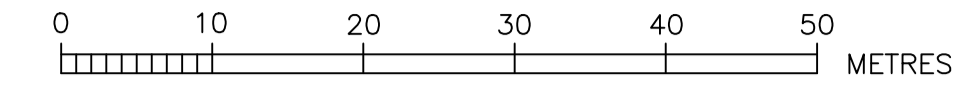




LOCALITY PLAN & BENCHMARK DIAGRAM

(NOT TO SCALE)



- DESIGNER AND WATER SERVICING COORDINATOR:  
QALCHEK PTY LTD (CERTIFIED No.289)  
77 UNION RD, PENRITH NSW 2750  
PH. No. (02) 4722 8181  
  
FOR:  
WOORONG PARK PTY LTD  
c/o J WYNDHAM PRINCE  
580 HIGH STREET, PENRITH, NSW, 2750  
PHONE 02 4720 3341 (CHRIS MUDIE, PROJECT MANAGER JWP)
- THE WORKS AND MATERIALS ARE IN ACCORDANCE WITH THE WATER SUPPLY CODE OF AUSTRALIA (WSA 03-2011-3.1) INCLUDING THE SYDNEY WATER SUPPLEMENT (2014) AND APPENDICES.
- MAINS LAID GENERALLY AS SHOWN ON PLAN AT STANDARD DEPTH BELOW KERB INLET EXCEPT WHERE OTHERWISE SHOWN.
- ALL EXCAVATION, SHORING EXCAVATION AND STABILITY OF ADJACENT STRUCTURES/SERVICES/DWELLINGS WAS THE RESPONSIBILITY OF THE CONSTRUCTOR.
- PRECAUTIONS MAY BE NECESSARY IN THE VICINITY OF SUB-STATION EARTHING.
- ALL BUILDING LAYOUTS, FINISHED SURFACE LEVELS, STORMWATER INFORMATION, AND GENERAL CIVIL ENGINEERING DETAILS TAKEN FROM:  
CIVIL ENGINEERING AND STORMWATER: NEWPARK PRECINCT 6 CAD BASE 180731.DWG & PRECINCT 6 CC PLANS.PDF (PROVIDED BY JWP 31.07.2018)  
SURFACE INFORMATION: NEWPARK PRECINCT 6 3D TRIANGLES 180808.DWG (PROVIDED BY JWP 08.08.2018)
- CONDITIONS FOR EMBEDMENT, BACKFILL AND TESTING REQUIREMENTS ARE AS FOLLOWS:  
  
- ALL POTABLE WATER ROAD CARRIAGEWAY CROSSINGS FOR EXISTING AND NEW ROADS BEDDED AND BACKFILLED WITH SAND/CEMENT. SAND/CEMENT RATIO 14:1 AND IS PLACED DRY.  
  
- FOR ANY WATERMAIN LOCATED WITHIN 1.0m OF A ROAD SHOULDER OR KERB AND GUTTER IN THE VERGE OR FOOTPATH THE EMBEDMENT AND BACKFILL (IF "COHESIVE" MATERIAL WAS USED) IT WAS COMPACTED TO A DENSITY INDEX OF 95%. ALL TESTS (EMBEDMENT AND BACKFILL) DONE AS FOR TRAFFICABLE AREA.  
  
THEREFORE THE MINIMUM NUMBER OF FIELD COMPACTION TESTS CONDUCTED TO SATISFY THE CONDITIONS ABOVE AS WELL AS THE WATER SUPPLY CODE OF AUSTRALIA ARE:  
  
PIPE EMBEDMENT ZONE: 70 TESTS CONDUCTED  
TRENCH FILL ZONE (TRAFFICABLE): 140 TESTS CONDUCTED  
TRENCH FILL ZONE PROPERTY SERVICES: 0 TESTS CONDUCTED (LETTER PROVIDED)  
COMPACTION TESTS - TOTAL: 210 TESTS CONDUCTED
- ALL PROPERTY (MAIN TO METER) SERVICES ARE CONSTRUCTED TO SYDNEY WATER'S INSTALLATION REQUIREMENTS BY A LICENSED PLUMBER AND ACCREDITED DRILLER. THE WORKS ARE INSTALLED IN ACCORDANCE WITH THE CURRENT SYDNEY WATER PROPERTY SERVICE (MAIN TO METER) INSTALLATIONS TECHNICAL REQUIREMENTS, NSW CODE OF PRACTICE FOR PLUMBING AND DRAINAGE, AND AS/NZ 3500.
- ALL REDUNDANT SURFACE FITTINGS AND INDICATOR PLATES AT POINTS OF CONNECTION TO EXISTING SYSTEM WERE RECOVERED WHERE FLUSHING BENDS WERE REMOVED AND CONNECTIONS MADE.
- THE WORKS ARE CONSTRUCTED IN ACCORDANCE WITH SYDNEY WATER'S DEEMED TO COMPLY DRAWINGS:  
- FOR HORIZONTAL BENDS TYPE 2 DTC-1111 (ISSUE B 29.02.12)  
- FOR TAPERS DTC-1112 (ISSUE B 29.02.12)  
- FOR TEES DTC-1113 (ISSUE B 29.02.12)  
- FOR VERTICAL BENDS & HYDRANT BENDS DTC-1114 (ISSUE A 31.01.12)
- ALL ROAD CROSSINGS AND ALL MAINS LOCATED WITHIN ROAD CARRIAGEWAYS OF EXISTING AND NEW ROADS ARE BACKFILLED WITH SAND/CEMENT AT A RATIO OF 14:1. MINIMUM COVER OF SAND CEMENT BACKFILL ON POTABLE WATERMAIN IS 300mm. ALL TRENCHES OTHER THAN IN CARRIAGEWAY ARE BACKFILLED AS FOR A TRAFFICABLE AREA (REFER TO SECTION 17 OF WSA 03-2011-3.1).
- BULKHEADS CONSTRUCTED AT EACH KERB CROSSING TO WAT-1209.

PLAN DRAWN DATE: 26.07.2019 VERSION: 0 SHEET 1 OF 5 SHEETS

0	WORK AS CONSTRUCTED	J.V.	26.07.19
B	ISSUE FOR APPROVAL	F.J.	29.08.18
A	DRAFT ISSUE FOR TENDER	F.J.	22.08.18
No.	AMENDMENT DESCRIPTION	BY	DATE

PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION  
PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT :-  
DIAL BEFORE YOU DIG ..... Ph. 1100  
ELECTRICITY ..... Ph. ....  
GAS ..... Ph. ....  
TELECOMMUNICATIONS ..... Ph. ....  
SYDNEY WATER ..... Ph. 132 092  
GIVING AT LEAST 48 HOURS NOTICE.

UTILITIES		DATE		REF.	
STORMWATER:	SWD	---	SWD	31.07.18	ENG.PLANS
SEWER:	S	---	S	22.08.18	DESIGN

WORK AS CONSTRUCTED CERTIFICATION	
DEVELOPER	WOORONG PARK PTY LTD
WATER SERVICE CO-ORDINATOR	QALCHEK PTY LTD
CONSTRUCTOR	C.J. DOYLE CONTRACTING
COMPLETED	22.07.2019
DESIGNER	QALCHEK PTY LTD
W.A.C. PREPARED	26.07.2019
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.	

PIPE SCHEDULE				
SIZE (DN)	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES
200	O.P.V.C.	PN16	482.9	RRJ
100	O.P.V.C.	PN16	3206.2	RRJ
DESIGN HEAD, 120 m				
BOUNDARY TRAPS REQUIRED.				

AUSTRALIAN HEIGHT DATUM  
SCALES  
PLAN 1:500 SECTION { HOR. . . . .  
VERT. . . . .  
CROSS SECTIONS . . . . . NATURAL  
LENGTHS, DEPTHS & LEVELS ARE IN METRES.

NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.  
U.B. DIRECTORY . . . . . MAP 126 A/16 45th EDITION  
SHEET . 1 . OF . 5 . File No. N/A

**Sydney WATER** SYDNEY WATER CORPORATION  
Case No. 167856PW  
WATERMAIN EXTENSION  
ELARA BV & OTHERS  
MARSDEN PARK BLACKTOWN

**IMPORTANT:**  
● MEANS THAT A TAPPING IS CONSTRUCTED OFF THE EXISTING DN200 MAIN IN ELARA BV

HYDRANT BEND REMOVED AND CONNECTION TO EXISTING DN100 PW MAIN MADE.

DN200 OPVC CN 164980PW

HYDRANT BEND REMOVED AND CONNECTION TO EXISTING DN100 PW MAIN MADE.

HYDRANT BEND REMOVED AND CONNECTION TO EXISTING DN100 PW MAIN MADE.

200x100 TAPER AND HYDRANT BEND REMOVED AND CONNECTION TO EXISTING DN200 PW MAIN MADE.

RIBBONWOOD CR

BETULA

PLATYPUS

ELKHORN

ELARA

KALUTA

WAGTAIL

AV

BETULA PD

WOYLIE

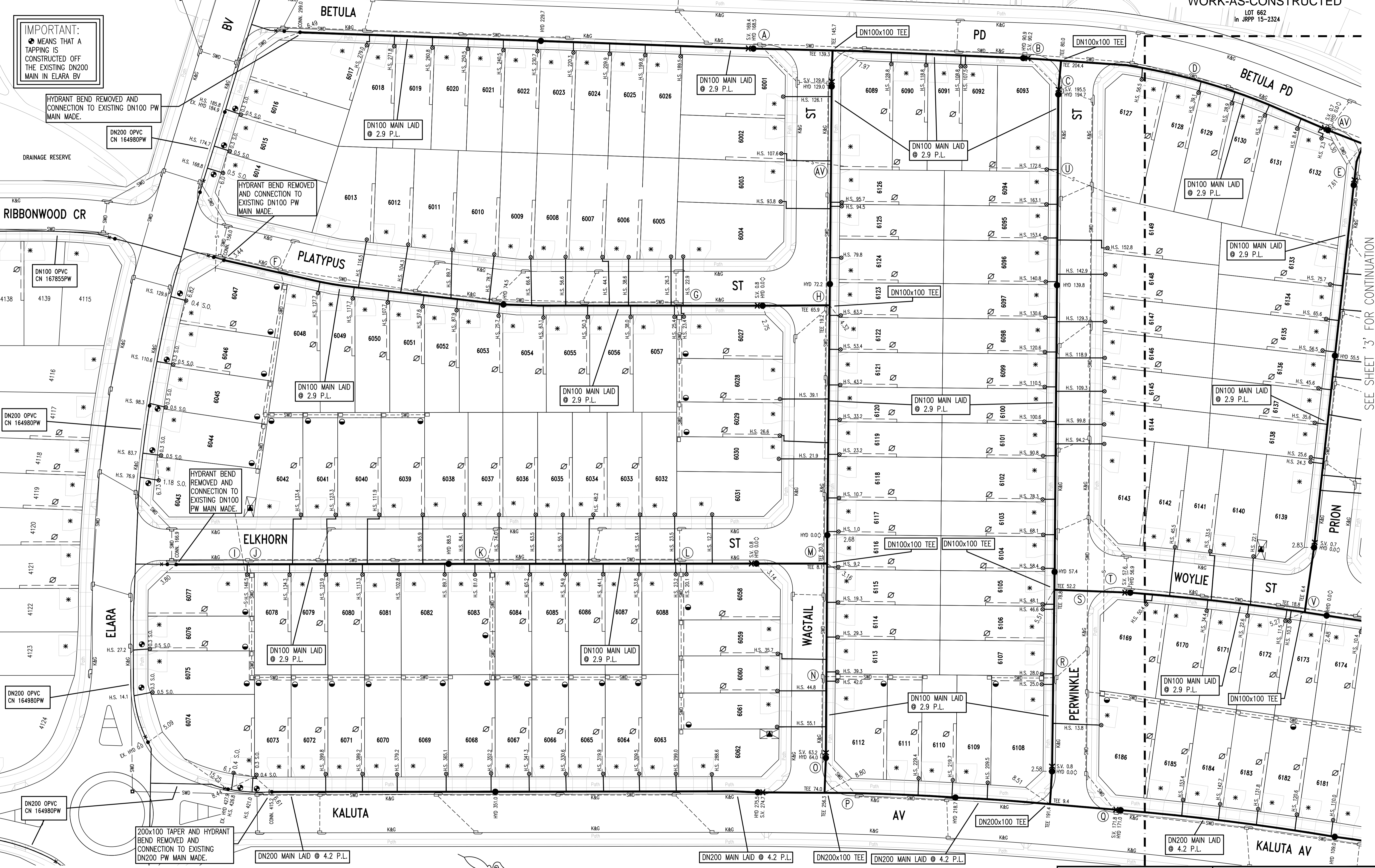
ST

KALUTA AV

SEE SHEET '3' FOR CONTINUATION

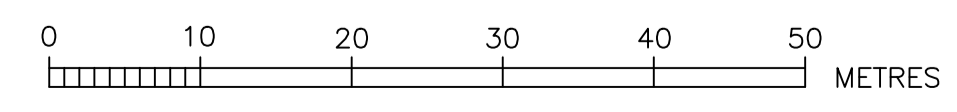
PLAN DRAWN DATE: 26.07.2019 VERSION: 0

SHEET 2 OF 5 SHEETS



No.	AMENDMENT DESCRIPTION	BY	DATE
0	WORK AS CONSTRUCTED	J.V.	26.07.19
B	ISSUE FOR APPROVAL	F.J.	29.08.18
A	DRAFT ISSUE FOR TENDER	F.J.	22.08.18

- EASEMENT FOR ACCESS AND MAINTENANCE 0.9 WIDE
- EASEMENT TO DRAIN WATER 1.5 WIDE
- DRIVEWAY
- SUBSTATION
- TAPPINGS INSERTED INTO DN200 MAIN



WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER	
DEVELOPER	WOORONG PARK PTY LTD	SYDNEY WATER CORPORATION	
W.S.C.	QALCHEK PTY LTD	Case No. 167856PW	SHT 2 OF 5 SHTS.
CONSTRUCTOR	C.J. DOYLE CONTRACTING	COMPLETED 22.07.2019	
W.A.C. PREPARED	26.07.2019	DESIGNER QALCHEK PTY LTD	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	

LOT 662  
in JRPP 15-2324

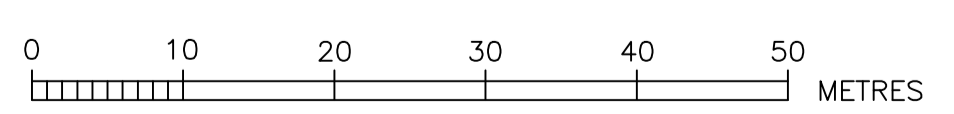


SEE SHEET '2' FOR CONTINUATION

SEE SHEET '5' FOR CONTINUATION

No.	AMENDMENT DESCRIPTION	BY	DATE
0	WORK AS CONSTRUCTED	J.V.	26.07.19
B	ISSUE FOR APPROVAL	F.J.	29.08.18
A	DRAFT ISSUE FOR TENDER	F.J.	22.08.18

- ⊘ EASEMENT FOR ACCESS AND MAINTENANCE 0.9 WIDE
- EASEMENT TO DRAIN WATER 1.5 WIDE
- ⊙ DRIVEWAY
- ⊠ SUBSTATION

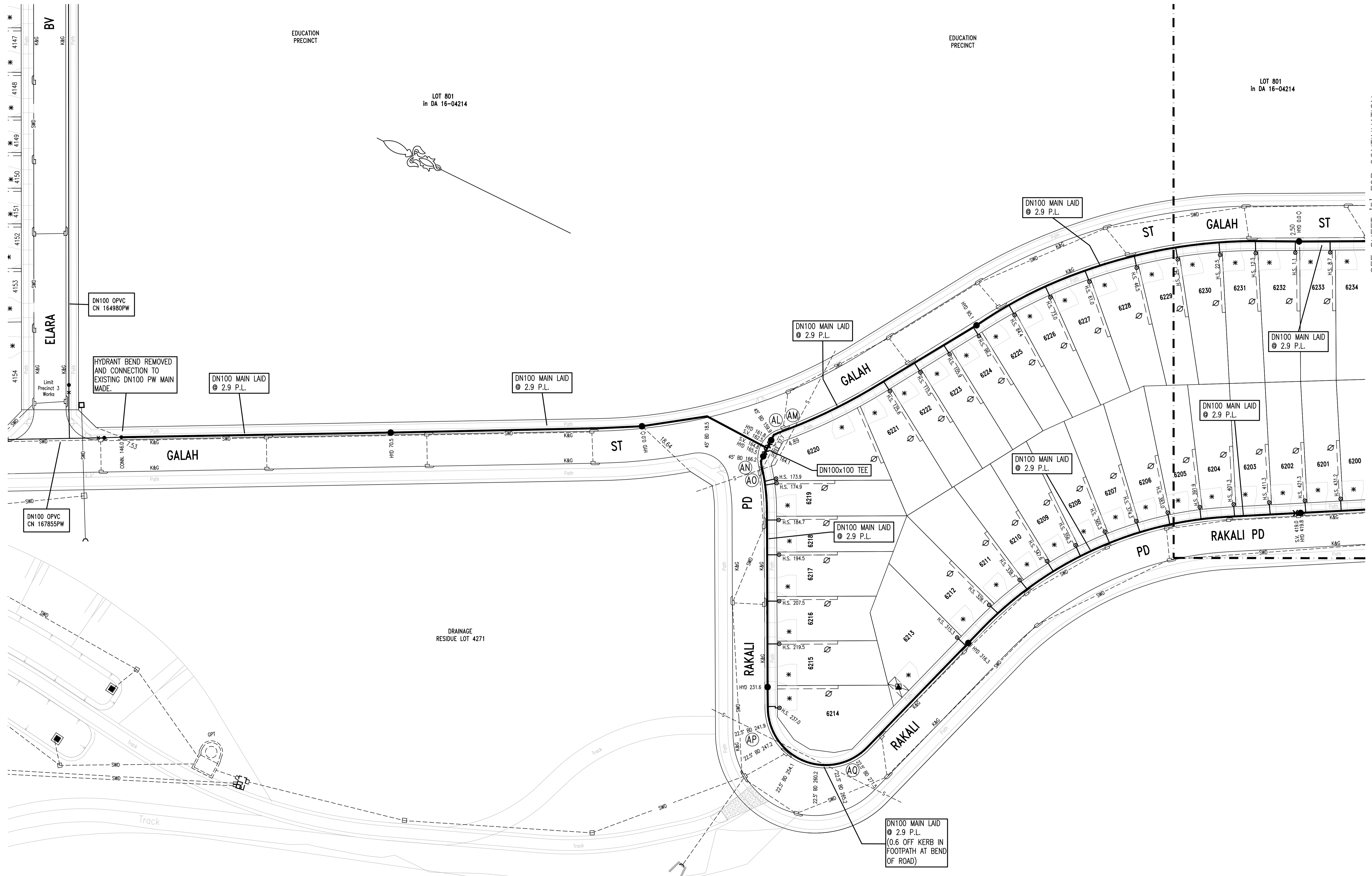


WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	Case No. 167856PW	SHT 3 OF 5 SHTS.
COMPLETED	22.07.2019		
W.A.C. PREPARED	26.07.2019		
DESIGNER	QALCHEK PTY LTD	SYDNEY WATER CORPORATION	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	

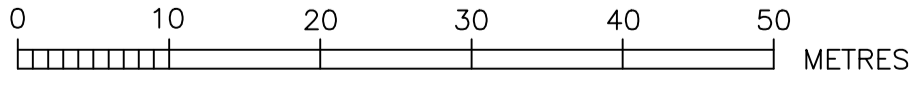
LOT 801  
in DA 16-04214

LOT 801  
in DA 16-04214

SEE SHEET '5' FOR CONTINUATION



- ⊙ EASEMENT FOR ACCESS AND MAINTENANCE 0.9 WIDE
- ⊙ EASEMENT TO DRAIN WATER 1.5 WIDE
- \* DRIVEWAY
- SUBSTATION



0	WORK AS CONSTRUCTED	J.V.	26.07.19
B	ISSUE FOR APPROVAL	F.J.	29.08.18
A	DRAFT ISSUE FOR TENDER	F.J.	22.08.18
No.	AMENDMENT DESCRIPTION	BY	DATE

WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	Case No. 167856PW SHT 4 OF 5 SHTS.
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	FOR DETAILS OF SERVICES SEE SHEET 1	
COMPLETED	22.07.2019		
W.A.C. PREPARED	26.07.2019	SYDNEY WATER CORPORATION	
DESIGNER	QALCHEK PTY LTD	I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS	

SERVICES CROSSING TABLE SHEET 2 - MAIN LAID OVER UNLESS NOTED OTHERWISE

CROSSING	SERVICE	SERVICE SIZE	PW SIZE	SERVICE COVER (m)	PW COVER (m)	CLEARANCE (m)	COMMENT/DTC
'A'	SWD	DN750	DN100	1.88	0.75	1.03	N/A
'B'	SWD	DN750	DN100	1.97	0.75	1.12	N/A
'C'	SWD	DN750	DN100	1.65	0.75	0.80	N/A
'D'	SWD	DN750	DN100	2.45	0.75	1.60	N/A
'E'	SWD	DN450	DN100	1.77	0.75	0.92	N/A
'AV'	SWD	DN450	DN100	2.10	0.75	1.25	N/A
'F'	SWD	DN375	DN100	1.06	0.75	0.21	N/A
'G'	SWD	DN225	DN100	0.84	0.59	0.15	Ease Main over SWD
'H'	SWD	DN450	DN100	1.19	0.75	0.34	N/A
'I'	Sewer	DN150	DN100	2.41	0.75	1.56	N/A
'J'	SWD	DN375	DN100	1.08	0.75	0.23	N/A
'K'	SWD	DN375	DN100	1.07	0.75	0.22	N/A
'L'	SWD	DN225	DN100	1.11	0.75	0.26	N/A
'M'	SWD	DN375	DN100	1.20	0.75	0.35	N/A
'N'	SWD	DN225	DN100	1.11	0.75	0.26	N/A
'O'	SWD	DN375	DN100	1.22	0.75	0.37	N/A
'P'	SWD	DN375	DN200	1.59	0.75	0.64	N/A
'O'	SWD	DN375	DN200	1.78	0.75	0.83	N/A
'R'	SWD	DN225	DN100	1.11	0.75	0.26	N/A
'S'	SWD	DN450	DN100	1.29	0.75	0.44	N/A
'T'	Sewer	DN150	DN100	2.26	0.75	1.41	N/A
'U'	Sewer	DN150	DN100	2.56	0.75	1.71	N/A
'V'	SWD	DN375	DN100	1.11	0.75	0.26	N/A
'AV'	Sewer	DN225	DN100	2.65	0.75	1.80	N/A

SERVICES CROSSING TABLE SHEET 3 - MAIN LAID OVER UNLESS NOTED OTHERWISE

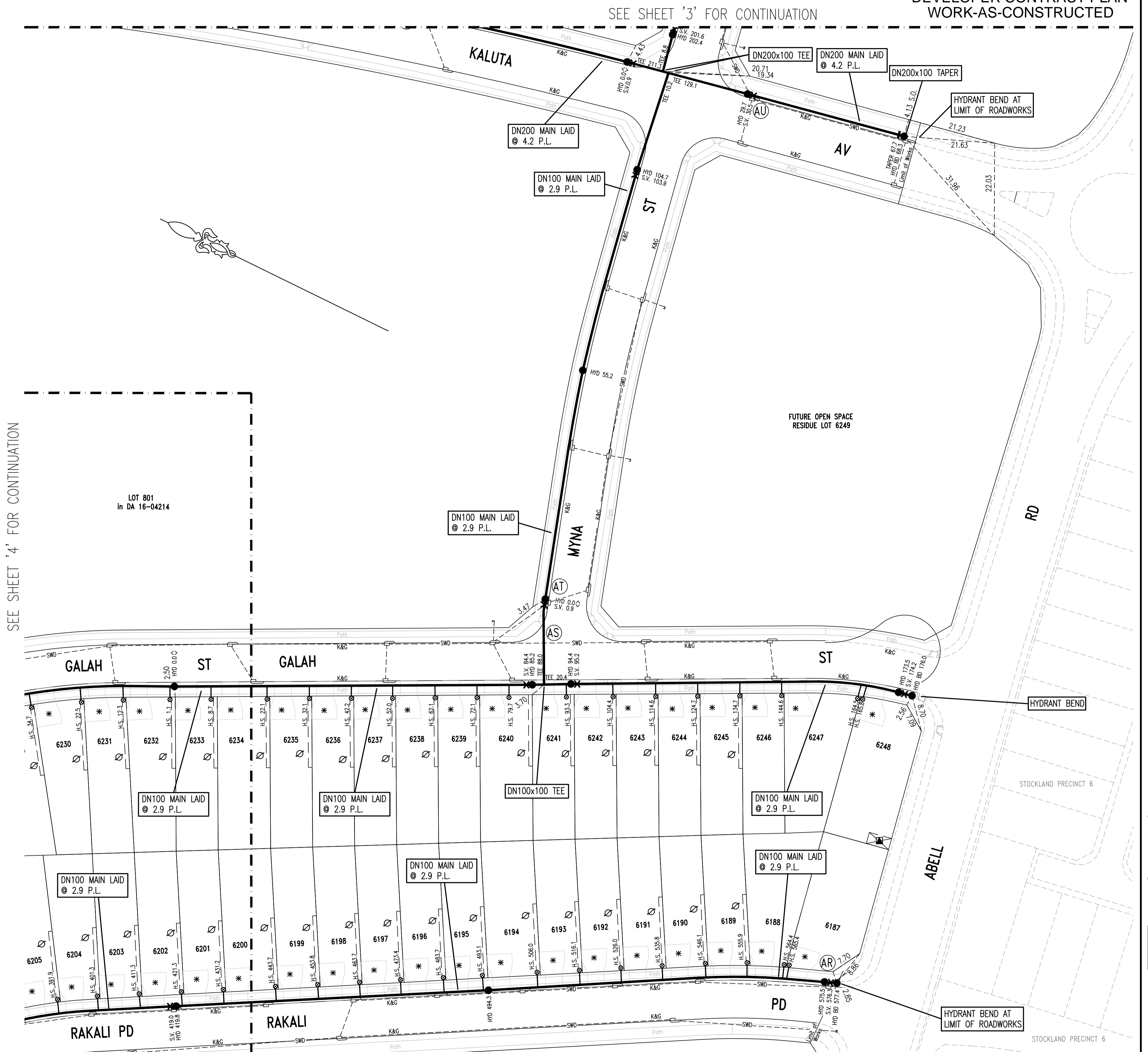
CROSSING	SERVICE	SERVICE SIZE	PW SIZE	SERVICE COVER (m)	PW COVER (m)	CLEARANCE (m)	COMMENT/DTC
'W'	Sewer	DN150	DN100	3.34	0.75	2.49	N/A
'X'	SWD	DN600	DN100	1.51	0.75	0.66	N/A
'Y'	Sewer	DN225	DN100	4.71	0.75	3.86	N/A
'Z'	SWD	DN375	DN100	1.13	0.75	0.28	N/A
'AA'	SWD	DN825	DN100	2.07	0.75	1.22	N/A
'AB'	Sewer	DN150	DN100	3.46	0.75	2.61	N/A
'AC'	SWD	DN825	DN100	1.83	0.75	0.98	N/A
'AD'	SWD	DN375	DN100	1.21	0.75	0.35	N/A
'AE'	SWD	DN375	DN100	1.11	0.75	0.26	N/A
'AF'	SWD	DN375	DN100	1.30	0.75	0.45	N/A
'AG'	SWD	DN375	DN100	1.07	0.75	0.22	N/A
'AH'	SWD	DN600	DN100	1.20	0.75	0.35	N/A
'AI'	Sewer	DN150	DN100	2.78	0.75	1.93	N/A
'AJ'	SWD	DN375	DN100	1.07	0.75	0.22	N/A
'AK'	SWD	DN375	DN200	1.08	0.75	0.18	N/A

SERVICES CROSSING TABLE SHEET 4 - MAIN LAID OVER UNLESS NOTED OTHERWISE

CROSSING	SERVICE	SERVICE SIZE	PW SIZE	SERVICE COVER (m)	PW COVER (m)	CLEARANCE (m)	COMMENT/DTC
'AL'	SWD	DN825	DN100	2.26	0.75	1.41	N/A
'AM'	Sewer	DN150	DN100	3.89	0.75	3.04	N/A
'AN'	Sewer	DN225	DN100	3.56	0.75	2.71	N/A
'AO'	SWD	DN825	DN100	1.97	0.75	1.12	N/A
'AP'	Sewer	DN225	DN100	4.84	0.75	3.99	N/A
'AQ'	Sewer	DN225	DN100	4.78	0.75	3.93	N/A

SERVICES CROSSING TABLE SHEET 5 - MAIN LAID OVER UNLESS NOTED OTHERWISE

CROSSING	SERVICE	SERVICE SIZE	PW SIZE	SERVICE COVER (m)	PW COVER (m)	CLEARANCE (m)	COMMENT/DTC
'AR'	SWD	DN375	DN100	1.83	0.75	0.98	N/A
'AS'	SWD	DN375	DN100	1.66	0.75	0.82	N/A
'AT'	SWD	DN825	DN100	1.87	0.75	1.02	N/A
'AU'	SWD	DN375	DN200	1.63	0.75	0.68	N/A

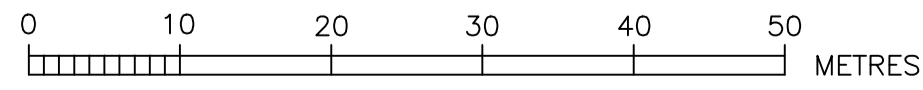


SEE SHEET '4' FOR CONTINUATION

SEE SHEET '3' FOR CONTINUATION

No.	AMENDMENT DESCRIPTION	BY	DATE
0	WORK AS CONSTRUCTED	J.V.	26.07.19
B	ISSUE FOR APPROVAL	F.J.	29.08.18
A	DRAFT ISSUE FOR TENDER	F.J.	22.08.18

- ⊙ EASEMENT FOR ACCESS AND MAINTENANCE 0.9 WIDE
- ⊙ EASEMENT TO DRAIN WATER 1.5 WIDE
- \* DRIVEWAY
- SUBSTATION



WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	WOORONG PARK PTY LTD	<b>Sydney WATER</b>	
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	C.J. DOYLE CONTRACTING	Case No. 167856PW	SHT 5 OF 5 SHTS.
COMPLETED	22.07.2019		
W.A.C. PREPARED	26.07.2019		
DESIGNER	QALCHEK PTY LTD	SYDNEY WATER CORPORATION	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	