

PROPOSED RESIDENTIAL SUBDIVISION 23-27 WARRIEWOOD ROAD, WARRIEWOOD STORMWATER CONCEPT DESIGN STAGE II FOR DA



LOCALITY PLAN
NOT TO SCALE
COPYRIGHT OF SIX MAPS
LOCALITY PLAN

ARCHITECT:



DRAWINGS LIST			
Sheet No.	DWG No.	TITLE	REV
1	SWDA100	COVER SHEET	A
2	SWDA102	SITE PLAN	A
3	SWDA200	STORMWATER CONCEPT DESIGN - RESIDENTIAL APARTMENT BASEMENT B2	A
4	SWDA202A	STORMWATER CONCEPT DESIGN - TOWNHOUSES FIRST FLOOR PLAN	A
5	SWDA202B	STORMWATER CONCEPT DESIGN - RESIDENTIAL DEPARTMENTS GROUND FLOOR	A
6	SWDA203	STORMWATER CONCEPT DESIGN - RESIDENTIAL APARTMENTS & TOWNHOUSES ROOF PLAN	A
7	SWDA300A	STORMWATER CONCEPT DESIGN - DETAILS SHEET 1 OF 2	A
8	SWDA300B	STORMWATER CONCEPT DESIGN - DETAILS SHEET 2 OF 2	A
9	SWDA400	EROSION & SEDIMENT CONTROL - PLAN AND DETAILS SHEET	A
10	SWDA500	STORMWATER CONCEPT DESIGN - MUSIC CATCHMENT PLAN	A

CLIENT :

THE KNOWLES
GROUP- ARCARE






PREPARED BY:
SGC Consulting Engineers
Suite 5.03, Level 5
156 Pacific Highway
St. Leonards, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au



- RIPARIAN
- PAVED AREA & DRIVEWAY
197m²
- COURTYARDS & PLANTER BOX
3107m²
- LANDSCAPING
377m²
- ROADS
2444m²
- SHARED PEDESTRIAN / CYCLEWAY
285m²
- ROOFS
3040m²

SITE PLAN
scale 1:250



Reference Coordination Drawing				 ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER	QUALITY CONTROL		<p>WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD</p>  <p>0m 2.5 5 7.5 10 12.5 SCALE 1:250 ON ORIGINAL SIZE</p>	CLIENT THE KNOWLES GROUP- ARCARE	ARCHITECT  V-ARC V-ARC.COM.AU	<p>Unit 412, Level 4, 14-16 LEXINGTON DRIVE BELLA VISTA, NSW 2153 T: +61 2 8883 4239 F: +61 2 9672 6977 Email: office@sgce.com.au Web: www.sgce.com.au</p> <p>A.B.N. 21 118 222 530</p>	PROJECT PROPOSED RESIDENTIAL APARTMENTS & TOWNHOUSES 23-27 WARRIEWOOD ROAD, WARRIEWOOD STAGE II	Drawing Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Discipline Drawing Title and Number Date Rev.					DRAWN DATE							Drawing Title		
ARCH SITE PLAN 16.02.2018 1					CHECKED DATE							SITE PLAN		
ARCH GROUND FLOOR SLAB PLAN PART 1&2 16.02.2018 E					DESIGNED DATE							STAGE II		
MECH					VERIFIED DATE							Project No Drawing No Revision No		
ELEC					SAM HADDAD 02.05.2017							20160112 SWDA102 P1		
HYD					MI Elaut CP&ng NPER 2247040							Grid Datum Sheet Scale (at original size)		
FIRE						- A.H.D. 2 of 10 1:250 @ A1								
LANDS COMPOSITE LOWER GROUND & GROUND 11.06.2017 A														
CIVIL														
SURVEY														
Issue Last revision title				by Date Status										
Issued internal sequence and revision history														
1-preliminary 2-discovery application 3-construction certificate														
4-tender 5-construction 6-other														



100yr 2hr ARI STORM= 60.1mm/hr
 AR1X2=120.2mm
 AREA OF DRIVEWAY
 RAMP UNCOVERED= 13.1m²
 V=AxId
 =13.10x(120.2/1000)
 =1.57m³
 THEREFORE ADOPT A MIN. PUMP OUT PIT SIZE OF 3.0m³ IN ACCORDANCE WITH
 AS3500.

BASEMENT DRAINAGE DESIGN SUBJECT TO
GEOTECHNICAL INVESTIGATION AND
STRUCTURAL DESIGN OF WALLS AND SLABS.

EACH PUMP NEED TO BE INSTALLED FOLLOWING ITEMS:

- .900SQ HEAVY DUTY CLASS "C" STEEL GRATED LID FOR ACCESS AND MAINTENANCE PURPOSES.
- CONFINED SPACE SIGN ABOVE PUMP OUT PIT FOR PUBLIC AWARENESS AND WARNING.
- STEP IRONS. REFER SW300 TO DETAILS.
- INSTALL TWO (2) K-30 SUBMERSIBLE PUMPS OR EQUIVALENT EACH WITH A PUMP CAPACITY OF 10L/S AT 8m HEAD, FLOAT SWITCH AND CONTROL PANEL TO MANUFACTURER'S SPECIFICATIONS.

BASEMENT SLAB TO HAVE 1% MINIMUM FALL TO INLET
PITS TO AS 2890 REQUIREMENTS.

PIT No.	TYPE	SIZE	GRATE & FRAME	RL	IL
1/1	GTD	200x200	HEAVY DUTY CLASS "C"	-0.4	-0.6
2/1	GSP	450x450	HEAVY DUTY CLASS "C"	-0.5	-0.95
2/2	GSP	600x600	HEAVY DUTY CLASS "C"	-0.5	-1.15
3/1	GSP	450x450	HEAVY DUTY CLASS "C"	-0.5	-0.95
3/2	GSP	450x450	HEAVY DUTY CLASS "C"	-0.5	-1.15




QUALITY CONTROL	
DRAWN	DATE
CHECKED	DATE
DESIGNED	DATE
VERIFIED	DATE
APPROVED	DATE

WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD



Scales



A horizontal scale bar with markings at 0m, 2, 4, 6, 8, and 10. Below the bar is the text "SCALE 1:200 ON ORIGINAL SIZE".

CLIENT
THE KNOWLES
GROUP- ARCARE

ARCHITECT



Suite 5.03, Level 5,
156 PACIFIC HIGHWAY,
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au

A.B.N. 21 118 222 53

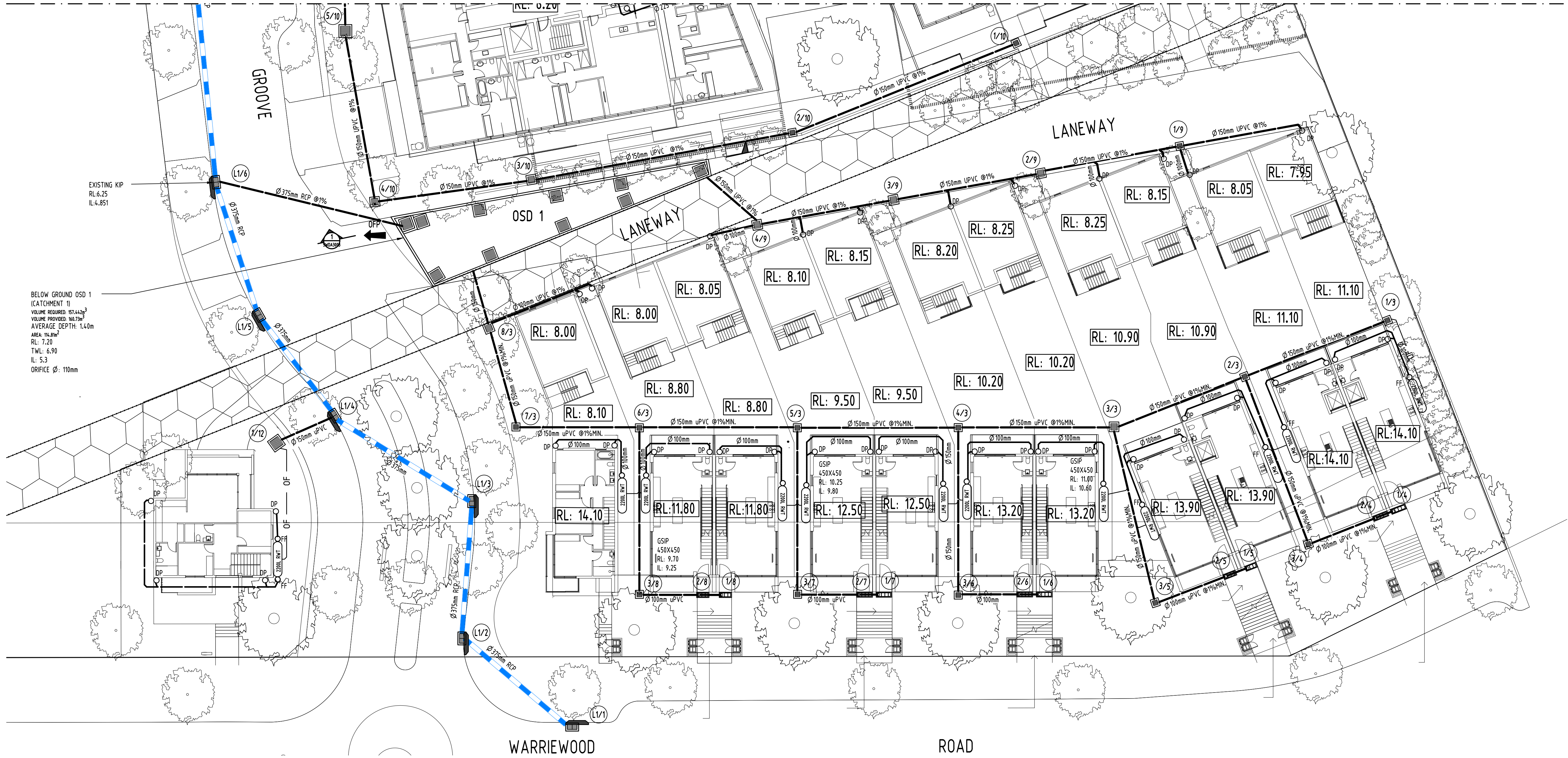
PROJECT
PROPOSED RESIDENTIAL
APARTMENTS & TOWNHOUSES
23-27 WARRIEWOOD ROAD, WARRIEWOOD
STAGE II

Grid	Datum	Sheet	Scale (at original size)
-	A.H.D.	3 of 10	1:200 @ A1

Drawing Status	FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Drawing Title	STORMWATER CONCEPT PLAN RESIDENTIAL APARTMENT BASEMENT BUILDING

Project No	Drawing No	Revision No
20160112	SWDA200	A

REFER TO SW202B FOR CONTINUATION



Reference Coordination Drawing				
Discipline	Drawing Title and Number	Date	Rev.	
ARCH	DA-101	03.2017	C	
ARCH				
STRUCT				
MECH				
ELEC				
HYD				
FIRE				
LANDS				
SURVEY				

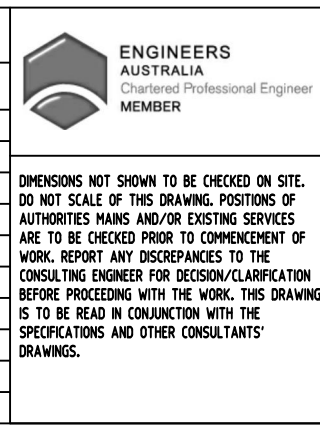
Issue | Last revision title

1-preliminary	2-development application	3-construction certificate	4-tender	5-construction	6-other
---------------	---------------------------	----------------------------	----------	----------------	---------

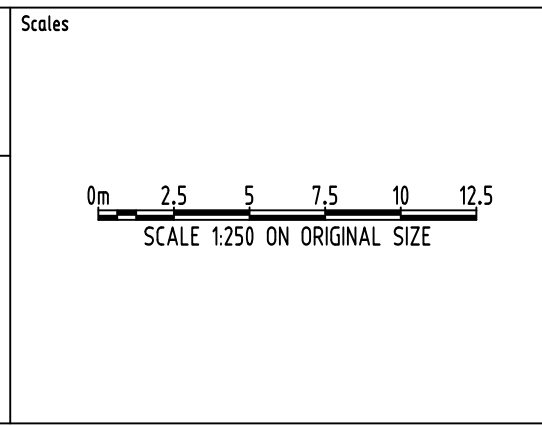
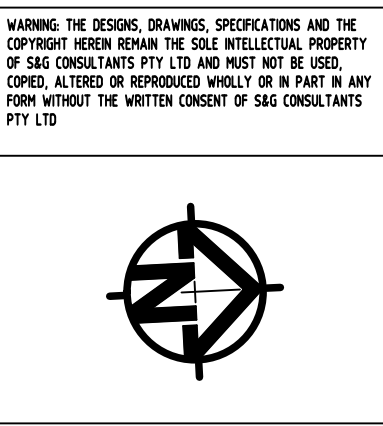
Issuer internal sequence and revision history

LN	16.10.18	2	
LN	17.09.18	1	

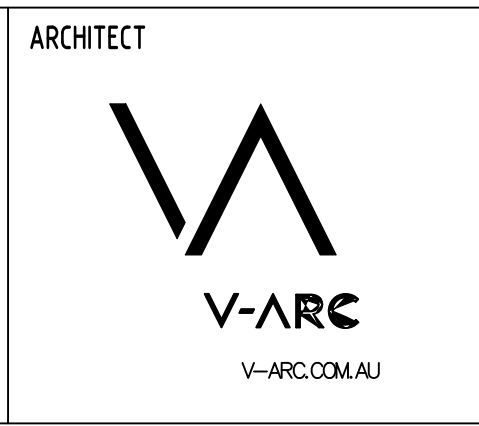
by Date Status



QUALITY CONTROL	
DRAWN	DATE
CHECKED	DATE
DESIGNED	DATE
VERIFIED	DATE
APPROVED	DATE



CLIENT
THE KNOWLES
GROUP- ARCARE



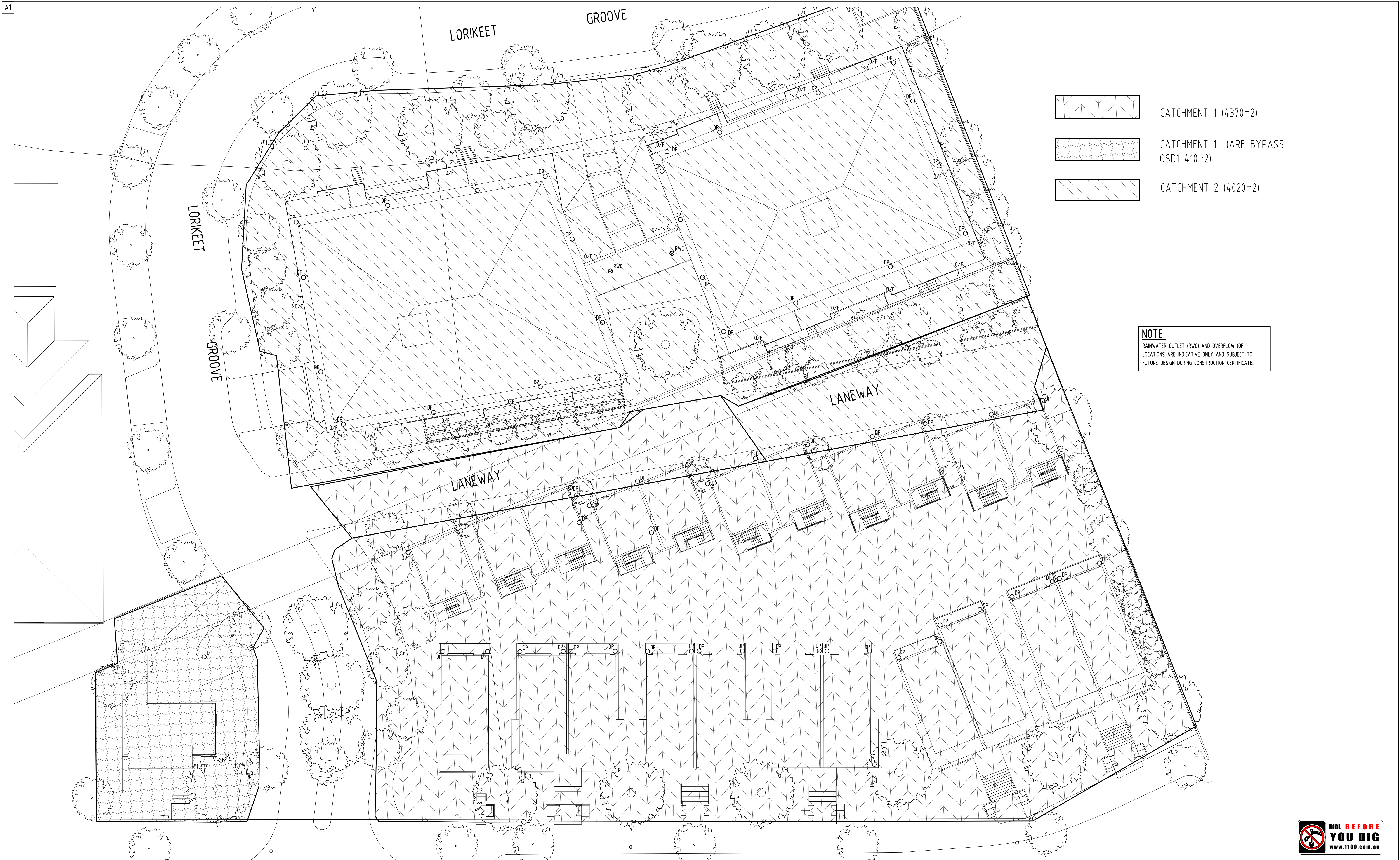
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY,
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au




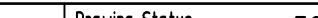
A.B.N. 21 118 222 530

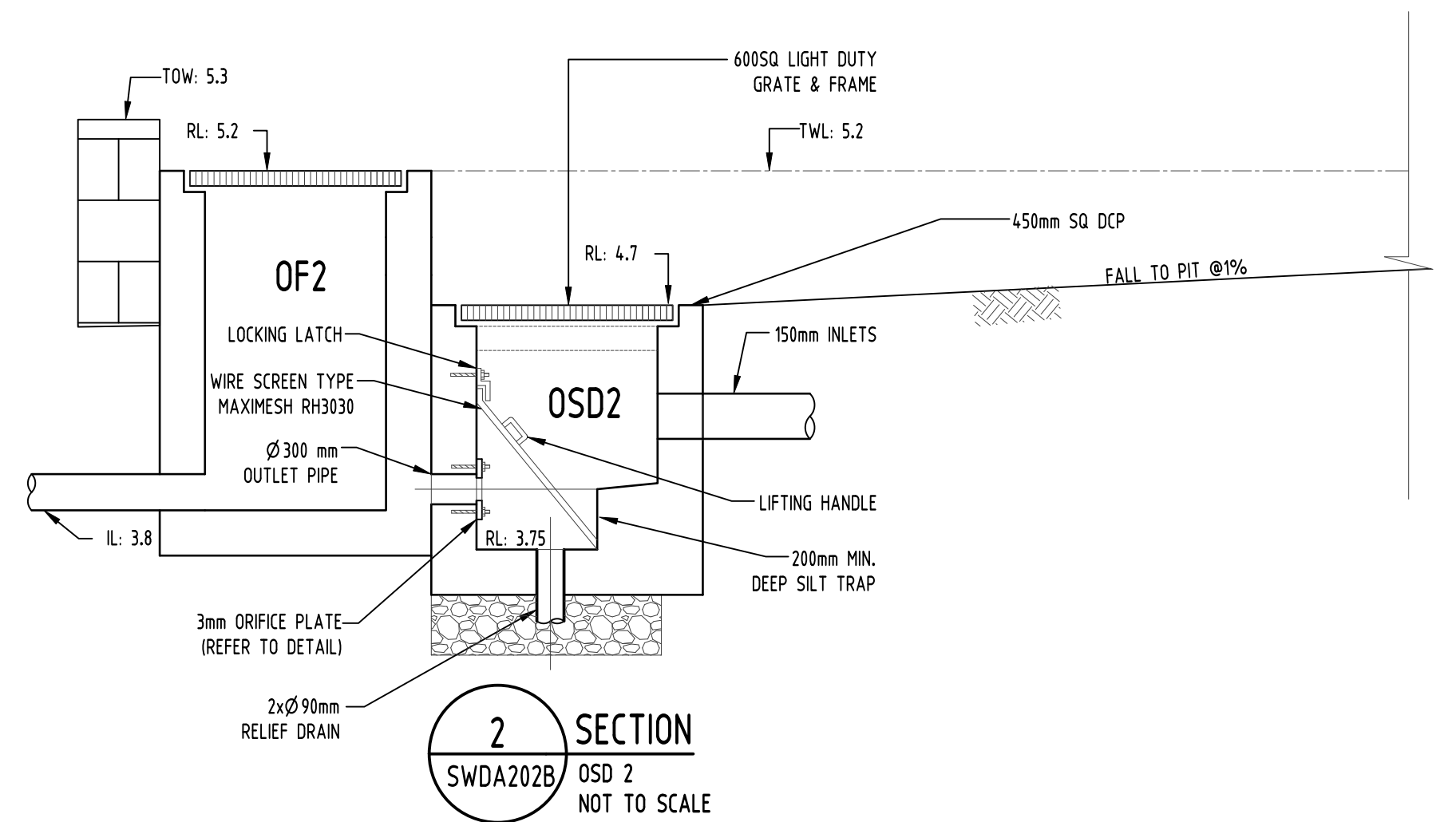
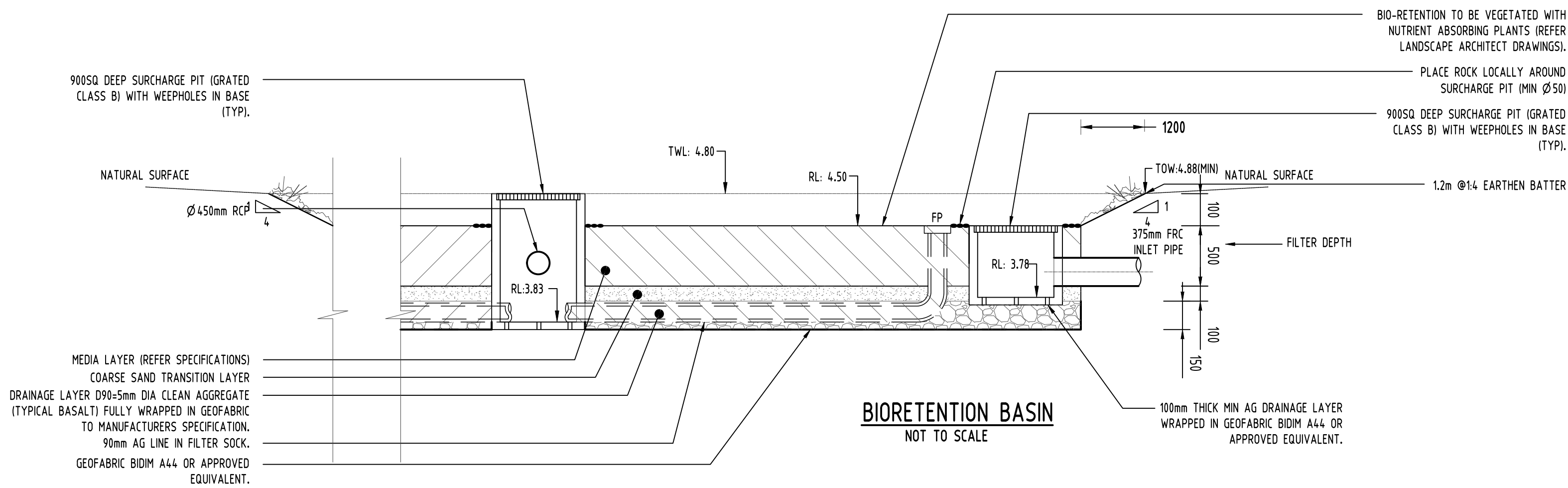
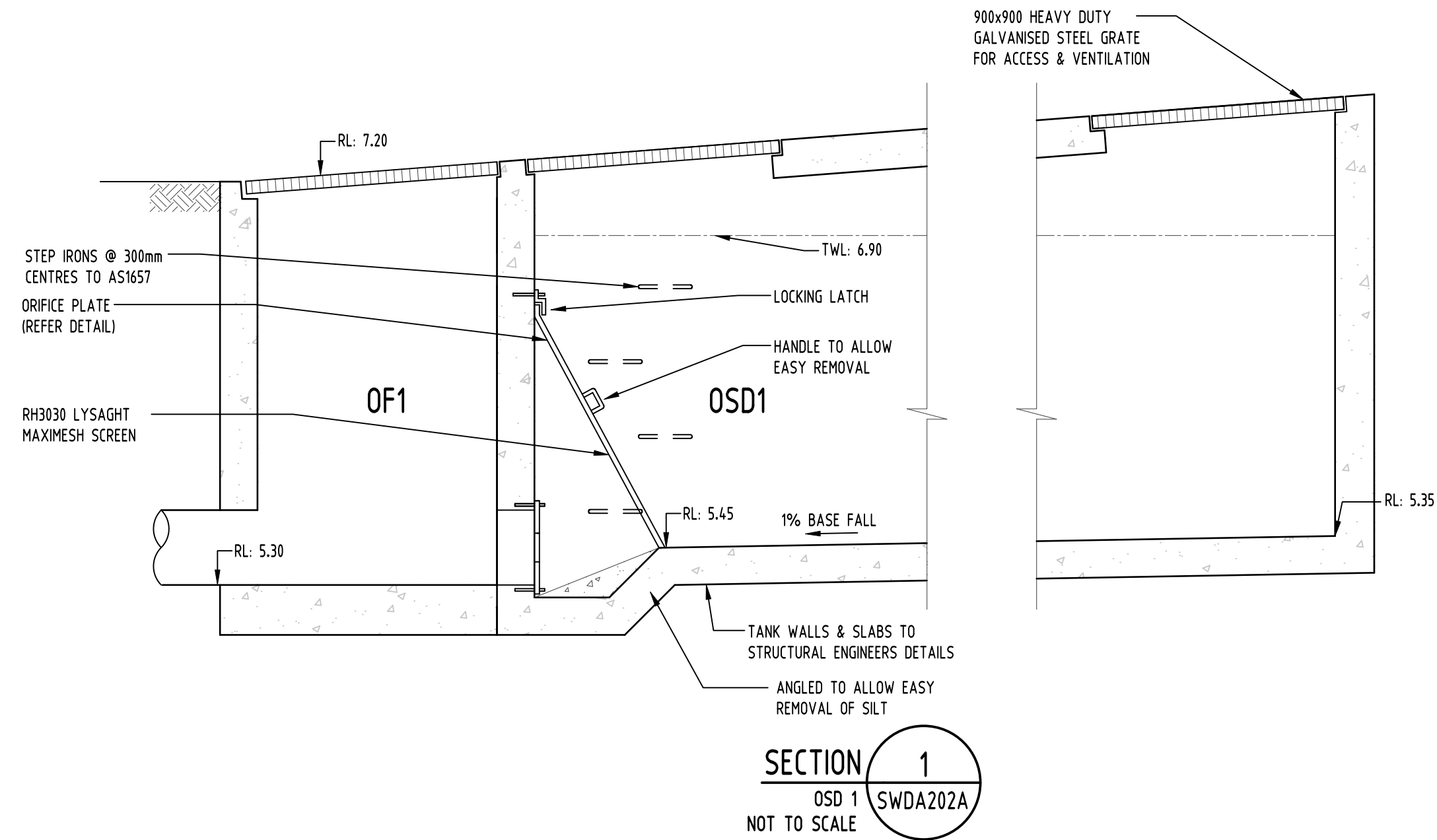
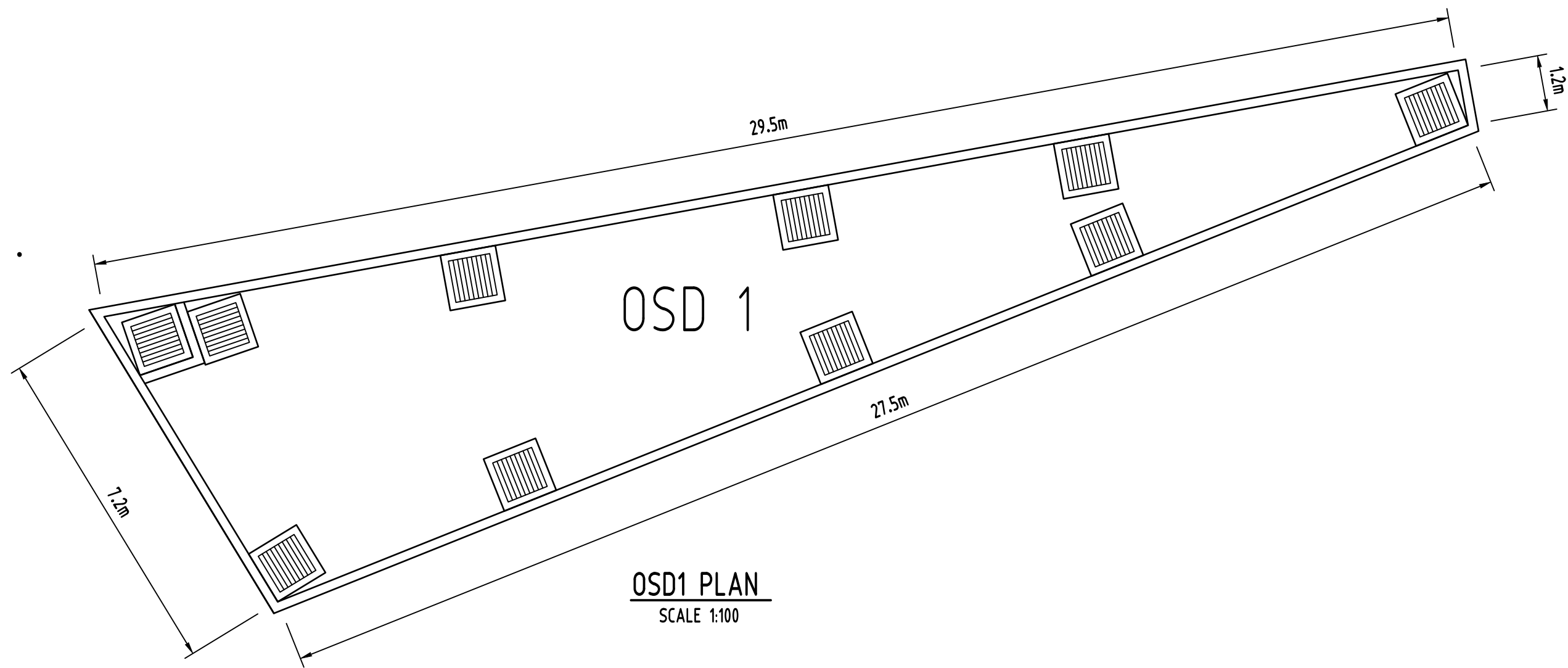
PROJECT
PROPOSED RESIDENTIAL
APARTMENTS & TOWNHOUSES
23-27 WARRIEWOOD ROAD, WARRIEWOOD
STAGE II

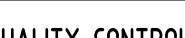



Grid	Datum	Sheet	Scale (at original size)
-	A.H.D.	4 of 10	1:200 @ A1

Drawing Status	FOR APPROVAL		
	NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Drawing Title	STORMWATER CONCEPT PLAN TOWNHOUSES FIRST FLOOR PLAN		
Project No	Drawing No	Revision No	
20160112	SWDA202A	A	



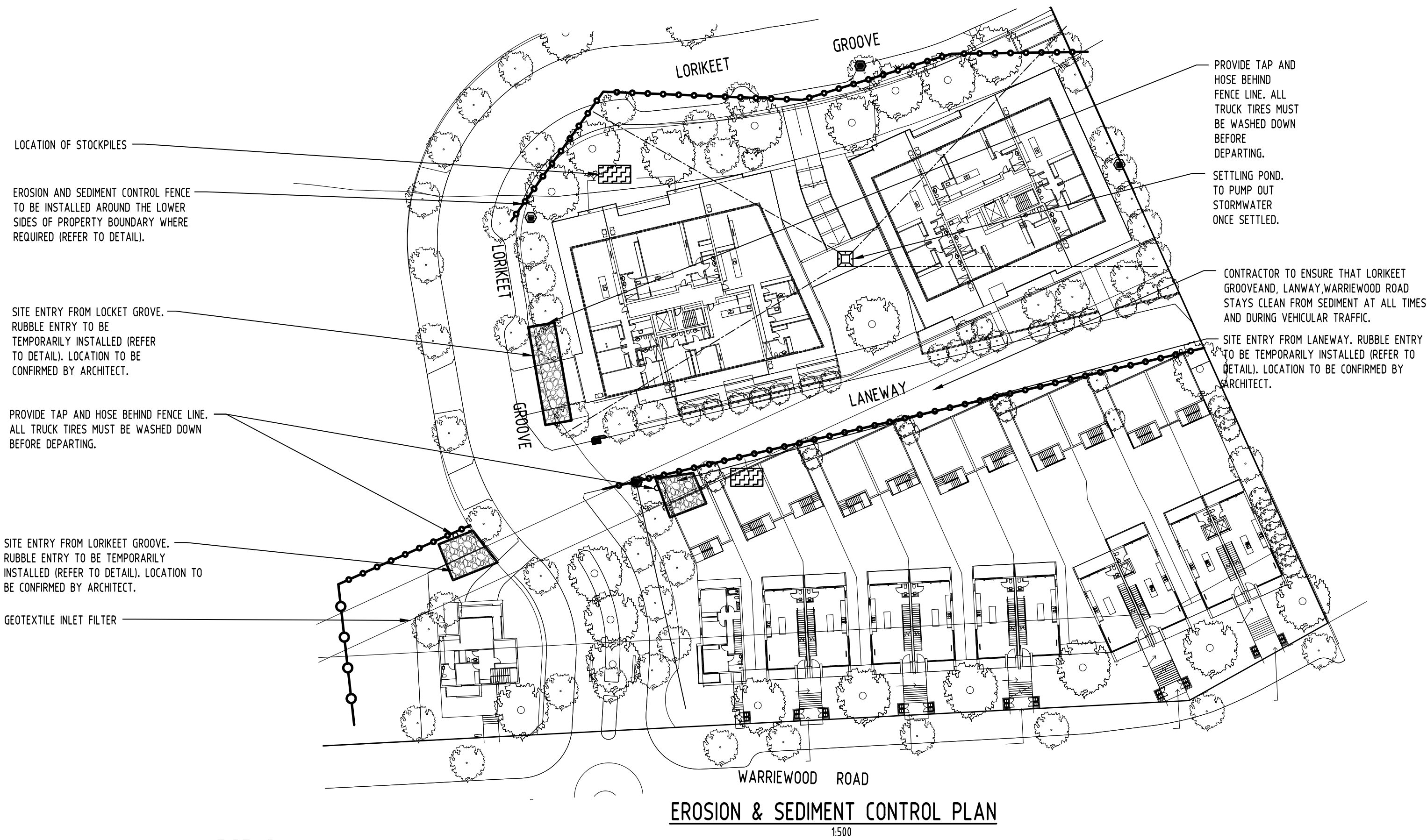
Reference Coordination Drawing										 ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER										QUALITY CONTROL										Scales										CLIENT										ARCHITECT										PROJECT										Drawing Status																			
Discipline Drawing Title and Number Date Rev.										DISCREPANCIES NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING. POSITIONS OF AUTHORITIES MARKS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR RECONCILIATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.										DRAWN DATE										0m 2 4 6 8 10 SCALE 1:200 ON ORIGINAL SIZE										THE KNOWLES GROUP- ARCARE										 V-ARC V-ARC.COM.AU										Suite 5.03, Level 5, 156 PACIFIC HIGHWAY, ST. LEONARDS, NSW 2065 T: +61 2 8883 4239 Email: office@sgce.com.au Web: www.sgce.com.au A.B.N. 21 118 222 530										PROPOSED RESIDENTIAL APARTMENTS & TOWNHOUSES 23-27 WARRIEWOOD ROAD, WARRIEWOOD STAGE II										NOT TO BE USED FOR CONSTRUCTION PURPOSES									
ARCH DA-103 03.07.2017 C																				CHECKED DATE																																								Drawing Title																													
ARCH STRUCT																				DESIGNED DATE																														STORMWATER CONCEPT PLAN																																							
MECH																				VERIFIED DATE																														RESIDENTIAL APARTMENTS & TOWNHOUSES																																							
ELEC																				APPROVED DATE																														ROOF PLAN																																							
HYD																																																		Project No																																							
FRZ																																																		Drawing No																																							
LANDS																																																		Revision No																																							
CIVIL																																																		20160112 SWDA203 A																																							
SURVEY																																																																																									
1-preliminary 4-tender										2-development application 5-construction										3-construction certificate 6-other																																																																					



Reference Coordination Drawing				 ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER	QUALITY CONTROL		<small>WARNING: THE DESIGN, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD</small>	<small>Scales</small>  SCALE 1:100 ON ORIGINAL SIZE	CLIENT THE KNOWLES GROUP- ARCARE	ARCHITECT  V-ARC.COM.AU	 Suite 5.03, Level 5, 156 PACIFIC HIGHWAY, ST. LEONARDS, NSW 2065 T: +61 2 8883 4239 Email: office@sgce.com.au Web: www.sgce.com.au A.B.N. 21 118 222 530	PROJECT PROPOSED RESIDENTIAL APARTMENTS & TOWNHOUSES 23-27 WARRIEWOOD ROAD, WARRIEWOOD STAGE II	Drawing Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Discipline					DRAWN								Drawing Title		
Drawing Title and Number					DATE								STORMWATER CONCEPT PLAN		
Date					CHECKED								DETAILS		
Rev.					DATE								SHEET 2 OF 2		
MECH					DESIGNED								Project No		
ELEC					DATE								Drawing No		
HYD				VERIFIED		Revision No									
FIRE				DATE		20160112									
LANDS				APPROVED		SWDA300B									
CIVIL				DATE		A									
SURVEY															

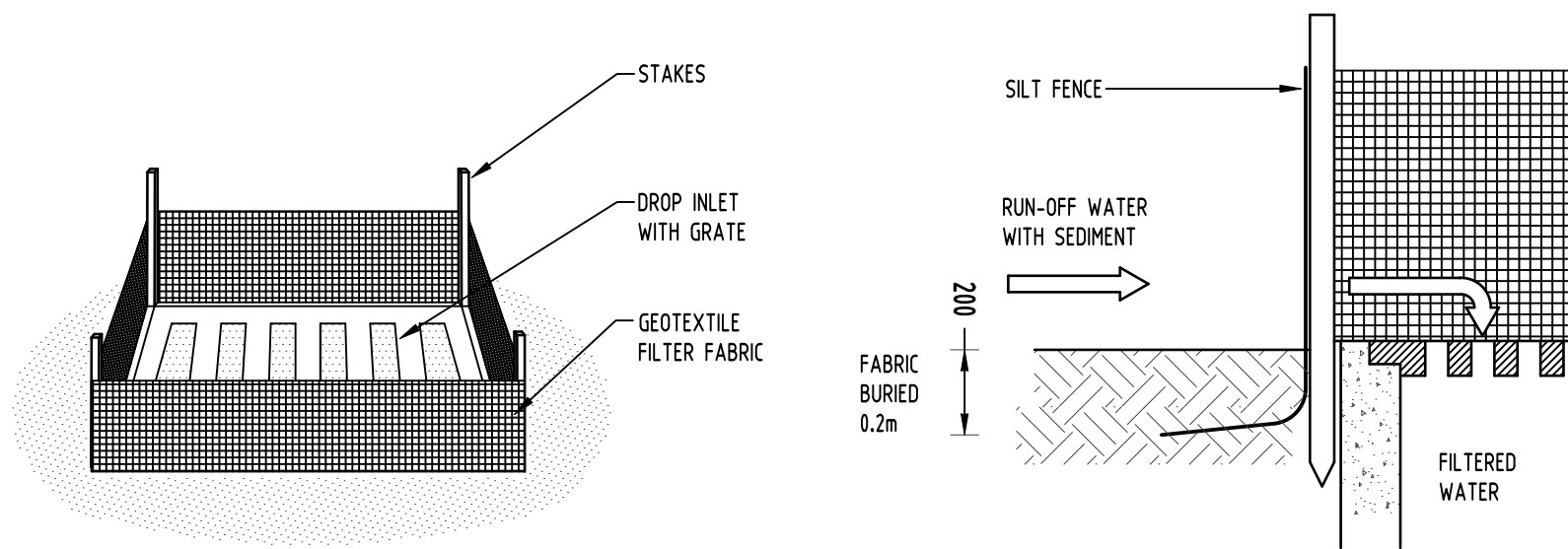
ISSUING NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE UP THIS DRAWING. POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DESIGN/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.			
--	--	--	--

Issuer internal sequence and revision history			
1-preliminary	2-development application	3-construction certificate	6-other
4-tender	5-construction		

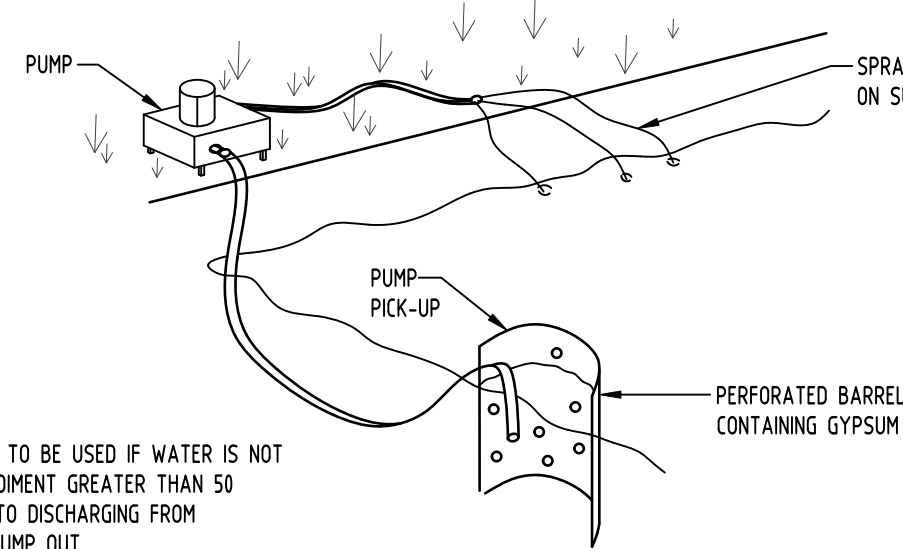


LEGEND

- SEDIMENT FENCE
- GEOTEXTILE INLET FILTER (FOR PITS WITHIN LANDSCAPED AREAS)
- GEOTEXTILE INLET FILTER (FOR PITS WITHIN PAVEMENT AREAS) MESH & GRAVEL INLET FILTER
- STABILISED SITE ACCESS



GEOTEXTILE INLET FILTER
NOT TO SCALE

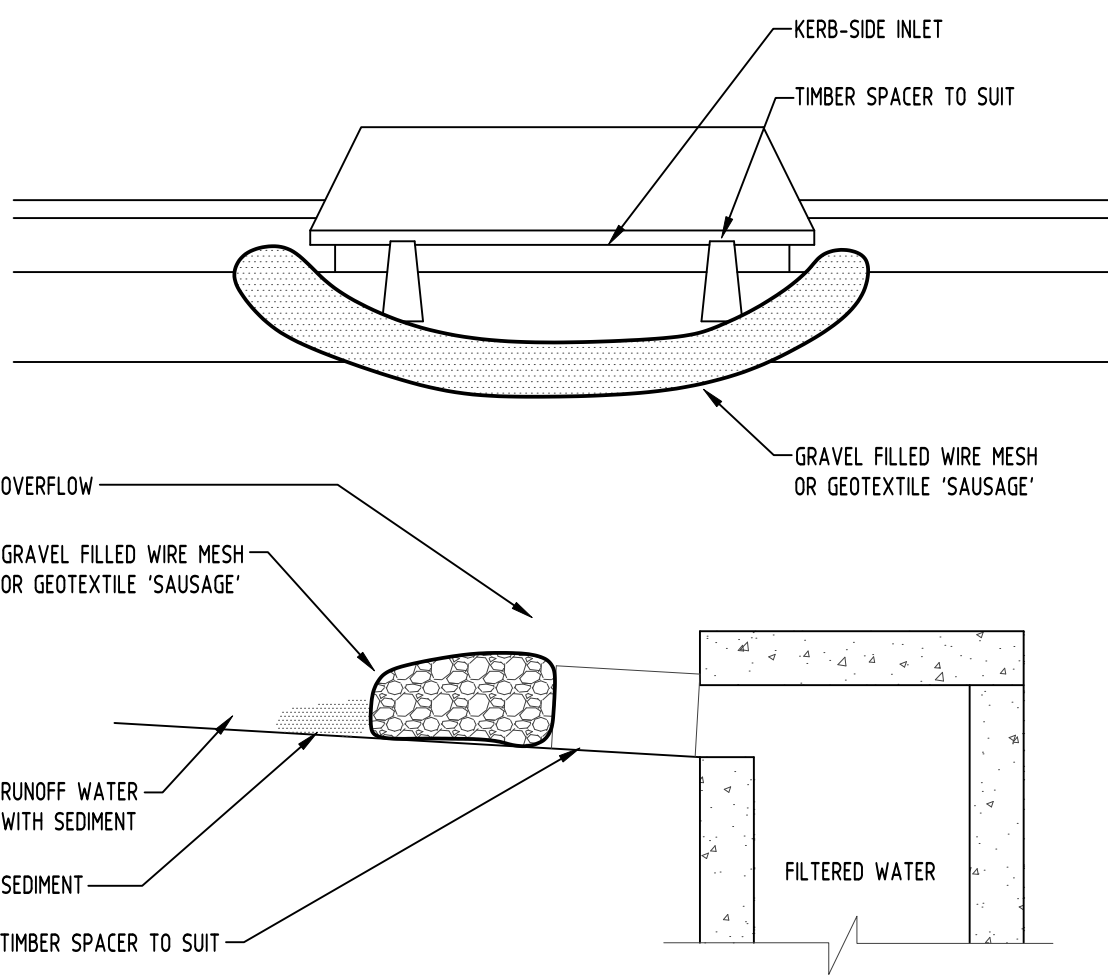


- NOTE:
- FLOCCULATION TO BE USED IF WATER IS NOT CLEAR (i.e. SEDIMENT GREATER THAN 50 mg/L) PRIOR TO DISCHARGING FROM TEMPORARY PUMP OUT
 - FOR RATES & AGENTS SEE APPENDIX E OF NEW SOUTH WALES DEPARTMENT OF HOUSING "MANAGING URBAN STORMWATER SOILS & CONSTRUCTION".

FLOCCULATION DETAIL
NOT TO SCALE

EROSION & SEDIMENTATION CONTROL NOTES

- CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
- EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
- NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
- GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
- CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.



GEOTEXTILE INLET FILTER
NOT TO SCALE

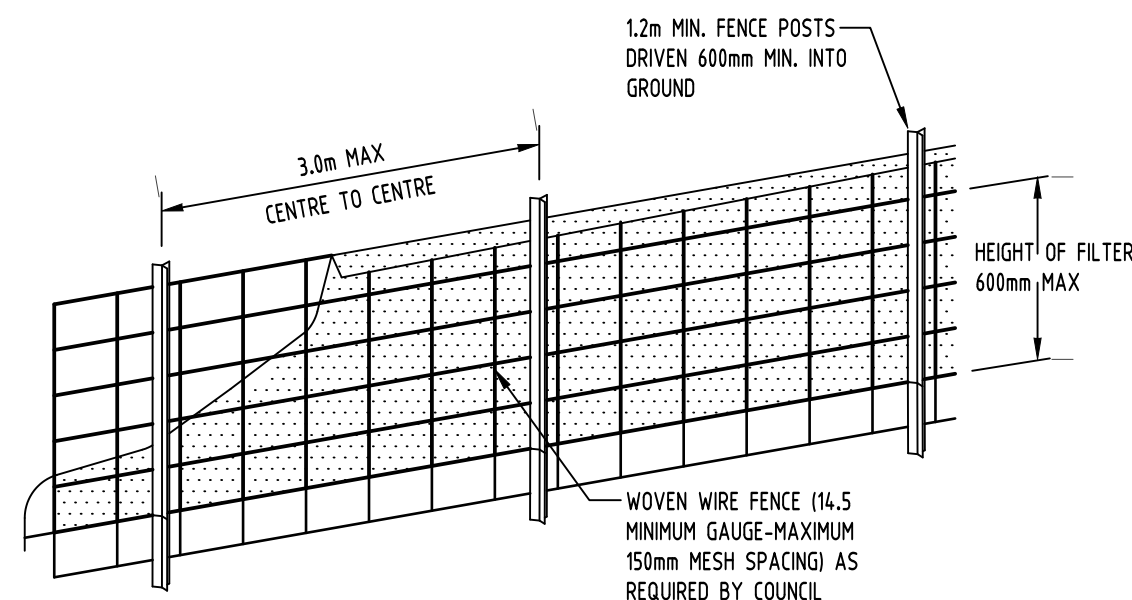
GENERAL NOTES

- THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
- ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

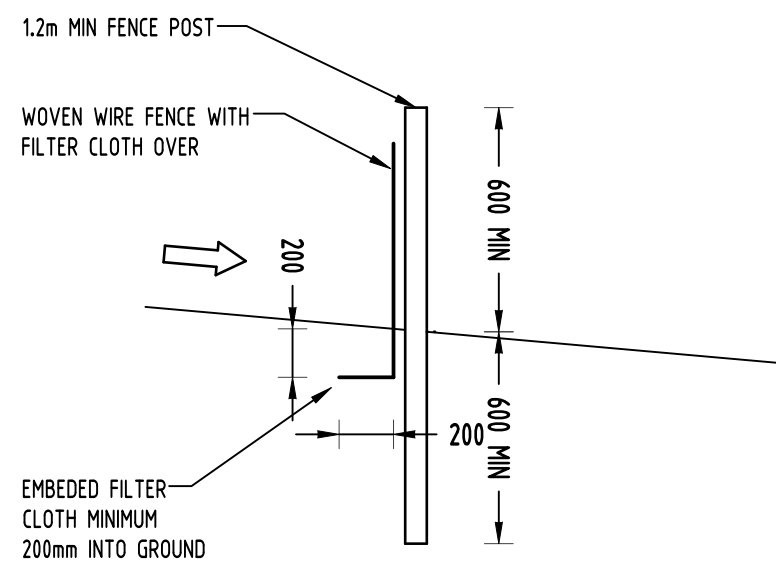
CLAY SOILS

A SYSTEM SHALL BE INSTALLED TO EITHER:

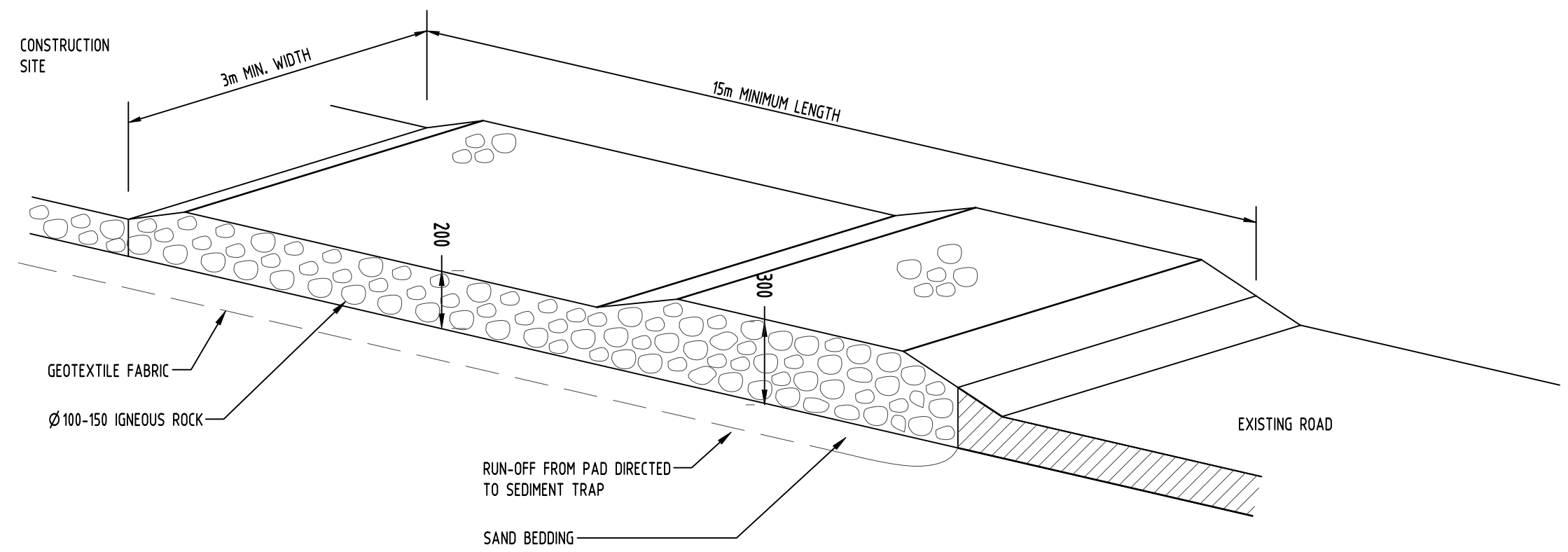
- TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
- TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL.



DIAGRAMMATIC VIEW



TYPICAL SECTION
SEDIMENT FENCE
NOT TO SCALE



TEMPORARY CONSTRUCTION EXIT
NOT TO SCALE



Reference Coordination Drawing										 ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER		QUALITY CONTROL		WARNING: THE DESIGN, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD		Scales SCALE 1:500 ON ORIGINAL SIZE		CLIENT THE KNOWLES GROUP- ARCARE		ARCHITECT V-ARC.COM.AU		 Suite 5.03, Level 5, 156 PACIFIC HIGHWAY, ST. LEONARDS, NSW 2065 T: +61 2 8883 4239 Email: office@sgce.com.au Web: www.sgce.com.au A.B.N. 21 118 222 530		PROJECT PROPOSED RESIDENTIAL APARTMENTS & TOWNHOUSES 23-27 WARRIEWOOD ROAD, WARRIEWOOD STAGE II		Drawing Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Discipline Drawing Title and Number Date Rev.										DRAWN DATE						Scale 1500 on Original Size		THE KNOWLES GROUP- ARCARE		ARCHITECT V-ARC.COM.AU		 Suite 5.03, Level 5, 156 PACIFIC HIGHWAY, ST. LEONARDS, NSW 2065 T: +61 2 8883 4239 Email: office@sgce.com.au Web: www.sgce.com.au A.B.N. 21 118 222 530		PROJECT PROPOSED RESIDENTIAL APARTMENTS & TOWNHOUSES 23-27 WARRIEWOOD ROAD, WARRIEWOOD STAGE II		Drawing Title STORMWATER CONCEPT PLAN EROSION & SEDIMENT CONTROL PLAN AND DETAILS SHEET	
ARCH										CHECKED DATE																	
ARCH										DESIGNED DATE																	
STRUCT										VERIFIED DATE																	
MECH										APPROVED DATE																	
LN 18.10.18 2										DRAWN DATE																	
LN 17.09.18 1										CHECKED DATE																	
BY Date Status										DESIGNED DATE																	
Issue Last revision title										VERIFIED DATE																	
1-preliminary 2-development application 3-construction certificate 4-tender 5-construction 6-other										APPROVED DATE																	
Issuer internal sequence and revision history																											

