

# PROPOSED SECONDARY DWELLING HOUSE

## 129 GEORGE STREET, AVALON BEACH NSW 2107

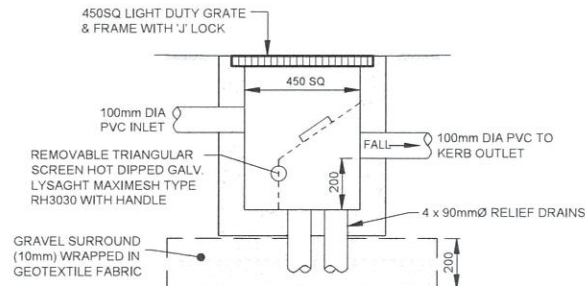
### STORMWATER MANAGEMENT DESIGN

#### 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.

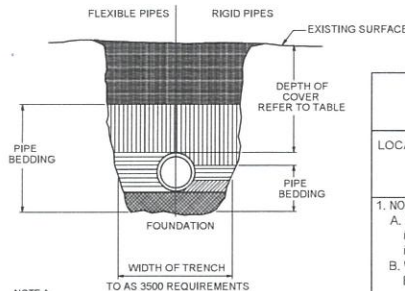
#### RAINWATER TANK NOTES

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 (a) 100mm THICKNESS OF REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICULAR LOADING

#### LEGEND - TRENCH BACKFILL

SYMBOL	FLEXIBLE PIPES	RIGID PIPES
	BACKFILL	BACKFILL
	PIPE OVERLAY	PIPE OVERLAY
	PIPE SIDE SUPPORT	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	100
	0	300
	0 (**)	50 (**)
	0 (**)	50 (**)
2. SUBJECT TO VEHICULAR LOADING A. OTHER THAN ROADS i. WITHOUT PAVEMENT - ii. WITH PAVEMENT OF - REINF. CONC. FOR HEAVY VEHICLES - - BRICK/UNREINFORCED CONC LIGHT VEHICLES - B. ROADS i. SEALED ii. UNSEALED	300	450
	0 (** #)	100 (** #)
	0 (** #)	75 (** #)
	300	500 (#)
3. SUBJECT TO CONSTRUCTION VEHICLES OR IN EMBANKMENT CONDITIONS	300	500 (#)
	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 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)	1,190
TOTAL INCREASE IN IMPERVIOUS AREA (m2)	154.8
MINIMUM OSD STORAGE CAPACITY REQUIRED (L)	12,000
MAXIMUM OSD DISCHARGE RATE (l/s)	6.0
ORIFICE PLATE DIAMETER (mm)	45
TOTAL STORAGE VOLUME PROVIDED (L)	12,000

#### BASIX CERTIFICATE REQUIREMENTS

- PROVIDE A MINIMUM 3,000 LITRE RAINWATER TANK STORAGE
- COLLECT A MINIMUM 120 m2 OF ROOF AREA
- CONNECT TO ALL TOILETS, CLOTHES WASHERS AND AT LEAST ONE OUTDOOR TAP

#### 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

COVER SHEET AND NOTES	SHEET SW1
STORMWATER MANAGEMENT PLAN	SHEET SW2
SECTIONS AND DETAILS	SHEET SW3

### 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

### NOTE:

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

### 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.

ON-SITE DETENTION / RAINWATER REUSE TANK  
PROVIDE 2 x 7,500 LITRE ABOVE GROUND ROUND RAINWATER TANKS BY THE TANK SHOP (PH 1300 920547) OR SIMILAR TO LOCAL COUNCIL AND SYDNEY WATER REQUIREMENTS  
TANK DIMENSIONS - 2,250 (DIA) x 2,100 (H)  
ON-SITE DETENTION STORAGE VOLUME = 12,000 LITRES  
RAINWATER REUSE STORAGE VOLUME = 3,000 LITRES  
BASIX CERTIFICATE REQUIREMENTS

- MINIMUM 3,000 LITRES STORAGE REQUIRED
- CONNECTED TO ALL TOILETS, COLD WATER TAP THAT SUPPLIES EACH CLOTHES WASHER AND AT LEAST ONE OUTDOOR TAP
- COLLECT A MINIMUM 120 m<sup>2</sup> ROOF AREA (REFER TO SECTION IN DRAWING No.SW3)

100 Ø UPVC OVERFLOW PIPE TO EXISTING STORMWATER SYSTEM  
NOTE: PLUMBER TO LOCATE EXISTING STORMWATER PIPE AND UPGRADE AS NECESSARY

100 Ø UPVC PIPE @ MIN 1% GRADE FIXED TO UNDERSIDE OF FLOOR JOISTS OR SIDE WALLS TO ON-SITE DETENTION / RAINWATER TANKS

REFER TO PLAN BELOW FOR CONTINUATION OF THE NEW STORMWATER PIPE TO EXISTING THE STORMWATER SYSTEM

100 Ø UPVC CHARGED PIPE TO ON-SITE DETENTION / RAINWATER TANK. ALL PIPES AND DOWNPIPES SHALL BE FULLY SEALED UP TO THE EAVES GUTTERS

CONNECT NEW 100 Ø UPVC PIPE TO THE EXISTING STORMWATER PIT  
NOTE: PLUMBER TO LOCATE EXISTING STORMWATER PIT AND UPGRADE AS NECESSARY

MAINTAIN THE EXISTING GUTTER OUTLET PIPE INVERT RL 1.85  
NOTE: PLUMBER TO LOCATE AND UPGRADE AS NECESSARY

REFER TO PLAN ABOVE FOR CONTINUATION OF THE NEW STORMWATER PIPE FROM THE NEW SECONDARY DWELLING



SCALE 1:200 @ A3

**WATERDESIGN**  
**CIVIL ENGINEERS**

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CLIENT NAME:  
**GREIG WITNEY**

PROJECT TITLE:  
**SECONDARY DWELLING HOUSE  
129 GEORGE STREET,  
AVALON BEACH NSW 2107**

DRAWING TITLE:  
**STORMWATER  
MANAGEMENT PLAN**

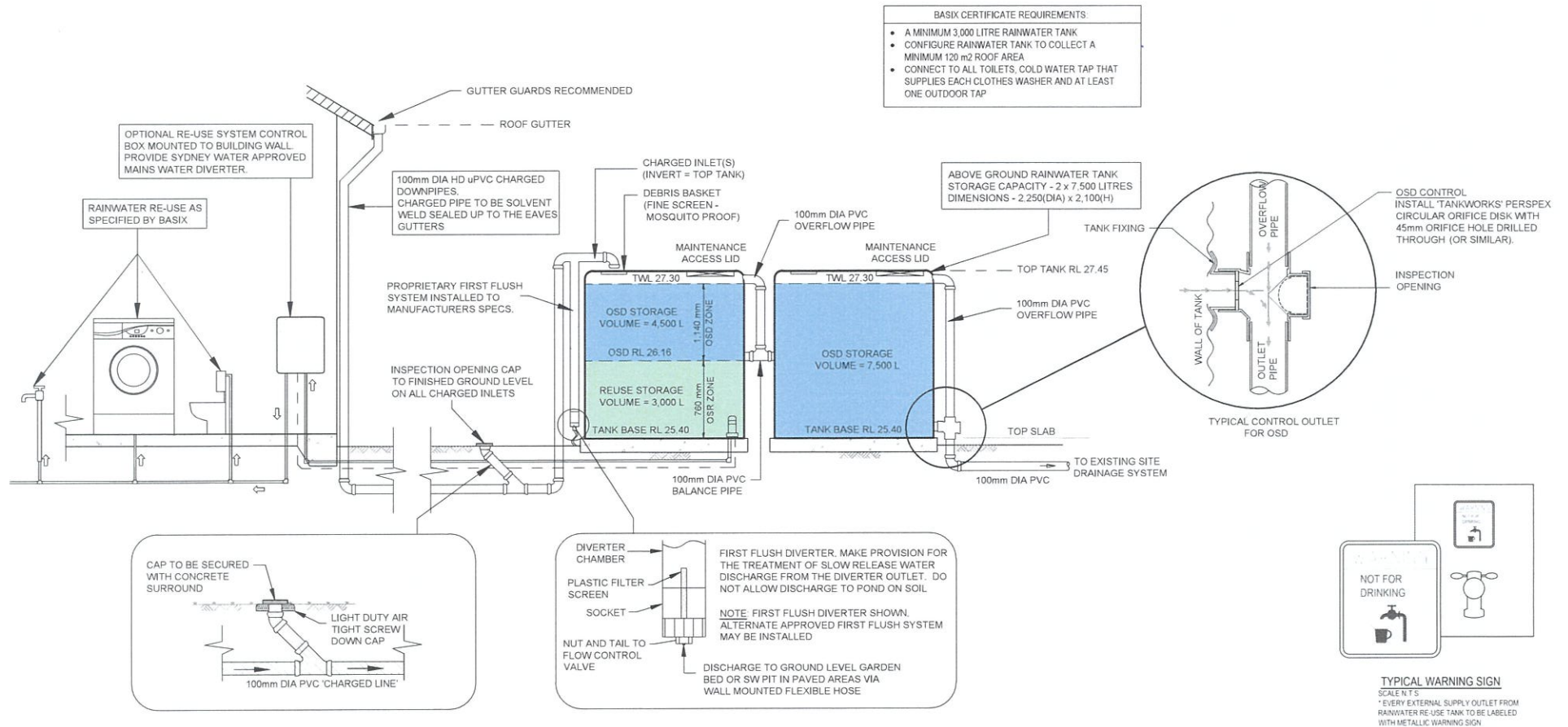
DRAWN: A.L.  
DATE: 28.03.2024  
JOB No: 2023-052

APPROVED BY:  
ANDREW LAM  
MEASUREMENT B.E. Civil (Hons)  
DWG NO: SW2  
no. IN SET: 3

CLIENT REQUEST		10.04.24
REVISION / ISSUE DESCRIPTION		DATE

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

**WATERDESIGN  
CIVIL ENGINEERS**

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DRAWING TITLE  
**SECTIONS AND DETAILS**

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APPROVED BY  
ANDREW LAM  
MIE Aust B.E. Civil (Hons)  
DWG NO  
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