

30 October 2025

General Manager
Northern Beaches Council
725 Pittwater Road
DEE WHY NSW 2099

Address of the Project: **1 Kimo Street, North Balgowlah**

Description of Project: **Stormwater Management Plan**

With reference to the development application for the above property please find enclosed a copy of the site Stormwater Management Plan & Details, STORM-1 & STORM-2, for your perusal.

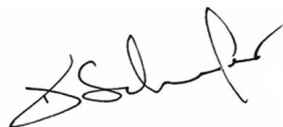
The plan shows collected flows from the proposed dwelling and surrounding paved and landscaped areas discharging via a level spreader. The rate of discharge for the developed area has been restricted to the 5 year state-of-nature level, in accordance with Council's Water Management for Development Policy for low level properties. The level spreader discharges collected runoff as uniform sheet flow across the rear boundary observing the natural fall of the land.

The attached design has a 11,690 litre on-site detention tank concealed within the pool coping area in accordance with Council's Water Management for Development Policy.

The owners have approached their neighbours and they have been unsuccessful in acquiring an easement, and the nature of the site and general area did not warrant absorption to be a viable stormwater disposal solution. The only viable option for disposal is via a level spreader at the rear of the property.

Should you require any further information, please contact the undersigned.

Yours faithfully
TAYLORCONSULTING.NET.AU



D.M.Schaefer - Director
B.E Civil (Hons) M.I.E. Aust. N.E.R.



The Owner

2A Abingdon Street

North Balgowlah NSW 2093

Dear Sir/Madam

I, Simon Gardiner, am proposing to redevelop our property at 1 Kimo Street, North Balgowlah

Before we can proceed with this proposal Council has advised us that we have two options for the drainage of stormwater, the first, which is Council's preferred method, is to obtain a drainage easement to convey the stormwater runoff from our property to the nearest public stormwater drainage infrastructure or Council approved discharge point, being Abingdon Street.

This will require you to grant me/us a drainage easement through your property with all legal and survey costs for the creation of the easement being borne by us, together with any consideration for the use of your property as determined by an independent valuation or agreement.

The other alternative is to install an underground absorption system or level spreader (if appropriate for this site) to spread and disperse the stormwater flow. As the runoff and seepage from this system may flow towards your property because of the slope of the land, the best solution would be to have a drainage system that will convey our stormwater via an inter-allotment drainage pipe to the kerb and gutter in Abingdon Street.

You are advised that if Council determines that the only way for the drainage of stormwater is via an easement through your property, I/we may have to use Section 88K of the Conveyancing Act 1919 to request the Supreme Court to grant me/us the drainage easement. This will probably result in legal expenses and time spent for both you and I/us.

Could you please indicate your position regarding this matter so that we can advise Council to enable our application to progress.

YES I/we are willing to grant you a drainage easement.

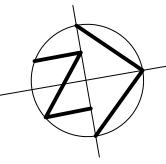
.....
Name

.....
Address

NO I/we are not willing to grant you a drainage easement.

Chris & Anne-Marie Rickard 2A Abingdon St.
Name Address North Balgowlah
NSW 2093

am Rickard



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

B
2

7000 LONG HORIZONTAL
Ø150 LEVEL SPREADER PIPE
STRAPPED TO ROCK SHELF

A
2

STORMWATER DETENTION TANK
TANK VOLUME = 11690 LITRES
TANK AREA = 8.35m²
TANK DEPTH = 1400mm
STORAGE DEPTH = 1300mm
TANK FLOOR = R.L. 47.396
PROVIDE Ø150 LOW LEVEL CONNECTION TO LEVEL SPREADER

D
2

450 SQ. JUNCTION
PIT WITH RH3030
TRASH SCREEN

PROVIDE Ø100
DOWNPIPE (TYP)

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

C
2

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.

No. 2A ABINGDON STREET

600 SQ ACCESS
GRATE (TYP)

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

150 WIDE
GRATED DRAIN

BENCHMARK NAIL
IN TOP OF KERB
R.L. 52.72 (A.H.D.)

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 & FOLLOW TOPOGRAPHICAL FEATURES TO REDUCE IMPACT AND AVOID TREE ROOTS.
18. 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

1. ROOF WATER ONLY TO BE DRAINED TO THE RAINWATER STORAGE TANK.
2. THE RAINWATER STORAGE TANK NEEDS TO BE CONNECTED FOR RE-USE AS REQUIRED BY THE OWNER.
3. RAINWATER STORAGE TANK TO BE CONFIGURED IN ACCORDANCE WITH SYDNEY WATER SPECIFICATIONS' GUIDELINES FOR RAINWATER TANK ON RESIDENTIAL PROPERTIES'.
4. 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.
5. 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.
6. INLETS TO RAINWATER TANK MUST BE SCREENED TO PREVENT THE ENTRY OF FOREIGN MATTER, ANIMALS OR INSECTS.
7. 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.
8. RAINWATER TANK TO BE PLACED ON A STRUCTURALLY ADEQUATE BASE IN ACCORDANCE WITH THE MANUFACTURER'S OR STRUCTURAL ENGINEER'S DETAILS.
9. THE TANK MUST NOT BE INSTALLED OVER ANY MAINTENANCE STRUCTURE OR FITTINGS USED BY A PUBLIC AUTHORITY.
10. 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 = 718m² (100%)
PROPOSED IMPERVIOUS AREA = 397m² (55%)
PROPOSED LANDSCAPED AREA = 321m² (45%)

PARTIAL SITE ANALYSIS

AREA DRAINING TO OSD & LEVEL SPREADER = 429m²
AREA DRAINING TO OSD & LEVEL SPREADER (EXCLUDING POOL) = 407m²

OSD SYSTEM DESIGN DATA

PERMISSIBLE SITE DISCHARGE (STATE OF NATURE FOR CATCHMENT = 407m²)

5 YR ARI = 9 l/s

DEVELOPED SITE FLOWS (FOR CATCHMENT = 407m²)

100 YR ARI = 9 l/s

THEREFORE IN SUMMARY, THE 100 YR ARI DEVELOPED SITE FLOWS WITH OSD IS LESS THAN OR EQUAL TO THE 5 YR ARI STATE OF NATURE FLOWS

DETENTION SYSTEM DATA

AREA DRAINING TO THE DETENTION TANK = 407m²
ORIFICE DIAM = 62 mm
SSR = 11.27m³

STORMWATER SYSTEM DESIGN DATA

SITE DATA

SITE AREA = 718 m² (100%)
PROPOSED IMPERVIOUS AREA = 397 m² (55%)
PROPOSED LANDSCAPED AREA = 321 m² (45%)
EXISTING IMPERVIOUS AREA = 288 m² (40%)
EXISTING LANDSCAPED AREA = 430 m² (60%)

ISSUE DATE	REVISION

TITLE
STORMWATER MANAGEMENT PLAN
1 KIMO STREET, NORTH BALGOWLAH

DRAWN
CJM
ENGINEER
CJM

DATE
30 OCTOBER 2025

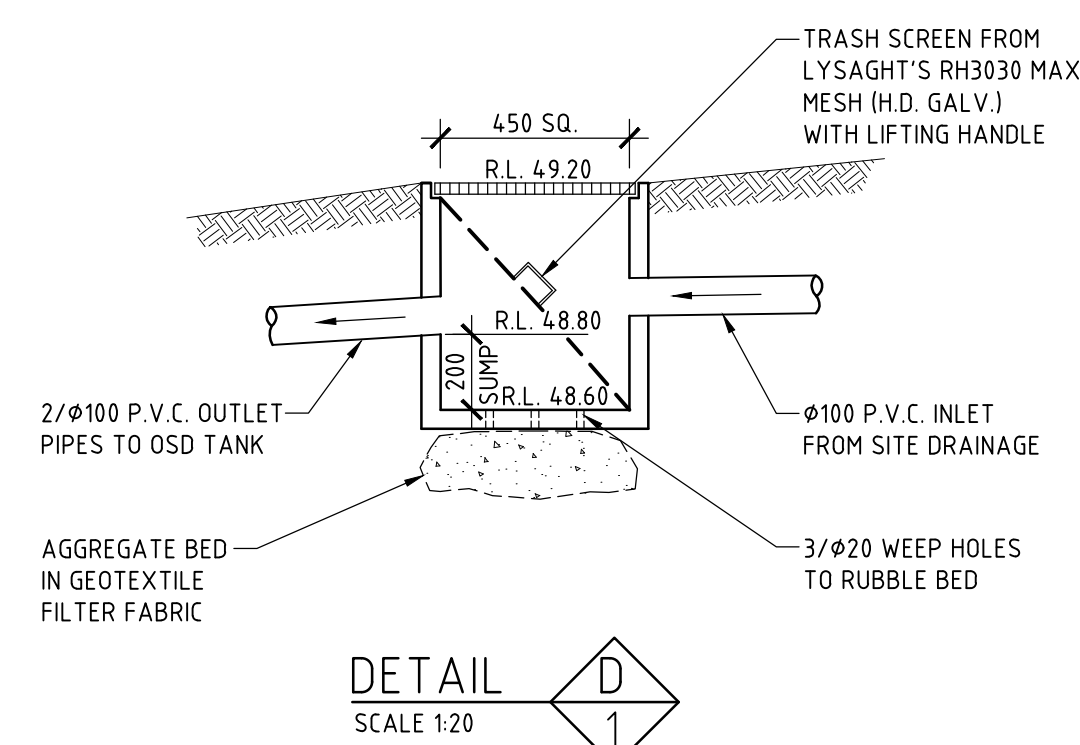
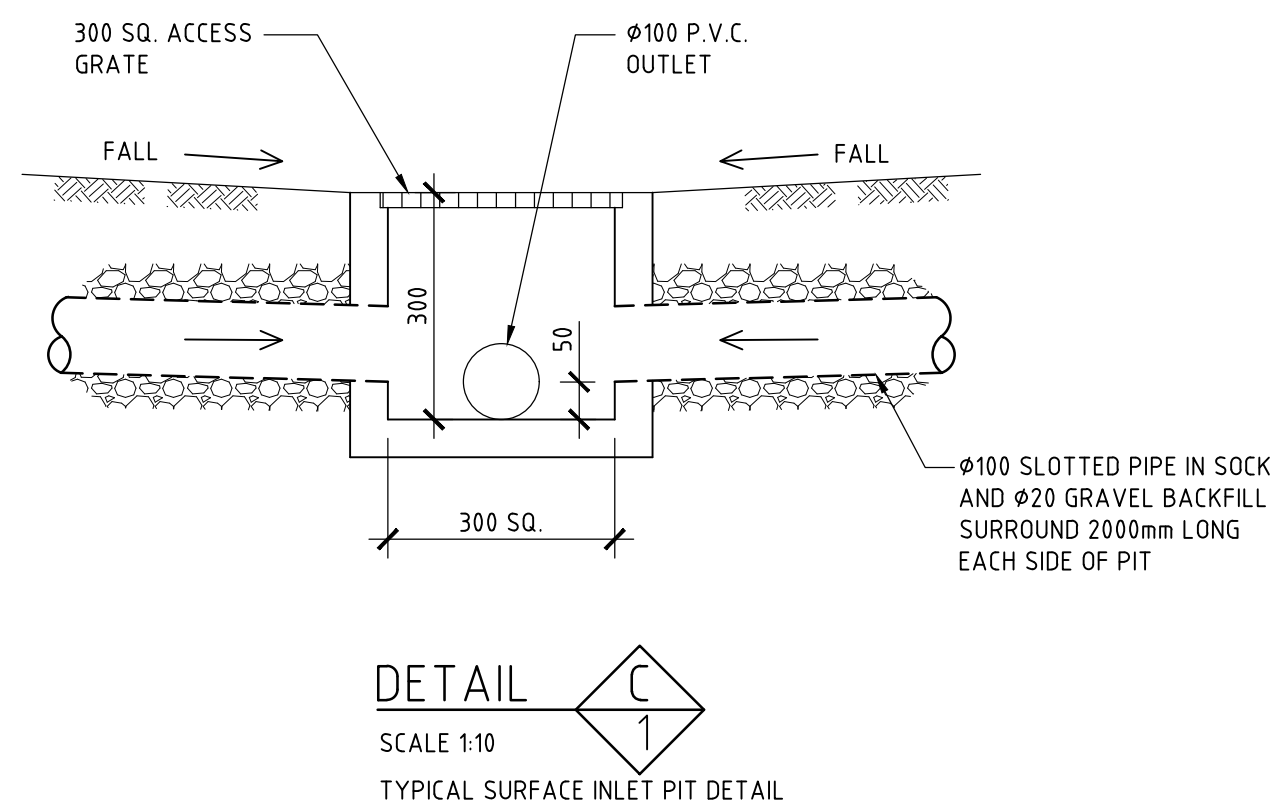
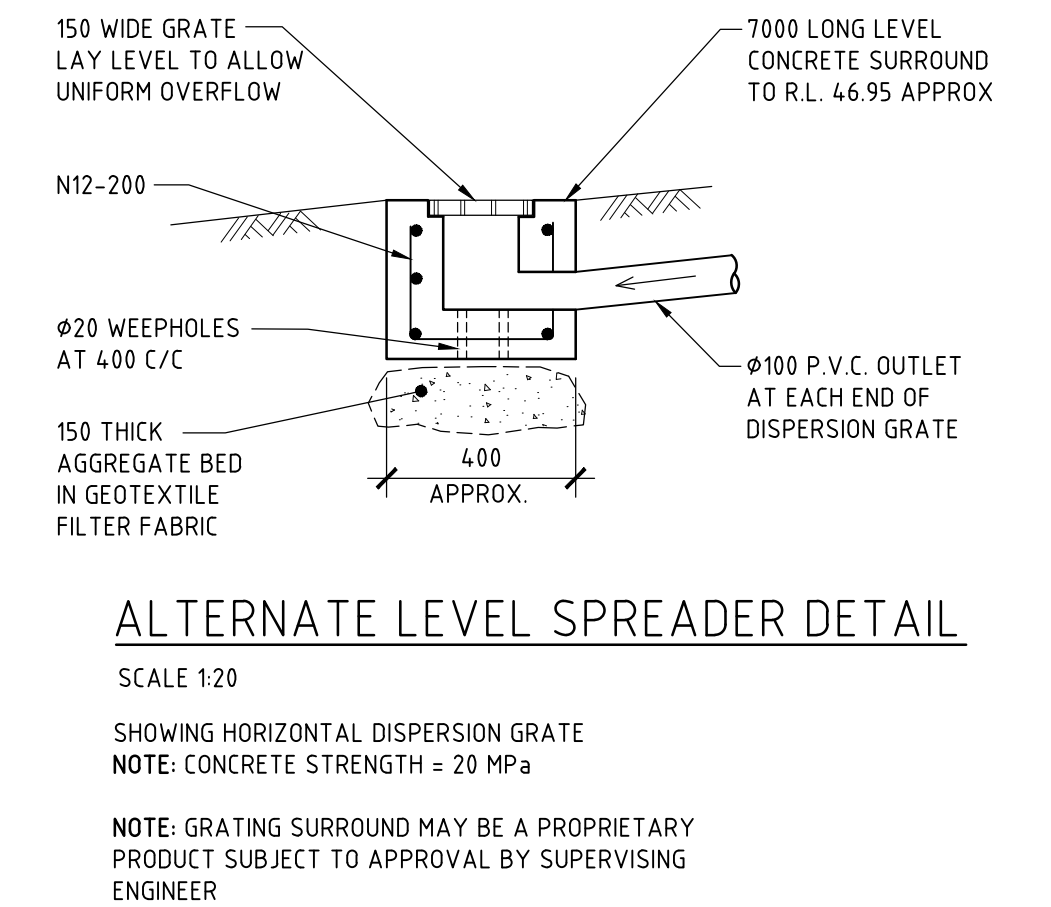
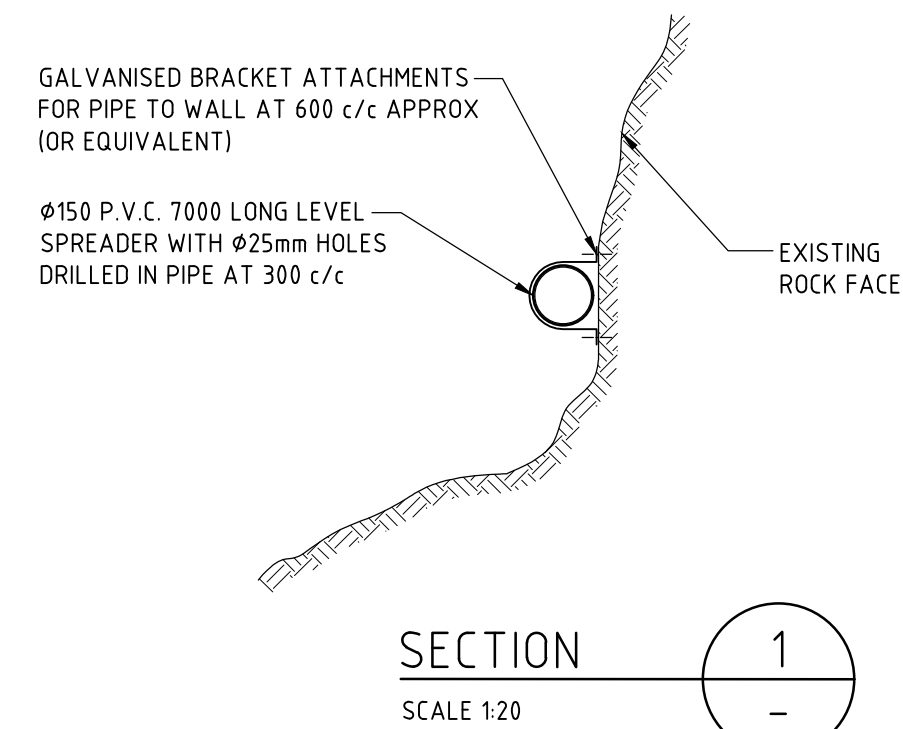
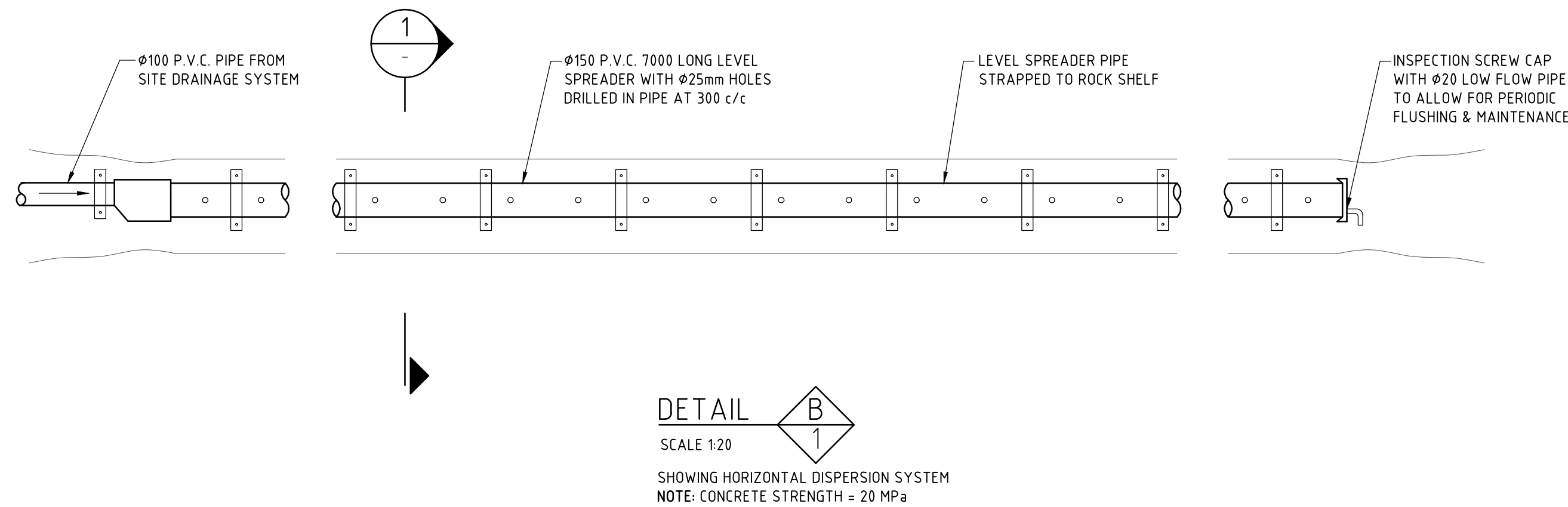
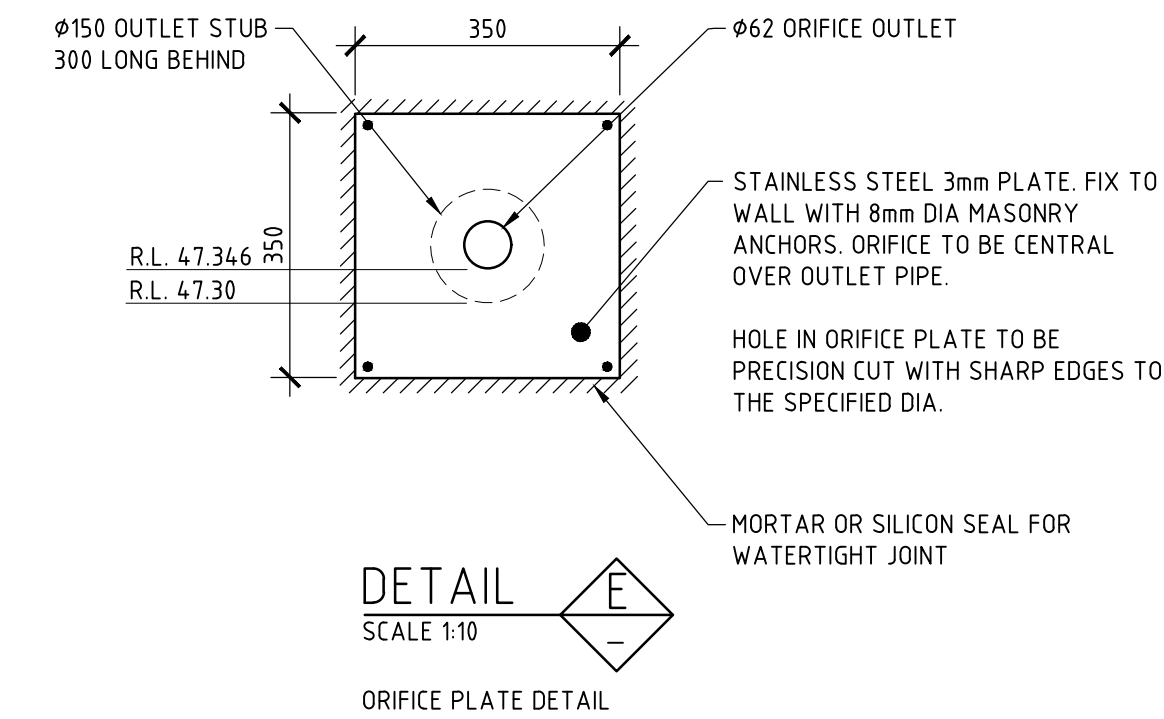
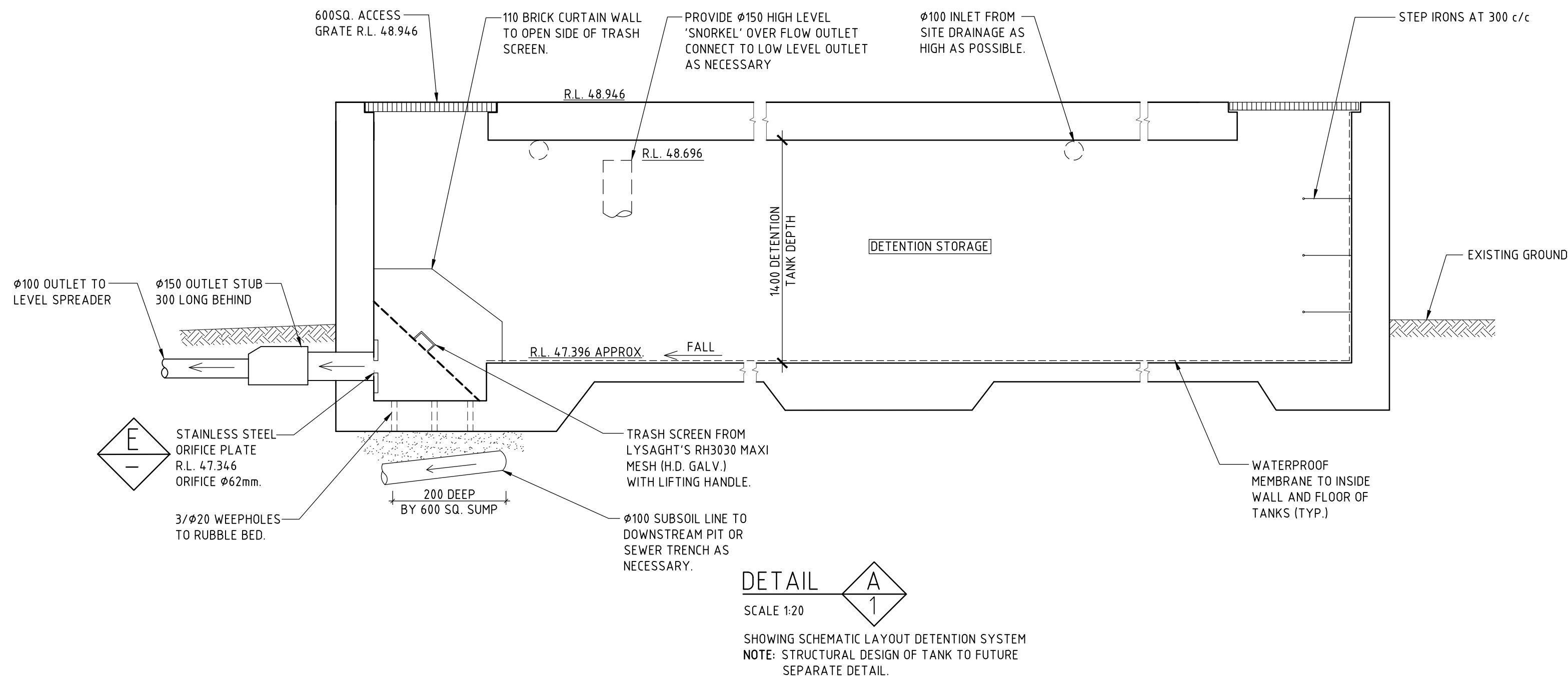
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BE Civil (Hons) MIE Aust.

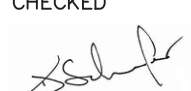
SCALE
A1
1:100



DRAWING NO
STORM-1



ISSUE	DATE	REVISION

TITLE STORMWATER MANAGEMENT PLAN 1 KIMO STREET, NORTH BALGOWLAH				 TAYLOR	DRAWING NO STORM-2
DRAWN CJM	DATE 30 OCTOBER 2025	CHECKED 	SCALE @ A1 1:20 1:10		
ENGINEER CJM	BE Civil (Hons) MIE Aust.				
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