

B
2
300 SQ. BY 300 DEEP INLET PIT
NOTE: ALL PITS TO HAVE 2.0m
LONG SUB-SOIL TAIL INLET (TYP)

SECURE DRAINAGE LINES TO
UNDERSIDE OF FLOOR STRUCTURE
AS NECESSARY FOR CONNECTION
TO SITE DRAINAGE SYSTEM (TYP)

PROVIDE Ø100
DOWNPIPE (TYP)

EXISTING 450 SQ. PIT
GRATE R.L. = 55.57
INVERT R.L. = 55.07

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

BUILDER TO CONFIRM EXISTING 200 x 150
R.H.S. TO KERB AND GUTTER IN NET ROAD
PRIOR TO COMMENCEMENT OF CONSTRUCTION

EASEMENT TO DRAIN WATER
900mm WIDE AND VARIABLE
WIDTH (D.P. 1225869)

EASEMENT TO DRAIN WATER
350mm WIDE (D.P. 1225869)

NO. 37 QUEENS AVE

NO. 5 NET RD

PROVIDE 100 WIDE GRATED
DRAIN AT CARPORT

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.

AREA TO EXISTING DRAINAGE
PIT & EASEMENT = 522m²

AREA BYPASSING EXISTING DRAINAGE
PIT & EASEMENT = 432m²

PROVIDE 100 WIDE
GRATED DRAIN AT
DOOR THRESHOLD (TYP)

RAINWATER RETENTION/DETENTION TANK
DETENTION STORAGE VOLUME = 4500 LITRES
RAINWATER STORAGE VOLUME = 2000 LITRES
TOTAL STORAGE VOLUME = 6500 LITRES
TANK LENGTH = 3300mm
TANK WIDTH = 1150mm
TANK DEPTH = 1860mm
TANK FLOOR = R.L. 58.10 A.H.D.
TANK BOSS ORIFICE = R.L. 58.67 A.H.D.
PROVIDE Ø100 HIGH LEVEL OVERFLOW OUTLET TO
SITE DRAINAGE SYSTEM

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

BENCHMARK NAIL
IN TOP OF KERB
R.L. 56.44 (A.H.D.)

SITE DRAINAGE PLAN
SCALE 1:100

SITE CATCHMENT PLAN
SCALE 1:500

- 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 (ON 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 = 954m² (100%)
 PROPOSED IMPERVIOUS AREA = 624m² (65%)
 PROPOSED LANDSCAPED AREA = 330m² (35%)

NORTHERN BEACHES COUNCIL - REGION 1, SOUTHERN CATCHMENTS (ZONE 1)

TOTAL INCREASE IN IMPERVIOUS AREA > 50M² AND/OR TOTAL EXISTING IMPERVIOUS AREA > 35% OF TOTAL SITE AREA, OSD REQUIRED

PARTIAL SITE ANALYSIS (SEE CATCHMENT PLAN)

TOTAL SITE AREA = 954m²
 AREA DRAINING TO NEW SITE DRAINAGE SYSTEM (TO EXISTING PIT & EASEMENT) = 522m²
 AREA BYPASSING NEW SITE DRAINAGE SYSTEM (TO EXISTING DRAINAGE SYSTEM IN SHARED ACCESS DRIVEWAY) = 432m²
 THEREFORE SITE ANALYSIS AREA = 522m²

OSD SYSTEM DESIGN DATA

PERMISSIBLE SITE DISCHARGE (STATE OF NATURE FOR CATCHMENT = 522m²)

5 YR ARI = 17 l/s
 100 YR ARI = 35 l/s

DEVELOPED SITE FLOWS (FOR CATCHMENT = 522m²)

5 YEAR ARI:

OSD SITE FLOWS = 2 l/s
 OSD BYPASS FLOWS = 10 l/s
 TOTAL DEVELOPED SITE FLOWS = 12 l/s

100 YEAR ARI:

OSD SITE FLOWS = 3 l/s
 OSD BYPASS FLOWS = 22 l/s
 TOTAL DEVELOPED SITE FLOWS = 25 l/s

DETENTION SYSTEM DATA

AREA DRAINING TO TANK = 158m²
 ORIFICE DIAM = 4.0 mm (MODELED AT 35 mm)
 SSR = 4.48 m³

STORMWATER SYSTEM DESIGN DATA

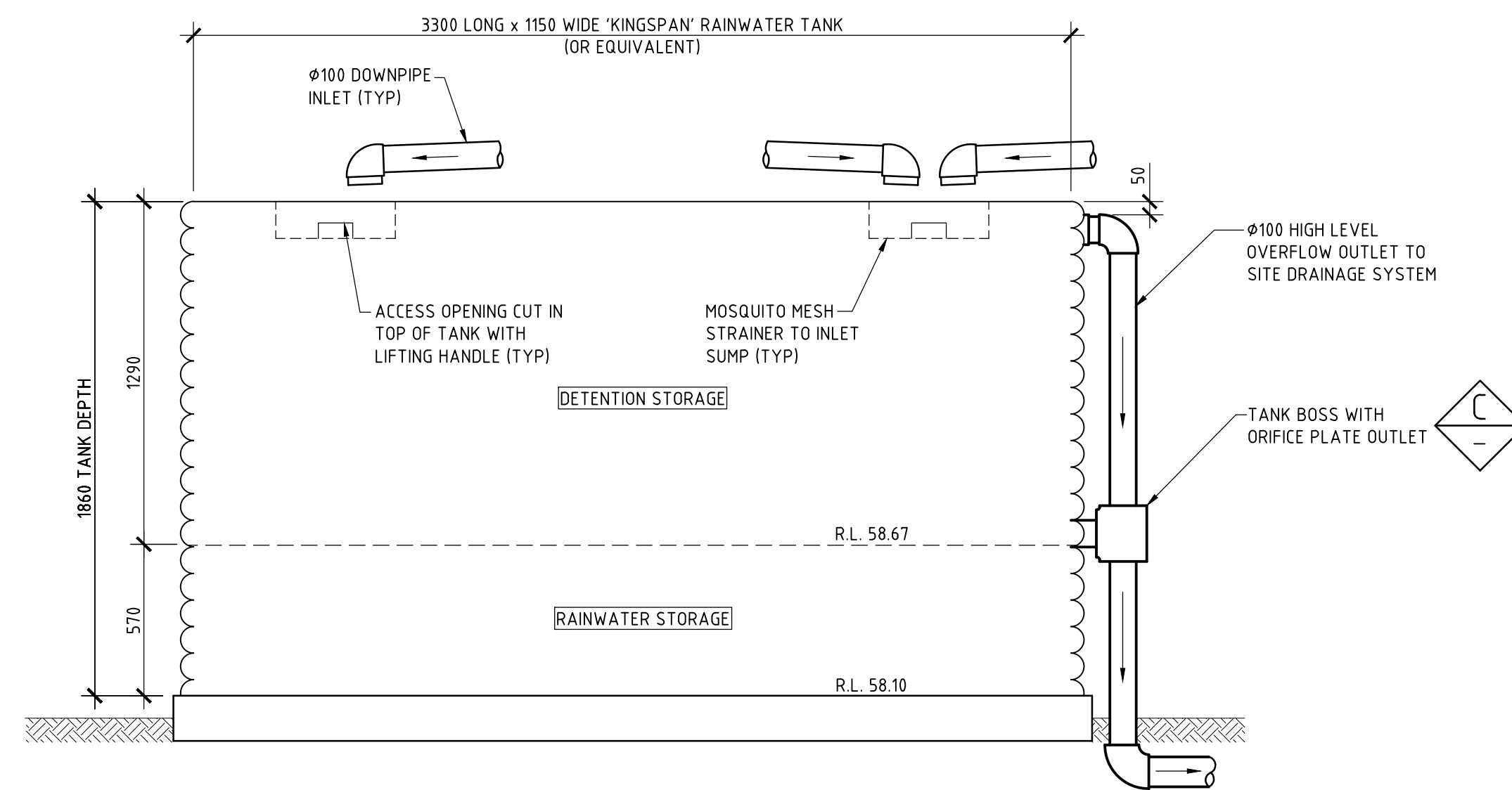
SITE DATA

SITE AREA = 954 m² (100%)
 PROPOSED IMPERVIOUS AREA = 624.3 m² (65%)
 PROPOSED LANDSCAPED AREA = 329.7 m² (35%)
 EXISTING LANDSCAPED AREA = 954 m² (100%)

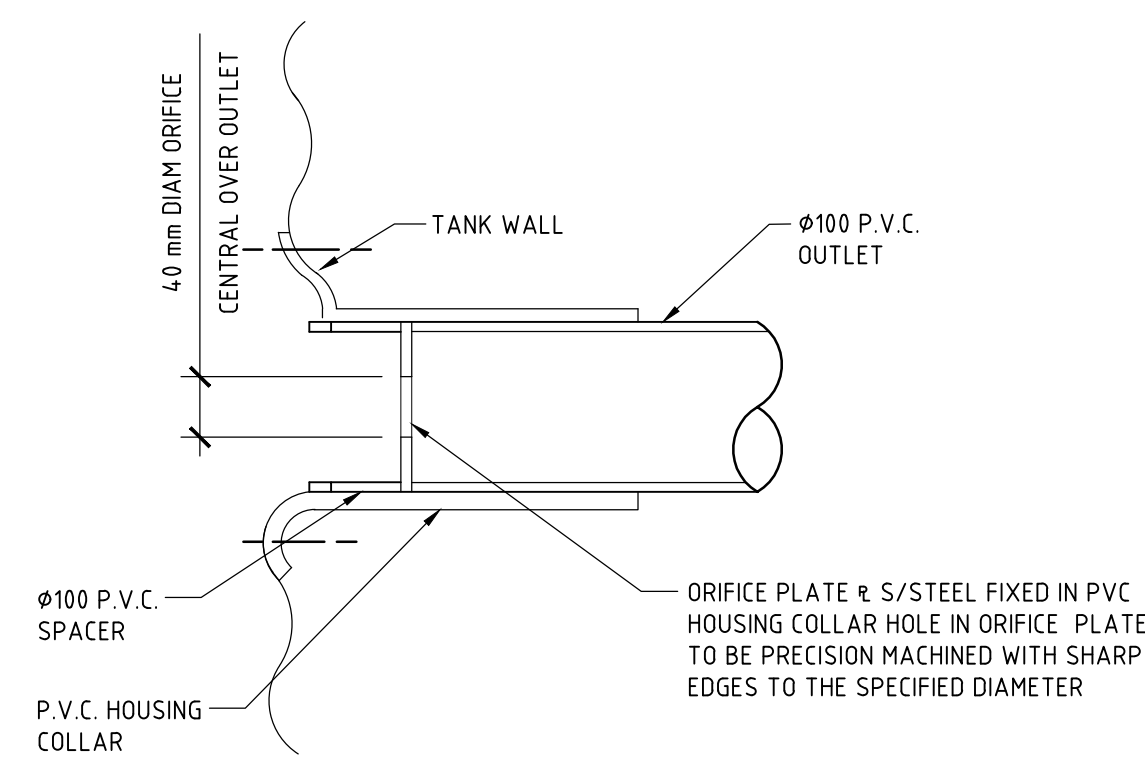
ISSUE DATE	REVISION

TITLE STORMWATER MANAGEMENT PLAN 35A QUEENS AVENUE, AVALON BEACH			
DRAWN LI	DATE 30 OCTOBER 2024	CHECKED <i>[Signature]</i>	SCALE @ A1 1:100 1:500
ENGINEER CJM	BY Civil (Hons) MIE Aust.		



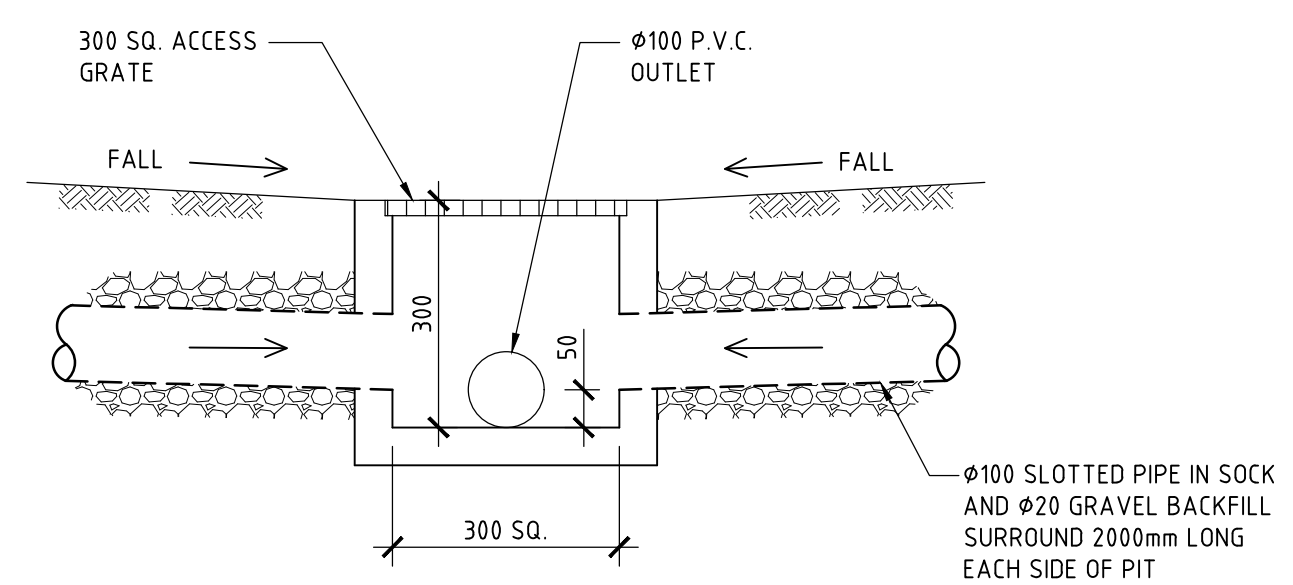


DETAIL A
SCALE 1:20



DETAIL C
SCALE 1:5

DETENTION STORAGE OUTLET ORIFICE PLATE



DETAIL B
SCALE 1:10
TYPICAL SURFACE INLET PIT DETAIL

ISSUE DATE	REVISION

TITLE STORMWATER MANAGEMENT DETAILS 35A QUEENS AVENUE, AVALON BEACH			
DRAWN LI	DATE 30 OCTOBER 2024	CHECKED <i>[Signature]</i>	SCALE @ A1 1:20 1:10 1:5
ENGINEER CJM	BE Civil (Hons) MIE Aust.		



DRAWING NO
STORM-2