

Bridge Inspection							
Bridge File Number	70034 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1954/1954			Lot No.	1		
Bridge or Town Name	SUNDRE			Inspector Name	Owen Salava		
Located Over	WALTON CREEK, 3.98.2, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	584:02 C1 21.927			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	27-Oct-2011		
Legal Land Location	NW SEC 11 TWP 33 RGE 7 W5M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-114:53:55, 51:49:21			Data Entry Date	28-Nov-2011		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA29			Review Date	13-Nov-2011		
Clear Roadway/Skew	9.1 /			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	470 / 2010 (A)			Dept. Review Date	28-Nov-2011		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	5						
Allowable Load (t):	Single	CS1 28 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 66 GIRDER	---> On Critical Spans --->Critical Member
Design Loading:	HS20						---> 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	Not required.							
Hazard Marker At Bridge (Y/N)	Yes							
Remarks	Too low.							
Other Sign Types	Curve & 65km/hr SB, Curve & 55km/hr NB, Narrow Bridge, Bump.							

Utilities (Located at)				
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE			
Telephone	West side, conduit.		Gas	Crossing 150m south.
Power	Crosses road 300mm North & 1 wire 50m West.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Curve to north and south. Hill to north & south. No passing.
Vertical Alignment		5	5	
Roadway Width (m)	9.540			Insufficient posts.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		7	7	
Length (m)	15.240			
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		7	7	
Approach Road General Rating		4	4	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PGO, 2 Spans, Lengths(m): 6.1-6.1, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now	0.0	0.0	0.0	0.0	
Wearing Surface			6	6	Placed standard reinforced pyramet concrete overlay Oct. 7/91. Hairline longitudinal cracks between girder.
(Material Type : CONCRETE)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	Yes				
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			N	N	Buffer angles covered by overlay. Sawcut overlay between spans & installed Sika Flex L.M. caulking Oct.91
Bump (Y/N)		No			
Deck Drainage			7	7	
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Blade scratches. Exposed rebar @ corners. Lift pockets deteriorated - photo.
(Curb Type : Standard)					
Scaling (Percent Area)		10			
Bridge Rail			7	7	Double layer. Nut @ east not tight & washer missing - photo. Flexbeam only.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			3	3	
(Type : TREATED TIMBER;TREATED TIMBER)					
Bridge Rail/Posts Coating			7	7	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Girders			4	4	A few with narrow shear cracks. Medium width flexural crack @ 2nd from E @ S span. Wide cracks in bottom of webs of 7 girders. S2G10 & S1G9 with spalls & corroding longit. rebars - photo. Ext into AZ. 2 'A' curbs & 10 'G' interiors each span.
Last Complete Inspection Date		27-Oct-2011			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		5			
Lift or Connector Pocket Grouted (Y/N)		Yes			
(Number Of Girders : 24)					
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)				A1P3 is out of alignment @ South. Steel capital gap void of grout.					
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
Last									
Now	0	0	0				0		
Bearing Seats/Caps/Corbels							6	6	
(Type : STEEL)									
(Depth(mm) : 310)									
(Width(mm) : 310)									
Backwalls/Breastwalls			5				4		Vertical sheeting, horiz. on 4 corners. Not low enough at NW & NE corners.
Greatest Height (m)		2.40							
Wingwalls			6	6					
(Total Number of Bearing Piles : 8:8)				2 split piles - photo. Held in pile capital. South piles leaning North 10mm & cap leaning south 25mm - photos. A1P2 wide split - photo.					
Piles Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
Last									
Now	0	0	0				0		
Piles			4				4		
Paint/Coating			4				4		10% corrosion at caps.
Abutment Stability			4				4		South piles leaning from backwall pressure.
Scour/Erosion			5				4		Losing fill below planks at N corners. North slope eroding.
Piers/Bents									
(Type : PIER-COLUMN)									
(Total Number of Caps/Corbels : 1)									
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)	3 (count)					
Last									
Now	0	0	0	0					
Bearing Seats/Caps/Corbels				6	6				
(Type : STEEL)									
(Depth(mm) : 310)									
(Width(mm) : 310)									
(Total Number of Bearing Piles : 8)				P7 has wide split and swollen at waterline. Steel jacket torn.					
Piles Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
Last							2		
Now	0	0	0				1		
Pier Shaft/Piles			3				3		
Greatest Height (m)		3.20							
Bracing/Struts/Sheathing			4				4		Some bracings are notched; beaver chew marks.
Nose Plate			X				X		
Paint/Coating			4				4		Paint peeled @ cap flanges, South. Black.
(Colour Description :)									
(Colour Code :)									
Pier Stability			6	6					

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		4	4	Small scouring beside piles South side.
Debris (Y/N)	Yes			Drift under bridge; old beaver dam.
Substructure General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				Bends upstream and downstream.
(D/S Direction : E)				
Alignment		4	4	
Bank Stability		5	5	Cut banks East & West.
HWM (m below Top of Curb)	0.8			(Grass on stiffeners in cap. 15/Mar/2006)
Drift (Y/N)	Yes			
Slope Protection		4	4	Backwalls high with no protection at corners, N wall.
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		X	X	
Adequacy of Opening		4	4	Stream/bridge opening angle differ.
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL	2012	Install washer and tighten bridge post nut @ east.								
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										
INSTALL STRUTS										
OTHER ACTION	2012	Install steel pile jacket pier P7.								
OTHER ACTION	2012	Replace 1 pier brace plank, 3x12x20.								
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	50.1/50.1	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes			
Special Comments for Next Inspection	Department Comments		Date		Estimated Total		0			
Maintenance Reviewed By	2006.07.28 With normal maintenance the bridge should be good until 2020 (Steel caps, overlay).									
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Dave Lam		Previous Assistant's Name							
Next Inspection Date	27-Oct-2012		Previous Inspection Date		24-Sep-2009					
Inspection Cycle (Modified) (months)	12									
Comment										

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL	2012	Install washer and tighten bridge post nut @ east.	programmed	2013		
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						
INSTALL STRUTS						
OTHER ACTION	2012	Install steel pile jacket pier P7.	programmed	2013		
OTHER ACTION	2012	Replace 1 pier brace plank, 3x12x20.	programmed	2013		
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	50.1/50.1	Est. Repl. Yr	2013	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection			Department Comments	Replacement year changed to 2019. DA		
Maintenance Reviewed By	Darron Ahlstedt		Date	22-Nov-2012	Estimated Total	0
Proposed Long-Term Strategy	2006.07.28 With normal maintenance the bridge should be good until 2020 (Steel caps, overlay).					
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name			
Next Inspection Date	27-Jan-2015		Previous Inspection Date	24-Sep-2009		
Inspection Cycle (Default) (months)	39					

Comment	
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