TAYLOR
CONSULTING
CIVIL & STRUCTURAL ENGINEERS

4 February 2022

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

Dear Sir/Madam,

Re: Stormwater Management Plan – 120 Prince Alfred Parade, Newport

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 plans show the roofed and landscaped areas draining into the Salt Pan Cove via a pollution control pit at the northern end of the site.

Note that it is proposed to provide a 10000 litre rainwater storage tank for non-potable, domestic re-use in accordance with BASIX and Council requirements.

This is to certify that the Stormwater Management Plan layout as shown on plan STORM-1 and STORM-2 by Taylor Consulting Civil & Structural Engineers has been designed in accordance with section 3.1.2, 'Drainage', of the Building Code of Australia Housing Provision, AS/NZS 3500.3.2 – Stormwater Drainage and Northern Beaches Council - Water Management for Development Policy.

Should you require any further information please contact the undersigned.

Yours faithfully
TAYLOR CONSULTING

D M SCHAEFER – Director
B.E. Civil (Hons) M.I.E. Aust. N.E.R.

REGISTERED NER Engineers Australia

ACSE
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PROVIDE SANDSTONE BOULDER APRON FOR ENERGY DISSIPATION OF STORMWATER DISCHARGE. SUBJECT TO THE APPROVAL BY THE SUPERVISING ENGINEER.

EXTEND PIPE THROUGH EXISTING SEA-WALL AS LOW AS POSSIBLE MAKE GOOD TO SATISFACTION OF SUPERVISING ENGINEER

PROVIDE 600 SQ. BY 800 DEEP INLET PIT WITH TRASHSCREEN, ADJACENT TO EXISTING SEA-WALL NOTE: PIT DESIGN TO SURCHARGED IN HIGH INTENSITY STORM EVENTS.

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

PROVIDE 200SQ. INLET PIT WITH TILED FALL TO SUIT (TYP)

PROVIDE 10,000L RAINWATER TANK TO BASIX REQUIREMENTS

TANK VOLUME	= 10,000 LITRES
STORAGE LENGTH	= 5000mm
STORAGE WIDTH	= 2000mm
STORAGE DEPTH	= 1200mm

PROVIDE Ø150 HIGH LEVEL OUTLET AND 2/600 SQ. ACCESS MATCHES

C/2

150 WIDE GRATED DRAIN WITH TILED FALLS TO SUIT (TYP)

100 WIDE GRATED DRAIN ALONG BUILDING LINE

200 DEEP MIN. RAINHEAD TO Ø100 DOWNPIPE & WITH PROVISION FOR EMERGENCY OVERFLOW

PROVIDE 200 DEEP RAINHEAD ON UPPER ROOF LEVELS TO Ø100 SPREADER WITH PROVISION FOR EMERGENCY OVERFLOW (TYP)

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

A/2 PROVIDE 'SPS TRUFLO 100mm WITH ALL-PURPOSE PLANTER BOX ADAPTER' OR EQUIVALENT (TYP)

PROVIDE 100 WIDE GAP IN HOB FOR EMERGENCY OVERFLOW (TYP)

SWIMMING POOL

PROPOSED No. 120A PRINCE ALFRED PARADE

PRINCE ALFRED PARADE

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 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

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

EXISTING SITE DATA

SITE AREA = 1632 m^2 (100%)
EXISTING IMPERVIOUS AREA = 739 m^2 (45%)
EXISTING LANDSCAPED AREA = 893 m^2 (55%)

PROPOSED SITE DATA

SITE AREA = 800 m^2 (100%)
PROPOSED IMPERVIOUS AREA = 433 m^2 (54%)
PROPOSED LANDSCAPED AREA = 367 m^2 (46%)

ISSUE	DATE	REVISION

TITLE
STORMWATER MANAGEMENT PLAN
120 PRINCE ALFRED PARADE, NEWPORT

DRAWN	DATE	CHECKED	SCALE @ A1
RB	4 FEBRUARY 2022	BE Civil (Hons) MIE Aust.	1:100

TAYLOR CONSULTING
CIVIL & STRUCTURAL ENGINEERS

DRAWING NO. STORM-1

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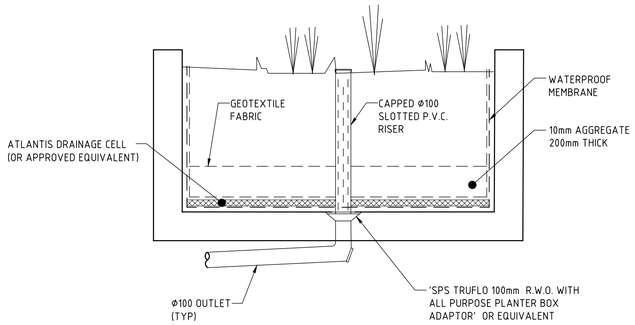
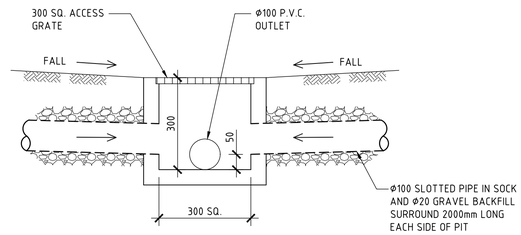


DETAIL A/1

SCALE 1:20

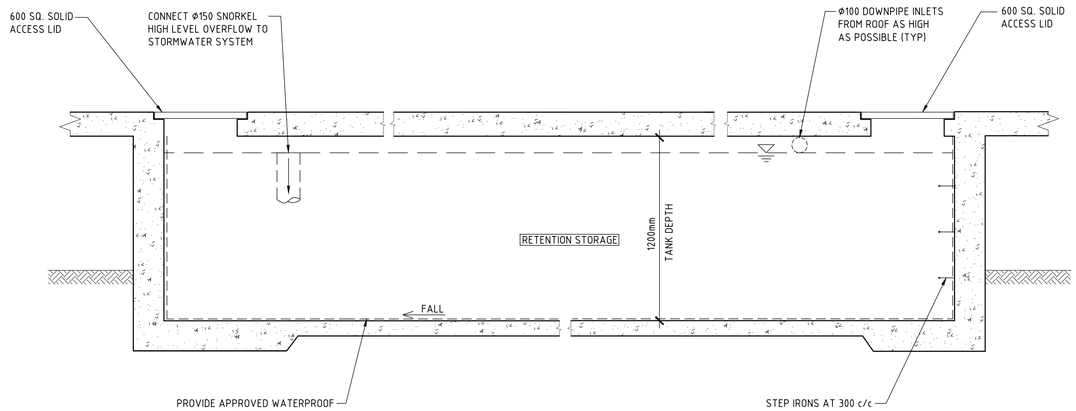
SHOWING TYPICAL PLANTER BOX DETAIL



DETAIL B/1

SCALE 1:10

TYPICAL SURFACE INLET PIT DETAIL



DETAIL C/1

SCALE 1:20

SHOWING SCHEMATIC LAYOUT OF RETENTION SYSTEM

ISSUE DATE	REVISION

TITLE

STORMWATER MANAGEMENT DETAILS
120 PRINCE ALFRED PARADE, NEWPORT

DRAWN	DATE	CHECKED	SCALE @ A1
RB	4 FEBRUARY 2022	BE Civil (Hons) MIE Aust.	1:20 1:10

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DRAWING NO. STORM-2

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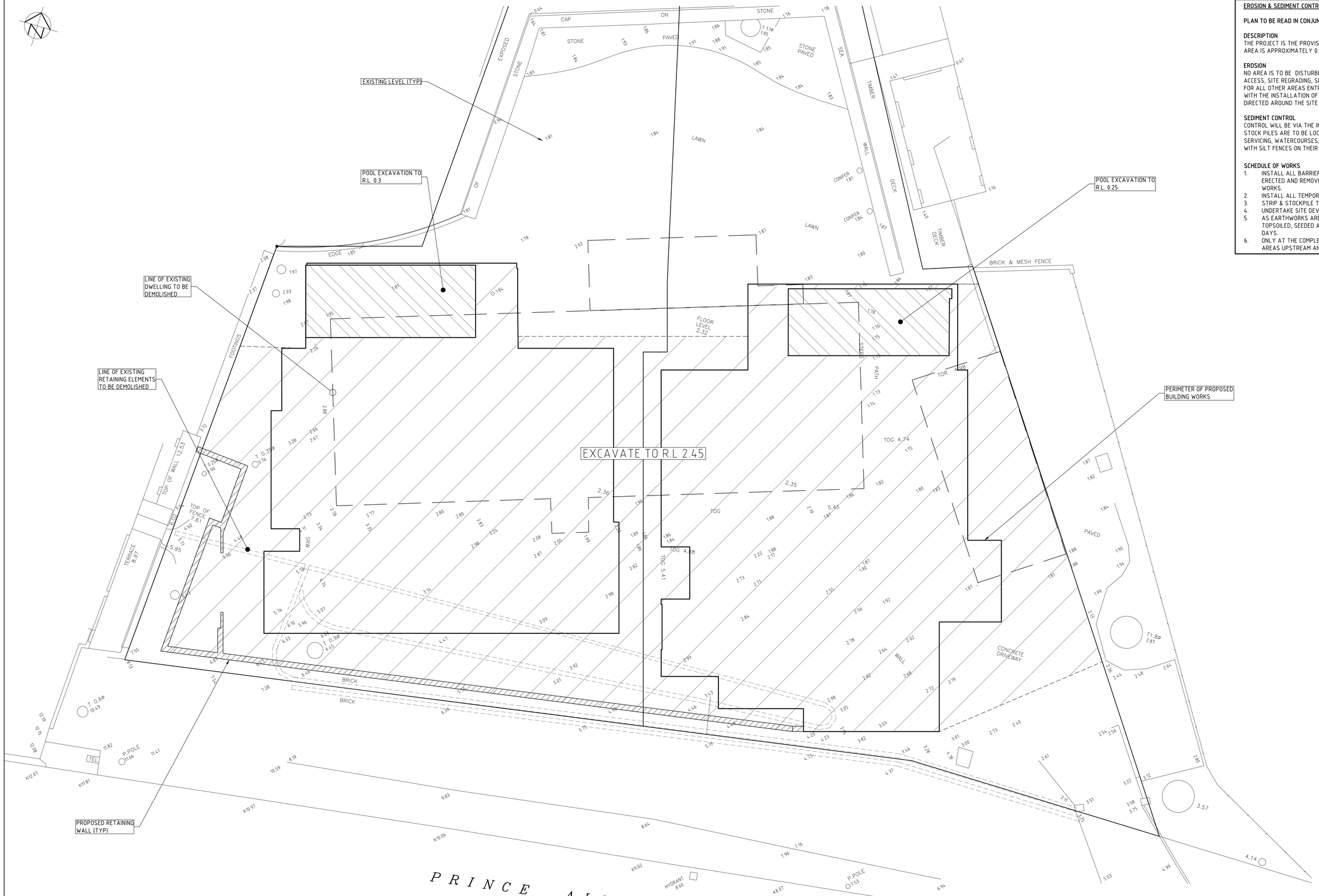

SITE PLAN

SCALE 1:100

SHOWING BOTH EXISTING & PROPOSED BUILT ELEMENTS & EXTENT & LEVEL OF PROPOSED EXCAVATIONS

EROSION & SEDIMENT CONTROL NOTES.

PLAN TO BE READ IN CONJUNCTION WITH DWG STORM-3 EXCAVATION PLAN

DESCRIPTION

THE PROJECT IS THE PROVISION OF A NEW RESIDENTIAL. THE TOTAL DISTURBED AREA IS APPROXIMATELY 0.105 Ha.

EROSION

NO AREA IS TO BE DISTURBED OTHER THEN THAT DIRECTLY AFFECTED BY ACCESS, SITE REGRADING, SERVICING, ROAD WORKS AND DRAINAGE WORKS. FOR ALL OTHER AREAS ENTRY IS PROHIBITED AND IS TO BE CLEARLY DEFINED WITH THE INSTALLATION OF BARRIER FENCING. UPSTREAM WATER IS TO BE DIRECTED AROUND THE SITE WITHOUT CONTAMINATION.

SEDIMENT CONTROL

CONTROL WILL BE VIA THE INSTALLATION OF SILT FENCES AS SHOWN ON PLAN. STOCK PILES ARE TO BE LOCATED IN AREAS SHOWN ON THE PLAN (CLEAR OF SERVICING, WATERCOURSES, ROAD AND DRAINAGE WORKS) AND PROVIDED WITH SILT FENCES ON THEIR DOWNSTREAM SIDE.

SCHEDULE OF WORKS

1. INSTALL ALL BARRIER AND SILT FENCING. BARRIER FENCING MAY BE ERECTED AND REMOVED AS NECESSARY TO SUIT STAGING OF WORKS.
2. INSTALL ALL TEMPORARY DRAINAGE STRUCTURES AS NECESSARY.
3. STRIP & STOCKPILE TOPSOIL.
4. UNDERTAKE SITE DEVELOPMENT.
5. AS EARTHWORKS ARE COMPLETED THESE AREAS ARE TO BE TOPSOILED, SEEDED AND MULCHED OR PAVED WITHIN 20 WORKING DAYS.
6. ONLY AT THE COMPLETION OF WORKS AND STABILIZATION OF AREAS UPSTREAM ANY CONTROL DEVICES TO BE REMOVED.

ISSUE	DATE	REVISION

TITLE
EXCAVATION PLAN
120 PRINCE ALFRED PARADE, NEWPORT

DRAWN	DATE	CHECKED	SCALE @ A1
RB	4 FEBRUARY 2022	BE Civil (Hons) MIE Aust.	1:100

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DRAWING NO. STORM-3

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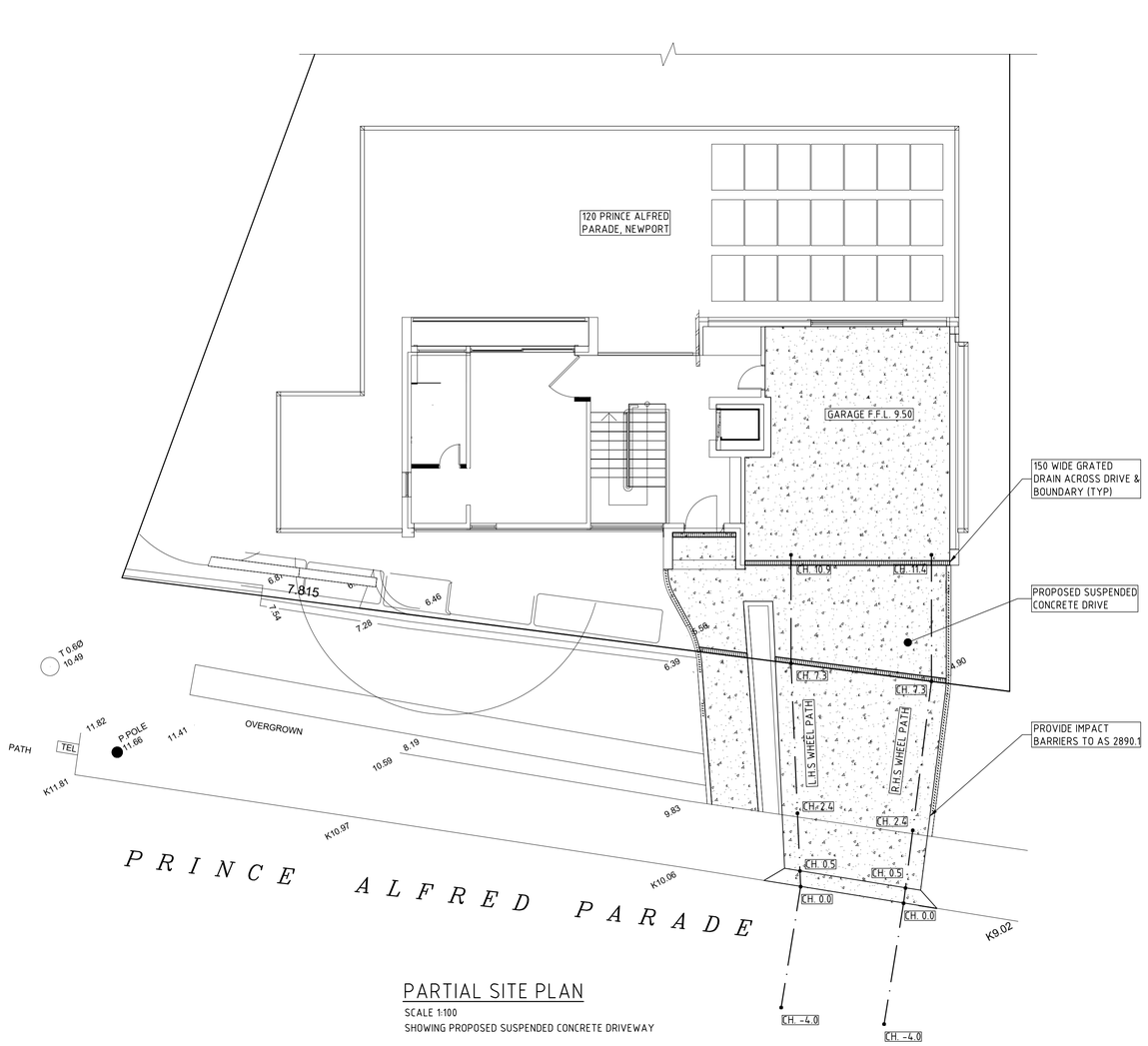
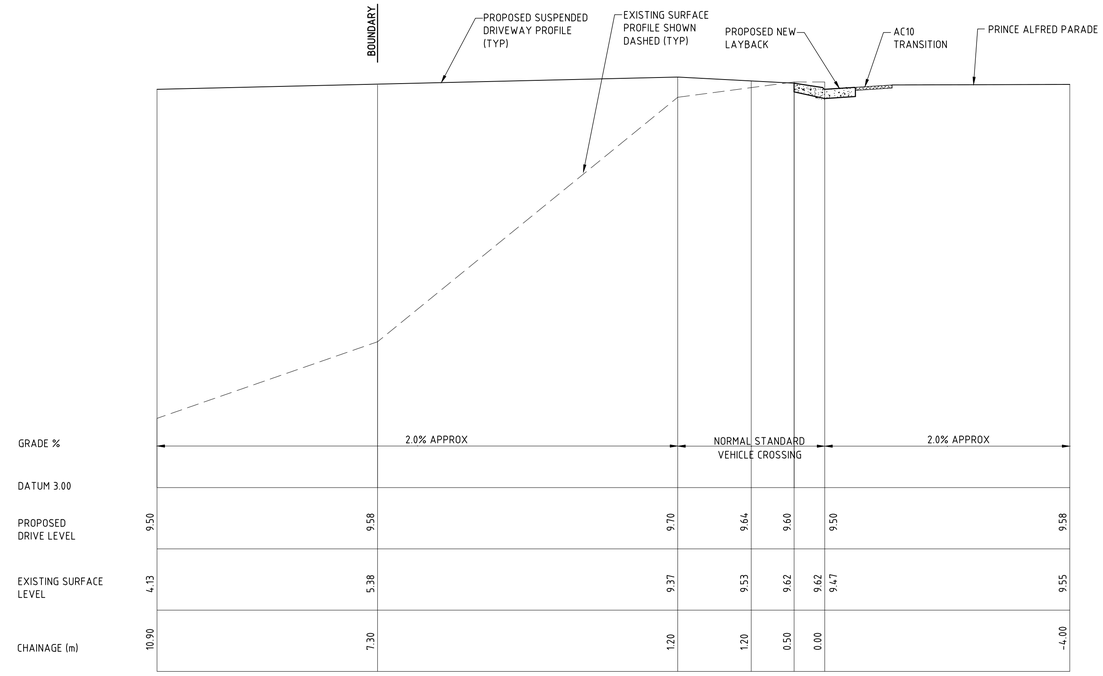


PARTIAL SITE PLAN

SCALE 1:100
SHOWING PROPOSED SUSPENDED CONCRETE DRIVEWAY



L.H.S. DRIVEWAY LONG-SECTION

SCALE 1:50 NATURAL

R.H.S. DRIVEWAY LONG-SECTION

SCALE 1:50 NATURAL

ISSUE DATE	REVISION

TITLE
DRIVEWAY PLAN AND LONG-SECTIONS 120 PRINCE ALFRED PARADE, NEWPORT

DRAWN	DATE	CHECKED	SCALE @ A1
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TAYLOR CONSULTING
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DRAWING NO. CIVIL-1

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