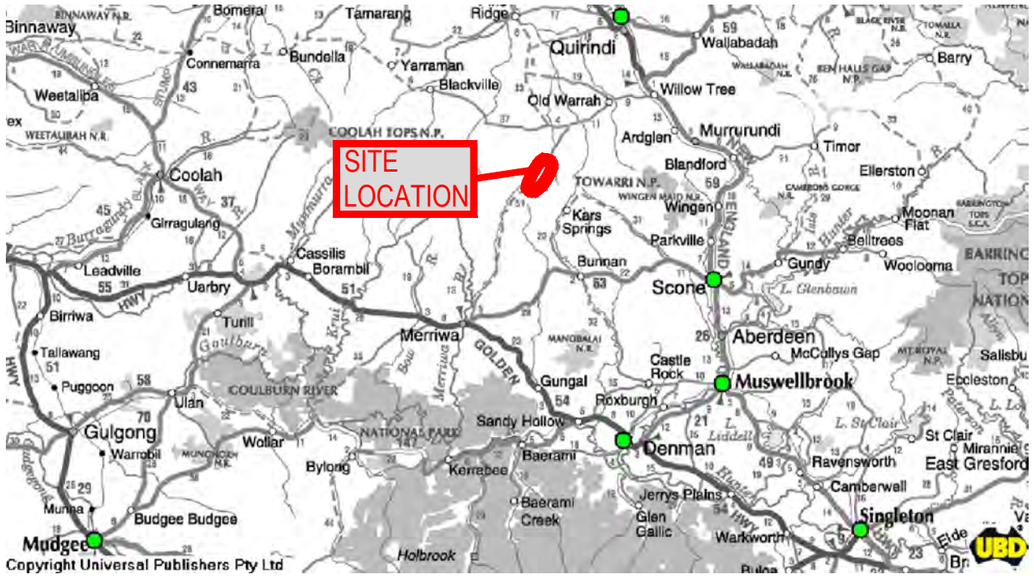
UPPER HUNTER SHIRE COUNCIL
MR358 - COULSONS CREEK ROAD
REHABILITATION DESIGN
12542101



LOCALITY PLAN

DRAWING LIST

FILE No.	DRG No.	DRAWING TITLE	No. SHEETS
12542101-C0001	C0001	COVER SHEET - LOCALITY PLAN AND DRAWING INDEX	1 SHEET
12542101-C0020	C0021	OVERVIEW PLAN	1 SHEET
12542101-C0040	C0041	GENERAL NOTES AND LEGEND	1 SHEET
12542101-C3110	C3111 TO C3118	TYPICAL SECTIONS	8 SHEETS
12542101-C3150	C3151 TO C3159	ALIGNMENT PLAN AND PROFILE - MC20	9 SHEETS
12542101-C3160	C3161	ALIGNMENT PLAN AND PROFILE - MC50 MR50L MR50R	1 SHEET
12542101-C3200	C3201 TO C3209	DETAIL PLAN	9 SHEETS
12542101-C3250	C3251 TO C3259	SETOUT PLAN	9 SHEETS
12542101-C3270	C3271 TO C3273	ROAD SETOUT SCHEDULES	3 SHEETS
12542101-C3280	C3281 TO C3287	CATCH DRAIN SETOUT SCHEDULES	7 SHEETS
12542101-C3290	C3291 TO C3297	WALL SETOUT SCHEDULES	7 SHEETS
12542101-C3300	C3301 TO C3309	STORMWATER MANAGEMENT PLAN	9 SHEETS
12542101-C3320	C3321	STORMWATER CATCHMENT PLAN	1 SHEETS
12542101-C3330	C3321 TO C3322	CROSS AND PAVEMENT DRAINAGE SCHEDULE	2 SHEETS
12542101-C3340	C3341 TO C3347	CROSS AND PAVEMENT DRAINAGE PROFILES	7 SHEETS
12542101-C3360	C3361 TO C3367	CATCH DRAIN PROFILES	7 SHEETS
12542101-C3400	C3401 TO C3409	PAVEMENT AND GEOTECHNICAL TREATMENT PLANS	9 SHEETS
12542101-C3450	C3451	PAVEMENT TYPE, EDGE AND INTERFACE DETAILS	1 SHEET
12542101-C3450	C3452	CONCRETE CAUSEWAY DETAILS	1 SHEET
12542101-C3500	C3501 TO C3505	GEOTECHNICAL AND STRUCTURAL DETAILS	5 SHEETS
12542101-C3550	C3551 TO C3563	WALL PROFILES	13 SHEETS
12542101-C3800	C3801 TO C3854	CROSS SECTIONS - MC20	54 SHEETS

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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: COVERSHEET
LOCALITY PLAN AND DRAWING INDEX

Original Size: A3
Drawing No: 12542101-C0001
Rev: 0

Plot Date: 27 May 2022 - 2:41 PM
Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C0001.dwg



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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: OVERVIEW PLAN

Original Size: A3
Drawing No: 12542101-C0021
Rev: 0

Plot Date: 27 May 2022 - 12:38 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C0020.dwg

GENERAL

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT CONTRACT,SCOPE OF WORKS AND RELEVANT TECHNICAL SPECIFICATIONS AS REFERENCED IN GHD TECHNICAL SPECIFICATION DOCUMENT, SPECIFICATIONS, CURRENT REVISIONS OF THE RELEVANT TfNSW AND AUSTRALIAN STANDARDS UNLESS NOTED OTHERWISE.
2. PROVISION OF TRAFFIC CONTROL DURING CONSTRUCTION TO BE IN ACCORDANCE WITH THE AS AS1742.3.
3. ALL LOCATIONS, ORIENTATIONS AND LEVELS TO BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK. REFER DISCREPANCIES TO THE PRINCIPAL. DO NOT OBTAIN DIMENSIONS FROM SCALING. NATURAL SURFACE LEVELS ON THE DRAWINGS ARE INDICATIVE ONLY.

TYPICAL SECTIONS

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

ALIGNMENT SETOUT CONTROL PLANS AND TABLES

1. SURVEY HEIGHT DATUM IS AHD.
2. SURVEY COORDINATE GRID IS GDA94 ZONE 56. SURVEY PROVIDED BY UHSC AND FYFE.
3. SURVEY MARKS ARE NOT TO BE DISTURBED BEFORE ASSESSMENT BY SURVEYOR.
4. THE CONTRACTOR SHALL CHECK SUSTAINABILITY OF THE STATED COORDINATES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
5. ANY SURVEY PMs OR SSMs THAT ARE DESTROYED ARE TO BE REPLACED WITH ANOTHER PM OR SSM TO NSW SPATIAL SERVICES AND SHALL BE DOCUMENTED AND CO-ORDINATED TO EQUIVALENT NSW SPATIAL SERVICES STANDARDS.
6. REFER TfNSW SPECIFICATION G71 FOR SURVEY REQUIREMENTS FOR SPATIAL TOLERANCES AND QUALITY ASSURANCE REQUIREMENTS
7. REFER TfNSW STANDARD DRAWINGS R0400-01 AND R0400-02 FOR SETTING OUT DIAGRAMS FOR ROADS

TYPICAL DETAILS

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

UTILITIES

1. LOCATION AND LEVEL OF ALL SERVICES CROSSING AND NEW DRAINAGE MUST BE OBTAINED PRIOR TO CONSTRUCTION. ALL LEVELS MUST BE CHECKED FOR CONFLICT WITH ANY SERVICES, AND ANY CONFLICTS TO BE RAISED WITH THE PRINCIPAL.

DRAINAGE

1. ALL STORMWATER PIPES TO BE SN8 (min) HDPE CORRUGATED DUAL SKIN PIPES OR SIMILAR.
2. HDPE PIPE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
3. ALL BACKFILL AND HAUNCH MATERIAL TO BE CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO AS 3725 APPENDIX A OR SIMILAR STABILISED MATERIAL AS APPROVED BY UHSC.
4. HDPE PIPES ARE TO CONFORM TO TfNSW SPECIFICATION R23.
5. PIPE CLASSES HAVE BEEN DETERMINED BASED ON TYPE HS2 SUPPORT AND TRENCH OR EMBANKMENT INSTALLATION CONDITION IN ACCORDANCE WITH AS3725 UNLESS NOTED OTHERWISE. GENERALLY MINIMUM COVER TO ALL PIPES TO BE 600mm BELOW THE FINISHED SURFACE.
6. THE DOCUMENTED DRAINAGE DESIGNS ARE DETAILED ONLY FOR THE PERMANENT ROAD CONFIGURATION UNLESS NOTED OTHERWISE. CONSTRUCTION REQUIREMENTS TO BE THE CONTRACTOR'S RESPONSIBILITY.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF AN EROSION AND SEDIMENT MANAGEMENT PLAN DURING CONSTRUCTION.
8. ANY PERMITS FOR DIVERSION WORKS REQUIRED DURING CONSTRUCTION TO BE OBTAINED BY THE CONTRACTOR.
9. EXISTING STORM WATER PIPES AND MANHOLES WITHIN THE LIMITS OF WORK TO BE REMOVED OR MODIFIED AS SPECIFIED.
10. CONNECTION BETWEEN PIPES AND STRUCTURES TO BE UNDERTAKEN IN ACCORDANCE WITH TfNSW SPECIFICATION R11 AND DRAWINGS UNLESS NOTED OTHERWISE.
11. IN ROCK FILL EMBANKMENTS AND/OR NOMINATED STEEP SLOPE INSTALLATIONS, ENCLOSE ZONE OF COMPACTED FILL AROUND PIPES WITH GEOTEXTILE IN ACCORDANCE WITH TfNSW SPECIFICATION.

PAVEMENT

1. PAVEMENTS SHALL BE CONSTRUCTED ACCORDING TO TfNSW SPECIFICATION R44, WITH ANNEXURE REQUIREMENTS DEFINED IN THE PROJECT'S GHD TECHNICAL SPECIFICATION.
2. SUBSURFACE DRAINS SHALL OUTLET BY UNSLOTTED OUTLET PIPE TO TABLE DRAINS WITH SCOUR PROTECTION IN ACCORDANCE TO TfNSW SPECIFICATION R33.

CATCH DRAINS, BERM DRAINS AND CHANNELS

1. ALL CHANNELS TO BE IN ACCORDANCE WITH TfNSW ROAD WORKS SPECIFICATION R11. CHANNELS NOT LINED WITH ROCK OR CONCRETE ARE TO BE VEGETATED. CHANNELS ARE TO BE PREPARED, STABILISED AND VEGETATED IN ACCORDANCE WITH GHD TECHNICAL SPECIFICATION.
2. DRAINAGE AND DIVERSION BANK CHANNEL LOCATIONS ARE TO BE PROVIDED UNDER THE DIRECTION OF THE SUPERINTENDENT. CATCH DRAINS ABOVE CUT BATTERS MAY BE SET BACK FROM THE TOP OF THE BATTER PROVIDED THE MAXIMUM DISTANCE FROM THE TOP OF THE BATTER TO THE EDGE OF THE DRAIN IS LESS THAN 2.5m.

DRAINAGE STRUCTURES

1. EQUIVALENT PRECAST HEADWALLS / PITS MAY BE USED. PRECAST HEADWALL TO BE PLACED IN ACCORDANCE WITH R11.
2. INADEQUATE FOUNDING MATERIAL FOR PIPES AND STRUCTURES TO BE REMOVED OR IMPROVED FOLLOWING CONSULTATION WITH THE PRINCIPAL.
3. GHD AND TfNSW STANDARD DETAILS TO BE ADOPTED.

ROADSIDE FURNITURE AND DELINIATION

1. PAVEMENT MARKING AND SIGNAGE TO BE IN ACCORDANCE WITH TfNSW SPECIFICATIONS, GUIDELINES AND STANDARDS.
2. SIGNAGE TO BE LOCATED IN ACCORDANCE WITH AS1742.
3. MOUNTED HEIGHT FOR SIGNS TO BE 2.5m MIN.
4. THE CONTRACTOR IS TO ENSURE THAT SIGN FOOTINGS DO NOT CLASH WITH UNDERGROUND UTILITIES. SHOULD SIGN LOCATIONS NEED TO BE MOVED, APPROVAL IS REQUIRED FROM THE PRINCIPAL.
5. ALL SIGN SUPPORT STRUCTURES ARE TO BE GRADE C320LO IN ACCORDANCE WITH TfNSW SPECIFICATION R143 UNLESS NOTED OTHERWISE.
6. RAISED REFLECTIVE PAVEMENT MARKERS AND GUIDE POSTS / REFLECTORS TO BE INSTALLED IN ACCORDANCE WITH THE SPACINGS SPECIFIED IN THE TfNSW DELINEATION GUIDELINES.
7. RAISED REFLECTIVE PAVEMENT MARKERS FOR ONLY BB LINE MARKING. EDGE REFLECTORS TO BE LOCATED ON BARRIERS AND GUIDE POSTS ONLY.
8. REUSE OF ANY EXISTING SIGN FACES AND SUPPORT STRUCTURES REQUIRE APPROVAL FROM THE PRINCIPAL.
9. CONTRACTOR TO ENSURE SAFETY BARRIER FOOTINGS DO NOT CLASH WITH UNDERGROUND UTILITIES AND EXISTING CULVERTS.

REVEGETATION

1. TOPSOIL SHALL INCLUDE A MINIMUM OF THE FIRST 100mm OF THE SOIL SURFACE.
2. TOPSOIL IS TO BE STRIPPED FROM ALL AREAS THAT ARE TO BE CUT OR FILLED AND STOCKPILED AWAY FROM DRAINAGE FLOWPATHS.
3. TOPSOIL STOCKPILES ARE TO BE TRACK ROLLED AND WHERE STOCKPILED FOR PERIODS GREATER THAN 6 WEEKS FURTHER STABILISED (e.g. SEEDED WITH AN APPROPRIATE VEGETATIVE COVERCROP OR MULCHED).
4. THE CONTRACTOR SHALL CARRY OUT TESTS ON THE STOCKPILES TOPSOIL USING A NATA ACCREDITED TESTING LABORATORY TO ASCERTAIN ITS SUITABILITY FOR REUSE IN REVEGETATION AND TO PREVENT EROSION. THE SOIL TEST CERTIFICATE MUST CONTAIN THE DATE OF TESTING AND DETAILS OF THE TYPES OF TEST UNDERTAKEN AND THEIR RESULTS, INCLUDING CATION BALANCE (EXCHANGEABLE CATION PERCENTAGE AND CATION RATIOS), PH VALUES, SALT CONTENT, PARTICLE ANALYSIS, AND ANY RECOMMENDATIONS ON THE USE OF THE TOPSOIL INCLUDING AMELIORATION RATES.
5. IF THE SOIL TEST CERTIFICATE INDICATES ANY STOCKPILED TOPSOIL TO BE UNSUITABLE FOR USE IN REVEGETATION WORKS, THE PRINCIPAL MAY DIRECT THE CONTRACTOR TO CARRY OUT THE MEASURES RECOMMENDED IN THE SOIL TEST CERTIFICATE TO IMPROVE THE STOCKPILED TOPSOIL.
6. TOPSOIL IS TO BE RE-SPREAD OVER ALL EXPOSED SOIL SURFACES WHERE VEGETATION IS REQUIRED.
7. WHERE CUT BATTERS ARE TO BE SEEDED, SLOPES EXCEEDING 1 : 2.5 (H : V) SHALL BE ROUGHENED HORIZONTALLY TO ENHANCE THE RETENTION OF TOPSOIL.
8. SEEDBED PREPARATION SHALL BE PROVIDED WHERE TOPSOIL HAS BEEN OVERLY COMPACTED.
9. ALL EFFORTS SHALL BE MADE TO ESTABLISH VEGETATION ON ALL EXPOSED SOIL SURFACES IMMEDIATELY AFTER EARTHWORKS ARE COMPLETED. THE MINIMUM REQUIREMENT SHALL BE ESTABLISHMENT OF A COVERCROP SPECIES WITH THE INCLUSION OF PERMANENT VEGETATION SPECIES AS APPROPRIATE.
10. STOCKPILE SITES, BORROW PITS ETC. SHALL BE REVEGETATED IMMEDIATELY UPON DECOMMISSION.

FOUNDATION PREPARATION - GABION WALLS

1. ALL UNCONTROLLED FILL, OVER SATURATED SOIL, LANDSLIDE DEBRIS, ORGANIC MATERIAL INCLUDING TREE STUMPS, AND OTHERWISE DELETERIOUS MATERIAL WITHIN THE FOUNDATION AND FOOTPRINT OF BACK FILL TO BE REMOVED.
2. FOUNDATION SHALL BE EXCAVATED TO HIGHLY WEATHERED, LOW STRENGTH BASALT, CONFIRMED AND APPROVED BY A SUITABLY EXPERIENCED AND QUALIFIED GEOTECHNICAL ENGINEER (SEQGE).
3. UNSUITABLE OR WATER SOFTENED FOUNDATION SHALL BE REMOVED AND REPLACED WITH NO FINES CONCRETE, BLINDING CONCRETE OR APPROVED STABILISED GRANULAR FILL EQUIVALENT UNDER THE DIRECTION OF A SEQGE. WHERE SEEPAGE IS OBSERVED OR WHERE NOTED ON THE DRAWINGS, INSTALL SUBSOIL DRAINAGE ON THE EXCAVATED SURFACE PRIOR TO PLACEMENT OF BACKFILL.

FOUNDATION PREPARATION - RENO MATTRESSES AND CULVERTS

1. ALL UNCONTROLLED FILL, OVER SATURATED SOIL, LANDSLIDE DEBRIS, ORGANIC MATERIAL INCLUDING TREE STUMPS, AND OTHERWISE DELETERIOUS MATERIAL WITHIN THE FOUNDATION AND FOOTPRINT OF RENO MATTRESS / CULVERT TRENCH BACKFILL AND HEADWALLS TO BE REMOVED.
2. FOUNDATION SHALL BE EXCAVATED TO STABLE FILL OR STABLE NATURAL SOIL.
3. UNSUITABLE, WATER SOFTENED FOUNDATION SHALL BE REMOVED AND REPLACED WITH GENERAL FILL PLACED AND COMPACTED TO TfNSW QA SPECIFICATION R44.

CONSTRUCTION OF EARTHWORKS OVER EXISTING FILL

1. SIGNIFICANT SECTIONS OF EXISTING FILL ARE CONSIDERED TO BE UNCONTROLLED FILL AND INCLUDE AREAS OF INSTABILITY, TENSION CRACKING, ZONES OF POORLY OR UNCOMPACTED MATERIAL, UNSUITABLE MATERIALS, TREES AND OVERSIZE PARTICLES (BOULDERS). PRIOR TO THE PLACEMENT OF NEW FILL ON OR AGAINST EXISTING FILL THE STRIPPED SURFACE SHALL BE INSPECTED BY A SEQGE TO ENSURE THE EXISTING MATERIAL IS SUITABLE FOR THE PLACEMENT AND COMPACTION OF NEW EARTHWORKS.

LEGEND

PLANS

- GUARD RAIL
- FENCE
- EXISTING CULVERT
- EXISTING MAJOR CONTOUR AS PROVIDED WITH POST CONSTRUCTION SURVEY (2.5m)
- EXISTING MINOR CONTOUR AS PROVIDED WITH POST CONSTRUCTION SURVEY (0.5m)
- DESIGN MAJOR CONTOUR (1m)
- DESIGN MINOR CONTOUR (0.2m)
- DESIGN CULVERT
- DESIGN GABION WALL

CROSS SECTIONS

- DESIGN SURFACE
- DESIGN CATCH DRAIN SURFACE
- 2021 COMBINED SURVEY AS PROVIDED BY UHSC AND FYFE (POST CONSTRUCTION)

TEMPORARY EXCAVATIONS

1. TEMPORARY BATTERS OR BENCHING SHALL NOT EXCEED 2H:1V IN SOIL AND 1H:1V IN ROCK UNLESS APPROVED AND INSPECTED BY A SEQGE.
2. TEMPORARY SUPPORT OF EXCAVATIONS, MANAGEMENT OF SEEPAGE AND GROUNDWATER MAY BE PERIODICALLY REQUIRED TO MAINTAIN A STABLE AND SAFE WORK AREA FOR CONSTRUCTION. DESIGN AND INSTALLATION OF TEMPORARY WORKS SHALL BE APPROVED AND UNDERTAKEN UNDER THE DIRECTION OF A SEQGE.

MANAGING EARTHWORKS AND SLOPE HAZARDS

1. THE SITE CONTAINS AREAS OF EXISTING AND POTENTIAL LANDFORM INSTABILITY BOTH UPSLOPE AND DOWNSLOPE OF THE ROAD. INSPECTION AND MONITORING MEASURES INCLUDING RAINFALL, SLOPE MOVEMENT, TRIGGER LIMITS AND RISK MANAGEMENT FOR WORK AREAS WITHIN AND NEAR EXISTING AND POTENTIAL SLOPE / GEOTECHNICAL HAZARD WILL NEED TO BE DEVELOPED AND INCORPORATED INTO SAFE WORK METHOD DOCUMENTATION.
2. PLANNING OF WORKS WITH REGARD TO EXPECTED WET OR HOT/DRY WEATHER CONDITIONS IS ESSENTIAL. INCORPORATION OF TEMPORARY MEASURES TO PROTECT EXPOSED WORK AREAS AND PREVENT FURTHER DAMAGE TO THE SITE, ESPECIALLY WITH RESPECT TO RAINFALL EVENTS WILL BE REQUIRED.

GABION AND RENO MATTRESS CONSTRUCTION

1. GABION AND RENO MATTRESS MATERIALS, SUPPLY, STORAGE AND INSTALLATION SHALL BE AS PER TfNSW SPECIFICATION R55 AND THE MANUFACTURERS REQUIREMENT.
2. BASKET WIRE SHALL INCLUDE A 0.5mm HEAVY DUTY GREY PVC COATING IN ADDITION TO THE GALMAC COATING.

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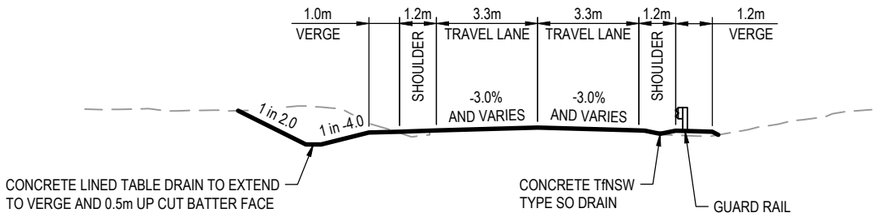
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Project: COULSONS CREEK ROAD REHABILITATION
Title: GENERAL NOTES

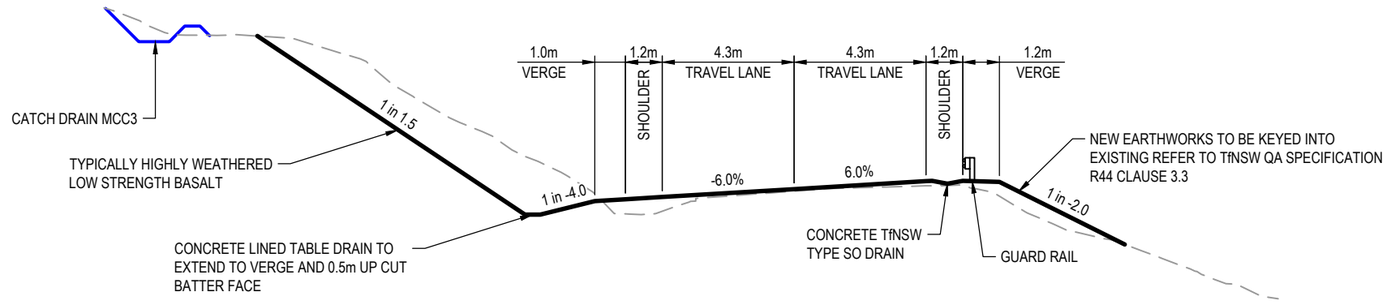
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Rev: 0

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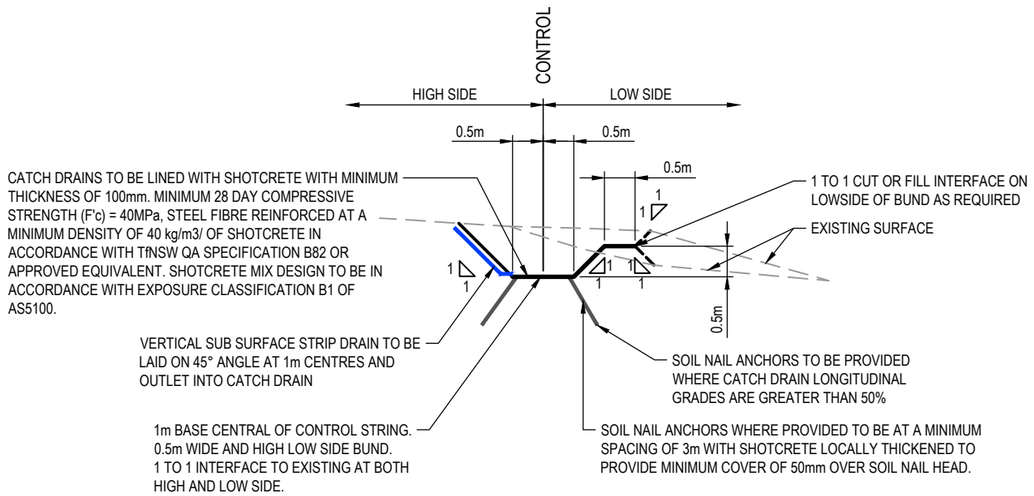
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2. FOR GABION WALL DETAILS REFER TO DRG C3501



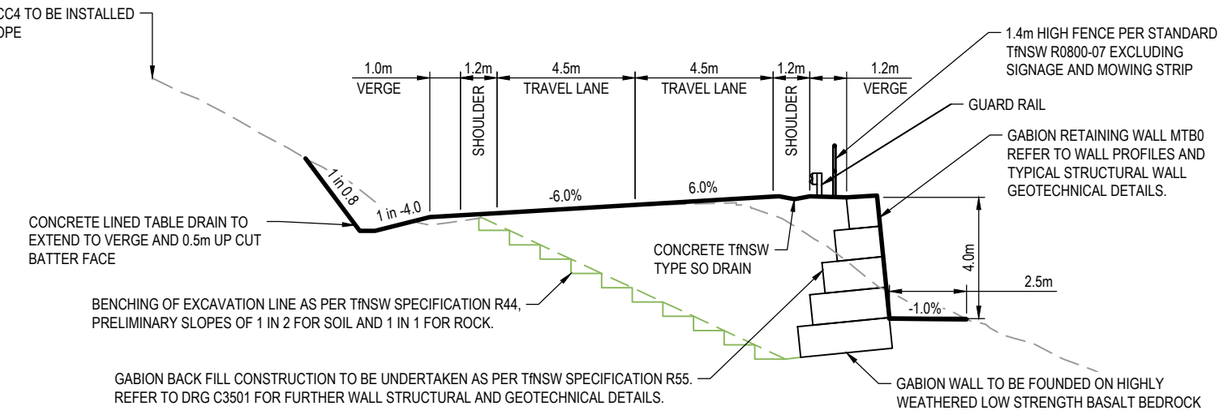
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SCALE 1 : 200



B TYPICAL SECTION - CH 300 TO CH 780 (CH500)
SCALE 1 : 200



TYPICAL CATCH DRAIN
SCALE 1:100



C TYPICAL SECTION - CH 780 TO CH 890 (CH840)
SCALE 1 : 200

WALL MTB0

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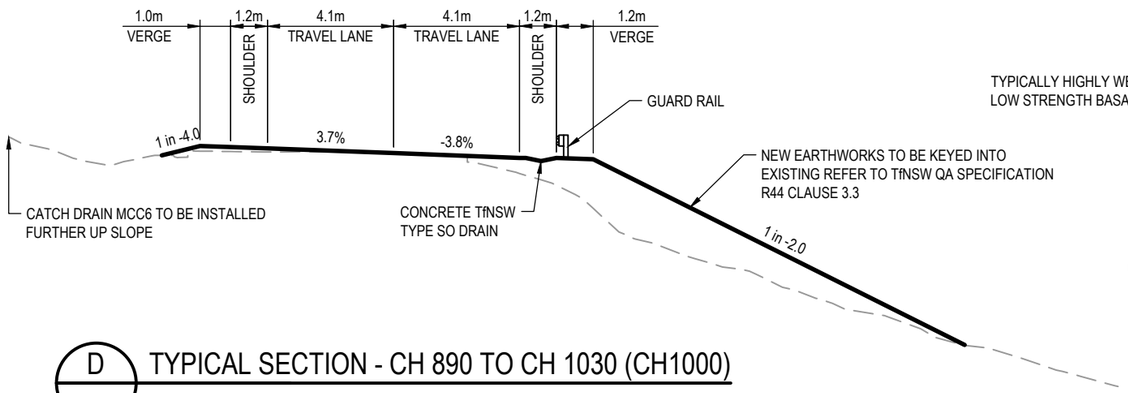
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title TYPICAL SECTIONS
SHEET 1 OF 8

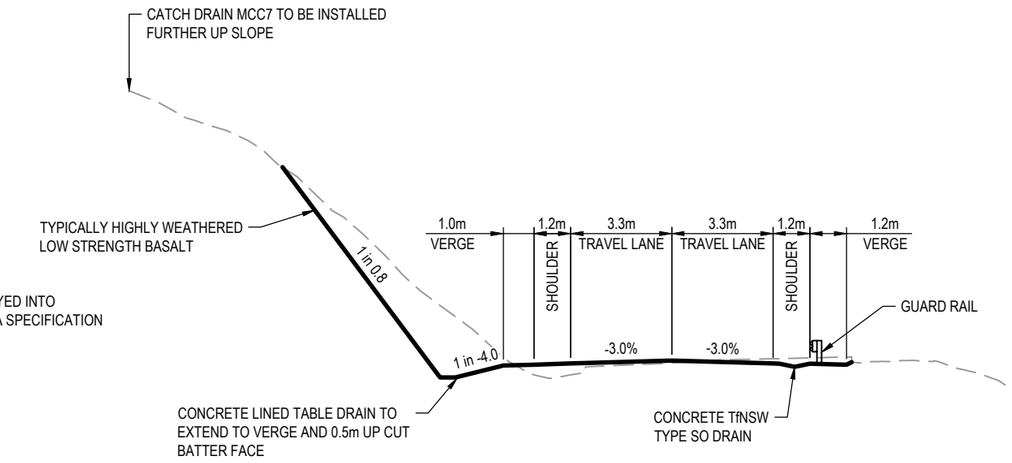
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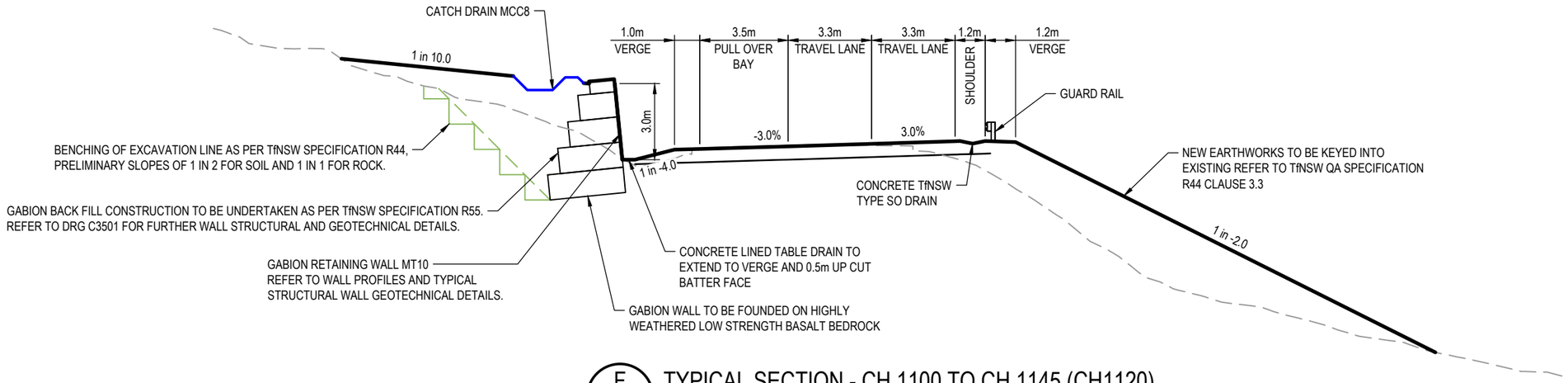
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D TYPICAL SECTION - CH 890 TO CH 1030 (CH1000)
SCALE 1 : 200



E TYPICAL SECTION - CH 1030 TO CH 1100 (CH1060)
SCALE 1 : 200



F TYPICAL SECTION - CH 1100 TO CH 1145 (CH1120)
SCALE 1 : 200

WALL MT10

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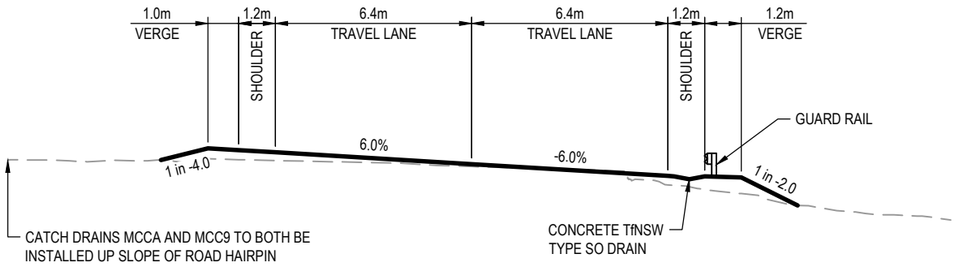
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Project COULSONS CREEK ROAD REHABILITATION
Title TYPICAL SECTIONS SHEET 2 OF 8

Original Size A3
Drawing No: 12542101-C3112
Rev: 0

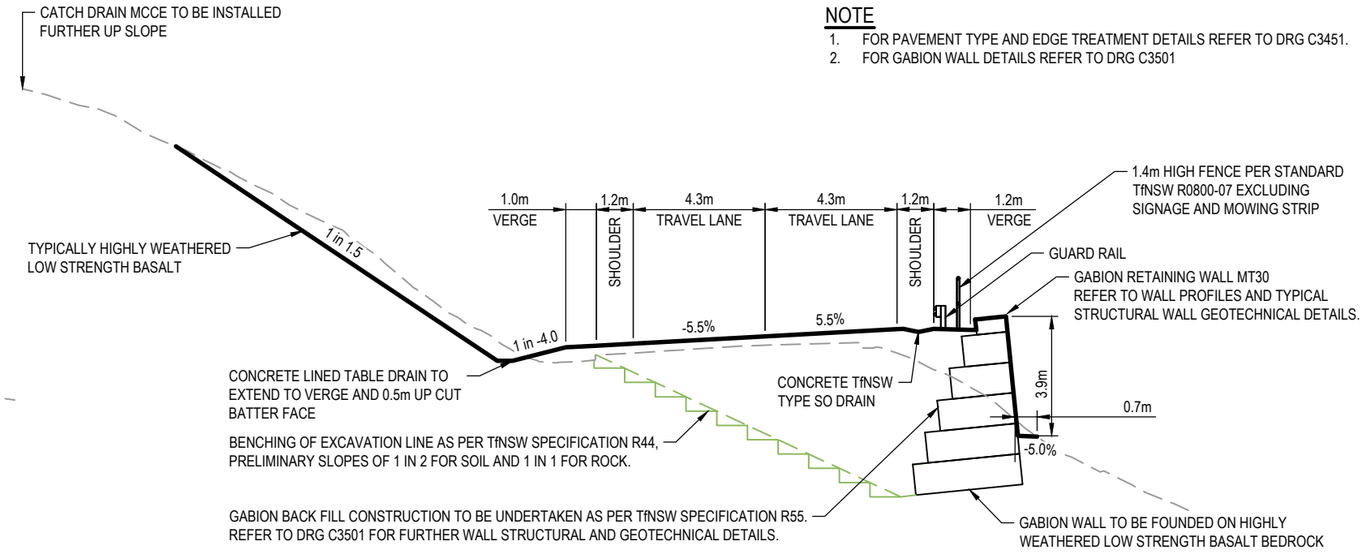
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G - TYPICAL SECTION - CH 1145 TO CH 1350 (CH1260)

SCALE 1 : 200

HAIRPIN LANE WIDENING



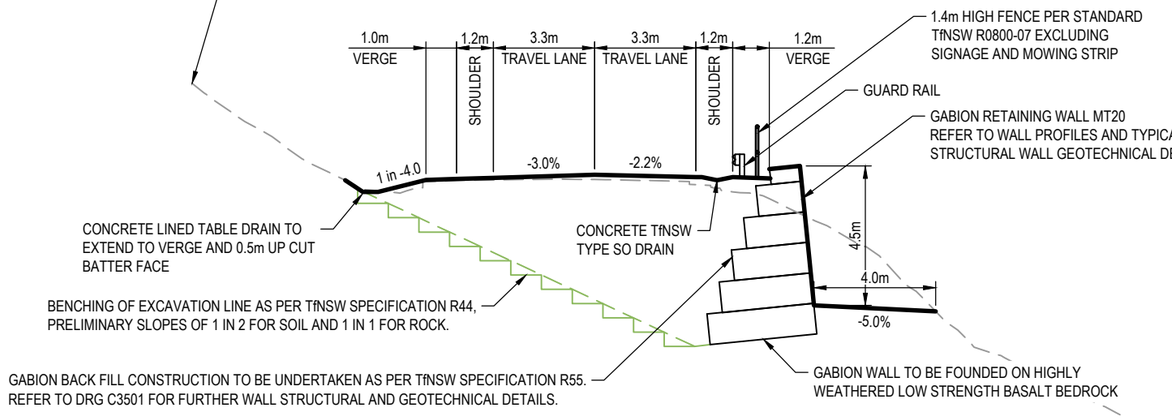
NOTE

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2. FOR GABION WALL DETAILS REFER TO DRG C3501

I - TYPICAL SECTION - CH 1400 TO CH 1540 (CH1460)

SCALE 1 : 200

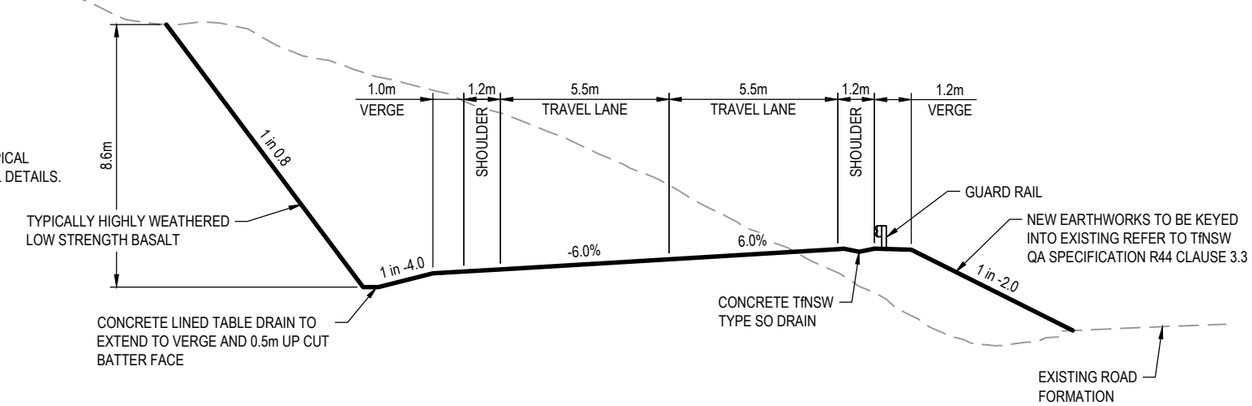
WALL MT30



H - TYPICAL SECTION - CH 1350 TO CH 1400 (CH1380)

SCALE 1 : 200

WALL MT20



J - TYPICAL SECTION - CH 1540 TO CH 1670 (CH1620)

SCALE 1 : 200

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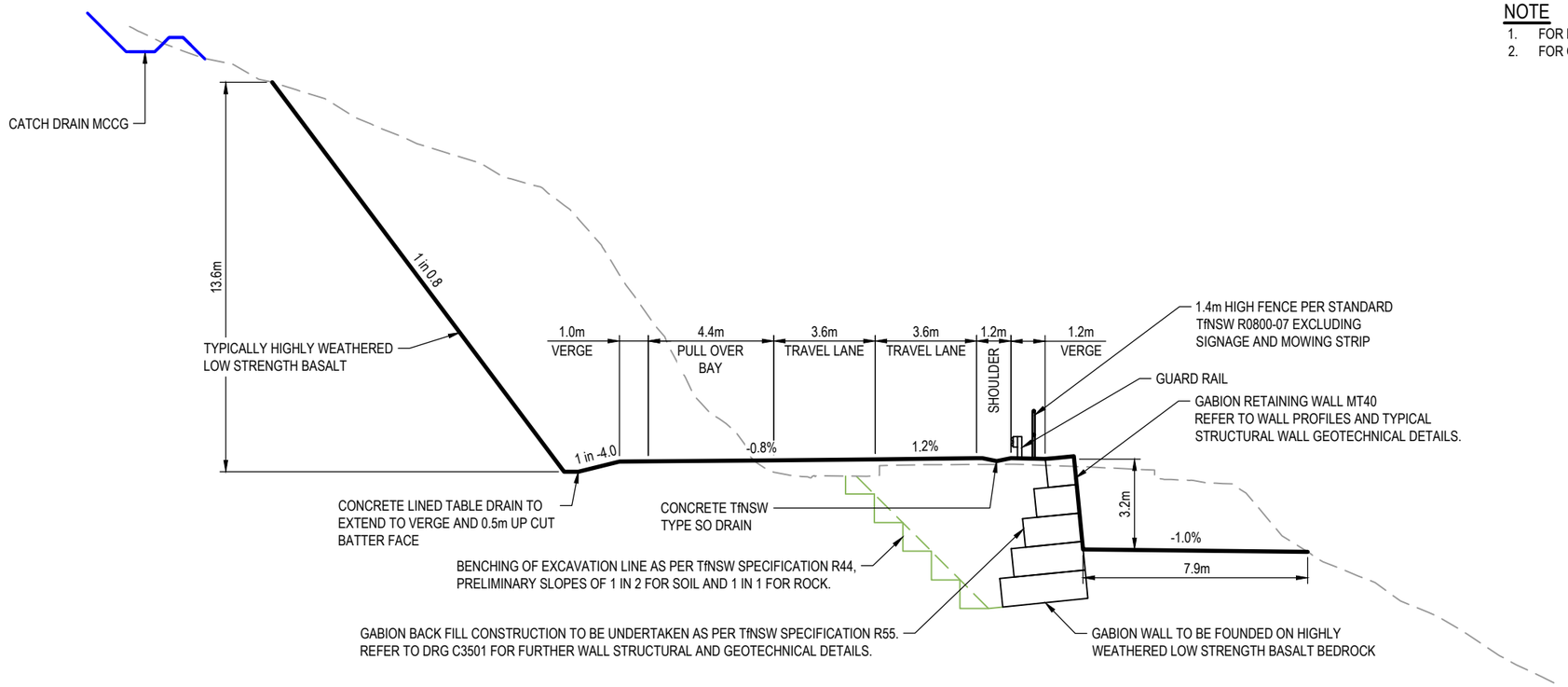
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Title: TYPICAL SECTIONS SHEET 3 OF 8

Original Size: A3
Drawing No: 12542101-C3113
Rev: 0

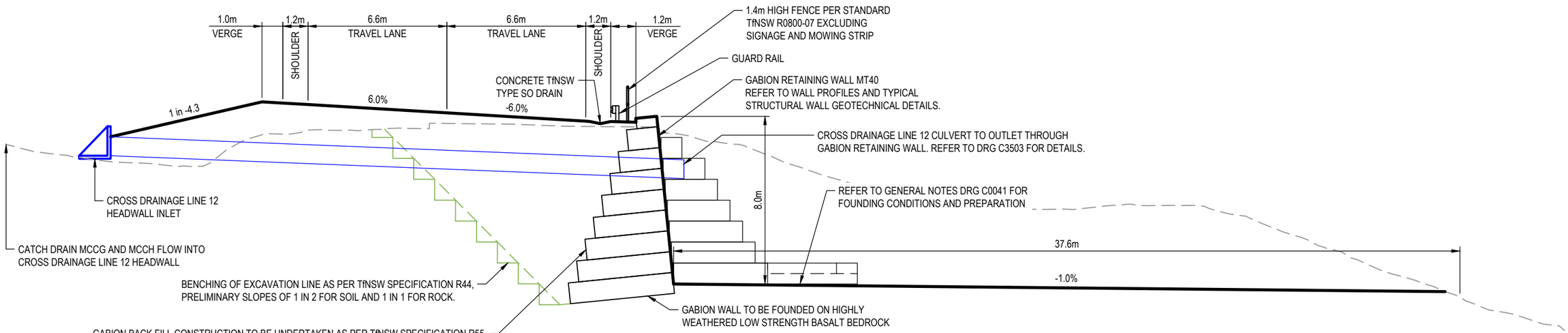
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NOTE
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2. FOR GABION WALL DETAILS REFER TO DRG C3501



K - SCALE 1 : 200

TYPICAL SECTION - CH 1670 TO CH 1720 (CH1700)
WALL MT40 AND PULL OVER BAY



L - SCALE 1 : 200

TYPICAL SECTION - CH 1720 TO CH 1810 (CH1740)
WALL MT40

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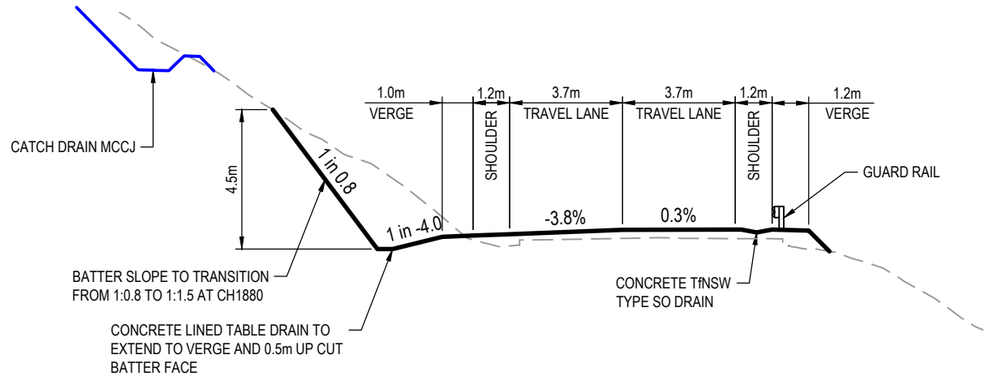
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Project: COULSONS CREEK ROAD REHABILITATION
Title: TYPICAL SECTIONS
SHEET 4 OF 8

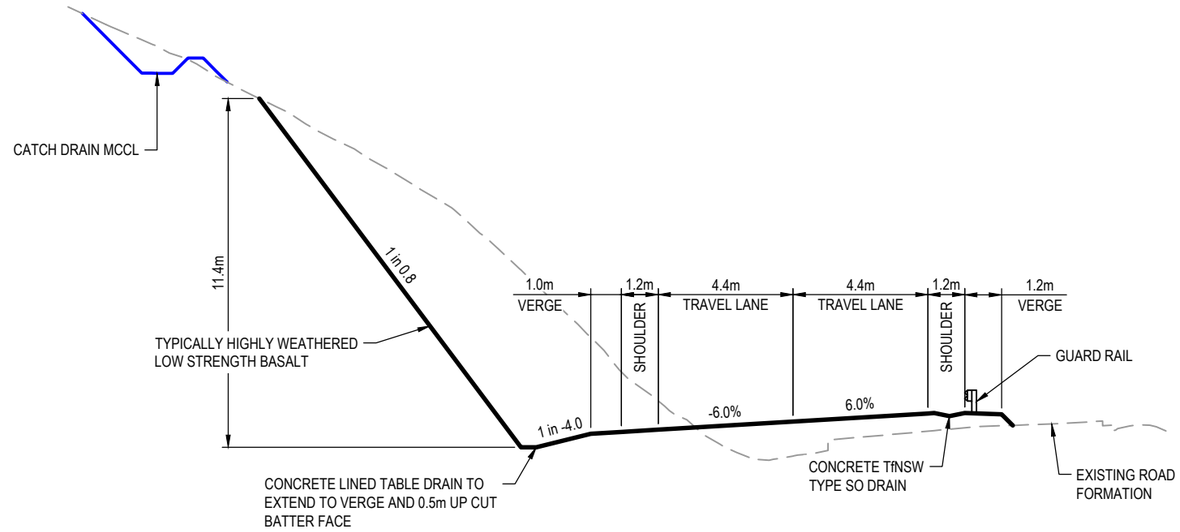
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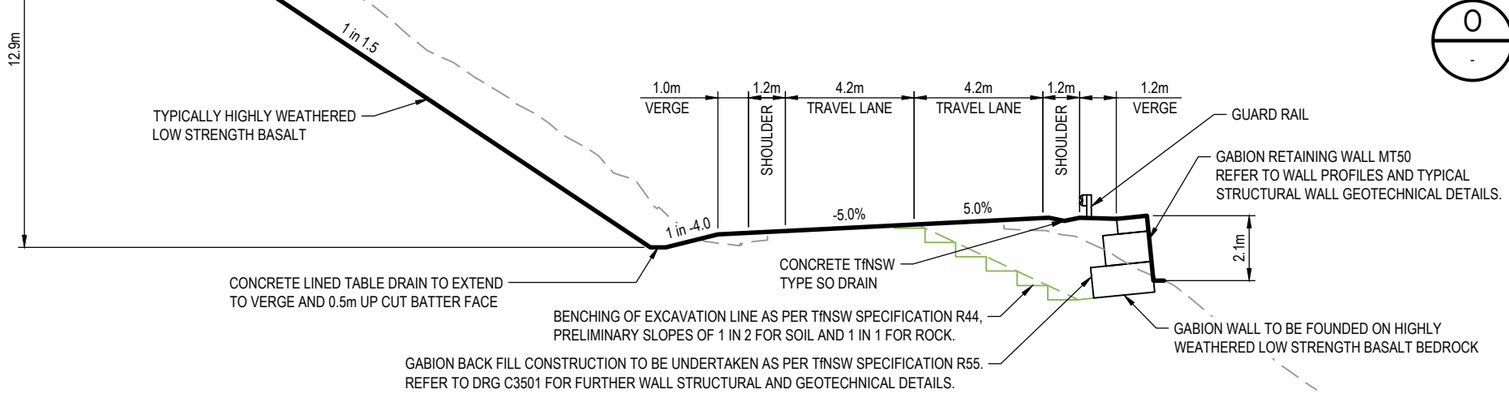
NOTE
1. FOR PAVEMENT TYPE AND EDGE TREATMENT DETAILS REFER TO DRG C3451.
2. FOR GABION WALL DETAILS REFER TO DRG C3501



M - TYPICAL SECTION - CH 1810 TO CH 1940 (CH1860)
SCALE 1 : 200



O - TYPICAL SECTION - CH 2025 TO CH 2190 (CH2140)
SCALE 1 : 200



N - TYPICAL SECTION - CH 1940 TO CH 2025 (CH1980)
SCALE 1 : 200

WALL MT50

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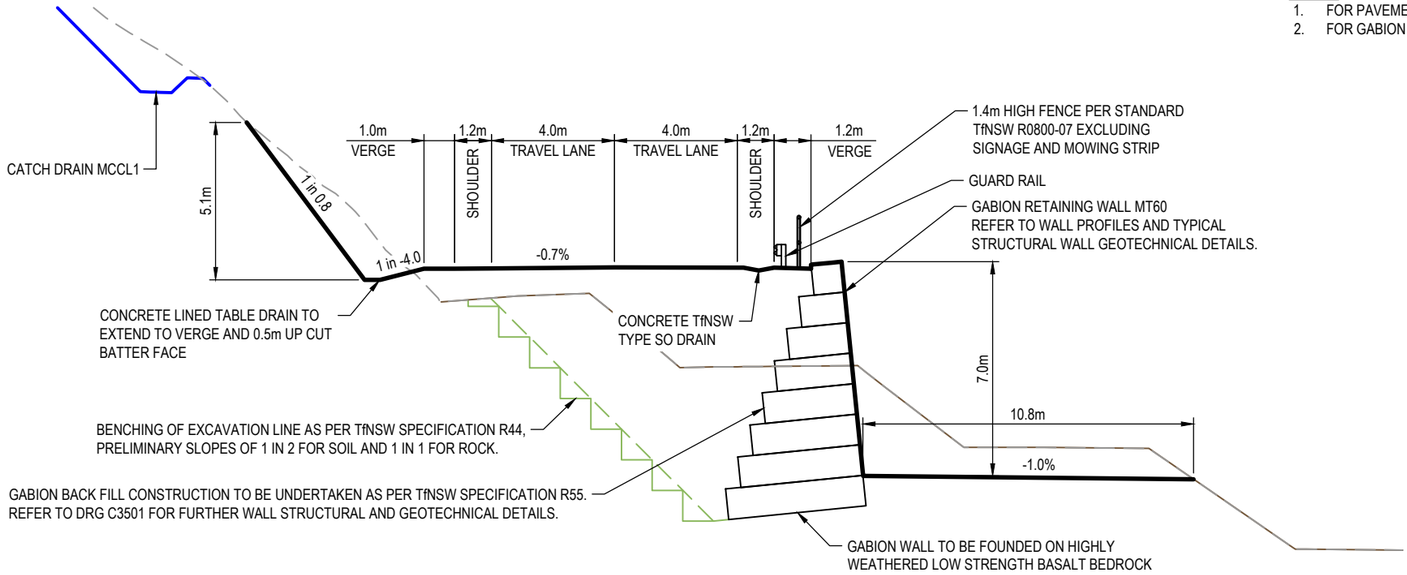
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Project COULSONS CREEK ROAD REHABILITATION
Title TYPICAL SECTIONS SHEET 5 OF 8

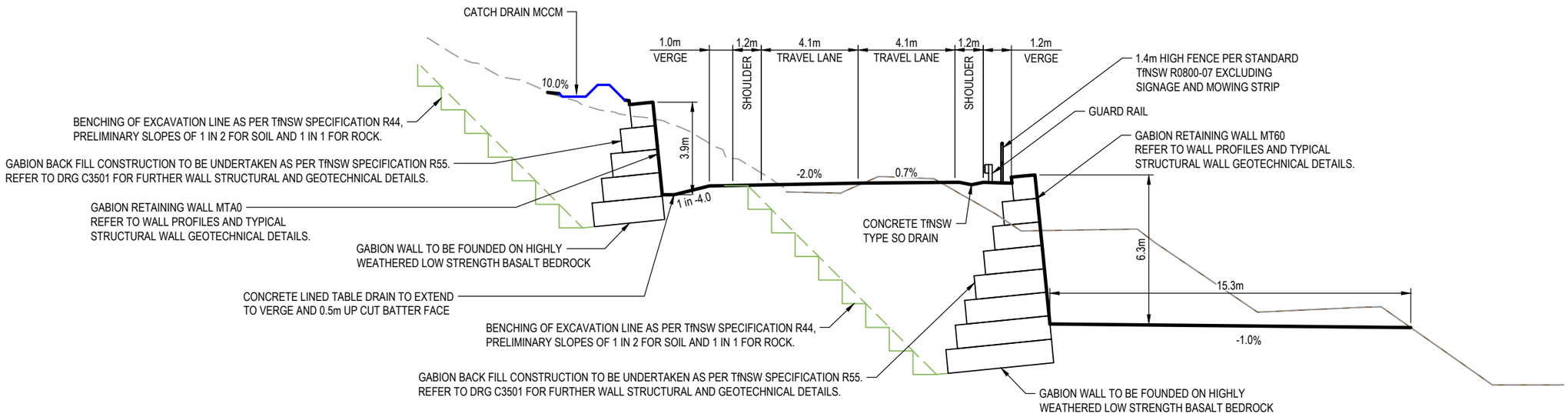
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Rev: 0

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NOTE
1. FOR PAVEMENT TYPE AND EDGE TREATMENT DETAILS REFER TO DRG C3451.
2. FOR GABION WALL DETAILS REFER TO DRG C3501



P
-
TYPICAL SECTION - CH 2190 TO CH 2220 (CH2220)
SCALE 1 : 200
WALL MT60



Q
-
TYPICAL SECTION - CH 2220 TO CH 2320 (CH2300)
SCALE 1 : 200
WALL MT60 AND MTA0

No	Revision	Drawn	Job Manager	Project Director	Date
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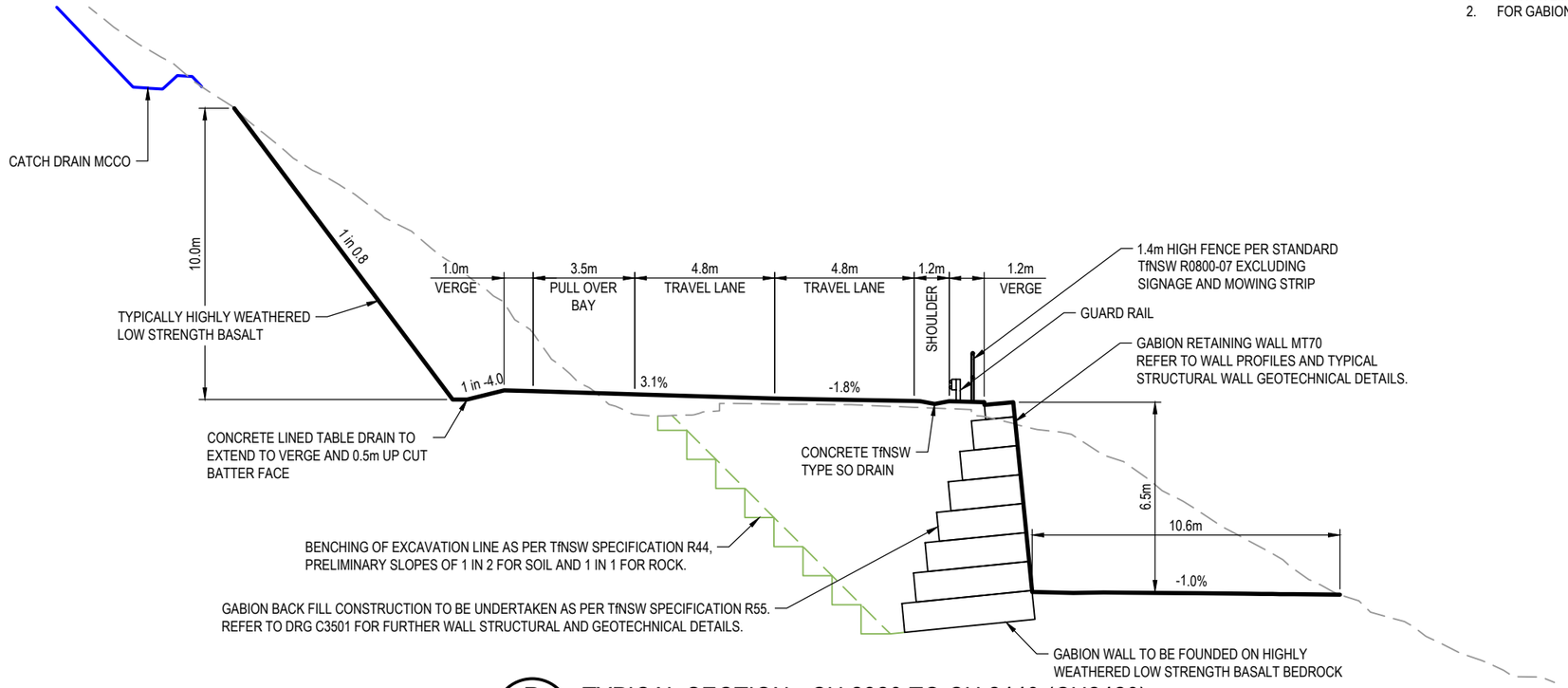
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Title: TYPICAL SECTIONS SHEET 6 OF 8

Original Size A3
Drawing No: 12542101-C3116
Rev: 0

Plot Date: 27 May 2022 - 12:39 PM Plotted By: Isaac Smith
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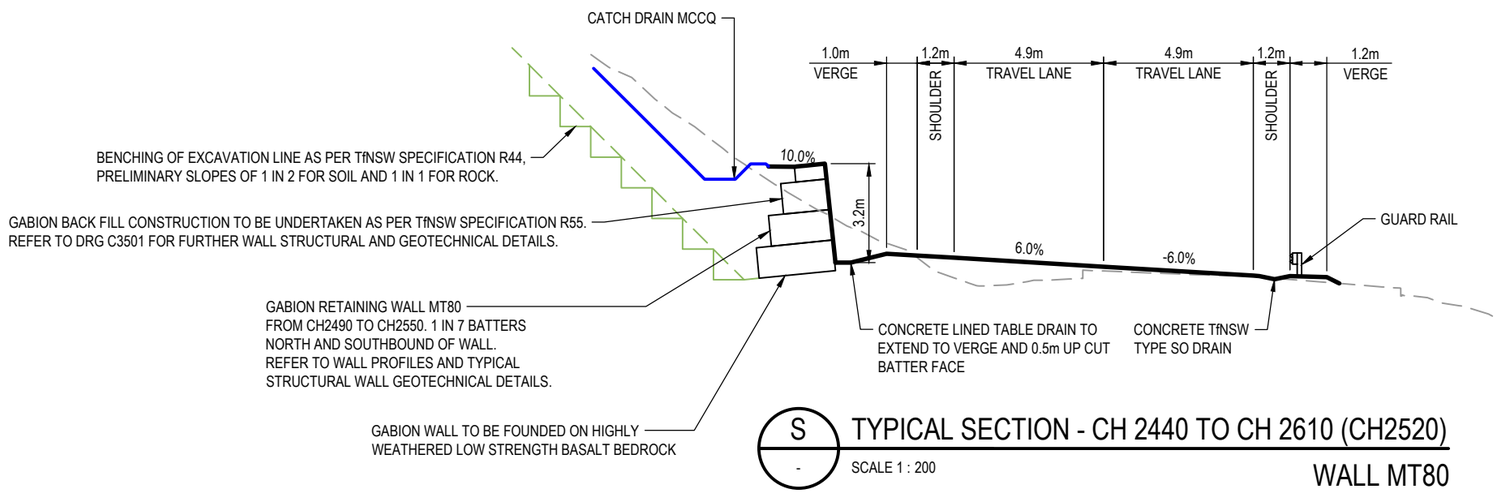
1. FOR PAVEMENT TYPE AND EDGE TREATMENT DETAILS REFER TO DRG C3451.
2. FOR GABION WALL DETAILS REFER TO DRG C3501



R / - TYPICAL SECTION - CH 2320 TO CH 2440 (CH2420)

SCALE 1 : 200

WALL MT70



S / - TYPICAL SECTION - CH 2440 TO CH 2610 (CH2520)

SCALE 1 : 200

WALL MT80

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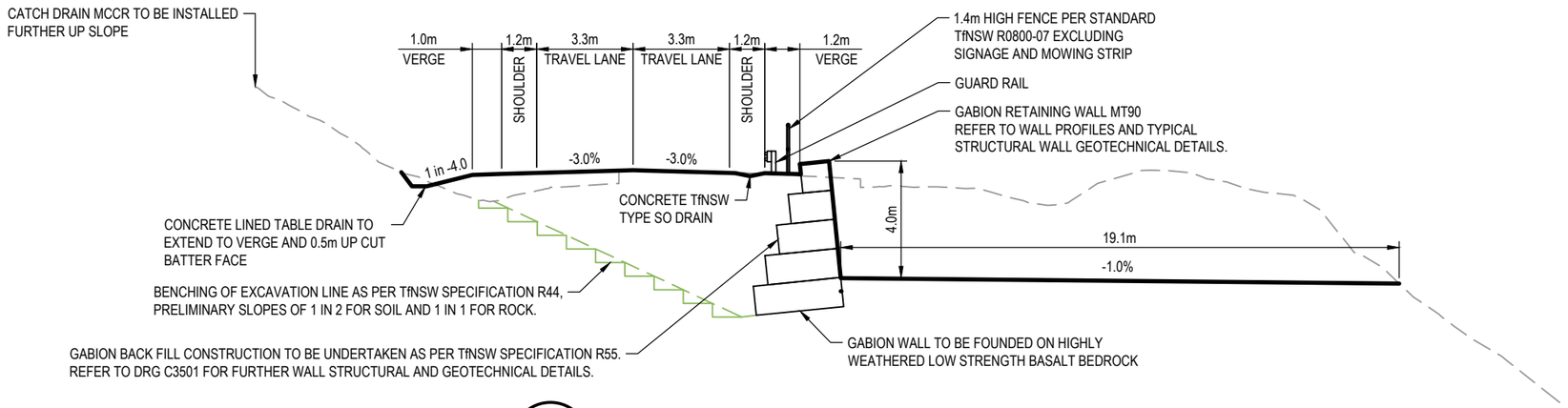
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Title TYPICAL SECTIONS
SHEET 7 OF 8

Original Size A3 Drawing No: 12542101-C3117 Rev: 0

Plot Date: 27 May 2022 - 12:39 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3110.dwg

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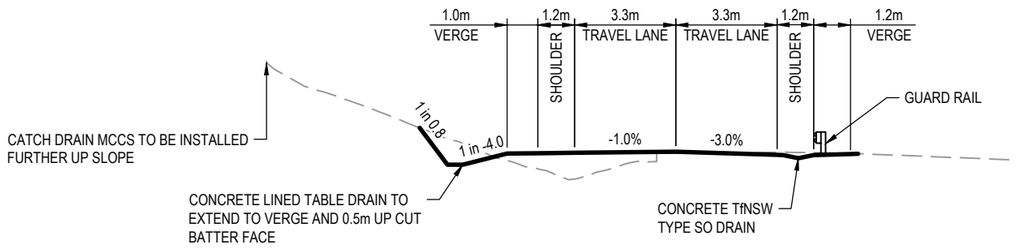
1. FOR PAVEMENT TYPE AND EDGE TREATMENT DETAILS REFER TO DRG C3451.
2. FOR GABION WALL DETAILS REFER TO DRG C3501



T / - TYPICAL SECTION - CH 2610 TO CH 2680 (CH2660)

SCALE 1 : 200

WALL MT90



U / - TYPICAL SECTION - CH 2680 TO CH 2870 (CH2760)

SCALE 1 : 200

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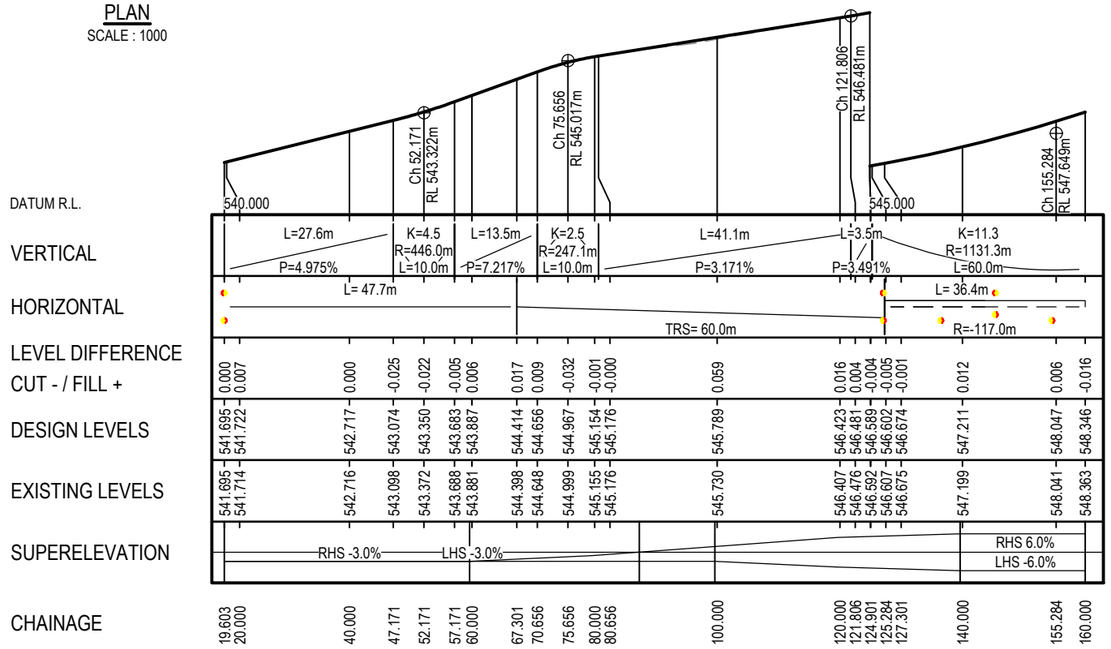
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Title TYPICAL SECTIONS SHEET 8 OF 8

Original Size A3 Drawing No: 12542101-C3118 Rev: 0

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SCALE : 1000



MC20 PROFILE
SCALE : HORZ=1000 VERT=200

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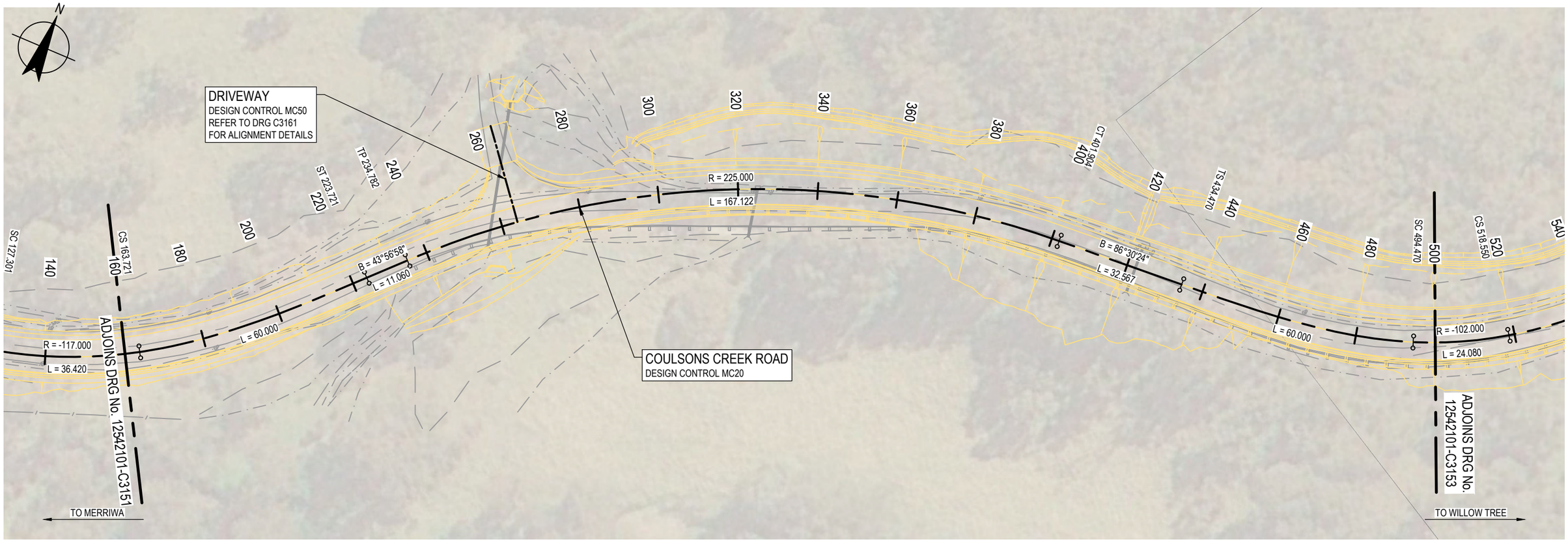
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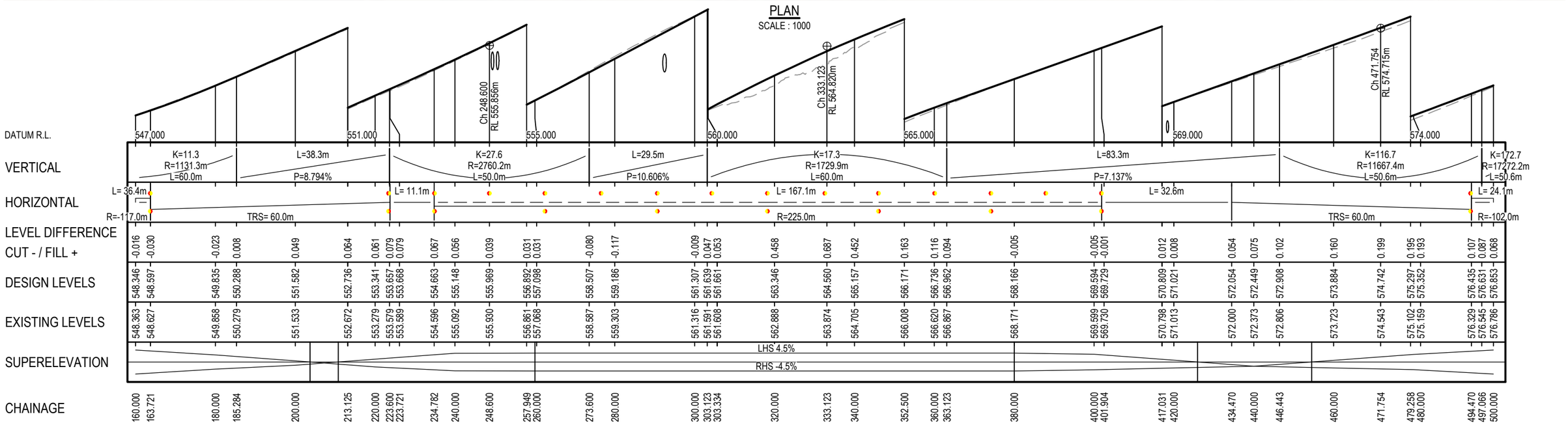
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Title ALIGNMENT PLAN AND PROFILE
MC20 - CH0 TO CH160 - SHEET 1 OF 9

Original Size A3
Drawing No: 12542101-C3151
Rev: 0

Plot Date: 27 May 2022 - 12:39 PM Plotted By: Isaac Smith
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SCALE : 1000



MC20 PROFILE
SCALE : HORZ=1000 VERT=200

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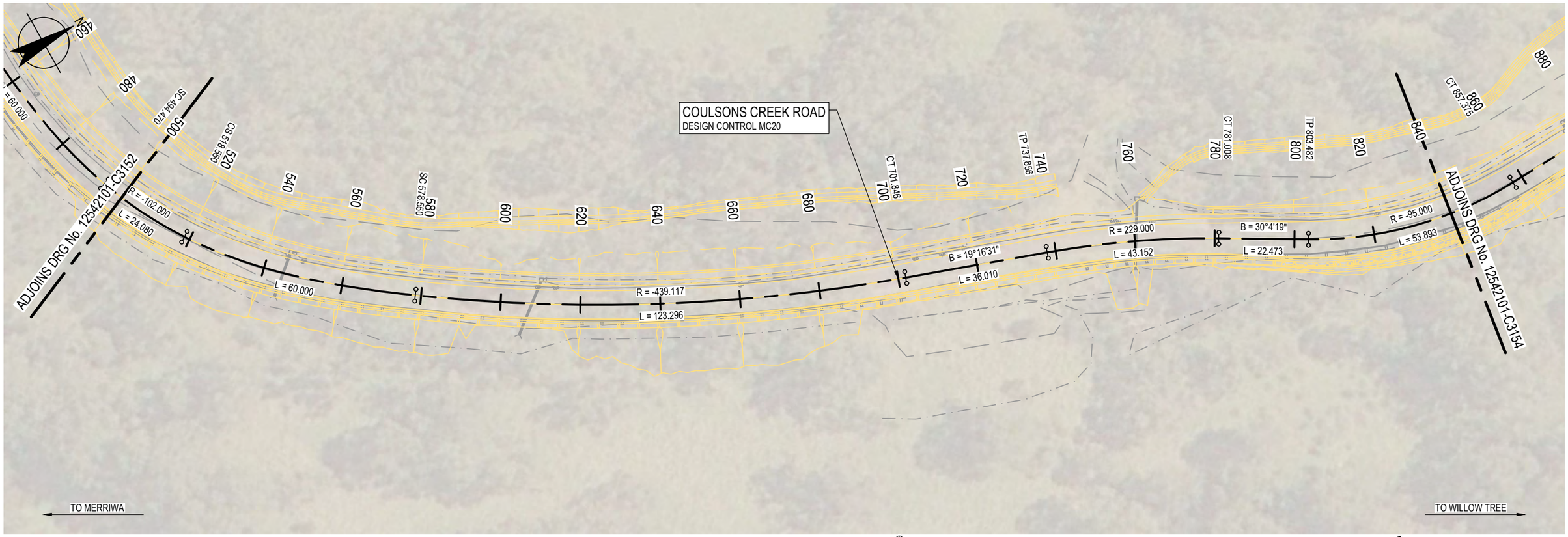
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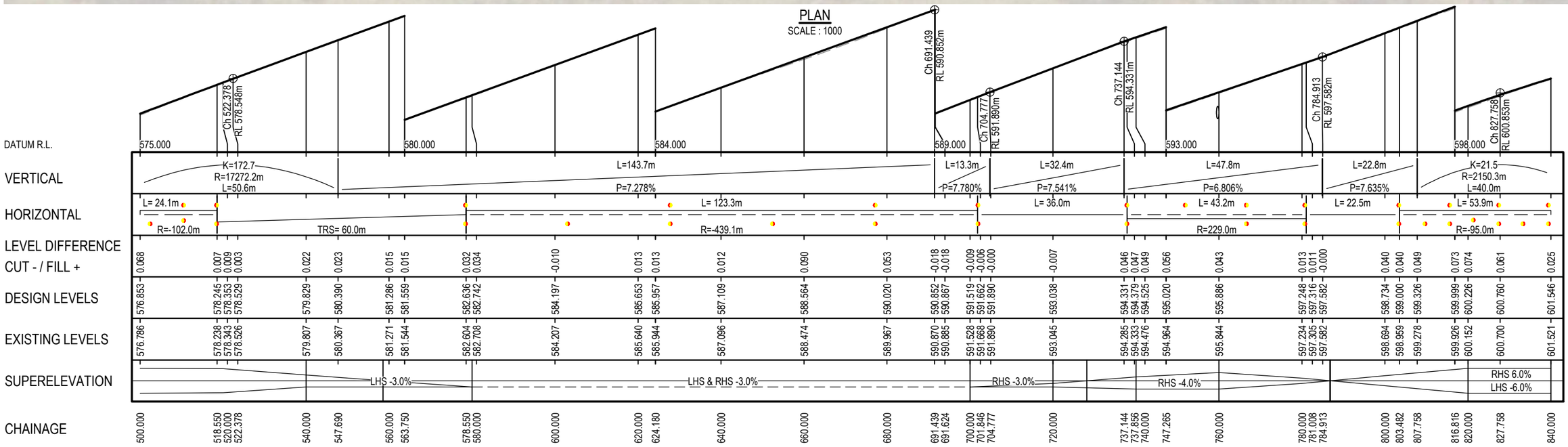
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: ALIGNMENT PLAN AND PROFILE MC20 - CH160 TO CH500 - SHEET 2 OF 9

Original Size: A3
Drawing No: 12542101-C3152
Rev: 0

Plot Date: 27 May 2022 - 12:40 PM
Plotted By: Isaac Smith
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PLAN
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MC20 PROFILE

SCALE : HORZ=1000 VERT=200

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0 10 20 30m

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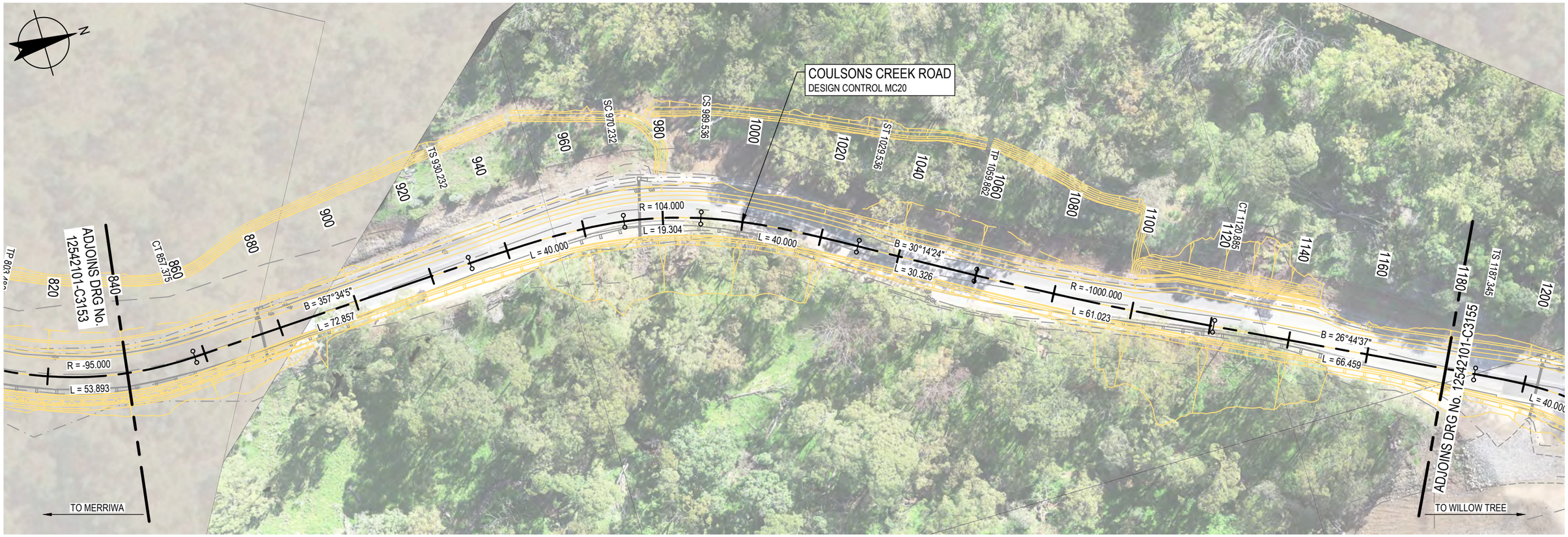
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: ALIGNMENT PLAN AND PROFILE
MC20 - CH500 TO CH840 - SHEET 3 OF 9

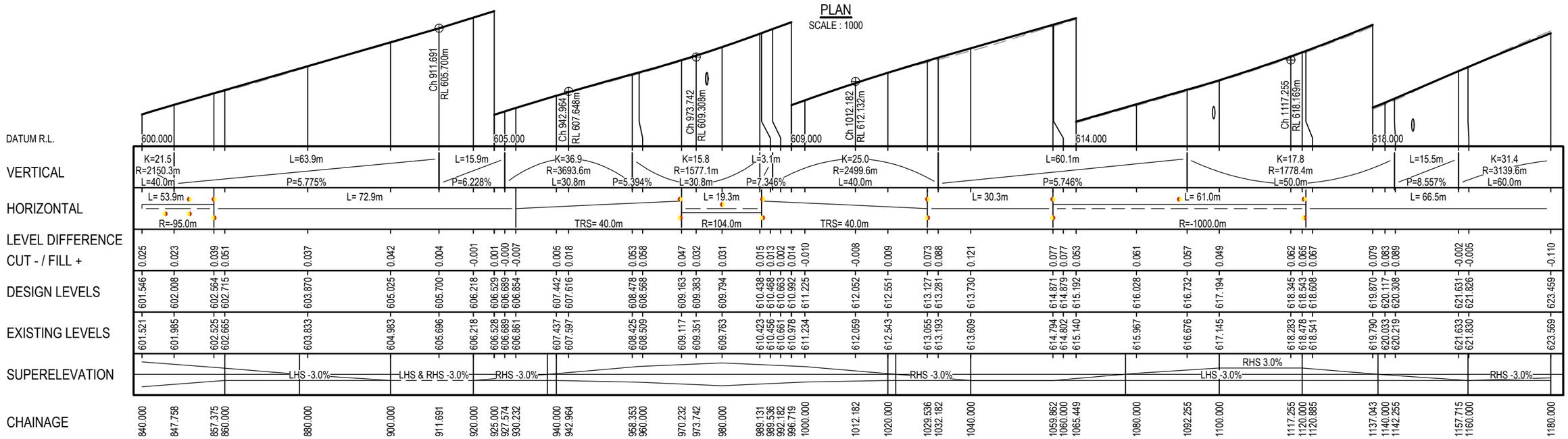
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Drawing No: 12542101-C3153
Rev: 0

Plot Date: 27 May 2022 - 12:40 PM Plotted By: Isaac Smith
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MC20 PROFILE

SCALE : HORZ=1000 VERT=200

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0 10 20 30m

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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL

Project: COULSONS CREEK ROAD REHABILITATION

Title: ALIGNMENT PLAN AND PROFILE
MC20 - CH840 TO CH1180 - SHEET 4 OF 9

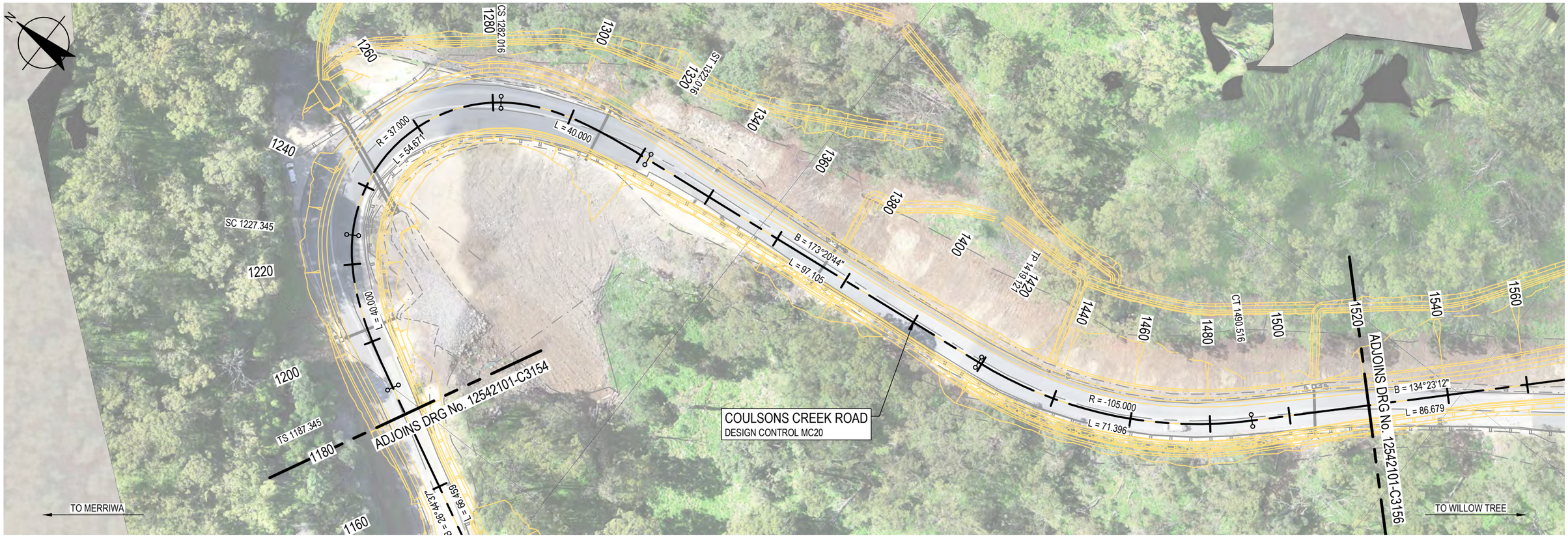
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Drawing No: 12542101-C3154

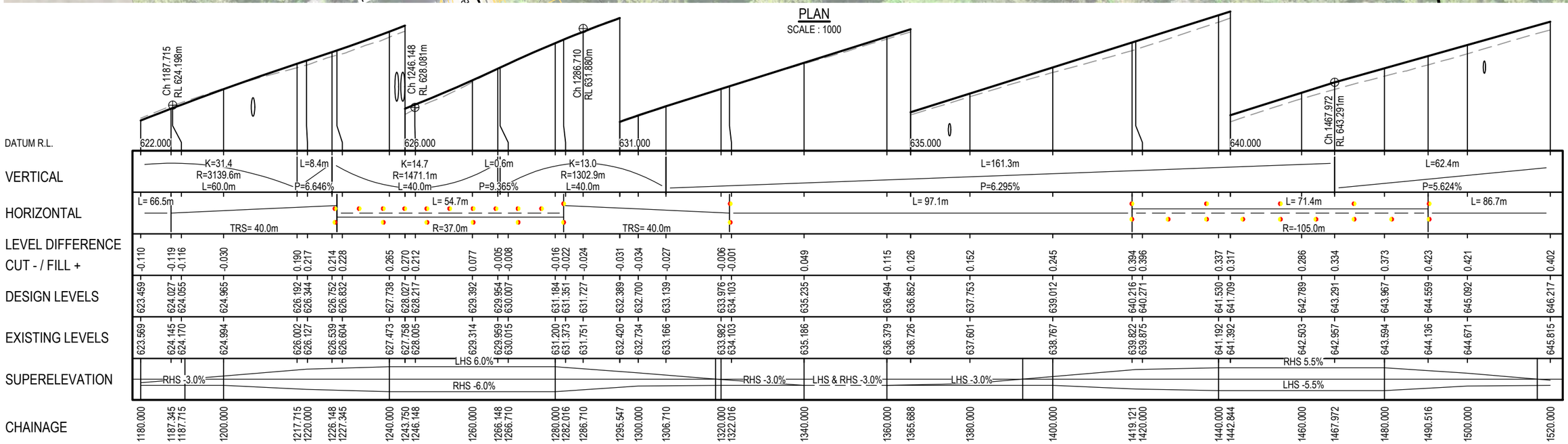
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Plot Date: 27 May 2022 - 12:40 PM Plotted By: Isaac Smith

Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3150.dwg



PLAN
SCALE : 1000



MC20 PROFILE
SCALE : HORZ=1000 VERT=200

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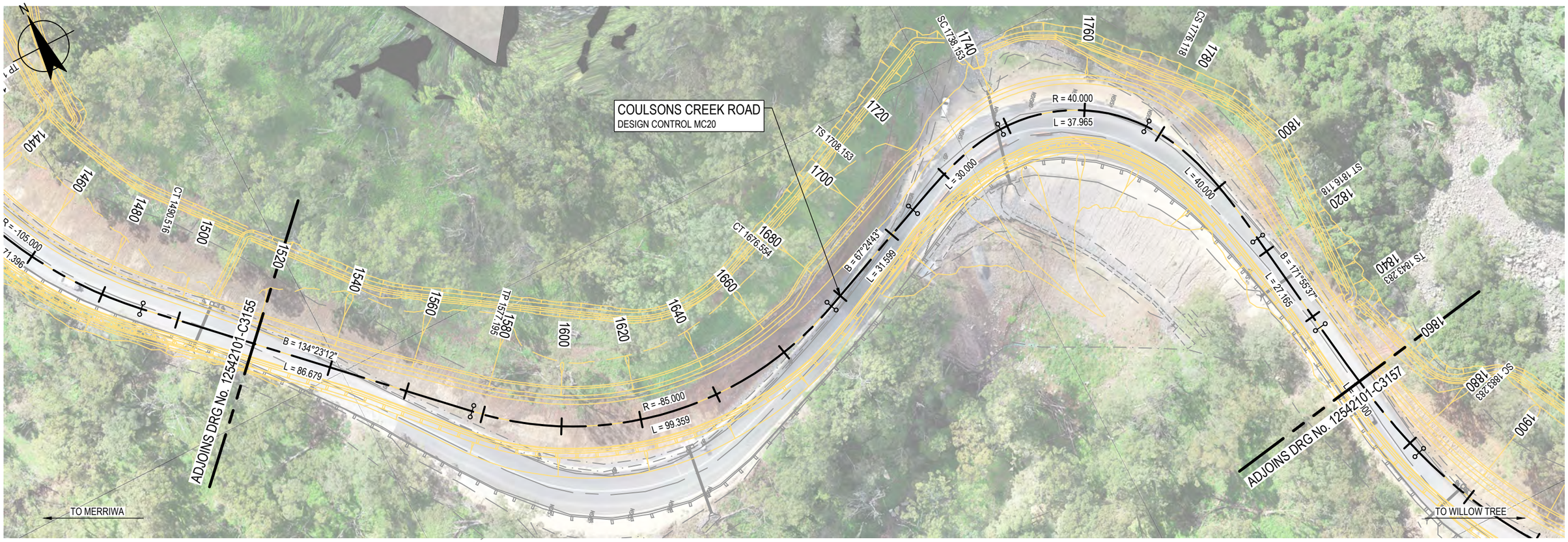
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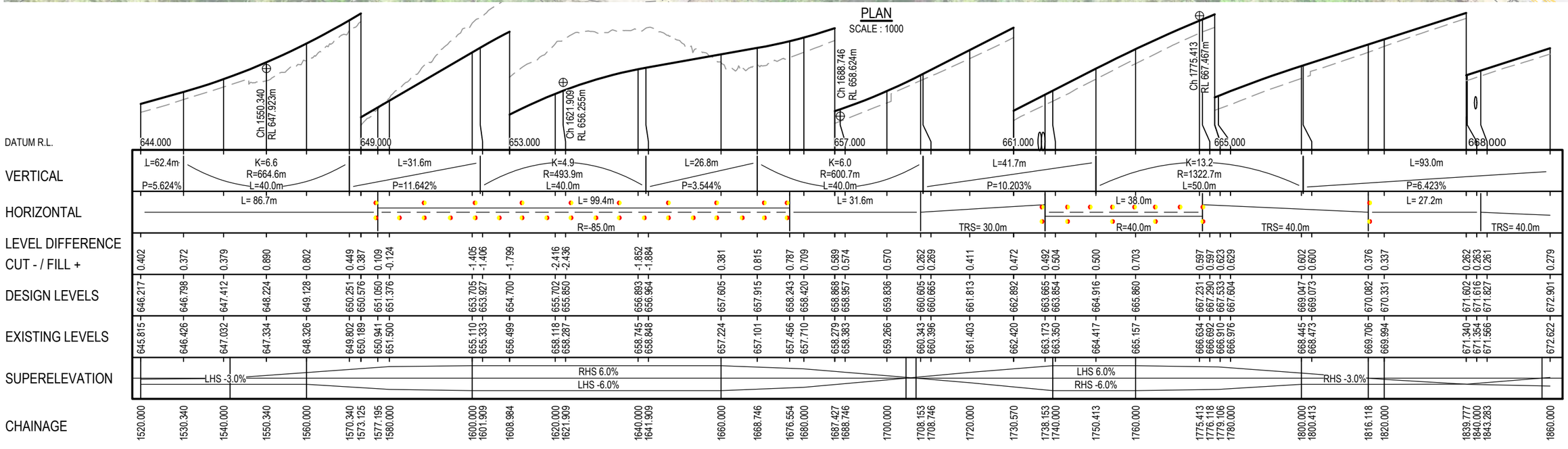
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title ALIGNMENT PLAN AND PROFILE
MC20 - CH1180 TO CH1520 - SHEET 5 OF 9

Original Size A3
Drawing No: 12542101-C3155
Rev: 0

Plot Date: 27 May 2022 - 12:40 PM Plotted By: Isaac Smith
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SCALE : 1000



MC20 PROFILE
SCALE : HORZ=1000 VERT=200

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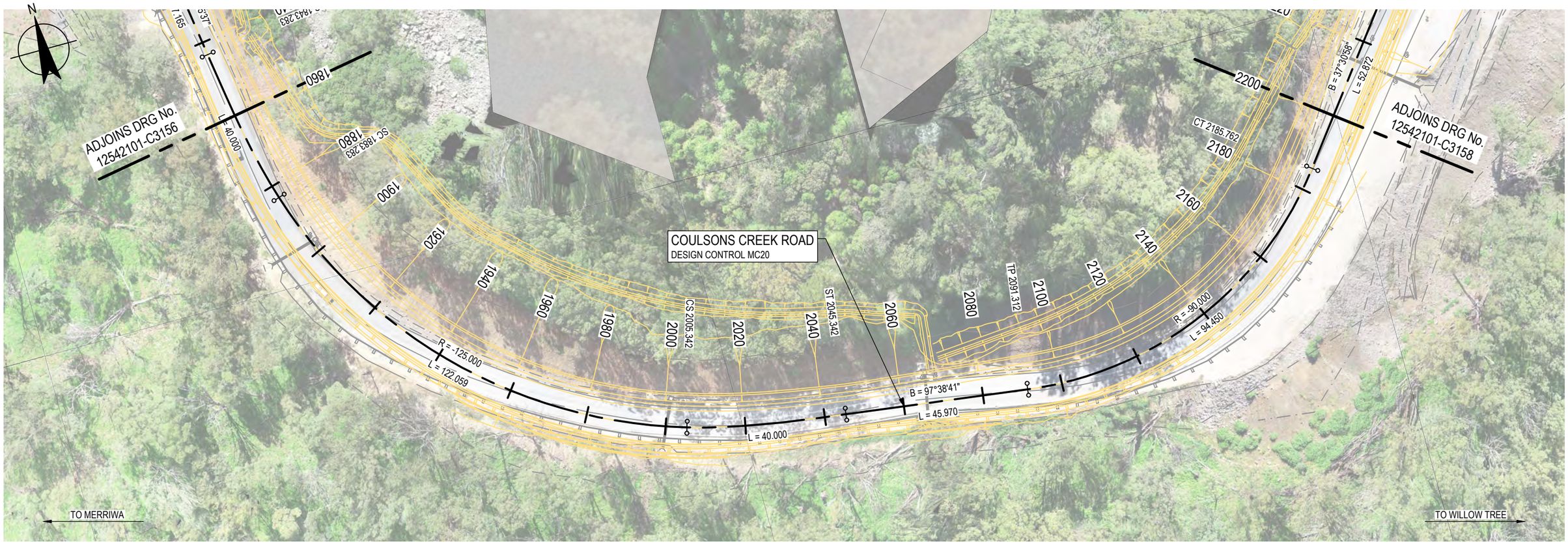
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: ALIGNMENT PLAN AND PROFILE
MC20 - CH1520 TO CH1860 - SHEET 6 OF 9

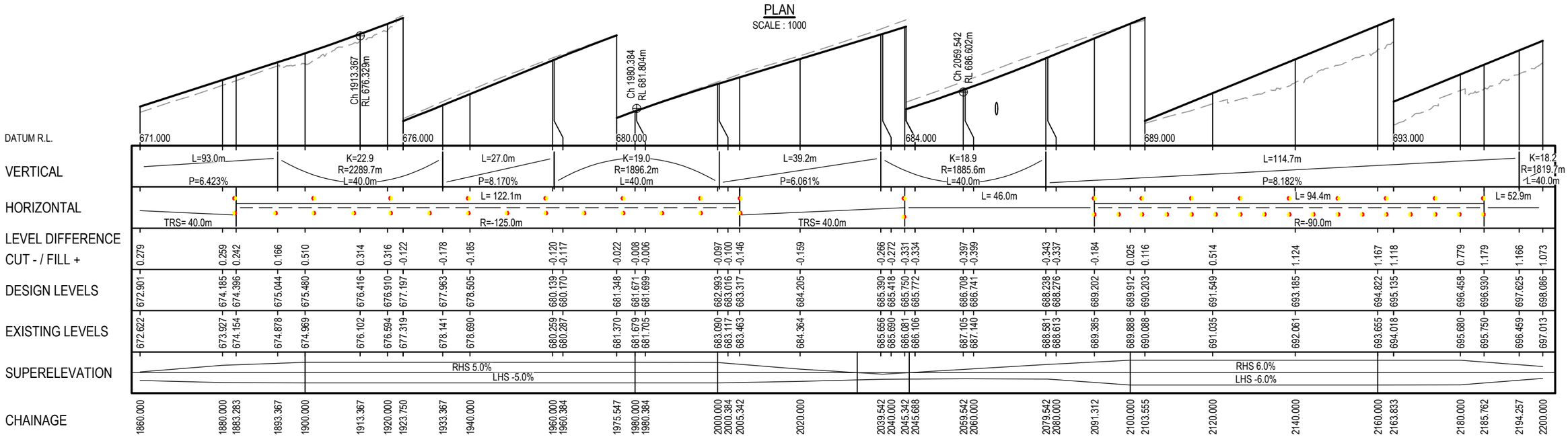
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Drawing No: 12542101-C3156
Rev: 0

Plot Date: 27 May 2022 - 12:41 PM
Plotted By: Isaac Smith
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PLAN

SCALE : 1000



MC20 PROFILE

SCALE : HORZ=1000 VERT=200

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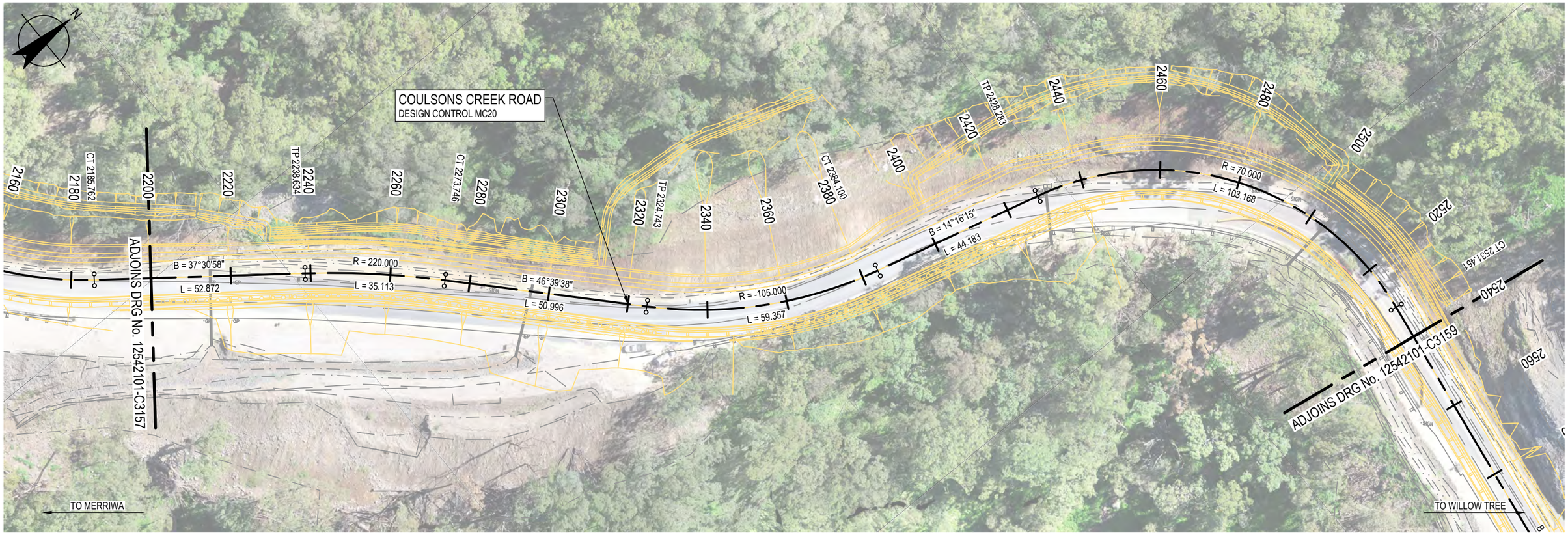
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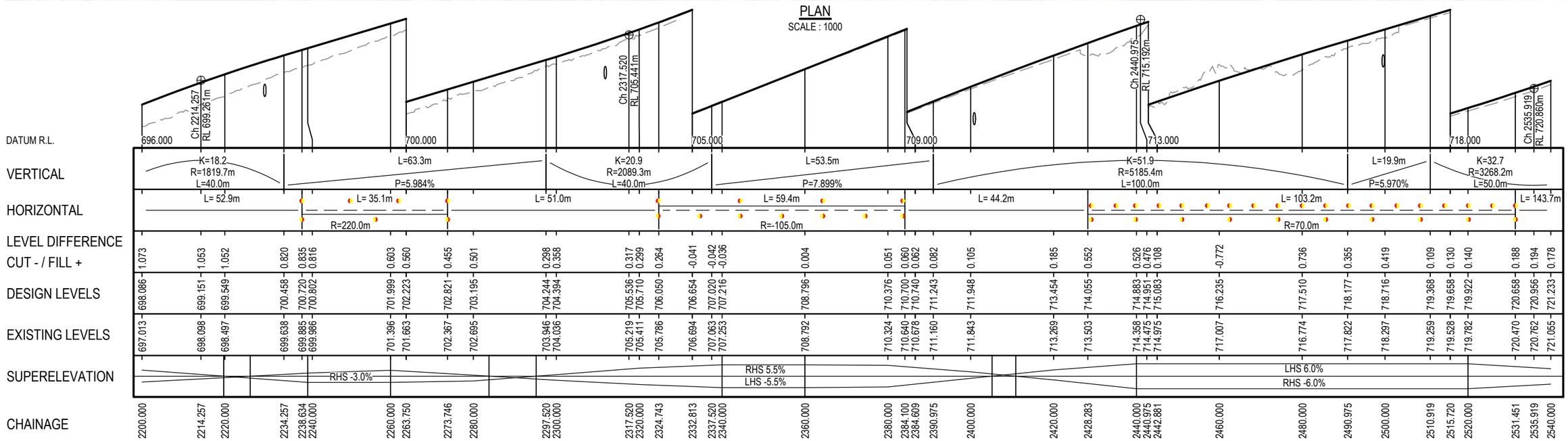
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: ALIGNMENT PLAN AND PROFILE
MC20 - CH1860 TO CH2200 - SHEET 7 OF 9

Original Size A3 | Drawing No: 12542101-C3157 | Rev: 0

Plot Date: 27 May 2022 - 12:41 PM | Plotted By: Isaac Smith | Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3150.dwg



PLAN
SCALE : 1000



MC20 PROFILE
SCALE : HORZ=1000 VERT=200

No	Revision	Drawn	Job Manager	Project Director	Date
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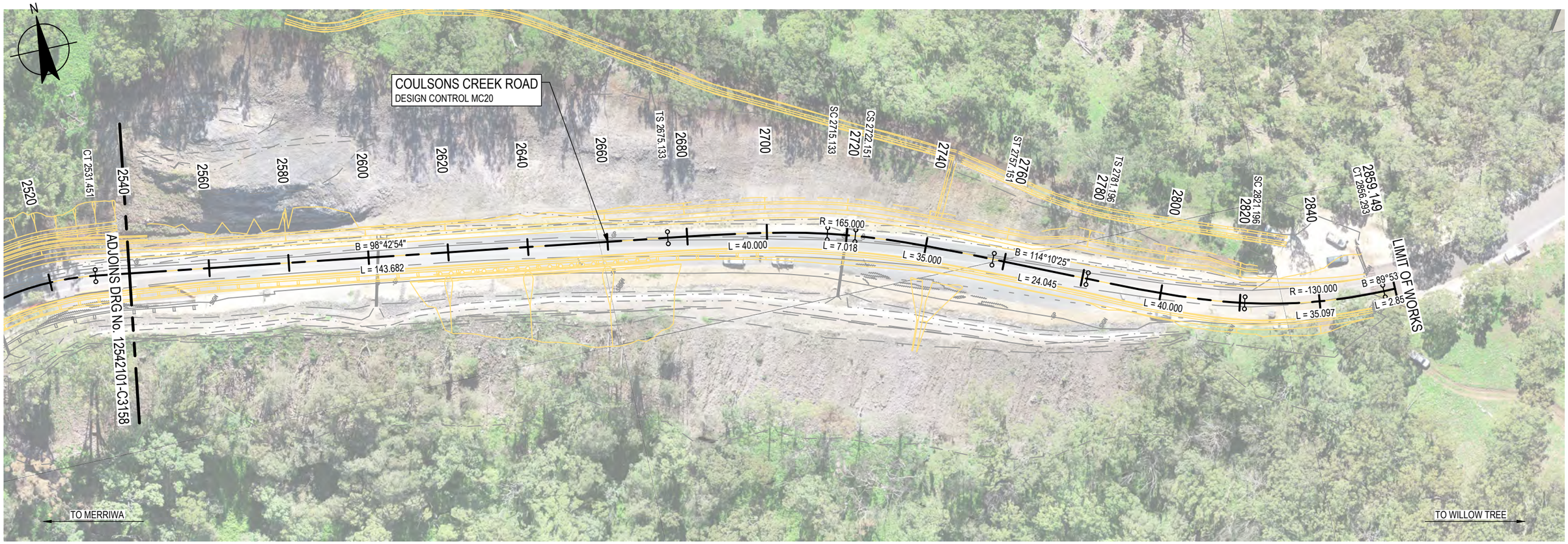
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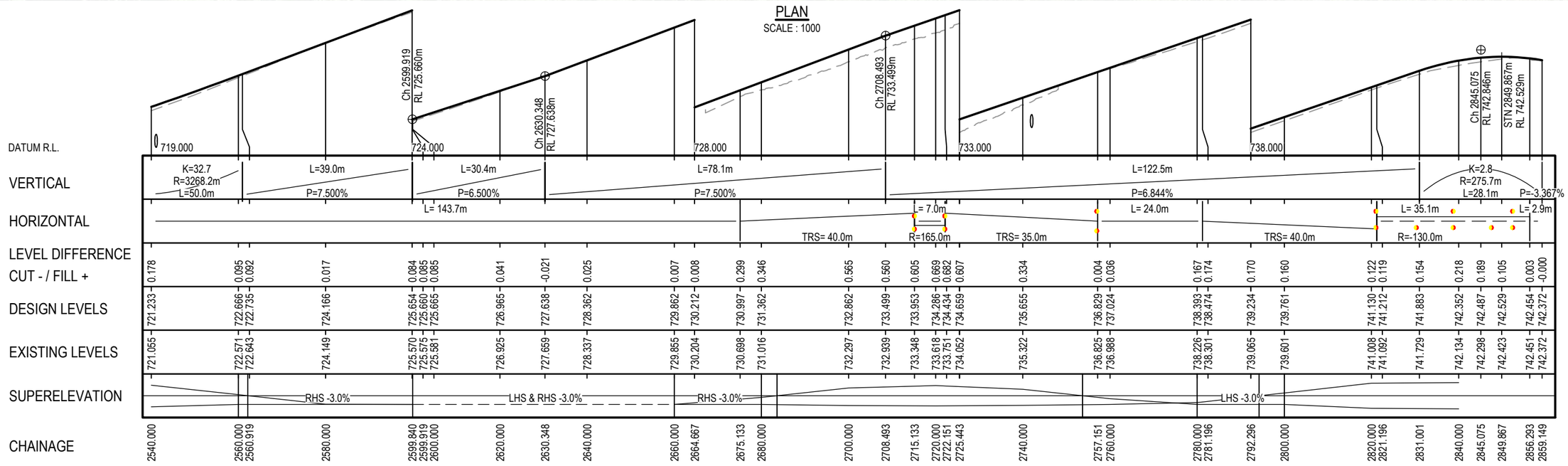
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title ALIGNMENT PLAN AND PROFILE
MC20 - CH2200 TO CH2540 - SHEET 8 OF 9

Original Size A3 Drawing No: 12542101-C3158 Rev: 0

Plot Date: 27 May 2022 - 12:41 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3150.dwg



PLAN
SCALE : 1000



MC20 PROFILE
SCALE : HORZ=1000 VERT=200

No	Revision	Drawn	Job Manager	Project Director	Date
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HORIZONTAL SCALE 1:1000
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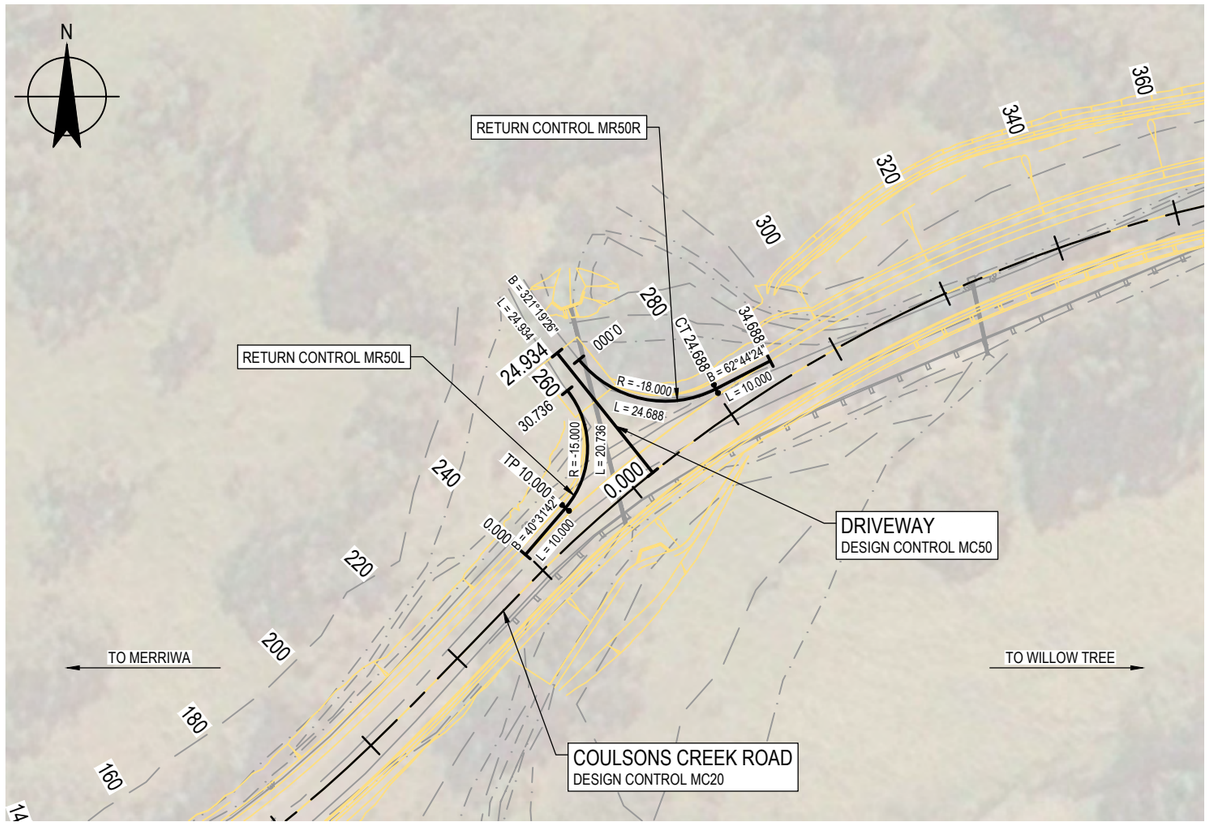
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Date	27.05.2022		
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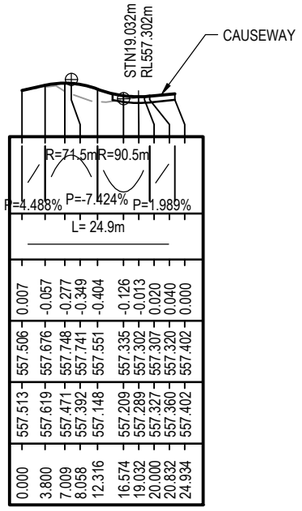
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title ALIGNMENT PLAN AND PROFILE
MC20 - CH2540 TO CH2880 - SHEET 9 OF 9

Original Size A3
Drawing No: 12542101-C3159
Rev: 0

Plot Date: 27 May 2022 - 12:41 PM Plotted By: Isaac Smith
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PLAN
SCALE : 1000



DATUM R.L. 556.000																
VERTICAL																
HORIZONTAL																
LEVEL DIFFERENCE CUT - / FILL +	0.007	-0.057	-0.277	-0.349	-0.404	-0.126	-0.013	0.020	0.040	0.000						
DESIGN LEVELS	557.506	557.676	557.748	557.741	557.551	557.335	557.302	557.307	557.320	557.402						
EXISTING LEVELS	557.513	557.619	557.471	557.392	557.148	557.209	557.289	557.327	557.360	557.402						
CHAINAGE	0.000	3.800	7.009	8.058	12.316	16.574	19.032	20.000	20.832	24.934						

MC50 PROFILE
SCALE : HORZ=1000 VERT=200

DATUM R.L. 554.000				
EXISTING LEVELS	555.124	556.128	556.680	557.042	557.133
LEVEL DIFFERENCE CUT - / FILL +	0.178	0.154	0.337	0.172	0.060
DESIGN LEVELS	555.302	556.281	557.018	557.214	557.193
CHAINAGE	0.000	10.000	20.000	28.075	30.737

MR50L PROFILE
SCALE : HORZ=1000 VERT=200

DATUM R.L. 556.000						
EXISTING LEVELS	557.345	557.362	557.538	558.564	559.113	559.608	560.053
LEVEL DIFFERENCE CUT - / FILL +	0.136	0.088	0.432	0.395	0.308	0.339	0.361
DESIGN LEVELS	557.481	557.450	557.970	558.958	559.422	559.947	560.414
CHAINAGE	0.000	2.199	10.000	20.000	24.688	30.000	34.688

MR50R PROFILE
SCALE : HORZ=1000 VERT=200

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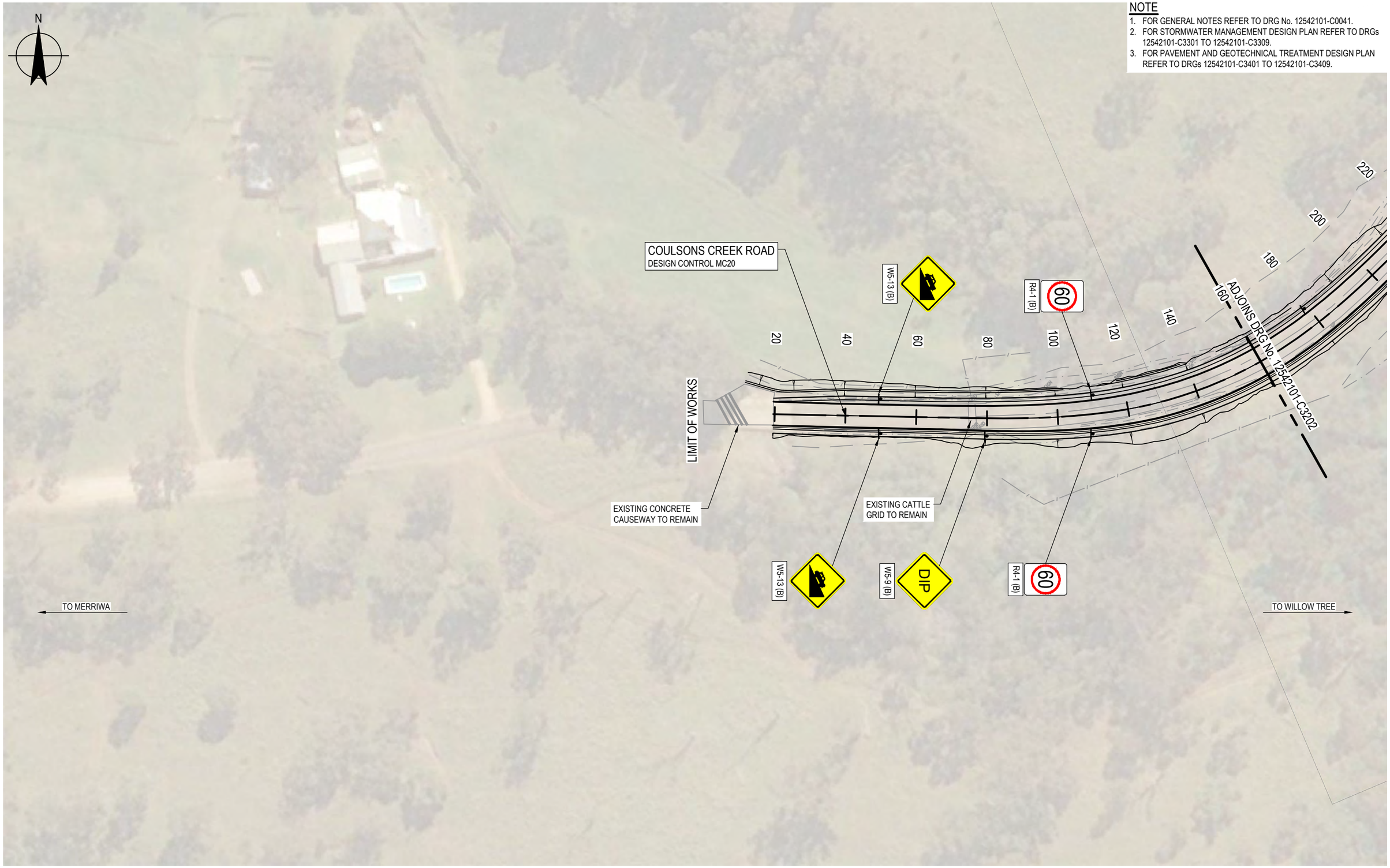
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title ALIGNMENT PLAN AND PROFILE MC50 - MR50L MR50R - SHEET 1 OF 1

Original Size A3
Drawing No: 12542101-C3161
Rev: 0

Plot Date: 27 May 2022 - 12:42 PM Plotted By: Isaac Smith
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NOTE

1. FOR GENERAL NOTES REFER TO DRG No. 12542101-C0041.
2. FOR STORMWATER MANAGEMENT DESIGN PLAN REFER TO DRGs 12542101-C3301 TO 12542101-C3309.
3. FOR PAVEMENT AND GEOTECHNICAL TREATMENT DESIGN PLAN REFER TO DRGs 12542101-C3401 TO 12542101-C3409.



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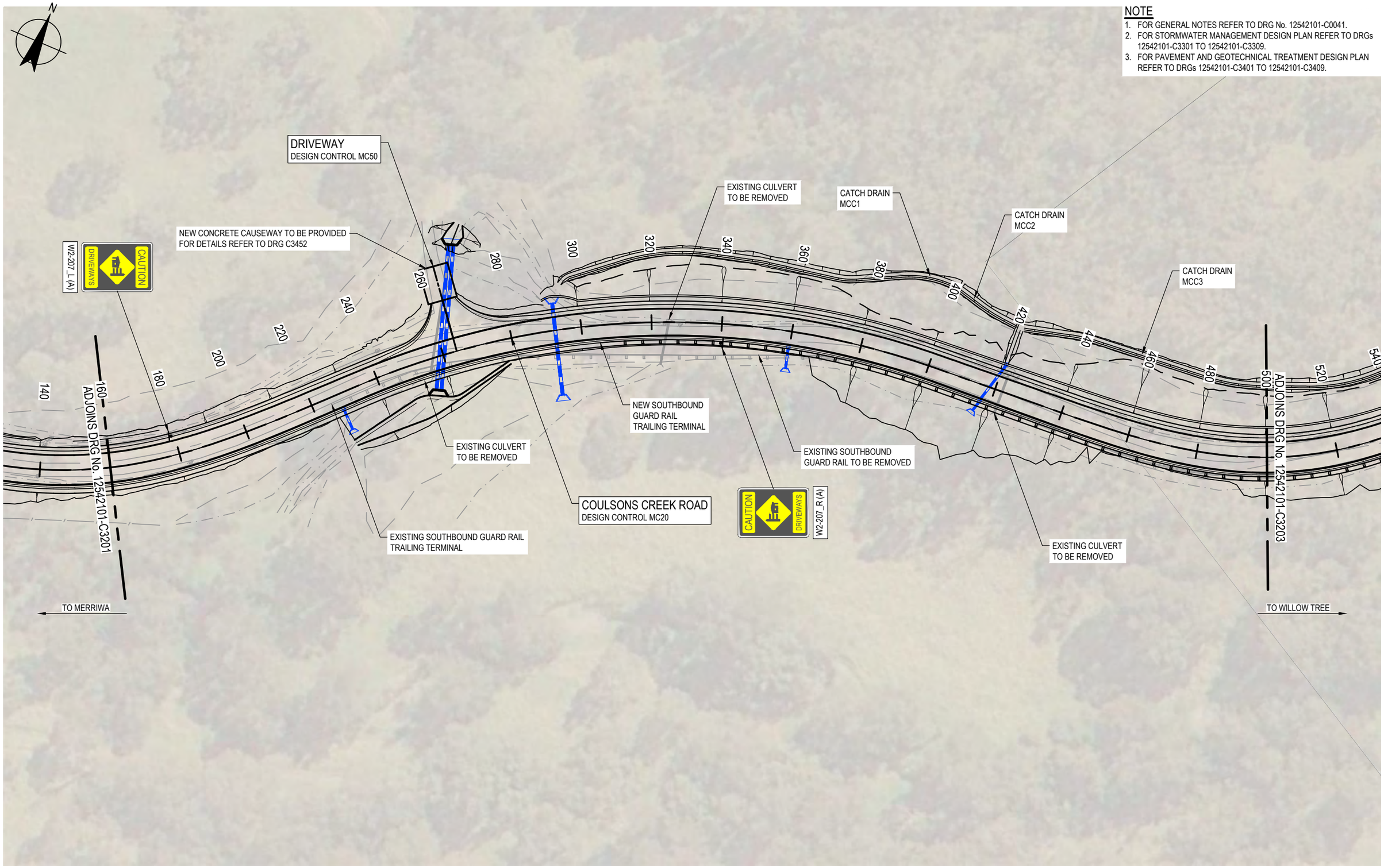
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:1000	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: DETAIL PLAN
MC20 - CH0 TO CH160 - SHEET 1 OF 9

Original Size: A3
Drawing No: 12542101-C3201
Rev: 0

Plot Date: 27 May 2022 - 12:42 PM Plotted By: Isaac Smith
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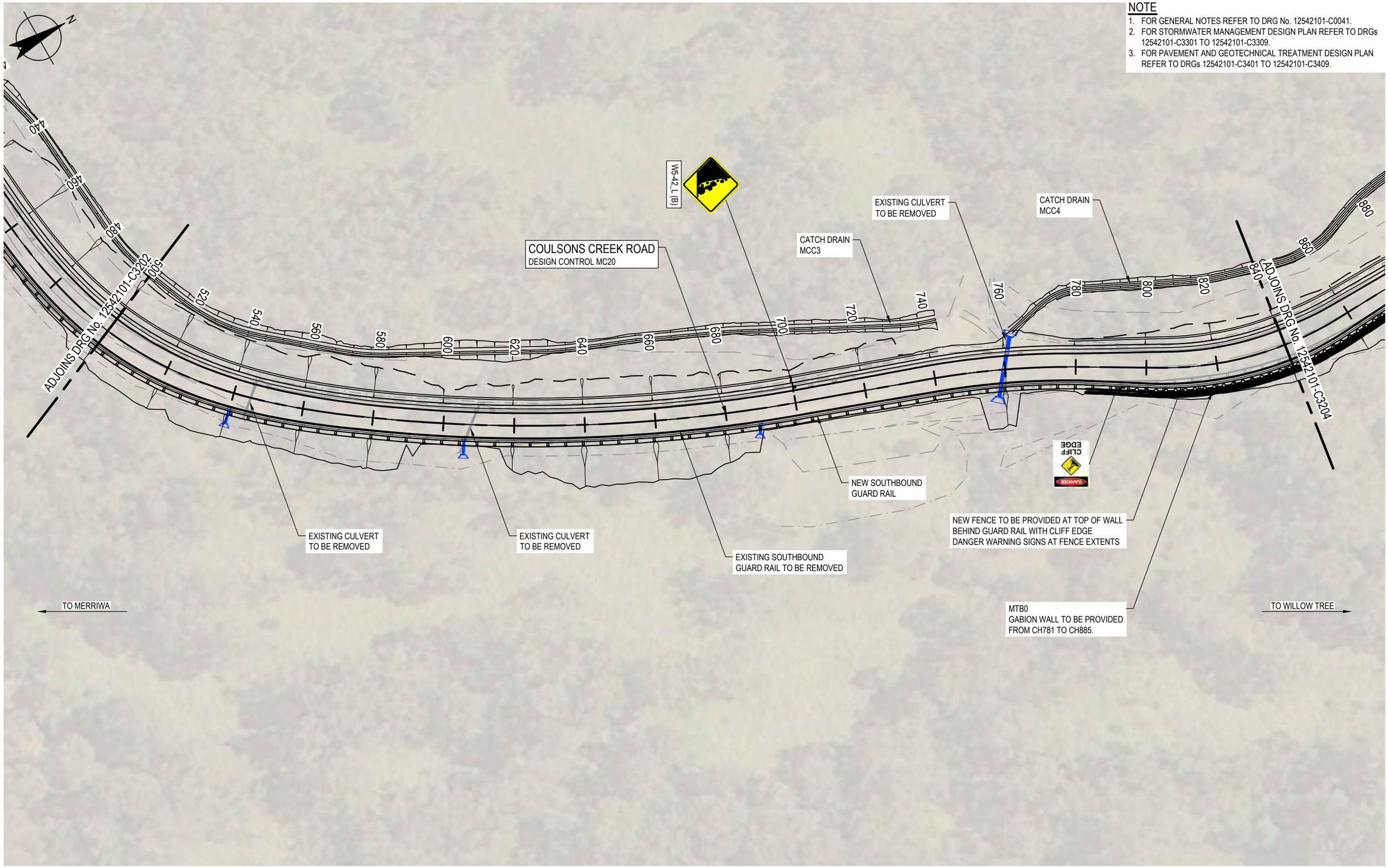
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title DETAIL PLAN
MC20 - CH160 TO CH500 - SHEET 2 OF 9

Original Size A3 Drawing No: 12542101-C3202 Rev: 0

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NOTE

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3. FOR PAVEMENT AND GEOTECHNICAL TREATMENT DESIGN PLAN REFER TO DRGs 12542101-C3401 TO 12542101-C3409.



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Approved (Project Director)	S.ROOTH		
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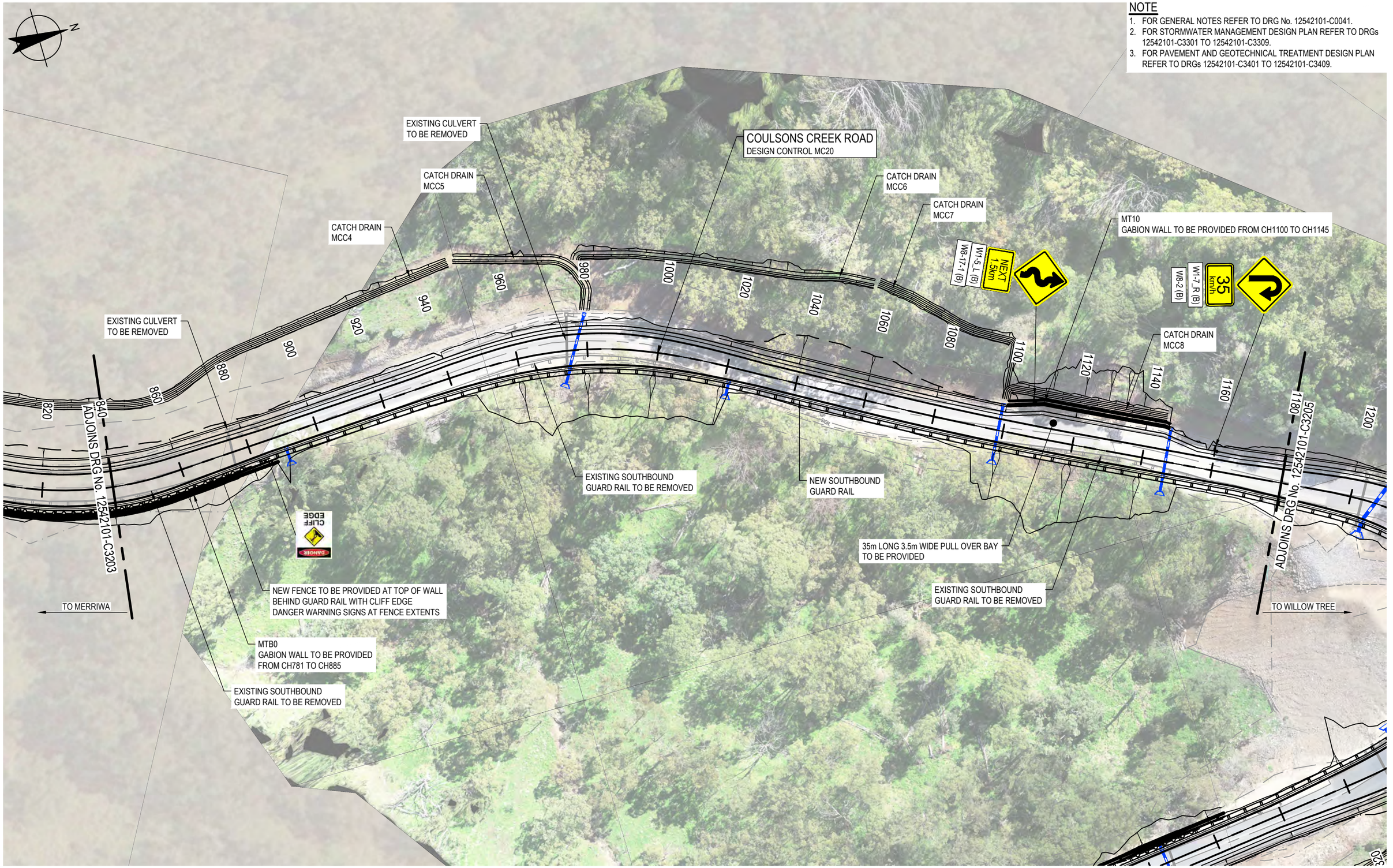
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: DETAIL PLAN
MC20 - CH500 TO CH840 - SHEET 3 OF 9

Original Size: A3
Drawing No: 12542101-C3203
Rev: 0

Plot Date: 27 May 2022 - 12:43 PM
Plotted By: Isaac Smith
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NOTE

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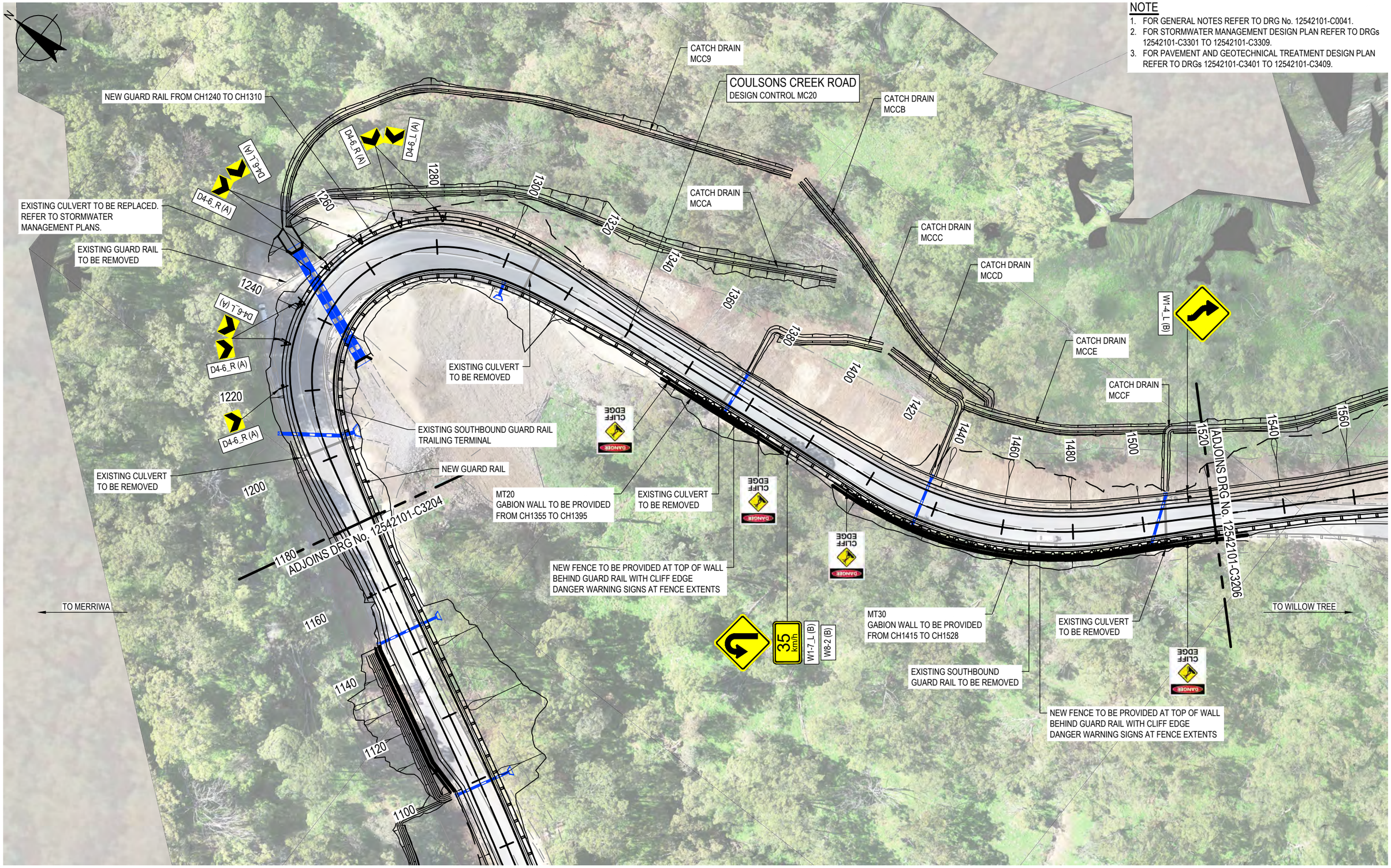
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: DETAIL PLAN
MC20 - CH840 TO CH1180 - SHEET 4 OF 9

Original Size: A3
Drawing No: 12542101-C3204
Rev: 0

Plot Date: 27 May 2022 - 4:22 PM
Plotted By: Isaac Smith
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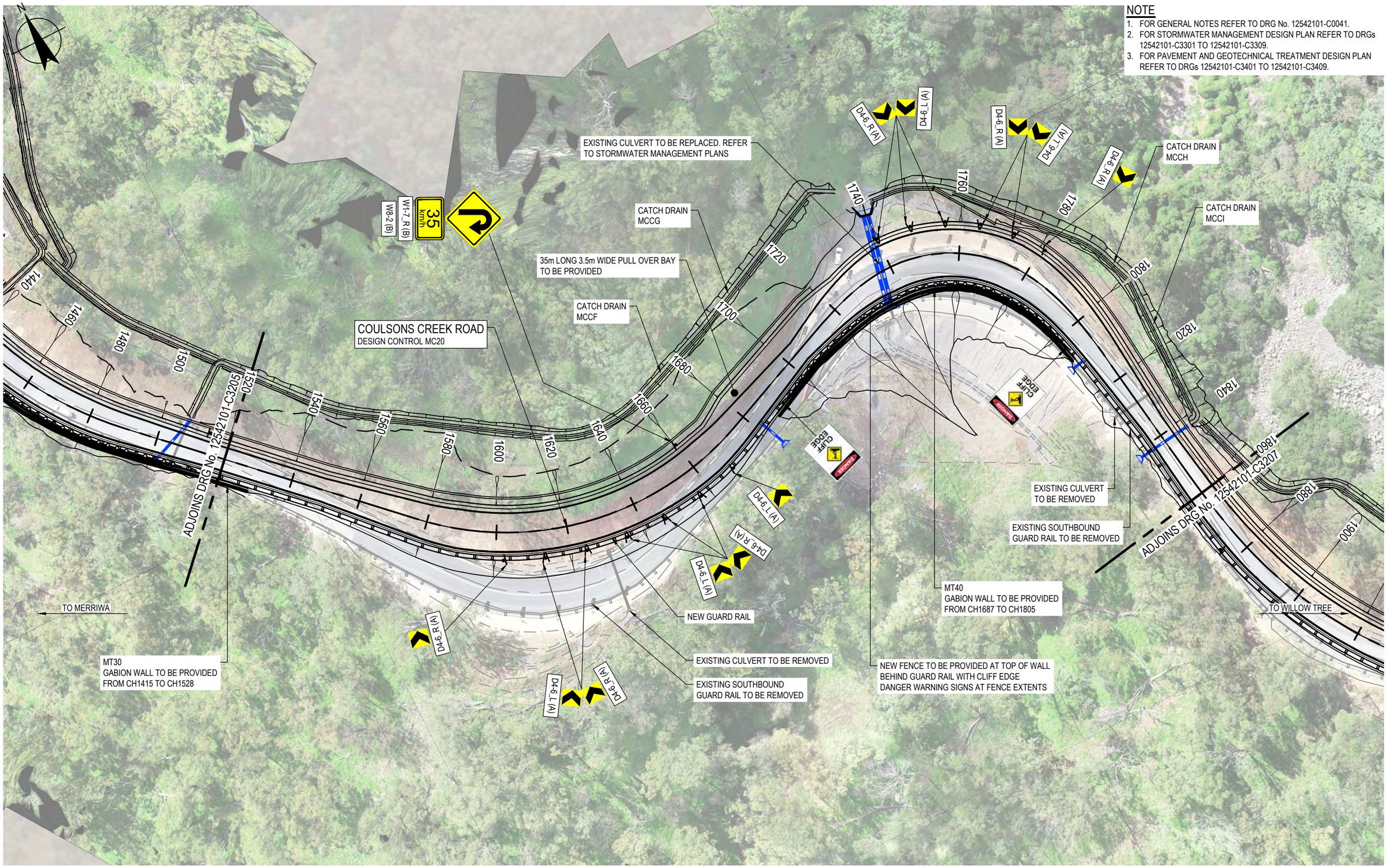
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title DETAIL PLAN
MC20 - CH1180 TO CH1520 - SHEET 5 OF 9

Original Size A3 Drawing No: 12542101-C3205 Rev: 0

Plot Date: 27 May 2022 - 4:22 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3200.dwg



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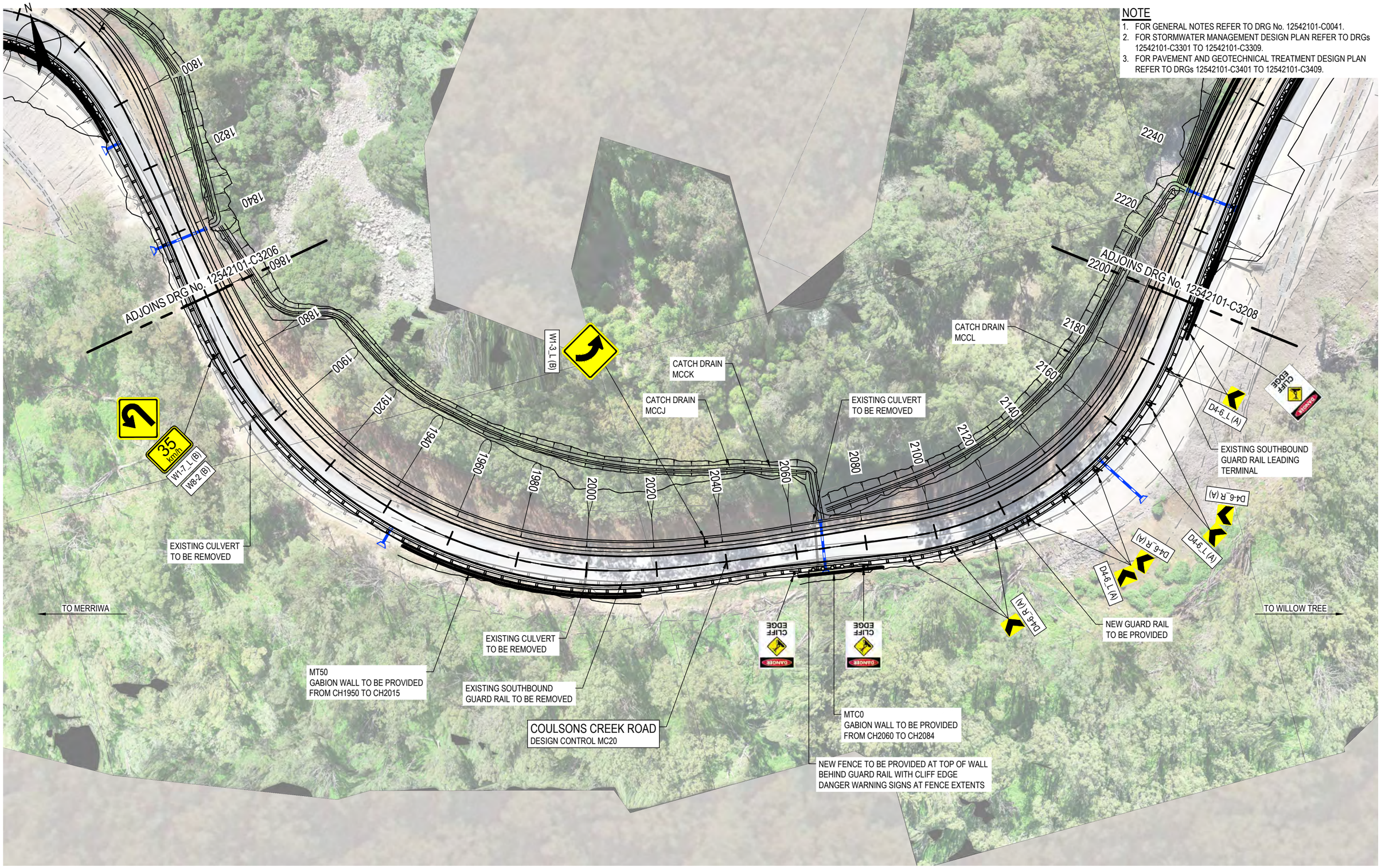
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Project COULSONS CREEK ROAD REHABILITATION
Title DETAIL PLAN
MC20 - CH1520 TO CH1860 - SHEET 6 OF 9

Original Size A3 Drawing No: 12542101-C3206 Rev: 0

Plot Date: 27 May 2022 - 12:43 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3200.dwg



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Project: COULSONS CREEK ROAD REHABILITATION
Title: DETAIL PLAN
MC20 - CH1860 TO CH2200 - SHEET 7 OF 9

Original Size A3 | Drawing No: 12542101-C3207 | Rev: 0

Plot Date: 27 May 2022 - 12:43 PM | Plotted By: Isaac Smith | Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3200.dwg

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COULSONS CREEK ROAD
DESIGN CONTROL MC20

35m LONG 3.5m WIDE PULL OVER BAY TO BE PROVIDED

CATCH DRAIN MCCP

CATCH DRAIN MCCO

CATCH DRAIN MCCN

CATCH DRAIN MCCL

CATCH DRAIN MCCL1

MTA0
GABION WALL TO BE PROVIDED FROM CH2230 TO CH2310

CATCH DRAIN MCCM

W1-4_L (B)

D4-6_R (A)

D4-6_L (A)

2160 2180 2200 2220 2240 2260 2280 2300 2320 2340 2360 2380 2400 2420 2440 2460 2480 2500 2520 2540 2560

ADJOINS DRG No. 12542101-C3207

MT80
GABION WALL TO BE PROVIDED FROM CH2500 TO CH2540

CATCH DRAIN MCCQ

EXISTING CULVERT TO BE REMOVED

EXISTING SOUTHBOUND GUARD RAIL TO BE REMOVED

EXISTING CULVERT TO BE REMIOVED

ADJOINS DRG No. 12542101-C3209

W1-3_R (B)

CLIFF EDGE

DANGER

REDUCE SPEED

W9-9 (B)

MT70
GABION WALL TO BE PROVIDED FROM CH2345 TO CH2440

NEW FENCE TO BE PROVIDED AT TOP OF WALL BEHIND GUARD RAIL WITH CLIFF EDGE DANGER WARNING SIGNS AT FENCE EXTENTS

EXISTING CULVERT PARTIALLY REMOVED DURING REMEDIATION WORKS. REMAINDER OF PIPE TO BE REMOVED.

TO MERRIWA

TO WILLOW TREE

EXISTING CULVERT PARTIALLY REMOVED DURING REMEDIATION WORKS. REMAINDER OF PIPE TO BE REMOVED.

NEW SOUTHBOUND GUARD RAIL

MT60
GABION WALL TO BE PROVIDED FROM CH2190 TO CH2338.
EXISTING FILL TO BE REMOVED, SORTED AND RE-COMPACTED.

NEW FENCE TO BE PROVIDED AT TOP OF WALL BEHIND GUARD RAIL WITH CLIFF EDGE DANGER WARNING SIGNS AT FENCE EXTENTS

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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title DETAIL PLAN
MC20 - CH2200 TO CH2540 - SHEET 8 OF 9

Original Size A3
Drawing No: 12542101-C3208
Rev: 0

Plot Date: 27 May 2022 - 12:44 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3200.dwg

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3. FOR PAVEMENT AND GEOTECHNICAL TREATMENT DESIGN PLAN REFER TO DRGs 12542101-C3401 TO 12542101-C3409.

CATCH DRAIN MCCR

COULSONS CREEK ROAD
DESIGN CONTROL MC20

EXISTING CULVERT TO BE REMOVED

35m LONG 3.5m WIDE PULL OVER BAY TO BE PROVIDED

CATCH DRAIN MCCS

LONG STEEP DESCENT NEXT 4.5km
G9-83

TRUCKS & BUSES MUST USE LOW GEAR
NEXT 4.5km
R6-22 (B)
R9-7-1 (B)

W5-11 (B)
CREST

2520 2540 2560 2580 2600 2620 2640 2660 2680 2700 2720 2740 2760 2780 2800 2820 2840 2859.149

ADJOINS DRG No. 12542101-C3208

LIMIT OF WORKS

CLIFF EDGE DANGER

EXISTING GUARD RAIL TO BE REMOVED

W1-3_L (B)

EXISTING CULVERT TO BE REMOVED

W5-42_R (B)

NEW SOUTHBOUND GUARD RAIL LEADING TERMINAL

TO MERRIWA

NEXT 1.5km
W1-5_R (B)
W8-17-1 (B)

REDUCE SPEED
W9-9 (B)

W5-12 (B)

TRUCKS & BUSES MUST USE LOW GEAR
NEXT 3km
R6-22 (B)
R9-7-1 (B)

LONG STEEP DESCENT NEXT 3km
G9-83

TO WILLOW TREE

MT90
GABION WALL TO BE PROVIDED
FROM CH2610 TO CH2676

NEW FENCE TO BE PROVIDED AT TOP OF WALL
BEHIND GUARD RAIL WITH CLIFF EDGE
DANGER WARNING SIGNS AT FENCE EXTENTS

No	Revision	Drawn	Job Manager	Project Director	Date
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Project: COULSONS CREEK ROAD REHABILITATION
Title: DETAIL PLAN
MC20 - CH2540 TO CH2880 - SHEET 9 OF 9

Original Size: A3
Drawing No: 12542101-C3209
Rev: 0

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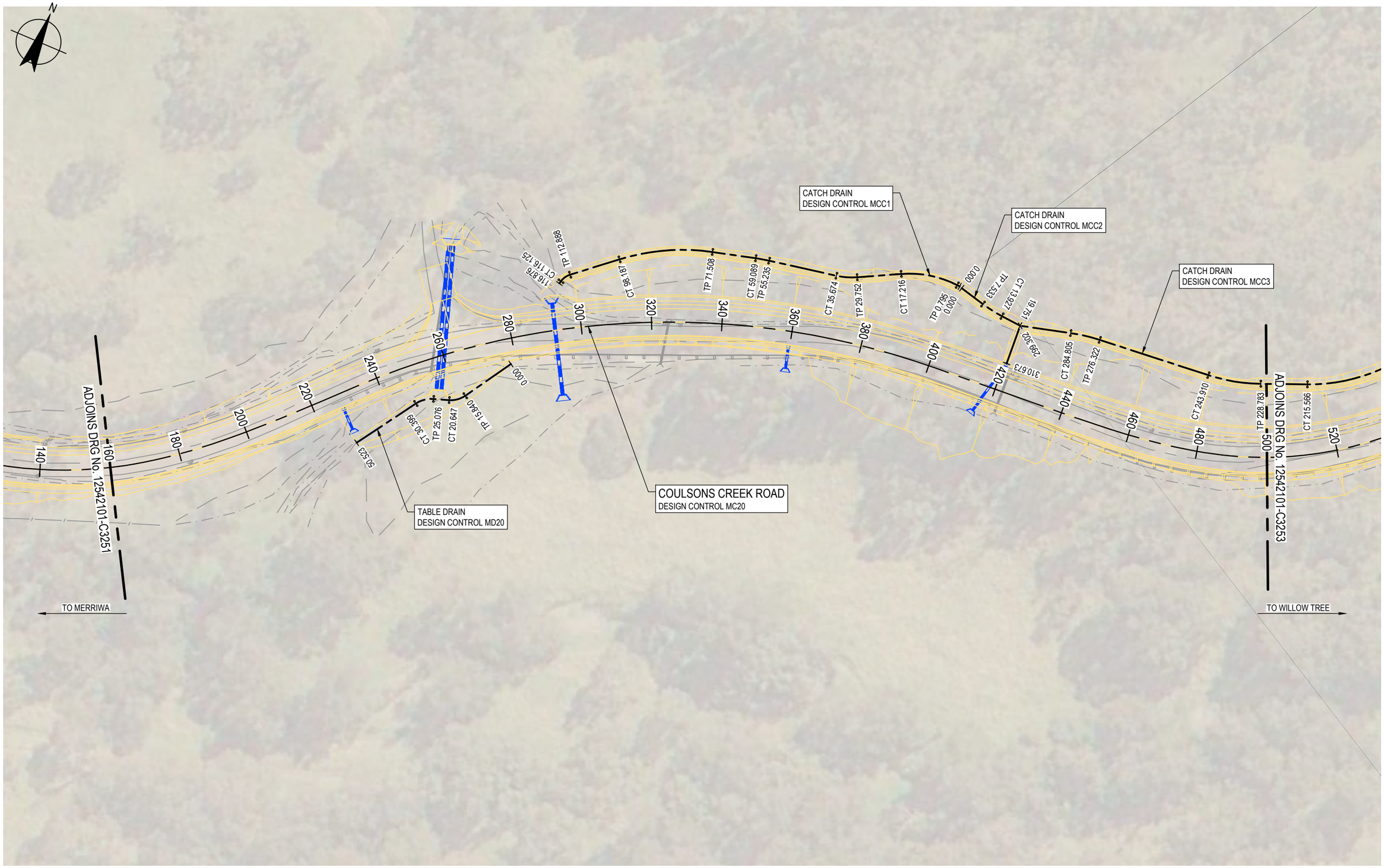
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Project: COULSONS CREEK ROAD REHABILITATION
Title: SETOUT PLAN
MC20 - CH0 TO CH160 - SHEET 1 OF 9

Original Size: A3
Drawing No: 12542101-C3251
Rev: 0

Plot Date: 27 May 2022 - 12:44 PM Plotted By: Isaac Smith
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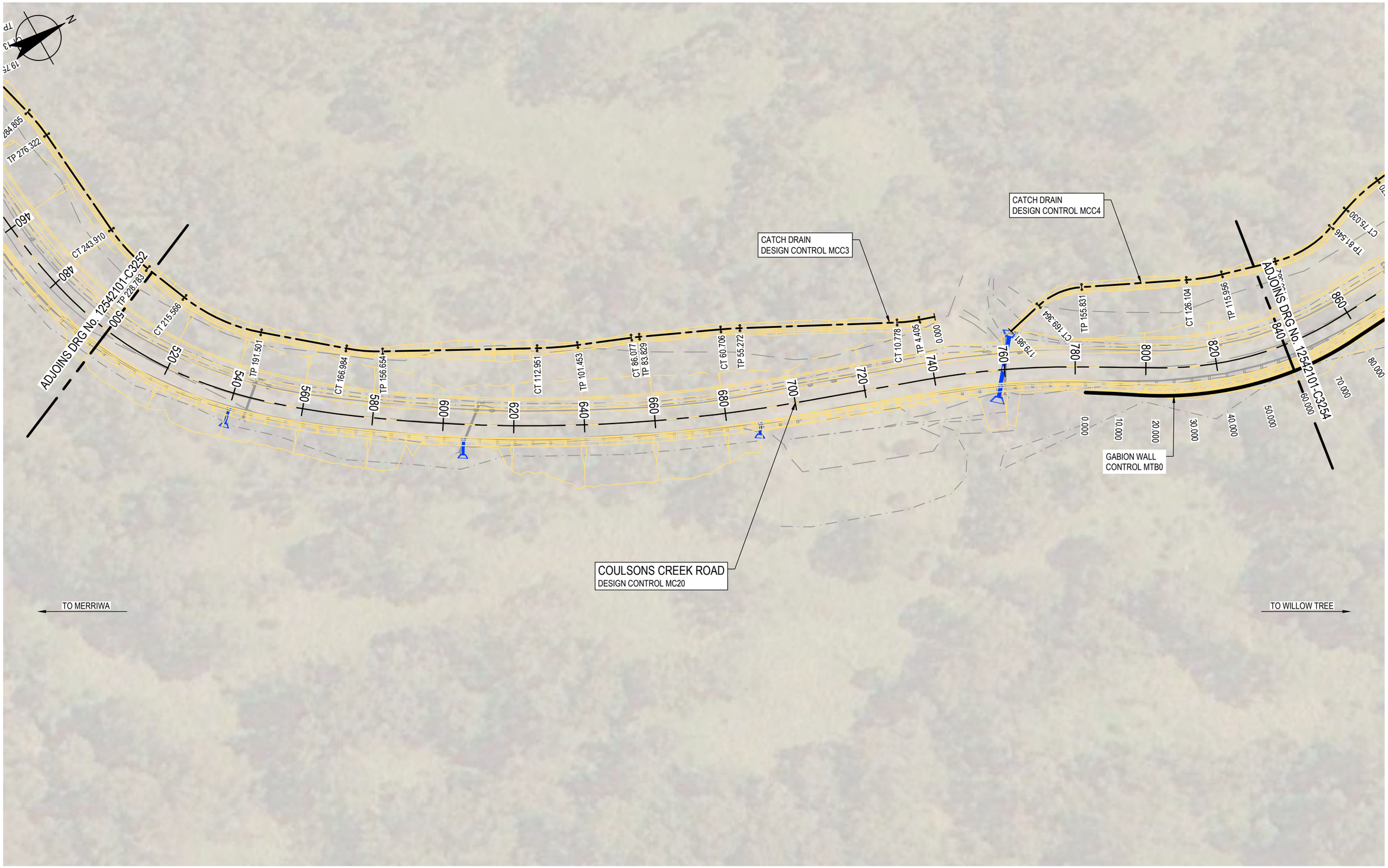
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: SETOUT PLAN
MC20 - CH160 TO CH500 - SHEET 2 OF 9

Original Size: A3
Drawing No: 12542101-C3252
Rev: 0

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Plotted By: Isaac Smith
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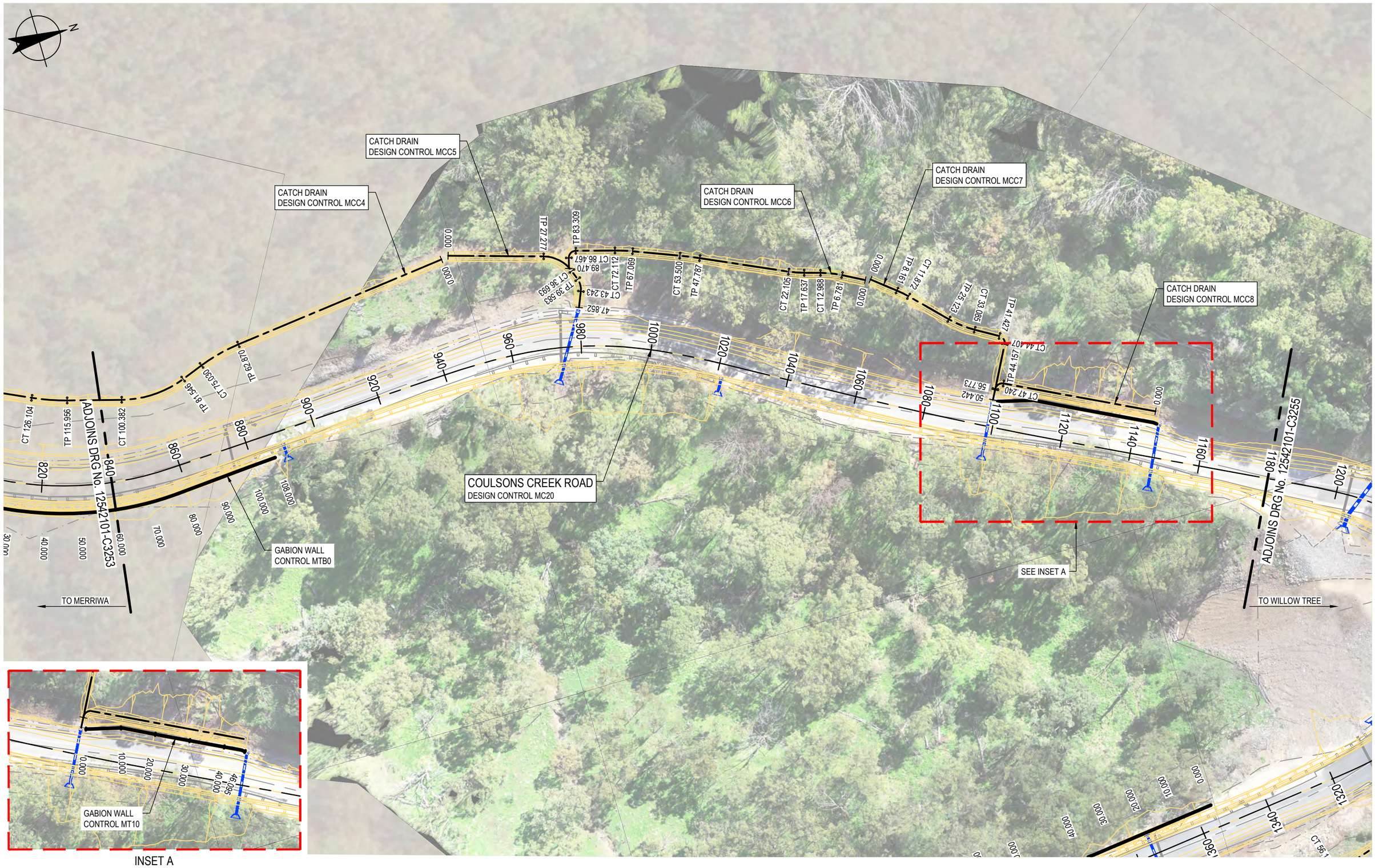
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title SETOUT PLAN
MC20 - CH500 TO CH840 - SHEET 3 OF 9

Original Size **A3** Drawing No: **12542101-C3253** Rev: **0**

Plot Date: 27 May 2022 - 12:45 PM Plotted By: Isaac Smith

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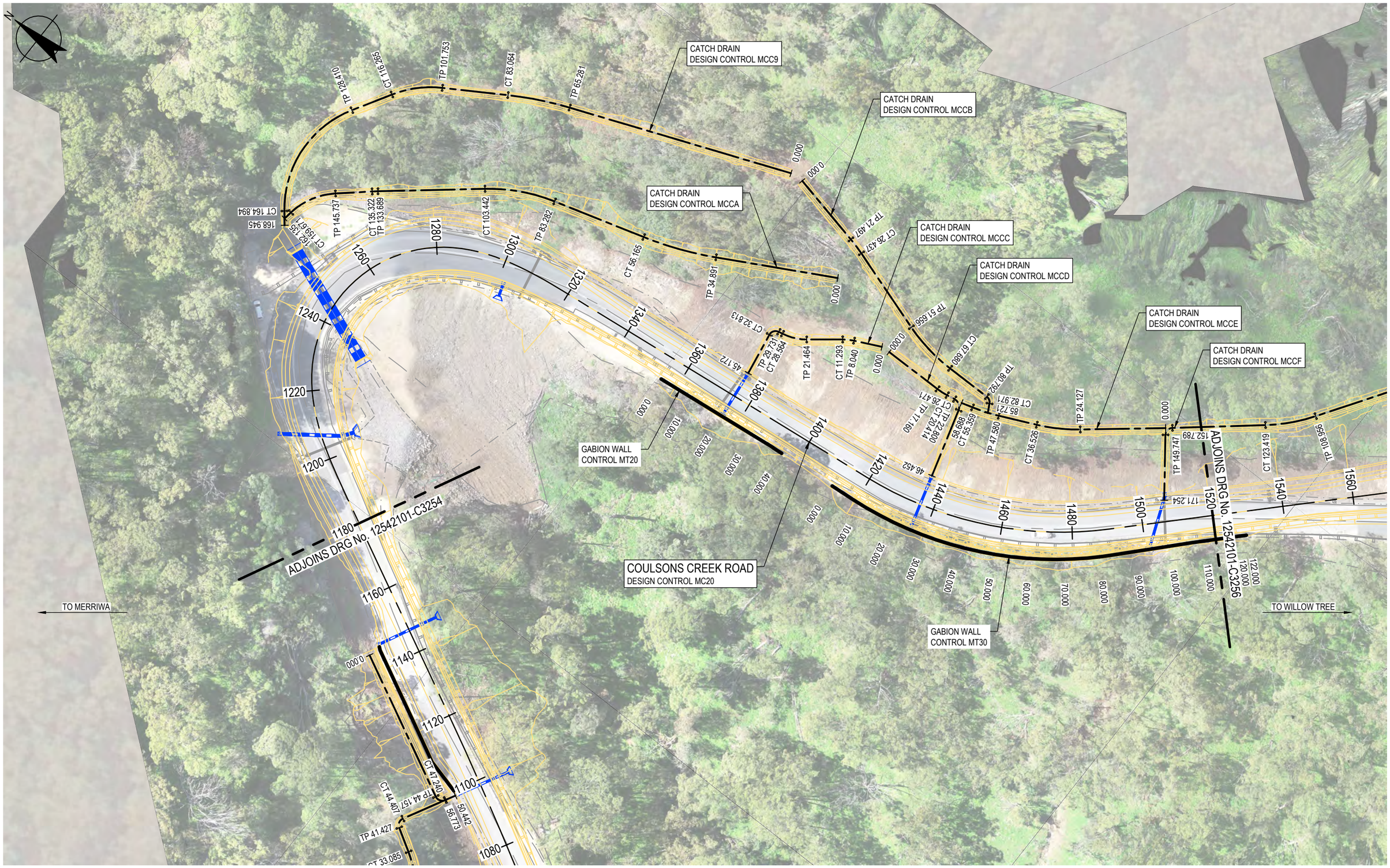
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Client UPPER HUNTER SHIRE COUNCIL
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Title SETOUT PLAN
MC20 - CH840 TO CH1180 - SHEET 4 OF 9

Original Size A3 Drawing No: **12542101-C3254** Rev: 0

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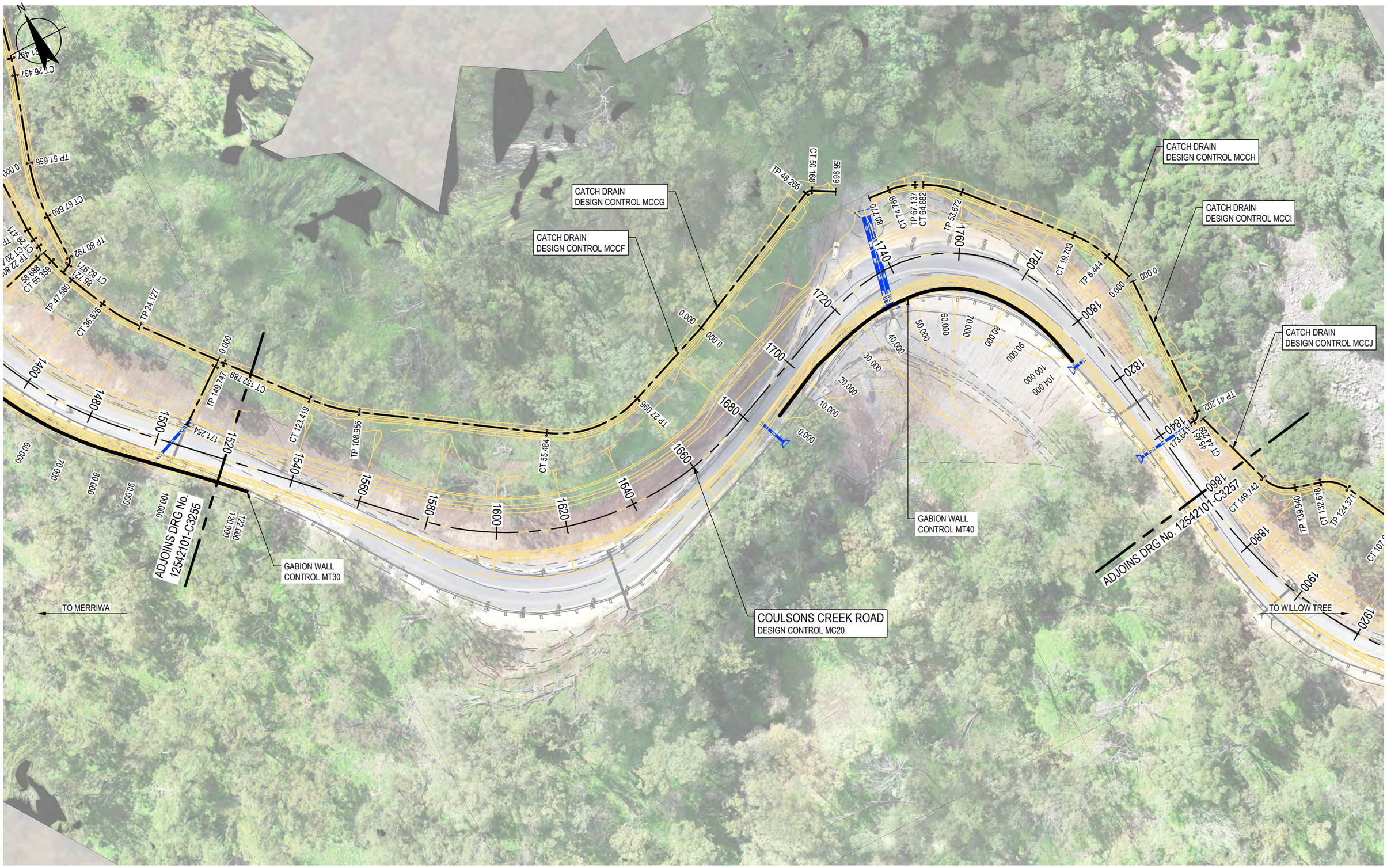
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Project COULSONS CREEK ROAD REHABILITATION
Title SETOUT PLAN
MC20 - CH1180 TO CH1520 - SHEET 5 OF 9

Original Size A3 Drawing No: **12542101-C3255** Rev: 0

Plot Date: 27 May 2022 - 12:45 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3250.dwg



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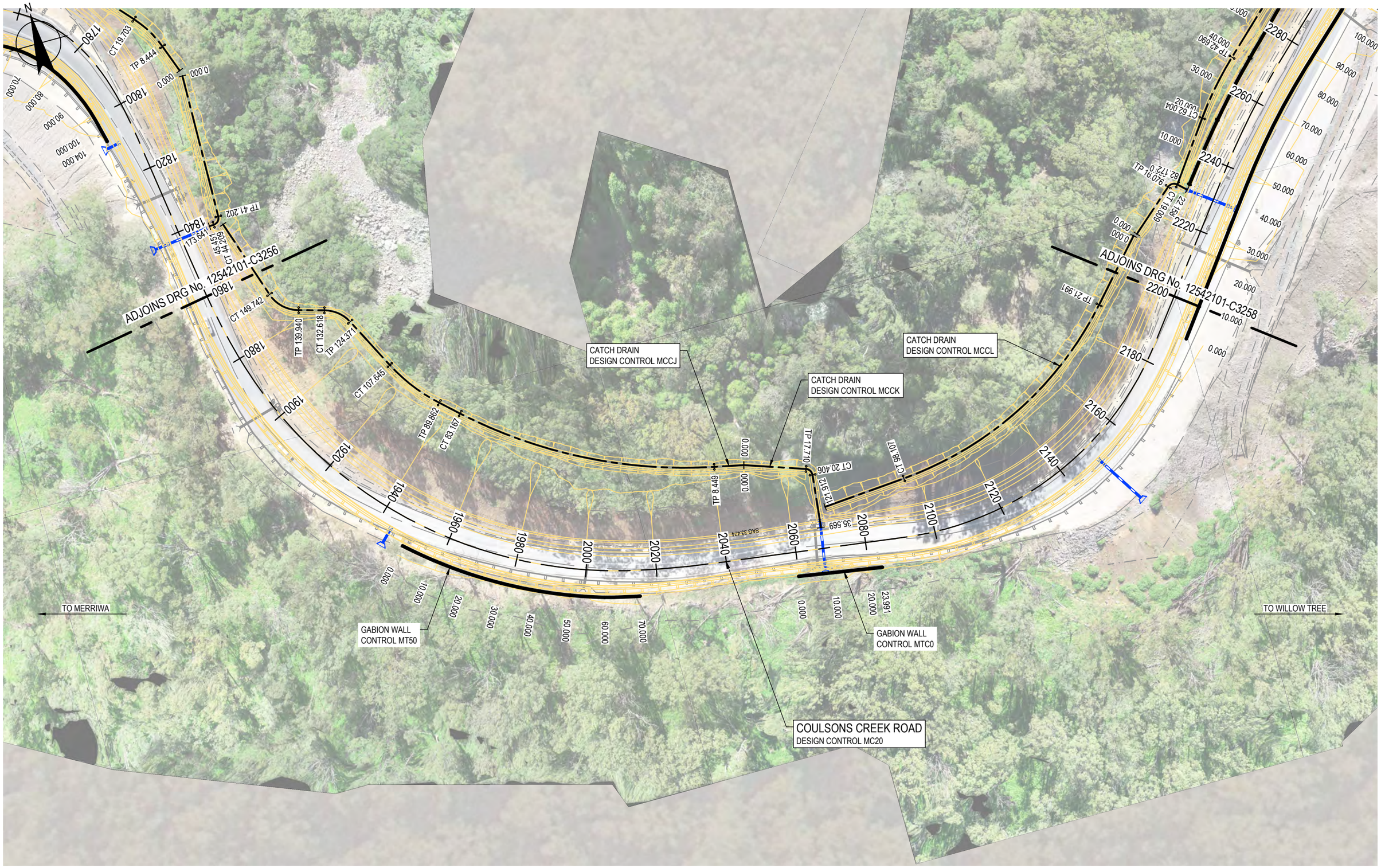
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title SETOUT PLAN
MC20 - CH1520 TO CH1860 - SHEET 6 OF 9

Original Size A3 Drawing No: **12542101-C3256** Rev: 0

Plot Date: 27 May 2022 - 12:45 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3250.dwg



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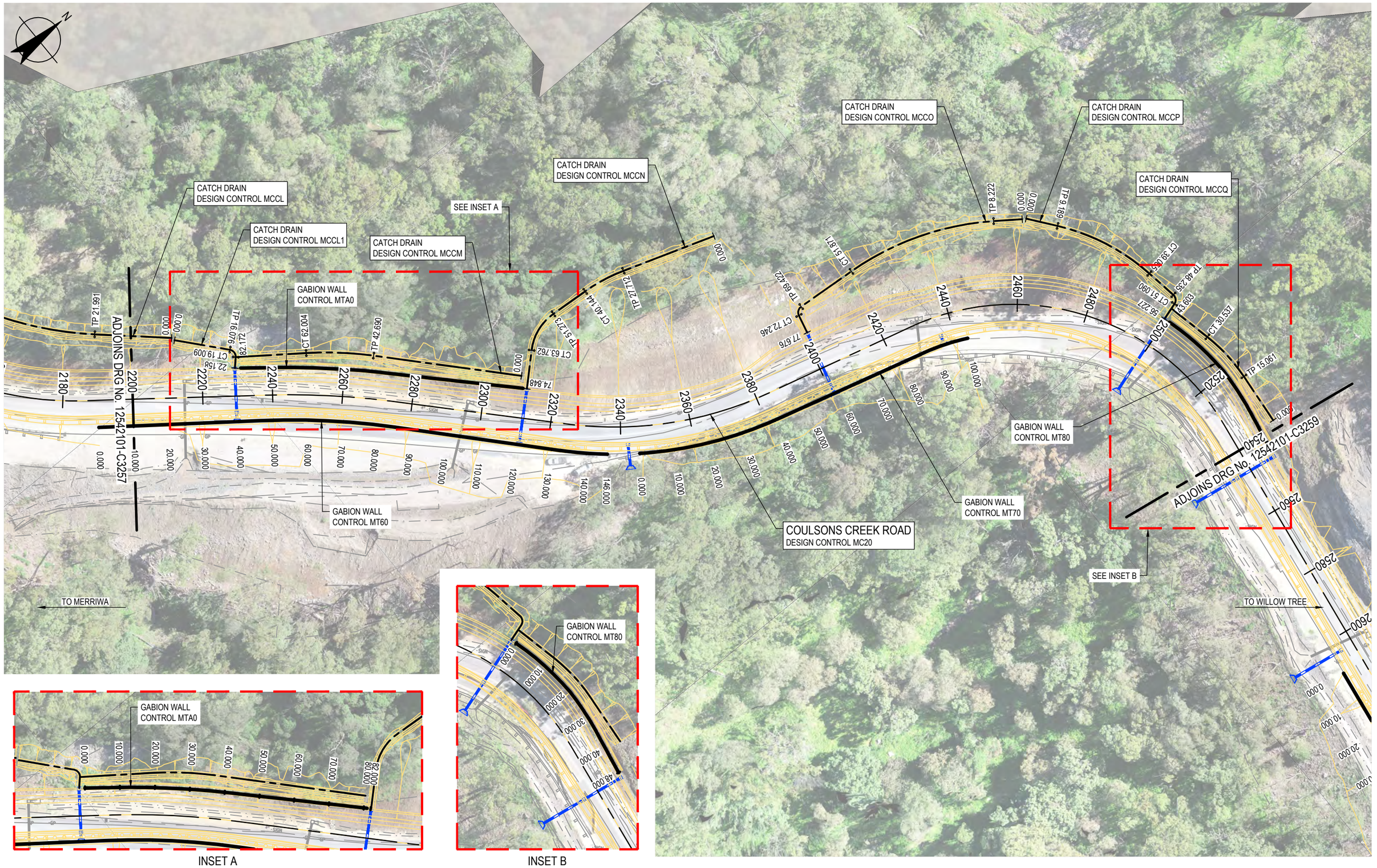
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Client: **UPPER HUNTER SHIRE COUNCIL**
Project: **COULSONS CREEK ROAD REHABILITATION**
Title: **SETOUT PLAN**
MC20 - CH1860 TO CH2200 - SHEET 7 OF 9

Original Size **A3** Drawing No: **12542101-C3257** Rev: **0**

Plot Date: 27 May 2022 - 12:45 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3250.dwg



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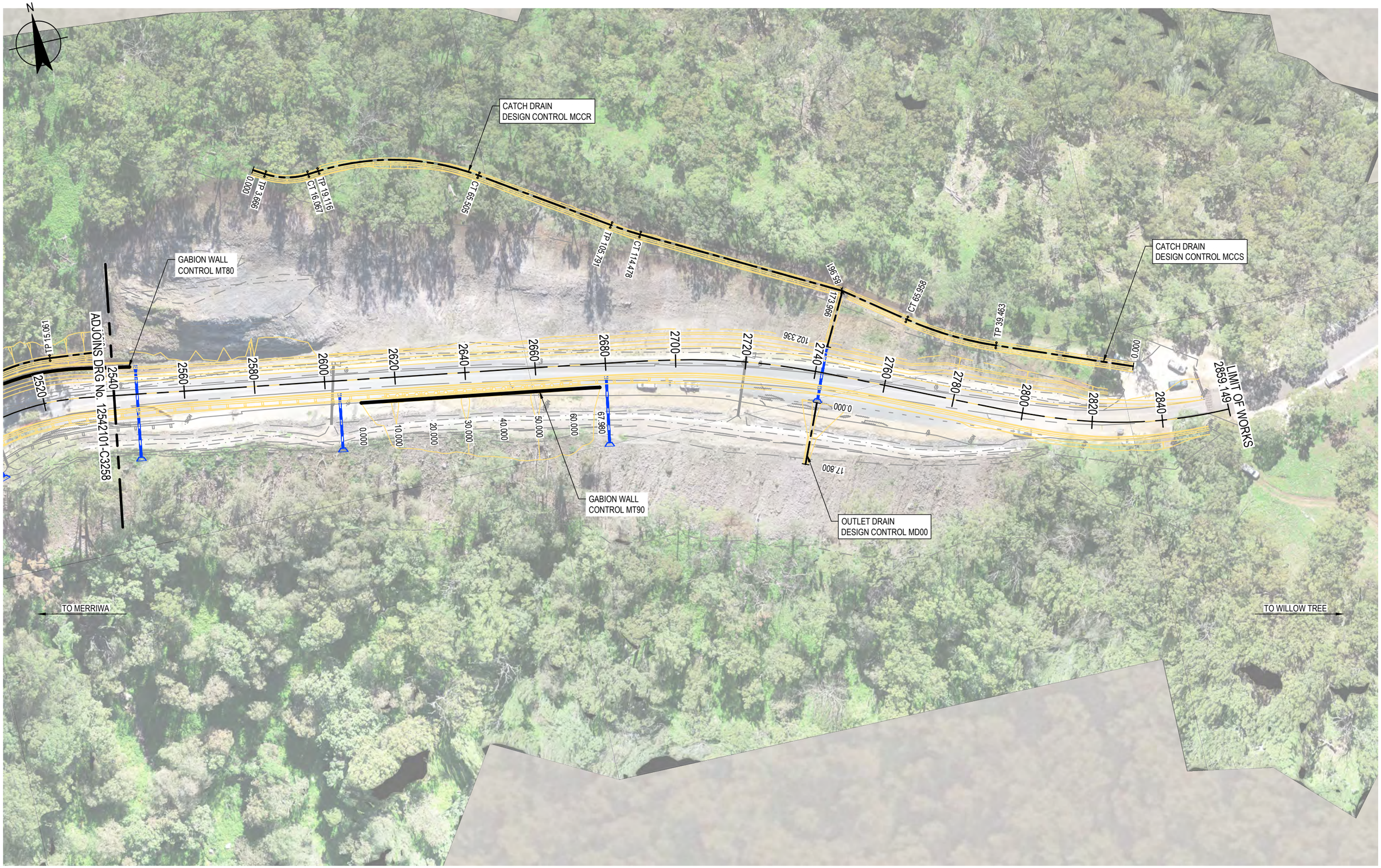
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title SETOUT PLAN
MC20 - CH2200 TO CH2540 - SHEET 8 OF 9

Original Size A3 Drawing No: 12542101-C3258 Rev: 0

Plot Date: 27 May 2022 - 12:46 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3250.dwg



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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title SETOUT PLAN
MC20 - CH2540 TO CH2880 - SHEET 9 OF 9

Original Size **A3** Drawing No: **12542101-C3259** Rev: **0**

Plot Date: 27 May 2022 - 12:46 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3250.dwg

MC20 COULSONS CREEEK ROAD - HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH
EN	19.603	262922.753	6473888.009	541.702	91°10'00.88"		
TS	67.301	262970.442	6473887.038	544.414	91°10'00.88"	L = 60.000	
SC	127.301	263030.140	6473890.927	546.674	76°28'32.47"	R = -117.000	36.420
CS	163.721	263063.666	6473904.774	548.597	58°38'26.29"	L = 60.000	
ST	223.721	263108.709	6473944.146	553.668	43°56'57.88"		
TC	234.782	263116.385	6473952.109	554.663	43°56'57.88"	R = 225.000	167.122
CT	401.904	263264.665	6474020.536	569.729	86°30'24.24"		
TS	434.470	263297.171	6474022.520	572.054	86°30'24.24"	L = 60.000	
SC	494.470	263356.188	6474031.979	576.435	69°39'18.12"	R = -102.000	24.080
CS	518.550	263377.573	6474042.926	578.245	56°07'43.90"	L = 60.000	
SC	578.550	263418.706	6474086.144	582.636	35°21'45.99"	R = -439.117	123.296
CT	701.846	263475.106	6474195.329	591.662	19°16'30.74"		
TC	737.856	263486.994	6474229.320	594.379	19°16'30.74"	R = 229.000	43.152
CT	781.008	263504.981	6474268.475	597.316	30°04'18.72"		
TC	803.482	263516.242	6474287.923	599.000	30°04'18.72"	R = -95.000	53.893
CT	857.375	263528.943	6474339.557	602.564	357°34'04.76"		
TS	930.232	263525.852	6474412.348	606.854	357°34'04.76"	L = 40.000	
SC	970.232	263526.716	6474452.273	609.163	8°35'11.07"	R = 104.000	19.304
CS	989.536	263531.348	6474470.985	610.468	19°13'17.37"	L = 40.000	
ST	1029.536	263549.209	6474506.702	613.127	30°14'23.68"		
TC	1059.862	263564.482	6474532.902	614.871	30°14'23.68"	R = -1000.000	61.023
CT	1120.885	263593.588	6474586.526	618.608	26°44'36.72"		
TS	1187.345	263623.494	6474645.876	624.027	26°44'36.72"	L = 40.000	
SC	1227.345	263647.278	6474677.391	626.832	57°42'51.21"	R = 37.000	54.671
CS	1282.016	263696.346	6474668.700	631.351	142°22'29.20"	L = 40.000	
ST	1322.016	263707.859	6474630.933	634.103	173°20'43.69"		
TC	1419.121	263719.111	6474534.482	640.216	173°20'43.69"	R = -105.000	71.396
CT	1490.516	263749.957	6474471.613	644.559	134°23'12.02"		
TC	1577.195	263811.900	6474410.982	651.050	134°23'12.02"	R = -85.000	99.359
CT	1676.554	263904.006	6474393.246	658.243	67°24'42.88"		
TS	1708.153	263933.181	6474405.383	660.605	67°24'42.88"	L = 30.000	
SC	1738.153	263961.919	6474413.318	663.665	88°53'52.18"	R = 40.000	37.965
CS	1776.118	263994.751	6474397.242	667.290	143°16'44.43"	L = 40.000	
ST	1816.118	264006.713	6474359.537	670.082	171°55'36.83"		
TS	1843.283	264010.528	6474332.641	671.827	171°55'36.83"	L = 40.000	
SC	1883.283	264018.239	6474293.438	674.396	162°45'34.46"	R = -125.000	122.059
CS	2005.342	264101.469	6474210.828	683.317	106°48'43.23"	L = 40.000	
ST	2045.342	264140.729	6474203.410	685.750	97°38'40.86"		
TC	2091.312	264186.290	6474197.295	689.202	97°38'40.86"	R = -90.000	94.450
CT	2185.762	264269.649	6474231.686	696.930	37°30'57.64"		
TC	2238.634	264301.848	6474273.624	700.720	37°30'57.64"	R = 220.000	35.113
CT	2273.746	264325.358	6474299.654	702.821	46°39'38.08"		
TC	2324.743	264362.448	6474334.653	706.050	46°39'38.08"	R = -105.000	59.357
CT	2384.100	264392.144	6474385.137	710.700	14°16'15.46"		
TC	2428.283	264403.035	6474427.956	714.055	14°16'15.46"	R = 70.000	103.168
CT	2531.451	264481.481	6474479.893	720.658	98°42'53.61"		
TS	2675.133	264623.505	6474458.122	730.997	98°42'53.61"	L = 40.000	
SC	2715.133	264662.741	6474450.475	733.953	105°39'35.40"	R = 165.000	7.018
CS	2722.151	264669.456	6474448.437	734.434	108°05'48.24"	L = 35.000	
ST	2757.151	264701.857	6474435.249	736.829	114°10'24.81"		
TS	2781.196	264723.793	6474425.402	738.474	114°10'24.81"	L = 40.000	
SC	2821.196	264761.038	6474410.929	741.212	105°21'31.76"	R = -130.000	35.097
CT	2856.293	264795.719	6474406.287	742.454	89°53'25.28"		
EN	2859.149	264798.574	6474406.292	742.372	89°53'25.28"		

No	Revision	Drawn	Job Manager	Project Director	Date
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title ROAD SETOUT SCHEDULES SHEET 1 OF 3

Original Size A3 Drawing No: 12542101-C3271 Rev: 0

Plot Date: 27 May 2022 - 12:46 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3270.dwg

MC20 COULSONS CREEEK ROAD - VERTICAL POINTS

PT	CHAINAGE	HEIGHT	GRADE	K VALUE	RADIUS	LENGTH
IP 1	19.603	541.702				
TC	47.171	543.074	5.00%			
IP 2	52.171	543.322		4.46	446.035	10.000
CT	57.171	543.683	7.20%			
TC	70.656	544.656	7.20%			
IP 3	75.656	545.017		2.47	247.129	10.000
CT	80.656	545.176	3.20%			
IP 4	121.806	546.481				
TC	125.284	546.602	3.50%			
IP 5	155.284	547.649		11.31	1131.258	60.000
CT	185.284	550.288	8.80%			
TC	223.600	553.657	8.80%			
IP 6	248.600	555.856		27.60	2760.226	50.000
CT	273.600	558.507	10.60%			
TC	303.123	561.639	10.60%			
IP 7	333.123	564.820		17.30	1729.854	60.000
CT	363.123	566.962	7.10%			
TC	446.443	572.908	7.10%			
IP 8	471.754	574.715		116.67	11667.422	50.624
CC	497.066	576.631	7.60%			
IP 9	522.378	578.548		172.72	17272.212	50.624
CT	547.690	580.390	7.30%			
IP 10	691.439	590.852				
IP 11	704.777	591.890				
IP 12	737.144	594.331				
IP 13	784.913	597.582				
TC	807.758	599.326	7.60%			
IP 14	827.758	600.853		21.50	2150.262	40.000
CT	847.758	602.008	5.80%			
IP 15	911.691	605.700				
TC	927.574	606.689	6.20%			
IP 16	942.964	607.648		36.94	3693.647	30.778
CC	958.353	608.478	5.40%			
IP 17	973.742	609.308		15.77	1577.064	30.778
CT	989.131	610.438	7.30%			
TC	992.182	610.663	7.30%			
IP 18	1012.182	612.132		25.00	2499.586	40.000
CT	1032.182	613.281	5.70%			
TC	1092.255	616.732	5.70%			
IP 19	1117.255	618.169		17.78	1778.444	50.000
CT	1142.255	620.308	8.60%			
TC	1157.715	621.631	8.60%			
IP 20	1187.715	624.198		31.40	3139.606	60.000
CT	1217.715	626.192	6.60%			
TC	1226.148	626.752	6.60%			
IP 21	1246.148	628.081		14.71	1471.090	40.000
CT	1266.148	629.954	9.40%			
TC	1266.710	630.007	9.40%			
IP 22	1286.710	631.880		13.03	1302.947	40.000
CT	1306.710	633.139	6.30%			
IP 23	1467.972	643.291				
TC	1530.340	646.798	5.60%			
IP 24	1550.340	647.923		6.65	664.595	40.000
CT	1570.340	650.251	11.60%			
TC	1601.909	653.927	11.60%			

MC20 COULSONS CREEEK ROAD - VERTICAL POINTS

PT	CHAINAGE	HEIGHT	GRADE	K VALUE	RADIUS	LENGTH
IP 25	1621.909	656.255		4.94	493.944	40.000
CT	1641.909	656.964	3.50%			
TC	1668.746	657.915	3.50%			
IP 26	1688.746	658.624		6.01	600.679	40.000
CT	1708.746	660.665	10.20%			
TC	1750.413	664.916	10.20%			
IP 27	1775.413	667.467		13.23	1322.735	50.000
CT	1800.413	669.073	6.40%			
TC	1893.367	675.044	6.40%			
IP 28	1913.367	676.329		22.90	2289.671	40.000
CT	1933.367	677.963	8.20%			
TC	1960.384	680.170	8.20%			
IP 29	1980.384	681.804		18.96	1896.208	40.000
CT	2000.384	683.016	6.10%			
TC	2039.542	685.390	6.10%			
IP 30	2059.542	686.602		18.86	1885.586	40.000
CT	2079.542	688.238	8.20%			
TC	2194.257	697.625	8.20%			
IP 31	2214.257	699.261		18.20	1819.683	40.000
CT	2234.257	700.458	6.00%			
TC	2297.520	704.244	6.00%			
IP 32	2317.520	705.441		20.89	2089.332	40.000
CT	2337.520	707.020	7.90%			
TC	2390.975	711.243	7.90%			
IP 33	2440.975	715.192		51.85	5185.395	100.000
CT	2490.975	718.177	6.00%			
TC	2510.919	719.368	6.00%			
IP 34	2535.919	720.860		32.68	3268.234	50.000
CT	2560.919	722.735	7.50%			
IP 35	2599.919	725.660				
IP 36	2630.348	727.638				
IP 37	2708.493	733.499				
TC	2831.001	741.883	6.80%			
IP 38	2845.075	742.846		2.76	275.671	28.148
IP 39	2859.149	742.372				

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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: ROAD SETOUT SCHEDULES SHEET 2 OF 3

Original Size: A3 **Drawing No: 12542101-C3272** **Rev: 0**

Plot Date: 27 May 2022 - 12:46 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3270.dwg

MC50 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	263137.971	6473971.771	557.506	321°19'25.78"
IP 2	24.934	263122.389	6473991.236	557.402	321°19'25.78"

MC50 VERTICAL POINTS

PT	CHAINAGE	HEIGHT	GRADE	K VALUE	RADIUS	LENGTH
IP 1	0.000	557.506				
TC	3.800	557.676	4.50%			
IP 2	8.058	557.868		0.72	71.489	8.516
CC	12.316	557.551	-7.40%			
IP 3	16.574	557.235		0.91	90.468	8.516
CT	20.832	557.320	2.00%			
IP 4	24.934	557.402				

MR50L HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263117.243	6473958.391	555.302	40°31'55.76"			
TC	10.000	263123.741	6473965.991	556.281	40°31'55.76"			
IP 2	20.368	263131.807	6473975.424	557.035		R = -15.000	20.737	79°12'29.98"
IP 3	30.737	263124.051	6473985.113	557.193	321°19'25.78"			

MR50L VERTICAL POINTS

PT	CHAINAGE	HEIGHT	GRADE	K VALUE	RADIUS	LENGTH
IP 1	0.000	555.302				
IP 2	1.021	555.400				
IP 3	2.042	555.498				
IP 4	3.064	555.597				
IP 5	4.088	555.697				
IP 6	5.112	555.797				
IP 7	6.137	555.898				
IP 8	7.163	555.999				
IP 9	8.190	556.101				
IP 10	8.998	556.181				
IP 11	9.218	556.203				
TC	10.000	556.281	10.00%			
IP 12	16.221	556.904		1.90	189.554	12.442
CC	22.442	557.117	3.40%			
IP 13	26.589	557.260		1.64	163.840	8.295
IP 14	30.737	557.193				

MR50R HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263125.946	6473990.161	557.481	141°19'25.78"			
IP 2	12.344	263135.150	6473978.662	558.202		R = -18.000	24.688	78°35'02.25"
CT	24.688	263148.243	6473985.409	559.422	62°44'23.53"			
IP 3	34.688	263157.132	6473989.989	560.414	62°44'23.53"			

MR50R VERTICAL POINTS

PT	CHAINAGE	HEIGHT	GRADE	K VALUE	RADIUS	LENGTH
IP 1	0.000	557.481				
TC	1.271	557.458	-1.80%			
IP 2	4.271	557.404		0.51	51.314	6.000
CT	7.271	557.700	9.90%			
IP 3	29.790	559.926				
IP 4	29.893	559.936				
IP 5	29.995	559.946				
IP 6	30.098	559.956				
IP 7	30.200	559.967				
IP 8	30.302	559.977				
IP 9	30.405	559.987				
IP 10	30.507	559.997				
IP 11	30.610	560.007				
IP 12	30.712	560.017				
IP 13	30.814	560.027				
IP 14	30.917	560.038				
IP 15	31.019	560.048				
IP 16	31.121	560.058				
IP 17	31.224	560.068				
IP 18	31.326	560.078				
IP 19	31.428	560.088				
IP 20	31.531	560.099				
IP 21	31.633	560.109				
IP 22	31.735	560.119				
IP 23	31.837	560.129				
IP 24	31.940	560.139				
IP 25	32.042	560.149				
IP 26	32.144	560.160				
IP 27	32.246	560.170				
IP 28	32.349	560.180				
IP 29	32.451	560.190				
IP 30	32.553	560.200				
IP 31	32.655	560.210				
IP 32	32.757	560.221				
IP 33	32.860	560.231				
IP 34	32.962	560.241				
IP 35	33.064	560.251				
IP 36	33.166	560.261				
IP 37	33.268	560.272				
IP 38	33.370	560.282				
IP 39	33.473	560.292				

MR50R VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 40	33.575	560.302
IP 41	33.677	560.312
IP 42	33.779	560.323
IP 43	33.881	560.333
IP 44	33.983	560.343
IP 45	34.085	560.353
IP 46	34.187	560.363
IP 47	34.289	560.374
IP 48	34.391	560.384
IP 49	34.493	560.394
IP 50	34.595	560.404
IP 51	34.688	560.414

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Drafting Check B.DREW		Design Check A.SNEDDON	
Approved (Project Director) S.ROOTH			
Date 27.05.2022			
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Client **UPPER HUNTER SHIRE COUNCIL**
Project **COULSONS CREEK ROAD REHABILITATION**
Title **ROAD SETOUT SCHEDULES SHEET 3 OF 3**

Original Size **A3** Drawing No: **12542101-C3273** Rev: **0**

Plot Date: 27 May 2022 - 12:46 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3270.dwg

CATCH DRAIN - MCC1 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263262.092	6474044.547	576.869	273°58'01.10"			
TC	0.795	263261.299	6474044.602	576.835	273°58'01.10"			
IP 2	9.006	263252.897	6474045.185	576.075		R = -30.000	16.421	31°21'44.34"
CT	17.216	263245.420	6474041.309	574.279	242°36'16.75"			
TC	29.752	263234.290	6474035.541	572.192	242°36'16.75"			
IP 3	32.713	263231.641	6474034.169	571.886		R = 20.000	5.922	16°57'56.17"
CT	35.674	263228.708	6474033.629	571.730	259°34'12.92"			
TC	55.235	263209.470	6474030.088	571.632	259°34'12.92"			
IP 4	57.162	263207.574	6474029.739	571.531		R = -50.000	3.854	4°24'58.23"
CT	59.089	263205.710	6474029.245	571.424	255°09'14.70"			
TC	71.508	263193.706	6474026.063	570.735	255°09'14.70"			
IP 5	84.847	263180.595	6474022.587	569.071		R = -60.000	26.679	25°28'34.55"
CT	98.187	263170.254	6474013.811	566.514	229°40'40.15"			
TC	112.888	263159.045	6474004.298	563.273	229°40'40.15"			
IP 6	114.507	263157.767	6474003.212	562.682		R = -5.000	3.236	37°05'12.41"
CT	116.125	263157.401	6474001.575	562.010	192°35'27.73"			
IP 7	116.876	263157.237	6474000.842	561.646	192°35'27.73"			

CATCH DRAIN - MCC1 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	576.869
IP 2	6.667	576.587
IP 3	24.097	572.774
IP 4	34.162	571.737
IP 5	55.346	571.631
IP 6	74.246	570.583
IP 7	82.903	569.415
IP 8	95.793	567.134
IP 9	108.191	563.925
IP 10	112.500	563.415
IP 11	115.452	562.336

CATCH DRAIN - MCC2 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263262.818	6474044.310	576.955	103°52'10.87"			
TC	7.533	263270.131	6474042.504	576.538	103°52'10.87"			
IP 2	10.730	263273.242	6474041.736	576.198		R = -40.000	6.394	9°09'30.16"
CT	13.927	263276.435	6474041.473	575.812	94°42'40.71"			
IP 3	19.751	263282.238	6474040.995		94°42'40.71"			

CATCH DRAIN - MCC2 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	576.955
IP 2	8.220	576.500
IP 3	14.304	575.767
IP 4	19.284	575.560

CATCH DRAIN - MCC3 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263472.634	6474239.886	599.593	198°10'02.40"			
TC	4.405	263471.261	6474235.701	599.191	198°10'02.40"			
IP 2	7.592	263470.265	6474232.666	598.900		R = 40.000	6.373	9°07'44.36"
CT	10.778	263468.801	6474229.829	598.608	207°17'46.76"			
TC	55.272	263448.396	6474190.289	596.385	207°17'46.76"			
IP 3	57.989	263447.150	6474187.874	596.358		R = -100.000	5.434	3°06'47.93"
CT	60.706	263446.037	6474185.395	596.331	204°10'58.83"			
TC	83.829	263436.564	6474164.301	595.659	204°10'58.83"			
IP 4	84.953	263436.104	6474163.276	595.594		R = -50.000	2.248	2°34'32.42"
CT	86.077	263435.690	6474162.231	595.529	201°36'26.41"			
TC	101.453	263430.028	6474147.935	593.910	201°36'26.41"			
IP 5	107.202	263427.908	6474142.584	593.083		R = 100.000	11.499	6°35'17.97"
CT	112.951	263425.189	6474137.511	592.440	208°11'44.37"			
TC	156.654	263404.540	6474098.995	587.440	208°11'44.37"			
IP 6	161.819	263402.091	6474094.426	586.837		R = 50.000	10.331	11°50'17.18"
CT	166.984	263398.756	6474090.457	586.235	220°02'01.55"			
TC	191.501	263382.987	6474071.686	583.513	220°02'01.55"			
IP 7	203.533	263375.094	6474062.291	582.478		R = 50.000	24.065	27°34'35.48"
CT	215.566	263363.749	6474057.617	582.288	247°36'37.03"			
TC	228.783	263351.527	6474052.582	581.509	247°36'37.03"			
IP 8	236.347	263344.480	6474049.679	581.449		R = 50.000	15.126	17°20'00.70"
CT	243.910	263336.889	6474049.008	581.411	264°56'37.73"			
TC	276.322	263304.602	6474046.151	579.482	264°56'37.73"			
IP 9	280.564	263300.367	6474045.776	578.785		R = -50.000	8.483	9°43'14.48"
CT	284.805	263296.256	6474044.692	577.840	255°13'23.25"			
IP 10	299.302	263282.238	6474040.995	575.583				
IP 11	310.673	263282.883	6474029.642	570.931	176°45'10.82"			

CATCH DRAIN - MCC3 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	599.593
IP 2	23.618	597.436
IP 3	53.068	596.407
IP 4	74.610	596.192
IP 5	92.966	595.132
IP 6	111.235	592.503
IP 7	121.574	592.126
IP 8	149.794	588.240
IP 9	185.559	584.069
IP 10	201.139	582.613
IP 11	205.714	582.355
IP 12	220.986	582.252
IP 13	229.034	581.485
IP 14	255.350	581.354
IP 15	268.955	580.695
IP 16	281.236	578.674
IP 17	292.974	575.932
IP 18	299.766	575.557
IP 19	302.257	575.018
IP 20	307.176	572.228

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Drafting Check B.DREW | Design Check A.SNEDDON
Approved (Project Director) S.ROOTH
Date 27.05.2022
Scale NTS
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CATCH DRAIN SETOUT SCHEDULES
SHEET 1 OF 7

Original Size A3 | Drawing No: 12542101-C3281 | Rev: 0

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3280.dwg

CATCH DRAIN - MCC4 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263493.610	6474430.507	618.669	173°41'59.72"			
TC	62.870	263500.509	6474368.016	612.399	173°41'59.72"			
IP 2	68.950	263501.180	6474361.943	611.586		R = -50.000	12.160	13°56'02.84"
CT	75.030	263503.293	6474356.210	610.674	159°45'56.88"			
TC	81.546	263505.547	6474350.096	609.697	159°45'56.88"			
IP 3	90.964	263508.915	6474340.957	608.284		R = 30.000	18.836	35°58'23.95"
CT	100.382	263506.273	6474331.583	607.964	195°44'20.83"			
TC	115.956	263502.049	6474316.592	607.613	195°44'20.83"			
IP 4	121.030	263500.669	6474311.697	607.499		R = 60.000	10.148	9°41'27.33"
CT	126.104	263498.485	6474307.103	607.385	205°25'48.16"			
TC	155.831	263485.720	6474280.257	604.069	205°25'48.16"			
IP 5	162.597	263482.698	6474273.902	602.795		R = -20.000	13.533	38°46'13.49"
CT	169.364	263484.322	6474267.054	599.681	166°39'34.67"			
IP 6	179.981	263486.772	6474256.724	594.316	166°39'34.67"			

CATCH DRAIN - MCC4 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	618.669
IP 2	64.842	612.203
IP 3	91.812	608.157
IP 4	126.363	607.379
IP 5	159.933	603.608
IP 6	167.354	601.345
IP 7	172.532	597.060
IP 8	176.089	595.191

CATCH DRAIN - MCC5 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263493.121	6474432.631	618.547	16°47'21.52"			
TC	27.277	263501.000	6474458.746	613.785	16°47'21.52"			
IP 2	31.985	263502.471	6474463.619	613.078		R = 10.000	9.416	53°57'04.83"
CT	36.693	263507.276	6474465.297	612.372	70°44'26.35"			
TC	39.583	263510.004	6474466.251	611.598	70°44'26.35"			
IP 3	41.413	263511.813	6474466.883	611.068		R = 5.000	3.660	41°56'25.94"
CT	43.243	263513.581	6474466.144	610.538	112°40'52.29"			
IP 4	47.852	263517.833	6474464.367	609.204	112°40'52.29"			

CATCH DRAIN - MCC5 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	618.547
IP 2	12.242	616.724
IP 3	16.486	615.463
IP 4	25.622	614.033
IP 5	37.144	612.304
IP 6	47.852	609.204

CATCH DRAIN - MCC6 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263533.394	6474544.993	629.540	208°20'20.88"			
TC	6.781	263530.175	6474539.024	629.225	208°20'20.88"			
IP 2	9.884	263528.697	6474536.283	629.080		R = -30.000	6.207	11°51'16.84"
CT	12.988	263527.813	6474533.296	628.554	196°29'04.03"			
TC	17.637	263526.494	6474528.838	627.482	196°29'04.03"			
IP 3	19.871	263525.859	6474526.692	626.967		R = 30.000	4.468	8°31'56.79"
CT	22.105	263524.912	6474524.665	626.452	205°01'00.82"			
TC	47.787	263514.052	6474501.391	620.531	205°01'00.82"			
IP 4	50.644	263512.843	6474498.802	619.873		R = -100.000	5.713	3°16'23.32"
CT	53.500	263511.785	6474496.148	619.214	201°44'37.50"			
TC	67.069	263506.758	6474483.545	616.445	201°44'37.50"			
IP 5	69.590	263505.823	6474481.201	615.967		R = -50.000	5.044	5°46'46.39"
CT	72.112	263505.129	6474478.774	615.488	195°57'51.12"			
TC	83.309	263502.050	6474468.009	613.449	195°57'51.12"			
IP 6	84.888	263501.495	6474466.070	613.167		R = -2.000	3.158	90°28'22.55"
CT	86.467	263503.438	6474465.532	612.886	105°29'28.57"			
IP 7	89.470	263506.332	6474464.730	612.350	105°29'28.57"			

CATCH DRAIN - MCC6 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	629.540
IP 2	10.914	629.032
IP 3	58.260	618.117
IP 4	75.768	614.795
IP 5	89.470	612.350

CATCH DRAIN - MCC7 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263533.677	6474546.474		39°00'16.61"			
TC	8.161	263538.813	6474552.816	629.265	39°00'16.61"			
IP 2	10.017	263539.982	6474554.260	629.054		R = 30.000	3.711	7°05'11.77"
CT	11.872	263541.321	6474555.548	628.843	46°05'28.38"			
TC	25.083	263550.838	6474564.710	626.988	46°05'28.38"			
IP 3	29.103	263553.752	6474567.515	626.344		R = -30.000	8.041	15°21'23.52"
CT	33.124	263555.819	6474570.991	625.713	30°44'04.86"			
TC	40.417	263559.547	6474577.260	624.611	30°44'04.86"			
IP 4	41.942	263560.523	6474578.903	624.380		R = 2.000	3.051	87°23'32.01"
CT	43.467	263562.209	6474578.002	624.036	118°07'36.87"			
IP 5	56.773	263573.943	6474571.729	617.831	118°07'36.87"			

CATCH DRAIN - MCC7 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.090	629.519
IP 2	6.632	629.439
IP 3	17.512	628.202
IP 4	31.655	625.934
IP 5	42.870	624.240
IP 6	49.413	622.001
IP 7	55.323	618.668

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Drafting Check B.DREW	Design Check A.SNEDDON	Project	COULSONS CREEK ROAD REHABILITATION
Approved (Project Director) S.ROOTH		Title	CATCH DRAIN SETOUT SCHEDULES SHEET 2 OF 7
Date 27.05.2022			
Scale NTS	This Drawing must not be used for Construction unless signed as Approved	Original Size A3	Drawing No: 12542101-C3282 Rev: 0

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3280.dwg

CATCH DRAIN - MCC8 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263592.731	6474613.956		206°45'10.13"			
TC	44.157	263572.854	6474574.526	619.462	206°45'10.13"			
IP 2	45.698	263571.980	6474572.792	618.981		R = -2.000	3.083	88°19'39.63"
CT	47.240	263573.688	6474571.867	618.026	118°25'30.50"			
IP 3	50.442	263576.504	6474570.343	616.573	118°25'30.50"			

CATCH DRAIN - MCC8 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	622.623
IP 2	35.563	619.843
IP 3	44.981	619.425
IP 4	48.690	617.128
IP 5	49.836	616.676

CATCH DRAIN - MCC9 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263773.414	6474604.466	666.613	338°21'19.21"			
TC	65.281	263749.336	6474665.144	649.568	338°21'19.21"			
IP 2	74.173	263746.047	6474673.431	646.501		R = -100.000	17.784	10°11'21.49"
CT	83.064	263741.345	6474681.005	644.150	328°09'57.72"			
TC	101.753	263731.487	6474696.882	641.074	328°09'57.72"			
IP 3	109.009	263727.583	6474703.170	639.836		R = -30.000	14.512	27°42'58.05"
CT	116.265	263721.203	6474706.921	638.520	300°26'59.67"			
TC	128.410	263710.733	6474713.076	636.279	300°26'59.67"			
IP 4	146.652	263692.732	6474723.658	632.308		R = -30.000	36.483	69°40'41.52"
CT	164.894	263676.557	6474710.453	627.575	230°46'18.15"			
IP 5	168.945	263673.419	6474707.891	627.138	230°46'18.15"			

CATCH DRAIN - MCC9 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	666.613
IP 2	10.461	665.507
IP 3	19.842	663.696
IP 4	32.781	660.190
IP 5	58.309	652.220
IP 6	71.452	647.220
IP 7	87.702	642.924
IP 8	103.333	640.866
IP 9	116.406	638.495
IP 10	141.549	633.855
IP 11	154.878	629.814
IP 12	161.270	627.966

CATCH DRAIN - MCCA HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263758.311	6474575.795		331°26'37.05"			
TC	34.891	263741.632	6474606.442	653.633	331°26'37.05"			
IP 2	45.528	263736.528	6474615.820	652.594		R = 100.000	21.273	12°11'19.13"
CT	56.165	263733.519	6474626.064	650.100	343°37'56.18"			
TC	83.282	263725.878	6474652.083	643.704	343°37'56.18"			
IP 3	93.362	263722.998	6474661.887	642.514		R = -50.000	20.159	23°06'03.77"
CT	103.442	263716.503	6474669.776	638.344	320°31'52.41"			
TC	133.689	263697.275	6474693.126	630.470	320°31'52.41"			
IP 4	134.506	263696.756	6474693.756	630.359		R = -50.000	1.633	1°52'15.06"
CT	135.322	263696.217	6474694.369	630.249	318°39'37.35"			
TC	145.737	263689.338	6474702.189	628.836	318°39'37.35"			
IP 5	152.704	263684.540	6474707.642	628.161		R = -20.000	13.934	39°55'05.19"
CT	159.671	263677.362	6474708.746	627.559	278°44'32.16"			
IP 6	162.135	263674.926	6474709.121		278°44'32.16"			

CATCH DRAIN - MCCA VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.558	658.004
IP 2	12.334	655.558
IP 3	28.736	653.917
IP 4	39.465	653.422
IP 5	50.000	651.984
IP 6	61.823	648.370
IP 7	69.645	644.578
IP 8	83.173	643.717
IP 9	94.027	642.436
IP 10	109.923	635.527
IP 11	115.861	634.156
IP 12	132.444	630.639
IP 13	147.214	628.636
IP 14	162.112	627.348

CATCH DRAIN - MCCB VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	666.507
IP 2	5.327	666.372
IP 3	12.226	665.101
IP 4	21.497	663.040
IP 5	37.609	659.135
IP 6	51.656	656.407
IP 7	62.222	654.582
IP 8	66.752	654.200
IP 9	72.939	653.324
IP 10	85.579	651.890

CATCH DRAIN - MCCB HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263773.685	6474600.637	666.507	192°06'18.18"			
TC	21.497	263769.177	6474579.618	663.040	192°06'18.18"			
IP 2	23.967	263768.659	6474577.201	662.441		R = 50.000	4.940	5°39'40.65"
CT	26.437	263767.904	6474574.846	661.842	197°45'58.84"			
TC	51.656	263760.209	6474550.830	656.407	197°45'58.84"			
IP 3	59.668	263757.743	6474543.134	655.023		R = -50.000	16.025	18°21'46.46"
CT	67.680	263757.827	6474535.053	654.068	179°24'12.38"			
TC	80.792	263757.964	6474521.942	652.433	179°24'12.38"			
IP 4	81.882	263757.976	6474520.730	652.309		R = 2.000	2.178	62°24'33.68"
CT	82.971	263756.909	6474520.158	652.186	241°48'46.05"			
IP 5	85.721	263754.484	6474518.859		241°48'46.05"			

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN SETOUT SCHEDULES SHEET 3 OF 7

Original Size: A3
Drawing No: 12542101-C3283
Rev: 0

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3280.dwg

CATCH DRAIN - MCCC HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263750.724	6474553.975	653.093	334°12'45.62"			
TC	8.040	263747.226	6474561.214	652.194	334°12'45.62"			
IP 2	9.667	263746.516	6474562.685	651.833		R = -15.000	3.253	12°25'35.36"
CT	11.293	263745.506	6474563.968	651.410	321°47'10.26"			
TC	21.464	263739.214	6474571.959	648.137	321°47'10.26"			
IP 3	25.014	263736.976	6474574.802	646.787		R = 15.000	7.100	27°07'12.34"
CT	28.564	263736.280	6474578.352	645.770	348°54'22.60"			
TC	29.731	263736.056	6474579.497	645.579	348°54'22.60"			
IP 4	31.272	263735.682	6474581.402	644.847		R = -2.000	3.082	88°18'04.33"
CT	32.813	263733.766	6474581.085	644.013	260°36'18.26"			
IP 5	45.172	263721.574	6474579.068	636.422	260°36'18.26"			

CATCH DRAIN - MCCF HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263908.173	6474422.475	674.162	249°17'24.58"			
TC	27.096	263882.828	6474412.893	670.423	249°17'24.58"			
IP 2	41.290	263868.463	6474407.462	667.488		R = 30.000	28.388	54°13'01.62"
CT	55.484	263855.658	6474415.940	665.569	303°30'26.21"			
TC	108.956	263811.072	6474445.458	656.918	303°30'26.21"			
IP 3	116.187	263805.000	6474449.479	655.818		R = 50.000	14.463	16°34'23.99"
CT	123.419	263800.327	6474455.064	654.826	320°04'50.20"			
TC	149.747	263783.432	6474475.257	653.307	320°04'50.20"			
IP 4	151.268	263782.211	6474476.716	653.251		R = -2.000	3.042	87°08'25.48"
CT	152.789	263780.693	6474475.569	653.018	232°56'24.72"			
IP 5	171.254	263765.958	6474464.441		232°56'24.72"			

CATCH DRAIN - MCCC VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	653.093
IP 2	8.452	652.148
IP 3	16.239	650.124
IP 4	27.024	646.023
IP 5	30.000	645.535
IP 6	36.154	642.205
IP 7	39.999	639.537
IP 8	45.172	636.422

CATCH DRAIN - MCCD VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	653.378
IP 2	1.877	653.070
IP 3	26.732	651.269
IP 4	31.829	649.156
IP 5	39.245	645.126
IP 6	46.418	639.986

CATCH DRAIN - MCCF VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	674.162
IP 2	8.518	673.921
IP 3	20.393	672.003
IP 4	37.109	668.063
IP 5	51.305	666.113
IP 6	67.053	664.064
IP 7	82.038	661.914
IP 8	100.284	658.238
IP 9	122.017	654.930
IP 10	138.214	653.729
IP 11	152.366	653.211
IP 12	160.004	649.720
IP 13	166.090	646.605
IP 14	168.727	644.883
IP 15	169.900	644.430
IP 16	171.043	644.404

CATCH DRAIN - MCCD HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263750.830	6474551.419	653.378	179°12'54.63"			
TC	17.160	263751.065	6474534.260	651.963	179°12'54.63"			
IP 2	18.787	263751.087	6474532.630	651.845		R = -20.000	3.254	9°19'20.14"
CT	20.414	263751.373	6474531.024	651.727	169°53'34.50"			
TC	22.800	263751.792	6474528.676	651.554	169°53'34.50"			
IP 3	24.635	263752.188	6474526.455	651.421		R = 2.500	3.671	84°07'54.81"
CT	26.471	263750.019	6474525.834	651.288	254°01'29.30"			
IP 4	46.452	263730.809	6474520.334		254°01'29.30"			

CATCH DRAIN - MCCE HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263782.211	6474476.716		320°55'59.38"			
TC	24.127	263767.005	6474495.449	652.288	320°55'59.38"			
IP 2	30.327	263763.078	6474500.287	652.065		R = 50.000	12.398	14°12'27.23"
CT	36.526	263760.458	6474505.940	651.945	335°08'26.61"			
TC	47.580	263755.811	6474515.971	651.764	335°08'26.61"			
IP 3	51.470	263754.173	6474519.507	651.719		R = 50.000	7.779	8°54'49.97"
CT	55.359	263753.102	6474523.254	651.674	344°03'16.58"			
IP 4	58.688	263752.188	6474526.455		344°03'16.58"			

CATCH DRAIN - MCCE VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.188	653.175
IP 2	8.998	652.843
IP 3	19.131	652.467
IP 4	30.522	652.058
IP 5	43.935	651.806
IP 6	58.527	651.637

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN SETOUT SCHEDULES
SHEET 4 OF 7

Original Size: A3
Drawing No: 12542101-C3284
Rev: 0

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3280.dwg

CATCH DRAIN - MCCG HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263908.173	6474422.475	674.162	65°06'05.36"			
TC	48.266	263951.953	6474442.796	668.544	65°06'05.36"			
IP 2	49.217	263952.887	6474443.229	668.402		R = 2.000	1.902	54°29'11.48"
CT	50.168	263953.783	6474442.721	668.260	119°35'16.84"			
IP 3	56.969	263959.697	6474439.363		119°35'16.84"			

CATCH DRAIN - MCCG VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	674.162
IP 2	11.445	674.067
IP 3	20.474	673.166
IP 4	34.564	670.592
IP 5	51.240	668.100
IP 6	54.721	664.711
IP 7	56.741	664.421

CATCH DRAIN - MCCH VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.031	678.355
IP 2	10.000	676.849
IP 3	17.484	674.496
IP 4	30.165	670.130
IP 5	39.208	667.916
IP 6	47.582	665.895
IP 7	52.931	665.175
IP 8	61.629	663.932
IP 9	73.027	663.253
IP 10	80.770	662.216

CATCH DRAIN - MCCH HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264022.640	6474380.049		339°50'42.61"			
TC	8.444	264019.731	6474387.976	677.084	339°50'42.61"			
IP 2	14.073	264017.768	6474393.323	675.569		R = -30.000	11.258	21°30'05.78"
CT	19.703	264013.982	6474397.579	673.732	318°20'36.83"			
TC	53.672	263991.403	6474422.959	665.069	318°20'36.83"			
IP 3	59.277	263987.634	6474427.196	664.268		R = -30.000	11.210	21°24'33.03"
CT	64.882	263982.578	6474429.765	663.738	296°56'03.81"			
TC	67.137	263980.568	6474430.787	663.604	296°56'03.81"			
IP 4	70.953	263977.124	6474432.536	663.377		R = -20.000	7.631	21°51'43.46"
CT	74.769	263973.277	6474432.878	663.020	275°04'20.34"			
IP 5	80.770	263967.299	6474433.408		275°04'20.34"			

CATCH DRAIN - MCCI HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264022.976	6474378.358	678.586	181°05'48.46"			
TC	41.202	264022.187	6474337.164	673.765	181°05'48.46"			
IP 2	42.705	264022.152	6474335.294	673.251		R = 2.000	3.007	86°08'55.16"
CT	44.209	264020.284	6474335.204	672.738	267°14'43.63"			
IP 3	45.451	264019.043	6474335.145	672.314	267°14'43.63"			

CATCH DRAIN - MCCI VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	678.586
IP 2	10.083	677.519
IP 3	11.816	677.079
IP 4	38.487	674.691
IP 5	45.451	672.314

CATCH DRAIN - MCCJ HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264147.554	6474229.253	696.636	281°58'19.87"			
TC	8.449	264139.288	6474231.006	696.069	281°58'19.87"			
IP 2	45.808	264101.849	6474238.945	694.862		R = 140.000	74.718	30°34'43.34"
CT	83.167	264073.655	6474264.826	692.918	312°33'03.22"			
TC	89.862	264068.723	6474269.354	691.761	312°33'03.22"			
IP 3	98.754	264062.103	6474275.430	690.148		R = 50.000	17.782	20°22'37.30"
CT	107.645	264058.013	6474283.432	689.109	332°55'40.51"			
TC	124.371	264050.401	6474298.325	687.813	332°55'40.51"			
IP 4	128.494	264048.410	6474302.221	686.923		R = -10.000	8.248	47°15'25.51"
CT	132.618	264044.198	6474303.402	685.930	285°40'15.00"			
TC	139.940	264037.149	6474305.380	683.363	285°40'15.00"			
IP 5	144.841	264032.012	6474306.821	681.523		R = 10.000	9.802	56°09'50.33"
CT	149.742	264030.348	6474311.891	679.966	341°50'05.33"			
IP 6	173.641	264022.898	6474334.598	674.717	341°50'05.33"			

CATCH DRAIN - MCCJ VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	696.636
IP 2	9.502	695.998
IP 3	40.298	694.936
IP 4	73.971	694.484
IP 5	89.214	691.888
IP 6	96.444	690.478
IP 7	104.076	689.385
IP 8	125.000	687.764
IP 9	133.976	685.603
IP 10	146.623	680.853
IP 11	154.270	678.677
IP 12	171.871	674.842

CATCH DRAIN - MCCK HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264147.554	6474229.253	696.636	109°00'52.94"			
TC	17.710	264164.297	6474223.483	695.245	109°00'52.94"			
IP 2	19.058	264165.808	6474222.963	694.872		R = 2.000	2.697	77°15'04.71"
CT	20.406	264165.633	6474221.374	694.141	186°15'57.65"			
IP 3	35.569	264163.979	6474206.302		186°15'57.65"			

CATCH DRAIN - MCCK VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	696.636
IP 2	18.480	695.185
IP 3	21.617	693.486
IP 4	27.044	690.502
IP 5	31.031	688.155
IP 6	33.474	686.256
IP 7	33.974	686.257

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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN SETOUT SCHEDULES SHEET 5 OF 7

Original Size: A3
Drawing No: 12542101-C3285
Rev: 0

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3280.dwg

CATCH DRAIN - MCCL HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264271.783	6474262.659	707.096	221°58'53.05"			
TC	21.991	264257.074	6474246.312	706.200	221°58'53.05"			
IP 2	60.049	264230.313	6474216.571	704.683		R = 100.000	76.115	43°36'39.47"
CT	98.107	264190.423	6474213.496	695.632	265°35'32.52"			
IP 3	121.912	264166.688	6474211.667	688.553	265°35'32.52"			

CATCH DRAIN - MCCL VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	707.096
IP 2	14.250	706.532
IP 3	32.501	705.749
IP 4	55.365	705.175
IP 5	64.677	704.197
IP 6	72.686	702.067
IP 7	85.861	698.459
IP 8	95.720	696.388
IP 9	103.186	694.024
IP 10	110.085	691.879
IP 11	119.716	688.885

CATCH DRAIN - MCCL1 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 2	13.730	704.276
IP 3	17.328	703.211
IP 4	20.584	701.391
IP 5	22.117	699.343

CATCH DRAIN - MCCL1 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264272.823	6474262.901	706.530	49°03'38.38"			
TC	16.076	264284.967	6474273.435	703.581	49°03'38.38"			
IP 2	17.543	264286.328	6474274.615	703.091		R = 2.000	2.934	84°02'31.97"
CT	19.009	264287.644	6474273.384	702.271	133°06'10.35"			
IP 3	22.158	264289.943	6474271.232		133°06'10.35"			

CATCH DRAIN - MCCM HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264343.499	6474333.253		227°02'00.14"			
TC	42.690	264312.260	6474304.157	705.544	227°02'00.14"			
IP 2	52.347	264305.172	6474297.554	704.740		R = -100.000	19.315	11°03'59.10"
CT	62.004	264299.482	6474289.713	703.936	215°58'01.04"			
IP 3	82.172	264287.637	6474273.390		215°58'01.04"			

CATCH DRAIN - MCCM VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.402	709.079
IP 2	6.000	708.900
IP 3	8.000	708.200
IP 4	31.005	706.570
IP 5	32.412	706.400
IP 6	63.349	703.824
IP 7	81.813	702.541

CATCH DRAIN - MCCP VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	734.182
IP 2	24.532	731.170
IP 3	32.015	729.554
IP 4	37.564	727.249
IP 5	42.654	725.837
IP 6	49.745	724.261
IP 7	50.990	723.019
IP 8	52.658	722.026
IP 9	55.431	718.330

CATCH DRAIN - MCCN HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264347.397	6474401.112		198°14'29.31"			
TC	27.712	264338.723	6474374.793	727.612	198°14'29.31"			
IP 2	33.928	264336.767	6474368.859	726.354		R = -50.000	12.432	14°14'45.76"
CT	40.144	264336.332	6474362.626	723.517	183°59'43.55"			
TC	51.273	264335.556	6474351.523	717.895	183°59'43.55"			
IP 3	57.517	264335.094	6474344.908	715.333		R = -15.000	12.488	47°42'06.55"
CT	63.762	264339.676	6474340.114	711.438	136°17'37.00"			
IP 4	74.848	264347.337	6474332.100	704.076	136°17'37.00"			

CATCH DRAIN - MCCN VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.285	733.451
IP 2	17.838	729.611
IP 3	35.917	725.951
IP 4	43.045	721.846
IP 5	50.549	718.140
IP 6	55.517	716.462
IP 7	60.044	713.906
IP 8	74.848	704.076

CATCH DRAIN - MCCO VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	734.179
IP 2	12.635	733.170
IP 3	16.112	731.701
IP 4	37.510	728.880
IP 5	44.648	726.868
IP 6	56.549	722.288
IP 7	67.626	718.555
IP 8	73.907	716.060
IP 9	77.637	711.094

CATCH DRAIN - MCCO HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264399.479	6474472.413	734.179	215°26'45.11"			
TC	8.222	264394.711	6474465.715	733.523	215°26'45.11"			
IP 2	30.046	264381.731	6474447.481	729.864		R = -80.000	43.649	31°15'39.41"
CT	51.871	264380.097	6474425.158	724.088	184°11'05.70"			
TC	69.422	264378.817	6474407.654	717.842	184°11'05.70"			
IP 3	70.834	264378.692	6474405.953	717.281		R = -2.000	2.824	80°53'25.53"
CT	72.246	264380.351	6474405.561	716.720	103°17'40.17"			
IP 4	77.676	264385.636	6474404.313		103°17'40.17"			

CATCH DRAIN - MCCP HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264400.073	6474473.386	734.182	52°24'18.02"			
TC	9.189	264407.354	6474478.992	733.054	52°24'18.02"			
IP 2	24.127	264419.440	6474488.298	731.220		R = 60.000	29.875	28°31'43.76"
CT	39.065	264434.504	6474490.702	726.833	80°56'01.77"			
TC	48.235	264443.560	6474492.147	724.596	80°56'01.77"			
IP 3	49.663	264445.270	6474492.420	724.279		R = 2.000	2.855	81°46'52.12"
CT	51.090	264445.785	6474490.766	722.960	162°42'53.89"			
IP 4	56.227	264447.311	6474485.861		162°42'53.89"			

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Drawn I.SMITH		Designer D.McCARTHY	
Drafting Check B.DREW		Design Check A.SNEDDON	
Approved (Project Director) S.ROOTH			
Date 27.05.2022			
Scale NTS	This Drawing must not be used for Construction unless signed as Approved	Original Size A3	Drawing No: 12542101-C3286 Rev: 0

Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CATCH DRAIN SETOUT SCHEDULES SHEET 6 OF 7

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3280.dwg

CATCH DRAIN - MCCQ HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264489.396	6474491.573	725.259	275°24'08.67"			
TC	15.061	264474.402	6474492.991	723.152	275°24'08.67"			
IP 2	22.799	264466.636	6474493.725	722.569		R = -50.000	15.477	17°44'05.82"
CT	30.537	264459.015	6474492.059	722.129	257°40'02.85"			
IP 3	43.603	264446.251	6474489.269		257°40'02.85"			

CATCH DRAIN - MCCQ VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	725.259
IP 2	10.200	724.052
IP 3	15.803	723.014
IP 4	28.448	722.210
IP 5	40.656	721.739
IP 6	43.250	721.626

CATCH DRAIN - MCCR VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	753.578
IP 2	5.008	752.605
IP 3	31.329	751.110
IP 4	47.750	749.817
IP 5	56.837	748.172
IP 6	68.742	747.645
IP 7	96.341	746.950
IP 8	111.595	745.428
IP 9	119.601	744.184
IP 10	131.850	742.960
IP 11	155.733	741.238

CATCH DRAIN - MCCR HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264542.366	6474532.704	753.578	120°35'18.23"			
TC	3.666	264545.522	6474530.838	752.866	120°35'18.23"			
IP 2	9.867	264551.038	6474527.578	752.329		R = -20.000	12.401	35°31'35.09"
CT	16.067	264557.421	6474528.129	751.977	85°03'43.14"			
TC	19.116	264560.459	6474528.392	751.803	85°03'43.14"			
IP 3	42.310	264584.452	6474530.465	750.245		R = 70.000	46.388	37°58'10.20"
CT	65.505	264604.641	6474517.338	747.788	123°01'53.34"			
TC	105.791	264638.416	6474495.378	746.007	123°01'53.34"			
IP 4	110.135	264642.060	6474493.008	745.574		R = -100.000	8.687	4°58'38.82"
CT	114.478	264645.896	6474490.964	744.980	118°03'14.52"			
IP 5	173.966	264698.393	6474462.987	740.787	118°03'14.52"			

TABLE DRAIN - MD20 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263153.567	6473974.440	558.741	212°08'07.19"			
TC	15.840	263145.141	6473961.027	555.973	212°08'07.19"			
IP 2	18.243	263143.810	6473958.908	555.553		R = 7.000	4.807	39°20'37.51"
CT	20.647	263141.437	6473958.113	555.132	251°28'44.70"			
TC	25.076	263137.237	6473956.706	554.931	251°28'44.70"			
IP 3	27.737	263134.616	6473955.828	554.904		R = -8.000	5.322	38°07'02.36"
CT	30.399	263133.096	6473953.520	554.853	213°21'42.34"			
IP 4	50.523	263122.029	6473936.711	551.985	213°21'42.34"			

CATCH DRAIN - MCCS HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264774.671	6474424.038	741.411	291°09'32.66"			
TC	39.463	264737.869	6474438.282	741.116	291°09'32.66"			
IP 2	52.710	264725.441	6474443.092	741.016		R = 100.000	26.495	15°10'50.00"
CT	65.958	264714.707	6474450.989	740.917	306°20'22.66"			
IP 3	85.961	264698.594	6474462.842	740.767				
IP 4	102.336	264690.966	6474448.352		207°45'54.71"			

CATCH DRAIN - MCCS VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	741.411
IP 2	90.350	740.734
IP 3	96.296	738.820
IP 4	101.188	736.602
IP 5	102.334	735.073

CATCH DRAIN - MCCT VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	666.768
IP 2	20.808	663.901

CATCH DRAIN - MCCT HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	263996.348	6474410.973	666.768	326°44'53.85"
IP 2	20.808	263984.938	6474428.374	663.901	326°44'53.85"

CATCH DRAIN - MD00 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	264684.629	6474433.406	734.251	202°55'17.52"
IP 2	17.800	264677.697	6474417.011	732.827	202°55'17.52"

CATCH DRAIN - MD00 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	734.251
IP 2	17.800	732.827

TABLE DRAIN - MD20 VERTICAL POINTS

PT	CHAINAGE	HEIGHT	GRADE	K VALUE	RADIUS	LENGTH
IP 1	0.000	558.741				
IP 2	21.602	554.965				
IP 3	30.231	554.879				
TC	38.742	553.556	-15.50%			
IP 4	39.730	553.402		0.85	84.475	1.980
CT	40.722	553.272	-13.10%			
IP 5	50.523	551.985				

No	Revision	Drawn	Job Manager	Project Director	Date
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN SETOUT SCHEDULES SHEET 7 OF 7

Original Size: A3
Drawing No: 12542101-C3287
Rev: 0

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith
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GABION WALL - MT10 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263577.313	6474571.518		14°49'54.64"			
IP 2	2.037	263577.835	6474573.487	616.749				
IP 3	4.073	263578.352	6474575.457	616.862				
IP 4	6.108	263578.864	6474577.426	616.978				
IP 5	8.143	263579.373	6474579.396	617.096				
IP 6	10.176	263579.877	6474581.366	617.216				
IP 7	15.565	263582.354	6474586.152	617.591		R = -990.136	10.778	0°37'25.25"
CT	20.954	263584.779	6474590.965	617.983	26°44'36.72"			
IP 8	45.069	263595.631	6474612.500	619.918				
IP 9	46.095	263596.286	6474613.289	620.010	39°41'46.67"			

GABION WALL - MT10 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	616.638
IP 2	2.037	616.749
IP 3	4.073	616.862
IP 4	6.108	616.978
IP 5	8.143	617.096
IP 6	10.176	617.216
IP 7	12.157	617.352
IP 8	13.500	617.445
IP 9	14.137	617.490
IP 10	15.500	617.586
IP 11	16.117	617.630
IP 12	18.097	617.773
IP 13	19.000	617.839
IP 14	19.087	617.846
IP 15	20.078	617.918
IP 16	20.954	617.983
IP 17	22.069	618.065
IP 18	23.069	618.140
IP 19	24.000	618.210
IP 20	24.069	618.215
IP 21	26.069	618.366
IP 22	28.069	618.520
IP 23	30.069	618.677
IP 24	32.069	618.835
IP 25	34.069	618.996
IP 26	36.069	619.159
IP 27	38.069	619.324
IP 28	40.069	619.492
IP 29	41.069	619.576
IP 30	42.069	619.661
IP 31	42.324	619.683
IP 32	42.500	619.698
IP 33	45.069	619.918
IP 34	46.095	620.010

GABION WALL - MT20 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263705.026	6474597.394	636.040	173°20'45.48"			
TC	35.104	263709.094	6474562.527	638.540	173°20'45.48"			
IP 2	36.104	263709.210	6474561.533	638.540		R = 80.096	2.000	1°25'50.44"
CT	37.104	263709.301	6474560.537	638.540	174°46'35.92"			
IP 3	40.000	263709.565	6474557.653	638.540	174°46'35.92"			

GABION WALL - MT20 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	636.040
IP 2	1.999	636.040
IP 3	2.000	636.540
IP 4	9.999	636.540
IP 5	10.000	637.040
IP 6	15.999	637.040
IP 7	16.000	637.540
IP 8	23.999	637.540
IP 9	24.000	638.040
IP 10	31.999	638.040
IP 11	32.000	638.540
IP 12	40.000	638.540

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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GABION WALL SETOUT SCHEDULES
SHEET 1 OF 7

Original Size: A3 **Drawing No: 12542101-C3291** **Rev: 0**

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3290.dwg

GABION WALL - MT30 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263711.113	6474540.718	639.940	174°46'38.56"			
TC	7.034	263711.753	6474533.713	640.440	174°46'38.56"			
IP 2	46.145	263715.486	6474492.868	642.940		R = -105.281	78.221	42°34'10.36"
IP 3	85.256	263745.867	6474465.314	644.940				
IP 4	106.379	263761.326	6474450.920	645.940				
IP 5	122.000	263772.547	6474440.052	646.940	134°05'15.21"			

GABION WALL - MT40 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263916.595	6474390.179	658.950	64°15'49.73"			
TC	17.107	263932.005	6474397.607	660.450	64°15'49.73"			
IP 2	17.607	263932.456	6474397.825	660.450		R = 6.244	1.000	9°10'36.13"
CT	18.107	263932.936	6474397.967	660.450	73°26'25.86"			
IP 3	27.470	263941.911	6474400.636	661.450				
IP 4	32.936	263947.159	6474402.196	661.950		R = 78.747	10.931	7°57'12.00"
IP 5	38.401	263952.571	6474403.016	662.450				
IP 6	42.215	263956.354	6474403.588	662.950		R = 39.139	7.627	11°09'56.60"
CT	46.028	263960.176	6474403.417	663.450	92°33'34.46"			
IP 7	49.882	263964.026	6474403.245	663.450				
IP 8	62.228	263977.109	6474402.660	665.450		R = 29.950	24.691	47°14'07.86"
IP 9	74.574	263985.562	6474392.658	666.950				
IP 10	85.804	263992.938	6474383.932	667.950		R = 49.680	22.461	25°54'16.68"
IP 11	97.035	263995.760	6474372.860	668.950				
IP 12	100.517	263996.621	6474369.485	669.450		R = 241.702	6.965	1°39'03.60"
IP 13	104.000	263997.383	6474366.087	669.450	167°21'02.88"			

GABION WALL - MT30 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	639.940
IP 2	1.999	639.940
IP 3	2.000	640.440
IP 4	7.999	640.440
IP 5	8.000	640.940
IP 6	17.999	640.940
IP 7	18.000	641.440
IP 8	25.999	641.440
IP 9	26.000	641.940
IP 10	33.999	641.940
IP 11	34.000	642.440
IP 12	41.999	642.440
IP 13	42.000	642.940
IP 14	49.999	642.940
IP 15	50.000	643.440
IP 16	57.999	643.440
IP 17	58.000	643.940
IP 18	69.999	643.940
IP 19	70.000	644.440
IP 20	77.999	644.440
IP 21	78.000	644.940
IP 22	89.999	644.940
IP 23	90.000	645.440
IP 24	97.999	645.440
IP 25	98.000	645.940
IP 26	109.999	645.940
IP 27	110.000	646.440
IP 28	117.999	646.440
IP 29	118.000	646.940
IP 30	122.000	646.940

GABION WALL - MT40 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	658.950
IP 2	1.999	658.950
IP 3	2.000	659.450
IP 4	9.999	659.450
IP 5	10.000	659.950
IP 6	15.999	659.950
IP 7	16.000	660.450
IP 8	19.999	660.450
IP 9	20.000	660.950
IP 10	25.999	660.950
IP 11	26.000	661.450
IP 12	31.999	661.450
IP 13	32.000	661.950
IP 14	35.999	661.950
IP 15	36.000	662.450
IP 16	41.999	662.450
IP 17	42.000	662.950
IP 18	45.999	662.950
IP 19	46.000	663.450
IP 20	49.999	663.450
IP 21	50.000	663.950
IP 22	53.999	663.950
IP 23	54.000	664.450
IP 24	57.999	664.450
IP 25	58.000	664.950
IP 26	61.999	664.950
IP 27	62.000	665.450
IP 28	65.999	665.450
IP 29	66.000	665.950
IP 30	69.999	665.950
IP 31	70.000	666.450
IP 32	73.999	666.450
IP 33	74.000	666.950
IP 34	77.999	666.950
IP 35	78.000	667.450
IP 36	81.999	667.450
IP 37	82.000	667.950
IP 38	87.999	667.950
IP 39	88.000	668.450
IP 40	91.999	668.450
IP 41	92.000	668.950
IP 42	99.999	668.950
IP 43	100.000	669.450
IP 44	104.000	669.450

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GABION WALL SETOUT SCHEDULES SHEET 2 OF 7

Original Size: A3 **Drawing No: 12542101-C3292** **Rev: 0**

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith

Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3290.dwg

GABION WALL - MT50 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264047.806	6474232.937	679.460	132°38'13.59"			
IP 2	0.531	264048.196	6474232.578	679.460		R = -132.600	1.061	0°27'30.89"
CC	1.061	264048.590	6474232.221	679.460	132°10'42.70"			
IP 3	27.231	264068.239	6474214.418	681.460		R = -132.600	52.340	22°36'57.65"
CC	53.402	264093.224	6474205.539	683.460	109°33'45.05"			
IP 4	56.584	264096.223	6474204.474	683.460		R = -132.600	6.365	2°45'01.65"
IP 5	59.767	264099.271	6474203.553	683.460				
IP 6	59.779	264099.282	6474203.549	683.460				
IP 7	60.489	264099.967	6474203.360	683.460				
IP 8	62.603	264102.010	6474202.819	683.960				
IP 9	64.713	264104.057	6474202.309	683.960				
IP 10	66.816	264106.105	6474201.830	683.960				
IP 11	68.911	264108.151	6474201.380	683.960				
IP 12	69.959	264109.177	6474201.165	683.960				
IP 13	70.000	264109.217	6474201.156	683.960	101°30'20.83"			

GABION WALL - MT50 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	679.460
IP 2	1.999	679.460
IP 3	2.000	679.960
IP 4	7.999	679.960
IP 5	8.000	680.460
IP 6	15.999	680.460
IP 7	16.000	680.960
IP 8	19.999	680.960
IP 9	20.000	681.460
IP 10	27.999	681.460
IP 11	28.000	681.960
IP 12	35.999	681.960
IP 13	36.000	682.460
IP 14	43.999	682.460
IP 15	44.000	682.960
IP 16	51.999	682.960
IP 17	52.000	683.460
IP 18	61.999	683.460
IP 19	62.000	683.960
IP 20	70.000	683.960

No	Revision	Drawn	Job Manager	Project Director	Date
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GABION WALL SETOUT SCHEDULES SHEET 3 OF 7

Original Size: A3 **Drawing No: 12542101-C3293** **Rev: 0**

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3290.dwg

GABION WALL - MT60 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264278.432	6474230.398	697.740	36°51'57.02"			
TC	46.440	264306.293	6474267.552	700.740	36°51'57.02"			
IP 2	65.562	264317.798	6474282.893	701.740		R = 209.393	38.244	10°27'52.99"
CT	84.684	264331.897	6474295.889	702.740	47°19'50.01"			
TC	132.468	264367.031	6474328.276	706.240	47°19'50.01"			
IP 3	139.234	264372.012	6474332.867	706.740		R = -110.424	13.531	7°01'15.80"
IP 4	146.000	264376.395	6474338.033	707.240	40°18'34.21"			

GABION WALL - MT60 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	697.740
IP 2	5.999	697.740
IP 3	6.000	698.240
IP 4	11.999	698.240
IP 5	12.000	698.740
IP 6	19.999	698.740
IP 7	20.000	699.240
IP 8	25.999	699.240
IP 9	26.000	699.740
IP 10	35.999	699.740
IP 11	36.000	700.240
IP 12	43.999	700.240
IP 13	44.000	700.740
IP 14	53.999	700.740
IP 15	54.000	701.240
IP 16	59.999	701.240
IP 17	60.000	701.740
IP 18	69.999	701.740
IP 19	70.000	702.240
IP 20	77.999	702.240
IP 21	78.000	702.740
IP 22	85.999	702.740
IP 23	86.000	703.240
IP 24	93.999	703.240
IP 25	94.000	703.740
IP 26	101.999	703.740
IP 27	102.000	704.240
IP 28	107.999	704.240
IP 29	108.000	704.740
IP 30	115.999	704.740
IP 31	116.000	705.240
IP 32	121.999	705.240
IP 33	122.000	705.740
IP 34	127.999	705.740
IP 35	128.000	706.240
IP 36	135.999	706.240
IP 37	136.000	706.740
IP 38	141.999	706.740
IP 39	142.000	707.240
IP 40	146.000	707.240

GABION WALL - MT70 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264382.094	6474345.345	707.830	35°36'24.62"			
IP 2	20.377	264394.089	6474362.096	709.330		R = -112.798	40.755	20°42'05.01"
CT	40.755	264399.388	6474382.004	710.830	14°54'19.60"			
TC	86.874	264411.251	6474426.571	713.830	14°54'19.60"			
IP 3	93.437	264412.946	6474432.938	714.330		R = 61.701	13.127	12°11'21.69"
IP 4	100.000	264415.947	6474438.803	714.830	27°05'41.29"			

GABION WALL - MT70 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	707.830
IP 2	1.999	707.830
IP 3	2.000	708.330
IP 4	7.999	708.330
IP 5	8.000	708.830
IP 6	15.999	708.830
IP 7	16.000	709.330
IP 8	21.999	709.330
IP 9	22.000	709.830
IP 10	27.999	709.830
IP 11	28.000	710.330
IP 12	35.999	710.330
IP 13	36.000	710.830
IP 14	41.999	710.830
IP 15	42.000	711.330
IP 16	49.999	711.330
IP 17	50.000	711.830
IP 18	55.999	711.830
IP 19	56.000	712.330
IP 20	63.999	712.330
IP 21	64.000	712.830
IP 22	71.999	712.830
IP 23	72.000	713.330
IP 24	79.999	713.330
IP 25	80.000	713.830
IP 26	87.999	713.830
IP 27	88.000	714.330
IP 28	93.999	714.330
IP 29	94.000	714.830
IP 30	100.000	714.830

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GABION WALL SETOUT SCHEDULES
SHEET 4 OF 7

Original Size: A3 **Drawing No: 12542101-C3294** **Rev: 0**

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith
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CTRL WALL - MT80 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264448.647	6474486.267	718.896	73°36'31.28"			
IP 2	10.506	264458.786	6474489.250	719.454		R = 78.768	21.012	15°17'02.65"
IP 3	21.012	264469.353	6474489.454	720.022				
IP 4	21.630	264469.971	6474489.441	720.055				
IP 5	23.880	264472.220	6474489.355	720.176				
IP 6	26.128	264474.462	6474489.205	720.298				
IP 7	27.757	264476.085	6474489.056	720.387				
IP 8	27.757	264476.085	6474489.056	720.387				
IP 9	28.373	264476.698	6474488.993	720.414				
IP 10	30.616	264478.925	6474488.726	720.514				
IP 11	32.858	264481.141	6474488.395	720.616				
IP 12	34.482	264482.742	6474488.116	720.690				
IP 13	34.482	264482.742	6474488.116	720.690				
IP 14	35.032	264483.282	6474488.014	720.719				
IP 15	37.033	264485.248	6474487.643	720.824				
IP 16	39.034	264487.215	6474487.272	720.930				
IP 17	41.035	264489.181	6474486.901	721.038				
IP 18	43.036	264491.148	6474486.531	721.148				
IP 19	45.037	264493.115	6474486.161	721.260				
IP 20	47.039	264495.081	6474485.791	721.373				
IP 21	48.000	264496.026	6474485.613	721.428	100°38'39.45"			

CTRL WALL - MT80 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	718.896
IP 2	11.411	719.502
IP 3	12.628	719.566
IP 4	14.878	719.687
IP 5	17.129	719.809
IP 6	18.500	719.884
IP 7	19.379	719.932
IP 8	19.500	719.939
IP 9	21.012	720.022
IP 10	21.630	720.055
IP 11	23.880	720.176
IP 12	25.004	720.237
IP 13	26.000	720.291
IP 14	26.128	720.298
IP 15	27.757	720.387
IP 16	28.373	720.414
IP 17	30.616	720.514
IP 18	31.500	720.554
IP 19	32.000	720.577
IP 20	32.858	720.616
IP 21	33.000	720.622
IP 22	34.482	720.690
IP 23	35.032	720.719
IP 24	35.500	720.743
IP 25	37.033	720.824
IP 26	39.034	720.930
IP 27	41.035	721.038
IP 28	43.036	721.148
IP 29	45.037	721.260
IP 30	47.039	721.373
IP 31	48.000	721.428

GABION WALL - MT90 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	264558.108	6474461.368	726.170	98°42'53.61"
IP 2	65.125	264622.482	6474451.501	731.170	
IP 3	65.983	264623.328	6474451.357	731.170	
IP 4	67.980	264625.296	6474451.022	731.170	
IP 5	68.003	264625.318	6474451.018	731.170	99°42'55.26"

GABION WALL - MT90 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	726.170
IP 2	1.999	726.170
IP 3	2.000	726.670
IP 4	7.999	726.670
IP 5	8.000	727.170
IP 6	15.999	727.170
IP 7	16.000	727.670
IP 8	23.999	727.670
IP 9	24.000	728.170
IP 10	29.999	728.170
IP 11	30.000	728.670
IP 12	35.999	728.670
IP 13	36.000	729.170
IP 14	43.999	729.170
IP 15	44.000	729.670
IP 16	49.999	729.670
IP 17	50.000	730.170
IP 18	57.999	730.170
IP 19	58.000	730.670
IP 20	63.999	730.670
IP 21	64.000	731.170
IP 22	68.003	731.170

No	Revision	Drawn	Job Manager	Project Director	Date
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GABION WALL SETOUT SCHEDULES
SHEET 5 OF 7

Original Size: A3
Drawing No: 12542101-C3295
Rev: 0

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CTRL WALL - MTA0 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	264290.965	6474272.519	699.958	38°27'13.70"			
IP 2	0.870	264291.506	6474273.200	700.018				
IP 3	2.870	264292.750	6474274.767	700.155				
IP 4	3.127	264292.910	6474274.968	700.172				
IP 5	4.870	264293.993	6474276.333	700.290				
IP 6	6.871	264295.237	6474277.900	700.425				
IP 7	7.505	264295.631	6474278.397	700.467				
IP 8	8.672	264296.349	6474279.318	700.544				
IP 9	8.919	264296.501	6474279.512	700.560				
IP 10	10.991	264297.787	6474281.136	700.695				
IP 11	13.062	264299.088	6474282.748	700.830				
IP 12	15.133	264300.403	6474284.347	700.965				
IP 13	17.204	264301.732	6474285.935	701.100				
IP 14	19.274	264303.076	6474287.511	701.235				
IP 15	21.345	264304.434	6474289.074	701.370				
IP 16	23.037	264305.553	6474290.343	701.480				
IP 17	25.683	264307.305	6474292.327	701.633		R = 227.771	5.293	1°19'53.32"
IP 18	28.330	264309.101	6474294.271	701.786				
IP 19	28.330	264309.101	6474294.271	701.786				
IP 20	29.628	264309.981	6474295.225	701.850				
IP 21	31.699	264311.395	6474296.737	701.953				
IP 22	33.769	264312.823	6474298.237	702.056				
IP 23	35.840	264314.265	6474299.724	702.159				
IP 24	37.911	264315.720	6474301.198	702.262				
IP 25	39.982	264317.188	6474302.659	702.365				
IP 26	42.054	264318.669	6474304.106	702.467				
IP 27	43.862	264319.974	6474305.359	702.557				
IP 28	44.116	264320.155	6474305.536	702.570				
IP 29	45.859	264321.402	6474306.754	702.660				
IP 30	46.116	264321.586	6474306.934	702.673				
IP 31	48.117	264323.017	6474308.331	702.776				
IP 32	50.117	264324.448	6474309.729	702.878				
IP 33	52.117	264325.879	6474311.127	702.980				
IP 34	54.117	264327.310	6474312.525	703.083				
IP 35	56.118	264328.740	6474313.923	703.185				
IP 36	58.118	264330.170	6474315.322	703.286				
IP 37	60.118	264331.600	6474316.720	703.388				
IP 38	62.119	264333.030	6474318.119	703.490				
IP 39	64.119	264334.460	6474319.518	703.591				
IP 40	66.119	264335.890	6474320.917	703.692				
IP 41	67.640	264336.976	6474321.981	703.769				
IP 42	68.120	264337.319	6474322.316	703.793				
IP 43	70.120	264338.748	6474323.716	703.895				
IP 44	72.120	264340.178	6474325.116	703.999				
IP 45	74.121	264341.606	6474326.516	704.105				
IP 46	76.121	264343.035	6474327.916	704.212				
IP 47	78.121	264344.463	6474329.316	704.321				
IP 48	78.868	264344.997	6474329.839	704.363				
IP 49	81.000	264346.530	6474331.321	704.502	45°59'11.37"			

CTRL WALL - MTA0 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	699.958
IP 2	0.870	700.018
IP 3	2.870	700.155
IP 4	3.127	700.172
IP 5	4.870	700.290
IP 6	6.871	700.425
IP 7	7.505	700.467
IP 8	8.796	700.552
IP 9	9.000	700.565
IP 10	11.000	700.695
IP 11	12.026	700.762
IP 12	13.062	700.830
IP 13	14.097	700.897
IP 14	14.500	700.924
IP 15	15.133	700.965
IP 16	17.204	701.100
IP 17	19.274	701.235
IP 18	21.345	701.370
IP 19	23.037	701.480
IP 20	27.557	701.741
IP 21	28.330	701.786
IP 22	28.500	701.794
IP 23	29.628	701.850
IP 24	31.699	701.953
IP 25	33.769	702.056
IP 26	35.840	702.159
IP 27	37.911	702.262
IP 28	40.000	702.365
IP 29	42.054	702.467
IP 30	43.000	702.514
IP 31	43.862	702.557
IP 32	44.116	702.570
IP 33	45.000	702.615

CTRL WALL - MTA0 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 34	45.859	702.660
IP 35	46.116	702.673
IP 36	47.116	702.724
IP 37	47.500	702.744
IP 38	48.117	702.776
IP 39	50.117	702.878
IP 40	52.117	702.980
IP 41	54.117	703.083
IP 42	55.500	703.153
IP 43	56.118	703.185
IP 44	58.118	703.286
IP 45	59.000	703.331
IP 46	59.118	703.337
IP 47	60.118	703.388
IP 48	62.119	703.490
IP 49	64.119	703.591
IP 50	66.119	703.692
IP 51	67.640	703.769
IP 52	68.120	703.793
IP 53	70.120	703.895
IP 54	72.120	703.999
IP 55	74.121	704.105
IP 56	76.121	704.212
IP 57	76.500	704.233
IP 58	78.121	704.321
IP 59	78.868	704.363
IP 60	80.122	704.444
IP 61	81.000	704.502

No	Revision	Drawn	Job Manager	Project Director	Date
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client **UPPER HUNTER SHIRE COUNCIL**
Project **COULSONS CREEK ROAD REHABILITATION**
Title **GABION WALL SETOUT SCHEDULES SHEET 6 OF 7**

Original Size **A3** Drawing No: **12542101-C3296** Rev: **0**

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3290.dwg

GABION WALL - MTB0 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	263512.229	6474266.605	597.850	30°35'38.71"			
IP 2	4.229	263514.381	6474270.246	597.850		R = 221.843	8.458	2°11'04.01"
CT	8.458	263516.671	6474273.802	598.350	32°46'42.72"			
TC	15.611	263520.544	6474279.816	598.850	32°46'42.72"			
IP 3	35.829	263531.633	6474297.036	600.350		R = -102.903	40.435	22°30'50.44"
CC	56.046	263535.282	6474317.190	601.850	10°15'52.28"			
IP 4	67.368	263537.310	6474328.390	602.350		R = -90.000	22.643	14°24'54.35"
CT	78.689	263536.487	6474339.742	602.850	355°50'57.93"			
TC	99.943	263534.948	6474360.939	603.850	355°50'57.93"			
IP 5	101.443	263534.840	6474362.435	603.850		R = 216.495	3.000	0°47'38.24"
CT	102.943	263534.752	6474363.933	603.850	356°38'36.18"			
IP 6	108.000	263534.456	6474368.981	604.350	356°38'36.18"			

GABION WALL - MTB0 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	597.850
IP 2	5.999	597.850
IP 3	6.000	598.350
IP 4	11.999	598.350
IP 5	12.000	598.850
IP 6	17.999	598.850
IP 7	18.000	599.350
IP 8	23.999	599.350
IP 9	24.000	599.850
IP 10	29.999	599.850
IP 11	30.000	600.350
IP 12	37.999	600.350
IP 13	38.000	600.850
IP 14	45.999	600.850
IP 15	46.000	601.350
IP 16	53.999	601.350
IP 17	54.000	601.850
IP 18	61.999	601.850
IP 19	62.000	602.350
IP 20	73.999	602.350
IP 21	74.000	602.850
IP 22	83.999	602.850
IP 23	84.000	603.350
IP 24	93.999	603.350
IP 25	94.000	603.850
IP 26	103.999	603.850
IP 27	104.000	604.350
IP 28	108.000	604.350

GABION WALL - MTC0 HORIZONTAL POINTS

PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	264154.173	6474194.608	686.960	99°13'11.71"
IP 2	23.991	264177.854	6474190.765	688.960	99°13'11.71"

GABION WALL - MTC0 VERTICAL POINTS

PT	CHAINAGE	HEIGHT
IP 1	0.000	686.960
IP 2	3.999	686.960
IP 3	4.000	687.460
IP 4	9.999	687.460
IP 5	10.000	687.960
IP 6	15.999	687.960
IP 7	16.000	688.460
IP 8	21.999	688.460
IP 9	22.000	688.960
IP 10	23.991	688.960

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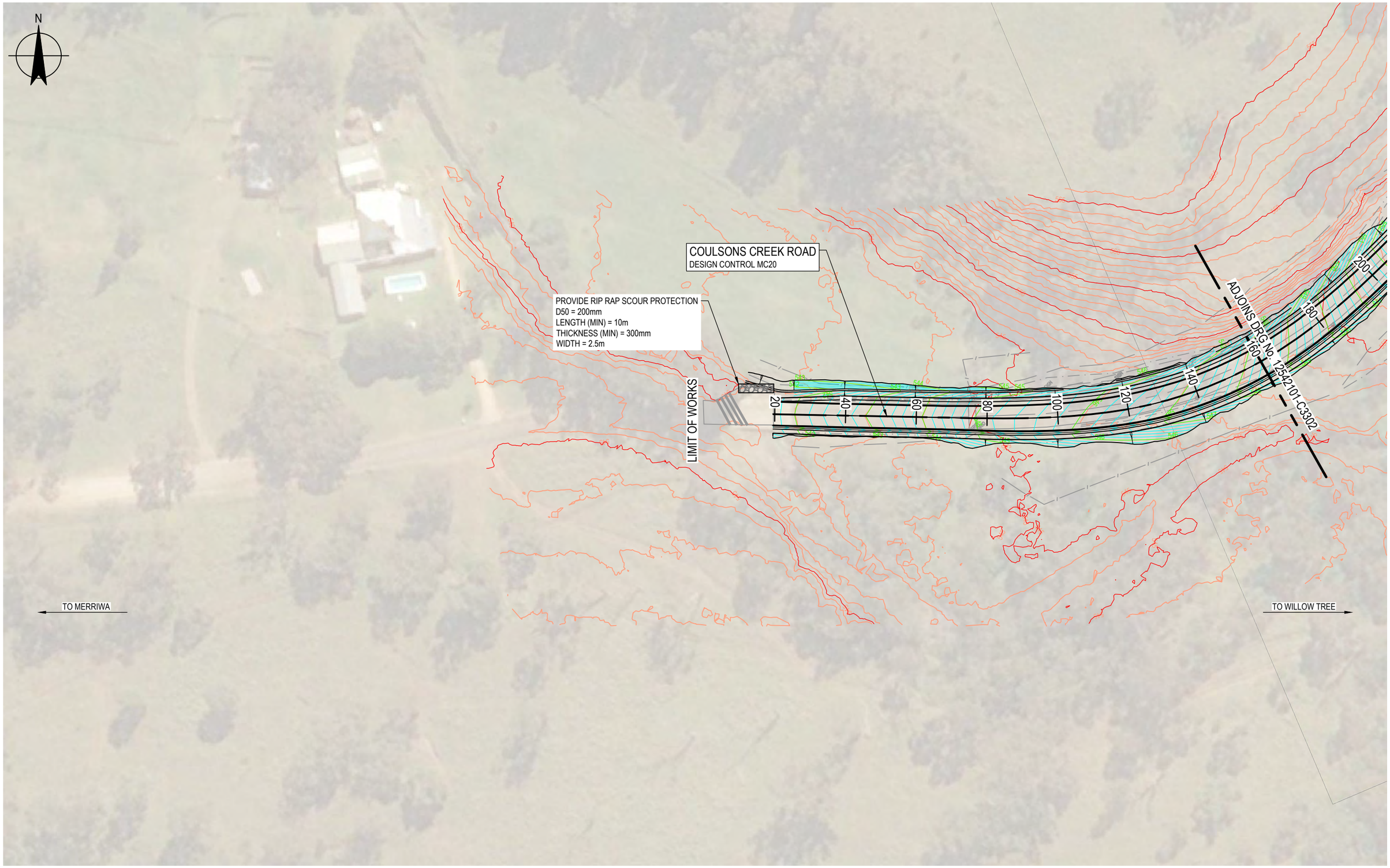
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title GABION WALL SETOUT SCHEDULES SHEET 7 OF 7

Original Size A3 Drawing No: 12542101-C3297 Rev: 0

Plot Date: 27 May 2022 - 12:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3290.dwg



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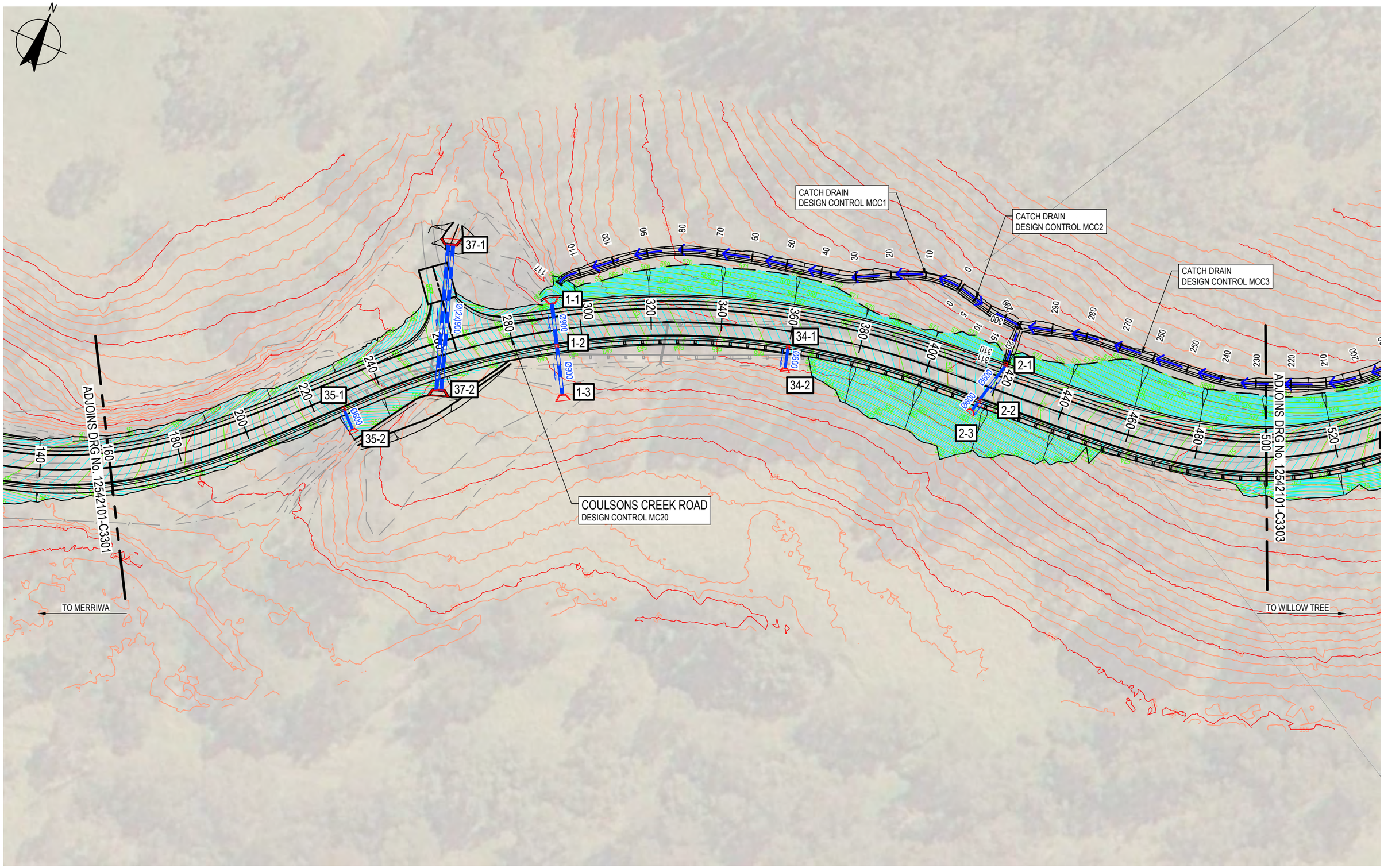
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: STORMWATER MANAGEMENT PLAN
MC20 - CH0 TO CH160 - SHEET 1 OF 9

Original Size: A3
Drawing No: 12542101-C3301
Rev: 0

Plot Date: 27 May 2022 - 12:48 PM
Plotted By: Isaac Smith
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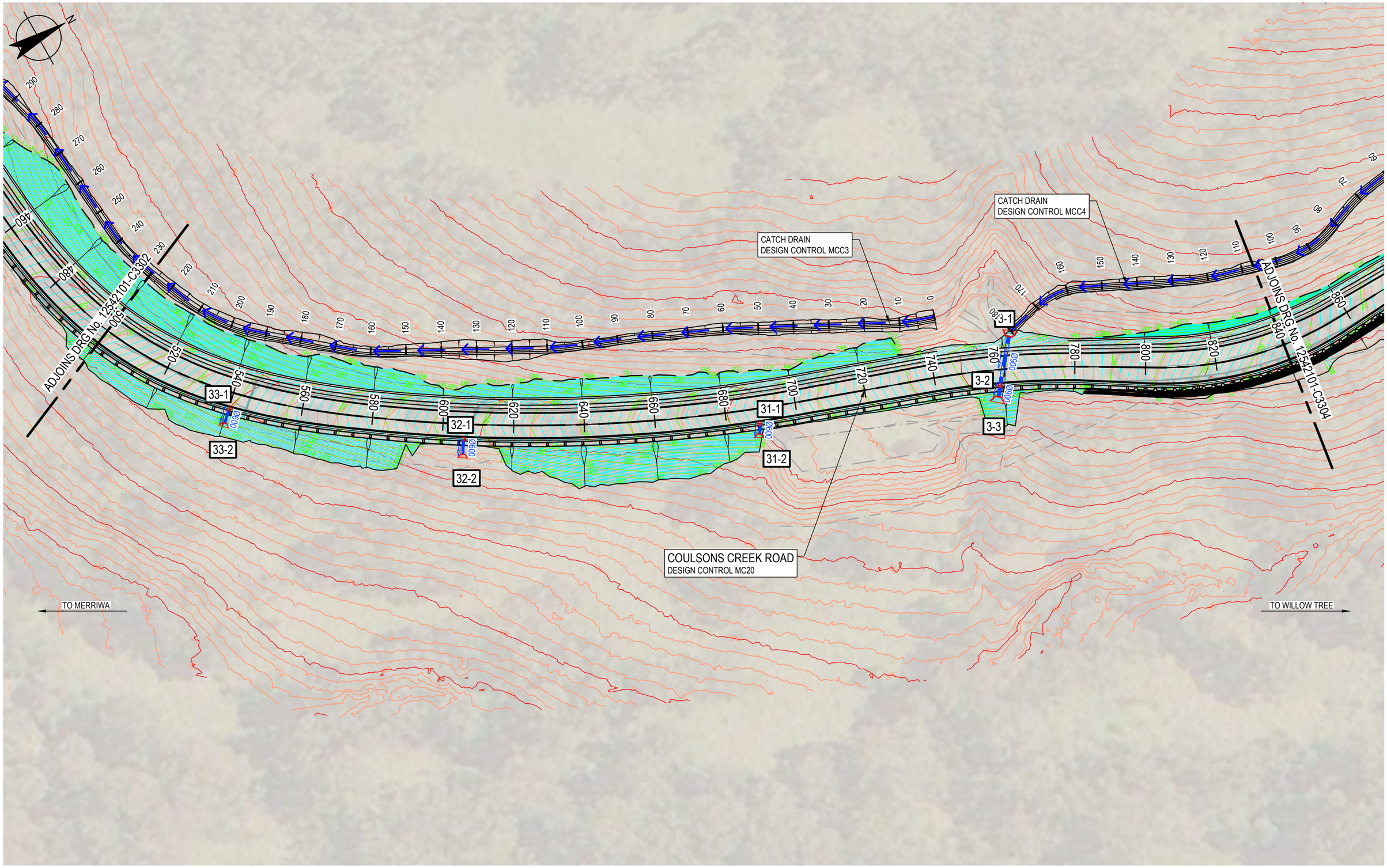
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Project: COULSONS CREEK ROAD REHABILITATION
Title: STORMWATER MANAGEMENT PLAN
MC20 - CH160 TO CH500 - SHEET 2 OF 9

Original Size A3 **Drawing No: 12542101-C3302** **Rev: 0**

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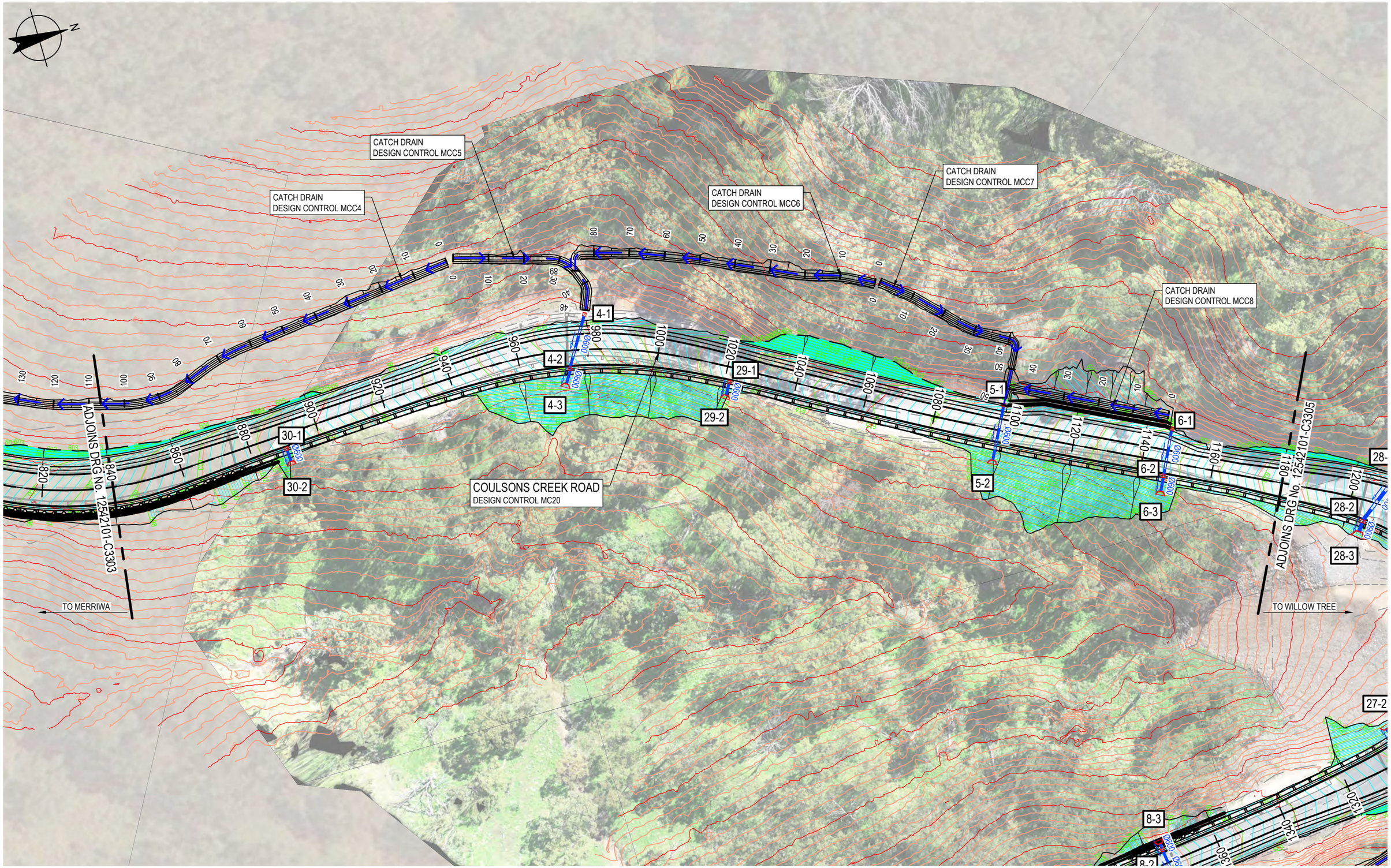
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Project COULSONS CREEK ROAD REHABILITATION
Title STORMWATER MANAGEMENT PLAN
MC20 - CH500 TO CH840 - SHEET 3 OF 9

Original Size **A3** Drawing No: **12542101-C3303** Rev: **0**

Plot Date: 27 May 2022 - 12:49 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3300.dwg



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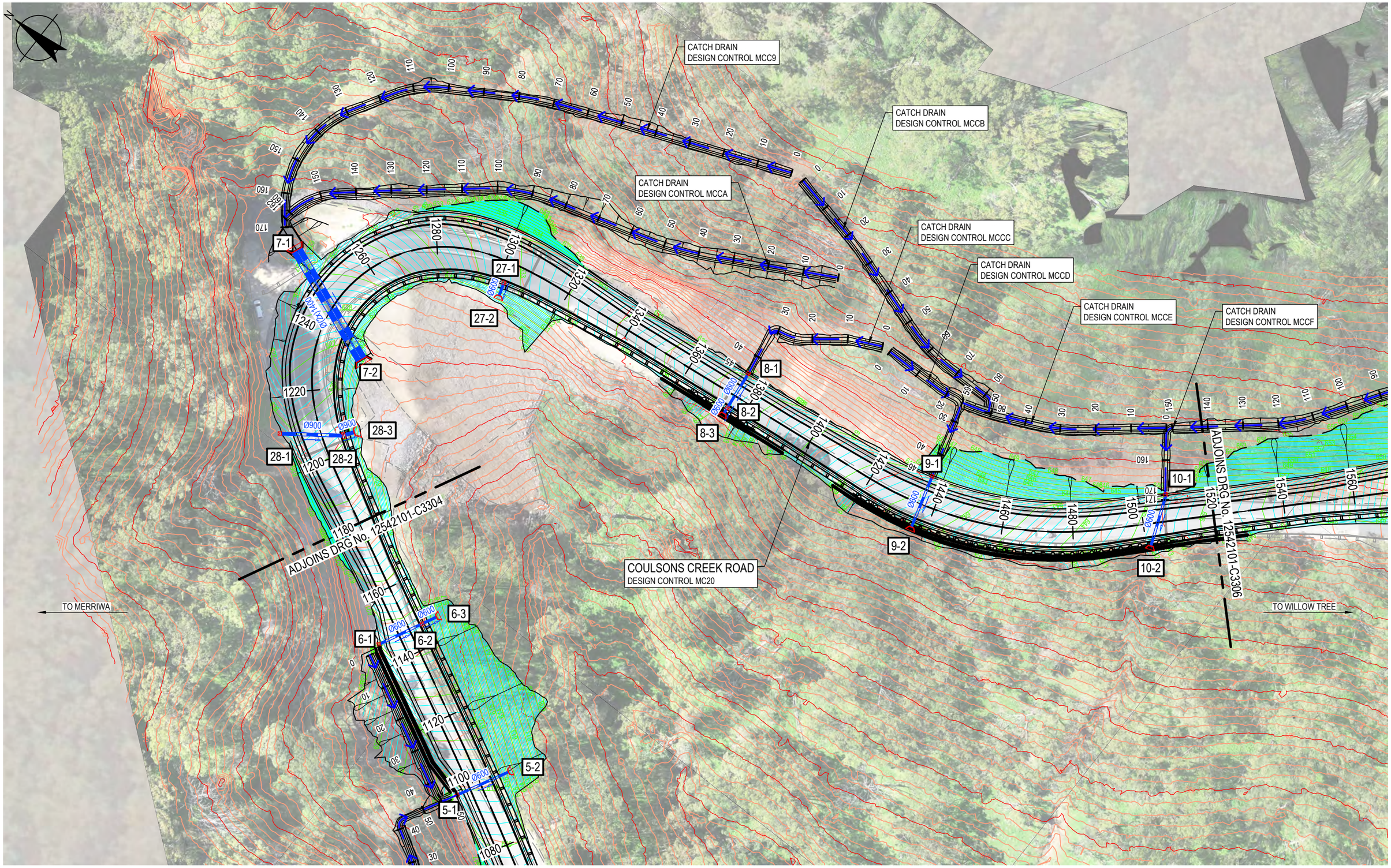
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Title STORMWATER MANAGEMENT PLAN
MC20 - CH840 TO CH1180 - SHEET 4 OF 9

Original Size A3 Drawing No: 12542101-C3304 Rev: 0

Plot Date: 27 May 2022 - 12:49 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3300.dwg



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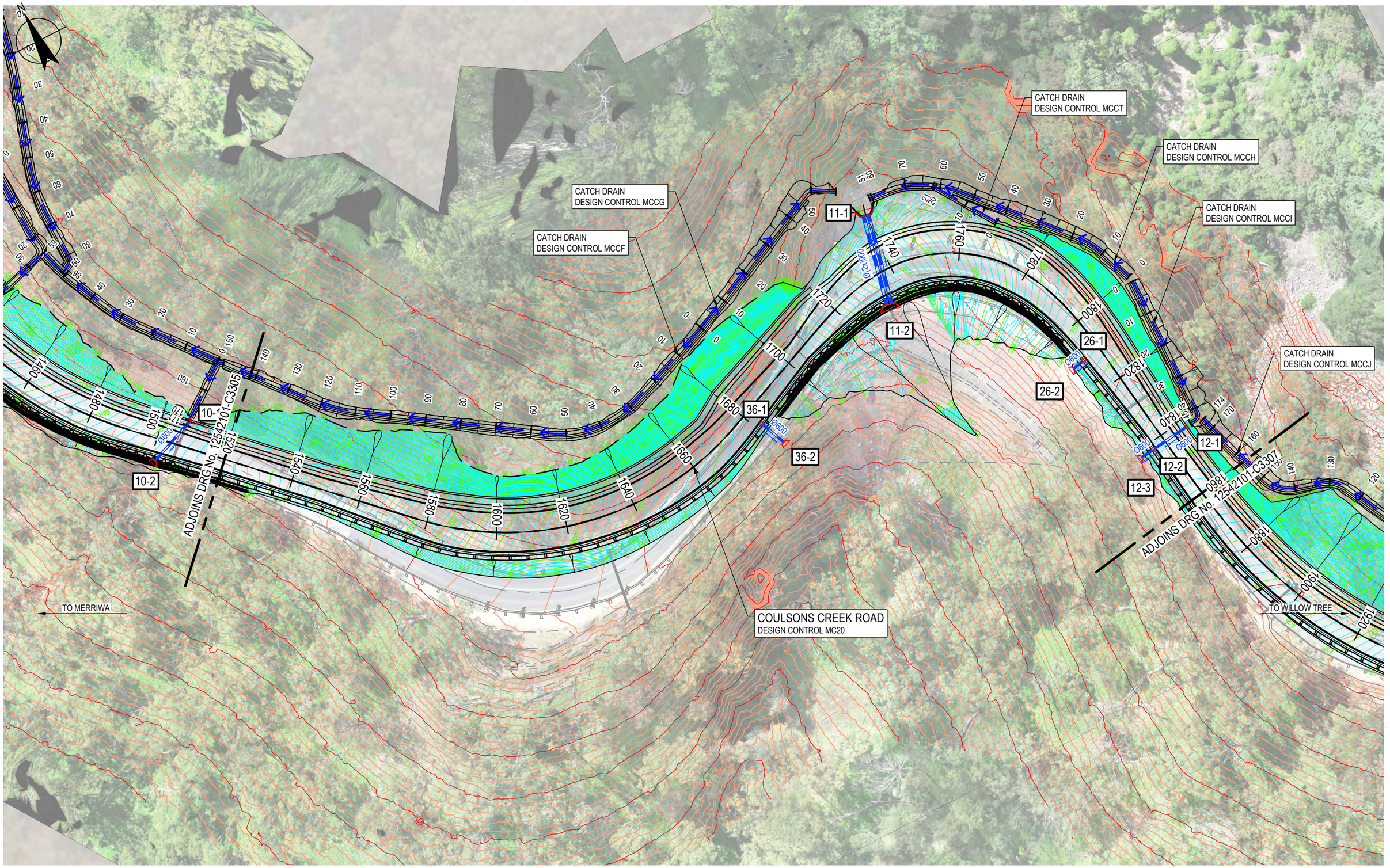
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Project COULSONS CREEK ROAD REHABILITATION
Title STORMWATER MANAGEMENT PLAN
MC20 - CH1180 TO CH1520 - SHEET 5 OF 9

Original Size A3
Drawing No: 12542101-C3305
Rev: 0

Plot Date: 27 May 2022 - 12:49 PM Plotted By: Isaac Smith
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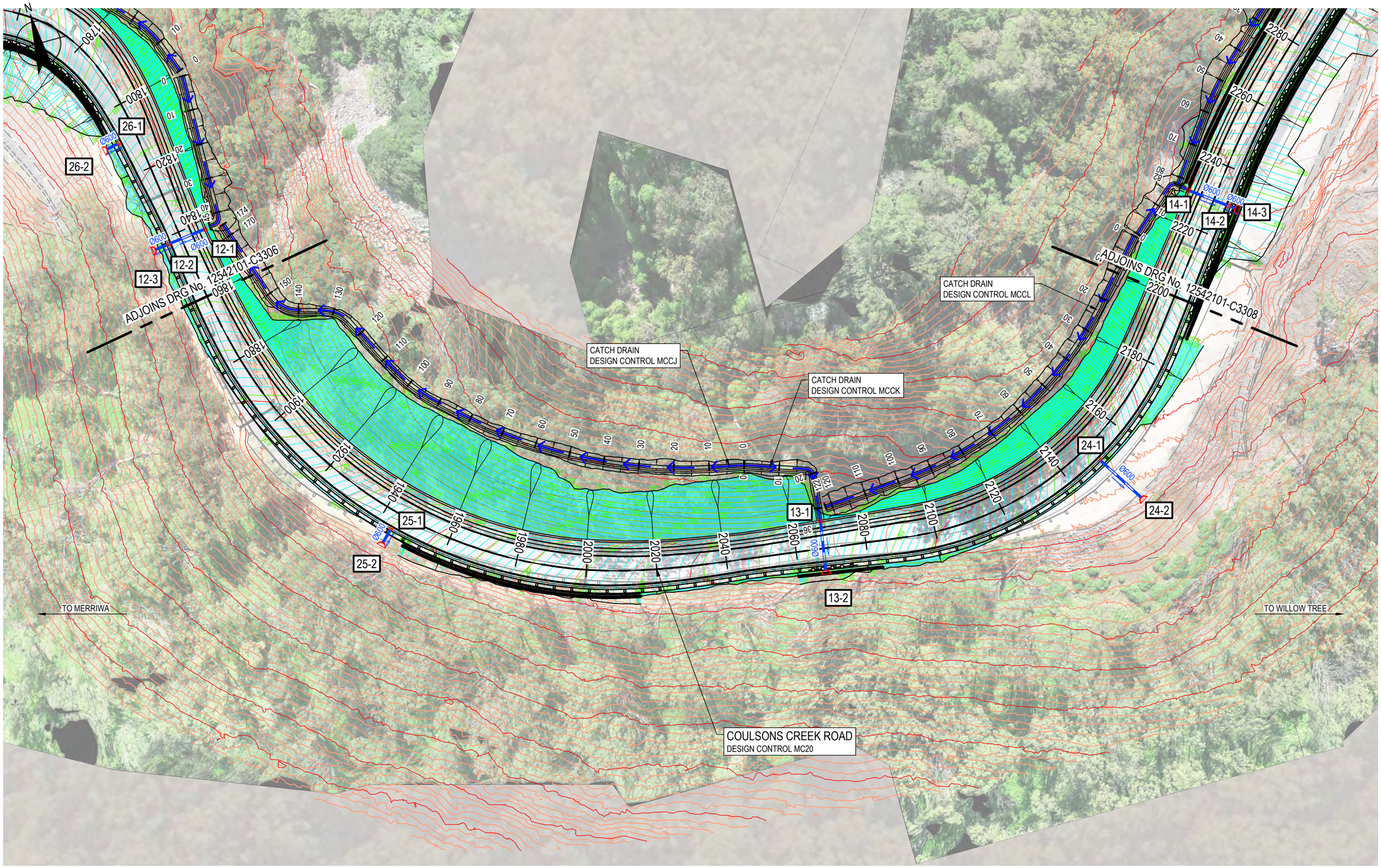
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Client **UPPER HUNTER SHIRE COUNCIL**
Project **COULSONS CREEK ROAD REHABILITATION**
Title **STORMWATER MANAGEMENT PLAN**
MC20 - CH1520 TO CH1860 - SHEET 6 OF 9

Original Size **A3** Drawing No: **12542101-C3306** Rev: **0**

Plot Date: 27 May 2022 - 12:49 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3300.dwg



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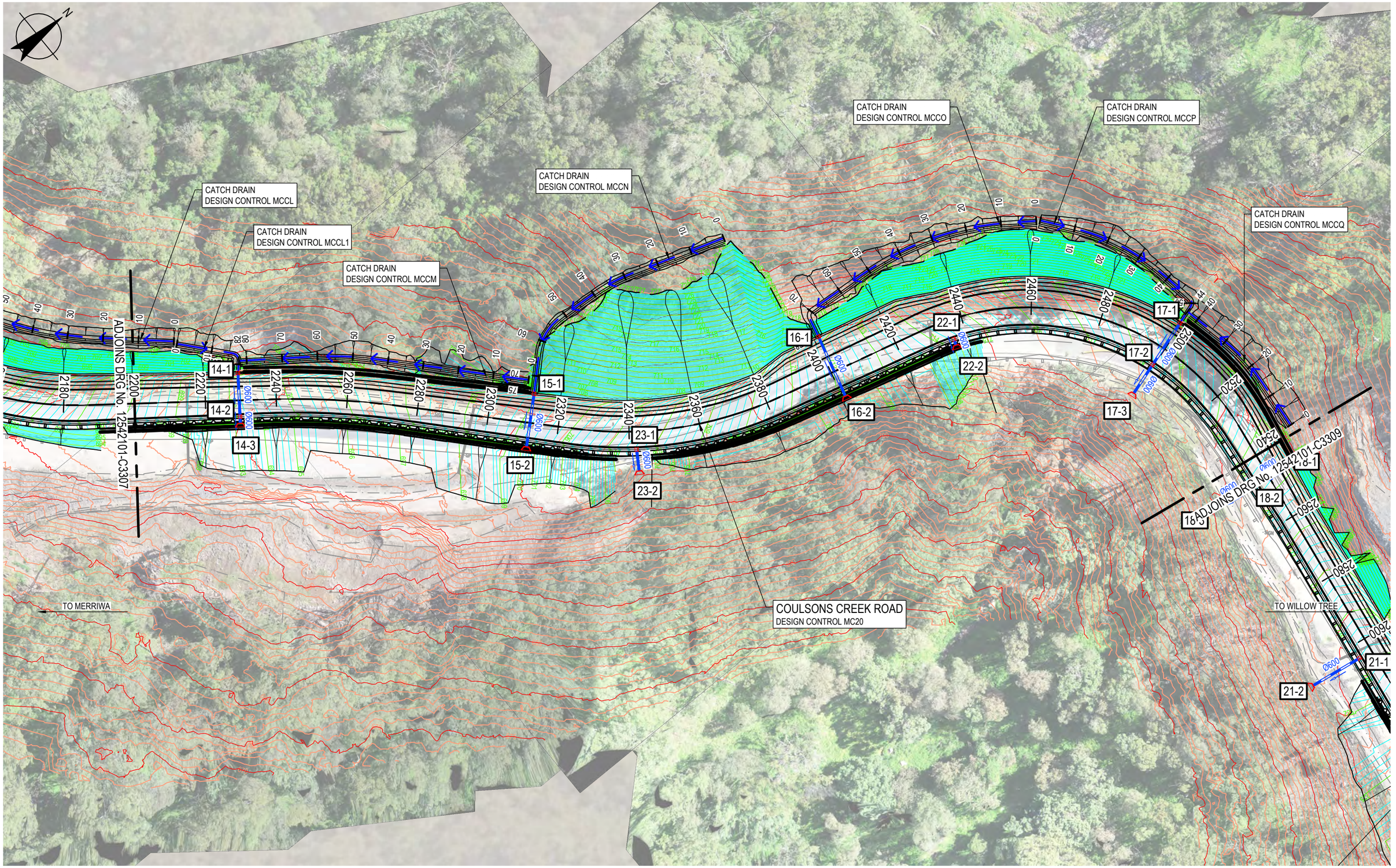
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title STORMWATER MANAGEMENT PLAN
MC20 - CH1860 TO CH2200 - SHEET 7 OF 9

Original Size A3 Drawing No: 12542101-C3307 Rev: 0

Plot Date: 27 May 2022 - 12:49 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3300.dwg



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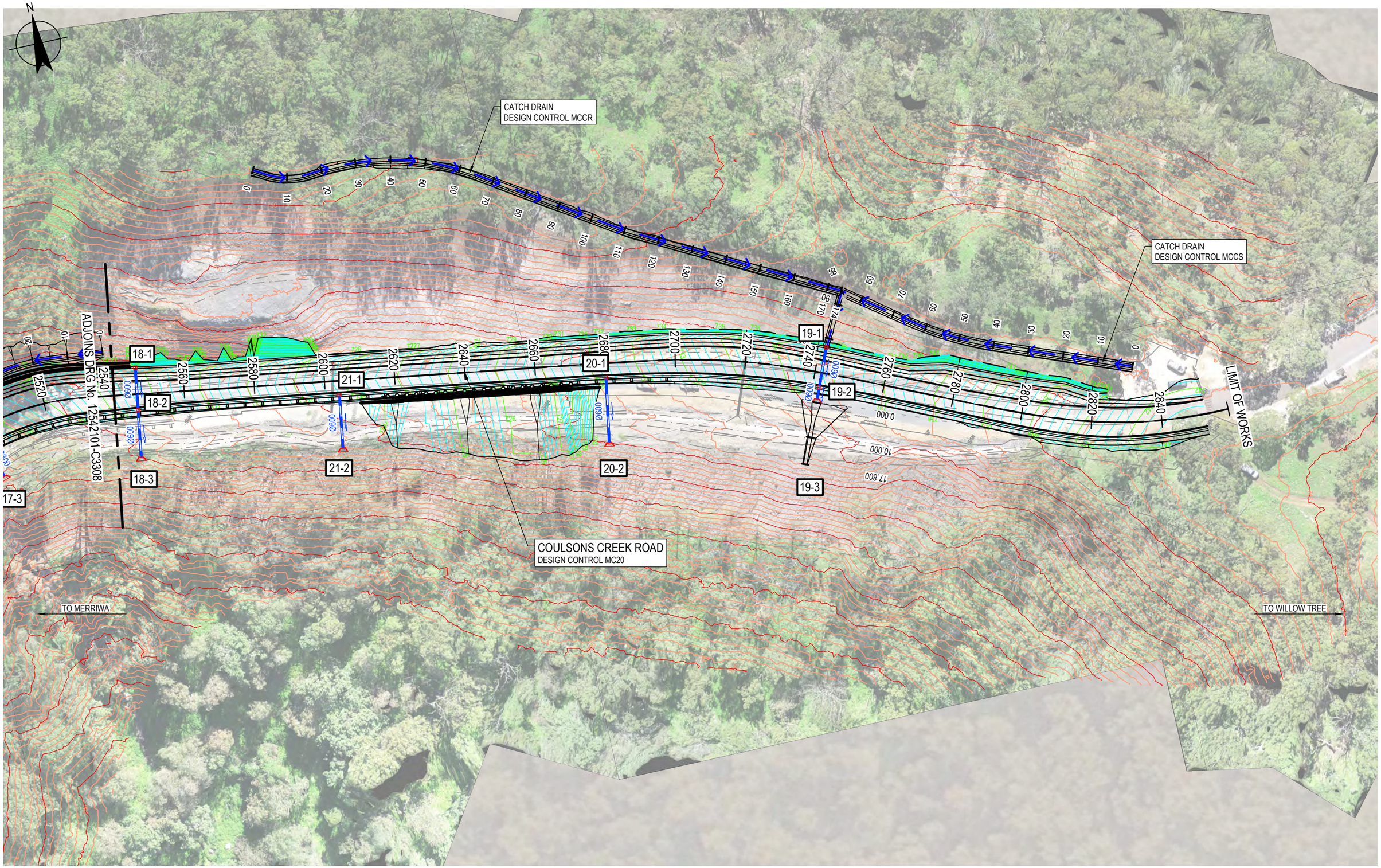
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title STORMWATER MANAGEMENT PLAN
MC20 - CH2200 TO CH2540 - SHEET 8 OF 9

Original Size A3 Drawing No: 12542101-C3308 Rev: 0

Plot Date: 27 May 2022 - 12:50 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3300.dwg



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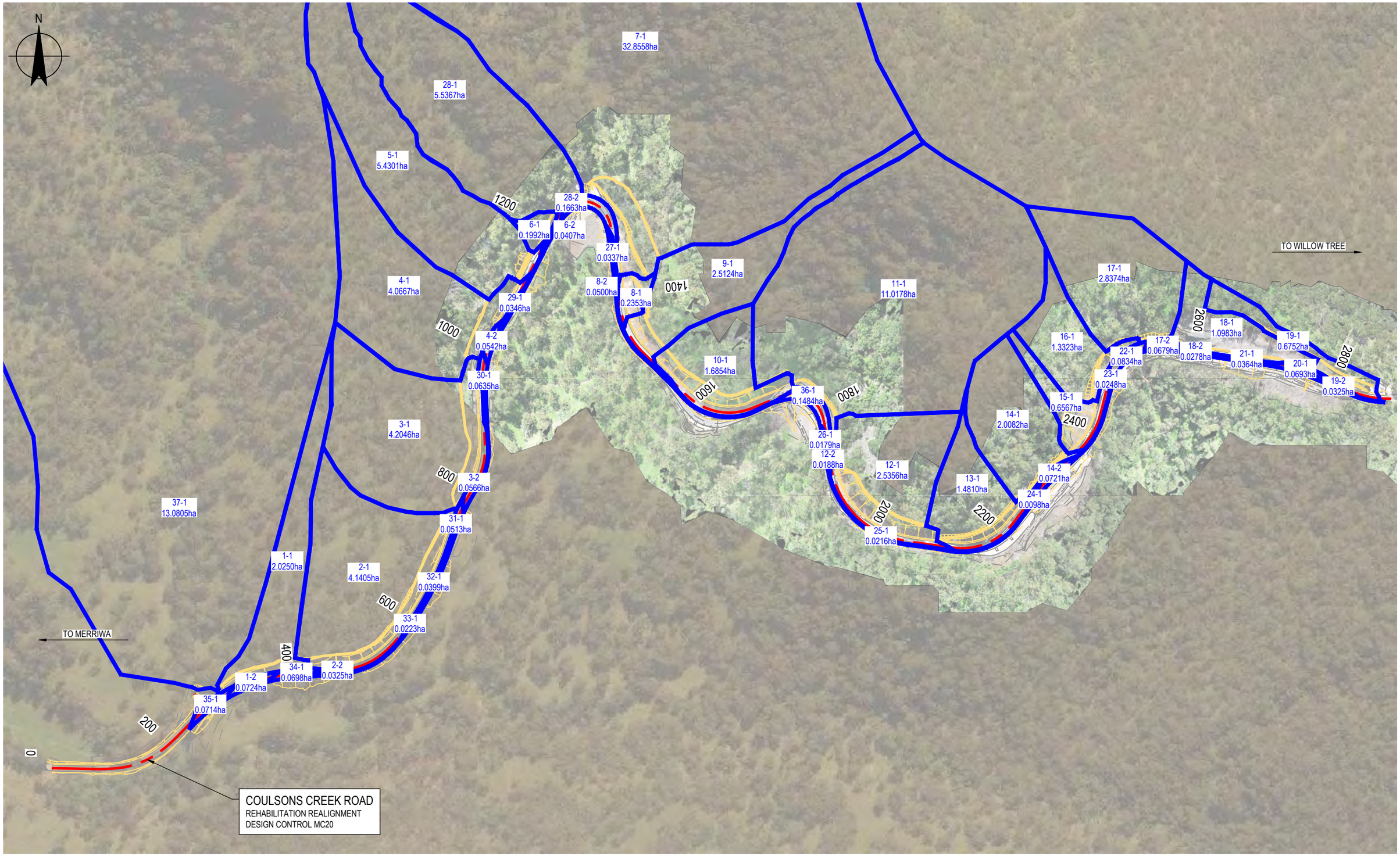
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title STORMWATER MANAGEMENT PLAN
MC20 - CH2540 TO CH2880 - SHEET 9 OF 9

Original Size A3 Drawing No: **12542101-C3309** Rev: 0

Plot Date: 27 May 2022 - 12:50 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3300.dwg



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Scale	1:5000	This Drawing must not be used for Construction unless signed as Approved	

Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title STORMWATER CATCHMENT PLAN
SHEET 1 OF 1

Original Size **A3** Drawing No: **12542101-C3321** Rev: **0**

Plot Date: 27 May 2022 - 2:18 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3320.dwg

CROSS AND PAVEMENT DRAINAGE SCHEDULE

PIT / HEADWALL NAME	PIT / HEADWALL TYPE	PIT / HEADWALL EASTING	PIT / HEADWALL NORTHING	PIT / HEADWALL SETOUT RL	PIT / HEADWALL DEPTH	INLET DIAMETER	INLET INVERT LEVEL	OUTLET DIAMETER	OUTLET INVERT LEVEL	OUTLET PIPE TYPE	OUTLET PIPE LENGTH	OUTLET PIPE GRADE	REMARKS
1-1	HEADWALL	263157.506	6473994.927	559.050	0.000			900	559.050	HDPE	12.313	-33.334	PRECAST CONCRETE HEADWALL INLET
1-2	STANDARD GULLY PIT TYPE SO1	263163.602	6473984.228	560.226	1.576	900	558.681	900	558.651	HDPE	14.080	-33.334	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
1-3	HEADWALL	263170.572	6473971.995	558.228	0.000	900	558.228						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
2-1	INLET SUMP WITH RAISED STEEL GRATE	263282.918	6474029.379	570.775	1.075			600	569.700	HDPE	12.879	-40.117	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
2-2	STANDARD GULLY PIT TYPE SO1	263279.972	6474016.880	570.582	1.233	600	569.379	600	569.349	HDPE	3.442	-39.999	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
2-3	HEADWALL	263279.177	6474013.548	569.263	0.000	600	569.263						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
3-1	HEADWALL	263487.792	6474255.602	594.316	0.000			900	594.316	HDPE	14.201	-50.000	PRECAST CONCRETE HEADWALL INLET
3-2	STANDARD GULLY PIT TYPE SO1	263498.778	6474246.621	595.525	1.523	900	594.032	900	594.002	HDPE	3.404	-50.003	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
3-3	HEADWALL	263501.404	6474244.475	593.934	0.000	900	593.934						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
4-1	INLET SUMP WITH RAISED STEEL GRATE	263518.867	6474463.726	608.500	0.000			600	608.500	HDPE	15.871	-20.000	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
4-2	STANDARD GULLY PIT TYPE SO1	263532.459	6474455.574	609.084	1.564	600	607.706	600	607.519	HDPE	4.550	-20.000	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
4-3	HEADWALL	263536.341	6474453.245	607.292	0.000	600	607.292						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
5-1	INLET SUMP WITH RAISED STEEL GRATE	263576.893	6474570.114	616.549	0.899			600	615.650	HDPE	15.972	-50.001	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
5-2	HEADWALL	263591.040	6474562.698	615.331	0.000	600	615.331						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
6-1	INLET SUMP WITH RAISED STEEL GRATE	263596.735	6474613.877	620.078	1.078			600	619.000	HDPE	13.509	-49.999	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
6-2	STANDARD GULLY PIT TYPE SO1	263608.788	6474607.804	620.541	1.841	600	618.730	600	618.700	HDPE	4.569	-49.998	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
6-3	HEADWALL	263612.869	6474605.748	618.608	0.000	600	618.608						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
7-1	HEADWALL	263669.892	6474700.885	624.822	0.000			(2x)1400	624.822	HDPE	36.000	-36.364	PRECAST CONCRETE HEADWALL INLET
7-2	HEADWALL	263657.415	6474668.864	623.877	0.000	(2x)1400	623.832						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
8-1	INLET SUMP WITH RAISED STEEL GRATE	263721.277	6474579.033	636.890	0.952			600	635.938	HDPE	11.314	-49.998	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
8-2	STANDARD GULLY PIT TYPE SO1	263710.039	6474577.722	637.241	1.559	600	635.712	600	635.682	HDPE	1.951	-49.989	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
8-3	HEADWALL	263708.102	6474577.496	635.643	0.000	600	635.643						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
9-1	INLET SUMP WITH RAISED STEEL GRATE	263730.569	6474520.267	640.486	1.084			600	639.402	HDPE	15.551	-50.001	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
9-2	HEADWALL	263715.610	6474516.015	639.091	0.000	600	639.091						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
10-1	INLET SUMP WITH RAISED STEEL GRATE	263767.265	6474465.298	643.888	0.000			600	643.888	HDPE	15.245	-50.001	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
10-2	HEADWALL	263753.188	6474459.533	643.583	0.000	600	643.583						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
11-1	HEADWALL	263964.204	6474429.564	661.600	0.000			(2x)900	661.600	HDPE	26.251	-25.000	PRECAST CONCRETE HEADWALL INLET
11-2	HEADWALL	263958.549	6474403.930	660.550	0.000	(2x)900	660.550						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
12-1	INLET SUMP WITH RAISED STEEL GRATE	264017.618	6474334.736	671.202	1.002			600	670.200	HDPE	11.315	-50.001	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
12-2	STANDARD GULLY PIT TYPE SO1	264006.391	6474333.325	671.556	1.613	600	669.974	600	669.944	HDPE	4.080	-49.997	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
12-3	HEADWALL	264002.343	6474332.817	669.862	0.000	600	669.862						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
13-1	INLET SUMP WITH RAISED STEEL GRATE	264164.214	6474208.100	685.800	0.000			600	685.800	HDPE	14.167	-46.767	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
13-2	HEADWALL	264161.946	6474194.116	685.497	0.000	600	685.497						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
14-1	INLET SUMP WITH RAISED STEEL GRATE	264290.097	6474271.024	699.838	1.047			600	698.790	HDPE	12.342	-50.000	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
14-2	STANDARD GULLY PIT TYPE SO1	264300.005	6474263.667	700.014	1.500	600	698.544	600	698.514	HDPE	1.962	-50.005	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
14-3	HEADWALL	264301.581	6474262.497	698.474	0.000	600	698.474						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
15-1	INLET SUMP WITH RAISED STEEL GRATE	264347.523	6474331.932	704.578	0.951			600	703.626	HDPE	15.167	-49.999	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
15-2	HEADWALL	264357.786	6474320.765	703.323	0.000	600	703.323						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
16-1	INLET SUMP WITH RAISED STEEL GRATE	264385.869	6474404.216	711.590	1.111			600	710.480	HDPE	18.438	-50.001	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
16-2	HEADWALL	264403.694	6474399.500	710.111	0.000	600	710.111						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
17-1	INLET SUMP WITH RAISED STEEL GRATE	264447.418	6474485.632	718.824	1.224			600	717.600	HDPE	14.118	-19.999	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
17-2	STANDARD GULLY PIT TYPE SO1	264451.625	6474472.156	718.284	1.420	600	716.894	600	716.864	HDPE	9.707	-19.999	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
17-3	HEADWALL	264454.517	6474462.891	716.379	0.000	600	716.379						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
18-1	INLET SUMP WITH RAISED STEEL GRATE	264497.570	6474485.067	721.521	1.021			600	720.500	HDPE	12.069	-33.332	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
18-2	STANDARD GULLY PIT TYPE SO1	264495.742	6474473.139	721.470	1.362	600	720.138	600	720.108	HDPE	13.516	-18.024	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
18-3	HEADWALL	264493.694	6474459.779	719.358	0.000	600	719.358						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS

NOTE

1. PIT SETOUT CO-ORDINATES TO PIT CENTER.
2. PIT SETOUT LEVEL TO PIT SUMP.
3. PIPE OUTLET SETOUT CO-ORDINATES TO END OF PIPE.
4. PIPE OUTLET SETOUT LEVEL TO PIPE INVERT.
5. REFER TO GEOTECHNICAL DRAWINGS FOR OUTLET TREATMENT DETAILS.

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client **UPPER HUNTER SHIRE COUNCIL**
Project **COULSONS CREEK ROAD REHABILITATION**
Title **CROSS AND PAVEMENT DRAINAGE SCHEDULE SHEET 1 OF 2**

Original Size **A3** Drawing No: **12542101-C3331** Rev: **0**

Plot Date: 27 May 2022 - 12:51 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3330.dwg

CROSS AND PAVEMENT DRAINAGE SCHEDULE

PIT / HEADWALL NAME	PIT / HEADWALL TYPE	PIT / HEADWALL EASTING	PIT / HEADWALL NORTHING	PIT / HEADWALL SETOUT RL	PIT / HEADWALL DEPTH	INLET DIAMETER	INLET INVERT LEVEL	OUTLET DIAMETER	OUTLET INVERT LEVEL	OUTLET PIPE TYPE	OUTLET PIPE LENGTH	OUTLET PIPE GRADE	REMARKS
19-1	INLET SUMP WITH RAISED STEEL GRATE	264690.746	6474448.175	735.566	1.115			600	734.451	HDPE	11.630	-99.996	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
19-2	STANDARD GULLY PIT TYPE SO1	264686.322	6474437.420	735.569	1.285	600	734.335	600	734.285	HDPE	3.410	-100.007	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
19-3	HEADWALL	264685.025	6474434.266	734.251	0.000	600	734.251						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
20-1	STANDARD GULLY PIT TYPE SO1	264627.690	6474453.351	731.155	1.205			600	729.950	HDPE	18.616	-50.000	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
20-2	HEADWALL	264624.608	6474434.992	729.578	0.000	600	729.578						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
21-1	STANDARD GULLY PIT TYPE SO1	264552.587	6474464.946	725.720	1.800			600	723.920	HDPE	15.254	-99.998	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
21-2	HEADWALL	264550.267	6474449.870	723.767	0.000	600	723.767						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
22-1	STANDARD GULLY PIT TYPE SO1	264410.588	6474433.346	714.198	1.198			600	713.000	HDPE	1.854	-33.325	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
22-2	HEADWALL	264412.323	6474432.694	712.944	0.000	600	712.944						HEADWALL OUTLET REFER TO DRAWING 12542101-C3503 FOR DETAILS
23-1	STANDARD GULLY PIT TYPE SO1	264378.031	6474344.386	707.527	2.043			600	705.485	HDPE	6.117	-49.999	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
23-2	HEADWALL	264383.177	6474341.081	705.362	0.000	600	705.362						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
24-1	STANDARD GULLY PIT TYPE SO1	264245.406	6474203.902	694.180	1.610			600	692.570	HDPE	16.150	-50.000	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
24-2	HEADWALL	264254.041	6474190.255	692.247	0.000	600	692.247						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
25-1	STANDARD GULLY PIT TYPE SO1	264045.884	6474238.518	678.952	1.252			600	677.700	HDPE	4.685	-50.000	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
25-2	HEADWALL	264042.575	6474235.201	677.606	0.000	600	677.606						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
26-1	STANDARD GULLY PIT TYPE SO1	264000.435	6474364.761	669.440	1.390			600	668.050	HDPE	3.878	-50.004	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
26-2	HEADWALL	263996.640	6474363.961	667.972	0.000	600	667.972						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
27-1	STANDARD GULLY PIT TYPE SO1	263698.771	6474649.163	632.567	1.475			600	631.092	HDPE	3.938	-50.002	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
27-2	HEADWALL	263695.027	6474647.942	631.013	0.000	600	631.013						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
28-1	INLET SUMP WITH RAISED STEEL GRATE	263626.207	6474672.618	625.600	1.688			900	623.912	HDPE	18.089	-50.000	REFER TO TfNSW STANDARD DRAWING R0220-36 FOR DETAILS
28-2	STANDARD GULLY PIT TYPE SO2	263636.953	6474658.088	625.054	1.534	900	623.550	900	623.520	HDPE	3.201	-50.006	REFER TO TfNSW STANDARD DRAWING R0220-22 FOR DETAILS
28-3	HEADWALL	263639.593	6474656.278	623.456	0.000	900	623.456						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
29-1	STANDARD GULLY PIT TYPE SO1	263548.795	6474497.560	612.426	1.475			600	610.951	HDPE	3.869	-50.005	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
29-2	HEADWALL	263552.147	6474495.627	610.873	0.000	600	610.873						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
30-1	STANDARD GULLY PIT TYPE SO1	263531.555	6474372.323	604.279	1.479			600	602.800	HDPE	3.863	-50.004	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
30-2	HEADWALL	263535.415	6474372.487	602.723	0.000	600	602.723						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
31-1	STANDARD GULLY PIT TYPE SO1	263474.788	6474182.086	590.489	0.989			600	589.500	HDPE	3.077	-50.006	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
31-2	HEADWALL	263477.413	6474180.493	589.438	0.000	600	589.438						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
32-1	STANDARD GULLY PIT TYPE SO1	263437.496	6474106.773	584.422	1.475			600	582.947	HDPE	4.355	-50.000	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
32-2	HEADWALL	263441.192	6474104.470	582.859	0.000	600	582.859						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
33-1	STANDARD GULLY PIT TYPE SO1	263397.441	6474053.118	579.846	1.475			600	578.371	HDPE	4.296	-49.997	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
33-2	HEADWALL	263400.439	6474050.042	578.286	0.000	600	578.286						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
34-1	STANDARD GULLY PIT TYPE SO1	263224.114	6474009.673	566.432	1.475			600	564.957	HDPE	6.158	-50.003	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
34-2	HEADWALL	263225.738	6474003.733	564.834	0.000	600	564.834						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
35-1	STANDARD GULLY PIT TYPE SO1	263114.946	6473944.077	553.827	1.475			600	552.352	HDPE	6.356	-50.003	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
35-2	HEADWALL	263119.560	6473939.705	552.224	0.000	600	552.224						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
36-1	STANDARD GULLY PIT TYPE SO1	263911.048	6474390.499	658.627	1.527			600	657.100	HDPE	8.211	-49.997	REFER TO TfNSW STANDARD DRAWING R0220-21 FOR DETAILS
36-2	HEADWALL	263914.201	6474382.919	656.936	0.000	600	656.936						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS
37-1	HEADWALL	263124.588	6473999.039	555.850	0.000			(2x)900	555.850	HDPE	41.685	-49.625	PRECAST CONCRETE HEADWALL INLET
37-2	HEADWALL	263138.410	6473957.365	554.972	0.000	(2x)900	555.010						HEADWALL OUTLET REFER TO DRAWING 12542101-C3502 FOR DETAILS

NOTE

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2. PIT SETOUT LEVEL TO PIT SUMP.
3. PIPE OUTLET SETOUT CO-ORDINATES TO END OF PIPE.
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5. REFER TO GEOTECHNICAL DRAWINGS FOR OUTLET TREATMENT DETAILS.

No	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

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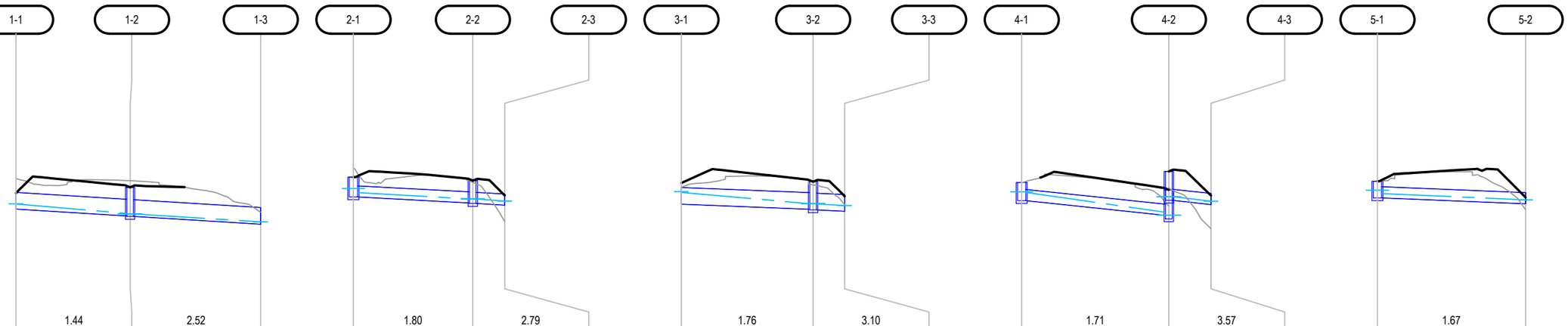
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Drawn	I.SMITH	Designer	N.HINCKS
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	NTS	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS AND PAVEMENT DRAINAGE SCHEDULE SHEET 2 OF 2

Original Size A3 **Drawing No: 12542101-C3332** **Rev: 0**

Plot Date: 27 May 2022 - 12:51 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3330.dwg



	1-1	1-2	1-3	2-1	2-2	2-3	3-1	3-2	3-3	4-1	4-2	4-3	5-1	5-2
VELOCITY (m/s)	1.44	2.52		1.80	2.79		1.76	3.10		1.71	3.57		1.67	
CAPACITY VELOCITY (m/s)	5.72	5.72		3.43	3.45		4.35	4.36		4.86	4.88		3.08	
PIPE FLOW (cu.m/s)	0.162	0.148		0.277	0.284		0.621	0.635		0.262	0.271		0.243	
PIPE CAPACITY (cu.m/s)	3.636	3.636		0.970	0.975		1.229	1.233		1.374	1.379		0.872	
PIPE GRADE (%)	3.0%	3.0%		2.5%	2.5%		2.0%	2.0%		5.0%	5.0%		2.0%	
PIPE SLOPE (1 IN X)	33.3	33.3		40.1	40.0		50.0	50.0		20.0	20.0		50.0	
PIPE SIZE (mm)	900	900		600	600		900	900		600	600		600	
PIPE CLASS	HDPE	HDPE		HDPE	HDPE		HDPE	HDPE		HDPE	HDPE		HDPE	
DATUM R.L.	536.00			546.00			571.00			585.00	584.00		592.00	
HYDRAULIC GRADE LINE	559.331	559.320	558.819	558.786		558.361	570.156	569.938	569.599	569.595	569.584	569.485	594.990	594.951
	594.343	594.324	594.240	608.980	608.950	607.884	607.717	607.712	607.473	616.067	615.886	615.547		
DEPTH TO INVERT FROM DESIGN SURFACE	0.900	1.546	1.576	0.900	0.900	1.075	1.203	1.233	0.600	0.600	0.900	1.493	1.523	0.900
	0.900	0.983	1.377	1.564	0.600	0.600	0.899	0.600	0.600					
INVERT LEVEL	559.050	558.681	558.651	558.228	558.228	569.700	569.379	569.349	569.263	569.263	594.316	594.032	594.002	593.934
	593.934	608.500	607.706	607.519	607.292	607.292	615.650	615.331	615.331					
DESIGN SURFACE LEVEL	559.950	560.226	559.128	570.775	570.582	569.863	596.216	595.525	594.834	609.483	609.084	607.892	616.549	615.931
	615.931													
EXISTING SURFACE LEVEL	560.694	560.577	558.883	571.278	570.486	568.376	595.227	595.350	594.287	609.483	608.212	605.986	616.553	615.011
	615.011													
CHAINAGE	0.000	12.313	12.313	14.080	26.393	0.000	12.879	12.879	3.442	16.320	0.000	14.201	14.201	3.404
	17.605	0.000	15.871	15.871	4.550	20.421	0.000	15.972	15.972					

LINE 1 LINE 2 LINE 3 LINE 4 LINE 5

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

VERTICAL SCALE 1:250 AT ORIGINAL SIZE
HORIZONTAL SCALE 1:500 AT ORIGINAL SIZE
0 2.5 5 7.5m
0 5 10 15m

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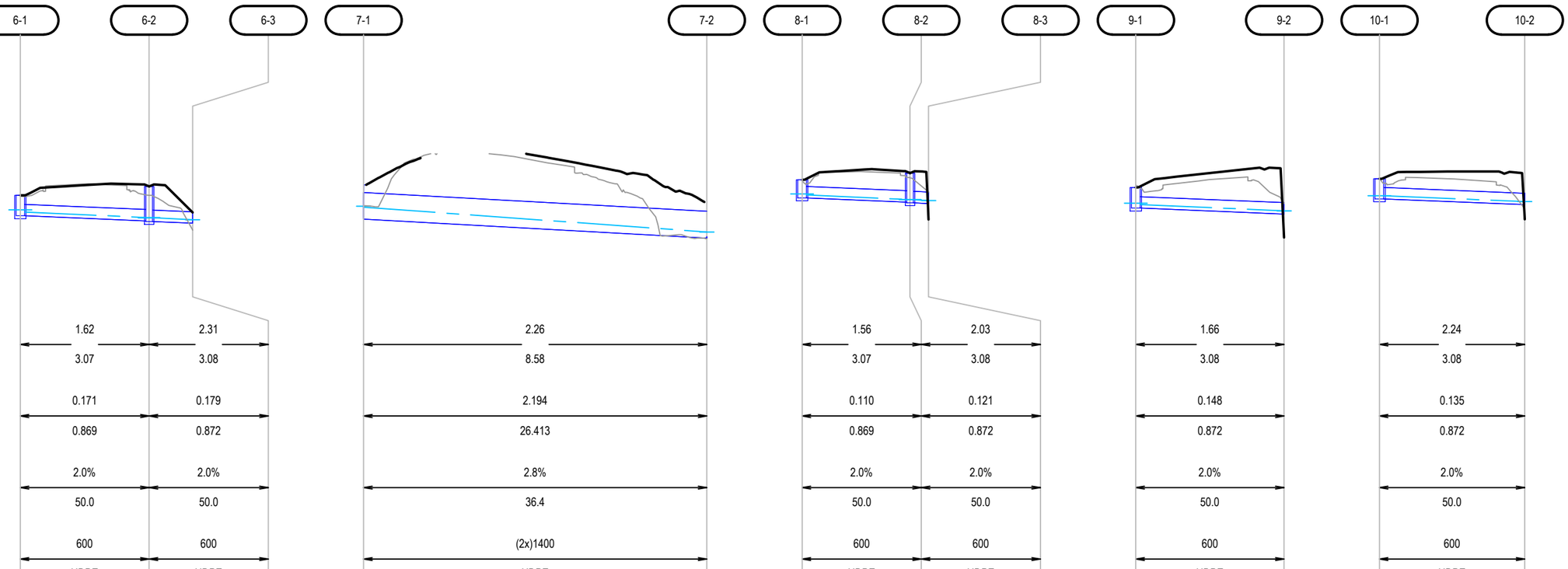
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS AND PAVEMENT DRAINAGE PROFILES SHEET 1 OF 7

Original Size A3 Drawing No: 12542101-C3341 Rev: 0

Plot Date: 27 May 2022 - 12:51 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3340.dwg



	6-1	6-2	6-3	7-1	7-2	8-1	8-2	8-3	9-1	9-2	10-1	10-2
VELOCITY (m/s)	1.62	2.31		2.26		1.56	2.03		1.66		2.24	
CAPACITY VELOCITY (m/s)	3.07	3.08		8.58		3.07	3.08		3.08		3.08	
PIPE FLOW (cu.m/s)	0.171	0.179		2.194		0.110	0.121		0.148		0.135	
PIPE CAPACITY (cu.m/s)	0.869	0.872		26.413		0.869	0.872		0.872		0.872	
PIPE GRADE (%)	2.0%	2.0%		2.8%		2.0%	2.0%		2.0%		2.0%	
PIPE SLOPE (1 IN X)	50.0	50.0		36.4		50.0	50.0		50.0		50.0	
PIPE SIZE (mm)	600	600		(2x)1400		600	600		600		600	
PIPE CLASS	HDPE	HDPE		HDPE		HDPE	HDPE		HDPE		HDPE	
DATUM R.L.	596.00			602.00		612.00			616.00		620.00	
HYDRAULIC GRADE LINE	619.309 / 619.197	618.810 / 618.897	618.894	625.499 / 625.450	624.150	636.152 / 636.096	635.856 / 635.848	635.840	639.663 / 639.588	639.259	644.048	643.743
DEPTH TO INVERT FROM DESIGN SURFACE	1.078	1.811	1.841 / 0.600	1.400	0.067 / 0.067	0.952	1.529	1.559 / 0.600	1.084	0.600 / 0.600	1.051	0.600 / 0.600
INVERT LEVEL	619.000	618.730	618.700 / 618.608	624.822	623.832 / 623.832	635.938	635.712	635.682 / 635.643	639.402	639.091 / 639.091	643.888	643.583 / 643.583
DESIGN SURFACE LEVEL	620.078		620.541 / 619.208	626.222	623.899	636.890		637.241 / 636.243	640.486	639.691	644.938	644.183
EXISTING SURFACE LEVEL	620.024		620.068 / 618.247	625.536	623.802	636.805		636.991 / 636.248	640.608	639.649	644.973	643.362
CHAINAGE	0.000	13.509	13.509 / 4.569 / 18.077	0.000	36.000 / 36.000	0.000	11.314	11.314 / 1.951 / 13.264	0.000	15.551 / 15.551	0.000	15.245 / 15.245
	LINE 6			LINE 7		LINE 8			LINE 9		LINE 10	

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

VERTICAL SCALE 1:250 AT ORIGINAL SIZE
HORIZONTAL SCALE 1:500 AT ORIGINAL SIZE
0 2.5 5 7.5m
0 5 10 15m

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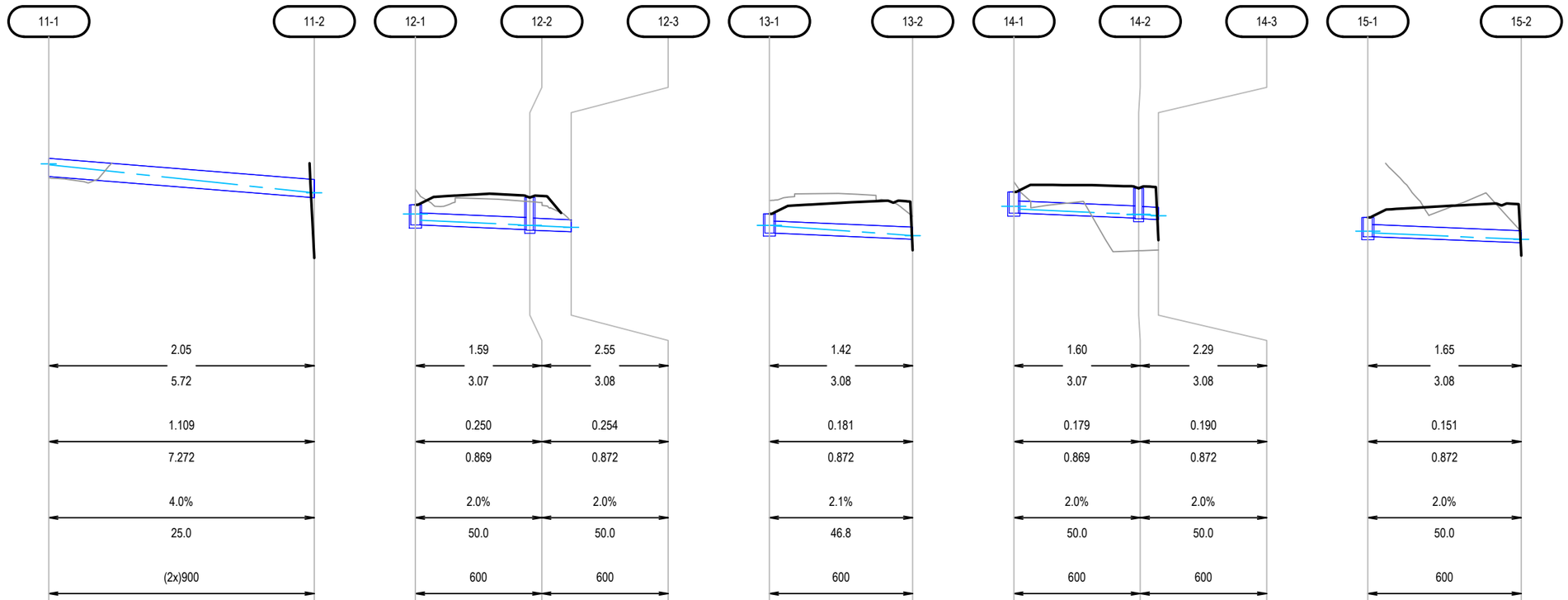
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Drawn	I.SMITH	Designer	N.HINCKS
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS AND PAVEMENT DRAINAGE PROFILES SHEET 2 OF 7

Original Size: A3
Drawing No: 12542101-C3342
Rev: 0

Plot Date: 27 May 2022 - 12:51 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3340.dwg



	11-1	11-2	12-1	12-2	12-3	13-1	13-2	14-1	14-2	14-3	15-1	15-2
VELOCITY (m/s)	2.05		1.59	2.55		1.42		1.60	2.29		1.65	
CAPACITY VELOCITY (m/s)	5.72		3.07	3.08		3.08		3.07	3.08		3.08	
PIPE FLOW (cu.m/s)	1.109		0.250	0.254		0.181		0.179	0.190		0.151	
PIPE CAPACITY (cu.m/s)	7.272		0.869	0.872		0.872		0.869	0.872		0.872	
PIPE GRADE (%)	4.0%		2.0%	2.0%		2.1%		2.0%	2.0%		2.0%	
PIPE SLOPE (1 IN X)	25.0		50.0	50.0		46.8		50.0	50.0		50.0	
PIPE SIZE (mm)	(2x)900		600	600		600		600	600		600	
PIPE CLASS	HDPE		HDPE	HDPE		HDPE		HDPE	HDPE		HDPE	
DATUM R.L.	636.00		647.00			663.00		675.00			681.00	
HYDRAULIC GRADE LINE	662.217 / 662.179	660.788	670.750 / 670.440	670.194 / 670.181	670.176	686.188 / 686.166	685.680	699.123 / 698.992	698.729 / 698.727	698.715	703.893 / 703.814	703.493
DEPTH TO INVERT FROM DESIGN SURFACE	0.900	0.900	1.002	1.583	1.613	0.959	0.600	1.047	1.470	1.500	0.951	0.600
INVERT LEVEL	661.600	660.550	670.200	669.974	669.944	685.800	685.497	698.790	698.544	698.514	703.626	703.323
DESIGN SURFACE LEVEL	662.500	661.450	671.202	671.556		686.759	686.097	699.838	700.014		704.578	703.923
EXISTING SURFACE LEVEL	661.539	662.588	671.972	671.356		687.414	686.643	700.346	696.930		708.198	703.880
CHAINAGE	0.000	26.251	0.000	11.315	4.080	0.000	14.167	0.000	12.342	1.962	0.000	15.167
	26.251		15.395			14.167		14.304			15.167	

LINE 11 LINE 12 LINE 13 LINE 14 LINE 15

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

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HORIZONTAL SCALE 1:500 AT ORIGINAL SIZE
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0 5 10 15m

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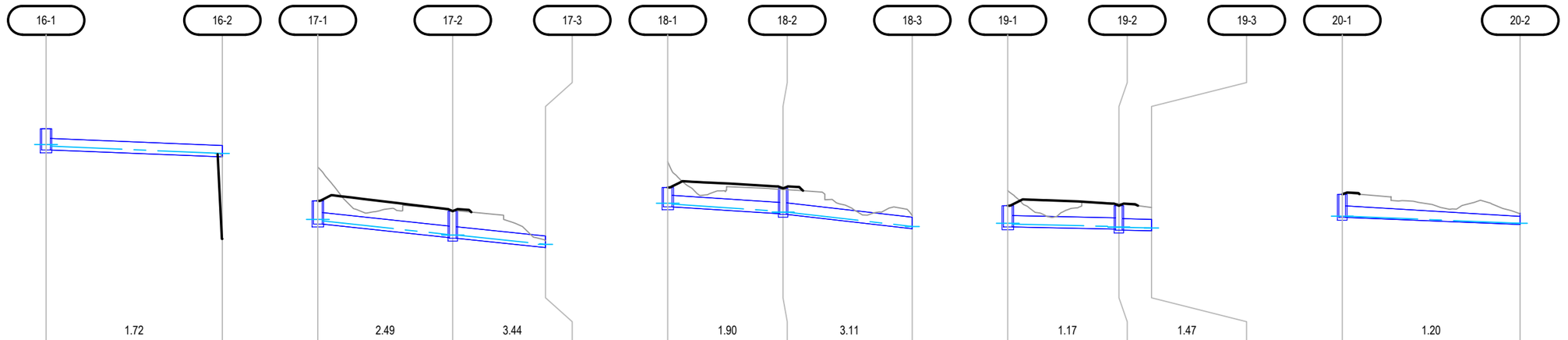
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Drawn	I.SMITH	Designer	N.HINCKS
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS AND PAVEMENT DRAINAGE PROFILES SHEET 3 OF 7

Original Size A3 Drawing No: 12542101-C3343 Rev: 0

Plot Date: 27 May 2022 - 12:51 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3340.dwg



	16-1	16-2	17-1	17-2	17-3	18-1	18-2	18-3	19-1	19-2	19-3	20-1	20-2
VELOCITY (m/s)	1.72		2.49	3.44		1.90	3.11		1.17	1.47		1.20	
CAPACITY VELOCITY (m/s)	3.08		4.86	4.88		4.86	4.88		2.17	2.18		3.07	
PIPE FLOW (cu.m/s)	0.171		0.200	0.215		0.118	0.125		0.076	0.081		0.020	
PIPE CAPACITY (cu.m/s)	0.872		1.374	1.379		1.374	1.379		0.614	0.617		0.869	
PIPE GRADE (%)	2.0%		5.0%	5.0%		3.0%	5.5%		1.0%	1.0%		2.0%	
PIPE SLOPE (1 IN X)	50.0		20.0	20.0		33.3	18.0		100.0	100.0		50.0	
PIPE SIZE (mm)	600		600	600		600	600		600	600		600	
PIPE CLASS	HDPE		HDPE	HDPE		HDPE	HDPE		HDPE	HDPE		HDPE	
DATUM R.L.	684.00		695.00			697.00			712.00			707.00	
HYDRAULIC GRADE LINE	710.764	710.680	717.846	717.773	717.049 717.031	720.694	720.651	720.273 720.228	734.646	734.606	734.477 734.439	730.014	730.015
DEPTH TO INVERT FROM DESIGN SURFACE	1.111	0.600	1.224	1.390	1.420	1.021	1.332	1.362	1.115	1.235	1.285	1.205	0.600
INVERT LEVEL	710.480	710.111	717.600	716.894	716.864	720.500	720.138	720.108	734.451	734.335	734.285	729.950	729.578
DESIGN SURFACE LEVEL	711.590	710.711	718.824		718.284	721.521		721.470	735.566		735.569	731.155	
EXISTING SURFACE LEVEL	714.127	710.094	720.590		718.330	722.858		721.413	736.355		735.672	731.230	
CHAINAGE	0.000	18.438	0.000	14.118	14.118	0.000	12.069	12.069	0.000	11.630	11.630	0.000	18.616
	18.438		23.824			25.584			15.040			18.616	

LINE 16 | LINE 17 | LINE 18 | LINE 19 | LINE 20

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

VERTICAL SCALE 1:250 AT ORIGINAL SIZE
HORIZONTAL SCALE 1:500 AT ORIGINAL SIZE
0 2.5 5 7.5m
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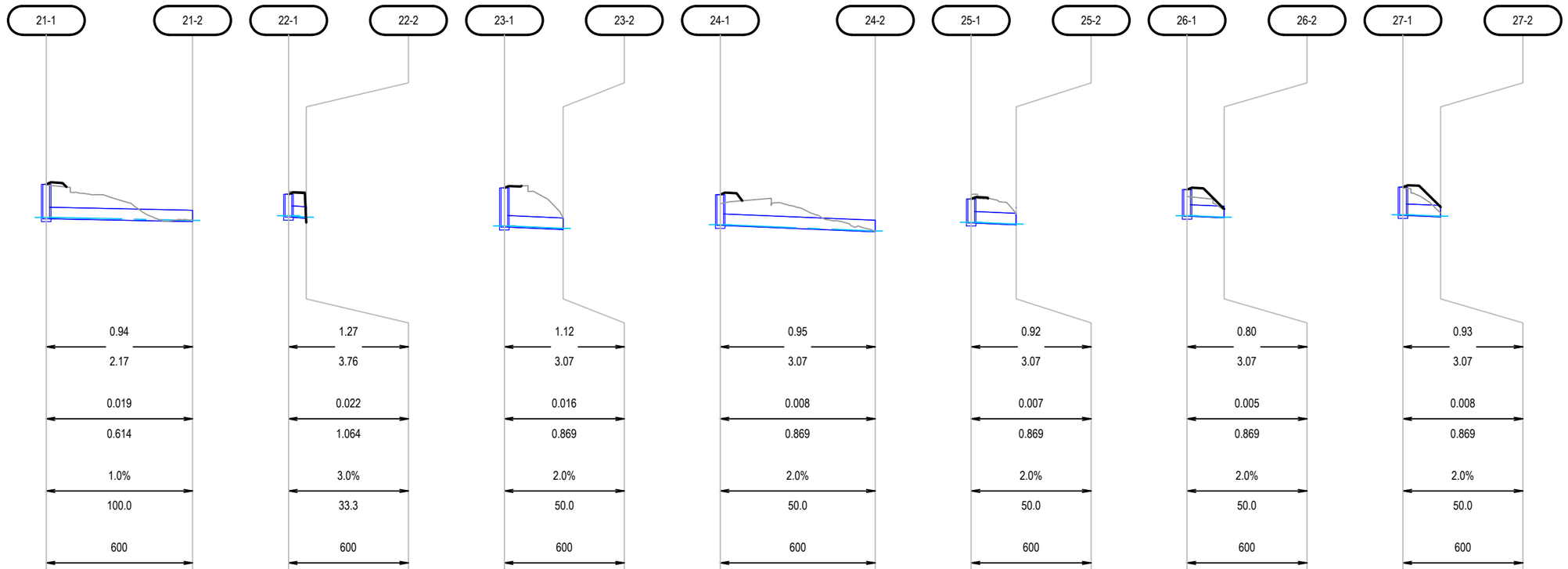
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS AND PAVEMENT DRAINAGE PROFILES SHEET 4 OF 7

Original Size: A3
Drawing No: 12542101-C3344
Rev: 0

Plot Date: 27 May 2022 - 12:51 PM
Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3340.dwg



	LINE 21		LINE 22		LINE 23		LINE 24		LINE 25		LINE 26		LINE 27	
VELOCITY (m/s)		0.94		1.27		1.12		0.95		0.92		0.80		0.93
CAPACITY VELOCITY (m/s)		2.17		3.76		3.07		3.07		3.07		3.07		3.07
PIPE FLOW (cu.m/s)		0.019		0.022		0.016		0.008		0.007		0.005		0.008
PIPE CAPACITY (cu.m/s)		0.614		1.064		0.869		0.869		0.869		0.869		0.869
PIPE GRADE (%)		1.0%		3.0%		2.0%		2.0%		2.0%		2.0%		2.0%
PIPE SLOPE (1 IN X)		100.0		33.3		50.0		50.0		50.0		50.0		50.0
PIPE SIZE (mm)		600		600		600		600		600		600		600
PIPE CLASS		HDPE		HDPE		HDPE		HDPE		HDPE		HDPE		HDPE
DATUM R.L.		701.00		690.00		683.00		670.00		655.00		645.00		608.00
HYDRAULIC GRADE LINE	723.996	723.995	713.074	713.066	713.005	705.545	705.420	692.611	692.288	677.740	677.646	668.082	668.004	631.135	631.054
DEPTH TO INVERT FROM DESIGN SURFACE	1.800	0.600	1.198	0.600	0.600	2.043	0.600	0.600	1.610	0.600	0.600	1.252	0.600	0.600	1.390	0.600	0.600	1.475	0.600	0.600
INVERT LEVEL	723.920	723.767	713.000	712.944	712.944	705.485	705.362	705.362	692.570	692.247	692.247	677.700	677.606	677.606	668.050	667.972	667.972	631.092	631.013	631.013
DESIGN SURFACE LEVEL	725.720	724.367	714.198	713.544	705.962	707.527	705.962	694.180	692.847	692.254	678.952	678.206	678.172	669.440	668.572	668.380	632.567	631.613	631.228
EXISTING SURFACE LEVEL	725.688	723.837	714.347	714.326	705.962	707.595	705.962	693.706	692.254	692.150	679.185	678.178	678.685	669.080	668.380	668.378	632.531	631.228	631.938
CHAINAGE	0.000	15.254	15.254	0.000	1.854	1.854	0.000	6.117	6.117	0.000	16.150	16.150	0.000	4.685	4.685	0.000	3.878	3.878	0.000	3.938	3.938

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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VERTICAL SCALE 1:250 AT ORIGINAL SIZE
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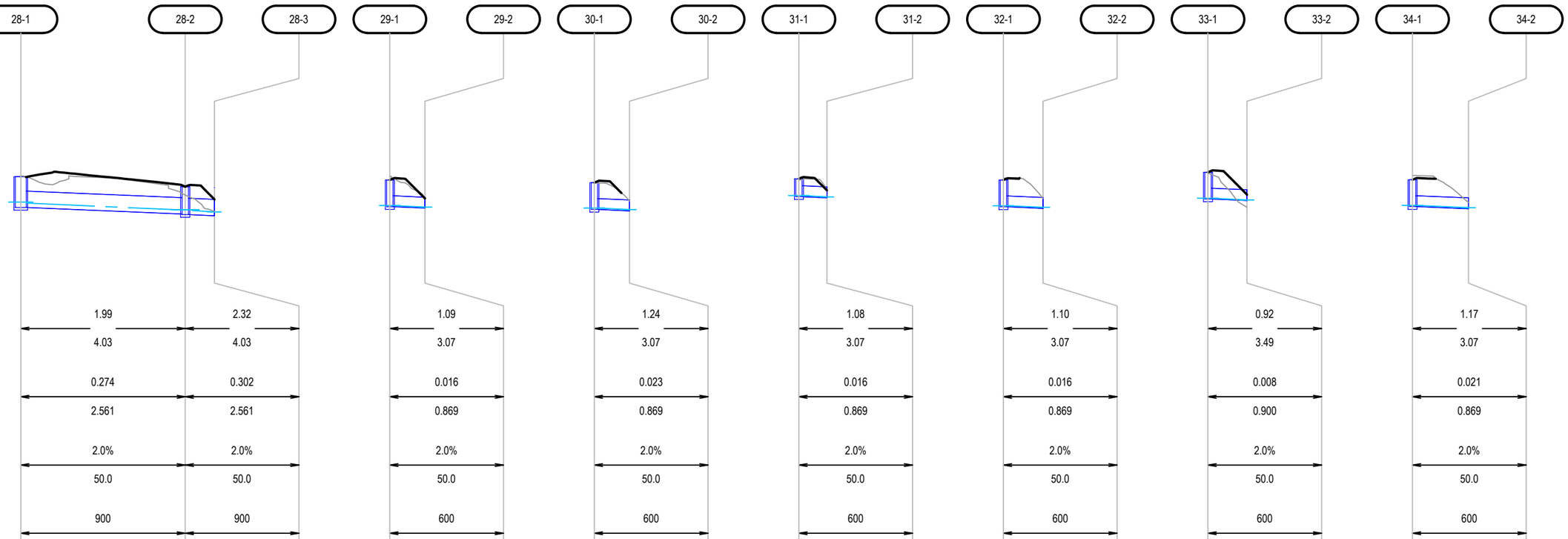
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS AND PAVEMENT DRAINAGE PROFILES SHEET 5 OF 7

Original Size: A3
Drawing No: 12542101-C3345
Rev: 0

Plot Date: 27 May 2022 - 12:51 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3340.dwg



	LINE 28				LINE 29		LINE 30		LINE 31		LINE 32		LINE 33		LINE 34	
VELOCITY (m/s)	1.99		2.32		1.09		1.24		1.08		1.10		0.92		1.17	
CAPACITY VELOCITY (m/s)	4.03		4.03		3.07		3.07		3.07		3.07		3.49		3.07	
PIPE FLOW (cu.m/s)	0.274		0.302		0.016		0.023		0.016		0.016		0.008		0.021	
PIPE CAPACITY (cu.m/s)	2.561		2.561		0.869		0.869		0.869		0.869		0.900		0.869	
PIPE GRADE (%)	2.0%		2.0%		2.0%		2.0%		2.0%		2.0%		2.0%		2.0%	
PIPE SLOPE (1 IN X)	50.0		50.0		50.0		50.0		50.0		50.0		50.0		50.0	
PIPE SIZE (mm)	900		900		600		600		600		600		600		600	
PIPE CLASS	HDPE		HDPE		HDPE		HDPE		HDPE		HDPE		HDPE		HDPE	
DATUM R.L.	601.00				588.00		580.00		566.00		560.00		555.00		542.00	
HYDRAULIC GRADE LINE	624.202	624.153	623.777	623.743	611.012	611.011	602.877	602.873	589.563	589.560	583.008	583.006	578.413	578.412	565.028	565.027
				623.665		610.930		602.792		589.495		582.915		578.325		564.902
DEPTH TO INVERT FROM DESIGN SURFACE	1.688		1.504	1.534	1.475		1.479		0.989		1.475		1.475		1.475	
				0.900		0.600		0.600		0.600		0.600		0.600		0.600
INVERT LEVEL	623.912		623.550	623.520	610.951		602.800		589.500		582.947		578.371		564.957	
				623.456		610.873		602.723		589.438		582.859		578.286		564.834
DESIGN SURFACE LEVEL	625.600		625.054		612.426		604.279		590.489		584.422		579.846		566.432	
				624.356		611.473		603.323		590.038		583.459		578.886		565.434
EXISTING SURFACE LEVEL	625.660		624.595		612.619		604.259		590.419		584.537		579.794		566.670	
				623.696		611.394		603.270		589.912		583.405		577.921		565.183
CHAINAGE	0.000	18.089	18.089	3.201	0.000	3.869	0.000	3.863	0.000	3.077	0.000	4.355	0.000	4.296	0.000	6.158
				21.290		3.869		3.863		3.077		4.355		4.296		6.158

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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VERTICAL SCALE 1:250 AT ORIGINAL SIZE
HORIZONTAL SCALE 1:500 AT ORIGINAL SIZE
0 2.5 5 7.5m
0 5 10 15m

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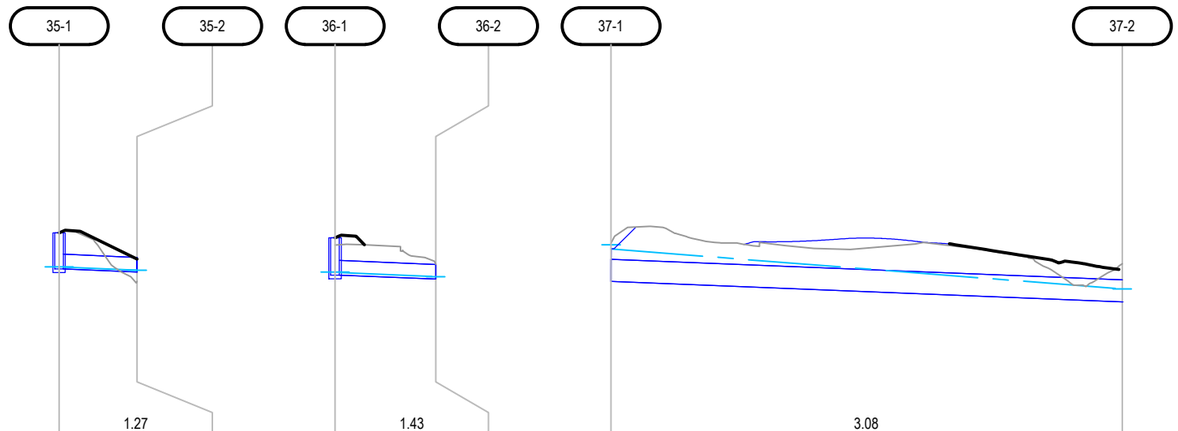
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS AND PAVEMENT DRAINAGE PROFILES SHEET 6 OF 7

Original Size: A3
Drawing No: 12542101-C3346
Rev: 0

Plot Date: 27 May 2022 - 12:51 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3340.dwg



	35-1	35-2	36-1	36-2	37-1	37-2
VELOCITY (m/s)	1.27		1.43		3.08	
CAPACITY VELOCITY (m/s)	3.07		3.07		7.11	
PIPE FLOW (cu.m/s)	0.027		0.052		3.337	
PIPE CAPACITY (cu.m/s)	0.869		0.869		6.681	
PIPE GRADE (%)	2.0%		2.0%		2.0%	
PIPE SLOPE (1 IN X)	50.0		50.0		49.6	
PIPE SIZE (mm)	600		600		(2x)900	
PIPE CLASS	HDPE		HDPE		HDPE	
DATUM R.L.	529.00		634.00		533.00	
HYDRAULIC GRADE LINE	552.434	552.430	657.224	657.209	557.342	557.167
DEPTH TO INVERT FROM DESIGN SURFACE	1.475	0.600	1.527	0.600	0.900	0.000
INVERT LEVEL	552.352	552.224	657.100	656.936	555.850	555.010
DESIGN SURFACE LEVEL	553.827	552.824	658.627	657.536	556.750	555.010
EXISTING SURFACE LEVEL	553.825	551.850	658.326	657.540	557.404	556.565
CHAINAGE	0.000	6.356	0.000	8.211	0.000	41.685
	552.297	6.356	657.035	8.211	555.538	41.685

LINE 35 LINE 36 LINE 37

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HORIZONTAL SCALE 1:500 AT ORIGINAL SIZE
0 2.5 5 7.5m
0 5 10 15m

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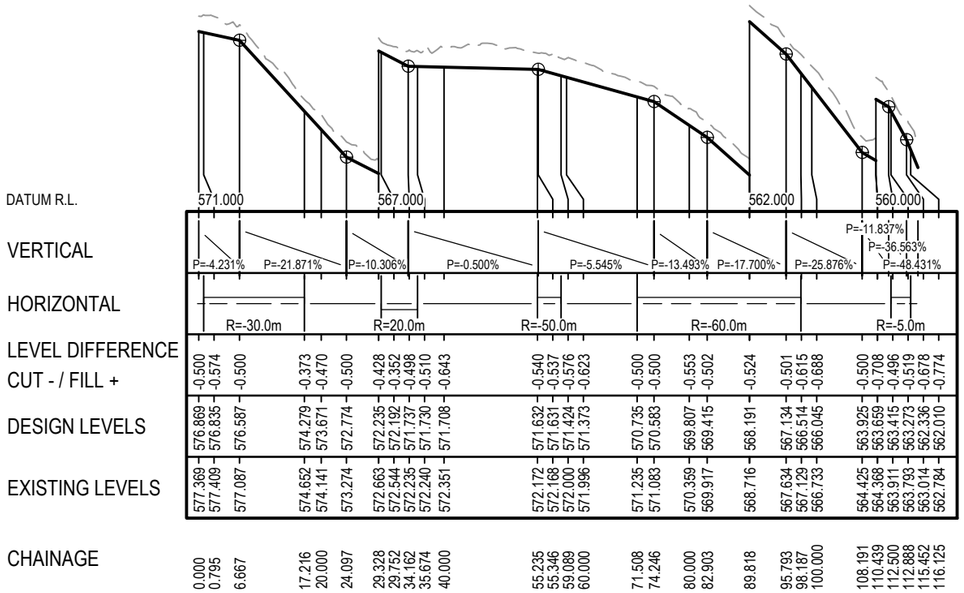
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Approved (Project Director)	S.ROOTH		
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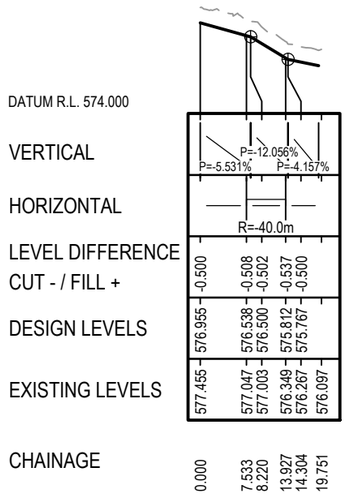
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS AND PAVEMENT DRAINAGE PROFILES SHEET 7 OF 7

Original Size A3 Drawing No: 12542101-C3347 Rev: 0

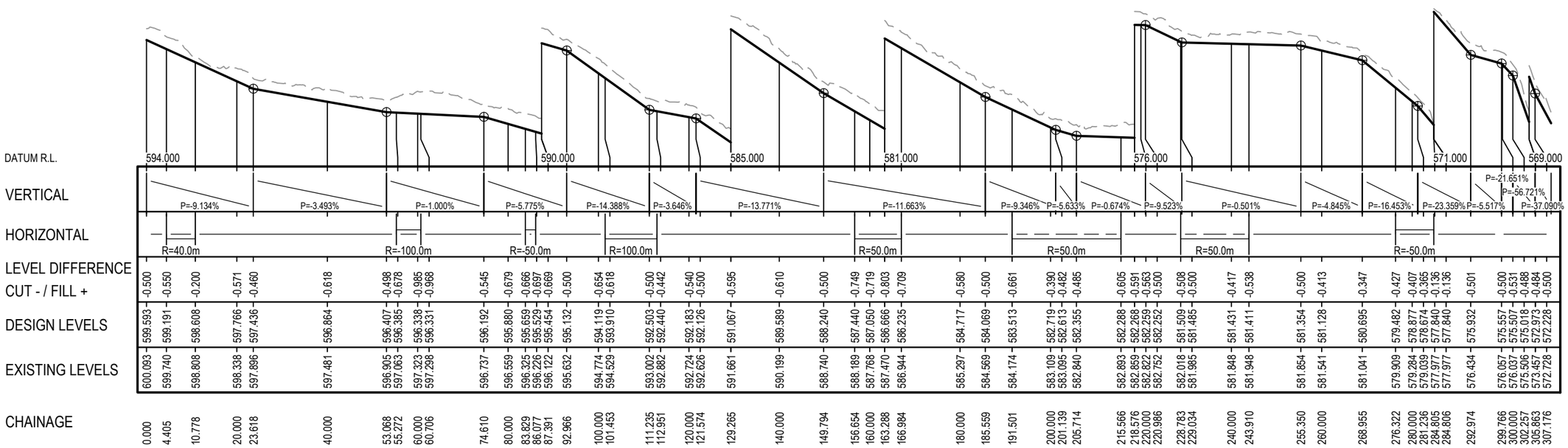
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CATCH DRAIN PROFILE - CONTROL MCC1



CATCH DRAIN PROFILE - CONTROL MCC2



CATCH DRAIN PROFILE - CONTROL MCC3

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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HORIZONTAL SCALE 1:1000 AT ORIGINAL SIZE
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0 10 20 30m

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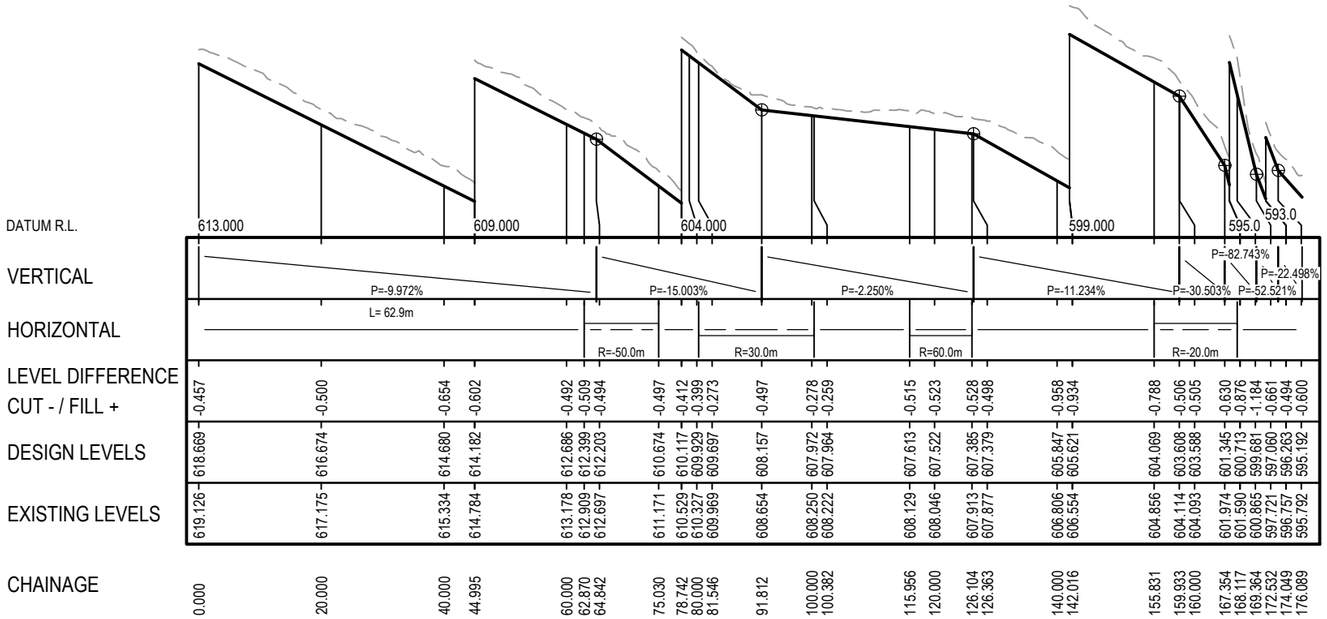
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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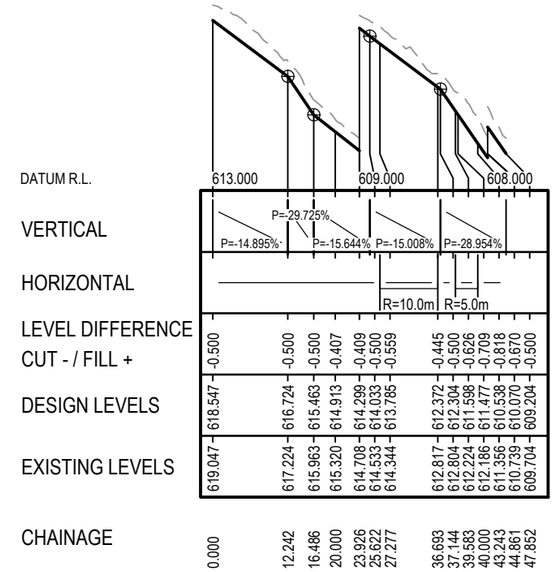
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN PROFILES SHEET 1 OF 7

Original Size: A3
Drawing No: 12542101-C3361
Rev: 0

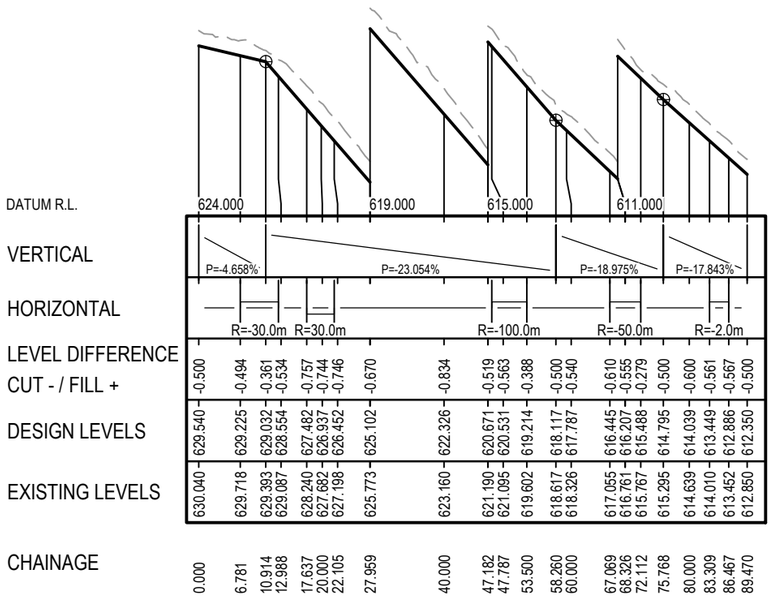
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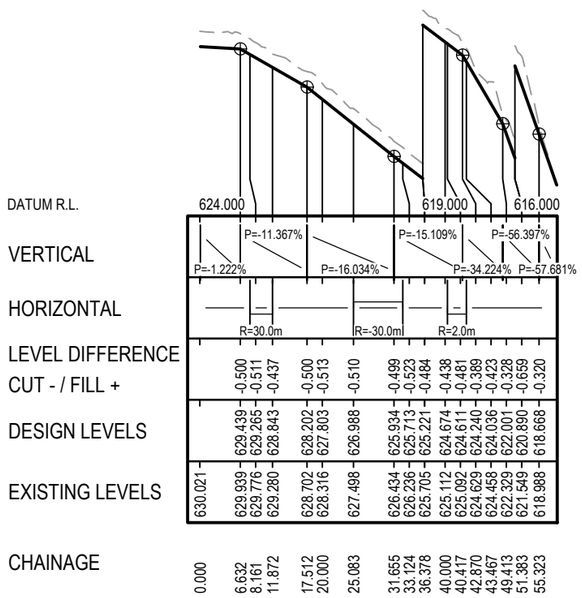
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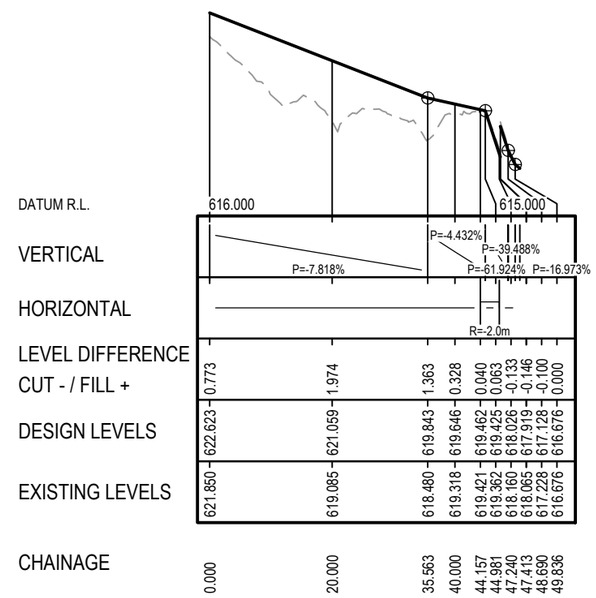
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CATCH DRAIN PROFILE - CONTROL MCC6



CATCH DRAIN PROFILE - CONTROL MCC7



CATCH DRAIN PROFILE - CONTROL MCC8

No	Revision	Drawn	Job Manager	Project Director	Date
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0 10 20 30m

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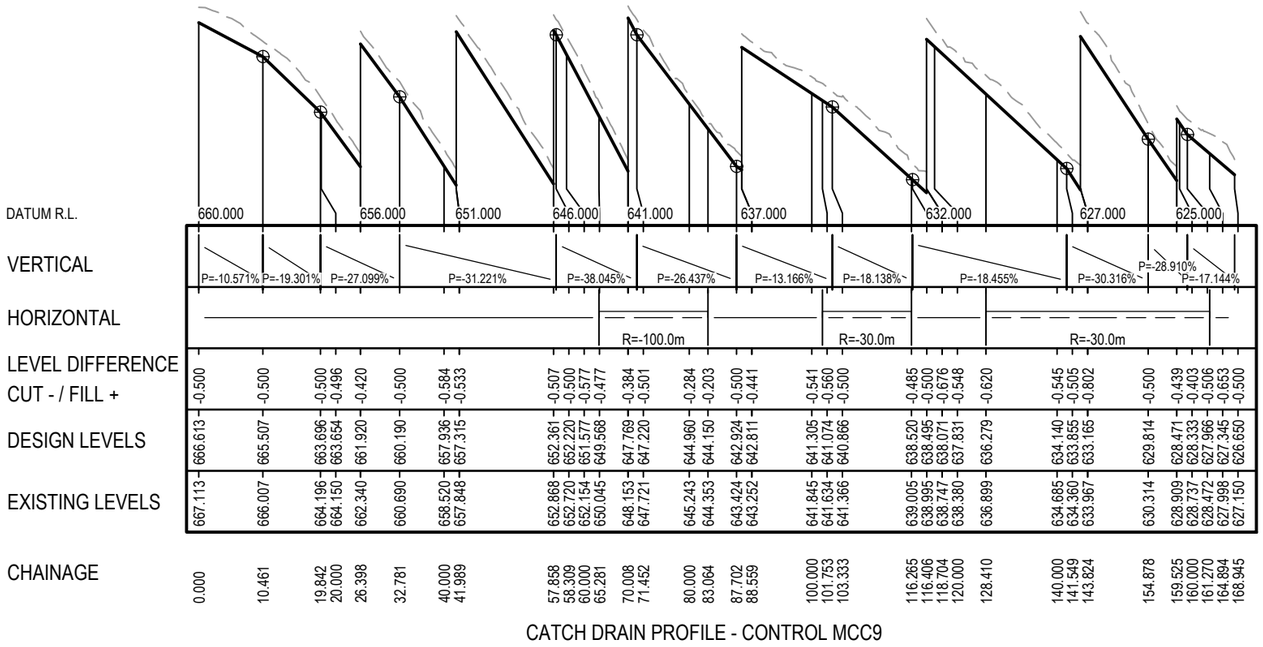
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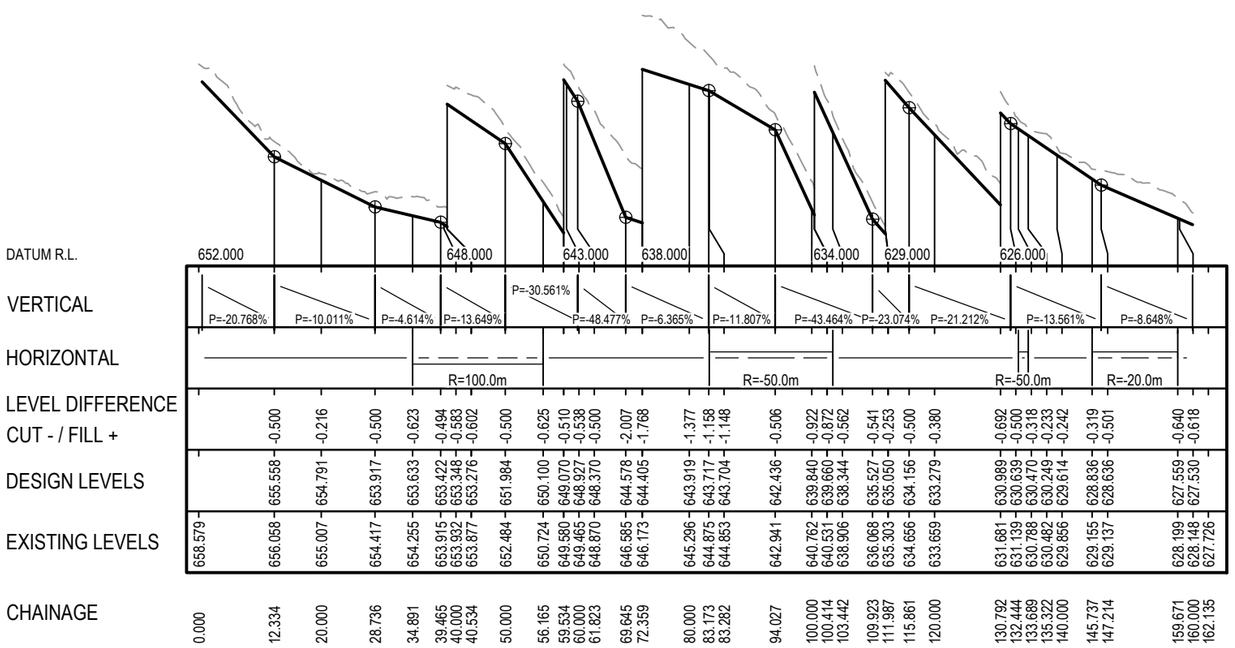
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN PROFILES SHEET 2 OF 7

Original Size A3 | Drawing No: 12542101-C3362 | Rev: 0

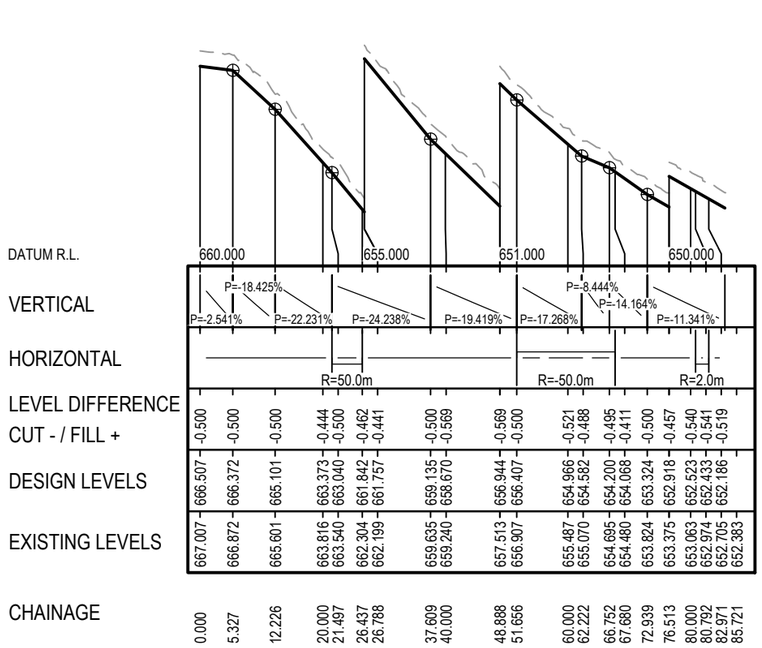
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CATCH DRAIN PROFILE - CONTROL MCC9



CATCH DRAIN PROFILE - CONTROL MCCA



CATCH DRAIN PROFILE - CONTROL MCCB

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HORIZONTAL SCALE 1:1000 AT ORIGINAL SIZE
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0 10 20 30m

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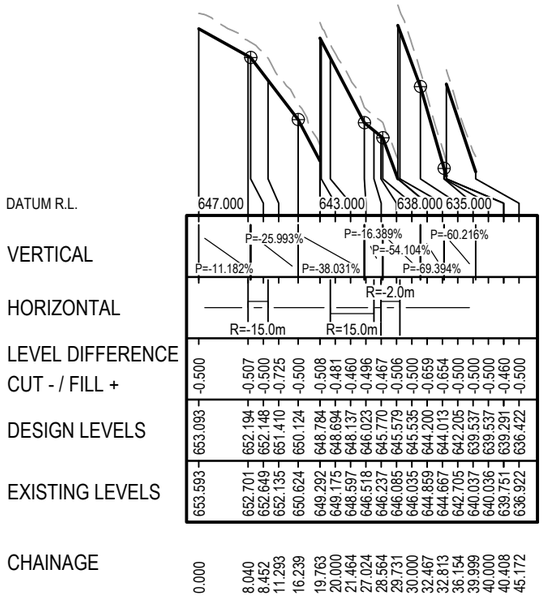
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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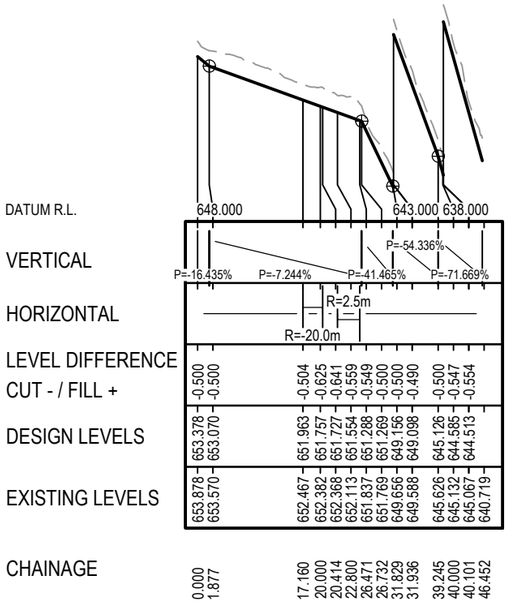
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN PROFILES SHEET 3 OF 7

Original Size A3 | Drawing No: 12542101-C3363 | Rev: 0

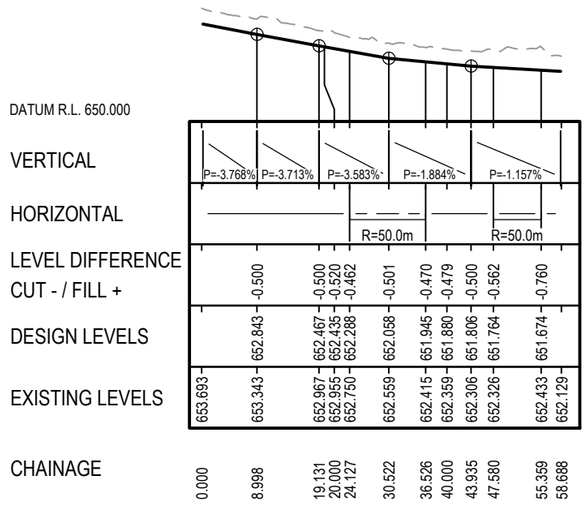
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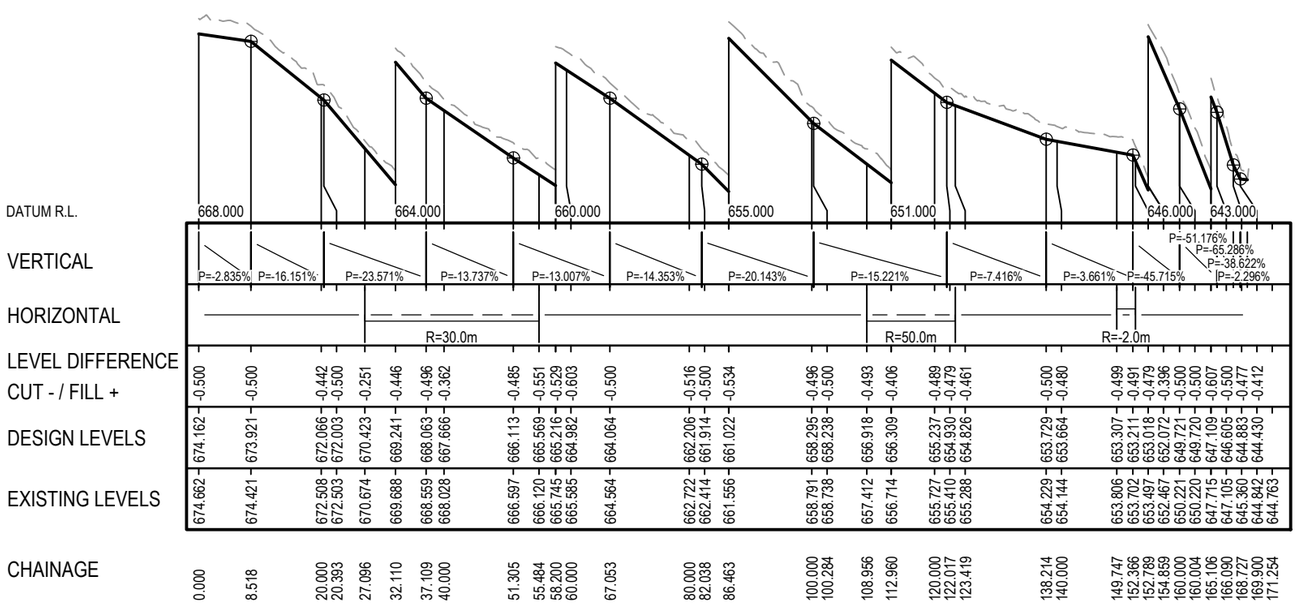
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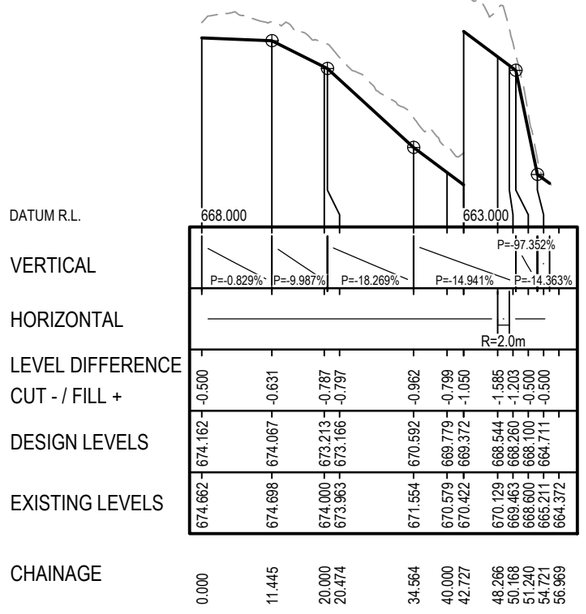
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CATCH DRAIN PROFILE - CONTROL MCCE



CATCH DRAIN PROFILE - CONTROL MCCF



CATCH DRAIN PROFILE - CONTROL MCCG

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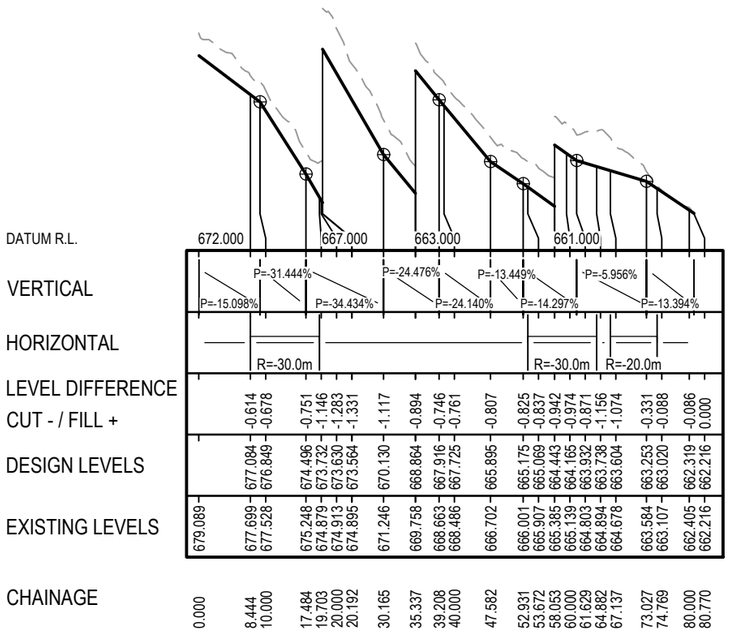
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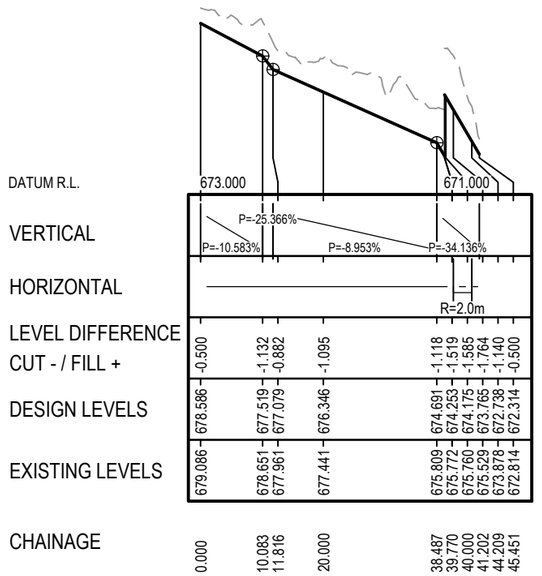
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Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN PROFILES SHEET 4 OF 7

Original Size A3 | Drawing No: 12542101-C3364 | Rev: 0

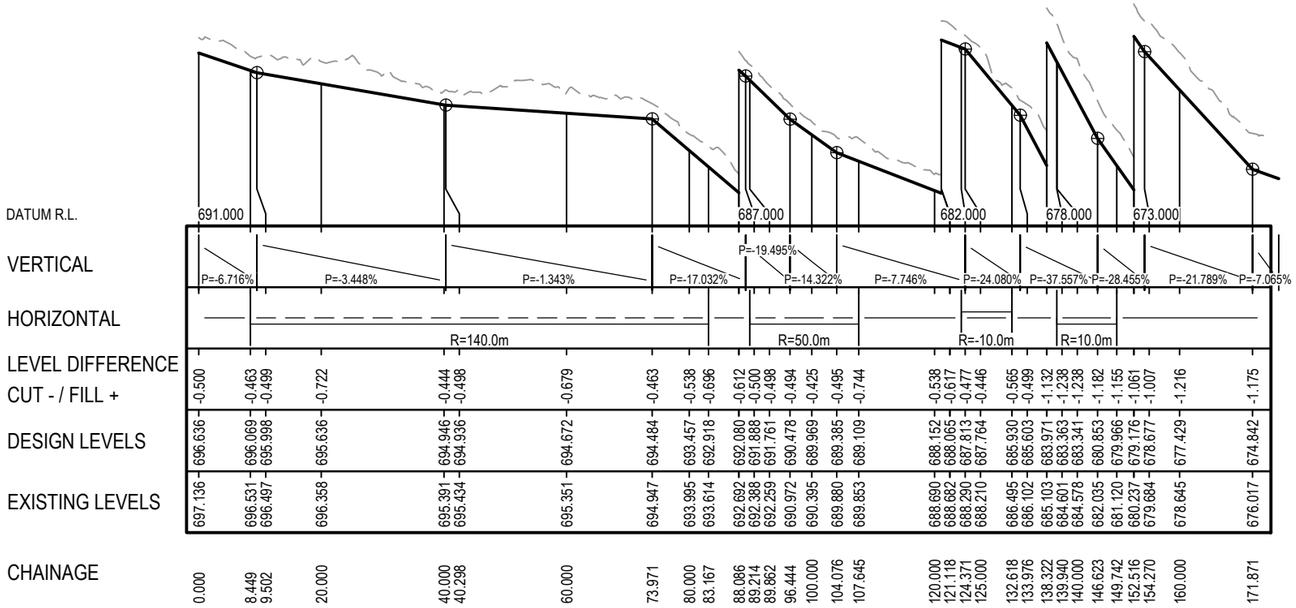
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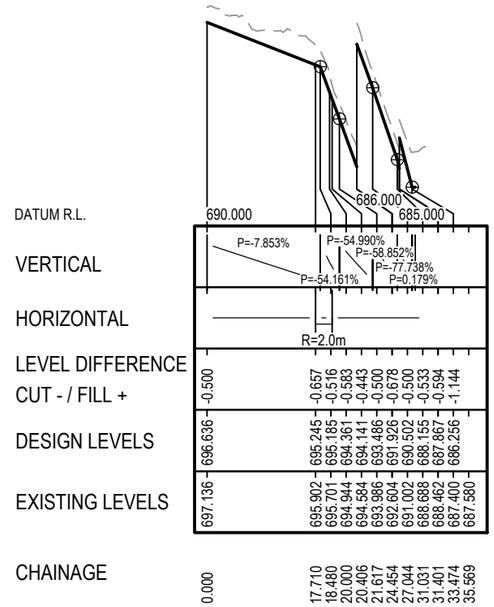
CATCH DRAIN PROFILE - CONTROL MCCH



CATCH DRAIN PROFILE - CONTROL MCCI



CATCH DRAIN PROFILE - CONTROL MCCJ



CATCH DRAIN PROFILE - CONTROL MCCK

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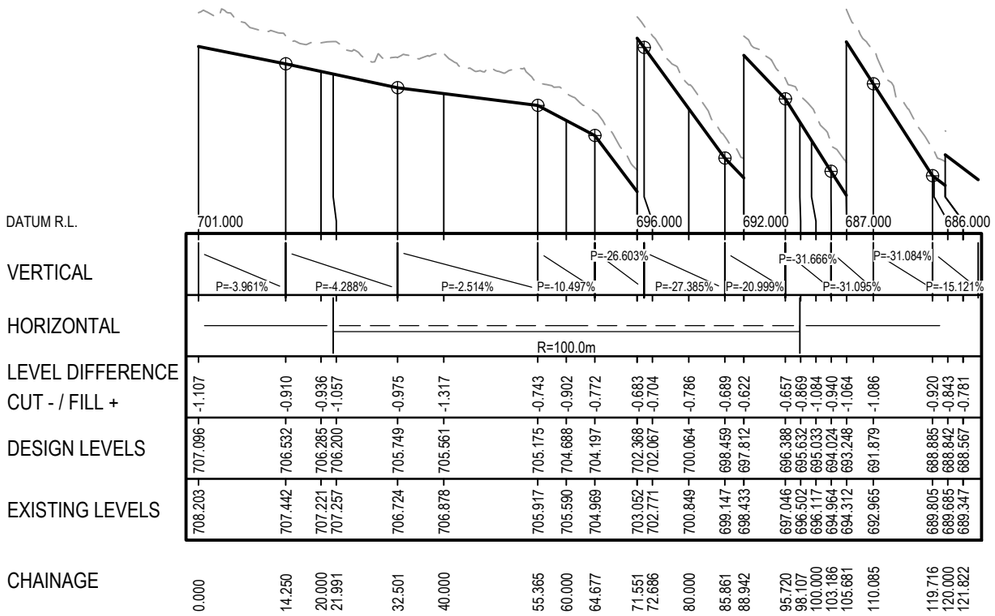
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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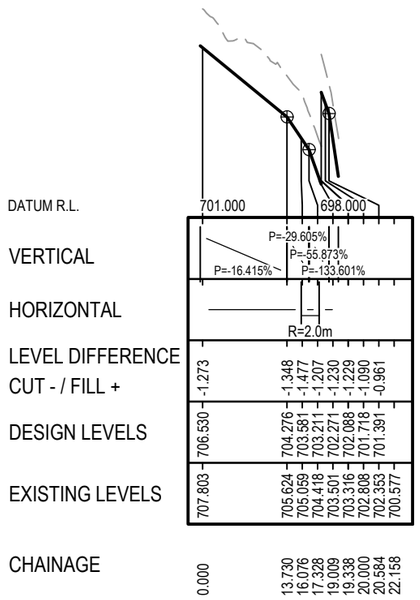
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN PROFILES SHEET 5 OF 7

Original Size A3 | Drawing No: 12542101-C3365 | Rev: 0

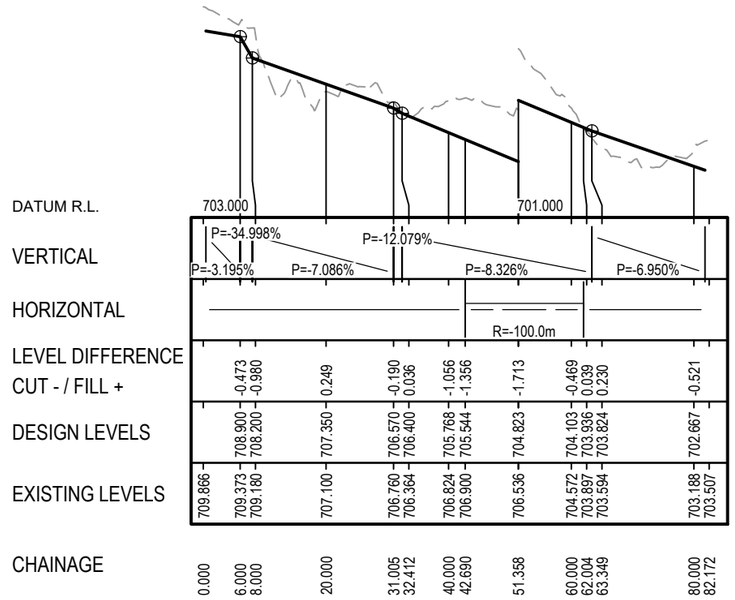
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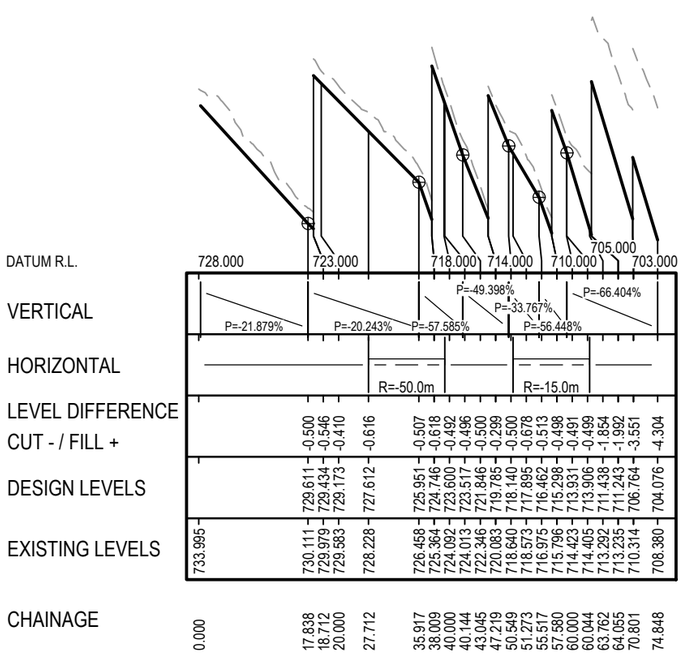
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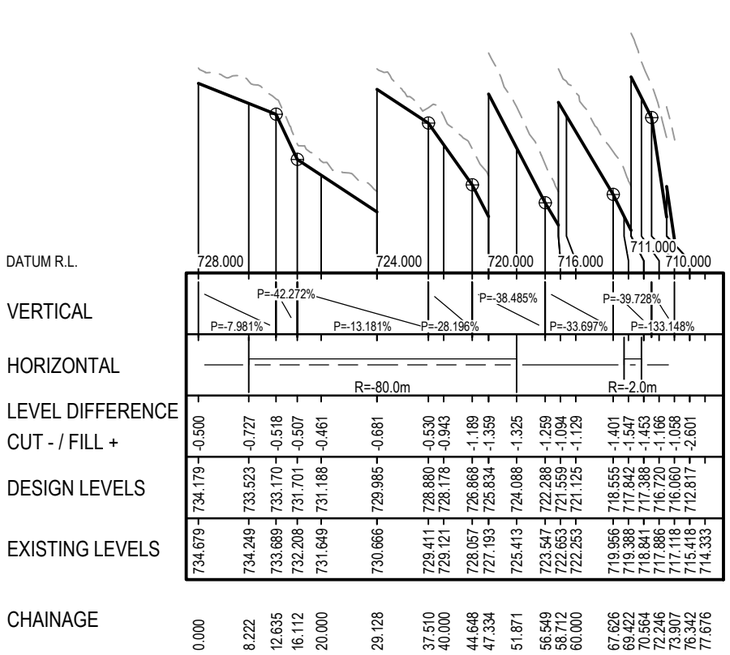
CATCH DRAIN PROFILE - CONTROL MCCL1



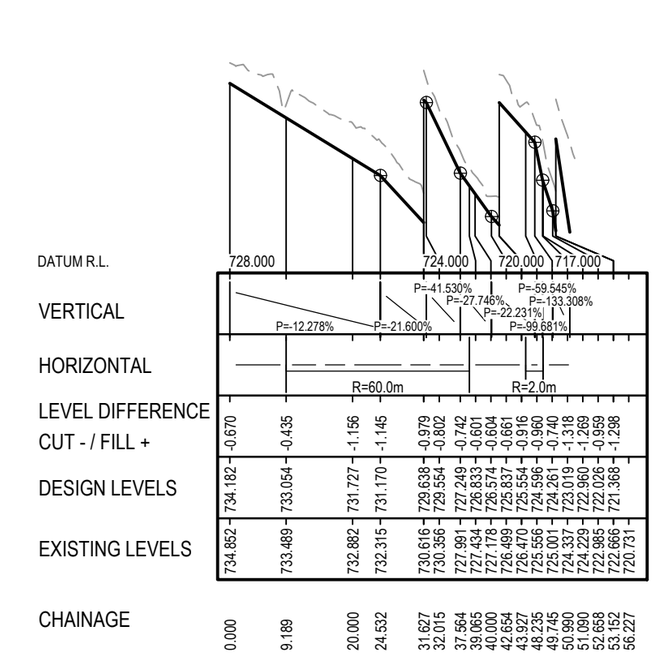
CATCH DRAIN PROFILE - CONTROL MCCM



CATCH DRAIN PROFILE - CONTROL MCCN



CATCH DRAIN PROFILE - CONTROL MCCO



CATCH DRAIN PROFILE - CONTROL MCCP

No	Revision	Drawn	Job Manager	Project Director	Date
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VERTICAL SCALE 1:200 AT ORIGINAL SIZE
HORIZONTAL SCALE 1:1000 AT ORIGINAL SIZE
0 2 4 6m
0 10 20 30m

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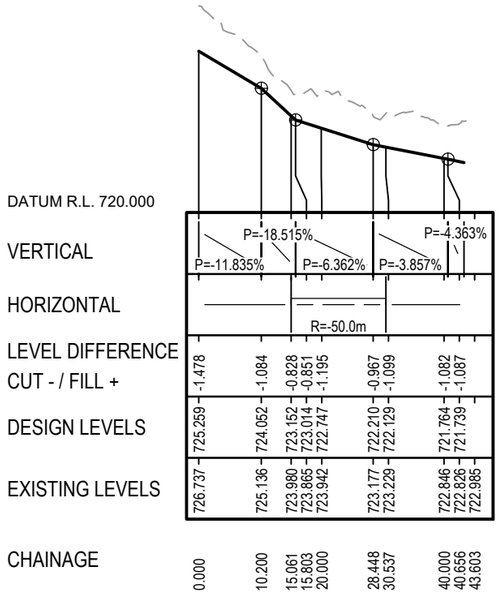
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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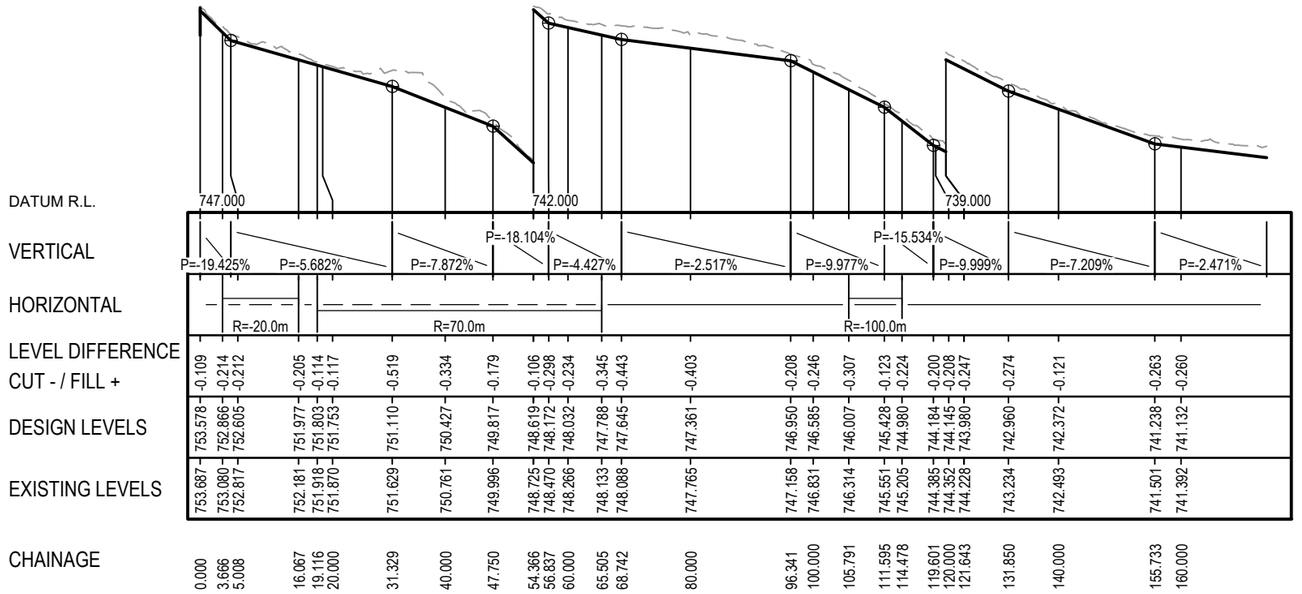
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN PROFILES SHEET 6 OF 7

Original Size A3 | Drawing No: 12542101-C3366 | Rev: 0

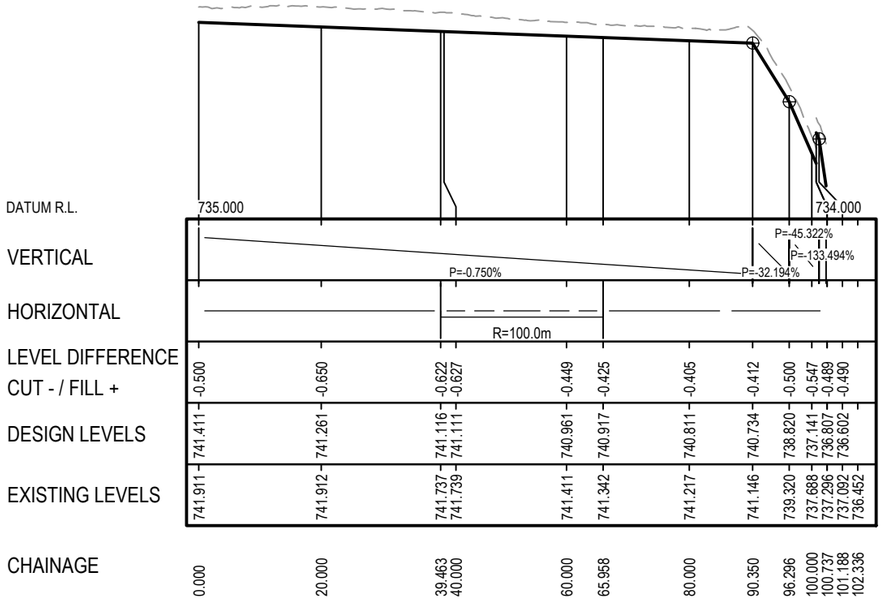
Plot Date: 27 May 2022 - 12:52 PM | Plotted By: Isaac Smith | Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3360.dwg



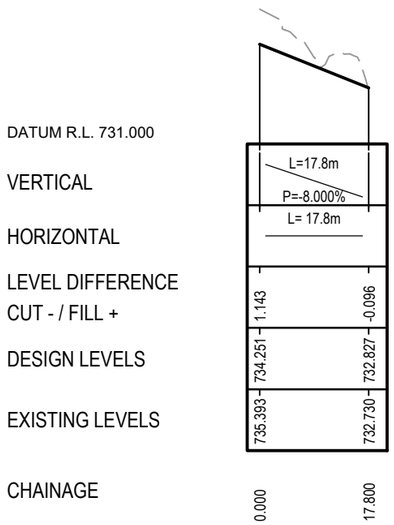
CATCH DRAIN PROFILE - CONTROL MCCQ



CATCH DRAIN PROFILE - CONTROL MCCR



CATCH DRAIN PROFILE - CONTROL MCCS



DRAIN PROFILE CONTROL MD00

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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VERTICAL SCALE 1:200 AT ORIGINAL SIZE
HORIZONTAL SCALE 1:1000 AT ORIGINAL SIZE
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0 10 20 30m

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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CATCH DRAIN PROFILES SHEET 7 OF 7

Original Size: A3
Drawing No: 12542101-C3367
Rev: 0

Plot Date: 27 May 2022 - 12:52 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3360.dwg

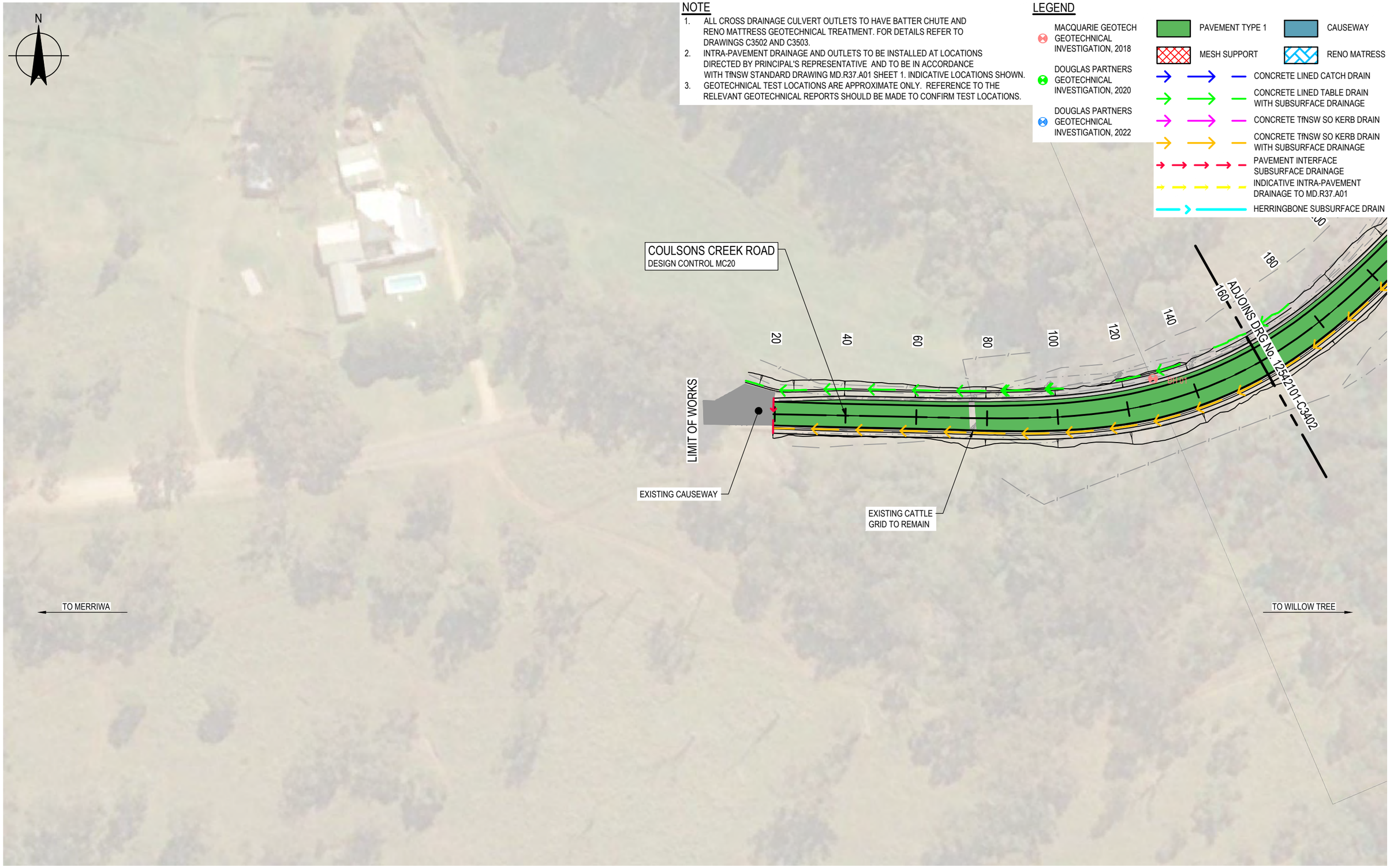
N

NOTE

1. ALL CROSS DRAINAGE CULVERT OUTLETS TO HAVE BATTER CHUTE AND RENO MATTRESS GEOTECHNICAL TREATMENT. FOR DETAILS REFER TO DRAWINGS C3502 AND C3503.
2. INTRA-PAVEMENT DRAINAGE AND OUTLETS TO BE INSTALLED AT LOCATIONS DIRECTED BY PRINCIPAL'S REPRESENTATIVE AND TO BE IN ACCORDANCE WITH TfNSW STANDARD DRAWING MD.R37.A01 SHEET 1. INDICATIVE LOCATIONS SHOWN.
3. GEOTECHNICAL TEST LOCATIONS ARE APPROXIMATE ONLY. REFERENCE TO THE RELEVANT GEOTECHNICAL REPORTS SHOULD BE MADE TO CONFIRM TEST LOCATIONS.

LEGEND

- MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022
- PAVEMENT TYPE 1
- CAUSEWAY
- MESH SUPPORT
- RENO MATRESS
- CONCRETE LINED CATCH DRAIN
- CONCRETE LINED TABLE DRAIN WITH SUBSURFACE DRAINAGE
- CONCRETE TfNSW SO KERB DRAIN
- CONCRETE TfNSW SO KERB DRAIN WITH SUBSURFACE DRAINAGE
- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN



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0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 10 20 30m
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Approved (Project Director)	S.ROOTH		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH0 TO CH160 - SHEET 1 OF 9

Original Size: A3
Drawing No: 12542101-C3401
Rev: 0

Plot Date: 27 May 2022 - 4:46 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3400.dwg

N

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- CAUSEWAY
- MESH SUPPORT
- RENO MATRESS
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- CONCRETE TfNSW SO KERB DRAIN
- CONCRETE TfNSW SO KERB DRAIN WITH SUBSURFACE DRAINAGE
- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN

DRIVEWAY
DESIGN CONTROL MC50

NEW CONCRETE CAUSEWAY TO BE PROVIDED

CATCH DRAIN MCC1

CATCH DRAIN MCC2

CATCH DRAIN MCC3

140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540

ADJOINS DRG No. 12542101-C3401

ADJOINS DRG No. 12542101-C3403

COULSONS CREEK ROAD
DESIGN CONTROL MC20

RENO MATTRESS GEOTECHNICAL TREATMENT.
REFER TO DRG C3502 FOR DETAILS.

TO MERRIWA

TO WILLOW TREE

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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Approved (Project Director)	S.ROOTH		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH160 TO CH500 - SHEET 2 OF 9

Original Size: A3
Drawing No: 12542101-C3402
Rev: 0

Plot Date: 27 May 2022 - 4:46 PM
Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3400.dwg

NOTE

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2. INTRA-PAVEMENT DRAINAGE AND OUTLETS TO BE INSTALLED AT LOCATIONS DIRECTED BY PRINCIPAL'S REPRESENTATIVE AND TO BE IN ACCORDANCE WITH TfNSW STANDARD DRAWING MD.R37.A01 SHEET 1. INDICATIVE LOCATIONS SHOWN.
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LEGEND

- MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022
- PAVEMENT TYPE 1
- CAUSEWAY
- MESH SUPPORT
- RENO MATRESS
- CONCRETE LINED CATCH DRAIN
- CONCRETE LINED TABLE DRAIN WITH SUBSURFACE DRAINAGE
- CONCRETE TfNSW SO KERB DRAIN
- CONCRETE TfNSW SO KERB DRAIN WITH SUBSURFACE DRAINAGE
- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN

N

COULSONS CREEK ROAD
DESIGN CONTROL MC20

CATCH DRAIN MCC3

CATCH DRAIN MCC4

ADJOINS DRG No. 12542101-C3402

ADJOINS DRG No. 12542101-C3404

420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860

MTB0
GABION WALL TO BE PROVIDED FROM CH781 TO CH885.

TO MERRIWA

TO WILLOW TREE

0 10 20 30m
SCALE 1:1000 AT ORIGINAL SIZE

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH500 TO CH840 - SHEET 3 OF 9

Original Size: A3
Drawing No: 12542101-C3403
Rev: 0

Plot Date: 27 May 2022 - 4:46 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3400.dwg

NOTE

1. ALL CROSS DRAINAGE CULVERT OUTLETS TO HAVE BATTER CHUTE AND RENO MATTRESS GEOTECHNICAL TREATMENT. FOR DETAILS REFER TO DRAWINGS C3502 AND C3503.
2. INTRA-PAVEMENT DRAINAGE AND OUTLETS TO BE INSTALLED AT LOCATIONS DIRECTED BY PRINCIPAL'S REPRESENTATIVE AND TO BE IN ACCORDANCE WITH TfNSW STANDARD DRAWING MD.R37.A01 SHEET 1. INDICATIVE LOCATIONS SHOWN.
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LEGEND

- MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022
- PAVEMENT TYPE 1
- CAUSEWAY
- MESH SUPPORT
- RENO MATRESS
- CONCRETE LINED CATCH DRAIN
- CONCRETE LINED TABLE DRAIN WITH SUBSURFACE DRAINAGE
- CONCRETE TfNSW SO KERB DRAIN
- CONCRETE TfNSW SO KERB DRAIN WITH SUBSURFACE DRAINAGE
- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN

COULSONS CREEK ROAD
DESIGN CONTROL MC20

CATCH DRAIN MCC4
CATCH DRAIN MCC5
CATCH DRAIN MCC6
CATCH DRAIN MCC7
CATCH DRAIN MCC8

MT10
GABION WALL TO BE PROVIDED FROM CH1100 TO CH1145

MTB0
GABION WALL TO BE PROVIDED FROM CH781 TO CH885

820 840 860 880 900 920 940 960 980 1000 1020 1040 1060 1080 1100 1120 1140 1160 1180 1200

ADJOINS DRG No. 12542101-C3403

ADJOINS DRG No. 12542101-C3405

TO MERRIWA

TO WILLOW TREE

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Approved (Project Director)	S.ROOTH		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH840 TO CH1180 - SHEET 4 OF 9

Original Size A3
Drawing No: 12542101-C3404
Rev: 0

Plot Date: 27 May 2022 - 4:47 PM Plotted By: Isaac Smith
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NOTE

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- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022
- PAVEMENT TYPE 1
- CAUSEWAY
- MESH SUPPORT
- RENO MATRESS
- CONCRETE LINED CATCH DRAIN
- CONCRETE LINED TABLE DRAIN WITH SUBSURFACE DRAINAGE
- CONCRETE TfNSW SO KERB DRAIN
- CONCRETE TfNSW SO KERB DRAIN WITH SUBSURFACE DRAINAGE
- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN
- GROUTED ROCK PAD

MESH SUPPORT TO BE CONFIRMED DURING CONSTRUCTION BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER

CATCH DRAIN MCC9

CATCH DRAIN MCCA

CATCH DRAIN MCCB

MESH SUPPORT TO BE CONFIRMED DURING CONSTRUCTION BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER

CATCH DRAIN MCCC

CATCH DRAIN MCCD

CATCH DRAIN MCCE

CATCH DRAIN MCCF

GROUTED ROCK PAD FROM CULVERT AT CH1240 TO EXTEND 10m FROM END OF THE CULVERT OUTLET HEADWALL.

MT20
GABION WALL TO BE PROVIDED FROM CH1355 TO CH1395

RENO MATTRESS FROM CULVERT AT CH1240 TO EXTEND FROM END OF GROUTED ROCK PAD TO A MINIMUM OF 900mm PAST CULVERT AT CH1210 AND 200mm ABOVE TOE OF FILL EMBANKMENT FOR SCOUR PROTECTION. FURTHER GEOFABRIC TAIL OUT FROM RENO MATTRESS TO BE PROVIDED. ENSURE RENO MATTRESS SURFACE FALLS INWARDS TO A CENTRAL FLOW PATH.

ADJOINS DRG No. 12542101-C3404

ADJOINS DRG No. 12542101-C3406

COULSONS CREEK ROAD
DESIGN CONTROL MC20

MT30
GABION WALL TO BE PROVIDED FROM CH1415 TO CH1528

TO MERRIWA

TO WILLOW TREE

1100 1120 1140 1160 1180 1200 1220 1240 1260 1280 1300 1320 1340 1360 1380 1400 1420 1440 1460 1480 1500 1520 1540 1560

0 10 20 30m
SCALE 1:1000 AT ORIGINAL SIZE

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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Approved (Project Director)	S.ROOTH		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH1180 TO CH1520 - SHEET 5 OF 9

Original Size: A3
Drawing No: 12542101-C3405
Rev: 0

Plot Date: 27 May 2022 - 4:47 PM
Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3400.dwg

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- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN

COULSONS CREEK ROAD
DESIGN CONTROL MC20

CATCH DRAIN MCCG

CATCH DRAIN MCCF

CATCH DRAIN MCCH

CATCH DRAIN MCCI

MESH SUPPORT ON SLOPE FROM CH1840 TO CH1900 TO BE CONFIRMED DURING CONSTRUCTION BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.

MT40
GABION WALL TO BE PROVIDED FROM CH1687 TO CH1805

CULVERT OUTLET RENO MATTRESS WITH GEO-FABRIC TAILOUT

MT30
GABION WALL TO BE PROVIDED FROM CH1415 TO CH1528

REMOVE ALL LANDSLIDE DEBRIS AND COLLUVIAL SOIL, INSTALL HERRINGBONE SUBSURFACE DRAINAGE AT 5m SPACINGS AND REPLACE WITH ENGINEERED FILL TO FINISHED SURFACE LEVEL PRIOR TO CONSTRUCTION OF GABION WALL PIPE OUTLET STRUCTURE. GABION WALL STRUCTURE SUB SURFACE DRAINAGE TO CONNECT TO HERRINGBONE SUB SURFACE DRAINAGE.

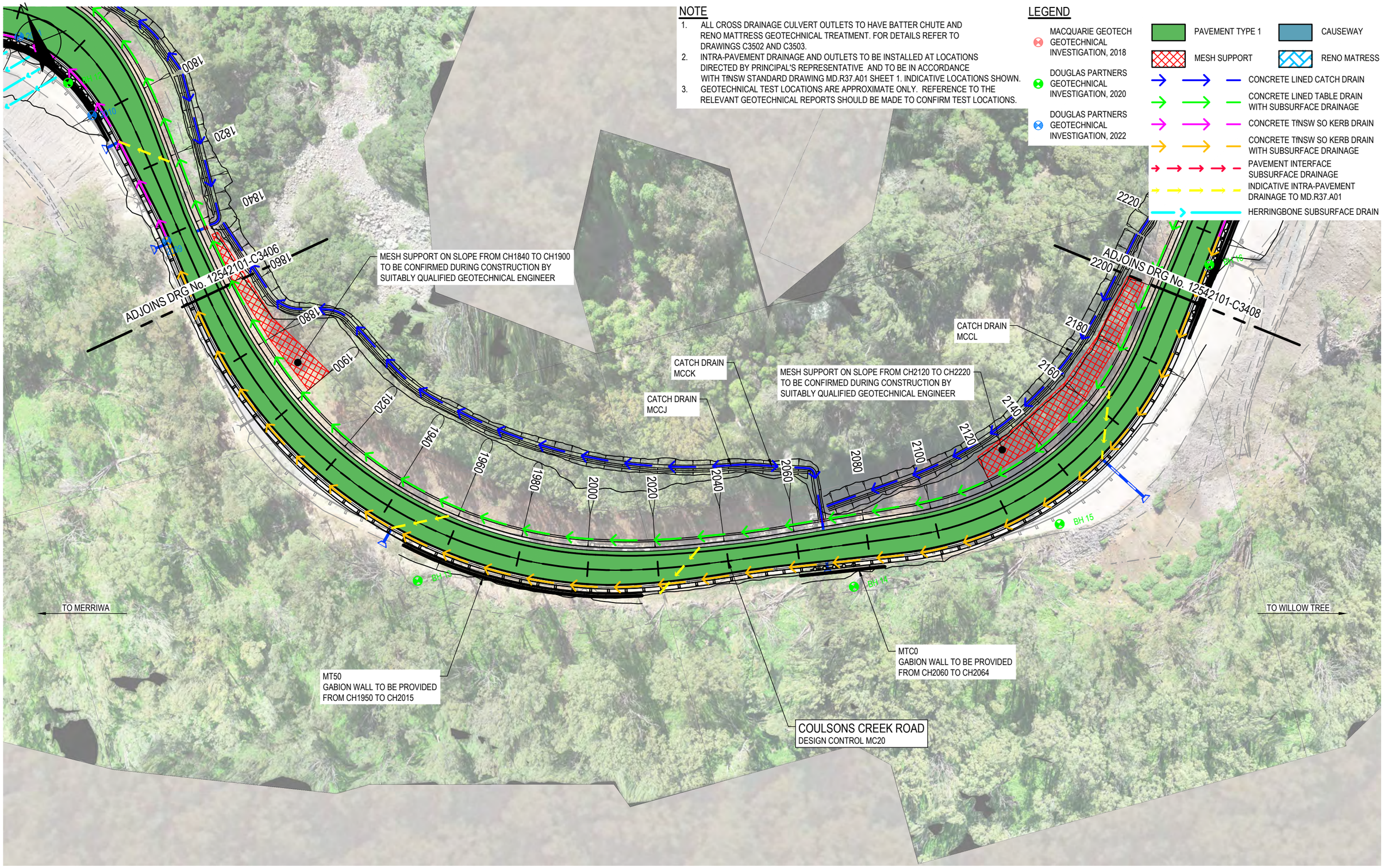
ADJOINS DRG No. 12542101-C3405

ADJOINS DRG No. 12542101-C3407

TO MERRIWA

TO WILLOW TREE

BH 7 BH7A BH 8 BH 11a BH 12 BH 13 BH 14 BH 15 BH 16 BH 17 BH 18 BH 19 BH 20 BH 21 BH 22 BH 23 BH 24 BH 25 BH 26 BH 27 BH 28 BH 29 BH 30 BH 31 BH



No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

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0 10 20 30m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:1000	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH1860 TO CH2200 - SHEET 7 OF 9

Original Size: A3
Drawing No: 12542101-C3407
Rev: 0

Plot Date: 27 May 2022 - 4:47 PM
Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3400.dwg

NOTE

1. ALL CROSS DRAINAGE CULVERT OUTLETS TO HAVE BATTER CHUTE AND RENO MATTRESS GEOTECHNICAL TREATMENT. FOR DETAILS REFER TO DRAWINGS C3502 AND C3503.
2. INTRA-PAVEMENT DRAINAGE AND OUTLETS TO BE INSTALLED AT LOCATIONS DIRECTED BY PRINCIPAL'S REPRESENTATIVE AND TO BE IN ACCORDANCE WITH TfNSW STANDARD DRAWING MD.R37.A01 SHEET 1. INDICATIVE LOCATIONS SHOWN.
3. GEOTECHNICAL TEST LOCATIONS ARE APPROXIMATE ONLY. REFERENCE TO THE RELEVANT GEOTECHNICAL REPORTS SHOULD BE MADE TO CONFIRM TEST LOCATIONS.

LEGEND

- MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022
- PAVEMENT TYPE 1
- CAUSEWAY
- MESH SUPPORT
- RENO MATRESS
- CONCRETE LINED CATCH DRAIN
- CONCRETE LINED TABLE DRAIN WITH SUBSURFACE DRAINAGE
- CONCRETE TfNSW SO KERB DRAIN
- CONCRETE TfNSW SO KERB DRAIN WITH SUBSURFACE DRAINAGE
- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN

MESH SUPPORT TO BE CONFIRMED DURING CONSTRUCTION BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER

MESH SUPPORT TO BE CONFIRMED DURING CONSTRUCTION BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER

CATCH DRAIN MCCL

CATCH DRAIN MCCL1

MTA0
GABION WALL TO BE PROVIDED FROM CH2230 TO CH2310

CATCH DRAIN MCCM

CATCH DRAIN MCCN

CATCH DRAIN MCCO

CATCH DRAIN MCCP

MT80
GABION WALL TO BE PROVIDED FROM CH2500 TO CH2540

CATCH DRAIN MCCQ

2160 2180 2200 2220 2240 2260 2280 2300 2320 2340 2360 2380 2400 2420 2440 2460 2480 2500 2520 2540 2560

ADJOINS DRG No. 12542101-C3407

ADJOINS DRG No. 12542101-C3409

MT70
GABION WALL TO BE PROVIDED FROM CH2345 TO CH2440

TO MERRIWA

TO WILLOW TREE

COULSONS CREEK ROAD
DESIGN CONTROL MC20

INSTALL HERRINGBONE SUB SURFACE DRAINAGE PIPES AT 5m SPACINGS FOR REMAINING SATURATED GULLY SOIL. SURVEY TO CONFIRM EXTENT REQUIRED. GABION WALL SUB SURFACE DRAINAGE TO CONNECT TO HERRINGBONE SUB SURFACE DRAINAGE.

MT60
GABION WALL TO BE PROVIDED FROM CH2190 TO CH2338.
EXISTING FILL TO BE REMOVED, SORTED AND RE-COMPACTED.

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 10 20 30m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH2200 TO CH2540 - SHEET 8 OF 9

Original Size A3
Drawing No: 12542101-C3408
Rev: 0

Plot Date: 27 May 2022 - 4:47 PM
Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3400.dwg

NOTE

1. ALL CROSS DRAINAGE CULVERT OUTLETS TO HAVE BATTER CHUTE AND RENO MATTRESS GEOTECHNICAL TREATMENT. FOR DETAILS REFER TO DRAWINGS C3502 AND C3503.
2. INTRA-PAVEMENT DRAINAGE AND OUTLETS TO BE INSTALLED AT LOCATIONS DIRECTED BY PRINCIPAL'S REPRESENTATIVE AND TO BE IN ACCORDANCE WITH TfNSW STANDARD DRAWING MD.R37.A01 SHEET 1. INDICATIVE LOCATIONS SHOWN.
3. GEOTECHNICAL TEST LOCATIONS ARE APPROXIMATE ONLY. REFERENCE TO THE RELEVANT GEOTECHNICAL REPORTS SHOULD BE MADE TO CONFIRM TEST LOCATIONS.

LEGEND

- MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022
- PAVEMENT TYPE 1
- MESH SUPPORT
- CAUSEWAY
- RENO MATRESS
- CONCRETE LINED CATCH DRAIN
- CONCRETE LINED TABLE DRAIN WITH SUBSURFACE DRAINAGE
- CONCRETE TfNSW SO KERB DRAIN
- CONCRETE TfNSW SO KERB DRAIN WITH SUBSURFACE DRAINAGE
- PAVEMENT INTERFACE SUBSURFACE DRAINAGE
- INDICATIVE INTRA-PAVEMENT DRAINAGE TO MD.R37.A01
- HERRINGBONE SUBSURFACE DRAIN

COULSONS CREEK ROAD
DESIGN CONTROL MC20

2520 2540 2560 2580 2600 2620 2640 2660 2680 2700 2720 2740 2760 2780 2800 2820 2840 2859.149

ADJOINS DRG No. 1254210 1-C3408

LIMIT OF WORKS

BATTER CHUTE AND RENO MATTRESS GEOTECHNICAL TREATMENT. REFER TO DRG C3502 FOR DETAILS.

MT90
GABION WALL TO BE PROVIDED FROM CH2610 TO CH2676

TO MERRIWA

TO WILLOW TREE

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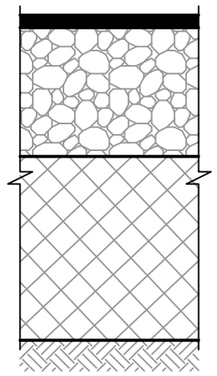
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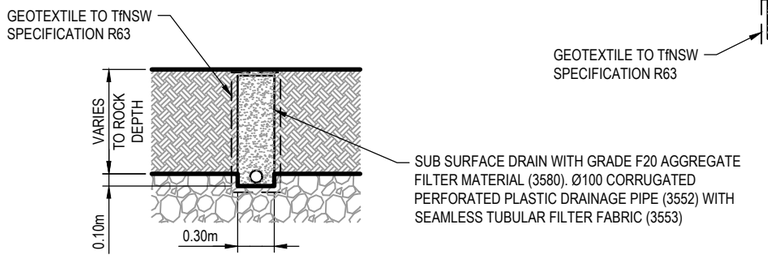
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: PAVEMENT AND GEOTECHNICAL TREATMENT PLAN MC20 - CH2540 TO CH2880 - SHEET 9 OF 9

Original Size A3 | Drawing No: 12542101-C3409 | Rev: 0

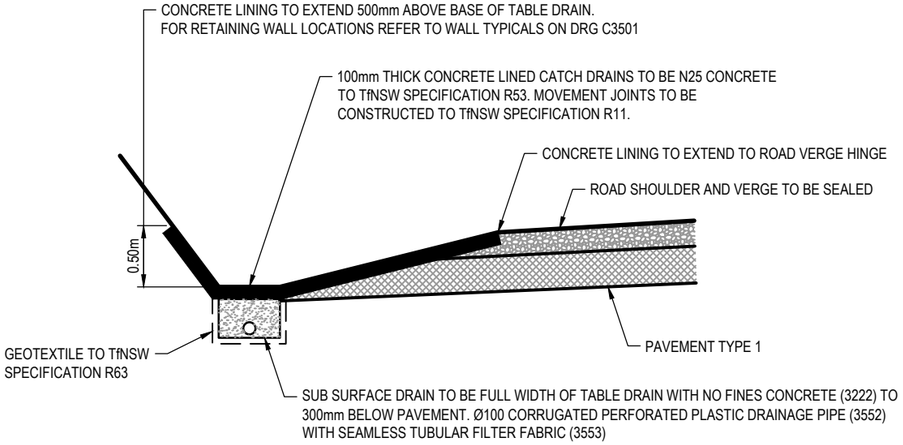
Plot Date: 27 May 2022 - 4:47 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3400.dwg



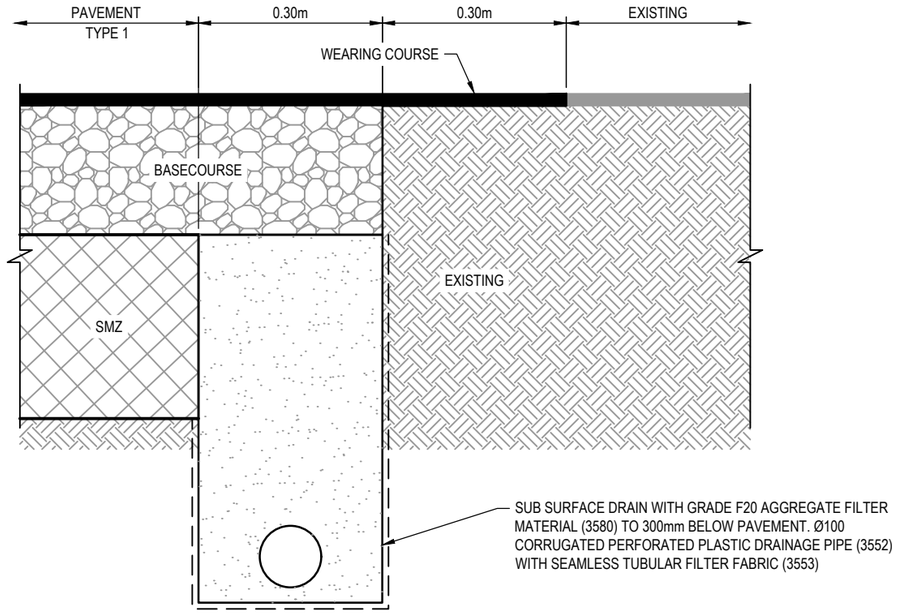
PAVEMENT TYPE 1
SCALE 1:10



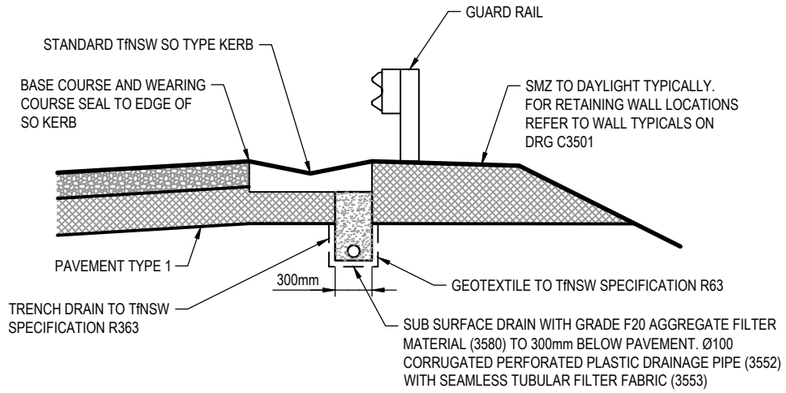
HERRINGBONE SUB SURFACE DRAINAGE DETAIL
SCALE 1:50



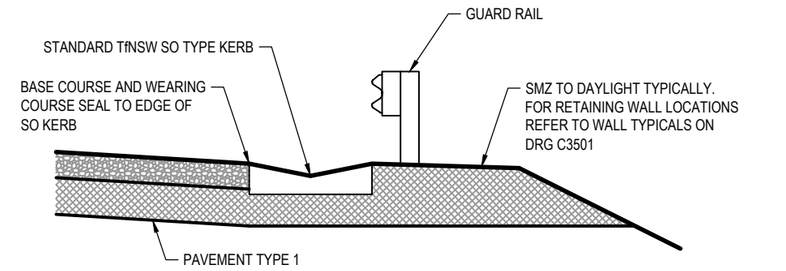
EDGE DETAIL
UPSLOPE WITH TABLE DRAIN
SCALE 1:50



INTERFACE TO EXISTING
SCALE 1:10



EDGE DETAIL
DOWN SLOPE IN SUPER ELEVATION
WITH SO KERB, SUB SURFACE DRAIN AND GUARD RAIL
SCALE 1:50



EDGE DETAIL
DOWN SLOPE NO SUPER ELEVATION
WITH SO KERB AND GUARD RAIL
SCALE 1:50

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0 0.1 0.2 0.3m
SCALE 1:10 AT ORIGINAL SIZE

0 0.5 1.0 1.5m
SCALE 1:50 AT ORIGINAL SIZE

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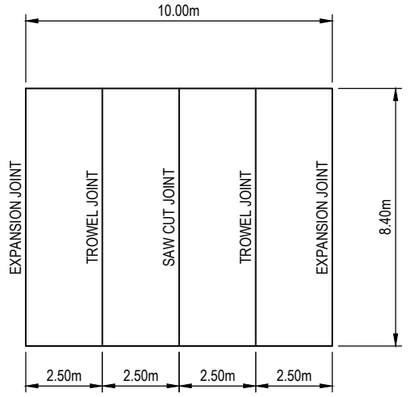
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title PAVEMENT TYPE, EDGE AND INTERFACE DETAILS SHEET 1 OF 1

Original Size A3 **Drawing No:** 12542101-C3451 **Rev:** 0

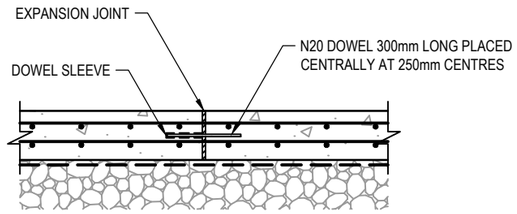
Plot Date: 27 May 2022 - 12:54 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3450.dwg

CONCRETE NOTES

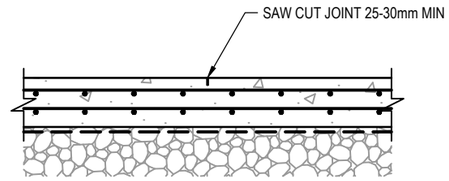
1. CONCRETE SHALL BE ACCORDANCE WITH AS1379 AND AS3600.
2. ALL CONCRETE SHALL BE BROOM TINE OR GROVE FINISHED OR SIMILAR.
3. CONCRETE POURS SHALL BE FULL WIDTH (8.4m) AND LIMITED TO 21m (MAX) IN LENGTH.
4. JOINT SPACING SHALL NOT EXCEED 5m.
5. CONCRETE STRENGTH SHALL BE MINIMUM OF 32MPa AND MINIMUM FLEXURAL STRENGTH OF 4MPa .



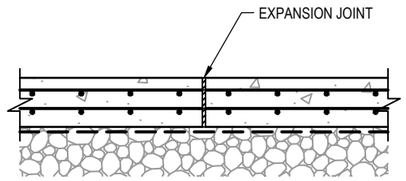
JOINT LAYOUT SPACING
SCALE 1:200



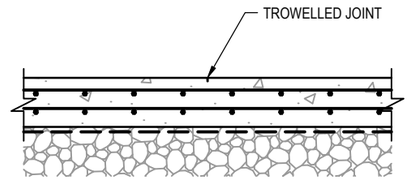
TYPICAL
EXPANSION JOINT WITH DOWEL
SCALE 1:25



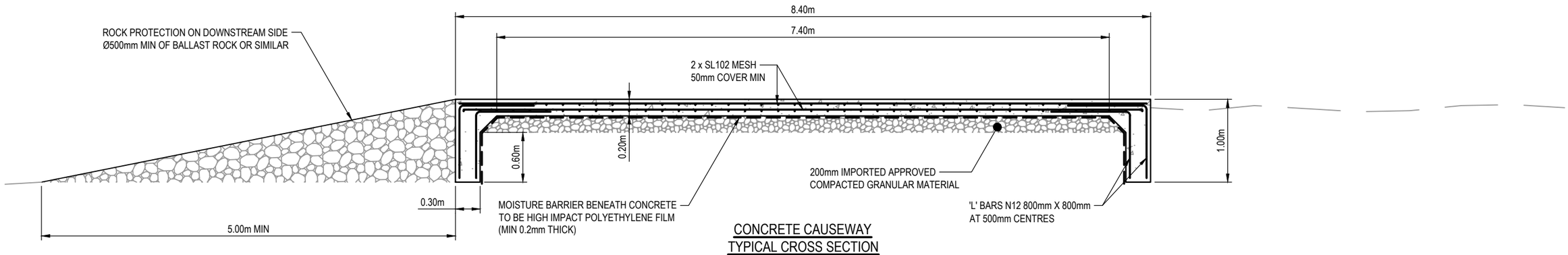
TYPICAL
SAW CUT JOINT
SCALE 1:25



TYPICAL
EXPANSION JOINT
SCALE 1:25



TYPICAL
TROWELLED JOINT
SCALE 1:25



CONCRETE CAUSEWAY
TYPICAL CROSS SECTION
SCALE 1:50

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 2 4 6m
SCALE 1:200 AT ORIGINAL SIZE

0 0.25 0.5 0.75m
SCALE 1:25 AT ORIGINAL SIZE

0 0.5 1.0 1.5m
SCALE 1:50 AT ORIGINAL SIZE

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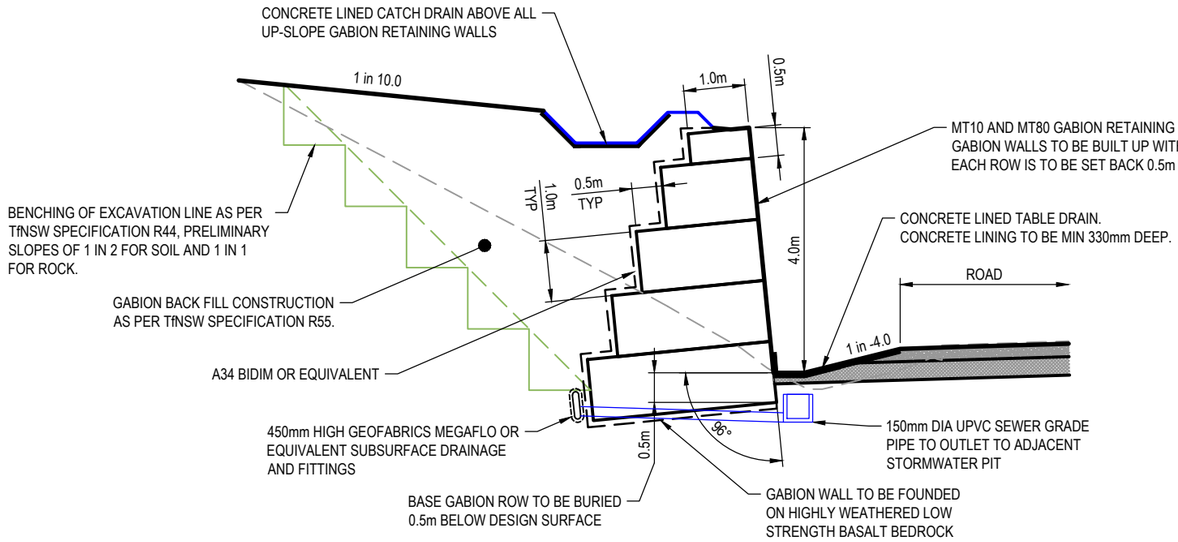
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CONCRETE CAUSEWAY DETAIL
SHEET 1 OF 1

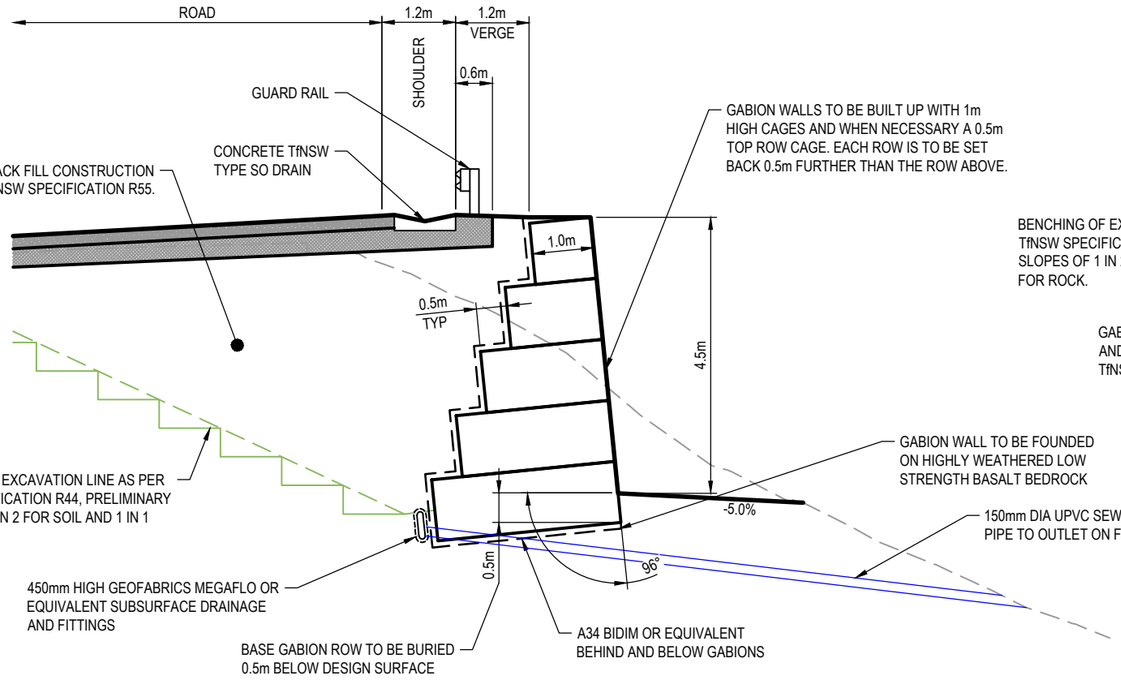
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Drawing No: 12542101-C3452
Rev: 0

Plot Date: 27 May 2022 - 12:54 PM
Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3450.dwg



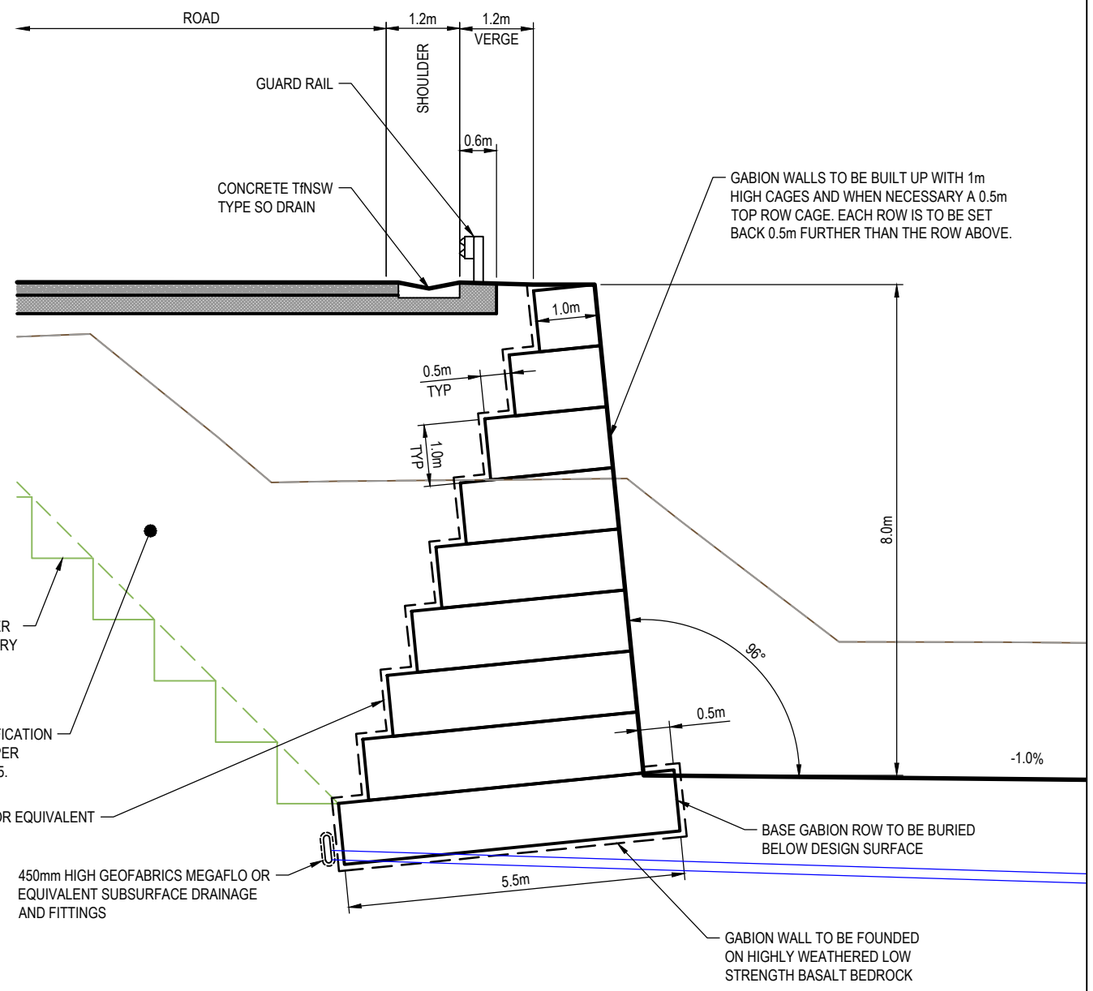
TYPICAL UP-SLOPE WALL 3m TO 5m HIGH
(4m HIGH WALL SHOWN)

SCALE 1:100



TYPICAL DOWN-SLOPE WALL 0.5m TO 6m HIGH
(4.5m HIGH WALL SHOWN)

SCALE 1:100



TYPICAL DOWN-SLOPE WALL 8m TO 10m HIGH
(8m HIGH WALL SHOWN)

SCALE 1:100

GABION WALL TYPICAL CROSS SECTION DETAILS

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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0 1 2 3m
SCALE 1:100 AT ORIGINAL SIZE

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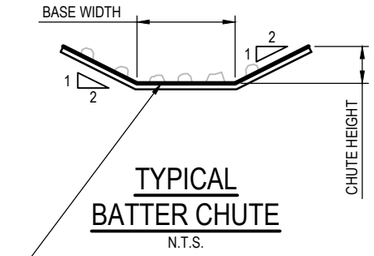
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GEOTECHNICAL / STRUCTURAL DETAILS SHEET 1 OF 5

Original Size: A3
Drawing No: 12542101-C3501
Rev: 0

Plot Date: 27 May 2022 - 12:55 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3500.dwg

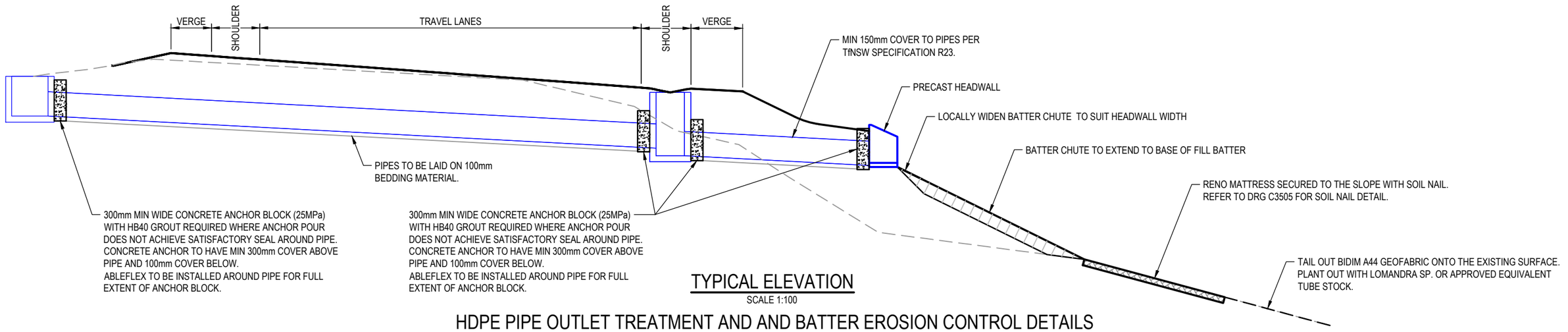
BATTER CHUTE AND RENO MATTRESS SCHEDULE

DRAINAGE LINE NUMBER	CULVERT DIA (mm)	BATTER CHUTE PROFILE			MINIMUM RENO MATTRESS DIMENSIONS				GEOFABRIC TAIL LENGTH (mm)	SOIL NAIL						COMMENT
		BASE (mm)	Height (mm)	ROCK SIZE (d50 - mm)	H (mm)	W (mm)	L (mm)	ROCK SIZE (d50 - mm)		LENGTH (mm)	BAR TYPE	DRILLED HOLE DIA (mm)	INCLINATION TO HORIZONTAL (deg)	SPACING W (mm)	SPACING L (mm)	
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2	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
3	900	800	300	200	300	2700	5400	150	5400	2000	25	75	30	1500	3000	
4	600	500	200	200	300	1800	3600	150	3600	2000	25	75	30	1500	3000	
5	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
6	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
7	2x1400	N/A	N/A	N/A	500	8400	16800	250	1680	2000	25	75	30	1500	3000	
8	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
9	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
10	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
11	2x900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
12	600	500	200	200	200	3600	2000	25	3600	2000	25	75	30	1500	3000	
13	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
14	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
15	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
16	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
17	600	500	200	200	300	1800	3600	150	3600	2000	25	75	30	1500	3000	
18	600	500	200	200	300	1800	3600	150	3600	2000	25	75	30	1500	3000	
19	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
20	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
21	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
22	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CULVERT OUTLETS THROUGH RETAINING WALL WITH GABION DROP STRUCTURE
23	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
24	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
25	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
26	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
27	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
28	900	800	300	200	200	2700	5400	100	5400	2000	25	75	30	1500	3000	
29	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
30	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
31	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
32	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
33	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
34	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
35	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
36	600	500	200	200	200	1800	3600	100	3600	2000	25	75	30	1500	3000	
37	2x900	N/A	N/A	N/A	300	5400	10800	150	1680	2000	25	75	30	1500	3000	



TYPICAL BATTER CHUTE
N.T.S.

BATTER CHUTE TO BE LINED WITH EMBEDDED ROCK AS PER TABLE AND SHOTCRETE WITH MINIMUM THICKNESS OF 100mm. MINIMUM 28 DAY COMPRESSIVE STRENGTH (F'c) = 40MPa, STEEL FIBRE REINFORCED AT A MINIMUM DENSITY OF 40 kg/m3/ OF SHOTCRETE IN ACCORDANCE WITH TfNSW QA SPECIFICATION B82.
SHOTCRETE MIX DESIGN TO BE IN ACCORDANCE WITH EXPOSURE CLASSIFICATION B1 OF AS5100.



TYPICAL ELEVATION
SCALE 1:100

HDPE PIPE OUTLET TREATMENT AND AND BATTER EROSION CONTROL DETAILS

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

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0 1 2 3m
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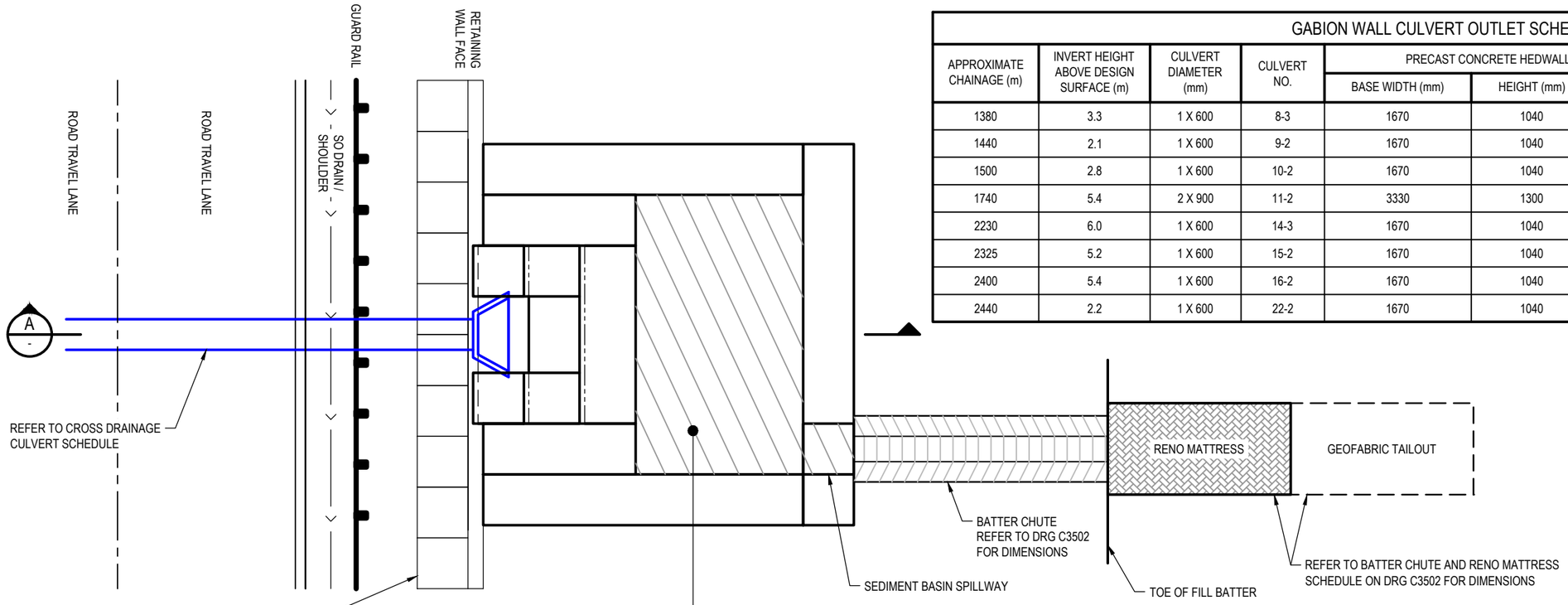
Drawn I.SMITH		Designer J.PETERSON	
Drafting Check B.DREW		Design Check A.SNEDDON	
Approved (Project Director) S.ROOTH			
Date 27.05.2022			
Scale AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	Original Size A3	Drawing No: 12542101-C3502 Rev: 0

Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title GEOTECHNICAL / STRUCTURAL DETAILS SHEET 2 OF 5

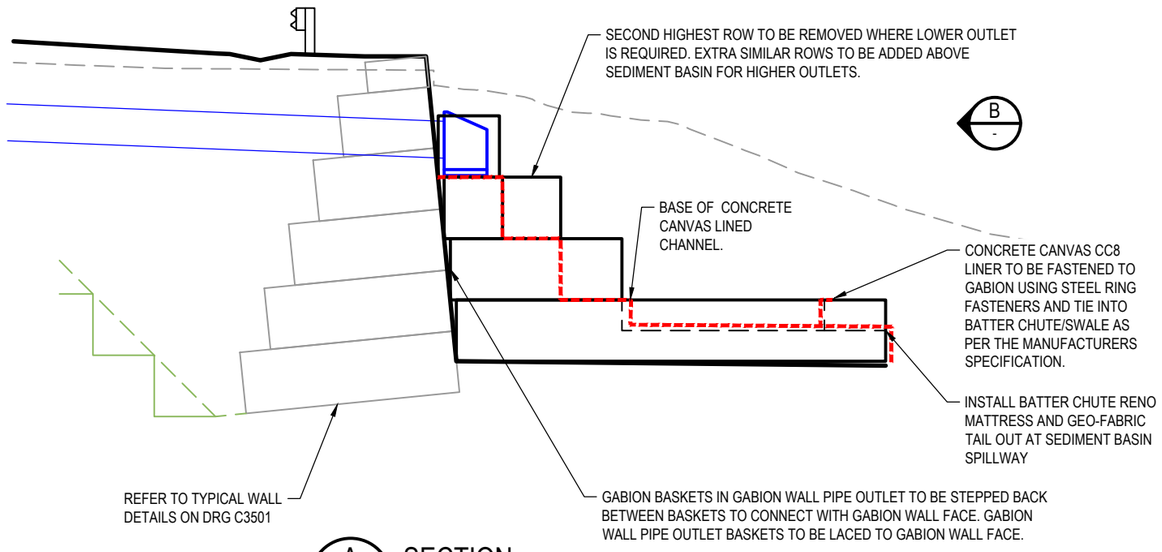
Plot Date: 27 May 2022 - 4:37 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3500.dwg

GABION WALL CULVERT OUTLET SCHEDULE

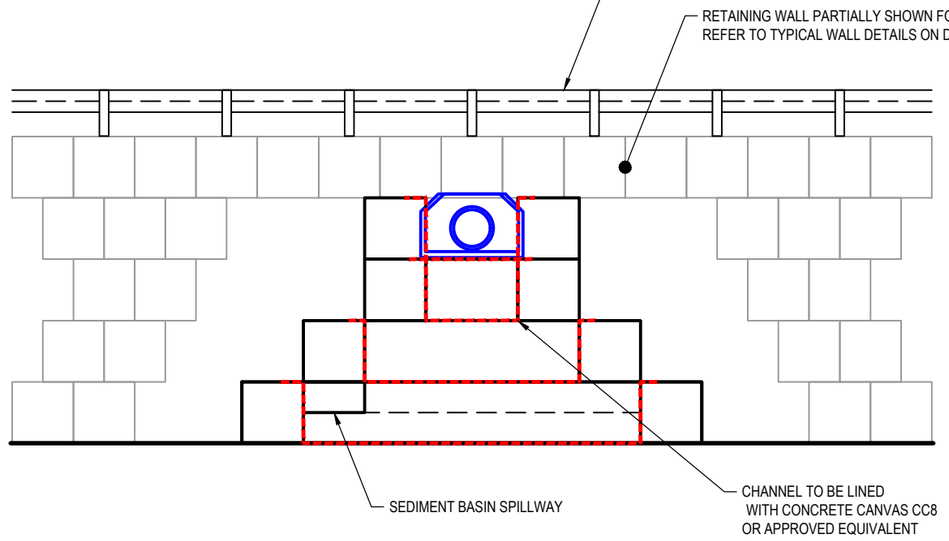
APPROXIMATE CHAINAGE (m)	INVERT HEIGHT ABOVE DESIGN SURFACE (m)	CULVERT DIAMETER (mm)	CULVERT NO.	PRECAST CONCRETE HEDWALL DIMENSION			GABION OUTLET DIMENSION	
				BASE WIDTH (mm)	HEIGHT (mm)	LENGTH (mm)	TOP WIDTH (mm)	BASE WIDTH (mm)
1380	3.3	1 X 600	8-3	1670	1040	700	4000	8000
1440	2.1	1 X 600	9-2	1670	1040	700	4000	6000
1500	2.8	1 X 600	10-2	1670	1040	700	4000	8000
1740	5.4	2 X 900	11-2	3330	1300	1010	6000	8000
2230	6.0	1 X 600	14-3	1670	1040	700	4000	8000
2325	5.2	1 X 600	15-2	1670	1040	700	4000	8000
2400	5.4	1 X 600	16-2	1670	1040	700	4000	8000
2440	2.2	1 X 600	22-2	1670	1040	700	4000	6000



PLAN
SCALE 1:100



A - SECTION
SCALE 1 : 100



B - ELEVATION
SCALE 1 : 100

GABION WALL PIPE OUTLET DETAILS

No	Revision	Drawn	Job Manager	Project Director	Date
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

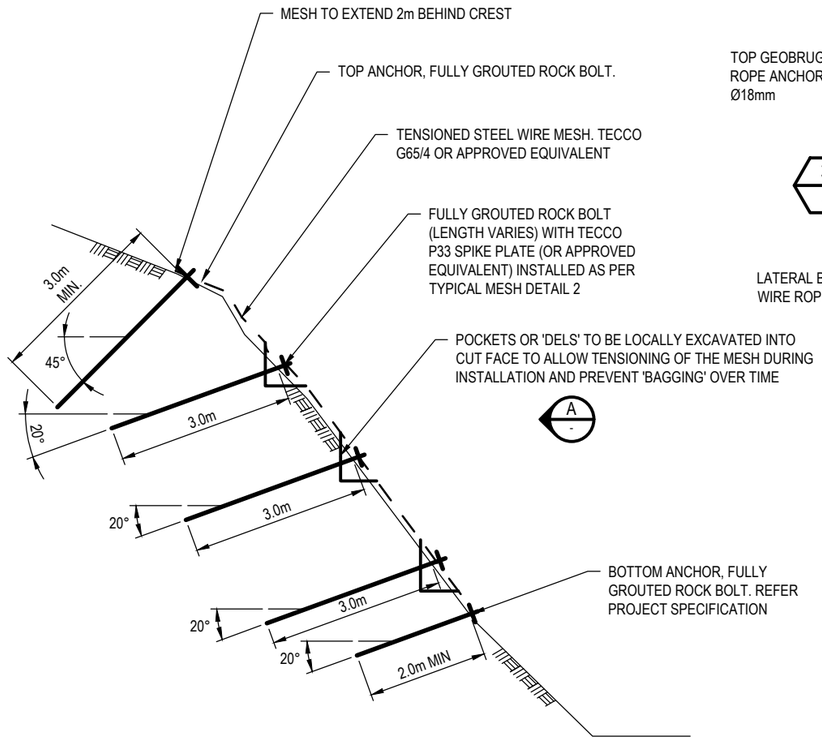
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GEOTECHNICAL / STRUCTURAL DETAILS SHEET 3 OF 5

Original Size: A3
Drawing No: 12542101-C3503
Rev: 0

Plot Date: 27 May 2022 - 12:55 PM Plotted By: Isaac Smith
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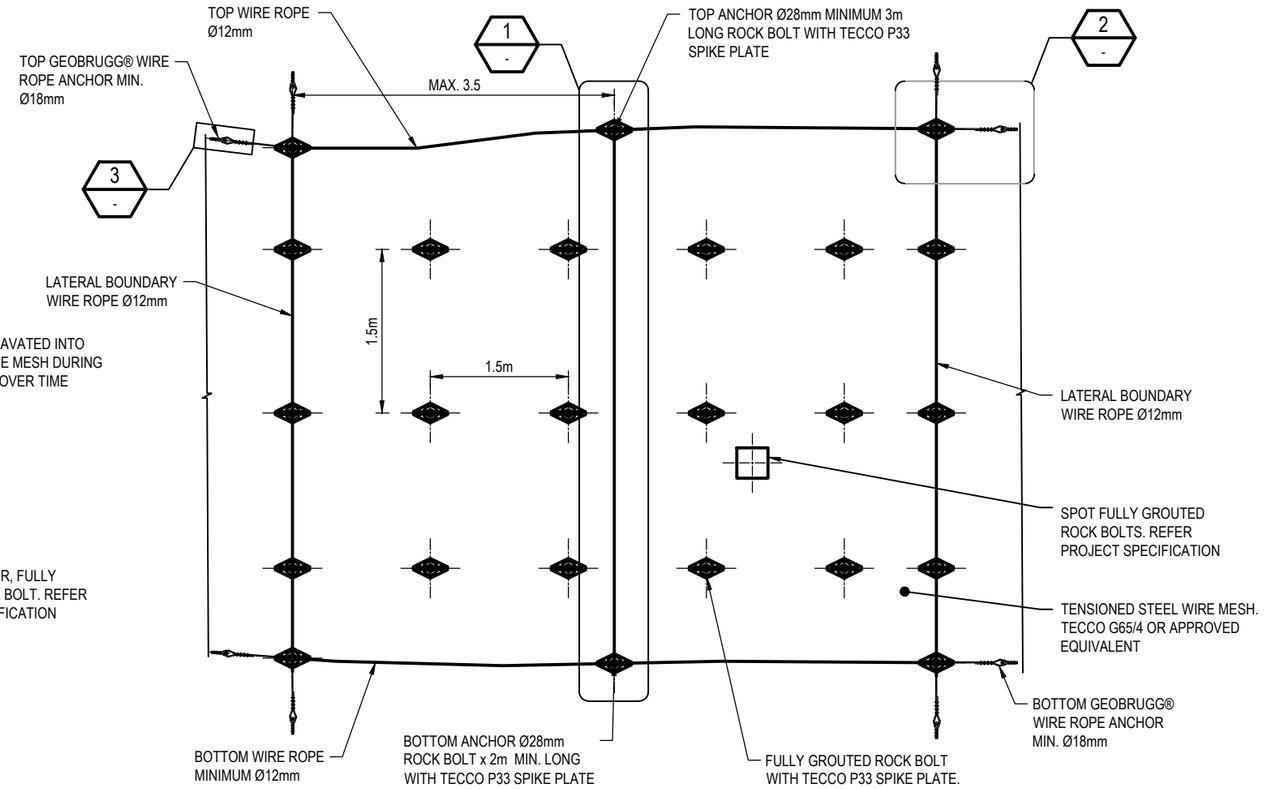
NOTES:

1. DRAWING TO BE READ IN CONJUNCTION WITH THE SPECIFICATION.
2. ALL ANCHORS AND FIXTURES SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AS 1214B AND AS 4680.
3. ROCK BOLTS TO BE INSTALLED DECLINED AT 20° BELOW HORIZONTAL, OR DIRECTED BY THE GEOTECHNICAL REPRESENTATIVE.
4. MESH TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. TYPICAL MESH AND WIRE ROPE DETAIL PROVIDED BY GEOBRUGG AUSTRALIA PTY LTD.
6. THE DISTANCE e BETWEEN THE WIRE ROPE CLIPS SHOULD BE 1 x t BUT SHOULD NOT EXCEED 2 x t, WHERE t IS THE WIDTH OF THE CLAMPING JAWS.



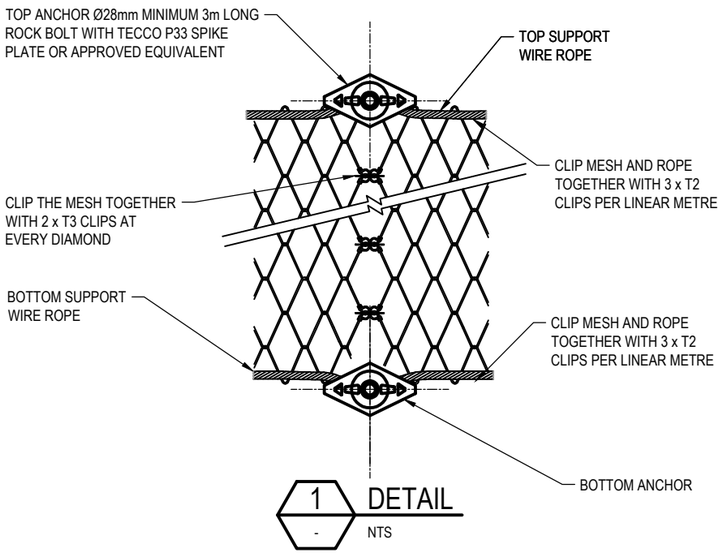
MESH SUPPORT INDICATIVE CROSS-SECTION

N.T.S



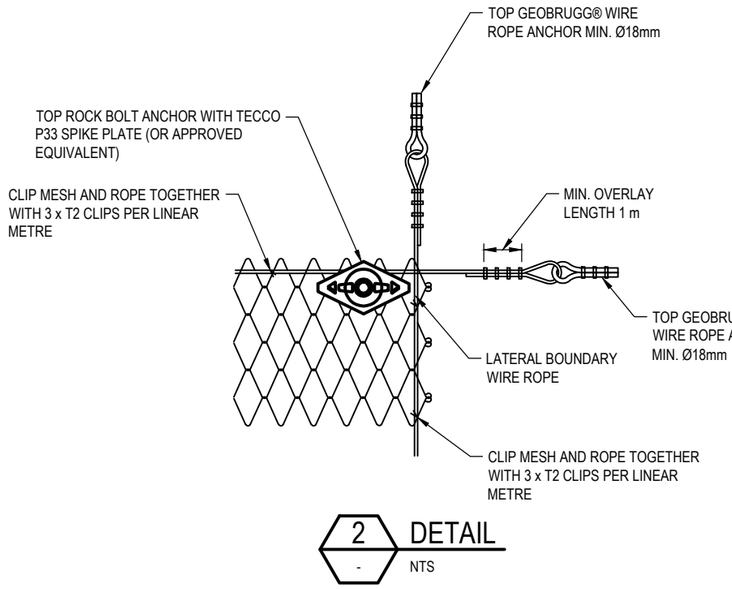
A - MESH SUPPORT ELEVATION

SCALE 1 : NTS



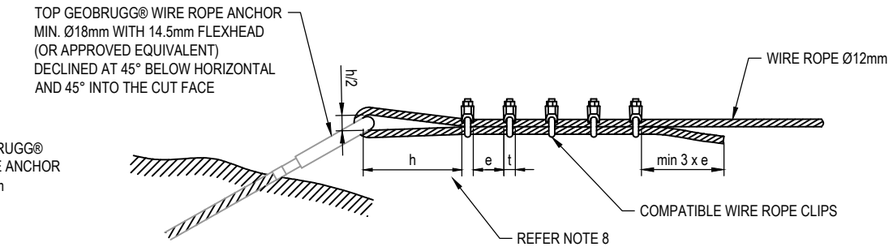
1 - DETAIL

NTS



2 - DETAIL

NTS



3 - DETAIL

NTS

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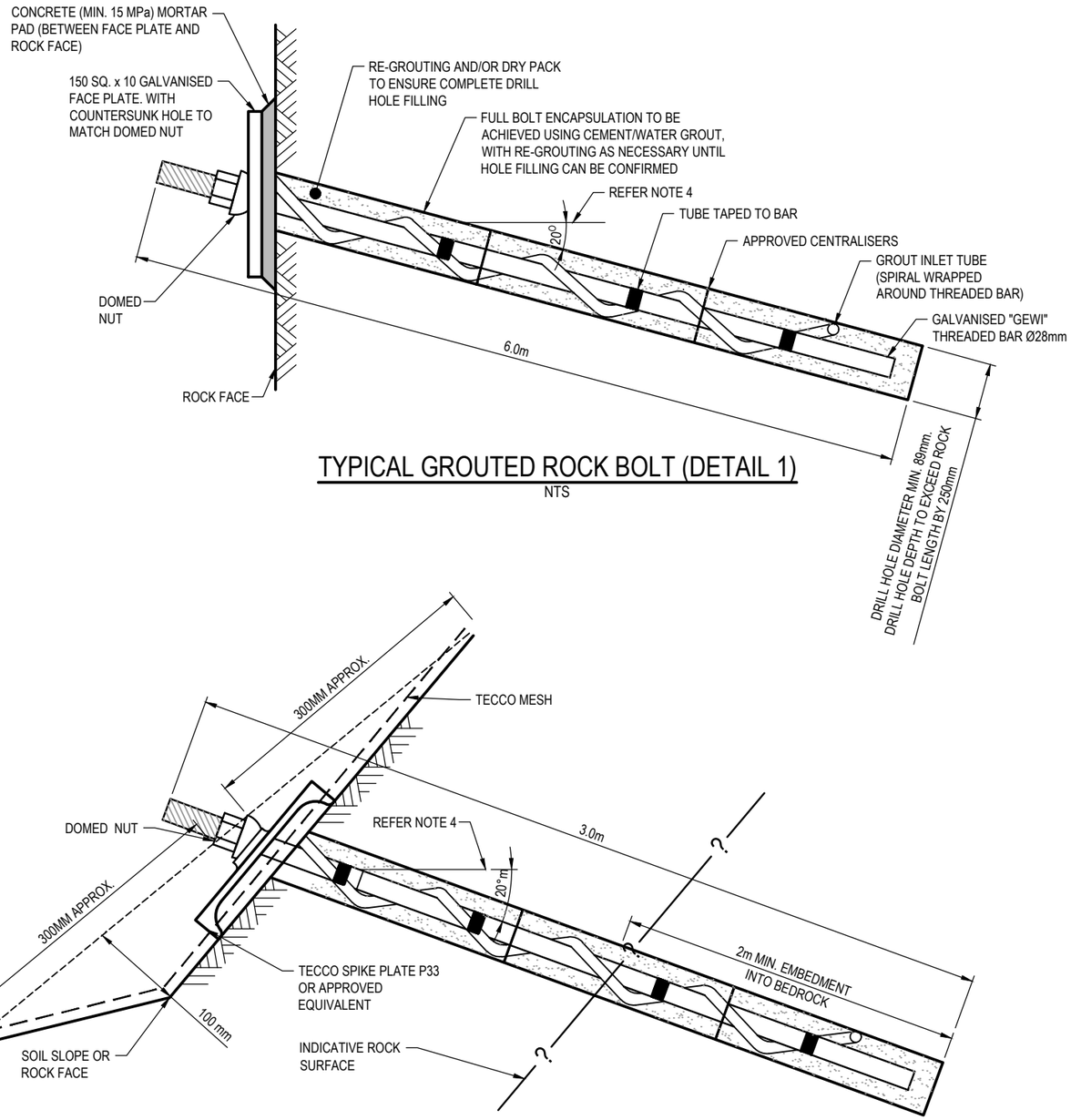
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
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Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: GEOTECHNICAL / STRUCTURAL DETAILS SHEET 4 OF 5

Original Size: A3 | Drawing No: 12542101-C3504 | Rev: 0

Plot Date: 27 May 2022 - 12:55 PM | Plotted By: Isaac Smith | Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3500.dwg



TYPICAL GROUTED ROCK BOLT (DETAIL 1)

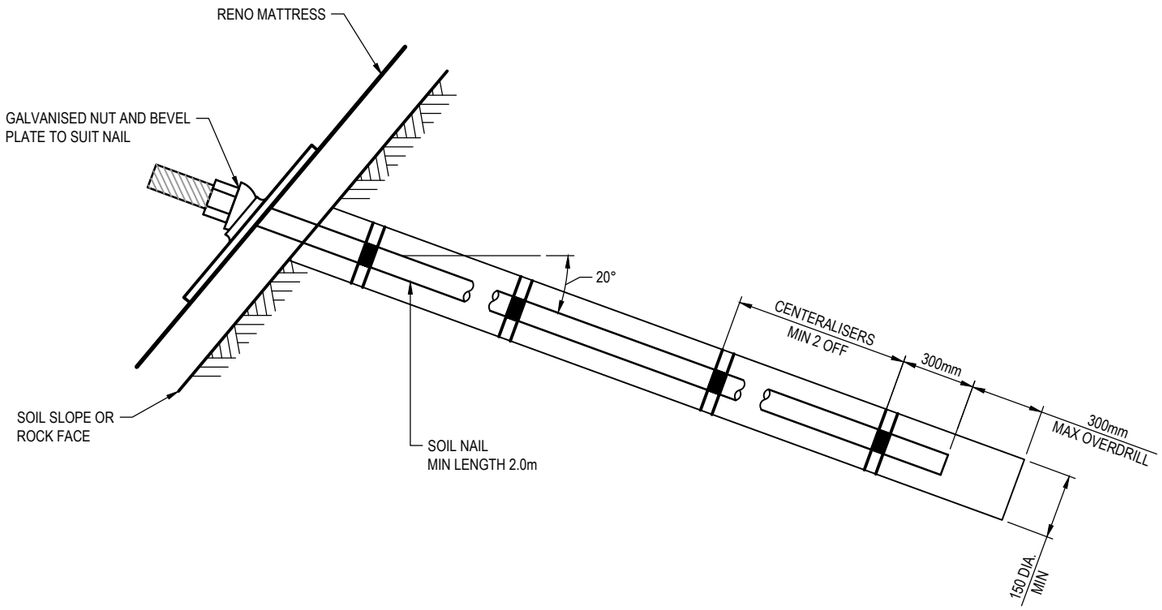
NTS

TYPICAL MESH ANCHOR / GROUTED ROCK BOLT WITH SPIKE PLATE HEAD (DETAIL 2)

NTS
FOR ADDITIONAL INFORMATION REFER DETAIL 1 ABOVE

NOTE

1. DRAWING TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATION.
2. REFER TO PROJECT SPECIFICATION FOR ROCK BOLTING SPECIFICATION.
3. ALL ANCHORS AND FIXTURES SHALL BE HOT DIPPED GALVANISED IN ACCORDANCE WITH AS1214, AS1650 AND AS4680.
4. ROCK BOLTS TO BE INSTALLED DECLINED AT 150° BELOW HORIZONTAL, UNLESS OTHERWISE SPECIFIED OR DIRECTED BY THE GEOTECHNICAL REPRESENTATIVE.
5. MESH ANCHOR 20°
6. TECCO SPIKE PLATE (DETAIL 1) P33 TO BE USED INSTEAD OF SQUARE FACE PLATES WHERE SPECIFIED (OR APPROVED EQUIVALENT). FOR MESH ANCHORAGE (DETAIL 2)



TYPICAL SOIL NAIL

NTS

No	Revision	Drawn	Job Manager	Project Director	Date
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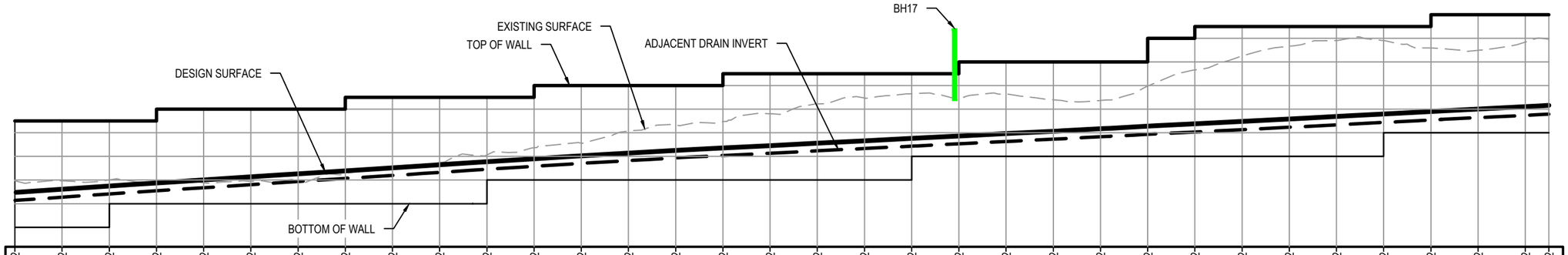
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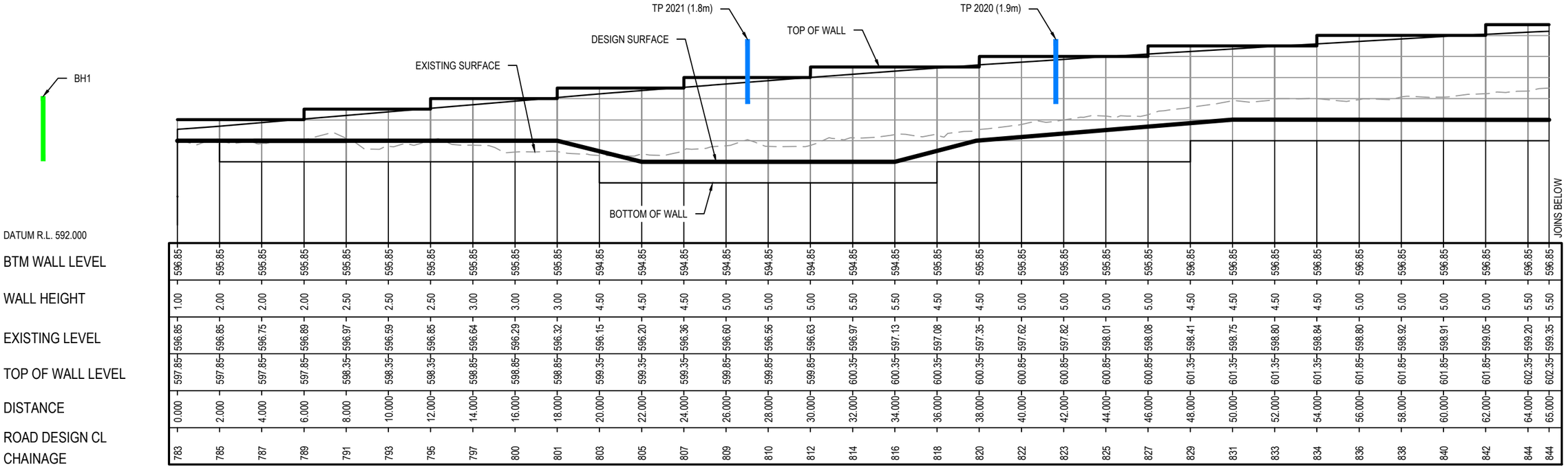
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Project: COULSONS CREEK ROAD REHABILITATION
Title: GEOTECHNICAL / STRUCTURAL DETAILS SHEET 5 OF 5

Original Size: A3
Drawing No: 12542101-C3505
Rev: 0

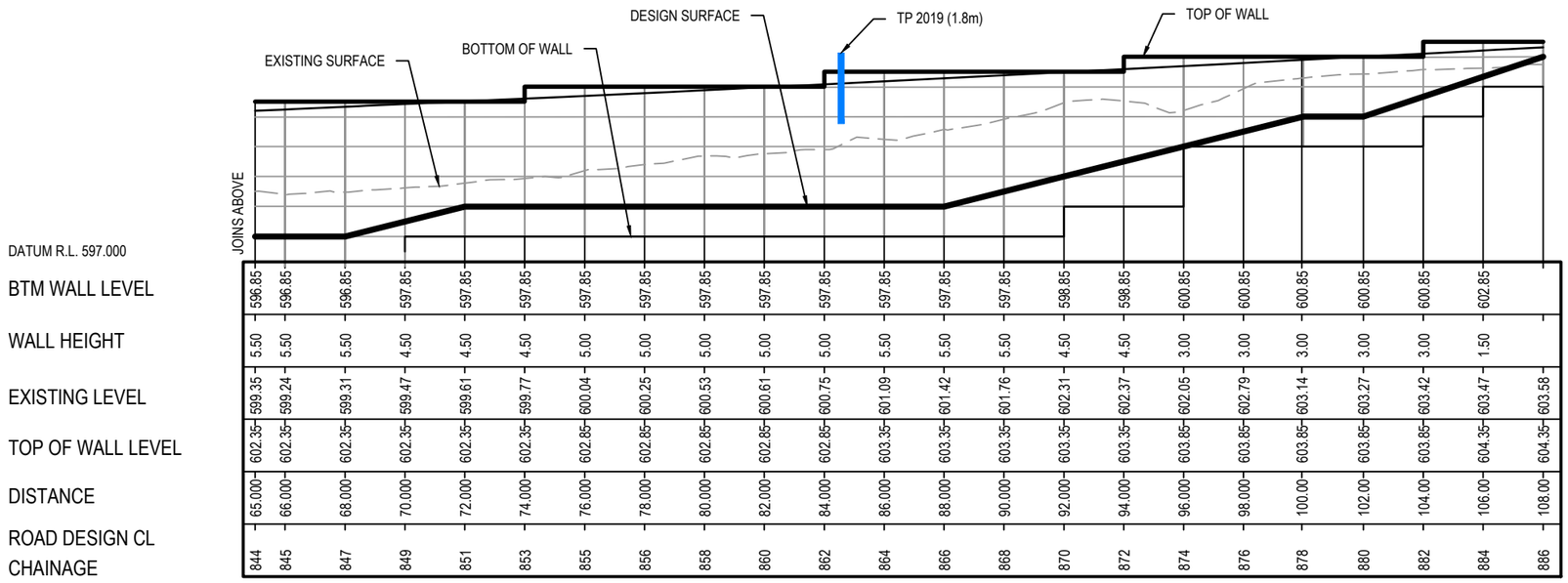
Plot Date: 27 May 2022 - 12:55 PM
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BH17
EXISTING SURFACE
TOP OF WALL
ADJACENT DRAIN INVERT
DESIGN SURFACE
BOTTOM OF WALL

| | | |



GABION WALL PROFILE MTB0
SCALE: HORIZ 1:200, VERT 1:200



GABION WALL PROFILE MTB0
SCALE: HORIZ 1:200, VERT 1:200

LEGEND

LINES SHOWN ON PROFILES ARE SYMBOLIC ONLY AND NOT TO SCALE

- MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022

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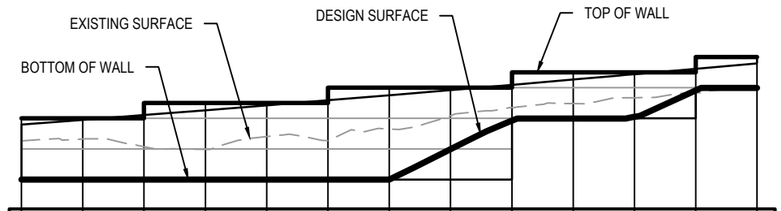
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Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title WALL PROFILES SHEET 2 OF 13

Original Size A3 Drawing No: 12542101-C3552 Rev: 0

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DATUM R.L. 684.000													
BTM WALL LEVEL	684.96	684.96	684.96	684.96	684.96	684.96	684.96	684.96	684.96	686.96	686.96	686.96	687.96
WALL HEIGHT	2.00	2.00	2.00	2.50	2.50	2.50	3.00	3.00	3.00	1.50	1.50	1.50	1.00
EXISTING LEVEL	686.22	686.28	686.03	685.94	686.36	686.23	686.61	687.04	687.31	687.44	687.63	687.79	687.97
TOP OF WALL LEVEL	686.96	686.96	686.96	687.46	687.46	687.46	687.96	687.96	687.96	688.46	688.46	688.46	688.96
DISTANCE	0.000	2.000	4.000	6.000	8.000	10.000	12.000	14.000	16.000	18.000	20.000	22.000	24.000
ROAD DESIGN CL CHAINAGE	2060.0	2062.0	2064.0	2066.0	2068.0	2070.0	2072.0	2074.0	2076.0	2078.0	2080.0	2082.0	2084.0

GABION WALL PROFILE MTC0

SCALE: HORIZ 1:200, VERT 1:200

LEGEND

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- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022

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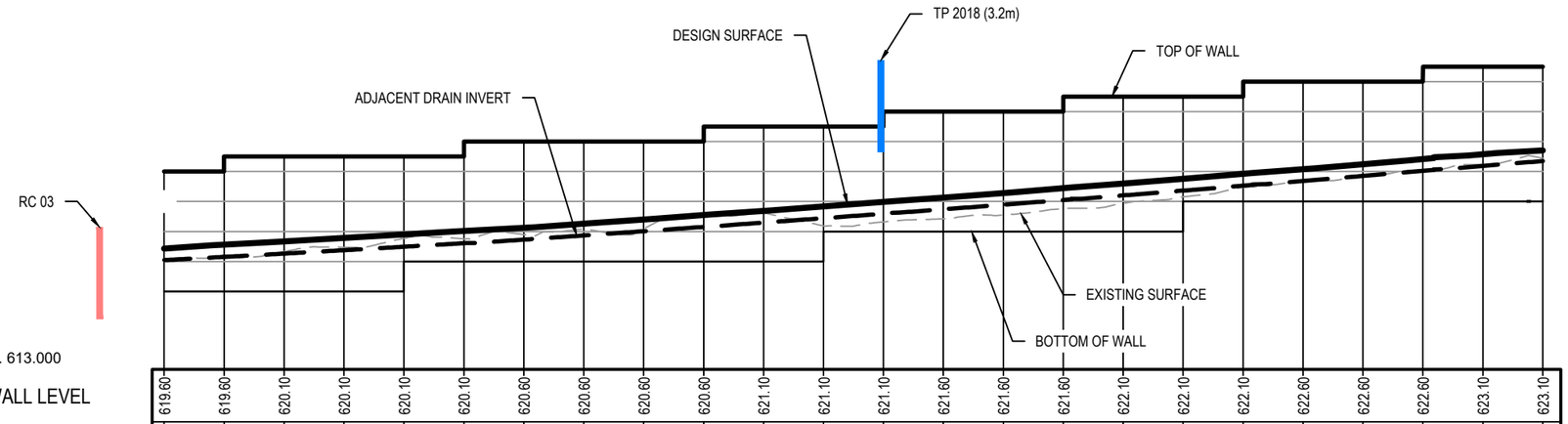
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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:200	This Drawing must not be used for Construction unless signed as Approved	

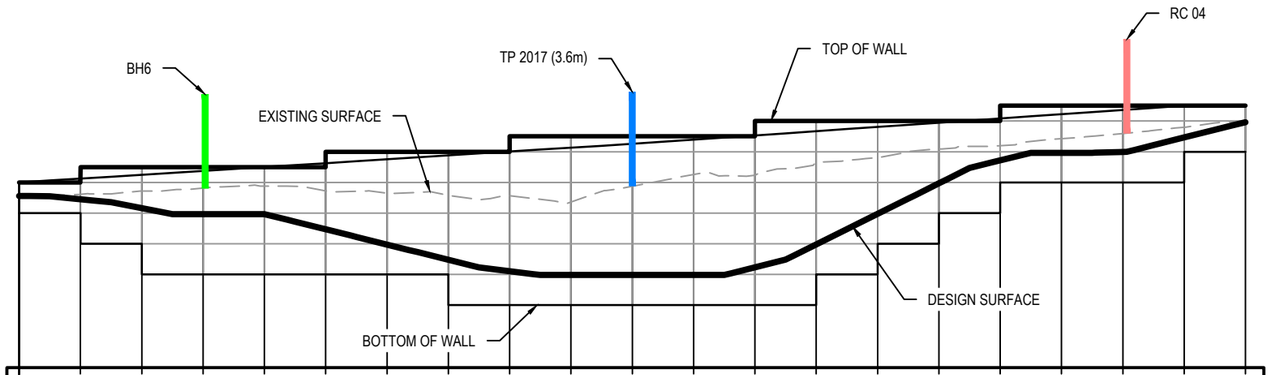
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title WALL PROFILES SHEET 3 OF 13

Original Size A3 Drawing No: 12542101-C3553 Rev: 0

Plot Date: 27 May 2022 - 12:55 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3550.dwg


TP 2018 (3.2m)
DESIGN SURFACE
TOP OF WALL
ADJACENT DRAIN INVERT
RC 03
EXISTING SURFACE
BOTTOM OF WALL

| | | |



DATUM R.L. 630.000																							
BTM WALL LEVEL	635.04	635.04	633.04	633.04	633.04	633.04	633.04	632.04	632.04	632.04	632.04	632.04	632.04	633.04	634.04	635.04	635.04	636.04	636.04	636.04	637.04		
WALL HEIGHT	1.00	1.00	3.50	3.50	3.50	3.50	4.00	5.00	5.00	5.50	5.50	5.50	5.50	5.00	4.00	3.00	3.00	2.50	2.50	2.50	1.50		
EXISTING LEVEL	635.65	635.65	635.76	635.86	635.92	635.76	635.69	635.62	635.60	635.40	635.92	636.30	636.27	636.70	636.85	637.13	637.23	637.46	637.56	637.75	638.06		
TOP OF WALL LEVEL	636.04	636.04	636.54	636.54	636.54	636.54	637.04	637.04	637.04	637.54	637.54	637.54	637.54	638.04	638.04	638.04	638.04	638.54	638.54	638.54	638.54		
DISTANCE	0.000	2.000	4.000	6.000	8.000	10.000	12.000	14.000	16.000	18.000	20.000	22.000	24.000	26.000	28.000	30.000	32.000	34.000	36.000	38.000	40.000		
ROAD DESIGN CL CHAINAGE	1355.0	1357.0	1359.0	1361.0	1363.0	1365.0	1367.0	1369.0	1371.0	1373.0	1375.0	1377.0	1379.0	1381.0	1383.0	1385.0	1387.0	1389.0	1391.0	1393.0	1395.2		

GABION WALL PROFILE MT20
SCALE: HORIZ 1:200, VERT 1:200

LEGEND

LINES SHOWN ON PROFILES ARE SYMBOLIC ONLY AND NOT TO SCALE

MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018

DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020

DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2 4 6m
SCALE 1:200 AT ORIGINAL SIZE

GHD Tower, Level 3 24 Honeysuckle Drive
Newcastle NSW 2300 Australia
PO Box 5403 Hunter Rgn Mail Cent. NSW 2310
T 61 2 4979 9999 F 61 2 4979 9988
E ntlmail@ghd.com W www.ghd.com

DO NOT SCALE

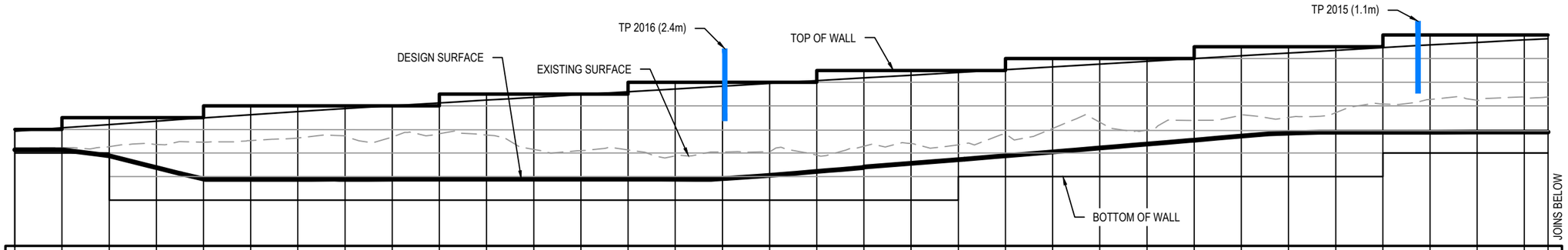
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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:200	This Drawing must not be used for Construction unless signed as Approved	

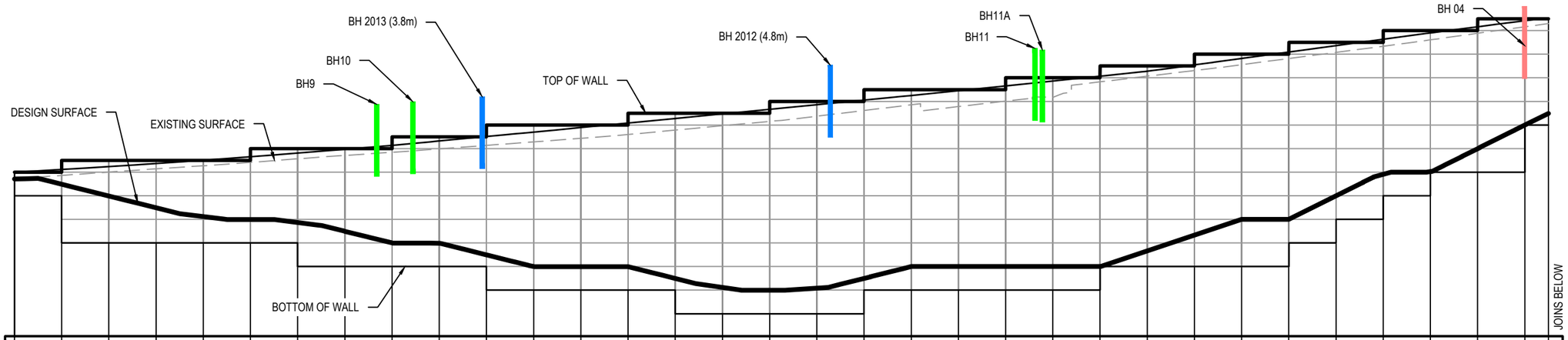
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title WALL PROFILES SHEET 5 OF 13

Original Size A3 Drawing No: 12542101-C3555 Rev: 0

Plot Date: 27 May 2022 - 12:55 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3550.dwg

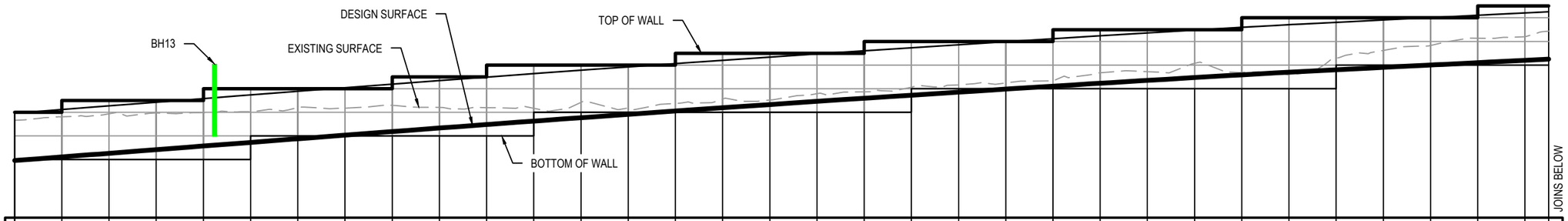

TP 2016 (2.4m)
TP 2015 (1.1m)
DESIGN SURFACE
EXISTING SURFACE
TOP OF WALL
BOTTOM OF WALL
JOINS BELOW

| | | |

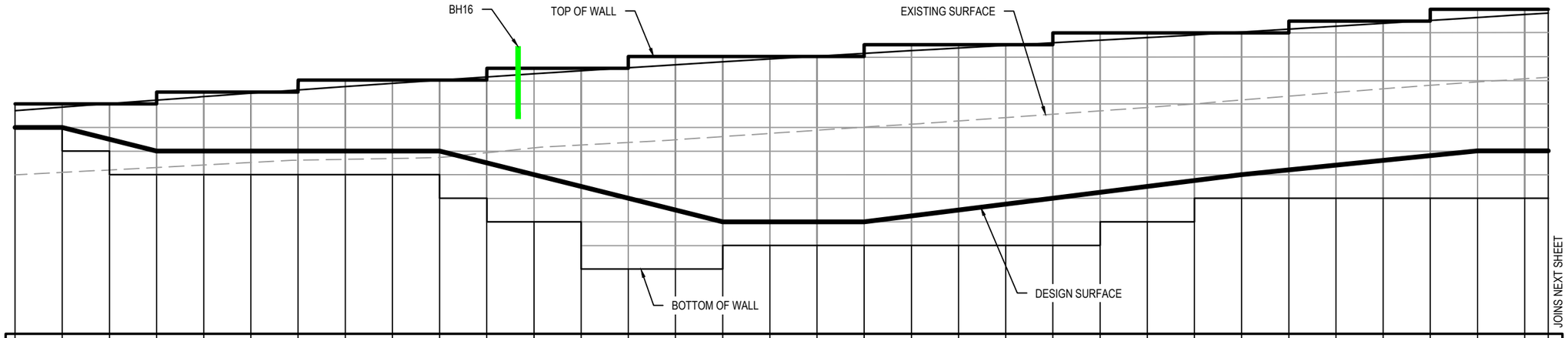


DATUM R.L. 652.000

| | | |

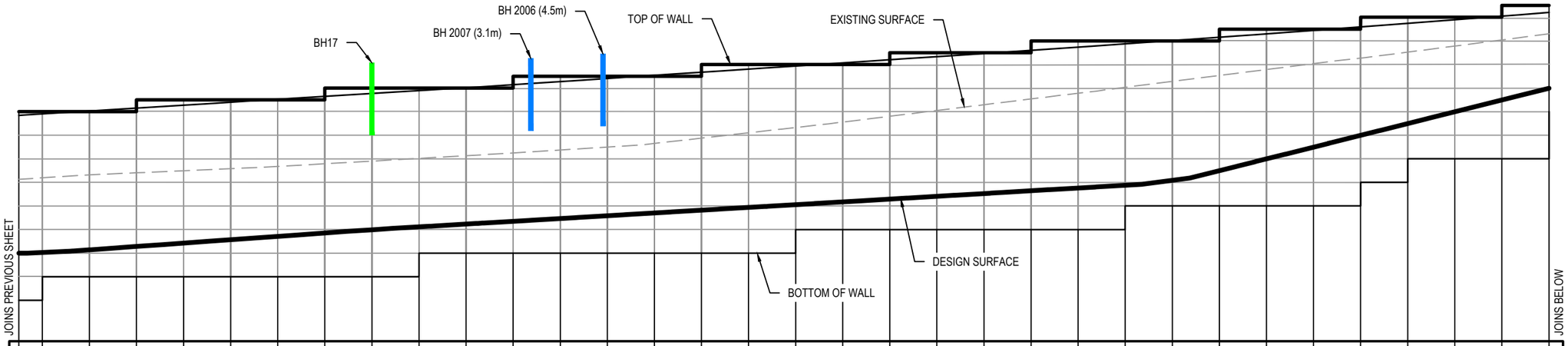

DESIGN SURFACE
TOP OF WALL
BH13
EXISTING SURFACE
BOTTOM OF WALL
JOINS BELOW

| | | |



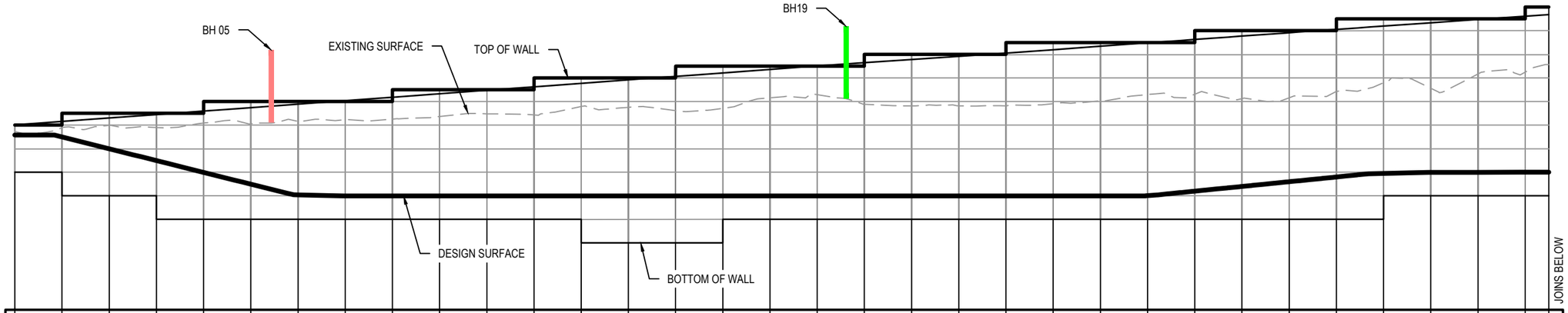
DATUM R.L. 688.000

| | | |



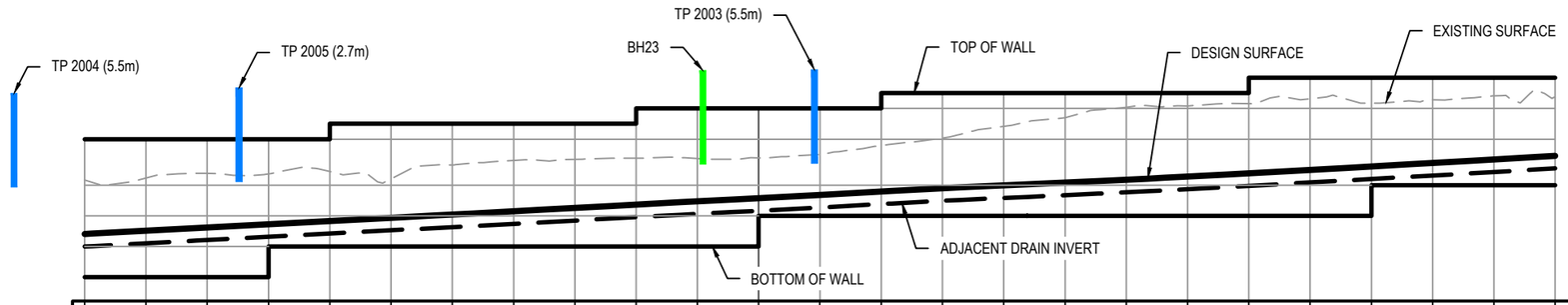
DATUM R.L. 692.000

| | | |



DATUM R.L. 670.000

| | | |



DATUM R.L. 717.000

TOP WALL LEVEL	722.28	722.28	722.28	722.28	722.28	722.78	722.78	722.78	722.78	722.78	723.28	723.28	723.28	723.28	723.78	723.78	723.78	723.78	723.78	724.28	724.28	724.28	724.28	724.28
WALL HEIGHT	4.50	4.50	4.50	4.50	3.50	4.00	4.00	4.00	4.00	4.00	4.50	3.89	3.50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.50	4.50	3.50	3.50	3.50
EXISTING LEVEL	720.94	721.02	721.17	721.15	721.32	720.99	721.49	721.59	721.57	721.66	721.67	721.66	721.78	722.11	722.30	722.69	722.94	723.37	723.37	723.44	723.65	723.58	723.53	723.62	723.79
BTM WALL LEVEL	717.78	717.78	717.78	717.78	718.78	718.78	718.78	718.78	718.78	718.78	718.78	718.39	719.78	719.78	719.78	719.78	719.78	719.78	719.78	719.78	719.78	719.78	720.78	720.78	720.78
DISTANCE	0.000	2.000	4.000	6.000	8.000	10.000	12.000	14.000	16.000	18.000	20.000	22.000	24.000	26.000	28.000	30.000	32.000	34.000	36.000	38.000	40.000	42.000	44.000	46.000	48.000
ROAD DESIGN CL CHAINAGE	2500.8	2502.5	2504.3	2506.1	2507.4	2509.6	2511.9	2513.2	2514.1	2516.0	2518.1	2519.9	2521.8	2523.8	2525.2	2527.1	2528.5	2531.3	2532.2	2533.7	2535.7	2537.7	2539.7	2541.7	2543.7

GABION WALL PROFILE MT80
SCALE: HORIZ 1:200, VERT 1:200

LEGEND

LINES SHOWN ON PROFILES ARE SYMBOLIC ONLY AND NOT TO SCALE

- MACQUARIE GEOTECH GEOTECHNICAL INVESTIGATION, 2018
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2020
- DOUGLAS PARTNERS GEOTECHNICAL INVESTIGATION, 2022

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2 4 6m
SCALE 1:200 AT ORIGINAL SIZE

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Newcastle NSW 2300 Australia
PO Box 5403 Hunter Rgn Mail Cent. NSW 2310
T 61 2 4979 9999 F 61 2 4979 9988
E ntlmail@ghd.com W www.ghd.com

DO NOT SCALE

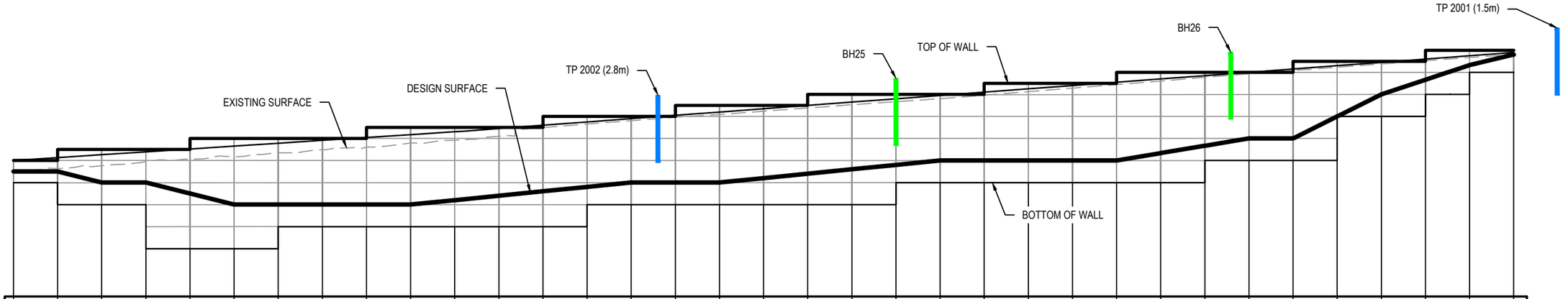
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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:200	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: WALL PROFILES
SHEET 12 OF 13

Original Size: A3
Drawing No: 12542101-C3562
Rev: 0

Plot Date: 27 May 2022 - 12:56 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3550.dwg

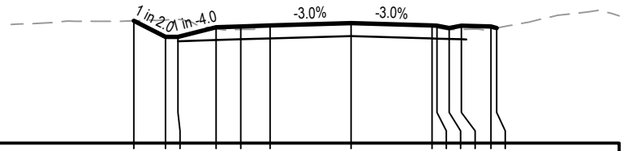


DATUM R.L. 720.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

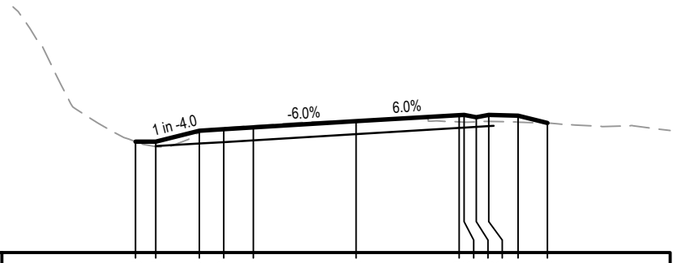


Level Datum = 539.000

| | | |

LEGEND

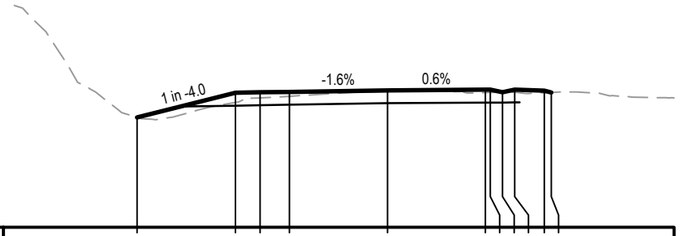
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 543.000

DESIGN LEVELS	547.518	547.518	547.962	548.022	548.094	548.346	548.598	548.610	548.510	548.610	548.574	548.276
CUT STRINGS	IA21	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	547.52	547.32	547.90		548.07	548.16	548.36	548.32	548.31	548.33	548.34	548.31	548.28
DESIGN OFFSET	-8.997	-8.179	-6.400		-5.400	-4.200	0.000	4.200	4.400	4.900	5.400	6.600	7.796

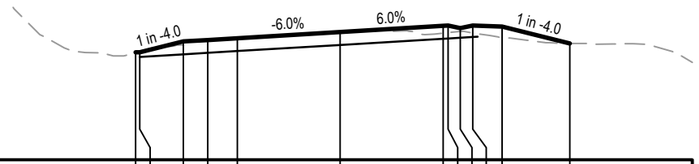
CH 160.000



Level Datum = 546.000

DESIGN LEVELS	550.479	551.482	551.498	551.517	551.582	551.604	551.605	551.505	551.605	551.569	551.496
CUT STRINGS	IA21	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	550.48	551.09	551.27	551.34	551.53	551.49	551.50	551.50	551.50	551.48	551.50
DESIGN OFFSET	-10.208	-6.196	-5.196	-3.996	0.000	3.996	4.196	4.696	5.196	6.396	6.688

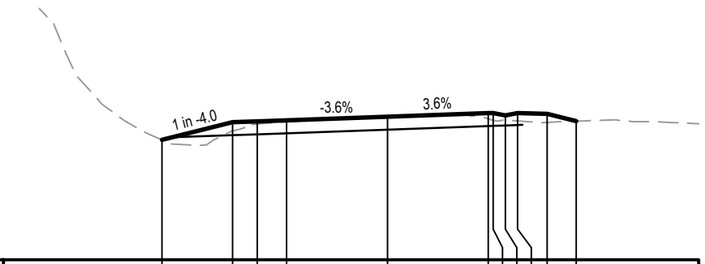
CH 200.000



Level Datum = 542.000

DESIGN LEVELS	546.383	546.383	546.827	546.887	546.959	547.211	547.463	547.475	547.375	547.475	547.439	546.750
CUT STRINGS	IA21		EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	546.38	546.43	546.68	546.86	546.94	547.20	547.16	547.18	547.24	547.17	546.99	546.75
DESIGN OFFSET	-8.338	-8.179	-6.400	-5.400	-4.200	0.000	4.200	4.400	4.900	5.400	6.600	9.357

CH 140.000



Level Datum = 544.000

DESIGN LEVELS	548.890	549.611	549.646	549.689	549.835	549.981	549.988	549.888	549.988	549.952	549.655
CUT STRINGS	IA21	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	548.89	549.26	549.54	549.63	549.86	549.75	549.69	549.71	549.66	549.61	549.66
DESIGN OFFSET	-9.192	-6.308	-5.308	-4.108	0.000	4.108	4.308	4.808	5.308	6.508	7.696

CH 180.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Newcastle NSW 2300 Australia
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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

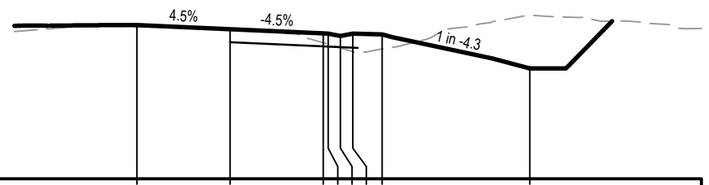
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 2 OF 54

Original Size: A3
Drawing No: 12542101-C3802
Rev: 0

Plot Date: 27 May 2022 - 12:57 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

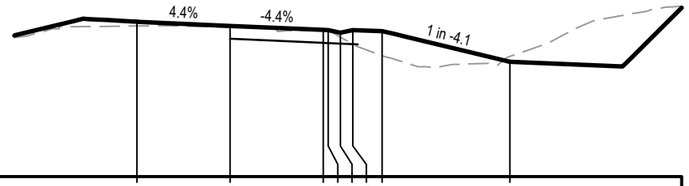
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 551.000

DESIGN LEVELS	557.269	557.098	556.927	556.918	556.918	556.882	555.495					
CUT STRINGS	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I					
EXISTING LEVELS	557.20	557.07	556.55	556.47	556.34	556.18	556.29	557.66				
DESIGN OFFSET	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	12.216				

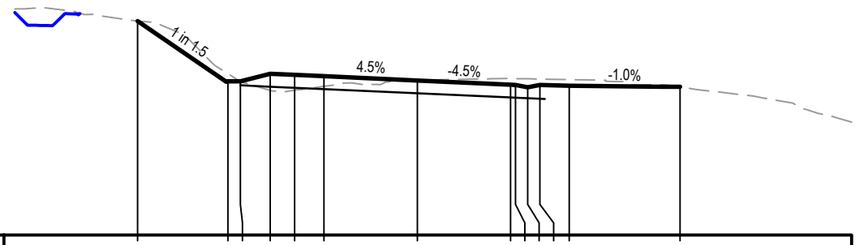
CH 260.000



Level Datum = 549.000

DESIGN LEVELS	555.315	555.148	554.982	554.873	554.873	554.973	554.937	553.681				
CUT STRINGS	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I					
EXISTING LEVELS	555.14	555.09	554.95	554.94	554.69	554.40	553.93	553.90				
DESIGN OFFSET	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	11.409				

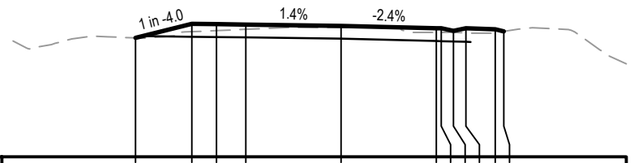
CH 240.000



Level Datum = 555.000

DESIGN LEVELS	563.731	561.273	561.273	561.577	561.532	561.478	561.307	561.136	561.127	561.027	561.127	561.091	561.046
CUT STRINGS	IA21	IE20	IA20	EV20	ES20	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I	
EXISTING LEVELS	563.73	561.58	561.26	560.90	560.91	561.07	561.32	561.39	561.38	561.37	561.36	561.34	561.05
DESIGN OFFSET	-11.405	-7.717	-7.217	-6.000	-5.000	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	10.709

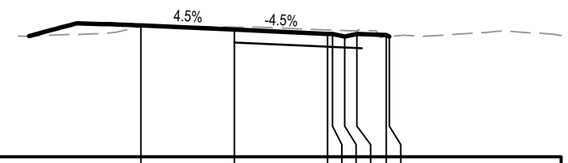
CH 300.000



Level Datum = 548.000

DESIGN LEVELS	552.850	553.425	553.411	553.394	553.341	553.246	553.241	553.241	553.205	553.118
CUT STRINGS	IA21	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	552.85	553.11	553.15	553.20	553.28	553.08	553.08	553.08	553.05	553.07	553.12
DESIGN OFFSET	-8.381	-6.083	-5.083	-3.883	0.000	3.883	4.083	4.583	5.083	6.283	6.629

CH 220.000



Level Datum = 554.000

DESIGN LEVELS	559.357	559.186	559.015	559.006	558.906	559.006	558.970	558.908	
CUT STRINGS	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I		
EXISTING LEVELS	559.32	559.29	559.17	559.16	559.15	559.14	558.90	558.91	
DESIGN OFFSET	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	6.324	

CH 280.000

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 2.5 5.0 7.5m

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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

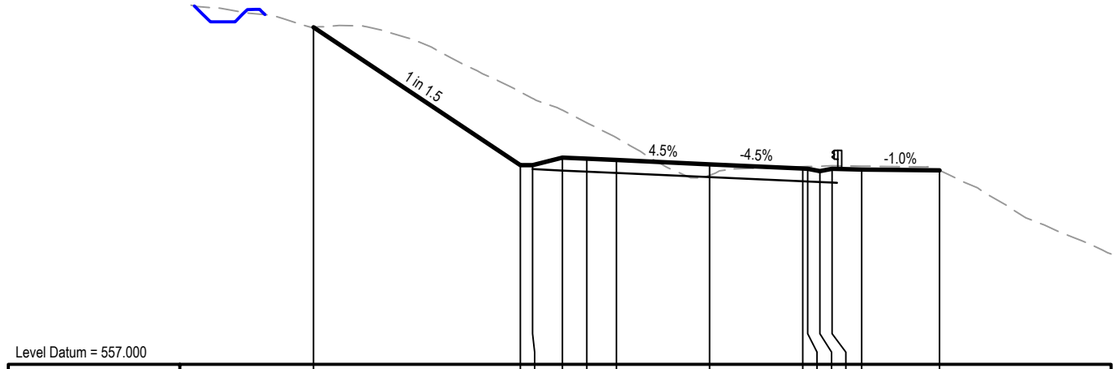
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 3 OF 54

Original Size: A3
Drawing No: 12542101-C3803
Rev: 0

Plot Date: 27 May 2022 - 12:57 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

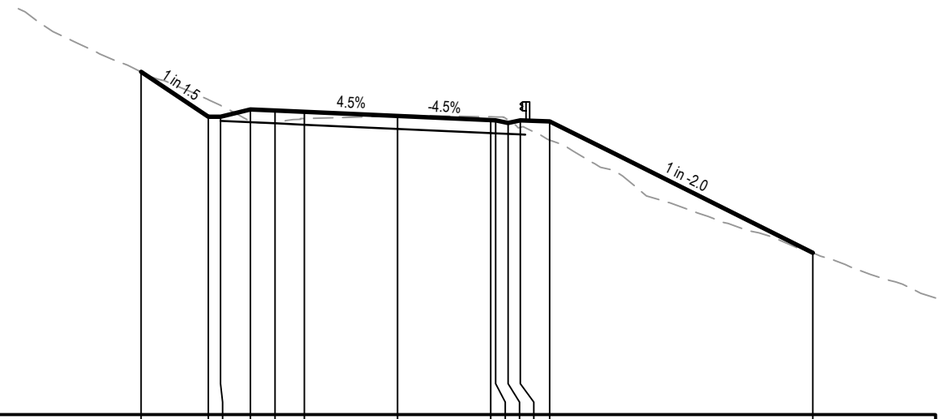
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 557.000

DESIGN LEVELS	570.744		565.122	565.122	565.427	565.382	565.328	565.157	564.986	564.977	564.877	564.977	564.941	564.909										
CUT STRINGS	EH20		IE2O	IA2O	EV2O	ES2O	CE2O	MC2O	CE2I	CF0I	CB0I	BG2I	EV2I	IA0I										
EXISTING LEVELS	570.74		568.11	567.84	567.36	566.85	566.24	564.70	565.06	565.07	565.08	565.10	565.08	564.91										
DESIGN OFFSET	-16.145		-7.717	-7.217	-6.000	-5.000	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	9.373										

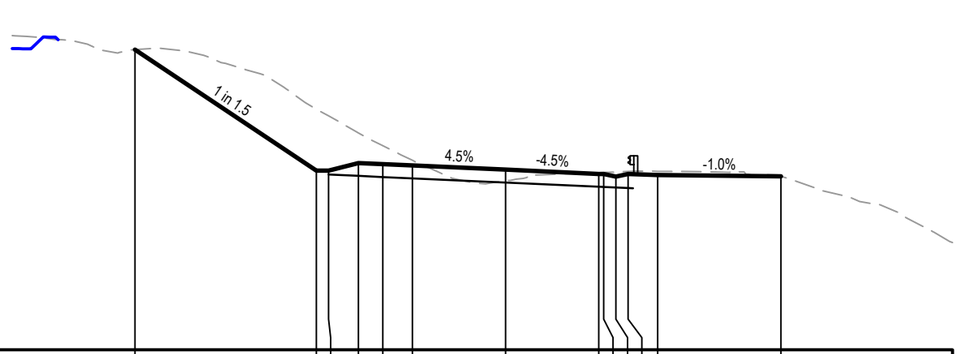
CH 340.000



Level Datum = 556.000

DESIGN LEVELS	569.961		568.132	568.132	568.436	568.391	568.337	568.166	567.995	567.986	567.886	567.986	567.950	562.586										
CUT STRINGS	EH20		IE2O	IA2O	EV2O		CE2O	MC2O	CE2I	CF0I	CB0I		EV2I	IA0I										
EXISTING LEVELS	569.96		568.83	568.60	567.94	567.87	568.06	568.17	568.13	568.13	568.00	567.70	567.19	562.59										
DESIGN OFFSET	-10.460		-7.717	-7.217	-6.000	-5.000	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	16.930										

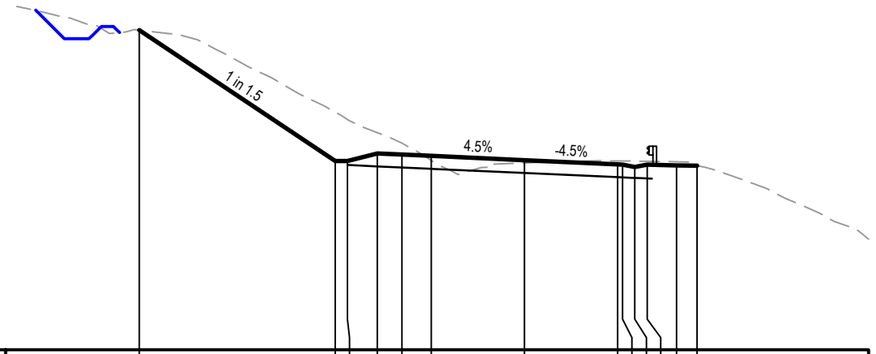
CH 380.000



Level Datum = 556.000

DESIGN LEVELS	568.243		563.312	563.312	563.616	563.571	563.517	563.346	563.175	563.166	563.066	563.166	563.130	563.080										
CUT STRINGS	EH20		IE2O	IA2O	EV2O	ES2O	CE2O	MC2O	CE2I	CF0I	CB0I	BG2I	EV2I	IA0I										
EXISTING LEVELS	568.24		565.82	565.54	564.84	564.32	563.73	562.89	563.23	563.23	563.25	563.28	563.28	563.08										
DESIGN OFFSET	-15.110		-7.717	-7.217	-6.000	-5.000	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	11.227										

CH 320.000



Level Datum = 559.000

DESIGN LEVELS	572.029		566.702	566.702	567.006	566.961	566.907	566.736	566.565	566.556	566.456	566.556	566.520	566.511										
CUT STRINGS	EH20		IE2O	IA2O	EV2O	ES2O	CE2O	MC2O	CE2I	CF0I	CB0I	BG2I	EV2I	IA0I										
EXISTING LEVELS	572.03		568.70	568.39	567.85	567.43	566.72	566.62	566.70	566.70	566.69	566.69	566.67	566.51										
DESIGN OFFSET	-15.704		-7.717	-7.217	-6.000	-5.000	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	7.033										

CH 360.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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0 2.5 5.0 7.5m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

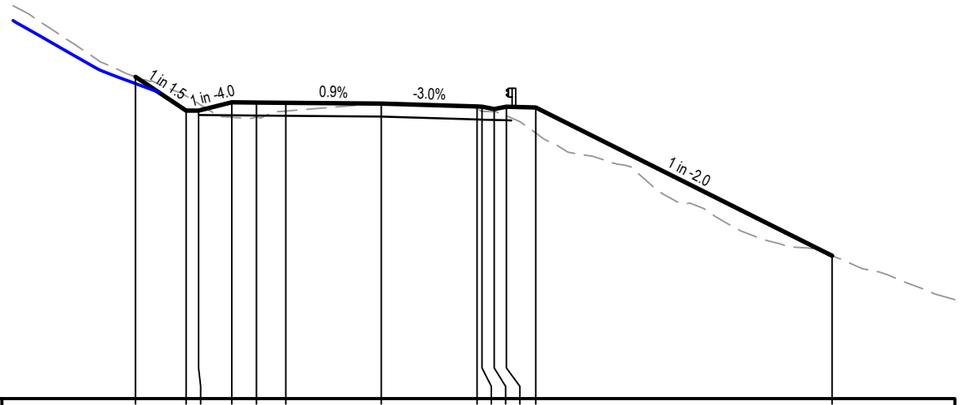
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS SECTIONS MC20 - SHEET 4 OF 54

Original Size A3 Drawing No: 12542101-C3804 Rev: 0

Plot Date: 27 May 2022 - 12:58 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

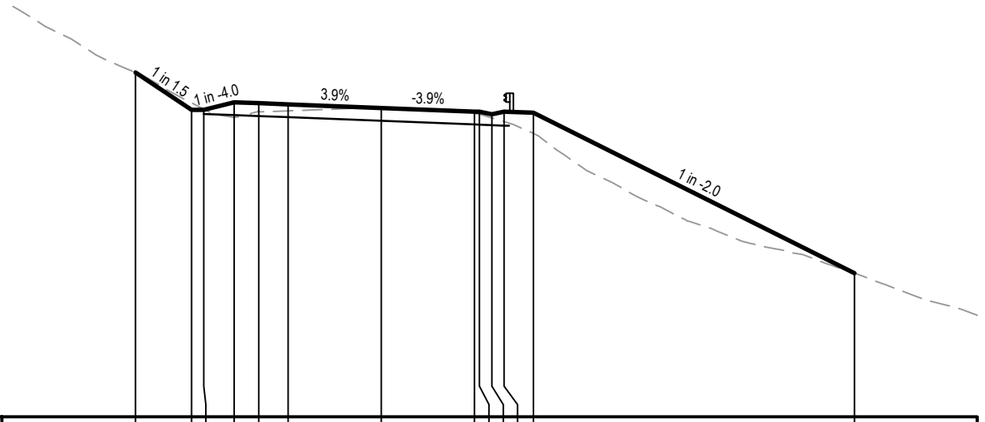
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 559.000

DESIGN LEVELS	572.112	570.735	570.735	571.075	571.066	571.056	571.021	570.904	570.898	570.798	570.898	570.862	564.821
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I		IA0I
EXISTING LEVELS	572.11	571.33	571.03	570.47	570.50	570.72	571.01	570.79	570.71	570.70	570.53	569.83	564.82
DESIGN OFFSET	-10.021	-7.957	-7.457	-6.098	-5.098	-3.898	0.000	3.898	4.098	4.598	5.098	6.298	18.381

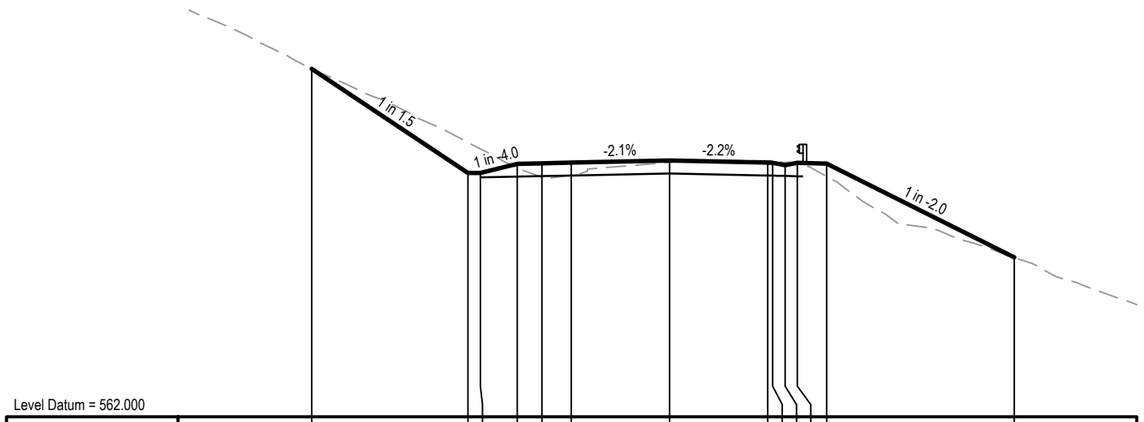
CH 420.000



Level Datum = 557.000

DESIGN LEVELS	571.040	569.517	569.517	569.827	569.788	569.741	569.594	569.446	569.438	569.338	569.438	569.402	562.857
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I		IA0I
EXISTING LEVELS	571.04	569.80	569.54	569.21	569.47	569.48	569.60	569.37	569.34	569.19	569.03	568.55	562.86
DESIGN OFFSET	-10.022	-7.739	-7.239	-6.000	-5.000	-3.800	0.000	3.800	4.000	4.500	5.000	6.200	19.290

CH 400.000



Level Datum = 562.000

DESIGN LEVELS	576.188	571.940	571.940	572.317	572.338	572.364	572.449	572.362	572.357	572.257	572.357	572.321	568.498
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I		IA0I
EXISTING LEVELS	576.19	573.19	572.92	572.14	571.77	571.85	572.37	572.44	572.44	572.38	572.36	571.80	568.50
DESIGN OFFSET	-14.586	-8.217	-7.717	-6.206	-5.206	-4.006	0.000	4.006	4.206	4.706	5.206	6.406	14.052

CH 440.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing.	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

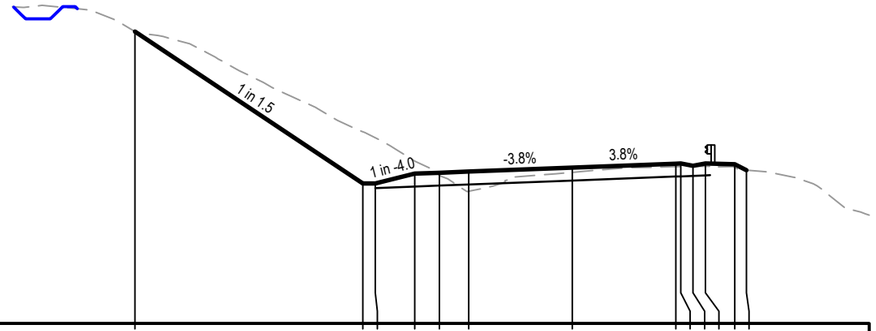
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 5 OF 54

Original Size A3 — Drawing No: 12542101-C3805 — Rev: 0

Plot Date: 27 May 2022 - 12:58 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

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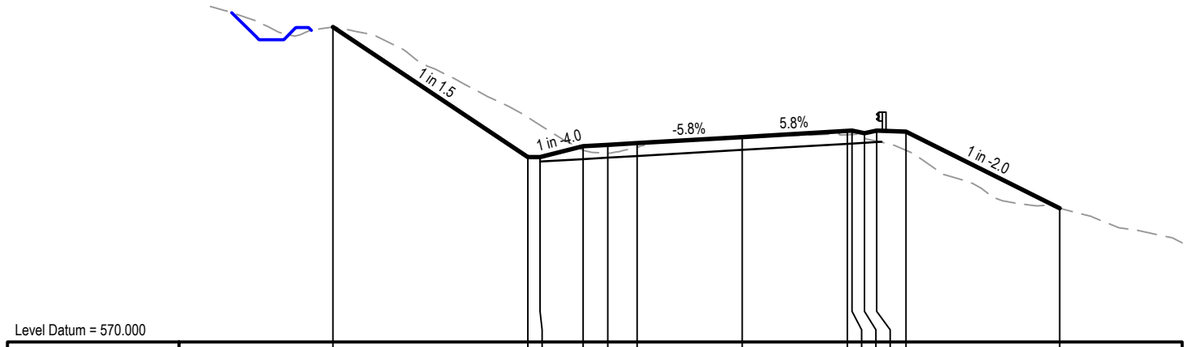
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 569.000

DESIGN LEVELS	580.900					574.702	574.702	575.106	575.144	575.190		575.352			575.513	575.521	575.421	575.521	575.485	575.246				
CUT STRINGS	EH20					IE20	IA20	EV20		CE20		MC20			CE2I	CF0I	CB0I		EV2I	IA0I				
EXISTING LEVELS	580.90					576.61	576.57	575.61	575.04	574.38		575.16			575.39	575.39	575.40	575.41	575.36	575.25				
DESIGN OFFSET	-17.831					-8.539	-8.039	-6.422	-5.422	-4.222		0.000			4.222	4.422	4.922	5.422	6.622	7.100				

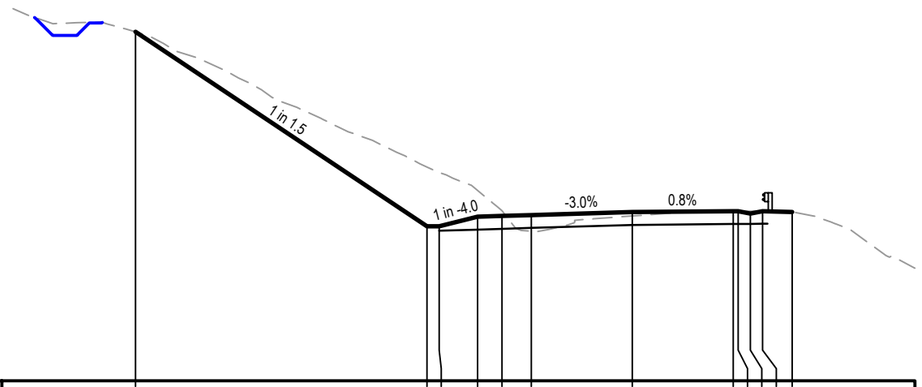
CH 480.000



Level Datum = 570.000

DESIGN LEVELS	582.834					577.538	577.538	577.978	578.036	578.105		578.353			578.600	578.612	578.512	578.612	578.576				575.447	
CUT STRINGS	EH20					IE20	IA20	EV20		CE20		MC20			CE2I	CF0I	CB0I		EV2I				IA0I	
EXISTING LEVELS	582.83					579.15	578.84	577.82	577.70	577.94		578.34			578.45	578.46	578.32	578.19	577.81				575.45	
DESIGN OFFSET	-16.683					-8.743	-8.243	-6.482	-5.482	-4.282		0.000			4.282	4.482	4.982	5.482	6.682				12.940	

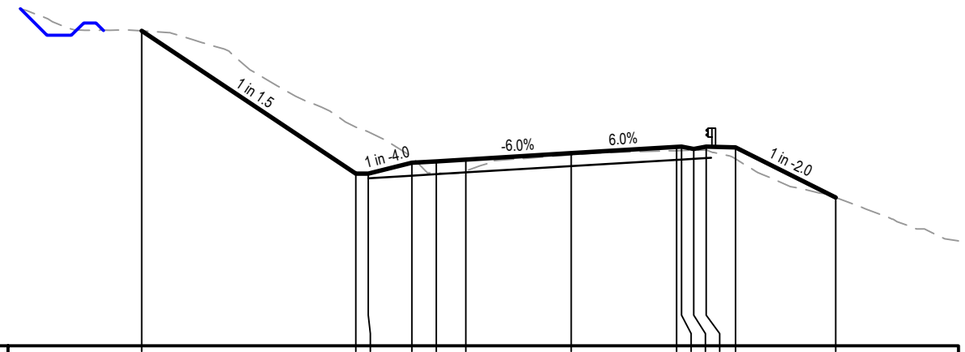
CH 520.000



Level Datum = 567.000

DESIGN LEVELS	581.225					573.304	573.304	573.694	573.724	573.760		573.884			573.918	573.920	573.820	573.920	573.884					
CUT STRINGS	EH20					IE20	IA20	EV20		CE20		MC20			CE2I	CF0I	CB0I		EV2I	IA0I				
EXISTING LEVELS	581.22					575.72	575.50	574.77	573.93	573.10		573.72			573.91	573.91	573.92	573.93	573.89					
DESIGN OFFSET	-20.254					-8.377	-7.877	-6.314	-5.314	-4.114		0.000			4.114	4.314	4.814	5.314	6.514					

CH 460.000



Level Datum = 569.000

DESIGN LEVELS	581.841					576.019	576.019	576.463	576.523	576.595		576.853			577.111	577.123	577.023	577.123	577.087				575.043	
CUT STRINGS	EH20					IE20	IA20	EV20		CE20		MC20			CE2I	CF0I	CB0I		EV2I				IA0I	
EXISTING LEVELS	581.84					577.92	577.72	576.70	576.04	576.13		576.79			576.96	576.96	576.97	576.99	576.62				575.04	
DESIGN OFFSET	-17.508					-8.779	-8.279	-6.500	-5.500	-4.300		0.000			4.300	4.500	5.000	5.500	6.700				10.789	

CH 500.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

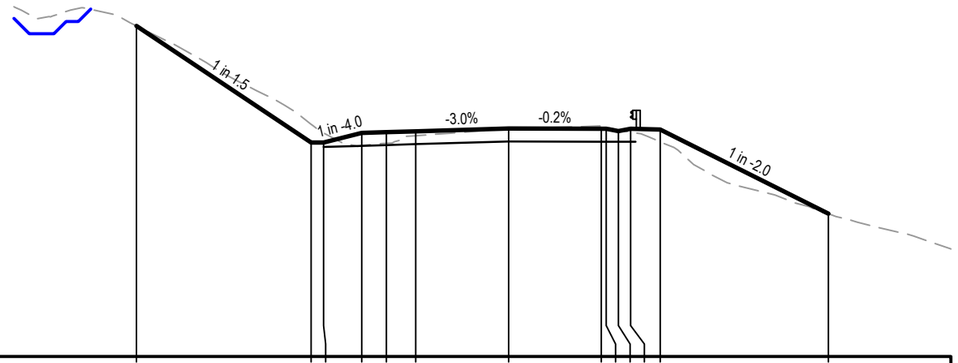
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 6 OF 54

Original Size: A3 Drawing No: 12542101-C3806 Rev: 0

Plot Date: 27 May 2022 - 12:58 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

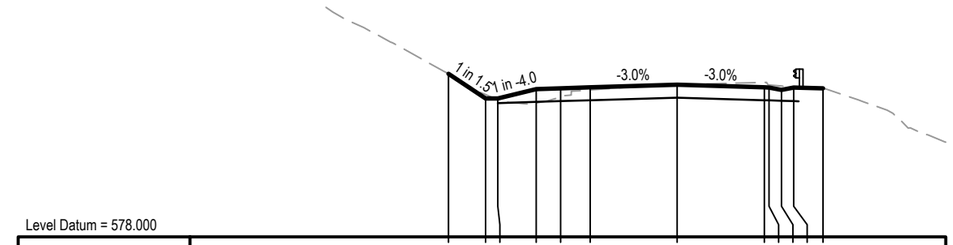
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 572.000

DESIGN LEVELS	585.465	580.716	580.716	581.107	581.137	581.173	581.286	581.278	581.277	581.177	581.277	581.241	577.813
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	585.47	581.46	581.11	580.59	580.68	581.00	581.27	581.30	581.31	581.22	581.14	580.74	577.81
DESIGN OFFSET	-15.166	-8.046	-7.546	-5.982	-4.982	-3.782	0.000	3.782	3.982	4.482	4.982	6.182	13.038

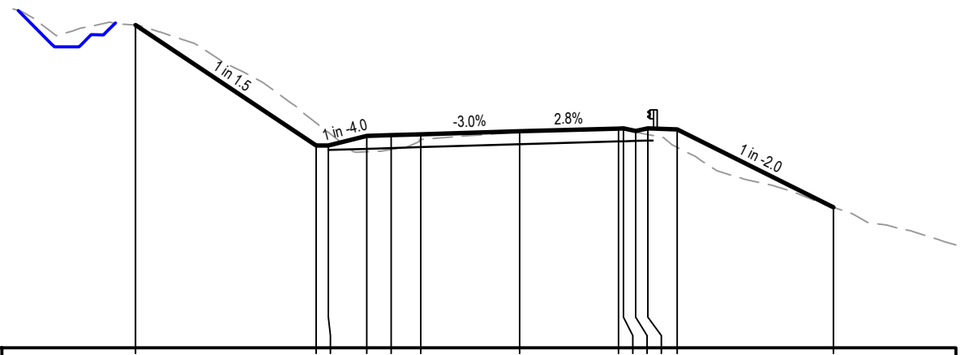
CH 560.000



Level Datum = 578.000

DESIGN LEVELS	584.640	583.634	583.634	584.025	584.055	584.091	584.197	584.091	584.085	583.985	584.085	584.049
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	584.64	583.79	583.58	583.45	583.70	583.99	584.21	584.29	584.19	584.15	584.08	584.05	
DESIGN OFFSET	-9.321	-7.814	-7.314	-5.750	-4.750	-3.550	0.000	3.550	3.750	4.250	4.750	5.950	

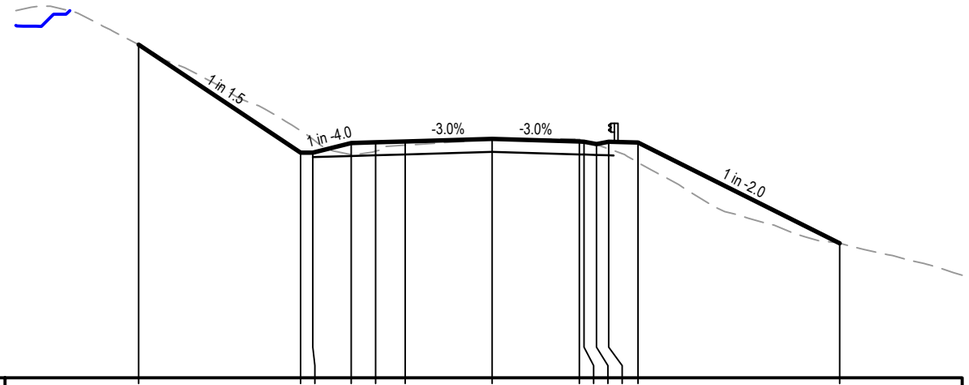
CH 600.000



Level Datum = 571.000

DESIGN LEVELS	584.160	579.251	579.251	579.642	579.672	579.708	579.829	579.941	579.946	579.846	579.946	579.910	576.730
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	584.16	580.17	579.79	578.99	579.09	579.50	579.81	579.94	579.95	579.79	579.70	579.17	576.73
DESIGN OFFSET	-15.655	-8.296	-7.796	-6.232	-5.232	-4.032	0.000	4.032	4.232	4.732	5.232	6.432	12.793

CH 540.000



Level Datum = 573.000

DESIGN LEVELS	586.581	582.178	582.178	582.569	582.599	582.635	582.742	582.635	582.629	582.629	582.629	582.593	578.484
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	586.58	583.08	582.73	582.11	582.24	582.49	582.71	582.72	582.69	582.51	582.33	581.78	578.48
DESIGN OFFSET	-14.415	-7.814	-7.314	-5.750	-4.750	-3.550	0.000	3.550	3.750	4.250	4.750	5.950	14.168

CH 580.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

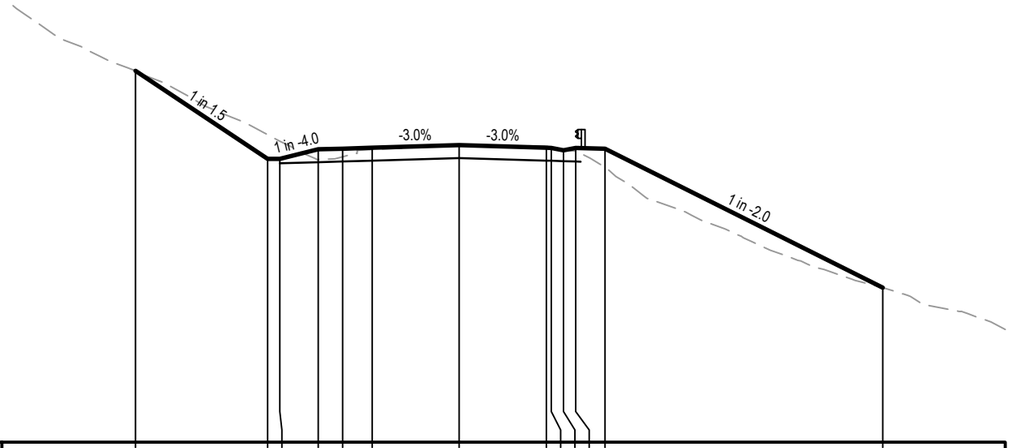
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 7 OF 54

Original Size: A3
Drawing No: 12542101-C3807
Rev: 0

Plot Date: 27 May 2022 - 12:59 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

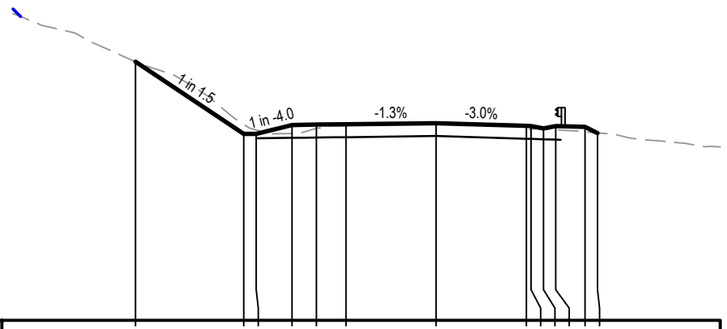


Level Datum = 575.000

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LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

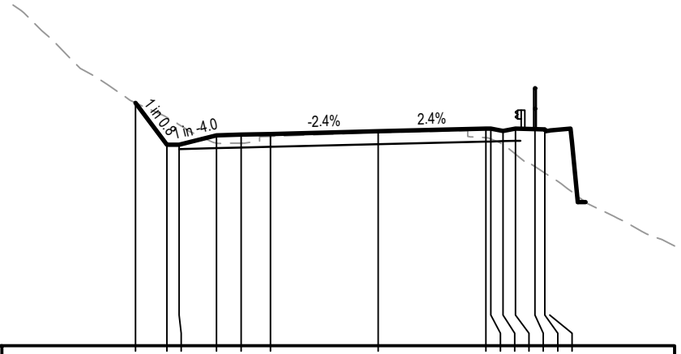


Level Datum = 585.000

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LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

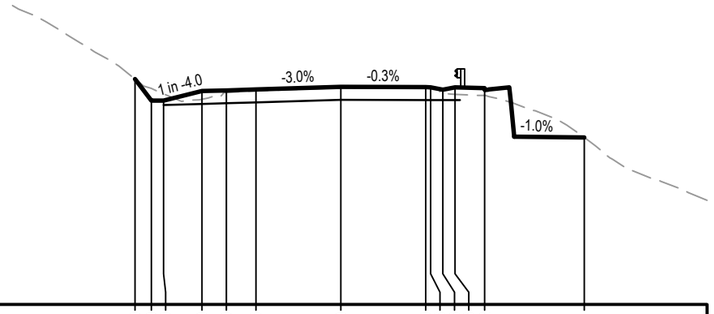


Level Datum = 590.000

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LEGEND

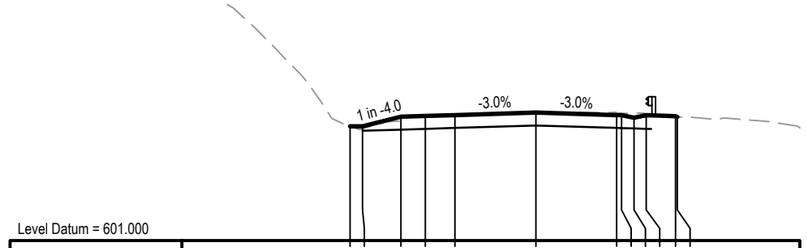
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 595.000

DESIGN LEVELS	604.190	603.309	603.309	603.700	603.730	603.766	603.870	603.859	603.858	603.758	603.858	603.822	601.811											
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0J											
EXISTING LEVELS	604.19	603.81	603.59	603.37	603.64	603.70	603.83	603.83	603.83	603.60	603.57	603.52	601.81											
DESIGN OFFSET	-9.386	-7.725	-7.225	-5.661	-4.661	-3.461	0.000	3.461	3.661	4.161	4.661	5.861	9.932											

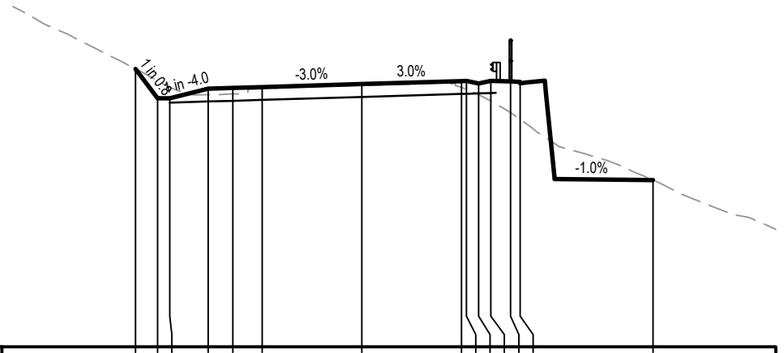
CH 880.000



Level Datum = 601.000

DESIGN LEVELS	605.662	605.662	606.053	606.083	606.119	606.218	606.119	606.113	606.013	606.113	606.077	606.044												
CUT STRINGS	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I												
EXISTING LEVELS	605.66	605.56	605.87	606.08	606.11	606.22	606.19	606.19	606.20	606.03	606.04	606.04												
DESIGN OFFSET	-7.578	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	5.766												

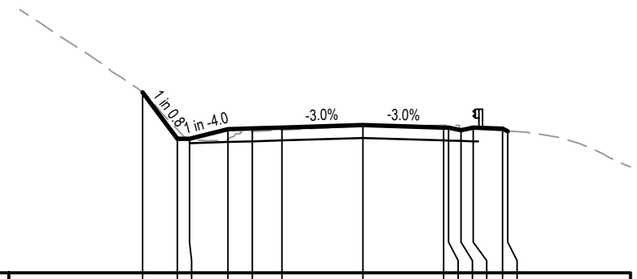
CH 920.000



Level Datum = 592.000

DESIGN LEVELS	603.335	602.136	602.136	602.527	602.557	602.593	602.715	602.835	602.841	602.741	602.841	602.805	598.800											
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0J											
EXISTING LEVELS	603.33	602.85	602.58	602.28	602.31	602.53	602.66	602.57	602.50	602.28	602.02	601.55	601.27	598.80										
DESIGN OFFSET	-9.224	-9.325	-7.825	-6.261	-5.261	-4.061	0.000	4.061	4.261	4.761	5.261	6.061	6.461	11.879										

CH 860.000



Level Datum = 599.000

DESIGN LEVELS	606.363	604.469	604.469	604.860	604.890	604.926	605.025	604.926	604.920	604.820	604.920	604.884	604.778											
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I											
EXISTING LEVELS	606.36	604.85	604.45	604.48	604.76	604.82	604.98	605.01	605.02	604.85	604.86	604.79	604.78											
DESIGN OFFSET	-8.984	-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	5.912											

CH 900.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m

SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

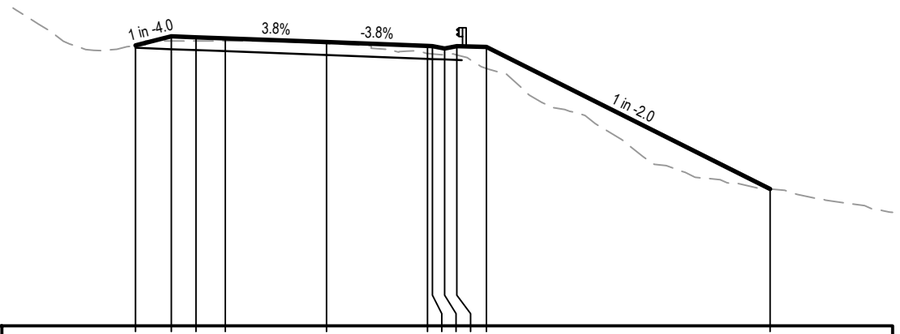
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 11 OF 54

Original Size A3 **Drawing No: 12542101-C3811** **Rev: 0**

Plot Date: 27 May 2022 - 1:00 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

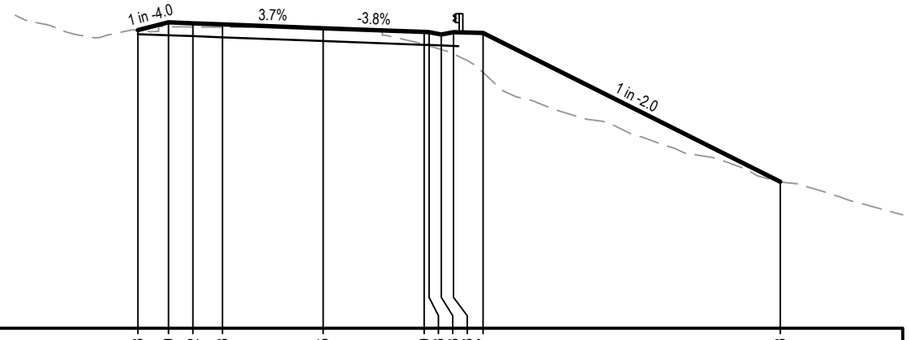
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 597.000

DESIGN LEVELS	608.440	608.805	608.768	608.722	608.568	608.411	608.404	608.304	608.404	608.368	602.582			
CUT STRINGS	IA21	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I			
EXISTING LEVELS	608.44	608.61	608.61	608.61	608.51	608.10	608.08	608.06	608.05	607.50	602.58			
DESIGN OFFSET	-7.781	-6.319	-5.319	-4.119	0.000	4.119	4.319	4.819	5.319	6.519	18.089			

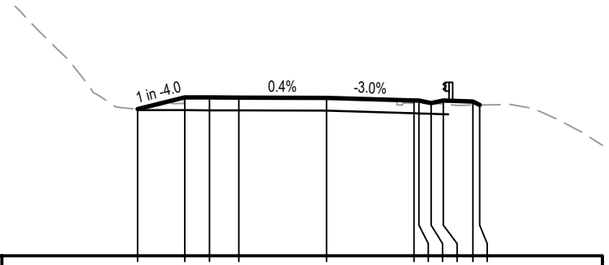
CH 960.000



Level Datum = 599.000

DESIGN LEVELS	611.148	611.459	611.422	611.378	611.225	611.070	611.063	610.963	611.063	611.027	604.968			
CUT STRINGS	IA21	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I			
EXISTING LEVELS	611.15	611.29	611.28	611.26	611.23	610.56	610.50	610.35	610.17	609.42	604.97			
DESIGN OFFSET	-7.557	-6.312	-5.312	-4.112	0.000	4.112	4.312	4.812	5.312	6.512	18.630			

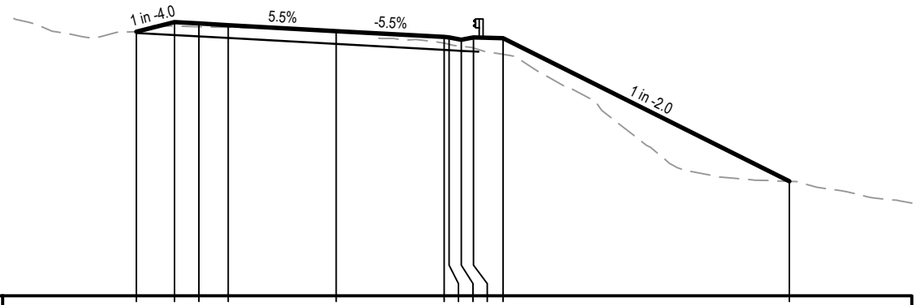
CH 1000.000



Level Datum = 601.000

DESIGN LEVELS	606.981	607.463	607.459	607.455	607.442	607.335	607.329	607.229	607.329	607.293	607.152
CUT STRINGS	IA21	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	606.98	607.42	607.43	607.44	607.44	607.23	607.22	607.23	607.19	607.15	607.15
DESIGN OFFSET	-7.697	-5.769	-4.769	-3.569	0.000	3.569	3.769	4.269	4.769	5.969	6.251

CH 940.000



Level Datum = 599.000

DESIGN LEVELS	609.770	610.157	610.102	610.036	609.794	609.552	609.541	609.441	609.541	609.505	603.669
CUT STRINGS	IA21	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	609.77	610.00	609.97	609.95	609.76	609.30	609.25	609.10	608.84		603.67
DESIGN OFFSET	-8.149	-6.600	-5.600	-4.400	0.000	4.400	4.600	5.100	5.600	6.800	18.472

CH 980.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

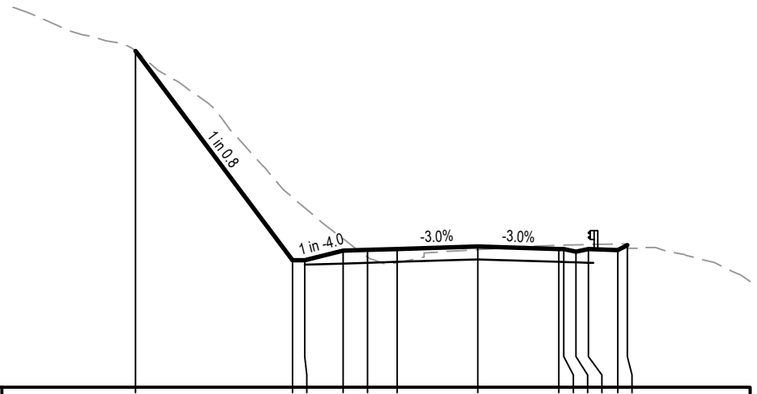
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 12 OF 54

Original Size A3 — Drawing No: 12542101-C3812 — Rev: 0

Plot Date: 27 May 2022 - 1:00 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

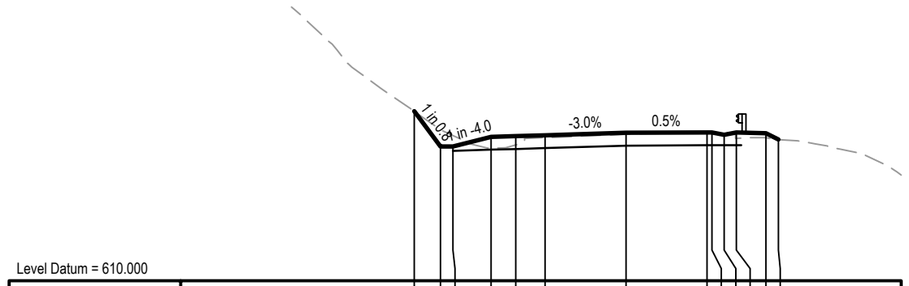
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 608.000

DESIGN LEVELS	621.702		613.174	613.174	613.565	613.595	613.631	613.730	613.631	613.625	613.525	613.625	613.589	613.785
CUT STRINGS	EH20		IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	621.70		615.74	615.31	614.05	613.30	613.07	613.61	613.78	613.79	613.80	613.81	613.84	613.84
DESIGN OFFSET	-13.959		-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	6.093

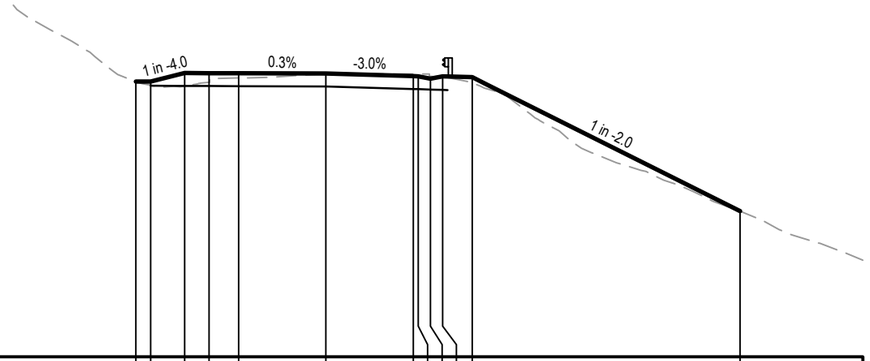
CH 1040.000



Level Datum = 610.000

DESIGN LEVELS	616.908		615.472	615.472	615.863	615.893	615.929	616.028	616.043	616.044	615.944	616.044	616.008	615.753
CUT STRINGS	EH20		IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	616.91		616.15	615.92	615.40	615.53	615.83	615.97	616.02	616.02	616.03	615.80	615.83	615.75
DESIGN OFFSET	-8.640		-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	6.210

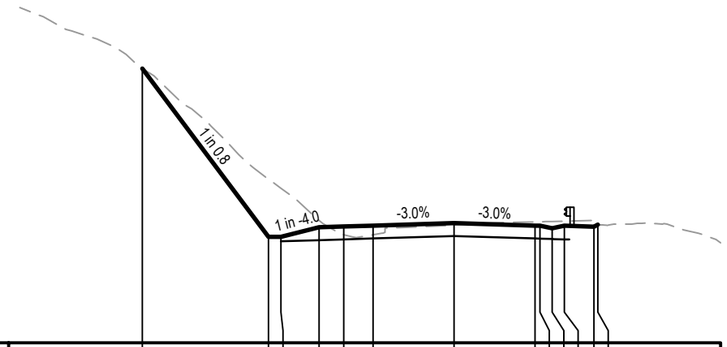
CH 1080.000



Level Datum = 601.000

DESIGN LEVELS	612.224	612.224	612.570	612.566	612.563	612.551	612.444	612.438	612.338	612.438	612.402			606.940
CUT STRINGS	IA2I	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I			IA0I
EXISTING LEVELS	612.22	612.07	612.04	612.19	612.37	612.54	612.53	612.53	612.43	612.40	612.16			606.94
DESIGN OFFSET	-7.749	-7.147	-5.762	-4.762	-3.562	0.000	3.562	3.762	4.262	4.762	5.962			16.888

CH 1020.000



Level Datum = 610.000

DESIGN LEVELS	621.180		614.323	614.323	614.714	614.744	614.780	614.879	614.781	614.775	614.675	614.775	614.739	614.822
CUT STRINGS	EH20		IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	621.18		616.67	616.31	614.99	614.41	614.41	614.80	614.93	614.94	614.95	614.96	614.99	614.81
DESIGN OFFSET	-12.706		-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	5.865

CH 1060.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

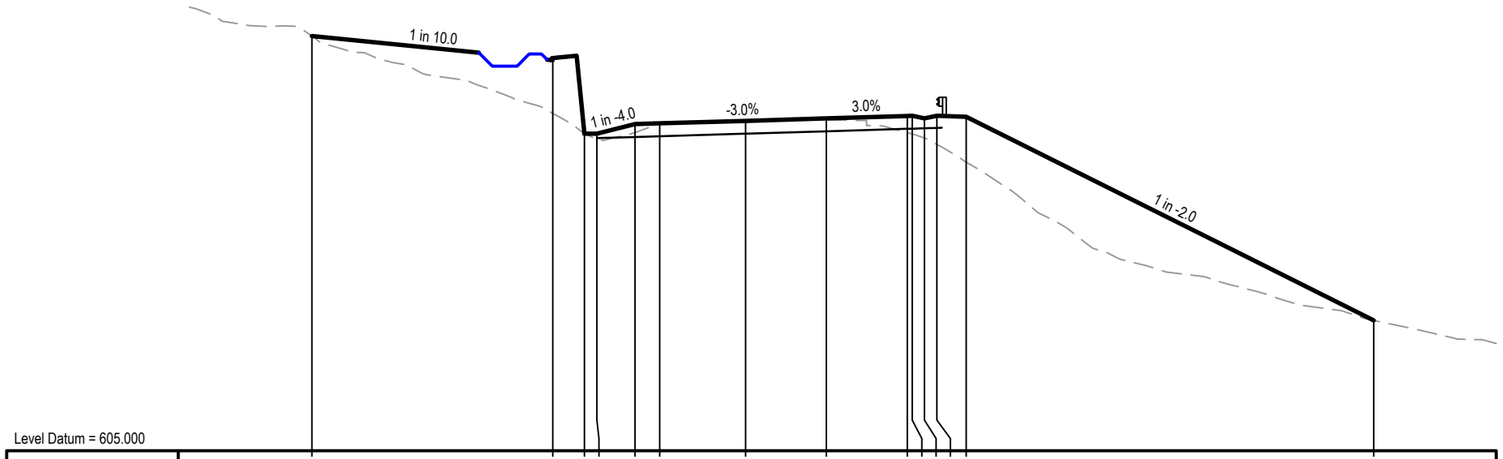
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 13 OF 54

Original Size A3 — Drawing No: 12542101-C3813 — Rev: 0

Plot Date: 27 May 2022 - 1:01 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

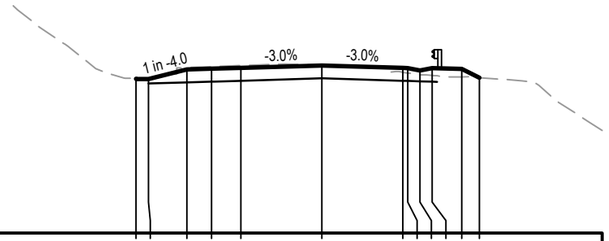


Level Datum = 605.000

| | | |

LEGEND

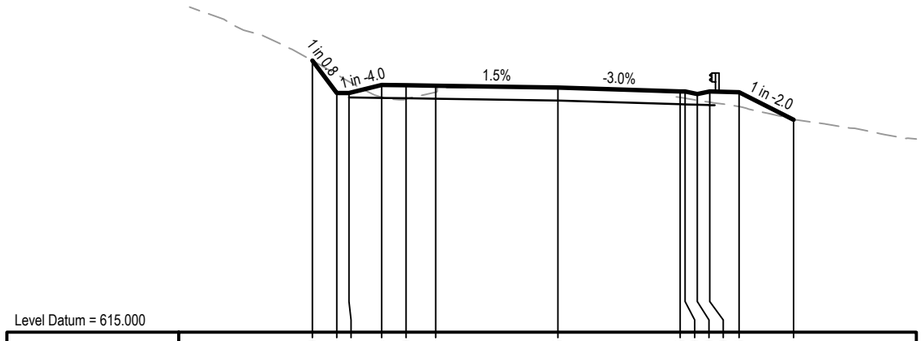
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 615.000

DESIGN LEVELS	621.286	621.270	621.661	621.691	621.727	621.826	621.727	621.721	621.621	621.685	621.321
CUT STRINGS	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	621.29	621.28	621.74	621.77	621.82	621.83	621.54	621.52	621.44	621.42	621.35	621.32
DESIGN OFFSET	-7.576	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	6.427

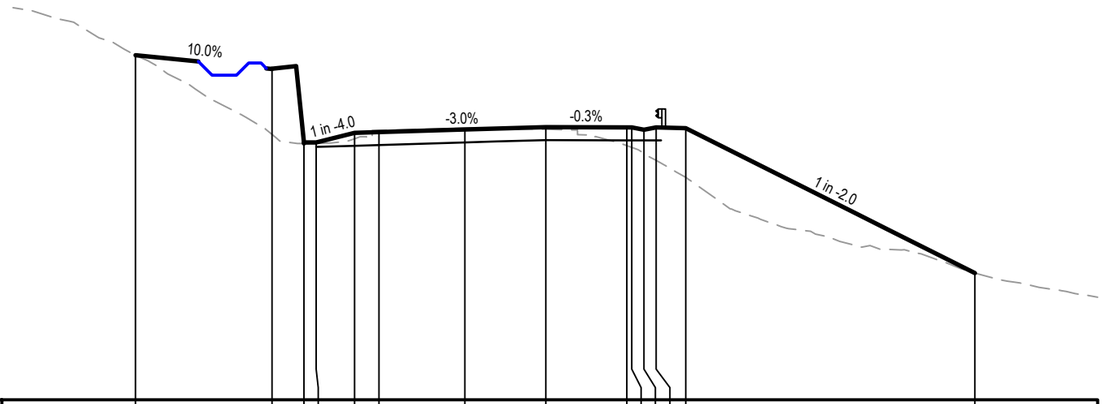
CH 1160.000



Level Datum = 615.000

DESIGN LEVELS	626.069	624.741	624.741	625.074	625.059	625.041	624.965	624.815	624.809	624.709	624.809	624.773	623.661
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	626.07	625.50	625.22	624.58	624.51	624.78	624.99	624.56	624.53	624.45	624.37	624.20	623.66
DESIGN OFFSET	-10.014	-9.018	-8.518	-7.187	-6.187	-4.987	0.000	4.987	5.187	5.687	6.187	7.387	9.611

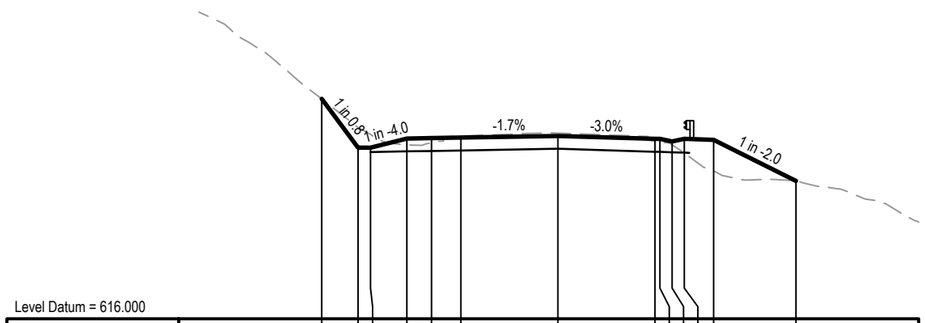
CH 1200.000



Level Datum = 609.000

DESIGN LEVELS	623.048	622.492	619.492	619.492	619.882	619.912	620.017	620.116	620.107	620.107	620.007	620.107	620.071	614.172
CUT STRINGS	IA22	WT01	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	623.05	619.82	619.45	619.45	619.64	619.99	620.07	620.03	619.37	619.29	619.05	618.76	618.07	614.17
DESIGN OFFSET	-16.726	-11.164	-9.864	-9.364	-7.800	-6.800	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	17.498

CH 1140.000



Level Datum = 616.000

DESIGN LEVELS	624.965	622.979	622.979	623.351	623.369	623.390	623.459	623.340	623.334	623.334	623.334	623.298	621.622
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	624.96	623.80	623.51	623.09	623.18	623.45	623.57	623.25	623.21	623.10	622.77	622.02	621.62
DESIGN OFFSET	-9.634	-8.144	-7.644	-6.154	-5.154	-3.954	0.000	3.954	4.154	4.654	5.154	6.354	9.706

CH 1180.000

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 2.5 5.0 7.5m

SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

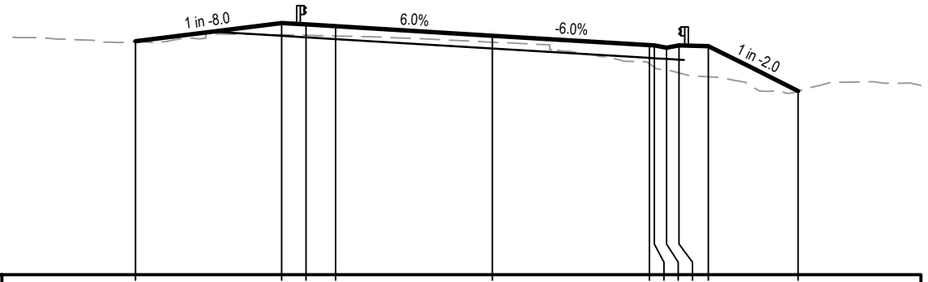
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 15 OF 54

Original Size: A3
Drawing No: 12542101-C3815
Rev: 0

Plot Date: 27 May 2022 - 1:01 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

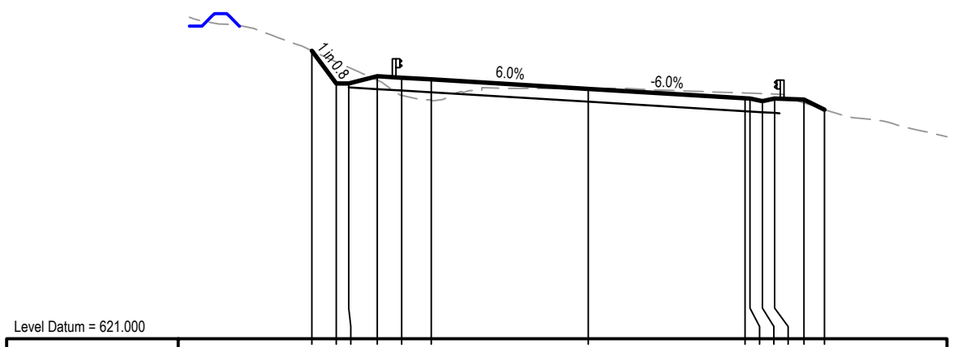
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 618.000

DESIGN LEVELS	627.510	628.254	628.194	628.122	627.738	627.354	627.342	627.242	627.342	627.306	625.475
CUT STRINGS	IA2I	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	627.51	627.77	627.75	627.73	627.47	626.59	626.45	626.33	626.22	626.06	625.47
DESIGN OFFSET	-14.553	-8.600	-7.600	-6.400	0.000	6.400	6.600	7.100	7.600	8.800	12.462

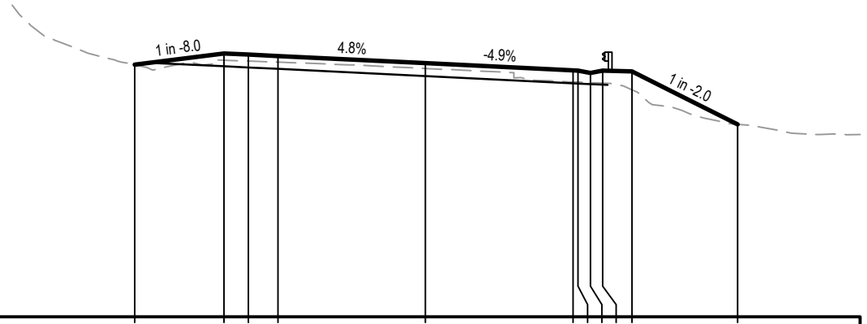
CH 1240.000



Level Datum = 621.000

DESIGN LEVELS	632.738	631.408	631.408	631.700	631.640	631.568	631.184	630.800	630.788	630.688	630.788	630.752	630.335
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	632.74	632.28	632.06	631.54	630.92	630.71	631.20	631.01	631.01	630.99	630.97	630.61	630.34
DESIGN OFFSET	-11.265	-10.268	-9.768	-8.600	-7.600	-6.400	0.000	6.400	6.600	7.100	7.600	8.800	9.633

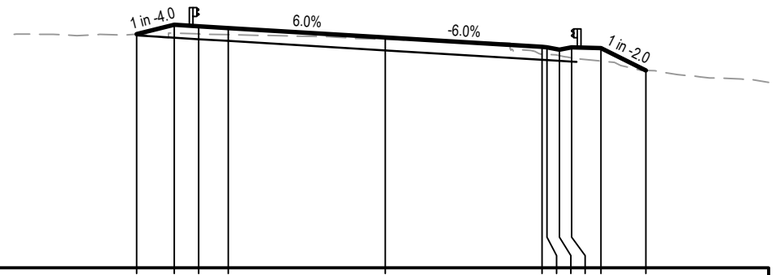
CH 1280.000



Level Datum = 616.000

DESIGN LEVELS	626.284	626.738	626.690	626.633	626.344	626.049	626.039	625.939	626.039	626.003	623.852
CUT STRINGS	IA2I	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	626.28	626.46	626.43	626.38	626.13	625.57	625.57	625.55	625.53	625.26	623.85
DESIGN OFFSET	-11.855	-8.221	-7.221	-6.021	0.000	6.021	6.221	6.721	7.221	8.421	12.723

CH 1220.000



Level Datum = 620.000

DESIGN LEVELS	629.525	629.908	629.848	629.776	629.392	629.008	628.996	628.896	628.996	628.960	628.044
CUT STRINGS	IA2I	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	629.53	629.57	629.54	629.51	629.31	628.71	628.70	628.65	628.56	628.43	628.04
DESIGN OFFSET	-10.130	-8.600	-7.600	-6.400	0.000	6.400	6.600	7.100	7.600	8.800	10.631

CH 1260.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

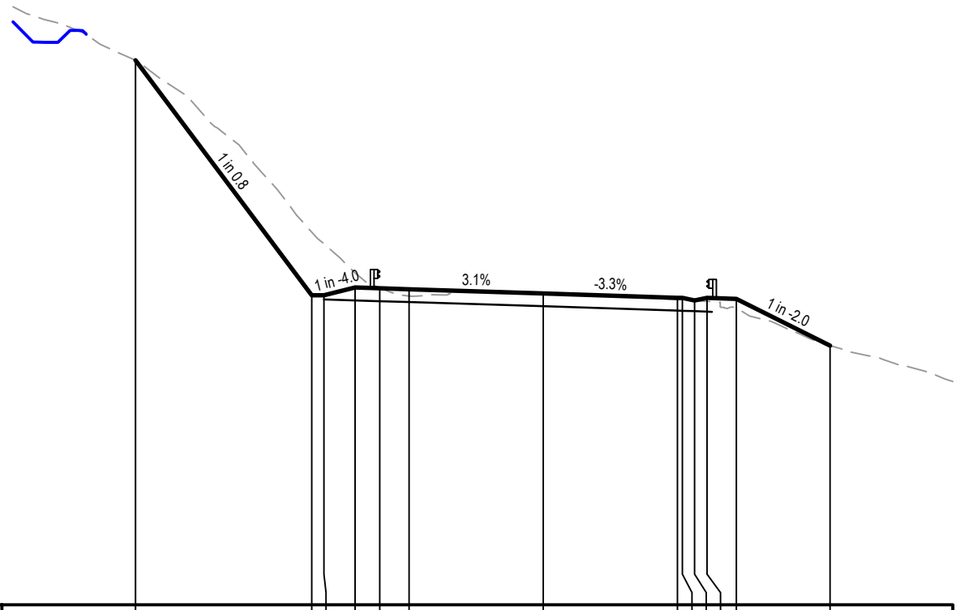
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 16 OF 54

Original Size: A3
Drawing No: 12542101-C3816
Rev: 0

Plot Date: 27 May 2022 - 1:02 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

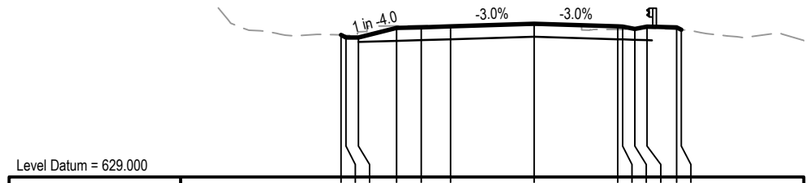
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 620.000

DESIGN LEVELS	642.196	632.617	632.617	632.934	632.903	632.867	632.700	632.519	632.512	632.412	632.512	632.476	630.565
CUT STRINGS	EH20	IE20	IA20	EV20	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I	
EXISTING LEVELS	642.20	635.19	634.72	633.53	632.92	632.59	632.73	632.45	632.43	632.40	632.37	632.10	630.57
DESIGN OFFSET	-16.625	-9.440	-8.940	-7.671	-6.671	-5.471	0.000	5.471	5.671	6.171	6.671	7.871	11.693

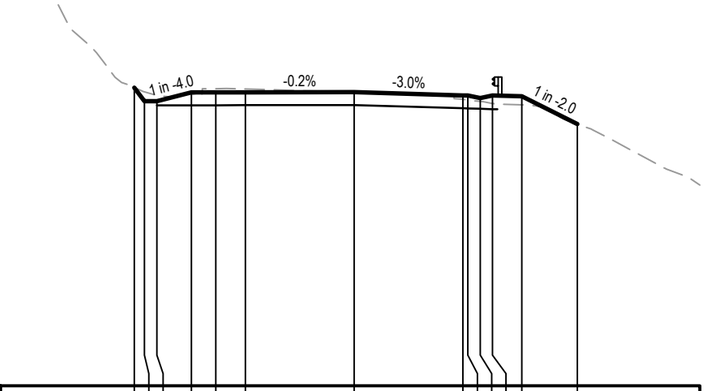
CH 1300.000



Level Datum = 629.000

DESIGN LEVELS	634.780	634.676	634.676	635.067	635.097	635.133	635.235	635.133	635.127	635.027	635.127	635.091	634.995
CUT STRINGS	IA2I	IE20	IA20	EV20	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	634.78	634.77	634.90	635.15	635.16	635.17	635.19	635.00	635.01	635.03	635.06	635.01	634.99
DESIGN OFFSET	-7.876	-7.688	-7.168	-5.604	-4.604	-3.404	0.000	3.404	3.604	4.104	4.604	5.804	5.996

CH 1340.000



Level Datum = 622.000

DESIGN LEVELS	634.156	633.609	633.609	633.962	633.964	633.966	633.976	633.843	633.837	633.737	633.837	633.801	632.671
CUT STRINGS	EH20	IE20	IA20	EV20	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	634.16	633.98	633.85	633.88	634.12	634.10	633.98	633.68	633.65	633.59	633.51	633.46	632.67
DESIGN OFFSET	-8.959	-8.548	-8.048	-6.637	-5.637	-4.437	0.000	4.437	4.637	5.137	5.637	6.837	9.096

CH 1320.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 17 OF 54

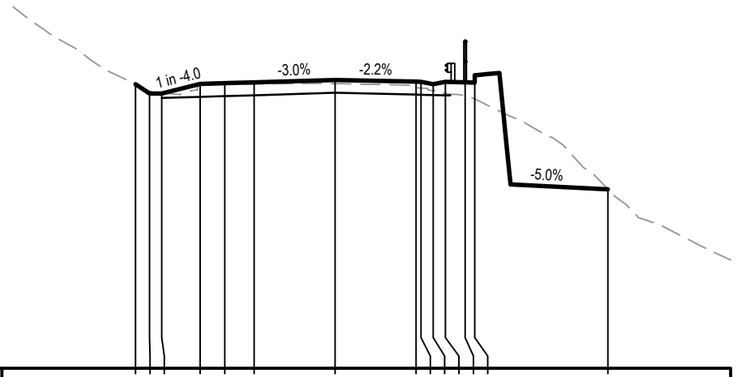
Original Size A3 — Drawing No: 12542101-C3817 — Rev: 0

Plot Date: 27 May 2022 - 1:02 PM Plotted By: Isaac Smith

Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

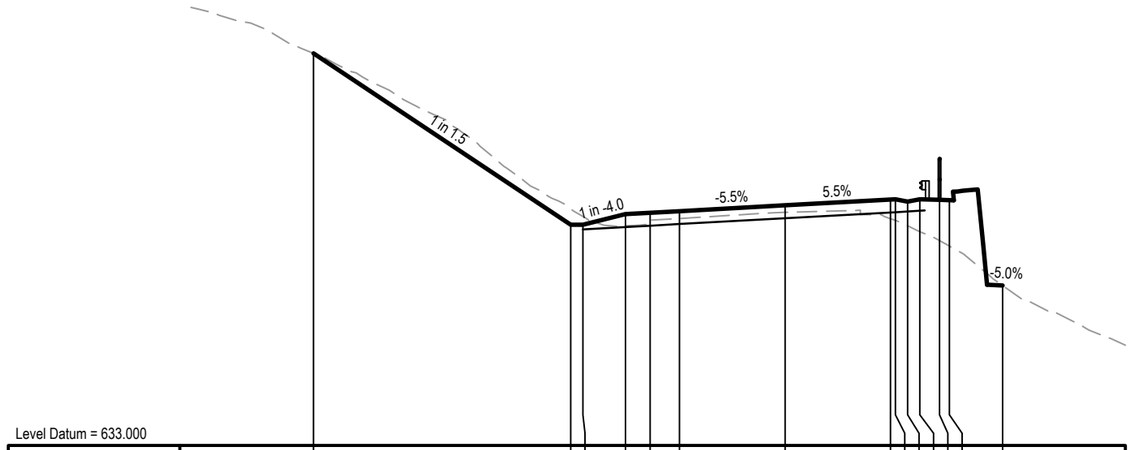


Level Datum = 626.000

| | | |

LEGEND

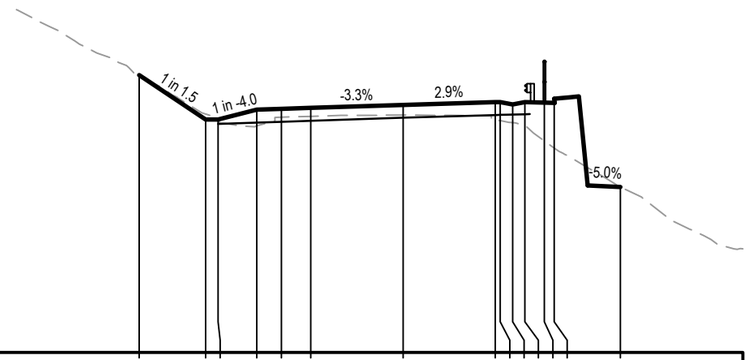
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 633.000

DESIGN LEVELS	648.988		641.997	641.997	642.431	642.486	642.552	642.789	643.025	643.036	642.936	643.036	643.012	643.000	639.520
CUT STRINGS	EH20		IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I		IA0J
EXISTING LEVELS	648.99		642.65	642.34	641.96	642.19	642.25	642.50	642.25	642.17	641.96	641.71	641.36	641.13	639.52
DESIGN OFFSET	-19.221		-8.738	-9.238	-6.500	-5.500	-4.300	0.000	4.300	4.500	5.000	5.500	6.300	6.700	8.875

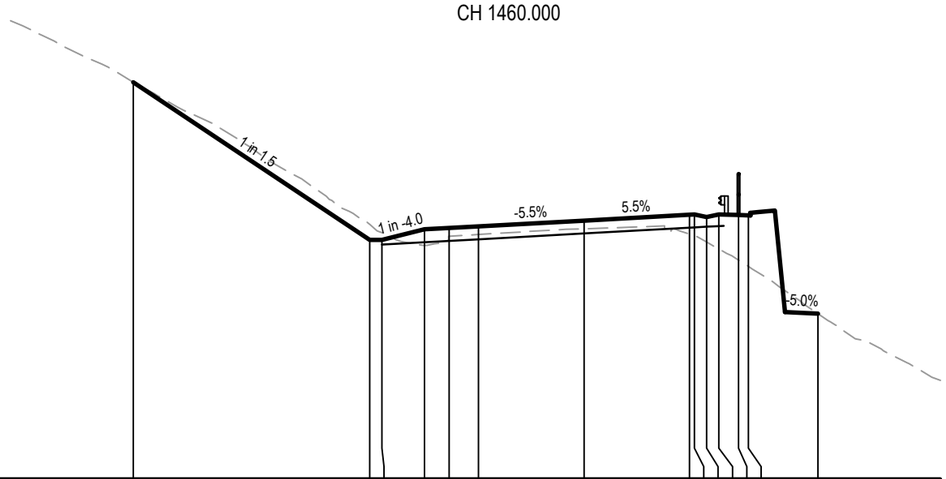
CH 1460.000



Level Datum = 635.000

DESIGN LEVELS	646.306		644.496	644.496	644.892	644.926	644.966	645.092	645.200	645.206	645.106	645.206	645.182	645.170	641.742
CUT STRINGS	EH20		IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I		IA0J
EXISTING LEVELS	646.31		644.72	644.44	644.24	644.59	644.63	644.67	644.46	644.45	644.37	644.25	643.61	643.33	641.74
DESIGN OFFSET	-10.762		-8.049	-7.549	-5.963	-4.963	-3.763	0.000	3.763	3.963	4.463	4.963	5.763	6.163	8.856

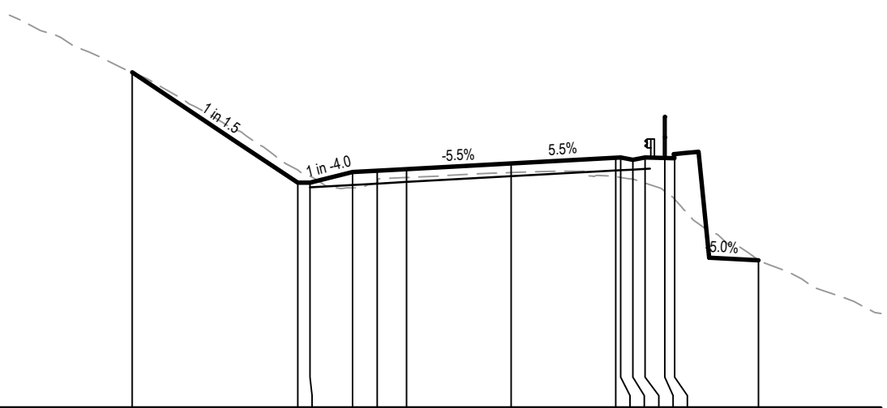
CH 1500.000



Level Datum = 631.000

DESIGN LEVELS	647.167		640.738	640.738	641.172	641.227	641.293	641.530	641.766	641.777	641.677	641.777	641.753	641.741	637.738
CUT STRINGS	EH20		IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I		IA0J
EXISTING LEVELS	647.17		641.37	641.04	640.52	640.89	640.96	641.19	640.98	640.91	640.66	640.37	639.92	639.66	637.74
DESIGN OFFSET	-18.378		-8.738	-9.238	-6.500	-5.500	-4.300	0.000	4.300	4.500	5.000	5.500	6.300	6.700	9.536

CH 1440.000



Level Datum = 634.000

DESIGN LEVELS	647.678		643.177	643.177	643.612	643.667	643.733	643.967	644.202	644.213	644.113	644.213	644.189	644.177	640.021
CUT STRINGS	EH20		IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I		IA0J
EXISTING LEVELS	647.68		643.70	643.45	642.97	643.17	643.39	643.59	643.43	643.40	643.32	643.16	642.84	642.51	640.02
DESIGN OFFSET	-15.449		-8.701	-8.201	-6.463	-5.463	-4.263	0.000	4.263	4.463	4.963	5.463	6.263	6.663	10.083

CH 1480.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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Drawn	I.SMITH	Designer	D.McCARTHY
Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

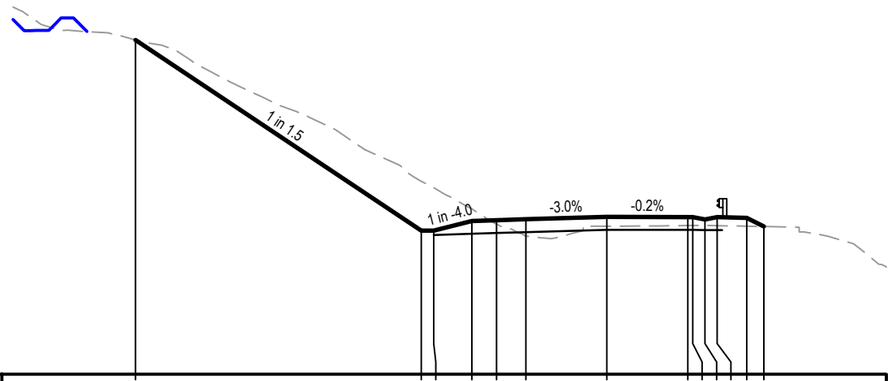
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 19 OF 54

Original Size: A3
Drawing No: 12542101-C3819
Rev: 0

Plot Date: 27 May 2022 - 1:03 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

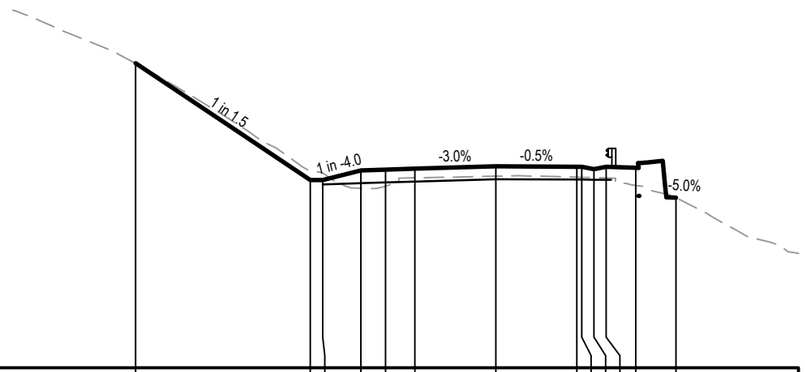
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 641.000

DESIGN LEVELS	654.624	646.856	646.856	647.247	647.277	647.313	647.412	647.404	647.404	647.304	647.404	647.368	647.019
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	654.62	648.86	648.61	647.74	647.12	646.63	647.03	647.06	647.06	647.06	647.05	647.03	647.02
DESIGN OFFSET	-19.217	-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	6.397

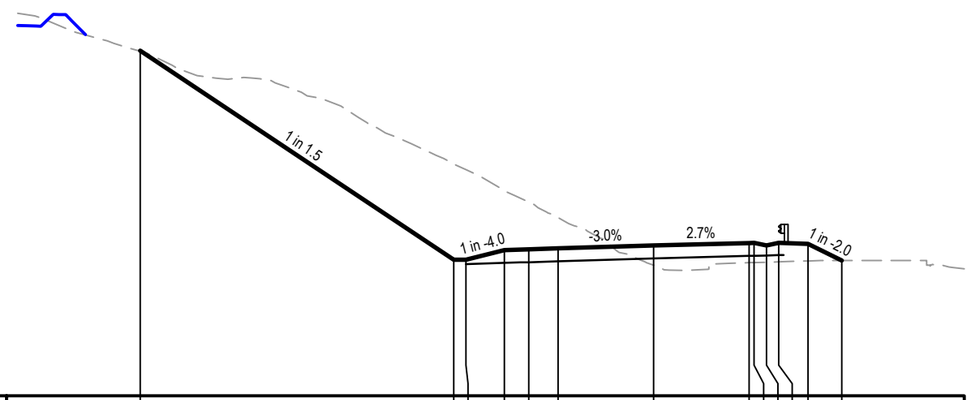
CH 1540.000



Level Datum = 638.000

DESIGN LEVELS	650.415	645.661	645.661	646.052	646.082	646.118	646.217	646.199	646.198	646.098	646.198	646.162	644.937
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0J
EXISTING LEVELS	650.42	646.04	645.94	645.31	645.40	645.75	645.81	645.77	645.77	645.75	645.74	645.44	644.94
DESIGN OFFSET	-14.695	-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	7.340

CH 1520.000



Level Datum = 643.000

DESIGN LEVELS	657.073	648.554	648.554	648.945	648.975	649.011	649.128	649.232	649.237	649.137	649.237	649.201	648.517
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	657.07	652.46	652.23	651.37	650.91	650.26	648.33	648.43	648.44	648.45	648.46	648.50	648.52
DESIGN OFFSET	-20.935	-8.158	-7.658	-6.094	-5.094	-3.894	0.000	3.894	4.094	4.594	5.094	6.294	7.662

CH 1560.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

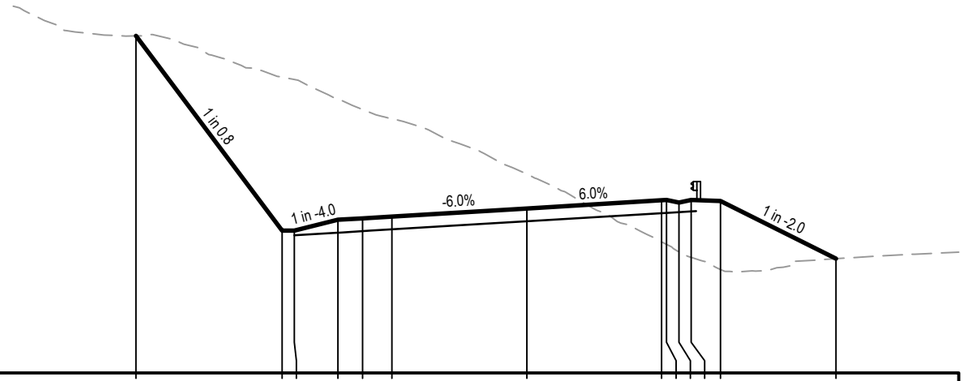
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 20 OF 54

Original Size: A3
Drawing No: 12542101-C3820
Rev: 0

Plot Date: 27 May 2022 - 1:03 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

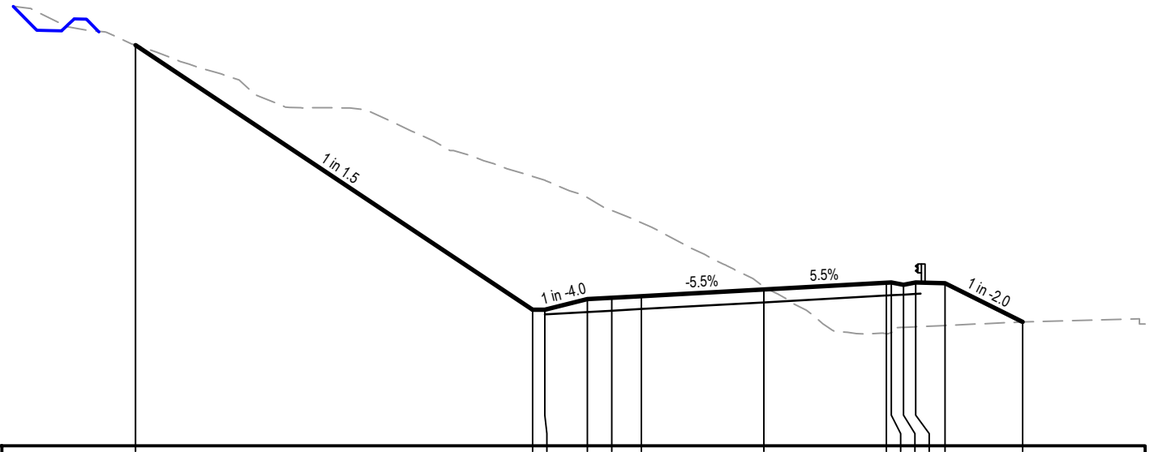
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 647.000

DESIGN LEVELS	660.737	652.798	652.798	653.243	653.303	653.375	653.705	654.035	654.047	653.947	654.047	654.011	651.655	
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CE0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	660.74	659.05	658.96	658.16	657.74	657.36	655.11	652.34	652.24	651.93	651.71	651.22	651.65	
DESIGN OFFSET	-15.934	-9.979	-9.479	-7.700	-6.700	-5.500	0.000	5.500	5.700	6.200	6.700	7.900	12.612	

CH 1600.000



Level Datum = 645.000

DESIGN LEVELS	661.337	650.549	650.549	650.983	651.037	651.103	651.376	651.653	651.664	651.564	651.664	651.628	650.049	
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CE0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	661.34	655.98	655.83	655.12	654.59	654.10	651.50	649.58	649.62	649.83	649.86	649.91	650.05	
DESIGN OFFSET	-25.613	-9.430	-9.930	-7.194	-6.194	-4.994	0.000	4.994	5.194	5.694	6.194	7.394	10.551	

CH 1580.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

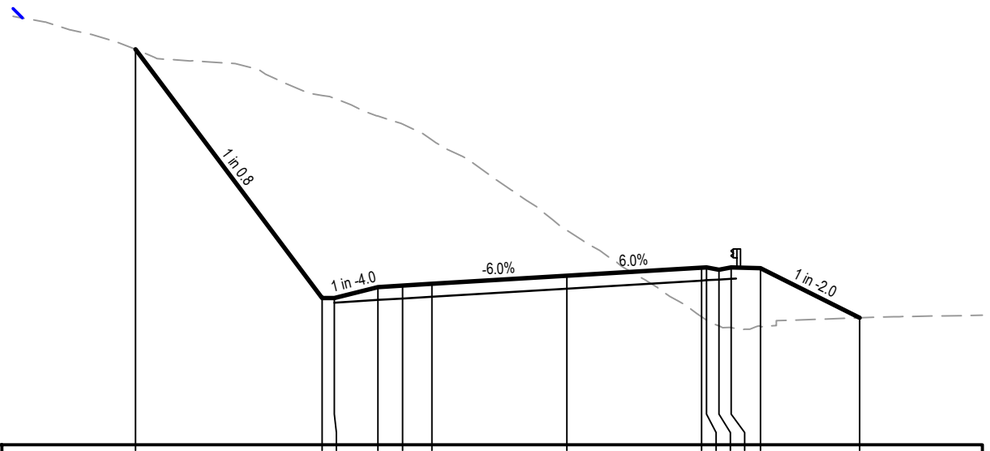
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 21 OF 54

Original Size: A3
Drawing No: 12542101-C3821
Rev: 0

Plot Date: 27 May 2022 - 1:03 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

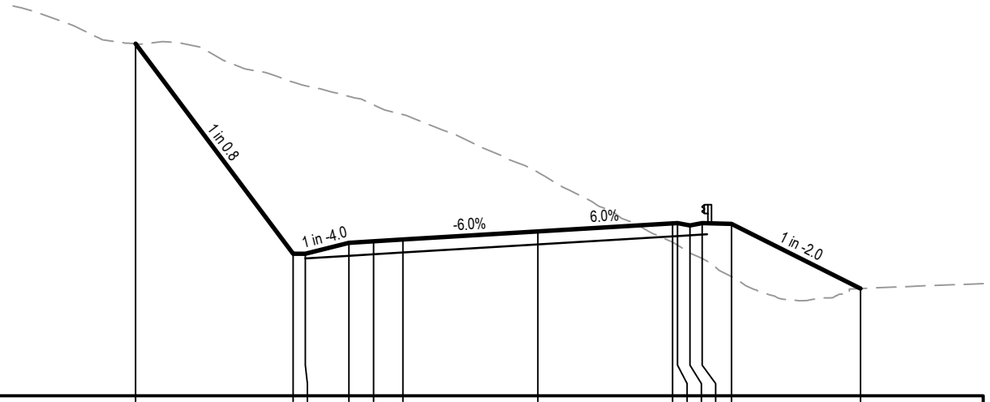
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 650.000

DESIGN LEVELS	666.123					655.986	655.986	656.431	656.491	656.563			656.893			657.223	657.235	657.135	657.235	657.199			655.177	
CUT STRINGS	EH20					IE20	IA20	EV20		CE20			MC20			CE2I	CE0I	CB0I	EV2I				IA0I	
EXISTING LEVELS	666.12					664.24	664.13	663.40	663.07	662.43			658.74			655.22	655.08	654.85	654.78	654.83			655.18	
DESIGN OFFSET	-17.581					-9.979	-9.479	-7.700	-6.700	-5.500			0.000			5.500	5.700	6.200	6.700	7.900			11.944	

CH 1640.000



Level Datum = 649.000

DESIGN LEVELS	663.352					654.795	654.795	655.240	655.300	655.372			655.702			656.032	656.044	655.944	656.044	656.008			653.377	
CUT STRINGS	EH20					IE20	IA20	EV20		CE20			MC20			CE2I	CE0I	CB0I	EV2I				IA0I	
EXISTING LEVELS	663.35					661.79	661.64	661.21	660.87	660.47			658.12			655.26	655.15	654.82	654.60	653.86			653.38	
DESIGN OFFSET	-16.397					-9.979	-9.479	-7.700	-6.700	-5.500			0.000			5.500	5.700	6.200	6.700	7.900			13.161	

CH 1620.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

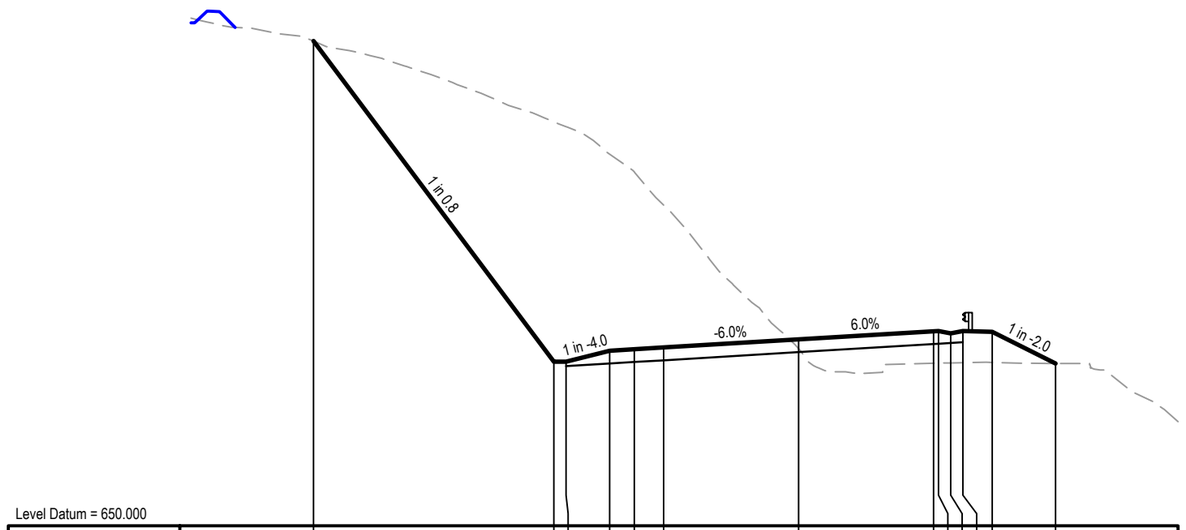
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS SECTIONS
MC20 - SHEET 22 OF 54

Original Size A3 Drawing No: 12542101-C3822 Rev: 0

Plot Date: 27 May 2022 - 1:04 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 650.000

DESIGN LEVELS	669.760					656.699	656.699	657.143	657.203	657.275		657.605				657.935	657.947	657.847	657.947	657.911		656.625	
CUT STRINGS	EH20					IE20	IA20	EV20		CE20		MC20				CE2I	CF0I	CB0I		EV2I		IA0I	
EXISTING LEVELS	669.76					666.47	666.27	665.15	664.43	663.07		657.22				656.63	656.64	656.65	656.66	656.67		656.62	
DESIGN OFFSET	-19.775					-9.979	-9.479	-7.700	-6.700	-5.500		0.000				5.500	5.700	6.200	6.700	7.900		10.473	

CH 1660.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

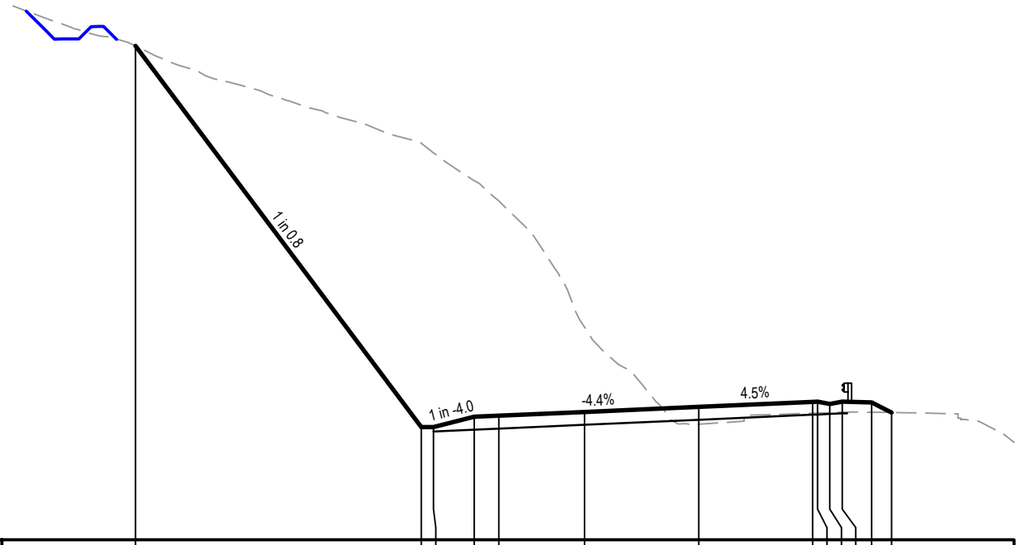
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 23 OF 54

Original Size: A3
Drawing No: 12542101-C3823
Rev: 0

Plot Date: 27 May 2022 - 1:04 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

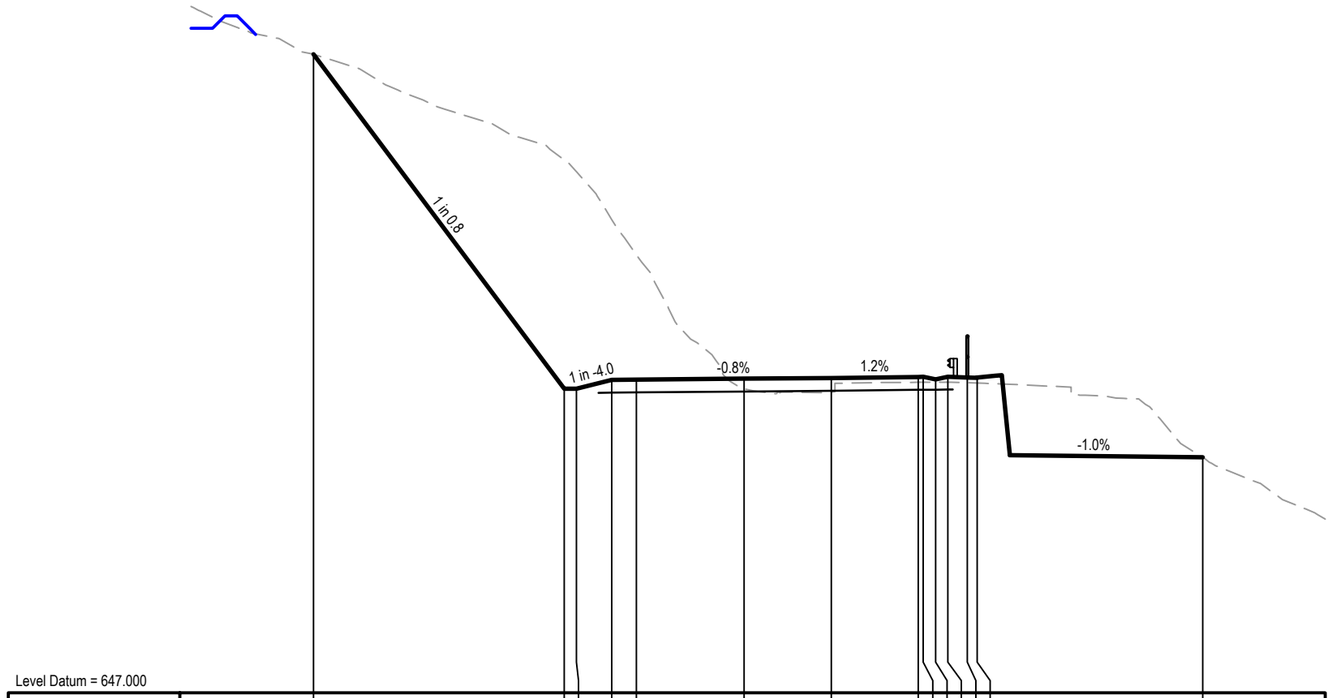


Level Datum = 653.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

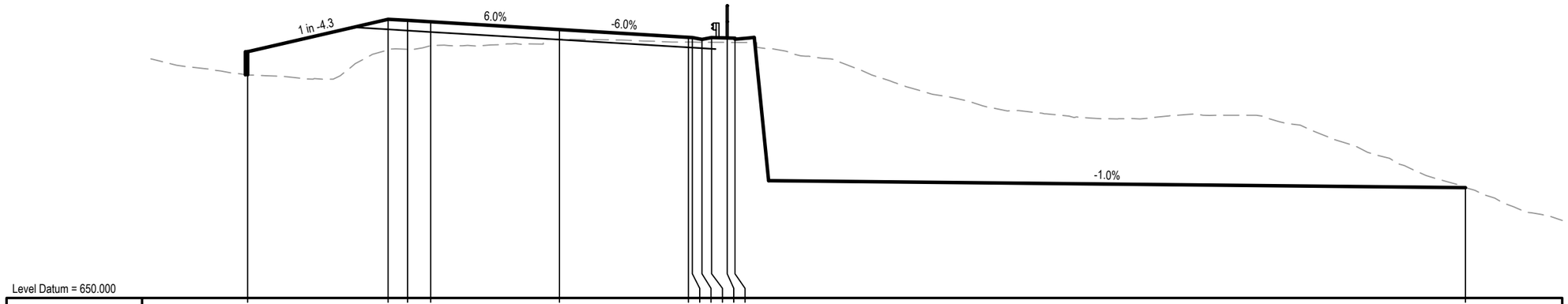


Level Datum = 647.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

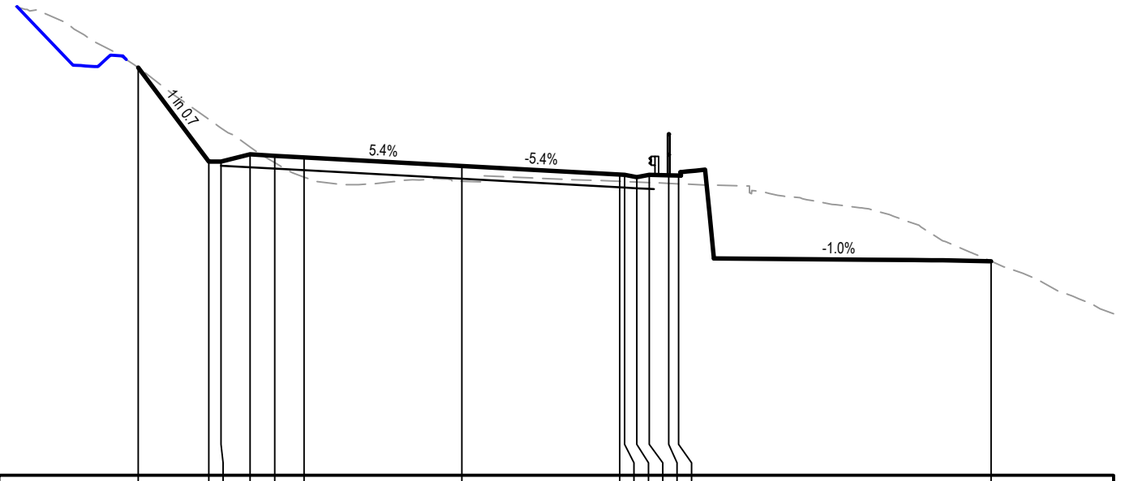


Level Datum = 650.000

| | | |

LEGEND

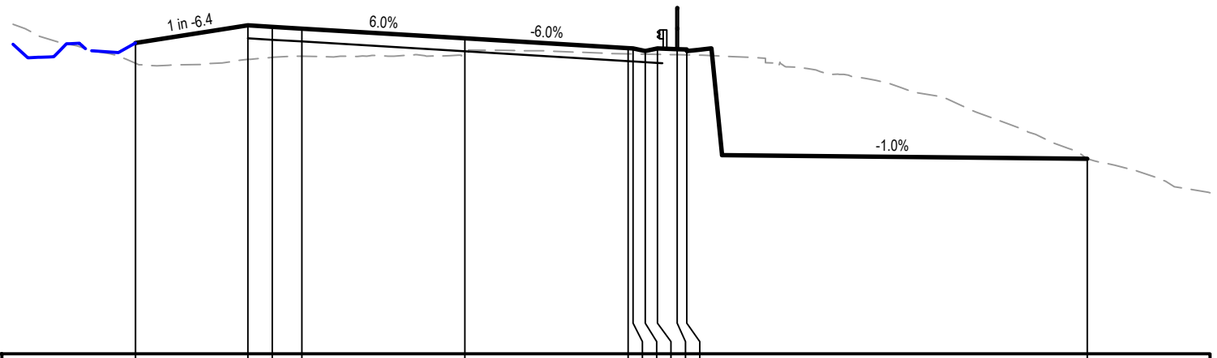
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 655.000

DESIGN LEVELS	671.614		667.776	667.776	668.072	668.018	667.953		667.604			667.256	667.245	667.145	667.245	667.221	667.209							663.719
CUT STRINGS	IA21		IE20	IA20	EV20		CE20		MC20			CE2I	CF0I	CB0I		EV2I								IA0J
EXISTING LEVELS	671.61		669.50	669.15	668.37	667.73	667.15		666.98			666.98	666.97	666.95	666.93	666.89	666.87							663.72
DESIGN OFFSET	-13.199		-10.320	-9.820	-8.633	-7.633	-6.433		0.000			6.433	6.633	7.133	7.633	8.433	8.833							21.572

CH 1780.000



Level Datum = 653.000

DESIGN LEVELS	665.676		666.391	666.331	666.259		665.860					665.461	665.449	665.349	665.449	665.425	665.413							660.954
CUT STRINGS	IA21		EV20		CE20		MC20					CE2I	CF0I	CB0I		EV2I								IA0J
EXISTING LEVELS	664.85		665.00	665.09	665.14		665.16					665.23	665.23	665.22	665.21	665.19	665.19							660.95
DESIGN OFFSET	-13.428		-8.850	-7.850	-6.650		0.000					6.650	6.850	7.350	7.850	8.650	9.050							25.378

CH 1760.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

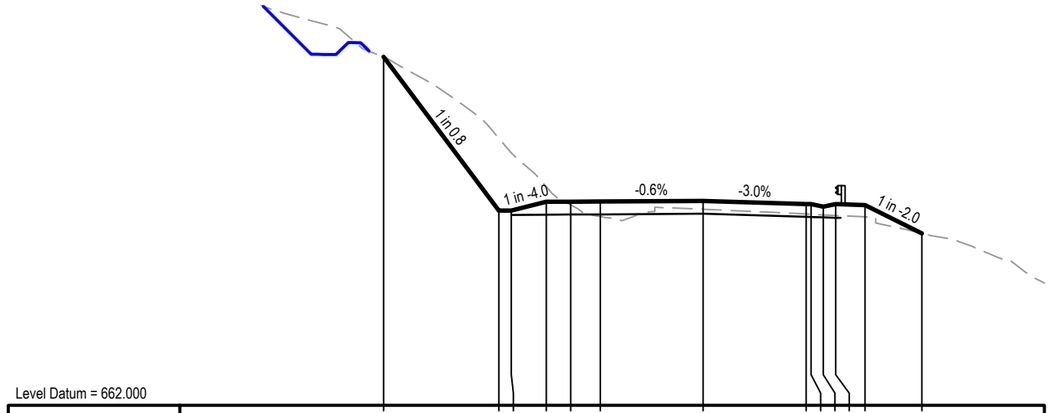
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS SECTIONS
MC20 - SHEET 27 OF 54

Original Size A3 Drawing No: 12542101-C3827 Rev: 0

Plot Date: 27 May 2022 - 1:06 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

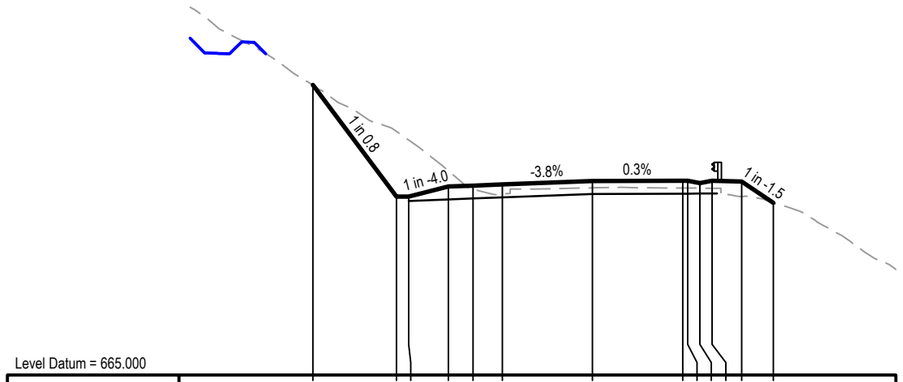
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 662.000

DESIGN LEVELS	676.203	669.937	669.937	670.294	670.300	670.307	670.331	670.205	670.199	670.099	670.163	669.006
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	676.20	672.88	672.29	670.91	670.17	669.69	669.99	669.80	669.79	669.76	669.74	669.68	669.01
DESIGN OFFSET	-13.028	-8.329	-7.829	-6.400	-5.400	-4.200	0.000	4.200	4.400	4.900	5.400	6.600	8.915

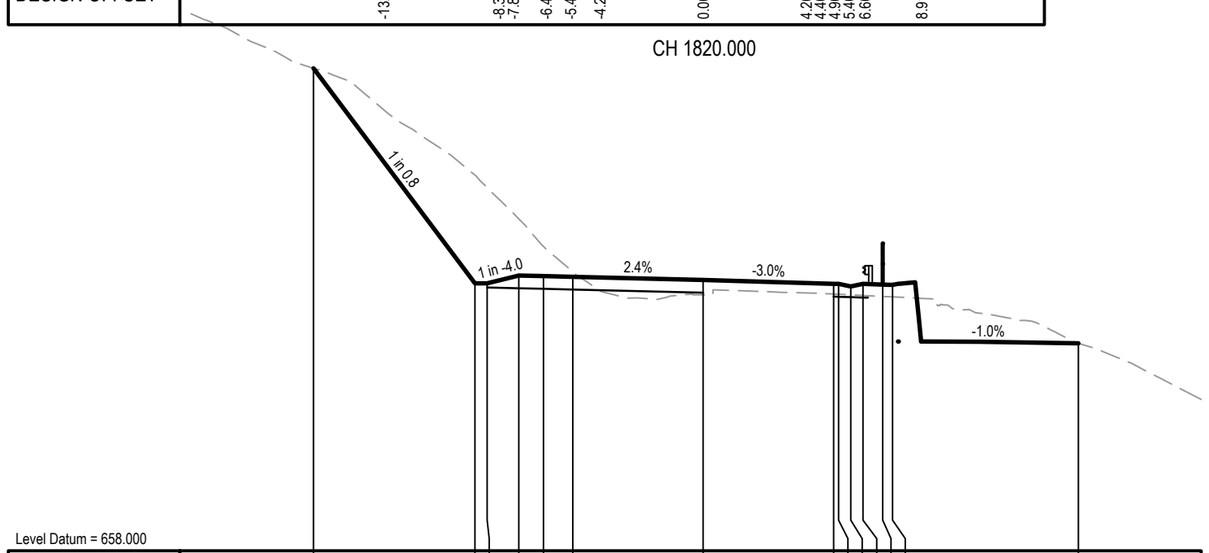
CH 1820.000



Level Datum = 665.000

DESIGN LEVELS	676.820	672.271	672.271	672.675	672.714	672.760	672.901	672.912	672.913	672.813	672.913	672.877	672.015
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	676.82	674.92	674.57	673.32	672.57	672.38	672.62	672.62	672.61	672.61	672.61	672.26	672.01
DESIGN OFFSET	-11.406	-7.994	-7.494	-5.876	-4.876	-3.676	0.000	3.676	3.876	4.376	4.876	6.076	7.370

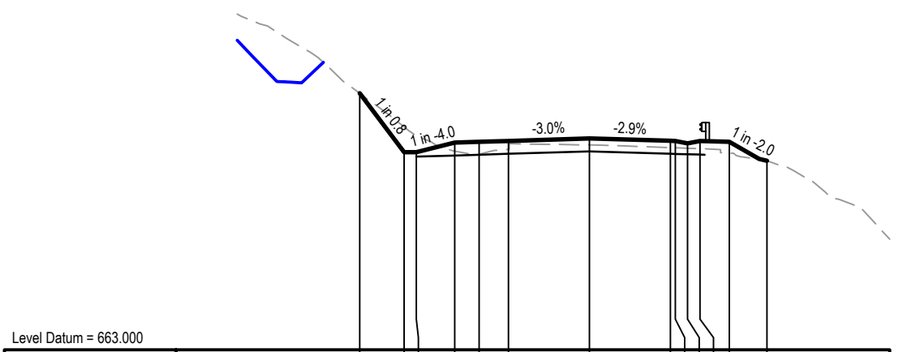
CH 1860.000



Level Datum = 658.000

DESIGN LEVELS	677.672	668.905	668.905	669.228	669.204	669.175	669.047	668.887	668.881	668.881	668.781	668.857	668.845	666.465
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I		IA0J
EXISTING LEVELS	677.67	673.32	672.81	671.53	670.41	669.37	668.44	668.47	668.46	668.44	668.41	668.37	668.35	666.46
DESIGN OFFSET	-15.886	-9.311	-8.811	-7.517	-6.517	-5.317	0.000	5.317	5.517	6.017	6.517	7.317	7.717	15.300

CH 1800.000



Level Datum = 663.000

DESIGN LEVELS	673.461	671.060	671.060	671.451	671.481	671.517	671.616	671.521	671.515	671.415	671.515	671.479	670.710
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	673.46	672.10	671.74	671.10	670.97	671.17	671.35	671.24	671.24	671.22	671.20	671.02	670.71
DESIGN OFFSET	-9.364	-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	7.238

CH 1840.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

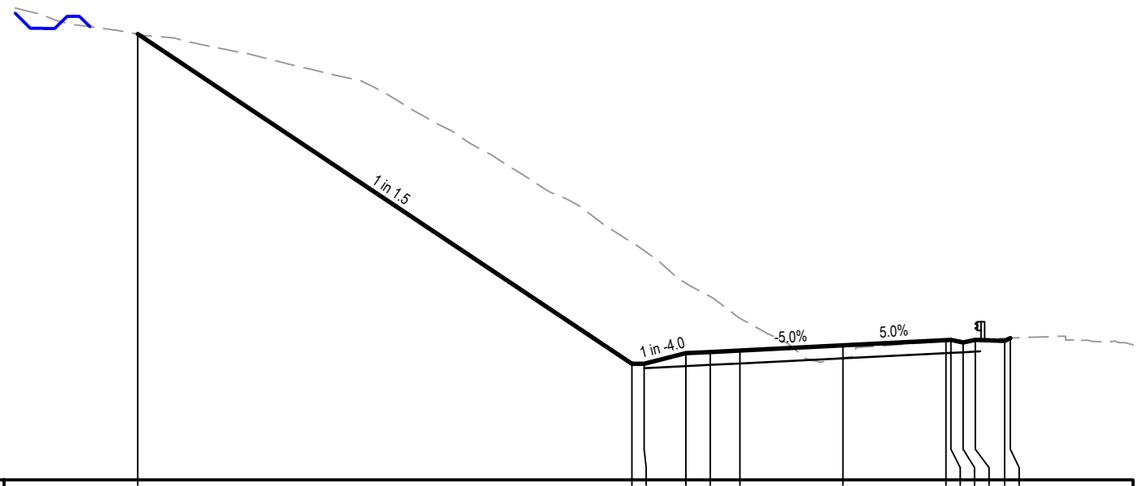
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 28 OF 54

Original Size A3 — Drawing No: 12542101-C3828 — Rev: 0

Plot Date: 27 May 2022 - 1:06 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

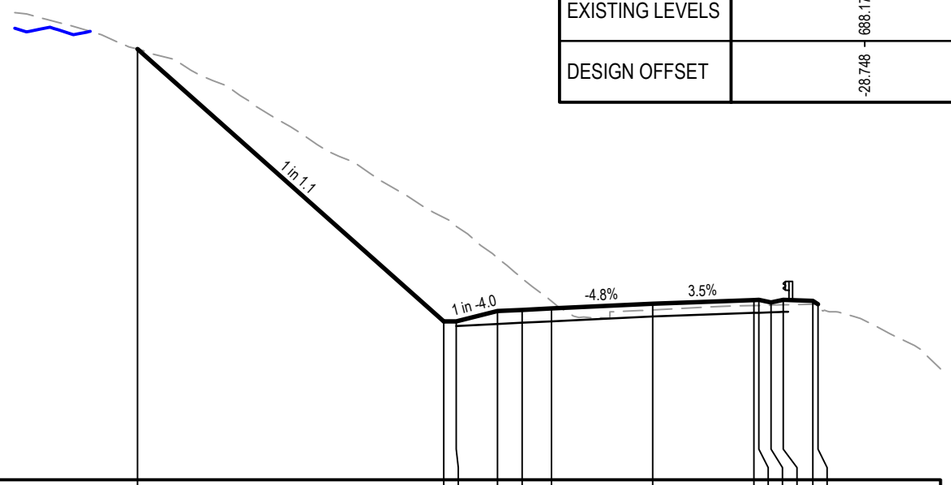
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 670.000

DESIGN LEVELS	688.166													674.735	674.735	675.160	675.210	675.270	675.480	675.690	675.700	675.700	675.700	675.664	675.780
CUT STRINGS	IA21													IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	688.17													679.68	679.34	678.01	677.47	676.58	674.97	675.65	675.67	675.71	675.73	675.77	675.78
DESIGN OFFSET	-28.748													-8.600	-8.100	-6.400	-5.400	-4.200	0.000	4.200	4.400	4.900	5.400	6.600	6.833

CH 1900.000



Level Datum = 667.000

DESIGN LEVELS	684.561													673.458	673.458	673.880	673.928	673.986	674.185	674.330	674.337	674.237	674.337	674.301	674.160
CUT STRINGS	IA21													IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	684.56													677.69	677.34	676.06	675.22	674.29	673.93	674.11	674.11	674.12	674.14	674.16	674.16
DESIGN OFFSET	-21.005													-8.514	-8.014	-6.326	-5.326	-4.126	0.000	4.126	4.326	4.826	5.326	6.526	6.738

CH 1880.000

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

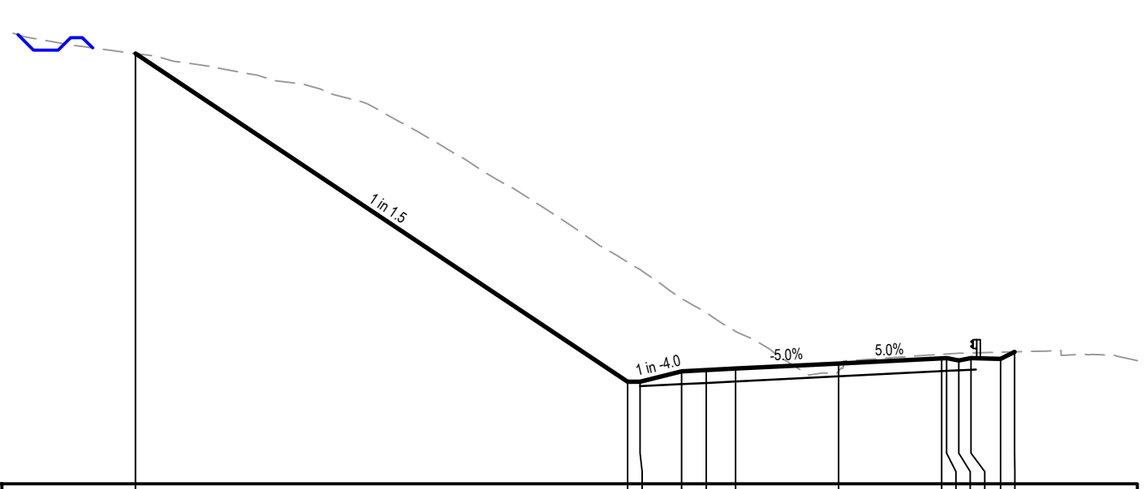
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 29 OF 54

Original Size A3 — Drawing No: 12542101-C3829 — Rev: 0

Plot Date: 27 May 2022 - 1:06 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 672.000

DESIGN LEVELS	689.541							676.165	676.165	676.590	676.640	676.700			676.910				677.120	677.130	677.030	677.130	677.094	677.383
CUT STRINGS	IA21							IE20	IA20	EV20		CE20			MC20				CE2I	CE0I	CB0I		EV2I	IA0I
EXISTING LEVELS	689.54							681.04	680.73	679.56	678.98	678.22			676.59				677.28	677.30	677.33	677.34	677.37	677.38
DESIGN OFFSET	-28.664							-8.600	-8.100	-6.400	-5.400	-4.200			0.000				4.200	4.400	4.900	5.400	6.600	7.179

CH 1920.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

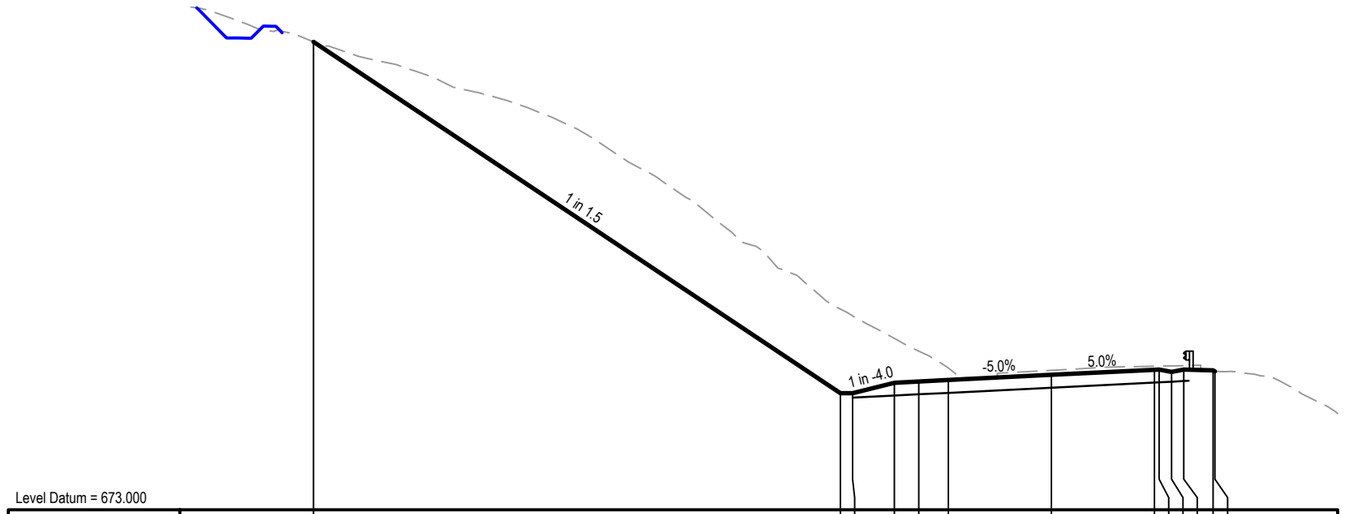
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 30 OF 54

Original Size A3 **Drawing No: 12542101-C3830** **Rev: 0**

Plot Date: 27 May 2022 - 1:07 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

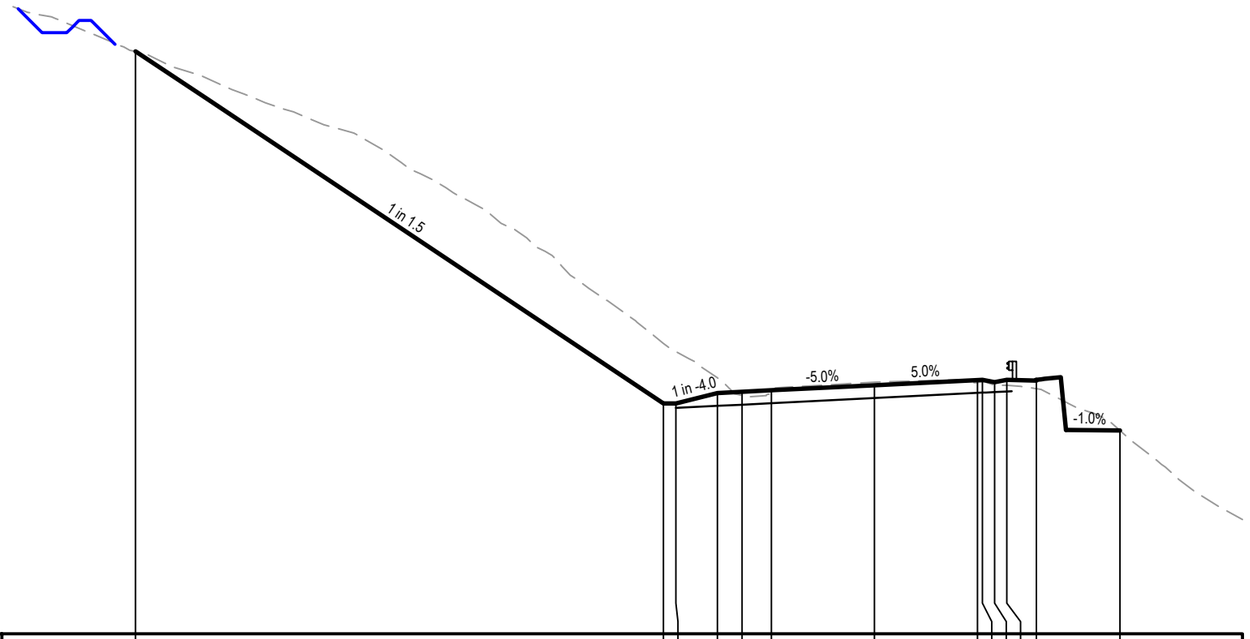


Level Datum = 673.000

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LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

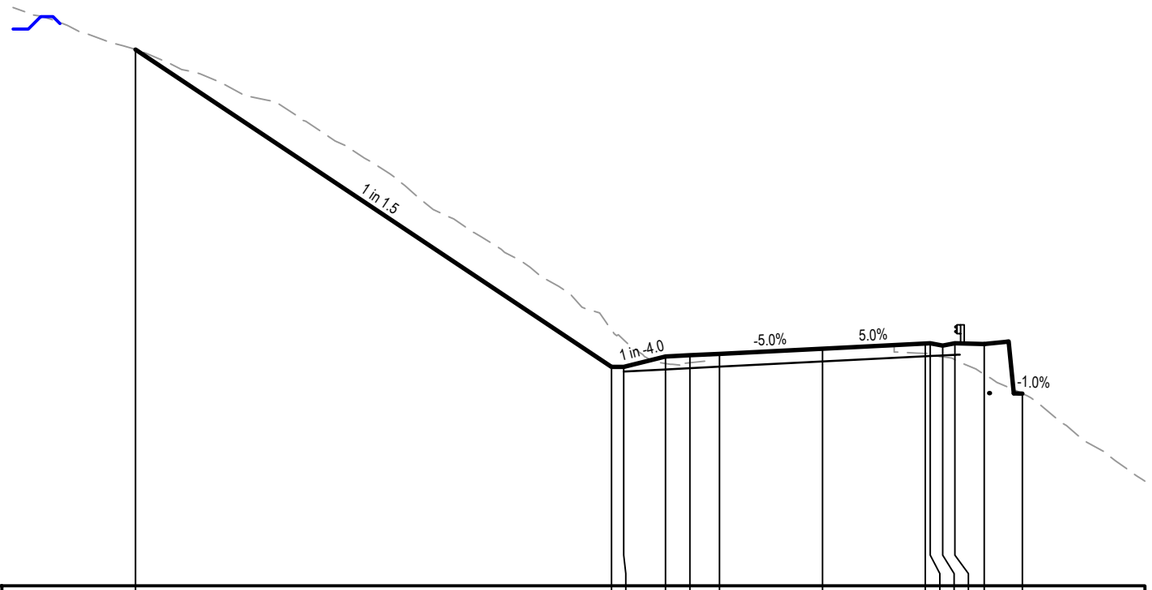


Level Datum = 670.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 672.000

DESIGN LEVELS	693.863							680.926	680.926	681.351	681.401	681.461			681.671			681.881	681.891	681.791	681.891	681.855		679.842
CUT STRINGS	IA21							IE20	IA20	EV20		CE20			MC20			CE2I	CE0I	CB0I		EV2I		IA0J
EXISTING LEVELS	693.86							682.43	682.03	681.06	681.10	681.43			681.68			681.48	681.45	681.34	681.22	680.63		679.84
DESIGN OFFSET	-28.004							-8.600	-8.100	-6.400	-5.400	-4.200			0.000			4.200	4.400	4.900	5.400	6.600		8.150

CH 1980.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

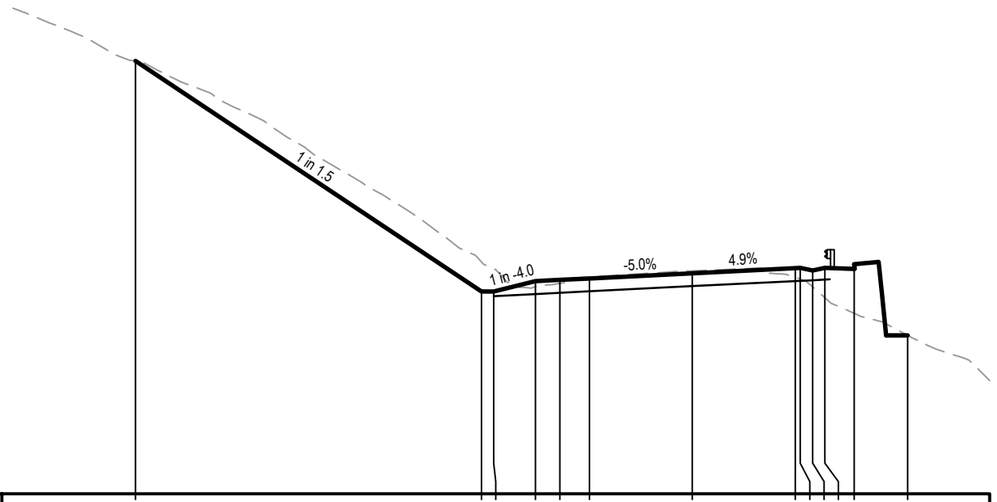
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 33 OF 54

Original Size A3 Drawing No: 12542101-C3833 Rev: 0

Plot Date: 27 May 2022 - 1:08 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

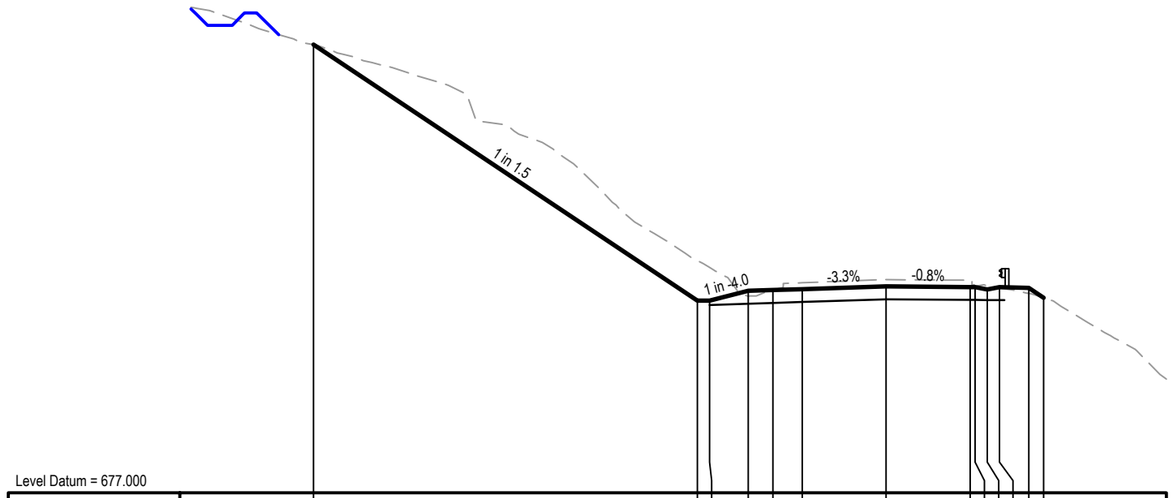


Level Datum = 674.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 677.000

DESIGN LEVELS	695.269							684.839	684.839	685.234	685.267	685.306		685.418			685.392	685.390	685.290	685.390	685.354	684.955	
CUT STRINGS	IA21							IE20	IA20	EV20		CE20		MC20			CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	695.27							686.47	686.19	685.02	685.25	685.57		685.69			685.67	685.40	685.44	685.34	685.13	684.95	
DESIGN OFFSET	-23.346							-7.701	-7.201	-5.620	-4.620	-3.420		0.000			3.420	3.620	4.120	4.620	5.820	6.419	

CH 2040.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

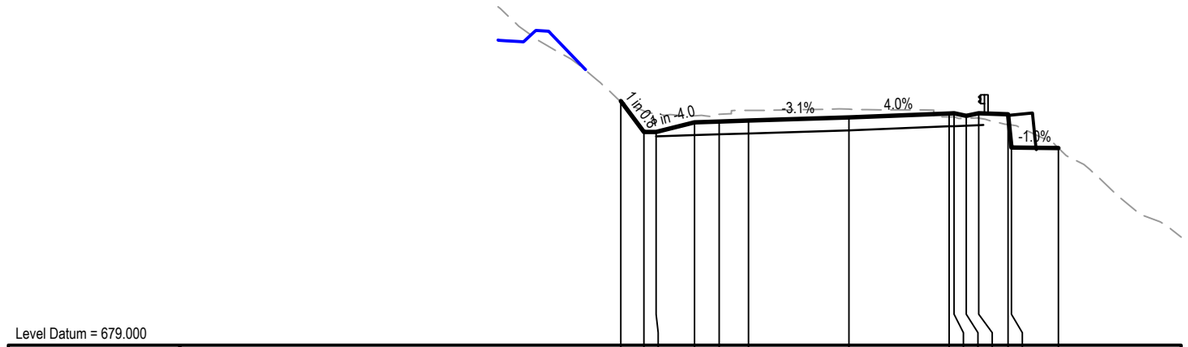
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS SECTIONS
MC20 - SHEET 35 OF 54

Original Size A3 **Drawing No: 12542101-C3835** **Rev: 0**

Plot Date: 27 May 2022 - 1:09 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

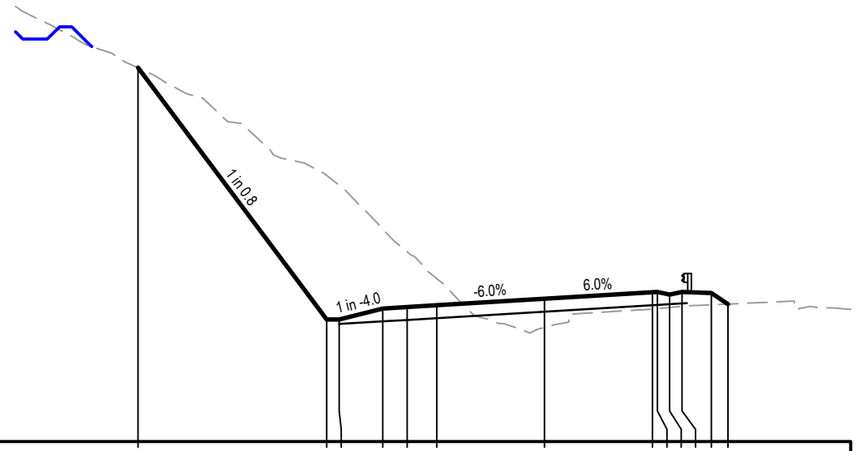


Level Datum = 679.000

| | | |

LEGEND

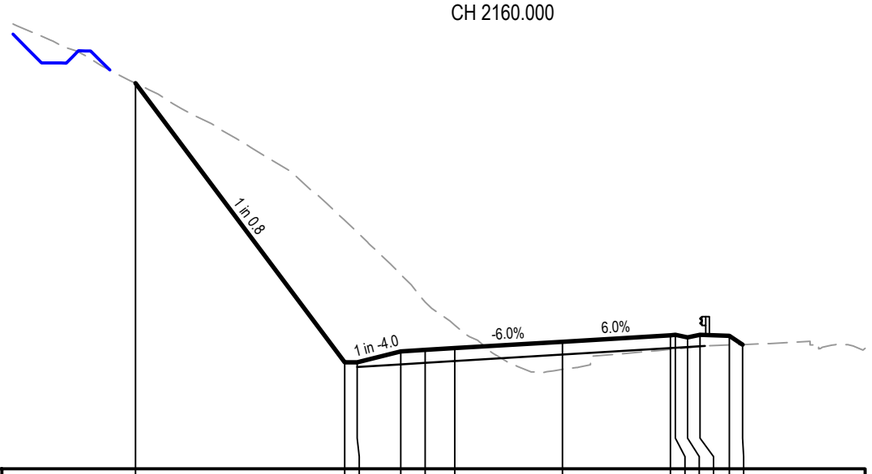
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 689.000

DESIGN LEVELS	704.244	693.981	693.981	694.426	694.486	694.558	694.822	695.086	695.098	694.998	695.098	695.062	694.607	
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	704.24	699.85	699.45	697.66	696.74	695.65	693.66	694.41	694.43	694.47	694.51	694.58	694.61	
DESIGN OFFSET	-16.576	-8.879	-8.379	-6.600	-5.600	-4.400	0.000	4.400	4.600	5.100	5.600	6.800	7.482	

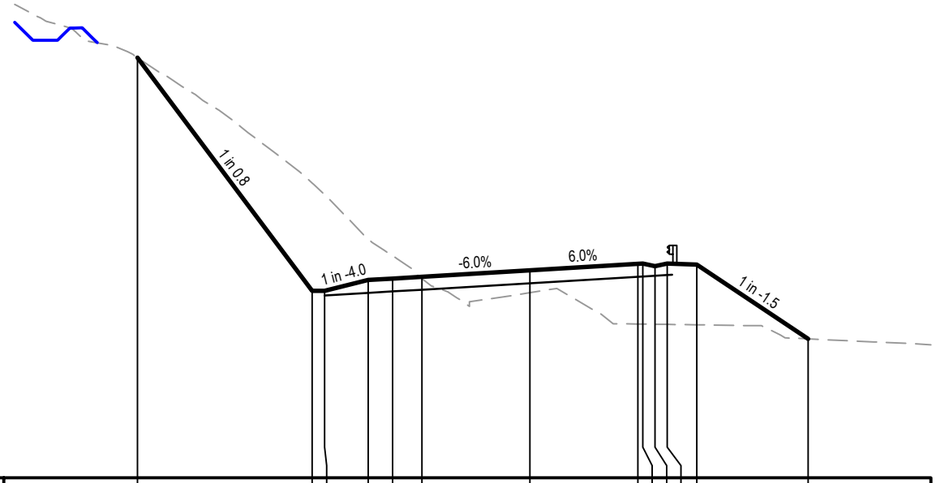
CH 2160.000



Level Datum = 688.000

DESIGN LEVELS	703.719	692.345	692.345	692.789	692.849	692.921	693.185	693.449	693.461	693.361	693.461	693.425	693.068	
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	703.72	698.13	697.65	695.93	694.80	693.86	692.06	692.87	692.89	692.94	692.99	693.05	693.07	
DESIGN OFFSET	-17.410	-8.879	-8.379	-6.600	-5.600	-4.400	0.000	4.400	4.600	5.100	5.600	6.800	7.336	

CH 2140.000



Level Datum = 688.000

DESIGN LEVELS	705.127	695.621	695.621	696.065	696.125	696.196	696.458	696.721	696.733	696.733	696.733	696.697	693.666	
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	705.13	700.01	699.54	697.74	697.05	696.13	695.55	694.27	694.27	694.25	694.25	694.24	693.67	
DESIGN OFFSET	-16.005	-8.876	-8.376	-6.600	-5.600	-4.400	0.000	4.400	4.600	5.100	5.600	6.800	11.346	

CH 2180.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

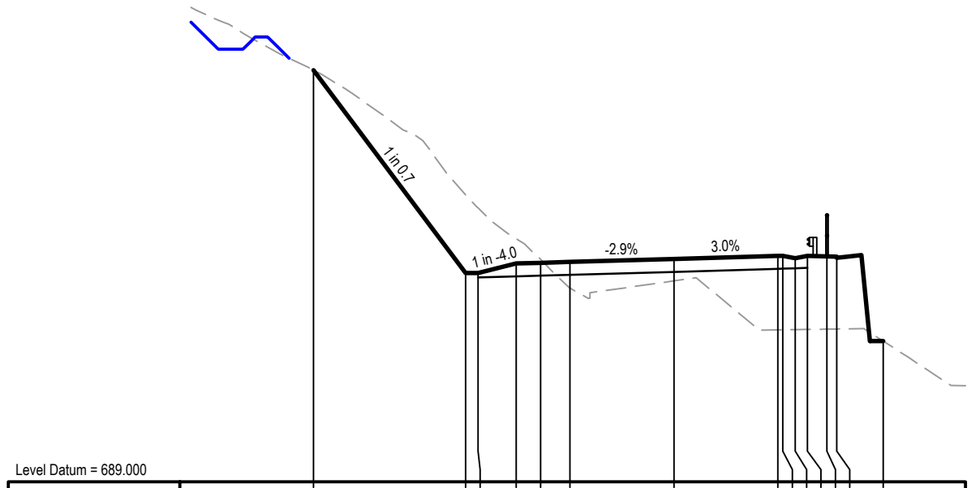
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 37 OF 54

Original Size A3 — Drawing No: 12542101-C3837 — Rev: 0

Plot Date: 27 May 2022 - 1:09 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

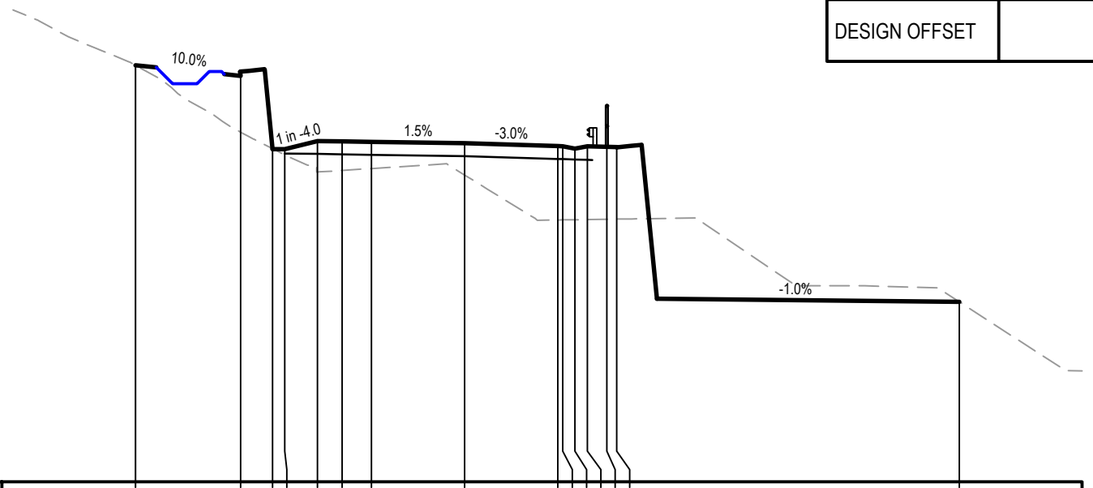


Level Datum = 689.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

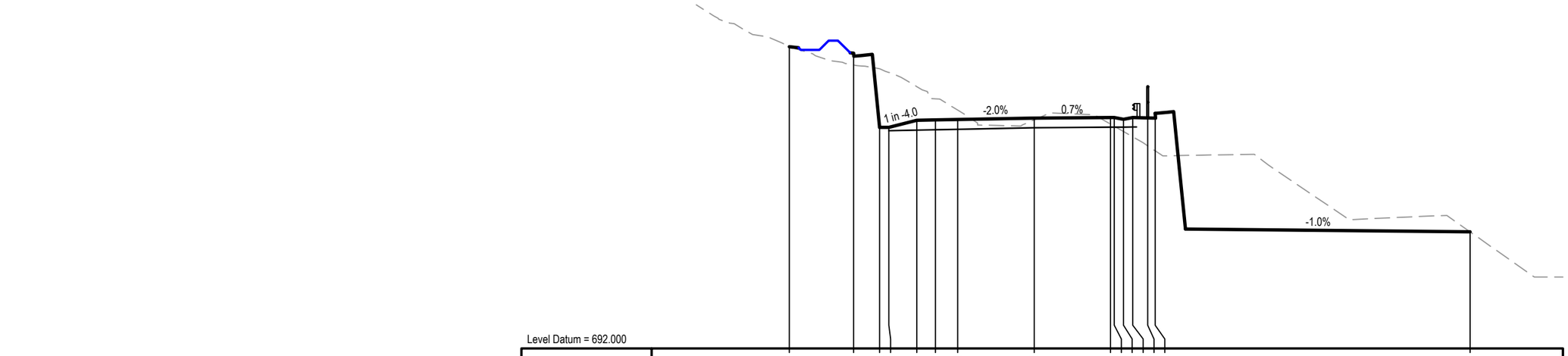


Level Datum = 687.000

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LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)

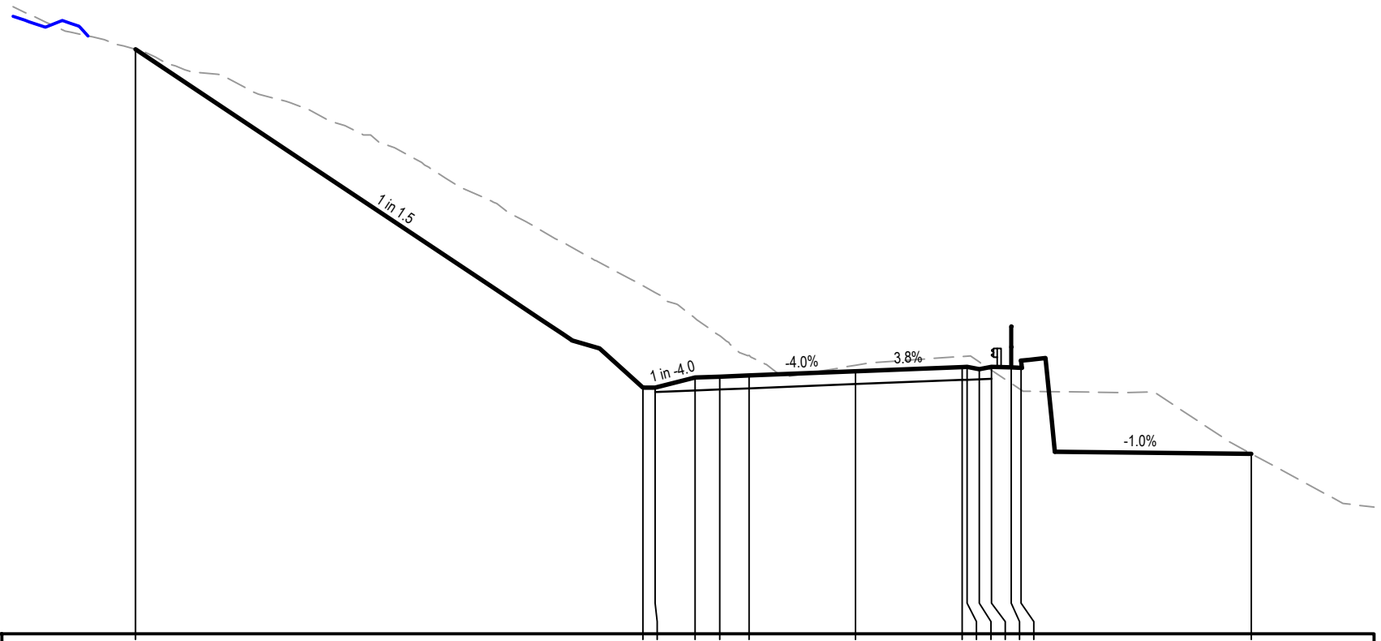


Level Datum = 692.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 695.000

DESIGN LEVELS	718.830							705.040	705.040	705.448	705.488	705.536		705.710			705.877	705.885	705.785	705.885	705.861	705.849		702.342
CUT STRINGS	EH20							IE20	IA20	EV20		CE20		MC20			CE2I	CF0I	CB0I		EV2I			IA0J
EXISTING LEVELS	718.83							709.19	708.92	707.86	707.16	706.35		705.95			706.31	706.32	706.08	705.74	705.21	704.95		702.34
DESIGN OFFSET	-29.357							-8.673	-8.173	-6.544	-5.544	-4.344		0.000			4.344	4.544	5.044	5.544	6.344	6.744		16.134

CH 2320.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

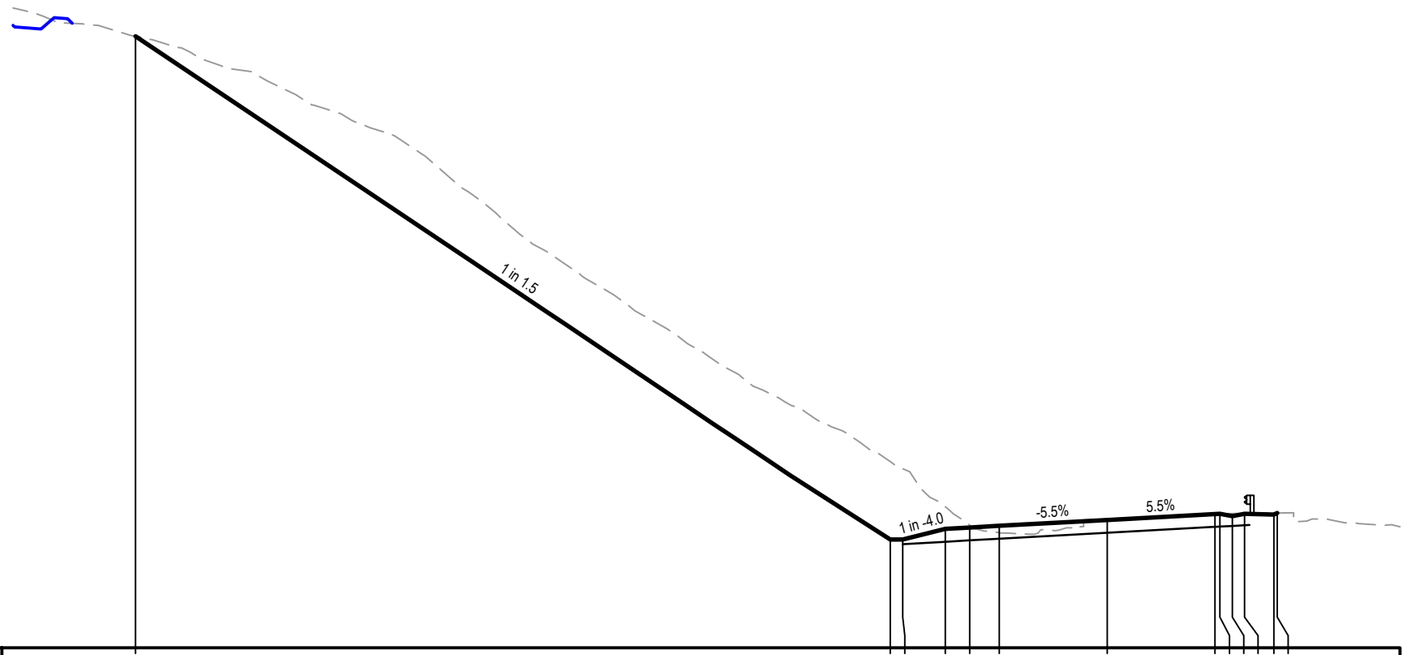
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 41 OF 54

Original Size: A3
Drawing No: 12542101-C3841
Rev: 0

Plot Date: 27 May 2022 - 1:11 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 702.000

DESIGN LEVELS	726.935							706.419	706.419	706.853	706.908	706.974		707.216		707.458	707.469	707.369	707.469	707.433	707.502
CUT STRINGS	EH20							IE20	IA20	EV20		CE20		MC20		CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	726.94							709.59	709.30	707.75	707.00	706.69		707.25		707.46	707.46	707.47	707.48	707.50	707.50
DESIGN OFFSET	-39.613							-8.838	-8.338	-6.600	-5.600	-4.400		0.000		4.400	4.600	5.100	5.600	6.800	6.938

CH 2340.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

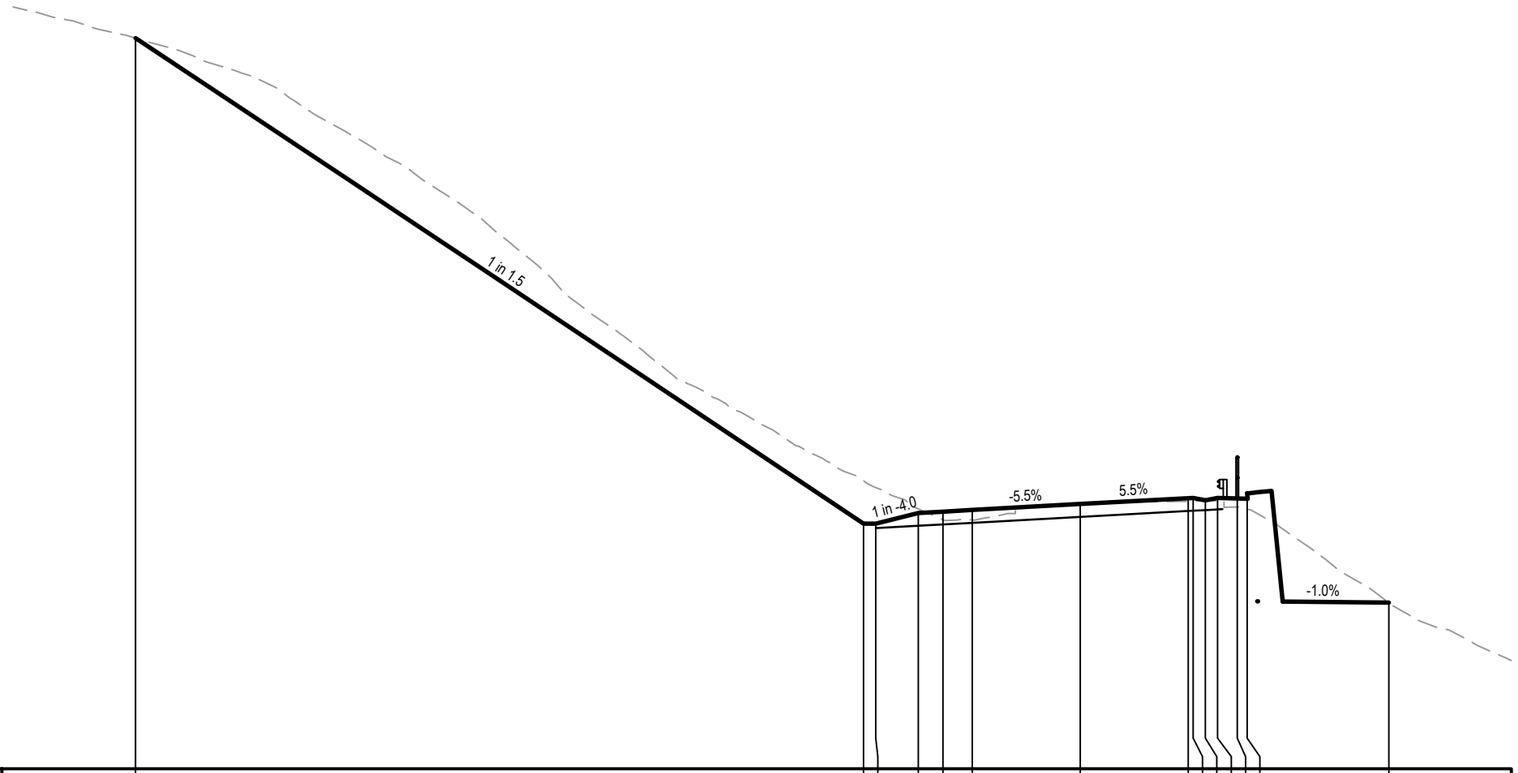
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS SECTIONS
MC20 - SHEET 42 OF 54

Original Size A3 Drawing No: **12542101-C3842** Rev: **0**

Plot Date: 27 May 2022 - 1:11 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 698.000

DESIGN LEVELS	727.784											707.998	707.998	708.433	708.488	708.554	708.796	709.038	709.049	708.949	709.049	709.025	709.013	704.776
CUT STRINGS	EH20											IE20 IA20		EV20		CE20	MC20	CE2I	CE0I CB0I			EV2I		IA0J
EXISTING LEVELS	727.78											709.74	709.47	708.59	708.16	708.15	708.79	708.91	708.91	708.92	708.68	708.60		704.78
DESIGN OFFSET	-38.517											-8.838	-8.338	-6.600	-5.600	-4.400	0.000	4.400	4.600	5.100	5.600	6.400	6.800	12.581

CH 2360.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

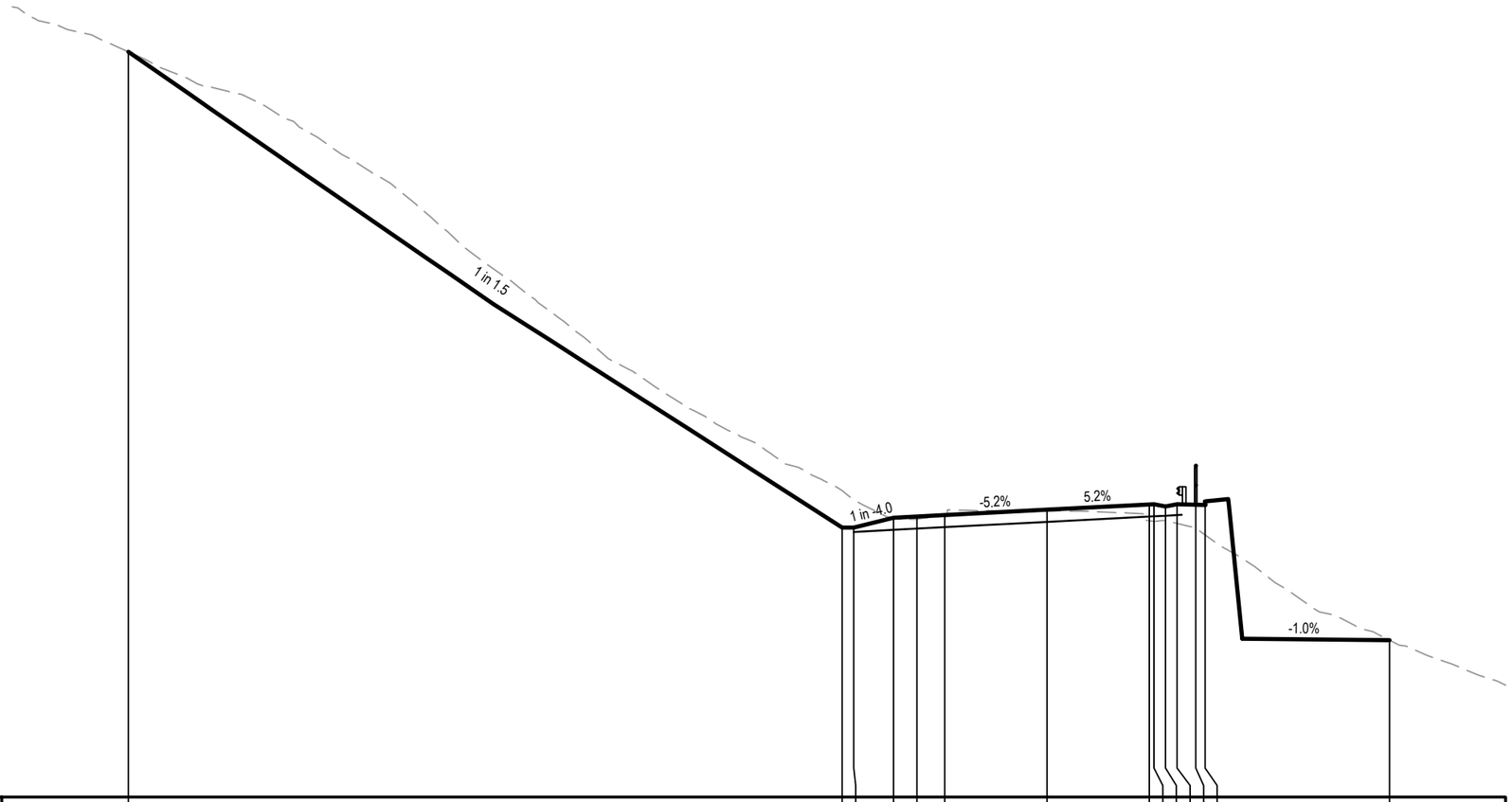
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 43 OF 54

Original Size A3
Drawing No: 12542101-C3843
Rev: 0

Plot Date: 27 May 2022 - 1:11 PM Plotted By: Isaac Smith
Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 698.000

DESIGN LEVELS	730.083											709.605	709.605	710.033	710.085	710.147	710.376	710.605	710.615	710.515	710.615	710.591	710.579	704.756
CUT STRINGS	EH20											IE20 IA20		EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I		IA0J
EXISTING LEVELS	730.08											711.19	710.82	710.00	709.98	710.10	710.32	709.90	709.87	709.90	709.78	709.56	709.29	704.76
DESIGN OFFSET	-39.532											-8.814	-8.314	-6.600	-5.600	-4.400	0.000	4.400	4.600	5.100	5.600	6.400	6.800	14.741

CH 2380.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing.	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

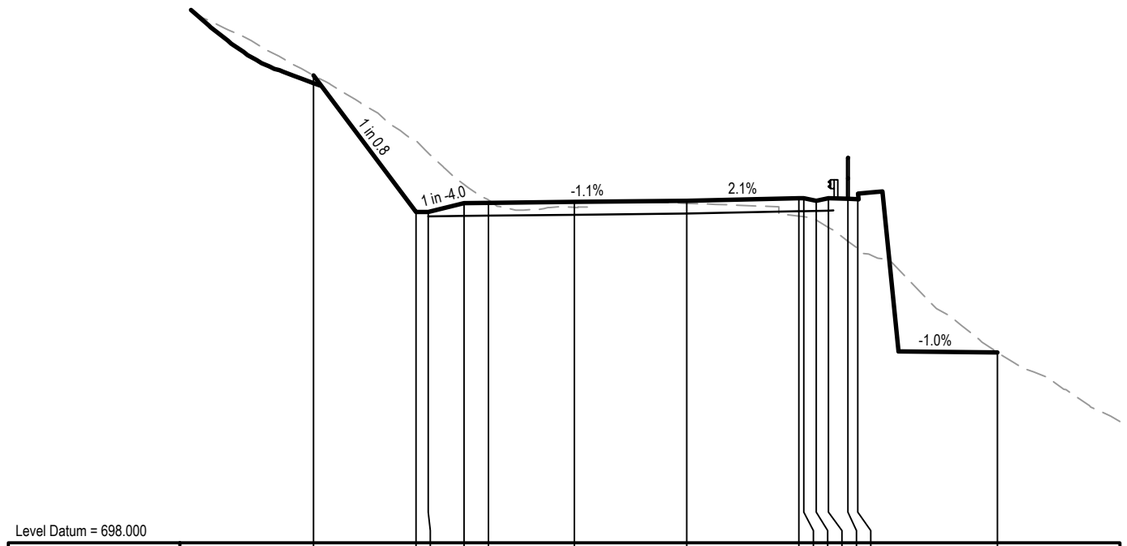
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 44 OF 54

Original Size A3 — Drawing No: 12542101-C3844 — Rev: 0

Plot Date: 27 May 2022 - 1:12 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 698.000

DESIGN LEVELS	717.057		711.487	711.487	711.851	711.862		711.899		711.948		712.045	712.049	711.949	712.049	712.025	712.013			705.767				
CUT STRINGS	EH20		IE20	IA20	EV20			CE20		MC20		CE2I	CE0I	CB0I		EV2I				IA0J				
EXISTING LEVELS	717.06		714.38	713.89	712.61	711.98		711.68		711.84		711.32	711.29	711.17	710.86	710.29	710.00			705.77				
DESIGN OFFSET	-15.211		-11.033	-10.533	-9.080	-8.080		-4.580		0.000		4.580	4.780	5.280	5.780	6.580	6.980			12.667				

CH 2400.000

0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22	
No	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date	

0 2.5 5.0 7.5m
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

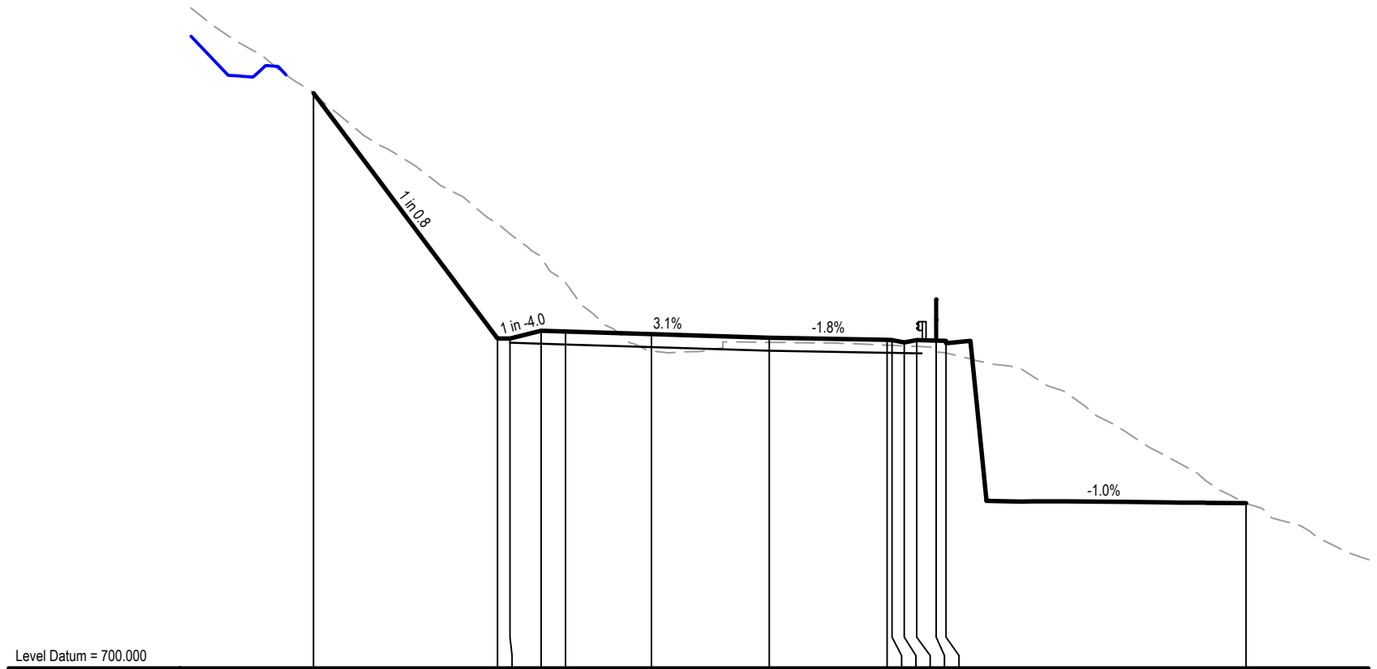
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS SECTIONS
MC20 - SHEET 45 OF 54

Original Size A3 Drawing No: 12542101-C3845 Rev: 0

Plot Date: 27 May 2022 - 1:12 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

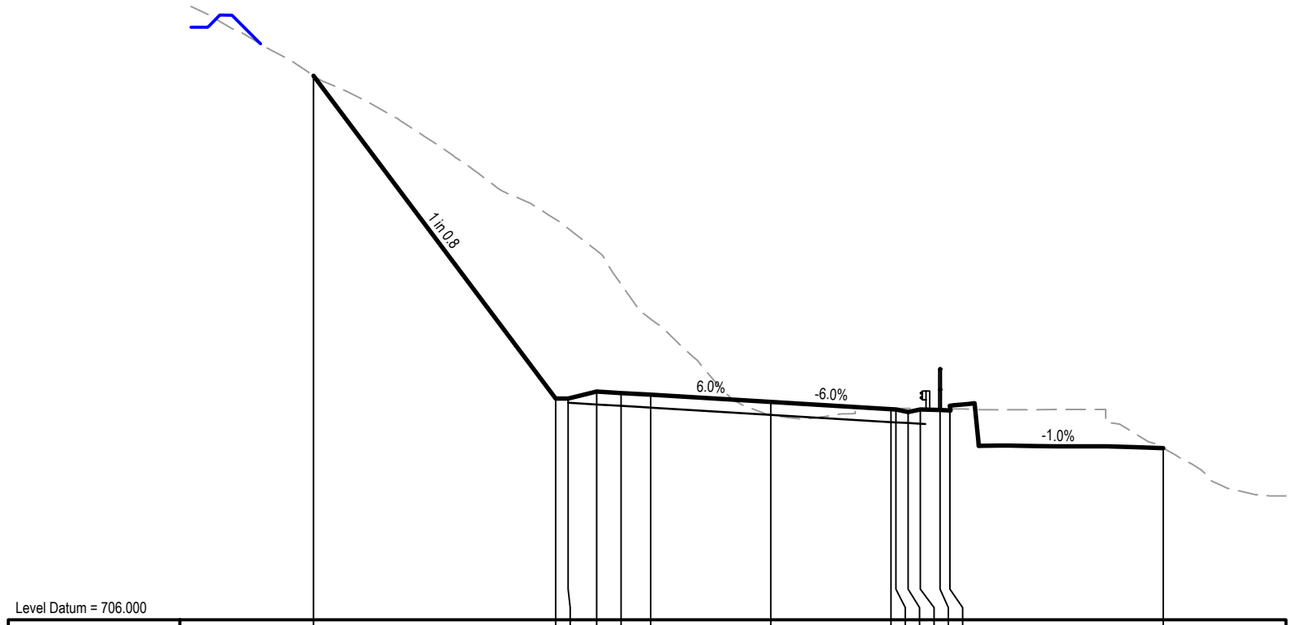


Level Datum = 700.000

| | | |

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

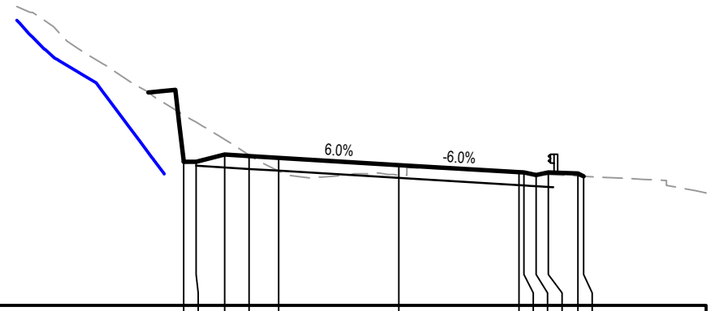


Level Datum = 706.000

| | | |

LEGEND

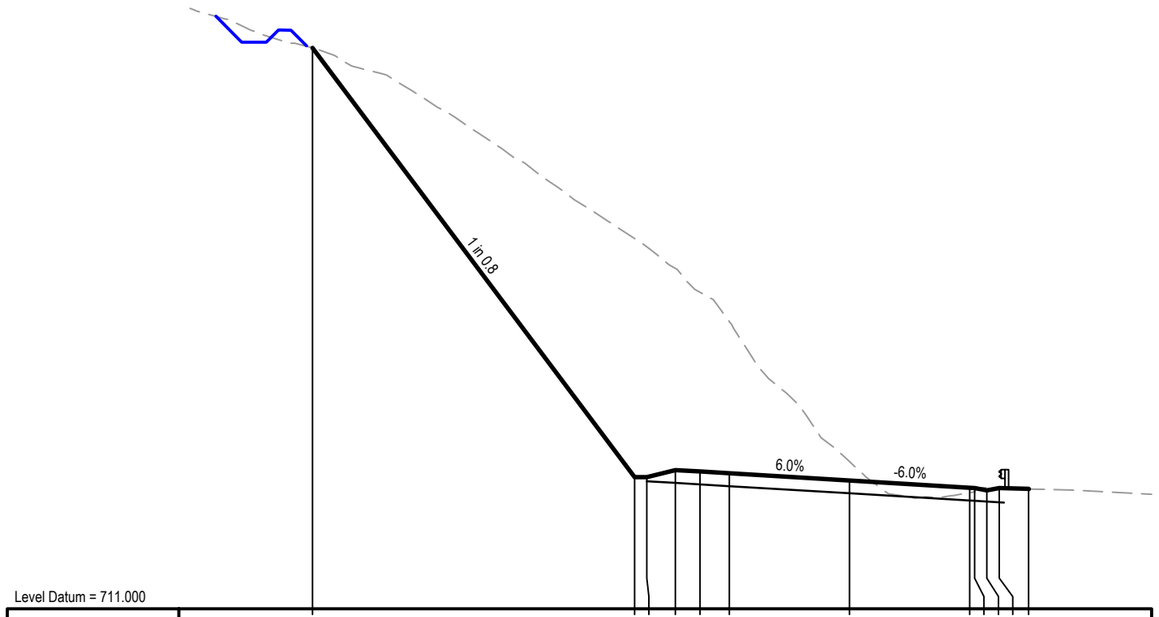
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 713.000

DESIGN LEVELS	718.850	718.850	719.142	719.082	719.010	718.716	718.422	718.410	718.310	718.410	718.374	718.258		
CUT STRINGS	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I		
EXISTING LEVELS	720.75	720.46	719.76	719.12	718.47	718.30	718.40	718.39	718.36	718.33	718.27	718.26		
DESIGN OFFSET	-8.768	-8.268	-7.100	-6.100	-4.900	0.000	4.900	5.100	5.600	6.100	7.300	7.532		

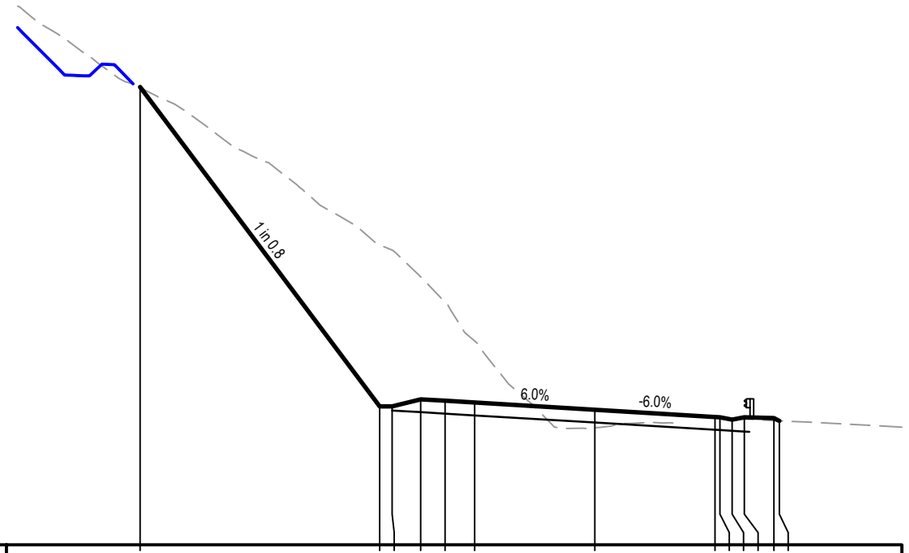
CH 2500.000



Level Datum = 711.000

DESIGN LEVELS	733.870	716.369	716.369	716.661	716.601	716.529	716.235	715.941	715.929	715.829	715.929	715.893		
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	733.87	726.10	725.76	724.88	723.91	722.71	717.01	715.74	715.77	715.93	715.92	715.89		
DESIGN OFFSET	-21.893	-8.768	-8.268	-7.100	-6.100	-4.900	0.000	4.900	5.100	5.600	6.100	7.300		

CH 2460.000



Level Datum = 712.000

DESIGN LEVELS	730.665	717.644	717.644	717.936	717.876	717.804	717.510	717.216	717.204	717.104	717.204	717.168	717.057	
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	730.67	724.23	724.01	722.92	721.90	720.31	716.77	717.19	717.18	717.16	717.13	717.07	717.06	
DESIGN OFFSET	-18.534	-8.768	-8.268	-7.100	-6.100	-4.900	0.000	4.900	5.100	5.600	6.100	7.300	7.522	

CH 2480.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

0 2.5 5.0 7.5m
SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

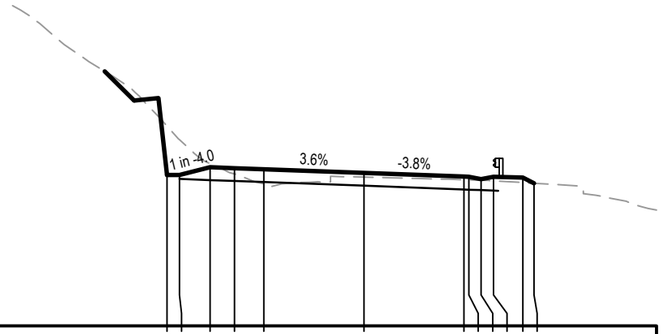
Client UPPER HUNTER SHIRE COUNCIL
Project COULSONS CREEK ROAD REHABILITATION
Title CROSS SECTIONS
MC20 - SHEET 48 OF 54

Original Size A3 Drawing No: 12542101-C3848 Rev: 0

Plot Date: 27 May 2022 - 1:13 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

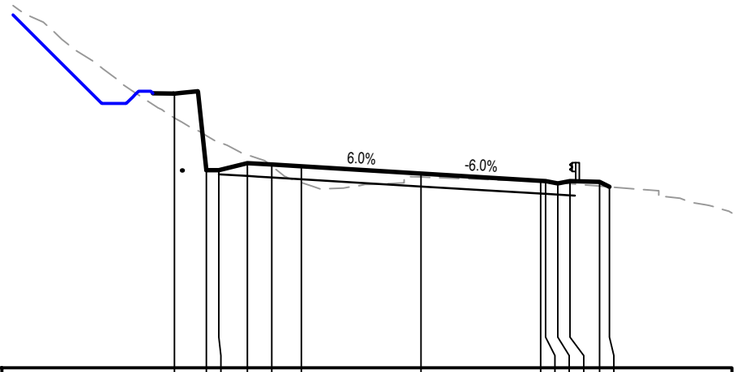
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 715.000

DESIGN LEVELS	721.148	721.148	721.460	721.424	721.381	721.233	721.078	721.070	720.970	721.070	721.034	720.807		
CUT STRINGS	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I		
EXISTING LEVELS	723.14	722.58	721.61	721.19	720.78	721.06	720.95	720.94	720.93	720.91	720.83	720.81		
DESIGN OFFSET	-8.026	-7.526	-6.278	-5.278	-4.078	0.000	4.078	4.278	4.778	5.278	6.478	6.931		

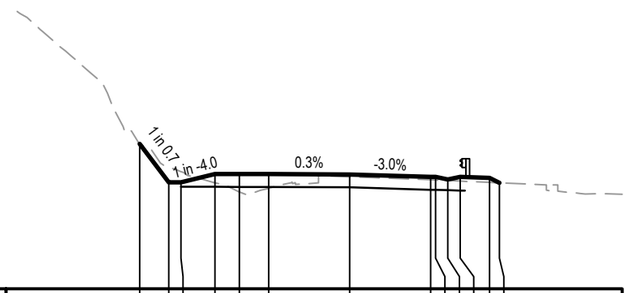
CH 2540.000



Level Datum = 712.000

DESIGN LEVELS	723.045	720.055	720.055	720.347	720.287	720.215	719.922	719.630	719.618	719.518	719.618	719.582	719.379	
CUT STRINGS	WT01	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	722.19	721.47	721.20	720.69	720.22	719.56	719.78	719.61	719.59	719.55	719.51	719.41	719.38	
DESIGN OFFSET	-10.046	-8.746	-8.246	-7.078	-6.078	-4.878	0.000	4.878	5.078	5.578	6.078	7.278	7.684	

CH 2520.000



Level Datum = 718.000

DESIGN LEVELS	723.910	722.340	722.340	722.685	722.682	722.678	722.666	722.567	722.561	722.461	722.561	722.525	722.322	
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	723.91	722.96	722.78	722.33	721.95	722.10	722.57	722.45	722.44	722.41	722.39	722.34	722.32	
DESIGN OFFSET	-8.562	-7.384	-6.884	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	6.107	

CH 2560.000

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 2.5 5.0 7.5m

SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

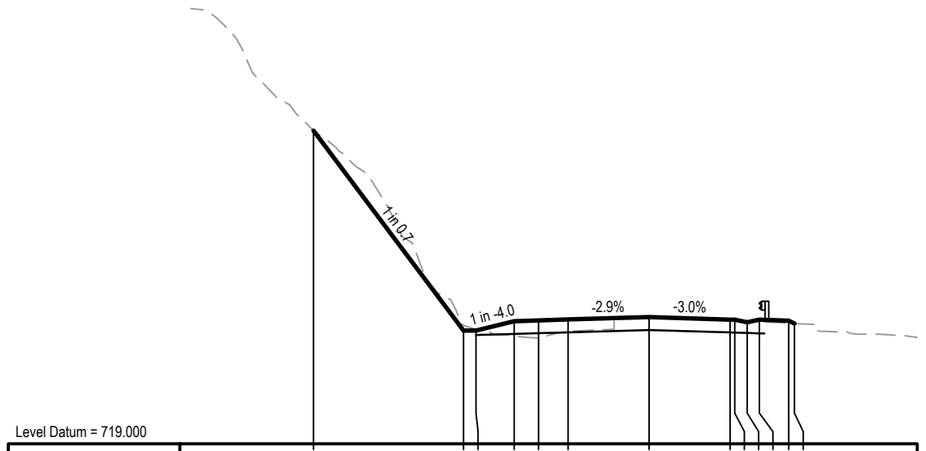
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 49 OF 54

Original Size: A3
Drawing No: 12542101-C3849
Rev: 0

Plot Date: 27 May 2022 - 1:14 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

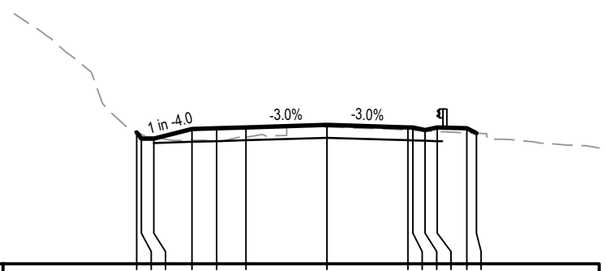
DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 719.000

DESIGN LEVELS	731.772	723.616	723.616	724.005	724.035	724.070	724.166	724.067	724.061	723.961	724.061	724.025	723.909
CUT STRINGS	IA21	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	731.77	723.84	723.68	723.40	723.30	723.55	724.15	724.05	724.04	724.01	723.99	723.92	723.91
DESIGN OFFSET	-13.677	-7.559	-7.059	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	5.932

CH 2580.000



Level Datum = 720.000

DESIGN LEVELS	725.363	725.110	725.110	725.500	725.530	725.566	725.665	725.566	725.560	725.460	725.560	725.524	725.327
CUT STRINGS	IA21	IA20		EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	725.36	725.29	725.18	725.03	724.99	725.16	725.58	725.46	725.45	725.42	725.40	725.34	725.33
DESIGN OFFSET	-7.753	-7.664	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	6.095

CH 2600.000

No	Revision	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION	IMS	GM	SR	27.05.22

Note: * indicates signatures on original issue of drawing or last revision of drawing

0 2.5 5.0 7.5m

SCALE 1:250 AT ORIGINAL SIZE

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

Client UPPER HUNTER SHIRE COUNCIL

Project COULSONS CREEK ROAD REHABILITATION

Title CROSS SECTIONS
MC20 - SHEET 50 OF 54

Original Size A3

Drawing No: 12542101-C3850

Rev: 0

Plot Date: 27 May 2022 - 1:14 PM Plotted By: Isaac Smith

Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

DESIGN SURFACE — DESIGN CATCH DRAIN — — — — — — 2021 COMBINED SURVEY (POST CONSTRUCTION)

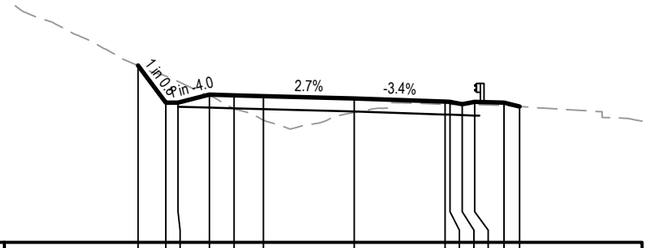


Level Datum = 713.000

| | | |

LEGEND

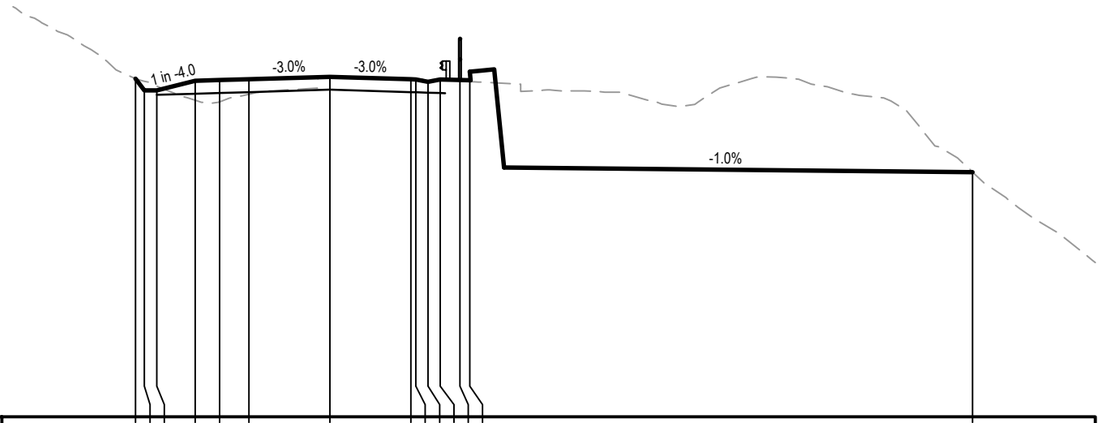
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 727.000

DESIGN LEVELS	734.206	732.698	732.698	733.019	732.993	732.961	732.862	732.737	732.730	732.630	732.730	732.694	732.536
CUT STRINGS	EH20	IE20	IA20	EV20	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	734.21	733.78	733.56	732.97	732.46	731.98	732.30	732.63	732.62	732.63	732.62	732.58	732.54
DESIGN OFFSET	-8.819	-7.688	-7.188	-5.904	-4.904	-3.704	0.000	3.704	3.904	4.404	4.904	6.104	6.738

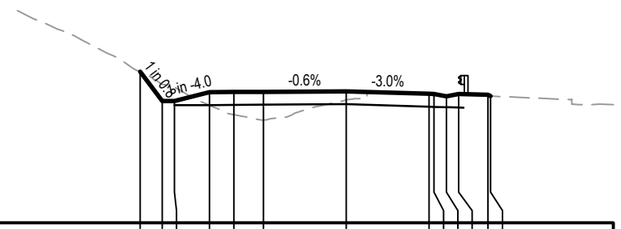
CH 2700.000



Level Datum = 716.000

DESIGN LEVELS	729.789	729.306	729.306	729.697	729.727	729.763	729.862	729.763	729.757	729.657	729.757	729.733	729.721	725.979
CUT STRINGS	IA21	IE20	IA20	EV20	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0J
EXISTING LEVELS	729.79	729.68	729.48	728.91	728.84	729.15	729.86	729.78	729.78	729.76	729.73	729.69	729.67	725.98
DESIGN OFFSET	-7.926	-7.564	-7.064	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.300	5.700	26.204

CH 2660.000



Level Datum = 726.000

DESIGN LEVELS	732.167	730.972	730.972	731.329	731.335	731.342	731.362	731.261	731.255	731.155	731.255	731.219	731.167
CUT STRINGS	EH20	IE20	IA20	EV20	CE20	MC20	CE2I	CF0I	CB0I	EV2I	IA0I
EXISTING LEVELS	732.17	731.64	731.53	730.79	730.41	730.19	731.02	731.25	731.24	731.23	731.22	731.17	731.17
DESIGN OFFSET	-8.404	-7.508	-7.008	-5.579	-4.579	-3.379	0.000	3.379	3.579	4.079	4.579	5.779	5.883

CH 2680.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
0	ISSUED FOR CONSTRUCTION		IMS	GM	SR	27.05.22

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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

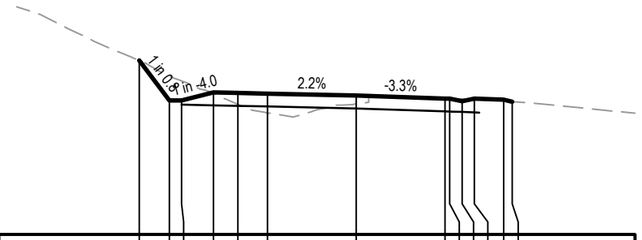
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 52 OF 54

Original Size: A3
Drawing No: 12542101-C3852
Rev: 0

Plot Date: 27 May 2022 - 1:15 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

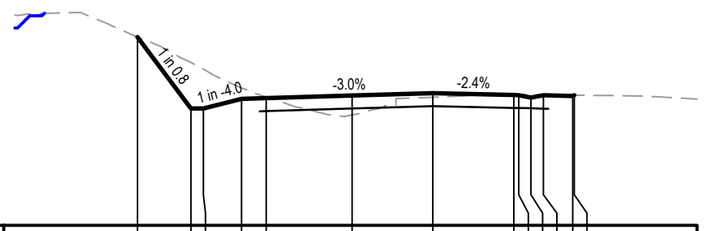
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 730.000

DESIGN LEVELS	737.089	735.459	735.459	735.785	735.762	735.736	735.655	735.536	735.529	735.429	735.329	735.493	735.406
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	737.09	736.45	736.26	735.75	735.29	734.94	735.32	735.54	735.53	735.52	735.50	735.43	735.41
DESIGN OFFSET	-8.843	-7.620	-7.120	-5.819	-4.819	-3.619	0.000	3.619	3.819	4.319	4.819	6.019	6.366

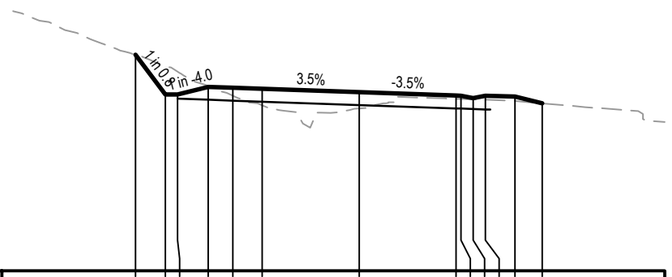
CH 2740.000



Level Datum = 733.000

DESIGN LEVELS	740.678	737.768	737.768	738.159	738.189	738.294	738.393	738.315	738.310	738.210	738.310	738.274	738.307
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	740.68	739.64	739.37	738.61	738.23	737.51	738.23	738.33	738.33	738.32	738.32	738.31	738.31
DESIGN OFFSET	-12.046	-9.864	-9.364	-7.800	-6.800	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	5.766

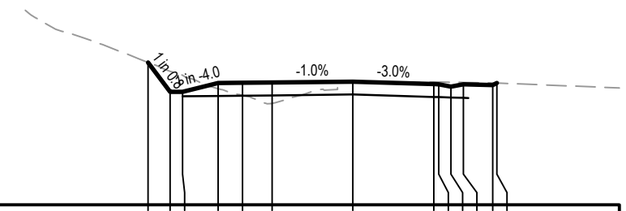
CH 2780.000



Level Datum = 727.000

DESIGN LEVELS	735.806	734.189	734.189	734.502	734.467	734.425	734.286	734.148	734.141	734.041	734.141	734.105	733.827
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	735.81	735.34	735.12	734.54	734.14	733.75	733.62	734.01	734.01	733.99	733.97	733.92	733.83
DESIGN OFFSET	-9.115	-7.903	-7.403	-6.150	-5.150	-3.950	0.000	3.950	4.150	4.650	5.150	6.350	7.462

CH 2720.000



Level Datum = 732.000

DESIGN LEVELS	737.809	736.605	736.605	736.968	736.978	736.990	737.024	736.925	736.919	736.819	736.919	736.883	736.965
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I
EXISTING LEVELS	737.81	737.45	737.29	736.74	736.47	736.14	736.99	737.01	737.01	737.00	736.99	736.97	736.97
DESIGN OFFSET	-8.355	-7.451	-6.951	-5.500	-4.500	-3.300	0.000	3.300	3.500	4.000	4.500	5.700	5.865

CH 2760.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

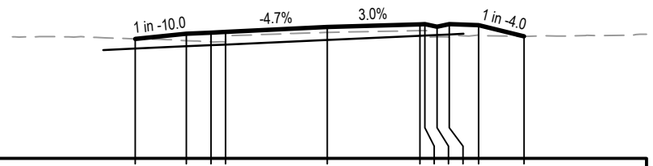
Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS MC20 - SHEET 53 OF 54

Original Size A3 — Drawing No: 12542101-C3853 — Rev: 0

Plot Date: 27 May 2022 - 1:15 PM Plotted By: Isaac Smith Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg

LEGEND

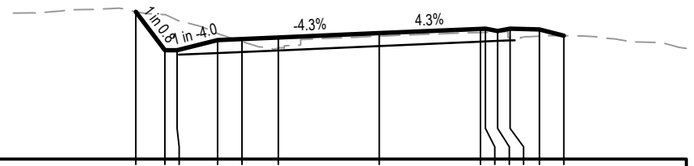
DESIGN SURFACE — DESIGN CATCH DRAIN — 2021 COMBINED SURVEY (POST CONSTRUCTION)



Level Datum = 737.000

DESIGN LEVELS	741.871	742.079	742.127	742.155	742.352	742.465	742.468	742.368	742.468	742.432	741.971			
CUT STRINGS	IA25	EV20	CE20		MC20	CE2I	CF0I	CB0I		EV2I	IA0I			
EXISTING LEVELS	741.87	741.80	741.75	742.00	742.13	742.21	742.21	741.95	741.96	742.03	741.97			
DESIGN OFFSET	-7.836	-5.750	-4.750	-4.150	0.000	3.770	3.970	4.470	4.970	6.170	8.014			

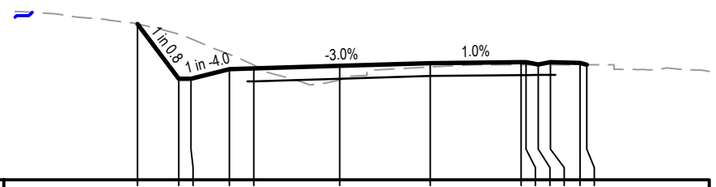
CH 2840.000



Level Datum = 736.000

DESIGN LEVELS	742.002	740.432	740.432	740.845	740.888	740.952	741.130	741.307	741.316	741.216	741.316	741.280	741.032	
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE2I	CF0I	CB0I		EV2I	IA0I	
EXISTING LEVELS	742.00	741.89	741.66	741.12	740.79	740.52	741.01	741.16	741.17	741.18	740.94	741.01	741.03	
DESIGN OFFSET	-9.928	-8.750	-8.250	-6.600	-5.600	-4.125	0.000	4.125	4.325	4.825	5.325	6.525	7.517	

CH 2820.000



Level Datum = 735.000

DESIGN LEVELS	741.358	739.124	739.124	739.515	739.545	739.650	739.761	739.797	739.799	739.699	739.799	739.763	739.694	
CUT STRINGS	EH20	IE20	IA20	EV20		CE20	MC20	CE21	CF0I	CB0I		EV2I	IA01	
EXISTING LEVELS	741.36	740.94	740.76	740.12	739.68	739.07	739.60	739.69	739.69	739.69	739.69	739.69	739.69	
DESIGN OFFSET	-11.938	-10.263	-9.763	-8.200	-7.200	-3.700	0.000	3.700	3.900	4.400	4.900	6.100	6.375	

CH 2800.000

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
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Drafting Check	B.DREW	Design Check	A.SNEDDON
Approved (Project Director)	S.ROOTH		
Date	27.05.2022		
Scale	1:250	This Drawing must not be used for Construction unless signed as Approved	

Client: UPPER HUNTER SHIRE COUNCIL
Project: COULSONS CREEK ROAD REHABILITATION
Title: CROSS SECTIONS
MC20 - SHEET 54 OF 54

Original Size A3 | Drawing No: 12542101-C3854 | Rev: 0

Plot Date: 27 May 2022 - 1:15 PM | Plotted By: Isaac Smith | Cad File No: C:\12d\SW\data\P-00-12D-001\22-12542101 - Coulsons Creek Road Rehab_1218\CADD\AutoCAD\DRG\22-12542101-DRG-C3800.dwg