
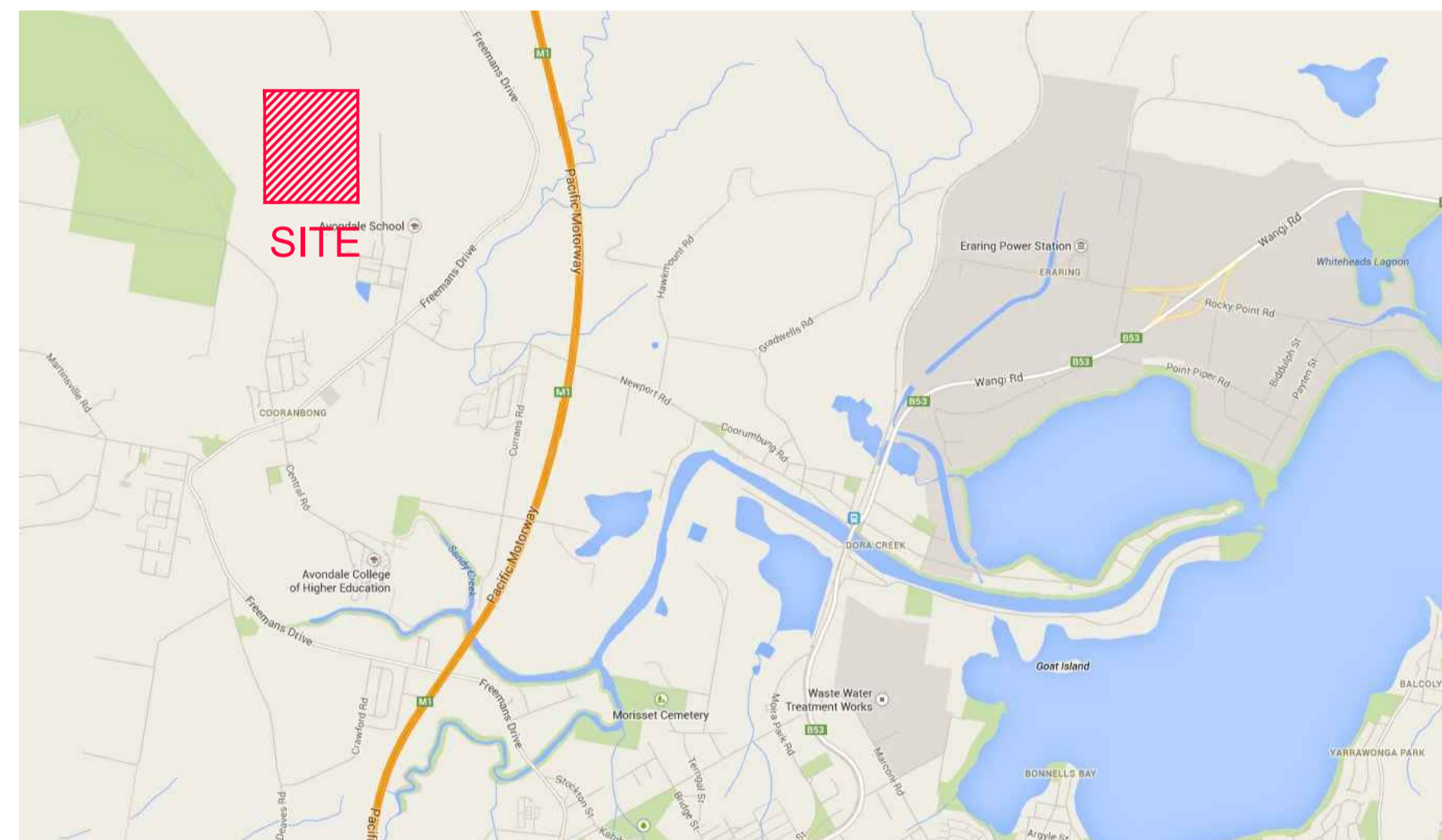
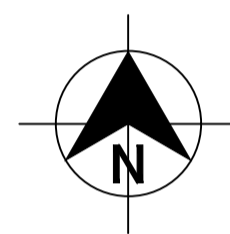


239078(5)2-WAT-001(3)

WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



LOCALITY SKETCH
NOT TO SCALE

Sheet Title	Sheet Description
239078(5)2-WAT-001	TITLE SHEET, DRAWING INDEX & LOCALITY PLAN
239078(5)2-WAT-002	GENERAL NOTES
239078(5)2-WAT-003	SITE PLAN
239078(5)2-WAT-101	POTABLE WATER DETAIL PLAN: SHEET 1 OF 6
239078(5)2-WAT-102	POTABLE WATER DETAIL PLAN: SHEET 2 OF 6
239078(5)2-WAT-103	POTABLE WATER DETAIL PLAN: SHEET 3 OF 6
239078(5)2-WAT-104	POTABLE WATER DETAIL PLAN: SHEET 4 OF 6
239078(5)2-WAT-105	POTABLE WATER DETAIL PLAN: SHEET 5 OF 6
239078(5)2-WAT-106	POTABLE WATER DETAIL PLAN: SHEET 6 OF 6
239078(5)2-WAT-201	RECYCLED WATER DETAIL PLAN: SHEET 1 OF 6
239078(5)2-WAT-202	RECYCLED WATER DETAIL PLAN: SHEET 2 OF 6
239078(5)2-WAT-203	RECYCLED WATER DETAIL PLAN: SHEET 3 OF 6
239078(5)2-WAT-204	RECYCLED WATER DETAIL PLAN: SHEET 4 OF 6
239078(5)2-WAT-205	RECYCLED WATER DETAIL PLAN: SHEET 5 OF 6
239078(5)2-WAT-206	RECYCLED WATER DETAIL PLAN: SHEET 6 OF 6
239078(5)2-WAT-301	PRESSURE SEWER DETAIL PLAN: SHEET 1 OF 5
239078(5)2-WAT-302	PRESSURE SEWER DETAIL PLAN: SHEET 2 OF 5
239078(5)2-WAT-303	PRESSURE SEWER DETAIL PLAN: SHEET 3 OF 5
239078(5)2-WAT-304	PRESSURE SEWER DETAIL PLAN: SHEET 4 OF 5
239078(5)2-WAT-305	PRESSURE SEWER DETAIL PLAN: SHEET 5 OF 5
239078(5)2-WAT-401	TYPICAL CROSS SECTIONS: A & B
239078(5)2-WAT-402	TYPICAL CROSS SECTION: C
239078(5)2-WAT-403	TYPICAL PIPEWORK TRENCHING DETAILS
239078(5)2-WAT-404	TYPICAL PROPERTY CONNECTION: SHEET 1 OF 2
239078(5)2-WAT-405	TYPICAL PROPERTY CONNECTION: SHEET 2 OF 2
239078(5)2-WAT-406	SEWER SERVICE CONNECTION DETAILS
239078(5)2-WAT-407	THRUST BLOCK DETAILS

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.



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT		PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.			
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.		 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 PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780		POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		TITLE SHEET, DRAWING INDEX & LOCALITY PLAN		ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2	WAT	001	3
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.															
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.															
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.															
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.															
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.															
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.															

239078(5)2-WAT-002(3)

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:

- 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.
- 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.
- 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 CONTRACTOR 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.
- PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 02-2007 AND ALTOGETHER SUPPLEMENTARY MANUAL TO WSA.
- 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.
- 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.
- 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.
- MAINS WITHIN 2.0m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER REPRESENTATIVE).
- ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSA PRODUCT SPECIFICATION WSA-PS350 AND WSA-PS351.
- ALL BENDS SHALL BE ELECTROFUSION OR BUTT WELD SWEEP BENDS. FABRICATED BENDS SHALL NOT BE USED IN LIEU. KNUCKLE ELBOWS ARE NOT PERMITTED.
- 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).
- ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).
- 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
- 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).
- DETECTABLE MARKING TAPE SHALL BE LAID ON TOP OF THE PIPE EMBEDMENT MATERIAL BEFORE BACKFILLING AND CONNECTED TO SURFACE FITTINGS.
- ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- DURING CONSTRUCTION, ALL OPEN ENDS OF PIPE SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- ALL VALVES SHALL BE RESILIENT SEATED SLUICE VALVES (ANTI-CLOCKWISE CLOSING). SHALL BE RESTRAINED IN ACCORDANCE WITH WAT-1207 AND SHALL COMPLY WITH ALTOGETHER STANDARD DRAWING PSS-1015-FS.
- ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 07-2007 VERSION 1.1.
- FOR LOTS WITH TANKS IN THE REAR
1 x ø25mm INSTRUMENTATION CONDUIT (ORANGE) AND 1 x ø25mm 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).
- THE CONTRACTOR 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.
- UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAD EXISTED PRIOR TO COMMENCEMENT OF WORKS.
- PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
- 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.
- THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 21.3.4) 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.
- BOUNDARY KITS (COMPLETE) SHALL BE NOV SUPPLIED (NOV PSS-BK4).
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.
- 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.
- ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.
- ROPE OFF ALL PRESSURE SEWER UNITS AND FLUSHING POINTS TO LIMIT DAMAGE DURING CONSTRUCTION.
- PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
- WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A. SUBMISSION CHECKLIST.
- 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:

- 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).
- POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.
- 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.
- 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 CONTRACTOR 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.
- THE CONTRACTOR SHALL VERIFY WITH THE SITE SUPERVISOR THE POSITION AND LEVEL OF ALL EXISTING AND PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.
- 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-V) AND 800mm IN ROADWAYS (TYPE L EMBEDMENT: WAT-1204-V). 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.
- ALL POTABLE WATER MAINS TO BE BLUE PVC-M (PN16). ALL RECYCLED WATER MAINS 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.
- MAXIMUM JOINT DEFLECTIONS TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 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.
- 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/TRENCHFILL TYPE AND THE NEED FOR TRENCH DRAINAGE/BULKHEADS.
- DURING CONSTRUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- HYDRANTS, STOP VALVES AND ALL OTHER FITTINGS TO BE THE SAME SIZE AS THE THROUGH WATER MAIN AND ANTI CLOCKWISE CLOSING.
- 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.
- THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH WAT-1205.
- 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
- PROPERTY SERVICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE ALTOGETHER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
- SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- ALL MAINS SHALL BE PRESSURE TESTED TO 1500kPa IN ACCORDANCE WITH CLAUSE 19.4 OF WSA03-2011 (SYDNEY WATER EDITION 2014).
- ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- WATER QUALITY TESTING SHALL BE IN ACCORDANCE WITH WSA 03-2011-3.1 (SYDNEY WATER EDITION-2014. CLAUSE 19.7).
- THE CONTRACTOR 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.
- UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAD EXISTED PRIOR TO COMMENCEMENT OF WORKS.
- PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
- 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.
- 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.
- SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.
- PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
- WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A. SUBMISSION CHECKLIST.
- 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:

- 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.
- 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.
- MAKE SMOOTH TRANSITION TO EXISTING WORKS (i.e. ROAD PAVEMENT AND FOOTPATHS) TO P.C.A. AND SUPERINTENDENT'S REQUIREMENTS.
- SUITABLE PROTECTION TO EXISTING ROAD PAVEMENT, KERB AND GUTTER, FOOTPATHS AND ANY EXISTING FEATURES SHALL BE PROVIDED UNTIL THE CONSTRUCTION WORKS ARE COMPLETED.

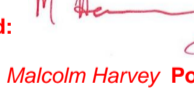
CLEARANCES BETWEEN PIPELINES AND UNDERGROUND SERVICES

UTILITY (EXISTING OR PROPOSED SERVICE)	MINIMUM HORIZONTAL CLEARANCE (mm)		MINIMUM VERTICAL CLEARANCE (mm)
	NEW MAIN SIZE		
	≤ DN200	≥ DN200	
WATER MAINS - DN375	600	600	300
WATER MAINS - DN375	300*	600	150
GAS MAINS	300*	600	150
TELECOMMUNICATION CONDUITS AND CABLES	300*	600	150
ELECTRICITY CONDUITS AND CONDUITS	200	1000	225*
STORMWATER DRAINS	300*	600	150*
SEWERS (GRAVITY)	1000* / 600	1000* / 600	500*
SEWERS (PRESSURE AND VACUUM)	600	600	300*
KERBS	150	600 ^S	150 (WHERE POSSIBLE)

NOTES:

- 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.
- WATER MAINS INCLUDES MAINS SUPPLYING BOTH POTABLE AND RECYCLED WATER.
- FOR AREAS WITH EXISTING WATER RETICULATION, CLEARANCES CAN BE FURTHER REDUCED TO 600mm WITH THE APPROVAL OF THE WATER AUTHORITY.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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: 	Date: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor	



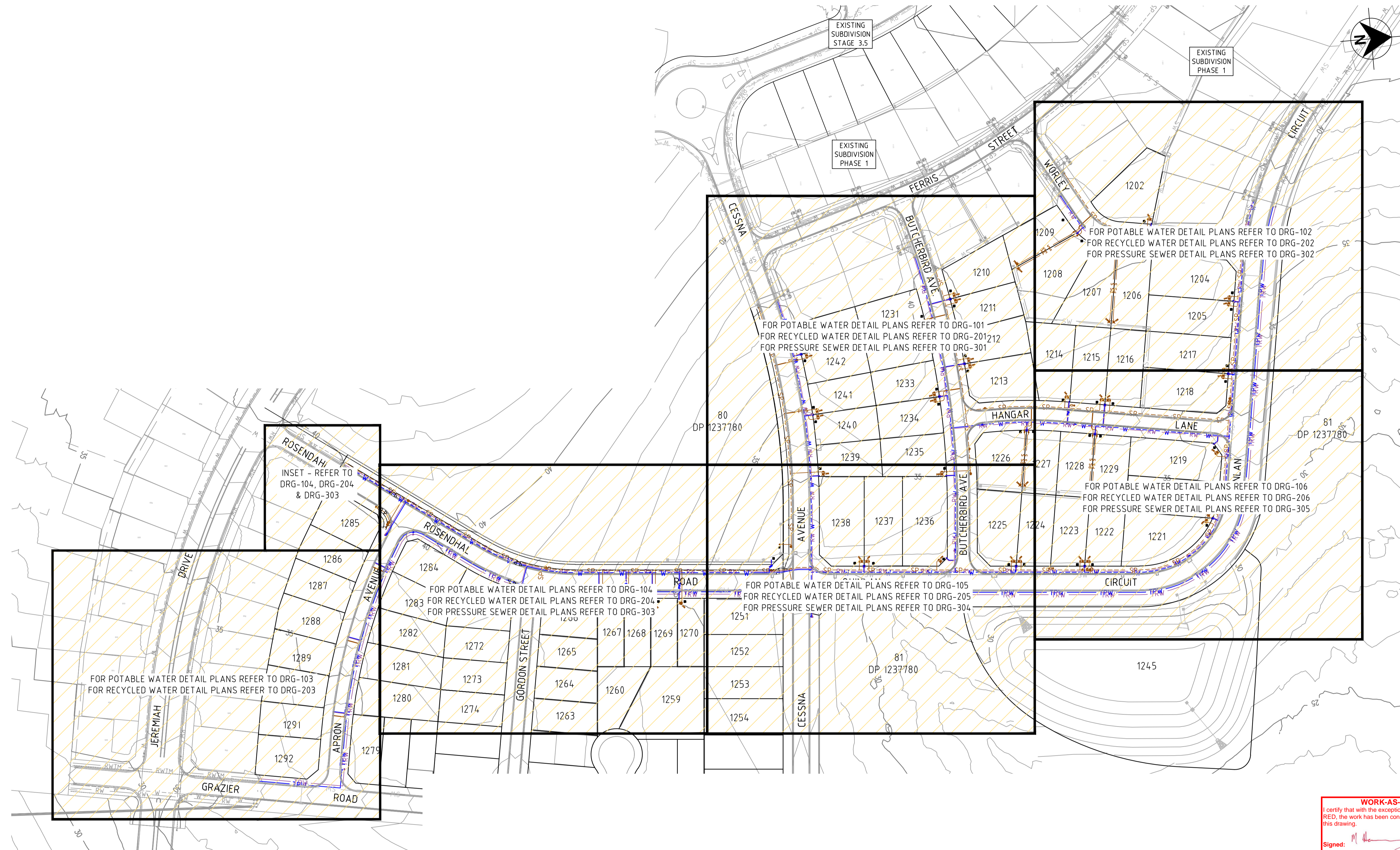
CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.		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 PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	GENERAL NOTES	239078(5)2	WAT	002	3
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.									
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.									
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.									
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.									
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.									
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.									

DESIGN FILE N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)-WAT-DESIGN(P2).dwg

ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE

Plotted By: leahs Plot Date: 02/06/23 - 10:20 Cad File: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)-WAT-002(3).dwg



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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



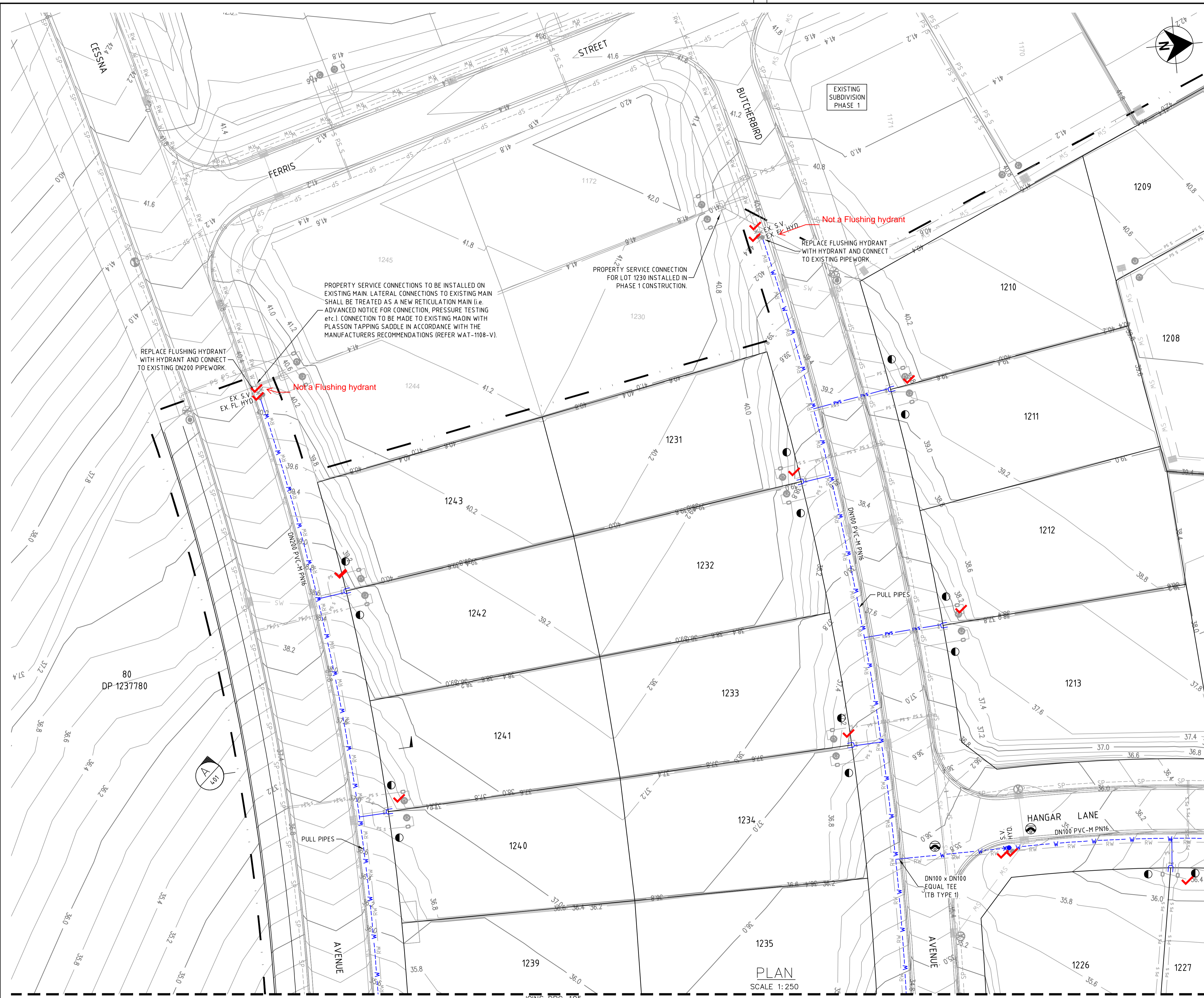
CONSTRUCTION ISSUE

PLAN
SCALE 1:1000

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		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		CLIENT WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	PROPERTY DESCRIPTION		PROJECT		PROJECT No. 239078(5)2	DISCIPLINE WAT	NUMBER 003	REV. 3
PLAN TITLE		POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		SITE PLAN															
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	 A1 / A3 1:1000 / 1:2000		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		CLIENT WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	PROPERTY DESCRIPTION		PROJECT		PROJECT No. 239078(5)2	DISCIPLINE WAT	NUMBER 003	REV. 3
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.						PLAN TITLE		POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION					
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.						SITE PLAN							
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.													
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.													
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.													
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.													

239078(5)2-WAT-106(3)

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

- TPW — PVC-M POTABLE WATER TRANSFER MAIN
- W — PVC-M POTABLE WATER RETICULATION
- PWS — POTABLE WATER PROPERTY SERVICE
- RW — PVC-M RECYCLED WATER RETICULATION
- RWS — RECYCLED WATER PROPERTY SERVICE
- SP — PE PRESSURE SEWER RETICULATION
- PS — PE PRESSURE SEWER PROPERTY SERVICE
- EX PW — EXISTING POTABLE WATER RETICULATION
- EX RW — EXISTING RECYCLED WATER RETICULATION
- EX PS — EXISTING PRESSURE SEWER RETICULATION
- SW — STORMWATER PIPEWORK
- SV — STOP VALVE
- HYD. — HYDRANT
- FL HYD. — FLUSHING HYDRANT
- — PROPERTY SERVICE CONNECTION
- — LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- — LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
- — PROPOSED EASEMENT
- - - - - SUBDIVISION STAGE BOUNDARY

POTABLE WATER PROPERTY SERVICE CONNECTIONS

TOTAL 45 CONNECTIONS

- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
- SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	501
DN150	PVC-M PN16	502
DN200	PVC-M PN16	150
DN250	PVC-M PN16	723

- NOTES:**
1. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT
I	03.02.2023	UPDATE PIPE SIZE
J	14.02.2023	UPDATE PIPE SIZE
K	14.02.2023	CLIENT COMMENTS
O	27.02.2023	FOR CONSTRUCTION
1	09.03.2023	FOR CONSTRUCTION
2	12.05.2023	FOR CONSTRUCTION
3	01.06.2023	FOR CONSTRUCTION

DRAWN	CHECK	DESIGN	VERIFY	SCALES
G.S.	M.K.	M.K.	M.K.	A1 / A3 1:250 / 1:500
G.S.	M.K.	M.K.	M.K.	
G.S.	M.K.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
L.S.	C.S.	M.K.	M.K.	

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@adwjohanson.com.au
www.adwjohanson.com.au
ABN 62 129 445 398

JOHNSON PROPERTY GROUP

CLIENT

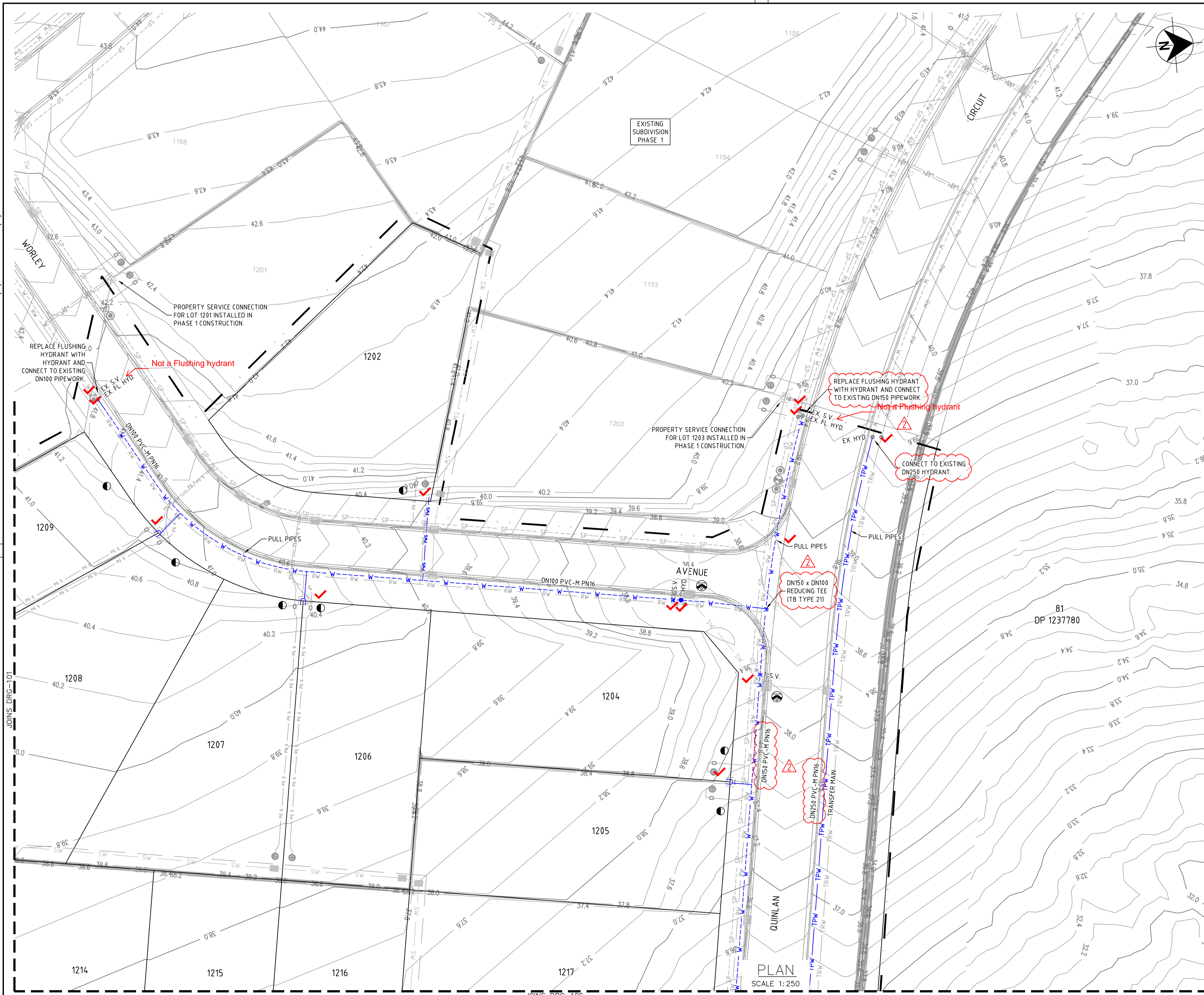
PROPERTY DESCRIPTION
WATANG PARK
PROPOSED SUBDIVISION - PHASE 2
PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
LOT 82 DP1237780

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	3
PLAN TITLE	POTABLE WATER DETAIL PLAN: SHEET 1 OF 6		
PROJECT No.	239078(5)2	DISCIPLINE	WAT
NUMBER	101	REV.	3

239078(5)2-WAT-106(3)

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**
- TPW — PVC-M POTABLE WATER TRANSFER MAIN
 - W — PVC-M POTABLE WATER RETICULATION
 - PS — POTABLE WATER PROPERTY SERVICE
 - RW — PVC-M RECYCLED WATER RETICULATION
 - RWS — RECYCLED WATER PROPERTY SERVICE
 - SP — PE PRESSURE SEWER RETICULATION
 - PS S — PE PRESSURE SEWER PROPERTY SERVICE
 - EX PW — EXISTING POTABLE WATER RETICULATION
 - EX RW — EXISTING RECYCLED WATER RETICULATION
 - EX PS — EXISTING PRESSURE SEWER RETICULATION
 - SW — STORMWATER PIPEWORK
 - SV — STOP VALVE
 - HYD. — HYDRANT
 - FL HYD. — FLUSHING HYDRANT
 - — PROPERTY SERVICE CONNECTION
 - — LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - — LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
 - — PROPOSED EASEMENT
 - - - - - SUBDIVISION STAGE BOUNDARY

- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 45 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	501
DN150	PVC-M PN16	502
DN200	PVC-M PN16	150
DN250	PVC-M PN16	723

- NOTES:**
1. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

<p>REV. DATE AMENDMENT</p> <p>I 03.02.2023 UPDATE PIPE SIZE</p> <p>J 14.02.2023 UPDATE PIPE SIZE</p> <p>K 14.02.2023 CLIENT COMMENTS</p> <p>O 27.02.2023 FOR CONSTRUCTION</p> <p>1 09.03.2023 FOR CONSTRUCTION</p> <p>2 12.05.2023 FOR CONSTRUCTION</p> <p>3 01.06.2023 FOR CONSTRUCTION</p>				<p>DRAWN CHECK DESIGN VERIFY SCALES</p> <p>G.S. M.K. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K. M.K.</p> <p>G.S. C.S. M.K. M.K. M.K.</p> <p>G.S. C.S. M.K. M.K. M.K.</p> <p>L.S. C.S. M.K. M.K. M.K.</p> <p>0 5 10 A1 / A3 1:250 / 1:500</p>				<p>CLIENT</p> <p>JOHNSON PROPERTY GROUP</p> <p>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</p>				<p>PROPERTY DESCRIPTION</p> <p>WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780</p>				<p>PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION</p> <p>PLAN TITLE POTABLE WATER DETAIL PLAN: SHEET 2 OF 6</p>			
<p>DESIGN FILE N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)-WAT-DESIGN(P2).dwg</p> <p>Plotted By: leahs Plot Date: 02/06/23 - 10:20 Cad File: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-106(3).dwg</p>		<p>ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE</p>		<p>SURVEYED ADW Johnson</p>		<p>DATUM GDA94 M.G.A. ZONE 56 A.H.D.</p>		<p>PROJECT No. 239078(5)2</p>		<p>DISCIPLINE WAT</p>		<p>NUMBER 102</p>		<p>REV. 3</p>					

239078(5)2-WAT-106(3)

100mm AT FULL SIZE
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LEGEND

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- W — PVC-M POTABLE WATER RETICULATION
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- SW — STORMWATER PIPEWORK
- SV — STOP VALVE
- HYD. — HYDRANT
- FL HYD. — FLUSHING HYDRANT
- — PROPERTY SERVICE CONNECTION
- — LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- — LAY UNDER SERVICE CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
- — PROPOSED EASEMENT
- - - - - SUBDIVISION STAGE BOUNDARY

POTABLE WATER PROPERTY SERVICE CONNECTIONS

- TOTAL 45 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
- SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

POTABLE WATER PIPE DATA

PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	501
DN150	PVC-M PN16	502
DN200	PVC-M PN16	150
DN250	PVC-M PN16	723

- NOTES:**
- FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor

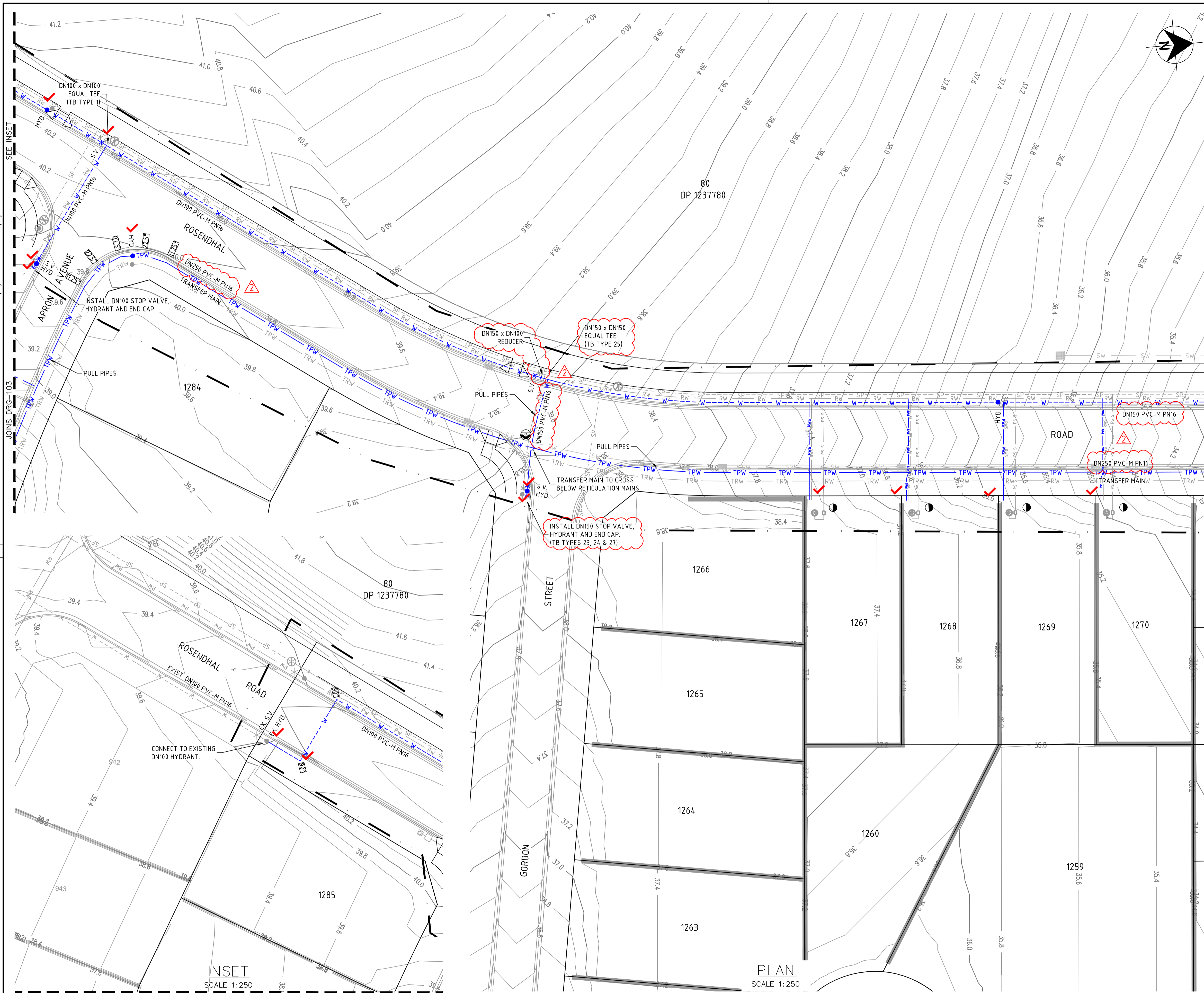


CONSTRUCTION ISSUE

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REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY																																																																	
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.																																																																	
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<p>DESIGN FILE: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-DESIGN(P2).dwg</p>		<p>ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE</p>		<p>SURVEYED</p> <p>ADW Johnson</p>		<p>DATUM</p> <p>GDA94 M.G.A. ZONE 56 A.H.D.</p>		<p>PROJECT No.</p> <p>239078(5)2</p>		<p>DISCIPLINE</p> <p>WAT</p>		<p>NUMBER</p> <p>103</p>		<p>REV.</p> <p>3</p>																																																									
<p>Plotted By: leahs Plot Date: 02/06/23 - 10:20 Cad File: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-106(3).dwg</p>																																																																							

239078(5)2-WAT-106(3)

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LEGEND

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- - - - - SUBDIVISION STAGE BOUNDARY

POTABLE WATER PROPERTY SERVICE CONNECTIONS

- TOTAL 45 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
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- SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
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POTABLE WATER PIPE DATA

PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	501
DN150	PVC-M PN16	502
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NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT
I	03.02.2023	UPDATE PIPE SIZE
J	14.02.2023	UPDATE PIPE SIZE
K	14.02.2023	CLIENT COMMENTS
O	27.02.2023	FOR CONSTRUCTION
1	09.03.2023	FOR CONSTRUCTION
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DRAWN	CHECK	DESIGN	VERIFY	SCALES
G.S.	M.K.	M.K.	M.K.	A1 / A3
G.S.	M.K.	M.K.	M.K.	1:250 / 1:500
G.S.	M.K.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
L.S.	C.S.	M.K.	M.K.	

adw Johnson

Hunter Office
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JOHNSON PROPERTY GROUP

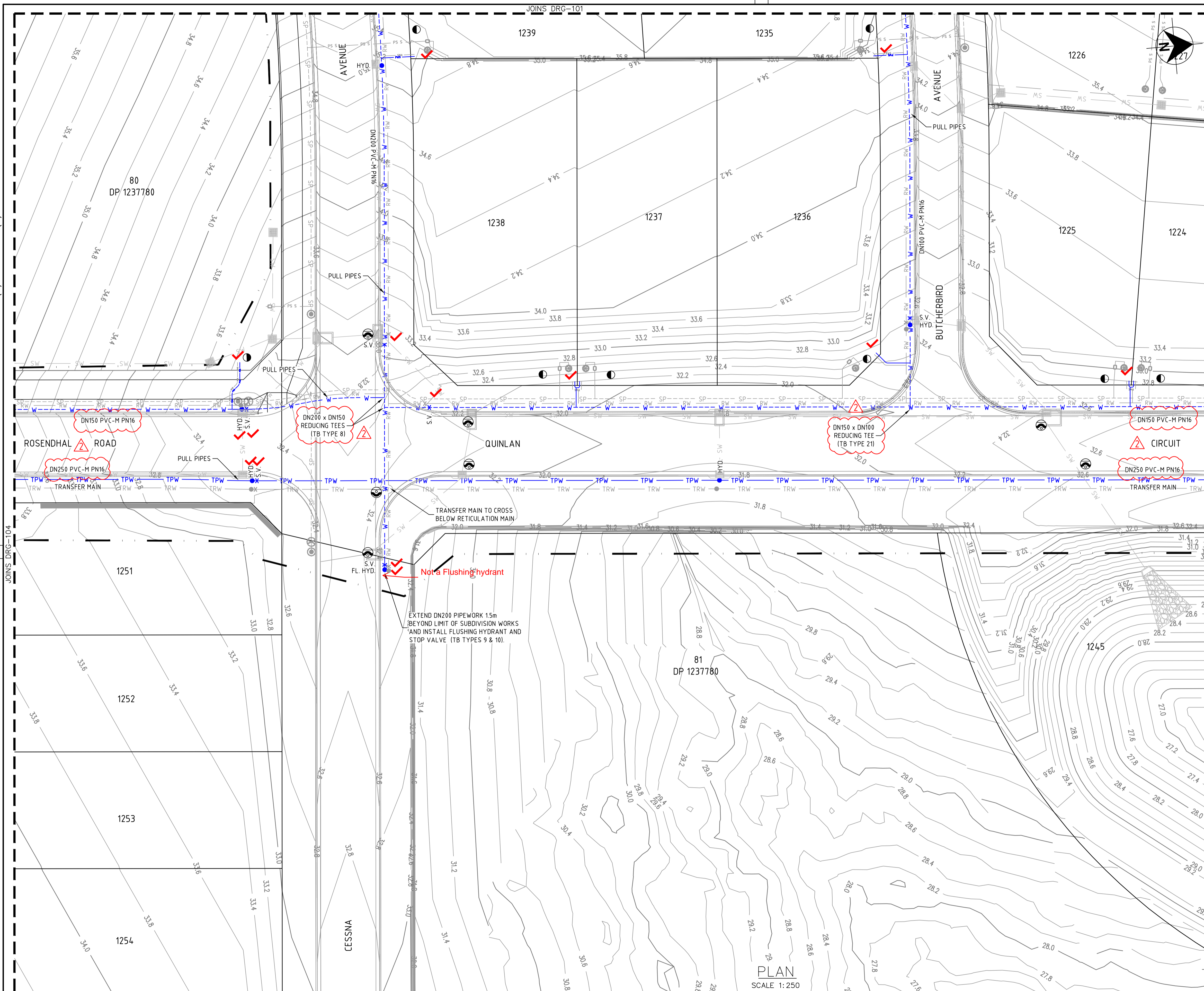
CLIENT
PROPERTY DESCRIPTION
WATAGAN PARK
PROPOSED SUBDIVISION - PHASE 2
PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
LOT 82 DP1237780

PROJECT	PLAN TITLE
POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	POTABLE WATER DETAIL PLAN: SHEET 4 OF 6

SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2	WAT	104	3

239078(5)2-WAT-106(3)

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**
- TPW — PVC-M POTABLE WATER TRANSFER MAIN
 - W — PVC-M POTABLE WATER RETICULATION
 - PWS — POTABLE WATER PROPERTY SERVICE
 - RW — PVC-M RECYCLED WATER RETICULATION
 - RWS — RECYCLED WATER PROPERTY SERVICE
 - SP — PE PRESSURE SEWER RETICULATION
 - PS S — PE PRESSURE SEWER PROPERTY SERVICE
 - EX PW — EXISTING POTABLE WATER RETICULATION
 - EX RW — EXISTING RECYCLED WATER RETICULATION
 - EX PS — EXISTING PRESSURE SEWER RETICULATION
 - SW — STORMWATER PIPEWORK
 - SV — STOP VALVE
 - HYD. — HYDRANT
 - FL HYD. — FLUSHING HYDRANT
 - — PROPERTY SERVICE CONNECTION
 - — LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H OR WAT-1255-V
 - — LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
 - — PROPOSED EASEMENT
 - - - - - SUBDIVISION STAGE BOUNDARY

- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 45 CONNECTIONS
 - SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	501
DN150	PVC-M PN16	502
DN200	PVC-M PN16	150
DN250	PVC-M PN16	723

- NOTES:**
1. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor

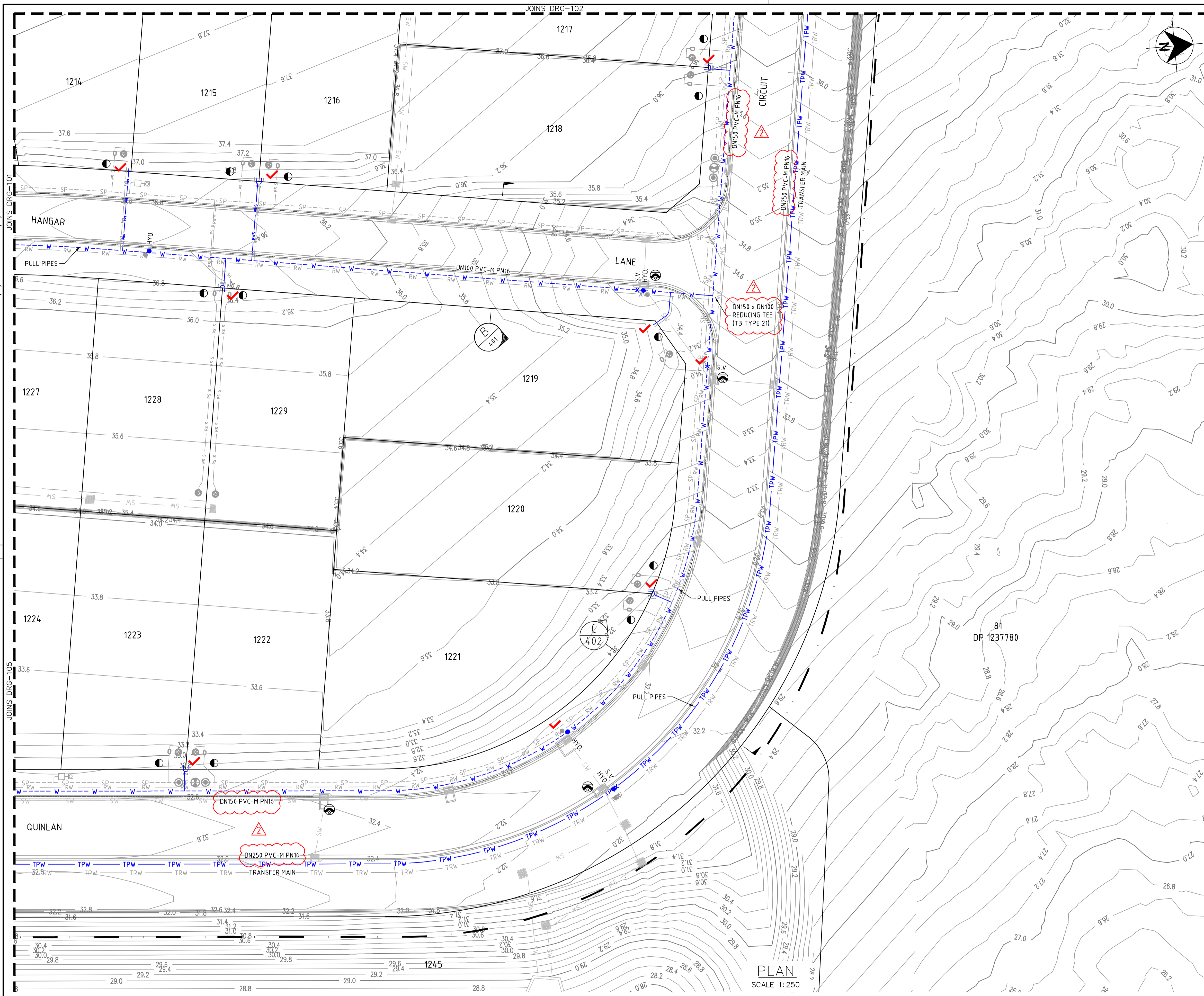


CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		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		PROJECT		PROJECT No. 239078(5)2	DISCIPLINE WAT	NUMBER 105	REV. 3
							WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780				POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		PLAN TITLE POTABLE WATER DETAIL PLAN: SHEET 5 OF 6					
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	 A1 / A3 1:250 / 1:500											
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.												
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.												
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.												
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.												
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.												
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.												

239078(5)2-WAT-106(3)

100mm AT FULL SIZE
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- LEGEND**
- TPW — PVC-M POTABLE WATER TRANSFER MAIN
 - W — PVC-M POTABLE WATER RETICULATION
 - PS — POTABLE WATER PROPERTY SERVICE
 - RW — PVC-M RECYCLED WATER RETICULATION
 - RWS — RECYCLED WATER PROPERTY SERVICE
 - SP — PE PRESSURE SEWER RETICULATION
 - PS S — PE PRESSURE SEWER PROPERTY SERVICE
 - EX PW — EXISTING POTABLE WATER RETICULATION
 - EX RW — EXISTING RECYCLED WATER RETICULATION
 - EX PS — EXISTING PRESSURE SEWER RETICULATION
 - SW — STORMWATER PIPEWORK
 - SV — STOP VALVE
 - HYD. — HYDRANT
 - FL HYD. — FLUSHING HYDRANT
 - — PROPERTY SERVICE CONNECTION
 - — LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - — LAY UNDER SERVICE CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
 - — PROPOSED EASEMENT
 - - - - - SUBDIVISION STAGE BOUNDARY
- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 45 CONNECTIONS
 - SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

POTABLE WATER PIPE DATA

PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	501
DN150	PVC-M PN16	502
DN200	PVC-M PN16	150
DN250	PVC-M PN16	723

- NOTES:**
- FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	 A1 / A3 1:250 / 1:500
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.	
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.	
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.	
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.	
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.	

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ABN 62 129 445 398

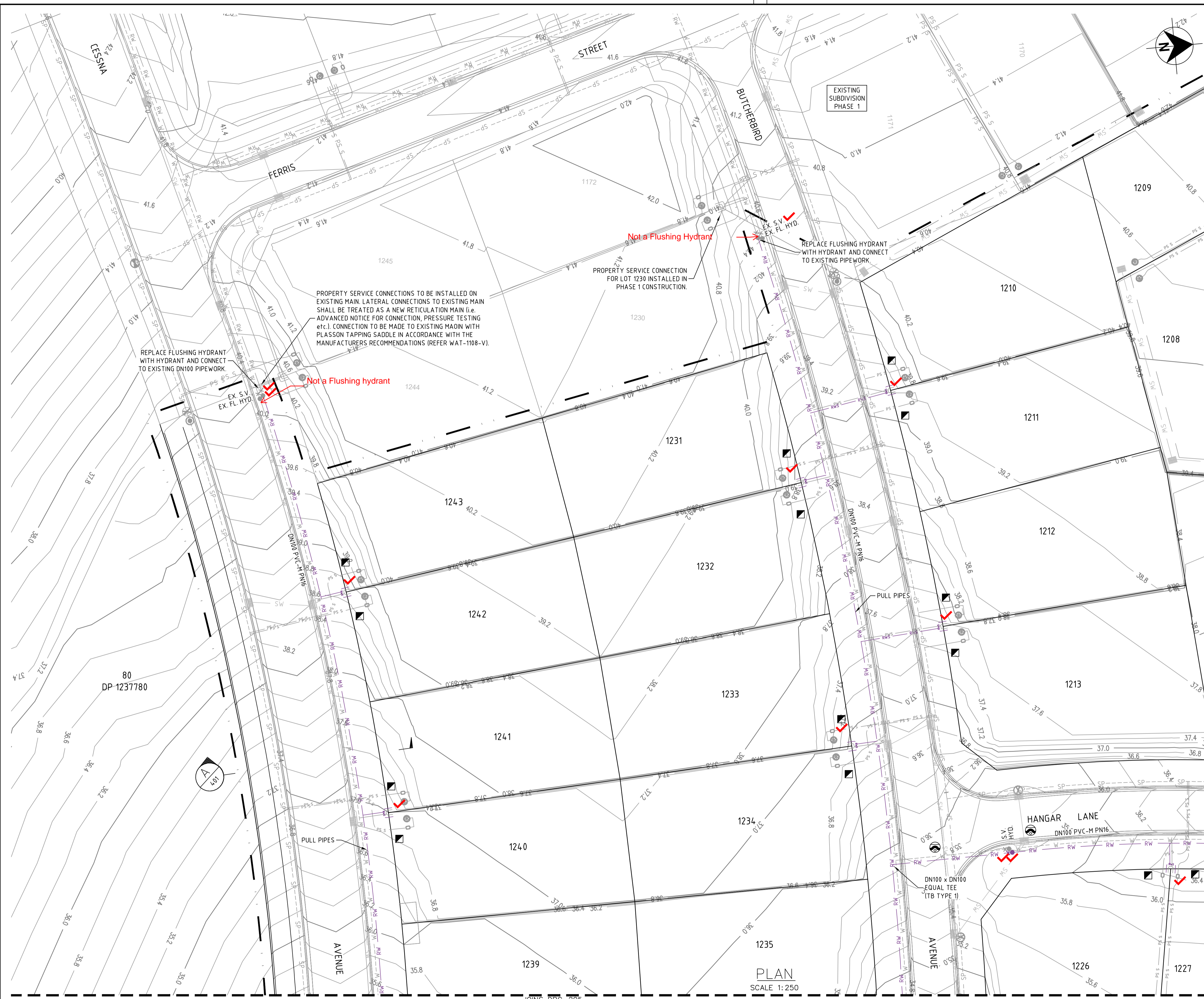
JOHNSON PROPERTY GROUP

PROPERTY DESCRIPTION
WATAGAN PARK
PROPOSED SUBDIVISION - PHASE 2
PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
LOT 82 DP1237780

PROJECT	DISCIPLINE	NUMBER	REV.
POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	WAT	106	3

239078(5)2-WAT-206(3)

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	POTABLE WATER PROPERTY SERVICE
---	TRW	PVC-M RECYCLED WATER TRANSFER MAIN
---	RW	PVC-M RECYCLED WATER RETICULATION
---	RWS	RECYCLED WATER PROPERTY SERVICE
---	SP	PE PRESSURE SEWER RETICULATION
---	PS	PE PRESSURE SEWER PROPERTY SERVICE
---	EX PW	EXISTING POTABLE WATER RETICULATION
---	EX RW	EXISTING RECYCLED WATER RETICULATION
---	EX PS	EXISTING PRESSURE SEWER RETICULATION
---	SW	STORMWATER PIPEWORK

- SV. ✖ STOP VALVE
- HYD. ● HYDRANT
- FL HYD. ● FLUSHING HYDRANT
- PROPERTY SERVICE CONNECTION
- LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
- PROPOSED EASEMENT
- - - SUBDIVISION STAGE BOUNDARY

- RECYCLED WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 45 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	522
DN150	PVC-M PN16	501
DN200	PVC-M PN16	122
DN250	PVC-M PN16	722

- NOTES:**
- FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT
I	03.02.2023	UPDATE PIPE SIZE
J	14.02.2023	UPDATE PIPE SIZE
K	14.02.2023	CLIENT COMMENTS
O	27.02.2023	FOR CONSTRUCTION
1	09.03.2023	FOR CONSTRUCTION
2	12.05.2023	FOR CONSTRUCTION
3	01.06.2023	FOR CONSTRUCTION

DRAWN	CHECK	DESIGN	VERIFY	SCALES
G.S.	M.K.	M.K.	M.K.	0 5 10 A1 / A3 1:250 / 1:500
G.S.	M.K.	M.K.	M.K.	
G.S.	M.K.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
L.S.	C.S.	M.K.	M.K.	

adw Johnson

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JOHNSON PROPERTY GROUP

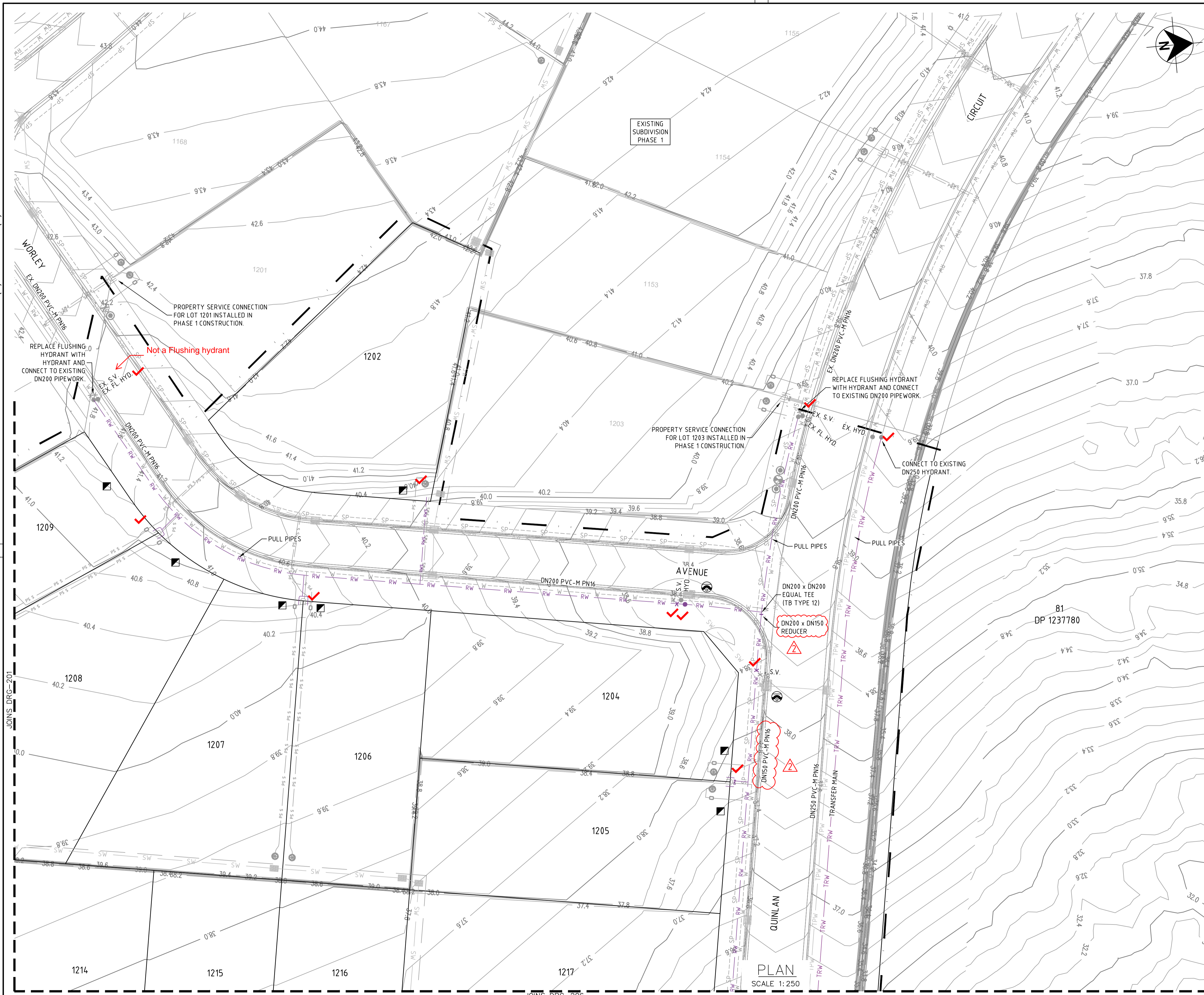
CLIENT

PROPERTY DESCRIPTION
WATAGAN PARK
PROPOSED SUBDIVISION - PHASE 2
PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
LOT 82 DP1237780

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	RECYCLED WATER DETAIL PLAN: SHEET 1 OF 6		
PROJECT No.	DISCIPLINE	NUMBER	REV.
239078(5)2	WAT	201	3

239078(5)2-WAT-206(3)

100mm AT FULL SIZE
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- LEGEND**
- W PVC-M POTABLE WATER RETICULATION
 - PWS POTABLE WATER PROPERTY SERVICE
 - TRW PVC-M RECYCLED WATER TRANSFER MAIN
 - RW PVC-M RECYCLED WATER RETICULATION
 - RWS RECYCLED WATER PROPERTY SERVICE
 - SP PE PRESSURE SEWER RETICULATION
 - PS S PE PRESSURE SEWER PROPERTY SERVICE
 - EX PW EXISTING POTABLE WATER RETICULATION
 - EX RW EXISTING RECYCLED WATER RETICULATION
 - EX PS EXISTING PRESSURE SEWER RETICULATION
 - SW STORMWATER PIPEWORK
 - SV STOP VALVE
 - HYD. HYDRANT
 - FL HYD. FLUSHING HYDRANT
 - PROPERTY SERVICE CONNECTION
 - LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
 - PROPOSED EASEMENT
 - SUBDIVISION STAGE BOUNDARY

- RECYCLED WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 45 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	522
DN150	PVC-M PN16	501
DN200	PVC-M PN16	122
DN250	PVC-M PN16	722

- NOTES:**
1. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

<p>REV. DATE AMENDMENT</p> <p>1 03.02.2023 UPDATE PIPE SIZE</p> <p>J 14.02.2023 UPDATE PIPE SIZE</p> <p>K 14.02.2023 CLIENT COMMENTS</p> <p>O 27.02.2023 FOR CONSTRUCTION</p> <p>1 09.03.2023 FOR CONSTRUCTION</p> <p>2 12.05.2023 FOR CONSTRUCTION</p> <p>3 01.06.2023 FOR CONSTRUCTION</p>	<p>DRAWN CHECK DESIGN VERIFY SCALES</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. C.S. M.K. M.K.</p> <p>G.S. C.S. M.K. M.K.</p> <p>L.S. C.S. M.K. M.K.</p>	<p>Hunter Office</p> <p>Unit 7/335 Hillsborough Rd</p> <p>Warners Bay N.S.W. 2282</p> <p>Phone: (02) 4978 5100</p> <p>Fax: (02) 4978 5199</p> <p>email: hunter@adwjohnson.com.au</p> <p>www.adwjohnson.com.au</p> <p>ABN 62 129 445 398</p>	<p>CLIENT</p> <p>JOHNSON PROPERTY GROUP</p>	<p>PROPERTY DESCRIPTION</p> <p>WATAGAN PARK</p> <p>PROPOSED SUBDIVISION - PHASE 2</p> <p>PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE</p> <p>LOT 82 DP1237780</p>	<p>PROJECT</p> <p>POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION</p> <p>PLAN TITLE</p> <p>RECYCLED WATER DETAIL PLAN: SHEET 2 OF 6</p>	<p>SURVEYED</p> <p>ADW Johnson</p> <p>DATUM</p> <p>GDA94 M.G.A. ZONE 56 A.H.D.</p> <p>PROJECT No.</p> <p>239078(5)2</p> <p>DISCIPLINE</p> <p>WAT</p> <p>NUMBER</p> <p>202</p> <p>REV.</p> <p>3</p>
--	--	---	--	---	---	--



LEGEND

- W --- PVC-M POTABLE WATER RETICULATION
- PWS --- POTABLE WATER PROPERTY SERVICE
- TRW --- PVC-M RECYCLED WATER TRANSFER MAIN
- RW --- PVC-M RECYCLED WATER RETICULATION
- RWS --- RECYCLED WATER PROPERTY SERVICE
- SP --- PE PRESSURE SEWER RETICULATION
- PS --- PE PRESSURE SEWER PROPERTY SERVICE
- EX PW --- EXISTING POTABLE WATER RETICULATION
- EX RW --- EXISTING RECYCLED WATER RETICULATION
- EX PS --- EXISTING PRESSURE SEWER RETICULATION
- SW --- STORMWATER PIPEWORK
- SV --- STOP VALVE
- HYD --- HYDRANT
- FL HYD --- FLUSHING HYDRANT
- --- PROPERTY SERVICE CONNECTION
- --- LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- --- LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
- --- PROPOSED EASEMENT
- --- SUBDIVISION STAGE BOUNDARY

- RECYCLED WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 45 CONNECTIONS
 - SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	522
DN150	PVC-M PN16	501
DN200	PVC-M PN16	122
DN250	PVC-M PN16	722

- NOTES:**
1. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

WORK-AS-EXECUTED
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Signed: *M. Harvey* Date: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor

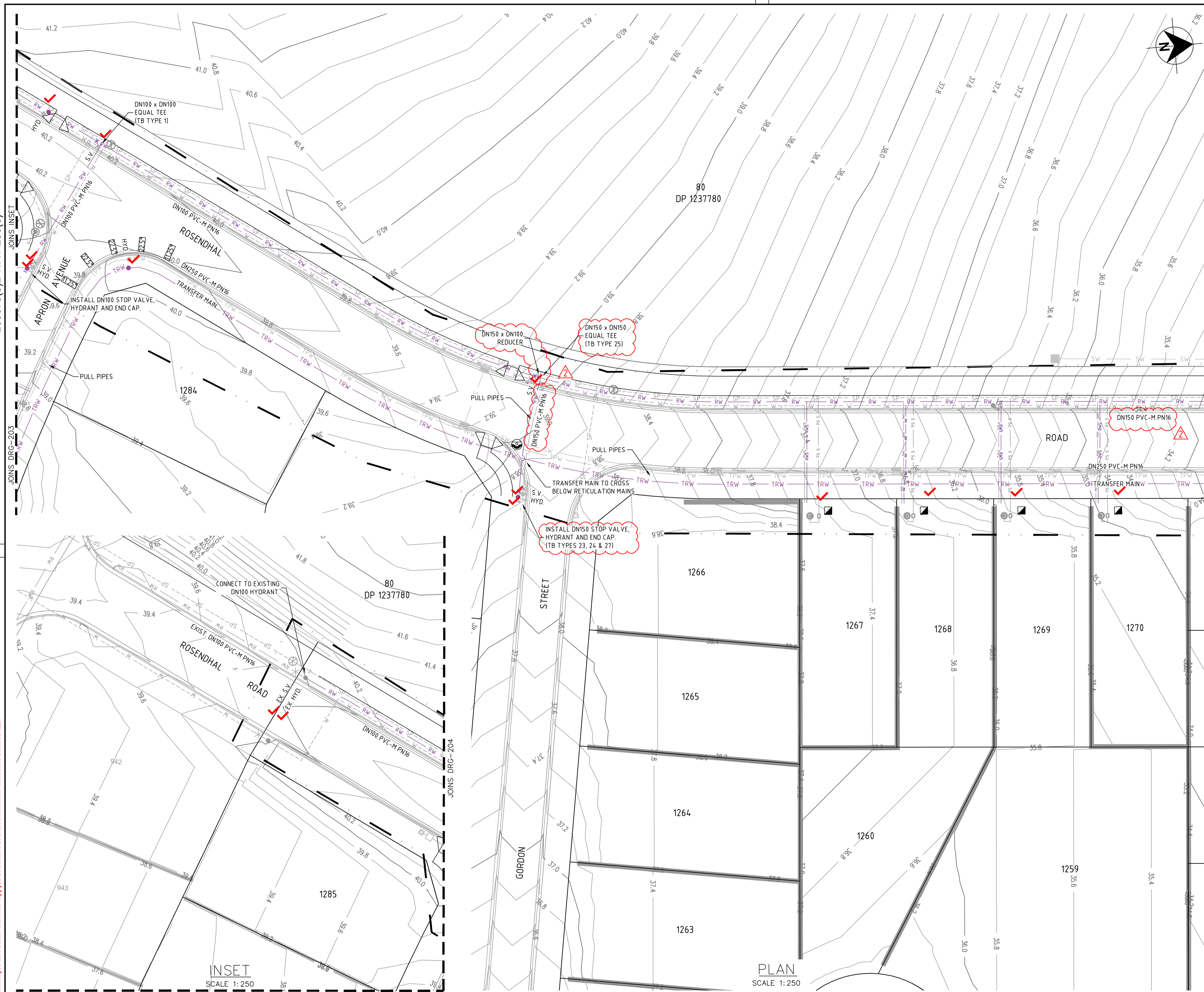


CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		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		PROJECT	
1	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	0 5 10 A1 / A3 1:250 / 1:500				WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	PLAN TITLE RECYCLED WATER DETAIL PLAN: SHEET 3 OF 6	PROJECT No. 239078(5)2
DESIGN FILE N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\X-239078(5)-WAT-DESIGN(P2).dwg ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE.								Plotted By: leahs Plot Date: 02/06/23 - 10:21 Cad File: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-206(3).dwg						

239078(5)2-WAT-206(3)

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LEGEND

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- TRW --- PVC-M RECYCLED WATER TRANSFER MAIN
- RW --- PVC-M RECYCLED WATER RETICULATION
- RWS --- RECYCLED WATER PROPERTY SERVICE
- SP --- PE PRESSURE SEWER RETICULATION
- PS S --- PE PRESSURE SEWER PROPERTY SERVICE
- EX PW --- EXISTING POTABLE WATER RETICULATION
- EX RW --- EXISTING RECYCLED WATER RETICULATION
- EX PS --- EXISTING PE PRESSURE SEWER RETICULATION
- SW --- STORMWATER PIPEWORK
- SV * STOP VALVE
- HYD. ● HYDRANT
- FL HYD. ● FLUSHING HYDRANT
- PROPERTY SERVICE CONNECTION
- LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
- PROPOSED EASEMENT
- - - SUBDIVISION STAGE BOUNDARY

RECYCLED WATER PROPERTY SERVICE CONNECTIONS

- TOTAL 45 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
- SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
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RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
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 2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

WORK-AS-EXECUTED
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Signed: *M. Harvey* Date: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT
I	03.02.2023	UPDATE PIPE SIZE
J	14.02.2023	UPDATE PIPE SIZE
K	14.02.2023	CLIENT COMMENTS
O	27.02.2023	FOR CONSTRUCTION
1	09.03.2023	FOR CONSTRUCTION
2	12.05.2023	FOR CONSTRUCTION
3	01.06.2023	FOR CONSTRUCTION

DRAWN	CHECK	DESIGN	VERIFY	SCALES
G.S.	M.K.	M.K.	M.K.	A1 / A3
G.S.	M.K.	M.K.	M.K.	1:250 / 1:500
G.S.	M.K.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
G.S.	C.S.	M.K.	M.K.	
L.S.	C.S.	M.K.	M.K.	

adw Johnson

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Warners Bay N.S.W. 2282
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Fax: (02) 4978 5199
email: hunter@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398

JOHNSON PROPERTY GROUP

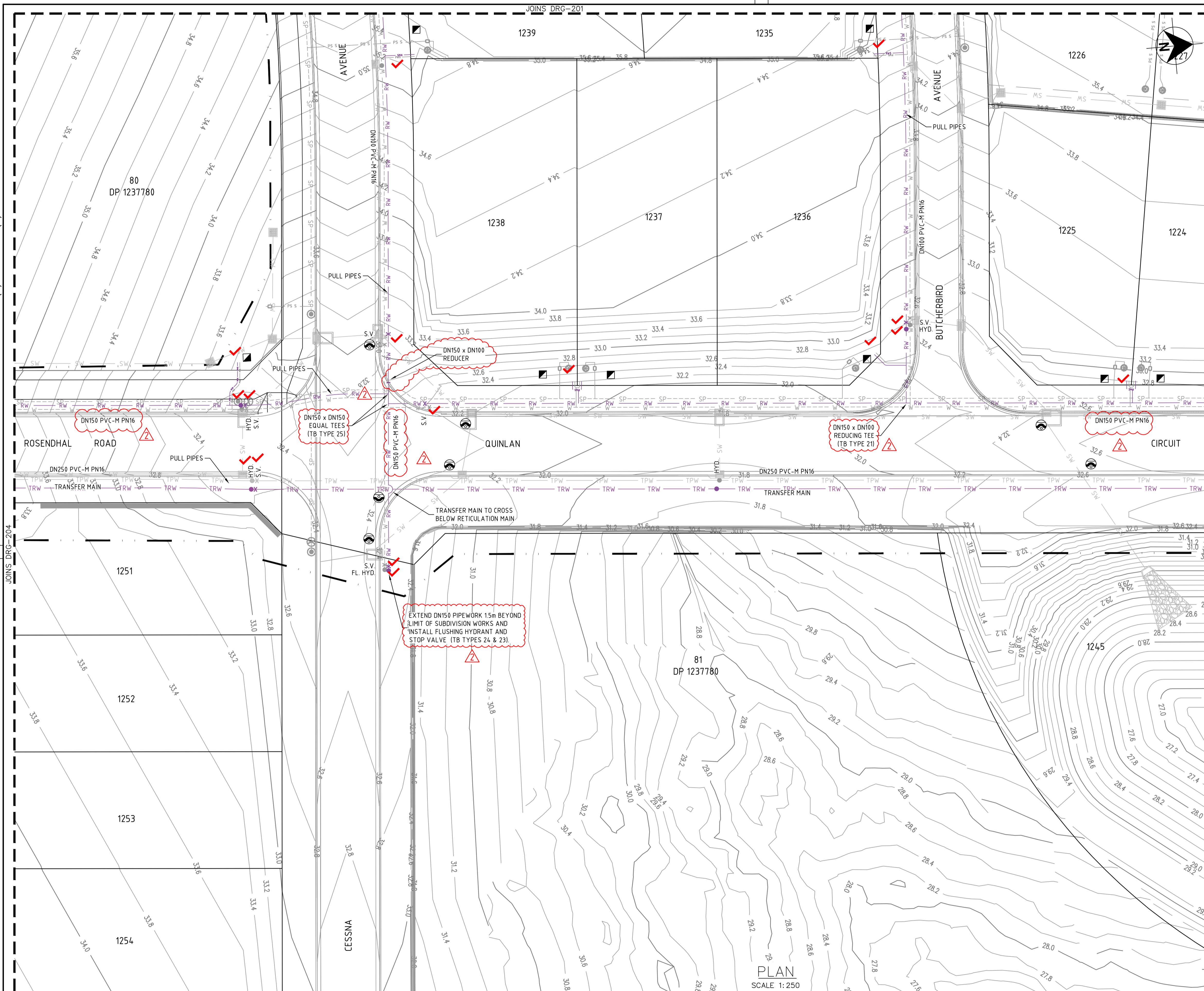
CLIENT

PROPERTY DESCRIPTION
WATAGAN PARK
PROPOSED SUBDIVISION - PHASE 2
PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
LOT 82 DP1237780

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION						
PLAN TITLE	RECYCLED WATER DETAIL PLAN: SHEET 4 OF 6						
PROJECT No.	239078(5)2	DISCIPLINE	WAT	NUMBER	204	REV.	3

239078(5)2-WAT-206(3)

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 POTABLE WATER PROPERTY SERVICE
 - TRW PVC-M RECYCLED WATER TRANSFER MAIN
 - RW PVC-M RECYCLED WATER RETICULATION
 - RWS RECYCLED WATER PROPERTY SERVICE
 - SP PE PRESSURE SEWER RETICULATION
 - PS S PE PRESSURE SEWER PROPERTY SERVICE
 - EX PW EXISTING POTABLE WATER RETICULATION
 - EX RW EXISTING RECYCLED WATER RETICULATION
 - EX PS EXISTING PRESSURE SEWER RETICULATION
 - SW STORMWATER PIPEWORK
 - SV STOP VALVE
 - HYD. HYDRANT
 - FL HYD. FLUSHING HYDRANT
 - PROPERTY SERVICE CONNECTION
 - LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H OR WAT-1255-V
 - LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
 - PROPOSED EASEMENT
 - SUBDIVISION STAGE BOUNDARY

- RECYCLED WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 45 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	522
DN150	PVC-M PN16	501
DN200	PVC-M PN16	122
DN250	PVC-M PN16	722

- NOTES:**
- FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor

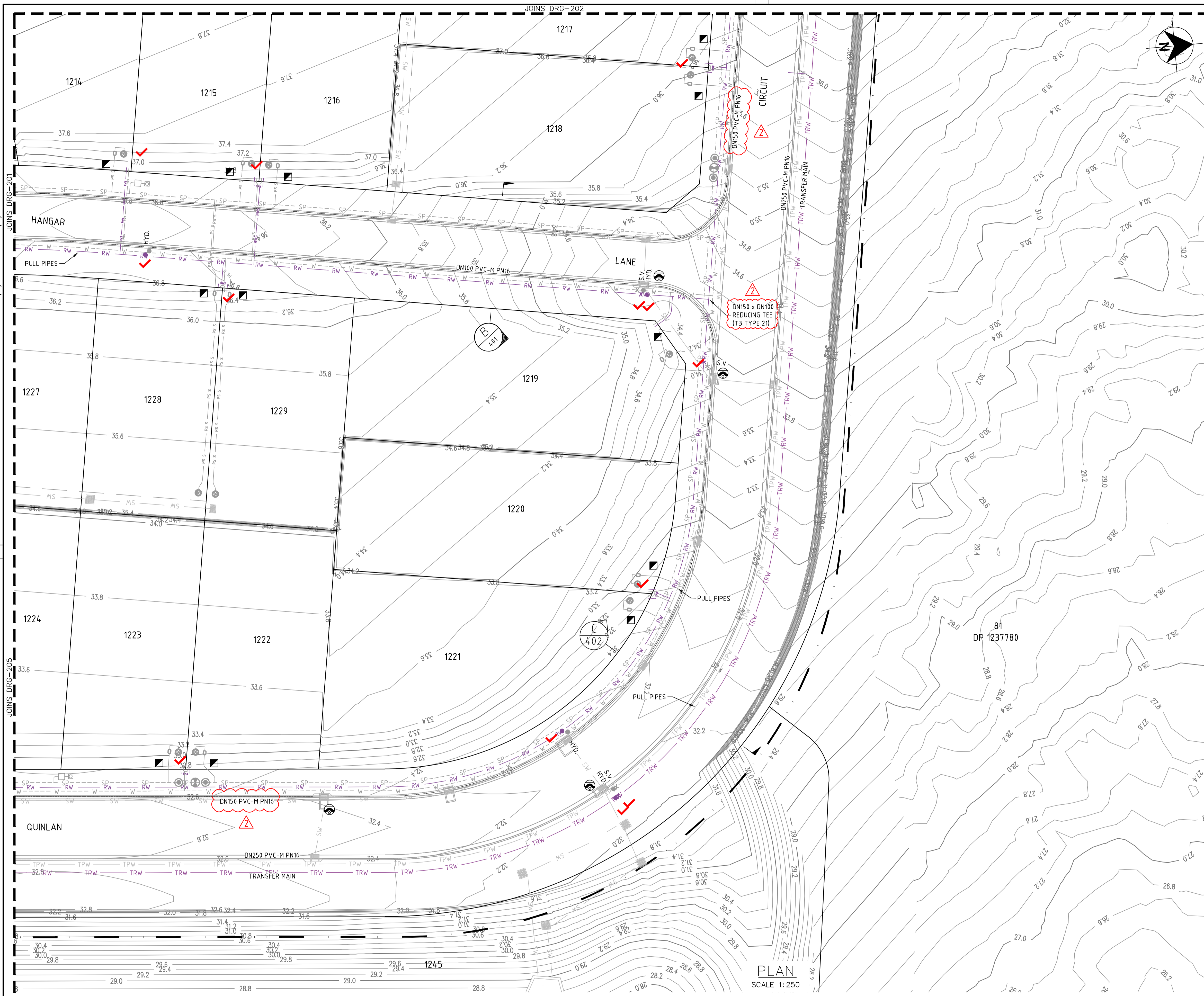


CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		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		PROJECT		PROJECT No. 239078(5)2	DISCIPLINE WAT	NUMBER 205	REV. 3
							WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780				POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		PLAN TITLE RECYCLED WATER DETAIL PLAN: SHEET 5 OF 6					
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	 A1 / A3 1:250 / 1:500		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 	WATAGAN PARK		PROJECT		PROJECT No.	DISCIPLINE	NUMBER	REV.
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.					PROPOSED SUBDIVISION - PHASE 2		POTABLE WATER, RECYCLED WATER AND					
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.					PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE		PRESSURE SEWER RETICULATION		PLAN TITLE	DISCIPLINE	NUMBER	REV.
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.					LOT 82 DP1237780		RECYCLED WATER DETAIL PLAN: SHEET 5 OF 6					
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.									239078(5)2	WAT	205	3
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.					239078(5)2	WAT	205	3				
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.									239078(5)2	WAT	205	3

239078(5)2-WAT-206(3)

100mm AT FULL SIZE
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LEGEND

- W --- PVC-M POTABLE WATER RETICULATION
- PWS --- POTABLE WATER PROPERTY SERVICE
- TRW --- PVC-M RECYCLED WATER TRANSFER MAIN
- RW --- PVC-M RECYCLED WATER RETICULATION
- RWS --- RECYCLED WATER PROPERTY SERVICE
- SP --- PE PRESSURE SEWER RETICULATION
- PS S --- PE PRESSURE SEWER PROPERTY SERVICE
- EX PW --- EXISTING POTABLE WATER RETICULATION
- EX RW --- EXISTING RECYCLED WATER RETICULATION
- EX PS --- EXISTING PRESSURE SEWER RETICULATION
- SW --- STORMWATER PIPEWORK
- SV. * STOP VALVE
- HYD. ● HYDRANT
- FL HYD. ● FLUSHING HYDRANT
- PROPERTY SERVICE CONNECTION
- LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- LAY UNDER SERVICE. CONSTRUCT WATERMANS IN ACCORDANCE WITH WAT-1211-V OR WAT-1255-V
- PROPOSED EASEMENT
- SUBDIVISION STAGE BOUNDARY

RECYCLED WATER PROPERTY SERVICE CONNECTIONS

TOTAL 45 CONNECTIONS

- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 5 x SHORT SIDE
 - 2 x LONG SIDE
- SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 14 x SHORT SIDE
 - 5 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	522
DN150	PVC-M PN16	501
DN200	PVC-M PN16	122
DN250	PVC-M PN16	722

- NOTES:**
- FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRGS-403 & 404.

NOTES REMOVED

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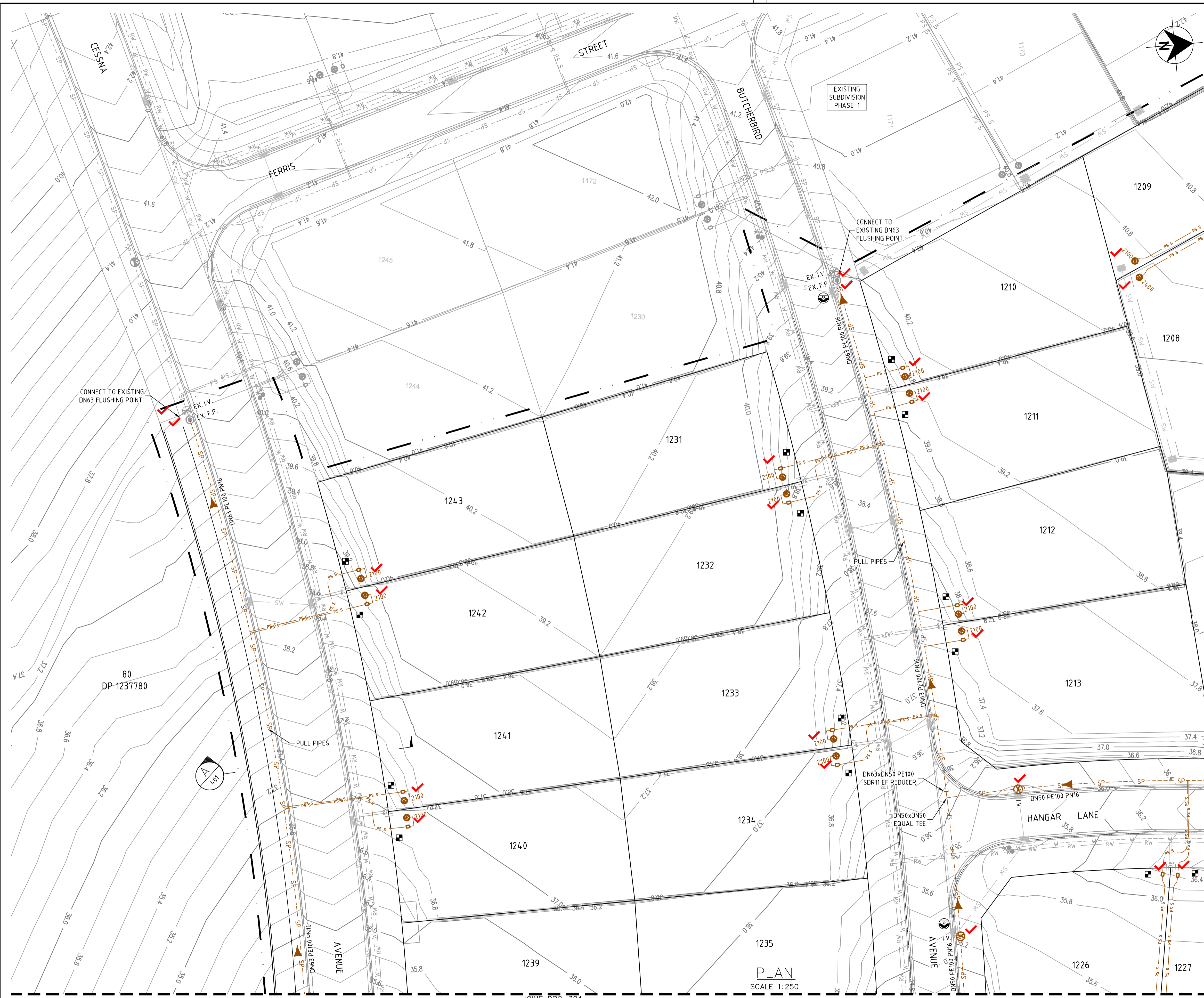


CONSTRUCTION ISSUE

<p>REV. DATE AMENDMENT</p> <p>I 03.02.2023 UPDATE PIPE SIZE</p> <p>J 14.02.2023 UPDATE PIPE SIZE</p> <p>K 14.02.2023 CLIENT COMMENTS</p> <p>O 27.02.2023 FOR CONSTRUCTION</p> <p>1 09.03.2023 FOR CONSTRUCTION</p> <p>2 12.05.2023 FOR CONSTRUCTION</p> <p>3 01.06.2023 FOR CONSTRUCTION</p>	<p>DRAWN CHECK DESIGN VERIFY</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. C.S. M.K. M.K.</p> <p>L.S. C.S. M.K. M.K.</p>	<p>SCALES</p> <p>0 5 10 A1 / A3</p> <p>1:250 / 1:500</p>	<p>adw Johnson</p> <p>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</p>	<p>CLIENT</p> <p>JOHNSON PROPERTY GROUP</p>	<p>PROPERTY DESCRIPTION</p> <p>WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780</p>	<p>PROJECT</p> <p>POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION</p> <p>PLAN TITLE</p> <p>RECYCLED WATER DETAIL PLAN: SHEET 6 OF 6</p>	<p>PROJECT No. 239078(5)2</p> <p>DISCIPLINE WAT</p> <p>NUMBER 206</p> <p>REV. 3</p>
--	--	--	---	--	--	---	---

239078(5)2-WAT-305(3)

100mm AT FULL SIZE
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LEGEND

- W --- PVC-M POTABLE WATER RETICULATION
- PWS --- POTABLE WATER PROPERTY SERVICE
- RW --- PVC-M RECYCLED WATER RETICULATION
- RWS --- RECYCLED WATER PROPERTY SERVICE
- SP --- PE PRESSURE SEWER RETICULATION
- PS S --- PE PRESSURE SEWER PROPERTY SERVICE
- EX PW --- EXISTING POTABLE WATER RETICULATION
- EX RW --- EXISTING RECYCLED WATER RETICULATION
- EX PS --- EXISTING PRESSURE SEWER RETICULATION
- SW --- STORMWATER PIPEWORK

- I.V. [Symbol] ISOLATION VALVE
- I.V. (N.C.) [Symbol] ISOLATION VALVE (NORMALLY CLOSED)
- F.P. [Symbol] FLUSHING POINT
- [Symbol] WASTEWATER COLLECTION TANK AND BOUNDARY KIT
- [Symbol] PRESSURE SEWER TEMPORARY FLOW DIRECTION
- [Symbol] PRESSURE SEWER FLOW DIRECTION
- [Symbol] PROPERTY SERVICE CONNECTION
- [Symbol] LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- PROPOSED EASEMENT
- SUBDIVISION STAGE BOUNDARY

■ PRESSURE SEWER PROPERTY SERVICE CONNECTIONS
 TOTAL 45 CONNECTIONS
 • SERVICES
 -23 x SHORT SIDE (INC. BODY KIT ONLY FOR SCHOOL)
 -22 x LONG SIDE

PRESSURE SEWER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN50	PE100 PN16	665
DN63	PE100 PN16	404

- NOTES:**
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 101 TO 107.
 - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 201 TO 207.
 - FOR TYPICAL PROPERTY CONNECTION DETAILS REFER TO DRGS - 403 & 404.
 - FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1017-FS.
 - CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.
 - ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).

WORK-AS-EXECUTED
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 Signed: *M. Harvey* Date: 13/10/2023
 Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	A1 / A3
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	1:250 / 1:500
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.	
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.	
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.	
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.	
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.	

DESIGN FILE: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-DESIGN(P2).dwg
 ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE.

adw Johnson

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

CLIENT

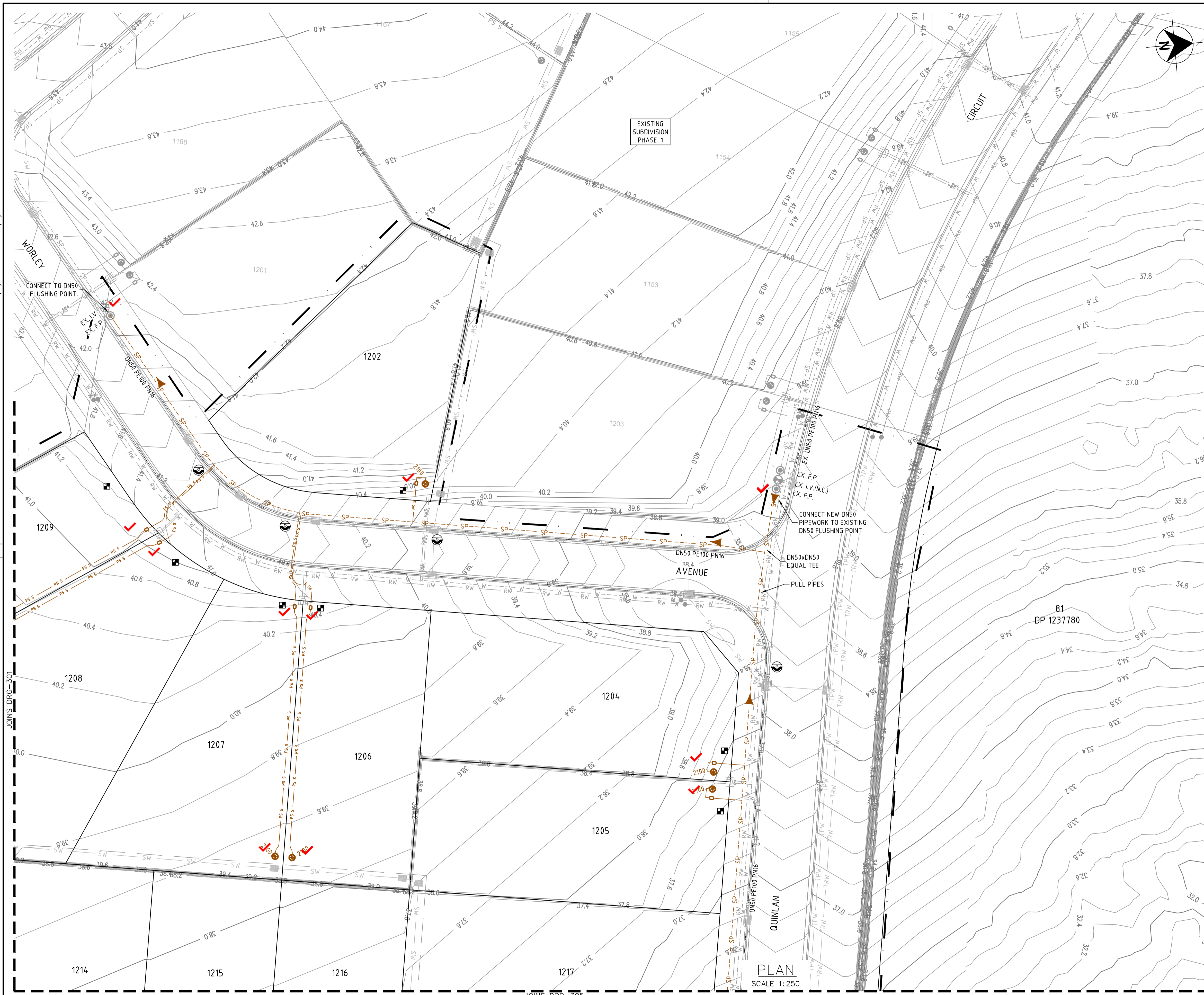
PROPERTY DESCRIPTION

WATAGAN PARK
 PROPOSED SUBDIVISION - PHASE 2
 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
 LOT 82 DP1237780

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	
PLAN TITLE	PRESSURE SEWER DETAIL PLAN: SHEET 1 OF 5	
SURVEYED	DATUM	PROJECT No.
ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2
DISCIPLINE	NUMBER	REV.
WAT	301	3

239078(5)2-WAT-305(3)

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 - SW --- STORMWATER PIPEWORK
 - I.V. ISOLATION VALVE
 - I.V. (N.C.) ISOLATION VALVE (NORMALLY CLOSED)
 - F.P. FLUSHING POINT
 - WASTEWATER COLLECTION TANK AND BOUNDARY KIT
 - PRESSURE SEWER TEMPORARY FLOW DIRECTION
 - PRESSURE SEWER FLOW DIRECTION
 - PROPERTY SERVICE CONNECTION
 - LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - PROPOSED EASEMENT
 - SUBDIVISION STAGE BOUNDARY

- PRESSURE SEWER PROPERTY SERVICE CONNECTIONS**
 TOTAL 45 CONNECTIONS
 • SERVICES
 -23 x SHORT SIDE (INC. BDY. KIT ONLY FOR SCHOOL)
 -22 x LONG SIDE

PRESSURE SEWER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN50	PE100 PN16	665
DN63	PE100 PN16	404

- NOTES:**
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 101 TO 107.
 - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 201 TO 207.
 - FOR TYPICAL PROPERTY CONNECTION DETAILS REFER TO DRGS - 403 & 404.
 - FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1017-FS.
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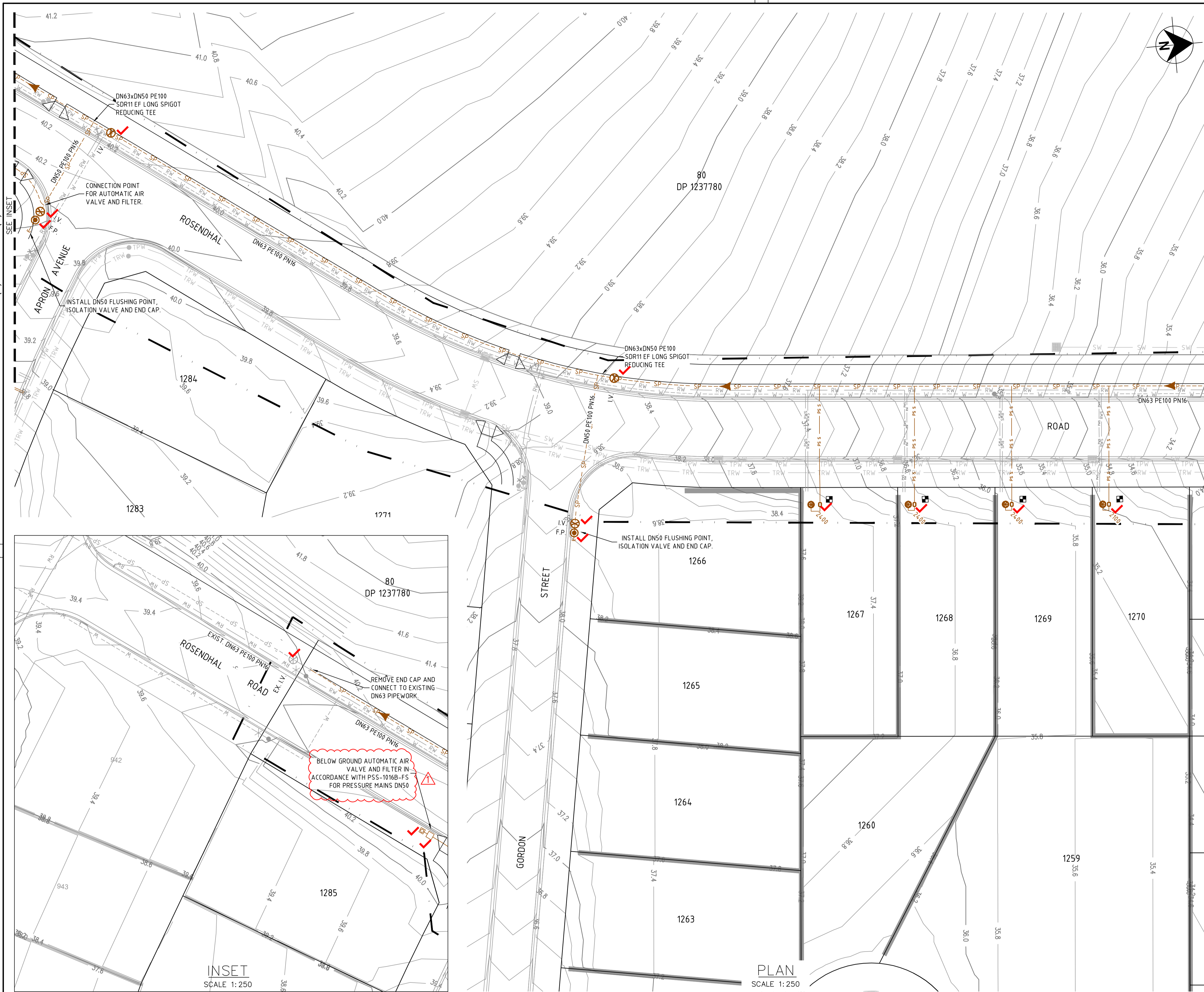


CONSTRUCTION ISSUE

<table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>AMENDMENT</th> <th>DRAWN</th> <th>CHECK</th> <th>DESIGN</th> <th>VERIFY</th> <th>SCALES</th> </tr> </thead> <tbody> <tr> <td>I</td> <td>03.02.2023</td> <td>UPDATE PIPE SIZE</td> <td>G.S.</td> <td>M.K.</td> <td>M.K.</td> <td>M.K.</td> <td rowspan="3"> A1 / A3 1:250 / 1:500 </td> </tr> <tr> <td>J</td> <td>14.02.2023</td> <td>UPDATE PIPE SIZE</td> <td>G.S.</td> <td>M.K.</td> <td>M.K.</td> <td>M.K.</td> </tr> <tr> <td>K</td> <td>14.02.2023</td> <td>CLIENT COMMENTS</td> <td>G.S.</td> <td>M.K.</td> <td>M.K.</td> <td>M.K.</td> </tr> <tr> <td>O</td> <td>27.02.2023</td> <td>FOR CONSTRUCTION</td> <td>G.S.</td> <td>M.K.</td> <td>M.K.</td> <td>M.K.</td> <td></td> </tr> <tr> <td>1</td> <td>09.03.2023</td> <td>FOR CONSTRUCTION</td> <td>G.S.</td> <td>C.S.</td> <td>M.K.</td> <td>M.K.</td> <td></td> </tr> <tr> <td>2</td> <td>12.05.2023</td> <td>FOR CONSTRUCTION</td> <td>G.S.</td> <td>C.S.</td> <td>M.K.</td> <td>M.K.</td> <td></td> </tr> <tr> <td>3</td> <td>01.06.2023</td> <td>FOR CONSTRUCTION</td> <td>L.S.</td> <td>C.S.</td> <td>M.K.</td> <td>M.K.</td> <td></td> </tr> </tbody> </table>	REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	 A1 / A3 1:250 / 1:500	J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.	O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.		1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.		2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.		3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.		<p>adw Johnson</p> <p>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</p>	<p>CLIENT</p> <p>JOHNSON PROPERTY GROUP</p>	<p>PROPERTY DESCRIPTION</p> <p>WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780</p>	<p>PROJECT</p> <p>POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION</p> <p>PLAN TITLE</p> <p>PRESSURE SEWER DETAIL PLAN: SHEET 2 OF 5</p>	<p>PROJECT No.</p> <p>239078(5)2</p>	<p>DISCIPLINE</p> <p>WAT</p>	<p>NUMBER</p> <p>302</p>	<p>REV.</p> <p>3</p>
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CONSTRUCTION ISSUE

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SCALES

A1 / A3
1:250 / 1:500

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

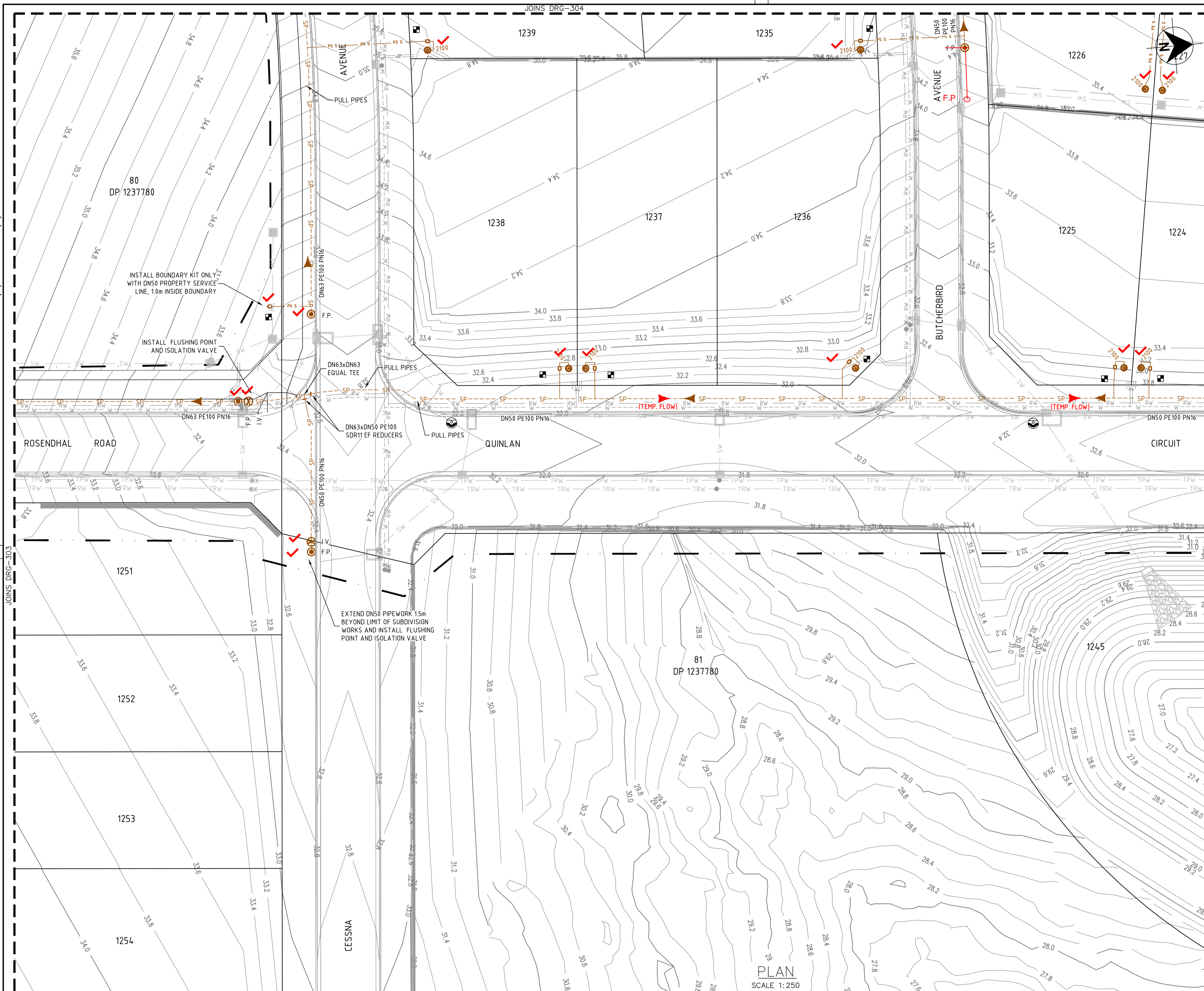
CLIENT

PROPERTY DESCRIPTION
WATAGAN PARK
PROPOSED SUBDIVISION - PHASE 2
PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
LOT 82 DP1237780

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION						
PLAN TITLE	PRESSURE SEWER DETAIL PLAN: SHEET 3 OF 5						
PROJECT No.	239078(5)2	DISCIPLINE	WAT	NUMBER	303	REV.	3
SURVEYED	ADW Johnson	DATUM	GDA94 M.G.A. ZONE 56	A.H.D.			

239078(5)2-WAT-305(3)

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 --- POTABLE WATER PROPERTY SERVICE
- RW --- PVC-M RECYCLED WATER RETICULATION
- RWS --- RECYCLED WATER PROPERTY SERVICE
- SP --- PE PRESSURE SEWER RETICULATION
- PS S --- PE PRESSURE SEWER PROPERTY SERVICE
- EX PW --- EXISTING POTABLE WATER RETICULATION
- EX RW --- EXISTING RECYCLED WATER RETICULATION
- EX PS --- EXISTING PRESSURE SEWER RETICULATION
- SW --- STORMWATER PIPEWORK
- I.V. --- ISOLATION VALVE
- I.V. (N.C.) --- ISOLATION VALVE (NORMALLY CLOSED)
- F.P. --- FLUSHING POINT
- WASTEWATER COLLECTION TANK AND BOUNDARY KIT
- PRESSURE SEWER TEMPORARY FLOW DIRECTION
- PRESSURE SEWER FLOW DIRECTION
- PROPERTY SERVICE CONNECTION
- LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- PROPOSED EASEMENT
- SUBDIVISION STAGE BOUNDARY
- PRESSURE SEWER PROPERTY SERVICE CONNECTIONS
- TOTAL 45 CONNECTIONS
- SERVICES
- 23 x SHORT SIDE (INC. BODY KIT ONLY FOR SCHOOL)
- 22 x LONG SIDE

PRESSURE SEWER PIPE DATA

PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN50	PE100 PN16	665
DN63	PE100 PN16	404

- NOTES:**
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 101 TO 107.
 - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 201 TO 207.
 - FOR TYPICAL PROPERTY CONNECTION DETAILS REFER TO DRGS - 403 & 404.
 - FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1017-FS.
 - CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.
 - ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



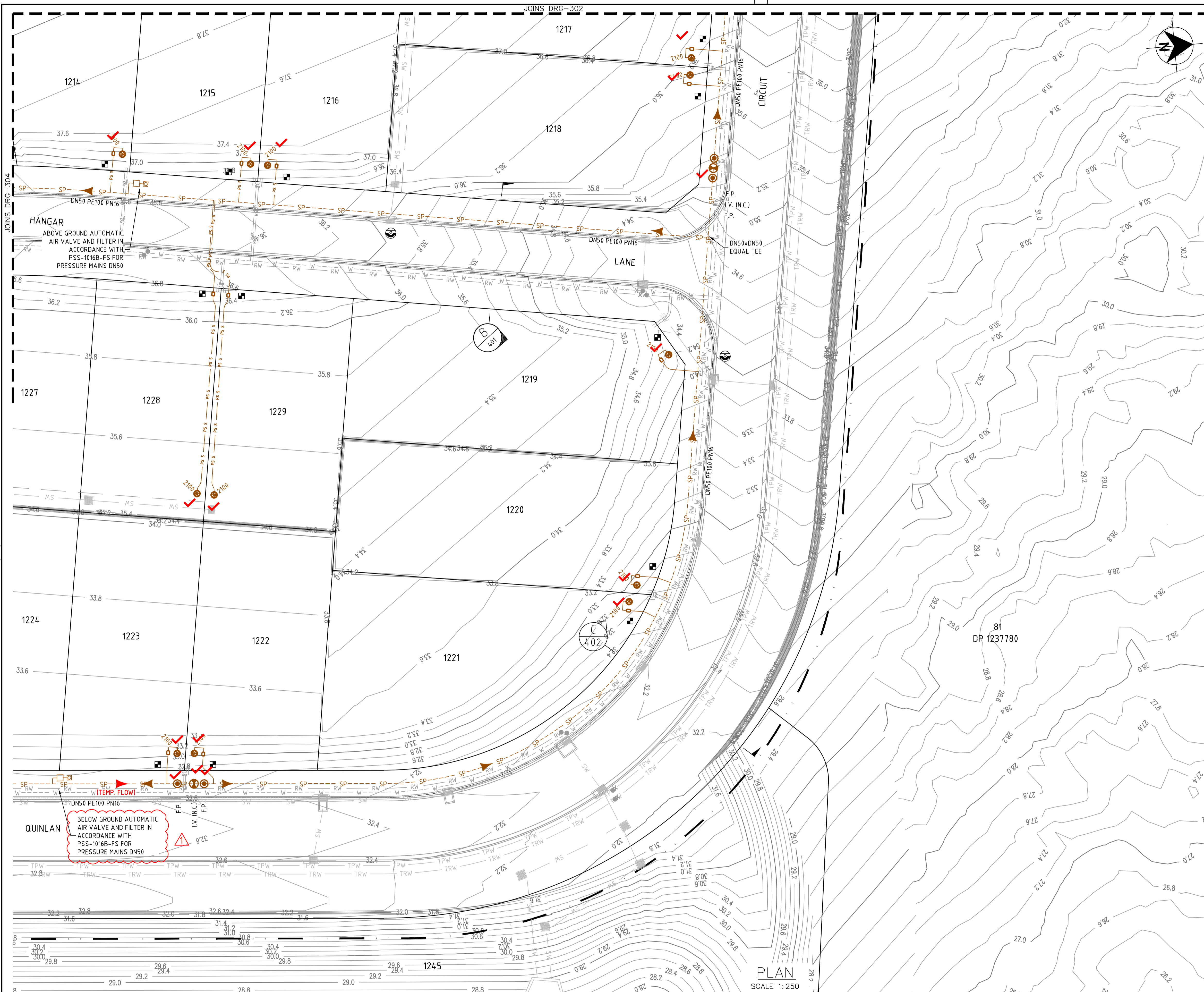
CONSTRUCTION ISSUE

<p>REV. DATE AMENDMENT</p> <p>1 03.02.2023 UPDATE PIPE SIZE</p> <p>J 14.02.2023 UPDATE PIPE SIZE</p> <p>K 14.02.2023 CLIENT COMMENTS</p> <p>O 27.02.2023 FOR CONSTRUCTION</p> <p>1 09.03.2023 FOR CONSTRUCTION</p> <p>2 12.05.2023 FOR CONSTRUCTION</p> <p>3 01.06.2023 FOR CONSTRUCTION</p>	<p>DRAWN CHECK DESIGN VERIFY SCALES</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. M.K. M.K. M.K.</p> <p>G.S. C.S. M.K. M.K.</p> <p>L.S. C.S. M.K. M.K.</p> <p>0 5 10 A1 / A3 1:250 / 1:500</p>	<p>adw Johnson</p> <p>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</p>	<p>CLIENT</p> <p>JOHNSON PROPERTY GROUP</p>	<p>PROPERTY DESCRIPTION</p> <p>WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780</p>	<p>PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION</p> <p>PLAN TITLE PRESSURE SEWER DETAIL PLAN: SHEET 4 OF 5</p>	<p>PROJECT No. 239078(5)2</p> <p>DISCIPLINE WAT</p> <p>NUMBER 304</p> <p>REV. 3</p>
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DESIGN FILE: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-DESIGN(P2).dwg
ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE
Plotted By: leahs Plot Date: 02/06/23 - 10:21 Cad File: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-305(3).dwg

239078(5)2-WAT-305(3)

100mm AT FULL SIZE
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- LEGEND**
- W --- PVC-M POTABLE WATER RETICULATION
 - PWS --- POTABLE WATER PROPERTY SERVICE
 - RW --- PVC-M RECYCLED WATER RETICULATION
 - RWS --- RECYCLED WATER PROPERTY SERVICE
 - SP --- PE PRESSURE SEWER RETICULATION
 - PS S --- PE PRESSURE SEWER PROPERTY SERVICE
 - EX PW --- EXISTING POTABLE WATER RETICULATION
 - EX RW --- EXISTING RECYCLED WATER RETICULATION
 - EX PS --- EXISTING PRESSURE SEWER RETICULATION
 - SW --- STORMWATER PIPEWORK
 - I.V. --- ISOLATION VALVE
 - I.V. (N.C.) --- ISOLATION VALVE (NORMALLY CLOSED)
 - F.P. --- FLUSHING POINT
 - WASTEWATER COLLECTION TANK AND BOUNDARY KIT
 - PRESSURE SEWER TEMPORARY FLOW DIRECTION
 - PRESSURE SEWER FLOW DIRECTION
 - PROPERTY SERVICE CONNECTION
 - LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - PROPOSED EASEMENT
 - SUBDIVISION STAGE BOUNDARY

- PRESSURE SEWER PROPERTY SERVICE CONNECTIONS**
TOTAL 45 CONNECTIONS
• SERVICES
-23 x SHORT SIDE (INC. BODY KIT ONLY FOR SCHOOL)
-22 x LONG SIDE

PRESSURE SEWER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN50	PE100 PN16	665
DN63	PE100 PN16	404

- NOTES:**
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 101 TO 107.
 - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS - 201 TO 207.
 - FOR TYPICAL PROPERTY CONNECTION DETAILS REFER TO DRGS - 403 & 404.
 - FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1017-FS.
 - CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.
 - ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor

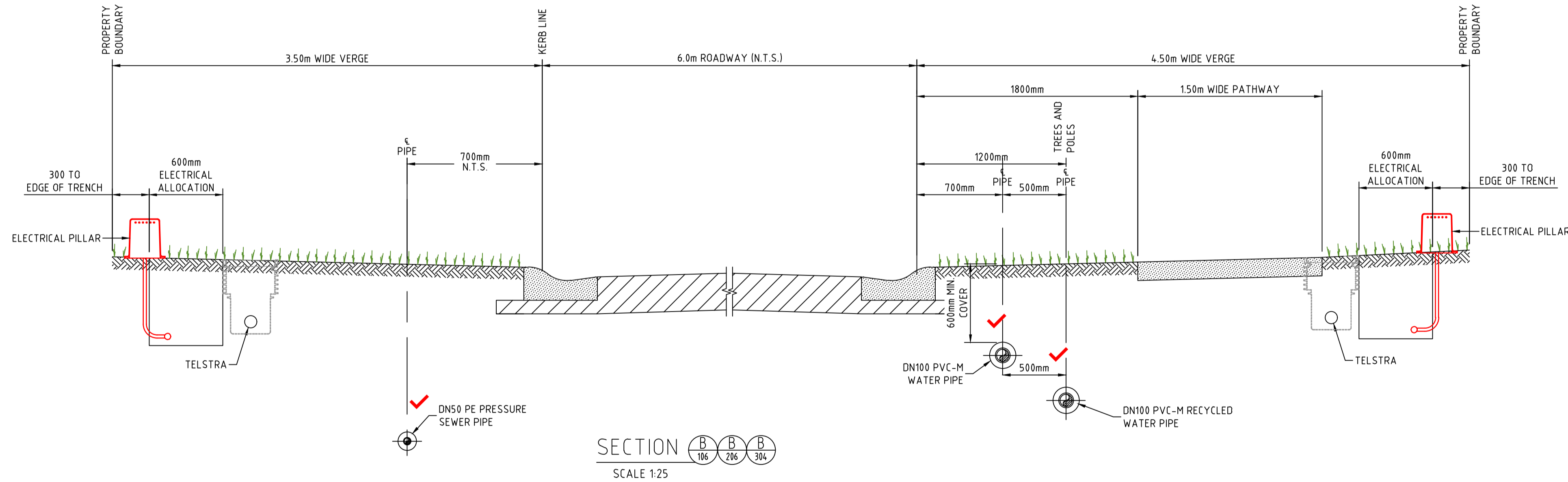
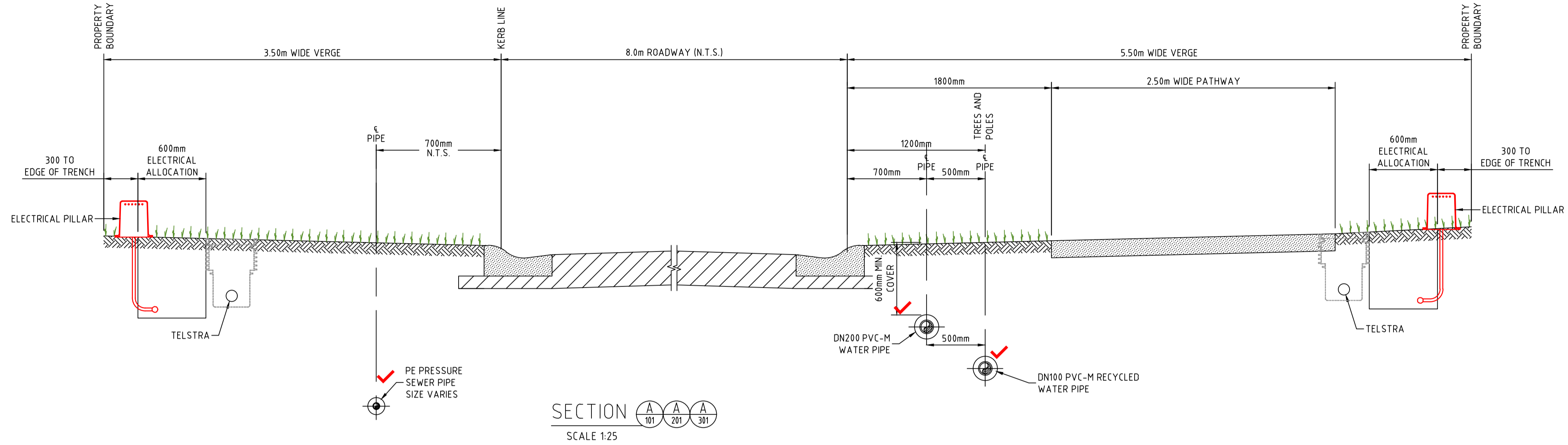


CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	A1 / A3
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	1:250 / 1:500
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.	
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.	
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.	
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.	
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.	

DESIGN FILE: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-DESIGN(P2).dwg
ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE
Plotted By: leahs Plot Date: 02/06/23 - 10:21 Cad File: N:\239078\239078(5)\DWG\Water & Sewer\Phase 2\239078(5)2-WAT-305(3).dwg

 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	 CLIENT	PROPERTY DESCRIPTION WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION
		SURVEYED ADW Johnson	DATUM GDA94 M.G.A. ZONE 56 A.H.D.
		NUMBER 305	REV. 3

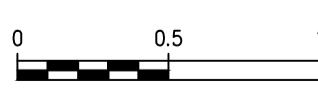


WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed:  Date: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.
0	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.

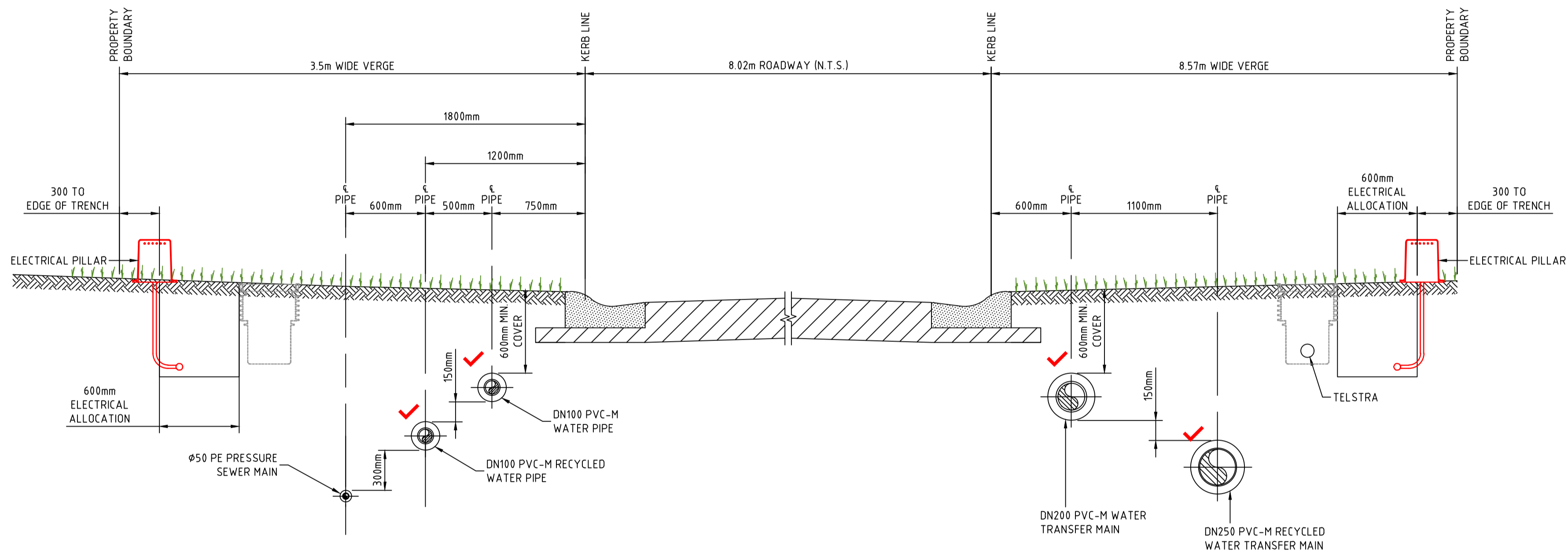
SCALE
 A1 / A3 1:25 / 1:50

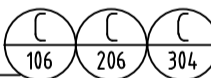
adw Johnson
Hunter Office
Unit 7/335 Hillsborough Rd
Warners Bay N.S.W. 2282
Phone: (02) 4978 5100
Fax: (02) 4978 5199
email: hunter@adwjohnson.com.au
www.adwjohnson.com.au
ABN 62 129 445 398


CLIENT
JOHNSON PROPERTY GROUP

PROPERTY DESCRIPTION
WATAGAN PARK
PROPOSED SUBDIVISION - PHASE 2
PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE
LOT 82 DP1237780

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION				
PLAN TITLE	TYPICAL CROSS SECTIONS: A & B				
SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2	WAT	401	3



SECTION 
SCALE 1:25

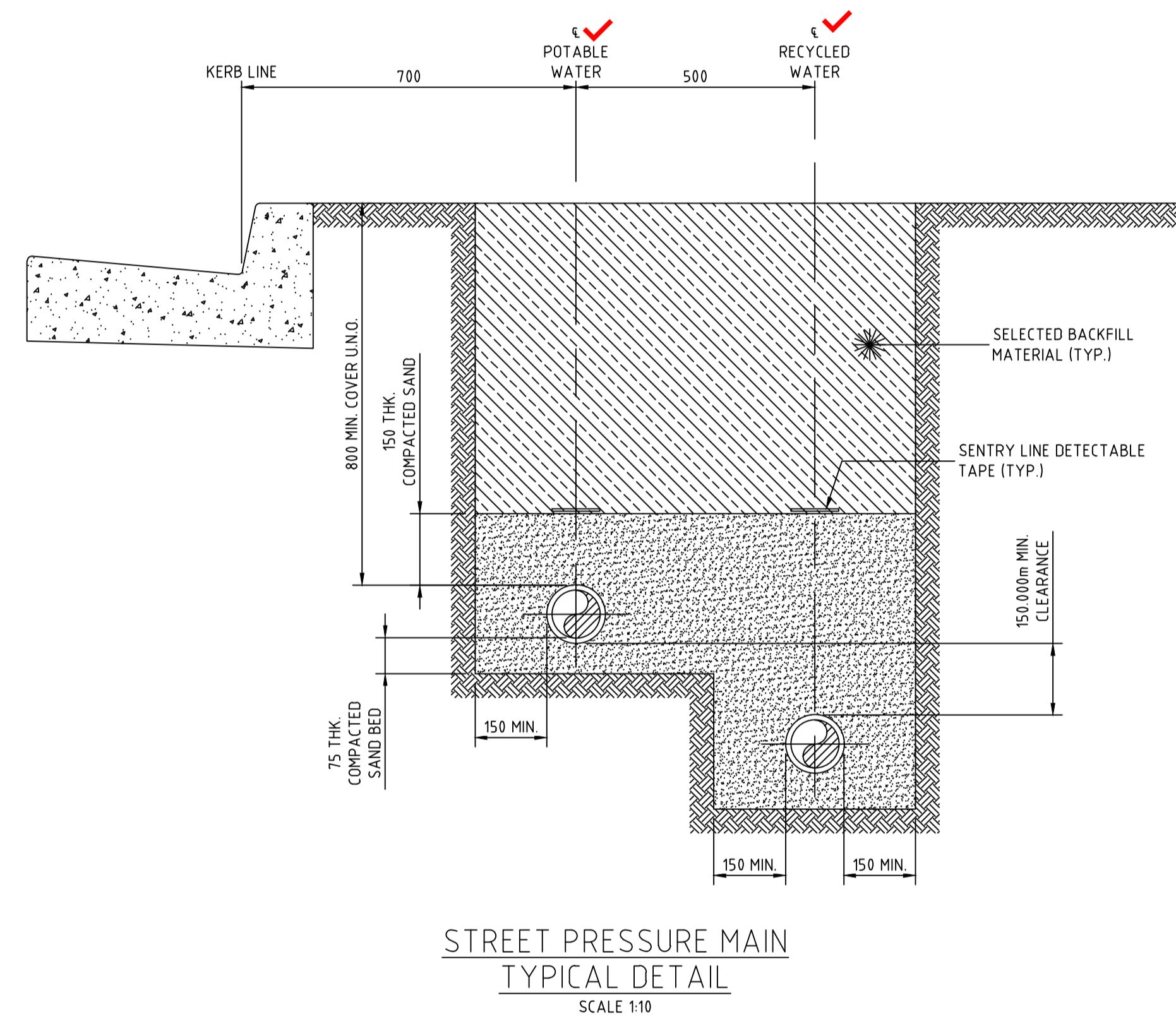
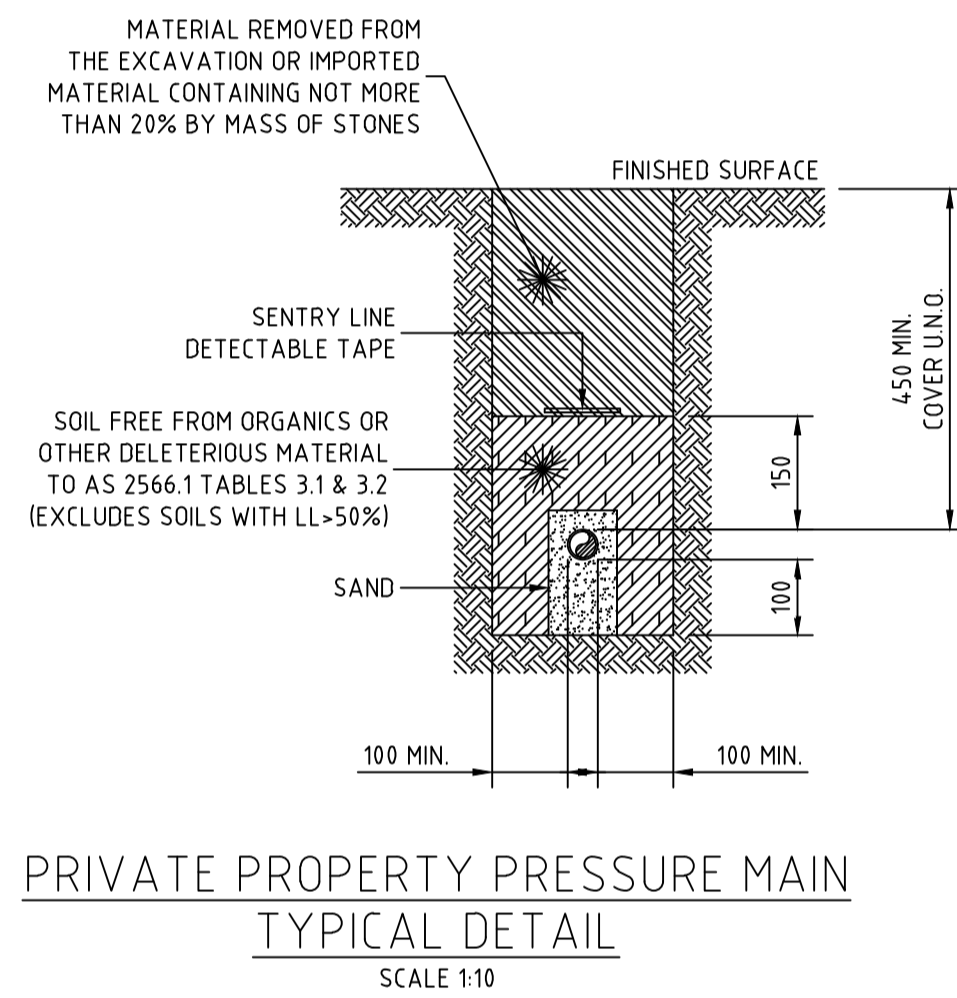
WORK-AS-EXECUTED
I certify that with the exception of the changes marked in RED, the work has been constructed in accordance with this drawing.
Signed:  Date: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

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REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	 A1 / A3 1:25 / 1:50	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 PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	TYPICAL CROSS SECTION: C	ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2 - WAT - 402	3		
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.											
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.											
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.											
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.											
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.											
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.											



WORK-AS-EXECUTED
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Signed:  Date: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor

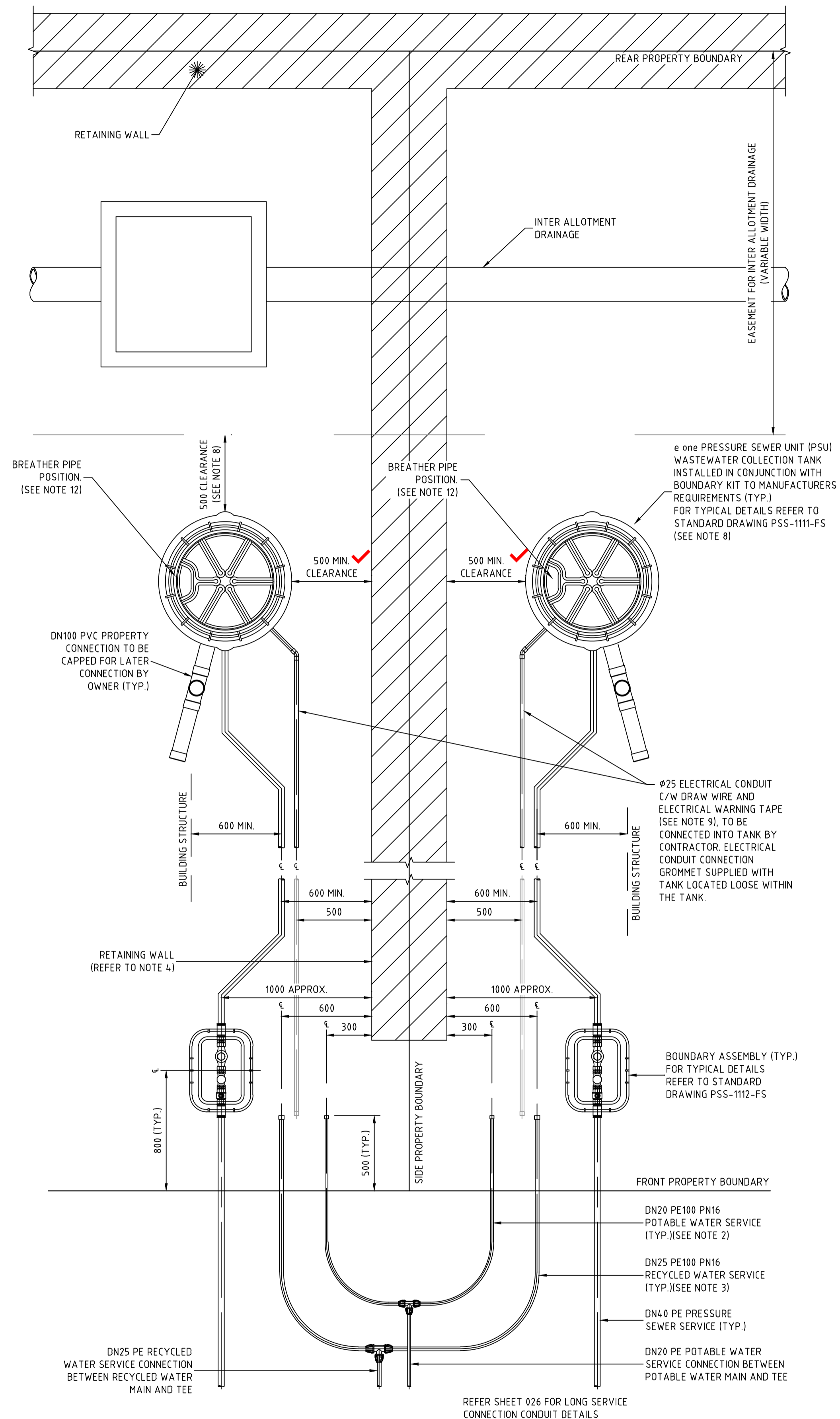


CONSTRUCTION ISSUE

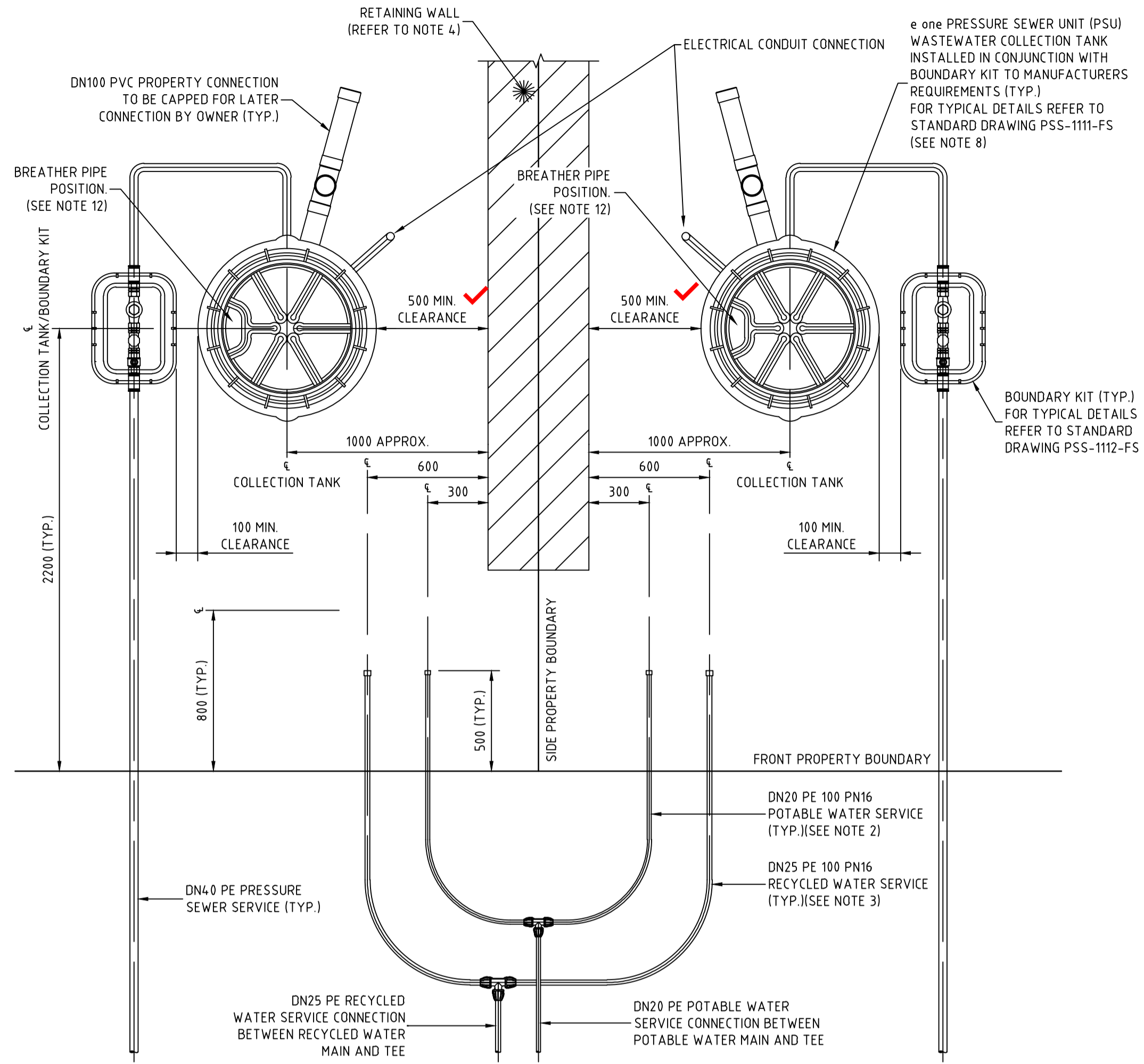
REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.		Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398	WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	TYPICAL PIPEWORK TRENCHING DETAILS	ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2 - WAT - 403	3		
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.											
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.											
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.											
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.											
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.											
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.											

239078(5)2-WAT-404(3)

100mm AT FULL SIZE
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TYPICAL PROPERTY CONNECTION DETAIL
(PRESSURE SEWER UNIT AT REAR)
SCALE 1:20



TYPICAL PROPERTY CONNECTION DETAIL
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.
- #25 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. INSTALL IN ACCORDANCE WITH AS3000 AT MIN 500mm COVER. 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 IN ACCORDANCE WITH AS3000 AT MIN 500mm COVER. ELECTRICAL GROMMET SUPPLIED WITH TANK AND LOCATED LOOSE WITHIN TANK. #25 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.

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: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor

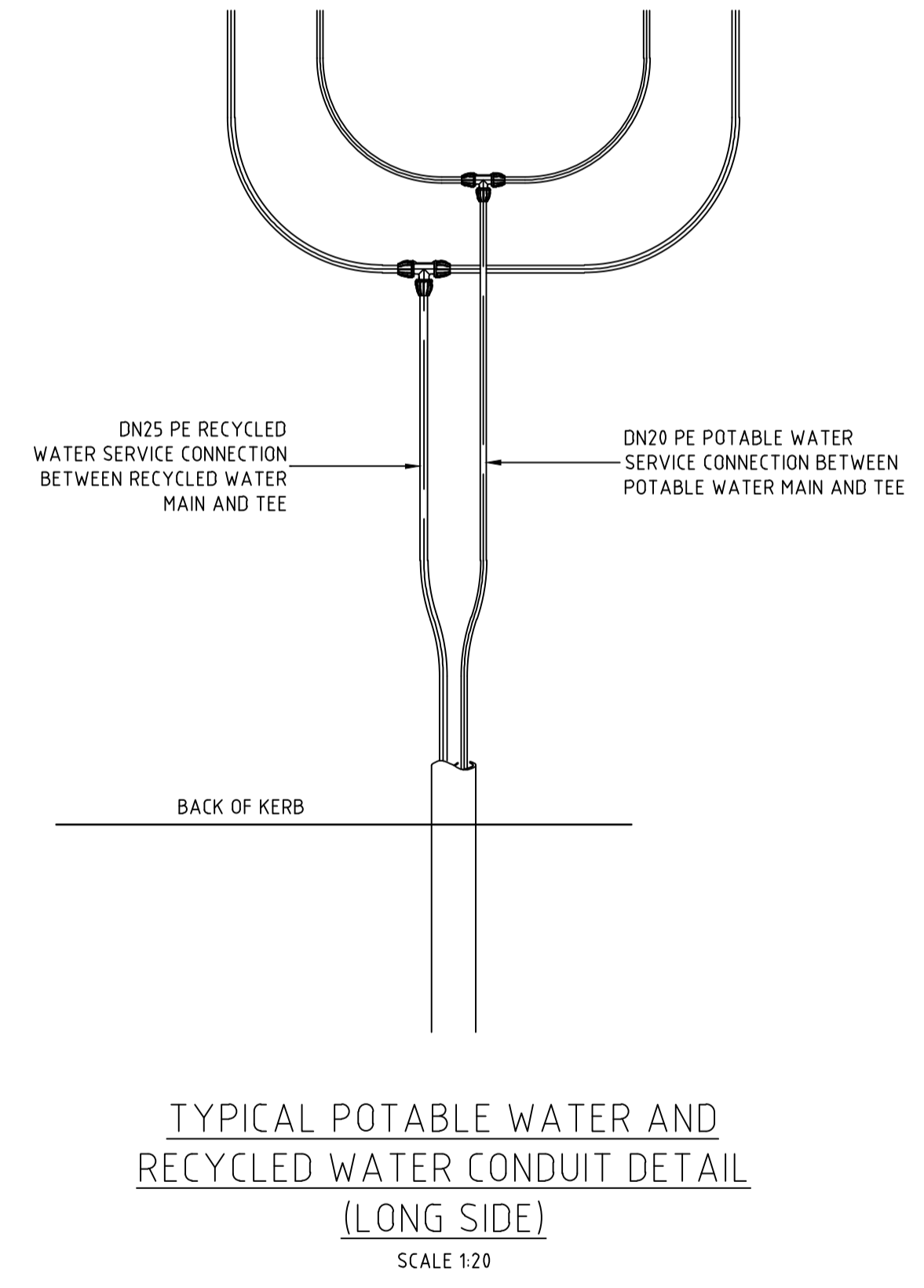
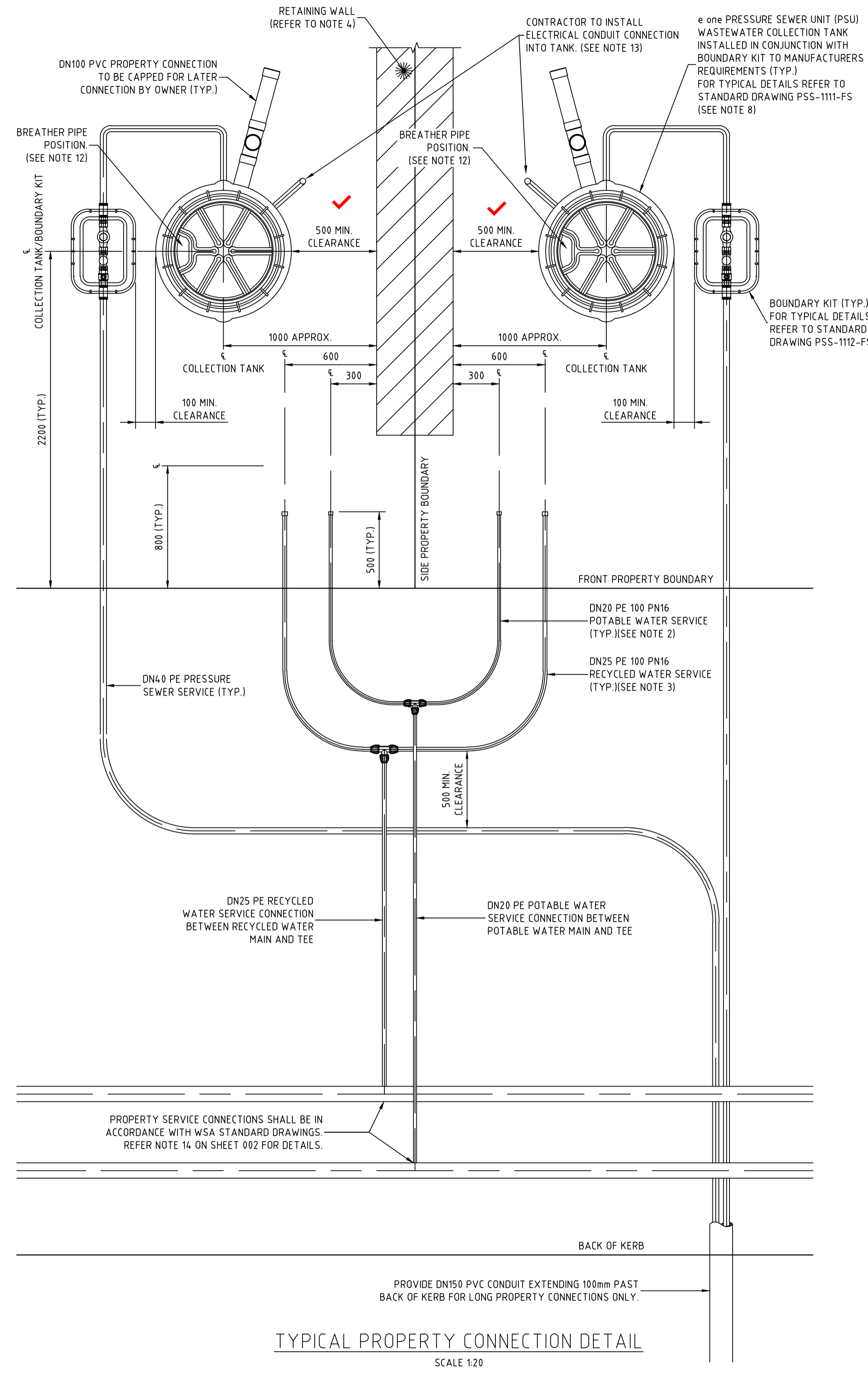


CONSTRUCTION ISSUE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.	0 0.4 0.8 A1 / A3 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@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398	WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	TYPICAL PROPERTY CONNECTION: SHEET 1 OF 2	ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2	WAT	404	3

239078(5)2-WAT-405(3)

100mm AT FULL SIZE
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- 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 2150mm CLEARANCE FROM BUILDING STRUCTURES.
 - Ø25 ELECTRICAL CONDUIT IS TO EXTEND FROM CONNECTION WITH PRESSURE SEWER UNIT (PSU) TO NOM. 500mm INSIDE PROPERTY BOUNDARY AND BE CAPPED. ELECTRICAL CONDUIT IS TO BE HEAVY DUTY ORANGE. INSTALL IN ACCORDANCE AS3000 AT MIN 500mm COVER. 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 IN ACCORDANCE WITH AS3000 AT MIN 500mm COVER. ELEC GROMMET SUPPLIED WITH TANK AND LOCATED LOOSE WITHIN TANK. Ø25 CONDUIT TO BE PROVIDED WITH LONG RADIUS BEND INTO THE VERTICAL POSITION AND LEFT CAPPED ABOVE GROUND LEVEL FOR FUTURE ELECTRICAL CONNECTION BY ELECTRICIAN ONCE DWELLING IS CONSTRUCTED.

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: 13/10/2023
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.
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.		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 PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	TYPICAL PROPERTY CONNECTION: SHEET 2 OF 2	ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2	WAT	405	3
J	14.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.												
K	14.02.2023	CLIENT COMMENTS	G.S.	M.K.	M.K.	M.K.											
O	27.02.2023	FOR CONSTRUCTION	G.S.	M.K.	M.K.	M.K.											
1	09.03.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.											
2	12.05.2023	FOR CONSTRUCTION	G.S.	C.S.	M.K.	M.K.											
3	01.06.2023	FOR CONSTRUCTION	L.S.	C.S.	M.K.	M.K.											

239078(5)2-WAT-406(3)

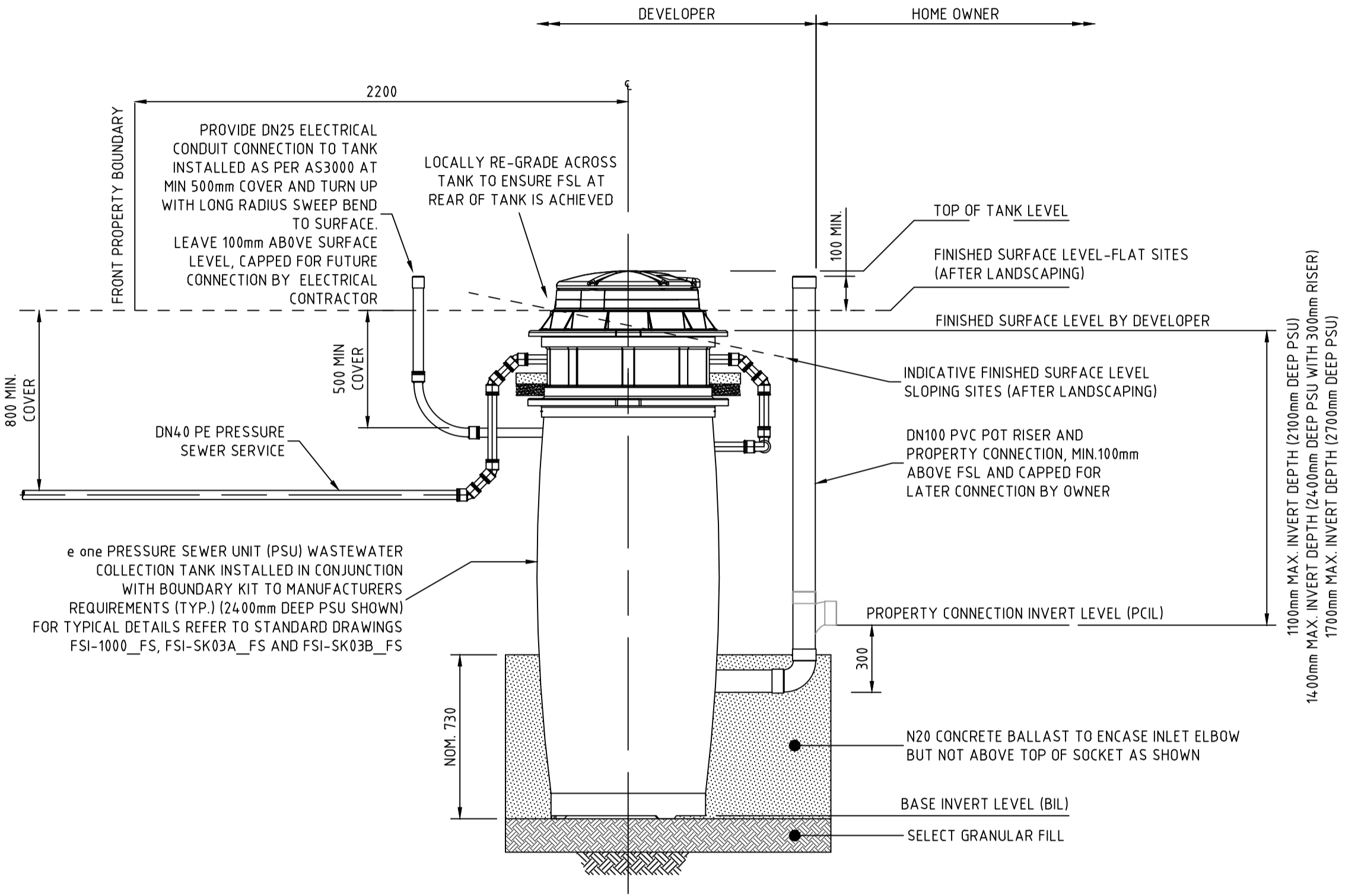
100mm AT FULL SIZE
This plan includes coloured information. If you have a black and white copy you do not have all of the information. This note is coloured red.

WASTEWATER COLLECTION TANK DETAILS

Table with columns: LOT NUMBER, TOP OF TANK, TANKS FSL, BASE IL, PROPERTY CONNECTION IL, TANK HEIGHT, TANK LOCATION, EASTING, NORTHING. Rows include lots 1201-1270 with various tank specifications and phases.

WASTEWATER COLLECTION TANK COUNT

Summary table with columns: TANK SIZE, NUMBER OF. Rows: 2100 (40), 2400 (4), 2700 (0).



PRESSURE SEWER SERVICE CONNECTION
TYPICAL SECTIONAL ELEVATION
SCALE 1:20

Table with columns: LOT NUMBER, Easting, Northing, Surface RL. Lists lots 1201-1224 with their respective coordinates and surface elevations.

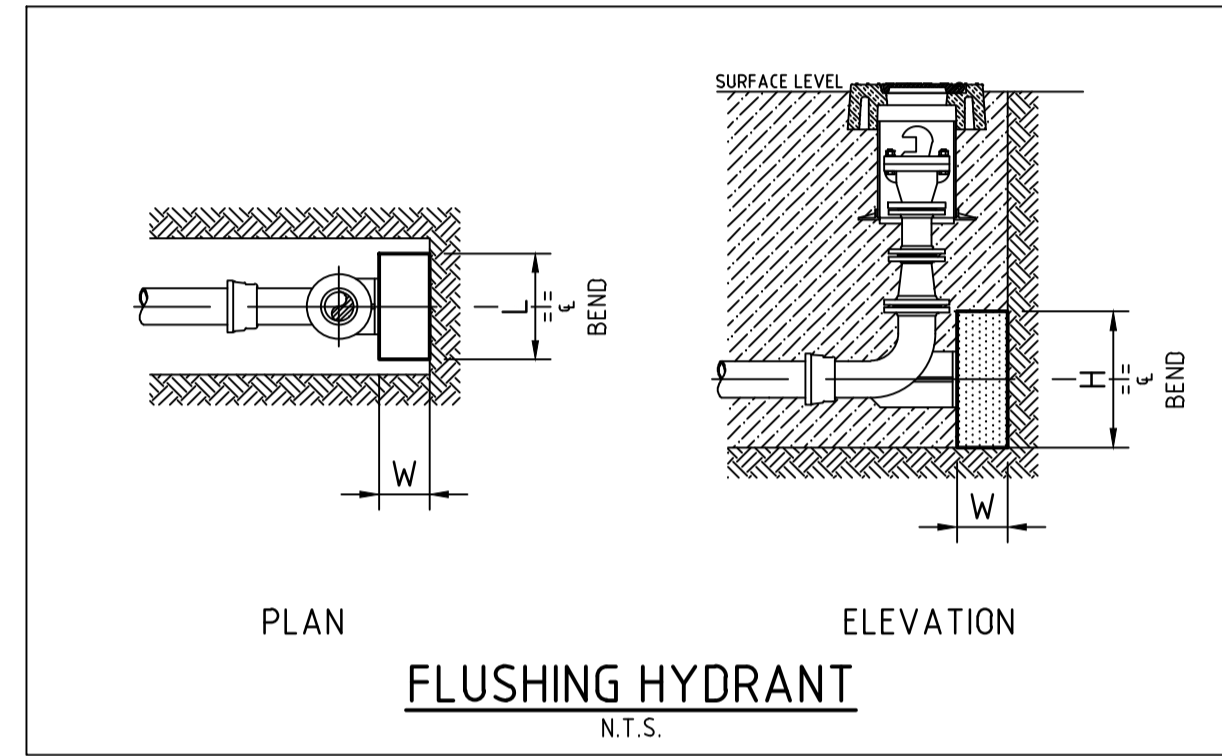
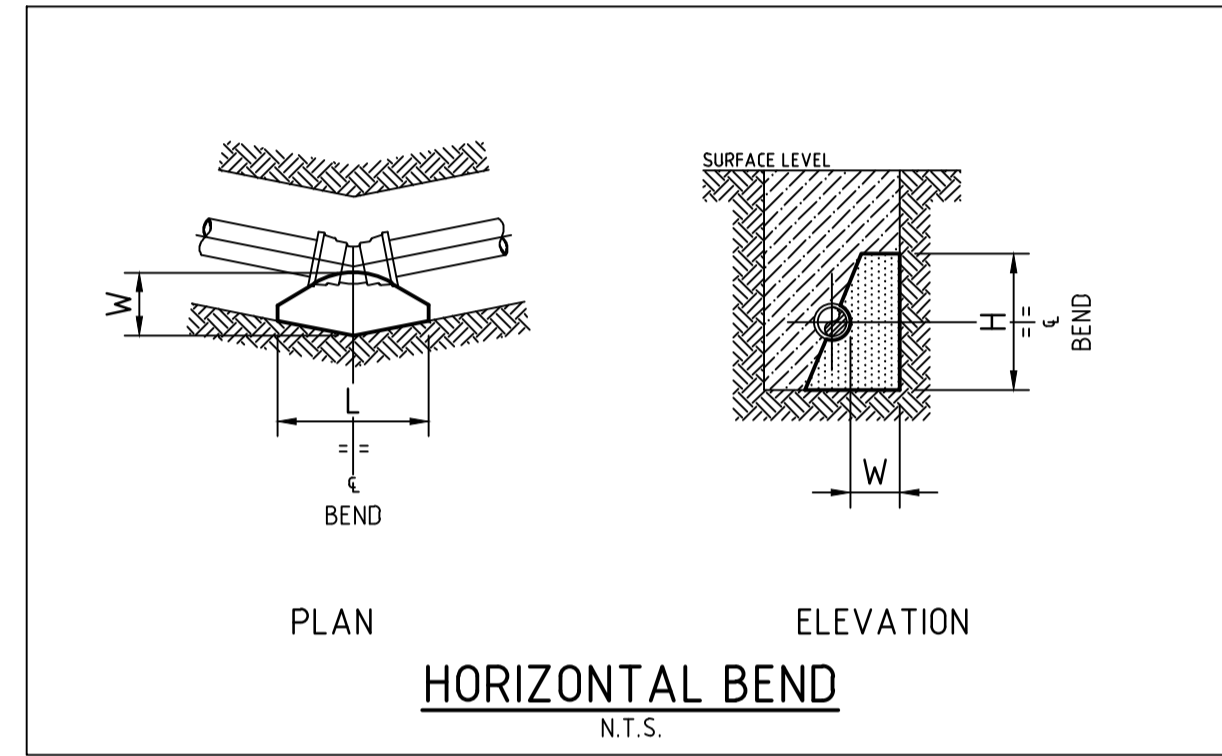
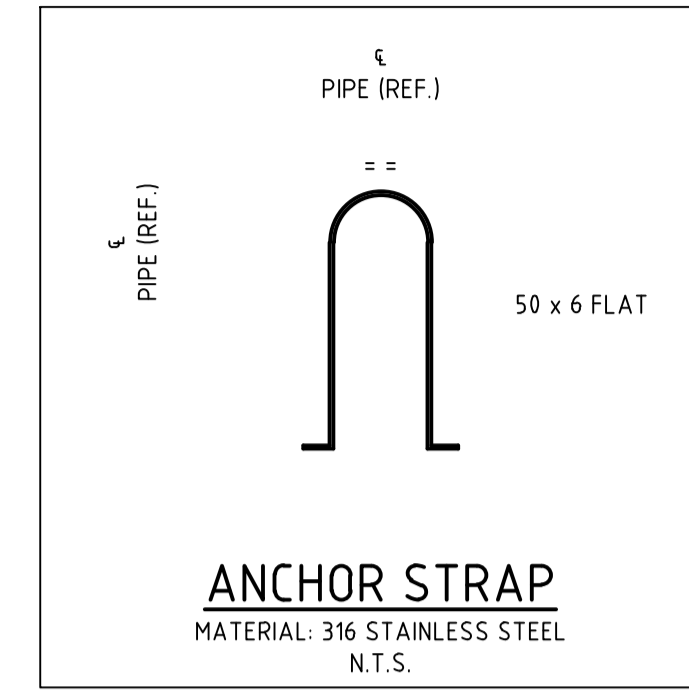
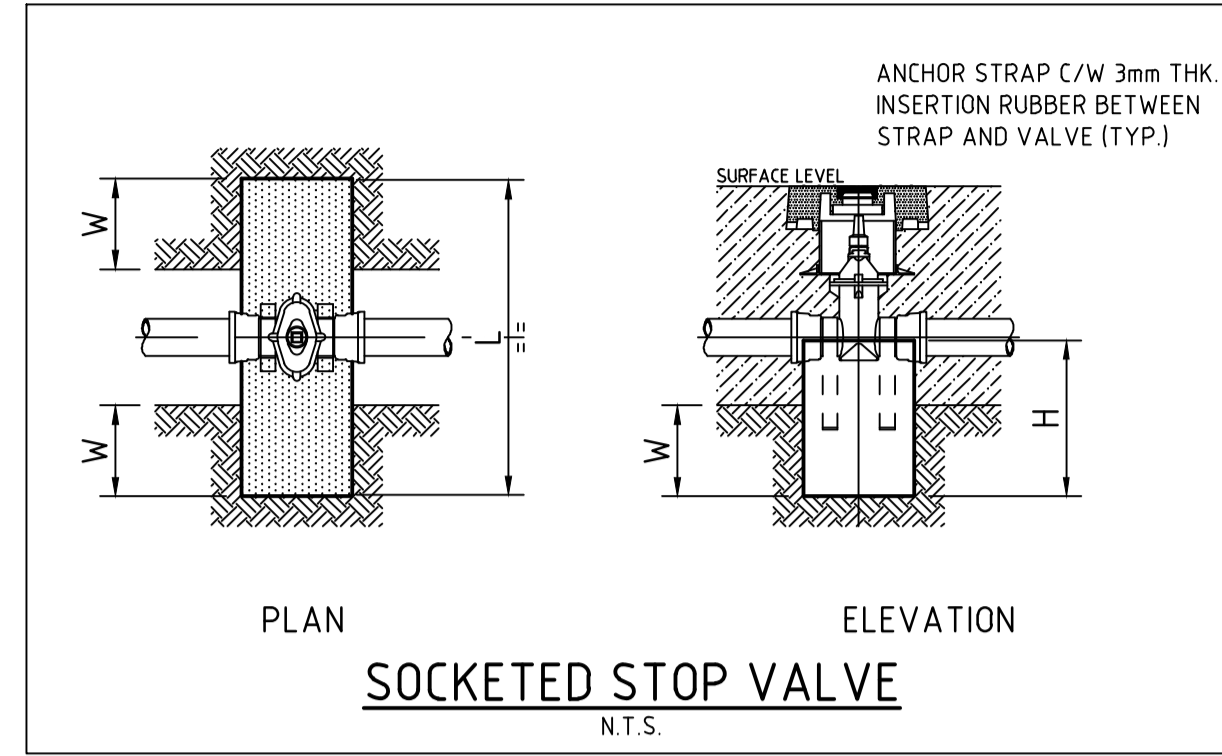
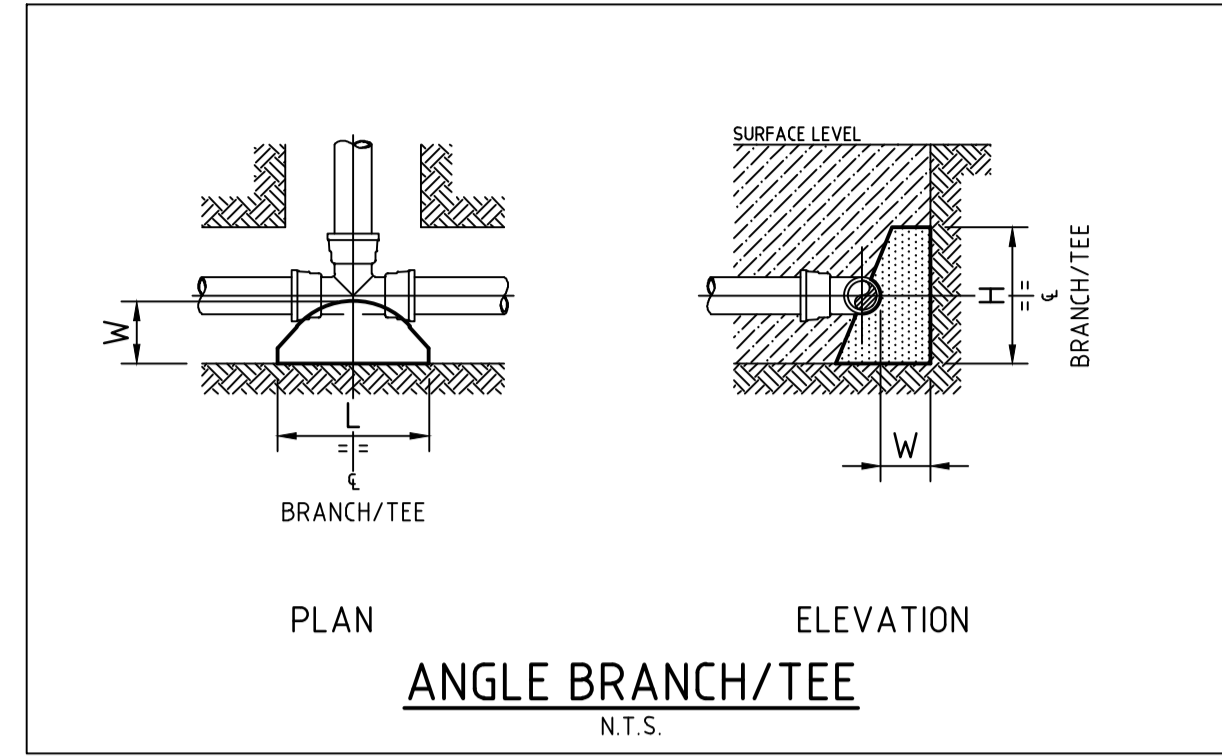
Table with columns: LOT NUMBER, Easting, Northing, Surface RL. Lists lots 1225-1243 with their respective coordinates and surface elevations.

WORK-AS-EXECUTED
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Signed: [Signature] Date: 13/10/2023
Name: Malcolm Harvey Position: Registered Surveyor



CONSTRUCTION ISSUE

Project information block containing: REV. table, DRAWN/CHECK/DESIGN/VERIFY table, SCALES, CLIENT (Johnson Property Group), PROPERTY DESCRIPTION (WATAGAN PARK PROPOSED SUBDIVISION - PHASE 2), PROJECT (POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION), PLAN TITLE (SEWER SERVICE CONNECTION DETAILS), SURVEYED (ADW Johnson), DATUM (GDA94 M.G.A. ZONE 56 A.H.D.), PROJECT No. (239078(5)2), DISCIPLINE (WAT), NUMBER (406), REV. (3).



TYPE	FITTING	Soil AHBP (Kpa)	Design STP (Kpa)	Thrust	TA (m2)	Length (L)	Height (H)	Width (W)
1	DN100 x DN100 EQUAL TEE	100	1500	18.00	0.18	0.45	0.40	0.30
2	DN100 x 90° HORIZONTAL BEND	100	1500	25.50	0.26	0.55	0.47	0.30
3	DN100 SOCKETED STOP VALVE	100	1500	18.00	0.18	1.05	0.44	0.30
4	DN100 FLUSHING HYDRANT	100	1500	18.00	0.18	0.45	0.40	0.30
5	DN375 x 50° HORIZONTAL BEND	100	1500	303.00	3.03	1.45	2.09	0.40
6	DN375 SOCKETED STOP VALVE	100	1500	214.50	2.15	2.00	0.86	0.55
7	DN375 FLUSHING HYDRANT	100	1500	214.50	2.15	1.20	1.80	0.40
8	DN200 x DN150 REDUCING TEE	100	1500	37.50	0.38	0.65	0.58	0.30
9	DN200 SOCKETED STOP VALVE	100	1500	64.50	0.65	1.40	0.62	0.40
10	DN200 FLUSHING HYDRANT	100	1500	64.50	0.65	0.85	0.77	0.30
11	DN200 END CAP	100	1500	64.50	0.65	0.85	0.77	0.30
12	DN200 x DN200 EQUAL TEE	100	1500	64.50	0.65	0.85	0.76	0.30
13	DN200 x DN100 TAPER	100	1500	46.50	0.47	1.20	0.78	0.30
14	DN250 x DN250 EQUAL TEE	100	1500	97.50	0.98	0.85	1.15	0.40
15	DN250 x DN100 REDUCING TEE	100	1500	18.00	0.18	0.40	0.45	0.30
16	DN250 x DN100 TAPER	100	1500	79.50	0.80	1.20	0.84	0.30
17	DN250 SOCKETED STOP VALVE	100	1500	97.50	0.98	1.40	0.64	0.40
18	DN250 FLANGED STOP VALVE	100	1500	97.50	0.98	1.20	0.84	0.30
19	DN250 FLUSHING HYDRANT	100	1500	97.50	0.98	0.85	1.16	0.40
20	DN250 END CAP	100	1500	97.50	0.98	0.85	1.16	0.40
21	DN150 x DN100 REDUCING TEE	100	1500	18.00	0.18	0.40	0.45	0.30
22	DN250 x DN200 TAPER	100	1500	33.00	0.33	1.20	0.84	0.30
23	DN150 SOCKETED STOP VALVE	100	1500	37.50	0.38	1.05	0.46	0.30
24	DN150 FLUSHING HYDRANT	100	1500	37.50	0.38	0.50	0.76	0.30
25	DN150 x DN150 EQUAL TEE	100	1500	37.50	0.38	0.50	0.75	0.30
26	DN150 END CAP	100	1500	37.50	0.38	0.50	0.76	0.30
27	DN150 x DN100 TAPER	100	1500	19.50	0.20	1.05	0.70	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
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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	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
I	03.02.2023	UPDATE PIPE SIZE	G.S.	M.K.	M.K.	M.K.		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 PROPOSED SUBDIVISION - PHASE 2 PRECINCT NORTH B STAGES 2(PART), 5 & SCHOOL SITE LOT 82 DP1237780	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	THRUST BLOCK DETAILS	ADW Johnson	GDA94 M.G.A. ZONE 56 A.H.D.	239078(5)2	WAT	407	3