

VER	BY	AMENDMENTS	DATE
Α	ВС	ORIGINAL ISSUE	28-08-2024
В	ВС	AMENDMENT TO BOUNDARY	01-10-2024
C	SG	REMOVE EASEMENTS	01-11-2024



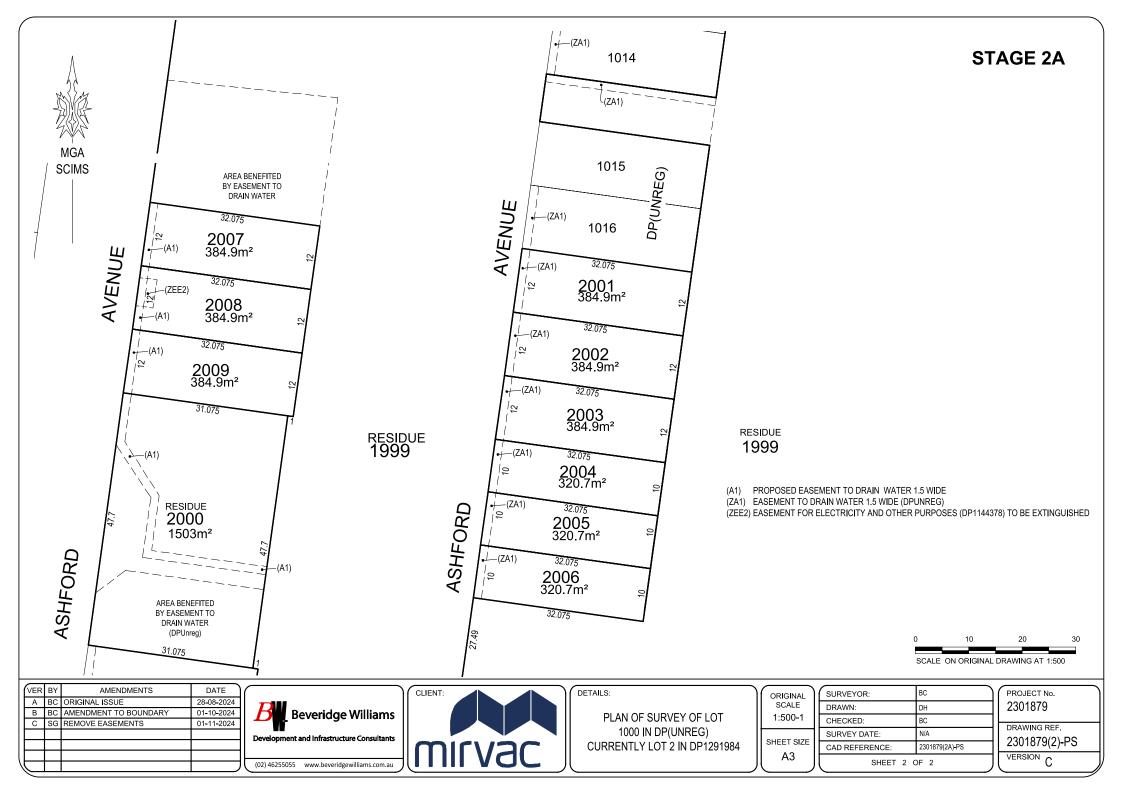


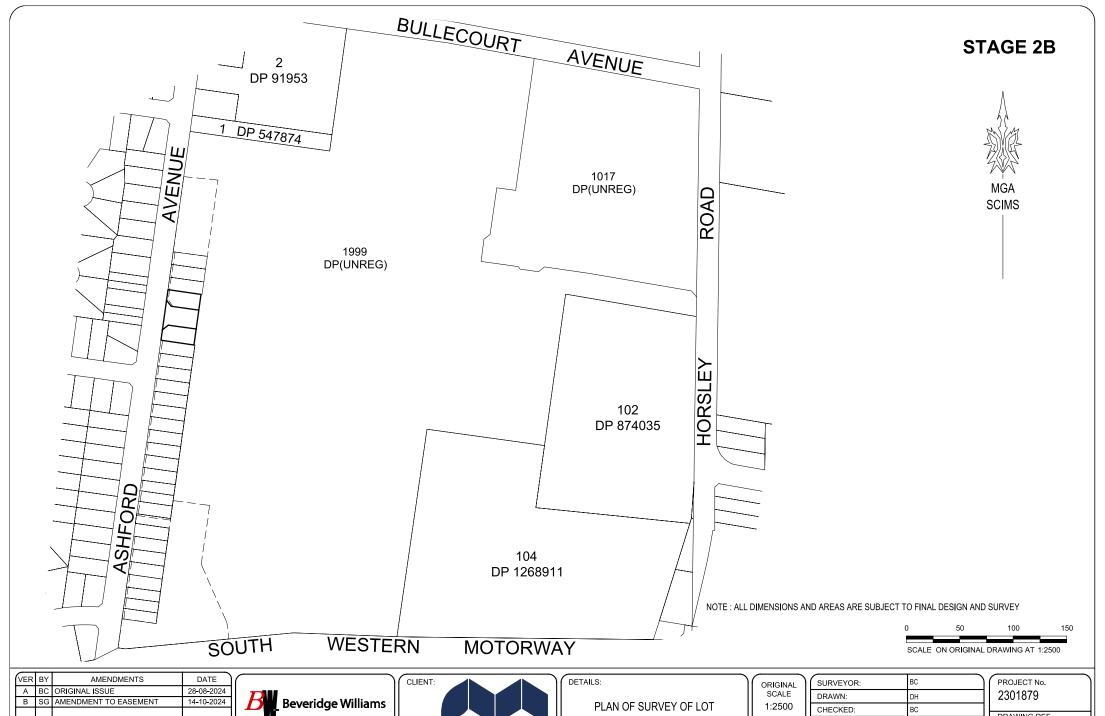
PLAN OF SURVEY OF LOT 1000 IN DP(UNREG) CURRENTLY LOT 2 IN DP1291984

ORIGINAL SCALE 1:2500
SHEET SIZE

DRAWN:	DH
CHECKED:	BC
SURVEY DATE:	N/A
CAD REFERENCE:	2301879(2A)-PS
SHEET 1 (	OF 2

PROJECT No.
2301879
DRAWING REF.
2301879(2)-PS
VERSION C





VER	BY	AMENDMENTS	DATE
Α	ВС	ORIGINAL ISSUE	28-08-2024
В	SG	AMENDMENT TO EASEMENT	14-10-2024
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2000 IN DP(UNREG.) CURRENTLY LOT 2 IN DP1291984

ORIGINAL SCALE
1:2500
SHEET SIZE

SHEET SIZ
A3

SURVEYOR:	BC
DRAWN:	DH
CHECKED:	BC
SURVEY DATE:	N/A
CAD REFERENCE:	2301879(2B)-PS
SHEET 1 C	OF 2

	2301879
ł	DRAWING REF.
ł	2301879(2B)-PS
1	VERSION B



## **STAGE 2B**

1999

NOTE: IT IS PROPOSED TO DEDICATE ROADS TO COUNCIL AS PUBLIC ROAD

(W) AREA BENEFITED BY EASEMENT TO DRAIN WATER DP(UNREG.)

(ZA1) EASEMENT TO DRAIN WATER 1.5 WIDE DP(UNREG.)



 VER
 BY
 AMENDMENTS
 DATE

 A
 BC
 ORIGINAL ISSUE
 28-08-2024

 B
 SG
 AMENDMENT TO EASEMENT
 14-10-2024

Beveridge Williams

Development and Infrastructure Consultants

(02) 46255055 www.beveridgewilliams.com.au

ASHFORD

•/—(ZA1)

•+--(ZA1)



DP(UNREG)

2007

2008

2009

31.075

2010 437.1m<sup>2</sup> 26.075

**ROAD NO.1** 

26.075

2011 463.9m²

31.075

1001

1002

DP(UNREG)

AVENUE

---(ZA1)

-(ZA1)

√8; √—(ZA1)

DETAILS:

PLAN OF SURVEY OF LOT 2000 IN DP(UNREG.) CURRENTLY LOT 2 IN DP1291984

ORIGINAL SCALE 1:500
SHEET SIZE

SURVEYOR:	BC
DRAWN:	DH
CHECKED:	BC
SURVEY DATE:	N/A
CAD REFERENCE:	2301879(2B)-PS
SHEET 2 C	OF 2

PROJECT No. 2301879
DRAWING REF.
2301879(2B)-PS
VERSION R

# WSU MILPERRA

CONCEPT CIVIL ENGINEERING PLANS TO SUPPORT THE STAGE 2A & 2B SUBDIVISION OF PROPOSED LOT 1000 (UNREG.)(TO BE CREATED UNDER STAGE 1)

LOT 2 IN DP1291984 - 2 BULLECOURT AVENUE, MILPERRA

CANTERBURY-BANKSTOWN COUNCIL

MIRVAC HOMES (NSW) PTY LTD



#### DRAWING INDEX

SHEET No	DRAWING No.	TITLE	REVISION
1	2301879-307-001	COVER SHEET	D
2	2301879-307-002	DETAILS & TYPICAL CROSS SECTION	A
3	2301879-307-005	DEMOLITION PLAN	D
4	2301879-307-010	LAYOUT PLAN	D
5	2301879-307-011	LOT BENCHING PLAN	D
6	2301879-307-012	BULT EARTHWORKS	D
7	2301879-307-100	ROAD 1 LONGITUDINAL SECTION	A
8	2301879-307-101	ASHFORD AVENUE BACK OF KERB LONGITUDINAL SECTIONS (NORTH AND SOUTH OF ROAD 1)	В
9	2301879-307-200	ROAD 1 CROSS SECTIONS	В
10	2301879-307-201	ASHFORD AVENUE (NORTH OF ROAD 1) LOT CROSS SECTIONS	A
11	2301879-307-202	ASHFORD AVENUE (SOUTH OF ROAD 1) LOT CROSS SECTIONS (SHEET 1 OF 2)	A
12	2301879-307-203	ASHFORD AVENUE (SOUTH OF ROAD 1) LOT CROSS SECTIONS (SHEET 2 OF 2)	В
13	2301879-307-400	SOIL AND WATER MANAGEMENT PLAN OVERALL PLAN	C
14	2301879-307-401	SOIL AND WATER MANAGEMENT PLAN STAGE 2 PLAN	С
15	2301879-307-402	SOIL AND WATER MANAGEMENT PLAN DETAILS AND NOTES	В
16	2301879-307-800	TURNING MOVEMENTS CAR (SHEET 1 OF 2)	A
17	2301879-307-801	TURNING MOVEMENTS SERVICE VEHICLE (SHEET 2 OF 2)	В
18	2301879-307-900	SIGNAGE & LINE MARKING PLANS	A

SITE PLAN

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I	D	DRAWING INDEX AMENDED	31,10,24	S.F	S.G					
ſ	C	STAGE 2A AND 2B ANNOTATED	18.10.24	C.Y	S.G				П	
ľ	В	LOTS 2003-2006 SHIFTED SOUTH 2m	09,10,24	B,R	S,F					
ľ	A	ISSUED FOR INFORMATION	17,09,24	B,R	S.F					
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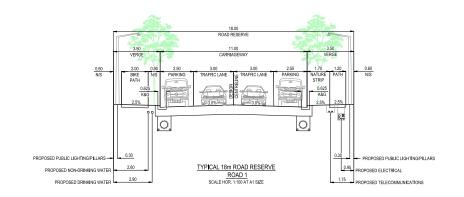
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Date	17.09.24
Drawn	B.RAU
Approved	S.GRAY
Date	17,09,24
DA Number	-

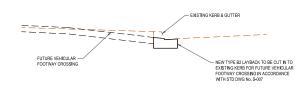
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ΑY	Development & Infrastructure Consultants

Protect WSU MILPERRA, LOT 2 IN DP1291984
2 BULLECOURT AVE, MILPERRA
STAGE 2 SUBDIVISION
Damero COVER SHEET

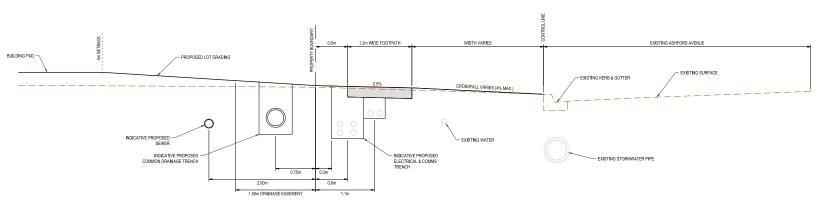
Sheet 01 of 18

2301879 307 001 D





## LAYBACK FOR VEHICULAR CROSSING TYPICAL SECTION SCALE HOR. 1:40 AT A1 SIZE



ASHFORD AVENUE TYPICAL CROSS SECTION SCALE HOR. 1:40 AT A1 SIZE

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Date	17,09.24	
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Approved	S.GRAY	
Date	17,09.24	
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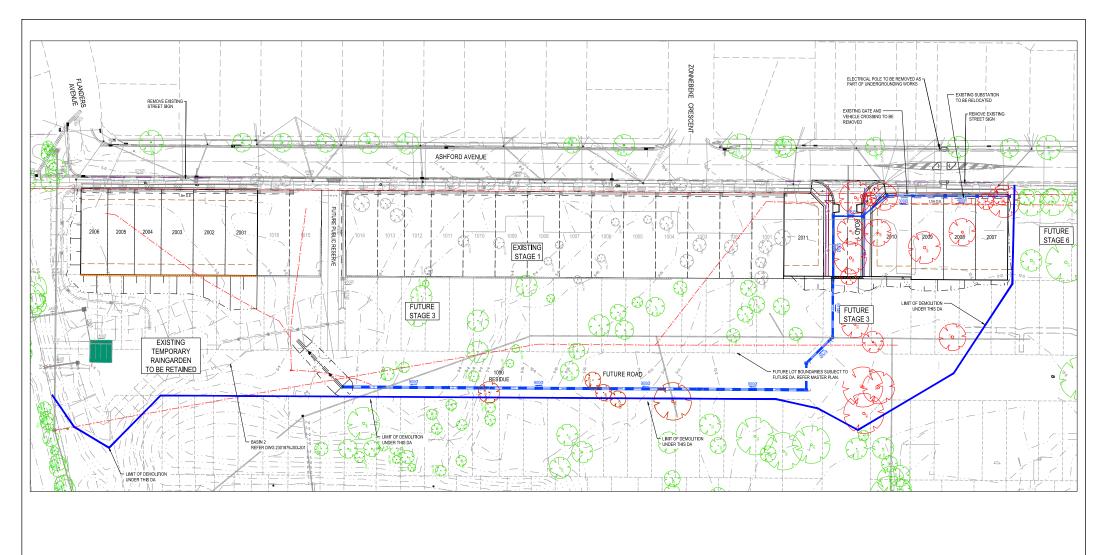
W	_		STAGE 2 SUBDIVISION
Development & Infrastr	ucture Consu <b>l</b> tants	Drawing Title	DETAILS & TYPICAL CF
Tuggerah Business Park Unit 4, 5 Colony Cl Tuggerah NSW 2259	ph: 02 43512233 www.beveridgewilliams.com.au		

WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE. MILPERRA	Sheet	02 of	18	
STAGE 2 SUBDIVISION	AS SHO	WNI		ĺ
DETAILS & TYPICAL CROSS SECTION	70 0110	****		1
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Q:tws/jobs/23/2301879 - 2 Bullecourt Avenue Milperral\_Eng/307 - Stage 2 DA/Drawings/2301879-307-002-DET/dwy

2301879 307 002

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### WARNING

WYANNING

BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only ar their exact position should be proven on site. 
No guarantee is given that all existing services are shown. 
Locate all underground services before commencement of work

DIAL 1100 BEFORE YOU DIG

**ISSUED** 

Sheet 03 of 18

FOR D.A

Beveridge Williams

Development & Infrastructure Consultants Tuggerah Business Park Unit 4, 5 Colony Cl ph: 02 43512233 ph: 02 43512233 www.bsveridgewillams.com.au

2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION Drawing DEMOLITION PLAN

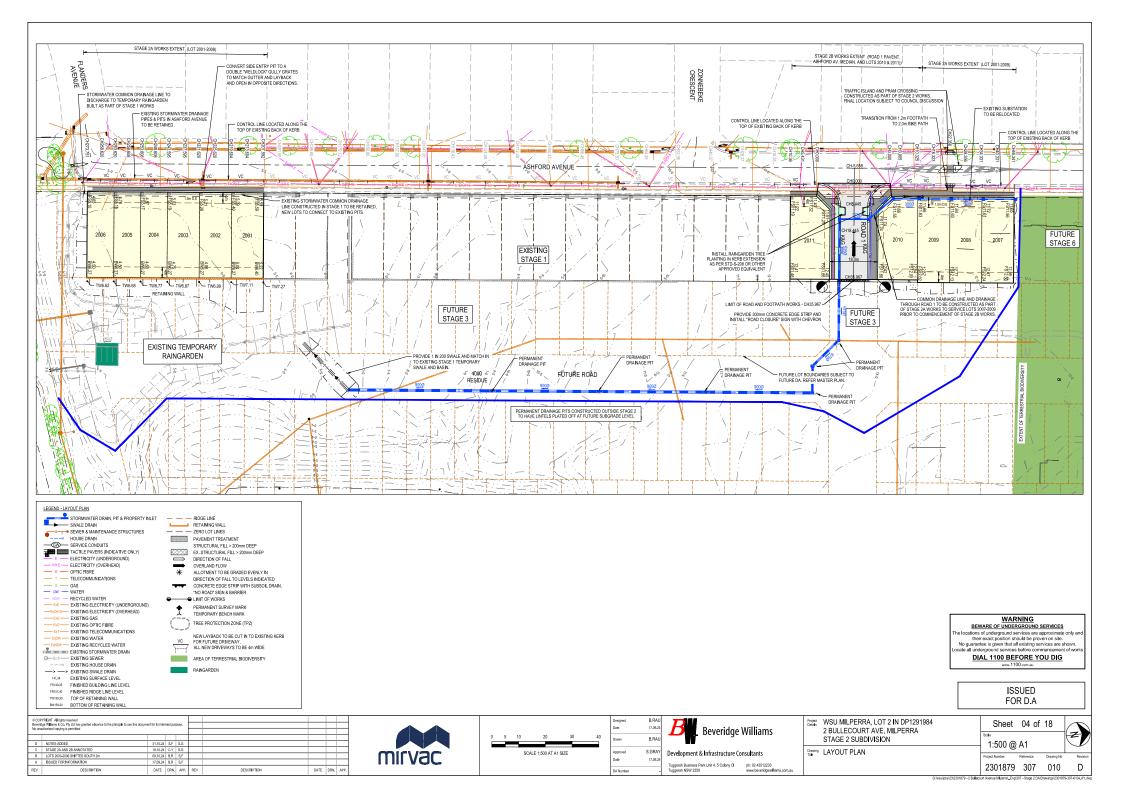
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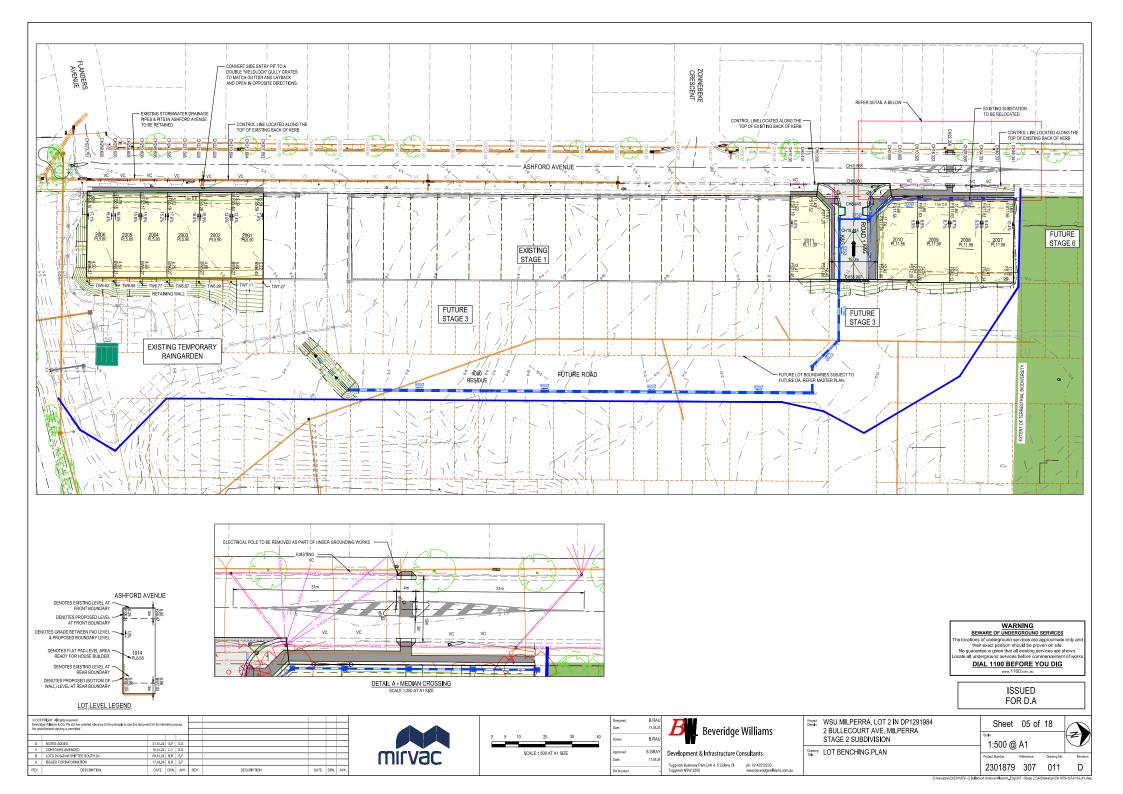
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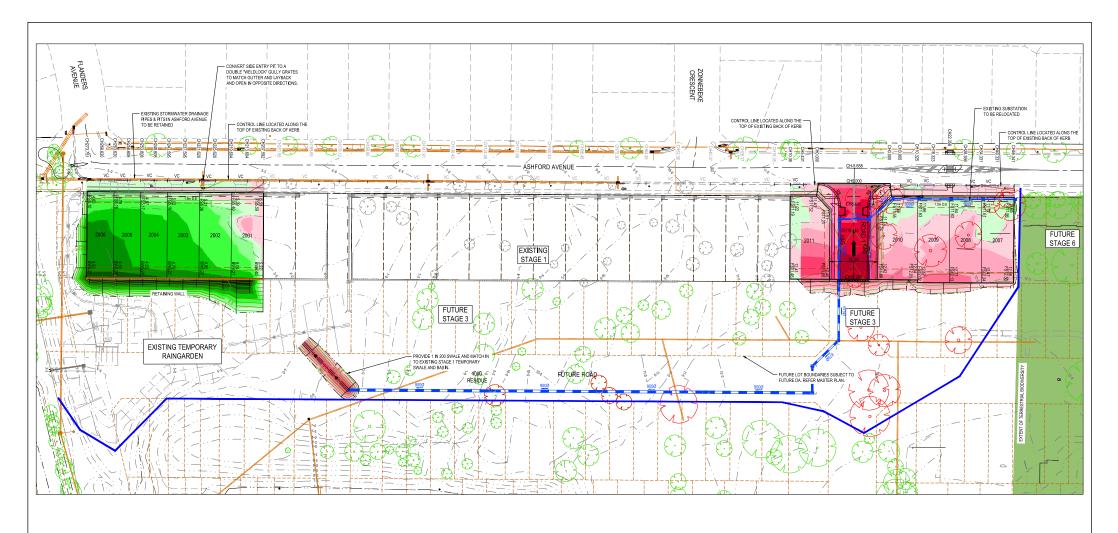
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ı	C	EXISTING CONTOURS DRAFTING	18.10.24	C.Y	S.G					Т
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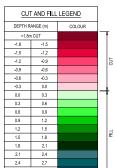


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APPROXIMATE EARTHWORKS VOLUMES: CUT - 1,577m<sup>3</sup> FILL - 2,397m<sup>3</sup>

\* THIS ESTIMATE IS BASED ON SURFACE TO SURFACE MODELLING ONLY AND IS SUBJECT TO FINAL DESIGNS

BALANCE - 820m3 OF FILL

#### WARNING BEWARE OF UNDERGROUND SERVICES

BEWARE OF UNDERSEAUDING SERVICES
The locations of underground services are approximate only an their exact position should be proven on site.

No guarantee is given that all existing services are shown, ocate all underground services before commencement of work

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	Date	17.09.24
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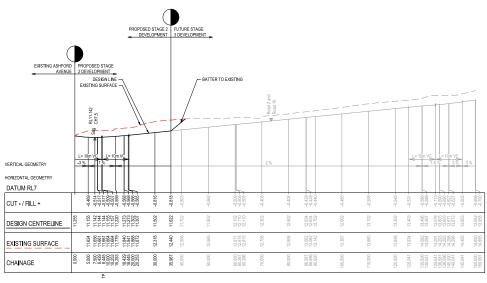
Development & Infrastructure Consultants						
Tuggerah Business Park Unit 4, 5 Colony Cl	ph: 02 43512233					
Tuggerah NSW 2259	www.beveridgewillams.com.au					

Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	BULT EARTHWORKS

Sheet	06	of	18
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LEGEND — EXISTING SURFACE — DESIGN LINE



ROAD 1 - LONGITUDINAL SECTION Scales: HORZ 1 : 500 VERT 1 : 100

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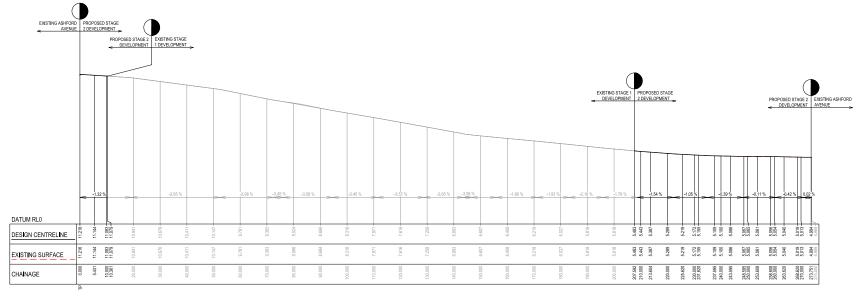
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Development & Infrastr	ucture Consultants
Tuggerah Business Park Unit 4, 5 Colony Cl	ph: 02 43512233
Tuggerah NSW 2259	www.beveridgewillams.com.au

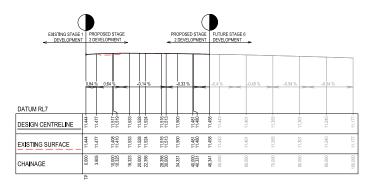
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WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION	Sheet 07 of 18 State 1:500 H 1:100 V @ A1	
Prior ROAD 1 LONGITUDINAL SECTION	Project Number Reference Drawing No 2301879 307 100	Revision

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LEGEND — EXISTING SURFACE — DESIGN LINE



ASHFORD AVENUE (SOUTH OF ROAD 1)- LONGITUDINAL SECTION Scales: HORZ 1: 500 VERT 1: 100



ASHFORD AVENUE (NORTH OF ROAD 1) - LONGITUDINAL SECTION Scales: HORZ 1 : 500 VERT 1 : 100

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6	Approved Date	S.GRAY 17.09.24	ı
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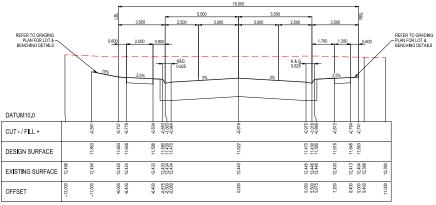
Development & Infrastr	ucture Consultants
Tuggerah Business Park Unit 4, 5 Colony Cl	ph: 02 43512233
Tuggerah NSW 2259	www.beveridoew/Hams.com.au

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	STAGE 2 SUBDIVISION	s	1:500 H	1·100 V	@ A1	
rawing No	ASHFORD AVENUE BACK OF KERB	P	roject Number	Reference	Drawing No	_
	LONGITUDINAL SECTIONS (NORTH AND SOUTH OF ROAD 1)		2301879	307	101	

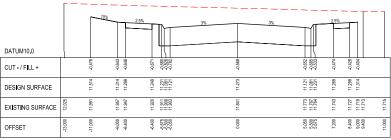
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DESIGN SURFACE



CH 35.967 - LIMIT OF WORKS



CH 18.445

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Date	17,09.24	T.,
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B	Beveridge Williams
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Development & Infrastructure Consultan						
Tuggerah Business Park Unit 4, 5 Colony Cl Tuggerah NSW 2259	ph: 02 43512233 www.beverldgewillams.com.au					

Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE. MILPERRA		Sheet 09 of 18					
	STAGE 2 SUBDIVISION		1:100 @ A1					
Drawing	ROAD 1 CROSS SECTIONS		1.100 @	731				
Title	NOVE TOROGO SESTIONS		Project Number	Reference	Drawing No			
			2301879	307	200			

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LEGEND \_\_ \_ \_ EXISTING SURFACE \_\_\_ DESIGN SURFACE



CH 40.331 - LOT 2007

		16.7% 4.5	5%	 	 9.7%		2.5%	
DATUM10.0							2.3%	T
CUT - / FILL +	800	-0.579	-0.472		0.142	0.025	-0.012	0000
DESIGN SURFACE	12.763	12:190	12.010		12.010	11.607	11.577	11.516
EXISTING SURFACE	12.763	12.769	12.482		11.868	11.631	11.589	11.516
OFFSET	39.763	36.320	32.326		8.247	3.647	2.447	00000

CH 28.356 - LOT 2008

		76.7%	4.3%	· – –	<u></u>		6.5%	2.5%		
DATUM10.0										
CUT - / FILL +	-0.011	-0.686		0.640		0000	0.009	-0.004	0.000	
DESIGN SURFACE	12,778	12.071		11,900		11.900	11.640	11.575	11.533	
EXISTING SURFACE	12.789	12.757		12.540		11,900	11.631	11.580	11.533	
OFFSET	40.611	36.369		32.378		8.296	3.696	1,696	00:00	

CH 16.323 - LOT 2009

		16,7% 7.89		 				
		133		0%	 		2.5%	
DATUM10.0								
CUT - / FILL +	0000	-0.624	-0.841		-0.182	-0.081	-0.014	0000
DESIGN SURFACE	12.575	11.942	11:830		11.630	11.584	11.519	11.477
EXISTING SURFACE	12.575	12.565	12.471		11.812	11.631	11.533	11.477
OFFSET	39.151	35.352	31.354		8.279	4.278	1.678	0.000

CH 3.905 - LOT 2010

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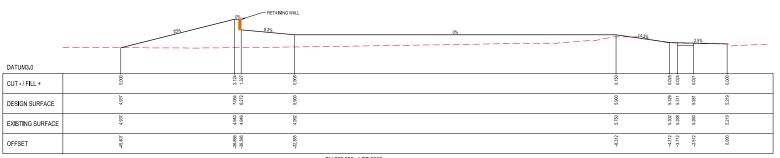
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_	Approved S.GF Date 17.0		Development & Infrastr	ucture Consu <b>l</b> tants			
	DA Number -		Tuggerah Business Park Unit 4, 5 Colony Cl Tuggerah NSW 2259	ph: 02 43512233 www.beveridgewillams.com.au			

RAU 19.24 RAU	<b>B</b> Beveridge Williams
RAY	Development & Infrastructure Consultants

Project Details	WSU MILPERRA, LOT 2 IN DP 2 BULLECOURT AVE, MILPER STAGE 2 SUBDIVISION
Drawing Title	ASHFORD AVENUE (NORTH C LOT CROSS SECTIONS
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TAGE 2 SUBDIVISION	1:100 @			
SHFORD AVENUE (NORTH OF ROAD 1)	1.100 @	; / \ 1		
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LEGEND EXISTING SURFACE DESIGN SURFACE



CH 213.604 - LOT 2001



CH 5.431 - LOT 2011

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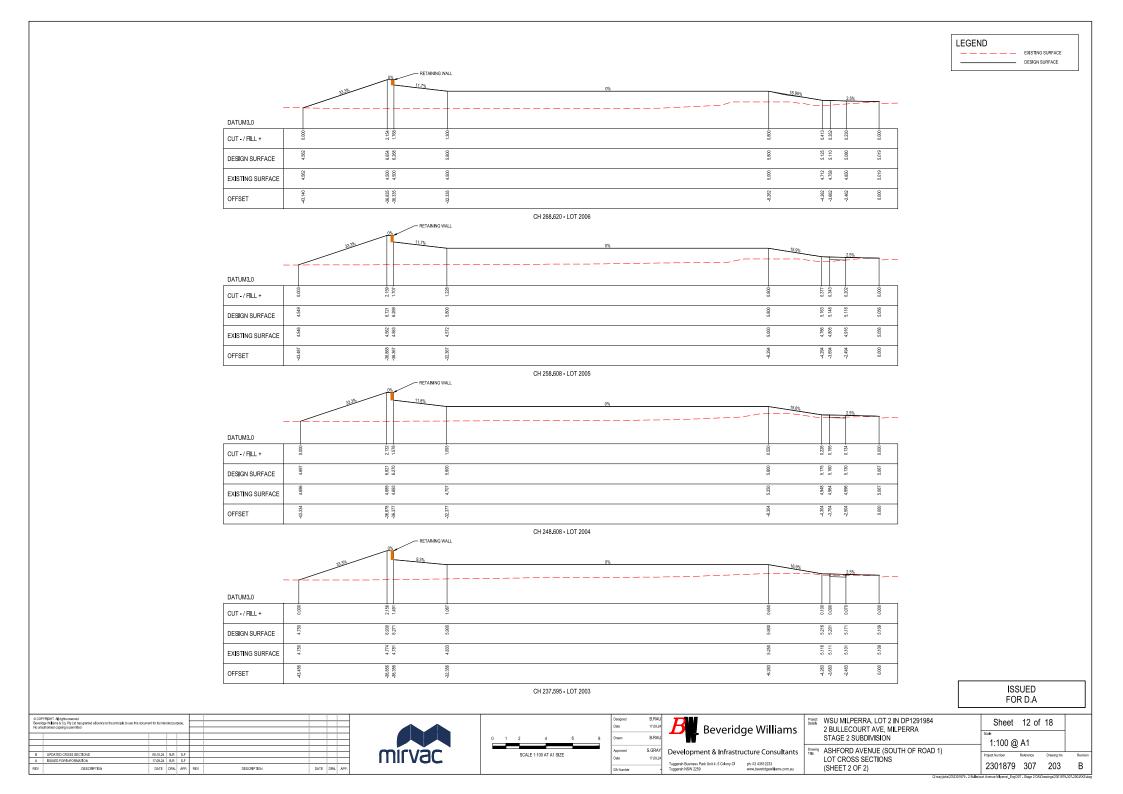
Tuggerah Business Park Unit 4, 5 Colony Cl Tuggerah NSW 2259

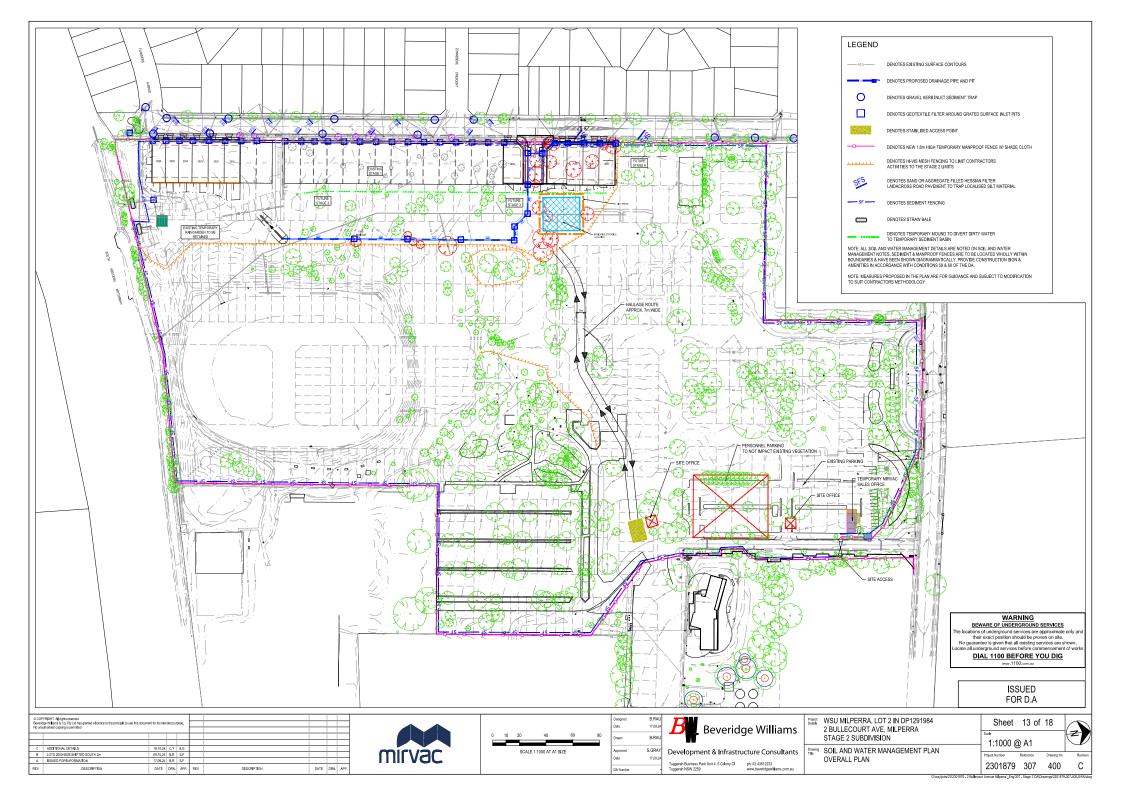
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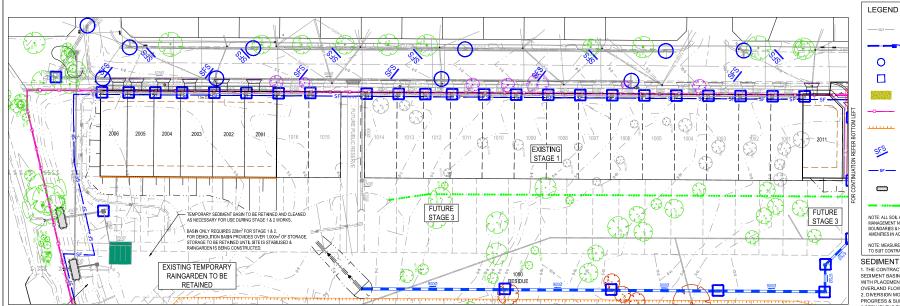
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D	Drawing Tible	ASHFORD AVENUE (SOUTH OF ROAI

Sheet	11	of	18
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STAGE 2 SUBDIVISION	
ASHFORD AVENUE (SOUTH OF ROAD LOT CROSS SECTIONS (SHEET 1 OF 2)	1)







#### 1. Erosion Hazard and Sediment Basins

Site Name: WSU Milperra

Precinct/Stage: Stage 1 & 2 Subdivision

Other Details:

	chment or	Notes			
					Notes
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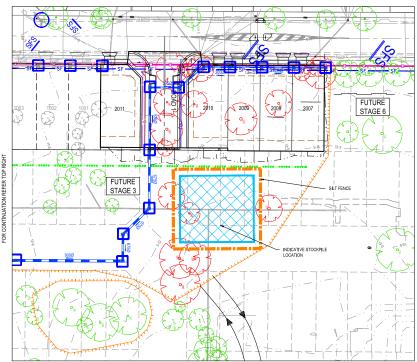
Soil analysis (enter sediment t	ype if	known	, or lat	orator	y parti	cle siz	e data)
Sediment Type (C, F or D) if known	F						From Appendix C (ffknown)
% sand (fraction 0.02 to 2.00 mm)	33						Enter the percentage of each soil
% silt (fraction 0.002 to 0.02 mm)	33						fraction, E.g. enter 10 for 10%
% clay (fraction finer than 0.002 mm)	33						ractoric c.g. ener rollor rollo
Dispersion percentage	10.0						E.g. enter 10 for dispersion of 10%
% of whole soil dispersible	4.95						See Section 6.3.3(e). Auto-calculated
Soil Texture Group	F						Automatic calculation from above

Rainfall data				
Design rainfall depth (no of days)	5			See Section 6.3.4 and, particularly,
Design rainfall depth (percentile)	75			Table 6.3 on pages 6-24 and 6-25.
x-day, y-percentile rainfall event (mm)	19.4			Titale 0.5 on pages 0.24 and 0.25.
Rainfall R-factor (if known)	2900			Only need to enter one or the other here
IFD: 2-year, 6-hour storm (if known)	8.3			Only need brenen one or the other nere

RUSLE Factors							
Rainfall erosivity (R-factor)	2600						Auto-filled from above
Soil erodibility (K-factor)	0.038						
Slope length (m)	200						Ī
Slope gradient (%)	2.4						RUSLE LS factor calculated for a high
Length/gradient (LS -factor)	0.74						rill/interrill ratio.
Erosion control practice (P -factor)	1.3	1.3	1.3	1.3	1.3	1.3	1
Ground cover (C-factor)	1	1	1	1	1	1	1

Sediment Basin Design Criteri	a (for 1	Гуре D				
Storage (soil) zone design (no of months)	2	2	2	2	2	Minimum is generally 2 months
Cv (Volumetric runoff coefficient)	0.35					See Table F2, page F-4 in Appendix F

Calculations and Type D/F Sec	iiment	Basin Volumes	
Soil loss (t/ha/yr)	96		
Soil Loss Class	1		See Table 4.2, page 4-13
Soil loss (m <sup>3</sup> /ha/yr)	73		Conversion to cubic metres
Sediment basin storage (soil) volume (m <sup>3</sup> )	35		See Sections 6.3.4(i) for calculations
Sediment basin setting (water) volume (m3)	193		See Sections 6.3.4(i) for calculations
Sediment basin total volume (m³)	228		



DENOTES EXISTING SURFACE CONTOURS DENOTES PROPOSED DRAINAGE PIPE AND PIT  $\circ$ DENOTES GRAVEL KERB INLET SEDIMENT TRAP DENOTES GEOTEXTILE ELLTER AROUND GRATED SURFACE INLET PITS. DENOTES STABILISED ACCESS POINT DENOTES NEW 1.8m HIGH TEMPORARY MANPROOF FENCE W/ SHADE CLOTH DENOTES HI-VIS MESH FENCING TO LIMIT CONTRACTORS ACTIVITIES TO THE STAGE 1 LIMITS DENOTES SAND OR AGGREGATE FILLED HESSIAN FILTER LAIDACROSS ROAD PAVEMENT TO TRAP LOCALISED SILT MATERIAL DENOTES SEDIMENT FENCING DENOTES STRAW BALE DENOTES TEMPORARY MOUND TO DIVERT DIRTY WATER TO TEMPORARY SEDIMENT BASIN NOTE: ALL SOIL AND WATER MANAGEMENT DETAILS ARE NOTED ON SOIL AND WATER NOTE: ALL SUIL AND WATER MANAGEMENT DEFINES ARE ROLLED ON SUIL AND WATER
MANAGEMENT NOTES, SEDIMENT & MANAPROOF FENCES ARE TO BE LOCATED WHOLLY WITHIN
BOUNDARIES & HAVE BEEN SHOWN DIAGRAMMATICALLY. PROVIDE CONSTRUCTION SIGN &
AMERITIES IN ACCORDANCE WITH CONDITIONS 59 & 60 OF THE DA. NOTE: MEASURES PROPOSED IN THE PLAN ARE FOR GUIDANCE AND SUBJECT TO MODIFICATION TO SUIT CONTRACTORS METHODOLOGY SEDIMENT BASIN

1. THE CONTRACTOR IS TO ENSURE STORMWATER RUNOFF IS DIRECTED TO THE

SEDIMENT BASIN
WITH PLACEMENT OF TEMPORARY DIVERSION MOUNDS OR THE FORMATION OF OVERLAND FLOW PATHS

2. DIVERSION MOUNDS & FLOW PATHS ARE TO BE ADJUSTED AS FILLING LAYERS PROGRESS & SURFACE LEVELS RISE.

PROGRESS & SURFACE LEVELS RISE.
3 SEDIMENT IS TO BE REMOVED SUCH THAT NOT LESS THAN 70% OF THE DESIGN CAPACITY IS AVAILABLE AT ALL TIMES MARKERS WITH

DEPTH INDICATORS ARE TO BE PLACED IN EACH BASIN TO INDICATE WHEN SEDIMENT ACCUMULATION EXCEEDS 30% OF STORAGE REQUIREMENTS.

4.BASINS ARE TO BE FLOCCULATED WITH GYPSUM WHEN SUSPENDED SOLID

CONCENTRATION EXCEEDS 50 milligrams per litre. SPREADING RATE TO BE DETERMINED AFTER TESTING AND ANALYSIS OF THE INITIAL STORM EVENT. FIRST APPLICATION IS TO BE 30 kilograms GYPSUM PER 100 curv. OF STORED WATER & THEREAFTER AS DETERMINED BY TESTING. PUMP OUT TO GOLF COURSE DAM WITHIN 72 hrs OF TREATMENT. REFER LANDCOM SOIL & CONSTRUCTION - "MANAGING URBAN

STORMWATER" MANUAL - APPENDIX E 6. UPON ADEQUATE SITE REVEGETATION & COUNCIL APPROVAL SEDIMENT BASIN IS TO BE DECOMMISSIONED & CONVERTED

INTO RAINGARDENS PER DESIGN.

### CONSTRUCTION SEQUENCE

FOLLOWING REMEDIATION OF THE AREA:

1 ALL TOPSOIL CONTAINING VEGETATION TO BE STRIPPED FROM EXISTING SURFACE & STOCKPILED FOR RESPREADING

FOLLOWING COMPLETION OF EARTHWORKS, (APPROX, 75mm THICK)

2. STRIPPED SURFACE TO BE INSPECTED & CERTIFIED READY FOR FILL PLACEMENT BY GEOTECHNICAL ENGINEER.

3. COMPLETE INITIAL EARTHWORKS IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S REPORT

4. IMPORTED FILL TO BE CERTIFIED AS V.E.N.M. & FREE OF SLAG, HAZARDOUS, CONTAMINATED, TOXIC, PUTRESCIBLE OR

RADIO-ACTIVE MATTER & INDUSTRIAL WASTE & BUILDING DEBRIS. THE ORIGIN OF FILL PROPOSED TO BE IMPORTED & THE ABOVE

CERTIFICATION TO BE REVIEWED & APPROVED BY COUNCIL PRIOR TO ANY IMPORTED

FILL ARRIVING ON SITE 5, ALL FILL IS TO BE PLACED & COMPACTED IN ACCORDANCE WITH COUNCIL'S

CONSTRUCTION SPECIFICATION

6. ALL FILL TO BE PLACED UNDER LEVEL 1 GEOTECHNICAL SUPERVISION.

7. COPIES OF ALL FILL COMPACTION TESTS TO BE PROVIDED TO PRINCIPLE.

8. COMPLETE ALL ROAD, DRAINAGE, RETAINING WALL & SERVICES WORKS 9. 300mm WIDE. 150mm THICK TOPSOIL TO BE PLACED BEHIND KERBS & TURFED WITH

KIKUYU TURE

10. FINAL TOPSOIL/ TURF & PATHWAYS WITHIN ASHFORD AVENUE VERGES TO BE BONDED WITH COUNCIL & COMPLETED BY BUILDERS FOLLOWING

HOUSE CONSTRUCTION

#### WARNING BEWARE OF UNDERGROUND SERVICES

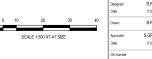
ocations of underground services are approximate only a bein exact position should be proven on site, guarantee is given that all existing services are shown a all underground services before commencement of we

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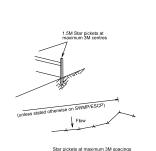


Project WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION

Drawing SOIL AND WATER MANAGEMENT PLAN STAGE 2 PLAN

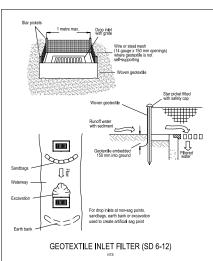
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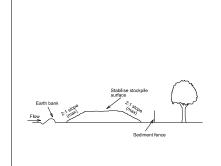


- Construct sediment fence as close as possible to parallel to the contours of the site.
- 2. Drive 1.5 metre long star pickets into ground, 3 metres apart.
- Dig a 150MM deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched
- Fix self supporting geotextile to upslope side of posts with wire ties or as recommended by geotextile manufacturer
- 6. Join sections of fabric at a support post with a 150mm overlap

#### SEDIMENT FENCE



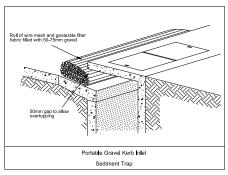
- Fabricate a sediment barrier made from geotextle or straw bales.
- Follow Standard Drawing 6-7 and Standard Drawing 6-8 for installation procedures for the straw bales or geofabric. Reduce the picket spacing to 1 metre centres.
- In waterways, artificial sag points can be created with sandbags or earth banks as shown in the drawing.
   Do not cover the inlet with geotextile unless the design is adequate to allow for all waters to bypass it.

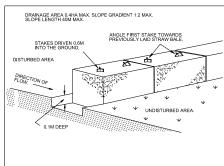


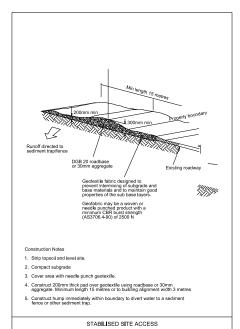
#### Construction Notes

- 2. Construct on the contour as a low, flat elongated mound
- 3. All stockoiles shall be less than 2 metres in height
- 4. Rehabilitate in accordance with the SWMP/ESCP.
- Construct earth bank (Standard Drawing 5-2) on the upslope side to divert run off around the stockpile and a sediment fence (standard Drawing 6-7) 1 to 2 metres downslope of stockpile.
- Seeded areas to be watered twice weekly until established. Substantial growth required within 14 days or bitumen straw mulch to be placed.
- 7. Dust to be controlled by watering

#### STOCKPILES







#### SEDIMENT & EROSION CONTROL

FINAL COMPLETION OF WORKS.

- THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO DISTURBANCE OF THE WORK AREA & TO BE CARRIED OUT IN ACCORDANCE WITH LANDCOM'S "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION VOLUME 1.
- SE2. THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL SEDIMENT AND FROSION CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM SUCH DEVICES BEFORE MORE THAN 60% OF THEIR CAPACITY IS LOST. ALL THE SILT REMOVED SHALL BE DISPOSED OF AS DIRECTED BY THE SUPERINTENDENT. NO SILT IS TO BE PLACED OUTSIDE THE LIMIT OF WORKS. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND LONGER AS MAY BE DIRECTED BY THE SUPERINTENDENT
- VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION CONFINING ACCESS WHERE POSSIBLE TO PROPOSED OR EXISTING ROAD ALIGNMENTS.
- WHEN ANY DEVICES ARE TO BE HANDED OVER TO COUNCIL, THEY SHALL BE IN A CLEAN & STABLE CONDITION.
- THE CONTRACTOR SHALL MAINTAIN ALL REVEGETATED AREAS INCLUDING WATERING UNTIL SE5.
- THE CONTRACTOR SHALL MAINTAIN DUST CONTROL UNTIL FINAL COMPLETION OF WORKS.
- THE CONTRACTOR'S RESPONSIBILITY IS TO ENSURE ALL NECESSARY MEASURES SO AS TO PROTECT ALL DISTURBED AREAS AS PER NOTE SET ALL ADDITIONAL COSTS ARE TO BE REFLECTED IN TENDER PRICE EVEN IF SUCH MEASURES ARE NOT INDICATED ON THE SEDIMENT AND EROSION CONTROL PLAN
- SE8. THE CONTRACTOR MUST COMMENCE REHABILITATION WITHIN  $\underline{\mathbf{5}}$  DAYS OF ANY SITE REGRADING & BATTER FORMATION.
- SE9. A 0.3m WIDE STRIP OF TURF TO BE PLACED BEHIND THE EXISTING KERB IN ASHFORD
- SE10. PROVIDE TURF AROUND ALL SURFACE INLET PITS IN ADDITION TO THE GEOTEXTILE INLET
- SE11. STOCKPILES TO BE STABILISED WITHIN 14 DAYS OF COMPLETING THE STOCKPILE

#### NOTES

ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE LANDCOM'S MANUAL "MANAGING URBAN STORMWATER" 4TH EDITION AUGUST 2004.

WORKS SHALL BE UNDERTAKEN AS OUTLINED ON PLANS EROSION AND SEDIMENT CONTROL MEASURES AFFECTE BY WORKS ARE TO BE RE-ESTABLISHED PRIOR TO THE COMPLETION OF EACH DAYS WORK.

THE CONTRACTOR IS TO STABILISE ALL STOCKPILES AND DISTURBED AREAS AS SOON AS THEY ARE FORMED TO FINAL LEVELS. STABILISATION TO BE BY HYDROSEEDING / SPRAY GRASS, OR AS DIRECTED BY COUNCIL ENGINEER.

SEED MIXTURE FOR FOOTWAYS AND OTHER AREAS UNDER THE CONTROL OF COUNCIL ARE TO BE IN ACCORDANCE WITH COUNCIL'S SPECIFICATION. FOR OTHER AREAS, THE LIST OF PLANT SPECIES FOR TEMPORARY COVER IS:

JAPANESE MILLET AND OATS(RYECORN) AT 25kg/ha EACH - SPRING/SUMMER JAPANESE MILLET AT 10kg/ha AND OATS(RYECORN) AT 30kg/ha - AUTUMN/WINTER

ALL SEEDED AREAS ARE TO BE WATERED TWICE WEEKLY.

WHERE SURFACE SLOPES ARE MORE THAN 4H:1V BATTER THEY SHALL BE TURFED.

DUST CONTROL MEASURES SHALL BE IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS. SUCH MEASURES ARE TO BE TO THE SATISFACTION OF THE SUPERINTENDENT AND COLINCII

TOPSOIL SHALL BE RESPREAD ON CONSTRUCTION AREAS AND STABILISED AS SOON AS POSSIBLE WITHIN 60 DAYS OF DISTURBANCE. ALL DISTURBED AREAS ARE TO BE LIEFT WITH A SCARIFIED SURFACE AT ALL TIMES TO ENCOURAGE WATER INFILTRATION AND ASSIST WITH KEYING OF TOPSOIL.

FOLLOWING COMPLETION OF WORKS AND STABILISATION OF ALL DISTURBED SURFACES ALL MATERIALS AND CONTROL MEASURES ARE TO BE REMOVED FROM SITE AND TEMPORARY BASINS FILLED. COMPACTED AND STABILISED.

ALL SITE ACCESS TO BE ACHIEVED FROM DESIGNATED SITE ACCESS. SITE ACCESS TO BE PROTECTED BY THE INSTALLATION OF AN APPROVED SHAKER RAMP. SHAKER RAMP TO BE REGULARLY MAINTAINED TO ENSURE EFFECTIVENESS.

UPON COMPLETION OF FINAL EARTHWORKS OR AFTER WRITTEN DIRECTION OF COUNCIL, IMMEDIATE SILT CONSERVATION TREATMENTS SHALL BE APPLIED SO AS TO RENDER AREAS THAT HAVE BEEN DISTURBED. ERSOIN PROOF WITHIN 14 DAYS.

ALL DISTURBED OVER ALL STORMWATER, POWER, TELEPHONE, GAS AND SEWER LINES NOT WITHIN STREETS IS TO BE SPRAY GRASSED AS SOON AS POSSIBLE BUT NO LATER THAN WITHIN 14 DAYS AFTER BACKFILI I

NO MORE THAN 150m OF TRENCH IS TO BE OPEN AT ANY ONE TIME. ALL TEMPORARY EARTH BERMS, DIVERSION AND SEDIMENT BASIN EMBANKMENTS ARE TO BE TRACK ROLLED, SEEDED OR MULCHED OR SPRAYED WITH BITUMEN AS SOON AS THEY HAVE BEEN FORMED.

ALL FILLS ARE TO BE LEFT WITH A WINDROW AT LEAST 20cm HIGH AT THE TOP OF THE SLOPE AT THE END OF EACH DAY'S EARTHWORKS AMD ALL EARTHWORK AREAS SHALL BE ROLLED EACH EVENING TO 'SEAL' THE EARTHWORKS.

STABILISATION OF ALL CUT AND FILL SLOPES SHALL BE COMMENCED WITHIN 14 DAYS OF COMPLETION OF FORMATION.

THE CONTRACTOR SHALL MAINTAIN AND PRODUCE ON REQUEST A LOGBOOK ON SITE DETAILING THE FOLLOWING:-

- RECORDS OF ALL RAINFALL
  DALY CONDITION OF ALL BROSION AND SEDIMENT CONTROL MEASURES
  ANY APPLICATION OF FLOCCULATION AGENTS TO BASINS
  VOLUMES OF WATER DISCHARGED FROM BASINS
  METHOD OF DISPOSAL OF WATER FROM BASINS
  ANY ADDITIONAL REMEDIAL WORKS REQUIRED.

THE ORIGINAL LOGBOOK SHALL BE ISSUED TO THE PROJECT MANAGER ON COMPLETION OF THE WORKS, SEDIMENT CONTROL MEASURES TO BE MONITORED ONCE A WEEK AND AFTER EVERY STORM EVENT.

STOCKPILES TO BE MAX 2 METRE HIGH WITH SEDIMENT FENCING TO LOW SIDE LOCATED CLEAR OF WATERCOURSES

ALL STORMWATER PITS TO BE BLOCKED DURING CONSTRUCTION UNTIL SITE STABILISED.

DURING CONSTRUCTION WORKS ANY WORK AND STORAGE AREAS WHERE SPILLAGE MAY OCCUR. MINST BE BUNDED THE SIZE OF THE AREA TO BE BUNDED AND HEIGHT OF THE BUND WALL SMIST BE CALCULATED AS BEING EQUAL TO 110% OF THE TOTAL VOLUME STORED OR EQUAL TO THE LARGEST STORAGE CONTAINER, WHICH EVER IS GREATER, ALP JIPPE WORK EXTENDING FROM THE BANDED AREA MUST BE DIRECTED OVER THE BUND WALL AND HOSE COUPLINGS MUST BE PLACED SUCH THAT LEAKS AND SPILLAGE'S ARE CONTAINED. THE AREAS MUST BE GRADED TO A PIT/SUMP TO FACILITATE EMPTYING.

ANY IMPORTED FILL USED MUST BE VALIDATED & SUITABLE & FREE OF SALINE & CONTAMINATION

#### WARNING BEWARE OF UNDERGROUND SERVICES

ne locations of underground services are approximate only an their exact position should be proven on site. No guarantee is given that all existing services are shown, cate all underground services before commencement of wor

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Approved Date	S.GRAY 17.09.24	
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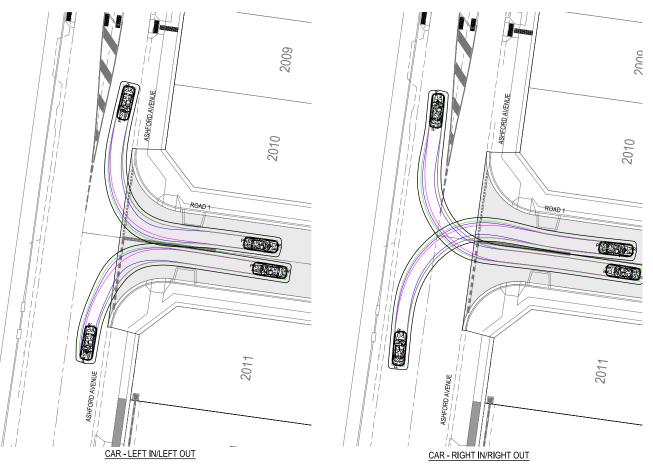
Development & Infrastructure Consultants Tuggerah Business Park Unit 4, 5 Colony Cl ph: 02 43512233 Tuggerah NSW 2259

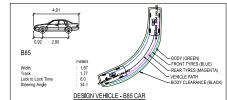
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Drawing SOIL AND WATER MANAGEMENT PLAN DETAILS AND NOTES

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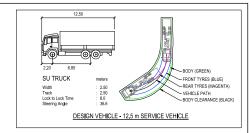
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Number	-	Tuggerah Business Park Unit 4, 5 Colony Cl Tuggerah NSW 2259	ph: 02 43512233 www.beveridgewillams.com.au

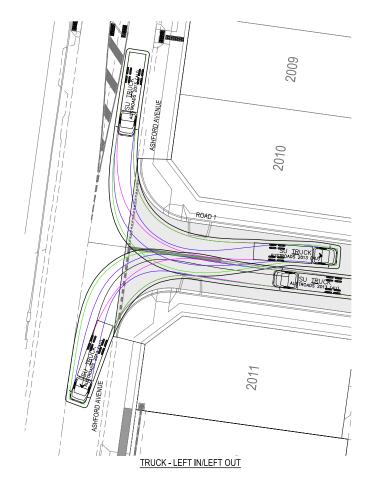
Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing	TURNING MOVEMENTS

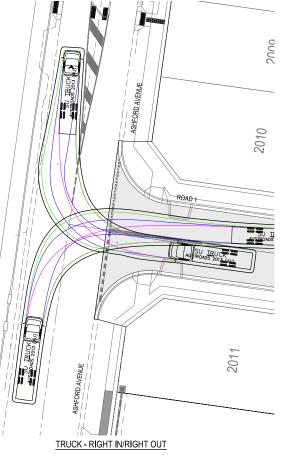
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ng	TURNING MOVEMENTS				`
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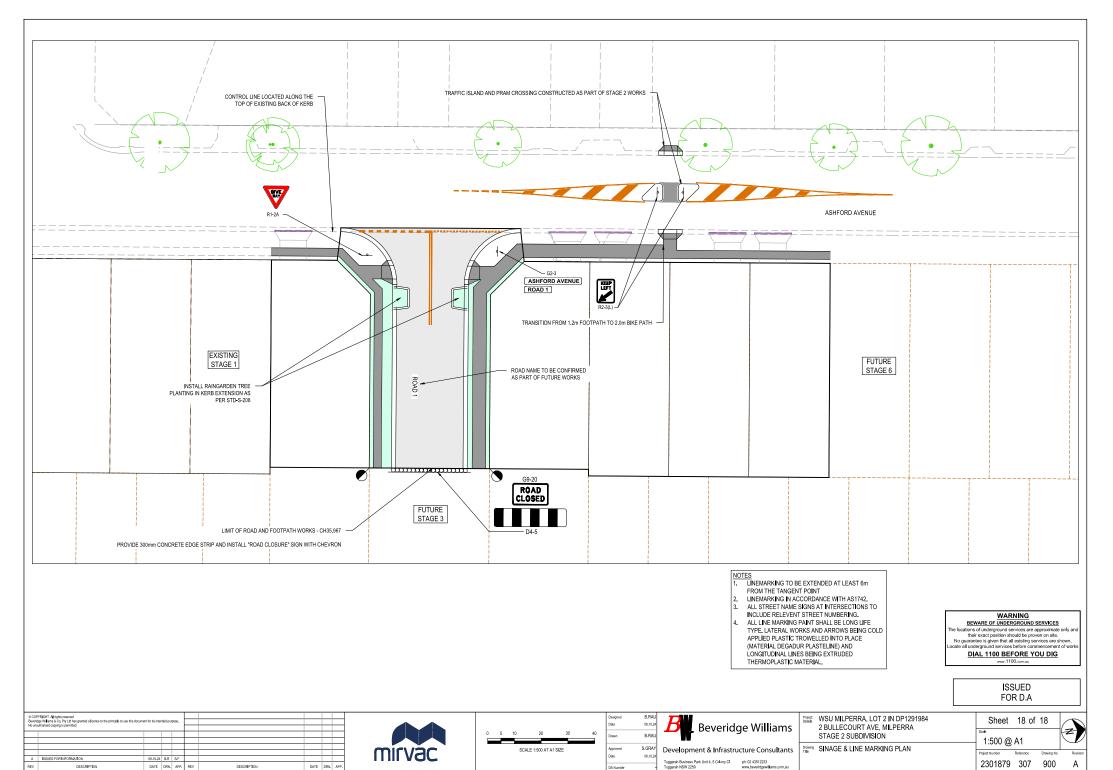
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Development & Infrastructure Consultants		
Tuggerah Business Park Unit 4, 5 Colony Cl Tuggerah NSW 2259	ph: 02 43512233 www.beveridgewillams.com.au	

Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA STAGE 2 SUBDIVISION
Drawing Title	TURNING MOVEMENTS SERVICE VEHICLE (SHEET 2 OF 2)

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