

AREA CALCULATIONS		
TOTAL SITE AREA	552.1	m ²
EXISTING DEVELOPMENT		
ROOF AREA	229.7	m ²
PAVED AREA	40.4	m ²
DRIVEWAY AREA	14.4	m ²
IMPERVIOUS AREA	284.50	m ²
TOTAL IMPERVIOUS AREA PERCENTAGE	51.53	%
PROPOSED DEVELOPMENT		
PROPOSED ROOF AREA	276.0	m ²
PROPOSED PAVED AREA	63.8	m ²
PROPOSED DRIVEWAY AREA	70.4	m ²
TOTAL IMPERVIOUS AREA	410.20	m ²
TOTAL IMPERVIOUS AREA PERCENTAGE	74.30	%

RAINWATER RE-USE TANK - RWT

(AS PER BASIX REQUIREMENTS)

SIZE: 3,000 LITRES (MIN)
SLIMLINE TANK BY "KINGSPAN" OR SIMILAR
(2300L x 800W x 1785H)

INSTALL TO MANUFACTURES SPECIFICATIONS, AS3500 AND COUNCIL REQUIREMENTS

- FOR RE-USE AS SPECIFIED BY BASIX CERTIFICATE
- ENSURE TOP OF TANK IS MIN 0.5m BELOW ROOF GUTTERS TO ENSURE SUFFICIENT HEAD FOR THE SYSTEM
- TANK TO BE INSTALLED BY LICENSED PLUMBER IN ACCORDANCE WITH AS/NZS 3500.3:2021 AND NSW CODE OF PRACTICE PLUMBING AND DRAINAGE 2006

OSD WARRANT

LGA: - CANTERBURY BANKSTOWN COUNCIL
SOURCE - CANTERBURY-BANKSTOWN DEVELOPMENT CONTROL PLAN 2023 SECTION 4.1 - ON-SITE DETENTION SYSTEMS

" SINGLE DWELLINGS AND DUAL OCCUPANCIES WILL NOT REQUIRE OSD WHERE:

- SINGLE DWELLINGS AND OUTBUILDINGS HAVE A COMBINED IMPERVIOUS AREA OF NO MORE THAN 75% OF THE SITE AREA. "

THEREFORE, NO OSD REQUIRED

DRAINAGE PIPE LEGEND

- EXISTING STORMWATER PIPE
- DRAINAGE PIPES TO RAINWATER TANK
- IN-GROUND DRAINAGE PIPES VIA GRAVITY
- CHARGED DRAINAGE PIPES
- PIPES STRAPPED TO UNDERSIDE OF SLAB

NOTE: ALL IN GROUND PIPES TO BE Ø100 PVC AT 1% (MIN) UNO

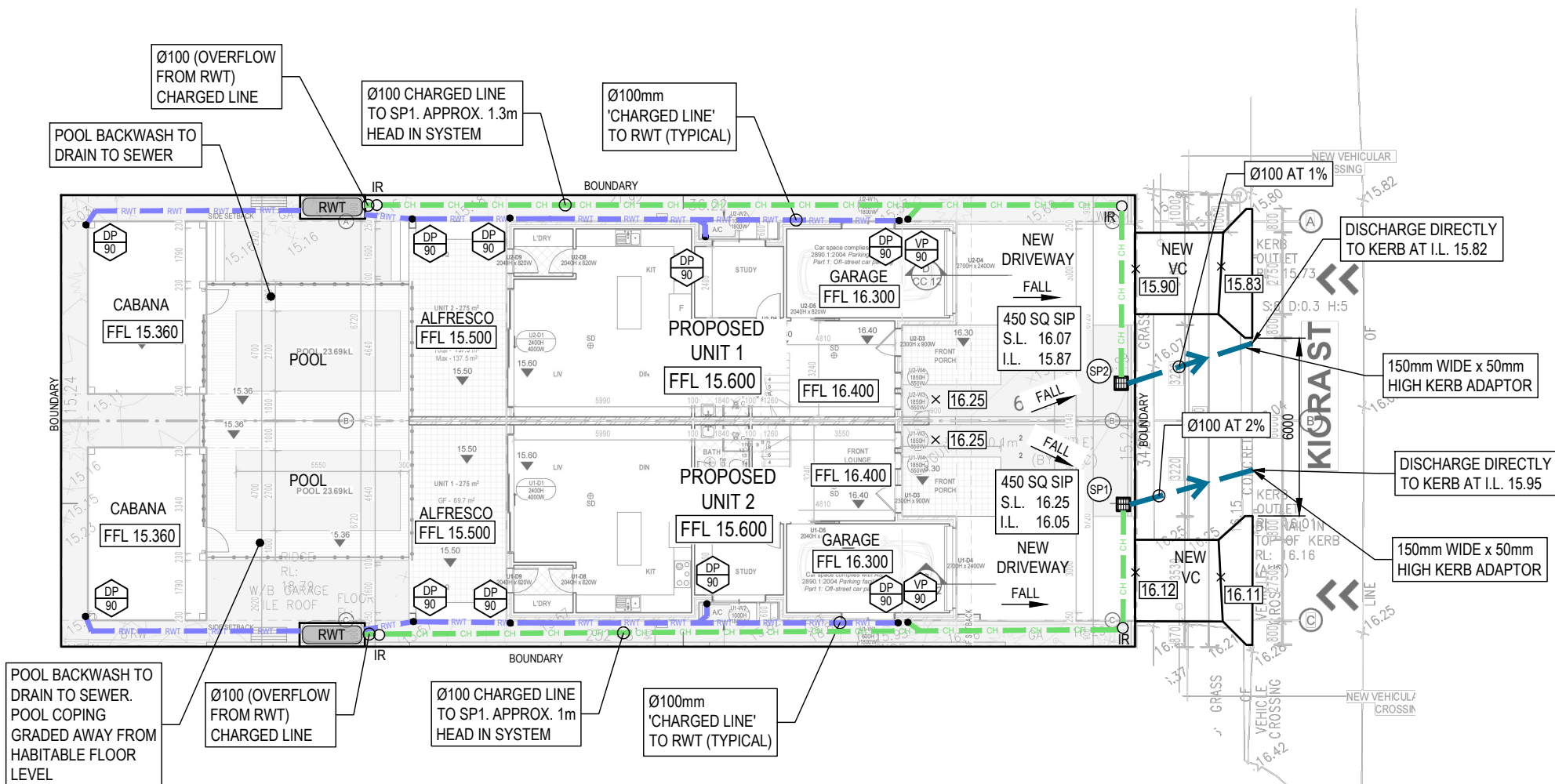
INSPECTION RISER (IR)

PROVIDE 'SCREW CAP' INSPECTION RISER AT LOWEST POINT OF 'CHARGED LINES', CRITICAL BENDS, AND 30m INTERVALS.

NOTE: ENSURE ANY PROPOSED PAVING IS GRADED SO THAT IT IS NOT IMPACTING ADJOINING PROPERTIES.

GRATED DRAIN

PROVIDE 150mm WIDE GRATED DRAINS UNO



APPROVED BY	REVISION	DRAWN	DESCRIPTION	DATE
NADER ZAKI MIEAust CPEng NER 3894863 	A	EM	ISSUED FOR DA	26.03.2025
	B	EM	COUNCIL RFI	27.05.2025
	C	CN	ISSUED FOR CC	18.08.2025

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www.nycivilengineering.com.au

STORMWATER MANAGEMENT PLAN

PROJECT TITLE

PROPOSED DUAL OCCUPANCY
No.16 KIARA STREET
PANANIA

SHEET SIZE A3

DESIGNED EM

CHECKED NZ

ISSUE C

SCALE 1:200

JOB REFERENCE

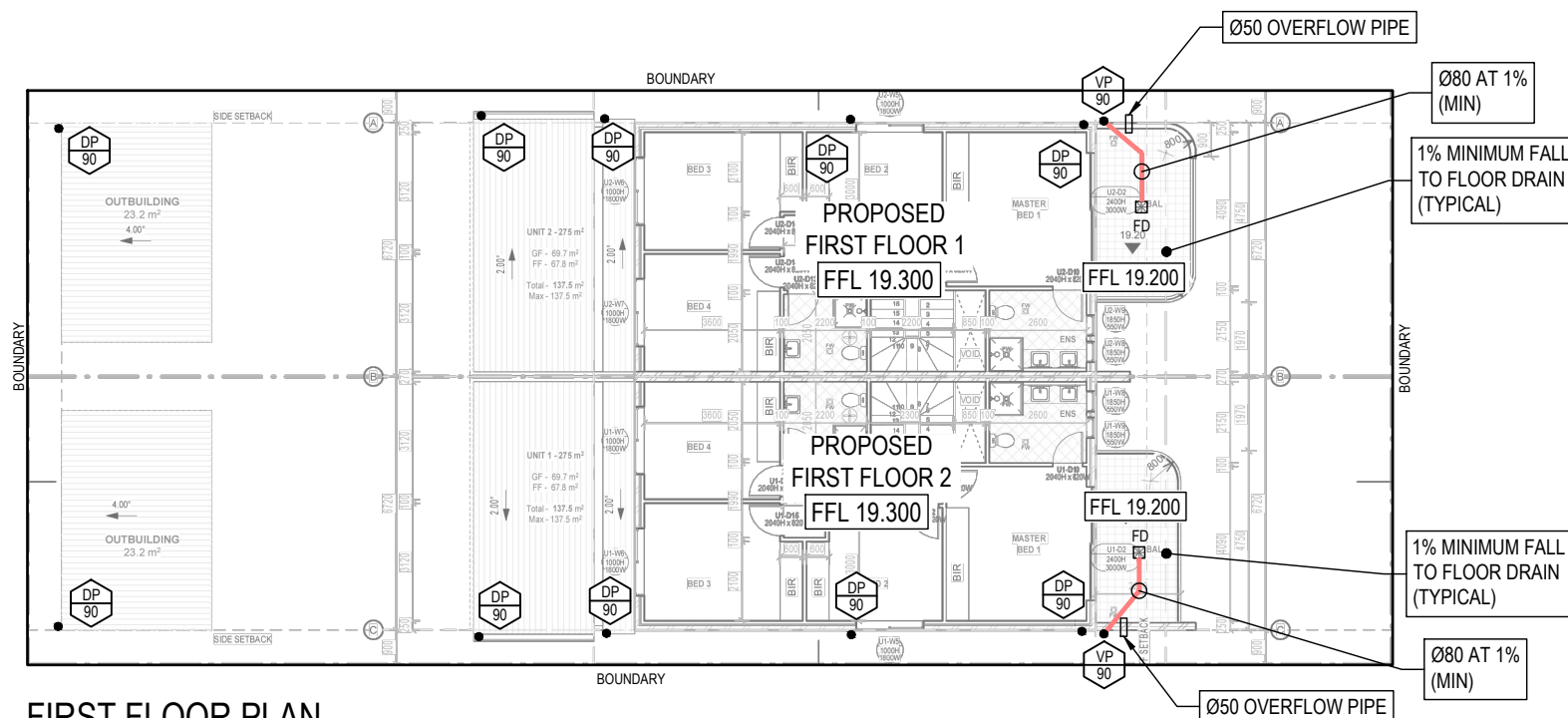
E250087

DRAWING No.

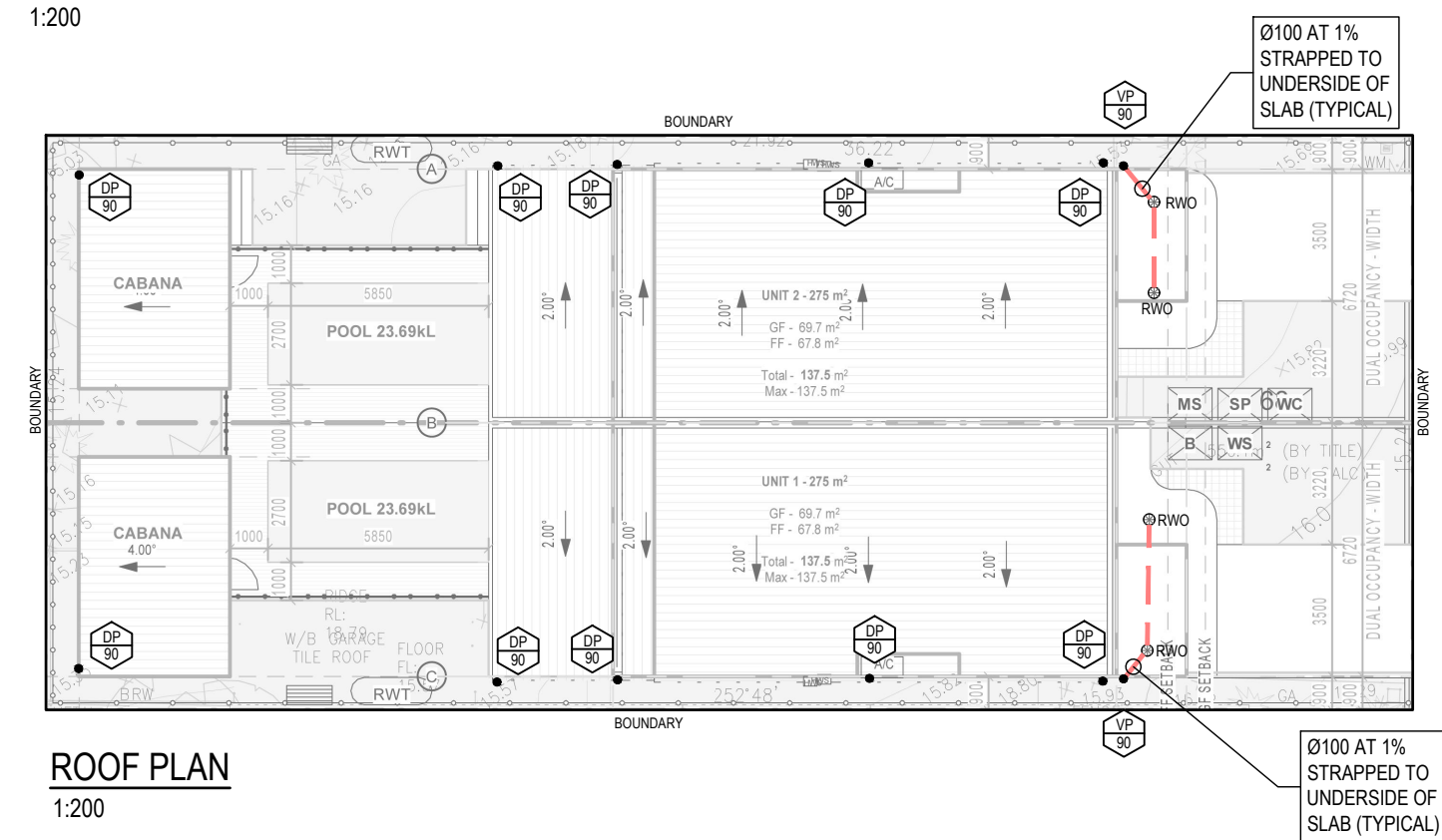
D2

No. IN SET

6

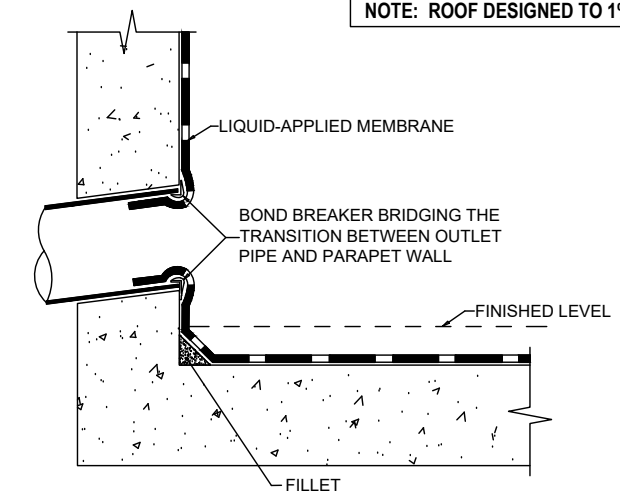


FIRST FLOOR PLAN
1:200

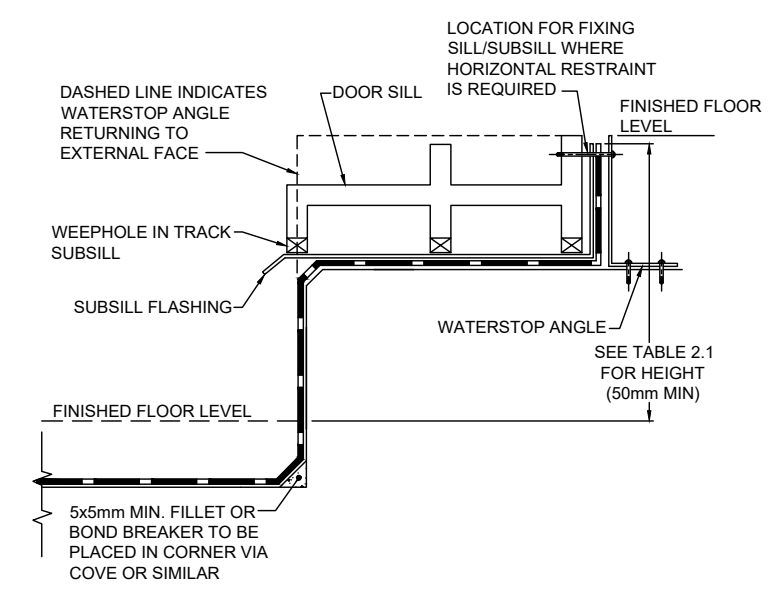


ROOF PLAN
1:200

- ROOF DRAINAGE
- GUTTERING - STRATCO SMOOTHLINE UNSLOTTED OR EQUIVALENT GUTTER WITH CROSS SECTIONAL AREA GREATER THAN 6000mm²
 - DOWN PIPES - 90mm DIA PVC OR COLORBOND
- NOTE: ROOF DESIGNED TO 1% AEP INTENSITY 195 mm/hr



PARAPET OVERFLOW - AS4654.2
NTS



BALCONY MEMBRANE TERMINATION - AS4654.2
NTS



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DRAWING TITLE
STORMWATER MANAGEMENT FIRST FLOOR/ROOF PLAN
PROJECT TITLE
PROPOSED DUAL OCCUPANCY No.16 KIORA STREET PANANIA

SHEET SIZE A3	JOB REFERENCE E250087
DESIGNED EM	
CHECKED NZ	DRAWING No. D3
ISSUE C	No. IN SET 6
SCALE 1:200	

DUST CONTROL:

• NOTE: DURING EXCAVATION, DEMOLITION AND CONSTRUCTION, ADEQUATE MEASURES SHALL BE TAKEN TO PREVENT DUST FROM AFFECTING THE AMENITY OF THE NEIGHBORHOOD.

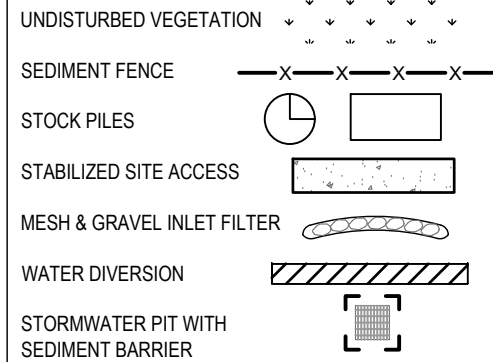
THE FOLLOWING MEASURES MUST BE ADOPTED:

1. PHYSICAL BARRIERS SHALL BE ERECTED AT RIGHT ANGLES TO PREVENT WIND DIRECTION OR SHALL BE PLACED AROUND OR OVER DUST SOURCES TO PREVENT WIND OR ACTIVITY FROM GENERATING DUST.
2. EARTHWORKS AND SCHEDULING ACTIVITIES SHALL BE MANAGED TO COINCIDE WITH THE NEXT STAGE OF DEVELOPMENT TO MINIMISE THE AMOUNT OF TIME THE SITE IS LEFT TO CUT OR EXPOSED.
3. ALL MATERIALS SHALL BE STORED OR STOCKPILED AT THE BEST LOCATIONS.
4. THE GROUND SURFACE SHOULD BE DAMPENED SLIGHTLY TO PREVENT DUST FROM BECOMING AIRBORNE BUT SHOULD NOT BE WET TO THE EXTENT THAT RUN-OFF OCCURS.
5. ALL VEHICLES CARRYING SOIL OR RUBBLE TO OR FROM THE SITE SHALL AT ALL TIMES BE COVERED TO PREVENT THE ESCAPE OF DUST.
6. ALL EQUIPMENT WHEELS SHALL BE WASHED BEFORE EXISTING THE SITE USING MANUAL OR AUTOMATED SPRAYERS AND DRIVE - THROUGH WASHING BAYS.
7. GATES SHALL BE CLOSED BETWEEN VEHICLE MOVEMENTS SHALL BE FITTED WITH SHADE CLOTH.
8. CLEANING OF FOOTPATHS AND ROADWAYS SHALL CARRIED OUT DAILY.
9. ALL BUILDERS REFUSE, SPOIL AND/OR MATERIAL UNSUITABLE FOR USE IN LANDSCAPE AREAS SHALL BE REMOVED FROM SITE ON COMPLETION OF THE BUILDING WORKS.

NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED DAILY BY SITE MANAGER IN ACCORDANCE WITH COUNCIL REQUIREMENTS.
2. ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATHS.
3. DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE.
4. ROADS AND FOOTPATH TO BE SWEEPED DAILY AS REQUIRED BY COUNCIL.
5. IF YOU DO NOT COMPLY WITH COUNCIL REQUIREMENTS & DOCUMENTATION, YOU MAY BE LIABLE TO PROSECUTION FROM GOVERNMENT AUTHORITIES.
6. THE CONTRACTOR SHALL CONTROL SEDIMENTATION, EROSION AND POLLUTION DURING CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF 'MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION' PRODUCED BY LANDCOM

LEGEND:



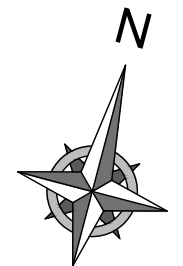
ERECT SEDIMENT FENCE, WHERE SHOWN, DURING CONSTRUCTION. REFER TO DETAIL

PROVIDE SEDIMENT BARRIER AROUND ALL PITS DURING CONSTRUCTION. REFER TO DETAIL

PROVIDE MESH AND GRAVEL INLET FILTER DURING CONSTRUCTION. REFER TO DETAIL

PROVIDE SKIP BIN/STOCKPILE FOR CONSTRUCTION MATERIALS DURING CONSTRUCTION.

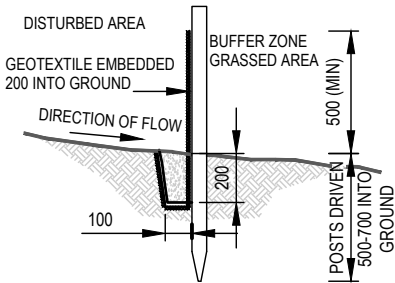
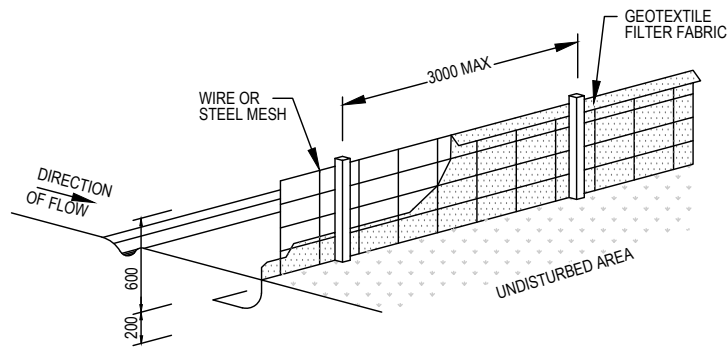
PROVIDE STABILIZED SITE ACCESS DURING CONSTRUCTION. REFER TO DETAIL



REVISION	DRAWN	DESCRIPTION	DATE
A	EM	ISSUED FOR DA	26.03.2025
B	EM	COUNCIL RFI	27.05.2025
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DRAWING TITLE
SEDIMENT CONTROL PLAN
PROJECT TITLE
PROPOSED DUAL OCCUPANCY No.16 KIORA STREET PANANIA

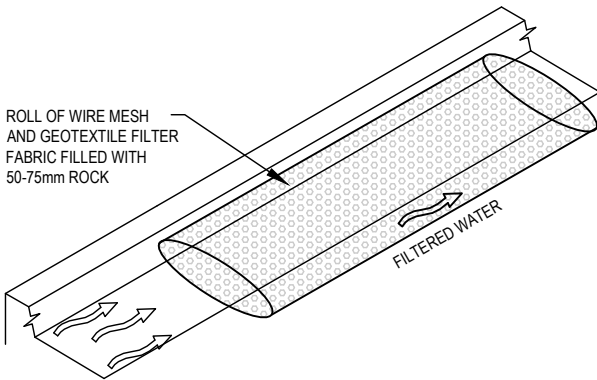
SHEET SIZE A3	JOB REFERENCE E250087
DESIGNED EM	
CHECKED NZ	DRAWING No. D5
ISSUE C	No. IN SET 6
SCALE 1:200	



SEDIMENT FENCE DETAIL
NTS

CONSTRUCTION NOTES:

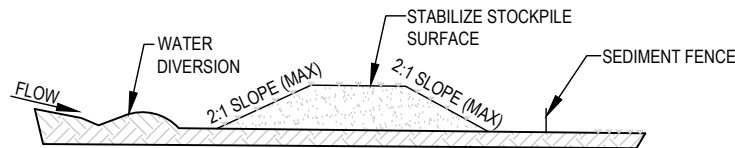
- CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENTS AREA OF ANY ONE SECTION. THE CATCHMENTS AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.
- CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- DRIVE 1.5m LONG STAR PICKETS INTO GROUND AT 2.5m INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
- FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
- JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH 150mm OVERLAP.
- BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.



MESH AND GRAVEL FILTER
NTS

CONSTRUCTION NOTES:

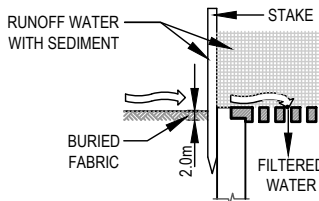
- INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS
- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
- FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm(h) x 400mm(w).
- PLACE THE FILTER AT THE OPENING LEAVING AT LEAST 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
- FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
- SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.



STOCKPILE
NTS

NOTE:

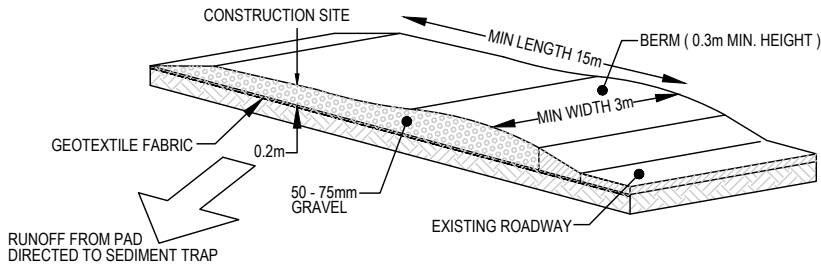
- PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METERS FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
- CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
- WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METERS IN HEIGHT.
- WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILIZE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
- CONSTRUCT EARTH BANKS (LOW FLOW) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METERS ON THE DOWNSLOPE.



SEDIMENT BARRIER AROUND PIT
NTS

CONSTRUCTION NOTES:

- FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
- FOLLOW STRAW FILTER AND SEDIMENT FENCE FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOTEXTILE. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
- IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
- DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.



STABILIZED SITE ACCESS
NTS

CONSTRUCTION NOTES:

- STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE
- COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE
- CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASED OR 30mm AGGREGATE
- ENSURE THE STRUCTURE IS AT LEAST 15m LONG OR TO BUILD ALIGNMENT AND AT LEAST 3 METERS WIDE.
- WHERE A SEDIMENT FENCE JOINS ONTO THE STABILIZED ACCESS, CONSTRUCT A HUMP IN THE STABILIZED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

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DRAWING TITLE
SEDIMENT CONTROL DETAILS
PROJECT TITLE
PROPOSED DUAL OCCUPANCY No.16 KIORA STREET PANANIA

SHEET SIZE A3	JOB REFERENCE E250087
DESIGNED EM	
CHECKED NZ	DRAWING No. D6
ISSUE C	No. IN SET 6
SCALE AS NOTED	