

NOTE: EXCAVATION WORK WITHIN THE TP2 OR SRZ COMPLETED BY HAND OR WITH AIR SPADE OR WITH WATER LANCE AND WILL RETAIN ALL ROOTS > 25MM DIAMETER.

900 SQ. DETENTION STORAGE PIT 2
GRATE R.L. 119.85
INVERT R.L. 119.30

WATERPROOF MASONRY PERIMETER EDGEMOUNT TO R.L. 120.05 MIN AROUND DETENTION BASIN

100 WIDE GRATED DRAIN (TYP)

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 13,500mm² (MIN) EAVES GUTTER (TYP)

RAINWATER STORAGE TANK TO BASIX REQUIREMENTS & WITH Ø100 HIGH LEVEL OVERFLOW OUTLET (TYP)

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

ABOVE GROUND DETENTION BASIN
STORAGE VOLUME = 8,860 LITRES
STORAGE ABOVE GROUND = 7.57m³
STORAGE BELOW GROUND = 1.19m³
STORAGE AREA REQUIRED = 30.68m²

1.0 WIDE EMERGENCY OVERFLOW WEIR OUTLET (& SLOT THROUGH FENCE) AT R.L. 120.00

900 SQ. DETENTION CONTROL PIT
GRATE R.L. 119.85
INVERT R.L. 119.25
SUMP R.L. 119.05

450 SQ. BOUNDARY PIT
GRATE R.L. 119.60
INVERT R.L. 119.20
SUMP R.L. 119.00
WITH TRASH SCREEN FOR POLLUTION CONTROL

900 SQ. DETENTION STORAGE PIT 2
GRATE R.L. 119.40
INVERT R.L. 118.85

ABOVE GROUND DETENTION BASIN
STORAGE VOLUME = 8,620 LITRES
STORAGE ABOVE GROUND = 7.42m³
STORAGE BELOW GROUND = 1.20m³
STORAGE AREA REQUIRED = 29.68m²

1.0 WIDE EMERGENCY OVERFLOW WEIR OUTLET (& SLOT THROUGH FENCE) AT R.L. 119.55

450 SQ. BOUNDARY PIT
GRATE R.L. 119.00
INVERT R.L. 118.69
SUMP R.L. 118.40
WITH TRASH SCREEN FOR POLLUTION CONTROL

900 SQ. DETENTION CONTROL PIT
GRATE R.L. 119.40
INVERT R.L. 118.80
SUMP R.L. 118.60

WATERPROOF MASONRY PERIMETER EDGEMOUNT TO R.L. 119.60 MIN AROUND DETENTION BASIN

SECURE DRAINAGE LINES TO UNDERSIDE OF FLOOR STRUCTURE AS NECESSARY FOR CONNECTION TO RAINWATER STORAGE TANK (TYP)

PROVIDE Ø100 DOWNPIPE (TYP)

BENCHMARK NAIL IN TOP OF KERB
R.L. 121.73 (A.H.D.)

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

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 ON 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

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 569.8 m² (100%)
PROPOSED IMPERVIOUS AREA = 352.2 m² (62%)
PROPOSED LANDSCAPED AREA = 217.6 m² (38%)

NORTHERN BEACHES COUNCIL - REGION 2: CENTRAL CATCHMENTS

SUBDIVISION WITH OSD DESIGNED BY FULL COMPUTATIONAL METHOD

OSD SYSTEM DESIGN DATA

EXISTING SITE FLOWS

20% AEP = 10 l/s
5% AEP = 17 l/s
1% AEP = 24 l/s

DEVELOPED SITE FLOWS LOT 1

20% AEP = 5 l/s
5% AEP = 6 l/s
1% AEP = 7 l/s

DEVELOPED SITE FLOWS LOT 2

20% AEP = 5 l/s
5% AEP = 6 l/s
1% AEP = 7 l/s

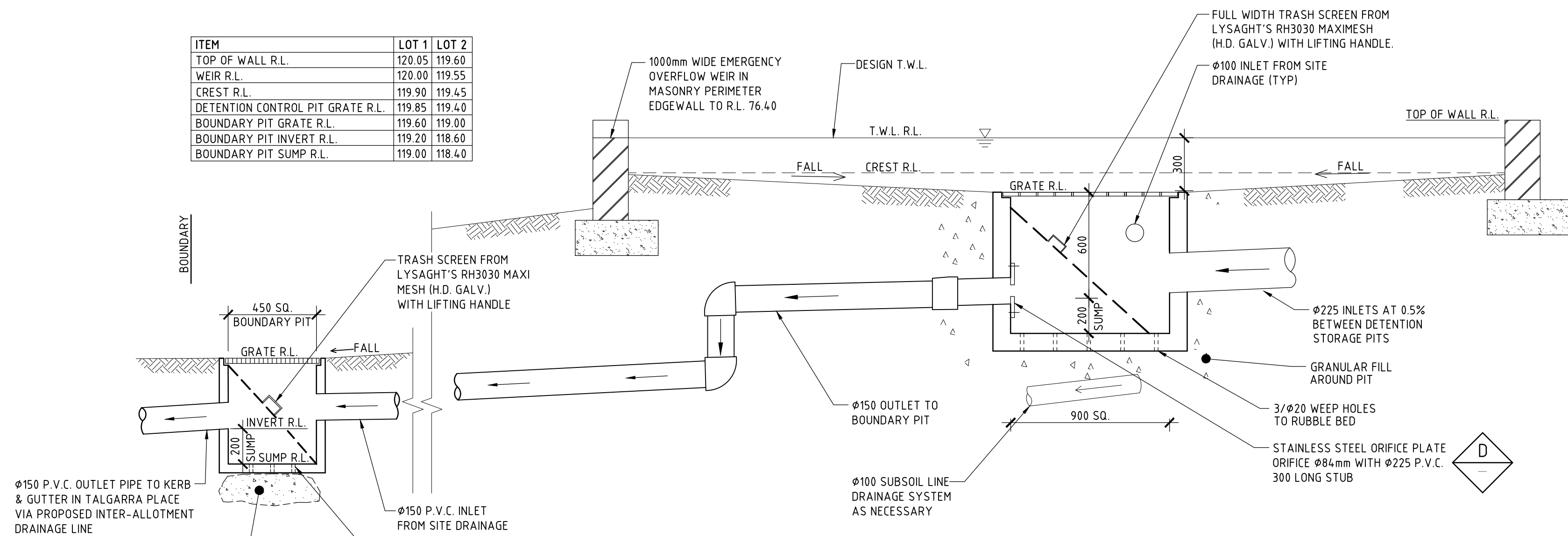
DETENTION SYSTEM DATA

AREA DRAINING TO THE TANK LOT 1 = 267.9 m²
AREA DRAINING TO THE TANK LOT 2 = 262.2 m²
1% AEP TWL LOT 1 = RL 119.98
1% AEP TWL LOT 2 = RL 119.53
ORIFICE DIAM LOT 1 = 60mm
ORIFICE DIAM LOT 2 = 60mm

SSR LOT 1 = 7.58 m³
SSR LOT 2 = 7.39 m³

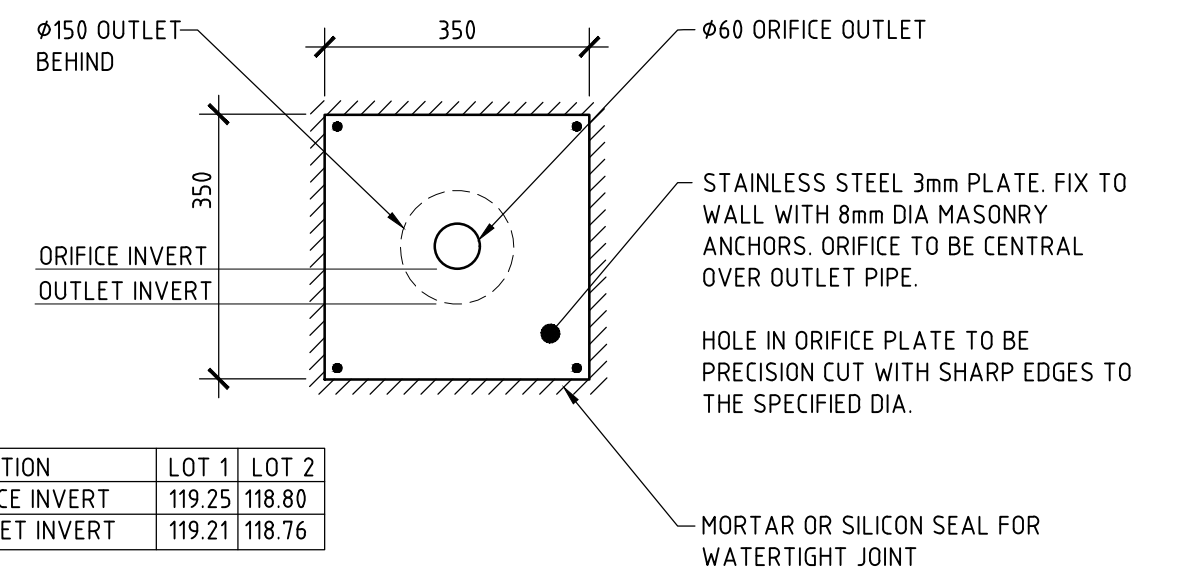
ISSUE	DATE	REVISION

TITLE STORMWATER MANAGEMENT PLAN 81 BEACON HILL ROAD, BEACON HILL				 TAYLOR	DRAWING NO STORM-1
DRAWN MDB	DATE 30 MAY 2025	CHECKED 	SCALE A1 1:100		
ENGINEER JPL	BE Civil (Hons) MIE Aust.				

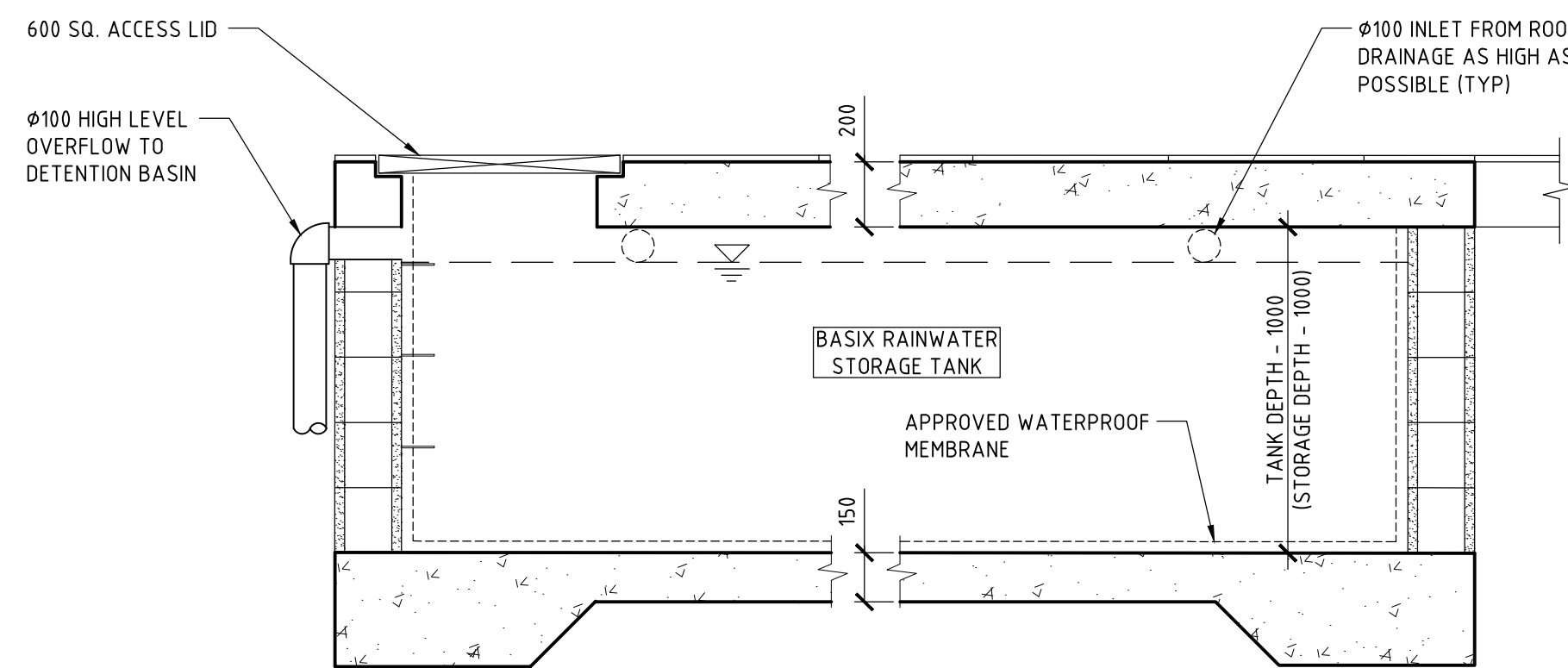


TYPICAL ABOVE GROUND DETENTION BASIN DETAIL
SCALE 1:20

SCHEMATIC OF DETENTION CONTROL PIT ORIENTATION SHOWING ORIFICE OUTLET, TRASHSCREEN, SUMP & OUTLET TO KERB

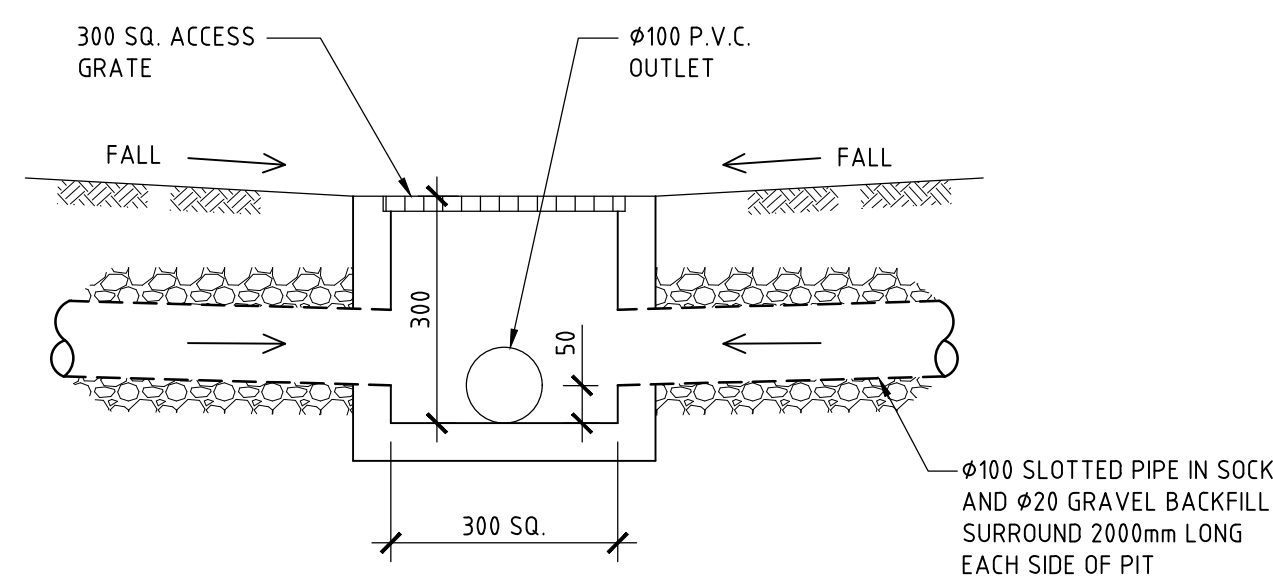


DETAIL D
SCALE 1:10
ORIFICE PLATE DETAIL



DETAIL B
SCALE 1:20

CONFIGURE BASIX RAINWATER FOR NON-PORTABLE TO SYDNEY WATER, COUNCIL AND MANUFACTURER'S REQUIREMENTS.



DETAIL C
SCALE 1:10
TYPICAL SURFACE INLET PIT DETAIL

ISSUE DATE	REVISION

TITLE STORMWATER MANAGEMENT DETAILS 81 BEACON HILL ROAD, BEACON HILL			
DRAWN	DATE	CHECKED	SCALE
MDR	30 MAY 2025	JPL	1:20
ENGINEER			1:10
TAYLOR BE Civil (Hons) MIE Aust.			