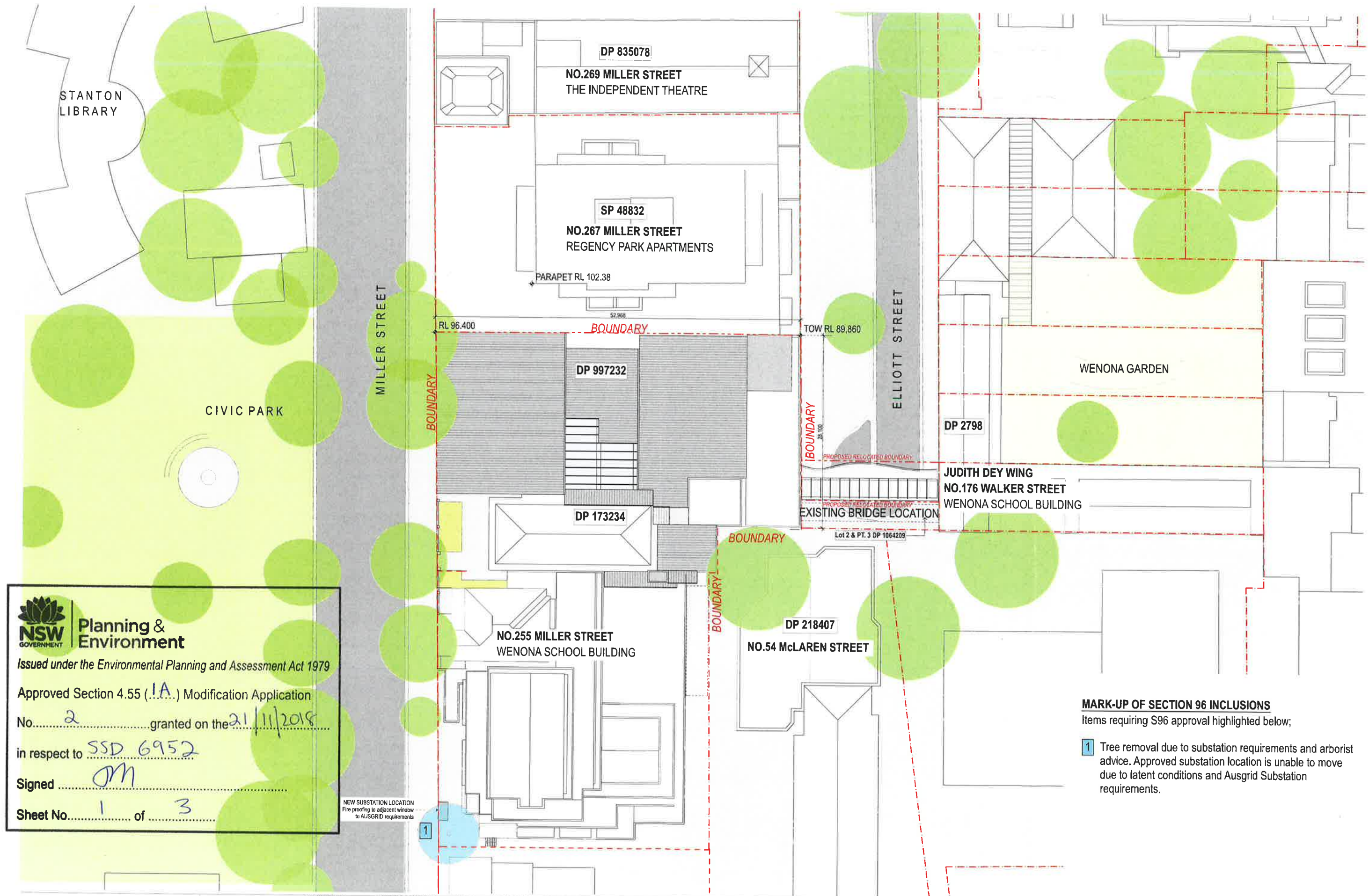


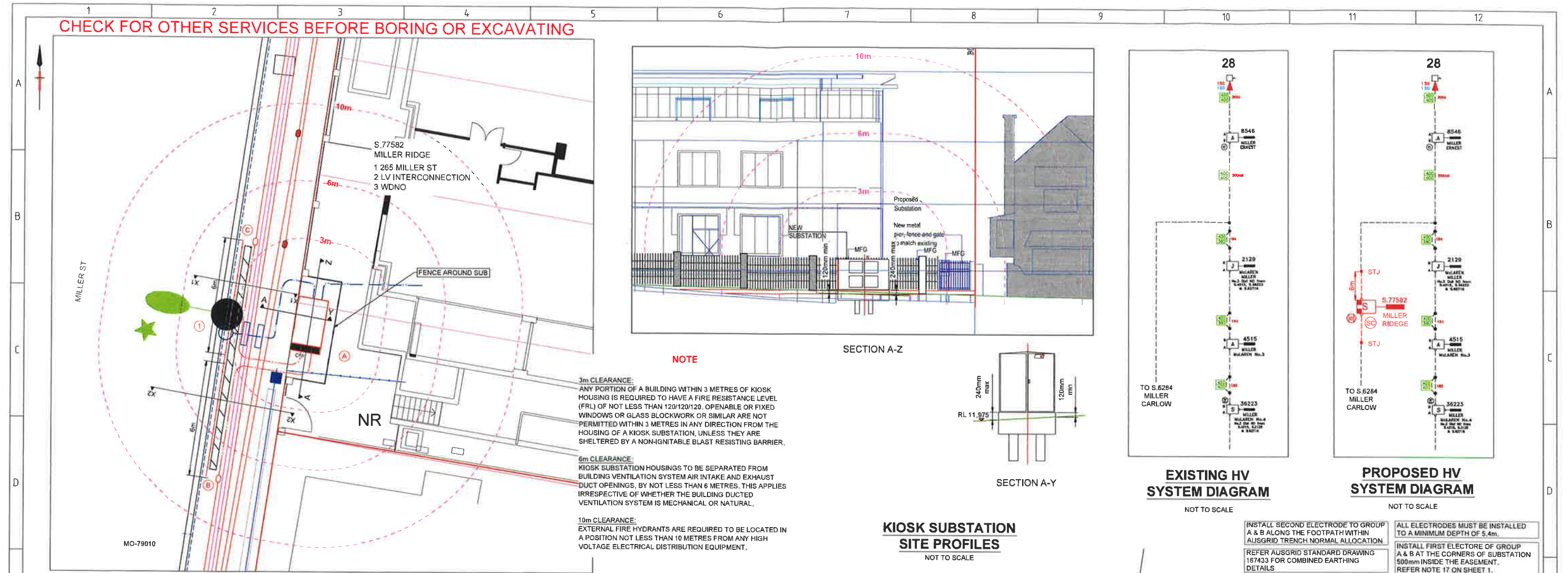


NSW GOVERNMENT Planning & Environment
Issued under the Environmental Planning and Assessment Act 1979
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Signed OM
Sheet No. 1 of 3

MARK-UP OF SECTION 96 INCLUSIONS
Items requiring S96 approval highlighted below:
1 Tree removal due to substation requirements and arborist advice. Approved substation location is unable to move due to latent conditions and Ausgrid Substation requirements.

NOTES: Do not scale off drawings. Use figured dimensions only. Report any discrepancies to the architect. These designs, plans, specifications and the copyright therein are the property of Tonkin Zulaikha Greer Architects Pty Ltd, and must not be reproduced or copied wholly or in part without written permission of Tonkin Zulaikha Greer Architects Pty Ltd.	ACCESSIBILITY Morris Gedling Elika Meechar Phone: 9592 9322 Email: elika@nzga.com.au	QUANTITY SURVEYOR MDA Australia Damon Blissett Phone: 8929 8000 Email: damon@mda-act.com.au	ELEC / MECH / LIFE/SECURITY MEDLAND METROPOLIS Chris Medland Phone: 450 444 810 Email: cmedland@medlandmetropolis.com.au	ACOUSTIC ENGINEER WILKINSON MURRAY Brian Clarke Phone: 9437 4611 Email: branc@wilmur.com.au	BCA / PCA CONSULTANT B&G Tony Heslop Phone: 9211 7777 Email: tony@bngplanning.com.au	LANDSCAPE 360 Glenn Dixon Phone: 8332 3601 Email: glenn@360.net.au	CLIENT: WENONA SCHOOL 176 Walker Street, North Sydney NSW 2060 Phone: 9408 4406 Email: hmcenry@wenona.nsw.edu.au	PROJECT: WENONA PROJECT ARCHIMEDES 255-265 Miller Street, North Sydney NSW 2060 PROJECT NO: 14010	ARCHITECT TONKIN ZULAIKHA GREER ARCHITECTS 117 Reservoir Street ABN: 4600722349 P: (02) 9215 4900 F: (02) 9215 4901 EMAIL: malinda@tzg.com.au WEB: www.tzg.com.au	DRAWING TITLE SITE PLAN SCALES 1:250 @A1 PHASE SECTION 96 - REV B DRAWING NO A-1001 ISSUE A	DRAWN BY ABN, AVDB, JH, MW, SB, CW, TS CHECKED PT
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CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATING



DETAIL 'A' SUBSTATION



UNDERGROUND CONSTRUCTION WORKS SCHEDULE									
REF. IDENTIFIER	ROUTE DISTANCE (m)	CIRCUIT VOLTAGE	CONDUCTOR OR ASSET DETAIL	CABLE CODE	MIN. INTERNAL BENDING RADIUS (mm) DURING INSTALLATION	MIN. INTERNAL BENDING RADIUS (mm) AFTER INSTALLATION	CALCULATED MAX. PULLING TENSION (kN) DURING INSTALLATION	CONSTRUCTION DETAIL	
EXCAVATION AND DUCT LAYING									
A	N/A	N/A	S.77582 MILLER RIDGE 1 x HV SCHNEIDER ELECTRIC RMI, EFI 1 X 600kVA TRANSFORMER 1 X 800/400/400 LV DISTRIBUTION BOARD	N/A	N/A	N/A	N/A	ESTABLISH S.77582 MILLER RIDGE IN THE LOCATION SHOWN PREPARE SITE AND CARRY OUT CIVIL WORKS SUPPLY AND INSTALL TRANSFORMER SUPPLY AND INSTALL LV BOARD INSTALL AND TERMINATE HV AND LV TRANSFORMER TAILS TERMINATE EARTH CABLES TO EARTH BAR TERMINATE LV SERVICE CABLE TO DISTRIBUTION BOARD	
B - C	12	N/A	1 x 150mm LD UPVC DUCT (1 SPARE), 1 x 63mm HD UPVC DUCT (SPARE)	N/A	N/A	N/A	N/A	EXCAVATE CABLE TRENCH AND LAY DUCTS WITHIN FOOTPATH AS PER CROSS SECTIONS X1 & X2.	
CABLE LAYING									
A - C	6	11kV	1 x 11kV 300CU1 G EPR G CU(W/S) ZYQ TRIPLEX	396	1335	890 (3) / 620 (1)	PULL BY HAND	INSTALL 1 x 11kV CU TRIPLEX TAILS FROM S.77582 TO REF 'C'. LAY CABLE AS PER CROSS SECTION X1.	
A - B	6	11kV	1 x 11kV 300CU1 G EPR G CU(W/S) ZYQ TRIPLEX	396	1335	890 (3) / 620 (1)	PULL BY HAND	INSTALL 1 x 11kV CU TRIPLEX TAILS FROM S.77582 TO REF 'B'. LAY CABLE AS PER CROSS SECTION X2.	
A - 1	12	LV	1 x 415V 240 AL4 XQ Z/SAC	2257	600	390	PULL BY HAND	INSTALL 1 x 415V 240AL4 XQZ/SAC CABLE LV BOARD OF SUBSTATION S.77582 TO UGOH POLE REF '1'. LAY DIRECT BURIED CABLE FROM SUBSTATION 'A' TO '1' AS PER CROSS SECTION X1. ALLOWANCE FOR SUB TERMINATION (4m) AND LV UGOH (8m)	
JOINTING AND TERMINATIONS									
B & C	12	N/A	2 x HV STRAIGHT THROUGH JOINT (HV 2 - 27)	170 396	N/A	N/A	N/A	CUT EXISTING 11kV 97 CU3 P L SW J CABLE AT REFERENCES 'B' & 'C' AND FORM 2 x HV STRAIGHT THROUGH JOINTS WITH PROPOSED 11kV 300 CU 1 G EPR G 70 CU(W/S) Z YQ/3 CABLES.	
B & C	12	N/A	2 x HV STRAIGHT THROUGH JOINT (HV 1-52)	396	1335	620	N/A	TERMINATE NEW 300 CU1 HV TAILS (HV 1-54)	
A	N/A	LV	2 x KIOSK LV TERMINATIONS (LV 1 - 41)	2257	600	390		TERMINATE 2 x 240 AL4 XQ Z/ SAC CABLES FOR DEVELOPMENT SUPPLY (DIST 1) AND FOR STREET BACK UP (DIST 2).	
A	N/A	LV	TERMINATION OF CONSUMERS MAINS			0		MAXIMUM SIZE CABLE FOR CONNECTION AT THE SUBSTATION 800AMP LV PANEL IS 300mm ² CU1 XQZ/ MAXIMUM NUMBER OF CABLES PER PHASE IS TWO (2) - REFER TO NS117 FOR FURTHER DETAILS	

OVERHEAD CONSTRUCTION WORKS SCHEDULE (POLES & WIRES SOFTWARE VERSION 6.23.631)									
REF. IDENTIFIER	POLE NUMBER	SIZE (mm)	STRENGTH (kN)	POLE TYPE	DEPTH (m)	FOOTING DETAILS	CONST TYPE	ATTACHED (m) FROM HEAD OF POLE	ADDITIONAL CONSTRUCT DETAIL
POLES & WIRES									
LV: EXT 1-74									
LV UGOH + FUSE LINK DISCONNECTOR (1-46)									
LV: 0.5									
N/A									

ASSOCIATED DRAWINGS									
Pole									
SL Standard									
LV Link Pillar									
Streetlight									
Streetlight-replacement									
Streetlight-removal									
Pole to be removed									
USL									
IDT									
Kiosk Sub									
Chamber Sub									
Pole Sub									
Two Pole Sub									

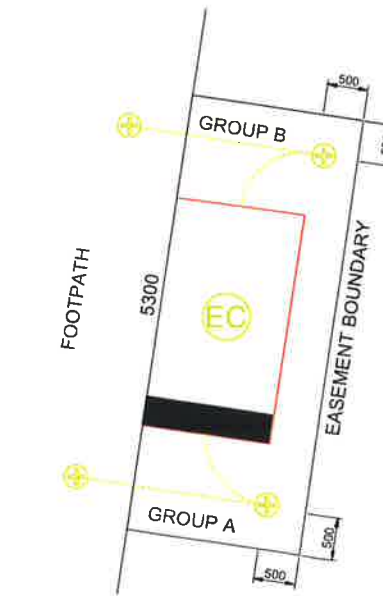
Signed *DM*
Sheet No. *2* of *3*

Approved Section 4.55 (1A) Modification Application
No. *SSD 6952*
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in respect to *MO-79010*

KIOSK SUBSTATION
SITE PROFILES
NOT TO SCALE

EXISTING HV
SYSTEM DIAGRAM
NOT TO SCALE

PROPOSED HV
SYSTEM DIAGRAM
NOT TO SCALE



EARTHING DIAGRAM
FOR PROPOSED KIOSK SUB
(COMBINED EARTHING)
NOT TO SCALE
(REFER TO NS0116 FOR MORE DETAILS)
BLACK INSULATED 70mm² STRANDED COPPER CONDUCTOR
ELECTRODE

GENERAL	
EARTHING CONFIGURATION	COMBINED
DESIGN CURVE	ENA - TD MEN
ELECTRODES INSTALLATION	DRIVEN
DESIGN	
HV ELECTRODES	
NUMBER OF ELECTRODES	2
DEPTH OF EACH ELECTRODE	5.4
SPACING BETWEEN ELECTRODES	2.3
MAX RESISTANCE - NORMAL	28.75
MAX RESISTANCE - DROUGHT	43.26
MEASURED	
LV ELECTRODES	
NUMBER OF ELECTRODES	2
DEPTH OF EACH ELECTRODE	5.4
SPACING BETWEEN ELECTRODES	2.3
MAX RESISTANCE - NORMAL	28.75
MAX RESISTANCE - DROUGHT	43.26
MEASURED	
COMBINED	
RESISTANCE	25.27
MINIMUM SEPARATION DISTANCES *	
MINIMUM SEPARATION FROM TELCO ASSETS	1.2
MINIMUM SEPARATION BETWEEN HV AND LV AND/OR MEN ELECTRODES	4.3
REFERENCE DRAWINGS FOR THIS INSTALLATION	
167433	

connect Electrical Infrastructure
CONSULTANCY, DESIGN & CONSTRUCTION

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ASP REF: DT494 - 03

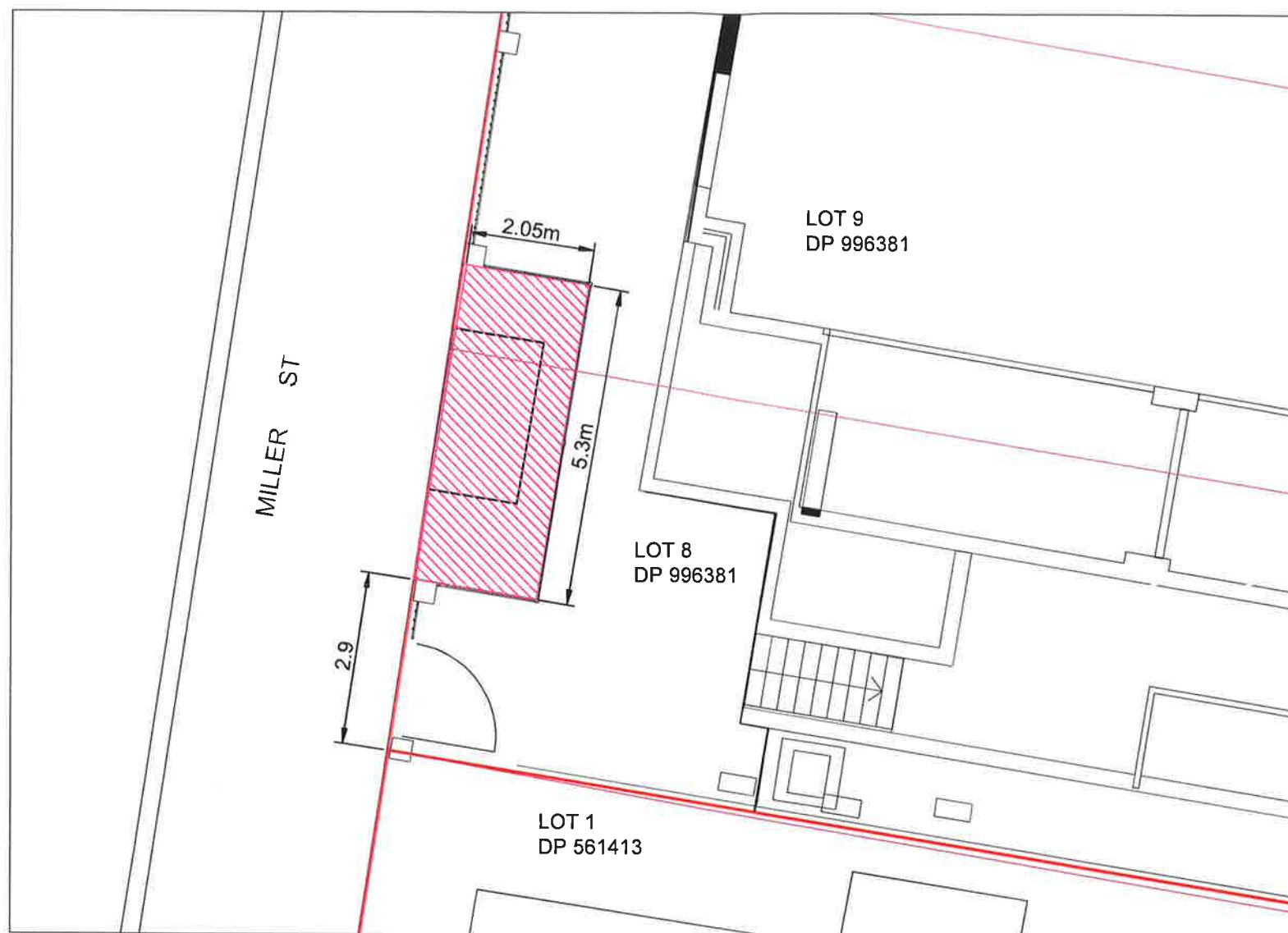
DESIGNED BY: PRAMOD PARAJULI
AUTH NO: 1104
SUBMIT DATE: 18/01/2017
LGA: NORTH SYDNEY COUNCIL
MAP REF: MAP 216 REF. D10
AUSGRID REF: MO 71
PILITRAK NO: XCC014738

ESTABLISH SUBSTATION
S.77582 'MILLER RIDGE'
265 MILLER STREET
NORTH SYDNEY
NSW

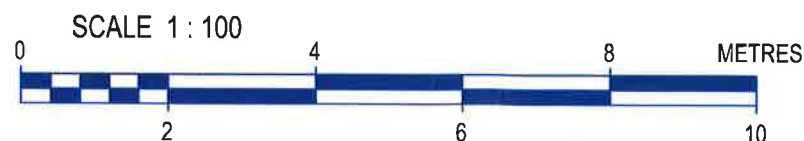
SC08715

SHEETS: 2 of 4

CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATING



EASEMENT DIAGRAM



"A" - EASEMENT FOR ELECTRICITY & OTHER PURPOSES 2.05 WIDE



Planning &
Environment

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in respect to SSD 6952

Signed OM

Sheet No. 3 of 3

CAD DRAWING

AMENDMENTS



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ASP REF. DT494 - 03

DESIGNED BY	PRAMOD PARAJULI
AUTH NO.	1104
SUBMIT DATE	SUBMITTED 18/01/2017
LGA	NORTH SYDNEY COUNCIL
MAP REF.	MAP 216 REF. D10
AUSGRID REF.	MO 71
PRJTRAK No.	XCC014738

ESTABLISH SUBSTATION
S.77582 'MILLER RIDGE'
265 MILLER STREET
NORTH SYDNEY
NSW

ASSOCIATED DRAWINGS

CERTIFICATION NUMBER 973725 / 20170208

SIZE A3

AUSGRID PROJECT No.

SC08715

SHEETS

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AMD.

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