



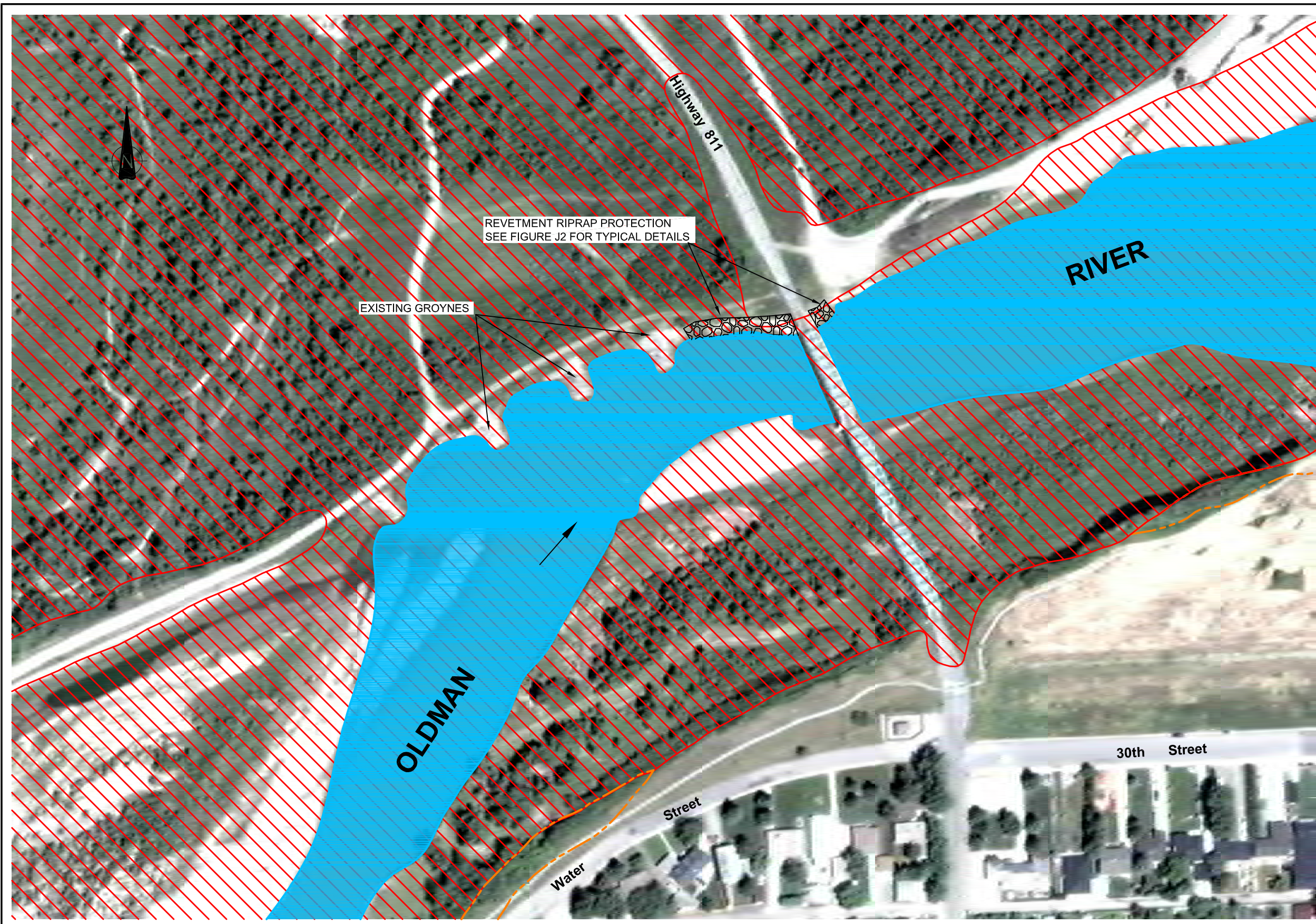
## **Appendix J**

### **Conceptual Design of Mitigation Measures at Fort MacLeod**

**Conceptual Cost Estimate  
Fort Mcleod Flood Defence**

Item No.	Item Description	Unit	Quantity	Unit Price	Extension
	<b>ALLOWANCES</b>				
1	Bigger Size Riprap	Allow.	Allowance		\$35,000
	<b>TEMPORARY FACILITIES</b>				
2	Mobilization and Demobilization	L.S.	1	Lump Sum	\$25,000
	<b>SITE PREPARATION</b>				
3	Care of Water	L.S.	1	Lump Sum	\$15,000
	<b>GRANULAR AND RIPRAP MATERIALS</b>				
4	Riprap Zone 6C	tonnes	1414.40	\$150.00	\$212,160
5	Gravel Armour Zone 5C	tonnes	404.00	\$40.00	\$16,160
6	Non-Woven Geotextile	m <sup>2</sup>	878.00	\$3.00	\$2,634
	<b>SUBTOTAL</b>				<b>\$305,954</b>
	<b>CONTINGENCIES @ 25%</b>				<b>\$76,489</b>
	<b>ENGINEERING @ 12%</b>				<b>\$36,714</b>
	<b>ESTIMATED TOTAL COST</b>				<b>\$419,000</b>





- LEGEND:**
- WATER BODY
  - FLOW DIRECTION
  - RIPRAP PROTECTION
  - FLOODWAY
  - FLOOD FRINGE

- NOTES:**
- PROPOSED FLOOD DEFENCE TO CONTINUATION OF THE BRIDGE ABUTMENT CONSIDERED IN CONJUNCTION WITH AN OVERALL MORPHOLOGY OF RIVER ENGINEERING. REVIEW OF RIVER TRAINING AT THIS BRIDGE CROSSING SHALL BE STUDIED FOR FURTHER FLOOD PROTECTION.

Scale:  
1:1000

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△	29	05	2014	ISSUED FOR FINAL REPORT	H.M.	G.G.
△	17	03	2014	ISSUED FOR CLIENT REVIEW	H.M.	G.G.
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**amec**

Client: SOUTHERN ALBERTA FLOOD RECOVERY TASK FORCE

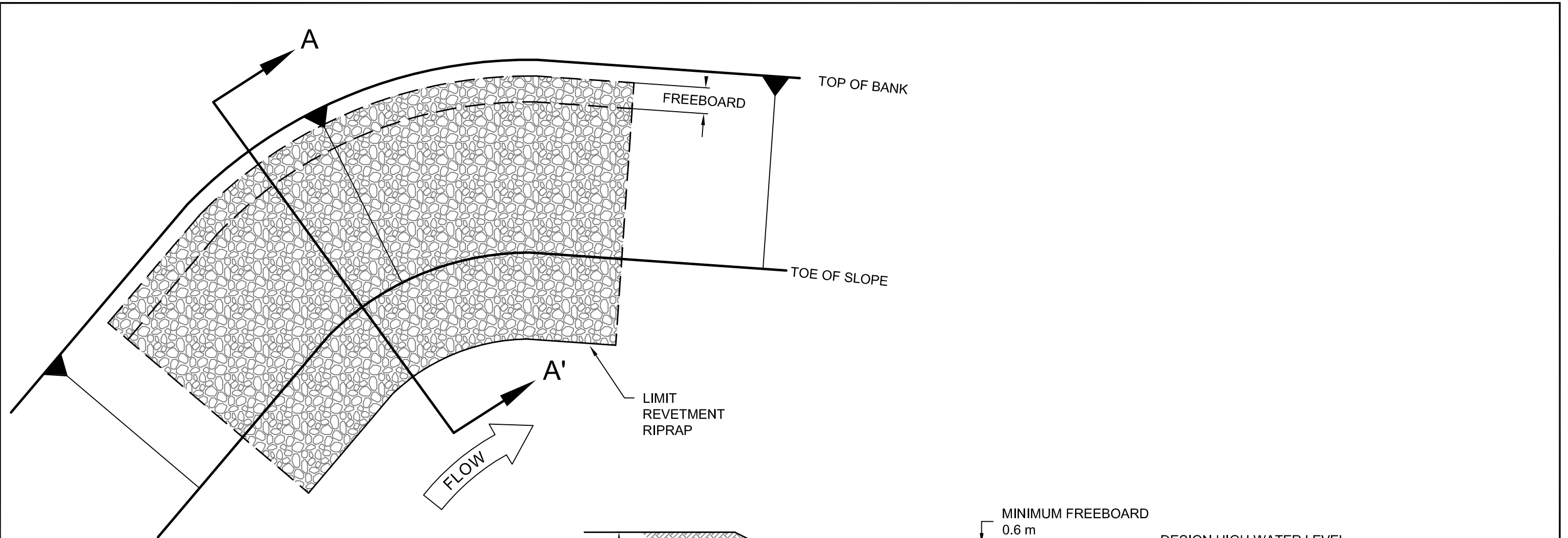
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PROJECT:	FLOOD MITIGATION FEASIBILITY STUDY FOR BOW, ELBOW AND OLDMAN RIVER BASINS
TITLE:	FORT MACLEOD FLOOD DEFENCES CONCEPTUAL PLAN

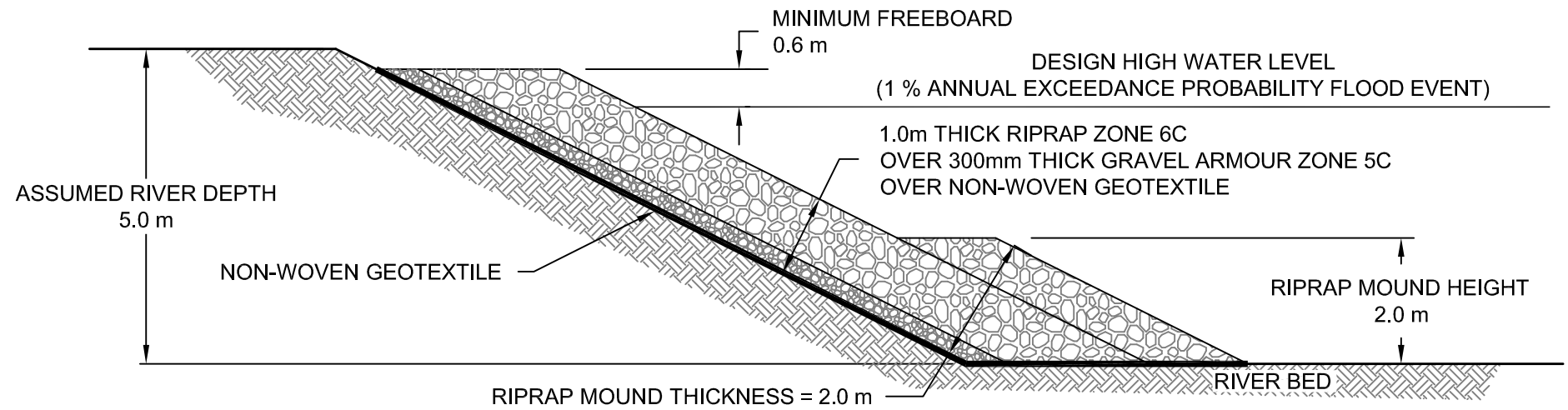
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Sheet No.:	1 of 2

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**PLAN VIEW**  
N.T.S.



**SECTION A-A' - REVETMENT RIPRAP**  
N.T.S.

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Client:

SOUTHERN ALBERTA FLOOD RECOVERY TASK FORCE



Designed By:	MG
Drawn By:	BJ
Checked By:	GB
Approved By:	GG
Scale:	NTS

PROJECT: FLOOD MITIGATION FEASIBILITY STUDY FOR BOW, ELBOW AND OLDMAN RIVER BASINS  
TITLE: FORT MACLEOD FLOOD DEFENCES TYPICAL DETAILS

Project No.:	CW2174
CADD File:	CW2174-FM01.dwg
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Sheet No.:	2 of 2