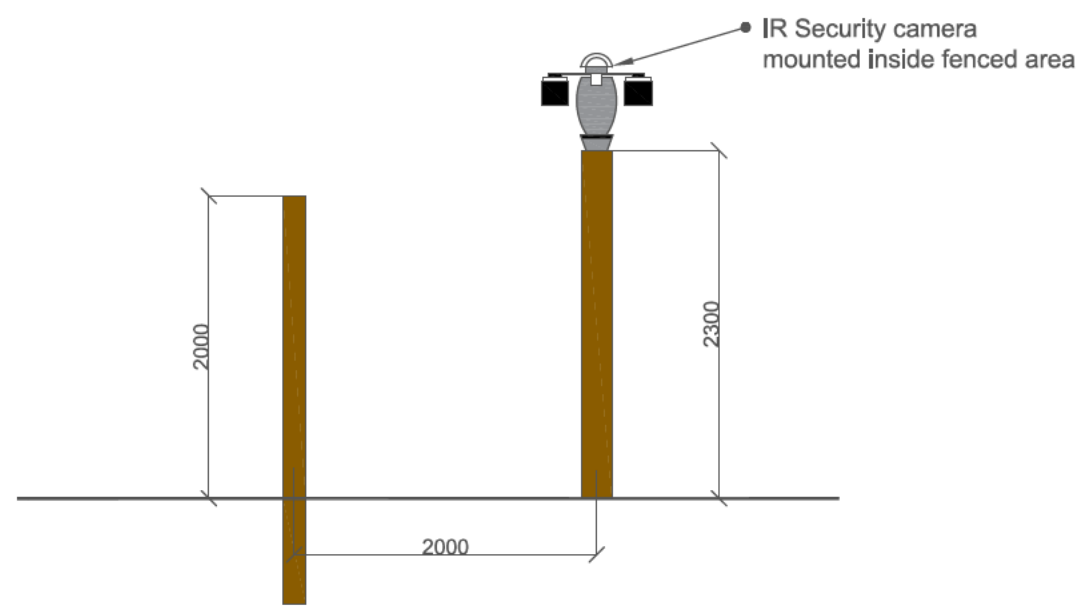
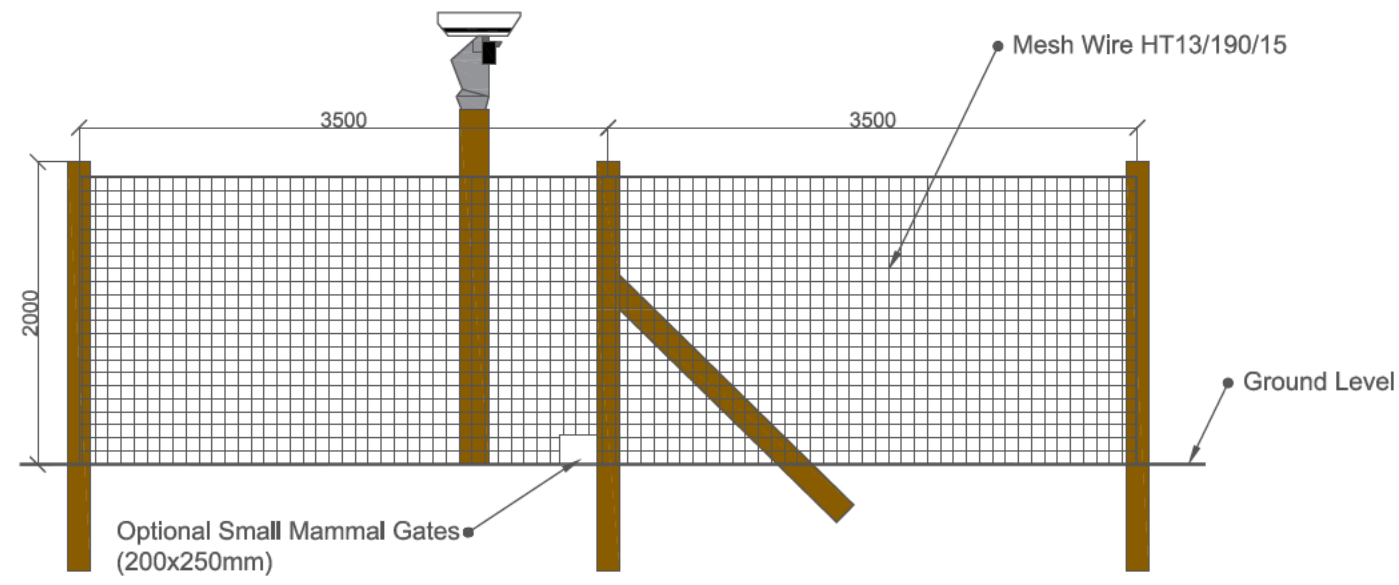


This drawing is the copyright of Low Carbon and must not be reproduced in whole or in part or used in any manner without their written permission.
 Scale dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	05.06.20	First Issue	PL	IL
02	10.08.20	Revised		

NOTES:
 -The colour of the cabins and components on site will be painted RAL 6005 Moss Green, or to the LPA preference.
 -Cameras to either be placed inside fence line or mounted on directly onto fence posts. To be confirmed in the final EPC contract.



SCALE 1:50

Status: **FOR PLANNING**



13 Berkeley Street, London W1J 6EU
 Tel: +44(0)207 4080700
 enquiries@lowcarbon.com www.lowcarbon.com

Drawn Title: **Security Fence and CCTV Standard Detail**

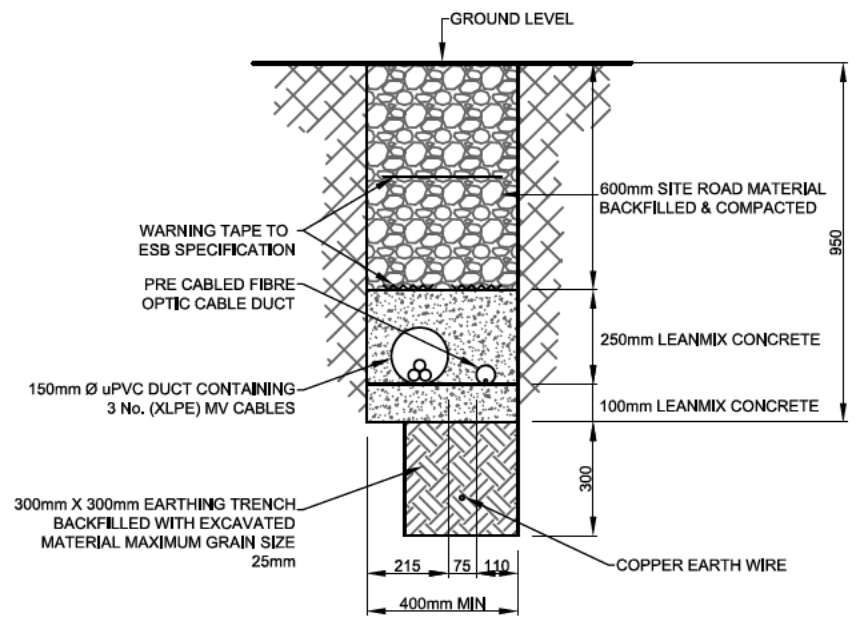
Drawn: PL	Checked: IL	First Issued: 05.06.20
Project Code: LCS-	Drawing Number: SD-04	
Sheet Size: A3	Scale: 1:50	Revision: 02

This drawing is the copyright of Low Carbon and must not be reproduced in whole or in part or used in any manner without their written permission. Scale dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

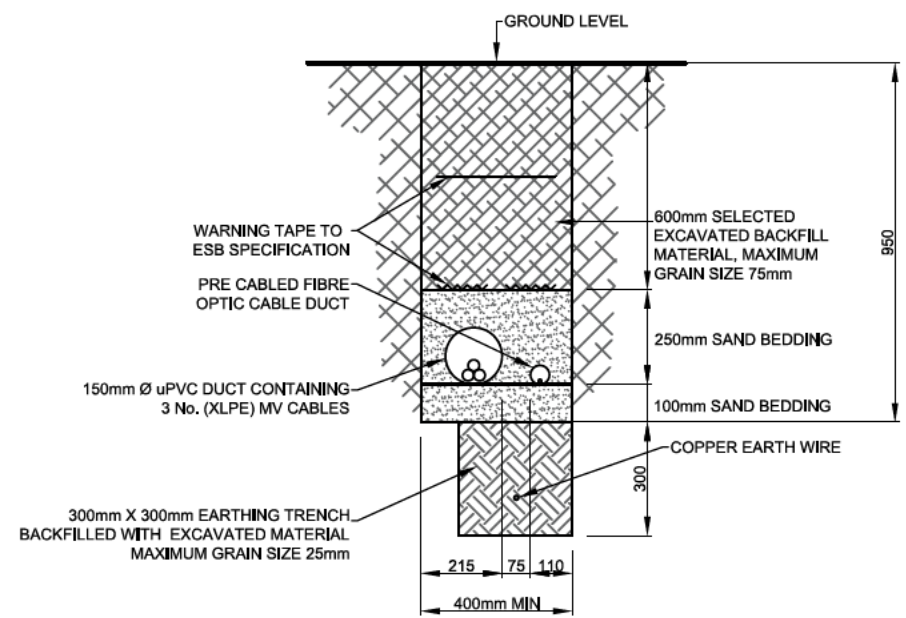
Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL

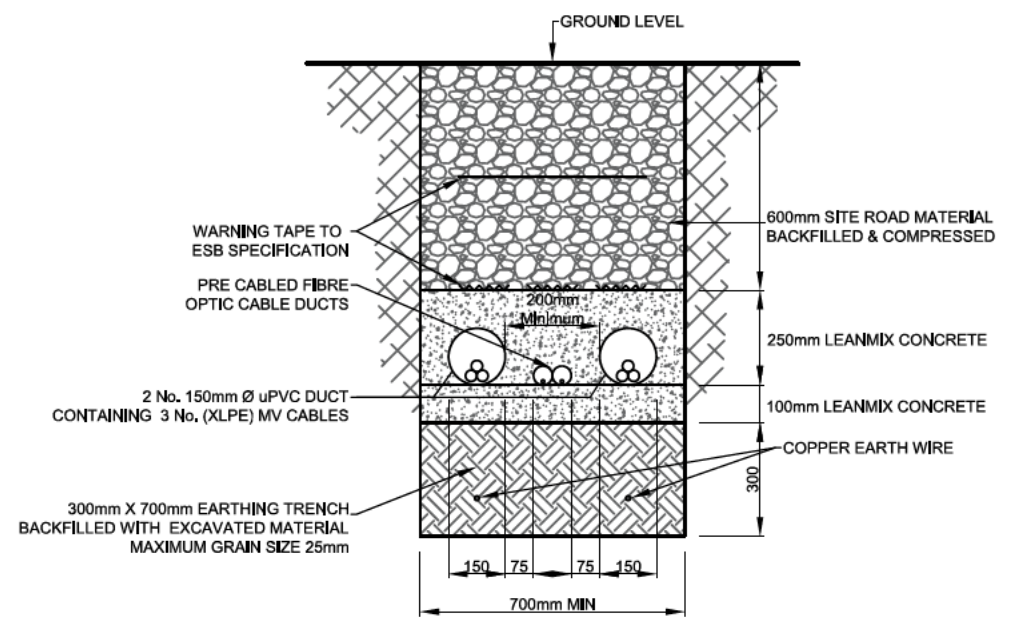
NOTES:



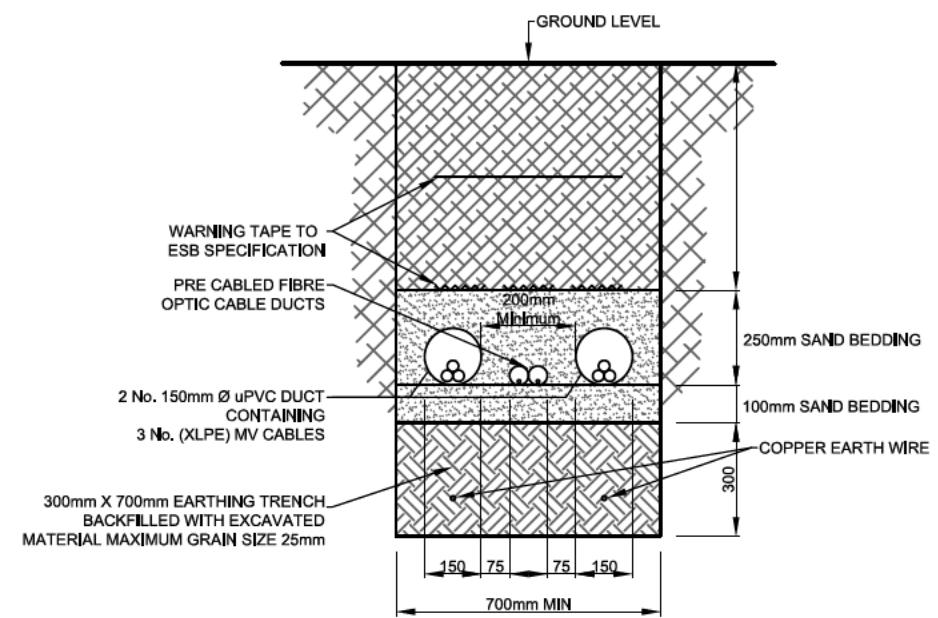
CABLE TRENCH IN SITE ROADWAY & FORESTRY CROSSING POINTS SINGLE CIRCUIT



CABLE TRENCH IN OPEN GROUND SINGLE CIRCUIT



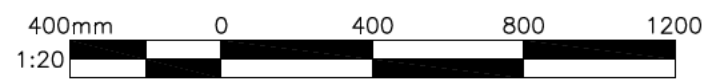
CABLE TRENCH IN SITE ROADWAY & FORESTRY CROSSING POINTS TWIN CIRCUIT



CABLE TRENCH IN OPEN GROUND TWIN CIRCUIT

ALL DIMENSIONS IN MILLIMETERS UNLESS STATED OTHERWISE

Notes:
 Depth of cable trenches to suit sub-surface conditions (i.e. to be located in stable soil conditions)
 Dimensions and specification are indicative only. The full specification and detail will be determined from ESB functional specification



Status: **FOR PLANNING**



13 Berkeley Street, London W1J 6EU
 Tel: +44(0)207 4060700
 enquiries@lowcarbon.com www.lowcarbon.com

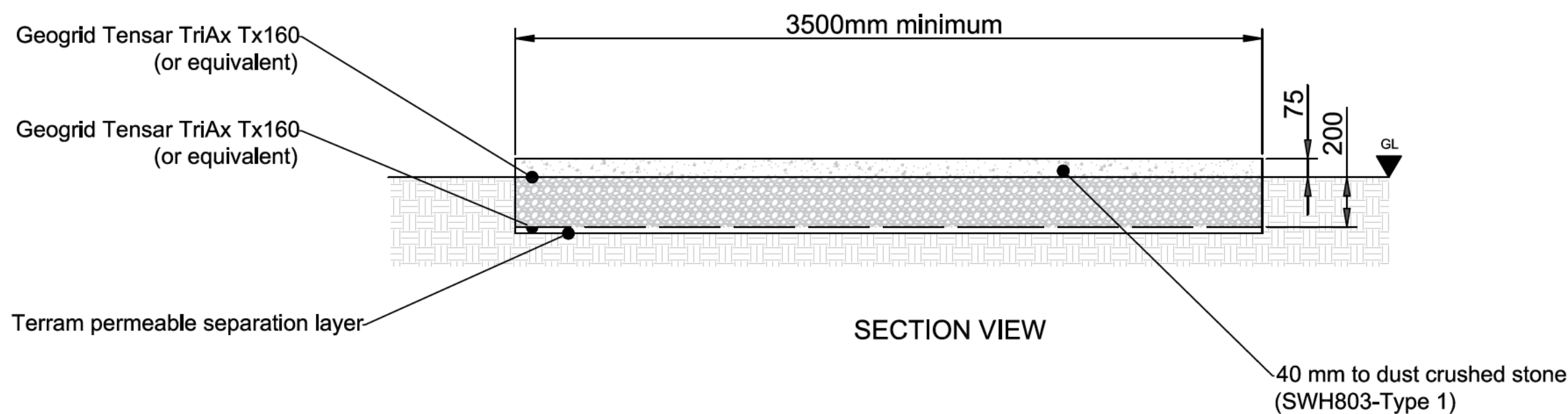
Drawing Title: **Cable Trench Cross Section**

Drawn: HN	Checked: IL	First Issued: 23.07.2020
Project Code: LCS-	Drawing Number: SD-05	
Sheet Size: A3	Scale: 1:20	Revision: 01

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL

NOTES:



Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8EU
 Tel: +44(0)207 4080700
 enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **Access Track Cross Section**

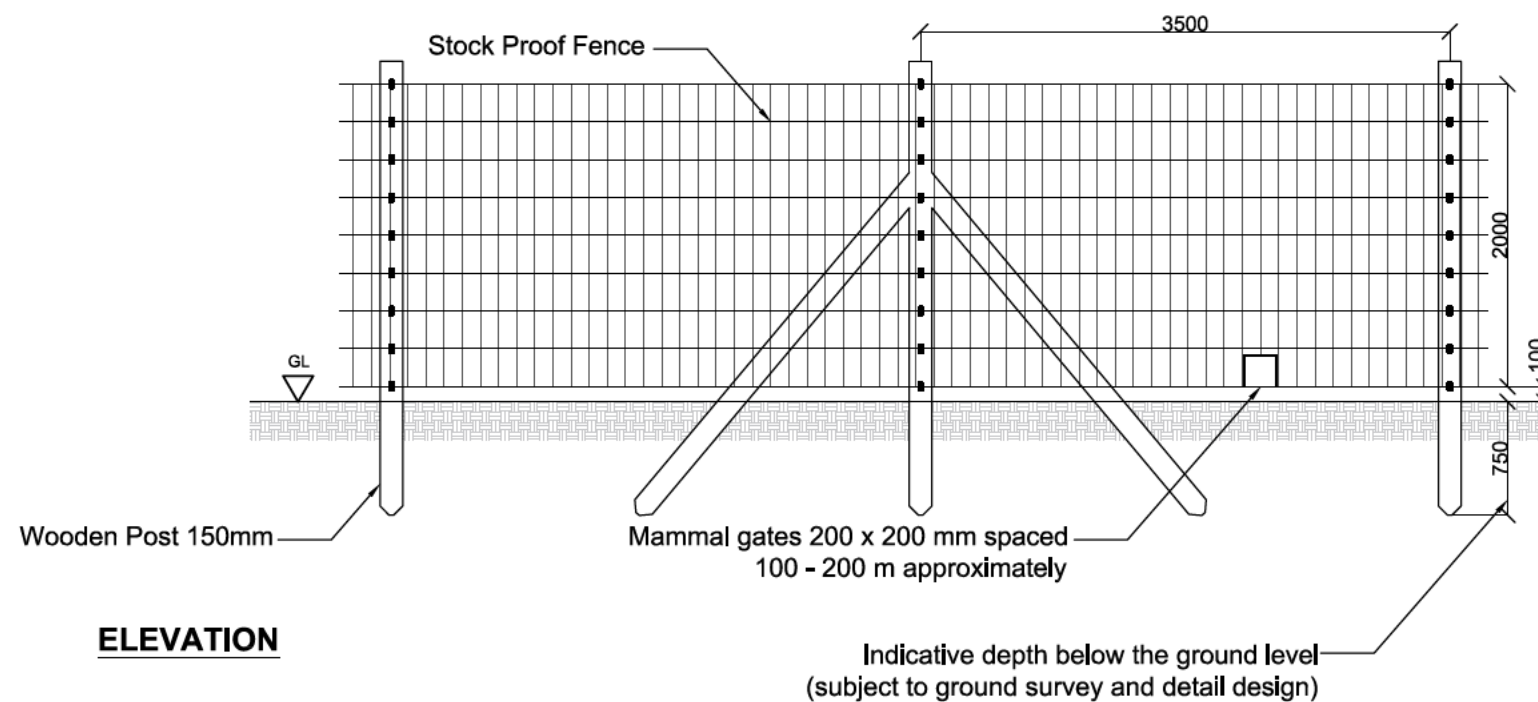
Drawn: HN	Checked: IL	First Issued: 23.07.2020
Project Code: LCS-	Drawing Number: SD-06	
Sheet Size: A3	Scale: 1:20	Revision: 01

This drawing is the copyright of Low Carbon and must not be reproduced in whole or in part or used in any manner without their written permission.
 Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL
02	20.01.20	Updated working		

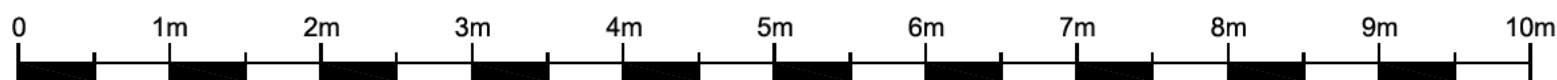
NOTES:



ELEVATION



PLAN



SCALE 1:50

Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
 Tel: +44(0)207 4580700
 email: info@lowcarbon.com www.lowcarbon.com

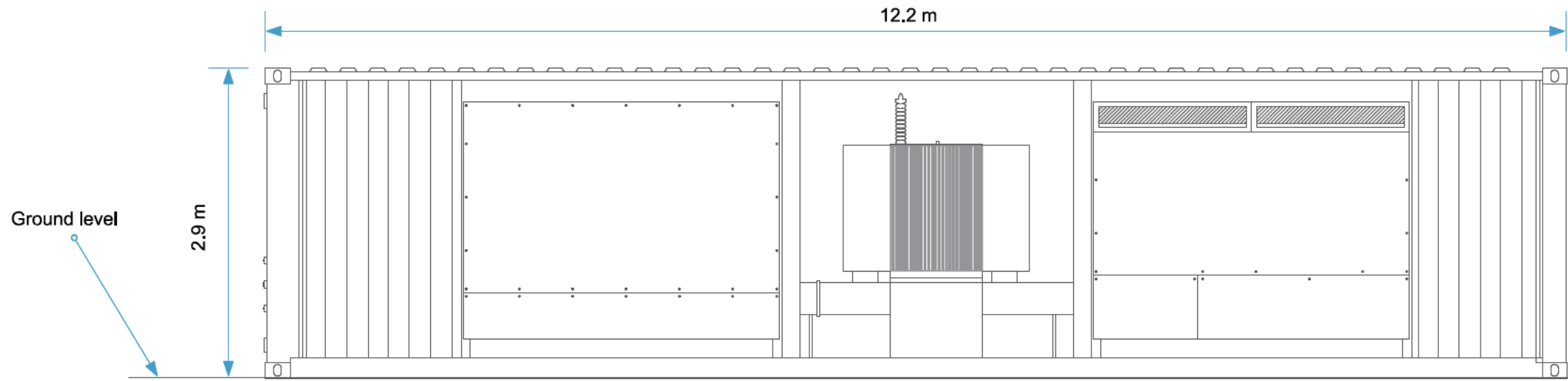
Drawing Title: Indicative Deer Fence - Standard Detail		
Drawn: HN	Checked: IL	First Issued: 23.07.2020
Project Code: LCS-	Drawing Number: SD-07	
Sheet Size: A3	Scale: 1:50	Revision: 02

This drawing is the copyright of Low Carbon and must not be reproduced whole or in part or used in any manner without their written permission.
 Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

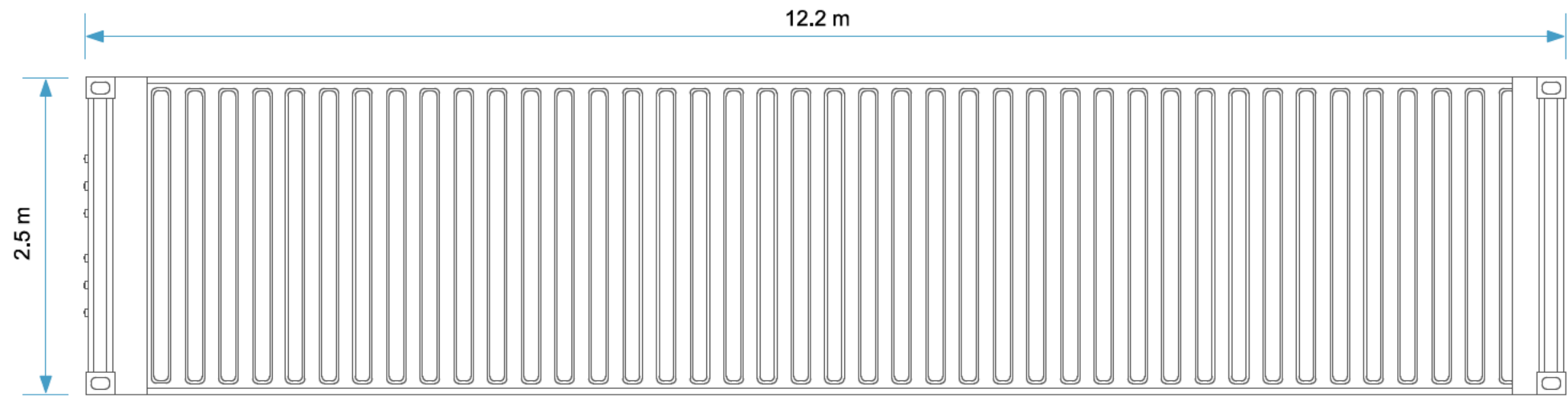
Revisions:				
Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL
02	10.08.20	Revised	HN	IL

NOTES:

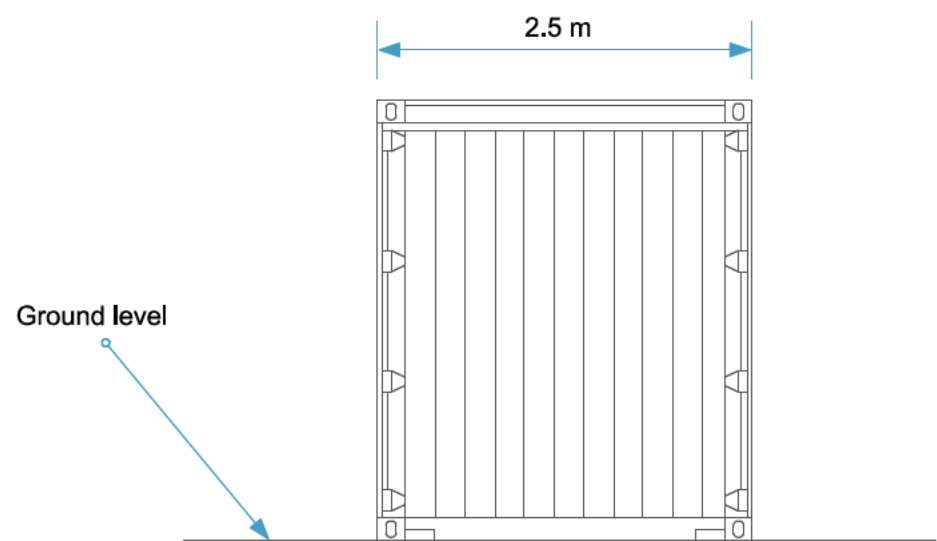
NB: Inverter dimensions will vary, dependant on manufacturers selected at the detailed design stage. Measurements are Indicative only.



Front Elevation



Roof Plan



Side Elevation



Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
 Tel: +44(0)207 4090700
 enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **Inverter Elevations and Dimensions Plan**

Drawn: HN Checked: IL First Issued: 23.07.2020

Project Code: LCS- Drawing Number: SD-08

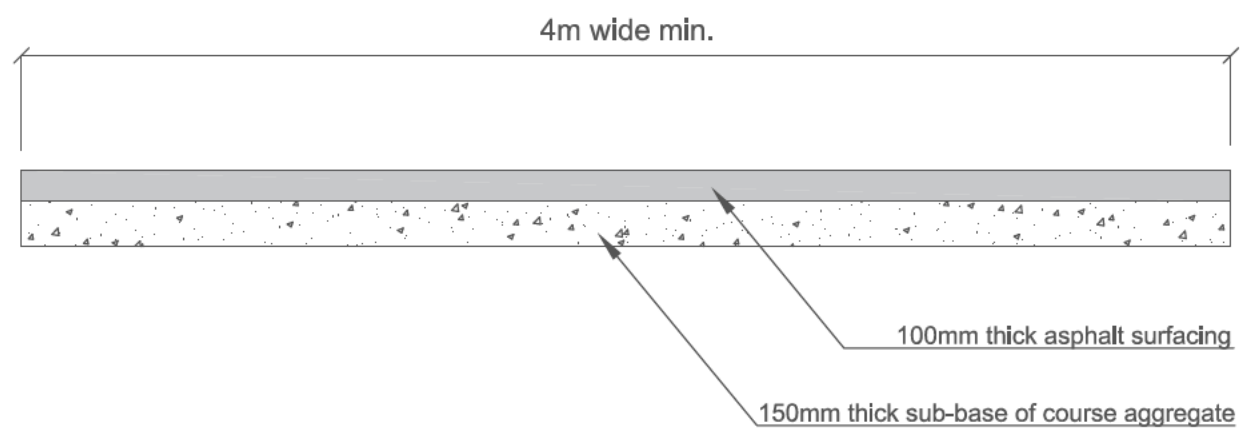
Sheet Size: A3 Scale: 1:50 Revision: 02

This drawing is the copyright of Low Carbon and must not be reproduced in whole or in part or used in any manner without their written permission.
 Scale dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

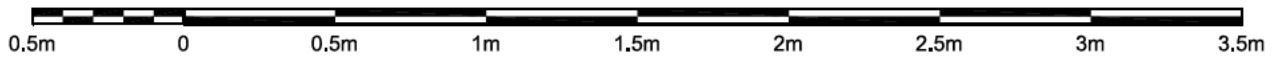
Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	23.07.20	First Issue	HN	IL

NOTES:



1:25



Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8EU
 Tel: +44(0)207 4080700
 enquiries@lowcarbon.com www.lowcarbon.com

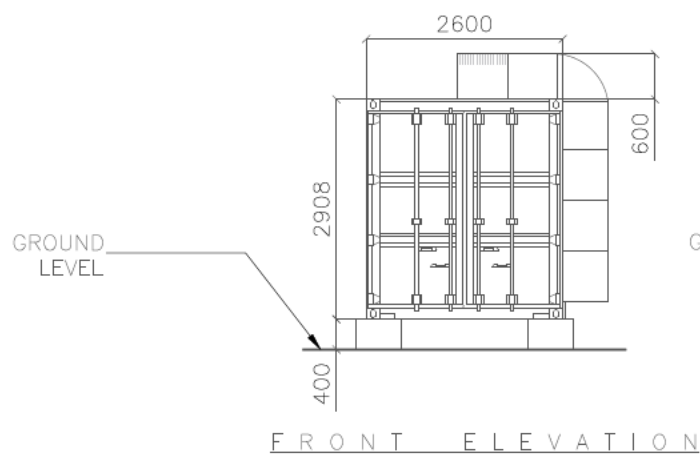
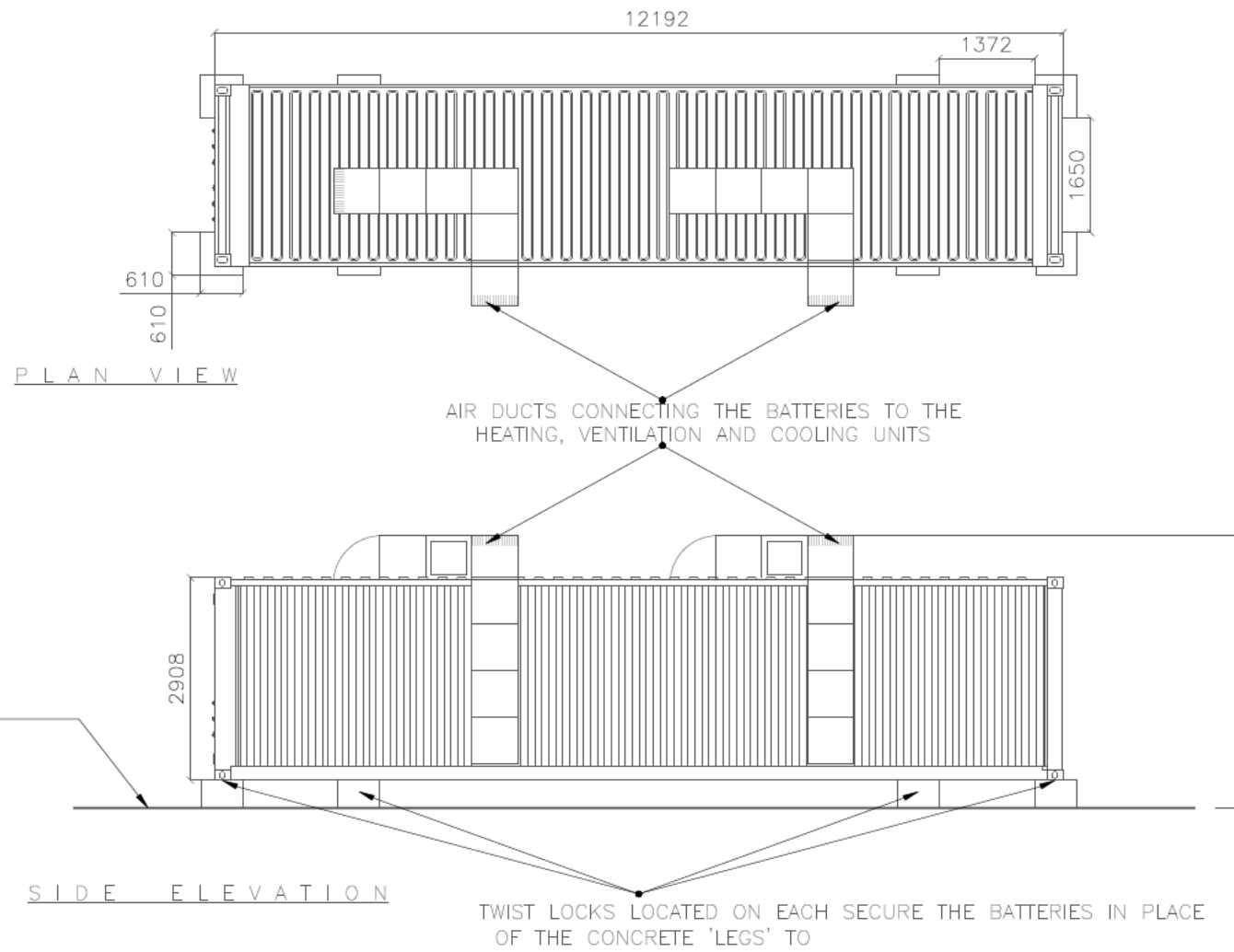
Drawn Title: **DNO Track Cross Section Standard Detail**

Drawn: HN	Checked: IL	First Issued: 23.07.2020
Project Code: LCS-	Drawing Number: SD-09	
Sheet Size: A3	Scale: 1:25	Revision: 01

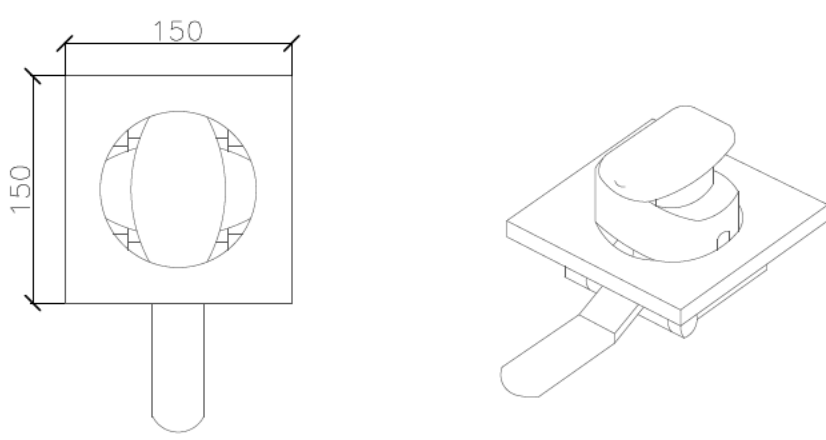
Revisions:

Revise on	Date	Revision Notes	Drawn	Inspected
01	21.06.21	First issue	JS	LM

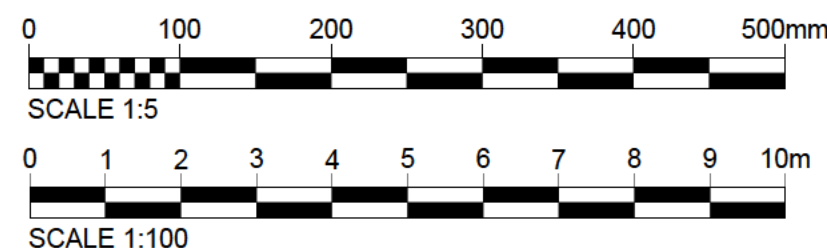
NOTES:



1 BATTERY CONTAINER PLAN AND ELEVATIONS
 Scale: 1:100@A3



2 WELD TWIST LOCK EXAMPLE
 Scale: 1:5@A3



Status: **PLANNING**



13 Berkeley Street, London W1J 8DU
 Tel: (0)207 050700
 enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **40ft Battery Container (HVAC on ground) Standard Detail**

Drawn: JS Checked: LM First Issued: 21.06.2021

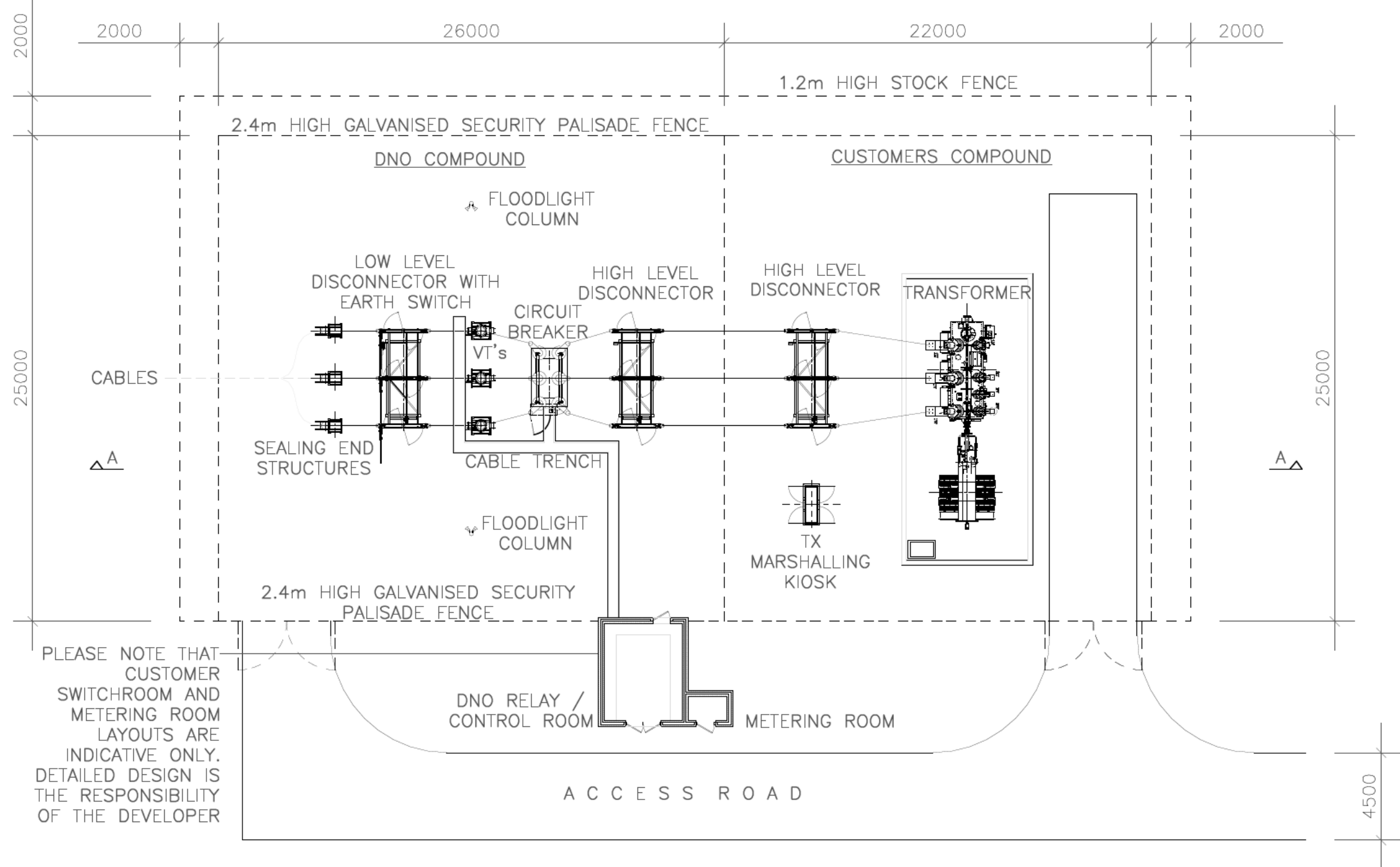
Project Code: **LCS- SD-11**

Sheet Size: A3 Scale: AN Revision: 01

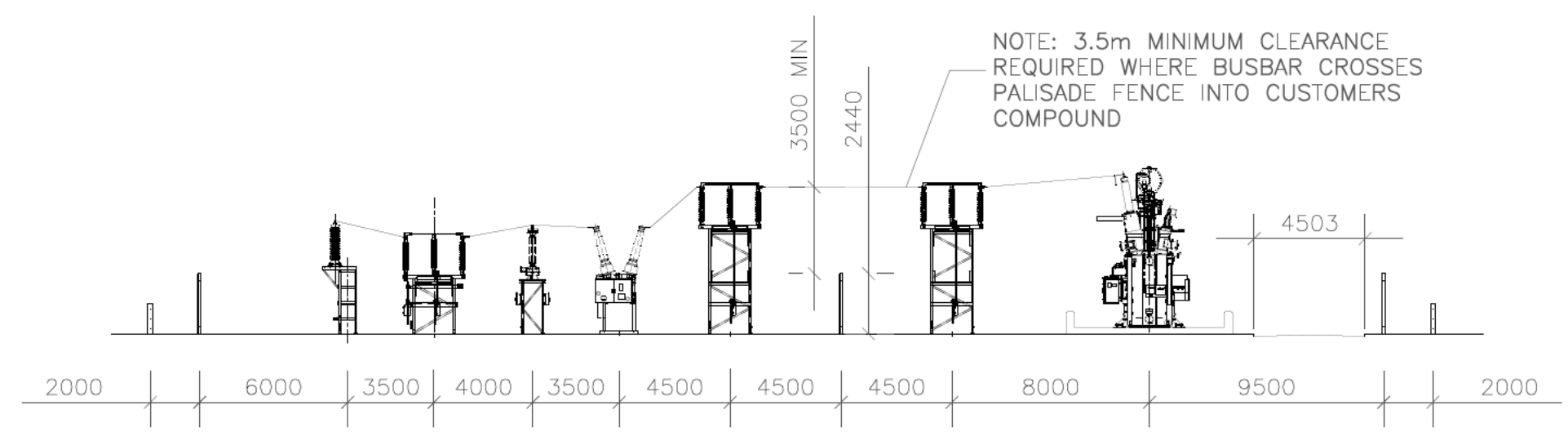
Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	07.07.21	First Issue	JS	LM

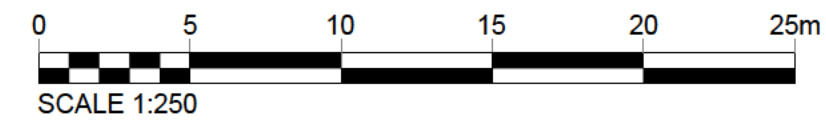
NOTES:



PLEASE NOTE THAT CUSTOMER SWITCHROOM AND METERING ROOM LAYOUTS ARE INDICATIVE ONLY. DETAILED DESIGN IS THE RESPONSIBILITY OF THE DEVELOPER



1 SUBSTATION COMPOUND PLAN
 Scale: 1:250@A3



Status: **FOR PLANNING**



13 Berkeley Street, London W1U 8DU
 Tel: (0)207 090700
 enquiries@lowcarbon.com www.lowcarbon.com

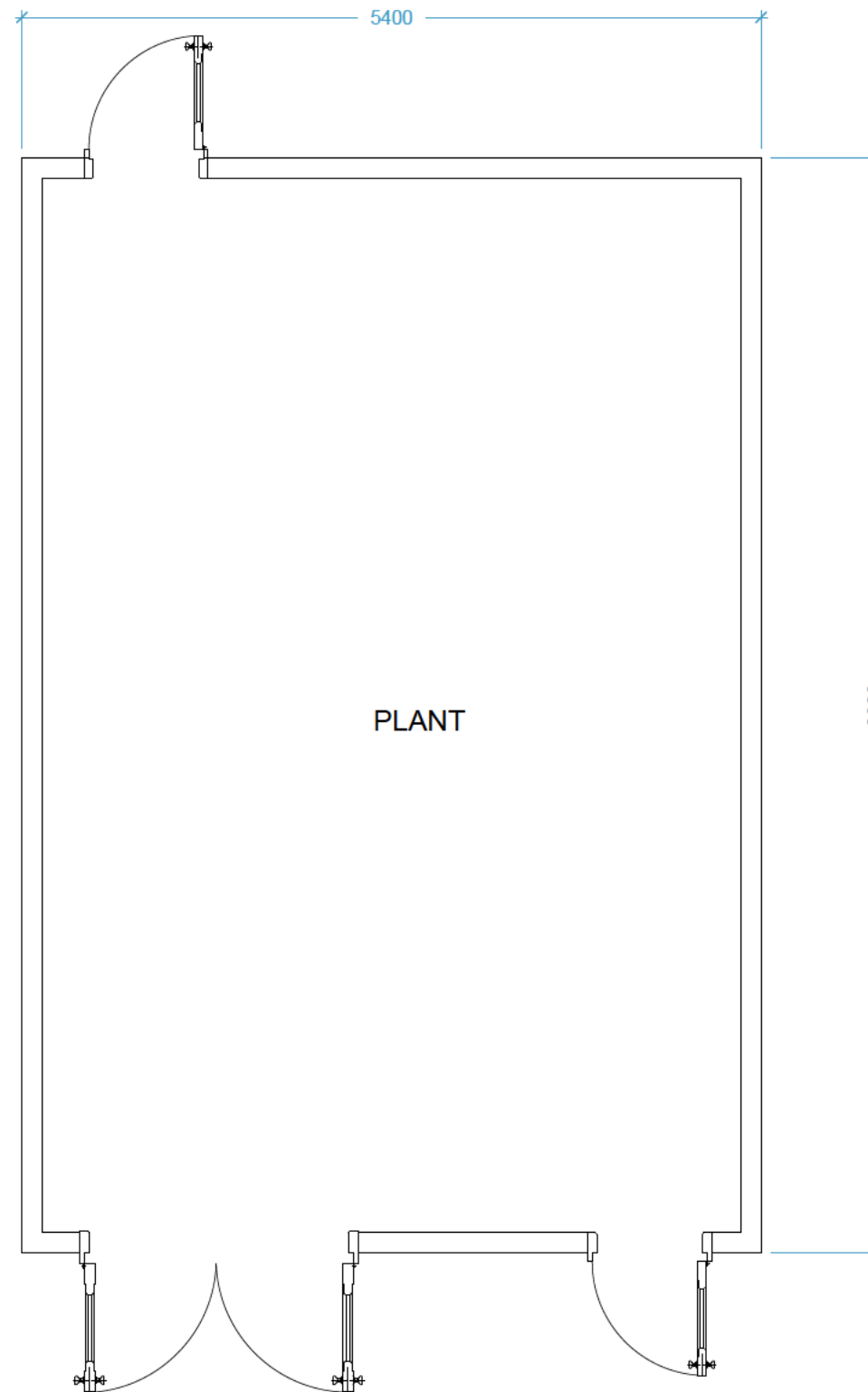
Drawing Title: **Substation Compound Plan**

Drawn: JS	Checked: LM	First Issued: 07.07.2021
Project Code: LCS-	Drawing Number: SD-13	
Sheet Size: A3	Scale: 1:250	Revision: 01

Revisions:

Revis on	Date	Revision Notes	Drawn	Inspected
01	07.07.21	First Issue	JS	LM

NOTES:



1 DNO SUBSTATION PLAN
Scale: 1:50@A3



Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
Tel: (0)207 096700
enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **DNO Substation Plan**

Drawn: JS	Checked: LM	First Issued: 07.07.2021
Project Code: LCS-	Drawing Number: SD-14	
Sheet Size: A3	Scale: 1:50	Revision: 01

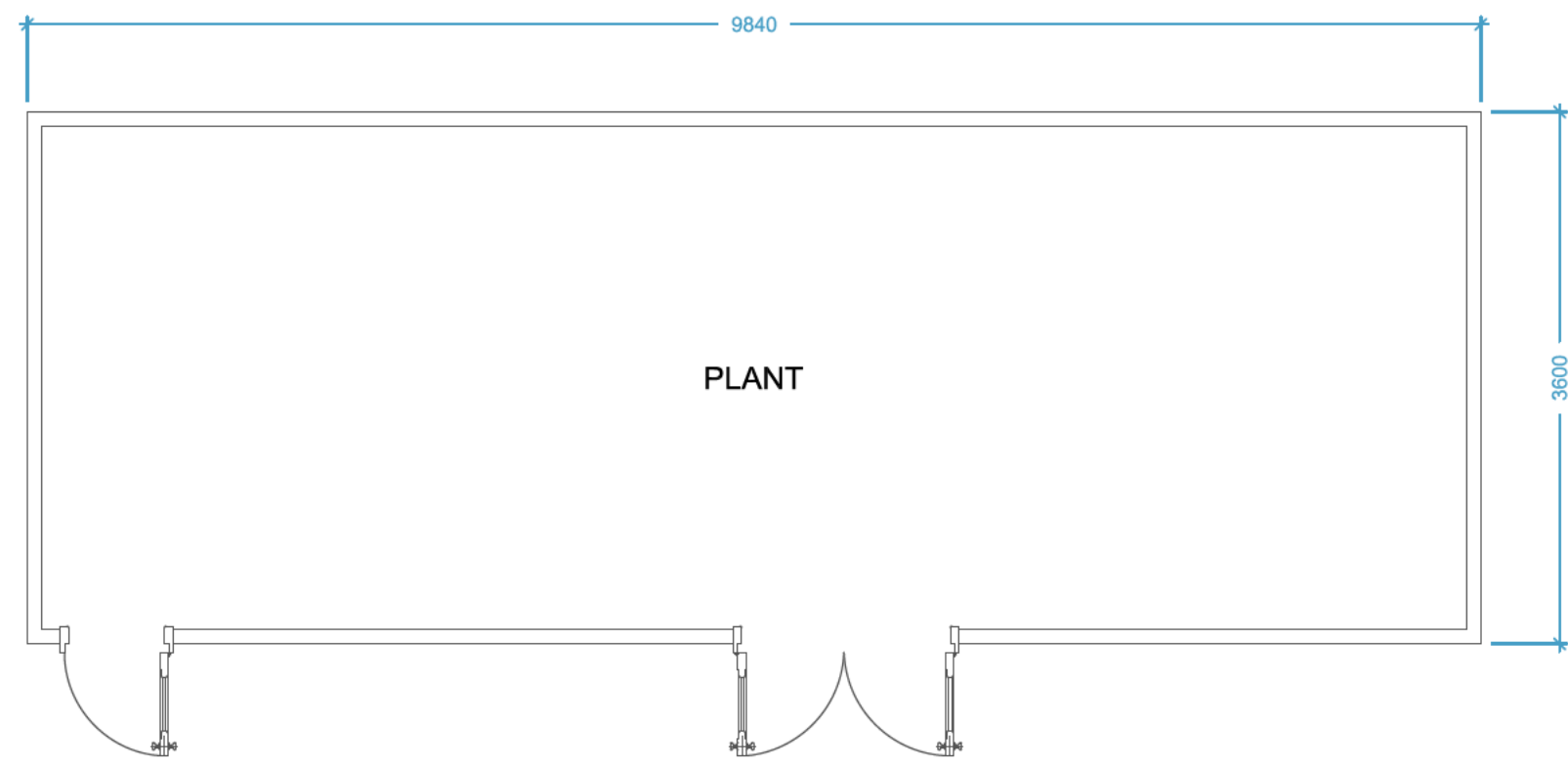
This drawing is the copyright of Low Carbon and must not be reproduced whole or in part or used in any manner without their written permission.
Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	15.09.20	First Issue	PL	IL

NOTES:

NB: Customer Substation dimensions will vary, dependant on manufactures selected at the detailed design stage. Measurements are Indicative only.



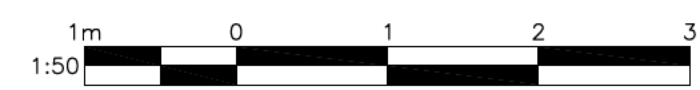
Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
Tel: +44(0)207 4096700
enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **Customer Substation Floor Plan**

Drawn: PL	Checked: IL	First Issued: 15.09.2020
Project Code: LCS-	Drawing Number: SD-15	
Sheet Size: A3	Scale: 1:50	Revision: 01



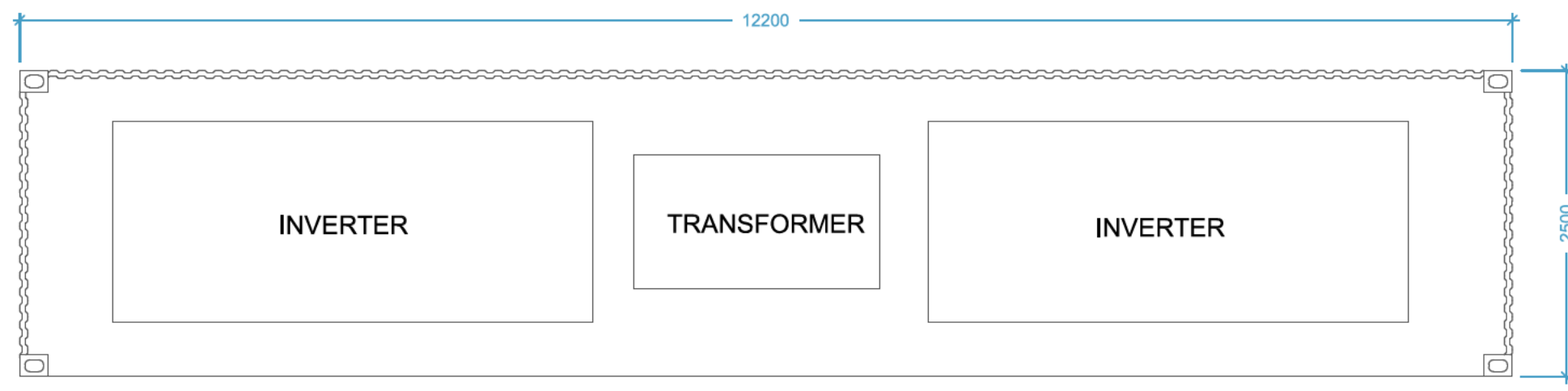
This drawing is the copyright of Low Carbon and must not be reproduced whole or in part or used in any manner without their permission.
 Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	15.09.20	First Issue	PL	IL

NOTES:

NB: Inverter dimensions will vary, dependant on manufactures selected at the detailed design stage.
 Measurements are Indicative only.



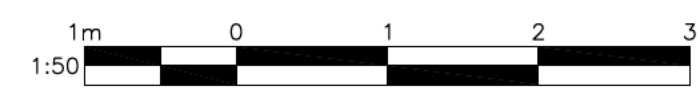
Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
 Tel: +44(0)207 4090700
 enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **Inverter Floor Plan**

Drawn: PL	Checked: IL	First Issued: 15.09.2020
Project Code: LCS-	Drawing Number: SD-16	
Sheet Size: A3	Scale: 1:50	Revision: 01

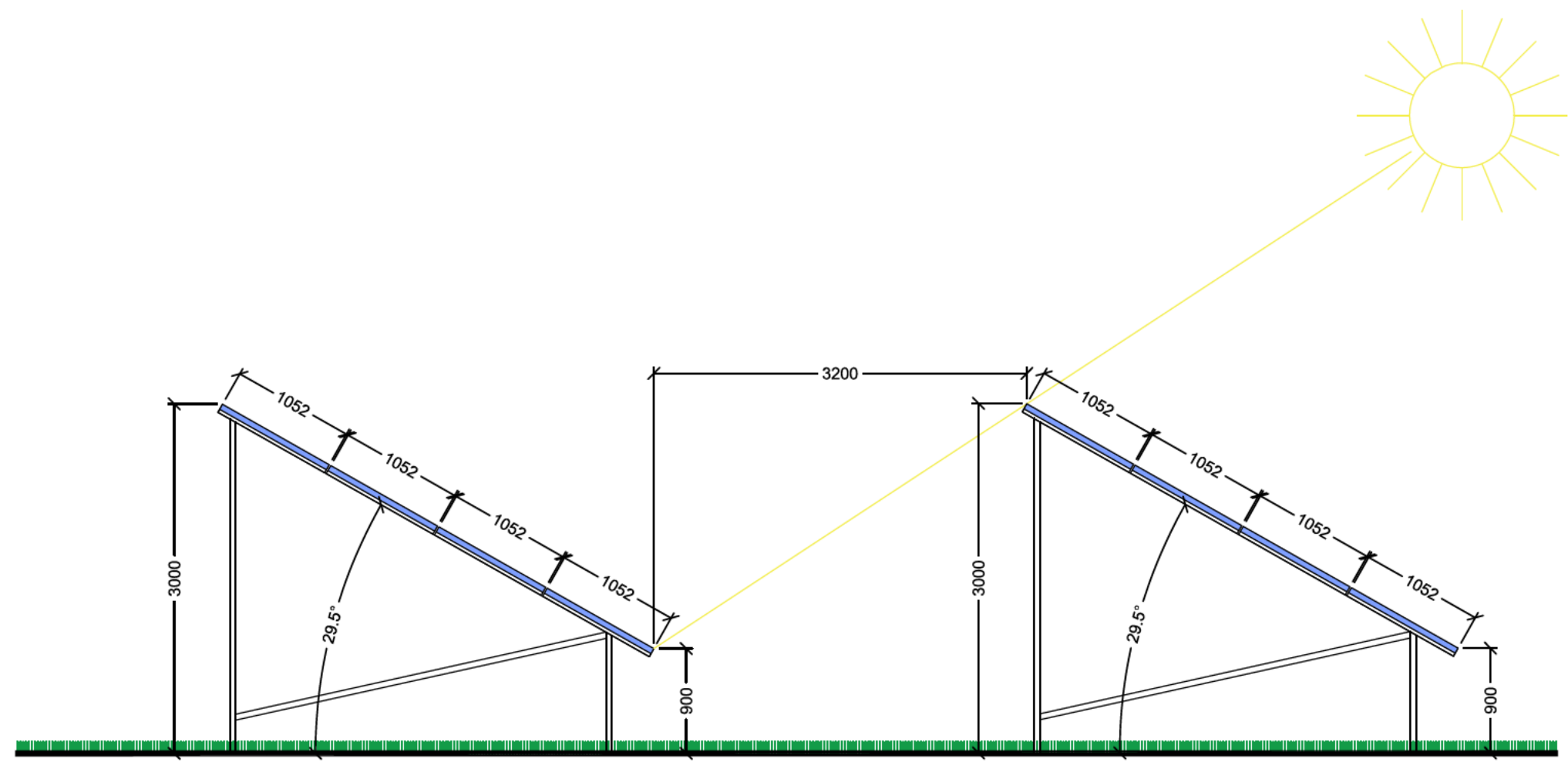


This drawing is the copyright of Low Carbon and must not be reproduced whole or in part or used in any manner without their written permission.
 Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

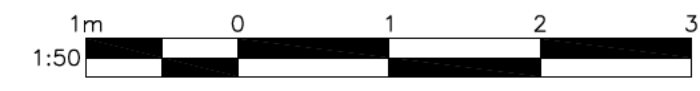
Revisions:

Revision	Date	Revision Note	Drawn	Inspected
01	26.10.20	First Issue	HN	LF

LEGEND:



1 PANEL CROSS SECTION
 Scale: 1:50@A3



Status: **FOR PLANNING**



13 Berkeley Street, London W1J 8DU
 Tel: +44(0)207 4096700
 enquiries@lowcarbon.com www.lowcarbon.com

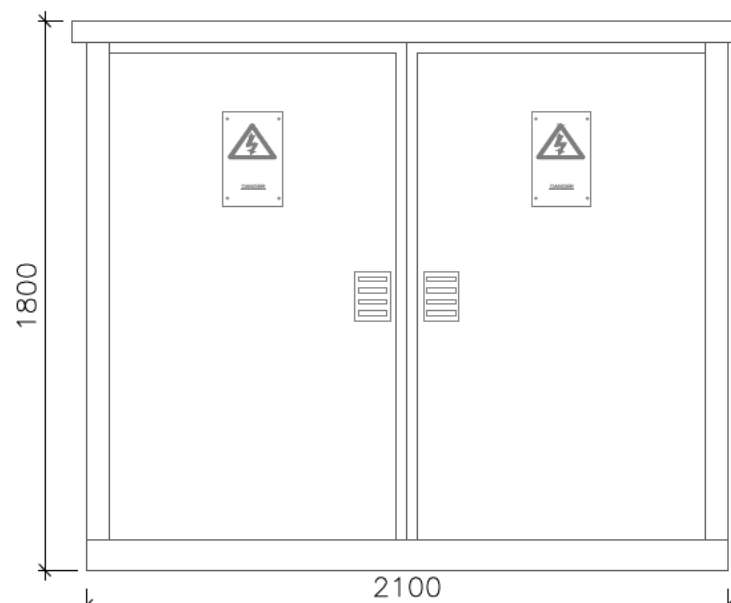
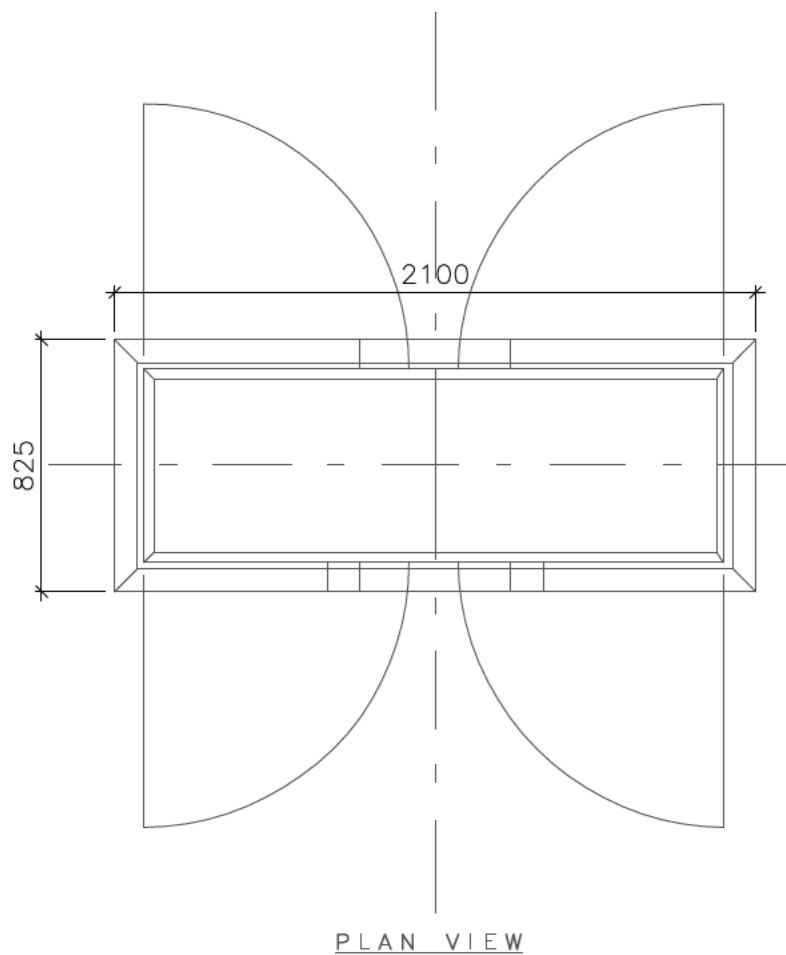
Drawing Title: **Panel Arrangement
 4 Landscape 29.5° Tilt**

Drawn: HN	Checked: LF	First Issued: 26.10.2020
Project Code: LCS-	Drawing Number: SD-17	
Sheet Size: A3	Scale: 1:50	Revision: 01

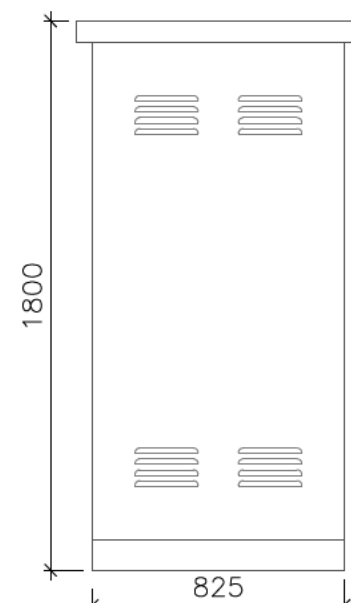
Revisions:

Revis on	Date	Revision Notes	Drawn	Inspected
01	21.06.21	First Issue	JS	LM

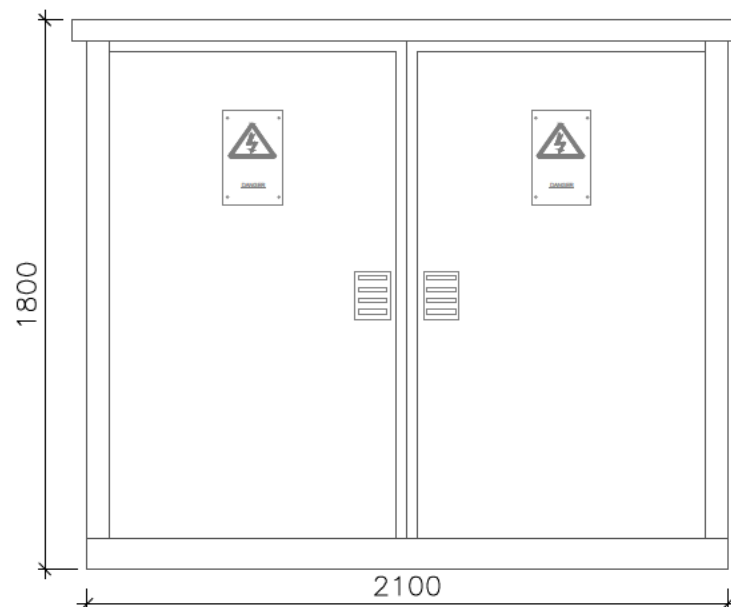
NOTES:



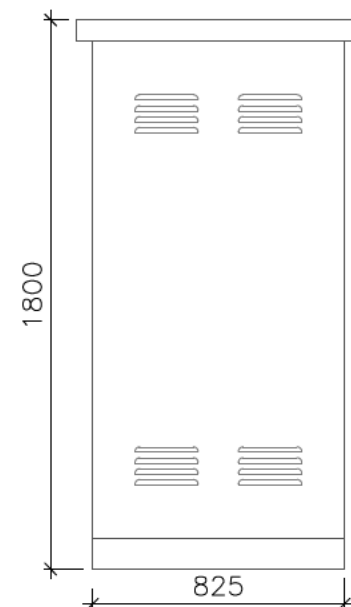
FRONT ELEVATION



RIGHT ELEVATION



REAR ELEVATION



LEFT ELEVATION

Status: **PLANNING**

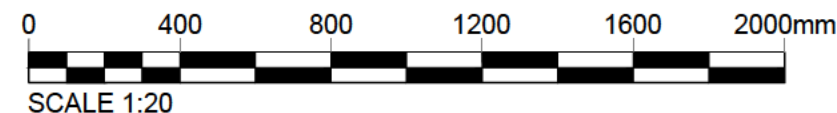


13 Berkeley Street, London W1J 8DU
 Tel: 0207 090700
 enquiries@lowcarbon.com www.lowcarbon.com

Drawing Title: **Meter Kiosk - Standard Detail**

Drawn: JS	Checked: LM	First Issued: 21.06.21
Project Code: LCS-	Drawing Number: SD-20	
Sheet Size: A3	Scale: 1:20	Revision: 01

1 METER KIOSK
 Scale: 1:20@A3

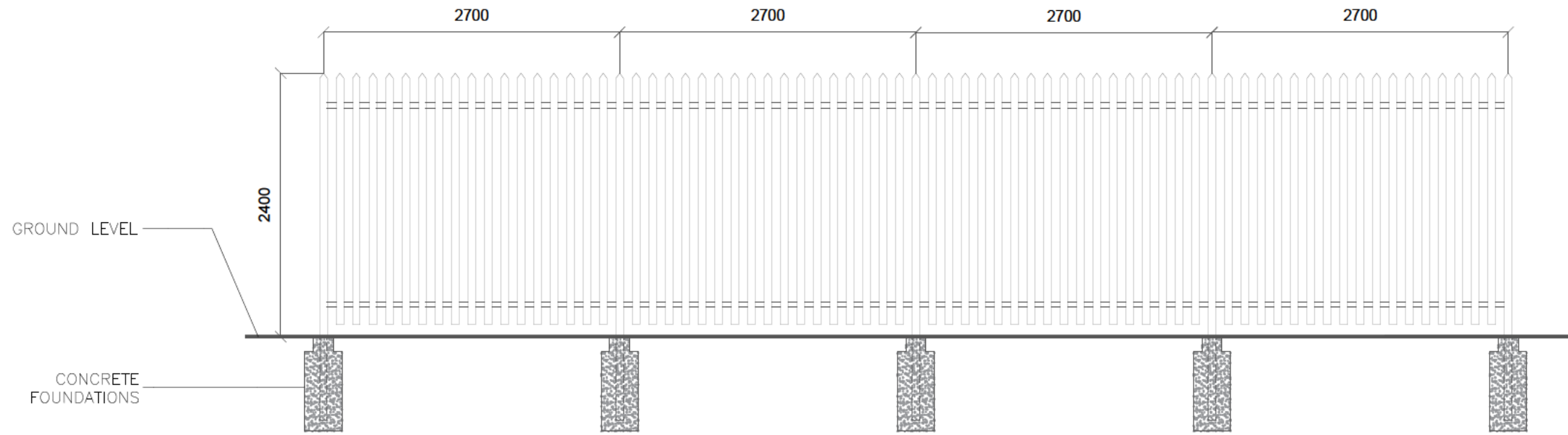


This drawing is the copyright of Low Carbon and must not be reproduced in whole or in part or used in any manner without their written permission.
 Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	21.06.21	First Issue	JS	LM

NOTES:



ELEVATION



PLAN

Status: **PLANNING**



Drawing Title: **132kV Substation Fence**

Drawn: JS	Checked: LM	First Issued: 21.06.21
Project Code: LCS-	Drawing Number: SD-25	
Sheet Size: A3	Scale: 1:50	Revision: 01

1 132kV SUBSTATION FENCE
 Scale: 1:50@A3



Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

Expertly Done.

DESIGN | ECONOMICS | ENVIRONMENT | HERITAGE | LAND & PROPERTY | PLANNING | TRANSPORT & INFRASTRUCTURE

Pegasus Group is a trading name of Pegasus Planning Group Limited (07277000) registered in England and Wales.

Registered office: Querns Business Centre, Whitworth Road, Cirencester, Gloucestershire, GL7 1RT
We are ISO certified 9001, 14001, 45001



[Pegasus_Group](#)



[pegasusgroup](#)



[Pegasus_Group](#)

[PEGASUSGROUP.CO.UK](https://www.pegasusgroup.co.uk)