

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV-2026-WAR-4890

Date: 15/07/2026



RIVERMONT PRECINCT 3
STAGE 3 - 25 LOTS



PLAN
SCALE 1:1000

DRAWING INDEX

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24-273-65	WATER RETICULATION - LIVE CONNECTION DETAIL - AND NOTES

DATUM A.H.D.
P.S.M. No 103504
E 497116.520
N 6998102.825
RL 19.282

UNITYWATER STAGED CONNECTION	-
CMB DA REF No.	DA/2025/5733

SCALE 1:1000 (A1 UNREDUCED)

UNITYWATER NETWORK WORKS STANDARD DESIGN
DRAWING NOTES

WATER SUPPLY NETWORK WORKS

- ALL DESIGN OF WATER SUPPLY NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE WATER SUPPLY CODE OF AUSTRALIA, SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION VERSION 1.4 (MARCH 2024), PART 1: PLANNING AND DESIGN AND PART 3: DRAWINGS.
- ALL CONSTRUCTION OF WATER SUPPLY NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE WATER SUPPLY CODE OF AUSTRALIA, SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION VERSION 1.4 (MARCH 2024), PART 2: CONSTRUCTION AND PART 3: DRAWINGS.
- ALL PRODUCTS AND MATERIALS USED IN CONSTRUCTION OF WATER SUPPLY NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE SOUTH EAST QUEENSLAND CODE ACCEPTED CIVIL INFRASTRUCTURE PRODUCTS AND MATERIAL LIST, AND THE MOST RECENT VERSION OF THE LIST IN EFFECT AT THE DATE OF THE CONSTRUCTION PRE-START MEETING.
- CONSTRUCTION WORKS SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO UNITYWATER'S WATER SUPPLY NETWORK.
- ALL LIVE WORKS ASSOCIATED WITH THE WATER SUPPLY NETWORK SHALL BE CARRIED OUT AT THE DEVELOPER'S COST BY QUOTATION REQUEST TO UNITYWATER PRIVATE WORKS ONLY.
- THE CONSTRUCTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT ASSET OWNERS AND AUTHORITIES BEFORE COMMENCING WORKS.
- PRIOR TO COMMENCEMENT OF ANY VARIATION WORKS, THE CONSTRUCTOR MUST FIRST OBTAIN APPROVAL FROM THE REGISTERED MAJOR CONNECTIONS CERTIFIER.

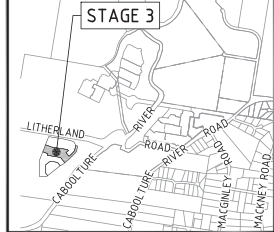
GRAVITY SEWERAGE NETWORK WORKS

- ALL DESIGN OF GRAVITY SEWERAGE NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE GRAVITY SEWERAGE CODE OF AUSTRALIA, SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION VERSION 2.1 (SEPT 2021), PART 1: PLANNING AND DESIGN AND PART 3: DRAWINGS.
- ALL CONSTRUCTION OF GRAVITY SEWERAGE NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE GRAVITY SEWERAGE CODE OF AUSTRALIA, SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION VERSION 2.1 (SEPT 2021), PART 2: CONSTRUCTION AND PART 3: DRAWINGS.
- ALL PRODUCTS AND MATERIALS USED IN CONSTRUCTION OF GRAVITY SEWERAGE NETWORK WORKS SHALL BE IN ACCORDANCE WITH THE SOUTH EAST QUEENSLAND CODE ACCEPTED CIVIL INFRASTRUCTURE PRODUCTS AND MATERIAL LIST, AND THE MOST RECENT VERSION OF THE LIST IN EFFECT AT THE DATE OF THE CONSTRUCTION PRE-START MEETING.
- ALL LIVE WORKS ASSOCIATED WITH THE SEWERAGE NETWORK SHALL BE CARRIED OUT AT THE DEVELOPER'S COST, EITHER:
 - BY THE CONSTRUCTOR, FOR 'MINOR' SEWERAGE CONNECTION WORKS, DEFINED IN THE A&C MANUAL UNDER SECTION PRE-START MEETING, UNDER THE INSPECTION OF THE CONSTRUCTION CERTIFIER WHO SHALL FOLLOW THE PLANNED NETWORK INTERVENTION PROCESS, OR
 - BY QUOTATION REQUEST TO UNITYWATER PRIVATE WORKS, FOR SEWERAGE CONNECTION WORKS NOT MEETING THE CRITERIA FOR CLASSIFICATION AS 'MINOR'.
- THE CONSTRUCTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT ASSET OWNERS AND AUTHORITIES BEFORE COMMENCING WORKS.
- PRIOR TO COMMENCEMENT OF ANY VARIATION WORKS, THE CONSTRUCTOR MUST FIRST OBTAIN APPROVAL FROM THE REGISTERED MAJOR CONNECTIONS CERTIFIER.

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!



LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	12.01.2026	DF
B	FOR APPROVAL	27.03.2026	DF

Client



Project

RIVERMONT
PRECINCT 3
STAGE 3



L1, 62 Astor Terrace, Spring Hill, QLD 4000
www.knigroup.com.au | 07 3017 1900

Approved Director - RPEQ 17544
Digitally signed by
Mark Shaw RPEQ
17544
Date: 2026.03.30
08:44:24+10'00'

Drawing Title
GENERAL
LOCALITY PLAN,
DRAWING INDEX AND NOTES

Drawn RP	Designed VS	Checked MAS	Date SEP'25
Scale AS SHOWN	Sheet 1 of 15	Revision	
A1	24-273-51	B	

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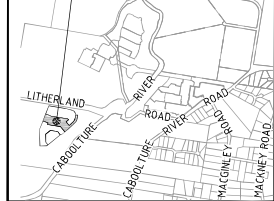


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LOCALITY PLAN

STAGE 3



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	12.01.2026	DF
B	FOR APPROVAL	27.03.2026	DF
C	RH RESPONSE	08.04.2026	DF
D	UNITYWATER RH	05.05.2026	DF

Client



Project

RIVERMONT
PRECINCT 3
STAGE 3



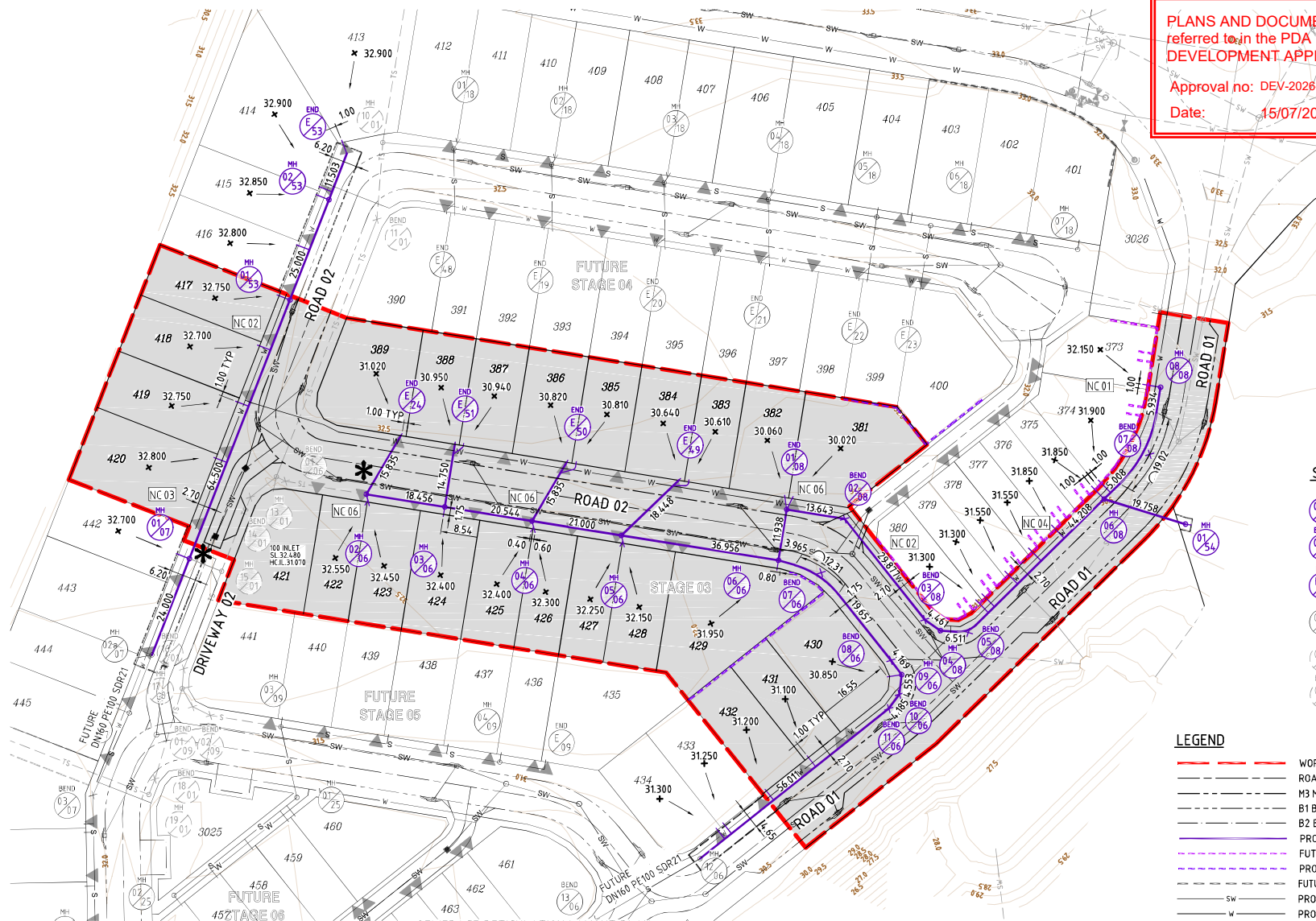
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Approved Director - RPEQ 17544

Digitally signed by
Mark Shaw RPEQ
17544
Date: 2026.05.05
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Drawing Title:
SEWER RETICULATION
LAYOUT PLAN
SHEET 1

Drawn	Designed	Checked	Date
RP	VS	MAS	MAY '26
Scale	Revision	Sheet	
AS SHOWN		2 of 15	
Drawing No	Revision		
A1	24-273-52		D



SEWER MANHOLE LEGEND

- MH 01/01 MANHOLE
- BEND 01/01 BEND
- END 01/01 END OF LINE
- MH 01/01 FUTURE MANHOLE
- MH 01/01 EXISTING MANHOLE
- BEND 01/01 EXISTING BEND

LEGEND

- WORKS BOUNDARY
- ROAD CENTRELINE
- M3 MOUNTABLE KERB AND CHANNEL
- B1 BARRIER KERB AND CHANNEL (300)
- B2 BARRIER KERB
- PROPOSED DN160 SEWER MAIN
- FUTURE CONCRETE BLOCK MASONRY WALL
- PROPOSED SLEEPER RETAINING WALL
- FUTURE SLEEPER RETAINING WALL
- PROPOSED STORMWATER MAIN
- PROPOSED WATER MAIN
- EXISTING TRUNK SEWER MAIN
- EXISTING SEWER MAIN
- EXISTING STORMWATER
- EXISTING WATER MAIN
- DESIGN SURFACE CONTOURS (0.1m)
- FINISHED SURFACE CONTOURS
- DEFINES CONNECTION REQUIRED BY UNITY WATER
- CONTROL POINT AND LEVEL
- FLOW ARROW
- BEND IP LOCATION
- UNITY WATER EASEMENT
- DNOTES NON-CONFORMING DESIGN ASPECT. REFER TO NON-CONFORMING DESIGN ASPECTS KN DWG 24-273-59 FOR DETAILS.

SCALE 1:500 (A1 UNREDUCED)

NOTES

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 1:60 AND A MAXIMUM DEPTH OF PROPERTY CONNECTION AT 1.5m. UNLESS OTHERWISE STATED, FOR PE NUSEWER JUNCTION DETAILS REFER SEQ-SEW-1106-1 TO SEQ-SEW-1106-6.

ALL CONNECTIONS TO LIVE SEWER TO BE UNDERTAKEN BY CONTRACTOR UNDER SUPERVISION OF CONSTRUCTION CERTIFIER OR AS DIRECTED BY UNITYWATER, AND AT THE DEVELOPERS EXPENSE

NOTE

ALL WORKS ON EXISTING SEWER MAINS TO BE CARRIED OUT BY UNITYWATER AT THE DEVELOPERS EXPENSE.

NOTE:

FOR BENCHING DETAILS REFER SEQ-SEW-1304-1, SEQ-SEW-1305-1, AND SEQ-SEW-1306-1.



PROPOSED WORKS ARE NEAR EXISTING SERVICES. CONTRACTOR TO COMPLETE DBYD AND LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION. POST SERVICE LOCATION, CONTRACTOR TO SUPPLY SURVEY INFORMATION TO SUPERINTENDENT'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.

NOTE:

LOTS 1-4 RETAINING WALL NEEDS TO HAVE A BRIDGING STRUCTURE OVER THE PROPERTY CONNECTION.

ALL WATER AND SEWER CONSTRUCTION WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORKPLACE HEALTH AND SAFETY ACT 2011. CONTACT YOUR NEAREST OFFICE OF THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. PHONE: 1300 362 128

CONTRACTOR TO CONFIRM ALL EXISTING SERVICES LOCATIONS AND MATERIAL PRIOR TO CONSTRUCTION

WHERE PROPERTY CONNECTION INSPECTION TEES TERMINATE BENEATH DRIVEWAY SLAB, EXTEND AN I.O. RISER TO SURFACE LEVEL AND FINISH WITH TRAFFICABLE BRASS CAP

NOTES

- ### ENVIRONMENTAL CONDITION

- ## VEGETATION PROTECTION

- SOIL

- ### CREEK CROSSINGS

- ## REHABILITATION

- ## SAFETY

- ## MAINTENANCE HOLES

DESIGN REQUIREMENTS

- | LOCATION | LIVE LOAD | ACCESS COVERS
TO AS 3996 |
|---|-----------|-----------------------------|
| RESERVES, RESIDENTIAL ALLOTMENTS,
FOOTPATHS AND VERGES | 25 kN | CLASS RATING B |
| ROADWAYS AND DRIVEWAYS, COMMERCIAL,
INDUSTRIAL AND NON-RESIDENTIAL
ALLOTMENTS | 80 kN | CLASS RATING D |

LOCATION	LIVE LOAD	ACCESS COVERS TO AS 3996
RESERVES, RESIDENTIAL ALLOTMENTS, FOOTPATHS AND VERGES	25 kN	CLASS RATING B
ROADWAYS AND DRIVEWAYS, COMMERCIAL, INDUSTRIAL AND NON-RESIDENTIAL ALLOTMENTS	80 kN	CLASS RATING D

- ### 3. DURABILITY CLASSIFICATION

STRUCTURE	COVER LOCATION	EXPOSURE CLASSIFICATION AS 3600, AS 3735	REINFORCEMENT COVER (mm)
SLABS	TOP	B2 TO AS 3600	40
	BOTTOM	B2 TO AS 3735	50 INCLUDING PE LINER THICKNESS

- ## GENERAL

- ## MAINTENANCE HOLES

- ## MAINTENANCE HOLE CIRCULAR ACCESS COVERS

- ## SAFETY IN DESIGN

- ## CONCRETE

- | CONCRETE
STRUCTURE | CONCRETE
STRENGTH f'_c | TEMPERATURE
LIMIT |
|---|---------------------------------|----------------------|
| CONCRETE SECTIONS LESS
THAN 600mm THICK. | EQUAL TO OR MORE THAN
40MPa. | 35°C |
| CONCRETE SECTIONS EQUAL
TO OR GREATER THAN
600mm THICK. | EQUAL TO OR MORE THAN
40MPa. | 27°C |

- | TYPE OF AGGREGATE | CALCAREOUS |
|---------------------------------|------------------------|
| COMPRESSIVE STRENGTH AT 28 DAYS | 40 MPa |
| MINIMUM CEMENT CONTENT | 380 kg/m ³ |
| MAXIMUM CEMENTITIOUS MATERIAL | 25% |
| MAXIMUM WATER/CEMENT RATIO | 0.5 |
| NOMINAL SLUMP | 80mm±15 |
| DRYING SHRINKAGE AT 21 DAYS | 500 x 10 ⁻⁶ |
| MAXIMUM AGGREGATE SIZE | 20mm |
| MINIMUM AGGREGATE SIZE | 10mm |

- ## REINFORCEMENT

- | BAR SIZE | LAP LENGTH (mm) |
|----------|-----------------|
| N12 | 350 |
| N16 | 500 |
| N20 | 600 |
| N24 | 700 |
| N28 | 850 |
| N32 | 950 |

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**Queensland
Government**

[illegible]

REVISIONS

[illegible]

Project	
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RIVERMONT
PRECINCT 3
STAGE 3



L1, 62 Astor Terrace, Spring Hill, QLD 4000
www.kngroup.com.au | 07 3017 1900

Approved Director - RPEQ 17544

M. Shaw Digitally signed by Mark
Shaw RPEQ 17544
Date: 2026.02.04
16:38:13+10'00'

Drawing Title

SEWER RETICULATION
NOTES
SHEET 1

Drawn RP	Designed VS	Checked MAS	Date SEP' 25
Scale AS SHOWN			Sheet 3 of 15
A1	Drawing No 24-273-53		Revision A

2. PRECAST CONCRETE MEMBERS TO COMPLY WITH AS 3850.1 AND AS 3850.2
3. PRECAST MEMBERS ARE DESIGNED FOR THE FINAL INSTALLED CONDITIONS ONLY. PRECAST MANUFACTURER TO DESIGN THE PRECAST MEMBERS INCLUDING CONNECTIONS, FIXING DETAILS, JOINTS, FIRE RESISTANCE, ETC. FOR STABILITY, SERVICEABILITY AND STRENGTH REQUIREMENTS REQUIRED DURING MANUFACTURE, TRANSPORT, LIFTING, ERECTION AND INSTALLATION.
4. PRECAST MANUFACTURER TO PROVIDE THEIR SHOP DRAWINGS AND RPEO CERTIFICATION FOR CONSTRUCTION OF THE PRECAST SLAB TO THE DESIGNS PROVIDED IN MAINTENANCE HOLE DRAWINGS INCLUDING DESIGN AND CONSTRUCTION CERTIFICATION FOR CONNECTIONS AND FIXING REQUIRED FOR MANUFACTURE, TRANSPORT, ERECTION AND INSTALLATION. (FORM 15 AND 16)
5. PRECAST CONCRETE MEMBERS TO BE SUPPLIED AND CONSTRUCTED BY A PRECAST CONCRETE CONSTRUCTOR.
6. ADEQUATELY DESIGNED TEMPORARY BRACING, AS REQUIRED, TO BE PROVIDED DURING ERECTION AND INSTALLATION.
7. MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH OF CONCRETE AT REMOVAL FROM MOULDS SHALL BE 15MPa
8. ALL INSERTS IN PRECAST CONCRETE MEMBERS TO BE STAINLESS STEEL.
9. ALL STRUCTURAL STEELWORK CONNECTIONS TO PRECAST CONCRETE MEMBERS TO BE HOT DIP GALVANISED TO AS 4680 SYSTEM DESIGNATION HDG600.
10. PROVIDE 15mm CHAMFERS OR FILLETS AT EDGES AND CORNERS OF PRECAST MEMBERS EXCEPT AT UNDERSIDE OF MM SLAB ACCESS OPENING UNLESS APPROVED OTHERWISE.
11. PRECAST CONCRETE MEMBERS TO BE CURED ON REINFORCED CONCRETE STRUCTURES UNTIL THE REINFORCED CONCRETE STRUCTURES HAVE BEEN CURED TO ACHIEVE 28 DAYS STRENGTH.
12. WEIGHT OF TOP SLAB TO BE STAMPED ON THE SLAB.
13. CONCRETE TO BE SPECIAL CLASS TO WSA PS-358 WITH CALCAROUS AGGREGATE.
14. APPROVED LIFTING PLAN IS TO BE AVAILABLE ON REQUEST.

1. STAINLESS STEEL TO COMPLY TO ASTM A240/A240M AND ASTM A480/ A480M.
2. FABRICATION BY MANUFACTURERS ASSDA ACCREDITED OR APPROVED EQUIVALENT.
3. WELDING SHALL BE GR 316 OR 316L UNO.
4. STORAGE FABRICATION AND WELDING TO BE IN APPROVED DEDICATED AREAS.
5. WELDING, CLEANING, PICKLE AND PASSIVATION TO COMPLY TO AS 1554.6 AND WITIA TECHNICAL NOTE 16 WELDING TO STAINLESS STEEL.
6. SURFACE FINISH TO BE 2B OR BETTER TO ASTM A480.
7. MEMBERS TO BE ACID PASSIVATED AFTER FABRICATION.
8. ANTI GALLING COMPOUND "DURALAC" OR SEQ-SP APPROVED EQUIVALENT REQUIRED ON ALL FASTENERS UNLESS APPROVED OTHERWISE.

1. THE PE LINER SHALL FORM A COMPLETELY SEALED AND WELDED ROBUST CONTINUOUS MEMBRANE SYSTEM. THE PE LINER SHALL BE BUILT TO THE MH CONSTRUCTION TOLERANCES WITHOUT ANY DEFECTS SUCH AS BULGING, WARPING, PINCHING, OVERLAPPING.
2. THE PE SHEETS SHALL:
 - HAVE A MINIMUM THICKNESS OF 2.5 mm.
 - ACHIEVE A MECHANICAL BOND BETWEEN THE CONCRETE AND LINER.
 - BE INSTALLED BY AN ACCREDITED APPLICATOR APPROVED BY THE MANUFACTURER.
 - BE TENSIONED OVER THE FORMWORK WITHIN THE YIELD ELONGATION LIMIT PRIOR TO SECURING TO THE FORMWORK.
3. PREPARATION, APPLICATION AND INSTALLATION TO COMPLY WITH THE MANUFACTURER'S SPECIFICATION.
4. POURED CONCRETE TO BE AT A COOLER AMBIENT TEMPERATURE THAN THE TEMPERATURE WHEN THE PE SHEETS WERE ATTACHED TO THE FORMWORK.
5. EXTRUSION WELDING AND WELD TESTING AT SEAMS TO BE UNDERTAKEN BY THE APPROVED APPLICATOR TO THE MANUFACTURER'S SPECIFICATION.
6. ENCAPSULATION OF ANCHORS TO BE CHECKED BY TAPPING THE SURFACE TO DETECT HOLLOW SOUNDS THAT INDICATE VOIDS. VOIDS TO BE FILLED BY INJECTION GROUT AND PE SHEET REPAIRED BY EXTRUSION WELDING OVER THE INJECTION HOLE.

2. STRUCTURAL STEEL WORKMANSHIP AND MATERIALS TO COMPLY WITH AS 4100.
 - STEEL TO COMPLY WITH:
 - AS 1163 GRADE C350 FOR RECTANGULAR AND HOLLOW SECTIONS.
 - AS 3678 FOR PLATES AND FLOOR PLATES.
 - AS 3679.1 GRADE 300 OR BHP GRADE 300 PLUS FOR PARALLEL FLANGE CHANNELS.
 - AS 3679.2 GRADE 300 FOR WELDED BEAMS AND COLUMNS.
 - OTHER SECTIONS TO COMPLY WITH AS 3678 OR AS 3679 GRADE 250.
3. WELDS TO AS 1554.
 - WELD CATEGORY SP
 - BUTT WELDS TO BE FULL PENETRATION WELDS.
 - WELDS TO BE 6mm CONTINUOUS FILLET WELDS ALL ROUND INTERFACES.
 - ELECTRODES TO AS 1554. CLASSIFICATION E48X.
4. BOLTS TO AS 1275. COMMERCIAL GRADE 4.6/S TO AS 1111 AND AS 1112. HIGH STRENGTH STRUCTURAL BOLTS TO AS 1252.
 - BOLTS, NUTS AND WASHERS M16 AND LARGER TO GRADE 8.8/S. M12 TO BE GRADE 4.6/S.
 - STRUCTURAL CONNECTIONS TO BE 2 M16 8.8/S WITH 10mm THICK CLEAT PLATE UNLESS NOTED OTHERWISE.
 - INSTALL WASHERS UNDER BOLT HEAD AND NUT. INSTALL TAPERED WASHERS AS REQUIRED.
 - BOLT PROJECTION BEYOND NUT TO BE MINIMUM TWO THREADS AND MAXIMUM 10mm.
5. HOLD DOWN BOLTS TO BE GRADE 4.6/S UNLESS NOTED OTHERWISE. HOLD DOWN BOLT GROUPS TO BE RIGIDLY TIED FOR CORRECT SET-OUT AND LOCATION.
6. SEAL WELD HOLD DOWN SECTIONS WITH 3mm THICK CAP PLATE UNLESS NOTED OTHERWISE.
7. GROUT BASE PLATES WITH HIGH STRENGTH NON-SHRINK PRE-MIXED GROUT BEFORE COLUMNS ARE LOADED.

1. STEELWORK TO BE HOT DIP GALVANISED TO AS 4680 SYSTEM DESIGNATION HDG600 AND THREADED FASTENERS TO AS 1214.
2. DAMAGED GALVANISED COATING REPAIR:
 - POWER CLEAN TO AS 1627.2
 - SOLVENT CLEAN/ DEGREASE TO AS 1627.1
 - APPLY TIN/ZINC TO PRE-HEATED STEEL OVERLAPPING THE GALVANISING COATING.

1. EXPOSED REINFORCEMENT AND CONCRETE REPAIRED AS FOLLOWS:
 - CORE HOLES ON EACH CORNER OF AREA TO BE CUT.
 - SAW CUT CONCRETE, PERPENDICULAR TO CONCRETE SURFACE, 15mm DEEP AROUND PERIMETER OF THE OPENING.
 - BREAKOUT REMAINING CONCRETE AROUND THE OPENING WITHOUT DAMAGING REINFORCEMENT.
 - CUT EXPOSED REINFORCEMENT SO THAT IS 30 mm CLEAR OF THE PIPE.
 - CLEAN CONCRETE SURFACE AND REMOVE ALL LOOSE MATERIAL.
 - ABRASIVE BLAST CLEAN EXPOSED REINFORCEMENT. IF IT IS CORRODED AND APPLY "NTOPRIME" ZINC RICH PRIMER UNLESS APPROVED OTHERWISE.
 - THOROUGHLY SOAK SUBSTRATE WITH CLEAN WATER FOR A MINIMUM OF TWO HOURS.
 - PLACE 1/2 CIRCULAR TRIMMER ON BOTH SIDES OF THE PIPE FLANGE.
 - INSTALL HYDROTITE CJ-07-25 SEAL ON PIPE 50mm FROM CONCRETE SURFACE UNLESS APPROVED OTHERWISE.
 - APPLY "NITOBOND HAR" PRIMER TO CONCRETE SURFACE UNLESS APPROVED OTHERWISE.
 - POUR CONCRETE/GROUT UNDER PRESSURE TO FILL OPENING.
 - FILL CONCRETE/GROUT TO SUPPLIER REQUIREMENTS.

1. ALL EXPOSED REINFORCEMENT AND MILD STEEL ANCHORED TO BE REPAIRED AS FOLLOWS:

- SAW CUT OR CHISEL CUT CONCRETE, PERPENDICULAR TO CONCRETE SURFACE, 15 mm DEEP AROUND REINFORCEMENT/ANCHOR.
- BRUSH OUT CONCRETE AROUND REINFORCEMENT/ANCHOR TO A DEPTH OF 60mm.
- CUT EXPOSED REINFORCEMENT/ANCHOR AT A MINIMUM DEPTH OF 50mm FROM CONCRETE SURFACE.
- CLEAN CONCRETE SURFACE AND REMOVE ALL LOOSE MATERIAL.
- ABRASIVE BLAST CLEAN EXPOSED REINFORCEMENT/ANCHOR. APPLY "NITOPRIME" ZINC RICH PRIMER TO REINFORCEMENT/ANCHOR UNLESS APPROVED OTHERWISE. THOROUGHLY SOAK SUBSTRATE WITH CHLORIDE FREE WATER.
- APPLY "NITOBOND HAR" PRIMER TO CONCRETE UNLESS APPROVED OTHERWISE.
- APPLY "RENDEROC HB40" TO FILL OPENING UNLESS APPROVED OTHERWISE.

1. BENCH MARK LEVELS ARE AS SHOWN ON KN DWG No 24-273-52.
2. THE CONTRACTOR SHALL VERIFY FINISH SURFACE LEVELS ON SITE BEFORE CONSTRUCTION OF SEWERS AND PROPERTY CONNECTION BRANCHES.
3. F.S.L. SHOWN ON THE LONGITUDINAL SECTIONS ARE INDICATIVE ONLY. MANHOLE COVERS TO BE CONSTRUCTED AS PER STD DWG No SEQ-SEW-1308-1.
4. UNITYWATER HAS APPROVED THE USE OF 5mm GRAVEL SCREENING AROUND AND SUPPORTING THE BOTTOM AND SIDES OF PIPES, A NON-COHESIVE GRANULAR MATERIAL COMPLYING WITH THE GRADING, AS SETOUT IN UNITYWATER'S SPECIFICATIONS SHALL BE USED TO ENCLOSE THE HOUSE CONNECTION BRANCH.
5. VACUUM TESTING OF ALL SEWER MANHOLES AND PIPELINES ARE REQUIRED TO THE SEQ WS&S D&C CODE - UNITYWATER - SPECIFICATION REQUIREMENTS.
6. PRIOR TO COMMENCING WORKS/CONSTRUCTIONS TO LIVE SEWERS KN IS TO BE NOTIFIED OF PROPOSED TIMING TO ALLOW NOTIFICATION TO UNITYWATER REPRESENTATIVES.
7. SEWER MAINTENANCE HOLES SHALL BE CONSTRUCTED WITHOUT STEP IRONS OR LADDERS.
8. DETECTABLE MARKER TAPE TO BE INSTALLED OVER ALL SEWER MAINS DIRECTLY ABOVE SCREENINGS.
9. PIPE EMBEDEDMENT SHALL BE CONSTRUCTED AS PER STD DWG No. SEQ-SEW-1201-1 TO SEQ-SEW-1205-1.
10. PROPERTY CONNECTION BRANCHES SHALL BE CONSTRUCTED AS PER STD DWG No SEQ-SEW-1106-1 TO SEQ-SEW-1106-6.
11. CCTV FOOTAGE TO UNITYWATER SEQ D&C CODE REQUIREMENTS TO BE PROVIDED. KN TO REVIEW/REPORT FOOTAGE FOR EACH SEWER LINE. CCTV NOT REQUIRED ON DN160 CROSS ROAD PROPERTY CONNECTIONS.
12. TANGENT POINT SET-OUT INFORMATION FOR HORIZONTAL BENDS IS TO BE INCLUDED ON AS-CONSTRUCTED DRAWINGS.
13. ALL PE-PE CONNECTIONS SHALL BE WELDED. WELDING REQUIREMENTS SHALL BE IN ACCORDANCE WITH WSA 02-2014-31 CLAUSE 4.7.1. CLASS PN10/SDR17 PE FITTINGS SHALL BE UTILISED THROUGHOUT.
14. ALL CONNECTIONS TO LIVE SEWER TO BE UNDERTAKEN BY CONTRACTOR UNDER SUPERVISION OF CONSTRUCTION CERTIFIER OR AS DIRECTED BY UNITYWATER, AND AT THE DEVELOPERS EXPENSE.
15. ALL LRB RADI SHALL BE 35 TIMES THE OUTSIDE DIAMETER OF AN SDR21 PE PIPE AND 25 TIMES THE OUTSIDE DIAMETER OF AN SDR17 PE100 PIPE. MOULDED PVC FITTING ARE NOT PERMITTED.
16. LEVELS FOR EXISTING SEWER HAVE BEEN OBTAINED FROM AS-CONSTRUCTED INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM EXISTING LEVELS ON SITE.
17. WHERE PROPERTY CONNECTION INSPECTION TEES TERMINATE BENEATH DRIVEWAY SLAB, EXTEND AN I.O. RISER TO SURFACE LEVEL AND FINISH WITH TRAFFICABLE BRASS CAP

[illegible]

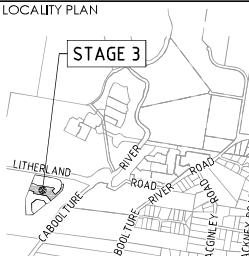
1. EMBEDMENT MATERIAL TO BE SINGLE SIZE CRUSHED ROCK NOMINAL 5 TO 7mm SIZE OR AS NOMINATED IN THE SEQ ACCEPTED PRODUCTS AND MATERIALS LIST.
2. THE CONTRACTOR MUST CONFIRM THE TRENCH SUBGRADE INSITU MATERIAL CHARACTERISTICS EQUAL OR EXCEED A MINIMUM NATIVE SOIL MODULUS OF 0.9 MPa AND SUBMIT TO THE SUPERINTENDENT FOR APPROVAL, PRIOR TO PROGRESSING WITH CONSTRUCTION.

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!



NORTH

LOCALITY PLAN

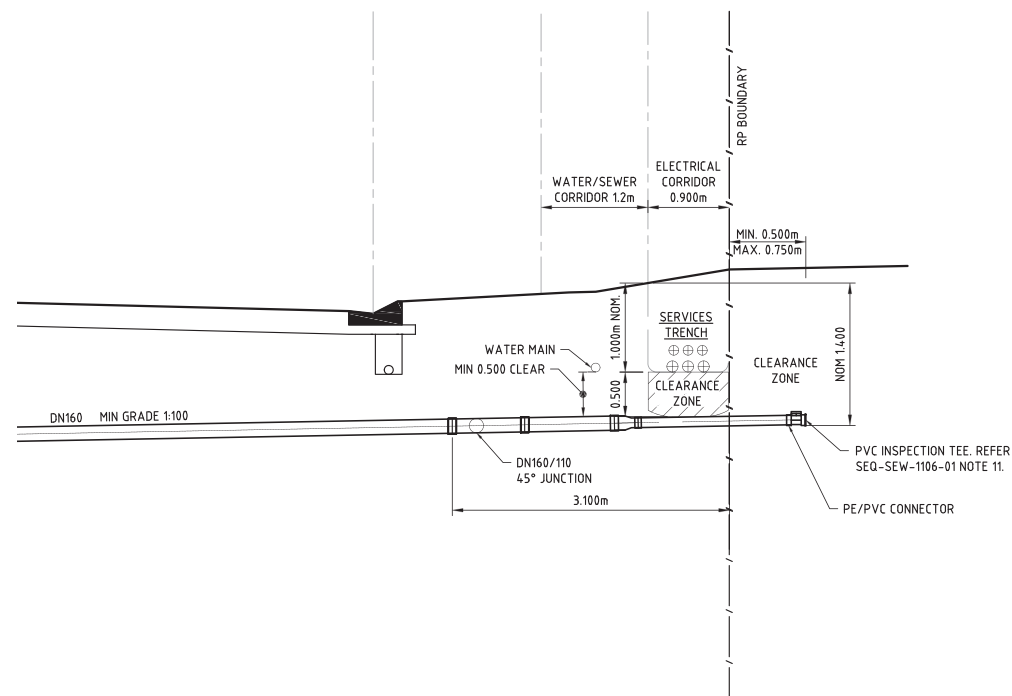
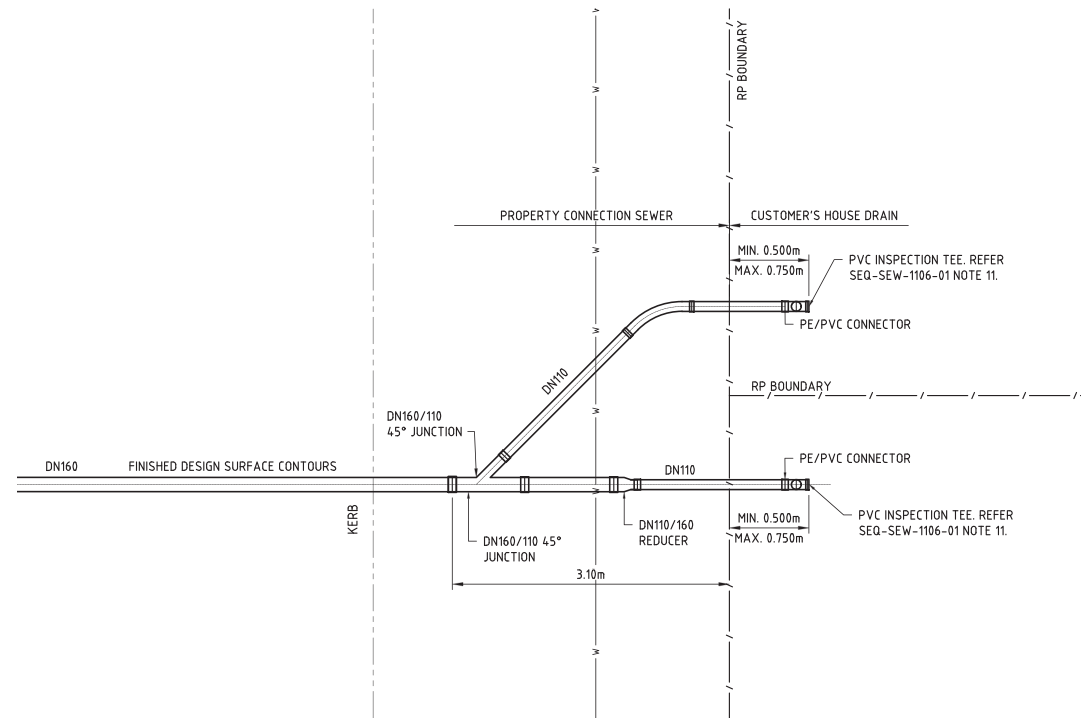


[illegible]

Digitally signed by
Mark Shaw RPEQ
17544
Date: 2026.05.05

Drawn RP	Designed VS	Checked MAS	Date MAY' 26
Scale AS SHOWN			Sheet 4 of 15
A1	Drawing No 24-273-54		Revision C

Date: 15/07/2026



A map of Stage 3 of the Caboolture Water Treatment Plant. The map shows the Litherland River and Caboolture River. A box labeled 'STAGE 3' is positioned above the Litherland River. The Caboolture River flows into the Litherland River. Roads shown include MacGinley Road, MacKew Road, and Caboolture Road. A small area is labeled 'LITHERLAND' and another 'CABOOLTURE'.

[illegible]

Stockland

RIVERMONT
PRECINCT 3
STAGE 3

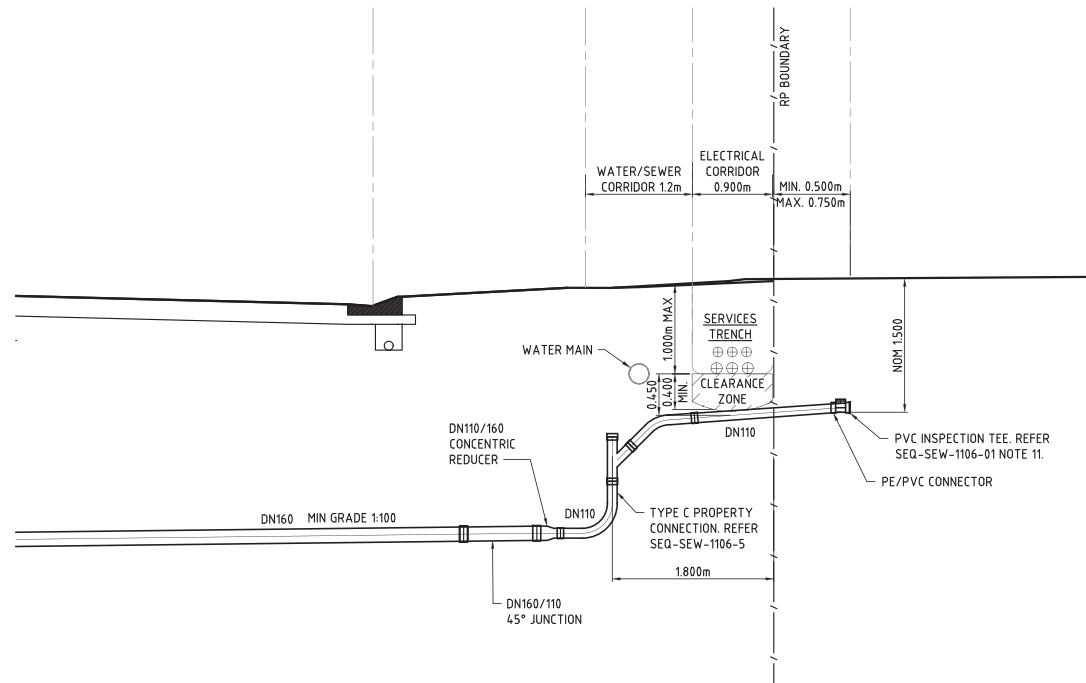


Approved Director - RPEQ 17544
 Digitally signed by Mark
 Shaw RPEQ 17544
 Date: 2026.02.03
 15:52:30+10'00'

Drawn RP	Designed VS	Checked MAS	Date SEP' 25
Scale AS SHOWN			Sheet 5 of 15
A1	Drawing No 24-273-55		Revision A

Date: 15/07/2026

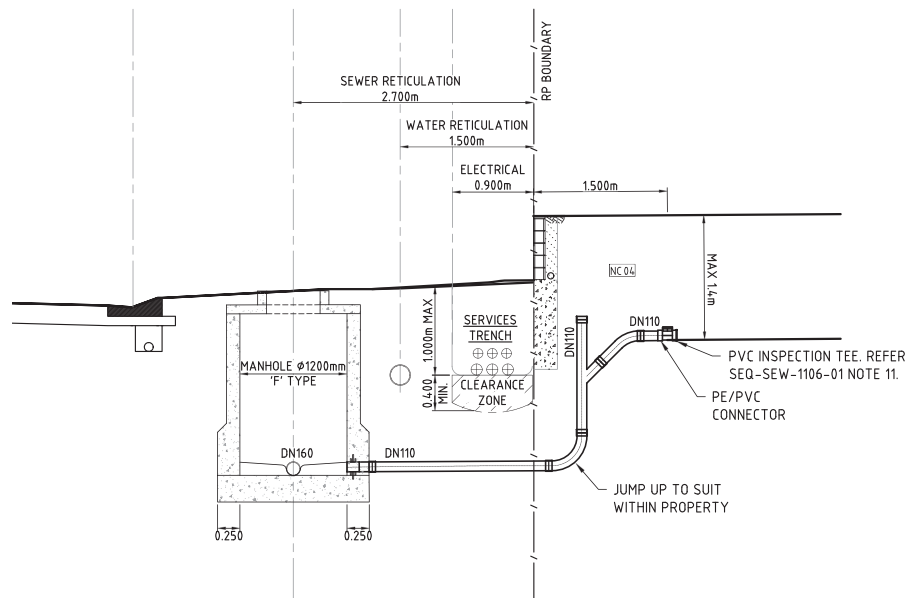
Date: 15/07/2026



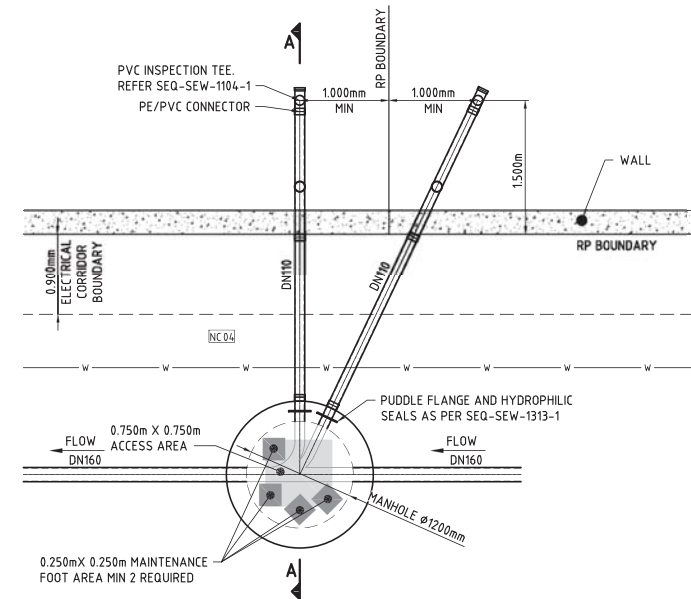
Drawn RP	Designed VS	Checked MAS	Date SEP' 25
Scale AS SHOWN			Sheet 7 of 15
A1	Drawing No 24-273-57		Revision A

Approval no: DEV-2026-WAR-4890

Date: 15/07/2026



NC04 SEWER MANHOLE CONNECTION DETAIL
SCALE 1:25



SCALE  1 : 25 (A1 UNREDUCED)

A map of Stage 3 of the Litherland River project. The map shows the Litherland River flowing through the area. Key features include the Litherland River, Caboot's Ture, and surrounding roads such as Litherland Road, Caboot's Ture Road, and MacKinnon Road. The map also shows the location of the Litherland River and the Litherland River.

[illegible] Stockland

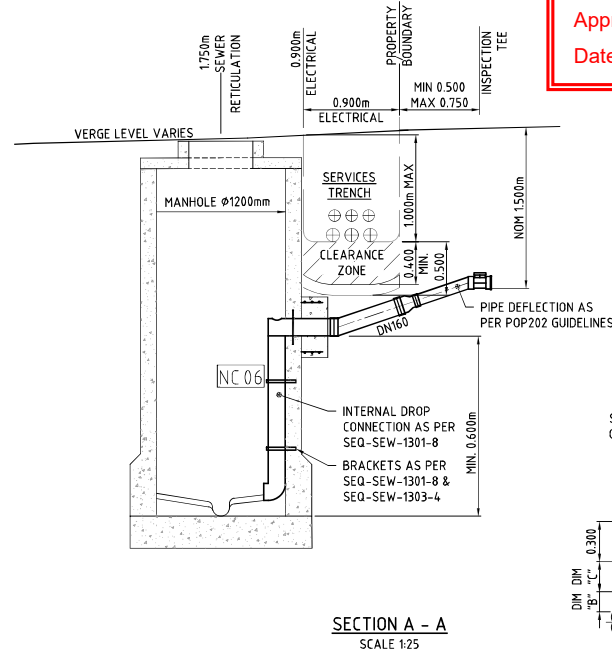
RIVERMONT
PRECINCT 3
STAGE 3



Approved Director - RPEQ 17544

 Digitally signed by Mark
 Shaw RPEQ 17544
 Date: 2026.02.03
 15:52:31+10'00'

Drawn DF	Designed VS	Checked MAS	Date SEP' 25
Scale AS SHOWN			Sheet 8 of 15
A1	Drawing No 24-273-58		Revision A

[illegible]

STORMWATER PIPE DN600
OR GREATER

0.500

0.050

0.500

0.300

DIM
"B" = "C"

SEWER PIPE

SAND BEDDING (TYPICAL)

COMPRESSIBLE
MEMBRANE, SEE TABLE

A

SECTION

SCALE 1:20

STORMWATER PIPE DN600 OR GREATER

COVER 75mm N25 (100 kPa)

COMPRESSIBLE MEMBRANE. SEE TABLE FOR MIN. DIMENSIONS

SAND BEDDING (TYPICAL)

CLEARANCE DIM. A

0.300 0.300

0.150 0.150

A

TYPICAL BRIDGING DETAIL

SCALE 1:20

CLEARANCE DIM "A"	DIM "B"	DIM "C"	MESH
0.300 -1.000	0.050	0.200 MIN	SL92

Stockland Client			
RIVERMONT PRECINCT 3 STAGE 3			
L1, 62 Astor Terrace, Spring Hill, QLD 4000 www.knigroup.com.au 07 3017 1900			
Approved Director - RPEQ 17544 <i>M. Shaw</i> Digitally signed by Mark Shaw RPEQ 17544 Date: 2026.05.05 12:04:24 +10:00			
Drawing Title: SEWER RETICULATION NON-CONFORMANCE TABLE			
Drawn: RP	Designed: VS	Checked: MAS	Date: MAY' 26
Scale: AS SHOWN			Sheet 9 of 15
A1	24-273-59		C

MAINTENANCE HOLE/SHAFT No.

MH/MS COVER TYPE
MH/MS TYPE
BRANCH LINE No.
BRANCH DROP TYPE
HC TYPE
HC DEPTH
HC CH. TO DS MH/MS
HC INVERT LEVEL
HC LOT No.

LEGEND:

- G = CONCRETE 0.900M MH AS PER SEQ-SEW-1301-2 TO 1301-5 WITH MINIMUM 150mm WALL THICKNESS.
F = CONCRETE 1.200M MH AS PER SEQ-SEW-1301-8 TO 1301-11
X = CONCRETE 1.200M MH AS PER SEQ-SEW-1301-14 TO 1301-21 EXCLUDING SAFETY CHAINS AND LADDER AS PER UW Pr11051 REV 1
@ = PE LINED SEQ-SPS-1407-1A, 1407-2B, AND SEQ-SEW-1301-26
+ = INTERNAL DROP PROPERTY CONNECTION REFER TO TYPICAL DETAIL ON NOTES PAGE
(B) = CLASS B NON-TRAFFICABLE
(D) = CLASS D TRAFFICABLE
NC (D) = REFER NONCONFORMANCE TABLE ON 24-273-59

NOTES:

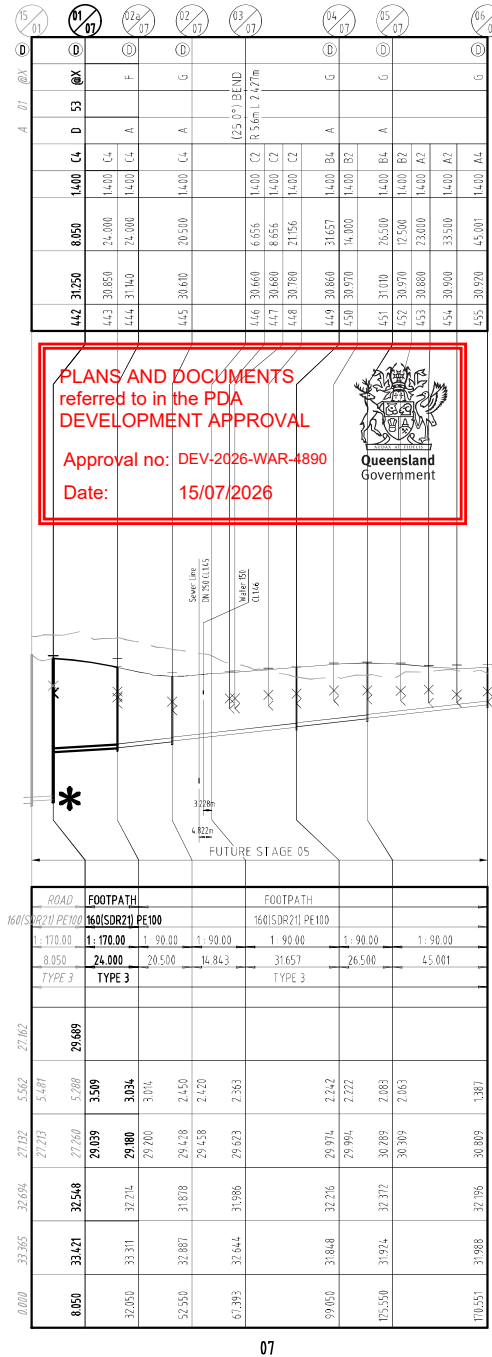
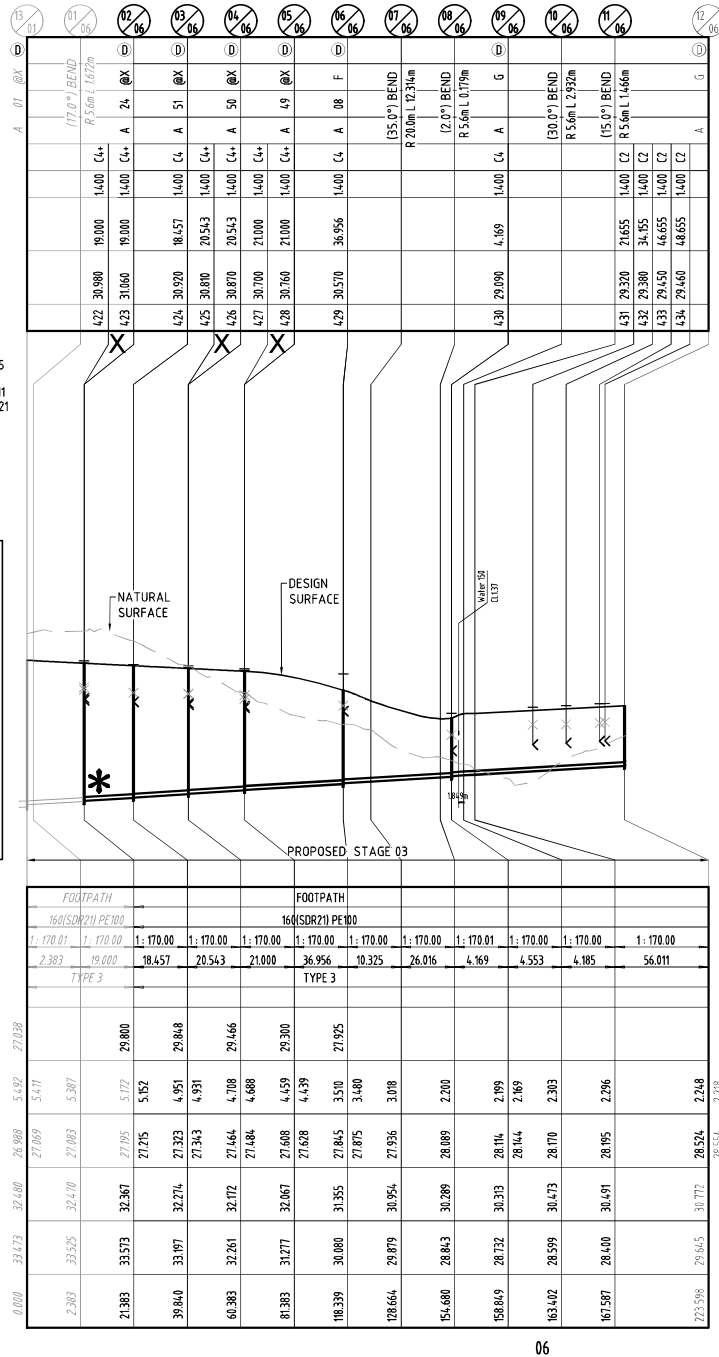
- PROPERTY CONNECTION TYPE/DETAILS REFER SEQ-SEW-1106 DWG SERIES.
- CAST IN SITU MANHOLE TYPE/DETAILS REFER SEQ-SEW-1301-1 to 1301-21, 1301-26, 1302-1, 1301-1, 1304-1, 1305-1, 1306-1, 1307-1, 1308-1, 1308-5 to 1308-11, 1313-1.
- MAINTENANCE SHAFTS TYPE/DETAILS REFER SEQ-SEW-1315-1 AND 1316-1 STD DWG.
- WHERE CLASS "D" COVERS ARE SPECIFIED FOR MH OR MS, INCREASE TOP SLAB THICKNESS FROM 150mm TO 175mm.
- COMPLETE ALL END OF LINE WITH A ELECTROFUSION STOP END OR BUTT WELDED CAP.
- MH ≥6.0M DEEP TO BE INDIVIDUALLY DESIGNED FOR SPECIFIC INSTALLATION DEPTH. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.

DATUM RL 24.0

LOCATION
PIPE DIAMETER
GRADE
LENGTH
EMBEDMENT TYPE
JUNCTION
INVERT LEVEL
DEPTH OF INVERT BELOW FSL
INVERT LEVEL (IL)
FINISHED SURFACE LEVEL (FSL)
EXISTING SURFACE LEVEL (ESL)
CHAINAGE (CH)

LINE

- * DENOTES LIVE CONNECTION REQUIRED UNDER UNITYWATER SUPERVISION. REFER FOR LIVE SEWER WORKS TABLE ON KNg DWG No. 24-273-54.
X REFER TO TWIN PROPERTY CONNECTION DETAIL ON KNg DWG No. 22-273-58
DENOTES BRIDGING STRUCTURE BETWEEN STORMWATER AND SEWER MAIN. REFER TO KNg DWG No. 24-273-59 FOR DETAILS.



PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL

Approval no: DEV-2026-WAR-4890

Date: 15/07/2026



DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!

LOCALITY PLAN

STAGE 3

REVISIONS

No	Description	Date	By
A	FOR APPROVAL	12.01.2026	DF
B	FOR APPROVAL	27.03.2026	DF
C	UNITYWATER RFI	05.05.2026	DF

Client

Project

RIVERMONT PRECINCT 3 STAGE 3

Approved Director - RPEQ 17544

Mark Shaw Digitally signed by Mark Shaw RPEQ 17544 Date: 2026.05.05 12:04:28+10:00

Drawing Title: SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 1

Drawn	Designed	Checked	Date
VS	VS	MAS	MAY '26

Scale: AS SHOWN

Revision: 10 of 15

Drawing No	Revision
A1	24-273-60

C

SCALE A 1:1000 (Horiz.)



B 1:100 (Vert.)



(A1 UNREDUCED)

MAINTENANCE HOLE/SHAFT No.

MH/MS COVER TYPE
MH/MS TYPE
BRANCH LINE No.
BRANCH DROP TYPE
HC TYPE
HC DEPTH
HC CH. TO DS MH/MS
HC INVERT LEVEL
HC LOT No.

LEGEND:

- G = CONCRETE 0.900Ø MH AS PER SEQ-SEW-1301-2 TO 1301-5 WITH MINIMUM 150mm WALL THICKNESS.
F = CONCRETE 1.200Ø MH AS PER SEQ-SEW-1301-8 TO 1301-11
X = CONCRETE 1.200Ø MH AS PER SEQ-SEW-1301-14 TO 1301-21 EXCLUDING SAFETY CHAINS AND LADDER AS PER UW Pr11051 REV 1
@ = PE LINED SEQ-SPS-1407-1A, 1407-2B, AND SEQ-SEW-1301-26
+ = INTERNAL DROP PROPERTY CONNECTION REFER TO TYPICAL DETAIL ON NOTES PAGE
(B) = CLASS B NON-TRAFFICABLE
(D) = CLASS D TRAFFICABLE
NC 01 = REFER NONCONFORMANCE TABLE ON 24-273-59

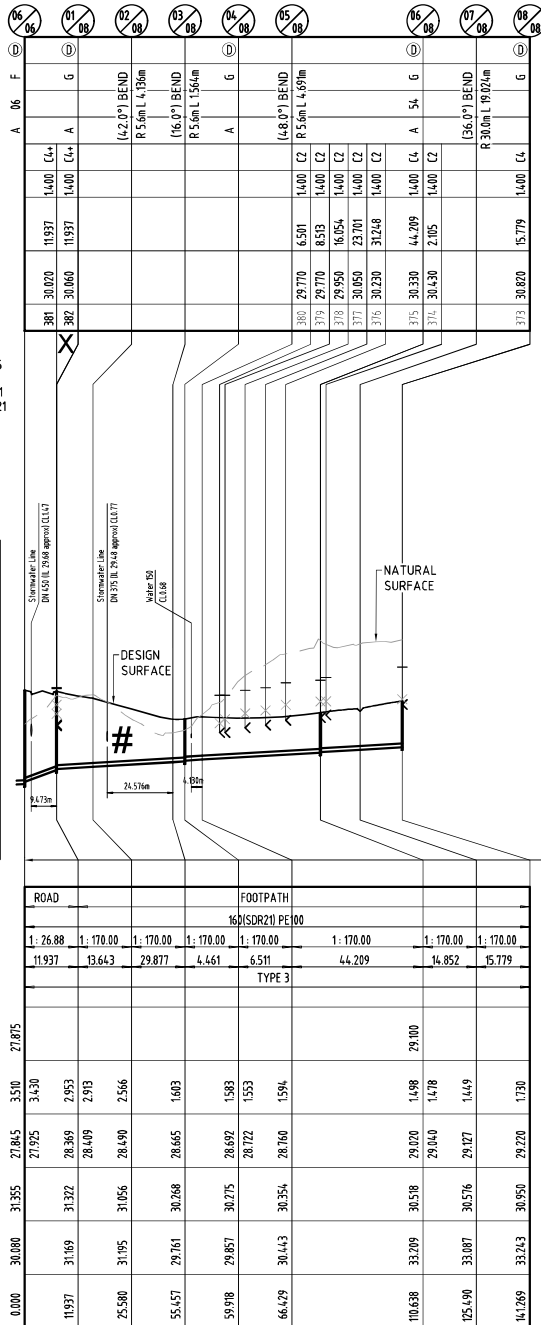
NOTES:

- PROPERTY CONNECTION TYPE/DETAILS REFER SEQ-SEW-1106 DWG SERIES.
- CAST IN SITU MANHOLE TYPE/DETAILS REFER SEQ-SEW-1301-1 TO 1301-21, 1301-26, 1302-1, 1301-1, 1304-1, 1305-1, 1306-1, 1307-1, 1308-1, 1308-5 TO 1308-11, 1313-1.
- MAINTENANCE SHAFTS TYPE/DETAILS REFER SEQ-SEW-1315-1 AND 1316-1 STD DWG.
- WHERE CLASS "D" COVERS ARE SPECIFIED FOR MH OR MS, INCREASE TOP SLAB THICKNESS FROM 150mm TO 175mm.
- COMPLETE ALL END OF LINE WITH A ELECTROFUSION STOP END OR BUTT WELDED CAP.
- MH 26.0M DEEP TO BE INDIVIDUALLY DESIGNED FOR SPECIFIC INSTALLATION DEPTH. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.

DATUM RL 24.0

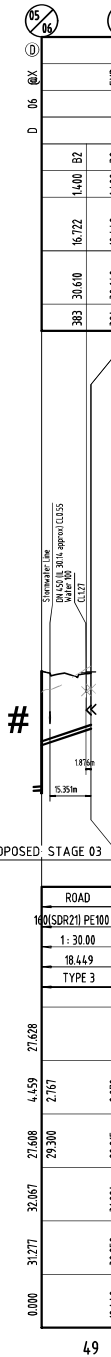
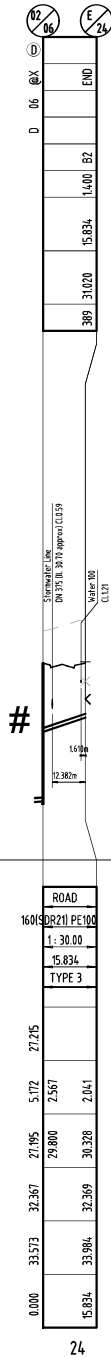
LOCATION
PIPE DIAMETER
GRADE
LENGTH
EMBEDMENT TYPE
JUNCTION
INVERT LEVEL
DEPTH OF INVERT BELOW FSL
INVERT LEVEL (IL)
FINISHED SURFACE LEVEL (FSL)
EXISTING SURFACE LEVEL (ESL)
CHAINAGE (CH)

LINE

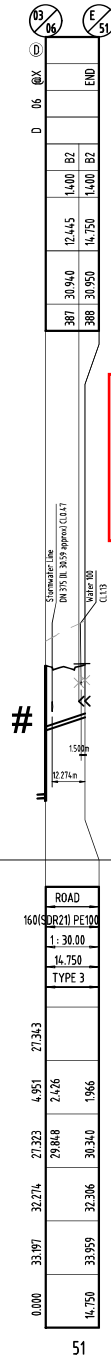
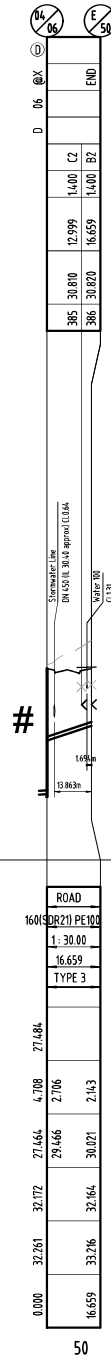


X REFER TO TWIN PROPERTY CONNECTION DETAIL ON KNg DWG No. 22-273-58

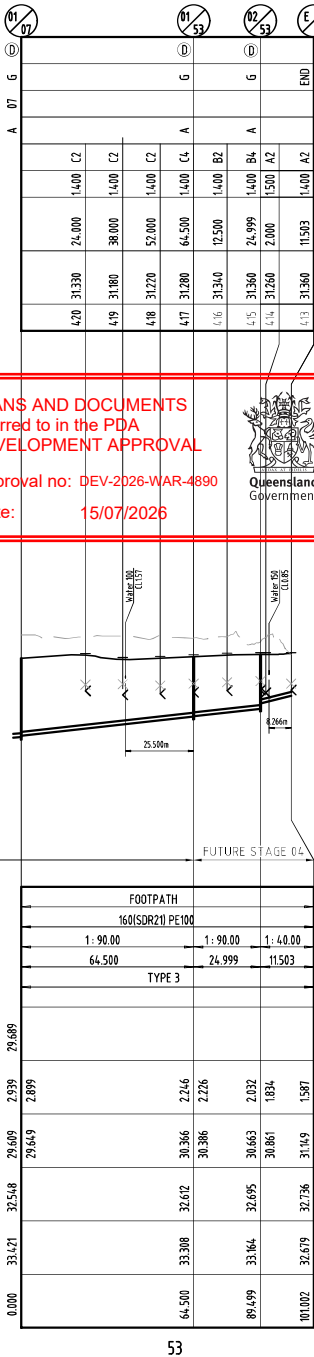
DENOTES BRIDGING STRUCTURE BETWEEN STORMWATER AND SEWER MAIN. REFER TO KNg DWG No. 24-273-59 FOR DETAILS.



SCALE A 1:1000 (Horiz.)



PLANS AND DOCUMENTS referred to in the PDA DEVELOPMENT APPROVAL
Approval no: DEV-2026-WAR-4890
Date: 15/07/2026



B 1:100 (Vert.)

DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!

LOCALITY PLAN

STAGE 3

REVISIONS

No	Description	Date	By
A	FOR APPROVAL	12.01.2026	DF
B	FOR APPROVAL	27.03.2026	DF
C	UNITYWATER RH	05.05.2026	DF

Client

Stockland

Project

RIVERMONT PRECINCT 3 STAGE 3

kn group

L1, 62 Astor Terrace, Spring Hill, QLD 4000
www.knigroup.com.au | 07 3017 1900

Approved Director - RPEQ 17544

Digitally signed by Mark Shaw RPEQ 17544
Date: 2026.05.05 12:04:28+10:00

Drawing Title: SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 2

Drawn	Designed	Checked	Date
VS	VS	MAS	MAY '26

Scale	Sheet
AS SHOWN	11 of 15

Drawing No	Revision
A1	24-273-61
C	

MH/MS COVER TYPE
MH/MS TYPE
BRANCH LINE No.
BRANCH DROP TYPE
HC TYPE
HC DEPTH
HC CH. TO DS MH/MS
HC INVERT LEVEL
HC LOT No.

G = CONCRETE 0.900M MH AS PER SEQ-SEW-1301-2 TO 1301-5
WITH MINIMUM 150mm WALL THICKNESS.

F = CONCRETE 1.200M MH AS PER SEQ-SEW-1301-8 TO 1301-11

X = CONCRETE 1200MM MH AS PER SEQ-SEW-1301-14 TO 1301-21
EXCLUDING SAFETY CHAINS AND LADDER AS PER UW
PR1051 REV 1

@ = PE LINED SEQ-SPS-1407-1A, 1407-2B, AND SEQ-SEW-1301-26

+ = INTERNAL DROP PROPERTY CONNECTION
REFER TO TYPICAL DETAIL ON NOTES PAGE

Ⓟ = CLASS B NON-TRAFFICABLE

Ⓛ = CLASS D TRAFFICABLE

NC 01 = REFER NONCONFORMANCE TABLE ON 24-273-59

1. PROPERTY CONNECTION TYPE/DETAILS REFER
SEW-SEW-1106 DWG SERIES.
2. CAST IN SITU MANHOLE TYPE/DETAILS REFER
SEW-SEW-1301-1 to
1301-21, 1301-26, 1302-1, 1301-1, 1304-1, 1305-1,
1306-1, 1307-1, 1308-1, 1308-5 to 1308-11, 1313-1.
3. MAINTENANCE SHAFTS TYPE/DETAILS REFER
SEW-SEW-1315-1 AND 1316-1 STD DWG.
4. WHERE CLASS "D" COVERS ARE SPECIFIED FOR MH OR
MS, INCREASE TOP SLAB THICKNESS FROM 150mm TO
175mm.
5. COMPLETE ALL END OF LINE WITH A
ELECTROFUSION STOP END OR BUTT WELDED CAP.
6. MH $\geq 6.0\text{M}$ DEEP TO BE INDIVIDUALLY DESIGNED
FOR SPECIFIC INSTALLATION DEPTH. REFER TO
STRUCTURAL DRAWINGS FOR DETAILS.

LOCATION
PIPE DIAMETER
GRADE
LENGTH
EMBEDMENT TYPE
JUNCTION
INVERT LEVEL
DEPTH OF INVERT BELOW FSL
INVERT LEVEL (IL)
FINISHED SURFACE LEVEL (FSL)
EXISTING SURFACE LEVEL (ESL)
CHAINAGE (CH)

	D	G	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ	AA
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19.758	32.687	30.633	29.320	1.313		ROAD
			29.100	1.418		SDR21 PE100
						1 : 90.00
						19.758
						TYPE 3

DENOTES BRIDGING STRUCTURE BETWEEN STORMWATER AND SEWER MAIN. REFER TO KNg DWG No. 24-273-59 FOR DETAILS.

Queensland
Government

[illegible]

Stockland

RIVERMONT
PRECINCT 3
STAGE 3



Digitally signed by Mark Shaw RPEQ
17544
Date: 2026.05.05

Drawn VS	Designed VS	Checked MAS	Date MAY' 26
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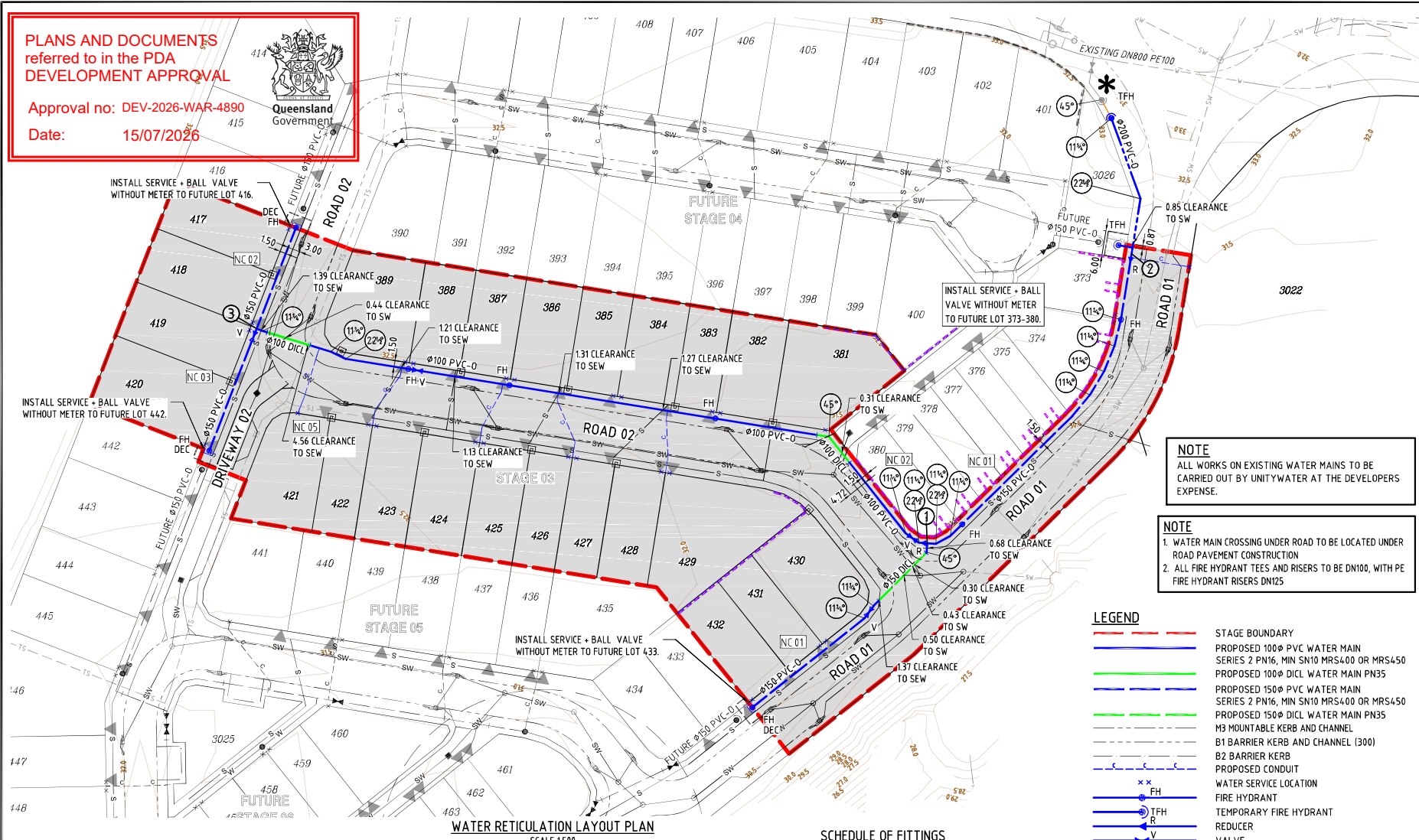
Scale	Sheet
AS SHOWN	12 of 15

A 1	Drawing No 24 273 42	Revision C
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PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV-2026-WAR-4890

Date: 15/07/2026



WATER RETICULATION LAYOUT PLAN

SCALE 1:500

NOTE

- ALL CONNECTIONS TO LIVE WATER MAINS TO BE UNDERTAKEN BY UNITYWATER AT DEVELOPER'S COST. THIS INCLUDES METER INSTALLATION TO LIVE SERVICES.
- IF AN APPROVAL IS HELD FOR EACH STAGE, FOR STAGED WORKS CONSTRUCTED CONCURRENTLY, FOLLOWING THE NECESSARY PRE-START MEETING(S), THE CONTRACTOR MAY INSTALL METERS ON NON-LIVE SERVICES.

UNITYWATER LIVE WATER
CONNECTION TABLE

LOCATION	DIAMETER
ROAD 01 ADJACENT TO LOT 3026	Ø200

SCHEDULE OF PIPES AND FITTINGS

PIPE SIZE	LENGTH(m)	VALVE	FIRE HYDRANT	TEMP FIRE HYDRANT	11° BEND	22½° BEND	45° BEND	90° BEND
Ø100 PVC-O	156.501	2	3	-	4	2	-	-
Ø100 DICL	22.000	-	-	-	-	-	1	-
Ø150 PVC-O	195.325	2	5	1	8	1	1	-
Ø150 DICL	16.500	-	-	-	-	-	-	-
Ø200 PVC-O	36.485	-	-	1	1	1	-	-
Ø200 DICL	-	-	-	-	-	-	-	-

NOTE - DUCTILE IRON (DICL) PIPEWORK UNDER ROAD CARRIAGEWAYS DENOTES DICL CLASS PN35.
- PVC-O PIPEWORK DENOTES PVC-O SERIES 2 PN16
- PE PIPEWORK DENOTES PE100 PN16. SERVICE LENGTHS APPROXIMATE, TO BE CONFIRMED ON SITE.
- ALL TRENCH REINSTATEMENT TO BE IN ACCORDANCE WITH SEQ-WAT-1204-1.

NOTE

ALL WORKS ON EXISTING WATER MAINS TO BE CARRIED OUT BY UNITYWATER AT THE DEVELOPERS EXPENSE.

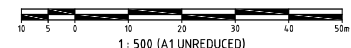
NOTE

- WATER MAIN CROSSING UNDER ROAD TO BE LOCATED UNDER ROAD PAVEMENT CONSTRUCTION
- ALL FIRE HYDRANT TEES AND RISERS TO BE DN100, WITH PE FIRE HYDRANT RISERS DN125

LEGEND

- STAGE BOUNDARY
- PROPOSED 100Ø PVC WATER MAIN
SERIES 2 PN16, MIN SNI0 MRS400 OR MRS450
- PROPOSED 100Ø DICL WATER MAIN PN35
- PROPOSED 150Ø PVC WATER MAIN
SERIES 2 PN16, MIN SNI0 MRS400 OR MRS450
- PROPOSED 150Ø DICL WATER MAIN PN35
- M3 MOUNTABLE KERB AND CHANNEL
- B1 BARRIER KERB AND CHANNEL (300)
- B2 BARRIER KERB
- PROPOSED CONDUIT
- WATER SERVICE LOCATION
- FIRE HYDRANT
- TEMPORARY FIRE HYDRANT
- REDUCER
- VALVE
- DEAD END CAP
- CONNECTION REQUIRED BY UNITYWATER
- FUTURE CONCRETE BLOCK MASONRY WALL
- EXISTING SLEEPER RETAINING WALL
- CONCRETE SLEEPER RETAINING WALL
- FUTURE SLEEPER RETAINING WALL
- STORMWATER DRAINAGE
- SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORMWATER MAIN
- EXISTING TRUNK SEWER MAIN
- UNITYWATER EASEMENT
- DRIVEWAY POSITION
- ELECTRICITY SERVICE POINT
- DENOTES NON-CONFORMING DESIGN ASPECT.
REFER TO NON-CONFORMING DESIGN
ASPECTS KN DWG 24-273-59 FOR DETAILS.

SCALE



DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!



LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	12.01.2026	DF
B	FOR APPROVAL	27.03.2026	DF
C	RH RESPONSE	08.04.2026	DF
D	UNITYWATER RH	05.05.2026	DF

Client



Project

RIVERMONT
PRECINCT 3
STAGE 3



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Approved Director - RPEQ 17544

Digitally signed by
Mark Shaw RPEQ
17544
Date: 2026.05.05
92342811000

WATER RETICULATION
LAYOUT PLAN

Drawn	Designed	Checked	Date
RP	VS	MAS	MAY '26
Scale	Sheet	Revision	
A3 SHOWN	13 of 15		
A1	24-273-63	D	



401

EXISTING MAIN DN250 PVC-O

EXISTING MAIN DN800 PE-100

ROAD 18

UNIT WATER CONNECTION

500m

PROPOSED MAIN DN200 PVC-O

CONSTRUCTOR TO INSTALL

ROAD 01

3026

UNIT WATER LIVE CONNECTION

REMOVE DEAD END CAP AND
TEMPORARY FIRE HYDRANTS
2 x DN200 APPROVED CONNECTORS
1 x DN200 PVC-O LENGTHS TO SUIT
WITH 45° BEND PIPE

STAGE 03 LIVE CONNECTION - ADJACENT TO LOT 3026
SCALE: 1:250

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SEQ WS&S AND D&C SPECIFICATIONS AND STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
4. COVER OVER MAINS FROM PERMANENT LEVEL TO BE AS PER WSA03-2011 AS AMENDED BY SEQ CODE TABLE 7.2.
5. MINIMUM EMBEDMENT SHALL BE IN ACCORDANCE WITH STANDARD DRAWING Nos. SEQ-WAT-1200-2 TO SEQ-WAT-1203-1.
6. THRUST BLOCKS SHALL BE IN ACCORDANCE WITH AND PRESSURE TESTED TO 1200kPa AS PER STANDARD DRAWING No. SEQ-WAT-1205-1.
7. SEQ-WAT-1206-1 AND SEQ-WAT-1207-1.
8. PRE-TAPPED CONNECTOR FITTINGS AND E-F TAPPING SADDLES TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWING No. SEQ-WAT-1108-1 & SEQ-WAT-1108-2.
9. A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH STANDARD DRAWING No. SEQ-WAT-1108-3.
10. ALL MATERIALS USED IN THE WORKS SHALL BE AS FOLLOWS:
 - ALL CAST IRON FITTINGS SHALL BE TO AS2544 WITH SOCKET ENDS DESIGNED FOR USE WITH UPVC OR DUCTILE IRON PIPES AS APPLICABLE AND SHALL BE 'LIGHT' CEMENT LINED.
 - PRESSURE PIPES USED FOR WATER SUPPLY INSTALLATION SHALL BE RUBBER RING JOINTED PIPES AND SHALL BE PVC-C PN16
 - PIPES MUST BE AC/DUCTILE IRON OD COMPATIBLE. OTHER TYPES AND CLASSES OF PIPES SHALL NOT BE INSTALLED.
 - CAST IRON GATE (SLUICE) VALVES SHALL CONFORM TO AS2638.
 - ALL VALVES AND HYDRANTS SHALL BE COATED INTERNALLY AND EXTERNALLY WITH A FUSION BONDED EPOXY.
 - ALL NUTS AND WASHES SHALL BE STAINLESS STEEL GRADE 316.
 - DETECTABLE MARKER TAPE TO BE INSTALLED ON ALL NEW WATERMAIN.
11. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS (WHERE APPLICABLE).
12. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING No. SEQ-WAT-1410-1.
13. MARKERS SHALL BE INSTALLED FOR ALL SERVICE CROSSINGS, HYDRANTS AND VALVES IN ACCORDANCE WITH STANDARD DRAWING Nos. SEQ-WAT-1108-1 & -2, SEQ-WAT-1300-1 AND SEQ-WAT-1300-2.
14. THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS R.P.E.Q. REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
15. WATER MAIN SHALL BE LAID AT 1500mm ALIGNMENT FROM PROPERTY BOUNDARY UNLESS NOTED OTHERWISE.
16. WHERE PERMANENT HYDRANTS ARE NOT INSTALLED AT END OF MAINS OF EACH STAGE, A TEMPORARY HYDRANT WILL BE INSTALLED INSTEAD.
17. NEW WATER MAINS UNDER EXISTING ROADS TO BE TUNNEL BORED, UNLESS NOTED OTHERWISE.
18. ALL VALVE AND HYDRANT ASSEMBLIES SHALL BE IN ACCORDANCE WITH SEQ-WAT-1301-1 TRAFFICABLE LID, AND SEQ-WAT-1302-1. WHERE PE IS SPECIFIED AS PIPEWORK REFER TO SEQ-WAT-1409-1 FOR HYDRANT INSTALLATION FITTINGS.
19. ALL WATER SERVICES TO COMPRISE 200mm I.D. FOR SERVICE LENGTHS <20m AND 250mm I.D. TO EACH LOT FOR SERVICE LENGTHS > 20m.
20. PRE-TAPPED CONNECTOR R 200mm I.D. SERVICE WITH LOCKABLE BALL VALVE UPSTREAM OF WATER METER (REFER SEQ-WAT-1108-3 ITEM 2) TO BE PROVIDED FOR FUTURE LOTS
21. MAXIMUM ALLOWABLE PIPE DEFLECTION IS 1" OR AS PER MANUFACTURERS SPECIFICATION.
22. WATER MAINS SHALL NOT BE CONSTRUCTED WITHIN ROAD PAVEMENTS AND ROAD CROSSING DEPTH MUST ACCOUNT FOR THE CONSTRUCTION PHASE OF THE DEVELOPMENT.
23. ROAD CROSSING DEPTH MUST ACCOUNT FOR THE CONSTRUCTION PHASE OF THE DEVELOPMENT.
24. WATERMAIN EMBEDMENT TO BE TYPE C SUPPORT AS PER SEQ-WAT-1201-1 OR AS DIRECTED BY SITE SUPERINTENDANT.
25. ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE 'ACCEPTED PRODUCTS AND MATERIALS' LIST.

1. SERVICE CONDUITS TO BE INSTALLED UNDER THE ROADWORKS CONTRACT AND SHOWN THUS: _____ ON THE DRAWINGS AND SHALL BE LOCATED AND INSTALLED IN ACCORDANCE WITH SEQ-WAT-1108-1.
2. CONDUITS UNDER ROADS ARE TO BE A SINGLE 100ø pVPC PN9 SERIES 1 CONDUIT WITH 2 x 25ø HDPE PE100 PN16 SERVICES FOR LENGTH LESS THAN OR EQUAL TO 20m OR 2 x DN32mm HDPE PE100 PN16 SERVICE PIPES FOR >20m AND <40m LONG.

- A. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- B. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 18m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- C. TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
- D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

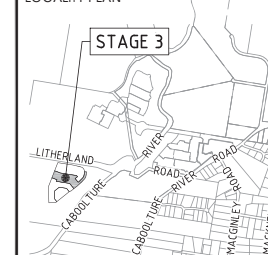
A. TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY.

B. CARE SHOULD BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROL AROUND STOCKPILES.

- A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- B. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- C. NO SOIL SHOULD BE STOCKPILED WITHIN 5m OF CREEK.

A. PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.

B. PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

[illegible]

Stockland

RIVERMONT
PRECINCT 3
STAGE 3

kngroup
L1, 62 Aster Terrace, Spring Hill, QLD 4000
www.kngroup.com.au | 07 3017 1900

Approved Director - RPEQ 17544
Digitally signed by
Mark Shaw RPEQ
17544
Date: 2026.03.30
08:44:27+10'00'

Drawing Title

WATER RETICULATION
LIVE CONNECTION DETAIL
AND NOTES

Drawn RP	Designed VS	Checked MAS	Date SEP '25
Scale AS SHOWN			Sheet 15 of 1
A1	Drawing No 24-273-65		Revision B

Date: 15/07/2026

