

PROPOSED SECONDARY DWELLING AT 14 AIRLY ROAD, UMINA BEACH NSW 2257

GENERAL NOTES

- G1 ALL WORKS SHALL BE IN ACCORDANCE WITH B.C.A AND AS3500.3.
- G2 ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
- G3 THE BUILDER SHALL ENSURE THAT THE STORMWATER ENGINEERS DRAWINGS CORRESPOND TO THE ARCHITECTURAL, STRUCTURAL, AND LANDSCAPING DRAWINGS. IF THERE EXISTS ANY DISCREPANCIES BETWEEN THE DRAWINGS, THE BUILDER SHALL REPORT THE DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORKS.
- G4 PRIOR TO COMMENCING ANY WORKS, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTS INTO THE COUNCILS KERB/DRAINAGE SYSTEM MATCHED THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER.
- G5 THE DRAINAGE CONTRACTOR IS TO LOCATE AND RELOCATE AS NECESSARY ALL SERVICES ON SITE.
- G6 ALL LEVELS SHALL RELATE TO THE ESTABLISHED BENCH MARK. THIS IS TYPICALLY METRES TO AUSTRALIAN HEIGHT DATUM (AHD).
- G7 ALL DOWNPIPES TO BE 100MM DIAMETER UNLESS NOTED OTHERWISE.
- G8 ALL DOWN PIPES TO HAVE LEAF GUARDS.
- G9 ALL LINES ARE TO BE 100MM DIAMETER uPVC AT A MINIMUM 1.0% SLOPE UNLESS NOTED OTHERWISE. LINES ARE TO BE SEWER-GRADE AND SEALED.
- G10 ALL PIPES TO HAVE MINIMUM 150MM COVER IF LOCATED WITHIN PROPERTY.
- G11 ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE PURPOSES.
- G12 ALL SUB-SOIL DRAINAGE SHALL BE OF A MINIMUM 100MM DIAMETER AND SHALL BE PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE ARCHITECT OR STORMWATER ENGINEER.
- G13 ALL RETAINING WALLS SHALL BE CONSTRUCTED COMPLETELY WITHIN THE PROPERTY BOUNDARY LIMITS TO DETAILS PREPARED BY THE STRUCTURAL ENGINEER. WALLS FORMING THE ON-SITE DETENTION SYSTEM SHALL BE OF MASONARY/BRICK/CONCRETE CONSTRUCTION AND WATER TIGHT.
- G14 ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ON-SITE DETENTION STORAGE SHALL BE OF A NON-FLOTABLE MATERIAL SUCH AS DECORATIVE RIVER GRAVEL. PINE PARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA.
- G15 ALL DRAINAGE WORKS ARE TO AVOID TREE ROOTS. ROOT BARRIER TO BE INSTALLED ADJACENT TO TREE ZONES WHERE DRAINAGE MAY BE AT RISK.
- G16 ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
- G17 COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.

RAINWATER TANKS

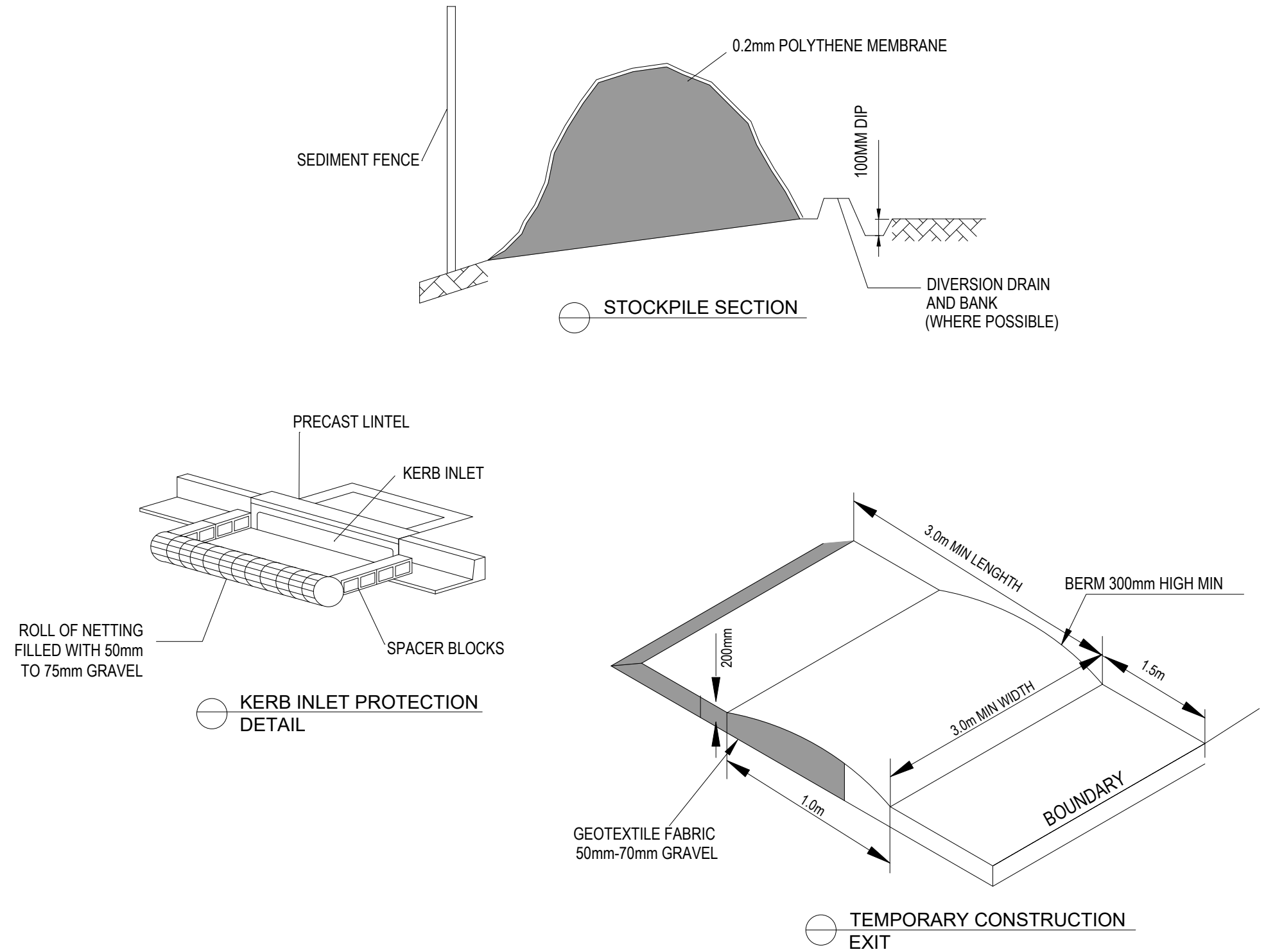
- R1 RAINWATER TANK, DRAINED ROOF AREAS AND REUSE PLUMBING TO COMPLY WITH BASIX REQUIREMENTS AND CERTIFICATE.
- R2 ADEQUATE SCREENING TO PREVENT MOSQUITO BREEDING AND ENTRY OF ANIMAL OR FLOATING MATTER.
- R3 A 'FIRST FLUSH' DIVERSION TO REMOVE ROOF CONTAMINANTS MUST BE PROVIDED.
- R4 TANKS TO BE PUMPED TO TOP-UP FROM THE POTABLE WATER SUPPLY DURING DRY PERIOD WHEN THE TANK IS 80% EMPTY.
- R5 PUMP TO BE SUITABLY SOUNDPROOFED.
- R6 A SIGN IS TO BE INSTALLED NEAR THE RAINWATER TANK HIGHLIGHTING "NOT FOR HUMAN CONSUMPTION".

LEGEND

PRESSURE PIPE (CHARGED LINE)	
GRAVITY PIPE AT MIN. 1% SLOPE U.N.O.	
AG. LINE AT MIN. 1% SLOPE	
DOWNPIPE MIN. Ø100 U.N.O.	
GRATED PIT SL: SURFACE LEVEL IL: INVERT LEVEL	
CLEANING EYE (INSPECTION EYE)	
OVERLAND FLOW PATH	
GRATED TRENCH	
EXISTING RL	+RL 00.000
DESIGN RL	+ <u>RL 00.000</u>

SEDIMENT & EROSION CONTROL

- S1 PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS.
- S2 IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURE TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
- S3 IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
- S4 PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
- S5 PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
- S6 ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
- S7 ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
- S8 WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
- S9 NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
- S10 APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGHOUT CONSTRUCTION.
- S11 IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
- S12 TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON SITE BY THE SUPERINTENDENT.



SEDIMENT FENCE

- F1 FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
- F2 WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150MM AND FOLDED.
- F3 POSTS SHALL NOT BE SPACED MORE THAN 3.0 METRES APART.
- F4 FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14MM GAUGE, 150MM MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
- F5 INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, SPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE
SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40M ON FLAT TERRAIN DECREASING TO 20M SPACINGS ON STEEP TERRAIN

NOTE

DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS FOR LEVELS, STEPS, DIMENSIONS AND SETOUT. VERIFY DIMENSIONS ON SITE. THE ENGINEER SHALL BE NOTIFIED OF ANY VARIATIONS TO THAT SHOWN ON STRUCTURAL PLANS BEFORE COMMENCEMENT OF WORKS

A	31.07.2026	ISSUED FOR DA		A.H
REV	DATE	DESCRIPTION		BY

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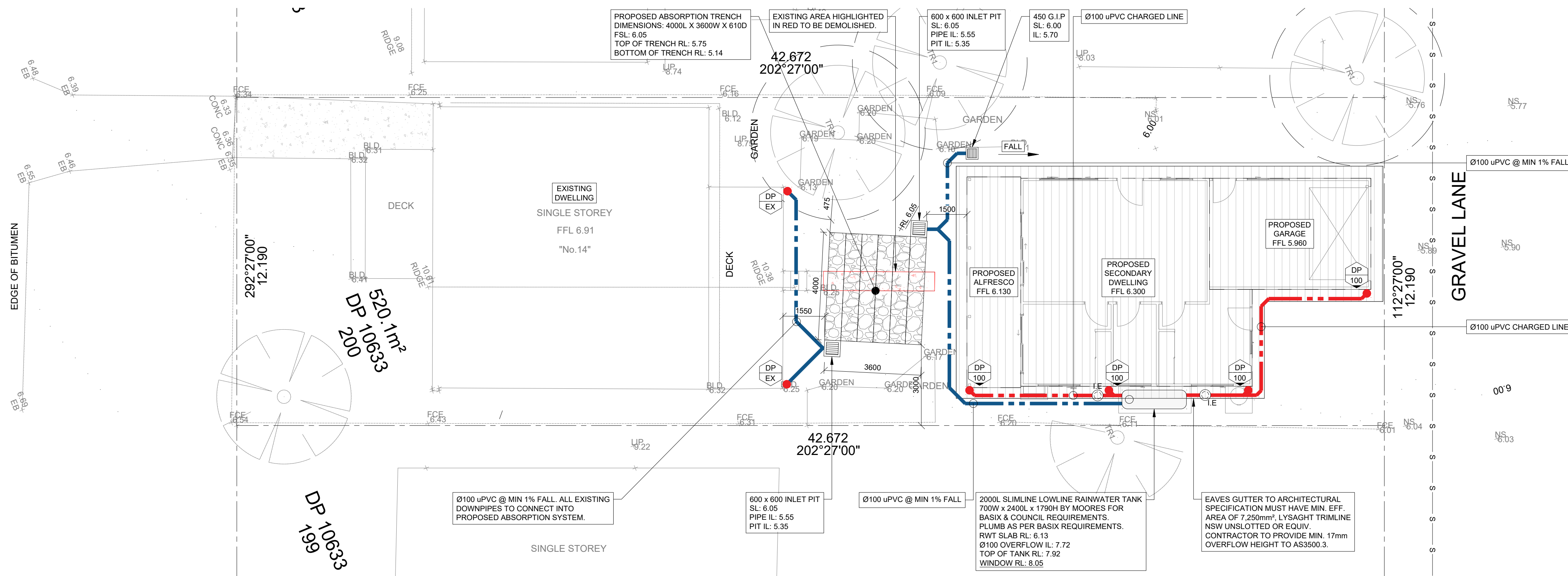
**PROPOSED
SECONDARY DWELLING**
AT: 14 AIRLY ROAD, UMINA BEACH NSW 2257
FOR: GRANNY FLAT SOLUTIONS

COVER SHEET

JOB NUMBER: 260796	DWG NUMBER: C000	ORIGINAL SIZE: A1
DESIGNED BY: A.H	DATE: 31/07/2026	
DRAWN BY: A.H	SCALE: AS SHOWN	



AIRLY RD



CONCEPT STORMWATER DRAINAGE PLAN

1:100

ABSORPTION TRENCH DESIGN

Address		14 Airly Road Umina Beach									
Development Type		Secondary Dwelling									
Project No.		260796									
Designed by		A.H									
Design Storm Event		5% AEP									
Site Area		520.1		m ²							
Area Draining to Infiltration Trench		235		m ²							
Run-off Coefficient		1.0		C							
Soil Type		Sandy Clay									
Soil Modification Factor		U		1							
Saturated Hydraulic Conductivity		k _s		1.0E-04		m/s					
Absorption Rate		0.100		L/m ² /s							
Maximum Emptying Time		2.5		days							
Selected Infiltration System				Evertrench Jumbo							
Selected System Size				Jumbo							
Number Required				24							
Trench Selected		Size	Height (mm)	Length (mm)	Width (mm)	Void Ratio	Capacity (L)	Base Area (m ²)	Number Required	Emptying Time (s)	Emptying Time (days)
Evertrench Jumbo		Jumbo	510	1000	600	0.75	175	14.39	24	7650	0.09 OK!

Time (min)	Rainfall Intensity (mm/hr)	Runoff (L/s)	Runoff Volume (m ³)
1	306.60	20.01	1.20
2	254.70	16.63	2.00
3	236.00	15.41	2.77
4	220.50	14.39	3.45
5	208.80	13.63	4.09
10	166.20	10.85	6.51
15	139.20	9.09	8.18
30	95.60	6.24	11.23
60	61.80	4.03	14.52
120	38.95	2.54	18.31
180	29.83	1.95	21.03
			21.03

SITE DISCHARGE INDEX (SID)

SUBJECT SITE FALLS WITHIN CENTRAL COAST COUNCIL, SOUTHERN AREA (FORMER GOSFORD LGA).

ACCORDING TO CLAUSE 3.1.11.3.4 OF THE CENTRAL COAST DEVELOPMENT PLAN (2022), THE SID IS TO BE 10% OR LESS.

SITE AREA = 520.1m²

PROPOSED IMPERVIOUS AREA BYPASSING STORMWATER SOURCE CONTROL MEASURES = 0m²

SID = 0 / 520.1 = 0 < 0.1 [OK]

RAINWATER TANK (RWT) WARRANT

SUBJECT SITE FALLS WITHIN THE SOUTHERN AREA (FORMER GOSFORD LGA), WITHIN THE CENTRAL COAST LGA.

ACCORDING TO CLAUSE 3.1.10.3 OF CHAPTER 3.1 FLOODPLAIN MANAGEMENT/WATER CYCLE MANAGEMENT, OF THE CENTRAL COAST DCP (2022), IF THE INCREASE IN IMPERVIOUS AREA IS GREATER THAN 50m², A RWT IS REQUIRED.

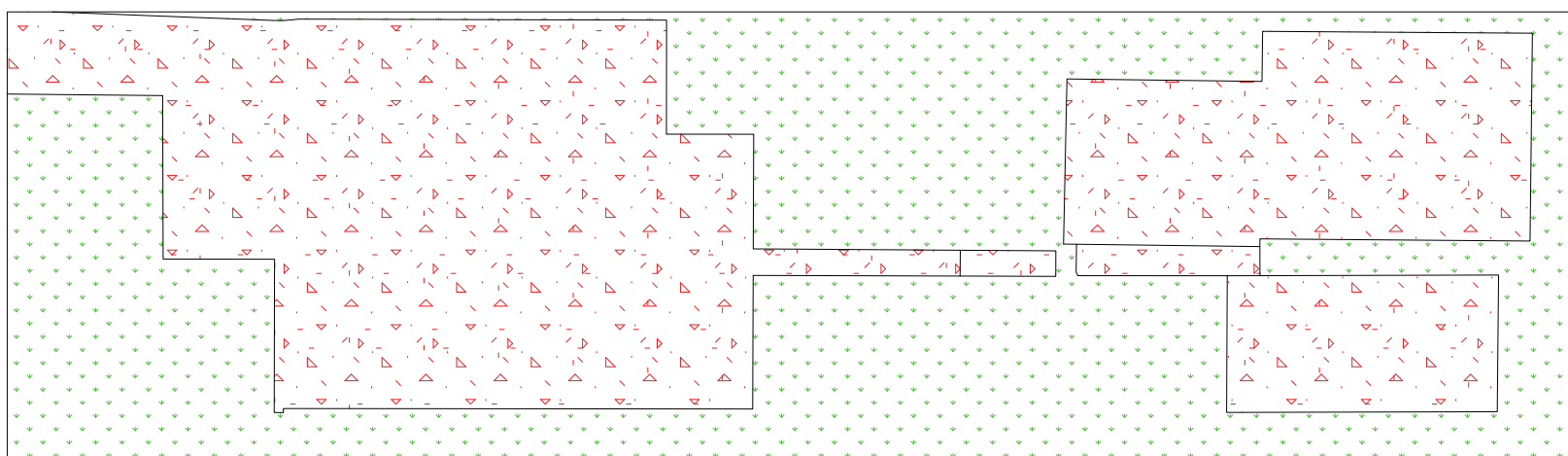
PRE DEV IMP. AREA = 262.8m²
POST DEV IMP. AREA = 285.0m²

TOTAL INCREASE IN IMPERVIOUS AREA = 22.2m²

SINCE INCREASE IN IMPERVIOUS AREA IS LESS THAN 50m², A RWT IS NOT REQUIRED FOR COUNCIL REQUIREMENTS; HOWEVER, A RWT IS REQUIRED FOR BASIX REQUIREMENTS.

THEREFORE, A 2000L RWT HAS BEEN PROVIDED.

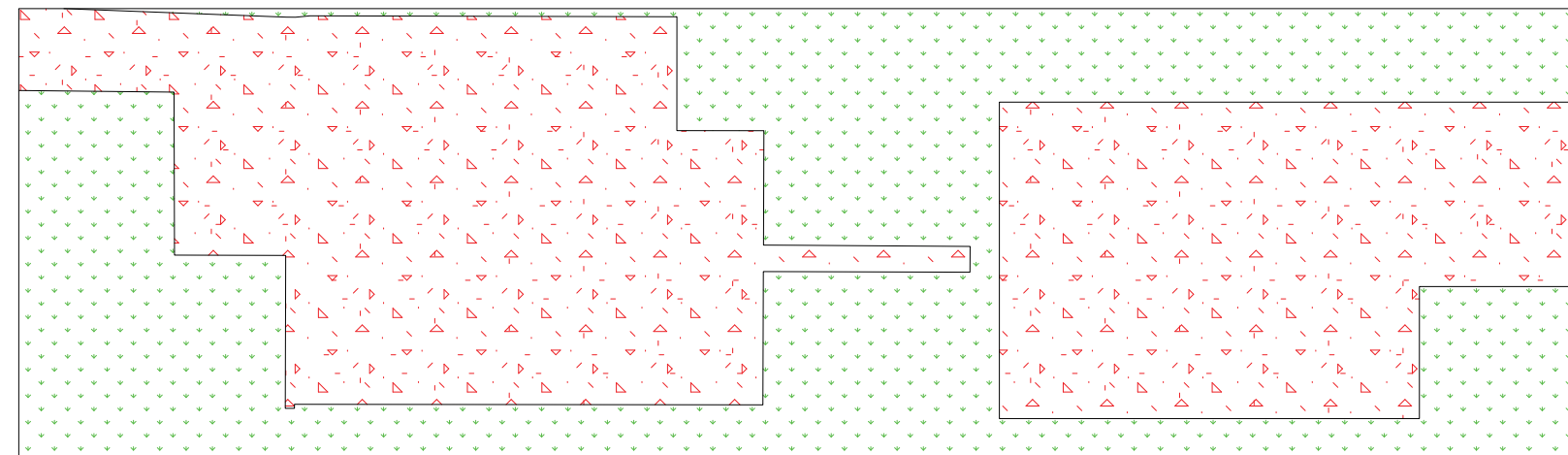
IMPERVIOUS AREA: 262.8m²
PERVIOUS AREA: 257.3m²
TOTAL AREA: 520.1m²



PRE-DEVELOPMENT CATCHMENT PLAN

1:200

IMPERVIOUS AREA: 285.0m²
PERVIOUS AREA: 235.1m²
TOTAL AREA: 520.1m²



POST-DEVELOPMENT CATCHMENT PLAN

1:200

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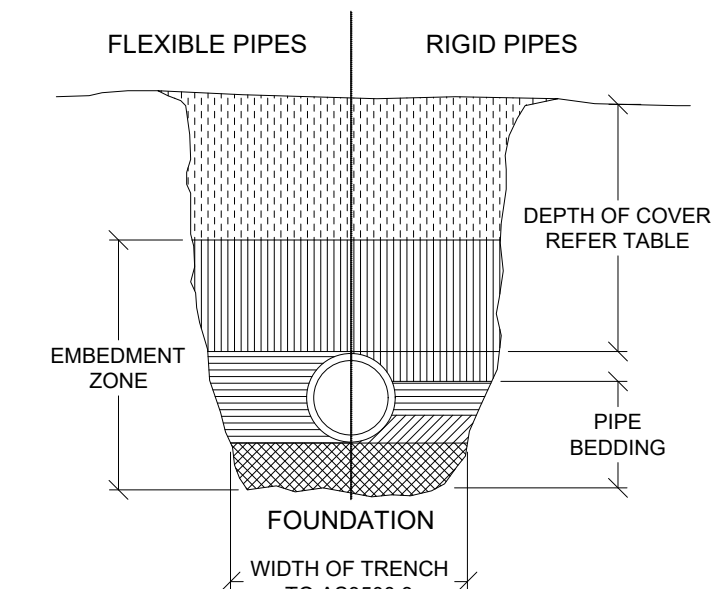
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PROPOSED SECONDARY DWELLING AT: 14 AIRLY ROAD, UMINA BEACH NSW 2257 FOR: GRANNY FLAT SOLUTIONS		JOB NUMBER: 260796	DWG NUMBER: C001	ORIGINAL SIZE: A1
CONCEPT STORMWATER DRAINAGE PLANS / CALCULATIONS		DESIGNED BY: A.H	DATE: 31/07/2026	
		DRAWN BY: A.H	SCALE: AS SHOWN	



LEGEND: TRENCH BACKFILL

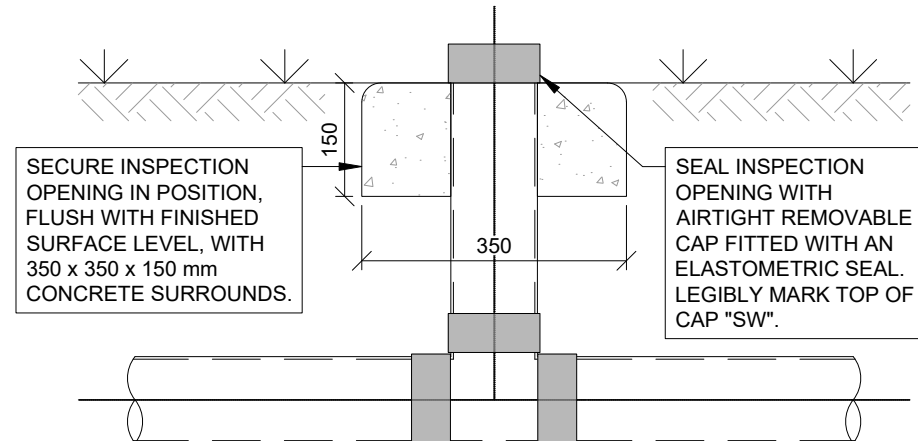
SYMBOL	FLEXIBLE PIPES	RIGID PIPES
[Pattern]	BACKFILL	
[Pattern]	OVERLAY	
[Pattern]	SIDE SUPPORT	
[Pattern]	HAUNCH	
[Pattern]	UNDERLAY	BEDDING

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

MINIMUM PIPE COVER (FROM FINISHED SURFACE TO TOP OF PIPE)		
LOCATION	MINIMUM COVER (mm)	
	CAST/DUCTILE IRON, GALV. STEEL	OTHER AUTHORISED PRODUCTS
1. NOT SUBJECT TO VEHICULAR LOADING:		
1.A. WITHOUT PAVEMENT:		
1.A.1. FOR SINGLE DWELLINGS	100	100
1.A.2. OTHER THAN SINGLE DWELLINGS	100	300
1.B. WITH PAVEMENT OF BRICK / UNREINFORCED CONCRETE	100	100*
2. SUBJECT TO VEHICULAR LOADING:		
2.A. OTHER THAN ROADS:		
2.A.1. WITHOUT PAVEMENT	300	450
2.A.2. WITH PAVEMENT OF:		
2.A.2.1. REINFORCED CONCRETE FOR HEAVY VEHICLES.	0*	100*
2.A.2.2. BRICK/UNREINFORCED CONCRETE FOR LIGHT VEHICLES	0*	75*
2.B. ROADS:		
2.B.1. SEALED ROADS	600	600
2.B.2. UNSEALED ROADS	600	750
3. SUBJECT TO CONSTRUCTION VEHICLES OR EMBANKMENT CONDITIONS	600#	750#
* BELOW THE UNDERSIDE OF PAVEMENT # SUBJECT TO COMPLIANCE WITH AS1762, AS2033, AS/NZS 2566.1, AS3725 OR AS 4060		

TYPICAL PIPE LAYING DETAIL

NTS



- LOCATION:**
INSPECTION EYES SHALL BE LOCATED AT:
- EACH POINT OF CONNECTION.
 - EVEN SPACINGS OF NOT MORE THAN 30m.
 - EACH END OF ANY INCLINED JUMP UP THAT EXCEEDS 6m IN LENGTH.
 - EACH CONNECTION TO AN EXISTING SITE STORMWATER DRAIN.
 - AT ANY CHANGE OF DIRECTION GREATER THAN 45°.
- SIZE:**
- FOR SIZES LESS THAN DN150, THE RISER SHALL BE THE SAME SIZE AS THE STORMWATER DRAIN.
 - OTHERWISE NOT LESS THAN DN150.
- NOTE:** AN INLET OR STORMWATER PIT MAY BE USED IN LIEU OF AN INSPECTION EYE.

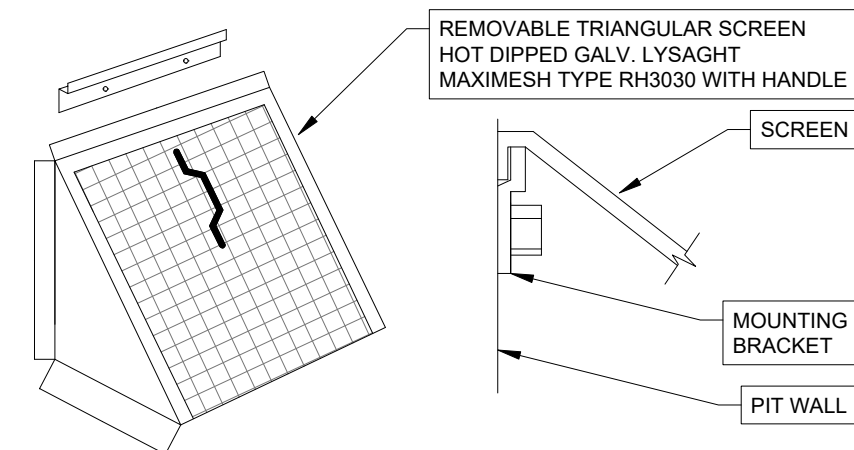
TYPICAL INSPECTION EYE DETAIL

NTS



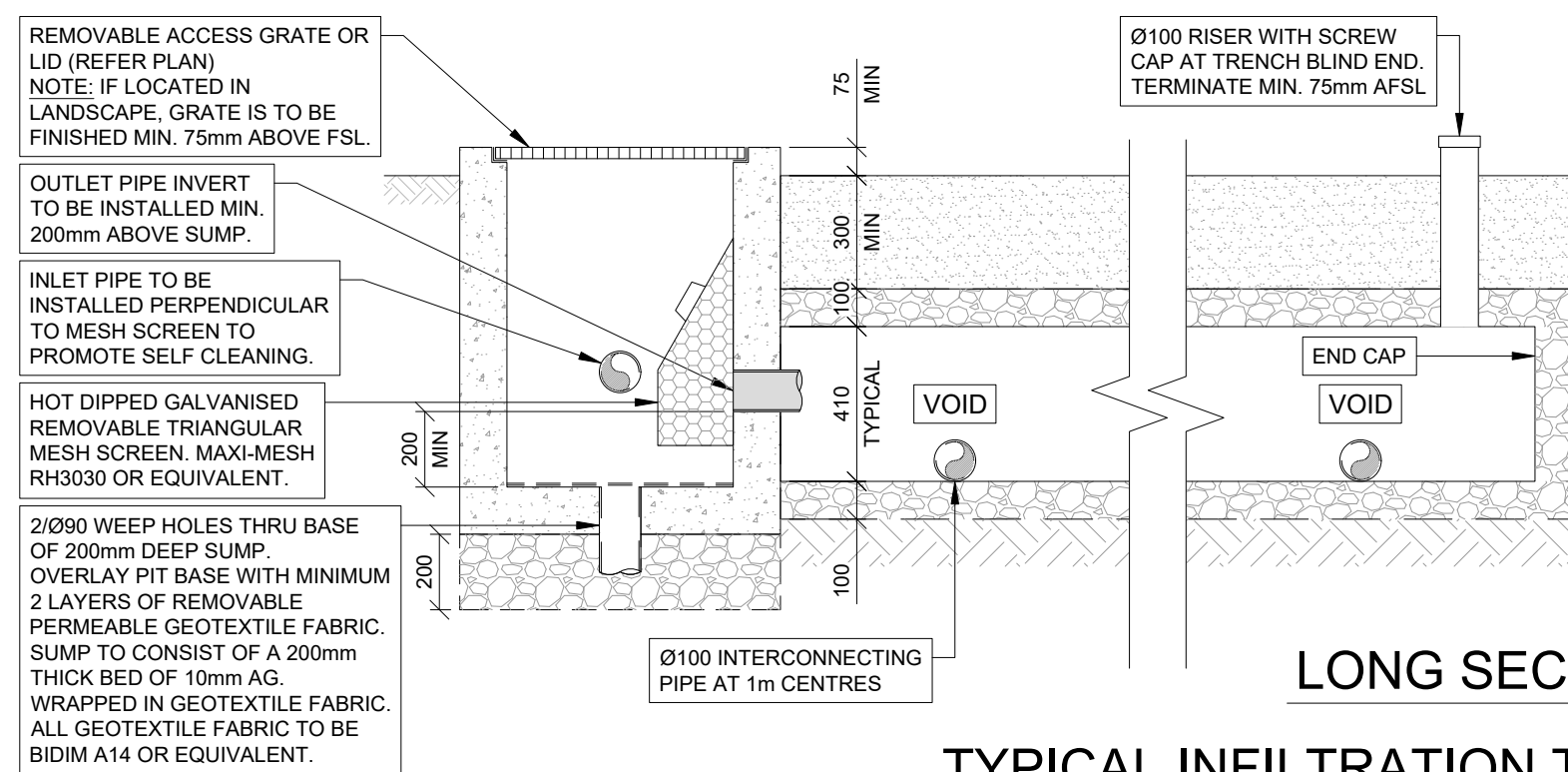
EVERY EXTERNAL SUPPLY OUTLET FROM
RAINWATER RE-USE TANK TO BE LABELED
WITH METALLIC WARNING SIGN

NON-POTABLE WARNING SIGN



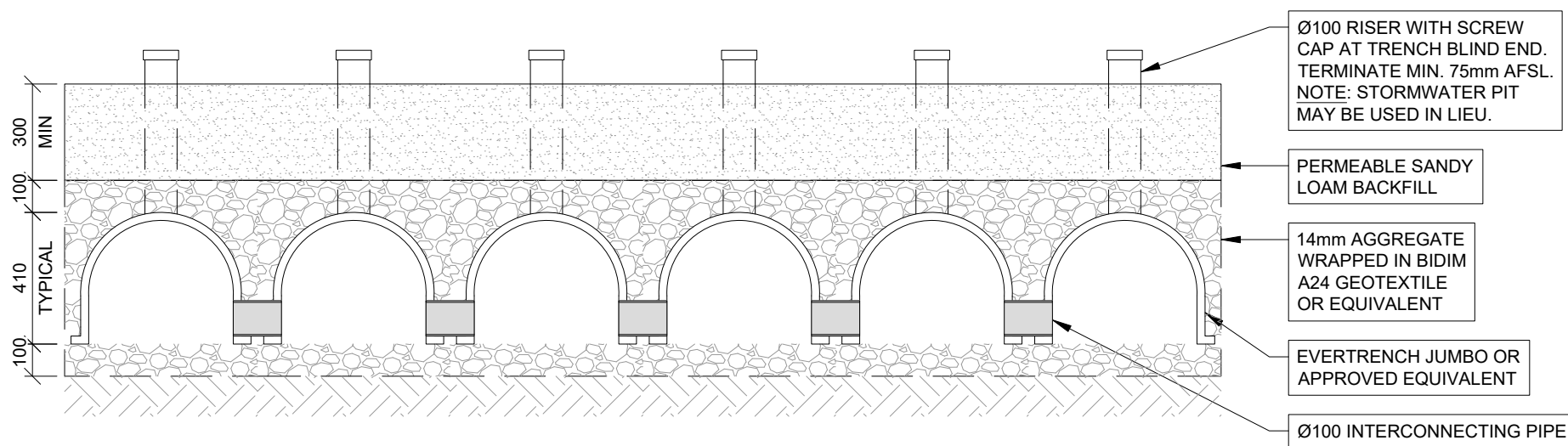
MULTI-PURPOSE FILTER SCREEN

NTS

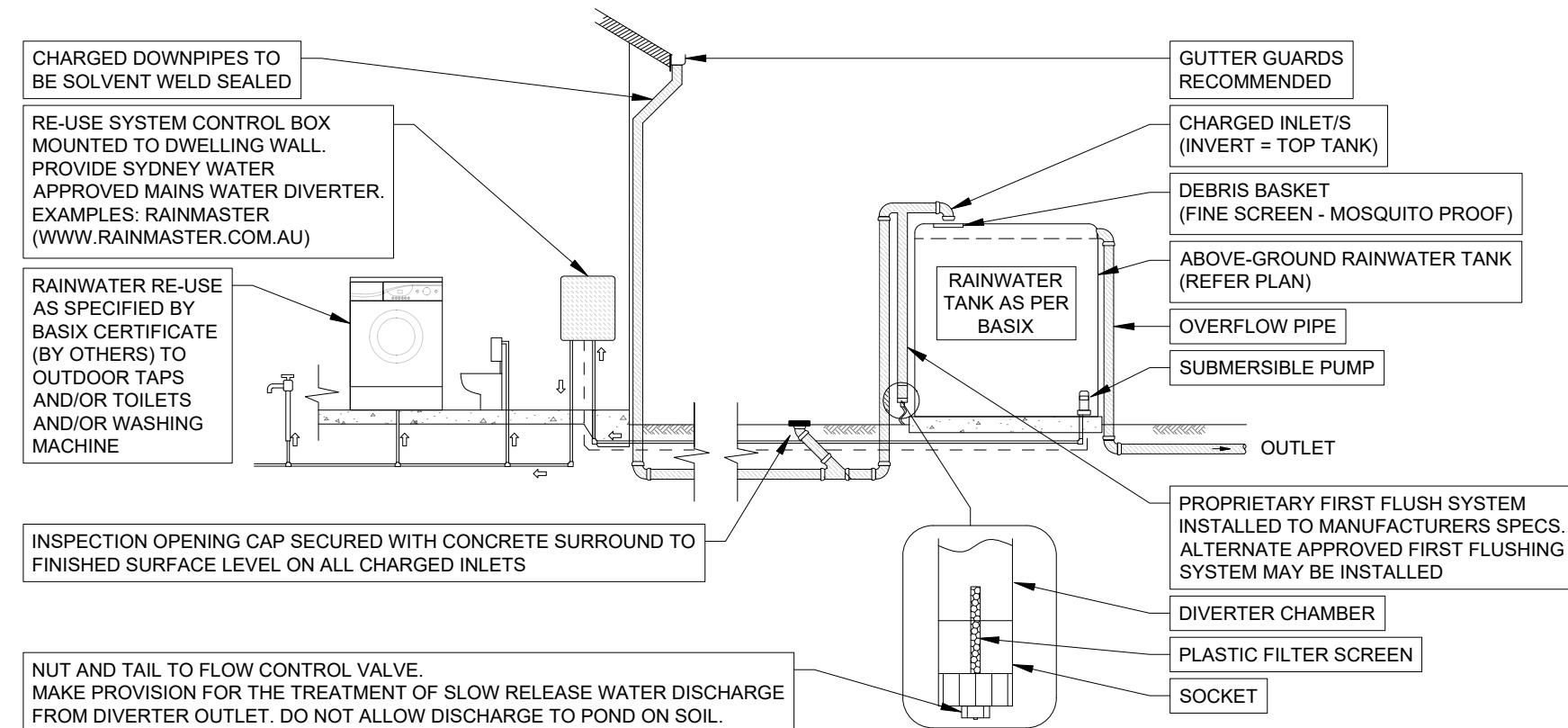


TYPICAL INFILTRATION TRENCH DETAIL

NTS



CROSS SECTION



TYPICAL ABOVE-GROUND RAINWATER RE-USE TANK DETAIL

NTS

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NOT FOR CONSTRUCTION

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PROPOSED SECONDARY DWELLING AT: 14 AIRLY ROAD, UMINA BEACH NSW 2257 FOR: GRANNY FLAT SOLUTIONS		JOB NUMBER: 260796	DWG NUMBER: C001	ORIGINAL SIZE: A1
CONCEPT STORMWATER DRAINAGE DETAILS		DESIGNED BY: A.H	DATE: 31/07/2026	
		DRAWN BY: A.H	SCALE: AS SHOWN	