

C	RE-SUBMISSION	HS	-	-	22/02/25
B	MODELLING UPDATE	HS	-	-	21/07/25
A	FIRST ISSUE	HS	-	-	16/01/2025
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER
FLOOD ASSESSMENT
1% AEP POST VS PRE DEVELOPMENT
COMPARISON PLAN

PURPOSE OF ISSUE:
FOR CONSENT

SCALE:
1:10,000

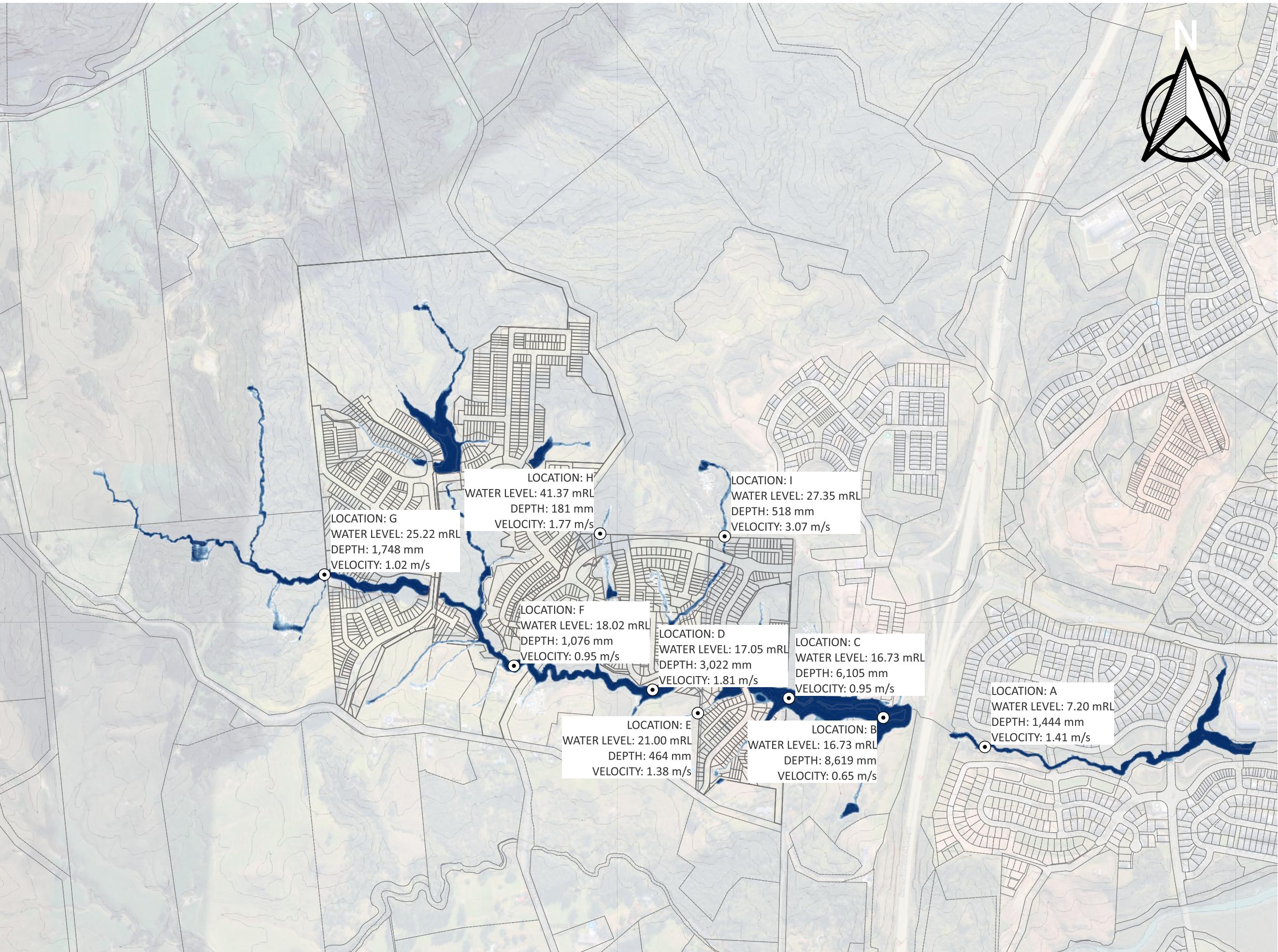
DRAWING NO.: 3725-0-4502

REV: C

NOTES:

1. SCENARIO ID IS D_MP38CC001AEPPTWBASE_PDT.
2. 1% AEP SCENARIO, WITH 3.8 DEGREE CLIMATE CHANGE, LAND USE IS MAXIMUM PROBABLE DEVELOPMENT WITHIN THE DELMORE SITE, EXISTING OUTSIDE THE DEVELOPMENT SITE.
3. COMPARISON AGAINST EXISTING DEVELOPMENT (EXD38CC001AEPPTWBASE_EXT, SCENARIO 8) IS SHOWN ON PLAN 4503.
4. CONTOUR INTERVAL IS 2.5m

LEGEND:



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

C	RE-SUBMISSION	HS	-	-	22/12/25
B	MODELLING UPDATE	HS	-	-	27/01/25
A	FIRST ISSUE	HS	-	-	16/01/2025
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER
FLOOD ASSESSMENT
1% AEP POST-DEVELOPMENT
FLOOD PLAIN PLAN (3.8D CC)

PURPOSE OF ISSUE:
FOR CONSENT

SCALE:
1:10,000

DRAWING NO.: 3725-0-4503
REV: C

NOTES:
1. SCENARIO ID ISEXD38CC001AEP7WB BASE_EXT
2. 1% AEP SCENARIO, WITH 3.8 DEGREE CLIMATE CHANGE,
LAND USE IS CURRENT (PRE-EXISTING).
4. CONTOUR INTERVAL IS 2.5m

LEGEND:



LOCATION: G
WATER LEVEL: 25.20 mRL
DEPTH: 1,723 mm
VELOCITY: 1.10 m/s

LOCATION: H
WATER LEVEL: 41.37 mRL
DEPTH: 183 mm
VELOCITY: 1.76 m/s

LOCATION: F
WATER LEVEL: 18.13 mRL
DEPTH: 1,183 mm
VELOCITY: 1.38 m/s

LOCATION: E
WATER LEVEL: 21.62 mRL
DEPTH: 1,091 mm
VELOCITY: 0.35 m/s

LOCATION: D
WATER LEVEL: 17.03 mRL
DEPTH: 3,008 mm
VELOCITY: 1.36 m/s

LOCATION: C
WATER LEVEL: 17.02 mRL
DEPTH: 6,397 mm
VELOCITY: 0.94 m/s

LOCATION: I
WATER LEVEL: 27.34 mRL
DEPTH: 517 mm
VELOCITY: 3.07 m/s

LOCATION: B
WATER LEVEL: 17.02 mRL
DEPTH: 8,912 mm
VELOCITY: 0.64 m/s

LOCATION: A
WATER LEVEL: 7.21 mRL
DEPTH: 1,449 mm
VELOCITY: 1.41 m/s

MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE:

FOR CONSENT

SCALE:

1:10,000

DRAWING NO.

3725-0-4504

REV:

C

CLIENT:

PROJECT:

TITLE:

DELMORE

STORMWATER
FLOOD ASSESSMENT
1% AEP PRE-DEVELOPMENT
FLOOD PLAIN PLAN (3.8D CC)

VINEWAY LIMITED

53A, 53B & 55 RUSSELL ROAD
OREWA



MCKENZIE & CO.

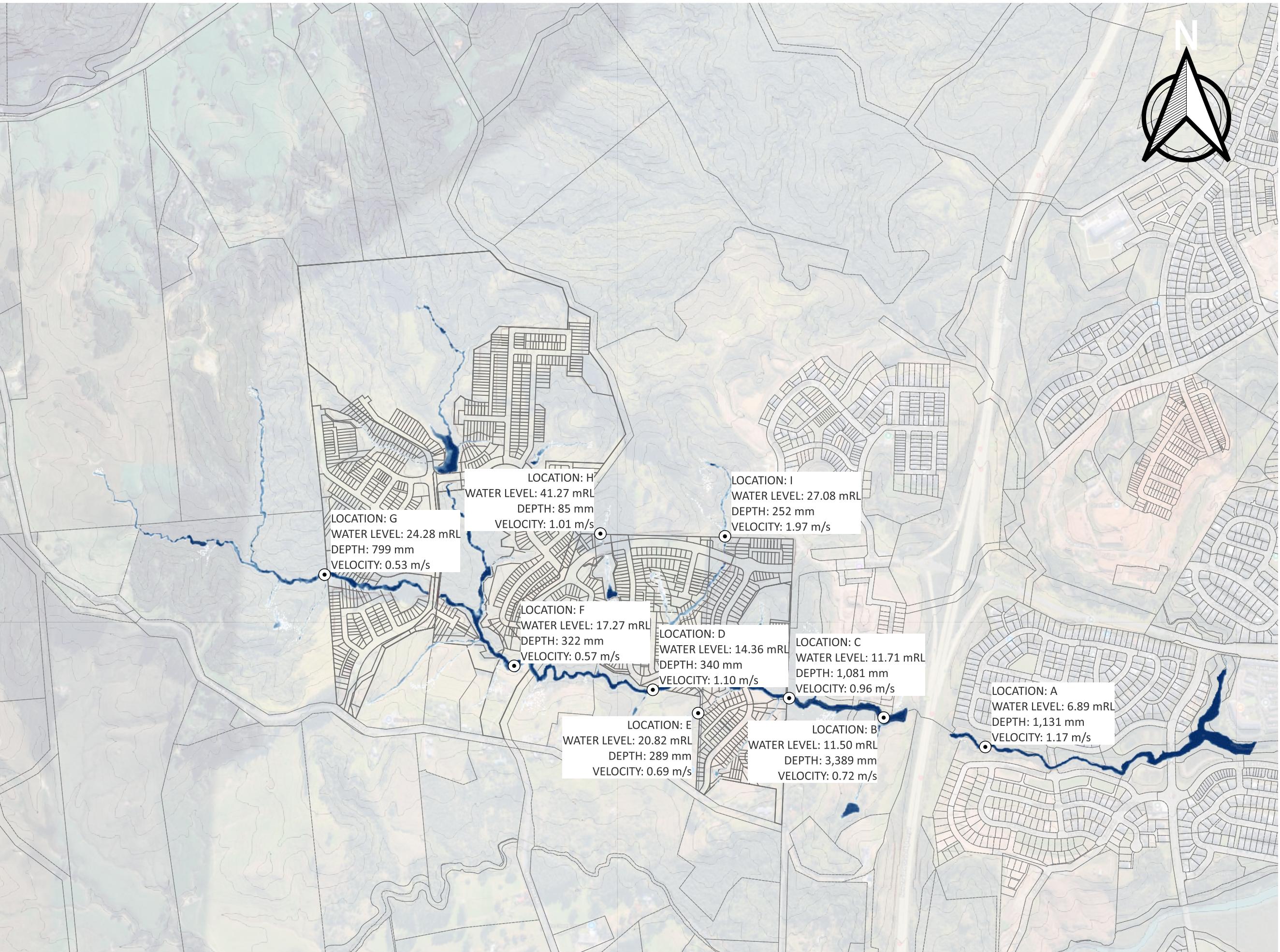
PLOT DATE: ----

WWW.MCKENZIEANDCO.CO.NZ

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NOTES:

1. SCENARIO ID IS D_MP21CC050AEPTWABASE_PDT
2. 50% AEP SCENARIO, WITH 2.1 DEGREE CLIMATE CHANGE, LAND USE IS MAXIMUM PROBABLE DEVELOPMENT WITHIN THE DELMORE SITE, EXISTING OUTSIDE THE DEVELOPMENT SITE.
3. CONTOUR INTERVAL IS 2.5m



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE:
FOR DISCUSSION ONLY

SCALE:
1:10,000

DRAWING NO.: 3725-0-4506

REV: C

C	RE-SUBMISSION	HS	-	-	22/12/25
B	MODELLING UPDATE	HS	-	-	21/07/25
A	FIRST ISSUE	HS	-	-	16/01/2025
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

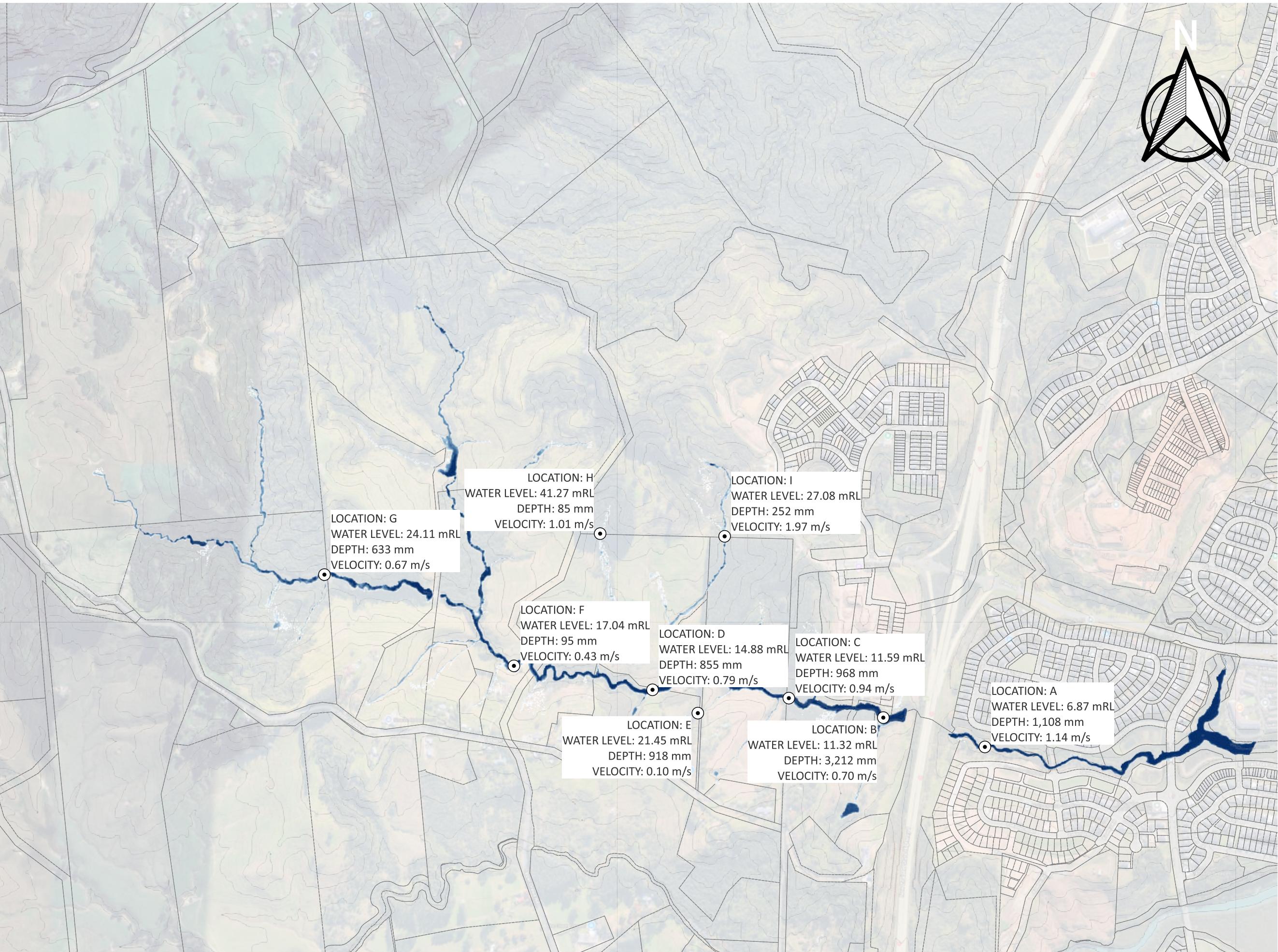
TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER
FLOOD ASSESSMENT
50% AEP POST-DEVELOPMENT
FLOOD PLAIN PLAN (2.1D CC)

NOTES:

1. SCENARIO ID IS EXD21CC050AEPWTWABASE_EXT
2. 50% AEP SCENARIO, WITH 2.1 DEGREE CLIMATE CHANGE, LAND USE IS CURRENT (PRE-EXISTING).
3. CONTOUR INTERVAL IS 2.5m



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

C	RE-SUBMISSION	HS	-	-	22/12/25
B	MODELLING UPDATE	HS	-	-	21/07/25
A	FIRST ISSUE	HS	-	-	16/01/2025
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

PURPOSE OF ISSUE:

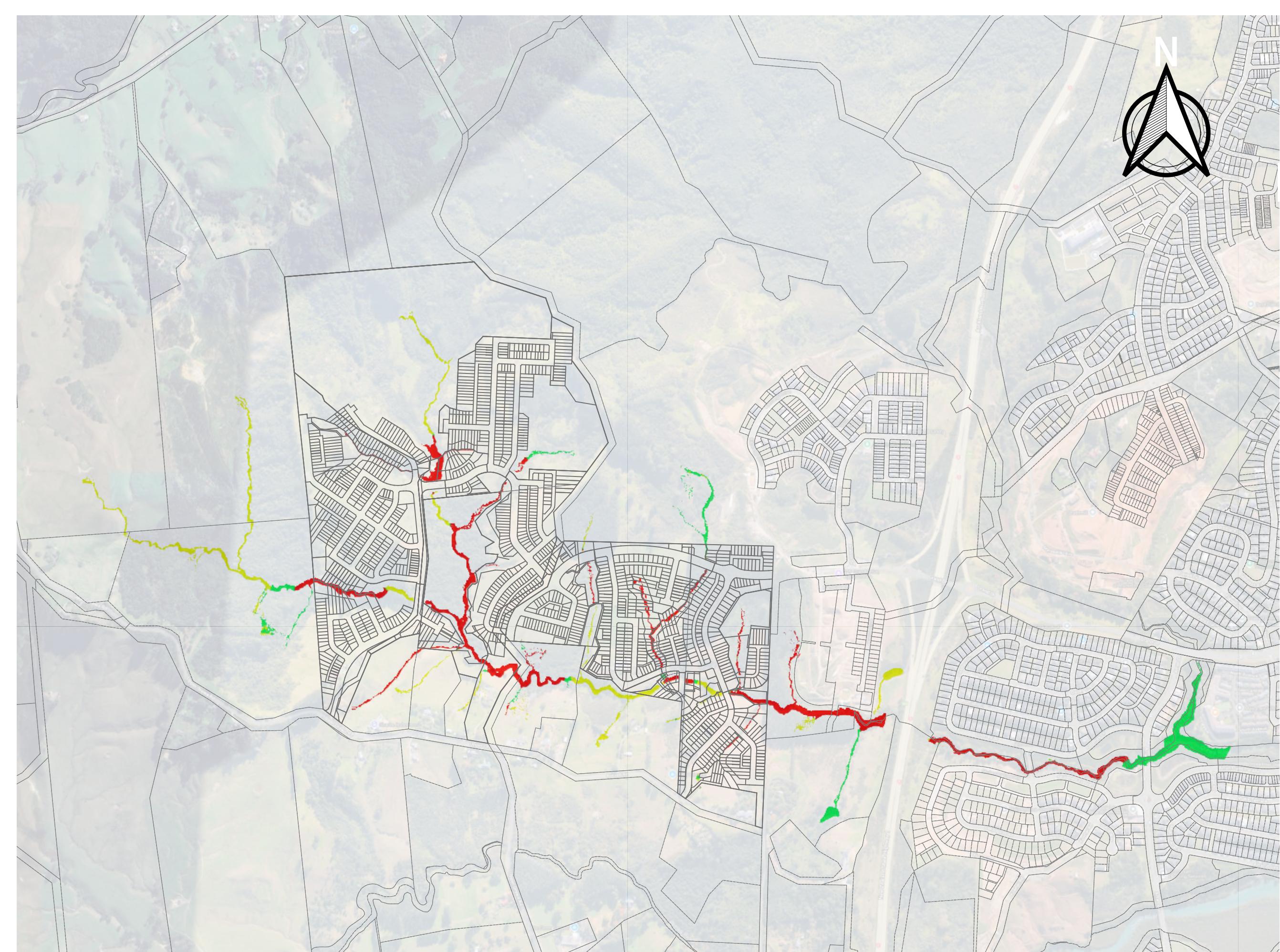
FOR CONSENT

SCALE:

1:10,000

DRAWING NO: 3725-0-4507

REV: C



C	RE-SUBMISSION	HS	-	-	22/02/25
B	MODELLING UPDATE	HS	-	-	21/07/25
A	FIRST ISSUE	HS	-	-	16/01/2025
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER
FLOOD ASSESSMENT
50% AEP POST VS PRE DEVELOPMENT
COMPARISON PLAN

PURPOSE OF ISSUE:

FOR CONSENT

SCALE:

1:10,000

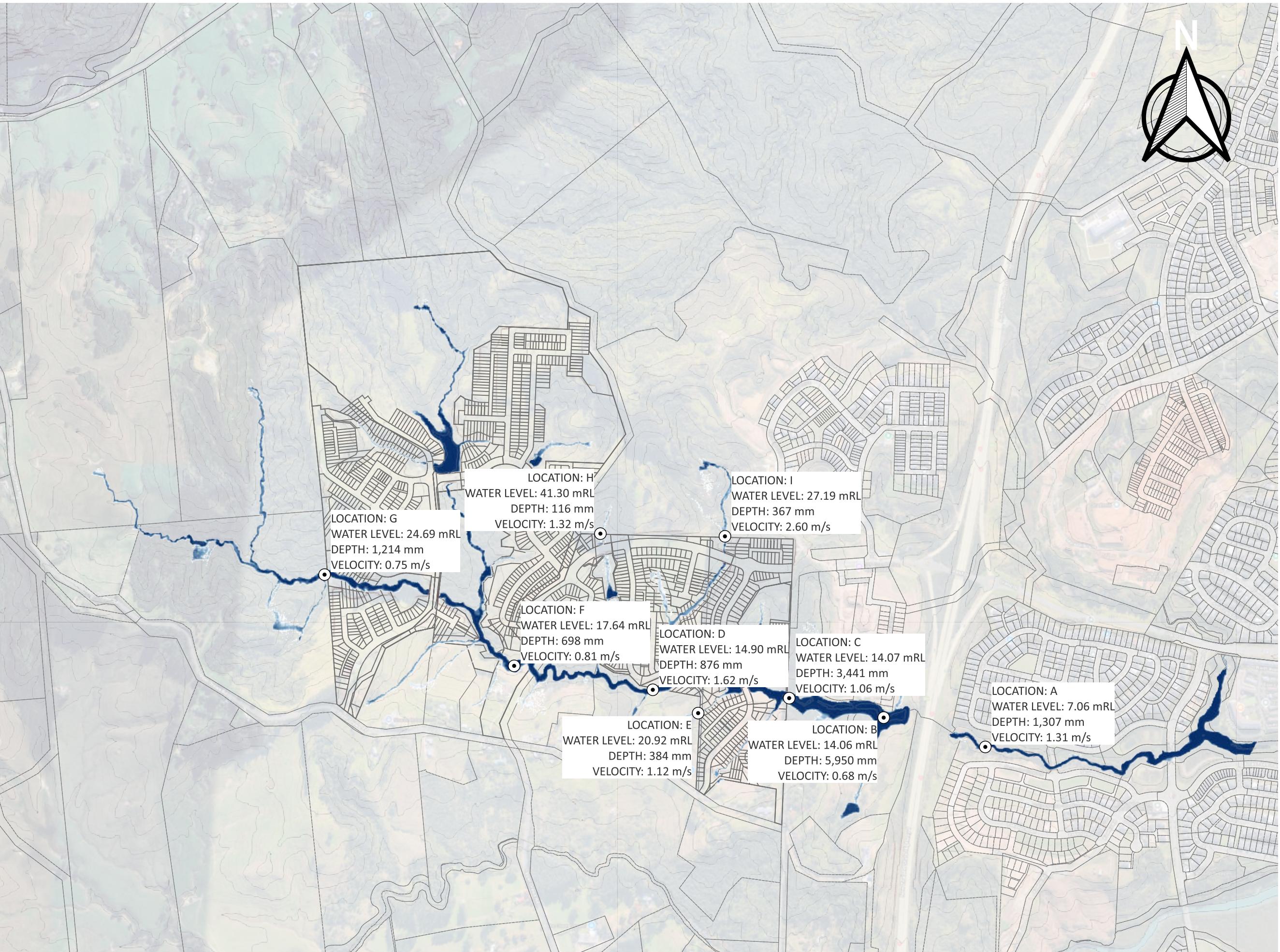
DRAWING NO:
3725-0-4508

REV:
C

NOTES:

1. SCENARIO ID IS D_MP21CC010AEPPTWABASE_PDT
2. 10% AEP SCENARIO, WITH 2.1 DEGREE CLIMATE CHANGE, LAND USE IS MAXIMUM PROBABLE DEVELOPMENT WITHIN THE DELMORE SITE, EXISTING OUTSIDE THE DEVELOPMENT SITE.
3. CONTOUR INTERVAL IS 2.5m

LEGEND:



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE: FOR CONSENT

SCALE: 1:10,000

DRAWING NO: 3725-0-4512

REV: C

C	RE-SUBMISSION	HS	-	-	22/12/25
B	MODELLING UPDATE	HS	-	-	21/07/25
A	FIRST ISSUE	HS	-	-	16/01/2025
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

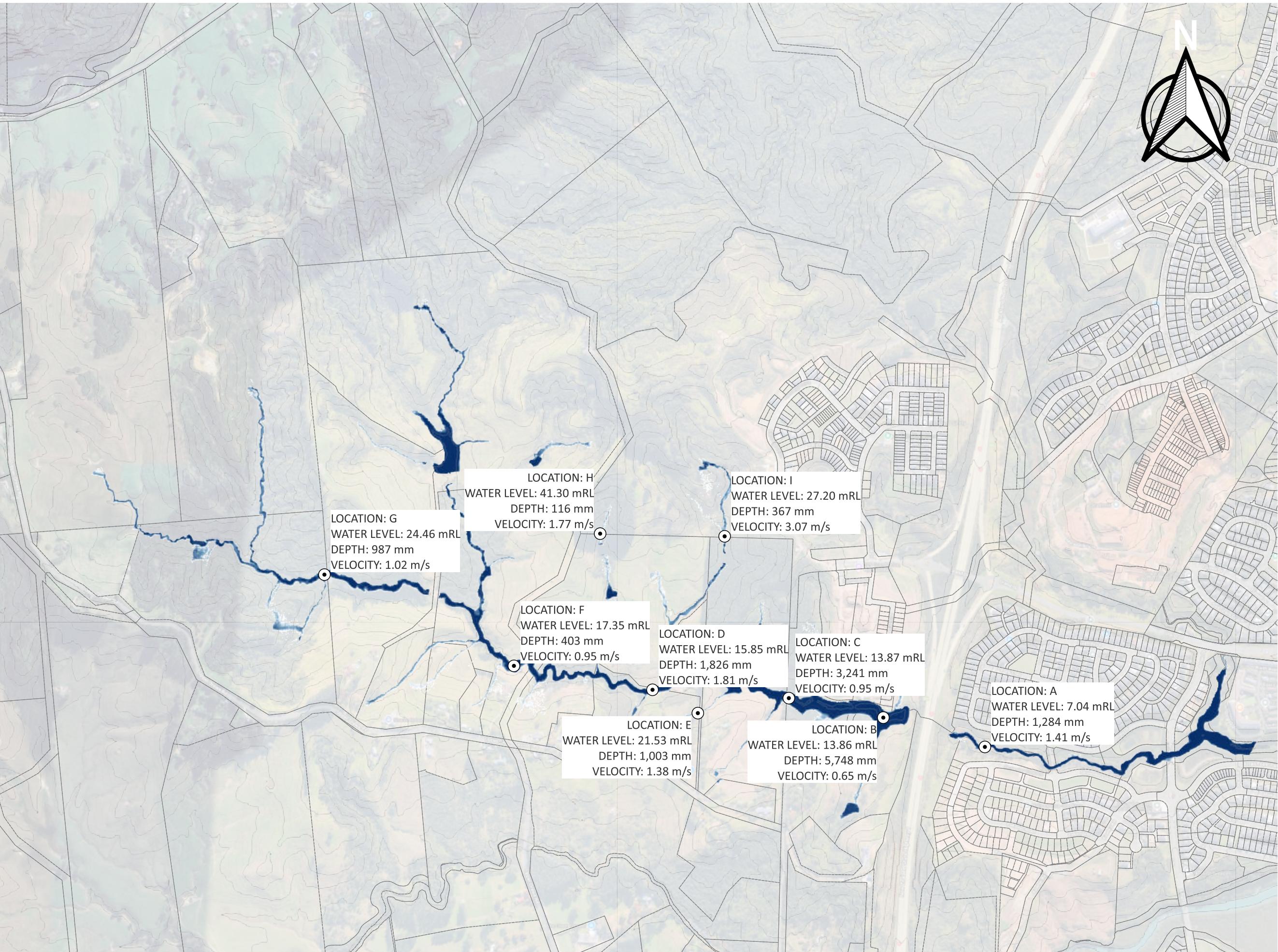
TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER
FLOOD ASSESSMENT
10% AEP POST-DEVELOPMENT
FLOOD PLAIN PLAN (2.1D CC)

NOTES:

1. SCENARIO ID IS EXD21CC010AEP_TWBASE_EXT
2. 10% AEP SCENARIO, WITH 2.1 DEGREE CLIMATE CHANGE, LAND USE IS CURRENT (PRE-EXISTING).
3. CONTOUR INTERVAL IS 2.5m



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

C	RE-SUBMISSION	HS	-	-	22/12/25
B	MODELLING UPDATE	HS	-	-	21/07/2025
A	FIRST ISSUE	HS	-	-	16/01/2025
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

PURPOSE OF ISSUE:

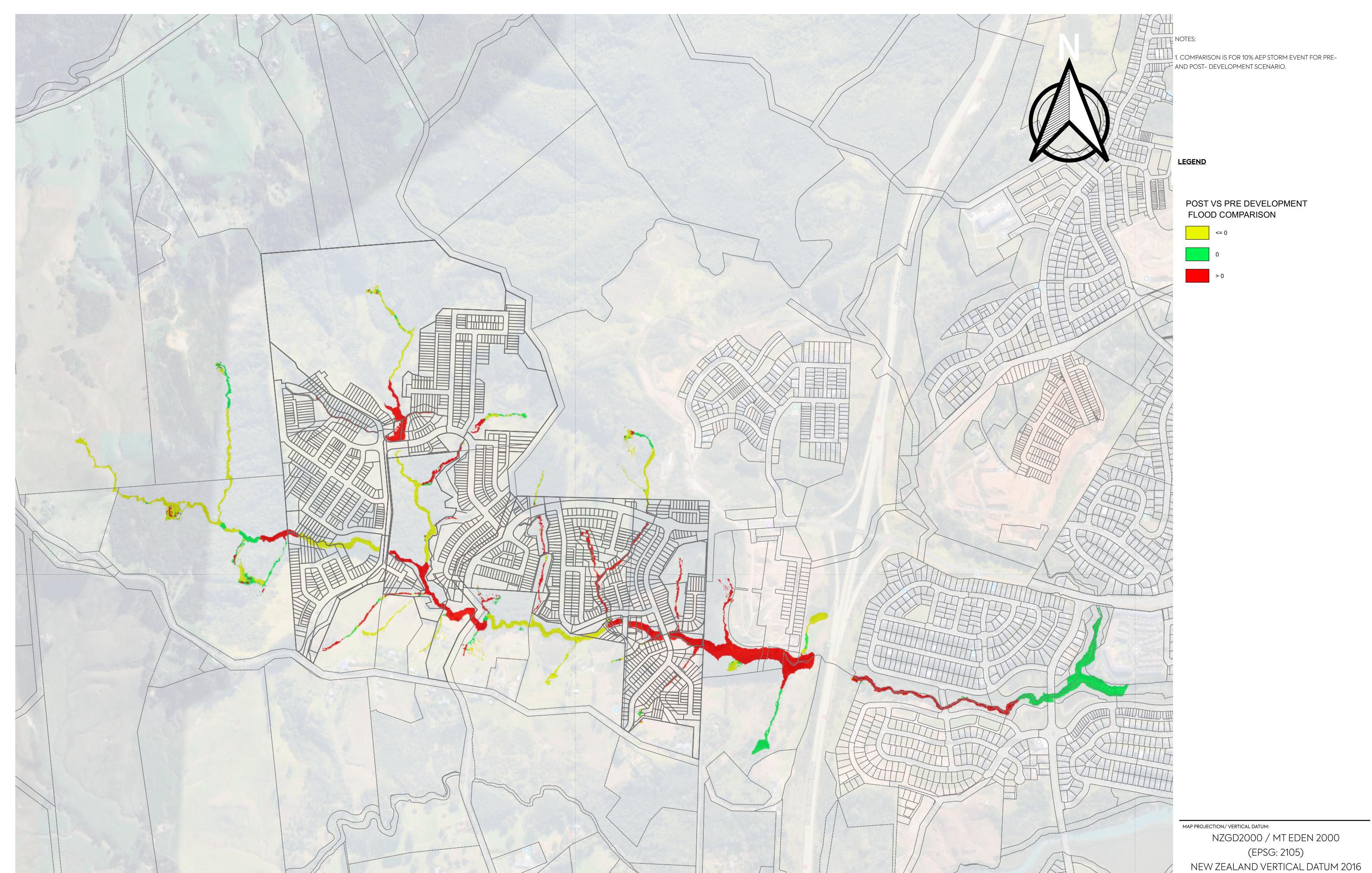
FOR CONSENT

SCALE:

1:10,000

DRAWING NO.: 3725-0-4513

REV: C



C	RE-SUBMISSION	HS	-	-	22/02/25	CLIENT:	PROJECT:	TITLE:	PURPOSE OF ISSUE:
B	MODELLING UPDATE	HS	-	-	21/07/25				FOR CONSENT
A	FIRST ISSUE	HS	-	-	16/01/2025				
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE				

MCKENZIE & CO.

VINEWAY LIMITED

DELMORE

53A, 53B & 55 RUSSELL ROAD

OREWA

STORMWATER
FLOOD ASSESSMENT
10% AEP POST VS PRE DEVELOPMENT
COMPARISON PLAN

SCALE: 1:10,000

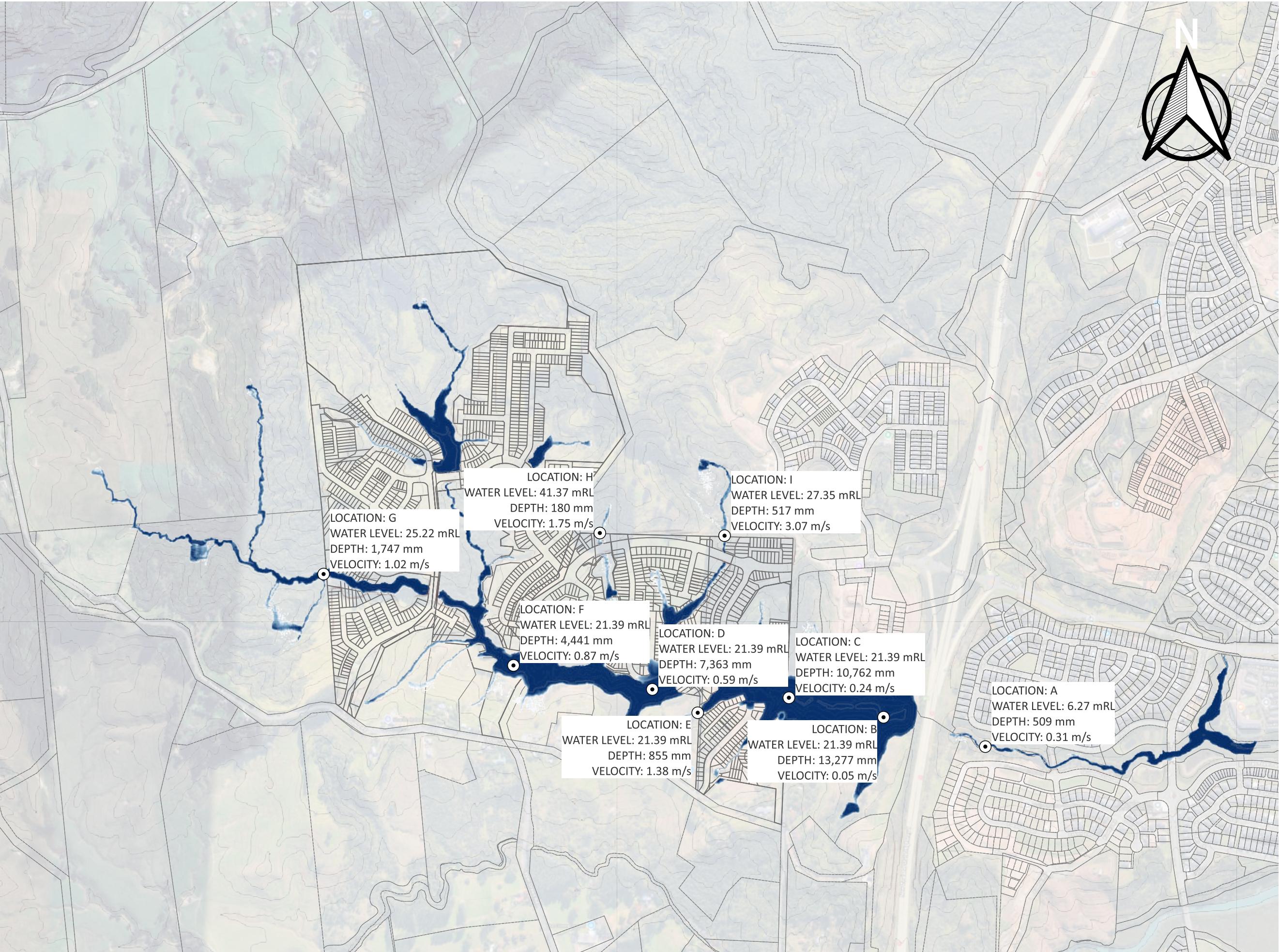
DRAWING NO: 3725-0-4514

REV: C

NOTES:

1. SCENARIO ID IS D_MP38CC_001AEP_MWAYCULBLOCK.
2. NZTA CULVERT UNDER MOTORWAY IS ASSUMED TO BE 100% BLOCKED.
3. LAND USE IS BASED ON DELMORE MASTERPLAN AREA
4. CONTOUR INTERVAL IS 2.5m

LEGEND:



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE: FOR CONSENT

SCALE: 1:10,000

DRAWING NO: 3725-0-4520 REV: A



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

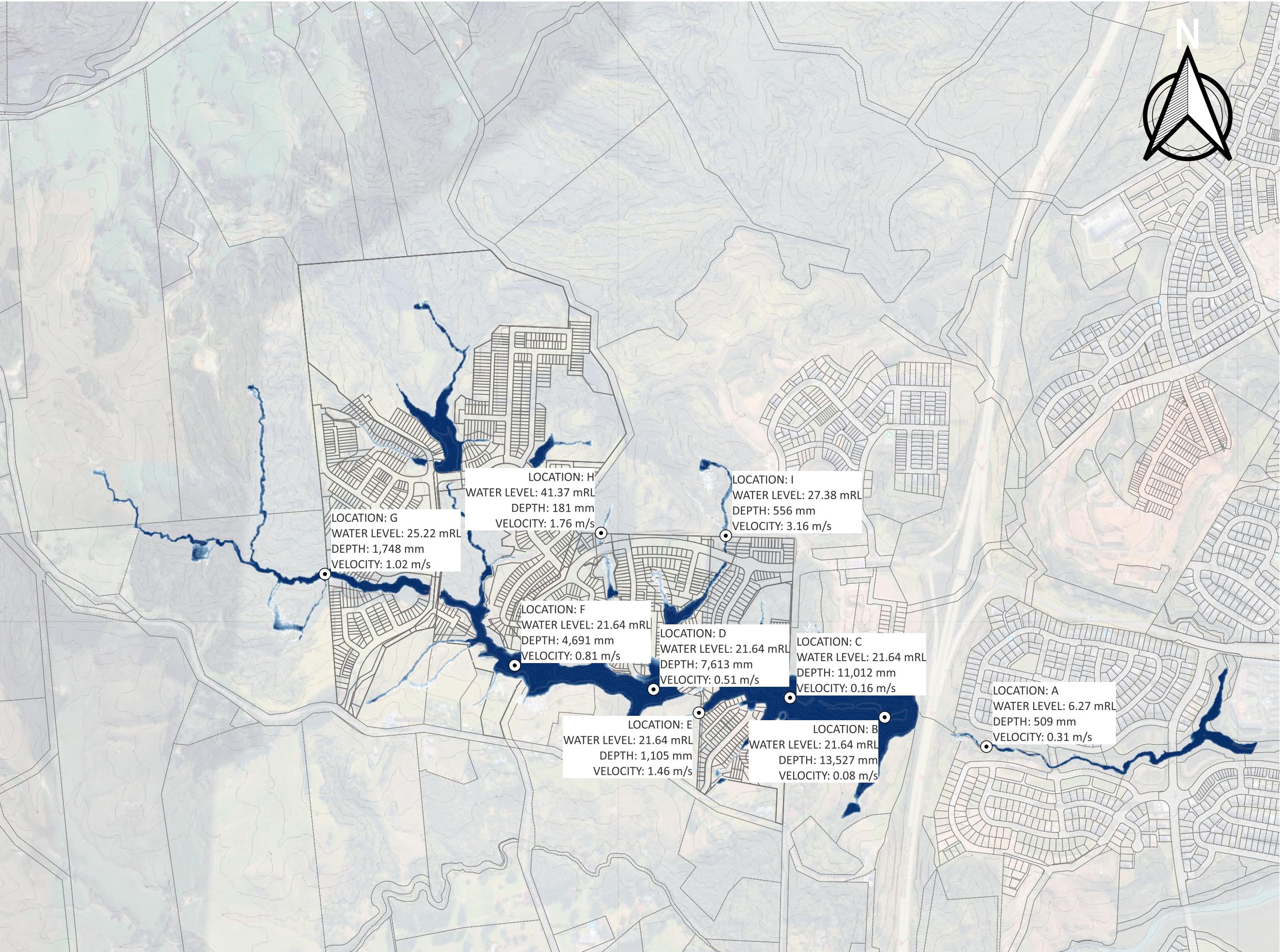
53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER

MOTORWAY CULVERT FULLY BLOCKED
1% AEP POST-DEVELOPMENT - MASTERPLAN
FLOOD PLAIN PLAN (3.8D CC)

NOTES:

1. SCENARIO ID IS MPD38CC_001AEP_MWAYCULBLOCK.
2. NZTA CULVERT UNDER MOTORWAY IS ASSUMED TO BE 100% BLOCKED.
3. LAND USE IS BASED ON UNITARY PLAN FUTURE URBAN ZONE
4. CONTOUR INTERVAL IS 2.5m



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE: FOR CONSENT
SCALE: 1:10,000
DRAWING NO: 3725-0-4521
REV: A



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER

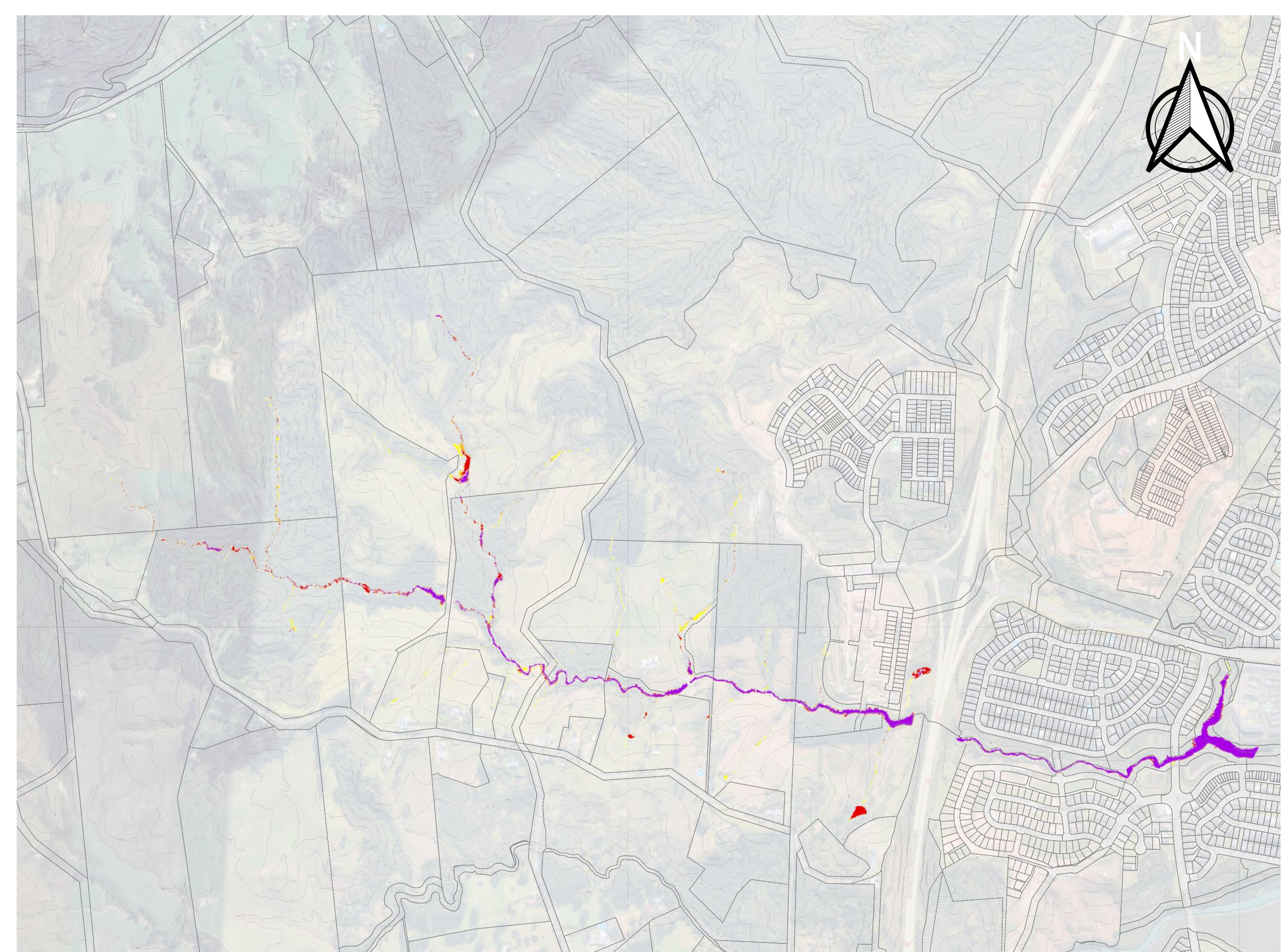
MOTORWAY CULVERT FULLY BLOCKED
1% AEP POST-DEVELOPMENT - FUZ MPD
FLOOD PLAIN PLAN (3.8D CC)

A FIRST ISSUE HS - - 22/12/25
REV DESCRIPTION DRN BYCHK BY APP BY DATE

PLOT DATE ----

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MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE:
FOR CONSENT
SCALE:
1:10,000
DRAWING NO.: 3725-0-4520
REV: A



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

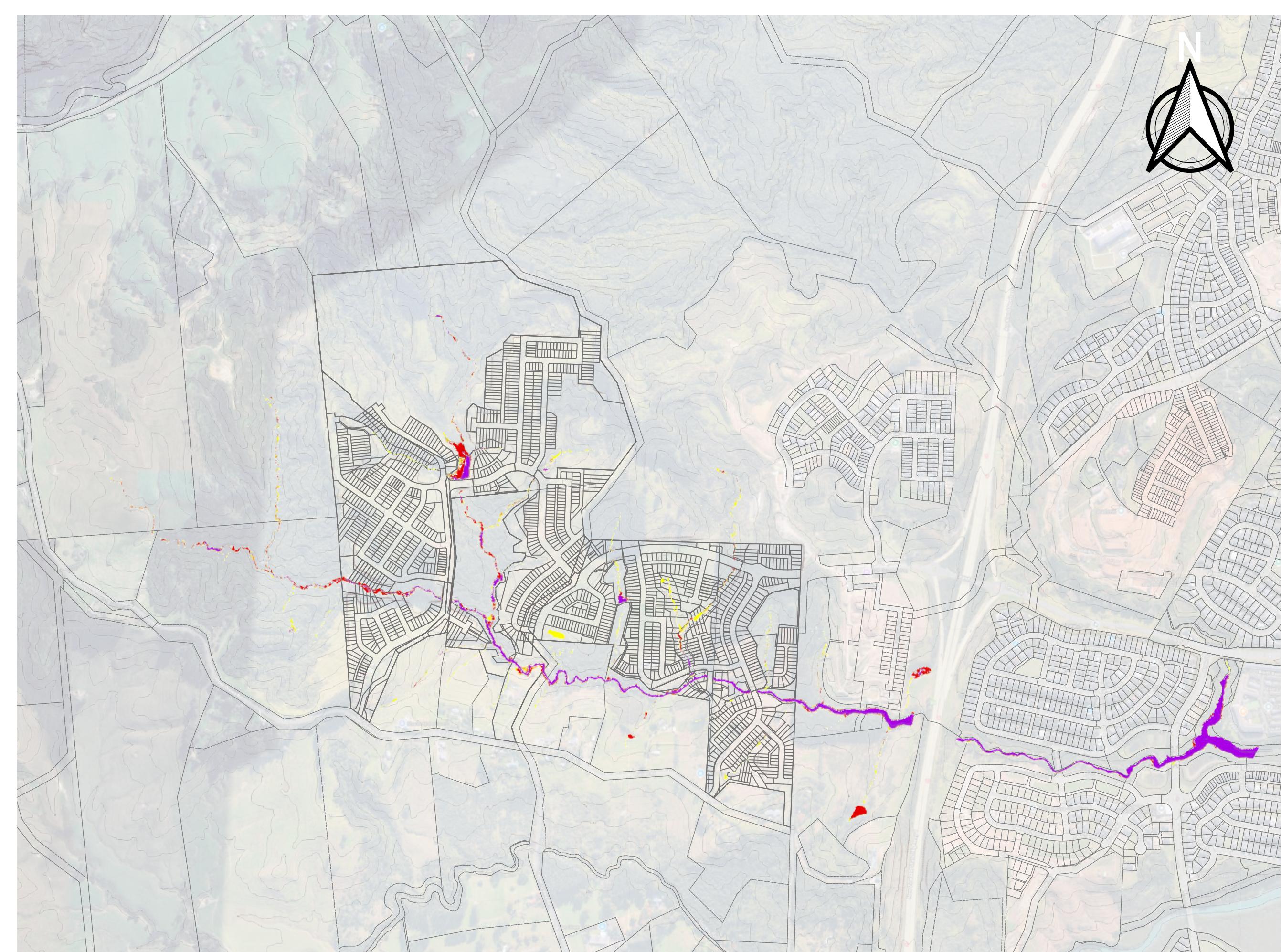
STORMWATER
50% AEP PRE-DEVELOPMENT
PC120 HAZARD PLAN

A FIRST ISSUE HS - - 22/12/25
REV DESCRIPTION DRN BYCHK BY APP BY DATE

PLOT DATE ----

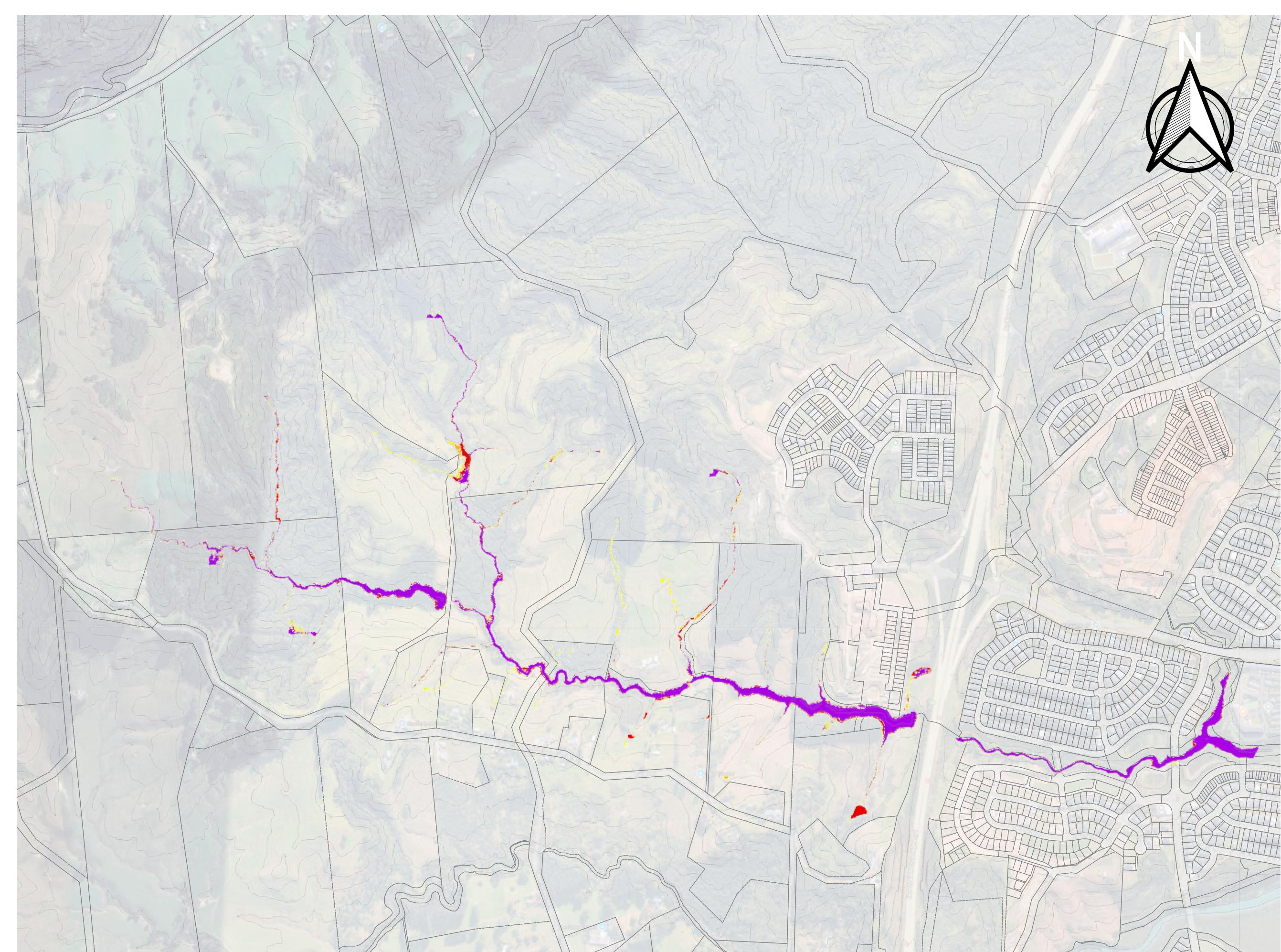
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A	FIRST ISSUE	HS	-	-	22/12/25	CLIENT:	VINEWAY LIMITED	PROJECT:	DELMORE	TITLE:	STORMWATER	PURPOSE OF ISSUE:	FOR CONSENT
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE				53A, 53B & 55 RUSSELL ROAD	OREWA	50% AEP POST-DEVELOPMENT		
										PC120 HAZARD PLAN		SCALE:	1:10,000
												DRAWING NO:	3725-0-4531





MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE:
FOR CONSENT
SCALE:
1:10,000
DRAWING NO.: 3725-0-4532
REV: A



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

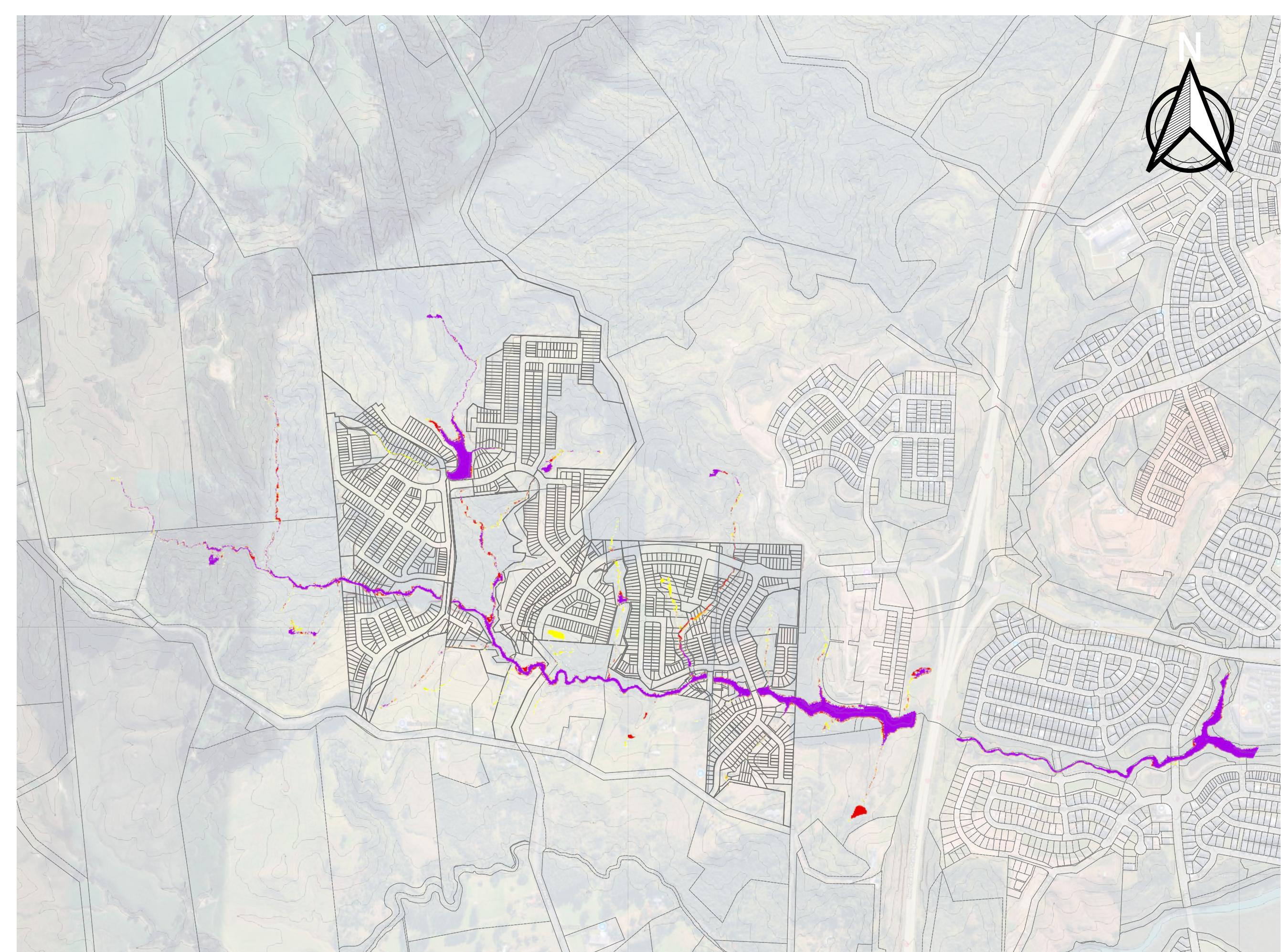
STORMWATER
10% AEP PRE-DEVELOPMENT
PC120 HAZARD PLAN

A FIRST ISSUE HS - - 22/12/25
REV DESCRIPTION DRN BYCHK BY APP BY DATE

PLOT DATE ----

WWW.MCKENZIEANDCO.CO.NZ

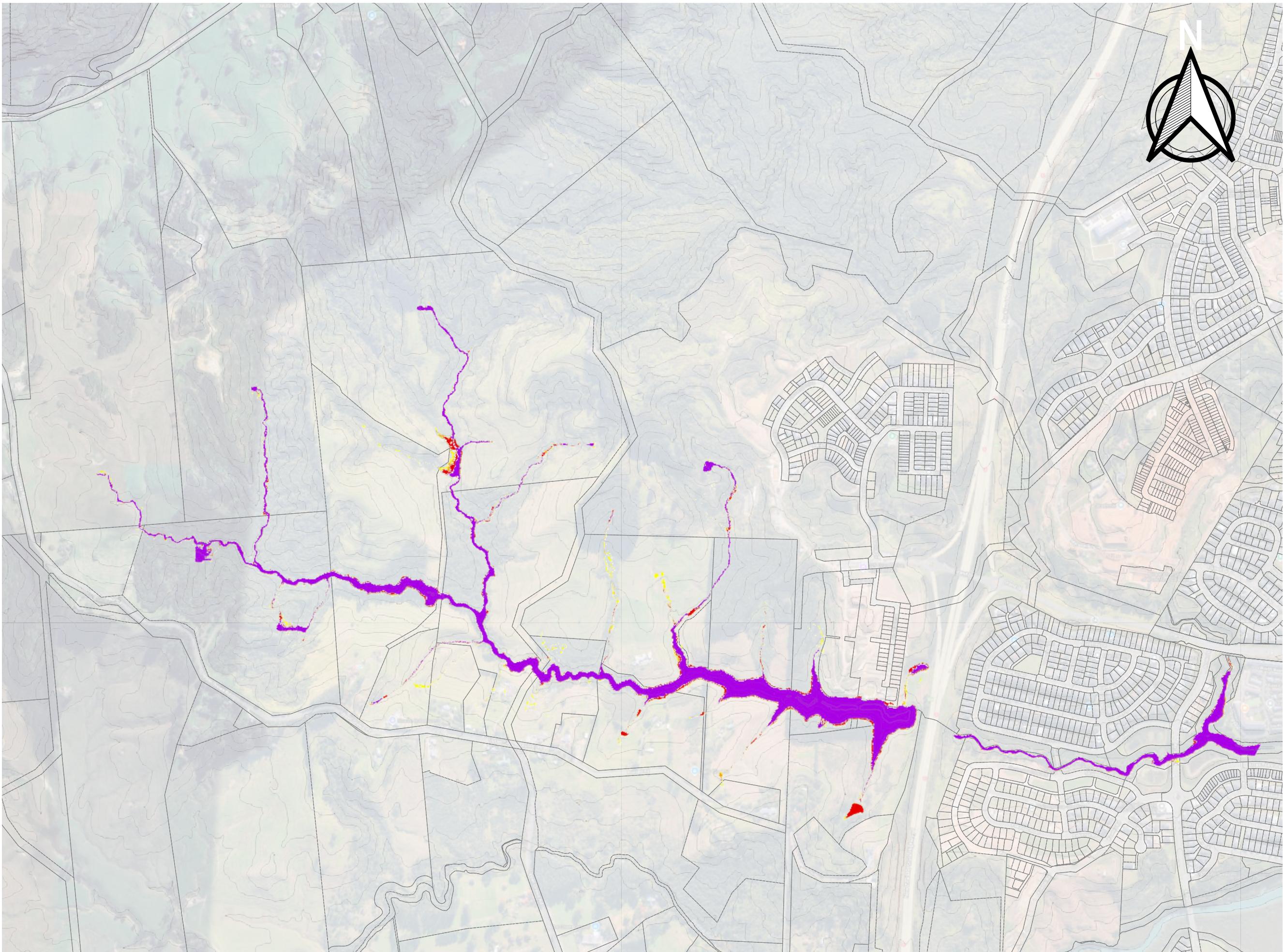
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A	FIRST ISSUE	HS	-	-	22/12/25	CLIENT:	VINEWAY LIMITED	PROJECT:	DELMORE	TITLE:	STORMWATER	PURPOSE OF ISSUE:	FOR CONSENT
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE				53A, 53B & 55 RUSSELL ROAD	OREWA	10% AEP POST-DEVELOPMENT		
										PC120 HAZARD PLAN		SCALE:	1:10,000
												DRAWING NO:	3725-0-4533
												REV:	A



MCKENZIE & CO.



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE:
FOR CONSENT
SCALE:
1:10,000
DRAWING NO.: 3725-0-4534
REV: A



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

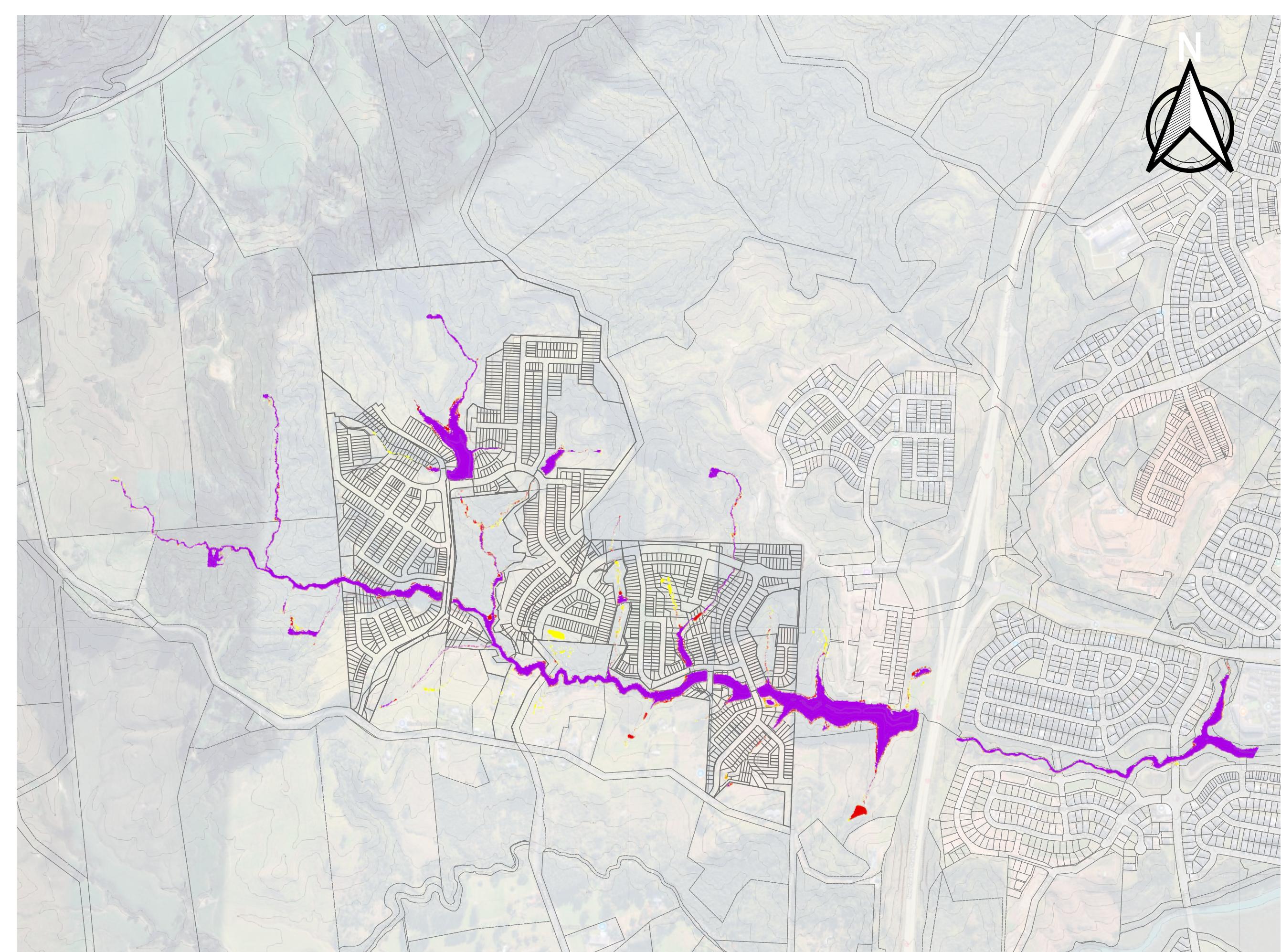
STORMWATER
1% AEP PRE-DEVELOPMENT
PC120 HAZARD PLAN

A FIRST ISSUE HS - - 22/12/25
REV DESCRIPTION DRN BYCHK BY APP BY DATE

PLOT DATE ----

WWW.MCKENZIEANDCO.CO.NZ

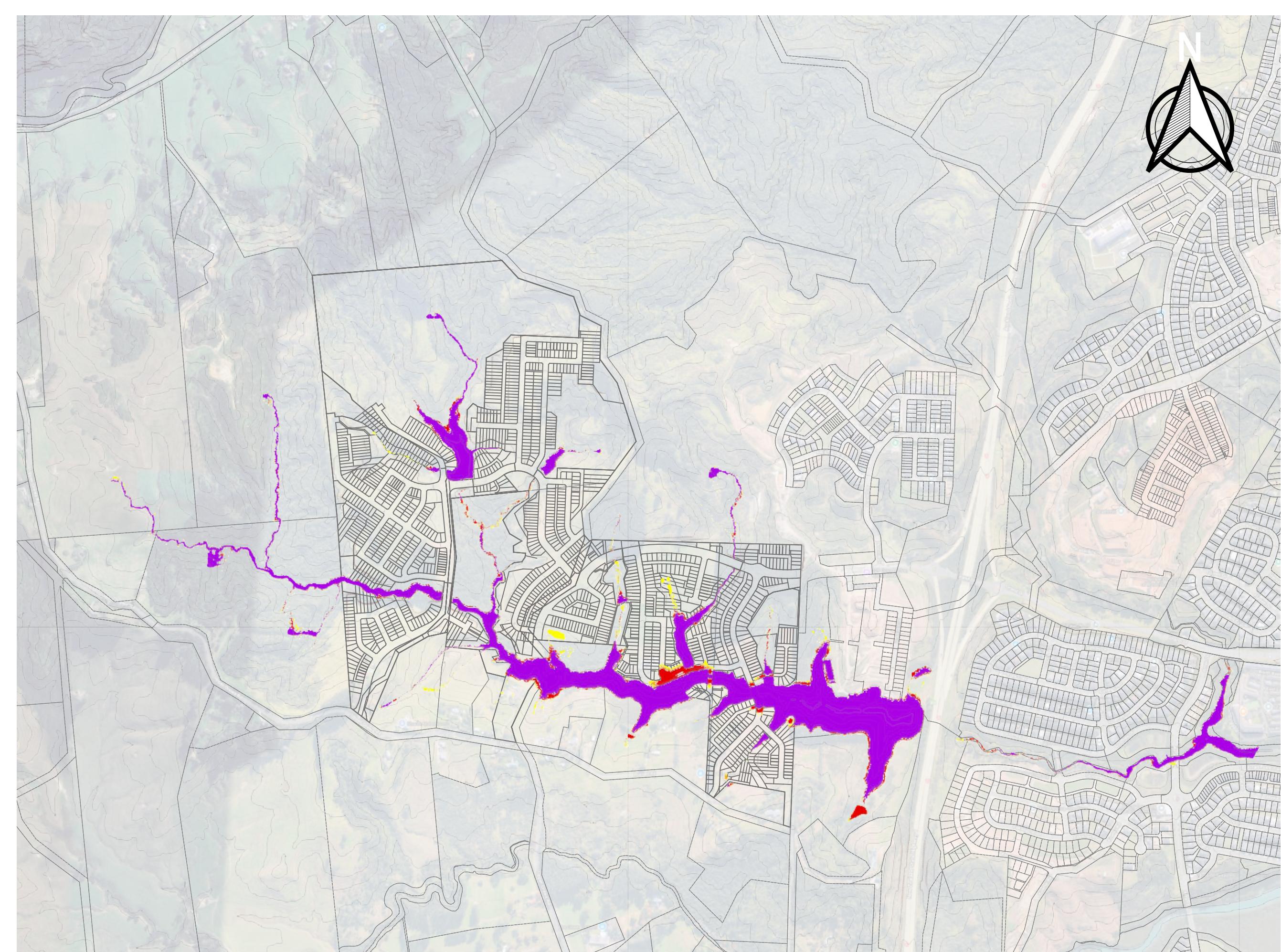
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A	FIRST ISSUE	HS	-	-	22/12/25	CLIENT:	VINEWAY LIMITED	PROJECT:	DELMORE	TITLE:	STORMWATER	PURPOSE OF ISSUE:	FOR CONSENT
REV	DESCRIPTION	DRN	BYCHK	BY APP	BY DATE				53A, 53B & 55 RUSSELL ROAD	OREWA	1% AEP POST-DEVELOPMENT		
										PC120 HAZARD PLAN		SCALE:	1:10,000
												DRAWING NO:	3725-0-4535
												REV:	A



MCKENZIE & CO.



MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE:
FOR CONSENT
SCALE:
1:10,000
DRAWING NO.: 3725-0-4536
REV: A



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER

1% AEP POST-DEVELOPMENT

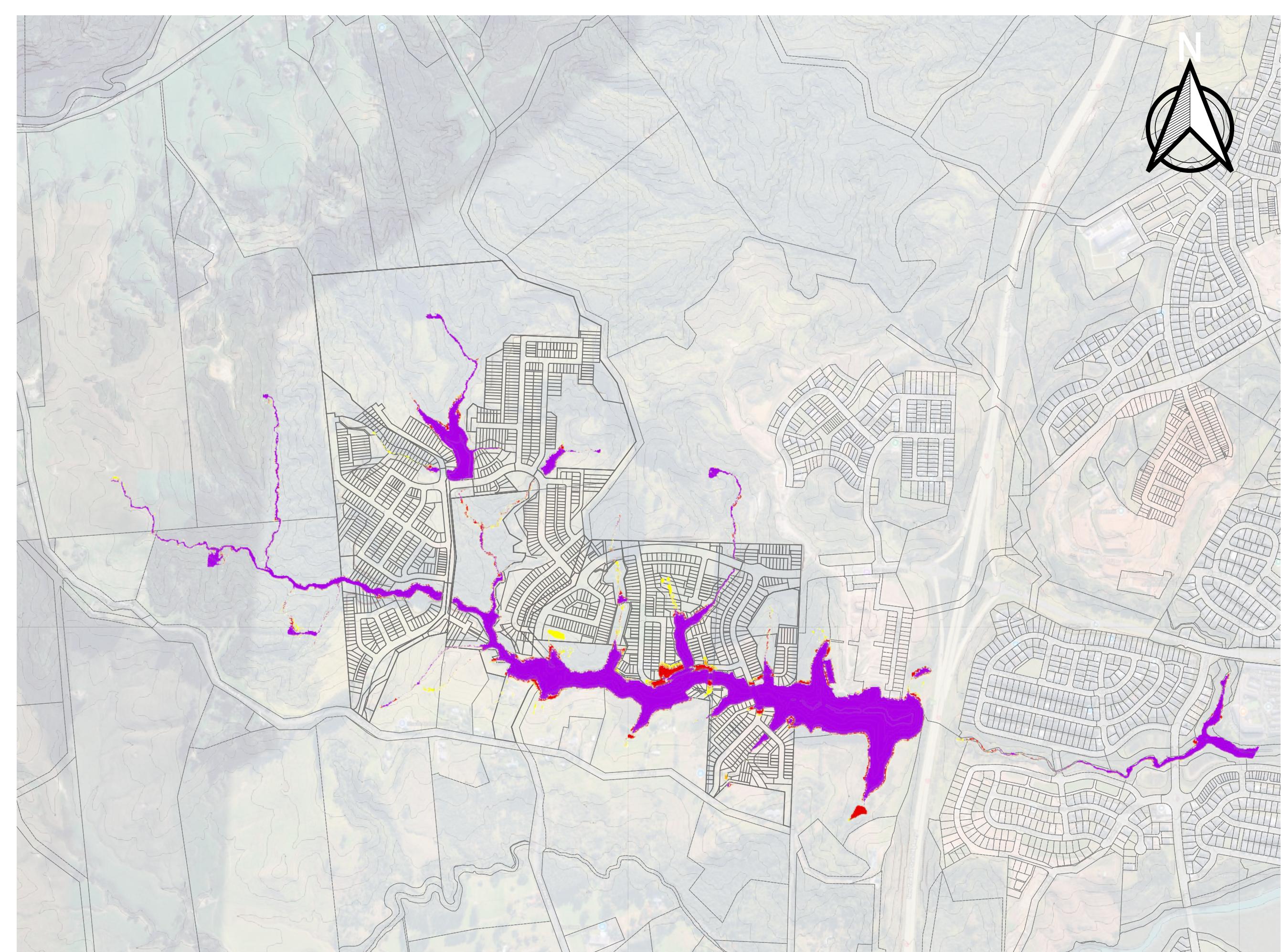
NZTA FULLY BLOCKED CULVERT - MASTERPLAN
PC120 HAZARD PLAN

A FIRST ISSUE HS - - 22/12/25
REV DESCRIPTION DRN BYCHK BY APP BY DATE

PLOT DATE ----

WWW.MCKENZIEANDCO.CO.NZ

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MAP PROJECTION/VERTICAL DATUM:
NZGD2000 / MT EDEN 2000
(EPSG: 2105)
NEW ZEALAND VERTICAL DATUM 2016

PURPOSE OF ISSUE:
FOR CONSENT
SCALE:
1:10,000
DRAWING NO.: 3725-0-4537
REV: A



MCKENZIE & CO.

CLIENT:

VINEWAY LIMITED

PROJECT:

DELMORE

TITLE:

53A, 53B & 55 RUSSELL ROAD
OREWA

STORMWATER

1% AEP POST-DEVELOPMENT
NZTA FULLY BLOCKED CULVERT - FUZ MPD
PC120 HAZARD PLAN