

2 ELLERY PARADE, SEAFORTH

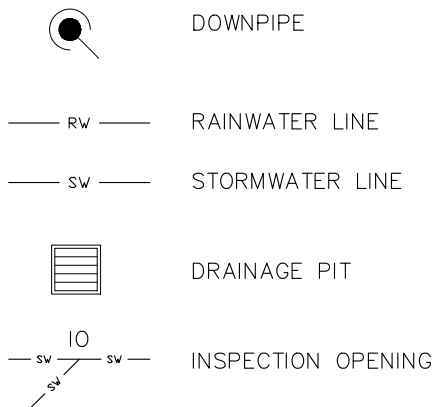
STORMWATER MANAGEMENT PLAN

<u>DRAWING NUMBER</u>	<u>REVISION</u>	<u>DRAWING TITLE</u>
DR-000	3	LEGEND
DR-001	3	PIPE LAYOUT & LEVEL SPREADER DETAILS
DR-002	2	ROOF LAYOUT
DR-003	1	DETAILS
DR-004	1	SITE AREAS
SD-001	0	SEDIMENT & EROSION CONTROL PLAN

NOTES:

1. ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.
2. SITE LAYOUT BASED ON ARCHITECTURAL PLANS BY BRICK ARCHITECTS (APRIL 2020).
3. LOCATION OF ALL SERVICES MUST BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.
4. ALL STORMWATER DRAINAGE PIPES AND ASSOCIATED DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE RELEVANT STANDARDS, THE BUILDING CODE OF AUSTRALIA, MANUFACTURER'S RECOMMENDATIONS, SYDNEY CATCHMENT AUTHORITY RECOMMENDED PRACTICE, AND LOCAL COUNCIL, AS APPLICABLE.
5. ALL INVERT LEVELS PROVIDED ON THIS DRAWING ARE REDUCED TO AHD AND BASED ON INTERPOLATED SURFACE LEVELS AND SYSTEM REQUIREMENTS
6. WHERE POSSIBLE, PIPEWORK SHALL BE LOCATED EXTERNAL TO THE BUILDING.
7. DOWNPIPES AND STORMWATER LINES TO BE SEALED DN100 uPVC UNLESS OTHERWISE NOTED.
8. STORMWATER PIPES TO BE GRADED AT A MINIMUM 1% UNLESS NOTED OTHERWISE.
9. ALTERNATIVE GUTTER AND DOWNPIPE CONFIGURATION MAY BE INSTALLED PROVIDED IT COMPLIES WITH AS3500.
10. ALL PIPE AND CONDUITS TO BE MARKED IN ACCORDANCE WITH AS1345 – 1995.
11. TRENCHES AND SERVICE SEPARATIONS IN ACCORDANCE WITH AS/NZS 5601, AS/NZS 3500, AND AS/CA S009.

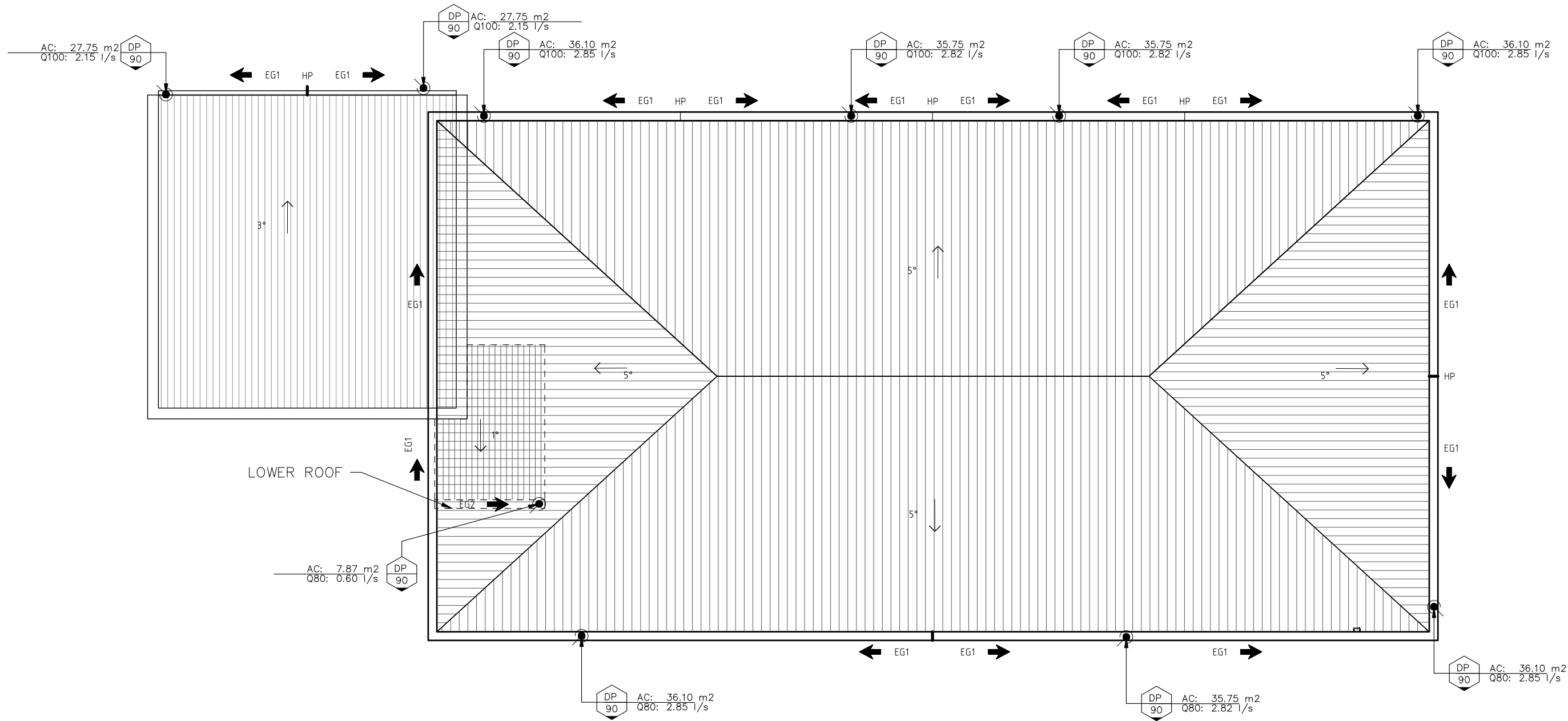
LEGEND:



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REVISIONS					NA	DESIGNED		SHA	CHECKED	IRW	 Stellen	LEGEND				
	3	SHA	20/04/2020	CHANGE RAINWATER TANK LOCATION		IRW	DRAWN		SHA	CHECKED					IRW	
	2	SSD	1/05/2019	CHANGE DP LOCATIONS		SSD	APPROVED		IRW	DATE					20/04/2020	
	1	YYA	15/04/2019	APPROVED FOR DA SUBMISSION		SSD	DO NOT SCALE. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED									
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No.	BY	DATE	DESCRIPTION	APPD	Stellen Consulting ABN 61 14 9 095 189				Size	A3	Status	APPROVED FOR DA SUBMISSION	Drg No.	DR-000	Rev.	3

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REVISIONS						AS NOTED				 Stellen Consulting ABN 61 14 9 095 189	PIPE LAYOUT & LEVEL SPREADER DETAILS				
	3	SHA	20/04/2020	CHANGE RAINWATER TANK LOCATION	IRW	DESIGNED					SHA	CHECKED	IRW		
	2	SSD	1/05/2019	CHANGE DP LOCATIONS	SSD	DRAWN					SHA	CHECKED	IRW		
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NOMENCLATURE

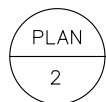
DP - DOWNPIPE
EG - EAVES GUTTER
HP - HIGH POINT
Ac - PLAN CATCHMENT AREA EXCLUDING ROOF PITCH
Q100 - 100YR 5 MINUTE ARI FLOW RATE

GUTTER SIZING

EAVE GUTTER DESIGNED TO ARI (80YR:260mm/hr)
EG1 - MIN CSA 9,400 mm²
EG2 - MIN CSA 7,600 mm²

LEGEND

TYPE
DIA
DOWNPIPE TYPE AND DIAMETER
➔ DIRECTION OF FALL

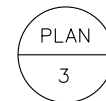
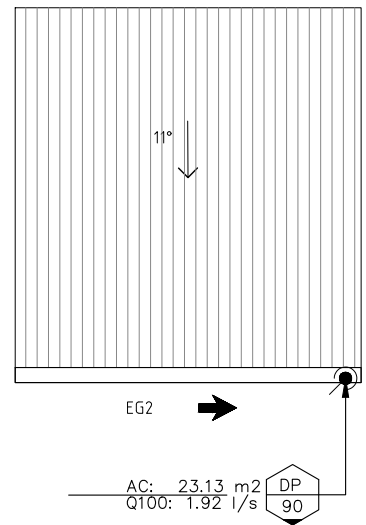


ROOF LAYOUT—MAIN DWELLING

1:100

NOTES:

- ALL INLET ENTRIES FROM THE EAVE GUTTERS SHOULD BE MIN 100X75 RECTANGULAR AND ADOPTERS FROM 100X75 RECTANGULAR DOWNPIPE TO 90 CIRCULAR DOWNPIPE TO BE INSTALL AT HIGHER LEVEL TO ALLOW CONVERSION FROM RECTANGULAR DOWNPIPE TO CIRCULAR DOWNPIPE.

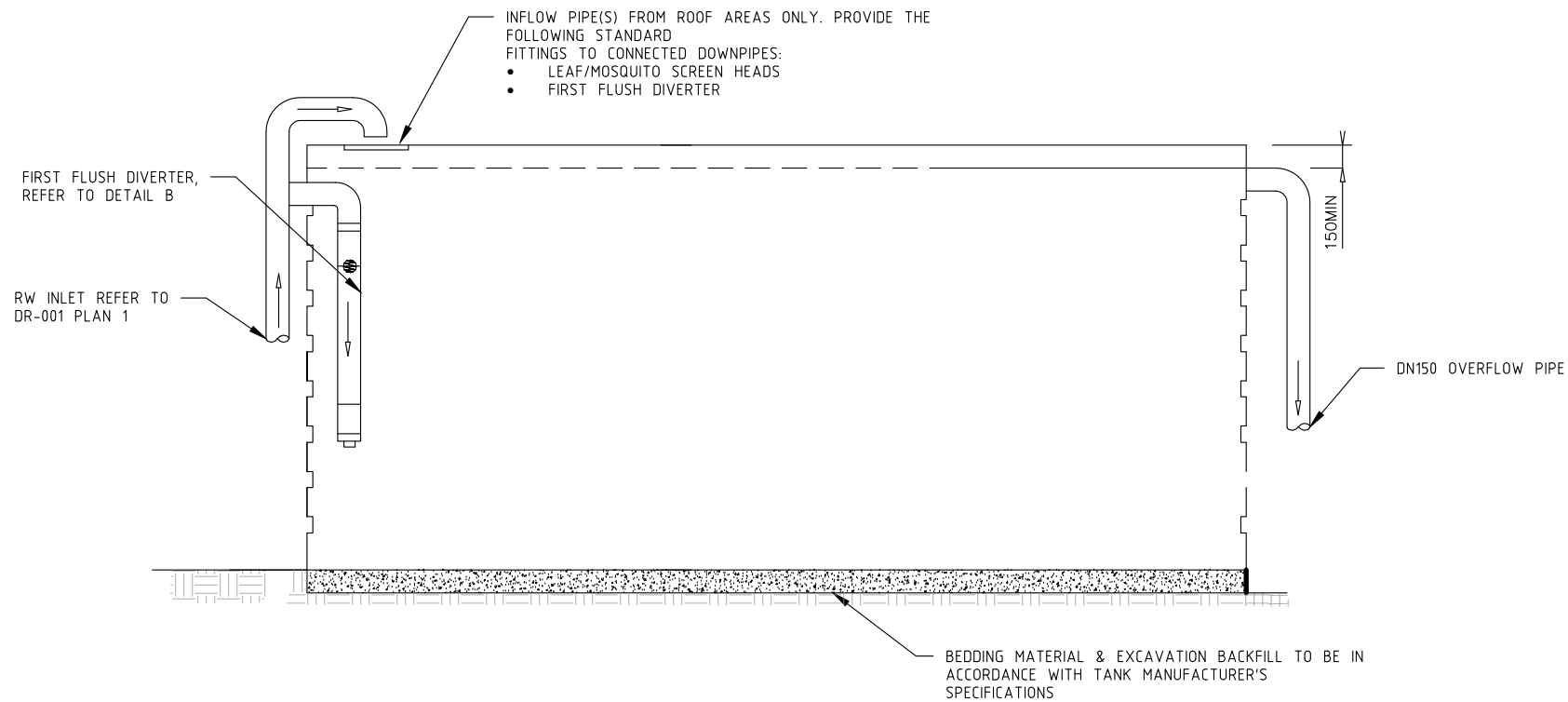


ROOF LAYOUT—GARDEN SHED

1:100

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															ROOF LAYOUT						
	2	SSD	1/05/2019	CHANGE DP LOCATIONS				SSD													Size
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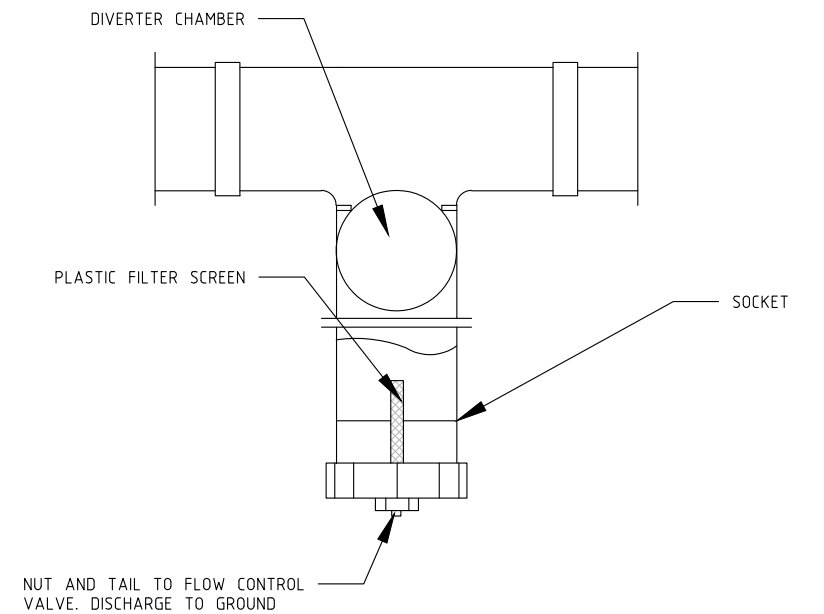
DETAIL
3

TYPICAL RAINWATER REUSE TANK ELEVATION

NOT TO SCALE

NOTES:

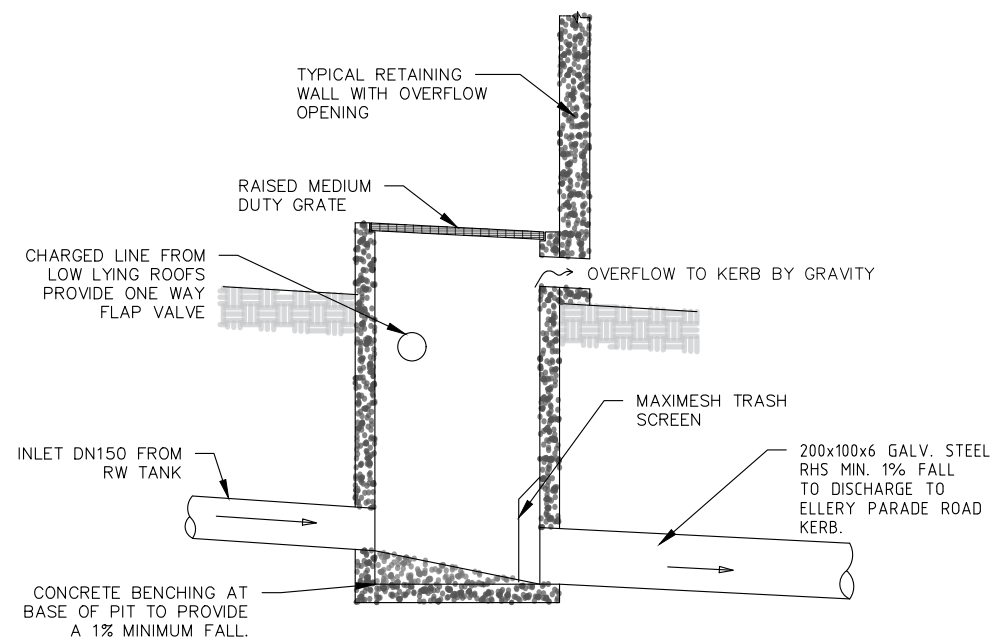
1. RAINWATER TANK TO BE AT LEAST 2000 LITRES.
2. RAINWATER TANK MUST MEET, AND BE INSTALLED IN ACCORDANCE WITH, THE REQUIREMENTS OF ALL APPLICABLE REGULATORY AUTHORITIES.



DETAIL
B

FIRST FLUSH DIVERTER

NOT TO SCALE



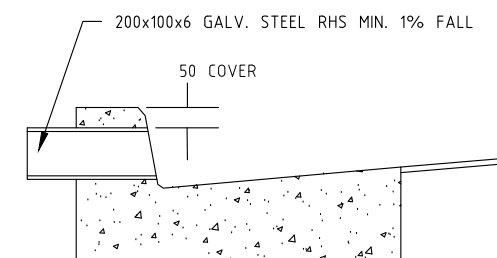
DETAIL
3

450 SQUARE MEDIUM DUTY PIT

NOT TO SCALE

NOTES:

1. 'LYSAGHT' MAXIMESH RH3030 (HOT DIPPED GALVANISED) OR EQUIVALENT.
2. MAXI MESH SCREENS MUST BE PLACED SUCH THAT THE LONG AXIS OF THE OVAL SHAPED HOLES ARE ORIENTATED HORIZONTALLY WITH THE PROTRUDING LIP ANGLED UPWARDS AND FACING TOWARDS THE OUTLET.



DETAIL
4

TYPICAL KERB CONNECTION

NOT TO SCALE

NOT FOR CONSTRUCTION

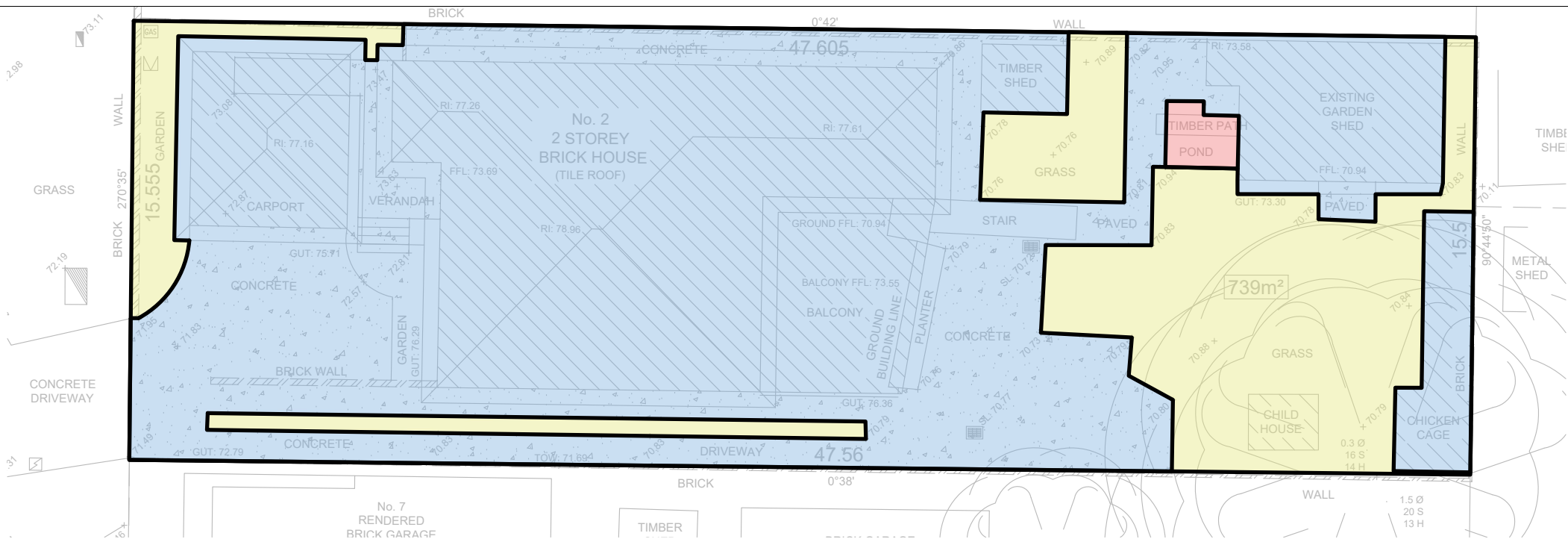
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Scale		NA	
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DESIGNED	YYA	CHECKED	SSD
DRAWN	YYA	CHECKED	SSD
APPROVED	SSD	DATE	15/04/2019



2 ELLERY PARADE, SEAFORTH			
DETAILS			
Size	Status	Org No.	Rev.
A3	APPROVED FOR DA SUBMISSION	DR-003	1



PLAN 5
SITE AREAS – EXISTING
1: 200

EXISTING

SITE AREA:	739.00 m ²
PERVIOUS:	168.70 m ² (22.83%)
IMPERVIOUS:	564.86 m ² (76.43%)
POND:	5.44 m ² (0.74%)

LEGEND

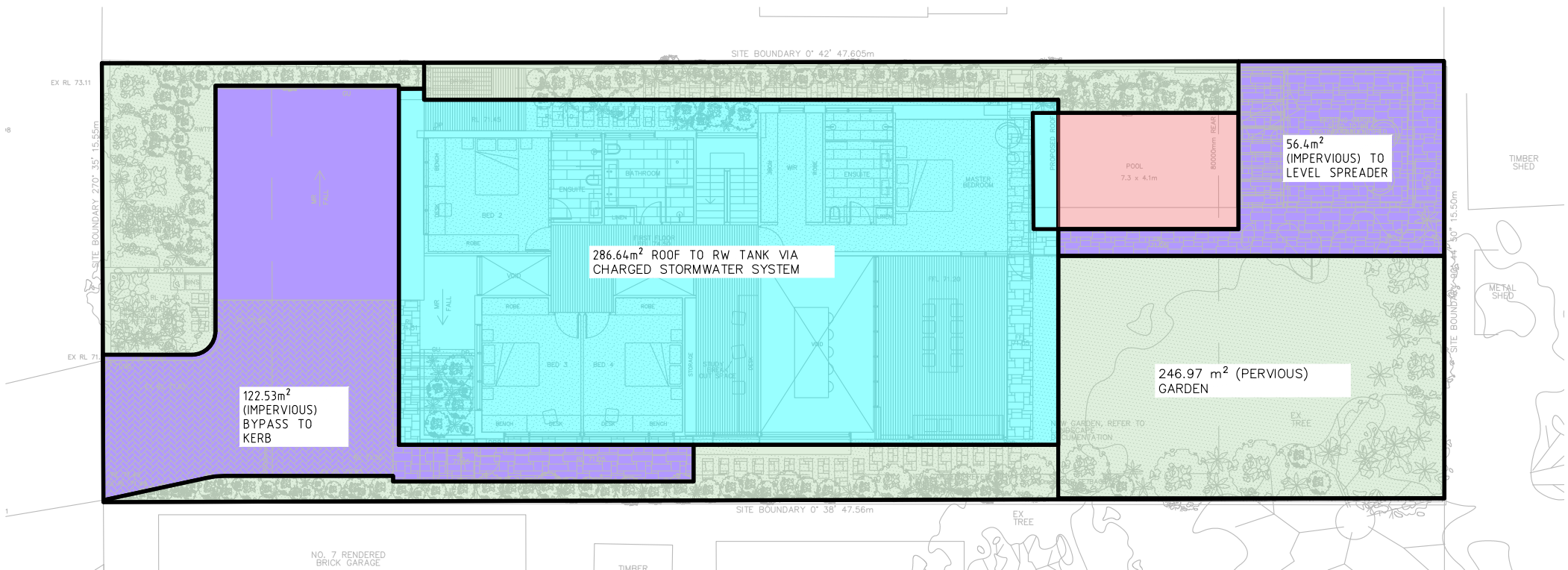
- EXISTING PERVIOUS
- EXISTING IMPERVIOUS
- PROPOSED PERVIOUS
- PROPOSED IMPERVIOUS BYPASS RAINWATER TANK
- PROPOSED IMPERVIOUS TO RAINWATER TANK
- POND AND POOL

PROPOSED

SITE AREA:	739.00 m ²
PERVIOUS :	246.97 m ² (33.4 %)
IMPERVIOUS TO RW TANK:	286.64 m ² (38.8 %)
IMPERVIOUS BYPASS RW TANK:	178.93 m ² (24.2 %)
POOL:	29.93 m ² (4.1 %)

OSD REQUIREMENT:

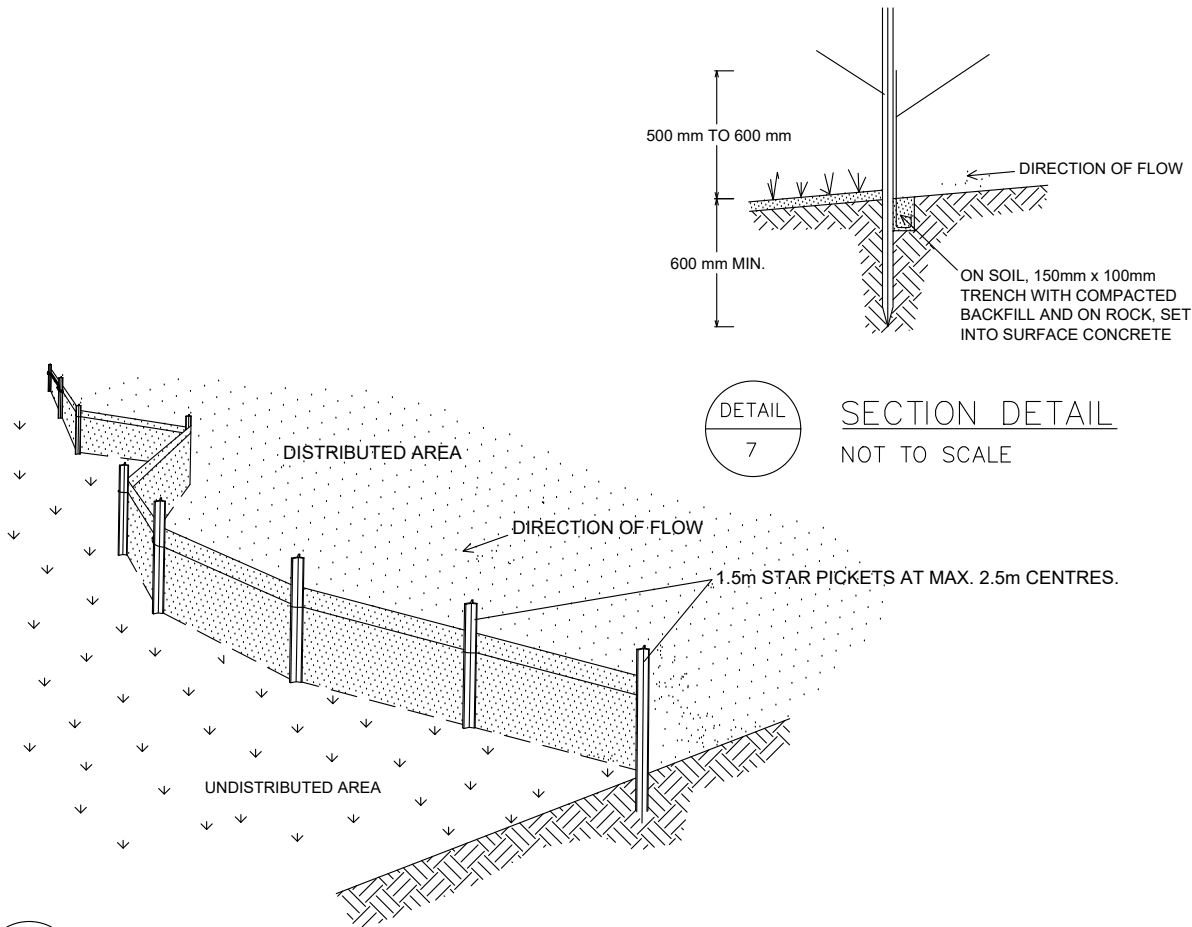
NET IMPERVIOUS DECREASED BY 99.21m², NO ADDITION ADVERSE IMPACTS ON ADJOINING AND DOWNSTREAM PROPERTIES ARE EXPECTED. AS A RESULT OF THE POST-DEVELOPMENT FLOWS GENERATED BY THE SITE OSD IS NOT RECOMMENDED



PLAN 4
SITE AREAS – PROPOSED
1: 200

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						DESIGNED	YYA	CHECKED	SSD			SITE AREAS			
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						APPROVED	SSD	DATE	15/04/2019						



DETAIL
7

SECTION DETAIL

NOT TO SCALE

DETAIL
6

TYPICAL SEDIMENT FENCE

NOT TO SCALE

GENERAL REQUIREMENTS

THE FOLLOWING EROSION AND SEDIMENT CONTROL PLAN (ESCP) HAS BEEN DEVELOPED IN GENERAL ACCORDANCE WITH LANDCOM (2004) – MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION, OTHERWISE KNOWN AS "THE BLUE BOOK". THIS PLAN SHOULD ALSO BE READ IN CONJUNCTION WITH MANAGING URBAN STORMWATER – SOILS AND CONSTRUCTION (VOLUME 2A INSTALLATION OF SERVICES).

SITE ESTABLISHMENT

PRIOR TO THE COMMENCEMENT OF EARTHWORKS ON THE SITE THE FOLLOWING SHALL BE UNDERTAKEN AS A MINIMUM:

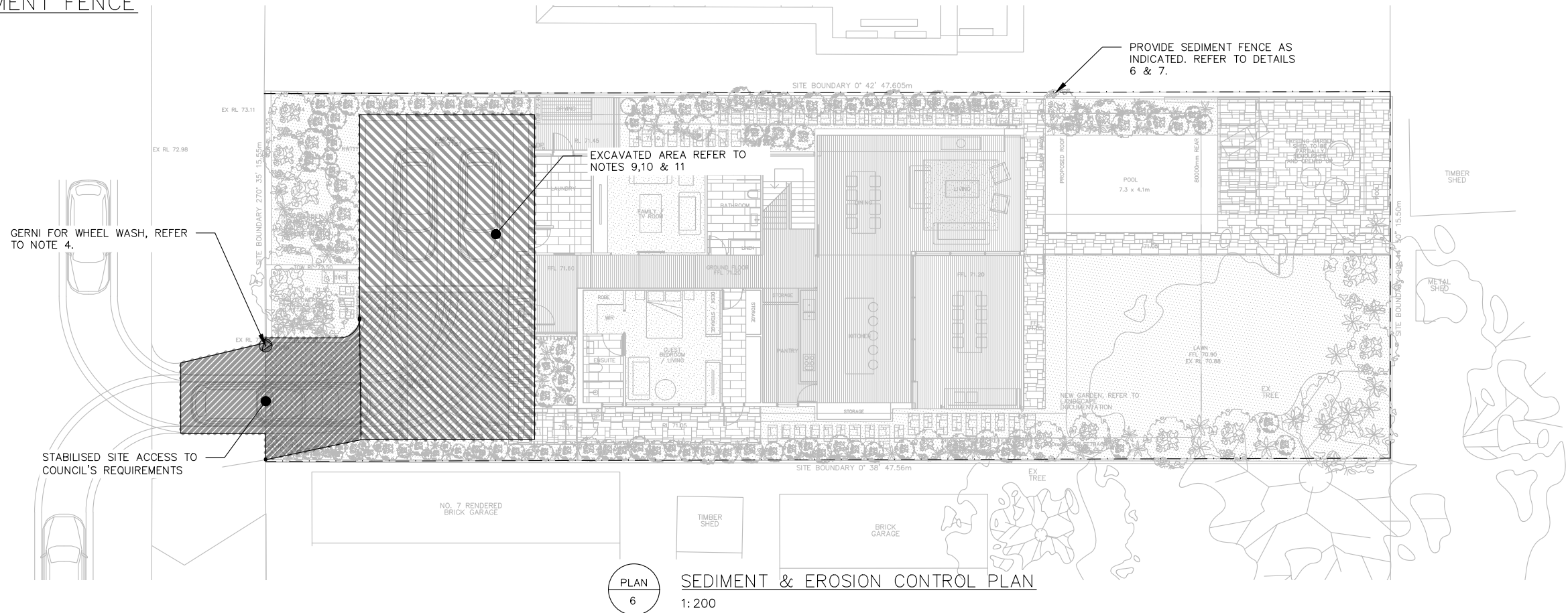
1. ERECT SAFETY FENCING WITH SIGNAGE CLEARLY INDICATING THAT THE SITE IS A CONSTRUCTION ZONE AND ACCESS IS RESTRICTED AS DEEMED NECESSARY.
2. ERECT CLEARLY VISIBLE BARRIER FENCING AT LOCATIONS SHOWN OR IF NOT SHOWN AT THE DISCRETION OF THE SITE SUPERINTENDENT TO ENSURE TRAFFIC IS CONTROLLED AND TO PROHIBIT UNNECESSARY SITE DISTURBANCE.
3. WHERE REQUIRED AT THE DISCRETION OF THE SITE SUPERINTENDENT, INSTALL STABILISED SITE ACCESS AT SITE ACCESS POINT TO PREVENT CONSTRUCTION EQUIPMENT FROM CARRYING SEDIMENT OFF THE SITE ONTO SURROUNDING ROADS.
4. PROVIDE GERNI PRESSURE CLEANER AT SITE EXIT POINT FOR TYRE WASH DOWN AT THE DISCRETION OF THE SITE SUPERINTENDENT.
5. INSTALL SEDIMENT AND EROSION CONTROL DEVICES IN ACCORDANCE WITH THE CONSTRUCTION DETAILS SPECIFIED IN THIS DRAWING SET AND/OR THE REQUIREMENTS OF THE 'BLUE BOOK'.

CONSTRUCTION

6. USE SANDBAGS, HAY BALES AND/OR GRAVEL FILLED GEOTEXTILE SOCKS TO FILTER AND CONVEY STORMWATER RUNOFF WITHIN THE SITE.
7. ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILISED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
8. INLET FILTERS SHALL BE INSTALLED WHERE SHOWN TO PREVENT WATER FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE. IF THE LOCATION OF INLET FILTERS ARE NOT SHOWN ON THE PLAN THEIR LOCATION SHALL BE AT THE DISCRETION OF THE SUPERINTENDENT.
9. STAGE WORK AND PROGRAMMING OF CONSTRUCTION ACTIVITIES TO MINIMISE THE EXTENT AND DURATION OF OPEN EXCAVATION. AVOID OPENING TRENCHES WHENEVER THE RISKS OF STORMS ARE HIGH.
10. DIVERT SURFACE WATER AWAY FROM EXCAVATION AREAS WITH SANDBAGS OR EQUIVALENT.
11. FOR DEWATERING OF EXCAVATION AREAS SET UP TEMPORARY DEWATERING PUMP OUT SYSTEM AS REQUIRED AND ENSURE FLOCCULATION IS USED IF WATER IS NOT CLEAR (i.e. SEDIMENT > 50mg/L). FOR RATES AND AGENTS REFER APPENDIX E NSW DEPARTMENT OF HOUSING "MANAGING URBAN STORMWATER SOILS & CONSTRUCTION". DISCHARGE SHALL BE DIRECTLY TO COUNCIL'S PIPED DRAINAGE SYSTEM. DO NOT DISCHARGE TO THE KERB.
12. STOCKPILES SHALL BE LOCATED NO CLOSER THAN 2m (PREFERABLY 5m) FROM CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS. PROTECT STOCKPILES FROM EROSION BY RAIN AND SURFACE FLOWS.
13. ENSURE CHEMICAL AND FUELS ARE STORED WITHIN BUNDED AREAS AND ELEVATED ABOVE POTENTIAL FLOW PATHS.

MAINTENANCE

14. ALL DEDICATED SEDIMENT STORAGE ZONES WITHIN TRAPS SHALL BE CLEANED WHEN A MAXIMUM OF 60% FULL OF SOLID MATERIALS AND DISPOSED OF IN A MANNER THAT PREVENTS FURTHER POLLUTION OF THE SITE.
15. TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES WILL BE RETAINED UNTIL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS STABILISED.
16. THE CONTRACTOR SHALL INSPECT THE SITE AT LEAST WEEKLY AND AFTER ANY STORM EVENT AND WILL:
 - ENSURE THAT DRAINS OPERATE PROPERLY AND TO EFFECT ANY NECESSARY REPAIRS;
 - REMOVE SPILLED SAND OR OTHER MATERIALS FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS (ESPECIALLY DRAINS AND TEMPORARY FLOW PATHS)
 - REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS WITHIN THE STRUCTURE;
 - CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS REQUIRED;
 - MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS STABILISED; AND
 - REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL STRUCTURES AS THE LAST ACTIVITY IN THE CONSTRUCTION PROGRAM.



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0 YYA 03/04/2019 APPROVED FOR DA SUBMISSION SSD					DO NOT SCALE. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED								Size	A3	Status	APPROVED FOR DA SUBMISSION	Drg No.	SD-001	Rev.	0
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