

# Bridge No. BC 1255

Central Avenue over  
Harford Run

Routine Inspection

# 2009

## BRIDGE INSPECTION PROGRAM

**City of Baltimore Contract #1105**



Presented by:  STV

In association with:  
Modjeski & Masters, Inc.  
Sabra, Wang & Associates, Inc.  
Tuhin Basu & Associates, Inc.  
M&N Engineering and Diving, Inc.

# 2009 BALTIMORE CITY BRIDGE INSPECTION

BRIDGE NO. BC 1255

CENTRAL AVENUE OVER HARFORD RUN

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Amanda D. Schindhelm, P.E.

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Date

Professional Certification - I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 27713, Expiration Date: July 12, 2012.

This inspection report was prepared under my supervision. The condition data and recommendations contained within this report are based on a visual inspection of accessible portions of the existing structure. No responsibility is accepted for the existence of latent defects, which cannot be detected during visual inspection.

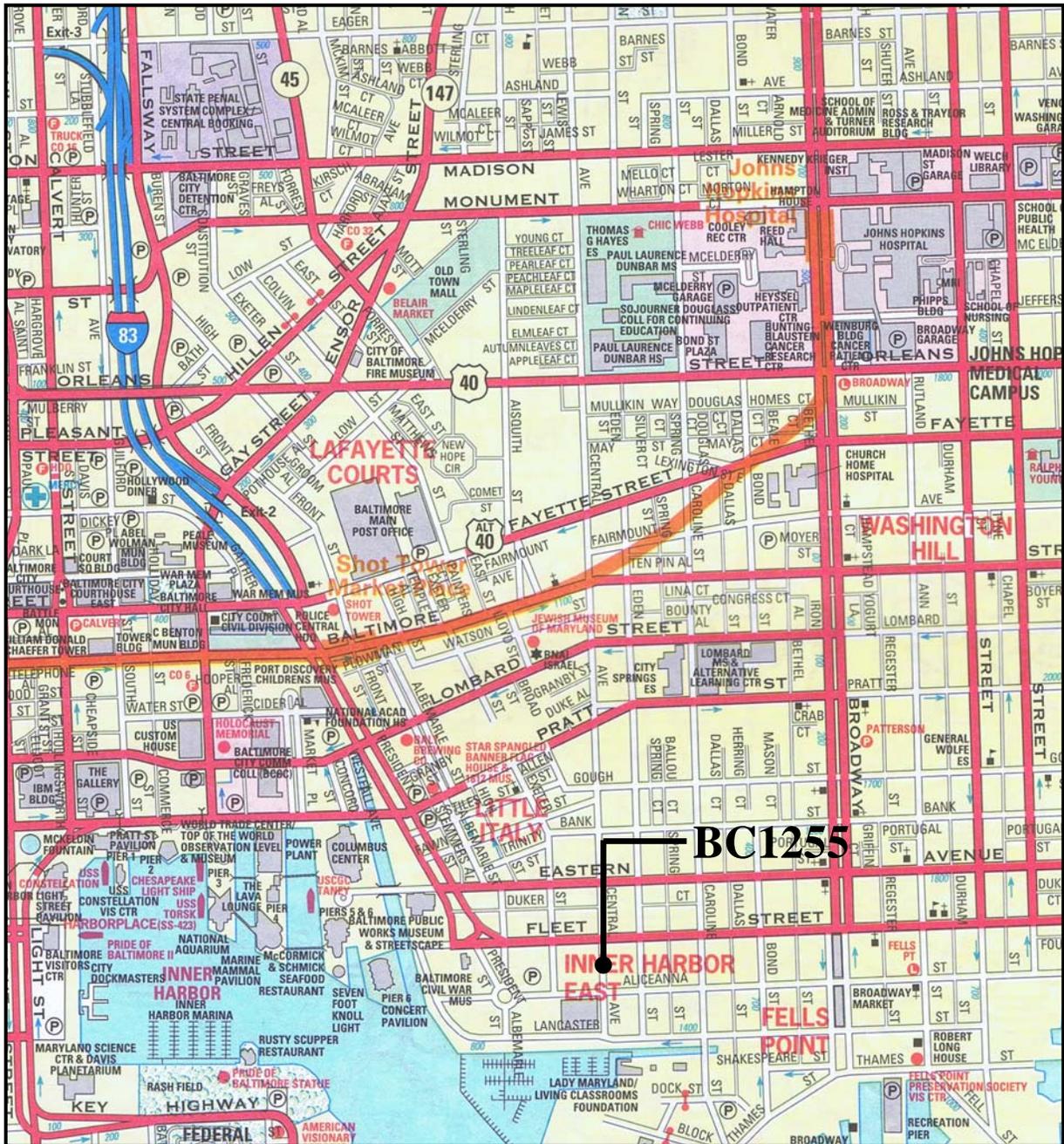
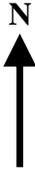
# 2009 BALTIMORE CITY BRIDGE INSPECTION

BRIDGE NO. BC 1255

CENTRAL AVENUE OVER HARFORD RUN

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ADC Street Grid Location: DOWNTOWN G6

## LOCATION MAP

SCALE: 1" = 2,000'

Copyright ADC The Map People  
M&N's Permitted Use Number: 21007246  
Expiration Date: July 31, 2011

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
SUMMARY REPORT**

BRIDGE NO.: BC 1255  
DESCRIPTION: CENTRAL AVENUE OVER HARFORD RUN  
REPORT PREPARED BY: M&N Engineering & Diving Services, Inc.

REPORT REVIEWED AND SUBMITTED BY: STV  
PROJECT MANAGER: Amanda D. Schindhelm, P.E.

DATE OF INSPECTION: 08/24/2010  
REDUNDANT/NON-REDUNDANT: Redundant  
FRACTURE CRITICAL: No  
PIN/HANGER UT INSPECTION: No  
UNDERWATER INSPECTION: Required. Due 09/13.  
POSTED: No  
RATING RECOMMENDED: No  
POSTING RECOMMENDED: No

MAINTENANCE NEEDS: Yes, See Repair Recommendations  
REPAIR NEEDS: Yes, See Repair Recommendations  
REHABILITATION: No

LETTER OF CONCERN: No

BRIDGE SUFFICIENCY RATING: 99.7

FOLLOW-UP REQUIREMENTS:

Warm Weather Inspection: No  
Storm Weather Inspection: No  
Underwater Inspection: Required. Due 08/13.  
Increased Inspection Frequency: Yes, 12-Month cycle  
Other: None

SCOUR EVALUATION: 8P

DATE OF SUBMISSION:

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
BRIDGE INSPECTION DATA FORM**

BRIDGE NO. BC 1255 YEAR BUILT 1960  
(8) (27, 106)  
 PRINCIPAL ROUTE Central Avenue  
 CROSSING Harford Run (Between Aliceanna and Fleet Streets) (6)  
 TYPE A19, Concrete Box Culvert POSTED WEIGHT & SPEED  (7)  
(43, 44, 206, 207) (41, 224, 225)  
 LENGTH 24'  
(Total length from end of approach pavement to end of approach pavement)

**ROADWAY MEASUREMENTS**

<b>APPROACH</b>	<b>BRIDGE</b>	<b>SIDEWALKS</b>
Width-Traveled Way: <u>42'</u> <small>(32)</small>	Clear Roadway: <u>42'</u> <small>(curb to curb) (51)</small>	Number: <u>None</u>
Type of Roadway: <u>Bituminous</u>	Surface: <u>Bituminous</u> <small>(107, 108, 232)</small>	Clear Width: Lt <u>0'</u> Rt. <u>0'</u> <small>(50) (50)</small>
Width of Shoulders: <u>None</u> <small>(32)</small>	Clearance over Rd.: <u>Unlimited</u> <small>(53, 226)</small>	Railing Type: <u>None</u> <small>(235, 236)</small>
Type of Shoulders: <u>None</u>	Skew: <u>0 Degrees</u> <small>(34)</small>	
	Long. Dist.: <u>270'</u>	
Alignment: <u>Tangent</u> <small>(72)</small>	Trans. Dist.: <u>24'</u> <small>(52)</small>	
	Alignment: <u>Tangent</u>	

**FOUNDATION**

Character of Foundation Material: Unknown

Type of Footing: Pile Concrete Filled Steel Pipe Spread None  
(228, 230) (228, 230)

**HYDRAULIC DATA** (To be completed for structures over water - By others)

Record of High Water Above Uncl. (Ft) N/A Below Uncl. (Ft) N/A Data N/A  
(251) (251) (252)

**WATERSHED DATA** -By others

**UTILITIES (260, 261)**

Area in Acres: <u>N/A</u>	Storm Sewers: <u>Yes, Misc. Storm Drains Empty into Culvert</u>
Discharge at Bridge (c.f.s.): <u>N/A</u>	Sanitary Sewers: <u>Yes, 8" parallel to Box Culvert</u>
Velocity Thru Bridge (ft./sec.): <u>N/A</u>	Water Mains: <u>Yes, 10" parallel to Box Culvert</u>
Bridge Opening Calculated (sq. ft.): <u>N/A</u>	Gas Mains: <u>None</u>
Bridge Opening Furnished (sq. ft.): <u>N/A</u>	Electric Mains: <u>Yes, 1'-4" and 1'-3" conduit parallel to Culvert</u>
Underclearance of Bridge to M.L.W.: <u>N/A</u>	Overhead: <u>None</u>
	Underground: <u>None</u>
	Other: <u>None</u>

**CLEARANCES UNDER BRIDGES OVER HIGHWAYS AND RAILROADS**

Vertical: N/A  
(Minimum distance from top of roadway to underside of bridge superstructure) (54)

Horizontal: N/A  
(Each lane of duals - Minimum distance face to face of supports flanking roadway. Measurements to be made perpendicular to Centerline of roadway) (55, 56, 280)

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
BRIDGE INSPECTION DATA FORM**

**BRIDGE NO.** BC 1255 **YEAR BUILT** 1960  
**PRINCIPAL ROUTE** Central Avenue **CROSSING** Harford Run (Between Aliceanna and Fleet  
**TYPE** A19, Concrete Box Culvert **POSTED WEIGHT AND SPEED**  
**TRAFFIC SAFETY FEATURES** N-N-N-N

DATE OF INSPECTION	11/15/05	12/3/07	4/7/09	8/24/10	REMARKS
INSPECTOR	BEC	DS	DS	ADS	
1. Number of Cells	1	1	1	1	
2. Foundations	7	7	7	7	
a. Undermining	8	8	8	8	
b. Scour	N	N	N	N	
c. Alignment	8	8	8	8	
3. Headwalls and Wing Walls	N	N	N	N	
a. Concrete	N	N	N	N	
b. Rubble	N	N	N	N	
c. Alignment	N	N	N	N	
4. Cell Walls	7	7	7	6	
a. Concrete	7	7	7	6	Spalls at Construction Joints
b. Metal	N	N	N	N	
c. Other	N	N	N	N	
5. Piles	N	N	N	N	
6. Ceiling of Cells	6	6	6	6	Full Width Trans. Cracks
7. Curbs	N	N	N	N	
8. Sidewalks	N	N	N	N	
9. Balustrade/Parapet	N	N	N	N	
10. Slope Protection	N	N	N	N	
11. Disintegrated Concrete	None	None	None	None	
12. Stream Channel	7	7	7	7	
13. Removal of Vegetation	No	No	No	No	
14. Identification Number	BC1255	BC1255	BC1255	BC1255	
15. Deck Punctures	None	None	None	None	
16. Coatings	N	N	N	N	
a. Asphalt	N	N	N	N	
b. Galvanizing	N	N	N	N	
c. Other	N	N	N	N	
17. Deck	7	7	7	6	
a. Surfacing	7	7	7	6	
b. Slabs	N	N	N	N	
18. Height of Fill over Structure	0	0	0	0	
19. Diver Needed	Yes	Yes	Yes	Yes	

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
BRIDGE INSPECTION FINDINGS**

***Description***

Bridge No. BC 1255 is an at-grade single-cell reinforced concrete box culvert built in 1960 (see Photograph Nos. 1 - 4). The culvert carries two lanes of Central Avenue over Harford Run between Fleet Street to the north and Aliceanna Street to the south. The cell has a span length of 24'-0" with a rise of 7'-3". The culvert has an overall length of 270'-0" along the invert (north and south) with a clear roadway width of 42'-0" and carries two lanes, one in each direction (north and south). There are no approach traffic barriers along the approaches or over the culvert, however; these are not required due to urban features.

The culvert is not posted. The culvert was inspected on August 24, 2010. The numbering convention for reporting purposes is from the north and the west.

***Inspection Access***

The inspection of Bridge No. BC 1255 required chest waders, ladder and a boat. The culvert is located between and abuts up to BC 8020 to the north and BC 8019 to the south. Access was obtained through the underside of BC 8018, BC 1555 and BC 8019.

***Inspection Findings***

Overall the culvert is in satisfactory condition. The following is a summary of the bridge inspection findings. For a more detailed description of the condition of each bridge element, see Pontis form:

**Approach Roadways**

1. The wearing surface on the approaches and over the culvert is in satisfactory condition.
2. There are 1/8" to 1/2" wide cracks in the pavement construction joint along both the east and west edges of the culvert.
3. There are random hairline to 1/8" wide transverse and longitudinal cracks in the bituminous wearing surface over the culvert. The transverse cracks are typically 5'-0" long with a few up to full width.
4. There is a 6'-0" x 6'-0" area of pavement that has heaved up to 3/8" near the north end (see Photograph No. 5).

5. There is a 1'-0" long piece of exposed train car rail in the pavement at the northwest corner with map cracking in a 10' x 6' area (see Photograph No. 6).
6. There is multi-directional cracking up to 1/8" wide in the South Approach Roadway (see Photograph No. 7).

### **Culvert**

1. The culvert is in satisfactory condition.
2. The construction joints typically are cracked with water leakage, rust staining and efflorescence.
3. There are sixteen (16) full width hairline transverse cracks with moderate efflorescence and rust staining in the top slab (see Photograph No. 8). The majority of these cracks extend through the full height of the culvert walls.
4. There are random hairline longitudinal cracks in the top slab.
5. There is a minor spall in the top slab at the 7th and 10th construction joints from the north. The spalls are each 1'-0" long x 3" wide x 3" deep.
6. There are random hairline vertical cracks in the culvert walls.
7. There is random hairline map cracking in the east wall with light efflorescence.
8. There is a failing repair in the west wall at a construction joint at mid-length of the culvert (see Photograph No. 9).
9. There is an inlet pipe opening in the west wall of the culvert. There are spalls surrounding the entire circumference of the pipe (see Photograph No. 10).
10. There is light scaling of the culvert walls along the waterline throughout.

### **Stream Channel**

1. The bottom slab is covered with up to 1'-0" of sand and gravel.

### ***Review of Previous Report***

The 2007 Bridge Inspection Report was available and used for comparison purposes. The overall condition of the structure differed from the previous report as noted:

The following repairs have been completed since the previous inspection:

1. No repairs were noted.

The following defects have progressed since the previous inspection:

1. None.

The following are new defects noted in the current inspection:

1. A piece of train car rail is exposed with map cracking in the pavement at the northwest corner.
2. There is a failing repair in the west wall.

### ***Review of Item 113 - Scour Potential Rating***

Item 113 is currently rated 8P. This implies that the bridge is a culvert-type structure with a paved bottom. Based on the observed conditions, this rating is still valid and does not require reevaluation.

### ***Load Ratings Summary/Posting Recommendation***

Whether due to deterioration or rehabilitation, the overall condition of the structure and rated components has not significantly changed since the 2007 inspection. The following Maryland Legal Load Limits were reproduced from the 2007 inspection report. Since review of load rating computations is beyond the scope of this inspection, no representation is hereby made or responsibility hereby assumed for the accuracy of the following tabulation:

<b>Vehicle</b>	<b>Gross Vehicle Weight</b>	<b>Inventory (Tons)</b>	<b>Operating (Tons)</b>
H-15	15 tons	24	39
HS-20	36 tons	44	70
Type 3	33 tons	24	39
Type 3S2	40 tons	44	70

Based on the above ratings, the bridge requires posting for 48,000 pounds for Single Unit Vehicles and 80,000 pounds for Combination Vehicles. Since the structure is inspected on a 12 month frequency, posting is not required.

**2009 BALTIMORE CITY BRIDGE INSPECTION  
 BRIDGE NO. BC 1255  
 CENTRAL AVENUE OVER HARFORD RUN  
 RECOMMENDATIONS**

Item	Quantity	Units	Unit Cost	Total Cost
<b><i>Immediate</i></b>				
None				\$0.00
<b>Subtotal (Immediate)</b>				<b>\$0.00</b>
<b><i>Short Term</i></b>				
None				\$0.00
<b>Subtotal (Short Term)</b>				<b>\$0.00</b>
<b><i>Long Term</i></b>				
1. Repair spalls in the top slab at Joints 7 and 10 and in the west wall of the culvert around the storm drain.	80	SF	\$60	\$4,800.00
<b>Subtotal (Long Term)</b>				<b>\$4,800.00</b>
<b>Total Maintenance Cost</b>				<b>\$4,800.00</b>

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
PHOTOGRAPHS**



1. North Approach Looking South



2. North Approach Looking North

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
PHOTOGRAPHS**



3. South Approach Looking North



4. South Approach Looking South

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
PHOTOGRAPHS**



5. Heaved Pavement Near the North End Over the Culvert



6. Exposed Train Car Rail in Pavement at Northwest Corner

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
PHOTOGRAPHS**



7. Multi-Directional Cracking in the South Approach Roadway



8. Typical Transverse Crack with Efflorescence and Rust Staining in the Top Slab

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
PHOTOGRAPHS**



9. Failing Repair in the West Wall at Midlength of the Culvert



10. Pipe with Adjacent Spalling in the West Wall

# Structure Inventory and Appraisal Forms

# STRUCTURE INVENTORY AND APPRAISAL REPORT

BRIDGE NUMBER:

## IDENTIFICATION

FORM 1 OF 8

(8) STRUCTURE NUMBER:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(7) FACILITY CARRIED:	<input style="width: 100%;" type="text"/>				
(6) FEATURE INTERSECTED:	<input style="width: 100%;" type="text"/>				
(27) YEAR BUILT:	<input type="text"/>	(106) YEAR RECONSTR:	<input type="text"/>		
(1) STATE CODE:	<input type="text"/>	(2) DISTRICT CODE:	<input type="text"/>		
(3) COUNTY CODE:	<input type="text"/>	(4) PLACE CODE:	<input type="text"/>		
(5) INVENTORY ROUTE:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Route Prefix	Level of Service	Number	Direction	
(9) LOCATION:	<input style="width: 100%;" type="text"/>				
(11) MILE POINT:	<input type="text"/>	(16) LATITUDE:	<input type="text"/>		
(17) LONGITUDE:	<input type="text"/>	(28) LANES ON:	<input type="text"/>	LANES UNDER:	<input type="text"/>
(42) TYPE OF SERVICE ON:	<input type="checkbox"/>	TYPE OF SERVICE UNDER:	<input type="checkbox"/>		
(98) BORDER STATE:	<input type="text"/>	BORDER STATE'S SHARE %:	<input type="text"/>		
(99) BORDER STATE'S NUMBER:	<input type="text"/>				
(262) NAME OF STRUCTURE:	<input style="width: 100%;" type="text"/>				

## CLASSIFICATION

FORM 2 OF 8

(104) HWY SYSTEM: <input type="checkbox"/>	(26) FUNCTION CLASS: <input type="checkbox"/>
(100) DEFENSE HWY: <input type="checkbox"/>	(101) PARALLEL STRUCT: <input type="checkbox"/>
(102) DIRECTION: <input type="checkbox"/>	(103) TEMP STRUCT: <input type="checkbox"/>
(110) NAT'L NTWK: <input type="checkbox"/>	(20) TOLL: <input type="checkbox"/>
(21) MAINTENANCE: <input type="checkbox"/>	(22) OWNER: <input type="checkbox"/>
(37) HISTORICAL: <input type="checkbox"/>	

## TRAFFIC

(19) DETOUR: <input type="checkbox"/>	(29) ADT: <input type="text"/>	(114) FUTURE ADT: <input type="text"/>	
(109) TRUCK ADT %: <input type="checkbox"/>	(30) ADT YEAR: <input type="text"/>	(115) FUTURE ADT YEAR: <input type="text"/>	

Bridge Number:

1

## STRUCTURE TYPE AND MATERIAL

## FORM 3 OF 8

(43) STRUCT TYPE:	<input type="checkbox"/>	<input type="checkbox"/>	(274) MAIN SUPP MEMBERS:	<input type="checkbox"/>
(44) STRUCT TYPE - APPR:	<input type="checkbox"/>	<input type="checkbox"/>		
(206) SUPPL TYPE - MAIN:	<input type="checkbox"/>	(207) SUPPL APPROACH:	<input type="checkbox"/>	
(208) STRUCT TYPE - WIDENED/EXTENDED:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(228) FOOTING - ABUTMENT:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(229) SUBSTRUCT ABUTMENT:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(230) FOOTING - PIER:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(231) SUBSTRUCTURE PIER:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(233) SUPSTRUCT DESIGN:	<input type="checkbox"/>	<input type="checkbox"/>		
(277) SUBSTRUCT - SPECIAL:	<input type="checkbox"/>	(219) SLOPE PROTECTION:	<input type="checkbox"/>	
(221) STRUCTURAL STEEL:	<input type="checkbox"/>	(235) PARAPET:	<input type="checkbox"/>	
(242) BEARING TYPE:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(107) DECK STRUCTURE TYPE:	<input type="checkbox"/>	(270) CONCRETE SLAB:	<input type="checkbox"/>	
(271) REBARS:	<input type="checkbox"/>	(272) ADMIXTURES:	<input type="checkbox"/>	
(108) WEARING SURFACE:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(243) JOINT TYPE:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(236) RAILING:	<input type="checkbox"/> <input type="checkbox"/>	-	<input type="checkbox"/> <input type="checkbox"/>	-
(237) FENCING:	<input type="checkbox"/> <input type="checkbox"/>	-		
(278) PAINT SYSTEM:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(344) PAINT COLOR / NUMBER:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## GEOMETRICS

## FORM 4 OF 8

(112) NBIS BRIDGE LENGTH:	<input type="checkbox"/>	(49) STRUCTURE LENGTH:	<input type="checkbox"/>
(210) NUMBER OF SPANS:	<input type="checkbox"/>	(48) LENGTH MAX SPAN:	<input type="checkbox"/>
(45) # SPANS IN MAIN UNIT:	<input type="checkbox"/>	(46) # APPROACH SPANS:	<input type="checkbox"/>
(209) # CONTINUOUS SPANS:	<input type="checkbox"/>		
(211) SPAN LENGTH 1:	<input type="checkbox"/>	(212) SPAN LENGTH 2:	<input type="checkbox"/>
(213) SPAN LENGTH 3:	<input type="checkbox"/>	(214) SPAN LENGTH 4:	<input type="checkbox"/>
(215) SPAN LENGTH 5:	<input type="checkbox"/>	(216) SPAN LENGTH 6:	<input type="checkbox"/>
(217) SPAN LENGTH 7:	<input type="checkbox"/>	(218) SPAN LENGTH 8:	<input type="checkbox"/>
(238) # STRINGER - ORIGINAL:	<input type="checkbox"/>	(239) # STRINGERS - WIDENED:	<input type="checkbox"/>
(240) SPACING - ORIGINAL:	<input type="checkbox"/>	(241) SPACING - WIDENED:	<input type="checkbox"/>
(51) DECK CURB-CURB WIDTH:	<input type="checkbox"/>	(52) DECK OUT-OUT WIDTH:	<input type="checkbox"/>
(50) CURB/SIDEWALK WIDTHS:	<input type="checkbox"/> <input type="checkbox"/>	(223) SHOULDER WIDTHS:	<input type="checkbox"/> <input type="checkbox"/>
(33) BRIDGE MEDIAN:	<input type="checkbox"/>	(205) MEDIAN WIDTH:	<input type="checkbox"/>
(32) APPROACH ROAD WIDTH:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	(35) STRUCTURE FLARED:	<input type="checkbox"/>
(10) INVENT ROUTE, MIN VERT CLEAR:	<input type="checkbox"/>	(47) INVENT ROUTE, TOTAL HORIZ CLEAR:	<input type="checkbox"/>
(53) BRIDGE ROADWAY, MIN VERTCLEAR:	<input type="checkbox"/>		

Bridge Number:

2

# GEOMETRICS (Cont.)

# FORM 5 OF 8

- (54) MIN VERTICAL UNDERCLEARANCE:
- (55) MIN LATERAL UNDERCLEARANCE (RIGHT):
- (56) MIN LATERAL UNDERCLEARANCE (LEFT):
- (342) HORIZONTAL CLEARANCE - ON:
- (280) HORIZONTAL CLEARANCE - UNDER
- (34) SKEW, IN DEGREES:
- (253) NUMBER OF CELLS:
- (256) SPAN OF CELLS:
- (258) EARTH FILL:
- (343) CENTERLINE LENGTH - CULVERTS/PIPES:
- (254) RISE:

# LOAD RATINGS AND POSTINGS

- (41) STATUS:
- (31) DESIGN LOAD:
- (70) POSTING:
- (224) WEIGHT POSTED, KIPS:
- (64) OPERATING RATING:
- (464) OPERATING RATING - H:
- (564) OPERATING RATING - HS:
- (664) OPERATING RATING - T3:
- (764) OPERATING RATING - 3S2:
- (225) SPEED LIMIT ON STRUCTURE
- (66) INVENTORY RATING:
- (466) INVENTORY RATING - H:
- (566) INVENTORY RATING - HS:
- (666) INVENTORY RATING - T3:
- (766) INVENTORY RATING - 3S2:
- (226) MIN VERT CLEARANCE OVER ROADWAY POSTED:
- (227) MIN VERT UNDERCLEARANCE POSTED:

SINGLE VEH. COMBO VEH.  
(First 2 Digits) (Second 2 Digits)

# BMS CONDITION RATINGS

# FORM 6 OF 8

- (90) INSPECTION DATE:
- (91) INSPECTION FREQUENCY, MONTHS:
- (92) CRITICAL FEATURE INSP: 

FRACTURE CRITICAL	UNDER WATER	OTHER SPECIAL
<input type="text"/>	<input type="text"/>	<input type="text"/>
- (93) CRIT FEATURE INSP DATE 

FRACTURE CRITICAL	UNDER WATER	OTHER SPECIAL
<input type="text"/>	<input type="text"/>	<input type="text"/>
- (58) DECK:
- (59) SUPERSTRUCTURE
- (60) SUBSTRUCTURE:
- (61) CHANNEL:
- (62) CULVERT:
- (332) POSTING SIGNS:
- (307) UNDER CONSTRUCTION:
- (340) INSPECTION CLASSIFICATION 

<input type="text"/>	<input type="text"/>

Bridge Number:

3

# APPRAISAL

# FORM 7 OF 8

- (67) STRUCTURAL EVALUATION:
- (69) UNDERCLEARANCE:
- (71) WATERWAY ADEQUACY:
- (36) TRAFFIC SAFETY FEATURES:
- RAILINGS:
- TRANSITIONS:
- (113) SCOUR EVALUATION:



- (68) DECK GEOMETRY:
- (72) APPROACH ALIGNMENT:
- APPROACH BARRIER:
- APPROACH BARRIER ENDS:

# NAVIGATION AND HYDRAULIC

- (38) NAVIGATION CONTROL:
- (40) NAV HORIZONTAL CLEARANCE:
- (111) PIER/ABUTMENT PROTECTION:
- (116) MIN NAV VERT CLEARANCE, VERT LIFT BRIDGE:
- (247) DESIGN YEAR STORM:
- (249) DRAINAGE AREA:
- (251) HIGH WATER ELEVATION:
- (252) YEAR HIGH WATER ELEVATION - LATEST:

- (39) NAV VERT CLEARANCE:
- (248) RUN-OFF Q:
- (250) STRUCTURE IN TIDAL AREA:

# HISTORY AND PROPOSED IMPROVEMENTS

# FORM 8 OF 8

- (201) CONTRACT NUMBERS:
- (202) CONTRACT NUMBERS:
- (203) SHA SPEC-YEAR:
- (263) SHA SPEC RECON 1:
- (265) AASHTO SPEC RECON 1:
- (75) TYPE OF WORK:
- (94) BRIDGE IMPROVE COST:
- (96) TOTAL PROJECT COST:

- (204) AASHTO SPEC-YEAR:
- (264) SHA SPEC RECON 2:
- (266) AASHTO SPEC RECON 2:
- (76) LENGTH OF IMPROVEMENT:
- (95) ROADWAY IMPROVE COST:
- (97) YEAR OF IMPROVEMENT:

# MISCELLANEOUS

- (244) SIGNS ON STRUCTURE:
- (246) ROADWAY LIGHTING:
- (260) UTILITIES - ON:

- (245) BRIDGE ROADWAY LIGHTING:
- (261) UTILITIES - UNDER:

REMARKS:

Bridge Number: 4

# PONTIS Form

**2009 BALTIMORE CITY BRIDGE INSPECTION  
BRIDGE NO. BC 1255  
CENTRAL AVENUE OVER HARFORD RUN  
PONTIS FORM**

BRIDGE NUMBER: BC 1255

INSPECTION DATE: 08/24/2010

(58) DECK  (59) SUPERSTRUCTURE  (60) SUBSTRUCTURE   
 (61) CHANNEL  (62) CULVERT

**ELEMENT** **TQ** **CS 1** **CS 2** **CS 3** **CS 4** **CS 5**

**057 Concrete Culvert at Grade Slab, Unprotected, with AC Overlay (EA)**

The roadway is in satisfactory condition. The wearing surface on the approaches and over the culvert is in good condition. There are 1/8" to 1/2" wide cracks in the pavement construction joint along both the east and west edges of the culvert. There is a 1'-0" long piece of exposed train car rail in the pavement at the northwest corner with map cracking in a 10' x 6' area. There are random hairline to 1/8" wide transverse and longitudinal cracks in the bituminous wearing surface over the culvert. The transverse cracks are typically 5'-0" long with a few up to full width. There is a 6'-0" x 6'-0" area of pavement that has heaved up to 3/8" near the north end. There is multi-directional cracking up to 1/8" wide in the South Approach Roadway.

**241 Concrete Culvert (LF)**

The culvert is in satisfactory condition. The construction joints typically are cracked with water leakage, rust staining and efflorescence. There are sixteen (16) full width hairline transverse cracks with moderate efflorescence and rust staining in the top slab. The majority of these cracks extend through the full height of the culvert walls. There are random hairline longitudinal cracks in the top slab. There is a minor spall in the top slab at the 7th and 10th construction joints. The spalls are each 1'-0" long x 3" wide x 3" deep. There are random hairline vertical cracks in the culvert walls. There is random hairline map cracking in the east wall with light efflorescence. There is a failing repair in the west wall at a construction joint at mid-length of the culvert. There is an inlet pipe opening in the west wall of the culvert. There are spalls surrounding the entire circumference of the pipe. There is light scaling of the culvert walls along the waterline throughout.

**345 Stream Channel (ENTIRE BRIDGE)**

The bottom slab is covered with up to 1'-0" of sand and gravel.