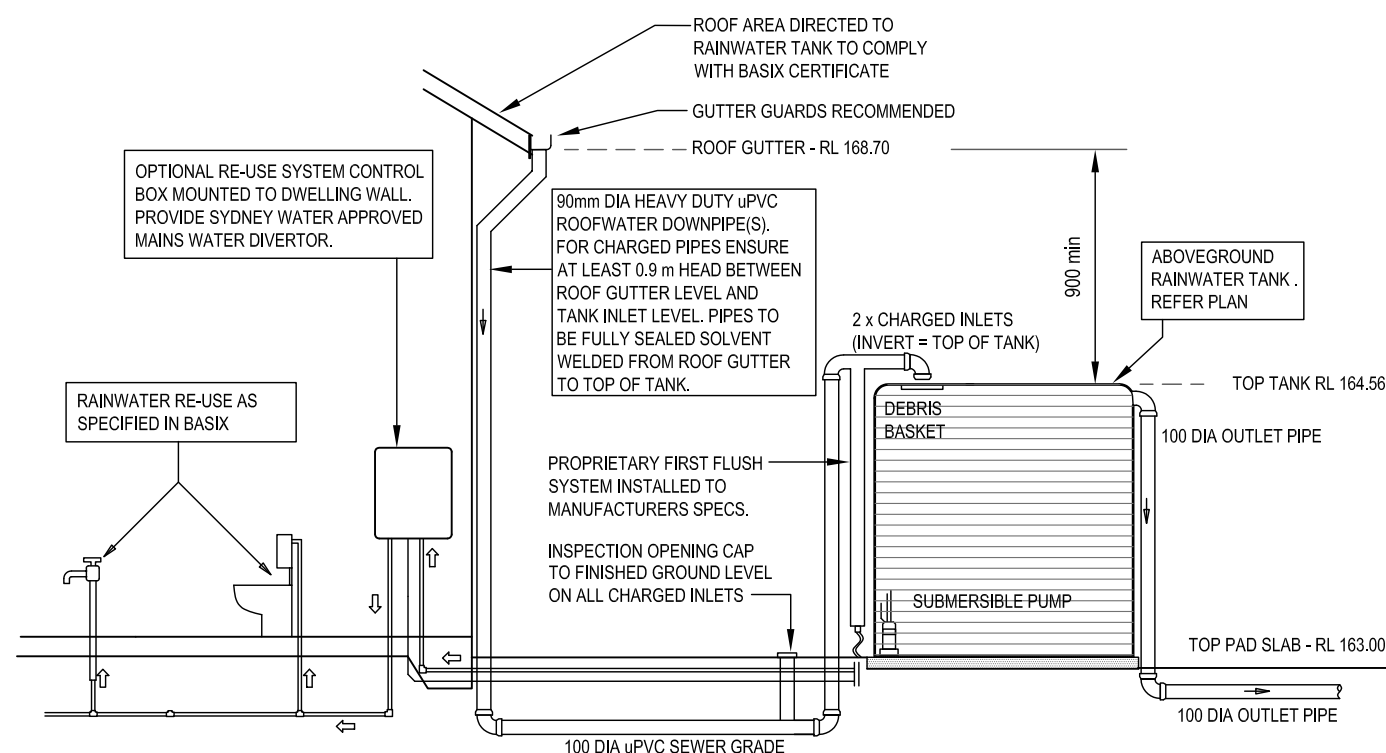


STORMWATER MANAGEMENT PLAN

PROPOSED SINGLE DWELLING DEVELOPMENT

Lot 18, No 19 MALBARA CRESCENT, FRENCHS FOREST



TYPICAL DETAIL - RAINWATER RE-USE TANK

LEGEND

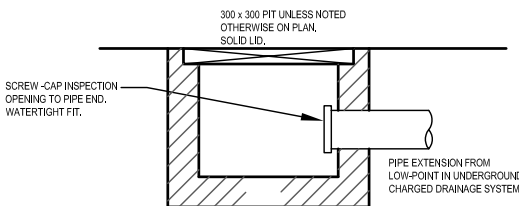
	GRATED INLET PIT
4.50x4.50	450 SQUARE INTERNAL
GRT 75.54	GRATE LEVEL = 75.54
IL 75.12	INVERT LEVEL = RL 75.12
	PROPOSED DOWNPIPE No 5.
	90mm dia. or 100mm x 50mm min.
	EXISTING TREE
	GRATED TRENCH DRAIN
	PROPOSED ROOF GUTTER FALL
	PROPOSED DOWNPIPE SPREADER
	STORMWATER PIPE 100mm dia min UNO
	SUBSOIL PIPE
	INSPECTION OPENING
	CONNECTION No 02, REFER SHEET D3 FOR CONTINUATION
	RAINWATER HEAD
	SUBSOIL CLEANOUT
	BALCONY OUTLET

GENERAL NOTES

1. FINAL LOCATION OF NEW DOWNPIPES TO BE DETERMINED BY BUILDER/ARCHITECT AT TIME OF CONSTRUCTION.
2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTS AND OTHER CONSULTANTS DRAWINGS. ANY DISCREPANCIES TO BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH WORK.
3. ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH AS/NZS 3500.3:2003 STORMWATER DRAINAGE, BCA AND LOCAL COUNCIL POLICY/CONSENT/REQUIREMENTS.
4. ALL DIMENSIONS AND LEVELS TO BE VERIFIED BY BUILDER ON-SITE PRIOR TO COMMENCEMENT OF WORKS. THESE DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS NOR TO BE USED FOR SETOUT PURPOSES.
5. ALL SURVEY INFORMATION AND PROPOSED BUILDING AND FINISHED SURFACE LEVELS SHOWN IN THESE DRAWINGS ARE BASED ON LEVELS OBTAINED FROM DRAWINGS BY OTHERS.
6. THESE DRAWINGS DEPICT THE DESIGN OF SURFACE STORMWATER RUNOFF DRAINAGE SYSTEMS ONLY AND DO NOT DEPICT ROOF DRAINAGE OR SUBSOIL DRAINAGE SYSTEMS UNLESS NOTED OTHERWISE. THE DESIGN OF ROOF AND SUBSOIL DRAINAGE SYSTEMS IS THE RESPONSIBILITY OF OTHERS.
7. ALL STORMWATER DRAINAGE PIPES ARE TO BE 100mm DIAMETER uPVC AT MINIMUM 1% GRADE UNLESS NOTED OTHERWISE.
8. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND LEVEL ALL EXISTING SERVICES OR OTHER STRUCTURES WHICH MAY AFFECT/BE AFFECTED BY THIS DESIGN PRIOR TO COMMENCEMENT OF WORKS.
9. ALL PITS WITHIN DRIVEWAYS TO BE 150mm THICK CONCRETE OR EQUAL.
10. THIS PLAN IS THE PROPERTY OF STORMCIVIL AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION FROM STORMCIVIL .

MINIMUM PIPE COVER (FROM FINISHED SURFACE TO TOP OF PIPE)		
LOCATION	MINIMUM COVER (mm)	
	CAST/DUCTILE IRON GAL. STEEL	OTHER AUTHORISED PRODUCTS (*)
1. NOT SUBJECT TO VEHICULAR LOADING: A. WITHOUT PAVEMENT: I. FOR SINGLE DWELLINGS - II. OTHER THAN SINGLE DWELLINGS - B. WITH PAVEMENT OF BRICK/UNREINFORCED CONCRETE -	0 0 0 (*)	100 300 50 (*)
2. SUBJECT TO VEHICULAR LOADING: A. OTHER THAN ROADS: I. WITHOUT PAVEMENT - II. WITH PAVEMENT OF: - REINF. CONC. FOR HEAVY VEHICLES - - BRICK/UNREINF. CONC LIGHT VEHICLES - B. ROADS: I. SEALED II. UNSEALED	300 0 (*) (#) 0 (*) (#) 300 300 300	450 100 (*) (#) 75 (*) (#) 500 (#) 500 (#) 500 (#)
3. SUBJECT TO CONSTRUCTION VEHICLES OR IN EMBANKMENT CONDITIONS	300	500 (#)

(*) INCLUDES OVERLAY ABOVE THE TOP OF THE PIPE OF NOT LESS THAN 50mm THICK
(*) BELOW THE UNDERSIDE OF THE PAVEMENT
(#) SUBJECT TO COMPLIANCE WITH AS1762, AS2033, ASINZS 2596:1, AS3725 OR AS 4060



TYPICAL DETAIL - CHARGED SYSTEM CLEANOUT PIT

ISS	DATE	AMENDMENT
B	01.05.2019	DPS TO RWT - DA ISSUE
A	30.04.2019	DA ISSUE

ARCHITECT/BUILDER	ARCH. REF : 29913405
CLARENDON HOMES	
OWNER	Mr C DOS SANTOS & Ms GARRICK
LGA	NORTHERN BEACHES (WARRINGAH)

StormCivil

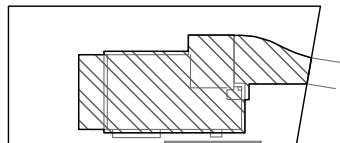
Consulting Engineers
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mark@stormcivil.com.au

Pty Ltd. ABN 71 612 151 461

DWG TITLE	LEGEND, NOTES, DETAILS, CALCULATIONS
PROJECT TITLE	PROPOSED SINGLE DWELLING DEVELOPMENT Lot 18, No 19 MALBARA CRESCENT, FRENCHS FOREST

StormCivil		APPROVED ON BEHALF OF STORMCIVIL PTY LTD	
JOB No	DWG No	No IN SET	ISSUE
303203	D1	2	B



PROPOSED IMPERVIOUS AREA = 288 m²

IMPERVIOUS AREAS DIAGRAM

SCALE 1:1000 at A3

STORMWATER DETENTION (OSD) CALCULATIONS

SITE AREA: 725 m²
DETENTION REQUIREMENT
CODE : WARRINGAH COUNCIL OSD TECHNICAL SPECIFICATION
PROPOSED IMPERVIOUS AREA = 288 m² (REFER DIAGRAM)
= 288 / 725 = 39.7%
< 40%

OSD NOT REQUIRED FOR IMPERVIOUS AREA < 40%
(SECTION 2.1)

CONCLUSION : OSD NOT REQUIRED.

TREE PRESERVATION NOTE

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PRIOR APPROVAL REQUIRED FROM COUNCIL WITH RESPECT TO POTENTIAL IMPACT ON TREES FOR ANY WORKS SHOWN ON THIS DRAWING PRIOR TO THE COMMENCEMENT OF THOSE WORKS.

100 DIA ROOF ONLY.
CHARGED LINE SEWER GRADE
uPVC SOLVENT WELDED.
NOTE CHARGED SYSTEM TO BE FULLY SEALED FROM ROOF GUTTER LEVEL TO RAIN TANK INLET.
ROOF GUTTER RL = 168.70
RAIN TANK INLET RL = 164.56
DIFFERENTIAL HEAD = 4.14 m
SUFFICIENT TO DRIVE SYSTEM.

GRATED TRENCH DRAIN.
200 WIDE CHAMBER.
150 DIA OUTLET.
DRAIN TO BE SET 0.5m FROM GARAGE FACE WITH DOWN-GRADE FROM GARAGE TO DRAIN.
FINISHED DRIVEWAY SURFACE TO BE GRADED SO THAT DRIVEWAY RUNOFF IS DIRECTED DOWN SIDE PASSAGEWAY AND NOT INTO GARAGE SHOULD GRATED TRENCH DRAIN BLOCK.

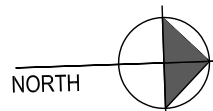
PIT P1 : 450 x 450
GRATE : RL 163.31
INVERT : RL 162.86
150 DIA OUTLET

PIT P2 : 450 x 450
GRATE : RL 162.20
INVERT : RL 161.90
150 DIA OUTLET

CONNECT TO EXISTING STORMWATER DRAINAGE EASEMENT PIPE.
UTILISE EXISTING HOUSE CONNECTION POINT IF PRACTICABLE.
NOTE : PLUMBER REPORT (RD PLUMBING) FOUND 150 DIA PIPE TO BE PRESENT IN EASEMENT AT DEPTH 500mm AND WAS TESTED CLEAR TO DOWNSTREAM OUTLET.

NOTE

THIS DRAWING IS NOT TO BE USED FOR SETOUT PURPOSES - REFER TO ARCHITECTURAL DRAWINGS



SCALE 1:200 at A3

NOTE

THIS DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS BY : CLARENDON HOMES
REF : 29913405

STORMWATER MANAGEMENT PLAN

SCALE 1:200 A3

ISS	DATE	AMENDMENT
B	01.05.2019	DPs TO RWT - DA ISSUE
A	30.04.2019	DA ISSUE

ARCHITECT/BUILDER ARCH. REF : 29913405

CLARENDON HOMES

OWNER

Mr C DOS SANTOS & Ms GARRICK

LGA NORTHERN BEACHES (WARRINGAH)

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Stormwater Management.

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Pty Ltd. ABN 71 612 151 461

DWG TITLE

STORMWATER MANAGEMENT PLAN

PROJECT TITLE

PROPOSED SINGLE DWELLING DEVELOPMENT
Lot 18, No 19 MALBARA CRESCENT, FRENCHS FOREST

StormCivil

APPROVED ON BEHALF OF
STORMCIVIL PTY LTD

Mark Taylor
MIE Aust CP Eng NER 173333

JOB No	DWG No	No IN SET	ISSUE
303203	D2	2	B

NOTE

THIS PLAN MANAGES STORMWATER RUNOFF DERIVED FROM ROOF AND DRIVEWAY SURFACES ONLY AS SHOWN ON ARCHITECTURAL DRAWINGS . ANY OTHER SURFACE RUNOFF WATER TO BE MANAGED BY SEPARATE SYSTEM BY OWNER IN ACCORDANCE WITH AS 3500.3 AND BCA PART 3.1.2

NOTE

ALL ROOF GUTTERS TO HAVE OVERFLOW PROVISION IN ACCORDANCE WITH AS 3500.3:2003 AND SECTIONS 3.5.3, 3.7.5 AND APPENDIX G OF AS 3500.3:2003.

