

PROPOSED ALTERATIONS AND ADDITIONS

1 KANIMBLA CRESCENT, BILGOLA PLATEAU

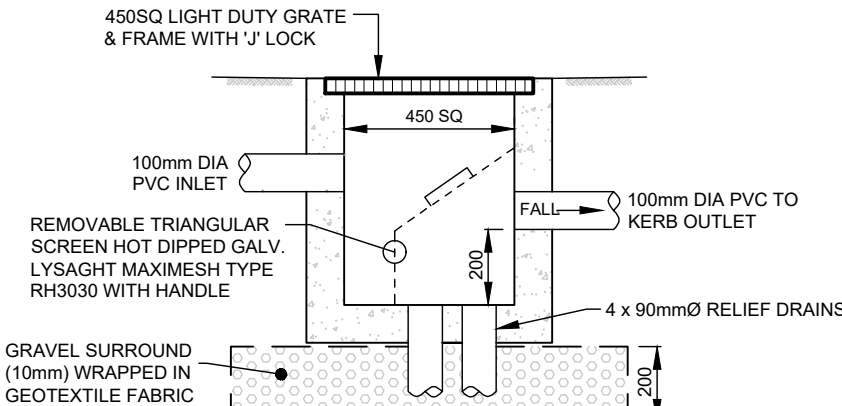
STORMWATER MANAGEMENT DESIGN

GENERAL DRAINAGE NOTES

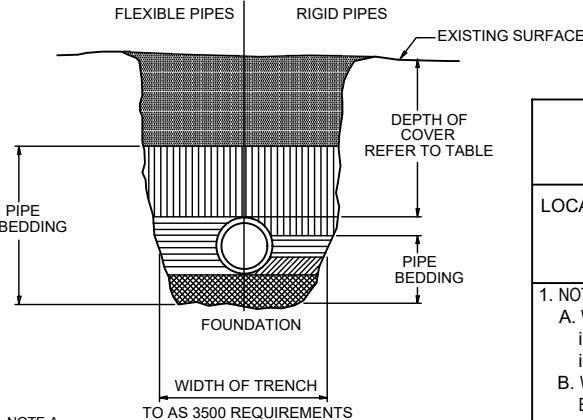
1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LOCAL COUNCIL'S RELEVANT SPECIFICATIONS AND/OR STORMWATER CODE. ANY DISCREPANCY VARIATION OR ADDITIONAL WORK SHALL BE APPROVED BY THE PRINCIPAL CERTIFIER.
2. ALL SERVICES SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. DIAL BEFORE YOU DIG SHALL BE CONTACTED PRIOR TO COMMENCEMENT.
4. ALL DRAINAGE PIPEWORK AND PLUMBING SHALL BE INSTALLED BY A CERTIFIED PLUMBER IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS AS3500 AND COUNCIL REQUIREMENTS.
5. ALL DRAINAGE PIPES ARE TO BE SEWER GRADE UNLESS NOTED OTHERWISE.
6. ALL COVERS, GRATES AND FRAMES ARE TO BE CLASS C HEAVY DUTY WHERE SUBJECT TO VEHICULAR TRAFFIC.
7. ALL COVERS, GRATES AND FRAMES ARE TO BE CLASS A MEDIUM DUTY WHERE SUBJECT TO PEDESTRIAN TRAFFIC OR IN LANDSCAPE AREAS.
8. COUNCIL PERMIT/APPROVAL SHALL BE OBTAINED PRIOR TO WORKS ON COUNCIL LAND AND CONNECTION TO COUNCIL SYSTEM.
9. ALL PIPE BENDS TO BE FITTED WITH AN INSPECTION OPENING.

RAINWATER TANK NOTES

1. THE TANK SHALL NOT BE LOCATED OVER A WATER OR SEWER MAIN UNLESS IT IS INSTALLED IN ACCORDANCE WITH THE REGULATORY AUTHORITY REQUIREMENTS
2. ABOVE GROUND TANKS SHALL BE LOCATED AT LEAST 100 MM FROM ANY POTABLE WATER SUPPLY PIPE AND AT LEAST 300 MM FOR BELOW GROUND TANKS.
3. ALL PLUMBING WORK SHALL BE CARRIED OUT BY A LICENSED PLUMBER IN ACCORDANCE WITH SYDNEY WATER REQUIREMENTS AND COUNCIL REGULATIONS.
4. ALL INLETS SHALL BE SCREENED OR FILTERED TO PREVENT THE ENTRY OF FOREIGN MATTER OR CREATURES.
5. REUSE PUMP TO BE INSTALLED BY A LICENSED PLUMBER AND ELECTRICIAN TO SYDNEY WATER REQUIREMENTS
6. A SIGN SHALL BE AFFIXED TO THE RAINWATER TANK AND ALL APERTURES CLEARLY STATING THAT THE WATER IN THE TANK IS RAINWATER
7. NOISE EMISSIONS FROM ANY PUMP SHALL MEET COUNCIL'S REQUIREMENTS.
8. WATER RETAINED FOR INDOOR HOUSEHOLD USE SHALL BE AUGMENTED BY MAINS WATER SUPPLY AND APPROVAL OBTAINED BY SYDNEY WATER.
9. WHERE RETAINED WATER IS AUGMENTED BY MAINS WATER SUPPLY A BACKFLOW PREVENTION DEVICE AND FLOW RESTRICTOR SHALL BE INSTALLED IN ACCORDANCE WITH AS 3500 AND SYDNEY WATER REQUIREMENTS.
10. ALL INLETS SHALL BE FITTED WITH A FIRST FLUSH DEVICE PRIOR TO DISCHARGING TO THE RAINWATER TANK.
11. THE INDIRECT CONNECTION TO MAINS WATER SUPPLY SHALL HAVE A VISIBLE AIR GAP IN ACCORDANCE WITH AS 3500.



POLLUTION CONTROL PIT DETAIL
NOT TO SCALE



NOTE A
STORMWATER DRAINS CONSTRUCTED OF OTHER THAN CAST IRON, DUCTILE IRON OR GALVANISED STEEL HAVING COVER LESS THAN THAT SPECIFIED IN TABLE SHALL BE COVERED WITH AT LEAST 50mm OVERLAY AND SHALL BE PAVED WITH AT LEAST 100mm THICKNESS OF REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICULAR LOADING

LEGEND - TRENCH BACKFILL

SYMBOL	FLEXIBLE PIPES	RIGID PIPES
	BACKFILL	
	PIPE OVERLAY	
	PIPE SIDE SUPPORT	SIDE ZONE
	—	HAUNCH ZONE
	PIPE UNDERLAY	BED ZONE

MINIMUM PIPE COVER (FROM FINISHED SURFACE TO TOP OF PIPE)

LOCATION	MINIMUM COVER (mm)	
	CAST / DUCTILE IRON OR GALV STEEL	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 -	300 0 (** #) 0 (** #)	450 100 (** #) 75 (** #)
B. ROADS i. SEALED ii. UNSEALED	300 300	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, AS/NZS 2566.1, AS3725 OR AS 4060

NORTHERN BEACHES COUNCIL REQUIREMENTS

THE STORMWATER DRAINAGE SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL WATER MANAGEMENT FOR DEVELOPMENT POLICY REGION 1 - NORTHERN CATCHMENT AND AUSTRALIAN STANDARDS AS3500.3

DESIGN PARAMETERS

SITE AREA (m2)	705.3
PRE-DEVELOPMENT TOTAL IMPERVIOUS AREA (m2)	184.8
POST-DEVELOPMENT IMPERVIOUS AREA (m2)	293.1
INCREASE IN IMPERVIOUS AREA (m2)	108.3
MINIMUM OSD STORAGE CAPACITY REQUIRED (L)	9,000
MAXIMUM OSD DISCHARGE RATE (l/s)	4.0
ORIFICE PLATE DIAMETER (mm)	38
TOTAL STORAGE VOLUME PROVIDED (L)	10,000

BASIX CERTIFICATE REQUIREMENTS

NO RAINWATER TANK REQUIRED

LEGEND

	DENOTES ON-SITE DETENTION / RAINWATER REUSE TANK
	DENOTES 100mm DIA. STORMWATER PIPE AT 1% MIN. GRADE U.N.O
	DENOTES 100mm DIA. CHARGED STORMWATER PIPE TO ON-SITE / DETENTION RAINWATER TANK
	DENOTES DOWNPIPE
	STORMWATER PIT - SOLID COVER
	STORMWATER PIT - GRATED INLET
	DENOTES GRATED DRAIN

SHEET INDEX

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STORMWATER MANAGEMENT PLAN	SHEET SW2
SECTIONS AND DETAILS	SHEET SW3

WATERDESIGN
CIVIL ENGINEERS

1 FLAME TREE PLACE
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CLIENT NAME:
JOHN & HELEN WOOD

PROJECT TITLE:
**ALTERATIONS AND ADDITIONS
1 KANIMBLA CRESCENT
BILGOLA PLATEAU NSW 2107**

DRAWING TITLE:
COVER SHEET AND NOTES

DRAWN: A.L.
DATE: 24.05.2021
JOB No: 2021-036

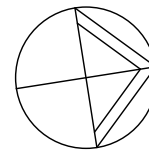
APPROVED BY:

ANDREW LAM
MIEAust B.E. Civil (Hons)

DWG NO: SW1
no. IN SET: 3

A	CLIENT REQUEST	21.06.21
No.	REVISION / ISSUE DESCRIPTION	DATE

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ON-SITE DETENTION / RAINWATER REUSE
PROVIDE A 10,000 LITRE ROUND ABOVE GROUND RAINWATER TANK BY SYDNEY TANKS (PH 1300 229 606) OR SIMILAR TO LOCAL COUNCIL AND SYDNEY WATER REQUIREMENTS
TANK DIMENSIONS - 2,530 (DIA) x 2,300 (H)
OSD STORAGE VOLUME REQUIRED = 9,000 L
TOTAL STORAGE VOLUME PROVIDED = 10,000 L
PERMISSIBLE DISCHARGE RATE = 4.0 L/s
ORIFICE PLATE DIAMETER = mm

100 mm Ø UPVC PIPE @ MIN 1% GRADE TO OSD / RAINWATER TANK. ALL PIPES SHALL BE FULLY SEALED. PIPES SHALL BE FIXED TO THE UNDERSIDE OF THE LOWER GROUND FLOOR

DISCHARGE STORMWATER INTO THE EXISTING ON-SITE DISPERSAL / LEVEL SPREADER IN ACCORDANCE WITH COUNCIL'S SPECIFICATION
NOTE: PLUMBER SHALL LOCATE THE EXISTING ON-SITE STORMWATER DISPOSAL SYSTEM AND UPGRADE AS NECESSARY

100 mm Ø UPVC PIPE @ MIN 1% GRADE TO OSD / RAINWATER TANK. ALL PIPES SHALL BE FULLY SEALED. PIPES SHALL BE FIXED TO THE UNDERSIDE OF DECK AND LOWER GROUND FLOOR

100 mm Ø UPVC PIPE @ MIN 1% GRADE FIXED TO CARPORT STRUCTURE AND RIASED GARDEN BED OR PLANTER BOX BESIDE THE DRIVEWAY

100 Ø UPVC PIPE @ MIN 1% GRADE GUTTER OUTLET INVERT RL 107.80

NOTE:

THIS DESIGN MANAGES STORMWATER RUNOFF FROM ROOF WATER AND DRIVEWAY SURFACES ONLY AS SHOWN ON THE ARCHITECTURAL DRAWINGS
ALL ROOF GUTTER TO HAVE OVERFLOW PROVISION IN ACCORDANCE WITH AS 3500.3.

NOTE:

ROAD OPENING PERMIT TO BE OBTAINED FROM COUNCIL PRIOR TO COMMENCEMENT OF ANY WORK IN THE ROAD RESERVE

NOTE:- TREE PRESERVATION

IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ANY APPROVALS NECESSARY FROM LOCAL COUNCIL PRIOR TO ANY WORKS COMMENCING WITH RESPECT TO THE POTENTIAL IMPACT ON ANY TREES FOR ANY WORKS SHOWN ON THIS DRAWING



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CIVIL ENGINEERS**

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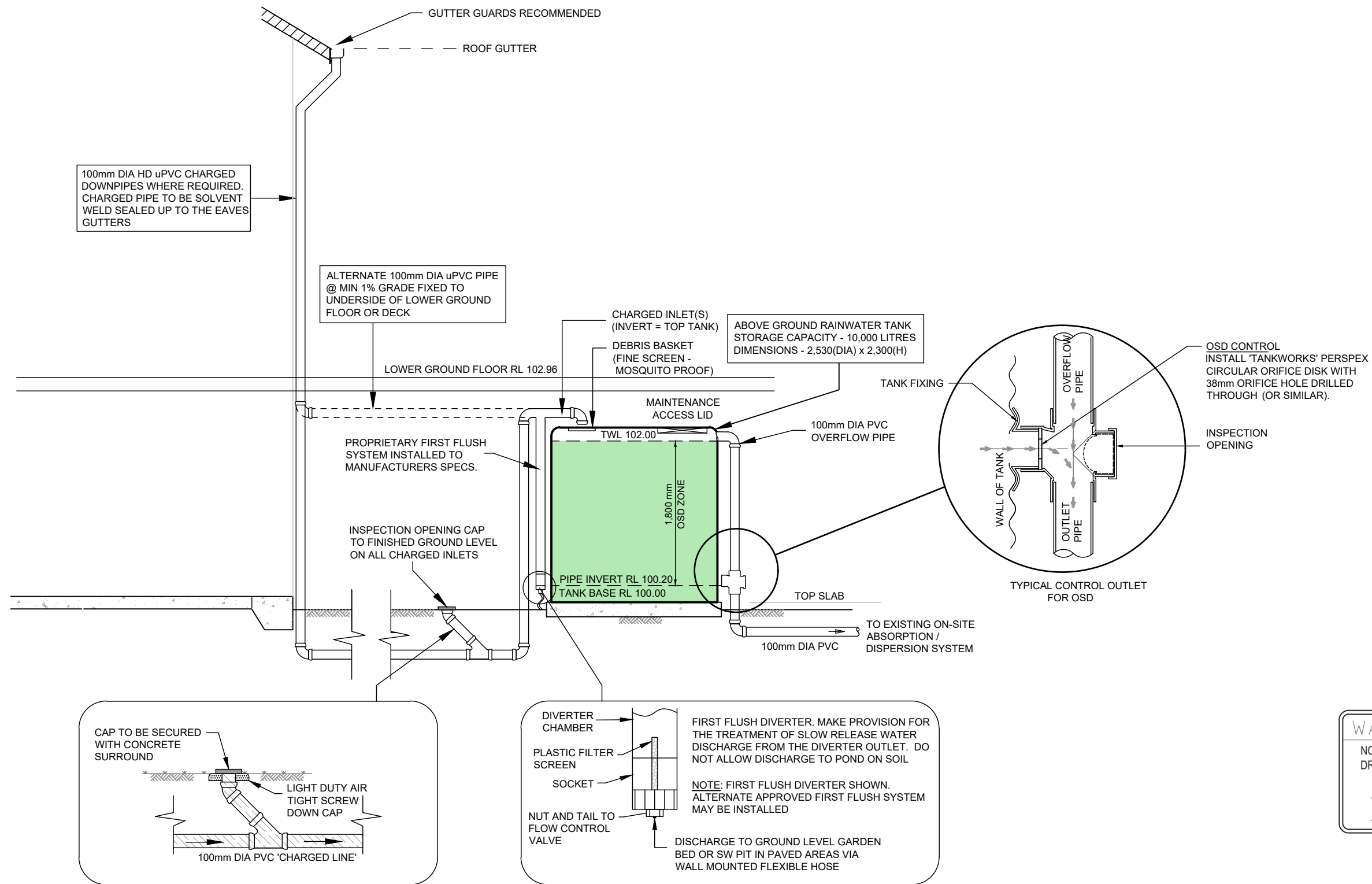
CLIENT NAME:
JOHN & HELEN WOOD

PROJECT TITLE:
**ALTERATIONS AND ADDITIONS
1 KANIMBLA CRESCENT
BILGOLA PLATEAU NSW 2107**

DRAWING TITLE:
**STORMWATER
MANAGEMENT PLAN**

DRAWN: A.L.	APPROVED BY: 		
DATE: 24.05.2021	ANDREW LAM MIEAust B.E. Civil (Hons)		
JOB No: 2021-036	DWG NO: SW2	no. IN SET 3	A
		No.	CLIENT REQUEST REVISION / ISSUE DESCRIPTION DATE





ABOVE GROUND ON-SITE DETENTION TANK SCHEMATIC DETAIL
NOT TO SCALE

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CIVIL ENGINEERS**

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**ALTERATIONS AND ADDITIONS
1 KANIMBLA CRESCENT
BILGOLA PLATEAU NSW 2107**

DRAWING TITLE:
SECTIONS AND DETAILS

DRAWN: A.L.
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