

25 ALLEYNE AVENUE, NORTH NARRABEEN

STORMWATER MANAGEMENT PLAN

DRAWING INDEX:





DR-000	LEGEND
DR-001	PIPE LAYOUTS
DR-002	ROOF LAYOUT & DETAILS
DR-003	RWT & OSD TANKS DETAILS
DR-004	SITE AREAS

NOTES:


1. ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.
2. SITE LAYOUT BASED ON ARCHITECTURAL DESIGN BY RAMA ARCHITECTS (OCTOBER 2021).
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.

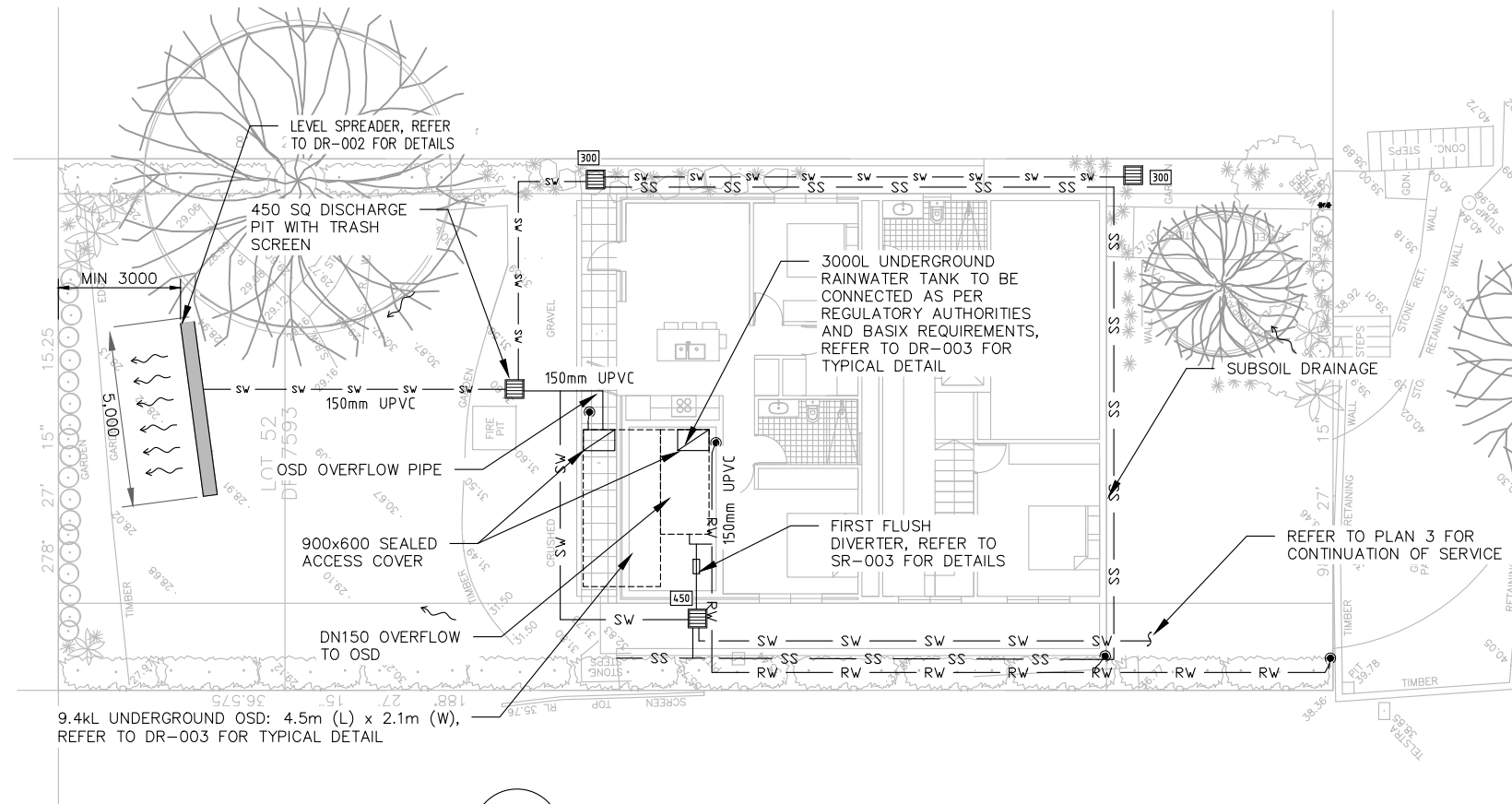
LEGEND:

Legend:

-  DOWNPIPE
-  STORMWATER PIPE
-  RAINWATER PIPE
-  DRAINAGE PIT

NOT FOR CONSTRUCTION

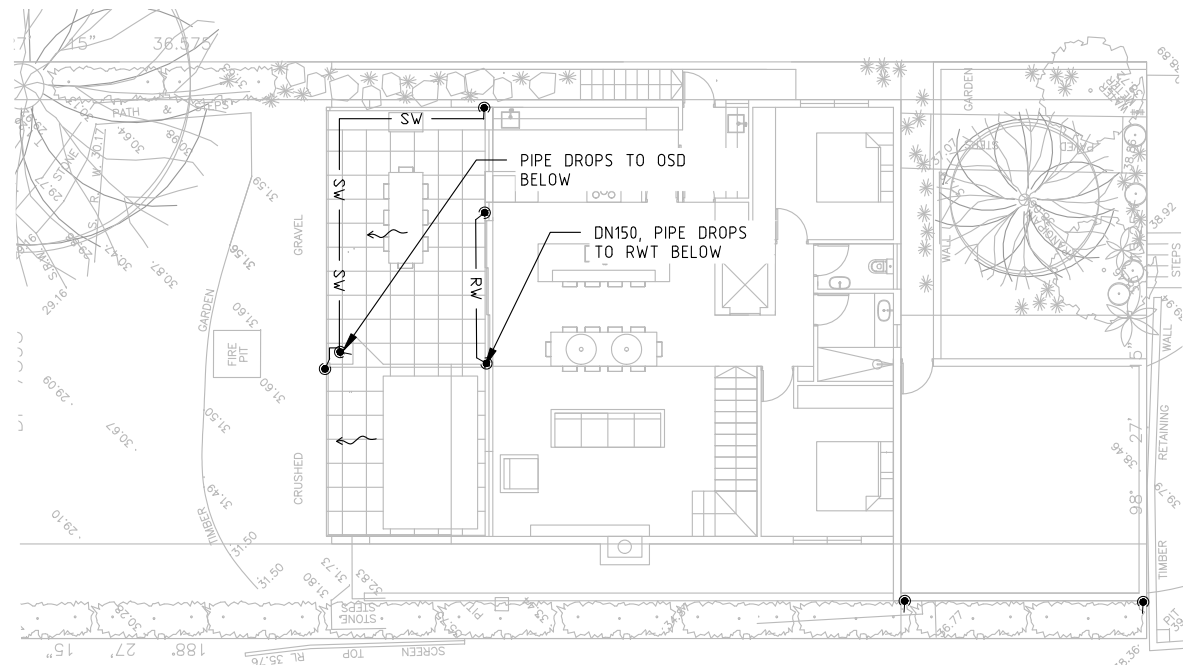
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PLAN
1

PIPE LAYOUT - LOWER GROUND

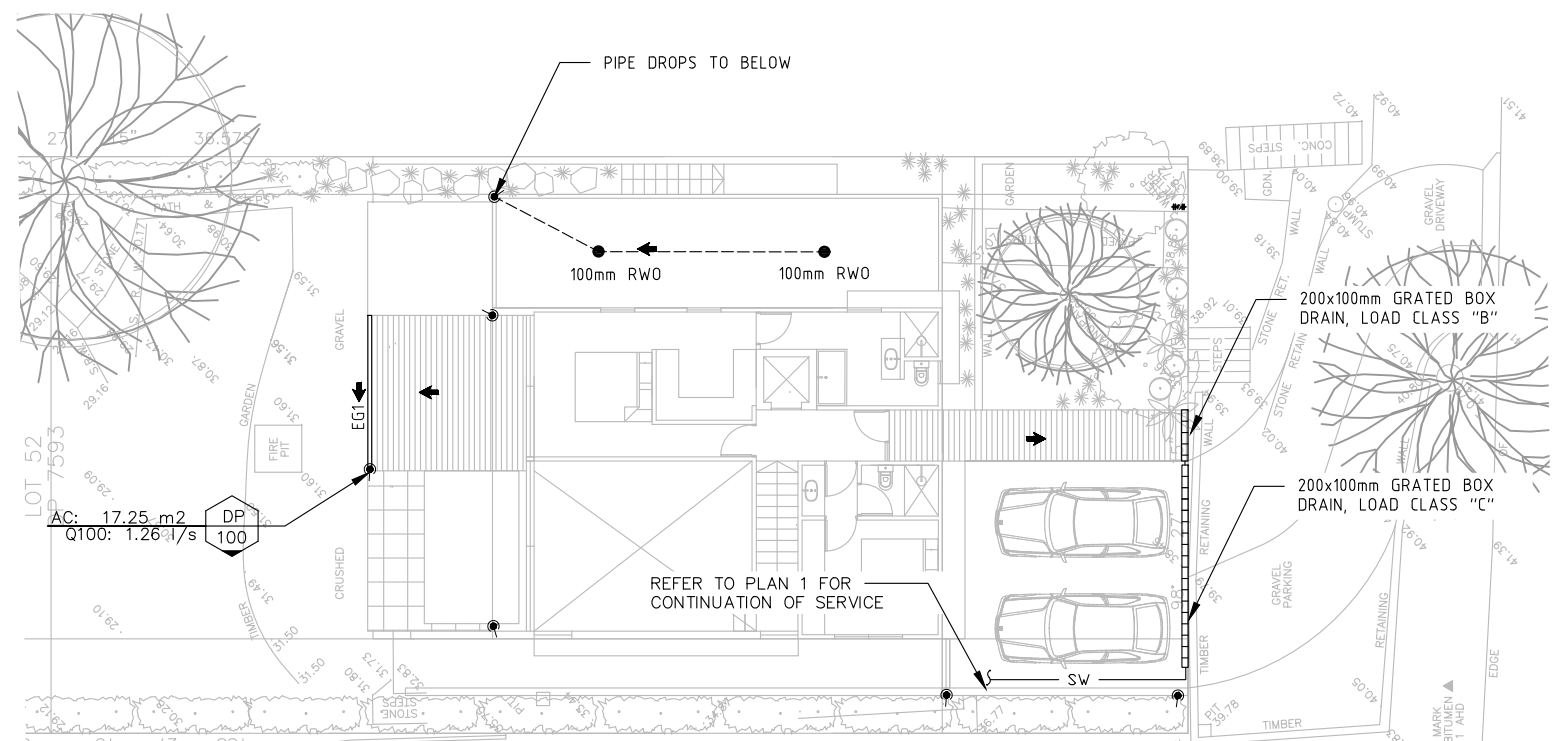
1:200



PLAN
2

PIPE LAYOUT - GROUND FLOOR

1:200




PLAN
3

PIPE LAYOUT - FIRST FLOOR

1:200

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REVISIONS						AS NOTED					 Stellen Consulting ABN 61 149 095 189	PIPE LAYOUTS												
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NOMENCLATURE
DP - DOWNPIPE
RWH - RAINWATER HEAD
EG - EAVES GUTTER
Ac - PLAN CATCHMENT AREA EXCLUDING ROOF PITCH
Q100 - 100YR 5 MINUTE ARI FLOW RATE

GUTTER SIZING
DESIGN Q100 ARI (100YR:261mm/hr)
EG1 - MIN CSA 12,100 mm², REFER TO TABLE 1
EG2 - MIN CSA 6,600 mm²

LEGEND
DOWNPIPE TYPE AND DIAMETER
DIRECTION OF FALL

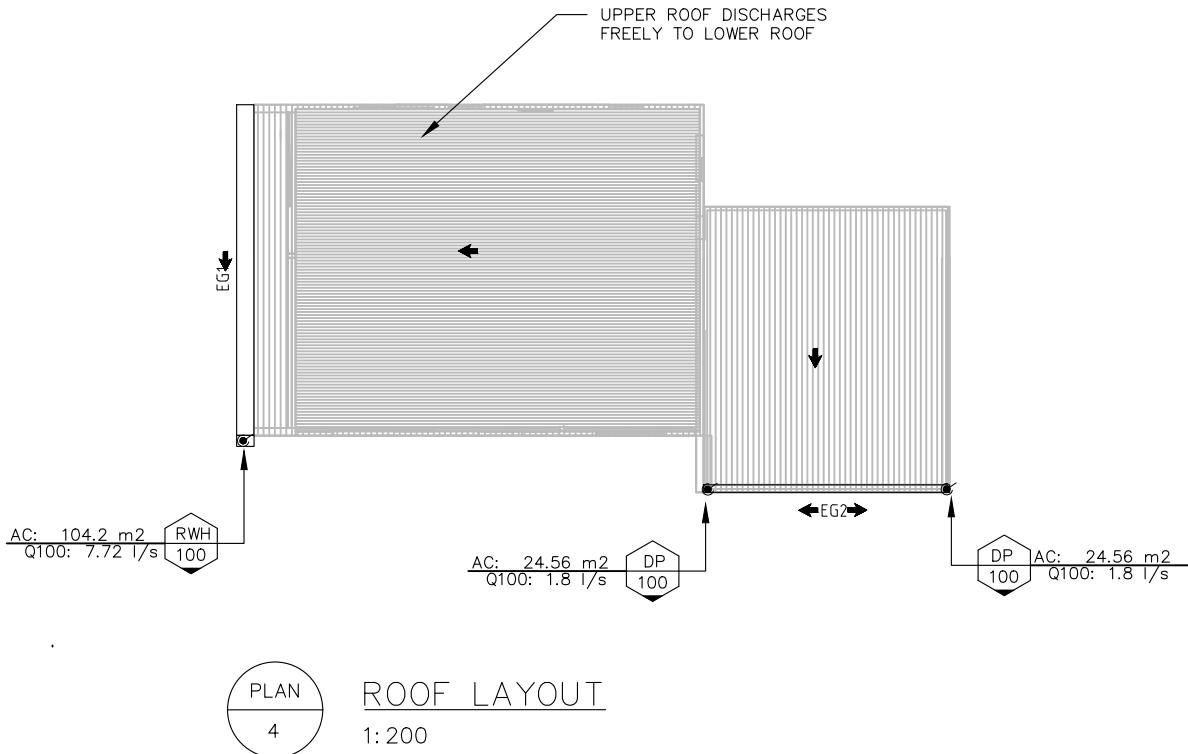
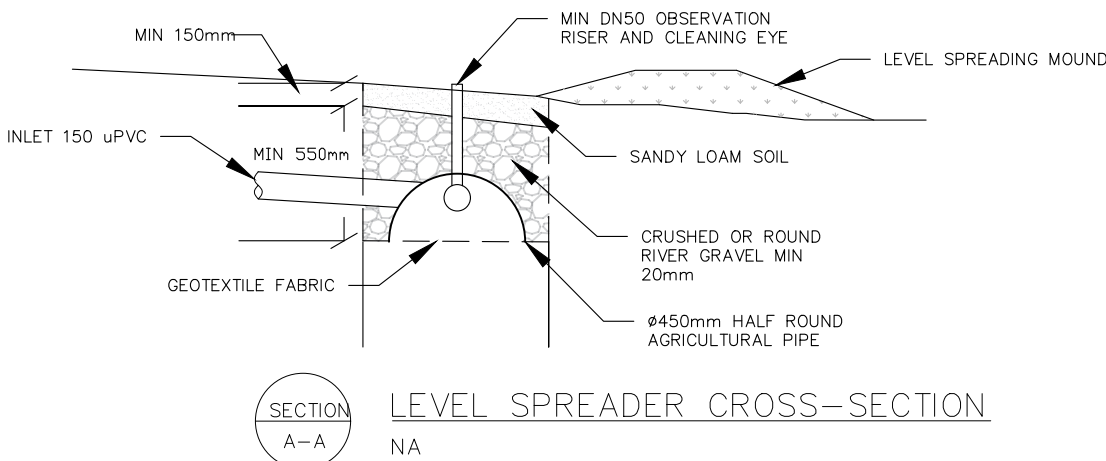
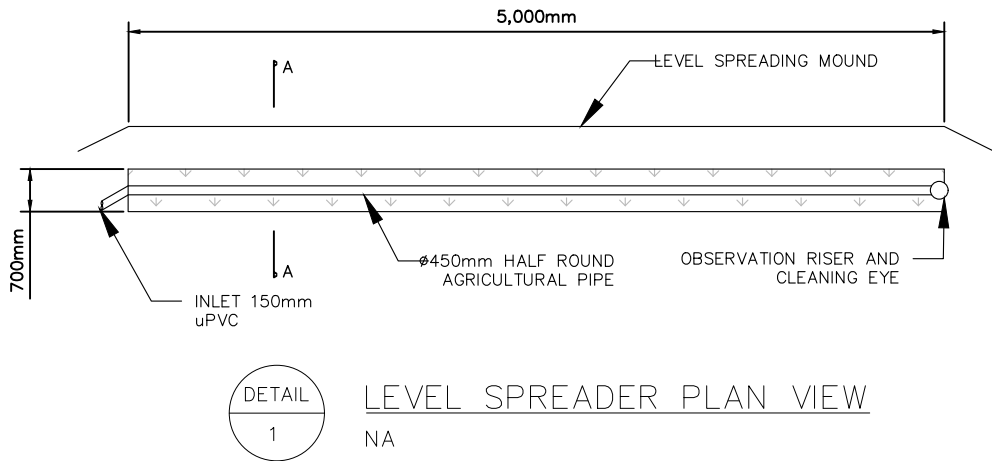



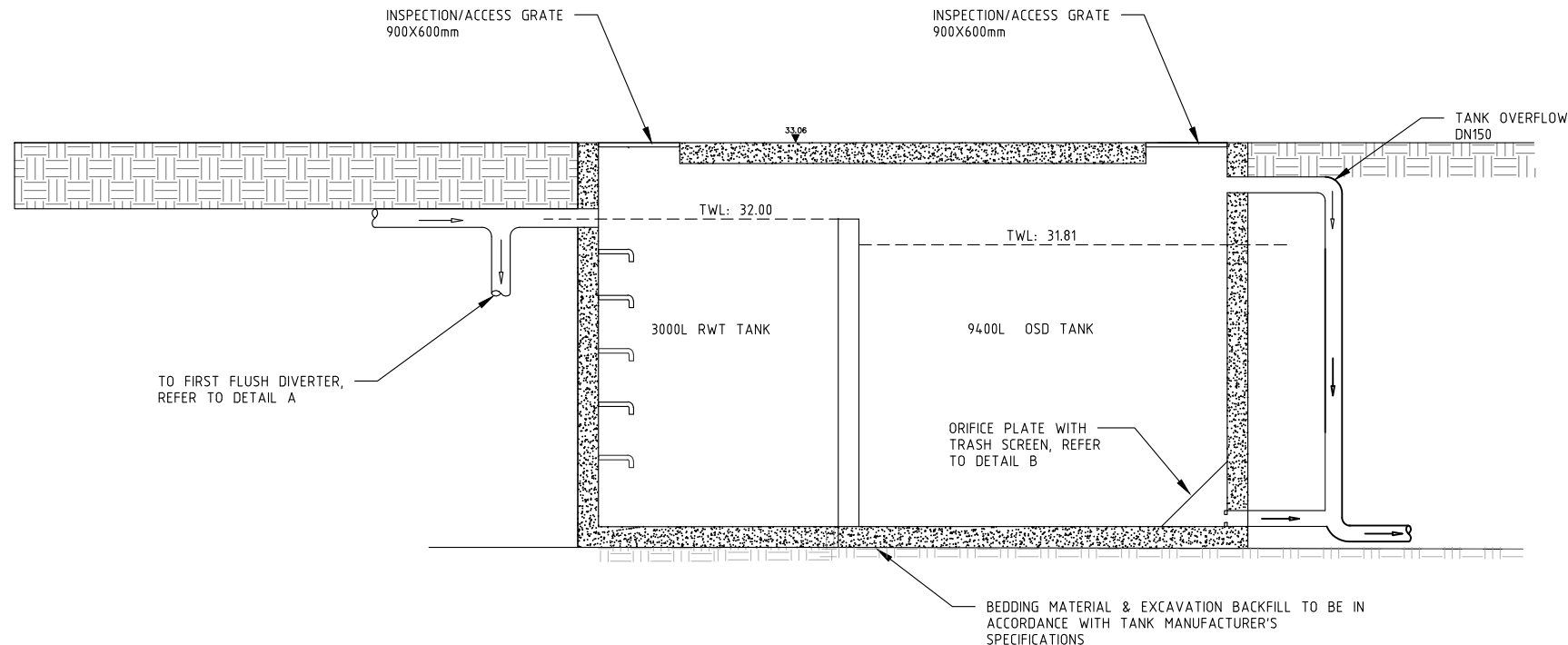
TABLE 1 – RAINWATER HEAD DESIGN
(100 YEAR ARI, 1:200 FALL)

ROOF SERVICE AREA	105.4m ²
DOWNPIPE DIAMETER	100mm
GUTTER AREA (MIN)	12100mm ²
LENGTH OF RAINWATER HEAD	185mm
RAINWATER HEAD DEPTH	225mm
RAINWATER HEAD WIDTH (MIN)	200mm



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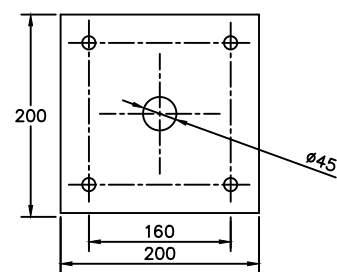


DETAIL
2

RAINWATER REUSE AND ON SITE DETENTION ELEVATION

NOT TO SCALE
NOTES:

1. RAINWATER TANK TO BE AT LEAST 3000 LITRES
2. THE APPLICANT MUST CONFIGURE THE RAINWATER TANK TO COLLECT RAINWATER RUNOFF FROM AT LEAST 150m² ROOF AREA.
3. RAINWATER TANK MUST MEET, AND BE INSTALLED IN ACCORDANCE WITH, THE REQUIREMENTS OF ALL APPLICABLE REGULATORY AUTHORITIES.
4. THE APPLICANT MUST CONNECT THE RAINWATER TANK TO AT LEAST ONE OUTDOOR TAP IN THE DEVELOPMENT

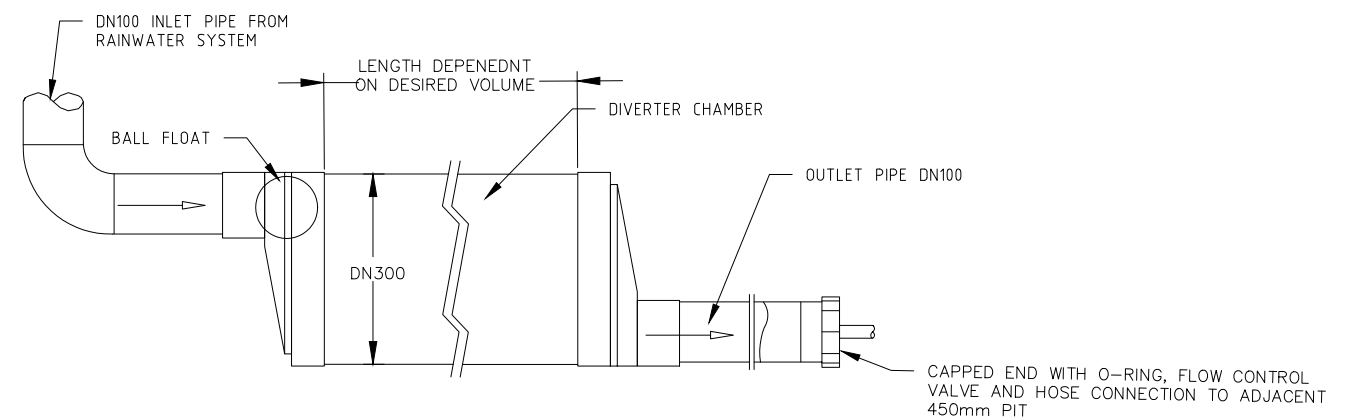
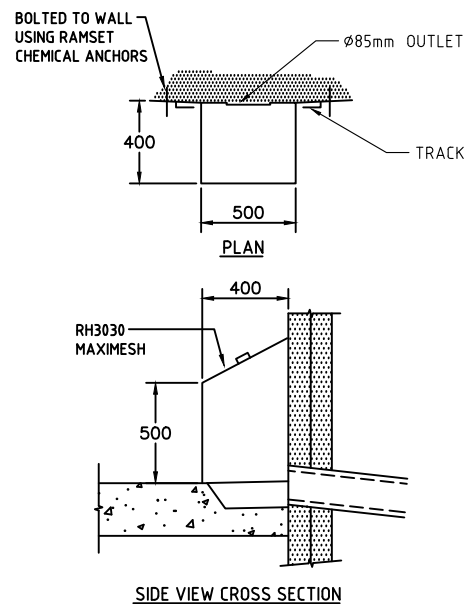


3mm THICK STAINLESS STEEL SECURELY
FIXED TO OSD WALL WITH 4 OFF 12mm
DYNA BOLTS

DETAIL
A

ORIFICE PLATE DETAIL

NOT TO SCALE



DETAIL
B


IN GROUND FIRST FLUSH DIVERTER

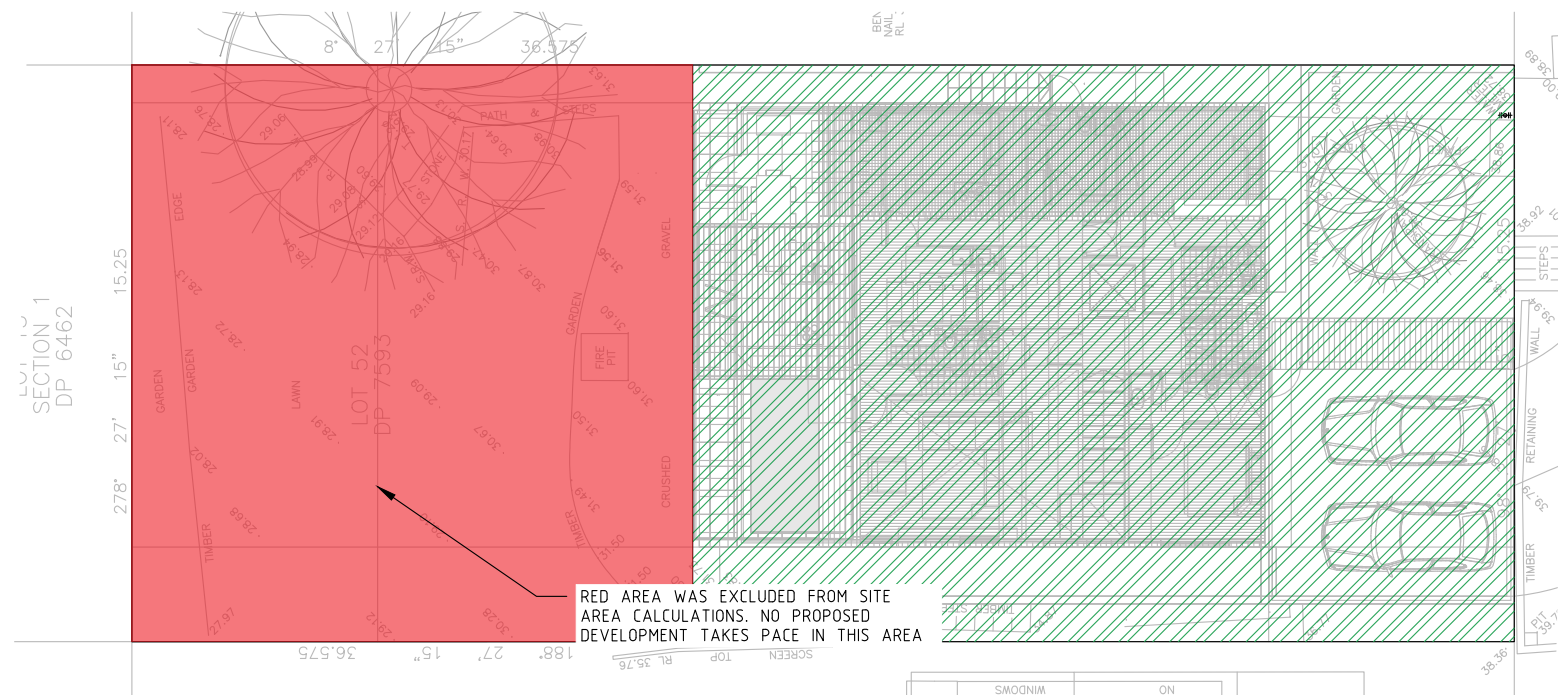
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NOTES:

1. INSTALL WITH MINIMUM 5 DEGREE SLOPE.
2. DIVERTER VOLUME TO BE MIN 52.1 LITRES (720mm of DN 300).

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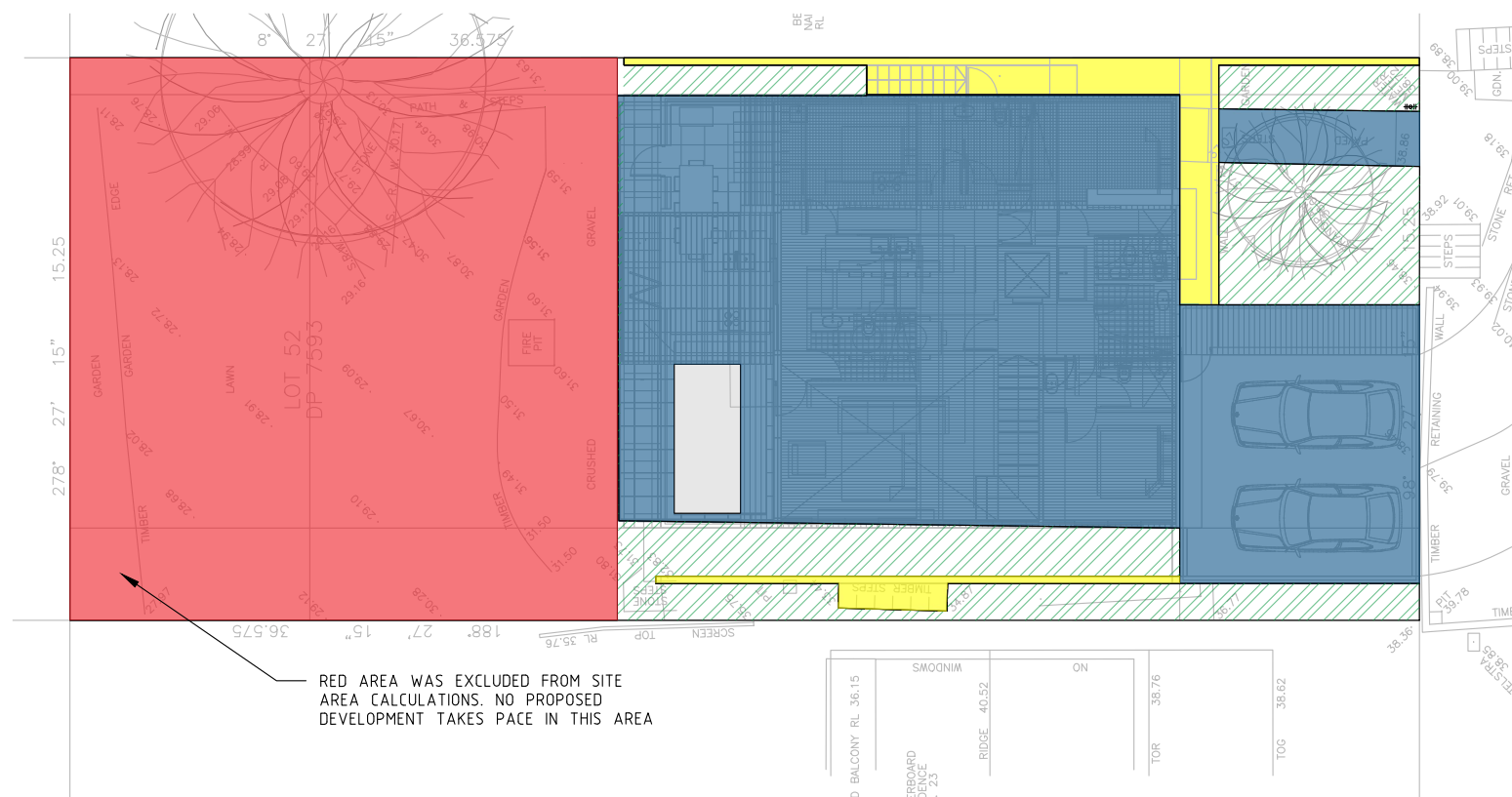
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PLAN
5

SITE AREAS – EXISTING

1:200



PLAN
6

SITE AREAS – PROPOSED

1:200

EXISTING

TOTAL SITE AREA: 331.6m²
PERVIOUS: 331.6m² (100%)

LEGEND

- IMPERVIOUS TO OSD
- IMPERVIOUS - BYPASS
- PERVIOUS - BYPASS

PROPOSED


TOTAL SITE AREA: 331.6m²

DRAINING TO OSD:
IMPERVIOUS: 226.6m² (68.3%)

OSD BYPASS:
PERVIOUS: 82.20m² (24.8%)
IMPERVIOUS: 22.80m² (6.9%)

TABLE 1				
PRE AND POST DEVELOPMENT FLOWS				
ARI	PREDEVELOPED PSD (l/s)	POST DEVELOPED FLOWS (l/s)		
		PIPED	OVERLAND	TOTAL
5 YEAR	4	4	0	4
20 YEAR	8	6	0	6
100 YEAR	12	8	0	8

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