

82.12
82.02
QUIRK STREET

150 WIDE GRATED DRAIN
ACROSS DRIVEWAY (TYP)

PROVIDE 300 SQ. BY 100 DEEP
SUMP WITH Ø100 DOWNPIPE FROM
BASE AND WITH PROVISION FOR
EMERGENCY OVERFLOW (TYP)

PROVIDE SPREADER FOR DISCHARGE
OF RUNOFF FROM UPPER TO LOWER
ROOF AREA (TYP)

PROVIDE 300 WIDE BY 200 DEEP MIN BOX
GUTTER TO 100 DEEP SUMPS AND WITH
PROVISION FOR EMERGENCY OVERFLOW (TYP)

100 WIDE GRATED
DRAIN (TYP)

PROVIDE 3 x 3000 LITRE COMBINATION
RETENTION/DETENTION TANKS ALONG
REAR WALL OF GRANNY FLAT EXCAVATION

200 SQ INLET TRAY
TO TILED AREAS (TYP)

BENCH MARK
NAIL IN KERB
R.L. 62.53

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

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

PROVIDE 450 SQ BY 450 DEEP INLET
PIT TO BASEMENT GARAGE LEVEL
(TO SEPARATE FUTURE DETAIL)
NO PUMP REQUIRED

PROVIDE 'SPS TRUFLO 100mm
WITH ALL-PURPOSE PLANTER
BOX ADAPTER' OR EQUIVALENT
TO BALCONY AREAS (TYP)

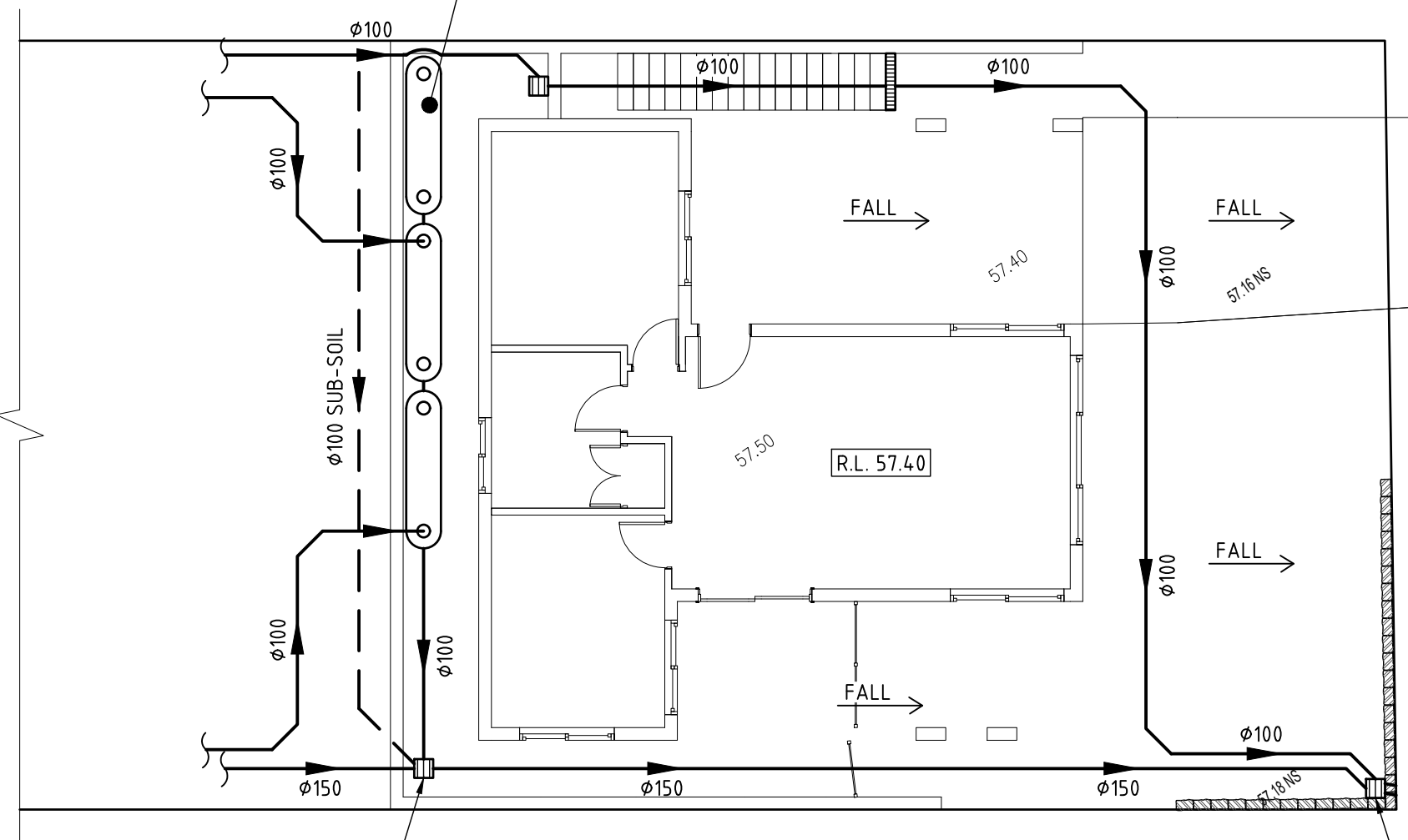
PROVIDE ATLANTIS DRAINAGE CELL
UNDERLAY (OR EQUIVALENT) TO
DRAIN PLANTER BASE (TYP).
PLANTER BASE DRAINAGE LAYOUT
TO FUTURE SEPARATE DETAIL.

PROVIDE 300 SQ BY 300 DEEP
BOUNDARY PIT WITH 2/Ø100 P.V.C.
OUTLETS THROUGH STONE KERBING
(OR SIMILAR) INTO ROAD RESERVE

STORMWATER MANAGEMENT PLAN

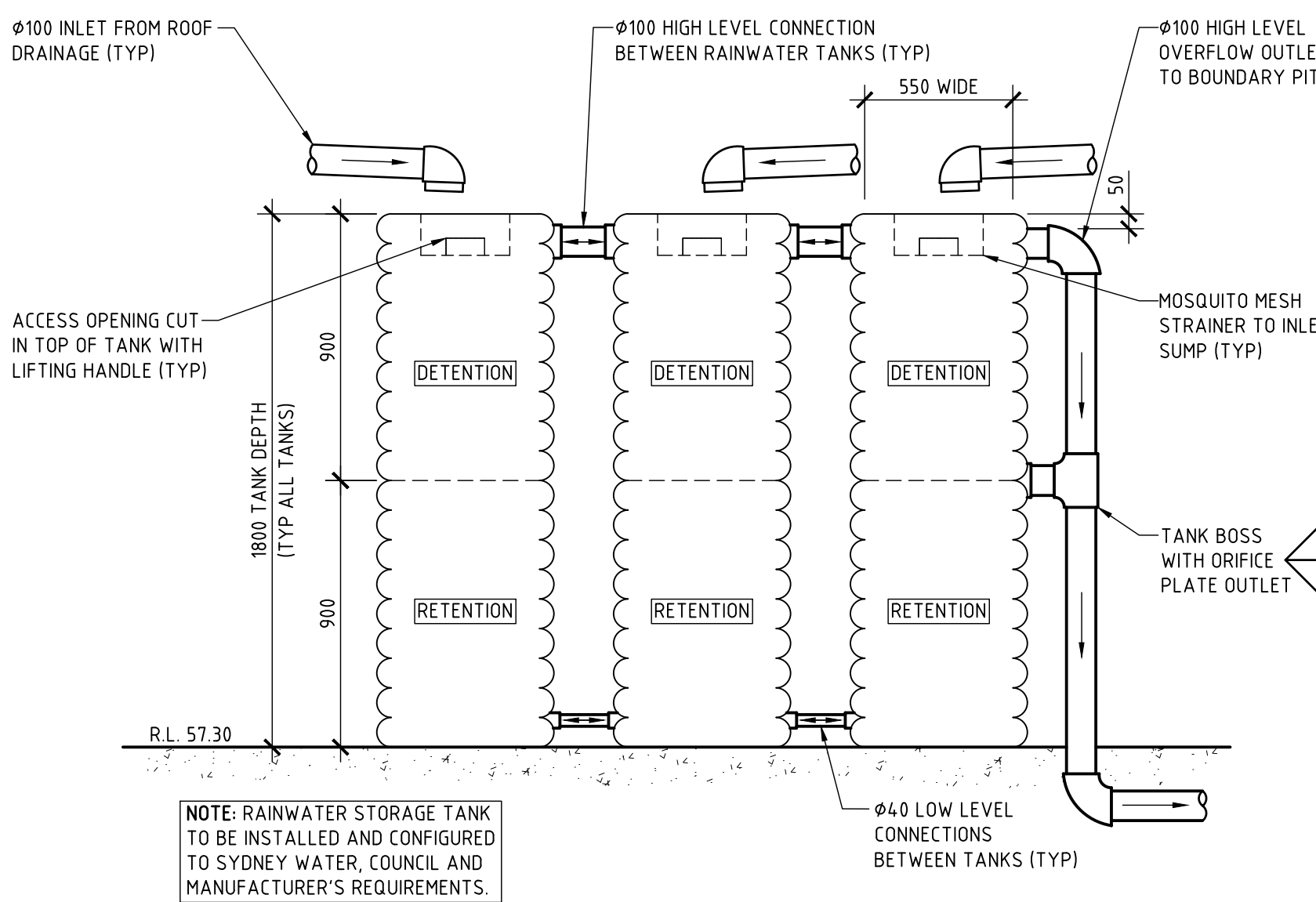
SCALE 1:100

PROVIDE 3 x 3000 LITRE COMBINATION
RETENTION/DETENTION TANKS ALONG
REAR WALL OF GRANNY FLAT EXCAVATION

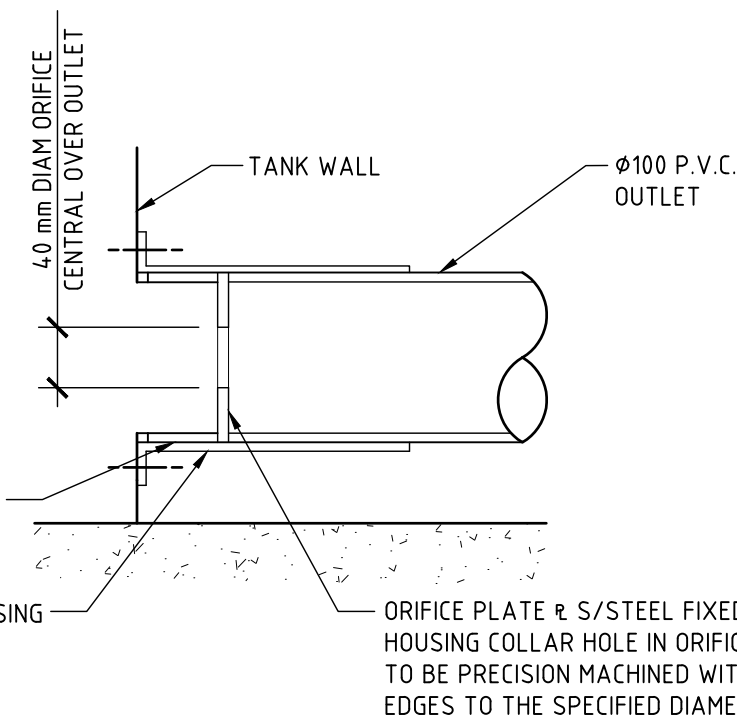


GRANNY FLAT FLOOR PLAN
SCALE 1:100
SHOWING DRAINAGE ELEMENTS TO BE PROVIDED

BUSHY PLACE



DETAIL A
SCALE 1:20
SHOWING PROPOSED RAINWATER
STORAGE TANK SCHEMATIC



DETAIL B
SCALE 1:5
ORIFICE PLATE OUTLET CONFIGURATION

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 D.A. SUBMISSION TO COUNCIL 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 TANKS.
- THE RAINWATER STORAGE TANKS NEEDS TO BE CONNECTED FOR RE-USE AS REQUIRED BY THE OWNER.
- RAINWATER STORAGE TANKS TO BE CONFIGURED IN ACCORDANCE WITH SYDNEY WATER SPECIFICATIONS 'GUIDELINES FOR RAINWATER TANK ON RESIDENTIAL PROPERTIES'.
- PROVIDE MAINS 'TOP-UP' SUPPLY TO RAINWATER TANKS. MAINS TOP-UP ZONE TO BE BASED ON THE DAILY NON-POTABLE USAGE THAT MAY BE CHECKED AFTER THE TANK.
- PROVIDE A MECHANICAL PUMPING ARRANGEMENT (IN SOUND-PROOF HOUSING) TO PUMP SUPPLIES SPECIFICATION TO SUIT INTENDED USAGE OF RAINWATER STORAGE. PUMPING ARRANGEMENTS MUST COMPLY WITH EPA GUIDELINES.
- INLETS TO RAINWATER TANKS MUST BE SCREENED TO PREVENT THE ENTRY OF FOREIGN MATTER, ANIMALS OR INSECTS.
- A SIGN MUST BE AFFIXED TO THE RAINWATER TANKS CLEARLY STATING THAT THE WATER IN THE TANKS IS RAINWATER AND IS NOT TO BE USED FOR HUMAN CONSUMPTION.
- RAINWATER TANKS TO BE PLACED ON A STRUCTURALLY ADEQUATE BASE IN ACCORDANCE WITH THE MANUFACTURER'S OR STRUCTURAL ENGINEER'S DETAILS.
- THE TANKS MUST NOT BE INSTALLED OVER ANY MAINTENANCE STRUCTURE OR FITTINGS USED BY A PUBLIC AUTHORITY.
- RAINWATER TANKS 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 = 720 m² (100%)

OSD SYSTEM DESIGN DATA

SITE DATA

AREA TO THE OSD = 282 m²

EXIST. MODELLED IMPERVIOUS AREA = 35 % imp.

EXISTING SITE FLOWS

5 YR ARI = 16 l/s

100 YR ARI = 34 l/s

DEVELOPED SITE FLOWS

5 YR ARI = 14 l/s

100 YR ARI = 26 l/s

DETENTION SYSTEM DATA

AREA DRAINING TO THE TANK = 282 m² (100% PAVED)

ORIFICE DIAM = 40 mm

SSR = 9.0 m³

NOTE - DETENTION STORAGE VOLUME HAS BEEN OFFSET BY 50% VIA THE PROVISION OF 4500 LITRES OF RAINWATER STORAGE.

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 720m² (100%)

PROPOSED IMPERVIOUS AREA = 453m² (63%)

PROPOSED LANDSCAPED AREA = 267m² (37%)

EXISTING IMPERVIOUS AREA = 315m² (44%)

EXISTING LANDSCAPED AREA = 405m² (56%)

TITLE STORMWATER MANAGEMENT PLAN 86 QUIRK STREET, CURL CURL

DRAWN

MDB

DATE

30 JUNE 2020

CHECKED

BE Civil (Hons) MIE Aust.

SCALE

A1

1:100

1:20

1:10

TAYLOR
CONSULTING
CIVIL & STRUCTURAL ENGINEERS

REVISION NO.
SHEET -1