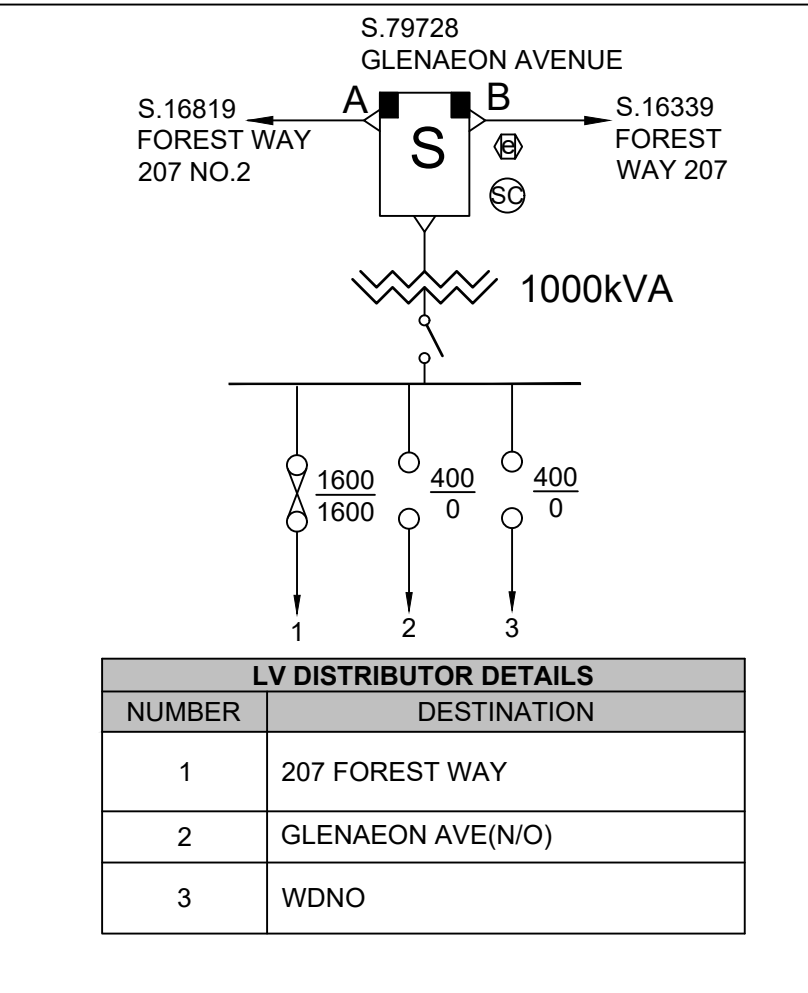


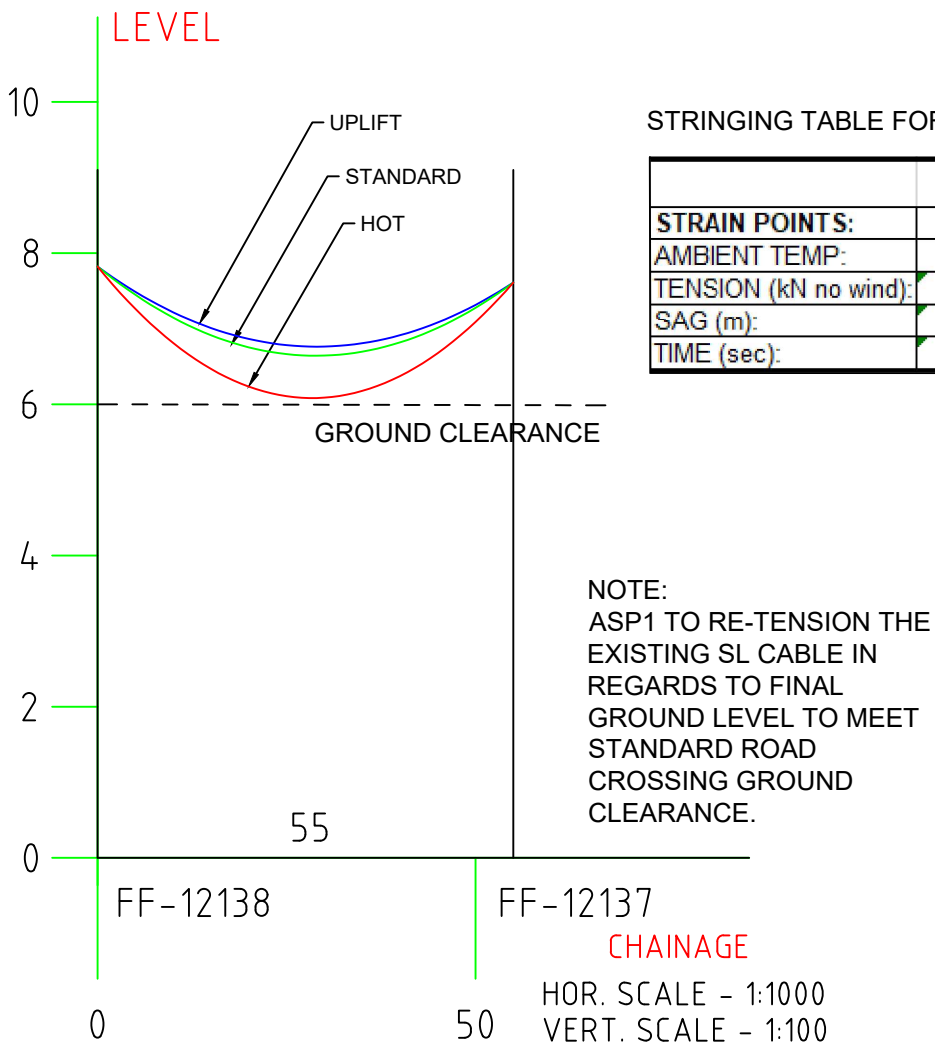
CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATION

UNDERGROUND CONSTRUCTION WORKS SCHEDULE (INSERT DETAILS OF UNDERGROUND DESIGN SOFTWARE USED)								
REF. IDENTIFIER	ROUTE DISTANCE (m)	CIRCUIT VOLTAGE	CONDUCTOR OR ASSET DETAIL	CONDUCTOR CODE / STOCK CODE	MIN. INTERNAL BENDING RADIUS (mm) DURING INSTALLATION	MIN. INTERNAL BENDING RADIUS (mm) AFTER INSTALLATION	CALCULATED MAX. PULLING TENSION (kN) DURING INSTALLATION	CONSTRUCTION DETAIL
A	-	11kV	KL TYPE KIOSK SUBSTATION, 1000kVA (HV1-52) TERMINATE HV CABLE (HV1-52) TERMINATE LV CABLE (LV1-41)	N/A	N/A	N/A	N/A	- INSTALL NEW 1000kVA KIOSK SUBSTATION. - TERMINATE TWO PROPOSED 11kV 185 CU1 TRXQ 70 CU(WS) Z YQ/Triplex CABLES INTO HV SWITCHGEAR (HV1-52). - TERMINATE ONE PROPOSED 415V 185 CU1 XQ Z / COM / 4 CABLES INTO LV SWITCHGEAR (LV1-41).
J	-	LV	DOUBLE LINK PILLAR (LV1-60)	N/A	N/A	N/A	N/A	INSTALL DOUBLE LINK PILLAR. TERMINATE TWO PROPOSED 415V 185 CU1 XQ Z / COM / 4 CABLES IN PILLAR.
L	-	LV	DOUBLE LINK PILLAR (LV1-60)	N/A	N/A	N/A	N/A	INSTALL DOUBLE LINK PILLAR. TERMINATE THREE PROPOSED 415V 185 CU1 XQ Z / COM / 4 CABLES IN PILLAR.
JOINTS								
E	-	11kV	2 X 3-1 JOINT (HV2-23)	N/A	N/A	N/A	N/A	INSTALL 2 X 3-1 JOINT (PROPOSED 11kV 400 AL3 TRXQ 35 CU(WS) Z YQ TO PROPOSED 11kV 185 CU1 TRXQ 70 CU(WS) Z YQ/Triplex)
P	-	11kV	3-1 JOINT (HV2-23)	N/A	N/A	N/A	N/A	INSTALL 3-1 JOINT (PROPOSED 11kV 400 AL3 TRXQ 35 CU(WS) Z YQ TO EXISTING 11kV 185 CU1 EPR CU(WS) YQ / 70DEG (CODE 12051))
Q	-	11kV	STRAIGHT THROUGH JOINT (HV2-22)	N/A	N/A	N/A	N/A	INSTALL ST JOINT (PROPOSED 11kV 400 AL3 TRXQ 35 CU(WS) Z YQ TO EXISTING 11kV 400 AL3 XQ MB CU(WS) Z YQ / ISC / 75DEG (CODE 12057))
M	-	LV	4-1 HEATSHRINK JOINT (LV2-36)	N/A	N/A	N/A	N/A	INSTALL 4-1 JOINT (PROPOSED 415V 185 CU1 XQ Z / COM / 4 CABLES (Parrot cable) TO EXISTING 415V 240 AL4 XQ Z / SAC (CODE 2257))
N	-	LV	4-1 HEATSHRINK JOINT (LV2-36)	N/A	N/A	N/A	N/A	INSTALL 4-1 JOINT (PROPOSED 415V 185 CU1 XQ Z / COM / 4 CABLES (Parrot cable) TO EXISTING 415V 240 AL4 XQ Z / SAC (CODE 2257))
1, 2, 4, 5, 6, 7	N/A	SL	12x SL CABLE TERMINATION IN COLUMNS AND PILLAR	N/A	N/A	N/A	N/A	TERMINATE SL CABLES IN COLUMN 1, 2, 4, 5, 6, 7 AND PILLAR REF. J
CABLES								
E-P	221	11kV	11kV 400 AL3 TRXQ 35 CU(WS) Z YQ	177562	2180	1305	5.86 (MAX. 10.5)	INSTALL PROPOSED 11kV CABLE BETWEEN PROPOSED JOINTS AT REF. 'E' AND REF. 'P'.
E-Q	220	11kV	11kV 400 AL3 TRXQ 35 CU(WS) Z YQ	177562	2180	1305	7.14 (MAX. 10.5)	INSTALL PROPOSED 11kV CABLE BETWEEN PROPOSED JOINTS AT REF. 'E' AND REF. 'Q'.
E-A	9	11kV	2 SETS OF 11kV 185 CU1 TRXQ 70 CU(WS) Z YQ/Triplex	181758	1120(Bundled) 870 (Phase)	745(Bundled) 525 (Phase)	N/A	INSTALL TWO SETS OF PROPOSED 11kV CABLES BETWEEN PROPOSED JOINTS AT REF. 'E' AND PROPOSED KIOSK AT 'A'.
A-J	35	LV	415V 185 CU1 XQ Z / COM / 4 CABLES (Parrot cable)	151183	270	180		INSTALL PROPOSED LV CABLE BETWEEN PROPOSED KIOSK SUB AND PROPOSED PILLAR AT REF. 'J'
J-L	160	LV	415V 185 CU1 XQ Z / COM / 4 CABLES (Parrot cable)	151183	270	180	6.47 (*) (MAX. 7.2)	INSTALL PROPOSED LV CABLE BETWEEN PROPOSED LINK PILLARS. (*) PULLING EYE METHOD TO BE CARRIED OUT IN PULLING CABLE.
L-M	3	LV	415V 185 CU1 XQ Z / COM / 4 CABLES (Parrot cable)	151183	270	180	N/A	INSTALL PROPOSED LV CABLE BETWEEN PROPOSED JOINT AT REF. 'M' AND PROPOSED PILLAR AT REF. 'L'
L-N	3	LV	415V 185 CU1 XQ Z / COM / 4 CABLES (Parrot cable)	151183	270	180	N/A	INSTALL PROPOSED LV CABLE BETWEEN PROPOSED JOINT AT REF. 'N' AND PROPOSED PILLAR AT REF. 'L'
J-6-5-7	43	SL	415V 16 CU4 XQ Z	148668	N/A	N/A	N/A	INSTALL PROPOSED SL CABLE FROM PROPOSED LINK PILLAR AT REF. 'J' TO PROPOSED LIGHTINGS AT REF. 6, 5 & 7.
J-1-2	28	SL	415V 16 CU4 XQ Z	148668	N/A	N/A	N/A	INSTALL PROPOSED SL CABLE FROM PROPOSED LINK PILLAR AT REF. 'J' TO PROPOSED LIGHTINGS AT REF. 1 & 2.
J-4	23	SL	415V 16 CU4 XQ Z	148668	N/A	N/A	N/A	INSTALL PROPOSED SL CABLE FROM PROPOSED LINK PILLAR AT REF. 'J' TO PROPOSED LIGHTING AT REF. 4.
DUCTS								
C-C1	26	-	2 x 50mm DUCTS (1 SPARE)	N/A	N/A	N/A	N/A	INSTALL PROPOSED DUCTS AS PER SECTIONS (F-F).
J-D	145	-	6 x 150mm DUCTS (6 SPARE)	N/A	N/A	N/A	N/A	INSTALL PROPOSED DUCTS AS PER SECTIONS (G-G).
F-G	19	-	6 x 150mm DUCTS (3 SPARE) 2 x 50mm DUCTS (1 SPARE)	N/A	N/A	N/A	N/A	INSTALL PROPOSED DUCTS AS PER SECTIONS (C-C).
G-H	12	-	2 x 50mm DUCTS (1 SPARE)	N/A	N/A	N/A	N/A	INSTALL PROPOSED DUCTS AS PER SECTIONS (H-H).
G-K	148	-	6 x 150mm DUCTS (3 SPARE)	N/A	N/A	N/A	N/A	INSTALL PROPOSED DUCTS AS PER SECTIONS (B-B).
K-P	36	-	4 x 150mm DUCTS (2 SPARE)	N/A	N/A	N/A	N/A	INSTALL PROPOSED DUCTS AS PER SECTIONS (A-A).
J-C	7	-	2 x 50mm DUCTS (1 SPARE)	N/A	N/A	N/A	N/A	INSTALL PROPOSED DUCTS AS PER SECTIONS (H-H).

STREET LIGHTING DESIGN DETAILS														
REF. IDENTIFIER	ASSET NUMBER	TARIFF	SL POLE TYPE	MOUNTING METHOD	SYSTEM CONSTRUCTION	CONNECTED PHASE	COLUMN COLOUR	OUTREACH BRACKET TYPE	OUTREACH (m)	HEIGHT OF LUMINAIRE (m)	LUMINAIRE TYPE	LUMINAIRE SIZE (W)	LUMINAIRE REMOVED TYPE	ADDITIONAL DESIGN DETAIL
1	FF02948	RATE 2	NEW COLUMN	RAGBOLT	DOUBLE INSUL.	A	TBA	N/A	3	6.5	17W LED	17W	-	INSTALL NEW COLUMN, OUTREACH, LUMINAIR AND PE-CELL.
2	FF02949	RATE 2	NEW COLUMN	RAGBOLT	DOUBLE INSUL.	B	TBA	N/A	3	6.5	17W LED	17W	-	INSTALL NEW COLUMN, OUTREACH, LUMINAIR AND PE-CELL.
3	FF-12137	RATE 2	EXT. TIMBER POLE	EXT.	EXT.	EXT.	EXT.	REFER AUSGRID DWG. 515156.	3.2	6.5	17W LED	17W	80 MBF	REPLACE EXISTING BRACKET AND LUMINAIR.
4	FF02950	RATE 2	NEW COLUMN	RAGBOLT	DOUBLE INSUL.	C	TBA	N/A	3	6.5	17W LED	17W	-	INSTALL NEW COLUMN, OUTREACH, LUMINAIR AND PE-CELL.
5	FF02951	RATE 2	NEW COLUMN	RAGBOLT	DOUBLE INSUL.	C	TBA	N/A	3	6.5	150W HPS FLOODLIGHT	150W	-	INSTALL NEW COLUMN, OUTREACH, LUMINAIR AND PE-CELL. (PEDESTRIAN CROSSING)
6	FF02952	RATE 2	NEW COLUMN	RAGBOLT	DOUBLE INSUL.	B	TBA	N/A	3	6.5	150W HPS FLOODLIGHT	150W	-	INSTALL NEW COLUMN, OUTREACH, LUMINAIR AND PE-CELL. (PEDESTRIAN CROSSING)
7	FF02990	RATE 2	NEW COLUMN	RAGBOLT	DOUBLE INSUL.	A	TBA	N/A	2	6.5	17W LED	17W	-	INSTALL NEW COLUMN, OUTREACH, LUMINAIR AND PE-CELL.
NOTE: GLARE SHIELDED VISORS VERSION OF 17W LEDs AND GLASS VISOR FLAT FOR FLOODLIGHTS MIGHT BE REQUIRED.														



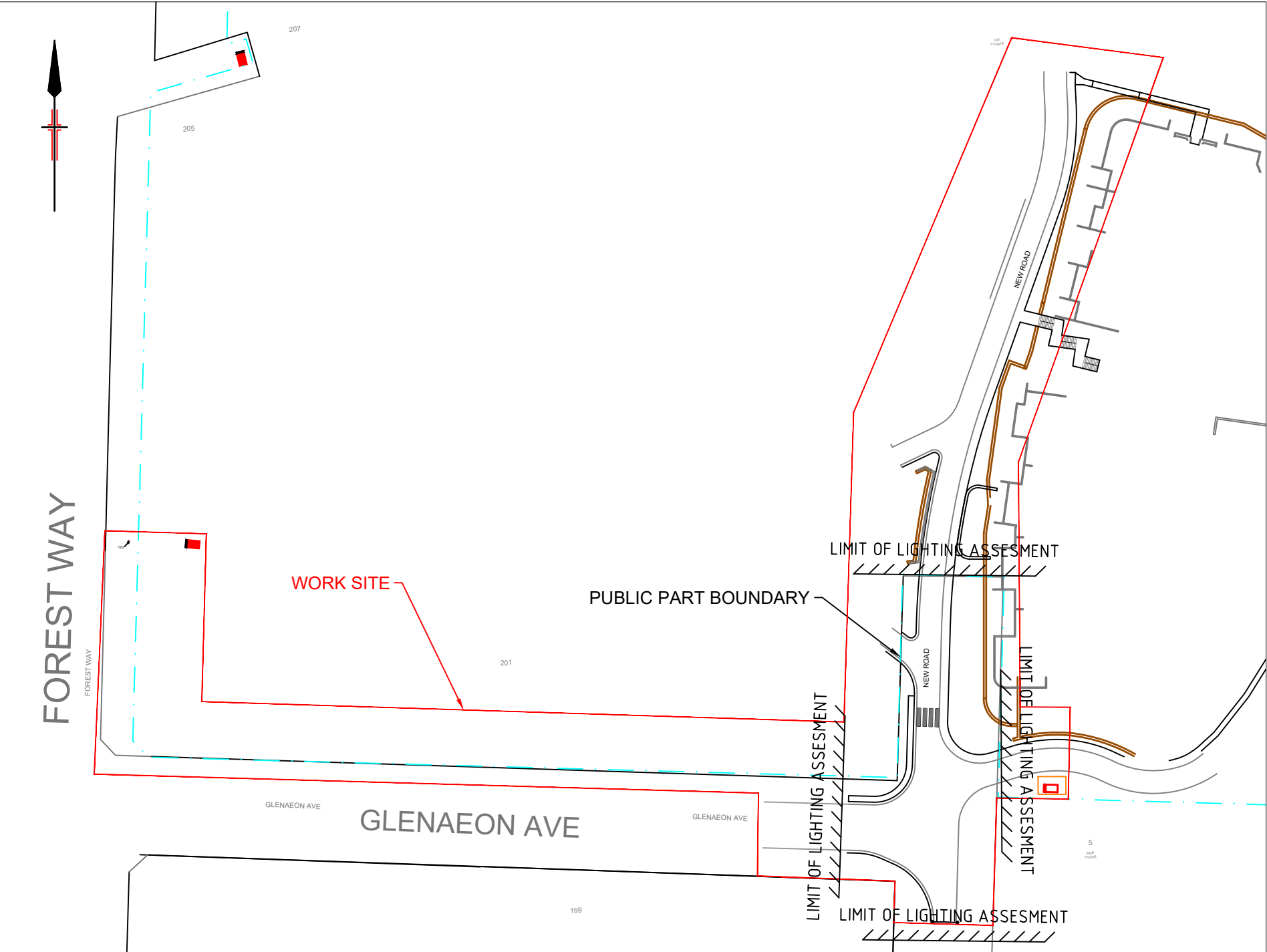
KIOSK SUBSTATION DETAILS	
SUBSTATION NAME:	GLENAEON AVENUE
SUBSTATION NUMBER:	79728
ADDRESS:	207 FOREST WAY, BELROSE
SUBSTATION TYPE:	KL
SIZE (kVA):	1000kVA
VECTOR GROUP:	Dyn1
TAP SETTING:	11000 / 433
HV SWITCHGEAR:	SCHNEIDER ELECTRIC RMI
HV FUSE DETAILS:	100 amp SIBA 300.20.93.100
LOAD CYCLE:	
PHASING DETAIL:	PHASING TO BE VERIFIED ON SITE.
LOW VOLTAGE BOARD:	1600/400/400
TRANSF. LV LINK RATING:	1600Amps
CCT1 LV FUSE SIZE (Amps):	1600 Amps 160mm CENTRES Alstom
CCT2 LV FUSE SIZE (Amps):	400 Amps 92mm CENTRES BELL/MEM "J"
CCT3 LV FUSE SIZE (Amps):	400 Amps 92mm CENTRES BELL/MEM "J"
CONFIGURE AS:	Dyn11:
EARTHING REQUIREMENTS:	AS BUILT INSTALLATION REPORT FOR PROJECT XCY012516 AND AS PER NS116 AND AUSGRID DWG 157433.
SUBSTATION PIERING:	AS PER NS141 AUSGRID DRW. 151572
EASEMENT PLAN DETAIL:	AS PER CONSTRUCTION AND EASEMENT PLAN AS SHOWN ON THIS DESIGN, NS141 AND AUSGRID DRW. 151572



OVERHEAD MAINS STRINGING TABLE									
STRAIN POINTS:		CABLE:	JUPITER	EQ SPAN:	55	DESIGN TEMP:	15		
AMBIENT TEMP:	0	5	10	15	20	25	30	35	40
TENSION (kN no wind):	0.38	0.34	0.32	0.30	0.28	0.26	0.25	0.24	0.23
SAG (m):	0.76	0.82	0.89	0.95	1.01	1.07	1.13	1.18	1.23
TIME (sec):	4.7	4.9	5.1	5.3	5.5	5.6	5.8	5.9	6.0

SEGMENTS DETAILS	
STRAIN SECTION	A
Conductor	JU (EXISTING)
No. Conductors	1
IDT	7
Str. Tension (kN)	0.3
Str. Tension	315
POLES	FF-12138 FF-12137
TEMPERATURES	hot (75°C) standard (15°C) uplift (5°C)

Project: Glenaeon Ave
Date of report: 22/01/2019; 10:30:21 AM
Results produced by Poles 'n' Wires v6.23.631



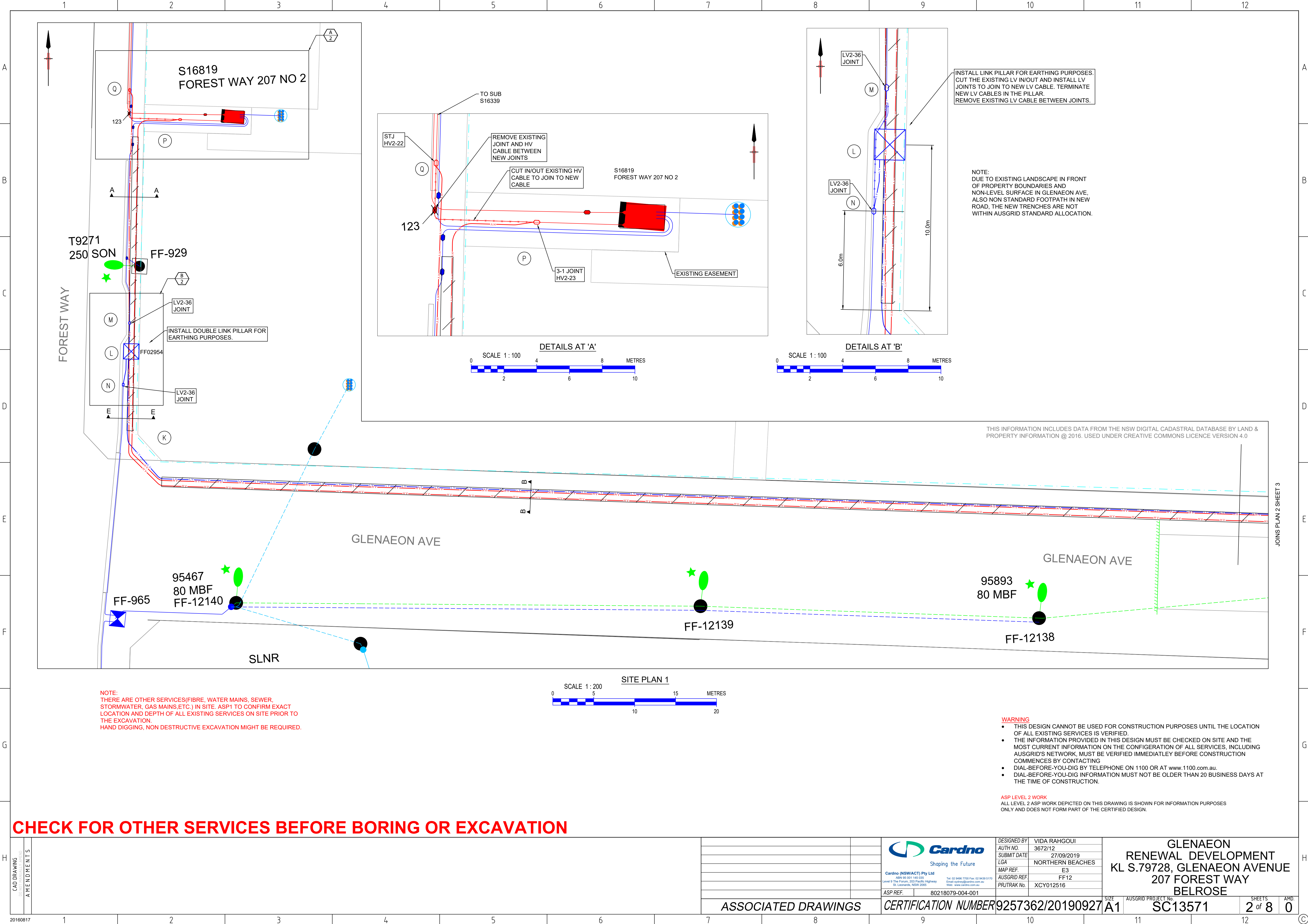
- NOTES:**
- CLAIMS FOR VARIATIONS TO THE COST OF NON-CONTESTABLE WORKS, INCLUDING ROCK EXCAVATION, WILL NOT BE ACCEPTED UNLESS VERIFIED ON SITE BY AUSGRID WHILE THE WORKS ARE IN PROGRESS.
 - THE ASP/1 IS RESPONSIBLE FOR UNDERTAKING SATISFACTORY CONSULTATION WITH ALL LOCAL CUSTOMERS WHO MAY POTENTIALLY BE AFFECTED BY THE CONSTRUCTION WORKS INCLUDING ALL ALTERATIONS TO SERVICE MAINS.
 - THE ASP/1 MUST MINIMISE THE IMPACT OF THE WORKS ON THE ELECTRICITY SUPPLY TO CUSTOMERS AND INTERRUPTIONS TO SUPPLY MUST BE AVOIDED WHEREVER POSSIBLE. AT LEAST FOUR (4) CLEAR BUSINESS DAYS NOTICE MUST BE PROVIDED TO ALL AFFECTED CUSTOMERS PRIOR TO ANY PLANNED INTERRUPTIONS TO THE ELECTRICITY SUPPLY. NOTICE MUST BE IN WRITING IN ACCORDANCE WITH CLAUSE 90 OF THE NATIONAL ENERGY RETAIL RULES.
 - SPECIFIC PRIOR APPROVAL MUST BE SOUGHT FROM AUSGRID FOR ANY PLANNED ELECTRICITY SUPPLY INTERRUPTIONS WHERE THE PLANNED INTERRUPTION WILL EXCEED ONE (1) HOUR IN DURATION OR THE DURATION WILL BE LESS THAN ONE HOUR, BUT A SUITABLE TIME FOR THE INTERRUPTION CANNOT BE MUTUALLY AGREED TO WITH THE AFFECTED CUSTOMER(S).
 - THE ASP/1 IS TO MAINTAIN ADEQUATE PUBLIC LIGHTING LEVELS FOR THE DURATION OF THE WORKS. IF NECESSARY, THE ASP/1 IS TO ARRANGE FOR SUITABLE TEMPORARY STREET LIGHTING TO BE PROVIDED UNTIL PERMANENT LIGHTING IS RE-ESTABLISHED.
 - FOR KIOSK AND CHAMBER TYPE SUBSTATIONS IN THE HUNTER AREAS, ARRANGE PHASING OF 11kV AND LOW VOLTAGE TRANSFORMER TERMINATIONS TO ACHIEVE DYN 11 INTERCONNECTION CAPABILITIES.
 - THE ASP/1 IS TO CO-ORDINATE THE MODIFICATION AND TESTING OF ANY REQUIRED PROTECTION RELAY WITH THE AUSGRID TECHNICAL SERVICES GROUP.
 - THE ASP/1 IS REQUIRED TO COMPLY WITH THE CORRECT PROCEDURE(S) FOR WORKING WITH AND/OR NEAR ASBESTOS MATERIAL (REFER TO AUSGRID NUS 211 - WORKING WITH ASBESTOS PRODUCTS).
 - TO MINIMISE THE EFFECT OF MUTUAL HEATING ON PARALLEL SECTIONS OF MAINS, WHENEVER NEW CABLE/S ARE INSTALLED (FOR PARALLEL LENGTH IN EXCESS OF 10m) A MINIMUM SEPARATION OF 4m IS TO BE MAINTAINED FROM ALL TRANSMISSION ASSETS (33-330kV) AND 2m IS TO BE MAINTAINED FROM EXISTING DISTRIBUTION MAINS (415V/ 11kV) (TRANSVERSE CROSSINGS ARE NOT A SIGNIFICANT ISSUE), UNLESS STATED OTHERWISE BY DISTRIBUTION PLANNING.

- WARNING**
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 - THE INFORMATION PROVIDED IN THIS DESIGN MUST BE CHECKED ON SITE AND THE MOST CURRENT INFORMATION ON THE CONFIGURATION OF ALL SERVICES, INCLUDING AUSGRID'S NETWORK, MUST BE VERIFIED IMMEDIATELY BEFORE CONSTRUCTION COMMENCES BY CONTACTING:
 - DIAL-BEFORE-YOU-DIG BY TELEPHONE ON 1100 OR AT www.1100.com.au.
 - DIAL-BEFORE-YOU-DIG INFORMATION MUST NOT BE OLDER THAN 20 BUSINESS DAYS AT THE TIME OF CONSTRUCTION.

ASP LEVEL 2 WORK
ALL LEVEL 2 ASP WORK DEPICTED ON THIS DRAWING IS SHOWN FOR INFORMATION PURPOSES ONLY AND DOES NOT FORM PART OF THE CERTIFIED DESIGN.

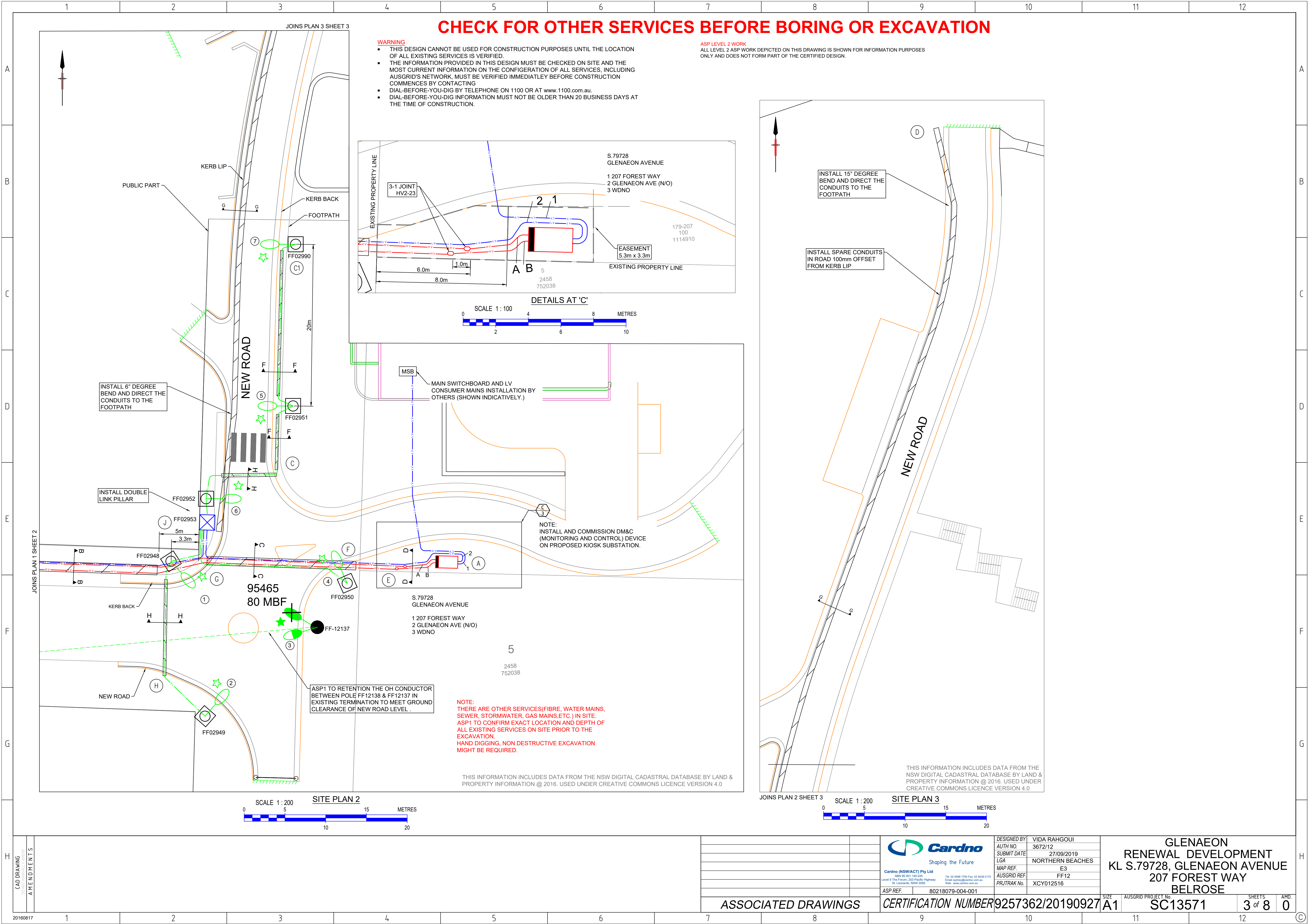
LEGEND		PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	REMOVE
Pole	○	●	Pole-to be removed	⦿	UGOH ○ Pot End	◁	UGOH ● Pot End	▷
SL Standard	⊗	⊗	USL	⦿	Joint ○ Sealed End	◁	Joint ● Sealed End	▷
Private Pillar	⊗	⊗	ABS	⦿	Conduit	▨	OH Lines	UG Cables
LV Pillar	⊗	⊗	IDT	⦿	OH Lines	UG Cables	OH Lines	UG Cables
LV Link Pillar	⊗	⊗	Kiosk Sub	⦿	-HV-	-HV-	-HV-	-HV-
Streetlight	⊗	⊗	Chamber Sub	⦿	-LV-	-LV-	-LV-	-LV-
Streetlight-PEC	⊗	⊗	Pole Sub	⦿	-SL-	-SL-	-SL-	-SL-
Streetlight-replacement	⊗	⊗	Two Pole Sub	⦿	-SV-	-SV-	-SV-	-SV-

DESIGNED BY VITA RAHGOUI 3672/12		GLENAEON RENEWAL DEVELOPMENT KL S.79728, GLENAEON AVENUE 207 FOREST WAY BELROSE	
SUBMIT DATE LGA 27/09/2019 NORTHERN BEACHES		MAP REF. E3	
AUSGRID REF. PRJTRAK NO. XCYO12516		SIZE A1	
ASP REF. 80218079-004-001		AUSGRID PROJECT No. SC13571	
CERTIFICATION NUMBER 9257362/20190927		SHEETS 1 of 8	
ASSOCIATED DRAWINGS		AM. 0	

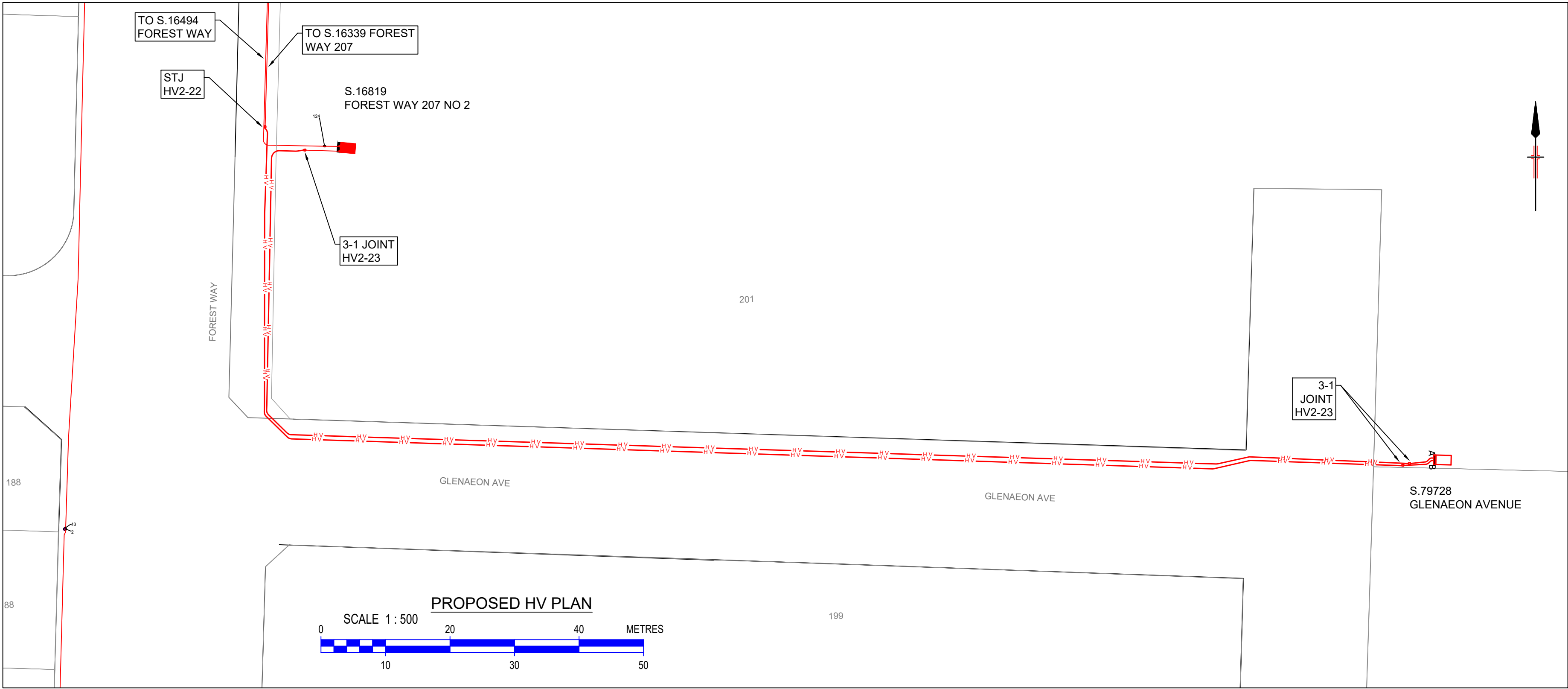


CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATION

CAD DRAWING AMENDMENTS									 Cardno Shaping the Future Cardno (NSW/ACT) Pty Ltd ABN 95 001 145 035 Level 9 The Forum, 203 Pacific Highway St Leonards, NSW 2055 Tel: 02 9449 7700 Fax: 02 9439 5170 Email: info@cardno.com.au Web: www.cardno.com.au	DESIGNED BY VIDA RAHGOUI AUTH NO. 3672/12 SUBMIT DATE 27/09/2019 LGA NORTHERN BEACHES MAP REF. E3 AUSGRID REF. FF12 PRJ/TRAK No. XCY012516	GLENAEON RENEWAL DEVELOPMENT KL S.79728, GLENAEON AVENUE 207 FOREST WAY BELROSE					
						ASSOCIATED DRAWINGS		CERTIFICATION NUMBER		9257362/20190927		SIZE A1	AUSGRID PROJECT No. SC13571	SHEETS 2 of 8	AMD. 0	
20160817	1	2	3	4	5	6	7	8	9	10	11	12	©			



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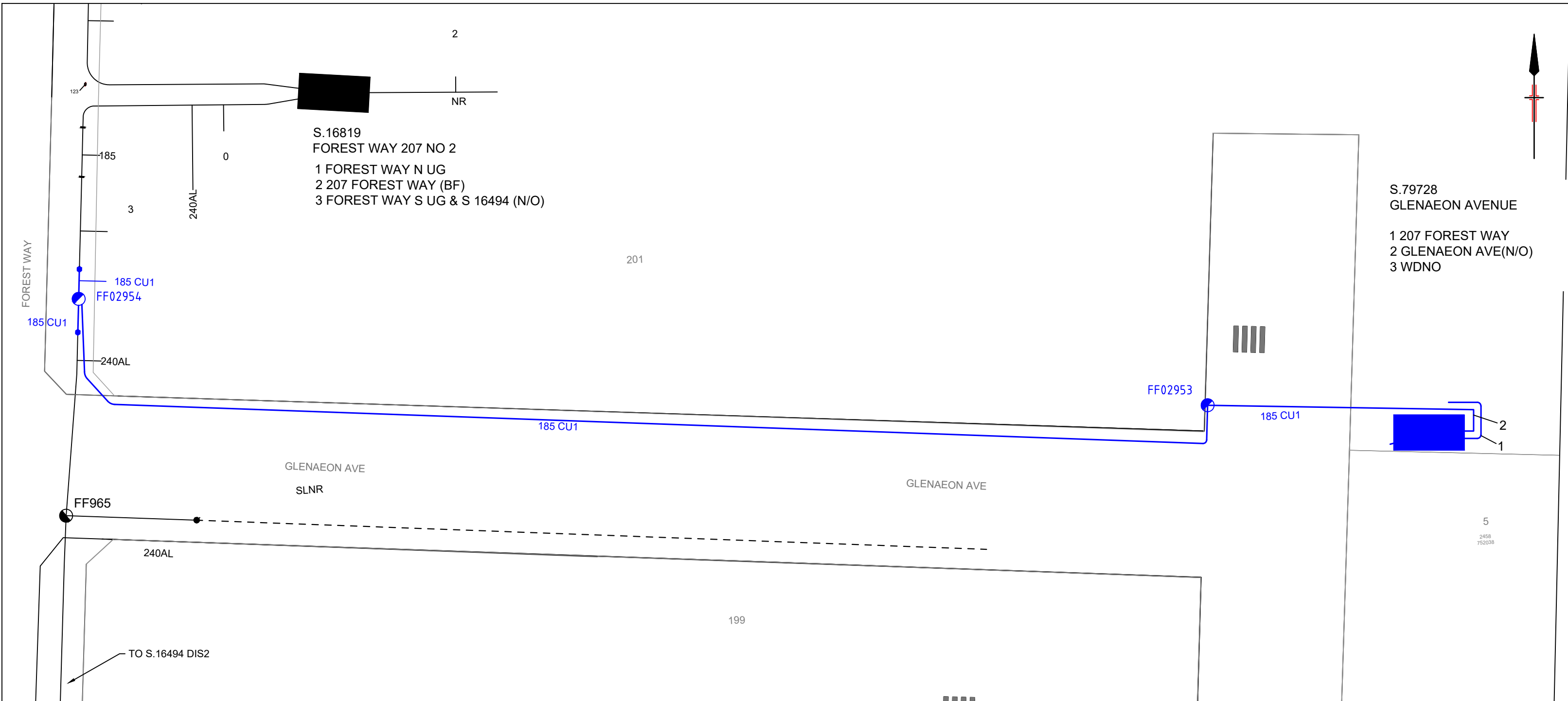
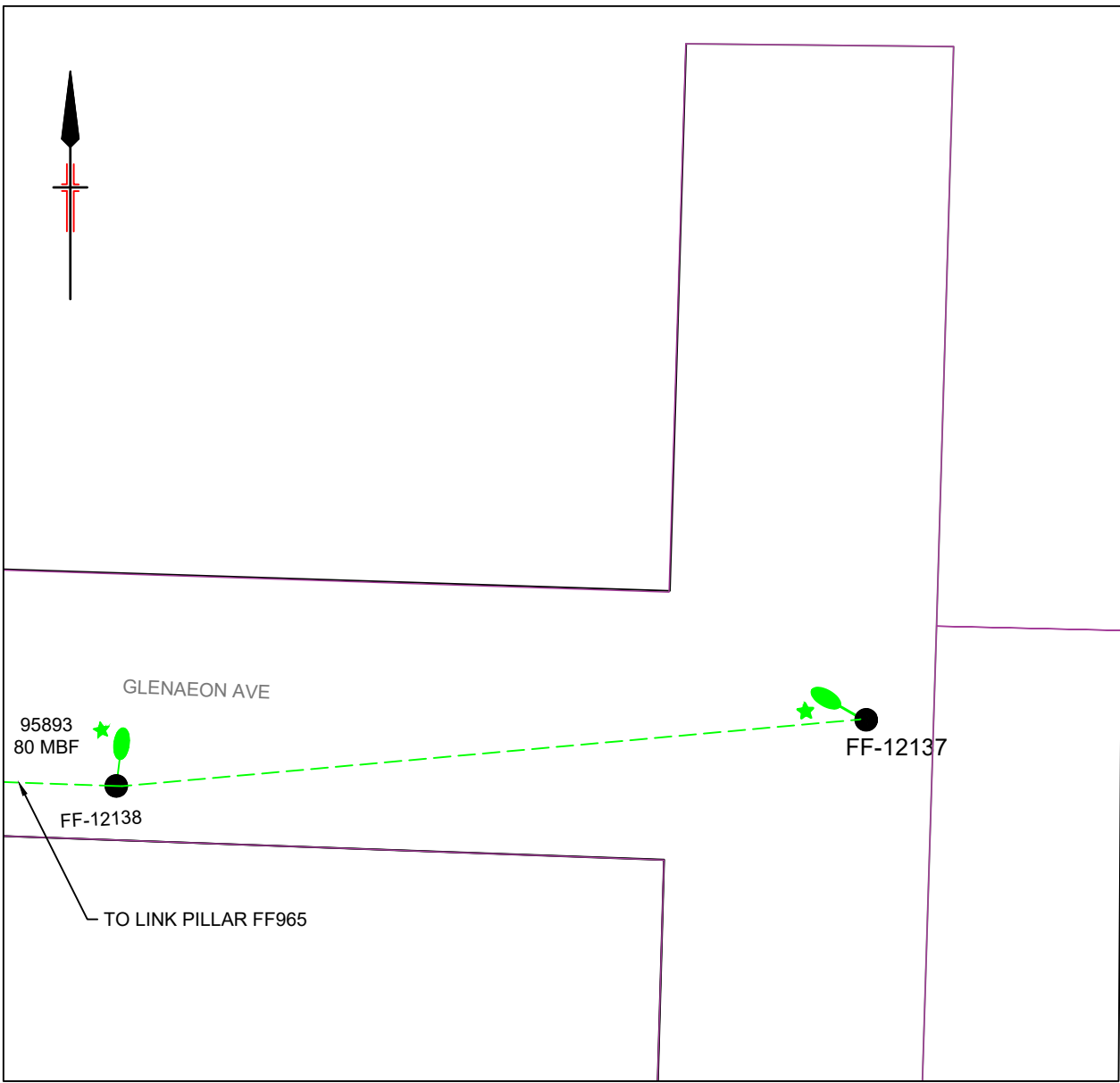
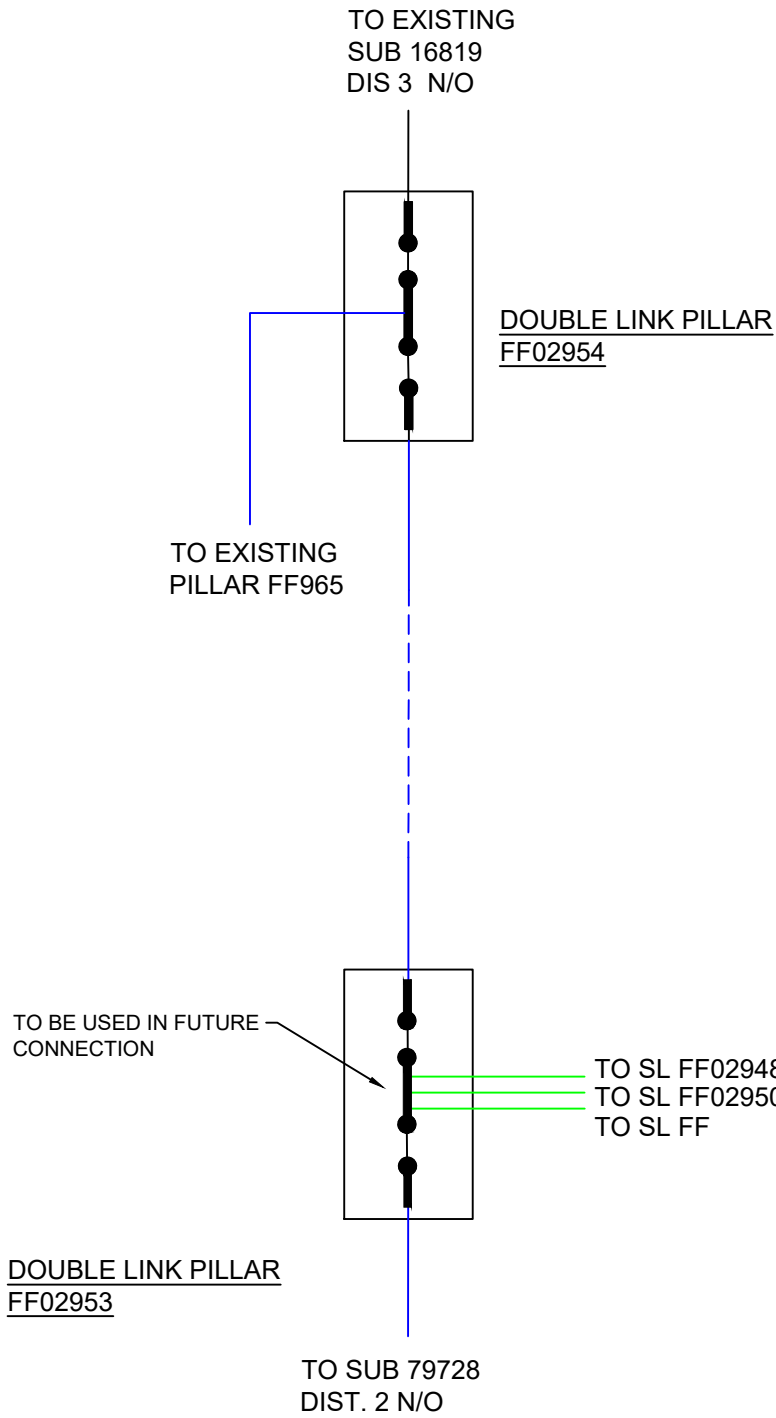
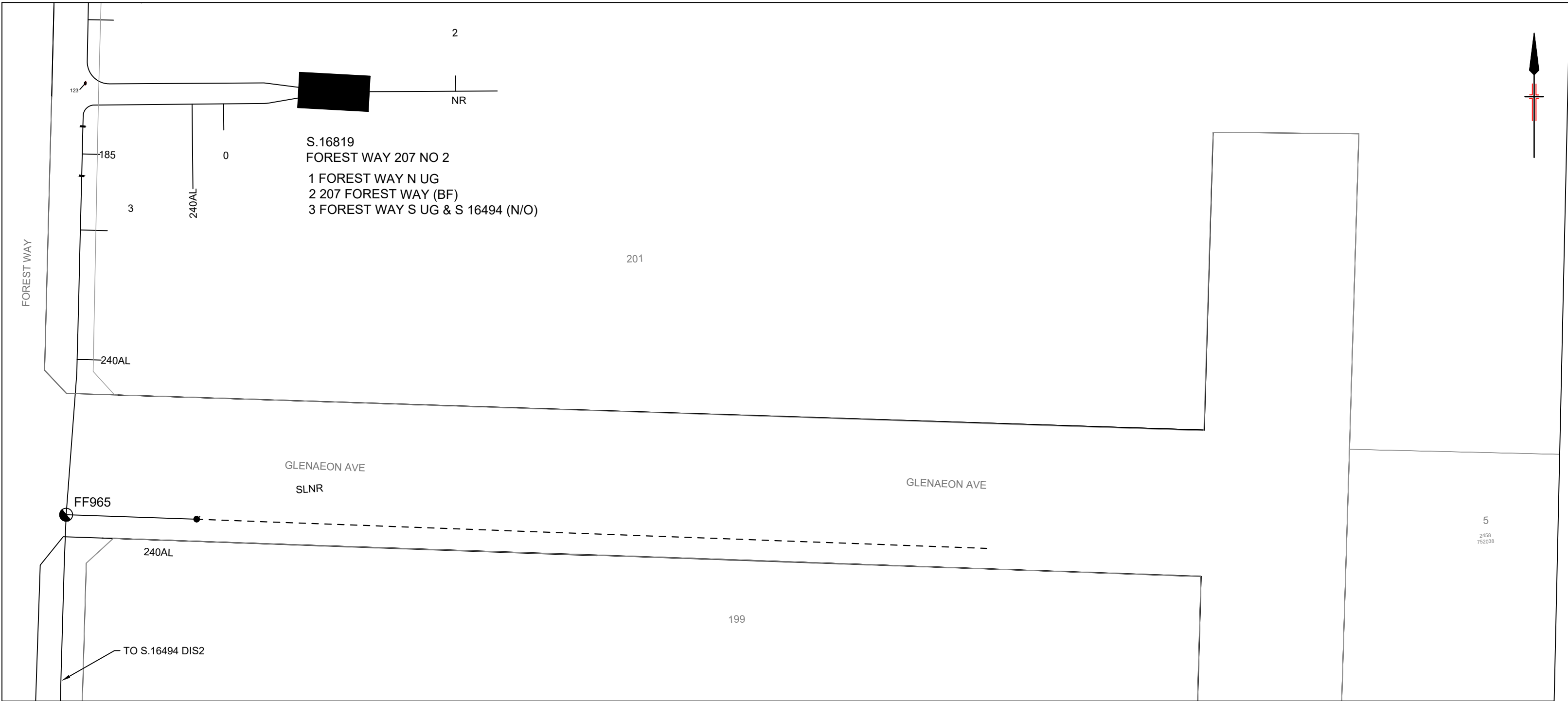


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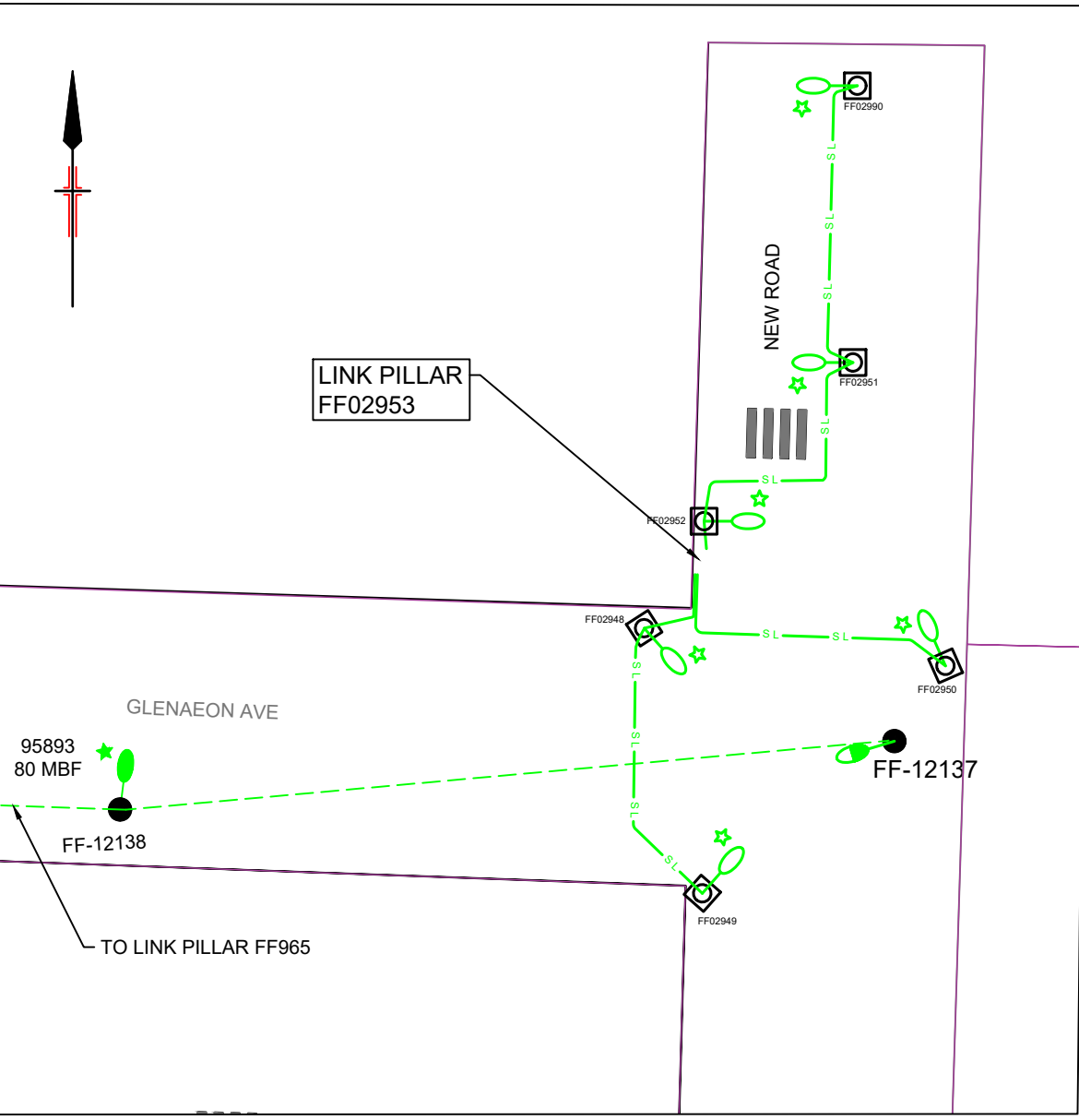
CAD DRAWING DO NOT MANUALLY EDIT AMENDMENTS										 Cardno Shaping the Future Cardno (NSW/ACT) Pty Ltd ABN 95 001 145 035 Level 9 The Forum, 203 Pacific Highway St Leonards, NSW 2055 Tel: 02 9449 7700 Fax: 02 9438 5170 Email: info@cardno.com.au Web: www.cardno.com.au	DESIGNED BY	VIDA RAHQOUI	GLENAEON RENEWAL DEVELOPMENT KL S.79728, GLENAEON AVENUE 207 FOREST WAY BELROSE
											AUTH NO.	3672/12	
											SUBMIT DATE	27/09/2019	
											LGA	NORTHERN BEACHES	
											MAP REF.	E3	
											AUSGRID REF.	FF12	
									PRJTRAK No.	XCY012516			

CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATION



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CAD DRAWING
DO NOT MANUALLY EDIT

AMENDMENTS

ASSOCIATED DRAWINGS



Cardno (NSW/ACT) Pty Ltd
ABN 95 001 145 035
Level 9 The Forum, 203 Pacific Highway
St Leonards, NSW 2055
Tel: 02 9449 7700 Fax: 02 9449 5170
Email: info@cardno.com.au
Web: www.cardno.com.au

ASP REF. 80218079-004-001

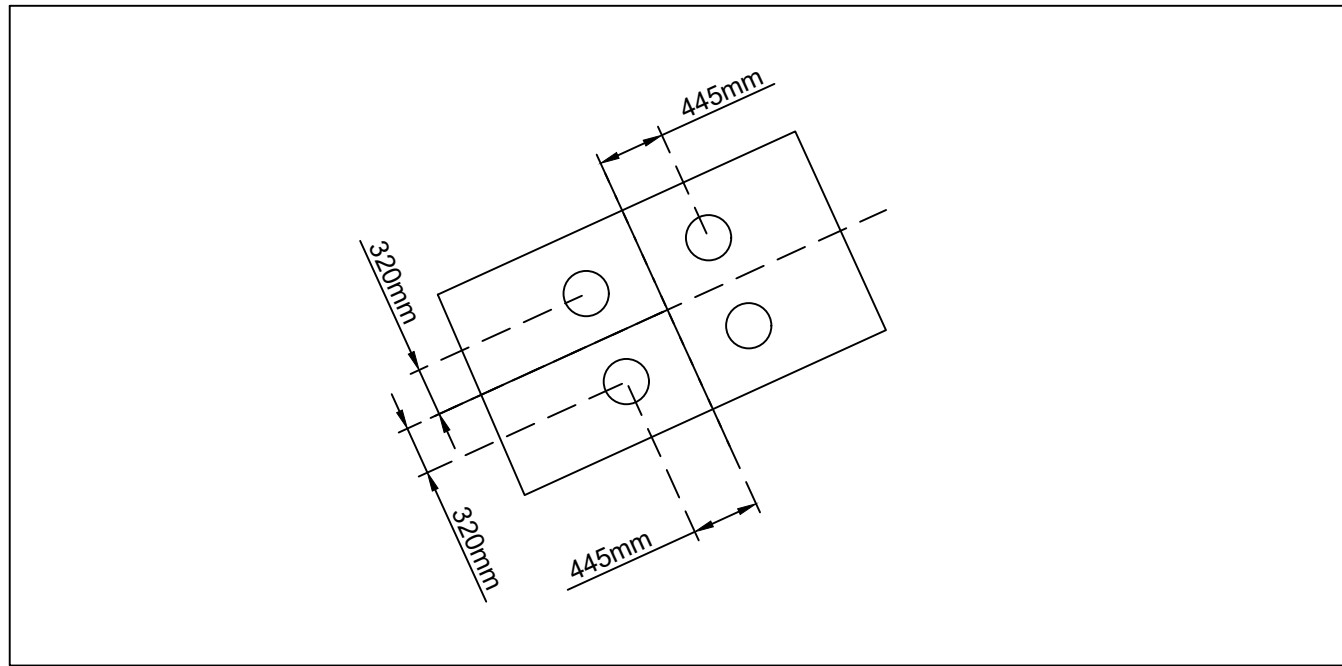
DESIGNED BY VIDA RAHGOUI
AUTH NO. 3672/12
SUBMIT DATE 27/09/2019
LGA NORTHERN BEACHES
MAP REF. E3
AUSGRID REF. FF12
PRJTRAK No. XCY012516

GLENAEON
RENEWAL DEVELOPMENT
KL S.79728, GLENAEON AVENUE
207 FOREST WAY
BELROSE

SIZE A1
AUSGRID PROJECT No. SC13571
SHEETS 5 of 8
AMD. 0

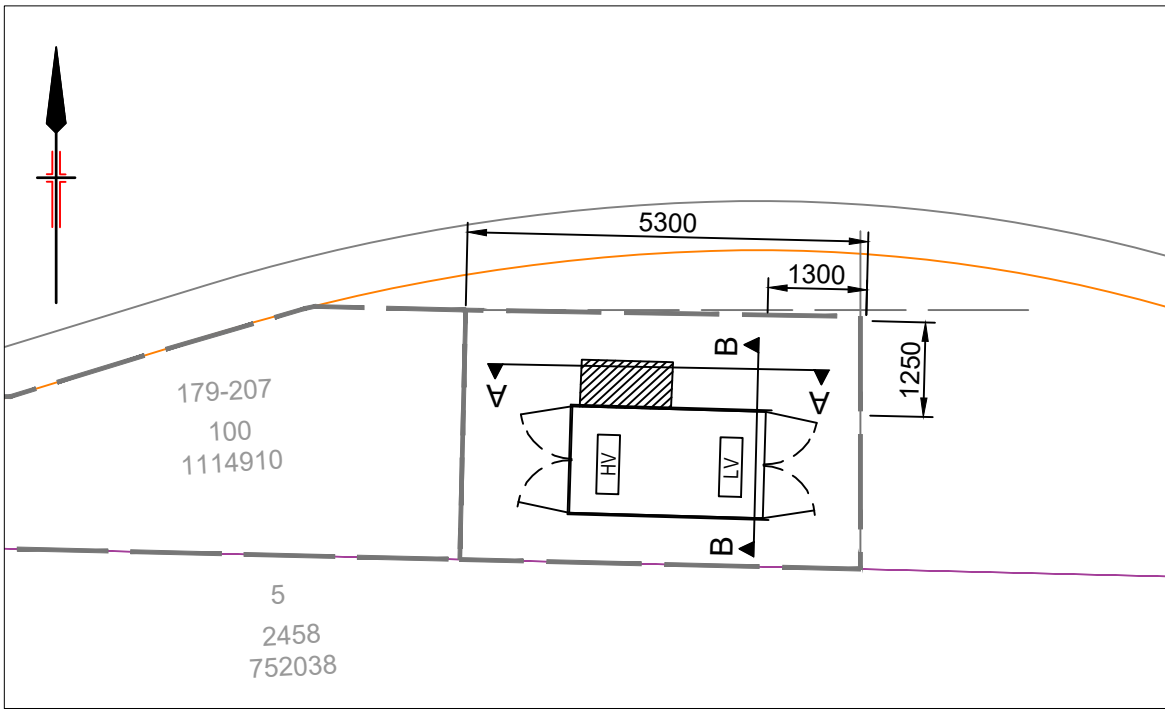
20160817

CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATION

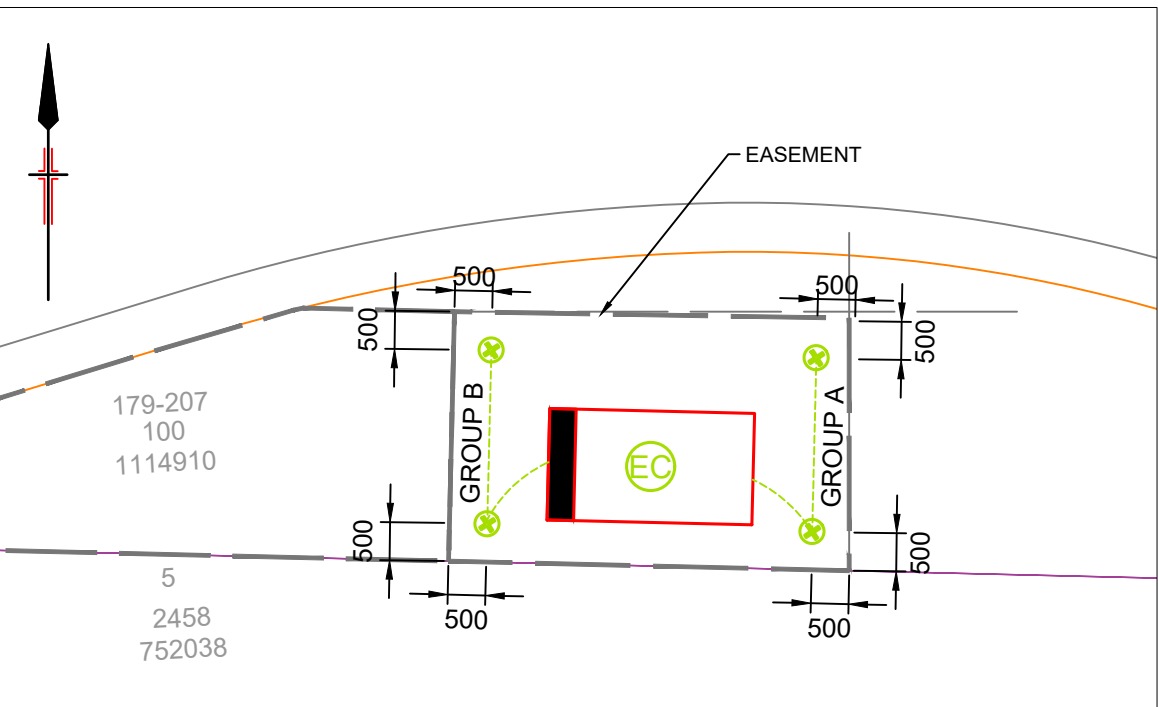


PIER LAYOUT FOR S.79728
NTS

- NOTE:
- PIERS TO BE INSTALLED AS PER AUSGRID DRAWING 151572.
 - ASP1 TO CONFIRM GROUND CONDITION PRIOR TO CONSTRUCTION. IF GROUND NOT SUITABLE, STRUCTURALLY DESIGNED PIER TO BE USED.
 - THE INITIAL AND FINAL LEVEL OF THE GROUND HAS TO BE THE SAME.



SUBSTATION LAYOUT
NTS



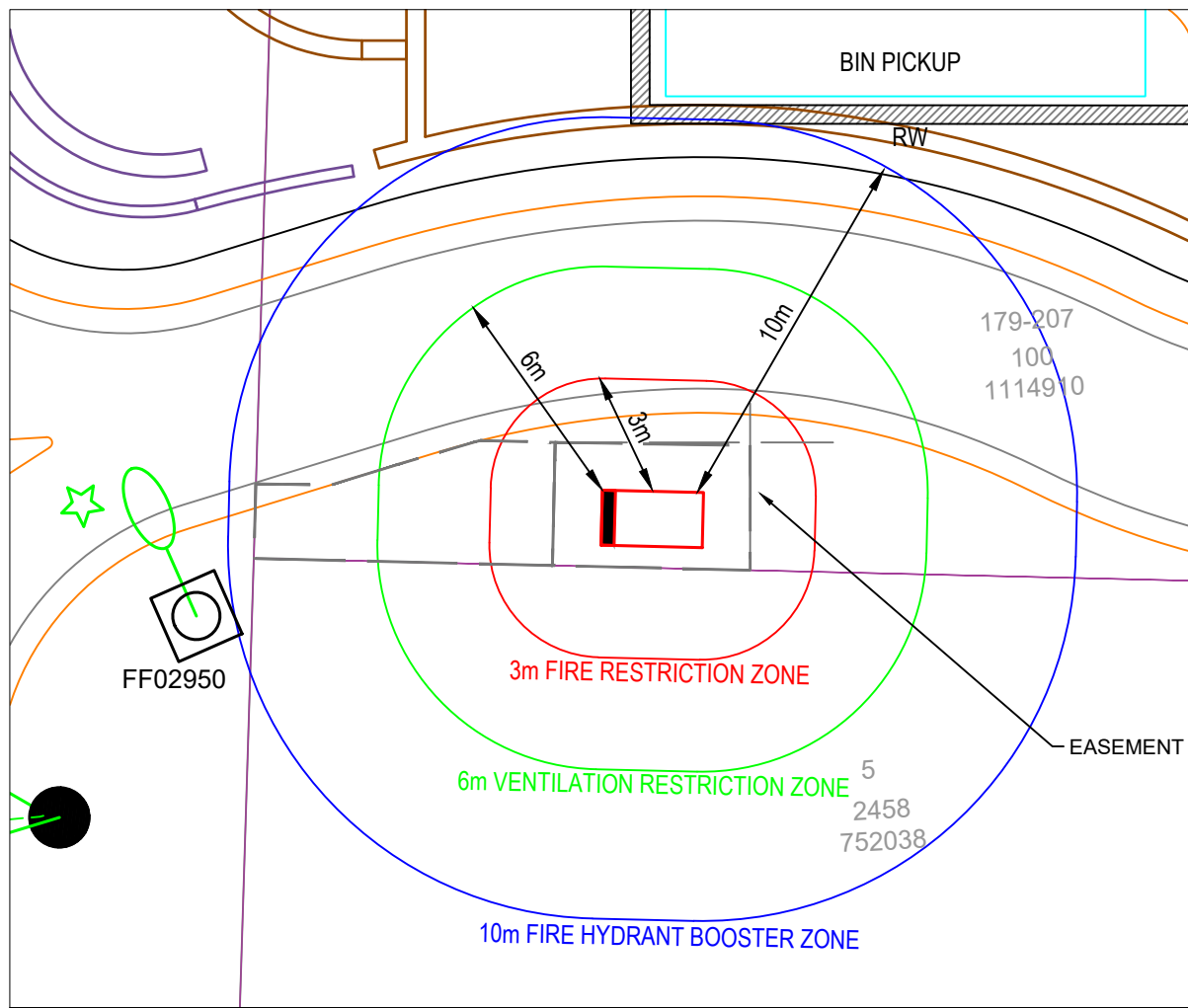
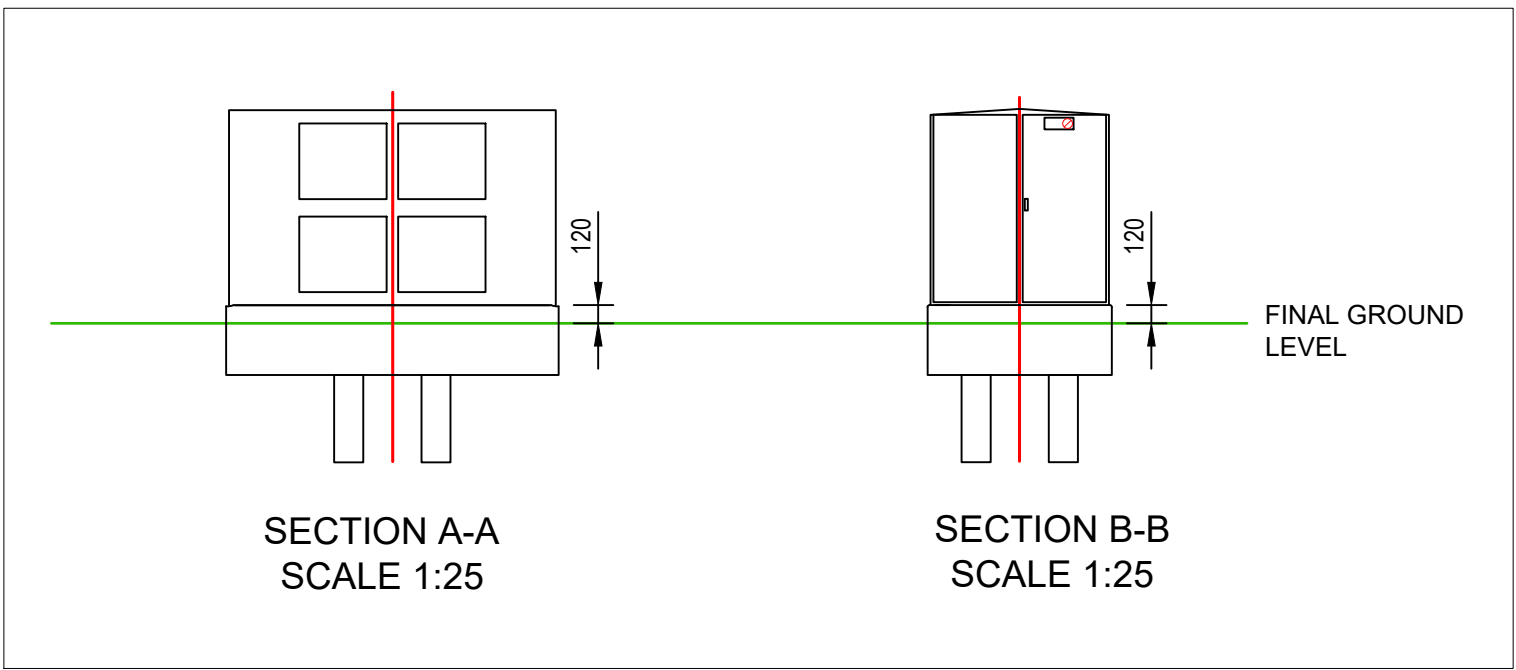
SUBSTATION EARTHING
NTS

LEGEND FOR EARTHING

SYMBOL	DESCRIPTION
ELETRODE	
EARTHING CABLE	

SUBSTATION S.79728 EARTHING AS BUILT TABLE

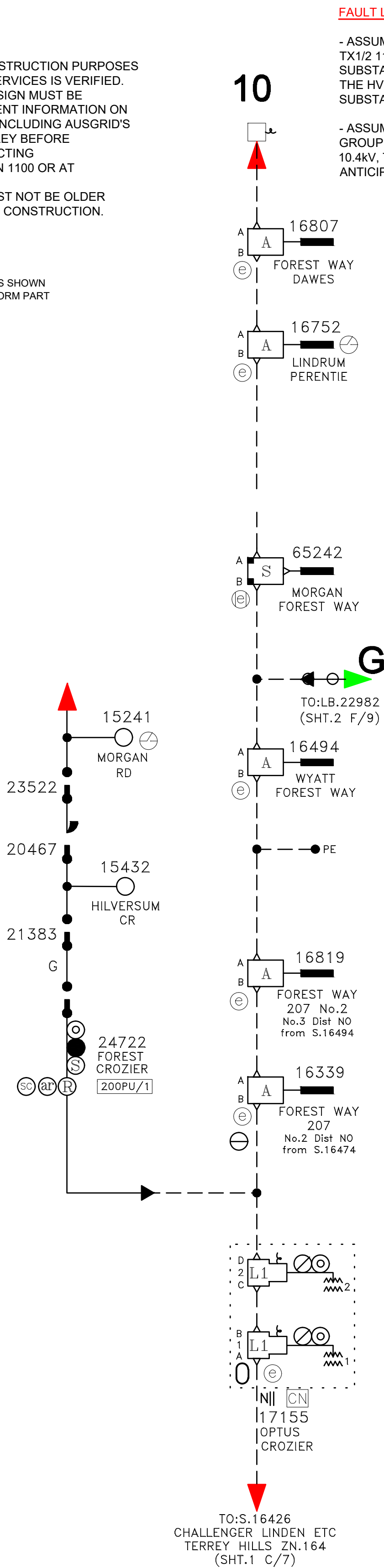
HV ELECTRODES		
	DESIGN	AS BUILT
NUMBER OF ELECTRODES	2	
DEPTH OF EACH ELECTRODE	5.4	
SPACING BETWEEN ELECTRODES	2.3	
MAX RESISTANCE - NORMAL	9.67	
MAX RESISTANCE - DROUGHT	18.28	
MEASURED		
LV ELECTRODES		
	DESIGN	AS BUILT
NUMBER OF ELECTRODES	2	
DEPTH OF EACH ELECTRODE	5.4	
SPACING BETWEEN ELECTRODES	2.3	
MAX RESISTANCE - NORMAL	9.67	
MAX RESISTANCE - DROUGHT	18.28	
MEASURED		
COMBINED		
RESISTANCE	10.9	
MIN SEPARATION TO TELCO ASSETS	1.2	
MIN SEPARATION TO BWTWEEN HV AND LV AND / OR MEN ELECTRODES	4.3	



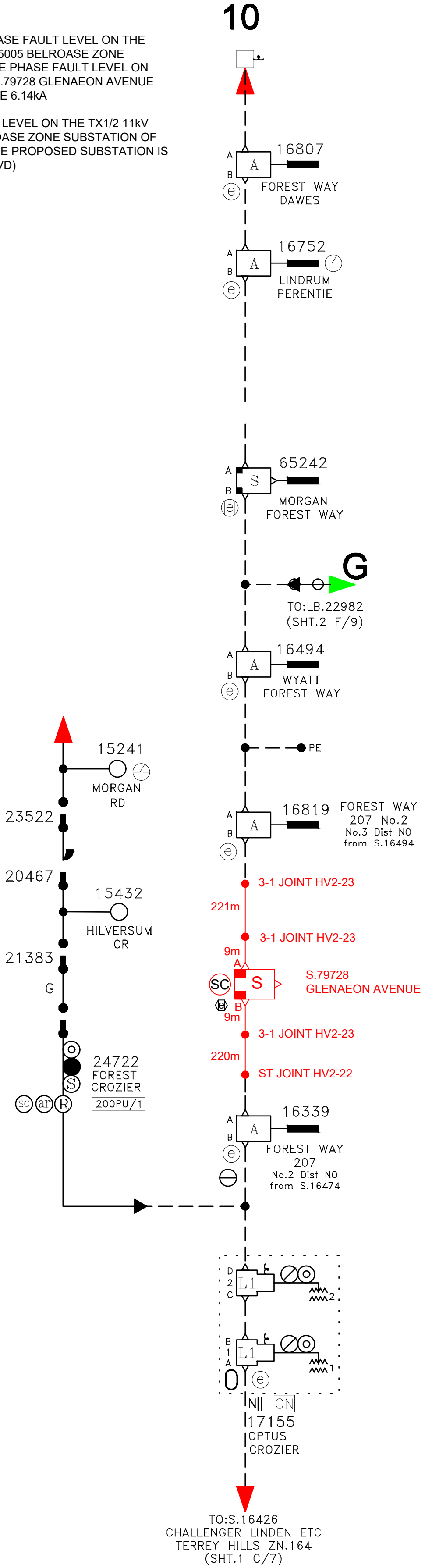
FIRE AND VENTILATION RESTRICTION ZONE
NTS

- WARNING**
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ASP LEVEL 2 WORK
ALL LEVEL 2 ASP WORK DEPICTED ON THIS DRAWING IS SHOWN FOR INFORMATION PURPOSES ONLY AND DOES NOT FORM PART OF THE CERTIFIED DESIGN.



11KV SCHEMATIC - EXISTING SYSTEM DIAGRAM



11KV SCHEMATIC - PROPOSED SYSTEM DIAGRAM

CAD DRAWING
DO NOT MANUALLY EDIT

AMENDMENTS

ASSOCIATED DRAWINGS



Cardno (NSW/ACT) Pty Ltd
ABN 95 001 145 025
Level 5 The Forum, 200 Pacific Highway
St Leonards, NSW 1555
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Email: info@cardno.com.au
Web: www.cardno.com.au

DESIGNED BY: VIDA RAHGOUI
AUTH NO.: 3672/12
SUBMIT DATE: 27/09/2019
LGA: NORTHERN BEACHES
MAP REF: E3
AUSGRID REF: FF12
PRJTRAK No: XCY012516

ASP REF: 80218079-004-001

CERTIFICATION NUMBER 9257362/20190927

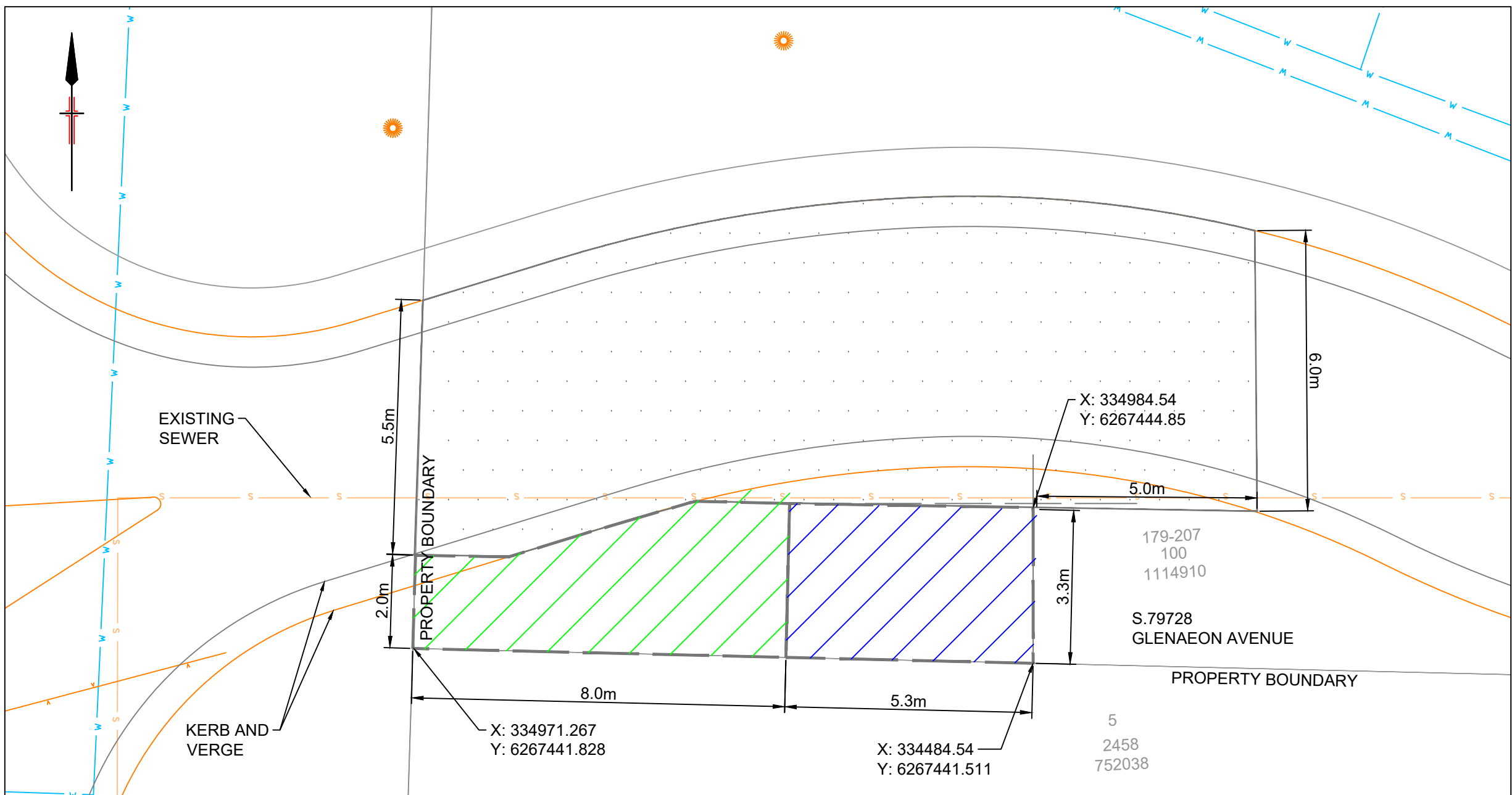
GLENAEON
RENEWAL DEVELOPMENT
KL S.79728, GLENAEON AVENUE
207 FOREST WAY
BELROSE

SIZE: A1
AUSGRID PROJECT No: SC13571
SHEETS: 6 of 8
AMD: 0

CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATION

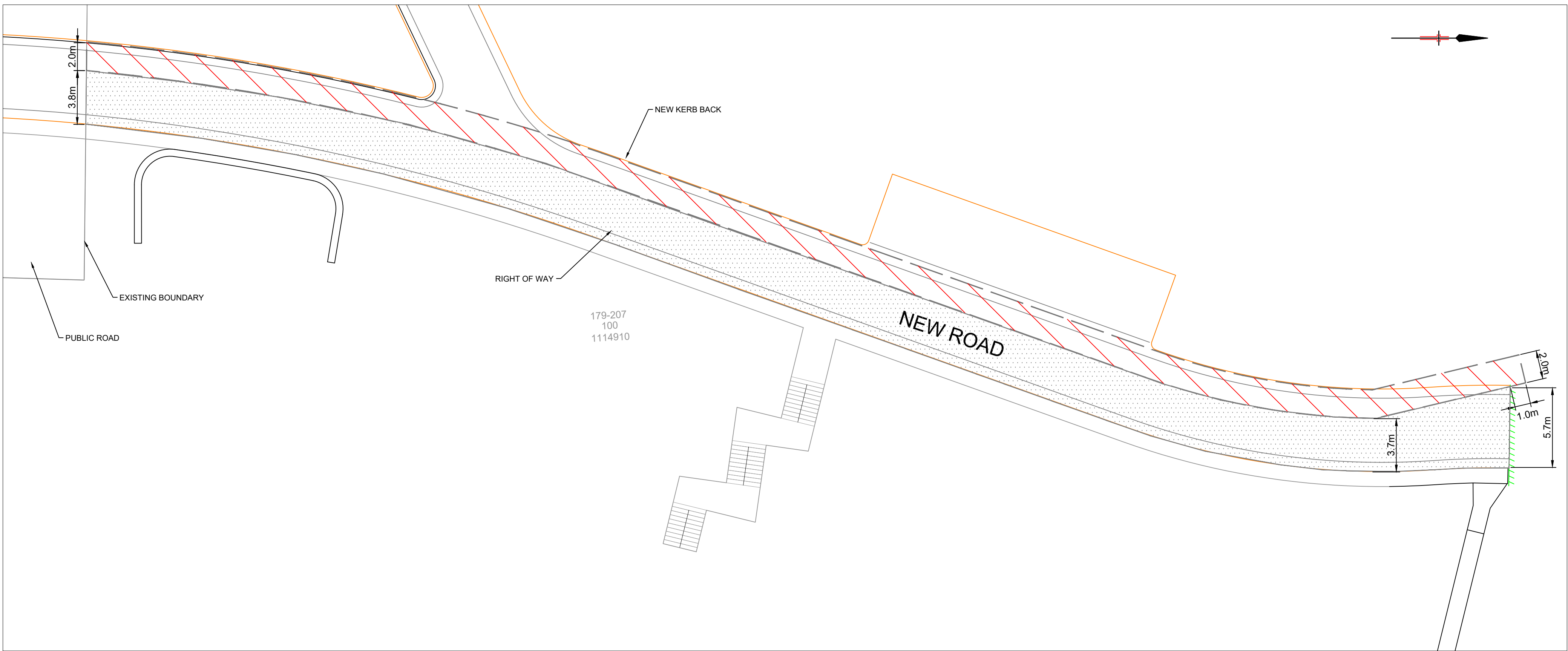
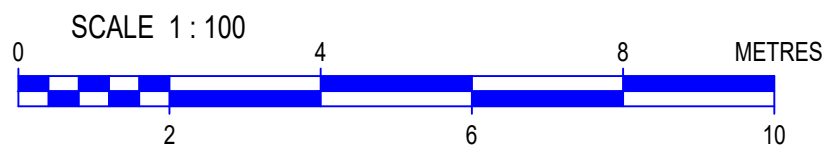
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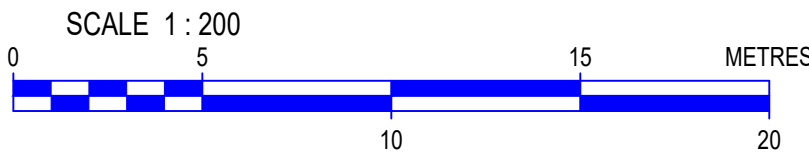


- KIOSK SUB & UG CONDUCTOR EASEMENT AND ROW LEGEND**
- NEW EASEMENT FOR PROPOSED KIOSK (5.3m X 3.3m WIDE)
 - NEW EASEMENT FOR PROPOSED UNDERGROUND HV/ LV/ SL CABLE. (MIN. 2.0m WIDE)
 - NEW RIGHT OF WAY FOR PROPOSED KIOSK (MIN. 5.5m WIDE AND VARY)

RIGHT OF WAY & EASEMENT PLAN 1



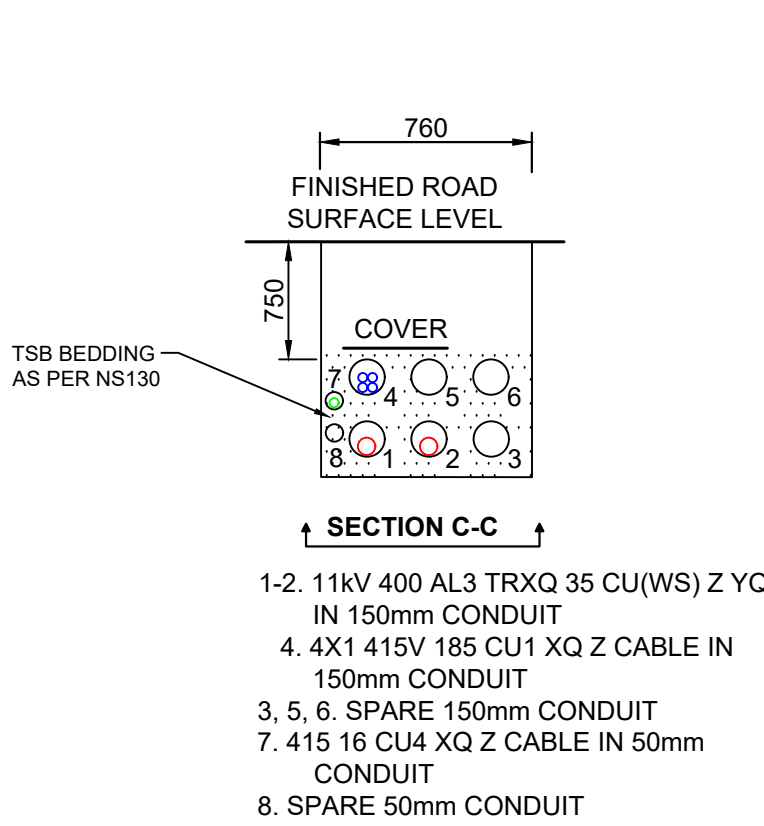
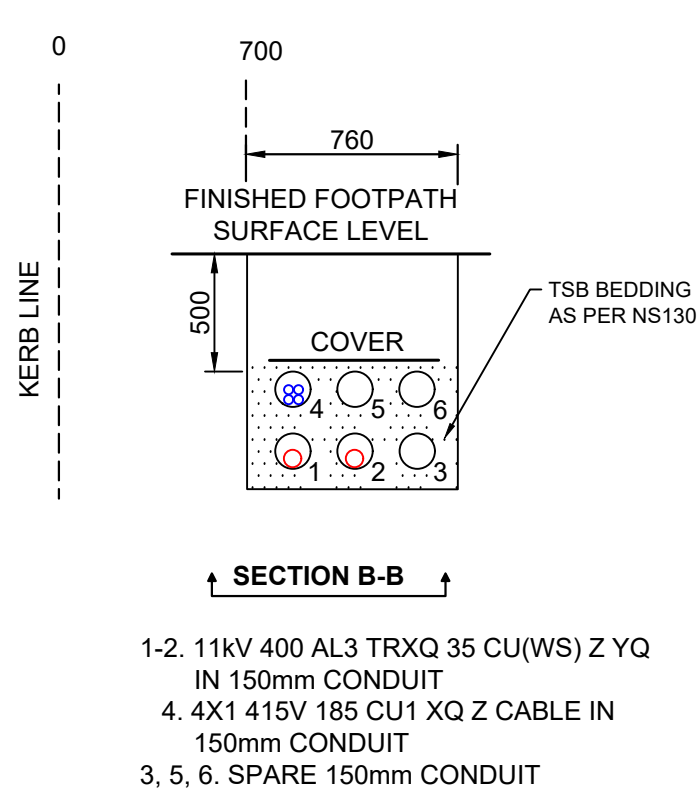
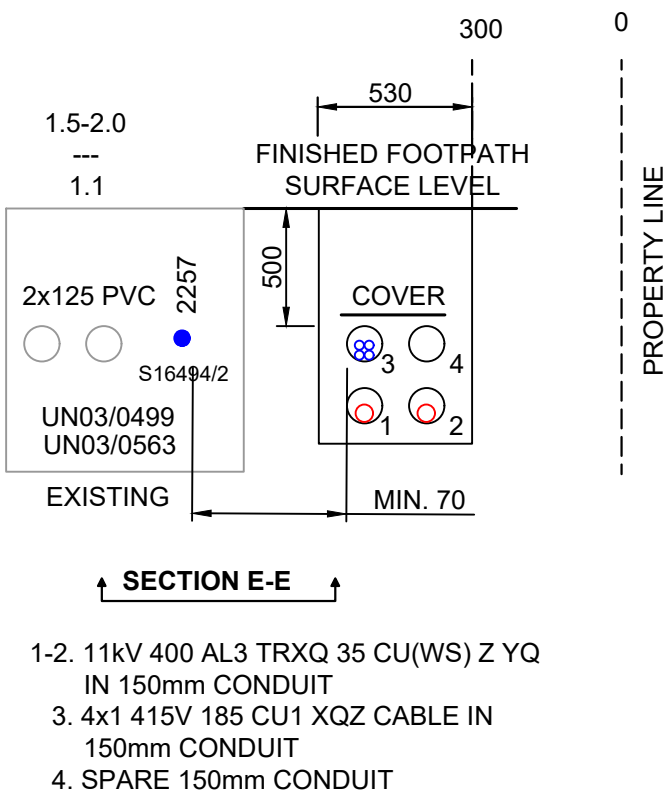
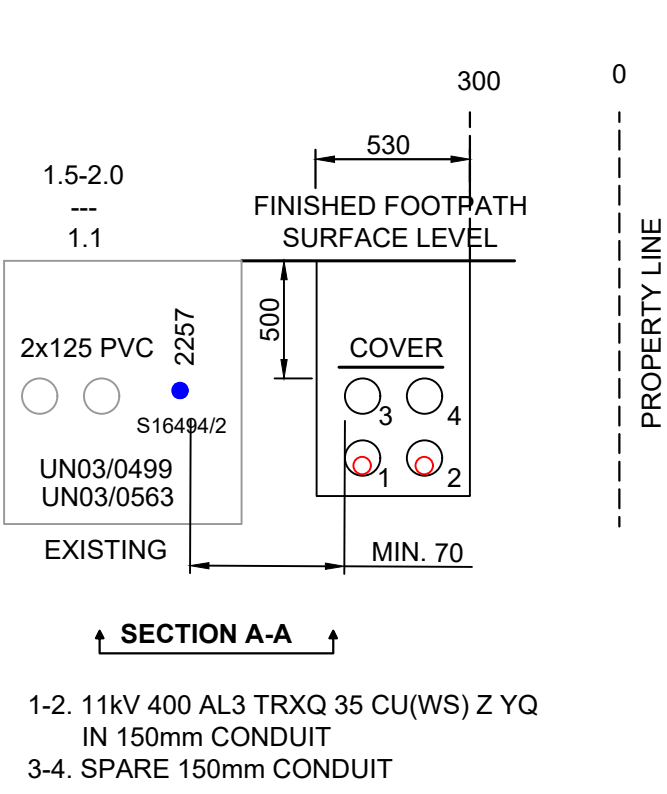
EASEMENT PLAN 2



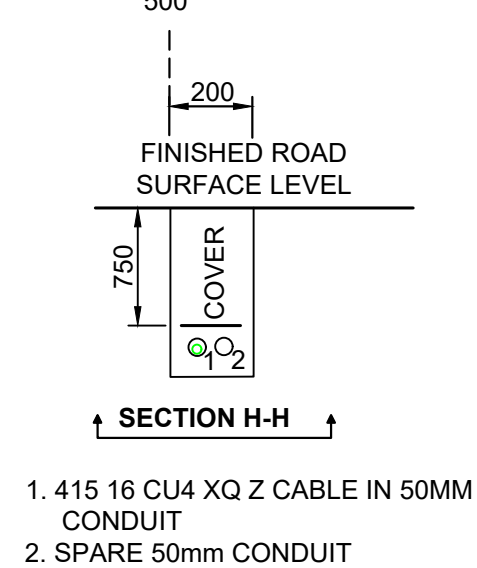
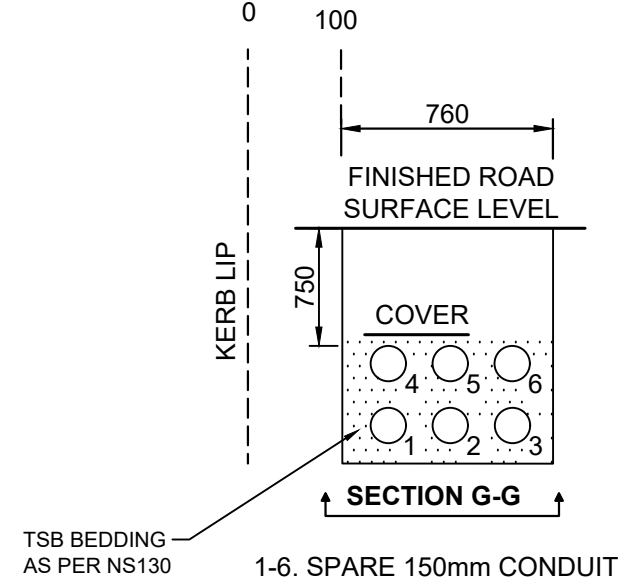
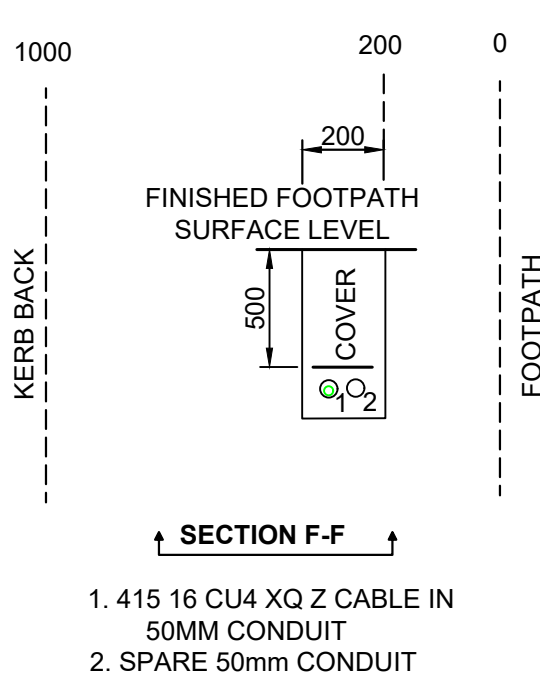
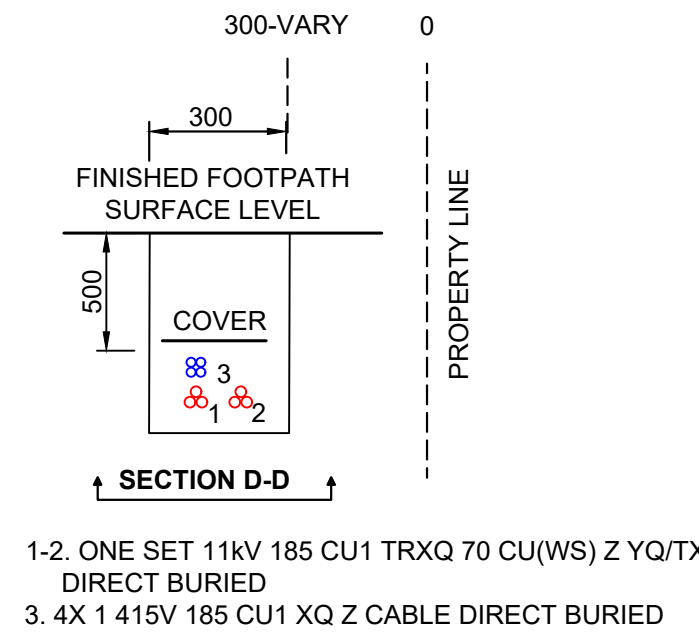
- SPARE DUCTS IN PRIVATE PROPERTY EASEMENT LEGEND**
- NEW EASEMENT FOR PROPOSED SPARE DUCTS (2.0m WIDE)
 - NEW RIGHT OF WAY FOR PROPOSED SPARE DUCTS (VARY)

CAD DRAWING DO NOT MANUALLY RE-PRINT AMENDMENTS								 Cardno Shaping the Future Cardno (NSW/ACT) Pty Ltd ABN 95 001 145 035 Level 9 The Forum, 203 Pacific Highway St Leonards, NSW 2055 Tel: 02 9449 7700 Fax: 02 9449 5170 Email: info@cardno.com.au Web: www.cardno.com.au	DESIGNED BY	VIDA RAHGOU	GLENAEON RENEWAL DEVELOPMENT KL S.79728, GLENAEON AVENUE 207 FOREST WAY BELROSE	SIZE A1	AUSGRID PROJECT No. SC13571	SHEETS 7 of 8	AM. 0
	AUTH NO.	3672/12													
	SUBMIT DATE	27/09/2019													
	LGA	NORTHERN BEACHES													
	MAP REF.	E3													
	AUSGRID REF.	FF12													
	PRJTRAK No.	XCY012516													
ASP REF.	80218079-004-001														
ASSOCIATED DRAWINGS								CERTIFICATION NUMBER		9257362/20190927					
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CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATION



NOTE:
DUE TO EXISTING LANDSCAPE IN FRONT
OF PROPERTY BOUNDARIES AND
NON-LEVEL SURFACE IN GLENAEON AVE,
ALSO NON STANDARD FOOTPATH IN NEW
ROAD, THE NEW TRENCHES ARE NOT
WITHIN AUSGRID STANDARD ALLOCATION.



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CAD DRAWING DO NOT MANUALLY EDIT AMENDMENTS									 Shaping the Future Cardno (NSW/ACT) Pty Ltd ABN 95 001 145 035 Level 9 The Forum, 200 Pacific Highway St Leonards, NSW 2055 Tel: 02 9449 7700 Fax: 02 9439 5170 Email: info@cardno.com.au Web: www.cardno.com.au	DESIGNED BY	VIDA RAHQOUI	GLENAEON RENEWAL DEVELOPMENT KL S.79728, GLENAEON AVENUE 207 FOREST WAY BELROSE	SIZE	AUSGRID PROJECT No	SHEETS	AMC
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AUSGRID REF.	FF12	PRJTRAK No.	XCYY012516													
ASP REF.	80218079-004-001															
ASSOCIATED DRAWINGS							CERTIFICATION NUMBER		9257362/20190927	A1	SC13571	8 of 8	0			