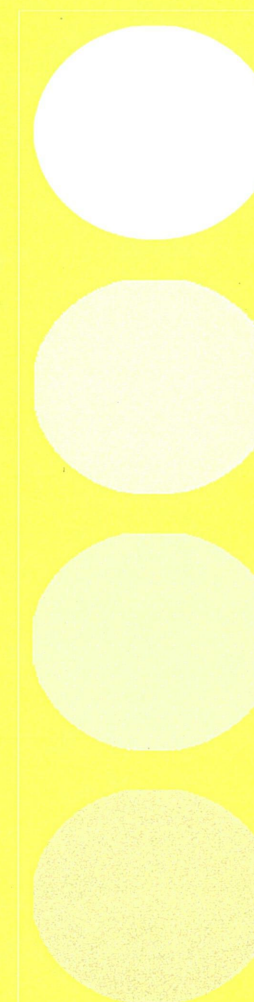


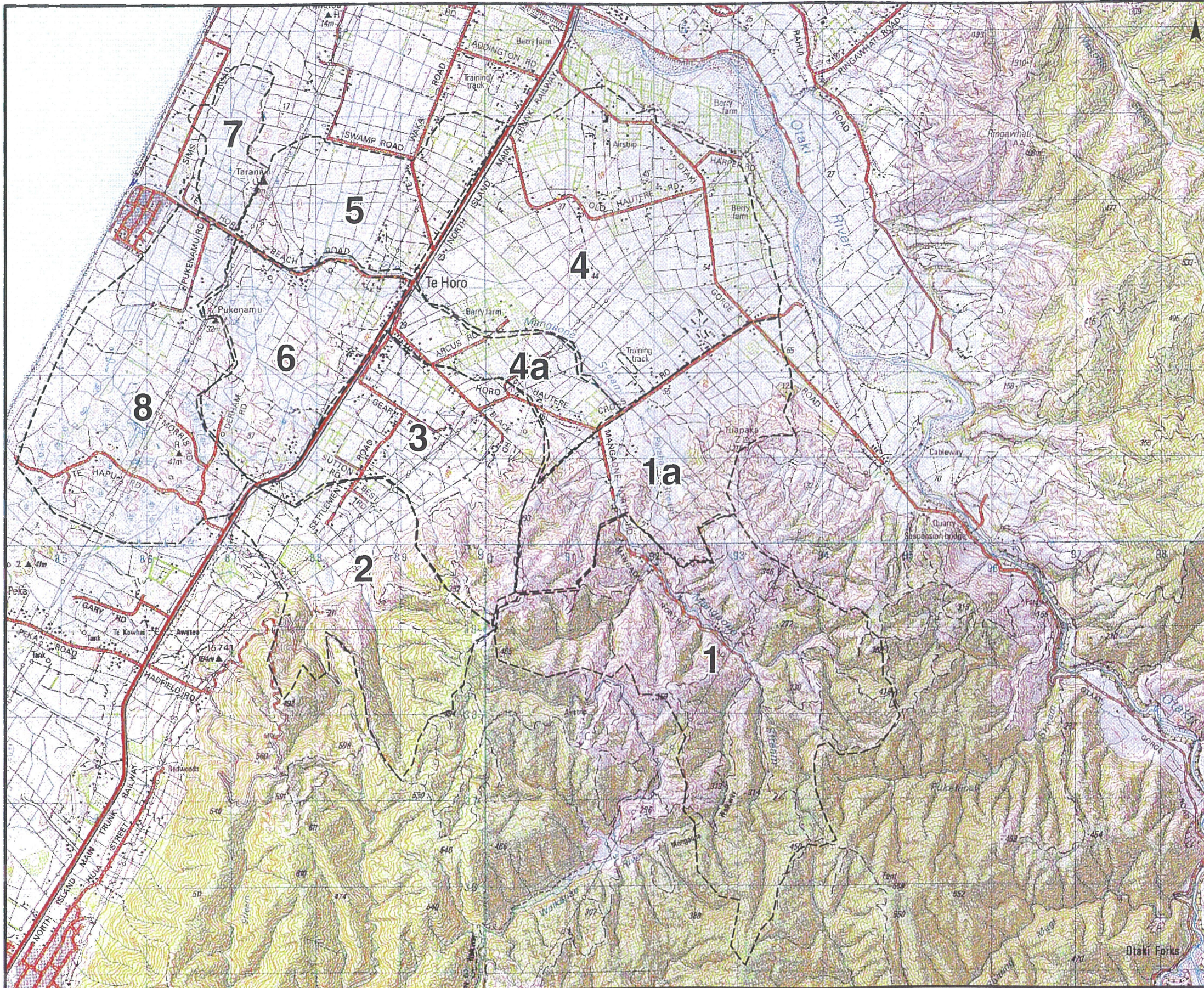
Wellington Regional Council
Publication #WRC/FPSA-T-02/27

Mangaone Stream
Flood Hazard Assessment
Hydraulic Modeling Report
Volume 2 of 2 Flood Maps

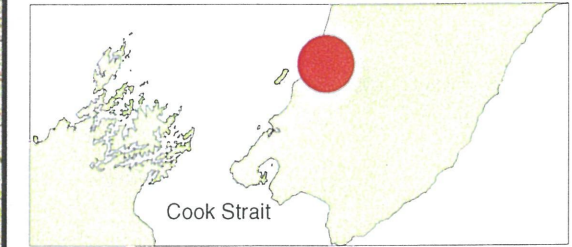
Final

June 2002





Location Map



Legend

Catchment	Catchment ID
Mangaone Stream Channel	1,4a
Powles Drain	7
Pukenamu Drain	2,8
Swamp Drain	5
Sages Drain	3,6
North 1 Flow Path	1a
North 2 Flow	4

Catchment Boundary ———

Wellington Regional Council Mangaone Stream Flood Hazard Assessment

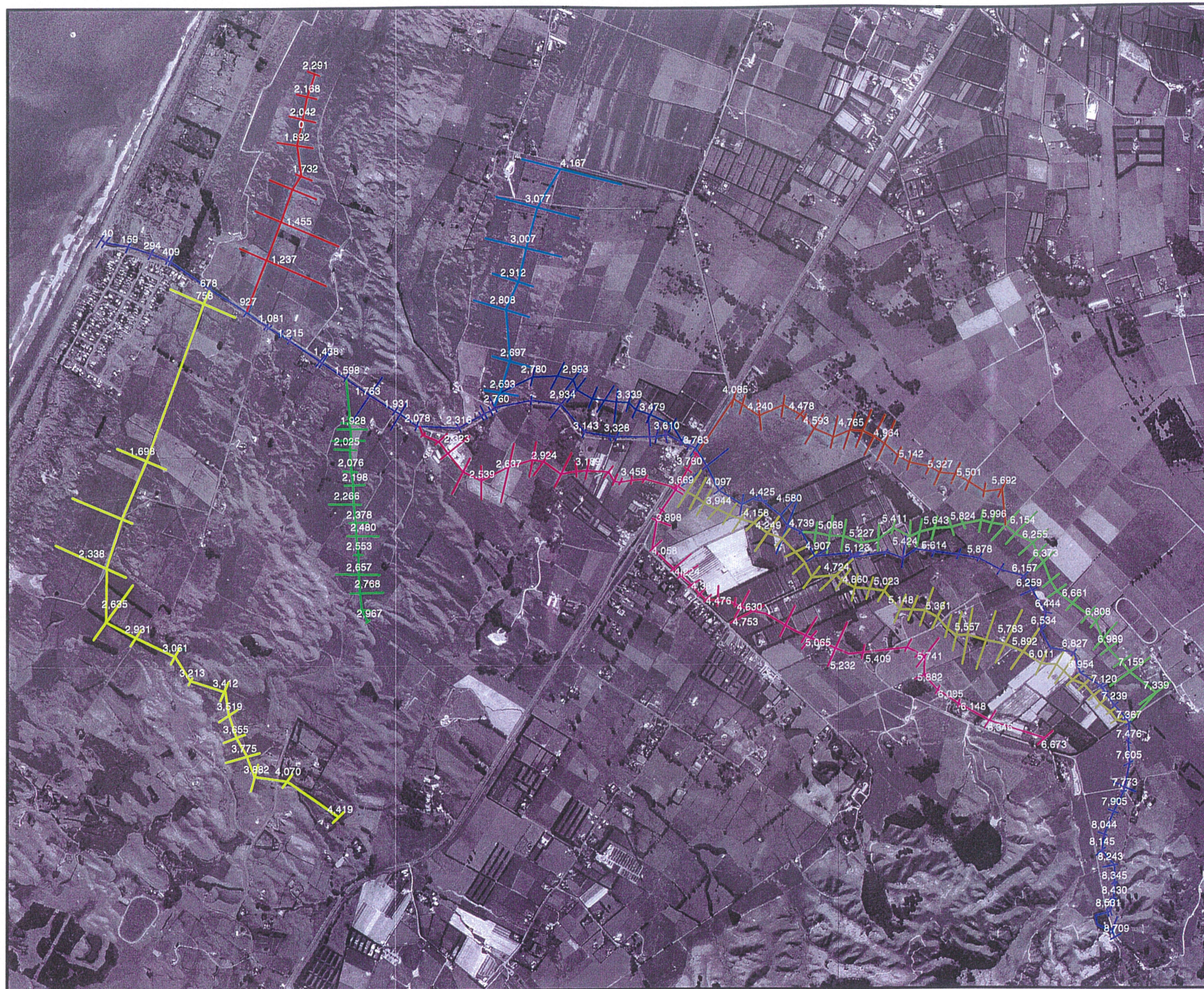
Sub-catchments



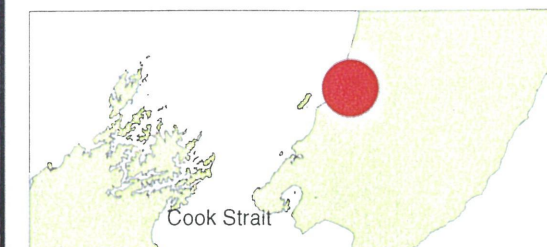
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Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S		
Date	13/08/02		
REVISION			B

MI REF. \\Mangaone\MI\WSCatchFig1



Location Map



Legend

Mangaone Stream Channel	—
Powles Drain	—
Pukenu Drain	—
Swamp Drain	—
Sages Drain	—
Overflow Channel	—
North 1 Flow Path	—
North 2 Flow Path	—
North 3 Flow path	—
South 1 Flood Path	—
School Drain	—
Distance from Stream Mouth	1,025

Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Distance From Coast
Along Stream Center Line



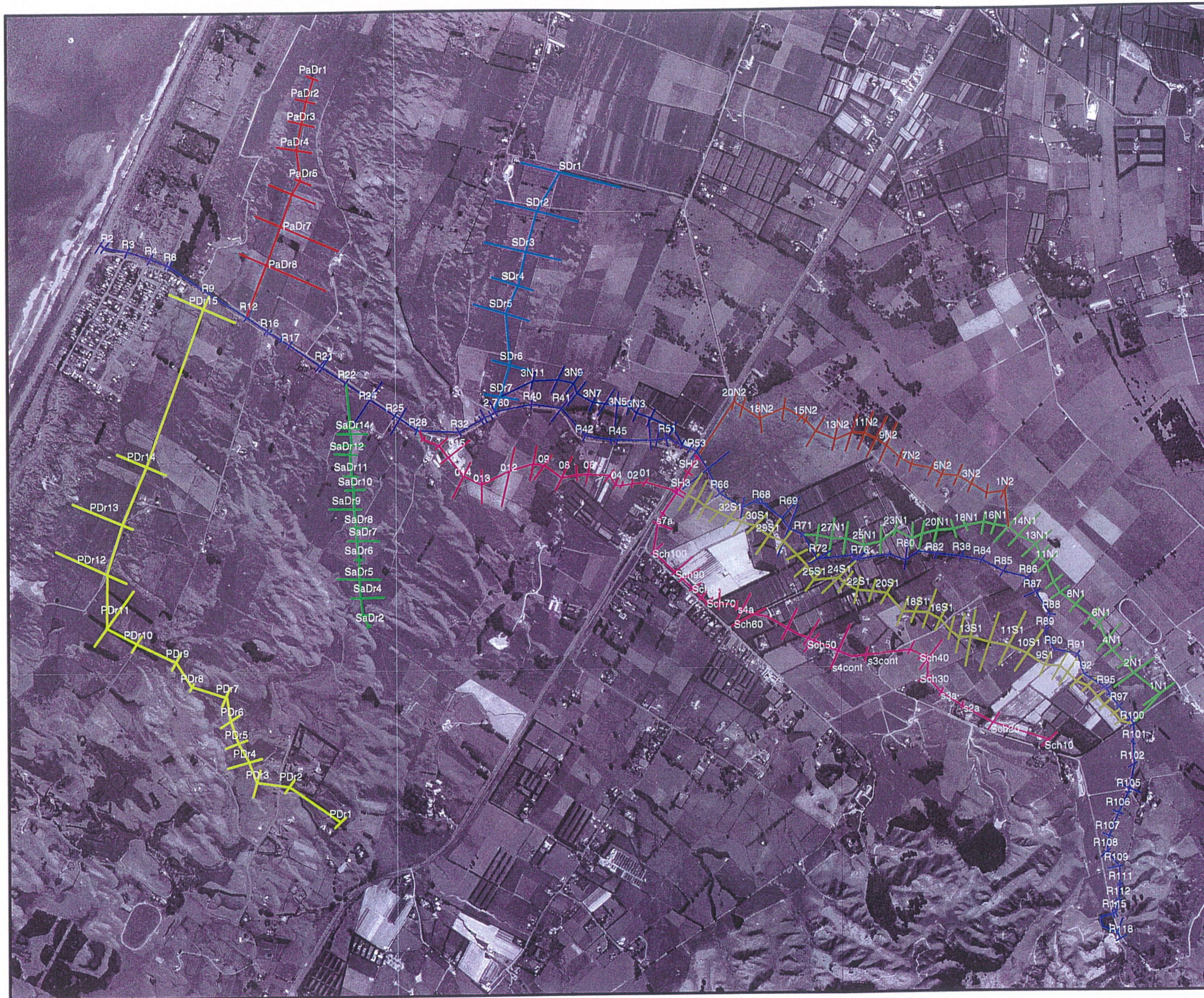
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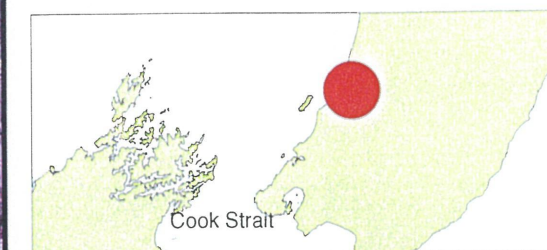
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MI REF. \Mangaone\MI\WSNetwork1

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B



Location Map



Legend

Mangaone Stream Channel	
Powles Drain	
Pukenamu Drain	
Swamp Drain	
Sages Drain	
Overflow Channel	
North 1 Flow Path	
North 2 Flow Path	
North 3 Flow path	
South 1 Flood Path	
School Drain	
Modelled Cross Section ID	R100

Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Hydraulic Model
Stream Cross Sections ID's



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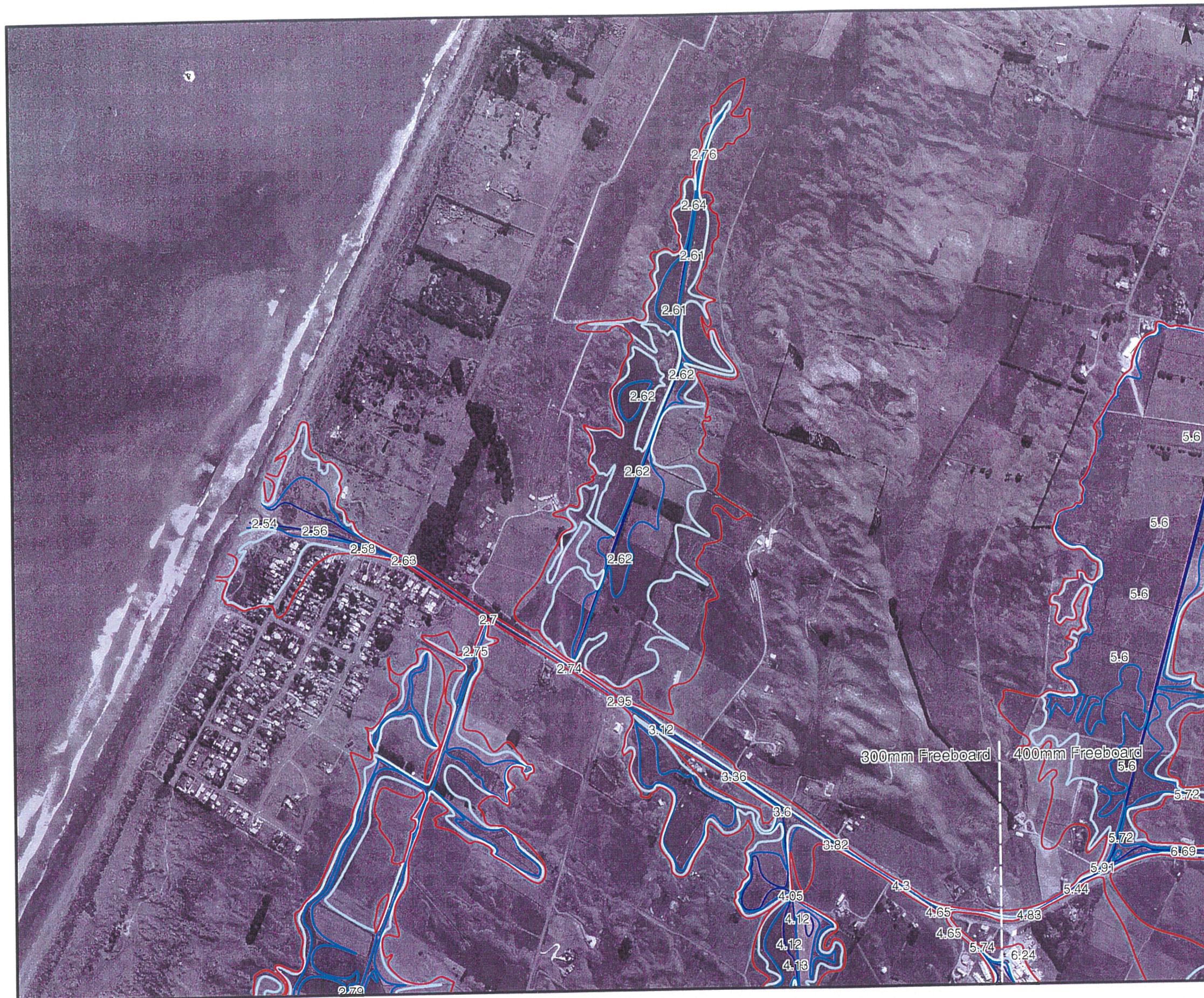


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MI REF:\Mangaone\MI\WSNetwork2

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B



10yr - 1 of 4

Location Map



Legend

Extent of Flood

0.25m Depth Contour

0.50m Depth Contour

Freeboard

Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



Wellington Regional Council Mangaone Stream Flood Hazard Assessment

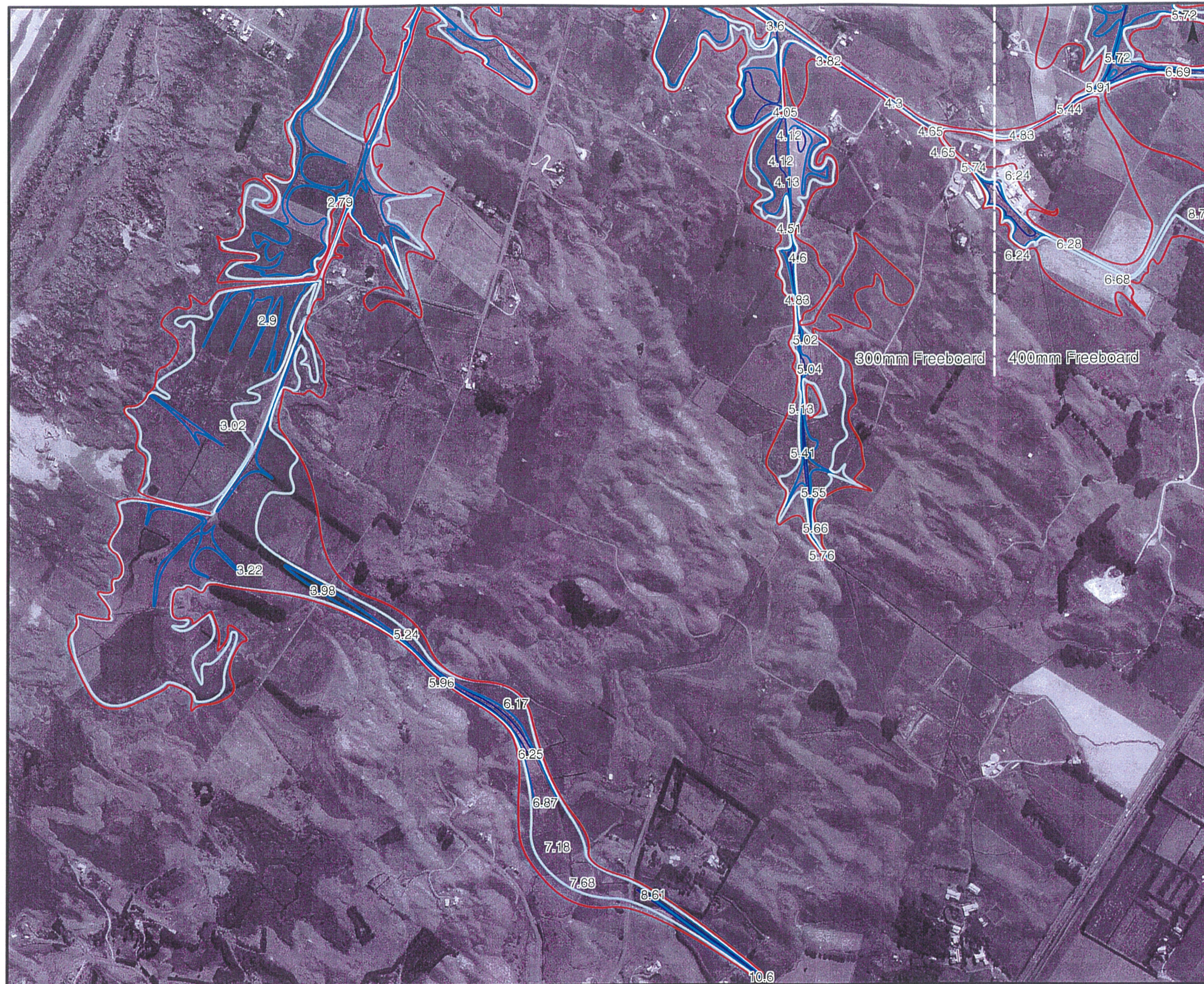
Modelled Flood Extent For
10 Year Event



These plans have been drawn by hand.
The flooding extent will be more accurately
displayed on a map that uses the latest D.T.M.

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B

MI REF. \\Mangaone\MI\WS10yr_1



10yr - 2 of 4

Location Map



Legend

Extent of Flood

0.25m Depth Contour

0.50m Depth Contour

Freeboard

Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
10 Year Event



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MI REF. \\Mangaone\MI\WS10yr_2

Drawn TDJ Chk'd

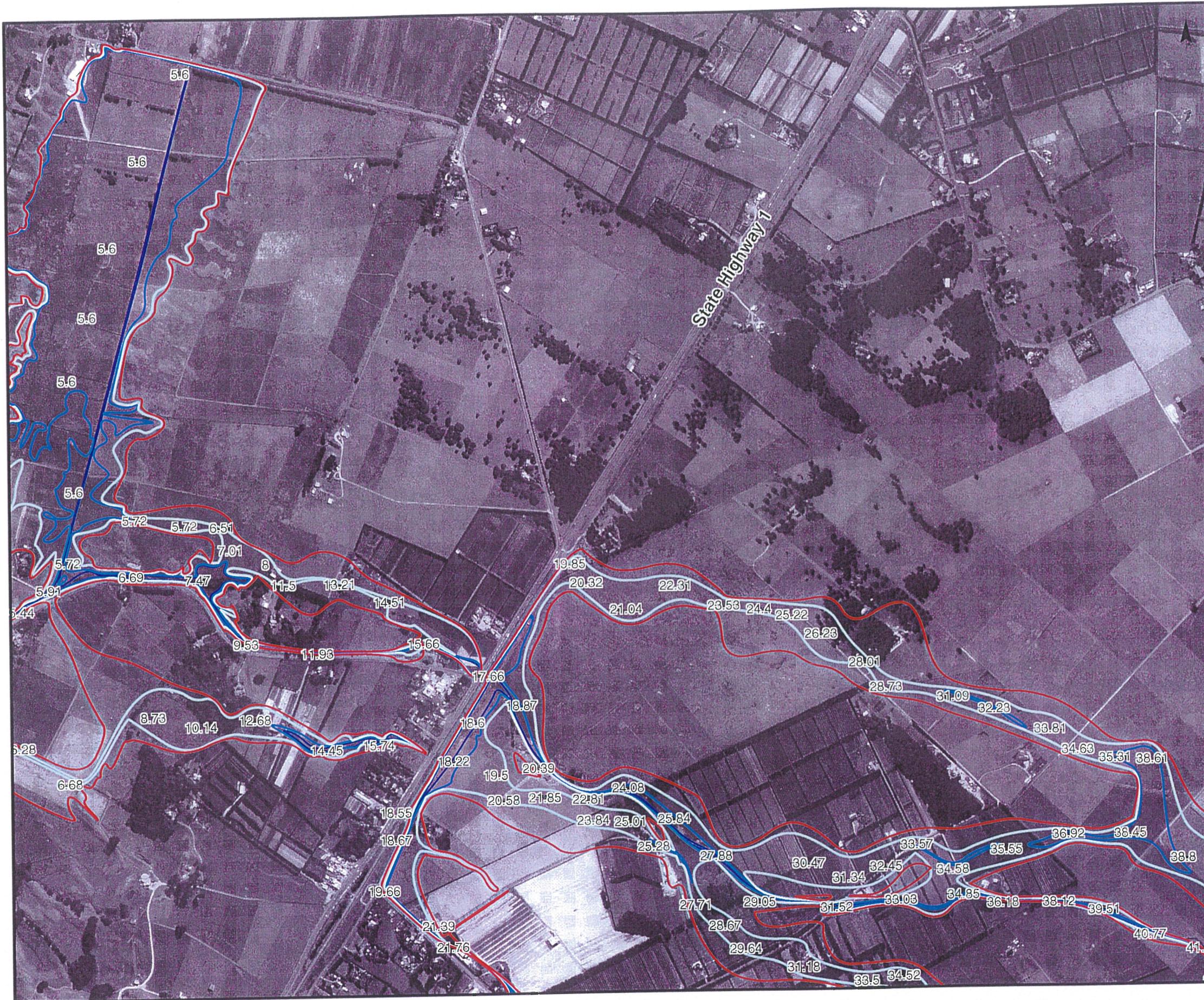
Status Final

Scale N.T.S.

Date 13/08/02

REVISION

B



10yr - 3 of 4

Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
10 Year Event



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MI REF. \\Mangaone\MI\WS10yr_3

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B



10yr - 4 of 4
Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



Wellington Regional Council
Mangao Stream
Flood Hazard Assessment

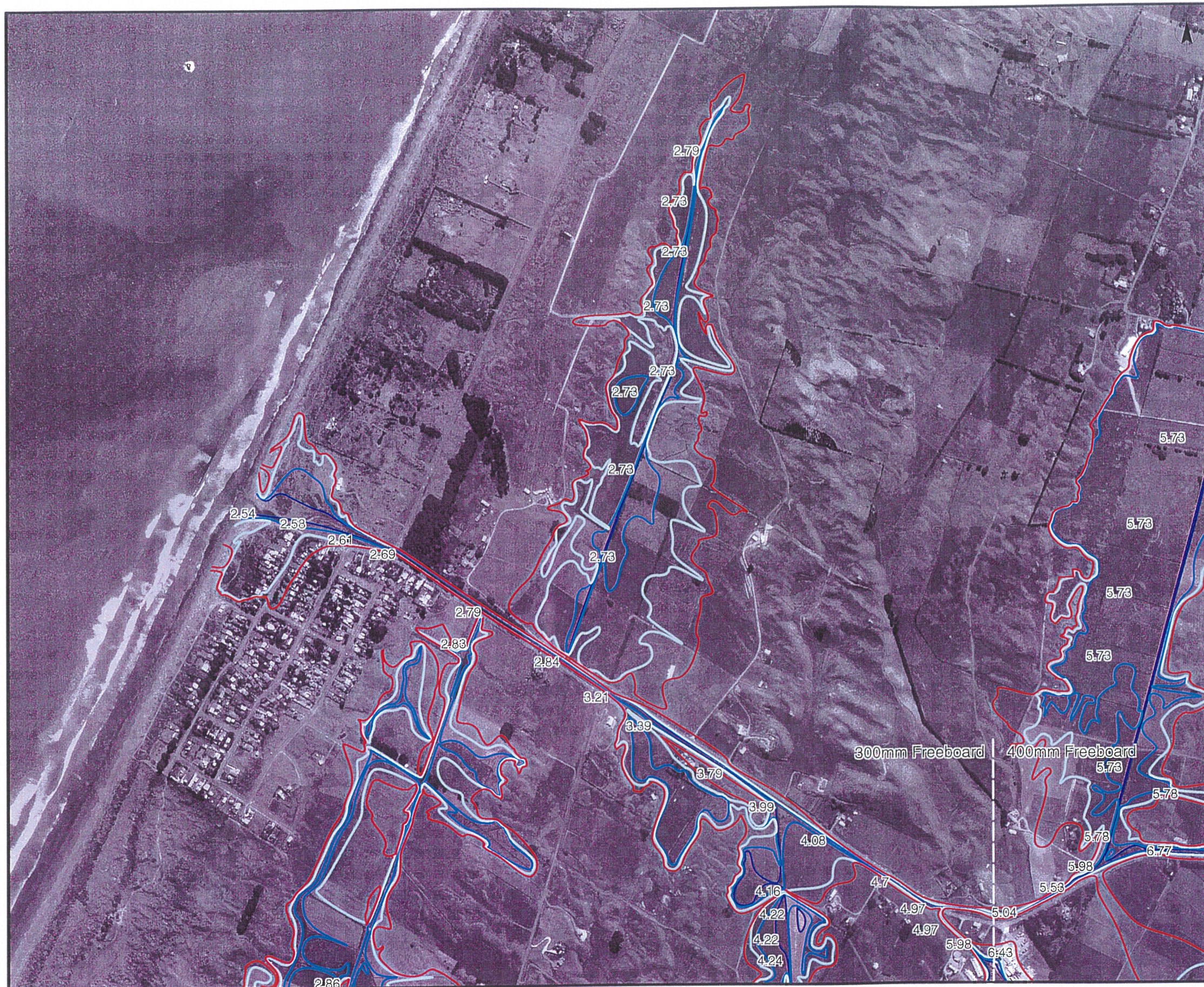
Modelled Flood Extent For
10 Year Event



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displayed on a map that uses the latest D.T.M.

MI REF. \\Mangaoe\MI\WS10yr_4

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B



50yr - 1 of 4

Location Map



Legend

Extent of Flood

0.25m Depth Contour

0.50m Depth Contour

Freeboard

Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaoe Stream Flood Hazard Assessment

Modelled Flood Extent For
50 Year Event



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displayed on a map that uses the latest D.T.M.

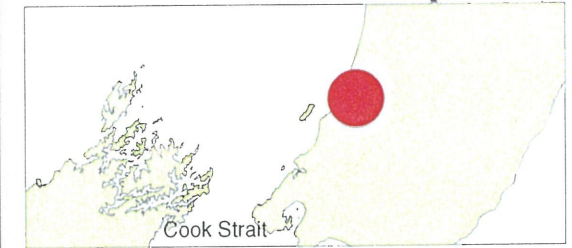
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Status	Final		
Scale	N.T.S		REVISION
Date	13/08/02		B

MI REF. \Mangaoe\MI\WS50yr_1



50yr - 2 of 4

Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangane Stream Flood Hazard Assessment

Modelled Flood Extent For
50 Year Event



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displayed on a map that uses the latest D.T.M.

MI REF. \Mangane\MIWS50yr_2

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S		
Date	13/08/02		
		REVISION	B



50yr - 3 of 4

Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangao Stream Flood Hazard Assessment

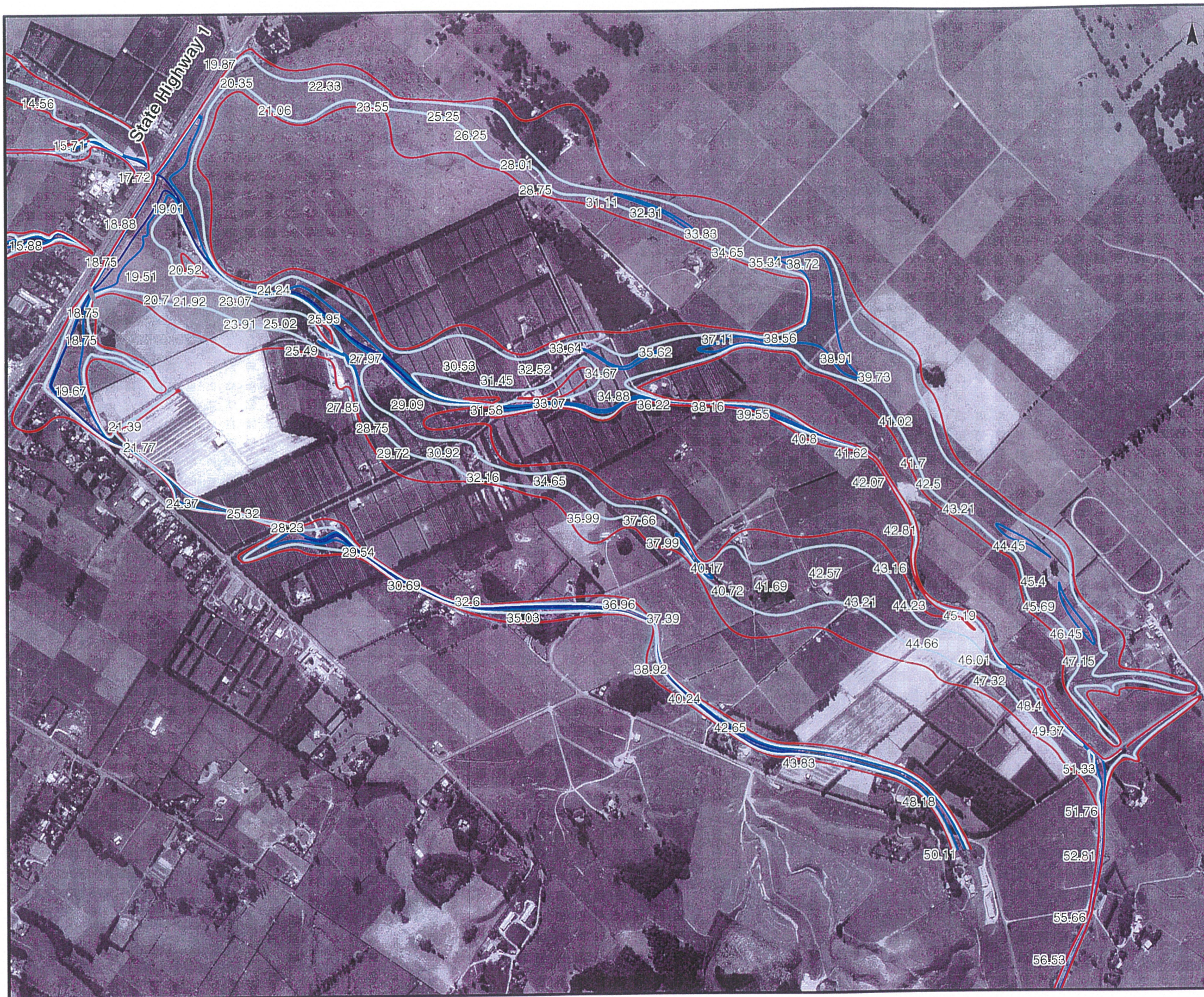
Modelled Flood Extent For
50 Year Event



These plans have been drawn by hand.
The flooding extent will be more accurately
displayed on a map that uses the latest D.T.M.

MI REF: \\Mangaone\MIWS50yr_3

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B

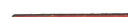


50yr - 4 of 4

Location Map



Legend

- Extent of Flood 
- 0.25m Depth Contour 
- 0.50m Depth Contour 
- Freeboard 
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



Wellington Regional Council Mangaone Stream Flood Hazard Assessment

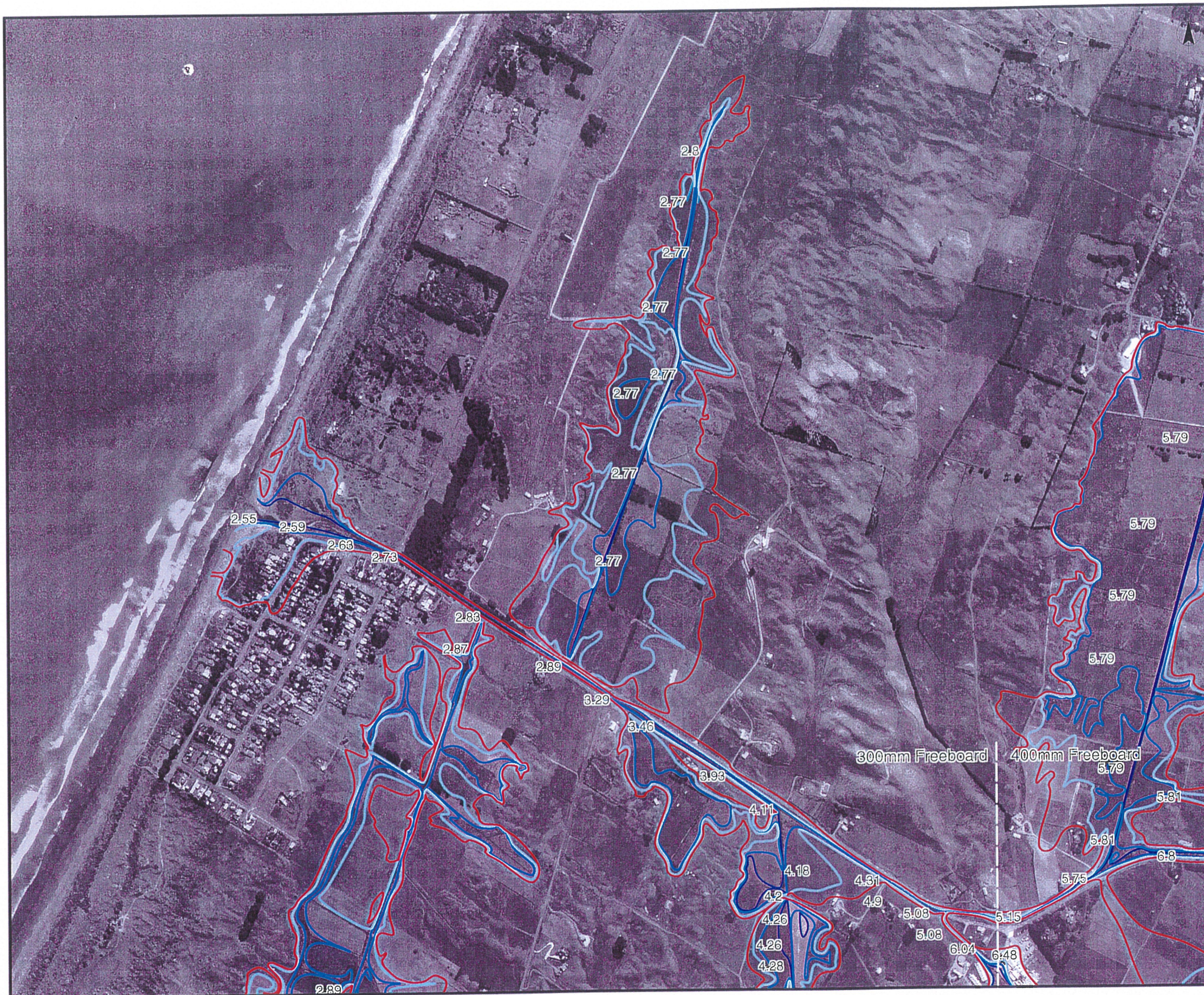
Modelled Flood Extent For
50 Year Event



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displayed on a map that uses the latest D.T.M.

MI REF. \Mangaone\MI\WS50yr_4

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S		
Date	13/08/02		
		REVISION	
		B	



100yr - 1 of 4

Location Map



Legend

Extent of Flood

0.25m Depth Contour

0.50m Depth Contour

Freeboard

Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
100 Year Event

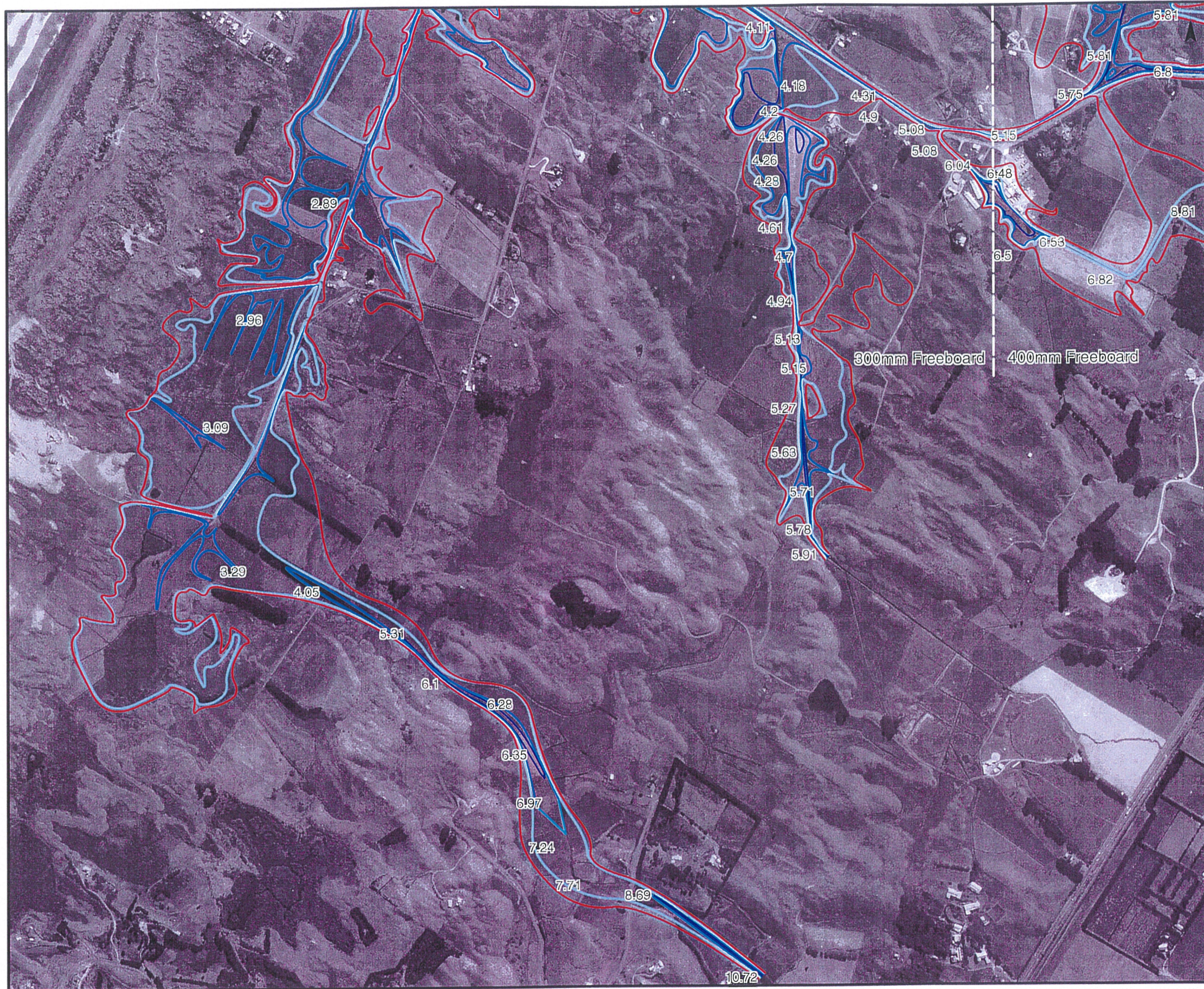


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Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B

MI REF. \\Mangaone\MI\WS100yr_1



100yr - 2 of 4

Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
100 Year Event



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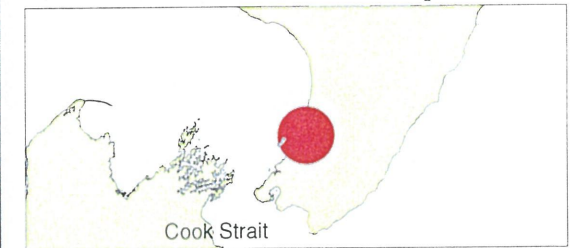
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Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B

MI REF. \\Mangaone\MI\WS100yr_2



100yr - 3 of 4

Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
100 Year Event

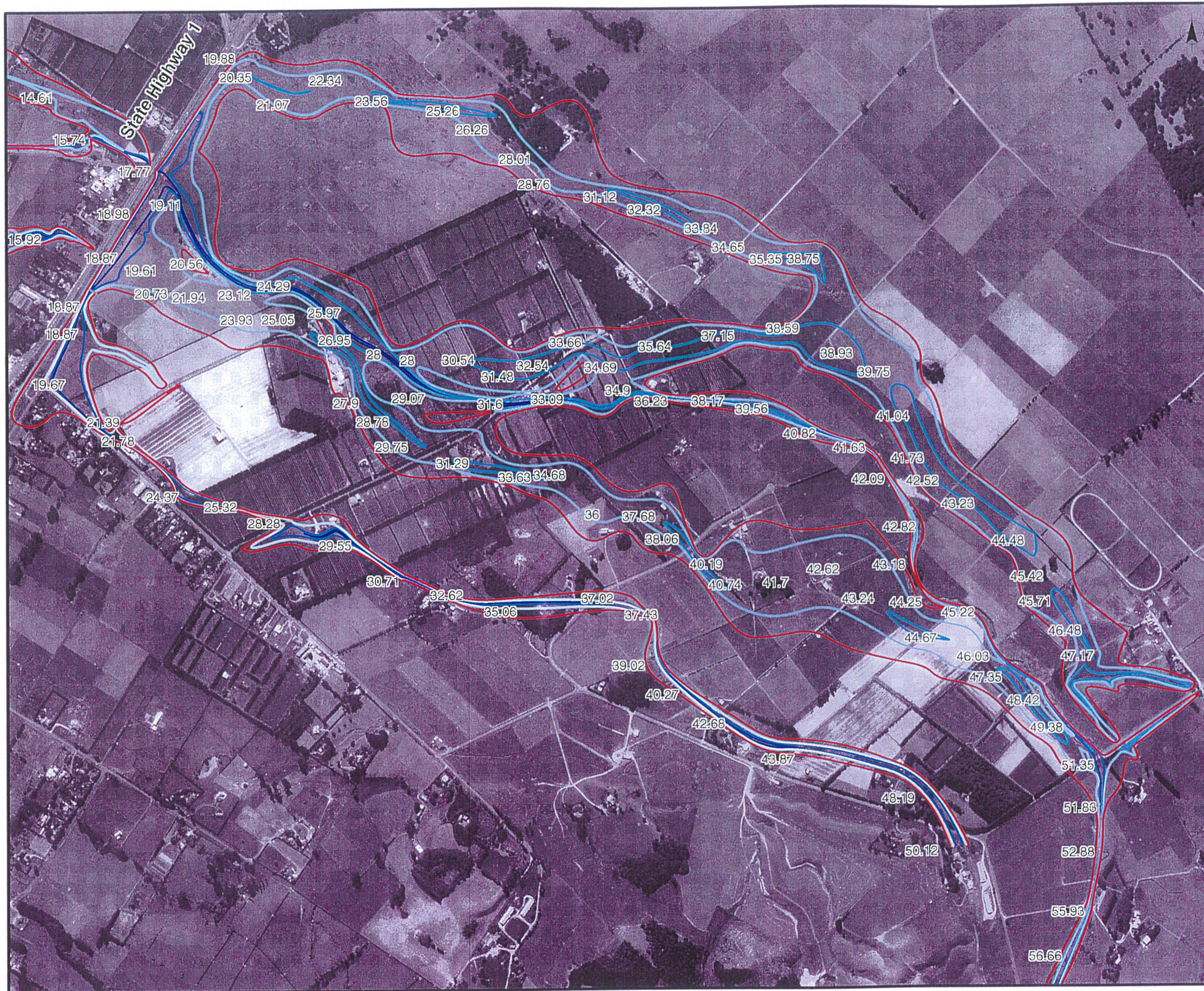


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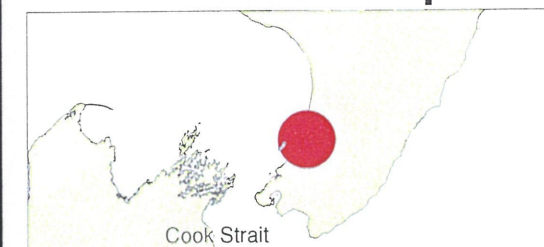
MI REF. \\Mangaone\MIWS100yr_3

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B



100yr - 4 of 4

Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard

Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
100 Year Event

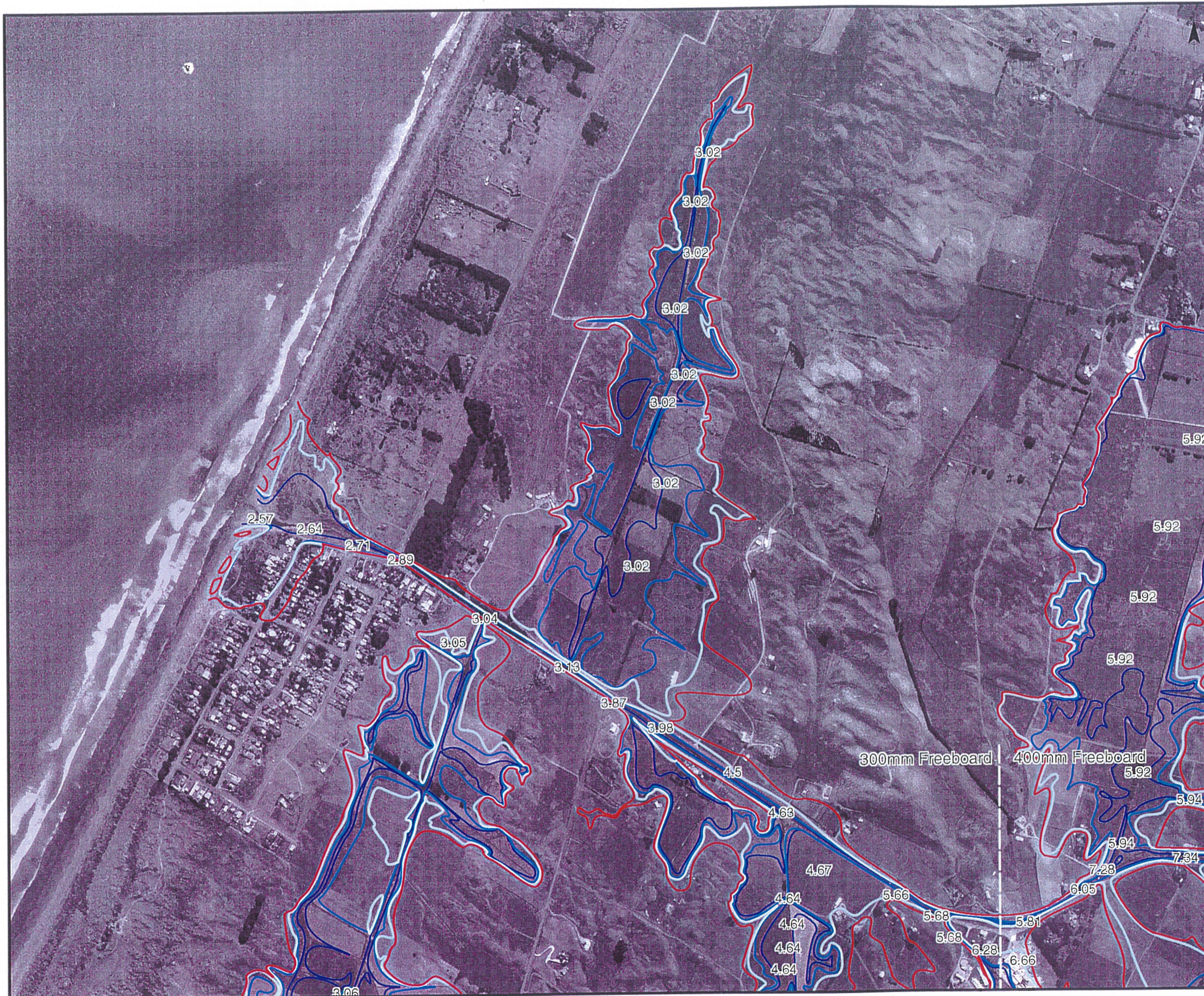


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Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B

MI REF. \\Mangaone\MIWS100yr_4



Extreme - 1 of 4

Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
Extreme Year Event

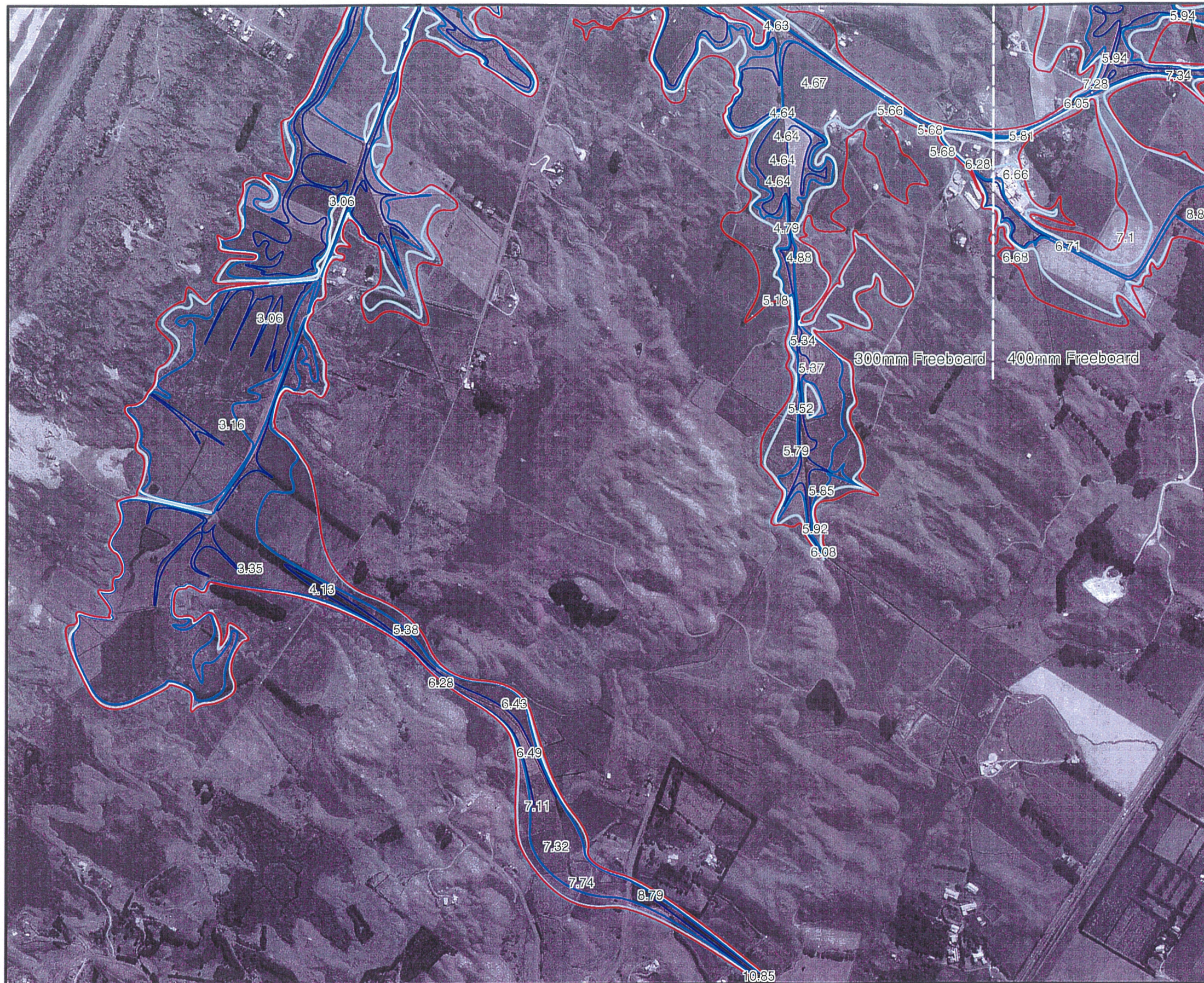


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Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B

MI REF. \\MangaoneMI\WSExe_1



Extreme - 2 of 4 Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
Extreme Year Event



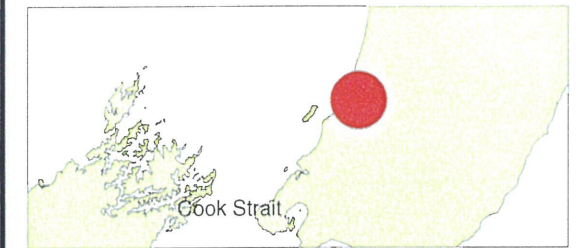
These plans have been drawn by hand.
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MI REF. \\Mangaone\\MI\\WSExe_2

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S		REVISION
Date	13/08/02		B



Extreme - 3 of 4 Location Map



Legend

- Extent of Flood
- 0.25m Depth Contour
- 0.50m Depth Contour
- Freeboard
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
Extreme Year Event



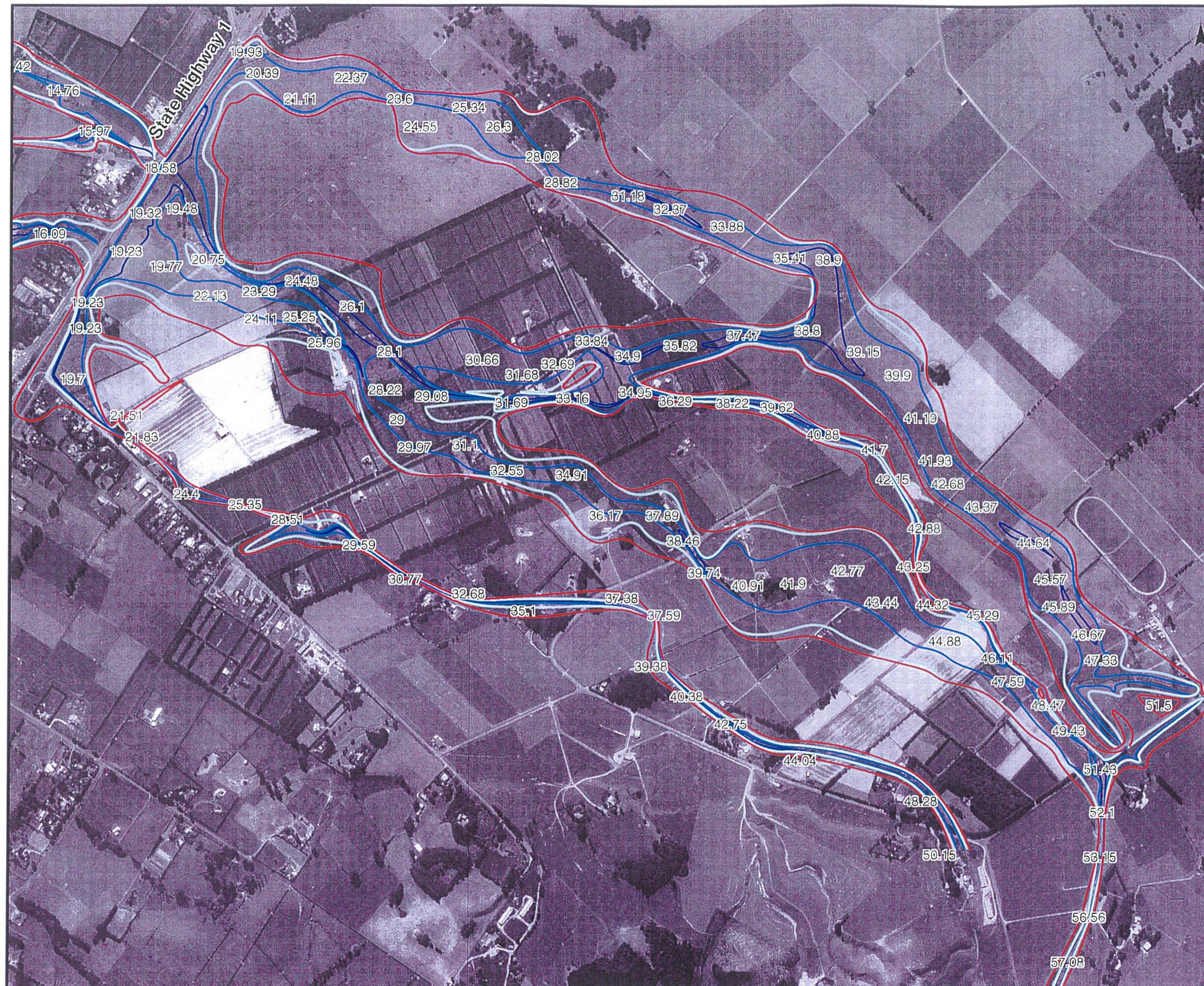
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Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S	REVISION	
Date	13/08/02		B

MI REF. \\Mangaone\MI\WSExe_3



Extreme - 4 of 4 Location Map



Legend

- Extent of Flood 
- 0.25m Depth Contour 
- 0.50m Depth Contour 
- Freeboard 
- Modelled Water Level 26.35

The freeboard consists on an increased water level of 300mm to 2.4km from the coast and 400mm upstream from there. (see map 1 of 4)



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Wellington Regional Council Mangaone Stream Flood Hazard Assessment

Modelled Flood Extent For
Extreme Year Event



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MI REF. \\Mangaone\MIWSExe_4

Drawn	TDJ	Chk'd	
Status	Final		
Scale	N.T.S		
Date	13/08/02	REVISION	B

