

# THE GABLES

BOX HILL

## PRECINCT D

### STAGE 1

### PRESSURE SEWER & RECYCLED WATER



LOCALITY PLAN  
(NOT TO SCALE)

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No.	REVISION DESCRIPTION	BY	DATE
06	WORK-AS-CONSTRUCTED		14/8/23
05a	TANK ADJUSTMENTS (1203 & 1206)	D.S.	6/10/22
05	TANK ADJUSTMENTS (2002 & 2003)	D.S.	8/8/22
04	MINOR TANK ADJUSTMENTS & R.W.	D.S.	14/7/22
03b	MINOR TANK ADJUSTMENTS (STOCKLAND)	D.S.	9/6/22
03a	ADDITIONAL RW HS ADDED (LOT 3703)	D.S.	16/12/21
03	ADDITIONAL CLOSED VALVES ADDED (SHEET 6)	D.S.	19/10/21
02	ISSUE FOR APPROVAL	D.S.	12/10/21
01	ORIGINAL ISSUE FOR TENDER	D.S.	27/9/21

<b>SERVICE</b>	<b>DATE</b>	<b>REF.</b>	<b>WORK-AS-CONSTRUCTED CERTIFICATION</b>	<b>ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.</b>	<b>CLIENT</b>	<b>STOCKLAND</b>	<b>ALTOGETHER</b>	<b>PLAN OF PROPOSED WATER INFRASTRUCTURE SERVICES</b>	<b>COVER SHEET</b>	<b>SHEET 1 OF 13</b>	<b>WAC</b>	
			DEVELOPER: STOCKLAND DEVELOPMENT Pty. Ltd. PROJECT SUPERVISOR: ROSE ATKINS RIMMER (INFRASTRUCTURE) Pty. Ltd. CONSTRUCTOR: SPRINGFIELD CIVIL COMPLETED: W.A.C. PREPARED: 14/8/2023	WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT <b>RAR</b> SHOP 7 & 8 'M CENTRE' 40 STERLING ROAD, MINCHINBURY NSW 2770 PH: (02) 9853 0200 FAX: (02) 9671 7399				THE GABLES DEVELOPMENT - PRECINCT D (STAGE 1) CHADWICK DRIVE, GABLES L.G.A. THE HILLS	DRAWN: D.SHEATHER CHECKED: D.SHEATHER SCALE: -	REVIEWED: K.GAO DATE OF REVIEW: 8/8/2023	DATE OF ISSUE: 14/8/2023	4/23645/D1

SEWER NOTES

- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A., PRESSURE SEWERAGE CODE OF AUSTRALIA WSA 07-2007 VERSION 1.1 & POLYETHYLENE PIPELINE CODE WSA 01-2004.
- ALL EQUIPMENT, MATERIALS & ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW & SHALL COMPLY WITH ALTOGETHER GROUP REQUIREMENTS. *BUTT FUSION FITTINGS DENOTED HERE WITH 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 & SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS & LOCATIONS 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 07-2007 & ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A.
- ALL POLYETHYLENE MAINS <DN200 SHALL BE JOINED BY ELECTROFUSION TECHNIQUES IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS. ALL POLYETHYLENE MAINS >DN200 SHALL BE JOINED BY BUTTWELD TECHNIQUES IN ACCORDANCE WITH THE 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 & WATER MAINS.* MINIMUM PIPE COVER SHALL BE 800mm IN FOOTWAYS & FOR ROADWAYS. MAXIMUM PIPE COVER SHALL GENERALLY BE 15m. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 15m, BUT LESS THAN 25m, THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND. *THE CONTRACTOR SHALL ENSURE THAT ALL PRESSURE SEWER & 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 2m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER GROUP REPRESENTATIVE).
- ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 & WSA-PS351.
- ALL BENDS SHALL BE ELECTROFUSION OR BUTTWELD 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 (ie. 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 GROUP STANDARD DRAWINGS. REFER TO WEBSITE FOR CURRENT VERSION.  
SMALL MAINS (<DN110)  
[https://information.altogethergroup.com.au/governance/Land\\_Housing/PSS-1017A-FS.pdf](https://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017A-FS.pdf)  
LARGE MAINS (>DN110)  
[https://information.altogethergroup.com.au/governance/Land\\_Housing/PSS-1017B-FS.pdf](https://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 & CONNECTED TO SURFACE VALVES.
- ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (ie 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 & SHALL COMPLY WITH ALTOGETHER GROUP 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 25mm INSTRUMENTATION CONDUIT (ORANGE) AND 1 x 25mm ELECTRICAL CONDUIT (ORANGE) (WITH DRAW WIRES) SHALL BE INSTALLED FROM THE COLLECTION TANK TO WATER METERS. THE CONDUITS SHALL BE LAID IN A COMMON TRENCH WITH THE SEWERAGE AND MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 400mm.*
- THE CONSTRUCTOR SHALL PROVIDE ALTOGETHER GROUP 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 & CONFIRMATION IS PROVIDED BY THE ALTOGETHER GROUP REPRESENTATIVE.*
- UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.
- 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 & APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER GROUP REPRESENTATIVE. *THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CO-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 / CROSSING (20 Tests)  
NON-TRAFFICABLE:  
PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / 100m (29 Tests)
- BOUNDARY KITS (COMPLETE) SHALL BE ONE SUPPLIED. COLLECTION TANKS SHALL BE INSTALLED WITH BOUNDARY KIT (REFER ALTOGETHER GROUP STANDARD DRAWINGS PSS-1112-FS & PSS-1113-FS). PUMP TO BE INSTALLED BY OTHERS.
- ALL MAINS (UP TO THE BOUNDARY KIT) SHALL BE PRESSURE TESTED TO 1600 kPa.*
- ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER GROUP REQUIREMENTS.
- ROPE OFF ALL PRESSURE SEWER UNITS & FLUSHING POINTS TO LIMIT DAMAGE DURING CONSTRUCTION.
- PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER GROUP REQUIREMENTS.
- WORK-AS-CO-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER GROUP Q.A. SUBMISSION CHECKLIST.*

RECYCLED WATER NOTES

- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A. & WSA 03-2011-3.1 (SYDNEY WATER WATER EDITION - 2014).
- POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.
- ALL EQUIPMENT, MATERIALS & ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW, SHALL CONFORM WITH THE APPROPRIATE CURRENT AUSTRALIAN STANDARDS & SHALL COMPLY WITH ALTOGETHER GROUP REQUIREMENTS.
- ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH & SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS & LOCATIONS 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 SURVEYOR THE POSITION & LEVEL OF ALL EXISTING & PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.
- MAINS 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 & WATER MAINS.* MINIMUM PIPE COVER SHALL BE 600mm IN FOOTWAYS (TYPE B EMBEDMENT: WAT-1202-VI) & FOR ROADWAYS (TYPE L EMBEDMENT: WAT-1204-VI). MAXIMUM PIPE COVER SHALL GENERALLY BE 15m. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 15m, BUT IS LESS THAN 25m, THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND. *THE CONTRACTOR SHALL ENSURE THAT ALL RECYCLED WATER & PRESSURE SEWER MAINS HAVE SUFFICIENT VERTICAL SEPARATION AS PER THE CLEARANCE TABLE ADJACENT.*
- ALL RECYCLED WATER MAINS SHALL BE LILAC mPVC (PN16). DIFFERENTIATION OF POTABLE & RECYCLED WATER SYSTEMS SHALL BE AS PER TABLE 4.1 WSA03-2011 WITH BOTH SERVICES BEING CLASSIFIED AS WATERMAINS. RECYCLED WATER MAINS SHALL ALWAYS BE LOWER THAN POTABLE MAINS. 150mm VERTICAL CLEARANCE BETWEEN POTABLE WATER & RECYCLED WATER MAINS SHALL BE PROVIDED.
- MAXIMUM JOINT DEFLECTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- LOCALLY LOWER PIPEWORK IN VICINITY OF STOP VALVES TO ENSURE SUFFICIENT COVER IS MAINTAINED OVER VALVES. LOWERING OF PIPEWORK SHALL ACHIEVED OVER A NUMBER OF PIPE LENGTHS EITHER SIDE OF VALVES TO ELIMINATE ANY SHARP DEFLECTIONS.
- ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION PS-350, 368 & 369. GEOTECHNICAL CONDITIONS SHOULD BE ASSESSED DURING CONSTRUCTION BY THE CONTRACTOR IN ASSOCIATION WITH THE ALTOGETHER GROUP REPRESENTATIVE TO DETERMINE THE NEED TO MODIFY EMBEDMENT/TRENCHFILL TYPE & THE ROAD FOR TRENCH DRAINAGE/BULKHEADS.
- DURING CONSTRUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- HYDRANTS & STOP VALVES & ALL OTHER FITTINGS SHALL BE THE SAME SIZE AS THROUGH WATER MAIN & ANTICLOCKWISE CLOSING.
- HYDRANTS MUST NOT BE INSTALLED IN POTENTIAL DRIVEWAY LOCATIONS. HYDRANTS & WATER SERVICES SHALL BE NOMINALLY AT LEAST 5m 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 ALTOGETHER GROUP REQUIREMENTS. REFER TO ALTOGETHER GROUP WEBSITE FOR CURRENT VERSIONS.  
SINGLE SERVICE  
[https://information.altogethergroup.com.au/governance/Land\\_Housing/WAT-1854-FS.pdf](https://information.altogethergroup.com.au/governance/Land_Housing/WAT-1854-FS.pdf)  
DUAL SERVICE  
[https://information.altogethergroup.com.au/governance/Land\\_Housing/WAT-1855-FS.pdf](https://information.altogethergroup.com.au/governance/Land_Housing/WAT-1855-FS.pdf)
- PROPERTY SERVICE CONNECTIONS SHALL BE FLUSHED & LOCKED (BY THE ALTOGETHER GROUP REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
- SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (ie ROADWAYS, PATHS etc) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 03-2011-3.1 (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 ALTOGETHER GROUP 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 & CONFIRMATION IS PROVIDED BY THE ALTOGETHER GROUP REPRESENTATIVE.*
- UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.
- 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 & APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER GROUP REPRESENTATIVE. *THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CO-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.*
- THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE WATER SUPPLY CODE OF AUSTRALIA ARE:  
TRAFFICABLE:  
PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / CROSSING (21 Tests)  
NON-TRAFFICABLE:  
PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / 100m (29 Tests)  
  
*TESTING SHALL BE IN ACCORDANCE WITH TABLE 16.1 & 17.1 OF THE WATER SUPPLY CODE OF AUSTRALIA*
- SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER GROUP REQUIREMENTS.
- PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER GROUP REQUIREMENTS.
- WORK-AS-CO-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER GROUP Q.A. SUBMISSION CHECKLIST.*

ALTOGETHER GROUP 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 THE HILLS SHIRE COUNCIL STANDARDS, ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A. & OTHER ASSOCIATED DRAWINGS AND TECHNICAL SPECIFICATIONS.
- ALL PRESSURE SEWER LATERALS & RECYCLED WATER PROPERTY SERVICE CONNECTIONS CROSSING CARRIAGEWAYS SHALL BE INSTALLED WITHIN INDIVIDUAL SERVICE CONDUITS.
- THE CONTRACTOR SHALL LOCATE AND IDENTIFY ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS AND SHALL REPAIR ANY DAMAGE CAUSED TO SUCH SERVICES DURING THE COURSE OF WORKS. ANY SERVICE LOCATIONS ON THE FOLLOWING DRAWINGS ARE INDICATIVE ONLY.
- MAKE SMOOTH TRANSITION TO EXISTING WORKS (i.e. ROAD PAVEMENTS AND FOOTPATHS TO P.C.A. AND SUPERINTENDENTS REQUIREMENTS).
- SUITABLE PROTECTION OF EXISTING ROAD PAVEMENT, KERB AND GUTTER, FOOTPATHS AND ANY EXISTING FEATURES SHALL BE PROVIDED UNTIL THE CONSTRUCTION WORKS ARE COMPLETED.

CLEARANCES BETWEEN PIPELINES & UNDERGROUND SERVICES

Utility (Existing or proposed service)	Minimum horizontal clearance mm		Minimum vertical clearance <sup>1</sup> mm
	New main size		
	<DN200	>DN200	
Water mains <sup>1</sup> > DN375	600	600	300
Water mains <sup>1</sup> < DN375	300*	600	150
Gas mains	300*	600	150
Telecommunication conduits and cables	300*	600	150
Electricity conduits and cables	500	1000	225*
Stormwater drains	300*	600	150*
Sewers - gravity	1000*/ 600	1000*/ 600	500*
Sewers - pressure and vacuum	600	600	300*
Kerbs	150	600*	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 2m when passing installations such as poles, pits, and small structures, providing the structures is not destabilised in the process.
  - Clearances from kerbs shall be measured from the nearest point of the kerb. For water/sewer <DN375, clearances from kerbs can be progressively reduced until the minimum of 150mm is reached for water/sewer <DN200.
  - Where a parallel sewer is of minimum vertical clearance (lower than the water main (500mm), maintain a minimum horizontal of 1000mm. This minimum clearance can be progressively reduced to 600mm as the vertical clearance is increased to 750mm.
  - For pressure sewer laterals, minimum vertical clearances may be reduced to 150mm providing there is no joint in the lateral within 500mm of either side of the service being crossed.
  - An additional clearance from high voltage electrical installations should be maintained above the conduits or cables to allow for a protective barrier and marking to be provided.
  - Water mains should always cross over sewers and stormwater drains. For cases where this is not 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 GROUP REPRESENTATIVE IN WRITING.

RECYCLED WATER PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
DN100	m.P.V.C.	PN16	3,162.2

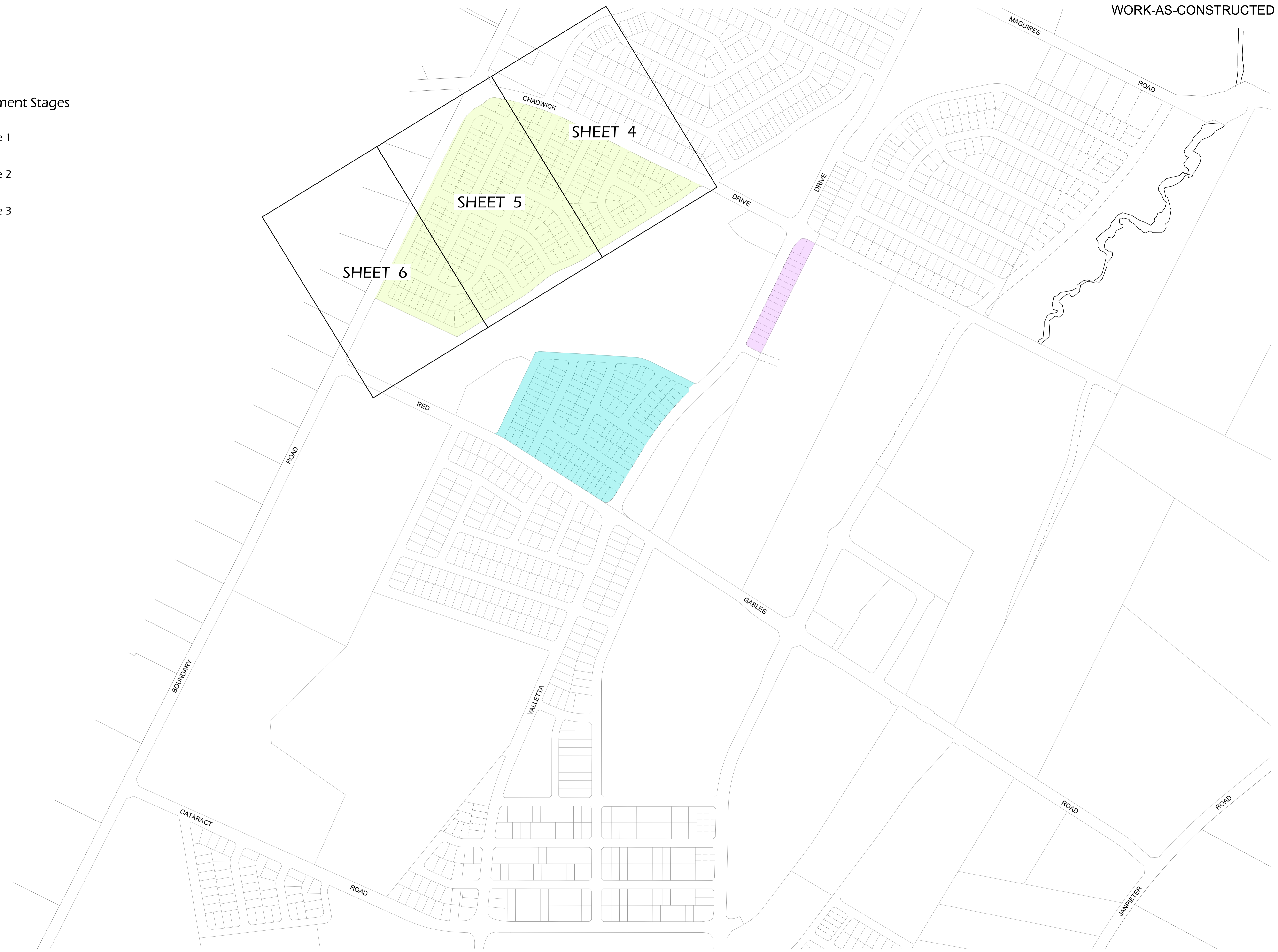
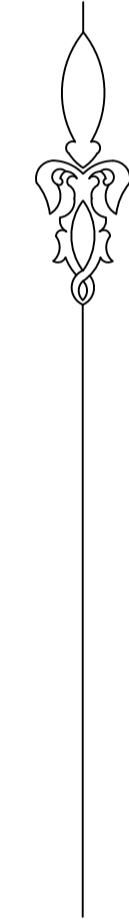
PRESSURE SEWER PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
DN90	PE100	PN16	662.0
DN75	PE100	PN16	178.2
DN63	PE100	PN16	587.9
DN50	PE100	PN16	1,776.9
DN40	PE100	PN16	3,252.8
			<b>TOTAL</b>
			<b>6,457.8</b>

 WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT SHOP 7 & 8 'M CENTRE' 40 STERLING ROAD, MINCHINBURY NSW 2770 PH: (02) 9853 0200 FAX: (02) 9671 7399		GENERAL NOTES				SHEET 2 OF 13	VERSION: WAC
		DRAFTED: D.SHEATHER SCALE: -	DESIGNED: D.SHEATHER DATE: -	REVIEWED: K.GAO U.S.A. REVIEWED: 88 J12	VERIFIED: K.GAO DATE OF ISSUE: 14/8/2023	4/23645/D1	

Precinct D Development Stages

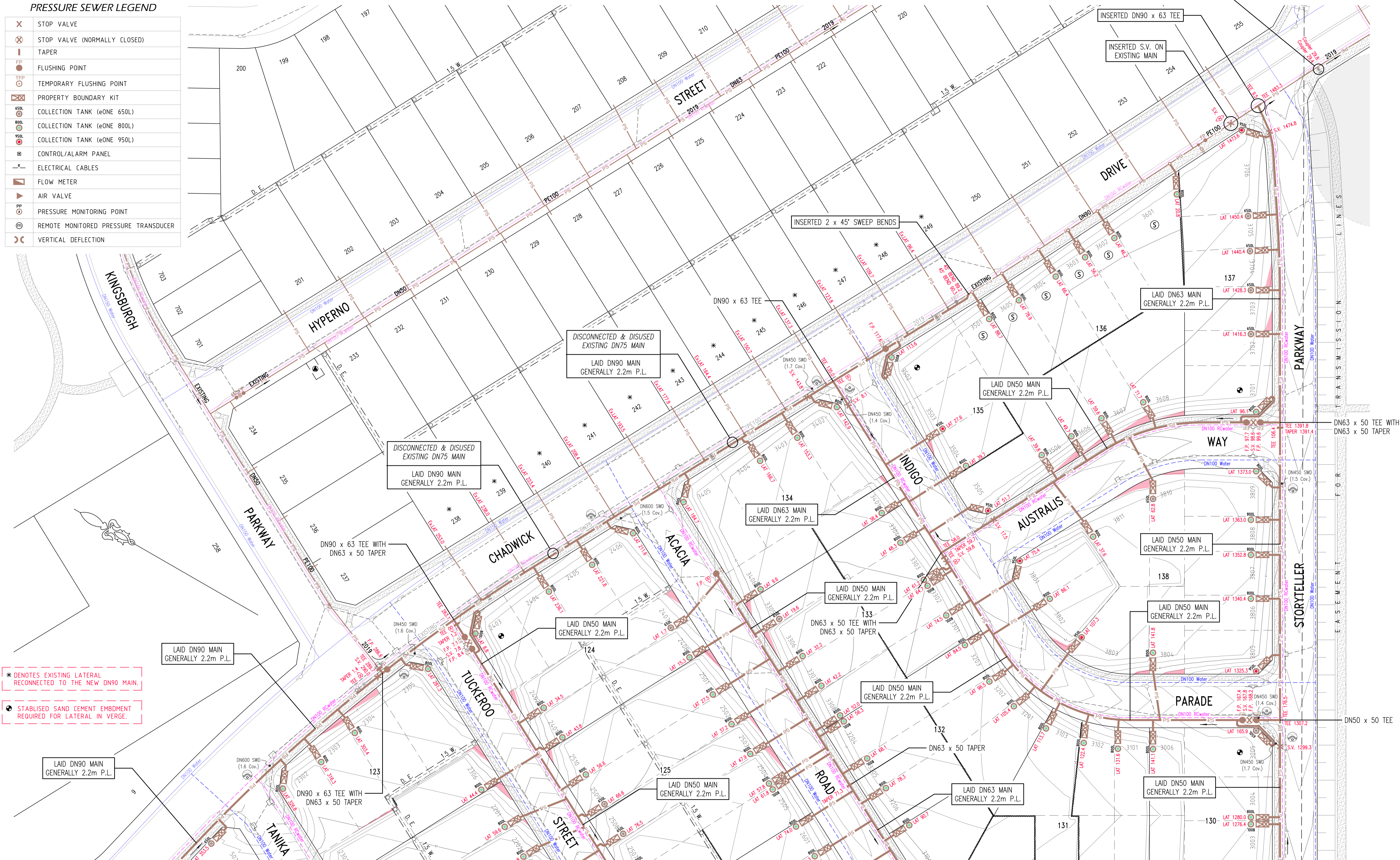
- Stage 1
- Stage 2
- Stage 3



<b>ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.</b> <small>WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT</small> <b>RAR</b> <small>Incorporated in New South Wales</small>		<small>SHOP 7 &amp; 8 'M CENTRE'</small> <small>40 STERLING ROAD, MINCHBURY NSW 2770</small> <small>PH: (02) 9853 0200 FAX: (02) 9671 7399</small>	 <small>Quality Endorsed Company</small>	<b>PRESSURE SEWER GENERAL ARRANGEMENT</b>		<small>SHEET 3 OF 13</small>	<small>VERSION</small> <b>WAC</b>
<small>DRAWN BY</small> D.SHEATHER	<small>DESIGNED BY</small> D.SHEATHER	<small>REVIEWED BY</small> K.GAO	<small>VERIFIED BY</small> K.GAO	<small>SCALE</small> -	<small>DATE</small> -	<small>W.A.S. REFERENCE</small> 88 J12	<small>DATE OF ISSUE</small> 14/8/2023
4/23645/D1							

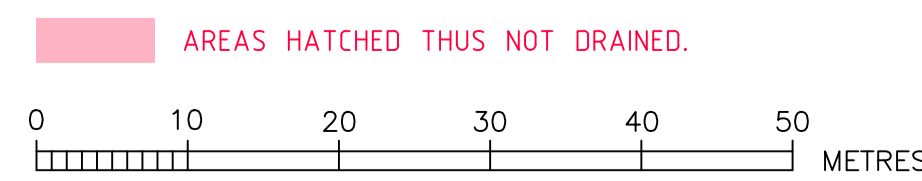
PRESSURE SEWER LEGEND

X	STOP VALVE
⊗	STOP VALVE (NORMALLY CLOSED)
∟	TAPER
FP	FLUSHING POINT
TFP	TEMPORARY FLUSHING POINT
▭	PROPERTY BOUNDARY KIT
650L	COLLECTION TANK (eONE 650L)
800L	COLLECTION TANK (eONE 800L)
950L	COLLECTION TANK (eONE 950L)
⊠	CONTROL/ALARM PANEL
—	ELECTRICAL CABLES
▶	FLOW METER
⊠	AIR VALVE
PM	PRESSURE MONITORING POINT
⊕	REMOTE MONITORED PRESSURE TRANSDUCER
∩	VERTICAL DEFLECTION



\* DENOTES EXISTING LATERAL RECONNECTED TO THE NEW DN90 MAIN.  
 Ⓢ STABILISED SAND CEMENT EMBODIMENT REQUIRED FOR LATERAL IN VERGE.

Ⓢ DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING MAIN WITH PLASSON TAPPING SADDLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER WAT-1108-V).  
 Ⓣ DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN. LATERAL CONNECTIONS TO EXISTING MAIN WERE MADE BY MEANS OF A TEE ONLY. TAPPING SADDLES ARE NOT PERMITTED.



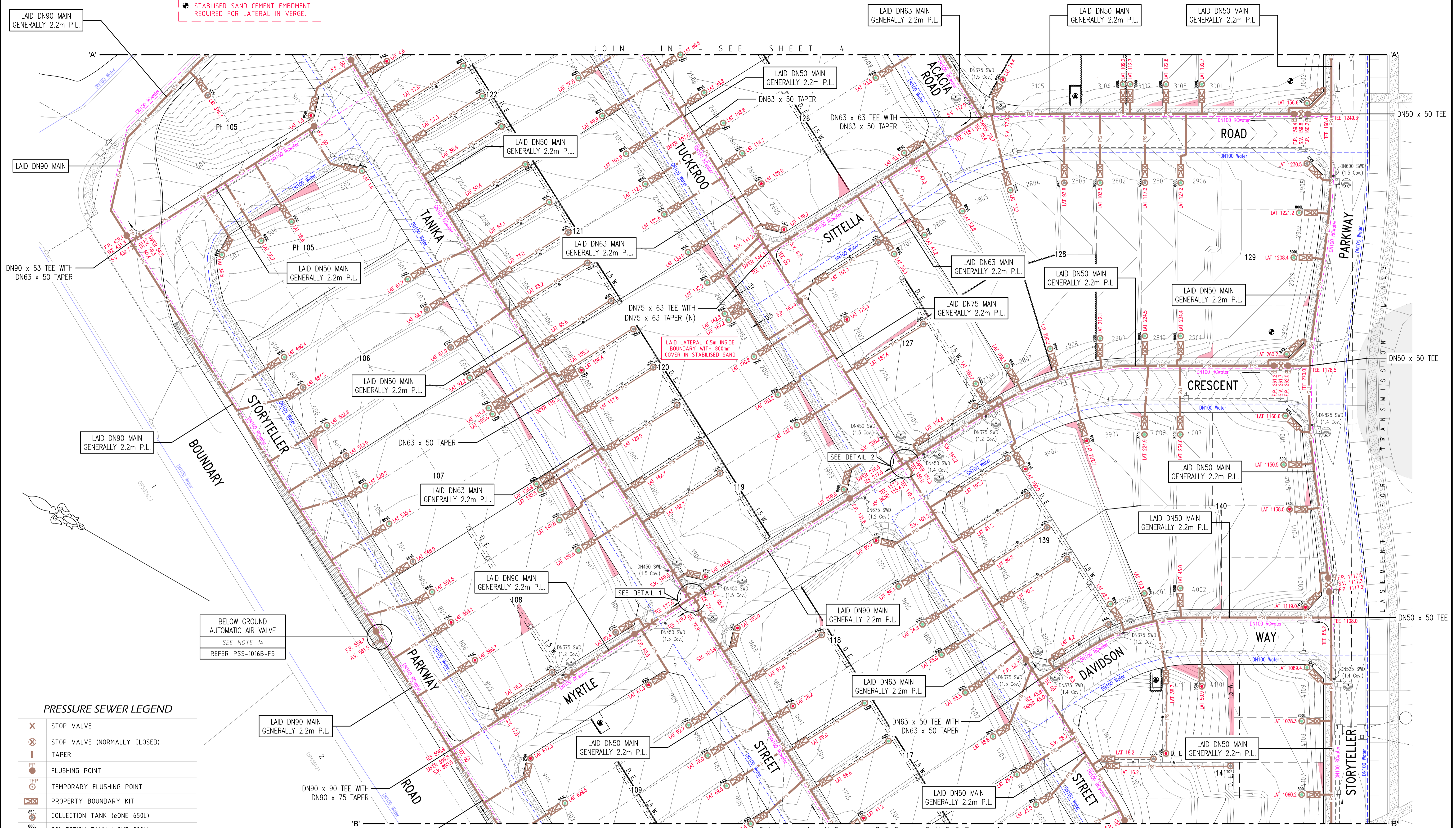
Ⓢ DENOTES LAY MAIN UNDER SERVICE  
 Ⓣ DENOTES LAY MAIN OVER SERVICE

Ⓢ ESMIT FOR PADMOUNT SUBSTATION 2.75 W.

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.  
**RAR** WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT  
 SHOP 7 & 8 'M CENTRE'  
 40 STERLING ROAD, MINCHINBURY NSW 2770  
 PH: (02) 9853 0200 FAX: (02) 9671 7399

PRESSURE SEWER DETAIL PLAN 1				SHEET 4 OF 13		WAC	
DESIGNED	D.SHEATHER	REVIEWED	K.GAO	DATE	14/8/2023	NO.	4/23645/D1
DRAWN	D.SHEATHER	DATE	A.H.D.	SCALE	1:500		

STABILISED SAND CEMENT EMBODMENT REQUIRED FOR LATERAL IN VERGE.



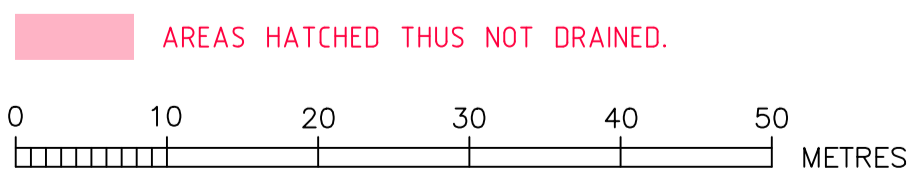
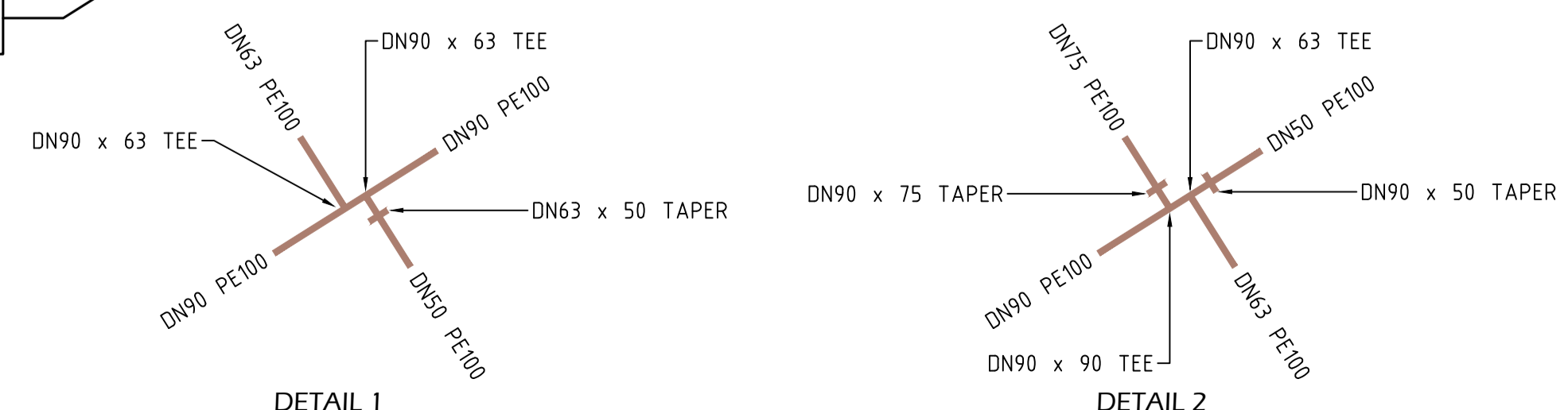
BELOW GROUND AUTOMATIC AIR VALVE  
SEE NOTE 14  
REFER PSS-1016B-FS

LAI LATERAL 0.5m INSIDE BOUNDARY WITH 800mm COVER IN STABILISED SAND

PRESSURE SEWER LEGEND

✕	STOP VALVE
⊗	STOP VALVE (NORMALLY CLOSED)
— —	TAPER
●	FLUSHING POINT
○	TEMPORARY FLUSHING POINT
⊠	PROPERTY BOUNDARY KIT
⊙	COLLECTION TANK (eONE 650L)
⊙	COLLECTION TANK (eONE 800L)
⊙	COLLECTION TANK (eONE 950L)
⊠	CONTROL/ALARM PANEL
—e—	ELECTRICAL CABLES
▶	FLOW METER
▲	AIR VALVE
⊙	PRESSURE MONITORING POINT
⊙	REMOTE MONITORED PRESSURE TRANSDUCER
⊂	VERTICAL DEFLECTION

⊙ DENOTES LAY MAIN UNDER SERVICE  
⊙ DENOTES LAY MAIN OVER SERVICE



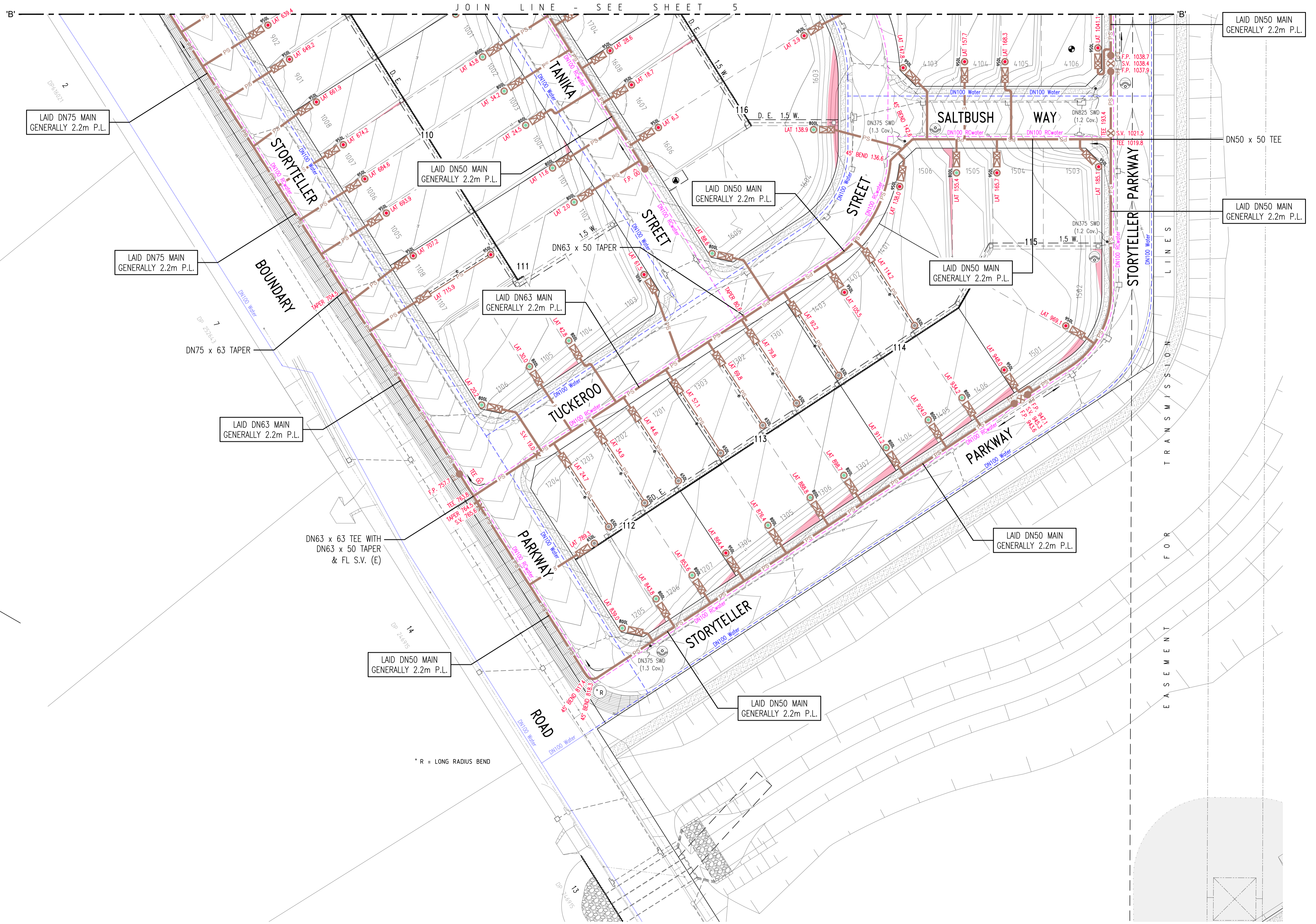
ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.  
**RAR**  
 WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT  
 SHOP 7 & 8 'M CENTRE'  
 40 STERLING ROAD, MINCHINBURY NSW 2770  
 PH: (02) 9853 0200 FAX: (02) 9671 7399



PRESSURE SEWER DETAIL PLAN 2			
DRAWN	DESIGNED	REVIEWED	ISSUED
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO
SCALE	DATE	SCALE REVISIONS	DATE OF ISSUE
1:500	A.H.D.	88 J12	14/8/2023

SHEET 5 OF 13	WAC
4/23645/D1	

STABILISED SAND CEMENT EMBANKMENT REQUIRED FOR LATERAL IN VERGE.



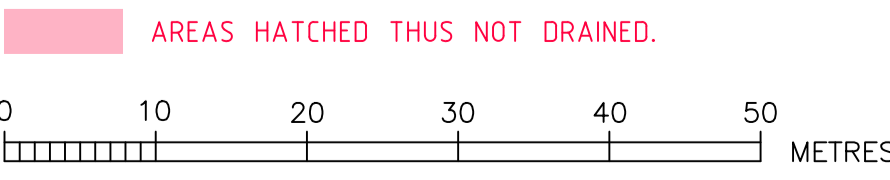
**PRESSURE SEWER LEGEND**

	STOP VALVE
	STOP VALVE (NORMALLY CLOSED)
	TAPER
	FLUSHING POINT
	TEMPORARY FLUSHING POINT
	PROPERTY BOUNDARY KIT
	COLLECTION TANK (eONE 650L)
	COLLECTION TANK (eONE 800L)
	COLLECTION TANK (eONE 950L)
	CONTROL/ALARM PANEL
	ELECTRICAL CABLES
	FLOW METER
	AIR VALVE
	PRESSURE MONITORING POINT
	REMOTE MONITORED PRESSURE TRANSDUCER
	DENOTES LAY MAIN UNDER SERVICE
	DENOTES LAY MAIN OVER SERVICE
	VERTICAL DEFLECTION

DENOTES LAY MAIN UNDER SERVICE  
 DENOTES LAY MAIN OVER SERVICE

ESMT FOR PADMOUNT SUBSTATION 2.75 W.

\* R = LONG RADIUS BEND



**ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.**  
 WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT  
**RAR**  
 SHOP 7 & 8 'M CENTRE'  
 40 STERLING ROAD, MINCHBURY NSW 2770  
 PH: (02) 9853 0200 FAX: (02) 9671 7399

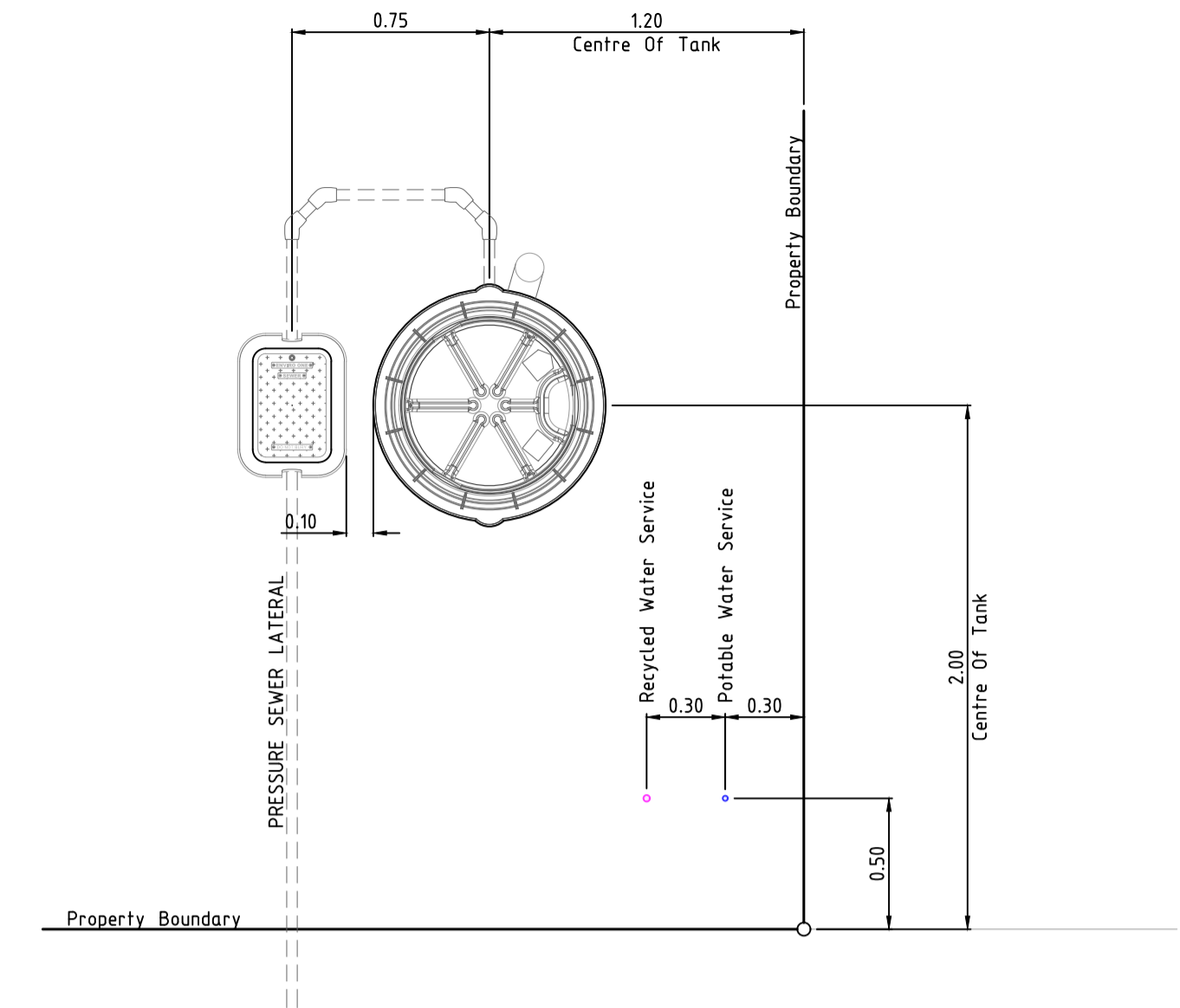
PRESSURE SEWER DETAIL PLAN 3				SHEET 6 OF 13	WAC
DRAWN: D.SHEATHER	DESIGNED: D.SHEATHER	REVIEWED: K.GAO	VERIFIED: K.GAO	DATE: 14/8/2023	AS No. 4/23645/D1
SCALE: 1:500	DRAWN: A.H.D.	DATE REVISION: 88 J12	DATE OF ISSUE: 14/8/2023		

PRESSURE SEWER COLLECTION TANK LEVEL DETAILS

THE GABLES DEVELOPMENT - PRECINCT D [STAGE 1]

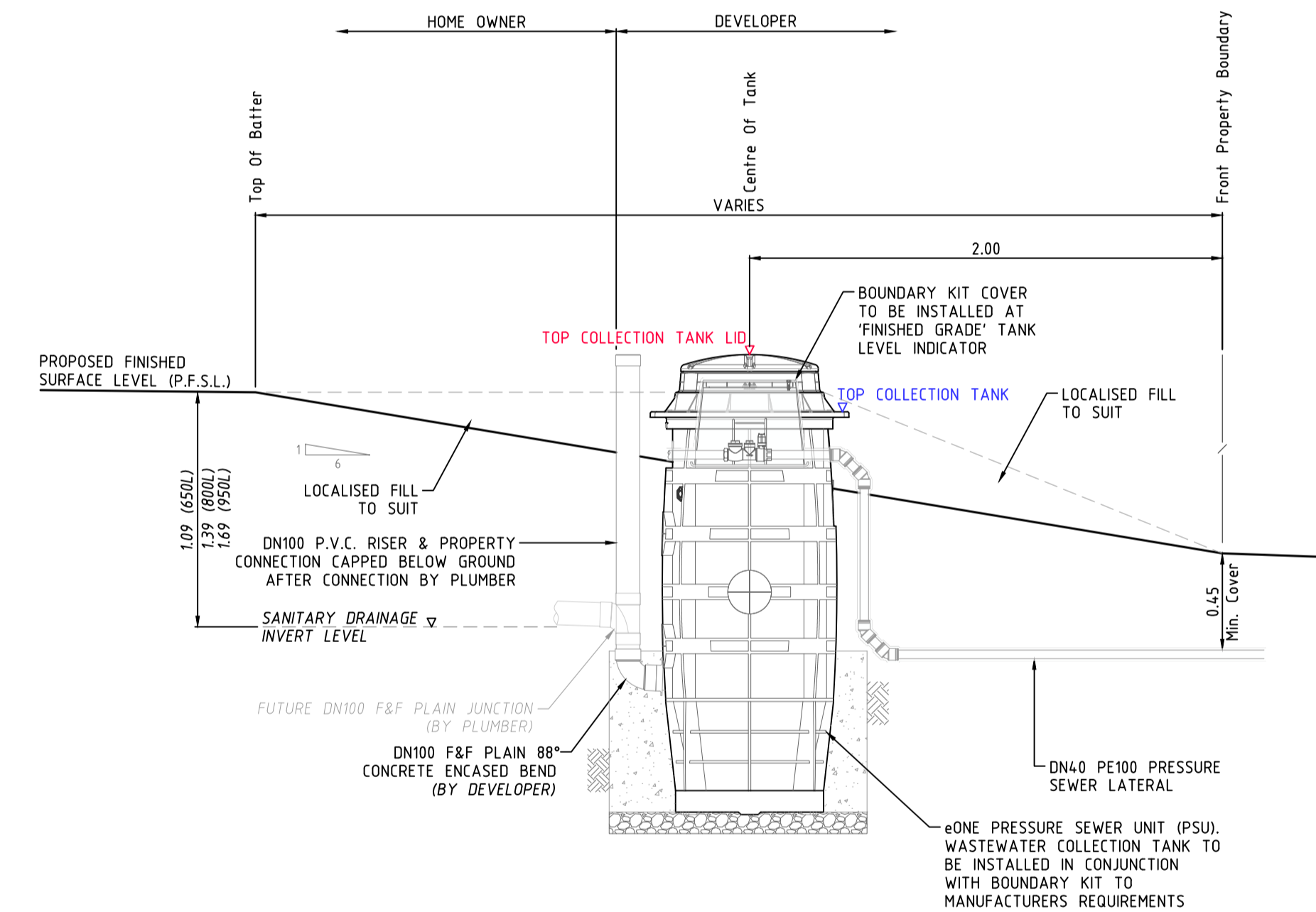
LOT NUMBER	COLLECTION TANK LOCATION	TANK SIZE	PFSL AT TANK LOCATION	TOP OF COLLECTION TANK	DESIGN SANITARY DRAINAGE INVERT LEVEL	TOP OF COLLECTION TANK LID*	CALCULATED SANITARY DRAINAGE INVERT LEVEL	WAC v's DESIGN INVERT LEVEL COMPARISON
	[FRONT / REAR]	[650L / 800L / 950L]		[Design R.L.]	[Design R.L.]	[Work-As-Constructed]	[Work-As-Constructed]	[- LOWER / + HIGHER]
501	FRONT FLAT	650L	41.62	41.58	40.58	41.85	40.58	0.00
502	FRONT FLAT	650L	41.45	41.41	40.41	41.66	40.39	-0.02
503	FRONT FLAT	950L	42.75	42.71	41.11	42.95	41.08	-0.03
504	FRONT BATTER	800L	43.79	44.21	42.91	44.42	42.85	-0.06
505	FRONT BATTER	800L	44.21	44.61	43.31	44.81	43.24	-0.07
506	FRONT BATTER	800L	44.43	44.81	43.51	45.00	43.43	-0.08
507	FRONT BATTER	800L	44.66	44.85	43.55	45.07	43.50	-0.05
601	FRONT FLAT	800L	46.29	46.25	44.95	46.52	44.95	0.00
602	FRONT FLAT	650L	46.72	46.68	45.68	46.95	45.68	0.00
603	FRONT FLAT	650L	47.14	47.10	46.10	47.35	46.08	-0.02
604	FRONT BATTER	800L	47.42	47.63	46.33	47.88	46.31	-0.02
605	FRONT BATTER	650L	47.59	47.66	46.66	47.88	46.61	-0.05
606	FRONT FLAT	800L	47.19	47.15	45.85	47.36	45.79	-0.06
607	FRONT FLAT	650L	46.67	46.63	45.63	46.83	45.56	-0.07
608	FRONT FLAT	800L	46.24	46.20	44.90	46.42	44.85	-0.05
701	FRONT BATTER	800L	47.61	48.04	46.74	48.32	46.75	0.01
702	FRONT BATTER	800L	47.62	48.05	46.75	48.33	46.76	0.01
703	FRONT BATTER	800L	47.48	47.91	46.61	48.20	46.63	0.02
704	FRONT FLAT	650L	48.44	48.40	47.40	48.66	47.39	-0.01
705	FRONT BATTER	800L	48.29	48.44	47.14	48.64	47.07	-0.07
706	FRONT BATTER	800L	47.93	48.07	46.77	48.27	46.70	-0.07
801	FRONT BATTER	800L	47.46	47.91	46.61	48.21	46.64	0.03
802	FRONT BATTER	800L	47.36	47.82	46.52	48.11	46.54	0.02
803	FRONT BATTER	800L	47.26	47.72	46.42	48.04	46.47	0.05
804	FRONT FLAT	650L	47.23	47.19	46.19	47.48	46.21	0.02
805	REAR	650L	47.84	47.80	46.80	48.01	46.74	-0.06
806	FRONT BATTER	950L	48.64	48.69	47.09	49.05	47.18	0.09
807	FRONT BATTER	950L	48.56	48.62	47.02	48.85	46.98	-0.04
808	FRONT BATTER	800L	48.52	48.51	47.21	48.74	47.17	-0.04
901	FRONT FLAT	950L	47.89	47.85	46.25	48.12	46.25	0.00
902	FRONT FLAT	950L	48.18	48.14	46.54	48.38	46.51	-0.03
903	FRONT FLAT	800L	48.36	48.32	47.02	48.56	46.99	-0.03
904	FRONT FLAT	950L	48.54	48.50	46.90	48.76	46.89	-0.01
905	FRONT BATTER	950L	47.38	47.41	45.81	47.64	45.77	-0.04
906	FRONT BATTER	800L	46.73	46.96	45.66	47.20	45.63	-0.03
907	FRONT BATTER	800L	46.44	46.61	45.31	46.85	45.28	-0.03
908	FRONT BATTER	800L	46.12	46.22	44.92	46.45	44.88	-0.04
1001	FRONT BATTER	800L	45.68	45.80	44.50	46.04	44.47	-0.03
1002	FRONT BATTER	800L	45.23	45.39	44.09	45.66	44.09	0.00
1003	FRONT BATTER	800L	44.85	45.00	43.70	45.31	43.74	0.04
1004	FRONT BATTER	800L	44.48	44.61	43.31	44.88	43.31	0.00
1005	FRONT FLAT	950L	46.27	46.23	44.63	46.50	44.63	0.00
1006	FRONT FLAT	950L	46.66	46.62	45.02	46.87	45.00	-0.02
1007	FRONT FLAT	950L	47.06	47.02	45.42	47.35	45.48	0.06
1008	FRONT FLAT	950L	47.50	47.46	45.86	47.77	45.90	0.04
1101	FRONT BATTER	800L	44.03	44.20	42.90	44.45	42.88	-0.02
1102	FRONT BATTER	800L	43.66	43.81	42.51	44.06	42.49	-0.02
1103	FRONT BATTER	950L	42.79	43.53	41.93	43.77	41.90	-0.03
1104	FRONT BATTER	800L	43.41	43.72	42.42	44.00	42.43	0.01
1105	FRONT BATTER	800L	43.56	43.89	42.59	44.14	42.57	-0.02
1106	FRONT BATTER	800L	43.76	43.96	42.66	44.04	42.47	-0.19
1107	REAR	950L	45.15	45.11	43.51	45.41	43.54	0.03
1108	FRONT FLAT	950L	45.79	45.75	44.15	46.04	44.17	0.02
1201	REAR	650L	42.48	42.44	41.44	42.73	41.46	0.02
1202	REAR	650L	42.58	42.54	41.54	42.83	41.56	0.02
1203	REAR	650L	42.68	42.64	41.64	42.89	41.62	-0.02
1204	FRONT FLAT	650L	42.77	42.73	41.73	43.02	41.75	0.02
1205	FRONT BATTER	800L	41.56	41.84	40.54	42.10	40.53	-0.01
1206	FRONT BATTER	800L	41.21	41.36	40.06	41.61	40.04	-0.02
1207	FRONT BATTER	800L	40.96	41.27	39.97	41.55	39.98	0.01
1301	REAR	650L	42.13	42.09	41.09	42.37	41.10	0.01
1302	REAR	650L	42.23	42.19	41.19	42.49	41.22	0.03
1303	REAR	650L	42.35	42.31	41.31	42.57	41.30	-0.01
1304	FRONT BATTER	950L	40.75	41.17	39.57	41.39	39.52	-0.05
1305	FRONT BATTER	800L	40.56	41.03	39.73	41.25	39.68	-0.05
1306	FRONT BATTER	800L	40.45	40.91	39.61	41.11	39.54	-0.07
1307	FRONT BATTER	800L	40.35	40.81	39.51	41.06	39.49	-0.02
1401	REAR	650L	41.77	41.73	40.73	42.03	40.76	0.03
1402	FRONT BATTER	950L	42.42	42.47	40.87	42.75	40.88	0.01
1403	REAR	650L	42.00	41.96	40.96	42.30	41.03	0.07
1404	FRONT FLAT	800L	40.50	40.46	39.16	40.72	39.15	-0.01
1405	FRONT FLAT	800L	40.40	40.36	39.06	40.59	39.02	-0.04
1406	FRONT FLAT	800L	40.30	40.26	38.96	40.48	38.91	-0.05
1501	FRONT BATTER	950L	39.91	40.34	38.74	40.65	38.78	0.04
1502	FRONT BATTER	950L	39.70	40.19	38.59	40.48	38.61	0.02
1503	FRONT FLAT	950L	39.75	39.71	38.11	40.03	38.16	0.05
1504	FRONT FLAT	950L	40.04	40.00	38.40	40.32	38.45	0.05
1505	FRONT FLAT	800L	40.72	40.68	39.38	41.00	39.43	0.05
1506	FRONT BATTER	950L	41.86	41.84	40.24	42.18	40.31	0.07
1601	FRONT BATTER	800L	43.27	43.49	42.19	43.71	42.14	-0.05
1602	FRONT BATTER	800L	42.96	43.10	41.80	43.35	41.78	-0.02
1603	FRONT BATTER	950L	42.68	42.98	41.38	43.23	41.36	-0.02
1604	FRONT BATTER	800L	42.23	42.78	41.48	43.02	41.45	-0.03
1605	FRONT BATTER	800L	42.93	43.17	41.87	43.40	41.83	-0.04
1606	FRONT FLAT	950L	43.74	43.70	42.10	43.92	42.05	-0.05
1607	FRONT FLAT	950L	44.10	44.06	42.46	44.27	42.40	-0.06
1608	FRONT FLAT	950L	44.50	44.46	42.86	44.69	42.82	-0.04
1701	FRONT BATTER	800L	43.95	44.27	42.97	44.47	42.90	-0.07
1702	FRONT BATTER	800L	43.83	44.15	42.85	44.36	42.79	-0.06
1703	FRONT BATTER	800L	43.57	43.81	42.51	44.03	42.46	-0.05
1704	FRONT FLAT	950L	44.94	44.90	43.30	45.13	43.26	-0.04
1705	REAR	800L	45.15	45.11	43.81	45.34	43.77	-0.04
1706	REAR	800L	45.66	45.62	44.32	45.84	44.27	-0.05

\* COLLECTION TANK LEVEL PROVIDED TO G.P.S. ACCURACY ONLY. THE BUILDER IS REQUIRED TO CONFIRM DRAINAGE CONSTRAINTS PRIOR TO MAKING CONNECTION TO TANK.



TYPICAL INFRASTRUCTURE SETOUT DIMENSIONS

SCALE 1:25



COLLECTION TANK SECTIONAL ELEVATION

SCALE 1:25

COLLECTION TANK NOTES

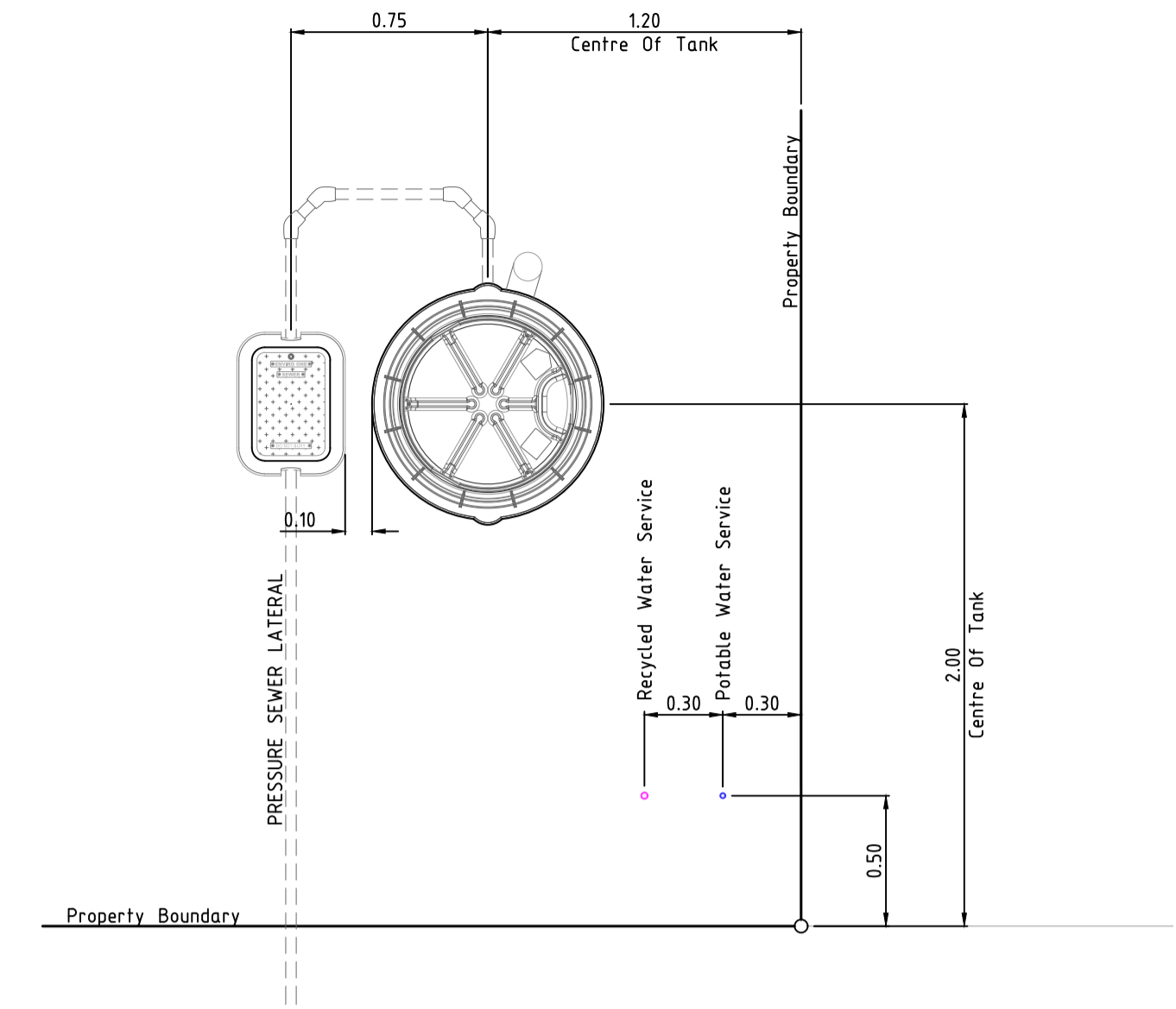
- DESIGN SURFACE LEVELS WERE ELECTRONICALLY EXTRACTED FROM DIGITAL DATA SUPPLIED BY ENSPIRE DATED 8/9/21 (210908 PRECINCT D TIN SURFACE.12daz).
- DESIGN LEVELS CAN ONLY BE ASSUMED AS CURRENT AT TIME OF EXTRACTION. ALL LEVELS SHALL BE CONFIRMED WITH THE SITE SUPERINTENDENT PRIOR TO INSTALLATION OF TANKS. SHOULD THE PROPOSED FINISHED SURFACE LEVEL (P.F.S.L.) DIFFER FROM DESIGN BY MORE THAN 100mm, THE CONSTRUCTOR SHALL CONTACT THE DESIGNER IMMEDIATELY.
- COLLECTION TANK SETOUT SHALL BE COMPLIANT WITH FSI-1000-FS & FSI-SK03A-FS. COLLECTION TANK INSTALLATION LEVELS DOCUMENTED ADJACENT SHALL SUPERSEDE ANY LEVELS ADVISED ON DRAWING FSI-SK03A-FS.
- R.A.R. ACCEPT NO RESPONSIBILITY FOR INCONSISTENCIES IN EXTRACTED LEVELS RESULTING FROM CHANGES TO THE MODEL (SURFACE LEVEL) INFORMATION POST DATA EXTRACTION DATE.

<b>ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.</b> WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT SHOP 7 & 8 'M CENTRE' 40 STERLING ROAD, MINCHINBURY NSW 2770 PH: (02) 9853 0200 FAX: (02) 9671 7399		<b>COLLECTION TANK LEVEL DETAILS 1</b>		SHEET 7 OF 13	WAC
DRAWN: D.SHEATHER SCALE:	DESIGNED: D.SHEATHER DATE:	REVIEWED: K.GAO DATE: 88 J12	VERIFIED: K.GAO DATE OF ISSUE: 14/8/2023	4/23645/D1	

PRESSURE SEWER COLLECTION TANK LEVEL DETAILS  
THE GABLES DEVELOPMENT - PRECINCT D [STAGE 1]

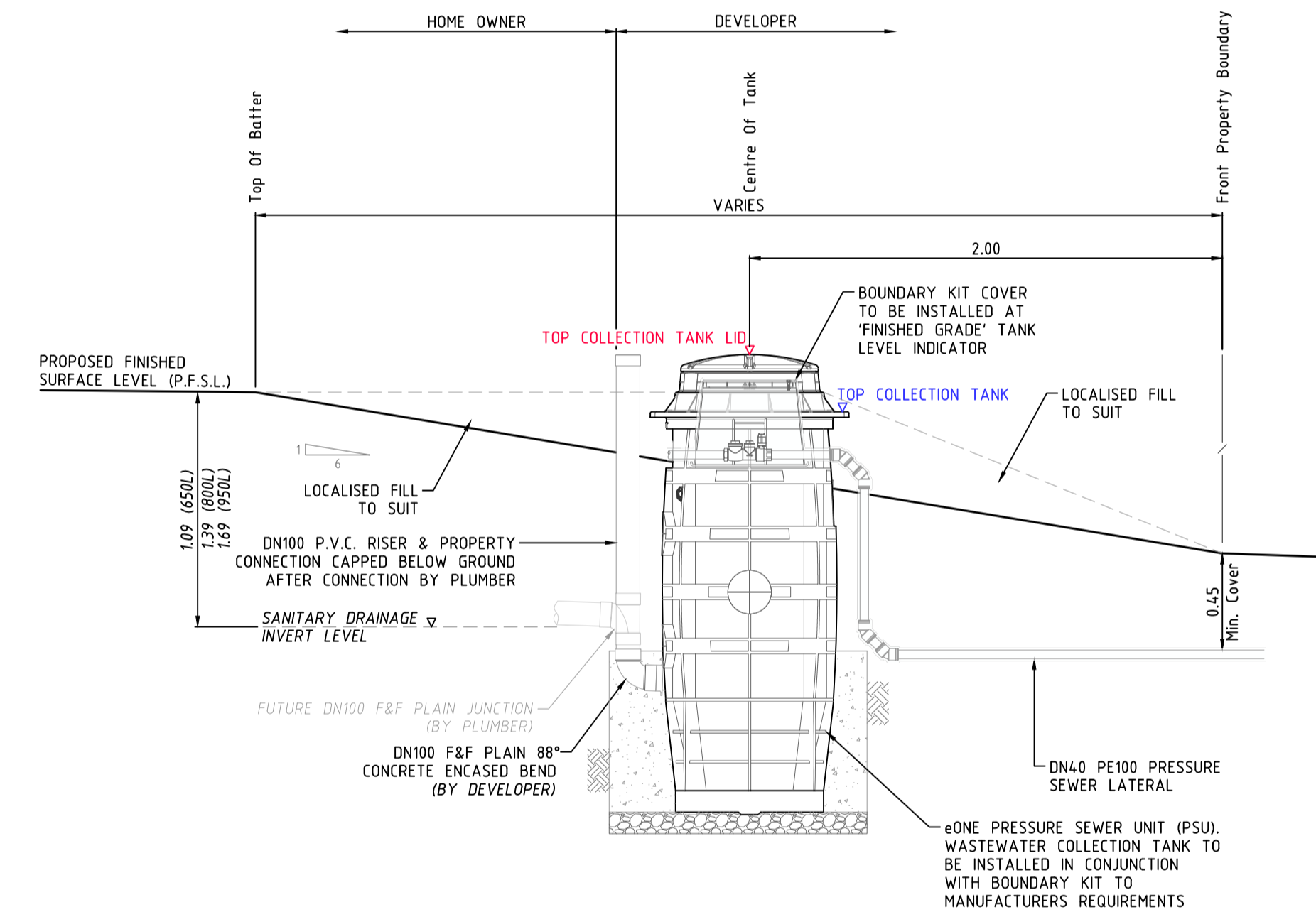
LOT NUMBER	COLLECTION TANK LOCATION	TANK SIZE	PFSL AT TANK LOCATION	TOP OF COLLECTION TANK	DESIGN SANITARY DRAINAGE INVERT LEVEL	TOP OF COLLECTION TANK LID*	CALCULATED SANITARY DRAINAGE INVERT LEVEL	WAC v's DESIGN INVERT LEVEL COMPARISON
	[FRONT / REAR]	[650L / 800L / 950L]		[Design R.L.]	[Design R.L.]	[Work-As-Constructed]	[Work-As-Constructed]	[- LOWER / + HIGHER]
1801	FRONT BATTER	950L	46.20	46.22	44.62	46.45	44.58	-0.04
1802	REAR	650L	45.89	45.85	44.85	46.08	44.81	-0.04
1803	FRONT BATTER	950L	46.72	46.66	45.06	46.88	45.01	-0.05
1804	FRONT BATTER	950L	44.72	45.01	43.41	45.24	43.37	-0.04
1805	FRONT BATTER	800L	44.29	44.49	43.19	44.70	43.13	-0.06
1806	FRONT BATTER	800L	44.06	44.37	43.07	44.55	42.98	-0.09
1901	FRONT BATTER	800L	45.02	45.45	44.15	45.69	44.12	-0.03
1902	FRONT BATTER	800L	44.95	45.44	44.14	45.66	44.09	-0.05
1903	FRONT BATTER	800L	44.77	45.16	43.86	45.46	43.89	0.03
1904	FRONT FLAT	950L	46.79	46.75	45.15	46.98	45.11	-0.04
1905	REAR	650L	46.29	46.25	45.25	46.53	45.26	0.01
1906	REAR	650L	46.39	46.35	45.35	46.61	45.34	-0.01
2001	FRONT BATTER	800L	45.03	45.46	44.16	45.66	44.09	-0.07
2002	FRONT BATTER	800L	45.15	45.51	44.21	45.75	44.18	-0.03
2003	FRONT BATTER	800L	45.16	45.51	44.21	45.73	44.16	-0.05
2004	FRONT BATTER	800L	45.12	45.45	44.15	45.68	44.11	-0.04
2005	REAR	650L	46.52	46.48	45.48	46.79	45.52	0.04
2006	REAR	650L	46.64	46.60	45.60	46.90	45.63	0.03
2007	FRONT BATTER	950L	47.26	47.31	45.71	47.56	45.69	-0.02
2008	REAR	650L	46.73	46.69	45.69	47.01	45.74	0.05
2101	FRONT BATTER	800L	44.20	44.37	43.07	44.59	43.02	-0.05
2102	FRONT BATTER	800L	44.44	44.66	43.36	44.87	43.30	-0.06
2103	FRONT BATTER	800L	44.64	44.95	43.65	45.15	43.58	-0.07
2104	FRONT BATTER	800L	44.81	45.08	43.78	45.27	43.70	-0.08
2105	REAR	650L	46.45	46.41	45.41	46.66	45.39	-0.02
2106	REAR	650L	46.33	46.29	45.29	46.54	45.27	-0.02
2107	REAR	650L	46.04	46.00	45.00	46.27	45.00	0.00
2108	REAR	800L	45.65	45.61	44.31	45.84	44.27	-0.04
2201	FRONT BATTER	800L	42.56	42.76	41.46	43.03	41.46	0.00
2202	FRONT BATTER	800L	42.96	43.15	41.85	43.38	41.81	-0.04
2203	FRONT BATTER	800L	43.35	43.54	42.24	43.76	42.19	-0.05
2204	FRONT BATTER	800L	43.80	43.95	42.65	44.16	42.59	-0.06
2205	REAR	800L	45.04	45.00	43.70	45.22	43.65	-0.05
2206	REAR	800L	44.44	44.40	43.10	44.62	43.05	-0.05
2207	REAR	800L	43.76	43.72	42.42	43.92	42.35	-0.07
2208	REAR	800L	43.09	43.05	41.75	43.24	41.67	-0.08
2301	FRONT FLAT	950L	42.72	42.68	41.08	42.90	41.03	-0.05
2302	FRONT BATTER	800L	41.37	41.79	40.49	41.99	40.42	-0.07
2303	FRONT BATTER	800L	41.29	41.68	40.38	41.87	40.30	-0.08
2304	FRONT BATTER	800L	41.12	41.54	40.24	41.77	40.20	-0.04
2305	FRONT BATTER	800L	40.86	41.29	39.99	41.52	39.95	-0.04
2306	FRONT BATTER	800L	42.04	42.26	40.96	42.52	40.95	-0.01
2401	FRONT BATTER	800L	42.02	42.23	40.93	42.46	40.89	-0.04
2402	FRONT BATTER	800L	41.66	41.94	40.64	42.15	40.58	-0.06
2403	FRONT BATTER	800L	41.01	41.39	40.09	41.59	40.02	-0.07
2404	FRONT BATTER	800L	41.29	41.55	40.25	41.75	40.18	-0.07
2405	FRONT BATTER	800L	41.37	41.58	40.28	41.80	40.23	-0.05
2406	FRONT BATTER	800L	41.32	41.58	40.28	41.78	40.21	-0.07
2407	FRONT BATTER	650L	41.76	41.91	40.91	42.16	40.89	-0.02
2408	FRONT BATTER	800L	42.00	42.20	40.90	42.43	40.86	-0.04
2501	FRONT BATTER	800L	42.32	42.62	41.32	42.83	41.26	-0.06
2502	FRONT BATTER	800L	42.50	42.72	41.42	42.97	41.40	-0.02
2503	FRONT BATTER	800L	42.75	43.10	41.80	43.31	41.74	-0.06
2504	FRONT BATTER	800L	42.93	43.39	42.09	43.59	42.02	-0.07
2505	FRONT BATTER	800L	42.95	43.40	42.10	43.60	42.03	-0.07
2506	FRONT FLAT	800L	44.02	43.98	42.68	44.26	42.69	0.01
2507	FRONT BATTER	800L	43.69	43.83	42.53	44.07	42.50	-0.03
2508	FRONT FLAT	650L	43.23	43.19	42.19	43.42	42.15	-0.04
2509	FRONT FLAT	650L	42.84	42.80	41.80	43.02	41.75	-0.05
2510	FRONT BATTER	800L	42.50	42.65	41.35	42.92	41.35	0.00
2601	FRONT BATTER	800L	42.95	43.27	41.97	43.46	41.89	-0.08
2602	FRONT BATTER	800L	42.92	43.17	41.87	43.37	41.80	-0.07
2603	FRONT BATTER	800L	42.84	43.07	41.77	43.28	41.71	-0.06
2604	FRONT FLAT	800L	43.23	43.19	41.89	43.38	41.81	-0.08
2605	FRONT FLAT	950L	44.67	44.63	43.03	44.88	43.01	-0.02
2606	FRONT FLAT	950L	44.51	44.47	42.87	44.70	42.83	-0.04
2607	FRONT FLAT	800L	44.37	44.33	43.03	44.57	43.00	-0.03
2608	FRONT FLAT	800L	44.21	44.17	42.87	44.41	42.84	-0.03
2701	FRONT BATTER	800L	44.01	44.26	42.96	44.49	42.92	-0.04
2702	REAR	650L	43.98	43.94	42.94	44.16	42.89	-0.05
2703	FRONT BATTER	950L	44.76	44.79	43.19	45.05	43.18	-0.01
2704	REAR	650L	43.89	43.85	42.85	44.10	42.83	-0.02
2705	REAR	650L	43.26	43.22	42.22	43.51	42.24	0.02
2706	FRONT BATTER	800L	43.18	43.45	42.15	43.70	42.13	-0.02
2801	FRONT FLAT	650L	41.22	41.18	40.18	41.45	40.18	0.00
2802	FRONT FLAT	800L	41.66	41.62	40.32	41.90	40.33	0.01
2803	FRONT FLAT	650L	42.02	41.98	40.98	42.26	40.99	0.01
2804	FRONT FLAT	800L	42.62	42.58	41.28	42.87	41.30	0.02
2805	FRONT FLAT	800L	43.17	43.13	41.83	43.38	41.81	-0.02
2806	FRONT FLAT	800L	43.62	43.58	42.28	43.79	42.22	-0.06
2807	FRONT BATTER	800L	42.72	42.95	41.65	43.25	41.68	0.03
2808	FRONT FLAT	800L	42.14	42.10	40.80	42.40	40.83	0.03
2809	FRONT FLAT	800L	41.55	41.51	40.21	41.77	40.20	-0.01
2810	FRONT BATTER	800L	41.02	41.17	39.87	41.47	39.90	0.03
2901	FRONT BATTER	800L	40.56	40.78	39.48	41.08	39.51	0.03
2902	FRONT BATTER	800L	39.55	39.96	38.66	40.27	38.70	0.04
2903	FRONT BATTER	800L	39.80	40.15	38.85	40.40	38.83	-0.02
2904	FRONT BATTER	800L	39.88	40.14	38.84	40.36	38.79	-0.05
2905	FRONT FLAT	650L	39.92	39.88	38.88	40.16	38.89	0.01
2906	FRONT FLAT	800L	40.86	40.82	39.52	41.10	39.53	0.01

\* COLLECTION TANK LEVEL PROVIDED TO G.P.S. ACCURACY ONLY. THE BUILDER IS REQUIRED TO CONFIRM DRAINAGE CONSTRAINTS PRIOR TO MAKING CONNECTION TO TANK.



TYPICAL INFRASTRUCTURE SETOUT DIMENSIONS

SCALE 1:25



COLLECTION TANK SECTIONAL ELEVATION

SCALE 1:25

COLLECTION TANK NOTES

- DESIGN SURFACE LEVELS WERE ELECTRONICALLY EXTRACTED FROM DIGITAL DATA SUPPLIED BY ENSPIRE DATED 8/9/21 (210908 PRECINCT D TIN SURFACE.12daz).
- DESIGN LEVELS CAN ONLY BE ASSUMED AS CURRENT AT TIME OF EXTRACTION. ALL LEVELS SHALL BE CONFIRMED WITH THE SITE SUPERINTENDENT PRIOR TO INSTALLATION OF TANKS. SHOULD THE PROPOSED FINISHED SURFACE LEVEL (P.F.S.L.) DIFFER FROM DESIGN BY MORE THAN 100mm, THE CONSTRUCTOR SHALL CONTACT THE DESIGNER IMMEDIATELY.
- COLLECTION TANK SETOUT SHALL BE COMPLIANT WITH FSI-1000-FS & FSI-SK03A-FS. COLLECTION TANK INSTALLATION LEVELS DOCUMENTED ADJACENT SHALL SUPERSEDE ANY LEVELS ADVISED ON DRAWING FSI-SK03A-FS.
- R.A.R. ACCEPT NO RESPONSIBILITY FOR INCONSISTENCIES IN EXTRACTED LEVELS RESULTING FROM CHANGES TO THE MODEL (SURFACE LEVEL) INFORMATION POST DATA EXTRACTION DATE.

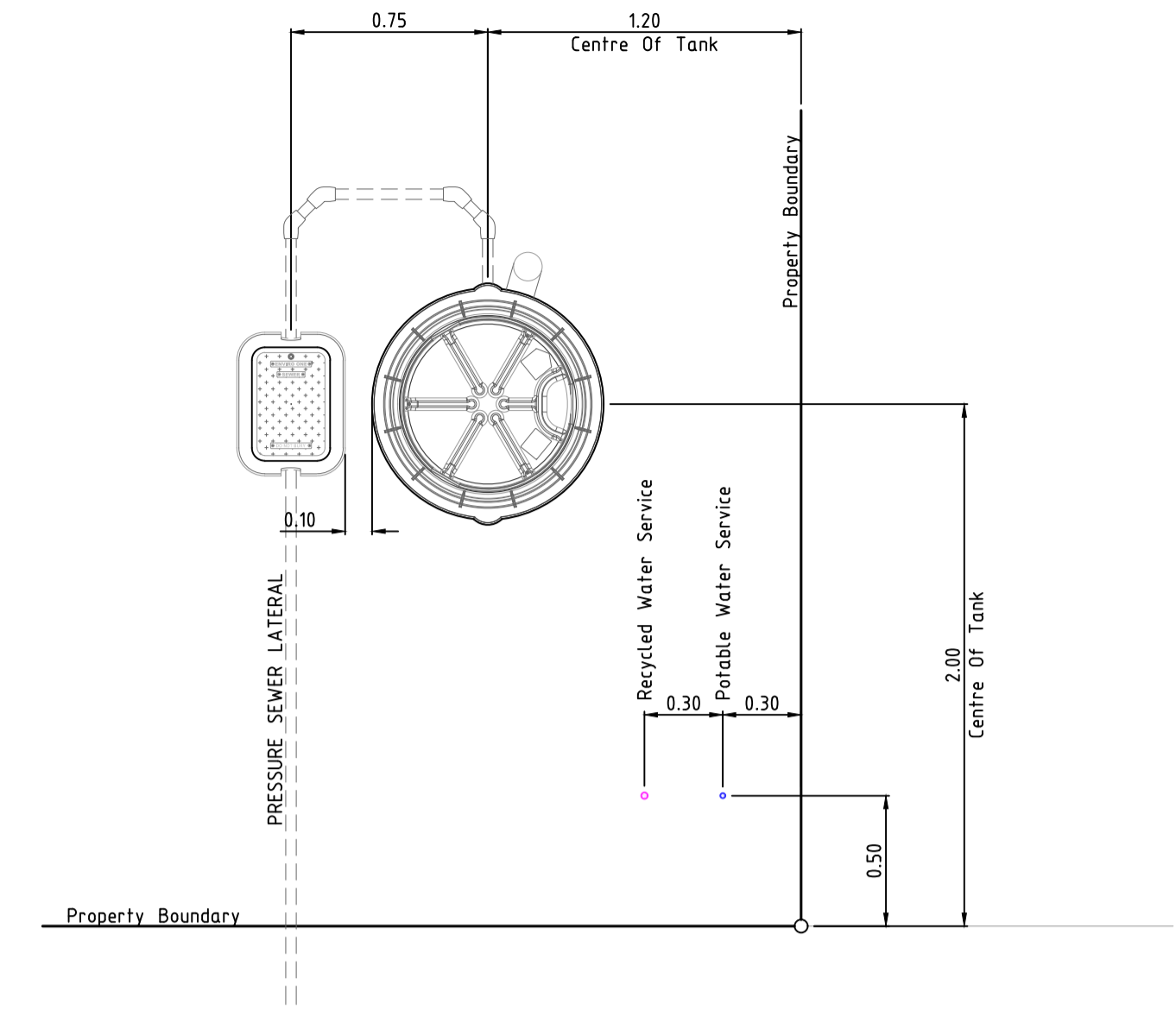
ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.		COLLECTION TANK LEVEL DETAILS 2		SHEET 8 OF 13	WAC
WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT SHOP 7 & 8 'M CENTRE' 40 STERLING ROAD, MINCHINBURY NSW 2770 PH: (02) 9853 0200 FAX: (02) 9671 7399		DRAFTED: D.SHEATHER DESIGNED: D.SHEATHER REVISIONS: K.GAO VERIFIED: K.GAO SCALE: - DATE: - DATE OF ISSUE: 8/8/2023		4/23645/D1	



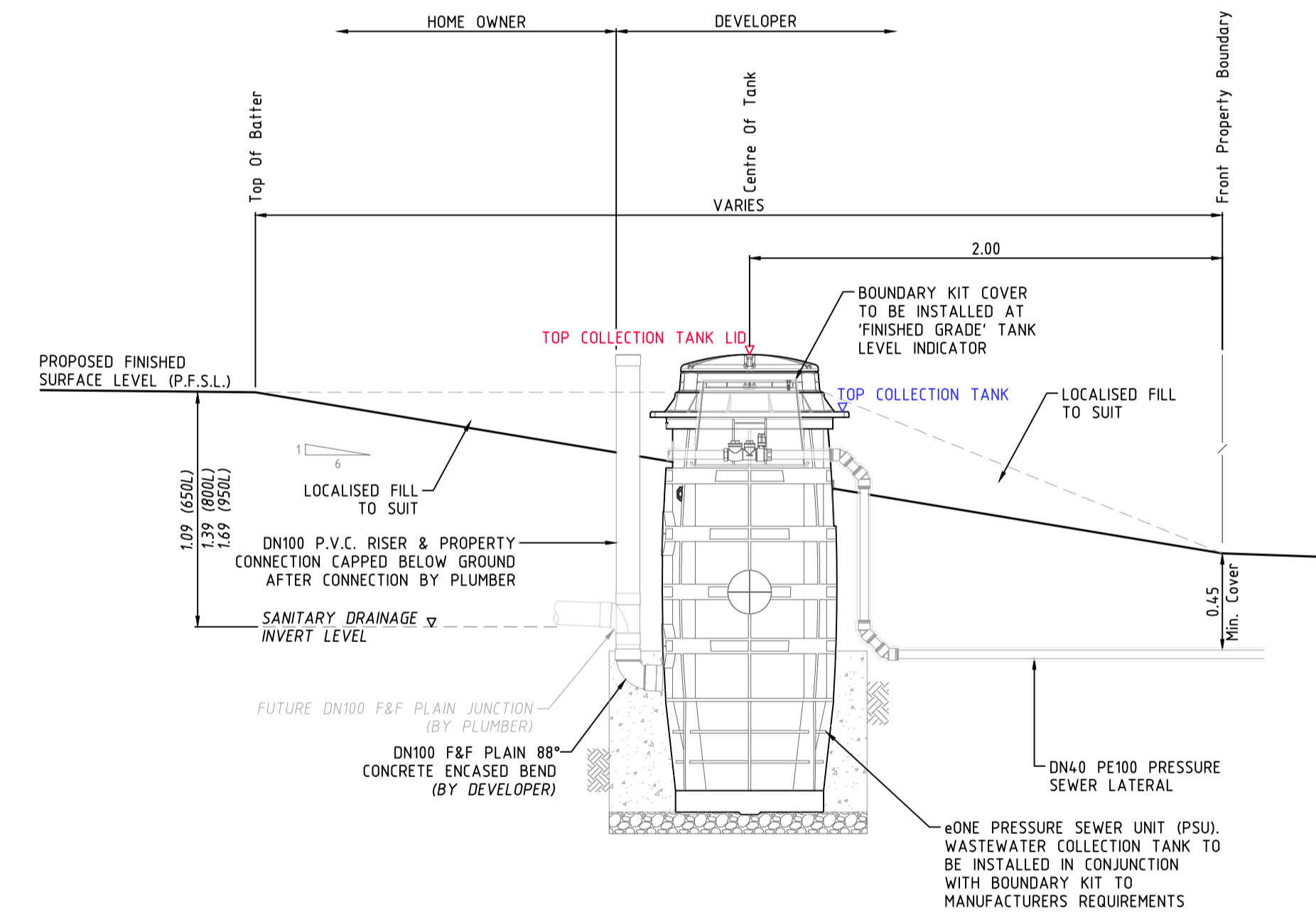
**PRESSURE SEWER COLLECTION TANK LEVEL DETAILS**  
**THE GABLES DEVELOPMENT - PRECINCT D [STAGE 1]**

LOT NUMBER	COLLECTION TANK LOCATION	TANK SIZE	P.F.S.L AT TANK LOCATION	TOP OF COLLECTION TANK	DESIGN SANITARY DRAINAGE INVERT LEVEL	TOP OF COLLECTION TANK LID *	CALCULATED SANITARY DRAINAGE INVERT LEVEL	WAC w's DESIGN INVERT LEVEL COMPARISON
	[FRONT / REAR]	[650L / 800L / 950L]		[Design R.L.]	[Design R.L.]	[Work-As-Constructed]	[Work-As-Constructed]	[- LOWER / + HIGHER]
3001	FRONT BATTER	800L	40.80	41.10	39.80	41.41	39.84	0.04
3002	FRONT BATTER	800L	40.15	40.44	39.14	40.74	39.17	0.03
3003	FRONT BATTER	800L	40.40	40.70	39.40	40.97	39.40	0.00
3004	FRONT BATTER	800L	40.42	40.70	39.40	40.97	39.40	0.00
3005	FRONT BATTER	650L	40.48	40.46	39.46	40.76	39.49	0.03
3006	FRONT BATTER	800L	40.98	41.14	39.84	41.43	39.86	0.02
3101	FRONT BATTER	800L	41.27	41.52	40.22	41.82	40.25	0.03
3102	FRONT BATTER	800L	41.43	41.62	40.32	41.88	40.31	-0.01
3103	FRONT BATTER	800L	41.69	42.02	40.72	42.25	40.68	-0.04
3104	FRONT BATTER	800L	42.84	43.03	41.73	43.29	41.72	-0.01
3105	FRONT FLAT	950L	42.57	42.53	40.93	42.79	40.92	-0.01
3106	FRONT BATTER	800L	41.60	41.96	40.66	42.25	40.68	0.02
3107	FRONT BATTER	800L	41.44	41.77	40.47	42.03	40.46	-0.01
3108	FRONT BATTER	800L	41.16	41.49	40.19	41.77	40.20	0.01
3201	FRONT BATTER	800L	41.87	42.17	40.87	42.40	40.83	-0.04
3202	FRONT BATTER	800L	42.03	42.28	40.98	42.54	40.97	-0.01
3203	FRONT BATTER	800L	42.24	42.40	41.10	42.66	41.09	-0.01
3204	FRONT BATTER	800L	42.83	43.21	41.91	43.49	41.92	0.01
3205	FRONT BATTER	800L	42.93	43.25	41.95	43.55	41.98	0.03
3206	FRONT BATTER	800L	42.92	43.14	41.84	43.44	41.87	0.03
3301	FRONT BATTER	800L	42.46	42.79	41.49	43.00	41.43	-0.06
3302	FRONT BATTER	800L	42.54	42.82	41.52	43.01	41.44	-0.08
3303	FRONT BATTER	800L	42.54	42.79	41.49	42.98	41.41	-0.08
3304	FRONT BATTER	800L	42.45	42.77	41.47	42.98	41.41	-0.06
3305	FRONT BATTER	650L	42.08	42.22	41.22	42.50	41.23	0.01
3306	FRONT BATTER	800L	42.43	42.73	41.43	43.02	41.45	0.02
3307	FRONT BATTER	800L	42.60	42.83	41.53	43.12	41.55	0.02
3308	FRONT BATTER	800L	42.80	43.12	41.82	43.41	41.84	0.02
3401	FRONT BATTER	800L	42.32	42.67	41.37	42.85	41.28	-0.09
3402	FRONT BATTER	800L	41.83	42.16	40.86	42.39	40.82	-0.04
3403	FRONT BATTER	800L	41.87	42.13	40.83	42.32	40.75	-0.08
3404	FRONT BATTER	800L	41.77	42.00	40.70	42.19	40.62	-0.08
3405	FRONT BATTER	800L	41.45	41.81	40.51	42.03	40.46	-0.05
3406	FRONT BATTER	800L	41.89	42.12	40.82	42.39	40.82	0.00
3501	FRONT BATTER	800L	42.33	42.61	41.31	42.91	41.34	0.03
3502	FRONT BATTER	800L	41.77	42.21	40.91	42.43	40.86	-0.05
3503	FRONT BATTER	950L	42.13	42.53	40.93	42.42	40.55	-0.38
3504	FRONT BATTER	800L	42.34	42.65	41.35	42.88	41.31	-0.04
3505	FRONT FLAT	950L	42.27	42.23	40.63	42.37	40.50	-0.13
3506	FRONT BATTER	800L	41.74	42.19	40.89	42.36	40.79	-0.10
3601	FRONT FLAT	800L	42.70	42.66	41.36	42.91	41.34	-0.02
3602	FRONT BATTER	800L	42.61	42.85	41.55	43.11	41.54	-0.01
3603	FRONT BATTER	800L	42.56	42.84	41.54	43.13	41.56	0.02
3604	FRONT BATTER	800L	42.51	42.84	41.54	43.10	41.53	-0.01
3605	FRONT BATTER	800L	42.41	42.71	41.41	42.94	41.37	-0.04
3606	FRONT BATTER	800L	41.63	42.09	40.79	42.26	40.69	-0.10
3607	FRONT BATTER	800L	41.54	41.99	40.69	42.18	40.61	-0.08
3608	FRONT BATTER	800L	41.42	41.85	40.55	42.04	40.47	-0.08
3701	FRONT BATTER	800L	41.32	41.57	40.27	41.76	40.19	-0.08
3702	FRONT BATTER	650L	41.58	41.74	40.74	41.94	40.67	-0.07
3703	FRONT BATTER	650L	41.69	41.87	40.87	42.05	40.78	-0.09
3704	FRONT BATTER	650L	41.79	41.97	40.97	42.17	40.90	-0.07
3705	FRONT BATTER	650L	41.89	42.06	41.06	42.27	41.00	-0.06
3706	FRONT BATTER	950L	42.17	42.37	40.77	42.58	40.71	-0.06
3801	FRONT FLAT	950L	42.27	42.23	40.63	42.51	40.64	0.01
3802	FRONT BATTER	800L	42.20	42.35	41.05	42.65	41.08	0.03
3803	FRONT FLAT	950L	41.73	41.69	40.09	41.98	40.11	0.02
3804	FRONT BATTER	800L	41.07	41.41	40.11	41.70	40.13	0.02
3805	FRONT BATTER	950L	40.72	41.08	39.48	41.38	39.51	0.03
3806	FRONT BATTER	800L	40.96	41.24	39.94	41.53	39.96	0.02
3807	FRONT BATTER	800L	41.07	41.36	40.06	41.66	40.09	0.03
3808	FRONT BATTER	800L	41.16	41.46	40.16	41.73	40.16	0.00
3809	FRONT BATTER	800L	41.18	41.44	40.14	41.69	40.12	-0.02
3810	FRONT BATTER	650L	41.35	41.51	40.51	41.79	40.52	0.01
3811	FRONT BATTER	800L	41.61	41.76	40.46	42.01	40.44	-0.02
3901	FRONT FLAT	950L	41.95	41.91	40.31	42.17	40.30	-0.01
3902	FRONT FLAT	950L	42.98	42.94	41.34	43.17	41.30	-0.04
3903	REAR	650L	43.26	43.22	42.22	43.47	42.20	-0.02
3904	REAR	650L	43.53	43.49	42.49	43.77	42.50	0.01
3905	REAR	650L	43.32	43.28	42.28	43.57	42.30	0.02
3906	REAR	650L	43.11	43.07	42.07	43.38	42.11	0.04
3907	REAR	650L	41.88	41.84	40.84	42.09	40.82	-0.02
3908	FRONT FLAT	800L	41.70	41.66	40.36	41.93	40.36	0.00
4001	FRONT FLAT	800L	41.12	41.08	39.78	41.34	39.77	-0.01
4002	FRONT FLAT	800L	40.56	40.52	39.22	40.79	39.22	0.00
4003	FRONT BATTER	950L	38.93	39.46	37.86	39.69	37.82	-0.04
4004	FRONT BATTER	950L	39.25	39.71	38.11	39.94	38.07	-0.04
4005	FRONT BATTER	800L	39.34	39.76	38.46	40.01	38.44	-0.02
4006	FRONT BATTER	800L	39.36	39.66	38.36	39.93	38.36	0.00
4007	FRONT FLAT	800L	40.47	40.43	39.13	40.70	39.13	0.00
4008	FRONT BATTER	800L	41.02	41.17	39.87	41.44	39.87	0.00
4101	REAR	650L	41.74	41.70	40.70	41.94	40.67	-0.03
4102	REAR	650L	40.01	39.97	38.97	40.20	38.93	-0.04
4103	FRONT FLAT	950L	41.61	41.57	39.97	41.78	39.91	-0.06
4104	FRONT BATTER	950L	40.68	40.84	39.24	41.12	39.25	0.01
4105	FRONT BATTER	950L	39.93	40.10	38.50	40.34	38.47	-0.03
4106	FRONT BATTER	950L	38.88	39.19	37.59	39.46	37.59	0.00
4107	FRONT BATTER	800L	38.87	39.36	38.06	39.60	38.03	-0.03
4108	FRONT BATTER	800L	38.74	39.16	37.86	39.42	37.85	-0.01
4109	FRONT BATTER	800L	38.70	39.06	37.76	39.28	37.71	-0.05
4110	FRONT BATTER	950L	40.43	40.84	39.24	41.05	39.18	-0.06
4111	REAR	950L	41.53	41.49	39.89	41.72	39.85	-0.04

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TYPICAL INFRASTRUCTURE SETOUT DIMENSIONS  
 SCALE 1:25



COLLECTION TANK SECTIONAL ELEVATION  
 SCALE 1:25

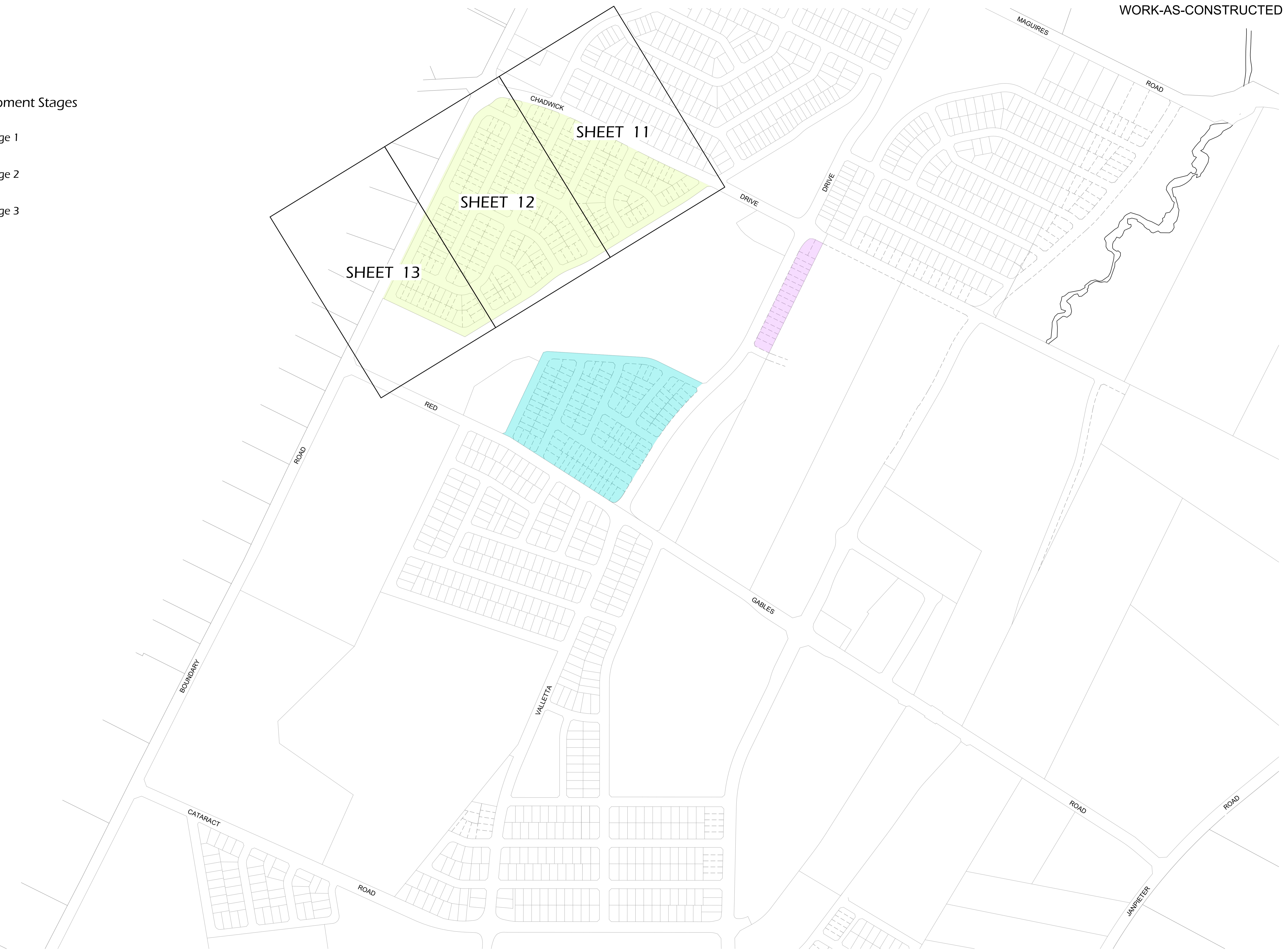
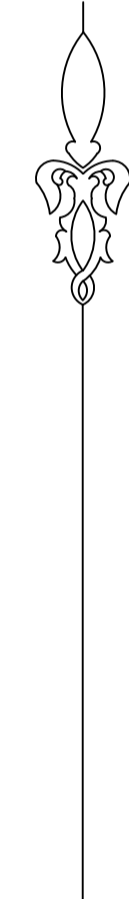
COLLECTION TANK NOTES

- DESIGN SURFACE LEVELS WERE ELECTRONICALLY EXTRACTED FROM DIGITAL DATA SUPPLIED BY ENSPIRE DATED 8/9/21 (210908 PRECINCT D TIN SURFACE.12daz).
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- R.A.R. ACCEPT NO RESPONSIBILITY FOR INCONSISTENCIES IN EXTRACTED LEVELS RESULTING FROM CHANGES TO THE MODEL (SURFACE LEVEL) INFORMATION POST DATA EXTRACTION DATE.

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.		COLLECTION TANK LEVEL DETAILS 3		SHEET 9 OF 13	WAC
WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT SHOP 7 & 8 'M CENTRE' 40 STERLING ROAD, MINCHINBURY NSW 2770 PH: (02) 9853 0200 FAX: (02) 9671 7399		DRAFTED: D.SHEATHER DESIGNED: D.SHEATHER REVIEWED: K.GAO VERIFIED: K.GAO		DATE: 14/8/2023 4/23645/D1	

Precinct D Development Stages

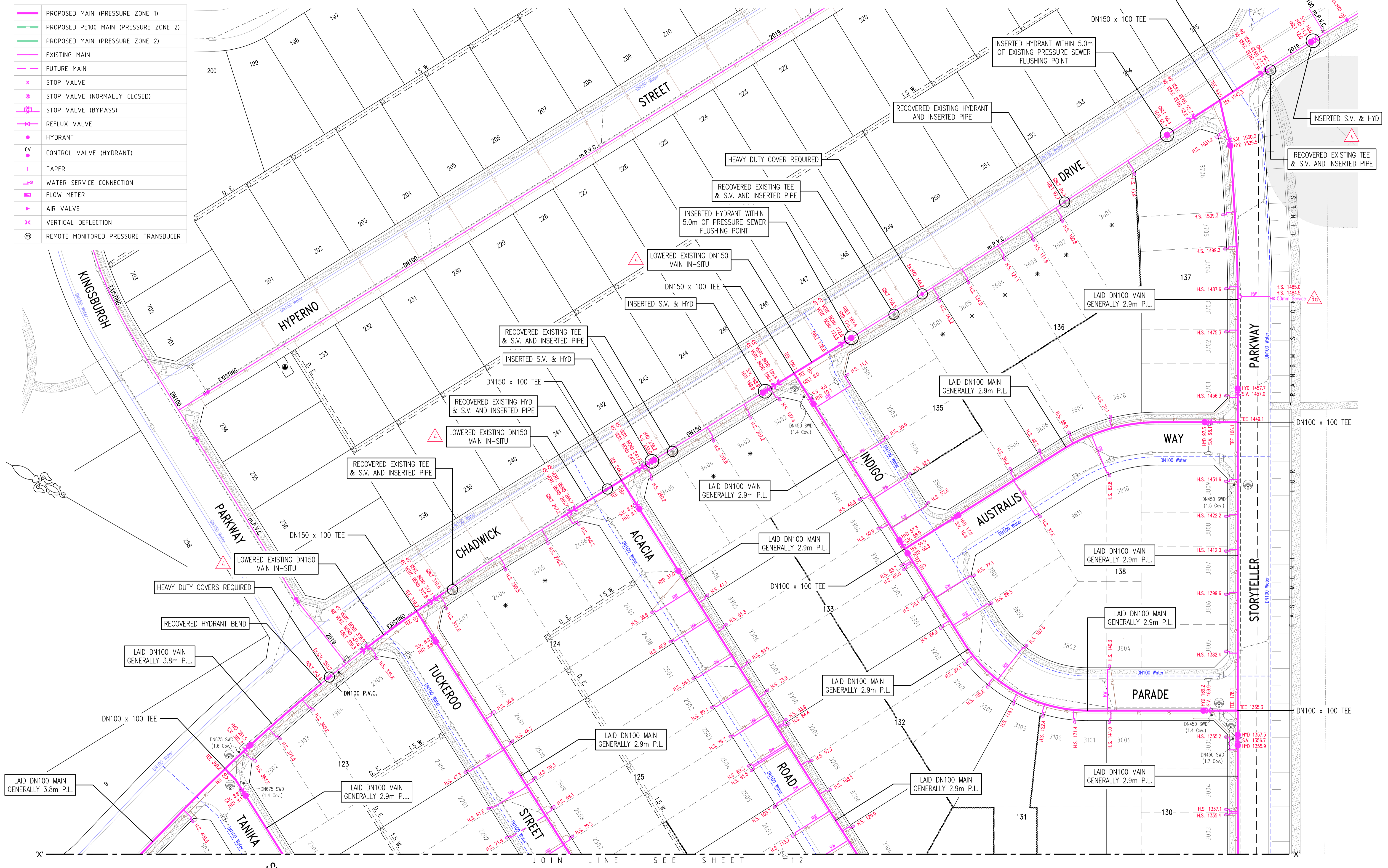
- Stage 1
- Stage 2
- Stage 3



RECYCLED WATER LEGEND

	PROPOSED MAIN (PRESSURE ZONE 1)
	PROPOSED PE100 MAIN (PRESSURE ZONE 2)
	PROPOSED MAIN (PRESSURE ZONE 2)
	EXISTING MAIN
	FUTURE MAIN
	STOP VALVE
	STOP VALVE (NORMALLY CLOSED)
	STOP VALVE (BYPASS)
	REFLUX VALVE
	HYDRANT
	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL DEFLECTION
	REMOTE MONITORED PRESSURE TRANSDUCER

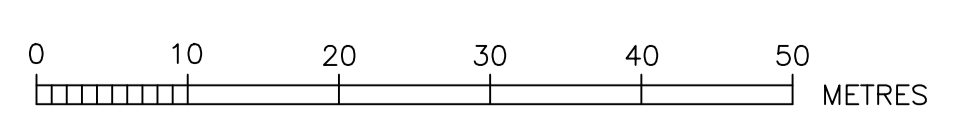
WORK-AS-CO-CONSTRUCTED



DENOTES LAY MAIN UNDER SERVICE  
 DENOTES LAY MAIN OVER SERVICE

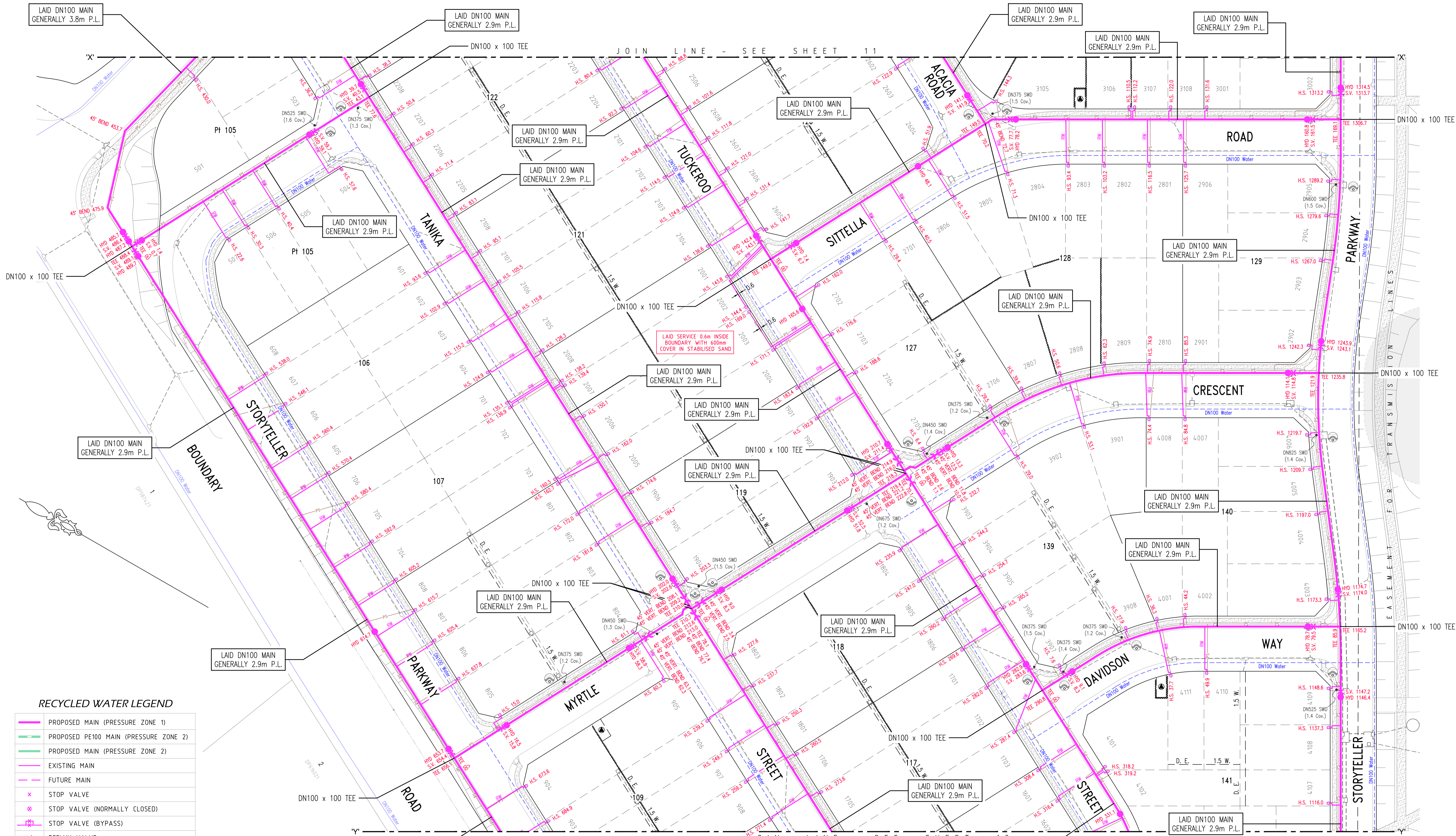
ESM FOR PADMOUNT SUBSTATION 2.75 W.

\* DENOTES PROPERTY SERVICE CONNECTION INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING PRESSURISED MAIN WITH MAIN TAP IN ACCORDANCE WITH WAT-1108-V.



**ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.**  
**RAR** WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT  
 SHOP 7 & 8 'M CENTRE'  
 40 STERLING ROAD, MINCHINBURY NSW 2770  
 PH: (02) 9853 0200 FAX: (02) 9671 7399

RECYCLED WATER DETAIL PLAN 1				SHEET 11 OF 13		WAC
DESIGNED BY	D.SHEATHER	REVIEWED BY	K.GAO	DATE	14/8/2023	4/23645/D1
SCALE	1:500	DATE	88 J12	DATE OF ISSUE	14/8/2023	

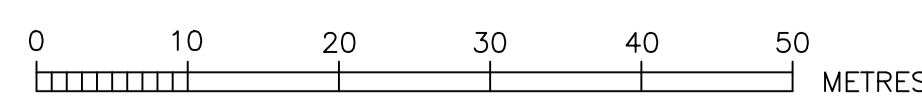


RECYCLED WATER LEGEND

	PROPOSED MAIN (PRESSURE ZONE 1)
	PROPOSED PE100 MAIN (PRESSURE ZONE 2)
	PROPOSED MAIN (PRESSURE ZONE 2)
	EXISTING MAIN
	FUTURE MAIN
	STOP VALVE
	STOP VALVE (NORMALLY CLOSED)
	STOP VALVE (BYPASS)
	REFLUX VALVE
	HYDRANT
	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL DEFLECTION
	REMOTE MONITORED PRESSURE TRANSDUCER

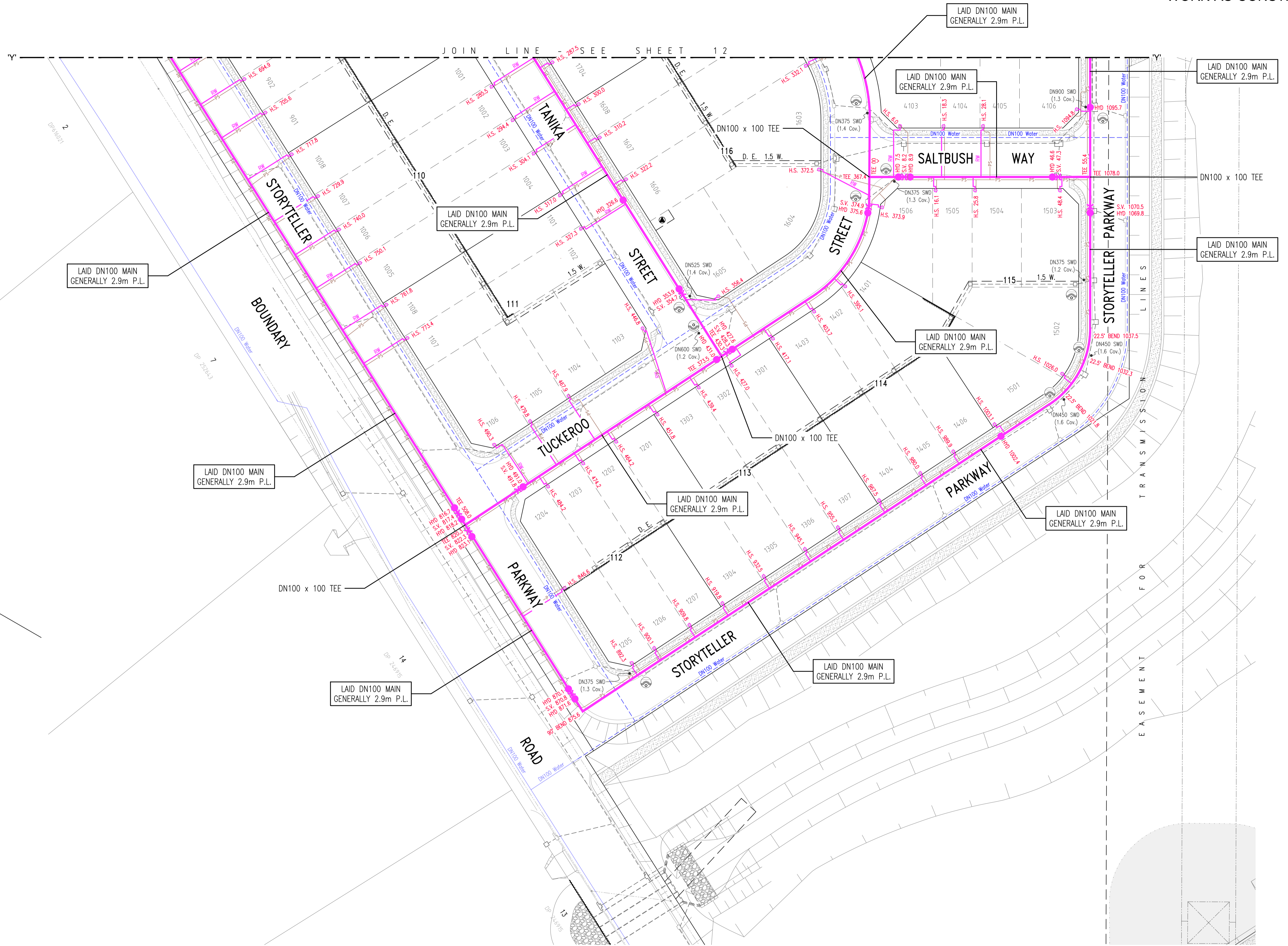
DENOTES LAY MAIN UNDER SERVICE  
 DENOTES LAY MAIN OVER SERVICE

ESMT FOR PADMOUNT SUBSTATION 2.75 W.



ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.  
**RAR**  
 WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT  
 SHOP 7 & 8 'M CENTRE'  
 40 STERLING ROAD, MINCHBURY NSW 2770  
 PH: (02) 9853 0200 FAX: (02) 9671 7399

RECYCLED WATER DETAIL PLAN 2				SHEET 12 OF 13		WAC	
DESIGNED	D.SHEATHER	REVIEWED	K.GAO	DATE	14/8/2023	NO.	4/23645/D1
SCALE	1:500	DATE		DATE OF ISSUE			

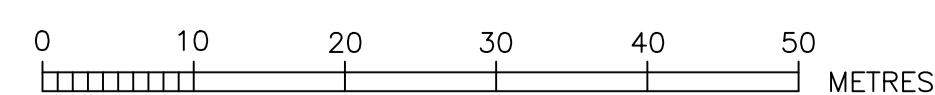


RECYCLED WATER LEGEND

	PROPOSED MAIN (PRESSURE ZONE 1)
	PROPOSED PE100 MAIN (PRESSURE ZONE 2)
	PROPOSED MAIN (PRESSURE ZONE 2)
	EXISTING MAIN
	FUTURE MAIN
	STOP VALVE
	STOP VALVE (NORMALLY CLOSED)
	STOP VALVE (BYPASS)
	REFLUX VALVE
	HYDRANT
	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL DEFLECTION
	REMOTE MONITORED PRESSURE TRANSDUCER

	DENOTES LAY MAIN UNDER SERVICE
	DENOTES LAY MAIN OVER SERVICE

ESMT FOR PADMOUNT SUBSTATION 2.75 W.



ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.  
**RAR** WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT  
 SHOP 7 & 8 'M CENTRE'  
 40 STERLING ROAD, MINCHBURY NSW 2770  
 PH: (02) 9853 0200 FAX: (02) 9671 7399



RECYCLED WATER DETAIL PLAN 3				SHEET 13 OF 13		VISION
DRAWN	DESIGNED	REVIEWED	VERIFIED	DATE	DATE OF ISSUE	NO.
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO			4/23645/D1
SCALE	DRAWN	DATE REVISION	DATE OF ISSUE			
1:500		88 J12	14/8/2023			