Bridge Inspection

Bridge File Number	08984 -1 Bridge	Form Type	PCS
Year Built/Year Supstr	1981/1981	Lot No.	2
		Inspector Name	Brian Pientsch
Bridge or Town Name	GROUARD	Inspector Class	BR CLS A
Located Over	SALT CREEK, 8.11.80.54.1, WATERCRS-ST	Assistant Name	Lisbeth Medina
Located On	750:02 C1 27.265	Assistant Class	
Water Body Cl./Year		Inspection Date	02-Dec-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 28 TWP 76 RGE 14 W5M	Data Entry Date	03-Jan-2011
Longitude, Latitude	-116:06:10, 55:36:28	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	20-Dec-2010
Contract Main. Area	CMA06	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	11.2 /	Dept. Review Date	24-Feb-2011
AADT/Year	560 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	3		

Allowable Load (t):	Single	CS1 41 GIRDER	Semi	CS2 61 GIRDER	Train	CS3 86 GIRDER	---> On Critical Spans --->Critical Member
Design Loading:		CS750					---> Primary Span

Posting Information

Required Load Posting (t)			Single		Semi		Truck Train	
Posted Loading (t)			Single		Semi		Truck Train	
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Remarks								

Hazard Marker At Bridge (Y/N)	Yes
Remarks	Gage station located 10m West of bridge opening.
Other Sign Types	

Utilities (Located at)

Utility Attachments			
Telephone	Attached along West curb.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Curve to S. Sight distance 500m Hill to south No passing in both directions.
Vertical Alignment		7	7	
Roadway Width (m)	8.700			
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		4	5	
Length (m)	15.300			
Current Standard (Y/N)	No			
Termination Type	TURN DOWN ENDS			
Drainage		8	7	
Approach Road General Rating		**7**	**7**	

Superstructure

Bridge Component				Last	Now	Explanation of Condition
(Primary Span : **SMO, 3 Spans, Lengths(m): 11-11-11, A-Ident Number:**)						
Special Features						
Special Feature					X	
(Type :)						
Special Feature					X	
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0	0		
Now						
Wearing Surface				8	8	
(Material Type : **CONCRETE**)						
(Thickness(mm) : **125**)						
Lateral Connection Problem (Y/N)			No			
Deck Top				N	N	
Deck Rideability				8	8	
Deck Joints				N	7	
Bump (Y/N)			No			
Deck Drainage				8	N	Covered with snow.
Drains Clogged (Y/N)						
Curbs/Median				6	N	Covered with snow.
(Curb Type : **Standard**)						
Scaling (Percent Area)			1			
Bridge Rail				7	7	
(Type : **GALVANIZED STEEL BRIDGE TUBE**)						
Bridge Rail Posts				7	7	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)						
Bridge Rail/Posts Coating				7	7	
(Type : **GALVANIZED**)						
Sidewalk				X	X	
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now						
Girders				4	4	Viewed middle span from shore. Staining between girders from bolted joints. S3,G2 has spalls with corrosion stains and 2mm wide crackx400mm long. S3G1,S3G10,S1G1 and S1G10 have spalls..
Last Complete Inspection Date			02-Dec-2010			
Cracking (Y/N)			Yes			
Spalling (Percent Area)			1			
Lift or Connector Pocket Grouted (Y/N)						
(Number Of Girders : **30**)						
Span Alignment Problems						
Vertical (Y/N)			No			
Horizontal (Y/N)			No			
Superstructure General Rating				**4**	**4**	

Substructure

Bridge Component	Last	Now	Explanation of Condition
Abutments			
(Extended Backwall Piles (Y/N) : **N**)			
(Extended Backwall Piles Spacing(mm) :)			
(Total Number of Caps/Corbels : **1:1**)			
Bearing Seats/Caps/Corbels Detail Ratings			
Bearing Seats/Caps/Corbels	7	6	
(Type : **CONCRETE**)			
(Depth(mm) : **700**)			
(Width(mm) : **500**)			
Backwalls/Breastwalls	7	7	
Greatest Height (m) : 1.00			
Wingwalls	6	6	Narrow cracking & spalling on concrete wingwalls
(Total Number of Bearing Piles : **0:0**)			
Piles Detail Ratings			
Piles	N	N	
Paint/Coating	X	X	
Abutment Stability	7	5	Fill settling under both caps.
Scour/Erosion	7	5	
Piers/Bents			
(Type : **PIER-COLUMN**)			Wide cracking on E. side of both pier caps. Crack on bottom on cap extending up into face approx. 100mm with efflorescence.
(Total Number of Caps/Corbels : **1:1**)			
Bearing Seats/Caps/Corbels Detail Ratings			
Bearing Seats/Caps/Corbels	4	4	
(Type : **CONCRETE**)			
(Depth(mm) : **600**)			
(Width(mm) : **500**)			

Bearing Seats/Caps/Corbels Detail Ratings

	N (count)	1 (count)	2 (count)	3 (count)
Last	0	0	0	0
Now				

Piles Detail Ratings

	N (count)	1 (count)	2 (count)	3 (count)
Last	14	0	0	0
Now	14	0	0	0

Bearing Seats/Caps/Corbels Detail Ratings

	N (count)	1 (count)	2 (count)	3 (count)
Last	0	0	0	0
Now				

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Total Number of Bearing Piles : **7:7**)				
Piles Detail Ratings				
	N (count) / 1 (count) / 2 (count) / 3 (count)			
Last	0 / 0 / 0 / 0			
Now				
Pier Shaft/Piles		7	7	
Greatest Height (m)	5.00			
Bracing/Struts/Sheathing		7	7	
Nose Plate		X	X	
Paint/Coating		5	5	Minor superficial rust.
(Colour Description : **GREEN**)				
(Colour Code : **14090**)				
Pier Stability		7	6	
Scour		7	4	Erosion 1mdeepx8m long and sloughing banks at both toe of slope.
Debris (Y/N)	Yes			Drift piled on east side.(Photo)
Substructure General Rating		**4**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **E**)				
(D/S Direction : **W**)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)				
Slope Protection		7	4	Erosion and sloughing banks at both toe of slope.
(Type :)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**4**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
SEAL CURBS						
PATCH DECK						
OVERLAY DECK						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
SHOTCRETE REPAIRS						
CORE TIMBER CAPS/CORBELS						
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION	2011					
INSTALL STRUTS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**44.4/44.4**	**Sufficiency Rating (Last/Now) (%)**	**69.4/65.6**	Est. Repl. Yr	2022	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Monitor pier cap cracking and girder cracking.	Department Comments	

Maintenance Reviewed By		Date		Estimated Total	0

Proposed Long-Term Strategy			
On 3-Year Program (Y/N)			
Proposed Action			
Previous Inspector's Name	Brian Pientsch	Previous Assistant's Name	Tim Miskiman
Next Inspection Date	02-Mar-2014	Previous Inspection Date	24-Jul-2007
Inspection Cycle (Default) (months)	39		
Comment			