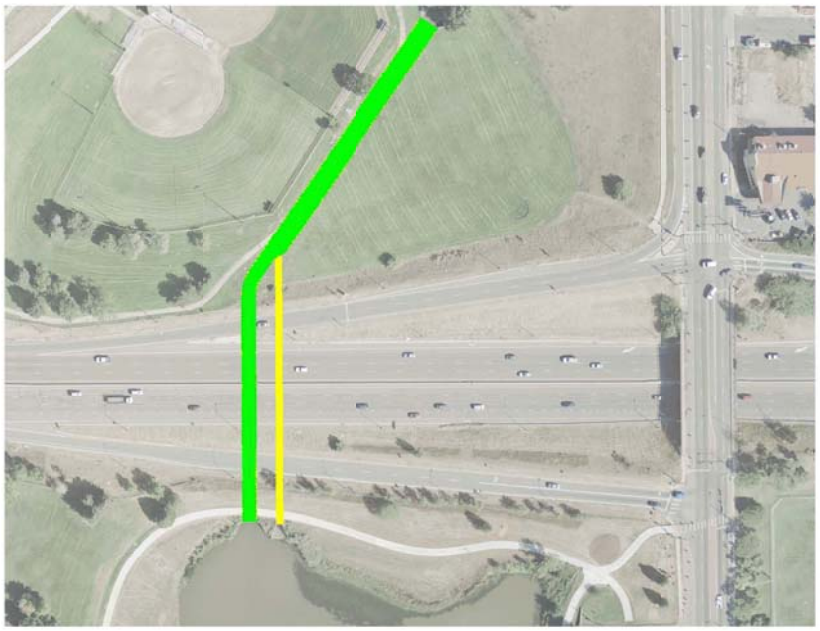
Weir Gulch Concrete Box Culvert (CBC)

Structure No.: 006G283860BR

The Weir Gulch CBC consists of: (1) concrete culvert, (2) culvert wingwalls, and (3) culvert headwalls.

Concrete culvert includes double 8 ft. wide x 6 ft. height cbc, 4.5 ft. diameter reinforced concrete pipe, and double 12 ft. wide x 8 ft. height. Double 8x6 and 4.5 ft. cbcs are located under the Barnum Park and US 6 roadway and ramps. Double 12x8 cbc is located under the Barnum North Park ball field. There are 4 wingwalls for both inlets, 2 wingwalls at outlet, and separate head walls at inlets.



Inspection photos:

West side

THC

THC

Bridge Inspection Report (English Units)

Structure No: 006G283860BR | Abbr. Str. No: 006G283860BR | Inspection Date : 6/22/2009

IDENTIFICATION

1. State:	08 Colorado
2. District:	Reg 6 MSec 8
3. County:	DENVER
4. City:	DENVER
5A. Route On/Under:	Route On Str
5B. Route Signing Prefix:	2 U.S. Numbered Hwy
5C. Level of Service:	1 Mainline
5D. Route Number:	0006G
5E. Directional Suffix:	0 N/A (NBI)
6. Feature Intersected:	WEIR GULCH
7. Facility Carried On:	US 6 ML
9. Location:	0.6 MI E OF JCT I-25
11. Mile Post:	283.86 miles
16. Latitude:	39 d 43 ' 36.6 "
17. Longitude:	105 d 1 ' 35.4 "
18A. Survey Range:	-
18B. Survey Township:	-
18C. Survey Section:	-
98. Border Bridge Code:	(N/A)
99. Neighboring State Code:	(N/A)
% of Responsibilty:	0%

CLASSIFICATION

20. Toll Facility:	3 On free road
21. Custodian:	State Highway Agency
22. Owner:	State Highway Agency
26. Function Class:	12 Urban Fwy/Expwy
37. Historical Sign.:	5 Not eligible for NRHP
100. Defense Hwy:	0 Not a STRAHNET hwy
101. Parallel Str:	No ll Bridge Exists
102. Dir of Traffic:	2 2-way traffic
103. Temporary Str:	Not a Temporary Structure
104. Highway Sys:	1 On the NHS
112. NBIS Length:	Too Short

GEOMETRIC DATA

10. Max. Ver Clr :	99.99 ft.
32. Appr. Roadway Width:	78 ft.
33. Bridge Median:	3 Closed Med w/Barriers
34. Skew:	0 degree(s)
35. Structure Flared:	Structure Not Flared
47. Horizontal Clr	36 ft.
48. Length of Max. Span:	8 ft.
49. Structure Length:	16 ft.
50A. Curb/Sdwlk Width (lt):	0 ft.
50B. Curb/Sdwlk Width (rt):	0 ft.
51. Curb to Curb Width:	0 ft.
52. Out to Out Width:	1015 ft.
53. Min Vert Clr Over:	99.9 ft.
54A. Ref Min Ver Clr Und:	Not a Highway or RR
54B. Min Vert Clr Und:	0 ft.
55A. Ref Min Lat Clr Und:	Not a Highway or RR
55B. Min Lat Clr Under (rt):	0 ft.
56. Min Lat Clr Under (lt):	0 ft.
Deck Area:	16241 sq. ft.

STRUCTURE TYPE AND MATERIALS

43A. Main Span Material:	1 Concrete
43B. Main Span Design:	19 Culvert
44A. Approach Material:	0 Other
44B. Approach Design:	00 Other (NBI)
45. No of Main Spans:	2
46. No of App. Spans:	0
107. Deck Type:	N N/A (NBI)
108A. Wearing Surface:	N N/A (no deck (NBI))
108B. Membrane:	N N/A (no deck (NBI))
108C. Deck Protection:	N N/A (no deck (NBI))
120A. Structure Type:	CBC
120B. Construction Type:	02

INSPECTION

91. Frequency:	48	90. Inspection Date:	6/22/2009	Next Inspection:	6/22/2013
92A. FC Frequency:	N	93A. FC Inspection Date:	-	Next FC Inspection:	-
92B UW Frequency:	N	93B. UW Inspection Date:	-	Next UW Inspection:	-
92C. Sp. Frequency:	N	93C. Sp. Inspection Date:	-	Next Sp. Inspection:	-
Elem Insp Freq:	48	Elem Insp Date:	6/22/2009	Next Elem Inspection:	6/22/2013
		Inspector:	WALANS	Signature:	_____

Bridge Inspection Report (English Units)

Structure No: 006G283860BR | Abbr. Str. No: 006G283860BR | Inspection Date : 6/22/2009

NAVIGATION DATA

38. Navigation Control:	Permit Not Required
39. Vertical Clearance:	0 ft.
40. Horizontal Clearance:	0 ft.
111. Pier Protection:	Not Applicable (P)
116. Lift Bridge Ver. Clr:	0 ft.

AGE AND SERVICE

19. Detour Length:	20 miles.
27. Year Built:	1958
28A. Lanes On:	8
28B. Lanes Under:	0
29. Avg. Daily Traffic:	124000
30. Year of ADT:	2008
42A. Service Type On:	1 Highway
42B. Service Type Under:	5 Waterway
106. Year Reconstructed:	1977
109. Truck ADT:	4%
114. Future ADT:	141400
115. Year of Future ADT:	2028

PROPOSED IMPROVEMENTS

75. Type of Work:	-
76. Length of Improvement:	0 ft.
94. Bridge Cost:	0
95. Roadway Cost:	0
96. Total Cost:	0
97. Year of Cost Estimate:	0

Sufficiency Rating:	59
SD/FO Indicator:	Not Applicable

APPRAISAL

36A. Bridge Rail:	N N/A or not required
36B. Transition:	N (N/A) or Not Required
36C. Approach Rail:	N N/A or not required
36D. Appr. Rail on End :	N N/A or not required
36H. Rail Height :	0.0 in.
66T. Asphalt Thickness :	72.0 in.
67. Structure Evaluation :	5 Above Min Tolerable
68. Deck Geometry :	N Not applicable (NBI)
69. Und. Clr. Ver. & Hor.:	N Not applicable (NBI)
71. Waterway Adequacy:	7 Above Minimum
72. Approach Alignment:	8 Equal Desirable Crit
113. Scour Critical:	8 Stable Above Footing

CONDITION

58. Deck:	N N/A (NBI)
59. Superstructure:	N N/A (NBI)
60. Substructure:	N N/A (NBI)
61. Channel/ Channel Prot.:	7 Minor Damage
62. Culvert:	5 Moderate Damage

LOAD RATING AND POSTING

31. Design Load:	5 MS 18 (HS 20)
41. Posting Status:	A Open, no restriction
63. Operating Rating Mthd:	5 No rating
64. Operating Rating:	40 tons.
65. Inventory Rating Mthd:	5 No rating
66. Inventory Rating:	36 tons.
70. Posting:	5 At/Above Legal Loads
129. Truck Load:	0 0 0 tons.
130. Rating Date:	6/22/2009

Bridge Notes:
GPS RT: LAT N 39 Degrees 43 Minutes 30.0 Seconds LONG W 105 Degrees 01 Minutes 38.3 Seconds

Inspection Notes:
Date - 6/22/2009
Temp: 92 Degrees Time: 3:20 PM Weather: Partly cloudy, breeze

Bridge Inspection Report (English Units)

Structure No: 006G283860BR | Abbr. Str. No: 006G283860BR | Inspection Date : 6/22/2009

ELEMENT DATA COLLECTION

Element Number	Element Name	Env.	Total Qty	Unit	Quantity by State 1	2	3	4	5
Substructure									
241 (4)	Concrete Culvert	1	2030	(LF)	600	1330	100	0	0
Double 8 ft W x 6 ft H cast-in-place concrete box culvert and 4.5 ft diameter reinforced concrete pipe at right combine at left side of roadway into a double 12 ft W x 8 ft H under ball field. Double 8 ft x 6 ft has areas of spalling with exposed reinforcing around joints and drop inlets. RCPC has no significant defects. Double 12 ft x 8 ft has active leakage with stains at approximately 4 construction joints, other areas of surface efflorescence.									
Other Elements									
327 (3)	Culvert Wingwalls	1	6	(EA)	6	0	0	0	0
Concrete, flared, at inlet and outlet - (4) wingwalls for both inlets and (2) at outlet.									
335 (3)	Culvert Headwalls	1	3	(EA)	3	0	0	0	0
Concrete at inlet and outlet - Separate headwalls at inlets.									