

Bridge Inspection							
Bridge File Number	00257 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1959/1959			Lot No.	1		
Bridge or Town Name	BOWDEN			Inspector Name	Owen Salava		
Located Over	BOWDEN CREEK, 3.89.1, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	587:02 C1 38.705			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	25-Oct-2011		
Legal Land Location	SE SEC 29 TWP 34 RGE 1 W5M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-114:06:13, 51:56:26			Data Entry Date	21-Nov-2011		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA19			Review Date	10-Nov-2011		
Clear Roadway/Skew	9.1 /			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	1,230 / 2010 (A)			Dept. Review Date	22-Nov-2011		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	6						
Allowable Load (t):	Single	CS1 28 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 62 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	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Remarks	Not required.							
Hazard Marker At Bridge (Y/N)	No							
Remarks	Not required.							
Other Sign Types								

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	On South curb.		Gas
Power	2 lines on North property line.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Farm & field entrance 200m West of bridge.
Vertical Alignment		7	7	
Roadway Width (m)	9.000			Slight bump @ both approaches due to settlement. Transverse ACP cracks at abutment & end of approach fill - typical both ends - photo.
Approach Bump		6	5	
Guardrail (Y/N)	Yes			SW & NE - 60.8m; NW & SE - 30.4m.
Guardrail		7	7	
Length (m)	30.400			
Current Standard (Y/N)	Yes			
Termination Type	TURNED DOWN ENDS			
Drainage		6	6	
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PG, 1 Spans, Lengths(m): 8.5, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	10	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface			5	5	6 lines longitudinal cracks in wearing surface, not sealed - photo. Aggregate plucked out along 1 crack line (photo).
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		Yes			
Deck Top			N	N	
Deck Rideability			6	6	
Deck Joints			N	N	Paved over.
Bump (Y/N)		No			
Deck Drainage			7	7	
Drains Clogged (Y/N)		No			
Curbs/Median			3	3	Cracked South curb under 1st post from East - photo.
(Curb Type : Standard)					
Scaling (Percent Area)		2			
Bridge Rail			7	7	Double layer. A/B & nuts rusting. Concrete damage at post anchor assembly.
(Type : FLEX BEAM)					
Bridge Rail Posts		4	4		
(Type : GALVANIZED POST STEEL;POST STEEL)					
Bridge Rail/Posts Coating		6	6		
(Type : PAINT)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Girders			5	5	Some forms still up from patching. G10 small spall midspan (photo). Cement btwn legs fallen out in 4/10 gaps partially exposing tie wire.
Last Complete Inspection Date		25-Oct-2011			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		1			
Lift or Connector Pocket Grouted (Y/N)					
(Number Of Girders : 11)					
Span Alignment Problems					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
Superstructure General Rating			5	5	

Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
(Extended Backwall Piles (Y/N) : Y)					
(Extended Backwall Piles Spacing(mm) : 1500)					
(Total Number of Caps/Corbels : 5:5)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Bearing Seats/Caps/Corbels				4	4
(Type : TREATED TIMBER)					
(Depth(mm) : 300)					
(Width(mm) : 360)					
Backwalls/Breastwalls			6	6	
Greatest Height (m)		1.90			
Wingwalls			6	6	
70mm x 250mm SW wingwall, 2nd plank from top split, dirt showing between 3rd & 4th plank - functional.					
(Total Number of Bearing Piles : 8:8)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	4	
Now	0	0	0	4	
Piles				3	3
Paint/Coating				X	X
Abutment Stability			3	3	
4th pile from S end W wall splitting & 70mm x 250mm showing movement. 4th pile from S end strutted 150mm x 200mm x 8.0m. Both abuts pushing in 4th & 5th pile from SW abut split 3-4, 7-8.					
Scour/Erosion			N	4	
Scour under bridge, by W wall.					
Piers/Bents					
(Type :)					
(Total Number of Caps/Corbels :)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Bearing Seats/Caps/Corbels				X	X
(Type :)					
(Depth(mm) :)					
(Width(mm) :)					
(Total Number of Bearing Piles :)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Pier Shaft/Piles				X	X
Greatest Height (m)					
Bracing/Struts/Sheathing			4	4	
Struts 150mm x 200mm x 8.0m. Bowed South strut cracking under pressure - photo. Strut appears stable.					
Nose Plate			X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				Poor, aligned at road 50m W before turning along road then turning into bridge.
(D/S Direction : N)				
Alignment		4	4	
Bank Stability		N	6	
HWM (m below Top of Curb)	1.6			Drift on lower strut.
Drift (Y/N)	No			
Slope Protection		N	4	300mm riprap.
(Type : NONE; NONE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		5	5	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Comment

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Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
SEAL CURBS	2012	Patch curb at SE post.	Programmed and completed	2012			
PATCH DECK	2012	Patch raveling ACP.	Programmed and completed				
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	Band 6 piles.	Programmed and completed (2) piles only	2012			
OTHER ACTION			Replaced timber strut	2012			
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	59.1/58.5	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	(Note: County just recently put 2 struts on centre piles just below subcap to prevent more movement. 27May2005). (Assessment completed in 2001. 27May2005).		Department Comments	Maintenance completed 26 June 2012			
Maintenance Reviewed By	Darron Ahlstedt		Date	29-Oct-2012	Estimated Total	0	
Proposed Long-Term Strategy	2004.05.29 Road paved in 2002. Minor repairs completed. Assessment recommended cap replacement. Caps should be good for 10 years hopefully. Bridge should be good until 2012.						

On 3-Year Program (Y/N)			
Proposed Action			
Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	25-Jan-2015	Previous Inspection Date	07-Dec-2010
Inspection Cycle (Default) (months)	39		
Comment			