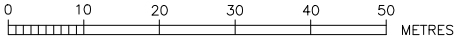


1. DESIGNER AND WSC:
ORION CONSULTING ENGINEERS PTY LTD
SUITE 4.04/12 Century Circuit, Norwest, NSW 2153
PH.: 02 8660 0035
www.theoriongroup.au

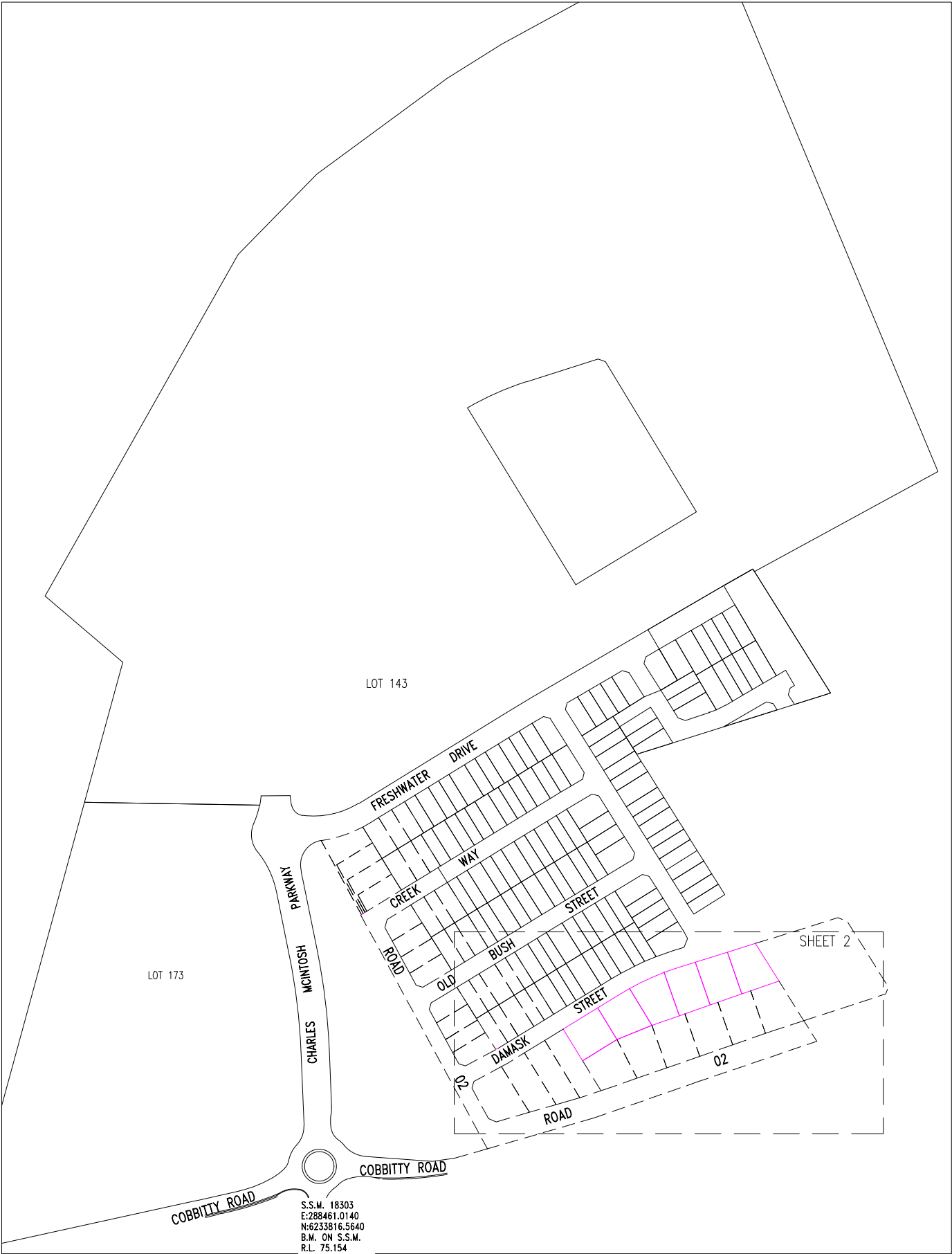
FOR: MIRVAC HOMES (NSW) PTY LTD
ADDRESS : LEVEL 28/200 GEORGE ST SYDNEY NSW 200
CONTACT : 0416 623 295
2. THE WORKS AND MATERIALS ARE IN ACCORDANCE WITH THE SYDNEY WATER TECHNICAL SPECIFICATION – CIVIL VERSION 11.0 AS WELL AS THE SEWERAGE CODE OF AUSTRALIA WSA 02–2002–2.2 SYDNEY WATER EDITION VERSION 4 (2017) INCLUDING THE SYDNEY WATER SUPPLEMENT & APPENDICES. THE CONTRACTOR MUST HAVE A COPY OF THESE ON SITE AT ALL TIMES.
3. ALL STRUCTURES CONSTRUCTED TO PROPOSED FINISHED SURFACE LEVELS. ALL LEVELS REFER TO PROPOSED FINISHED SURFACE LEVELS. CONTRACTOR LIAISED WITH ROAD AND/OR CIVIL CONTRACTOR TO VERIFY ALL LEVELS IN PARTICULAR IN OR ADJACENT TO ROADS. WSC WERE INFORMED OF ANY DISCREPANCIES.
4. ALL BUILDING LAYOUTS, FINISHED SURFACE LEVELS, STORMWATER INFORMATION, AND GENERAL CIVIL ENGINEERING DETAILS TAKEN FROM 'ORION CONSULTING ENGINEERS' ENGINEERING PLANS REVISION 'A' DATED '03.10.24'
5. THE CONTRACTOR APPLIED THE CONDITIONS OF THE SYDNEY WATER TECHNICAL SPECIFICATION – CIVIL VERSION 11.0 REGARDING BACKFILLING AND TESTING (SECTIONS C2.7 AND C2.8). A CONSTRUCTION QUALITY ASSURANCE PLAN SUBMITTED TO THE WSC AS PER THE REQUIREMENTS. THIS PLAN IS TO CLEARLY SPECIFY HE NUMBER OF TESTS REQUIRED FOR THE WORKS.
- THE NUMBER OF TESTS COMPLETED TO SATISFY THE TECHNICAL SPECIFICATION IS:

TRENCH FILL ZONE: 15 TESTS
MAINTENANCE STRUCTURE FILL ZONE: 46 TESTS

NOTE: A HIGHER LEVEL OF COMPACTION COMPLIED (FOR EXAMPLE TNSW OR COUNCIL REQUIREMENTS), THE CONTRACTOR LIAISED WITH THE SITE SUPERINTENDENT REGARDING REQUIREMENTS.
6. THE REVIEW OF ENVIRONMENTAL FACTORS WERE INTEGRAL PART OF THIS DESIGN AND WAS READ IN CONJUNCTION WITH THIS PLAN, ALL MITIGATION MEASURES IN THE REF WERE ADHERED TO.
7. PRIOR TO ANY EXCAVATION THE CONSTRUCTOR HAD A CURRENT COPY OF THE UNDERGROUND SERVICES REPORT, THIS WAS READ IN CONJUNCTION WITH THIS PLAN.
8. SERVICES SHOWN FROM 'DIAL BEFORE YOU DIG' SERVICES SEARCH WERE INDICATIVE ONLY AND IT WAS CONFIRMED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION WORKS ON SITE.
9. BUILDING OVER/ADJACENT TO SEWER – CONDITIONS MAY APPLY. REFER TO ORION CONSULTING ENGINEERS PTY LTD FOR DETAILS.
10. ALL EXCAVATION, SHORING EXCAVATION AND STABILITY OF ANY ADJACENT STRUCTURES, SERVICES OR DWELLINGS WAS THE RESPONSIBILITY OF THE CONTRACTOR. USE OF SHORING BOXES WAS NOT A FORM OF STABILITY CONTROL, NEITHER WAS SAND CEMENT BACKFILL OR CONCRETE ENCASEMENT. DILAPIDATION REPORTS WERE PROVIDED WHERE REQUIRED.
11. ALL JUNCTIONS FOR THE PCS'S LOCATED 0.7m MIN. OFF THE DOWNSTREAM PROPERTY BOUNDARY (CURRENT AND FUTURE) OR DOWNSTREAM EASEMENT BOUNDARY OR MINIMUM 1.0m MIN. OFF THE DOWNSTREAM STRUCTURE. ALL PCS's ARE CLEAR OF DRIVEWAYS, FOR LOCATION OF DRIVEWAYS CONTRACTOR LIAISED WITH CIVIL CONTRACTOR OR SITE SUPERINTENDENT FOR CONFIRMATION OF LOCATIONS.
DENOTES STANDARD PCS CONNECTION (REFER DTC-2120 ISSUE B DATE 31.07.24)
12. IT WAS THE CONTRACTORS RESPONSIBILITY TO PROVIDE THE CHAINAGES FOR THE PCS's, THE LENGTH OF THE PCS's, THE TYPE OF CONNECTION USED, THE LOCATION OF THE IO AND THE INVERT LEVEL AT THE PCP (IF APPLICABLE) TO THE WSC FOR WAC PURPOSES.
13. ALL PCS's HAVE MINIMUM STIFFNESS RATING OF SN10. JOINTING WAS SOLVENT WELDED.
14. CONTRACTOR ENSURED THAT WORKS WERE CONSTRUCTED IN ACCORDANCE WITH SYDNEY WATER'S DEEMED TO COMPLY DRAWINGS:
FOR ALL MH'S DTC-2000 (ISSUE D 31.07.24), DTC-2220 (ISSUE E 31.07.24), DTC-2202 (ISSUE F 31.07.24), DTC-2203 (ISSUE C 31.07.24), DTC-2221 (ISSUE D 31.07.24), DTC-2222 (ISSUE D 31.07.24), DTC-2223 (ISSUE C 31.07.24)
15. CONCRETE ENCASED PIPES SHOWN ACCORDINGLY:  – REFER TO SEW-1205-V
16. AREAS HATCHED THUS NOT DRAINED:– 
17. ALL MCs & MSs CONFORMED TO WSA-137-2019 VERSION 3.1, "INDUSTRY STANDARD FOR UNPLASTICISED POLYVINYL CHLORIDE (PVCU), POLYPROPYLENE (PP) AND POLYETHYLENE (PE) MAINTENANCE SHAFTS, MAINTENANCE CHAMBERS AND MAINTENANCE HOLES FOR SEWERAGE".
18. CONCRETE WORKS TO CONFORMED TO SECTION 3 TECHNICAL SPECIFICATION – CIVIL VERSION 11.0, CONCRETE TESTING UNDERTAKEN AS PER SECTION 3.12.
19. THE CONSTRUCTOR USED PRODUCTS AND MATERIALS APPROVED BY SYDNEY WATER. IF AN ALTERNATIVE WAS REQUIRED, THE CONSTRUCTOR OR ACCREDITED SUBCONSULTANT WERE TO PREPARE A DEVIATION FROM STANDARDS FOR SYDNEY WATER REVIEW & APPROVAL.
20. DUE TO EXISTING TREES ON LOT 1 DP1014583 EAST, AND THE CONSTRAIN TO TERMINATE WITH A STRUCTURE WITH IN THE LOT , CONSTRUCTOR ENSURED A STUB TERMINATED AT THE BOUNDARY FOR FUTURE CONNECTION.



WORK AS CONSTRUCTED



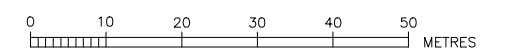
LOCALITY PLAN
(NOT TO SCALE)

MAINTENANCE STRUCTURE SCHEDULE

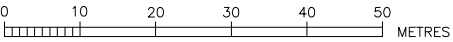
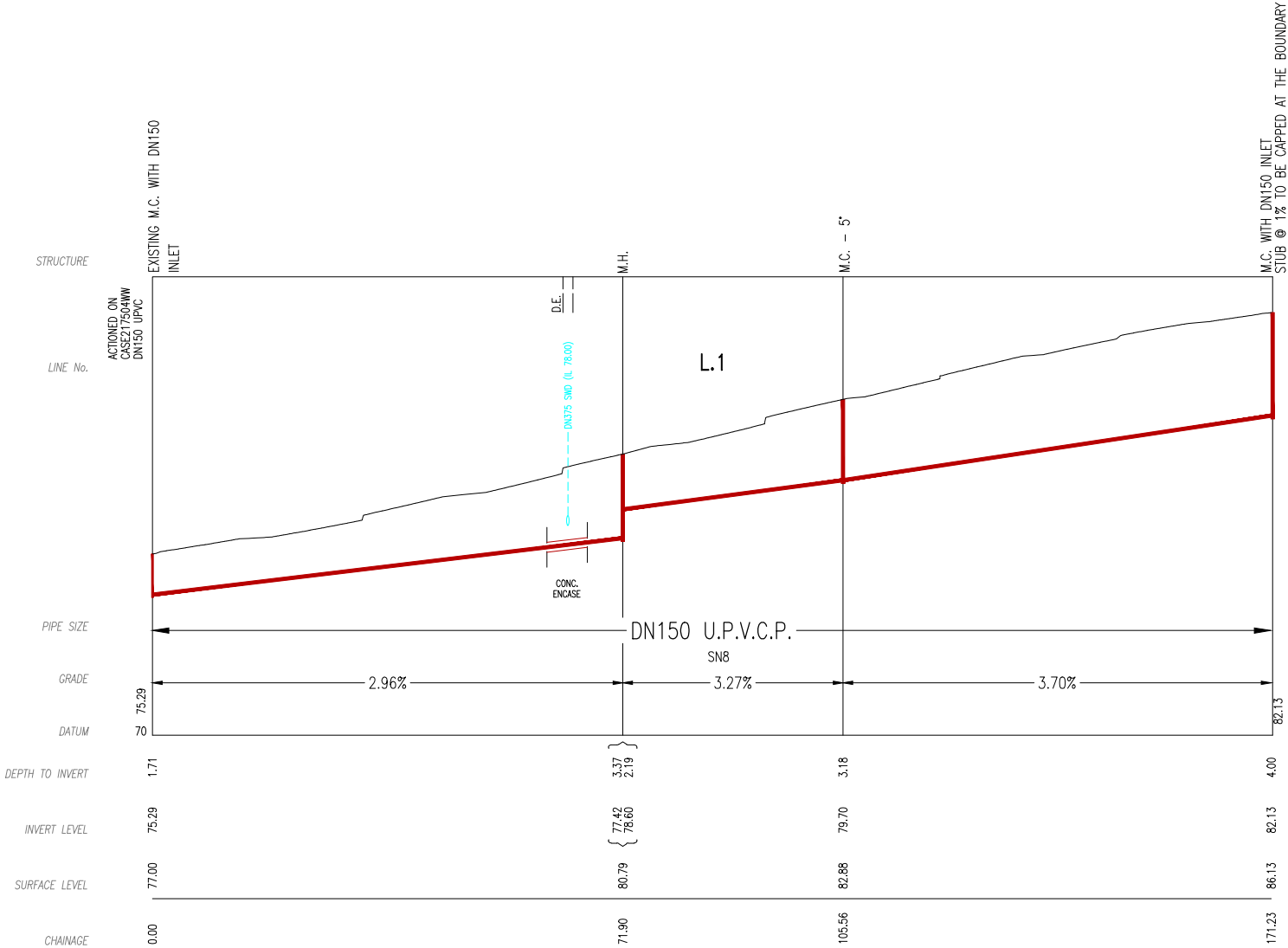
LINE	CHAINAGE	TYPE	DN RISER	CLASS OF COVER	MATERIAL	COMMENTS
1	71.90	M.H.	1050	D	CAST IN-SITU CONCRETE	DTC-2203 MANHOLE
1	105.56	M.C.	600	B	P.P.	AWASHAFT PP 600 (OR APPROVED EQUIVALENT)
1	171.23	M.C.	600	B	P.P.	AWASHAFT PP 600 (OR APPROVED EQUIVALENT)

5	WORK AS CONSTRUCTED	RA	6.06.2026
4	AMENDED LOT NUMBER	RA	7.8.2025
3	AMENDED TO ADDRESS SWC COMMENTS	RA	28.5.2025
2	ISSUE FOR APPROVAL	RA	15.5.2025
1	ISSUE FOR APPROVAL	RA	6.2.2025
No.	AMENDMENT DESCRIPTION	BY	DATE

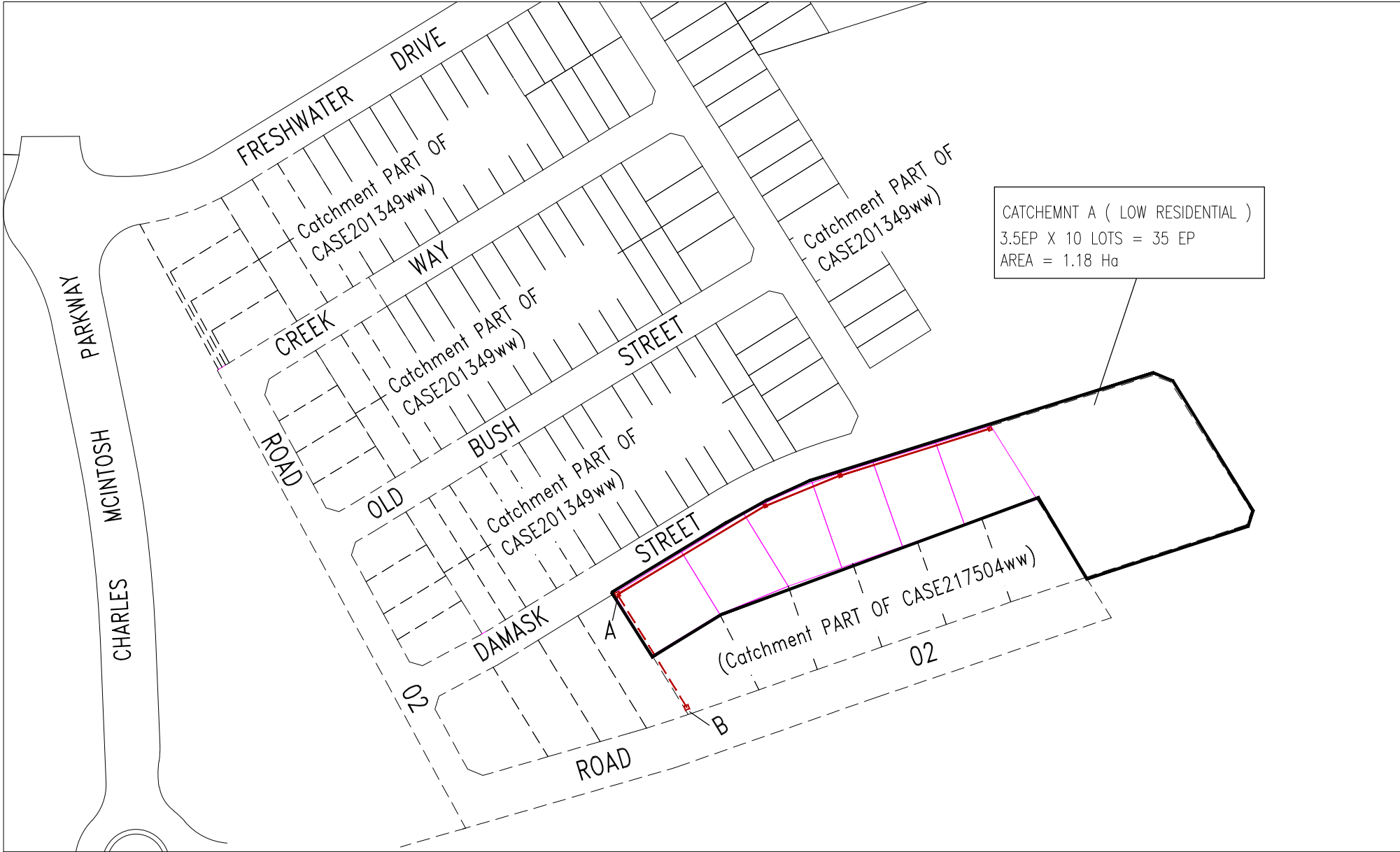
PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION	UTILITIES						WORK AS CONSTRUCTED CERTIFICATION						PIPE SCHEDULE				AUSTRALIAN HEIGHT DATUM	NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.	 SYDNEY WATER CORPORATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	TYPE	DATE	REF.	TYPE	DATE	REF.	DEVELOPER	MIRVAC HOMES PTY LTD	WATER SERVICE CO-ORDINATOR	ORION CONSULTING ENGINEERS PTY LTD	CONSTRUCTOR	GLENMORE PARK PLUMBING & DRAINAGE	COMPLETED	6.5.2026	W.A.C. PREPARED	6.6.2026				DESIGNER	Rimon Awad	I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.	SIZE DN	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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 880 906 . . . TELECOMMUNICATIONS . . . TELSTRA . . . Ph. 1800 114 918 . . . SYDNEY WATER . . . Ph. 132 092 . . . GIVING AT LEAST 48 HOURS NOTICE.	PROP STORMWATER: SWD	03.10.24	ENG.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						



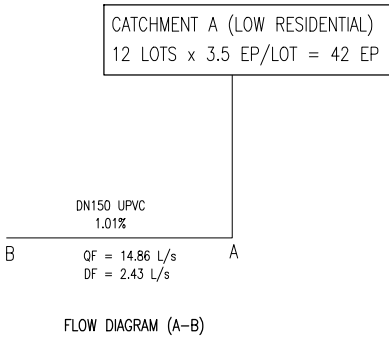
WORK AS CONSTRUCTED CERTIFICATION		 SYDNEY WATER CORPORATION	
DEVELOPER	MIRVAC HOMES PTY LTD	Case No. 208179WW SHT 2 OF 4 SHTS.	
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	GLENMORE PARK PLUMBING & DRAINAGE		
COMPLETED	6.5.2026		
W.A.C. PREPARED	6.6.2026		
DESIGNER <u>Rimon Awad</u> I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORKS ORDER AND THE DRAINAGE		SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1	



WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	MIRVAC HOMES PTY LTD	Case No. 208179WW SHT 3 OF 4 SHTS.	SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	GLENMORE PARK PLUMBING & DRAINAGE		
COMPLETED	6.5.2026		
W.A.C. PREPARED	6.6.2026		
DESIGNER	Rimon Awad		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS			



CATCHMENT PLAN
(NOT TO SCALE)



FLOW SCHEDULE

SUMMARY																					
Section	Line No	Chainage	Pipe Status	Total Area	Total Gravity	Total Grav + Pump	Pipe Material	Pipe Size	Pipe Size (ID)	Pipe Grade	Design Flow (DF)	Actual PDWF	Qf (Capacity)	Velocity @ Qf	Velocity @ PDWF	SHEAR STRESS	Grade Check	Max EP Check	Self Cleansing	Slime Control	Capacity Check
		m		Ha	EP	EP		mm	mm	%	L/s	L/s	L/s	m/s	m/s	Pa		for dia <= 300			
A-B	existing	00	existing	1.18	42	42	PVC-U PN16	150	148	1.01	2.43	0.81	14.86	0.87	0.45	1.37		RETIC 730EP MAX	Self Cleansing OK	NA - Reticulation	Capacity OK

WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER MIRVAC HOMES PTY LTD			
W.S.C. ORION CONSULTING ENGINEERS PTY LTD			
CONSTRUCTOR GLENMORE PARK PLUMBING & DRAINAGE		Case No. 208179WW	
COMPLETED 6.5.2026		SHT 4 OF 4 SHTS.	
W.A.C. PREPARED 6.6.2026			
DESIGNER Rimon Awad		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	