



## - CIVIL DRAWINGS -



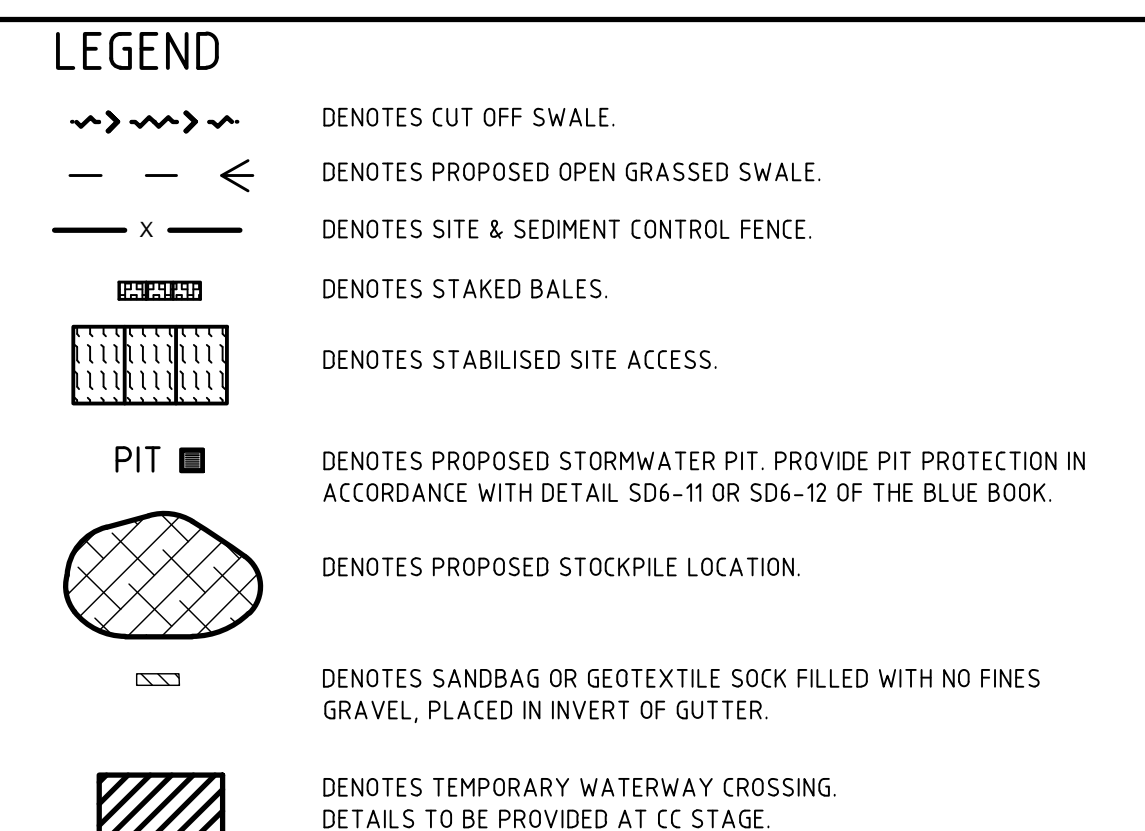
DRG No.	DRAWING TITLE
DA00	COVER SHEET AND DRAWING SCHEDULE
DA01	CONCEPT EROSION AND SEDIMENT CONTROL PLAN
DA02	CONCEPT EROSION AND SEDIMENT CONTROL DETAILS
DA03	CONCEPT STORMWATER MANAGEMENT AND LEVELS PLAN PART 1 OF 3
DA04	CONCEPT STORMWATER MANAGEMENT AND LEVELS PLAN PART 2 OF 3
DA05	CONCEPT STORMWATER MANAGEMENT AND LEVELS PLAN PART 3 OF 3
DA06	CIVIL DETAILS

**NOT FOR CONSTRUCTION**

REVISION		DESCRIPTION		ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	PROJECT		DRAWING TITLE		JOB NUMBER	
1		PRELIMINARY		SF		DH	23.02.15	WOOLWORTHS PTY LTD	 <b>NORTHROP</b> Central Coast	 <b>NORTHROP</b> Central Coast Suite 4, 257-259 Central Coast Hwy, Erina NSW 2250 Ph (02) 4365 1660 Fax (02) 4367 6555 Email centralcoast@northrop.com.au ABN 81 094 433 100	<b>HUNTERVIEW VILLAGE</b> <b>Cnr Bridgeman Rd and Glass Pde</b> <b>HUNTERVIEW. NSW. 2330</b>	<b>COVER SHEET AND</b> <b>DRAWING SCHEDULE</b>	<b>TL140118</b>		
A	ISSUED FOR DEVELOPMENT APPLICATION		SF	CS	DH	05.03.15	DRAWING NUMBER						REVISION		
B	RE- ISSUED FOR DEVELOPMENT APPLICATION		CD	CS	DH	29.06.15	<b>DA00</b>						<b>B</b>		
							DRAWING SHEET SIZE = A1								
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DRAWN: S. Forbes





1. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT ORDINANCES AND REGULATIONS; NOTE IN PARTICULAR THE REQUIREMENTS OF LANDSCAPES MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION (THE 'BLUE BOOK').
2. INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
3. EROSION CONTROL: ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
4. INSTALL SEDIMENT FENCING AROUND INDIVIDUAL BUILDING ZONES/AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT.
5. ALL TRENCHES INCLUDING ALL SERVICE TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-SLOPED TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAY'S WORK.
6. THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB & GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED DURING THE DURATION OF CONSTRUCTION. REFER ARCHITECTS PLANS FOR TREES TO BE KEPT.
7. ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ONSITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
8. STRIPES AND DISPOSAL AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH EPA GUIDELINES.
9. CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE).
10. ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
11. PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
12. ONCE CUT/FILL OPERATIONS HAVE BEEN FINALIZED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION & SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A DAILY BASIS & SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND ANY/L MAINTENANCE, CLEANING & BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.
14. WATER CAPTURED WITHIN THE SEDIMENT BASIN DURING CONSTRUCTION SHALL BE FLOCCULATED AND SETTLED BEFORE DISCHARGING TO THE CREEK AS SHOWN ON PLAN. THE DISCHARGE OF WATER SHALL OCCUR ONLY WHEN THE SUSPENDED SOLIDS (SS) CONCENTRATION IS BELOW 50mg/L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND UNDERTAKEN PRIOR TO DISCHARGE WITH DISCHARGE AND TESTING BEING CONDUCTED IN ACCORDANCE WITH APPENDIX E OF THE 'BLUE BOOK'. PROVIDE PUMPING EQUIPMENT TO DISCHARGE WATER AS NECESSARY.

THE SITE IS LOCATED WITHIN THE NEWCASTLE SOIL LANDSCAPE, WHICH HAS THE FOLLOWING PROPERTIES (IN ACCORDANCE WITH TABLE C13 OF THE "BLUE BOOK"):

- THE SIZING OF THE SEDIMENT STORAGE VOLUME OF THE SITES PROPOSED SEDIMENTATION BASINS WERE CALCULATED BY APPLYING THE REVISED UNIVERSAL SOIL LOSS EQUATION (RUSLE) METHOD:

$$\text{SOIL LOSS} = R K L S P C$$

WHERE; R = RAINFALL EROSIVITY FACTOR = 1490

2 YEAR, 6 HOUR STORM INTENSITY = 7.8mm/hr

LS = SLOPE LENGTH/GRADIENT FACTOR = 0.22.

K = SOIL ERODIBILITY FACTOR = 0.026

P = EROSION CONTROL PRACTICE (P-FACTOR) = 1.3 (TYPICAL)

C = GROUND COVER (C-FACTOR) = 1.0 (TYPICAL FOR STRIPPED SITE)

THE REMAINING VARIABLES ARE PRESENTED WITHIN THE TEMPORARY SEDIMENT BASIN CAPACITY TABLE.

THE SETTLING ZONE VOLUME OF THE BASIN WAS CALCULATED FOR A 2 MONTHS SOIL LOSS AS CALCULATED BY THE RUSLE METHOD:

SETTLING ZONE VOLUME = 10 CV RX-DAY, Y-%TILE A

WHERE; RX-DAY, Y-%TILE = 24.4 mm/hr [5 DAY, 75th PERCENTILE RAINFALL EVENT,

$C_v = \text{RUNOFF POTENTIAL} = 0.39$

SITE	C <sub>v</sub>	Rx-DAY, y-%ile	TOTAL CATCHMENT AREA (ha)	SETTING ZONE VOLUME (m <sup>3</sup> )	SEDIMENT STORAGE VOLUME (m <sup>3</sup> )	TOTAL BASIN VOLUME (m <sup>3</sup> )
BASIN	0.39	24.4	179	170	487	857

JOB NUMBER	
<b>TL140118</b>	
DRAWING NUMBER	REVISION
<b>DA01</b>	<b>B</b>
DRAWING SHEET SIZE = A1	

CLIENT

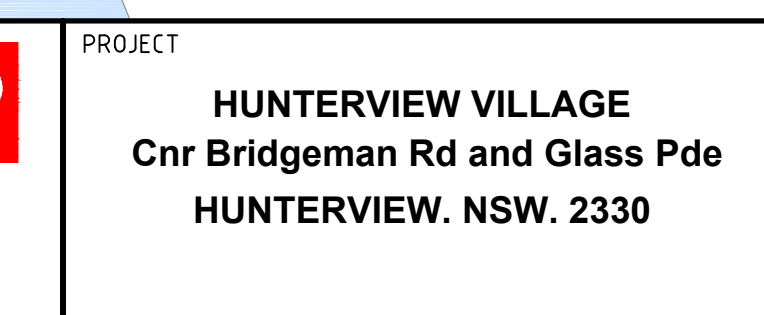
**WOOLWORTHS PTY LTD**

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COMMENCING WORK.  
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PLANS 1:400

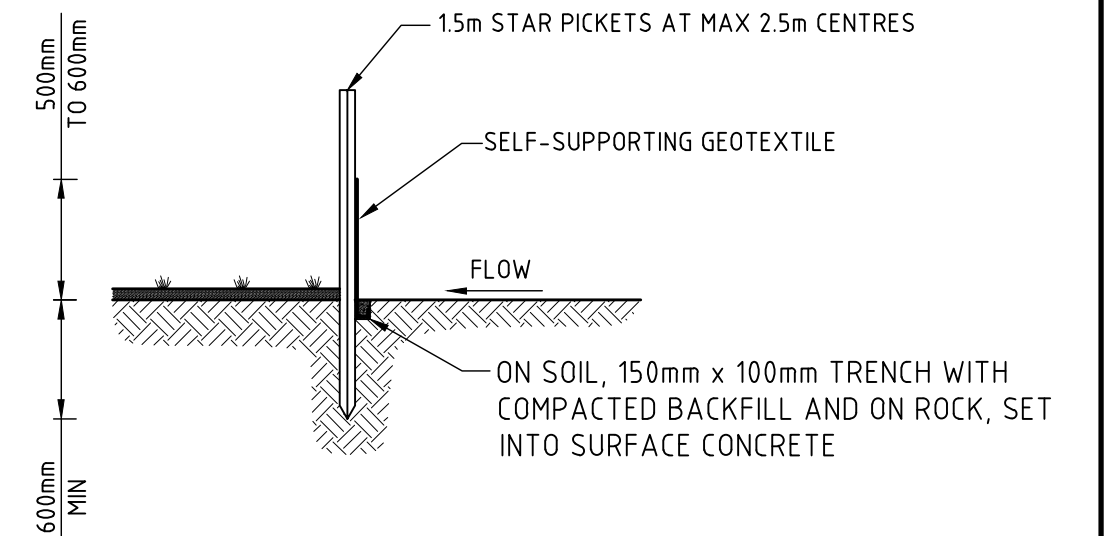
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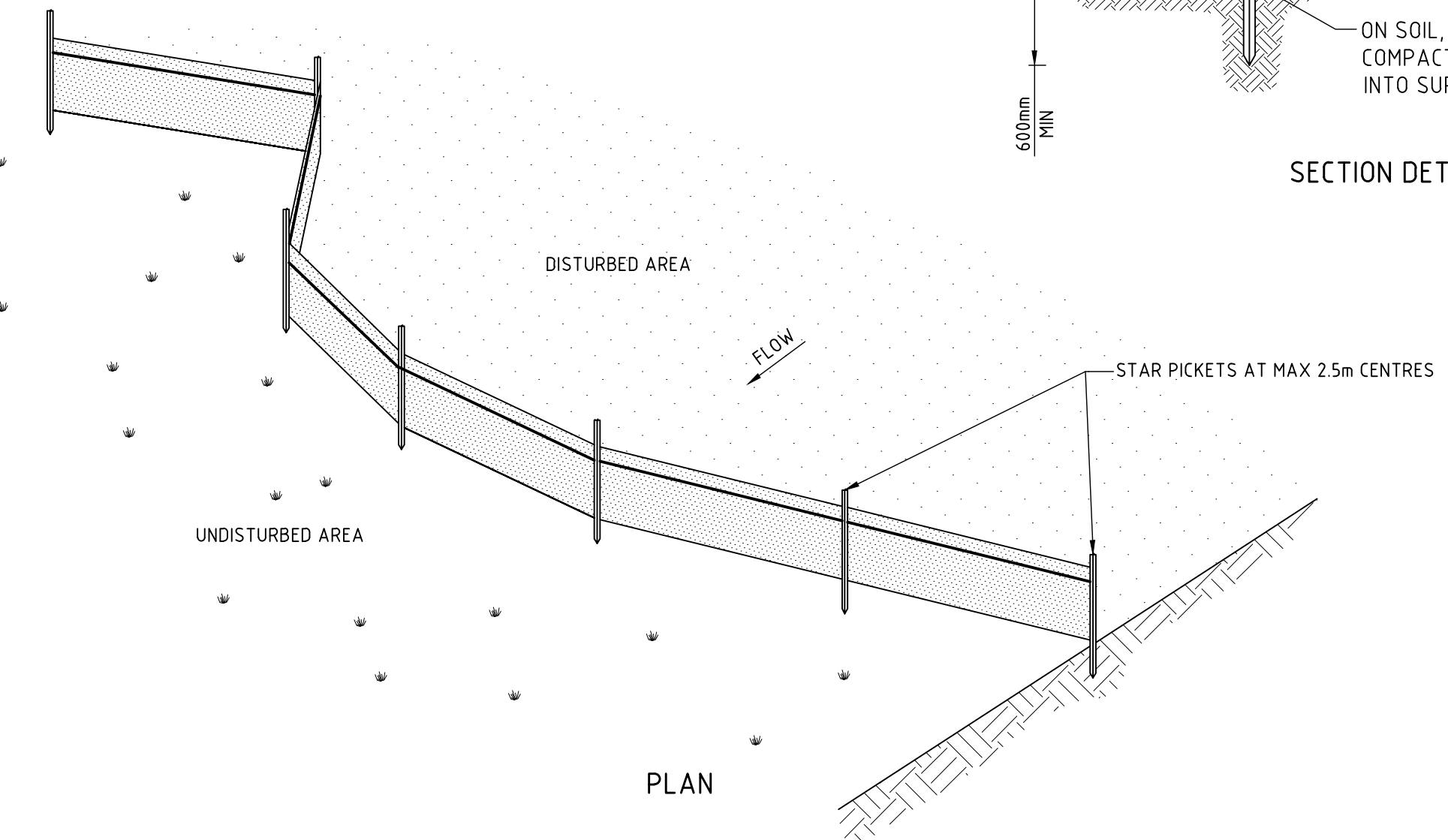
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**CONCEPT EROSION AND  
SEDIMENT CONTROL PLAN**

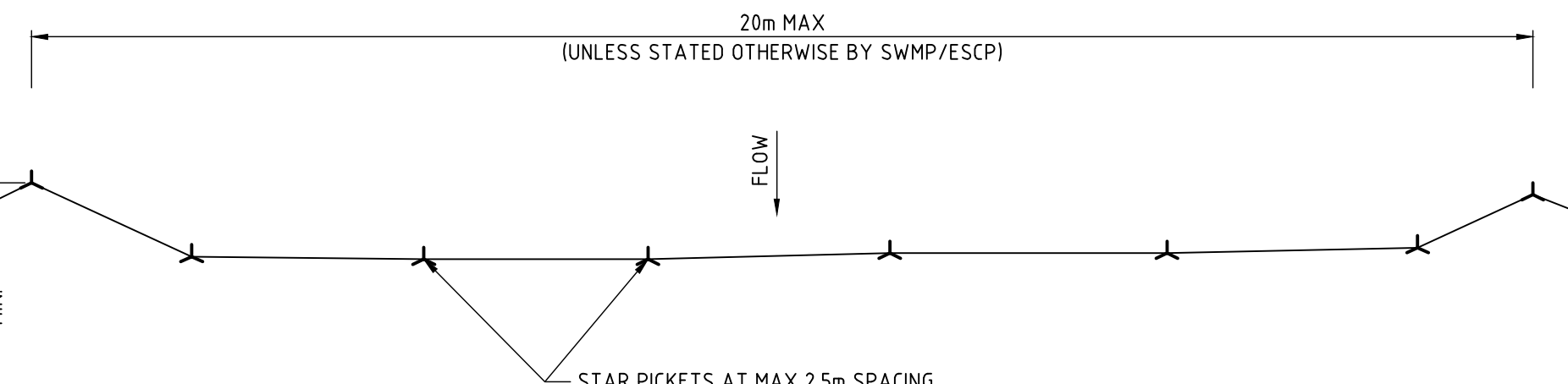




ELEVATION

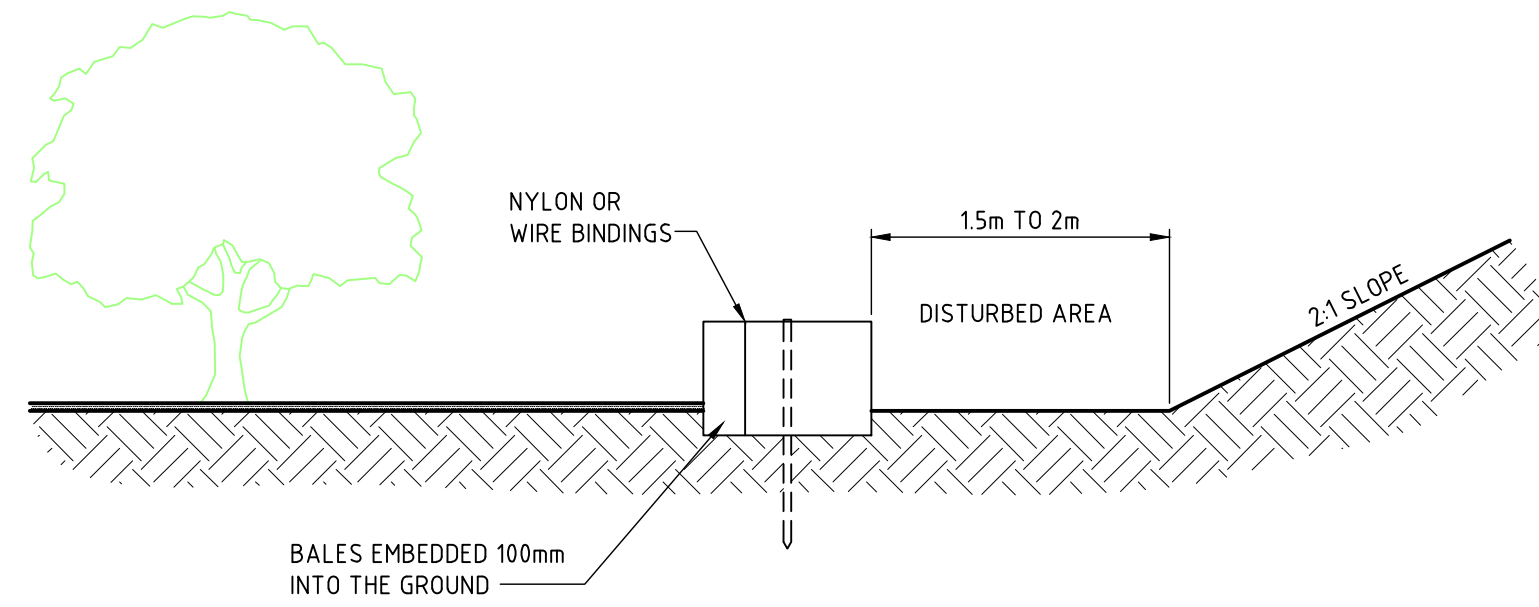


## PLAN



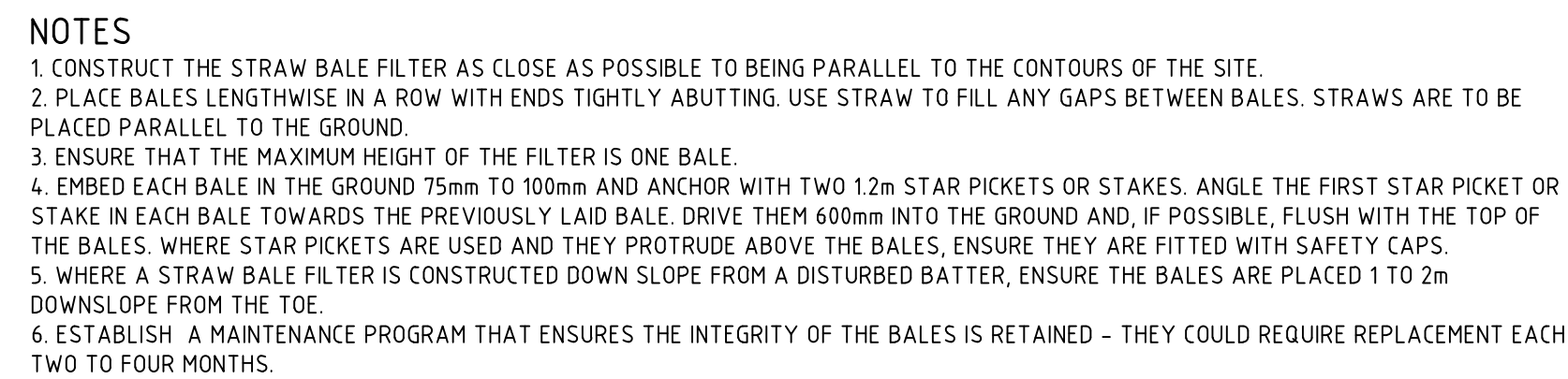
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## STRAW BALE FILTER SD 6-7

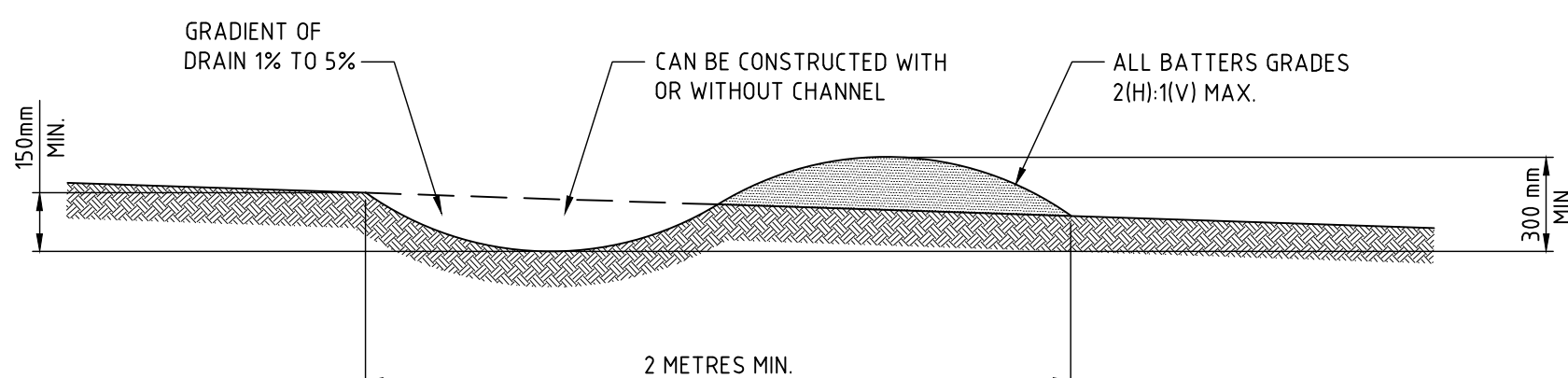


SECTION AA

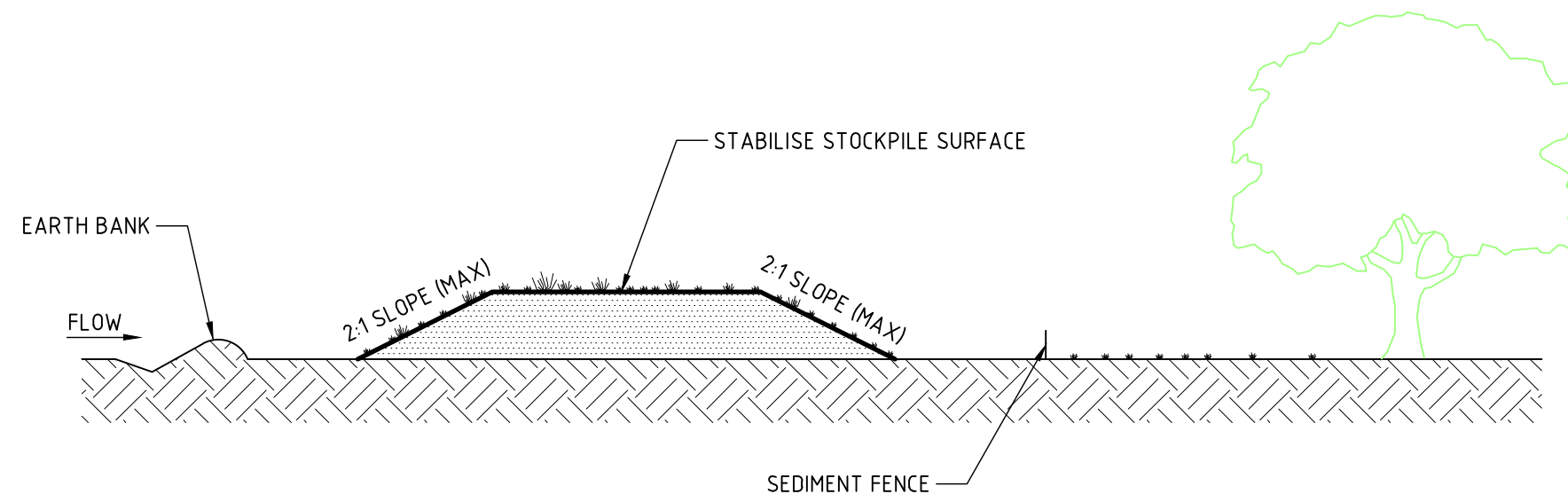
## STRAW BALE FILTER SD 6-7



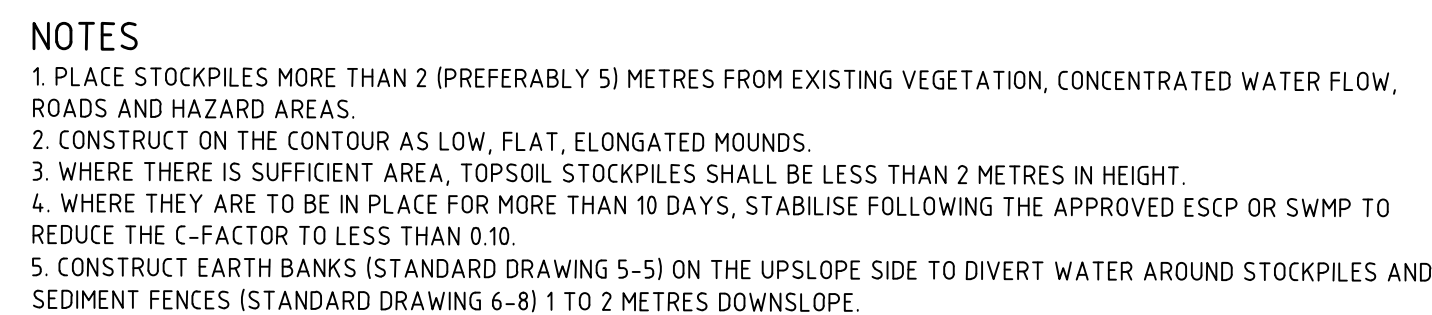
SD 6-12






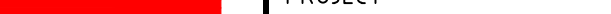

## EARTH BANK (LOW FLOW) SD 5-5



## STOCKPILES (SD 4-1)



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1	PRELIMINARY	SF		DH	23.02.15	WOOLWORTHS PTY LTD			HUNTERVIEW VILLAGE Cnr Bridgeman Rd and Glass Pde HUNTERVIEW. NSW. 2330	CONCEPT EROSION AND SEDIMENT CONTROL DETAILS	TL140118
A	ISSUED FOR DEVELOPMENT APPLICATION	SF	CS	DH	05.03.15						
B	RE- ISSUED FOR DEVELOPMENT APPLICATION	CD	CS	DH	29.06.15						
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DRAWING SHEET SIZE = A1											









REFER TO DRAWING DA03 FOR LEGEND.



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1	PRELIMINARY	SF		DH	23.02.15	<b>WOOLWORTHS PTY LTD</b>		 <b>NORTHROP</b> Central Coast Suite 4, 257-259 Central Coast Hwy, Erina NSW 2250 Ph: (02) 4365 1668 Fax: (02) 4367 6555 Email: centralcoast@northrop.com.au ABN 81 094 433 100	<b>HUNTERVIEW VILLAGE</b> Cnr Bridgeman Rd and Glass Pde HUNTERVIEW. NSW. 2330	<b>CONCEPT STORMWATER MANAGEMENT AND LEVELS PLAN PART 2 OF 3</b>	<b>TL140118</b>
A	ISSUED FOR DEVELOPMENT APPLICATION	SF	CS	DH	05.03.15						
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LEGEND

REFER TO DRAWING DA03 FOR LEGEND.

EXTEND MEDIAN & KERB & GUTTER  
PAST PROPOSED VEHICLE CROSSING.

FOR CONTINUATION - REFER TO DRAWING DA04

CONSTRUCT PRAM RAMP.

STREET LIGHT TO BE RELOCATED. PROPOSED LOCATION TO BE DETERMINED AT CC STAGE.



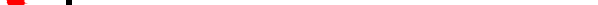
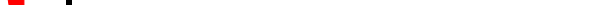
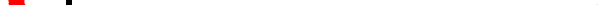
DENOTES UNCONTROLLED AREA  
DISCHARGING DIRECTLY TO ROAD SYSTEM.

CONSTRUCT PRAM RAMP.

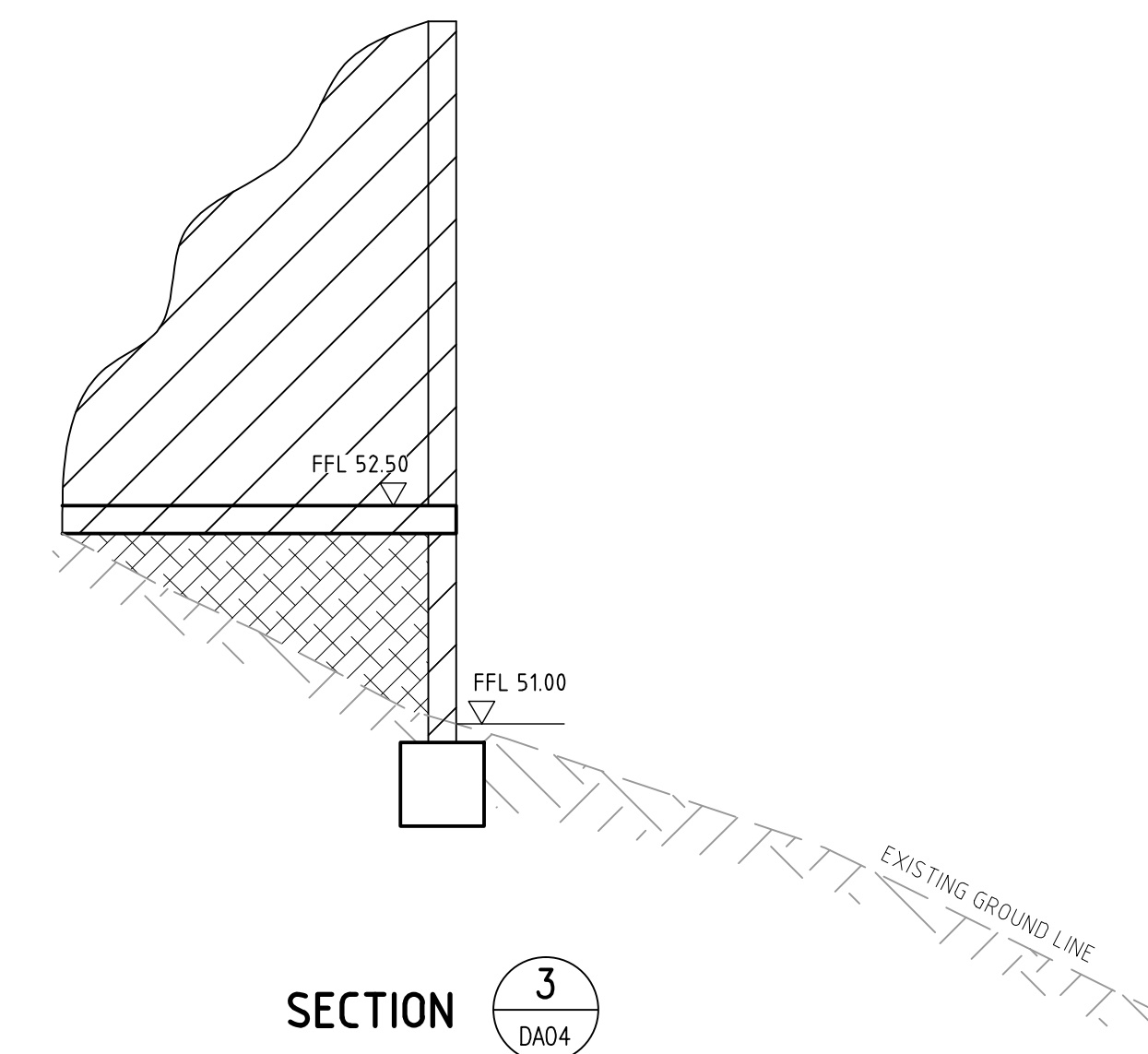
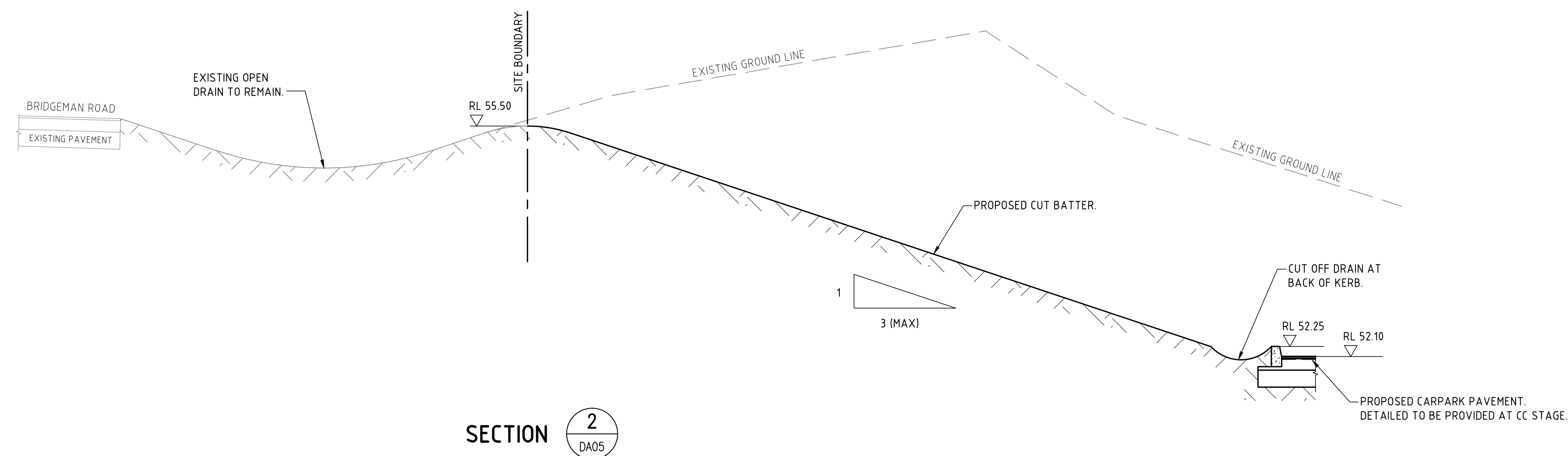
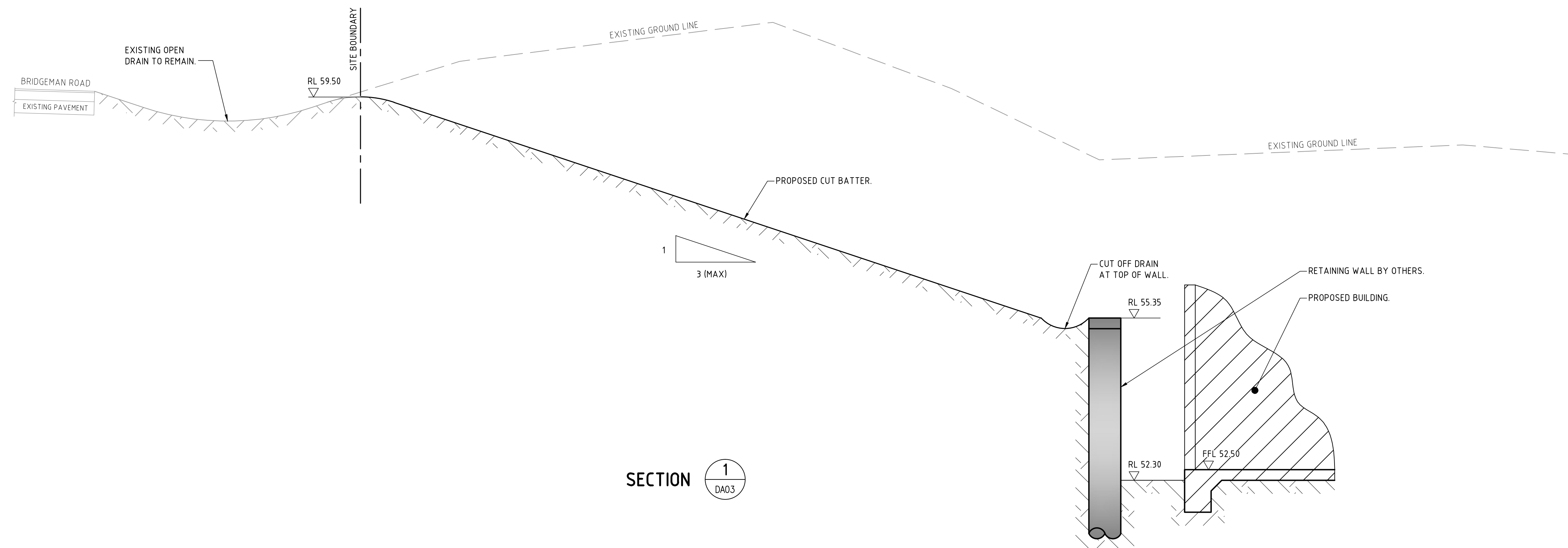
EXTEND KERB & GUTTER & FOOTPATH TO  
ACCOMMODATE PROPOSED NEW VEHICLE ENTRY/EXIT.

MEDIAN TO BE EXTENDED TO INCREASE RIGHT TURN STORAGE.

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT <div>WOOLWORTHS PTY LTD</div>	ARCHITECT <div><div><div></div><div>ROTHE LOWMAN</div></div></div>	<div><div>ALL SETOUT TO ARCHITECT'S DRAWINGS, DIMENSIONS TO BE VERIFIED WITH THE ARCHITECT AND ON SITE BEFORE MAKING SHOP DRAWINGS OR COMMENCING WORK.</div><div>NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.</div></div>	<div><div><div><div></div><div>NORTHROP</div></div><div>Central Coast</div><div>Suite 4, 257-259 Central Coast Hwy, Erina NSW 2250 Ph (02) 4365 1668 Fax (02) 4367 6555 Email centralcoast@northrop.com.au ABN 81 094 433 100</div></div></div>	PROJECT <div>HUNTERVIEW VILLAGE Cnr Bridgeman Rd and Glass Pde HUNTERVIEW. NSW. 2330</div>	DRAWING TITLE <div>CIVIL DETAILS</div>	JOB NUMBER <div>TL140118</div>	DRAWING NUMBER <div>DA06</div>	REVISION <div>B</div>	DRAWING SHEET SIZE = A1
A	ISSUED FOR DEVELOPMENT APPLICATION	SD	CS	DH	05.03.15										
B	RE- ISSUED FOR DEVELOPMENT APPLICATION	CF	CS	DH	29.06.15										
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION						THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP		<div>DETAILS: 1:50</div> <div><div><div></div><div>0</div><div>0.5</div><div>1</div><div>1.5</div><div>2</div><div>2.5m</div></div></div>							