

**ELEVATION C**

1 : 100



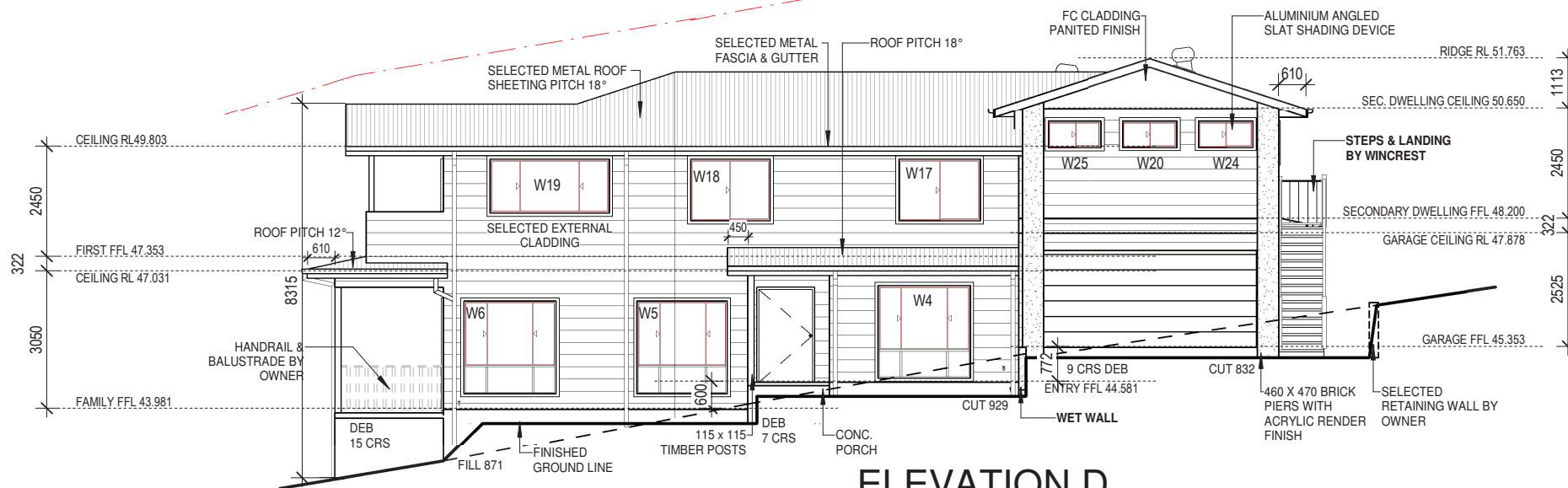
**THIS PLAN IS TO BE READ IN  
CONJUNCTION WITH  
THE CONDITIONS OF DEVELOPMENT  
CONSENT**

**DA2019/0352**

**NOTE:**

- FIRST FLOOR WINDOW HEAD HEIGHT 2100
- GROUND FLOOR WINDOW HEAD HEIGHT 2166 ABOVE FFL TO U/S STEEL ARCH BAR EXCEPT W1, W5 & W6 TO BE AT HEAD HEIGHT 2400
- ALL ANGLED WALLS @ 45° UNLESS NOTED OTHERWISE.

SOLAR PANEL POSITION FOR 2kw  
SOLAR PV SYSTEM ARE APPROX ONLY  
SOLAR PANELS TO BE INSTALLED  
AS PER MANUFACTURES  
RECOMMENDATIONS AND GUIDELINES



**ELEVATION D**

1 : 100

**ELEVATIONS**

**AFFINITY INCLUSIONS**

ISSUE	AMENDMENT	DATE
A	PFD, SV1 (EC)	18.10.18
B	VARY B (EC)	25.10.18
C	VARY C (EC)	12.12.18
D	VARY D, VARY E (EC)	05.02.19
E	VARY G, FFD (EC)	04.03.19
F	VARY H (EB)	26.03.19
G	VARY I, VARY K, VARY J & VARY L (EB)	18.04.19
H	VARY No1 & ADDITIONAL INFO ADDED AS PER COUNCIL LETTER (SB)	18.06.19

Copyright reserved.  
No part of these plans may  
be reproduced or transmitted  
in any form without the  
written permission of  
Wincrest Group Pty Ltd.

PRINTED: 18/06/2019 12:08:20 PM



Wincrest Group Pty Ltd.  
ACN 135 562 873  
Builders License No. 213 442C  
18 Pitt St, Paramatta NSW 2150  
Ph:(02) 9635 1644 Fax:(02) 9633 4806

**PROPOSED RESIDENCE FOR:**

CLIENT: **MR & MRS BROWN**

**ADDRESS:**

**LOT 1, No 98 ELIMATTA ROAD  
MONA VALE  
NORTHERN BEACHES COUNCIL**

DESIGN NAME: **CUSTOM**

DESIGN NO:

FACADE: **CUSTOM**

JOB NO: 17271

DATE: 04.03.19

DRAWN: EC

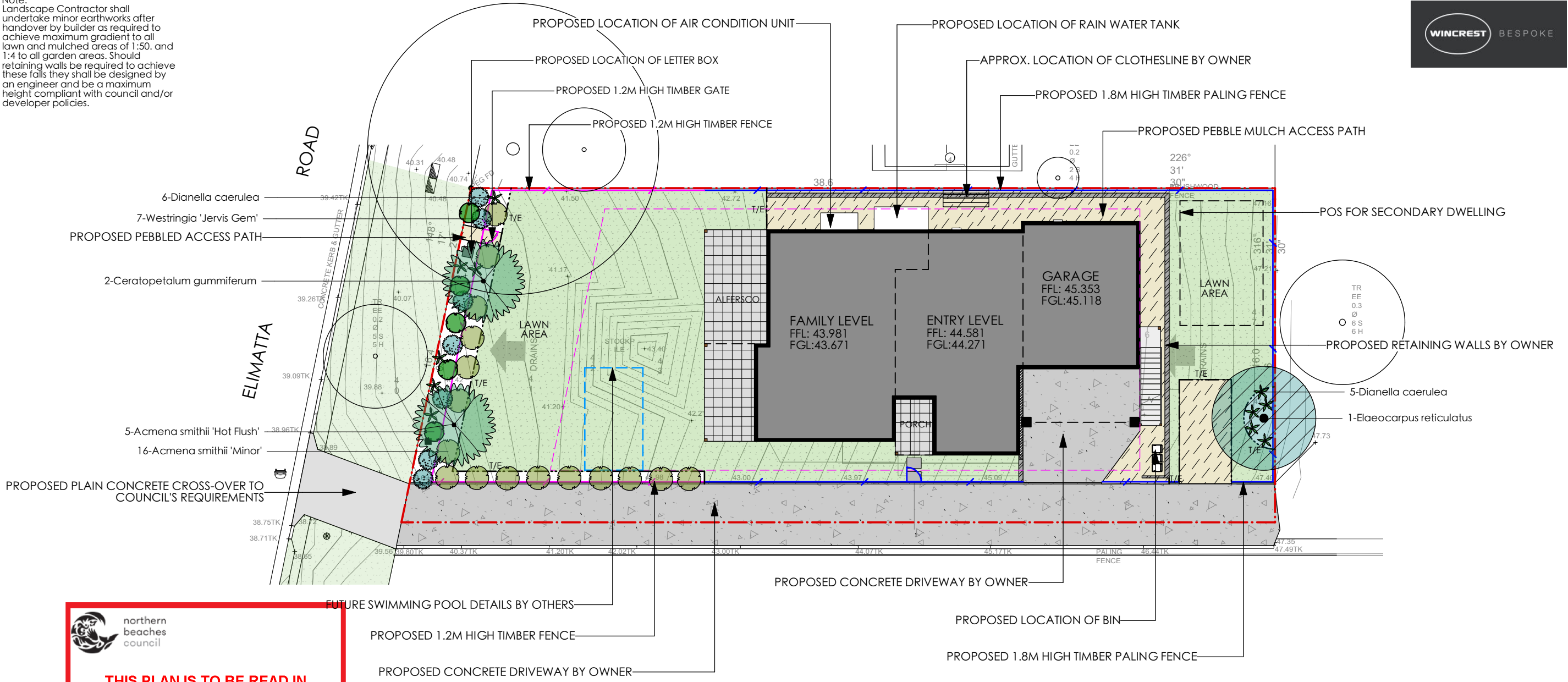
CHECKED: .

SCALE: 1 : 100

SHEET NO:05 /

ISSUE: H Please discard all other plans

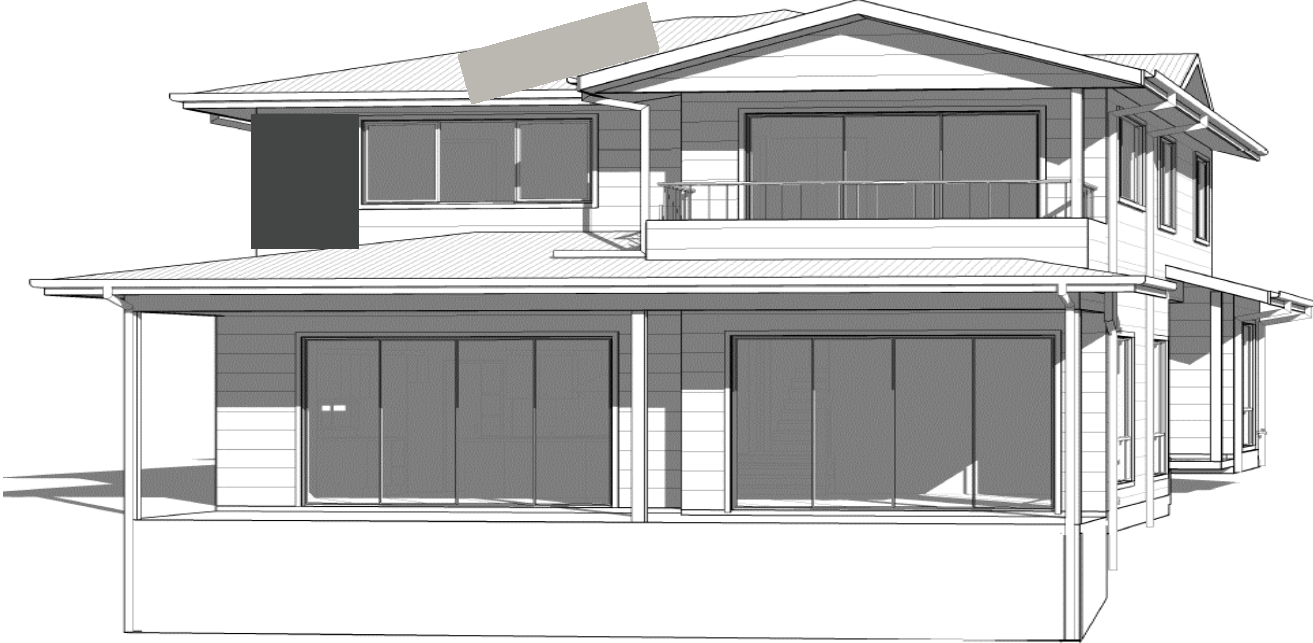
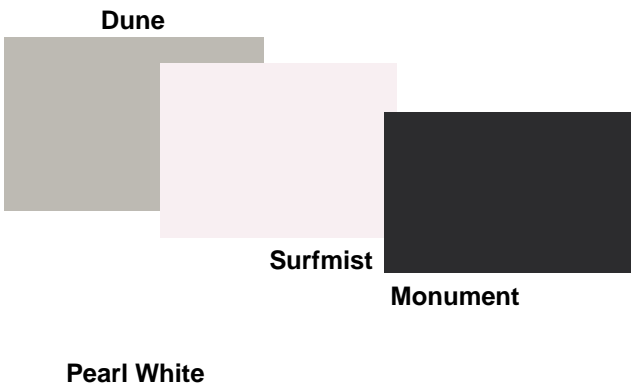
Note:  
Landscape Contractor shall undertake minor earthworks after handover by builder as required to achieve maximum gradient to all lawn and mulched areas of 1:50, and 1:4 to all garden areas. Should retaining walls be required to achieve these falls they shall be designed by an engineer and be a maximum height compliant with council and/or developer policies.



# External Colour Selection Schedule

our ref 17271

LOT 1, No 98 Elimatta Road  
Mona Vale



EXTERNAL COLOUR SELECTIONS		Ref 17
Detail	selection	
Roof colorbond	Dune	
Fascia / Garage	surfmist	
Gutters	Surfmist	
Windows	Cotton Ball	
Cladding	Orchid night	
Downpipes	Orchid Night	
Eaves	Cotton Ball	
Rainwater tank	Monument	





northern  
beaches  
council

THIS PLAN IS TO BE READ IN  
CONJUNCTION WITH  
THE CONDITIONS OF DEVELOPMENT  
CONSENT

DA2019/0352













# CONCEPT STORMWATER MANAGEMENT PLANS

## PROPOSED NEW RESIDENTIAL DEVELOPMENT

### No.98 ELIMATTA ROAD, MONA VALE NSW 2103

#### LEGEND

	GRATED INLET PIT
450x450	450mm SQUARE INTERNAL
GRT 75.54	GRATE LEVEL = RL 75.54
IL 75.12	INVERT LEVEL = RL 75.12
	INSPECTION OPENING CAP
	PROPOSED DOWNPIPE 90mm dia or 100mm x 50mm RECTANGULAR UNO
	EXISTING TREE
	GRATED TRENCH DRAIN
	GRATED ROUND OUTLET 100mm DIAMETER
	PROPOSED DOWNPIPE SPREADER
	STRUCTURE No 1 (FOR HYDRAULIC CALCS)
	STORMWATER DRAINAGE
	100 DIA CHARGED/1% MIN - ROOF AREA ONLY

#### NORTHERN BEACHES DRAINAGE CALCULATIONS

RELEVANT DESIGN CODE : NORTHERN BEACHES COUNCIL'S STORMWATER MANAGEMENT CODE.

SITE AREA = 648m<sup>2</sup>

DRAINAGE CODE REQUIREMENT:

PART OF A RECENT SUBDIVISION WITH THE CONSTRUCTION OF AN ONSITE STORMWATER DETENTION TANK LOCATED WITHIN THE FRONT SETBACK OF THE PROPERTY. THE OSD TANK IS CAPABLE OF DETAINING 48m<sup>3</sup>.

REFER TO RECENT SUBDIVISION REGISTRATION WHICH INDICATES THE EXISTING OSD TANK SYSTEM.

STORMWATER MANAGEMENT METHODOLOGY:

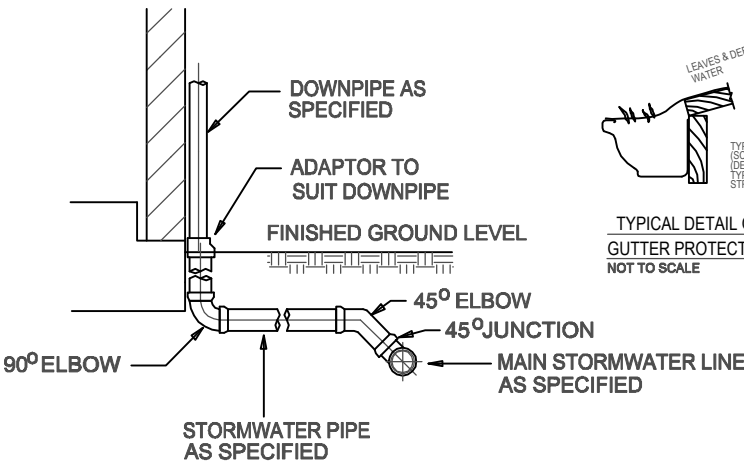
COLLECT ALL OF THE ROOF AREA OF THE PROPOSED DWELLING AND DISCHARGE INTO ABOVE GROUND 3000 LITRE RAINWATER TANK LOCATED ON THE SOUTHERN SIDE OF THE DWELLING WITH THE OVERFLOW AND PART OF THE IMPERVIOUS & PERVIOUS SURFACES DRAINING INTO THE EXISTING OSD TANK LOCATED WITHIN THE FRONT YARD OF LOT 1.

REFER TO SHEET D2 FOR DESIGN.

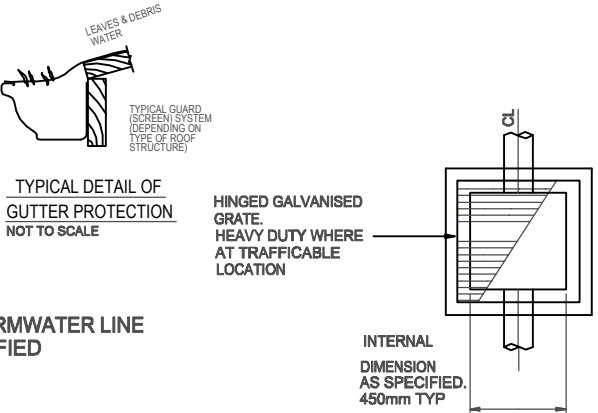
DESIGN BASED ON AR & R , AS 3500 AND RELEVANT COUNCIL STORMWATER MANAGEMENT GUIDELINES.

#### GENERAL NOTES

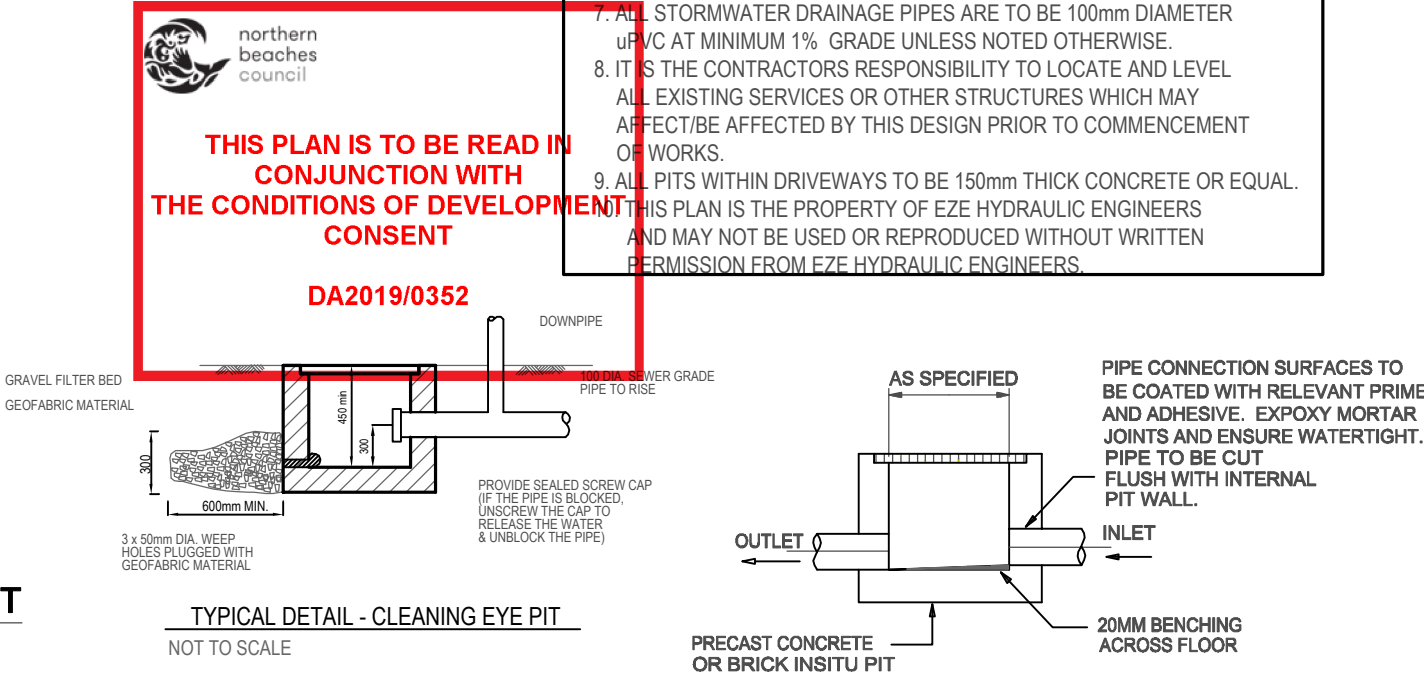
1. FINAL LOCATION OF NEW DOWNPIPES TO BE DETERMINED BY BUILDER/ARCHITECT AT TIME OF CONSTRUCTION.
  2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTS AND OTHER CONSULTANTS DRAWINGS. ANY DISCREPANCIES TO BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH WORK.
  3. ALL MATERIALS AND WORKMANSHIP 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.
- THIS PLAN IS THE PROPERTY OF EZE HYDRAULIC ENGINEERS AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION FROM EZE HYDRAULIC ENGINEERS.



**TYPICAL DETAIL - DOWNPIPE CONNECTION**  
NOT TO SCALE



**TYPICAL DETAIL - STANDARD PIT**  
NOT TO SCALE



**TYPICAL DETAIL - CLEANING EYE PIT**  
NOT TO SCALE

A	06.03.19	DA ISSUE
ISS	DATE	AMENDMENT

ARCHITECT/BUILDER  
**WINCREST HOMES**

CLIENT  
**MR. & MRS. BROWN**

#### EZE DRAINAGE SOLUTIONS

Pty Ltd ACN 619 135 198

CONSULTING ENGINEERS  
CIVIL & STORMWATER MANAGEMENT

Ph: (02) 97067767  
Fax: (02) 94754315

Mobile: 0405507654  
Email : info@ezeeng.com.au


DWG TITLE  
**COVER SHEET & CALCULATION TABLE**

PROJECT TITLE  
**PROPOSED NEW RESIDENTIAL DEVELOPMENT  
No. 98 ELIMATTA ROAD, MONA VALE NSW 2103**

DESIGNED BY :  
**EZ**

JOB No  
17096

DWG No  
D1

ISSUED BY :  
  
BE MIE Aust PENG

No IN SET  
3

ISSUE  
A

**NOTE**  
LOCATION OF NEW DOWNPIPES SHOWN ON THIS DRAWING ARE SUBJECT TO VERIFICATION BY BUILDER DURING CONSTRUCTION. DOWNPIPE LOCATION MAY BE VARIED PROVIDED INTENT OF THIS DESIGN IS MAINTAINED.

**NOTE**  
CONNECT ONLY ROOF AREA TO PROPOSED RAINWATER TANK. FIRST FLUSH DEVICES TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.

**NOTE**  
LOCATION OF NEW DOWNPIPES SHOWN ON THIS DRAWING ARE SUBJECT TO VERIFICATION BY BUILDER DURING CONSTRUCTION. DOWNPIPE LOCATION MAY BE VARIED PROVIDED INTENT OF THIS DESIGN IS MAINTAINED.

**NOTE**  
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS :  
**WINCREST HOMES**  
**JOB NO.17271 ISSUE E**  
**DATED 04.03.2019**


DISCHARGE TO EXISTING ONSITE DETENTION TANK BUILT AS PART OF THE APPROVED SUBDIVISION. ENSURE CONNECTION TO OSD TANK TO SATISFACTION OF COUNCIL. USE 150 DIA AT 1% MIN. **OUTLET IL 40.50** TO BE CONFIRMED PRIOR TO COMMENCEMENT OF WORKS. ALL SERVICES TO BE LOCATED BEFORE WORKS UNDERTAKEN. APPROXIMATE CONNECTION LOCATION SHOWN. FINAL DESIGN DETAILS AT CC STAGE.

PIT P3 : 450 x 450  
GRATE RL : 41.40 nom  
INVERT RL : 41.00

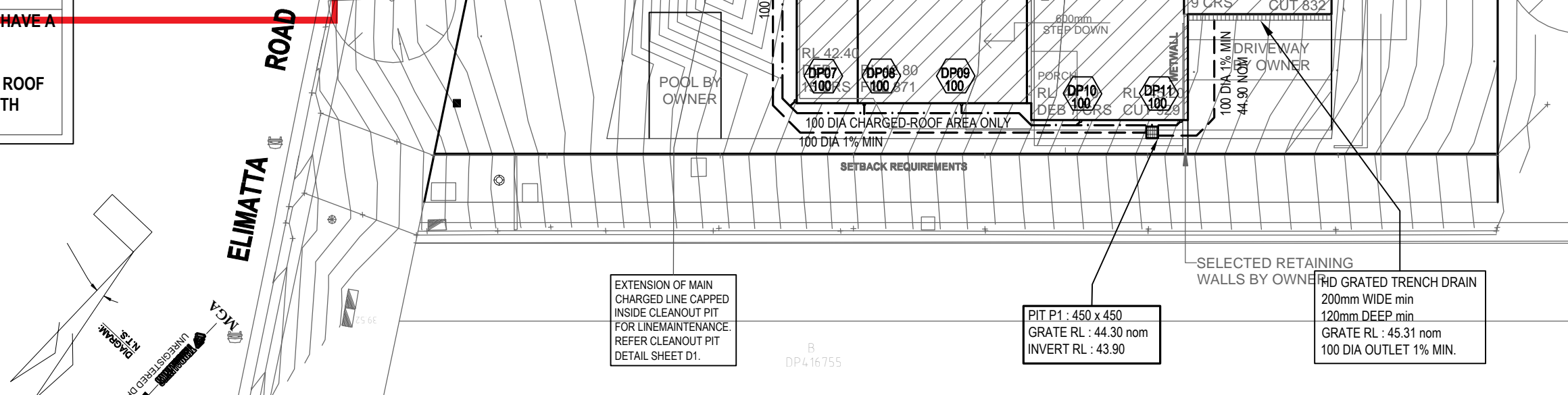
**BASIX RAINWATER/RE-USE TANK**  
**1 x 3000 litre ABOVE GROUND TANK**  
DIMENSIONS : 2400 LONG x 950 WIDE x 1480 HIGH  
"TANKWORKS EVOLUTION SERIES MKII TANK" OR APPROVED EQUIV. FOR RE-USE IN ACCORDANCE WITH BASIX CERTIFICATE. INSTALL TO MANUFACTURERS SPECIFICATIONS, AS 3500, DEPT HEALTH AND COUNCIL'S REQUIREMENTS. REFER TYPICAL DETAIL SHEET D3.  
**TANK INVERT = RL 43.80 nom**  
**TOP TANK = RL 45.28**  
CONNECT AT LEAST **200m<sup>2</sup>** OF ROOF AREA TO TANK AS REQUIRED BASIX CERTIFICATE.

PIT P2 : 450 x 450  
GRATE RL : 45.00 nom  
INVERT RL : 44.60

100 DIA ROOF ONLY.  
CHARGED LINE PRESSURE GRADE uPVC SOLVENT WELDED.  
NOTE CHARGED SYSTEM TO BE FULLY SEALED FROM TANK INLET TO ROOF GUTTER LEVEL.  
ROOF GUTTER RL = 47.00  
TANK INLET RL = 45.30  
DIFFERENTIAL HEAD = **1.30**  
SUFFICIENT TO DRIVE SYSTEM.

 **northern beaches council**  
**THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT**  
**DA2019/0352**

**BASIX COMMITMENT**  
PROPOSED DWELLING TO HAVE A 3000 LITRE (MINIMUM) RAINWATER TANK TO BE CONNECTED TO 200m<sup>2</sup> OF ROOF AREA IN ACCORDANCE WITH BASIX REQUIREMENTS.



EXTENSION OF MAIN CHARGED LINE CAPPED INSIDE CLEANOUT PIT FOR LIME MAINTENANCE. REFER CLEANOUT PIT DETAIL SHEET D1.

PIT P1 : 450 x 450  
GRATE RL : 44.30 nom  
INVERT RL : 43.90

HD GRATED TRENCH DRAIN  
200mm WIDE min  
120mm DEEP min  
GRATE RL : 45.31 nom  
100 DIA OUTLET 1% MIN.



**WARNING**  
LOCATION AND DEPTH OF ALL UNDERGROUND SERVICES TO BE INVESTIGATED WITH THE RELEVANT AUTHORITIES PRIOR TO COMMENCING WORKS.

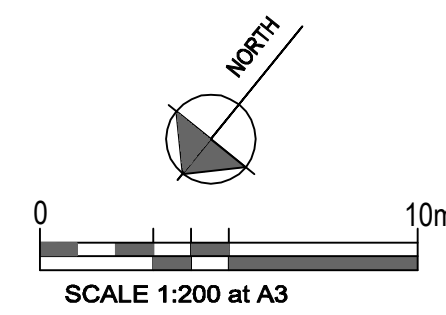
**NOTE**  
THIS DRAWING IS NOT TO BE USED FOR SETOUT PURPOSES. REFER TO ARCHITECTURAL DRAWINGS.

**NOTE**  
THIS DRAWING IS FOR STORMWATER MANAGEMENT DESIGN AND DOES NOT COVER ANY OVERLAND FLOW DESIGN REQUIREMENTS.

**NOTE**  
LOCATION OF NEW PITS SHOWN ON THIS DRAWING ARE SUBJECT TO VERIFICATION BY BUILDER DURING CONSTRUCTION. PIT LOCATIONS MAY BE VARIED PROVIDED INTENT OF THIS DESIGN IS MAINTAINED.

## STORMWATER MANAGEMENT PLAN

SCALE 1:200 A3

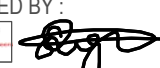


A	06.03.19	DA ISSUE
ISS	DATE	AMENDMENT

ARCHITECT/BUILDER  
**WINCREST HOMES**  
CLIENT  
**MR. & MRS. BROWN**

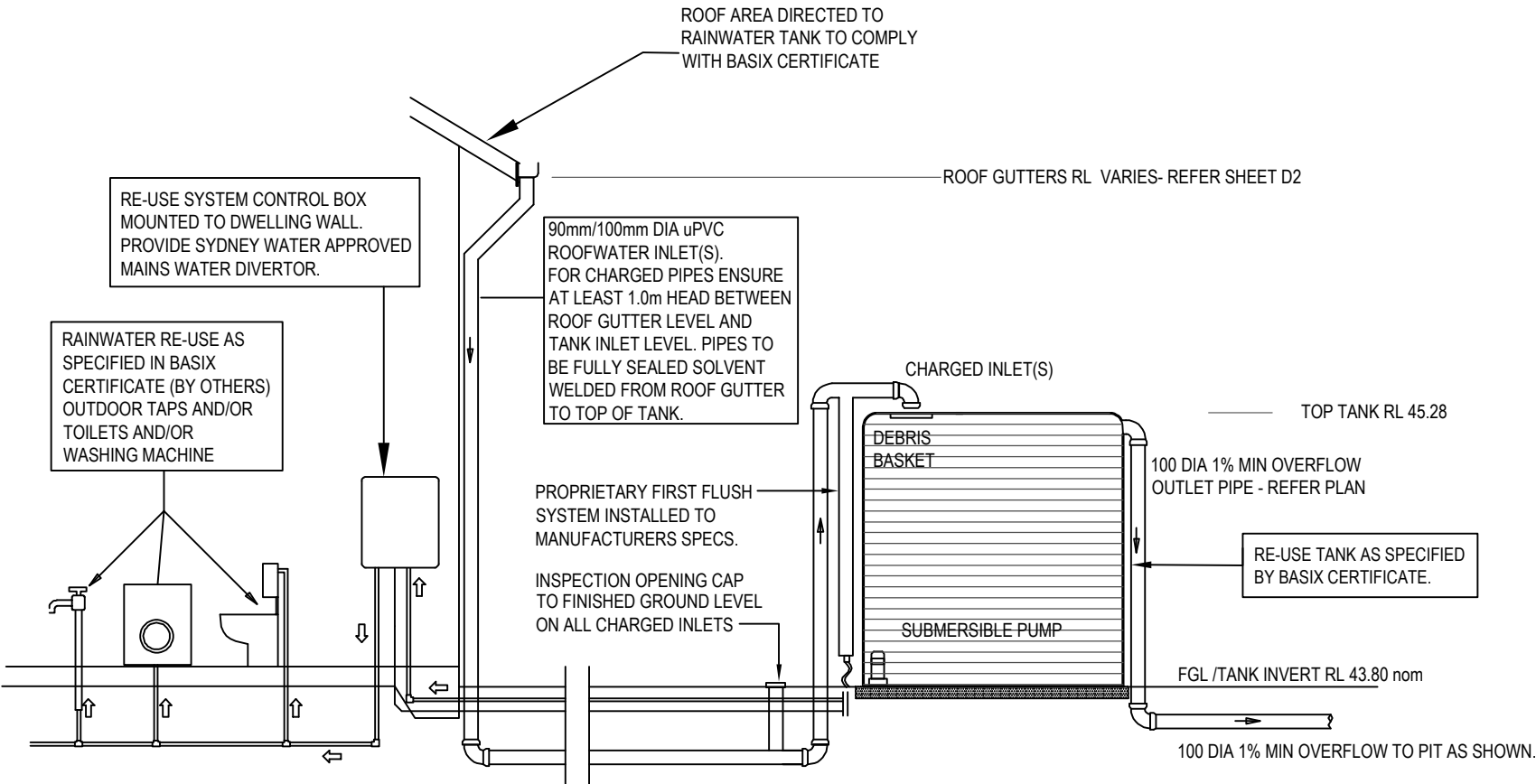
**EZE DRAINAGE SOLUTIONS**  
Pty Ltd ACN 619 135 198  
Ph: (02) 97067767  
Fax: (02) 94754315  
CONSULTING ENGINEERS  
CIVIL & STORMWATER MANAGEMENT  
Mobile: 0405507654  
Email : info@ezeeng.com.au

DWG TITLE  
**STORMWATER MANAGEMENT PLAN**  
PROJECT TITLE  
**PROPOSED NEW RESIDENTIAL DEVELOPMENT**  
**No. 98 ELIMATTA ROAD, MONA VALE NSW 2103**

DESIGNED BY : <b>EZ</b>		ISSUED BY :  BE MIE Aust PENG	
JOB No 17096	DWG No D2	No IN SET 3	ISSUE A

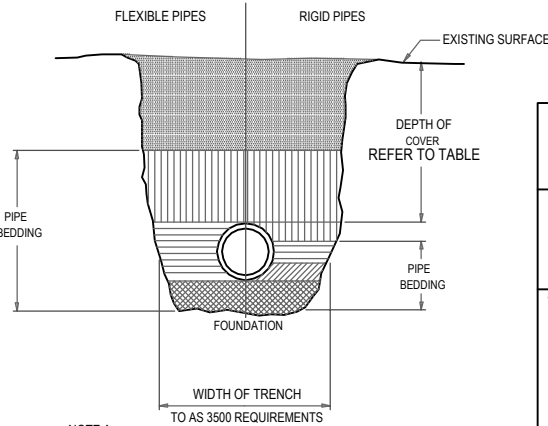
RAINWATER RE-USE SYSTEM NOTES

- 1. TOWNWATER CONNECTION TO RAINWATER TANK TO BE TO THE SATISFACTION OF SYDNEY WATER. THIS MAY REQUIRE PROVISION OF:
  - a. PERMANENT AIR GAP.
  - b. A BACKFLOW PREVENTION DEVICE.
  - c. NO DIRECT CONNECTION BETWEEN TOWN WATER SUPPLY AND THE RAIN WATER SUPPLY.
  - d. AN APPROVED STOP VALVE AND/OR PRESSURE LIMITING VALVE AT THE RAINWATER TANK.
- 2. PROVIDE AT LEAST ONE (1) EXTERNAL HOSE COCK ON THE TOWN WATER SUPPLY FOR FIRE FIGHTING.
- 3. PROVIDE APPROPRIATE FLOAT VALVES AND/OR SOLENOID VALVES
- 4. ALL PLUMBING WORKS ARE TO BE CARRIED OUT BY LICENSED PLUMBERS IN ACCORDANCE WITH AS3500.1 NATIONAL PLUMBING AND DRAINAGE CODE.
- 5. PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY LICENSED ELECTRICIAN.
- 6. ONLY ROOF RUN-OFF IS TO BE DIRECTED TO THE RAINWATER TANK. SURFACE WATER INLETS ARE NOT TO BE CONNECTED.
- 7. PIPE MATERIALS FOR RAINWATER SUPPLY PLUMBING ARE TO BE APPROVED MATERIALS TO AS 3500 PART 1 SECTION 2 AND TO BE CLEARLY AND PERMANENTLY IDENTIFIED "RAINWATER". THIS MAY BE ACHIEVED FOR BELOW GROUND PIPES USING IDENTIFICATION TAPE (MADE IN ACCORDANCE WITH AS 2648) OR FOR ABOVE GROUND PIPES BY USING ADHESIVE PIPE MARKERS (MADE IN ACCORDANCE WITH AS1345).
- 8. EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK ARE TO BE LABELLED "RAINWATER" ON A METALLIC SIGN IN ACCORDANCE WITH AS 1319.
- 9. ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE MEASURES PROVIDED TO PREVENT MOSQUITO AND VERMIN ENTRY.
- 10. SYSTEM TO COMPLY WITH SYDNEY WATER REQUIREMENTS AND ANY CONDITIONS OF LOCAL COUNCIL DEVELOPMENT CONSENT.



TYPICAL DETAIL - RAINWATER RE-USE TANK

NOT TO SCALE

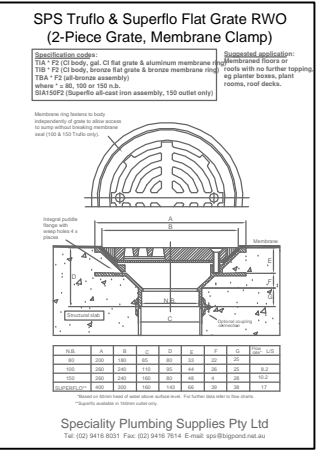
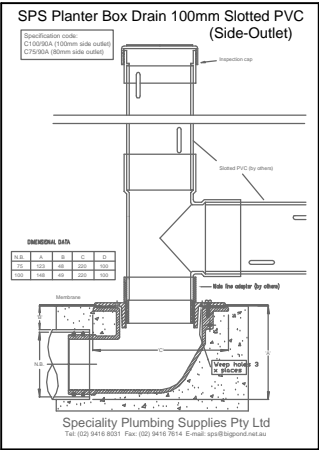
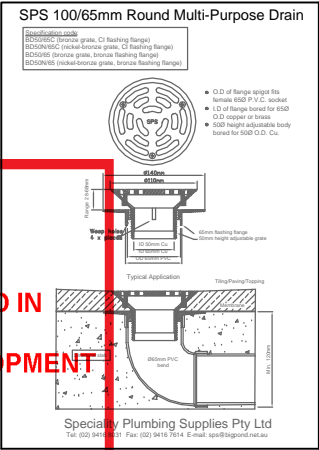


NOTE A  
STORMWATER DRAINS CONSTRUCTED OF OTHER THAN CAST IRON, DUCTILE IRON OR GALVANISED STEEL HAVING COVER LESS THAN THAT SPECIFIED IN TABLE SHALL BE COVERED WITH AT LEAST 50mm OVERLAY AND SHALL BE PAVED WITH AT LEAST —  
(a) 100mm THICKNESS OF REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICULAR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

LEGEND - TRENCH BACKFILL		
SYMBOL	FLEXIBLE PIPES	RIGID PIPES
	BACKFILL	
	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 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	450 100 (** #) 75 (** #) 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		

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT  
DA2019/0352



TYPICAL DETAILS- PLANTER BOX, BALCONY & TERRACE GRATE

NOT TO SCALE

A	06.03.19	DA ISSUE
ISS	DATE	AMENDMENT

ARCHITECT/BUILDER  
**WINCREST HOMES**  
CLIENT  
**MR. & MRS. BROWN**

**EZE DRAINAGE SOLUTIONS**  
Pty Ltd ACN 619 135 198  
Ph: (02) 97067767  
Fax: (02) 94754315  
CONSULTING ENGINEERS  
CIVIL & STORMWATER MANAGEMENT  
Mobile: 0405507654  
Email : info@ezeeng.com.au

DWG TITLE  
**TYPICAL DETAILS**  
PROJECT TITLE  
**PROPOSED NEW RESIDENTIAL DEVELOPMENT  
No. 98 ELIMATTA ROAD, MONA VALE NSW 2103**

DESIGNED BY :  
**EZ**  
ISSUED BY :  
**BE MIE Aust PENG**  
JOB No 17096  
DWG No D3  
No IN SET 3  
ISSUE A