OmVed Gardens Entrance and Glasshouse

Highgate, London

del Buono Gazerwitz
3rd Floor, 42 Theobalds Road
London WC1X 8NW

DAS Landscape Strategy

Rev. A

20 December 2023

Key

- Planning boundary line
- Extend of intervention
- Resin bound paving
- Granite setts 100x100x100 mm
- Self-binding gravel
- Hedge
- Mixed shrub and perennial planting
- Proposed trees
- Existing trees
- Tree to be removed, permission granted in 2023
- Tree to be relocated

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Existing site conditions

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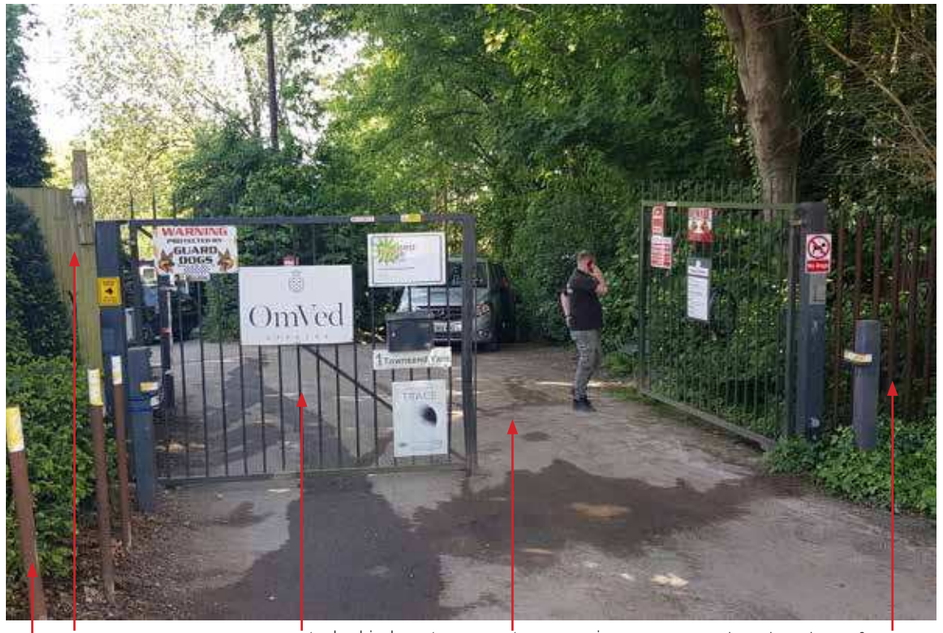
Existing site conditions
Tree plan



feather edge fence
weathered steel post
steel vehicular gates painted black
tarmac paving
weathered steel post fence

Existing access gate to OmVed Gardens

weeping willow trunk
tarmac paving
timber cabin
steps to gardens

Existing parking area and security cabin

The site is in Highgate, London and is accessed from the High Street via Townsend Yard. The plot is situated at the end of this lane, in an area locally referred to as the Highgate Bowl.

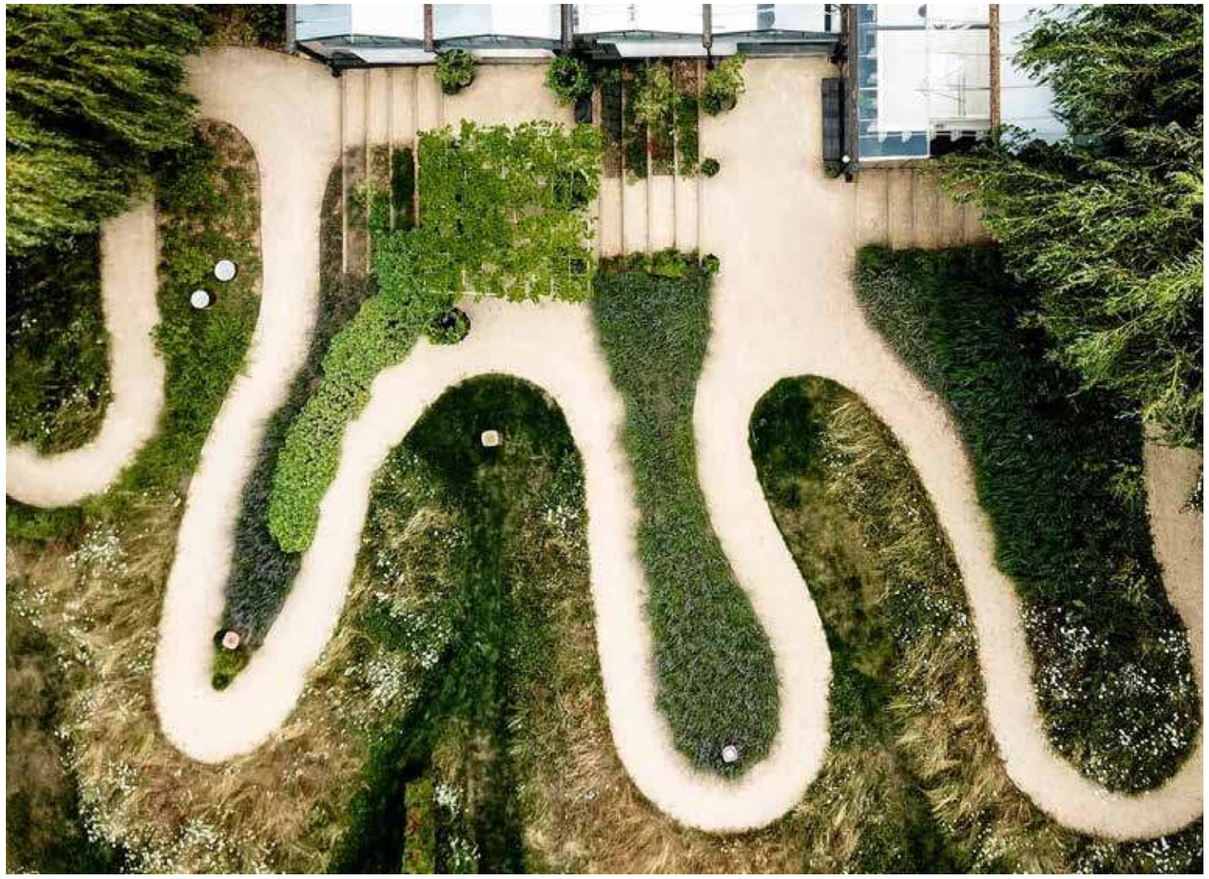
There is a double leaf vertical bar gate at the entrance to the site. This gate leads to a tarmacked car parking area, where a timber cabin is located, currently housing the site security. From here there is a service road surfaced in resin bound gravel that runs alongside the existing glasshouse. This service road continues past the glasshouse on its eastern flank to the bottom of the site and terminates in front of the new development on the other side of the OmVed Gardens.

The gardens proper and the existing glasshouse are accessed from the car park, either by a flight of timber sleeper steps or a ramp located behind the timber cabin. The existing glasshouse is arranged on 3 levels with entrances on two of these. Besides the timber sleeper steps the entrances can be approached by a series of circuitous gravel paths that track through the wildflower meadows and lavender beds. The gardens to the west of the glasshouse were laid out in 2017 and planted with a variety of native plants, flowering plants that provide for pollinators and others with medicinal or culinary value. Besides the tree cover that was in place in 2017, additional trees have also been planted to add to the diversity of the gardens. These include the Wild Service Tree (Sorbus torminalis) and a variety of heritage fruit trees.

To the south of the glasshouse is an outdoor classroom located beneath a large existing weeping willow (Salix babylonica). There is a compost area and storage area nearby which is associated with the kitchen garden. The kitchen garden is laid out with a series of raised circular beds and is used to grow fruits, vegetables and herbs that are used for events that are staged in the glasshouse.

The fringes of the site are planted with a variety of native shrubs and trees that were planted amongst the existing vegetation in 2017. These include Oak (Quercus robur), Hawthorn (Crataegus monogyna), Hornbeam (Carpinus betulus), Birch (Betulus pendula) and Guelder Rose (Viburnum opulus). This planting enhances the woodland on the adjacent property to the east of the site whilst the planting on the southern boundary creates a wildlife corridor linking the woodland in the east to the woodland located on the Highgate School on the west side.

All the existing trees that predate the extensive replanting of the gardens remain except for a weeping willow (Salix babylonica) near the parking area which perished 2 years ago from unknown causes. The truck of this tree remains and has been inoculated for growing mushrooms and fungi. The remainder of these trees are in good condition and are regularly assessed by an arboriculturist to ensure they stay healthy and well-tended.



Aerial view of OmVed Garden showing circulation and access area around the Glasshouse.

Eye level view of OmVed Garden entrance area.

View main circulation along Glasshouse

Glasshouse main entrance area.

Outdoor classroom area by the glasshouse building.

View of entrance area from main gates.

View of existing stepped and ramped access to OmVed Gardens.

View existing ramped access to be demolished.

View of service road at the height where the new UKPN substation is intended.

View from the service road towards the rear access to the existing glasshouse.

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Proposed landscape treatment

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- +0.00 Proposed levels
- (0.00) Existing levels

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Proposed landscape treatment
Entrance

Example of self-binding gravel

Example of resin bound gravel pavement with granite sett border

Hardwood seating wall

Hardwood cycle stand

Reinforced hardwood sleeper retaining wall

Since the proposed structure that will replace the existing glasshouse occupies the same footprint as the existing one, it is envisaged the landscape treatment around the glasshouse to remain as is. Any disturbance caused by the construction of the new structure will be made good and reinstated as originally implemented. It is also anticipated that as the footing of the new structure are not any more extensive than the existing, there will be no impact on the root systems of the trees within the vicinity. Despite this, tree protection methods will be implemented for nearby trees during the construction process to ensure that none of the trees incur any damage.

As part of these works, the area nearest to the gates will be reconfigured to create a more welcoming and inviting entrance to the garden. The hard surfacing will be modulated to draw visitors into the garden. The materials chosen for this will be resin bound gravel, selected for its permeable qualities and granite setts. The area can also accommodate a fire appliance should there be a need. The vehicle could enter the site, reverse down the service road and leave facing forward.

The entrance area will be bordered on the north side by a double row of Bird Cherry trees (Prunus avium) planted in a crescent shape. The area beneath these trees will be laid with self-binding gravel and will be used as a meeting point and a gathering place for visitors about to enter the gardens. There will also be several bicycle parking bays in this area for visitors to safely store their bicycles when they arrive.

The existing access ramp to the glasshouse will be removed as a new access will be available once the scheme to the Yard development has been completed. This area will be regraded and modelled to accept a new substation to be installed by UK Power Networks. The enclosure for this will be a green GRP supplied by UK Power Networks and screened from the entrance by newly planted vegetation.

The area that was formally occupied by the access ramp will be planted with the birch trees that needed to be lifted due to its demolition.

Double flowered Wild Cherry
Prunus avium

Silver Birch
Betulus pendula

English Oak
Quercus robur

Guelder rose
Viburnum opulus

Soft shield fern
Polystichum setiferum

Cranesbill
Geranium

Great Woodrush
Luzula sylvatica

Hornbeam hedge to match existing
Carpinus betulus

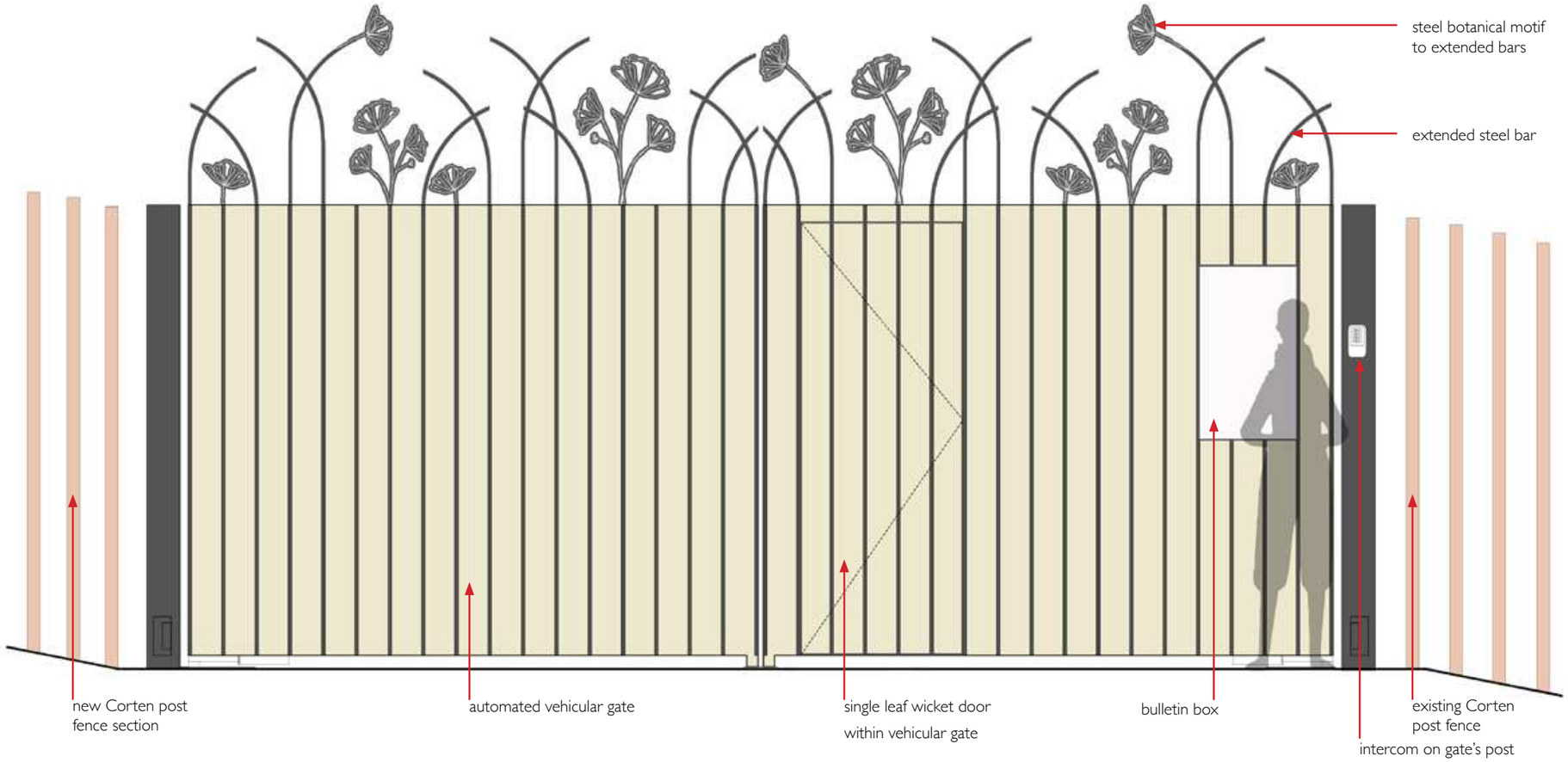
Blackthorn
Prunus espinosa

Hawthorn
Crataegus monogyna

The proposed planting palette picks up on the character of the existing woodland area at the rear of the glasshouse. It includes Oak (Quercus robur), Birch (Betulus pendula), Hawthorn (Crataegus monogyna), Hornbeam (Carpinus betulus), Blackthorn (Prunus espinosa) and Guelder Rose (Viburnum opulus), underplanted with ferns and flowering plants for seasonal interest.

All the trees that due to the construction work will need to be relocated will be accommodated in this area.

To reinforce the identity of the new arrival and gathering space a double row of Bird Cherry trees (Prunus avium) in a crescent shape will be introduced.



Elevation of proposed entrance gates

Painted steel with timber infill gate

Extended steel bars

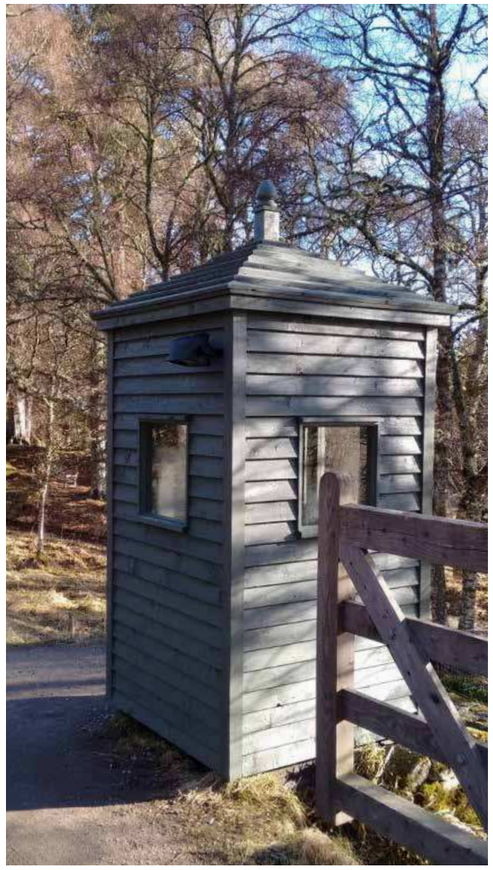
Examples of botanical motifs

It is proposed the existing double leaf vertical bar gates will be replaced with new metal gates of a similar size and proportion, located in the same position on the boundary. The new gates will be painted metal with a floral motif on the top of the leaves as illustrated on the accompanying elevation. The gates will be automated, with a pedestrian gate and bulletin box incorporated into the design.

Gate house location Plan

Example of circular cabin

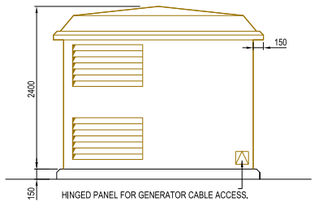
Historic example of rudimentaty guardhouse



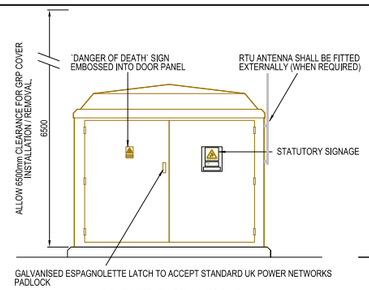
Example of timber gate house

Example timber cabin in woodland setting

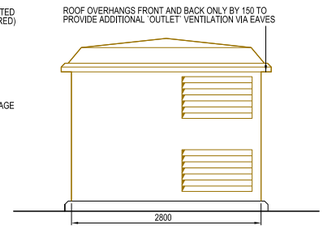
There will be a gatehouse as part of the new proposals. This diminutive single story timber structure is located near the entrance to the gardens on the right-hand side. It is to act as an information point for visitors to the garden and will be manned during events and functions. Being timber, it will mimic the design of the structures already constructed on site and hence blend into the natural surroundings of the gardens.



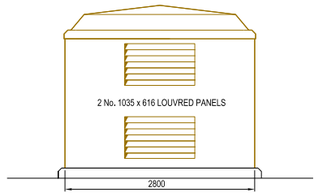
LEFT HAND SIDE ELEVATION



FRONT ELEVATION



RIGHT HAND SIDE ELEVATION

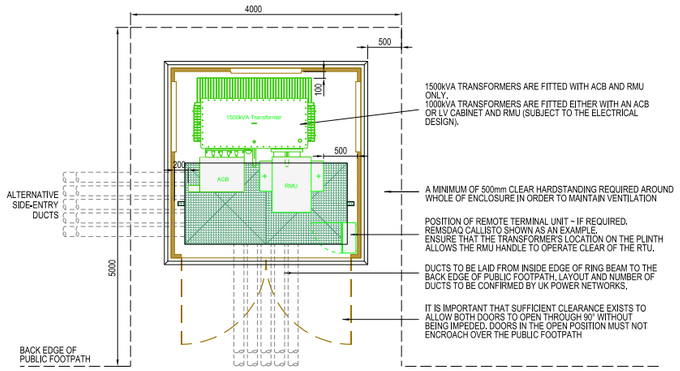


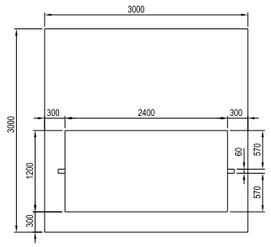
REAR ELEVATION

PROPOSED SUBSTATION LOCATION TO BE ADVISED BY DEVELOPER AND AGREED WITH UK POWER NETWORKS PRIOR TO CONSTRUCTION.

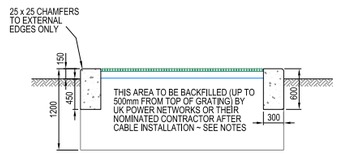
IF WITHIN 10m OF A WATERCOURSE OR WITHIN 50m OF A BOREHOLE USE THE FULLY-BUNDED DESIGN DRAWING EDS 07-3102.02

LOCATION PLAN

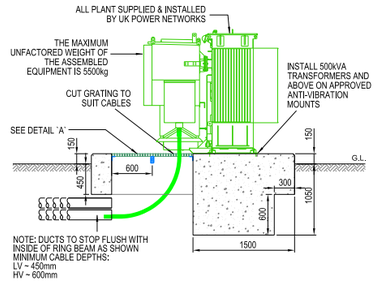




SETTING OUT DIMENSIONS



SECTION A-A



UNIT SUBSTATION ~ SECTION B-B

GENERAL NOTES

- DO NOT SCALE FROM THIS DRAWING. NO VARIATION TO THE STATED DIMENSIONS OR MATERIALS SPECIFIED WILL BE PERMITTED WITHOUT PRIOR WRITTEN CONSENT FROM UK POWER NETWORKS.
- ALL DIMENSIONS ARE IN MILLIMETRES.
- THE RUNNING OF SPRINKLER SYSTEM, HEATING, GAS, TELECOMS, WATER AND OTHER SERVICES THROUGH OR UNDER THE SUBSTATION AREA IS NOT PERMITTED.
- WORKMANSHIP AND MATERIALS TO CONFORM TO THE LATEST EDITION OF THE RELEVANT CODES OF PRACTICE OR BRITISH STANDARD AND EUROCODES.
- LOCATION OF THE SITE SHALL BE OVERLAID ON THE ORDNANCE SURVEY MAP AND ADDED ONTO THE PROJECT SPECIFIC DRAWING.

PLANNING, LOCATION AND POSITION

- POSITION AND ORIENTATION OF THE SUBSTATION SHALL BE AGREED WITH UK POWER NETWORKS PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORKS ON SITE.
- SUBSTATIONS SHALL BE LOCATED ADJACENT TO A PUBLIC HIGHWAY OR REACHED BY A PRIVATE DEDICATED ACCESS WAY WITH FULL CONTROL AND ASSOCIATED LEGAL RIGHTS.
- THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL PLANNING CONSENTS AND BUILDING REGULATION APPROVALS.
- UNIMPEDED ACCESS FOR UK POWER NETWORKS PERSONNEL IS REQUIRED AT ALL TIMES, 365 DAYS OF THE YEAR (24/7). ANY DOORS OR GATES ON THE ACCESS ROUTE SHALL BE LOCKED WITH THE STANDARD UK POWER NETWORKS LOCKING SUITE.
- ACCESS VIA 24 HOUR SECURITY IS UNACCEPTABLE.
- PROPOSED SOFT LANDSCAPING ADJACENT TO THE SUBSTATION (E.G. PLANTING SCHEMES) SHALL ALLOW FOR FUTURE PLANT GROWTH WITHOUT COMPROMISING ACCESS OR VENTILATION THROUGH DOORS AND LOUVRES.
- GRP SUBSTATIONS SHALL BE AT LEAST 4m AWAY FROM THE NEAREST BUILDING UNLESS A 4HR FIRE BARRIER IS LOCATED IN BETWEEN.

FOUNDATION AND REINFORCED CONCRETE

- AS STATED ON DRAWING OR TO SUIT THE SITE CONDITION.
- SUFFICIENT COVER TO THE REINFORCEMENT TO ACHIEVE A 4 HOUR FIRE RATING (50mm MINIMUM).
- FOR PRELIMINARY DESIGN, ASSUME 50kN/m²INCREASE IN GROUND PRESSURE AT FORMATION LEVEL.
- STRUCTURAL CONCRETE TO BE POURED ON 50mm GEN1 MIX CONCRETE BLINDING ON 1200 GAUGE GEOMEMBRANE, ON SAND BLINDING, ON WELL COMPACTED DTp1 TYPE MATERIAL.
- REINFORCING BARS TO BE ELECTRICALLY CONTINUOUS.

FLOOR SLAB

- TO THE STRUCTURAL ENGINEER'S SPECIFICATIONS TO SUSTAIN LOADS SHOWN. THE ENTIRE ACCESS ROUTE IS TO BE CAPABLE OF SUSTAINING THE EQUIPMENT LOAD.
- STANDARD FLOOR SLAB THICKNESS OF 225mm MINIMUM REINFORCED CONCRETE WITH A SUITABLE WEARING SCREED WITH A MINIMUM COMPRESSIVE STRENGTH OF 40N/mm2 AFTER 28 DAYS. CONCRETE WORKS FINISED WITH STEEL FLOAT TO WITHIN +-2mm OVER 2000mm.
- REINFORCEMENT TO DEVELOPER'S STRUCTURAL ENGINEER'S REQUIREMENTS.

GRP ENCLOSURE

- SUPPLIED AND INSTALLED BY UK POWER NETWORKS, USUALLY DELIVERED ASSEMBLED, FLAT PACK UNITS ARE AVAILABLE ON REQUEST.
- TOTAL WEIGHT OF GRP ENCLOSURE IS 600kg.
- THREE WAY LOCKING DEVICE WITH FREE ISSUED UK POWER NETWORKS PADLOCK.
- THE THRESHOLD SECTION BELOW THE DOORS IS REMOVABLE TO FACILITATE PLANT MOVEMENT.
- KEEP 1000mm CLEARANCE MINIMUM ABOVE ENCLOSURE FOR PRESSURE RELIEF AT ALL TIMES.
- ALLOW 6500mm CLEAR HEADROOM FOR THE REMOVAL OF THE ENCLOSURE DURING MAINTENANCE OR REPLACEMENT OF THE TRANSFORMER.
- MAXIMUM LOAD ON ROOF TO BE 2.5kN/m².
- LOUVERED VENTS SHALL NOT BE OBSTRUCTED; A MINIMUM CLEAR AREA OF 500mm IS REQUIRED AROUND THE ENCLOSURE.
- STANDARD COLOURS ARE MID BROWN 08-B-25 OR DARK GREEN 14-C-39 TO BS4800.

DUCTS

- 125mm INTERNAL DIAMETER TWIN WALLED HIGH DENSITY POLYETHYLENE DUCTING TO ESI 12-24 OR BS EN 61386, LAID FLAT AND LEVEL.
- NUMBER AND ENTRY POSITIONS SHALL BE VERIFIED BY UK POWER NETWORKS.

INFILL TO AREA AROUND CABLES

- AFTER CABLE INSTALLATION, SEAL ALL CABLE DUCTS. FILL TRENCHES WITH SAND WITH 100mm ABOVE TOP DUCT AND TO A MINIMUM OF 500mm BELOW THE TOP OF GRATINGS.

GRP GRATINGS AND SUPPORTS

- USE APPROVED 38mm DEEP MOULDED GRP GRATINGS; OPEN TYPE WITH GRITTED SURFACE AND COLOUR GREEN.
- GRATING SHALL BE FLUSH WITH TOP OF FOUNDATION AND SECURELY SUPPORTED, SEATED LEVEL WITH NO NOTICEABLE ROCKING OR SLIDING.
- CUT OFF OPENINGS FOR CABLE PENETRATIONS ENSURING THE GRATINGS CAN BE REMOVED WITH CABLES IN-SITU WHILE STILL REMAINING STABLE.
- STEELWORK FOR GRP GRATING SUPPORTS SHALL BE GALVANISED.

REFERENCES

SHEET 2	EARTHING LAYOUT
SHEET 3	SMALL POWER AND LIGHTING LAYOUT
EAS 07-0000	APPROVED EQUIPMENT LIST - CIVIL
EAS 02-0000	APPROVED EQUIPMENT LIST - CABLES & DUCTS
EDS 07-0119	SUBSTATION ELECTRICAL SERVICES
EDS 07-3101	PRE-DESIGN REQUIREMENTS FOR SECONDARY SUBSTATIONS
EDS 07-3102	SECONDARY SUBSTATION CIVIL DESIGN STANDARD

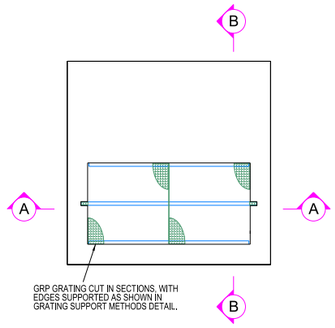
EQUIPMENT WHICH MAY BE USED WITH THIS DESIGN

- UNIT SUBSTATION WITH A 1500kVA TRANSFORMER OR BELOW.
- MICRO SUBSTATION.
- COMPACT SUBSTATION.

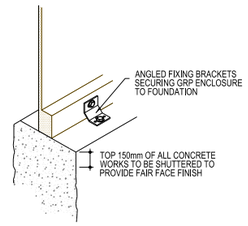
KERB LINE

PLAN VIEW OF SITE AND EQUIPMENT ARRANGEMENT

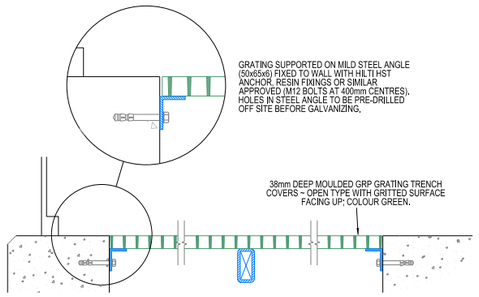
(GRP ROOF REMOVED FOR CLARITY)



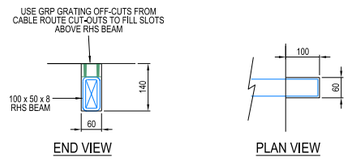
FOUNDATION PLAN VIEW



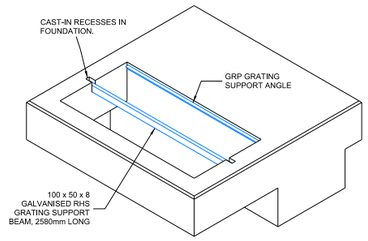
FIXING OF GRP COVER TO FOUNDATION ~ DETAIL



DETAIL `A` (SECTION B-B)



GRATING SUPPORT BEAM IN CONCRETE RECESS



FOUNDATION ~ ISOMETRIC VIEW

Version	Date	Description	Checked / Approved	Drn. / Designed
C	26-10-18	Design revised to show 1500kVA transformer	UA / UA	RDH / UKPN
B	05-01-18	Equipment positioning dimension added.	UA / UA	RDH / UKPN
A	09-08-17	ORIGINAL	UA / UA	RDH / UKPN

UK Power Networks

TITLE: UNIT OR PADMOUNT SUBSTATION IN A GRP ENCLOSURE CIVIL LAYOUT

SCALE: NTS @A1 APPROVED

DRAWING NO. EDS 07-3102.01 Sht 1 of 3

Version: C

SITE: SECONDARY SITES

This UK Power Networks drawing illustrates good practice regarding health, safety, security and cost efficiency, but design responsibility rests with the issuer of the site-specific version of the drawing.