ENW HV INSTALLATION

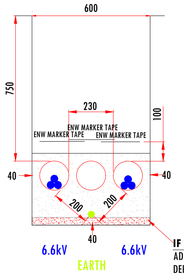
BACKFILL SPEC.:
FOR 6.6kV, THE BOTTOM OF EACH TRENCH SHALL BE FIRM AND OF SMOOTH CONTOUR AND FREE OF PROJECTING STONES, RUBBLE, FLINT ETC. WHERE THESE CONDITIONS DO NOT APPLY, AN ADDITIONAL 40mm DEPTH SHALL BE EXCAVATED AND REPLACED WITH AN APPROPRIATE SMOOTH BEDDING (E.G. SAND). POWER RAMMERS SHALL **NOT** BE USED TO CONSOLIDATE THE FIRST LAYER OF BACKFILL, I.E. ALL BEDDING AND BLINDING TO A LEVEL OF 225MM ABOVE THE CABLE. CABLE SPACING LV 0.15M HV 0.23M
NOTE: IF CABLE DUCTING IS LAID IN OPEN TRENCHES 150MM WARNING TAPE SHALL BE INSTALLED AT 100MM ABOVE THE CABLE DUCTING.

Ducts

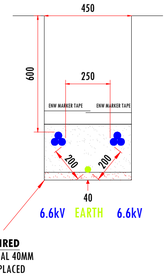
HV CABLE DUCTS TO BE 150mm INTERNAL DIAMETER RED SMOOTH WALL DUCT TO ENATS 12-24 EMBOSSED "ELECTRIC CABLE DUCT" ON OPPOSING SIDES.

ENW ◄ ► ENC

SECTION A-A

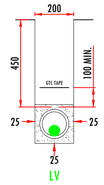


SECTION B-B

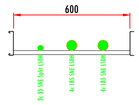


IF REQUIRED
ADDITIONAL 40MM DEPTH REPLACED WITH AN APPROPRIATE SMOOTH BEDDING

SECTION C-C



SECTION D-D



CABLE WEIGHTS

4c 95 Al Con. LSOH SNE - 2.5 kg/m

4c 185 Al Con. LSOH SNE - 4.5 kg/m

INSTALLATION NOTES:
LATERALLY INSTALLED MAINS CABLE MUST BE PROTECTED WITH COVERS IN ORDER TO PROTECT FROM DAMAGE BELOW

CABLE CROSS SECTIONS - NTS

ENC LV INSTALLATION

LV CABLE DUCTS TO BE 125MM INTERNAL BLACK TWIN WALLED CORRUGATED RIDGI-DUCT TO ESI 12-24 EMBOSSED "ELECTRIC CABLE DUCT" ON OPPOSING SIDES. ALL CABLES TO BE FULLY DUCTED ALONG THEIR ENTIRE LENGTH WITH MARKER TAPE COVER.

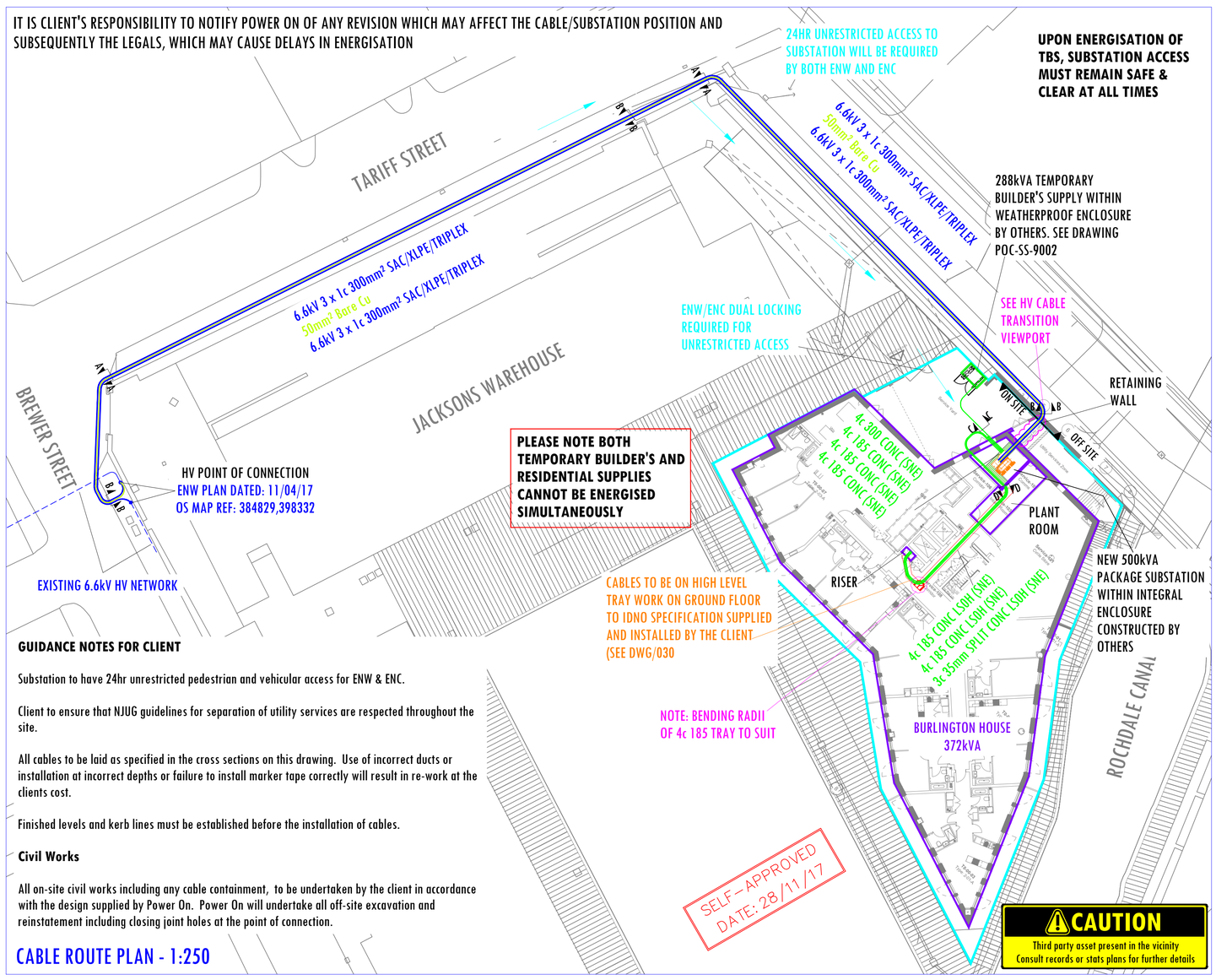
NOTE: IF LV CABLES ARE LAID ADJACENT TO HV CABLES (EXISTING OR NEW), LV TO BE INSTALLED WITH MARKER TILE TAPE COVER NOT MARKER TAPE.

BACKFILL SPECIFICATION
HATCHED AREA TO BE FINE FILL

MINIMUM OF 25MM CLEARANCE REQUIRED TO CONSOLIDATE DUCTS

MINIMUM BENDING RADII AND PULLING TENSIONS TO BE IN ACCORDANCE WITH THE DNO/IDNO REQUIREMENTS AS STATED IN THE G81 DOCUMENTATION.

IT IS CLIENT'S RESPONSIBILITY TO NOTIFY POWER ON OF ANY REVISION WHICH MAY AFFECT THE CABLE/SUBSTATION POSITION AND SUBSEQUENTLY THE LEGALS, WHICH MAY CAUSE DELAYS IN ENERGISATION



GUIDANCE NOTES FOR CLIENT

Substation to have 24hr unrestricted pedestrian and vehicular access for ENW & ENC.

Client to ensure that NJUG guidelines for separation of utility services are respected throughout the site.

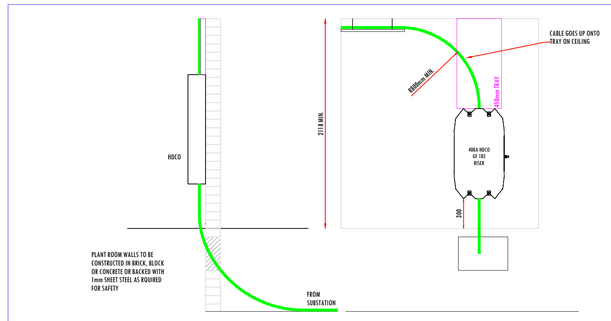
All cables to be laid as specified in the cross sections on this drawing. Use of incorrect ducts or installation at incorrect depths or failure to install marker tape correctly will result in re-work at the clients cost.

Finished levels and kerb lines must be established before the installation of cables.

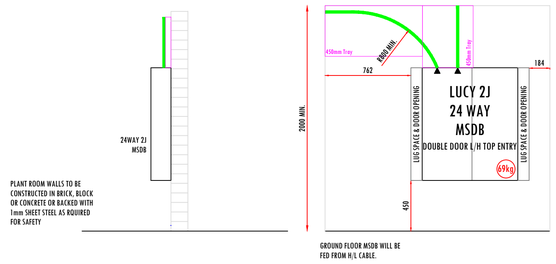
Civil Works

All on-site civil works including any cable containment, to be undertaken by the client in accordance with the design supplied by Power On. Power On will undertake all off-site excavation and reinstatement including closing joint holes at the point of connection.

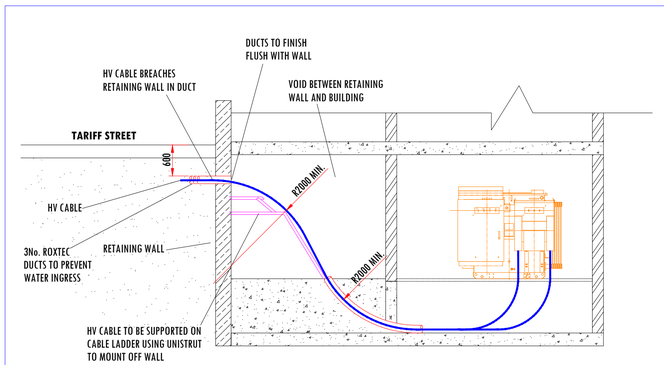
CABLE ROUTE PLAN - 1:250



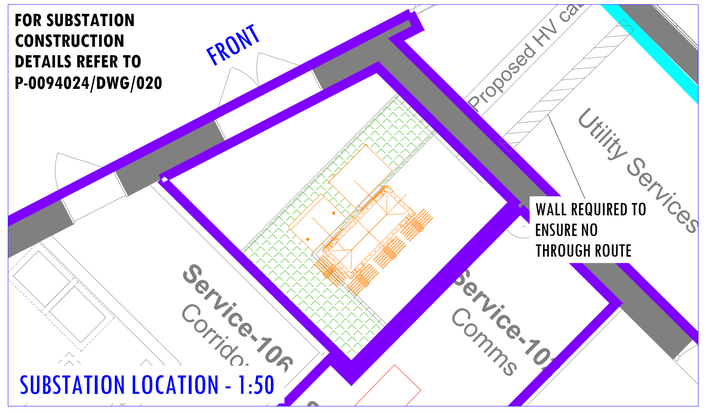
CABLE ENTRY (IN LINE CUT OUT) - NTS



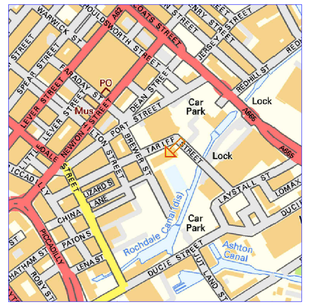
CABLE ENTRY (GROUND FLOOR MSDB) - NTS



HV CABLE TRANSITION - NTS



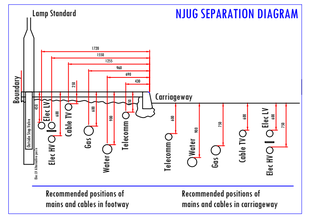
SUBSTATION LOCATION - 1:50



LEGEND

- HV Cable (& Existing HV)
- LV Cable (& Existing LV)
- Earth Bonding
- Termination
- Joint (HV / LV)
- Pressure End (HV / LV)
- Earth Rod
- Legal Boundaries
- Building Line

NJUG SEPARATION DIAGRAM



SATS No: 41282/1/F

Rev	Amendment	Date	Drwn	Chkd
0	ORIGINAL ISSUE	22/11/17	RE	CB

POWER ON connections

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DOVECOTE COURT, POTTERS MARSTON HALL, POTTERS MARSTON, LEICESTERSHIRE, LE9 3JR
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Client	GMI CONSTRUCTION GROUP PLC
Project Name	BURLINGTON HOUSE, MANCHESTER
Drawing Title	SUBSTATION LOCATION AND CABLE ROUTE PLAN
Site Address	BURLINGTON HOUSE TARIFF STREET MANCHESTER M1 2FJ

IF IN DOUBT - ASK

Design Engineer	REX ESTRANERO	Mobile	07855 270 476
Construction Engineer/Project Manager	TIM STEWART	Mobile	07824 439 491

Scale	Orig. Size	Sheet
VARIES	A1	1/1

Network Operator Ref.	Contract Drawing No.
5500083604/B	P-0094024/DWG/010