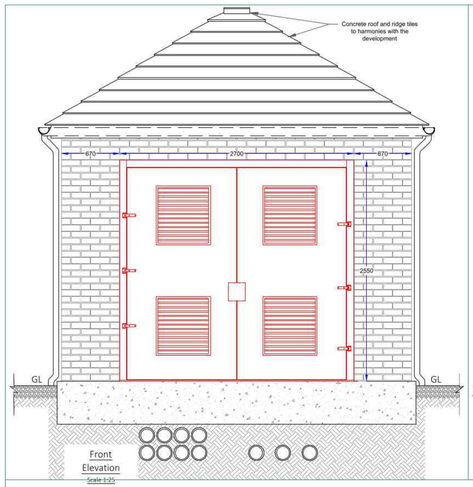
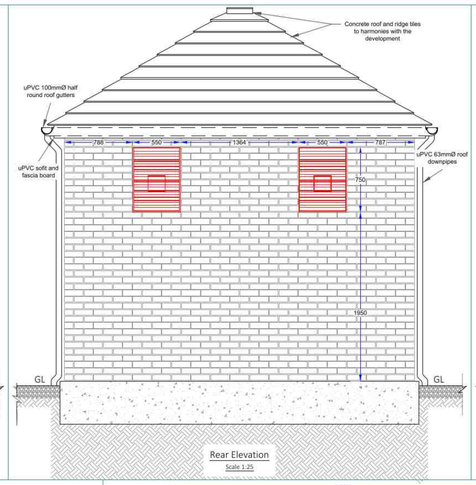


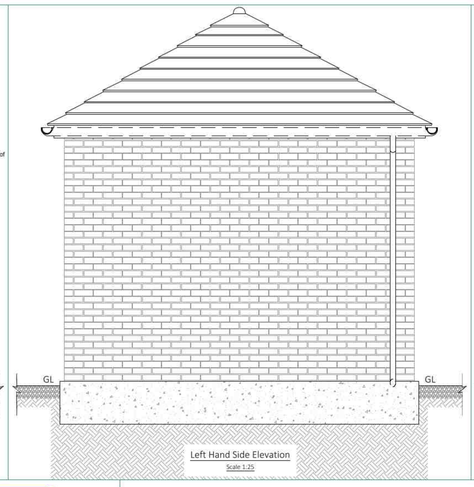
Front Elevation

Scale 1:25



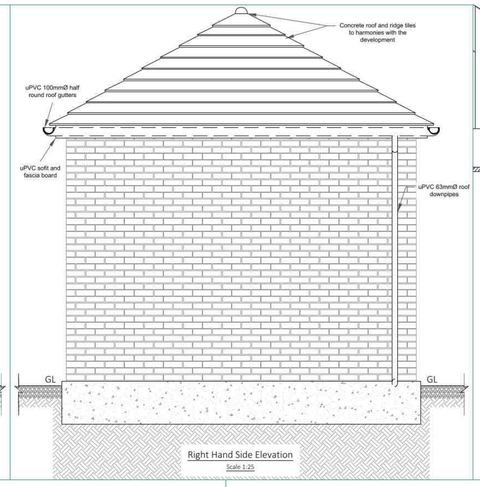
Rear Elevation

Scale 1:25



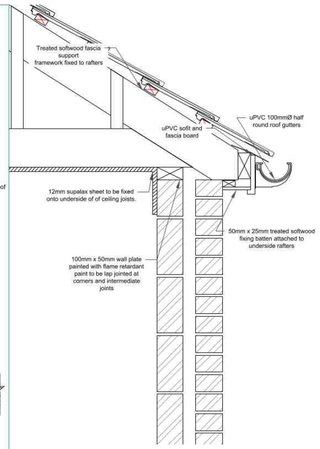
Left Hand Side Elevation

Scale 1:25



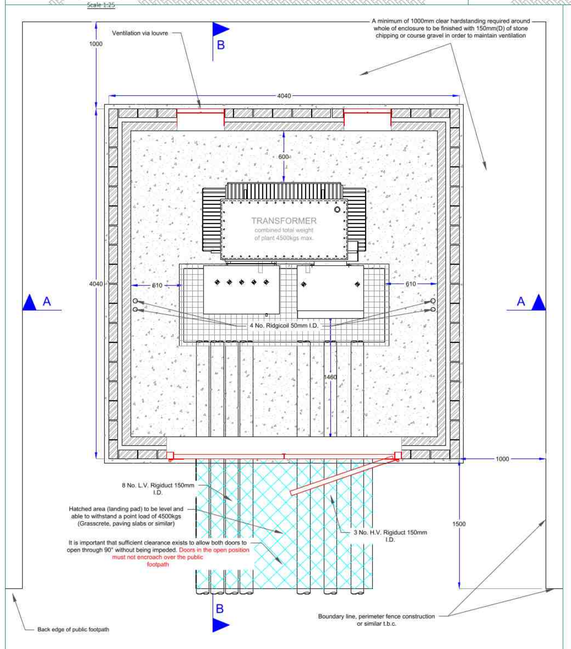
Right Hand Side Elevation

Scale 1:25



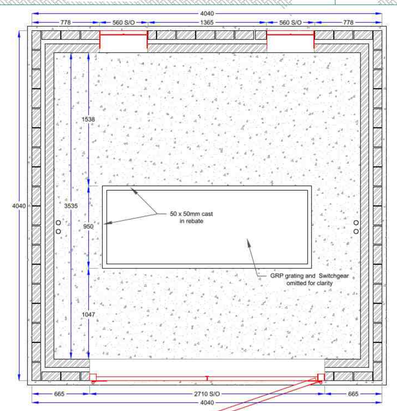
Roof Corner Detail Pull Out

N.T.S



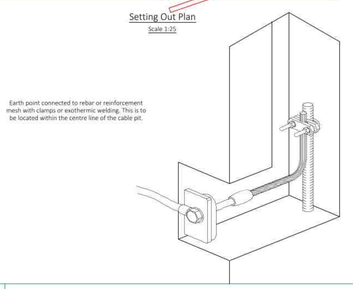
Substation Plan View

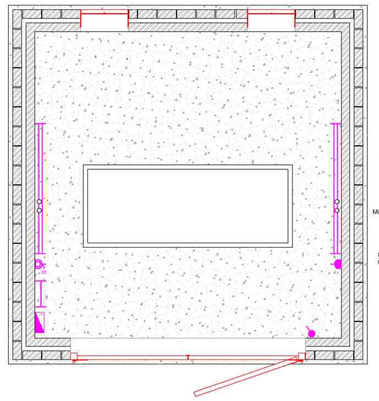
Scale 1:25



Setting Out Plan

Scale 1:25





Lighting - 6A M.C.B.
- 2 x IP55 1500mm Fluorescent Fitting.
- 1 x IP55 Bulkhead fitting

Small Power - 16A M.C.B
- 1 x Double IP55 R.C.D Type Socket Outlet
- 2 x 16A M.C.B for Spare

Small Power & Lighting to be installed and tested to the current issue of BS 7671 by a contractor who is registered with NICEIC or ECA. Internal lighting shall provide a minimum luminscence of 500 LUX in accordance with HSE guide HSG38 lighting at work.

2no. 1500mm Wall Mounted Twin Fluorescent 58W Tubes with Diffuser to BE EN 60698 and IP55min. Positioned 1,800mm above F.F.L.

Wall Mounted Square Bulkhead Twin Fluorescent 28W Tubes with Diffuser and Battery Back up IP55min 1,800mm above F.F.L. - EMG maintained

13A Twin Switched Socket IP55 with 30mA R.C.D with Operating Time of 30ms 400mm above F.F.L

Light Switch IP55 min1,000m above F.F.L – EMG key switch

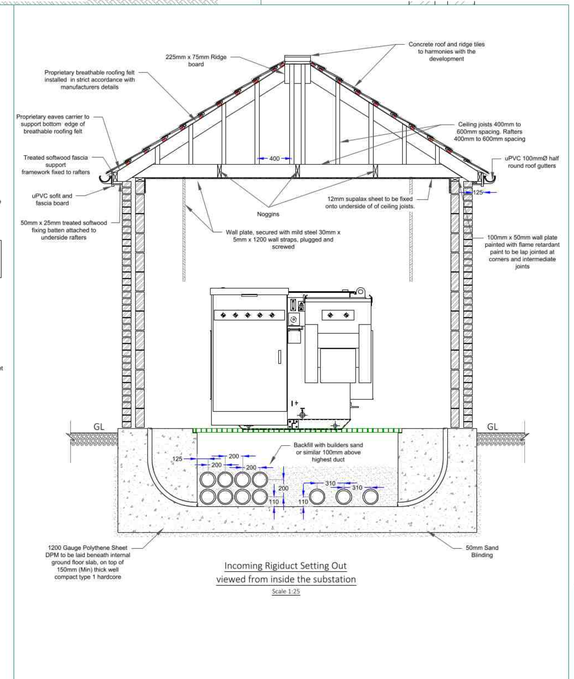
13A Unswitched Fused Spur Fitted with 5A fuse IP55min. 1,000mm above F.F.L

60A Single Phase Insulated Consumer Unit Conforming to BS EN 60439-3, BS 5486-12 and IP55min 1,800mm above F.F.L
- 6A M.C.B (Lighting)
- 16A M.C.B (Small Power)
- 16A Spare
- 16A Spare

Note: All small power and lighting within the substation to be in trunking and conduit that is non-flame propagating and self extinguishing heavy duty PVC to BS EN 50086-1

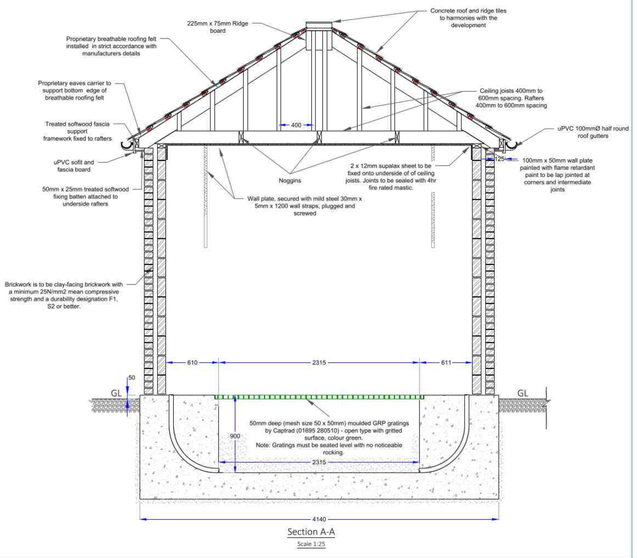
Small Power & Lighting

Scale 1:25



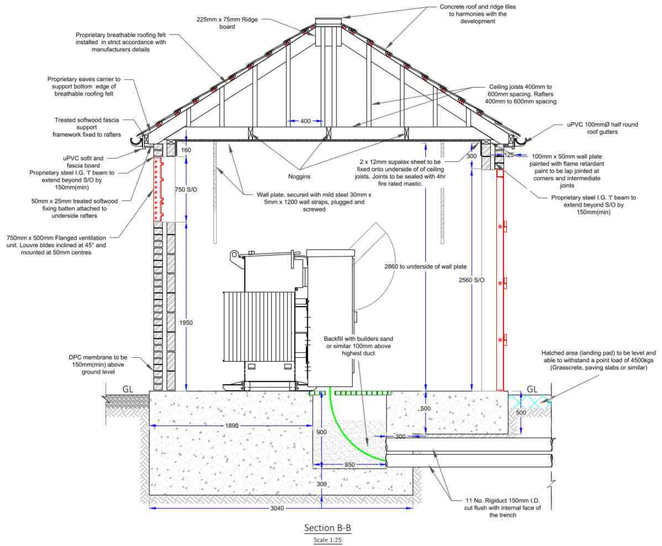
Incoming Rigiduct Setting Out viewed from inside the substation

Scale 1:25



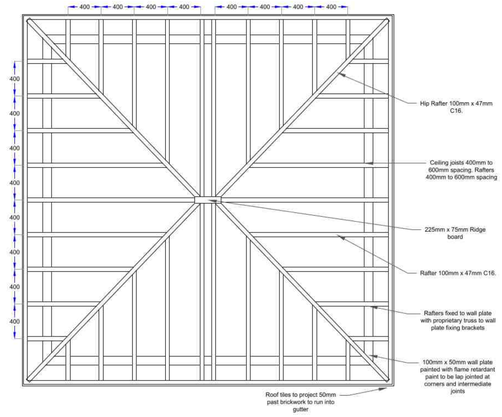
Section A-A

Scale 1:25



Section B-B

Scale 1:25



Roof Plan

Scale 1:25

Specification Notes:

ALL BUILDERSWORK TO BE PROVIDED BY CLIENTS DEVELOPER / BUILDER UNLESS EXPRESSLY STATED OTHERWISE.

Substation Location:
- It is important that the position and orientation of the substation is discussed and agreed with Eclipse prior to the commencement of any building works on site.
- Substations should be located adjacent to a public highway or reached by a private dedicated access way with full control and associated legal rights.
- Substations should be located 3000mm (min) from occupied buildings to minimize the potential risk of noise, vibration and fire spread to / from the Substation.
- 24 hour unimpeded Eclipse personnel access is required at all times, 365 days of the year. any doors or gates on the access route are to be locked via Eclipse dual locking suite.
- Access via 24hr security is unacceptable.
- Consideration is to be given at the design stage if adjacent soft landscaping is proposed ~ planting schemes must allow adequate provision for future plant growth without compromising access or ventilation through doors and louvres.
- Substation doors must not encroach over public footpath.

Foundations, Concrete & Reinforcement:

Reinforced Concrete Notes
- Excavations to be kept free from water at all times.
- All Concrete to be grade C25/45 with minimum cement content of 300kg/m³ and maximum water/cement ratio of 0.5. Cement to be OPC to BS 12.
- Aggregate size to be 20mm maximum.
- Cover to reinforcement to be 35mm unless shown otherwise.
- Reinforcement mesh to be supported with propriety chairs.
- Structural 'B' mesh (where specified) to be orientated as shown on plan.
- Mesh must not be trodden into concrete surface.
- Damp proof membrane (DPM) to be provided beneath internal ground floor slabs which are laid on top of a minimum 150mm thick well compact Type 1 hardcore sub-base.
- The standard design shown is based on a net increase of ground pressure at formation level not exceeding 25kN/m² assuming normal ground conditions.
- Should unusual or poor site conditions be encountered contact structural engineer to confirm design suitability, amendments or alternative solution.
- All concrete work to be finished smooth & level. It should be noted that a high standard of workmanship is required.
- There must be no trip hazards in front of plant.
- Basement tanking and waterproofing to be designed by a specialist CSSW qualified surveyor.

Representation of Bar Reinforcement
- Reinforcement is shown schematically on plans and elevations.
- Reinforcement bar sizes, shape codes and quantities are listed on Brick Substation Bar Bending Schedule shown on Table 1.
- Unless indicated otherwise on schedule, all bars to be 500MPa high yield (H) in accordance with BS 8866:2005.

Gratings:
- 50mm deep (mesh size 50 x 50mm) moulded GRP gratings by Captrad (01695 280510) - open type with gritted surface, colour green.
- Gratings must be seated level with no noticeable rocking and cut as required for cable penetrations ensuring they can still be removed with cables in-situ.
- 50 x 50mm cast in rebate required around top of trench perimeter, to receive GRP trench grating.

Note: Gratings are designed for personnel loading only

Plant Installation:
- Use acoustic mounts between plant and floor slab or anti-vibration matting.

Walls:
- 50mm cavity walls to be constructed from an outer skin of clay-facing brickwork with a minimum 25N/mm2 mean compressive strength and a durability designation F1, S2 or better. Inner skin to be blockwork with a minimum 7.2N/mm2 mean compressive strength.
- Inner and outer skins to be laid stretcher bond tied in with stainless steel wall ties, 'double triangle', vertical twist fishtail placed 450mm(max) c/c vertically and 375mm(max) c/c horizontally, with additional ties at structural openings.
- Both skins to have proprietary DPC membrane 150mm(min) above ground level
- Neat struck joints with mortar to be sand, lime, cement, mix 1:1:6 with sulphate resisting cement used below ground level.
- Plumb tolerance to be ±5mm.
- Wall plate to be secured with mild steel 30mm x 5mm x 1200 wall straps, plugged and screwed.
- All steel I.G. lintels to extend beyond structural opening by 150mm(min).
- All cavity's to receive cavity dower.

Doors & Louvres:
- Substation doors (can be GRP or Steel based on a risk assessment) and must be compliant with Eclipse GB1 Materials Specification. Wooden doors will not be acceptable.
- GRP doors are by MCL Industrial Enclosures. Ref number: SS1018.
- Steel doors are by Sunray Engineering Limited. Ref number: SQD/1063
- Steel Louvres are by Sunray Engineering Limited. Ref number: SQD/1066.

Ducts & Cable Access:
- 11no. 150mm internal diameter twin walled high density polyethylene ridgeducts to ESI 12-24, laid flat & level, eg. Ridgiduct, CDS Rise or similar.
- The exact duct entry positions are shown on the drawing.
- Groundwork for cable entry to be fully excavated and backfilled after cable installation by developer.
- Trenches to be filled with builders sand 100mm above highest duct, finish level post cable installation under EAN supervision.

Earthing:
A dedicated earthing system is to be supplied by the ICP.

NOTE: The small power and lighting requirement can be provided via the L.V. cabinet or alternatively, wall mounted small power and lighting will be required.

REV	AMENDMENT	BY	DATE

THE ICP
UNIT 4, PRESTON LODGE COURT
PRESTON DEANERY, NN7 2DS
TEL: 01604 343970

CLIENT: Stinders Homes SPV1 Ltd

PROJECT: LAND OFF LIME WALK, LONG SUTTON

TITLE: Substation Civils & SP&L

SCALE	DRAWN	DESIGNED
1:500 @ A0	RJB	RJB
REVIEWER	APPROVER	FIRST ISSUE DATE
JT	JT	28.03.23

TO BE READ IN CONJUNCTION WITH

DRAWING NO: ICP1648-LIME WALK-SB01 REV *

DRAWING STATUS: For Construction

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