

- DESIGNER AND WATER SERVICING COORDINATOR:
QALCHEK PTY LTD (CERTIFIED No.289)
77 UNION RD. PENRITH NSW 2750
PH. No. (02) 4722 8181

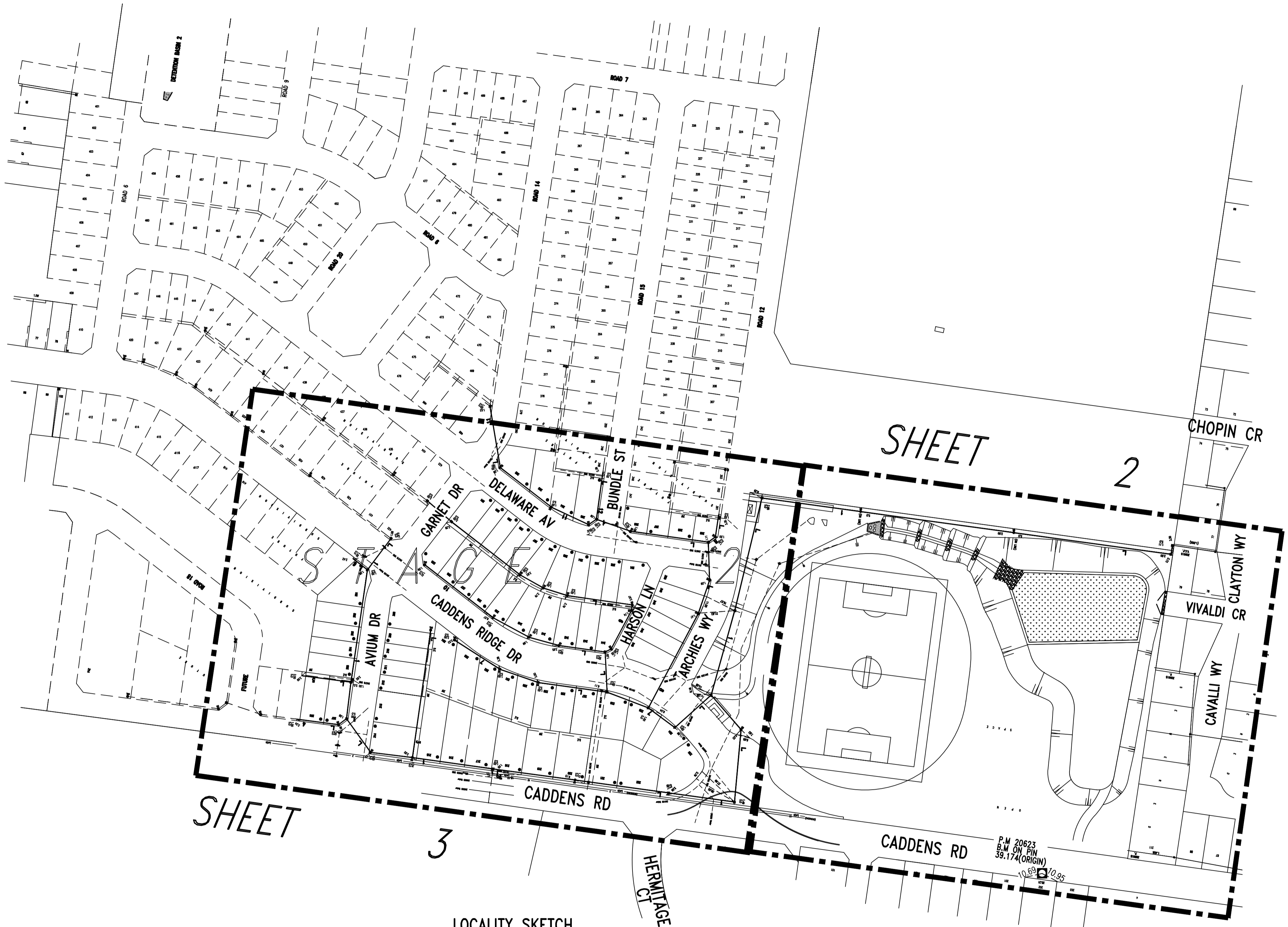
FOR: LEGPRO PTY LTD ATF LEGPRO 54 PTY LTD
LEVEL 27 - 19-29 MARTIN PLACE SYDNEY N.S.W 2000
PH: 92521111
- THE WORKS AND MATERIALS ARE IN ACCORDANCE WITH THE SEWERAGE RETICULATION CODE OF AUSTRALIA (WSA 02-2002-2.2 VERSION 3) INCLUDING THE SYDNEY WATER SUPPLEMENT AND APPENDICES AND THE TECHNICAL SPECIFICATION FOR LEAK TIGHT SEWER SYSTEMS (VERSION 8) 17-12-2014.
- ALL STRUCTURES CONSTRUCTED TO FINISHED SURFACE LEVELS.
ALL LEVELS REFER TO FINISHED SURFACE LEVEL.
- ALL BUILDING LAYOUTS, FINISHED SURFACE LEVELS, STORMWATER INFORMATION, AND GENERAL CIVIL ENGINEERING DETAILS TAKEN FROM 'CIVIL DESIGNERS COMPANY NAME' ENGINEERING PLANS REVISION 'A' DATED 'MAY 2017'
- THE MINIMUM NUMBER OF FIELD COMPACTION TESTS CONDUCTED TO SATISFY THE SEWERAGE CODE OF AUSTRALIA ARE:
SAND/CEMENT BACKFILL IS USED AT ROAD CROSSINGS (LETTER PROVIDED)
PIPE EMBEDMENT ZONE: 0 TESTS CONDUCTED (LETTER SUPPLIED)

TRENCH FILL ZONE (TRAFFICABLE): 0 TESTS CONDUCTED (LETTER SUPPLIED)

TRENCH FILL ZONE (NON TRAFFICABLE): 46 TESTS CONDUCTED

TRENCH FILL ZONE (MAINTENANCE STRUCTURES): 147 TESTS CONDUCTED

TRENCH FILL ZONE - TOTAL: 193 TESTS CONDUCTED
- ALL EXCAVATION, SHORING EXCAVATION AND STABILITY OF ADJACENT STRUCTURES/SERVICES/DWELLINGS WAS THE RESPONSIBILITY OF THE CONSTRUCTOR.
- ALL PSC CONNECTIONS TO I.S. ARE AT 0.7m & 45° TO MAIN UNLESS OTHERWISE INDICATED.
 DENOTES STANDARD PCS CONNECTION (REFER DTC-2120 ISSUE A DATE 18.03.15)
 DENOTES STANDARD PCS CONNECTION (REFER DTC-2120 ISSUE A DATE 18.03.15) 90° TO MAIN
- CONSTRUCTOR ENSURED THAT WORKS CONSTRUCTED IN ACCORDANCE WITH SYDNEY WATER'S DEEMED TO COMPLY DRAWINGS:
- FOR ALL MH'S DTC-2000 (ISSUE C 18-03-15), DTC-2220 (ISSUE D 18-03-15), DTC-2221 (ISSUE B 01.03.13), DTC-2222 (ISSUE C 18-03-15)
DTC-2200 (ISSUE F 18.03.15)
DTC-2203 (ISSUE B 18-03-15)
- PIPES CONCRETE ENCASED SHOWN ACCORDINGLY:- REFER TO SEW-1205-V
- ALL M.S.'s CONFORM TO WSA-137, "INDUSTRY STANDARD FOR MAINTENANCE SHAFTS AND MAINTENANCE CHAMBERS FOR SEWERAGE".
- W.A.C. PREPARED FROM INFORMATION SUPPLIED (IN PART BY QALCHEK) & BY VINCE MORGAN SURVEYORS PTY LTD



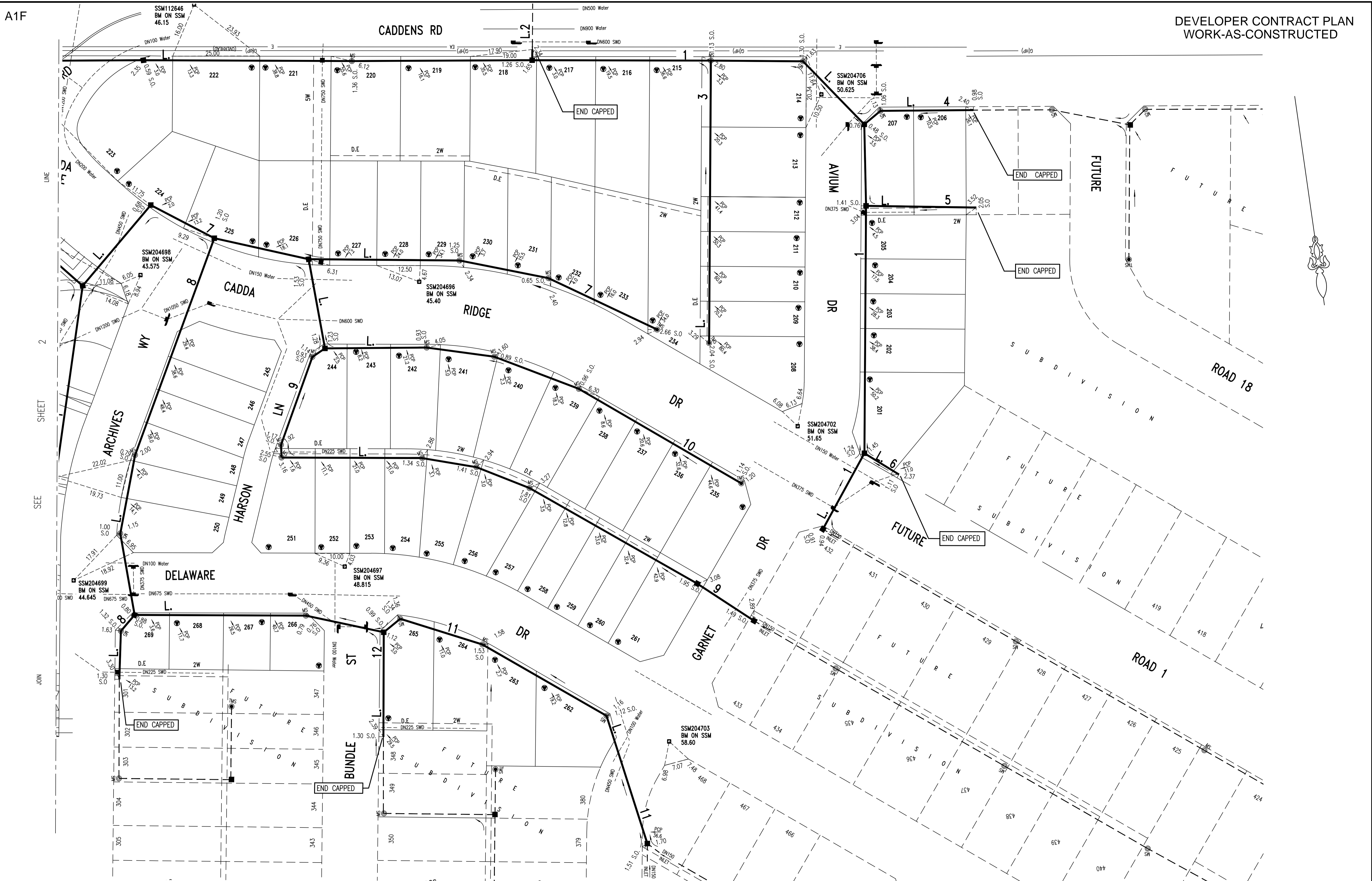
LOCALITY SKETCH
(NOT TO SCALE)

0	WORK AS CONSTRUCTED	R.B.	10.01.18
B	STAGE 2 ISSUED	M.P.	22.03.17
A	DRAFT	M.P.	01.12.16
No.	AMENDMENT DESCRIPTION	BY	DATE

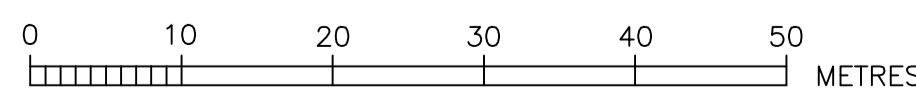
PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT :- DIAL BEFORE YOU DIG Ph. 1100 ELECTRICITY, ENDEAVOUR ENERGY Ph. 131 003 GAS JEMENA GAS Ph. 1300 880 908 TELECOMMUNICATIONS TELSTRA Ph. 1800 114 918 SYDNEY WATER Ph. 132 092 GIVING AT LEAST 48 HOURS NOTICE.	UTILITIES					WORK AS CONSTRUCTED CERTIFICATION					PIPE SCHEDULE					AUSTRALIAN HEIGHT DATUM		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.		<div>Sydney WATER</div> <div>SYDNEY WATER CORPORATION</div>	
	TYPE	DATE	REF.	TYPE	DATE	REF.	DEVELOPER	LEGPRO PTY LTD	SIZE (DN)	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES	SCALES							
	SEWER: S ----- S						WATER SERVICE CO-ORDINATOR	QALCHEK PTY LTD	150	U.P.V.C	SN8	1243.79	RRJ	PLAN . 1:500 . SECTION { HOR . 1:500 . VERT . 1:125 .							
	STORMWATER: SWD ----- SWD						CONSTRUCTOR	FLUID SERVICES PTY LTD	225	U.P.V.C	SN8	620.52	RRJ	CROSS SECTIONS NATURAL							
	CO-AXIAL: TEL ----- CO-AX						COMPLETED	29.09.17	100	UPVC	SN10	59.8	SWJ (NOTE 7)	LENGTHS, DEPTHS & LEVELS ARE IN METRES.							
	WATER: DN100 Water -----						DESIGNER	QALCHEK PTY LTD	I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.					DESIGN HEADm							
	GAS: G(HP) ----- G(HP)											NO BOUNDARY TRAPS REQUIRED.									
	ENERGY AUST: E ----- EA																				



FILE LOCATION: PM18541WW-0 DESIGNED: M.P. DRAFTED: R.B. VERIFIED: C.T. REVIEWED: C.T. APPROVED: C.T. ISSUED: 10.01.2018



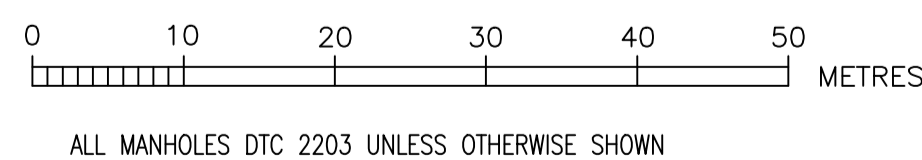
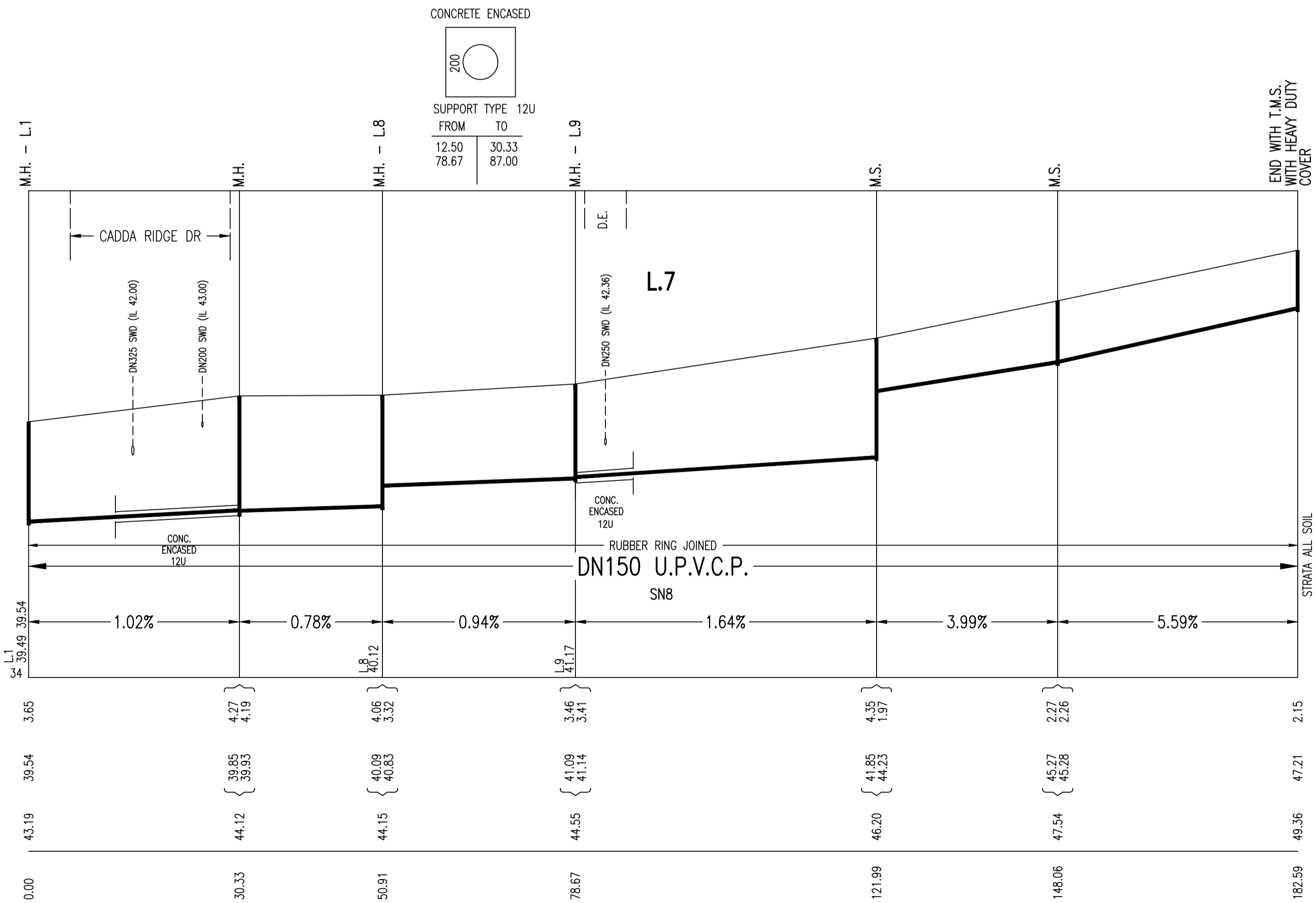
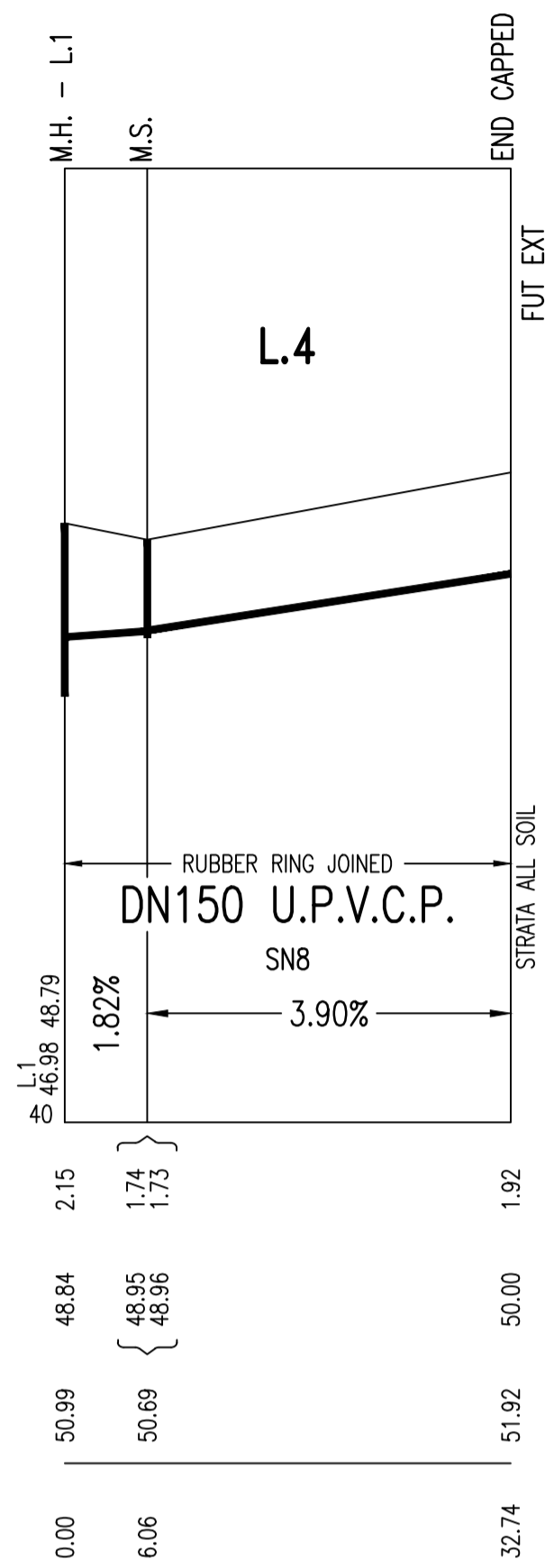
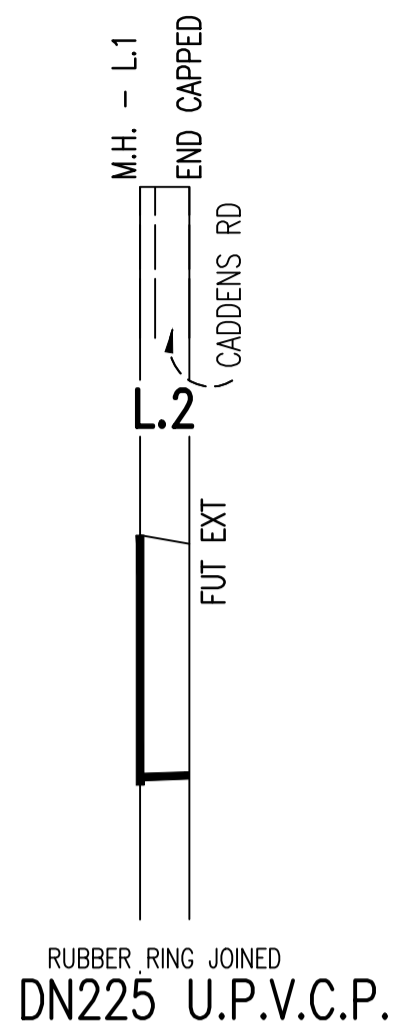
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- DENOTES EASEMENT FOR PADMOUNT SUBSTATION 2.75 WIDE
● DENOTES DRIVEWAY

WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER	
DEVELOPER	LEGPRO PTY LTD	SYDNEY WATER CORPORATION	
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	FLUID SERVICES PTY LTD		
COMPLETED	29.09.17		
W.A.C. PREPARED	10.01.18		
DESIGNER	QALCHEK PTY LTD		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS			
		SYDNEY WATER CORPORATION	
		FOR DETAILS OF SERVICES SEE SHEET 1	

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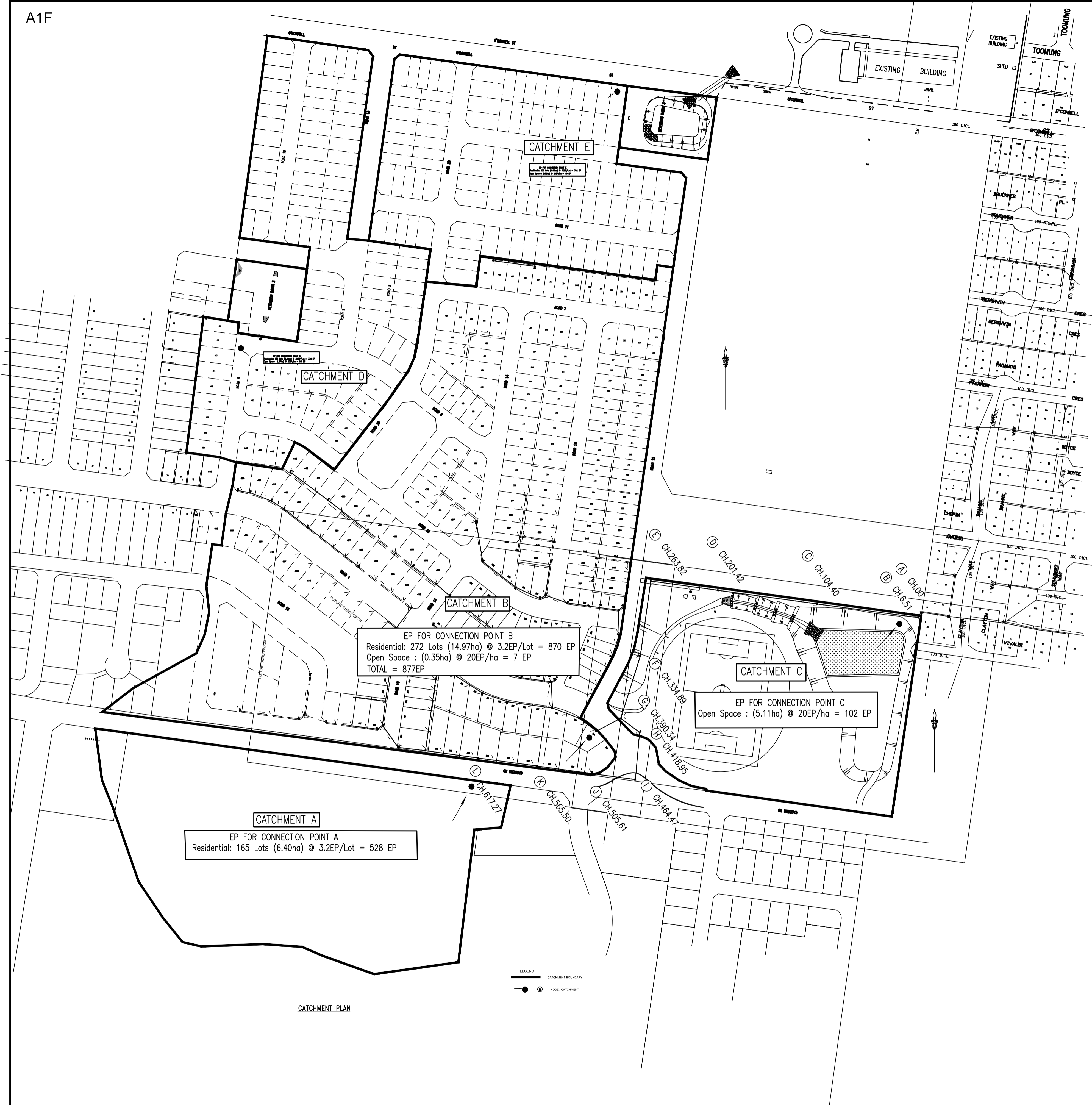
WORK AS CONSTRUCTED CERTIFICATION		 SYDNEY WATER CORPORATION	
DEVELOPER	LEGPRO PTY LTD	<div>Case No. 162195WW</div> <div>SHT 5 OF 7 SHTS.</div>	
W.S.C.	QALCHEK PTY LTD		
CONSTRUCTOR	FLUID SERVICES PTY LTD		
COMPLETED	29.09.17		
W.A.C. PREPARED	10.01.18		
DESIGNER	QALCHEK PTY LTD	SYDNEY WATER CORPORATION	
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[illegible]

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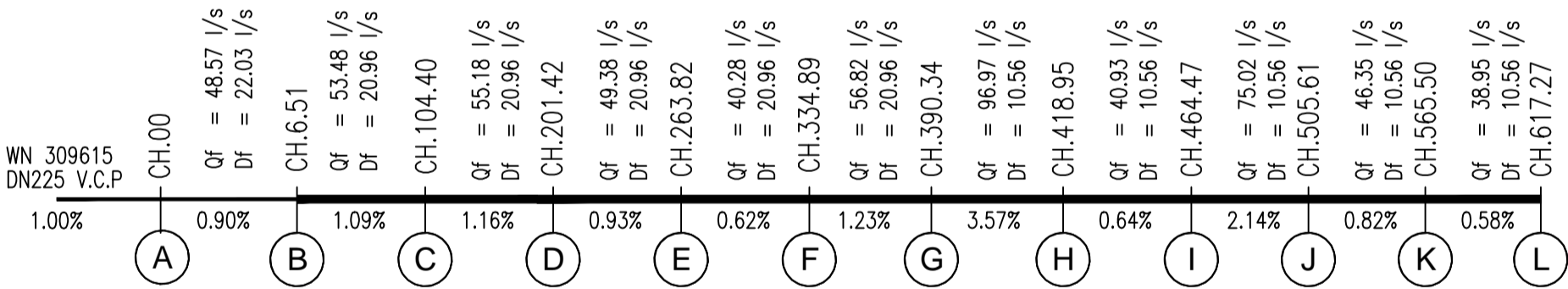
ALL MANHOLES DTC-2203 UNLESS OTHERWISE SHOWN

WORK AS CONSTRUCTED CERTIFICATION		<div style="display: flex; justify-content: space-between;"> <div> Sydney WATER </div> <div> SYDNEY WATER CORPORATION </div> </div>	
DEVELOPER	LEGPRO PTY LTD	<div style="border: 1px solid black; padding: 5px;"> Case No. 162195WW </div>	<div style="border: 1px solid black; padding: 5px;"> SHT 6 OF 7 SHTS. </div>
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CONSTRUCTOR	FLUID SERVICES PTY LTD		
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DESIGNER	QALCHEK PTY LTD	SYDNEY WATER CORPORATION	
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SECTION	CHAINAGE	TOTAL AREA	TOTAL Grav	TOTAL Grav + Pump	PIPE SIZE (DN)	PIPE SIZE (ID)	PIPE GRADE	DESIGN FLOW (DF)	Qf (Capacity)	Actual
	m	Ha	EP	EP	mm	mm	%	L/s	L/s	PDWF
A-B	00-6.51	26.83	1508	1508	225	235	0.9	22.03	48.57	7.34
B-C	6.51-104.40	21.72	1405	1405	225	235	1.09	20.96	53.48	6.99
C-D	104.40-201.42	21.72	1405	1405	225	235	1.16	20.96	55.18	6.99
D-E	201.42-263.82	21.72	1405	1405	225	235	0.93	20.96	49.38	6.99
E-F	263.82-334.89	21.72	1405	1405	225	235	0.62	20.96	40.28	6.99
F-G	334.89-390.34	21.72	1405	1405	225	235	1.23	20.96	56.82	6.99
G-H	390.34-418.95	6.4	528	528	225	235	3.57	10.56	96.97	3.52
H-I	418.95-464.47	6.4	528	528	225	235	0.64	10.56	40.93	3.52
I-J	464.47-505.61	6.4	528	528	225	235	2.14	10.56	75.02	3.52
J-K	505.61-565.50	6.4	528	528	225	235	0.82	10.56	46.35	3.52
K-L	565.50-617.27	6.4	528	528	225	235	0.58	10.56	38.95	3.52

SEWER FLOW DIAGRAM



DN225 U.P.V.C.P

FLOW CHART BASED ON 150L/CAPITA/DAY CALC. FROM JAN 2016
DESIGN BASED ON LEAK TIGHT SEWER

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W.S.C	QALCHEK PTY LTD		
CONSTRUCTOR	FLUID SERVICES PTY LTD	Case No. 162195WW SHT 7 OF 7 SHTS.	
COMPLETED	29.09.17		
W.A.C. PREPARED	10.01.18	SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1	
DESIGNER	QALCHEK PTY LTD		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS			