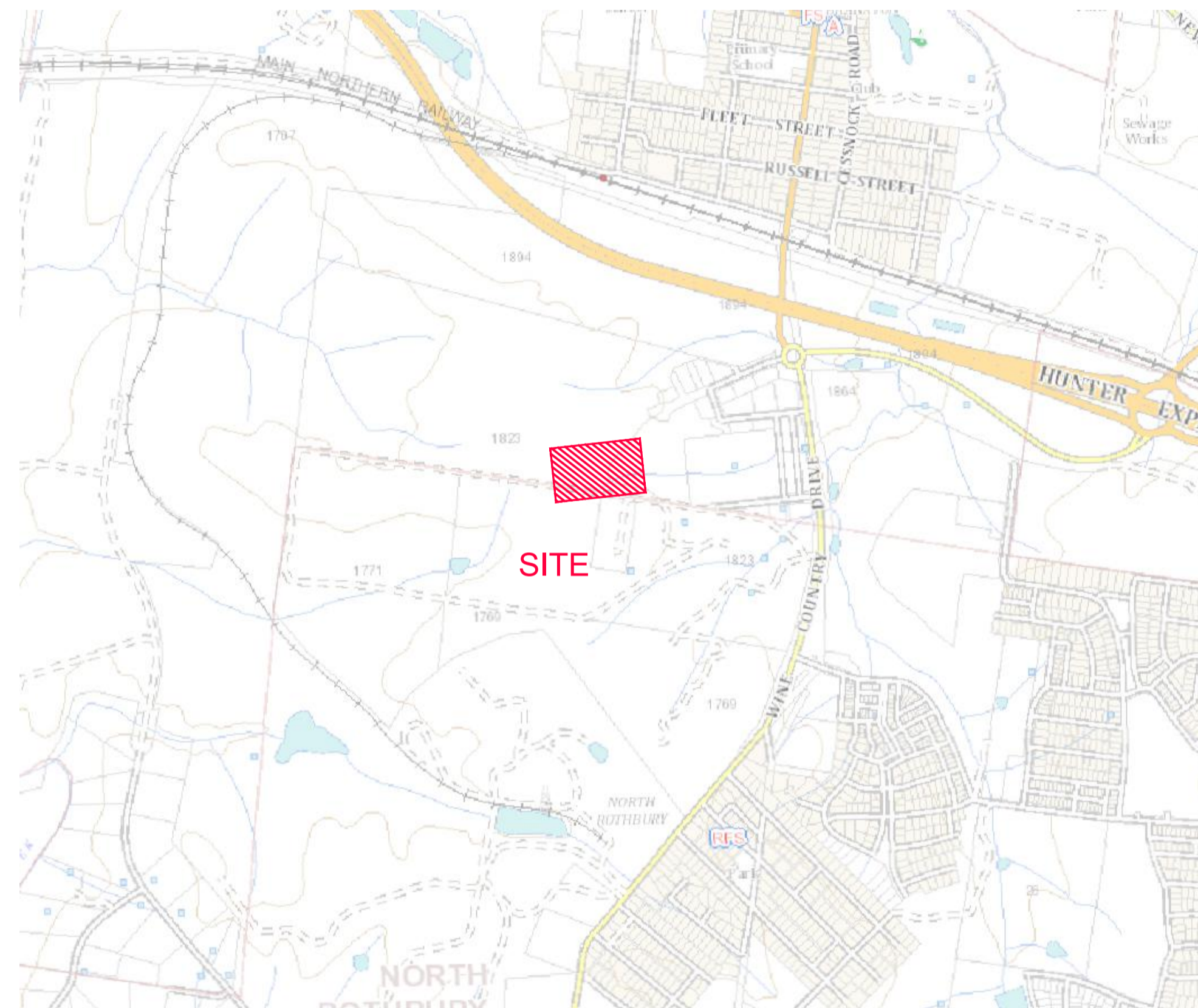
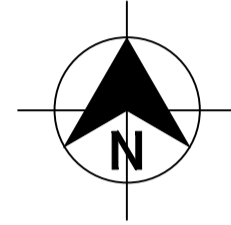


240037(TCR2)-WAC-003

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.

# PROPOSED SUBDIVISION STAGE - TOWN CENTRE RESIDENTIAL 2 HUNTLEE



LOCALITY SKETCH  
NOT TO SCALE

DRAWING INDEX	
DRAWING NUMBER	DRAWING TITLE
240037(TC2)-WAC-001	COVER SHEET, LOCALITY PLAN & DRAWING INDEX
240037(TC2)-WAC-002	GENERAL NOTES
240037(TC2)-WAC-003	OVERALL SITE PLAN
240037(TC2)-WAC-101	POTABLE WATER DETAIL PLAN - SHEET 1
240037(TC2)-WAC-102	POTABLE WATER DETAIL PLAN - SHEET 2
240037(TC2)-WAC-201	RECYCLED WATER DETAIL PLAN - SHEET 1
240037(TC2)-WAC-202	RECYCLED WATER DETAIL PLAN - SHEET 2
240037(TC2)-WAC-301	PRESSURE SEWER DETAIL PLAN - SHEET 1
240037(TC2)-WAC-302	PRESSURE SEWER DETAIL PLAN - SHEET 2
240037(TC2)-WAC-401	TYPICAL PIPEWORK TRENCHING DETAIL
240037(TC2)-WAC-402	TYPICAL PROPERTY CONNECTION DETAILS
240037(TC2)-WAC-403	WASTE WATER COLLECTION TANK LEVEL DETAILS
240037(TC2)-WAC-404	THRUST BLOCK DETAILS
240037(TC1)-WAC-405	FITTING DETAILS

**WORK AS CONSTRUCTED**  
THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 29-05-2024 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      COMPANY  
NAME EWEN B. RANDAL      NAME  
SIGNED *[Signature]*      DATE 06-06-2024      SIGNED      DATE  
REGISTERED SURVEYOR      CONSTRUCTION MANAGER

**ORIGIN OF W.A.C. LEVELS**

PM 20029      Co-Ord System: MGA Ground  
E: 345612.942      MGA Datum: GDA94  
N: 6382818.917      MGA Zone: 56  
RL: 77.675

**APPROVED FOR CONSTRUCTION  
BY ADW Johnson Pty Ltd**  
Date Approved: 15-09-2320



**AS CONSTRUCTED**

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
0	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.	

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ABN 62 129 445 398

CLIENT  
**altogether.**

PROPERTY DESCRIPTION  
PROPOSED SUBDIVISION  
STAGE - TOWN CENTRE RESIDENTIAL 2  
HUNTLEE

SURVEYED  
Daly,Smith Pty Ltd

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

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	COVER SHEET, LOCALITY PLAN & DRAWING INDEX		
PROJECT No.	DISCIPLINE	NUMBER	REV.
240037(TCR2) -	WAC	001	2

240037(TCR2)-WAC-003

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

PRESSURE SEWER NOTES:

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

POTABLE WATER AND RECYCLED WATER NOTES:

- 1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSA AND WSA 03-2011-3.1 (SYDNEY WATER EDITION 2014).
2. POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.
3. ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW, SHALL CONFORM TO THE APPROPRIATE CURRENT AUSTRALIAN STANDARDS AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS.
4. ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY CONSTRUCTED STRUCTURES FOR PROPOSED SERVICES, SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.
5. THE CONSTRUCTOR SHALL VERIFY WITH THE SITE SUPERVISOR THE POSITION AND LEVEL OF ALL EXISTING AND PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.
6. MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS. INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED. 600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS. MINIMUM PIPE COVER SHALL BE 600mm IN FOOTWAYS (TYPE B EMBEDMENT: WAT-1202-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 PER THE CLEARANCE TABLE ADJACENT.
7. ALL POTABLE WATERMANS TO BE BLUE PVC-M (PN16). ALL RECYCLED WATERMANS SHALL BE LILAC PVC-M (PN16). DIFFERENTIATION OF POTABLE AND RECYCLED WATER SYSTEMS SHALL BE AS PER TABLE 4.1 WSA03-2011 WITH BOTH SERVICES BEING CLASSIFIED AS WATER MAINS. RECYCLED WATER MAINS SHALL ALWAYS BE LOWER THAN POTABLE WATER MAINS. 150mm VERTICAL CLEARANCE BETWEEN POTABLE WATER AND RECYCLED WATER MAINS SHALL BE PROVIDED.
8. MAXIMUM JOINT DEFLECTIONS TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
9. LOCALLY LOWER PIPEWORK IN VICINITY OF STOP VALVES TO ENSURE SUFFICIENT COVER IS MAINTAINED OVER VALVES. LOWERING OF PIPEWORK SHALL BE ACHIEVED OVER A NUMBER OF PIPE LENGTHS EITHER SIDE OF VALVES TO ELIMINATE ANY SHARP DEFLECTIONS.
10. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSA PRODUCT SPECIFICATION PS-350, 368 AND 369. GEOTECHNICAL CONDITIONS SHOULD BE ASSESSED DURING CONSTRUCTION BY THE CONTRACTOR IN ASSOCIATION WITH THE ALTOGETHER REPRESENTATIVE TO DETERMINE THE NEED TO MODIFY EMBEDMENT/TRENCH FILL TYPE AND THE NEED FOR TRENCH DRAINAGE/BULKHEADS.
11. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
12. HYDRANTS, STOP VALVES AND ALL OTHER FITTINGS TO BE THE SAME SIZE AS THE THROUGH WATER MAIN AND ANTI CLOCKWISE CLOSING.
13. HYDRANTS MUST NOT BE INSTALLED IN POTENTIAL DRIVEWAY LOCATIONS. HYDRANTS AND WATER SERVICES SHALL BE NOMINALLY AT LEAST 5.0m FROM EACH BOUNDARY OR ON BOUNDARIES. WHERE POSSIBLE, FITTINGS SHALL BE LOCATED BEHIND KERB INLET PITS.
14. THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH WAT-1205.
15. ALL PROPERTY (MAIN TO METER) SERVICE CONNECTIONS SHALL BE CONSTRUCTED STRICTLY IN ACCORDANCE WITH ALTOGETHER REQUIREMENTS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION. SINGLE SERVICE: http://information.altogethergroup.com.au/governance/Land\_Housing/WAT-1854-FS.pdf DUAL SERVICE: http://information.altogethergroup.com.au/governance/Land\_Housing/WAT-1855-FS.pdf
16. PROPERTY SERVICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE ALTOGETHER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
17. SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
18. ALL MAINS SHALL BE PRESSURE TESTED TO 1500kPa IN ACCORDANCE WITH CLAUSE 19.4 OF WSA03-2011 (SYDNEY WATER EDITION 2014).
19. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
20. WATER QUALITY TESTING SHALL BE IN ACCORDANCE WITH WSA 03-2011-3.1(SYDNEY WATER EDITION-2014. CLAUSE 19.7).
21. THE CONSTRUCTOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING INFRASTRUCTURE. CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY THE ALTOGETHER REPRESENTATIVE.
22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.
23. PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.
25. MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY WSA03-2011 (SYDNEY WATER EDITION 2014) (CLAUSE 19.3.5): TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING. NON-TRAFFICABLE PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/900MM OF FILL AND EACH 100 LINEAL METERS OF PIPE. PROPERTY SERVICES 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. SUBMISSION CHECKLIST.
29. WHERE THE PIPE GRADE EXCEEDS 5%, TRENCHSTOPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WAT-1209 AND WAT-1210 AT THE SPACING OF 100/M 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/90004827263-Standard-drawings-for-land-developers-

GENERAL NOTES:

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

CLEARANCES BETWEEN PIPELINES AND UNDERGROUND SERVICES

Table with 4 columns: UTILITY (EXISTING OR PROPOSED SERVICE), MINIMUM HORIZONTAL CLEARANCE (mm) (NEW MAIN SIZE), MINIMUM VERTICAL CLEARANCE (mm). Rows include Water Mains, Gas Mains, Telecommunication Conduits, Electricity Conduits, Stormwater Drains, Sewers, and Kerbs.

NOTES:

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

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

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COMPANY ADW Johnson Pty Ltd COMPANY
NAME EWEN B. RANDAL NAME
SIGNED DATE 06-06-2024 SIGNED DATE
REGISTERED SURVEYOR CONSTRUCTION MANAGER

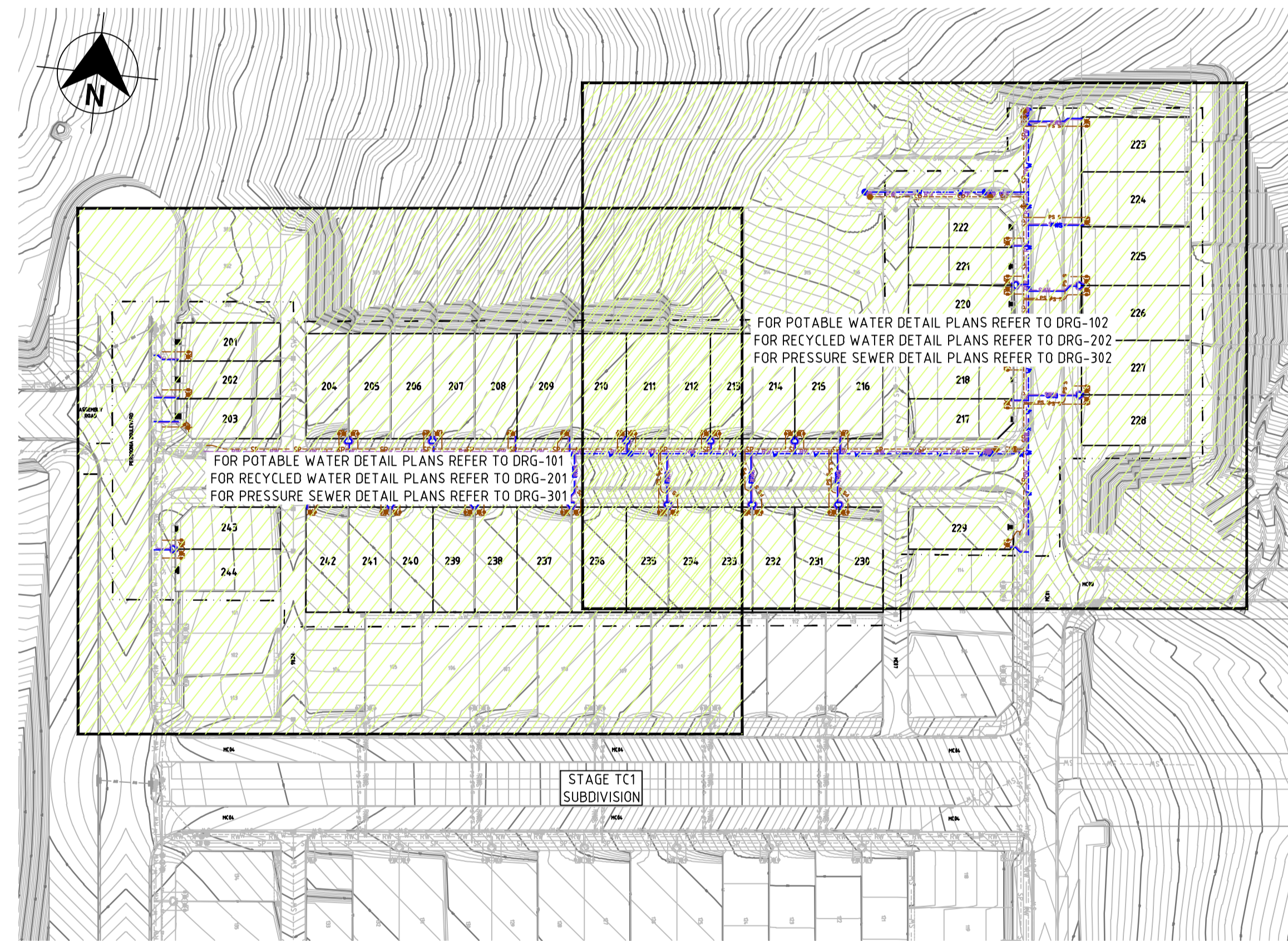
ORIGIN OF W.A.C. LEVELS
PM 20029 Co-Ord System: MGA Ground
E: 345612.942 MGA Datum: GDA94
N: 6382878.917 MGA Zone: 56
RL: 77.675

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd
Date Approved: 15-09-2320



AS CONSTRUCTED

Table with 5 main columns: REV., DATE, AMENDMENT, DRAWN/CHECK/DESIGN/VERIFY/SCALES, CLIENT (Hunter Office, Altogether), PROPERTY DESCRIPTION (PROPOSED SUBDIVISION STAGE - TOWN CENTRE RESIDENTIAL 2 HUNTLEE), PROJECT (POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION), PLAN TITLE (GENERAL NOTES), PROJECT No. (240037(TCR2) -), DISCIPLINE (WAC), NUMBER (002), REV. (2).



PLAN  
SCALE 1:1000

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COMPANY ADW Johnson Pty Ltd      COMPANY  
NAME E WEN B. RANDAL      NAME  
SIGNED *[Signature]* DATE 06-06-2024      SIGNED      DATE  
REGISTERED SURVEYOR      CONSTRUCTION MANAGER

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REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	 SCALE: 1:1000 (FULL)
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
0	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.	

DESIGN FILE N:\240037\DWG\Water & Sewer\Stage TCR2\240037(TCR2)-HUNTLEE-DESIGN.dwg      ALL DIMENSIONS ARE IN METRES U.N.O.      DO NOT SCALE  
Plotted By: glenns      Plot Date: 05/06/24 - 13:29      Cad File: N:\240072\DWG\Water & Sewer\STAGE TCR 2 WAC\240037(TCR2)-WAC-003.dwg

**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  
**altogether.**

PROPERTY DESCRIPTION  
PROPOSED SUBDIVISION  
STAGE - TOWN CENTRE RESIDENTIAL 2  
HUNTLEE

SURVEYED  
Daly,Smith Pty Ltd

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

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	OVERALL SITE PLAN		
PROJECT No.	DISCIPLINE	NUMBER	REV.
240037(TCR2) -	WAC	003	2

**WORK AS CONSTRUCTED**

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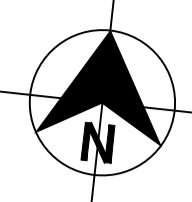
COMPANY: ADW Johnson Pty Ltd  
 NAME: EWEN B. RANDAL  
 SIGNED: [Signature] DATE: 06-06-2024  
 REGISTERED SURVEYOR

**ORIGIN OF W.A.C. LEVELS**

PM: 20029  
 E: 345612.942  
 N: 6382818.917  
 RL: 77.675

**APPROVED FOR CONSTRUCTION**  
 BY ADW Johnson Pty Ltd

Date Approved: 15-09-2320



**LEGEND**

- PVC-M POTABLE WATER RETICULATION
- POTABLE WATER PROPERTY SERVICE
- PVC-M RECYCLED WATER RETICULATION
- RECYCLED WATER PROPERTY SERVICE
- PE PRESSURE SEWER RETICULATION
- PE PRESSURE SEWER PROPERTY SERVICE
- EXISTING POTABLE WATER RETICULATION
- EXISTING RECYCLED WATER RETICULATION
- EXISTING PRESSURE SEWER RETICULATION
- STORMWATER PIPEWORK
- STOP VALVE
- HYDRANT
- FLUSHING HYDRANT
- PROPERTY SERVICE CONNECTION
- LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- SUBDIVISION STAGE BOUNDARY
- PROPERTY SERVICE CONNECTION. DENOTES PROPERTY LATERAL TO BE INSTALLED ON EXISTING MAIN IF APPLICABLE. LATERAL CONNECTIONS TO EXISTING MAIN SHALL BE TREATED AS A NEW RETICULATION MAIN (i.e. ADVANCED NOTICE FOR CONNECTION, PRESSURE TESTING etc.). CONNECTION TO BE MADE TO EXISTING MAIN WITH PLASSON TAPPING SADDLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER WAT-1108-V).

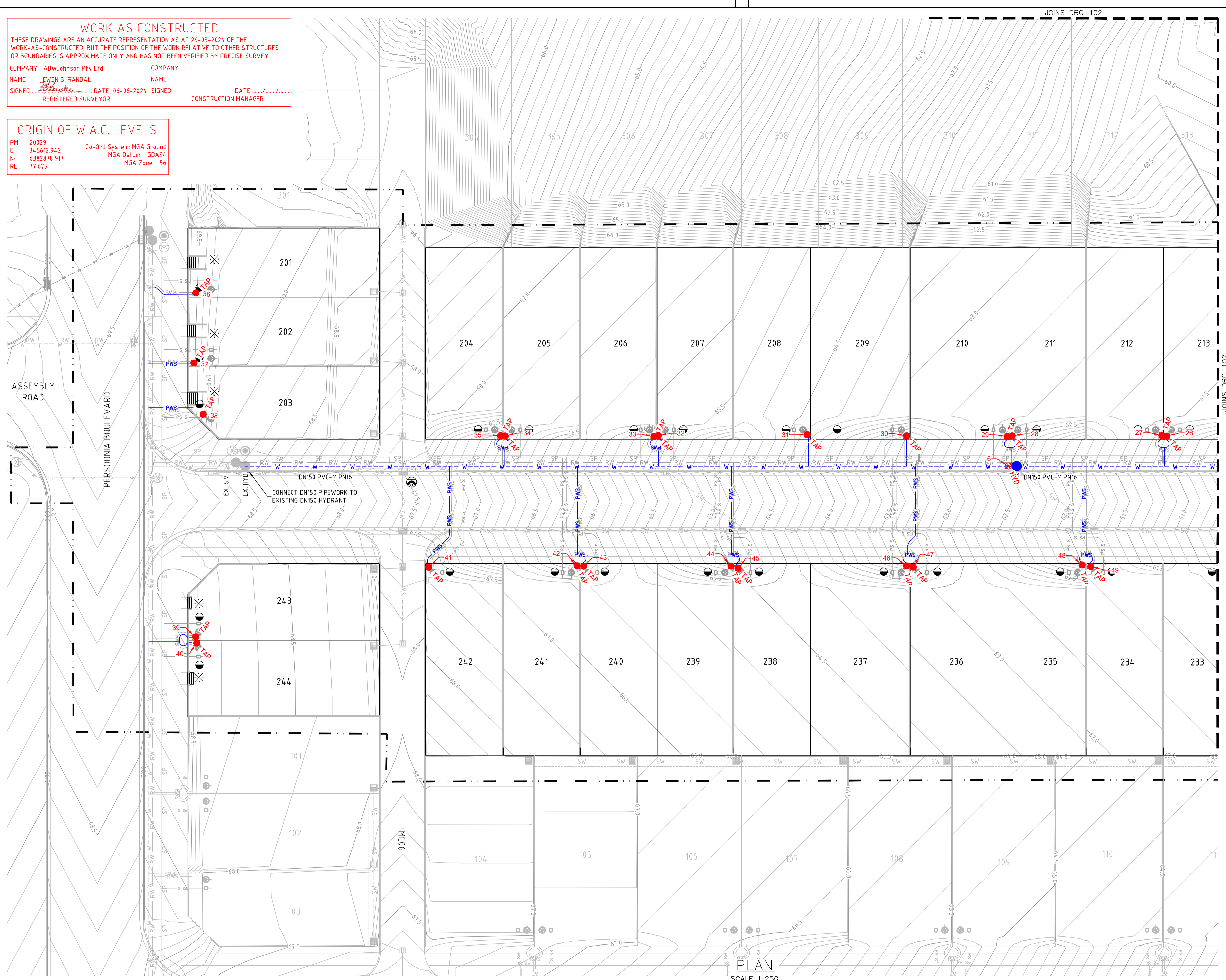
- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 44 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
    - 5 x SHORT SIDE
    - 11 x LONG SIDE
  - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
    - 10 x SHORT SIDE
    - 9 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN150	PVC-M PN16	337
DN20 (LATERAL)	PE100 PN16	257

- NOTES:**
1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.
  2. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 202.
  3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
  4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.

240037(TCR2)-WAC-101

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.



PLAN  
 SCALE 1:250

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
0	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.	

DESIGN FILE	ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE
N:\240037\DWG\Water & Sewer\Stage TC2\X-240037(TC2)-HUNTLEE-DESIGN.dwg	

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

**CLIENT**

PROPOSED SUBDIVISION  
 STAGE - TOWN CENTRE RESIDENTIAL 2  
 HUNTLEE

PROPERTY DESCRIPTION		
PROPOSED SUBDIVISION STAGE - TOWN CENTRE RESIDENTIAL 2 HUNTLEE		
SURVEYED	DATUM	A.H.D.
Daly,Smith Pty Ltd	GDA94 M.G.A. ZONE 56	

PROJECT			
POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION			
PLAN TITLE			
POTABLE WATER DETAIL PLAN - SHEET 1			
PROJECT No.	DISCIPLINE	NUMBER	REV.
240037(TCR2) -	WAC	101	2



**AS CONSTRUCTED**

**WORK AS CONSTRUCTED**

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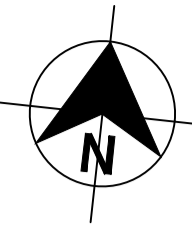
COMPANY ADWJohnson Pty Ltd  
 NAME EWEN B. RANDAL  
 SIGNED [Signature] DATE 06-06-2024 REGISTERED SURVEYOR  
 NAME [Signature] DATE [Signature] CONSTRUCTION MANAGER

**ORIGIN OF W.A.C. LEVELS**

PM 20029 Co-Ord System: MGA Ground  
 E 345612.942 MGA Datum: GDA94  
 N 6382878.917 MGA Zone: 56  
 RL 77.675

**APPROVED FOR CONSTRUCTION**  
 BY ADW Johnson Pty Ltd

Date Approved: 15-09-2320



- LEGEND**
- PVC-M POTABLE WATER RETICULATION
  - POTABLE WATER PROPERTY SERVICE
  - PVC-M RECYCLED WATER RETICULATION
  - RECYCLED WATER PROPERTY SERVICE
  - PE PRESSURE SEWER RETICULATION
  - PE PRESSURE SEWER PROPERTY SERVICE
  - EXISTING POTABLE WATER RETICULATION
  - EXISTING RECYCLED WATER RETICULATION
  - EXISTING PRESSURE SEWER RETICULATION
  - STORMWATER PIPEWORK
  - STOP VALVE
  - HYDRANT
  - FLUSHING HYDRANT
  - PROPERTY SERVICE CONNECTION
  - LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
  - SUBDIVISION STAGE BOUNDARY
  - PROPERTY SERVICE CONNECTION. DENOTES PROPERTY LATERAL TO BE INSTALLED ON EXISTING MAIN IF APPLICABLE. LATERAL CONNECTIONS TO EXISTING MAIN SHALL BE TREATED AS A NEW RETICULATION MAIN (i.e. ADVANCED NOTICE FOR CONNECTION, PRESSURE TESTING etc.). CONNECTION TO BE MADE TO EXISTING MAIN WITH PLASSON TAPPING SADDLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER WAT-1108-V).

- POTABLE WATER PROPERTY SERVICE CONNECTIONS**  
 TOTAL 44 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
    - 5 x SHORT SIDE
    - 1 x LONG SIDE
  - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
    - 10 x SHORT SIDE
    - 9 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN150	PVC-M PN16	337
DN20 (LATERAL)	PE100 PN16	257

- NOTES:**
1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.
  2. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 202.
  3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
  4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.

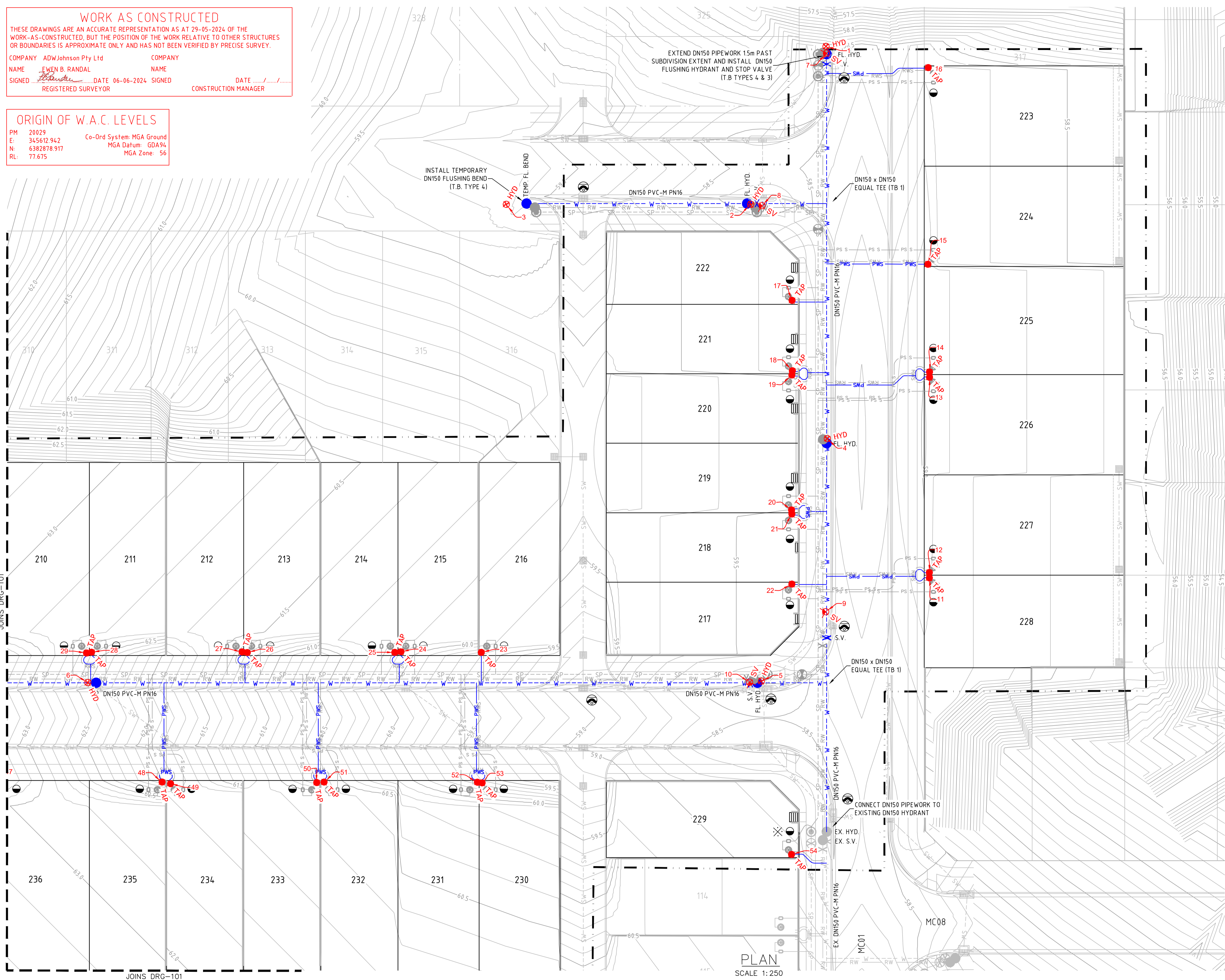


**AS CONSTRUCTED**

240037(TCR2)-WAC-101

JOINS DRG-101

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.



PLAN  
 SCALE 1:250

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	 SCALE: 1:250 (FULL)	 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	PROPOSED SUBDIVISION STAGE - TOWN CENTRE RESIDENTIAL 2 HUNTLÉE	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	POTABLE WATER DETAIL PLAN - SHEET 2	240037(TCR2) -	WAC	102	2
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.									
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.									
0	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.									
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.									
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.									

**WORK AS CONSTRUCTED**

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COMPANY: ADW Johnson Pty Ltd  
 NAME: EWEN B. RANDAL  
 SIGNED: [Signature] DATE: 06-06-2024  
 REGISTERED SURVEYOR

COMPANY: [Blank]  
 NAME: [Blank]  
 SIGNED: [Blank] DATE: [Blank]  
 CONSTRUCTION MANAGER

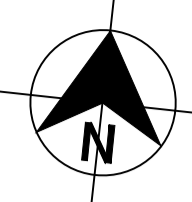
**ORIGIN OF W.A.C. LEVELS**

PM: 20079  
 E: 345612.942  
 N: 6382818.917  
 RL: 77.675

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

**APPROVED FOR CONSTRUCTION**  
 BY ADW Johnson Pty Ltd

Date Approved: 15-09-2320



**LEGEND**

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

- S.V. [Symbol] STOP VALVE
- S.V. N.C. [Symbol] STOP VALVE NORMALLY CLOSED
- HYD. [Symbol] HYDRANT
- FL. HYD. [Symbol] FLUSHING HYDRANT
- [Symbol] PROPERTY SERVICE CONNECTION
- [Symbol] LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- [Symbol] LIMIT OF SUBDIVISION WORKS
- [Symbol] PROPERTY SERVICE CONNECTION DENOTES PROPERTY LATERAL TO BE INSTALLED ON EXISTING MAIN IF APPLICABLE. LATERAL CONNECTIONS TO EXISTING MAIN SHALL BE TREATED AS A NEW RETICULATION MAIN (i.e. ADVANCED NOTICE FOR CONNECTION, PRESSURE TESTING etc.) CONNECTION TO BE MADE TO EXISTING MAIN WITH PLASSON TAPPING SADDLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER WAT-1108-V).

- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 44 CONNECTIONS
  - SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
    - 5 x SHORT SIDE
    - 1 x LONG SIDE
  - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
    - 10 x SHORT SIDE
    - 9 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN150	PVC-M PN16	335
DN25 (LATERAL)	PE100 PN16	266

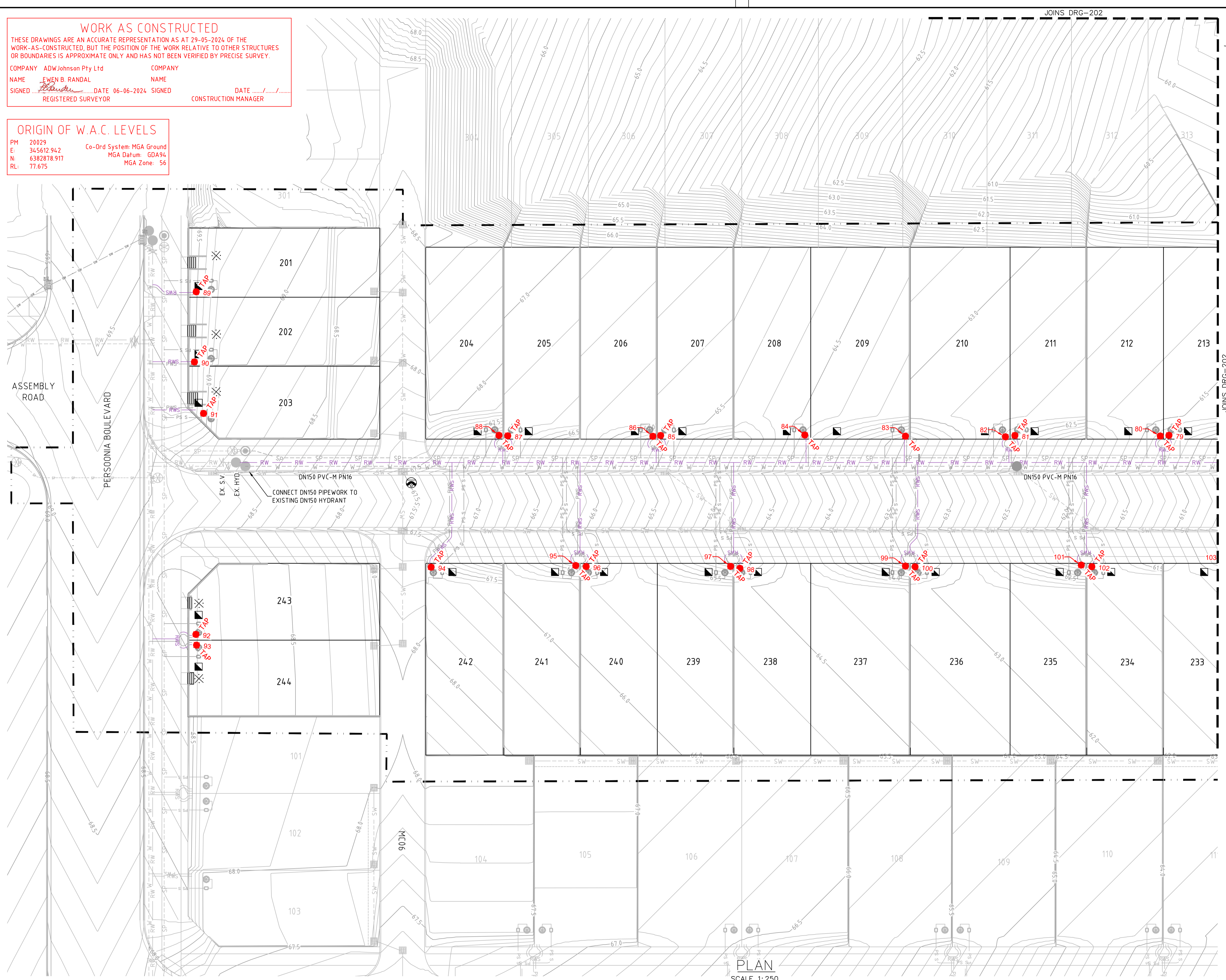
- NOTES:**
1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.
  2. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 102.
  3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
  4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.



**AS CONSTRUCTED**

240037(TCR2)-WAC-202

100mm AT FULL SIZE  
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REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
0	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.	

DRAWN	CHECK	DESIGN	VERIFY
G.S.	M-P.C.	G.S.	C.B.
G.S.	C.H.	G.S.	C.H.
G.S.	C.H.	G.S.	C.H.
G.S.	C.H.	G.S.	C.H.
G.S.	C.H.	G.S.	C.H.

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

**Hunter Office**  
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 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  
 PROPOSED SUBDIVISION  
 STAGE - TOWN CENTRE RESIDENTIAL 2  
 HUNTLEE

SURVEYED  
 Daly,Smith Pty Ltd

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

PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	RECYCLED WATER DETAIL PLAN - SHEET 1	240037(TCR2) -	WAC	201	2

**WORK AS CONSTRUCTED**

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COMPANY ADW Johnson Pty Ltd  
 NAME EWEN B. RANDAL  
 SIGNED [Signature] DATE 06-06-2024 REGISTERED SURVEYOR  
 NAME [Signature] DATE [Signature] CONSTRUCTION MANAGER

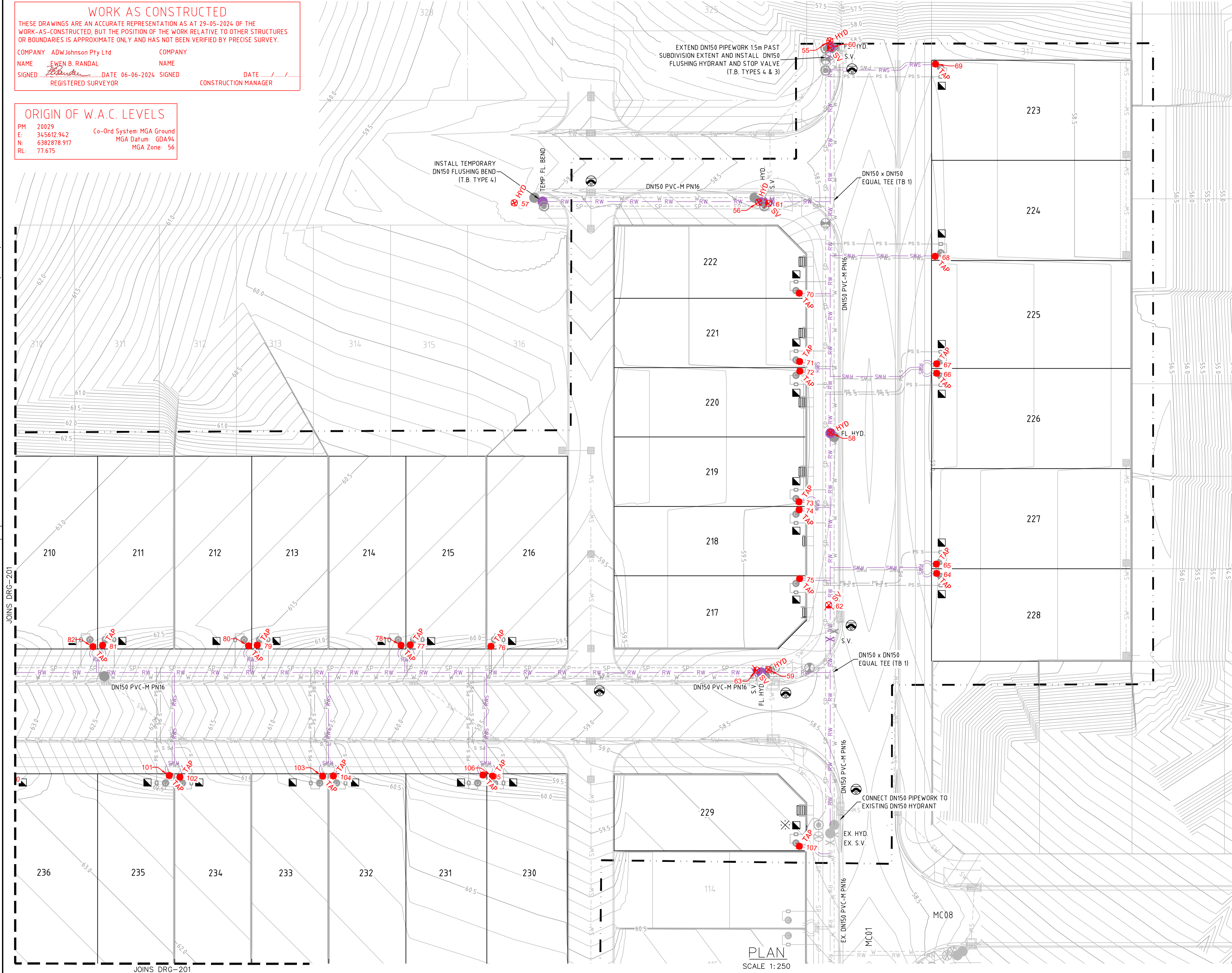
**ORIGIN OF W.A.C. LEVELS**

PM 20029  
 E 345612.942  
 N 6382878.917  
 RL 77.675  
 Co-Ord System: MGA Ground  
 MGA Datum: GDA94  
 MGA Zone: 56

**APPROVED FOR CONSTRUCTION**  
 BY ADW Johnson Pty Ltd

Date Approved: 15-09-2320

240037(TCR2)-WAC-202



**LEGEND**

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

- S.V. [Symbol] STOP VALVE
- S.V. N.C. [Symbol] STOP VALVE NORMALLY CLOSED
- HYD. [Symbol] HYDRANT
- FL. HYD. [Symbol] FLUSHING HYDRANT
- [Symbol] PROPERTY SERVICE CONNECTION
- [Symbol] LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- [Symbol] LIMIT OF SUBDIVISION WORKS
- [Symbol] PROPERTY SERVICE CONNECTION DENOTES PROPERTY LATERAL TO BE INSTALLED ON EXISTING MAIN IF APPLICABLE. LATERAL CONNECTIONS TO EXISTING MAIN SHALL BE TREATED AS A NEW RETICULATION MAIN (i.e. ADVANCED NOTICE FOR CONNECTION, PRESSURE TESTING etc.) CONNECTION TO BE MADE TO EXISTING MAIN WITH PLASSON TAPPING SADDLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER WAT-1108-V).

- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 44 CONNECTIONS
  - SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
    - 5 x SHORT SIDE
    - 1 x LONG SIDE
  - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
    - 10 x SHORT SIDE
    - 9 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN150	PVC-M PN16	335
DN25 (LATERAL)	PE100 PN16	266

- NOTES:**
- LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.
  - FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 102.
  - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 302.
  - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.



**AS CONSTRUCTED**

100mm AT FULL SIZE  
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REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.	
0	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.	

DESIGN FILE N:\240037\DWG\Water & Sewer\Stage TC2\240037(TC2)-HUNTLÉE-DESIGN.dwg  
 ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE

**adw Johnson**  
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 email: hunter@adwjohnson.com.au  
 www.adwjohnson.com.au  
 ABN 62 129 445 398

**CLIENT**

**PROPERTY DESCRIPTION**  
 PROPOSED SUBDIVISION  
 STAGE - TOWN CENTRE RESIDENTIAL 2  
 HUNTLÉE

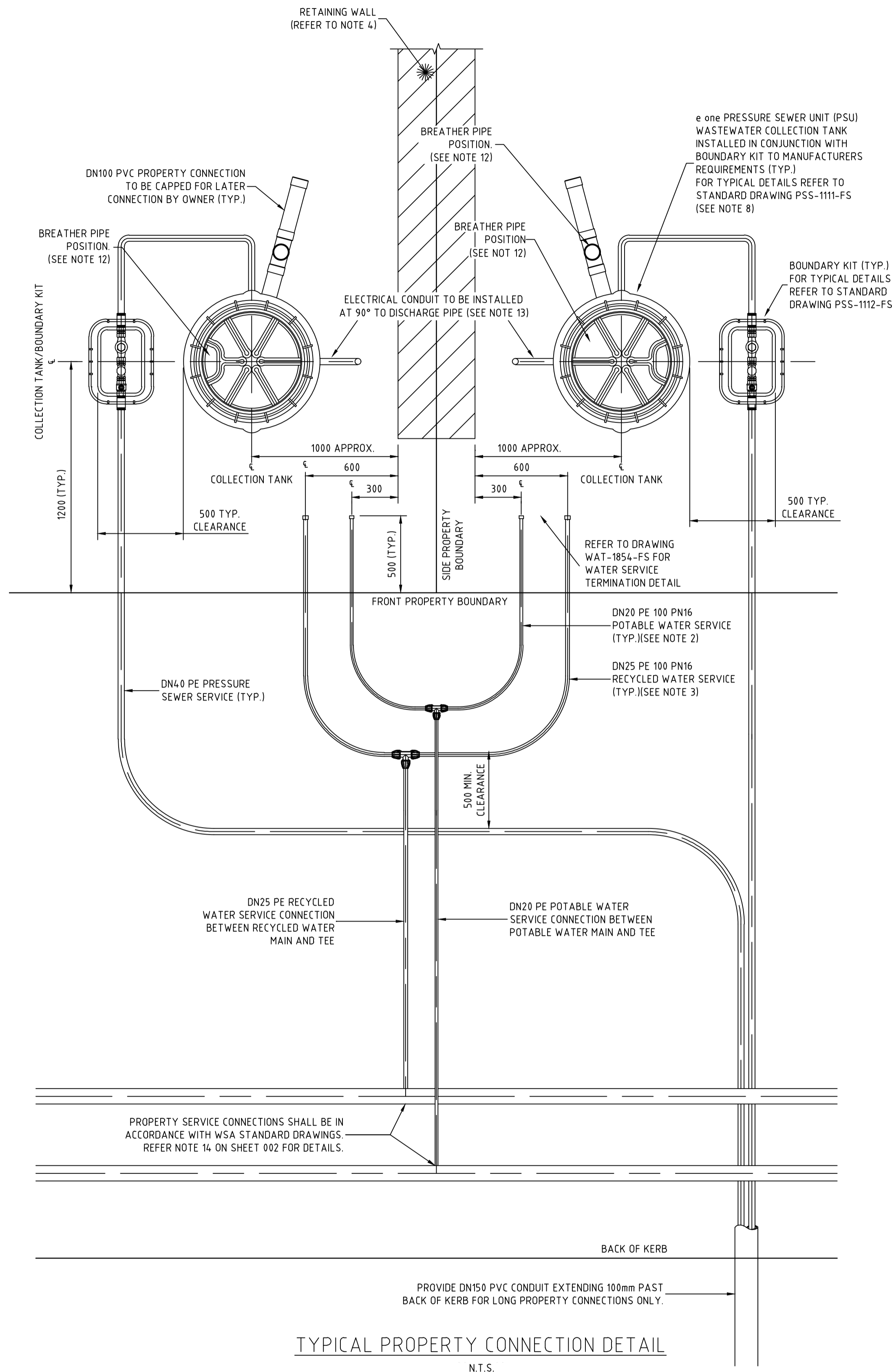
PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	RECYCLED WATER DETAIL PLAN - SHEET 2		
SURVEYED	DATUM	PROJECT No.	DISCIPLINE
Daly,Smith Pty Ltd	GDA94 M.G.A. ZONE 56 A.H.D.	240037(TCR2) -	WAC
NUMBER	REV.		
202	2		





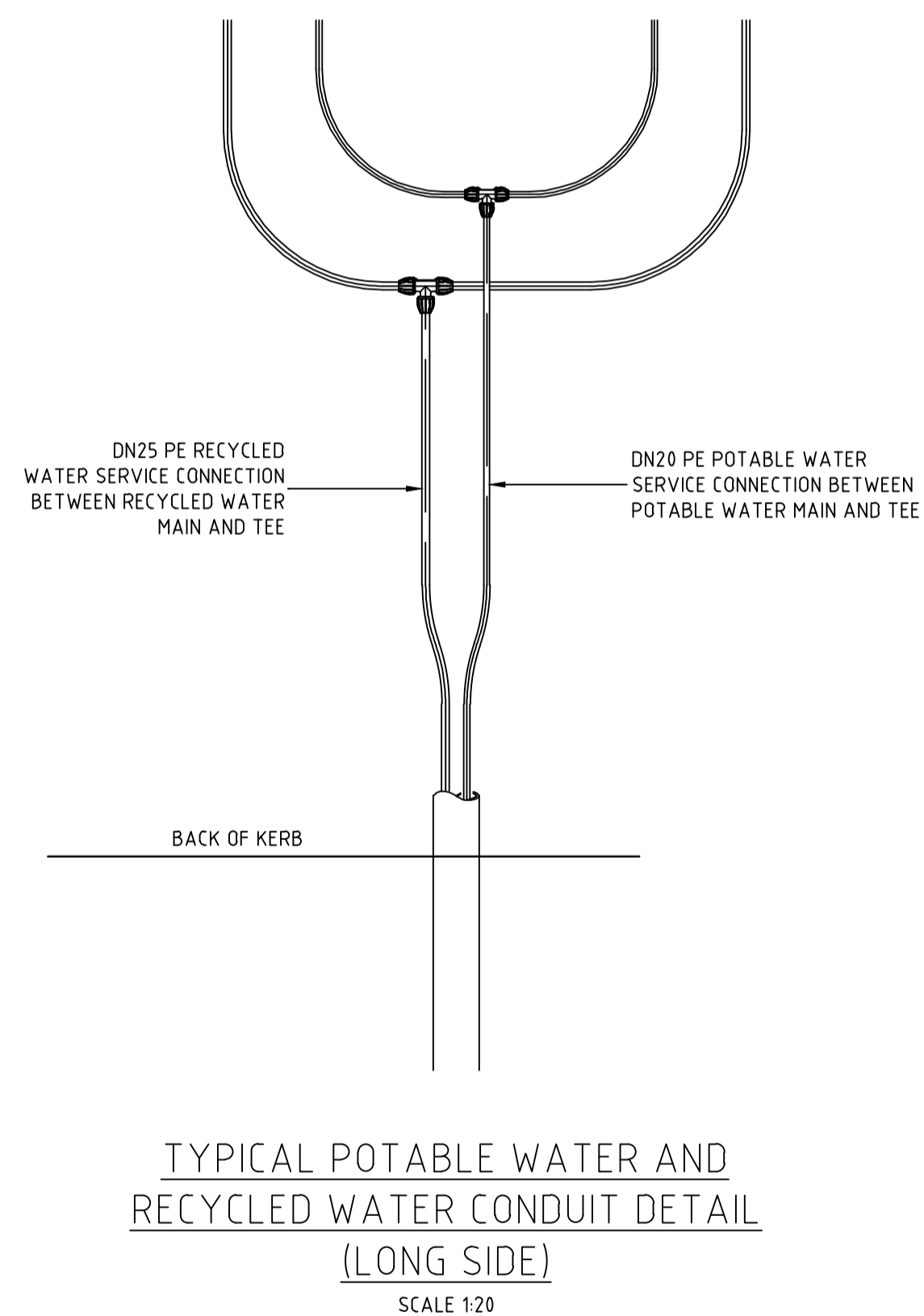






**NOTES:**

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



**WORK AS CONSTRUCTED**

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 29-05-2024 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 COMPANY  
 NAME EWEN B. RANDAL NAME  
 SIGNED *[Signature]* DATE 06-06-2024 SIGNED \_\_\_\_\_ DATE \_\_\_\_\_  
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

**ORIGIN OF W.A.C. LEVELS**

PM 20029 Co-Ord System: MGA Ground  
 E: 345612.942 MGA Datum: GDA94  
 N: 6382878.917 MGA Zone: 56  
 RL: 77.675

**APPROVED FOR CONSTRUCTION  
 BY ADW Johnson Pty Ltd**

Date Approved: 15-09-2320

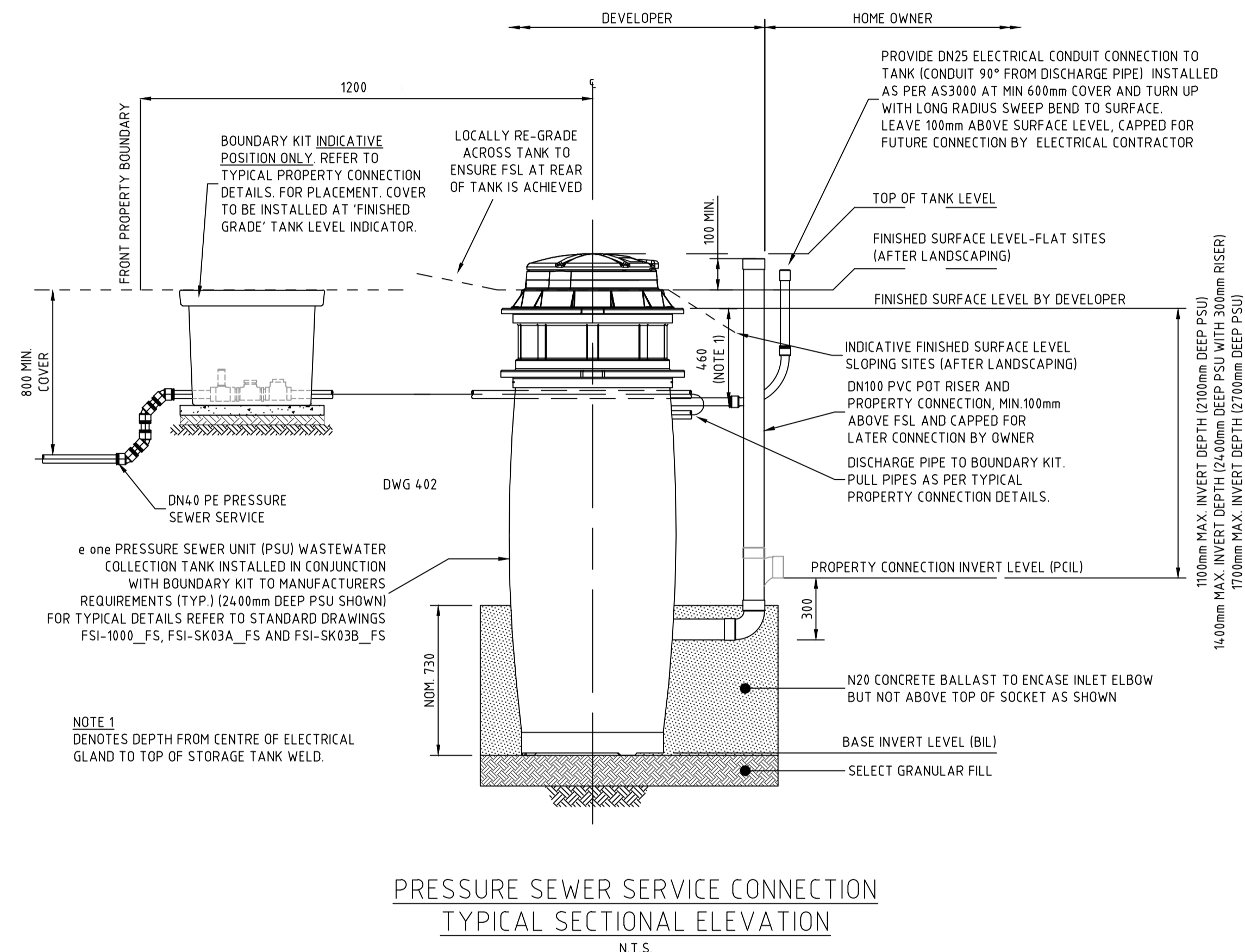


**AS CONSTRUCTED**

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	 ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE.	 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	 PROPOSED SUBDIVISION STAGE - TOWN CENTRE RESIDENTIAL 2 HUNTLÉE	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.				TYPICAL PROPERTY CONNECTION DETAILS		
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.				TYPICAL PROPERTY CONNECTION DETAILS		
O	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.				TYPICAL PROPERTY CONNECTION DETAILS		
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.				TYPICAL PROPERTY CONNECTION DETAILS		
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.				TYPICAL PROPERTY CONNECTION DETAILS		
DESIGN FILE N:\240037\DWG\Water & Sewer\Stage TC2\TC2-240037(TC2)-HUNTLÉE-DESIGN.dwg			ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE.			PROJECT No. 240037(TCR2) -		DISCIPLINE WAC		NUMBER 402		REV. 2

WASTEWATER COLLECTION TANK DETAILS

LOT NUMBER	TOP OF TANK	TANK FSL	BASE IL	CONNECTION IL	TANK HEIGHT	TANK LOCATION	EASTING	NORTHING	TOP OF COLLECTION TANK LID	CALCULATED WAC SANITARY DRAINAGE INVERT LEVEL	WAC V's DESIGN INVERT LEVEL COMPARISON
201	69.58	69.30	66.85	67.60	2700	FRONT	344.754.05	6384.093.16	69.54	67.63	0.03
202	69.51	69.23	66.78	67.53	2700	FRONT	344.755.02	6384.084.21	69.45	67.54	0.01
203	69.20	68.92	66.47	67.22	2700	FRONT	344.755.85	6384.076.41	69.135	67.22	0.00
204	67.56	67.28	65.43	66.18	2100	FRONT	344.792.78	6384.078.95	67.499	66.18	0.00
205	67.13	66.85	65.00	65.75	2100	FRONT	344.794.96	6384.079.18	67.048	65.73	-0.02
206	66.22	65.94	64.09	64.84	2100	FRONT	344.812.85	6384.081.12	66.142	64.83	-0.01
207	65.83	65.55	63.70	64.45	2100	FRONT	344.814.84	6384.081.34	65.74	64.43	-0.03
208	64.70	64.42	62.57	63.32	2100	FRONT	344.832.74	6384.083.28	64.621	63.31	-0.01
209	64.11	63.83	61.98	62.73	2100	FRONT	344.845.47	6384.084.66	64.024	62.71	-0.02
210	63.01	62.73	60.88	61.63	2100	FRONT	344.858.59	6384.086.08	62.889	61.57	-0.06
211	62.93	62.65	60.80	61.55	2100	FRONT	344.860.58	6384.086.29	62.789	61.47	-0.08
212	61.72	61.44	59.59	60.34	2100	FRONT	344.878.47	6384.088.23	61.627	60.31	-0.03
213	61.64	61.36	59.51	60.26	2100	FRONT	344.880.46	6384.088.45	61.537	60.22	-0.04
214	60.48	60.20	58.35	59.10	2100	FRONT	344.898.35	6384.090.39	60.391	59.08	-0.02
215	60.43	60.15	58.30	59.05	2100	FRONT	344.900.34	6384.090.60	60.332	59.02	-0.03
216	59.96	59.68	57.83	58.58	2100	FRONT	344.910.78	6384.091.73	59.861	58.55	-0.03
217	59.70	59.42	57.57	58.32	2100	FRONT	344.948.88	6384.103.20	59.612	58.30	-0.02
218	59.72	59.44	57.59	58.34	2100	FRONT	344.947.91	6384.112.15	59.642	58.33	-0.01
219	59.79	59.51	57.66	58.41	2100	FRONT	344.947.69	6384.114.14	59.704	58.39	-0.02
220	59.79	59.51	57.66	58.41	2100	FRONT	344.945.97	6384.130.05	59.698	58.38	-0.03
221	59.65	59.37	57.52	58.27	2100	FRONT	344.945.75	6384.132.04	59.579	58.26	-0.01
222	59.60	59.32	57.47	58.22	2100	FRONT	344.944.78	6384.140.98	59.509	58.19	-0.03
223	58.92	58.64	56.49	57.24	2400	FRONT	344.960.35	6384.171.74	58.852	57.24	0.00
224	59.05	58.77	56.62	57.37	2400	FRONT	344.962.94	6384.147.88	58.968	57.35	-0.02
225	59.24	58.96	56.81	57.56	2400	FRONT	344.964.44	6384.133.96	59.166	57.55	-0.01
226	59.24	58.96	56.81	57.56	2400	FRONT	344.964.66	6384.131.97	59.149	57.53	-0.03
227	59.18	58.90	56.75	57.50	2400	FRONT	344.967.25	6384.108.11	58.999	57.38	-0.12
228	59.18	58.90	56.75	57.50	2400	FRONT	344.967.46	6384.106.12	58.9	57.29	-0.21
229	59.74	59.46	57.61	58.36	2100	FRONT	344.952.51	6384.069.70	59.674	58.36	0.00
230	60.06	59.78	57.93	58.68	2100	FRONT	344.912.79	6384.073.24	59.993	58.68	0.00
231	60.13	59.85	58.00	58.75	2100	FRONT	344.910.61	6384.073.01	60.078	58.76	0.01
232	60.92	60.64	58.79	59.54	2100	FRONT	344.892.40	6384.071.03	60.816	59.50	-0.04
233	61.27	60.99	59.14	59.89	2100	FRONT	344.890.23	6384.070.80	61.201	59.89	0.00
234	62.09	61.81	59.96	60.71	2100	FRONT	344.872.52	6384.068.88	62.024	60.71	0.00
235	62.60	62.32	60.47	61.22	2100	FRONT	344.870.34	6384.068.64	62.516	61.20	-0.02
236	63.53	63.25	61.40	62.15	2100	FRONT	344.849.66	6384.066.40	63.416	62.10	-0.05
237	64.10	63.82	61.97	62.72	2100	FRONT	344.847.48	6384.066.16	64.011	62.70	-0.02
238	65.03	64.75	62.90	63.65	2100	FRONT	344.826.79	6384.063.92	64.931	63.62	-0.03
239	65.59	65.31	63.46	64.21	2100	FRONT	344.824.61	6384.063.69	65.475	64.16	-0.05
240	66.35	66.07	64.22	64.97	2100	FRONT	344.806.91	6384.061.77	66.248	64.93	-0.04
241	66.87	66.59	64.74	65.49	2100	FRONT	344.804.73	6384.061.53	66.752	65.44	-0.05
242	67.92	67.64	65.79	66.54	2100	FRONT	344.786.82	6384.059.59	67.838	66.52	-0.02
243	69.07	68.79	66.64	67.39	2400	FRONT	344.757.23	6384.048.54	68.989	67.37	-0.02
244	69.07	68.79	66.64	67.39	2400	FRONT	344.757.45	6384.046.55	68.986	67.37	-0.02



WASTEWATER COLLECTION TANK COUNT

TANK SIZE	NUMBER OF
2100	33
2400	8
2700	3

**WORK AS CONSTRUCTED**  
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 COMPANY: ADW Johnson Pty Ltd  
 NAME: EWEN B. RANDAL  
 SIGNED: [Signature] DATE: 06-06-2024  
 REGISTERED SURVEYOR

**ORIGIN OF W.A.C. LEVELS**  
 PM: 20029  
 E: 345612.942  
 N: 6382878.917  
 RL: 77.675  
 Co-Ord System: MGA Ground  
 MGA Datum: GDA94  
 MGA Zone: 56

**APPROVED FOR CONSTRUCTION**  
 BY ADW Johnson Pty Ltd  
 Date Approved: 15-09-2320



**AS CONSTRUCTED**

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.	0 0.1 0.2 0.3 0.4 A1 / A3	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	PROPOSED SUBDIVISION STAGE - TOWN CENTRE RESIDENTIAL 2 HUNTLLEE	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	WASTE WATER COLLECTION TANK LEVEL DETAILS	240037(TCR2) -	WAC	403	2
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.									
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.									
O	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.									
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.									
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.									

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COMPANY ADW Johnson Pty Ltd COMPANY  
 NAME EWEN B. RANDAL NAME  
 SIGNED *E. Randal* DATE 06-06-2024 SIGNED DATE  
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

**ORIGIN OF W.A.C. LEVELS**

PM 20029 Co-Ord System: MGA Ground  
 E: 345612.942 MGA Datum: GDA94  
 N: 638278.917 MGA Zone: 56  
 RL: 77.675

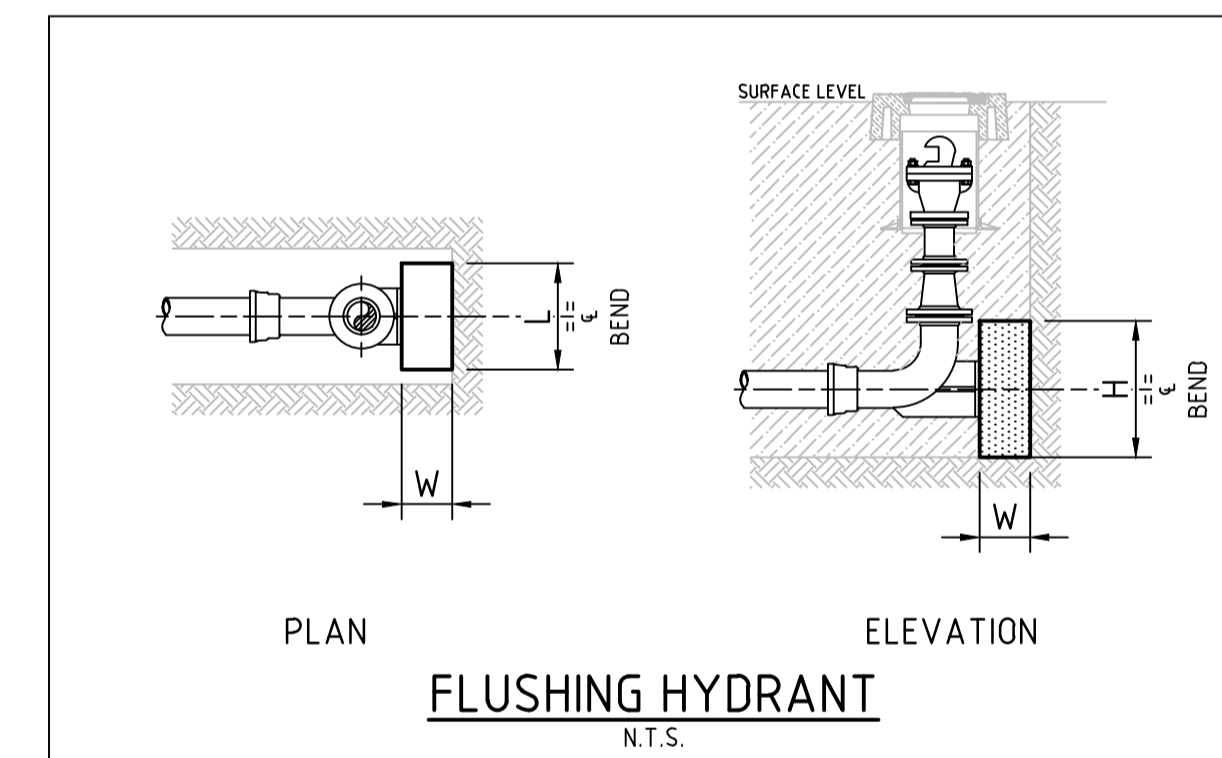
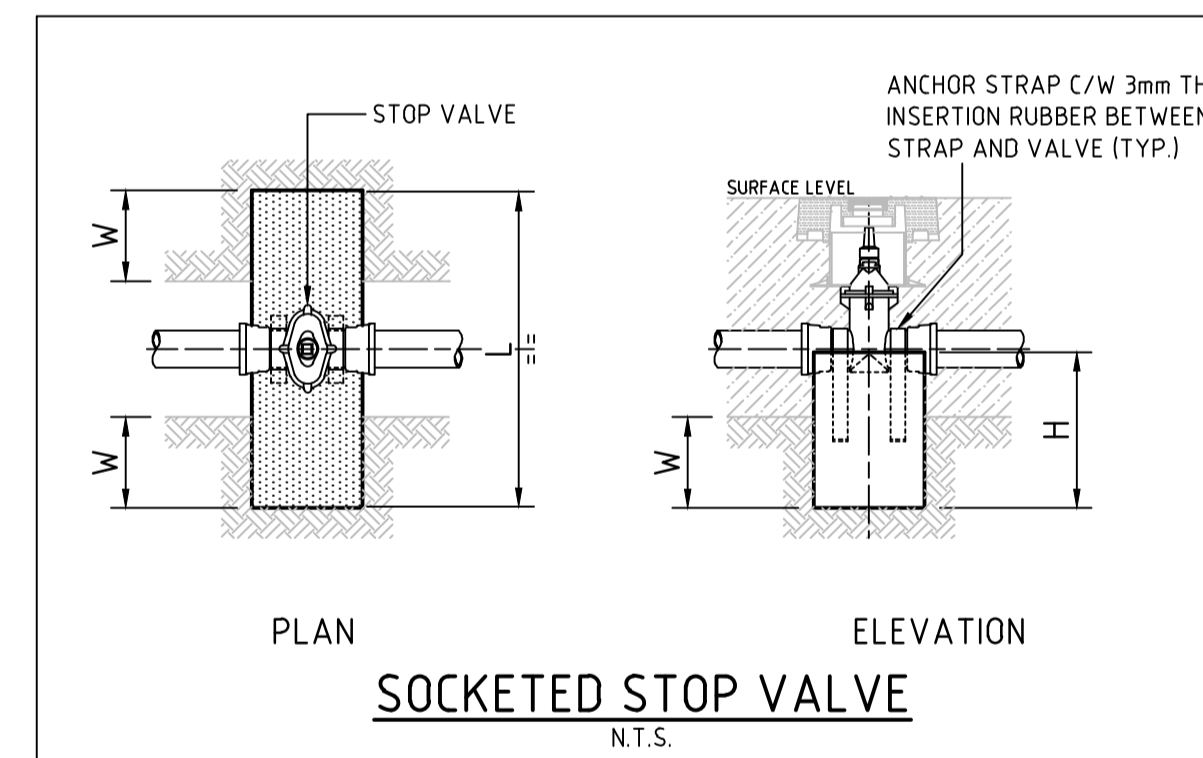
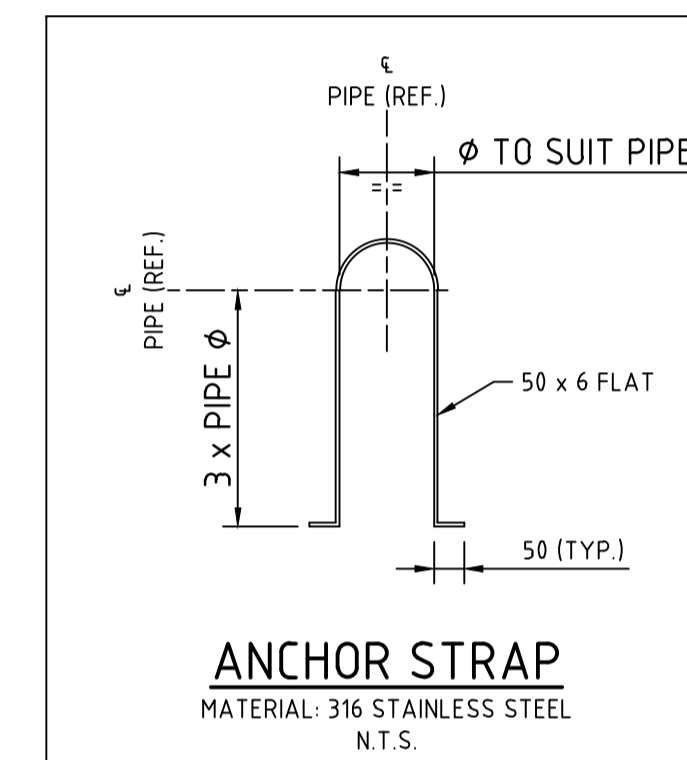
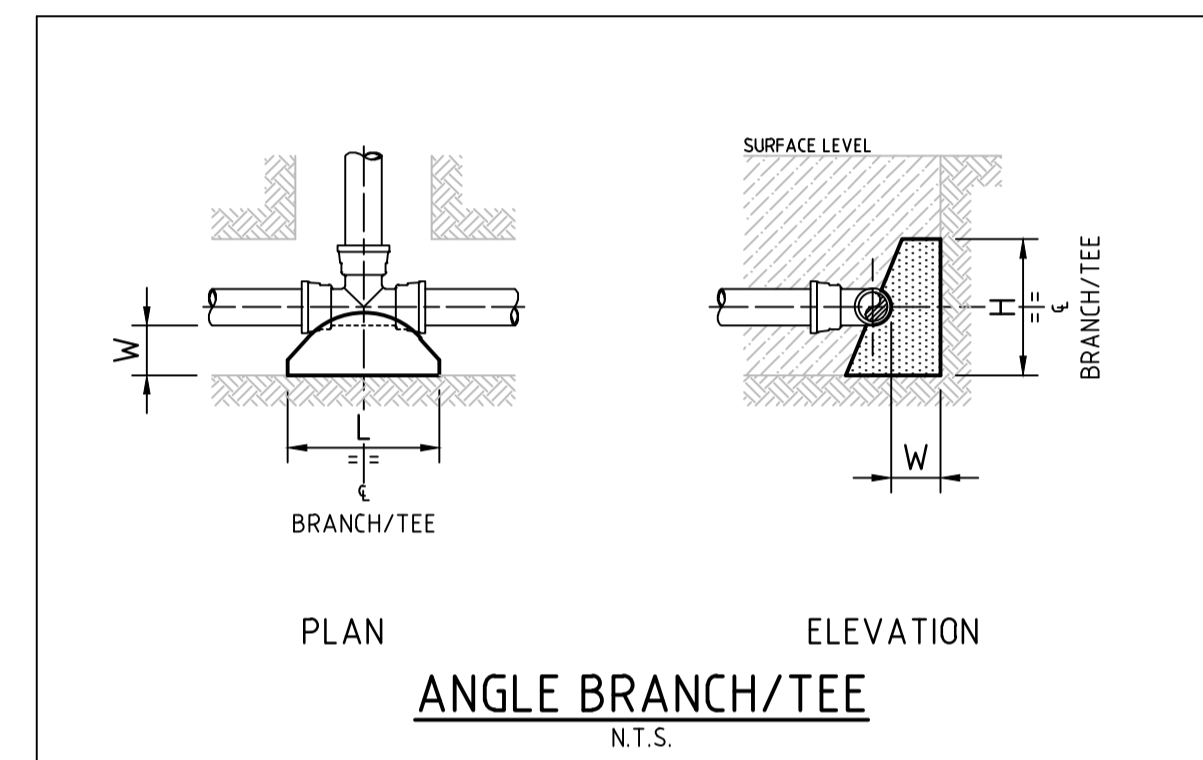
**APPROVED FOR CONSTRUCTION  
BY ADW Johnson Pty Ltd**

Date Approved: 15-09-2320

**THRUST BLOCK NOTES:**

- "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.
- CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE.
- 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.
- THRUST BLOCKS ARE TO BE CONSTRUCTED SUCH THAT THEY TRANSFER THE THRUST ONTO UNDISTURBED GROUND. THRUST BLOCKS ARE NOT TO INTERFERE WITH OTHER SERVICES.
- 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°.
- CONCRETE FOR THE THRUST BLOCKS TO BE GRADE S25 USING CEMENT TYPE "SR" TO AS3972. CONCRETE TO BE MECHANICALLY VIBRATED.
- CONCRETE THRUST BLOCKS ARE TO BE CURED FOR A MINIMUM OF 7 DAYS BEFORE BEING SUBJECTED TO ANY THRUST LOAD.
- REFER TO WAT-1205-V FOR GENERAL FITTING THRUST BLOCK ARRANGEMENTS.
- REFER TO WAT-1207-V FOR GENERAL VALVE AND VERTICAL BEND THRUST BLOCK ARRANGEMENTS.
- THRUST BLOCK TO EXTEND 300mm MINIMUM INTO BASE AND SIDE WALLS OF TRENCH.
- PROVIDE 3mm THK. INSERTION RUBBER BETWEEN ANCHOR STRAP AND PIPE BARREL.

TYPE	FITTING	SOIL AHBP (kPa)	DESIGN STP (kPa)	THRUST	TA (m <sup>2</sup> )	LENGTH (L)	HEIGHT (H)	WIDTH (W)
1	DN150 x DN150 EQUAL TEE	100	1500	37.50	0.38	0.05	0.75	0.30
2	DN150 x 6° & 11.25° HORIZONTAL BEND	100	1500	7.50	0.08	N	N	0.30
3	DN150 SOCKETED STOP VALVE	100	1500	37.50	0.38	1.05	0.46	0.30
4	DN150 FLUSHING HYDRANT	100	1500	37.50	0.38	0.50	0.76	0.30
5	DN150 x 90° HORIZONTAL BEND	100	1500	52.50	0.53	0.60	0.88	0.30
6	DN150 END CAP	100	1500	37.50	0.38	0.50	0.76	0.30
7	DN150 x 22.5° HORIZONTAL BEND	100	1500	15.00	0.15	0.34	0.45	0.30
8	DN150 x 45° HORIZONTAL BEND	100	1500	28.50	0.29	0.45	0.64	0.30



**AS CONSTRUCTED**

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT			PROPERTY DESCRIPTION			PROJECT					
A	18.11.2022	INITIAL ISSUE	G.S.	M-P.C.	G.S.	C.B.		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			PROPOSED SUBDIVISION STAGE - TOWN CENTRE RESIDENTIAL 2 HUNTLEE			POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION					
D	01.08.2023	ALTOGETHER GROUP COMMENTS & NEW SURFACE	G.S.	C.H.	G.S.	C.H.	PLAN TITLE												
E	28.08.2023	NEW SURFACE	G.S.	C.H.	G.S.	C.H.	THRUST BLOCK DETAILS												
0	15.09.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	SURVEYED												
1	14.11.2023	FOR CONSTRUCTION	G.S.	C.H.	G.S.	C.H.	DATUM												
2	05.06.2024	WORK AS CONSTRUCTED	G.S.	C.H.	G.S.	C.H.	PROJECT No.												
DESIGN FILE N:\240037\DWG\Water & Sewer\Stage TC2\240037(TC2)-HUNTLEE-DESIGN.dwg								ALL DIMENSIONS ARE IN METRES U.N.O. DO NOT SCALE			Daly,Smith Pty Ltd			GDA94 M.G.A. ZONE 56 A.H.D.			DISCIPLINE		
Plotted By: glenns Plot Date: 05/06/24 - 13:30 Cad File: N:\240072\DWG\Water & Sewer\STAGE TCR 2 WAC\240037(TCR2)-WAC-404.dwg											240037(TCR2) -			WAC			NUMBER		
											404			REV.					
											2								

240037(TCR2)-WAC-405

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.

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COMPANY ADW Johnson Pty Ltd COMPANY  
 NAME Ewen B. RANDAL NAME  
 SIGNED *E. B. Randal* DATE 06-06-2024 SIGNED DATE  
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

**ORIGIN OF W.A.C. LEVELS**

PM 20029 Co-Ord System: MGA Ground  
 E: 345612.942 MGA Datum: GDA94  
 N: 6382878.917 MGA Zone: 56  
 RL: 77.675

**APPROVED FOR CONSTRUCTION**  
 BY ADW Johnson Pty Ltd  
 Date Approved: 15-09-2320

Point Table				
Point #	Eastings	Northings	Levels	Codes
1	344946.11	6384173.74	58.48	waHYD
2	344938.62	6384152.33	58.40	waHYD
3	344907.11	6384148.92	59.19	waHYD
4	344951.75	6384123.22	58.81	waHYD
5	344946.64	6384091.05	58.42	waHYD
6	344859.88	6384081.47	62.48	waHYD
7	344946.26	6384172.85	58.51	waSV
8	344940.09	6384152.32	58.43	waSV
9	344953.96	6384100.90	58.73	waSV
10	344945.13	6384090.75	58.43	waSV
11	344966.85	6384106.71	58.76	waTAP
12	344966.77	6384107.40	58.84	waTAP
13	344964.07	6384132.55	58.96	waTAP
14	344964.00	6384133.24	58.94	waTAP
15	344962.28	6384147.09	58.85	waTAP
16	344959.57	6384172.42	58.57	waTAP
17	344945.29	6384140.54	59.30	waTAP
18	344946.30	6384131.47	59.36	waTAP
19	344946.30	6384130.92	59.36	waTAP
20	344948.16	6384113.53	59.42	waTAP
21	344948.24	6384113.01	59.43	waTAP
22	344949.22	6384103.99	59.38	waTAP
23	344910.16	6384090.85	59.49	waTAP
24	344899.80	6384089.81	60.01	waTAP
25	344899.01	6384089.65	60.07	waTAP
26	344880.00	6384087.57	61.20	waTAP
27	344879.32	6384087.57	61.26	waTAP
28	344859.93	6384085.44	62.50	waTAP
29	344859.30	6384085.26	62.56	waTAP
30	344846.25	6384083.94	63.41	waTAP
31	344833.35	6384082.70	64.27	waTAP
32	344814.06	6384080.51	65.45	waTAP
33	344813.49	6384080.29	65.57	waTAP
34	344794.21	6384078.30	66.78	waTAP
35	344793.61	6384078.27	66.92	waTAP
36	344752.13	6384092.48	69.35	waTAP
37	344752.86	6384083.38	69.26	waTAP
38	344754.78	6384076.85	68.95	waTAP
39	344756.93	6384047.92	68.68	waTAP
40	344757.14	6384047.12	68.64	waTAP
41	344786.16	6384060.20	67.58	waTAP

Point Table				
Point #	Eastings	Northings	Levels	Codes
42	344805.35	6384062.49	66.30	waTAP
43	344806.23	6384062.53	66.10	waTAP
44	344825.35	6384064.61	64.91	waTAP
45	344826.26	6384064.42	64.70	waTAP
46	344848.07	6384067.09	63.42	waTAP
47	344848.96	6384067.02	63.24	waTAP
48	344870.83	6384069.70	62.00	waTAP
49	344871.88	6384069.60	61.84	waTAP
50	344890.77	6384071.79	60.78	waTAP
51	344891.72	6384071.95	60.58	waTAP
52	344911.46	6384074.08	59.70	waTAP
53	344912.09	6384074.05	59.68	waTAP
54	344952.96	6384069.15	59.41	waTAP
55	344945.65	6384173.65	58.49	waHYDR
56	344938.71	6384151.85	58.40	waHYDR
57	344907.21	6384148.35	59.19	waHYDR
58	344951.23	6384123.16	58.81	waHYDR
59	344946.54	6384091.70	58.44	waHYDR
60	344945.82	6384172.78	58.51	waSVR
61	344940.03	6384151.84	58.42	waSVR
62	344953.39	6384100.86	58.76	waSVR
63	344945.03	6384091.45	58.45	waSVR
64	344966.88	6384106.46	58.78	waTAPR
65	344966.71	6384107.64	58.83	waTAPR
66	344964.07	6384132.28	58.94	waTAPR
67	344963.94	6384133.48	58.96	waTAPR
68	344962.25	6384147.34	58.83	waTAPR
69	344959.60	6384172.15	58.62	waTAPR
70	344945.24	6384140.69	59.38	waTAPR
71	344946.23	6384131.86	59.33	waTAPR
72	344946.39	6384130.63	59.35	waTAPR
73	344948.12	6384113.76	59.44	waTAPR
74	344948.24	6384112.74	59.43	waTAPR
75	344949.27	6384103.86	59.37	waTAPR
76	344910.41	6384090.83	59.53	waTAPR
77	344899.97	6384089.87	60.00	waTAPR
78	344898.80	6384089.68	60.06	waTAPR
79	344880.24	6384087.70	61.24	waTAPR
80	344879.13	6384087.49	61.27	waTAPR
81	344860.28	6384085.51	62.47	waTAPR
82	344859.06	6384085.22	62.52	waTAPR

Point Table				
Point #	Eastings	Northings	Levels	Codes
83	344846.09	6384083.88	63.44	waTAPR
84	344833.03	6384082.63	64.33	waTAPR
85	344814.35	6384080.53	65.50	waTAPR
86	344813.34	6384080.33	65.60	waTAPR
87	344794.53	6384078.35	66.79	waTAPR
88	344793.38	6384078.29	67.09	waTAPR
89	344752.12	6384092.64	69.33	waTAPR
90	344752.88	6384083.53	69.27	waTAPR
91	344754.79	6384076.98	68.95	waTAPR
92	344756.91	6384048.22	68.72	waTAPR
93	344757.14	6384046.86	68.68	waTAPR
94	344786.45	6384060.25	67.60	waTAPR
95	344805.17	6384062.48	66.38	waTAPR
96	344806.54	6384062.51	66.05	waTAPR
97	344825.26	6384064.57	64.93	waTAPR
98	344826.49	6384064.44	64.70	waTAPR
99	344847.93	6384067.05	63.58	waTAPR
100	344849.18	6384067.08	63.25	waTAPR
101	344870.70	6384069.65	62.05	waTAPR
102	344872.09	6384069.60	61.83	waTAPR
103	344890.49	6384071.72	60.79	waTAPR
104	344891.89	6384071.89	60.58	waTAPR
105	344911.17	6384074.10	59.78	waTAPR
106	344912.42	6384074.08	59.65	waTAPR
107	344952.98	6384069.33	59.43	waTAPR
108	344967.43	6384105.24	58.88	seBDYKIT
109	344967.02	6384109.02	58.98	seBDYKIT
110	344964.85	6384131.05	59.16	seBDYKIT
111	344964.32	6384134.98	59.11	seBDYKIT
112	344962.63	6384148.68	58.91	seBDYKIT
113	344960.34	6384170.86	58.80	seBDYKIT
114	344944.97	6384142.03	59.39	seBDYKIT
115	344946.00	6384133.06	59.45	seBDYKIT
116	344946.43	6384129.32	59.52	seBDYKIT
117	344947.80	6384115.18	59.54	seBDYKIT
118	344948.21	6384111.16	59.46	seBDYKIT
119	344949.24	6384102.39	59.47	seBDYKIT
120	344911.62	6384091.80	59.81	seBDYKIT
121	344901.20	6384090.89	60.32	seBDYKIT
122	344897.42	6384090.27	60.35	seBDYKIT
123	344881.31	6384088.60	61.49	seBDYKIT

Point Table				
Point #	Eastings	Northings	Levels	Codes
124	344877.52	6384088.29	61.52	seBDYKIT
125	344861.48	6384086.44	62.72	seBDYKIT
126	344857.68	6384085.99	62.82	seBDYKIT
127	344844.81	6384084.54	63.94	seBDYKIT
128	344831.74	6384083.18	64.64	seBDYKIT
129	344815.55	6384081.44	65.72	seBDYKIT
130	344811.82	6384081.06	66.13	seBDYKIT
131	344795.85	6384079.32	67.00	seBDYKIT
132	344792.09	6384078.81	67.39	seBDYKIT
133	344752.14	6384093.99	69.56	seBDYKIT
134	344753.04	6384085.02	69.42	seBDYKIT
135	344754.16	6384077.06	69.21	seBDYKIT
136	344757.00	6384049.55	68.94	seBDYKIT
137	344757.39	6384045.40	68.91	seBDYKIT
138	344787.72	6384059.81	67.80	seBDYKIT
139	344804.03	6384061.60	66.61	seBDYKIT
140	344807.87	6384061.98	66.17	seBDYKIT
141	344823.98	6384063.69	65.31	seBDYKIT
142	344827.72	6384063.99	64.89	seBDYKIT
143	344846.82	6384066.23	63.93	seBDYKIT
144	344850.53	6384066.75	63.33	seBDYKIT
145	344869.55	6384068.73	62.44	seBDYKIT
146	344873.48	6384069.01	61.99	seBDYKIT
147	344889.39	6384070.83	61.13	seBDYKIT
148	344893.28	6384071.27	60.76	seBDYKIT
149	344909.88	6384073.11	60.07	seBDYKIT
150	344913.75	6384073.53	59.95	seBDYKIT
151	344952.64	6384070.75	59.62	seBDYKIT
152	344944.34	6384174.64	58.47	seFP
153	344944.86	6384170.09	58.56	seFP
154	344937.05	6384150.43	58.44	seFP
155	344905.33	6384147.14	59.28	seFP
156	344943.57	6384092.44	58.48	seFP
157	344944.62	6384172.64	58.52	seSV
158	344907.48	6384147.31	59.25	seSV
159	344947.06	6384147.82	58.73	seSV
160	344946.12	6384092.55	58.46	seSV
161	344752.17	6384093.28	69.54	seTANK201
162	344753.22	6384084.24	69.45	seTANK202
163	344754.36	6384077.58	69.14	seTANK203
164	344792.76	6384078.96	67.50	seTANK204

Point Table				
Point #	Eastings	Northings	Levels	Codes
165	344795.11	6384079.37	67.05	seTANK205
166	344812.57	6384081.16	66.14	seTANK206
167	344814.81	6384081.36	65.74	seTANK207
168	344832.52	6384083.38	64.62	seTANK208
169	344845.47	6384084.70	64.02	seTANK209
170	344858.32	6384086.14	62.89	seTANK210
171	344860.79	6384086.40	62.79	seTANK211
172	344878.33	6384088.37	61.63	seTANK212
173	344880.65	6384088.55	61.54	seTANK213
174	344898.11	6384090.49	60.39	seTANK214
175	344900.56	6384090.76	60.33	seTANK215
176	344910.94	6384091.81	59.86	seTANK216
177	344949.17	6384103.17	59.61	seTANK217
178	344948.14	6384111.98	59.64	seTANK218
179	344947.89	6384114.52	59.70	seTANK219
180	344946.31	6384129.96	59.70	seTANK220
181	344946.07	6384132.42	59.58	seTANK221
182	344945.07	6384141.34	59.51	seTANK222
183	344960.21	6384171.59	58.85	seTANK223
184	344962.68	6384147.97	58.97	seTANK224
185	344964.41	6384134.20	59.17	seTANK225
186	344964.70	6384131.78	59.15	seTANK226
187	344967.15	6384108.31	59.00	seTANK227
188				