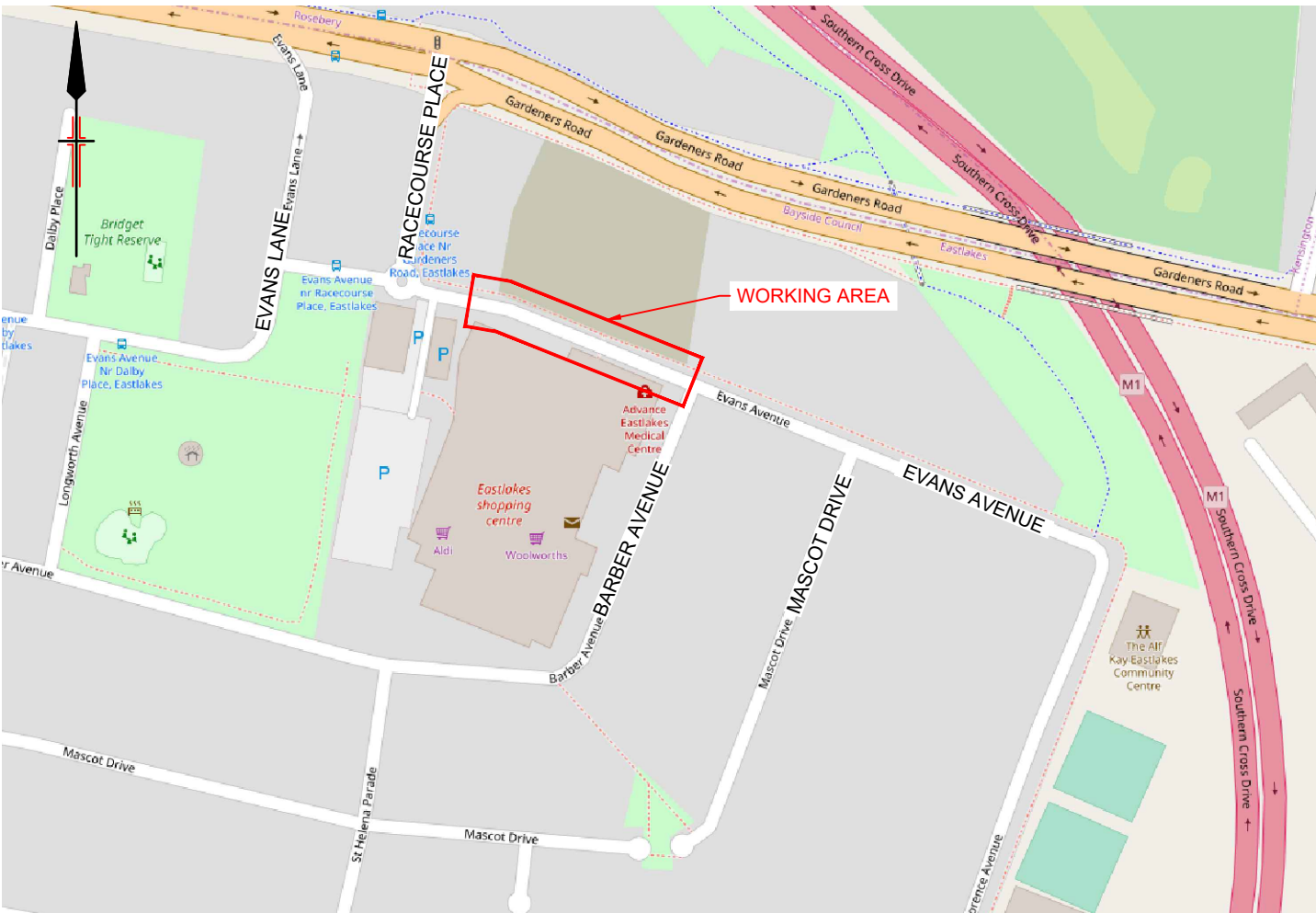


CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATING



LOCALITY MAP
NOT TO SCALE

NOTES

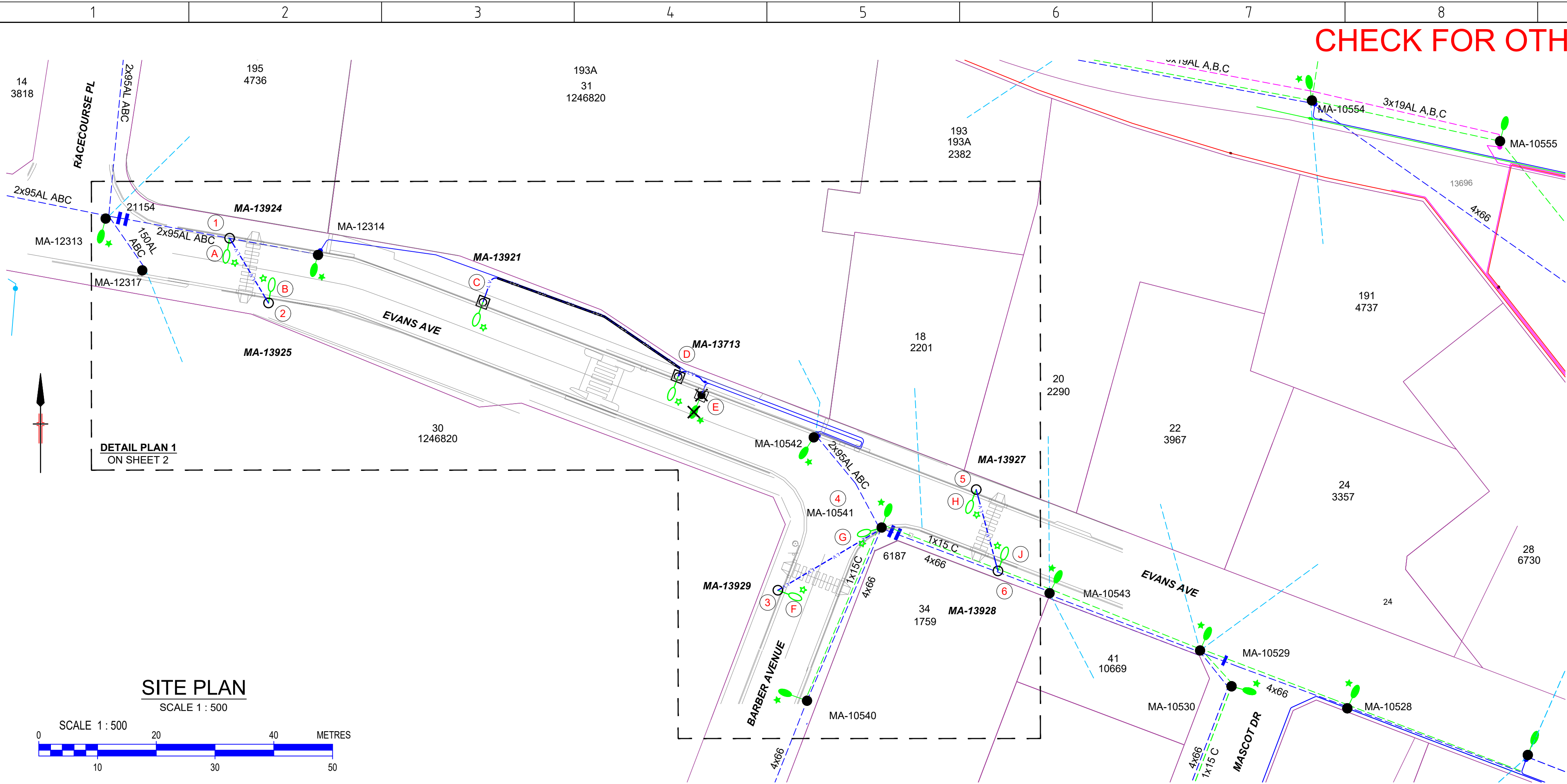
- CLAIMS FOR VARIATIONS TO THE COST OF NON-CONTESTABLE WORKS, INCLUDING ROCK EXCAVATION, WILL NOT BE ACCEPTED UNLESS VERIFIED ON SITE BY AUSGRID WHILE THE WORKS ARE IN PROGRESS.
- THE ASP1 IS RESPONSIBLE FOR UNDERTAKING SATISFACTORY CONSULTATION WITH ALL LOCAL CUSTOMERS WHO MAY POTENTIALLY BE AFFECTED 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 ASP1 IS REQUIRED TO COMPLY WITH THE CORRECT PROCEDURE(S) FOR WORKING WITH AND/OR NEAR ASBESTOS MATERIAL (REFER TO AUSGRID NS 211 - WORKING WITH ASBESTOS PRODUCTS). THE FOLLOWING AUSGRID ASSETS ARE REGISTERED AS CONTAINING ASBESTOS.
- THIS INFORMATION INCLUDES DATA FROM THE NSW DIGITAL CADASTRAL DATABASE BY LAND AND PROPERTY INFORMATION © 2016, USED UNDER CREATIVE COMMONS LICENCE VERSION 4.0.
- FOR IDENTIFICATION AND JOINTING PURPOSES, ALL CABLE ENDS SHALL BE LABELLED AT THE TERMINATION LOCATIONS AND IN JOINT BAYS DURING CABLE INSTALLATION. THE CABLES MUST BE LABELLED AS PER CERTIFIED DESIGN DRAWING

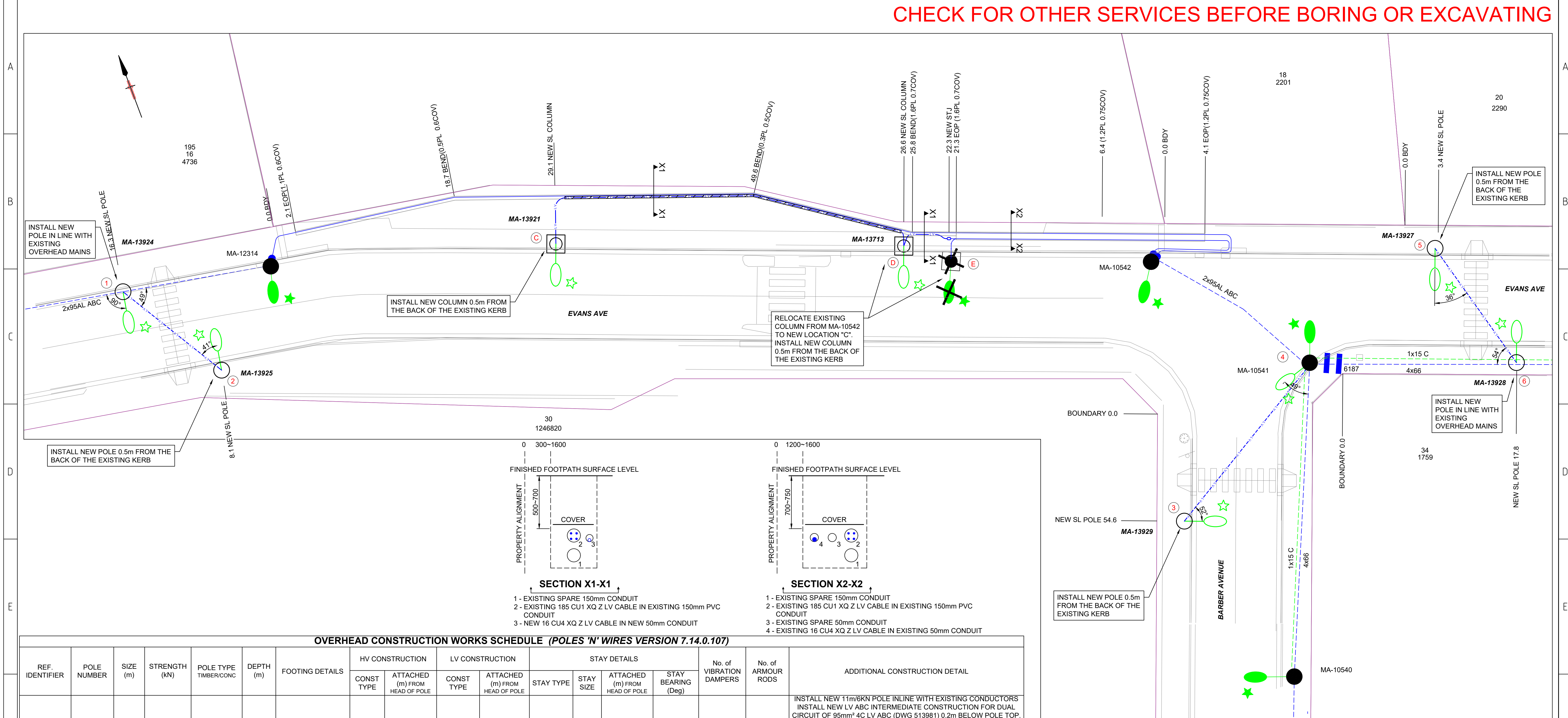
WARNING

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- 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.





SCALE 1 : 200

0 5 10 15 20 METRES

- 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.

REF. IDENTIFIER	POLE NUMBER	SIZE (m)	STRENGTH (kN)	POLE TYPE TIMBER/CONC	DEPTH (m)	FOOTING DETAILS	HV CONSTRUCTION		LV CONSTRUCTION		STAY DETAILS				No. of VIBRATION DAMPERS	No. of ARMOUR RODS	ADDITIONAL CONSTRUCTION DETAIL
							CONST TYPE	ATTACHED (m) FROM HEAD OF POLE	CONST TYPE	ATTACHED (m) FROM HEAD OF POLE	STAY TYPE	STAY SIZE	ATTACHED (m) FROM HEAD OF POLE	STAY BEARING (Deg)			
1	MA-13924	11	6	TIMBER	2.6	600mm CEMENT STABILISED	N/A	N/A	1-70 (DUAL) 1-71	0.2 0.5 0.8	N/A	N/A	N/A	N/A	N/A	INSTALL NEW 11m/6kN POLE INLINE WITH EXISTING CONDUCTORS INSTALL NEW LV ABC INTERMEDIATE CONSTRUCTION FOR DUAL CIRCUIT OF 95mm² 4C LV ABC (DWG 513981) 0.2m BELOW POLE TOP. INSTALL NEW LV ABC TERMINATION CONSTRUCTION FOR SINGLE CIRCUIT OF 25mm² 2C LV ABC (DWG 513982) 0.8m BELOW POLE TOP. RUN NEW DUAL 95 AL 4C LVABC CONDUCTORS BETWEEN POLES MA-12313 AND MA-12314. RUN NEW 25 AL2 LVABC CONDUCTORS BETWEEN POLES 1 AND 2 MAINTAIN EXISTING TENSIONS BETWEEN POLES MA-12313 AND MA-12314	
2	MA-13925	11	6	TIMBER	2.7	600mm SITE SPOIL	N/A	N/A	1-71	0.2	N/A	N/A	N/A	N/A	N/A	INSTALL NEW 11m/6kN POLE INSTALL NEW LV ABC TERMINATION CONSTRUCTION FOR SINGLE CIRCUIT OF 25mm² 2C LV ABC (DWG 513982) 0.2m BELOW POLE TOP.	
3	MA-13929	11	6	TIMBER	2.7	600mm SITE SPOIL	N/A	N/A	1-71	0.2	N/A	N/A	N/A	N/A	N/A	INSTALL NEW 11m/6kN POLE INSTALL NEW LV ABC TERMINATION CONSTRUCTION FOR SINGLE CIRCUIT OF 25mm² 2C LV ABC (DWG 513982) 0.2m BELOW POLE TOP. RUN NEW 25 AL2 LVABC CONDUCTORS BETWEEN POLES 3 AND 4.	
4	MA-10541	11	6	TIMBER	EXIST	EXIST	N/A	N/A	1-1 (EXIST) 1-89 (EXIST) 1-71	0.8 1.5 1.8	N/A	N/A	N/A	N/A	N/A	INSTALL NEW LV ABC TERMINATION CONSTRUCTION FOR SINGLE CIRCUIT OF 25mm² 2C LV ABC (DWG 513982) 1.8m BELOW POLE TOP.	
5	MA-13927	11	6	TIMBER	2.7	600mm SITE SPOIL	N/A	N/A	1-71	0.2	N/A	N/A	N/A	N/A	N/A	INSTALL NEW 11m/6kN POLE INSTALL NEW LV ABC TERMINATION CONSTRUCTION FOR SINGLE CIRCUIT OF 25mm² 2C LV ABC (DWG 513982) 0.2m BELOW POLE TOP. RUN NEW 25 AL2 LVABC CONDUCTORS BETWEEN POLES 5 AND 6	
6	MA-13928	11	6	TIMBER	2.7	600mm SITE SPOIL	N/A	N/A	1-1 (SL) 1-1 (LV)	0.2 0.8	N/A	N/A	N/A	N/A	N/A	INSTALL NEW 11m/6kN POLE INLINE WITH EXISTING CONDUCTORS INSTALL NEW SL HORIZONTAL PIN CONSTRUCTION (DWG 513900) 0.2m BELOW POLE TOP. INSTALL NEW SL HORIZONTAL PIN CONSTRUCTION (DWG 513900) 0.8m BELOW POLE TOP. MAINTAIN EXISTING TENSIONS BETWEEN POLES MA-10541 AND MA-10543	

	PROPOSED		EXISTING		PROPOSED		EXISTING	
Pole			Pole-to be removed		UGOH	Pot End	UGOH	Pot End
SL Standard			USL		Joint	Sealed End	Joint	Sealed End
Pillar Standard			ABS		Conduit			
LV Pillar			IDT		OH Lines	UG Cables	OH Lines	UG Cables
LV Link Pillar			Kiosk Sub		-HV-	-HV-		
Streetlight			Chamber Sub		-LV-	-LV-		
Streetlight-PCC			Pole Sub		-SL-	-SL-		
Streetlight-replacement			Two Pole Sub		-SV-	-SV-		

ASSOCIATED DRAWINGS

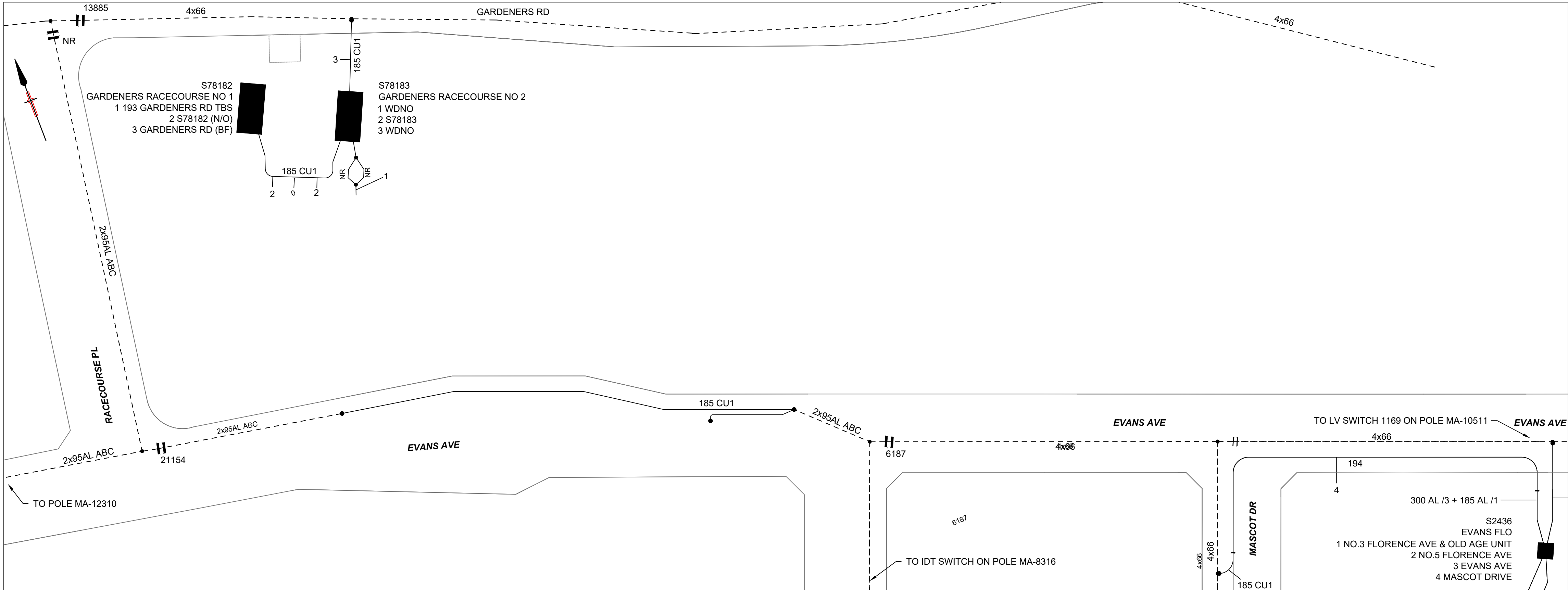
The Northrop logo features a stylized black and white sphere to the left of the word "NORTHROP" in bold, black, sans-serif capital letters. Below the logo, the word "Sydney" is centered. To the left of "Sydney" is the address "L 11 345 George Street, Sydney, N.S.W. 2000". To the right of "Sydney" are the phone number "Ph (02) 5241 4188" and "P.O. Box H171". Below the phone number is the fax number "Fax (02) 5241 4324" and "Australia Square, N.S.W. 1215". At the bottom left is the email "sydney@northrop.com.au" and at the bottom right is the alphanumeric code "ADN 61 094 432 100".

DESIGNED BY	PAUL CAVE
AUTH NO.	2431/08
SUBMIT DATE	SUBMITTED 17/04/2020
LGA	BAYSIDE COUNCIL
MAP REF.	UBD 276 F2
AUSGRID REF.	MA11 & MA12
PRJTRAK No.	XCZ021773

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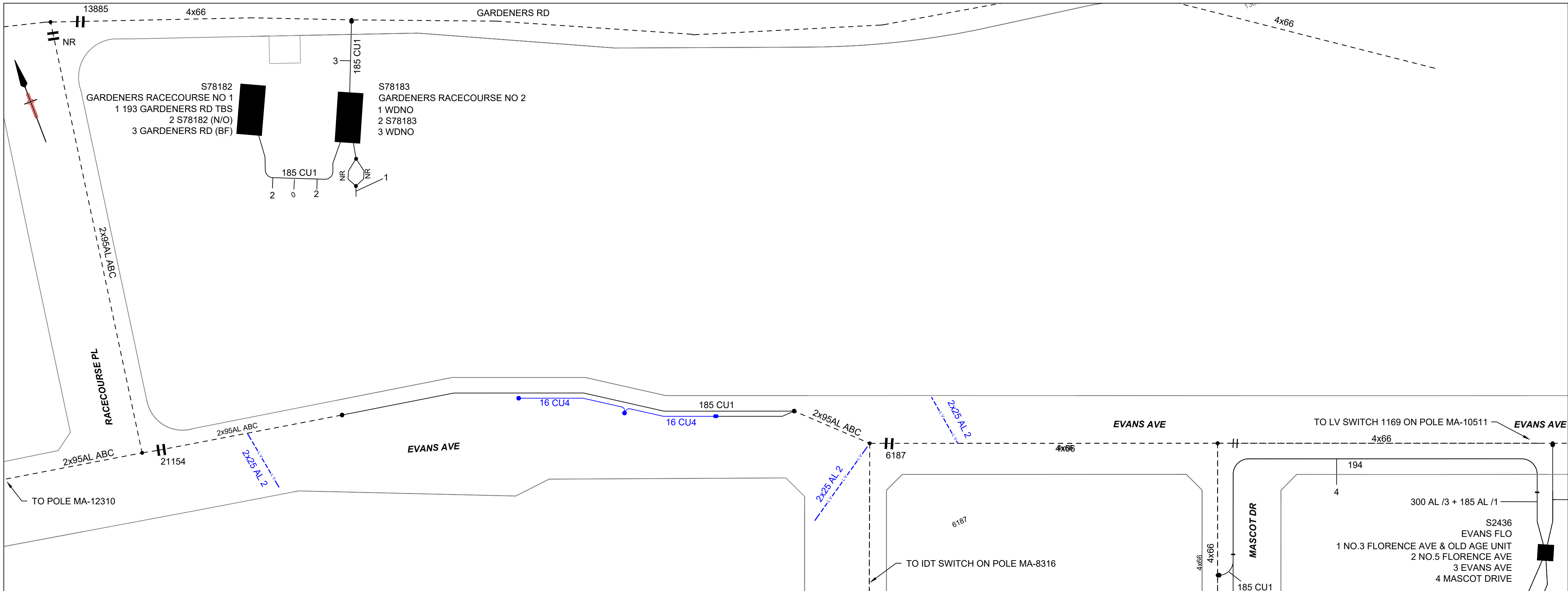
AUSGRID STREET LIGHTING RELOCATION AND INSTALLATION ON EVANS AVENUE EASTLAKES, NSW			
SIZE A1	AUSGRID PROJECT No. AN-20307	SHEET'S 2 of 5	AMD. 1

CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATING



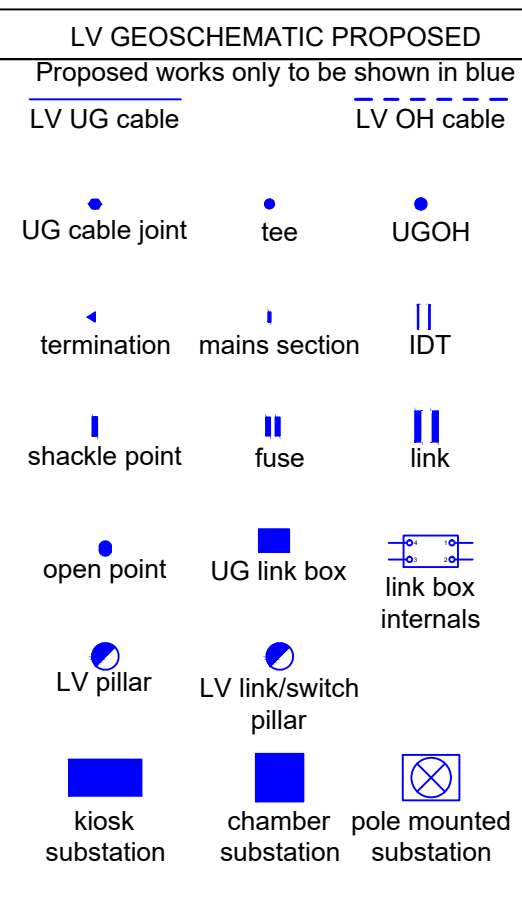
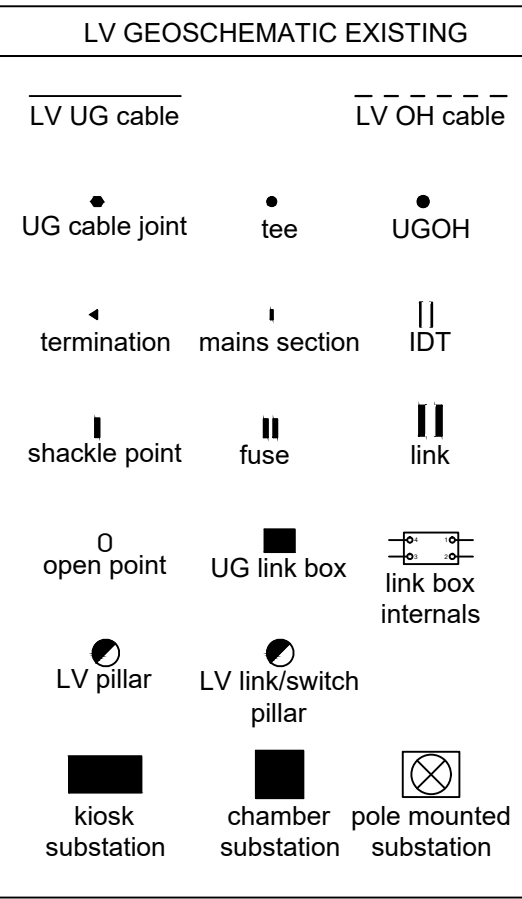
LV GEOSCHEMATIC - EXISTING

NOT TO SCALE



LV GEOSCHEMATIC - PROPOSED

NOT TO SCALE



WARNING

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ASP LEVEL 2 WORK

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CAD DRAWING
DO NOT MANUALLY EDIT
AMENDMENTS
1. NEW SL POLES
ADDED FOR PEDESTRIAN
CROSSING
CHECKED BY: J. B. 04/02/2020
APPROVED BY: J. B. 04/02/2020

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

ASSOCIATED DRAWINGS

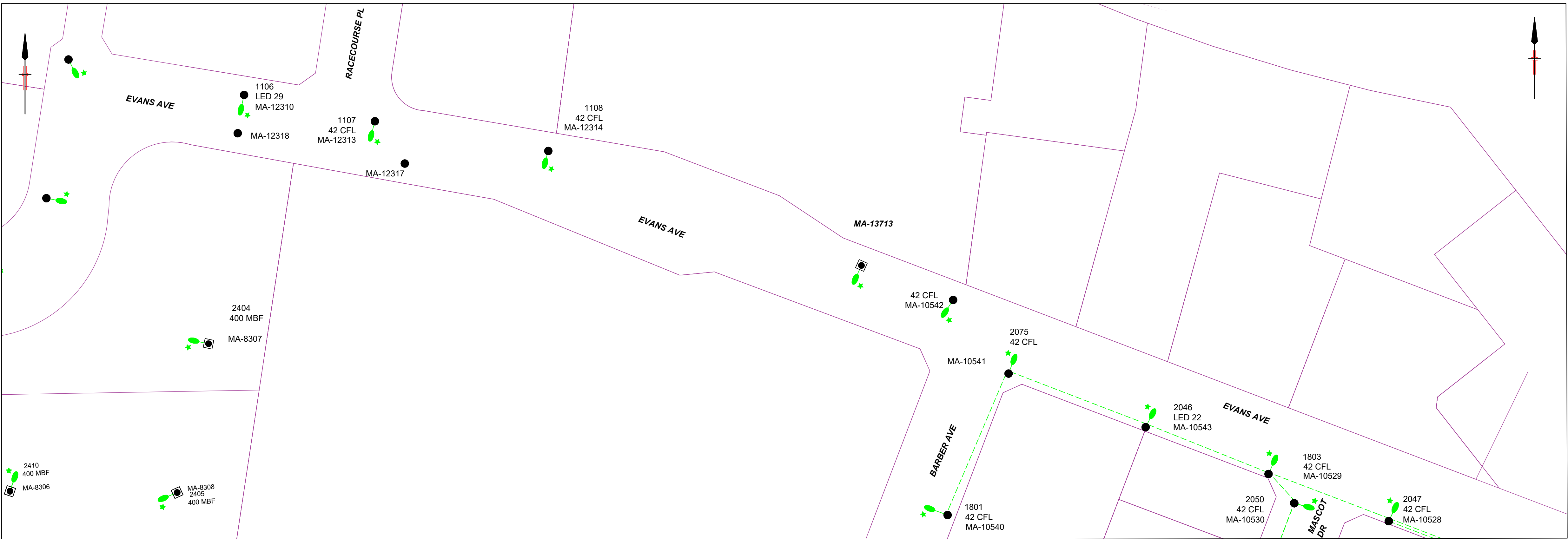
NORTHROP
Sydney
L1 11 345 George Street, Sydney, N.S.W. 2000
Ph (02) 9241 4188 Fax (02) 9241 4189
Email: sydney@northrop.com.au P.O. Box 41171, Australia Sydney, N.S.W. 1210
ABN 91 094 433 100

DESIGNED BY: PAUL CAVE
AUTH NO.: 2431/08
SUBMIT DATE: SUBMITTED 17/04/2020
LGA: BAYSIDE COUNCIL
MAP REF.: UBD 276 F2
AUSGRID REF.: MA11 & MA12
PRJ/TRAK No.: XCZ021773

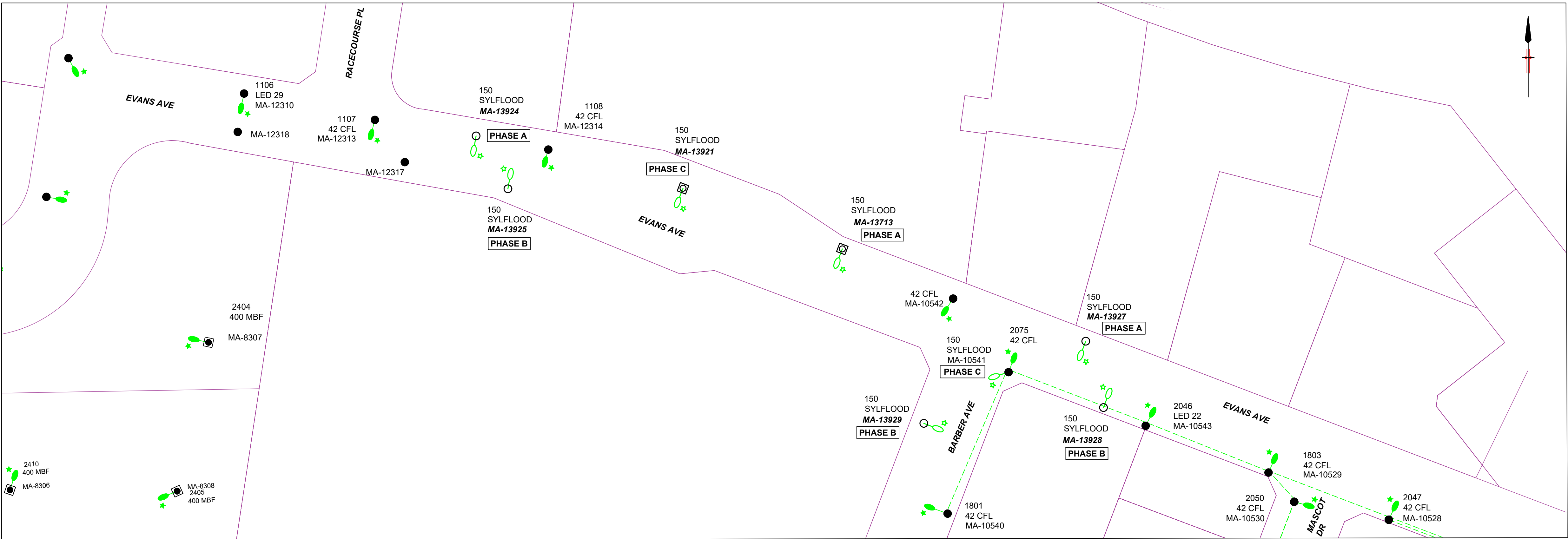
AUSGRID STREET LIGHTING
RELOCATION AND INSTALLATION
ON EVANS AVENUE
EASTLAKES, NSW

SIZE: A1
AUSGRID PROJECT No.: AN-20307
SHEETS: 3 of 5
AMD: 1

CHECK FOR OTHER SERVICES BEFORE BORING OR EXCAVATING



STREET LIGHT NETWORK - EXISITING
NOT TO SCALE



STREET LIGHT - PROPOSED
NOT TO SCALE

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CAD DRAWING
DO NOT MANUALLY EDIT
AMENDMENTS
1. NEW SL POLES
ADDED FOR PEDESTRIAN
CROSSING
CHECKED BY TS 04/02/2020
APPROVED BY CL 04/02/2020

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

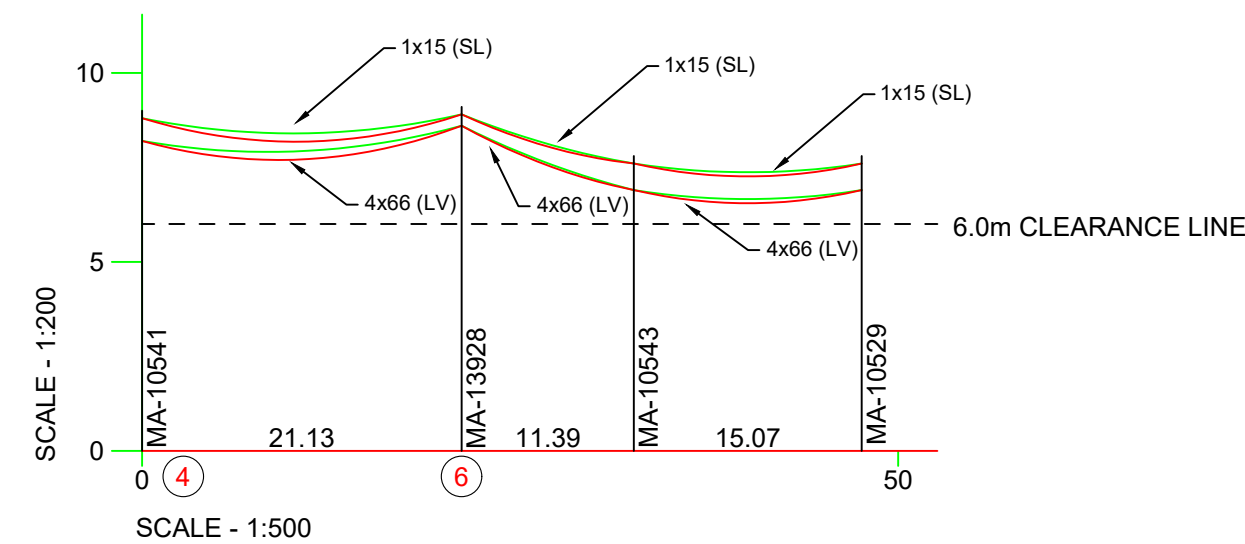
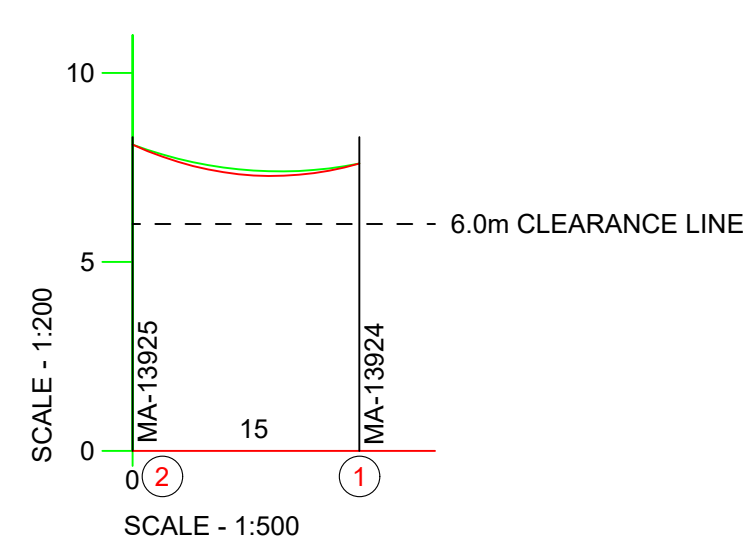
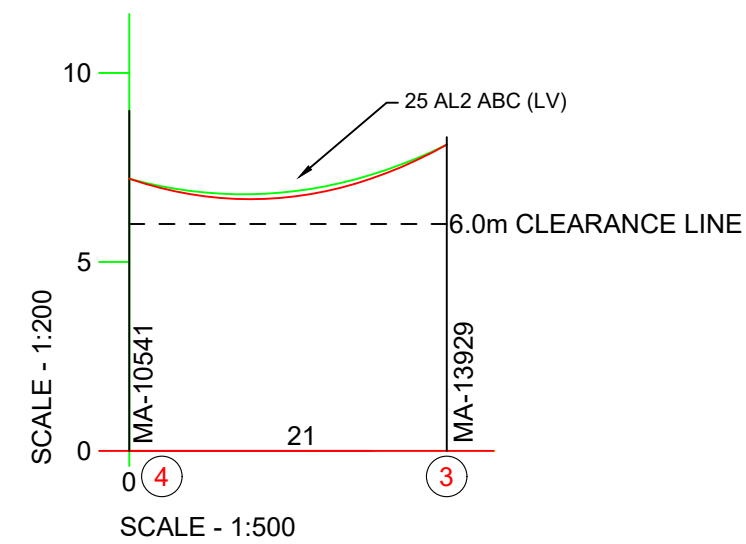
ASSOCIATED DRAWINGS

NORTHROP
Sydney
1/11/2019
P.O. Box 1171
Sydney, N.S.W. 2000
Ph (02) 9241 4188
Fax (02) 9241 4200
Email sydney@northrop.com.au
ABN 91 094 433 100

DESIGNED BY	PAUL CAVE
AUTH NO.	2431/08
SUBMIT DATE	SUBMITTED 17/04/2020
LGA	BAYSIDE COUNCIL
MAP REF.	UBD 276 F2
AUSGRID REF.	MA11 & MA12
PRJTRAK No.	XCZ021773

**AUSGRID STREET LIGHTING
RELOCATION AND INSTALLATION
ON EVANS AVENUE
EASTLAKES, NSW**

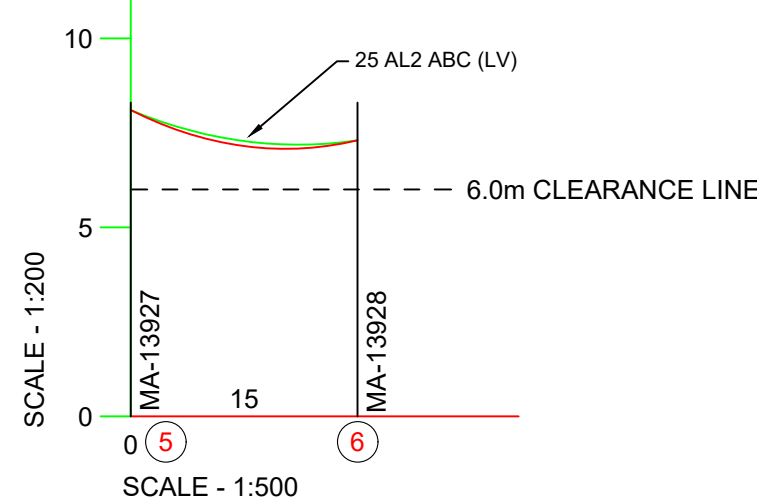
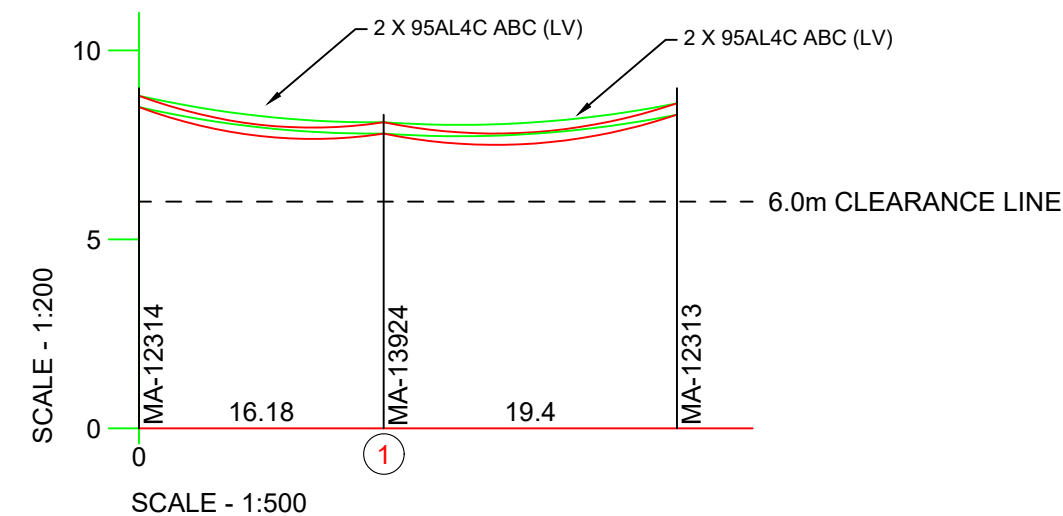
SIZE	A1	AUSGRID PROJECT No.	AN-20307	SHEETS	4 of 5	AMD.	1
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OVERHEAD MAINS STRINGING TABLE										
DESIGN SPAN:		MA-10541	TO	MA-13929	RULING SPAN (m)		21.0m	VOLTAGE		415
STRAIN POINTS:		MA-10541	TO	MA-13929	CABLE TENSION		2% UTS	MAX. OPERATING TEMP		80 Deg. C
CABLE DETAIL:		2X25 AL2 ABC					CONDUCTOR CODE:		1037	
AMBIENT TEMP:	0	5	10	15	20	25	30	35	40	
TENSION (kN no wind):	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.12	
SAG (m):	0.76	0.77	0.79	0.80	0.81	0.82	0.83	0.85	0.85	
TIME (sec):	4.70	4.80	4.80	4.80	4.90	4.90	4.90	5.00	5.00	

OVERHEAD MAINS STRINGING TABLE										
DESIGN SPAN:		MA-13925	TO	MA-13924	RULING SPAN (m)		15.0m	VOLTAGE		415
STRAIN POINTS:		MA-13925	TO	MA-13924	CABLE TENSION		2% UTS	MAX. OPERATING TEMP		80 Deg. C
CABLE DETAIL:		2X25 AL2 ABC					CONDUCTOR CODE:		1037	
AMBIENT TEMP:	0	5	10	15	20	25	30	35	40	
TENSION (kN no wind):	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	
SAG (m):	0.44	0.45	0.46	0.47	0.48	0.50	0.51	0.51	0.53	
TIME (sec):	3.60	3.60	3.70	3.70	3.80	3.80	3.90	3.90	3.90	

OVERHEAD MAINS STRINGING TABLE										
DESIGN SPAN:		MA-10541	TO	MA-13928	RULING SPAN (m)		17.36m	VOLTAGE		415
STRAIN POINTS:		MA-10541		MA-10529	CABLE TENSION		2.94 UTS	MAX. OPERATING TEMP		75 Deg. C
CABLE DETAIL:		66 HDCU4 (4x19/.083)					CONDUCTOR CODE:		51060	
AMBIENT TEMP:	0	5	10	15	20	25	30	35	40	
TENSION (kN no wind):	0.74	0.69	0.66	0.63	0.60	0.58	0.56	0.54	0.52	
SAG (m):	0.27	0.29	0.30	0.32	0.33	0.34	0.36	0.37	0.38	
TIME (sec):	2.80	2.90	3.00	3.10	3.10	3.20	3.30	3.30	3.30	



OVERHEAD MAINS STRINGING TABLE										
DESIGN SPAN:	MA-10541	TO	MA-13928	RULING SPAN (m)	17.36m	VOLTAGE			415	
STRAIN POINTS:	MA-10541	TO	MA-10529	CABLE TENSION	2.94 UTS	MAX. OPERATING TEMP			75 Deg. C	
CABLE DETAIL:	15 HDCU1 (1x7/0.064)				CONDUCTOR CODE:			51004		
AMBIENT TEMP:	0	5	10	15	20	25	30	35	40	
TENSION (kN no wind):	0.30	0.28	0.26	0.25	0.24	0.23	0.22	0.21	0.20	
SAG (m):	0.27	0.29	0.30	0.32	0.33	0.34	0.36	0.37	0.38	
TIME (sec):	2.80	2.90	3.00	3.10	3.10	3.20	3.30	3.30	3.30	

OVERHEAD MAINS STRINGING TABLE									
DESIGN SPAN:	MA-12314	TO	MA-13924	RULING SPAN (m)	18.01m	VOLTAGE		415	
STRAIN POINTS:	MA-12314	TO	MA-12313	CABLE TENSION	6 % TOS	MAX. OPERATING TEMP		80 Deg. C	
CABLE DETAIL:	415V 95 AAC 4 XQ / ABC + 95 AAC 4 XQ / ABC				CONDUCTOR CODE:		57003		
AMBIENT TEMP:	0	5	10	15	20	25	30	35	40
TENSION (kN no wind):	4.09	3.19	2.63	2.26	2.00	1.81	1.66	1.55	1.45
SAG (m):	0.11	0.14	0.17	0.19	0.22	0.24	0.26	0.28	0.30
TIME (sec):	1.80	2.00	2.20	2.40	2.50	2.70	2.80	2.90	3.00

OVERHEAD MAINS STRINGING TABLE										
DESIGN SPAN:		MA-13927	TO	MA-13928	RULING SPAN (m)		15.0m	VOLTAGE		415
STRAIN POINTS:		MA-13927	TO	MA-13928	CABLE TENSION		2% UTS	MAX. OPERATING TEMP		80 Deg. C
CABLE DETAIL:		2X25 AL2 ABC					CONDUCTOR CODE:		1037	
AMBIENT TEMP:	0	5	10	15	20	25	30	35	40	
TENSION [kN no wind]:	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	
SAG (m):	0.44	0.45	0.46	0.47	0.48	0.50	0.51	0.51	0.53	
TIME (sec):	3.60	3.60	3.70	3.70	3.80	3.80	3.90	3.90	3.90	

OVERHEAD MAINS CONDUCTOR DETAIL						
REF. IDENTIFIER	ACTION	CIRCUIT VOLTAGE	No. OF CABLES	CONDUCTOR TYPE	DEAD END SECTION LENGTH (m)	TOTAL CABLE LENGTH (m)
1 - 2	NEW	LV	1	25 AL2 ABC	15.0	15.0
3 - 4	NEW	LV	1	25 AL2 ABC	21.0	21.0
5 - 6	NEW	LV	1	25 AL2 ABC	15.0	15.0

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ASP LEVEL 2 WORK

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SHOWN FOR INFORMATION PURPOSES ONLY AND DOES NOT
FORM PART OF THE CERTIFIED DESIGN.

[illegible]