

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 PROPOSED WORKS AND MATERIALS IS IN ACCORDANCE WITH THE SYDNEY WATER TECHNICAL SPECIFICATION – CIVIL VERSION 10.0 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 ARE 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 WAS 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 ‘1’ DATED ‘11.06.24’
5. THE CONTRACTOR APPLIED THE CONDITIONS OF THE SYDNEY WATER TECHNICAL SPECIFICATION – CIVIL VERSION 10.0 REGARDING BACKFILLING AND TESTING (SECTIONS C2.7 AND C2.8). A CONSTRUCTION QUALITY ASSURANCE WAS SUBMITTED TO THE WSC AS PER THE REQUIREMENTS.
- THIS PLAN IS TO CLEARLY SPECIFY THE NUMBER OF TESTS REQUIRED FOR THE WORKS.
- NOTE: A HIGHER LEVEL OF COMPACTION COMPLIED WITH (FOR EXAMPLE IN TNSW ROADS, ETC), THE CONTRACTOR LIAISED WITH THE CIVIL CONTRACTOR OR SITE SUPERINTENDENT REGARDING REQUIREMENTS.

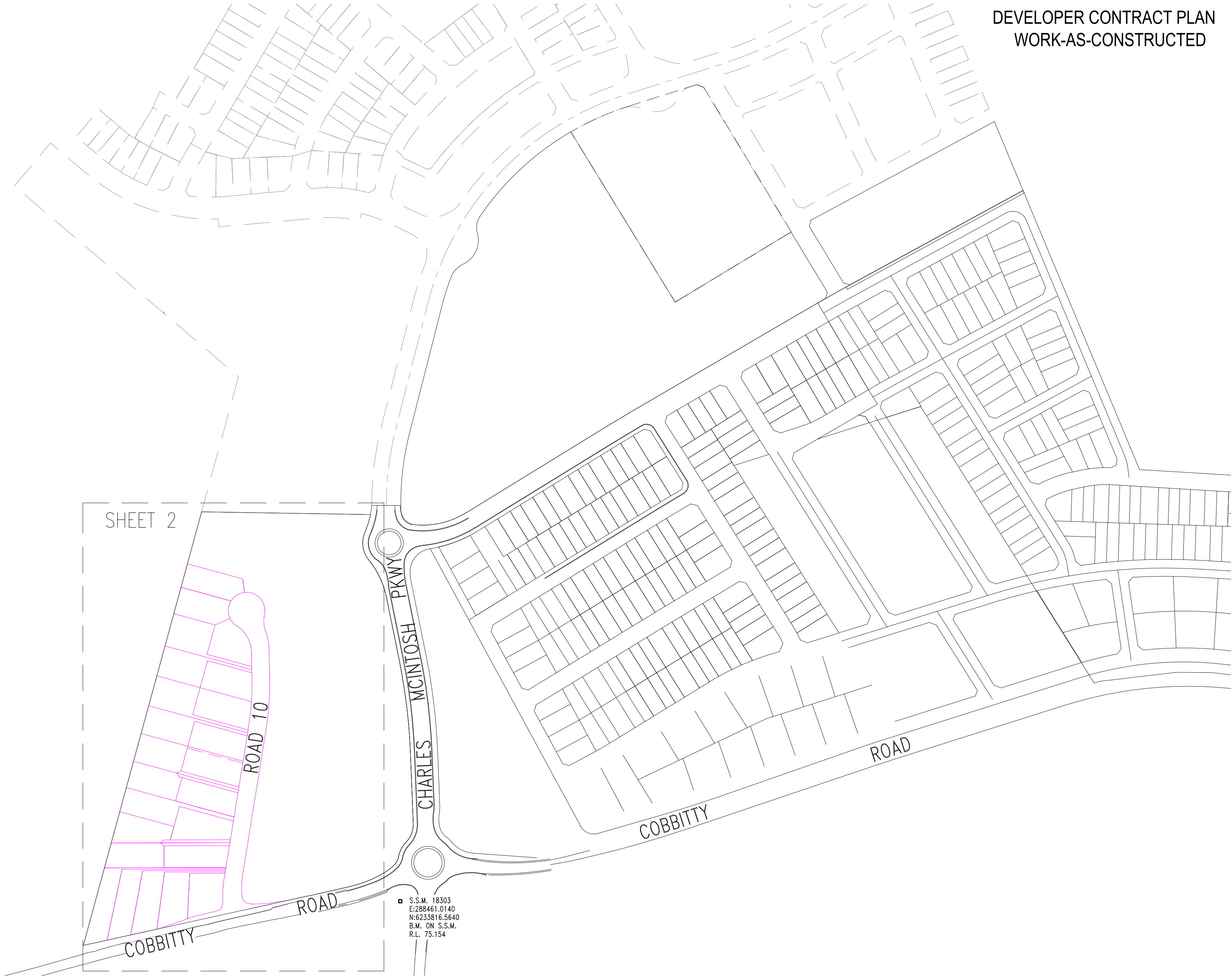
6. ALL LEVELS ELECTRONICALLY GENERATED. NO LEVEL BOOK AVAILABLE.
7. THE REVIEW OF ENVIRONMENTAL FACTORS IS AN INTEGRAL PART OF THIS DESIGN AND WAS READ IN CONJUNCTION WITH THIS PLAN, ALL MITIGATION MEASURES IN THE REF WAS ADHERED TO.
8. PRIOR TO ANY EXCAVATION THE CONSTRUCTOR HAD A CURRENT COPY OF THE UNDERGROUND SERVICES REPORT, THIS WAS READ IN CONJUNCTION WITH THIS PLAN.
9. SERVICES SHOWN FROM ‘DIAL BEFORE YOU DIG’ SERVICES SEARCH WERE INDICATIVE ONLY AND WAS BE CONFIRMED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION WORKS ON SITE.
10. BUILDING OVER/ADJACENT TO SEWER – CONDITIONS MAY APPLY. REFER TO ORION CONSULTING ENGINEERS PTY LTD FOR DETAILS.
11. 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 PROVIDED WHERE REQUIRED.
12. 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 A DATE 18.03.15)
13. 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 POP (IF APPLICABLE) TO THE WSC FOR WAC PURPOSES.
14. THE TOTAL LENGTH OF THE DN100 PCS’S EXCLUDING RISERS IS APPROXIMATELY 24.0m. PCS’S HAVE A MINIMUM STIFFNESS RATING OF SN10. JOINTING WERE SOLVENT WELDED.
15. CONTRACTOR ENSURED THAT WORKS ARE 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 F 18.03.15), DTC–2201 (ISSUE E 18.03.15), DTC–2202 (ISSUE E 18.03.15), DTC–2203 (ISSUE B 18.03.15), DTC–2221 (ISSUE B 01.03.13), DTC–2222 (ISSUE C 18.03.15), DTC–2223 (ISSUE B 18.03.15)
16. PIPES WERE CONCRETE ENCASED AS SHOWN :  – REFER TO SEW–1205–V
17. AREAS HATCHED THUS NOT DRAINED:– 

MAINTENANCE STRUCTURE SCHEDULE						
LINE	CHAINAGE	TYPE	DN RISER	CLASS OF COVER	MATERIAL	COMMENTS
1	75.41	M.H.	DN1050	D	CONCRETE	DTC–2203
1	99.86	M.H.	DN1050	D	CONCRETE	DTC–2203
1	129.46	M.H.	DN1050	D	CONCRETE	DTC–2203
1	181.58	M.S.	DN300	D	P.V.C.	
1	264.90	M.C.	DN600	D	P.P.	AWASHAFT PP 600
1	353.67	T.M.S.	DN300	D	P.V.C.	
2	33.54	M.C.	DN600	D	P.P.	AWASHAFT PP 600
2	57.50	M.C.	DN600	D	P.P.	AWASHAFT PP 600
2	69.47	M.C.	DN600	D	P.P.	AWASHAFT PP 600
2	85.51	M.C.	DN600	D	P.P.	AWASHAFT PP 600

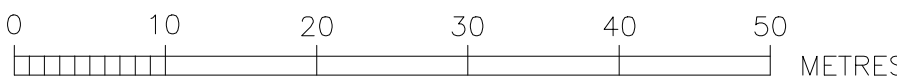
5	WORK AS CONSTRUCTED AS PER SWC	RA	8.08.25
4	WORK AS CONSTRUCTED	RA	1.07.25
3	BOUNDARY TRAPS ADDED TO BE REQUIRED	RA	06.03.25
2	ADDRESSED SWC COMMENTS	RA	08.11.24
1	ISSUE FOR APPROVAL	RA	09.09.24
No.	AMENDMENT DESCRIPTION	BY	DATE

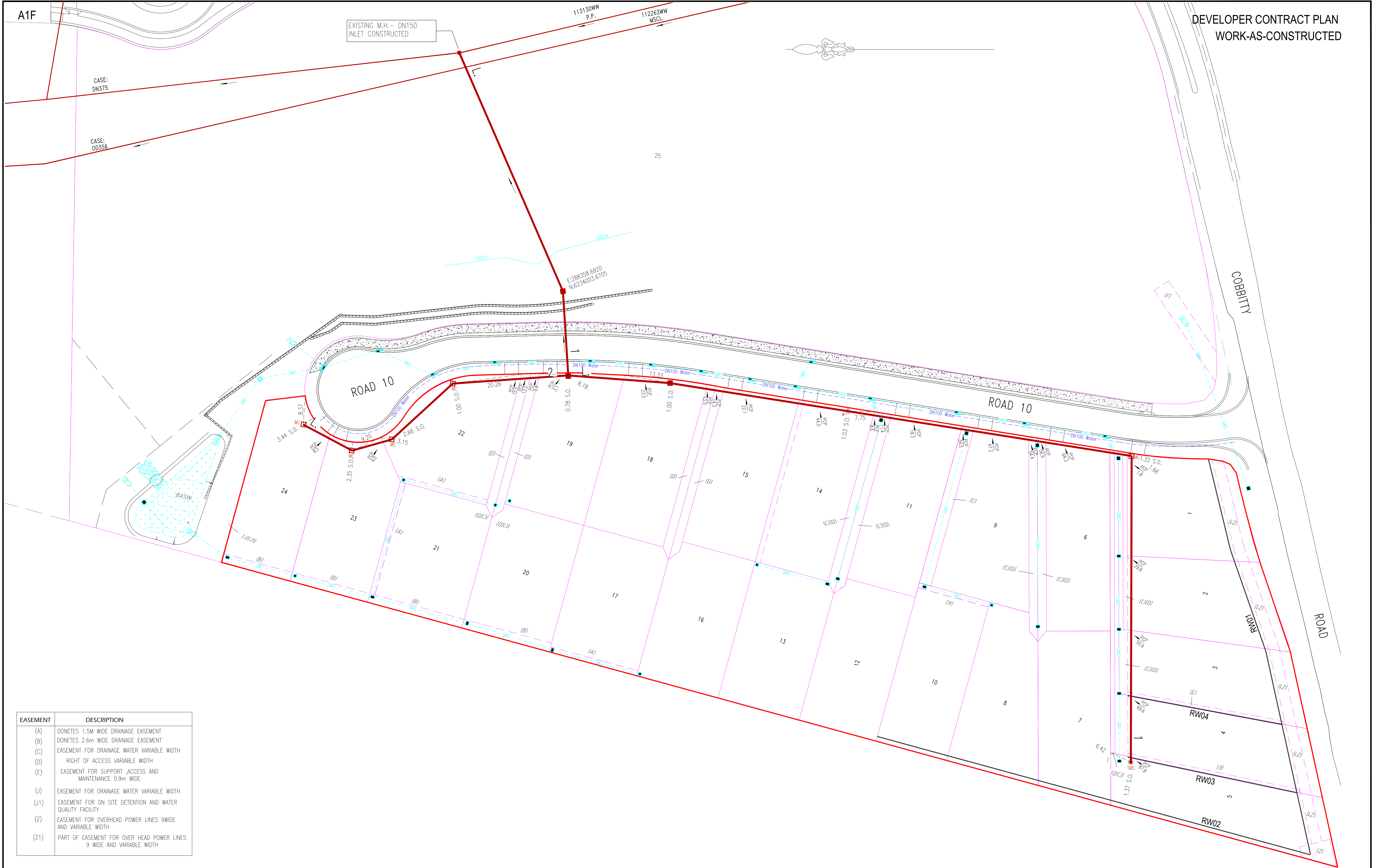
PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION	TYPE		DATE	REF.	TYPE	DATE	REF.	WORK AS CONSTRUCTED CERTIFICATION				PIPE SCHEDULE				MGA 2020 AUSTRALIAN HEIGHT DATUM		NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.	SYDNEY WATER CORPORATION		
	PROP WATER: DN100 WATER — — DN100 WATER		02.07.24	DESIGN				DEVELOPER	MIRVAC HOMES PTY LTD			SIZE DN	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES			SCALES PLAN 1:500 SECTION { HOR 1:500 VERT. 1:125 CROSS SECTIONS NATURAL LENGTHS, DEPTHS & LEVELS ARE IN METRES.	Case No. 214758WWW	WEST CAMDEN SEWERAGE DRAINS TO WEST CAMDEN STP VIA SP1161 AND SP0673
	PROP STORMWATER: SWD — — — SWD		11.06.24	ENG.					WATER SERVICE CO-ORDINATOR	ORION CONSULTING ENGINEERS PTY LTD	150	U.P.V.C.	SN8	439.18	RRJ						
								CONSTRUCTOR	GLENMORE PARK PLUMBING & DRAINAGE	35500	SCL	6.5 PL	20.0	BORE ENCASING PIPE							
								COMPLETED													
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.								DESIGNER	Rimon Awad												
								I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.				DESIGN HEAD		m		BOUNDARY TRAPS REQUIRED.					

DEVELOPER CONTRACT PLAN
WORK-AS-CONSTRUCTED

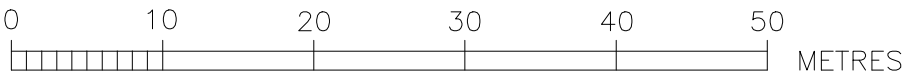


LOCALITY PLAN
(NOT TO SCALE)

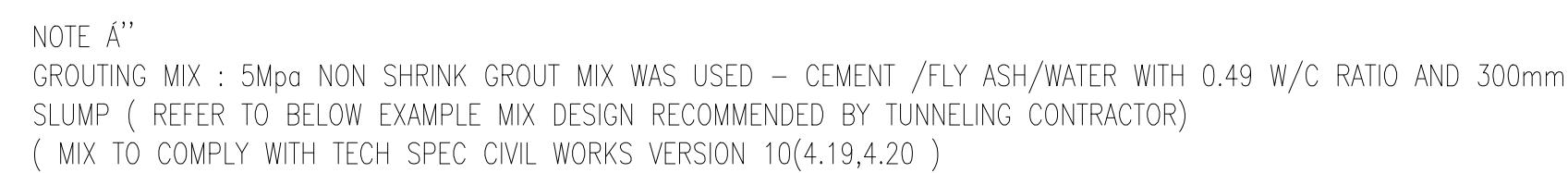
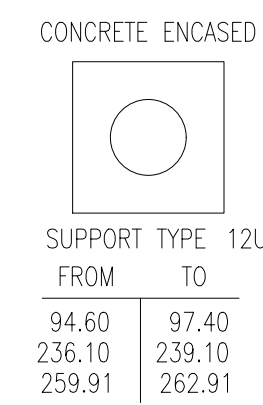
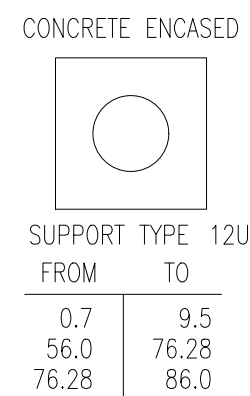




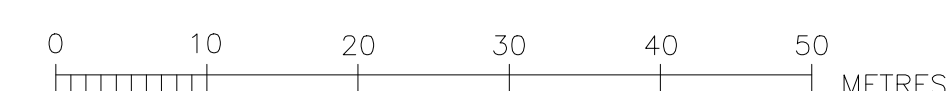
EASEMENT	DESCRIPTION
(A)	DONETES 1.5M WIDE DRAINAGE EASEMENT
(B)	DONETES 2.6m WIDE DRAINAGE EASEMENT
(C)	EASEMENT FOR DRAINAGE WATER VARIABLE WIDTH
(D)	RIGHT OF ACCESS VARIABLE WIDTH
(E)	EASEMENT FOR SUPPORT ACCESS AND MAINTENANCE 0.9m WIDE
(J)	EASEMENT FOR DRAINAGE WATER VARIABLE WIDTH
(J1)	EASEMENT FOR ON SITE DETENTION AND WATER QUALITY FACILITY
(Z)	EASEMENT FOR OVERHEAD POWER LINES 9WIDE AND VARIABLE WIDTH
(Z1)	PART OF EASEMENT FOR OVER HEAD POWER LINES 9 WIDE AND VARIABLE WIDTH



WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	MRIVAC HOMES PTY LTD	Case No. 214758WW SHT 2 OF 3 SHTS.	
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	GLENMORE PARK PLUMBING & DRAINAGE		
COMPLETED	01/4/2025		
W.A.C. PREPARED	01/07/2025		
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	



Compressive Strength : MPa at 28 Days	w/cm Ratio :	0.49			
Aggregate size :	Slump	300mm			
Usage :	Slump with SuperP :				
Placement :	Air % :	0.0 ± 0.0 %			
Mix analysis					
<u>Product Code - Description - Type - Supplier Name - Supplier City</u>	<u>F.M.</u>	<u>Gsb</u>	<u>Abs.</u>	<u>Qty SSD</u>	<u>Volume</u>
Cement & Mineral additive					
C-GP-GLQ - 2-SL CEMENT - Gladstone SL - - Cement Australia, Kandos	3.150			120 kg	0.038 m³
FASH-MTP - 2-Flyash - Fly Ash - -	2.150			1050 kg	0.488 m³
Water					
Water - 4-WATER - Mains Water - -	1.000	578 kg (578.1 L)			0.578 m³
Air					0.000 m³
Admixture & Other constituent					
P300RI - 3-Pozzolith 300 Ri - Retarder - - BASF, Sydney	1.000			1800 ml/m³	0.002 m³ / 0.002 m³
GLEN27 - 3-GLENIUM 27 - High Range Water Reducer - - BASF, Sydney	1.000			1750 ml/m³	0.002 m³ / 0.002 m³



WORK AS CONSTRUCTED CERTIFICATION		 SYDNEY WATER CORPORATION	
DEVELOPER	MIRIVAC HOMES PTY LTD	Case No. 214758WW	SHT 3 OF 3 SHTS.
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	GLENMORE PARK PLUMBING & DRAINAGE		
COMPLETED	01/4/2025		
W.A.C. PREPARED	01/07/2025		
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	