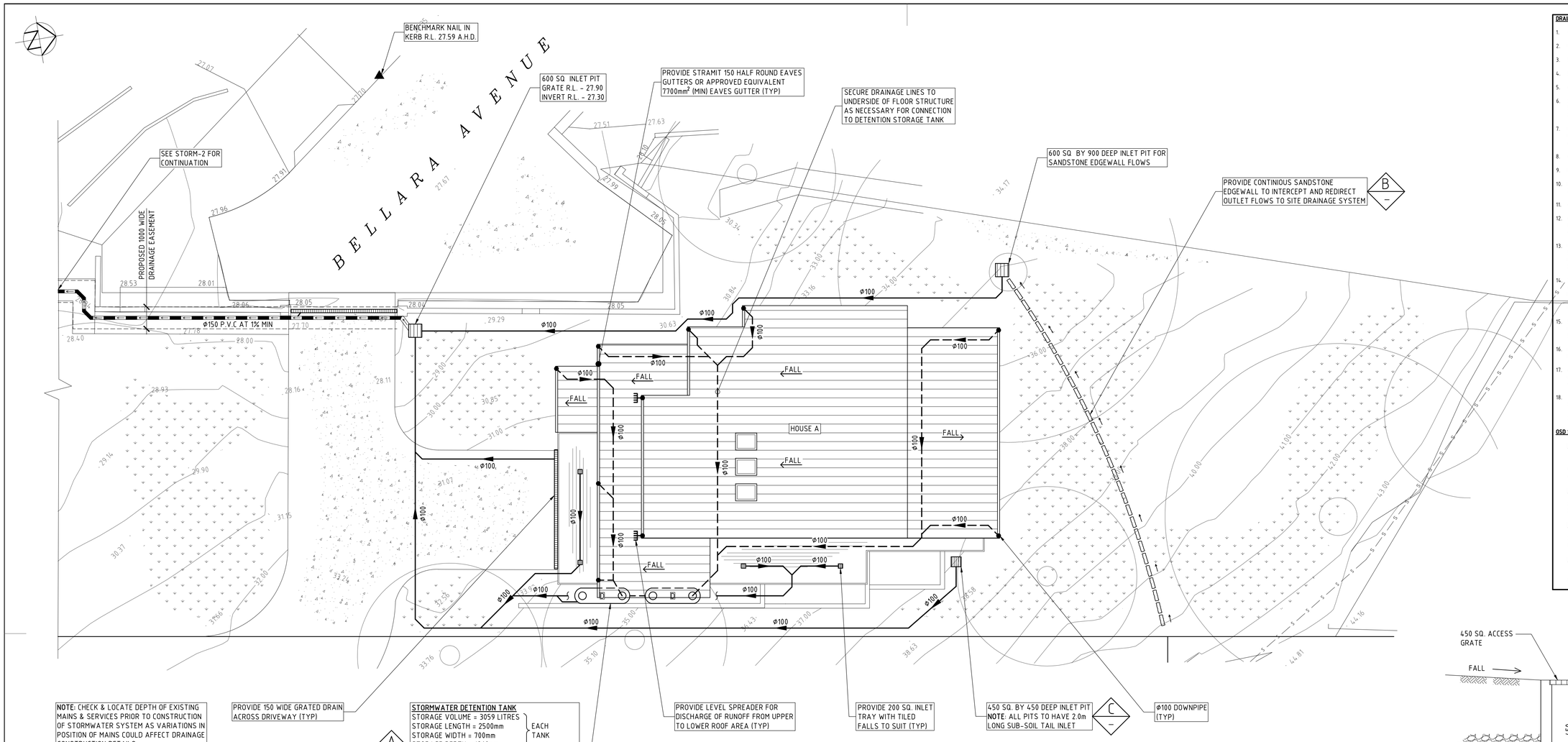


SITE DRAINAGE PLAN

SCALE 1:100

DRAINAGE NOTES

1. + DENOTES EXISTING GROUND LEVEL
2. FALL STORMWATER PIPES AT 1% MIN. UNLESS OTHERWISE NOTED.
3. SUB-SOIL DRAINAGE TO BE CONNECTED TO THE SITE DRAINAGE SYSTEM AS NECESSARY.
4. SURFACE GRATES 300 SQ. UNLESS OTHERWISE NOTED.
5. ALL STORMWATER PIPES TO HAVE SOLVENT CEMENT WATERTIGHT JOINTS.
6. CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS.
7. INSPECTIONS MUST BE UNDERTAKEN BY THIS OFFICE (BY PRIOR ARRANGEMENT WITH ENGINEER) DURING CONSTRUCTION TO ENABLE FULL CERTIFICATION UPON COMPLETION OF WORKS.
8. ALL CONSTRUCTION OF COUNCIL DRAINAGE WORKS TO COMPLY WITH COUNCIL STANDARD.
9. REMOVE REDUNDANT DRAINAGE PITS AND SEAL PIPES.
10. PIT BENCHING TO BE HALF THE OUTGOING PIPE DIAMETER. CONCRETE FOR BENCHING TO BE 20 MPa MASS CONCRETE.
11. APPROVED PRE-CAST PITS MAY BE USED.
12. 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
13. 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.
14. 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.
15. 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.
16. PLUMBING AND DRAINAGE WORKS TO COMPLY WITH AS-3500, THE NATIONAL DRAINAGE & PLUMBING CODE.
17. 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
18. THIS STORMWATER MANAGEMENT PLAN HAS BEEN PREPARED FOR SUBMISSION TO COUNCIL/CERTIFEIR 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

EXISTING SITE FLOWS

TOTAL SITE DATA = 1516 m²
AREA TO OSD = 198 m² (100% IMPERVIOUS)
AREA BYPASSING OSD = 1318 m² (33% IMPERVIOUS)

PRE-DEVELOPED SITE FLOWS

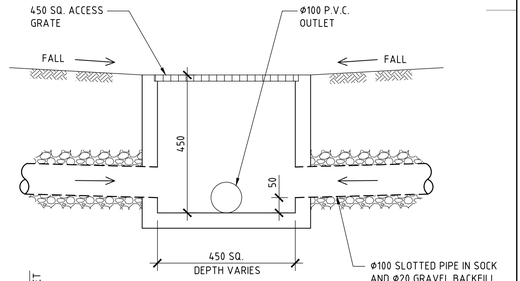
20% AEP = 31 l/s
1% AEP = 72 l/s

POST-DEVELOPED SITE FLOWS

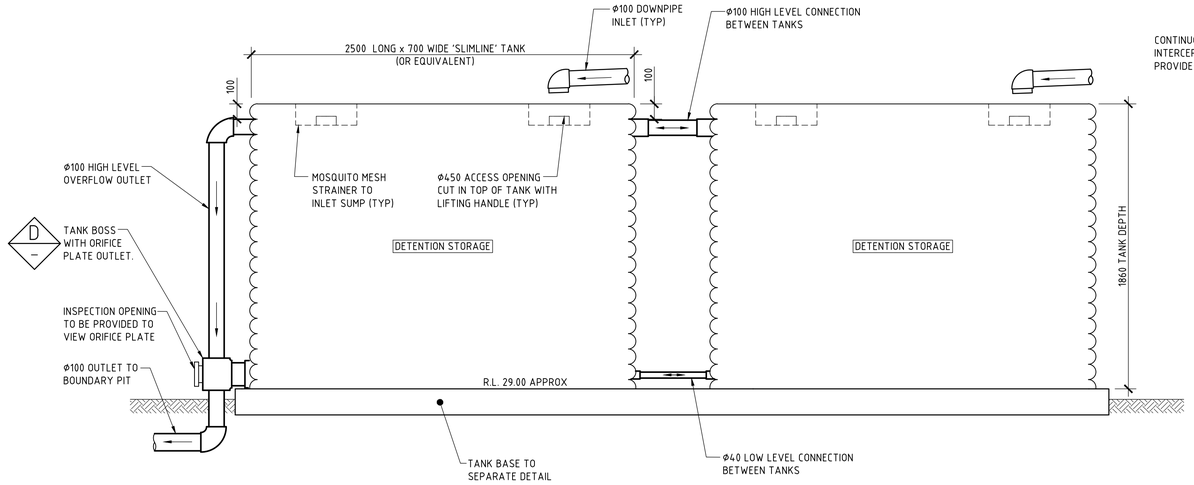
20% AEP = 30 l/s
1% AEP = 66 l/s

DETENTION SYSTEM DATA

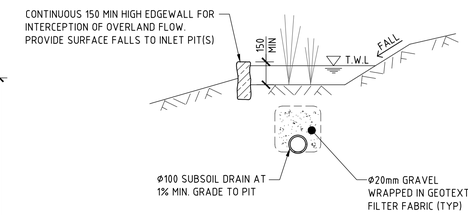
TOTAL SSR = 5.88 m³
ORIFICE DIAMETER = 40 mm (38 mm AS PER DRAINS)



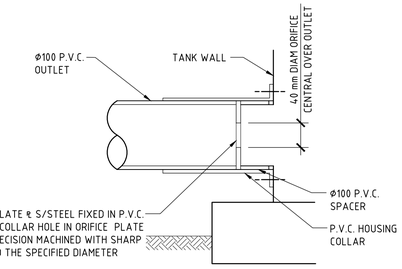
DETAIL C
SCALE 1:10
TYPICAL SURFACE INLET PIT DETAIL



DETAIL A
SCALE 1:20



DETAIL B
SCALE 1:20



DETAIL D
SCALE 1:5
DETENTION STORAGE OUTLET

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 1516 m² (100%)
PROPOSED IMPERVIOUS AREA = 369 m² (24%)
PROPOSED LANDSCAPED AREA = 1147 m² (76%)
EXISTING IMPERVIOUS AREA = 0 m² (0%)
EXISTING LANDSCAPED AREA = 1516 m² (100%)

ISSUE DATE	REVISION
18 JUN 2024	UPDATED PLAN TO SUIT LATEST ARCHITECTURAL PLANS

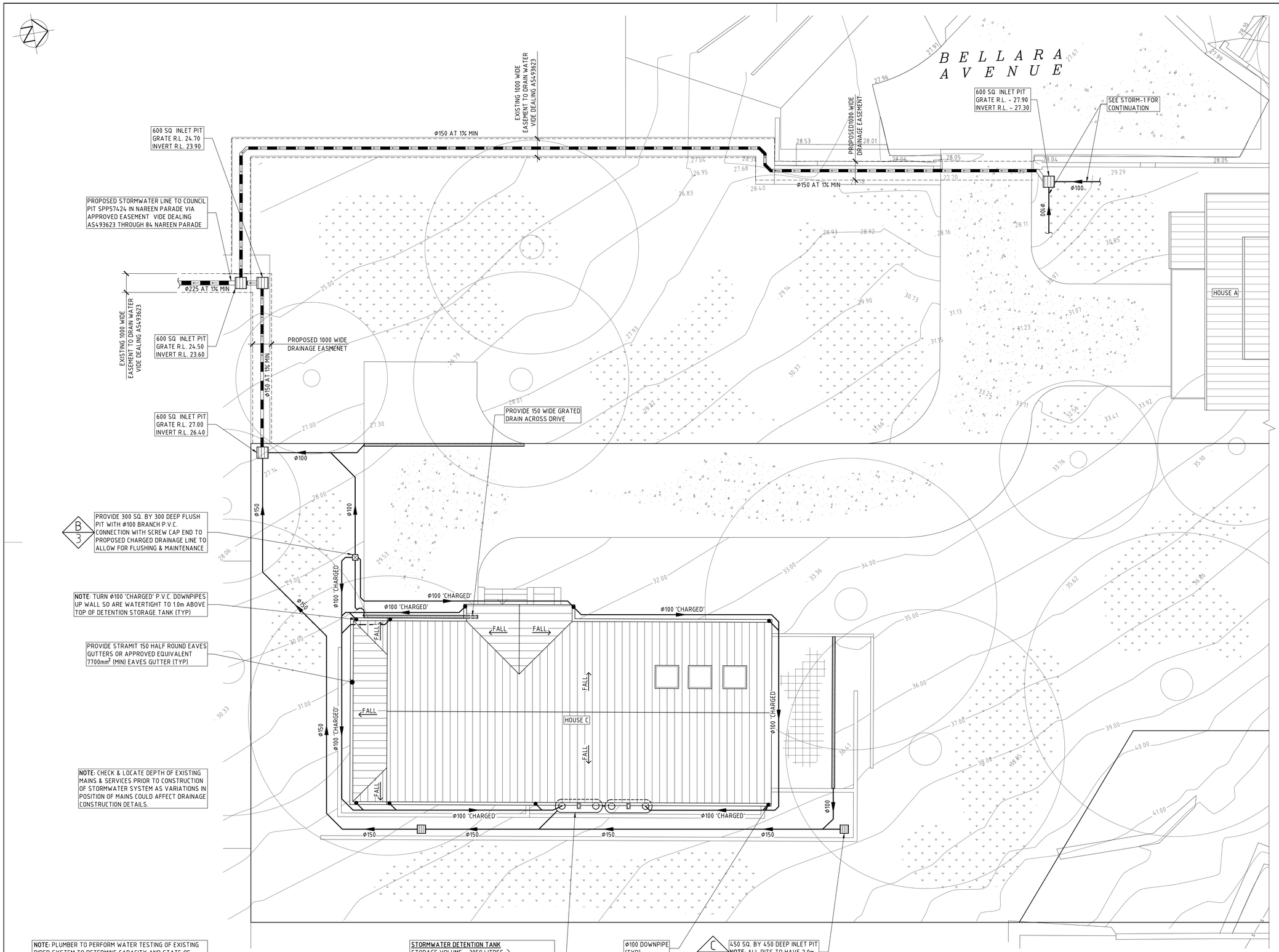
TITLE
STORMWATER MANAGEMENT PLAN
32 BELLARA AVENUE, NORTH NARRABEEN – HOUSE A

DRAWN	DATE	CHECKED	SCALE @ A1
LI	19 DECEMBER 2023	BE Civil (Hons) MIE Aust.	1:100 1:20 1:5
ENGINEER RB			

TAYLOR CONSULTING
CIVIL & STRUCTURAL ENGINEERS

DRAWING NO. STORM-1/A

"Seascape" Suite 7 22-26 Fisher Rd Dee Why NSW 2099 | T 02 9982 7092 | F 02 9982 5898 | enquire@taylorconsulting.net.au | www.taylorconsulting.net.au



SITE DRAINAGE PLAN

SCALE 1:100

DRAINAGE NOTES

1. + DENOTES EXISTING GROUND LEVEL
2. FALL STORMWATER PIPES AT 1% MIN. UNLESS OTHERWISE NOTED.
3. SUB-SOIL DRAINAGE TO BE CONNECTED TO THE SITE DRAINAGE SYSTEM AS NECESSARY.
4. SURFACE GRATES 300 SQ. UNLESS OTHERWISE NOTED.
5. ALL STORMWATER PIPES TO HAVE SOLVENT CEMENT WATERTIGHT JOINTS.
6. CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS.
7. INSPECTIONS MUST BE UNDERTAKEN BY THIS OFFICE (BY PRIOR ARRANGEMENT WITH ENGINEER) DURING CONSTRUCTION TO ENABLE FULL CERTIFICATION UPON COMPLETION OF WORKS.
8. ALL CONSTRUCTION OF COUNCIL DRAINAGE WORKS TO COMPLY WITH COUNCIL STANDARD.
9. REMOVE REDUNDANT DRAINAGE PITS AND SEAL PIPES.
10. PIT BENCHING TO BE HALF THE OUTGOING PIPE DIAMETER. CONCRETE FOR BENCHING TO BE 20 MPa MASS CONCRETE.
11. APPROVED PRE-CAST PITS MAY BE USED.
12. 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
13. 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.
14. 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.
15. 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.
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OSD SYSTEM DESIGN DATA

TOTAL SITE AREA = 1610 m²
AREA TO OSD = 226 m² (100% IMPERVIOUS)
AREA BYPASSING OSD = 1384 m² (173% 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	19 DECEMBER 2023	BE Civil (Hons) MIE Aust.	1:100
ENGINEER RB			

TAYLOR CONSULTING CIVIL & STRUCTURAL ENGINEERS

DRAWING NO STORM-2/B

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