

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: EXCAVATION WORK WITHIN THE TPZ OR SRZ COMPLETED BY HAND OR WITH AIR SPADE OR WITH WATER LANCE AND WILL RETAIN ALL ROOTS > 25MM DIAMETER.

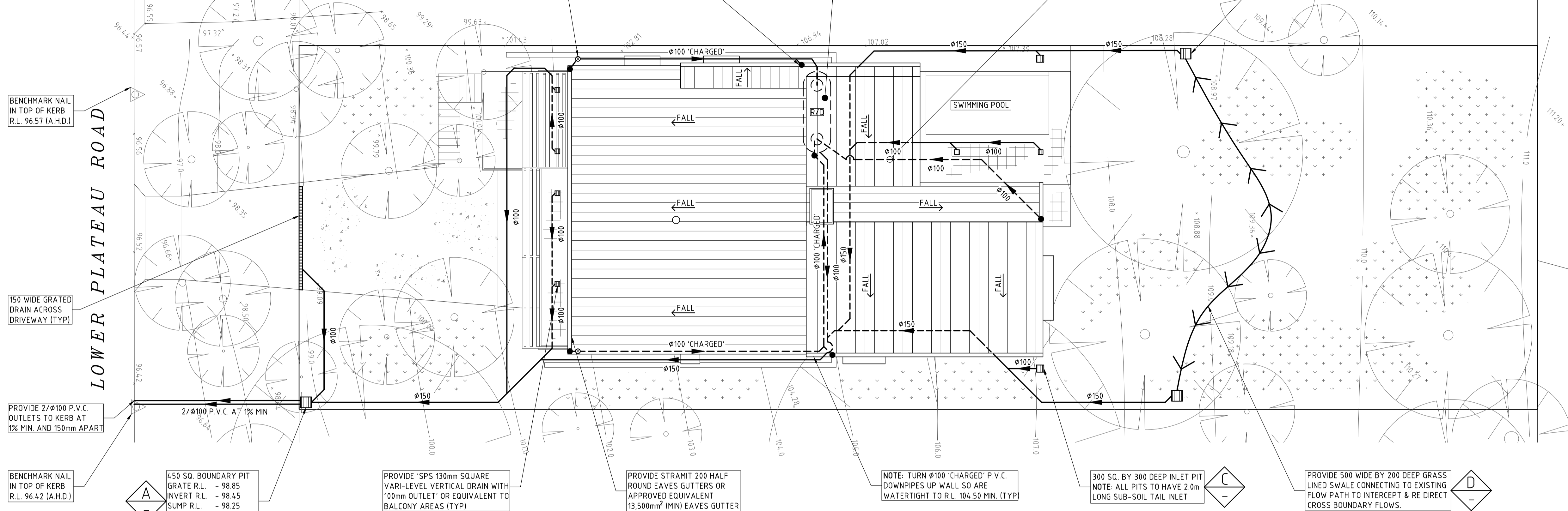
PROVIDE INSPECTION OPENING AT LOW POINT IN Ø100 'CHARGED' DRAINAGE SYSTEM FOR MAINTENANCE AND CLEANING (TYP)

PROVIDE Ø100 DOWNPIPE (TYP)

**RAINWATER RETENTION/DETENTION TANK**  
 STORAGE VOLUME = 8000 LITRES  
 STORAGE LENGTH = 3600mm  
 STORAGE WIDTH = 1150mm  
 STORAGE DEPTH = 2020mm  
 TANK FLOOR = R.L. 101.35 A.H.D.  
 TANK BOSS ORIFICE = R.L. 102.48 A.H.D.  
 DETENTION VOLUME = 3525 LITRES  
 RAINWATER VOLUME = 4475 LITRES  
 PROVIDE Ø100 HIGH LEVEL OUTLET TO BOUNDARY PIT

SECURE DRAINAGE LINES TO UNDERSIDE OF FLOOR STRUCTURE AS NECESSARY FOR CONNECTION TO COMBINATION RAINWATER/DETENTION STORAGE TANK OR SITE DRAINAGE SYSTEM (TYP)

450 SQ. INLET PIT DEPTH AS NECESSARY TO SUIT MINIMUM PIPE FALL.  
 NOTE: ALL PITS TO HAVE 2.0m LONG SUB-SOIL TAIL INLET



BENCHMARK NAIL IN TOP OF KERB R.L. 96.57 (A.H.D.)

150 WIDE GRATED DRAIN ACROSS DRIVEWAY (TYP)

PROVIDE 2/Ø100 P.V.C. OUTLETS TO KERB AT 1% MIN. AND 150mm APART

BENCHMARK NAIL IN TOP OF KERB R.L. 96.42 (A.H.D.)

450 SQ. BOUNDARY PIT GRATE R.L. - 98.85  
 INVERT R.L. - 98.45  
 SUMP R.L. - 98.25  
 WITH TRASH SCREEN FOR POLLUTION CONTROL

PROVIDE 'SPS 130mm SQUARE VARI-LEVEL VERTICAL DRAIN WITH 100mm OUTLET' OR EQUIVALENT TO BALCONY AREAS (TYP)

PROVIDE STRAMIT 200 HALF ROUND EAVES GUTTERS OR APPROVED EQUIVALENT 13,500mm<sup>2</sup> (MIN) EAVES GUTTER

NOTE: TURN Ø100 'CHARGED' P.V.C. DOWNPIPES UP WALL SO ARE WATERTIGHT TO R.L. 104.50 MIN. (TYP)

300 SQ. BY 300 DEEP INLET PIT NOTE: ALL PITS TO HAVE 2.0m LONG SUB-SOIL TAIL INLET

PROVIDE 500 WIDE BY 200 DEEP GRASS LINED SWALE CONNECTING TO EXISTING FLOW PATH TO INTERCEPT & RE-DIRECT CROSS BOUNDARY FLOWS.

**SITE DRAINAGE PLAN**

SCALE 1:100

- 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.

- RAINWATER RE-USE NOTES AND SPECIFICATIONS**
- ROOF WATER ONLY TO BE DRAINED TO THE RAINWATER STORAGE TANK.
  - THE RAINWATER STORAGE TANK NEEDS TO BE CONNECTED FOR RE-USE AS REQUIRED BY THE OWNER.
  - RAINWATER STORAGE TANK TO BE CONFIGURED IN ACCORDANCE WITH SYDNEY WATER SPECIFICATIONS 'GUIDELINES FOR RAINWATER TANK IN RESIDENTIAL PROPERTIES'.
  - PROVIDE MAINS 'TOP-UP' SUPPLY TO RAINWATER TANK. MAINS TOP-UP ZONE TO BE BASED ON THE DAILY NON-POTABLE USAGE THAT MAY BE EXPECTED FROM THE TANK.
  - PROVIDE A MECHANICAL PUMPING ARRANGEMENT (IN SOUND-PROOF HOUSING) TO PUMP SUPPLIERS SPECIFICATION TO SUIT INTENDED USAGE OF RAINWATER STORAGE. PUMPING ARRANGEMENTS MUST COMPLY WITH EPA GUIDELINES.
  - INLETS TO RAINWATER TANK MUST BE SCREENED TO PREVENT THE ENTRY OF FOREIGN MATTER, ANIMALS OR INSECTS.
  - A SIGN MUST BE AFFIXED TO THE RAINWATER TANK CLEARLY STATING THAT THE WATER IN THE TANK IS RAINWATER AND IS NOT TO BE USED FOR HUMAN CONSUMPTION.
  - RAINWATER TANK TO BE PLACED ON A STRUCTURALLY ADEQUATE BASE IN ACCORDANCE WITH THE MANUFACTURER'S OR STRUCTURAL ENGINEER'S DETAILS.
  - THE TANK MUST NOT BE INSTALLED OVER ANY MAINTENANCE STRUCTURE OR FITTINGS USED BY A PUBLIC AUTHORITY.
  - RAINWATER TANK AND ASSOCIATED PLUMBING WORKS TO BE INSTALLED AND CONFIGURED BY A LICENSED PLUMBER. PUMP TO BE INSTALLED BY A LICENSED ELECTRICIAN.

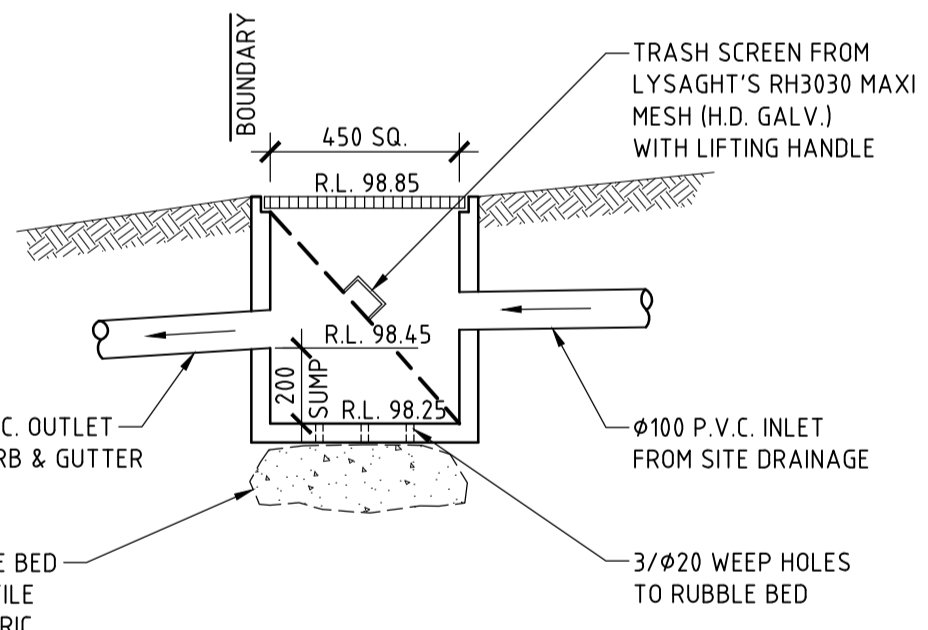
**NORTHERN BEACHES COUNCIL - REGION'S NORTHERN CATCHMENTS**  
 TOTAL INCREASE IN IMPERVIOUS AREA = 50m<sup>2</sup>. OSD REQUIRED

**OSD SYSTEM DESIGN DATA**

**EXISTING SITE FLOWS**  
 5 YR ARI = 14 l/s  
 20 YR ARI = 23 l/s  
 100 YR ARI = 34 l/s

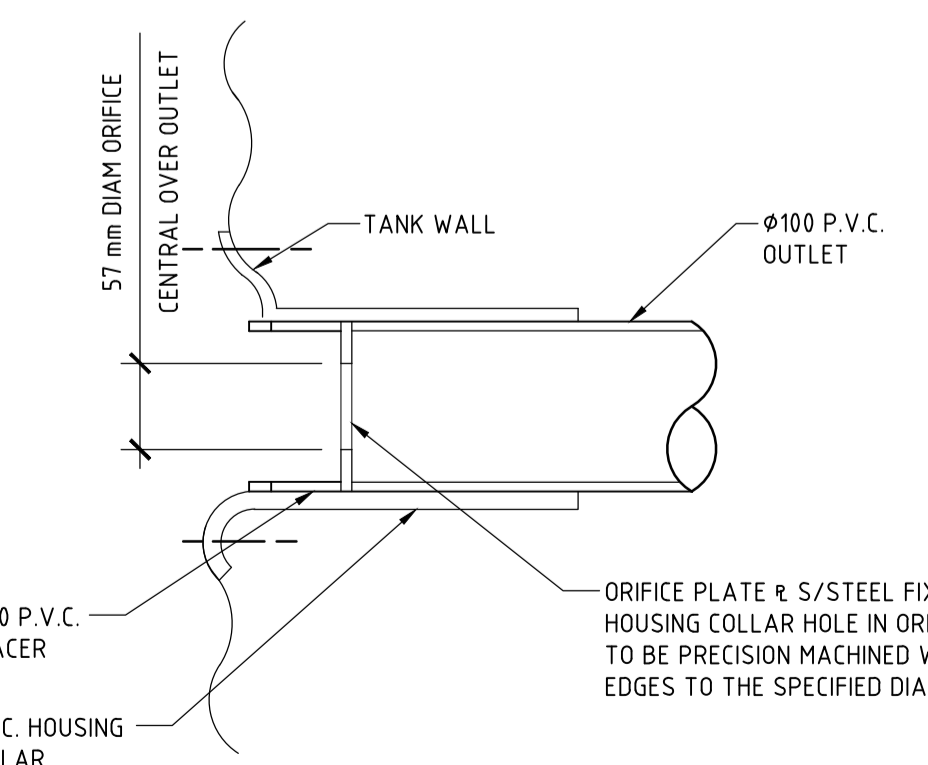
**DEVELOPED SITE FLOWS**  
 5 YR ARI = 13 l/s  
 20 YR ARI = 21 l/s  
 100 YR ARI = 29 l/s

**DETENTION SYSTEM DATA**  
 AREA DRAINING TO THE TANK = 217 m<sup>2</sup>  
 MAX. 100YR TWL = R.L. 103.22  
 ORIFICE DIAM = 57 mm  
 SSR = 352 m<sup>3</sup>



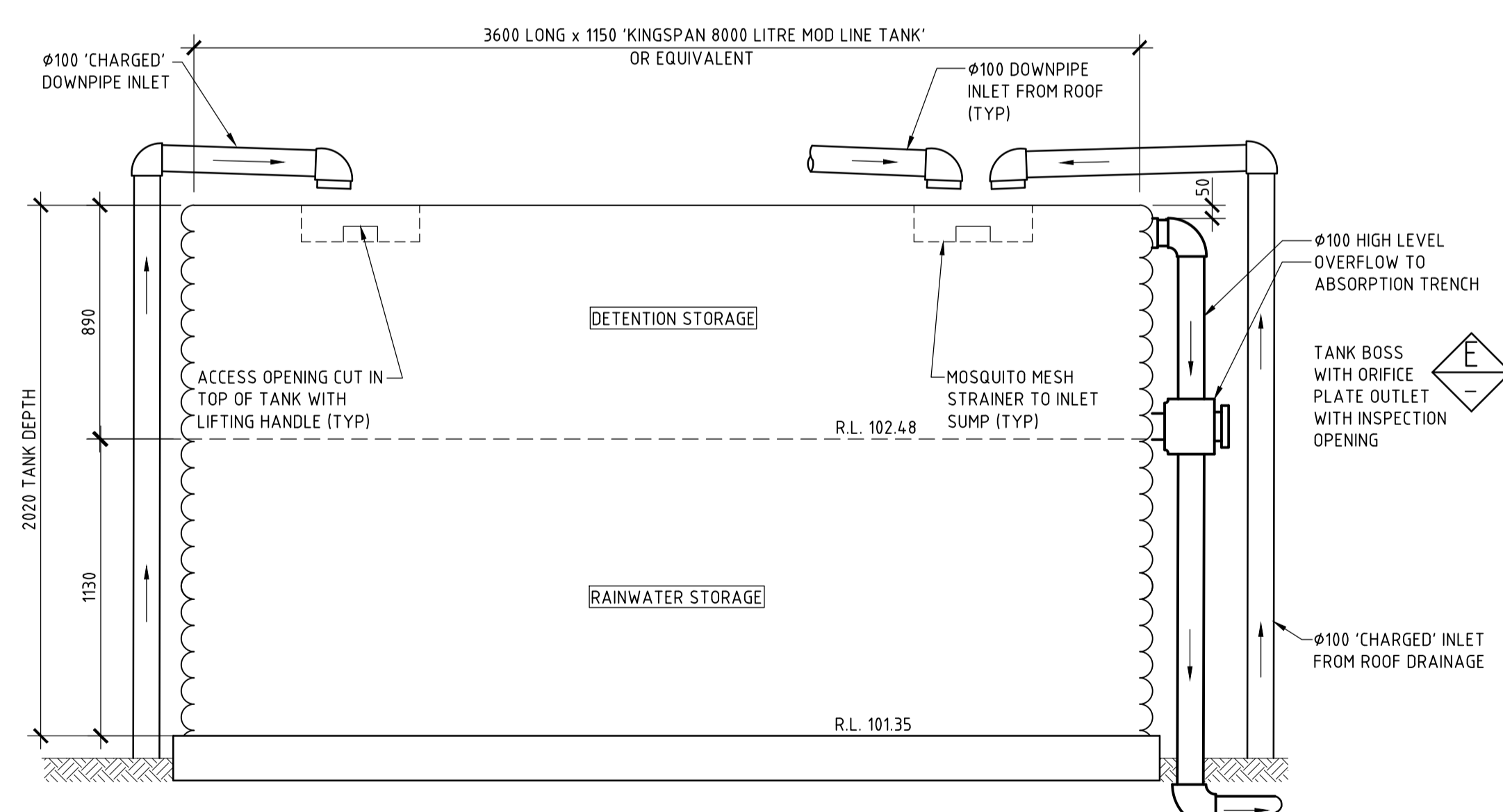
DETAIL A SCALE 1:20

TYPICAL BOUNDARY PIT DETAIL WITH POLLUTION CONTROL MEASURE



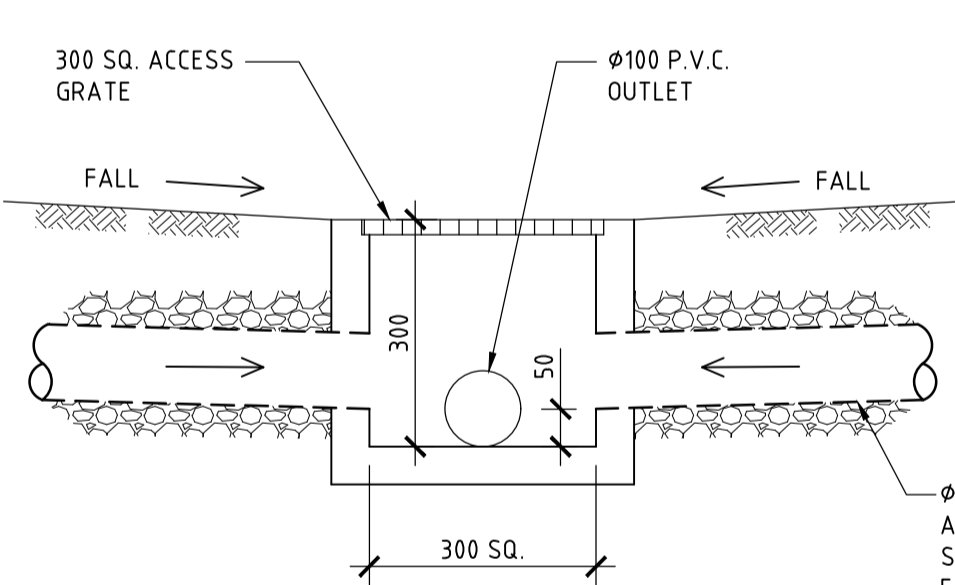
DETAIL E SCALE 1:5

DETENTION STORAGE OUTLET ORIFICE PLATE



NOTE: RAINWATER STORAGE TANK TO BE INSTALLED AND CONFIGURED TO SYDNEY WATER, COUNCIL AND MANUFACTURER'S REQUIREMENTS.

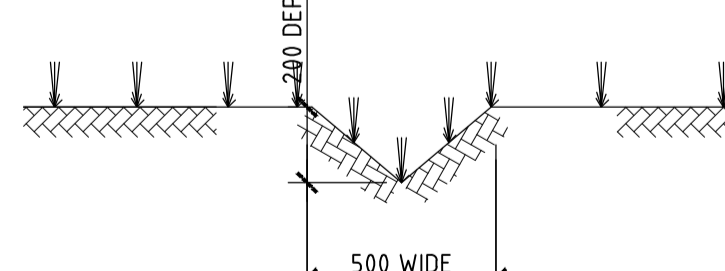
DETAIL B SCALE 1:20



DETAIL C SCALE 1:10

TYPICAL SURFACE INLET PIT DETAIL

NOTE: 450 SQ. INLET PIT SIMILAR



DETAIL D SCALE 1:20

TYPICAL GRASSED LINED SWALE DETAIL

**STORMWATER SYSTEM DESIGN DATA**

**SITE DATA**

SITE AREA = 789.1 m <sup>2</sup> (100%)
PROPOSED IMPERVIOUS AREA = 321.8 m <sup>2</sup> (41%)
PROPOSED LANDSCAPED AREA = 467.4 m <sup>2</sup> (59%)
EXISTING IMPERVIOUS AREA = 0 m <sup>2</sup> (0%)
EXISTING LANDSCAPED AREA = 789.1 m <sup>2</sup> (100%)

ISSUE DATE	REVISION
15 SEPT 2025	UPDATED TO SUIT LATEST ROOF PLAN

TITLE		DATE		CHECKED		SCALE @ A1	
STORMWATER MANAGEMENT PLAN		29 JULY 2025		<i>[Signature]</i>		1:100 1:5	
DRAWN		DATE		CHECKED		SCALE @ A1	
ENGINEER		DATE		CHECKED		SCALE @ A1	

