

WATAGAN PARK PROPOSED SUBDIVISION PRECINCT NORTH E - STAGE 5 LOT 89, D.P.1303421 - 35 MCCULLOUGH STREET, COORANBONG DA/918/2023



LOCALITY SKETCH
NOT TO SCALE

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WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed: Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT						
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.		Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohanson.com.au www.adwjohanson.com.au ABN 62 129 445 398	JOHNSON PROPERTY GROUP	WATAGAN PARK PRECINCT NORTH E - STAGE 5 LOT 89, D.P.1303421 35 MCCULLOUGH STREET, COORANBONG DA/918/2023	PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION				
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.							PLAN TITLE	COVER SHEET, LOCALITY PLAN & DRAWING INDEX		
C	20.06.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.										
D	03.07.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.										
E	08.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.										
O	29.09.2025	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.										
1	12.03.2026		T.A.	M.K.	M.K.	C.H.										
DESIGN FILE N:\239078\239078(8)\DWG\Water & Sewer\WAT\Stage 5\X-239078(8)5-WAT-DESIGN.dwg								ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE		PROJECT No. 239078(8)5 - DISCIPLINE WAT - NUMBER 001 - REV. 1						

239078(8)5-WAT-001

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

239078(8)5-WAT-002

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.

PRESSURE SEWER NOTES:

- 1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSA, PRESSURE SEWERAGE CODE OF AUSTRALIA - WSA 07-2007 VERSION 1.1 AND POLYETHYLENE PIPELINE CODE WSA 01-2004.
2. ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS. BUTT FUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE GEORG FISCHER PIPING SYSTEMS BUTT FUSION PRODUCT RANGE. ELECTROFUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE PLASSON "POLYETHYLENE PIPING SYSTEMS" PRODUCT RANGE.
3. ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY CONSTRUCTED STRUCTURES FOR PROPOSED SERVICES, SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.
4. PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 02-2007 AND ALTOGETHER SUPPLEMENTARY MANUAL TO WSA.
5. ALL POLYETHYLENE MAINS <= DN200 SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ALL POLYETHYLENE MAINS >= DN200 SHALL BE JOINED USING BUTTWELD JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
6. MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS. INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED. 600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS. MINIMUM PIPE COVER SHALL BE 800mm IN FOOTWAYS AND 1000mm IN ROADWAYS. MAXIMUM PIPE COVER SHALL BE 1500mm. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 1500mm BUT LESS THAN 2500mm THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND. THE CONTRACTOR SHALL ENSURE THAT ALL PRESSURE SEWER AND RECYCLED WATER MAINS HAVE SUFFICIENT VERTICAL SEPARATION AS PER THE CLEARANCE TABLE ADJACENT.
7. MAINS CROSSING UNDER EXISTING DRIVEWAYS (SEALED, PAVED OR DECORATIVE) SHALL BE CONDUCTED BY UNDER BORING ONLY UNLESS PERMISSION IS GRANTED BY THE AFFECTED PROPERTY OWNER.
8. MAINS WITHIN 2.0m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER REPRESENTATIVE).
9. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSA PRODUCT SPECIFICATION WSA-PS350 AND WSA-PS351.
10. ALL BENDS SHALL BE ELECTROFUSION OR BUTT WELD SWEEP BENDS. FABRICATED BENDS SHALL NOT BE USED IN LIEU. KNUCKLE ELBOWS ARE NOT PERMITTED.
11. MINIMUM BENDING RADIUS FOR PN16 PE100 (SDR11) SHALL BE 20 x DN. (i.e. DN400 : R8.0m, DN250 : R5.0m, DN200 : R4.0m, DN160 : R3.2m, DN125 : R2.5m, DN90 : R1.8m, DN75 : R1.5m, DN63 : R1.3m, DN50 : R1.0m, DN40 : R0.8m).
12. ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).
13. FLUSHING PITS SHALL CONFORM WITH ALTOGETHER STANDARD DRAWINGS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION. SMALL MAINS (<= DN110) http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017A-FS.pdf LARGE MAINS (>= DN110) http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017B-FS.pdf
14. LOCALISED DEEPENING OF MAINS MAY BE REQUIRED TO FACILITATE AIR VALVE INSTALLATION. THE CONTRACTOR SHALL ENSURE THAT THE AIR VALVE OFFTAKE IS LOCATED AT A HIGH POINT (NATURAL OR ARTIFICIAL) IN THE MAIN (i.e. MAIN SHALL GRADE DOWNWARDS EITHER SIDE OF THE AIR VALVE).
15. DETECTABLE MARKING TAPE SHALL BE LAID ON TOP OF THE PIPE EMBEDMENT MATERIAL BEFORE BACKFILLING AND CONNECTED TO SURFACE FITTINGS.
16. ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
17. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPE SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
18. ALL VALVES SHALL BE RESILIENT SEALED SLUICE VALVES (ANTI-CLOCKWISE CLOSING), SHALL BE RESTRAINED IN ACCORDANCE WITH WAT-1207 AND SHALL COMPLY WITH ALTOGETHER STANDARD DRAWING PSS-1015-FS.
19. ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 07-2007 VERSION 1.1.
20. FOR LOTS WITH TANKS IN THE REAR. 1 x $\phi 25\text{mm}$ INSTRUMENTATION CONDUIT (ORANGE) AND 1 x $\phi 25\text{mm}$ ELECTRICAL CONDUIT (ORANGE) (WITH DRAW WIRES) SHALL BE INSTALLED FROM THE COLLECTION TANK TO WATER METERS. THE CONDUITS SHALL BE LAID IN A COMMON TRENCH WITH THE SEWERAGE AND MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 400mm. (REFER TO ALTOGETHER STANDARD DRAWINGS FOR SETOUT DIMENSIONS).
21. THE CONSTRUCTOR SHALL PROVIDE ALTOGETHER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING INFRASTRUCTURE. CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY THE ALTOGETHER REPRESENTATIVE.
22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.
23. PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.
25. THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 213.4) ARE: TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING. NON-TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/900mm OF FILL AND EACH 100 LINEAL METRES OF PIPE.
26. BOUNDARY KITS (COMPLETE) SHALL BE NOV SUPPLIED (NOV PSS-BK4). e one COLLECTION TANK (ESD 20-0032/ESD 20-0033) SHALL BE INSTALLED WITH BOUNDARY KIT (REFER ALTOGETHER STANDARD DRAWINGS PSS-1112-FS AND PSS-1113-FS). PUMP TO BE INSTALLED BY OTHERS.
27. ALL MAINS (UP TO THE BOUNDARY KIT) SHALL BE PRESSURE TESTED TO 1600 kPa. ALL LINES FROM THE WASTEWATER COLLECTION TANK TO THE MANUAL ISOLATION VALVE WITHIN THE BOUNDARY KIT TO BE PRESSURE TESTED TO 1000kPa.
28. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
29. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.
30. ROPE OFF ALL PRESSURE SEWER UNITS AND FLUSHING POINTS TO LIMIT DAMAGE DURING CONSTRUCTION.
31. PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
32. WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER O.A. SUBMISSION CHECKLIST.
33. ELECTRICAL GLAND CONNECTION SUPPLIED LOOSE WITH EACH SEWER POT IS TO BE INSTALLED BY THE CIVIL CONTRACTOR AND ELECTRICAL CONDUIT ATTACHED TO THE TANK FOR FUTURE ELECTRICAL WIRING.

POTABLE WATER AND RECYCLED WATER NOTES:

- 1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSA AND WSA 03-2011-3.1 (SYDNEY WATER EDITION 2014).
2. POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.
3. ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW, SHALL CONFORM TO THE APPROPRIATE CURRENT AUSTRALIAN STANDARDS AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS.
4. ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY CONSTRUCTED STRUCTURES FOR PROPOSED SERVICES, SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.
5. THE CONSTRUCTOR SHALL VERIFY WITH THE SITE SUPERVISOR THE POSITION AND LEVEL OF ALL EXISTING AND PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.
6. MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS. INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED. 600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS. MINIMUM PIPE COVER SHALL BE 600mm IN FOOTWAYS (TYPE B EMBEDMENT: WAT-1202-VI) AND 800mm IN ROADWAYS (TYPE L EMBEDMENT: WAT-1204-VI). MAXIMUM PIPE COVER SHALL BE 1500mm. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 1500mm BUT LESS THAN 2500mm THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND. THE CONTRACTOR SHALL ENSURE THAT ALL RECYCLED WATER MAINS AND PRESSURE SEWER MAINS HAVE SUFFICIENT VERTICAL SEPARATION AS PER THE CLEARANCE TABLE ADJACENT.
7. ALL POTABLE WATERMANS TO BE BLUE PVC-M (PN16). ALL RECYCLED WATERMANS SHALL BE LILAC PVC-M (PN16). DIFFERENTIATION OF POTABLE AND RECYCLED WATER SYSTEMS SHALL BE AS PER TABLE 4.1 WSA03-2011 WITH BOTH SERVICES BEING CLASSIFIED AS WATER MAINS. RECYCLED WATER MAINS SHALL ALWAYS BE LOWER THAN POTABLE WATER MAINS. 150mm VERTICAL CLEARANCE BETWEEN POTABLE WATER AND RECYCLED WATER MAINS SHALL BE PROVIDED.
8. MAXIMUM JOINT DEFLECTIONS TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
9. LOCALLY LOWER PIPEWORK IN VICINITY OF STOP VALVES TO ENSURE SUFFICIENT COVER IS MAINTAINED OVER VALVES. LOWERING OF PIPEWORK SHALL BE ACHIEVED OVER A NUMBER OF PIPE LENGTHS EITHER SIDE OF VALVES TO ELIMINATE ANY SHARP DEFLECTIONS.
10. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSA PRODUCT SPECIFICATION PS-350, 368 AND 369. GEOTECHNICAL CONDITIONS SHOULD BE ASSESSED DURING CONSTRUCTION BY THE CONTRACTOR IN ASSOCIATION WITH THE ALTOGETHER REPRESENTATIVE TO DETERMINE THE NEED TO MODIFY EMBEDMENT/TRENCH FILL TYPE AND THE NEED FOR TRENCH DRAINAGE/BULKHEADS.
11. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
12. HYDRANTS, STOP VALVES AND ALL OTHER FITTINGS TO BE THE SAME SIZE AS THE THROUGH WATER MAIN AND ANTI CLOCKWISE CLOSING.
13. HYDRANTS MUST NOT BE INSTALLED IN POTENTIAL DRIVEWAY LOCATIONS. HYDRANTS AND WATER SERVICES SHALL BE NOMINALLY AT LEAST 5.0m FROM EACH BOUNDARY OR ON BOUNDARIES. WHERE POSSIBLE, FITTINGS SHALL BE LOCATED BEHIND KERB INLET PITS.
14. THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH WAT-1205.
15. ALL PROPERTY (MAIN TO METER) SERVICE CONNECTIONS SHALL BE CONSTRUCTED STRICTLY IN ACCORDANCE WITH ALTOGETHER REQUIREMENTS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION. SINGLE SERVICE: http://information.altogethergroup.com.au/governance/Land_Housing/WAT-1854-FS.pdf DUAL SERVICE: http://information.altogethergroup.com.au/governance/Land_Housing/WAT-1855-FS.pdf
16. PROPERTY SERVICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE ALTOGETHER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
17. SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
18. ALL MAINS SHALL BE PRESSURE TESTED TO 1500kPa IN ACCORDANCE WITH CLAUSE 19.4 OF WSA03-2011 (SYDNEY WATER EDITION 2014).
19. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
20. WATER QUALITY TESTING SHALL BE IN ACCORDANCE WITH WSA 03-2011-3.1(SYDNEY WATER EDITION-2014, CLAUSE 19.7).
21. THE CONSTRUCTOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING INFRASTRUCTURE. CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY THE ALTOGETHER REPRESENTATIVE.
22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.
23. PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.
25. MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY WSA03-2011 (SYDNEY WATER EDITION 2014) (CLAUSE 19.3.5) : TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING. NON-TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/900MM OF FILL AND EACH 100 LINEAL METERS OF PIPE. PROPERTY SERVICES TEST 1 OF EVERY 5 PROPERTY SERVICE TRENCHES. TESTING SHALL BE IN ACCORDANCE WITH TABLE 16.1 AND 17.1 OF THE WATER SUPPLY CODE OF AUSTRALIA.
26. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.
27. PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
28. WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER O.A. SUBMISSION CHECKLIST.
29. WHERE THE PIPE GRADE EXCEEDS 5% , TRENCHSTOPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WAT-1209 AND WAT-1210 AT THE SPACING OF 100/GRADE%. WHERE PIPE GRADES EXCEED 15%, CONCRETE BULKHEADS WILL BE CONSTRUCTED AT SPACING AS PER TABLE 7.5 OF WSA03-2001 SYDNEY WATER EDITION 2014.
ALTOGETHER STANDARD DRAWINGS CAN BE FOUND AT THE FOLLOWING ADDRESS: https://askus.altogethergroup.com.au/hc/en-us/articles/900004827263-Standard-drawings-for-land-developers-

GENERAL NOTES:

- 1. THIS DRAWING SET SHALL BE READ IN CONJUNCTION WITH CESSNOCK CITY COUNCIL STANDARDS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSA AND OTHER ASSOCIATED DRAWINGS AND TECHNICAL SPECIFICATIONS.
2. THE CONTRACTOR SHALL LOCATE AND IDENTIFY ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT OF WORK AND SHALL REPAIR ANY DAMAGE CAUSED TO SUCH SERVICES DURING THE COURSE OF WORKS. ANY SERVICE LOCATIONS SHOWN IN THIS DRAWING SET ARE INDICATIVE ONLY.
3. MAKE SMOOTH TRANSITION TO EXISTING WORKS (i.e. ROAD PAVEMENT AND FOOTPATHS) TO P.C.A. AND SUPERINTENDENT'S REQUIREMENTS.
4. SUITABLE PROTECTION TO EXISTING ROAD PAVEMENT, KERB AND GUTTER, FOOTPATHS AND ANY EXISTING FEATURES SHALL BE PROVIDED UNTIL THE CONSTRUCTION WORKS ARE COMPLETED.

CLEARANCES BETWEEN PIPELINES AND UNDERGROUND SERVICES

Table with 4 columns: UTILITY (EXISTING OR PROPOSED SERVICE), MINIMUM HORIZONTAL CLEARANCE (mm) (NEW MAIN SIZE), MINIMUM VERTICAL CLEARANCE (mm). Rows include WATER MAINS - DN375, GAS MAINS, TELECOMMUNICATION CONDUITS AND CABLES, ELECTRICITY CONDUITS AND CONDUITS, STORMWATER DRAINS, SEWERS (GRAVITY), SEWERS (PRESSURE AND VACUUM), KERBS.

NOTES:

- 1. VERTICAL CLEARANCES APPLY WHERE PIPELINES CROSS OTHER UTILITY SERVICES, EXCEPT IN THE CASE OF WATER/SEWER MAINS WHEN A VERTICAL SEPARATION SHALL ALWAYS BE MAINTAINED, EVEN WHEN THE PRESSURE SEWER AND WATER MAIN ARE PARALLEL. THE PRESSURE SEWER SHOULD ALWAYS BE LOCATED BELOW THE WATER MAIN TO MINIMISE THE POSSIBILITY OF BACKFLOW CONTAMINATION IN THE EVENT OF A PRESSURE MAIN BREAK.
2. WATER MAINS INCLUDES MAINS SUPPLYING BOTH POTABLE AND RECYCLED WATER.
3. FOR AREAS WITH EXISTING WATER RETICULATION, CLEARANCES CAN BE FURTHER REDUCED TO 600mm WITH THE APPROVAL OF THE WATER AUTHORITY.
4. CLEARANCES CAN BE FURTHER REDUCED TO 150mm FOR DISTANCES UP TO 2.0m WHEN PASSING INSTALLATIONS SUCH AS POLES, PITS, AND SMALL STRUCTURES, PROVIDING THE STRUCTURE IS NOT DE-STABILISED IN THE PROCESS.
5. CLEARANCES FROM KERBS SHALL BE MEASURED FROM THE NEAREST POINT OF THE KERB. FOR WATER/SEWER - DN 375, CLEARANCES FROM KERBS CAN BE PROGRESSIVELY REDUCED UNTIL THE MINIMUM OF 150mm IS REACHED FOR WATER/SEWER - DN200.
6. WHERE A PARALLEL SEWER IS AT MINIMUM VERTICAL CLEARANCE LOWER THAN THE WATER MAIN (500mm), MAINTAIN A MINIMUM HORIZONTAL OF 1000mm. THIS MINIMUM CLEARANCE CAN BE PROGRESSIVELY REDUCED TO 600mm AS THE VERTICAL CLEARANCE IS INCREASED TO 750mm.
7. FOR PRESSURE SEWER LATERALS, MINIMUM VERTICAL CLEARANCES MAY BE REDUCED TO 150mm PROVIDING THERE IS NO JOINT IN THE LATERAL WITHIN 500mm OF EITHER SIDE OF THE SERVICE BEING CROSSED.
8. AN ADDITIONAL CLEARANCE FROM HIGH VOLTAGE ELECTRICAL INSTALLATIONS SHOULD BE MAINTAINED ABOVE THE CONDUITS OR CABLES TO ALLOW FOR A PROTECTIVE BARRIER AND MARKING TO BE PROVIDED.
9. WATER MAINS SHOULD ALWAYS CROSS OVER SEWERS AND STORMWATER DRAINS. FOR CASES WHERE THERE IS NO ALTERNATIVE AND THE MAIN MUST CROSS UNDER THE SEWER, THE DESIGN SHALL NOMINATE AN APPROPRIATE PROTECTION TREATMENT JOINT-FREE IN THE VICINITY OF THE SEWER.

SHOULD THE RECOMMENDED CLEARANCES NOT BE ACHIEVED, NOTIFICATION SHALL BE CONVEYED TO THE ALTOGETHER REPRESENTATIVE IN WRITING.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed: [Signature] Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor

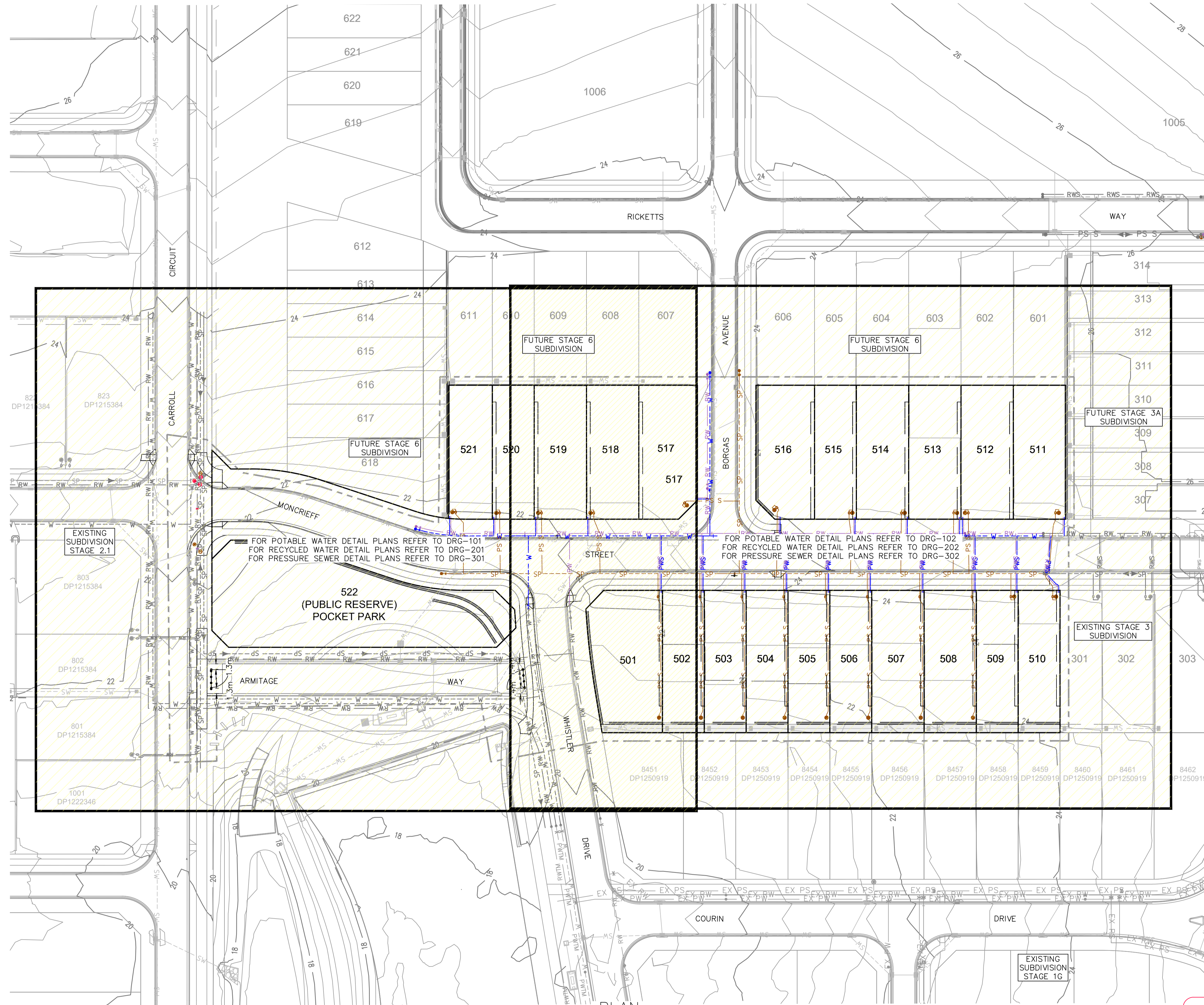
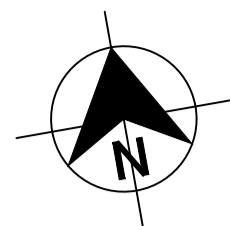


CONSTRUCTION ISSUE

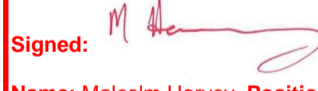
Table with 5 main columns: REV., DATE, AMENDMENT, DRAWN/CHECK/DESIGN/VERIFY/SCALES, CLIENT (Hunter Office, Johnson Property Group), PROPERTY DESCRIPTION (WATAGAN PARK, LOT 89, D.P.1303421), PROJECT (POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION), PLAN TITLE (GENERAL NOTES), SURVEYED (ADW Johnson), DATUM (GDA94 M.G.A. ZONE 56 A.H.D.), PROJECT No. (239078(8)5), DISCIPLINE (WAT), NUMBER (002), REV. (1)

239078(8)5-WAT-003

100mm AT FULL SIZE
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PLAN
SCALE 1:500

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Signed:  Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



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C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.
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1	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.

SCALE
0 10 20 A1 / A3 1:500 / 1:1000
CONTOUR INTERVAL: 0.5m

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ABN 62 129 445 398

CLIENT



JOHNSON PROPERTY GROUP

PROPERTY DESCRIPTION
WATAGAN PARK
PRECINCT NORTH E - STAGE 5
LOT 89, D.P.1303421
35 MCCULLOUGH STREET,
COORANBONG
DA/918/2023

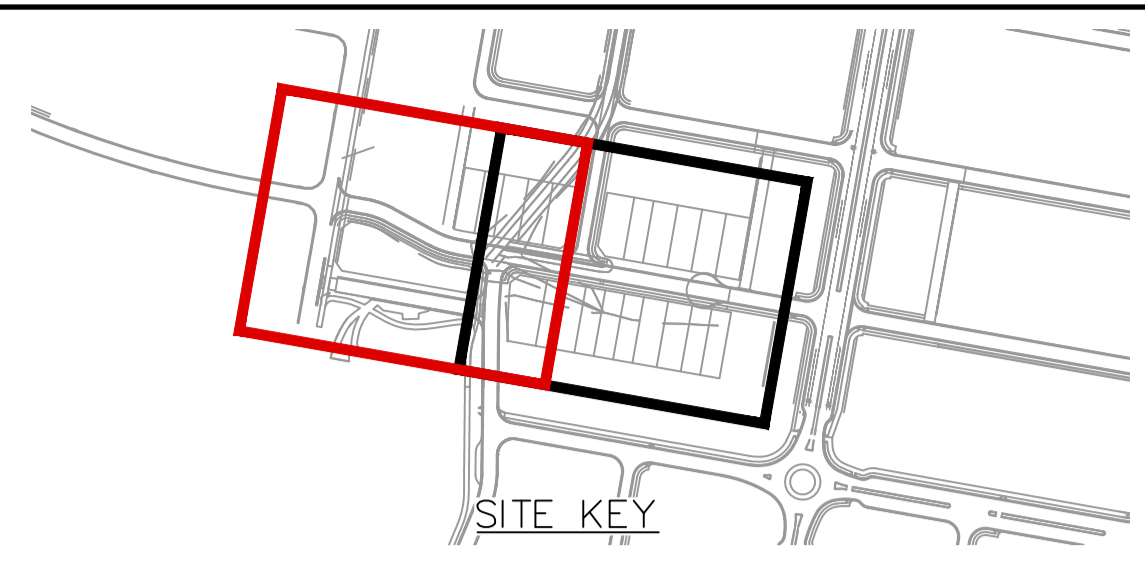
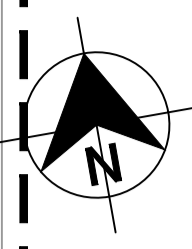
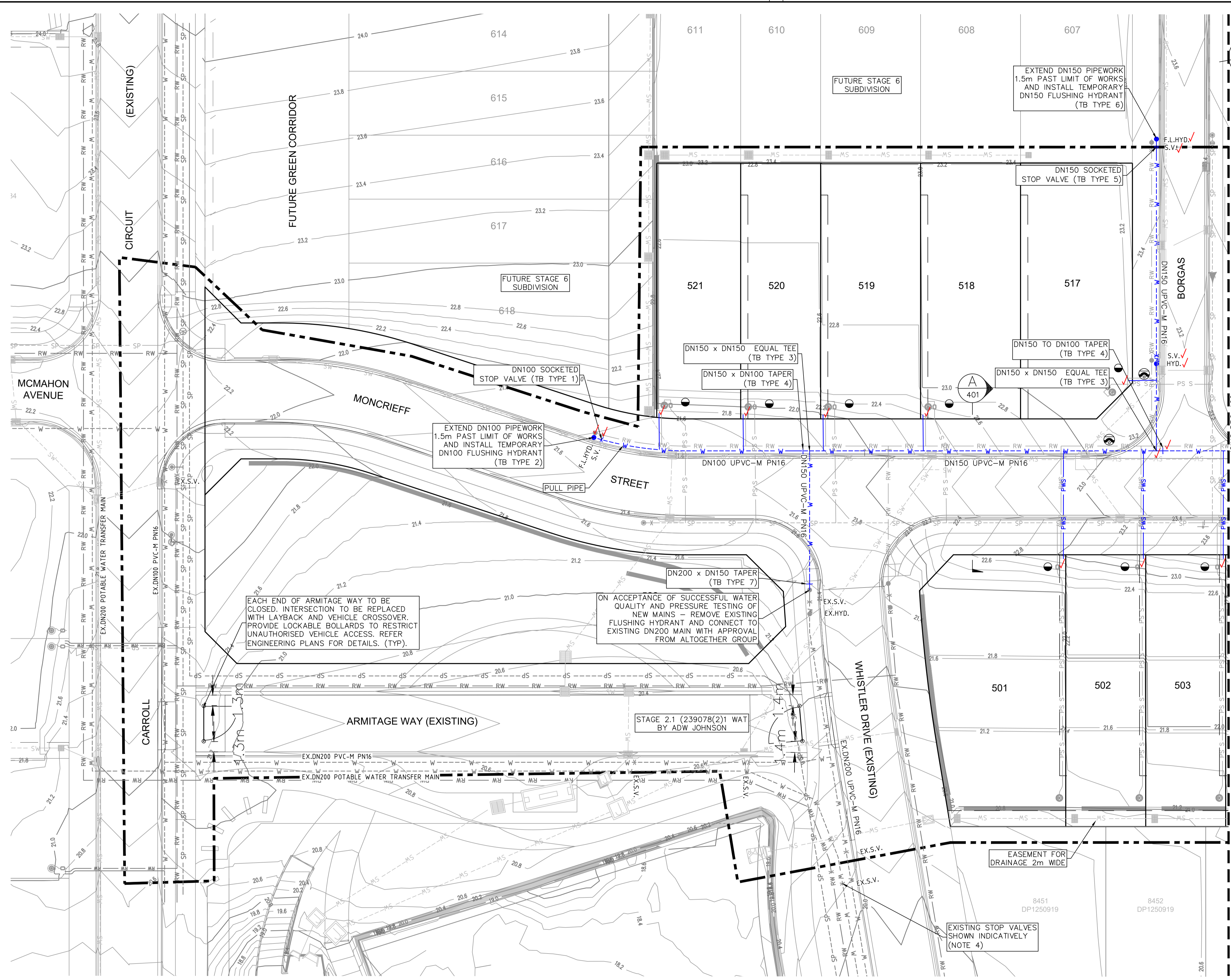
SURVEYED
ADW Johnson

DATUM
GDA94 M.G.A. ZONE 56 A.H.D.

PROJECT	PLAN TITLE
POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	OVERALL SITE PLAN
PROJECT No. 239078(8)5	DISCIPLINE - WAT
NUMBER - 003	REV. 1

239078(8)5-WAT-102

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured red.



- LEGEND**
- W PVC-M POTABLE WATER RETICULATION
 - PWS PE POTABLE WATER PROPERTY SERVICE
 - RW PVC-M RECYCLED WATER RETICULATION
 - SP PE PRESSURE SEWER RETICULATION
 - EX PW EXISTING POTABLE WATER RETICULATION
 - EX RW EXISTING RECYCLED WATER RETICULATION
 - EX PS EXISTING PRESSURE SEWER RETICULATION
 - SW STORMWATER PIPEWORK
 - ex g EXISTING GAS
 - ex e EXISTING ELECTRICITY
 - ex SP EXISTING SEWER PRESSURE
 - ex RW EXISTING RECYCLED WATER

- S.V. STOP VALVE
 - HYD. HYDRANT
 - FL. HYD. FLUSHING HYDRANT
 - LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - PROPERTY SERVICE CONNECTION
 - PROPOSED EASEMENT
 - LIMIT OF WORKS
- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
TOTAL 21 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 12 x SHORT SIDE
 - 9 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 0 x SHORT SIDE
 - 0 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	102
DN150	PVC-M PN16	103
DN200	PVC-M PN16	1

- NOTES:**
1. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 202.
 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.
 4. EXISTING STOP VALVES IN WHISTLER DRIVE HAVE NOT BEEN SURVEYED AND DO NOT APPEAR ON STAGE 1G OR 2.1 WAC PLANS.
 5. CONTRACTOR TO CONFIRM EXISTING ARRANGEMENT OF VALVES AND FITTING PRIOR TO PROCUREMENT OF NEW MATERIALS. TO BE CONFIRMED BY POSITIVE SERVICE LOCATION.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed: M. Harvey Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

PLAN
SCALE 1:250

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.
F	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.
O	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.

DRAWN	CHECK	DESIGN	VERIFY
I.B.	M.K.	M.K.	C.H.
I.B.	M.K.	M.K.	C.H.
T.A.	M.K.	M.K.	C.H.
T.A.	M.K.	M.K.	C.H.
T.A.	M.K.	M.K.	C.H.
T.A.	M.K.	M.K.	C.H.
T.A.	M.K.	M.K.	C.H.

SCALES
0 5 10 A1 / A3
1:250 / 1:500

CONTOUR INTERVAL: 0.2m

Hunter Office
Unit 7/335 Hillsborough Rd
Warners Bay N.S.W. 2282
Phone: (02) 4978 5100
Fax: (02) 4978 5199
email: hunter@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT

JOHNSON PROPERTY GROUP

PROPERTY DESCRIPTION
WATAGAN PARK
PRECINCT NORTH E - STAGE 5
LOT 89, D.P.1303421
35 MCCULLOUGH STREET,
COORANBONG
DA/918/2023

SURVEYED
ADW Johnson

DATUM
GDA94 M.G.A. ZONE 56 A.H.D.

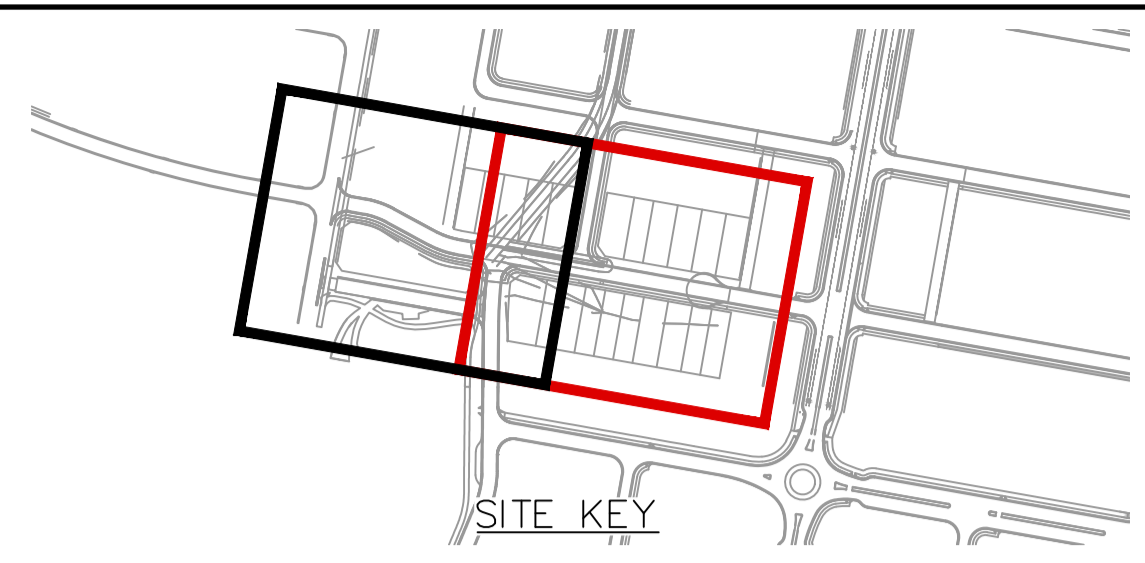
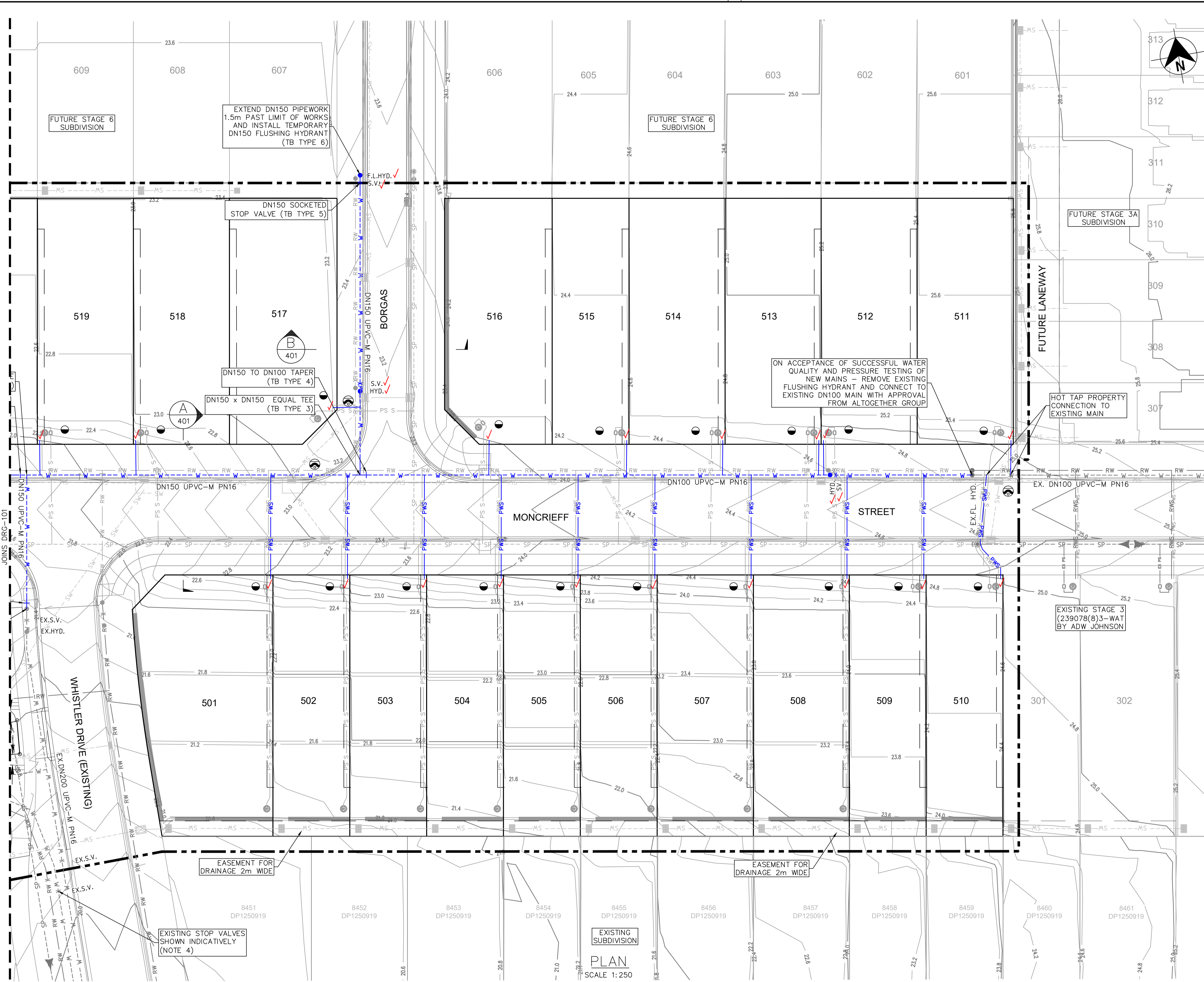
PROJECT	DISCIPLINE	NUMBER	REV.
POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	WAT	101	1

PLAN TITLE
POTABLE WATER DETAIL PLAN - SHEET 1

PROJECT No. 239078(8)5

239078(8)5-WAT-102

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.



- LEGEND**
- W PVC-M POTABLE WATER RETICULATION
 - PWS PE POTABLE WATER PROPERTY SERVICE
 - RW PVC-M RECYCLED WATER RETICULATION
 - SP PE PRESSURE SEWER RETICULATION
 - EX PW EXISTING POTABLE WATER RETICULATION
 - EX RW EXISTING RECYCLED WATER RETICULATION
 - EX PS EXISTING PRESSURE SEWER RETICULATION
 - SW STORMWATER PIPEWORK
 - EX G EXISTING GAS
 - EX E EXISTING ELECTRICITY
 - EX SP EXISTING SEWER PRESSURE
 - EX RW EXISTING RECYCLED WATER
- S.V. STOP VALVE
 - HYD. HYDRANT
 - FL. HYD. FLUSHING HYDRANT
 - LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - PROPERTY SERVICE CONNECTION
 - PROPOSED EASEMENT
 - LIMIT OF WORKS

- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 21 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-106-V
 - 12 x SHORT SIDE
 - 9 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-107-V
 - 0 x SHORT SIDE
 - 0 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	102
DN150	PVC-M PN16	103
DN200	PVC-M PN16	1

- NOTES:**
- FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 202.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.
 - EXISTING STOP VALVES IN WHISTLER DRIVE HAVE NOT BEEN SURVEYED AND DO NOT APPEAR ON STAGE 1G OR 2.1 WAC PLANS.
 - CONTRACTOR TO CONFIRM EXISTING ARRANGEMENT OF VALVES AND FITTING PRIOR TO PROCUREMENT OF NEW MATERIALS. TO BE CONFIRMED BY POSITIVE SERVICE LOCATION.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.

Signed: *M. Harvey* Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT
A	01.05.2025	INITIAL ISSUE
B	12.06.2025	CLIENT COMMENTS
C	20.06.2025	CLIENT COMMENTS
D	03.07.2025	ADDED EXISTING VALVES
E	08.09.2025	COUNCIL COMMENTS
O	29.09.2025	CONSTRUCTION ISSUE
1	12.03.2026	UPDATED TANK COORDINATES

DRAWN	CHECK	DESIGN	VERIFY	SCALES
I.B.	M.K.	M.K.	C.H.	0 5 10 A1 / A3
I.B.	M.K.	M.K.	C.H.	1:250 / 1:500
T.A.	M.K.	M.K.	C.H.	
T.A.	M.K.	M.K.	C.H.	
T.A.	M.K.	M.K.	C.H.	
T.A.	M.K.	M.K.	C.H.	
T.A.	M.K.	M.K.	C.H.	

adw Johnson

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JOHNSON PROPERTY GROUP

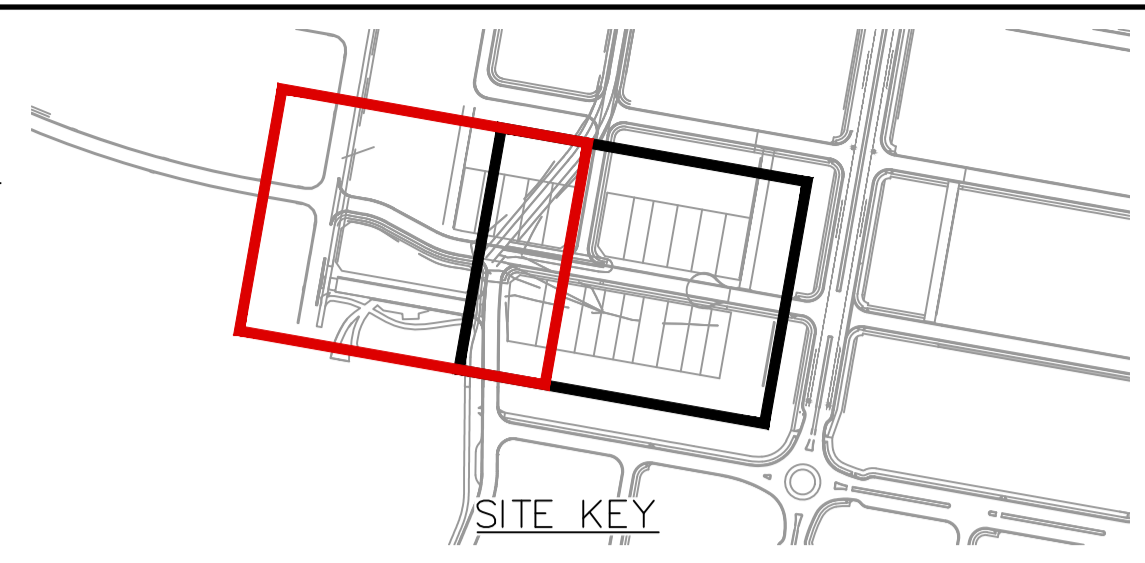
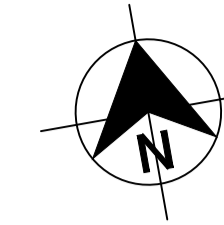
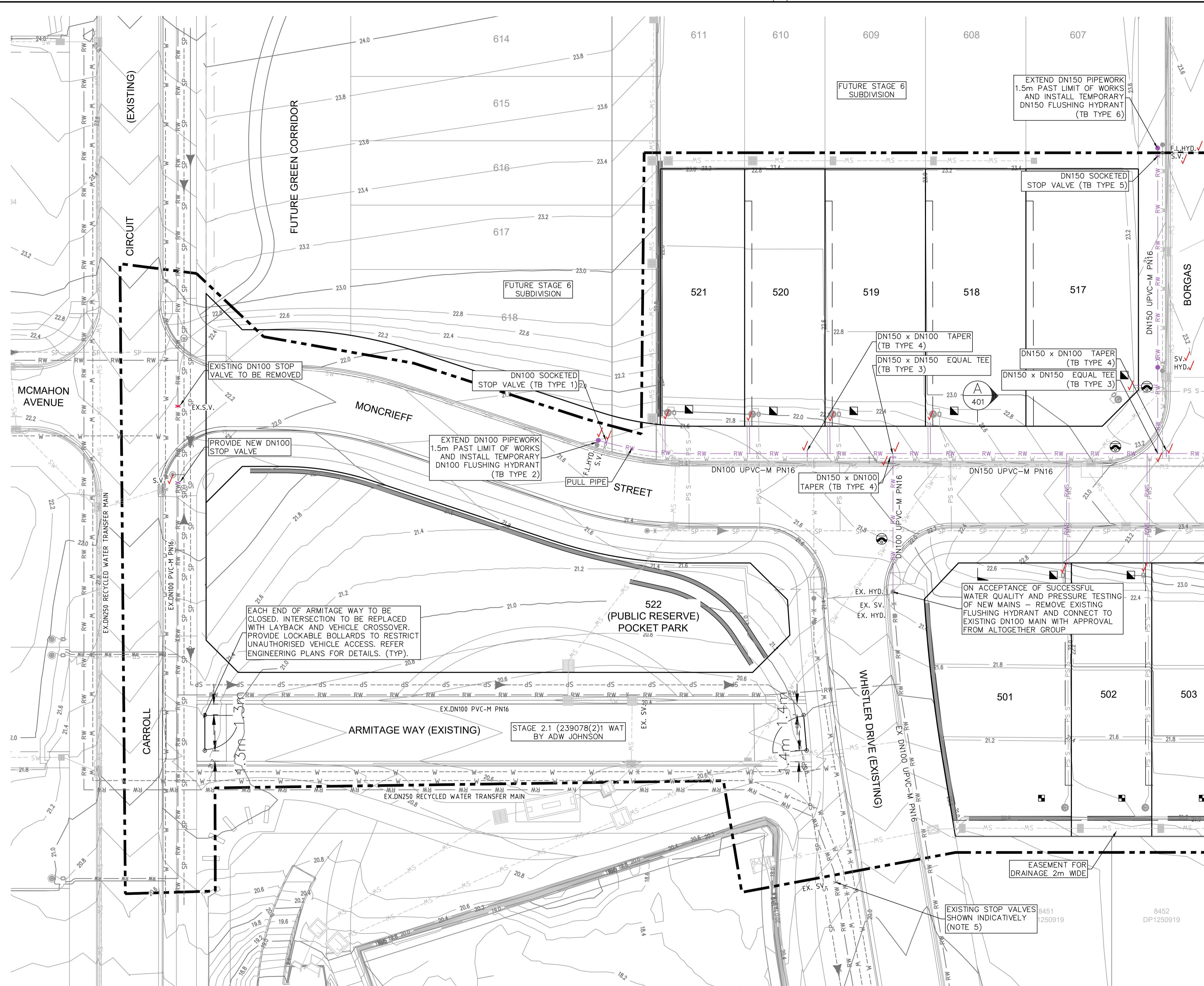
CLIENT

PROPERTY DESCRIPTION
WATAGAN PARK
PRECINCT NORTH E - STAGE 5
LOT 89, D.P.1303421
35 MCCULLOUGH STREET,
COORANBONG
DA/918/2023

PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	POTABLE WATER DETAIL PLAN - SHEET 2	239078(8)5	WAT	102	1

239078(8)5-WAT-202

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.



LEGEND

- RW PVC-M RECYCLED WATER RETICULATION
- RWS PE RECYCLED WATER PROPERTY SERVICE
- W PVC-M POTABLE WATER RETICULATION
- SP PE PRESSURE SEWER RETICULATION
- EX PW EXISTING POTABLE WATER RETICULATION
- EX RW EXISTING RECYCLED WATER RETICULATION
- EX PS EXISTING PRESSURE SEWER RETICULATION
- SW STORMWATER PIPEWORK
- ex g EXISTING GAS
- ex e EXISTING ELECTRICITY
- ex SP EXISTING SEWER PRESSURE
- ex RW EXISTING RECYCLED WATER

- S.V. STOP VALVE
- HYD. HYDRANT
- FL. HYD. FLUSHING HYDRANT
- LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- PROPERTY SERVICE CONNECTION
- PROPOSED EASEMENT
- LIMIT OF WORKS

- RECYCLED WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 21 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 12 x SHORT SIDE
 - 9 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 0 x SHORT SIDE
 - 0 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	120
DN150	PVC-M PN16	83

- NOTES:**
1. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 102.
 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.
 4. LOTS 307-322 ARE SUBJECT TO FUTURE REDEVELOPMENT APPLICATION AND SUBDIVISION WORKS CERTIFICATE.
 5. EXISTING STOP VALVES IN WHISTLER DRIVE HAVE NOT BEEN SURVEYED AND DO NOT APPEAR ON STAGE 1G OR 2.1 WAC PLANS.
 6. CONTRACTOR TO CONFIRM EXISTING ARRANGEMENT OF VALVES AND FITTING PRIOR TO PROCUREMENT OF NEW MATERIALS. TO BE CONFIRMED BY POSITIVE SERVICE LOCATION.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed: Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

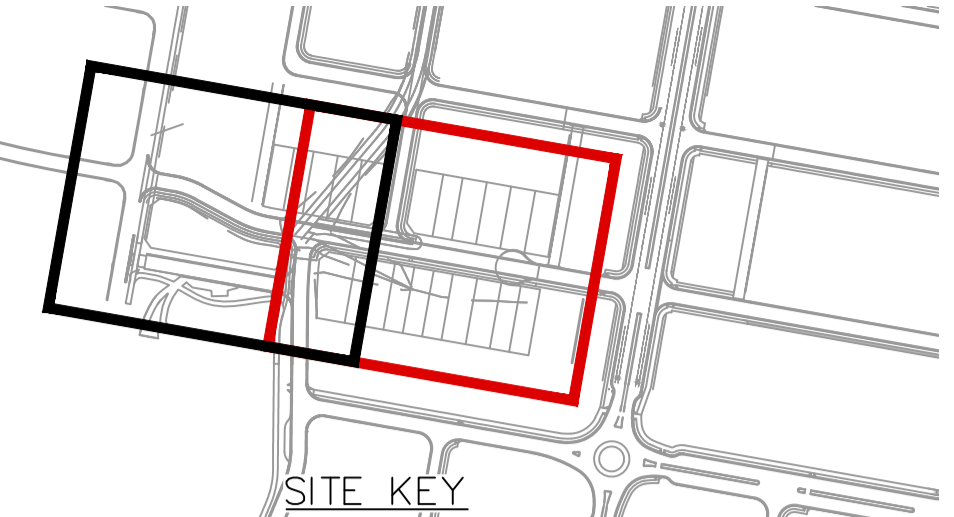
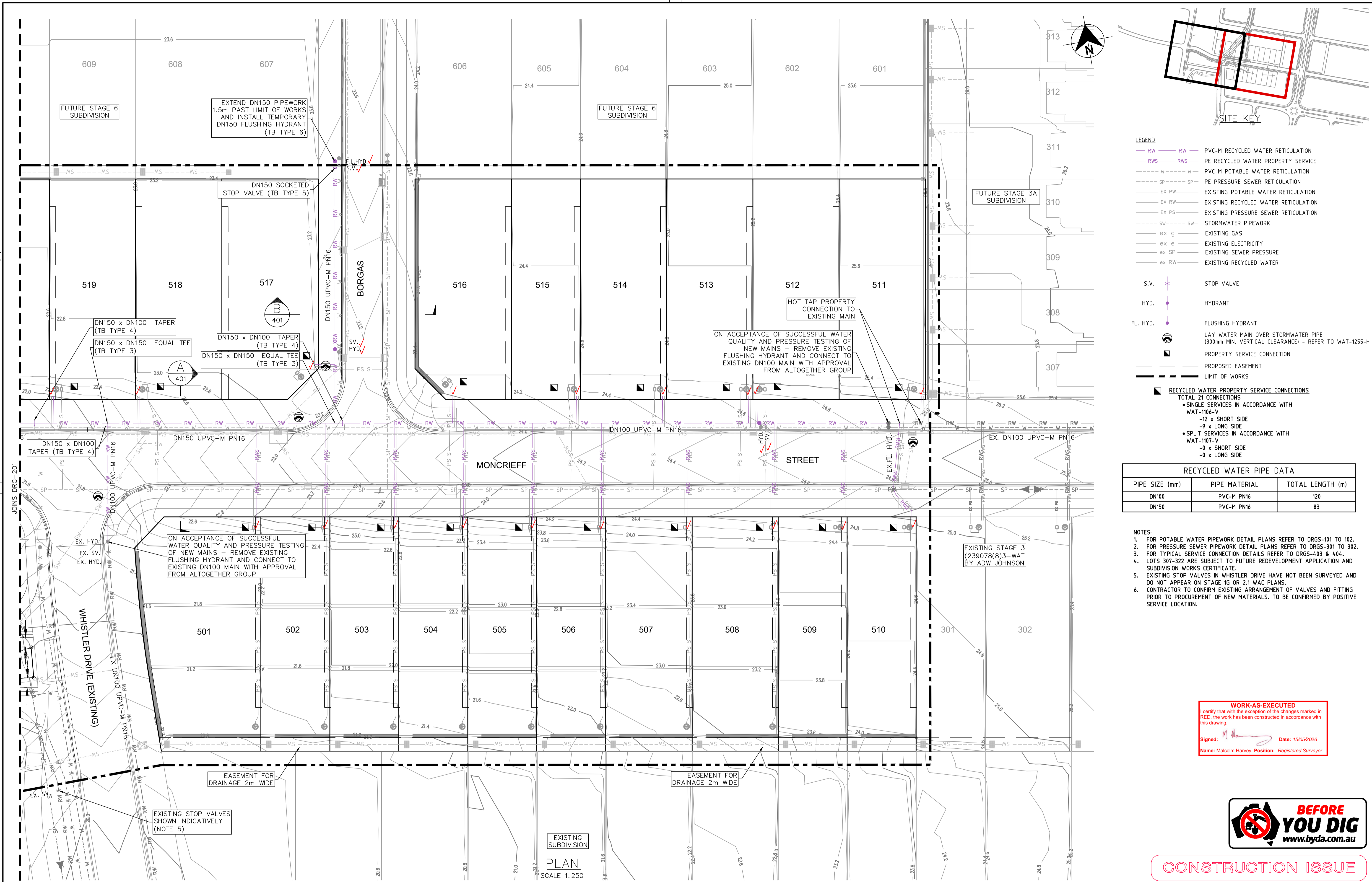
PLAN
SCALE 1:250

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REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY																																																								
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.																																																								
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<p>DESIGN FILE N:\239078\239078(8)\DWG\Water & Sewer\WAT\Stage 5\X-239078(8)5-WAT-DESIGN.dwg</p>		<p>ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE</p>		<p>CONTOUR INTERVAL: 0.2m</p>		<p>SURVEYED ADW Johnson</p>		<p>DATUM GDA94 M.G.A. ZONE 56 A.H.D.</p>		<p>PROJECT No. 239078(8)5</p>		<p>DISCIPLINE WAT</p>		<p>NUMBER 201</p>		<p>REV. 1</p>																																														

Plotted By: time Plot Date: 12/03/26 - 16:44 Cad File: \\adw-svr4\adw-data\239078\239078(8)\DWG\Water & Sewer\WAT\Stage 5\239078(8)5-WAT-202.dwg

239078(8)5-WAT-202

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.



- LEGEND**
- RW — PVC-M RECYCLED WATER RETICULATION
 - RWS — PE RECYCLED WATER PROPERTY SERVICE
 - W — PVC-M POTABLE WATER RETICULATION
 - SP — PE PRESSURE SEWER RETICULATION
 - EX PW — EXISTING POTABLE WATER RETICULATION
 - EX RW — EXISTING RECYCLED WATER RETICULATION
 - EX PS — EXISTING PRESSURE SEWER RETICULATION
 - SW — STORMWATER PIPEWORK
 - ex g — EXISTING GAS
 - ex e — EXISTING ELECTRICITY
 - ex SP — EXISTING SEWER PRESSURE
 - ex RW — EXISTING RECYCLED WATER
- S.V. — STOP VALVE
 HYD. — HYDRANT
 FL. HYD. — FLUSHING HYDRANT
 LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 PROPERTY SERVICE CONNECTION
 PROPOSED EASEMENT
 LIMIT OF WORKS

- RECYCLED WATER PROPERTY SERVICE CONNECTIONS**
 TOTAL 21 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 12 x SHORT SIDE
 - 9 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 0 x SHORT SIDE
 - 0 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	120
DN150	PVC-M PN16	83

- NOTES:**
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 102.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.
 - LOTS 307-322 ARE SUBJECT TO FUTURE REDEVELOPMENT APPLICATION AND SUBDIVISION WORKS CERTIFICATE.
 - EXISTING STOP VALVES IN WHISTLER DRIVE HAVE NOT BEEN SURVEYED AND DO NOT APPEAR ON STAGE 10 OR 2.1 WAC PLANS.
 - CONTRACTOR TO CONFIRM EXISTING ARRANGEMENT OF VALVES AND FITTING PRIOR TO PROCUREMENT OF NEW MATERIALS. TO BE CONFIRMED BY POSITIVE SERVICE LOCATION.

WORK-AS-EXECUTED
 I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
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 Name: Malcolm Harvey Position: Registered Surveyor

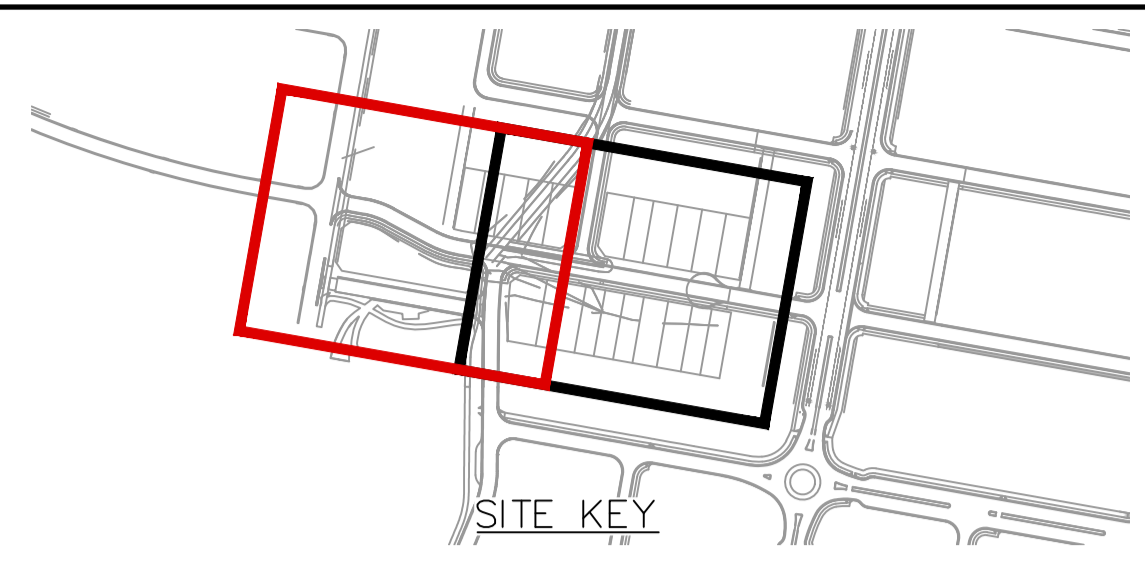
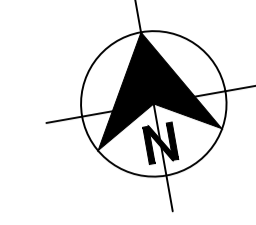
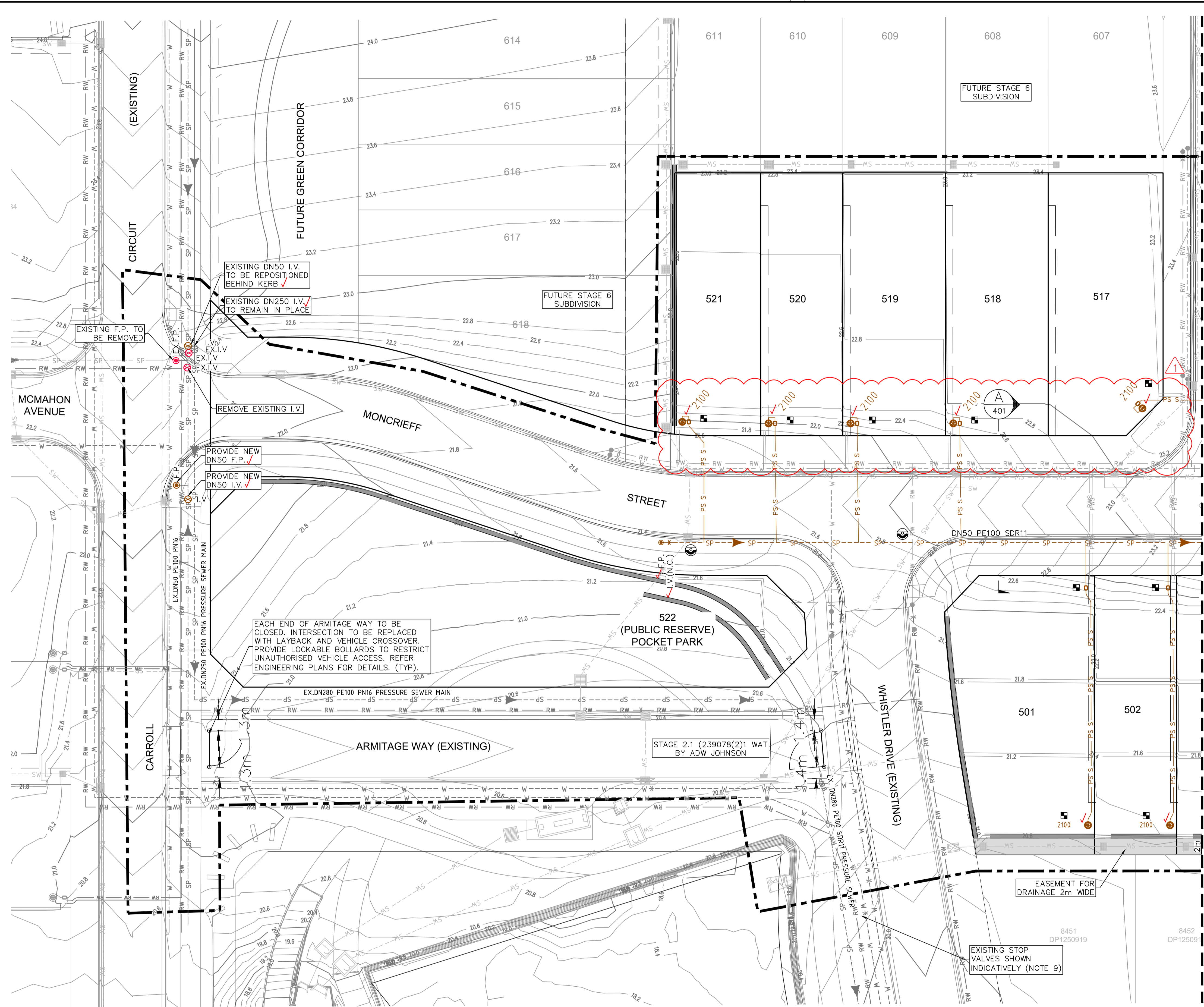


CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.	0 5 10 A1 / A3 1:250 / 1:500 CONTOUR INTERVAL: 0.2m	Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398	WATAGAN PARK PRECINCT NORTH E - STAGE 5 LOT 89, D.P.1303421 35 MCCULLOUGH STREET, COORANBONG DA/918/2023	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	RECYCLED WATER DETAIL PLAN - SHEET 2	239078(8)5	WAT	202	1
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.									
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.									
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.									
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.									
F	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.									
G	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.									

239078(8)5-WAT-302

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.



- LEGEND**
- SP PE PRESSURE SEWER RETICULATION
 - PS S PE PRESSURE SEWER PROPERTY SERVICE
 - W PVC-M POTABLE WATER RETICULATION
 - RW PVC-M RECYCLED WATER RETICULATION
 - EX PS EXISTING PRESSURE SEWER RETICULATION
 - EX PW EXISTING POTABLE WATER RETICULATION
 - EX RW EXISTING RECYCLED WATER RETICULATION
 - SW STORMWATER PIPEWORK
 - ex g EXISTING GAS
 - ex e EXISTING ELECTRICITY
 - ex SP EXISTING SEWER PRESSURE
 - ex RW EXISTING RECYCLED WATER
 - AV AIR VALVE
 - I.V. ISOLATION VALVE
 - I.V. (N.C.) ISOLATION VALVE - NORMALLY CLOSED
 - F.P. FLUSHING POINT
 - Boundary Kit
 - Pressure Sewer Flow Direction (TEMP. - RED), (ULTIMATE)
 - Lay Pressure Sewer Main Under Stormwater Pipe (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - Property Service Connection - STD CONNECTION
 - Proposed Easement
 - Limit of Works
 - Undrainable Area

- PRESSURE SEWER PROPERTY SERVICE CONNECTIONS**
- TOTAL 21 CONNECTIONS
 - SINGLE SERVICES
 - 12 x SHORT SIDE
 - 9 x LONG SIDE

PRESSURE SEWER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN63	PE100 SDR11	123
DN50	PE100 SDR11	61

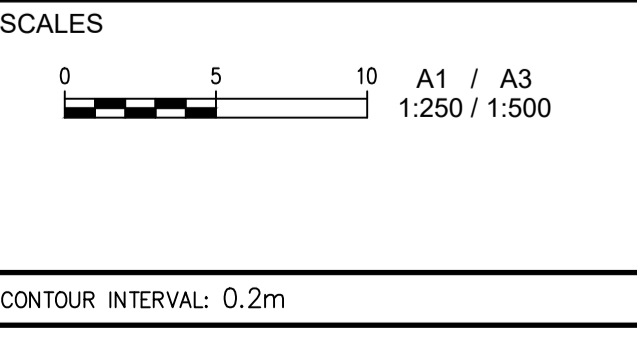
- NOTES:**
1. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 102.
 2. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 202.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-404.
 4. FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1017-FS.
 5. FOR FLOW MONITORING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1115-FS.
 6. CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIA.
 7. ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).
 8. PROVIDE BELOW GROUND AIR VALVE TO STANDARD DRAWING PSS-1016B-FS.
 9. EXISTING STOP VALVES IN WHISTLER DRIVE HAVE NOT BEEN SURVEYED AND DO NOT APPEAR ON STAGE 1G OR 2.1 WAC PLANS.
 10. CONTRACTOR TO CONFIRM EXISTING ARRANGEMENT OF VALVES AND FITTING PRIOR TO PROCUREMENT OF NEW MATERIALS. TO BE CONFIRMED BY POSITIVE SERVICE LOCATION.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed: *[Signature]* Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

PLAN
SCALE 1:250



REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.
O	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.
1	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.

adw Johnson
Hunter Office
Unit 7/335 Hillsborough Rd
Warners Bay N.S.W. 2282
Phone: (02) 4978 5100
Fax: (02) 4978 5199
email: hunter@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398



CLIENT
PROPERTY DESCRIPTION
WATAGAN PARK
PRECINCT NORTH E - STAGE 5
LOT 89, D.P.1303421
35 MCCULLOUGH STREET,
COORANBONG
DA/918/2023

PROJECT
POTABLE WATER, RECYCLED WATER AND
PRESSURE SEWER RETICULATION

PLAN TITLE
SEWER DETAIL PLAN - SHEET 1

SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(8)5	WAT	301	1

239078(8)5-WAT-302

100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured RED.



- LEGEND**
- SP PE PRESSURE SEWER RETICULATION
 - PS S PE PRESSURE SEWER PROPERTY SERVICE
 - W PVC-M POTABLE WATER RETICULATION
 - RW PVC-M RECYCLED WATER RETICULATION
 - EX PS EXISTING PRESSURE SEWER RETICULATION
 - EX PW EXISTING POTABLE WATER RETICULATION
 - EX RW EXISTING RECYCLED WATER RETICULATION
 - SW STORMWATER PIPEWORK
 - ex g EXISTING GAS
 - ex e EXISTING ELECTRICITY
 - ex SP EXISTING SEWER PRESSURE
 - ex RW EXISTING RECYCLED WATER
 - AIR VALVE
 - I.V. ISOLATION VALVE
 - I.V. (N.C.) ISOLATION VALVE - NORMALLY CLOSED
 - F.P. FLUSHING POINT
 - BOUNDARY KIT
 - PRESSURE SEWER FLOW DIRECTION (TEMP. - RED), (ULTIMATE)
 - LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - PROPERTY SERVICE CONNECTION - STD CONNECTION
 - PROPOSED EASEMENT
 - LIMIT OF WORKS
 - UNDRAINABLE AREA

- PRESSURE SEWER PROPERTY SERVICE CONNECTIONS**
- TOTAL 21 CONNECTIONS
 - SINGLE SERVICES
 - 12 x SHORT SIDE
 - 9 x LONG SIDE

PRESSURE SEWER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN63	PE100 SDR11	123
DN50	PE100 SDR11	61

- NOTES:**
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 102.
 - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 102.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-404.
 - FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1017-FS.
 - FOR FLOW MONITORING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1115-FS.
 - CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIA.
 - ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).
 - PROVIDE BELOW GROUND AIR VALVE TO STANDARD DRAWING PSS-1016B-FS.
 - EXISTING STOP VALVES IN WHISTLER DRIVE HAVE NOT BEEN SURVEYED AND DO NOT APPEAR ON STAGE 1G OR 2.1 WAC PLANS.
 - CONTRACTOR TO CONFIRM EXISTING ARRANGEMENT OF VALVES AND FITTING PRIOR TO PROCUREMENT OF NEW MATERIALS. TO BE CONFIRMED BY POSITIVE SERVICE LOCATION.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.

Signed: *M. Harvey* Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.	 CONTOUR INTERVAL: 0.2m
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.	
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.	
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.	
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.	
O	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.	
1	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.	

adw Johnson

Hunter Office
Unit 7/335 Hillsborough Rd
Warners Bay N.S.W. 2282
Phone: (02) 4978 5100
Fax: (02) 4978 5199
email: hunter@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

JOHNSON PROPERTY GROUP

CLIENT

PROPERTY DESCRIPTION
WATAGAN PARK
PRECINCT NORTH E - STAGE 5
LOT 89, D.P.1303421
35 MCCULLOUGH STREET,
COORNBONG
DA/918/2023

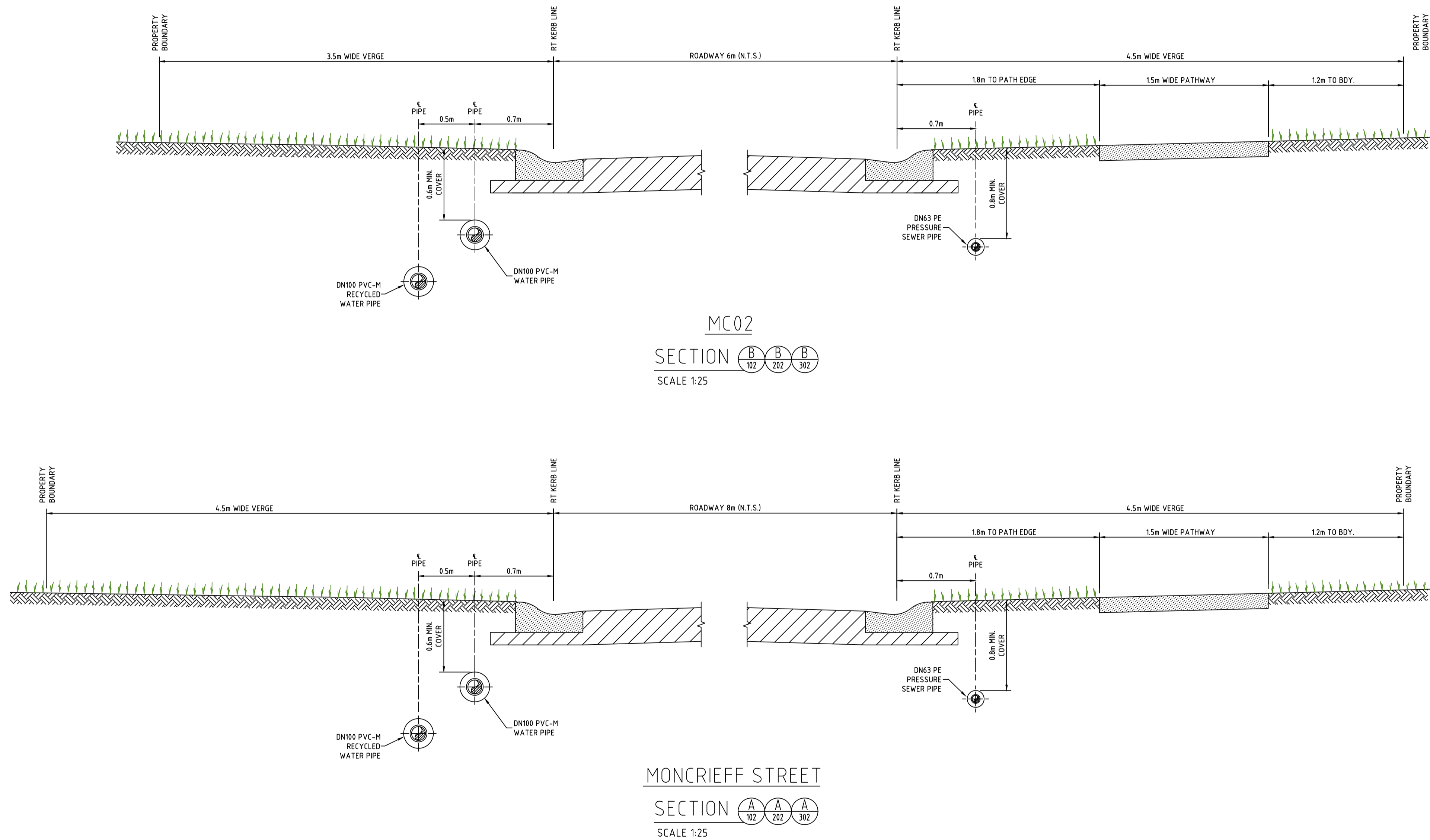
PROJECT

POTABLE WATER, RECYCLED WATER AND
PRESSURE SEWER RETICULATION

PLAN TITLE

SEWER DETAIL PLAN - SHEET 2

PROJECT No.	DISCIPLINE	NUMBER	REV.
239078(8)5	WAT	302	1

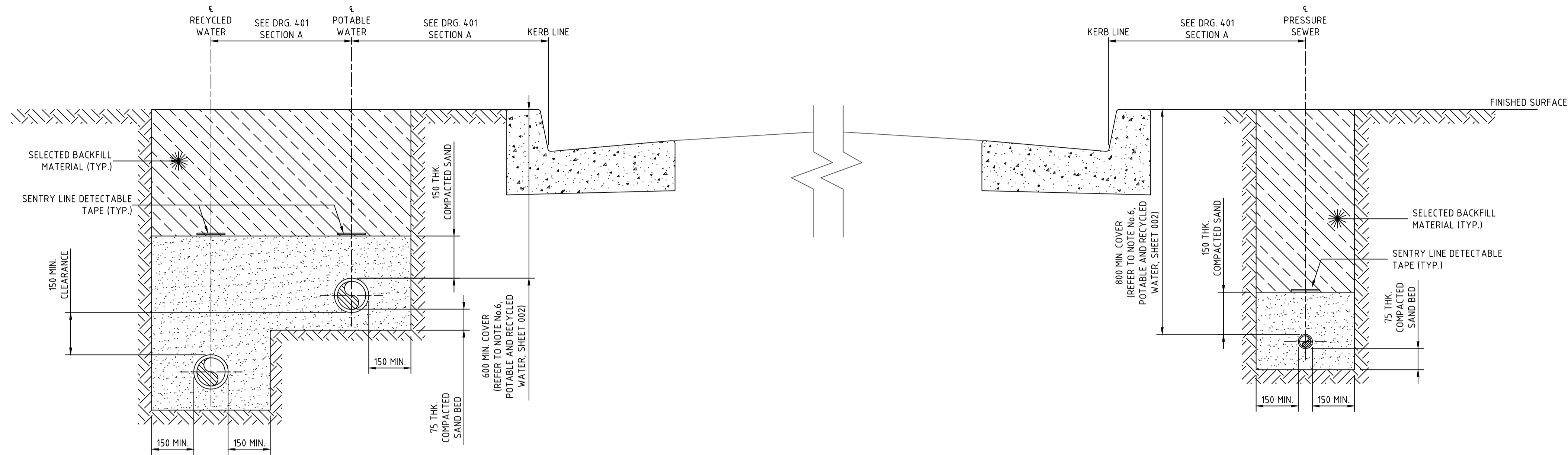


WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed: Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor

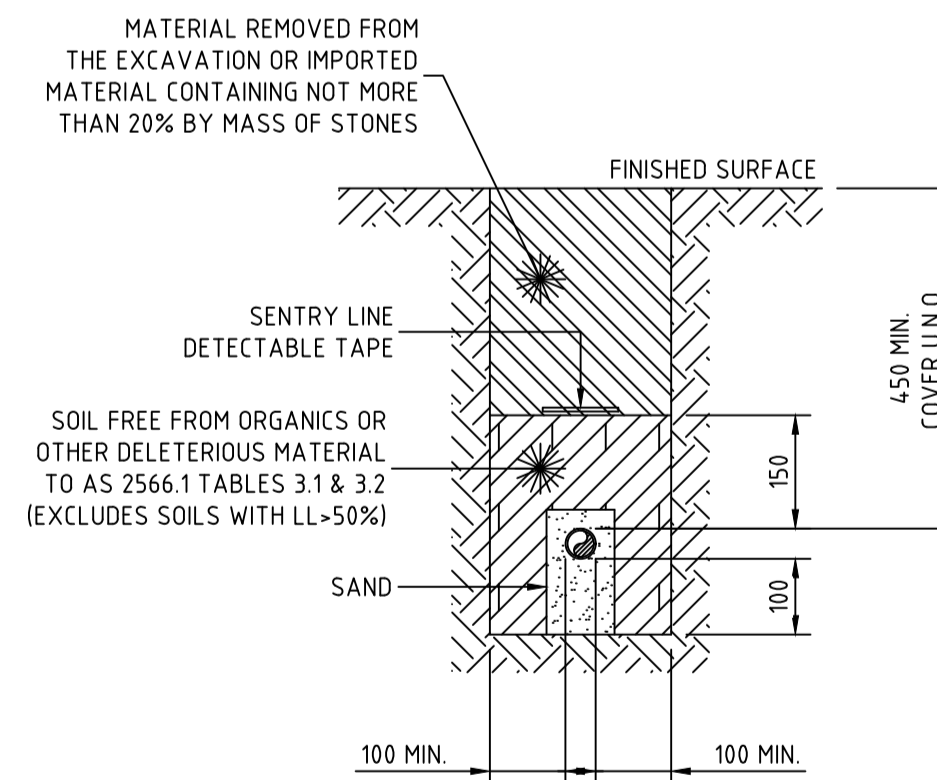


CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT												
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.				 Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohanson.com.au www.adwjohanson.com.au ABN 62 129 445 398	WATAGAN PARK PRECINCT NORTH E - STAGE 5 LOT 89, D.P.1303421 35 MCCULLOUGH STREET, COORANBONG DA/918/2023	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION										
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.		PLAN TITLE														
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.		TYPICAL CROSS SECTIONS														
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.		PROJECT No.														
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.		DISCIPLINE														
O	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.		NUMBER														
1	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.		REV.														
DESIGN FILE N:\239078\239078(8)\DWG\Water & Sewer\WAT\Stage 5\X-239078(8)5-WAT-DESIGN.dwg								ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE			SURVEYED ADW Johnson		DATUM GDA94 M.G.A. ZONE 56 A.H.D.		PROJECT No. 239078(8)5		DISCIPLINE WAT		NUMBER 401		REV. 1	



STREET PRESSURE MAIN
TYPICAL DETAIL - SECTION A
SCALE 1:10



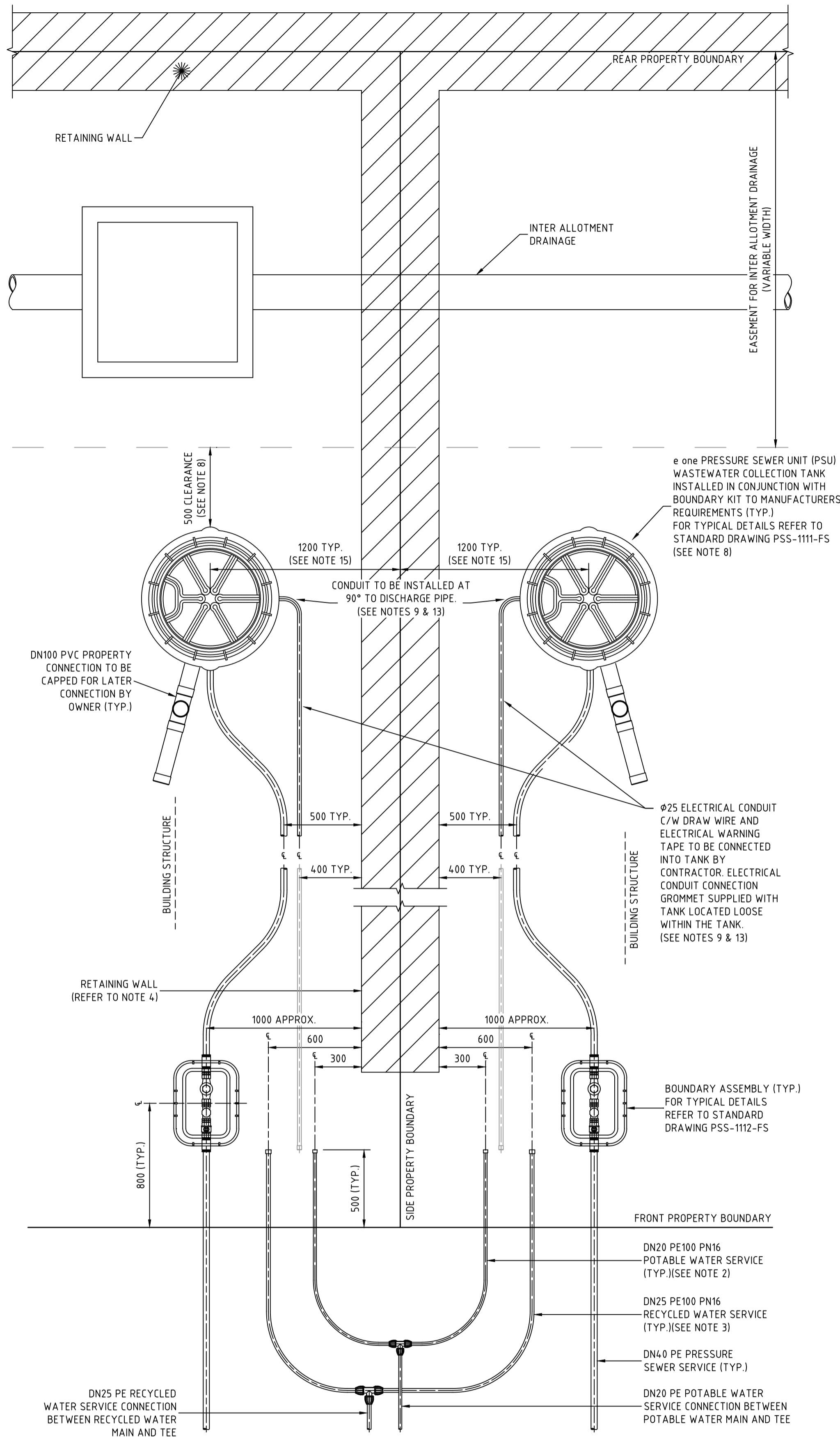
PRIVATE PROPERTY PRESSURE MAIN
TYPICAL DETAIL
SCALE 1:10

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed:  Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



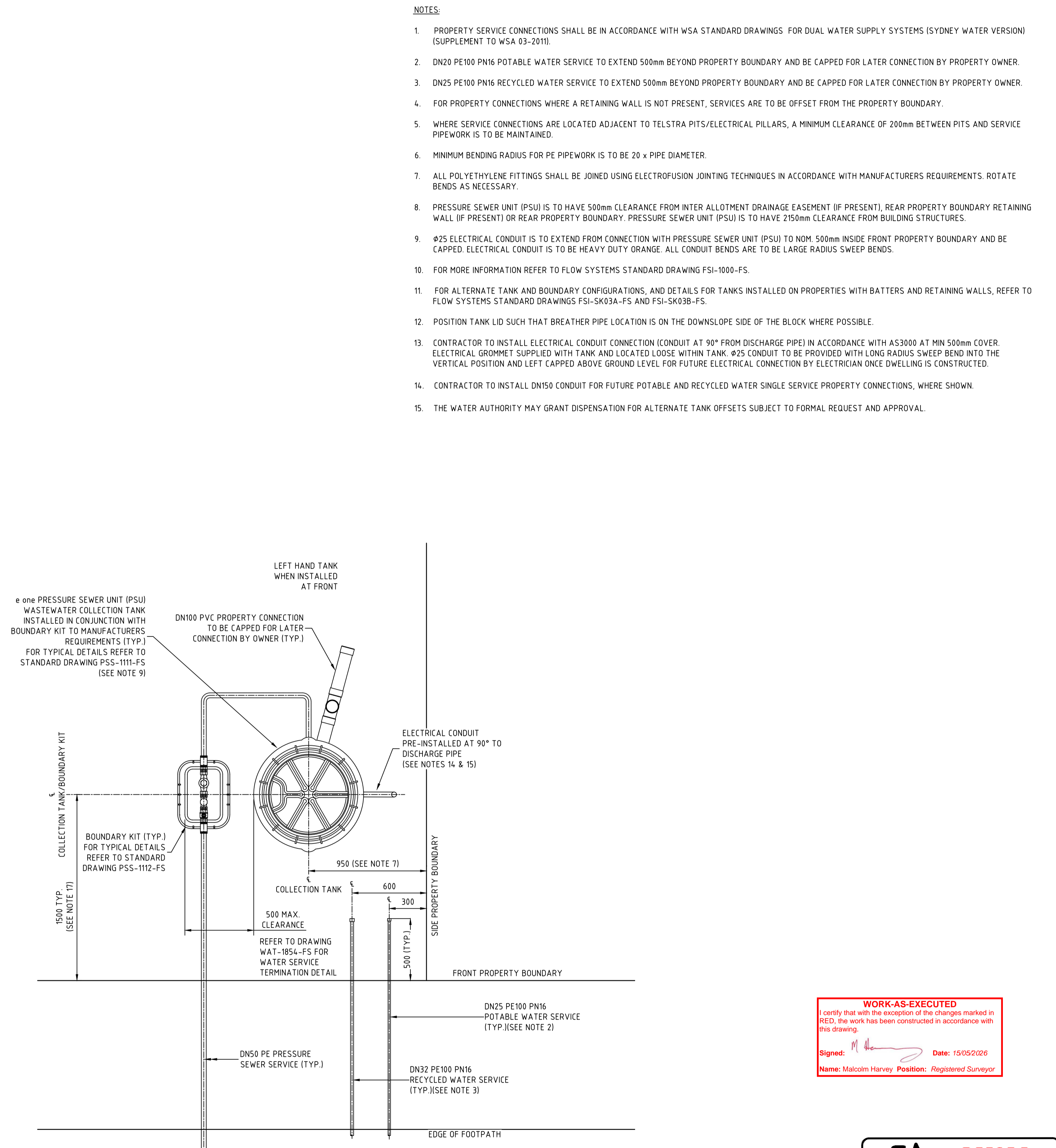
CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT		PROPERTY DESCRIPTION		PROJECT			
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.	 0 0.1 0.2 0.3 0.4 A1 / A3 1:10 / 1:20	Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398		WATAGAN PARK		POTABLE WATER, RECYCLED WATER AND			
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.				PRECINCT NORTH E - STAGE 5		PRESSURE SEWER RETICULATION			
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.				LOT 89, D.P.1303421		PLAN TITLE			
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.				35 MCCULLOUGH STREET,		TYPICAL PIPEWORK TRENCHING DETAILS			
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.				COORANBONG		PROJECT No.			
O	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.				DA/9/18/2023		239078(8)5 -			
1	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.			DISCIPLINE		NUMBER				
DESIGN FILE N:\239078\239078(8)\DWG\Water & Sewer\WAT\Stage 5\X-239078(8)5-WAT-DESIGN.dwg								ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE		ADW Johnson		GDA94 M.G.A. ZONE 56 A.H.D.		REV.	
Plotted By: tima Plot Date: 12/03/26 - 16:45 Cad File: \\adw-svr4\adw-data\239078\239078(8)\DWG\Water & Sewer\WAT\Stage 5\239078(8)5-WAT-402.dwg										WAT		402		1	



TYPICAL PROPERTY CONNECTION DETAIL
(PRESSURE SEWER UNIT AT REAR)

SCALE 1:20



TYPICAL PROPERTY CONNECTION DETAIL - SMALL LOTS

SCALE 1:20

NOTES:

- PROPERTY SERVICE CONNECTIONS SHALL BE IN ACCORDANCE WITH WSA STANDARD DRAWINGS FOR DUAL WATER SUPPLY SYSTEMS (SYDNEY WATER VERSION) (SUPPLEMENT TO WSA 03-2011).
- DN20 PE100 PN16 POTABLE WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- DN25 PE100 PN16 RECYCLED WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- FOR PROPERTY CONNECTIONS WHERE A RETAINING WALL IS NOT PRESENT, SERVICES ARE TO BE OFFSET FROM THE PROPERTY BOUNDARY.
- WHERE SERVICE CONNECTIONS ARE LOCATED ADJACENT TO TELSTRA PITS/ELECTRICAL PILLARS, A MINIMUM CLEARANCE OF 200mm BETWEEN PITS AND SERVICE PIPEWORK IS TO BE MAINTAINED.
- MINIMUM BENDING RADIUS FOR PE PIPEWORK IS TO BE 20 x PIPE DIAMETER.
- ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.
- PRESSURE SEWER UNIT (PSU) IS TO HAVE 500mm CLEARANCE FROM INTER ALLOTMENT DRAINAGE EASEMENT (IF PRESENT), REAR PROPERTY BOUNDARY RETAINING WALL (IF PRESENT) OR REAR PROPERTY BOUNDARY. PRESSURE SEWER UNIT (PSU) IS TO HAVE 2150mm CLEARANCE FROM BUILDING STRUCTURES.
- Ø25 ELECTRICAL CONDUIT IS TO EXTEND FROM CONNECTION WITH PRESSURE SEWER UNIT (PSU) TO NOM. 500mm INSIDE FRONT PROPERTY BOUNDARY AND BE CAPPED. ELECTRICAL CONDUIT IS TO BE HEAVY DUTY ORANGE. ALL CONDUIT BENDS ARE TO BE LARGE RADIUS SWEEP BENDS.
- FOR MORE INFORMATION REFER TO FLOW SYSTEMS STANDARD DRAWING FSI-1000-FS.
- FOR ALTERNATE TANK AND BOUNDARY CONFIGURATIONS, AND DETAILS FOR TANKS INSTALLED ON PROPERTIES WITH BATTERS AND RETAINING WALLS, REFER TO FLOW SYSTEMS STANDARD DRAWINGS FSI-SK03A-FS AND FSI-SK03B-FS.
- POSITION TANK LID SUCH THAT BREATHER PIPE LOCATION IS ON THE DOWNSLOPE SIDE OF THE BLOCK WHERE POSSIBLE.
- CONTRACTOR TO INSTALL ELECTRICAL CONDUIT CONNECTION (CONDUIT AT 90° FROM DISCHARGE PIPE) IN ACCORDANCE WITH AS3000 AT MIN 500mm COVER. ELECTRICAL GROMMET SUPPLIED WITH TANK AND LOCATED LOOSE WITHIN TANK. Ø25 CONDUIT TO BE PROVIDED WITH LONG RADIUS SWEEP BEND INTO THE VERTICAL POSITION AND LEFT CAPPED ABOVE GROUND LEVEL FOR FUTURE ELECTRICAL CONNECTION BY ELECTRICIAN ONCE DWELLING IS CONSTRUCTED.
- CONTRACTOR TO INSTALL DN150 CONDUIT FOR FUTURE POTABLE AND RECYCLED WATER SINGLE SERVICE PROPERTY CONNECTIONS, WHERE SHOWN.
- THE WATER AUTHORITY MAY GRANT DISPENSATION FOR ALTERNATE TANK OFFSETS SUBJECT TO FORMAL REQUEST AND APPROVAL.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed:  Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

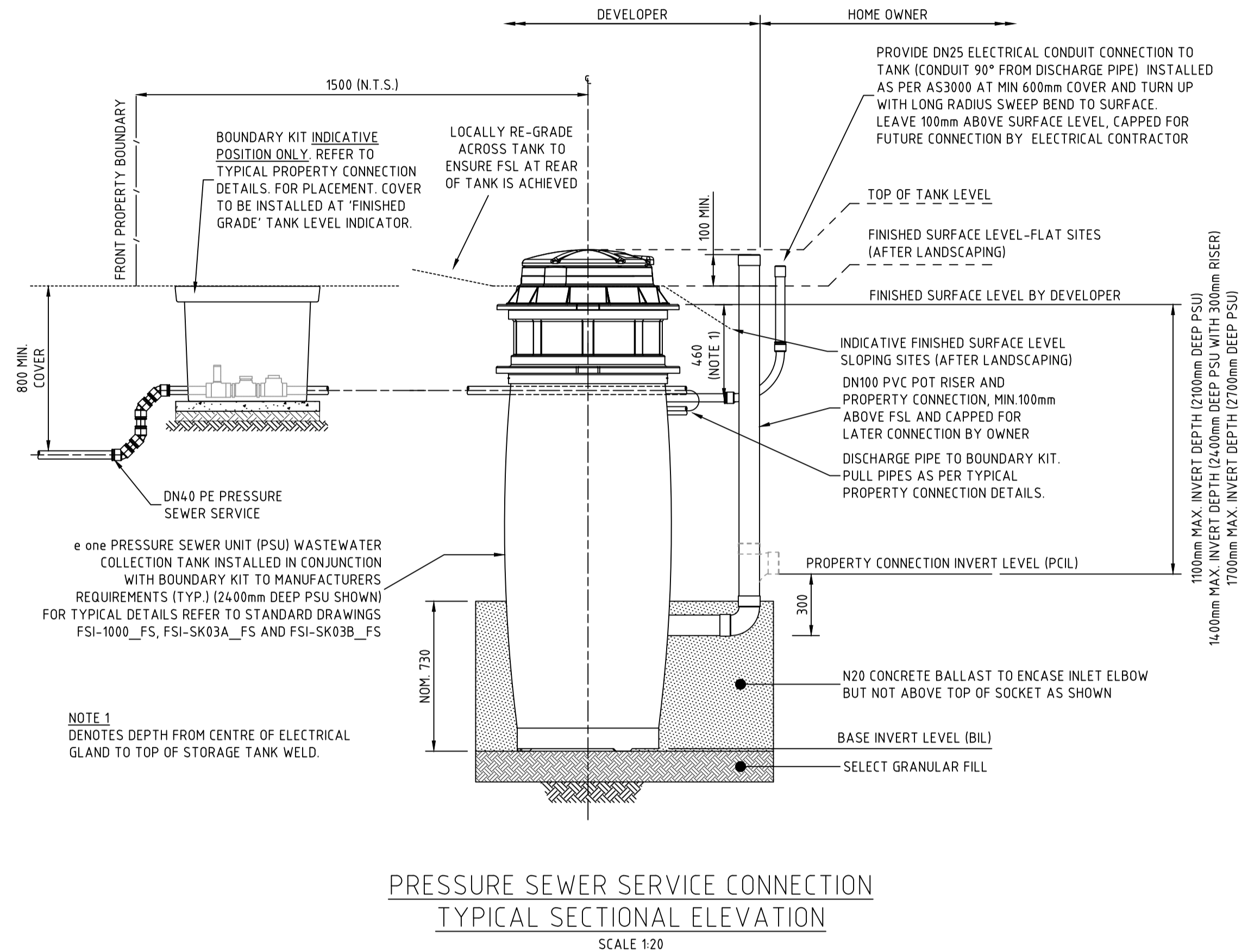
REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.	0 / 0.4 / 0.8 / 1.20 / 1:40	Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohanson.com.au www.adwjohanson.com.au ABN 62 129 445 398	WATAGAN PARK PRECINCT NORTH E - STAGE 5 LOT 89, D.P.1303421 35 MCCULLOUGH STREET, COORANBONG DA/918/2023	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	TYPICAL PROPERTY CONNECTION DETAILS	ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(8)5	WAT	403	1

WASTEWATER COLLECTION TANK DETAILS								
LOT NUMBER	TOP OF TANK	TANK FSL	BASE IL	PROPERTY CONNECTION IL	TANK HEIGHT	TANK LOCATION	EASTING	NORTHING
501	21.03	20.75	18.90	19.65	2100	REAR	356178.67	6340685.19
502	21.23	20.95	19.10	19.85	2100	REAR	356188.51	6340683.45
503	21.38	21.10	19.25	20.00	2100	REAR	356198.36	6340681.70
504	21.48	21.20	19.35	20.10	2100	REAR	356208.21	6340679.96
505	21.85	21.57	19.72	20.47	2100	REAR	356218.05	6340678.22
506	22.15	21.87	20.02	20.77	2100	REAR	356227.90	6340676.47
507	22.78	22.50	20.65	21.40	2100	REAR	356240.23	6340674.29
508	23.22	22.94	21.09	21.84	2100	REAR	356252.52	6340672.12
509	24.96	24.68	22.23	22.98	2700	FRONT BATTER	356267.26	6340698.87
510	25.16	24.88	22.43	23.18	2700	FRONT BATTER	356277.11	6340697.13
511	25.48	25.20	23.35	24.10	2100	FRONT	356281.24	6340716.73
512	25.16	24.88	23.03	23.78	2100	FRONT	356259.17	6340720.62
513	25.04	24.76	22.91	23.66	2100	FRONT	356257.30	6340720.95
514	24.81	24.53	22.68	23.43	2100	FRONT	356244.99	6340723.13
515	24.56	24.28	22.43	23.18	2100	FRONT	356232.68	6340725.31
516	24.41	24.13	22.28	23.03	2100	FRONT	356214.46	6340729.25
517	23.38	23.10	21.25	22.00	2100	FRONT	356194.04	6340734.00
518	22.91	22.63	20.78	21.53	2100	FRONT	356171.04	6340736.22
519	22.52	22.24	20.39	21.14	2100	FRONT	356158.73	6340738.40
520	22.27	21.99	20.14	20.89	2100	FRONT	356148.89	6340740.14
521	22.24	21.96	20.11	20.86	2100	FRONT	356138.58	6340742.16

WASTEWATER COLLECTION TANK COUNT (TOTAL)

TANK SIZE	NUMBER OF
2100	19
2400	0
2700	2

WASTEWATER COLLECTION TANK WAE DETAILS			
LOT NUMBER	EASTING	NORTHING	TOP OF TANK RL
501	356178.60	6340685.31	21.40
502	356188.40	6340683.61	21.50
503	356198.36	6340681.84	21.63
504	356208.13	6340680.19	21.67
505	356217.94	6340678.32	21.81
506	356227.76	6340676.56	22.22
507	356240.10	6340674.47	22.77
508	356252.45	6340672.33	23.43
509	356267.27	6340698.95	24.97
510	356277.15	6340697.18	25.21
511	356281.28	6340716.76	25.50
512	356299.22	6340720.60	25.17
513	356257.35	6340720.97	24.98
514	356244.98	6340723.14	24.84
515	356232.69	6340725.43	24.58
516	356214.43	6340729.20	24.39
517	356193.67	6340734.58	23.39
518	356171.05	6340736.18	22.92
519	356158.71	6340738.37	22.53
520	356148.94	6340740.14	22.32
521	356138.61	6340742.12	22.28



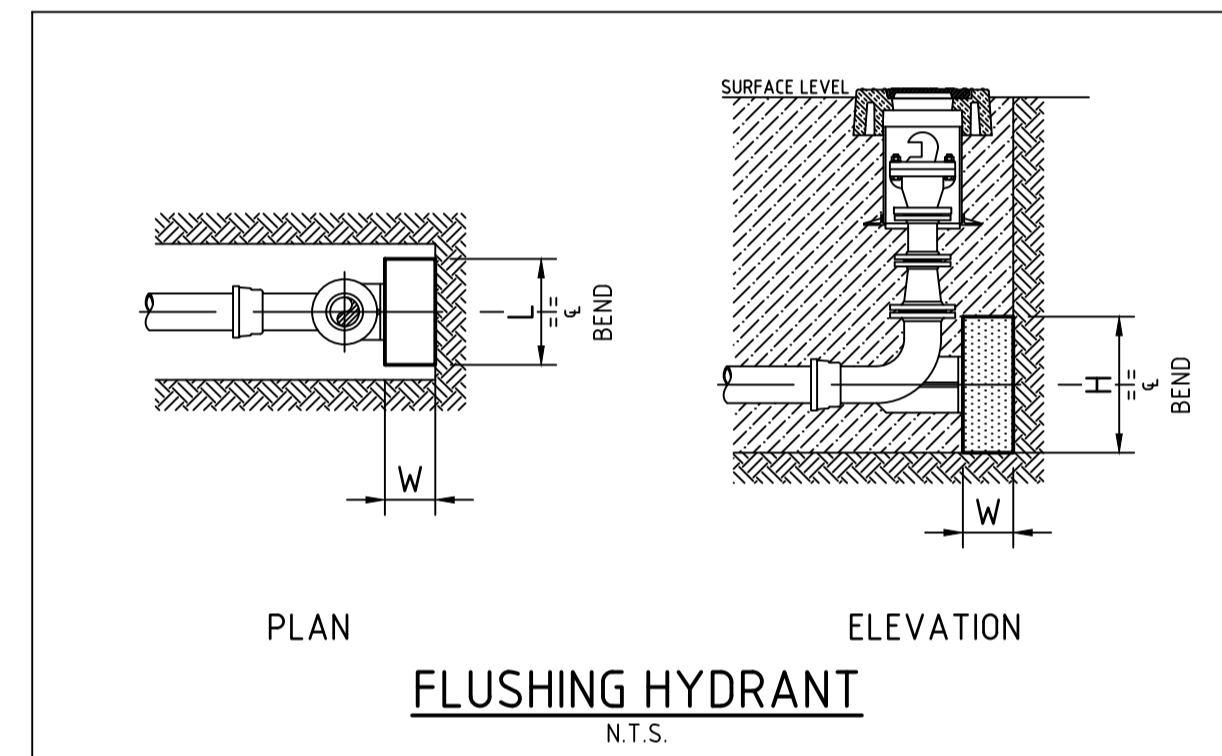
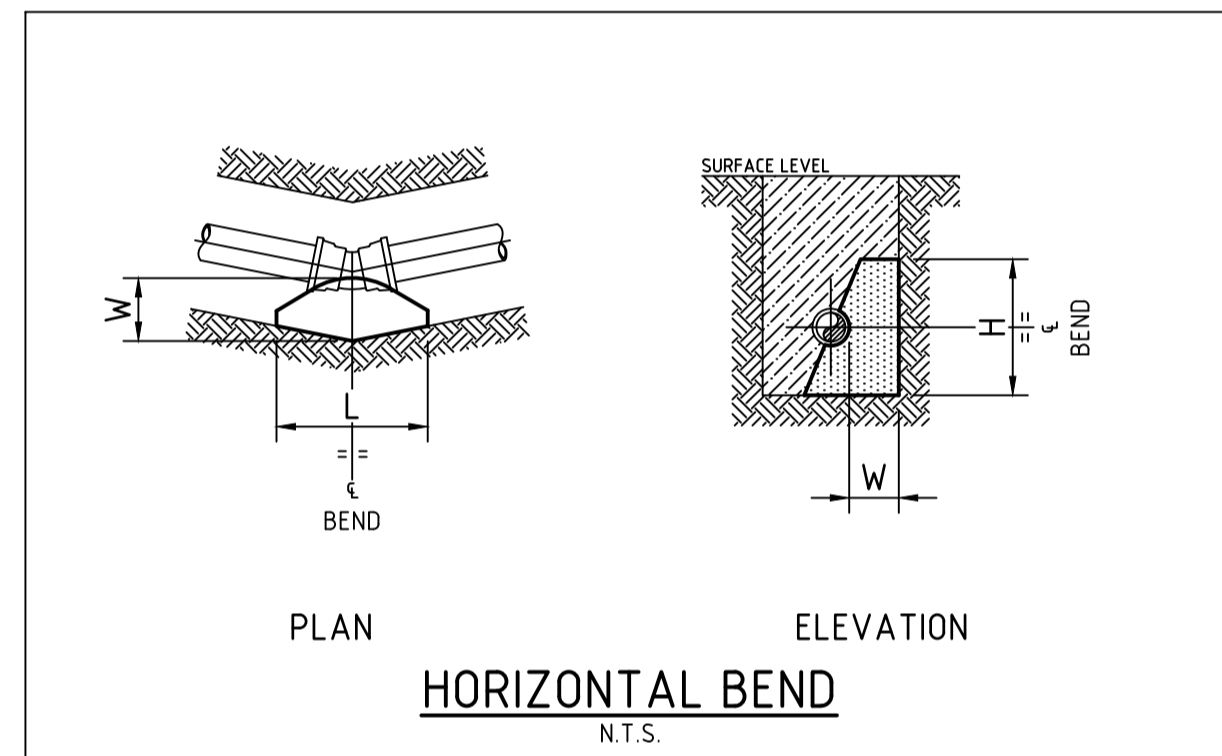
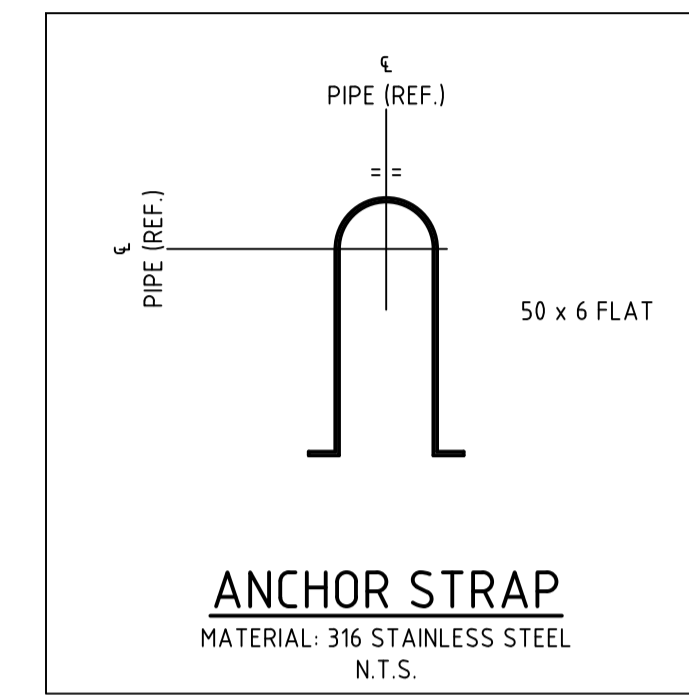
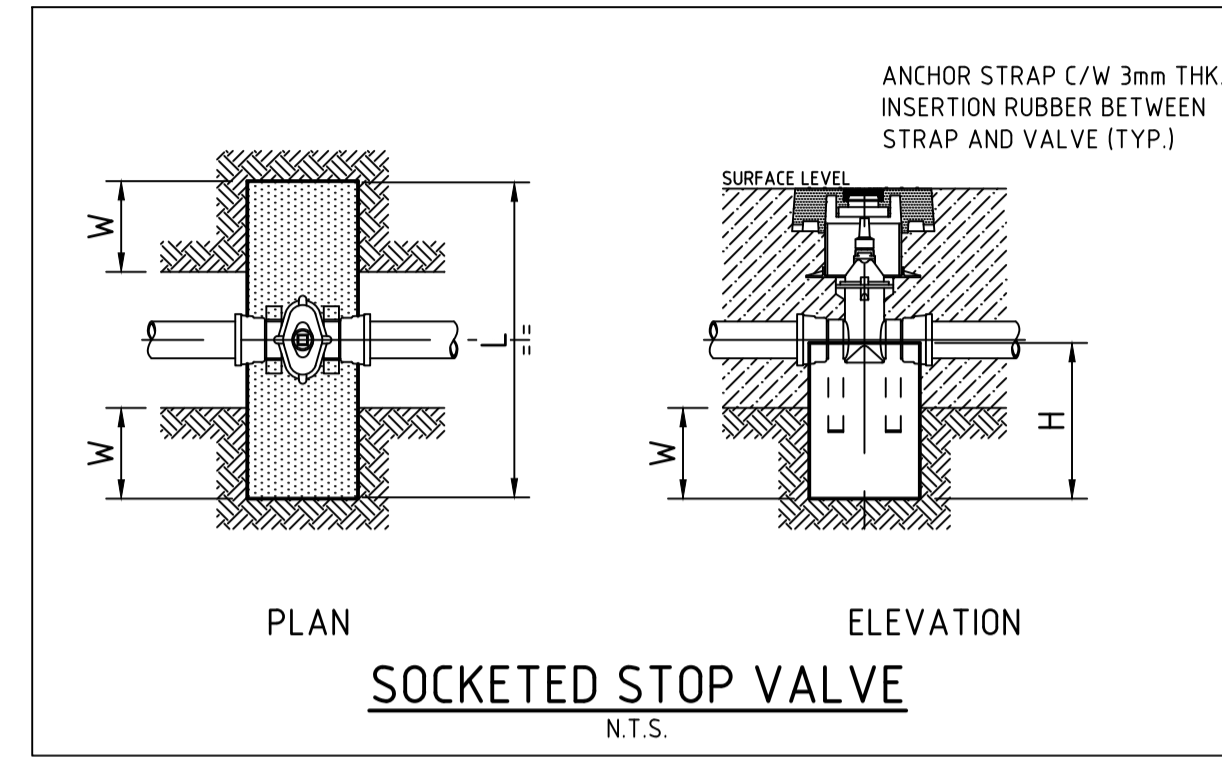
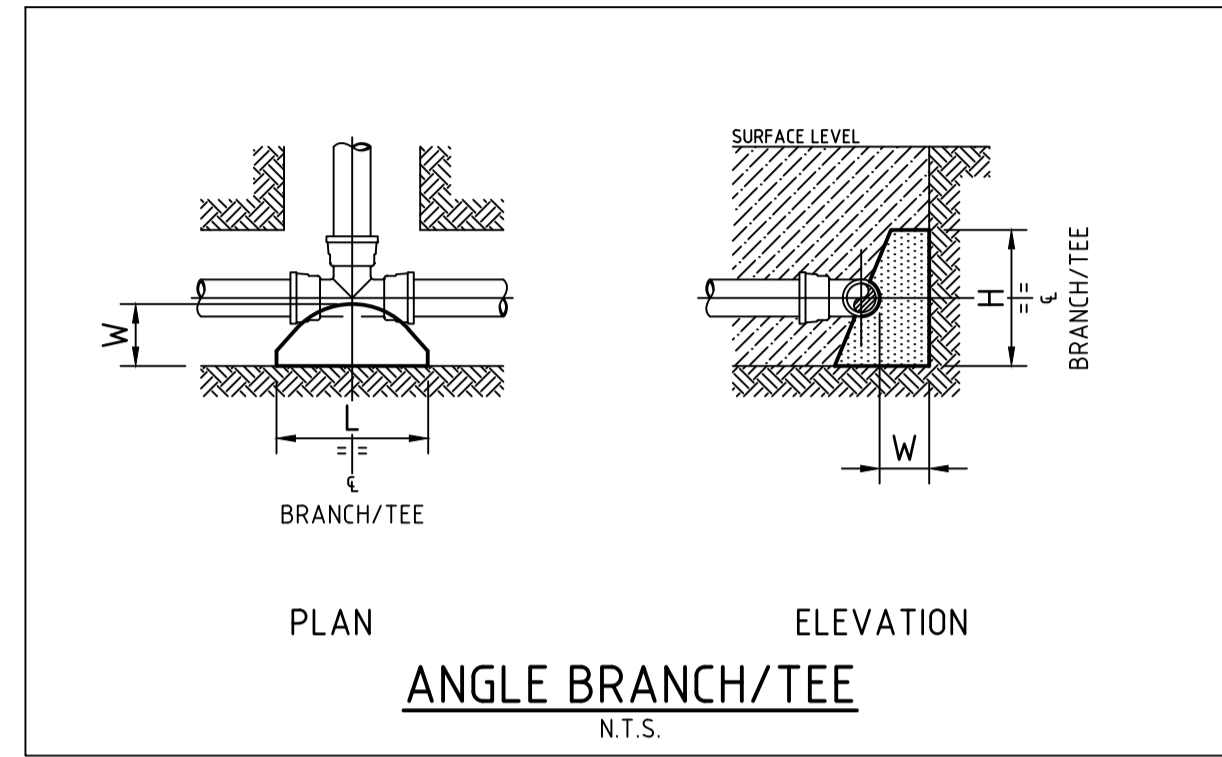
PRESSURE SEWER SERVICE CONNECTION
TYPICAL SECTIONAL ELEVATION
SCALE 1:20

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed: *M Harvey* Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

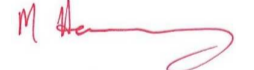
REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.		Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398	JOHNSON PROPERTY GROUP	WATAGAN PARK PRECINCT NORTH E - STAGE 5 LOT 89, D.P.1303421 35 MCCULLOUGH STREET, COORANBONG DA/918/2023	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(8)5 - WAT - 404	1		
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.											
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.											
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.											
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.											
O	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.											
1	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.											



TYPE	FITTING	Soil		Thrust	TA	Length	Height	Width
		AHBP (Kpa)	STP (Kpa)					
1	DN100 SOCKETED STOP VALVE	100	1500	18.00	0.18	1.05	0.44	0.30
2	DN100 FLUSHING HYDRANT	100	1500	18.00	0.18	0.45	0.40	0.30
3	DN150 x DN150 EQUAL TEE	100	1500	37.50	0.38	0.50	0.75	0.30
4	DN150 x DN100 TAPER	100	1500	19.50	0.20	1.05	0.70	0.30
5	DN150 SOCKETED STOP VALVE	100	1500	37.50	0.38	1.05	0.70	0.30
6	DN150 FLUSHING HYDRANT	100	1500	37.50	0.38	0.50	0.76	0.30
7	DN200 x DN150 TAPER	100	1500	27.00	0.27	1.20	0.78	0.30

THRUST BLOCK NOTES:

1. CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE.
2. THRUST BLOCK DIMENSIONS ARE BASED ON THE MINIMUM ALLOWABLE HORIZONTAL BEARING PRESSURES OF THE SOIL AS SHOWN. IF GROUND CONDITIONS ENCOUNTERED INDICATE THAT THESE BEARING PRESSURES MAY NOT BE ACHIEVED, THRUST BLOCK DESIGN IS TO BE REVISED.
3. THRUST BLOCKS ARE TO BE CONSTRUCTED SUCH THAT THEY TRANSFER THE THRUST ONTO UNDISTURBED GROUND. THRUST BLOCKS ARE NOT TO INTERFERE WITH OTHER SERVICES.
4. FINISH THRUST BLOCKS APPROXIMATELY 100mm ABOVE THE TOP OF THE FITTING OR BEARING PAD AND EXTEND TO THE FLOOR OF THE TRENCH OR DEEPER IF NECESSARY TO ACHIEVE THE REQUIRED THRUST AREA (N). MAXIMUM ENCASEMENT TO BE 180°.
5. CONCRETE FOR THE THRUST BLOCKS TO BE GRADE S25 USING CEMENT TYPE "SR" TO AS3972. CONCRETE TO BE MECHANICALLY VIBRATED.
6. CONCRETE THRUST BLOCKS ARE TO BE CURED FOR A MINIMUM OF 7 DAYS BEFORE BEING SUBJECTED TO ANY THRUST LOAD.
7. REFER TO WAT-1205-V FOR GENERAL FITTING THRUST BLOCK ARRANGEMENTS.
8. REFER TO WAT-1207-V FOR GENERAL VALVE AND VERTICAL BEND THRUST BLOCK ARRANGEMENTS.

WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed:  Date: 15/05/2026
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT			PROPERTY DESCRIPTION			PROJECT											
A	01.05.2025	INITIAL ISSUE	I.B.	M.K.	M.K.	C.H.		Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398			WATAGAN PARK PRECINCT NORTH E - STAGE 5 LOT 89, D.P.1303421 35 MCCULLOUGH STREET, COORANBONG DA/918/2023			POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION											
B	12.06.2025	CLIENT COMMENTS	I.B.	M.K.	M.K.	C.H.								PLAN TITLE THRUST BLOCK DETAILS											
C	20.06.2025	CLIENT COMMENTS	T.A.	M.K.	M.K.	C.H.																			
D	03.07.2025	ADDED EXISTING VALVES	T.A.	M.K.	M.K.	C.H.																			
E	08.09.2025	COUNCIL COMMENTS	T.A.	M.K.	M.K.	C.H.																			
O	29.09.2025	CONSTRUCTION ISSUE	T.A.	M.K.	M.K.	C.H.																			
1	12.03.2026	UPDATED TANK COORDINATES	T.A.	M.K.	M.K.	C.H.		SURVEYED ADW Johnson			DATUM GDA94 M.G.A. ZONE 56 A.H.D.			PROJECT No. 239078(8)5 -			DISCIPLINE WAT -			NUMBER 405			REV. 1		