

BELLARA
AVENUE

Future Dwelling within No 32 Bellara
Avenue to be to a separate application

DRAINAGE NOTES

- + DENOTES EXISTING GROUND LEVEL
- FALL STORMWATER PIPES AT 1% MIN UNLESS OTHERWISE NOTED.
- SUB-SOIL DRAINAGE TO BE CONNECTED TO THE SITE DRAINAGE SYSTEM AS NECESSARY.
- SURFACE GRATES 300 SQ. UNLESS OTHERWISE NOTED.
- ALL STORMWATER PIPES TO HAVE SOLVENT CEMENT WATERTIGHT JOINTS.
- CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS.
- INSPECTIONS MUST BE UNDERTAKEN BY THIS OFFICE (BY PRIOR ARRANGEMENT WITH ENGINEER) DURING CONSTRUCTION TO ENABLE FULL CERTIFICATION UPON COMPLETION OF WORKS.
- ALL CONSTRUCTION OF COUNCIL DRAINAGE WORKS TO COMPLY WITH COUNCIL STANDARD.
- REMOVE REDUNDANT DRAINAGE PITS AND SEAL PIPES.
- PIT BENCHING TO BE HALF THE OUTGOING PIPE DIAMETER. CONCRETE FOR BENCHING TO BE 20 MPa MASS CONCRETE.
- APPROVED PRE-CAST PITS MAY BE USED.
- ALL PIPES TO BE LAID ON COMPACTED FINE CRUSHED ROCK OR SAND BEDDING 75mm THICK & PIPES BACKFILLED WITH COMPACTED SAND TO 300mm ABOVE TOP OF PIPE, ELSE ATTACHED TO UNDERSIDE OF STRUCTURE AT 600mm c/c AS NECESSARY.
- PIPE ROUTES SHOWN ARE INDICATIVE ONLY AND SHOULD BE AS NECESSARY ACCORDING TO SITE CONDITIONS, TREE POSITIONS ETC. CONFIRM SIGNIFICANT CHANGES IN PIPES SYSTEM DETAILS WITH SUPERVISING ENGINEER PRIOR TO COMMENCEMENT OF DRAINAGE CONSTRUCTION WORKS.
- CONTRACTOR SHALL ENSURE THAT SERVICES TO BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED. CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS WHERE REQUIRED. ONCE WORKS ARE COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL TEMPORARY SERVICES AND MAKE GOOD ALL DISTURBED AREAS.
- STORMWATER SYSTEM REQUIRES SIGNIFICANT MAINTENANCE DUE TO POTENTIAL HIGH POLLUTANT LOAD. FILTERS AND POLLUTANT TRAPS SHOULD BE CHECKED AFTER LARGE STORM EVENTS AND CLEANED EVERY 6 MONTHS.
- PLUMBING AND DRAINAGE WORKS TO COMPLY WITH AS-3500, THE NATIONAL DRAINAGE & PLUMBING CODE.
- WHERE POSSIBLE, DRAINAGE LINES SHALL BE LAID IN AREAS PREVIOUSLY DISTURBED BY OTHER SITE WORKS AND FOLLOW TOPOGRAPHICAL FEATURES TO REDUCE IMPACT AND AVOID TREE ROOTS.
- THIS STORMWATER MANAGEMENT PLAN HAS BEEN PREPARED FOR SUBMISSION TO COUNCIL/CERTIFIER AND DOES NOT NECESSARILY CONTAIN ALL APPROPRIATE INFORMATION TO ENABLE FOR ISSUE TO PLUMBER/BUILDER FOR CONSTRUCTION. CONTACT TAYLOR CONSULTING FOR MORE INFORMATION.

OSD SYSTEM DESIGN DATA

TOTAL SITE AREA = 1610 m²
AREA TO OSD = 226 m² (100% IMPERVIOUS)
AREA BYPASSING OSD = 1384 m² (17% IMPERVIOUS)

PRE-DEVELOPED SITE FLOWS

20% AEP = 33 l/s
1% AEP = 71 l/s

DEVELOPED SITE FLOWS

20% AEP = 33 l/s
1% AEP = 71 l/s

DETENTION SYSTEM DATA

TOTAL SSR = 4.8 m³
ORIFICE DIAMETER = 50 mm

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 1609m² (100%)
PROPOSED IMPERVIOUS AREA = 482 m² (30%)
PROPOSED LANDSCAPED AREA = 1127 m² (70%)
EXISTING IMPERVIOUS AREA = 0 m² (0%)
EXISTING LANDSCAPED AREA = 1609 m² (100%)

ISSUE DATE	REVISION
18 JUN 2024	UPDATED PLAN TO SUIT LATEST ARCHITECTURAL PLANS
12 JULY 2024	AMENDMENTS TO TITLE BLOCK

TITLE STORMWATER MANAGEMENT PLAN 62 & 64 POWDERWORKS ROAD, NORTH NARRABEEN (LOWER SECTION) – HOUSE C			
DRAWN	DATE	CHECKED	SCALE @ A1
LI			1:100
ENGINEER	19 DECEMBER 2023	BE Civil (Hons) MIE Aust.	

TAYLOR
CONSULTING
CIVIL & STRUCTURAL ENGINEERS

DRAWING NO
STORM-2/B

600 SQ. INLET PIT
GRATE R.L. 24.70
INVERT R.L. 23.90

PROPOSED STORMWATER LINE TO COUNCIL
PIT SPP57424 IN NAREEN PARADE VIA
APPROVED EASEMENT VIDE DEALING
AS493623 THROUGH 84 NAREEN PARADE

EXISTING 1000 WIDE
EASEMENT TO DRAIN WATER
VIDE DEALING AS493623

600 SQ. INLET PIT
GRATE R.L. 24.50
INVERT R.L. 23.60

600 SQ. INLET PIT
GRATE R.L. 27.00
INVERT R.L. 26.40

PROVIDE 300 SQ. BY 300 DEEP FLUSH
PIT WITH Ø100 BRANCH P.V.C.
CONNECTION WITH SCREW CAP END TO
PROPOSED CHARGED DRAINAGE LINE TO
ALLOW FOR FLUSHING & MAINTENANCE

NOTE: TURN Ø100 'CHARGED' P.V.C. DOWNPIPES
UP WALL SO ARE WATERTIGHT TO 10m ABOVE
TOP OF DETENTION STORAGE TANK (TYP)

PROVIDE STRAMIT 150 HALF ROUND EAVES
GUTTERS OR APPROVED EQUIVALENT
7700mm² (MIN) EAVES GUTTER (TYP)

NOTE: CHECK & LOCATE DEPTH OF EXISTING
MAINS & SERVICES PRIOR TO CONSTRUCTION
OF STORMWATER SYSTEM AS VARIATIONS IN
POSITION OF MAINS COULD AFFECT DRAINAGE
CONSTRUCTION DETAILS.

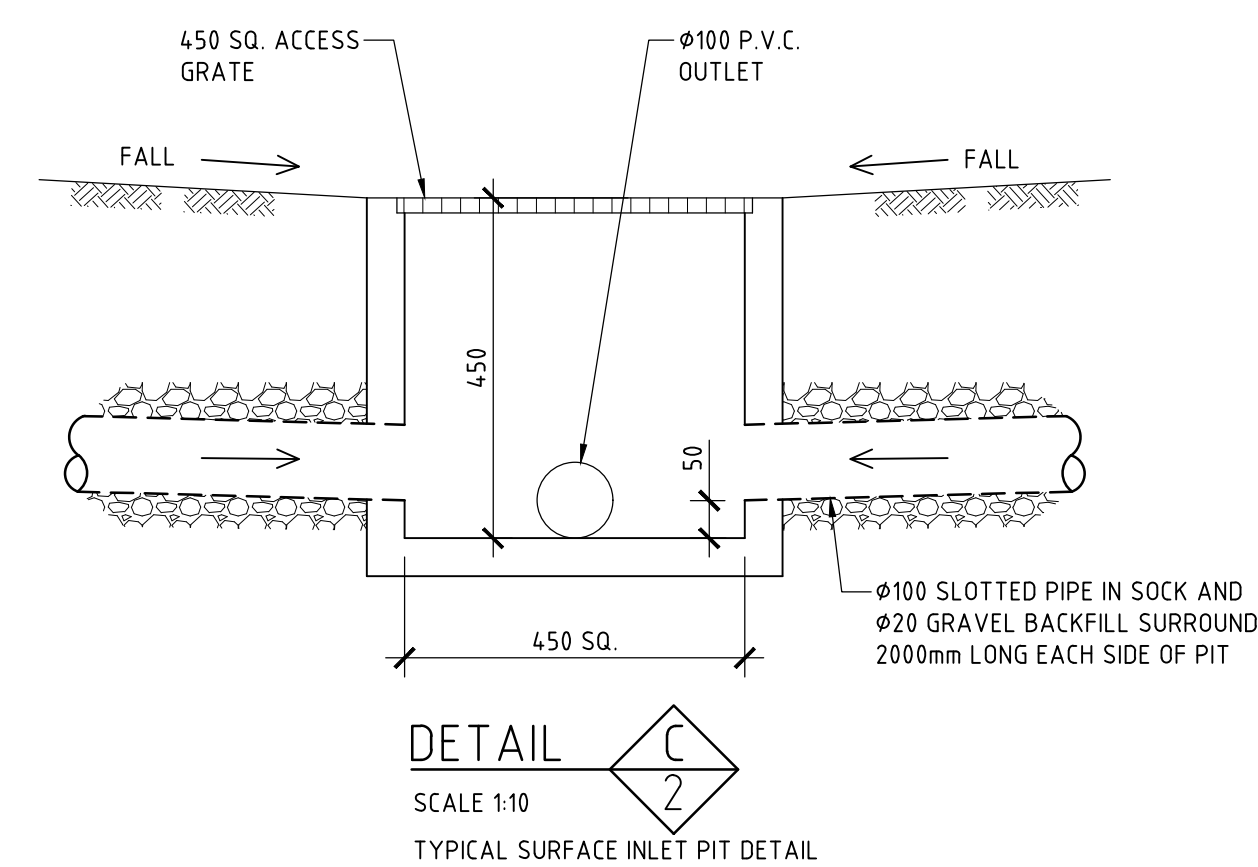
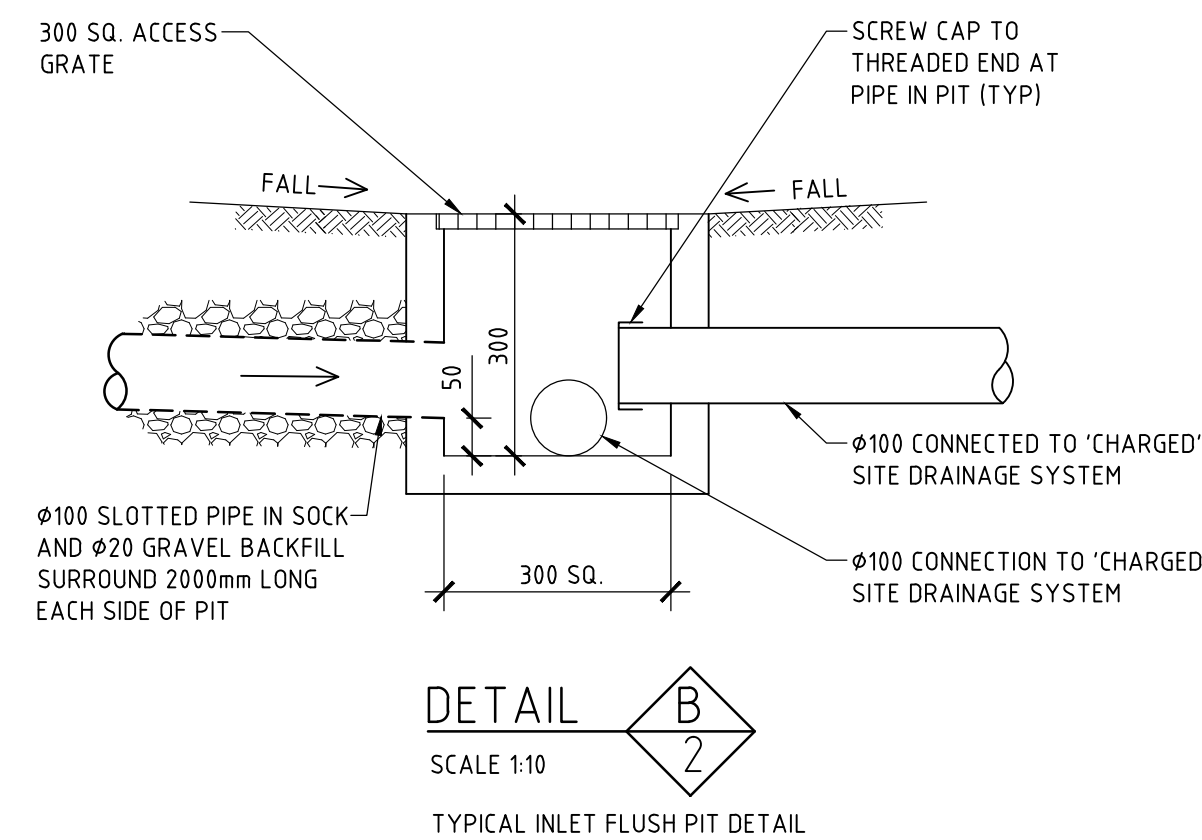
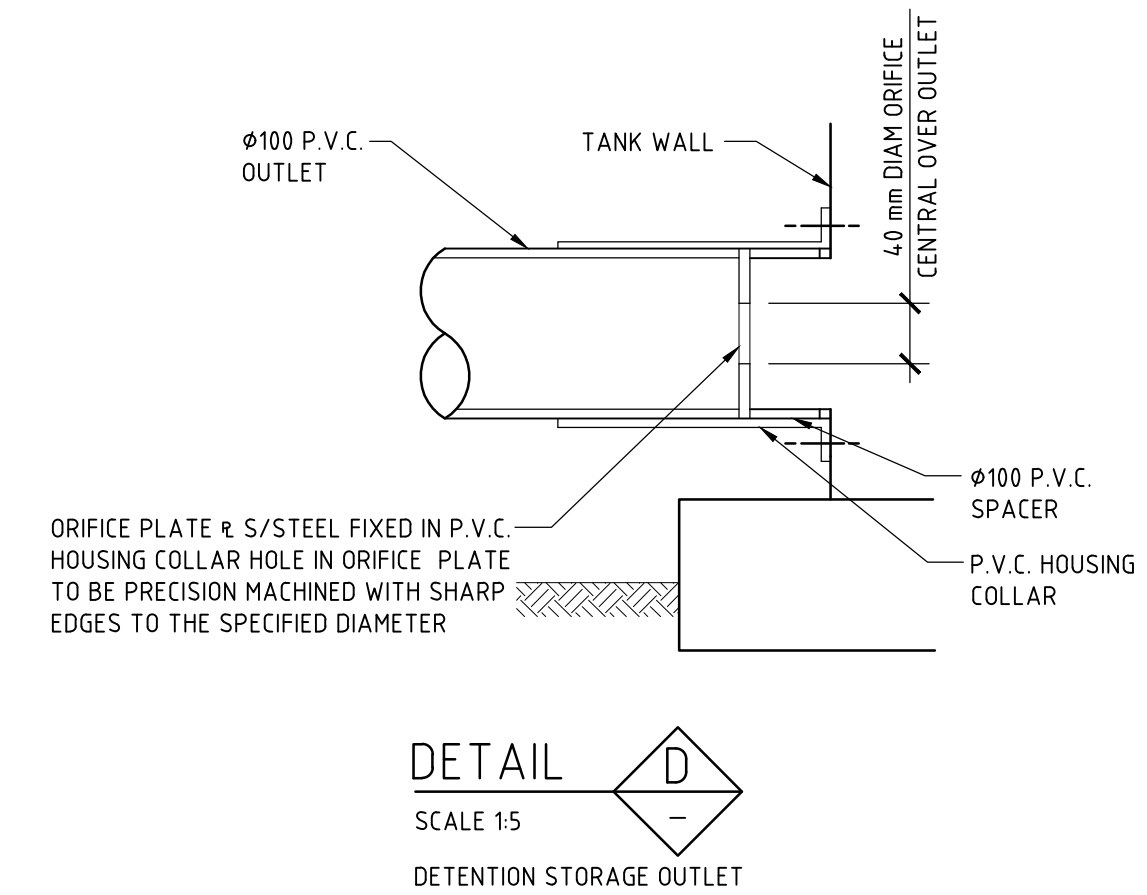
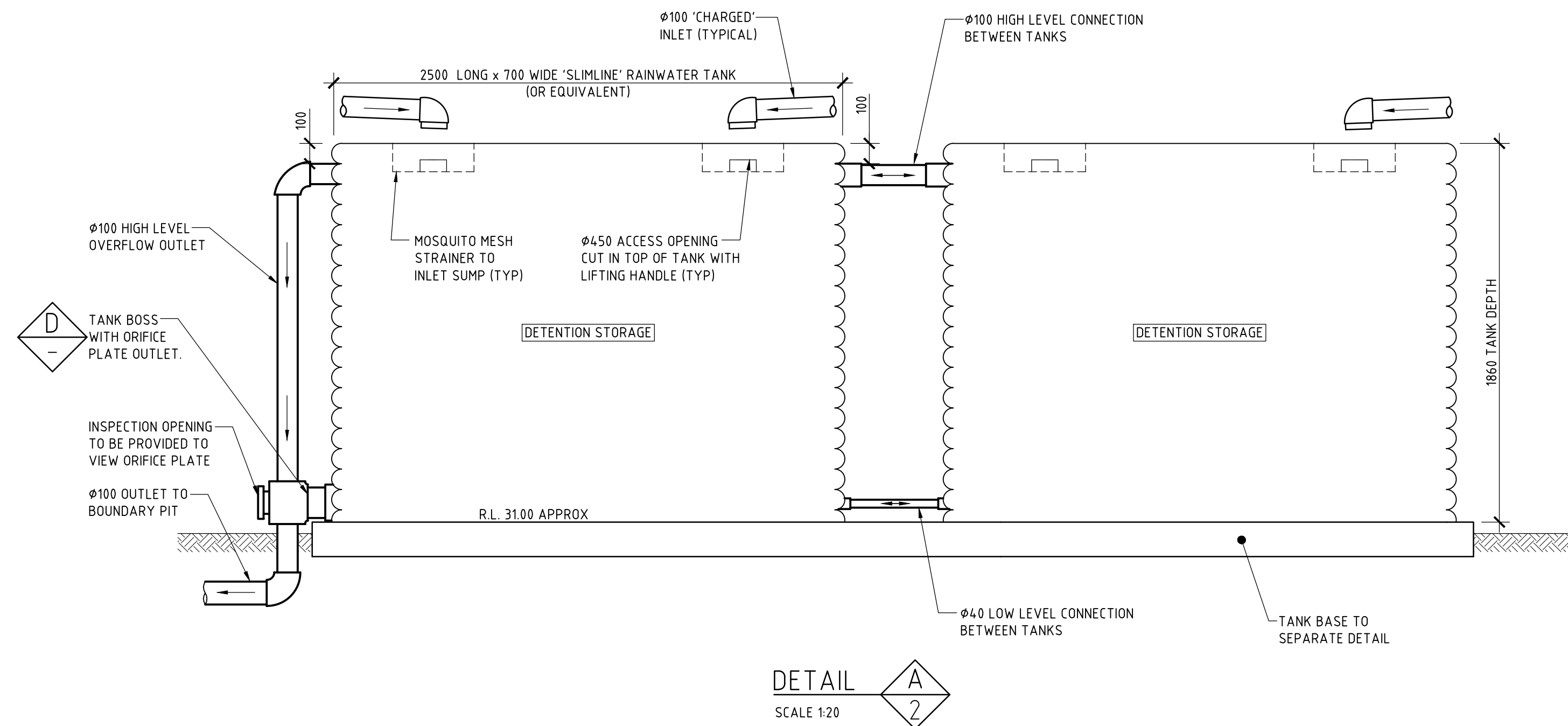
NOTE: PLUMBER TO PERFORM WATER TESTING OF EXISTING
PIPED SYSTEM TO DETERMINE CAPACITY AND STATE OF
REPAIR. PLUMBER TO INSPECT & REPAIR DAMAGED SECTIONS
OF EXISTING PIPE (INCLUDING DOWNPIPES) AS NECESSARY OR
PROVIDE NEW DRAINAGE LINES WHERE NECESSARY SUBJECT
TO THE APPROVAL BY THE SUPERVISING ENGINEER.

STORMWATER DETENTION TANK
STORAGE VOLUME = 3059 LITRES
STORAGE LENGTH = 2500mm
STORAGE WIDTH = 700mm
STORAGE DEPTH = 1860mm
TOTAL STORAGE = 6118 LITRES
TANK FLOOR = R.L. 31.00
PROVIDE Ø100 HIGH LEVEL & Ø40 LOW LEVEL
CONNECTIONS BETWEEN TANKS & Ø100 HIGH LEVEL
OVERFLOW OUTLET TO SITE DRAINAGE SYSTEM

Ø100 DOWNPIPE
(TYP)

450 SQ. BY 450 DEEP INLET PIT
NOTE: ALL PITS TO HAVE 2.0m
LONG SUB-SOIL TAIL INLET

SITE DRAINAGE PLAN
SCALE 1:100



ISSUE DATE		REVISION		TITLE			
18 JUN 2024		UPDATED PLAN TO SUIT LATEST ARCHITECTURAL PLANS		STORMWATER MANAGEMENT DETAILS			
12 JULY 2024		AMENDMENT TO TITLE BLOCK		62 & 64 POWDERWORKS ROAD, NORTH NARRABEEN (LOWER SECTION) – HOUSE C			
DRAWN		DATE		CHECKED		SCALE @ A1	
ENGINEER		19 DECEMBER 2023		BE Civil (Hons) MIE Aust.		1:20 1:10 1:5	

TAYLOR
CONSULTING
CIVIL & STRUCTURAL ENGINEERS

DRAWING NO
STORM-3/B