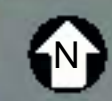


SCHEDULE 2: Kiwi Road Track Access - Indicative Layout Drawing

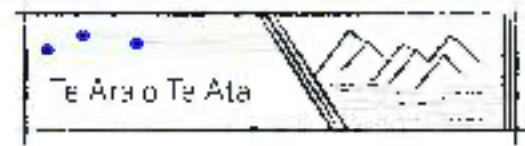


INDICATIVE CARPARK LAYOUT
 AREA TO BE LEVELLED AND SURFACED = 275m²
 5 CARPARKS WITH WHEELSTOPS

1:250 @ A1
 1:500 @ A3
 0 4 8 12 16 20 24 m

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
A	FOR INFORMATION						

LAB	MMA-DES-GEM-E1-FIG-0022
Scales	1:500 (A3) 1:2500 (A1)
Original Size	A1



MT MESSENGER BYPASS
INDICATIVE CARPARK LAYOUT

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-GEM-E1-FIG-0022
Revision	A

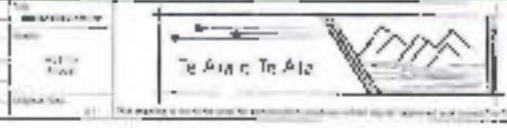
This drawing is not to be used for construction purposes unless signed approved and issued For Construction

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SCHEDULE 3: Maps showing the location of Kiwi Fencing

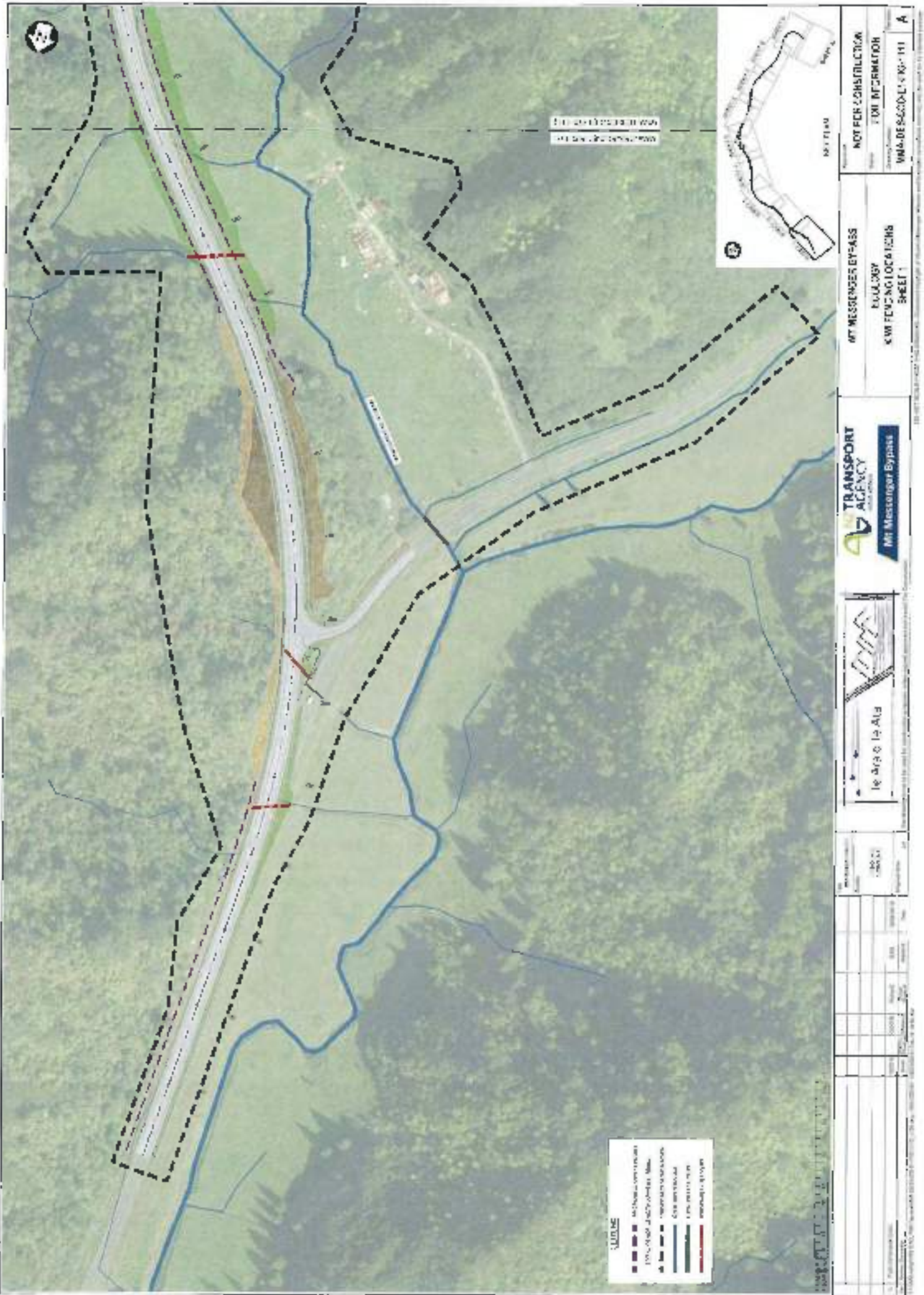


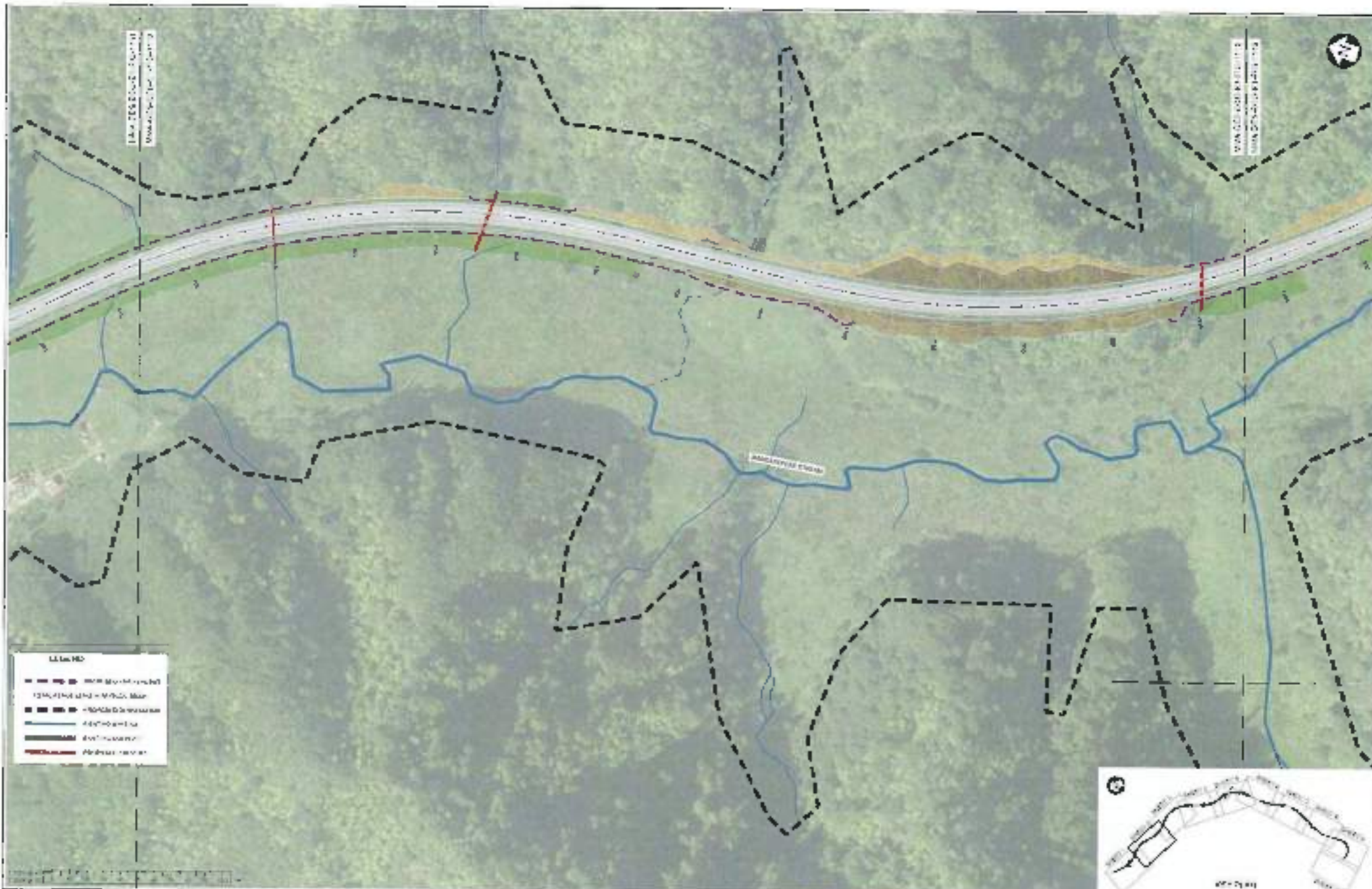
PROJECT NAME	MT MESSENGER BYPASS
PROJECT NUMBER	
DATE	08/04/2021
SCALE	AS SHOWN
PROJECT LOCATION	MT MESSENGER BYPASS
PROJECT OWNER	MT MESSENGER BYPASS
PROJECT MANAGER	
PROJECT ENGINEER	
PROJECT SURVEYOR	
PROJECT DESIGNER	
PROJECT CHECKER	
PROJECT APPROVER	



MT MESSENGER BYPASS
ECOLOGY
KNW FENCING LOCATIONS
SHEET 1A/11A/1

NOT FOR CONSTRUCTION
 FOR INFORMATION
 IWA-DES-000-01-FIG-110

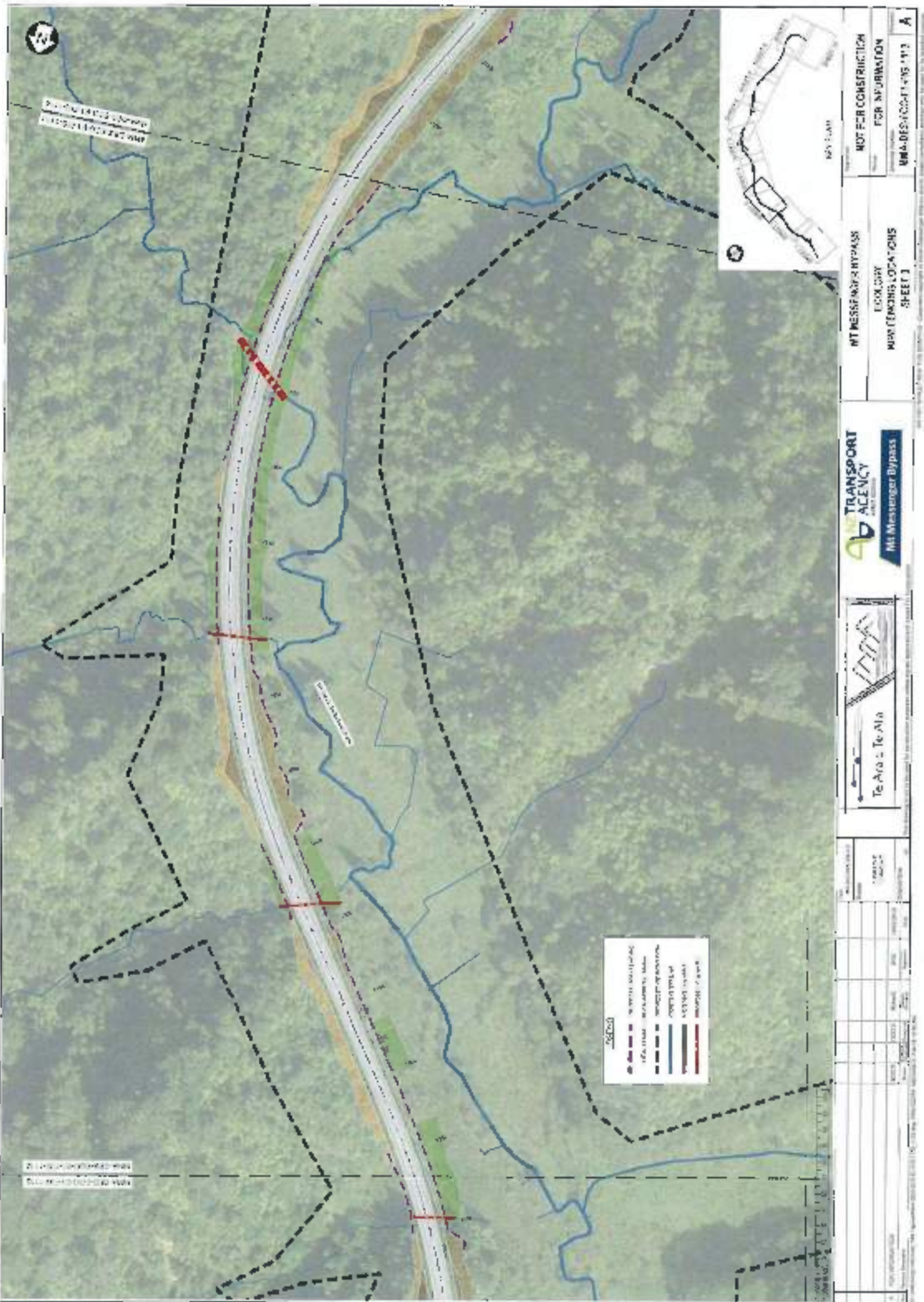




- LEGEND**
- Dashed black line - Boundary
 - Green shaded area - Vegetation
 - Brown shaded area - Earthworks
 - Blue line - Mangupua Stream
 - Red dashed line - Proposed road
 - Red solid line - Proposed road



				MT MESSENGER BYPASS ECOLOGY NW FENCING LOCATIONS SHEET 2		NOT FOR CONSTRUCTION FOR INFORMATION	
Te Aua o Te Ata		NZ TRANSPORT AGENCY MT Messenger Bypass		Project Name: MT MESSENGER BYPASS Project Number: WMA-018-SECRET-40-112		Drawing Number: A	

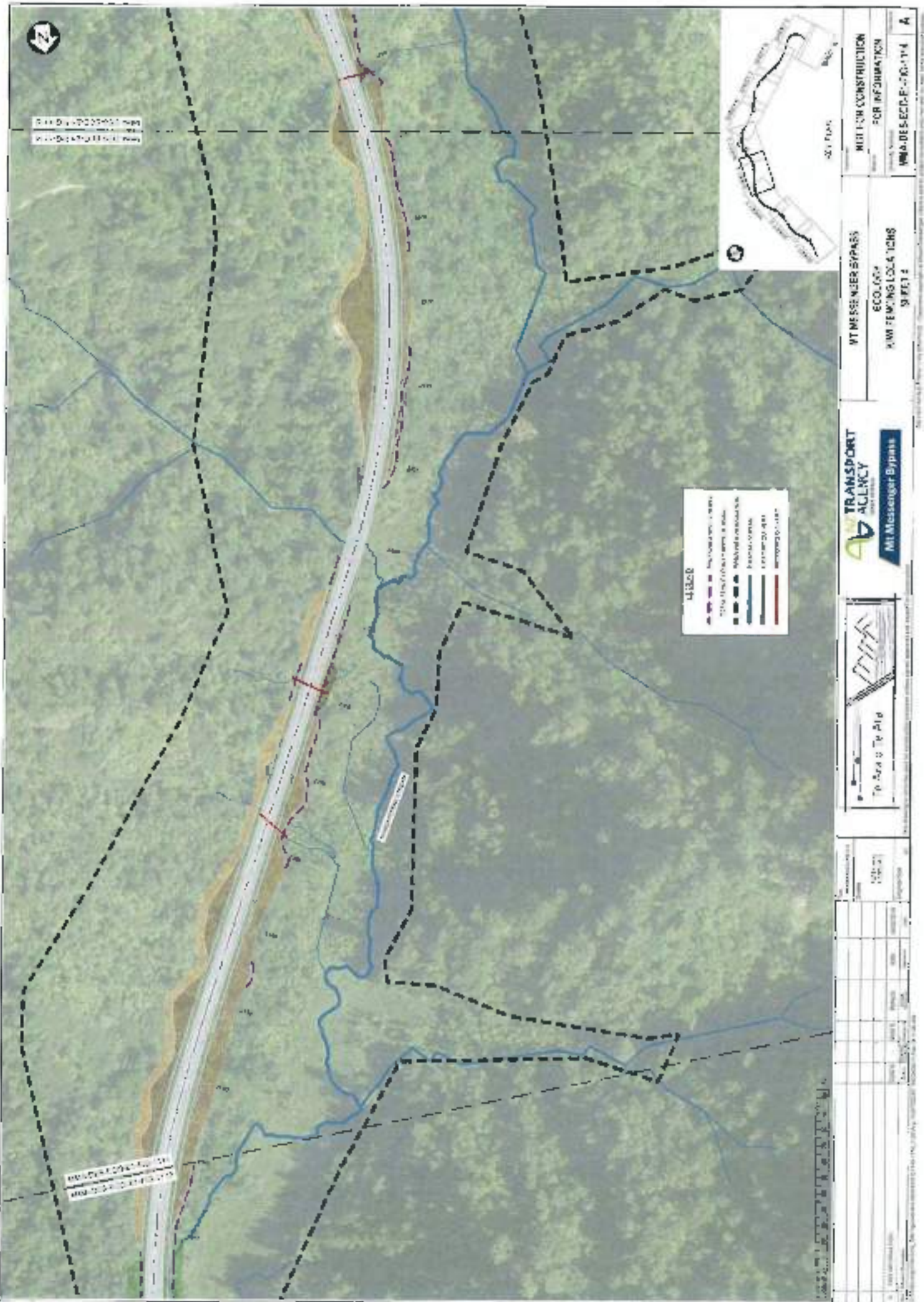


NOT FOR CONSTRUCTION
FOR INFORMATION
RMA DESIGNATIONS '17 A

MT MESSENGER BYPASS
LOOK ONLY
MOUNTING LOCATIONS
SHEET 1



NO.	REVISION	DATE	BY	CHKD	APPD	DESCRIPTION
1						
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Scale: 1:50,000
 North Arrow

- Legend**
- Proposed Bypass
 - Proposed Right-of-Way
 - Proposed Wetland
 - Proposed Stream
 - Proposed Road
 - Proposed Utility
 - Proposed Structure
 - Proposed Easement



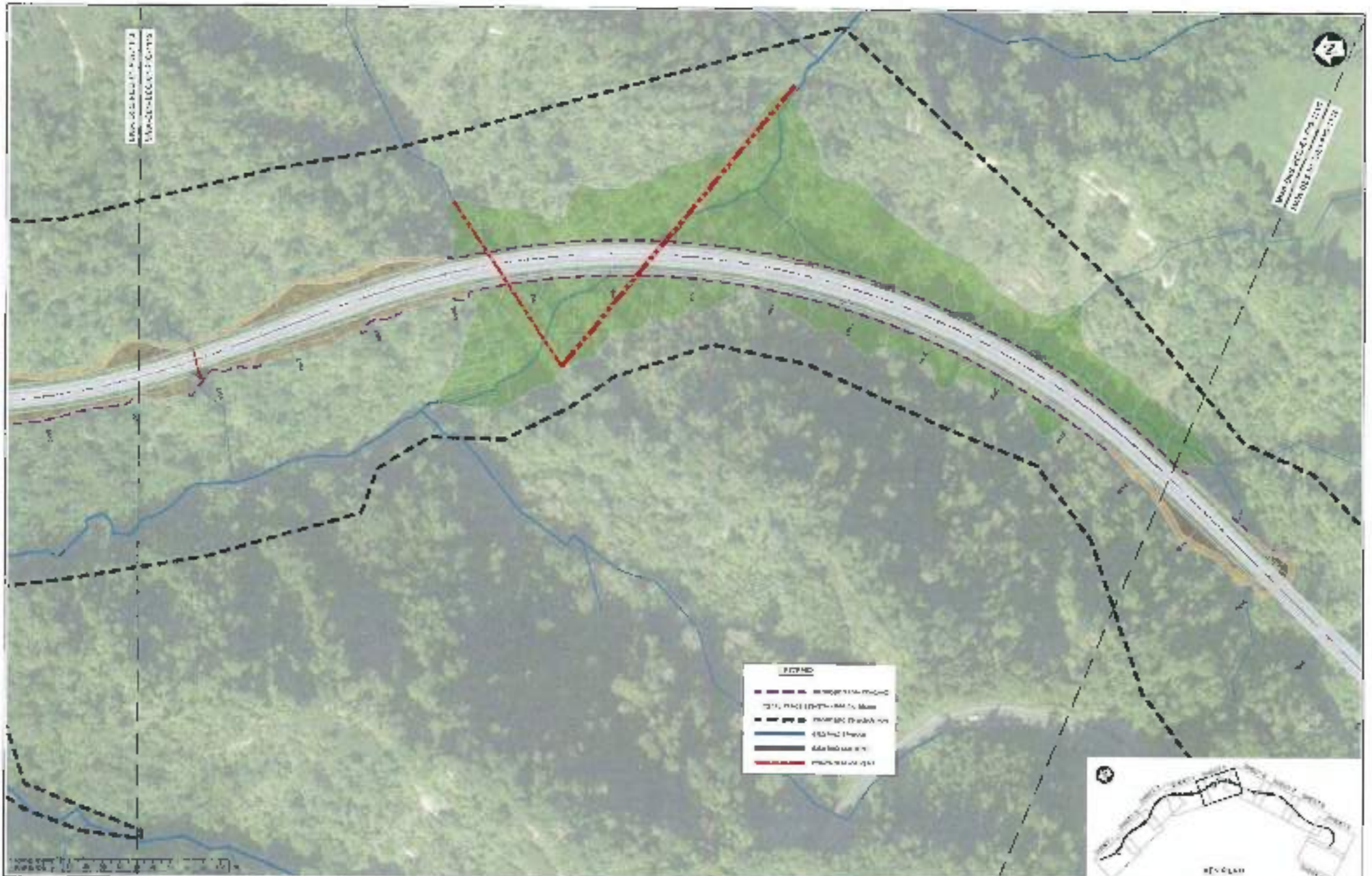
MT MESSENGER BYPASS
 ECOLOGY
 KMW FARMING LOCAL 10MS
 SHEET 1

MT TRANSPORT
 AGENCY
 MT Messenger Bypass

MT TRANSPORT
 AGENCY
 MT Messenger Bypass

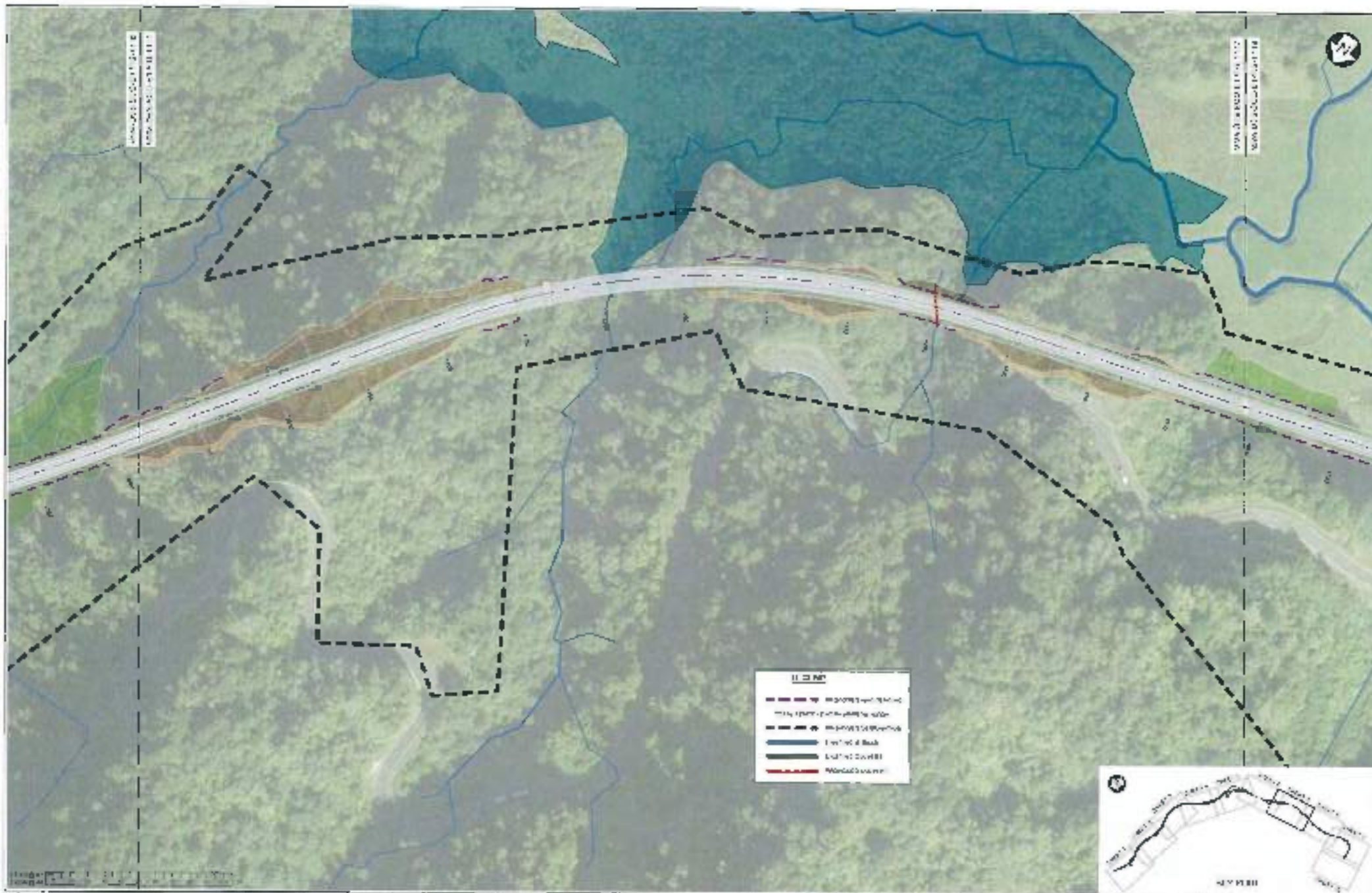
Scale: 1:50,000
 North Arrow

NO.	DESCRIPTION	DATE	BY	CHKD BY	APPROVED BY



				MT MESSENGER BYPASS ECOLOGY WAITING LOCATIONS SHEET 5		MTI FOR CONSTRUCTION FOR INFORMATION WMA DES-ECO-21-115-115	
Te Ara o Te Aia		MT Transport Agency		Mt Messenger Bypass		A	





LEGEND

- Proposed Right-of-Way
- Proposed Pavement Edge
- Proposed Shoulder
- Existing Bank
- Existing Ditch
- Proposed Ditch



Project Name	Mt Messenger Bypass
Project Number	1000-10-1000-10
Revision	000
Scale	1:1000
Date	08/04/2021
Author	XXX
Checked	XXX
Approved	XXX

Te Ara o Te Atā

TRANSPORT AGENCY

Mt Messenger Bypass

MT MESSENGER BYPASS

ECOLOGY

RWA PENDING LOCATIONS

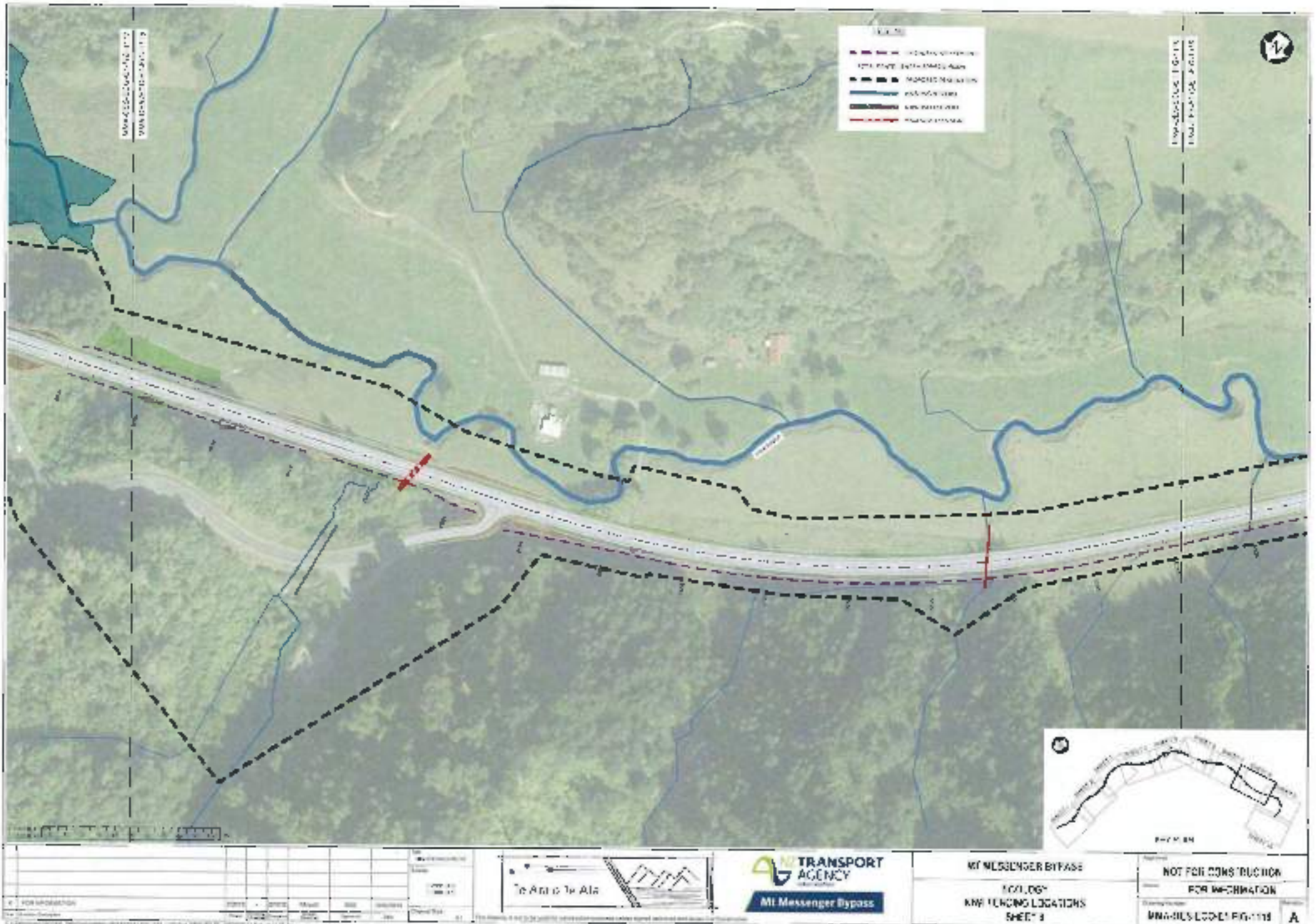
SHEET 7

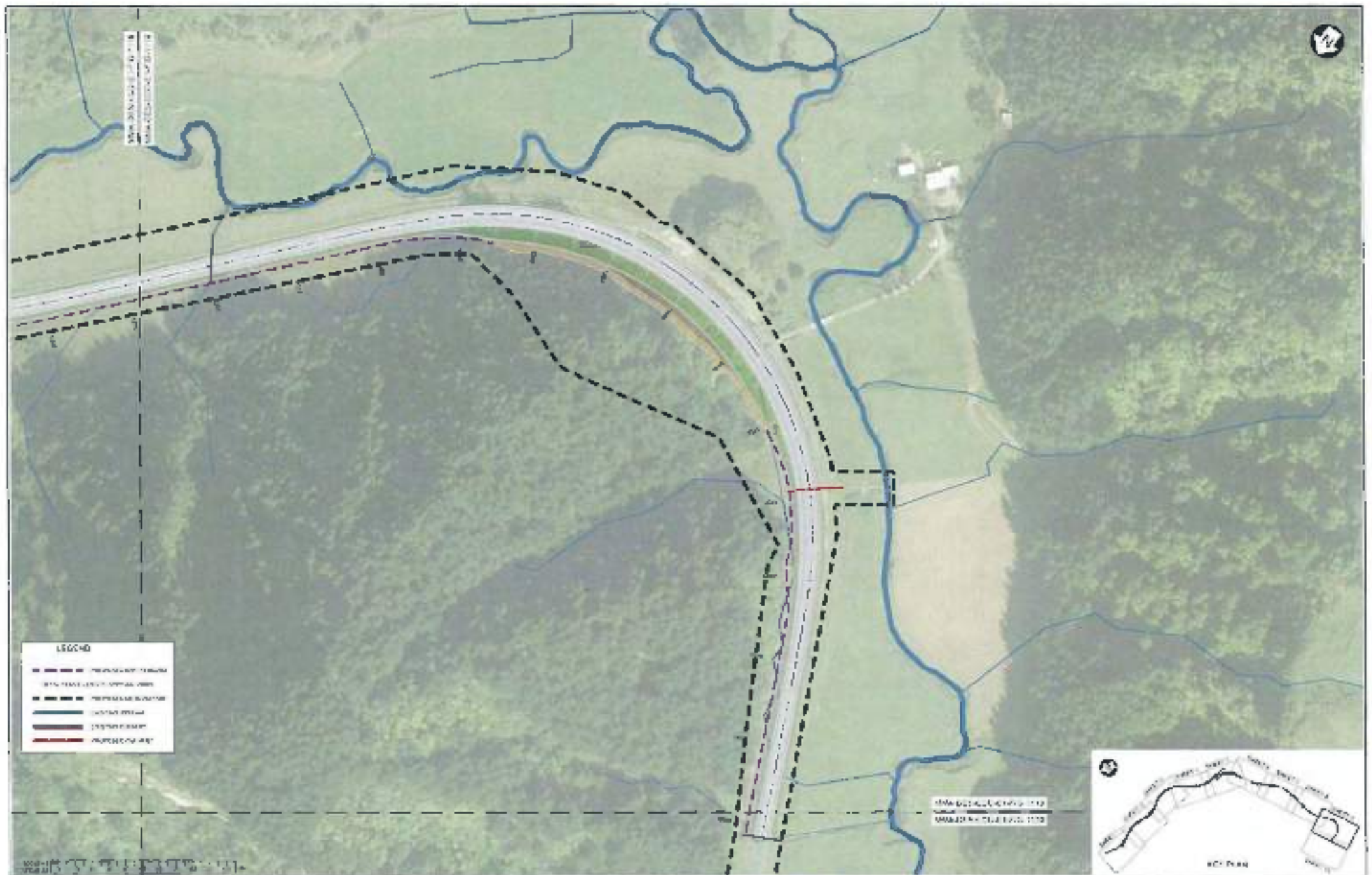
NOT FOR CONSTRUCTION

FOR INFORMATION

Drawing Number: MMA-DES-000-E-FIG-1117

A



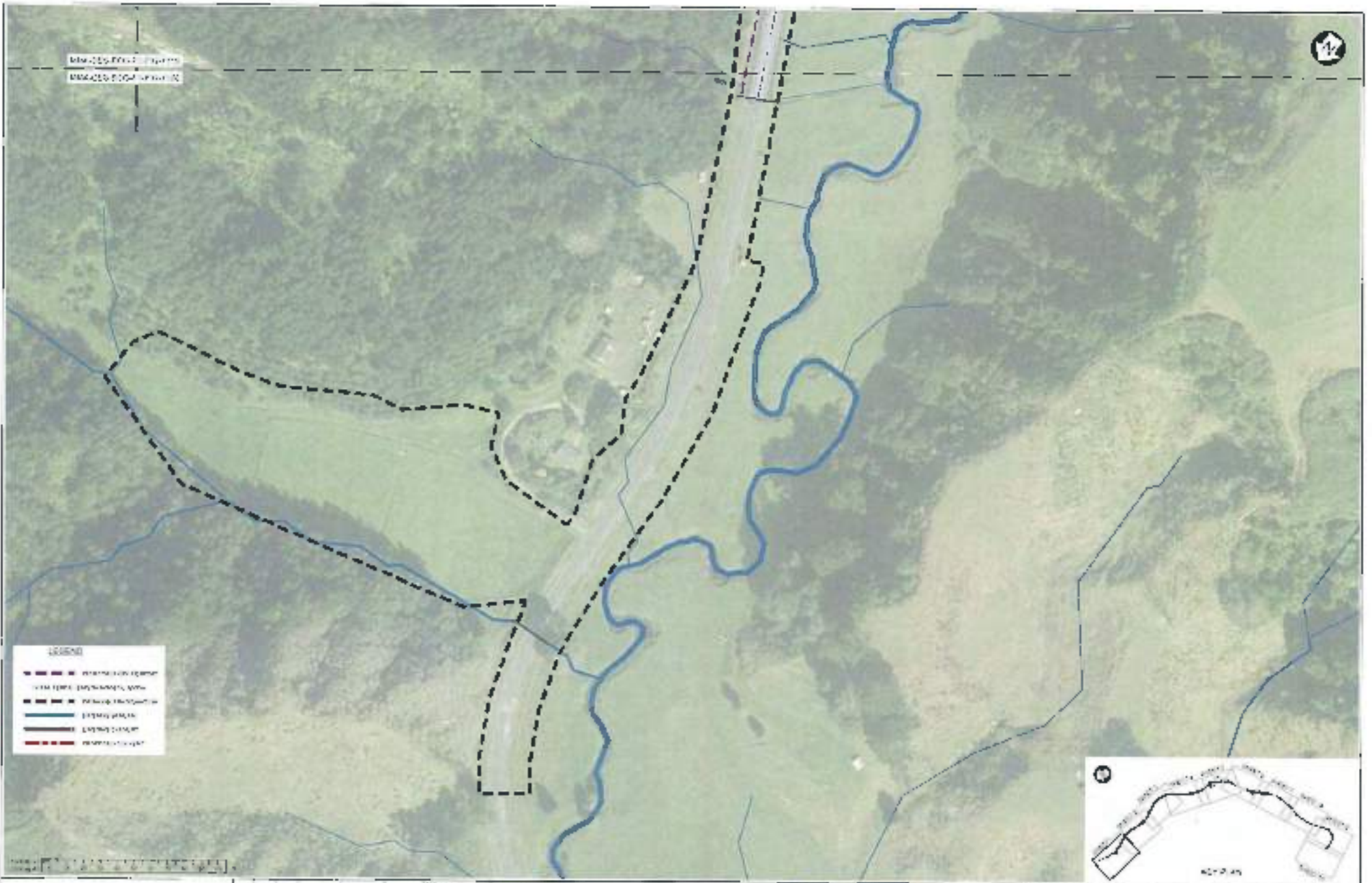


LEGEND

- PROPOSED ALIGNMENT
- PROPOSED ROADWAY
- PROPOSED DRAINAGE
- PROPOSED UTILITY



<p>Scale: 1:1000</p> <p>North Arrow</p>	<p>Te Ara o Te Aia</p>	<p>TRANSPORT AGENCY</p> <p>Mt Messenger Bypass</p>	<p>MT MESSENGER BYPASS</p> <p>BUILDING</p> <p>K/W FENCING LOCATIONS</p> <p>SHEETS</p>	<p>NOT FOR CONSTRUCTION</p> <p>FOR INFORMATION</p> <p>Project Name: MMA OCS-ECO-C1-FIG-1119</p> <p>Sheet: A</p>
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LEGEND

- PROPOSED ALIGNMENT
- EXISTING ALIGNMENT
- EXISTING RIGHT-OF-WAY
- CREEK
- EXISTING ROAD
- EXISTING FENCE

<p>DATE: 08/04/2021</p> <p>SCALE: 1" = 100'</p>	<p>PROJECT: MT MESSENGER BYPASS</p> <p>DATE: 08/04/2021</p>	<p>100' = 100'</p> <p>Is Area To Be</p>	<p>MT TRANSPORT AGENCY TRANSPORTATION</p> <p>Mt Messenger Bypass</p>	<p>MT MESSENGER BYPASS</p> <p>EXISTING KIM FENCING LOCATIONS</p> <p>SHEET 10</p>	<p>NOT FOR CONSTRUCTION</p> <p>FOR INFORMATION</p> <p>NWA-025-UGD-E1-FIG-112D</p>
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SCHEDULE 4: Plan titled: 'Property Pascoe Land Showing Little Farm', reference: MMA-DES-PRP-E1-DRG-1214



MOKAU RD (SH3)

144.0834

D A & T J S PASCOE
ID 7416362
SECTION 9 SO 457513
AREA: 155.6634ha

11.5800ha

N O T E
*Measurements and areas are approximate
and subject to detail design then legal
survey after construction*

KEY

- LITTLE FARM / NEW HOUSE LOCATION (11.5800ha)
- REMAINING LAND (144.0834ha)

1:3000 @ A1
1:6000 @ A3
0 50 100 150 200 250 m

Tab
MMA-DES-PRP-E1-DRG-1214
Scales
1:6000 (A3)
1:3000 (A1)



MT MESSENGER BYPASS
PROPERTY
PASCOE LAND SHOWING LITTLE FARM
D A & T J S PASCOE

Approved
NOT FOR CONSTRUCTION
Status
FOR INFORMATION
Drawing Number
MMA-DES-PRP-E1-DRG-1214
Revision
A

QDO'S	QDO'S	BSS	BSS	08/08/2019	Original Size	A1
Drawn	Checked	Designed	Design Checked	Approved	Date	Original Size

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SCHEDULE 5: BREAKDOWN OF MAXIMUM EXPENDITURE ASSOCIATED WITH CONDITION 5A(e)(iv)(3) (provision of new dwelling for Mr and Mrs Pascoe)

Design, consent, and construction of the new dwelling, also including water supply and filtration, waste water treatment and onsite disposal: **\$480,000** (Source: quote received from local builder, adjustment for additional items by Transport Agency / Mt Messenger Alliance)

Site survey for the new house: **\$5,000**
(Source: Transport Agency / Mt Messenger Alliance)

Establishment of a level free-draining building platform suitable for a single storey dwelling, and provision of a single lane unpaved all-weather gravel access way from the existing SH3 (to the west of the Little Farm) to the house location: **\$50,000** (Source: Transport Agency / Mt Messenger Alliance)

Hard stand areas (gravel or concrete) as required adjacent to the new house: **\$10,000**
(Source: Transport Agency / Mt Messenger Alliance)

Fencing requirements (to a standard necessary to fence adjoining pest management area land): **\$35,000**
(Source: Transport Agency / Mt Messenger Alliance)

Provision of an electricity supply to the new dwelling (and to the 'new' existing calf-feeding shed) comprising a single phase supply from the distribution line running alongside the existing SH3 to the west of the Little Farm house site: **\$110,000** -(Source: quotes from lines operator / local contractors, adjustment for additional items by Transport Agency / Mt Messenger Alliance)

Provision of a telephone line to the new house from existing telephone services located along the existing SH3 to the west of the Little Farm house site: **\$10,000** (Source: Transport Agency / Mt Messenger Alliance)

Total: \$700,000 (including GST)

**Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES)
Contaminated Land Management Plan**

1. The Consent Holder shall implement a Contaminated Land Management Plan (CLMP). The CLMP shall be certified in accordance with Condition 1A and remain in place until the Completion of Construction Works.
- 1A.
 - (a) The CLMP required under Condition 1 must be certified in writing by the Planning Lead (or Nominee) as set out in clause (b) to clause (d).
 - (b) The CLMP must be provided to the Planning Lead (or Nominee) for technical certification at least forty (40) Working Days prior to the commencement of works.
 - (c) Certification (or withholding certification) shall be based solely on whether the management plan(s) meets the technical requirements set out in Condition 2.
 - (d) If twenty (20) Working Days have passed since the management plan(s) has been provided to the Planning Lead (or Nominee), and the Planning Lead (or Nominee) has not certified the management plan(s) or provided advice that the management plan(s) is not suitable to certify, then the consent holder may commence works in accordance with the management plan(s) as provided.
 - (e) The resolution process stipulated under Condition 1B shall be followed:
 - (i) Where the Consent Holder and the Planning Lead (or Nominee) are unable to agree on certification of the CLMP; or
 - (ii) Where the Consent Holder considers that the Planning Lead (or Nominee) has not acted in accordance with Condition 1A(c).
- 1B.
 - (a) In the event of any dispute arising about the content of the CLMP between NPDC and the Consent Holder, matters shall be referred in the first instance to the Planning Lead, and to the Consent Holder's Construction Manager (as described in the CEMP), to determine a process of resolution.
 - (b) If a resolution cannot be agreed under (a) within 15 Working Days, the matter shall be referred within 10 Working Days to an independent appropriately qualified expert, acceptable to both parties, setting out the details of the matter to be referred for determination and the reasons the parties do not agree.
 - (c) The expert shall, as soon as possible, issue a recommendation on the matter. The Planning Lead (or Nominee) must notify its decision to the Consent Holder within 5 Working Days of receipt of the recommendation from the expert that the management plan is certified, declined, or request that the Consent Holder incorporate changes suggested by the Council.
2. The CLMP shall be prepared and remain in general accordance with Ministry for the Environment Contaminated Land Management Guideline No. 1: Reporting on Contaminated Sites in New Zealand (Revised 2011). The CLMP shall include procedures to manage the effects of contaminated or potentially contaminated soils

on human health and the environment during ground disturbance activities, including the following:

- (a) site establishment procedures;
 - (b) classification of soil to be disturbed;
 - (c) soil management procedures for off-site disposal; and
 - (d) unexpected discovery of contaminated material protocol and requirement to record and track placement of any such material if reused on-site.
3. On receipt of an itemised invoice, the Consent Holder shall pay to the New Plymouth District Council all the administration, monitoring and supervision costs of these consents, fixed in accordance with section 36 of the Resource Management Act, 1991.
 4. Pursuant to section 125(1) of the Act, the consent referenced LUC18/ 47193 shall lapse 10 years from the date of commencement of the consents in accordance with section 116 of the Act.

Mt Messenger Bypass

VOLUME 2 - DRAWING SET

3 JULY 2020



MT MESSENGER DRAWING REGISTER

DRAWING NUMBER	DRAWING TITLE	CURRENT REVISION	ISSUE DATE AND REVISION				
			6/10/2017	14/11/2017	27/07/2018	17/05/2019	3/07/2020
GEOMETRICS							
MMA-DES-GEM-C0-DRG-1000	GENERAL ARRANGEMENT - SHEET LAYOUT	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1001	GENERAL ARRANGEMENT - SHEET 1	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1002	GENERAL ARRANGEMENT - SHEET 2	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1003	GENERAL ARRANGEMENT - SHEET 3	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1004	GENERAL ARRANGEMENT - SHEET 4	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1005	GENERAL ARRANGEMENT - SHEET 5	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1006	GENERAL ARRANGEMENT - SHEET 6	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1007	GENERAL ARRANGEMENT - SHEET 7	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1008	GENERAL ARRANGEMENT - SHEET 8	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1009	GENERAL ARRANGEMENT - SHEET 9	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-1010	GENERAL ARRANGEMENT - SHEET 10	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2001	PLAN AND LONG SECTION - SHEET 1	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2002	PLAN AND LONG SECTION - SHEET 2	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2003	PLAN AND LONG SECTION - SHEET 3	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2004	PLAN AND LONG SECTION - SHEET 4	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2005	PLAN AND LONG SECTION - SHEET 5	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2006	PLAN AND LONG SECTION - SHEET 6	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2007	PLAN AND LONG SECTION - SHEET 7	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2008	PLAN AND LONG SECTION - SHEET 8	D	A	B	C	D	
MMA-DES-GEM-C0-DRG-2009	PLAN AND LONG SECTION - SHEET 9	DELETED	A	B			
MMA-DES-GEM-C0-DRG-3001	TYPICAL ROAD CROSS SECTION	B	A	A	B	B	
MMA-DES-GEM-C0-DRG-3011	ROAD CROSS SECTIONS - SHEET 1	C	A	B	C	C	
MMA-DES-GEM-C0-DRG-3012	ROAD CROSS SECTIONS - SHEET 2	C	A	B	C	C	
MMA-DES-GEM-C0-DRG-3013	ROAD CROSS SECTIONS - SHEET 3	C	A	B	C	C	
MMA-DES-GEM-C0-DRG-3014	ROAD CROSS SECTIONS - SHEET 4	C	A	B	C	C	
DRAINAGE							
MMA-DES-DNG-C0-DRG-1000	GENERAL ARRANGEMENT LAYOUT - SHEET LAYOUT	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1001	GENERAL ARRANGEMENT LAYOUT - SHEET 1	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1002	GENERAL ARRANGEMENT LAYOUT - SHEET 2	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1003	GENERAL ARRANGEMENT LAYOUT - SHEET 3	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1004	GENERAL ARRANGEMENT LAYOUT - SHEET 4	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1005	GENERAL ARRANGEMENT LAYOUT - SHEET 5	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1006	GENERAL ARRANGEMENT LAYOUT - SHEET 6	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1007	GENERAL ARRANGEMENT LAYOUT - SHEET 7	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1008	GENERAL ARRANGEMENT LAYOUT - SHEET 8	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1009	GENERAL ARRANGEMENT LAYOUT - SHEET 9	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-1010	GENERAL ARRANGEMENT LAYOUT - SHEET 10	D	A	B	C	D	
MMA-DES-DNG-C0-DRG-4001	TYPICAL DRAINAGE DETAILS - TYPICAL WETLAND DETAILS AND SCHEDULE	C	A	B	C	C	
MMA-DES-DNG-C0-DRG-4002	TYPICAL DRAINAGE DETAILS - STREAM DIVERSION DETAILS	DELETED	A	B			
MMA-DES-DNG-C0-DRG-4003	TYPICAL DRAINAGE DETAILS - TYPICAL CHANNEL CROSS SECTIONS	C	A	B	C	C	
MMA-DES-DNG-C0-DRG-4004	TYPICAL DRAINAGE DETAILS - RIPRAP BASIN DETAILS	C	A	B	C	C	
MMA-DES-DNG-C0-DRG-4005	TYPICAL DRAINAGE DETAILS - FISH PASSAGE DETAILS	B	A	B		B	
MMA-DES-DNG-C0-DRG-4006	TYPICAL DRAINAGE DETAILS - TYPICAL CULVERT SECTION AND SCHEDULE	C	A	B	C	C	
MMA-DES-DNG-C0-DRG-4007	TYPICAL DRAINAGE DETAILS - FLUME DETAILS	C	A	B	C	C	
MMA-DES-DNG-C0-DRG-4008	TYPICAL DRAINAGE DETAILS - CUT OFF DRAIN AND DEBRIS FENCE	C	A	B	C	C	
MMA-DES-DNG-C0-DRG-4011	TYPICAL DRAINAGE DETAILS - STREAM DIVERSION DETAILS TYPE 1	A			A	A	
MMA-DES-DNG-C0-DRG-4012	TYPICAL DRAINAGE DETAILS - STREAM DIVERSION DETAILS TYPE 2	A			A	A	
MMA-DES-DNG-C0-DRG-4013	TYPICAL DRAINAGE DETAILS - STREAM DIVERSION DETAILS TYPE 3	A			A	A	
TUNNELS							
MMA-DES-TUN-C0-DRG-3001	TYPICAL CROSS SECTION - SHEET 1	B	A	A	B	B	
STRUCTURES - BRIDGE 0							
MMA-DES-STR-C0-DRG-1001	GENERAL ARRANGEMENT - PERSPECTIVE VIEW	A		A	A	A	
MMA-DES-STR-C0-DRG-1002	GENERAL ARRANGEMENT - PLAN AND ELEVATION	A		A	A	A	

MT MESSENGER DRAWING REGISTER

DRAWING NUMBER	DRAWING TITLE	CURRENT REVISION	ISSUE DATE AND REVISION				
			6/10/2017	14/11/2017	27/07/2018	17/05/2019	3/07/2020
MMA-DES-STR-C0-DRG-1003	GENERAL ARRANGEMENT - TYPICAL CROSS SECTION STRUCTURES - BRIDGE 1	A			A	A	A
MMA-DES-STR-C0-DRG-1101	GENERAL ARRANGEMENT - PERSPECTIVE VIEW	A		A	A	A	A
MMA-DES-STR-C0-DRG-1102	GENERAL ARRANGEMENT - PLAN AND ELEVATION	A		A	A	A	A
MMA-DES-STR-C0-DRG-1103	GENERAL ARRANGEMENT - TYPICAL CROSS SECTION	A		A	A	A	A
LANDSCAPE							
MMA-DES-UDL-C0-DRG-1000	PRELIMINARY LANDSCAPE CONCEPT - SHEET LAYOUT	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1001	PRELIMINARY LANDSCAPE CONCEPT - SHEET 1	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1002	PRELIMINARY LANDSCAPE CONCEPT - SHEET 2	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1003	PRELIMINARY LANDSCAPE CONCEPT - SHEET 3	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1004	PRELIMINARY LANDSCAPE CONCEPT - SHEET 4	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1005	PRELIMINARY LANDSCAPE CONCEPT - SHEET 5	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1006	PRELIMINARY LANDSCAPE CONCEPT - SHEET 6	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1007	PRELIMINARY LANDSCAPE CONCEPT - SHEET 7	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1008	PRELIMINARY LANDSCAPE CONCEPT - SHEET 8	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1009	PRELIMINARY LANDSCAPE CONCEPT - SHEET 9	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1010	PRELIMINARY LANDSCAPE CONCEPT - SHEET 10	E		A	C	D	E
MMA-DES-UDL-C0-DRG-1011	PRELIMINARY LANDSCAPE CONCEPT - SHEET 11	E			C	D	E
MMA-DES-UDL-C0-DRG-1012	PRELIMINARY LANDSCAPE CONCEPT - SHEET 12	E			C	D	E
MMA-DES-UDL-C0-DRG-1013	PRELIMINARY LANDSCAPE CONCEPT - SHEET 13	E			C	D	E
EROSION AND SEDIMENT CONTROL							
MMA-DES-ESC-C0-DRG-1000	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET LAYOUT	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1001	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 1	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1002	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 2	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1003	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 3	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1004	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 4	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1005	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 5	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1006	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 6	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1007	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 7	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1008	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 8	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1009	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 9	E		A	B	D	E
MMA-DES-ESC-C0-DRG-1010	CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET 10	E		A	B	D	E
MMA-DES-ESC-C0-DRG-4001	TYPICAL DETAILS - SEDIMENT RETENTION PONDS	B		A	B	B	B
MMA-DES-ESC-C0-DRG-4002	TYPICAL DETAILS - SILT FENCE	B		A	B	B	B
MMA-DES-ESC-C0-DRG-4003	TYPICAL DETAILS - DECANTING EARTH BUND	B		A	B	B	B
MMA-DES-ESC-C0-DRG-4004	TYPICAL DETAILS - STABILISED VEHICLE ENTRANCEWAY	B		A	B	B	B
MMA-DES-ESC-C0-DRG-4005	TYPICAL DETAILS - FLOCCULATION SYSTEM	B		A	B	B	B
MMA-DES-ESC-C0-DRG-4006	TYPICAL DETAILS - WATER DIVERSION	B		A	B	B	B
MMA-DES-ESC-C0-DRG-4007	TYPICAL DETAILS - SEDIMENT RETENTION PONDS	B		A	B	B	B
MMA-DES-ESC-C0-DRG-4008	TYPICAL DETAILS - CHEMICAL TREATMENT DEVICES	B		A	B	B	B
PROPERTY							
MMA-DES-PRP-C0-DRG-1000	DESIGNATION PLANS - SHEET LAYOUT AND PROPERTY LIST	B		A	A	A	B
MMA-DES-PRP-C0-DRG-1001	DESIGNATION PLANS - SHEET 1	B		A	A	A	B
MMA-DES-PRP-C0-DRG-1002	DESIGNATION PLANS - SHEET 2	B		A	A	A	B
MMA-DES-PRP-C0-DRG-1003	DESIGNATION PLANS - SHEET 3	B		A	A	A	B
MMA-DES-PRP-C0-DRG-1004	DESIGNATION PLANS - SHEET 4	B		A	A	A	B
CONSTRUCTION							
MMA-DES-CON-C0-DRG-1001	CONSTRUCTION ZONES	D		A	B	C	D
MMA-DES-CON-C0-DRG-1010	SITE ACCESS POINTS	E		A	C	D	E
MMA-DES-CON-C0-DRG-1051	CONSTRUCTION - STAGE 1	D		A	B	C	D
MMA-DES-CON-C0-DRG-1052	CONSTRUCTION - STAGE 2	D		A	B	C	D
MMA-DES-CON-C0-DRG-1053	CONSTRUCTION - STAGE 3	D		A	B	C	D
MMA-DES-CON-C0-DRG-1054	CONSTRUCTION - STAGE 4	D		A	B	C	D

D	REVISED CONSENT ISSUE	QDO'S WHE*	-	-	BSS	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S WHE	-	-	BSS	17/05/2019
B	REVISED CONSENT ISSUE	QDO'S WHE	-	-	BSS	26/07/2018
A	FOR CONSENT	QDO'S WHE	-	-	LG	14/11/2017

Tab MMA-DES-DSM-C0-DRG-0001

Scales

NOT TO SCALE

Original Size A1

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DESIGN MANAGEMENT DRAWING REGISTER SHEET 1

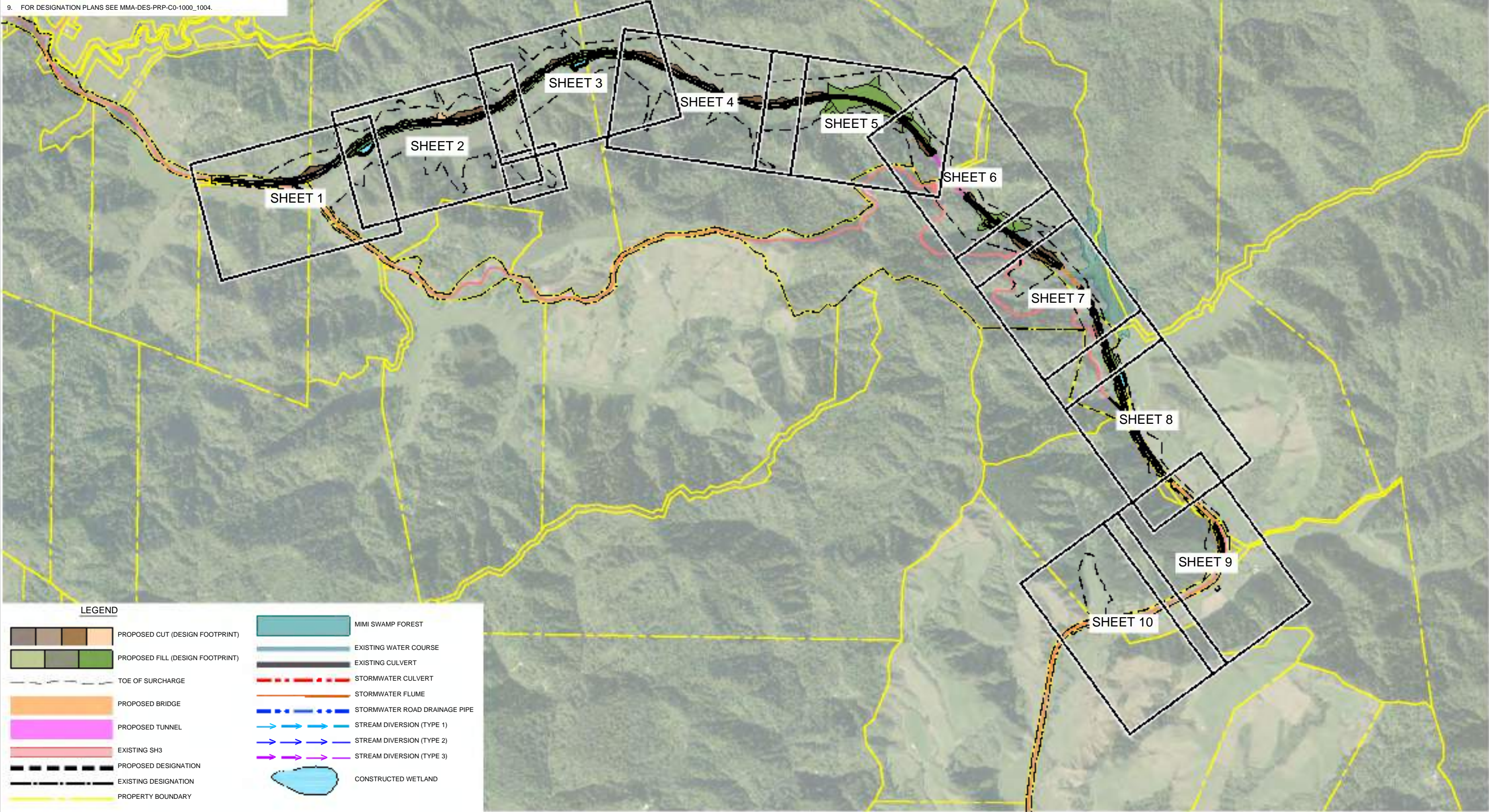
Approved

B. SYMMANS

Status **FOR CONSENT**

Drawing Number **MMA-DES-DSM-C0-DRG-0001** Revision **D**

- NOTES
1. COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000).
 2. HEIGHT DATUM: TARANAKI 1970 SEA LEVEL (TARAHT1970).
 3. FOR LONG SECTIONS SEE DRAWINGS MMA-DES-GEM-C0-DRG-2001_2009.
 4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-C0-DRG-3011_3014.
 5. FOR DRAINAGE DESIGN SEE DRAWINGS MMA-DES-DNG-C0-DRG-1000_1010.
 6. FOR TUNNEL DESIGN SEE DRAWINGS MMA-DES-TUN-C0-DRG-1001.
 7. FOR BRIDGE DESIGN SEE DRAWINGS MMA-DES-STR-C0-1001_1003 AND MMA-DES-STR-C0-1101_1103.
 8. FOR LANDSCAPE CONCEPT SEE DRAWINGS MMA-DES-UDL-C0-1000_1013.
 9. FOR DESIGNATION PLANS SEE MMA-DES-PRP-C0-1000_1004.



LEGEND

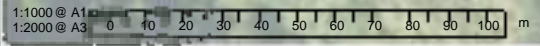
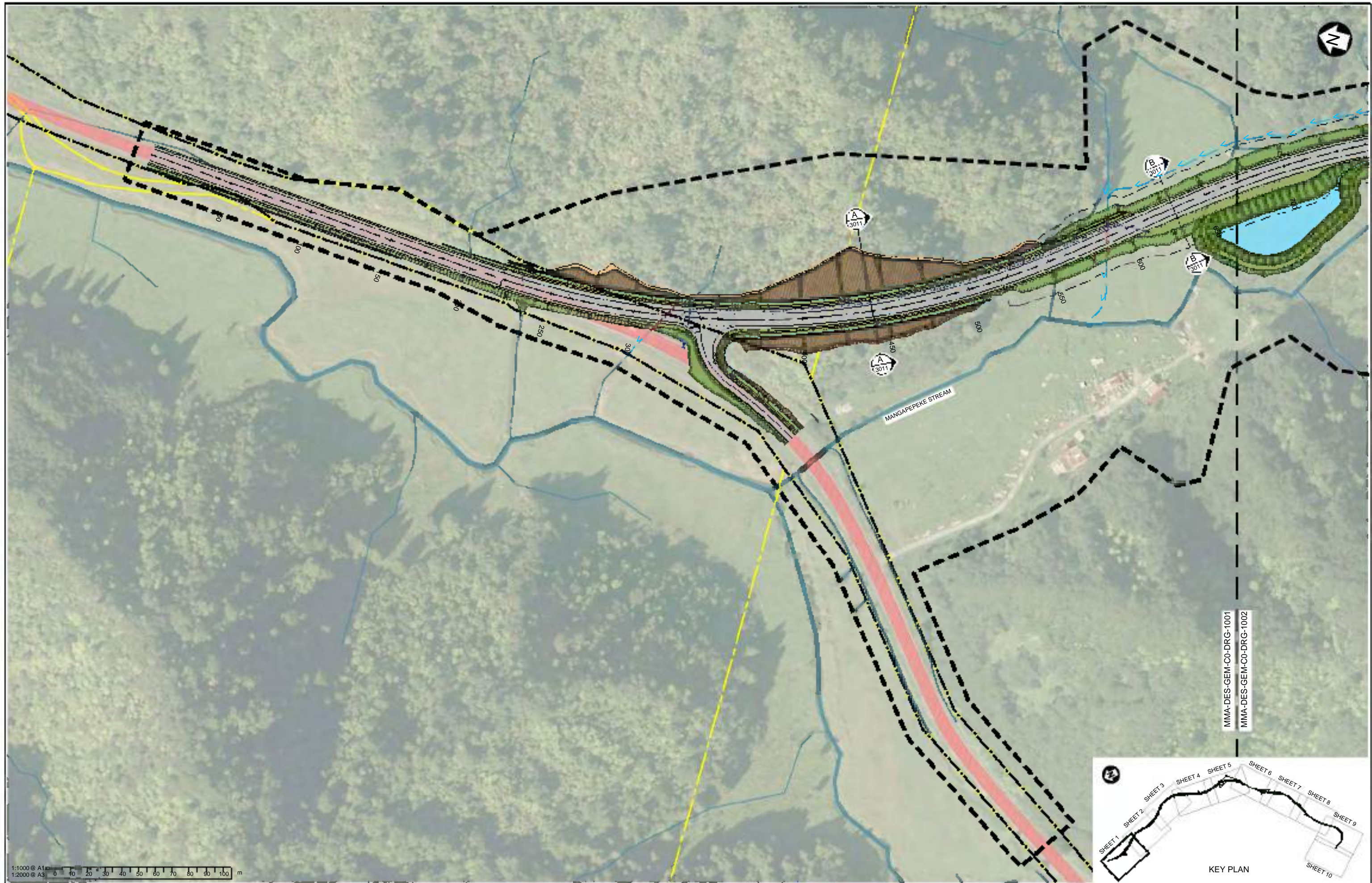
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	PROPOSED FILL (DESIGN FOOTPRINT)		EXISTING WATER COURSE
	TOE OF SURCHARGE		EXISTING CULVERT
	PROPOSED BRIDGE		STORMWATER CULVERT
	PROPOSED TUNNEL		STORMWATER FLUME
	EXISTING SH3		STORMWATER ROAD DRAINAGE PIPE
	PROPOSED DESIGNATION		STREAM DIVERSION (TYPE 1)
	EXISTING DESIGNATION		STREAM DIVERSION (TYPE 2)
	PROPERTY BOUNDARY		STREAM DIVERSION (TYPE 3)
			CONSTRUCTED WETLAND

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

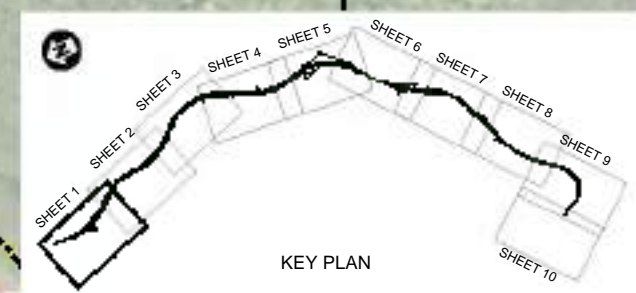
Tab MMA-DES-GEM-C0-DRG-1000			
Scales NOT TO SCALE			
Original Size A1	This drawing is not to be used for construction purposes unless signed approved and issued For Construction		

MT MESSENGER BYPASS	
GEOMETRICS GENERAL ARRANGEMENT SHEET LAYOUT	

Approved B. SYMMANS
Status FOR CONSENT
Drawing Number MMA-DES-GEM-C0-DRG-1000
Revision D

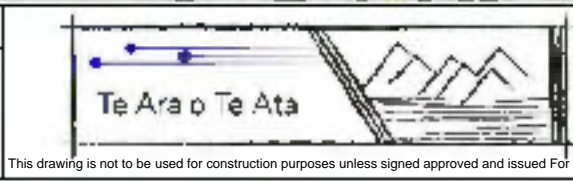


MMA-DES-GEM-C0-DRG-1001
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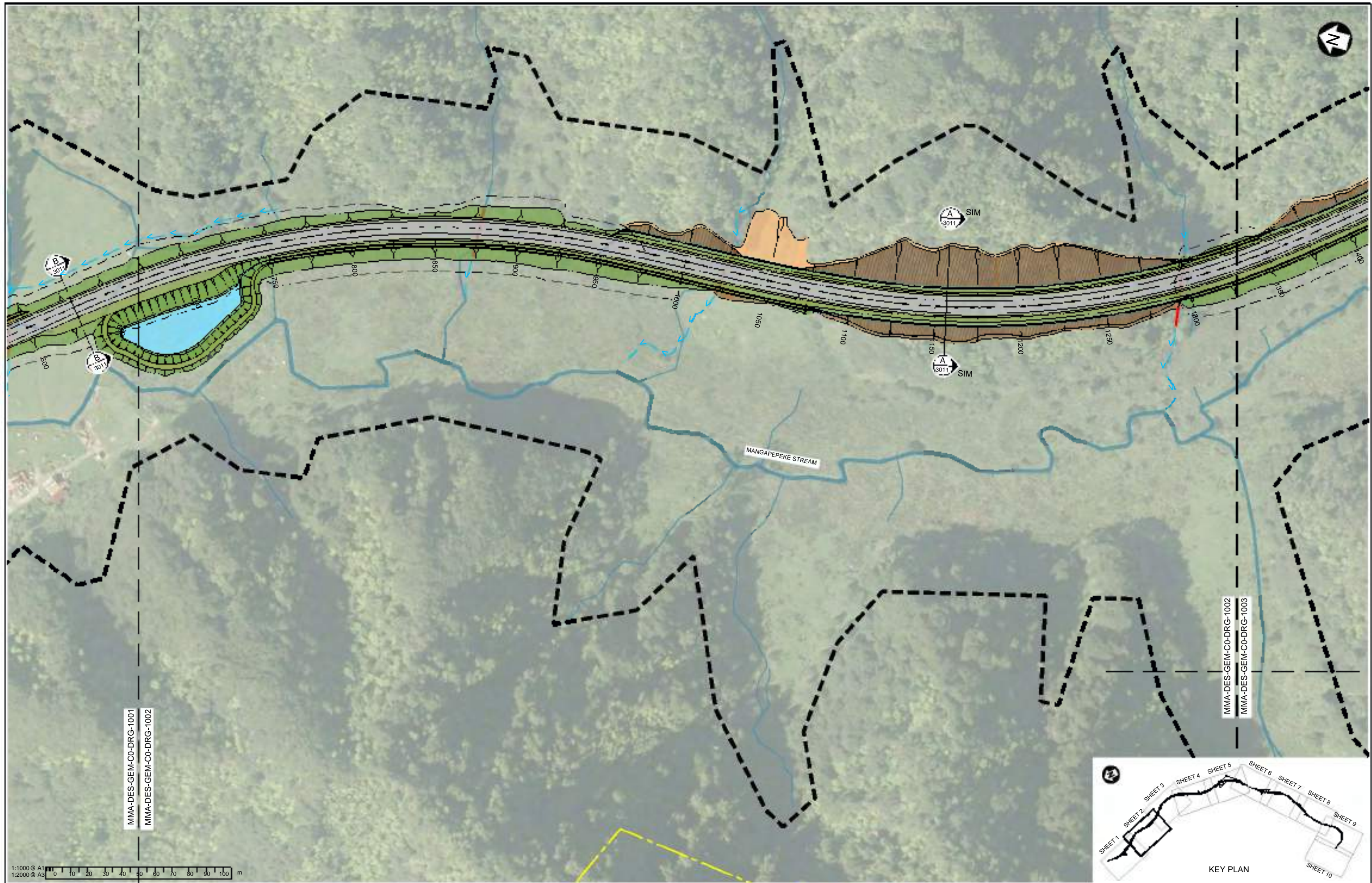
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D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-C0-DRG-1001
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS
GEOMETRICS
GENERAL ARRANGEMENT
SHEET 1

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Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-C0-DRG-1001
Revision
D



1:1000 @ A1
1:2000 @ A3

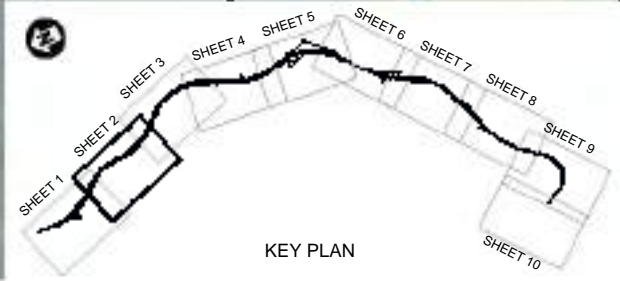
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D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

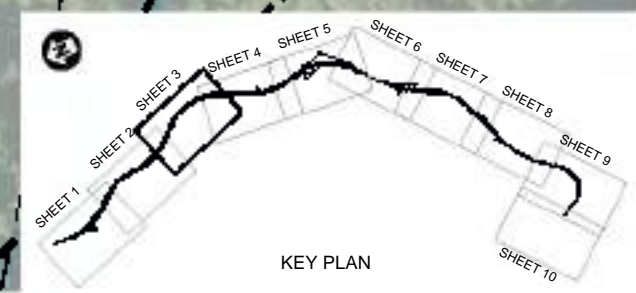
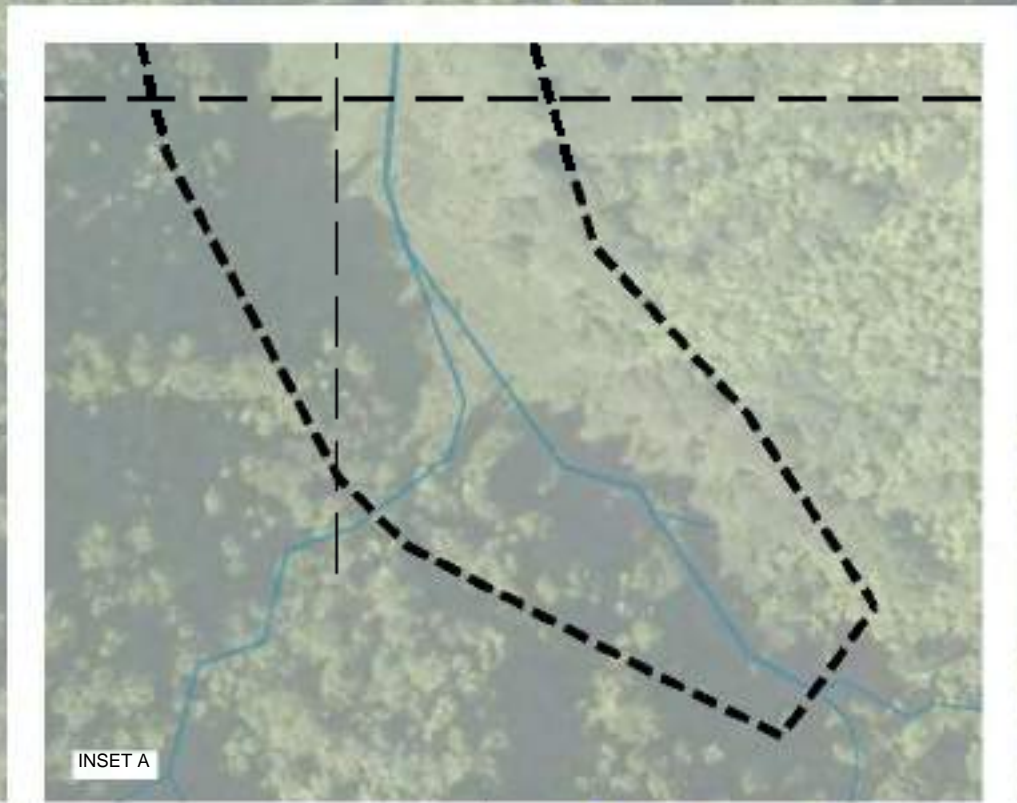
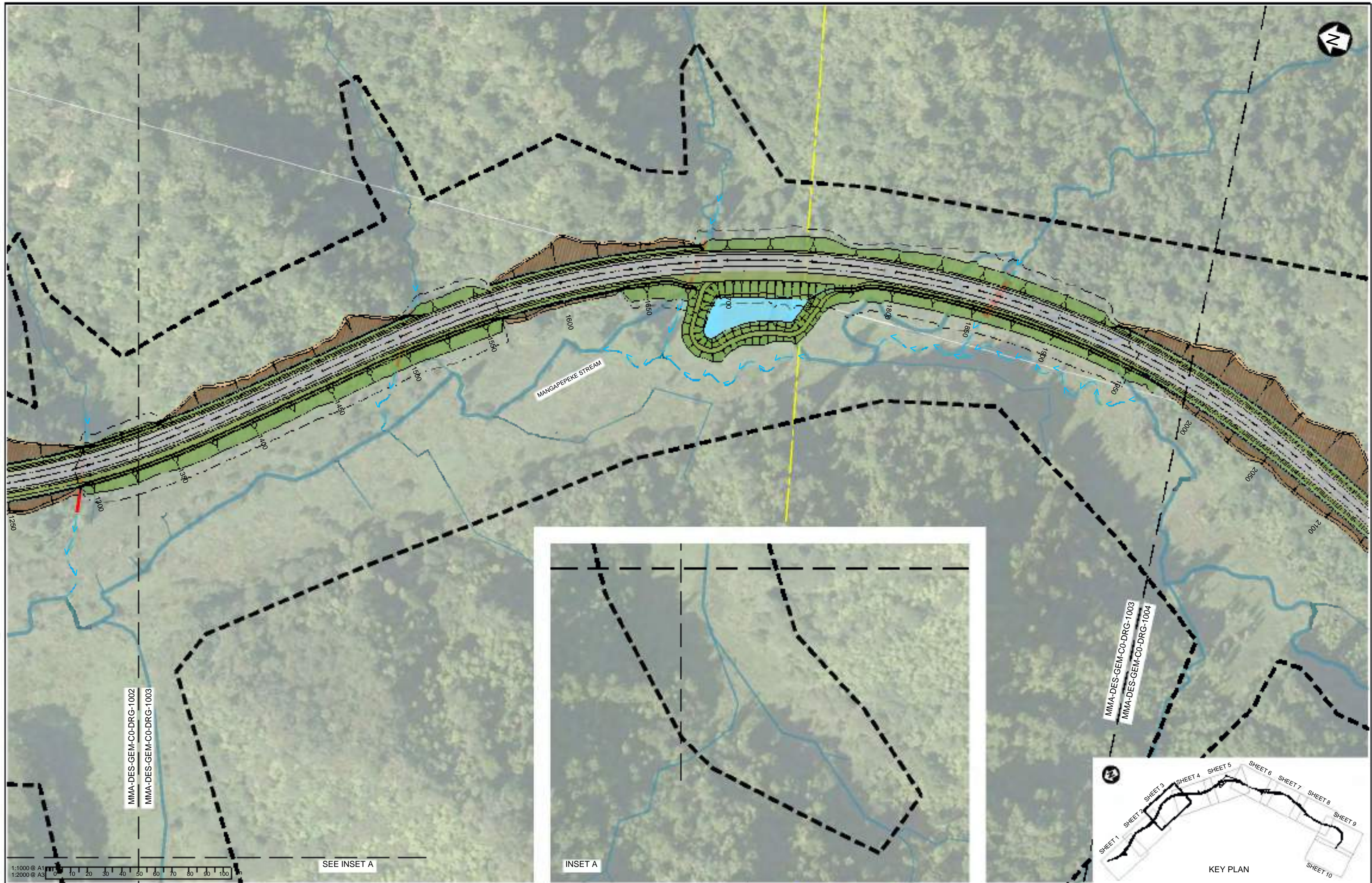
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MT MESSENGER BYPASS
GEOMETRICS
GENERAL ARRANGEMENT
SHEET 2

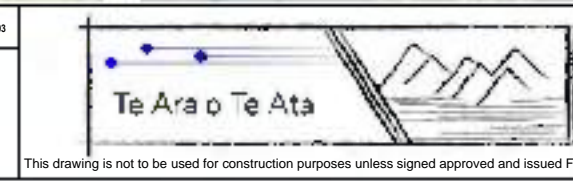
Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-CO-DRG-1002
Revision
D





Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

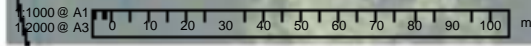
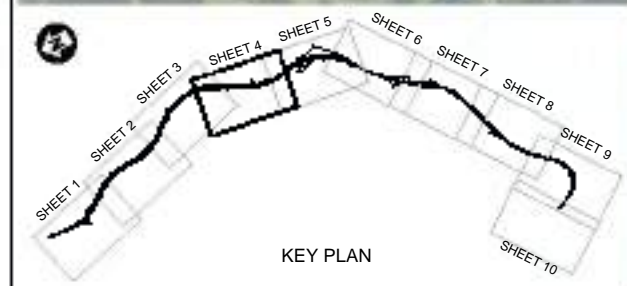
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Original Size	A1



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GEOMETRICS
GENERAL ARRANGEMENT
SHEET 3

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Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-C0-DRG-1003
Revision
D

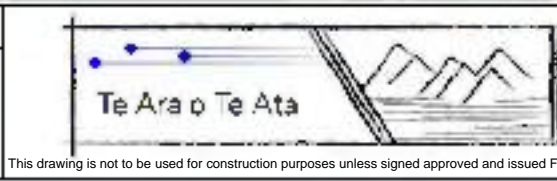


MMA-DES-GEM-CO-DRG-1004
MMA-DES-GEM-CO-DRG-1003

MMA-DES-GEM-CO-DRG-1004
MMA-DES-GEM-CO-DRG-1005

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
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C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	BRIDGE ADDED AT CH 2400, SECTION C REMOVED	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

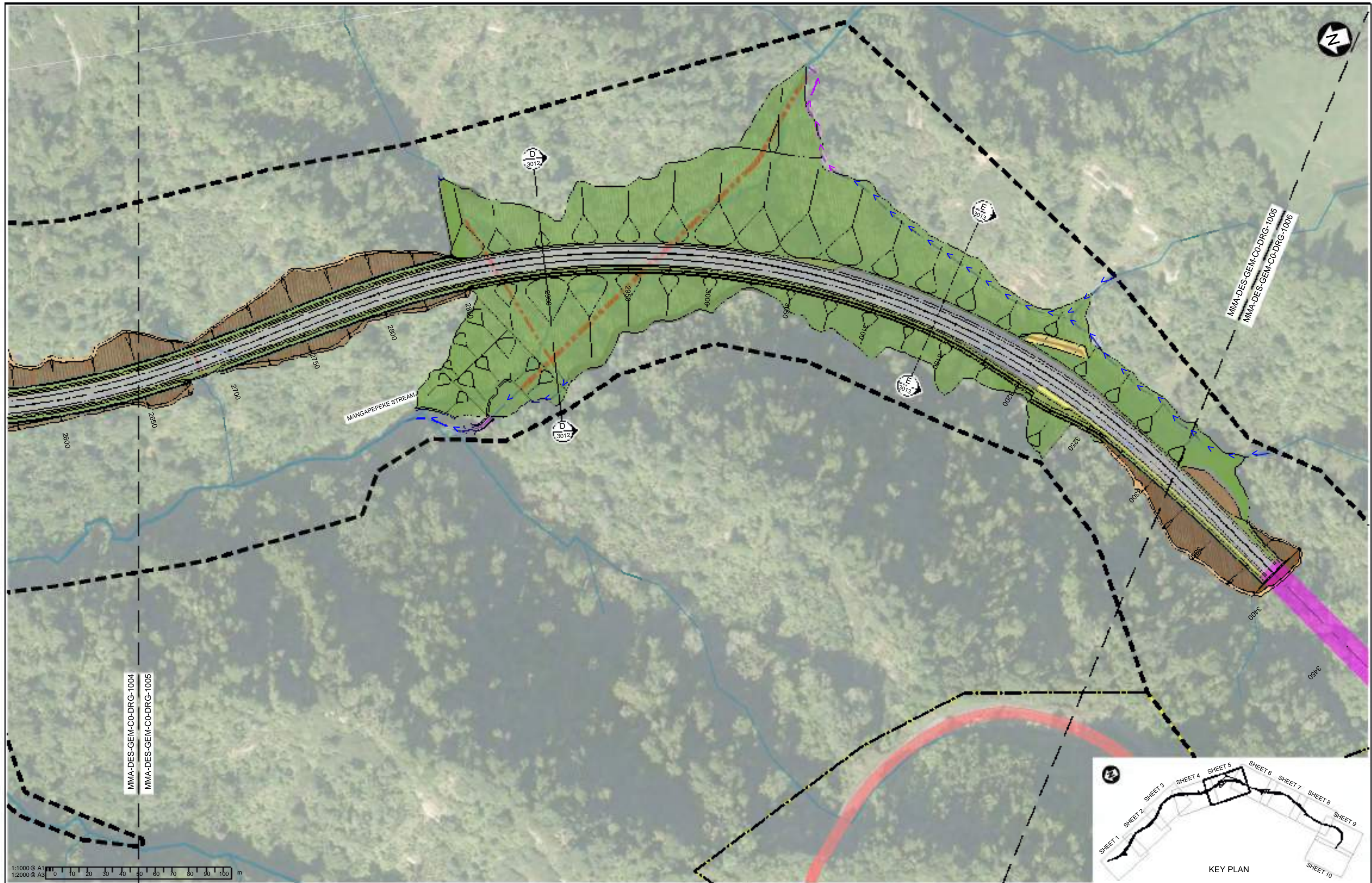
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GEOMETRICS
GENERAL ARRANGEMENT
SHEET 4

Approved
B. SYMMANS
Status
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Drawing Number
MMA-DES-GEM-CO-DRG-1004
Revision
D



MMA-DES-GEM-CO-DRG-1004
MMA-DES-GEM-CO-DRG-1005

MMA-DES-GEM-CO-DRG-1005
MMA-DES-GEM-CO-DRG-1006

1:1000 @ A1
1:2000 @ A3
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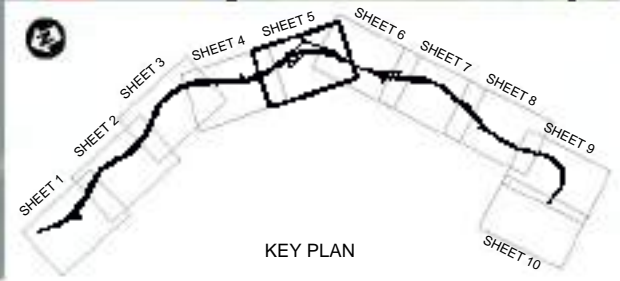
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C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

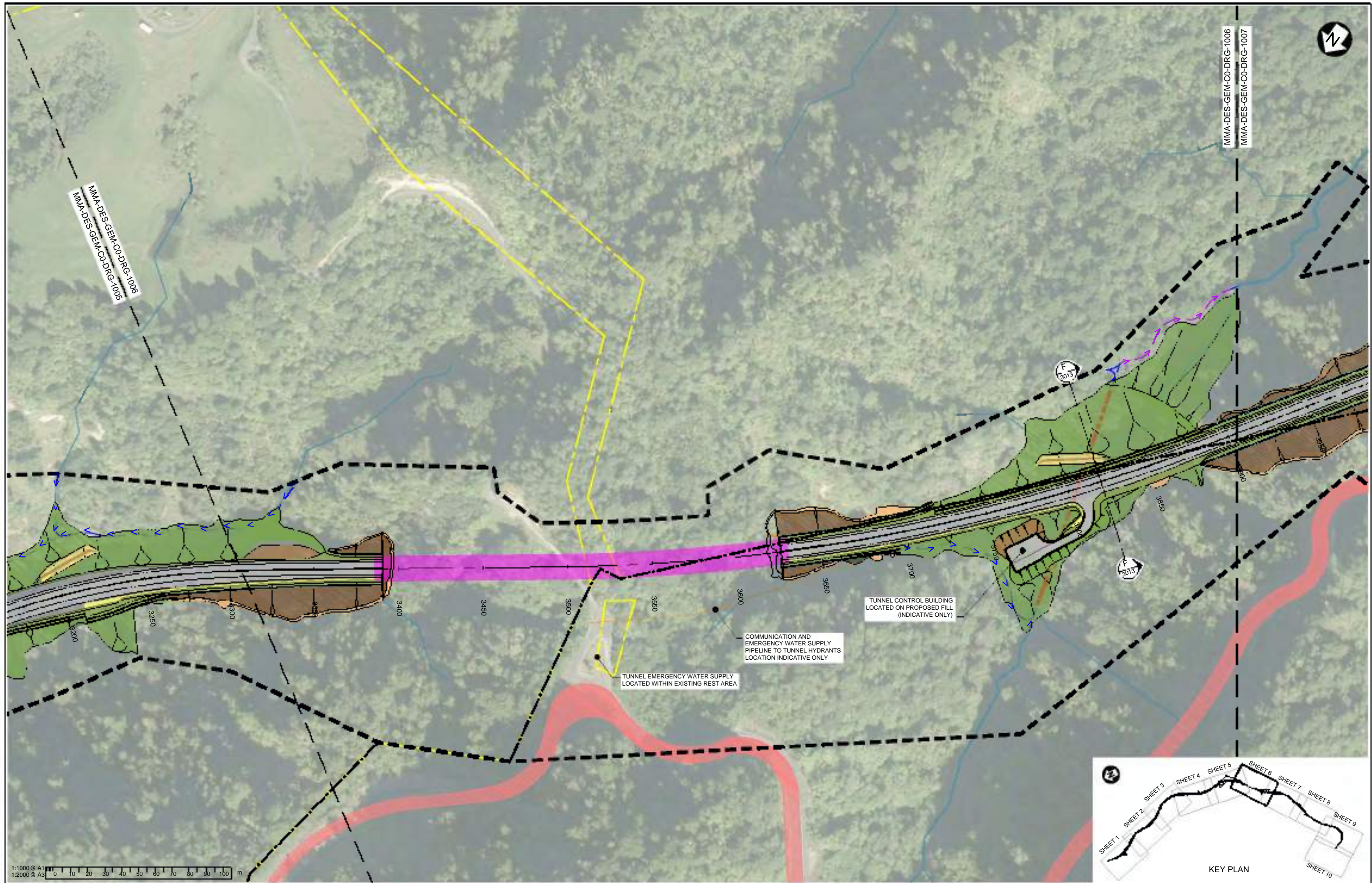
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GEOMETRICS
GENERAL ARRANGEMENT
SHEET 5

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B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-CO-DRG-1005
Revision
D

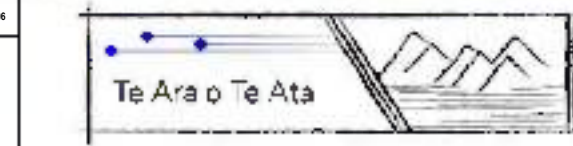




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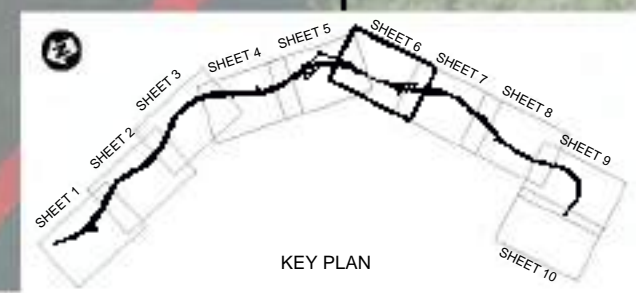
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C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

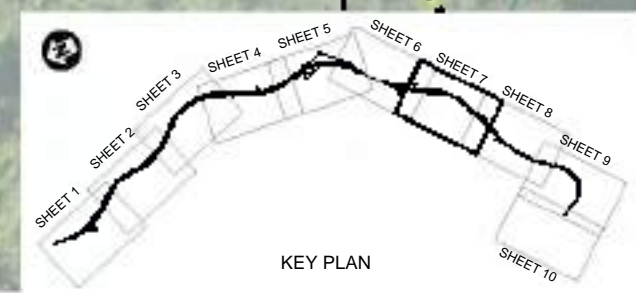
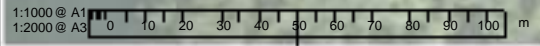
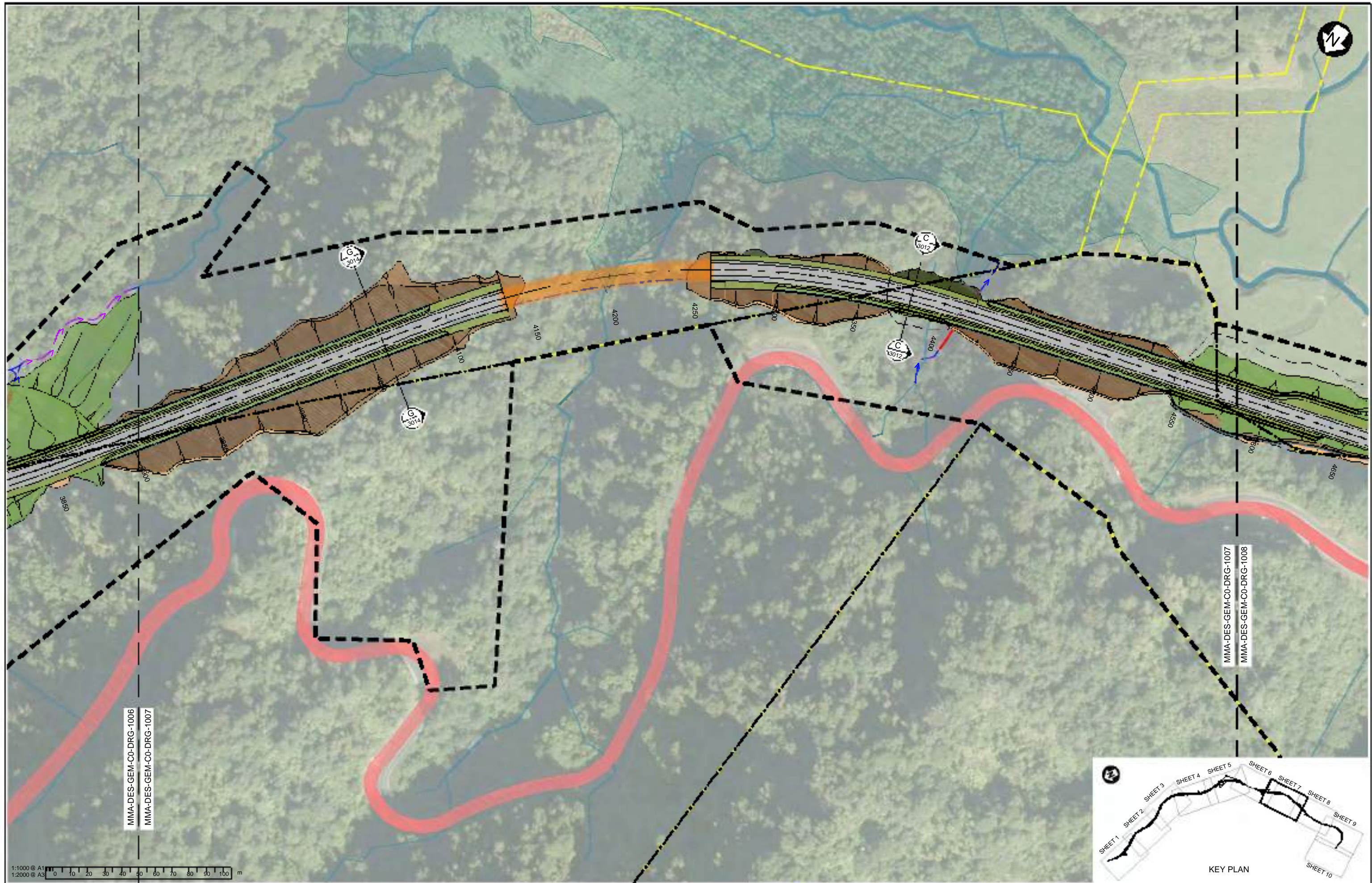
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Original Size	A1



MT MESSENGER BYPASS
GEOMETRICS
GENERAL ARRANGEMENT
SHEET 6

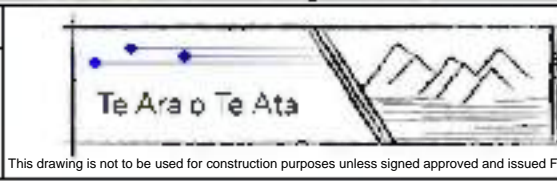
Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-CO-DRG-1006
Revision
D





Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

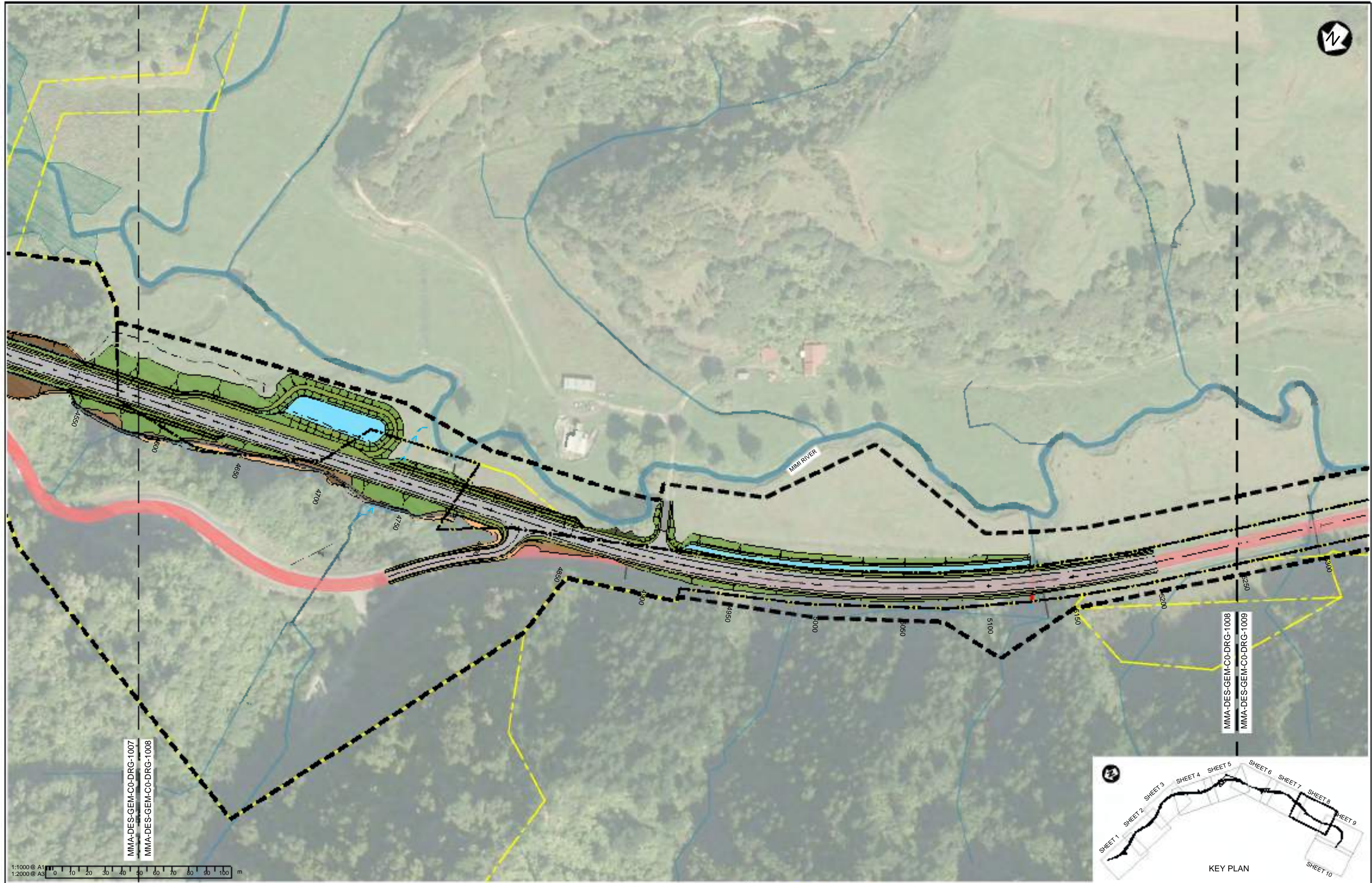
Tab	MMA-DES-GEM-CO-DRG-1007
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



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MT MESSENGER BYPASS
GEOMETRICS
GENERAL ARRANGEMENT
SHEET 7

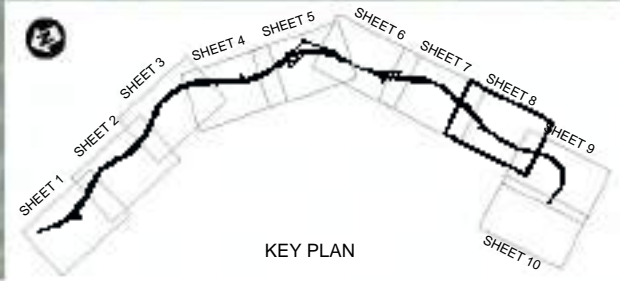
Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-CO-DRG-1007
Revision
D



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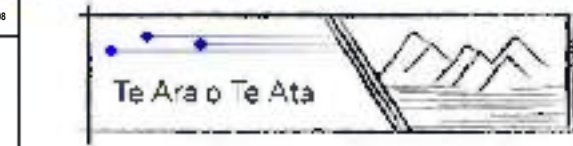
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MMA-DES-GEM-CO-DRG-1008
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Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
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C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	FILL DISPOSAL 3 REMOVED	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	Scale	Original Size
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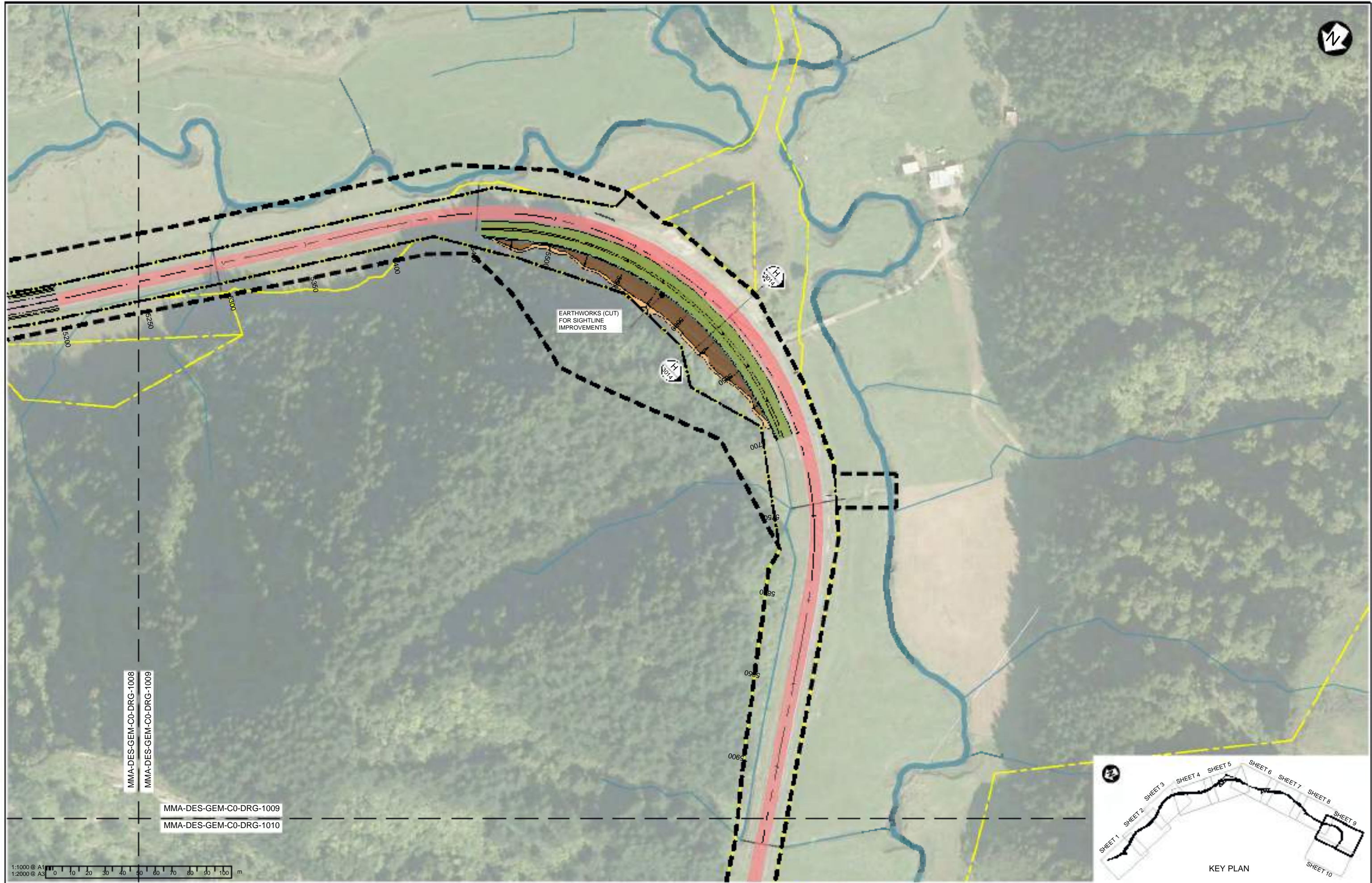


MT MESSENGER BYPASS
GEOMETRICS
GENERAL ARRANGEMENT
SHEET 8

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-CO-DRG-1008
Revision	D

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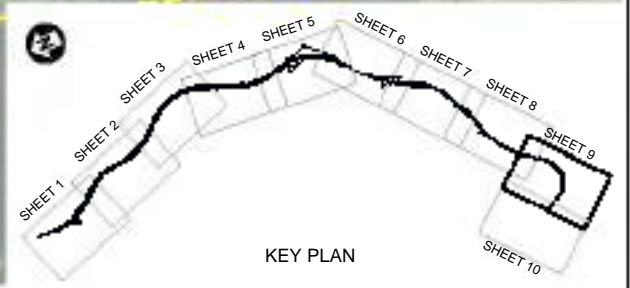
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MMA-DES-GEM-C0-DRG-1009

MMA-DES-GEM-C0-DRG-1009

MMA-DES-GEM-C0-DRG-1010

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1:2000 @ A3



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	Original Size
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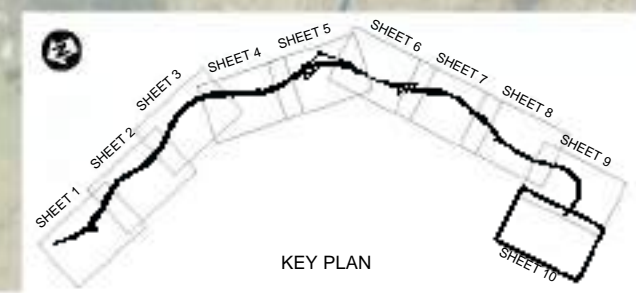
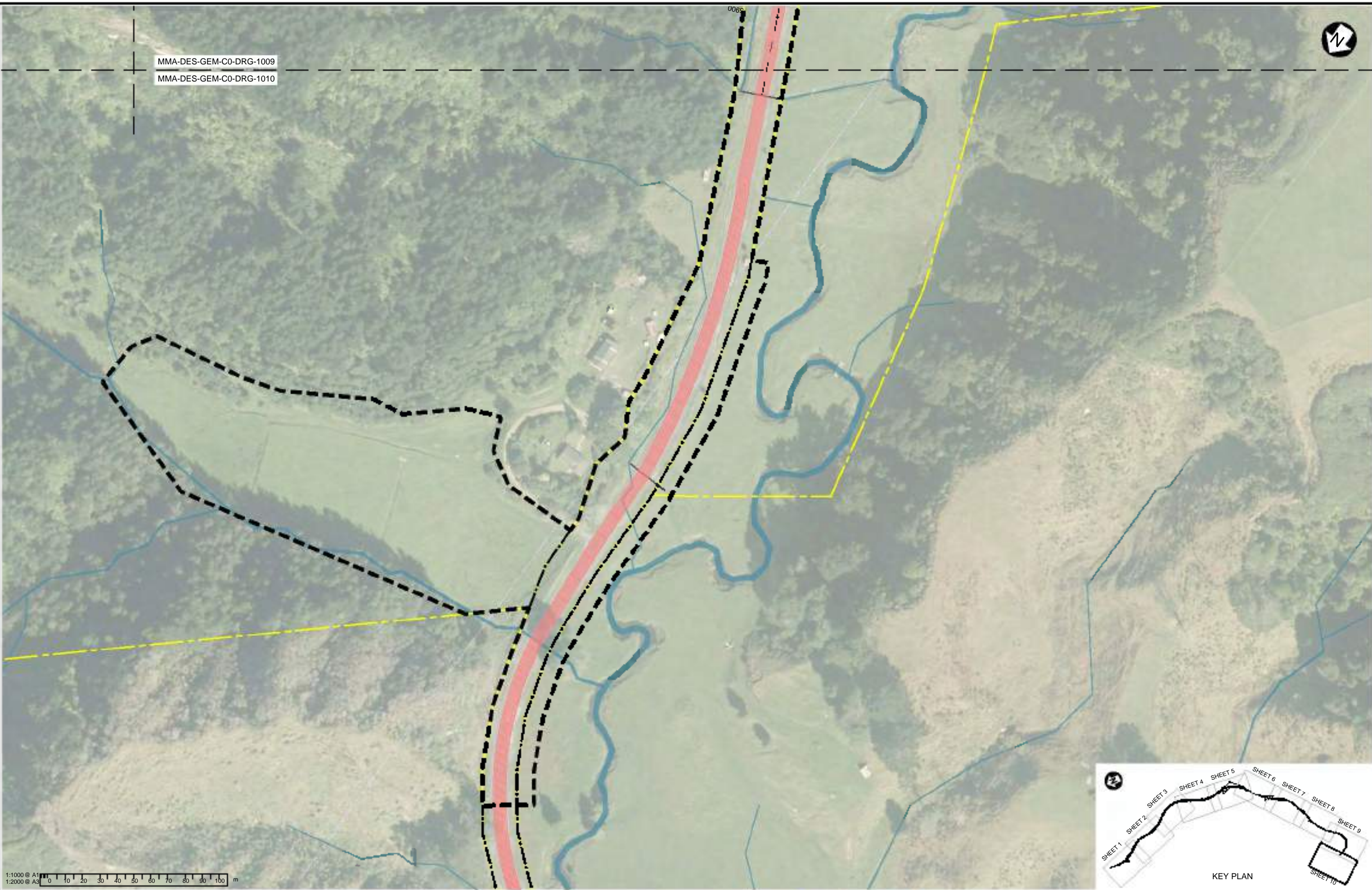
MT MESSENGER BYPASS
GEOMETRICS
GENERAL ARRANGEMENT
SHEET 9

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-C0-DRG-1009
Revision	D

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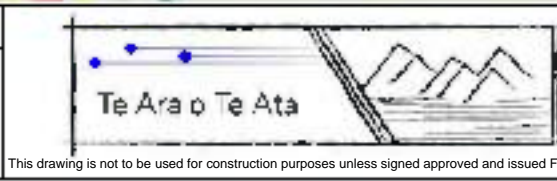
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MMA-DES-GEM-C0-DRG-1010



1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

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Original Size	A1



MT MESSENGER BYPASS
GEOMETRICS
GENERAL ARRANGEMENT
SHEET 10

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-C0-DRG-1010
Revision
D

- NOTES
1. COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000).
 2. HEIGHT DATUM: TARANAKI 1970 SEA LEVEL (TARAHT1970).
 3. FOR GENERAL ARRANGEMENTS SEE DRAWINGS MMA-DES-GEM-CO-DRG-1000_1010.
 4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-CO-DRG-3011_3014.
 5. FOR TUNNEL DESIGN SEE DRAWING MMA-DES-TUN-CO-DRG-1001.
 6. FOR BRIDGE DESIGN SEE DRAWINGS MMA-DES-STR-CO-1001_1003 AND MMA-DES-STR-CO-1101_1103.



IP CH 719.643 RL 16.308

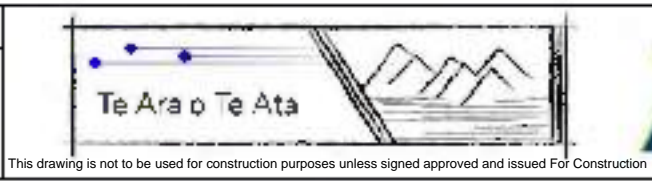
Station	680	682.15	700	719.64	750	800	850	900	922.48	950	1000	1002.48	1032.48	1050	1100	1112.48	1150	1200	1250	1300	1328.23	1350	1360
DATUM RL	-54.00																						
VERTICAL ALIGNMENT	K=1567.45 L=500m										L=932.84m G=0.6%												
HORIZONTAL ALIGNMENT	L=80m		L=240.32m R=500m			L=80m		L=30m		L=80m			L=215.76m R=460m						L=80m				
LEVEL DIFFERENCE CUT - / FILL +	3.66	3.78	3.95	3.95	3.88	4.39	3.46	4.77	4.58	3.29	-1.22	-2.67	-1.77	-1.12	-1.48	-21.54	-22.24	-24.06	-23.26	3.18	2.96	2.35	0.53
DESIGN SURFACE LEVEL	15.802	15.819	15.958	16.108	16.336	16.498	17.044	17.375	17.518	17.689	17.99	18.005	18.185	18.29	18.59	18.665	18.89	19.19	19.49	19.79	19.959	20.09	20.15
EXISTING SURFACE LEVEL	12.14	12.04	12.01	12.15	12.45	12.31	13.59	12.60	12.94	14.40	19.21	20.67	19.96	19.41	30.07	40.21	41.13	43.25	42.75	16.61	17.00	17.74	19.62
CHAINAGE	680	682.15	700	719.64	750	800	850	900	922.48	950	1000	1002.48	1032.48	1050	1100	1112.48	1150	1200	1250	1300	1328.23	1350	1360
SUPER ELEVATION	LHS 7%		RHS 7%																		LHS -7%		

1:1000 @ A1
1:2000 @ A3

LONGITUDINAL SECTION - MCE1

Rev	Revision Description	Drawn	Checked	Designed	Approved	Date	
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 2004 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-CO-DRG-2002
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS
GEOMETRICS
PLAN AND LONG SECTION
SHEET 2

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-CO-DRG-2002
Revision	D

- NOTES
1. COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000).
 2. HEIGHT DATUM: TARANAKI 1970 SEA LEVEL (TARAHT1970).
 3. FOR GENERAL ARRANGEMENTS SEE DRAWINGS MMA-DES-GEM-CO-DRG-1000_1010.
 4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-CO-DRG-3011_3014.
 5. FOR TUNNEL DESIGN SEE DRAWING MMA-DES-TUN-CO-DRG-1001.
 6. FOR BRIDGE DESIGN SEE DRAWINGS MMA-DES-STR-CO-1001_1003 AND MMA-DES-STR-CO-1101_1103.



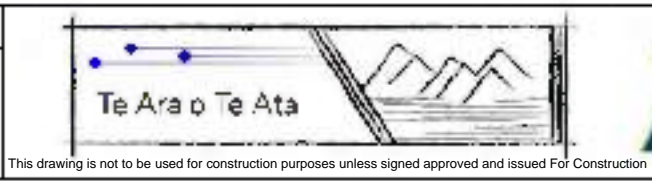
DATUM RL. -49.00	
VERTICAL ALIGNMENT	L=932.84m C=0.6%
HORIZONTAL ALIGNMENT	L=80m, L=57.76m, L=80m, L=487.23m R=500m, L=80m
LEVEL DIFFERENCE CUT - / FILL +	0.53, -0.75, -0.05, -2.55, -5.14, -1.52, 4.05, 3.78, -10.99, -1.55, 3.85, 4.27, 4.09, 3.82, 3.37, -0.80, -15.15, -23.54
DESIGN SURFACE LEVEL	20.15, 20.39, 20.439, 20.69, 20.786, 20.99, 21.266, 21.29, 21.89, 21.89, 22.19, 22.49, 22.79, 23.09, 23.39, 23.82, 24.537, 25.172, 25.317
EXISTING SURFACE LEVEL	19.62, 21.14, 20.49, 23.24, 25.92, 22.51, 17.22, 17.51, 18.34, 23.44, 18.34, 18.22, 18.70, 19.27, 20.02, 24.62, 39.69, 48.72, 42.09
CHAINAGE	1350, 1400, 1438.23, 1450, 1466, 1500, 1546, 1550, 1600, 1650, 1700, 1750, 1800, 1850, 1900, 1950, 2000, 2033.23, 2040
SUPER ELEVATION	RHS 6.6%, LHS 7%, RHS -7%

1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m

LONGITUDINAL SECTION - MCE1

Rev	Revision Description	Drawn	Checked	Designed	Approved	Date	
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 2004 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-CO-DRG-2003
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



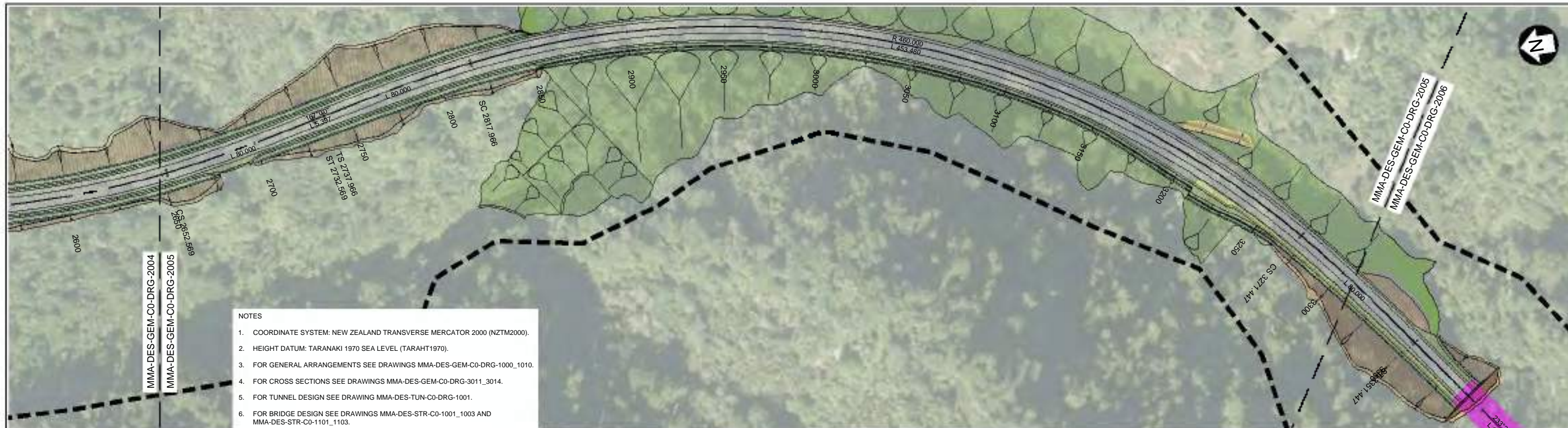
MT MESSENGER BYPASS

GEOMETRICS

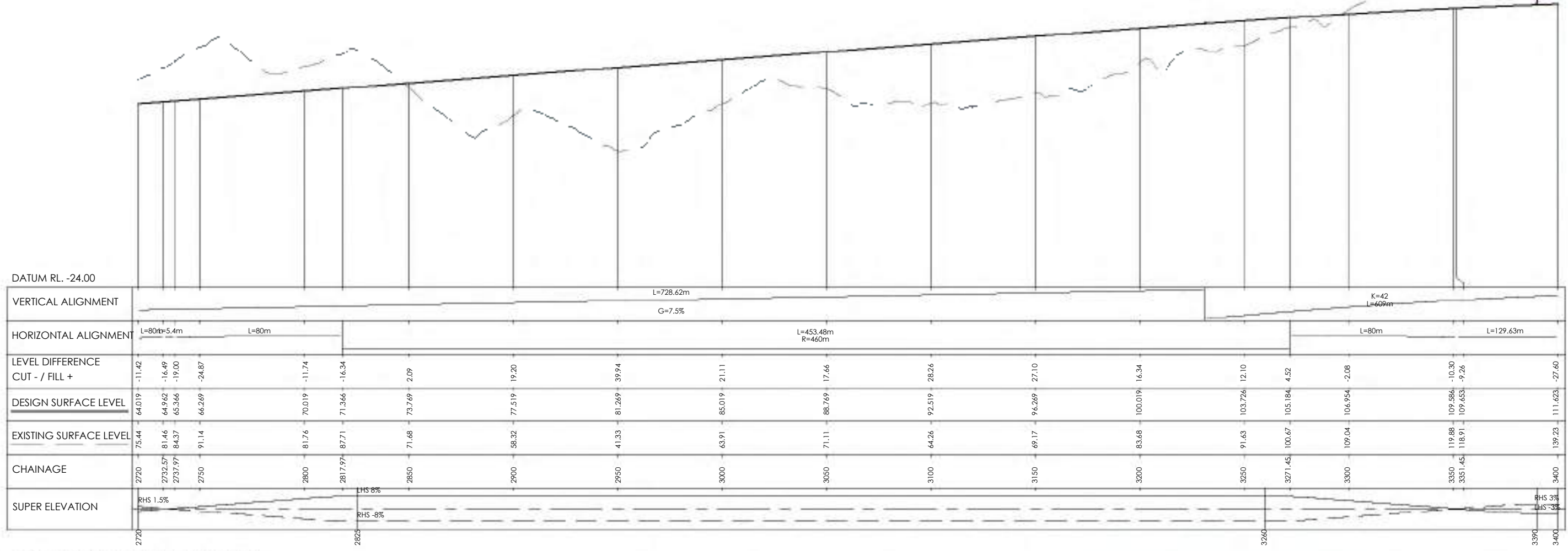
PLAN AND LONG SECTION

SHEET 3

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-CO-DRG-2003
Revision	D



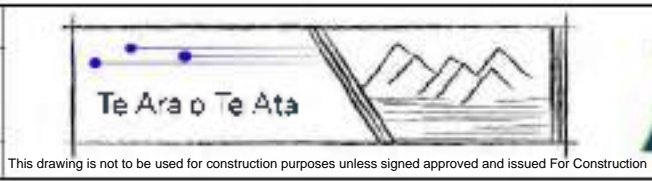
- NOTES**
1. COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000).
 2. HEIGHT DATUM: TARANAKI 1970 SEA LEVEL (TARAHT1970).
 3. FOR GENERAL ARRANGEMENTS SEE DRAWINGS MMA-DES-GEM-CO-DRG-1000_1010.
 4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-CO-DRG-3011_3014.
 5. FOR TUNNEL DESIGN SEE DRAWING MMA-DES-TUN-CO-DRG-1001.
 6. FOR BRIDGE DESIGN SEE DRAWINGS MMA-DES-STR-CO-1001_1003 AND MMA-DES-STR-CO-1101_1103.



LONGITUDINAL SECTION - MCE1

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 2004 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-CO-DRG-2005
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS
GEOMETRICS
PLAN AND LONG SECTION
SHEET 5

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-CO-DRG-2005
Revision	D

- NOTES
1. COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000).
 2. HEIGHT DATUM: TARANAKI 1970 SEA LEVEL (TARAHT1970).
 3. FOR GENERAL ARRANGEMENTS SEE DRAWINGS MMA-DES-GEM-C0-DRG-1000_1010.
 4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-C0-DRG-3011_3014.
 5. FOR TUNNEL DESIGN SEE DRAWING MMA-DES-TUN-C0-DRG-1001.
 6. FOR BRIDGE DESIGN SEE DRAWINGS MMA-DES-STR-C0-1001_1003 AND MMA-DES-STR-C0-1101_1103.



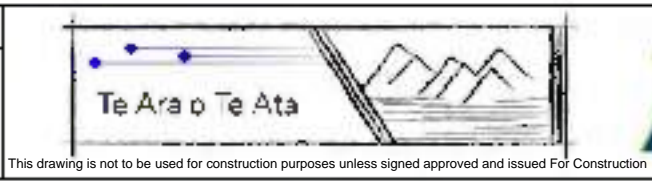
DATUM RL. 15.00																		
VERTICAL ALIGNMENT	K=42 L=609m																	
HORIZONTAL ALIGNMENT	L=129.63m		L=30m		L=359.35m R=1100m						L=30m		L=153.91m		L=80m		L=457.94m	
LEVEL DIFFERENCE CUT - / FILL +	27.60	-54.31	-72.05	-81.90	-93.85	-77.61	-65.13	-40.19	-6.35	11.96	17.39	26.19	10.63	11.29	-9.04	-13.17	-44.84	-46.37
DESIGN SURFACE LEVEL	111.623	113.065	113.661	113.911	114.018	114.151	114.162	113.818	112.879	111.345	109.215	106.49	103.181	101.751	99.681	96.181	92.681	89.181
EXISTING SURFACE LEVEL	139.23	167.37	185.71	195.81	207.87	191.76	179.29	154.00	119.23	99.39	91.83	80.30	92.55	90.47	108.72	109.55	137.52	135.55
CHAINAGE	3400	3450	3481.08	3500	3511.08	3535.56	3550	3600	3650	3700	3750	3800	3850	3870.43	3900	3950	4000	4050
SUPER ELEVATION	RHS 3% RHS 3% LHS and RHS -3%																	

1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m

LONGITUDINAL SECTION - MCE1

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 2004 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

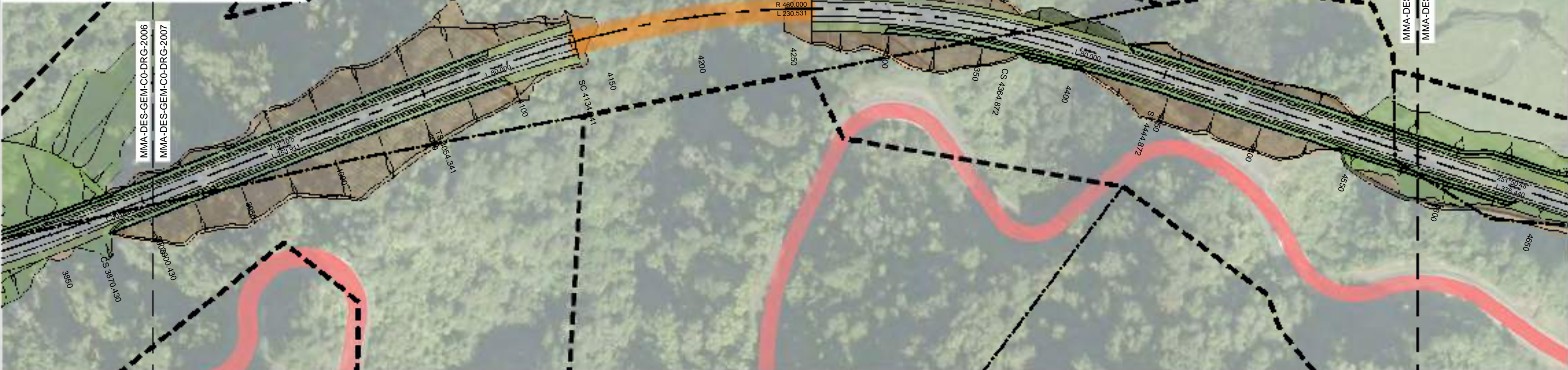
Tab	MMA-DES-GEM-C0-DRG-2006
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS
GEOMETRICS
PLAN AND LONG SECTION
SHEET 6

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-C0-DRG-2006
Revision
D

- NOTES
1. COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000).
 2. HEIGHT DATUM: TARANAKI 1970 SEA LEVEL (TARAHT1970).
 3. FOR GENERAL ARRANGEMENTS SEE DRAWINGS MMA-DES-GEM-CO-DRG-1000_1010.
 4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-CO-DRG-3011_3014.
 5. FOR TUNNEL DESIGN SEE DRAWING MMA-DES-TUN-CO-DRG-1001.
 6. FOR BRIDGE DESIGN SEE DRAWINGS MMA-DES-STR-CO-1001_1003 AND MMA-DES-STR-CO-1101_1103.

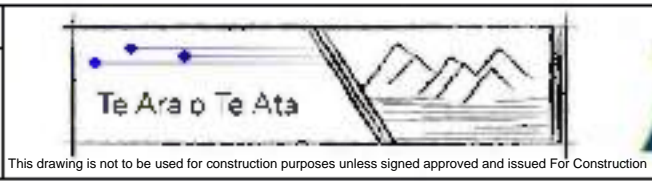


1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m

LONGITUDINAL SECTION - MCE1

Rev	Revision Description	Drawn	Checked	Designed	Approved	Date	
D	REVISED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 2004 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-CO-DRG-2007
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



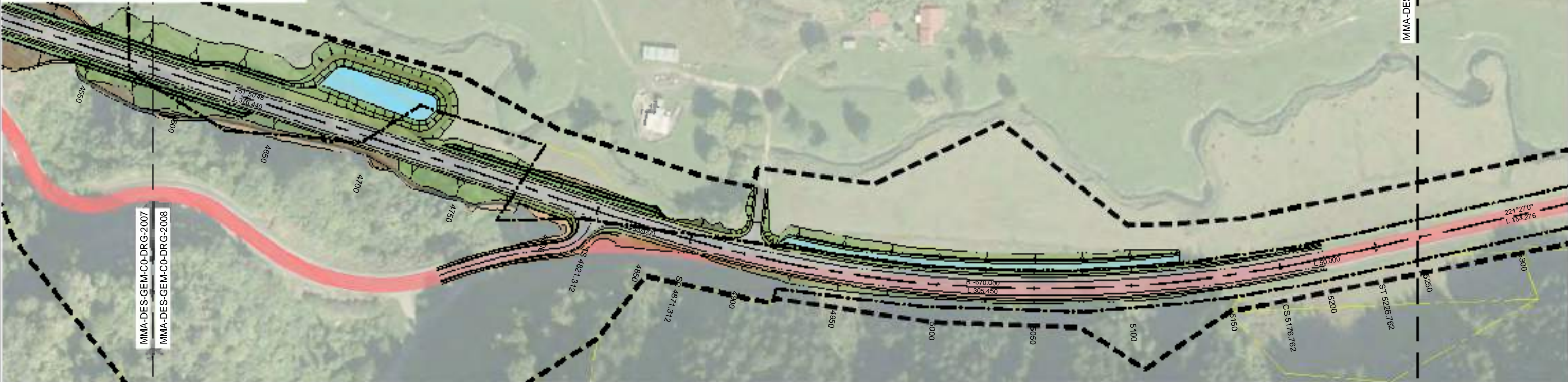
This drawing is not to be used for construction purposes unless signed approved and issued For Construction

MT MESSENGER BYPASS
GEOMETRICS
PLAN AND LONG SECTION
SHEET 7

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-GEM-CO-DRG-2007
Revision
D

NOTES

1. COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000).
2. HEIGHT DATUM: TARANAKI 1970 SEA LEVEL (TARAHT1970).
3. FOR GENERAL ARRANGEMENTS SEE DRAWINGS MMA-DES-GEM-CO-DRG-1000_1010.
4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-CO-DRG-3011_3014.
5. FOR TUNNEL DESIGN SEE DRAWING MMA-DES-TUN-CO-DRG-1001.
6. FOR BRIDGE DESIGN SEE DRAWINGS MMA-DES-STR-CO-1001_1003 AND MMA-DES-STR-CO-1101_1103.

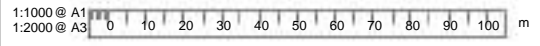


MMA-DES-GEM-CO-DRG-2008



MMA-DES-GEM-CO-DRG-2007
MMA-DES-GEM-CO-DRG-2008

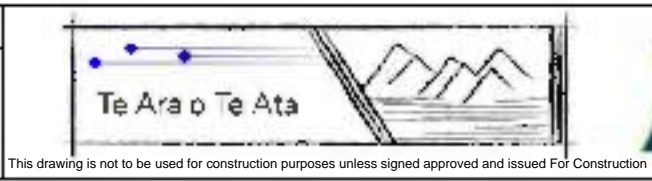
Station	4760	4800	4821.312	4850	4871.312	4900	4950	5000	5050	5100	5150	5176.76	5200	5209.095	5226.76	5250	5275	5300
DATUM RL. -19.00																		
VERTICAL ALIGNMENT	K=80 L=504m		L=385.79m G=-0.7%					K=96 L=42.53m		L=19.64m G=-0.26%	L=25m G=0.14%	L=25m G=-0.01%	L=25m G=-0.4%					
HORIZONTAL ALIGNMENT	L=376.44m		L=50m		L=305.45m R=670m					L=50m		L=154.28m						
LEVEL DIFFERENCE CUT - / FILL +	2.67	-0.39	-0.23	0.22	0.10	0.47	0.64	0.23	0.38	0.31	0.06	0.15	0.18	0.15	0.14	0.15	0.15	0.15
DESIGN SURFACE LEVEL	52.819	52.429	52.28	52.079	51.93	51.729	51.379	51.029	50.679	50.329	49.979	49.792	49.637	49.589	49.521	49.46	49.495	49.493
EXISTING SURFACE LEVEL	50.15	52.82	52.51	51.86	51.83	51.26	50.74	50.80	50.30	50.02	49.91	49.64	49.45	49.44	49.38	49.31	49.34	49.34
CHAINAGE	4760	4800	4821.312	4850	4871.312	4900	4950	5000	5050	5100	5150	5176.76	5200	5209.095	5226.76	5250	5275	5300
SUPER ELEVATION	LHS and RHS -3%		RHS 5%					LHS -5%										



LONGITUDINAL SECTION - MCE1

Rev	Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC	GGC	BSS*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 2004 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-CO-DRG-2008
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS

GEOMETRICS

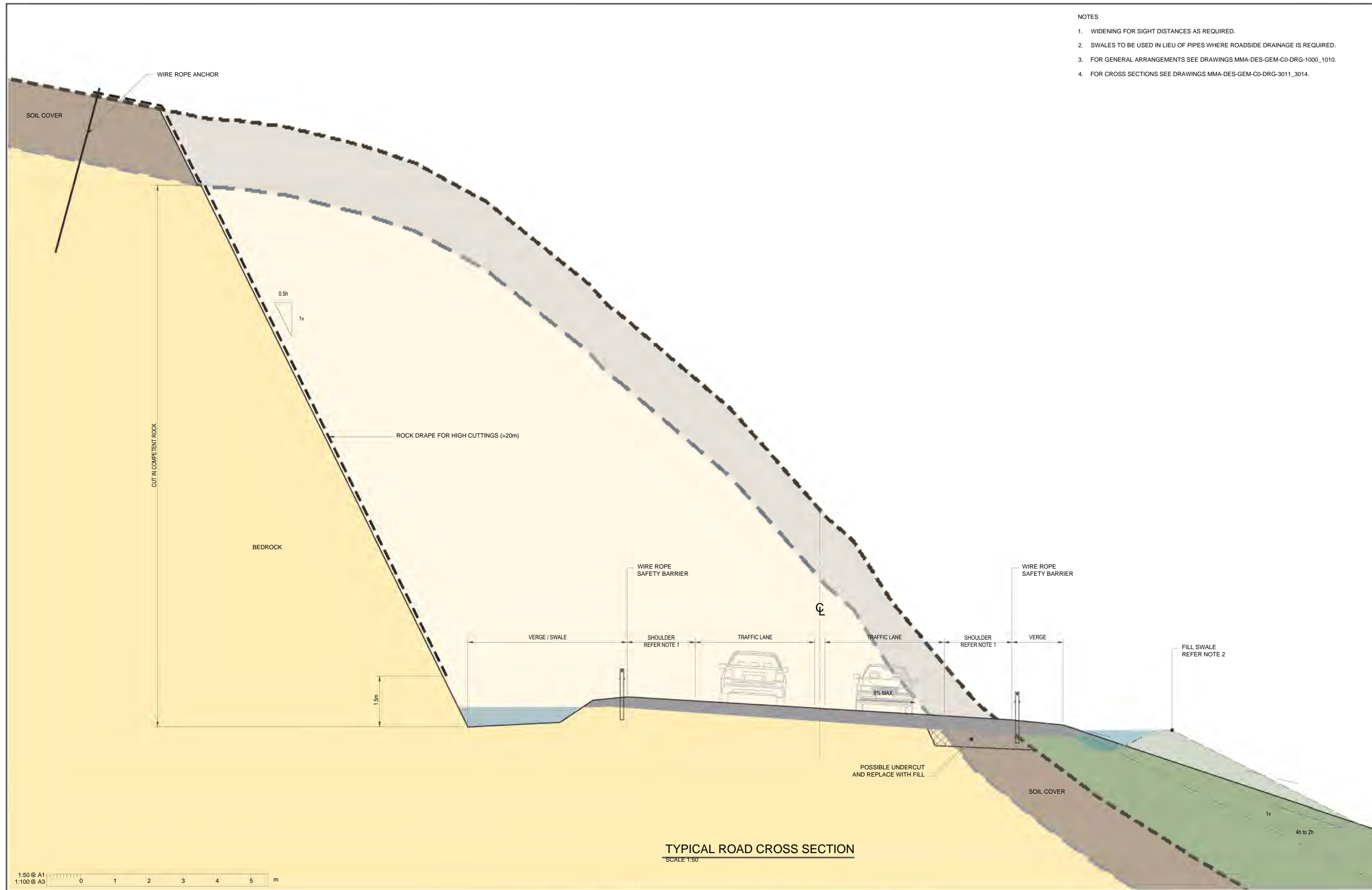
PLAN AND LONG SECTION

SHEET 8

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-CO-DRG-2008
Revision	D

NOTES

1. WIDENING FOR SIGHT DISTANCES AS REQUIRED.
2. SWALES TO BE USED IN LIEU OF PIPES WHERE ROADSIDE DRAINAGE IS REQUIRED.
3. FOR GENERAL ARRANGEMENTS SEE DRAWINGS MMA-DES-GEM-C0-DRG-1000_1010.
4. FOR CROSS SECTIONS SEE DRAWINGS MMA-DES-GEM-C0-DRG-3011_3014.

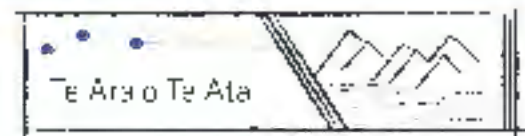


TYPICAL ROAD CROSS SECTION
SCALE 1:50

1:50 @ A1
1:100 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
B	UPDATED CONSENT ISSUE	QDO'S	WHE*	GGC	BSS	BSS	17/05/2019
A	FOR CONSENT	QDO'S	WHE	GC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-C0-DRG-3001
Scales	1:50 (A1) 1:100 (A3)
Original Size	A1



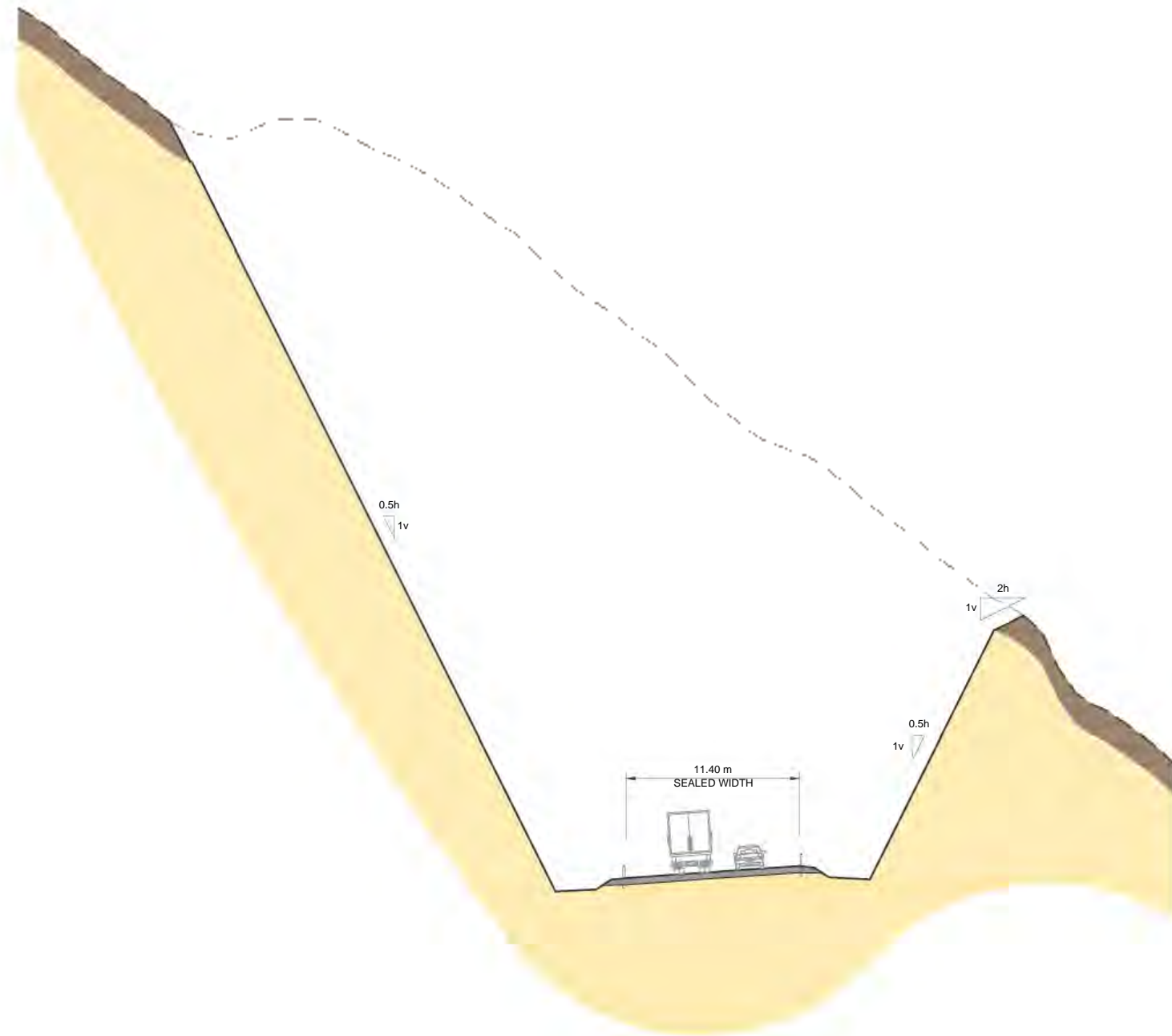
MT MESSENGER BYPASS
GEOMETRICS
TYPICAL ROAD CROSS SECTION

Approved	H. MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-C0-DRG-3001
Revision	B

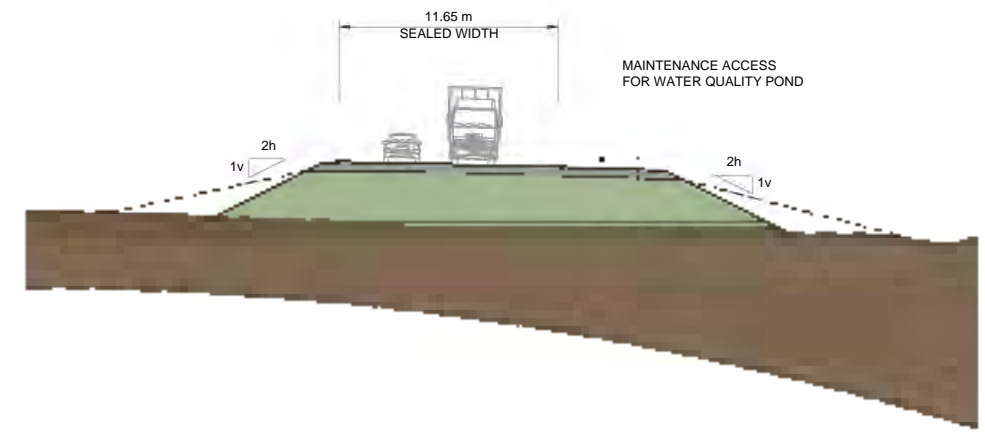
This drawing is not to be used for construction purposes unless signed approved and issued For Construction

NOTES

- 1. FOR GENERAL ARRANGEMENT PLANS AND SECTION LOCATIONS SEE DRAWINGS MMA-DES-GEM-C0-DRG-1000_1010.



A SECTION
1001 SCALE 1:200

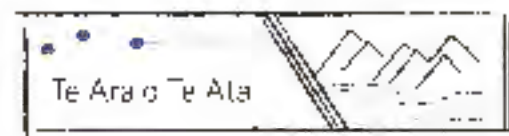


B SECTION
1001 SCALE 1:200



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 3012 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	MMA-DES-GEM-C0-DRG-3011
Scales	1:400 (A3) 1:200 (A1)
Original Size	A1



MT MESSENGER BYPASS
GEOMETRICS
ROAD CROSS SECTIONS
SHEET 1

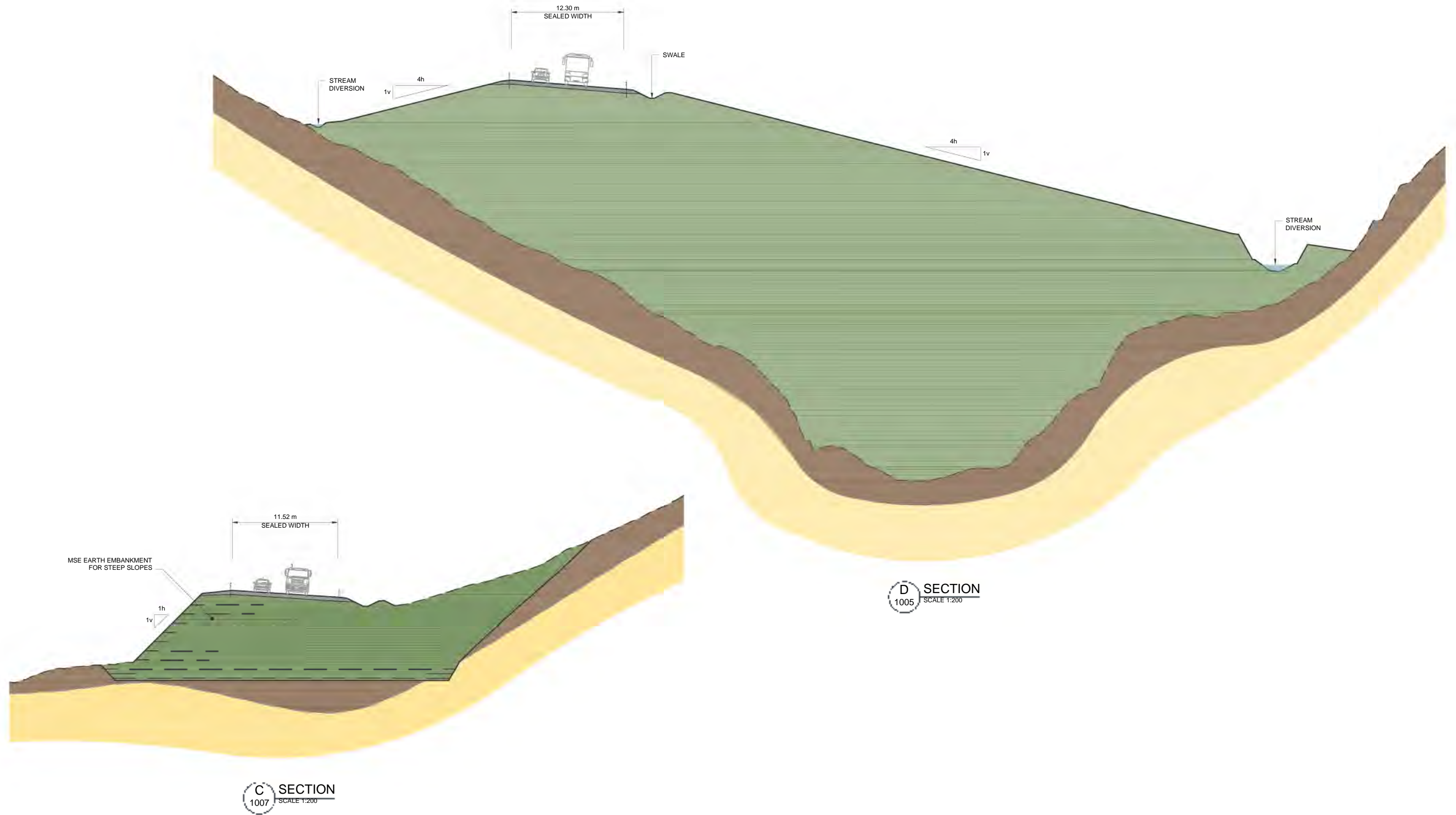
Approved	H.MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-C0-DRG-3011
Revision	C

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NOTES

1. FOR GENERAL ARRANGEMENT PLANS AND SECTION LOCATIONS SEE DRAWINGS MMA-DES-GEM-C0-DRG-1000_1010.



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	GGC	BSS	BSS	17/05/2019
B	SECTION C REMOVED	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab MMA-DES-GEM-C0-DRG-3012

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

Original Size A1

This drawing is not to be used for construction purposes unless signed approved and issued For Construction

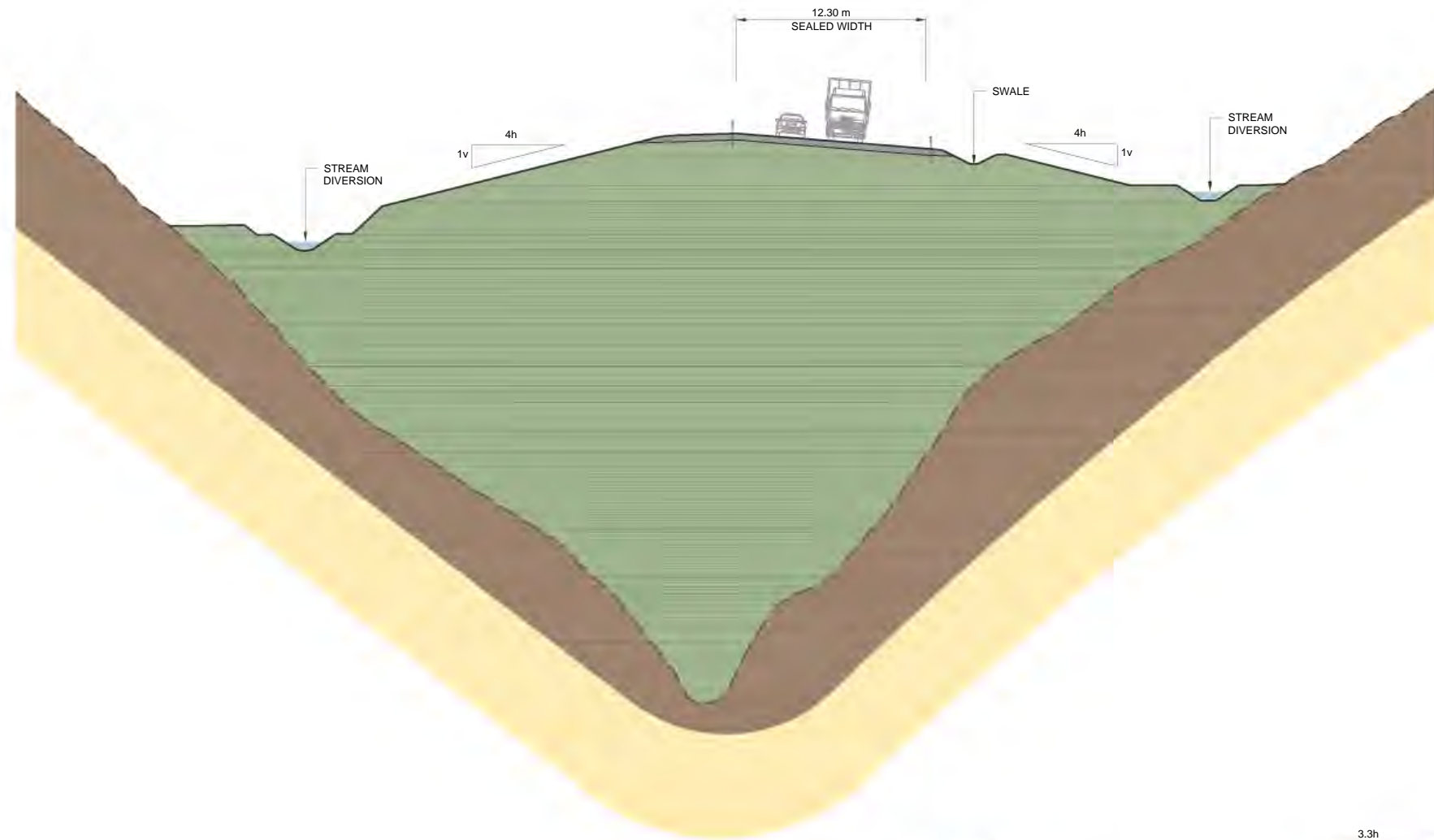


MT MESSENGER BYPASS
GEOMETRICS
ROAD CROSS SECTIONS
SHEET 2

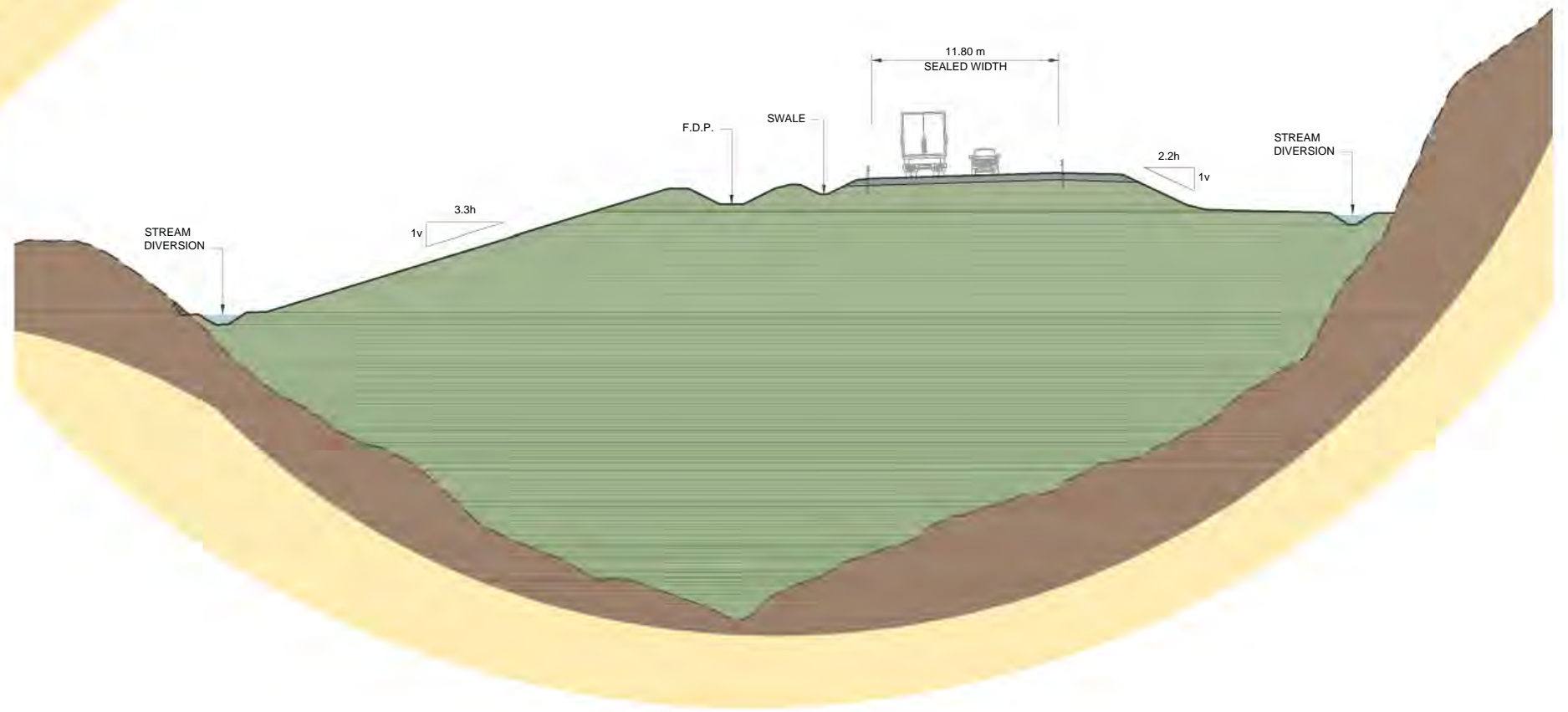
Approved	H.MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-C0-DRG-3012
Revision	C

NOTES

1. FOR GENERAL ARRANGEMENT PLANS AND SECTION LOCATIONS SEE DRAWINGS MMA-DES-GEM-CO-DRG-1000_1010.



E SECTION
1005 SCALE 1:200

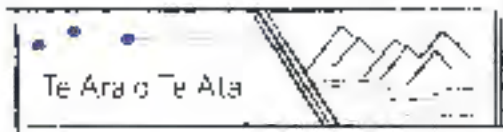


F SECTION
1006 SCALE 1:200



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	GGC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 3012 ONLY	QDO'S	GGC	GGC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GGC	LG	LG	14/11/2017

Tab	Original Size
MMA-DES-GEM-CO-DRG-3013	A1



MT MESSENGER BYPASS
GEOMETRICS
ROAD CROSS SECTIONS
SHEET 3

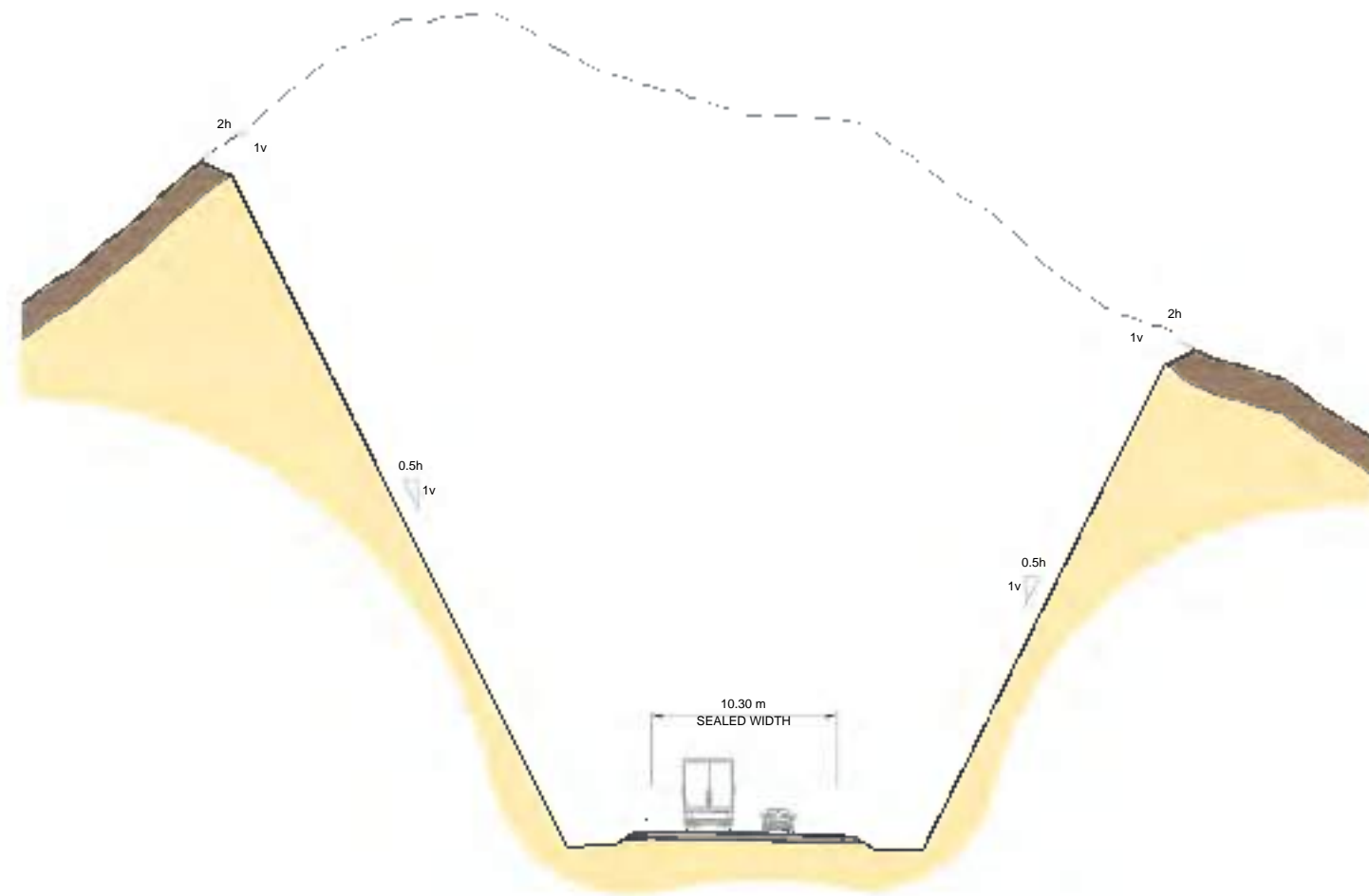
Approved	H.MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-CO-DRG-3013
Revision	C

This drawing is not to be used for construction purposes unless signed approved and issued For Construction

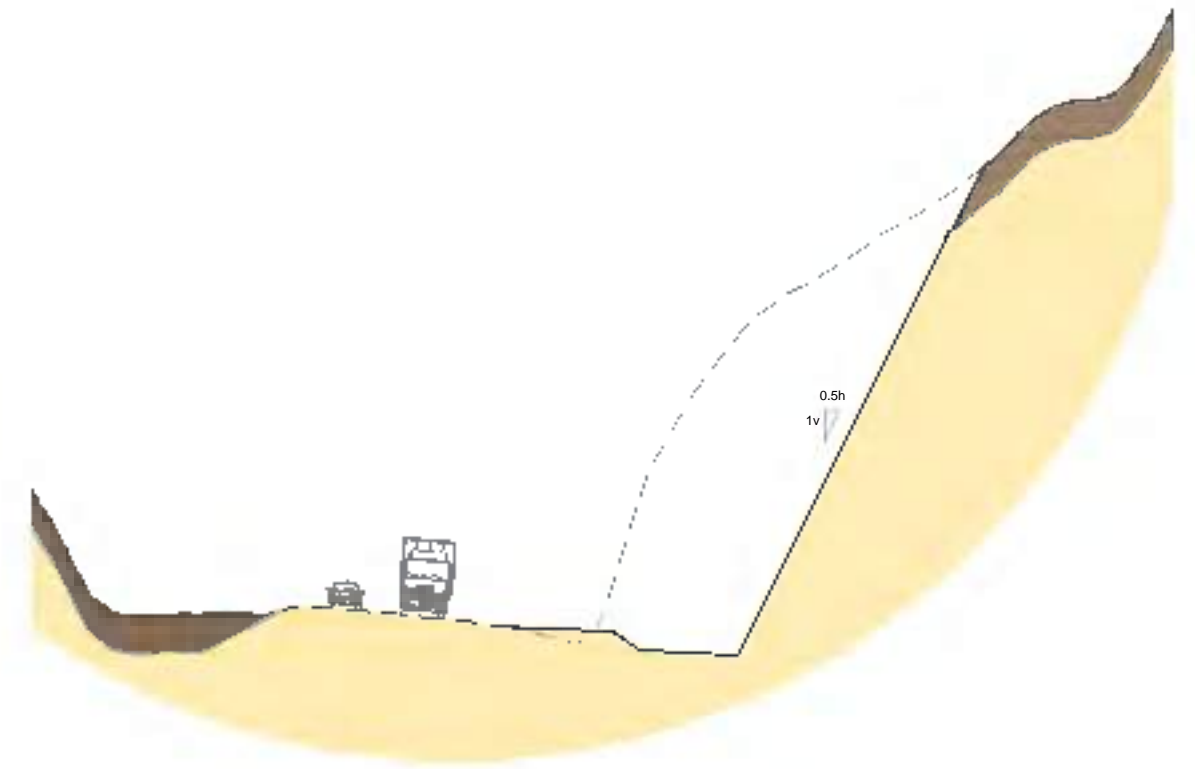
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NOTES

1. FOR GENERAL ARRANGEMENT PLANS AND SECTION LOCATIONS SEE DRAWINGS MMA-DES-GEM-CO-DRG-1000_1010.



G SECTION
1007 SCALE 1:200

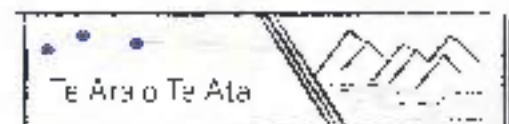


H SECTION
1009 SCALE 1:200



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	GCC	BSS	BSS	17/05/2019
B	CHANGES TO SHEET 3012 ONLY	QDO'S	GGC	GCC	BSS	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	GCC	LG	LG	14/11/2017

Tab	Original Size
MMA-DES-GEM-CO-DRG-3014	A1



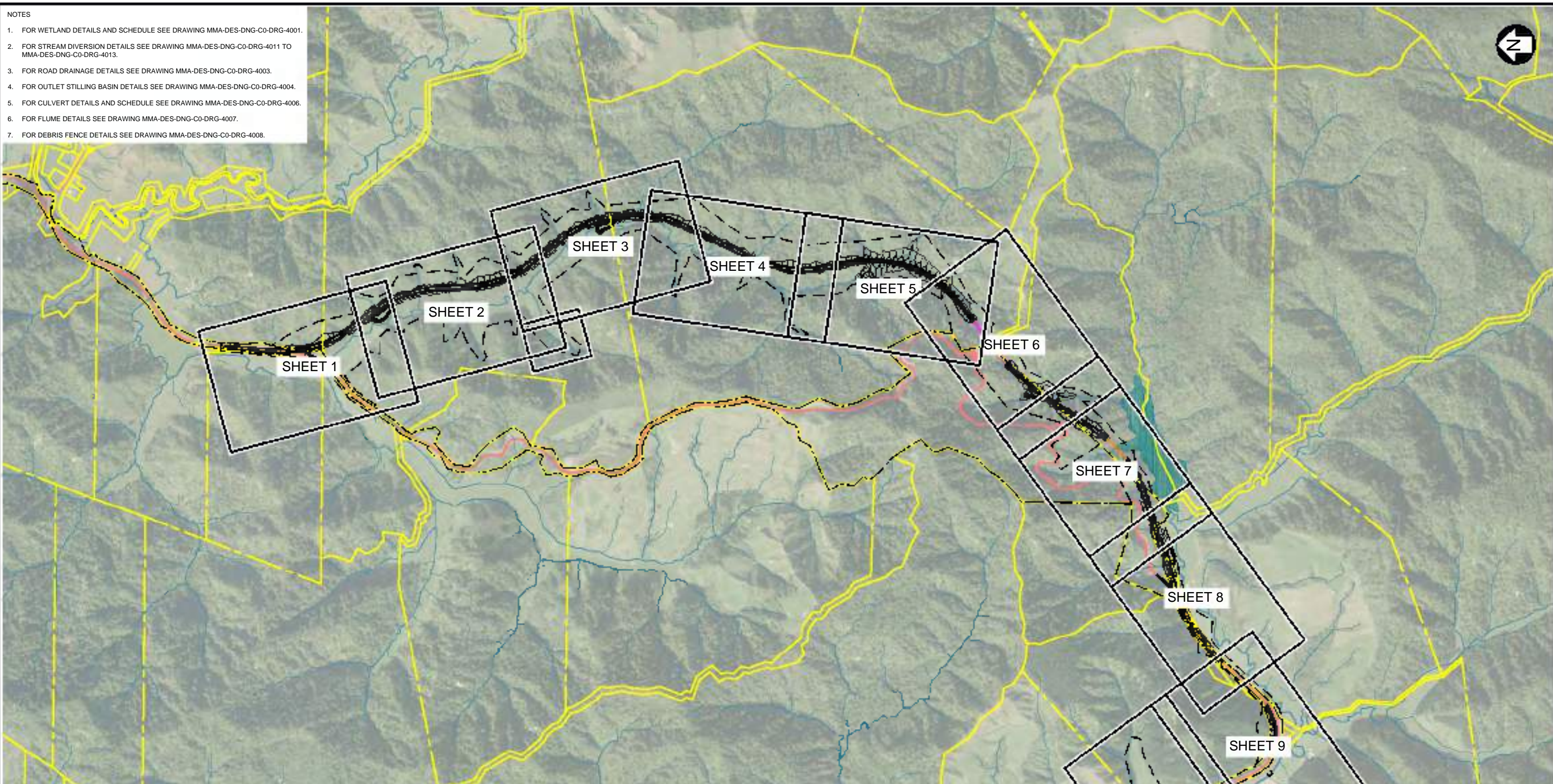
MT MESSENGER BYPASS
GEOMETRICS
ROAD CROSS SECTIONS
SHEET 4

Approved	H.MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-GEM-CO-DRG-3014
Revision	C

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- NOTES
1. FOR WETLAND DETAILS AND SCHEDULE SEE DRAWING MMA-DES-DNG-C0-DRG-4001.
 2. FOR STREAM DIVERSION DETAILS SEE DRAWING MMA-DES-DNG-C0-DRG-4011 TO MMA-DES-DNG-C0-DRG-4013.
 3. FOR ROAD DRAINAGE DETAILS SEE DRAWING MMA-DES-DNG-C0-DRG-4003.
 4. FOR OUTLET STILLING BASIN DETAILS SEE DRAWING MMA-DES-DNG-C0-DRG-4004.
 5. FOR CULVERT DETAILS AND SCHEDULE SEE DRAWING MMA-DES-DNG-C0-DRG-4006.
 6. FOR FLUME DETAILS SEE DRAWING MMA-DES-DNG-C0-DRG-4007.
 7. FOR DEBRIS FENCE DETAILS SEE DRAWING MMA-DES-DNG-C0-DRG-4008.



LEGEND

	PROPOSED CUT (DESIGN FOOTPRINT)		MIMI SWAMP FOREST		CHANNEL (TYPE B)
	PROPOSED FILL (DESIGN FOOTPRINT)		EXISTING WATER COURSE		STREAM DIVERSION (TYPE 1)
	TOE OF SURCHARGE		EXISTING CULVERT		STREAM DIVERSION (TYPE 2)
	PROPOSED BRIDGE		STORMWATER CULVERT		STREAM DIVERSION (TYPE 3 - WATERFALL)
	PROPOSED TUNNEL		STORMWATER FLUME		CONSTRUCTED WETLAND
	EXISTING SH3		STORMWATER ROAD DRAINAGE PIPE		FISH PASSAGE THROUGH CULVERT
	PROPOSED DESIGNATION		STORMWATER SWALE DRAIN (IN CUT)		PROVISIONAL FILL SITES
	EXISTING DESIGNATION		STORMWATER SWALE DRAIN (IN FILL)		STORMWATER MANHOLE
	PROPERTY BOUNDARY		STORMWATER SWALE DRAIN (RIP RAP LINED)		STORMWATER SCRUFFY DOME
			OVERFLOW CHANNEL		STORMWATER CATCHPIT MANHOLE
			CHANNEL (TYPE A)		

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab MMA-DES-DNG-C0-DRG-1000		
Scales NOT TO SCALE		
Original Size A1	This drawing is not to be used for construction purposes unless signed approved and issued For Construction	

MT MESSENGER BYPASS

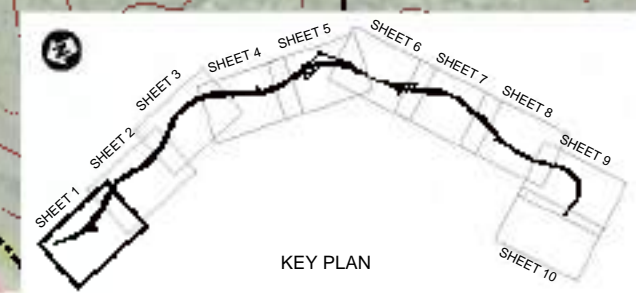
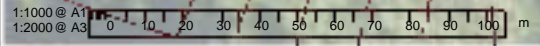
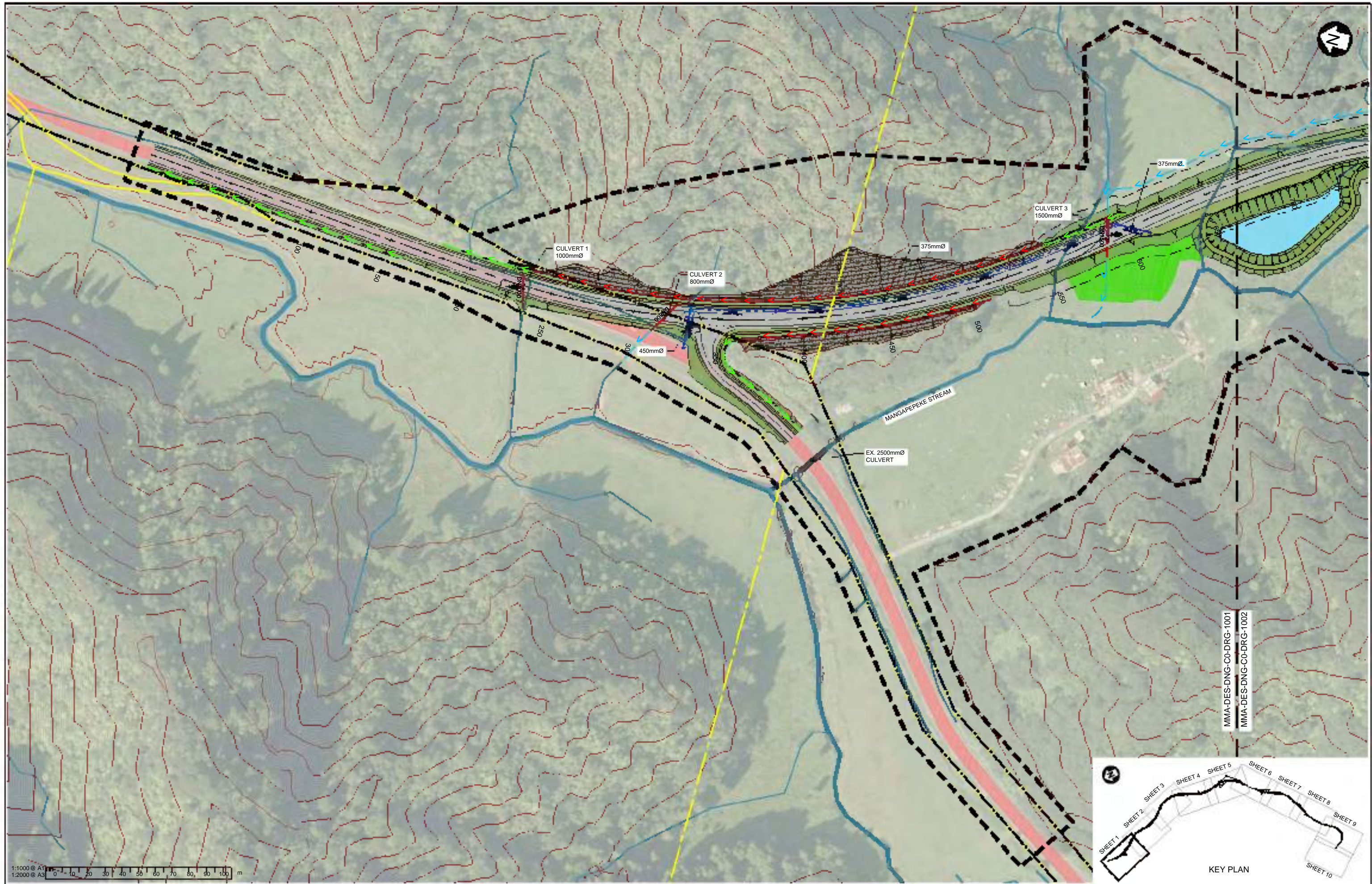
DRAINAGE GENERAL ARRANGEMENT SHEET LAYOUT

Approved
B. SYMMANS

Status
FOR CONSENT

Drawing Number
MMA-DES-DNG-C0-DRG-1000

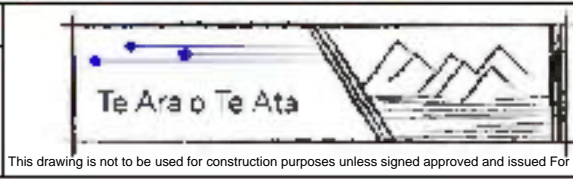
Revision
D



MMA-DES-DNG-C0-DRG-1001
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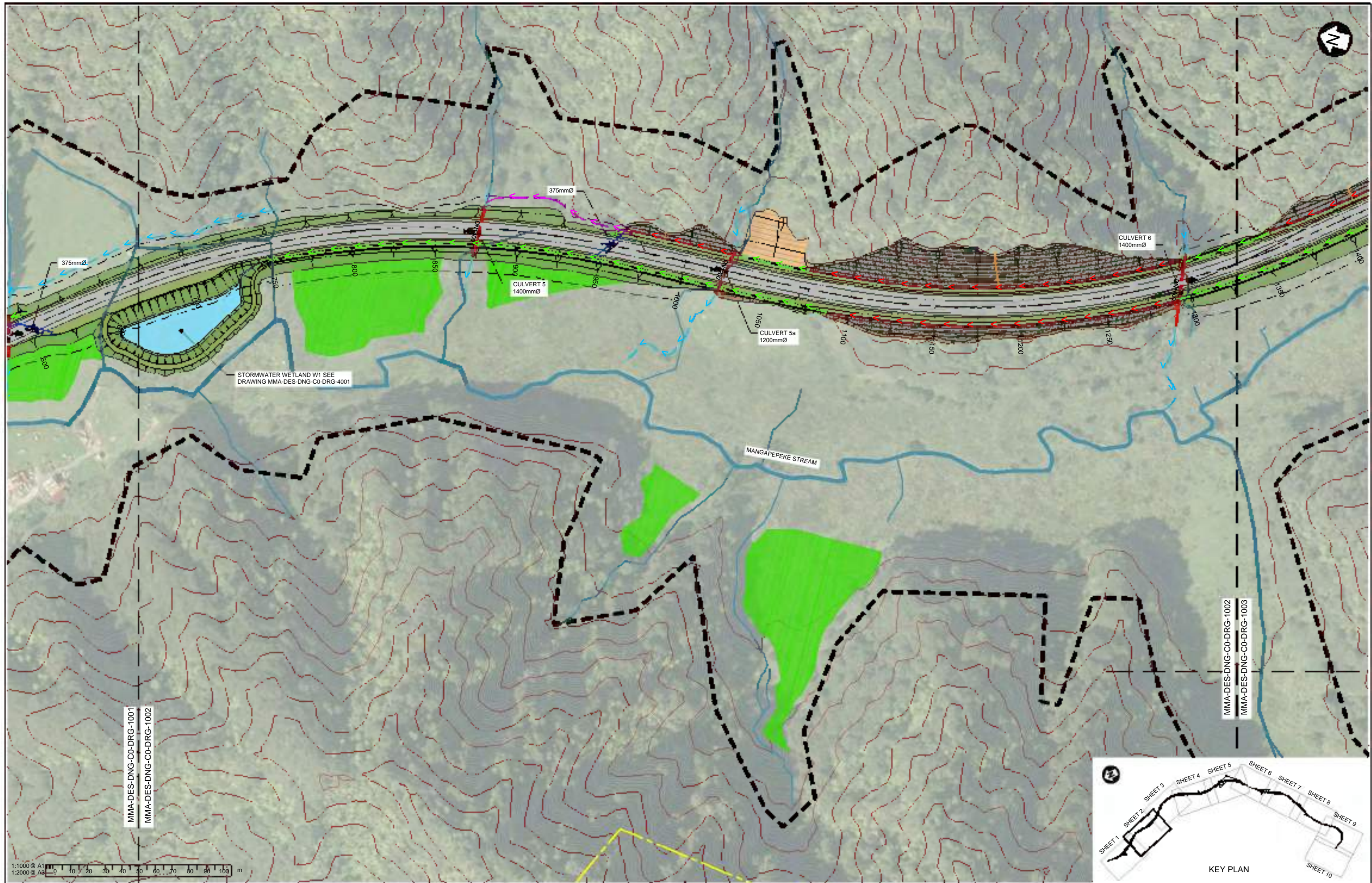
Rev	Revision Description	Drawn	Checked	Designed	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MAJS	AMcE*	BSS*
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MAJS	AMcE	BSS
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MAJS	AMcE	BSS
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG

Tab	MMA-DES-DNG-C0-DRG-1001
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Original Size	A1



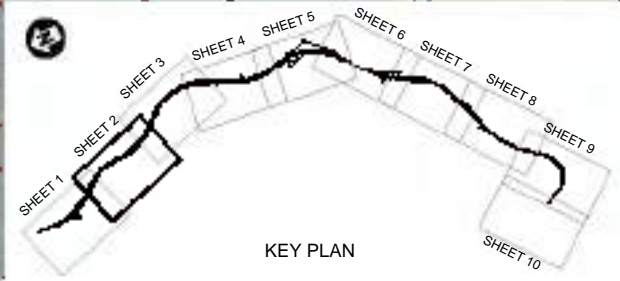
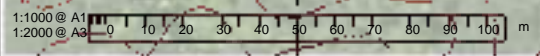
MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 1

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-1001
Revision
D



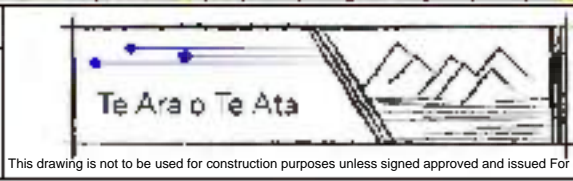
MMA-DES-DNG-CO-DRG-1001
MMA-DES-DNG-CO-DRG-1002

MMA-DES-DNG-CO-DRG-1002
MMA-DES-DNG-CO-DRG-1003



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	MMA-DES-DNG-CO-DRG-1002
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS

DRAINAGE GENERAL ARRANGEMENTS LAYOUT SHEET 2

Approved
B. SYMMANS

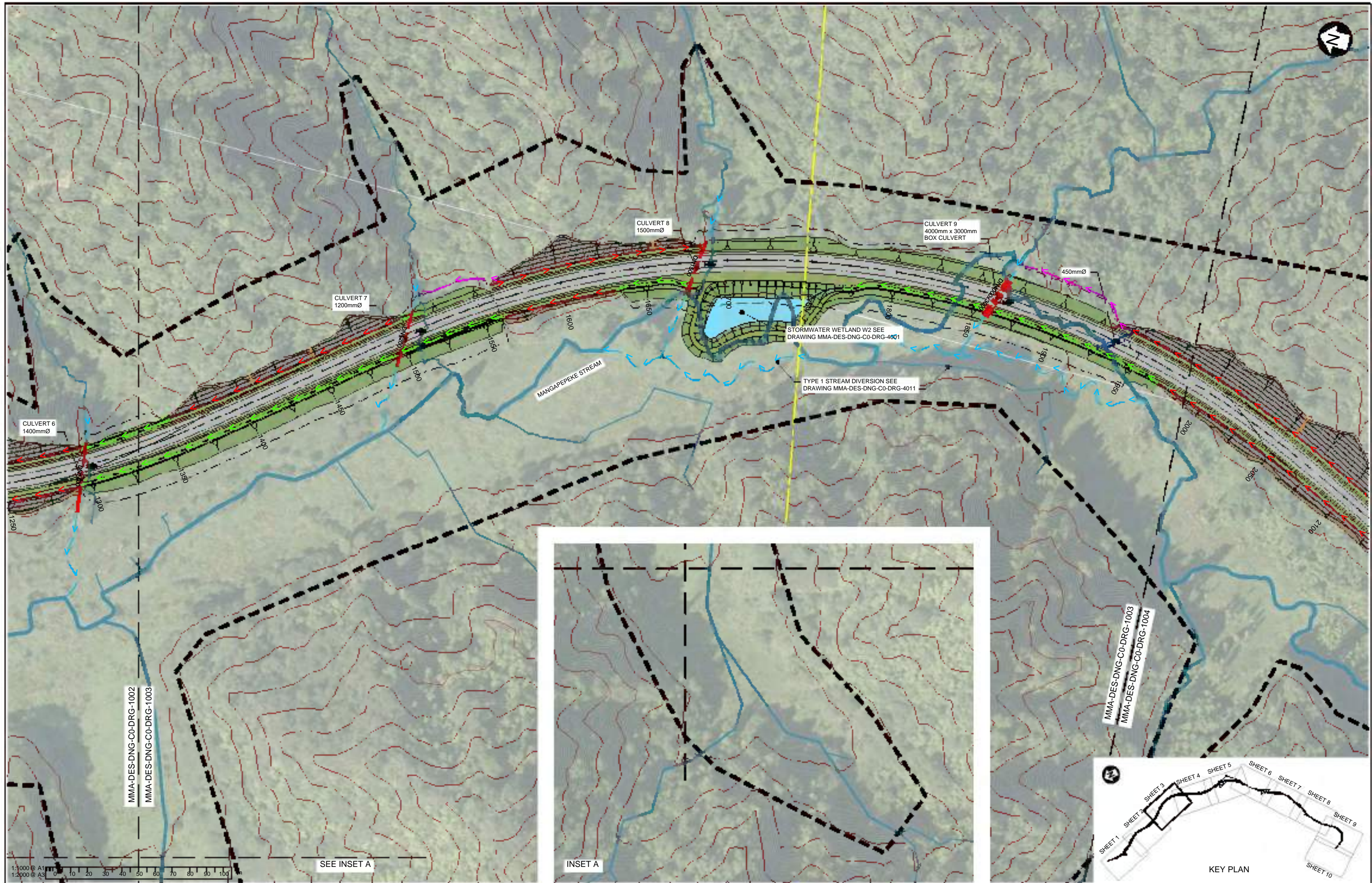
Status
FOR CONSENT

Drawing Number
MMA-DES-DNG-CO-DRG-1002

Revision
D

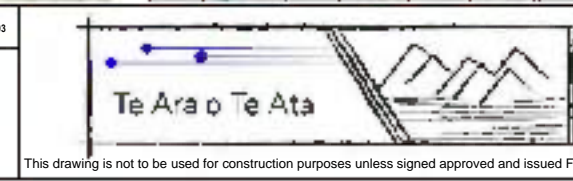
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Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	MMA-DES-DNG-CO-DRG-1003
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



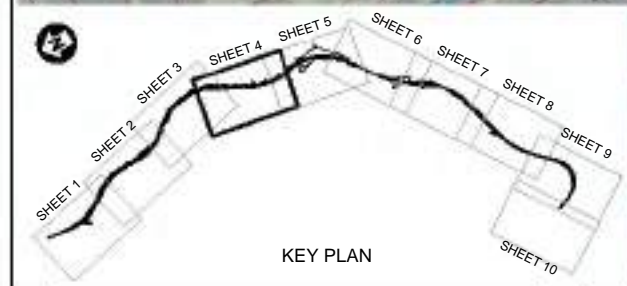
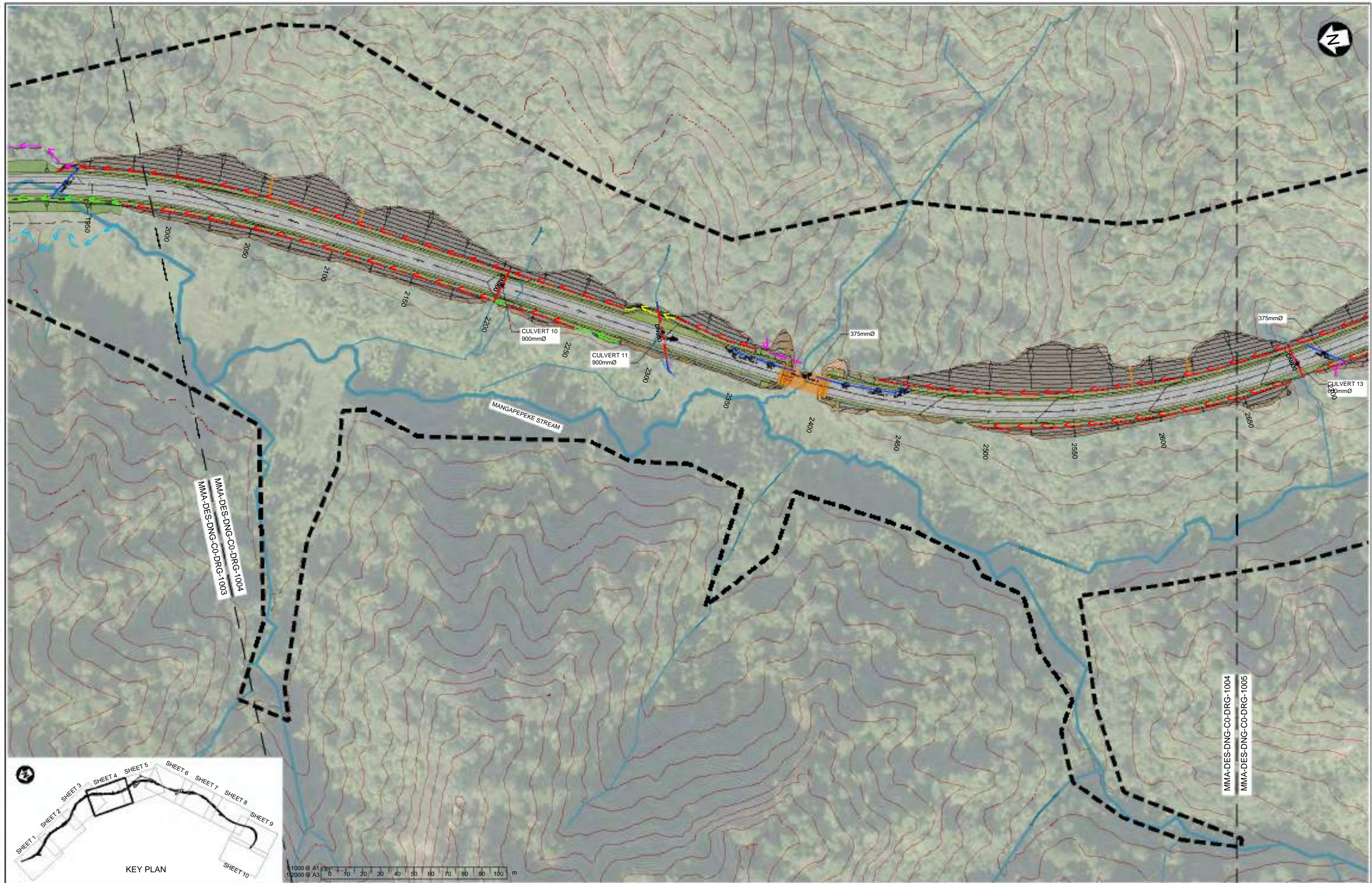
NZ TRANSPORT AGENCY
WAIKATO REGIONAL COUNCIL

Mt Messenger Bypass

MT MESSENGER BYPASS

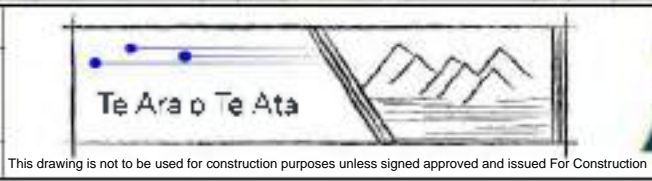
DRAINAGE GENERAL ARRANGEMENTS LAYOUT SHEET 3

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-DNG-CO-DRG-1003
Revision	D



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

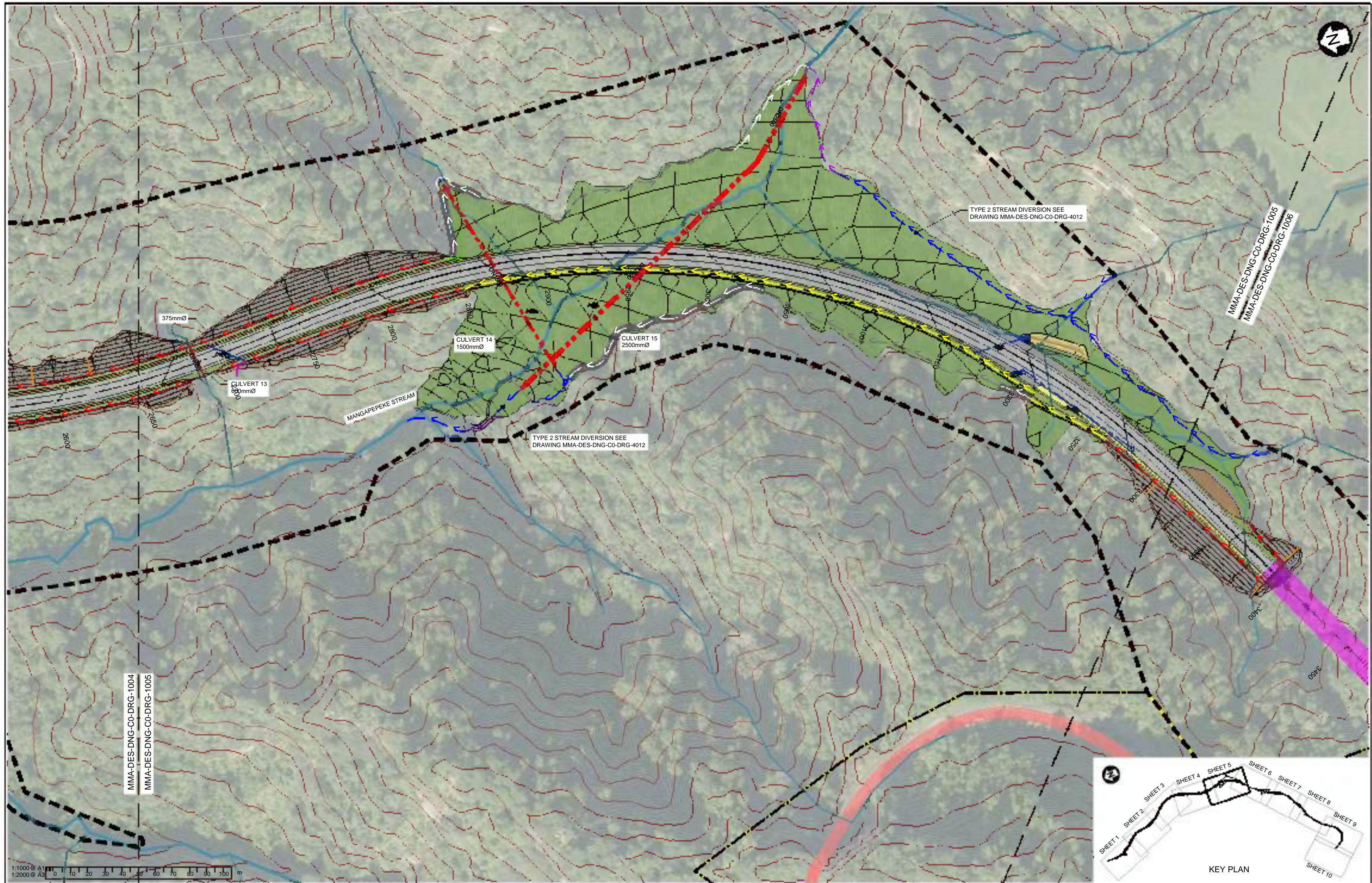
Tab	Scale	Original Size
MMA-DES-DNG-C0-DRG-1004	1:2000 (A3) 1:1000 (A1)	A1



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MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 4

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-1004
Revision
D



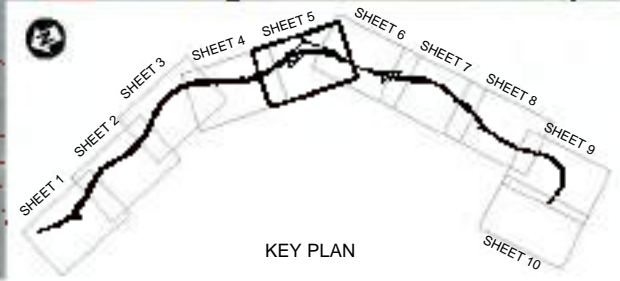
MMA-DES-DNG-C0-DRG-1004
MMA-DES-DNG-C0-DRG-1005

TYPE 2 STREAM DIVERSION SEE
DRAWING MMA-DES-DNG-C0-DRG-4012

TYPE 2 STREAM DIVERSION SEE
DRAWING MMA-DES-DNG-C0-DRG-4012

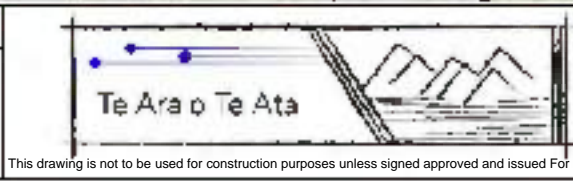
MMA-DES-DNG-C0-DRG-1005
MMA-DES-DNG-C0-DRG-1006

1:1000 @ A1
1:2000 @ A3



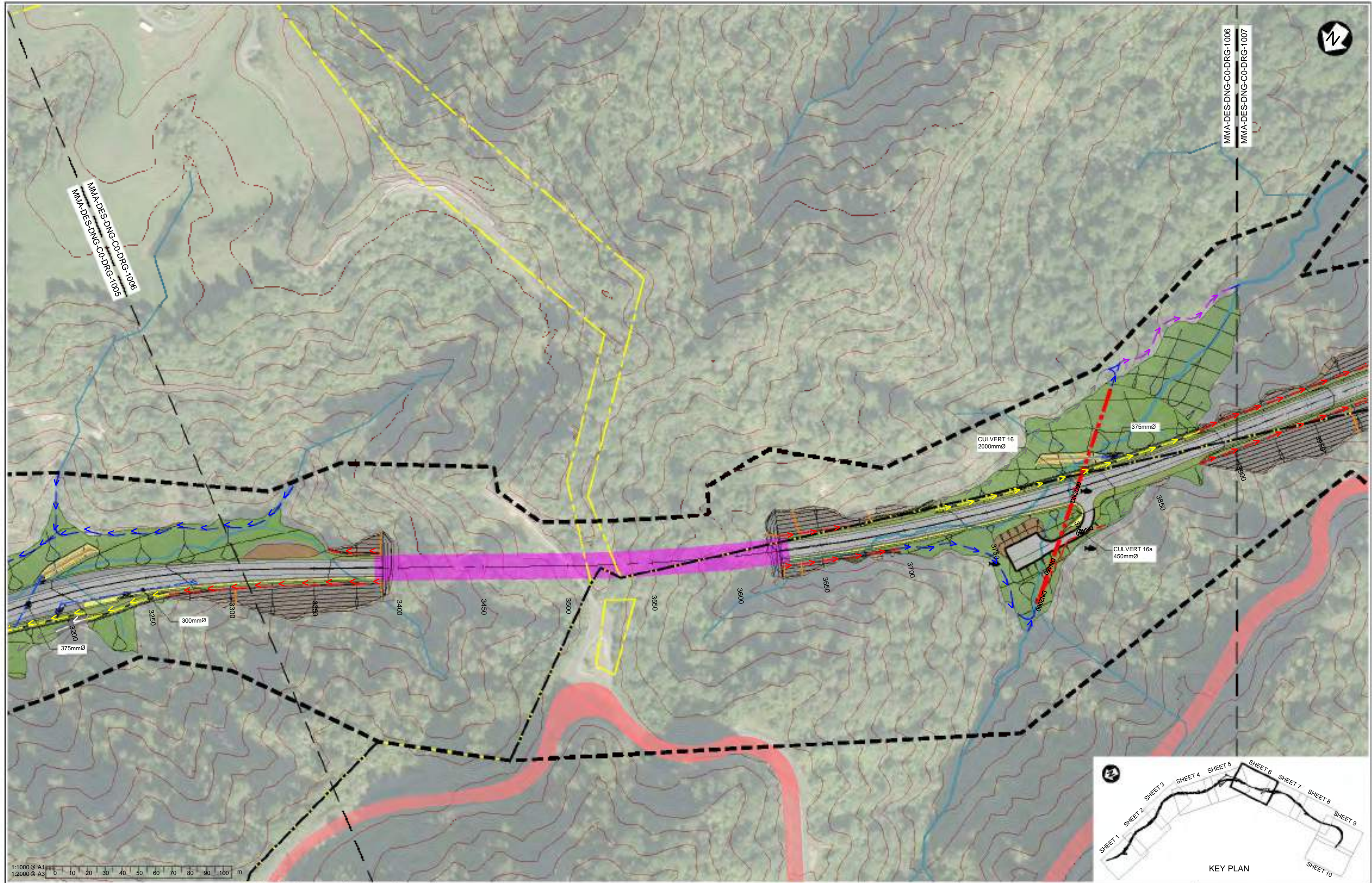
Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	Scale	Original Size
MMA-DES-DNG-C0-DRG-1005	1:2000 (A3) 1:1000 (A1)	A1



MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 5

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-1005
Revision
D



MMA-DES-DNG-C0-DRG-1006
MMA-DES-DNG-C0-DRG-1007

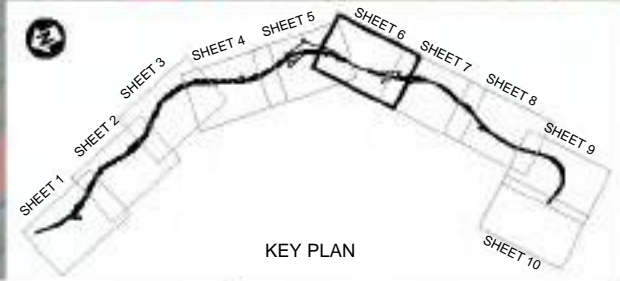
MMA-DES-DNG-C0-DRG-1006
MMA-DES-DNG-C0-DRG-1005

CULVERT 16
2000mmØ

CULVERT 16a
450mmØ

375mmØ

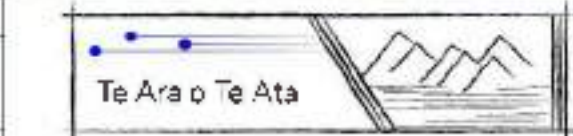
300mmØ



1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	Scale	Original Size
MMA-DES-DNG-C0-DRG-1006	1:2000 (A3) 1:1000 (A1)	A1

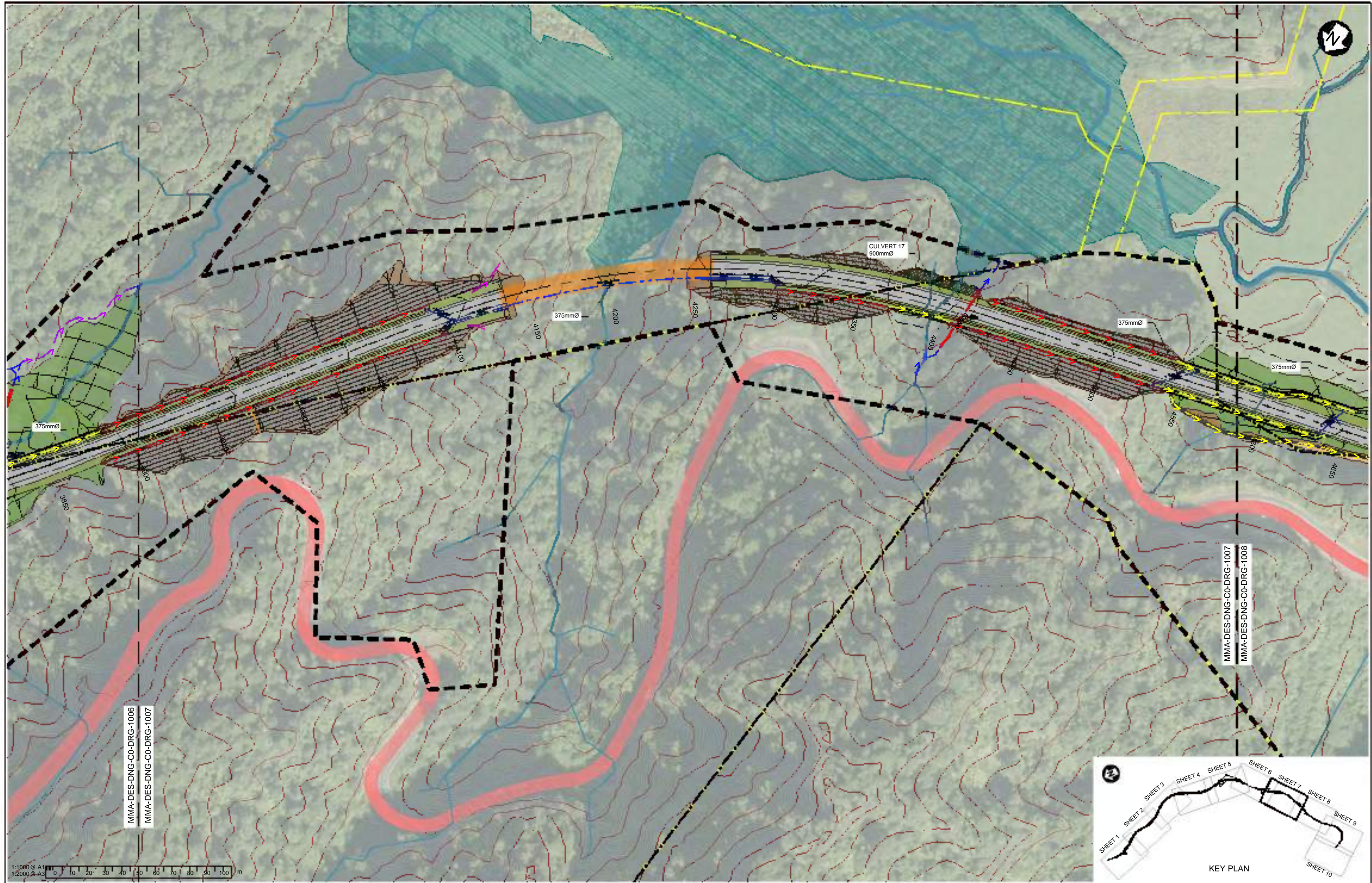


MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 6

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-1006
Revision
D

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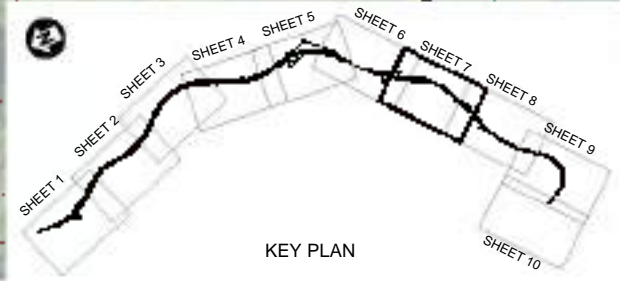
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MMA-DES-DNG-CO-DRG-1006
MMA-DES-DNG-CO-DRG-1007

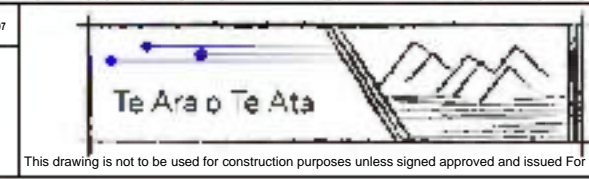
MMA-DES-DNG-CO-DRG-1007
MMA-DES-DNG-CO-DRG-1008

1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MAJS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MAJS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MAJS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	Scale	Original Size
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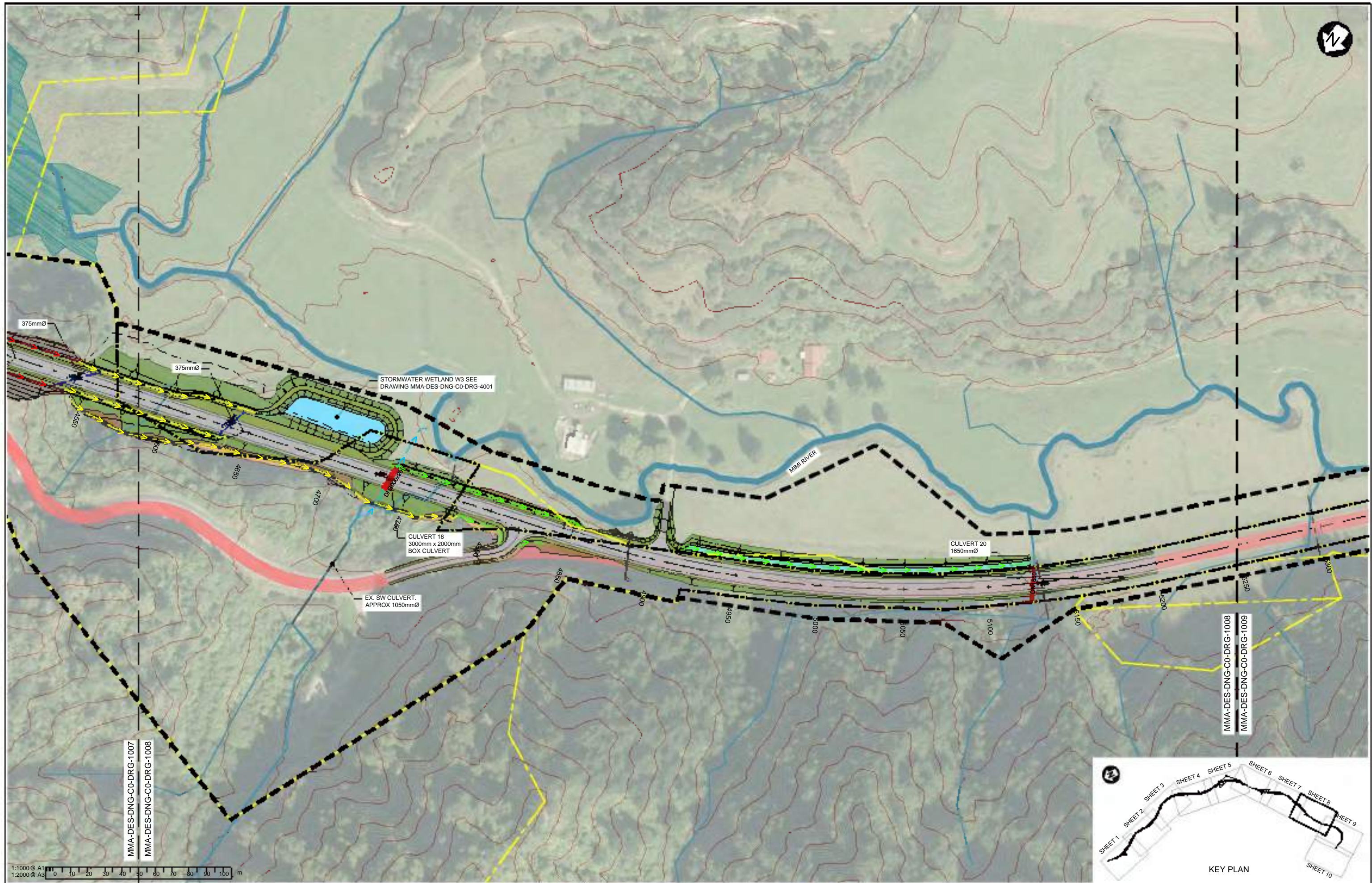
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MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 7

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-CO-DRG-1007
Revision
D

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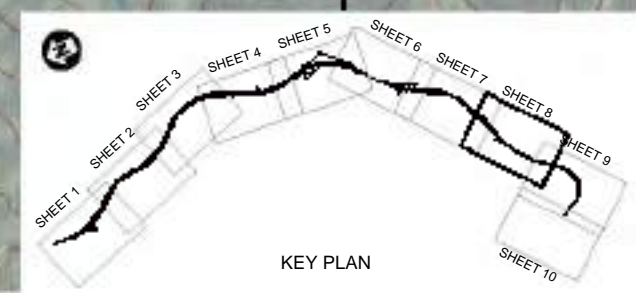
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1:1000 @ A1
1:2000 @ A3

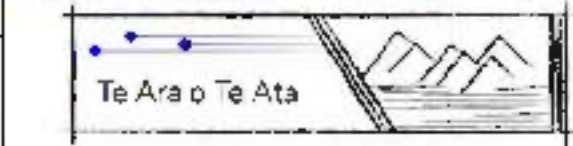
MMA-DES-DNG-C0-DRG-1007
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MMA-DES-DNG-C0-DRG-1008
MMA-DES-DNG-C0-DRG-1009



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	MMA-DES-DNG-C0-DRG-1008
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1

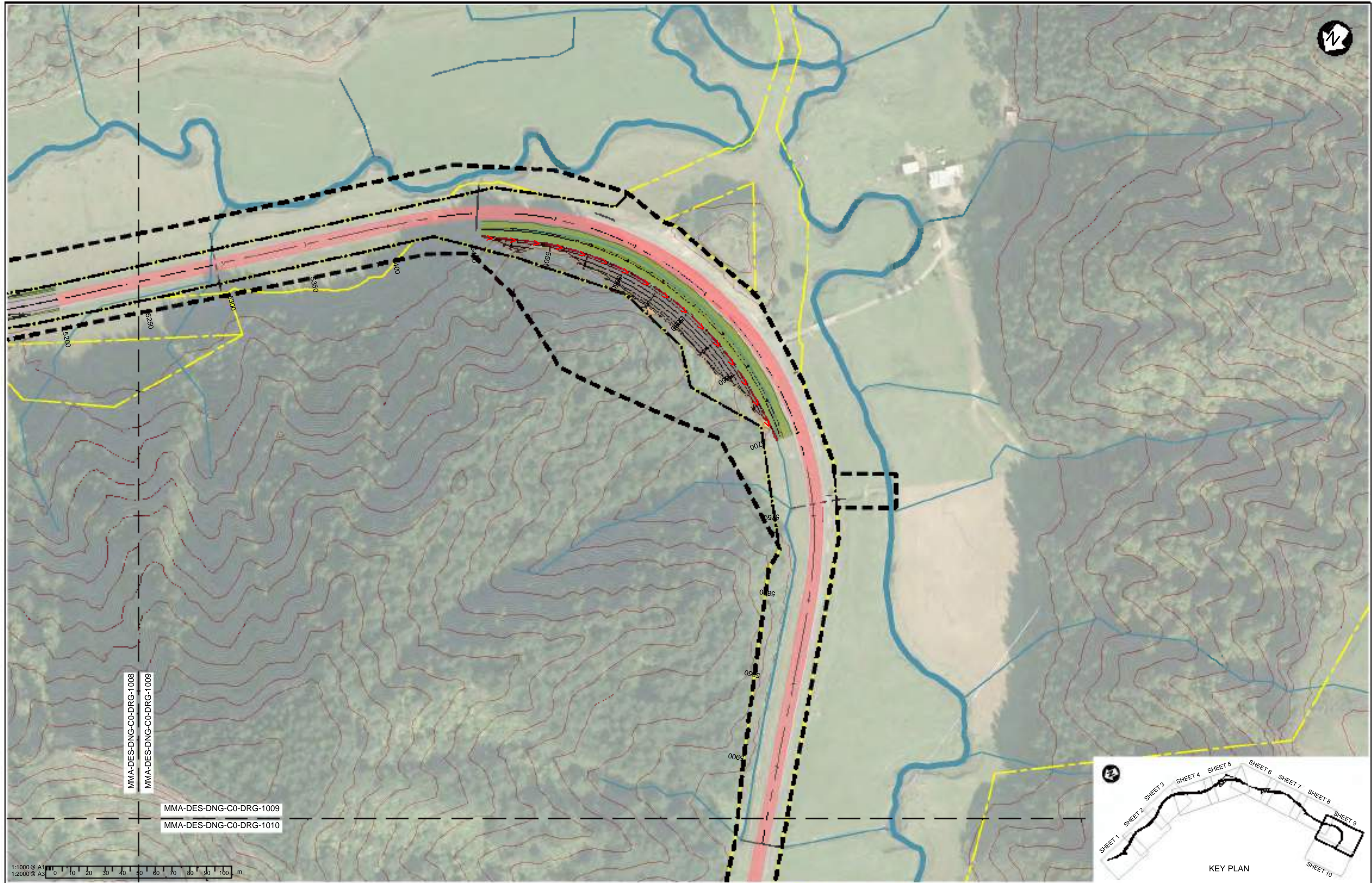


MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 8

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-1008
Revision
D

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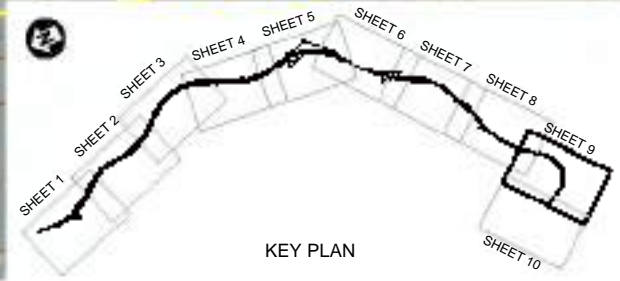
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MMA-DES-DNG-C0-DRG-1009

MMA-DES-DNG-C0-DRG-1009

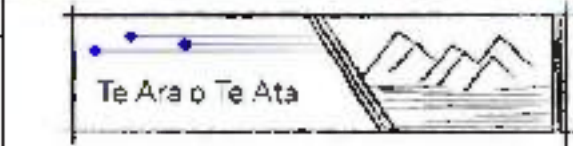
MMA-DES-DNG-C0-DRG-1010

1:1000 @ A1
1:2000 @ A3



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	MMA-DES-DNG-C0-DRG-1009
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 9

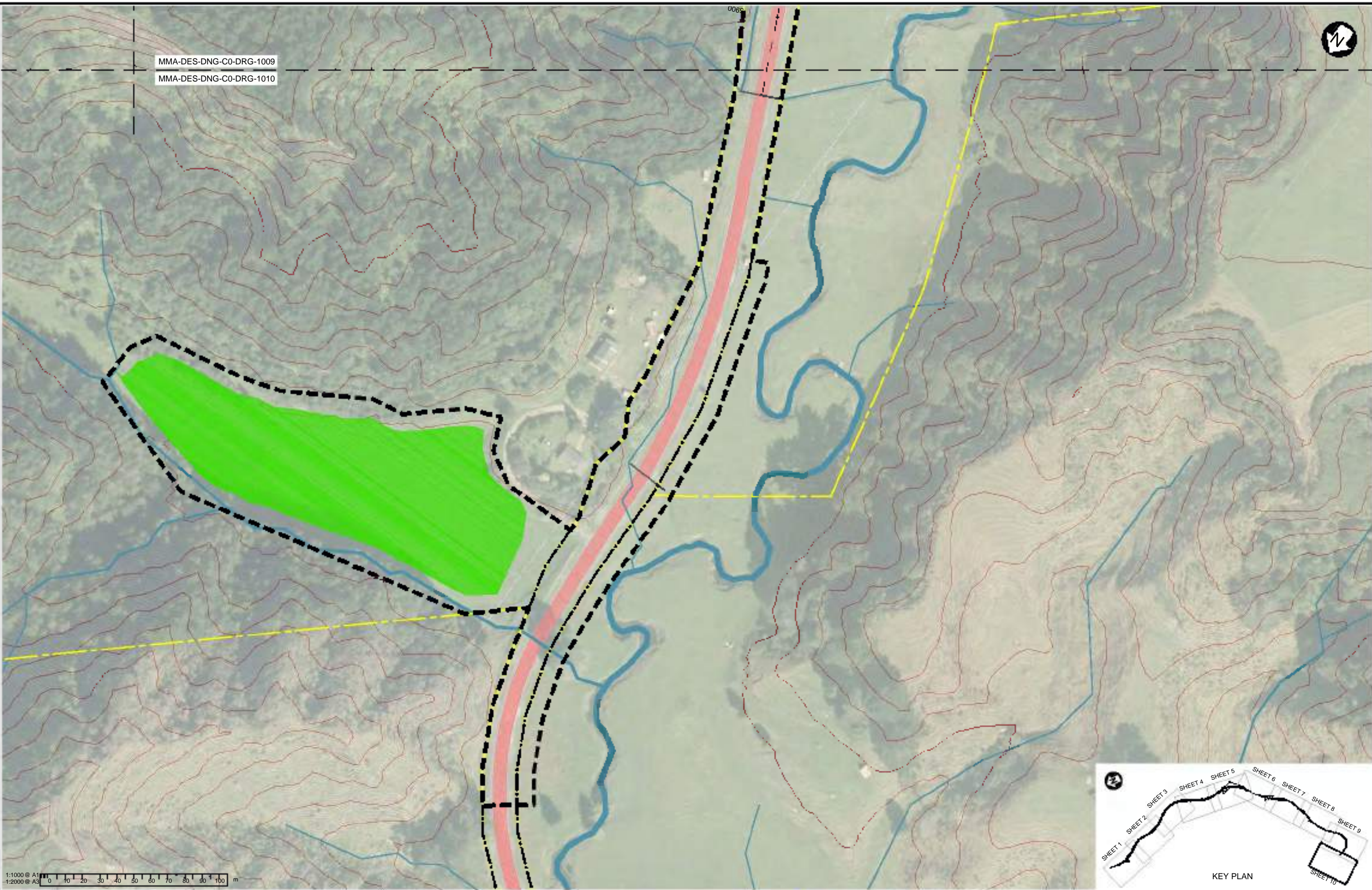
Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-DNG-C0-DRG-1009
Revision	D

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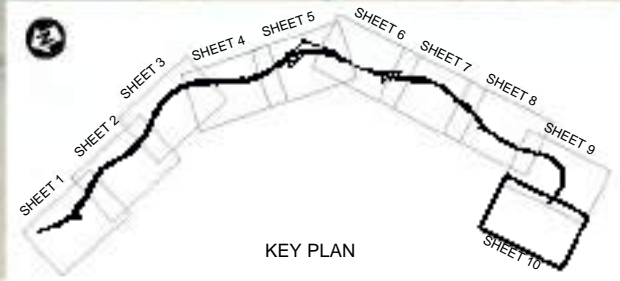
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MMA-DES-DNG-C0-DRG-1009

MMA-DES-DNG-C0-DRG-1010



1:1000 @ A1
1:2000 @ A3
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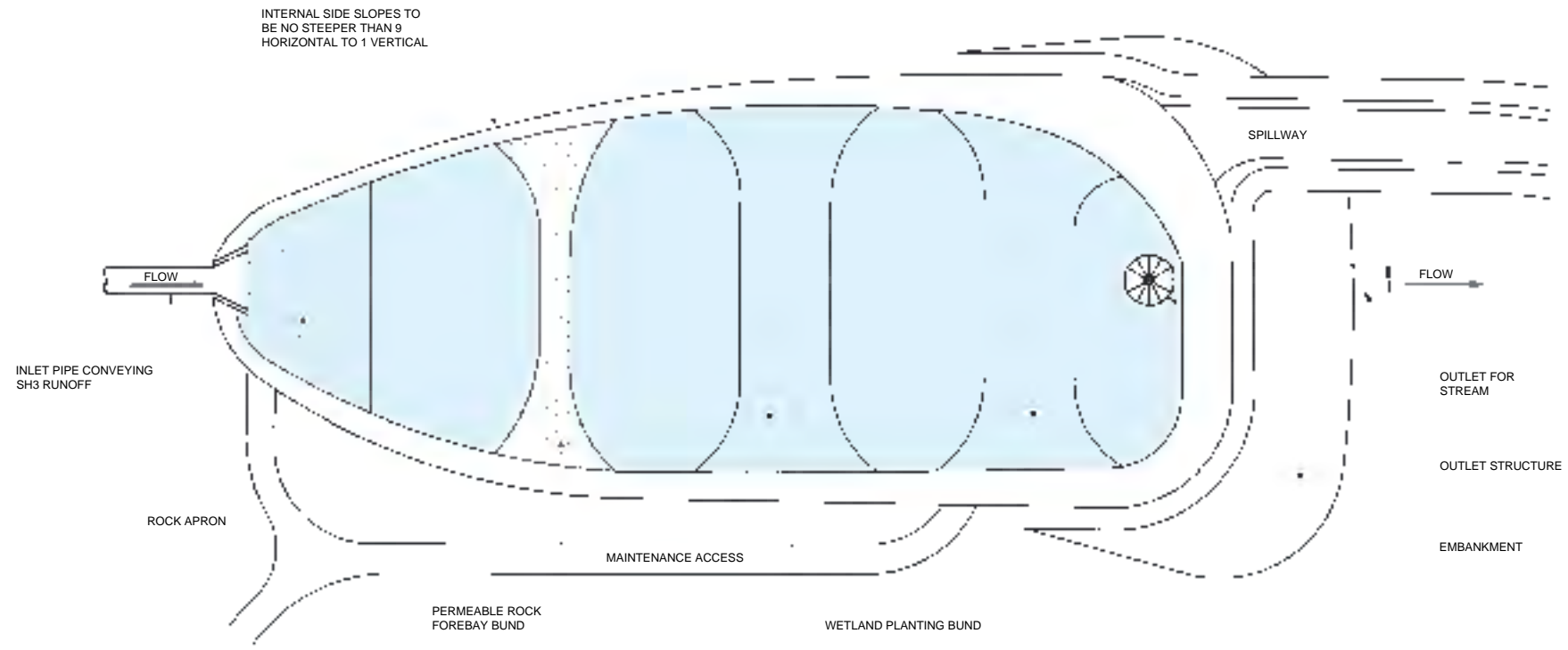
Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CULVERTS RESIZED/REMOVED, FILL DISPOSAL 3 REMOVED	QDO'S	GGC	MA/JS	AMcE	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	MAK	WSB	LJG	14/11/2017

Tab	MMA-DES-DNG-C0-DRG-1010
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1

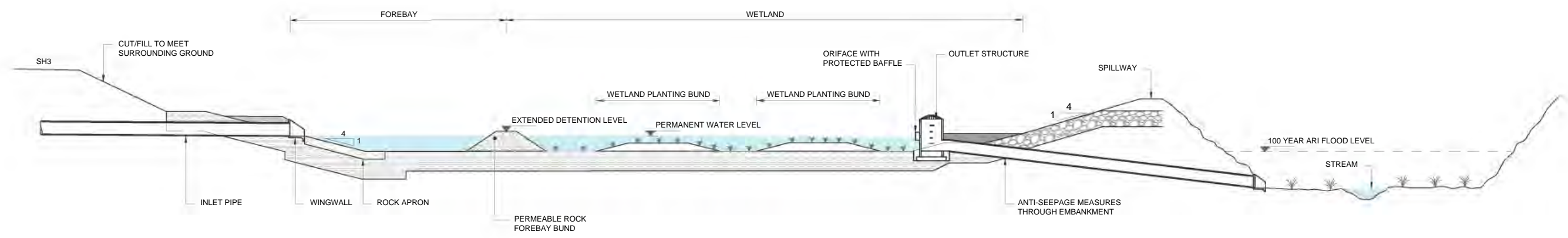


MT MESSENGER BYPASS
DRAINAGE
GENERAL ARRANGEMENTS LAYOUT
SHEET 10

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-1010
Revision
D



PLAN - TYPICAL WETLAND
NOT TO SCALE



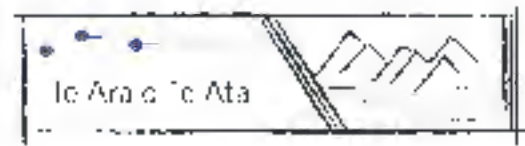
SECTION - TYPICAL WETLAND
NOT TO SCALE

Wetland Schedule				
Wetland ID	Impervious Catchment Area (m ²)	Pervious Catchment Area (m ²)	Total Catchment Area (m ²)	Functions
W1	20950	15770	36720	Water Quality Treatment & Extended Detention
W2	27750	33460	61210	Water Quality Treatment & Extended Detention
W3	16520	23520	40040	Water Quality Treatment & Extended Detention

NOTE: INDICATIVE CATCHMENT AREAS ONLY, SUBJECT TO DETAILED DESIGN

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	MAJS	AMcE	BSS	17/05/2019
B	CHANGES TO SHEETS 4005 AND 4006 ONLY	QDO'S	GGC	MAK	AMcE	BSS	26/07/2018
A	FOR CONSENT	AJW	QDO'S	MAK	WSB	LG	14/11/2017

Tab	MMA-DES-DNG-C0-DRG-4001
Scales	N.T.S.
Original Size	A1



MT MESSENGER BYPASS

DRAINAGE

TYPICAL DRAINAGE DETAILS

TYPICAL WETLAND DETAILS AND SCHEDULE

Approved
H. MILLIKEN

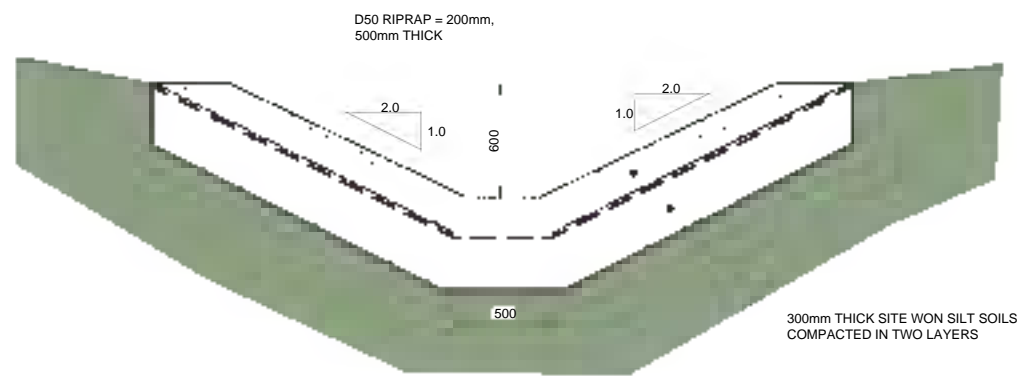
Status
FOR CONSENT

Drawing Number
MMA-DES-DNG-C0-DRG-4001

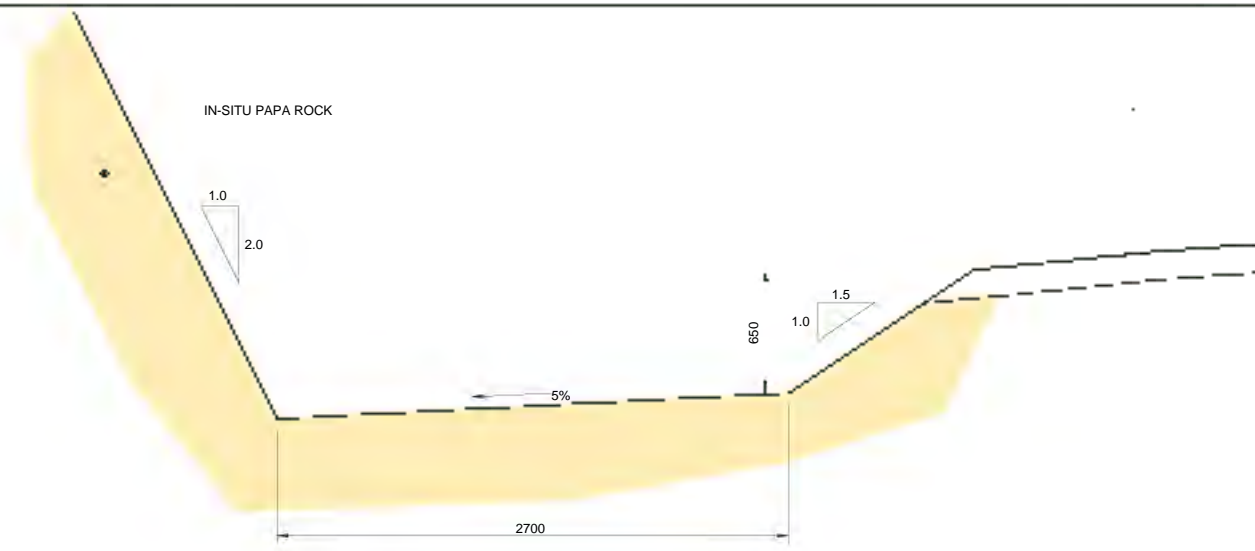
Revision
C

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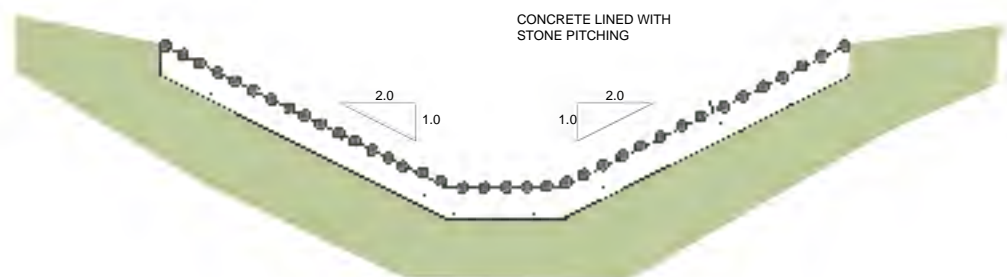
DO NOT SCALE FROM THIS DRAWING - Document copyright of Mount Messenger Alliance and its project consultants and may only be used for its intended purpose.



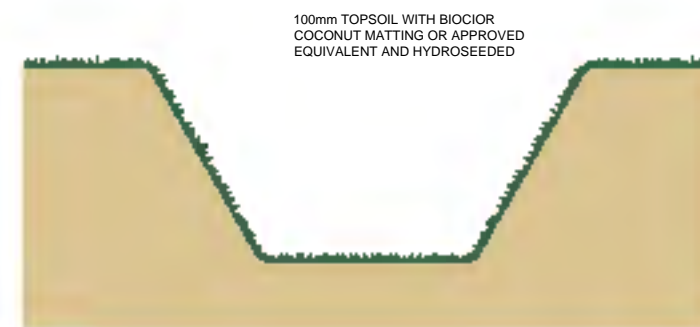
CHANNEL AT BASE OF FILL TYPE A - RIPRAP LINED
SCALE 1:20 (A1) 1:40 (A3)



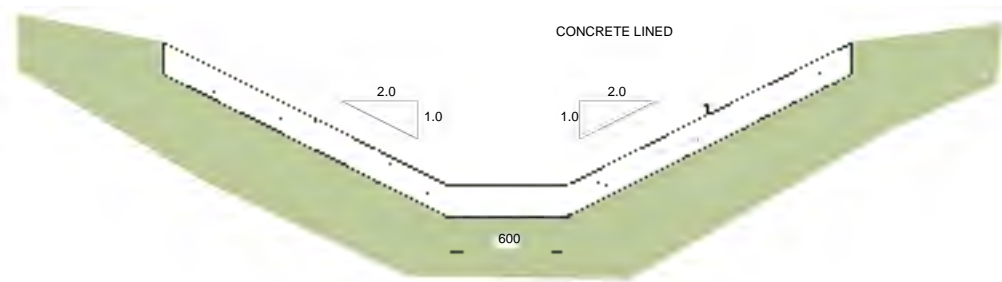
ROAD DRAINAGE SWALE TYPE IN CUT
SCALE 1:20 (A1) 1:40 (A3)



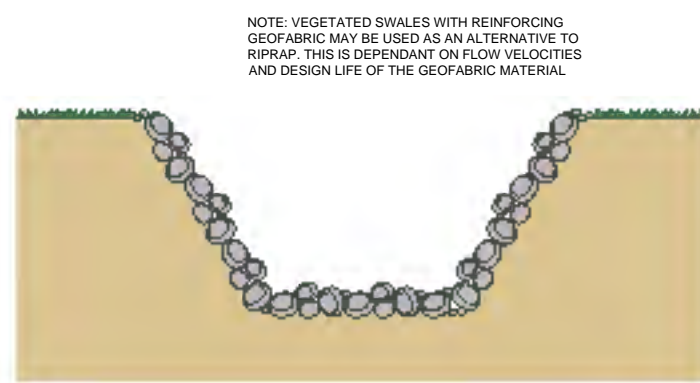
CHANNEL AT BASE OF FILL TYPE B - CONCRETE LINED WITH STONE PITCHING ALTERNATIVE
Scale: 1:20 (A1) 1:40 (A3)



VEGETATED CHANNEL FOR LOW FLOW AND/OR FLAT GRADIENTS
STORMWATER SWALE DRAIN IN FILL
TYPICAL SECTIONS - ROADSIDE SWALES
NOT TO SCALE



CHANNEL AT BASE OF FILL TYPE B - CONCRETE LINED
SCALE 1:20 (A1) 1:40 (A3)

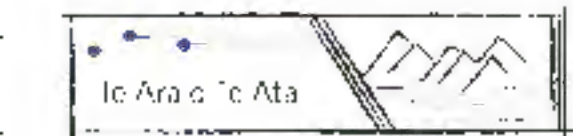


NOTE: VEGETATED SWALES WITH REINFORCING GEOFABRIC MAY BE USED AS AN ALTERNATIVE TO RIPRAP. THIS IS DEPENDANT ON FLOW VELOCITIES AND DESIGN LIFE OF THE GEOFABRIC MATERIAL.
STORMWATER SWALE DRAIN RIPRAP LINED
TYPICAL SECTIONS - ROADSIDE SWALES
NOT TO SCALE



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	MAJS	AMcE	BSS	17/05/2019
B	CHANGES TO SHEETS 4005 AND 4006 ONLY	QDO'S	GGC	MAK	AMcE	BSS	26/07/2018
A	FOR CONSENT	AJW	QDO'S	MAK	WSB	LG	14/11/2017

Tab	Scale	Original Size
MMA-DES-DNG-C0-DRG-4003	AS SHOWN	A1

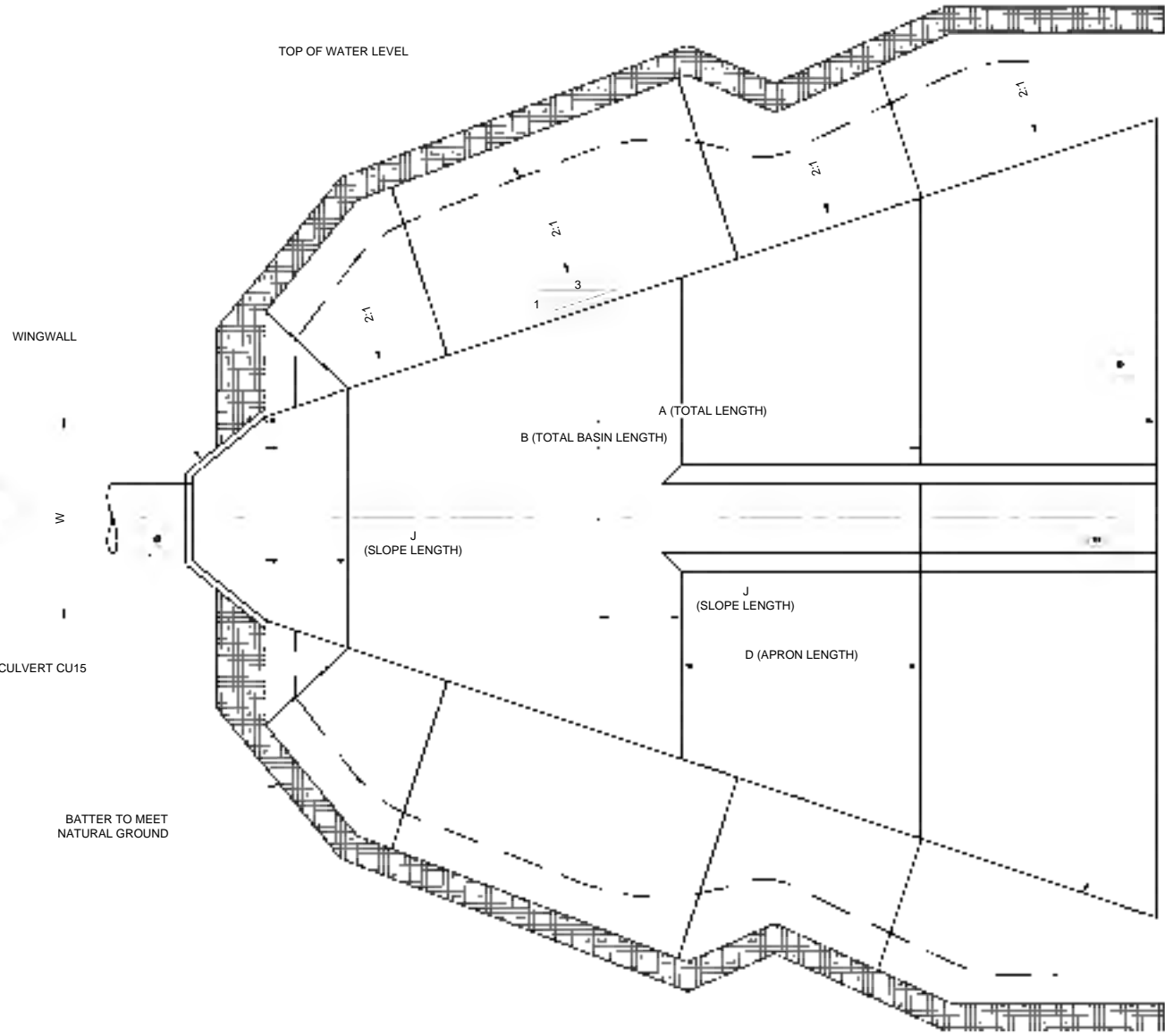


MT MESSENGER BYPASS

DRAINAGE
TYPICAL DRAINAGE DETAILS
TYPICAL CHANNEL CROSS SECTIONS

Approved: **H. MILLIKEN**
Status: **FOR CONSENT**
Drawing Number: **MMA-DES-DNG-C0-DRG-4003** Revision: **C**

	W	A	B	C	D	E	D	G	H	I	J	K	N
CULVERT SIZE (mm)	APRON WIDTH AT HEADWALL	TOTAL LENGTH (NOT INCLUDING HEADWALL)	*RIPRAP BASIN LENGTH (LB)*	*DISSIPATOR POOL LENGTH (LS)*	*APRON LENGTH (LA)*	*SCOUR HOLE DEPTH (Hs)*	*ROCK SIZE D ₅₀ * (mm)	*RIPRAP THICKNESS (LEADING EDGE)(3D ₅₀)*	*RIPRAP THICKNESS (ELSEWHERE)(2D ₅₀)*	*WIDTH AT END OF DISSIPATOR APRON (WB)*	*POOL INCLINE SLOPE LENGTH (?H ₂ +22)*	*DISSIPATOR POOL HORIZONTAL FLOOR (LS-4HS)*	TOP OF BASIN ABOVE EXIT CULVERT IL
2500	4.5	16	16	11	5	1.1	550	1.65	1.10	6.0	2.2	6.6	1.55



IF REQUIRED
TURF REINFORCEMENT MATTING,
LANDLOCK OR SIMILAR

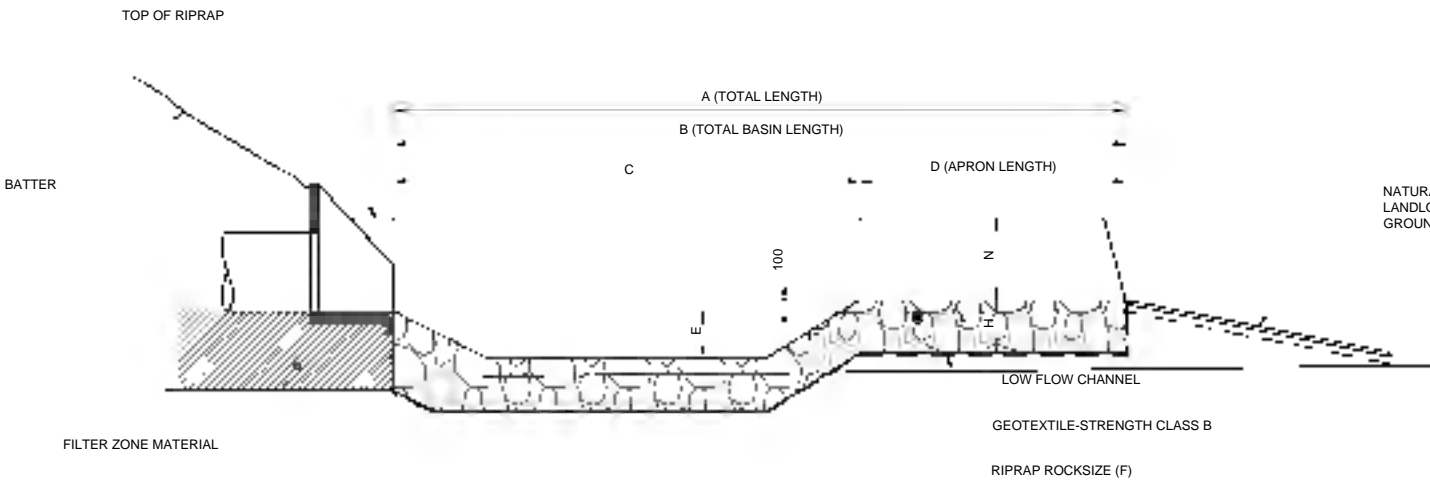


LOW FLOW CHANNEL TO
MATCH EXISTING STREAM

IF REQUIRED
LANDLOCK EXTENDED AT 3:1 BATTER
OR WHERE THIS IS UNACHIEVABLE
AS A RESULT OF NATURAL CHANNEL
TOPOGRAPHY, ZERO GRADIENT AS A MINIMUM.

NOTES

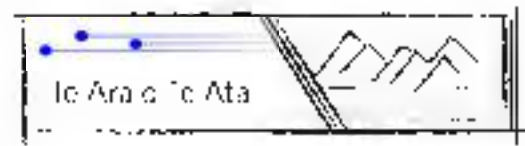
- FOR RIPRAP BASINS TO BE CONSTRUCTED AT 1:3 SPLAY FROM END CORNERS OF THE HEADWALL TO BE EXTENTS OF THE RIPRAP BASIN APRON.
- ALL EXTENDED APRONS TO BE CONSTRUCTED AT 1:3 SPLAY FROM THE EXTENTS OF THE RIPRAP BASIN APRON, EXCEPT WHERE EXTENDED APRON MEETS SIDE OF NATURAL CHANNEL GEOMETRY. AT THIS POINT EXTENDED APRON MAY BE MODIFIED TO FOLLOW NATURAL BASIN FLOOR, AT A MINIMUM SPLAY OF ZERO. THE EXTENDED APRON MAY NOT AT ANY POINT DECREASE IN WIDTH.
- RIPRAP BASINS TO BE CONSTRUCTED TO THE ELEVATION HEIGHTS GIVEN WITH 2:1 SIDE SLOPES TO MEET THE NATURAL GROUND, RIPRAP BASIN WALLS TO BE PROVIDED TO THE END OF THE RIPRAP BASIN APRON. WHERE EXTENDED APRONS ARE PROVIDED, THESE DO NOT REQUIRE EMBANKMENT STABILISATION.
- GEOTEXTILE SHALL BE PLACED BETWEEN ALL RIPRAP/RENO MATTRESS AND SUBGRADE..



A SECTION
NOT TO SCALE

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	MAJS	AMcE	BSS	17/05/2019
B	CHANGES TO SHEETS 4005 AND 4006 ONLY	QDO'S	GGC	MAK	AMcE	BSS	26/07/2018
A	FOR CONSENT	AJW	QDO'S	MAK	WSB	LG	14/11/2017

Tab	Scale	Original Size
MMA-DES-DNG-C0-DRG-4004	N.T.S	A1

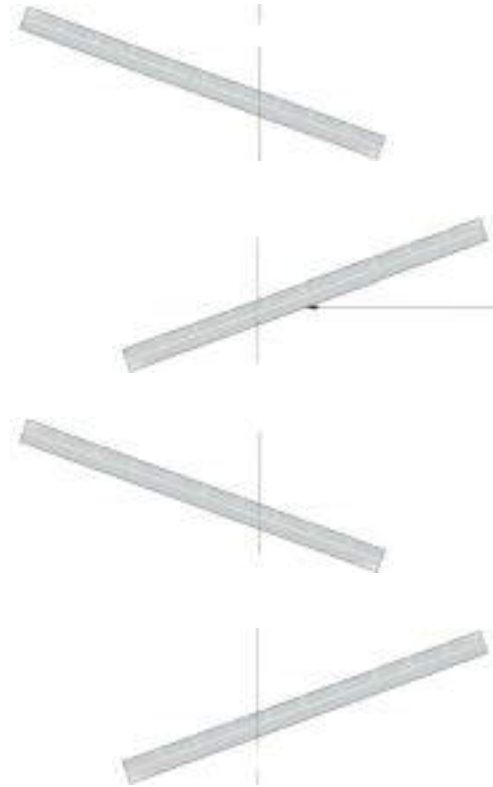


MT MESSENGER BYPASS
DRAINAGE
TYPICAL DRAINAGE DETAILS
OUTLET STILLING BASIN DETAILS

Approved
H. MILLIKEN
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-4004
Revision
C

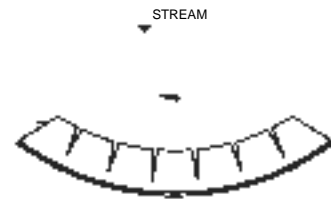
This drawing is not to be used for construction purposes unless signed approved and issued For Construction

DIAMETERS RANGE FROM
1200mm TO 3060mm



PLAN - FISH PASSAGE BAFFLES
NOT TO SCALE

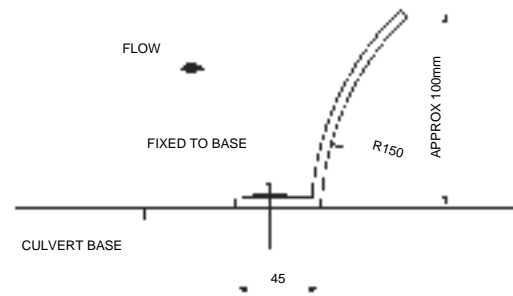
FLEXIBLE PLASTIC MOULDED CULVERT BAFFLES



A SECTION - FISH PASSAGE BAFFLES
NOT TO SCALE

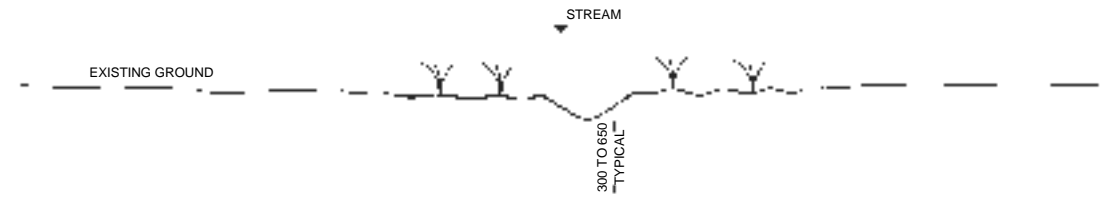


PIPE CULVERT



B SECTION - FISH PASSAGE BAFFLES
NOT TO SCALE

FISH PASSAGE DETAIL - TYPE 1
CULVERT BAFFLES FOR STEEP GRADIENT CULVERT

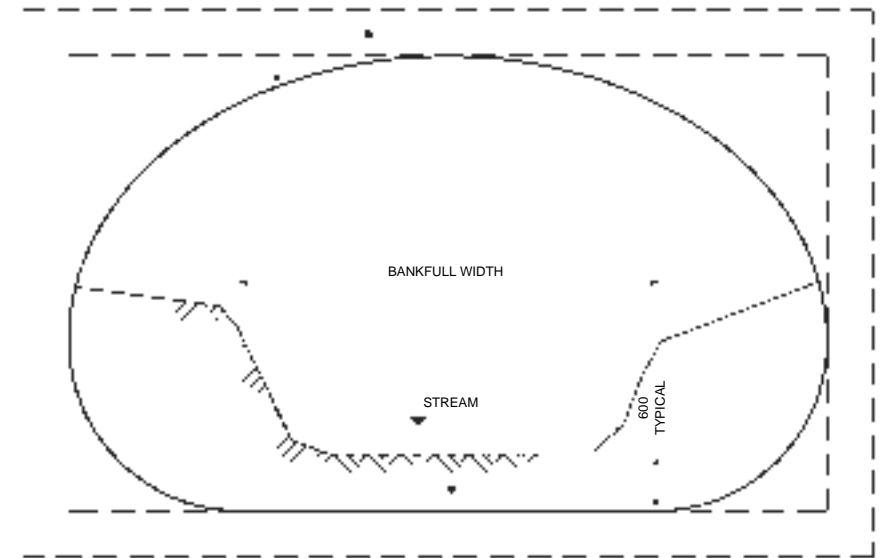


TYPICAL SECTION - FISH PASSAGE
NOT TO SCALE

FISH PASSAGE DETAIL - TYPE 2
EMBEDDED CULVERT BAFFLES FOR SHALLOW GRADIENT CULVERT

BOX/PIPE CULVERT ALTERNATIVE
(BOX CULVERT SHOWN)

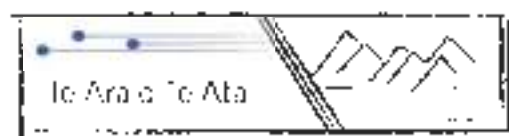
ARCH CULVERT WITH BASE (AS
SHOWN) OR WITH NO BOTTOM



FISH PASSAGE STREAM SIMULATION CULVERT DETAIL
NOT TO SCALE

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
B	ARCH / BOX CULVERT DETAIL ADDED	QDO'S	GGC	MAK	AMcE	BSS	26/07/2018
A	FOR CONSENT	AJW	QDO'S	MAK	WSB	LG	14/11/2017

Tab	MMA-DES-DNG-C0-DRG-4005
Scales	N.T.S.
Original Size	A1

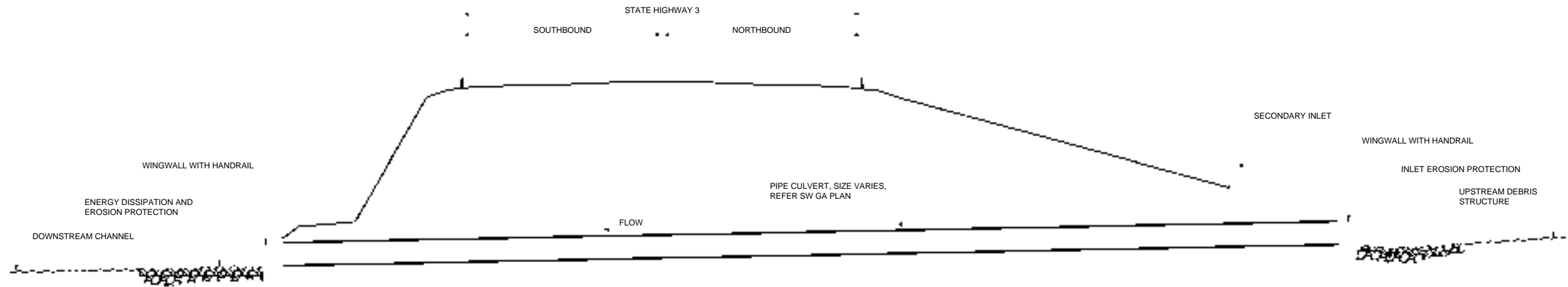


MT MESSENGER BYPASS
DRAINAGE
TYPICAL DRAINAGE DETAILS
FISH PASSAGE DETAILS

Approved
H. MILLIKEN
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-4005
Revision
B

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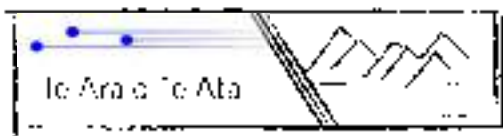
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TYPICAL CULVERT SECTION
NOT TO SCALE

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	MA/JS	AMcE	BSS	17/05/2019
B	TABLE AMENDED	QDO'S	GGC	MAK	AMcE	BSS	26/07/2018
A	FOR CONSENT	AJW	QDO'S	MAK	WSB	LG	14/11/2017

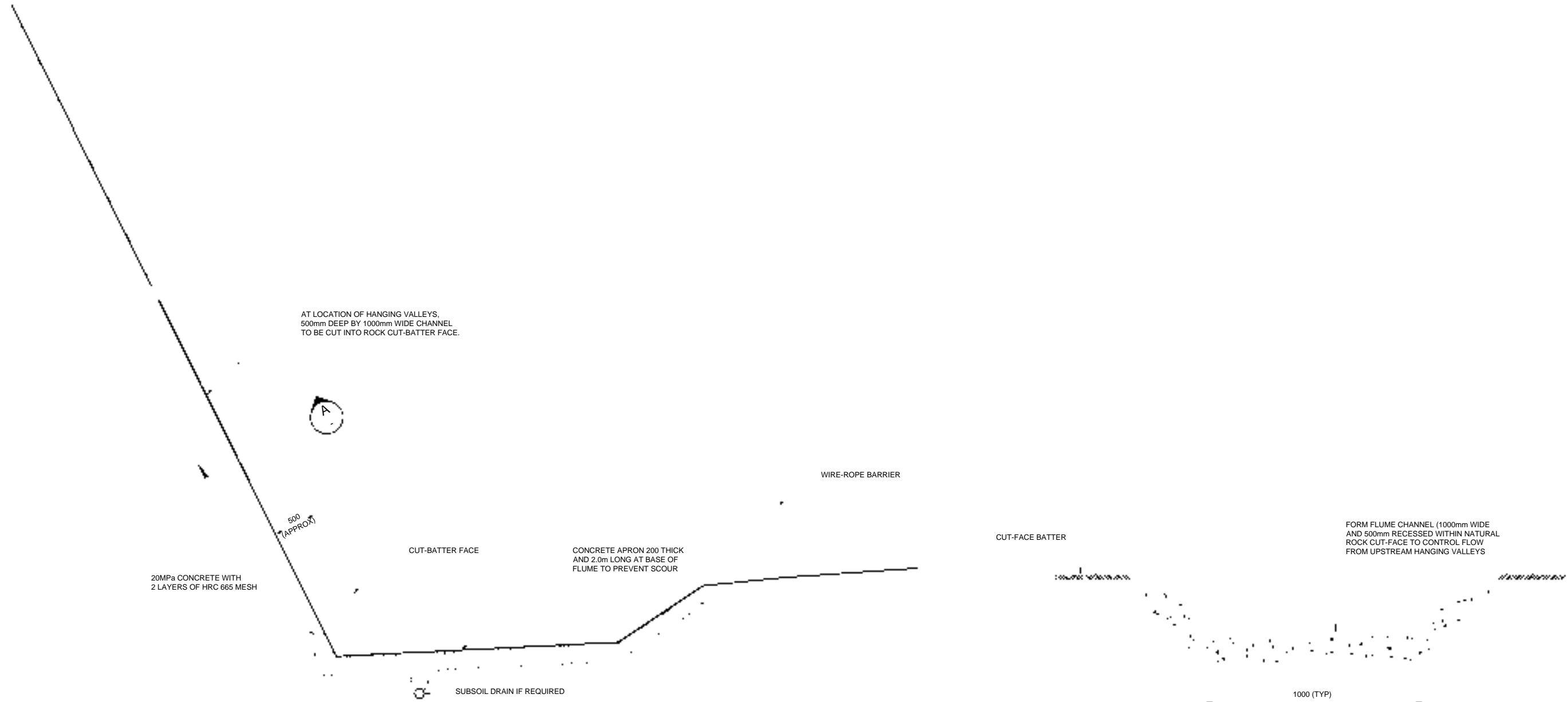
Tab	MMA-DES-DNG-C0-DRG-4006
Scales	N.T.S
Original Size	A1



MT MESSENGER BYPASS		Approved	H. MILLIKEN
DRAINAGE		Status	FOR CONSENT
TYPICAL DRAINAGE DETAILS		Drawing Number	MMA-DES-DNG-C0-DRG-4006
TYPICAL CULVERT SECTION & SCHEDULE		Revision	C

This drawing is not to be used for construction purposes unless signed approved and issued For Construction

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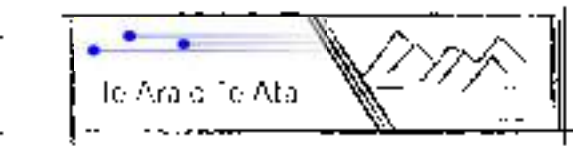


TYPICAL HANGING VALLEY FLUME
SCALE 1:25

FLUME - TYPICAL CROSS SECTION
SCALE 1:10

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC	MAJS	AMcE	BSS	17/05/2019
B	CHANGES TO SHEETS 4005 AND 4006 ONLY	QDO'S	GGC	MAK	AMcE	BSS	26/07/2018
A	FOR CONSENT	AJW	QDO'S	MAK	WSB	LG	14/11/2017

Tab	Original Size
MMA-DES-DNG-C0-DRG-4007	A1



Approved
H. MILLIKEN

Status
FOR CONSENT

Drawing Number
MMA-DES-DNG-C0-DRG-4007

Revision
C

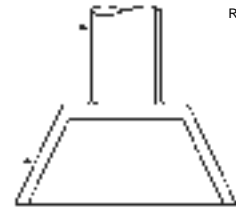
MT MESSENGER BYPASS

DRAINAGE

TYPICAL DRAINAGE DETAILS

FLUME DETAILS

CULVERT UNDER EMBANKMENT
REFER TO CULVERT SCHEDULE



ROAD EMBANKMENT

CULVERT HEADWALL
REFER TO CULVERT SCHEDULE

PLANT VEGETATION ON ROAD
SIDE OF DEBRIS FENCE FOR
AESTHETIC PURPOSES (REFER
LANDSCAPE DRAWINGS)



DEBRIS FENCE

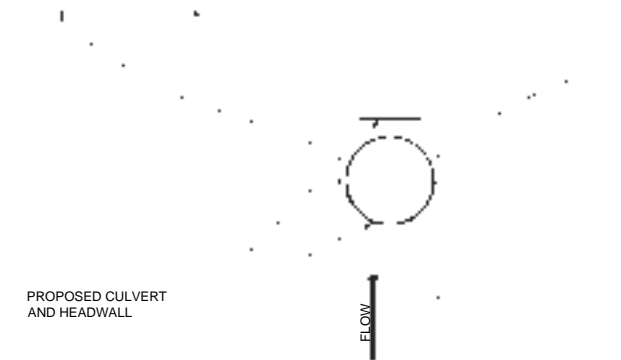


DEBRIS FENCE UPSTREAM OF CULVERT - TYPICAL PLAN DETAIL

NOT TO SCALE

HORIZONTAL RAIL FOR
STRUCTURAL SUPPORT

EXISTING GROUND



RAILWAY RAILS (MIN 50kg/m)
OR 310UC97

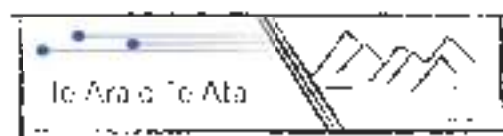
PROPOSED CULVERT
AND HEADWALL

DEBRIS FENCE UPSTREAM OF CULVERT - ELEVATION

NOT TO SCALE

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	MA/JS	AMcE	BSS	17/05/2019
B	CHANGES TO SHEETS 4005 AND 4006 ONLY	QDO'S	GGC	MAK	AMcE	BSS	26/07/2018
A	FOR CONSENT	AJW	QDO'S	MAK	WSB	LG	14/11/2017

Tab	MMA-DES-DNG-C0-DRG-4008
Scales	N.T.S
Original Size	A1

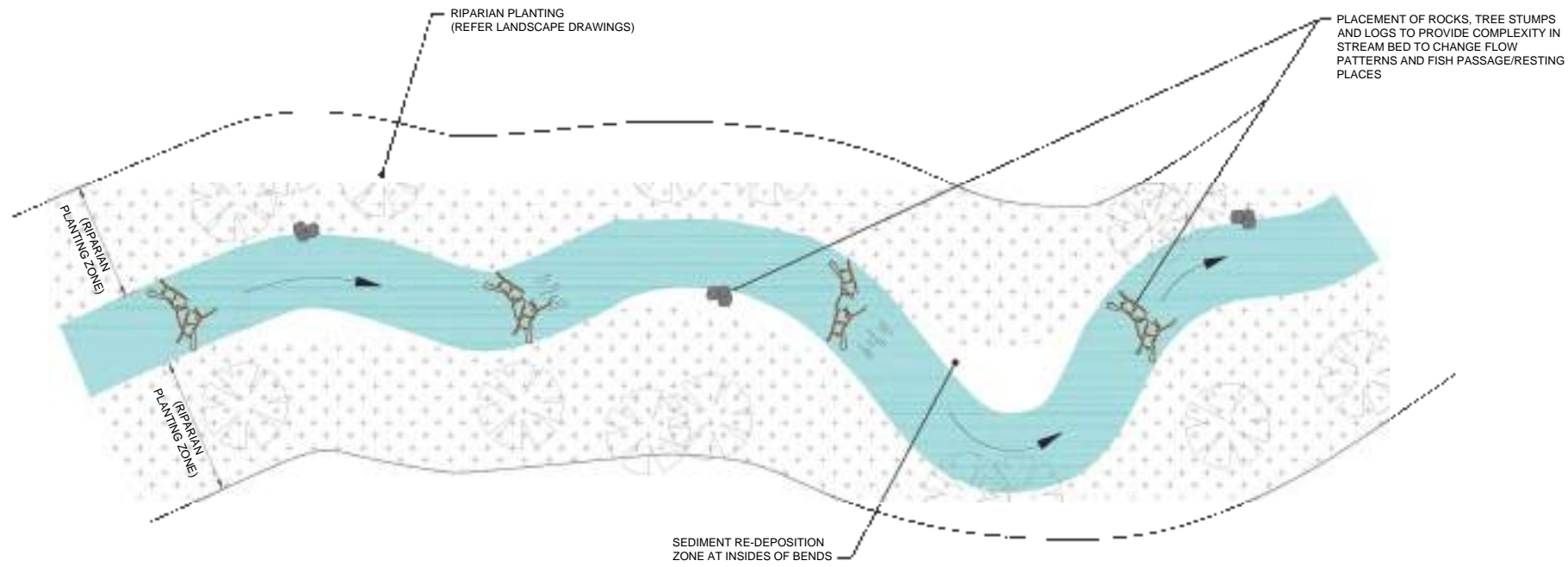


MT MESSENGER BYPASS
DRAINAGE
TYPICAL DRAINAGE DETAILS
DEBRIS FENCE DETAILS

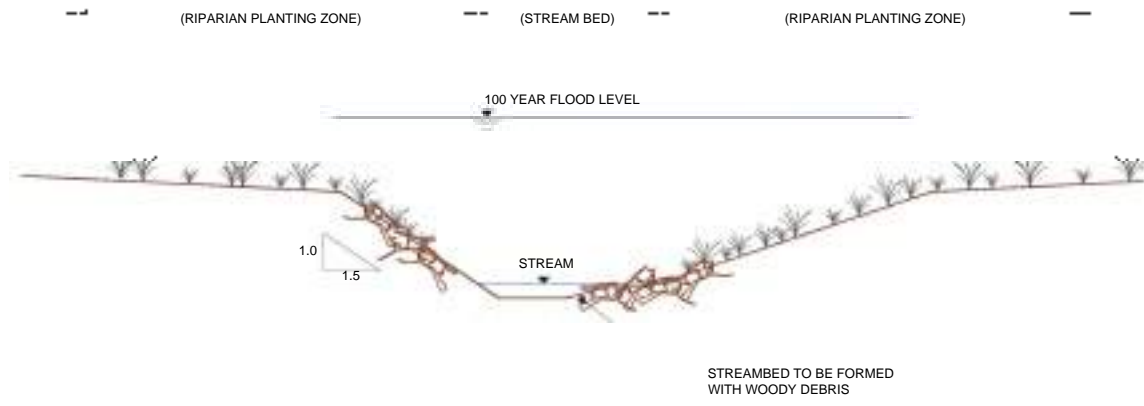
Approved
H. MILLIKEN
Status
FOR CONSENT
Drawing Number
MMA-DES-DNG-C0-DRG-4008 Revision
C

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PART PLAN - TYPICAL LOWLAND STREAM DIVERSION - TYPE 1
NOT TO SCALE

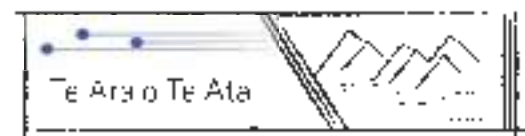


TYPICAL SECTION - LOWLAND STREAM DIVERSION
NOT TO SCALE

A UPDATED CONSENT ISSUE

CIV	QDO'S	JS	AMcE	BSS	17/05/2019
Drawn	Checked	Designed	Design Checked	Approved	Date

Tab
MMA-DES-DNG-C0-DRG-4011
Scales
NOT TO SCALE
Original Size
A1



MT MESSENGER BYPASS

DRAINAGE

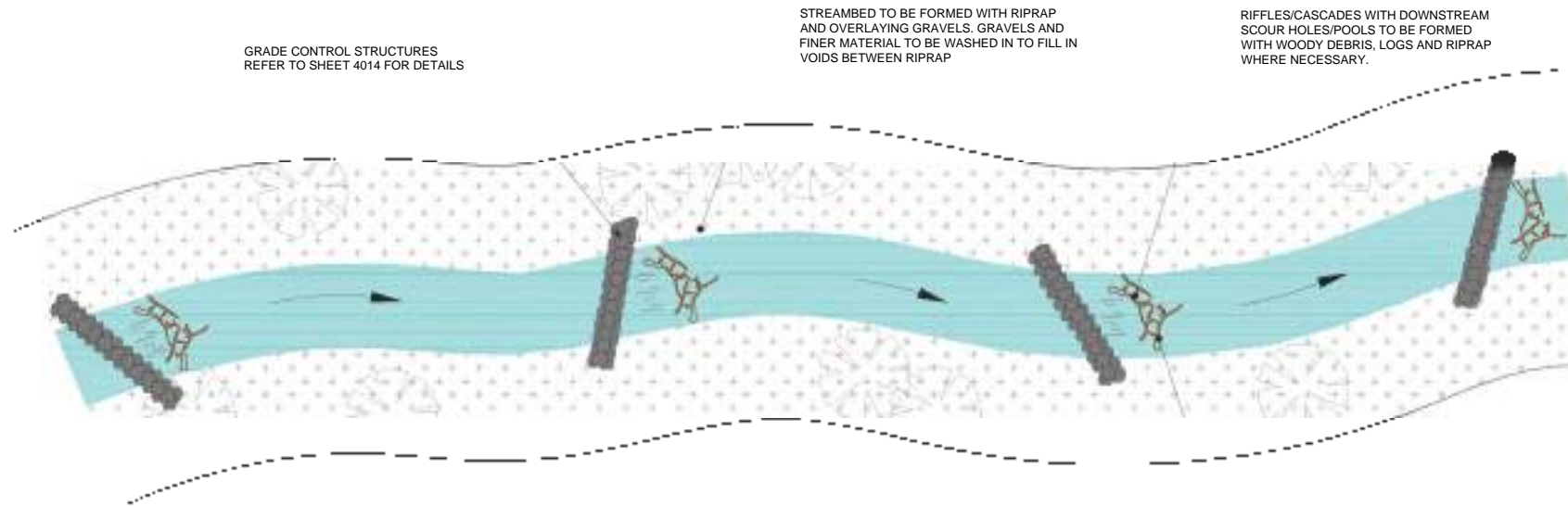
STREAM DIVERSION TYPICAL DETAILS

STREAM DIVERSION TYPE 1

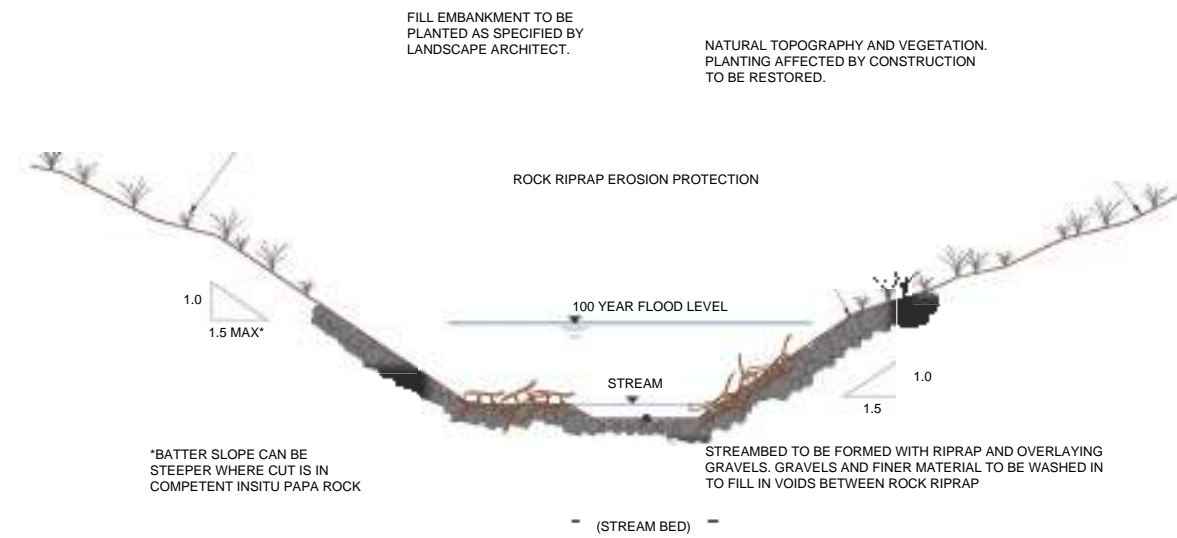
Approved	H. MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-DNG-C0-DRG-4011
Revision	A

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PART PLAN - TYPICAL STEEP STREAM DIVERSION - TYPE 2
NOT TO SCALE



TYPICAL SECTION - STEEP STREAM DIVERSION
NOT TO SCALE

Rev	Revision Description	CIV	QDO'S	JS	AMcE	BSS	17/05/2019
A	UPDATED CONSENT ISSUE						

Tab
MMA-DES-DNG-C0-DRG-4012

Scales
NOT TO SCALE

Original Size
A1

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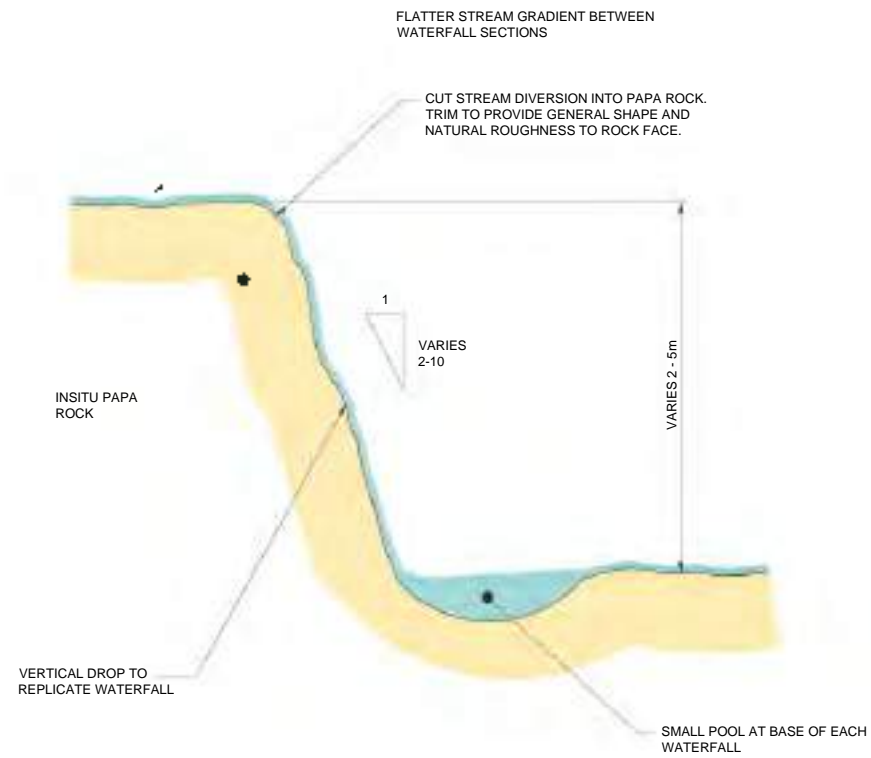
MT MESSENGER BYPASS

DRAINAGE

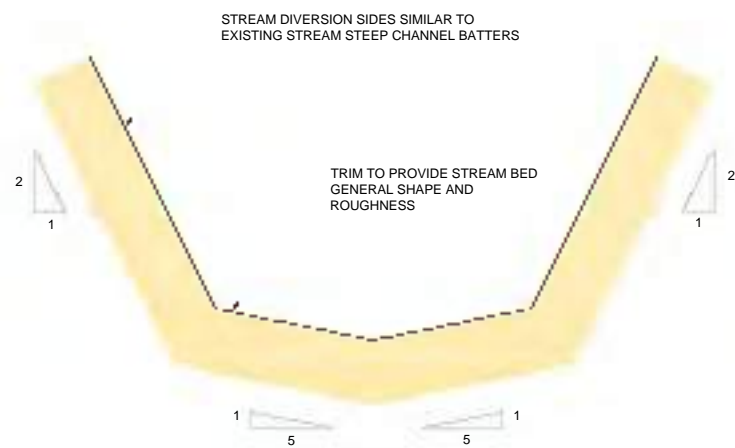
STREAM DIVERSION TYPICAL DETAILS

STREAM DIVERSION TYPE 2

Approved	H. MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-DNG-C0-DRG-4012
Revision	A



TYPICAL WATERFALL SECTION
 USED FOR STREAM DIVERSIONS SD150, SD151 AND SD160
 N.T.S



TYPICAL CROSS SECTION
 N.T.S

CONSTRUCTED WATERFALLS SHALL BE EXCAVATED AND TRIMMED TO REPLICATE NATURAL WATERFALLS AS CLOSE AS POSSIBLE

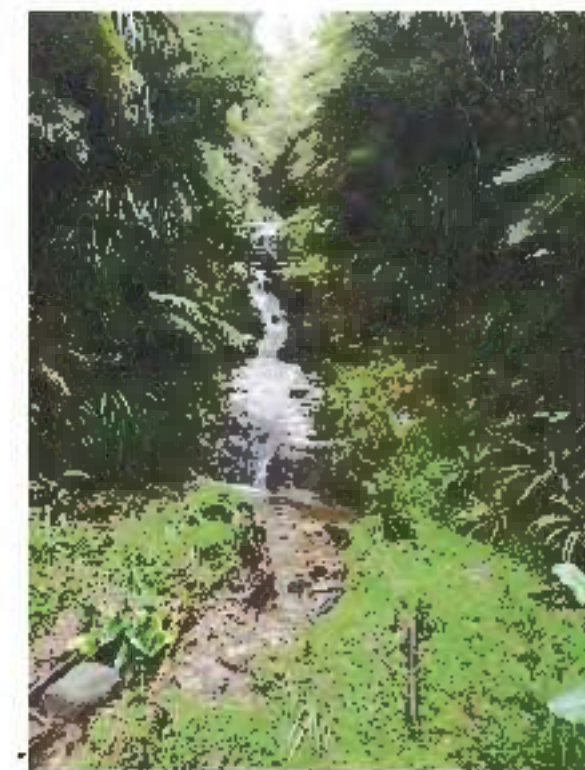


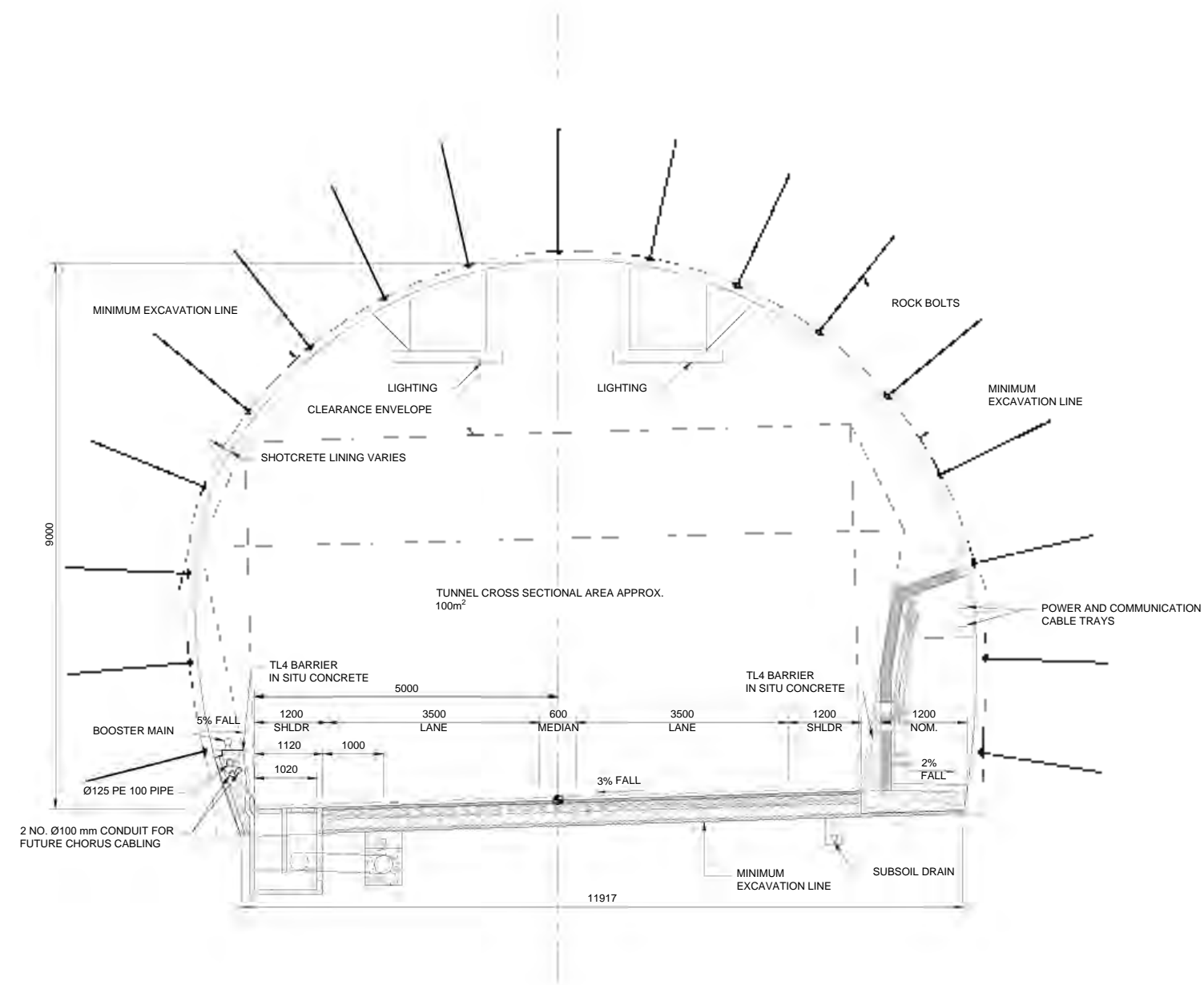
PHOTO OF EXAMPLE NATURAL WATERFALL
 N.T.S

Rev	Revision Description	CIV	QDO'S	JS	AMcE	BSS	17/05/2019
A	UPDATED CONSENT ISSUE						

Tab MMA-DES-DNG-C0-DRG-4013
 Scales NOT TO SCALE
 Original Size A1
 This drawing is not to be used for construction purposes unless signed approved and issued For Construction

MT MESSENGER BYPASS
DRAINAGE
STREAM DIVERSION TYPICAL DETAILS
STREAM DIVERSION TYPE 3

Approved	H. MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-DNG-C0-DRG-4013
Revision	A

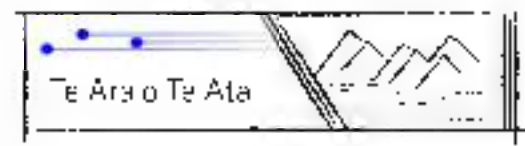


TYPICAL TUNNEL CROSS SECTION
SCALE: 1:50

1:50 @ A1
1:100 @ A3
0 1000 2000 3000 4000 5000 mm

B	UPDATED CONSENT ISSUE	WH	QDO'S	SC	SP	BSS	17/05/2019
A	FOR CONSENT	AJW	QDO'S	SC	PWG	LG	14/11/2017
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

TAB	MMA-DES-TUN-C0-DRG-3001
Scales	1:100 (A3) 1:50 (A1)
Original Size	A1

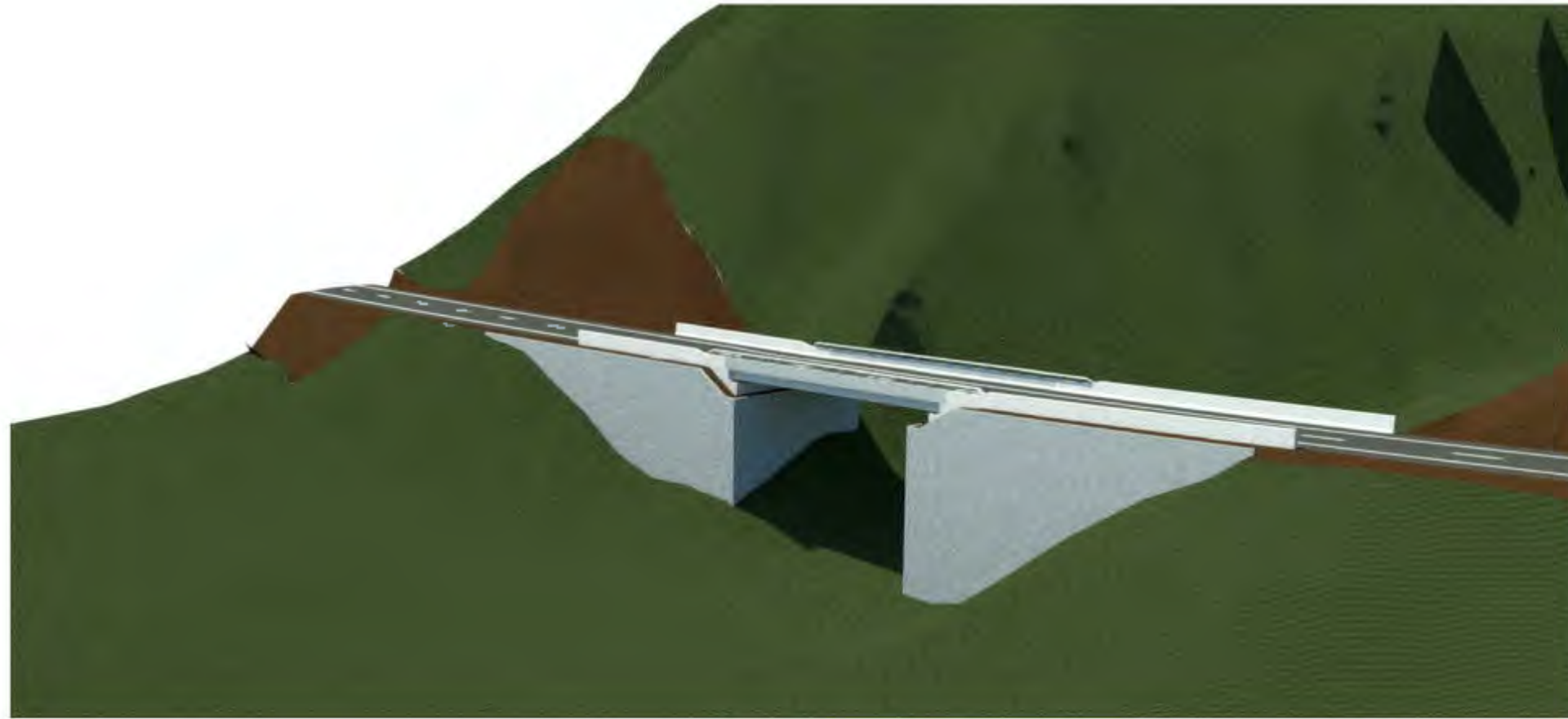


MT MESSENGER BYPASS
TUNNELS
TYPICAL CROSS SECTION
SHEET 1

Approved	H. MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-TUN-C0-DRG-3001
Revision	B

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A FOR CONSENT <small>Revision Description</small>		AJW <small>Drawn</small>	QDO'S <small>Checked</small>	TJB <small>Designed</small>	PWG <small>Design Checked</small>	BSS <small>Approved</small>	26/07/2018 <small>Date</small>	Original Size A1	This drawing is not to be used for construction purposes unless signed approved and issued For Construction			MT MESSENGER BYPASS STRUCTURE - BRIDGE 0 GENERAL ARRANGEMENT PERSPECTIVE VIEWS	Approved H. MILLIKEN Status FOR CONSENT Drawing Number MMA-DES-STR-C0-DRG-1001	Revision A
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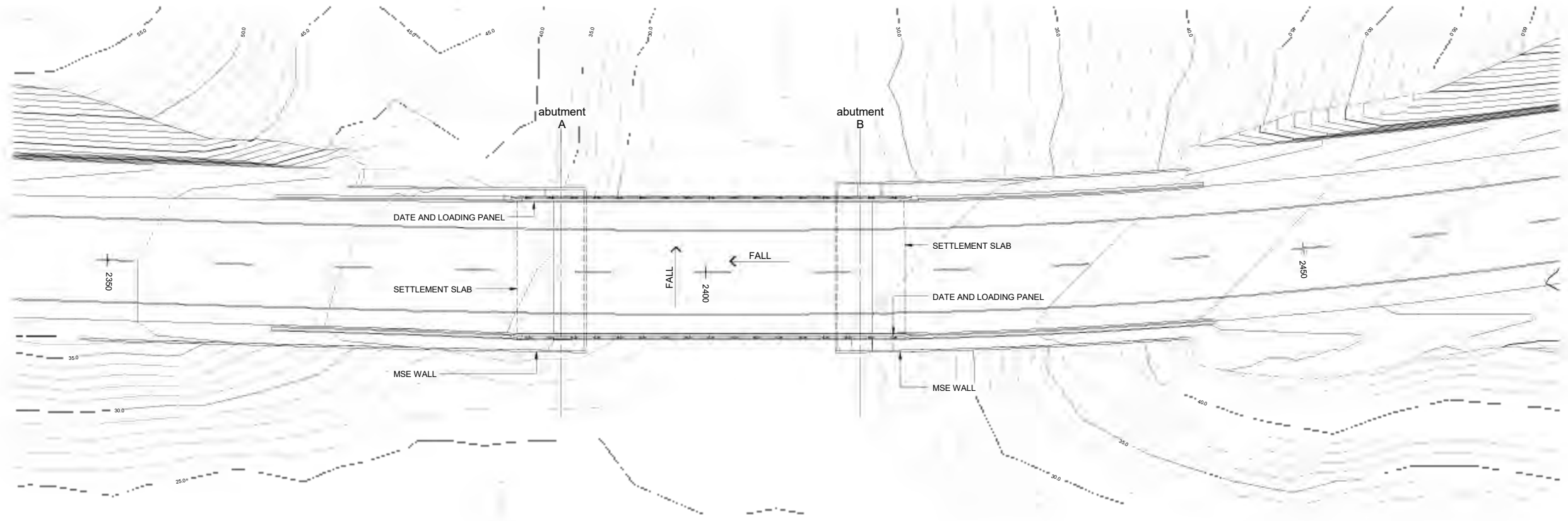
C:\126Synergy\2\09 Structures_7\06 CAD\Consent\C0\Bridges\0\MMA-DES-STR-C0-RV1-1000.rvt

PRINTED BY: ALAN WEST 27/07/2018 11:49:06 AM

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TO TONGAPORUTU

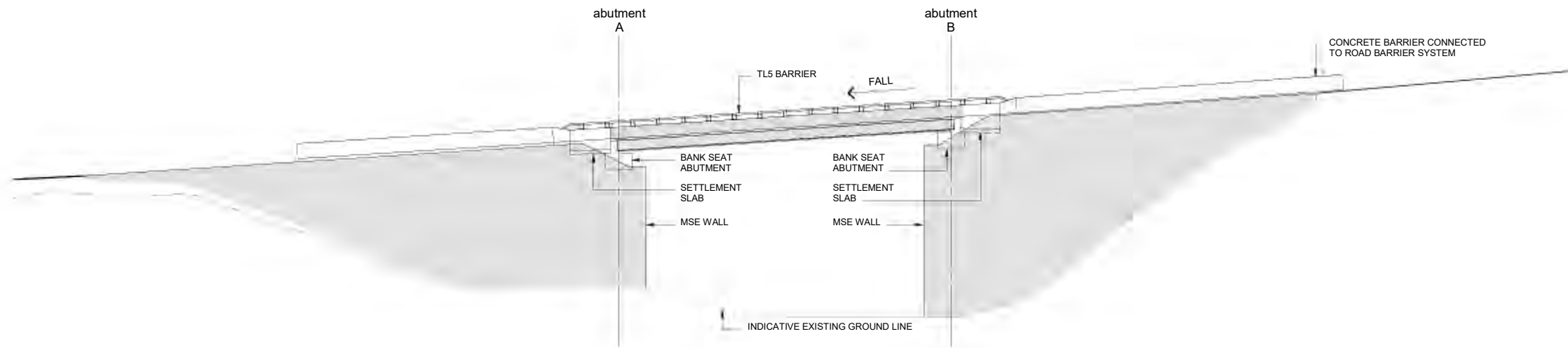
TO URENUI



PLAN
SCALE 1 : 200

TO TONGAPORUTU

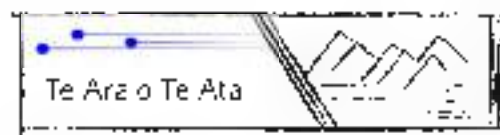
TO URENUI



NORTH WEST ELEVATION
SCALE 1 : 200

1 : 250 @ A1
 1 : 500 @ A3
 0 4000 8000 12000 16000 20000 24000 mm

Tab
 MMA-DES-STR-C0-DRG-1002
 Scales
 1 : 400 (A3)
 1 : 200 (A1)



A	FOR CONSENT	AJW	QDO'S	TJB	PWG	BSS	26/07/2018	Original Size	A1
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date	Original Size	A1

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Approved	H. MILLIKEN
Status	FOR CONSENT
Drawing Number	MMA-DES-STR-C0-DRG-1002
Revision	A

MT MESSENGER BYPASS
 STRUCTURE - BRIDGE 0
 GENERAL ARRANGEMENT
 PLAN AND ELEVATION

SOUTH EAST SIDE

NORTH WEST SIDE

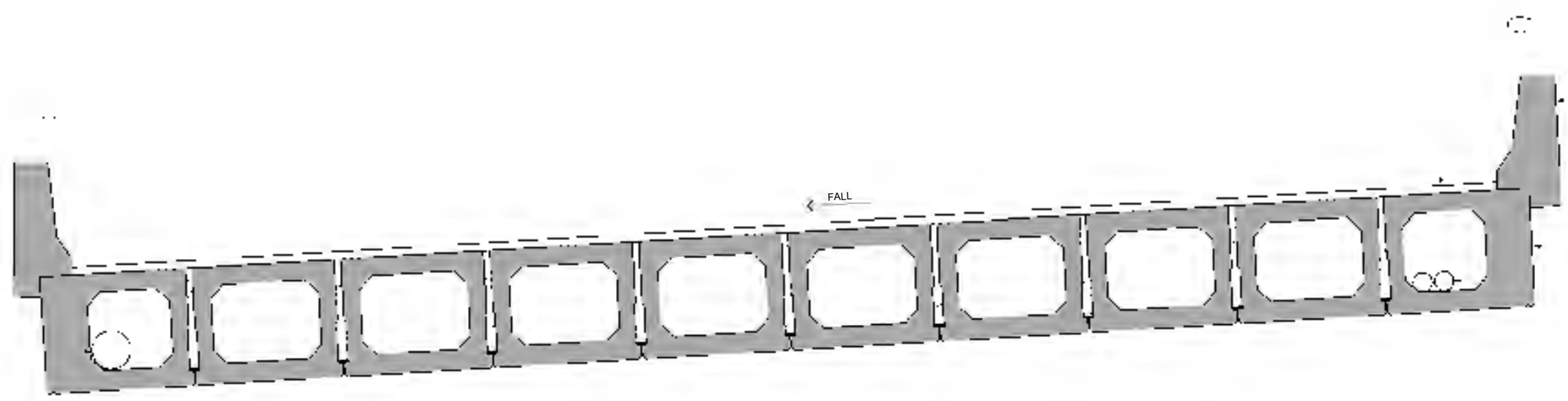
SURFACING

TL5 BARRIER,
REFER TO LANDSCAPE AND
ENVIRONMENT DESIGN
FRAMEWORK REPORT FOR
TREATMENT TO FACE OF BARRIER

PRECAST SINGLE
HOLLOWCORE UNITS
SERVICE DUCTS

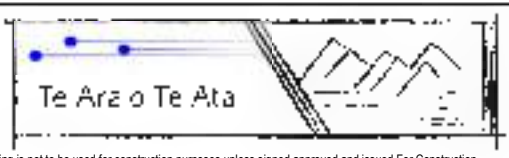
FALL

STORMWATER MAIN



1:20 @ A1
1:40 @ A3
0 200 400 600 800 1000 1200 1400 1600 1800 2000 mm

Tab
MMA-DES-STR-C0-DRG-1003
Scales
1:40 (A3)
1:20 (A1)



MT MESSENGER BYPASS
STRUCTURE - BRIDGE 0
GENERAL ARRANGEMENT
TYPICAL CROSS SECTION

Approved **H. MILLIKEN**
Status **FOR CONSENT**
Drawing Number **MMA-DES-STR-C0-DRG-1003**
Revision **A**

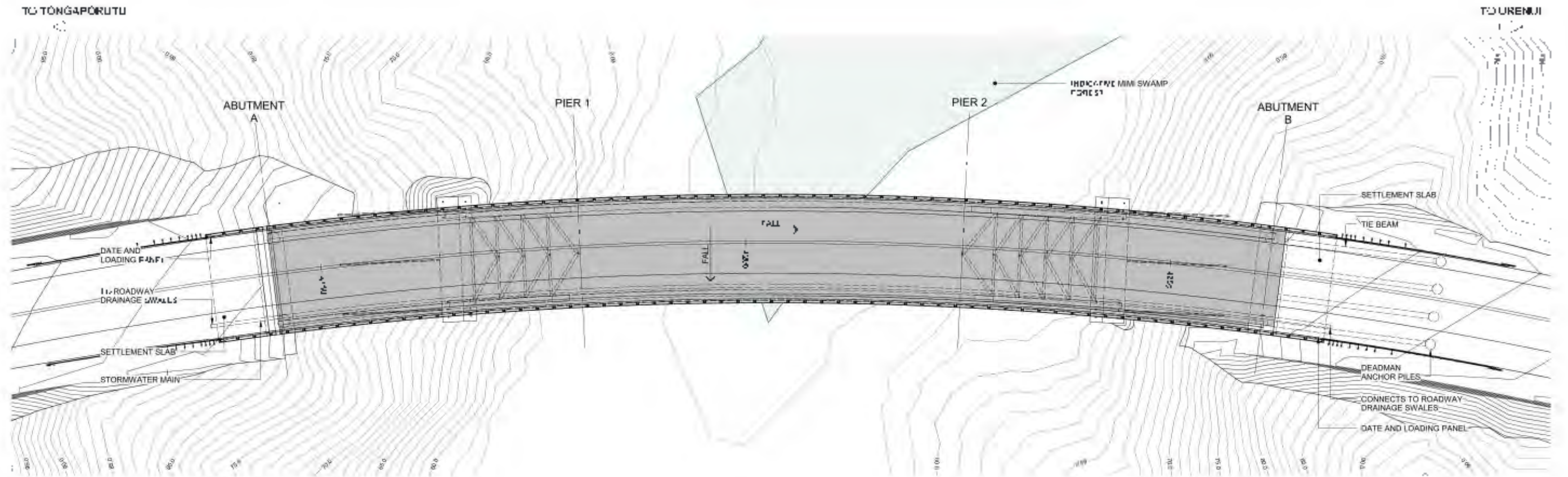
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A	FOR CONSENT	AJW	QDO'S	TJB	PWG	BSS	26/07/2018	A1

This drawing is not to be used for construction purposes unless signed approved and issued For Construction

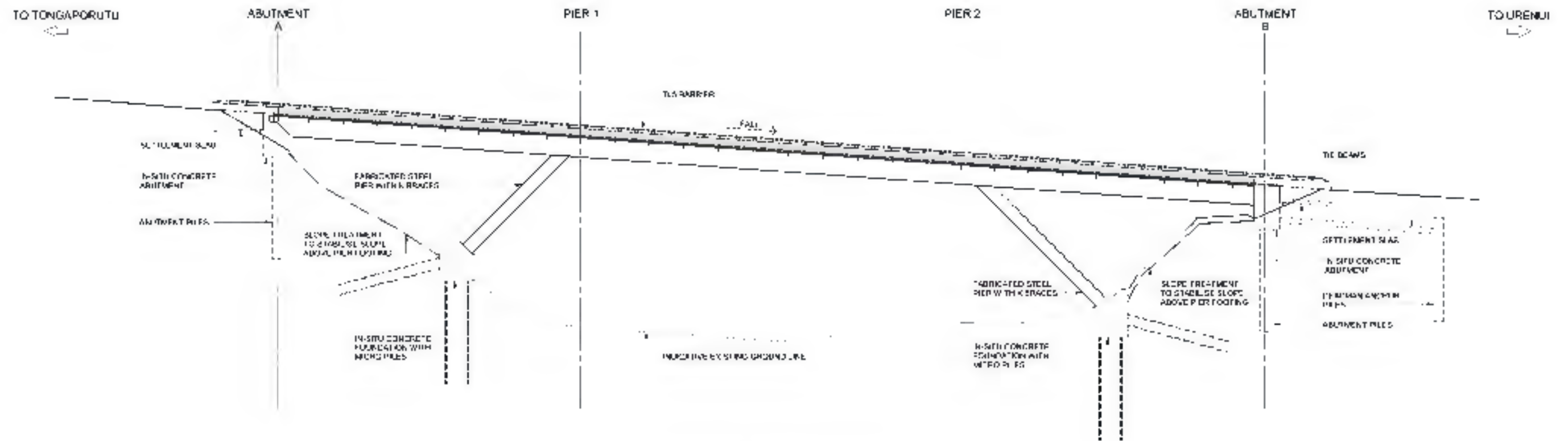
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<p>Project Name: MT MESSINGER BYPASS</p> <p>Client: NZTA</p> <p>Scale: 1:100</p>		<p>Drawn: [Name]</p> <p>Checked: [Name]</p> <p>Date: 08/04/2021</p>		<p>Site: Te Anau Te Anau</p>		<p>NZ TRANSPORT AGENCY</p> <p>Te Anau Bypass</p>		<p>MT MESSINGER BYPASS</p> <p>STRUCTURE - BRIDGE 1</p> <p>GENERAL ARRANGEMENT</p> <p>PERSPECTIVE VIEW</p>		<p>Approved: D. KENDERDINE</p> <p>Sheet: FOR CONSENT</p> <p>Project Number: MMA-DES-STR-CO-DRG-1101</p> <p>Revision: A</p>	
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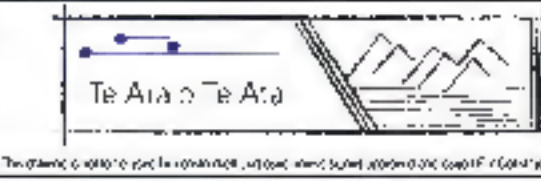
PLAN
SCALE 1:500



NORTH WEST ELEVATION
SCALE 1:500

1:500 (A1) 1:500 (A3) 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000

Project Name	Client	Scale	Author	Check	Date
Mt Messenger Bypass	Waka Kotahi	1:500	JC	JC	14/12/21

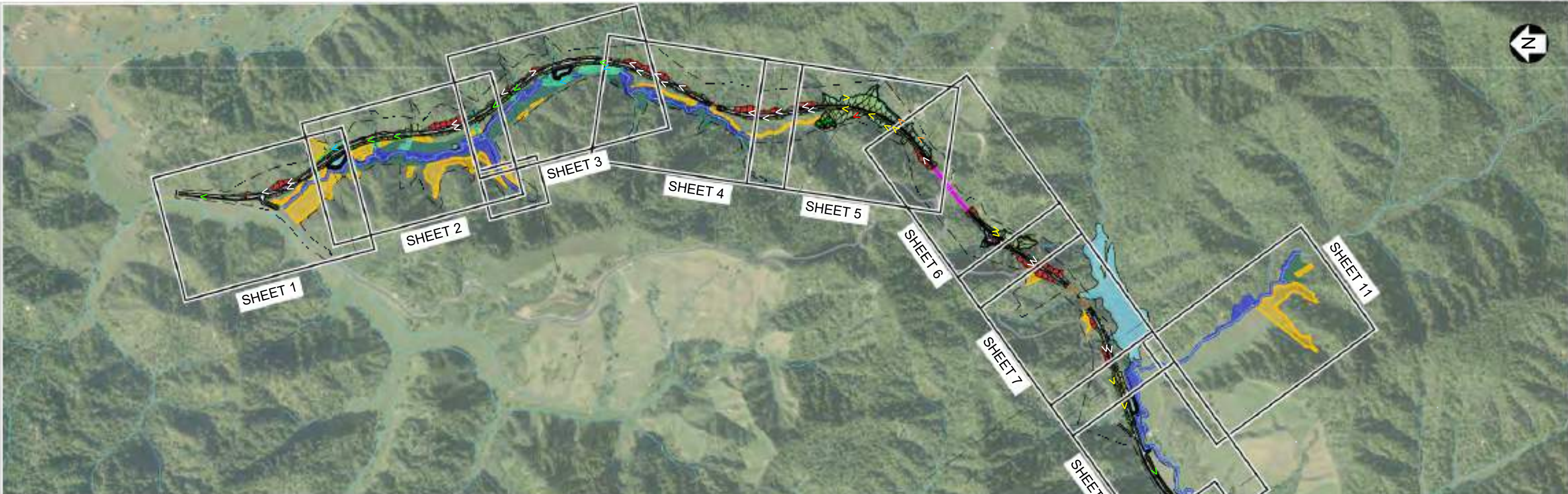


NZ TRANSPORT AGENCY
Waka Kotahi
Mt Messenger Bypass

MT MESSENGER BYPASS
STRUCTURE - BRIDGE 1
GENERAL ARRANGEMENT
PLAN AND ELEVATION

Approved	D. KENDERDINE
Drawn	FOR CONSENT
Project Number	MMA-DES-STR-CO-DRG-1102
Revision	A


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<p>BOUNDARY</p> <p>--- DESIGNATION BOUNDARY</p> <p>--- NGĀTI TAMA PROPERTY BOUNDARY</p> <p>EXISTING FEATURES</p> <p>--- EXISTING CULVERT</p> <p>--- STREAM</p> <p>--- EXISTING ROAD</p> <p>--- MIMI SWAMP FOREST</p> <p>ALIGNMENT</p> <p>--- BYPASS ALIGNMENT</p> <p>--- CHAINAGE</p> <p>MAIN STRUCTURES</p> <p>--- TUNNEL</p> <p>--- BRIDGE</p> <p>ACCESS</p> <p>--- HAUL ROAD</p> <p>FILL AREAS</p> <p>--- TEMPORARY STOCKPILE AREA, REHABILITATED/ RESTORATION PLANTING</p> <p>--- POTENTIAL PERMANENT DISPOSAL AREA, RESTORATION PLANTING</p>	<p>RESTORATION PLANTING</p> <p>--- RIPARIAN OFFSET RESTORATION</p> <p>--- REPLACEMENT MITIGATION PLANTING</p> <p>--- SWAMP FOREST OFFSET RESTORATION</p> <p>--- EXISTING WATER COVERED WETLAND AREAS TO BE RETAINED - MINOR SUPPLEMENTARY PLANTING OF SEDGE SPECIES WHERE REQUIRED TO FILL IN GAPS</p> <p>REHABILITATION PLANTING/ TREATMENT</p> <p>--- CUT SITE FINAL TREATMENT</p> <p>--- STREAM DIVERSION PLANTING 5-10M BUFFER ON EACH SIDE. EXISTING VEGETATION RETAINED</p> <p>--- CLIFF TOP CUT SITE, ASSISTANCE PLANTING & RE-VEGETATION</p> <p>--- FILL SITE ASSISTANCE PLANTING</p> <p>--- CONSTRUCTED WETLAND PLANTING</p> <p>--- MSE WALL - TERRA MESH</p> <p>--- MSE WALL - PLANTED, BIO WOOL</p> <p>SIGNIFICANT VEGETATION</p> <p>--- SIGNIFICANT TREE - MODERATE VALUE</p> <p>--- SIGNIFICANT TREE - HIGH VALUE</p> <p>--- SIGNIFICANT TREE - VERY HIGH VALUE</p> <p>--- SIGNIFICANT TREE - REMOVED WITH TREE FELLING PROTOCOL</p> <p>NOTE: REFER TO TECHNICAL REPORT 7A, VOLUME 5</p>	<p>DRAINAGE</p> <p>--- STREAM DIVERSION TYPE 1, LOWLAND</p> <p>--- STREAM DIVERSION TYPE 2, STEEP</p> <p>--- STREAM DIVERSION TYPE 3, WATERFALL</p> <p>--- CHANNEL TYPE A, RIPRAP</p> <p>--- CHANNEL TYPE B, CONCRETE</p> <p>--- CULVERTS</p> <p>ROADSIDE DRAINAGE</p> <p>--- CONSTRUCTED WETLAND, PLANTING TO TREATMENT ZONES</p> <p>--- SWALE TYPE 1, VEGETATED LINED</p> <p>--- SWALE TYPE 2, INSITU ROCK LINED</p> <p>--- SWALE TYPE 3, RIPRAP LINED</p> <p>--- OVERFLOW CHANNEL</p> <p>--- STORMWATER FLUMES</p> <p>--- TUNNEL CONTAINMENT POND</p> <p>--- VERGE & PAVEMENT SHOULDER</p> <p>--- ROCK DRAPE EXTENTS</p>
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Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date	Original Size	A1
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D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019	Scales	
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMCK	BSS	26/07/2018	NOT TO SCALE	
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018		
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017		

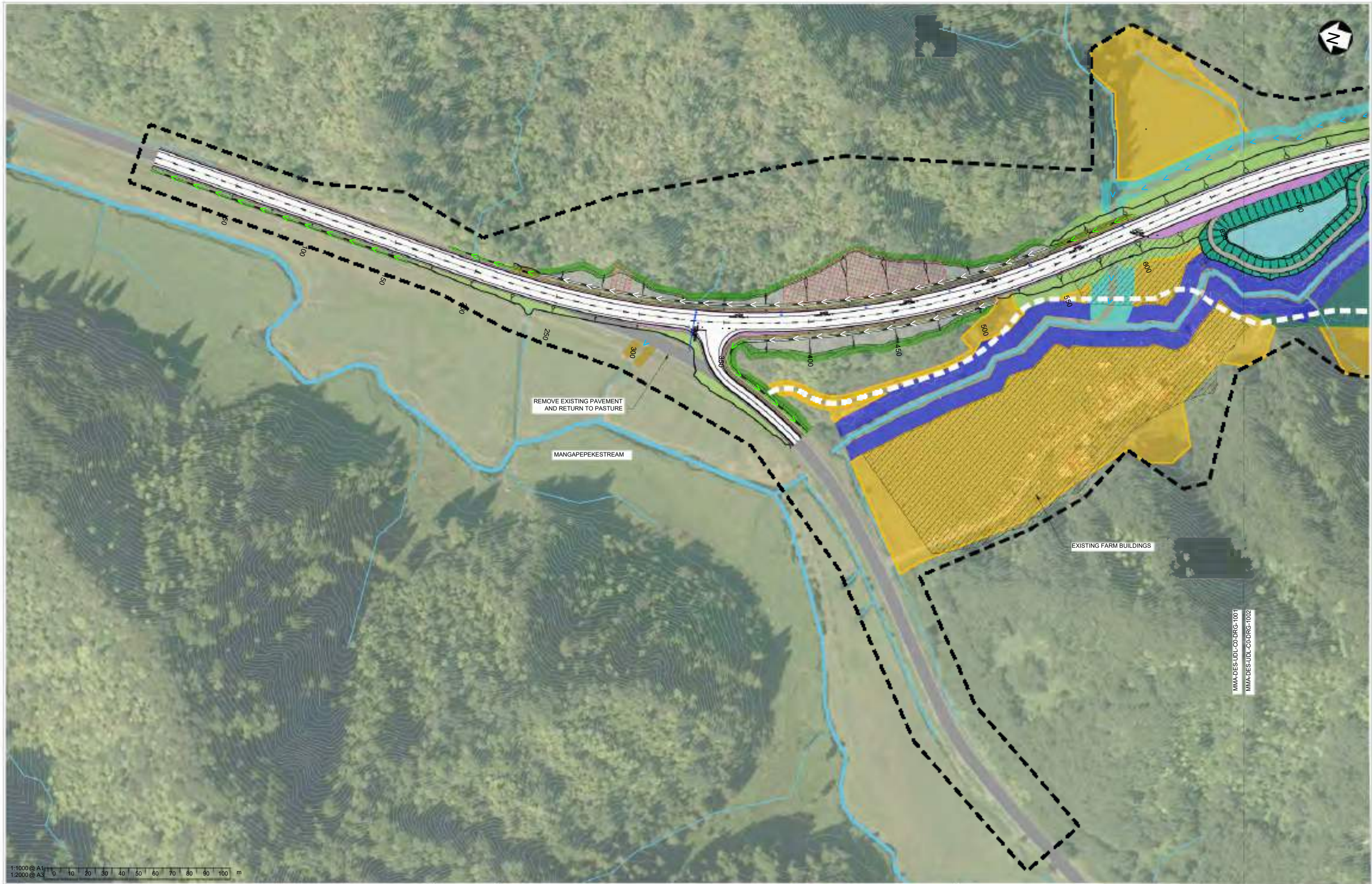
Te Ara o Te Ata



NEW ZEALAND TRANSPORT AGENCY
WANGI KOTAHU

Mt Messenger Bypass

MT MESSENGER BYPASS	Approved
PRELIMINARY LANDSCAPE CONCEPT SHEET LAYOUT	B. SYMMANS
Drawing Number MMA-DES-UDL-C0-DRG-1000	Status FOR CONSENT
Revision E	



1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017

Tab	Scale	Original Size
MMA-DES-UDL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)	A1

Te Ara o Te Ata

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NZ TRANSPORT AGENCY
WAIKATO REGION
Mt Messenger Bypass

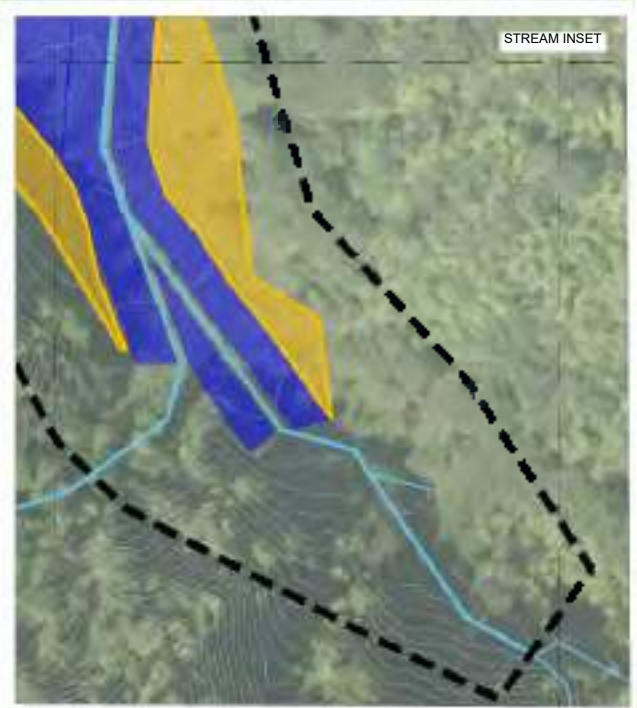
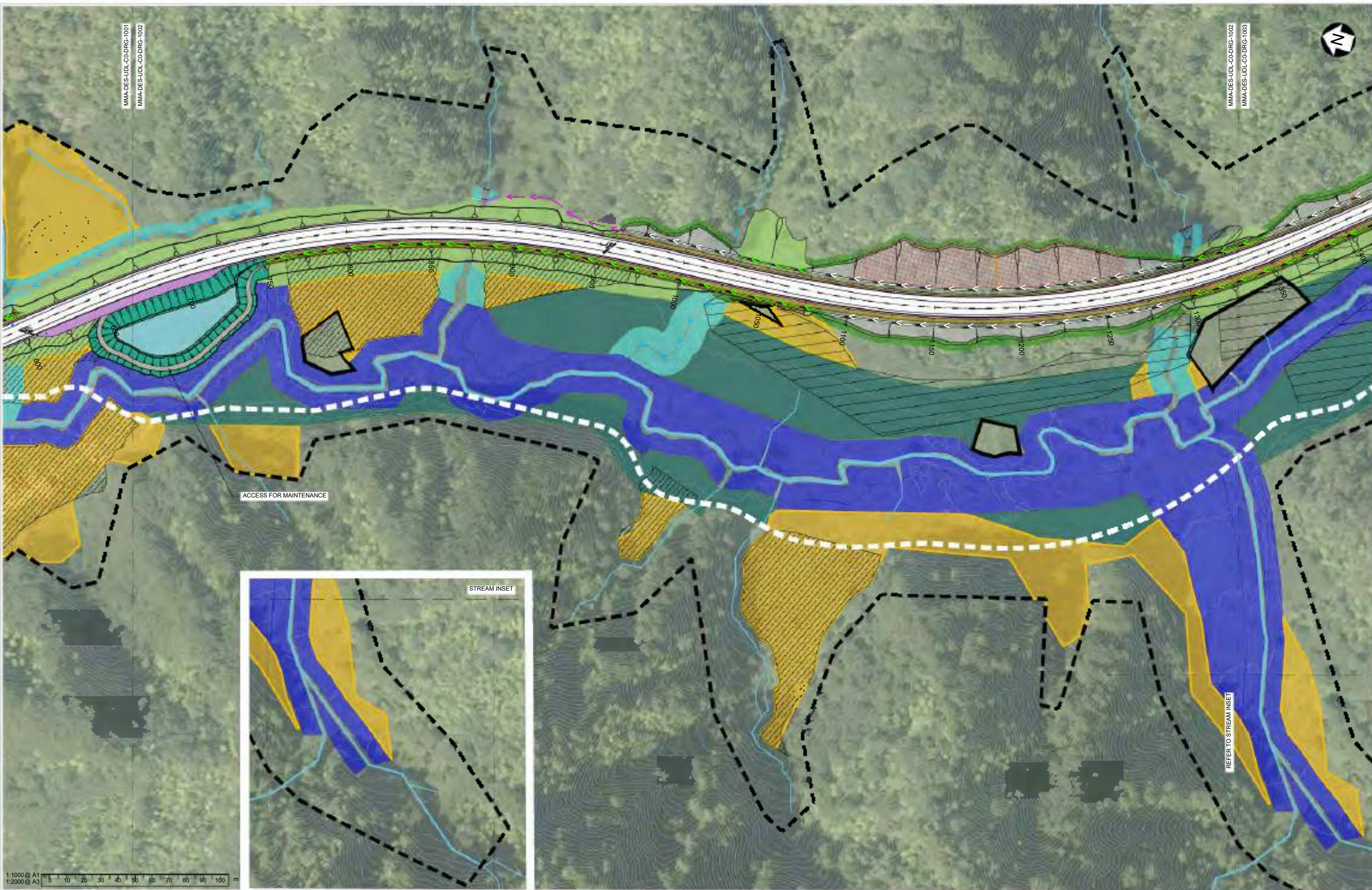
MT MESSENGER BYPASS
PRELIMINARY LANDSCAPE CONCEPT SHEET 1

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-UDL-C0-DRG-1001
Revision	E

MMA-DES-UDL-C0-DRG-1001
MMA-DES-UDL-C0-DRG-1002

MMA-DES-UJL-C0-DRG-1001
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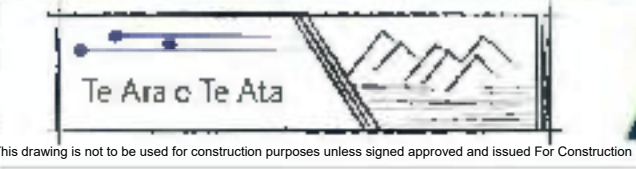
MMA-DES-UJL-C0-DRG-1002
MMA-DES-UJL-C0-DRG-1003



1:1000 @ A1
1:2000 @ A3
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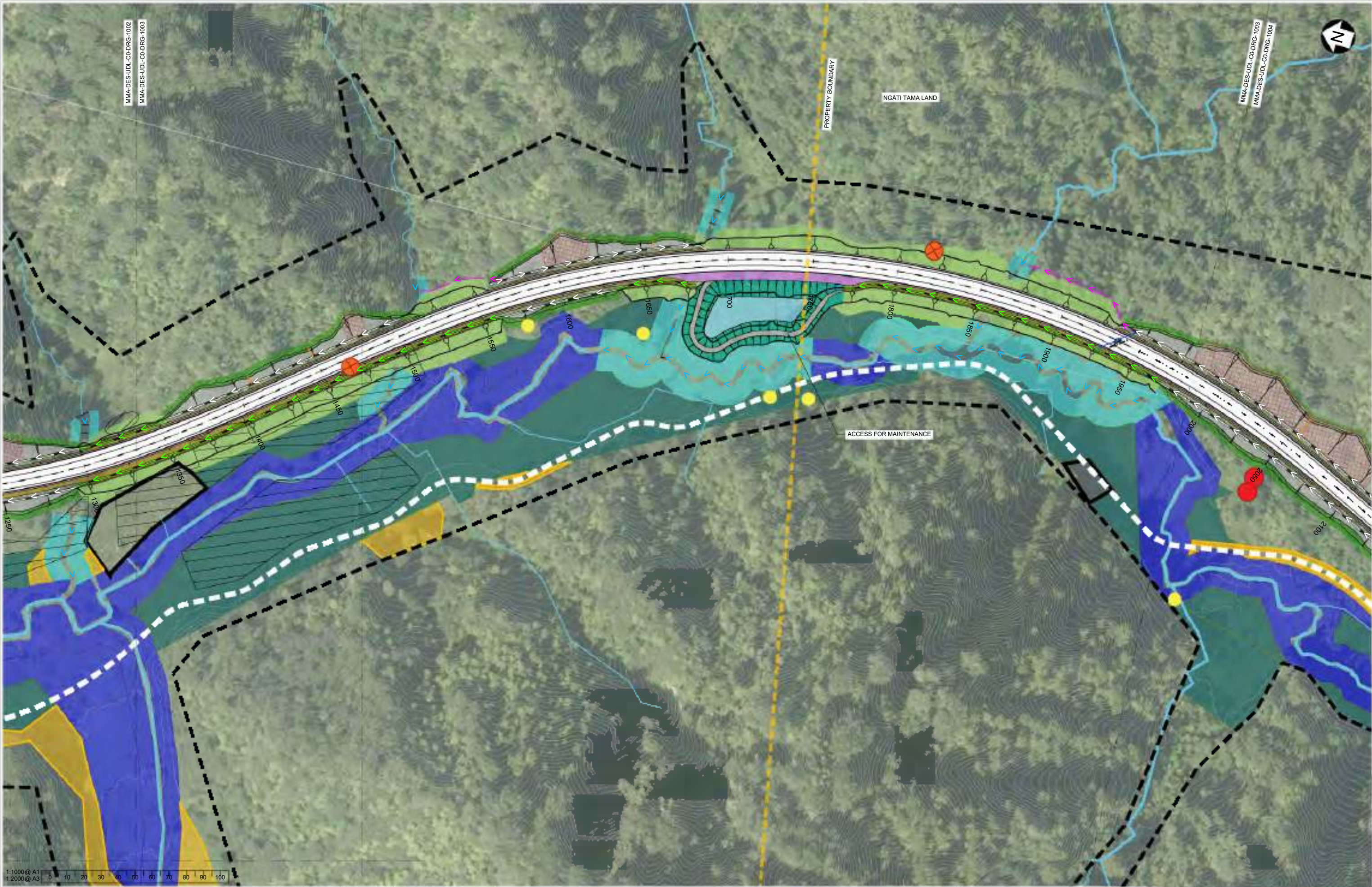
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date	Original Size
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020	A1
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019	A1
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018	A1
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018	A1
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017	A1

Tab	Scales
MMA-DES-UJL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)



MT MESSENGER BYPASS
PRELIMINARY LANDSCAPE CONCEPT
SHEET 2

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-UJL-C0-DRG-1002
Revision
E



MMA-DES-UDL-C0-DRG-1002
MMA-DES-UDL-C0-DRG-1003

MMA-DES-UDL-C0-DRG-1003
MMA-DES-UDL-C0-DRG-1004

1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	20/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017

Tab	Original Size
MMA-DES-UDL-E1-DRG-1000-1010	A1

Te Ara o Te Ata

Original Size A1

NZ TRANSPORT AGENCY
Ngāwhiri Kōwhiri
Mt Messenger Bypass

MT MESSENGER BYPASS

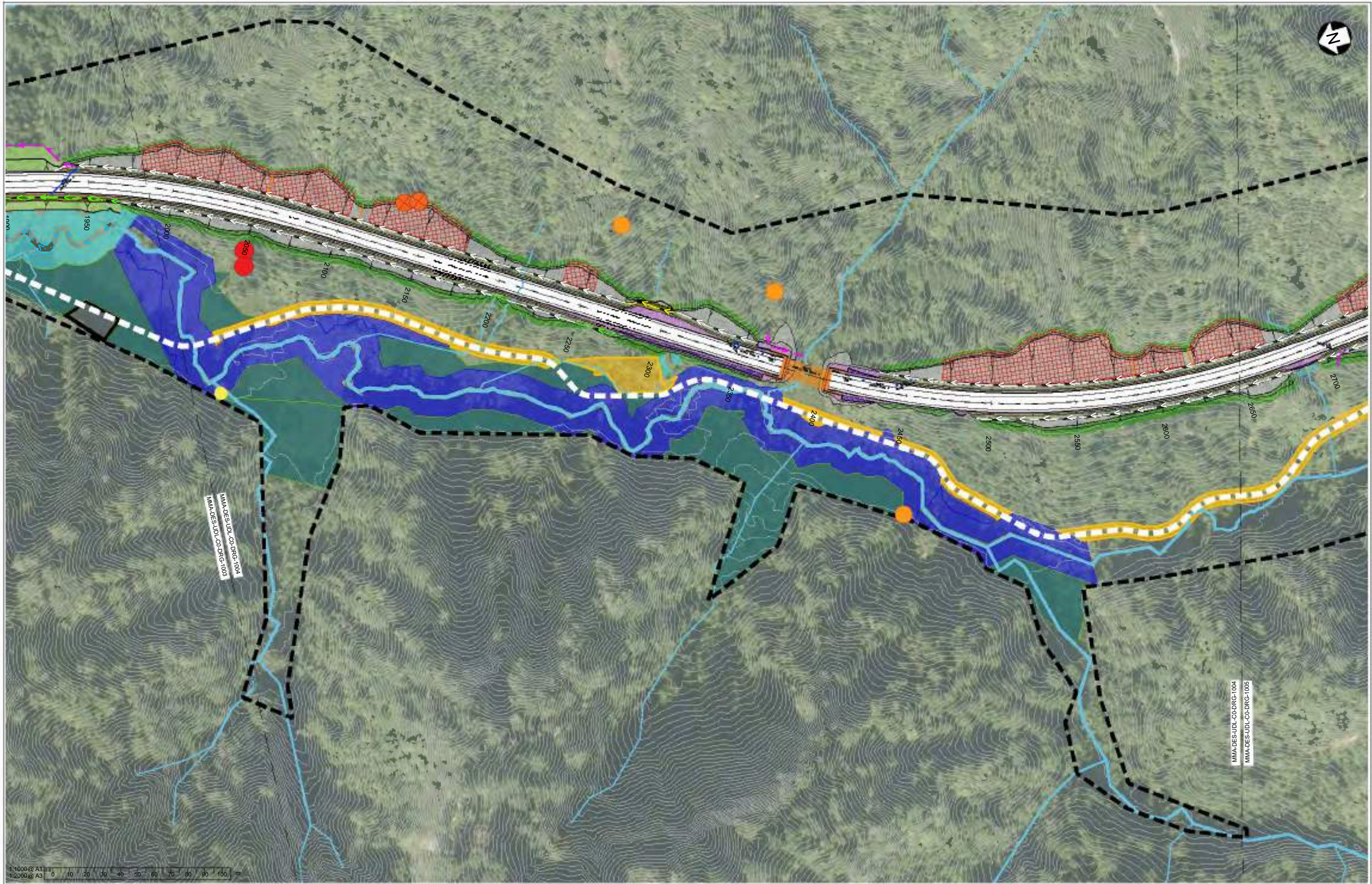
PRELIMINARY LANDSCAPE CONCEPT SHEET 3

Approved
B. SYMMANS

Status
FOR CONSENT

Drawing Number
MMA-DES-UDL-C0-DRG-1003

Revision
E



1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	BRIDGE ADDED AT CH 2400	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017

Tab	Original Size
MMA-DES-UDL-E1-DRG-1000-1010	A1

Te Ara o Te Ata

NZ TRANSPORT AGENCY
WAIKATO REGION
Mt Messenger Bypass

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Scale
1:2000 (A3)
1:1000 (A1)

MT MESSENGER BYPASS

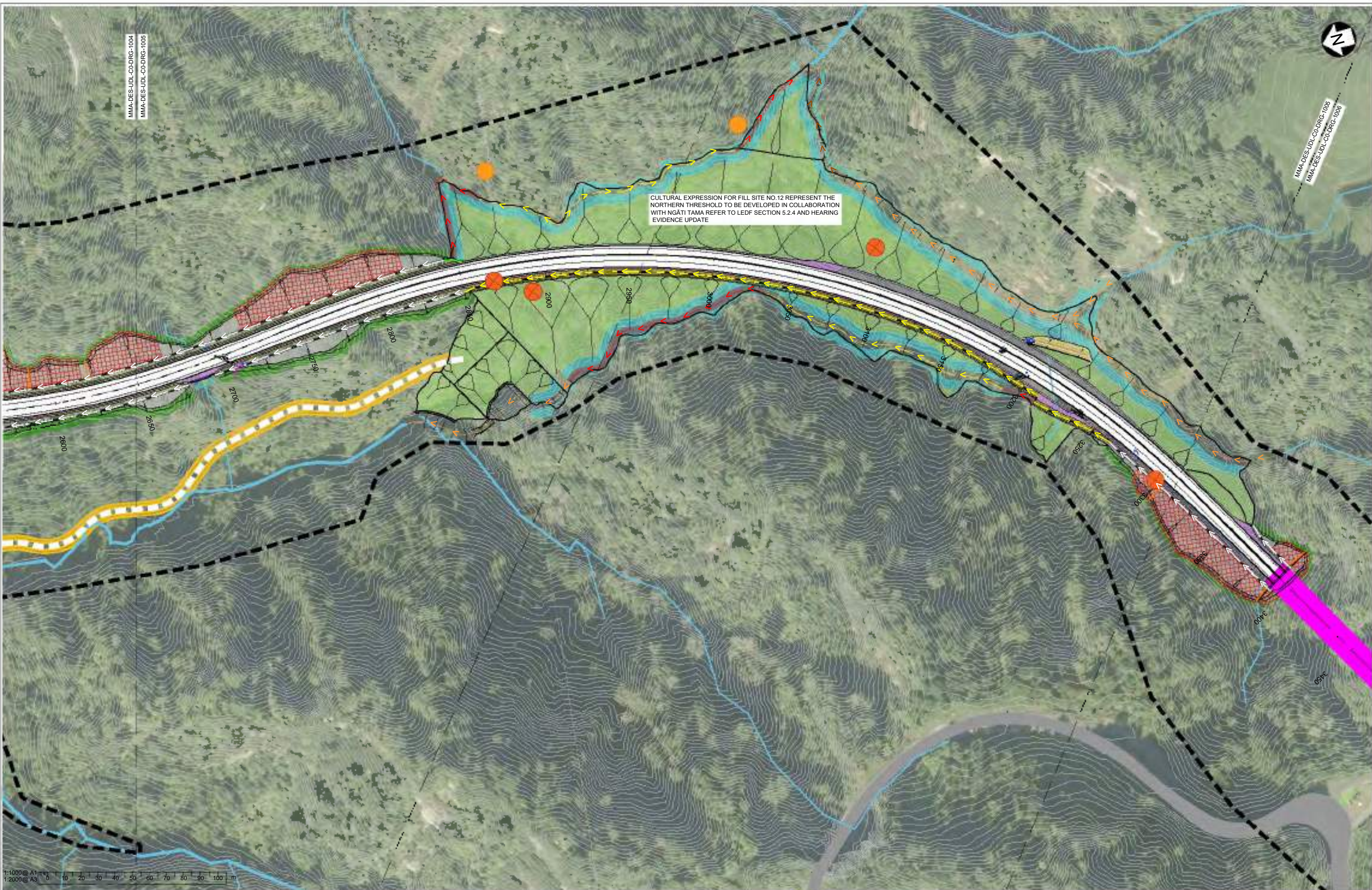
PRELIMINARY LANDSCAPE CONCEPT SHEET 4

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-UDL-C0-DRG-1004
Revision	E

MMA-DES-UDL-CO-DRG-1004
MMA-DES-UDL-CO-DRG-1005

MMA-DES-UDL-CO-DRG-1006
MMA-DES-UDL-CO-DRG-1009

CULTURAL EXPRESSION FOR FILL SITE NO.12 REPRESENT THE NORTHERN THRESHOLD TO BE DEVELOPED IN COLLABORATION WITH NGĀTI TAMA REFER TO LEDF SECTION 5.2.4 AND HEARING EVIDENCE UPDATE



1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Approved	Date	
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017

Tab	Scale	Original Size
MMA-DES-UDL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)	A1

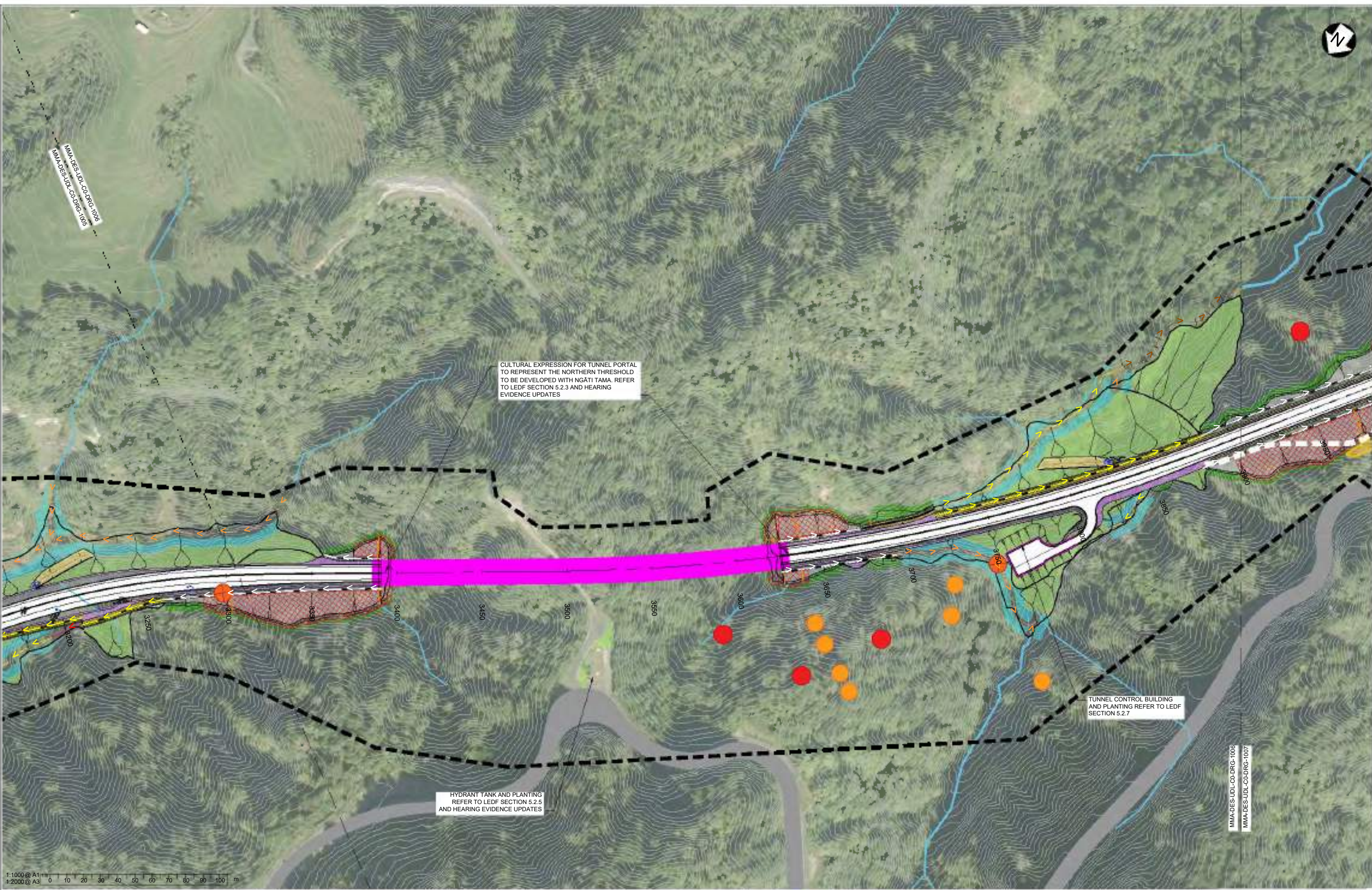


MT MESSENGER BYPASS
PRELIMINARY LANDSCAPE CONCEPT
SHEET 5

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-UDL-CO-DRG-1005
Revision	E

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CULTURAL EXPRESSION FOR TUNNEL PORTAL TO REPRESENT THE NORTHERN THRESHOLD TO BE DEVELOPED WITH NGĀTI TAMA. REFER TO LEDF SECTION 5.2.3 AND HEARING EVIDENCE UPDATES

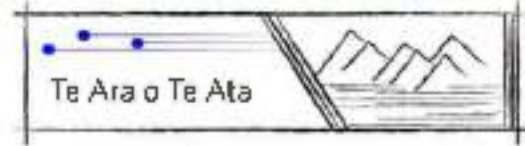
TUNNEL CONTROL BUILDING AND PLANTING REFER TO LEDF SECTION 5.2.7

HYDRANT TANK AND PLANTING REFER TO LEDF SECTION 5.2.5 AND HEARING EVIDENCE UPDATES

1:1000 @ A1
1:2000 @ A3
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Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018
B	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017

Tab	Scale	Original Size
MMA-DES-UDL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)	A1



MT MESSENGER BYPASS

PRELIMINARY LANDSCAPE CONCEPT

SHEET 6

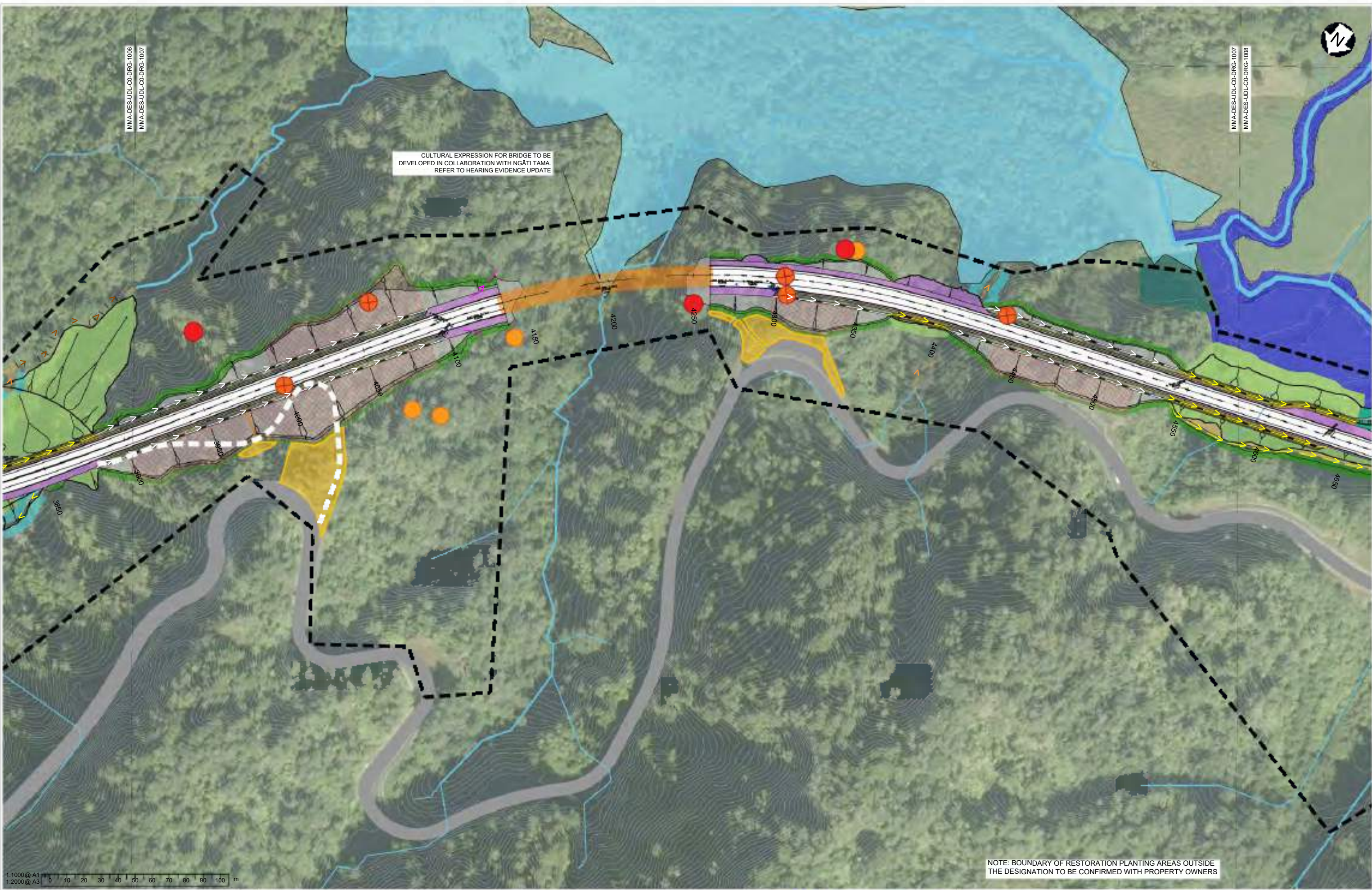
Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-UDL-C0-DRG-1006
Revision	E

MMA-DES-UDL-CO-DRG-1006
MMA-DES-UDL-CO-DRG-1007

MMA-DES-UDL-CO-DRG-1007
MMA-DES-UDL-CO-DRG-1008



CULTURAL EXPRESSION FOR BRIDGE TO BE DEVELOPED IN COLLABORATION WITH NGATI TAMA. REFER TO HEARING EVIDENCE UPDATE

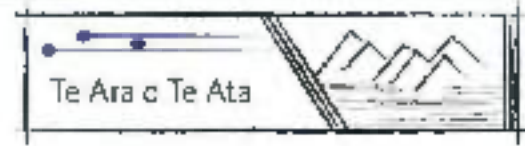


NOTE: BOUNDARY OF RESTORATION PLANTING AREAS OUTSIDE THE DESIGNATION TO BE CONFIRMED WITH PROPERTY OWNERS

1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	20/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017

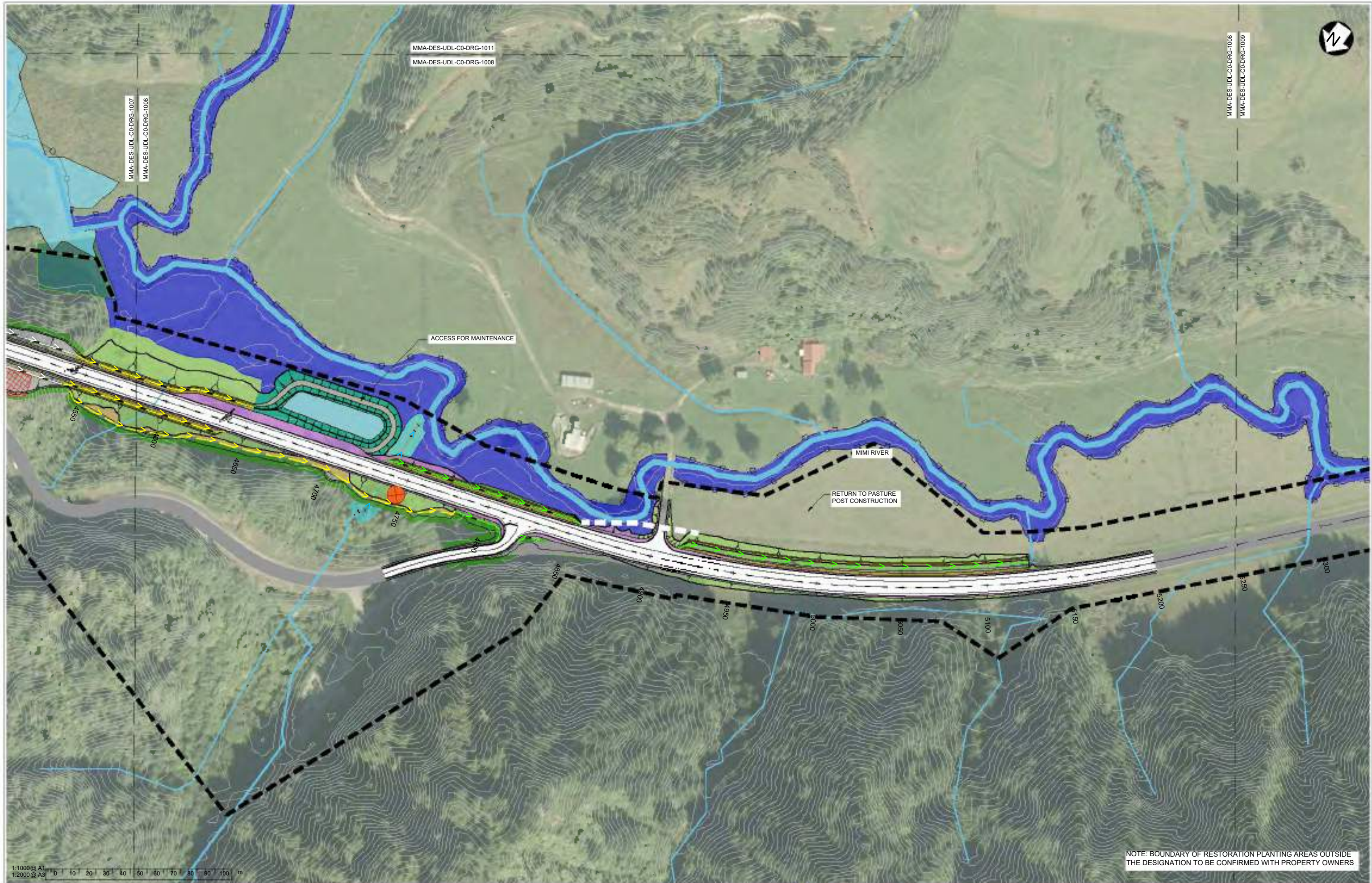
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Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



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MT MESSENGER BYPASS
PRELIMINARY LANDSCAPE CONCEPT
SHEET 7

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-UDL-CO-DRG-1007
Revision	E



MMA-DES-UDL-C0-DRG-1007
MMA-DES-UDL-C0-DRG-1008

MMA-DES-UDL-C0-DRG-1011
MMA-DES-UDL-C0-DRG-1008

MMA-DES-UDL-C0-DRG-1008
MMA-DES-UDL-C0-DRG-1009

1:1000 @ A1
1:2000 @ A3

NOTE: BOUNDARY OF RESTORATION PLANTING AREAS OUTSIDE THE DESIGNATION TO BE CONFIRMED WITH PROPERTY OWNERS

Rev	Revision Description	Drawn	Checked	Designed	Approved	Date
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D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS
C	FILL DISPOSAL SITE 3 REMOVED	CS	QDO'S	LR	BMcK	BSS
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK
A	FOR CONSENT	CS	QDO'S	SP	LR	DK

Tab	Scale	Original Size
MMA-DES-UDL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)	A1

Te Ara o Te Ata

Mt Messenger Bypass

ANZ TRANSPORT AGENCY
MIRARA KIOITAKI
Mt Messenger Bypass

MT MESSENGER BYPASS

PRELIMINARY LANDSCAPE CONCEPT
SHEET 8

Approved
B. SYMMANS

Status
FOR CONSENT

Drawing Number
MMA-DES-UDL-C0-DRG-1008

Revision
E

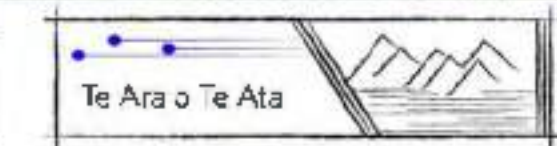
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MMA-DES-UDL-C0-DRG-1009



1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BM&K	BSS	26/07/2018
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017

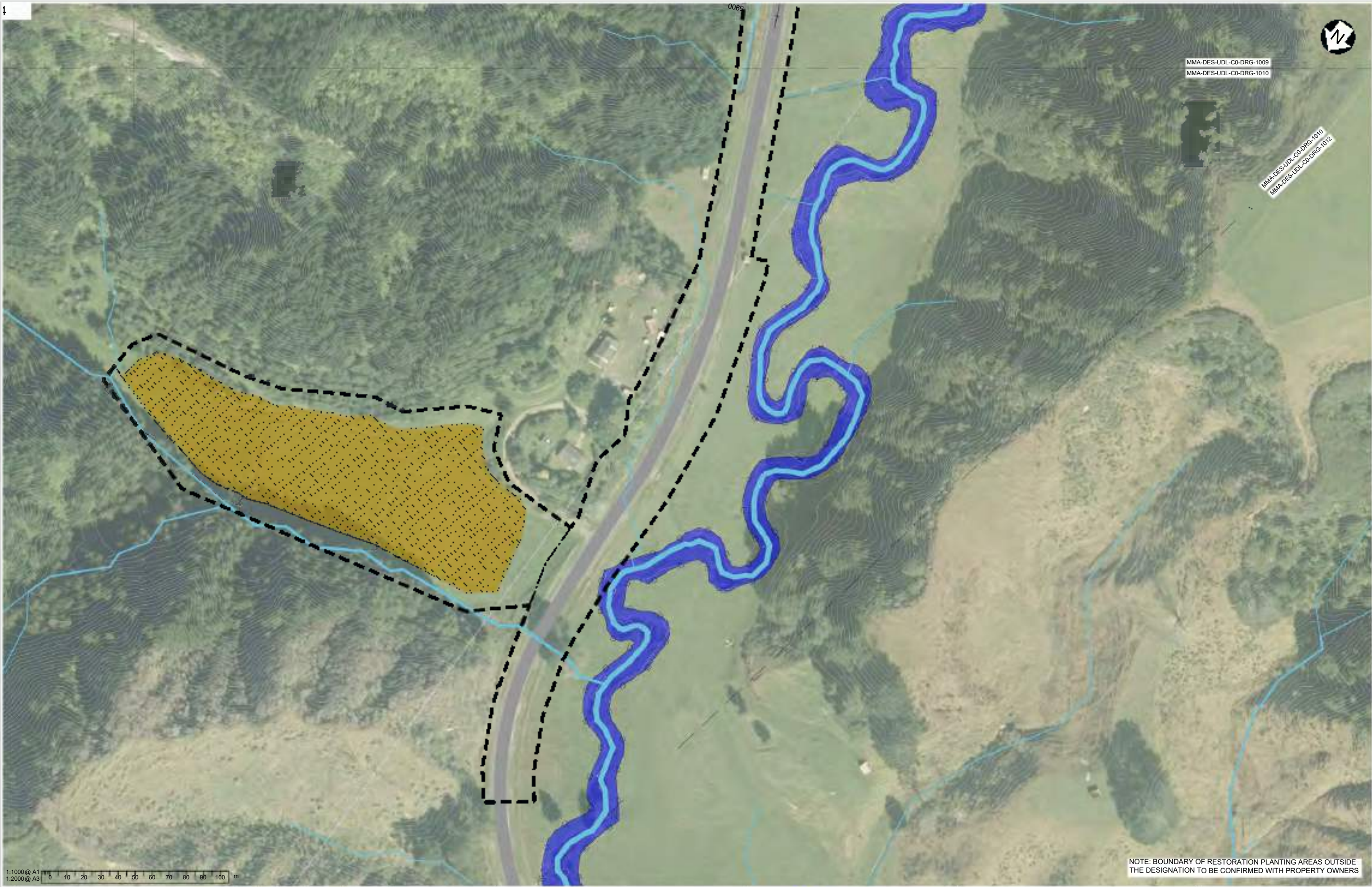
Tab	Scale	Original Size
MMA-DES-UDL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)	A1



MT MESSENGER BYPASS
PRELIMINARY LANDSCAPE CONCEPT SHEET 9

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-UDL-C0-DRG-1009
Revision
E

NOTE: BOUNDARY OF RESTORATION PLANTING AREAS OUTSIDE THE DESIGNATION TO BE CONFIRMED WITH PROPERTY OWNERS



MMA-DES-UDL-C0-DRG-1009
MMA-DES-UDL-C0-DRG-1010

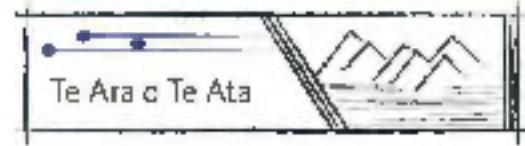
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MMA-DES-UDL-C0-DRG-1012

NOTE: BOUNDARY OF RESTORATION PLANTING AREAS OUTSIDE THE DESIGNATION TO BE CONFIRMED WITH PROPERTY OWNERS

1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date	Original Size
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020	A1
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019	A1
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018	A1
B	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018	A1
A	FOR CONSENT	CS	QDO'S	SP	LR	DK	14/11/2017	A1

Tab	Scales
MMA-DES-UDL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)



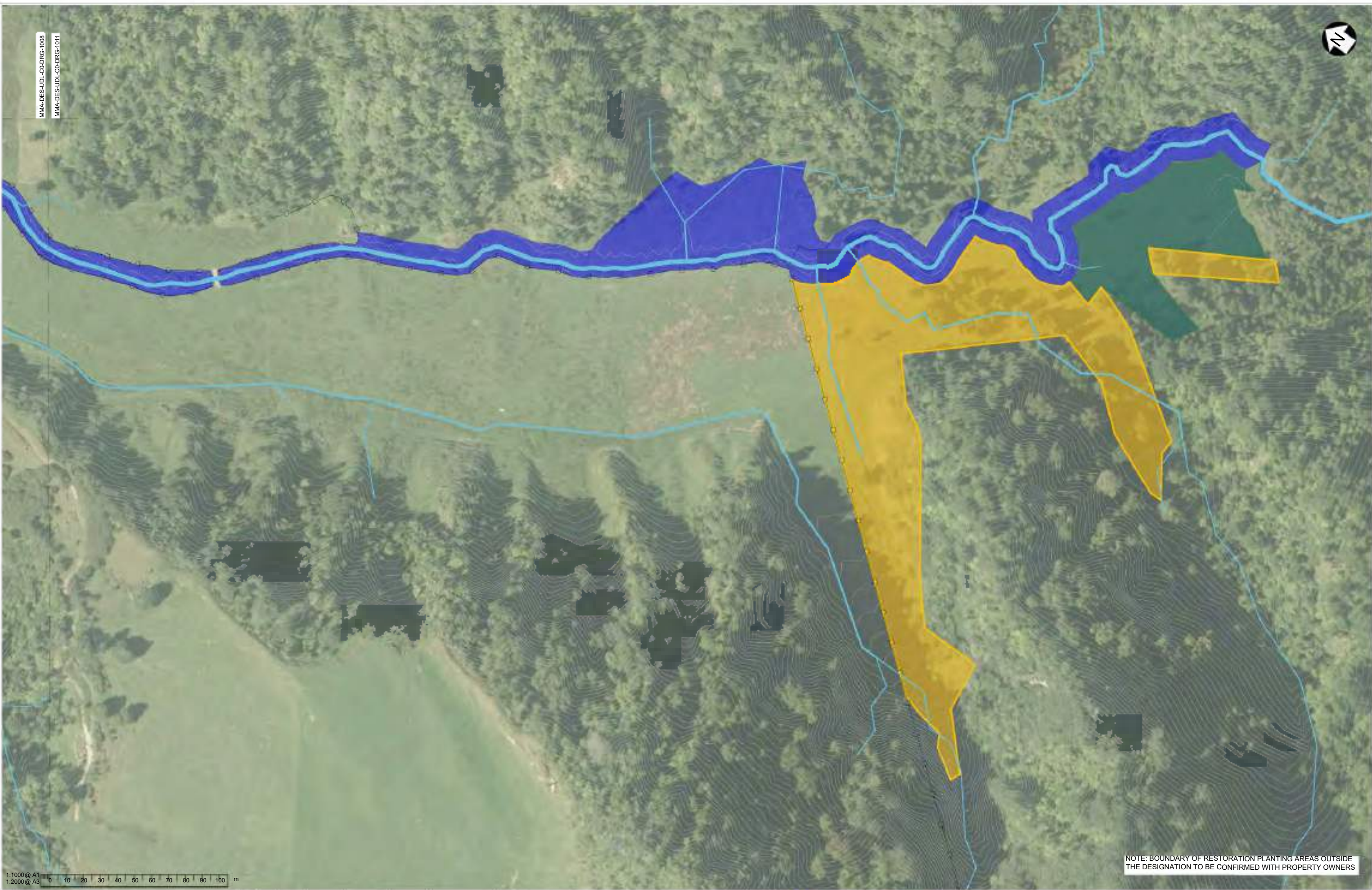
MT MESSENGER BYPASS
PRELIMINARY LANDSCAPE CONCEPT
SHEET 10

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-UDL-C0-DRG-1010
Revision	E

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MMA-DES-UDL-C0-DRG-1008
MMA-DES-UDL-C0-DRG-1011



NOTE: BOUNDARY OF RESTORATION PLANTING AREAS OUTSIDE THE DESIGNATION TO BE CONFIRMED WITH PROPERTY OWNERS

1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date	Original Size
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020	A1
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019	A1
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018	A1
B	NOT ISSUED	CS	-	LR	-	-	-	A1
A	FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018	A1

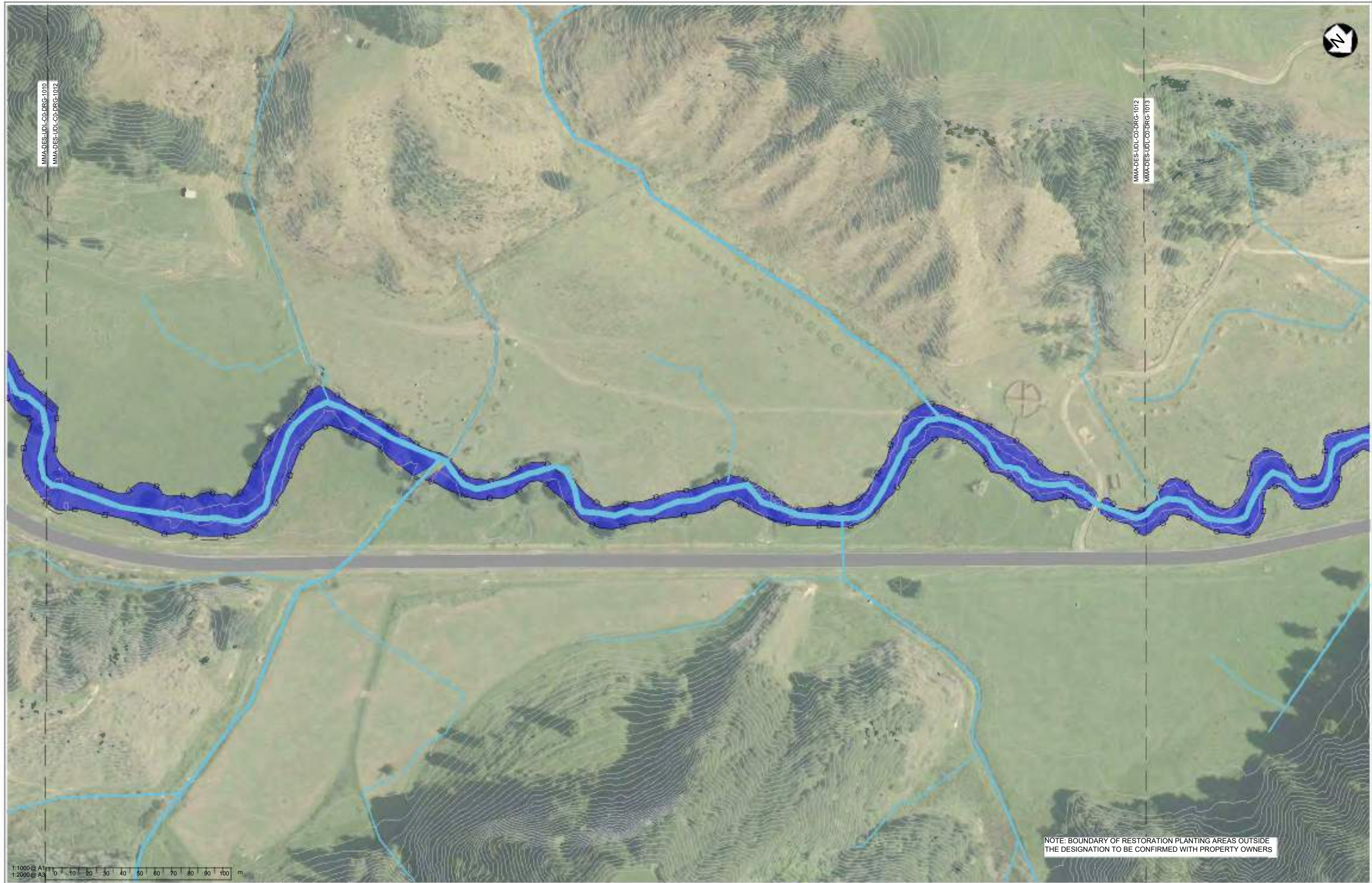
Tab	Scales
MMA-DES-UDL-E1-DRG-1000-1010	1:2000 (A3) 1:1000 (A1)



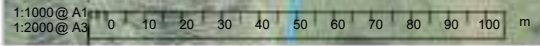
This drawing is not to be used for construction purposes unless signed approved and issued For Construction

MT MESSENGER BYPASS
PRELIMINARY LANDSCAPE CONCEPT
SHEET 11

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-UDL-C0-DRG-1011
Revision
E

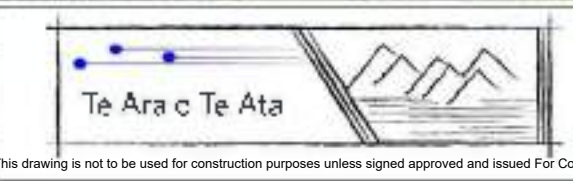


NOTE: BOUNDARY OF RESTORATION PLANTING AREAS OUTSIDE THE DESIGNATION TO BE CONFIRMED WITH PROPERTY OWNERS



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDOS	LR	LR	BS	26/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	NOT ISSUED	CS	-	LR	-	-	-
A	FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018

Tab	MMA-DES-UDL-E1-DRG-1000-1010
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS

PRELIMINARY LANDSCAPE CONCEPT SHEET 12

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-UDL-C0-DRG-1012
Revision	E

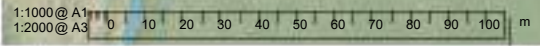
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MMA-DES-UDL-C0-DRG-1012
MMA-DES-UDL-C0-DRG-1013

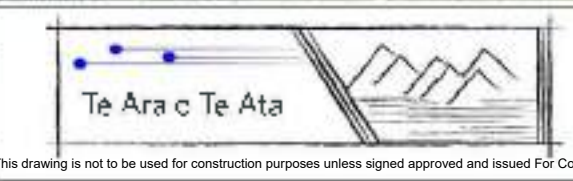


NOTE: BOUNDARY OF RESTORATION PLANTING AREAS OUTSIDE THE DESIGNATION TO BE CONFIRMED WITH PROPERTY OWNERS



Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date
E	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	26/06/2020
D	UPDATE FOR CONSENT	CS	QDO'S	LR	LR	BS	15/05/2019
C	CHANGES TO SHEETS 1004 AND 1008 ONLY	CS	QDO'S	LR	BMcK	BSS	26/07/2018
B	NOT ISSUED	CS	-	LR	-	-	-
A	FOR CONSENT	CS	QDO'S	LR	LR	DK	09/05/2018

Tab	MMA-DES-UDL-E1-DRG-1000-1010
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS

PRELIMINARY LANDSCAPE CONCEPT

SHEET 13

Approved
B. SYMMANS

Status
FOR CONSENT

Drawing Number
MMA-DES-UDL-C0-DRG-1013

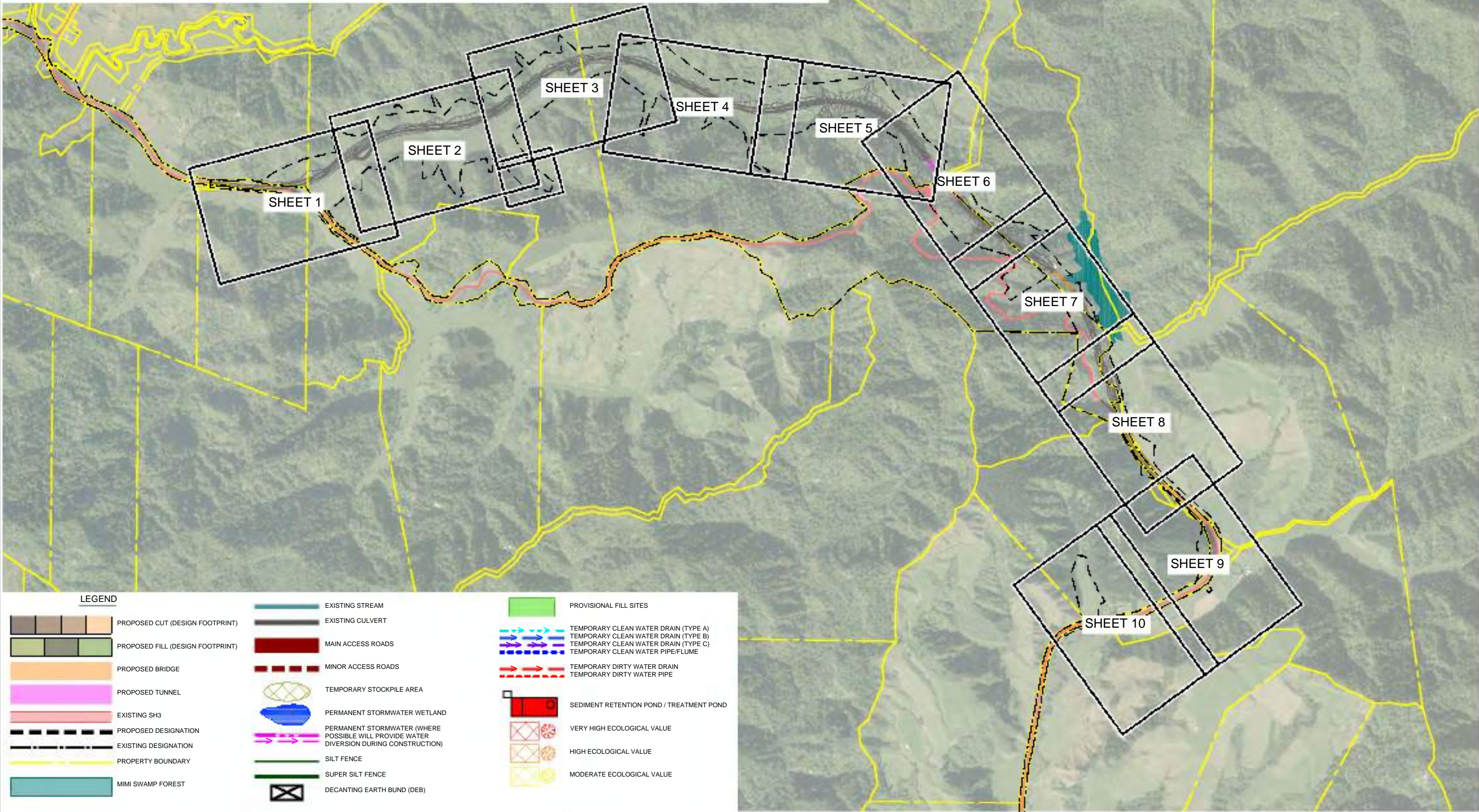
Revision
E

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CONCEPTUAL PLANS DESCRIBE EROSION AND SEDIMENT CONTROL FOR MAIN CONSTRUCTION WORKS ONLY. PLANS TO BE READ IN CONJUNCTION WITH THE CONSTRUCTION WATER MANAGEMENT PLAN (CWMP)

NOTES

- SILT FENCE AND SUPERSILT FENCE ARE THE PRIMARY TREATMENT FOR LINEAR SHAPING EARTHWORKS.
- SEDIMENT RETENTION PONDS ARE THE PRIMARY TREATMENT FOR CUT AND FILL EARTHWORKS. SEDIMENT POND VOLUMES SHOWN ARE SIZED IN ACCORDANCE WITH NZTA GUIDELINES TO APPROXIMATELY 2.6% OF THE CATCHMENT (FINAL VOLUME TO BE CONFIRMED)
- ALL SEDIMENT RETENTION PONDS DISCHARGE TO LAND A MINIMUM DISTANCE OF 5m FROM AN ACTIVE STREAM CHANNEL WHERE PRACTICABLE.
- WHERE NOTED SEDIMENT RETENTION PONDS MAY BE REPLACED WITH CONTAINER IMPOUNDMENT SYSTEMS (CIS), BUT THIS WILL REQUIRE A SPECIFIC ASSESSMENT OF SUITABILITY PRIOR TO IMPLEMENTATION.
- SILT FENCE WILL BE INSTALLED AROUND ALL TEMPORARY STOCKPILE SITES.
- ACCESS ROADS CONSTRUCTED USING CUT AND COVER METHODOLOGIES. DECANTING EARTH BUNDS (DEB) TREATING ACCESS ROAD SURFACE.
- REFER TO DRAWING MMA-DES-ESC-C0-DRG-4006 FOR TYPE A, B AND C CLEAN WATER DRAIN DETAILS.
- DESIGN GUIDELINES FOR ALL EROSION AND SEDIMENT CONTROLS (ESC) TO FOLLOW NZTA GUIDELINES WHERE PRACTICABLE. SEDIMENT RETENTION PONDS LOCATED WITHIN THE FLOOD PLAIN TO BE SPECIFICALLY DESIGNED.
- PROGRESSIVE STABILISATION IN ACCORDANCE WITH THE CONSTRUCTION WATER MANAGEMENT PLAN TO APPLY.
- ADAPTIVE MONITORING IN ACCORDANCE WITH THE CONSTRUCTION WATER MANAGEMENT PLAN TO APPLY.
- PROVISIONAL FILL SITES MAY BE USED FOR TEMPORARY STOCKPILING AS REQUIRED. REFER CONSTRUCTION WATER MANAGEMENT PLAN FOR EROSION AND SEDIMENT CONTROL OF PROVISIONAL FILL SITES.
- SELECTION OF STORAGE AND STOCKPILE LOCATIONS FOR LOGS AND WOODY MATERIAL SHALL BE IN ACCORDANCE WITH THE ECOLOGY AND LANDSCAPE MANAGEMENT PLAN.
- REFER ECOLOGY AND LANDSCAPE MANAGEMENT PLAN FOR REQUIREMENTS AT AREAS OF IDENTIFIED ECOLOGICAL VALUE.



LEGEND

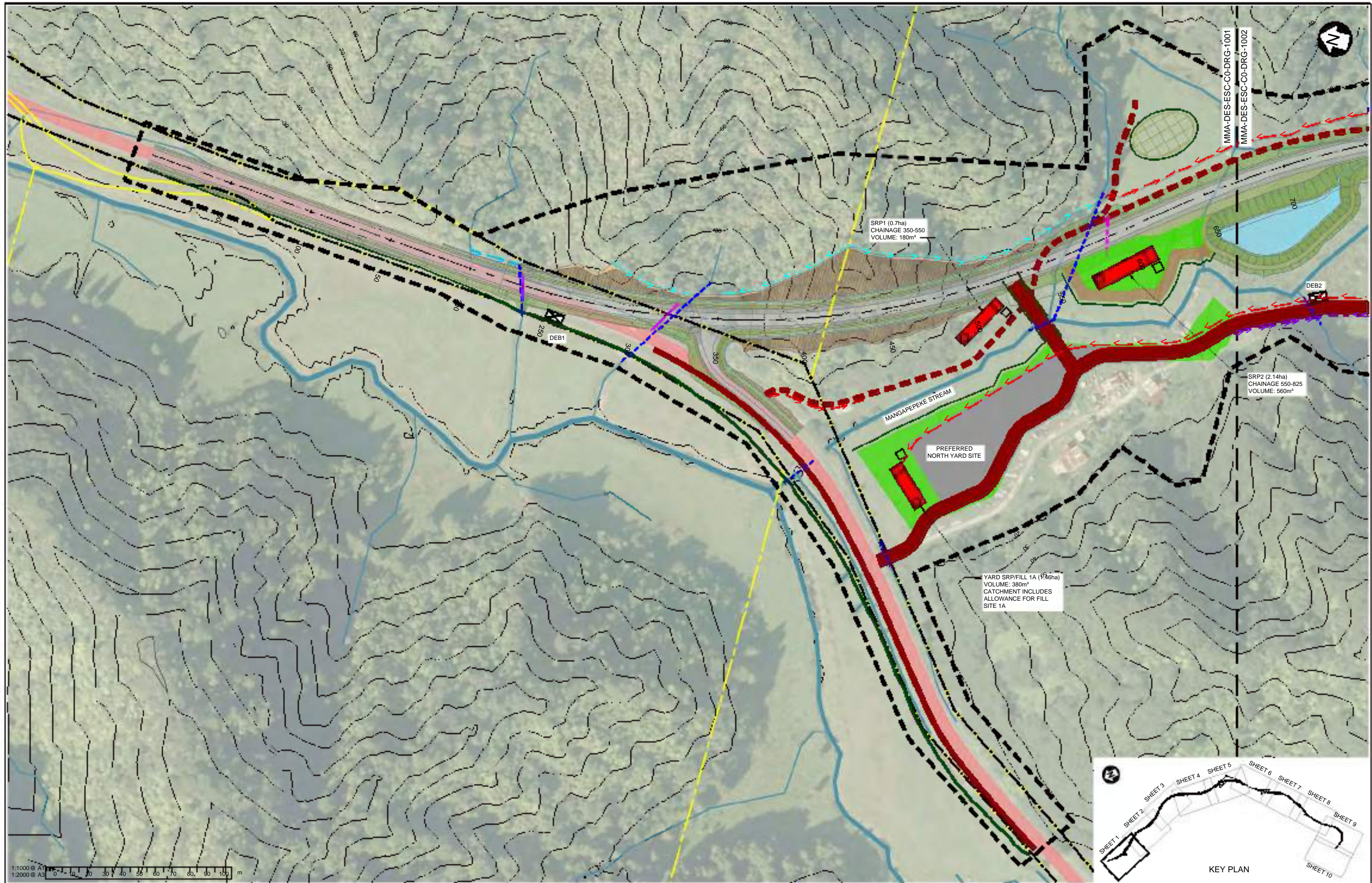
	PROPOSED CUT (DESIGN FOOTPRINT)		EXISTING STREAM		PROVISIONAL FILL SITES
	PROPOSED FILL (DESIGN FOOTPRINT)		EXISTING CULVERT		TEMPORARY CLEAN WATER DRAIN (TYPE A)
	PROPOSED BRIDGE		MAIN ACCESS ROADS		TEMPORARY CLEAN WATER DRAIN (TYPE B)
	PROPOSED TUNNEL		MINOR ACCESS ROADS		TEMPORARY CLEAN WATER DRAIN (TYPE C)
	EXISTING SH3		TEMPORARY STOCKPILE AREA		TEMPORARY CLEAN WATER PIPE/FLUME
	PROPOSED DESIGNATION		PERMANENT STORMWATER WETLAND		TEMPORARY DIRTY WATER DRAIN
	EXISTING DESIGNATION		PERMANENT STORMWATER (WHERE POSSIBLE WILL PROVIDE WATER DIVERSION DURING CONSTRUCTION)		TEMPORARY DIRTY WATER PIPE
	PROPERTY BOUNDARY		SILT FENCE		SEDIMENT RETENTION POND / TREATMENT POND
	MIMI SWAMP FOREST		SUPER SILT FENCE		VERY HIGH ECOLOGICAL VALUE
			DECANTING EARTH BUND (DEB)		HIGH ECOLOGICAL VALUE
					MODERATE ECOLOGICAL VALUE

E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020	Tab	MMA-DES-ESC-C0-DRG-1000
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GCC	SPP	GR	BSS	26/07/2018	Scales	
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018	NOT TO SCALE	
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017	Original Size	A1
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017		
Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date		

MT MESSENGER BYPASS

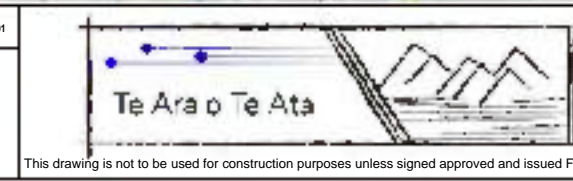
EROSION AND SEDIMENT CONTROL CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET LAYOUT

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-1000
Revision	E



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE, SITE YARD AMENDED	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GCC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

Tab	Scale	Original Size
MMA-DES-ESC-C0-DRG-1001	1:2000 (A3) 1:1000 (A1)	A1



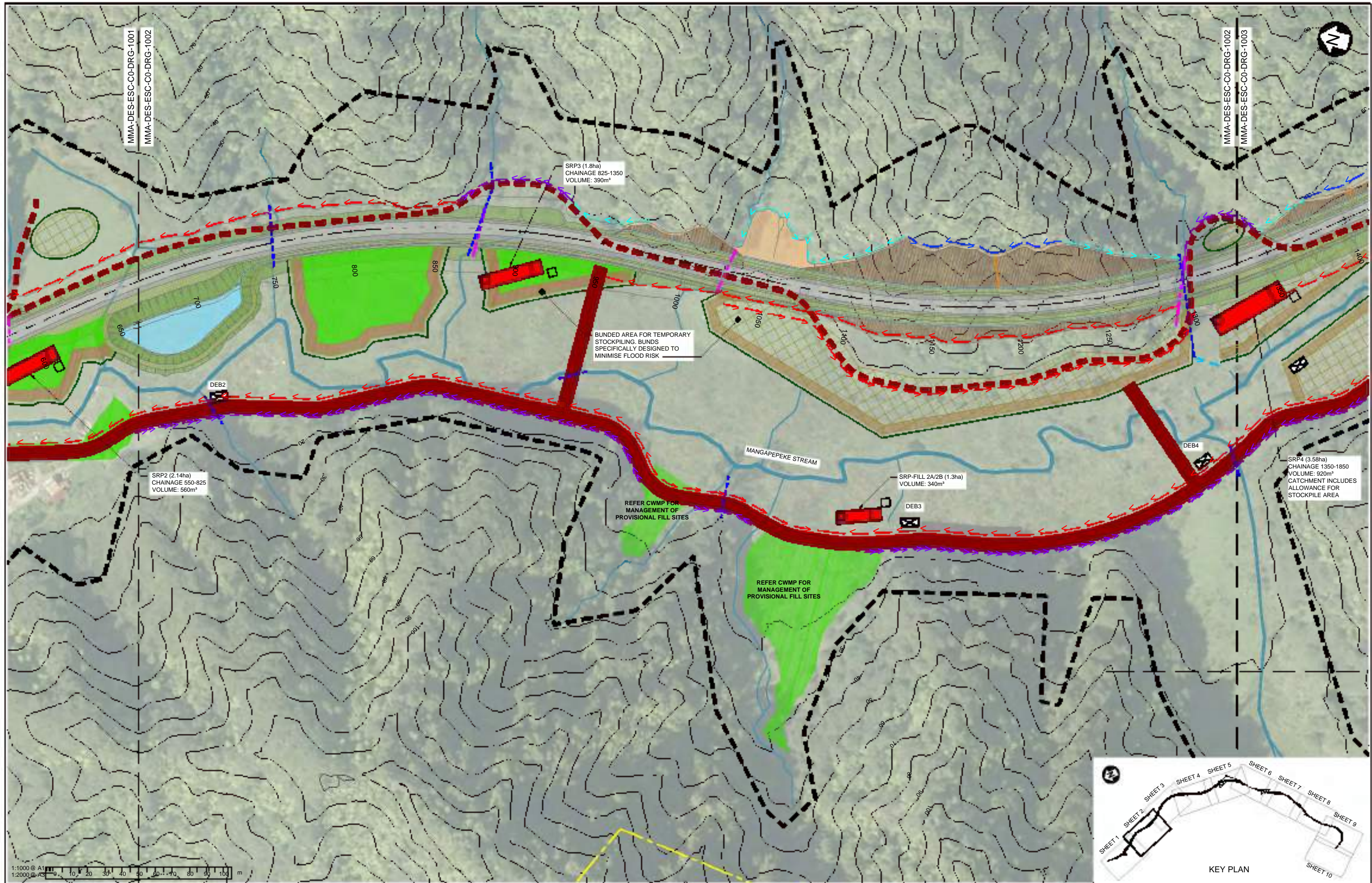
MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 1

Approved
B. SYMMANS
 Status
FOR CONSENT
 Drawing Number
MMA-DES-ESC-C0-DRG-1001

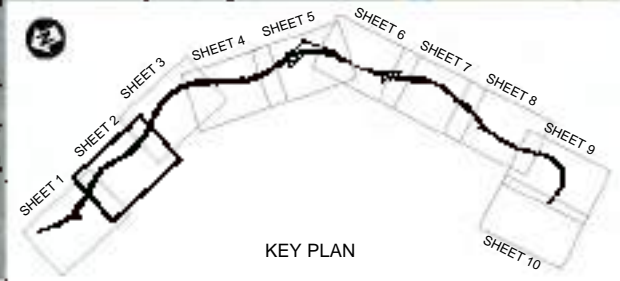
Revision
E

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1:1000 @ A1
1:2000 @ A3



E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020	Tab
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GCC	SPP	GR	BSS	26/07/2018	Scales
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018	1:2000 (A3)
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017	1:1000 (A1)
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017	Original Size
Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date	A1

Te Ara o Te Ata

NZ TRANSPORT AGENCY
WAKATAPU
Mt Messenger Bypass

MT MESSENGER BYPASS

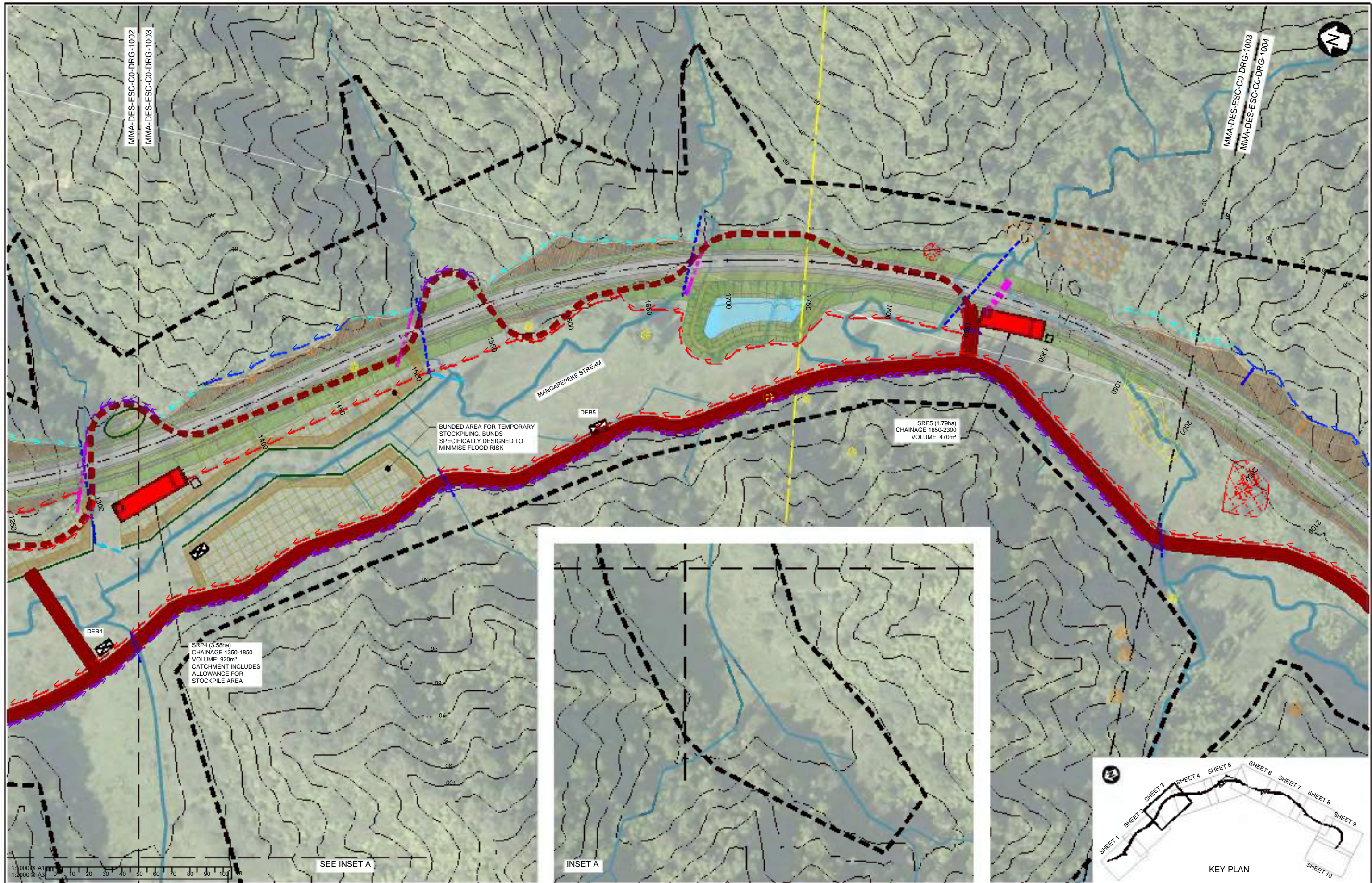
**EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 2**

Approved
B. SYMMANS

Status
FOR CONSENT

Drawing Number
MMA-DES-ESC-C0-DRG-1002

Revision
E



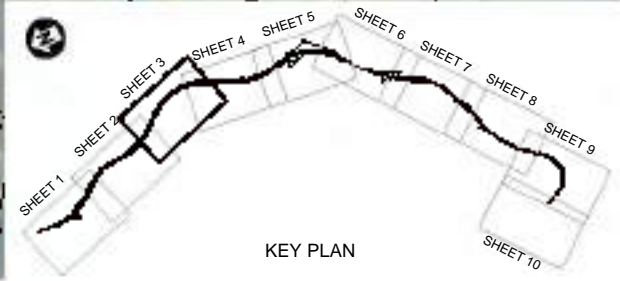
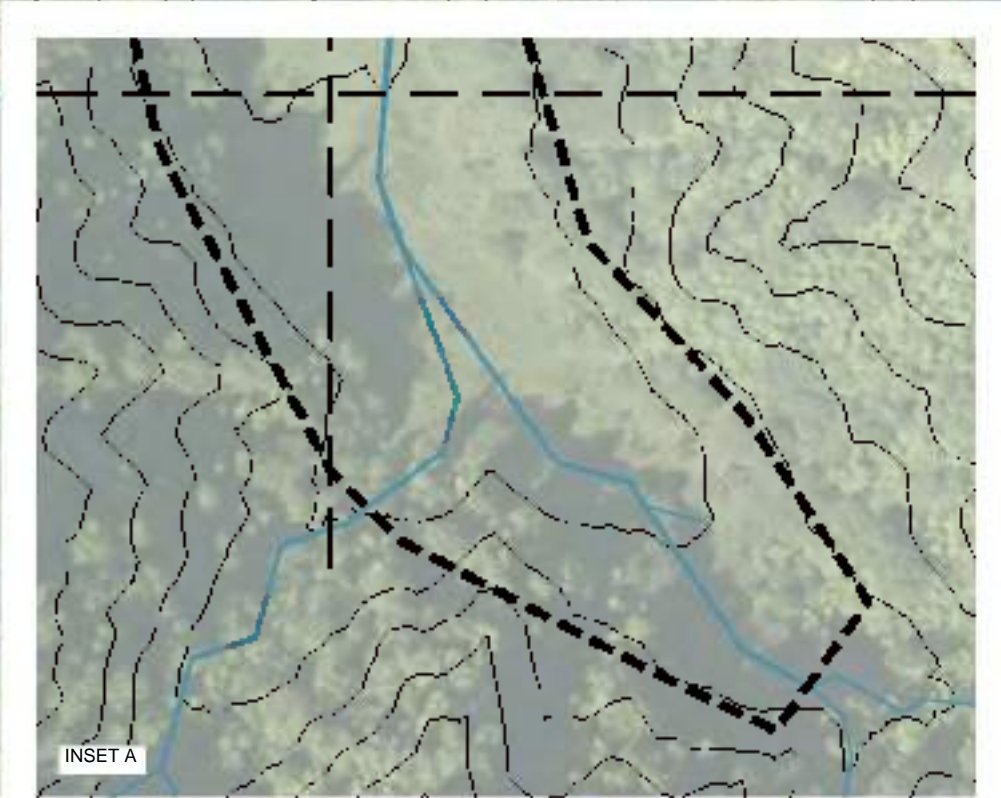
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MMA-DES-ESC-C0-DRG-1003

MMA-DES-ESC-C0-DRG-1003
MMA-DES-ESC-C0-DRG-1004

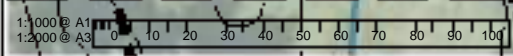
BUNDED AREA FOR TEMPORARY STOCKPILING. BUNDS SPECIFICALLY DESIGNED TO MINIMISE FLOOD RISK

SRP5 (1.79ha)
CHAINAGE 1850-2300
VOLUME: 470m³

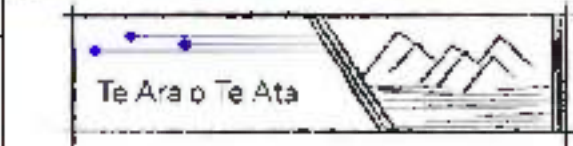
SRP4 (3.58ha)
CHAINAGE 1350-1850
VOLUME: 920m³
CATCHMENT INCLUDES ALLOWANCE FOR STOCKPILE AREA



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017



Tab	Scale	Original Size
MMA-DES-ESC-C0-DRG-1003	1:2000 (A3) 1:1000 (A1)	A1

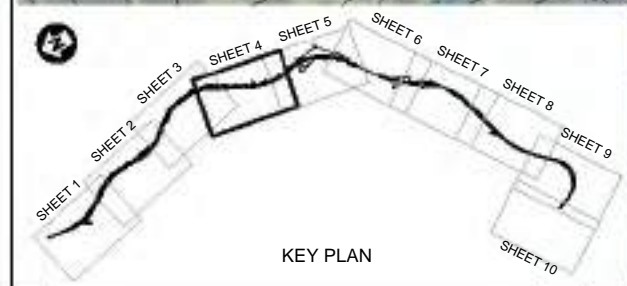
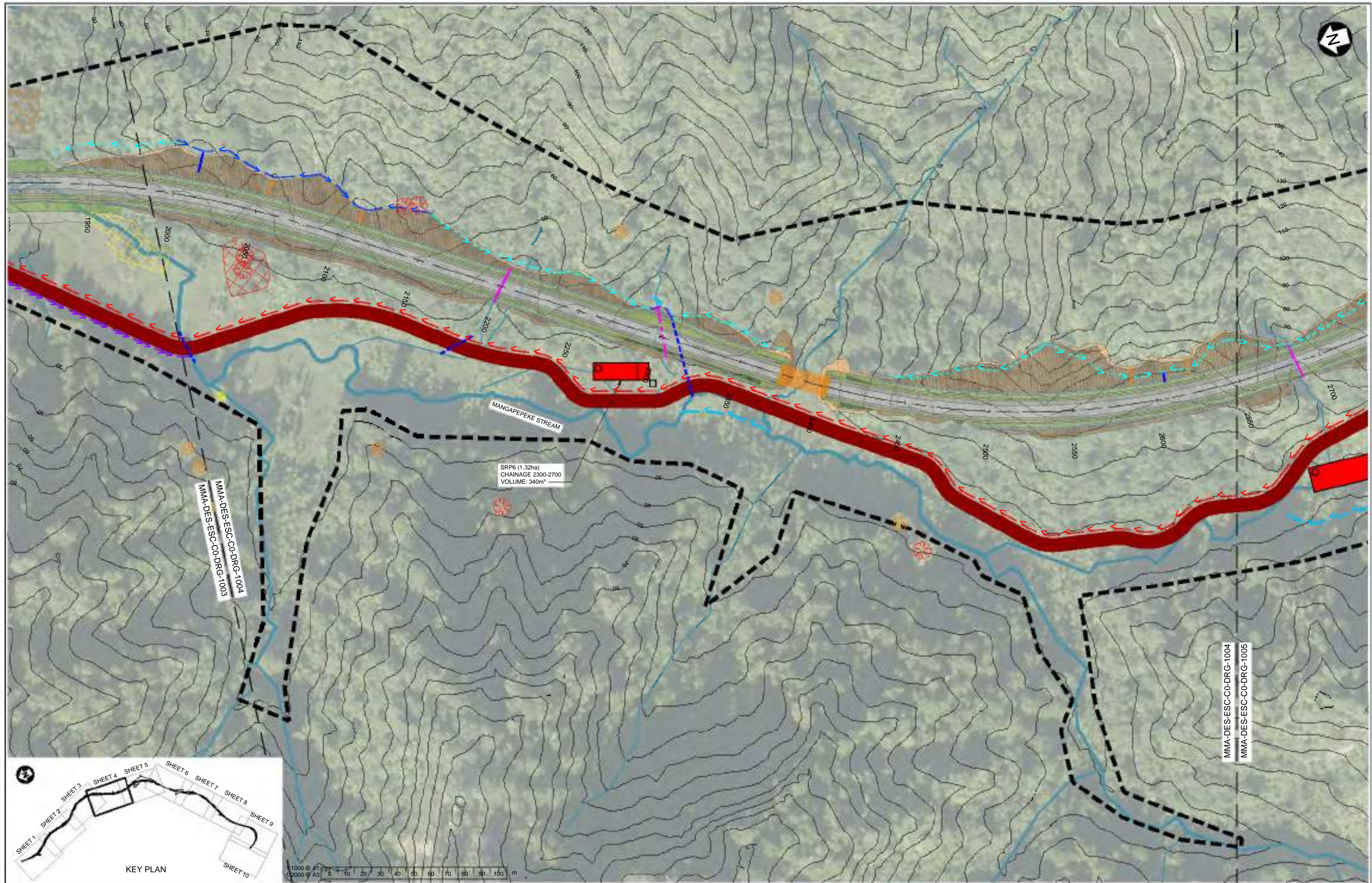


MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 3

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-ESC-C0-DRG-1003
Revision
E

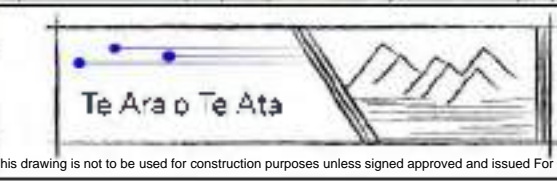
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Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	BRIDGE ADDED AT CH 2400	QDO'S	GCC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

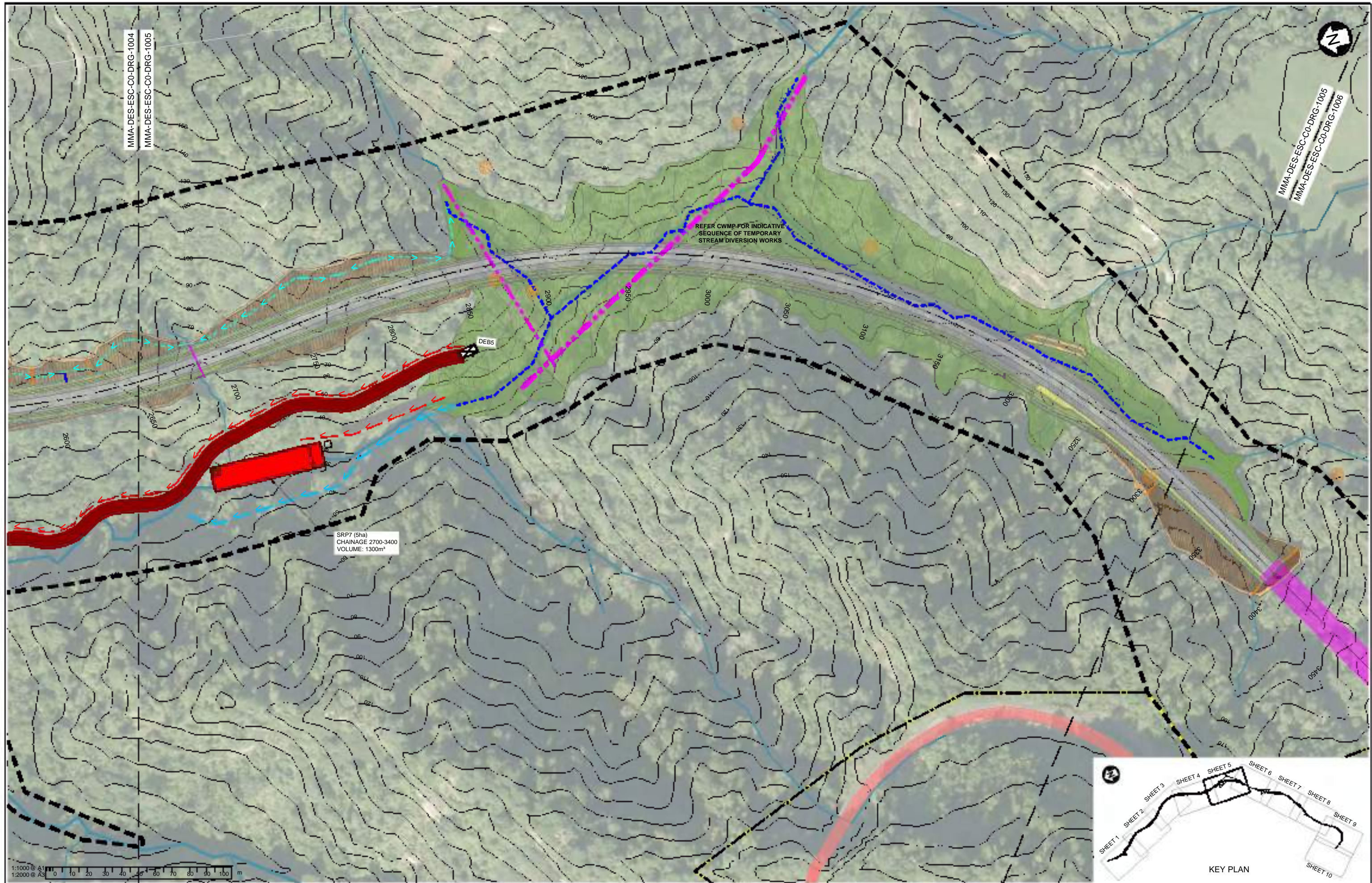
Tab	Scale	Original Size
MMA-DES-ESC-C0-DRG-1004	1:2000 (A3) 1:1000 (A1)	A1



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MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 4

Approved
B. SYMMANS
 Status **FOR CONSENT**
 Drawing Number **MMA-DES-ESC-C0-DRG-1004** Revision **E**



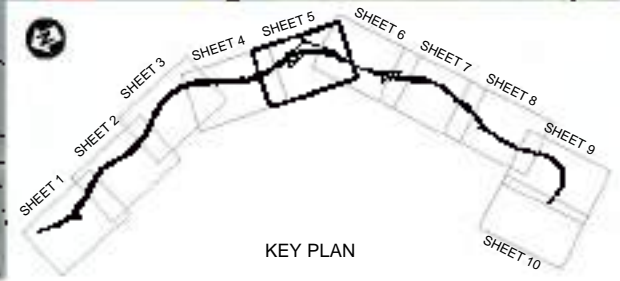
MMA-DES-ESC-C0-DRG-1004
MMA-DES-ESC-C0-DRG-1005

MMA-DES-ESC-C0-DRG-1005
MMA-DES-ESC-C0-DRG-1006

SRP7 (5ha)
CHAINAGE 2700-3400
VOLUME: 1300m³

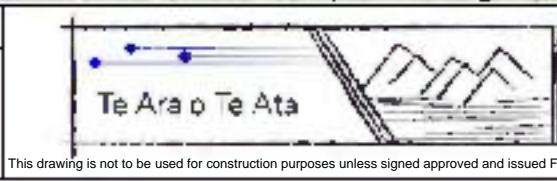
REFER CWMP FOR INDICATIVE
SEQUENCE OF TEMPORARY
STREAM DIVERSION WORKS

1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

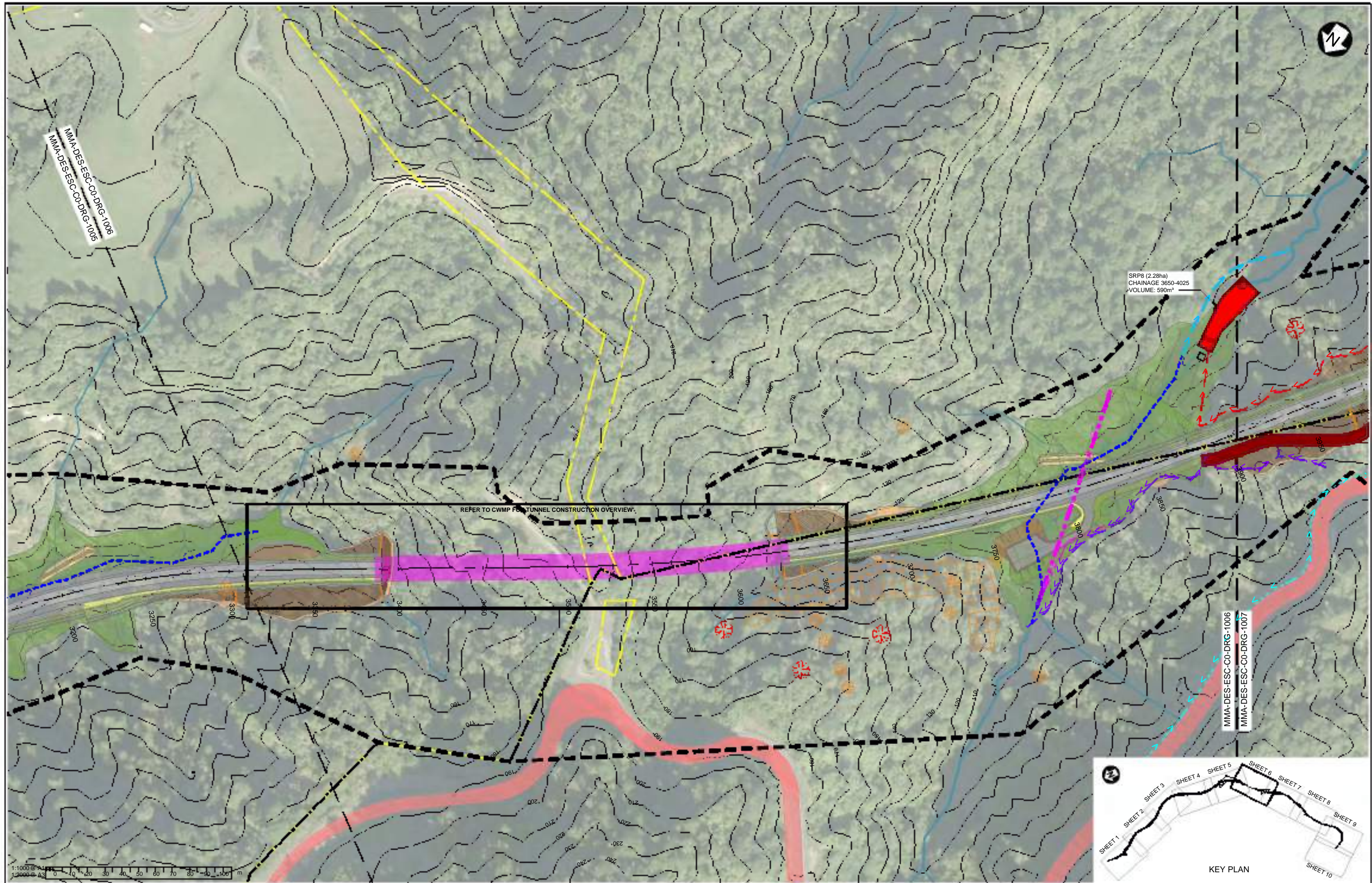
Tab	Scale	Original Size
MMA-DES-ESC-C0-DRG-1005	1:2000 (A3) 1:1000 (A1)	A1



MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 5

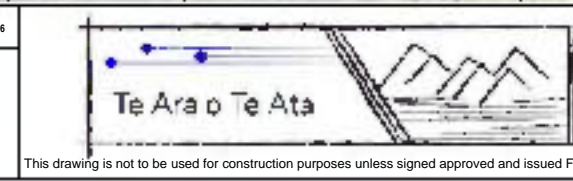
Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-ESC-C0-DRG-1005

Revision
E



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

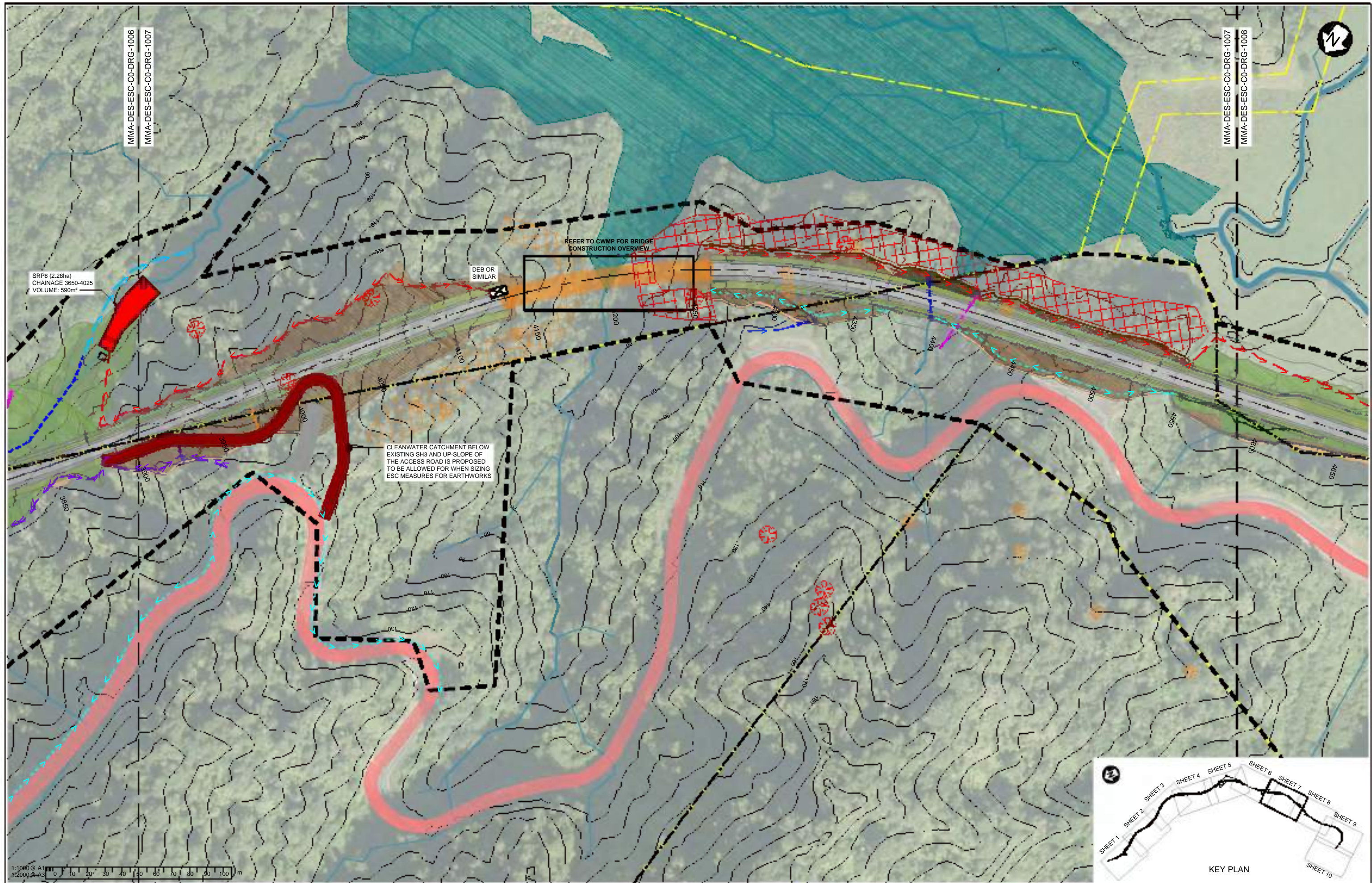
Tab	MMA-DES-ESC-C0-DRG-1006
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



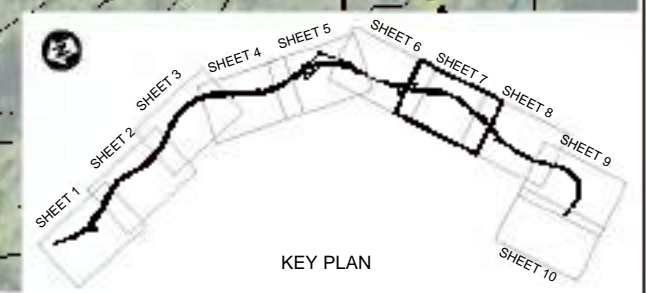
MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 6

Approved
B. SYMMANS
 Status
FOR CONSENT
 Drawing Number
MMA-DES-ESC-C0-DRG-1006

Revision
E

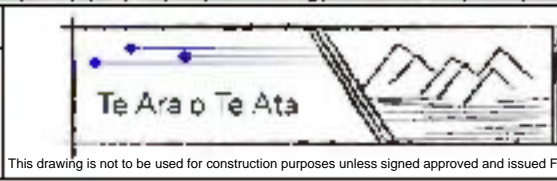


1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GCC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

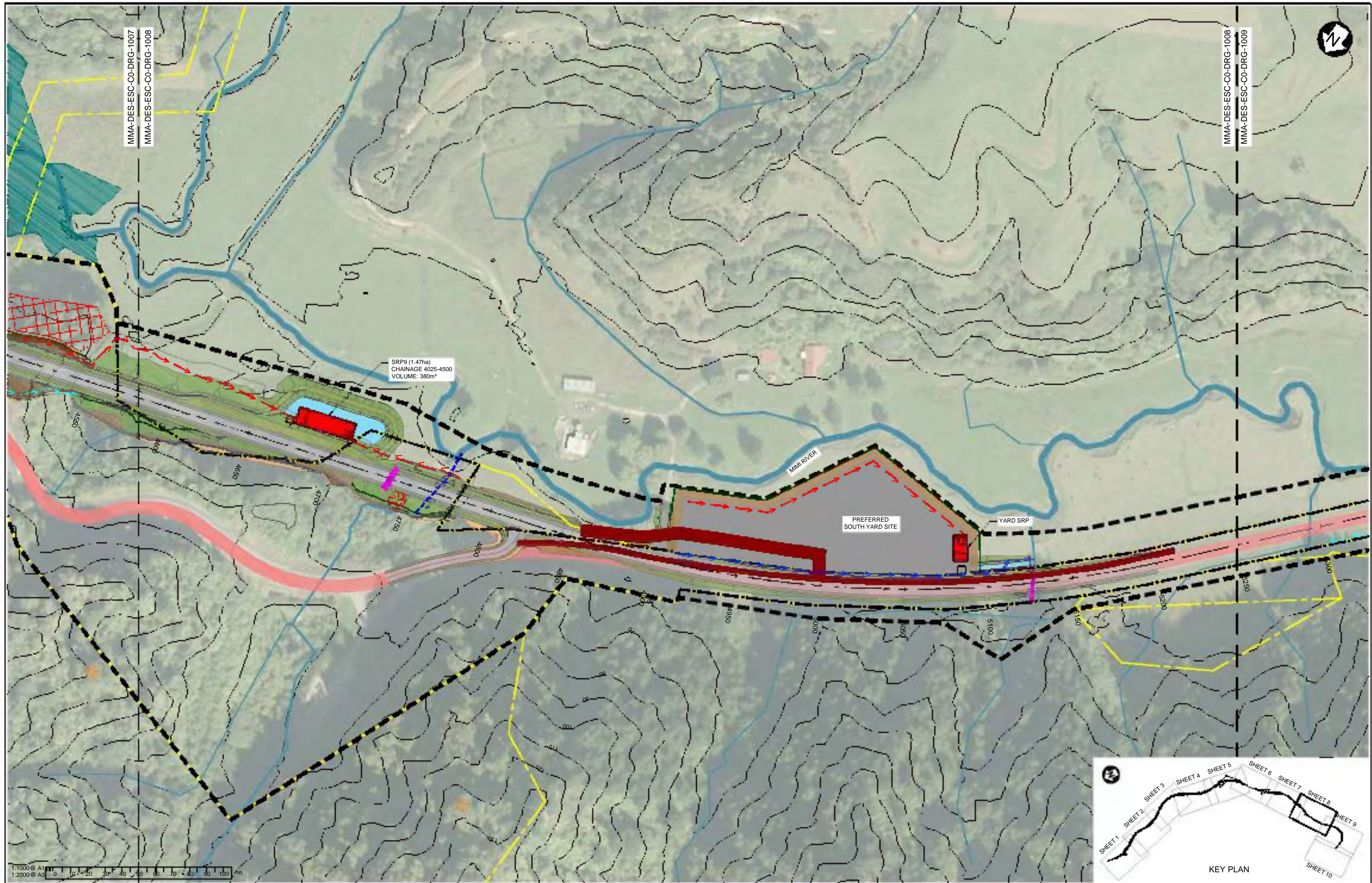
Tab	Scale	Original Size
MMA-DES-ESC-C0-DRG-1007	1:2000 (A3) 1:1000 (A1)	A1



Mt Messenger Bypass

MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 7

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-ESC-C0-DRG-1007
Revision
E



MMA-DES-ESC-C0-DRG-1007
MMA-DES-ESC-C0-DRG-1008

MMA-DES-ESC-C0-DRG-1008
MMA-DES-ESC-C0-DRG-1009

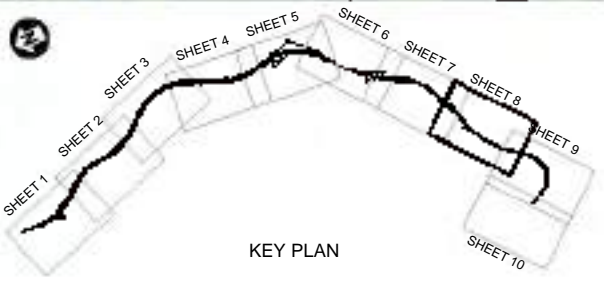
SRP9 (1.47ha)
CHAINAGE 4025-4500
VOLUME: 380m³

PREFERRED SOUTH YARD SITE

YARD SRP

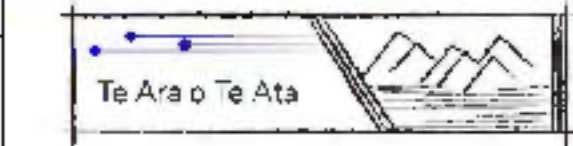
MT MESSENGER RIVER

1:2000 @ A1
1:2000 @ A3



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE, SITE YARD ADDED	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	FILL DISPOSAL 3 REMOVED	QDO'S	GCC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

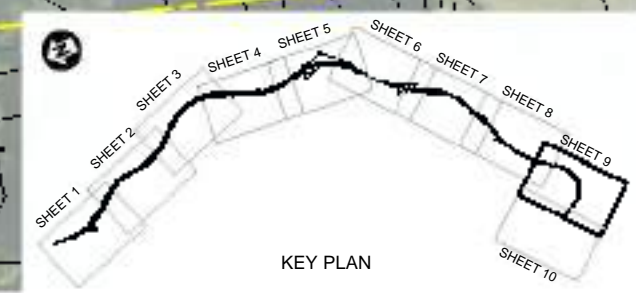
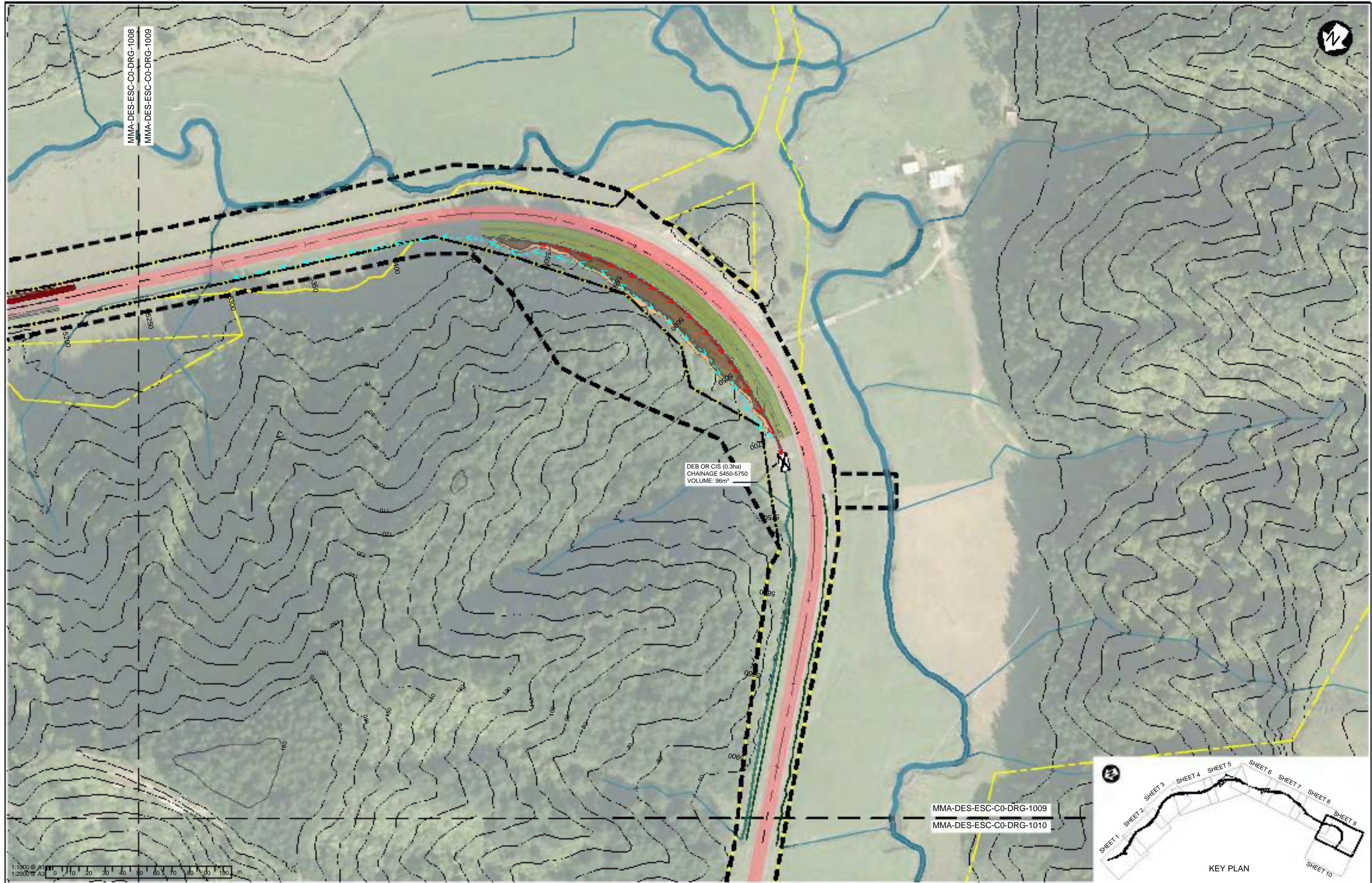
Lab	Scale	Original Size
MMA-DES-ESC-C0-DRG-1008	1:2000 (A3) 1:1000 (A1)	A1



MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 8

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-ESC-C0-DRG-1008
Revision
E

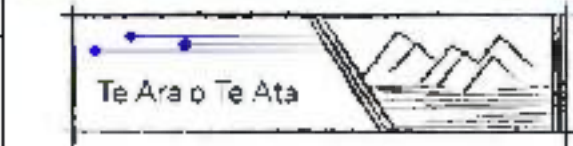
MMA-DES-ESC-C0-DRG-1008
MMA-DES-ESC-C0-DRG-1009



1:1000 @ A1
1:2000 @ A3
0 10 20 30 40 50 60 70 80 90 100 m

Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GCC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

Lab	Scales	Original Size
MMA-DES-ESC-C0-DRG-1009	1:2000 (A3) 1:1000 (A1)	A1

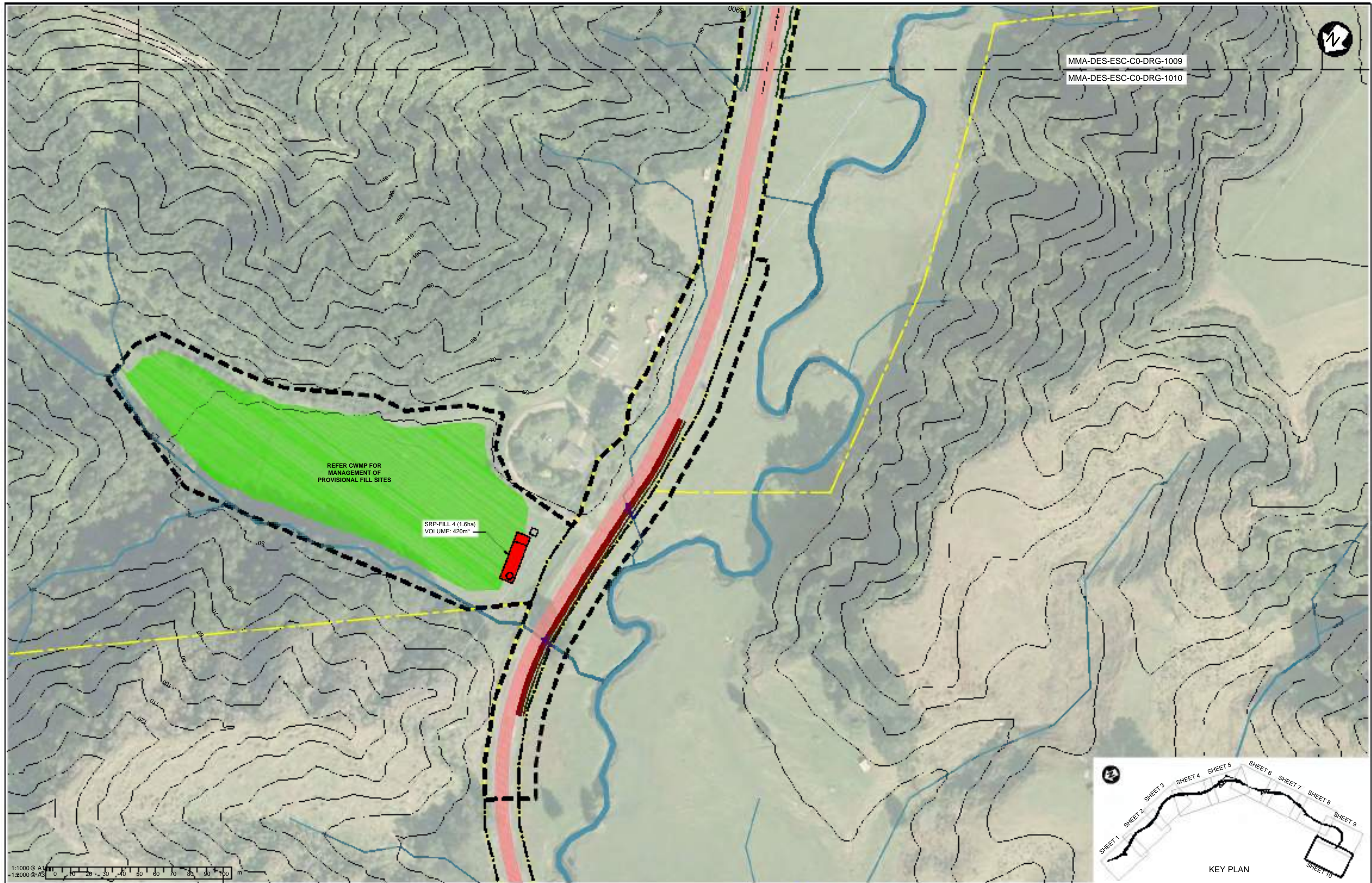


MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 9

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-ESC-C0-DRG-1009
Revision
E

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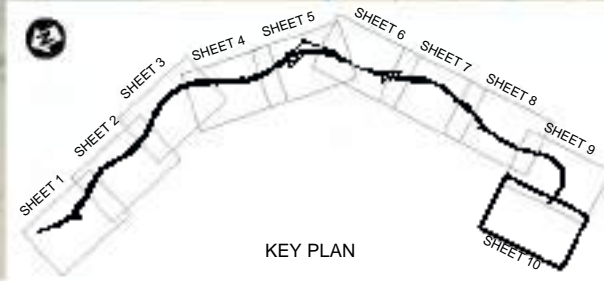
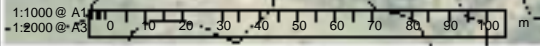


MMA-DES-ESC-C0-DRG-1009

MMA-DES-ESC-C0-DRG-1010

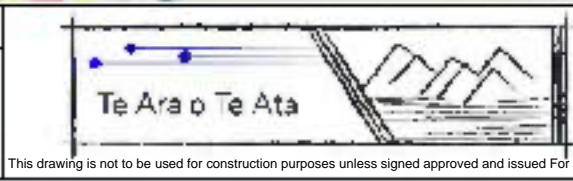
REFER CWMP FOR
MANAGEMENT OF
PROVISIONAL FILL SITES

SRP-FILL 4 (1.6ha)
VOLUME: 420m³



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
E	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	GR*	BSS	03/07/2020
D	CHANGES TO SHEETS 1004 AND 1008 ONLY	QDO'S	GGC	SPP	GR	BSS	26/07/2018
C	SEDIMENT RETENTION POND VOLUMES AMENDED	QDO'S	WHE	SPP	GR	BSS	04/05/2018
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LJG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

Tab	Scale	Original Size
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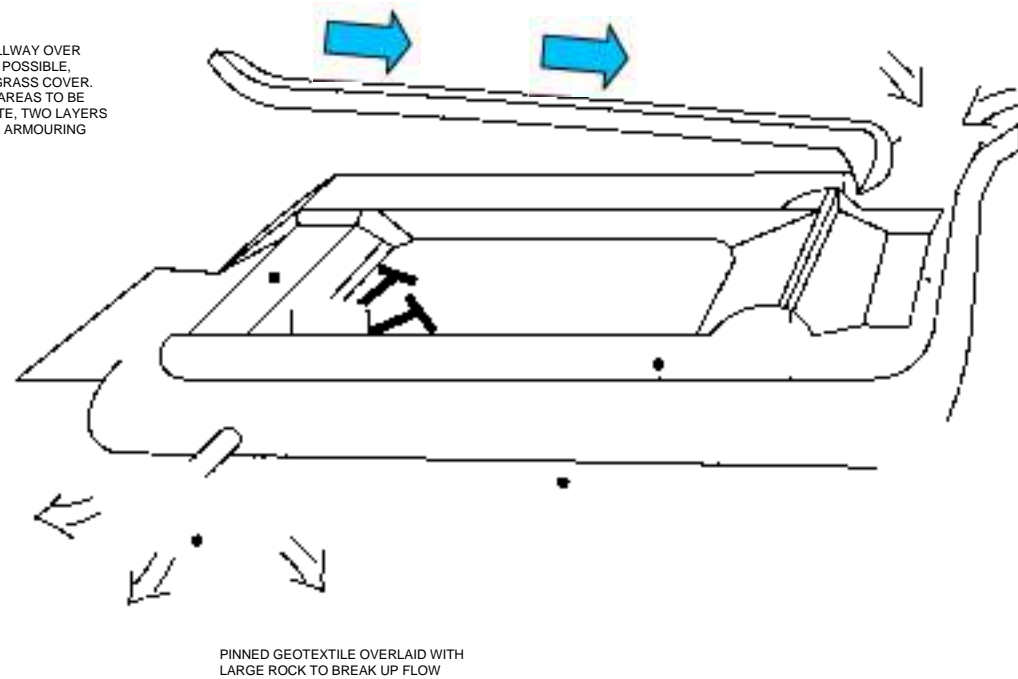
MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 10

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-ESC-C0-DRG-1010
Revision
E

NOTES

- REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)
- PRIOR TO SEDIMENT RETENTION POND CONSTRUCTION:
 - CHECK GROUND CONDITIONS TO ENSURE STABLE AND GEOTECHNICAL ASSESSMENT OCCURS.
 - CONFIRM DESIGN IS NOT IN THE FLOOD PLAIN.
 - INSTALL SILT FENCE OR SUPER SILT FENCE BELOW WORKS AREA.
 - REMOVE UNSUITABLE MATERIAL AND CONFIRM APPROPRIATE LOCATION.

WIDE SHALLOW LEVEL SPILLWAY OVER EXISTING GROUND WHERE POSSIBLE, RETAINING THE EXISTING GRASS COVER. MINIMUM WIDTH 6m. BARE AREAS TO BE STABILISED WITH CONCRETE, TWO LAYERS OF GEOTEXTILE OR OTHER ARMOURING



SCHEMATIC - SEDIMENT RETENTION POND
N.T.S.

SECURE THE ENDS OF THE LEVEL SPREADER BY BURYING WITHIN THE EARTH BUND AND HAUNCHING WITH CONCRETE

BUND/DIVERSION CHANNELS TO ENSURE ALL FLOW ENTERS AT THE INLET END

SEDIMENT FOREBAY (1m DEEP AND 2m WIDE)

LEVEL SPREADER FULL WIDTH OF INLET END, BATTER INTO POND TO BE STABILISED WITH SOFT MATTING GEOTEXTILE

EXTRA CREST WIDTH MAY BE REQUIRED TO PROVIDE FOR MACHINERY ACCESS FOR CLEANING OUT

ALL BARE SURFACES TO BE STABILISED WITH VEGETATION IF THE POND IS TO REMAIN THROUGH A WINTER PERIOD, OTHERWISE JUST THE OUTER BATTER NEEDS TO BE STABILISED

WIDTH OF TOP EMBANKMENT SHOULD BE WIDE ENOUGH TO ENSURE MACHINERY ACCESS FOR DE-SLUDGING OF POND, IF THERE ARE NO OTHER ACCESS POINTS AVAILABLE

SPILLWAY COMPACTED AND SMOOTHED TO ELIMINATE ALL VOIDS PRIOR TO LAYING AND PINNING APPROPRIATE GEOTEXTILE/CONCRETE

POND BATTERS 2:1 TO 3:1

POURED CONCRETE ANTI-SEEP COLLAR

300mmØ DISCHARGE PIPE LAID AT 1 TO 2% GRADIENT

POURED CONCRETE ANTI-SEEP COLLAR

MINIMUM FREEBOARD 300mm

CONCRETE RISER MAY REQUIRE WEIGHTING OR ANCHORING TO PREVENT FLOATING

UPPER DECANT OPERATES OVER TOP 1/3 OF LIVE STORAGE ONLY

MIDDLE DECANT OPERATES OVER TOP 2/3 OF LIVE STORAGE ONLY

LOWER DECANT OPERATES OVER FULL DEPTH OF LIVE STORAGE UP TO 1500mm

500mm DEAD STORAGE

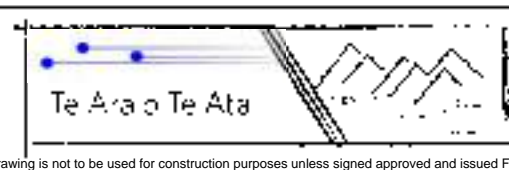
WARATAH STAKES REQUIRED FOR ALL DECANTS

LOWEST INLET PIPE TO RISER IS ANGLED UPWARD AT 15° TO EASE TENSION ON FLEXIBLE JOINT

SECTION - SEDIMENT RETENTION POND FOR THREE DECANTS
N.T.S.

B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017
Rev	Revision Description	Drawn	Design Checked	Designed	Design Checked	Approved	Date

Tab	MMA-DES-ESC-C0-DRG-4001
Scales	NOT TO SCALE
Original Size	A1



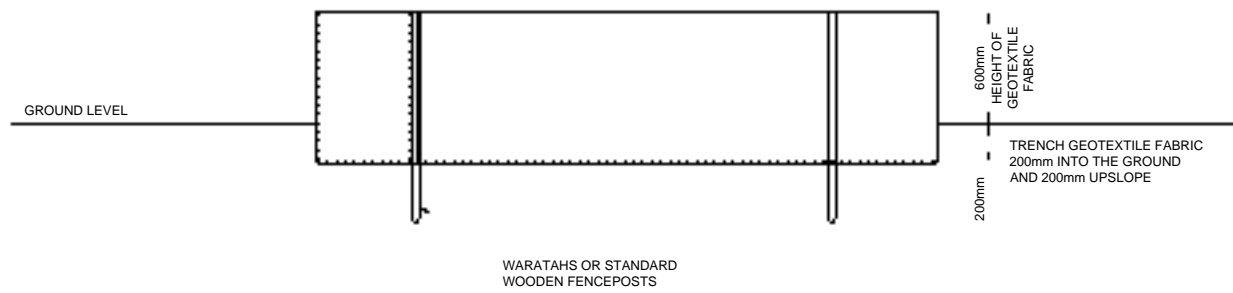
MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
SEDIMENT RETENTION POND

Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-4001
Revision	B

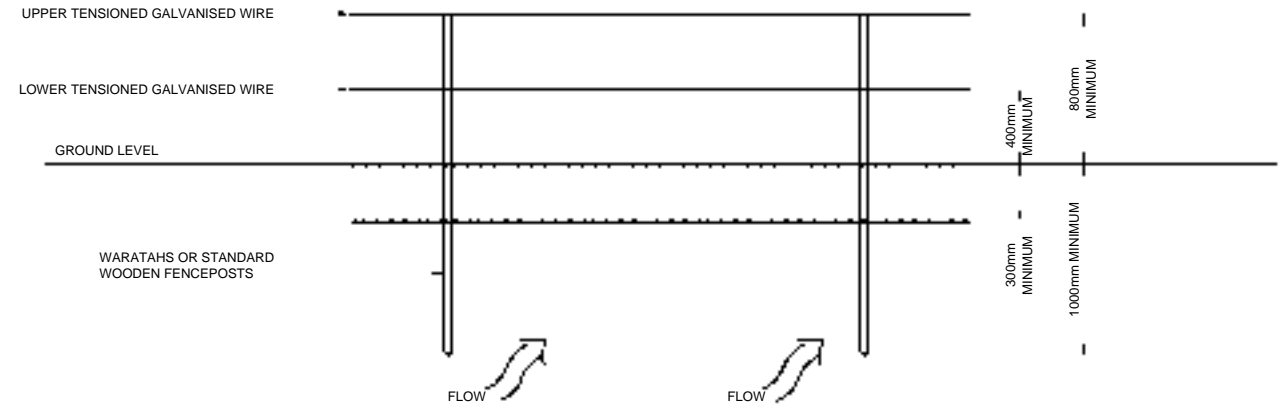
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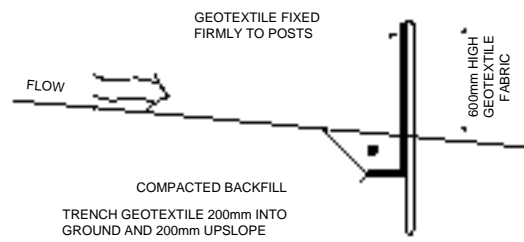
NOTES
 1. REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)



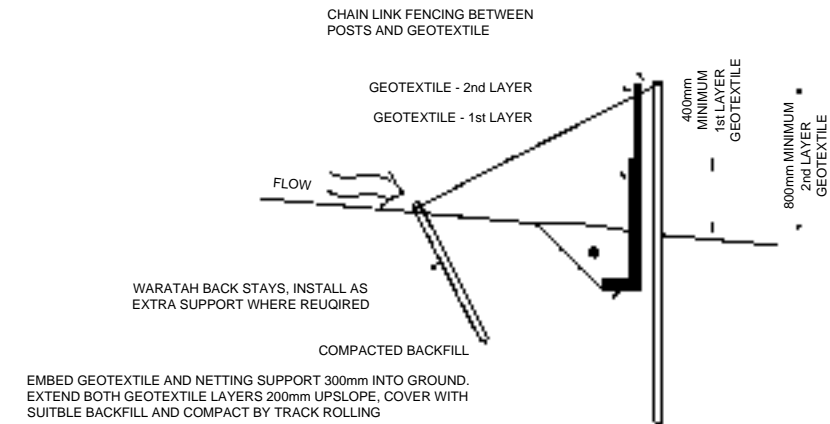
ELEVATION - SILT FENCE
 SCALE 1:20 (A1)



ELEVATION - SUPER SILT FENCE
 SCALE 1:20 (A1)



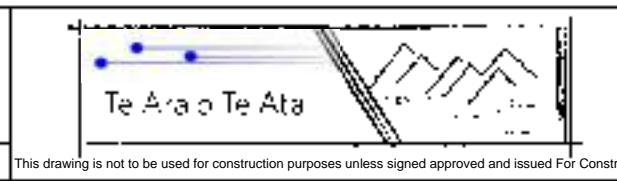
TYPICAL SECTION - SILT FENCE
 SCALE 1:20 (A1)



TYPICAL SECTION - SUPER SILT FENCE
 SCALE 1:20 (A1)

B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date

Tab	MMA-DES-ESC-C0-DRG-4002
Scales	1:40 (A3) 1:20 (A1)
Original Size	A1

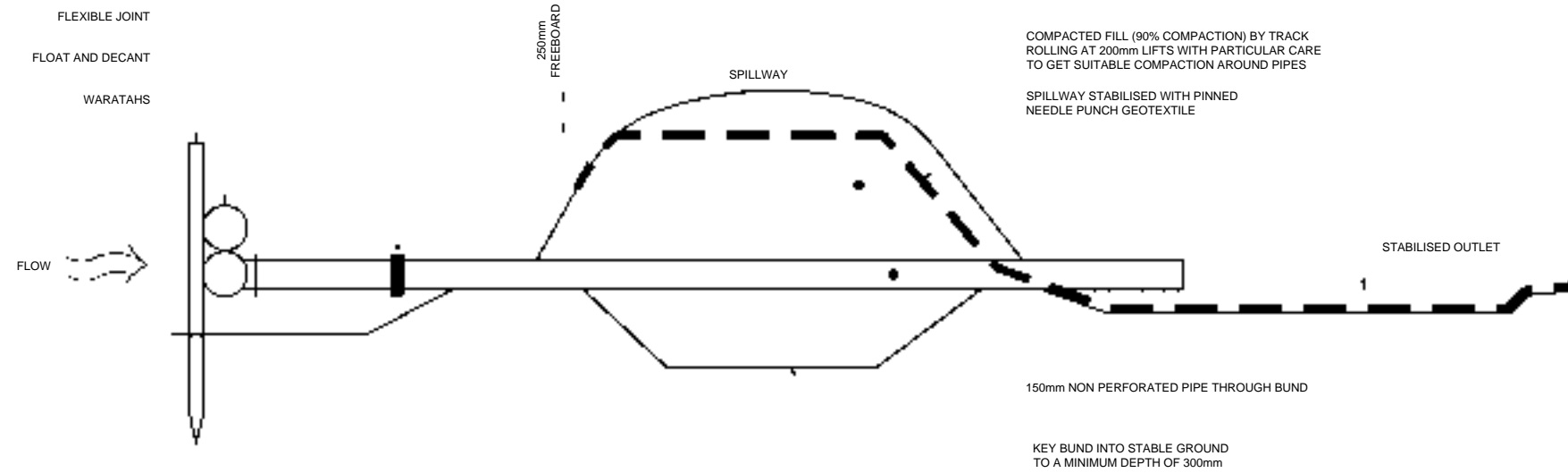


MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
SILT FENCE

Approved
D. KENDERDINE
 Status **FOR CONSENT**
 Drawing Number **MMA-DES-ESC-C0-DRG-4002** Revision **B**

NOTES

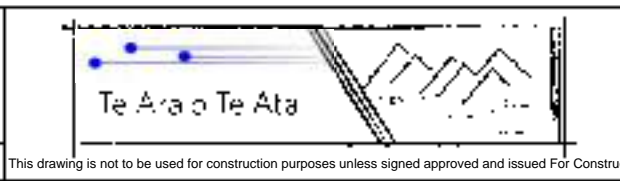
- REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)
- DECANTING EARTH BUNS TO HAVE:
 - 3:1 TO 5:1 LENGTH TO WIDTH RATIO
 - FLOATING DECANTS
 - ABILITY TO SAFELY PASS 1% AEP RAIN EVENT.



DECANTING EARTH BUND
N.T.S.

B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

TAB	MMA-DES-ESC-C0-DRG-4003
Scales	NOT TO SCALE
Original Size	A1

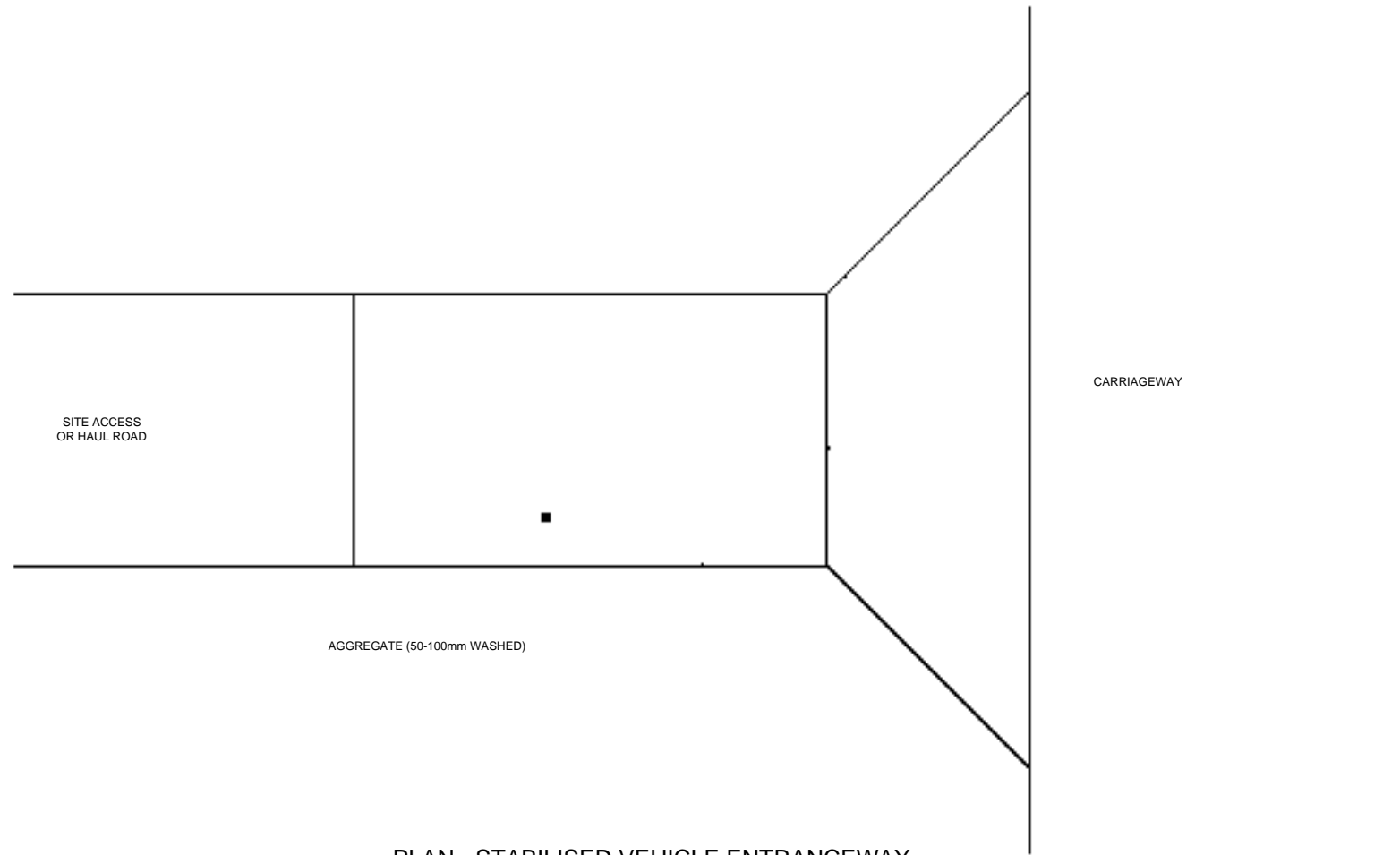


MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
DECANTING EARTH BUND

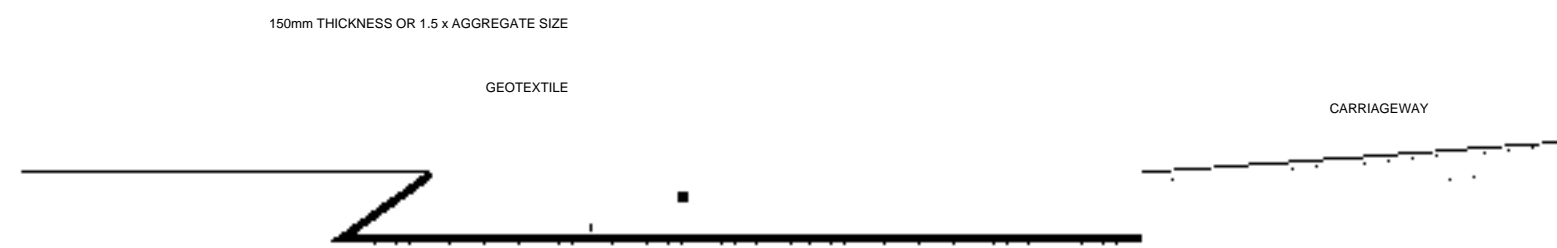
Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-4003
Revision	B

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NOTES
 1. REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)



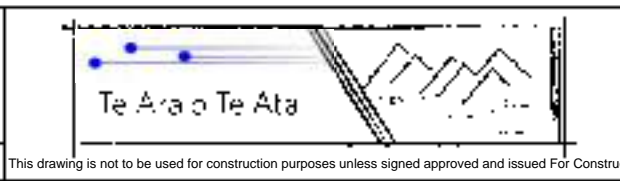
PLAN - STABILISED VEHICLE ENTRANCEWAY
 NOT TO SCALE



SECTION - STABILISED VEHICLE ENTRANCEWAY
 NOT TO SCALE

B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

Tab	MMA-DES-ESC-C0-DRG-4004
Scales	NOT TO SCALE
Original Size	A1



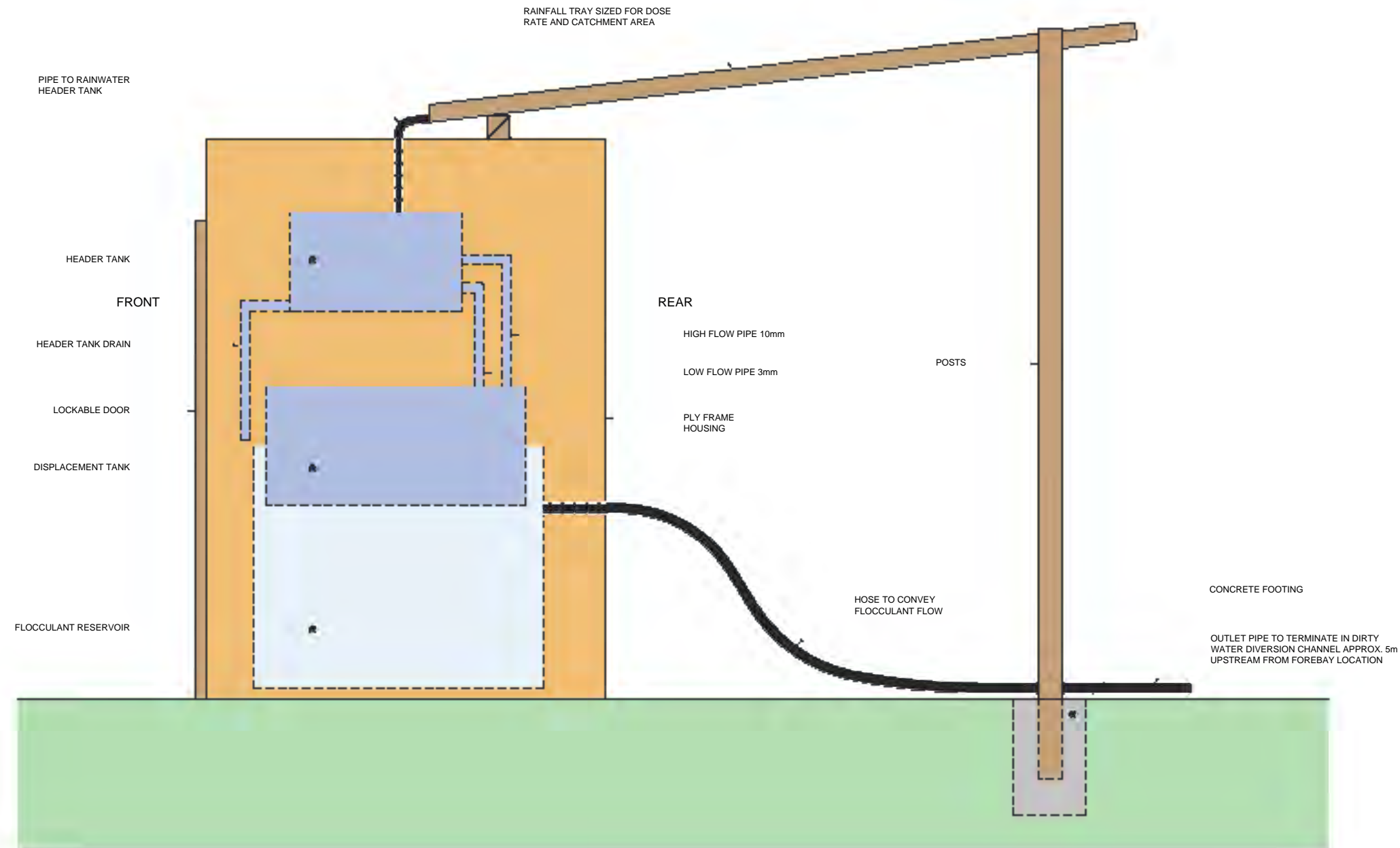
MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
STABILISED VEHICLE ENTRANCEWAY

Approved
D. KENDERDINE
 Status **FOR CONSENT**
 Drawing Number **MMA-DES-ESC-C0-DRG-4004** Revision **B**

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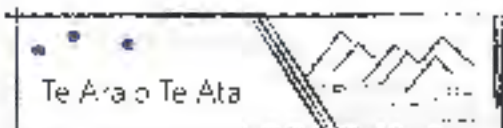
NOTES
 1. REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)



B FOR CONSENT
 A PRELIMINARY DRAFT - FOR EXTERNAL REVIEW

QDO'S	WHE	SPP	GR	LG	14/11/2017
QDO'S	WHE	SPP	GR	KJB	06/10/2017
Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

Tab
 MMA-DES-ESC-C0-DRG-4005
 Scales
 NOT TO SCALE
 Original Size A1



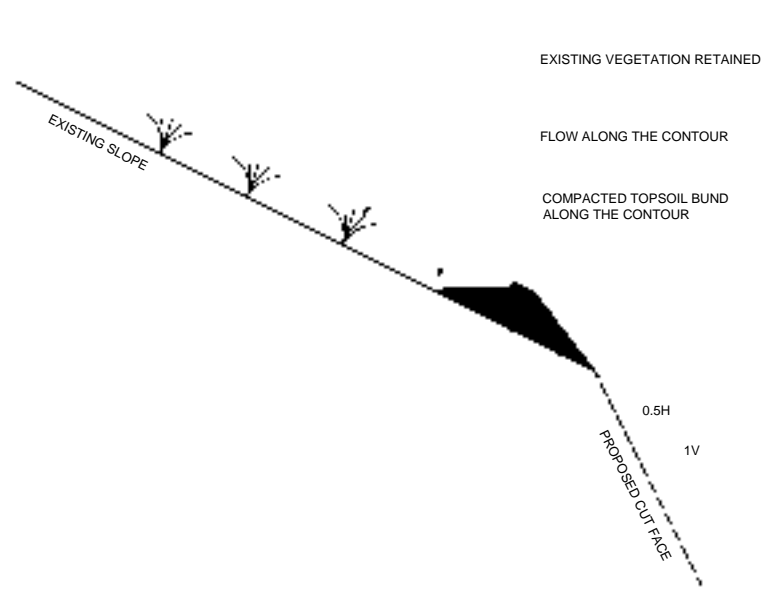
MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
FLOCCULATION SYSTEM

Approved
D. KENDERDINE
 Status **FOR CONSENT**
 Drawing Number **MMA-DES-ESC-C0-DRG-4005** Revision **B**

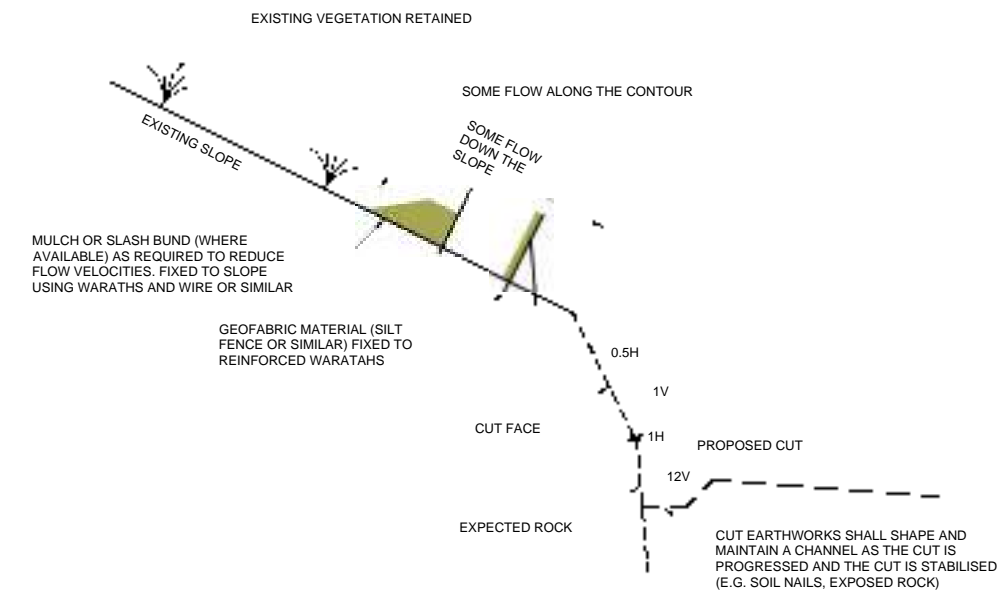
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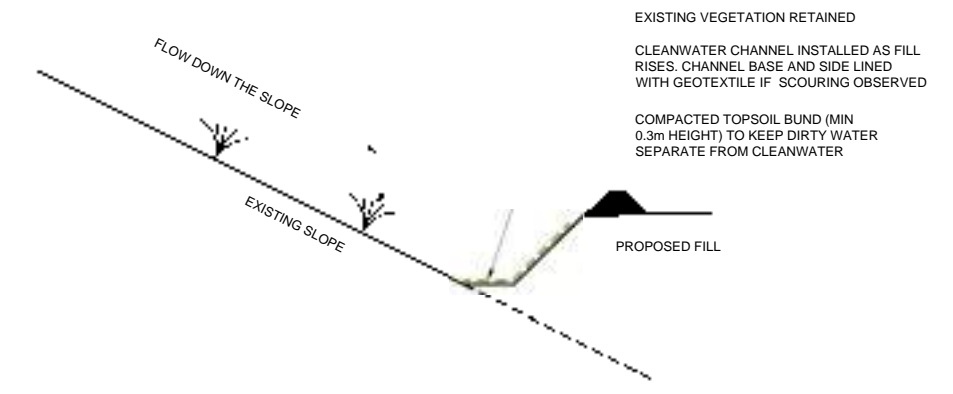
- NOTES
- REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)
 - DESIGN DIMENSIONS SUBJECT TO SPECIFIC DESIGN WITHIN CWMP AND SITE SPECIFIC MANAGEMENT PLAN DETAILS.



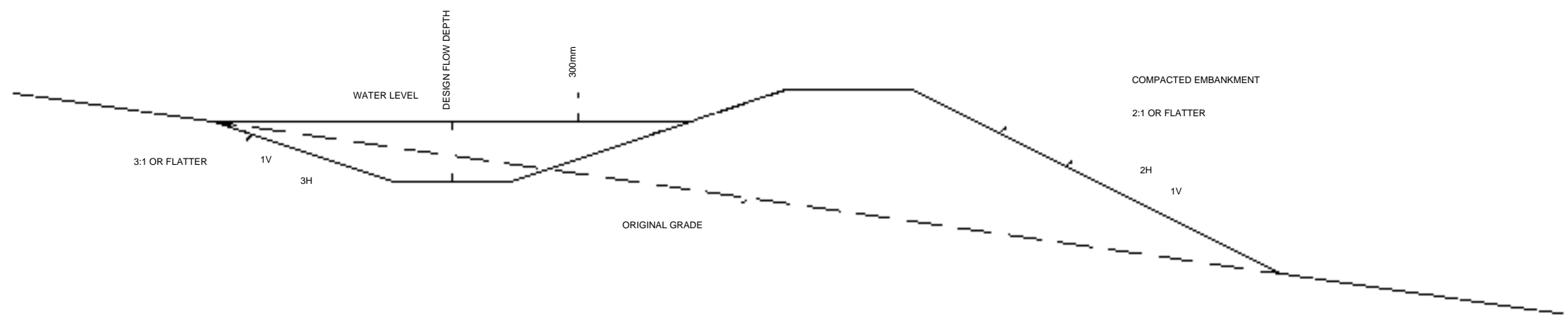
SECTION - CLEAN WATER DIVERSION TYPE A
N.T.S.



SECTION - CLEAN WATER DIVERSION TYPE B
N.T.S.



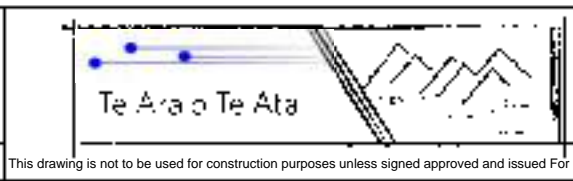
SECTION - CLEAN WATER DIVERSION TYPE C
N.T.S.



SECTION - DIRTY WATER DIVERSION
N.T.S.

B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

Tab	MMA-DES-ESC-C0-DRG-4006
Scales	NOT TO SCALE
Original Size	A1

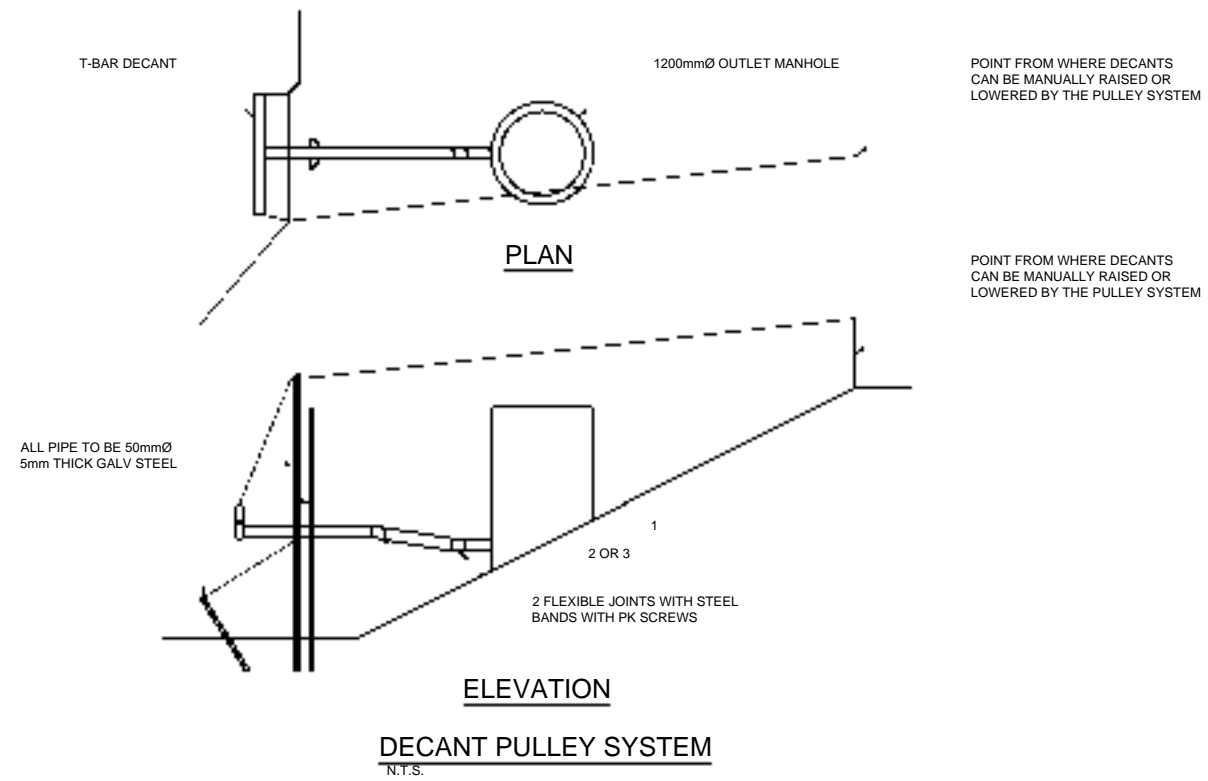


MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
WATER DIVERSION

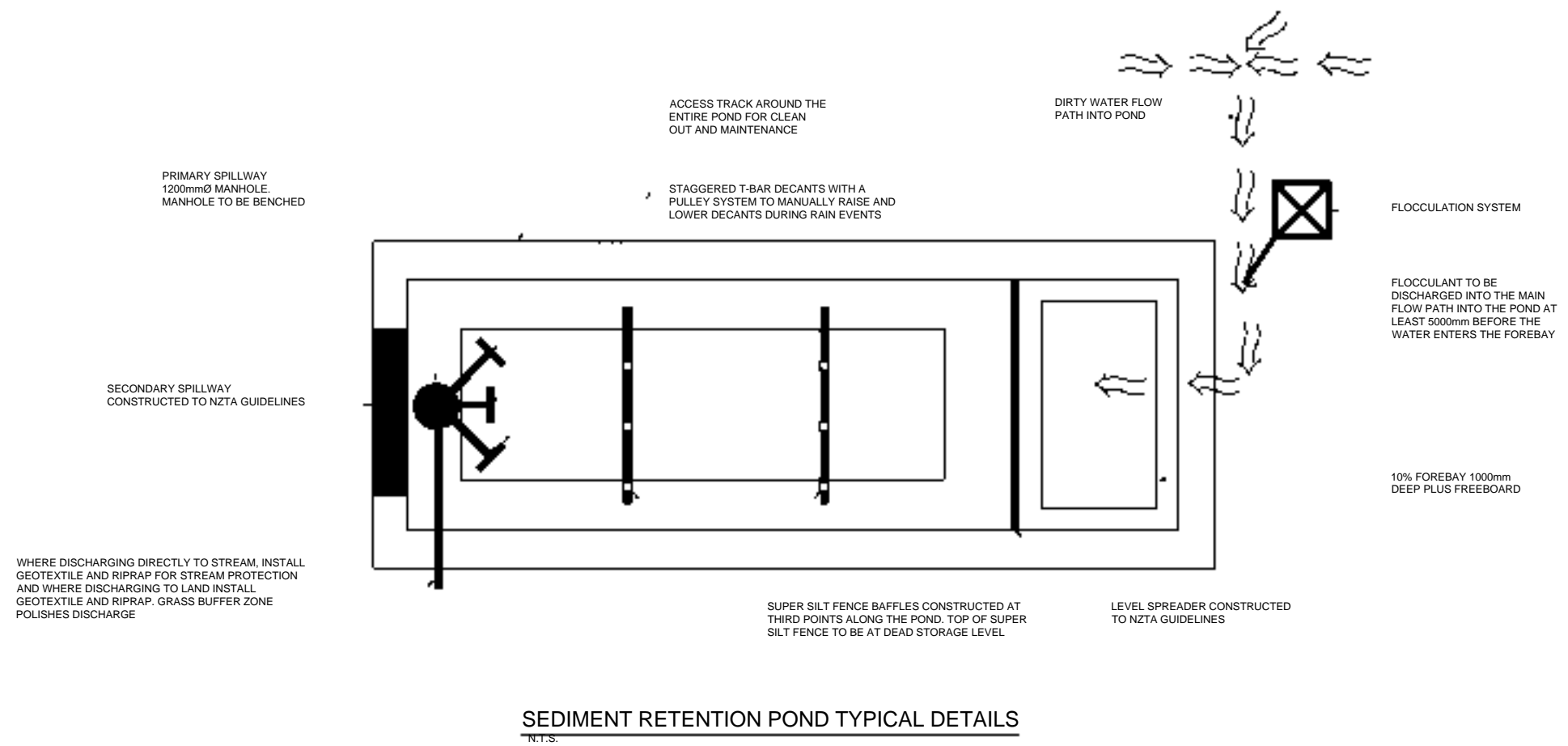
Approved
D. KENDERDINE
Status
FOR CONSENT
Drawing Number
MMA-DES-ESC-C0-DRG-4006
Revision
B

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- NOTES
- REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)
 - ALL ROPE FOR PULLEY SYSTEM TO BE NYLON ROPE.
 - ROPE TO BE SECURED TO THE BANK WITH A STAKE SO THAT IT CAN BE EASILY ACCESSED DURING A RAIN EVENT AND INDIVIDUAL DECANTS CAN BE MANUALLY RAISED OR LOWERED.
 - IF A PULLEY SYSTEM NOT INSTALLED THEN A "PLUG" WILL BE UTILISED IN THE OUTLET PIPE TO CEASE FLOWS AS NECESSARY.

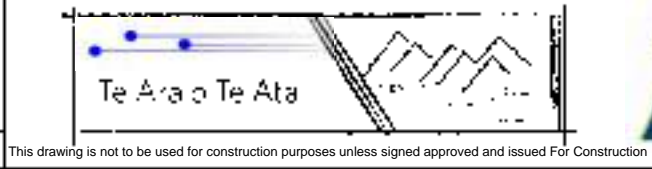


DECANT PULLEY SYSTEM
N.T.S.



B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

TAB	MMA-DES-ESC-CO-DRG-4007
Scales	NOT TO SCALE
Original Size	A1

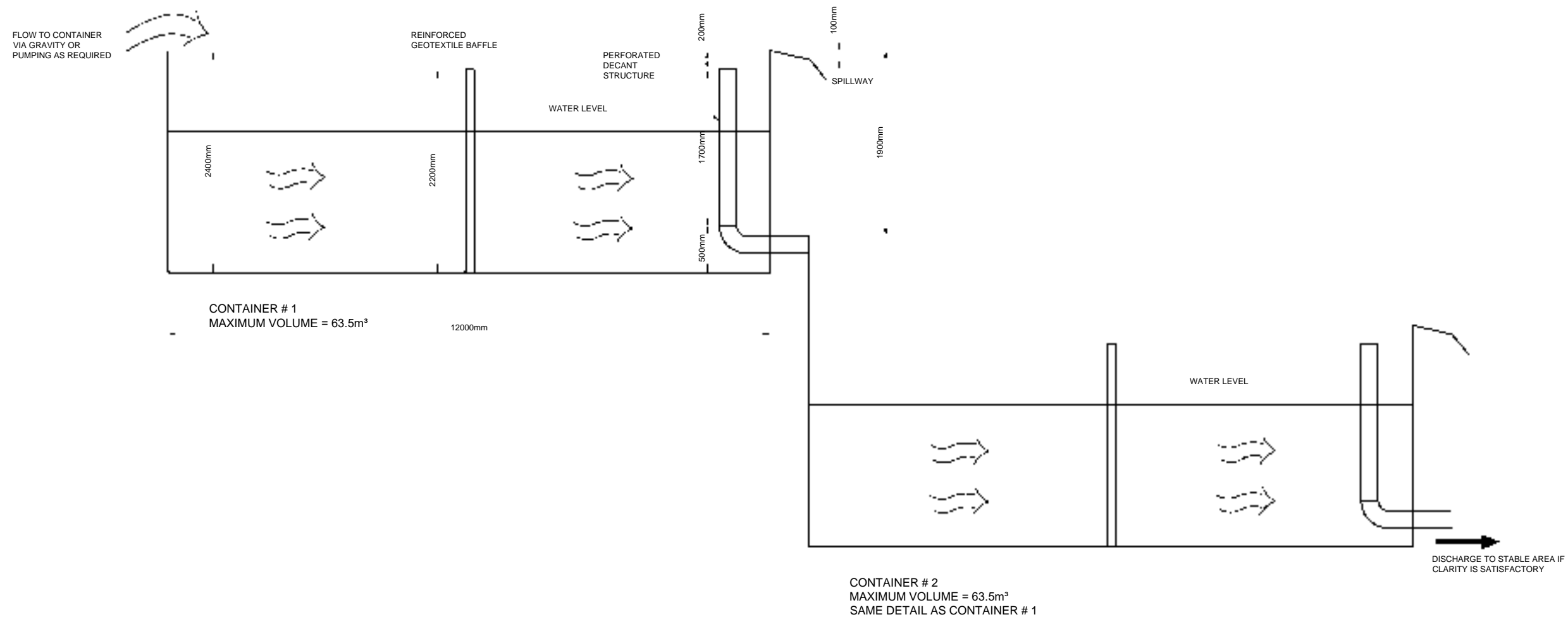


MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
SEDIMENT RETENTION POND

Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-CO-DRG-4007
Revision	B

NOTES

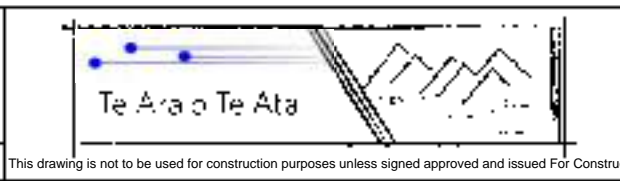
1. REFER TO NZTA EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE HIGHWAY INFRASTRUCTURE (NZTA GUIDELINES)
2. SHIPPING CONTAINERS CAN BE USED TO CREATE CONTAINERS. BAFFLE DESIGNED FROM REINFORCED GEOTEXTILE TO ALLOW FLOWS TO PASS. STRUCTURAL INTEGRITY OF CONTAINERS TO REMAIN.
3. CONTAINER # 1 WILL BE POSITIONED 1900mm HIGHER THAN CONTAINER # 2 IF CONTOURS DO NOT ALLOW THIS THEN CONTAINER # 1 WILL BE RAISED BY 1900mm.
4. WATER CLARITY CAN BE CHECKED IN CONTAINER # 2 AND FLOCCULANT ADDED MANUALLY IF NECESSARY TO ACHIEVE WATER CLARITY.



CONTAINER IMPOUNDMENT SYSTEM
N.T.S.

B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

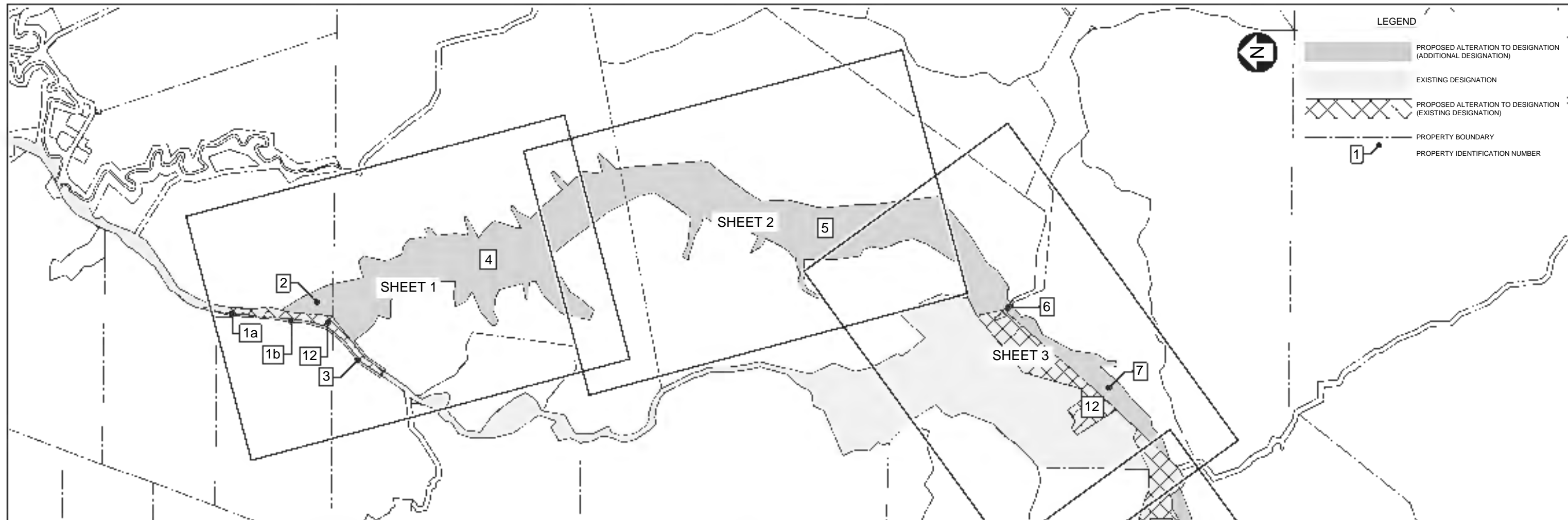
TAB	MMA-DES-ESC-C0-DRG-4008
Scales	NOT TO SCALE
Original Size	A1



MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
TYPICAL DETAILS
CHEMICAL TREATMENT DEVICES

Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-4008
Revision	B

This drawing is not to be used for construction purposes unless signed approved and issued For Construction



PROPERTY LIST - PARCEL DETAILS

PROPERTY ID No.	OWNERS	APPELLATION	TITLE REFERENCE	PARCEL AREA (ha)	DESIGNATION AREA (ha)
1a	G A T KEIGHLEY, J KEIGHLEY, KEIGHLEY NOMINEES LTD	SECTION 38, BLK VIII, MIMI SD	TNG3/168	0.0535ha	0.0161ha
1b	G A T KEIGHLEY, J KEIGHLEY, KEIGHLEY NOMINEES LTD	SECTION 50, BLK VIII, MIMI SD	TNG3/168	41.3240ha	0.3675ha
2	R J BARLOW	SECTION 55, BLK VIII, MIMI SD	TNJ1/249	38.2106ha	1.5677ha
3	D A & T J S PASCOE	SECTION 51, BLK VIII MIMI SD	TNH1/1387	22.1389ha	0.2708ha
4	D A & T J S PASCOE	SECTION 9, SO 457513	627642	155.6634ha	31.7031ha
5	NGATI TAMA CUSTODIAN TRUSTEE LIMITED	SECTION 1, SO 313242	149437	182.7400ha	31.0128ha
6	K G BEARD	LOT 1, DP 5816	TN145/198	23.9726ha	0.0474ha
7	NGATI TAMA CUSTODIAN TRUSTEE LIMITED	SECTION 1, SO 313243	149437	44.2683ha	5.7017ha
8a	A G R THOMSON	PT SECTION 13, BLK XII, MIMI SD	TNG2/1020	80.3375ha	2.8730ha
8b	A G R THOMSON	SECTION 16, BLK XII, MIMI SD	TNG1/1393	0.0141ha	0.0141ha
8c	A G R THOMSON	SECTION 17, BLK XII, MIMI SD	TNG1/1394	0.2744ha	0.0948ha
8d	A G R THOMSON	SECTION 18, BLK XII, MIMI SD	TNG3/57	0.0603ha	0.0603ha
8e	A G R THOMSON	SECTION 19, BLK XII, MIMI SD	TNG2/1395	0.1995ha	0.1995ha
9	R A GORDON	SECTION 35, BLK VIII MIMI SD	TNG1/238	52.6303ha	3.2465ha
10	J R B ANGLESEY, W A ANGLESEY	SECTION 20, BLK XII MIMI SD	TNG2/1181	60.1000ha	0.2209ha
11	C J SCOTT, T C SCOTT	LOT 1, DP 16494	TNH4/333	82.8796ha	0.2028ha
12	STATE HIGHWAY 3				20.9325ha

B	REVISED CONSENT ISSUE, DESIGNATION CHANGE TO AREA 8a	QDO'S	WHE*	QDO'S	PR*	BSS*	03/07/2020
A	FOR CONSENT	QDO'S	WHE	QDO'S	PR	LG	14/11/2017
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date






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Scales
NOT TO SCALE
Original Size A1
This drawing is not to be used for construction purposes unless signed approved and issued For Construction

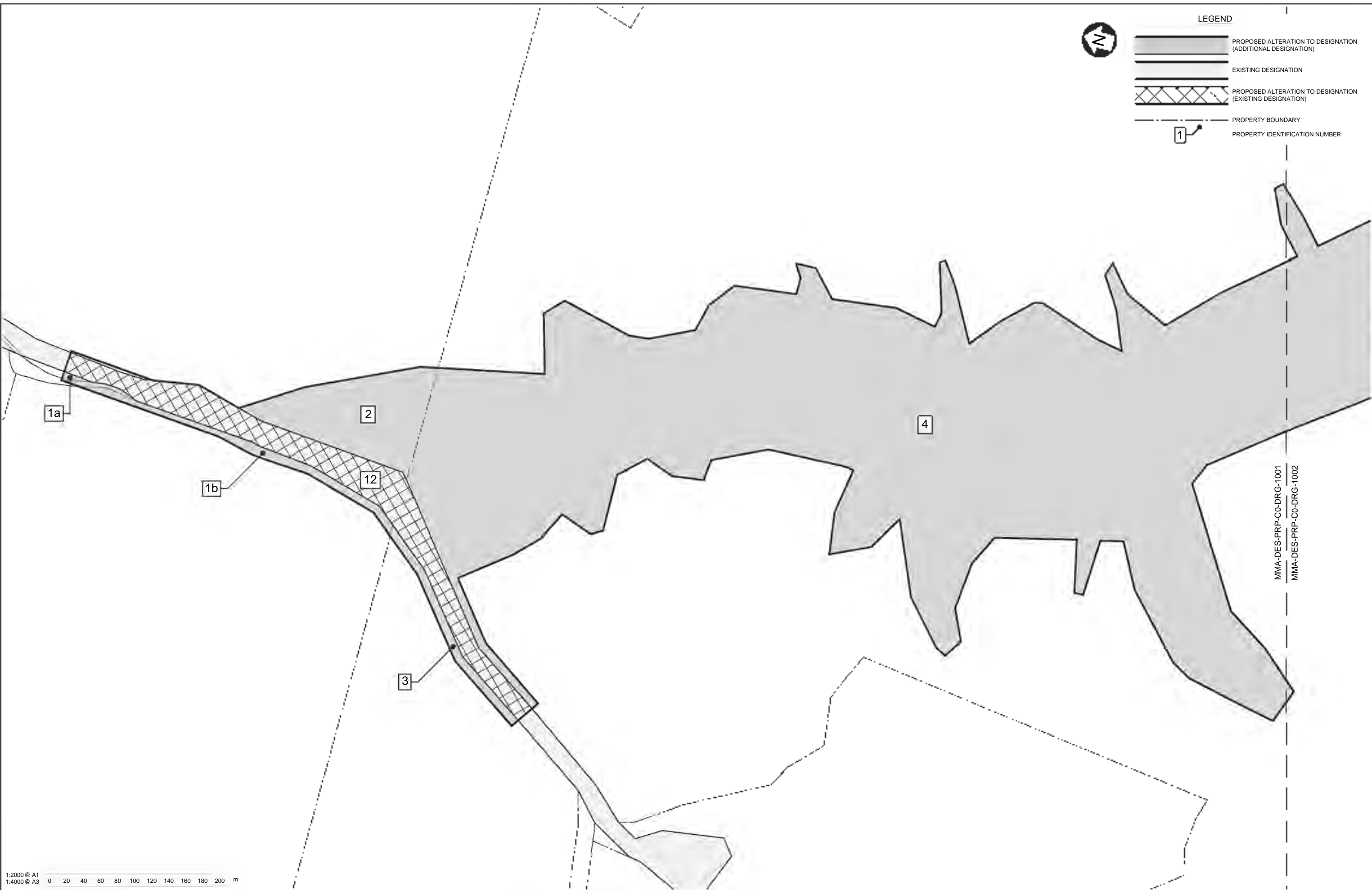
MT MESSENGER BYPASS
PROPERTY DESIGNATION PLANS
SHEET LAYOUT AND PROPERTY LIST

Approved
B. SYMMANS
Status
FOR CONSENT
Drawing Number
MMA-DES-PRP-C0-DRG-1000
Revision
B



LEGEND

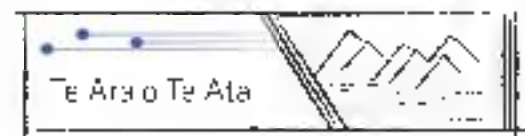
-  PROPOSED ALTERATION TO DESIGNATION (ADDITIONAL DESIGNATION)
-  EXISTING DESIGNATION
-  PROPOSED ALTERATION TO DESIGNATION (EXISTING DESIGNATION)
-  PROPERTY BOUNDARY
-  PROPERTY IDENTIFICATION NUMBER



1:2000 @ A1
 1:4000 @ A3
 0 20 40 60 80 100 120 140 160 180 200 m

B	REVISED CONSENT ISSUE	QDO'S	WHE*	QDO'S	PR*	BSS*	03/07/2020
A	FOR CONSENT	QDO'S	WHE	QDO'S	PR	LG	14/11/2017
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date

Tab	MMA-DES-PRP-C0-DRG-1001
Scales	1:4000 (A3) 1:2000 (A1)
Original Size	A1








MT MESSENGER BYPASS
PROPERTY DESIGNATION PLANS
SHEET 1

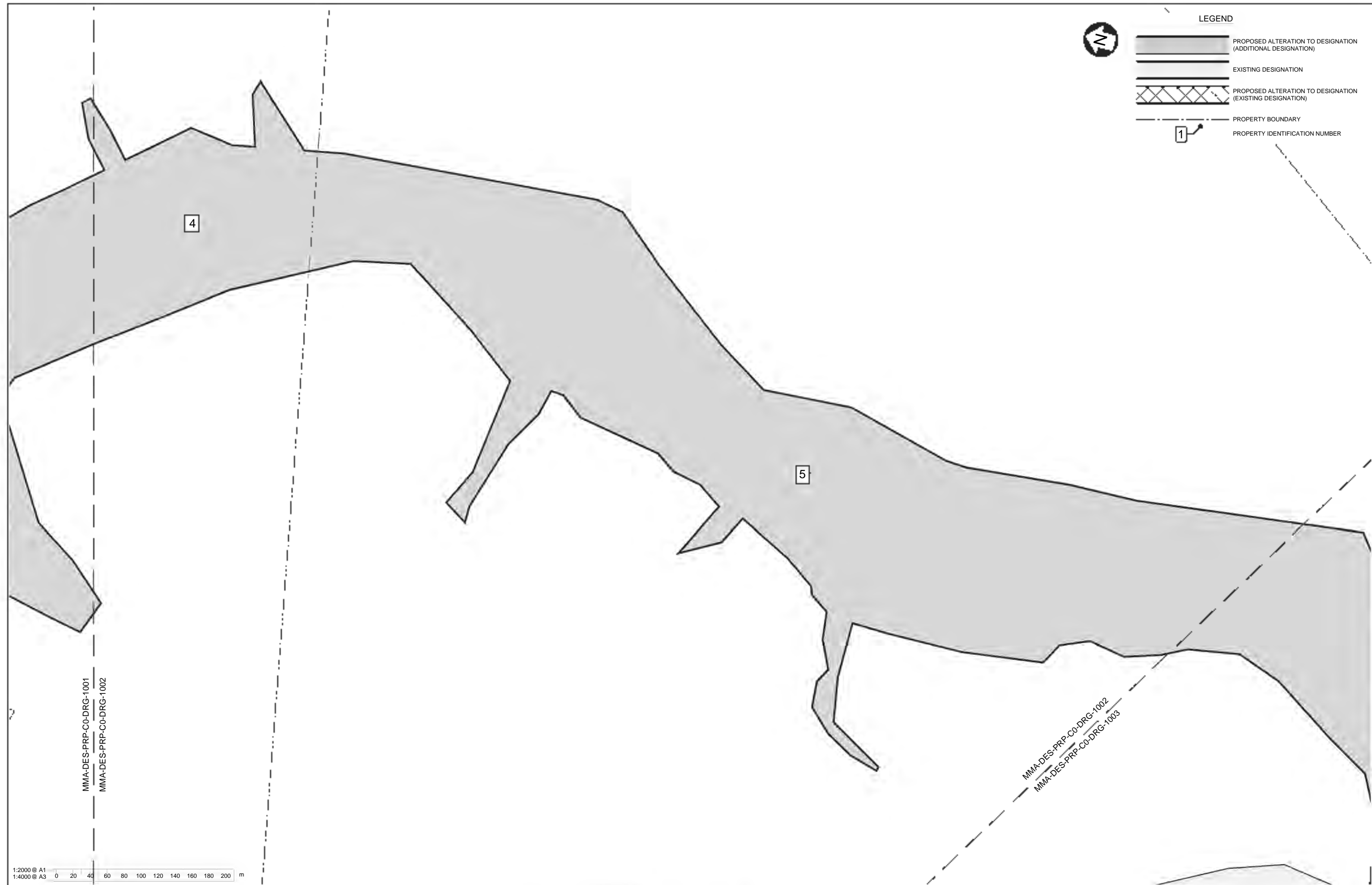
Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-PRP-C0-DRG-1001
Revision	B

This drawing is not to be used for construction purposes unless signed approved and issued For Construction



LEGEND

-  PROPOSED ALTERATION TO DESIGNATION (ADDITIONAL DESIGNATION)
-  EXISTING DESIGNATION
-  PROPOSED ALTERATION TO DESIGNATION (EXISTING DESIGNATION)
-  PROPERTY BOUNDARY
-  PROPERTY IDENTIFICATION NUMBER



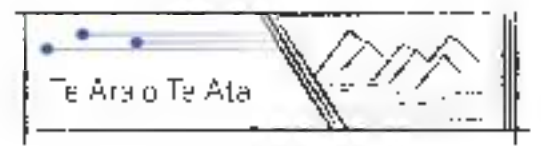
MMA-DES-PRP-CO-DRG-1001
MMA-DES-PRP-CO-DRG-1002

MMA-DES-PRP-CO-DRG-1002
MMA-DES-PRP-CO-DRG-1003

1:2000 @ A1
1:4000 @ A3
0 20 40 60 80 100 120 140 160 180 200 m

B	REVISED CONSENT ISSUE	QDO'S	WHE*	QDO'S	PR*	BSS*	03/07/2020
A	FOR CONSENT	QDO'S	WHE	QDO'S	PR	LG	14/11/2017
Rev	Revision Description	* Drawn	* Checked	* Designed	* Design Checked	* Approved	* Date

Tab	MMA-DES-PRP-CO-DRG-1002
Scales	1:4000 (A3) 1:2000 (A1)
Original Size	A1



MT MESSENGER BYPASS
PROPERTY DESIGNATION PLANS
SHEET 2

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-PRP-CO-DRG-1002
Revision	B

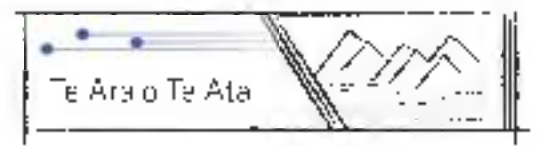
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Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
B	REVISED CONSENT ISSUE	QDO'S	WHE	QDO'S	PR*	BSS*	03/07/2020
A	FOR CONSENT	QDO'S	WHE	QDO'S	PR	LG	14/11/2017

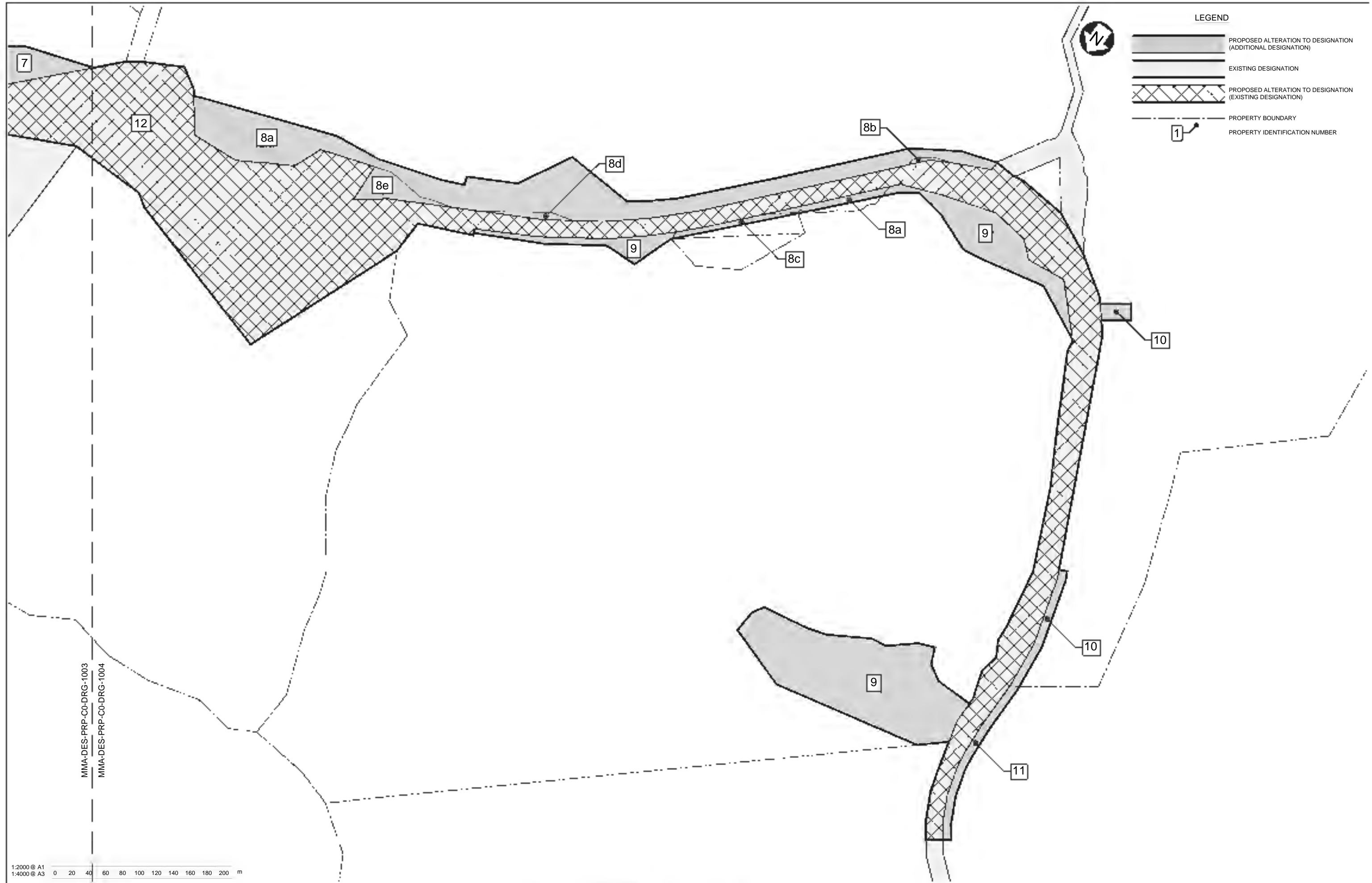
Tab	MMA-DES-PRP-CO-DRG-1003
Scales	1:4000 (A3) 1:2000 (A1)
Original Size	A1



MT MESSENGER BYPASS

PROPERTY DESIGNATION PLANS SHEET 3

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-PRP-CO-DRG-1003
Revision	B

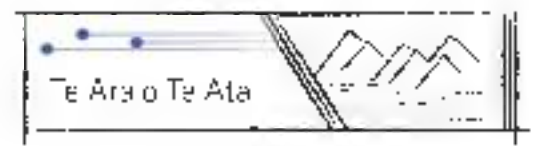


MMA-DES-PRP-C0-DRG-1003
MMA-DES-PRP-C0-DRG-1004

1:2000 @ A1
1:4000 @ A3
0 20 40 60 80 100 120 140 160 180 200 m

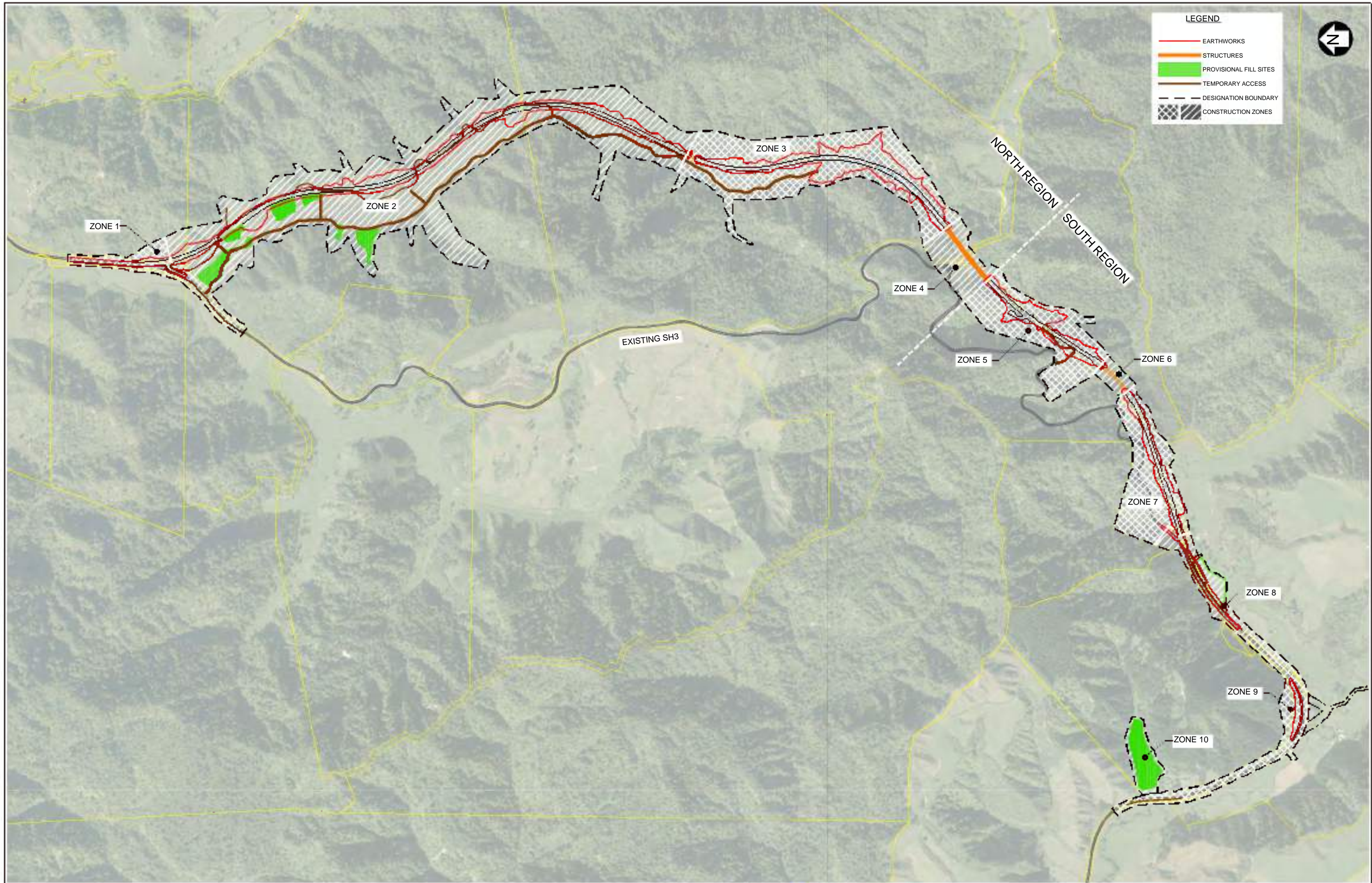
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
B	REVISED CONSENT ISSUE, DESIGNATION CHANGE TO AREA 8a	QDO'S	WHE	QDO'S	PR*	BSS*	03/07/2020
A	FOR CONSENT	QDO'S	WHE	QDO'S	PR	LG	14/11/2017

Tab	MMA-DES-PRP-C0-DRG-1004
Scales	1:4000 (A3) 1:2000 (A1)
Original Size	A1



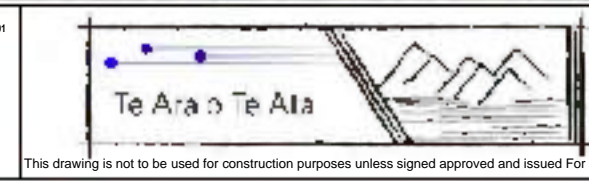
MT MESSENGER BYPASS
PROPERTY DESIGNATION PLANS
SHEET 4

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-PRP-C0-DRG-1004
Revision	B



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	JJS	QDO'S	QDO'S	SPP*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	SPP	HM	BSS	17/05/2019
B	BRIDGE ADDED IN ZONE 3, FILL SITE REMOVED FROM ZONE 7	QDO'S	GGC	SPP	HM	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	SPP	HM	LG	14/11/2017

Tab	MMA-DES-CON-C0-DRG-1001
Scales	NOT TO SCALE
Original Size	A1

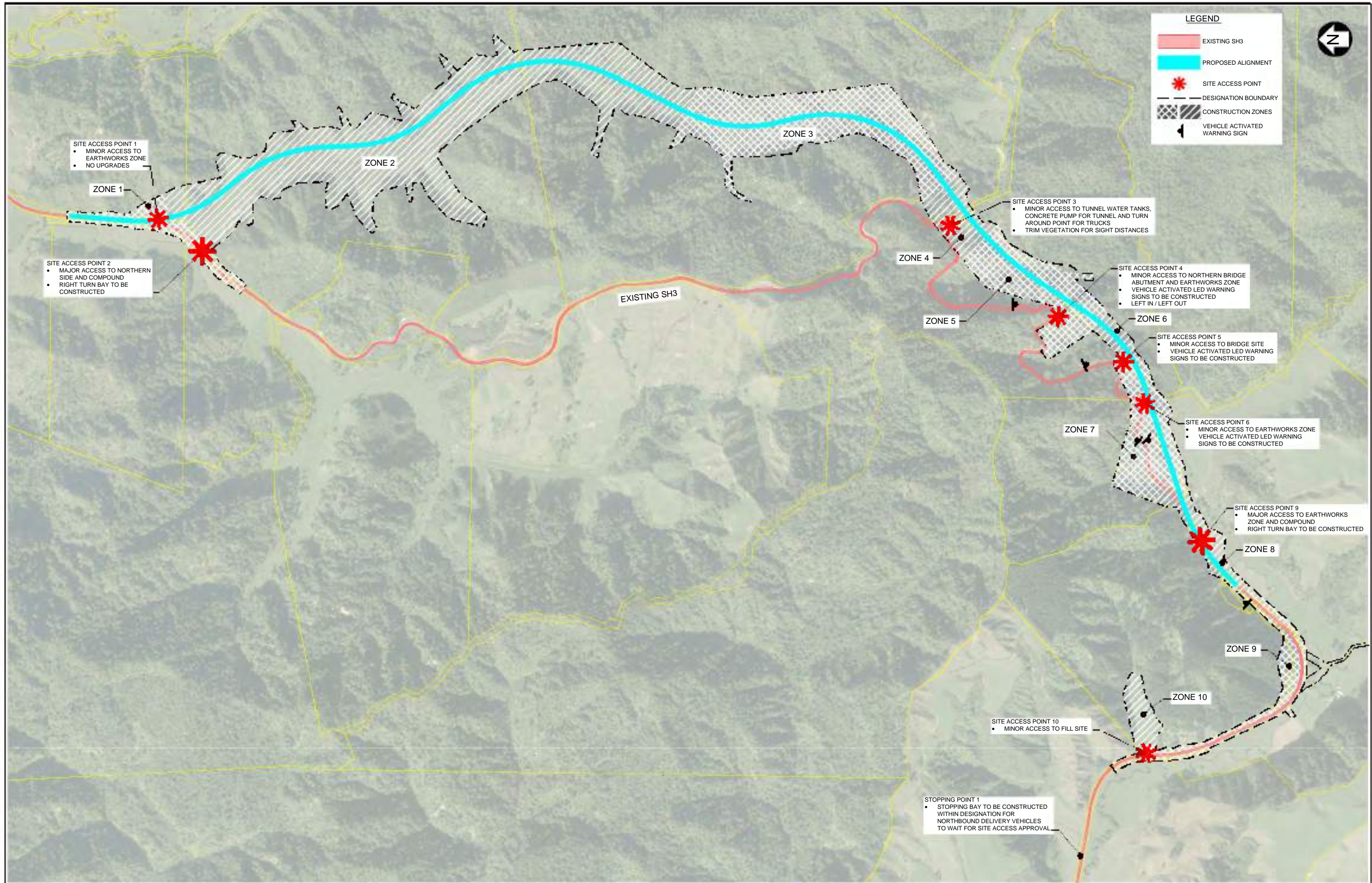


Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-CON-C0-DRG-1001
Revision	D

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-CON-C0-DRG-1001
Revision	D

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Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
A	FOR CONSENT	QDO'S	WHE	RSG	HM	LG	14/11/2017
B	MINOR AMENDMENTS TO LABELS	QDO'S	WHE	RSG	HM	LG	24/05/2018
C	SITE ACCESS POINTS 7 AND 8 REMOVED	QDO'S	WHE	RSG	HM	LJG	16/07/2018
D	UPDATED CONSENT ISSUE	QDO'S	WHE	RSG	HM	BSS	17/05/2019
E	REVISED CONSENT ISSUE	JJS	QDO'S	RSG	SPP*	BSS*	03/07/2020

Tab
MMA-DES-CON-C0-DRG-1010

Scales
NOT TO SCALE

Original Size
A1

This drawing is not to be used for construction purposes unless signed approved and issued For Construction

MT MESSENGER BYPASS

CONSTRUCTION SITE ACCESS POINTS

Approved
B. SYMMANS

Status
FOR CONSENT

Drawing Number
MMA-DES-CON-C0-DRG-1010

Revision
E

NOTES

1. STAGING EXTENTS ARE INDICATIVE ONLY.

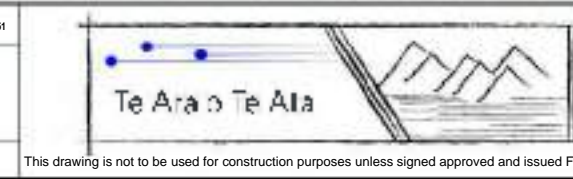
LEGEND

- ACCESS AND ESTABLISHMENT
- CONSTRUCTION WORKS
- ACCESS ROAD/CONSTRUCTION FOOTPRINT REMEDIATION
- WORKS COMPLETE AND STABILISED
- PAVEMENT FORMATION AND ROAD FURNITURE
- WORKS NOT YET COMPLETED/COMMENCED
- DESIGNATION BOUNDARY



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	SPP*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	SPP	HM	BSS	17/05/2019
B	BRIDGE ADDED IN ZONE 3, FIL SITE REMOVED FROM ZONE 7	QDO'S	GGC	SPP	HM	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	SPP	HM	LJG	14/11/2017

Tab	MMA-DES-CON-C0-DRG-1051
Scales	NOT TO SCALE
Original Size	A1



MT MESSENGER BYPASS

CONSTRUCTION

STAGE 1 - APPROX. 6 MONTHS

ACCESS AND ESTABLISHMENT

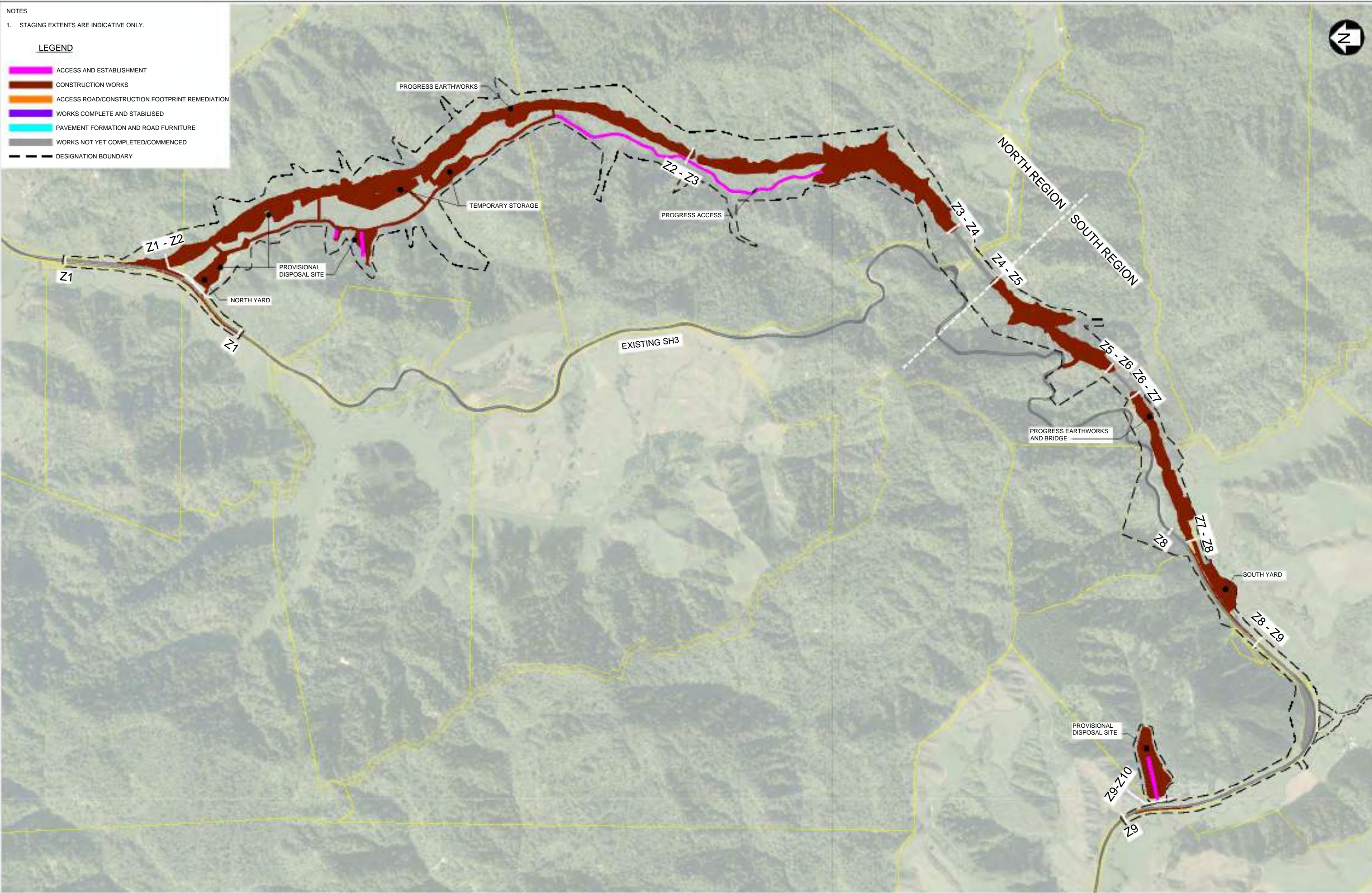
Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-CON-C0-DRG-1051
Revision	D

NOTES

1. STAGING EXTENTS ARE INDICATIVE ONLY.

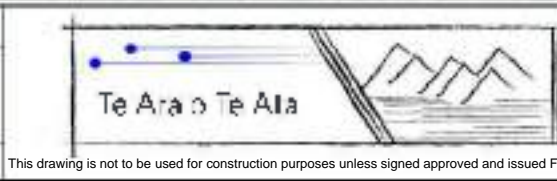
LEGEND

- ACCESS AND ESTABLISHMENT
- CONSTRUCTION WORKS
- ACCESS ROAD/CONSTRUCTION FOOTPRINT REMEDIATION
- WORKS COMPLETE AND STABILISED
- PAVEMENT FORMATION AND ROAD FURNITURE
- WORKS NOT YET COMPLETED/COMMENCED
- DESIGNATION BOUNDARY



Rev	Revision Description	Drawn	Checked	Designed	Checked	Approved	Date
D	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	SPP*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	SPP	HM	BSS	17/05/2019
B	BRIDGE ADDED IN ZONE 3, FIL SITE REMOVED FROM ZONE 7	QDO'S	GGC	SPP	HM	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	SPP	HM	LJG	14/11/2017

Tab	MMA-DES-CON-C0-DRG-1052
Scales	NOT TO SCALE
Original Size	A1



MT MESSENGER BYPASS

CONSTRUCTION

STAGE 2 - AT APPROX. 12 MONTHS

CLEARING EARTHWORKS AND BRIDGE

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-CON-C0-DRG-1052
Revision	D

NOTES

1. STAGING EXTENTS ARE INDICATIVE ONLY.

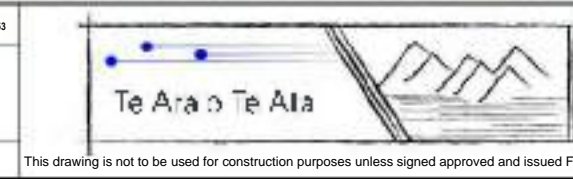
LEGEND

- ACCESS AND ESTABLISHMENT
- CONSTRUCTION WORKS
- ACCESS ROAD/CONSTRUCTION FOOTPRINT REMEDIATION
- WORKS COMPLETE AND STABILISED
- PAVEMENT FORMATION AND ROAD FURNITURE
- WORKS NOT YET COMPLETED/COMMENCED
- DESIGNATION BOUNDARY



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
D	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	SPP*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	SPP	HM	BSS	17/05/2019
B	BRIDGE ADDED IN ZONE 3, FIL SITE REMOVED FROM ZONE 7	QDO'S	GGC	SPP	HM	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	SPP	HM	LJG	14/11/2017

Tab	MMA-DES-CON-C0-DRG-1053
Scales	NOT TO SCALE
Original Size	A1



This drawing is not to be used for construction purposes unless signed approved and issued For Construction

MT MESSENGER BYPASS
CONSTRUCTION
STAGE 3 - BETWEEN 12 - 24 MONTHS
EARTHWORKS, TUNNEL AND BRIDGE

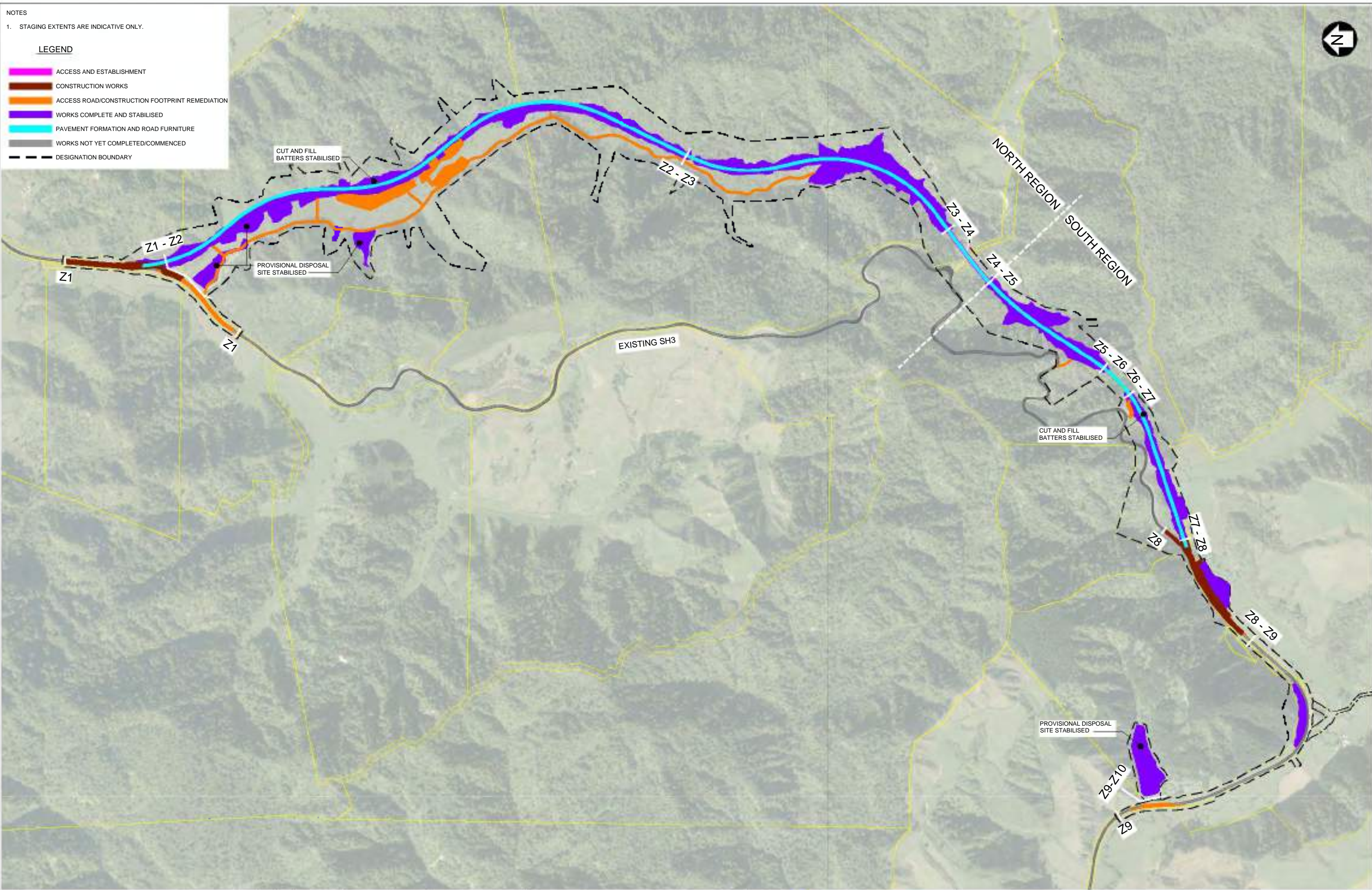
Approved
B. SYMMANS
 Status
FOR CONSENT
 Drawing Number
MMA-DES-CON-C0-DRG-1053
 Revision
D

NOTES

1. STAGING EXTENTS ARE INDICATIVE ONLY.

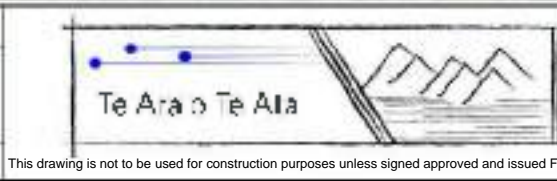
LEGEND

- ACCESS AND ESTABLISHMENT
- CONSTRUCTION WORKS
- ACCESS ROAD/CONSTRUCTION FOOTPRINT REMEDIATION
- WORKS COMPLETE AND STABILISED
- PAVEMENT FORMATION AND ROAD FURNITURE
- WORKS NOT YET COMPLETED/COMMENCED
- DESIGNATION BOUNDARY



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
D	REVISED CONSENT ISSUE	JJS	QDO'S	SPP	SPP*	BSS*	03/07/2020
C	UPDATED CONSENT ISSUE	QDO'S	GGC*	SPP	HM	BSS	17/05/2019
B	BRIDGE ADDED IN ZONE 3, FIL SITE REMOVED FROM ZONE 7	QDO'S	GGC	SPP	HM	BSS	26/07/2018
A	FOR CONSENT	QDO'S	WHE	SPP	HM	LJG	14/11/2017

Tab	MMA-DES-CON-C0-DRG-1054
Scales	NOT TO SCALE
Original Size	A1



MT MESSENGER BYPASS
CONSTRUCTION
STAGE 4 - AT APPROX. 30 MONTHS
STABILISATION

Approved	B. SYMMANS
Status	FOR CONSENT
Drawing Number	MMA-DES-CON-C0-DRG-1054
Revision	D