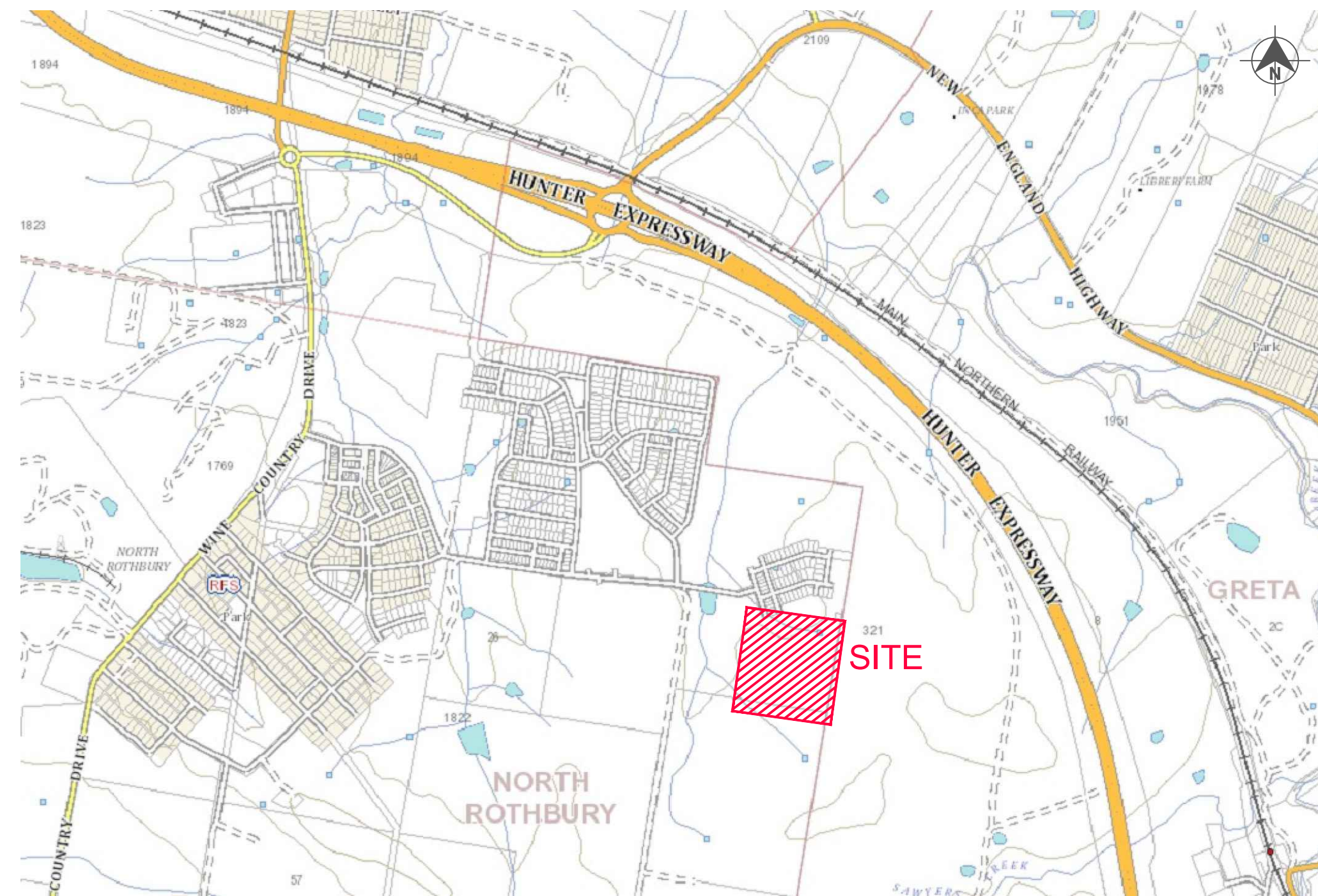




PROPOSED SUBDIVISION STAGE 26 HUNTLEE



LOCALITY SKETCH
NOT TO SCALE

DRAWING INDEX	
Sheet Title	Sheet Description
240037(26)-WAT-001	COVER SHEET, LOCALITY PLAN & DRAWING INDEX
240037(26)-WAT-002	GENERAL NOTES
240037(26)-WAT-003	OVERALL SITE PLAN
240037(26)-WAT-101	POTABLE WATER DETAIL PLAN
240037(26)-WAT-201	RECYCLED WATER DETAIL PLAN
240037(26)-WAT-301	PRESSURE SEWER DETAIL PLAN
240037(26)-WAT-351	FITTINGS TABLE
240037(26)-WAT-401	TYPICAL PIPEWORK TRENCHING DETAILS
240037(26)-WAT-402	TYPICAL SERVICE CONNECTION DETAILS
240037(26)-WAT-403	WASTE WATER COLLECTION TANK LEVEL DETAILS
240037(26)-WAT-404	THRUST BLOCK DETAILS

WORK AS CONSTRUCTED
 THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 28/06/2022 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 MATHEW DAVID LONDON NAME
 SIGNED *mathew* DATE 21/07/2022 SIGNED DATE
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS
 PM: 20029
 E: 345 612.942 Co-Ord System: MGA Ground
 N: 6 382 878.917 MGA Datum: GDA94
 RL: 77.675m MGA Zone: 56

APPROVED FOR CONSTRUCTION
 BY ADW Johnson Pty Ltd
 Date Approved: 25/08/2021

WORK AS CONSTRUCTED

100mm AT FULL SIZE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.	
B	12.08.2021	FOR APPROVAL	G.S.	C.B.	G.S.	C.B.	
0	25.08.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.	
1	07.09.2021	UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE	G.S.	C.B.	G.S.	C.B.	
2	09.09.2021	MAINS ADJUSTMENT ON HEDLEY WAY	G.S.	C.B.	G.S.	C.B.	
3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.	
4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.	

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 ABN 62 129 445 398

altogether.

PROPERTY DESCRIPTION
 PROPOSED SUBDIVISION
 STAGE 26
 HUNTLEE

SURVEYED DALEY SMITH Pty Ltd
 DATUM GDA94 MGA56 - A.H.D.

PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION
 PLAN TITLE COVER SHEET, LOCALITY PLAN & DRAWING INDEX

PROJECT No. 240037(26) DISCIPLINE - WAC - NUMBER 001 REV. 4

PRESSURE SEWER NOTES:

- 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.
- ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS. BUTT FUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE GEORG FISCHER PIPING SYSTEMS BUTT FUSION PRODUCT RANGE. ELECTROFUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE PLASSON "POLYETHYLENE PIPING SYSTEMS" PRODUCT RANGE.
- ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE 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.
- PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 02-2007 AND ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA.
- ALL POLYETHYLENE MAINS ≤ DN200 SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ALL POLYETHYLENE MAINS ≥ DN200 SHALL BE JOINED USING BUTTWELD JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
- MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS. INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED. 600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS. MINIMUM PIPE COVER SHALL BE 800mm IN FOOTWAYS AND 1000mm IN ROADWAYS. MAXIMUM PIPE COVER SHALL 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.
- MAINS WITHIN 2.0m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER REPRESENTATIVE).
- ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 AND WSA-PS351.
- ALL BENDS SHALL BE ELECTROFUSION OR BUTT WELD SWEEP BENDS. FABRICATED BENDS SHALL NOT BE USED IN LIEU. KNUCKLE ELBOWS ARE NOT PERMITTED.
- MINIMUM BENDING RADIUS FOR PN16 PE100 (SDR11) SHALL BE 20 x DN. (i.e. DN400 - R8.0m, DN250 - R5.0m, DN200 - R4.0m, DN160 - R3.2m, DN125 - R2.5m, DN90 - R1.8m, DN75 - R1.5m, DN63 - R1.3m, DN50 - R1.0m, DN40 - R0.8m).
- ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).
- FLUSHING PITS SHALL CONFORM WITH ALTOGETHER STANDARD DRAWINGS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION. SMALL MAINS (≤ DN110) http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017A-FS.pdf LARGE MAINS (> DN110) http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017B-FS.pdf
- LOCALISED DEEPENING OF MAINS MAY BE REQUIRED TO FACILITATE AIR VALVE INSTALLATION. THE CONTRACTOR SHALL ENSURE THAT THE AIR VALVE OFFTAKE IS LOCATED AT A HIGH POINT (NATURAL OR ARTIFICIAL) IN THE MAIN (I.E. MAIN SHALL GRADE DOWNWARDS EITHER SIDE OF THE AIR VALVE).
- DETECTABLE MARKING TAPE SHALL BE LAID ON TOP OF THE PIPE EMBEDMENT MATERIAL BEFORE BACKFILLING AND CONNECTED TO SURFACE FITTINGS.
- ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (I.E. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- DURING CONSTRUCTION, ALL OPEN ENDS OF PIPE SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- ALL VALVES SHALL BE RESILIENT SEATED SLUICE VALVES (CLOCKWISE CLOSING), SHALL BE RESTRAINED IN ACCORDANCE WITH WAT-1207 AND SHALL COMPLY WITH ALTOGETHER STANDARD DRAWING PSS-1015-FS.
- ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 07-2007 VERSION 1.1.
- FOR LOTS WITH TANKS IN THE REAR 1 x ø25mm INSTRUMENTATION CONDUIT (ORANGE) AND 1 x ø25mm ELECTRICAL CONDUIT (ORANGE)(WITH DRAW WIRES) SHALL BE INSTALLED FROM THE COLLECTION TANK TO WATER METERS. THE CONDUITS SHALL BE LAID IN A COMMON TRENCH WITH THE SEWERAGE AND MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 400mm. (REFER TO ALTOGETHER STANDARD DRAWINGS FOR SETOUT DIMENSIONS).
- THE 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.
- UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.
- PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
- BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.
- THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 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.
- 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.
- ALL MAINS (UP TO THE BOUNDARY KIT) SHALL BE PRESSURE TESTED TO 1600 kPa. ALL LINES FROM THE WASTEWATER COLLECTION TANK TO THE MANUAL ISOLATION VALVE WITHIN THE BOUNDARY KIT TO BE PRESSURE TESTED TO 1000kPa.
- ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.
- ROPE OFF ALL PRESSURE SEWER UNITS AND FLUSHING POINTS TO LIMIT DAMAGE DURING CONSTRUCTION.
- PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
- WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A. SUBMISSION CHECKLIST.

POTABLE WATER AND RECYCLED WATER NOTES:

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

GENERAL NOTES:

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

CLEARANCES BETWEEN PIPELINES AND UNDERGROUND SERVICES

UTILITY (EXISTING OR PROPOSED SERVICE)	MINIMUM HORIZONTAL CLEARANCE (mm)		MINIMUM VERTICAL CLEARANCE (mm)
	NEW MAIN SIZE		
	≤ DN200	≥ DN200	
WATER MAINS > DN375	600	60	300
WATER MAINS < DN375	300*	600	150
GAS MAINS	300*	600	150
TELECOMMUNICATION CONDUITS AND CABLES	300*	600	150
ELECTRICITY CONDUITS AND CONDUITS	200	1000	225*
STORMWATER DRAINS	300*	600	150*
SEWERS (GRAVITY)	1000* / 600	1000* / 600	500*
SEWERS (PRESSURE AND VACUUM)	600	600	300*
KERBS	150	600 ⁵	150 (WHERE POSSIBLE)

NOTES:

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

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

WORK AS CONSTRUCTED

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COMPANY ADW Johnson Pty Ltd COMPANY
NAME MATHEW DAVID LONDON NAME
SIGNED *MatheW* DATE 21/07/2022 SIGNED _____ DATE ____/____/____
REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029 Co-Ord System: MGA Ground
E: 345 612.942 MGA Datum: GDA94
N: 6 382 878.917 MGA Zone: 56
RL: 77.675m

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

Date Approved: 25/08/2021

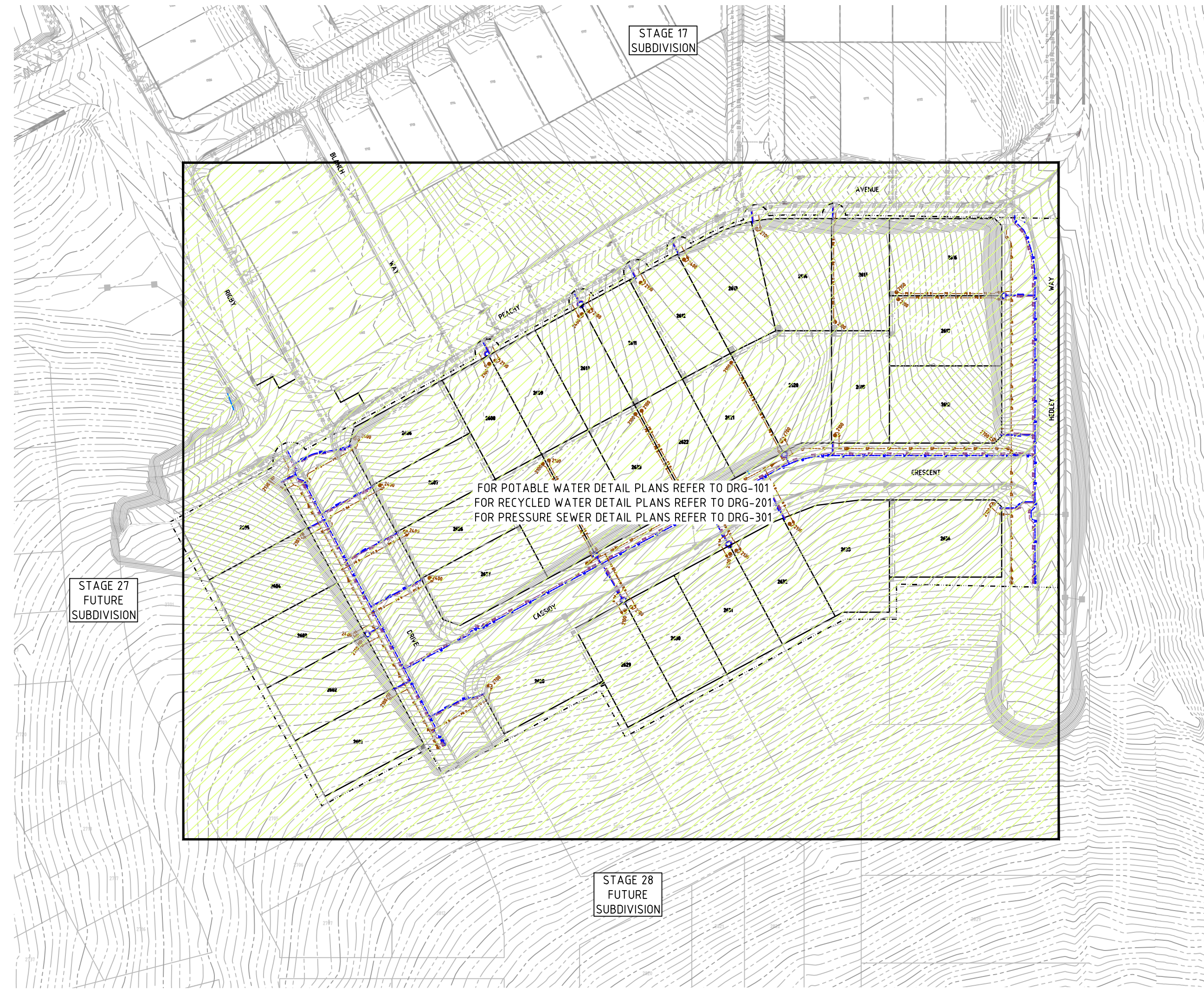
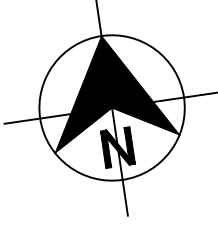
WORK AS CONSTRUCTED

240037(26)-WAC-002

100mm AT FULL SIZE

100mm AT FULL SIZE

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	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@adwjohson.com.au www.adwjohson.com.au ABN 62 129 445 398	PROPOSED SUBDIVISION STAGE 26 HUNTLEE	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	GENERAL NOTES	240037(26)	- WAC -	002	4
B	12.08.2021	FOR APPROVAL	G.S.	C.B.	G.S.	C.B.									
0	25.08.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.									
1	07.09.2021	UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE	G.S.	C.B.	G.S.	C.B.									
2	09.09.2021	MAINS ADJUSTMENT ON HEDLEY WAY	G.S.	C.B.	G.S.	C.B.									
3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.									
4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.									
DESIGN FILE N:\								ALL DIMENSIONS ARE IN METRES. DO NOT SCALE							



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COMPANY ADW Johnson Pty Ltd COMPANY
 NAME MATHEW DAVID LONDON NAME
 SIGNED *mathe* DATE 21/07/2022 SIGNED DATE
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS
 PM 20029
 E: 345 612.942 Co-Ord System: MGA Ground
 N: 6 382 878.917 MGA Datum: GDA94
 RL: 77.675m MGA Zone: 56

APPROVED FOR CONSTRUCTION
 BY ADW Johnson Pty Ltd
 Date Approved: 25/08/2021

WORK AS CONSTRUCTED

PLAN
 SCALE 1:1000

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.	<p>Bar Scale 1: 1000</p>
B	12.08.2021	FOR APPROVAL	G.S.	C.B.	G.S.	C.B.	
0	25.08.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.	
1	07.09.2021	UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE	G.S.	C.B.	G.S.	C.B.	
2	09.09.2021	MAINS ADJUSTMENT ON HEDLEY WAY	G.S.	C.B.	G.S.	C.B.	
3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.	
4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	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

CLIENT

PROPERTY DESCRIPTION

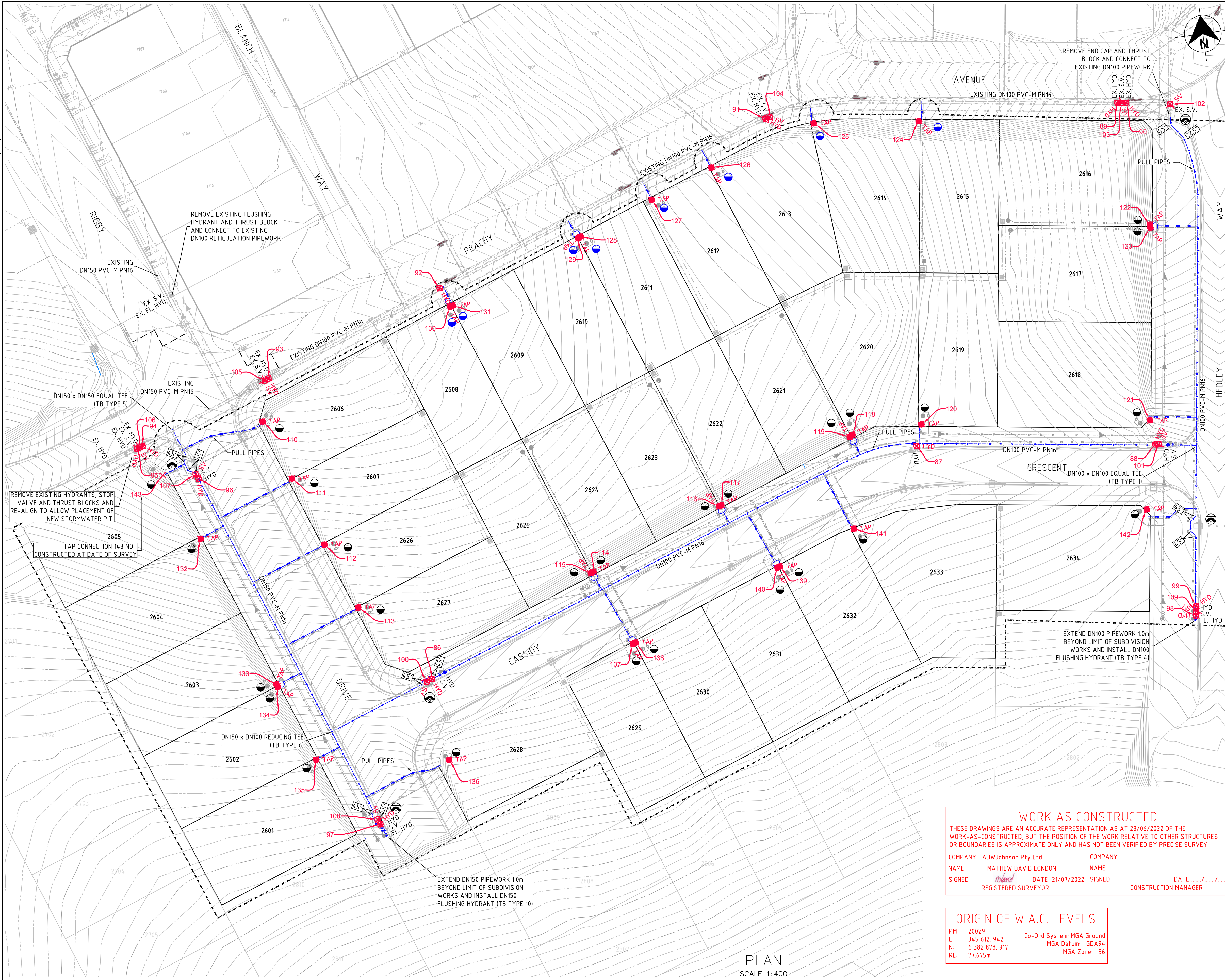
PROPOSED SUBDIVISION
 STAGE 26
 HUNTLÉE

SURVEYED DALEY SMITH Pty Ltd
 DATUM GDA94 MGA56 - A.H.D.

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	OVERALL SITE PLAN		
PROJECT No.	240037(26)	DISCIPLINE	- WAC -
NUMBER	003	REV.	4

240037(26)-WAC-101

100mm AT FULL SIZE



- LEGEND**
- W - PVC-M POTABLE WATER RETICULATION
 - PWS - POTABLE WATER PROPERTY SERVICE
 - RW - PVC-M RECYCLED WATER RETICULATION
 - RWS - RECYCLED WATER PROPERTY SERVICE
 - SP - PE PRESSURE SEWER RETICULATION
 - PS S - PE PRESSURE SEWER PROPERTY SERVICE
 - EX PW - EXISTING POTABLE WATER RETICULATION
 - EX RW - EXISTING RECYCLED WATER RETICULATION
 - EX PS - EXISTING PRESSURE SEWER RETICULATION
 - SW - STORMWATER PIPEWORK
 - * - STOP VALVE
 - - HYDRANT
 - - FLUSHING HYDRANT
 - - PROPERTY SERVICE CONNECTION
 - - PROPERTY SERVICE CONNECTION DENOTES PROPERTY LATERAL TO BE INSTALLED ON EXISTING MAIN. 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).
 - - LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
 - 45° 22.5° - HORIZONTAL FITTING TYPES FOR BENDS IN MAINS
 - - - - - PROPOSED EASEMENT
 - - - - - SUBDIVISION STAGE BOUNDARY

- POTABLE WATER PROPERTY SERVICE CONNECTIONS**
TOTAL 34 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 10 x SHORT SIDE
 - 6 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 7 x SHORT SIDE
 - 2 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN150	PVC-M PN16	104
DN100	PVC-M PN16	300
DN20 (LATERAL)	PE100 PN16	235

- NOTES:**
- LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.
 - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-007 AND 008.
 - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-010 AND 011.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-014.

WORK AS CONSTRUCTED
THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 28/06/2022 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: MATHEW DAVID LONDON
SIGNED: [Signature] DATE: 21/07/2022
REGISTERED SURVEYOR

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

ORIGIN OF W.A.C. LEVELS

PM: 20029
E: 345 612.942
N: 6 382 878.917
RL: 77.675m

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

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd
Date Approved: 25/08/2021

WORK AS CONSTRUCTED

PLAN
SCALE 1:400

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.
B	12.08.2021	FOR APPROVAL	G.S.	C.B.	G.S.	C.B.
0	25.08.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.
1	07.09.2021	UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE	G.S.	C.B.	G.S.	C.B.
2	09.09.2021	MAINS ADJUSTMENT ON HEDLEY WAY	G.S.	C.B.	G.S.	C.B.
3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.
4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.

DESIGN FILE N:\

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

adw Johnson

CLIENT

altogether.

PROPERTY DESCRIPTION

PROPOSED SUBDIVISION
STAGE 26
HUNTLEE

SURVEYED: DALEY.SMITH Pty Ltd
DATUM: GDA94 MGA56 - A.H.D.

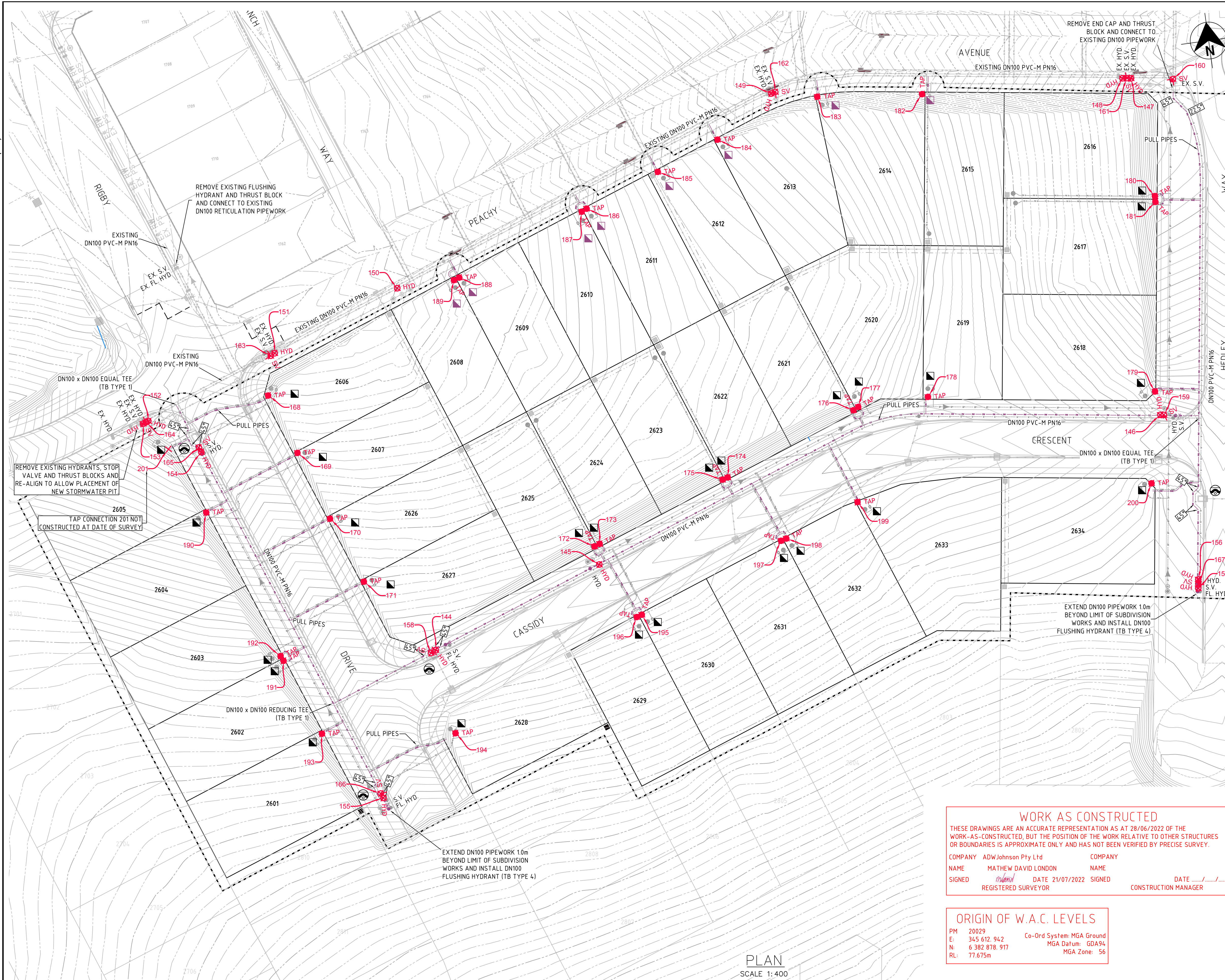
PROJECT: POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION

PLAN TITLE: POTABLE WATER DETAIL PLAN

PROJECT No. 240037(26) - WAC - 101
DISCIPLINE: - WAC -
NUMBER: 101
REV. 4

240037(26)-WAC-201

100mm AT FULL SIZE



- LEGEND**
- RW — RW — PVC-M RECYCLED WATER RETICULATION
 - RWS — RWS — RECYCLED WATER PROPERTY SERVICE
 - PWS — PWS — POTABLE WATER RETICULATION
 - SP — SP — POTABLE WATER PROPERTY SERVICE
 - PS S — PS S — PE PRESSURE SEWER RETICULATION
 - EX RW — EX RW — EXISTING RECYCLED WATER RETICULATION
 - EX PW — EX PW — EXISTING POTABLE WATER RETICULATION
 - EX PS — EX PS — EXISTING PE PRESSURE SEWER RETICULATION
 - SW — SW — STORMWATER PIPEWORK
 - * STOP VALVE
 - HYDRANT
 - FLUSHING HYDRANT
 - PROPERTY SERVICE CONNECTION
- PROPERTY SERVICE CONNECTION DENOTES PROPERTY LATERAL TO BE INSTALLED ON EXISTING MAIN. 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).
- LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- 45° 22.5° HORIZONTAL FITTING TYPES FOR BENDS IN MAINS
- PROPOSED EASEMENT
- SUBDIVISION STAGE BOUNDARY

- RECYCLED WATER PROPERTY SERVICE CONNECTIONS**
- TOTAL 34 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
 - 10 x SHORT SIDE
 - 6 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
 - 7 x SHORT SIDE
 - 2 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN100	PVC-M PN16	410
DN25 (LATERAL)	PE100 PN16	235

- NOTES:**
1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.
 2. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-004 AND 005.
 3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-010 AND 011.
 4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-014.

WORK AS CONSTRUCTED

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COMPANY ADW Johnson Pty Ltd COMPANY
 NAME MATHEW DAVID LONDON NAME
 SIGNED *mathew* DATE 21/07/2022 SIGNED _____ DATE _____
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029
 E: 345 612 942 Co-Ord System: MGA Ground
 N: 6 382 878 917 MGA Datum: GDA94
 RL: 77.675m MGA Zone: 56

APPROVED FOR CONSTRUCTION
 BY ADW Johnson Pty Ltd
 Date Approved: 25/08/2021

WORK AS CONSTRUCTED

PLAN
SCALE 1:400

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.
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3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.
4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

Bar Scale 1:400

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 www.adwjohnson.com.au
 ABN 62 129 445 398

CLIENT

PROPERTY DESCRIPTION

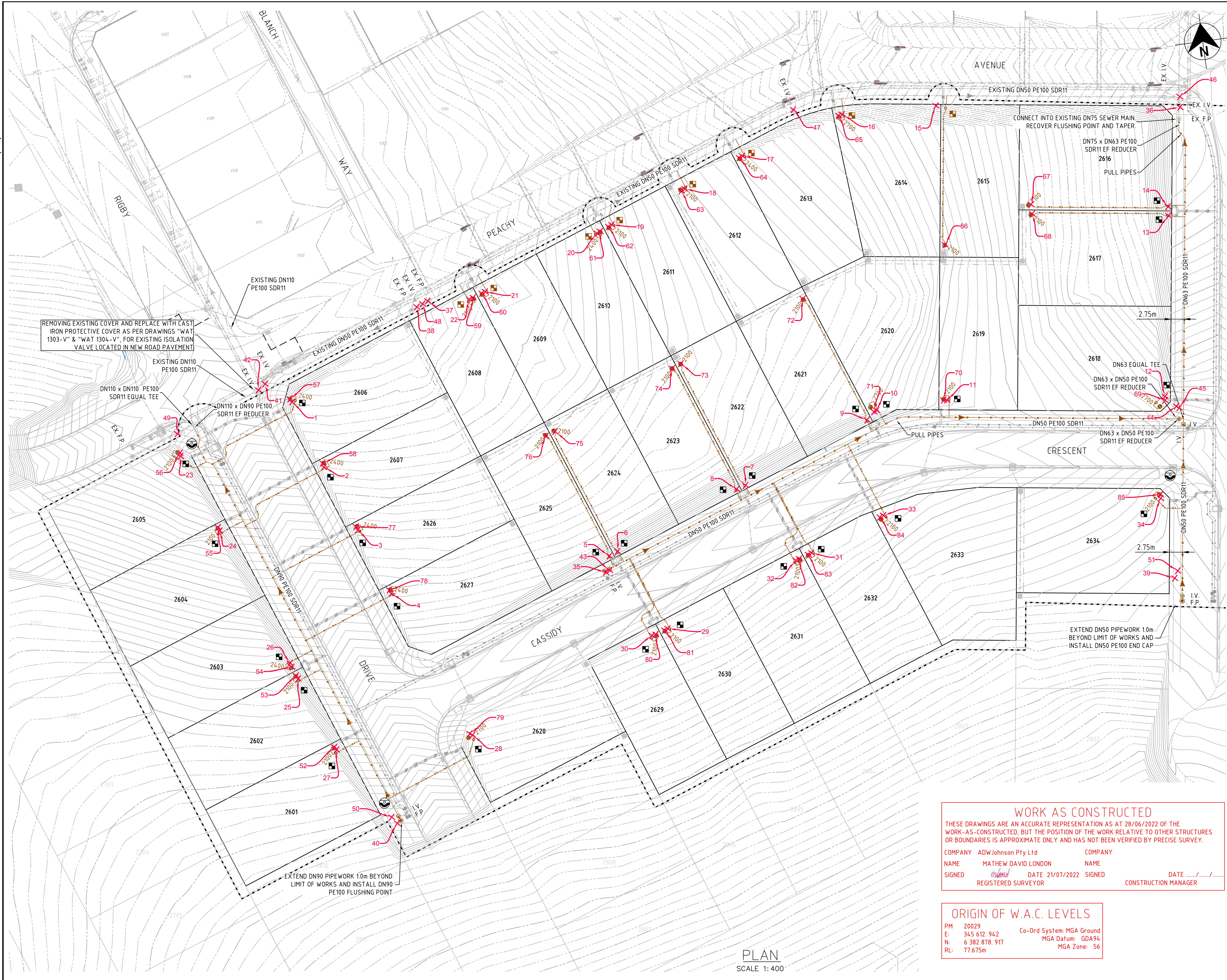
PROPOSED SUBDIVISION
STAGE 26
HUNTLEE

SURVEYED DALEY SMITH Pty Ltd DATUM GDA94 MGA56 - A.H.D.

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	RECYCLED WATER DETAIL PLAN		
PROJECT No.	240037(26)	DISCIPLINE	- WAC -
NUMBER	201	REV.	4

240037(26)-WAC-301

100mm AT FULL SIZE



LEGEND

- SP PE PRESSURE SEWER RETICULATION
- PS S PE PRESSURE SEWER PROPERTY SERVICE
- W PVC-M POTABLE WATER RETICULATION
- PWS POTABLE WATER PROPERTY SERVICE
- RW PVC-M RECYCLED WATER RETICULATION
- RWS RECYCLED WATER PROPERTY SERVICE
- EX PS EXISTING PRESSURE SEWER RETICULATION
- EX PW EXISTING POTABLE WATER RETICULATION
- EX RW EXISTING RECYCLED WATER RETICULATION
- SW STORMWATER PIPEWORK
- IV ISOLATION VALVE
- IV NC ISOLATION VALVE - NORMALLY CLOSED
- FP FLUSHING POINT
- WWT WASTEWATER COLLECTION TANK AND BOUNDARY KIT
- PSD PRESSURE SEWER FLOW DIRECTION (SEE NOTE 7)
- PC PROPERTY SERVICE CONNECTION
- PC-ADV PROPERTY SERVICE CONNECTION. DENOTES PROPERTY LATERAL TO BE INSTALLED ON EXISTING MAIN. 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).
- LV LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
- PE PROPOSED EASEMENT
- SSB SUBDIVISION STAGE BOUNDARY

■ PRESSURE SEWER PROPERTY SERVICE CONNECTIONS
TOTAL 34 CONNECTIONS
• SINGLE SERVICES
-24 x SHORT SIDE
-10 x LONG SIDE

PRESSURE SEWER PIPE DATA

PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN50	PE100 SDR11	165
DN63	PE100 SDR11	63
DN90	PE100 SDR11	101
DN40 (LATERAL)	PE100 SDR11	533

- NOTES:**
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-004 AND 005.
 - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-007 AND 008.
 - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-014.
 - FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1017-FS.
 - FOR FLOW MONITORING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1115-FS.
 - CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.
 - ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).

WORK AS CONSTRUCTED
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COMPANY ADW Johnson Pty Ltd COMPANY
NAME MATHEW DAVID LONDON NAME
SIGNED *mathew* DATE 21/07/2022 SIGNED _____ DATE _____
REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS
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RL: 77.675m MGA Zone: 56

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd
Date Approved: 25/08/2021

WORK AS CONSTRUCTED

PLAN
SCALE 1:400

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.
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4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.

SCALES

Bar Scale 1:400

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adw Johnson

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PROPERTY DESCRIPTION

PROPOSED SUBDIVISION
STAGE 26
HUNTLEE

SURVEYED DALEY.SMITH Pty Ltd
DATUM GDA94 MGA56 - A.H.D.

PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION

PLAN TITLE PRESSURE SEWER DETAIL PLAN

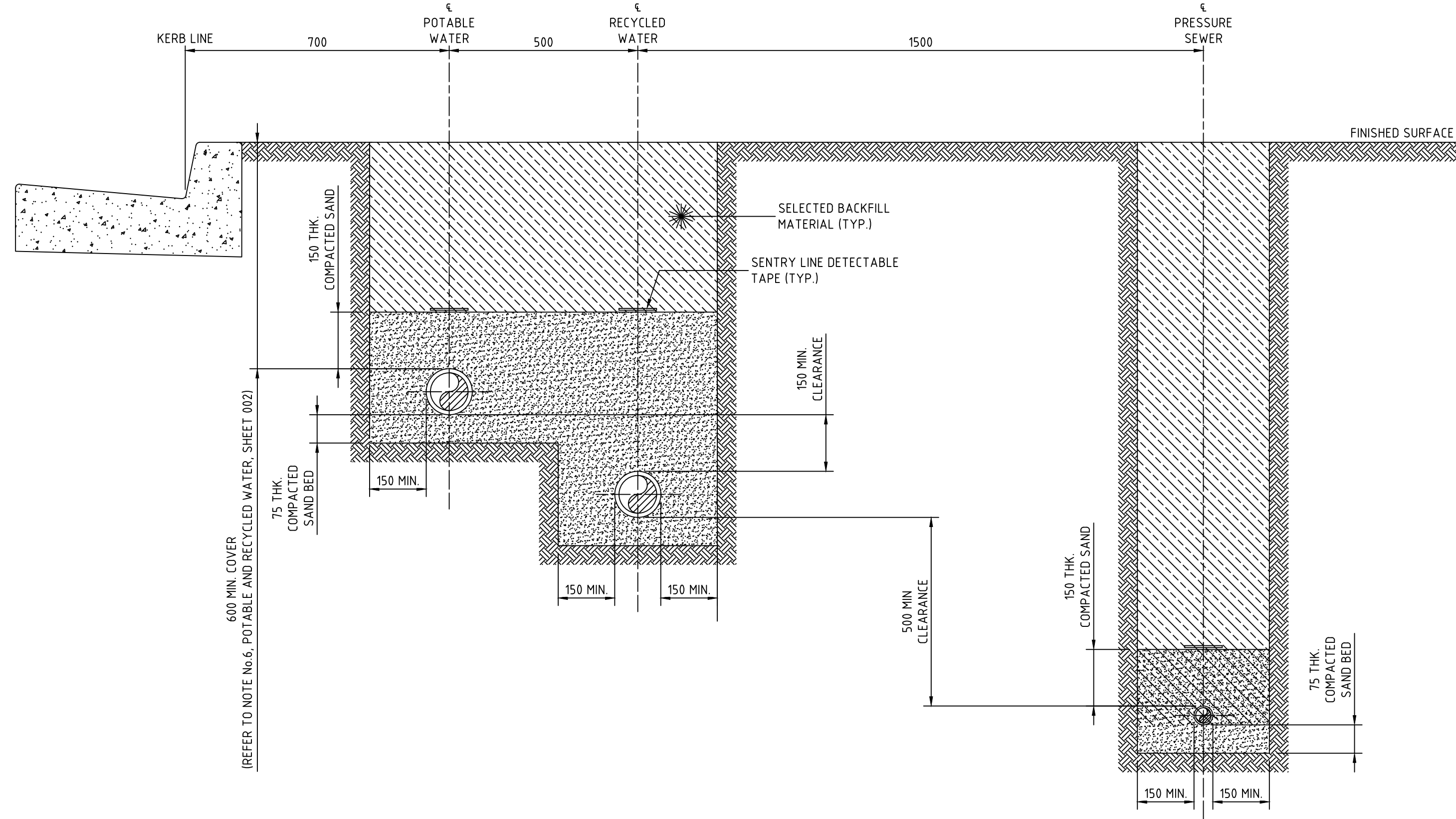
PROJECT No. 240037(26) DISCIPLINE - WAC - NUMBER 301 REV. 4

Point Table				
Point #	Eastings	Northings	Levels	Codes
1	34.6926.18	6383007.40	54.17	seBDYKIT
2	34.6930.90	6382992.99	55.23	seBDYKIT
3	34.6936.10	6382978.97	55.96	seBDYKIT
4	34.694.120	6382964.79	56.62	seBDYKIT
5	34.6987.54	6382966.28	57.45	seBDYKIT
6	34.6989.37	6382966.97	57.43	seBDYKIT
7	34.7017.85	6382976.98	57.82	seBDYKIT
8	34.7015.90	6382976.43	57.85	seBDYKIT
9	34.704.4.94	6382987.02	58.02	seBDYKIT
10	34.704.7.17	6382988.77	58.04	seBDYKIT
11	34.7062.07	6382988.83	58.24	seBDYKIT
12	34.7107.4.3	6382983.25	59.43	seBDYKIT
13	34.7113.4.1	6383020.65	61.53	seBDYKIT
14	34.7113.55	6383022.55	61.48	seBDYKIT
15	34.7068.34	6383050.20	61.28	seBDYKIT
16	34.704.8.61	6383051.13	57.88	seBDYKIT
17	34.7026.72	6383045.39	56.79	seBDYKIT
18	34.7013.81	6383040.25	56.41	seBDYKIT
19	34.6997.65	6383034.93	55.69	seBDYKIT
20	34.6994.34	6383033.57	55.54	seBDYKIT
21	34.6969.46	6383024.69	54.64	seBDYKIT
22	34.6965.97	6383023.56	54.56	seBDYKIT
23	34.6901.49	6382999.40	54.56	seBDYKIT
24	34.6907.4.7	6382982.78	55.62	seBDYKIT
25	34.6919.42	6382949.81	57.37	seBDYKIT
26	34.6918.20	6382953.28	57.27	seBDYKIT
27	34.6925.30	6382933.94	58.26	seBDYKIT
28	34.6953.97	6382933.08	58.50	seBDYKIT
29	34.6997.54	6382949.50	57.96	seBDYKIT
30	34.6994.10	6382948.54	57.98	seBDYKIT
31	34.7029.57	6382961.04	58.09	seBDYKIT
32	34.7026.13	6382959.96	58.03	seBDYKIT
33	34.7045.56	6382966.75	58.23	seBDYKIT
34	34.7103.57	6382962.24	59.35	seBDYKIT
35	34.6986.31	6382962.97	57.47	seFP
36	34.7118.93	6383042.81	61.51	seFP
37	34.6957.25	6383024.44	54.09	seFP
38	34.6954.82	6383023.50	54.01	seFP
39	34.7104.16	6382945.27	59.57	seFP
40	34.6935.81	6382916.94	58.60	seFP
41	34.6921.13	6383011.95	53.64	seSV
42	34.6919.56	6383010.86	53.55	seSV
43	34.6987.17	6382963.30	57.59	seSV
44	34.7109.50	6382980.91	59.53	seSV
45	34.7110.02	6382980.49	59.53	seSV
46	34.7119.20	6383045.04	61.62	seSV
47	34.7038.65	6383053.53	57.84	seSV
48	34.6956.08	6383023.99	54.03	seSV
49	34.6901.49	6383004.15	53.47	seSV
50	34.6934.80	6382918.36	58.43	seSV
51	34.7105.01	6382946.71	59.63	seSV
52	34.6924.99	6382934.57	58.31	seTANK2601
53	34.6919.09	6382950.47	57.43	seTANK2602
54	34.6918.47	6382952.44	57.35	seTANK2603
55	34.6907.22	6382983.52	55.68	seTANK2604
56	34.6901.43	6383000.04	54.57	seTANK2605
57	34.6925.87	6383008.10	54.29	seTANK2606
58	34.6930.79	6382993.81	55.30	seTANK2607
59	34.6966.76	6383023.82	54.75	seTANK2608

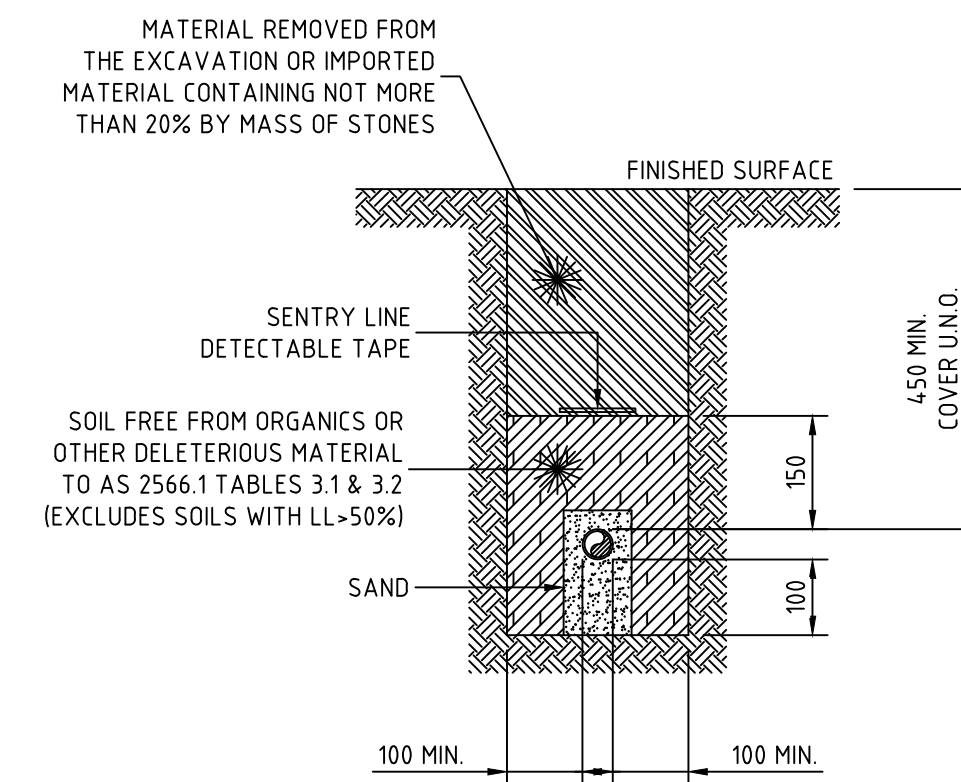
Point Table				
Point #	Eastings	Northings	Levels	Codes
60	34.6968.71	6383024.43	54.74	seTANK2609
61	34.6995.04	6383033.87	55.71	seTANK2610
62	34.6996.92	6383034.60	55.80	seTANK2611
63	34.7013.07	6383039.93	56.56	seTANK2612
64	34.7026.03	6383045.11	56.91	seTANK2613
65	34.7047.87	6383050.98	57.95	seTANK2614
66	34.7066.19	6383021.11	57.98	seTANK2615
67	34.7085.17	6383026.99	59.16	seTANK2616
68	34.7085.17	6383024.97	59.14	seTANK2617
69	34.7107.33	6382982.47	59.47	seTANK2618
70	34.7061.39	6382988.93	58.24	seTANK2619
71	34.7046.62	6382988.53	58.04	seTANK2620
72	34.7035.17	6383014.02	56.67	seTANK2621
73	34.7007.95	6383004.08	56.14	seTANK2622
74	34.7006.05	6383003.34	56.15	seTANK2623
75	34.6979.87	6382993.64	55.61	seTANK2624
76	34.6977.86	6382993.01	55.62	seTANK2625
77	34.6935.84	6382979.68	56.03	seTANK2626
78	34.6940.92	6382965.57	56.69	seTANK2627
79	34.6953.43	6382933.44	58.52	seTANK2628
80	34.6994.89	6382948.65	57.95	seTANK2629
81	34.6996.84	6382949.24	57.95	seTANK2630
82	34.7026.86	6382960.17	58.11	seTANK2631
83	34.7028.82	6382960.78	58.14	seTANK2632
84	34.7044.79	6382966.48	58.30	seTANK2633
85	34.7103.65	6382963.04	59.38	seTANK2634
86	34.6952.48	6382948.94	57.14	waHYD
87	34.7059.23	6382983.03	58.22	waHYD
88	34.7108.51	6382976.50	59.07	waHYD
89	34.7110.55	6383048.06	61.16	waHYD
90	34.7112.36	6383047.80	61.24	waHYD
91	34.7037.49	6383054.92	57.64	waHYD
92	34.6965.35	6383029.40	54.35	waHYD
93	34.6927.40	6383015.66	53.46	waHYD
94	34.6899.46	6383005.38	53.36	waHYD
95	34.6898.24	6383005.15	53.37	waHYD
96	34.6910.08	6382997.02	54.26	waHYD
97	34.6937.65	6382920.47	58.32	waHYD
98	34.7112.02	6382939.93	59.56	waHYD
99	34.7112.29	6382941.88	59.53	waHYD
100	34.6951.38	6382948.52	57.14	waSV
101	34.7109.26	6382976.42	59.11	waSV
102	34.7121.43	6383046.28	61.61	waSV
103	34.7111.46	6383047.93	61.20	waSV
104	34.7038.40	6383055.17	57.70	waSV
105	34.6926.58	6383015.30	53.45	waSV
106	34.6898.83	6383005.14	53.38	waSV
107	34.6909.62	6382998.01	54.19	waSV
108	34.6937.23	6382921.53	58.30	waSV
109	34.7112.15	6382940.86	59.52	waSV
110	34.6924.96	6383006.96	54.09	waTAP
111	34.6929.37	6382994.32	54.84	waTAP
112	34.6934.17	6382979.75	55.70	waTAP
113	34.6939.33	6382965.83	56.42	waTAP
114	34.6988.90	6382966.39	57.42	waTAP
115	34.6988.32	6382966.23	57.38	waTAP
116	34.7016.69	6382976.30	57.83	waTAP
117	34.7017.21	6382976.47	57.79	waTAP
118	34.7046.31	6382987.19	58.01	waTAP

Point Table				
Point #	Eastings	Northings	Levels	Codes
119	34.7045.69	6382986.87	58.04	waTAP
120	34.7060.84	6382987.37	58.37	waTAP
121	34.7108.12	6382981.65	59.33	waTAP
122	34.7113.80	6383021.97	61.55	waTAP
123	34.7113.78	6383021.36	61.52	waTAP
124	34.7069.02	6383050.03	59.21	waTAP
125	34.7047.29	6383052.59	58.04	waTAP
126	34.7024.92	6383046.42	56.88	waTAP
127	34.7011.66	6383041.52	56.32	waTAP
128	34.6995.91	6383035.90	55.66	waTAP
129	34.6995.33	6383035.70	55.65	waTAP
130	34.6967.00	6383025.21	54.53	waTAP
131	34.6967.56	6383025.40	54.57	waTAP
132	34.6908.80	6382984.55	55.43	waTAP
133	34.6920.21	6382952.31	57.19	waTAP
134	34.6920.45	6382951.77	57.18	waTAP
135	34.6926.27	6382935.62	57.77	waTAP
136	34.6953.69	6382931.74	58.14	waTAP
137	34.6995.00	6382950.40	57.68	waTAP
138	34.6995.53	6382950.58	57.67	waTAP
139	34.7027.54	6382962.15	57.95	waTAP
140	34.7027.01	6382961.97	57.94	waTAP
141	34.7043.87	6382967.80	58.13	waTAP
142	34.7104.89	6382963.33	59.21	waTAP
143	34.6902.79	6382998.72	54.30	waTAP
144	34.6952.31	6382949.33	57.15	waHYDR
145	34.6988.52	6382962.26	57.46	waHYDR
146	34.7108.64	6382976.97	59.11	waHYDR
147	34.7112.28	6383047.25	61.24	waHYDR
148	34.7110.53	6383047.51	61.19	waHYDR
149	34.7037.57	6383054.49	57.71	waHYDR
150	34.6954.78	6383025.11	53.98	waHYDR
151	34.6927.61	6383015.23	53.52	waHYDR
152	34.6899.65	6383004.84	53.38	waHYDR
153	34.6898.41	6383004.46	53.39	waHYDR
154	34.6909.61	6382996.94	54.26	waHYDR
155	34.6937.23	6382920.33	58.34	waHYDR
156	34.7111.73	6382941.92	59.54	waHYDR
157	34.7111.46	6382940.09	59.53	waHYDR
158	34.6951.23	6382948.86	57.17	waSVR
159	34.7109.38	6382976.86	59.14	waSVR
160	34.7120.90	6383045.89	61.58	waSVR
161	34.7111.45	6383047.42	61.20	waSVR
162	34.7038.46	6383054.70	57.76	waSVR
163	34.6926.72	6383014.80	53.49	waSVR
164	34.6899.05	6383004.69	53.39	waSVR
165	34.6909.25	6382997.97	54.23	waSVR
166	34.6936.83	6382921.32	58.31	waSVR
167	34.7111.59	6382941.01	59.54	waSVR
168	34.6925.03	6383006.69	54.14	waTAPR
169	34.6929.43	6382994.00	54.77	waTAPR
170	34.6934.25	6382979.48	55.70	waTAPR
171	34.6939.43	6382965.52	56.43	waTAPR
172	34.6988.04	6382966.15	57.42	waTAPR
173	34.6989.18	6382966.52	57.44	waTAPR
174	34.7017.54	6382976.54	57.80	waTAPR
175	34.7016.39	6382976.23	57.83	waTAPR
176	34.7045.42	6382986.77	58.06	waTAPR
177	34.7046.49	6382987.32	58.01	waTAPR

Point Table				
Point #	Eastings	Northings	Levels	Codes
178	34.7061.19	6382987.38	58.33	waTAPR
179	34.7108.21	6382981.94	59.32	waTAPR
180	34.7113.81	6383022.27	61.54	waTAPR
181	34.7113.75	6383021.06	61.54	waTAPR
182	34.7068.69	6383050.02	59.20	waTAPR
183	34.7046.99	6383052.51	58.04	waTAPR
184	34.7025.16	6383046.54	56.88	waTAPR
185	34.7011.90	6383041.60	56.32	waTAPR
186	34.6996.15	6383036.06	55.66	waTAPR
187	34.6995.06	6383035.58	55.64	waTAPR
188	34.6967.87	6383025.51	54.59	waTAPR
189	34.6966.72	6383025.15	54.52	waTAPR
190	34.6908.89	6382984.33	55.45	waTAPR
191	34.6920.56	6382951.50	57.17	waTAPR
192	34.6920.09	6382952.57	57.14	waTAPR
193	34.6926.40	6382935.35	57.75	waTAPR</



STREET PRESSURE MAIN
TYPICAL DETAIL
SCALE 1:10



PRIVATE PROPERTY PRESSURE MAIN
TYPICAL DETAIL
SCALE 1:10

WORK AS CONSTRUCTED
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COMPANY ADW Johnson Pty Ltd COMPANY
NAME MATHEW DAVID LONDON NAME
SIGNED *mathew* DATE 21/07/2022 SIGNED DATE
REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS
PM 20029
E: 345 612.942 Co-Ord System: MGA Ground
N: 6 382 878.917 MGA Datum: GDA94
RL: 77.675m MGA Zone: 56

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd
Date Approved: 25/08/2021

WORK AS CONSTRUCTED

- NOTES:
1. ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.

100mm AT FULL SIZE

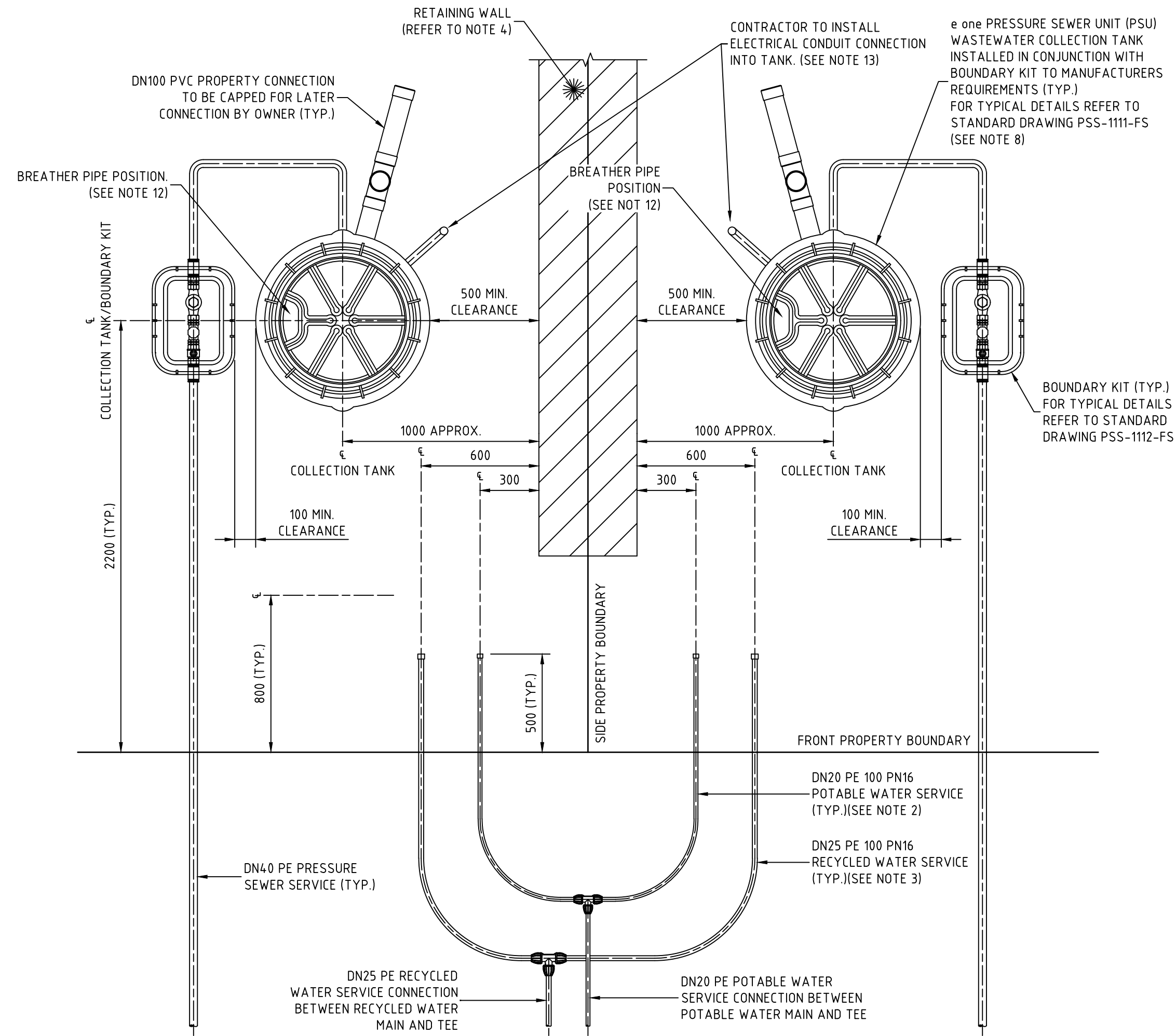
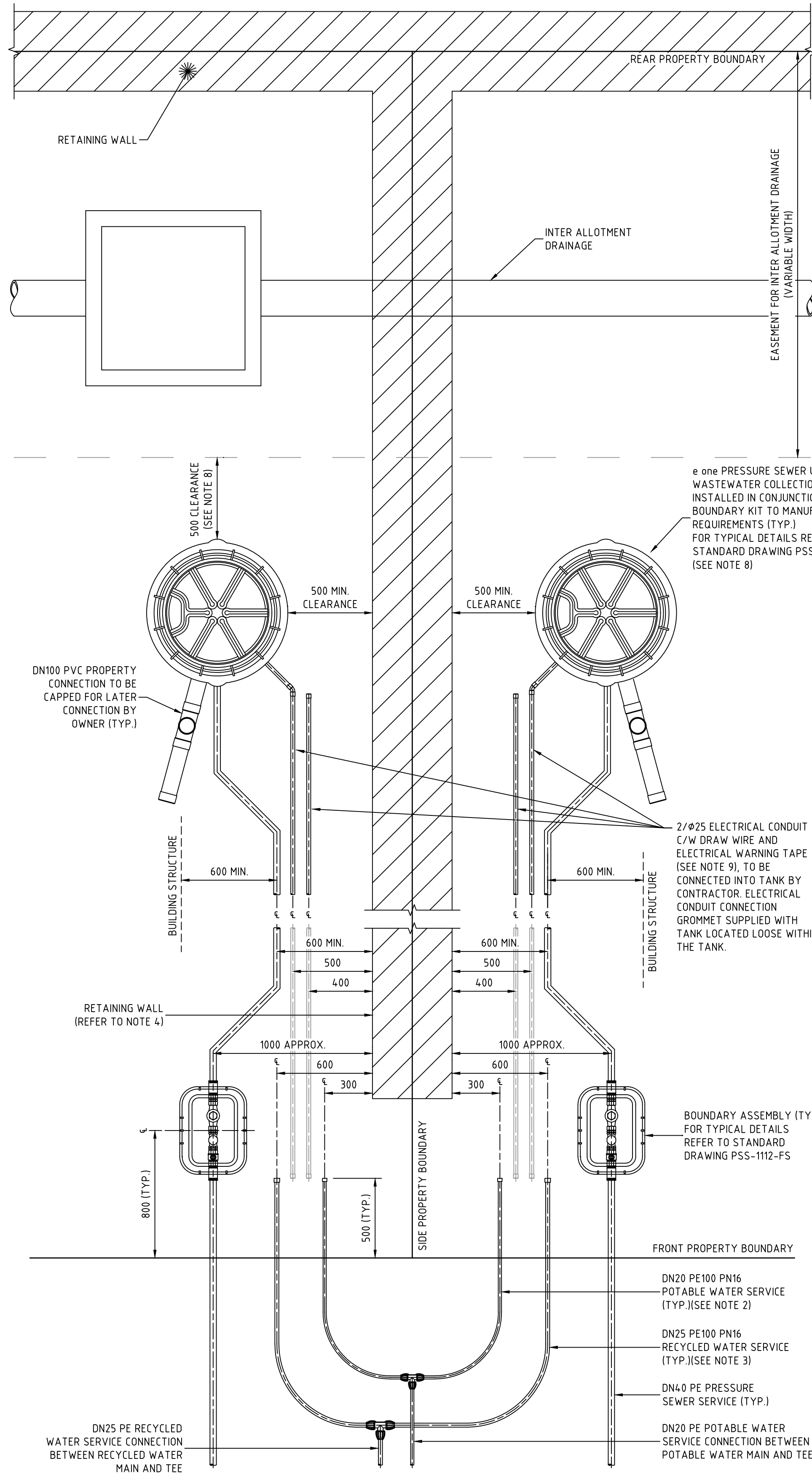
REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.	
B	12.08.2021	FOR APPROVAL	G.S.	C.B.	G.S.	C.B.	
0	25.08.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.	
1	07.09.2021	UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE	G.S.	C.B.	G.S.	C.B.	
2	09.09.2021	MAINS ADJUSTMENT ON HEDLEY WAY	G.S.	C.B.	G.S.	C.B.	
3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.	
4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.	

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www.adwjohnson.com.au
ABN 62 129 445 398

CLIENT
altogether.

PROPERTY DESCRIPTION
PROPOSED SUBDIVISION
STAGE 26
HUNTLEE
SURVEYED DALEY.SMITH Pty Ltd
DATUM GDA94 MGA56 - A.H.D.

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	TYPICAL PIPEWORK TRENCHING DETAILS		
PROJECT No.	DISCIPLINE	NUMBER	REV.
240037(26)	- WAC -	401	4



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 JOINING 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. 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 28/06/2022 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 MATHEW DAVID LONDON NAME
 SIGNED *MatheW* DATE 21/07/2022 SIGNED DATE
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029
 E: 345 612 942 Co-Ord System: MGA GDA94
 N: 6 382 878 917 MGA Datum: GDA94
 RL: 77.675m MGA Zone: 56

APPROVED FOR CONSTRUCTION
 BY ADW Johnson Pty Ltd
 Date Approved: 25/08/2021

WORK AS CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.	0 0.1 0.2 0.3 0.4 A1 / A3
B	12.08.2021	FOR APPROVAL	G.S.	C.B.	G.S.	C.B.	1:10 / 1:20
0	25.08.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.	
1	07.09.2021	UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE	G.S.	C.B.	G.S.	C.B.	0 0.4 0.8 A1 / A3
2	09.09.2021	MAINS ADJUSTMENT ON HEDLEY WAY	G.S.	C.B.	G.S.	C.B.	1:20 / 1:40
3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.	
4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.	

DESIGN FILE N:\
 Plotted By: robertc Plot Date: 29/07/22 - 14:44 Cad File: N:\240072\DWG\Water & Sewer\Stage 26-WAC\240037(26)-WAC-403.dwg

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

CLIENT

PROPERTY DESCRIPTION
 PROPOSED SUBDIVISION
 STAGE 26
 HUNTLEE

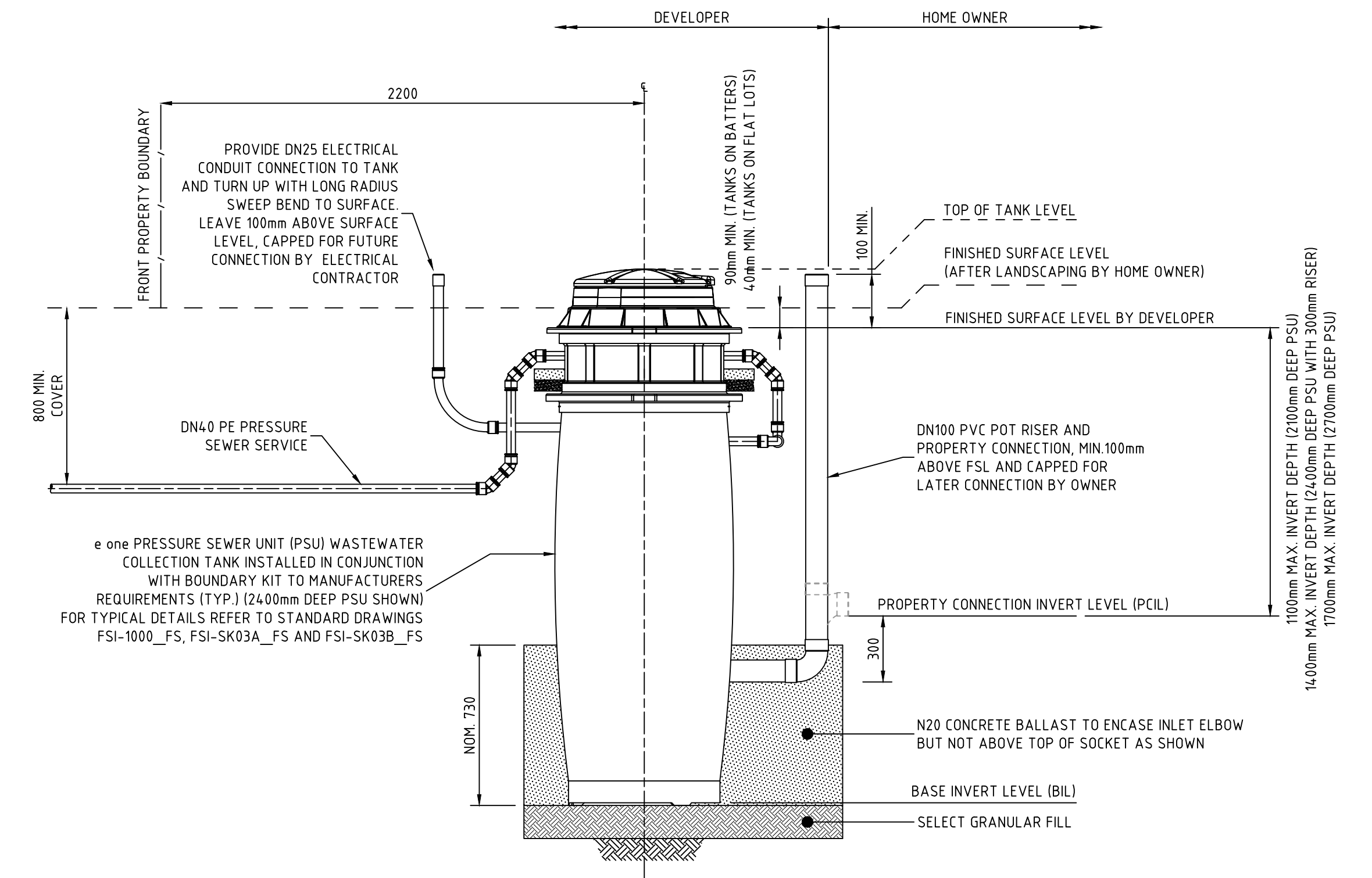
SURVEYED DALEY.SMITH Pty Ltd
 DATUM GDA94 MGA56 - A.H.D.

PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
PLAN TITLE	TYPICAL SERVICE CONNECTION DETAILS		
PROJECT No.	240037(26)	DISCIPLINE	- WAC -
NUMBER	402	REV.	4



WASTEWATER COLLECTION TANK DETAILS

LOT NUMBER	TOP OF TANK	TANK FSL	BASE IL	CONNECTION IL	TANK TYPE	TANK LOCATION	EASTING	NORTHING	TOP OF COLLECTION TANK LID	CALCULATED WAC SANITARY DRAINAGE INVERT LEVEL	WAC V'S DESIGN INVERT LEVEL COMPARISON
2601	58.30	58.17	56.17	57.07	2100	FRONT BATTER	346924.75	6382934.41	58.310	57.00	-0.07
2602	57.43	57.30	55.30	56.20	2100	FRONT BATTER	346918.98	6382950.40	57.430	56.12	-0.09
2603	57.34	57.21	54.91	55.81	2400	FRONT BATTER	346918.31	6382952.29	57.350	55.74	-0.07
2604	55.69	55.56	53.56	54.46	2100	FRONT BATTER	346907.12	6382983.33	55.680	54.37	-0.09
2605	54.54	54.41	52.41	53.31	2100	FRONT BATTER	346901.01	6383000.29	54.570	53.26	-0.05
2606	54.30	54.17	51.87	52.77	2400	FRONT BATTER	346925.84	6383008.08	54.290	52.68	-0.09
2607	55.27	55.14	52.84	53.74	2400	FRONT	346930.97	6382993.84	55.300	53.69	-0.05
2608	54.76	54.63	52.63	53.53	2100	FRONT	346966.82	6383023.55	54.750	53.44	-0.09
2609	54.82	54.69	52.69	53.59	2100	FRONT	346968.70	6383024.23	54.740	53.43	-0.16
2610	55.76	55.63	53.63	54.53	2100	FRONT	346995.04	6383033.72	55.710	54.40	-0.13
2611	55.85	55.72	53.72	54.62	2100	FRONT	346996.93	6383034.40	55.800	54.49	-0.13
2612	56.61	56.48	54.48	55.38	2100	FRONT	347012.92	6383040.16	56.560	55.25	-0.13
2613	56.98	56.85	54.85	55.75	2100	FRONT	347026.09	6383044.91	56.910	55.60	-0.16
2614	57.95	57.82	55.22	56.12	2700	FRONT BATTER	347047.79	6383050.65	57.950	56.04	-0.08
2615	58.05	57.92	55.92	56.82	2100	REAR	347066.10	6383021.04	57.980	56.67	-0.16
2616	59.12	58.99	56.99	57.89	2100	REAR	347084.65	6383026.91	59.160	57.85	-0.05
2617	59.15	59.02	57.02	57.92	2100	REAR	347084.85	6383024.86	59.140	57.83	-0.09
2618	59.44	59.31	56.71	57.61	2700	FRONT	347106.06	6382981.32	59.470	57.56	-0.05
2619	58.27	58.14	56.14	57.04	2100	FRONT	347061.41	6382989.08	58.240	56.93	-0.11
2620	57.55	57.42	54.82	55.72	2700	FRONT	347046.02	6382989.59	58.040	56.13	0.41
2621	56.71	56.58	54.58	55.48	2100	REAR	347035.16	6383013.84	56.670	55.36	-0.12
2622	56.18	56.05	54.05	54.95	2100	REAR	347007.88	6383004.01	56.140	54.83	-0.13
2623	56.15	56.02	54.02	54.92	2100	REAR	347005.99	6383003.33	56.150	54.84	-0.09
2624	55.63	55.50	53.50	54.40	2100	REAR	346979.65	6382993.84	55.610	54.30	-0.10
2625	55.61	55.48	53.48	54.38	2100	REAR	346977.77	6382993.16	55.620	54.31	-0.08
2626	56.02	55.89	53.89	54.79	2400	FRONT	346936.05	6382979.73	56.030	54.42	-0.07
2627	56.67	56.54	54.54	55.44	2400	FRONT	346941.14	6382965.62	56.690	55.08	-0.06
2628	58.51	58.38	56.38	57.28	2400	FRONT	346953.02	6382932.63	58.520	56.91	-0.07
2629	57.95	57.82	55.82	56.72	2100	FRONT	346994.96	6382948.41	57.950	56.64	-0.08
2630	57.94	57.81	55.81	56.71	2100	FRONT	346996.84	6382949.09	57.950	56.64	-0.07
2631	58.11	57.98	55.98	56.88	2100	FRONT	347026.94	6382959.96	58.110	56.80	-0.09
2632	58.12	57.99	55.99	56.89	2100	FRONT	347028.82	6382960.64	58.140	56.83	-0.06
2633	58.31	58.18	56.18	57.08	2100	FRONT	347044.96	6382965.99	58.300	56.99	-0.09
2634	59.43	59.30	57.30	58.20	2100	FRONT	347103.39	6382963.10	59.380	58.07	-0.13



PRESSURE SEWER SERVICE CONNECTION
TYPICAL SECTIONAL ELEVATION
SCALE 1:20

WASTEWATER COLLECTION TANK COUNT

TANK SIZE	NUMBER OF
2100	25
2400	6
2700	3

WORK AS CONSTRUCTED
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 COMPANY: ADW Johnson Pty Ltd
 NAME: MATHEW DAVID LONDON
 SIGNED: [Signature] DATE: 21/07/2022
 REGISTERED SURVEYOR

APPROVED FOR CONSTRUCTION
 BY ADW Johnson Pty Ltd
 Date Approved: 25/08/2021

ORIGIN OF W.A.C. LEVELS
 PM: 20029
 E: 345 612. 942
 N: 6 382 878. 917
 RL: 77.675m
 Co-Ord System: MGA Ground
 MGA Datum: GDA94
 MGA Zone: 56

WORK AS CONSTRUCTED

<table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>AMENDMENT</th> <th>DRAWN</th> <th>CHECK</th> <th>DESIGN</th> <th>VERIFY</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>17.06.2021</td> <td>PRELIMINARY ISSUE</td> <td>G.S.</td> <td>C.B.</td> <td>G.S.</td> <td>C.B.</td> </tr> <tr> <td>B</td> <td>12.08.2021</td> <td>FOR APPROVAL</td> <td>G.S.</td> <td>C.B.</td> <td>G.S.</td> <td>C.B.</td> </tr> <tr> <td>0</td> <td>25.08.2021</td> <td>FOR CONSTRUCTION</td> <td>G.S.</td> <td>C.B.</td> <td>G.S.</td> <td>C.B.</td> </tr> <tr> <td>1</td> <td>07.09.2021</td> <td>UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE</td> <td>G.S.</td> <td>C.B.</td> <td>G.S.</td> <td>C.B.</td> </tr> <tr> <td>2</td> <td>09.09.2021</td> <td>MAINS ADJUSTMENT ON HEDLEY WAY</td> <td>G.S.</td> <td>C.B.</td> <td>G.S.</td> <td>C.B.</td> </tr> <tr> <td>3</td> <td>21.04.2022</td> <td>WORK AS CONSTRUCTED</td> <td>I.B.</td> <td>C.B.</td> <td>G.S.</td> <td>C.B.</td> </tr> <tr> <td>4</td> <td>21.07.2022</td> <td>WORK AS CONSTRUCTED AMENDED</td> <td>I.B.</td> <td>C.B.</td> <td>G.S.</td> <td>C.B.</td> </tr> </tbody> </table>	REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	A	17.06.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.	B	12.08.2021	FOR APPROVAL	G.S.	C.B.	G.S.	C.B.	0	25.08.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.	1	07.09.2021	UPDATED SURFACE CONTOURS AND CIVIL INFRASTRUCTURE	G.S.	C.B.	G.S.	C.B.	2	09.09.2021	MAINS ADJUSTMENT ON HEDLEY WAY	G.S.	C.B.	G.S.	C.B.	3	21.04.2022	WORK AS CONSTRUCTED	I.B.	C.B.	G.S.	C.B.	4	21.07.2022	WORK AS CONSTRUCTED AMENDED	I.B.	C.B.	G.S.	C.B.	<p>0 0.4 0.8 A1 / A3 1:20 / 1:40</p>	<p>Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398</p>	<p>CLIENT</p>	<p>PROPERTY DESCRIPTION</p> <p>PROPOSED SUBDIVISION STAGE 26 HUNTLEE</p>	<p>PROJECT</p> <p>POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION</p>	<p>PLAN TITLE</p> <p>WASTE WATER COLLECTION TANK LEVEL DETAILS</p>	<p>PROJECT No. 240037(26)</p>	<p>DISCIPLINE - WAC -</p>	<p>NUMBER 403</p>	<p>REV. 4</p>
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<p>DESIGN FILE N:\</p>		<p>ALL DIMENSIONS ARE IN METRES. DO NOT SCALE</p>		<p>SURVEYED DALEY SMITH Pty Ltd</p>		<p>DATUM GDA94 MGA56 - A.H.D.</p>		<p>Plotted By: robertc Plot Date: 29/07/22 - 14:44 Cad File: N:\240072\DWG\Water & Sewer\Stage 26-WAC\240037(26)-WAC-403.dwg</p>																																																										

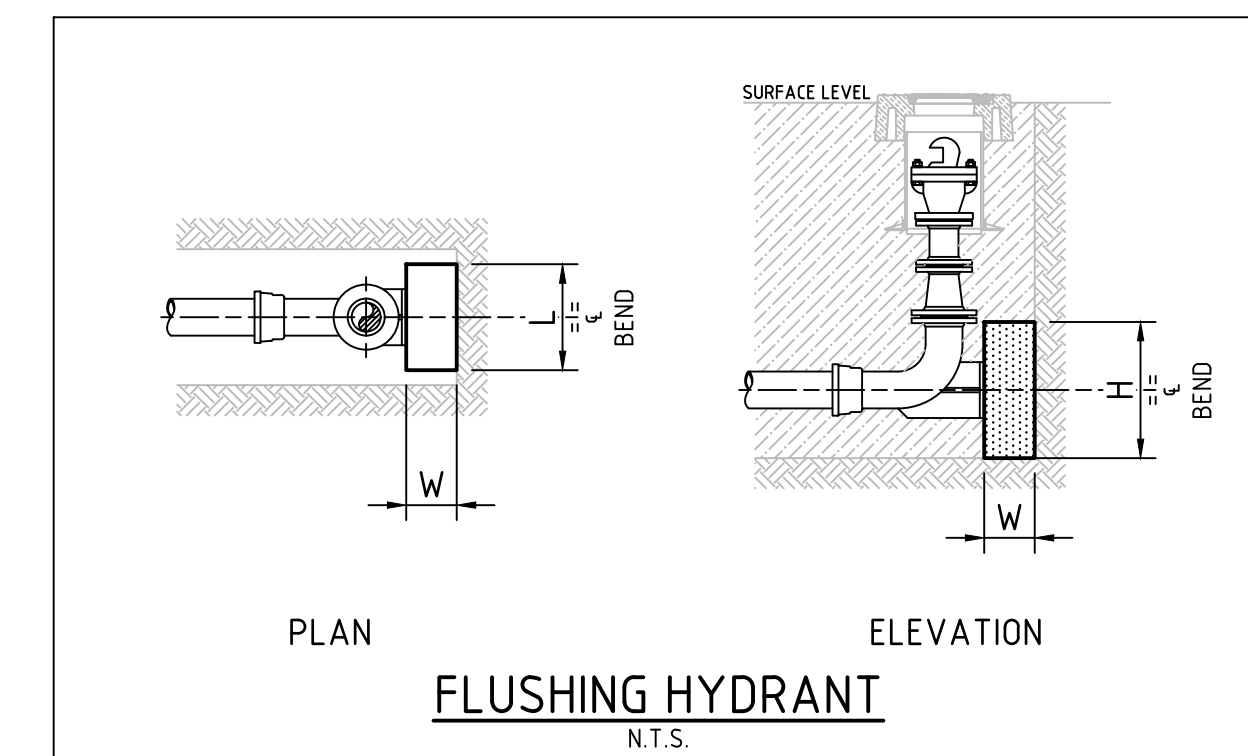
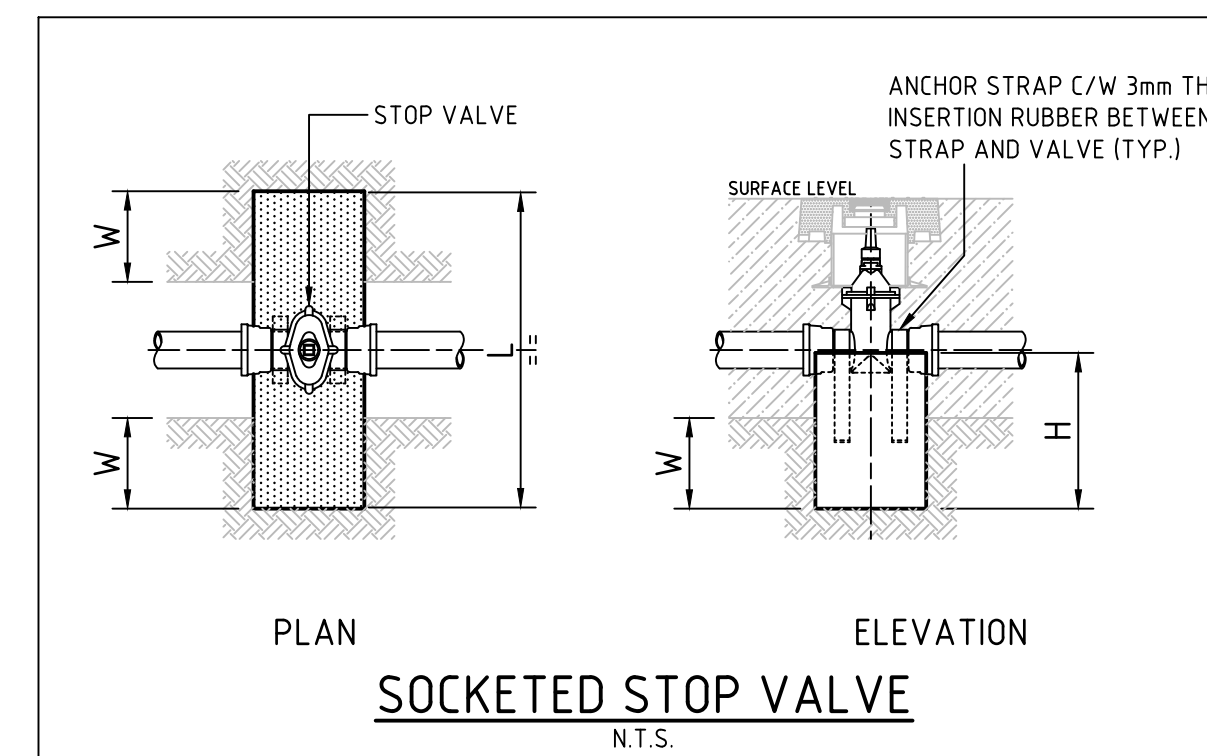
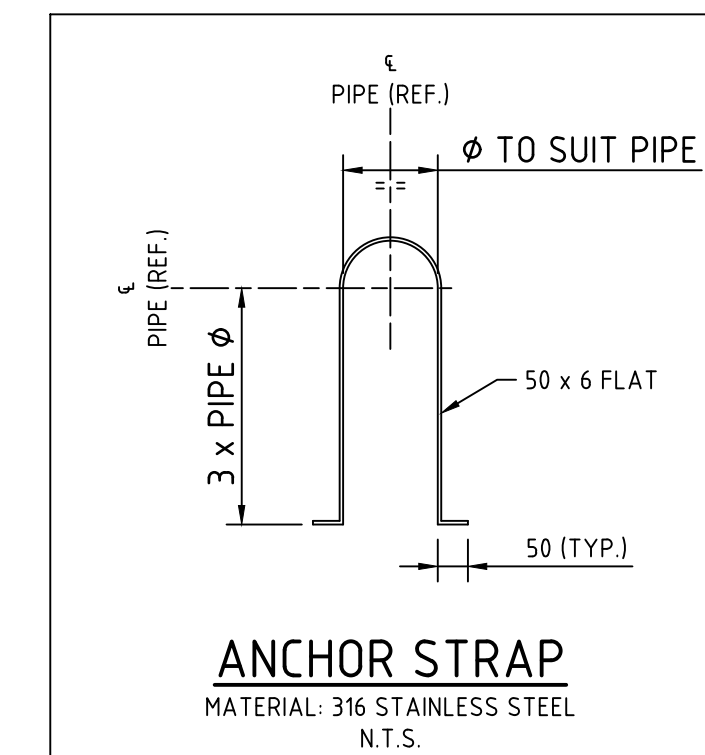
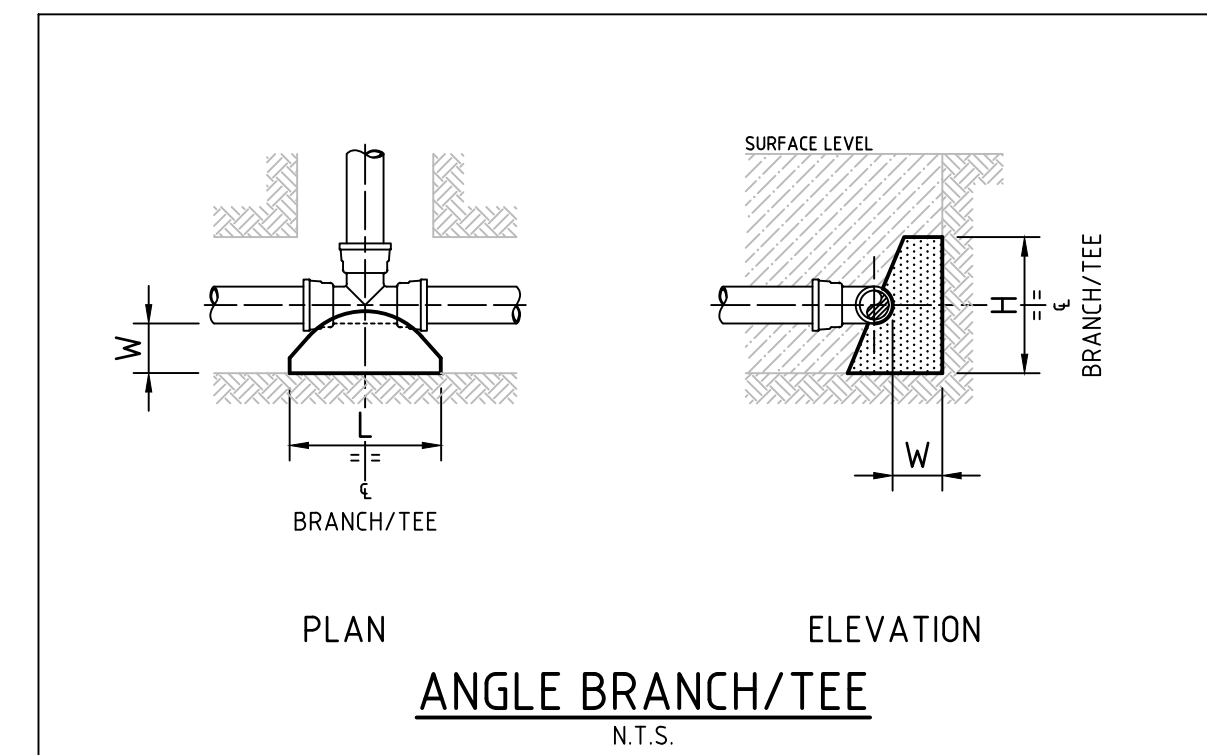


DIAL 1100
BEFORE YOU DIG

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 AHP (kPa)	DESIGN STP (kPa)	THRUST	TA (m ²)	LENGTH (L)	HEIGHT (H)	WIDTH (W)
1	DN100 x DN100 EQUAL TEE	100	1500	18.00	0.18	0.45	0.40	0.30
2	DN100 x 45° HORIZONTAL BEND	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	DN150 x DN150 EQUAL TEE	100	1500	37.50	0.38	0.50	0.75	0.30
6	DN150 x DN100 REDUCING TEE	100	1500	18.00	0.18	0.40	0.45	0.30
7	DN150 x DN100 TAPER	100	1500	19.50	0.20	1.05	0.70	0.30
8	DN150 x 45° HORIZONTAL BEND	100	1500	28.50	0.29	0.45	0.64	0.30
9	DN150 SOCKETED STOP VALVE	100	1500	37.50	0.38	1.05	0.46	0.30
10	DN150 FLUSHING HYDRANT	100	1500	37.50	0.38	0.50	0.76	0.30



WORK AS CONSTRUCTED
 THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 28/06/2022 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 MATHEW DAVID LONDON NAME
 SIGNED *Mathew* DATE 21/07/2022 SIGNED DATE
 REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS
 PM 20029
 E: 345 612 942 Co-Ord System: MGA Ground
 N: 6 382 878 917 MGA Datum: GDA94
 RL: 77.675m MGA Zone: 56

APPROVED FOR CONSTRUCTION
 BY ADW Johnson Pty Ltd
 Date Approved: 25/08/2021

WORK AS CONSTRUCTED

100mm AT FULL SIZE

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adw Johnson
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 Fax: (02) 4978 5199
 email: hunter@adwjohnson.com.au
 www.adwjohnson.com.au
 ABN 62 129 445 398

CLIENT

PROPERTY DESCRIPTION
 PROPOSED SUBDIVISION
 STAGE 26
 HUNTLEE
 SURVEYED DALEY SMITH Pty Ltd
 DATUM GDA94 MGA56 - A.H.D.

PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION
 PLAN TITLE THRUST BLOCK DETAILS
 PROJECT No. 240037(26) DISCIPLINE - WAC - NUMBER 404 REV. 4