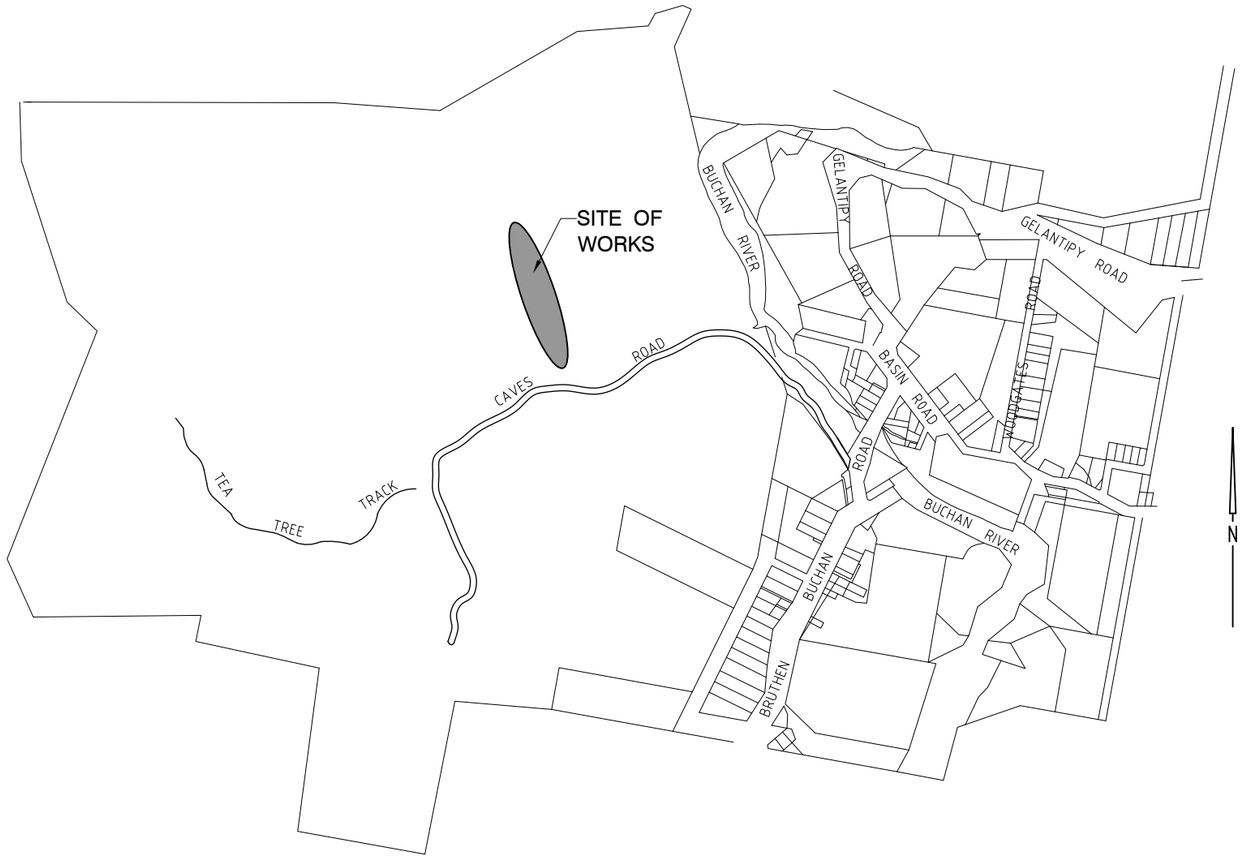
BUCHAN CAVES RESERVE
NORTH ARM DRAINAGE REDEVELOPMENT

DRG. No.	DESCRIPTION
	CULVERT & CREEK RESTORATION
2508/1000	LOCALITY PLANS AND DRAWING LIST
2508/1001	EXISTING CONDITIONS, CULVERT LOCATIONS
2508/1002	DEMOLITION LAYOUT PLAN - SHEET 1 OF 3
2508/1003	DEMOLITION LAYOUT PLAN - SHEET 2 OF 3
2508/1004	DEMOLITION LAYOUT PLAN - SHEET 3 OF 3
2508/1005	OVERALL LAYOUT PLAN - SHEET 1 OF 3
2508/1006	OVERALL LAYOUT PLAN - SHEET 2 OF 3
2508/1007	OVERALL LAYOUT PLAN - SHEET 3 OF 3
2508/1008	SCOUR SITE No. 1 & SCOUR SITE No. 2
2508/1009	SCOUR SITE No. 3
2508/1010	SCOUR SITE No. 4 & SCOUR SITE No. 5
2508/1011	SWALE OUTFALL
2508/1012	SWALE LONGITUDINAL SECTION - SHEET 1 OF 3
2508/1013	SWALE LONGITUDINAL SECTION - SHEET 2 OF 3
2508/1014	SWALE LONGITUDINAL SECTION - SHEET 3 OF 3
2508/1015	SWALE CROSS SECTIONS - SHEET 1 OF 2
2508/1016	SWALE CROSS SECTIONS - SHEET 1 OF 2
2508/1017	SWALE CONSTRUCTION TYPICAL SECTIONS & CONSTRUCTION NOTES
2508/1018	PLANTING SCHEDULE AND LANDSCAPE PLAN
2508/1019	TREE PROTECTION PLAN - SHEET 1 OF 3
2508/1020	TREE PROTECTION PLAN - SHEET 2 OF 3
2508/1021	TREE PROTECTION PLAN - SHEET 3 OF 3
	TURNING MOVEMENT
2508/001	TURNING MOVEMENT CFA 4.46m TRUCK



LOCALITY PLAN
NOT TO SCALE

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
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A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	NOT TO SCALE	PLAN No:	-

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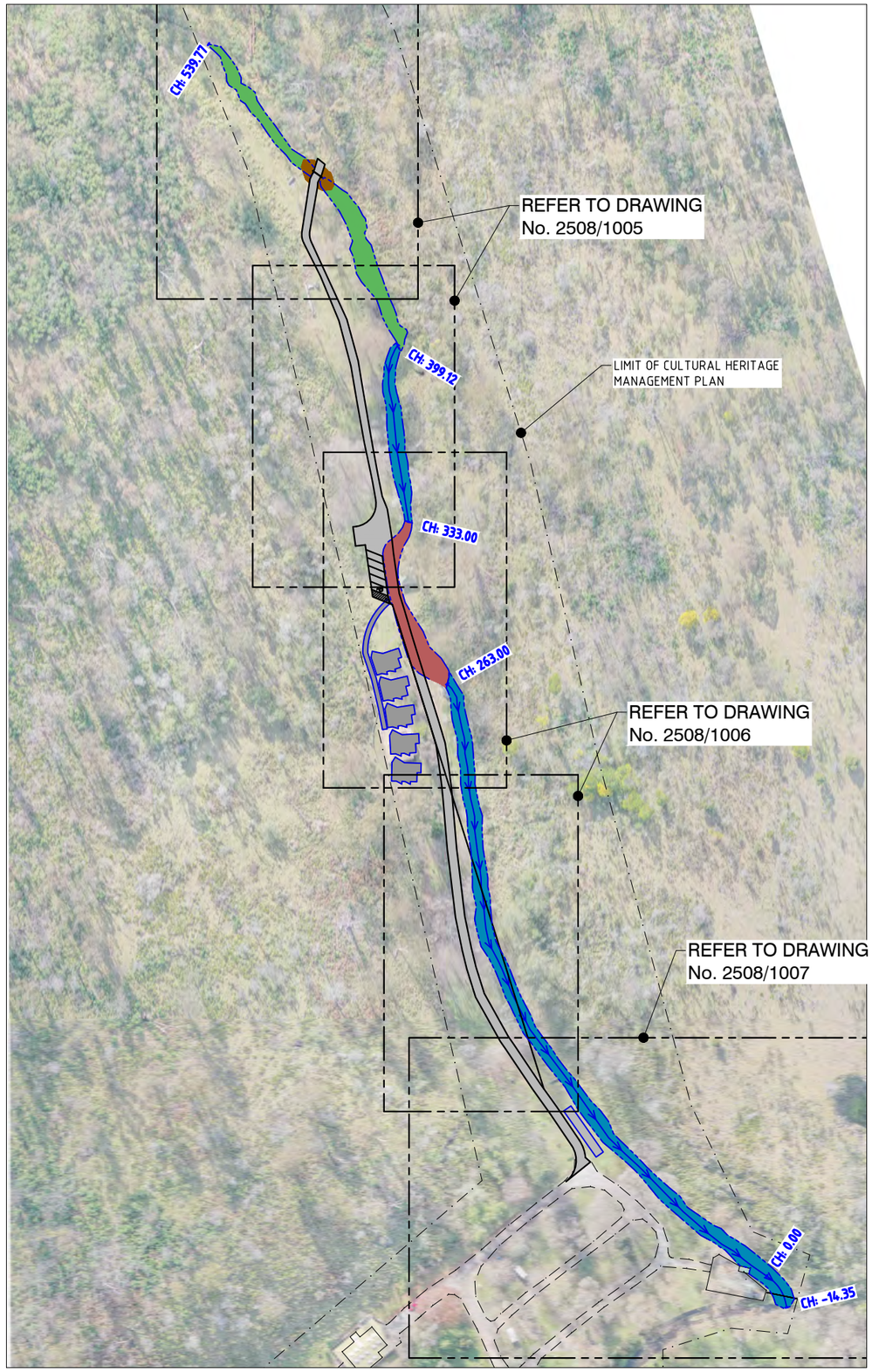
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1000.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
LOCALITY PLANS & DRAWING LIST

DATE: AUGUST 2022
SHEET 1 OF 22
DRAWING No: 2508/1000
Rv. F

NORTH ARM DRAINAGE REDEVELOPMENT
NOT TO SCALE



N

LEGEND:

- PROPOSED STORMWATER
- PROPOSED ACCESS TRACK
- PROPOSED CONSTRUCTED SWALE
- PROPOSED REHABILITATED STREAM BED
- NON-SWALED FLOOD AREA (TO PRESERVE TREES)
- PROPOSED SWALE INVERT
- PROPOSED EXERNAL BATTER LINES
- CH: 450.00 — PROPOSED SWALE CHAINAGES
- CH 250.00 — PROPOSED ROAD CHAINAGES
- LIMIT OF CULTURAL HERITAGE MANAGEMENT PLAN
- 18 — EXISTING CONTOURS (1.0m INTERVAL)
- EXISTING EDGE OF SEAL
- SWD — EXISTING STORMWATER DRAINAGE
- D — EXISTING DRAINAGE
- S — EXISTING SEWER
- W — EXISTING WATERMAIN
- E — EXISTING ELECTRICITY
- V — EXISTING OVERHEAD ELECTRICITY
- T — EXISTING TELSTRA
- EXISTING TREES
- EXISTING TREES TO BE REMOVED

GENERAL NOTES:

1. PARKS VICTORIA CONTRACT SPECIFICATION TO BE READ IN CONJUNCTION WITH THESE DRAWINGS.
2. CHAINAGES ARE CENTRE-LINE CHAINAGES UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR IS TO LOCATE ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF EARTHWORKS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH OCCUPATIONAL HEALTH AND SAFETY GUIDELINES.
5. ANY PIPE REPLACEMENT TO BE MIN CLASS 2 RRJ RCP OR FRCP UNLESS OTHERWISE AGREED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
6. SEDIMENT CONTROL STRUCTURES TO BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATION AND TO THE APPROVAL OF THE SUPERINTENDENT.

20 10 0 20 40 60 80
1 : 1000 AT A1
1 : 2000 AT A3

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO
ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

dlcs AS/NZS ISO 9001 CERTIFIED

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

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CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1001.dwg

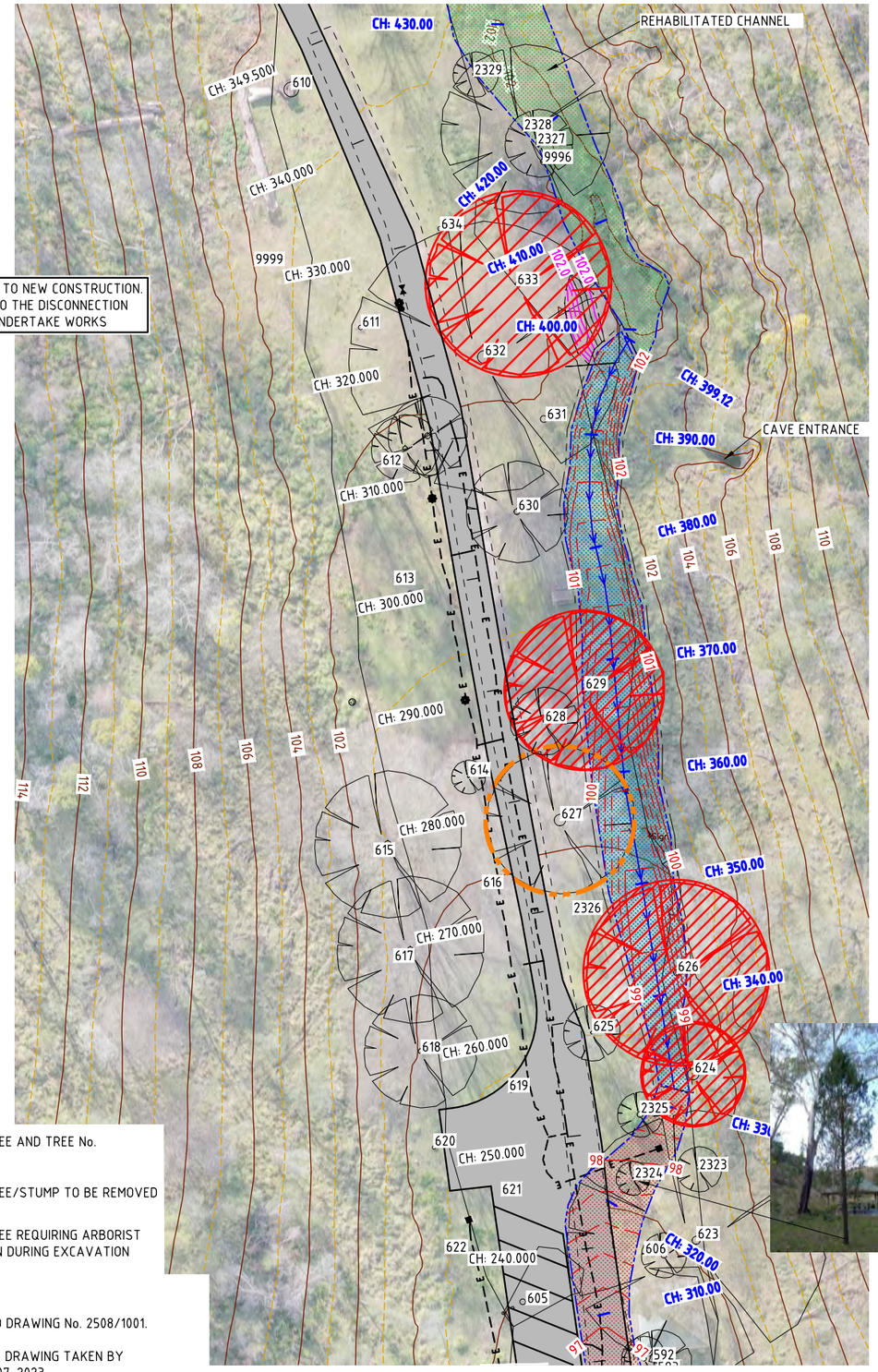
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

EXISTING CONDITIONS AND CULVERT LOCATIONS

DATE: AUGUST 2022
SHEET 2 OF 22
DRAWING No: 2508/1001
Rv. F

FOR CONTINUATION REFER TO BELOW LEFT

CONTRACTOR TO LOCATE AND DEPTH ALL EXISTING SERVICES IN CLOSE PROXIMITY TO NEW CONSTRUCTION. CONTRACTOR TO ALLOW TO LIAISE WITH RELEVANT AUTHORITIES IN RELATION TO THE DISCONNECTION AND REMOVAL OF EXISTING SERVICES AND INFRASTRUCTURE REQUIRED TO UNDERTAKE WORKS



FOR CONTINUATION REFER TO ABOVE RIGHT

FOR CONTINUATION REFER TO DRAWING No. 2508/1003

LEGEND:

- 572 — EXISTING TREE AND TREE No.
- EXISTING TREE/STUMP TO BE REMOVED
- EXISTING TREE REQUIRING ARBORIST SUPERVISION DURING EXCAVATION

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.
2. REFERENCE PHOTOS USED ON THIS DRAWING TAKEN BY ARBORICULTURE PTY. LTD ON 19-07-2023.

10 5 0 10 20

1 : 250 (A1)
1 : 500 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
Email: consult@crossco.com.au
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DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	1:250	PLAN No:	-

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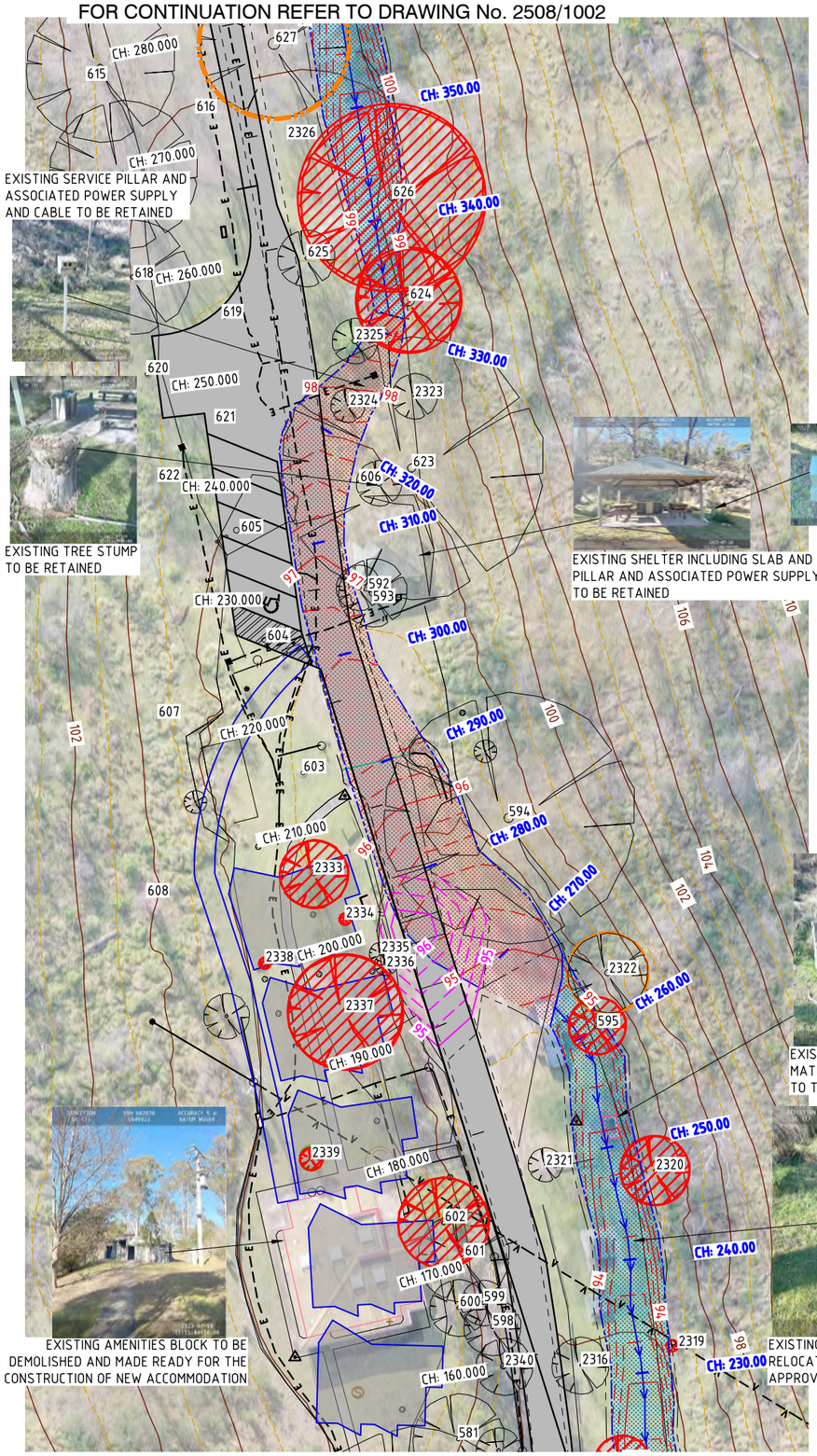
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

DEMOLITION PLAN - SHEET 1 OF 3

DATE: AUGUST 2022
SHEET 3 OF 22
DRAWING No: 2508/1002
Rv. F

FOR CONTINUATION REFER TO DRAWING No. 2508/1002



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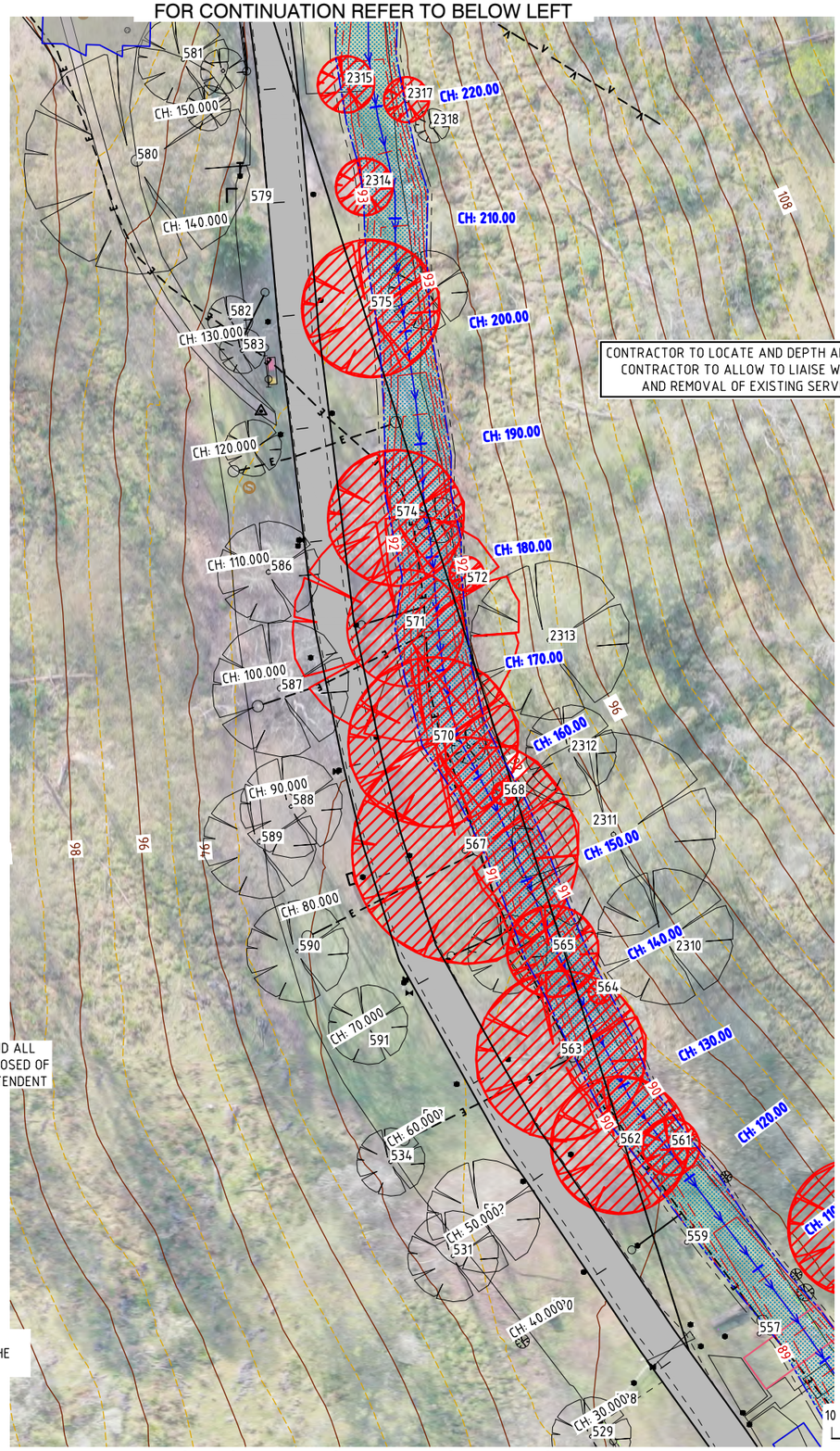

CONTRACTOR TO LOCATE AND DEPTH ALL EXISTING SERVICES IN CLOSE PROXIMITY TO NEW CONSTRUCTION. CONTRACTOR TO ALLOW TO LIAISE WITH RELEVANT AUTHORITIES IN RELATION TO THE DISCONNECTION AND REMOVAL OF EXISTING SERVICES AND INFRASTRUCTURE REQUIRED TO UNDERTAKE WORKS

N

LEGEND:

- 572 — EXISTING TREE AND TREE No.
- EXISTING TREE/STUMP TO BE REMOVED
- EXISTING TREE REQUIRING ARBORIST SUPERVISION DURING EXCAVATION

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.
2. REFERENCE PHOTOS USED ON THIS DRAWING TAKEN BY CROSSCO CONSULTING DURING SITE INSPECTION ON 18-07-2023.

10 5 0 10 20

1 : 250 (A1)
1 : 500 (A3)

FOR CONTINUATION REFER TO DRAWING No. 2508/1004

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
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C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
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Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

dlcs ASINZS ISO 9001 Certified

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DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	1 : 250	PLAN No:	-

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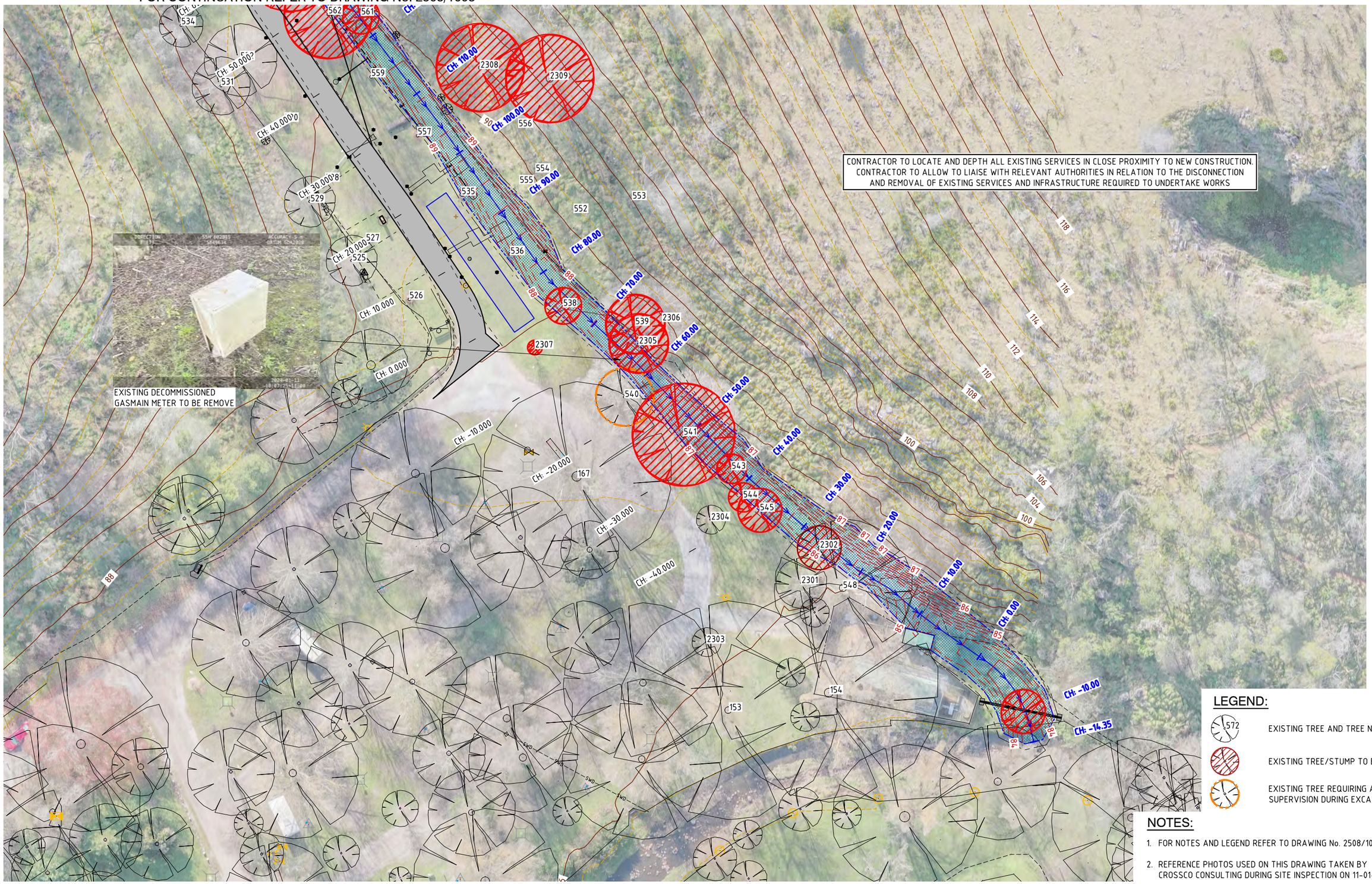
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

DEMOLITION PLAN - SHEET 2 OF 3

DATE: AUGUST 2022
SHEET 4 OF 22
DRAWING No: 2508/1003
Rv. F

FOR CONTINUATION REFER TO DRAWING No. 2508/1003



LEGEND:

- 572 — EXISTING TREE AND TREE No.
- EXISTING TREE/STUMP TO BE REMOVED
- EXISTING TREE REQUIRING ARBORIST SUPERVISION DURING EXCAVATION

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.
2. REFERENCE PHOTOS USED ON THIS DRAWING TAKEN BY CROSSCO CONSULTING DURING SITE INSPECTION ON 11-01-2024.

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1 : 500 (A3)

Rv.	APPR.	DATE	REVISIONS
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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
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Email: consult@crossco.com.au

DESIGNED:	M.S.
DRAWN:	A.M.M
CHECKED:	S.G.
APPROVED:	A.G.
SCALE:	1 :250

A1

DATUM:
HEIGHT: AHD
HORIZONTAL: MGA2020

SURVEY REF: -
PLAN No: -

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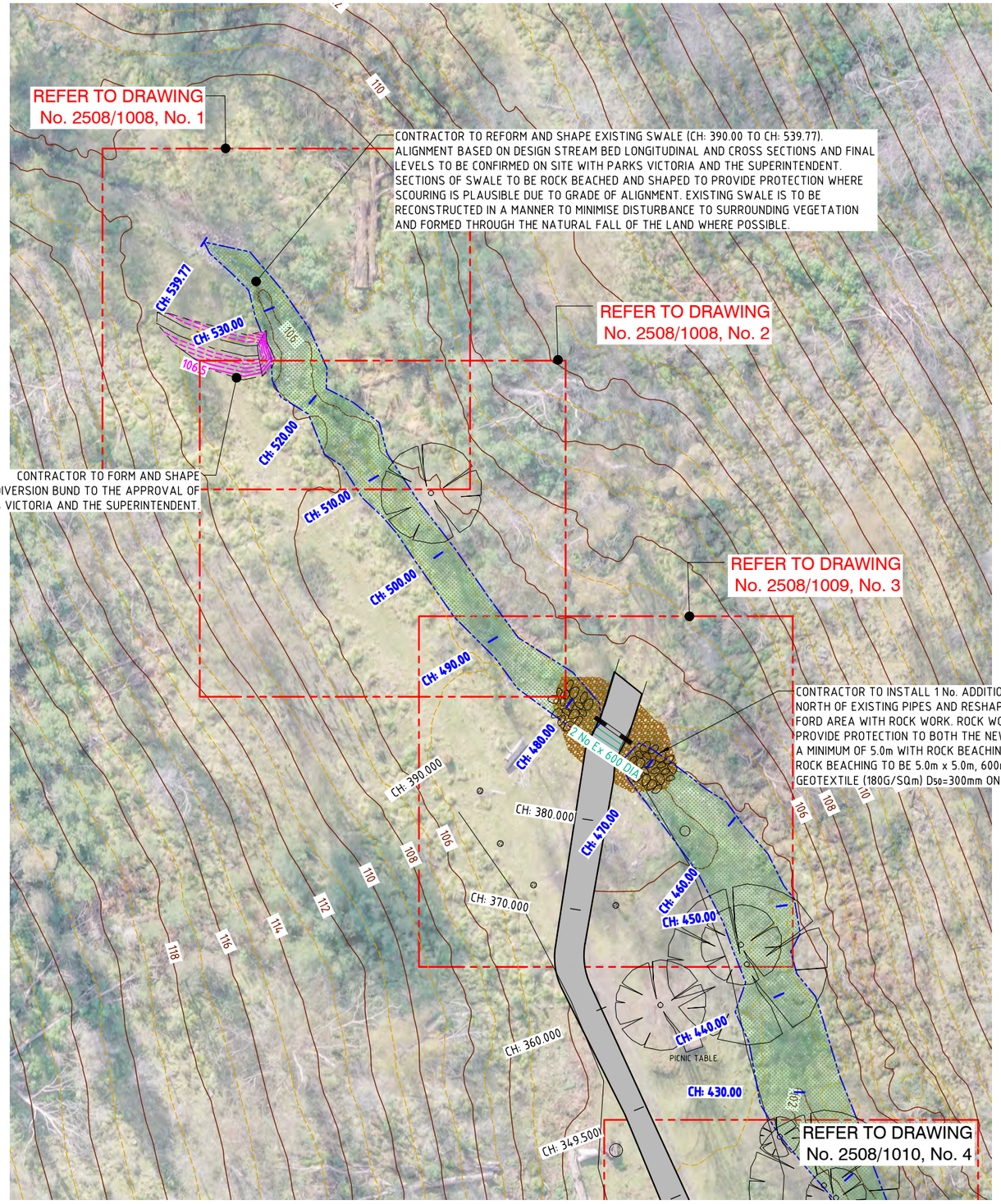
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

DEMOLITION PLAN - SHEET 3 OF 3

DATE: AUGUST 2022
SHEET 5 OF 22
DRAWING No: 2508/1004
Rv. F



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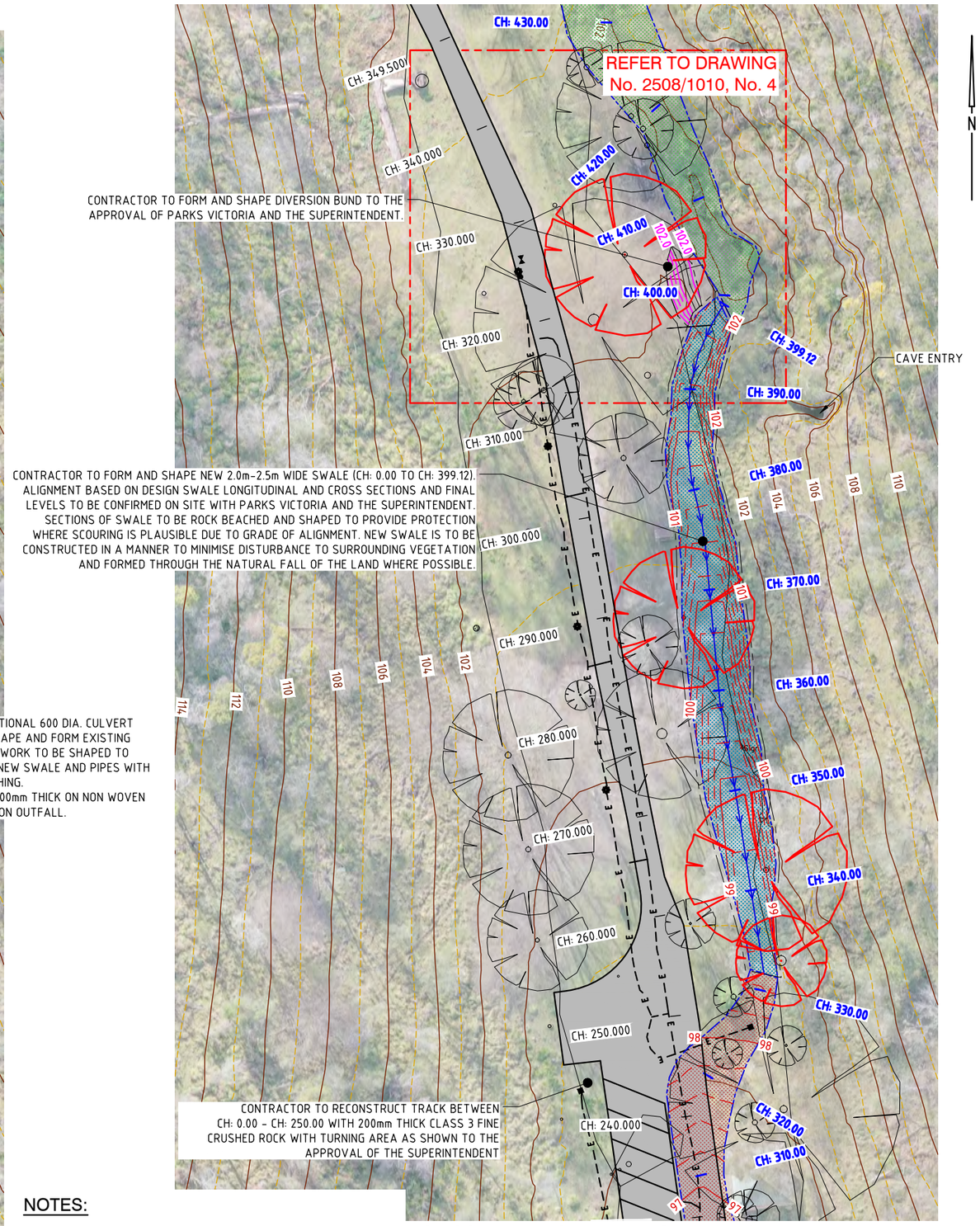

FOR CONTINUATION REFER TO DRAWING No. 2508/1006

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.

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1 : 250 (A1)
1 : 500 (A3)

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Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	1:250	PLAN No:	-

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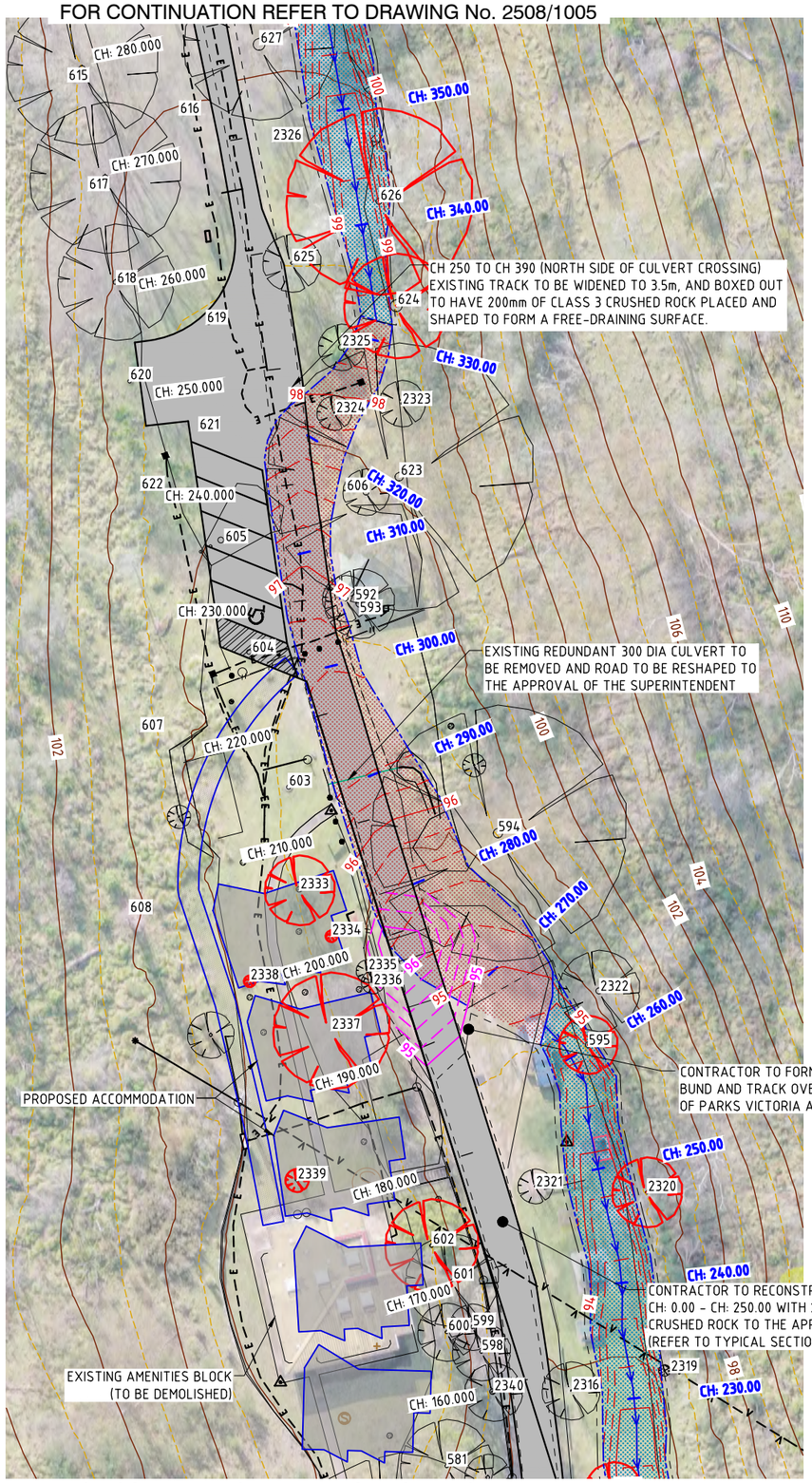
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
OVERALL
LAYOUT PLAN - SHEET 1 OF 3

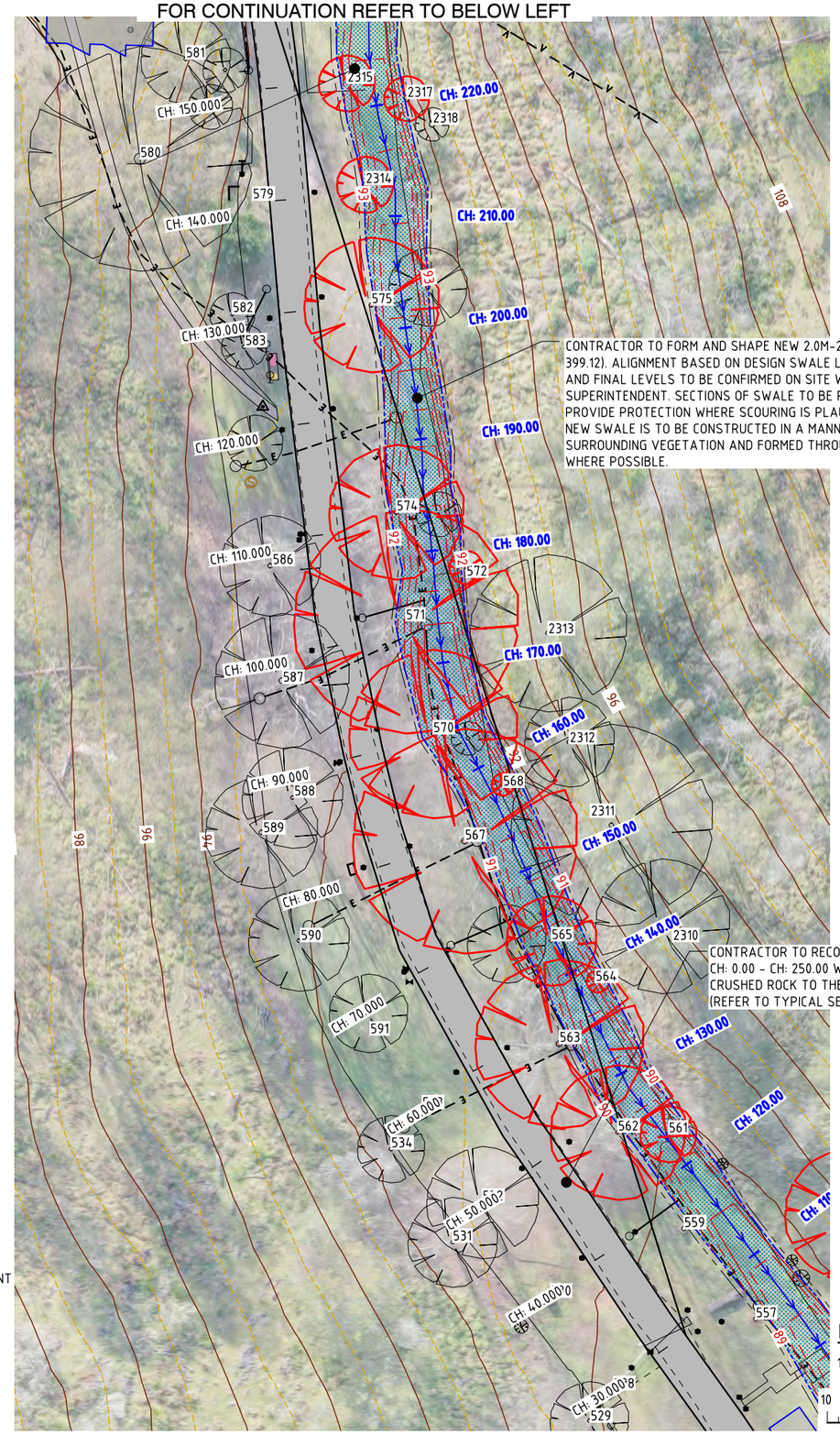
DATE: AUGUST 2022
SHEET 6 OF 22
DRAWING No: 2508/1005
Rv. F

FOR CONTINUATION REFER TO DRAWING No. 2508/1005



FOR CONTINUATION REFER TO ABOVE RIGHT

FOR CONTINUATION REFER TO BELOW LEFT



N

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.

10 5 0 10 20

1 : 250 (A1)
1 : 500 (A3)

FOR CONTINUATION REFER TO DRAWING No. 2508/1007

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCo ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

dlcs ASINZS ISO 9001 Registered

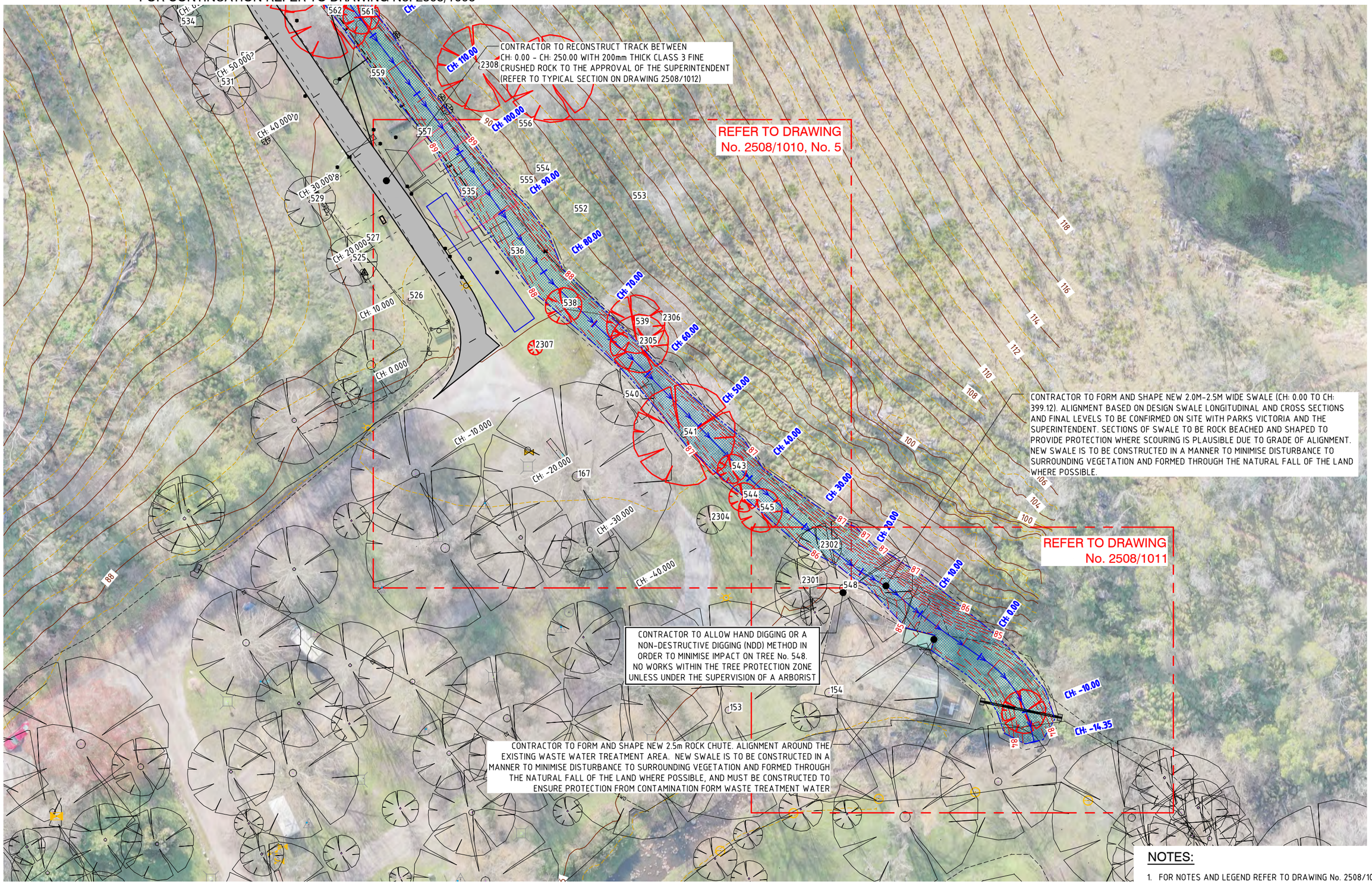
DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	1 : 250	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Xref\2508 BP.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1006.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
OVERALL
LAYOUT PLAN - SHEET 2 OF 3

DATE: AUGUST 2022
SHEET 7 OF 22
DRAWING No: 2508/1006
Rv. F

FOR CONTINUATION REFER TO DRAWING No. 2508/1006



NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.

10 5 0 10 20

1 : 250 (A1)
1 : 500 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

dlcs AS/NZS ISO 9001 QUALITY

DESIGNED:	M.S.
DRAWN:	A.M.M
CHECKED:	S.G.
APPROVED:	A.G.
SCALE:	1 :250

A1

DATUM:
HEIGHT: AHD
HORIZONTAL: MGA2020

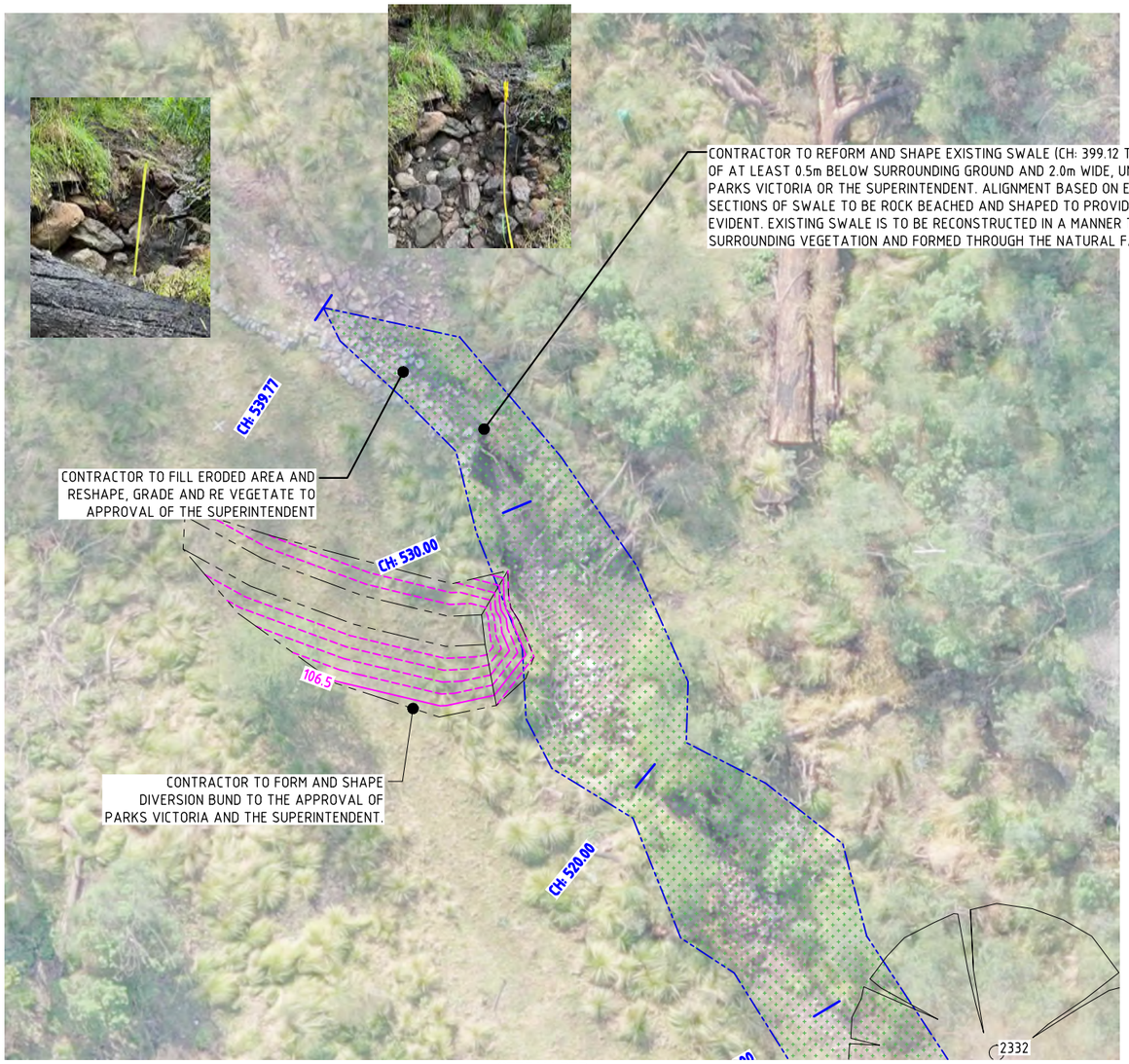
SURVEY REF: -
PLAN No: -

XREF ATTACHED: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Xref\2508 BP.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1007.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL

BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
OVERALL
LAYOUT PLAN - SHEET 3 OF 3

DATE: AUGUST 2022
SHEET 8 OF 22
DRAWING No:
2508/1007
Rv. F



STREAM BED 1

SCOUR SITE No. 1

SCALE : 1: 200 AT A3

SCOUR SITE No. 2

SCOUR SITE No. 2

SCALE : 1: 200 AT A3

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.
2. REFERENCE PHOTOS USED ON THIS DRAWING TAKEN BY CROSSCO CONSULTING DURING SITE INSPECTION ON 22-06-2022.

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCo ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

dlcs ASINZS ISO 9001 Certified

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1008.dwg

PARKS VICTORIA

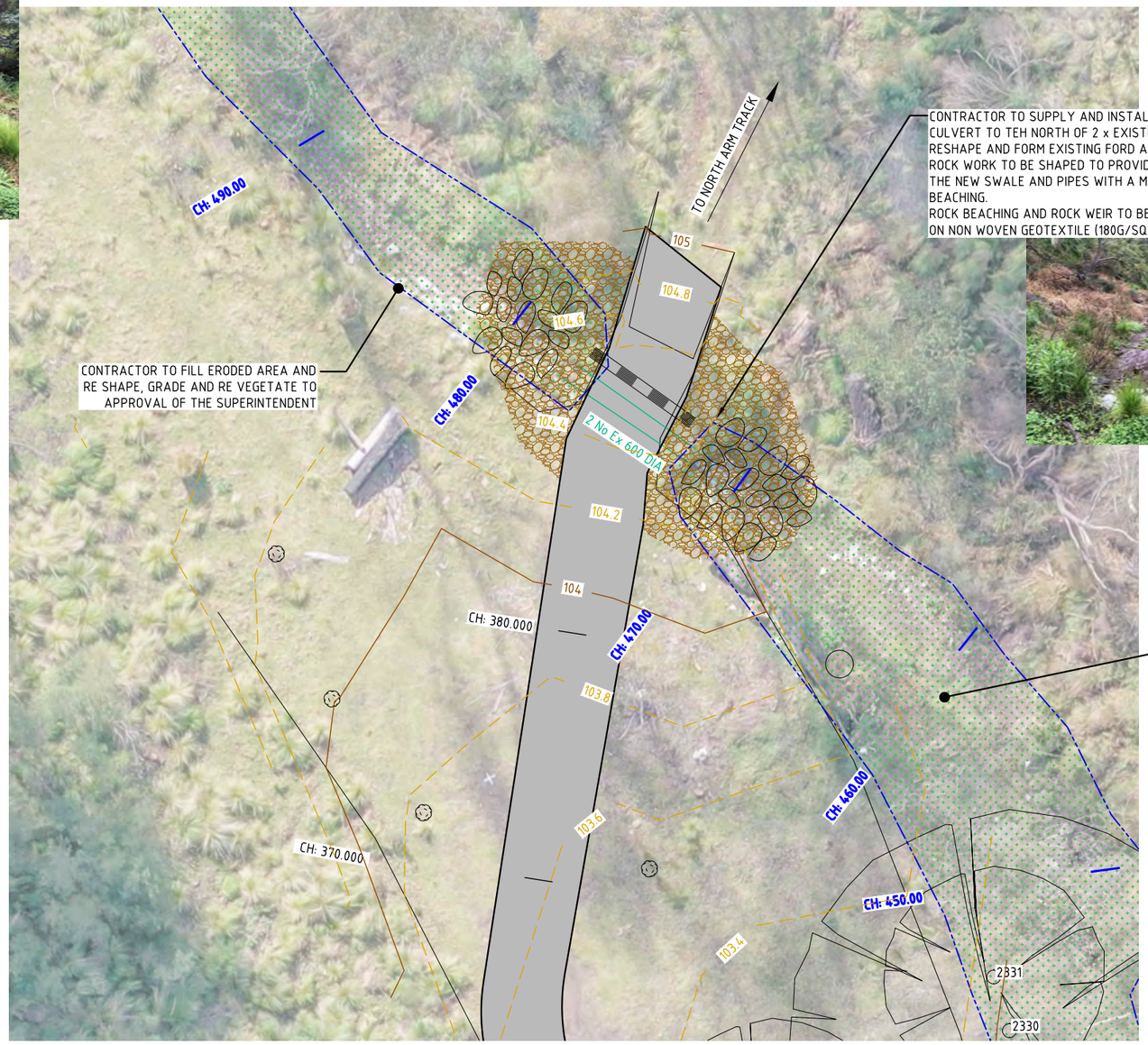
EAST GIPPSLAND SHIRE COUNCIL

BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

SCOUR SITE No. 1 & SCOUR SITE No. 2

DATE: AUGUST 2022
SHEET 9 OF 22
DRAWING No: 2508/1008
Rv. F

LOOKING UPSTREAM



CONTRACTOR TO FILL ERODED AREA AND RE SHAPE, GRADE AND RE VEGETATE TO APPROVAL OF THE SUPERINTENDENT

CONTRACTOR TO SUPPLY AND INSTALL ADDITIONAL 600 DIA. CULVERT TO TEH NORTH OF 2 x EXISTING CULVERTS AND RESHAPE AND FORM EXISTING FORD AREA WITH ROCK WORK. ROCK WORK TO BE SHAPED TO PROVIDE PROTECTION TO BOTH THE NEW SWALE AND PIPES WITH A MINIMUM OF 5.0m WITH ROCK BEACHING.
ROCK BEACHING AND ROCK WEIR TO BE 5.0m x 5.0m, 600mm THICK ON NON WOVEN GEOTEXTILE (180G/SQm) D_{50}=300mm ON OUTFALL.

LOOKING DOWNSTREAM

CONTRACTOR TO REFORM AND SHAPE EXISTING SWALE (CH: 390.00 TO CH: 539.77). ALIGNMENT BASED ON DESIGN STREAM BED LONGITUDINAL AND CROSS SECTIONS AND FINAL LEVELS TO BE CONFIRMED ON SITE WITH PARKS VICTORIA AND THE SUPERINTENDENT. SECTIONS OF SWALE TO BE ROCK BEACHED AND SHAPED TO PROVIDE PROTECTION WHERE SCOURING IS PLAUSIBLE DUE TO GRADE OF ALIGNMENT. EXISTING SWALE IS TO BE RECONSTRUCTED IN A MANNER TO MINIMISE DISTURBANCE TO SURROUNDING VEGETATION AND FORMED THROUGH THE NATURAL FALL OF THE LAND WHERE POSSIBLE.

2 x 600 DIA. CULVERT

SCOUR SITE No. 3

SCALE : 1: 200 AT A3

2 No. 600 DIA. PIPES

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.
2. REFERENCE PHOTOS USED ON THIS DRAWING TAKEN BY CROSSCO CONSULTING DURING SITE INSPECTION ON 10-10-2021.

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
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C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

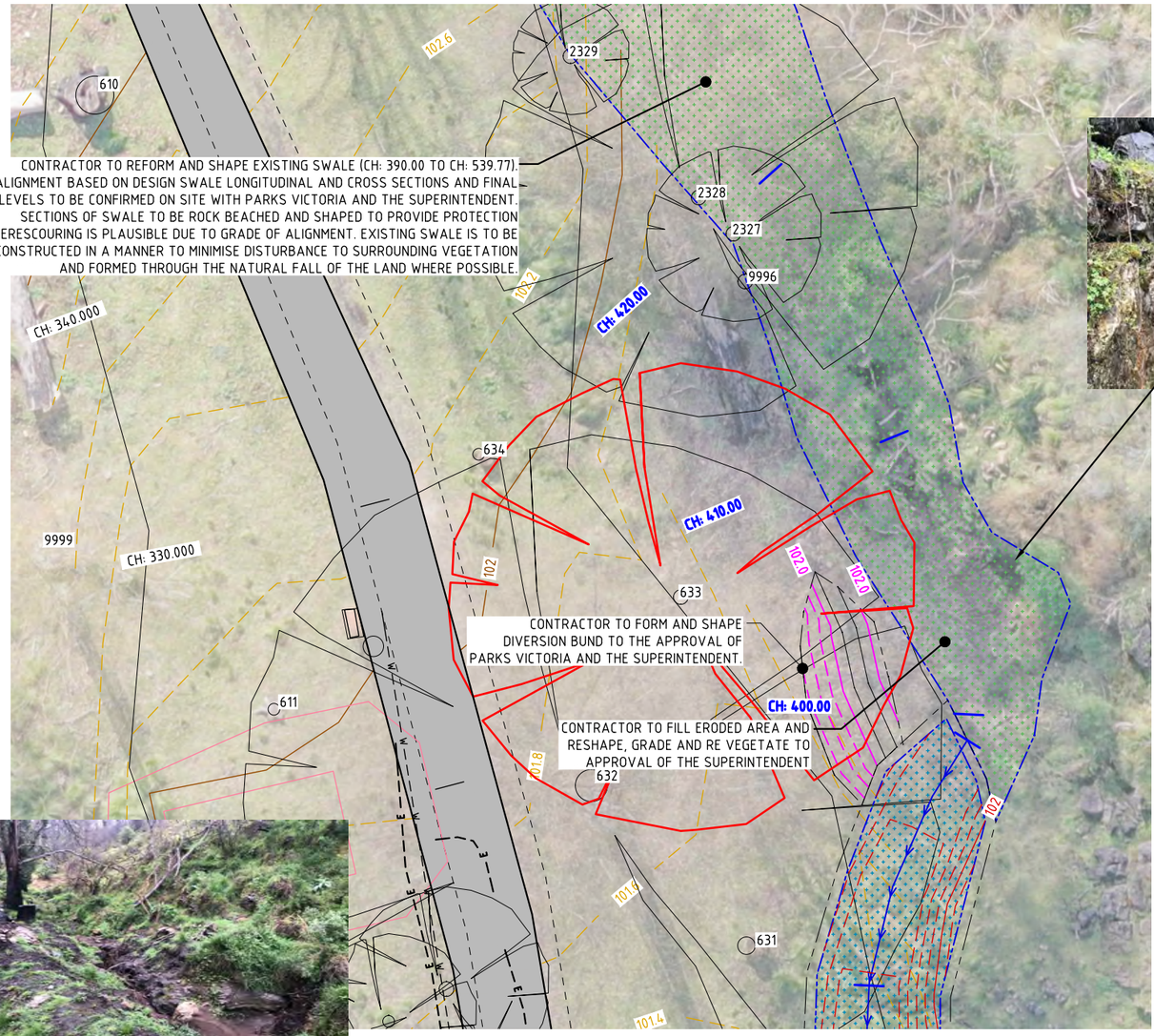
DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1009.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

SCOUR SITE No. 3

DATE: AUGUST 2022
SHEET 10 OF 22
DRAWING No: 2508/1009
Rv. F



CAVE ENTRY

NORTH ARM BOTTOM AREA

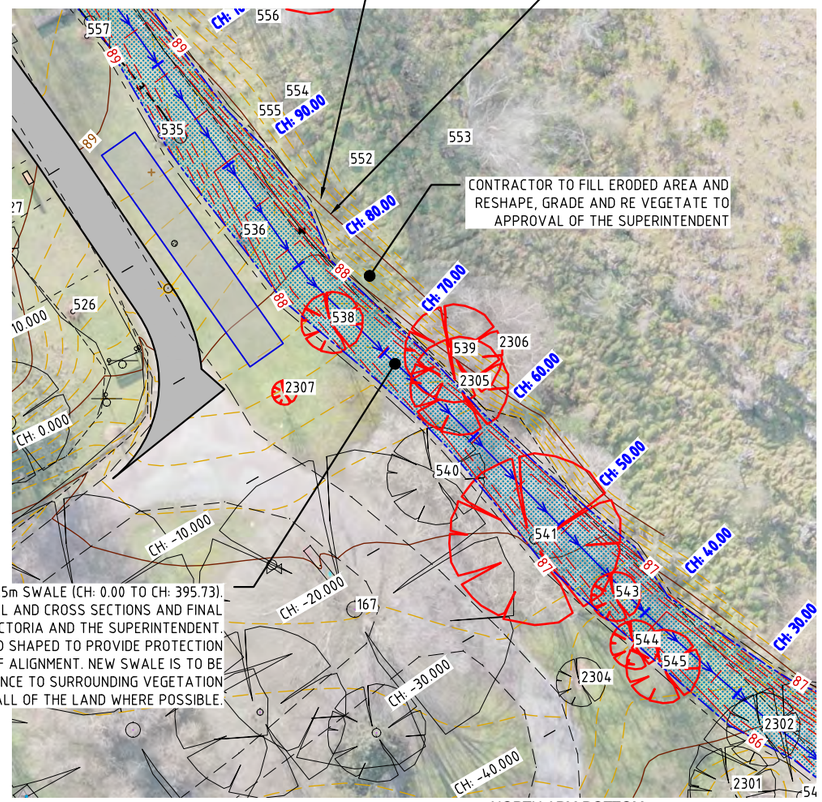
NORTH ARM BOTTOM AREA

CH: 400.00 - CH:430.00 SCOUR SITE

CAVE ENTRY

SCOUR SITE No. 4

SCALE : 1: 200 AT A3



NORTH ARM BOTTOM

SCOUR SITE No. 5

SCALE : 1: 500 AT A3

NORTH ARM BOTTOM PICNIC SITE

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.
2. REFERENCE PHOTOS USED ON THIS DRAWING TAKEN BY CROSSCO CONSULTING DURING SITE INSPECTION ON 10-10-2021 & 22-06-2022.

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
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Email: consult@crossco.com.au

Parks VICTORIA

dlcs ASINZS ISO 9001 Certified

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1010.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

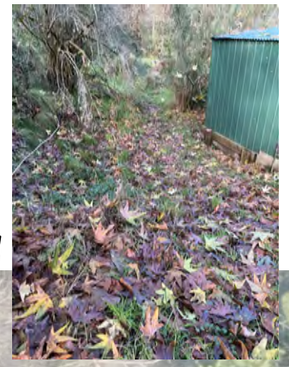
SCOUR SITE No. 4 & SCOUR SITE No. 5

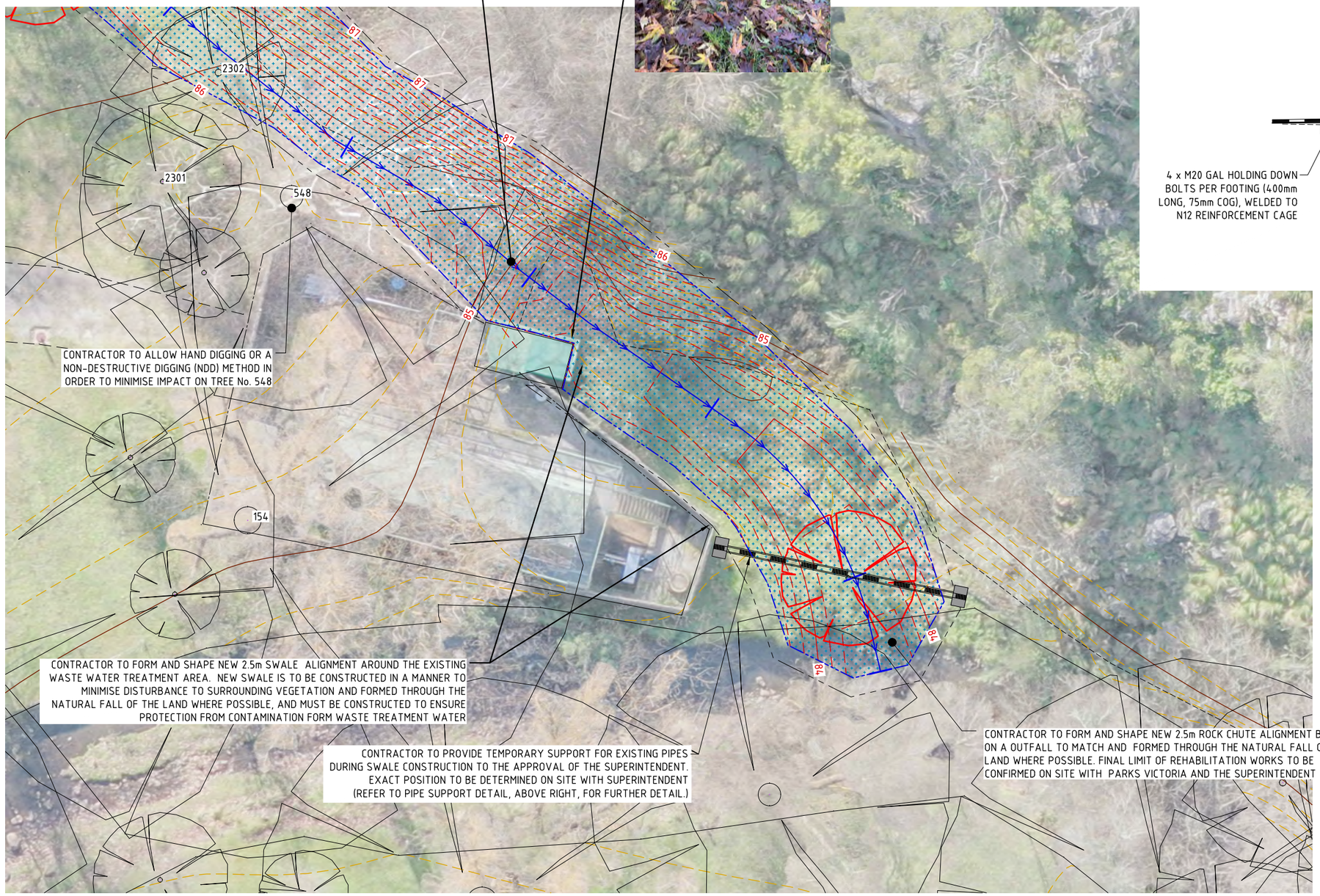
DATE: AUGUST 2022
SHEET 11 OF 22
DRAWING No: 2508/1010
Rv. F

N

CONTRACTOR TO FORM AND SHAPE NEW 2.5m SWALE (CH: 0.00 TO CH: 395.73). ALIGNMENT BASED ON DESIGN SWALE LONGITUDINAL AND CROSS SECTIONS AND FINAL LEVELS TO BE CONFIRMED ON SITE WITH PARKS VICTORIA AND THE SUPERINTENDENT. SECTIONS OF SWALE TO BE ROCK BEACHED AND SHAPED TO PROVIDE PROTECTION WHERE SCOURING IS PLAUSIBLE DUE TO GRADE OF ALIGNMENT. NEW SWALE IS TO BE CONSTRUCTED IN A MANNER TO MINIMISE DISTURBANCE TO SURROUNDING VEGETATION AND FORMED THROUGH THE NATURAL FALL OF THE LAND WHERE POSSIBLE.

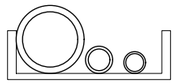
NEW SWALE TO BE SHAPED CLEAR OF EXISTING BUILDING





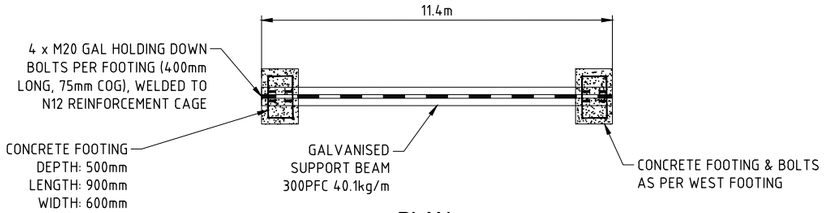
SWALE OUTFALL

SCALE : 1: 200 AT A3

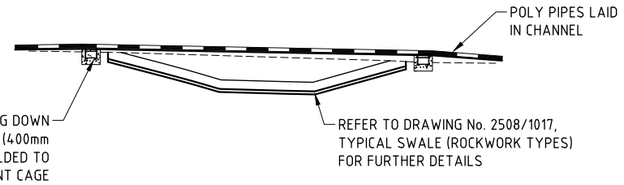


TYPICAL PIPE ARANGEMENT

NOT TO SCALE



PLAN



ELEVATION

PIPE SUPPORT DETAIL

NOT TO SCALE

NEW ROCK CHUTE TO BE SHAPED TO MATCH AND FORM INTO EXISTING NATURAL FALL OF THE LAND

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.
2. REFERENCE PHOTOS USED ON THIS DRAWING TAKEN BY CROSSCO CONSULTING DURING SITE INSPECTION ON 10-10-2021.

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
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Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

dlcs AS/NZS ISO 9001 CERTIFIED

DESIGNED:	M.S.
DRAWN:	A.M.M
CHECKED:	S.G.
APPROVED:	A.G.
SCALE:	AS SHOWN

A1

DATUM:
HEIGHT: AHD
HORIZONTAL: MGA2020

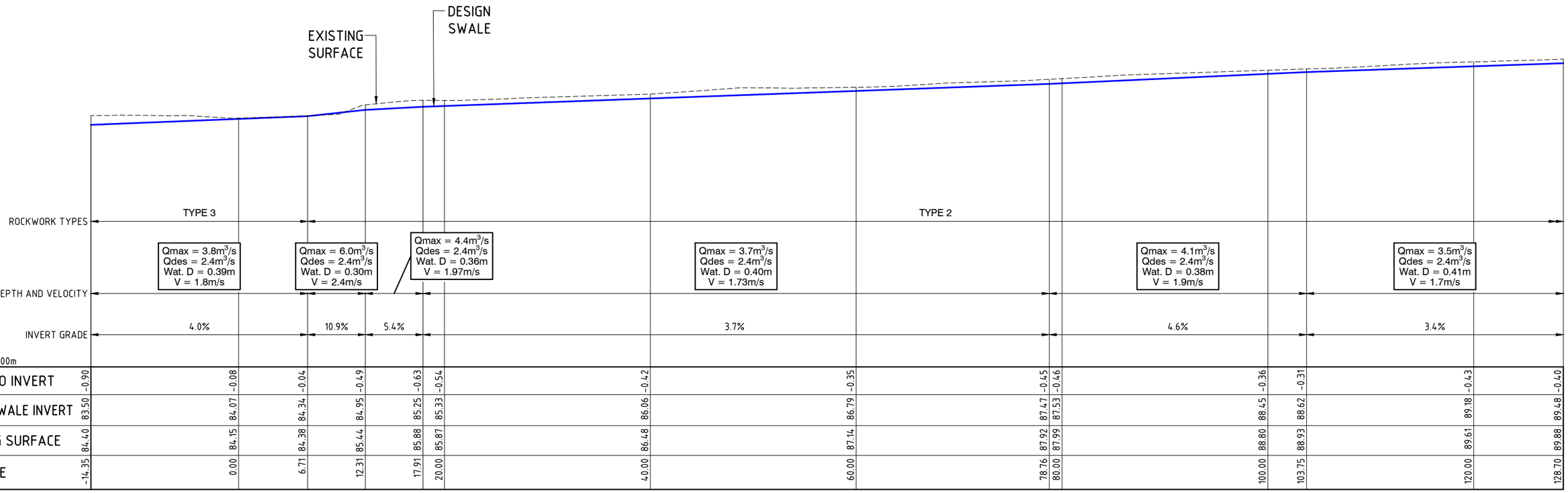
SURVEY REF: -
PLAN No: -

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1011.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

SWALE OUTFALL

DATE: AUGUST 2022
SHEET 12 OF 22
DRAWING No: 2508/1011
Rv. F



Datum 60.000m

DEPTH TO INVERT	-0.90	-0.08	-0.04	-0.49	-0.63	-0.54	-0.42	-0.35	-0.45	-0.46	-0.36	-0.31	-0.43	-0.40
DESIGN SWALE INVERT	83.50	84.07	84.34	84.95	85.25	85.33	86.06	86.79	87.47	87.53	88.45	88.62	89.18	89.48
EXISTING SURFACE	84.40	84.15	84.38	85.44	85.88	85.87	86.48	87.14	87.92	87.99	88.80	88.93	89.61	89.88
CHAINAGE	-14.35	0.00	6.71	12.31	17.91	20.00	40.00	60.00	78.76	80.00	100.00	103.75	120.00	128.70

FOR CONTINUATION REFER TO DRAWING No. 2508/1013

LONGITUDINAL SECTION

SWALE INVERT

SCALE H. 1:200, V. 1:200 AT A1
H. 1:400, V. 1:400 AT A3

10 5 0 10

1 : 200 (A1)
1 : 400 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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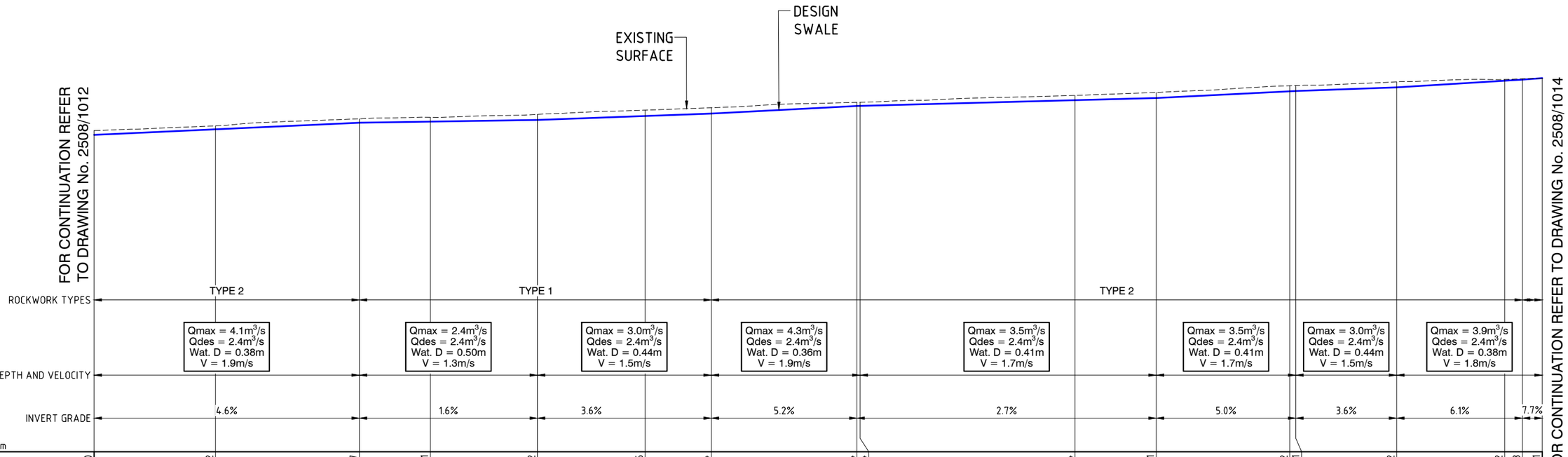
Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
Email: consult@crossco.com.au

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1012.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
SWALE LONGITUDINAL SECTION - SHEET 1 OF 3

DATE: AUGUST 2022
SHEET 13 OF 22
DRAWING No: 2508/1012
Rv. F



Datum 60.000m

DEPTH TO INVERT	-0.40	-0.32	-0.37	-0.41	-0.52	-0.55	-0.54	-0.34	-0.34	-0.44	-0.51	-0.52	-0.51	-0.52	-0.12	-0.08	0.01
DESIGN SWALE INVERT	89.48	90.00	90.61	90.71	90.87	91.24	91.46	92.17	92.18	92.71	92.91	93.53	93.56	93.90	94.52	94.62	94.76
EXISTING SURFACE	89.88	90.32	90.98	91.12	91.39	91.78	92.00	92.51	92.51	93.15	93.42	94.05	94.07	94.42	94.64	94.69	94.75
CHAINAGE	128.70	140.00	153.40	160.00	169.97	180.00	186.15	199.71	200.00	220.00	227.57	240.00	240.56	249.95	260.00	261.65	263.50

LONGITUDINAL SECTION

SWALE INVERT

SCALE H. 1:200, V. 1:200 AT A1
H. 1:400, V. 1:400 AT A3

10 5 0 10 1 : 200 (A1) 1 : 400 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Parks VICTORIA
Email: consult@crossco.com.au

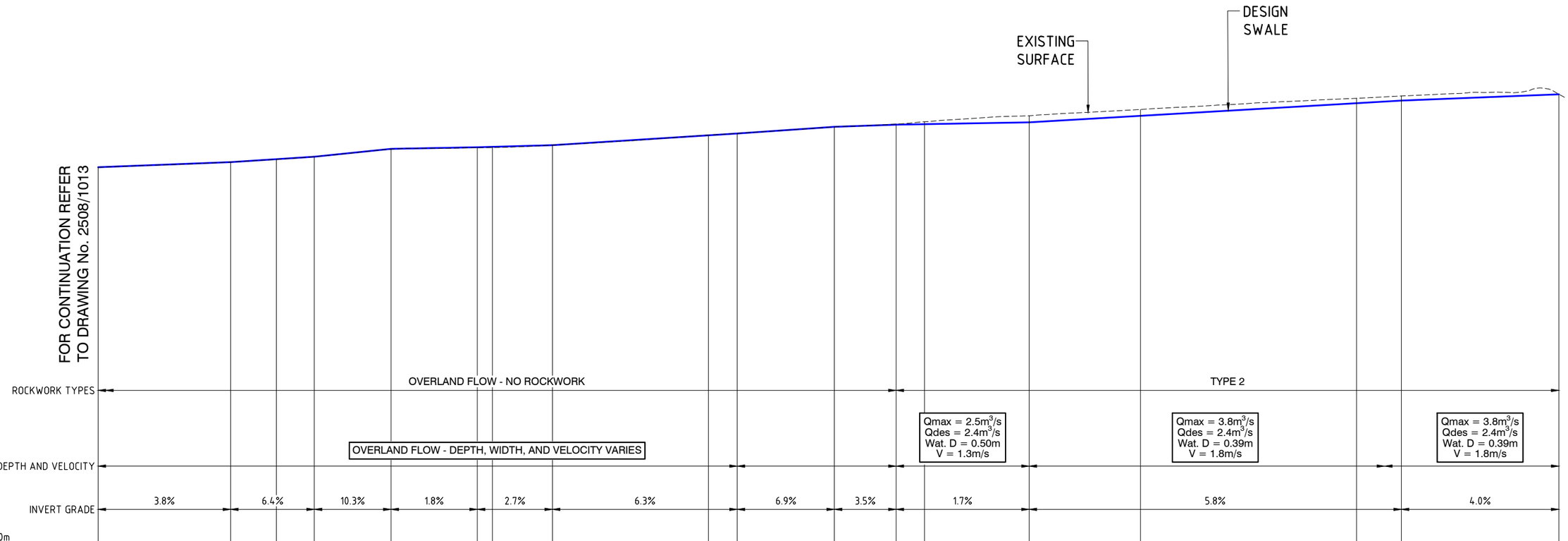
dlcs AS/NZS ISO 9001 QUALITY

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1013.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
SWALE LONGITUDINAL SECTION - SHEET 2 OF 3

DATE: AUGUST 2022
SHEET 14 OF 22
DRAWING No: 2508/1013
Rv. F



Datum 60.000m

DEPTH TO INVERT	0.01	0.00	0.03	-0.00	0.04	0.04	0.07	-0.00	-0.02	-0.02	0.00	-0.05	-0.22	-0.61	-0.59	-0.45	-0.42	-0.01
DESIGN SWALE INVERT	94.76	95.23	95.50	95.73	96.46	96.61	96.64	96.80	97.71	97.88	98.49	98.69	98.74	98.91	99.51	100.68	100.92	101.50
EXISTING SURFACE	94.75	95.23	95.47	95.73	96.42	96.56	96.58	96.80	97.73	97.89	98.49	98.75	98.96	99.52	100.10	101.13	101.34	101.51
CHAINAGE	263.50	275.77	280.00	283.51	290.62	298.61	300.00	305.56	320.00	322.67	331.66	337.38	340.00	349.69	360.00	380.00	384.15	398.73

LONGITUDINAL SECTION

SWALE INVERT

SCALE H. 1:200, V. 1:200 AT A1
H. 1:400, V. 1:400 AT A3

10 5 0 10

1 : 200 (A1)
1 : 400 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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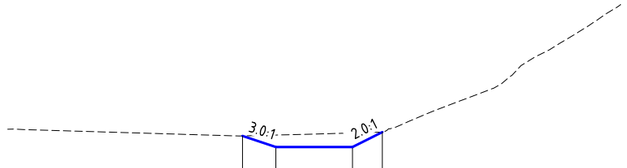
Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Parks VICTORIA
Email: consult@crossco.com.au

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1014.dwg

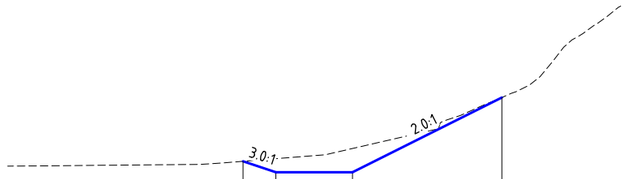
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
SWALE LONGITUDINAL SECTION - SHEET 3 OF 3

DATE: AUGUST 2022
SHEET 15 OF 22
DRAWING No: 2508/1014
Rv. F



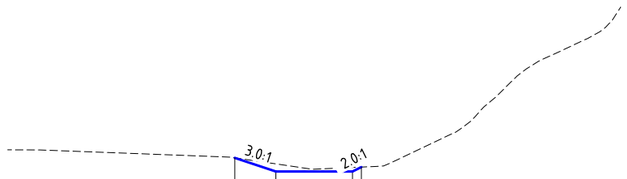
DATUM 85				
DESIGN SURFACE	86.42	86.06	86.06	86.54
EXISTING SURFACE	86.42	86.45	86.51	86.54
OFFSET	-2.34	-1.25	1.25	2.22

CH 40.00



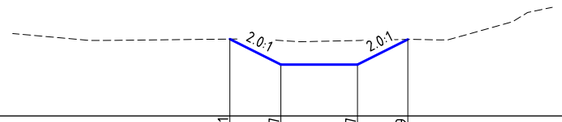
DATUM 84				
DESIGN SURFACE	85.68	85.33	85.33	87.76
EXISTING SURFACE	85.68	85.77	86.10	87.76
OFFSET	-2.32	-1.25	1.25	6.12

CH 20.00



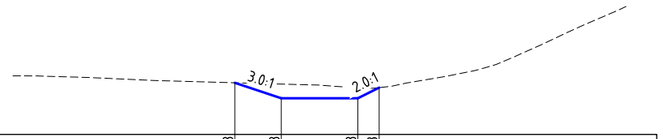
DATUM 83				
DESIGN SURFACE	84.52	84.07	84.07	84.22
EXISTING SURFACE	84.52	84.32	84.20	84.22
OFFSET	-2.59	-1.25	1.25	1.54

CH -0.00



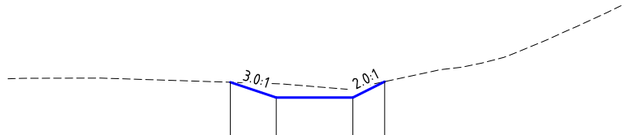
DATUM 82				
DESIGN SURFACE	84.51	83.67	83.67	84.49
EXISTING SURFACE	84.51	84.46	84.46	84.49
OFFSET	-2.91	-1.25	1.25	2.89

CH -10.00



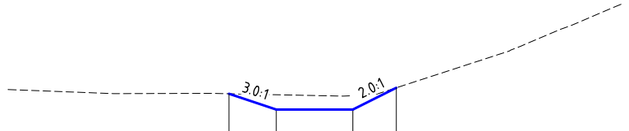
DATUM 88				
DESIGN SURFACE	89.68	89.18	89.18	89.53
EXISTING SURFACE	89.68	89.64	89.53	89.53
OFFSET	-2.76	-1.25	1.25	1.94

CH 120.00



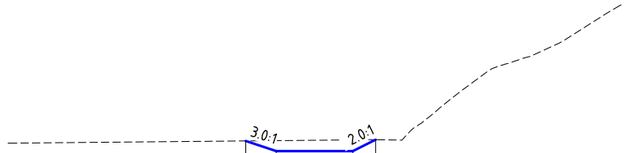
DATUM 87				
DESIGN SURFACE	88.95	88.45	88.45	88.97
EXISTING SURFACE	88.95	88.90	88.74	88.97
OFFSET	-2.75	-1.25	1.25	2.29

CH 100.00



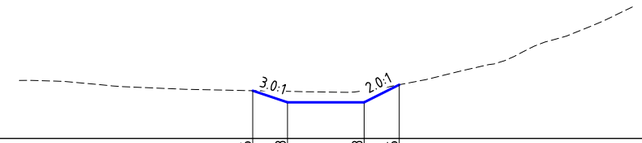
DATUM 86				
DESIGN SURFACE	88.04	87.53	87.53	88.24
EXISTING SURFACE	88.04	88.01	87.98	88.24
OFFSET	-2.79	-1.25	1.25	2.67

CH 80.00



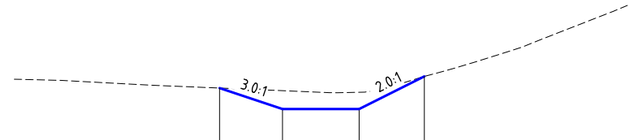
DATUM 85				
DESIGN SURFACE	87.12	86.79	86.79	87.16
EXISTING SURFACE	87.12	87.13	87.15	87.16
OFFSET	-2.24	-1.25	1.25	1.99

CH 60.00



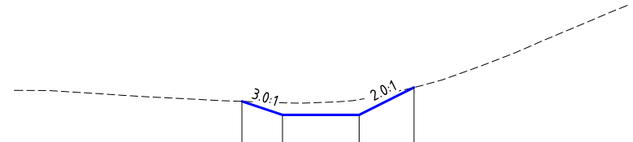
DATUM 91				
DESIGN SURFACE	92.56	92.18	92.18	92.75
EXISTING SURFACE	92.56	92.54	92.56	92.75
OFFSET	-2.39	-1.25	1.25	2.40

CH 200.00



DATUM 90				
DESIGN SURFACE	91.92	91.24	91.24	92.30
EXISTING SURFACE	91.92	91.83	91.78	92.30
OFFSET	-3.30	-1.25	1.25	3.38

CH 180.00



DATUM 89				
DESIGN SURFACE	91.15	90.71	90.71	91.61
EXISTING SURFACE	91.15	91.11	91.21	91.61
OFFSET	-2.57	-1.25	1.25	3.04

CH 160.00

DATUM 89				
DESIGN SURFACE	90.45	90.00	90.00	90.63
EXISTING SURFACE	90.45	90.38	90.38	90.63
OFFSET	-2.62	-1.25	1.25	2.52

CH 140.00

NOTE: CROSS SECTION SHOW FINISHED SURFACE ONLY - ROCKWORK AND REVEGETATION SHOWN ON DRAWING No. 2508/1017

2 1 0 2 4 6 8

1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS

Parks VICTORIA
Email: consult@crossco.com.au

DESIGNED:	M.S.
DRAWN:	A.M.M
CHECKED:	S.G.
APPROVED:	A.G.
SCALE:	1:100

A1

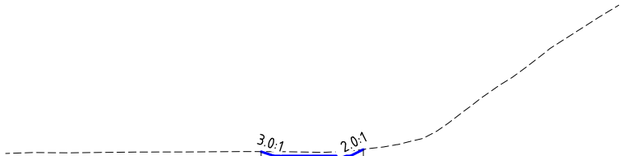
DATUM:
HEIGHT: AHD
HORIZONTAL: MGA2020

SURVEY REF: -
PLAN No: -

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1015.dwg

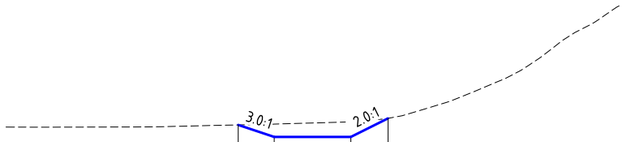
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
SWALE
CROSS SECTIONS - SHEET 1 OF 2

DATE: AUGUST 2022
SHEET 16 OF 22
DRAWING No: 2508/1015
Rv. F



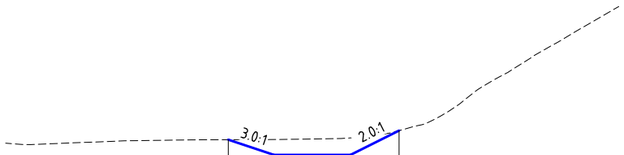
DATUM 93					
DESIGN SURFACE	94.66	94.52	94.52	94.73	
EXISTING SURFACE	94.66	94.65	94.68	94.73	
OFFSET	-1.67	-1.25	1.25	1.67	

CH 260.00



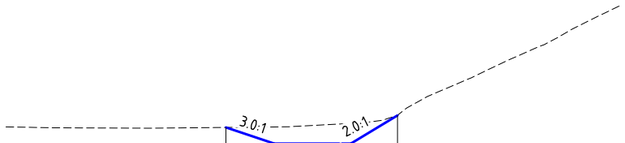
DATUM 99					
DESIGN SURFACE	101.07	100.68	100.68	101.28	
EXISTING SURFACE	101.07	101.10	101.17	101.28	
OFFSET	-2.42	-1.25	1.25	2.46	

CH 380.00



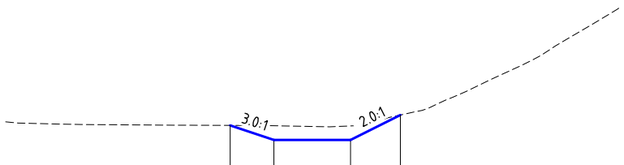
DATUM 92					
DESIGN SURFACE	94.03	93.53	93.53	94.32	
EXISTING SURFACE	94.03	94.03	94.09	94.32	
OFFSET	-2.74	-1.25	1.25	2.83	

CH 240.00



DATUM 98					
DESIGN SURFACE	100.04	99.51	99.51	100.41	
EXISTING SURFACE	100.04	100.05	100.17	100.41	
OFFSET	-2.83	-1.25	1.25	2.77	

CH 360.00



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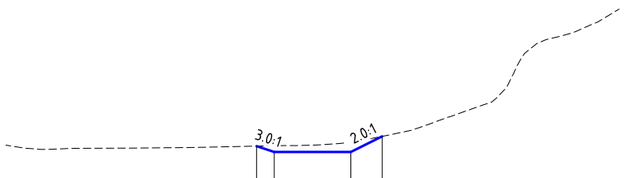
CH 220.00



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EXISTING SURFACE	98.93	98.94	99.05	99.25	
OFFSET	-1.83	-1.25	1.25	2.27	

CH 340.00

NOTE: CROSS SECTION SHOW FINISHED SURFACE ONLY - ROCKWORK AND REVEGETATION SHOWN ON DRAWING No. 2508/1017

2 1 0 2 4 6 8
1 : 100 (A1)
1 : 200 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

DESIGNED: M.S.
DRAWN: A.M.M
CHECKED: S.G.
APPROVED: A.G.
SCALE: 1:100

A1

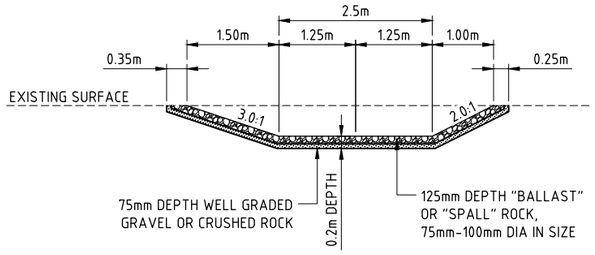
DATUM:
HEIGHT: AHD
HORIZONTAL: MGA2020

SURVEY REF: -
PLAN No: -

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
CAD FILE NAME: R:\2508 Aspect PV Buchan Caves Reserve\ACAD\Drg\2508-1016.dwg

PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
SWALE
CROSS SECTIONS - SHEET 2 OF 2

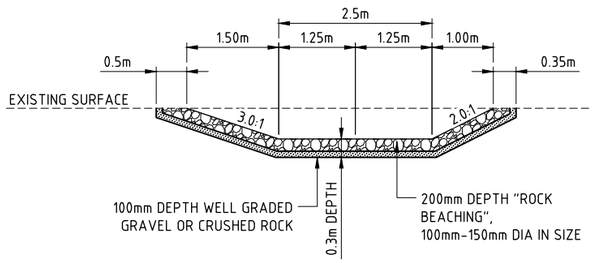
DATE: AUGUST 2022
SHEET 17 OF 22
DRAWING No: 2508/1016
Rv. F



TYPICAL SWALE (ROCKWORK TYPES)

TYPE 1 SECTION

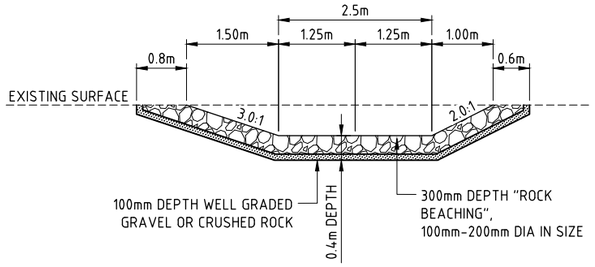
NOT TO SCALE



TYPICAL SWALE (ROCKWORK TYPES)

TYPE 2 SECTION

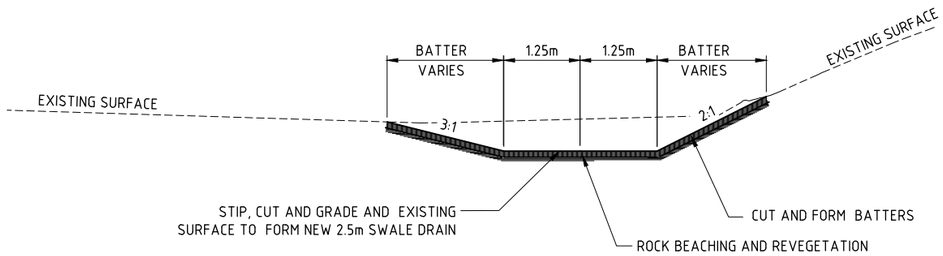
NOT TO SCALE



TYPICAL SWALE (ROCKWORK TYPES)

TYPE 3 SECTION

NOT TO SCALE



VEGEATATED SWALE

TYPICAL SECTION

NOT TO SCALE

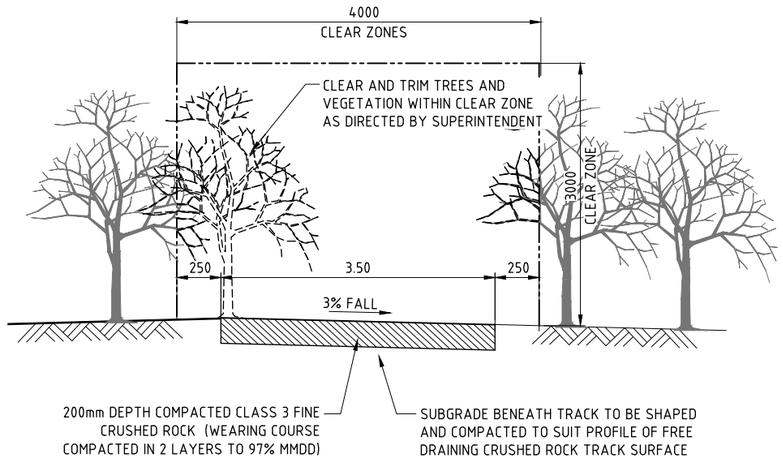
PROPOSED ROCK BEACHED PLACEMENT STYLE

NOT TO SCALE

NEW SWALE AND ROCK BEACHING IS TO BE INSTALLED IN A MANNER TO MINIMISE DISTURBANCE TO SURROUNDING VEGETATION AND FORMED THROUGH THE NATURAL FALL OF THE LAND WHERE POSSIBLE.

PROPOSED REPAIR AND CONSTRUCTION METHODOLOGY

1. CONTRACTOR TO PICK BEST FIT ALIGNMENT BASED ON DESIGN SWALE LONGITUDINAL AND CROSS SECTIONS SECTIONS SWALE ALIGNMENT AND FINAL LEVELS TO BE CONFIRMED ON SITE WITH PARKS VICTORIA AND THE SUPERINTENDENT.
2. CONTRACTOR TO CLEAR AND DISPOSE OF EXISTING STRUCTURES AND/OR CULVERTS, AND CLEAR NEW SWALE AND ROCKWORK ALIGNMENT TO REQUIRED DEPTH AND WIDTH FOR SUBGRADE INSPECTION.
3. NEW SWALE IS TO BE INSTALLED IN A MANNER TO MINIMISE DISTURBANCE TO SURROUNDING VEGETATION AND FORMED THROUGH THE NATURAL FALL OF THE LAND WHERE POSSIBLE.
4. ERODED AREAS OF THE EXISTING STREAM BED ADJACENT TO THE NEW SWALE SHALL HAVE ALL REMOVE LOOSE MATERIAL AROUND ERODED AREA REMOVED , AND A FIRM BASE REESTABLISH, BACKFILLED IN COMPACTED LAYERS WITH SELECT FILL. ROCK BEACHING AND TOPSOIL WON FROM SITE.
5. TRACK SUBGRADE SHALL BE SHAPED TO SUIT A FREE-DRAINING FINISHED PAVEMENT SURFACE AND PROOF-ROLLED IN THE PRESENCE OF THE SUPERINTENDENT. IF SUBGRADE IS COMPETENT, CONTRACTOR SHALL PROCEED WITH TRACK CONSTRUCTION
6. IF SUBGRADE IMPROVEMENT IS REQUIRED, THE PARKS VICTORIA REPRESENTATIVE WILL INSTRUCT REMOVAL OF UNSUITABLE, AND REPLACEMENT WITH REINFORCED FOUNDATION LAYER(S). WHEN COMPLETE THIS WORK SHALL BE INSPECTED BY THE REPRESENTATIVE OFFICER
7. ERODED BACKFILLING IN TRAFFICABLE AREAS (CARRIAGEWAY AND SHOULDERS) SHALL BE PERFORMED USING 20MM CLASS 3 F.C.R. OR AN APPROVED EQUIVALENT MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150MM
8. BACKFILLING IN NON TRAFFICED AREAS (VERGES) SHALL BE PERFORMED USING SELECT BACKFILL MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 150MM
9. CONTRACTOR TO REFER TO PROPOSED SWALE LONGITUDINAL SECTION FOR ROCKWORK IN NEW SWALE AND ROCK BEACHING PLACED AS DIRECTED
10. CONTRACTOR TO SOURCE AS MUCH ROCK BEACHING AS POSSIBLE FROM SCREENED EXCAVATION MATERIAL, AND TO THE EXTENT POSSIBLE THIS SHALL BE PLACED AT THE SURFACE OF THE SWALE WHERE IT IS MOST VISIBLE.
11. ROCKWORK SHALL BE SELECTED AND CAREFULLY WORKED INTO PLACE TO ACHIEVE MAXIMUM INTERLOCKING OF ROCK PARTICLES, AND MINIMUM VOIDS
12. ROCKWORK SHALL BE FORMED IN A WAY THAT TRANSITIONS THE FLOW FROM THE NATURAL STREAMBED SHAPE INTO THE DESIGN SWALE, IF ADDITIONAL ROCKWORK IS NEEDED TO ACHIEVE THIS, THE CONTRACTOR SHALL ADVISE THE RESPONSIBLE OFFICER
13. WHERE THE ROCKWORK, EXISTING CULVERTS AND NATURAL STREAMBED MEET (BOTH DOWNSTREAM AND UPSTREAM OF THE CULVERT) A ROCK "CUT-OFF" WALL 600MM DEEPER THAT THE ROCKWORK SHALL BE FORMED.
14. SUITABLE ROCK WON FROM SITE EXCAVATION AND REMEDIAL WORKS SHALL BE USED AS BEACHING WHERE DIRECTED BY THE SUPERINTENDENT



GRAVEL TRACK TYPICAL SECTION - (SINGLE CROSSFALL)

4.0m x 3.0m CONSTRUCTION CLEAR ZONE SHOWN

NOT TO SCALE

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Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Parks VICTORIA
Email: consult@crossco.com.au

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	AS SHOWN	PLAN No:	-

XREF ATTACHED: R:\2508 Aspect PV Buchan Cave Reserve\ACAD\Xref\2508 TB.dwg
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PARKS VICTORIA

EAST GIPPSLAND SHIRE COUNCIL

BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

CONSTRUCTION DETAILS

DATE: AUGUST 2022
SHEET 18 OF 22
DRAWING No: 2508/1017
Rv. F

PLANTING SCHEDULE

Ref: EGCMA "Murrindal River downstram of W-Tree and Bucan River downstream of Gillingall to the Snow River Confluence".

Type	Botanical Name	Common Name	Area to be planted (m2)	Typical Planing Denisty (plants / m2)	No
Small shrubs, herbs & ferns (minimum 4 species - Approaches)			1350	2	2,700
	Pteridium esculentum	Austral Bracken			
	Blechnum nudum	Fishbone water-fern			
	Callistemon sieberi	River bottlebrush			
	Sannantha virgata	Tall Baeckea			
	Adriana tomentosa var. tomentosa	Eastern bitter bush			
	Kunzea ericoides	Burgan			
	Lycopus australis	Australian gypsywort			
Grasses, reeds, sedges (minimum 2 species - swale batter and stream bank)			900	2	1,460
	Carex appressa	Tall sedge			
	Carex longebrachiata	Bergalia tussock			
	Cyperus lucidus	Leafy flat-sedge			
	Lomandra longifolia 'Katrinus'	Spiny-headed mat-rush			
Total number of plants					4,353

PTERIDUM ESCULENTUM

BIECHNUM NUDIM

CALLISTEMON SIEBERI

SANNANTHA VIRGATA

ADRIANA TOMENTOSA

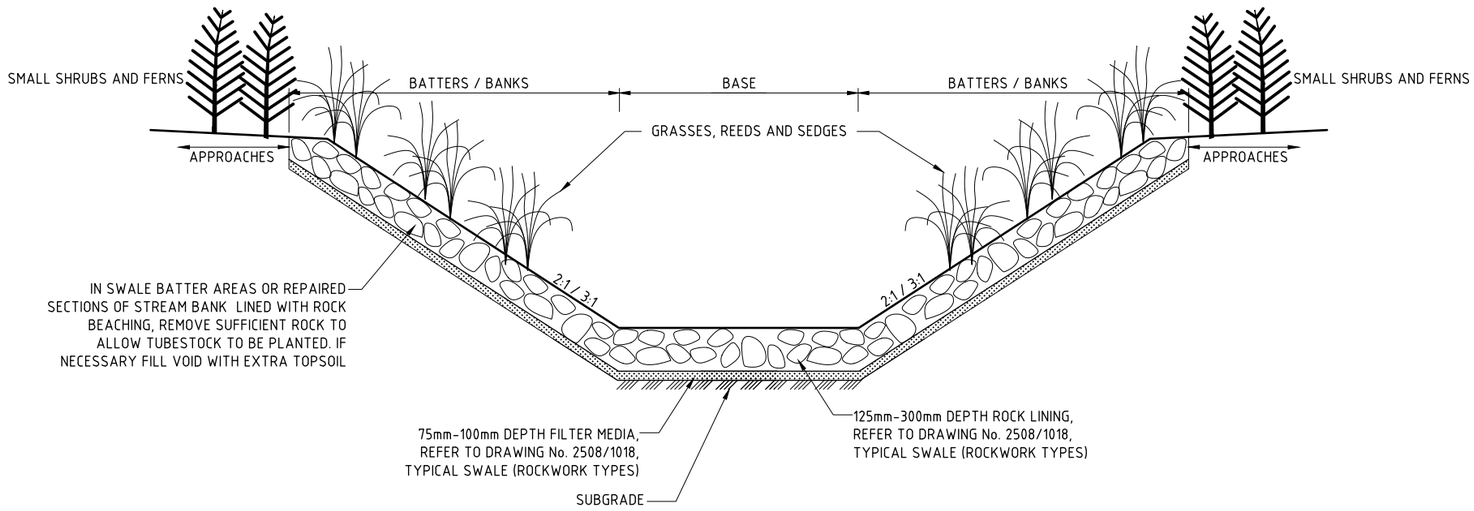
KUNZEA ERICOIDES

LYCOPUS AUSTRALIS

CAREX APPRESSA

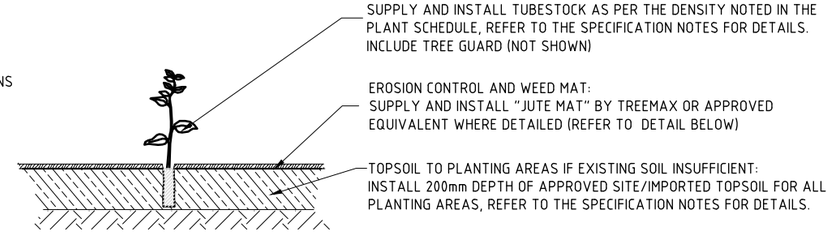
CAREX LONGEBRACHIATA

LOMANDRA LONGIFOLIA



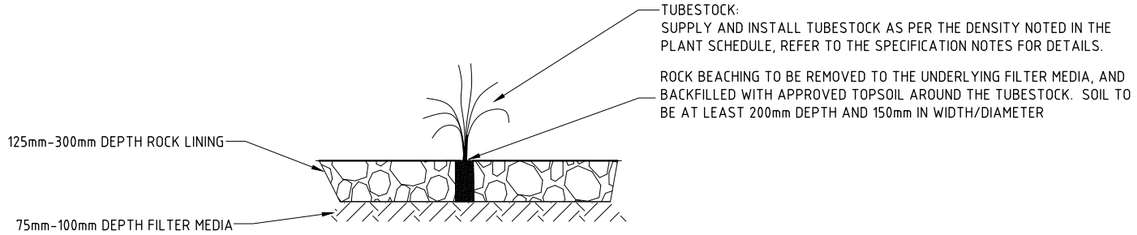
TYPICAL SWALE BATTER / STREAM BANK VEGETATION DETAIL

NOT TO SCALE



TUBESTOCK PLANTING DETAIL - PLANTS IN SOIL

NOT TO SCALE



TUBESTOCK PLANTING DETAIL - PLANTS IN ROCK BEACHING

NOT TO SCALE

Rv.	APPR.	DATE	REVISIONS
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Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Parks VICTORIA
Email: consult@crossco.com.au

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	NOT TO SCALE	PLAN No:	-

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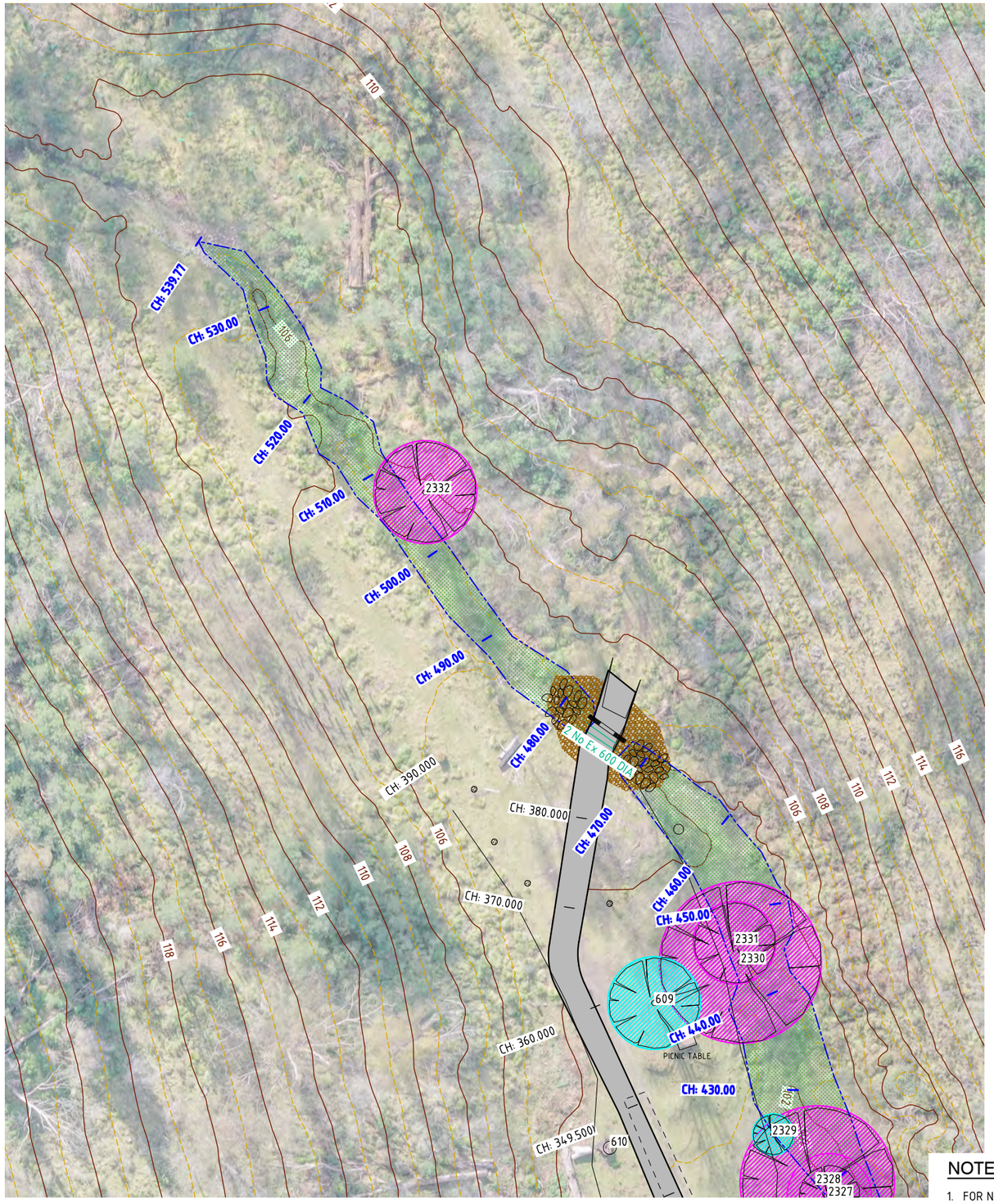
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
LANDSCAPE PLAN
PLANTING SCHEDULE

DATE: AUGUST 2022
SHEET 19 OF 22
DRAWING No: 2508/1018
Rv. F

FOR CONTINUATION REFER TO BELOW LEFT



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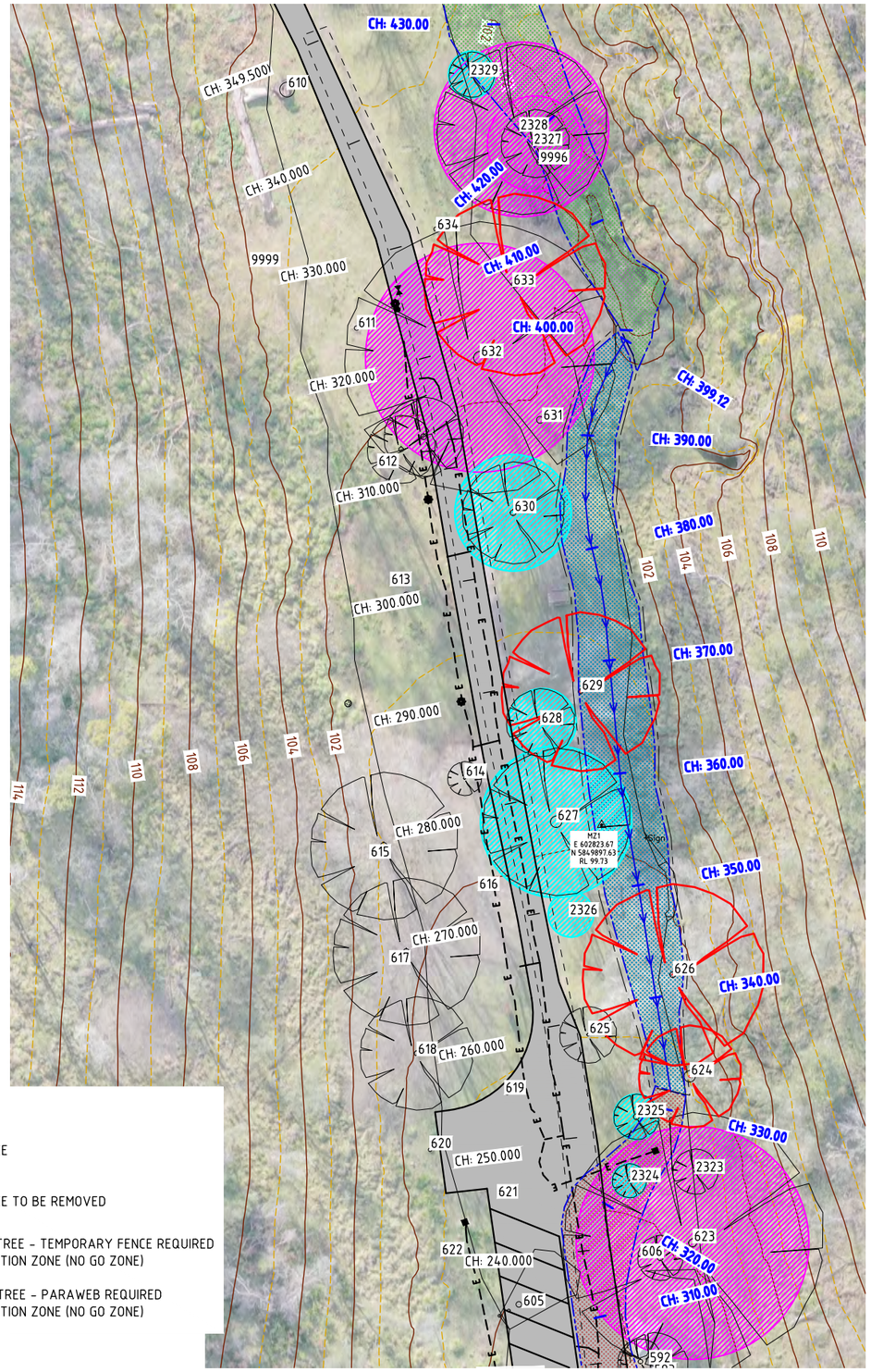

FOR CONTINUATION REFER TO DRAWING No. 2508/1020

N

LEGEND:

- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- HIGH VALUE TREE - TEMPORARY FENCE REQUIRED
  TREE PROTECTION ZONE (NO GO ZONE)
- SIGNIFICANT TREE - PARAWEB REQUIRED
  TREE PROTECTION ZONE (NO GO ZONE)

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.

10 5 0 10 20

1 : 250 (A1)
1 : 500 (A3)

Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
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B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
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Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO
ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

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DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	1:250	PLAN No:	-

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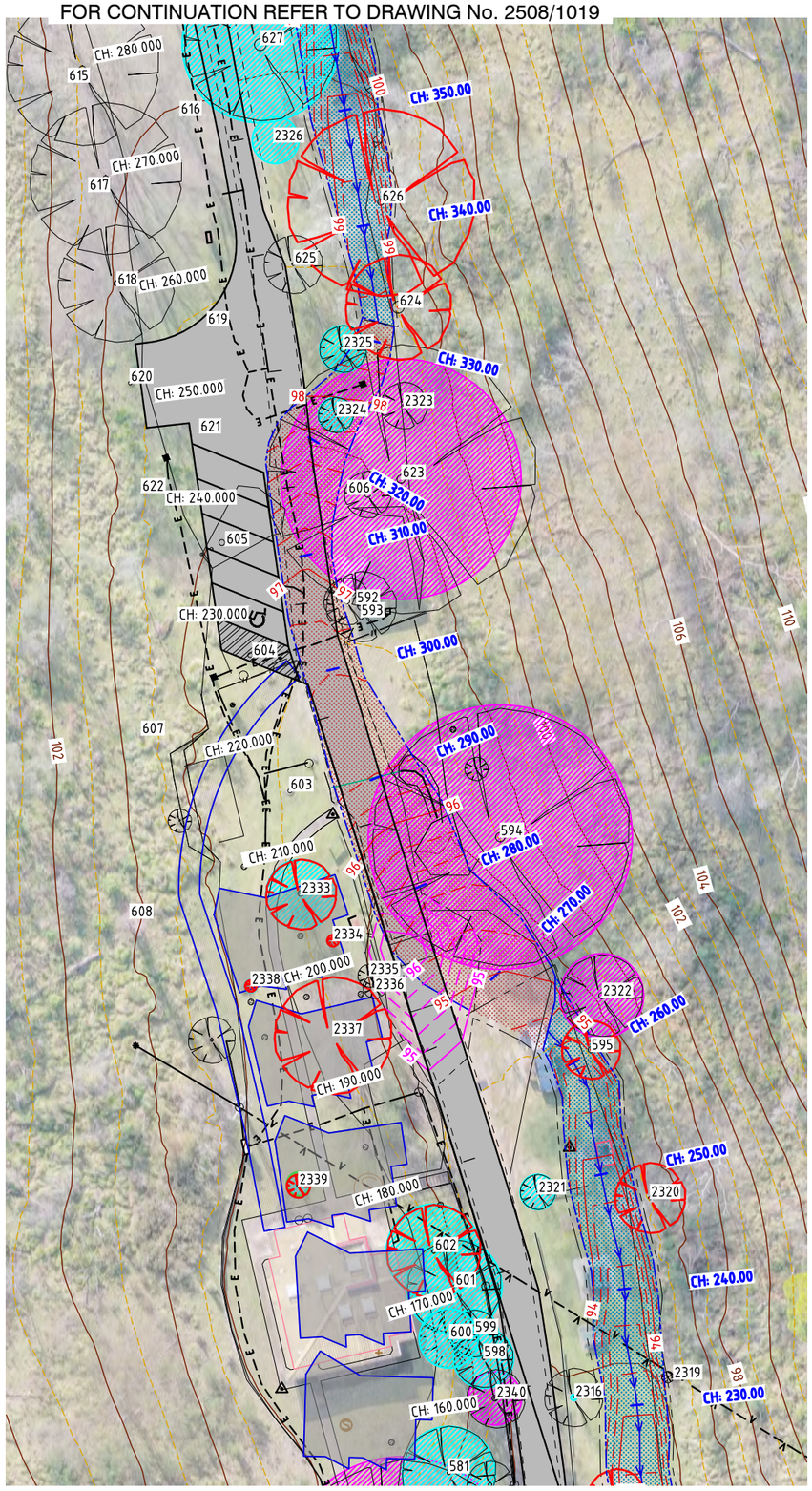
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL

BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
TREE PROTECTION PLAN
SHEET 1 OF 3

DATE: AUGUST 2022
SHEET 20 OF 22
DRAWING No:
2508/1019
Rv. F

FOR CONTINUATION REFER TO DRAWING No. 2508/1019



FOR CONTINUATION REFER TO ABOVE RIGHT

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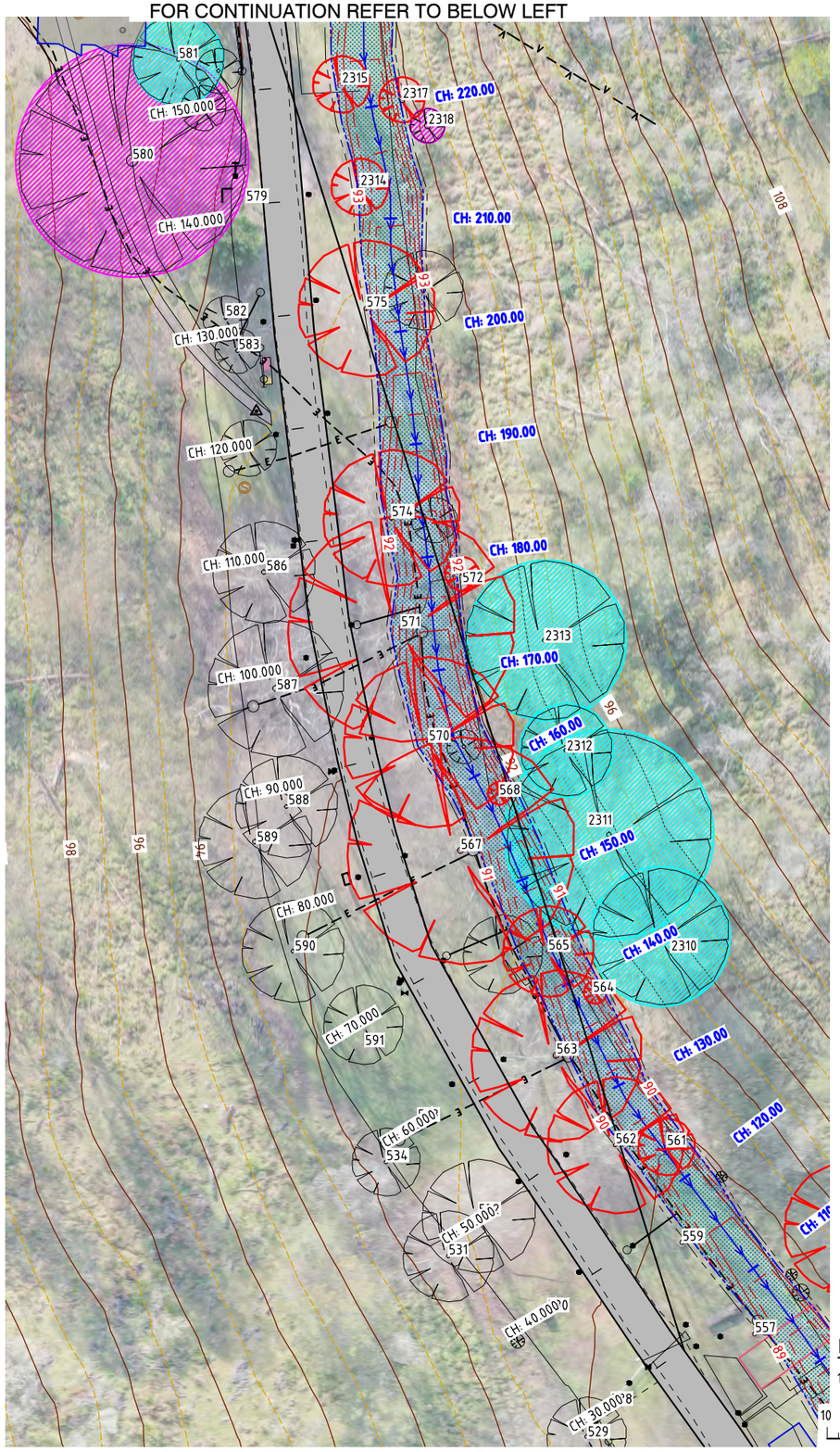

FOR CONTINUATION REFER TO DRAWING No. 2508/1021

N

LEGEND:

- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- HIGH VALUE TREE - TEMPORARY FENCE REQUIRED TREE PROTECTION ZONE (NO GO ZONE)
- SIGNIFICANT TREE - PARAWEB REQUIRED TREE PROTECTION ZONE (NO GO ZONE)

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING No. 2508/1001.

10 5 0 10 20

1 : 250 (A1)
1 : 500 (A3)

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Tel:(03) 51526298
Fax (03) 51527222
CROSSCO
ENGINEERING & ENVIRONMENTAL CONSULTANTS
Email: consult@crossco.com.au

Parks VICTORIA

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DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	1 : 250	PLAN No:	-

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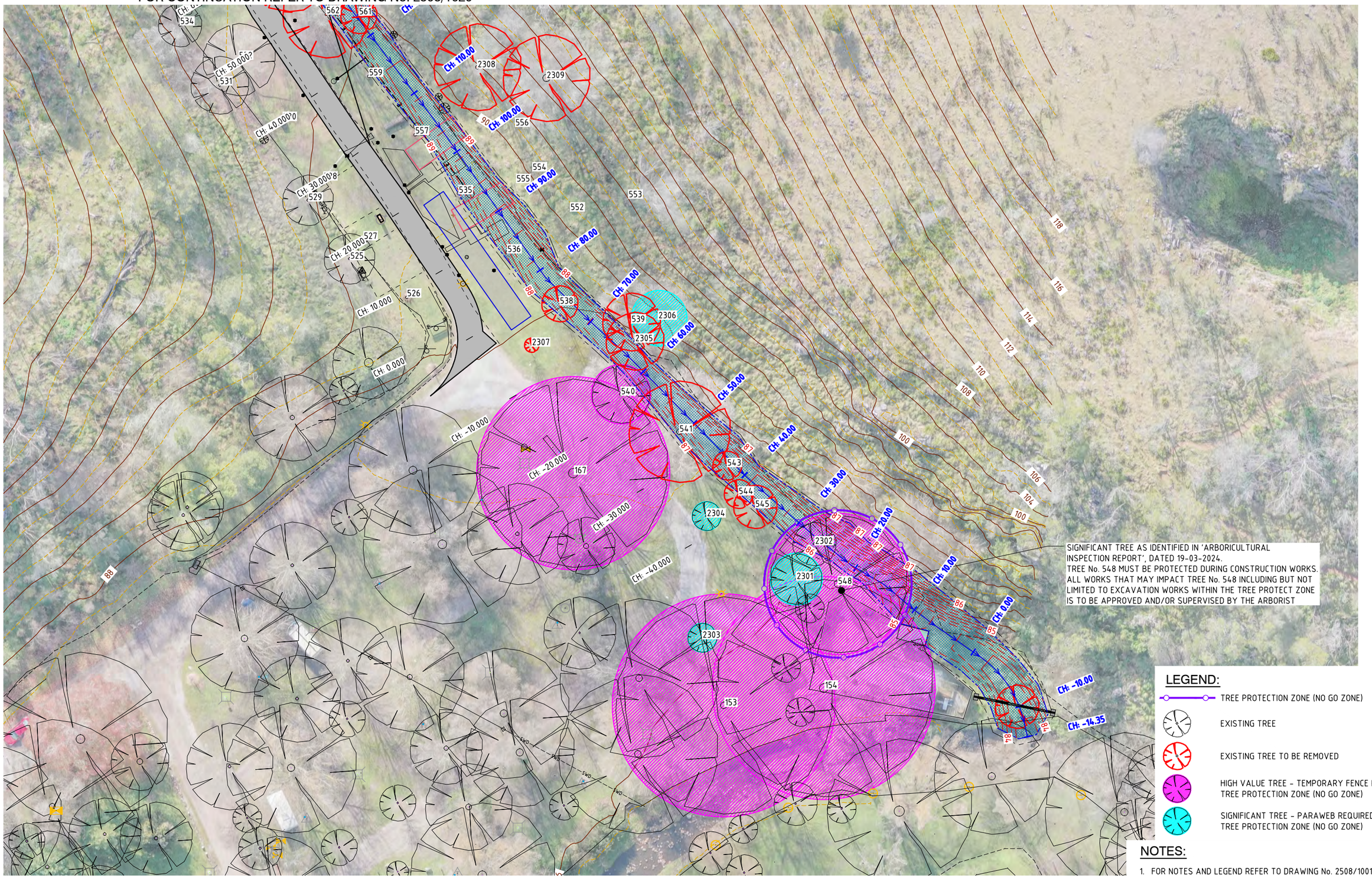
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS

TREE PROTECTION PLAN
SHEET 2 OF 3

DATE: AUGUST 2022
SHEET 21 OF 22
DRAWING No: 2508/1020
Rv. F

FOR CONTINUATION REFER TO DRAWING No. 2508/1020



Rv.	APPR.	DATE	REVISIONS
F	M.S.	08-04-2024	AMENDMENTS ADDED - ISSUED FOR REVIEW
E	M.S.	22-03-2024	UPDATED CONSTRUCTION DESIGN - ISSUED FOR REVIEW
D	M.S.	14-12-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
C	M.S.	06-06-2023	CONSTRUCTION DESIGN - ISSUED FOR REVIEW
B	M.S.	19-12-2022	DESIGN ISSUE - ISSUED FOR REVIEW
A	M.S.	01-08-2022	ORIGINAL ISSUE - ISSUED FOR COMMENT

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Crossco Consulting Pty Ltd
ABN: 88 135 548 110
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
CROSSCO ENGINEERING & ENVIRONMENTAL CONSULTANTS
Parks VICTORIA
Email: consult@crossco.com.au

DESIGNED:	M.S.	A1	DATUM: HEIGHT: AHD HORIZONTAL: MGA2020
DRAWN:	A.M.M		
CHECKED:	S.G.		
APPROVED:	A.G.	SURVEY REF:	-
SCALE:	1 : 250	PLAN No:	-

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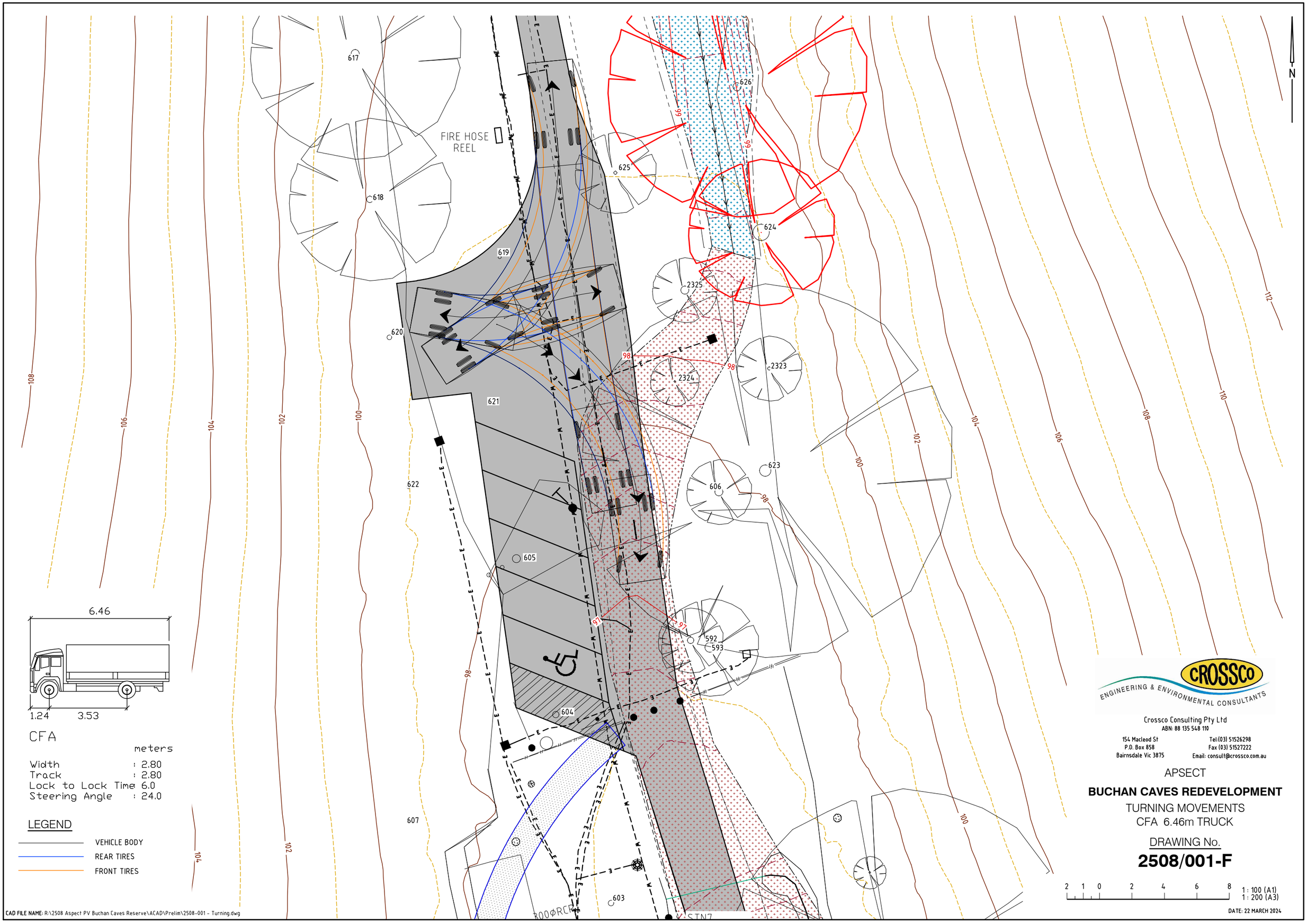
PARKS VICTORIA
EAST GIPPSLAND SHIRE COUNCIL
BUCHAN CAVES RESERVE
NORTH ARM REDEVELOPMENT WORKS
TREE PROTECTION PLAN
SHEET 3 OF 3

DATE: AUGUST 2022
SHEET 22 OF 22
DRAWING No: 2508/1021
Rv. F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106
104
102
100
110
112
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1.24
3.53
CFA
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Width : 2.80
Track : 2.80
Lock to Lock Time 6.0
Steering Angle : 24.0
LEGEND
VEHICLE BODY
REAR TIRES
FRONT TIRES
300ØRCP
STN7
CROSSCO
ENGINEERING & ENVIRONMENTAL CONSULTANTS
Crossco Consulting Pty Ltd
ABN: 88 135 548 110
154 Macleod St
P.O. Box 858
Bairnsdale Vic 3875
Tel:(03) 51526298
Fax (03) 51527222
Email: consult@crossco.com.au
APSECT
BUCHAN CAVES REDEVELOPMENT
TURNING MOVEMENTS
CFA 6.46m TRUCK
DRAWING No.
2508/001-F
2 1 0 2 4 6 8
1 : 100 (A1)
1 : 200 (A3)
DATE: 22 MARCH 2024
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