

Colorado Department of Transportation
Structure Inspection and Inventory Report (English Units)

Highway Number (ON) 5D: 105A

Mile Post (ON)11: 5.210 mi

Bridge Key: H-17-CZ Inspection Date: 1/17/2012 Sufficiency Rating: 87.5 Not Eligible

Rgn/Sectn 2E/2M:	24	Hist Signif 37:	5	UW Inspection Date 93B:	
Trans Region 2T:	01	Posting status 41:	A	SI Date 93C:	
County Code 3:	041	Service on/un 42A/B:	6 1	Bridge Cost 94:	\$ 1,856,000
EL PASO		Main Mat/Desgn 43A/B:	5 2	Roadway Cost 95:	\$ 185,000
Place Code 4:	00000	Appr Mat/Desgn 44A/B:	0 0	Total Cost 96:	\$ 2,784,000
non-city		Main Spans Unit 45:	2	Year of Cost Estimate 97:	2002
Rte.(On/Under)5A:	1	Approach Spans 46:	0	Brdr Brdg Code/% 98A/B:	
Signing Prefix 5B:	3	Horiz Clr 47:	83.0 ft	Border Bridge Number 99:	
Level of Service 5C:	1	Max Span 48:	92.0 ft	Defense Highway 100:	0
Directional Suffix 5E:	0	Str Length 49:	188.7 ft	Parallel Structure 101:	N
Feature Intersected 6:		Curb Wdth L/R 50A/B:	0.0 ft 10.0 ft	Direction of Traffic 102:	2
25 ML		Width Curb to Curb 51:	83.0 ft	Temporary Structure 103:	
Facility Carried 7:		Width Out to Out 52:	95.5 ft	Highway System 104:	0
SH 105 ML		Deck Area:	18,018. sq. ft	Fed Lands Hiway 105:	0
Alias Str No.8A:		Min Clr Ovr Brdg 53:	99.99	Year Reconstructed 106:	0000
		Min Undrclr Ref 54A:	H	Deck Type 107:	2
Prll Str No. 8P		Min Undrclr 54B:	18.1 ft	Wearing Surface 108A:	1
		Min Lat Clrnce Ref R 55A:	H	Membrane 108B:	0
Location 9:	328.05117409:	Min Lat Undrclr R 55B:	14.0 ft	Deck Protection 108C:	1
MONUMENT INTERCHANGE		Min Lat Undrclr L 56:	21.0006562	Truck ADT 109:	3 %
Max Clr 10:	99.99	Deck 58:	7	Trk Net 110:	0
BaseHiway Net12:	0	Super 59:	8	Pier Protection 111:	#
IrsinvRout 13A:	0000000000	Sub 60:	8	NBIS Length 112:	Y
IrssubRout No13B:	00	Channel/Protection 61:	N	Scour Critical 113:	N
Latitude 16:	39d 05' 33"	Culvert 62:	N	Scour Watch 113M:	
Longitude 17:	104d 51' 45"	Oprtn Rtg Method 63:	1 LF Load Fact	Future ADT 114:	17,875
Range18A:	67 W	Operating Rating 64:	62.7	Year of Future ADT 115:	2028
Township18B:	67	Inv Rtn Method 65:	1	CDOT Str Type 120A:	CPGC
Section18C:	14	Inventory Rating 66:	51.9	CDOT Constr Type 120B:	41
Detour Length 19:	10.0 mi	Asph/Fill Thick 66T:	000 "in"	Inspection Indic 122A:	
Toll Facility 20:	3	Str. Evaluation 67:	8	Inspection Trip 122AA:	
Custodian 21:	1	Deck Geometry 68:	5	Scheduling Status 122B:	
Owner 22:	1	Undrclr Vert/Hor 69:	6	Maintenance Patrol 123:	39
Functional Class 26:	16	Posting 70:	5	Expansion Dev/Type124:	D
Year Built 27:	2004	Waterway Adequacy 7:	N	Brdg Rail Type/Mod 125A/B:	Y 0
Lanes on 28A:	6	Approach Alignment 72:	8	Posting Trucks 129A/B/C:	0 0 0
Lanes Under 28B:	6	Type of Work 75A:	35	Str Rating Date 130:	6/27/2001
ADT 29:	12,500	Work Done By 75B:	1	Special Equip 133:	-1
Year of ADT 30:	2008	Length of Improvment 76:	218.2 ft	Vert Clr N/E 134A/B/C:	N 55.55 0.01
Design Load 31:	9	Insp Team Indicator 90B:	WHITE TEAM	Vert Clr S/W 135A/B/C:	S 55.55 0.01
Apr Rdwy Width 32:	83.0 ft	Inspector Name 90C:	CHURCHESK	Vertical Clr Date:	1/1/2004
Median 33:	0	Frequency 91:	24 months	Weight Limit Color: 139:	0
Skew 34:	4.00 °	FC Frequency 92A:	-1	Str Billing Type:	IIC
Structure Flared 35:	0	UW Frequency 92B:	-1	Userkey 1 - System:	ONSYS
Sfty Rail 36a/b/c/d:	1 0 0 0	SI Frequency 92C:	-1	Userkey 7-Update Indic:	
Rail ht36h:	35 "in"	FC Inspection Date 93A:			

Inspector Name: CHURCHESK

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Element Inspection Report

Elm/En	Description	Units	Total Qty	% in 1	CS 1	% in 2	CS 2	% in 3	CS 3	% in 4	CS 4	% in 5	CS 5
35/1	Pcst Pnl Cnc Dk Bare	(SF)	18,018	100 %	18,018	0 %	0	0 %	0	0 %	0	0 %	0
109/1	P/S Conc Open Girder	(LF)	1,656	100 %	1,656	0 %	0	0 %	0	0 %	0	0 %	0
205/1	R/Conc Column	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
215/1	R/Conc Abutment	(LF)	192	99 %	190	1 %	2	0 %	0	0 %	0	0 %	0
234/1	R/Conc Cap	(LF)	94	100 %	94	0 %	0	0 %	0	0 %	0	0 %	0
300/1	Strip Seal Exp Joint	(LF)	192	100 %	192	0 %	0	0 %	0	0 %	0	0 %	0
301/1	Pourable Joint Seal	(LF)	192	100 %	192	0 %	0	0 %	0	0 %	0	0 %	0
321/1	R/Conc Approach Slab	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0
325/1	Slope Prot/Berms	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0
326/1	Bridge Wingwalls	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
334/1	Metal Rail Coated	(LF)	567	100 %	567	0 %	0	0 %	0	0 %	0	0 %	0
338/1	Conc Curbs/SW	(LF)	378	99 %	376	1 %	2	0 %	0	0 %	0	0 %	0
340/1	Superstr Cnc Coating	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
341/1	Substr Conc Coating	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
358/1	Deck Cracking SmFlag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
359/1	Soffit Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
530/1	Approach Guardrail A	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0

Elem/Env	Description	Element Notes
35/1	Pcst Pnl Cnc Dk Bare	Light random and longitudinal cracks in concrete deck surface, mostly at ends and above Pier 2. Surface is starting to wear and exposing aggregates. Deck drains are clogged.
109/1	P/S Conc Open Girder	Good condition.
205/1	R/Conc Column	Stone veneer on all columns. Good condition.
215/1	R/Conc Abutment	Decorative concrete retaining wall abutments. Some light vertical cracks in both, two with efflorescence at Abutment #3. Some seepage along horiz. cold jt. at left side of Abutment 1.
234/1	R/Conc Cap	Good condition.
300/1	Strip Seal Exp Joint	At sleeper slab joints. Both open 2 inches, and filled with sand & ice. Longit. cracking along end dams at both. Concrete end dam is spalled in EBnd shoulder area at #3.
301/1	Pourable Joint Seal	At abutments. Some minor chips in concrete along joints.
321/1	R/Conc Approach Slab	Light to mod. random/map cracking (open to 1/16 inch) in both. Many longit. cracks (open to 1/16 inch) in #1.

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Elem/Env	Description	Element Notes
325/1	Slope Prot/Berms	Concrete slope paving at both abutments. Good condition. Covered with sand.
326/1	Bridge Wingwalls	U-type abutment wings with stone veneer, and decorative concrete retaining walls. Hairline to light vertical cracks with some efflorescence in retaining walls. Stone veneer is starting to break up at #3 Lt. wingwall. (See 2012 Photo)
334/1	Metal Rail Coated	Painted Type Y bridge rail at both edges of deck. Also includes 1 length of pedestrian fence attached to back side of right curb. Looks good.
338/1	Conc Curbs/SW	10 Foot wide sidewalk at right, and curb at left. Some light trans. cracks in sidewalk (and in top of curb), and some light scale. Typical vertical cracks in curb faces. Couple minor spalls on face of sidewalk above Span 2.
340/1	Superstr Cnc Coating	On exterior girders, overhangs, and curbs. Looks good.
341/1	Substr Conc Coating	On abutments, pier cap, and retaining walls. Looks good.
358/1	Deck Cracking SmFlag	See Element 35 for comments.
359/1	Soffit Smart Flag	Concrete deck panels on bottom of deck. Some efflorescence seeping through joints. Light diagonal cracks with efflorescence in some panels near abutments. Hairline random cracking with efflorescence in few other panels. (See 2008 Photo) Small hole near deck drain at right rear corner due to a void during the pour of the slab.
530/1	Approach Guardrail A	The thrie beams at the right rear corner, and both fwd. corners, are not double-nested. The unanchored rail is attached to the rigid concrete retaining wall making it inadequate. (See 2010 Photo) The flex-beam guard rail at the #3 left approach has been bent and dented from traffic impact.

Maintenance Activity Summary

MMS Activity	Description	Recommended	Status	Target Year	Est Cost
352.01	Cln & Wash	1/25/2006	-1	2015	250

Clean out deck drains that are clogged.

356.00	Curb & RI	1/20/2010	-1	2015	3000
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Stiffen, add anchor posts, and end treatments to the current inadequate thrie beam. See PHOTO.

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Bridge Notes

Utilities: Two 12 inch Ø steel pipes suspended from deck panels in Bay B.
Exposed corroded drain pipe was damaged from a vehicle at base of right rear slope pave, still functional though.

Inspection Notes

Temperature: 20°
Time: 10:40
Weather: Partly Cloudy

Scope:

NBI: Element: Underwater: Fracture Critical: Other: Type: Regular NBI

Inspector: CHURCHESK

Inspection Team:

Inspection Date: 01/17/2012

Inspector

Inspector