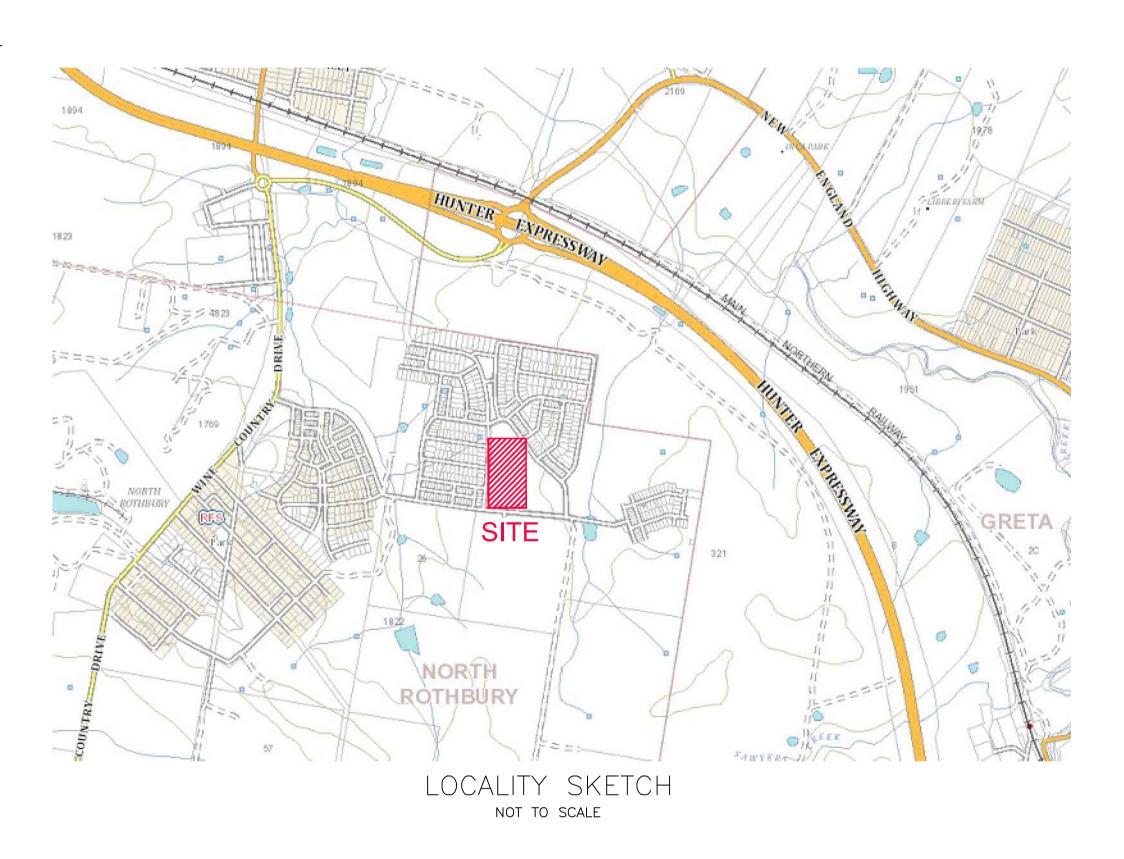


PROPOSED SUBDIVISION STAGE 42 HUNTLEE





	DRAWING INDEX
DRAWING NUMBER	DRAWING TITLE
240037(42)-WAT-001	COVER SHEET, LOCALITY PLAN & DRAWING INDEX
240037(42)-WAT-002	GENERAL NOTES
240037(42)-WAT-003	OVERALL SITE PLAN
240037(42)-WAT-101	POTABLE WATER DETAIL PLAN - SHEET 1
240037(42)-WAT-102	POTABLE WATER DETAIL PLAN - SHEET 2
240037(42)-WAT-103	POTABLE WATER DETAIL PLAN - SHEET 3
240037(42)-WAT-201	RECYCLED WATER DETAIL PLAN - SHEET 1
240037(42)-WAT-202	RECYCLED WATER DETAIL PLAN - SHEET 2
240037(42)-WAT-203	RECYCLED WATER DETAIL PLAN - SHEET 3
240037(42)-WAT-301	PRESSURE SEWER DETAIL PLAN - SHEET 1
240037(42)-WAT-302	PRESSURE SEWER DETAIL PLAN - SHEET 2
240037(42)-WAT-303	PRESSURE SEWER DETAIL PLAN - SHEET 3
240037(42)-WAT-400	FITTINGS TABLE
240037(42)-WAT-401	TYPICAL PIPEWORK TRENCHING DETAIL
240037(42)-WAT-402	TYPICAL PROPERTY CONNECTION DETAILS
240037(42)-WAT-403	WASTE WATER COLLECTION TANK LEVEL DETAILS
240037(42)-WAT-404	THRUST BLOCK DETAILS

WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/04/2023 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.

COMPANY ABW Johnson Pty Ltd NAME DAVID IAN TURNER SIGNED DATE 16/05/2023 SIGNED

DATE/...../..... CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS

E: 345612.942 MGA Datum: GDA94 N: 6382878.917 MGA Zone: 56 RL: 77.675m

Co-Ord System: MGA Ground

CONSTRUCTION ISSUE

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info	REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	
Ired	Α	08.10.2021	INITIAL ISSUE	G.S.	C.B.	G.S.	C.B.		Hunter Office
includes coloured	0	16.02.2022	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.		Unit 7/335 Hillsborough Rd
ose	2	04.03.2022	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.		Warners Bay N.S.W. 2282
pn	3	03.06.2022	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.		Phone: (02) 4978 5100
ı inc			FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.	aawi	Fax: (02) 4978 5199
plan			FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.		email: hunter@adwjohnson.com.au
his	6	16.05.2023	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.	labraar	www.adwjohnson.com.au
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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



	PROPERTY DESCRIPTION	PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION							
r.	PROPOSED SUBDIVISION STAGE 42 HUNTLEE			PLAN TITLE	OVER SHEET,	, LOCALITY PLAN	I & DRAW	/ING INDEX	
	SURVEYED Daly.Smith Pty Ltd	DATUM GDA94 M.G.A. ZONE 56	A.H.D.	PROJECT No. 240037(4)	2) –	DISCIPLINE WAC	_	NUMBER 001	REV.

PRESSURE SEWER NOTES:

- 1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA, PRESSURE SEWERAGE CODE OF AUSTRALIA - WSA 07-2007 VERSION 1.1 AND POLYETHYLENE PIPELINE CODE WSA 01-2004.
- 2. ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS. BUTT FUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE GEORG FISCHER PIPING SYSTEMS BUTT FUSION PRODUCT RANGE. ELECTROFUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE PLASSON "POLYETHYLENE PIPING SYSTEMS"PRODUCT RANGE.
- 3. ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY
 - CONSTRUCTED STRUCTURES FOR PROPOSED SERVICES. SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.
- 4. PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 02-2007 AND ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA.
- 5. ALL POLYETHYLENE MAINS ≤ DN200 SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS
- ALL POLYETHYLENE MAINS ≥ DN200 SHALL BE JOINED USING BUTTWELD JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
- 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 GENERALLY 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.
- 8. MAINS WITHIN 2.0m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER REPRESENTATIVE).
- 9. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 AND WSA-PS351.
- 10. ALL BENDS SHALL BE <u>electrofusion or butt weld sweep bends</u>. Fabricated bends shall not be used in lieu. Knuckle elbows are not
- 11. MINIMUM BENDING RADIUS FOR PN16 PE100 (SDR11) SHALL BE 20 x DN. (i.e. DN400 : R8.0m, DN250 : R5.0m, DN200: R4.0m, DN160: R3.2m, DN125: R2.5m, DN90: R1.8m, DN75: R1.5m, DN63: R1.3m, DN50: R1.0m, DN40: R0.8m).
- 12. ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).
- 13. FLUSHING PITS SHALL CONFORM WITH ALTOGETHER STANDARD DRAWINGS.

MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS

INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED.

- REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION. SMALL MAINS (≤ DN110)
- http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017A-FS.pdf
- LARGE MAINS (> DN110) http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017B-FS.pdf
- 14. LOCALISED DEEPENING OF MAINS MAY BE REQUIRED TO FACILITATE AIR VALVE INSTALLATION.
- THE CONTRACTOR SHALL ENSURE THAT THE AIR VALVE OFFTAKE IS LOCATED AT A HIGH POINT (NATURAL OR ARTIFICIAL) IN THE MAIN (i.e. MAIN SHALL GRADE DOWNWARDS EITHER SIDE OF THE AIR VALVE).
- 15. DETECTABLE MARKING TAPE SHALL BE LAID ON TOP OF THE PIPE EMBEDMENT MATERIAL BEFORE BACKFILLING AND CONNECTED TO SURFACE FITTINGS.
- 16. ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- 17. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPE SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- 18. ALL VALVES SHALL BE RESILIENT SEATED SLUICE VALVES (ANTI-CLOCKWISE CLOSING), SHALL BE RESTRAINED IN ACCORDANCE WITH WAT-1207 AND SHALL COMPLY WITH ALTOGETHER STANDARD DRAWING PSS-1015-FS.
- 19. ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 07-2007 VERSION 1.1.
- 20. FOR LOTS WITH TANKS IN THE REAR.
- 1 x 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).
- 21. THE CONSTRUCTOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING INFRASTRUCTURE. CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY THE ALTOGETHER REPRESENTATIVE.
- 22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO
- 23. PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE
- 24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED
- 25. THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 21.3.4) ARE: <u>TRAFFICABLE</u>
 - PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING.
- NON-TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/900mm OF FILL AND EACH 100 LINEAL METRES OF PIPE.
- 26. BOUNDARY KITS (COMPLETE) SHALL BE NOV SUPPLIED (NOV PSS-BK4). e one COLLECTION TANK (ESD 20-0032/ESD 20-0033) SHALL BE INSTALLED WITH BOUNDARY KIT (REFER ALTOGETHER STANDARD DRAWINGS PSS-1112-FS AND PSS-1113-FS). PUMP TO BE INSTALLED BY OTHERS.
- 27. ALL MAINS (UP TO THE BOUNDARY KIT) SHALL BE PRESSURE TESTED TO 1600 kPa. ALL LINES FROM THE WASTEWATER COLLECTION TANK TO THE MANUAL ISOLATION VALVE WITHIN THE BOUNDARY KIT TO BE PRESSURE TESTED TO 1000KPa.
- 28. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- 29. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.
- 30. ROPE OFF ALL PRESSURE SEWER UNITS AND FLUSHING POINTS TO LIMIT DAMAGE DURING CONSTRUCTION.
- 31. PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
- 32. WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A.

POTABLE WATER AND RECYCLED WATER NOTES:

- 1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA AND WSA 03-2011-3.1 (SYDNEY WATER EDITION 2014).
- 2. POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.
- 3. ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW, SHALL CONFORM TO THE APPROPRIATE CURRENT AUSTRALIAN STANDARDS AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS.
- 4. ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY CONSTRUCTED STRUCTURES FOR PROPOSED SERVICES, SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.
- 5. THE CONSTRUCTOR SHALL VERIFY WITH THE SITE SUPERVISOR THE POSITION AND LEVEL OF ALL EXISTING AND PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.
- 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 GENERALLY 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
- ALL POTABLE WATERMAINS TO BE BLUE PVC-M (PN16).

PER THE CLEARANCE TABLE ADJACENT.

ALL RECYCLED WATERMAINS SHALL BE LILAC PVC-M (PN16).

MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS.

- DIFFERENTIATION OF POTABLE AND RECYCLED WATER SYSTEMS SHALL BE AS PER TABLE 4.1 WSA03-2011 WITH BOTH SERVICES BEING CLASSIFIED AS WATER MAINS. RECYCLED WATER MAINS SHALL ALWAYS BE LOWER THAN POTABLE WATER MAINS.
- 150mm VERTICAL CLEARANCE BETWEEN POTABLE WATER AND RECYCLED WATER MAINS SHALL BE PROVIDED.
- 8. MAXIMUM JOINT DEFLECTIONS TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 9. LOCALLY LOWER PIPEWORK IN VICINITY OF STOP VALVES TO ENSURE SUFFICIENT COVER IS MAINTAINED OVER VALVES. LOWERING OF PIPEWORK SHALL BE ACHIEVED OVER A NUMBER OF PIPE LENGTHS EITHER SIDE OF VALVES TO ELIMINATE ANY SHARP DEFLECTIONS.
- 10. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA 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 NED FOR TRENCH DRAINAGE/BULKHEADS.
- 11. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- 12. HYDRANTS , STOP VALVES AND ALL OTHER FITTINGS TO BE THE SAME SIZE AS THE THROUGH WATER MAIN AND ANTI CLOCKWISE CLOSING.
- 13. HYDRANTS MUST NOT BE INSTALLED IN POTENTIAL DRIVEWAY LOCATIONS. HYDRANTS AND WATER SERVICES SHALL BE NOMINALLY AT LEAST 5.0m FROM EACH BOUNDARY OR ON BOUNDARIES. WHERE POSSIBLE, FITTINGS SHALL BE LOCATED BEHIND KERB INLET PITS.
- 14. THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH WAT-1205.
- 15. ALL PROPERTY (MAIN TO METER) SERVICE CONNECTIONS SHALL BE CONSTRUCTED STRICTLY IN ACCORDANCE WITH ALTOGETHER REQUIREMENTS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION.
- SINGLE SERVICE: http://information.altogethergroup.com.au/governance/Land_Housing/WAT-1854-FS.pdf http://information.altogethergroup.com.au/governance/Land Housing/WAT-1855-FS.pdf
- 16. PROPERTY SERVICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE ALTOGETHER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
- 17. SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc. SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- 18. ALL MAINS SHALL BE PRESSURE TESTED TO 1500kPa IN ACCORDANCE WITH CLAUSE 19.4 OF WSA03-2011 (SYDNEY WATER EDITION 2014).
- 19. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- 20. WATER QUALITY TESTING SHALL BE IN ACCORDANCE WITH WSA 03-2011-3.1(SYDNEY WATER EDITION-2014. CLAUSE 19.7).
- 21. THE CONSTRUCTOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING INFRASTRUCTURE . CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY
- 22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.
- 23. PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE
- 24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED
- 25. MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY WSA03-2011 (SYDNEY WATER EDITION 2014) (CLAUSE 19.3.5):

 - PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING. NON-TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/900MM OF FILL AND EACH 100 LINEAL METERS OF PIPE. PROPERTY SERVICES
- TEST 1 OF EVERY 5 PROPERTY SERVICE TRENCHES. TESTING SHALL BE IN ACCORDANCE WITH TABLE 16.1 AND 17.1 OF THE WATER SUPPLY CODE OF AUSTRALIA.
- 26. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.
- 27. PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
- 28. WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A.
- 29. WHERE THE PIPE GRADE EXCEEDS 5%, TRENCHSTOPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WAT-1209 AND WAT-1210 AT THE SPACING OF 100/GRADE%. WHERE PIPE GRADES EXCEED 15%, CONCRETE BULKHEADS WILL BE CONSTRUCTED AT SPACING AS PER TABLE 7.5 OF WSA03-2001 SYDNEY WATER EDITION 2014.

ALTOGETHER STANDARD DRAWINGS CAN BE FOUND AT THE FOLLOWING ADDRESS: https://askus.altogethergroup.com.au/hc/en-us/articles/900004827263-Standard-drawings-for-land-developers-

GENERAL NOTES:

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

CLEARANCES BETWEEN PIPELINES AND UNDERGROUND SERVICES

UTILITY		ORIZONTAL NCE (mm)	MINIMUM VERTICAL	
(EXISTING OR PROPOSED SERVICE)	NEW MA	CLEARANCE (mm)		
	≤ DN200	≥ DN200]	
WATER MAINS > DN375	600	600	300	
WATER MAINS < DN375	300 4	600	150	
GAS MAINS	300 4	600	150	
TELECOMMUNICATION CONDUITS AND CABLES	300 4	600	150	
ELECTRICITY CONDUITS AND CONDUITS	200	1000	225 °	
STORMWATER DRAINS	300 4	600	150 %	
SEWERS (GRAVITY)	1000 6 / 600	1000 ⁶ / 600	500 °	
SEWERS (PRESSURE AND VACUUM)	600	600	300 9	
KERBS	150	6005	150 (WHERE POSSIBLE)	

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

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

WORK AS CONSTRUCTED

COMPANY

DATE/..../....

CONSTRUCTION MANAGER

NAME

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/04/2023 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.

MGA Datum: GDA94

MGA Zone: 56

COMPANY ABW Johnson Pty Ltd DAVID IAN TURNER

6382878.917

RL: 77.675m

DATE 16/05/2023 SIGNED REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS Co-Ord System: MGA Ground 345612.942

CONSTRUCTION ISSUE

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R	EV. DATI	AMENDMENT	DRAWN CHECK DESIGN VERIFY	SCALES			CLIENT	PROPERTY DESCRIPTION		PROJECT [POTABLE WATER, RECY	CLED WATER AND	
Ired	A 08.10.2	021 INITIAL ISSUE	G.S. C.B. G.S. C.B.			Hunter Office					PRESSURE SEWER F	RETICULATION	
10/0		022 FOR CONSTRUCTION	G.S. C.B. G.S. C.B.			Unit 7/335 Hillsborough Rd		PROPOSI	ED SUBDIVISION	PLAN TITLE			
os c		022 FOR CONSTRUCTION	G.S. C.B. G.S. C.B.			Warners Bay N.S.W. 2282	alle a a bla a u		TAGE 42				
pnl		1022 FOR CONSTRUCTION	G.S. C.B. G.S. C.B.			Phone: (02) 4978 5100			UNTLEE		GENERAL NOT	ES	
ni r		1022 FOR CONSTRUCTION	G.S. C.B. G.S. C.B.		aawi	Fax: (02) 4978 5199	91199 9 911919		0111222				
plar	5 21.09.2	022 FOR CONSTRUCTION	G.S. C.B. G.S. C.B.			email: hunter@adwjohnson.com.au							
This	6 16.05.2	023 WORK AS CONSTRUCTED	I.B. C.B. G.S. C.B.		labbaan	www.adwjohnson.com.au	The second secon	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	R
DE	SIGN FILE N	:\JOBNUMBER\Design\12D\		ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE	Journaou	ABN 62 129 445 398		Daly.Smith Pty Ltd	GDA94 M.G.A. ZONE 56 A.H.D.	240037(4	42) – WAC	- 002	

6 16.05.2023 WORK AS CONSTRUCTED DESIGN FILE N: \JOBNUMBER\Design\12D\

0 16.02.2022 FOR CONSTRUCTION

2 04.03.2022 FOR CONSTRUCTION

3 03.06.2022 FOR CONSTRUCTION

4 04.08.2022 FOR CONSTRUCTION

5 21.09.2022 FOR CONSTRUCTION

REV. DATE AMENDMENT

INITIAL ISSUE

Johnson ABN 62 129 445 398 ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCAL Plotted By: iainb Plot Date: 19/05/23 - 09:06 Cad File: \\jpserver10\adw-data\240072\DWG\Water & Sewer\Stage 42-WAC\240037(42)-WAC-003.dwg

C.B.

C.B. C.B.

C.B. C.B.

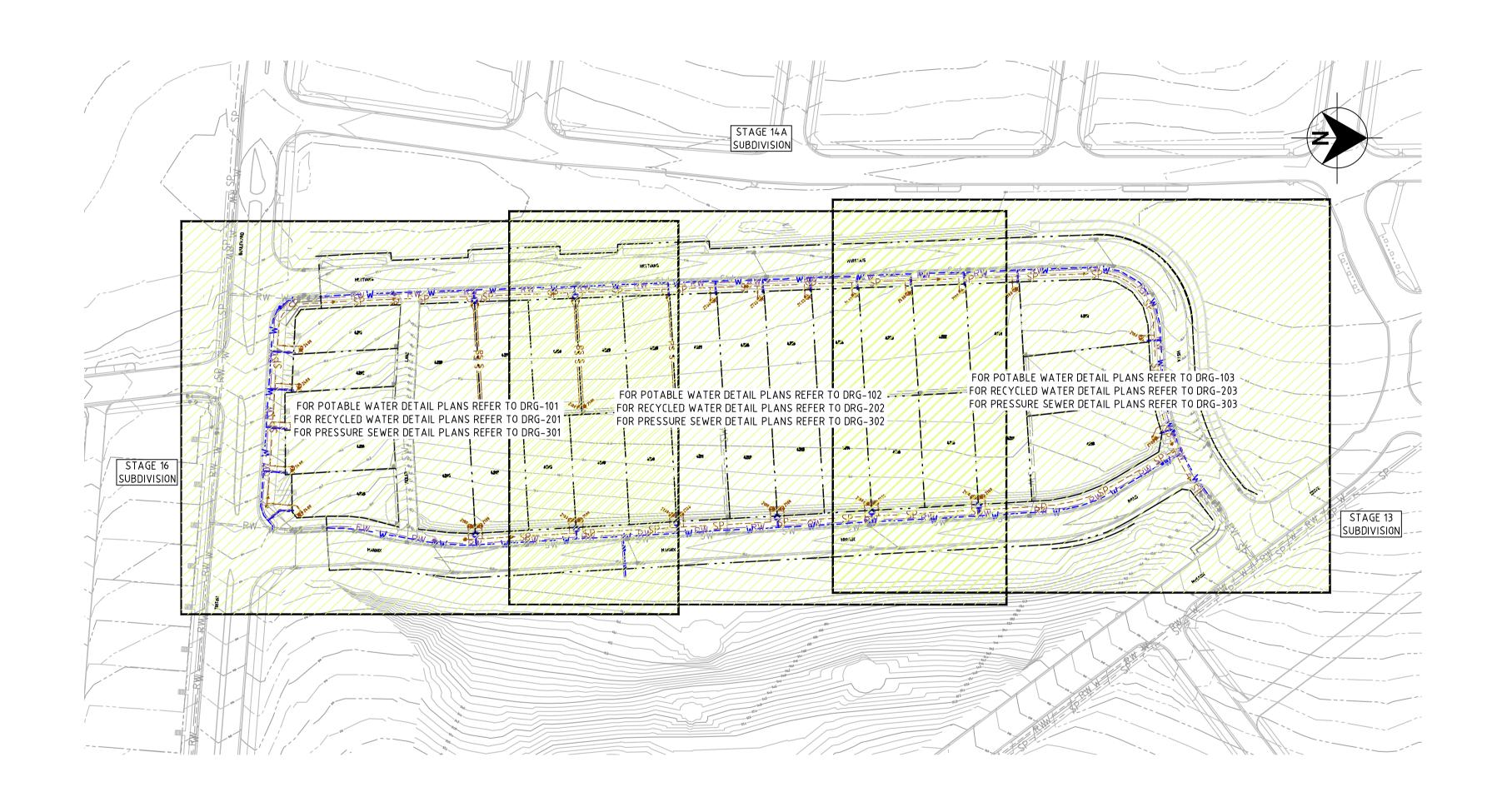
G.S. G.S. G.S. G.S. G.S.

DRAWN CHECK DESIGN VERIFY SCALES

G.S. C.B.

Bar Scale 1: 1000





PLAN

SCALE 1:1000

Hunter Office

Unit 7/335 Hillsborough Rd

Warners Bay N.S.W. 2282

email: hunter@adwjohnson.com.au

Phone: (02) 4978 5100

Fax: (02) 4978 5199

www.adwjohnson.com.au

CLIENT

WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/04/2023 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.

COMPANY ADW Johnson Pty Ltd NAME DAVID IAN TURNER

SIGNED DATE 16/05/2023 SIGNED

REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

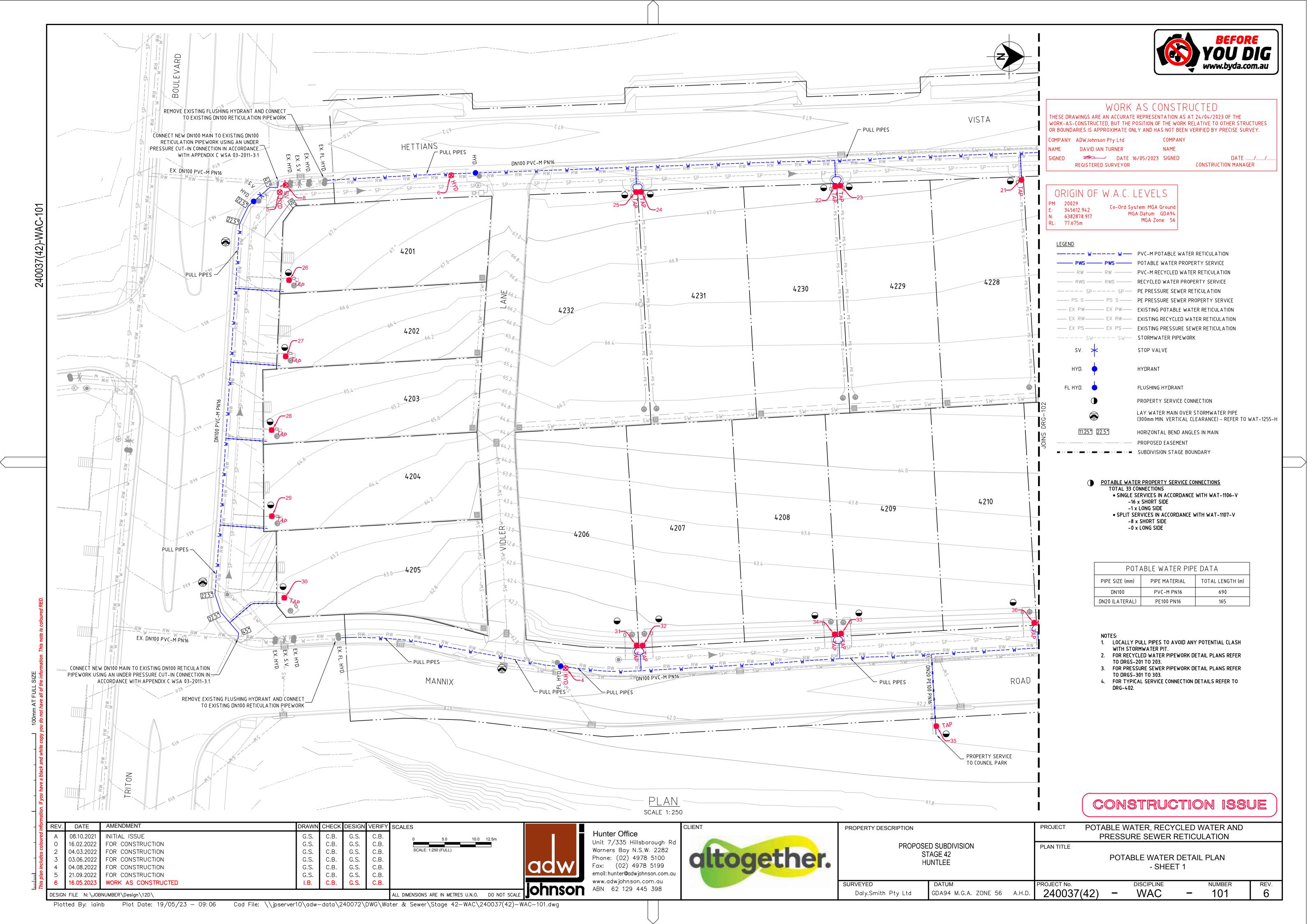
Co-Ord System: MGA Ground MGA Datum: GDA94 MGA Zone: 56

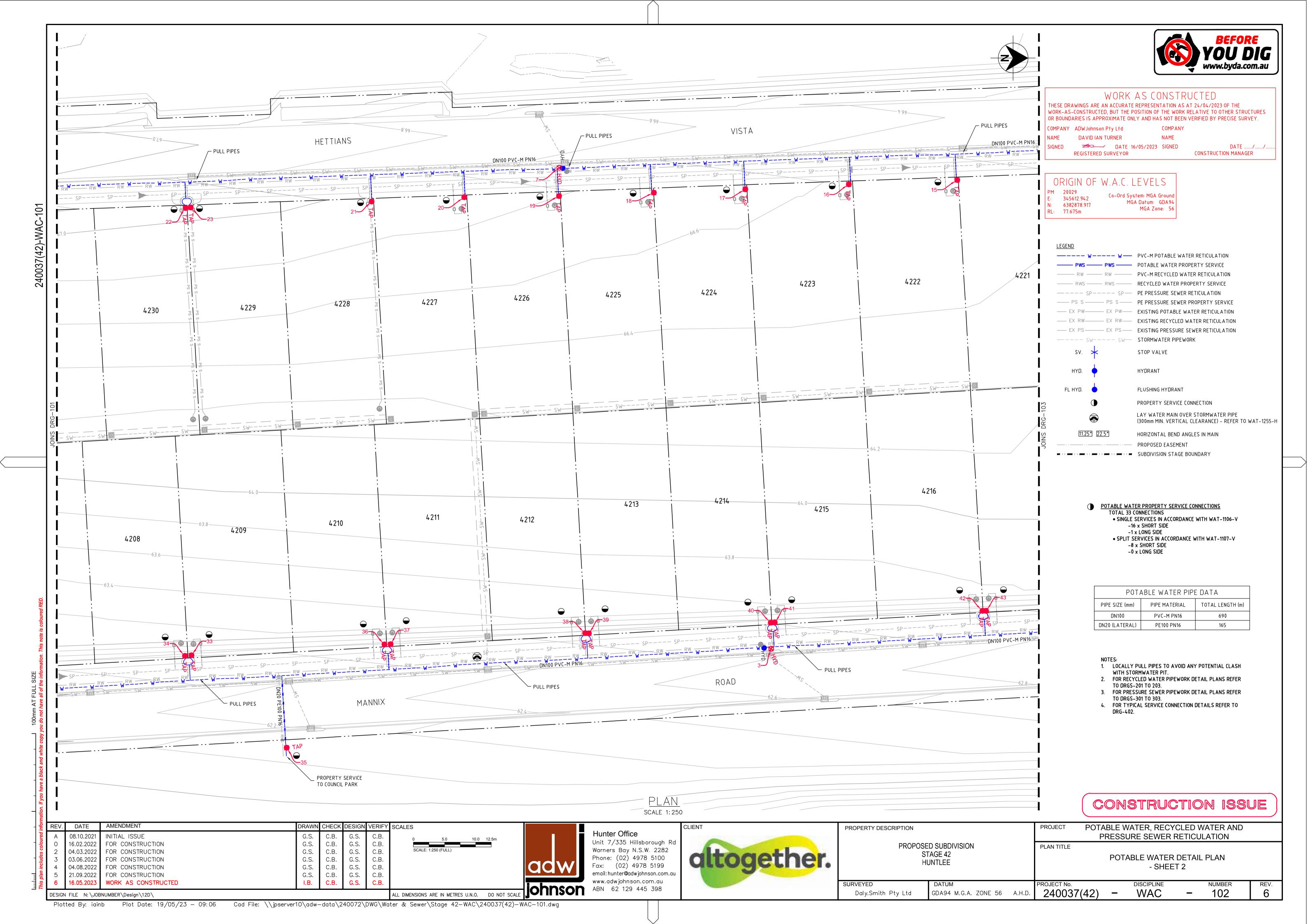


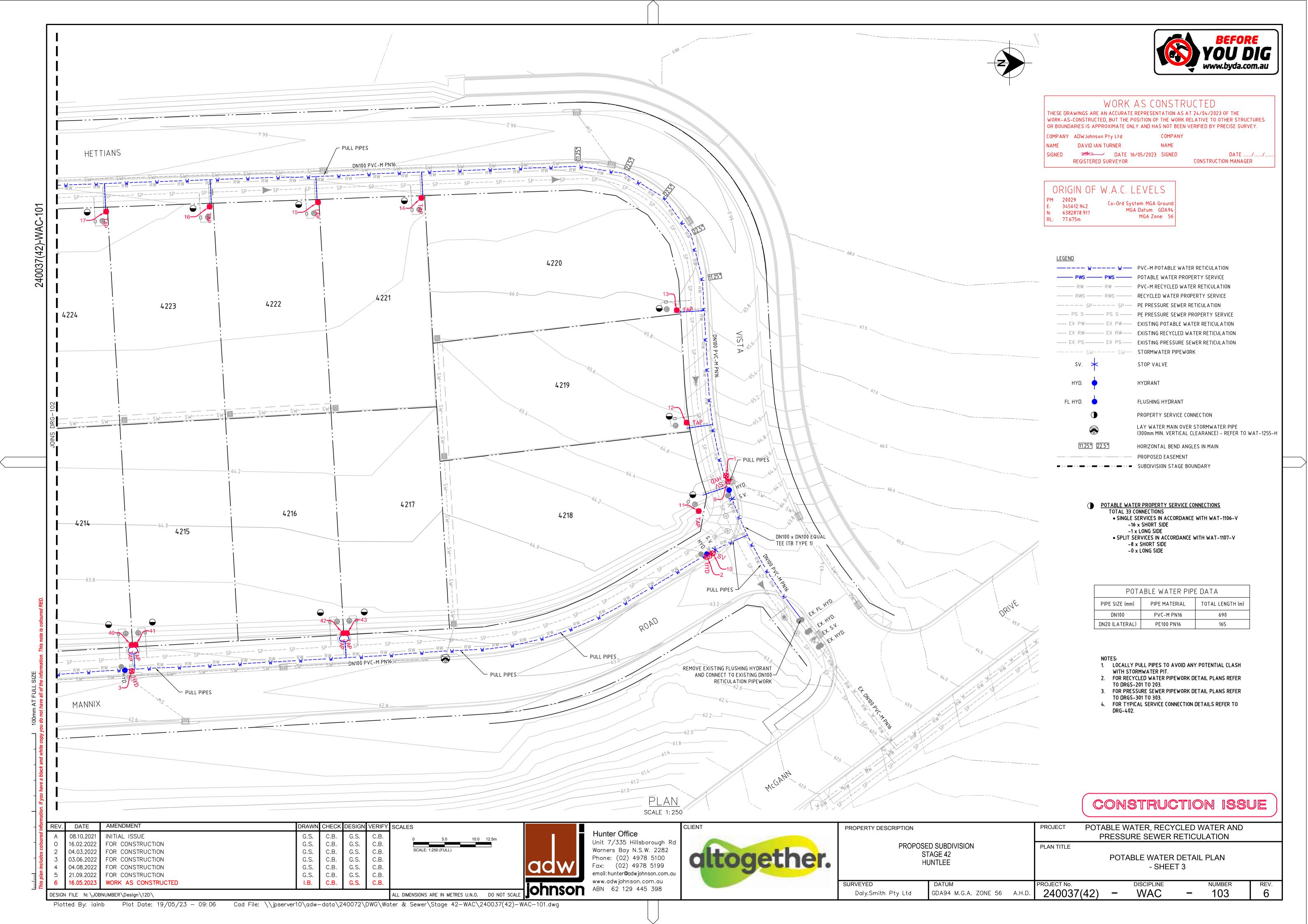
CONSTRUCTION ISSUE

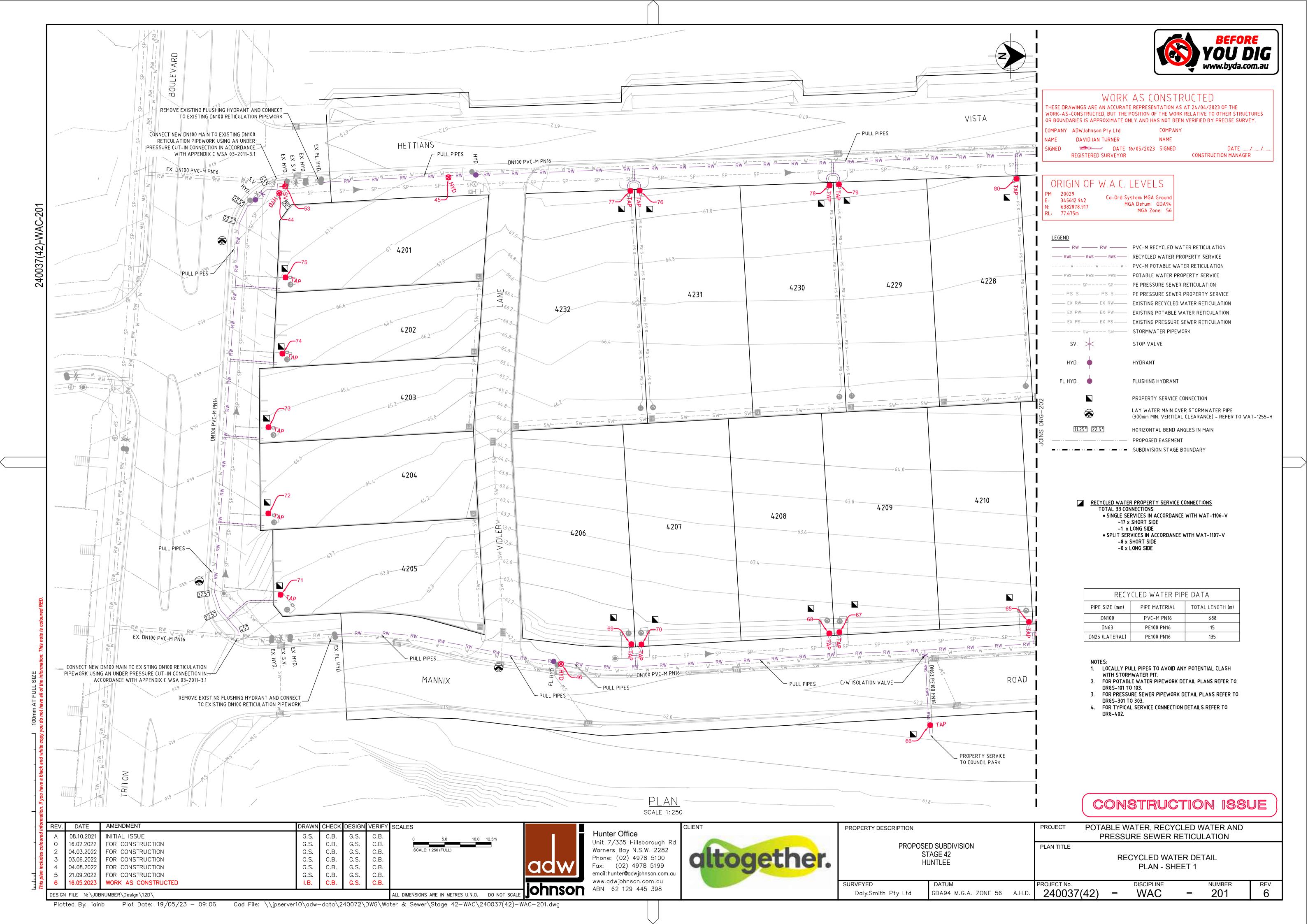
POTABLE WATER, RECYCLED WATER AND PROJECT PROPERTY DESCRIPTION PRESSURE SEWER RETICULATION PROPOSED SUBDIVISION PLAN TITLE STAGE 42 OVERALL SITE PLAN HUNTLEE PROJECT No. DISCIPLINE 240037(42) -WAC 003 Daly.Smith Pty Ltd GDA94 M.G.A. ZONE 56 A.H.D.

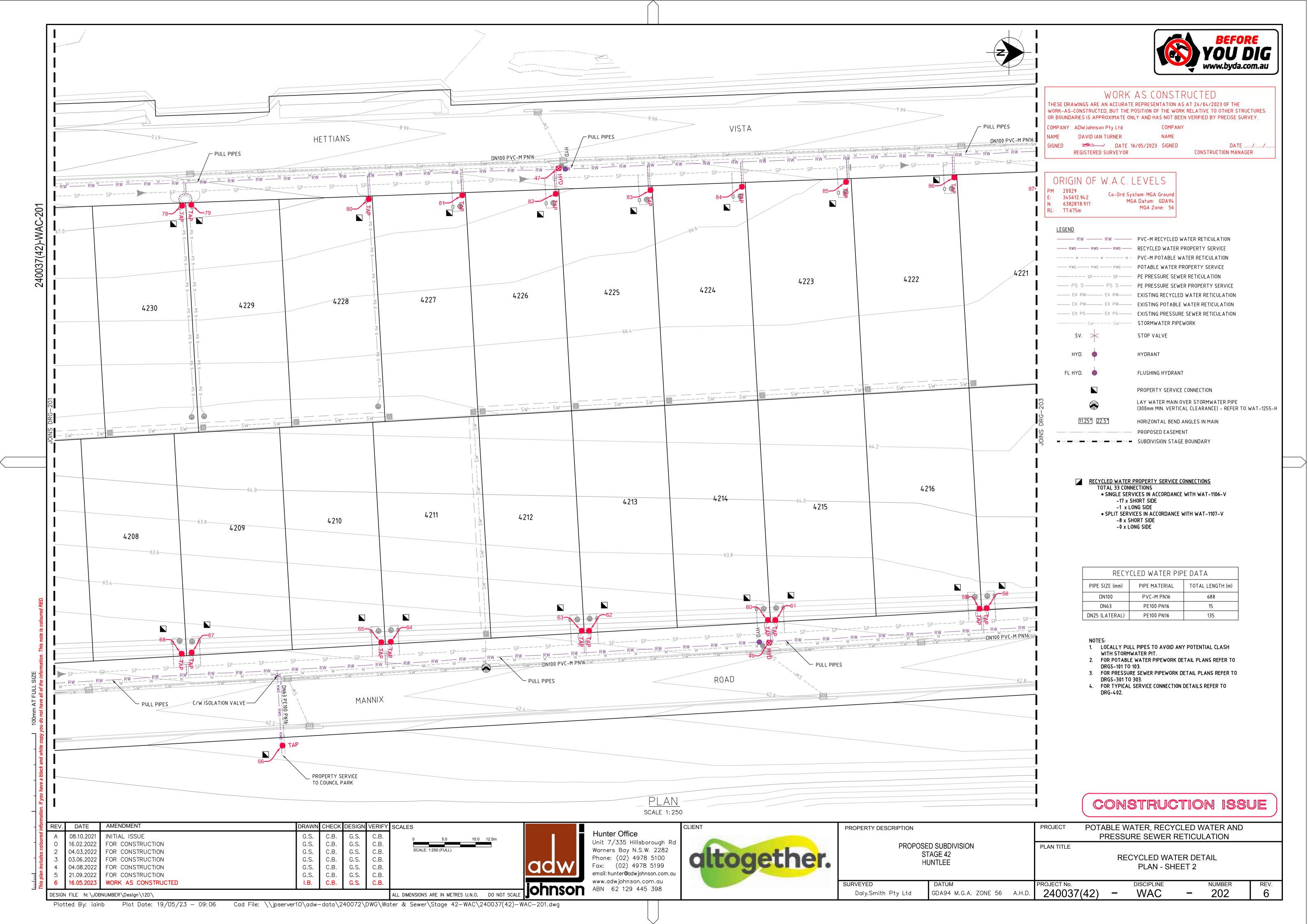
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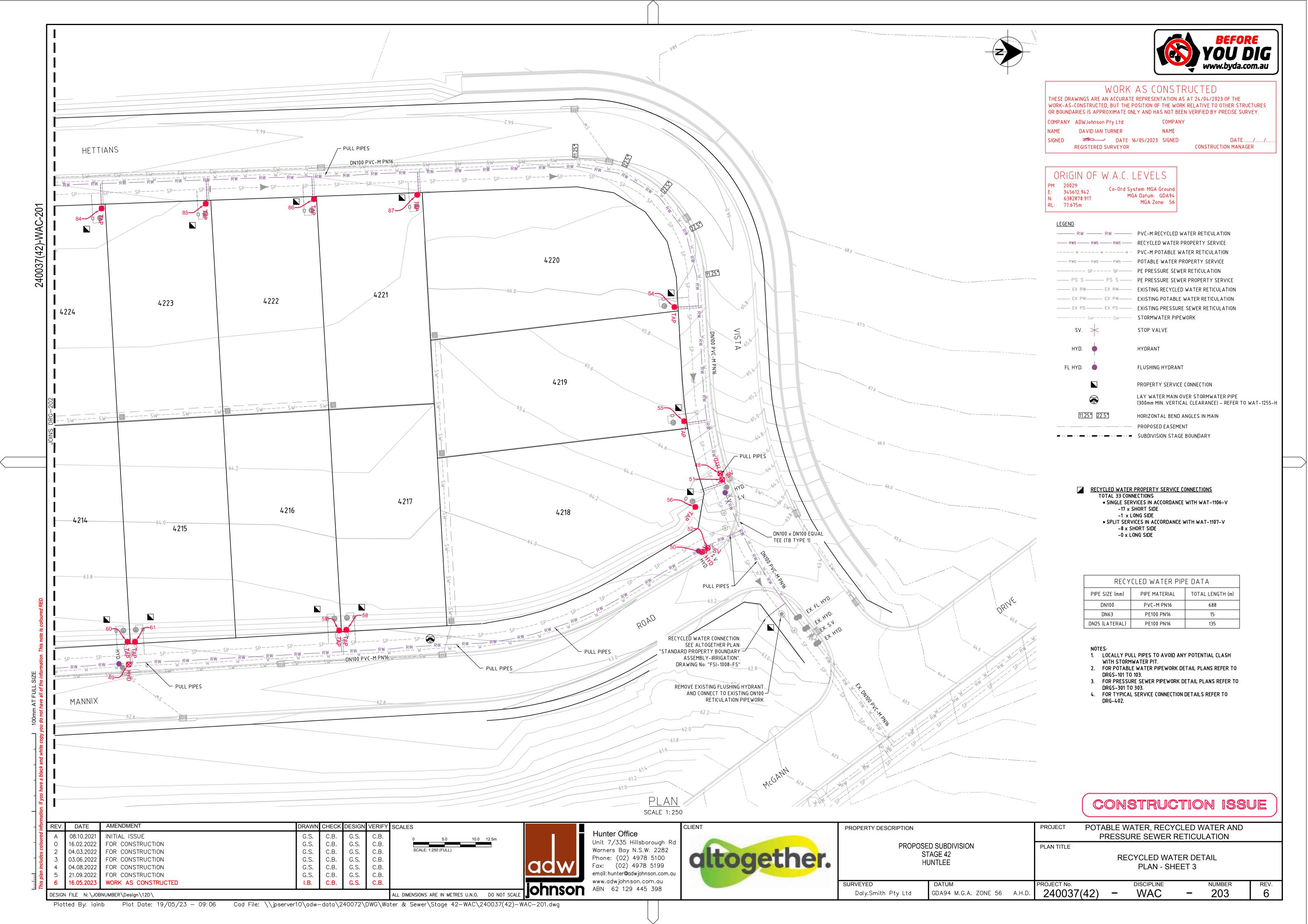


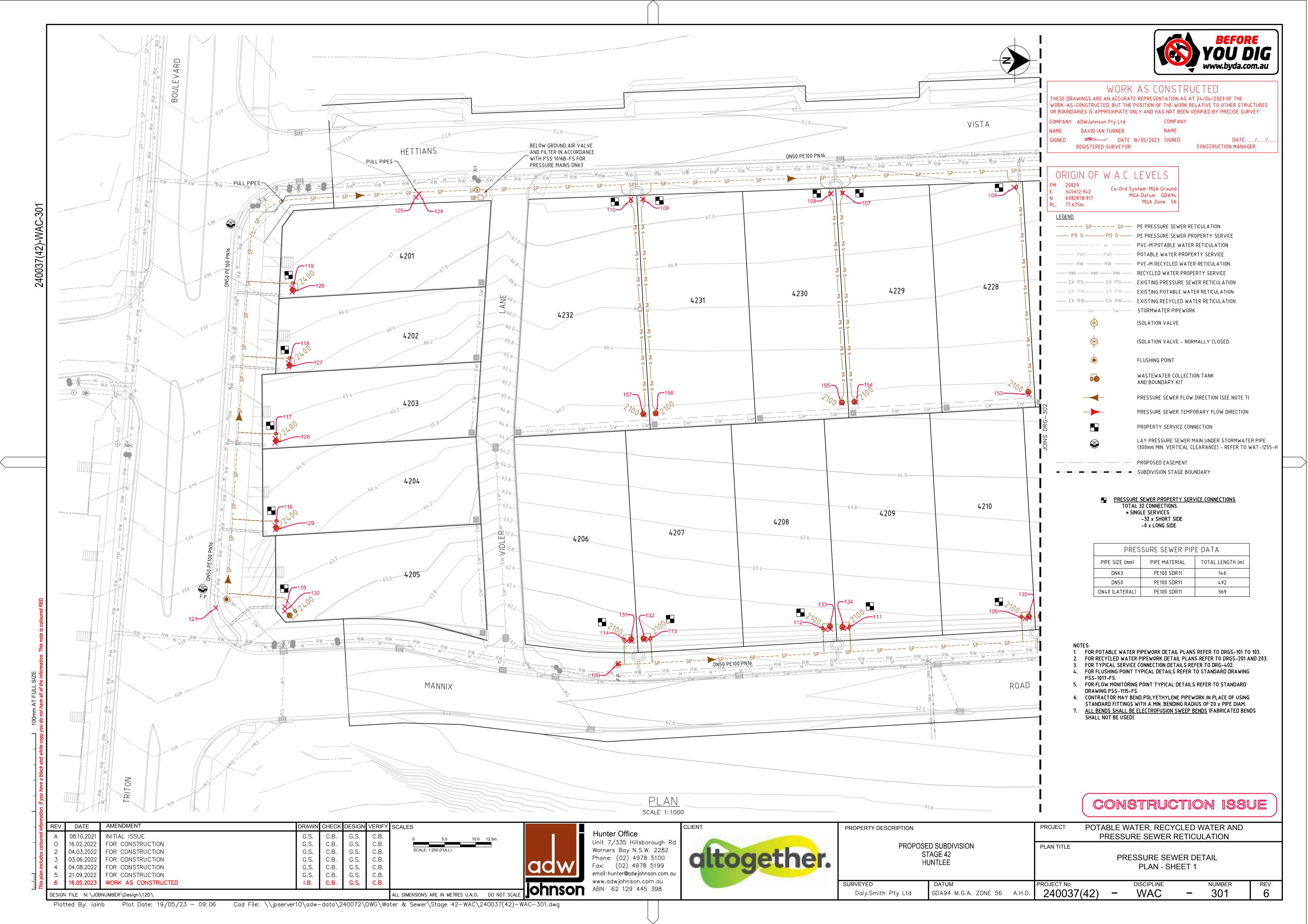


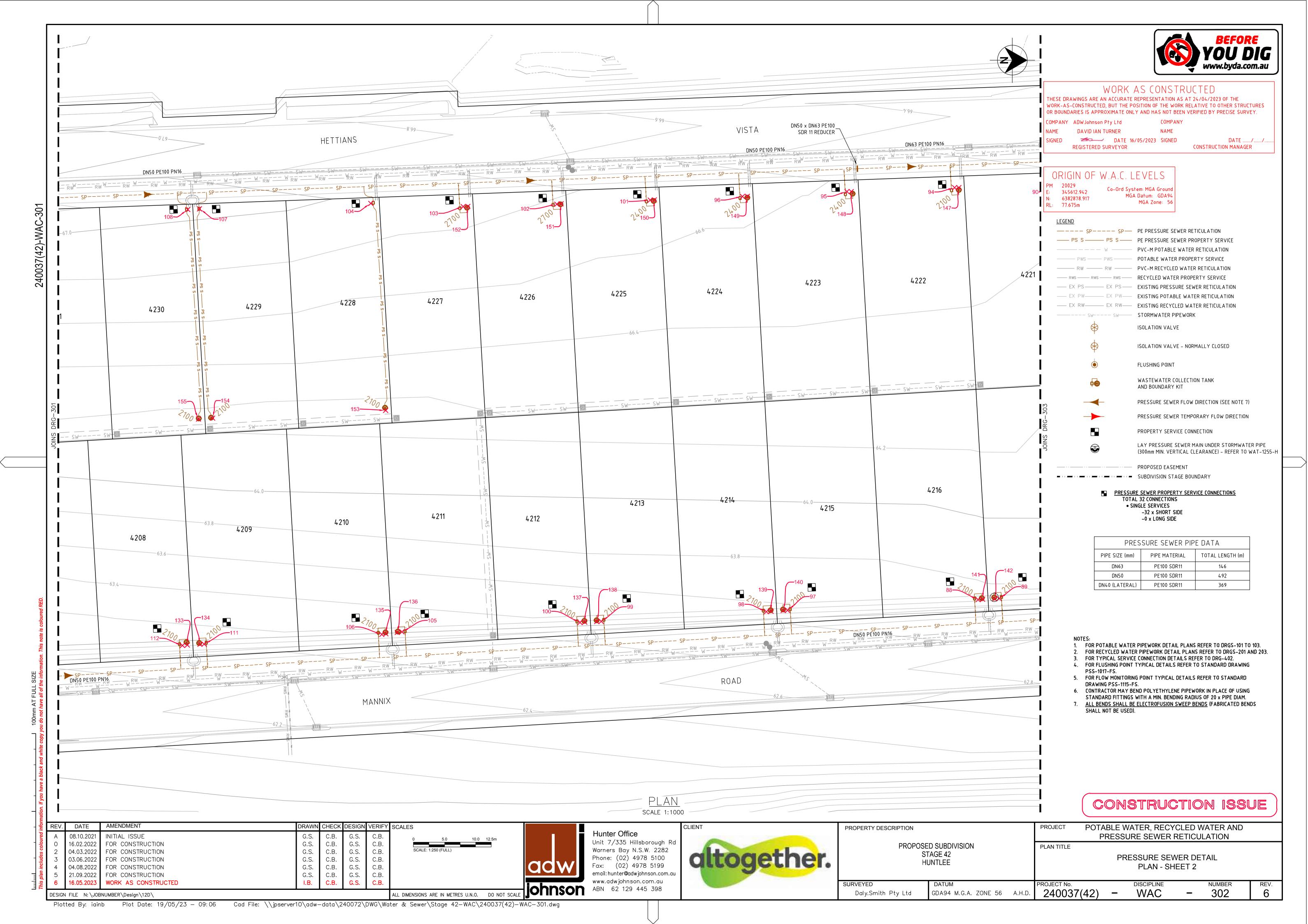


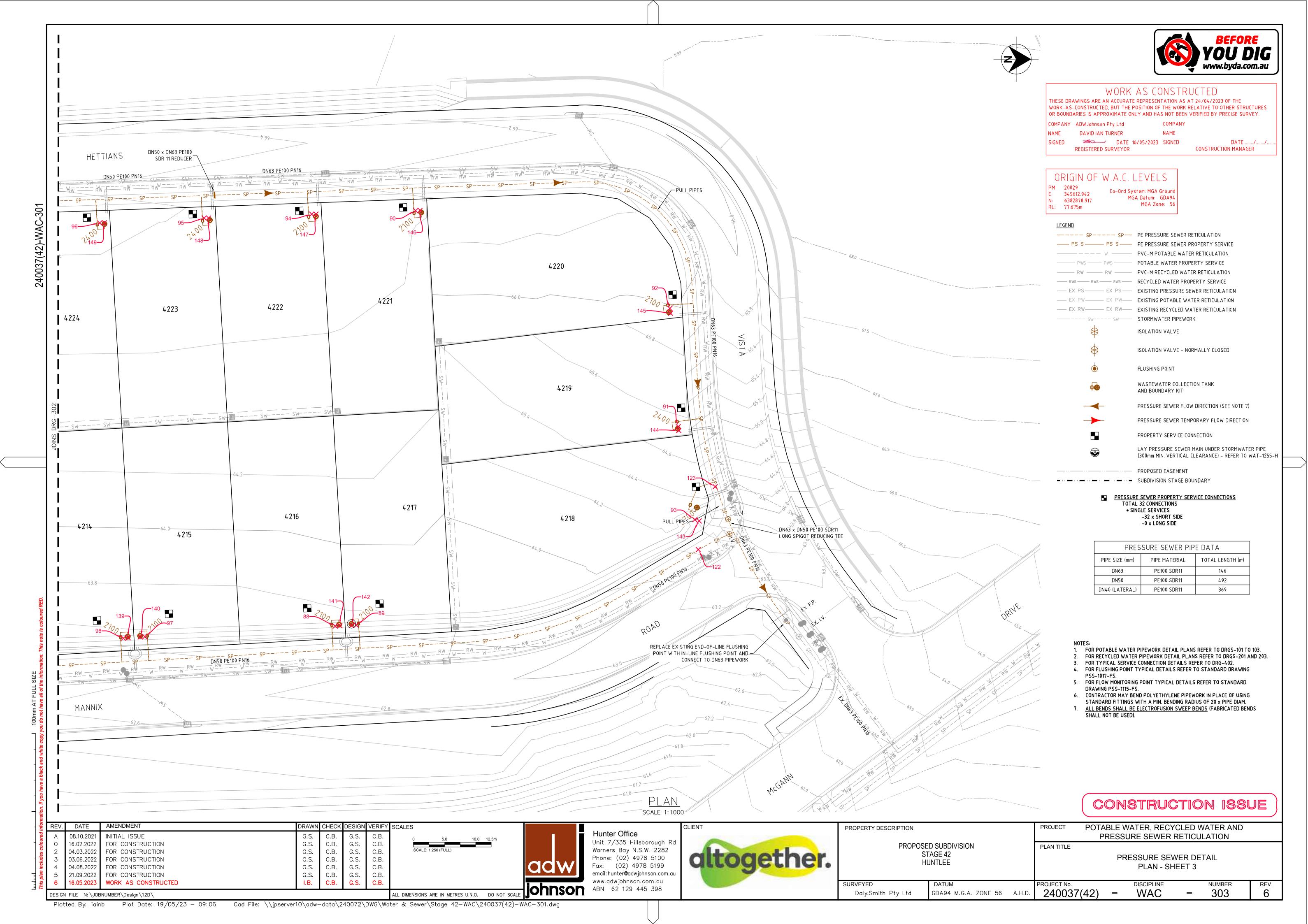












2 04.03.2022 FOR CONSTRUCTION 3 03.06.2022 FOR CONSTRUCTION 4 04.08.2022 FOR CONSTRUCTION 5 21.09.2022 FOR CONSTRUCTION 6 16.05.2023 WORK AS CONSTRUCTED DESIGN FILE N:\JOBNUMBER\Design\12D\

REV. DATE AMENDMENT

INITIAL ISSUE

0 16.02.2022 FOR CONSTRUCTION

9 | 346389.97 | 6383446.78 | 64.43 | waSV 10 346401.50 6383444.30 63.49 waSV 11 346394.72 6383442.07 64.29 waTAP 12 | 346380.50 | 6383440.12 | 65.23 | waTAP 13 346362.45 6383438.55 65.83 waTAP 14 346344.41 6383397.47 66.37 waTAP 15 | 346345.13 | 6383380.87 | 66.45 | waTAP 16 346345.82 6383363.44 66.61 waTAP 17 | 346346.64 | 6383346.81 | 66.63 | waTAP 18 346347.18 6383332.10 66.71 waTAP 19 346347.73 6383316.86 66.86 waTAP 20 | 346347.93 | 6383301.63 | 66.84 | waTAP 21 | 346348.62 | 6383286.75 | 66.94 | waTAP 22 346349.68 6383256.83 67.01 waTAP 23 346349.57 6383257.67 67.04 waTAP 24 346350.55 6383225.62 67.22 waTAP 25 | 346350.58 | 6383224.83 | 67.21 | waTAP 26 | 346364.76 | 6383169.06 | 67.25 | waTAP 27 | 346377.02 | 6383168.53 | 66.44 | waTAP 28 | 346388.85 | 6383166.27 | 65.28 | waTAP 29 | 346402.70 | 6383166.30 | 64.61 | waTAP 30 | 346415.80 | 6383168.32 | 63.09 | waTAP 31 346423.45 6383224.95 62.29 waTAP 32 | 346423.48 | 6383225.91 | 62.28 | waTAP 33 346421.54 6383257.80 62.51 waTAP 34 346421.65 6383256.77 62.48 waTAP 35 346436.40 6383273.12 62.45 waTAP 36 | 346419.79 | 6383288.83 | 62.68 | waTAP 37 | 346419.77 | 6383289.80 | 62.64 | waTAP 39 | 346418.01 | 6383321.68 | 62.77 | waTAP 40 346416.27 6383350.93 | 62.96 | waTAP 346416.25 | 6383351.56 | 62.96 | waTAP 42 346414.37 6383384.96 63.10 waTAP 346350.95 | 6383168.04 | 66.99 | waHYDR 6383195.24 67.25 waHYDR 346426.60 | 6383213.35 | 62.02 | waHYDR 346389.17 | 6383445.93 | 64.55 | waHYDR 6383350.85 | 62.78 | waHYDR 346401.78 | 6383443.01 | 63.39 | waHYDR 346390.12 | 6383446.23 | 64.42 | waSVR 53 | 346349.87 | 6383168.99 | 66.96 | waSVR 6383438.55 | 65.85 | waTAPR 346380.75 | 6383440.11 | 65.25 | waTAPR

Point Table

Point # Eastings Northings Levels Codes

1 346389.03 6383446.46 64.53 waHYD

2 | 346402.09 | 6383443.40 | 63.37 | waHYD

3 346420.48 6383350.98 62.76 waHYD

4 346427.11 6383213.52 62.03 waHYD

5 346350.64 6383167.57 66.97 waHYD

6 | 346347.91 | 6383195.12 | 67.23 | waHYD

7 | 346343.19 | 6383316.90 | 66.74 | waHYD

8 346349.51 6383168.51 66.96 waSV

	Point Table							
Point #	Eastings	Northings	Levels	Codes				
	346394.55		64.31					
56		6383441.91		WaTAPR				
58	346414.31	6383385.84	63.12	WaTAPR				
59	346414.40	6383384.68	63.07	waTAPR				
60	346416.25	6383350.66	62.96	waTAPR				
61	346416.25	6383351.88	62.93	waTAPR				
62	346417.98	6383321.95	62.82	waTAPR				
63	346417.97	6383320.77	62.81	waTAPR				
64	346419.75	6383290.06	62.63	waTAPR				
65	346419.83	6383288.55	62.67	waTAPR				
66	346436.42	6383272.67	62.44	waTAPR				
67	346421.49	6383258.08	62.52	waTAPR				
68	346421.69	6383256.45	62.60	waTAPR				
69	346423.45	6383224.64	62.31	waTAPR				
70	346423.46	6383226.27	62.28	waTAPR				
71	346415.52	6383168.27	63.04	waTAPR				
72	346402.44	6383166.30	64.56	waTAPR				
73	346388.57	6383166.31	65.32	waTAPR				
74	346376.77	6383168.56	66.41	waTAPR				
75	346364.49	6383169.05	67.23	waTAPR				
76	346350.54	6383225.95	67.24	waTAPR				
77	346350.58	6383224.46	67.22	waTAPR				
78	346349.68	6383256.51	67.01	waTAPR				
79	346349.52	6383257.98	67.07	waTAPR				
80	346348.63	6383286.52	66.93	waTAPR				
81	346347.98	6383301.54	66.84	waTAPR				
82	346347.75	6383316.57	66.85	waTAPR				
83	346347.15	6383331.79	66.75	waTAPR				
84	346346.62	6383346.48	66.61	waTAPR				
85	346345.83	6383363.22	66.61	waTAPR				
86	346345.09	6383380.60	66.45	waTAPR				
87	346344.40	6383397.19	66.35	waTAPR				
88	346412.72	6383383.36	63.86	seBDYKIT				
89	346412.53	6383386.74	63.91	seBDYKIT				
90	346345.95	6383396.24	66.56	seBDYKIT				
91	346380.63	6383438.46	65.57	seBDYKIT				
92	346361.64	6383437.12	66.06	seBDYKIT				
93	346395.57	6383441.16	64.37	seBDYKIT				
94	346346.51	6383379.55	66.59	seBDYKIT				
95	346347.14	6383362.26	66.82	seBDYKIT				
96	346347.94	6383345.47	66.72	seBDYKIT				
97	346414.42	6383352.73	63.74	seBDYKIT				
98	346414.65	6383349.32	63.76	seBDYKIT				
99	346416.23	6383322.78	63.55	seBDYKIT				
100	346416.40	6383319.38	63.55	seBDYKIT				
101	346348.52	6383330.64	66.89	seBDYKIT				
102	346349.19	6383315.62	67.08	seBDYKIT				
103	346349.57	6383300.58	67.01	seBDYKIT				
			67.03					
104	346349.08	6383285.73		seBDYKIT				
105	346417.93	6383290.75	63.34	seBDYKIT				
106	346418.34	6383287.53	63.40	seBDYKIT				
107	346349.95	6383258.20	67.18	seBDYKIT				
108	346350.07	6383256.32	67.17	seBDYKIT				
109	346350.96	6383226.07	67.32	seBDYKIT				
110	346351.03	6383224.14	67.31	seBDYKIT				

Point #	Eastings	Northings	Levels	Codes
111	346419.89	6383258.96 63.22		seBDYKIT
112	346420.12	6383255.47	63.24	seBDYKIT
113	346421.71	6383226.99	62.98	seBDYKIT
114	346421.96	6383223.58	62.99	seBDYKIT
115	346416.49	6383168.56	63.22	seBDYKIT
116	346403.38	6383166.99	64.68	seBDYKIT
117	346389.46	6383166.99	65.42	seBDYKIT
118	346377.27	6383169.16	66.66	seBDYKIT
119	346365.20	6383169.67	67.40	seBDYKIT
120	346425.61	6383222.18	62.09	seFP
121	346416.66	6383157.44	62.79	seFP
122	346400.40	6383441.69	63.43	seSV
123	346390.29	6383444.42	64.47	seSV
124	346350.12	6383190.09	67.18	seSV
125	346350.72	6383189.61	67.14	seSV
126	346365.91	6383169.70	67.44	seTANK4201
127	346377.95	6383169.15	66,68	seTANK4202
128	346390.17	6383166.96	65.48	seTANK4203
129	346404.12	6383167.02	64.71	seTANK4204
130	346417.18	6383168.55	63.28	seTANK4205
131	346421.98	6383224.32	63.04	seTANK4206
132	346421.76	6383226.28	63.05	seTANK4207
133	346420.05	6383256.27	63.27	seTANK4208
134	346419.94	6383258.27	63.26	seTANK4209
135	346418.22	6383288.19	63.43	seTANK4210
136	346418.01	6383290.00	63.36	seTANK4211
137	346416.34	6383320.14	63.57	seTANK4212
138	346416.24	6383322.06	63.58	seTANK4213
139	346414.58	6383350.07	63.79	seTANK4214
140	346414.47	6383352.02	63.79	seTANK4215
141	346412.66	6383384.09	63.88	seTANK4216
142	346412.59	6383386.00	63.94	seTANK4217
143	346395.79	6383441.83	64.40	seTANK4217
144	346381.26 346362.40	6383438.56 6383437.23	65.62 66.12	seTANK4219 seTANK4220
146	346345.88		66.57	
		6383396.96	66.64	seTANK4221 seTANK4222
147	346346.51	6383380.24		
	346347.14	6383362.97	66.86	seTANK4223
149	346347.91	6383346.25	66.80	seTANK4224
150	346348.48	6383331.31	66.92	seTANK4225
151	346349.13	6383316.32	67.11	seTANK4226
152	346349.55	6383301.34	67.06	seTANK4227
153	346382.34	6383288.13	66.21	seTANK4228
154	346383.58	6383260.32	66.24	seTANK4229
155	346383.72	6383258.04	66.24	seTANK4230
156	346385.46	6383228.18	66.28	seTANK4231
157	346385.62	6383226.25	66.31	seTANK4232

Point Table



WORK AS CONSTRUCTED

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COMPANY ADW Johnson Pty Ltd

COMPANY

DAVID IAN TURNER

DATE 16/05/2023 SIGNED

DATE/..../.... CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS

345612.942 N: 6382878.917 RL: 77.675m

Co-Ord System: MGA Ground MGA Datum: GDA94 MGA Zone: 56

CONSTRUCTION ISSUE

PROPERTY DESCRIPTION

CLIENT

Hunter Office

Unit 7/335 Hillsborough Rd

Warners Bay N.S.W. 2282

email: hunter@adwjohnson.com.au

Phone: (02) 4978 5100

Fax: (02) 4978 5199

www.adwjohnson.com.au

PROPOSED SUBDIVISION STAGE 42

POTABLE WATER, RECYCLED WATER AND PROJECT PRESSURE SEWER RETICULATION PLAN TITLE

FITTINGS TABLE

HUNTLEE

Daly.Smith Pty Ltd

PROJECT No. GDA94 M.G.A. ZONE 56 A.H.D.

240037(42) -

DISCIPLINE WAC 400

6

johnson ABN 62 129 445 398 ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCAL

G.S. G.S. G.S.

G.S.

G.S. I.B.

C.B.

C.B.

C.B.

C.B.

C.B. **C.B.**

DRAWN CHECK DESIGN VERIFY SCALES

G.S. C.B.

G.S. C.B. C.B.

G.S. C.B.

G.S. C.B. **C.B.**

0 0.1 0.2 0.3 0.4 A1 / A3 1:10 / 1:20 JOHNSON ABN 62 129 445 398

NOTES:

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

MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.

1. ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH

CLIENT

PROPERTY DESCRIPTION

PROPOSED SUBDIVISION STAGE 42 HUNTLEE

POTABLE WATER, RECYCLED WATER AND PROJECT PRESSURE SEWER RETICULATION PLAN TITLE

TYPICAL PIPEWORK TRENCHING DETAILS

CONSTRUCTION ISSUE

6

PROJECT No. DISCIPLINE 240037(42) -WAC 401 GDA94 M.G.A. ZONE 56 A.H.D.

DATE/..../....

MATERIAL REMOVED FROM

SENTRY LINE _ DETECTABLE TAPE

PRIVATE PROPERTY PRESSURE MAIN

TYPICAL DETAIL SCALE 1:10

SOIL FREE FROM ORGANICS OR OTHER DELETERIOUS MATERIAL TO AS 2566.1 TABLES 3.1 & 3.2 (EXCLUDES SOILS WITH LL>50%) FINISHED SURFACE

THE EXCAVATION OR IMPORTED MATERIAL CONTAINING NOT MORE THAN 20% BY MASS OF STONES

PRESSURE POTABLE RECYCLED KERB LINE WATER SEWER WATER 500 1500 FINISHED SURFACE _ SELECTED BACKFILL MATERIAL (TYP.) SENTRY LINE DETECTABLE TAPE (TYP.) 150 MIN. 150 MIN. 150 MIN.

> STREET PRESSURE MAIN TYPICAL DETAIL

WORK AS CONSTRUCTED

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COMPANY ADW Johnson Pty Ltd COMPANY NAME DAVID IAN TURNER

DATE 16/05/2023 SIGNED REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

E: 345612.942 MGA Datum: GDA94 N: 6382878.917 MGA Zone: 56 RL: 77.675m

Co-Ord System: MGA Ground

Daly.Smith Pty Ltd

G.S. G.S. G.S. G.S. G.S. C.B. **C.B.** G.S. C.B. **C.B.** ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCAI

G.S. C.B.

G.S. C.B. G.S. C.B. G.S. C.B. G.S. C.B.

C.B. C.B. C.B.

C.B.

DRAWN CHECK DESIGN VERIFY SCALES

RETAINING WALL

DN100 PVC PROPERTY CONNECTION TO BE

CAPPED FOR LATER-

CONNECTION BY

OWNER (TYP.)

RETAINING WALL (REFER TO NOTE 4)

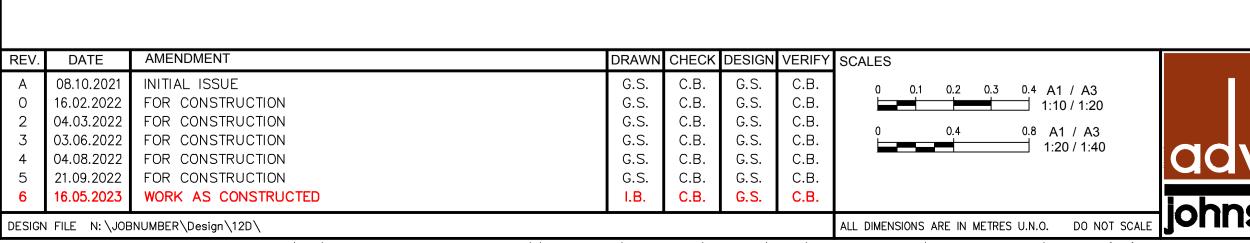
DN25 PE RECYCLED

MAIN AND TEE

WATER SERVICE CONNECTION

BETWEEN RECYCLED WATER

600 MIN.



TYPICAL PROPERTY CONNECTION DETAIL

(PRESSURE SEWER UNIT AT REAR)

SCALE 1:20

INTER ALLOTMENT

e one PRESSURE SEWER UNIT (PSU)

WASTEWATER COLLECTION TANK

INSTALLED IN CONJUNCTION WITH BOUNDARY KIT TO MANUFACTURERS

FOR TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1111-FS

REQUIREMENTS (TYP.)

2/ø25 ELECTRICAL CONDUIT C/W DRAW WIRE AND

ELECTRICAL WARNING TAPE

CONNECTED INTO TANK BY

CONTRACTOR. ELECTRICAL CONDUIT CONNECTION GROMMET SUPPLIED WITH TANK LOCATED LOOSE WITHIN

BOUNDARY ASSEMBLY (TYP.) FOR TYPICAL DETAILS

REFER TO STANDARD DRAWING PSS-1112-FS

FRONT PROPERTY BOUNDARY

-POTABLE WATER SERVICE

-RECYCLED WATER SERVICE

DN20 PE POTABLE WATER

- SERVICE CONNECTION BETWEEN

POTABLE WATER MAIN AND TEE

DN20 PE100 PN16

(TYP.)(SEE NOTE 2)

DN25 PE100 PN16

(TYP.)(SEE NOTE 3)

DN40 PE PRESSURE SEWER SERVICE (TYP.)

(SEE NOTE 9), TO BE

THE TANK.

600 MIN.

(SEE NOTE 8)

DRAINAGE

CLEARANCE

600 MIN.

600

1000 APPROX.

500

400

300 [©]

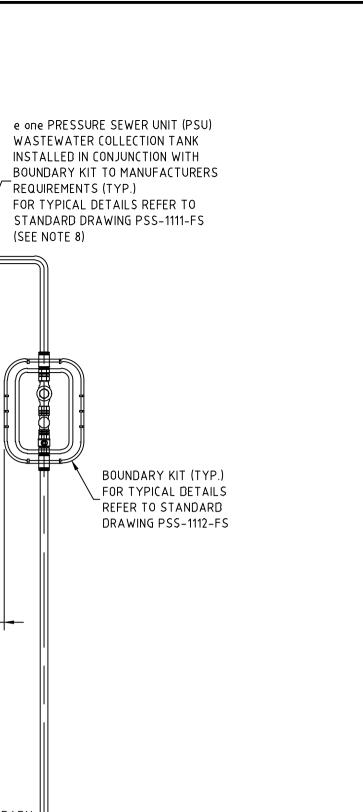
Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au

www.adwjohnson.com.au

ABN 62 129 445 398



PROJECT PROPERTY DESCRIPTION PROPOSED SUBDIVISION PLAN TITLE STAGE 42 HUNTLEE PROJECT No. DISCIPLINE 240037(42) -WAC Daly.Smith Pty Ltd GDA94 M.G.A. ZONE 56 A.H.D.



BOUNDARY KIT TO MANUFACTURERS DN100 PVC PROPERTY CONNECTION REQUIREMENTS (TYP.) TO BE CAPPED FOR LATER— FOR TYPICAL DETAILS REFER TO CONNECTION BY OWNER (TYP.) STANDARD DRAWING PSS-1111-FS (SEE NOTE 8) BREATHER PIPE POSITION. — POSITION-(SEE NOTE 12) (SEE NOT 12) 500 MIN. CLEARANCE CLEARANCE BOUNDARY KIT (TYP.) FOR TYPICAL BETAILS REFER TO STANDARD 1000 APPROX. 1000 APPROX. DRAWING PSS-1112-FS 600 COLLECTION TANK COLLECTION TANK 100 MIN. 100 MIN. CLEARANCE CLEARANCE FRONT PROPERTY BOUNDARY DN20 PE 100 PN16 -POTABLE WATER SERVICE (TYP.)(SEE NOTE 2) DN25 PE 100 PN16 RECYCLED WATER SERVICE DN40 PE PRESSURE (TYP.)(SEE NOTE 3) SEWER SERVICE (TYP.) DN25 PE RECYCLED DN20 PE POTABLE WATER WATER SERVICE CONNECTION - SERVICE CONNECTION BETWEEN BETWEEN RECYCLED WATER POTABLE WATER MAIN AND TEE MAIN AND TEE

CONTRACTOR TO INSTALL

INTO TANK. (SEE NOTE 13)

ELECTRICAL CONDUIT CONNECTION

RETAINING WALL

(REFER TO NOTE 4)

TYPICAL PROPERTY CONNECTION DETAIL

NOTES:

- 1. PROPERTY SERVICE CONNECTIONS SHALL BE IN ACCORDANCE WITH WSA STANDARD DRAWINGS FOR DUAL WATER SUPPLY SYSTEMS (SYDNEY WATER VERSION) (SUPPLEMENT TO WSA 03-2011).
- 2. DN20 PE100 PN16 POTABLE WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- 3. DN25 PE100 PN16 RECYCLED WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- 4. FOR PROPERTY CONNECTIONS WHERE A RETAINING WALL IS NOT PRESENT. SERVICES ARE TO BE OFFSET FROM THE PROPERTY BOUNDARY.
- 5. 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.
- 6. MINIMUM BENDING RADIUS FOR PE PIPEWORK IS TO BE 20 x PIPE DIAMETER.
- 7. ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.
- 8. 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.
- 9. \$\phi 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. ALL CONDUIT BENDS ARE TO BE LARGE RADIUS SWEEP BENDS.
- 10. FOR MORE INFORMATION REFER TO FLOW SYSTEMS STANDARD DRAWING FSI-1000-FS.
- 11. 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.
- 12. POSITION TANK LID SUCH THAT BREATHER PIPE LOCATION IS ON THE DOWNSLOPE SIDE OF THE BLOCK WHERE POSSIBLE.
- 13. CONTRACTOR TO INSTALL ELECTRICAL CONDUIT CONNECTION. ELECTRICAL GROMMET SUPPLIED WITH TANK AND LOCATED LOOSE WITHIN TANK. \$\phi 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 CONSTRUCTED

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COMPANY ADW Johnson Pty Ltd COMPANY

NAME NAME DAVID IAN TURNER DATE 16/05/2023 SIGNED

DATE/..../... CONSTRUCTION MANAGER

402

ORIGIN OF W.A.C. LEVELS

Co-Ord System: MGA Ground 345612.942 MGA Datum: GDA94 6382878.917 MGA Zone: 56 RL: 77.675m

REGISTERED SURVEYOR

CONSTRUCTION ISSUE

POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION TYPICAL PROPERTY CONNECTION DETAILS

500 MIN. CLEARANCE

600 MIN.

1000 APPROX.

400

300

4232

66.25

66.12

64.12

REV. DATE AMENDMENT 0 16.02.2022 FOR CONSTRUCTION

2 04.03.2022 FOR CONSTRUCTION 03.06.2022 FOR CONSTRUCTION 4 04.08.2022 FOR CONSTRUCTION 5 21.09.2022 FOR CONSTRUCTION 6 16.05.2023 WORK AS CONSTRUCTED

INITIAL ISSUE

DRAWN CHECK DESIGN VERIFY SCALES G.S. C.B. C.B. G.S. C.B. C.B. G.S. C.B. C.B. G.S. G.S. C.B. C.B. G.S. C.B. **C.B.** G.S. C.B. G.S. G.S. C.B.

0 0.1 0.2 0.3 0.4 A1 / A3 1:10 / 1:20 0.8 A1 / A3 1:20 / 1:40 **Ohnson** ABN 62 129 445 398

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



-0.08

	PROPERTY DESCRIP	Τ
ner.	F	'n
	SURVEYED	
	Daly Smith Pty	1

ROPERTY DESCRIPTION				TABLE WATER, RECYC		
				PRESSURE SEWER RI	ETICULATION	
	D SUBDIVISION		PLAN TITLE			
STAGE 42 HUNTLEE			WAST	TE WATER COLLECTION TAN	NK LEVEL DETAILS	
JRVEYED	DATUM		PROJECT No.	DISCIPLINE	NUMBER	Г
Daly.Smith Pty Ltd	GDA94 M.G.A. ZONE 56	A.H.D.	240037(42)	- WAC	- 403	

CALCULATED TOP OF VAC V'S DESIGN **WAC SANITARY** COLLECTION **INVERT LEVEL** DRAINAGE TANK LID **COMPARISON INVERT LEVEL** WASTEWATER COLLECTION TANK DETAILS LOT NUMBER TOP OF TANK TANK FSL BASE IL EASTING NORTHING CONNECTION IL TANK HEIGHT TANK LOCATION 67.41 67.28 64.98 65.88 2400 FRONT 346365.64 6383169.85 67.41 65.80 -0.08 2400 FRONT 4202 66.49 64.19 65.09 346377.69 6383169.31 65.01 -0.0866,62 66.62 2400 FRONT 4203 65.29 62.99 63.89 346389.84 6383167.12 63.81 -0.0865.42 65.42 2400 FRONT 62.21 63.11 346403.86 6383167.21 4204 64.64 64.51 64.64 63.03 -0.084205 63.21 63.08 60.78 61.68 2400 FRONT 346417.89 6383169.31 61.60 -0.0863.21 60.87 61.77 2100 FRONT 346420.10 -0.09 4206 63.00 62.87 6383224.11 63.00 61.69 2100 FRONT 4207 62.92 60.92 61.82 346419.99 6383226.11 -0.0963.05 63.05 61.74 63.08 61.08 61.98 2100 FRONT 346418.26 -0.084208 63.21 6383256.06 63.21 61.90 4209 63.22 63.09 61.09 61.99 2100 FRONT 346418.14 6383258.06 63.22 61.91 -0.094210 62.15 2100 FRONT 346416.42 6383288.01 62.07 -0.0863.38 63.25 61.25 63.38 2100 FRONT 4211 63.38 63.25 61.25 62.15 346416.30 6383290.00 63.38 62.07 -0.082100 FRONT 4212 63.56 63.43 61.43 62.33 346414.57 6383319.95 63.56 62.25 -0.084213 62.32 2100 FRONT 63.55 63.42 61.42 346414.46 6383321.95 63.55 62.24 -0.094214 63.74 2100 FRONT -0.08 63.61 61.61 62.51 346412.84 6383349.90 63.74 62.43 4215 61.62 62.52 2100 FRONT 63.75 63.62 346412.73 6383351.90 63.75 62.44 -0.09FRONT 4216 62.61 2100 346410.88 6383383.85 63.84 63.71 61.71 63.84 62.53 -0.082100 FRONT 4217 63.74 63.87 61.74 62.64 346410.77 6383385.84 63.87 62.56 -0.094218 64.22 61.62 62.52 2700 FRONT BATTER 346393.64 6383441.48 -0.0964.35 64.35 62.44 2400 4219 65.60 65.47 63.17 64.07 FRONT 346380.99 6383438.37 -0.0865.60 63.99 2100 4220 64.86 FRONT -0.08 66.09 65.96 63,96 346362.27 6383436.93 66.09 64.78 2100 FRONT 4221 66.54 66.41 64.41 65.31 346346.25 6383397.14 66.54 65.23 -0.084222 66.62 64.49 65.39 2100 FRONT 346346.87 6383380.21 66.62 65.31 -0.0866.49 4223 64.28 65.18 2400 FRONT 346347.50 65.10 66.71 66.58 6383363.16 66.71 -0.09 2400 65.24 FRONT 4224 66.77 64.34 346348.12 6383346.22 66.64 66.77 65.16 -0.082400 FRONT 346348.67 4225 66.85 66.72 64.42 65.32 6383331.17 66.85 65.24 -0.082700 FRONT 4226 67.03 66.90 64.30 65.20 346349.22 6383316.18 67.03 65.12 -0.08 2700 4227 65.16 FRONT 346349.77 66.99 66.86 64.26 6383301.19 66.99 65.08 -0.084228 64.96 2100 REAR 346381.92 6383288.02 64.88 -0.0866.19 66.06 64.06 66.19 4229 65.02 2100 REAR 346383.54 6383260.06 66.25 64.94 -0.0866.25 66.12 64.12 2100 4230 66.12 64.12 65.02 REAR 346383.65 6383258.07 64.94 -0.0866.25 66.25 2100 4231 66.13 64.13 65.03 REAR 346385.38 6383228.12 64.95 -0.0866.26 66.26

REAR

346385.49

6383226.12

66.25

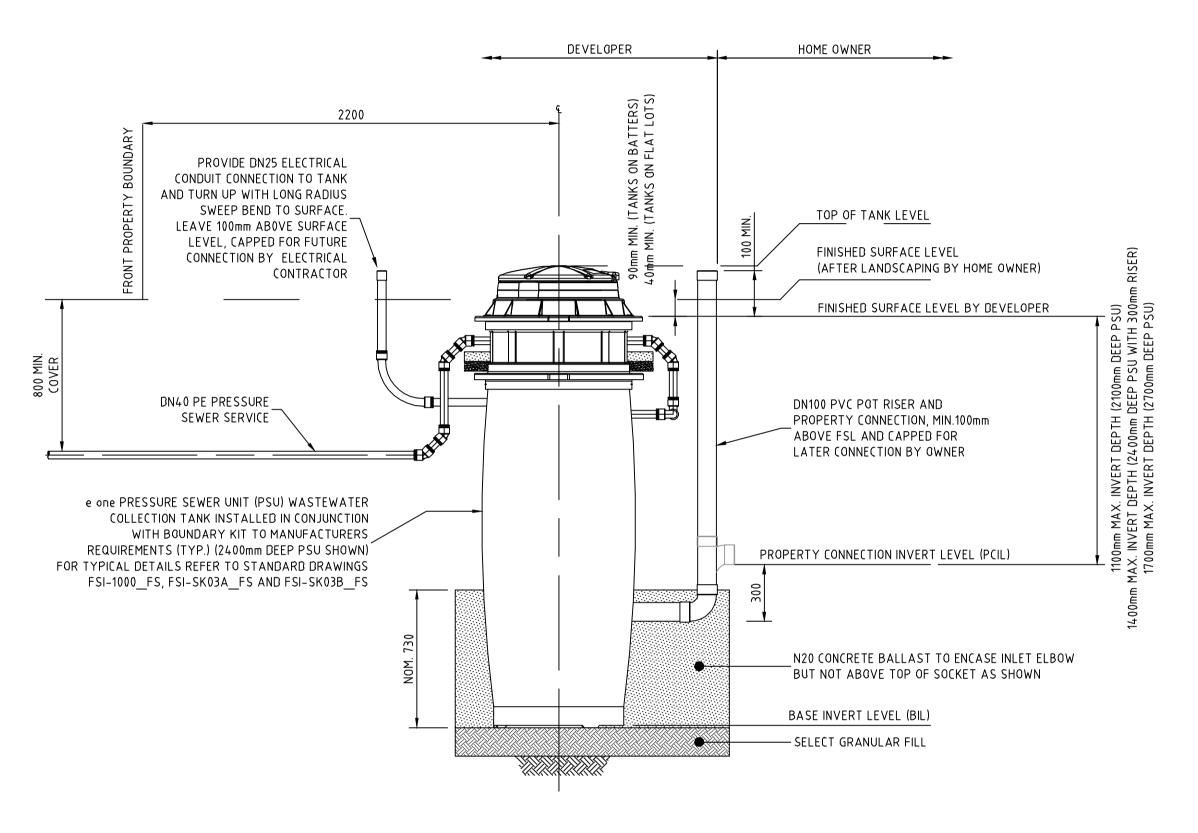
64.94

WASTEWATER COLLECTION TANK COUNT

65.02

2100

TANK SIZE | NUMBER OF 2100 2400 9 2700



PRESSURE SEWER SERVICE CONNECTION TYPICAL SECTIONAL ELEVATION

WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/04/2023 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.

COMPANY COMPANY ADW Johnson Pty Ltd NAME DAVID IAN TURNER NAME

DATE 16/05/2023 SIGNED DATE/....../ CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS

Co-Ord System: MGA Ground E: 345612.942 MGA Datum: GDA94 N: 6382878.917 MGA Zone: 56 RL: 77.675m

CONSTRUCTION ISSUE

ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCAI DESIGN FILE N:\JOBNUMBER\Design\12D\

REV. DATE AMENDMENT 0 16.02.2022 FOR CONSTRUCTION

INITIAL ISSUE

2 04.03.2022 FOR CONSTRUCTION

G.S. G.S. G.S. G.S. C.B. C.B. C.B. C.B. 3 03.06.2022 FOR CONSTRUCTION Fax: (02) 4978 5199 G.S. G.S. I.B. C.B. G.S. C.B. 4 04.08.2022 FOR CONSTRUCTION email: hunter@adwjohnson.com.au C.B. **C.B.** G.S. C.B. **C.B.** 5 21.09.2022 FOR CONSTRUCTION 6 16.05.2023 WORK AS CONSTRUCTED www.adwjohnson.com.au **Johnson** ABN 62 129 445 398 ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCAI DESIGN FILE N:\JOBNUMBER\Design\12D\

G.S. C.B.

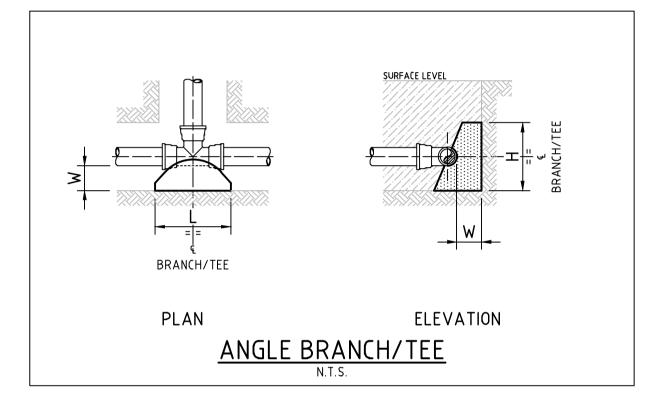
DRAWN CHECK DESIGN VERIFY SCALES

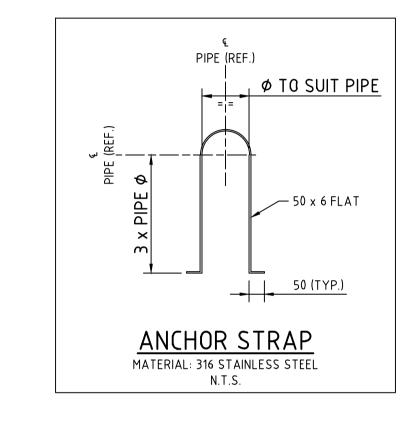


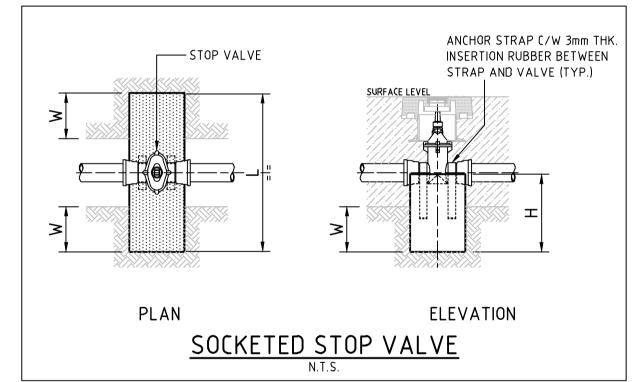
THRUST BLOCK NOTES:

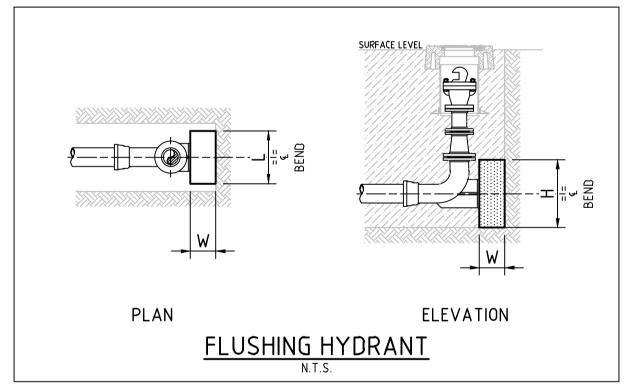
- 1. "N" DENOTES NOMINAL THRUST AREA TO BE ACHIEVED BY POURING CONCRETE THE FULL LENGTH OF THE FITTING AND EXTENDING FROM THE FLOOR OF THE TRENCH TO NOM. 100mm ABOVE THE FITTING.
- 2. CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE.
- 3. THRUST BLOCK DIMENSIONS ARE 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.
- 4. THRUST BLOCKS ARE TO BE CONSTRUCTED SUCH THAT THEY TRANSFER THE THRUST ONTO UNDISTURBED GROUND. THRUST BLOCKS ARE NOT TO INTERFERE WITH OTHER SERVICES.
- 5. 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. MAXIMUM ENCASEMENT TO BE 180°.
- 6. CONCRETE FOR THE THRUST BLOCKS TO BE GRADE \$25 USING CEMENT TYPE "SR" TO A\$3972. CONCRETE TO BE MECHANICALLY VIBRATED.
- 7. CONCRETE THRUST BLOCKS ARE TO BE CURED FOR A MINIMUM OF 7 DAYS BEFORE BEING SUBJECTED TO ANY THRUST LOAD.
- 8. REFER TO WAT-1205-V FOR GENERAL FITTING THRUST BLOCK ARRANGEMENTS.
- 9. REFER TO WAT-1207-V FOR GENERAL VALVE AND VERTICAL BEND THRUST BLOCK ARRANGEMENTS.
- 10. THRUST BLOCK TO EXTEND 300mm MINIMUM INTO BASE AND SIDE WALLS OF TRENCH.
- 11. PROVIDE 3mm THK. INSERTION RUBBER BETWEEN ANCHOR STRAP AND PIPE BARREL.

TYPE	FITTING	SOIL	DESIGN	THRUST	TA	LENGTH	HEIGHT	WIDTH
		AHBP (kPa)	STP (kPa)		(m ²)	(∟)	(H)	(W)
1	DN100 × DN100 EQUAL TEE	100	1500	18.00	0.18	0.45	0.40	0.30
2	DN100 x (45°, 22.5°, 11.25° & 6°) HORIZONTAL BENDS	100	1500	7.50	0.08	N	N	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	DN100 x 90° HORIZONTAL BEND	100	1500	25.50	0.26	0.55	0.47	0.30









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COMPANY ADW Johnson Pty Ltd NAME DAVID IAN TURNER

SIGNED DATE 16/05/2023 SIGNED REGISTERED SURVEYOR

DATE/..... CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

E: 345612.942 N: 6382878.917 RL: 77.675m

Co-Ord System: MGA Ground MGA Datum: GDA94 MGA Zone: 56

CONSTRUCTION ISSUE

CLIENT PROPERTY DESCRIPTION Unit 7/335 Hillsborough Rd

Hunter Office

Warners Bay N.S.W. 2282

Phone: (02) 4978 5100

PROPOSED SUBDIVISION STAGE 42 HUNTLEE

POTABLE WATER, RECYCLED WATER AND PROJECT PRESSURE SEWER RETICULATION PLAN TITLE

THRUST BLOCK DETAILS

PROJECT No. DISCIPLINE 240037(42) -WAC 404 Daly.Smith Pty Ltd GDA94 M.G.A. ZONE 56 A.H.D.