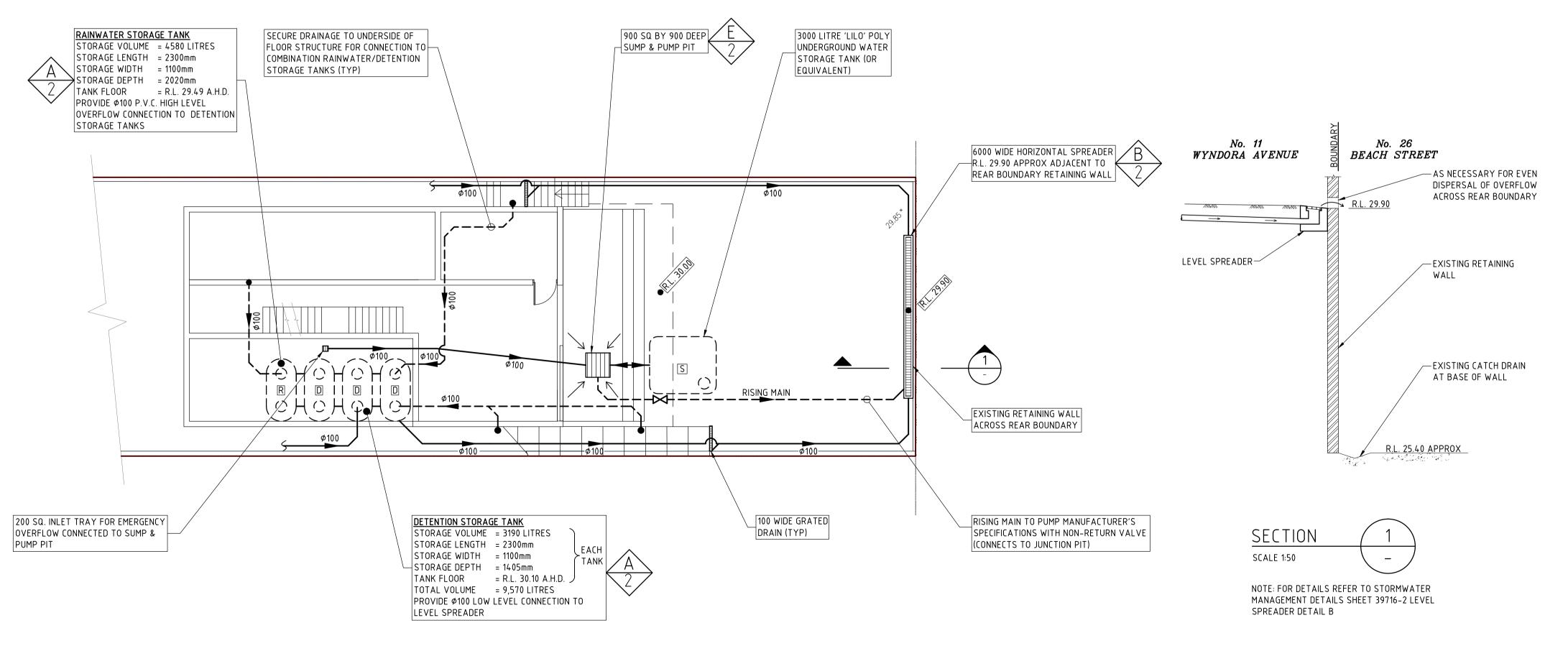


SITE DRAINAGE PLAN



+ DENOTES EXISTING GROUND LEVEL

DRAINAGE NOTES

- 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
- 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 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
  - 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
  - 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.
- 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

## OSD SYSTEM DESIGN DATA

SITE DATA

SITE AREA =  $405 \text{ m}^2$ TOTAL IMPERVIOUS AREA = 246m<sup>2</sup> TOTAL PERVIOUS AREA = 159m² IMPERVIOUS AREA DRAINING TO SPREADER O.S.D. = 236m<sup>2</sup>

PERVIOUS AREA DRAINING SPREADER = 60m<sup>2</sup> PERVIOUS AREA BYPASSSING SPREADER = 99m<sup>2</sup>

PARTIAL PERMISSIBLE SITE FLOWS (STATE OF NATURR FOR CATCHMENT = 384m<sup>2</sup>

- 5 YR ARI = 7 l/s DEVELOPED SITE FLOWS
- 100 YR ARI = 10 l/s
- DETENTION SYSTEM DATA
- AREA DRAINING TO THE TANK = 236 m<sup>2</sup>

IMPERVIOUS AREA DRAINING TO 0.S.D. = 236m<sup>2</sup> DEVELOPED 100YR T.W.L. = R.L. 31.33 A.H.D. ORIFICE DIAM = 57mm SSR = 9.5m<sup>3</sup>

PARTIAL SITE PLAN

SCALE 1:100 SHOWING GROUND FLOOR & COMBINATION RAINWATER/DETENTION STORAGE TANKS ISSUE DATE : REVISION STORMWATER MANAGEMENT PLAN 11 WYNDORA AVENUE, FRESHWATER

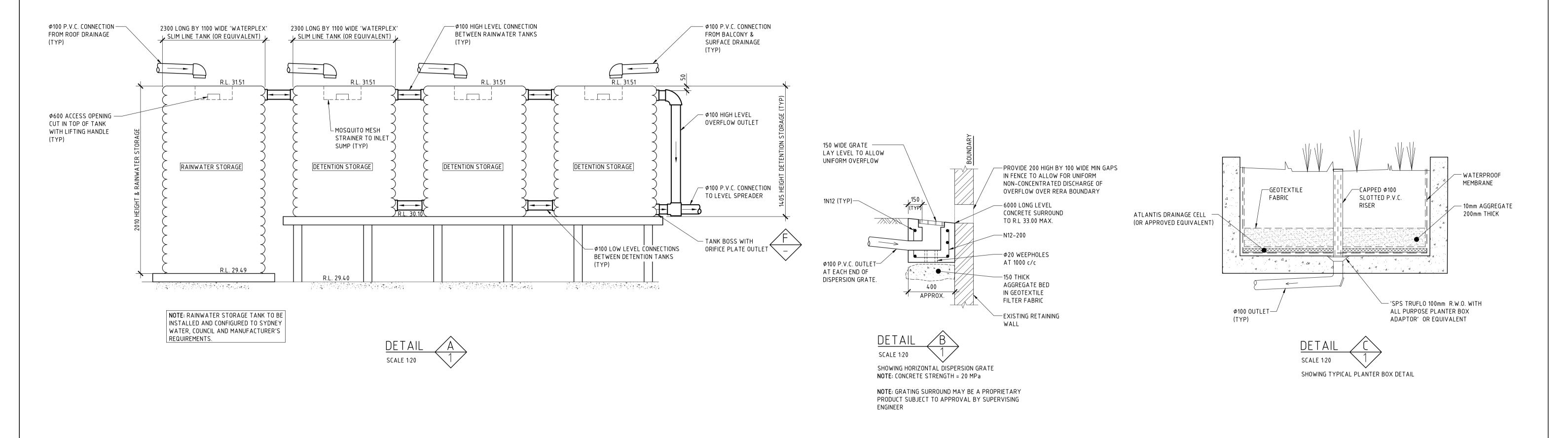
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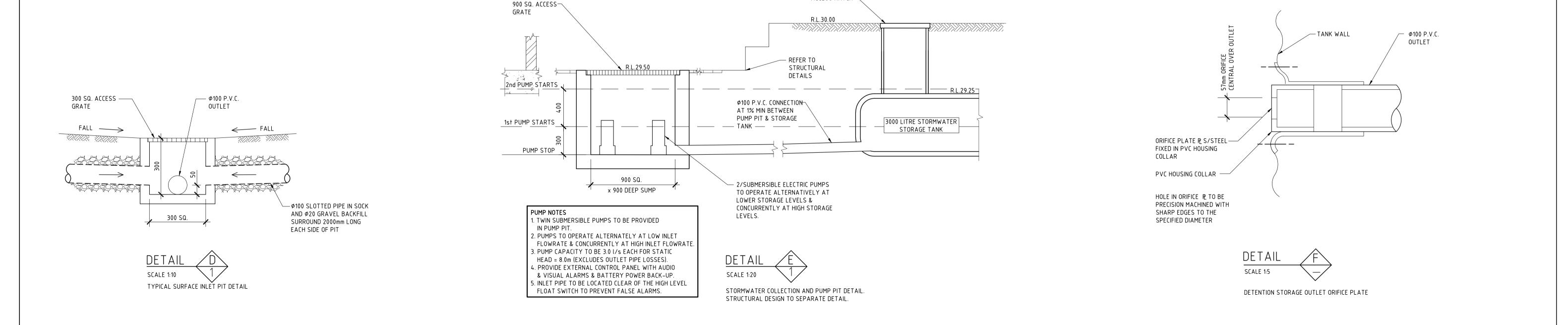
SCALE @ A1 1:100 02 DECEMBER 2016

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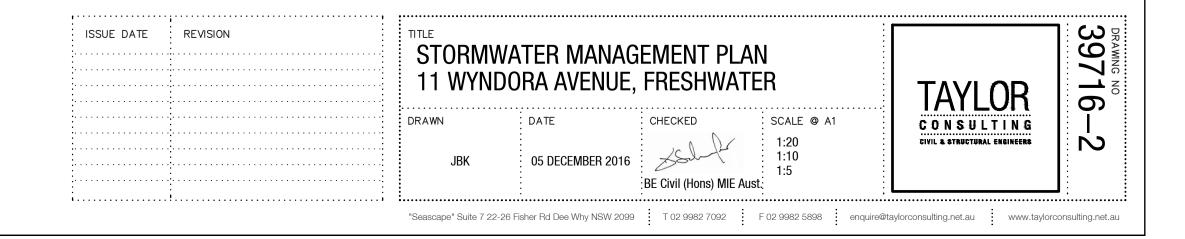
"Seascape" Suite 7 22-26 Fisher Rd Dee Why NSW 2099 T 02 9982 7092 F 02 9982 5898 enquire@taylorconsulting.net.au www.taylorconsulting.net.au

BE Civil (Hons) MIE Aust.

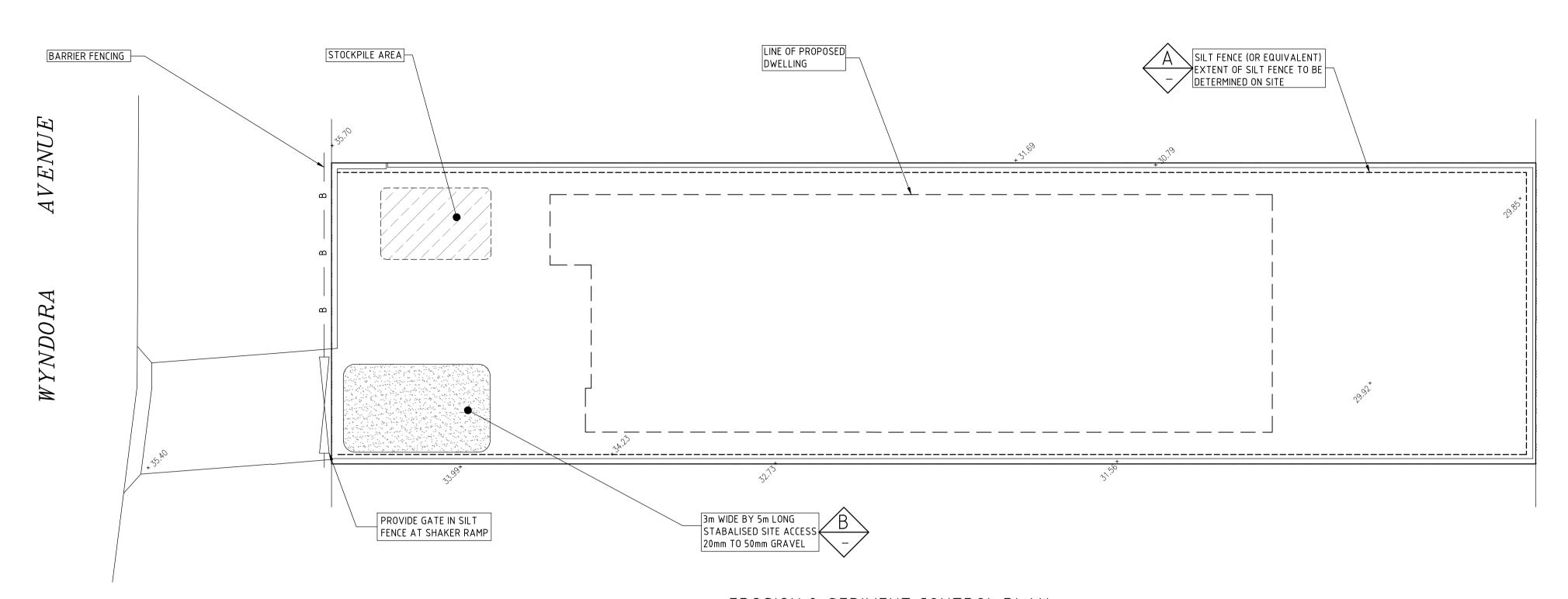




ACCESS HATCH —

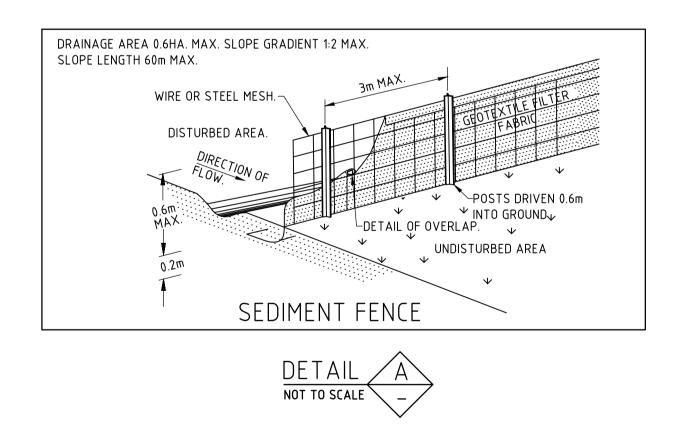


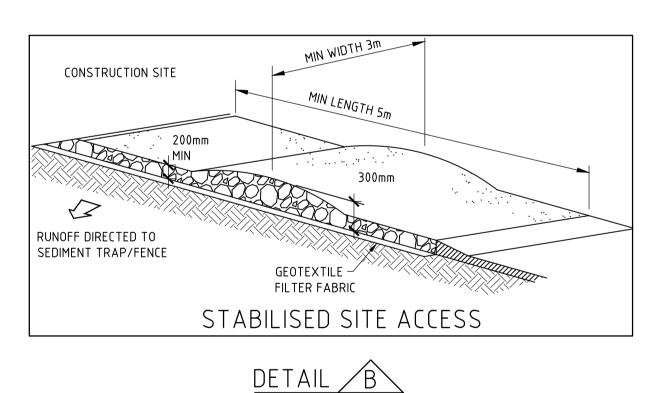




EROSION & SEDIMENT CONTROL PLAN

NOTE: SHOWING PROPOSED EROSION & SEDIMENT CONTROL MEASURES TO BE PROVIDED FOR THE SITE





ISSUE DATE : REVISION **EROSION & SEDIMENT CONTOL PLAN** 11 WYNDORA AVENUE, FRESHWATER

SCALE @ A1 1:100 05 DECEMBER 2016 BE Civil (Hons) MIE Aust.

EROSION & SEDIMENT CONTROL NOTES.

MANAGEMENT PLAN

SEDIMENT CONTROL

PHASING OF WORKS

DESCRIPTION

PLAN TO BE READ IN CONJUNCTION WITH DWG 39716-1 SITE STROMWATER

THE PROJECT IS THE PROVISION OF A NEW RESIDENTIAL UNIT BUILDING. THE

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

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

1. INSTALL ALL BARRIER AND SILT FENCING. BARRIER FENCING MAY BE ERECTED AND REMOVED AS NECESSARY TO SUIT STAGING OF

2. INSTALL ALL TEMPORARY DRAINAGE STRUCTURES AS NECESSARY.

AS EARTHWORKS ARE COMPLETED THESE AREAS ARE TO BE TOPSOILED, SEEDED AND MULCHED OR PAVED WITHIN 20 WORKING

ONLY AT THE COMPLETION OF WORKS AND STABILIZATION OF AREAS UPSTREAM ANY CONTROL DEVICES TO BE REMOVED.

TOTAL DISTURBED AREA IS APPROXIMATELY 0.02 Ha.

DIRECTED AROUND THE SITE WITHOUT CONTAMINATION.

WITH SILT FENCES ON THEIR DOWNSTREAM SIDE.

STRIP & STOCKPILE TOPSOIL. UNDERTAKE SITE DEVELOPMENT.

> 39716-CONSULTING

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