

WSU MILPERRA

CONCEPT CIVIL ENGINEERING PLANS TO SUPPORT THE CHILD CARE CENTRE
(SUBDIVISION OF LOT 2000 IN DP101147) - 2 BULLECOURT AVENUE, MILPERRA

CANTERBURY-BANKSTOWN COUNCIL

MIRVAC HOMES (NSW) PTY LTD



SITE PLAN
NOT TO SCALE

DRAWING INDEX		
DRAWING No.	TITLE	REVISION
2301879-315-001	COVER SHEET	C
2301879-315-002	TYPICAL CROSS SECTIONS	C
2301879-315-003	TYPICAL DETAILS	C
2301879-315-004	DEMOLITION PLAN	C
2301879-315-008	STAGING PLAN	C
2301879-315-010	LAYOUT & LOT BENCHING PLAN	C
2301879-315-015	BULK EARTHWORKS PLAN	C
2301879-315-100	ROAD 2, ROAD 3 & CHILD CARE CARPARK LONGITUDINAL SECTION (SHEET 1 OF 2)	C
2301879-315-101	HORSLEY ROAD & ROAD 9 LONGITUDINAL SECTION (SHEET 2 OF 2)	C
2301879-315-200	ROAD 2 CROSS SECTIONS (SHEET 1 OF 2)	C
2301879-315-201	ROAD 2 CROSS SECTIONS (SHEET 2 OF 2)	C
2301879-315-202	ROAD 3 CROSS SECTIONS	C
2301879-315-203	HORSLEY ROAD CROSS SECTIONS	C
2301879-315-204	ROAD 9 CROSS SECTIONS	C
2301879-315-300	WATER QUANTITY ASSESSMENT	C
2301879-315-400	SOIL AND WATER MANAGEMENT PLAN OVERALL	C
2301879-315-401	SOIL AND WATER MANAGEMENT PLAN DETAILS AND NOTES	C
2301879-315-950	DETENTION BASIN LAYOUT PLAN	C
2301879-315-955	SIGNAGE AND LINE MARKING PLAN	C
2301879-315-960	TURNING MOVEMENTS (SHEET 1 OF 2)	C
2301879-315-961	TURNING MOVEMENTS (SHEET 2 OF 2)	C

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C	ISSUED FOR DA	19.12.24	B.R.	S.F.					
B	ISSUED FOR INFORMATION	13.12.24	B.R.	S.F.					
A	ISSUED FOR INFORMATION	06.12.24	B.R.	S.F.					



Designed	S.FERGUSON
Date	06.12.24
Drawn	B.RAU
Approved	S.GRAY
Date	06.12.24
DA Number	-


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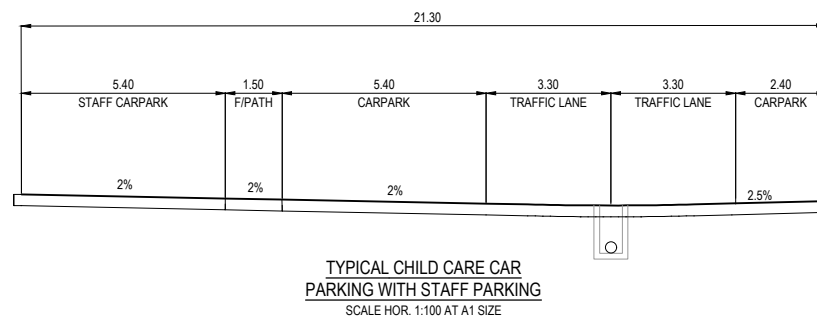
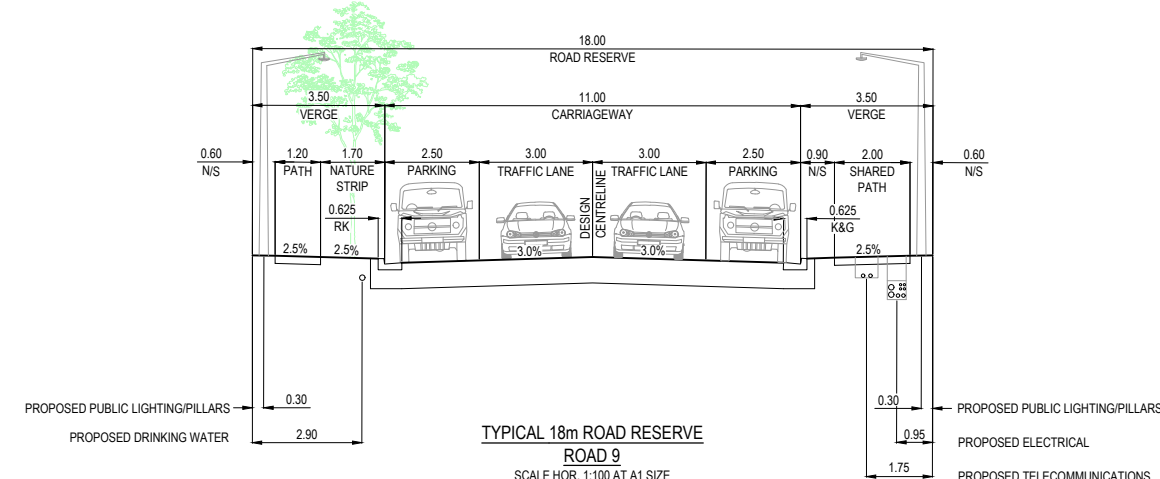
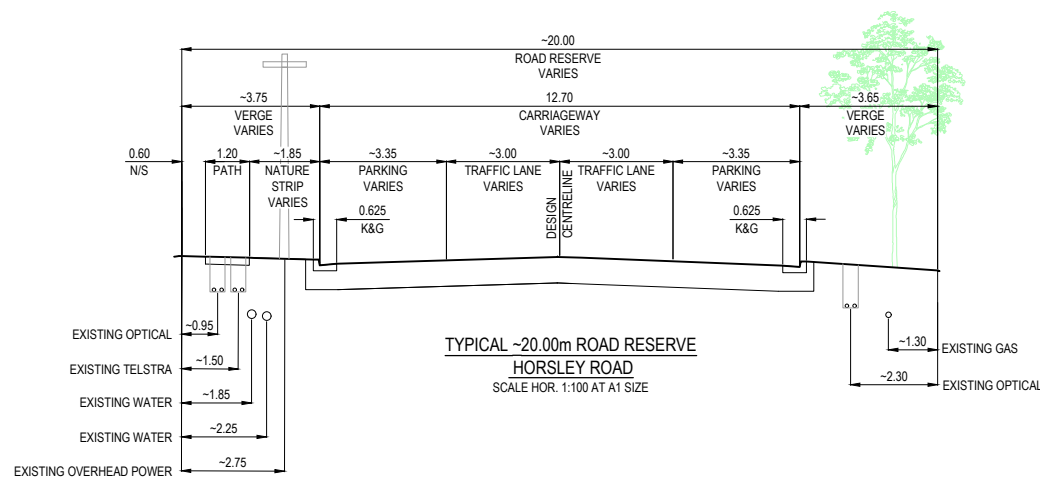
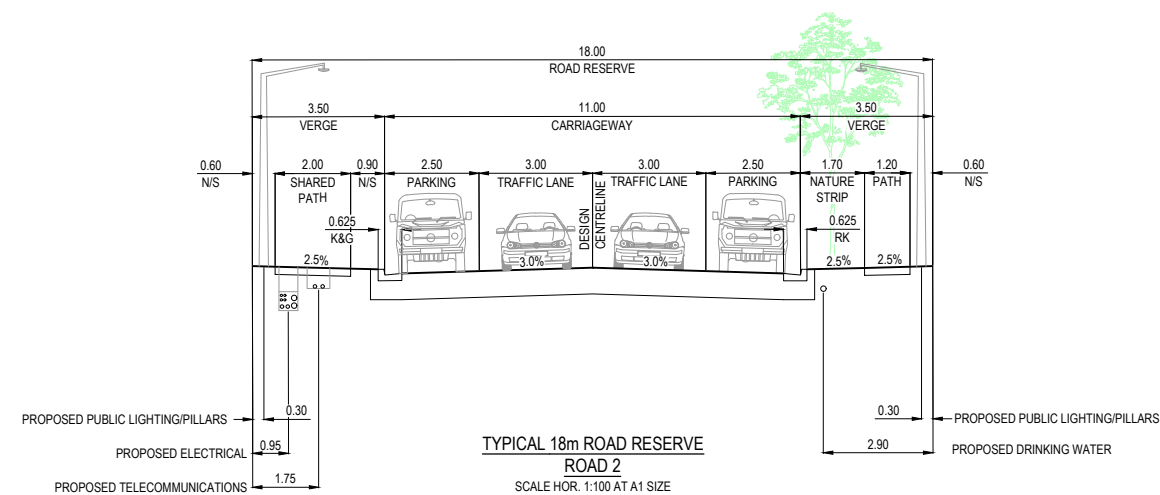
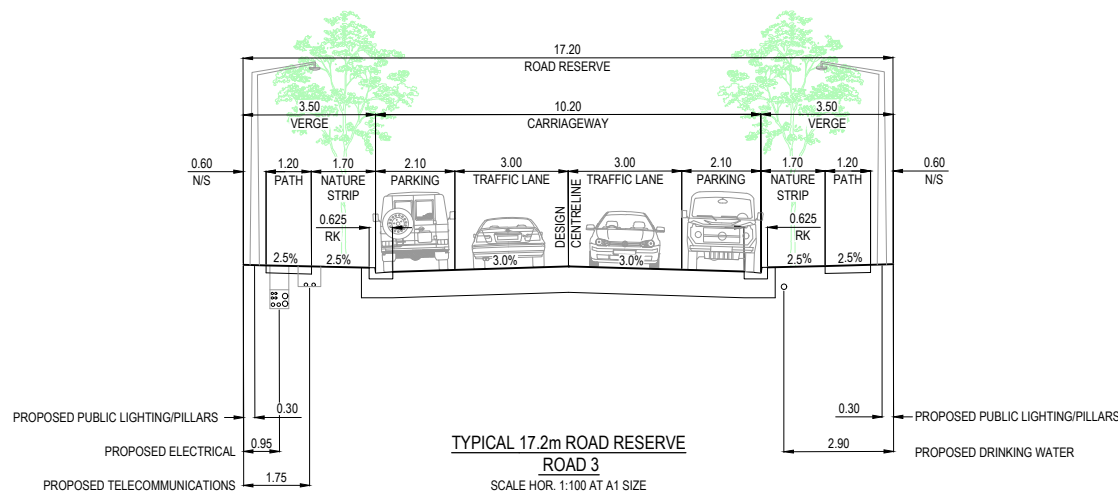
Development & Infrastructure Consultants

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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	COVER SHEET

Sheet 01 of 21			
Scale			
Project Number	Reference	Drawing No	Revision
2301879	315	001	C



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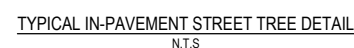


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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	TYPICAL CROSS SECTIONS

Sheet	02 of 21
Scale	AS SHOWN
Project Number	2301879
Reference	315
Drawing No	002
Revision	C



1. COUNCIL TO INSPECT AT COMPLETION OF CONCRETE KERB TO ALLOW CONFIRMATION OF CORRECT LEVELS/DEPTH.
2. COUNCIL TO INSPECT AT COMPLETION OF ALL LAYERS-DRAINAGE, TRANSITION OF BIOFILTER & DEPTH OF GRAVEL MULCH
3. COUNCIL TO INSPECT THE POSITIONING & COVERING OF SUB-SOIL DRAINAGE

TYPICAL IN-PAVEMENT STREET TREE DETAIL
N.T.S.

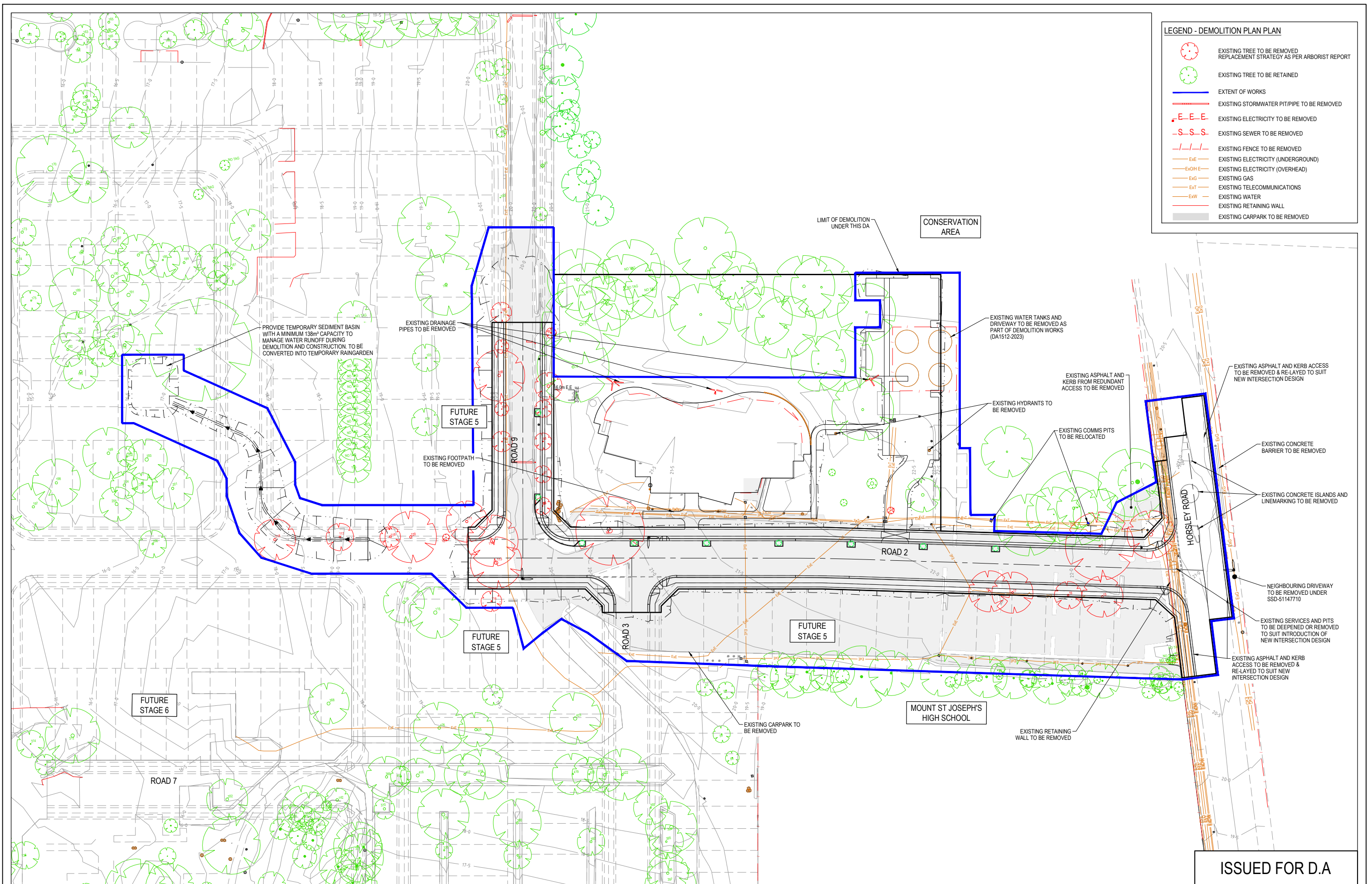


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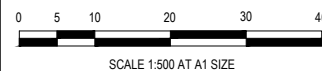


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Project Number	Reference	Drawing No	Revision
2301879	315	003	C



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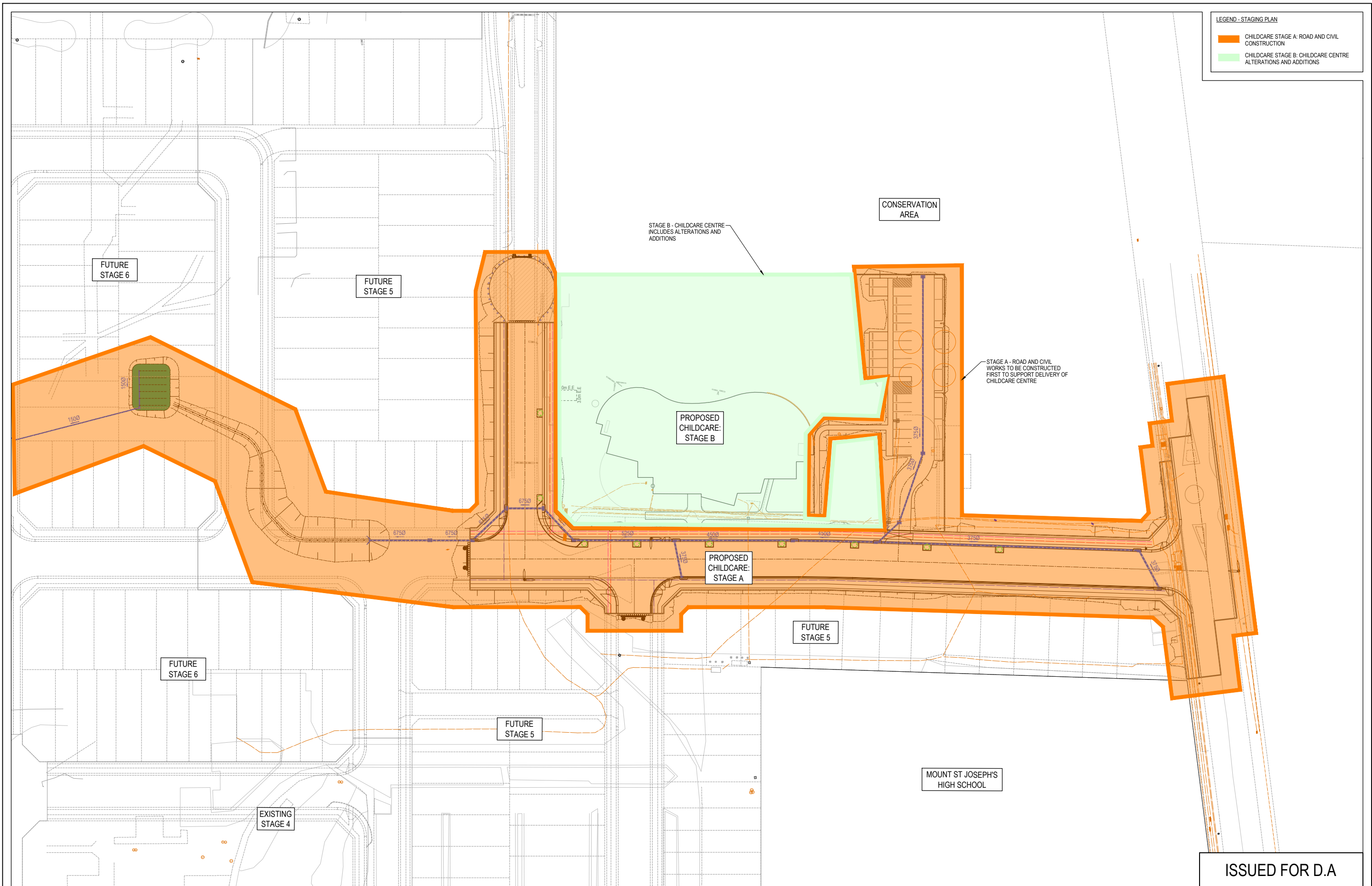
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DA Number	-



Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	DEMOLITION PLAN

Sheet 04 of 21

Scale 1:500 @ A1			
Project Number 2301879	Reference 315	Drawing No 004	Revision C



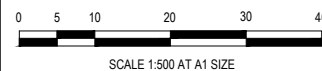
LEGEND - STAGING PLAN

CHILDCARE STAGE A: ROAD AND CIVIL CONSTRUCTION

CHILDCARE STAGE B: CHILDCARE CENTRE ALTERATIONS AND ADDITIONS

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Drawing Title	STAGING PLAN

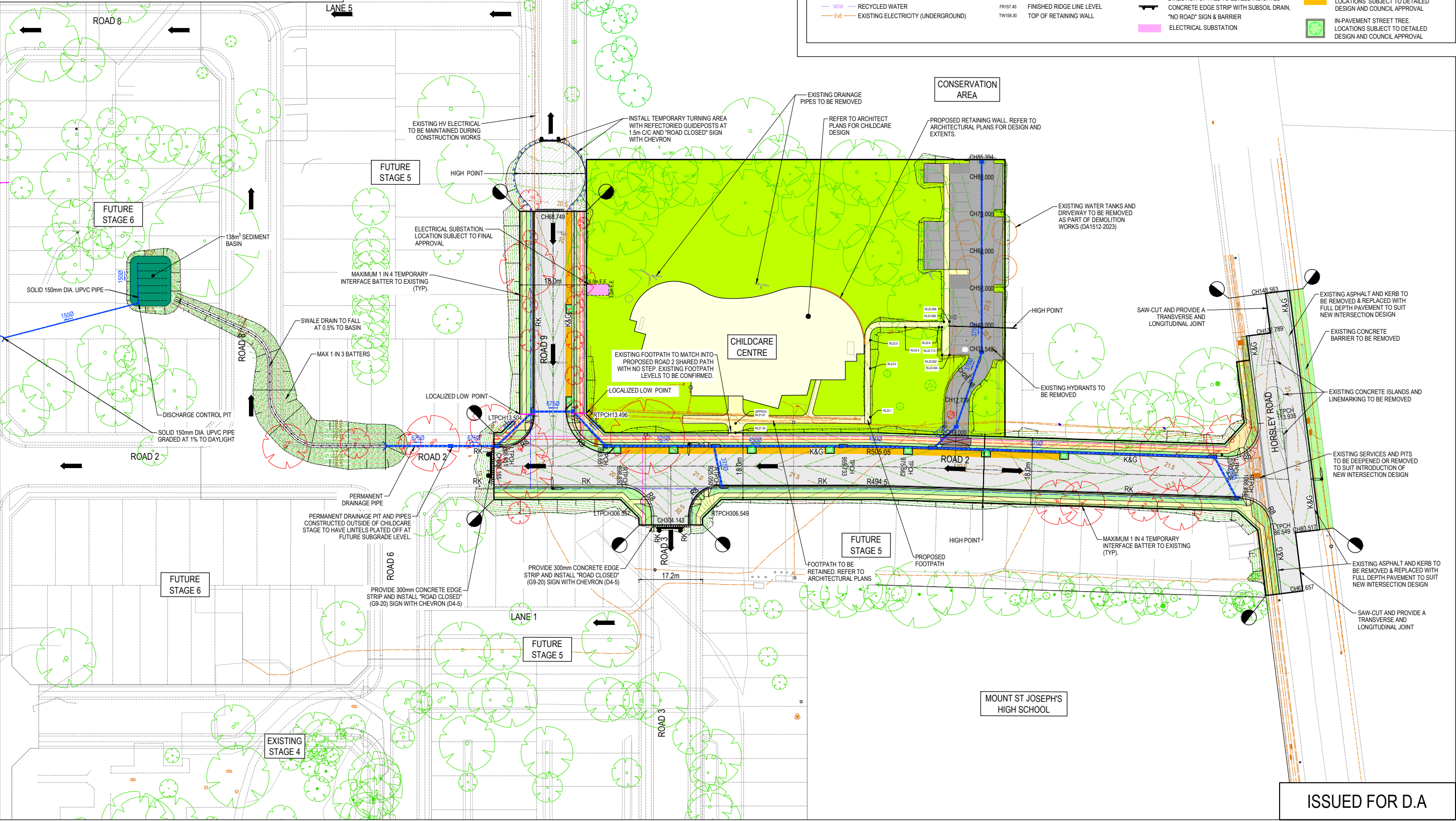
Sheet	05 of 21
Scale	1:500 @ A1
Project Number	2301879
Reference	315
Drawing No	008
Revision	C



SERVICE OFFSET TABLE

Location	ND - Water		Water		Electricity		Telecommunication	
	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)
ROAD 2	S	2.60	S	2.90	N	0.95*	N	1.75*
ROAD 3	E	2.60	E	2.90	W	0.95*	W	1.75
ROAD 9	W	2.60	W	2.90	E	0.95*	E	1.75

NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS
*ELECTRICAL & COMMS ALIGNMENTS & OFFSETS ARE INDICATIVE ONLY. REFER TO ELECTRICAL & COMMS PLANS FOR DETAILS.



LEGEND - LAYOUT PLAN

	EXISTING ELECTRICITY (OVERHEAD)		
	EXISTING GAS		
	EXISTING OPTIC FIBRE		
	EXISTING TELECOMMUNICATIONS		
	EXISTING WATER		
	EXISTING RECYCLED WATER		
	EXISTING STORMWATER DRAIN		
	EXISTING SEWER		
	EXISTING HOUSE DRAIN		
	EXISTING SWALE DRAIN		
	FINISHED BUILDING LINE LEVEL		
	FINISHED RIDGE LINE LEVEL		
	TOP OF RETAINING WALL		

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Project Details
WSU MILPERRA, LOT 2 IN DP1291984
2 BULLECOURT AVE, MILPERRA
CHILD CARE CENTRE
Drawing Title
LAYOUT & LOT BENCHING PLAN

Sheet 06 of 21

Scale
1:500 @ A1

Project Number	Reference	Drawing No	Revision
2301879	315	010	C

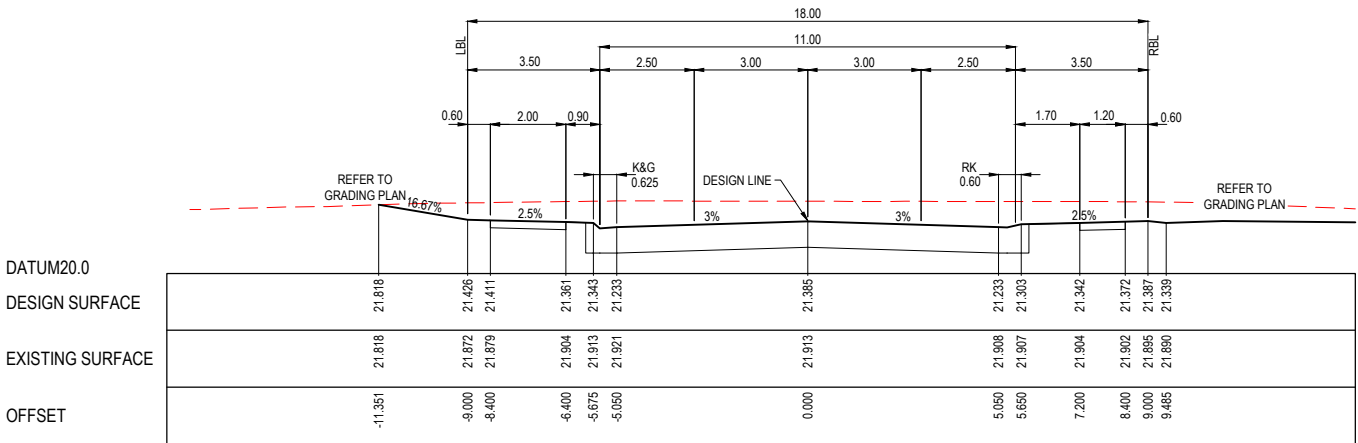


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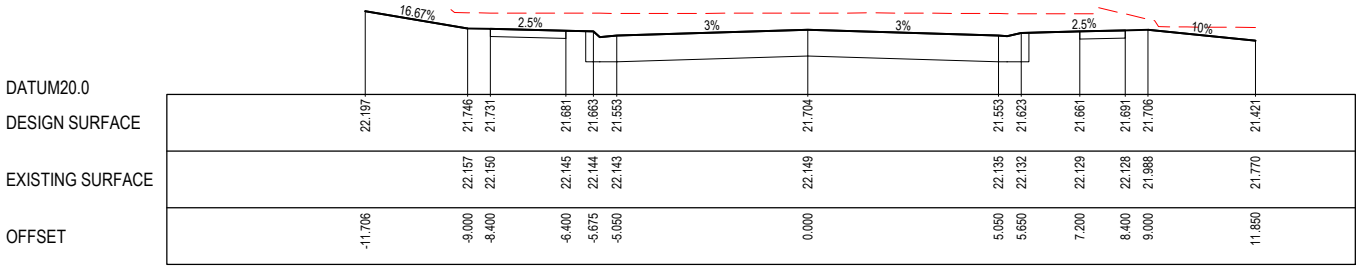
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DESIGN SURFACE

STRUCTURAL FILL

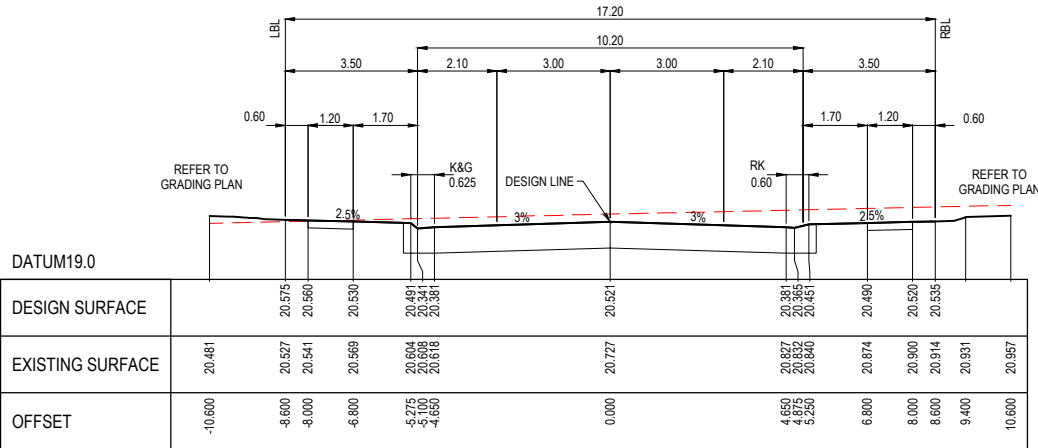


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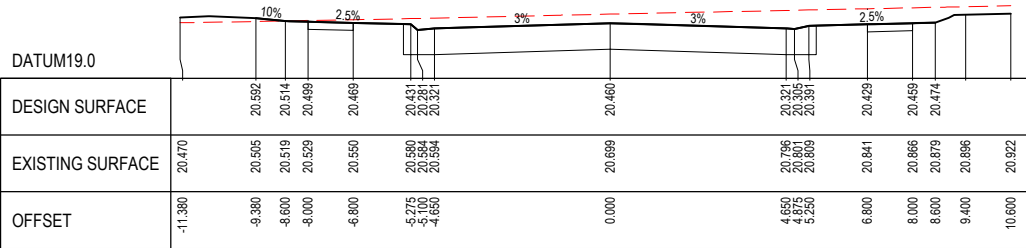


LEGEND

EXISTING SURFACE

DESIGN SURFACE

TP CH 306.549



L.O.W CH 304.143

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Sheet 12 of 21

Scale 1:100 H 1:50 V @ A1

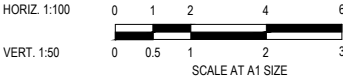
Project Number 2301879

Reference 315

Drawing No 202

Revision C

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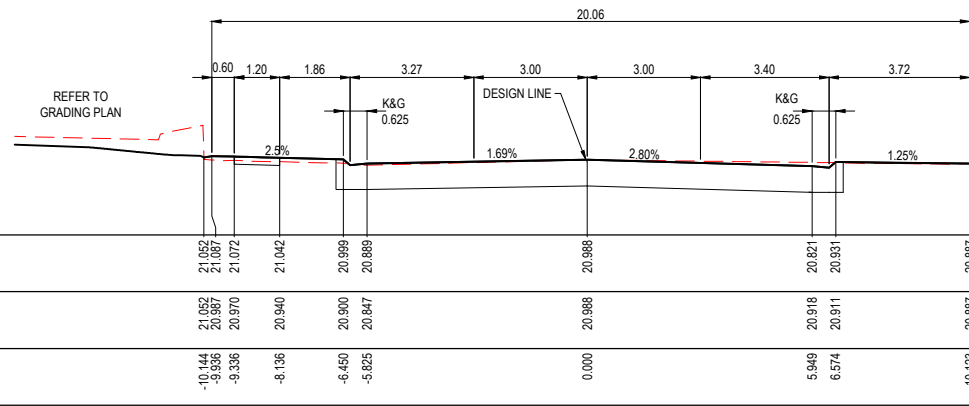
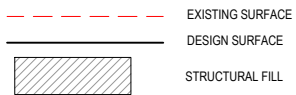
Project Details

WSU MILPERRA, LOT 2 IN DP1291984
2 BULLECOURT AVE, MILPERRA
CHILD CARE CENTRE

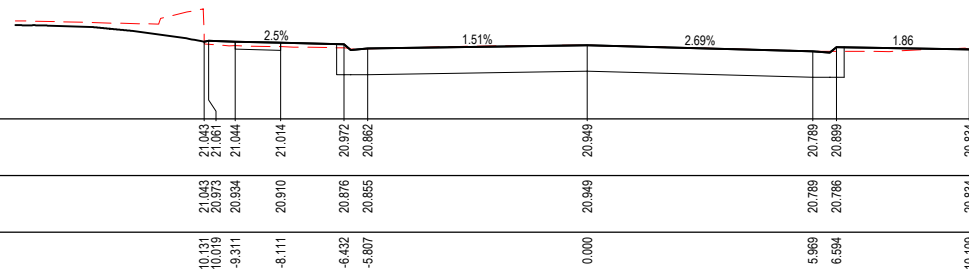
Drawing Title

ROAD 3
CROSS SECTIONS

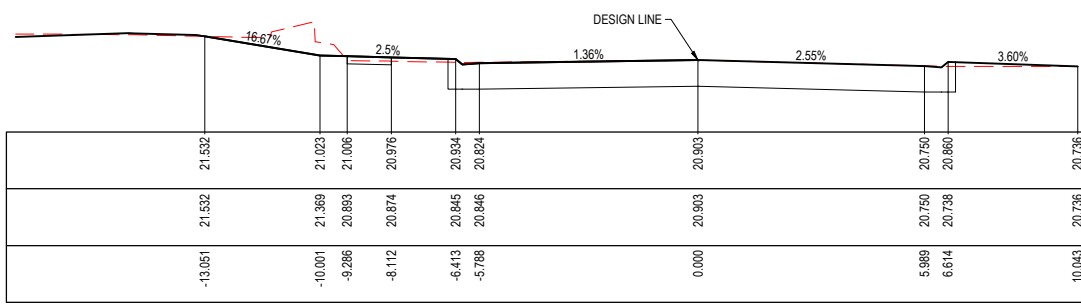
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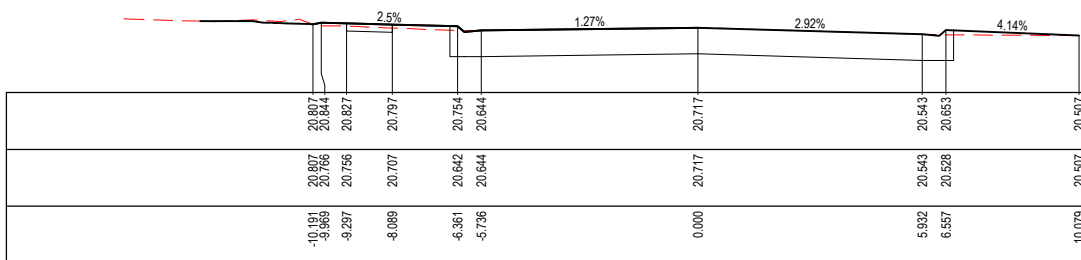
CH 86.549



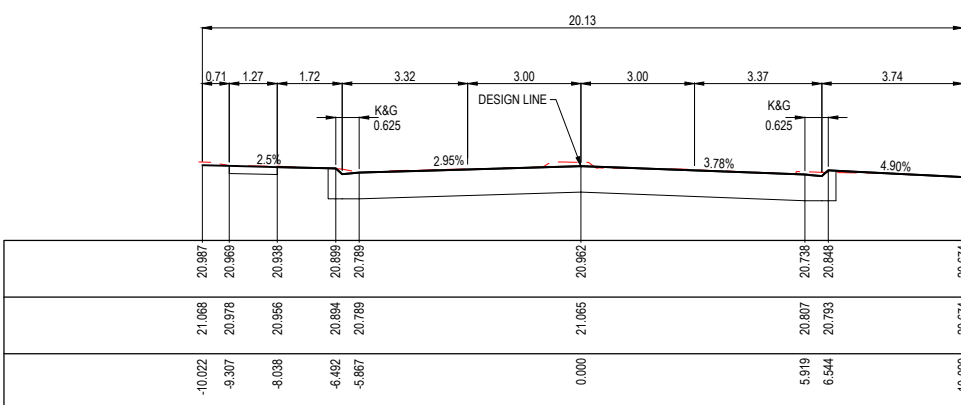
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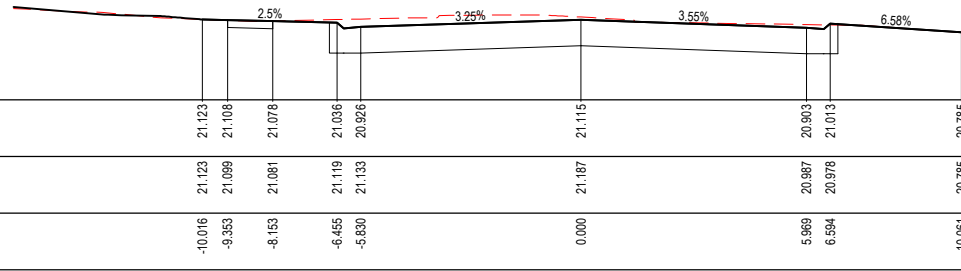
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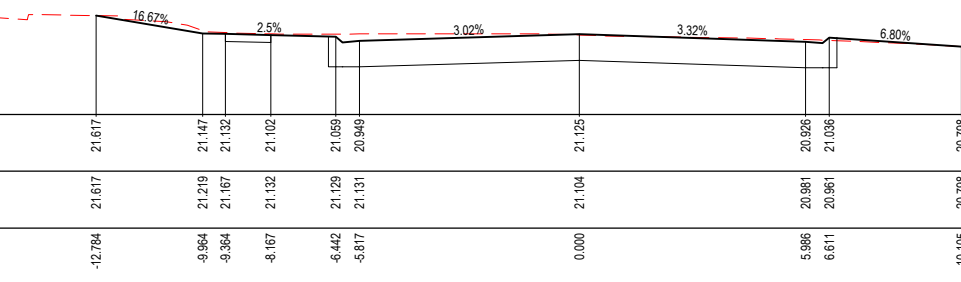
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CH 137.780



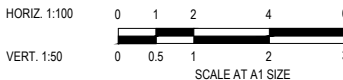
CH 120.000



CH 113.935

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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	HORSLEY ROAD CROSS SECTIONS

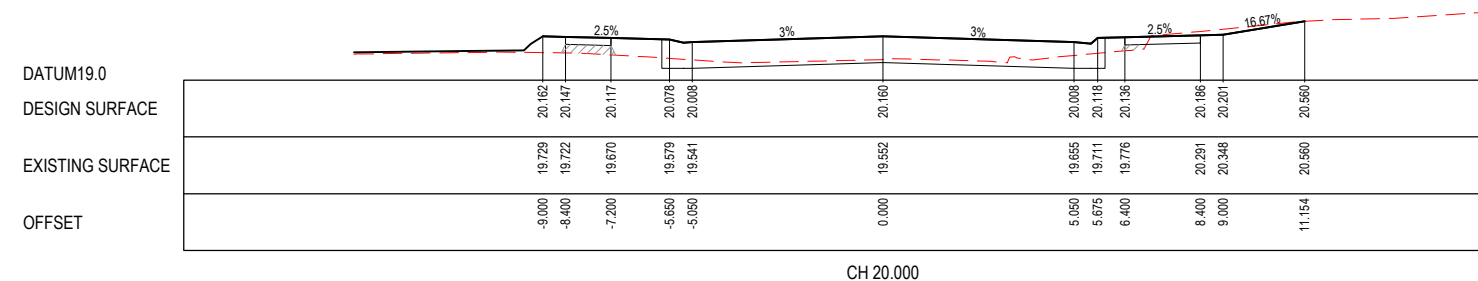
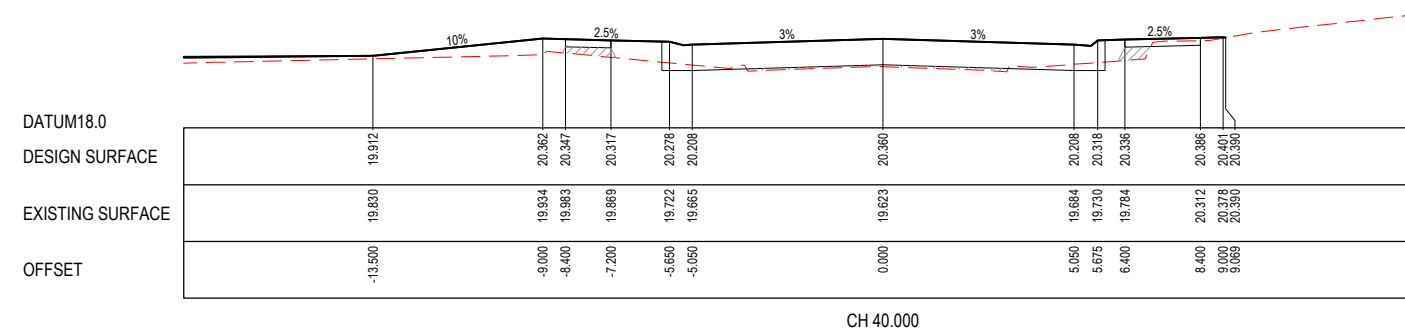
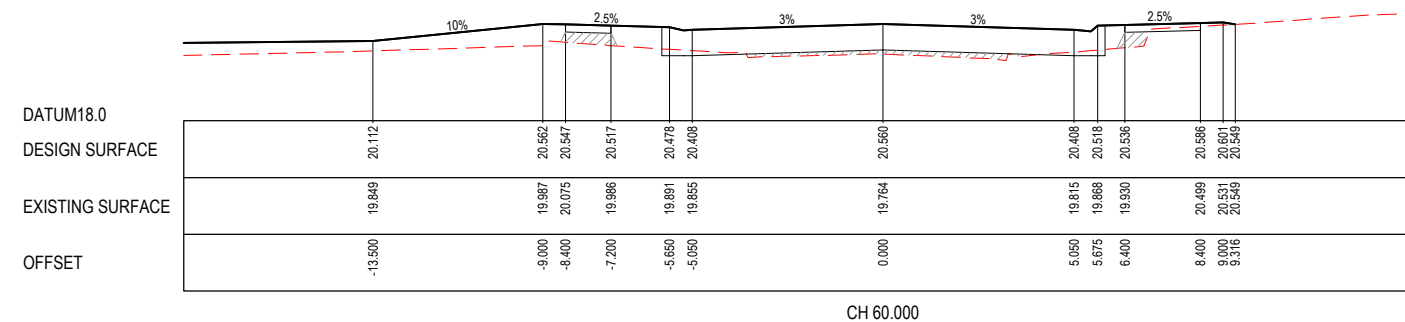
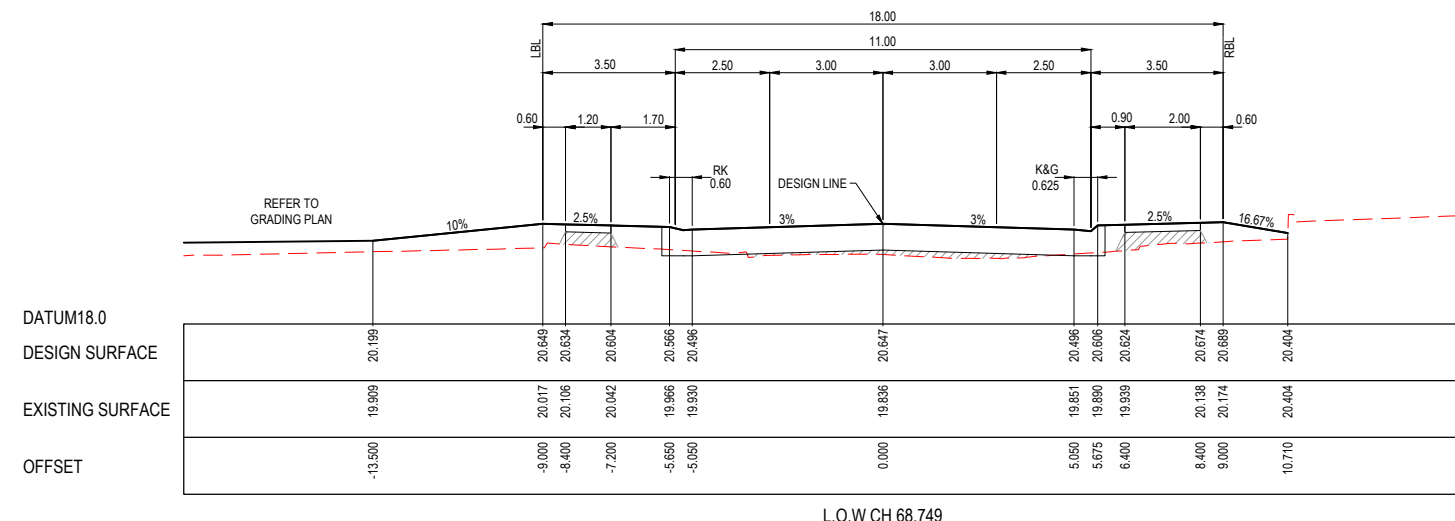
Sheet 13 of 21

Scale
1:100 H 1:50 V @ A1

Project Number	Reference	Drawing No	Revision
2301879	315	203	C

LEGEND

	EXISTING SURFACE
	DESIGN SURFACE
	STRUCTURAL FILL



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HORIZ. 1:100 0 1 2 4

VERT. 1:50 0 0.5 1 2

SCALE AT A1 SIZE

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Date	06.12.2006
Drawn	B.RAINE
Approved	S.GRAY
Date	06.12.2006
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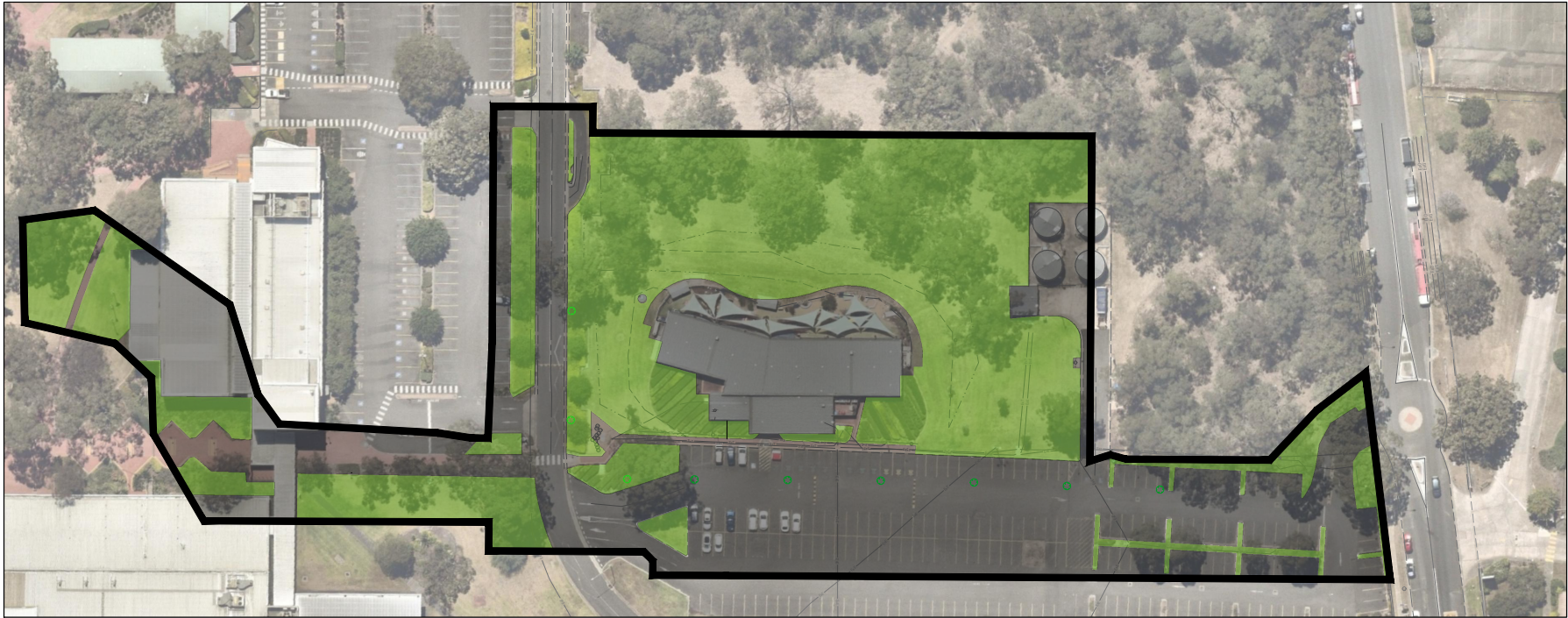
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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	ROAD 9 CROSS SECTIONS



Sheet 14 of 21

Scale
1:100 H 1:50 V @ A1

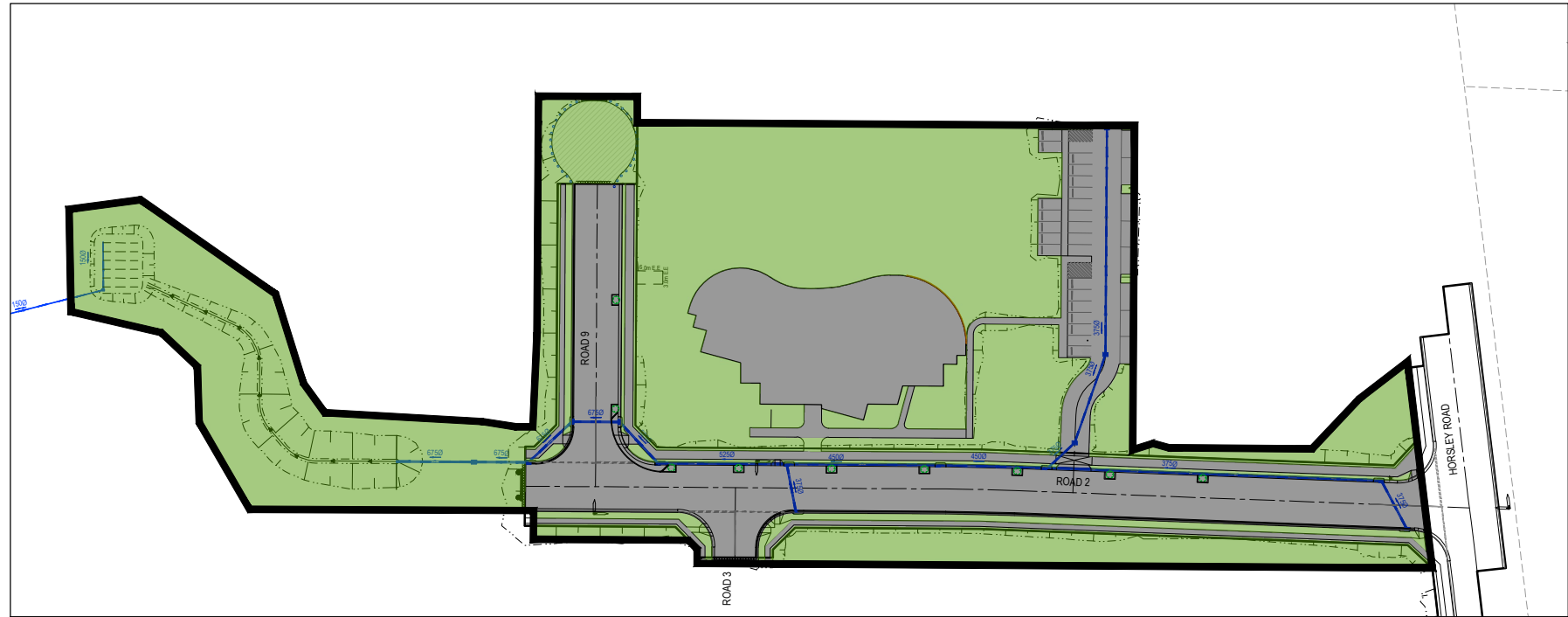
Project Number	Reference	Drawing No	Revision
2301879	315	204	C





SITE UNDER EXISTING CONDITION
RATIO 1:750

-  DENOTES 100% IMPERVIOUS AREA UNDER EXISTING CONDITION. AREA = 9,462m²
-  DENOTES PERVIOUS AREA UNDER EXISTING CONDITION. AREA = 8,904m²

SUMMARY
UNDER EXISTING CONDITIONS THE SITE HAS A GREATER IMPERVIOUS AREA THAN UNDER THE PROPOSED CONDITIONS. A DRAINS MODEL HAS BEEN PREPARED FOR BOTH SCENARIOS WHICH DEMONSTRATES THAT THE PROPOSED DEVELOPMENT PRODUCES LESS STORMWATER RUNOFF THAN UNDER EXISTING CONDITIONS. AS SUCH, AN OSD BASIN IS NOT REQUIRED.



SITE UNDER PROPOSED CONDITIONS
RATIO 1:750

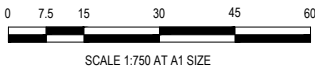
-  DENOTES 100% IMPERVIOUS AREA UNDER PROPOSED CONDITION. AREA = 6,895m²
-  DENOTES PERVIOUS AREA UNDER PROPOSED CONDITION. AREA = 11,471m²

WARNING
Beware of Underground Services
The locations of underground services are approximate only and 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 works
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Project Details
WSU MILPERRA, LOT 2 IN DP1291984
2 BULLECOURT AVE, MILPERRA
CHILD CARE CENTRE
Drawing Title
WATER QUANTITY ASSESSMENT

Sheet 15 of 21

Scale
1:750 @ A1

Project Number	Reference	Drawing No	Revision
2301879	315	300	C



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WARNING

BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only and 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 works

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LEGEND

- 45.5 — DENOTES EXISTING SURFACE CONTOURS
- — DENOTES PROPOSED DRAINAGE PIPE AND PIT
- DENOTES GRAVEL KERB INLET SEDIMENT TRAP
- DENOTES GEOTEXTILE FILTER 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 CHILD CARE DEVELOPMENT LIMITS
- SFS DENOTES SAND OR AGGREGATE FILLED HESSIAN FILTER LAID ACROSS ROAD PAVEMENT TO TRAP LOCALISED SILT MATERIAL
- SF DENOTES SEDIMENT FENCING

NOTE: ALL SOIL AND WATER MANAGEMENT DETAILS ARE NOTED ON SOIL AND WATER MANAGEMENT NOTES. SEDIMENT & MANPROOF FENCES ARE TO BE LOCATED WHOLLY WITHIN BOUNDARIES & HAVE BEEN SHOWN DIAGRAMMATICALLY. PROVIDE CONSTRUCTION SIGN & AMENITIES IN ACCORDANCE WITH CONDITIONS 59 & 60 OF THE DA.

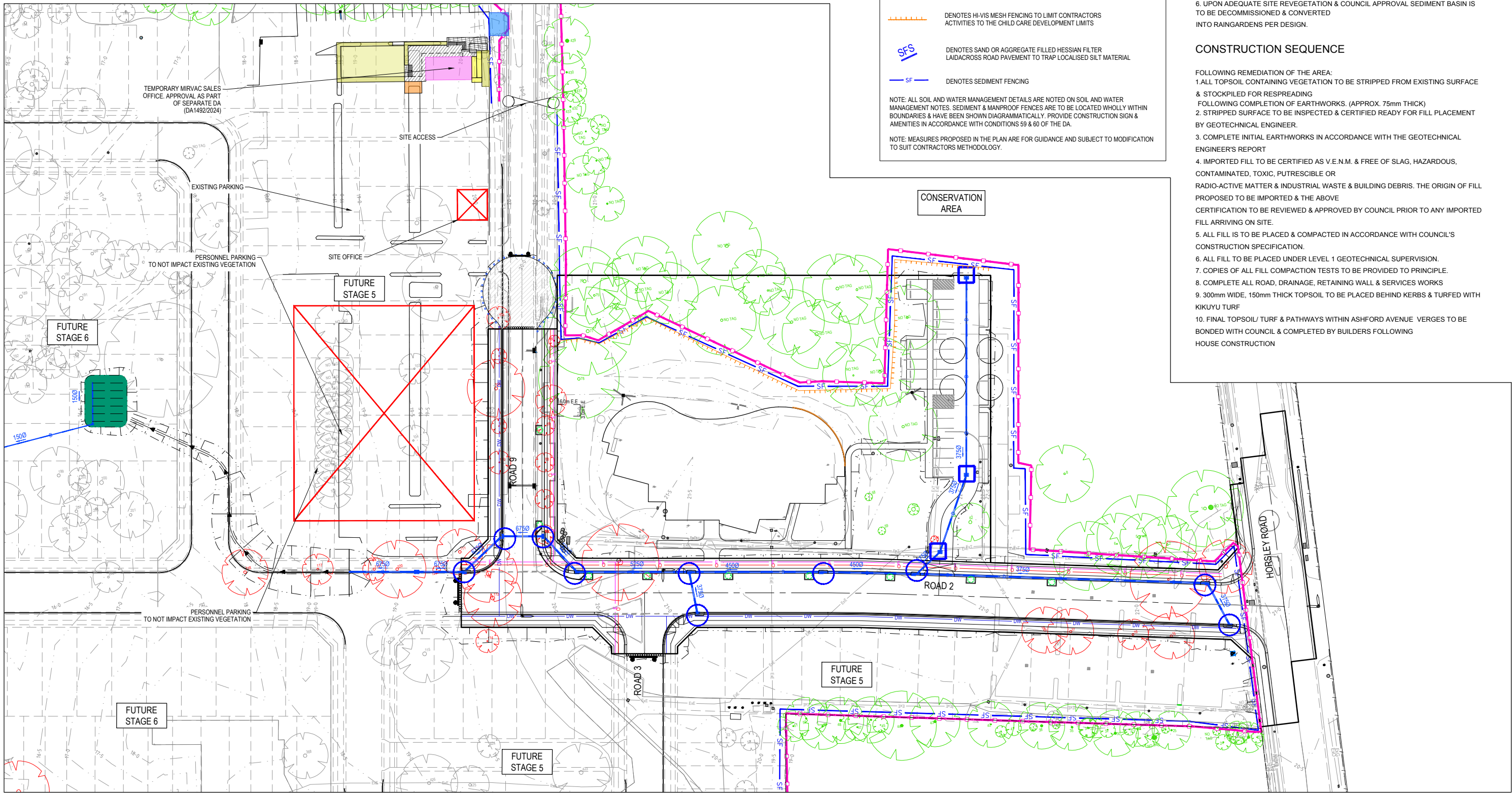
NOTE: MEASURES PROPOSED IN THE PLAN ARE FOR GUIDANCE AND SUBJECT TO MODIFICATION TO SUIT CONTRACTORS METHODOLOGY.

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.
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 cum. 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.

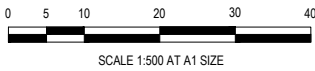
CONSTRUCTION SEQUENCE

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



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Designed S.FERGUSON
Date 06.12.24
Drawn B.RAU
Approved S.GRAY
Date 06.12.24
DA Number

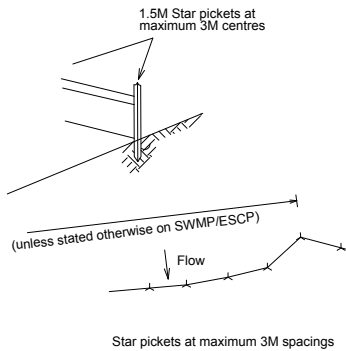
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Project Details
WSU MILPERRA, LOT 2 IN DP1291984
2 BULLECOURT AVE, MILPERRA
CHILD CARE CENTRE
Drawing Title
SOIL AND WATER MANAGEMENT PLAN
OVERALL

Sheet 16 of 21

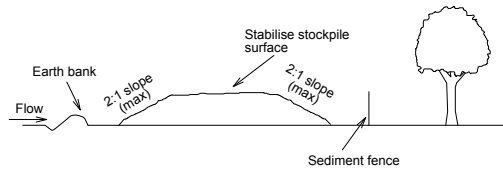
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Project Number	Reference	Drawing No	Revision
2301879	315	400	C



- Construct sediment fence as close as possible to parallel to the contours of the site
- 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
- Join sections of fabric at a support post with a 150mm overlap

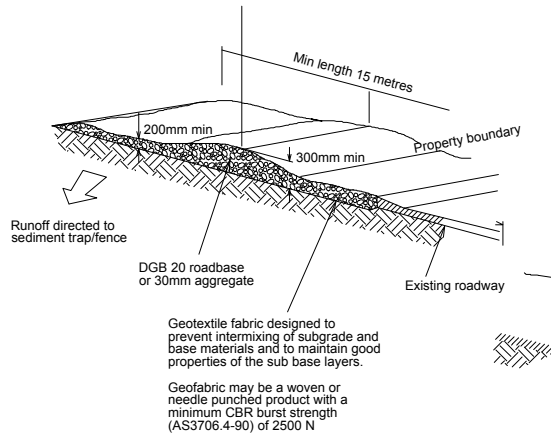
SEDIMENT FENCE



Construction Notes

- Locate stockpile at least 5 metres from existing vegetation, concentrated water flows, roads and hazard areas.
- Construct on the contour as a low, flat elongated mound.
- All stockpiles shall be less than 2 metres in height
- 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.
- Dust to be controlled by watering

STOCKPILES



Construction Notes

- Strip topsoil and level site.
- Compact subgrade
- Cover area with needle punch geotextile.
- Construct 200mm thick pad over geotextile using roadbase or 30mm aggregate. Minimum length 15 metres or to building alignment width 3 metres
- Construct hump immediately within boundary to divert water to a sediment fence or other sediment trap.

STABILISED SITE ACCESS

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 AFFECTED BY WORKS ARE TO BE RE-ESTABLISHED PRIOR TO THE COMPLETION OF EACH DAY'S 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 COUNCIL.

TOPSOIL SHALL BE RESPREAD ON CONSTRUCTION AREAS AND STABILISED AS SOON AS POSSIBLE WITHIN 60 DAYS OF DISTURBANCE. ALL DISTURBED AREAS ARE TO BE LEFT 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, EROSION 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 BACKFILL.

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 AND 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
- DAILY CONDITION OF ALL EROSION 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

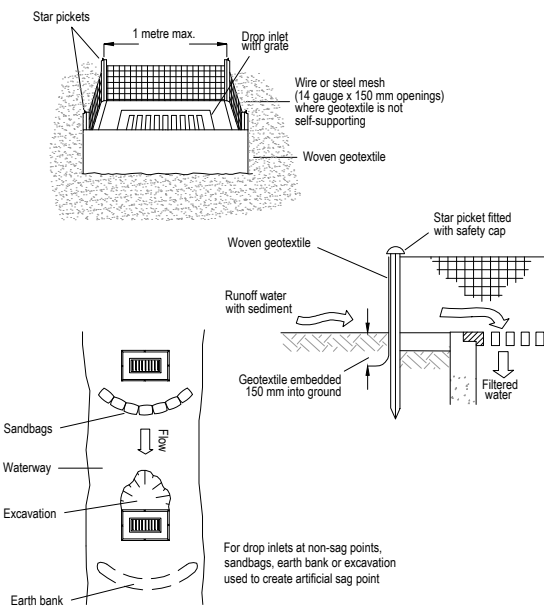
ALL STORMWATER PITS TO BE BLOCKED DURING CONSTRUCTION UNTIL SITE STABILISED.

DURING CONSTRUCTION WORKS ANY WORK AND STORAGE AREAS WHERE SPILLAGE MAY OCCUR MUST BE BUNDED. THE SIZE OF THE AREA TO BE BUNDED AND HEIGHT OF THE BUND WALLS MUST BE CALCULATED AS BEING EQUAL TO 110% OF THE TOTAL VOLUME STORED OR EQUAL TO THE LARGEST STORAGE CONTAINER, WHICHEVER IS GREATER. ALL PIPE WORK EXTENDING FROM THE BUNDED 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

SEDIMENT & EROSION CONTROL

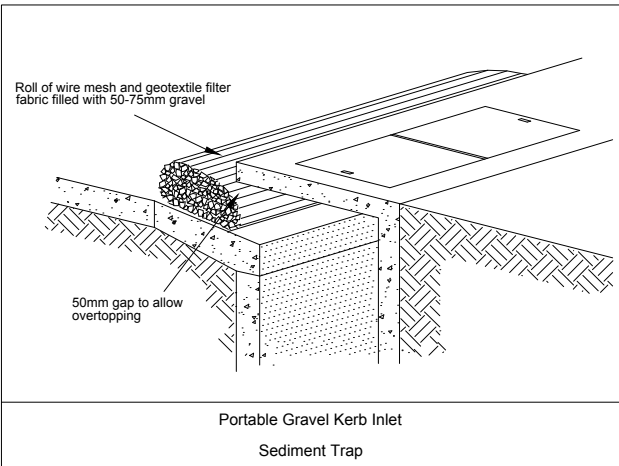
- SE1. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO DISTURBANCE OF THE WORK AREA & TO BE CARRIED OUT IN ACCORDANCE WITH LANDCOM'S "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION" VOLUME 1.
- SE2. THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL SEDIMENT AND EROSION 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 OR COUNCIL.
- SE3. VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION CONFINING ACCESS WHERE POSSIBLE TO PROPOSED OR EXISTING ROAD ALIGNMENTS.
- SE4. WHEN ANY DEVICES ARE TO BE HANDED OVER TO COUNCIL, THEY SHALL BE IN A CLEAN & STABLE CONDITION.
- SE5. THE CONTRACTOR SHALL MAINTAIN ALL REVEGETATED AREAS INCLUDING WATERING UNTIL FINAL COMPLETION OF WORKS.
- SE6. THE CONTRACTOR SHALL MAINTAIN DUST CONTROL UNTIL FINAL COMPLETION OF WORKS.
- SE7. THE CONTRACTOR'S RESPONSIBILITY IS TO ENSURE ALL NECESSARY MEASURES SO AS TO PROTECT ALL DISTURBED AREAS AS PER NOTE SE1. 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 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 AVENUE.
- SE10. PROVIDE TURF AROUND ALL SURFACE INLET PITS IN ADDITION TO THE GEOTEXTILE INLET FILTER.
- SE11. STOCKPILES TO BE STABILISED WITHIN 14 DAYS OF COMPLETING THE STOCKPILE.



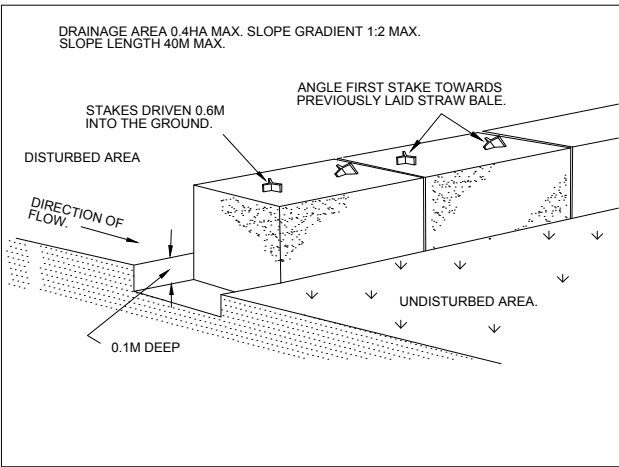
GEOTEXTILE INLET FILTER (SD 6-12)
NTS

Construction Notes

- Fabricate a sediment barrier made from geotextile 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.



Portable Gravel Kerb Inlet
Sediment Trap



WARNING
Beware of Underground Services
The locations of underground services are approximate only and 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 works
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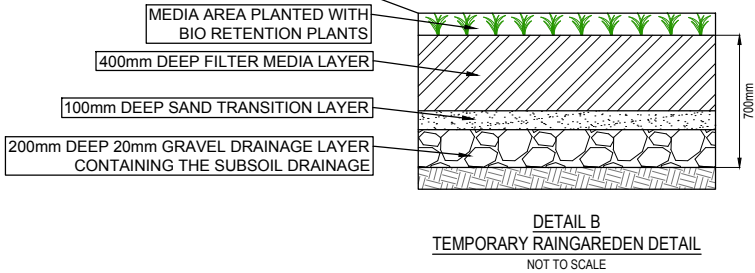
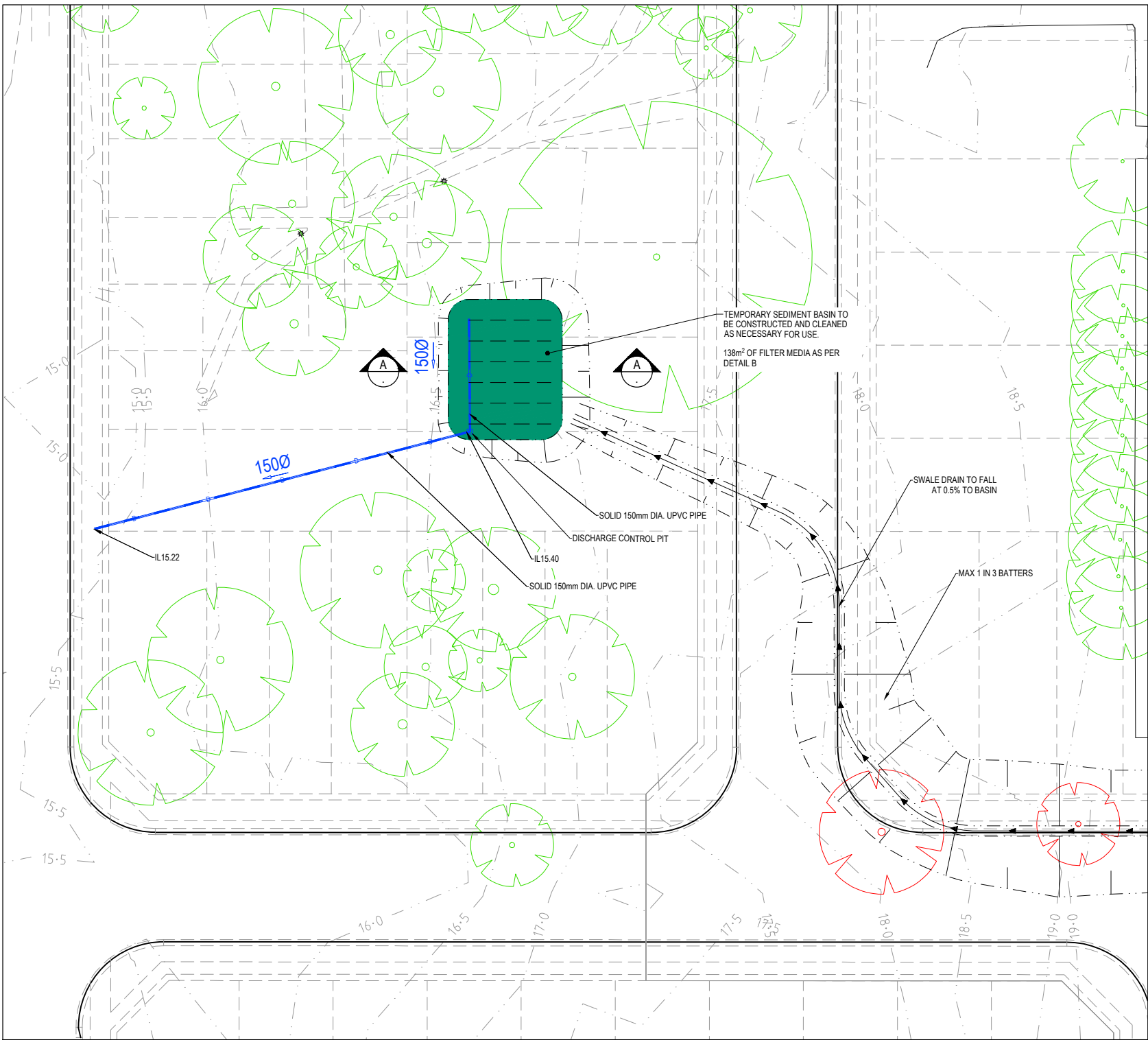
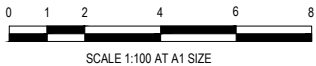
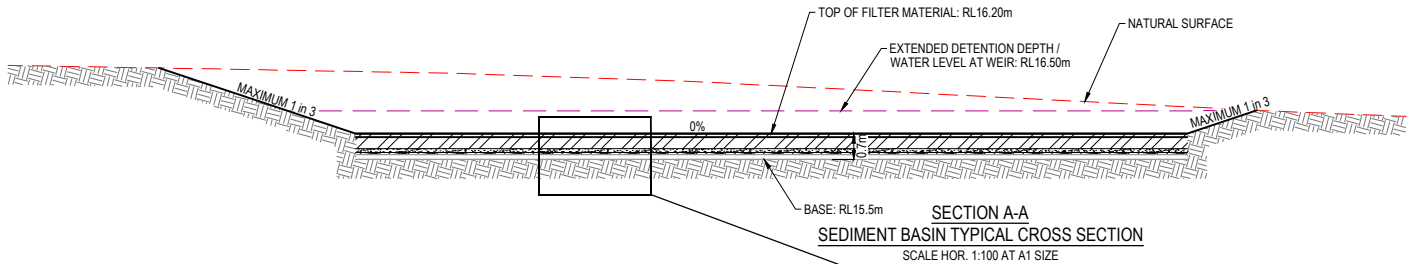


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Approved	S.GRAY
Date	06.12.24
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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	SOIL AND WATER MANAGEMENT PLAN DETAILS AND NOTES

Sheet	17 of 21
Scale	NOT TO SCALE
Project Number	2301879
Reference	315
Drawing No	401
Revision	C



1. Erosion Hazard and Sediment Basins

Site Name: WSU Milperra

Site Location: 2 Bullecourt Ave, Milperra

Precinct/Stage: Commercial Development

Other Details:

Site area	Sub-catchment or Name of Structure	Notes
Total catchment area (ha)	1.715	
Disturbed catchment area (ha)	1.715	

Soil analysis (enter sediment type if known, or laboratory particle size data)					
Sediment Type (C, F or D) if known:	F				From Appendix C (if known)
% sand (fraction 0.02 to 2.00 mm)	33				Enter the percentage of each soil fraction. E.g. enter 10 for 10%
% silt (fraction 0.002 to 0.02 mm)	33				
% clay (fraction finer than 0.002 mm)	33				
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, Table 6.3 on pages 6-24 and 6-25.
Design rainfall depth (percentile)	75				
x-day, y-percentile rainfall event (mm)	19.4				
Rainfall R-factor (if known)	2600				Only need to enter one or the other here
IFD: 2-year, 6-hour storm (if known)	8.3				

RUSLE Factors					
Rainfall erosivity (R-factor)	2600				Auto-filled from above
Soil erodibility (K-factor)	0.038				
Slope length (m)	213				
Slope gradient (%)	2.4				RUSLE LS factor calculated for a high rill/interill ratio.
Length/gradient (LS-factor)	0.76				
Erosion control practice (P-factor)	1.3	1.3	1.3	1.3	1.3
Ground cover (C-factor)	1	1	1	1	1

Sediment Basin Design Criteria (for Type D/F basins only. Leave blank for Type C basins)					
Storage (soil) zone design (no of months)	2	2	2	2	2
Cv (Volumetric runoff coefficient)	0.35				

Calculations and Type D/F Sediment Basin Volumes					
Soil loss (t/ha/y)	98				
Soil Loss Class	1				See Table 4.2, page 4-13
Soil loss (m³/ha/y)	76				Conversion to cubic metres
Sediment basin storage (soil) volume (m³)	22				See Sections 6.3.4(i) for calculations
Sediment basin settling (water) volume (m³)	116				See Sections 6.3.4(i) for calculations
Sediment basin total volume (m³)	138				

NB for sizing of Type C (coarse) sediment basins, see Worksheet 3 (if required).

WARNING
BWARE OF UNDERGROUND SERVICES

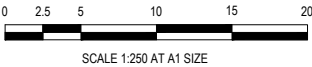
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Locate all underground services before commencement of works

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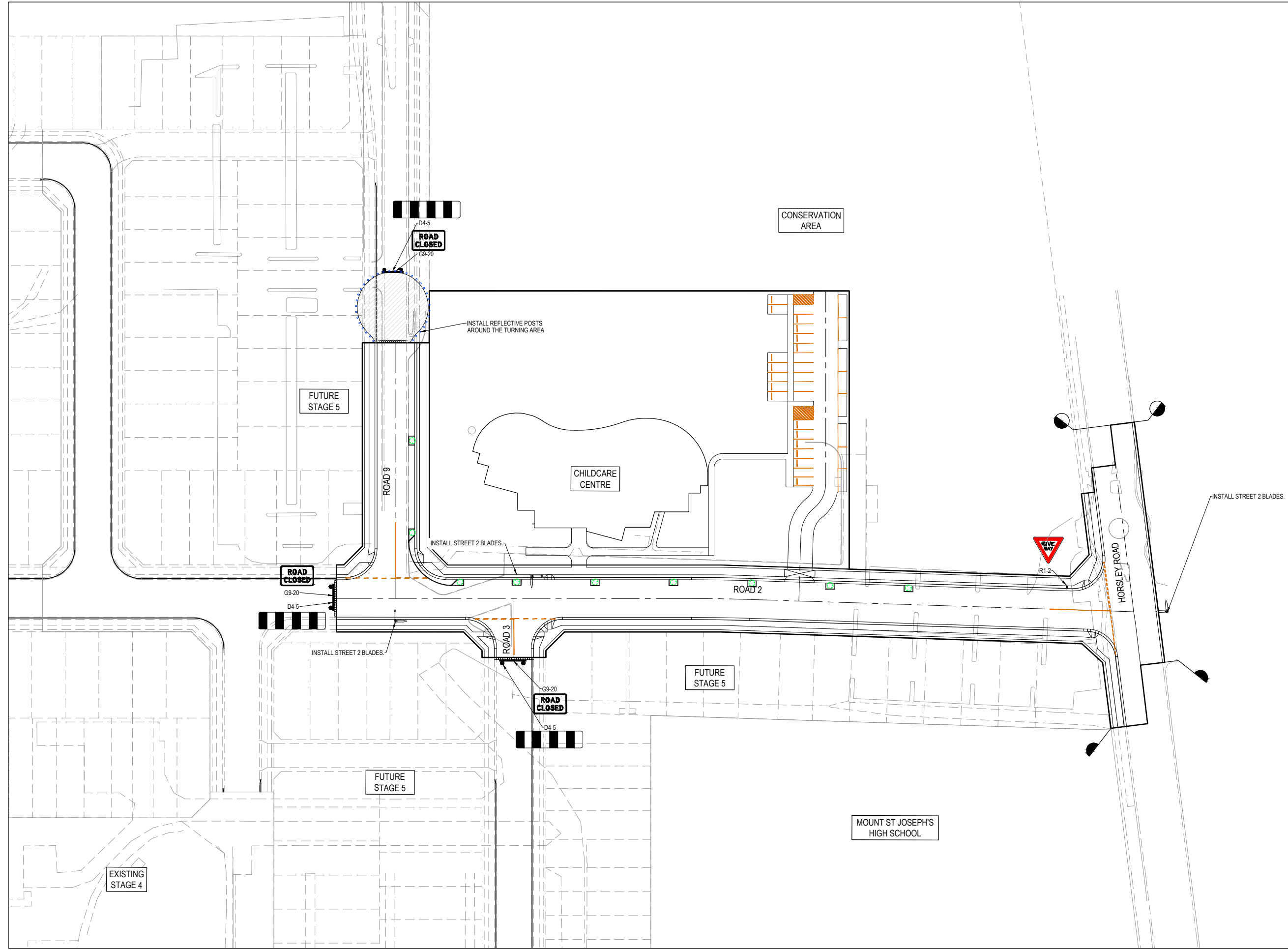
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Drawing Title	DETENTION BASIN LAYOUT PLAN

Sheet 18 of 21

Scale
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Project Number	Reference	Drawing No	Revision
2301879	315	950	C

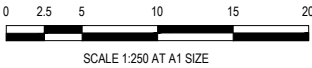


LEGEND - LAYOUT PLAN

- CARPARK WHEEL STOP
- PAVEMENT LINE MARKING

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
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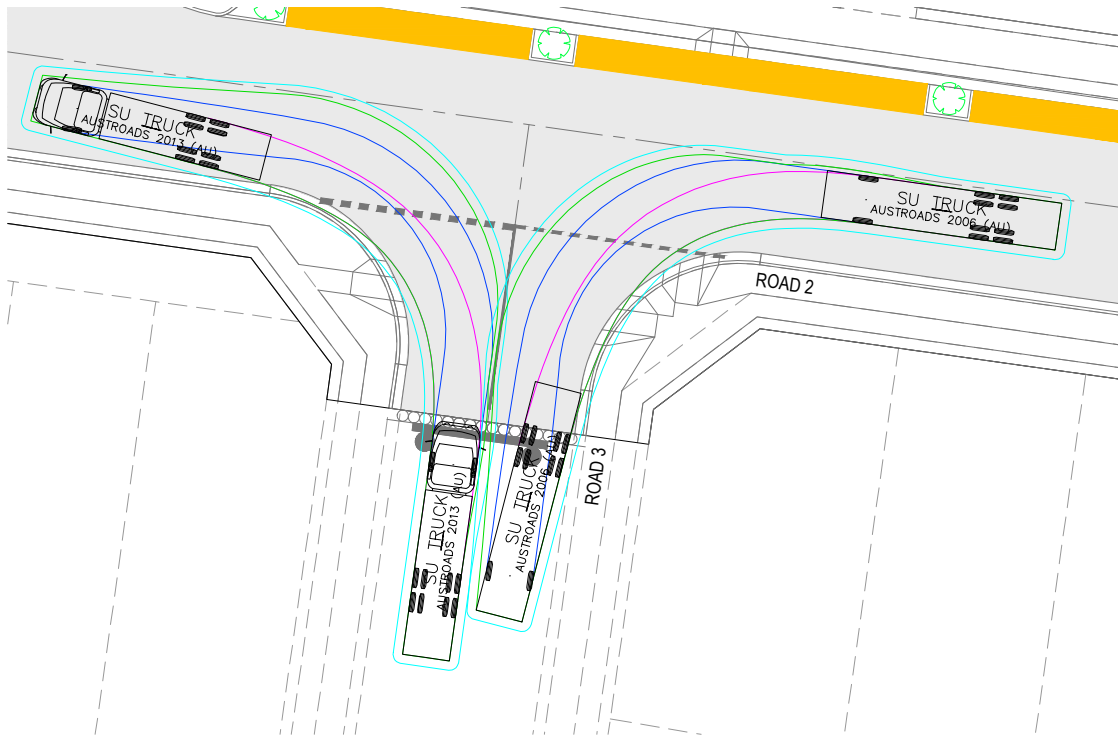
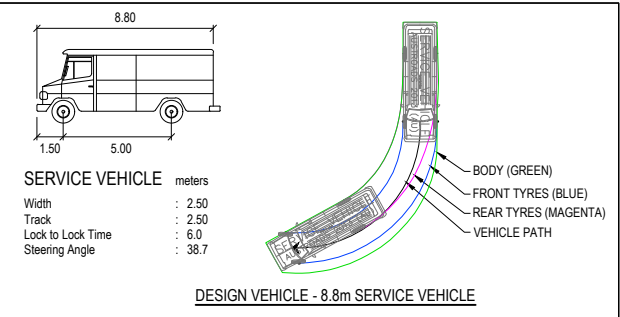
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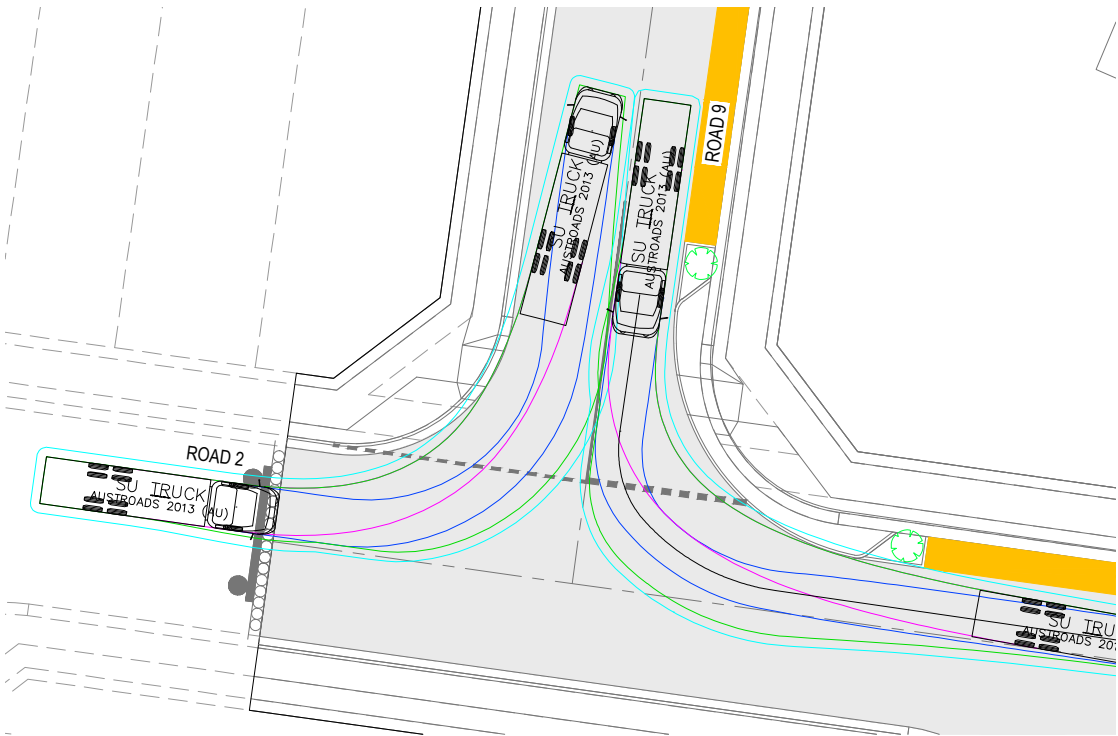
Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	SIGNAGE AND LINE MARKING PLAN

Sheet 19 of 21			
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Project Number	Reference	Drawing No	Revision
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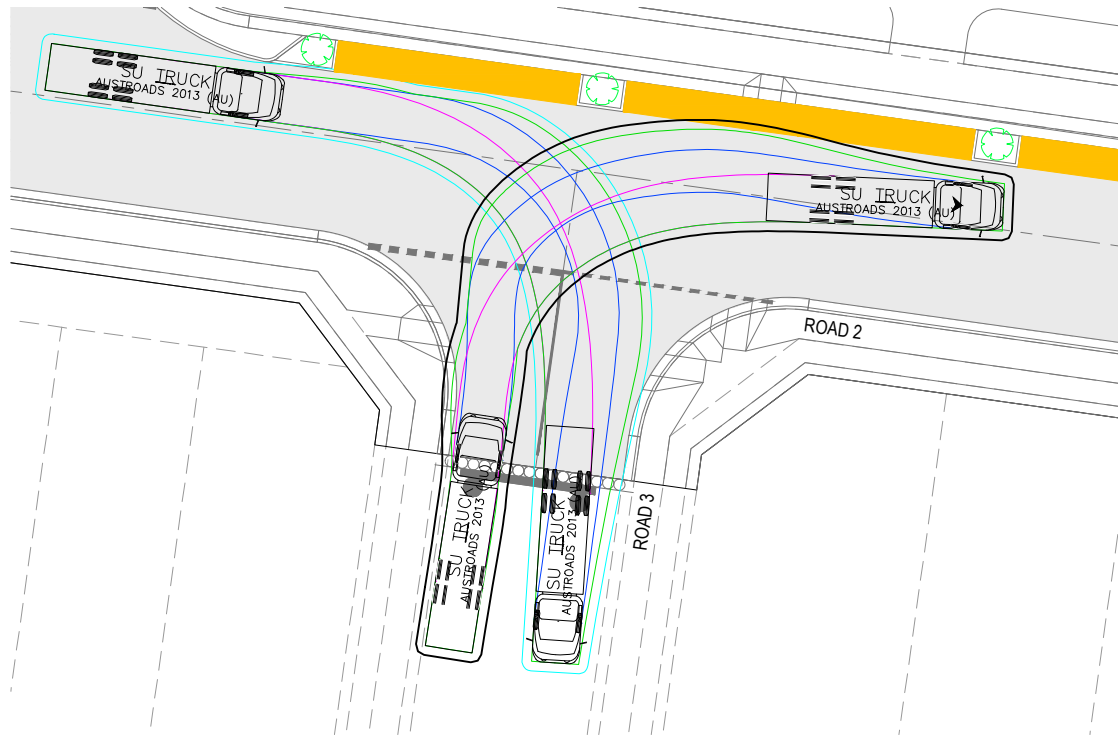




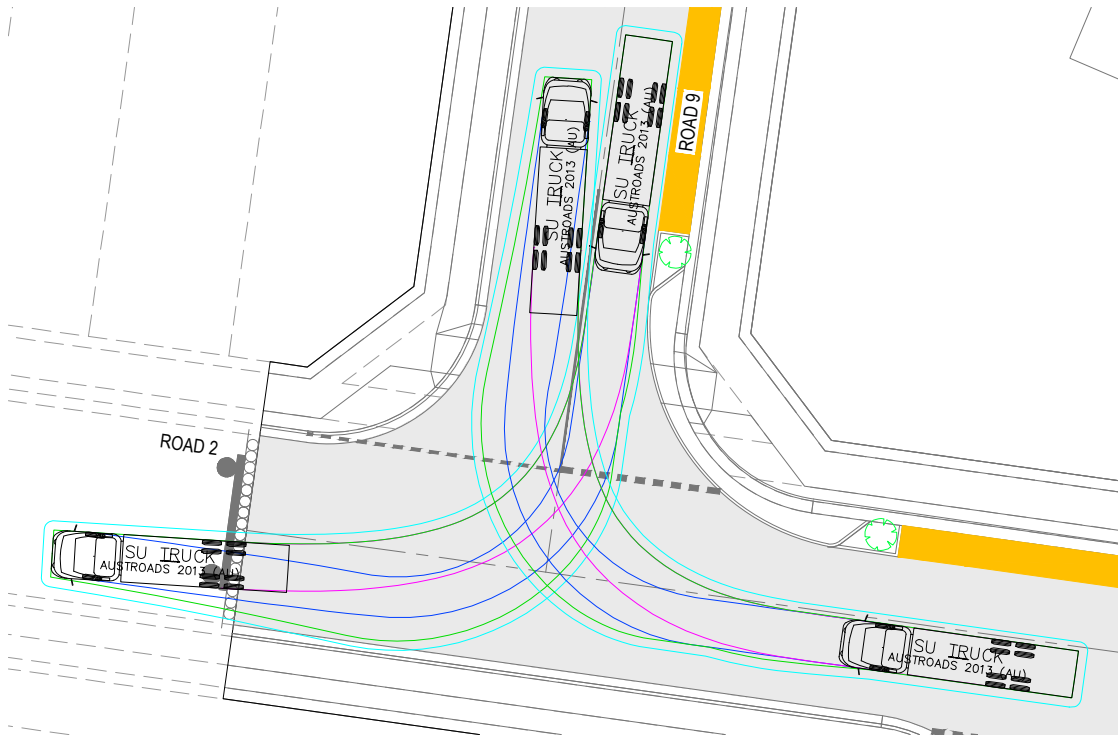
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TRUCK - LEFT IN/LEFT OUT



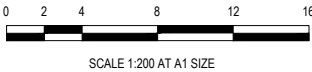
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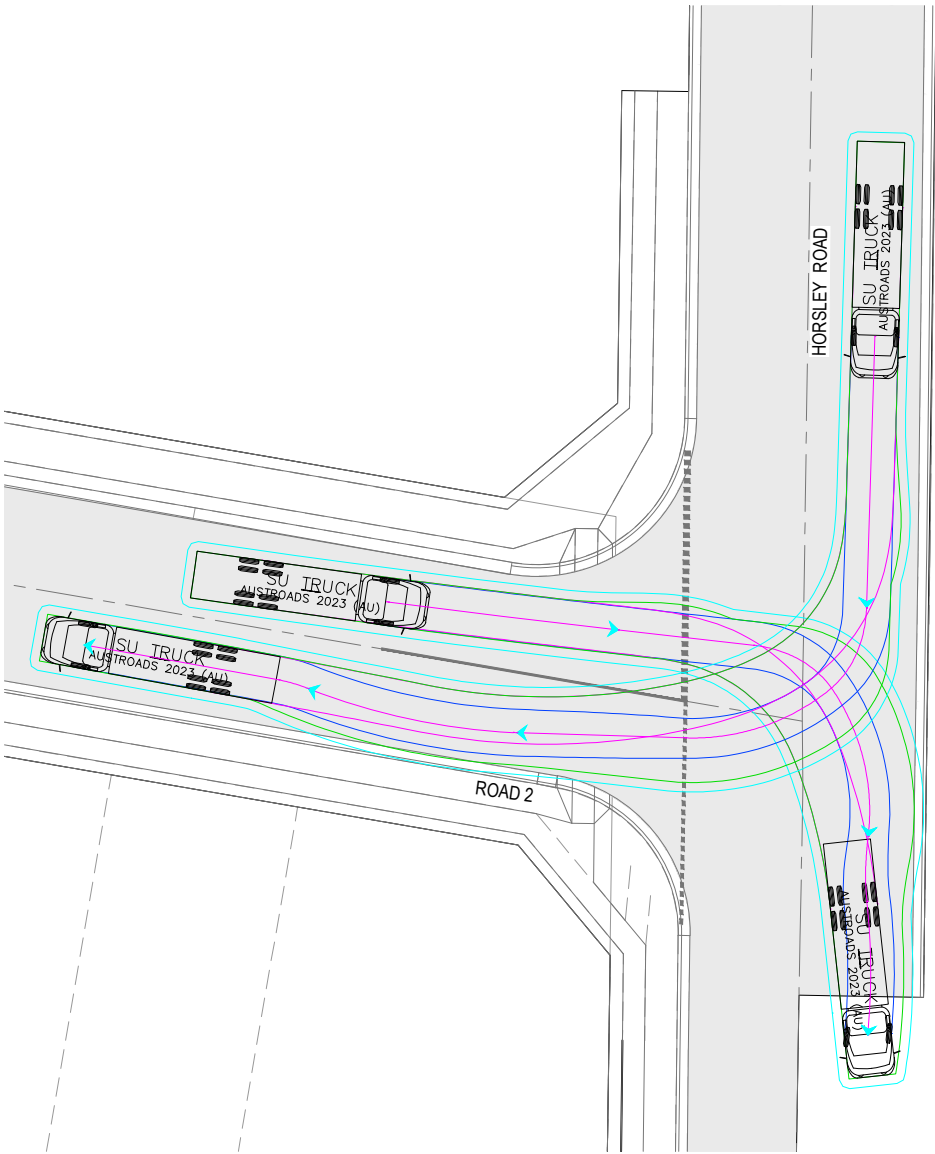
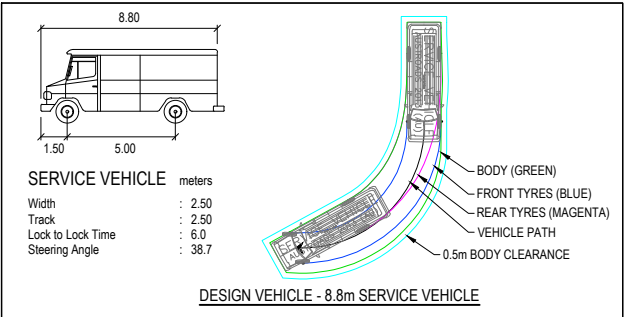
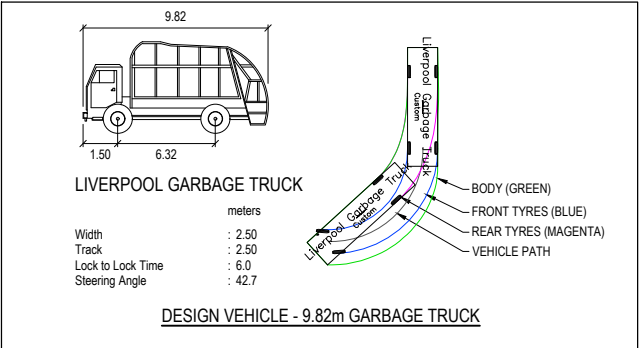
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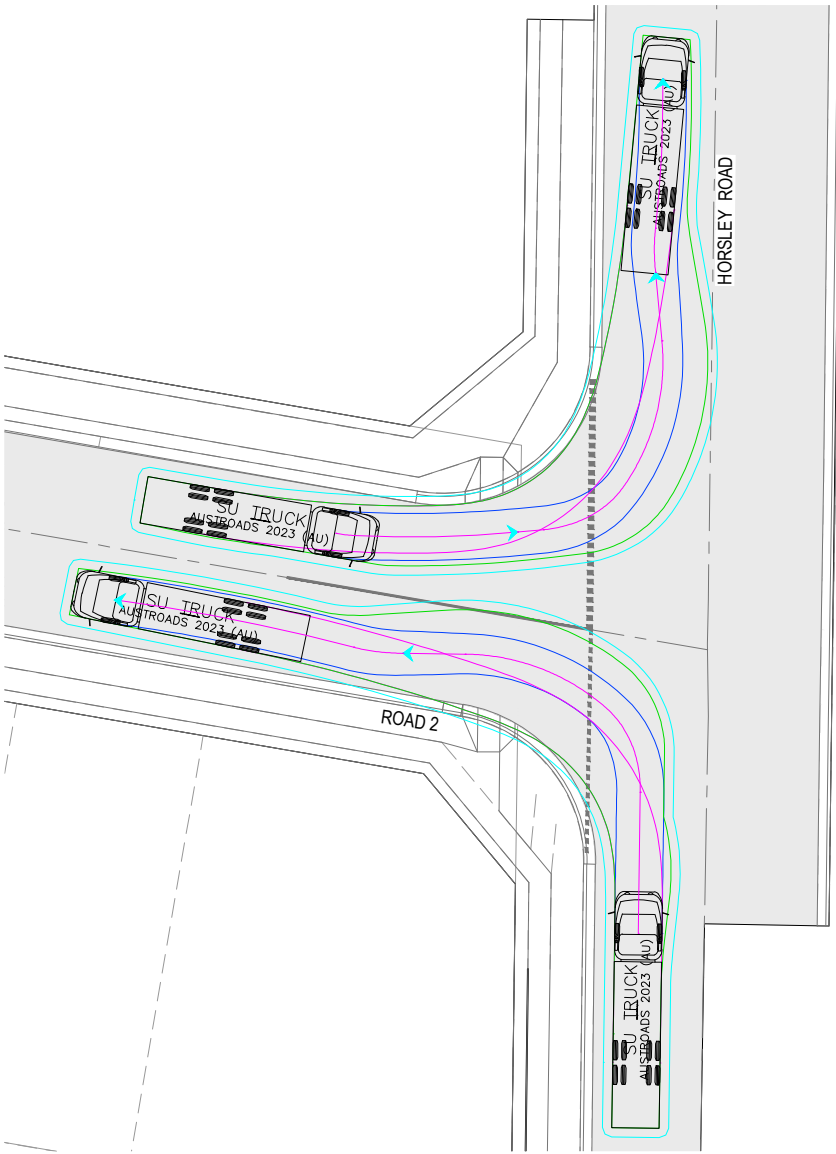
Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	TURNING MOVEMENTS (SHEET 1 OF 2)

Sheet	20 of 21
Scale	1:200 @ A1
Project Number	2301879
Reference	315
Drawing No	960
Revision	C

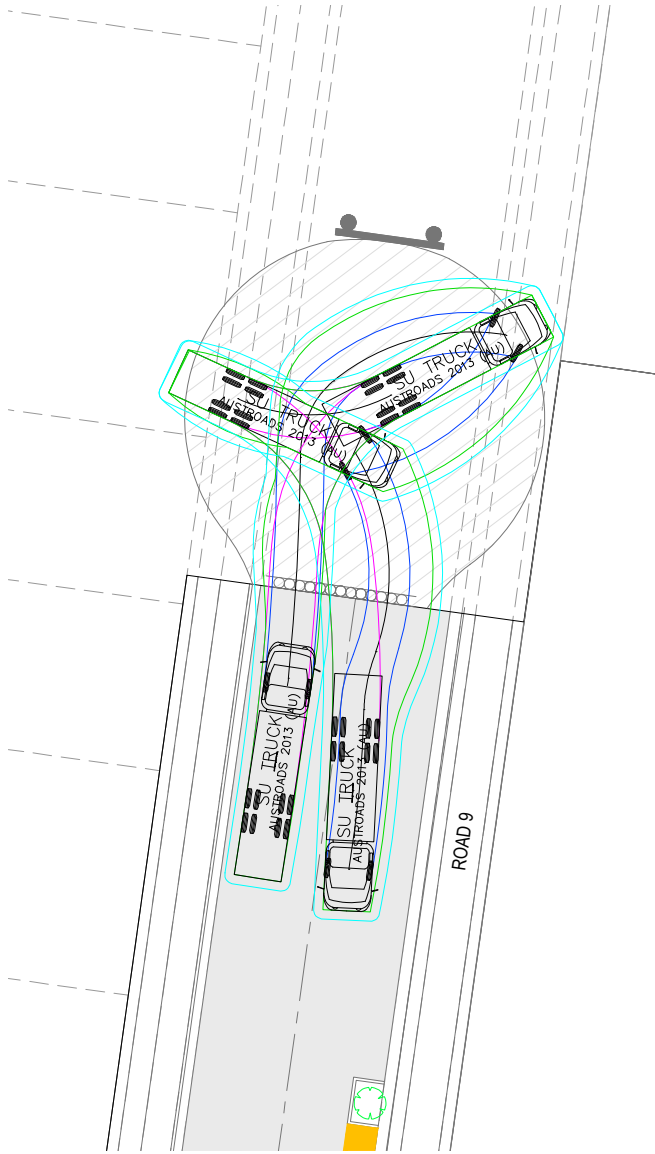




TRUCK - RIGHT IN/RIGHT OUT



TRUCK - LEFT IN/LEFT OUT



TRUCK - TEMPORARY TURNING HEAD

ISSUED FOR D.A

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REV	DESCRIPTION	DATE	DRN.	APP.	REV	DESCRIPTION	DATE	DRN.	APP.
C	ISSUED FOR DA	19.12.24	B.R.	S.F.					
B	ISSUED FOR INFORMATION	13.12.24	B.R.	S.F.					
A	ISSUED FOR INFORMATION	06.12.24	B.R.	S.F.					



Designed	S.FERGUSON
Date	06.12.24
Drawn	B.RAU
Approved	S.GRAY
Date	06.12.24
DA Number	-


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Project Details	WSU MILPERRA, LOT 2 IN DP1291984 2 BULLECOURT AVE, MILPERRA CHILD CARE CENTRE
Drawing Title	TURNING MOVEMENTS (SHEET 2 OF 2)

Sheet 21 of 21			
Scale	1:200 @ A1		
Project Number	Reference	Drawing No	Revision
2301879	315	961	C

