

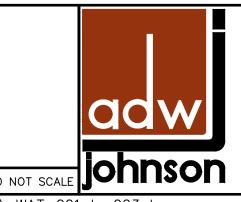
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	А	13.10.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.		
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# PROPOSED SUBDIVISION STAGE 29 HUNTLEE

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240037(29)-WAT-201	RECYCLED WATER DETAIL PLAN – SHEET 1
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240037(29)-WAT-401	TYPICAL PIPEWORK TRENCHING DETAILS
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240037(29)-WAT-404	THRUST BLOCK DETAILS



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PROPERTY DESCRIPTION

PROPOSED SUBDIVISION STAGE 29 HUNTLEE

SURVEYED Daly.Smith Pty Ltd DATUM GDA94 MGA



	CONSTRUCTION ISSUE
	PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION
	PLAN TITLE COVER SHEET, LOCALITY PLAN & DRAWING INDEX
GA56 — A.H.D.	PROJECT No.     DISCIPLINE     NUMBER     REV.       240037(29)     -     WAT -     001     1

$\underline{PR}$	<u>ESSURE SEWER NOTES:</u>	<u>P(</u>	DTABLE W
1.	ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA, PRESSURE SEWERAGE CODE OF AUSTRALIA – WSA 07-2007 VERSION 1.1 AND POLYETHYLENE PIPELINE CODE WSA 01-2004.	1.	ALL WORKS SHA WSA 03-2011-3.1
	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.		POTABLE WATER
	ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO		AUSTRALIAN ST
	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.	ALL SERVICES SH COMMENCEMENT THE CONSTRUCTO CONSTRUCTED ST THE CONTRACTOR
4.	PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 02–2007 AND ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA.	5.	THE CONSTRUCT
	ALL POLYETHYLENE MAINS $\leq$ DN200 SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.	6	TO THE INFRASTI
	ALL POLYETHYLENE MAINS $\geq$ DN200 SHALL BE JOINED USING BUTTWELD JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.	0.	INSTRUCTION NO 600mm HORIZONT
	MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS. INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED.		MINIMUM PIPE CO' WAT-1204-V). MAXIMUM PIPE CO
	600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS. MINIMUM PIPE COVER SHALL BE 800mm IN FOOTWAYS AND 1000mm IN ROADWAYS.		MAIN AS A MINIM THE CONTRACTO
	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	7	PER THE CLEARA
	CLEARANCE TABLE ADJACENT.	7.	ALL RECYCLED W
	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.		WATER MAINS. RECYCLED WATE
8.	MAINS WITHIN 2.0m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER REPRESENTATIVE).	8.	150mm VERTICAL MAXIMUM JOINT (
9.	ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 AND WSA-PS351.	9.	LOCALLY LOWER
	ALL BENDS SHALL BE <u>ELECTROFUSION OR BUTT WELD SWEEP BENDS</u> . FABRICATED BENDS SHALL NOT BE USED IN LIEU. KNUCKLE ELBOWS ARE NOT PERMITTED.	10.	
11.	MINIMUM BENDING RADIUS FOR PN16 PE100 (SDR11) SHALL BE 20 x DN. (i.e. DN400 : R8.0m, DN250 : R5.0m,		GEOTECHNICAL C
	DN200 : R4.0m, DN160 : R3.2m, DN125 : R2.5m, DN90 : R1.8m, DN75 : R1.5m, DN63 : R1.3m, DN50 : R1.0m, DN40 : R0.8m).	11.	DURING CONSTRU
12.	ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).	12.	HYDRANTS, STO
	FLUSHING PITS SHALL CONFORM WITH ALTOGETHER STANDARD DRAWINGS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION.	13.	HYDRANTS MUST FROM EACH BOUN
	SMALL MAINS (≤ DN110) <u>http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017A-FS.pdf</u> LARGE MAINS (> DN110)	14.	THRUST BLOCKS
14.	<u>http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017B-FS.pdf</u> 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	15.	ALL PROPERTY ( REFER TO ALTOG SINGLE SERVICE: DUAL SERVICE:
15.	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	16.	PROPERTY SERV TESTING.
	FITTINGS.	17.	SURFACE FITTING
	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.	18.	ALL MAINS SHAL
	ALL VALVES SHALL BE RESILIENT SEATED SLUICE VALVES (ANTI-CLOCKWISE CLOSING), SHALL BE RESTRAINED IN ACCORDANCE WITH WAT-1207 AND	19.	ALL MAINS SHAL
	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.	21.	THE CONSTRUCTO
	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).	22.	UPON COMPLETIO
	THE CONSTRUCTOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE <u>IN WRITING</u> 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.		PERMISSION OF E PROPERTY. BURIED FITTINGS
	UPON COMPLETION OF WORKS , ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.	24.	ALTOGETHER REF THE CONTRACTOR FITTINGS.
	PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.	25.	MINIMUM NUMBER
	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.		PIPE EMBEDMEN NON-TRAFFICA PIPE EMBEDMEN PROPERTY SER TEST 1 OF EVER TESTING SHALL E
رے.	THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 21.3.4) ARE: <u>TRAFFICABLE</u> PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING.	26.	SURFACE IDENTIF
	NON-TRAFFICABLE     PIPE EMBEDMENT ZONE: NIL   TRENCH FILL ZONE: 1 TEST/900mm OF FILL AND EACH 100 LINEAL METRES OF PIPE.	27.	
	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	28.	ALTOGETHER REG
	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	29.	SUBMISSION CHEC WHERE THE PIPE 100/GRADE%.
28.	TESTED TO 1000KPa. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.		WHERE PIPE GRA EDITION 2014.
	SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.		OGETHER STANDA ps://askus.altoget
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.		
	DATEAMENDMENTDRAWNCHECKDESIGNVERIFYSCALES3.10.2021PRELIMINARY ISSUEG.S.C.B.G.S.C.B.C.B.		
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0	3.06.2022 FOR CONSTRUCTION G.S. C.B. G.S. C.B.		
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# WATER AND RECYCLED WATER NOTES:

ALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA AND 1 (SYDNEY WATER EDITION 2014).

SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.

, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW, SHALL CONFORM TO THE APPROPRIATE CURRENT ANDARDS AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS.

SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO OF ANY WORKS.

TOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY STRUCTURES FOR PROPOSED SERVICES, SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. OR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.

TOR SHALL VERIFY WITH THE SITE SUPERVISOR THE POSITION AND LEVEL OF ALL EXISTING AND PROPOSED BOUNDARIES PERTINENT TRUCTURE INSTALLATIONS.

GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS. DTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED. TAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS.

)VER SHALL BE 600mm IN FOOTWAYS (TYPE B EMBEDMENT: WAT-1202-V) AND 800mm IN ROADWAYS (TYPE L EMBEDMENT:

COVER SHALL GENERALLY BE 1500mm. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 1500mm BUT LESS THAN 2500mm THE 10M SHALL BE EMBEDDED IN STABILISED SAND. OR SHALL ENSURE THAT ALL RECYCLED WATER MAINS AND PRESSURE SEWER MAINS HAVE SUFFICIENT VERTICAL SEPARATION AS ANCE TABLE ADJACENT.

VATERMAINS TO BE BLUE PVC-M (PN16).

WATERMAINS SHALL BE LILAC PVC-M (PN16). N OF POTABLE AND RECYCLED WATER SYSTEMS SHALL BE AS PER TABLE 4.1 WSA03–2011 WITH BOTH SERVICES BEING CLASSIFIED AS

ER MAINS SHALL ALWAYS BE LOWER THAN POTABLE WATER MAINS. L CLEARANCE BETWEEN POTABLE WATER AND RECYCLED WATER MAINS SHALL BE PROVIDED.

DEFLECTIONS TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

R PIPEWORK IN VICINITY OF STOP VALVES TO ENSURE SUFFICIENT COVER IS MAINTAINED OVER VALVES. LOWERING OF PIPEWORK EVED OVER A NUMBER OF PIPE LENGTHS EITHER SIDE OF VALVES TO ELIMINATE ANY SHARP DEFLECTIONS.

NG MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION PS-350, 368 AND 369. CONDITIONS SHOULD BE ASSESSED DURING CONSTRUCTION BY THE CONTRACTOR IN ASSOCIATION WITH THE ALTOGETHER /E TO DETERMINE THE NEED TO MODIFY EMBEDMENT/TRENCHFILL TYPE AND THE NED FOR TRENCH DRAINAGE/BULKHEADS.

CUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.

OP VALVES AND ALL OTHER FITTINGS TO BE THE SAME SIZE AS THE THROUGH WATER MAIN AND ANTI CLOCKWISE CLOSING.

NOT BE INSTALLED IN POTENTIAL DRIVEWAY LOCATIONS. HYDRANTS AND WATER SERVICES SHALL BE NOMINALLY AT LEAST 5.0m JNDARY OR ON BOUNDARIES. WHERE POSSIBLE, FITTINGS SHALL BE LOCATED BEHIND KERB INLET PITS.

S SHALL BE INSTALLED IN ACCORDANCE WITH WAT-1205.

(MAIN TO METER) SERVICE CONNECTIONS SHALL BE CONSTRUCTED STRICTLY IN ACCORDANCE WITH ALTOGETHER REQUIREMENTS. GETHER WEBSITE FOR CURRENT VERSION.

<u>http://information.altogethergroup.com.au/governance/Land\_Housing/WAT-1854-FS.pdf</u> http://information.altogethergroup.com.au/governance/Land\_Housing/WAT-1855-FS.pdf

VICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE ALTOGETHER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE

IGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc. SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.

LL BE PRESSURE TESTED TO 1500kPa IN ACCORDANCE WITH CLAUSE 19.4 OF WSA03-2011 (SYDNEY WATER EDITION 2014).

LL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.

TESTING SHALL BE IN ACCORDANCE WITH WSA 03-2011-3.1(SYDNEY WATER EDITION-2014. CLAUSE 19.7).

TOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING E. CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY R REPRESENTATIVE.

ION OF WORKS , ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO OF WORKS.

ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE

S ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE PRESENTATIVE. OR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED

OF COMPACTION TESTS REQUIRED TO SATISFY WSA03-2011 (SYDNEY WATER EDITION 2014) (CLAUSE 19.3.5) :

INT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING.

ENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/900MM OF FILL AND EACH 100 LINEAL METERS OF PIPE.

rvices ERY 5 PROPERTY SERVICE TRENCHES.

BE IN ACCORDANCE WITH TABLE 16.1 AND 17.1 OF THE WATER SUPPLY CODE OF AUSTRALIA.

FICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER REQUIREMENTS.

NSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER

EQUIREMENTS.

TRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A. ECKLIST.

E GRADE EXCEEDS 5%, TRENCHSTOPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WAT-1209 AND WAT-1210 AT THE SPACING OF

ADES EXCEED 15%, CONCRETE BULKHEADS WILL BE CONSTRUCTED AT SPACING AS PER TABLE 7.5 OF WSA03–2001 SYDNEY WATER

ARD DRAWINGS CAN BE FOUND AT THE FOLLOWING ADDRESS: <u>thergroup.com.au/hc/en-us/articles/900004827263-Standard-drawings-for-land-developers-</u>

# GENERAL NOTES:

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

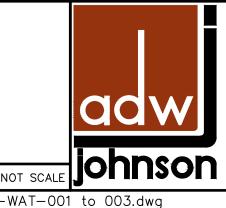
## CLEARANCES BETWEEN PIPELINES AND UNDERGROUND SERVICES

UTILITY	MINIMUM HI CLEARA	MINIMUM VERTICAL		
(EXISTING OR PROPOSED SERVICE)	NEW MA	CLEARANCE (mm)		
	≤ DN200	≥ DN200		
WATER MAINS > DN375	600	60	300	
WATER MAINS < DN375	300 4	600	150	
GAS MAINS	300 4	600	150	
TELECOMMUNICATION CONDUITS AND CABLES	300 4	600	150	
ELECTRICITY CONDUITS AND CONDUITS	200	1000	225 <sup>8</sup>	
STORMWATER DRAINS	300 4	600	150 °	
SEWERS (GRAVITY)	1000 ° / 600	1000 6 / 600	500 °	
SEWERS (PRESSURE AND VACUUM)	600	600	300 <b>°</b>	
KERBS	150	600 <sup>s</sup>	150 (WHERE POSSIBLE)	

NOTES

- CONTAMINATION IN THE EVENT OF A PRESSURE MAIN BREAK.
- 2. WATER MAINS INCLUDES MAINS SUPPLYING BOTH POTABLE AND RECYCLED WATER.
- 600mm WITH THE APPROVAL OF THE WATER AUTHORITY. DE-STABILISED IN THE PROCESS.
- MINIMUM OF 150mm IS REACHED FOR WATER/SEWER < DN200.
- 7. FOR PRESSURE SEWER LATERALS, MINIMUM VERTICAL CLEARANCES MAY BE REDUCED TO 150mm CROSSED.
- 8. AN ADDITIONAL CLEARANCE FROM HIGH VOLTAGE ELECTRICAL INSTALLATIONS SHOULD BE TO BE PROVIDED.
- SEWER).

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



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 29 HUNTLEE

DATUM

PROPERTY DESCRIPTION

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THIS DRAWING SET SHALL BE READ IN CONJUNCTION WITH CESSNOCK CITY COUNCIL STANDARDS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA

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.



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

3. FOR AREAS WITH EXISTING WATER RETICULATION, CLEARANCES CAN BE FURTHER REDUCED TO

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

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

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.

PROVIDING THERE IS NO JOINT IN THE LATERAL WITHIN 500mm OF EITHER SIDE OF THE SERVICE BEING

MAINTAINED ABOVE THE CONDUITS OR CABLES TO ALLOW FOR A PROTECTIVE BARRIER AND MARKING

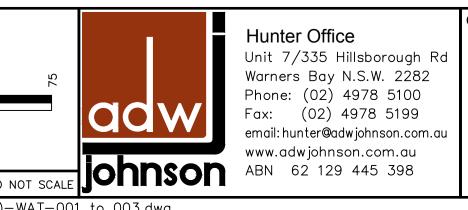
9. WATER MAINS SHOULD ALWAYS CROSS OVER SEWERS AND STORMWATER DRAINS. FOR CASES WHERE THERE IS NO ALTERNATIVE AND THE MAIN MUST CROSS UNDER THE SEWER, THE DESIGN SHALL NOMINATE AN APPROPRIATE PROTECTION TREATMENT (JOINT-FREE IN THE VICINITY OF THE

		CONSTRUCTION ISS	UE
	PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	
	PLAN TITLE		
		GENERAL NOTES	
.56 – A.H.D.	PROJECT No.	DISCIPLINE NUMBER D037(29) - WAT - 002	REV. <b>1</b>



	REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCAL	ES					
	А	13.10.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.							
-	В	22.11.2021	ALTOGETHER COMMENTS	G.S.	C.B.	G.S.	C.B.							
	0	20.12.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.	0	10	20	30	40	50	
-	1	03.06.2022	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.							
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Plotted By: glenns Plot Date: 03/06/22 - 09:46 Cad File: N:\240037\DWG\Water & Sewer\Stage 29 Water and Sewer\240037(29)-WAT-001 to 003.dwg





PROPERTY DESCRIPTION

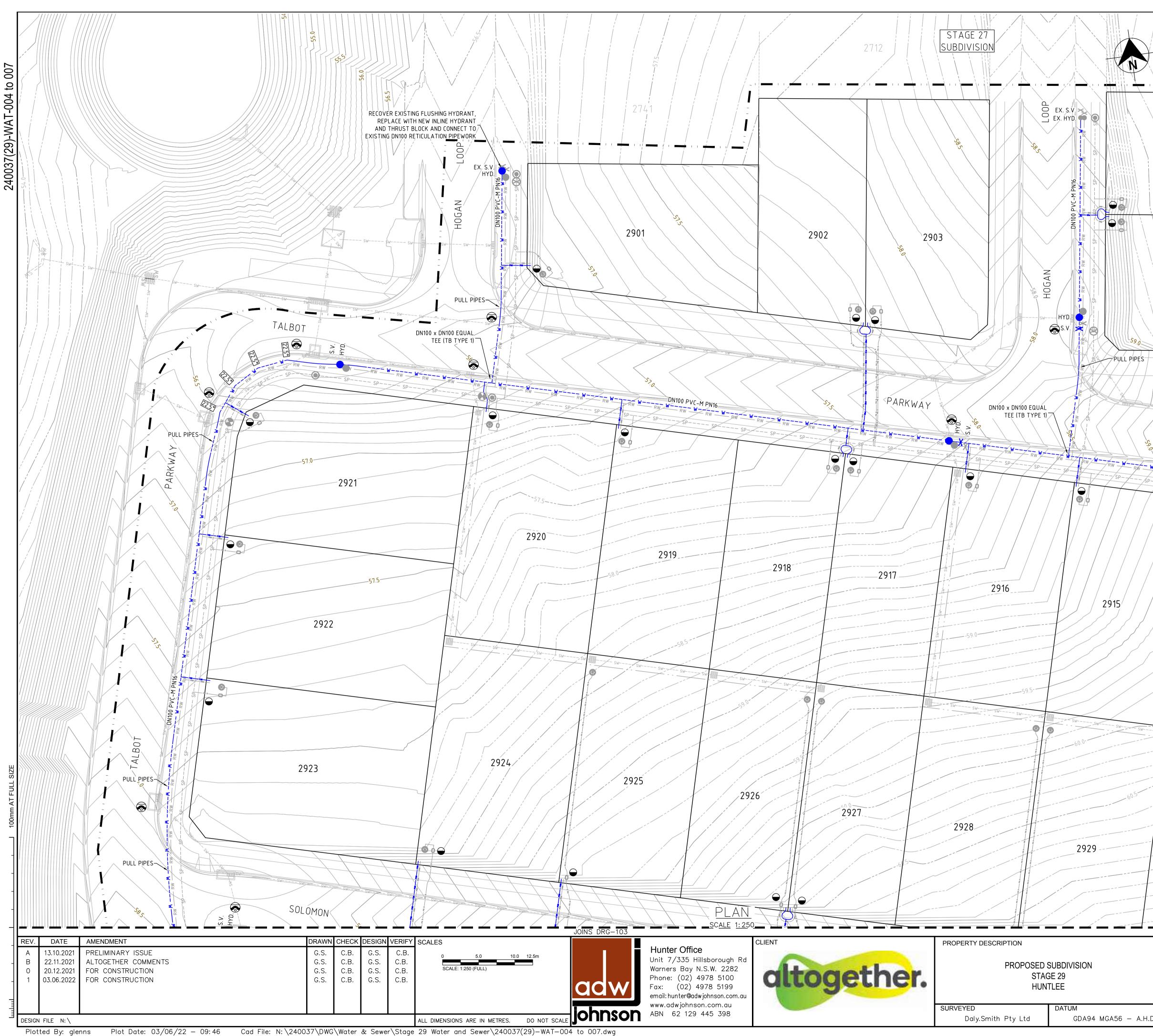
PROPOSED SUBDIVISION STAGE 29 HUNTLEE

GDA94 MGA56

DATUM



		CONSTRUCTION ISSU	JE
	PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	
	PLAN TITLE	OVERALL SITE PLAN	
6 – A.H.D.	PROJECT No.	DISCIPLINE NUMBER 0037(29) - WAT - 003	rev. <b>1</b>





PULL PIPES

———— w——	w
PWS	
RW	- RW
RWS	- RWS
SP	SP
PS S	
EX PW	- EX PW
EX RW	– ex rw—
EX PS	– ex ps—
SW	SW
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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

PROPOSED EASEMENT 

 POTABLE WATER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS • SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V -20 x SHORT SIDE -4 x LONG SIDE
• SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
-5 x SHORT SIDE
-4 x LONG SIDE

POTABLE WATER PIPE DATA						
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)				
DN150	PVC-M PN16	130				
DN100	PVC-M PN16	612				
DN20 (LATERAL)	PE100 PN16	236				

NOTES:

1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.

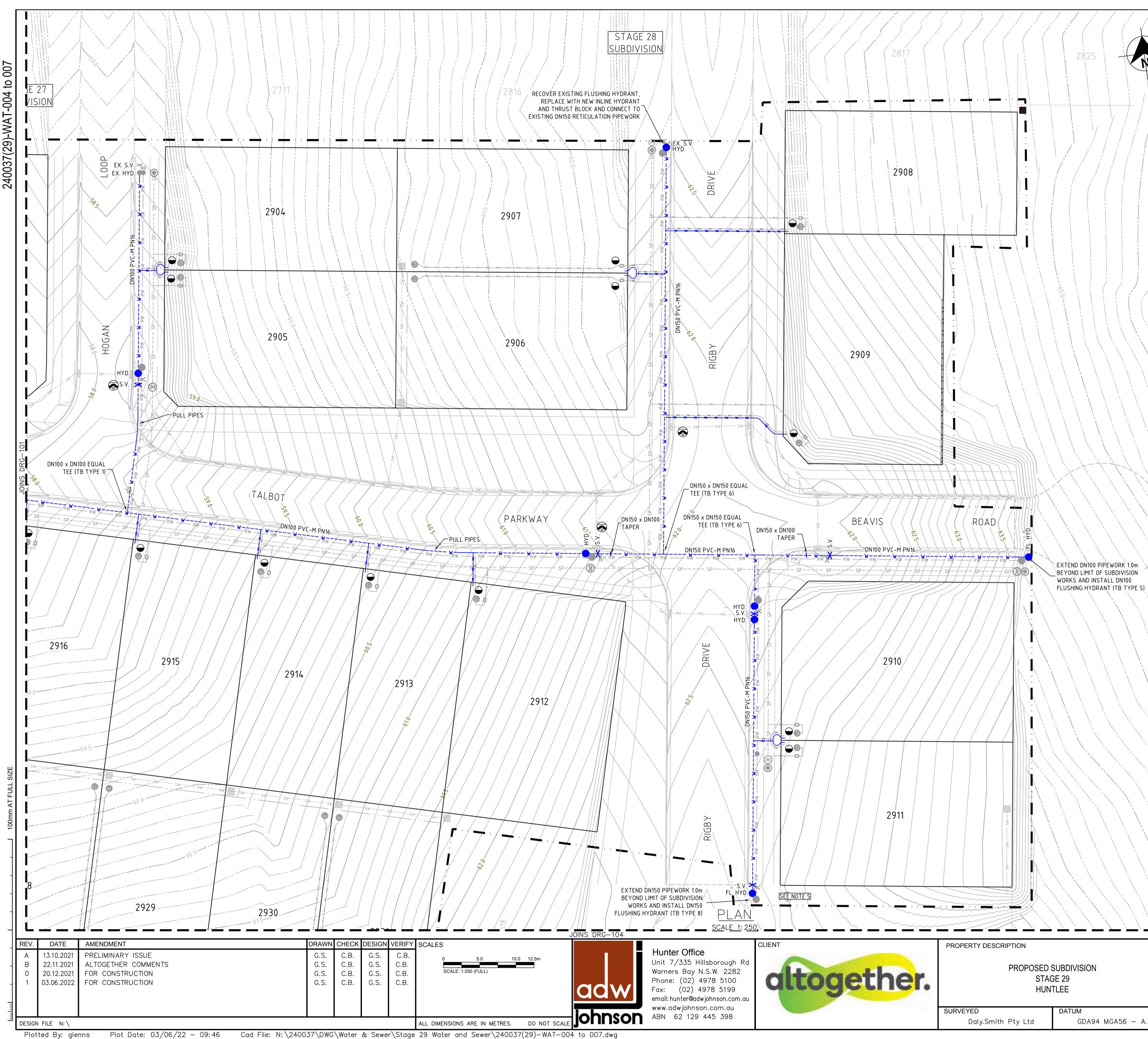
- 2. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 TO 204.
- 3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
- 4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.

5. IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN FROM ALTOGETHER REPRESENTATIVE.

 	CONSTRUCTION ISSUE
PROJECT	POTABLE WATER, RECYCLED WATER AND
	PRESSURE SEWER RETICULATION
PLAN TITLE	
	POTABLE WATER DETAIL PLAN - SHEET 1

	PROJECT No.	DISCIPLINE	NUMBER	REV.
GA56 — A.H.D.	240037(29)	– WAT –	101	1







w	w
PWS	PWS
——— RW —	RW
——— RWS —	
SF	SP
—— PS S—	PS S
EX PW	EX PW
EX RW	EX RW
— EX PS—	EX PS
SV	v sw
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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

PROPOSED EASEMENT 

 POTABLE WATER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS • SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V -20 x SHORT SIDE

-4 x LONG SIDE
• SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
-5 x SHORT SIDE
-4 x LONG SIDE

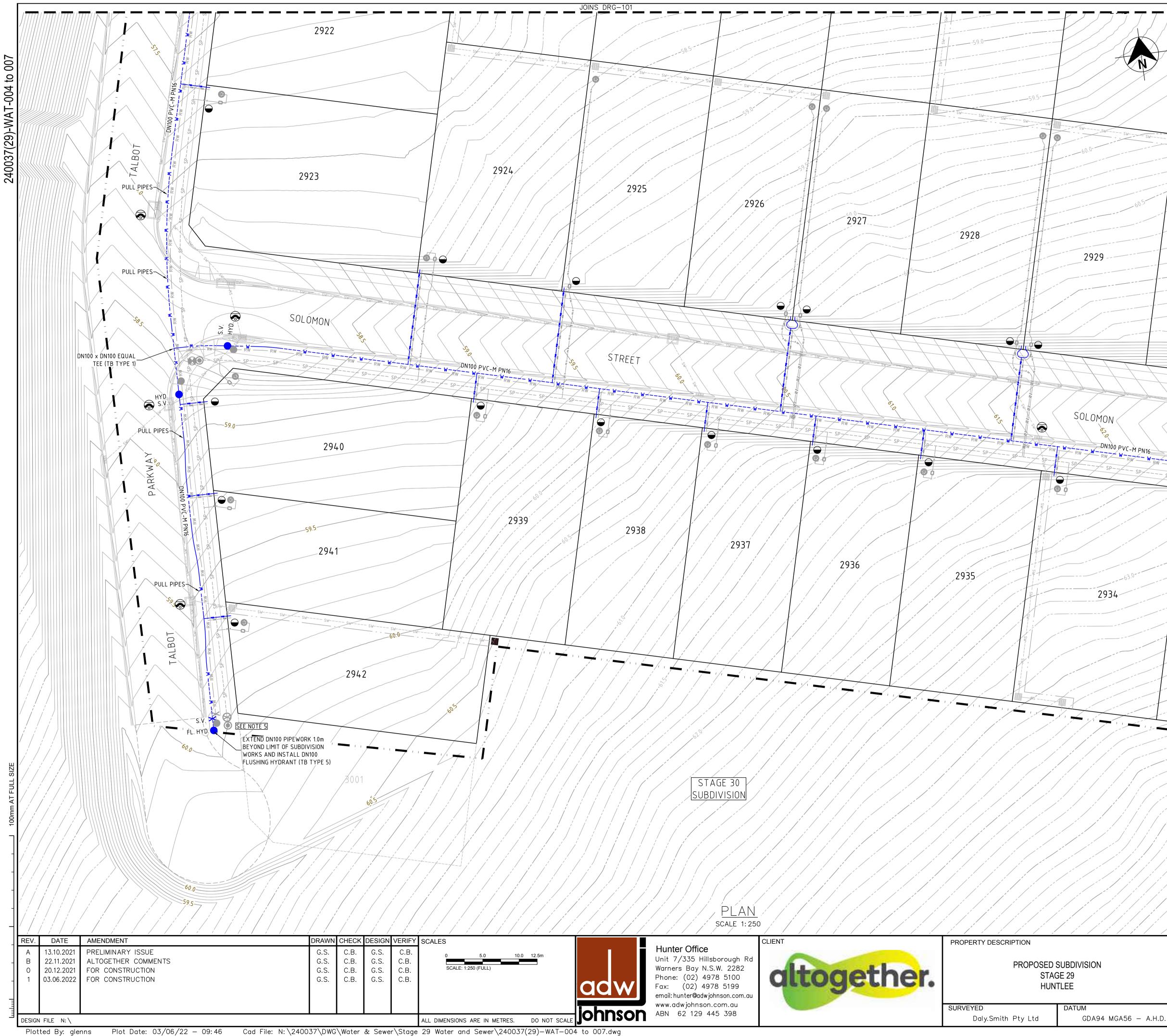
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POTABLE WATER PIPE DATA				
PIPE SIZE (mm) PIPE MATERIAL TOTAL LENGTH (m)				
DN150	PVC-M PN16	130		
DN100	PVC-M PN16	612		
DN20 (LATERAL)	PE100 PN16	236		

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 204.
- 3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER
- TO DRGS-301 TO 304. 4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.
- 5. IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN FROM ALTOGETHER REPRESENTATIVE.

		CONSTRUCTION ISSUE
	PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION
	PLAN TITLE	POTABLE WATER DETAIL PLAN
		- SHEET 2
456 — A.H.D.	PROJECT №. <b>24(</b>	DISCIPLINE NUMBER REV. D037(29) - WAT - 102 1



Plotted By: glenns



## <u>LEGEND</u>

w	w —
PWS	PWS
RW	RW
RWS	RWS —
SP	sp
PS S	- PS S ——
EX PW	- EX PW
EX RW	- ex rw
EX PS	- EX PS
SW	sw
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 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

PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

 POTABLE WATER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS • SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V -20 x SHORT SIDE -4 x LONG SIDE
• SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
-5 x SHORT SIDE
-4 x LONG SIDE

POTABLE WATER PIPE DATA				
PIPE SIZE (mm) PIPE MATERIAL TOTAL LENGTH (m)				
DN150	PVC-M PN16	130		
DN100	PVC-M PN16	612		
DN20 (LATERAL)	PE100 PN16	236		

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 204.
- 3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
- 4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.

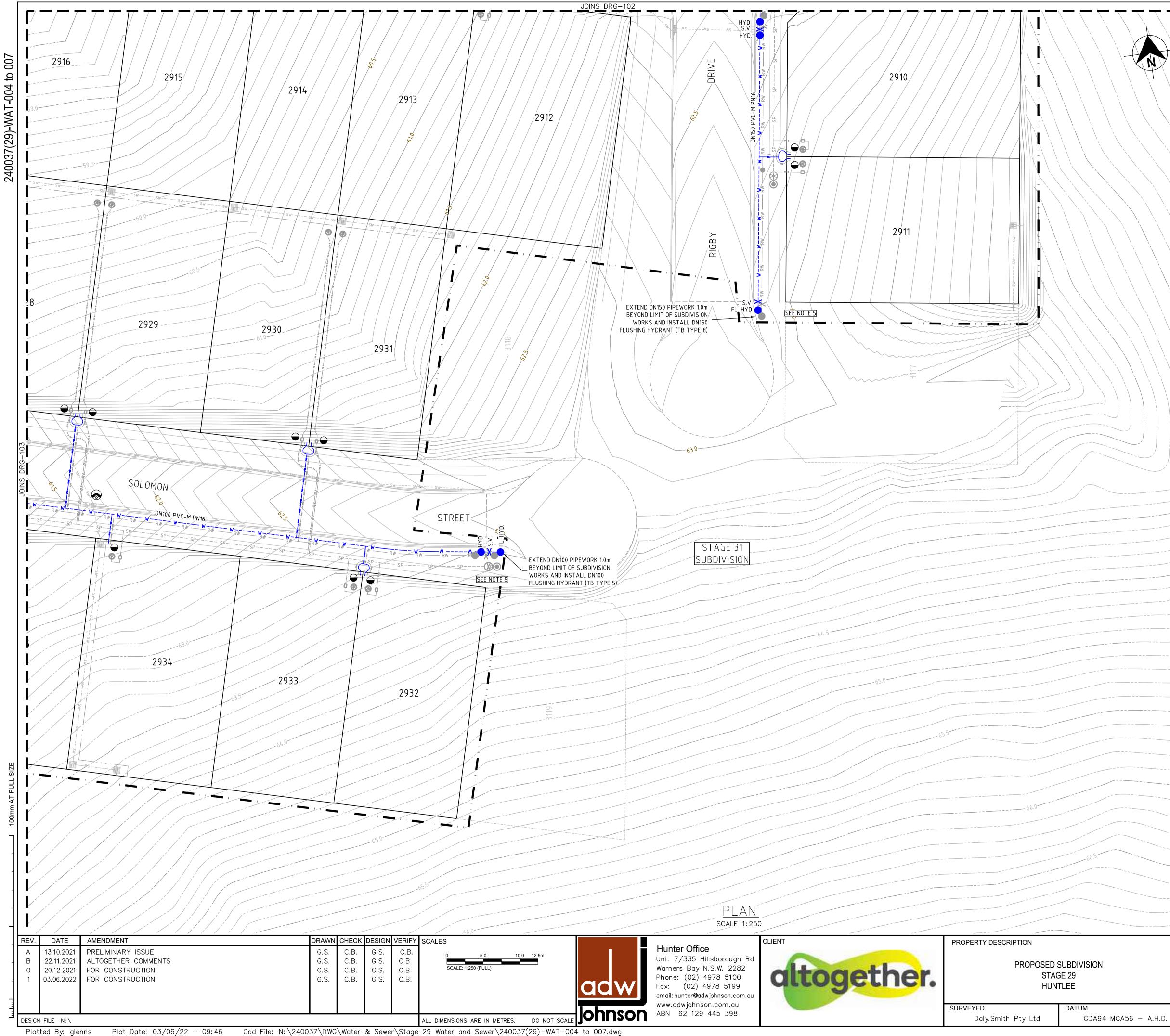
5. IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN FROM ALTOGETHER REPRESENTATIVE.

103

	CONSTRUCT	ion issl	je
PROJECT	POTABLE WATER, RECYCLED PRESSURE SEWER RETIO		
PLAN TITLE			
	POTABLE WATER DE - SHEET 3	TAIL PLAN	
PROJECT No.	DISCIPLINE	NUMBER	REV.

– WAT –

240037(29)





w	w
PWS	- PWS
RW	- RW
RWS	- RWS
SP	SP-
PS S	— PS S —
EX PW	— EX PW—
EX RW	— EX RW—
EX PS	— EX PS—
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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

PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

POTABLE WATER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS
SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V -20 x SHORT SIDE
4 x LONG SIDE
SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V -5 x SHORT SIDE
4 x LONG SIDE

POTABLE WATER PIPE DATA				
PIPE SIZE (mm) PIPE MATERIAL TOTAL LENGTH (m)				
DN150	PVC-M PN16	130		
DN100	PVC-M PN16	612		
DN20 (LATERAL)	PE100 PN16	236		

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 204.
- 3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-301 TO 304.
- 4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.

IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN FROM ALTOGETHER REPRESENTATIVE.

 	CONSTRUCTIO	on Issl	je
PROJECT	POTABLE WATER, RECYCLED PRESSURE SEWER RETICU		
PLAN TITLE			
	POTABLE WATER DET. - SHEET 4	AIL PLAN	
PROJECT No.	DISCIPLINE	NUMBER	REV.

– WAT –

104

240037(29)





RW -		- RW
RWS	- RWS -	RWS
w		w w -
PWS	– PWS –	PWS
	SP	SP
PS S-		– PS S ——
EX RW-		- EX RW
EX PW-		- EX PW
EX PS-		– EX PS
	sw	sw
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PVC-M RECYCLED WATER RETICULATION RECYCLED WATER PROPERTY SERVICE PVC-M POTABLE WATER RETICULATION POTABLE WATER PROPERTY SERVICE PE PRESSURE SEWER RETICULATION PE PRESSURE SEWER PROPERTY SERVICE EXISTING RECYCLED WATER RETICULATION EXISTING POTABLE 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

PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

RECYCLED WATER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS • SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V -20 x SHORT SIDE

-4 x LONG SIDE • SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V -5 x SHORT SIDE

RECYCLED WATER PIPE DATA

TOTAL LENGTH (m)

727

242

PIPE MATERIAL

PVC-M PN16

PE100 PN16

1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH

2. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO

3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO

4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO

5. IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN FROM ALTOGETHER REPRESENTATIVE.

POTABLE WATER, RECYCLED WATER AND

PRESSURE SEWER RETICULATION

DISCIPLINE

RECYCLED WATER DETAIL

PLAN - SHEET 1

– WAT –

CONSTRUCTION ISSUE

NUMBER

201

REV.

1

-4 x LONG SIDE

PIPE SIZE (mm)

DN100

DN25 (LATERAL)

NOTES:

240037(29)

WITH STORMWATER PIT.

DRGS-101 TO 104.

DRGS-301 TO 304.

DRG-402.





Plot Date: 03/06/22 - 09:46 Cad File: N:\240037\DWG\Water & Sewer\Stage 29 Water and Sewer\240037(29)-WAT-009 to 012.dwg



#### <u>LEGEND</u>

RW -		RW
RWS	– RWS –	
w	——— W	w -
PWS	– PWS –	PWS
	SP	SP
—— PS S-		- PS S ——
EX RW-		ex rw
EX PW-		EX PW
EX PS-		ex ps
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PVC-M RECYCLED WATER RETICULATION RECYCLED WATER PROPERTY SERVICE PVC-M POTABLE WATER RETICULATION POTABLE WATER PROPERTY SERVICE PE PRESSURE SEWER RETICULATION PE PRESSURE SEWER PROPERTY SERVICE EXISTING RECYCLED WATER RETICULATION EXISTING POTABLE 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

----- PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

RECYCLED WATER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS • SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V -20 x SHORT SIDE

-4 x LONG SIDE • SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V

RECYCLED WATER PIPE DATA

TOTAL LENGTH (m)

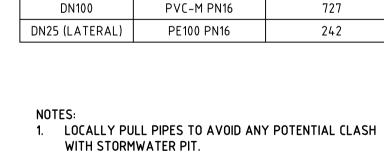
727

242

PIPE MATERIAL

- -5 x SHORT SIDE

- -4 x LONG SIDE

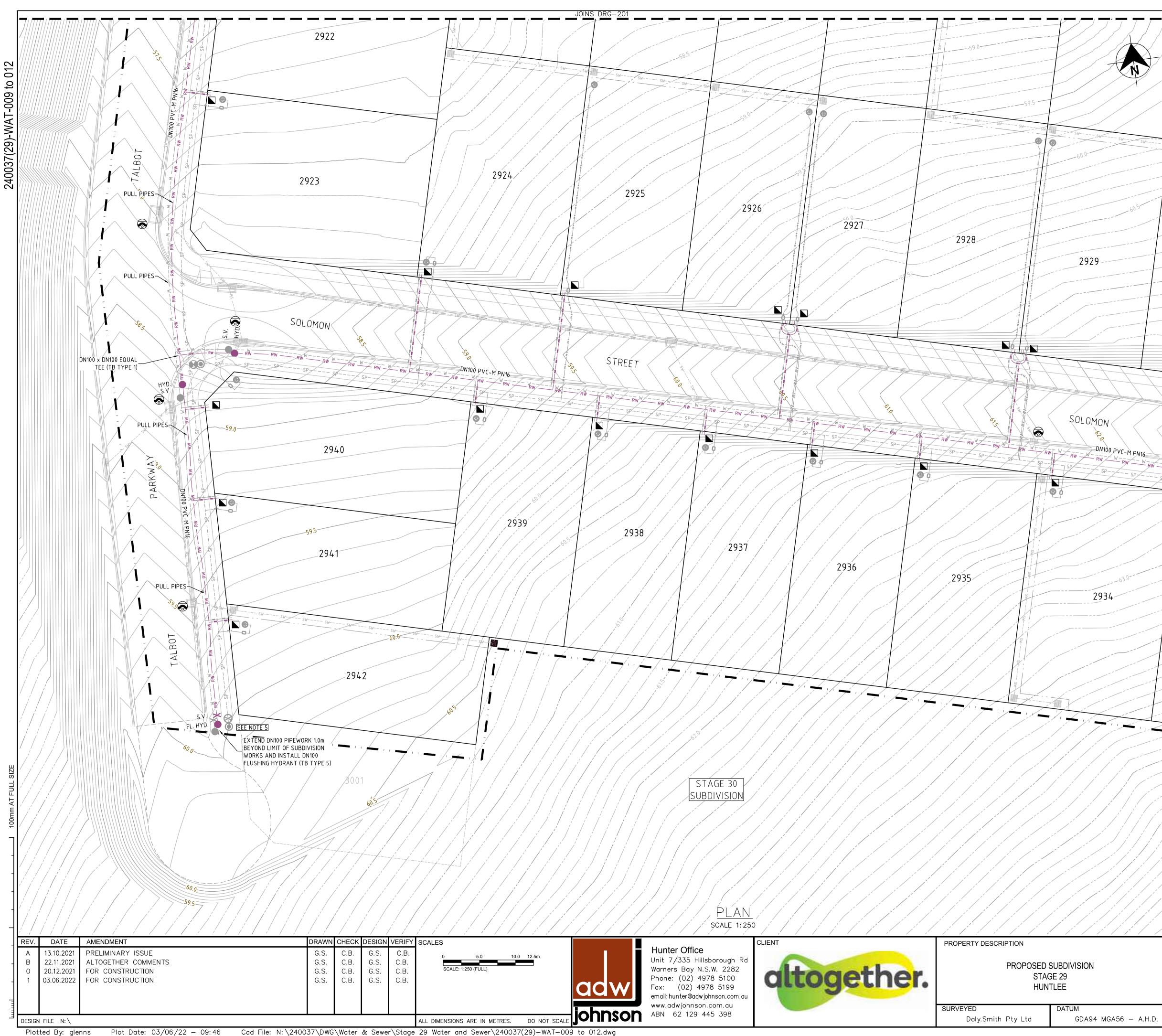


PIPE SIZE (mm)

2. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO

- DRGS-101 TO 104.
- 3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO
- DRGS-301 TO 304. 4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO
- DRG-402. 5. IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN FROM ALTOGETHER REPRESENTATIVE.

		CONSTRUCTION ISSU	
	PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	
	PLAN TITLE	RECYCLED WATER DETAIL PLAN - SHEET 2	
56 – A.H.D.	PROJECT №. <b>24(</b>	DISCIPLINE NUMBER 1037(29) - WAT - 202	rev. <b>1</b>



Plot Date: 03/06/22 - 09:46 Cad File: N: \240037 \DWG \Water & Sewer \Stage 29 Water and Sewer \240037(29) - WAT - 009 to 012.dwg



#### <u>LEGEND</u>

		- RW
RWS	– RWS –	RWS
w	v	/ w -
PWS	– PWS –	PWS
	SP	SP
—— PS S-		- PS S ——
EX RW-		EX RW
EX PW-		EX PW
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PVC-M RECYCLED WATER RETICULATION RECYCLED WATER PROPERTY SERVICE PVC-M POTABLE WATER RETICULATION POTABLE WATER PROPERTY SERVICE PE PRESSURE SEWER RETICULATION PE PRESSURE SEWER PROPERTY SERVICE EXISTING RECYCLED WATER RETICULATION EXISTING POTABLE 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

PROPOSED EASEMENT 



- -4 x LONG SIDE • SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
- -4 x LONG SIDE

RECYCLED WATER PIPE DATA

TOTAL LENGTH (m)

727

242

PIPE MATERIAL

PVC-M PN16

PE100 PN16

1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH

2. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO

3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO

4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO

FROM ALTOGETHER REPRESENTATIVE.

5. IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN

-4	×	LONG	SIDL		

WITH STORMWATER PIT.

DRGS-101 TO 104.

DRGS-301 TO 304.

DRG-402.

PIPE SIZE (mm)

DN100

DN25 (LATERAL)

NOTES:

-5 x SHORT SIDE

PROJECT

PLAN TITLE

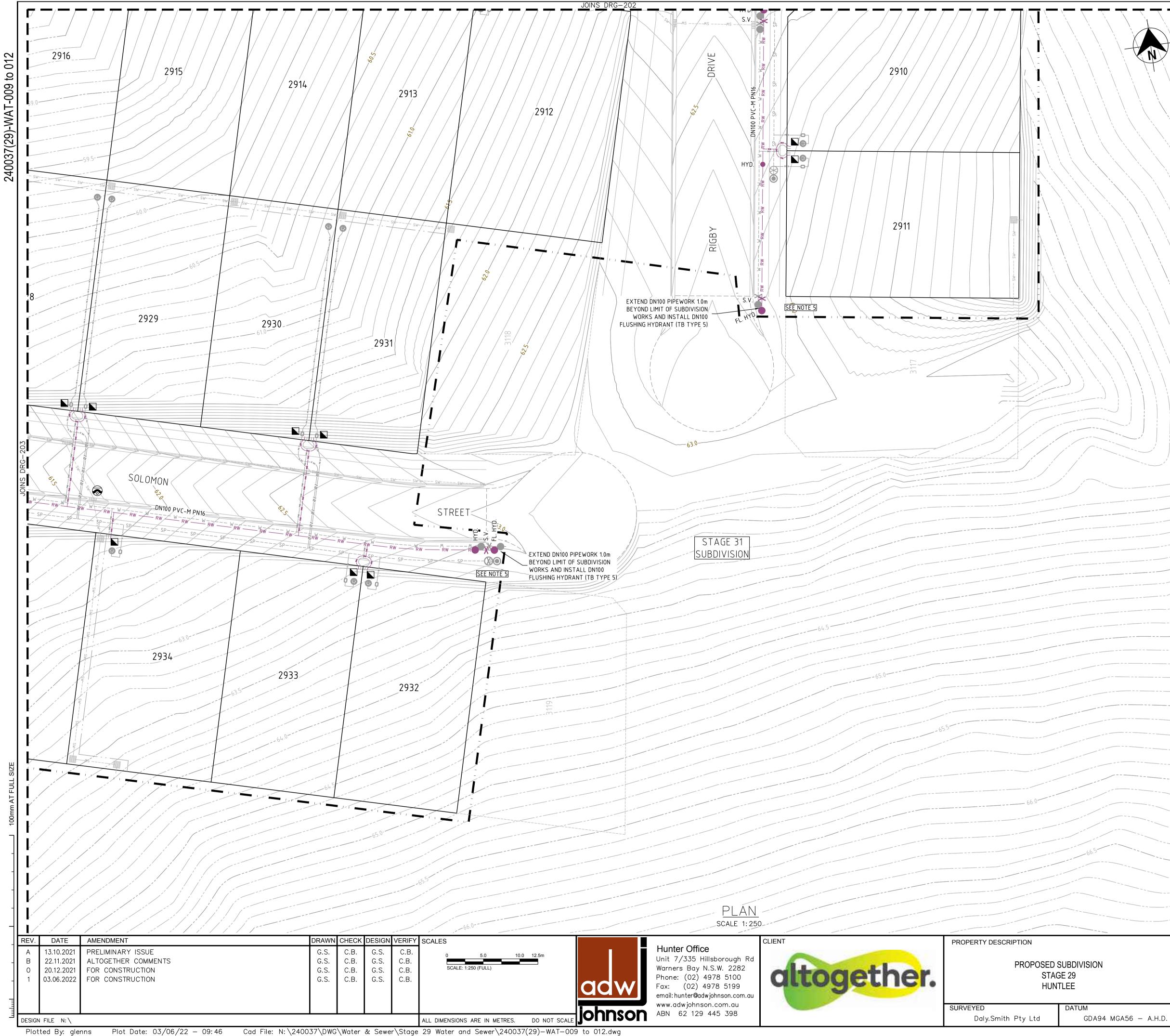
POTABLE WATER, RECYCLED WATER AND

CONSTRUCTION ISSUE

PRESSURE SEWER RETICULATION

RECYCLED WATER DETAIL PLAN - SHEET 3

	PROJECT No.	DISCIPLINE	NUMBER	REV.
A56 – A.H.D.	240037(29)	– WAT –	203	1





RW -		RW
RWS	- RWS -	RWS
w	——— W	W -
PWS	– PWS –	PWS
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PVC-M RECYCLED WATER RETICULATION RECYCLED WATER PROPERTY SERVICE PVC-M POTABLE WATER RETICULATION POTABLE WATER PROPERTY SERVICE PE PRESSURE SEWER RETICULATION PE PRESSURE SEWER PROPERTY SERVICE EXISTING RECYCLED WATER RETICULATION EXISTING POTABLE 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

PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

 RECYCLED WATER PROPERTY SERVICE CONNECTIONS
TOTAL 42 CONNECTIONS
SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V -20 x SHORT SIDE
-4 x LONG SIDE
• SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
-5 x SHORT SIDE
-4 x LONG SIDE

RECYCLED WATER PIPE DATA PIPE SIZE (mm) PIPE MATERIAL TOTAL LENGTH (m) PVC-M PN16 DN100 727 242 DN25 (LATERAL) PE100 PN16

NOTES:

240037(29)

1. LOCALLY PULL PIPES TO AVOID ANY POTENTIAL CLASH WITH STORMWATER PIT.

2. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 104.

3. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO

DRGS-301 TO 304. 4. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO

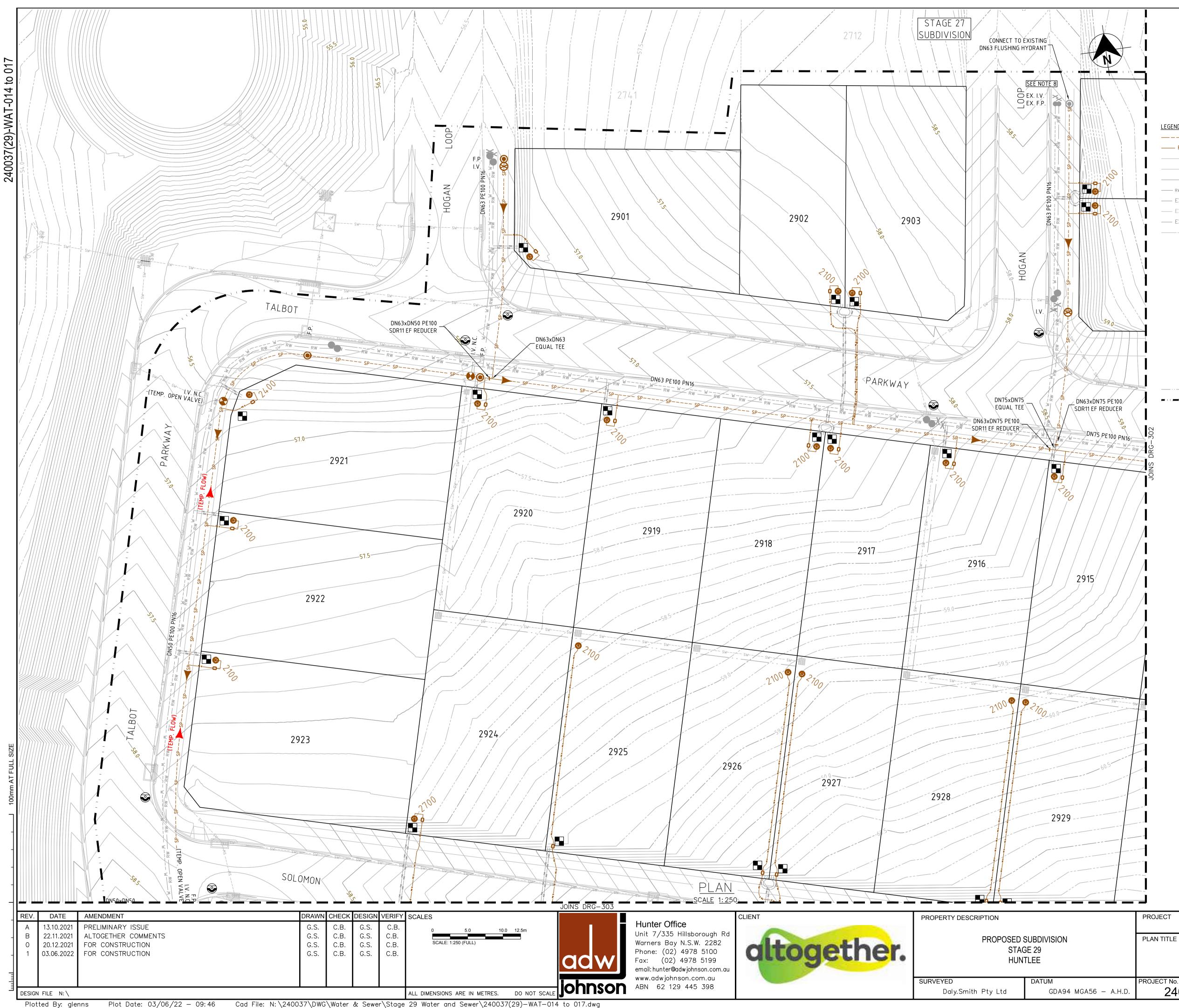
DRG-402.

5. IF WORKS ARE BEING CONSTRUCTED CONCURRENTLY WITH AN ADJACENT STAGE, <u>DO NOT</u> INSTALL STOP VALVE /FLUSHING HYDRANT UNLESS CONFIRMATION IS GIVEN FROM ALTOGETHER REPRESENTATIVE.

– WAT –

204

	CONSTRUCTIO	n Issl	je
PROJECT	POTABLE WATER, RECYCLED WA PRESSURE SEWER RETICULA		
PLAN TITLE	RECYCLED WATER DET PLAN - SHEET 4	AIL	
PROJECT No.	DISCIPLINE	NUMBER	REV.





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— PE PRESSURE SEWER RETICULATION — PE PRESSURE SEWER PROPERTY SERVICE PVC-M POTABLE WATER RETICULATION POTABLE WATER PROPERTY SERVICE PVC-M RECYCLED WATER RETICULATION RECYCLED WATER PROPERTY SERVICE EXISTING PRESSURE SEWER RETICULATION EXISTING POTABLE WATER RETICULATION - EXISTING RECYCLED WATER RETICULATION STORMWATER PIPEWORK

ISOLATION VALVE

ISOLATION VALVE - NORMALLY CLOSED

FLUSHING POINT

WASTEWATER COLLECTION TANK AND BOUNDARY KIT

PRESSURE SEWER FLOW DIRECTION

PRESSURE SEWER TEMPORARY FLOW DIRECTION

PROPERTY SERVICE CONNECTION

LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

# PRESSURE SEWER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS • SINGLE SERVICES -30 x SHORT SIDE -12 x LONG SIDE

PRESSURE SEWER PIPE DATA				
PIPE SIZE (mm) PIPE MATERIAL TOTAL LENGTH (m)				
DN90	PE100 SDR11	58		
DN75	PE100 SDR11	123		
DN63	PE100 SDR11	212		
DN50	PE100 SDR11	335		
DN40 (LATERAL)	PE100 SDR11	593		

#### NOTES:

PROJECT

1. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 104. 2. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 AND 204.

FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402.
FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING

- PSS-1017-FS. 5. FOR FLOW MONITORING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1115-FS.
- 6. CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.
- 7. <u>ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS</u> (FABRICATED BENDS
- SHALL NOT BE USED).

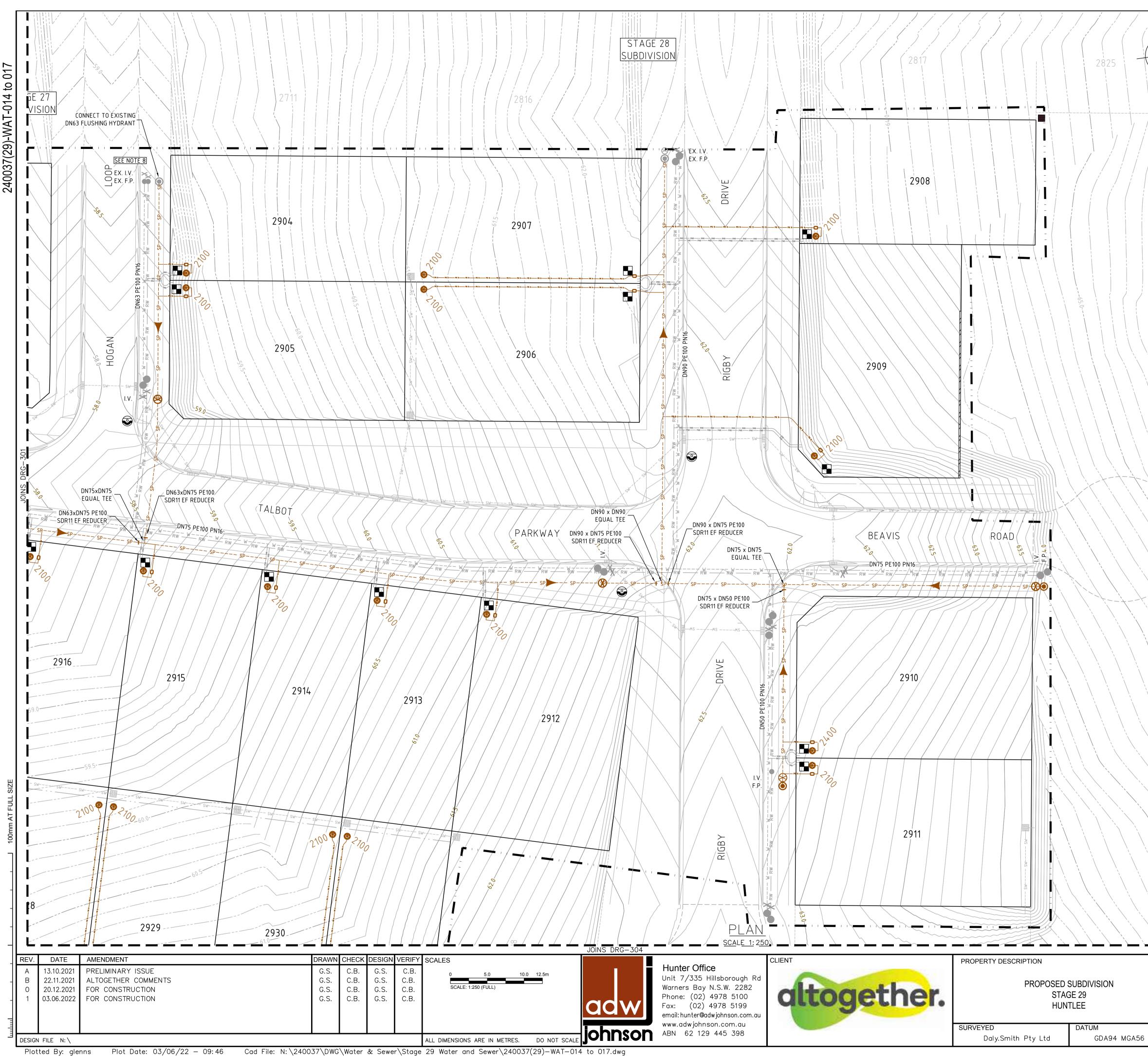


## POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION

#### PRESSURE SEWER DETAIL PLAN - SHEET 1

	PROJECT No.	DISCIPLINE	NUMBER	REV.
A56 – A.H.D.	240037(29)	– WAT –	301	1







	SP-
PS_S	
	W
PWS	
RW	
RWS RWS -	
EX PS	– EX PS —
EX PW	- EX PW-
EX RW	- ex rw
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— PE PRESSURE SEWER RETICULATION — PE PRESSURE SEWER PROPERTY SERVICE PVC-M POTABLE WATER RETICULATION POTABLE WATER PROPERTY SERVICE — PVC-M RECYCLED WATER RETICULATION — RECYCLED WATER PROPERTY SERVICE — EXISTING PRESSURE SEWER RETICULATION EXISTING POTABLE WATER RETICULATION EXISTING RECYCLED WATER RETICULATION STORMWATER PIPEWORK

ISOLATION VALVE

ISOLATION VALVE - NORMALLY CLOSED

FLUSHING POINT

WASTEWATER COLLECTION TANK AND BOUNDARY KIT

PRESSURE SEWER FLOW DIRECTION

PRESSURE SEWER TEMPORARY FLOW DIRECTION

PROPERTY SERVICE CONNECTION

LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H – PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

PRESSURE SEWER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS SINGLE SERVICES -30 x SHORT SIDE -12 x LONG SIDE

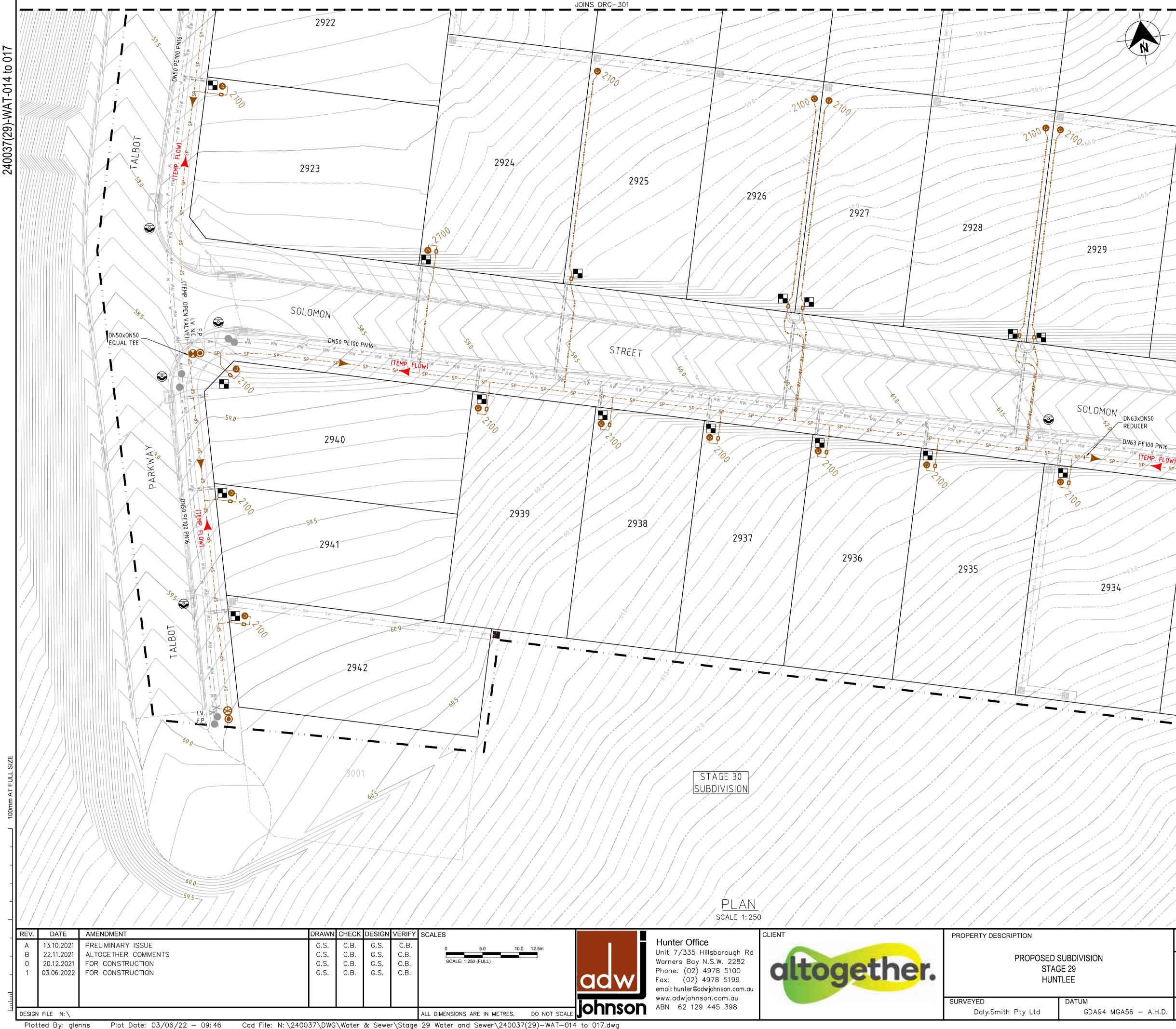
PRESSURE SEWER PIPE DATA				
PIPE SIZE (mm)	TOTAL LENGTH (m)			
DN90	PE100 SDR11	58		
DN75	PE100 SDR11	123		
DN63	PE100 SDR11	212		
DN50	PE100 SDR11	335		
DN40 (LATERAL)	PE100 SDR11	593		

#### NOTES:

- 1. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-101 TO 104. 2. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-201 AND 204.
- **3.** FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402. 4. FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING
- PSS-1017-FS. 5. FOR FLOW MONITORING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING PSS-1115-FS.
- 6. CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING
- STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM. 7. <u>ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS</u> (FABRICATED BENDS
- SHALL NOT BE USED). 8. ISOLATION VALVE IN NORTHERN END OF STAGE 27 BETWEEN HOGAN LOOP AND RIGBY DRIVE, TO BE CLOSED ON COMMISSIONING OF STAGE 29 SEWER.

		CONSTRUCTION ISSU	je
	PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	
	PLAN TITLE	PRESSURE SEWER DETAIL PLAN - SHEET 2	
6 – A.H.D.	PROJECT №. <b>24(</b>	DISCIPLINE NUMBER 0037(29) - WAT - 302	rev. <b>1</b>





Plot Date: 03/06/22 - 09:46 Cad File: N:\240037\DWG\Water & Sewer\Stage 29 Water and Sewer\240037(29)-WAT-014 to 017.dwg



#### <u>LEGEND</u>

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— PE PRESSURE SEWER RETICULATION — PE PRESSURE SEWER PROPERTY SERVICE PVC-M POTABLE WATER RETICULATION POTABLE WATER PROPERTY SERVICE – PVC–M RECYCLED WATER RETICULATION RECYCLED WATER PROPERTY SERVICE EXISTING PRESSURE SEWER RETICULATION EXISTING POTABLE WATER RETICULATION EXISTING RECYCLED WATER RETICULATION STORMWATER PIPEWORK

ISOLATION VALVE

ISOLATION VALVE - NORMALLY CLOSED

FLUSHING POINT

WASTEWATER COLLECTION TANK AND BOUNDARY KIT

PRESSURE SEWER FLOW DIRECTION

PRESSURE SEWER TEMPORARY FLOW DIRECTION

PROPERTY SERVICE CONNECTION

LAY PRESSURE SEWER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H PROPOSED EASEMENT SUBDIVISION STAGE BOUNDARY

#### PRESSURE SEWER PROPERTY SERVICE CONNECTIONS TOTAL 42 CONNECTIONS SINGLE SERVICES -30 x SHORT SIDE

-12 x LONG SIDE

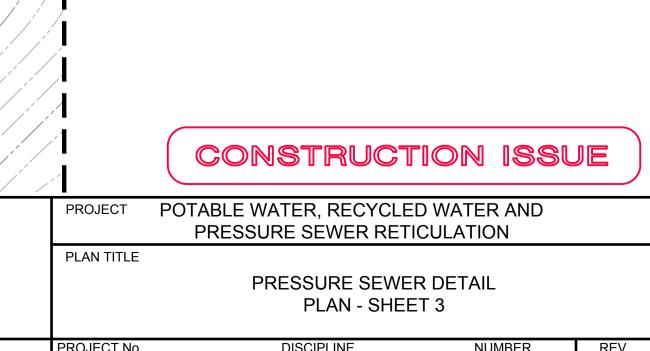
PRESSURE SEWER PIPE DATA			
PIPE SIZE (mm)	TOTAL LENGTH (m)		
DN90	PE100 SDR11	58	
DN75	PE100 SDR11	123	
DN63	PE100 SDR11	212	
DN50	PE100 SDR11	335	
DN40 (LATERAL)	PE100 SDR11	593	

#### NOTES:

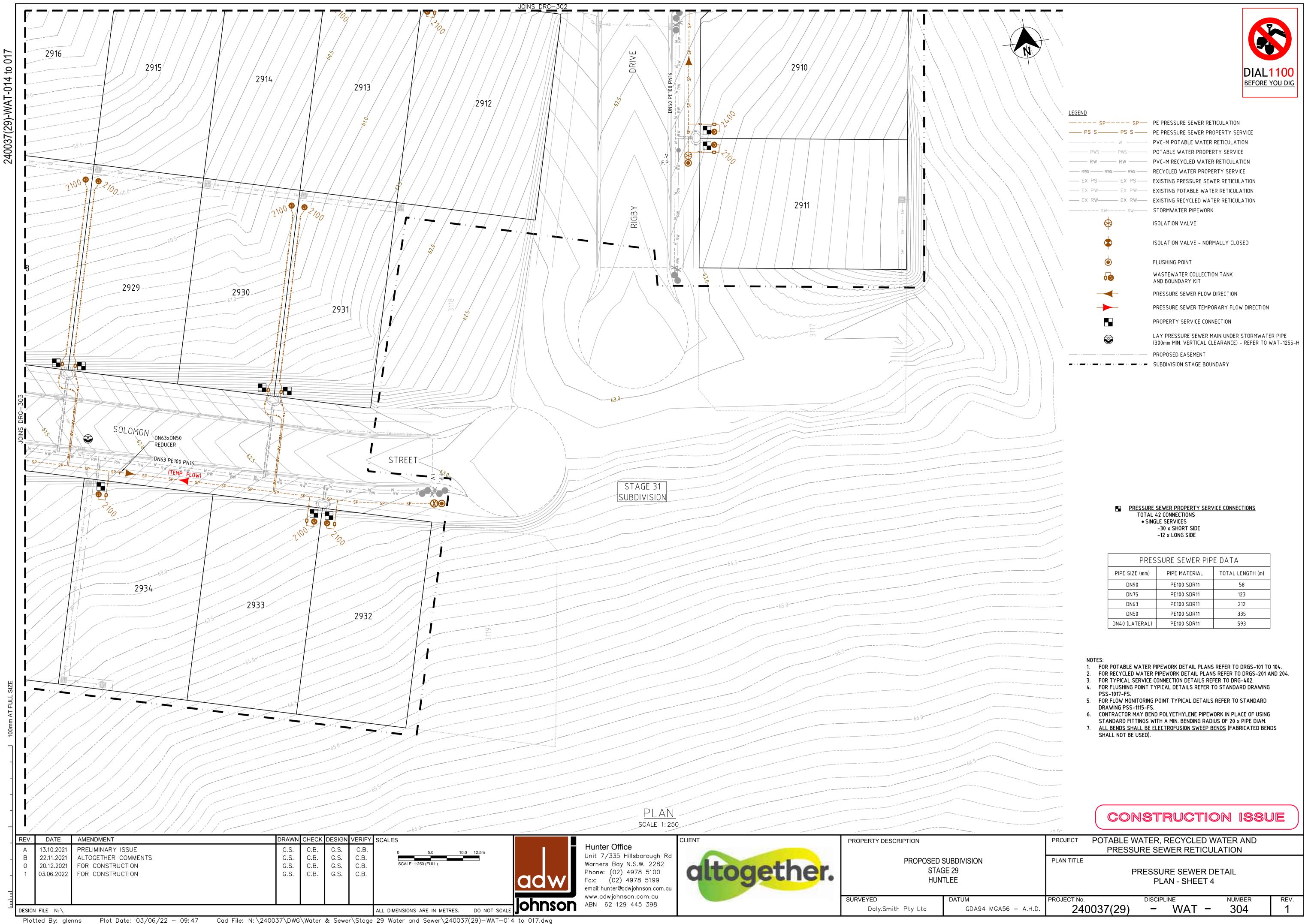
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3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-402. 4. FOR FLUSHING POINT TYPICAL DETAILS REFER TO STANDARD DRAWING

- PSS-1017-FS. 5. FOR FLOW MONITORING POINT TYPICAL DETAILS REFER TO STANDARD
- DRAWING PSS-1115-FS. 6. CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING
- STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.
- 7. ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).



	PROJECT No.	DISCIPL	INE	NUMBER	REV.
456 – A.H.D.	240037(29)	—	WAT -	303	1



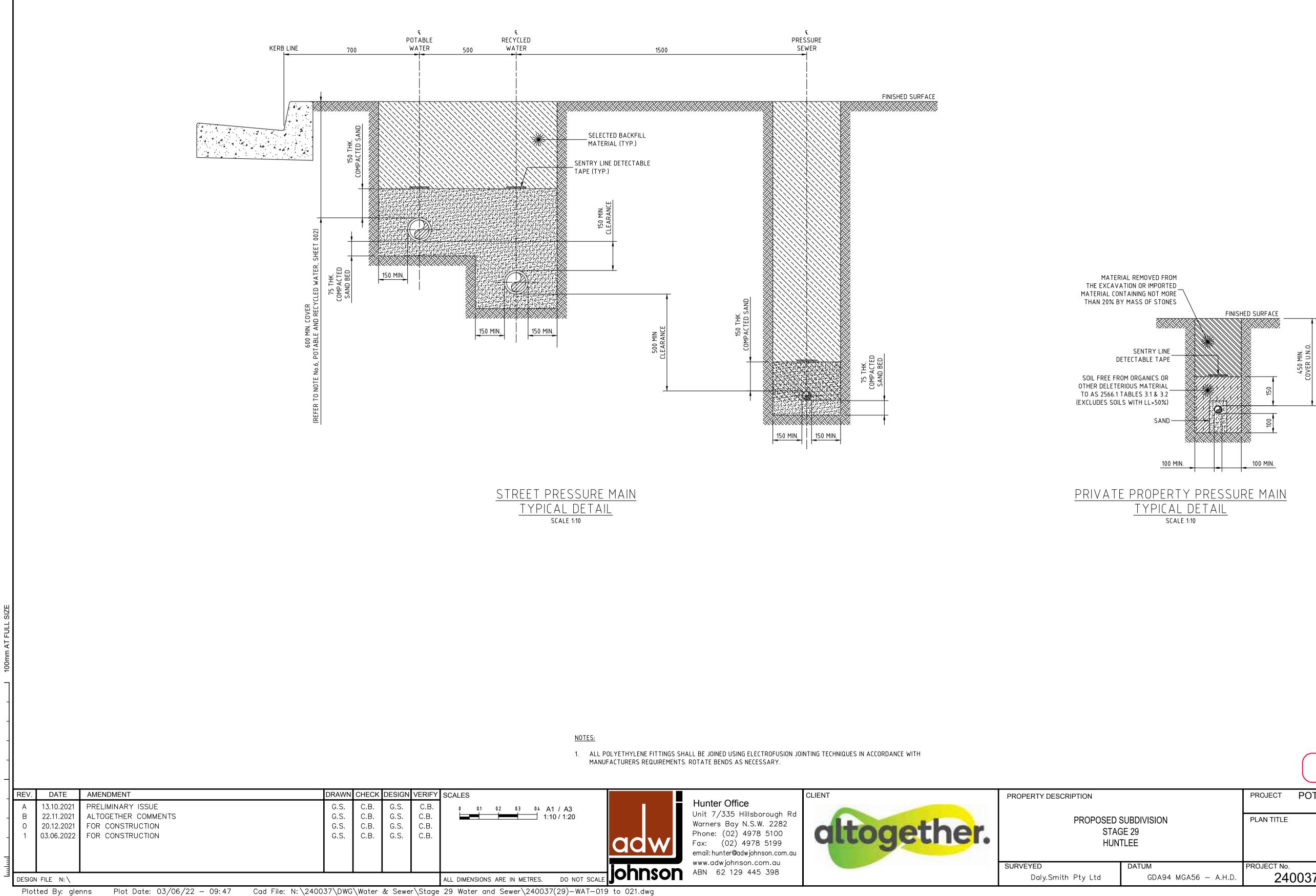
Plotted By: glenns



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PRES	SURE SEWER PIP	E DATA
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN90	PE100 SDR11	58
DN75	PE100 SDR11	123
		040

021 **t** 240037(29)-WAT-019

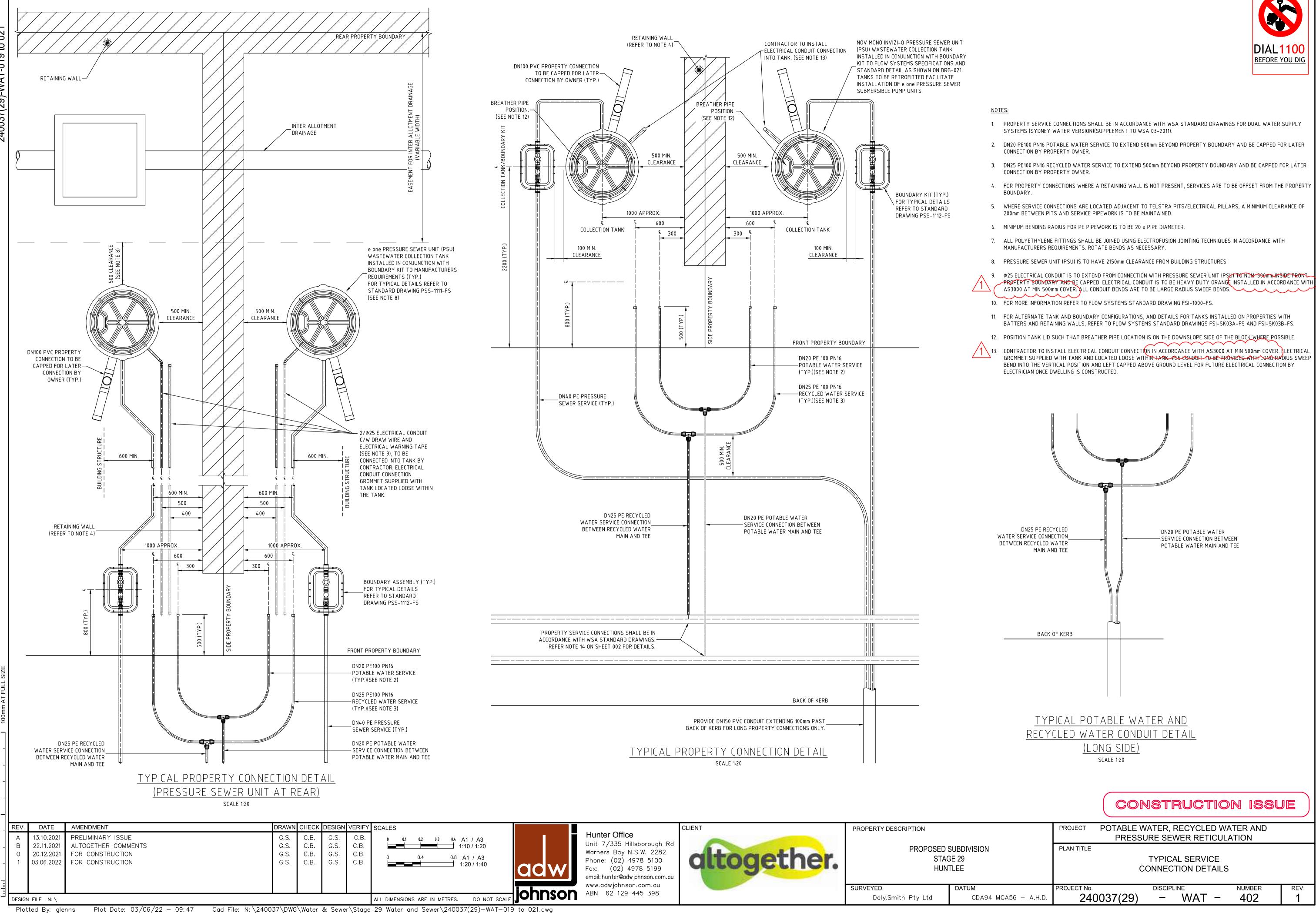




	CONSTRUCTION ISSUE
PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION
PLAN TITLE	
	TYPICAL PIPEWORK
	TRENCHING DETAILS

	PROJECT No.	DISCIPLINE	NUMBER	REV.
A56 – A.H.D.	240037(29)	– WAT –	401	1

02 တ 0 29) 0037



Plotted By: glenns



# WASTEWATER COLLECTION TANK DETAILS

	WASTEWATER LULLELTION TANK DETAILS					
LOT NUMBER	TOP OF TANK		BASE IL	CONNECTION IL	TANK HEIGHT	TANK LOCATION
2901	56.98	56.85	54.85	55.75	2100	FRONT BATTER
2902	57.91	57.78	55.78	56.68	2100	FRONT
2903	57.94	57.81	55.81	56.71	2100	FRONT
2904	59.06	58.93	56.93	57.83	2100	FRONT BATTER
2905	59.11	58.98	56.98	57.88	2100	FRONT BATTER
2906	61.21	61.08	59.08	59.98	2100	REAR
2907	61.25	61.12	59.12	60.02	2100	REAR
2908	63.32	63.19	61.19	62.09	2100	FRONT BATTER
2909	62.45	62.32	60.32	61.22	2100	FRONT BATTER
2910	62.96	62.83	60.53	61.43	2400	FRONT
2911	62.99	62.86	60.86	61.76	2100	FRONT
2912	61.16	61.03	59.03	59.93	2100	FRONT
2913	60.44	60.31	58.31	59.21	2100	FRONT
2914	59.70	59.57	57.57	58.47	2100	FRONT
2915	58.90	58.77	56.77	57.67	2100	FRONT
2916	58.30	58.17	56.17	57.07	2100	FRONT
2917	57.89	57.76	55.76	56.66	2100	FRONT
2918	57.85	57.72	55.72	56.62	2100	FRONT
2919	57.26	57.13	55.13	56.03	2100	FRONT
2920	56.95	56.82	54.82	55.72	2100	FRONT
2921	56.83	56.70	54.40	55.30	2400	FRONT BATTER
2922	57.40	57.27	55.27	56.17	2100	FRONT
2923	57.90	57.77	55.77	56.67	2100	FRONT
2924	58.54	58.41	55.81	56.71	2700	FRONT BATTER
2925	58.54	58.41	56.41	57.31	2100	REAR
2926	59.36	59.23	57.23	58.13	2100	REAR
2927	59.44	59.31	57.31	58.21	2100	REAR
2928	59.92	59.79	57.79	58.69	2100	REAR
2929	59.97	59.84	57.84	58.74	2100	REAR
2930	60.66	60.53	58.53	59.43	2100	REAR
2931	60.75	60.62	58.62	59.52	2100	REAR
2932	63.35	63.22	61.22	62.12	2100	FRONT
2933	63.29	63.16	61.16	62.06	2100	FRONT
2934	62.44	62.31	60.31	61.21	2100	FRONT
2935	61.93	61.80	59.80	60.70	2100	FRONT
2936	61.40	61.27	59.27	60.17	2100	FRONT
2937	60.83	60.70	58.70	59.60	2100	FRONT
2938	60.08	59.95	57.95	58.85	2100	FRONT
2939	59.27	59.14	57.14	58.04	2100	FRONT
2940	58.64	58.51	56.51	57.41	2100	FRONT BATTER
2941	59.45	59.32	57.32	58.22	2100	FRONT
2942	59.89	59.76	57.76	58.66	2100	FRONT
2942	59.89	59.76	57.76	58.66	2100	FRONT

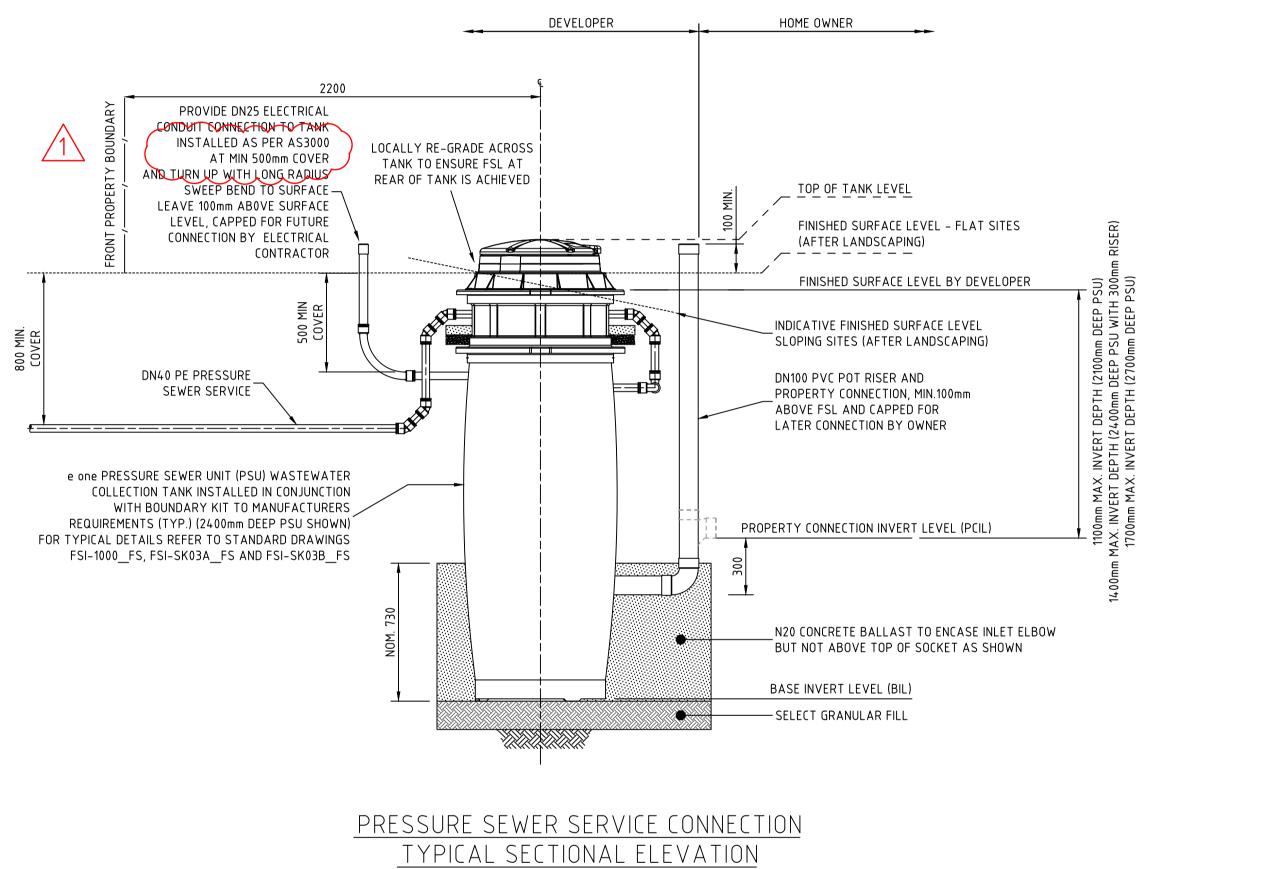
# WASTEWATER COLLECTION TANK COUNT

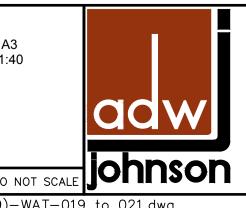
TANK SIZE	NUMBER OF
2100	39
2400	2
2700	1

	REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		
-	A B 0 1	13.10.2021 22.11.2021 20.12.2021 03.06.2022	PRELIMINARY ISSUE ALTOGETHER COMMENTS FOR CONSTRUCTION FOR CONSTRUCTION	G.S. G.S. G.S. G.S.	C.B. C.B. C.B. C.B.	G.S. G.S. G.S. G.S.	C.B. C.B. C.B. C.B.	0 0.4		A1 / A3 1:20 / 1:40
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Plotted By: glenns Plot Date: 03/06/22 - 09:47 Cad File: N: \240037 \DWG \Water & Sewer \Stage 29 Water and Sewer \240037(29) - WAT-019 to 021.dwg

EASTING	NORTHING
346792.34	6382781.84
346835.01	6382770.94
346836.95	6382770.41
346873.11	6382779.91
346872.82	6382777.93
346904.78	6382773.24
346905.07	6382775.22
346958.52	6382773.02
346954.19	6382743.49
346948.38	6382703.86
346948.09	6382701.88
346907.12	6382728.33
346892.64	6382732.26
346890.71	6382732.78
346861.76	6382740.63
346859.83	6382741.15
346830.87	6382749.00
346828.94	6382749.53
346799.99	6382757.38
346782.13	6382762.22
346750.22	6382767.95
346745.52	6382750.59
346735.77	6382714.62
346765.09	6382705.08
346791.54	6382726.20
346820.49	6382718.35
346822.42	6382717.83
346851.38	6382709.98
346853.31	6382709.46
346882.26	6382701.61
346884.19	6382701.08
346880.90	6382652.35
346878.97	6382652.87
346846.64	6382661.63
346828.79	6382666.48
346814.31	6382670.40
346799.83	6382674.32
346785.35	6382678.25
346768.94	6382682.70
346736.80	6382692.59
346733.80	6382675.85
346733.29	6382658.89
5,0,55,27	0502050.07





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



PROPERTY DESCRIPTION

PROPOSED SUBDIVISION STAGE 29 HUNTLEE

SCALE 1:20

SURVEYED Daly.Smith Pty Ltd DATUM GDA94 MGA



		CONSTRUCTION ISSUE					
	PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION						
	PLAN TITLE						
	WASTE WATER COLLECTION						
	TANK LEVEL DETAILS						
	PROJECT No.	DISCIPLINE NUMBER REV.					
GA56 — A.H.D.	2400	37(29) - WAT - 403   1					

#### THRUST BLOCK NOTES:

- 1. "N" DENOTES NOMINAL THRUST AREA TO BE ACHIEVED BY POURING CONCRETE THE FULL LENGTH OF THE FITTING AND EXTENDING FROM THE FLOOR OF THE TRENCH TO NOM. 100mm ABOVE THE FITTING.
- 2. CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE.
- 3. THRUST BLOCK DIMENSIONS ARE BASED ON THE MINIMUM ALLOWABLE HORIZONTAL BEARING PRESSURES OF THE SOIL AS SHOWN. IF GROUND CONDITIONS ENCOUNTERED INDICATE THAT THESE BEARING PRESSURES MAY NOT BE ACHIEVED, THRUST BLOCK DESIGN IS TO BE REVISED.
- 4. THRUST BLOCKS ARE TO BE CONSTRUCTED SUCH THAT THEY TRANSFER THE THRUST ONTO UNDISTURBED GROUND. THRUST BLOCKS ARE NOT TO INTERFERE WITH OTHER SERVICES.
- 5. FINISH THRUST BLOCKS APPROXIMATELY 100mm ABOVE THE TOP OF THE FITTING OR BEARING PAD AND EXTEND TO THE FLOOR OF THE TRENCH OR DEEPER IF NECESSARY TO ACHIEVE THE REQUIRED THRUST AREA. MAXIMUM ENCASEMENT TO BE 180°.
- 6. CONCRETE FOR THE THRUST BLOCKS TO BE GRADE S25 USING CEMENT TYPE "SR" TO AS3972. CONCRETE TO BE MECHANICALLY VIBRATED.
- 7. CONCRETE THRUST BLOCKS ARE TO BE CURED FOR A MINIMUM OF 7 DAYS BEFORE BEING SUBJECTED TO ANY THRUST LOAD.
- 8. REFER TO WAT-1205-V FOR GENERAL FITTING THRUST BLOCK ARRANGEMENTS.
- 9. REFER TO WAT-1207-V FOR GENERAL VALVE AND VERTICAL BEND THRUST BLOCK ARRANGEMENTS.
- 10. THRUST BLOCK TO EXTEND 300mm MINIMUM INTO BASE AND SIDE WALLS OF TRENCH.
- 11. PROVIDE 3mm THK. INSERTION RUBBER BETWEEN ANCHOR STRAP AND PIPE BARREL

TYPE	FITTING	SOIL	DESIGN	THRUST	ΤA	LENGTH	HE
		AHBP (kPa)	STP (kPa)		(m²)	(L)	
1	DN100 x DN100 EQUAL TEE	100	1500	18.00	0.18	0.45	
2	DN100 x 22.5° HORIZONTAL BEND	100	1500	7.50	0.08	N	
3	DN100 x 11.25° HORIZONTAL BEND	100	1500	7.50	0.08	N	
4	DN100 SOCKETED STOP VALVE	100	1500	18.00	0.18	1.05	
5	DN100 FLUSHING HYDRANT	100	1500	18.00	0.18	0.45	
6	DN150 x DN150 EQUAL TEE	100	1500	37.50	0.38	0.50	
7	DN150 SOCKETED STOP VALVE	100	1500	37.50	0.38	1.05	
8	DN150 FLUSHING HYDRANT	100	1500	37.50	0.38	0.50	

	REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	
	А	13.10.2021	PRELIMINARY ISSUE	G.S.	C.B.	G.S.	C.B.		
-	В	22.11.2021	ALTOGETHER COMMENTS	G.S.	C.B.	G.S.	C.B.		
	0	20.12.2021	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.		
-	1	03.06.2022	FOR CONSTRUCTION	G.S.	C.B.	G.S.	C.B.		
	DECION								
	DESIGN	I FILE N: \		ALL DIMENSIONS ARE IN METRES.	DO				

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Plotted By: glenns Plot Date: 03/06/22 - 09:47 Cad File: N:\240037\DWG\Water & Sewer\Stage 29 Water and Sewer\240037(29)-WAT-022.dwg



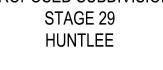
Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email:hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398



PROPERTY DESCRIPTION

PROPOSED SUBDIVISION STAGE 29 HUNTLEE



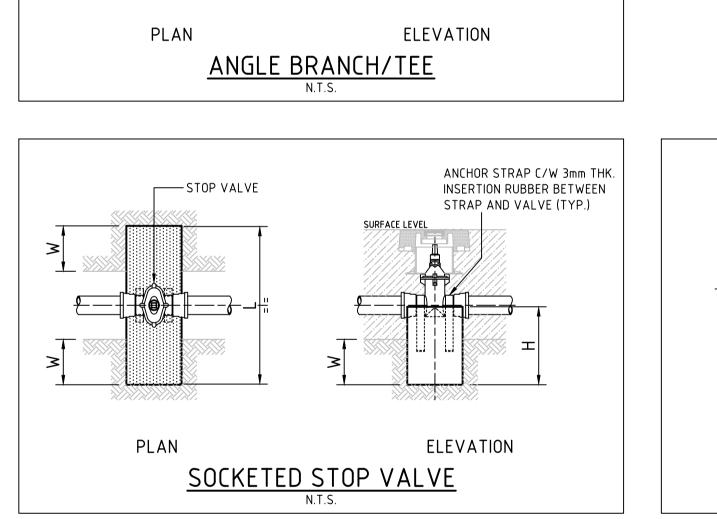


SURVEYED

Daly.Smith Pty Ltd

DATUM

HEIGHT<br/>(H)WIDTH<br/>(W)0.400.30N0.30N0.300.440.300.400.300.750.300.460.300.760.30



BRANCH/TEE

SURFACE LEVEL

