

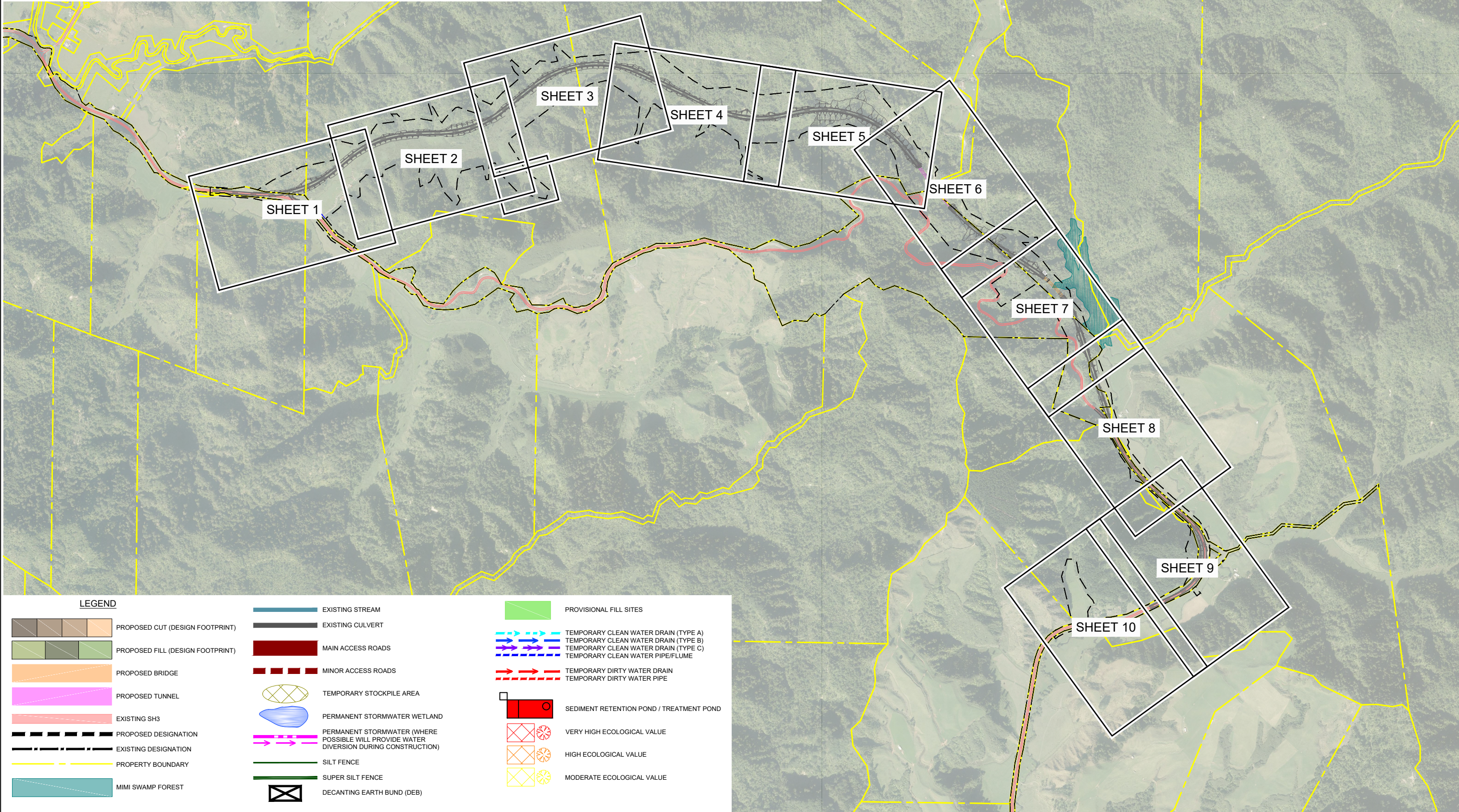
CONCEPTUAL PLANS DESCRIBE EROSION AND SEDIMENT CONTROL FOR MAIN CONSTRUCTION WORKS ONLY. PLANS TO BE READ IN CONJUNCTION WITH THE CONSTRUCTION WATER MANAGEMENT PLAN (CWMP)

NOTES

1. SILT FENCE AND SUPERSILT FENCE ARE THE PRIMARY TREATMENT FOR LINEAR SHAPING EARTHWORKS.
2. SEDIMENT RETENTION PONDS ARE THE PRIMARY TREATMENT FOR CUT AND FILL EARTHWORKS.
3. ALL SEDIMENT RETENTION PONDS DISCHARGE TO LAND A MINIMUM DISTANCE OF 5m FROM AN ACTIVE STREAM CHANNEL WHERE PRACTICABLE.

4. 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.
5. SILT FENCE WILL BE INSTALLED AROUND ALL TEMPORARY STOCKPILE SITES.
6. ACCESS ROADS CONSTRUCTED USING CUT AND COVER METHODOLOGIES. DECANTING EARTH BUNDS (DEB) TREATING ACCESS ROAD SURFACE.
7. REFER TO DRAWING MMA-DES-ESC-C0-DRG-4006 FOR TYPE A, B AND C CLEAN WATER DRAIN DETAILS.
8. 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.

9. PROGRESSIVE STABILISATION IN ACCORDANCE WITH THE CONSTRUCTION WATER MANAGEMENT PLAN TO APPLY.
10. ADAPTIVE MONITORING IN ACCORDANCE WITH THE CONSTRUCTION WATER MANAGEMENT PLAN TO APPLY.
11. 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.
12. SELECTION OF STORAGE AND STOCKPILE LOCATIONS FOR LOGS AND WOODY MATERIAL SHALL BE IN ACCORDANCE WITH THE ECOLOGY AND LANDSCAPE MANAGEMENT PLAN.
13. 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

Tab	MMA-DES-ESC-C0-DRG-1000						
Scales	NOT TO SCALE						
Original Size	A1						
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
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

Te Ara o Te Ata

NZ TRANSPORT AGENCY
WAKA KOTAHĪ
Mt Messenger Bypass

MT MESSENGER BYPASS

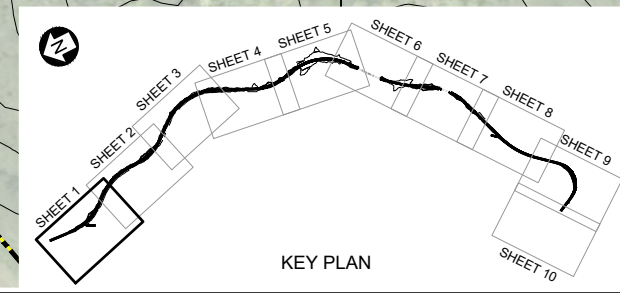
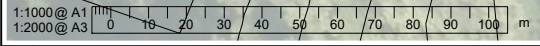
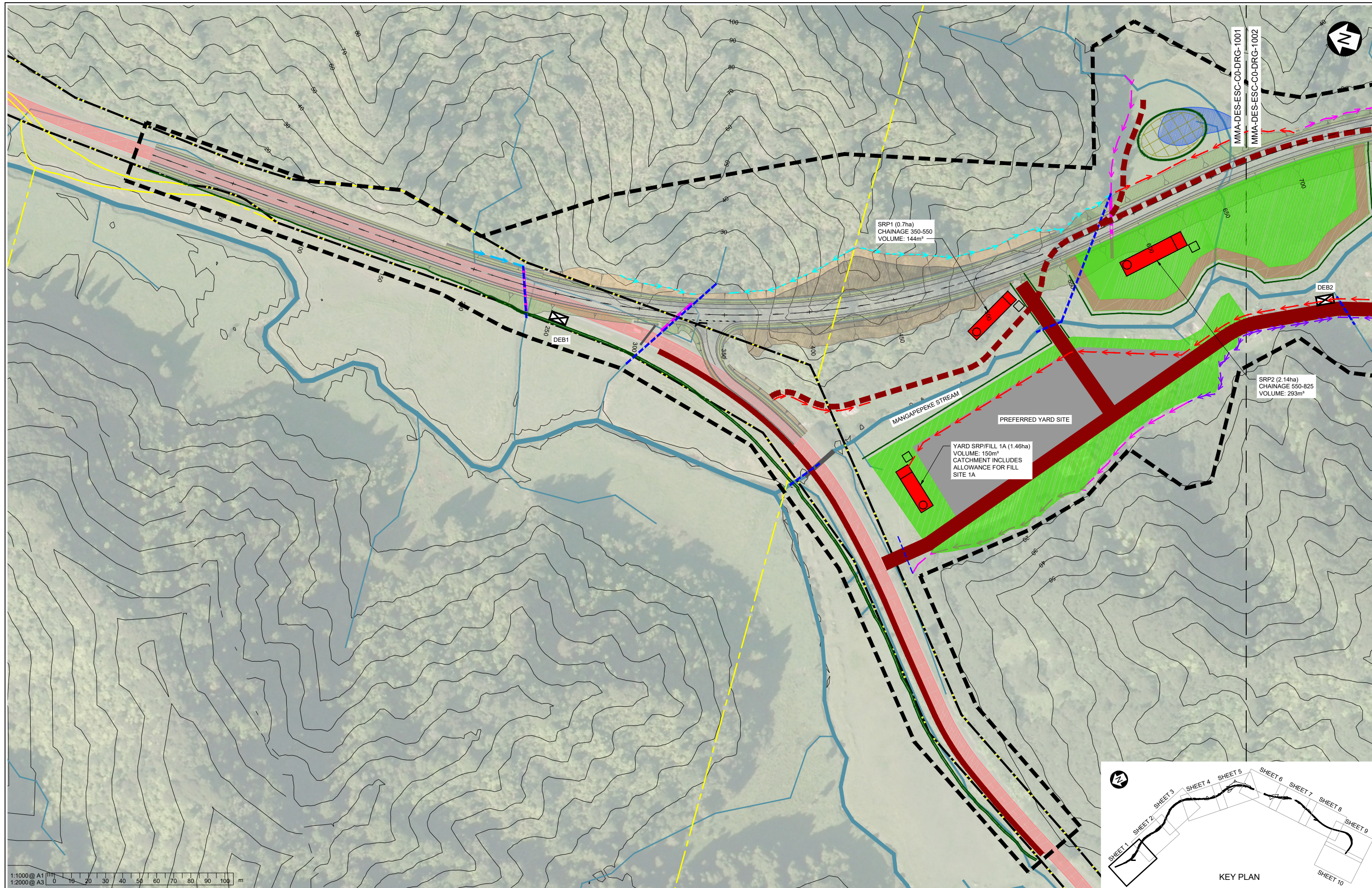
EROSION AND SEDIMENT CONTROL CONCEPTUAL PLANS FOR MAIN CONSTRUCTION WORKS - SHEET LAYOUT

Approved
D. KENDERDINE

Status
FOR CONSENT

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

Revision
B



Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date
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

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

Te Ara o Te Ata

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

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WAKA KOTAHĪ
Mt Messenger Bypass

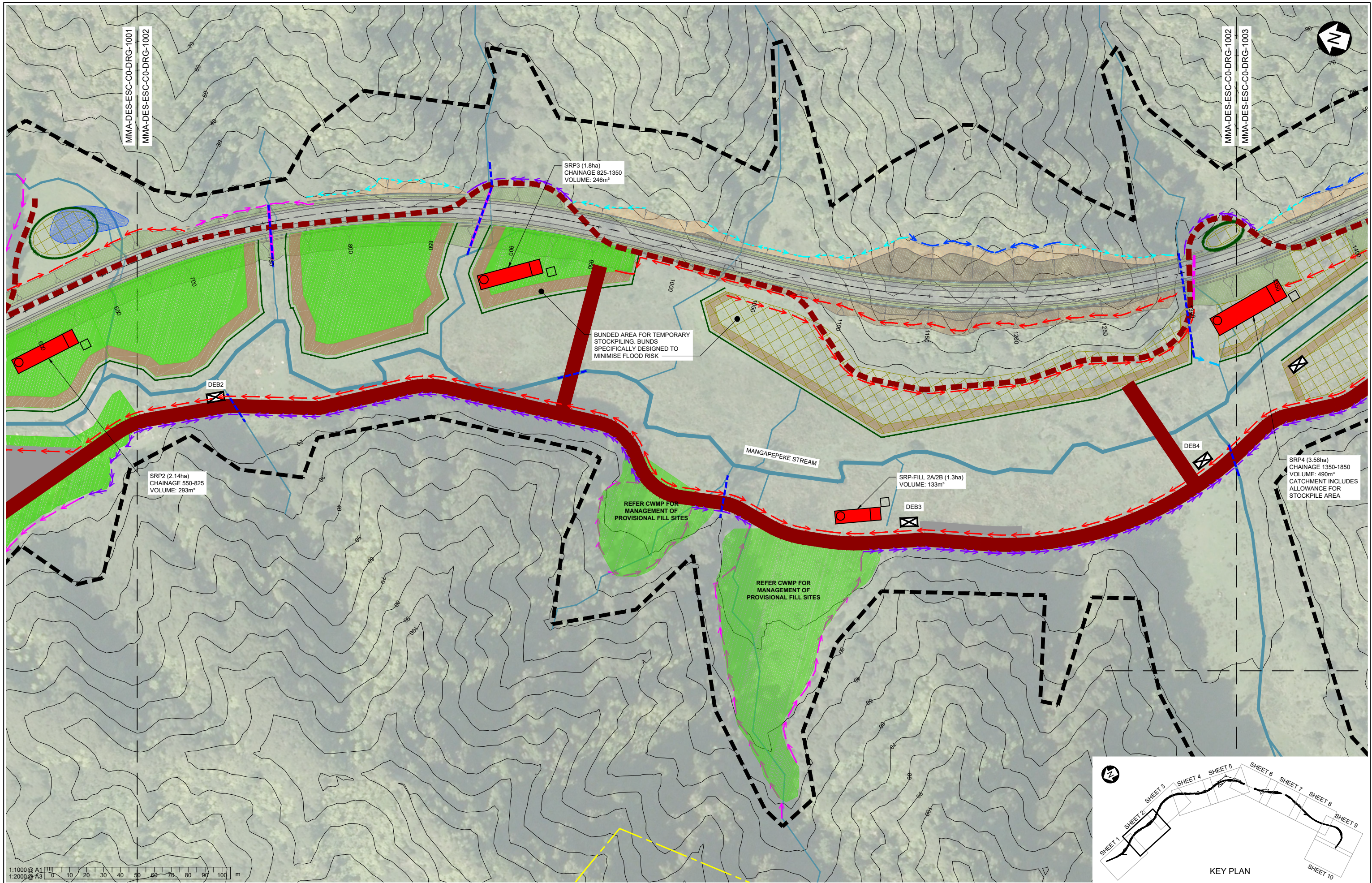
MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 1

Approved
D. KENDERDINE

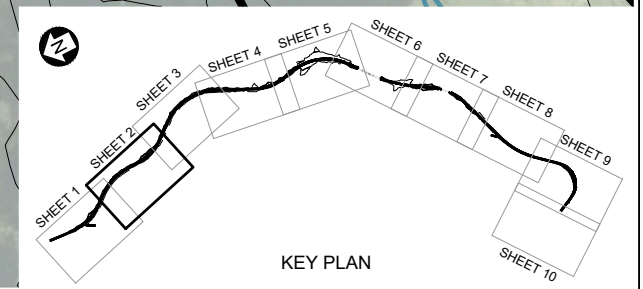
Status
FOR CONSENT

Drawing Number
MMA-DES-ESC-C0-DRG-1001

Revision
B

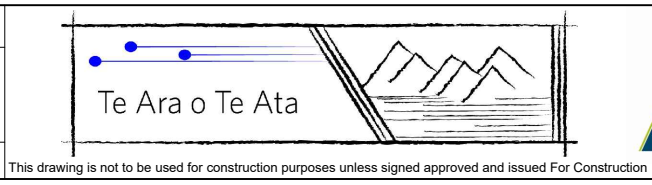


1:1000 @ A1
1:2000 @ A3



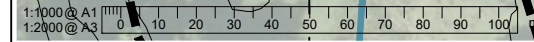
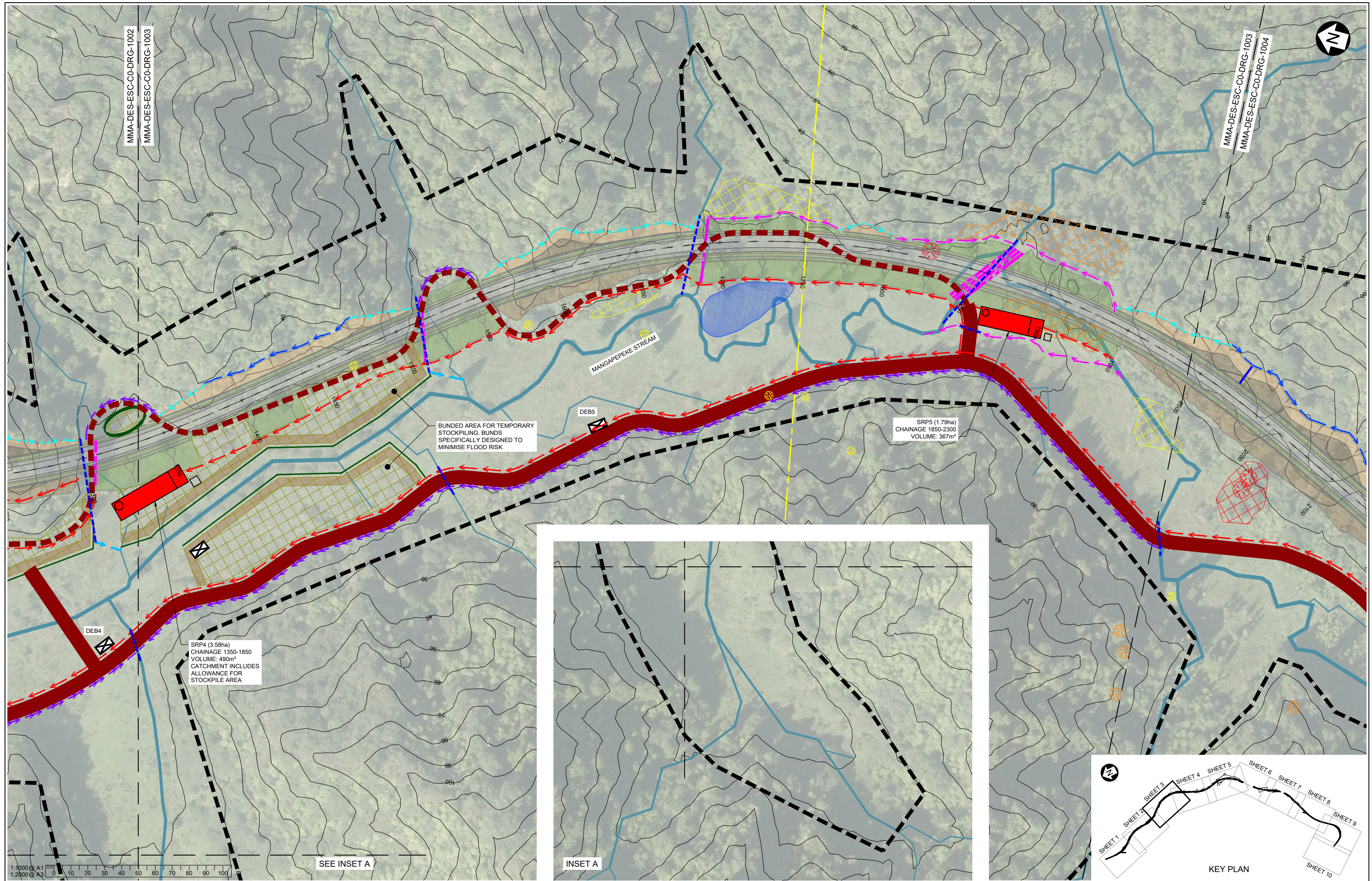
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B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

Tab	MMA-DES-ESC-C0-DRG-1002
Scales	1:2000 (A3) 1:1000 (A1)
Original Size	A1



MT MESSENGER BYPASS
EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 2

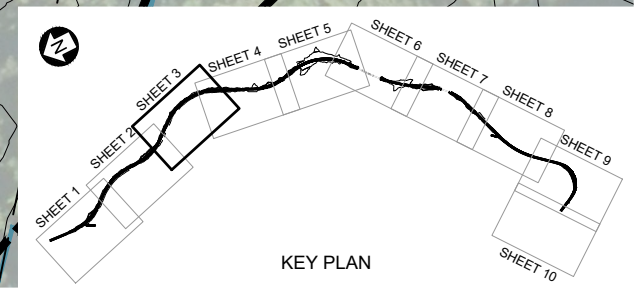
Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-1002
Revision	B



SEE INSET A



INSET A



KEY PLAN

Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date
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

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

Te Ara o Te Ata

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MT MESSENGER BYPASS

EROSION AND SEDIMENT CONTROL

CONCEPTUAL PLANS FOR MAIN

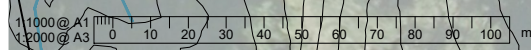
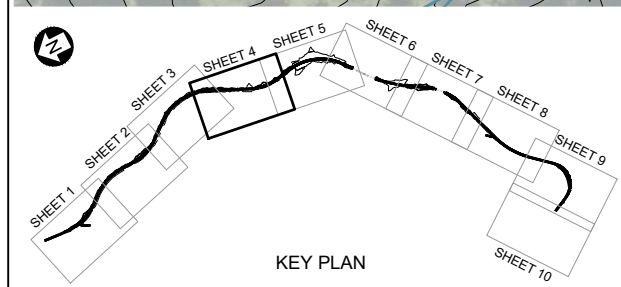
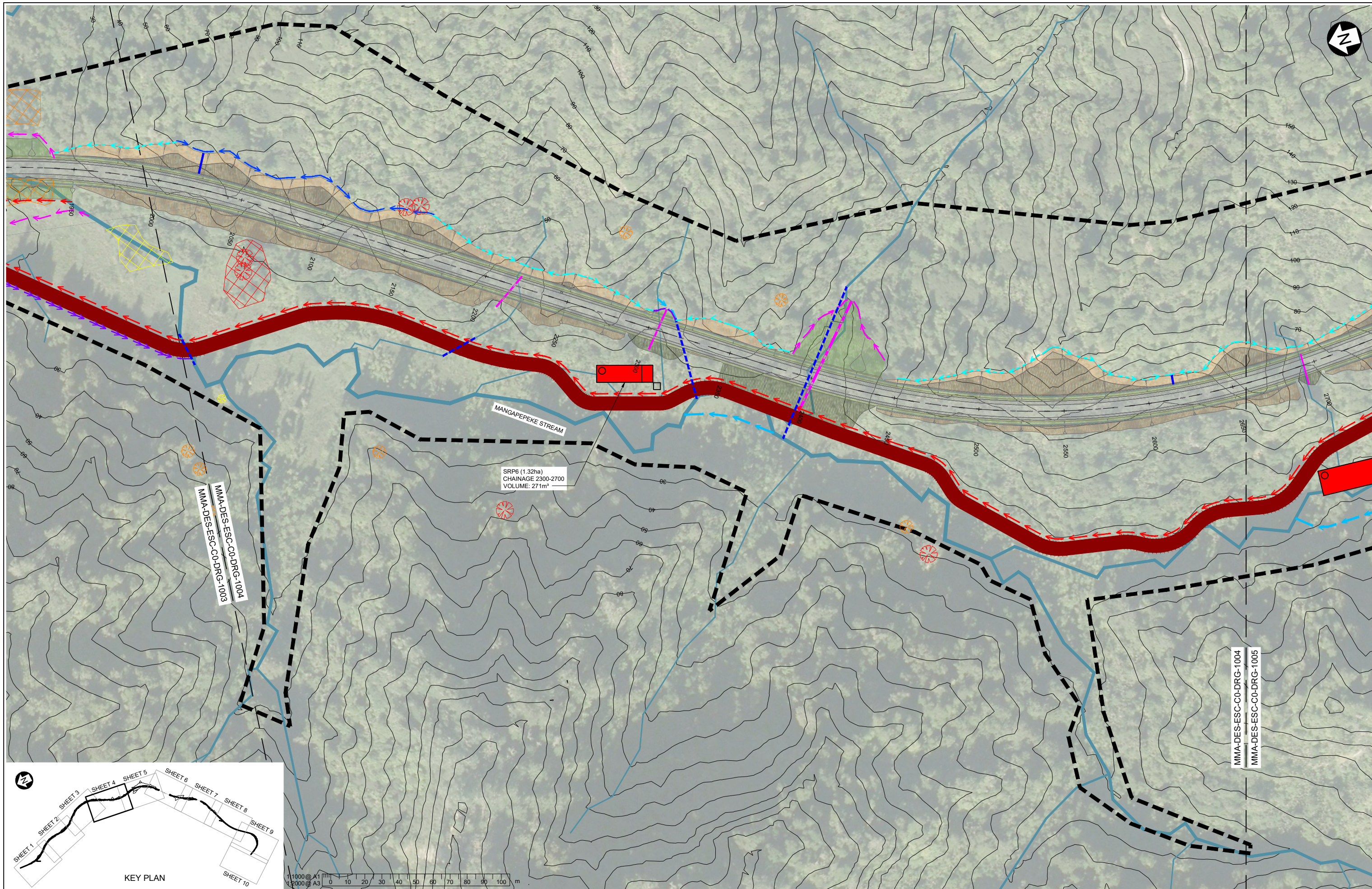
CONSTRUCTION WORKS - SHEET 3

Approved
D. KENDERDINE

Status
FOR CONSENT

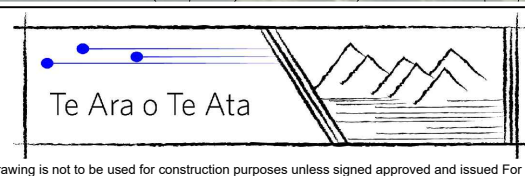
Drawing Number
MMA-DES-ESC-CO-DRG-1003

Revision
B



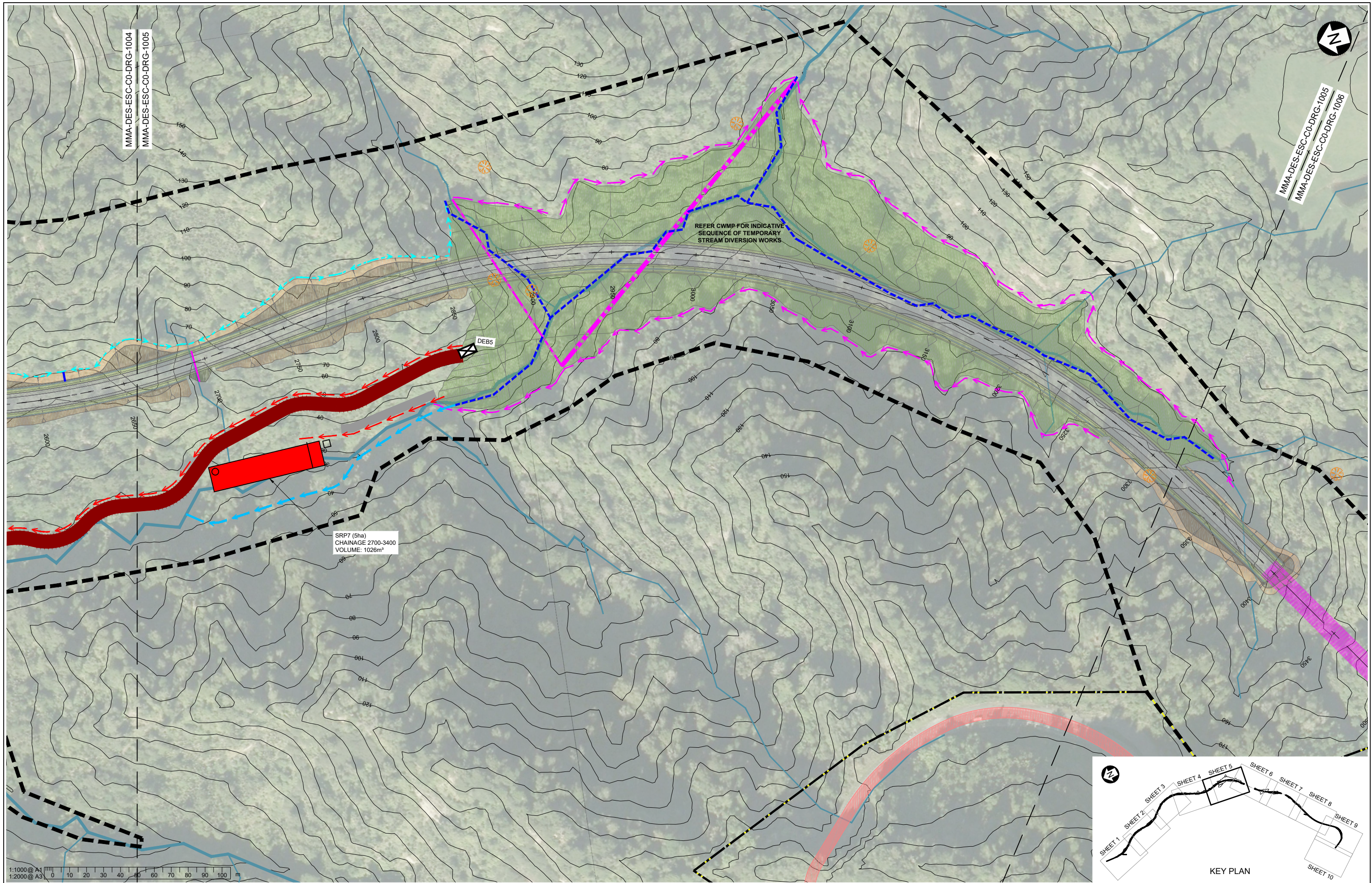
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B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

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



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

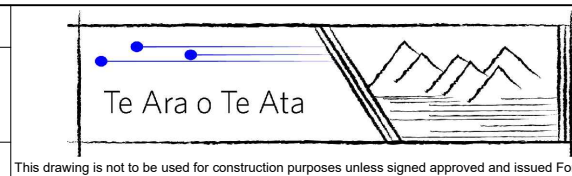
Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-1004
Revision	B



1:1000 @ A1
1:2000 @ A3

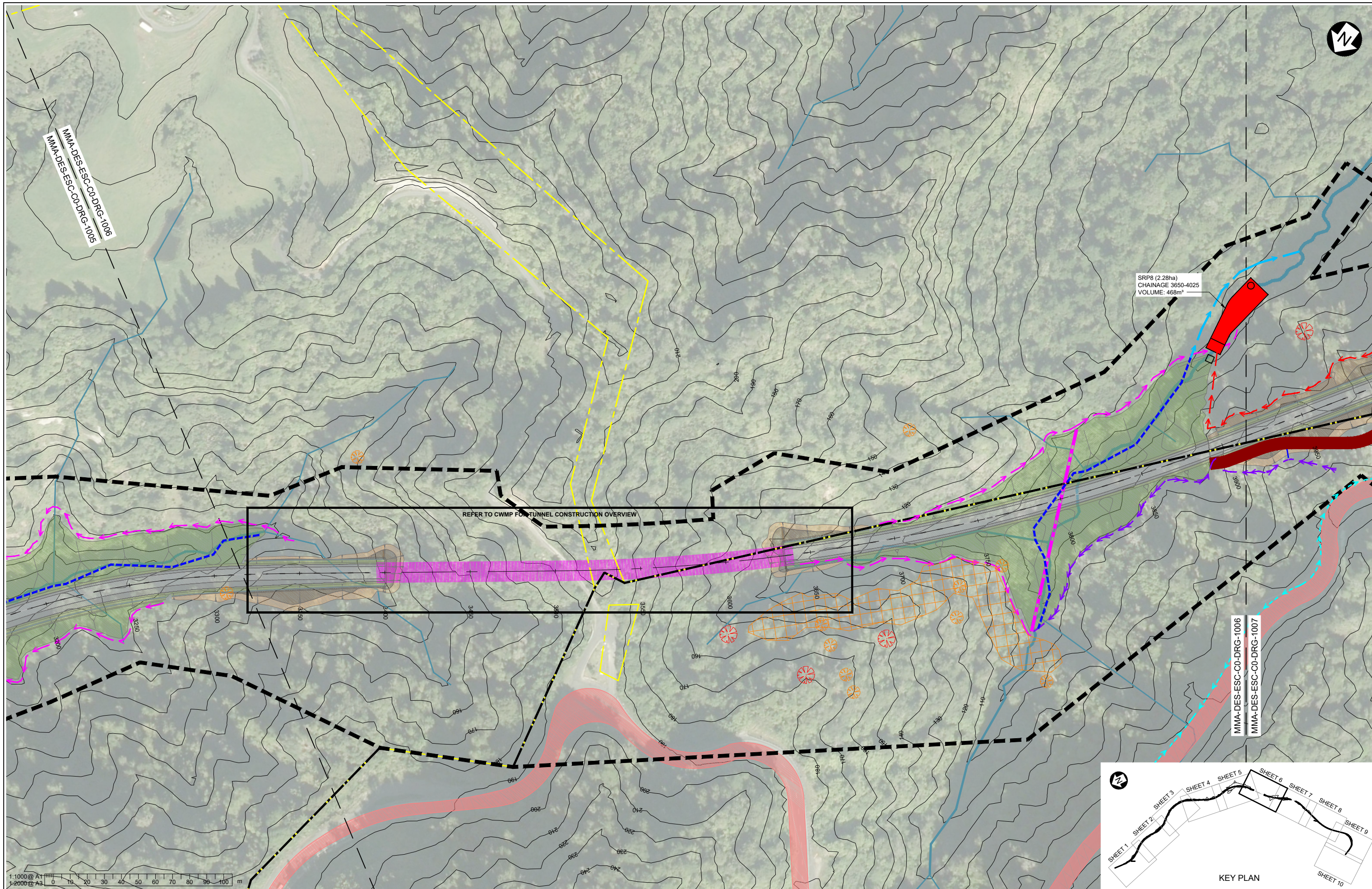
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B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

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



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

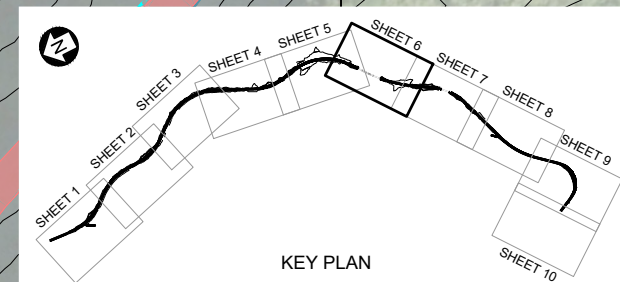
Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-1005
Revision	B



SRP8 (2.28ha)
CHAINAGE 3650-4025
VOLUME: 468m³

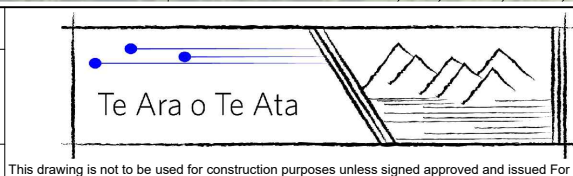
REFER TO CWMP FOR TUNNEL CONSTRUCTION OVERVIEW

MMA-DES-ESC-C0-DRG-1006
MMA-DES-ESC-C0-DRG-1007



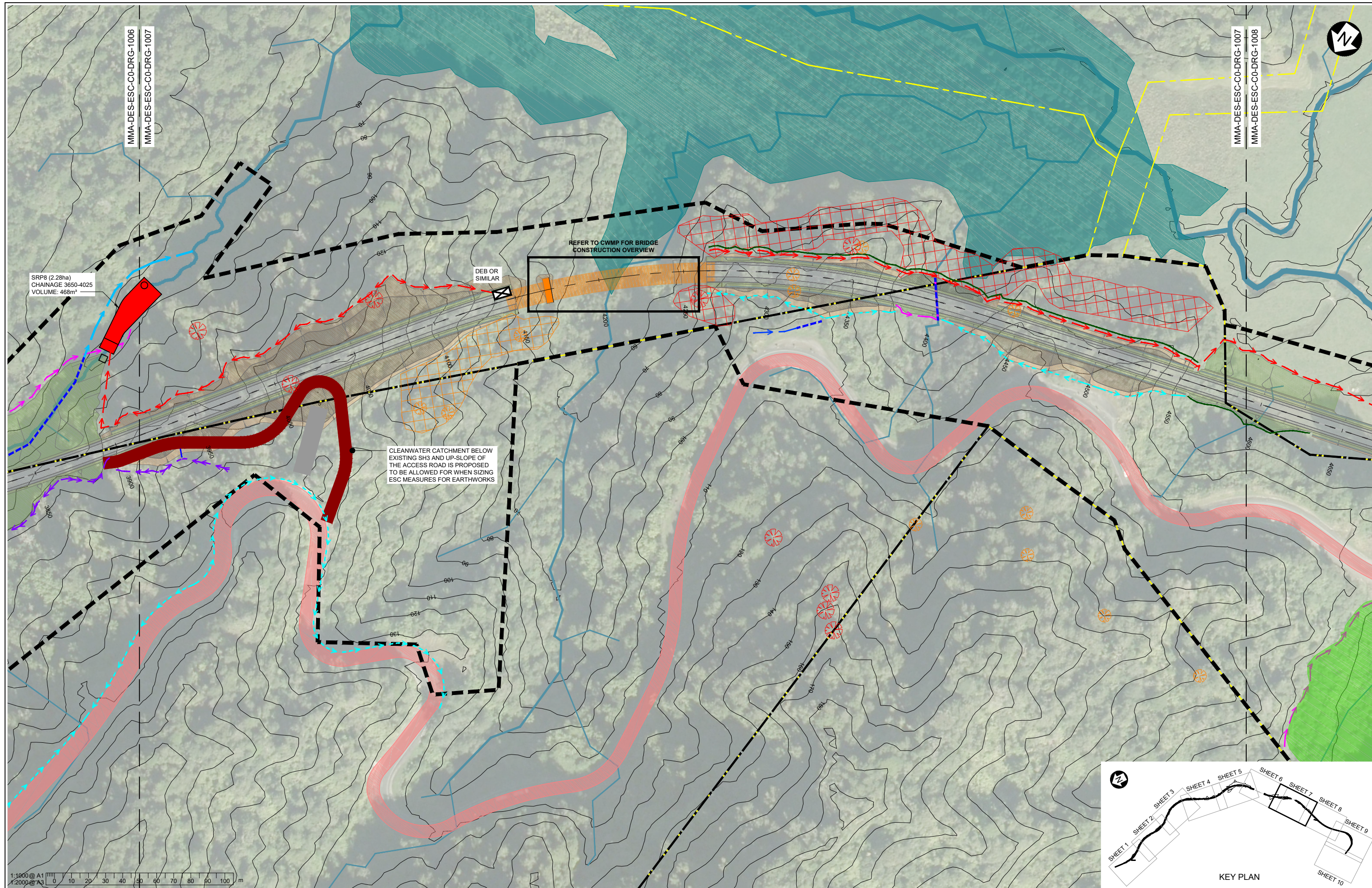
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B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

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	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-1006
Revision	B



SRP8 (2.28ha)
CHAINAGE 3650-4025
VOLUME: 468m³

MMA-DES-ESC-C0-DRG-1006
MMA-DES-ESC-C0-DRG-1007

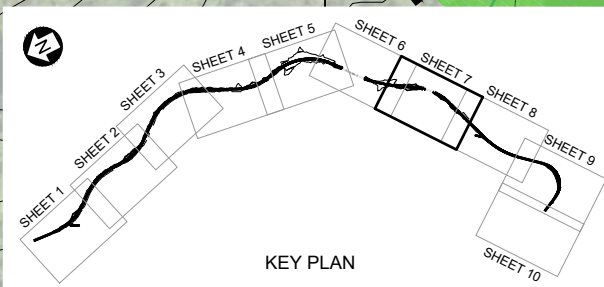
MMA-DES-ESC-C0-DRG-1007
MMA-DES-ESC-C0-DRG-1008

REFER TO CWMP FOR BRIDGE
CONSTRUCTION OVERVIEW

DEB OR
SIMILAR

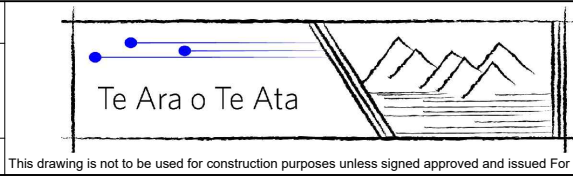
CLEANWATER CATCHMENT BELOW
EXISTING SH3 AND UP-SLOPE OF
THE ACCESS ROAD IS PROPOSED
TO BE ALLOWED FOR WHEN SIZING
ESC MEASURES FOR EARTHWORKS

1:1000 @ A1
1:2000 @ A3



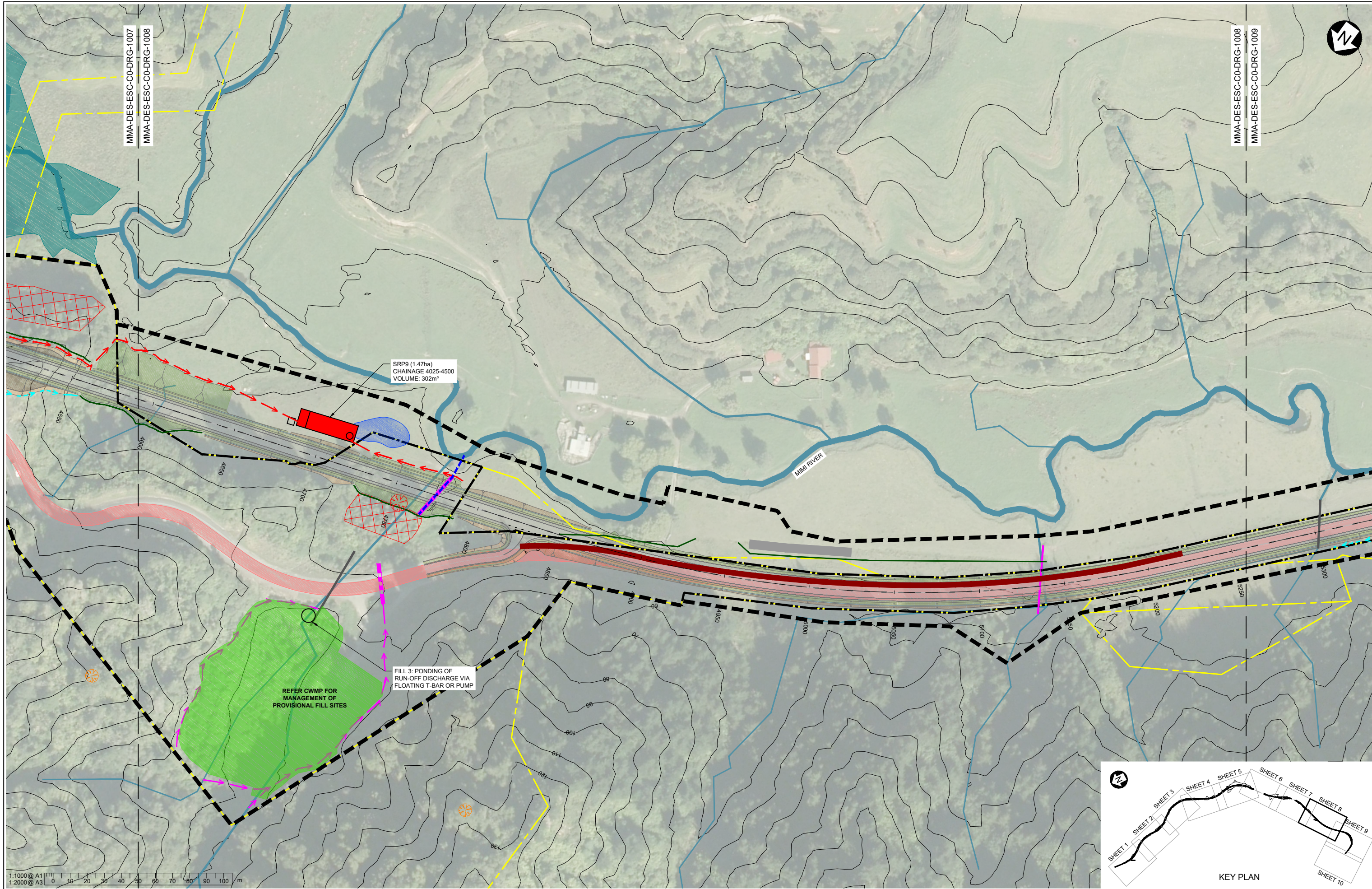
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

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



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

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



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

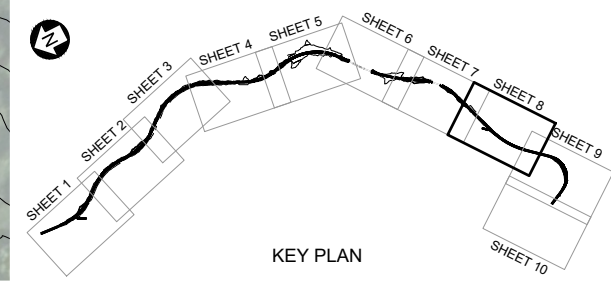
MMA-DES-ESC-C0-DRG-1008
MMA-DES-ESC-C0-DRG-1009

SRP9 (1.47ha)
CHAINAGE 4025-4500
VOLUME: 302m³

FILL 3: PONDING OF
RUN-OFF DISCHARGE VIA
FLOATING T-BAR OR PUMP

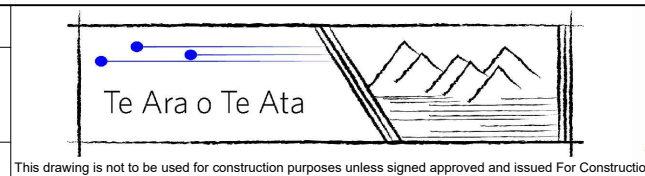
REFER CWMP FOR
MANAGEMENT OF
PROVISIONAL FILL SITES

1:1000 @ A1
1:2000 @ A3



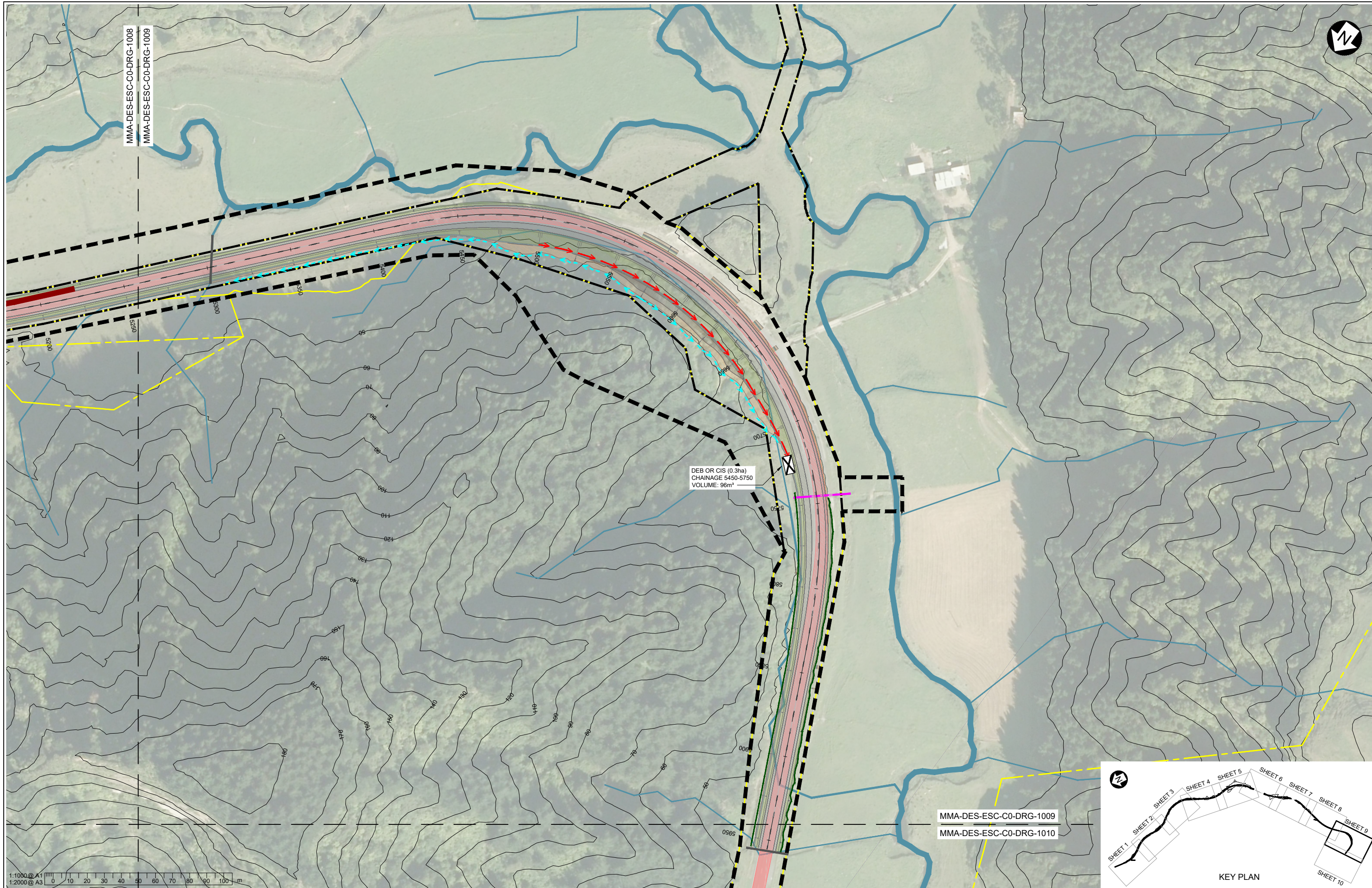
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
B	FOR CONSENT	QDO'S	WHE	SPP	GR	LG	14/11/2017
A	PRELIMINARY DRAFT - FOR EXTERNAL REVIEW	QDO'S	WHE	SPP	GR	KJB	06/10/2017

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



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

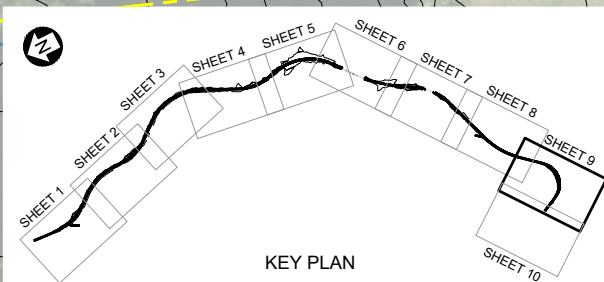
Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-1008
Revision	B



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

DEB OR CIS (0.3ha)
CHAINAGE 5450-5750
VOLUME: 96m³

MMA-DES-ESC-C0-DRG-1009
MMA-DES-ESC-C0-DRG-1010



1:1000 @ A1
1:2000 @ A3

Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date
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

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

Te Ara o Te Ata

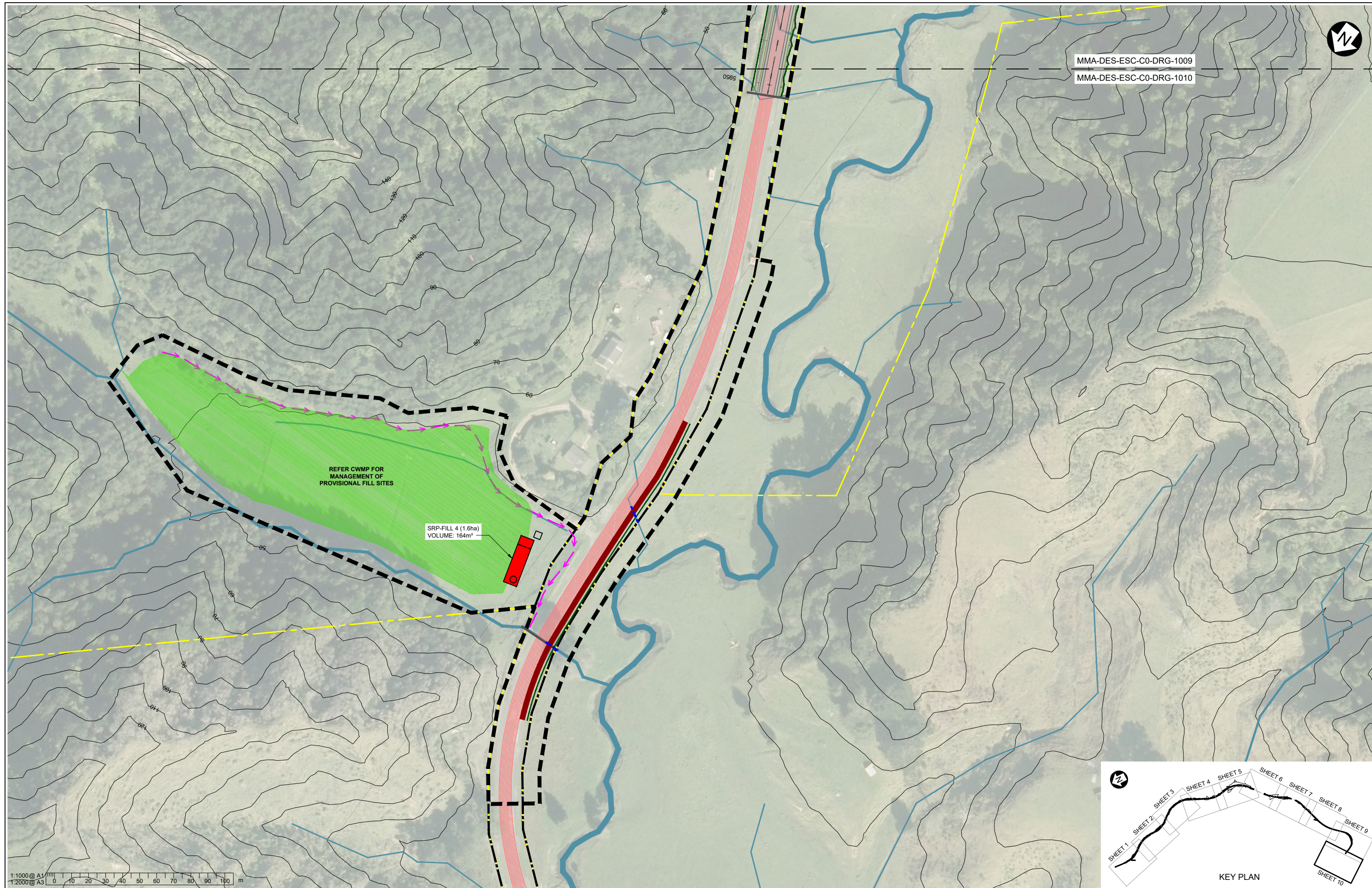
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EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 9

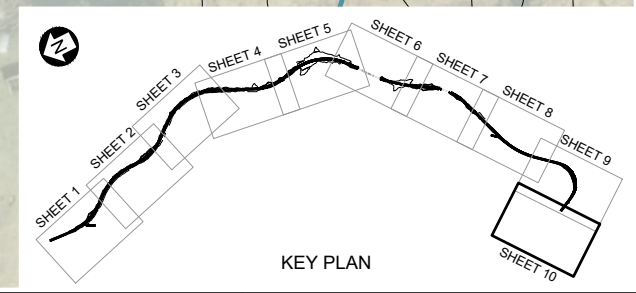
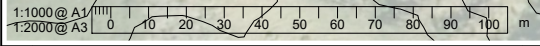
Approved	D. KENDERDINE
Status	FOR CONSENT
Drawing Number	MMA-DES-ESC-C0-DRG-1009
Revision	B



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: 164m³



Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date
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

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

Te Ara o Te Ata

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MT MESSENGER BYPASS

**EROSION AND SEDIMENT CONTROL
CONCEPTUAL PLANS FOR MAIN
CONSTRUCTION WORKS - SHEET 10**

Approved
D. KENDERDINE

Status
FOR CONSENT

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

Revision
B