ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 752015-, Fulton County
BRMLB-9007(14)
Courtland Street Viaduct Replacement

OFFICE Preconstruction

DATE January 2, 2007

FROM Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Babs Abubakari
Bryant Poole
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

NOV 20 2006

INTERDEPARTMENT CORRESPONDENCE

FILE	BRLMB-9007(14) Fulton County Courtland Street Viaduct Replacement	**OFFICE**	Urban Design
PI NUMBER	752015	**DATE**	November 14, 2006
FROM	James B. Buchan, State Urban Design Engineer		
TO	Genetha Rice-Singleton, Assistant Director of Preconstruction		
SUBJECT	Revised Project Concept Report		

Attached is the original copy of the Revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The original concept proposed to replace 2 of 28 spans of the existing Courtland Street bridge over CSXT to provide horizontal and vertical clearances for a third rail line. The revised concept proposes a complete replacement of the existing bridge due to continued deterioration of the structure. Large areas of deck and beam have deteriorated to the point that concrete is breaking off of the structure and posing a danger to pedestrians and vehicles below. The proposed bridge replacement will cross over MARTA, CSXT, and Decatur Street.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 12-12-06

State Transportation Planning Administrator

Distribution:

Brian Summers, P.E., Project Review Engineer
Harvey Keepler, State Environment/Location Engineer
Keith Golden, P.E., State Traffic Safety and Design Engineer
Angela Alexander, State Transportation Planning Administrator
Jamie Simpson, State Transportation Financial Management Administrator
Bryant Poole, P.E., District Engineer
Paul Liles, P.E., State Bridge Design Engineer

REVISED PROJECT CONCEPT REPORT

Need and Purpose:
The existing Courtland Street bridge structure has shown signs of major deterioration over the last few years and is now in need of a full replacement. The most recent sufficiency rating is 48.09. Sufficiency ratings reflect the overall structural condition of the bridge. The sufficiency rating is a score between 0 and 100, which is computed based primarily on structural conditions, deck width, and guardrail type. The lower a structure's sufficiency rating, the less stable the structure and the greater the potential hazard to the public. According to GDOT policy, a sufficiency rating below 50 indicates that the bridge is structurally deficient as well as functionally obsolete and therefore a candidate for replacement. The bridge has been temporarily shored in the area north of the CSXT rail lines. However, the bottom of the concrete deck is spalling in numerous locations resulting in chunks of concrete falling off and endangering the public below. The City plans to install netting underneath the bridge to catch falling debris until the bridge can be replaced.

The Georgia Department of Transportation proposes to replace all 28 spans of the Courtland Street bridge over the Metropolitan Atlanta Rapid Transit Authority (MARTA) rail, CSX rail, and Decatur Street. The section of bridge north of the CSXT tracks has deteriorated as described above. In addition, in order to provide the additional horizontal and vertical clearances necessary for the multi-modal passenger terminal and additional passenger rail facilities (long-range projects), the portion of the Courtland Street Bridge going over the CSXT rail lines (2 spans) must also be reconfigured. Finally, the section of bridge south of the CSXT tracks built in 1971 is also proposed to be replaced since it is already 35 years old, the goal being to avoid impacting the area again in a few years when that section of bridge reaches its design life.

Project location:
The existing Courtland Street Bridge over MARTA, CSX Railroad, and Decatur Street is located between Martin Luther King Jr. Drive and Gilmer Street. The bridge Location I.D. number is 121-09007M-002.60N and the bridge Structure I.D. number is 121-0322-0.

Description of the approved concept:

PDP Classification: Major X Minor __

Federal Oversight: Full Oversight ( ), Exempt(X), State Funded( ), or Other ( )

Functional Classification: Urban Arterial

U. S. Route Number(s): None **State Route Number(s):** None

Traffic (AADT) as shown in the approved concept:
Current Year: 21,050 (1995) Design Year: 28,400 (2015)

Proposed features to be revised:
The existing Courtland Street Bridge over MARTA, CSXT, and Decatur Street is 1,077 feet long and has 28 spans with a maximum span length of 84 feet. The original concept proposed to replace two of the existing spans located over the CSXT tracks to provide proper horizontal and vertical clearances for a third (commuter rail) track on the north side of the two existing CSXT tracks. The replacement spans were to be constructed to match the widths and grade of the existing spans. The existing bridge width is 60 feet out to out and 45 feet gutter to gutter. The deteriorating condition of the bridge necessitated the re-evaluation of the original approved concept and prompted the proposed revision. The bridge condition letter from the GDOT Maintenance Office supporting this concept revision is attached to this report.

Describe the revised feature(s) to be approved:
The original concept proposed to replace two of the 28 spans of the existing Courtland Street Bridge. The revised concept proposes to change the project from a span replacement to a complete bridge replacement. The project termini will remain the same - Martin Luther King Jr. Drive to Gilmer Street.

Updated traffic data (AADT):
Current Year: Not Available Design Year: Not Available

Programmed/Schedule:
P.E. ___ R/W: Local Construction: Scheduled Date 11-05-07 w/ Const 2008

Revised cost estimates:
1. Construction cost including inflation and E&C,
2. Right-of-Way, and
3. Utilities

Is the project located in a Non-attainment area?

Yes. The revised concept makes no changes in through lanes or the year proposed to be open to traffic. The project limits do not change.

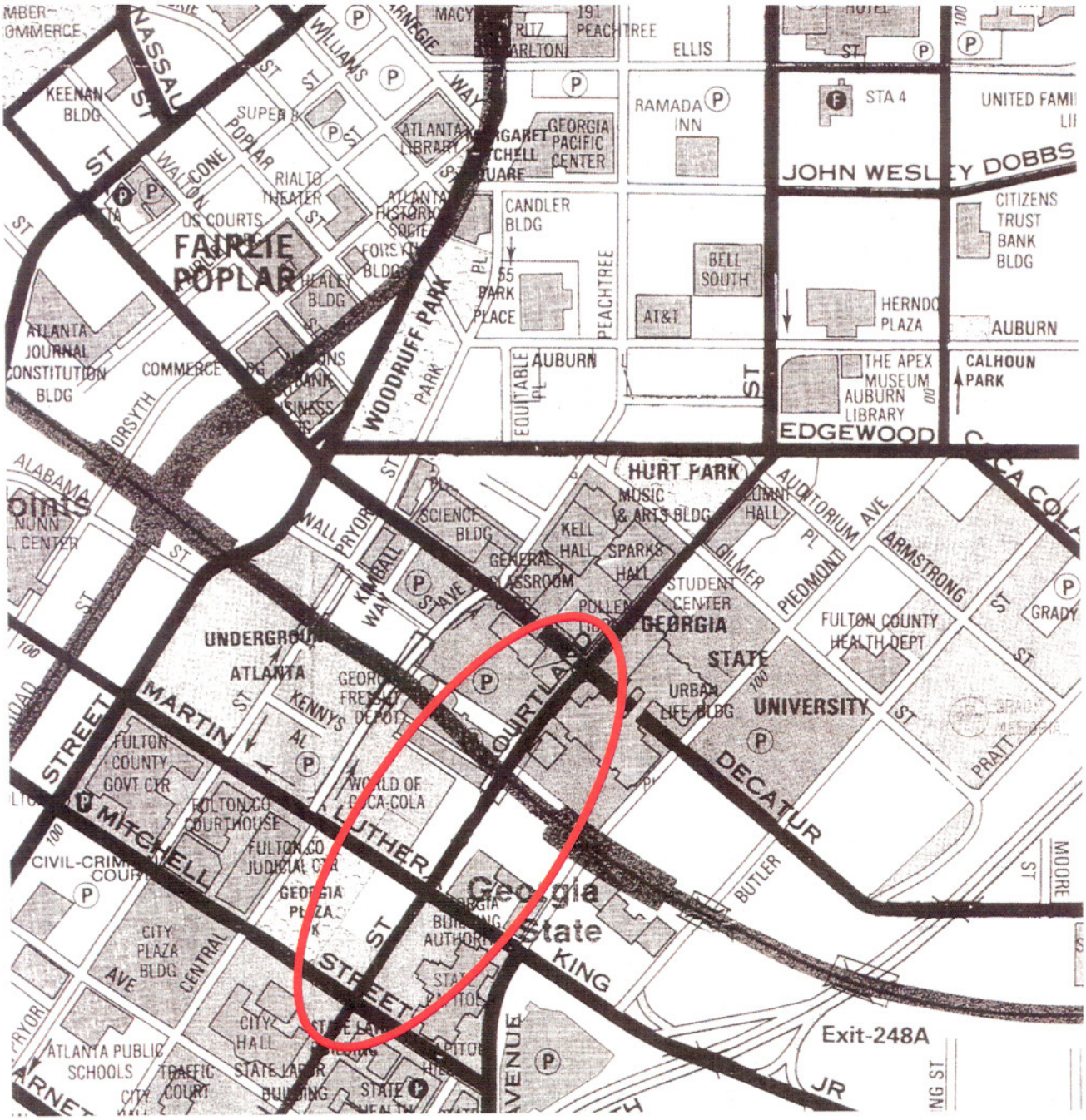
Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:

1. Sketch Map
2. Cost Estimate
3. Bridge Condition Letter
4. Bridge Inventory Management System data

Concur: _____
Director of Preconstruction

Approve: _____
Chief Engineer



Sketch Map

Courtland Street over MARTA, CSX Railroad, and Decatur St.

BRMLB-9007(14) Fulton

PI No.: 752015

Attachment 1

Estimate Report for file "COURTLAND AVE"

Section 1

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-2000	1	Lump Sum	1300000.00	TRAFFIC CONTROL	1300000.00
153-1300	1	EA	100000.00	FIELD ENGINEERS OFFICE TP 3	100000.00
163-0501	2	EA	870.23	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	1740.46
163-0520	1	Lump Sum	15000.00	LANDSCAPING	15000.00
165-0030	265	LF	3.87	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	1025.55
171-0030	265	LF	3.31	TEMPORARY SILT FENCE, TYPE C	877.15
207-0203	756	CY	49.72	FOUND BKFILL MATL, TP II	37588.32
210-0100	1	LS	50000.00	GRADING COMPLETE -	50000.00
211-0400	1467	CY	25.00	ROAD EXCAVATION	36675.00
310-5120	2200	SY	30.00	GR AGGR BASE CRS, 12 INCH, INCL MATL	66000.00
400-3600	150	TN	80.00	ASPH CONC 9.5 MM SMA, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME	12000.00
400-3605	365	TN	80.00	ASPH CONC 19MM SUPERPAVE, GP 1 OR 2, INCL POLYMER MODIFIED BITUM MATL & H LIME	29200.00
402-1812	50	TN	45.93	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	2296.50
402-3121	730	TN	80.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	58400.00
413-1000	155	GL	2.00	BITUM TACK COAT	310.00
433-1000	350	SY	151.00	REINF CONC APPROACH SLAB	52850.00
441-004	500	SY	31.90	CONC SLOPE PAV, 4 IN	15950.00
441-0104	305	SY	28.82	CONC SIDEWALK, 4 IN	8790.10
441-0300	2	EA	2051.85	CONC SPILLWAY, SPCL DES	4103.70
441-4130	660	LF	11.40	CONC GUTTER WITH RAISED EDGE, 6 IN X 30 IN	7524.00
500-0100	5146	SY	4.61	GROOVED CONCRETE	23723.06
500-1006	2691	CY	1500.00	SUPERSTR CONCRETE, CL AA, BR NO-1	4036500.00
500-2110	1477	LF	169.57	CONCRETE PARAPAT, SPCL DESIGN	250454.89
500-3002	782	CY	1000.00	CLASS AA CONCRETE	782000.00
500-3015	1402	CY	882.77	CLASS AA-1 CONCRETE, RETAINING WALL	1237643.54
501-3000	208643	Lump Sum	2.00	STR STEEL, BR NO	417286.00
511-1000	105570	LB	1.00	BAR REINF STEEL	105570.00
511-1000	245420	LB	1.00	BAR REINF STEEL	245420.00
511-3000	605475	Lump Sum	1.00	SUPERSTR REINF STEEL, BR NO	605475.00
522-1000	1	Lump Sum	100000.00	SHORING	100000.00
524-0010	1320	LF	1507.50	DRILLED CAISSON	1989900.00
530-0105	400	SY	19.00	WATERPROOFING	7600.00
530-0105	756	LB	10.00	WATERPROOFING	7560.00
540-1201	1	Lump Sum	1915500.00	REMOVAL OF PARTS OF EXISTING BR, STA NO	1915500.00
544-1000	1	Lump Sum	20000.00	DECK DRAIN SYSTEM, BR NO	20000.00
610-6605	15	EA	1000.00	REMOVE LIGHTING STANDARD	15000.00
610-6610	10	EA	100.00	REMOVE LUMINAIRE	1000.00
620-0100	400	LF	35.23	TEMPORARY BARRIER, METHOD NO. 1	14092.00
622-1050	600	LF	130.00	PRECAST CONCRETE MEDIAN BARRIER, METHOD 4	78000.00
634-1200	10	EA	100.00	RIGHT OF WAY MARKERS	1000.00

Attachment 2

653-3501	1100	GLF	0.18	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	198.00
654-1003	15	EA	3.79	RAISED PVMT MARKERS TP 3	56.85
681-4320	15	EA	3000.00	LIGHTING STD, 32 FT MH, 6 FT ARM	45000.00
681-6320	15	EA	600.00	LUMINAIRE, TP 3, 150W HP SODIUM - MC	9000.00
681-6646	10	EA	600.00	LUMINAIRE, TP A, 250W HP SODIUM	6000.00
682-1404	3000	LF	0.60	CABLE, TP XHHW, AWG NO 10	1800.00
682-1407	4600	LF	1.59	CABLE, TP XHHW, AWG NO 4	7314.00
682-1408	2300	LF	2.46	CABLE, TP XHHW, AWG NO 2	5658.00
682-6110	1000	LF	13.17	CONDUIT, RIGID, 1 IN	13170.00
682-6120	2300	LF	15.00	CONDUIT, RIGID, 2 IN	34500.00
682-9023	4	EA	535.04	ELECTRICAL JUNCTION BOX, GALVANIZED, SIZE - 12" X 10" X 8"	2140.16

Section Sub Total: $13,778,892.28

Total Estimated Cost: $13,778,892.28

Subtotal Construction Cost	**$13,778,892.28**
E&C Rate 10.0 %	$1,377,889.23
Inflation Rate 0.0 % @ 4.0 Years	$0.00
Total Construction Cost	**$15,156,781.51**
Right Of Way	$0.00
ReImb. Utilities	$0.00
Grand Total Project Cost	**$15,156,781.51**

HAROLD E. LINNENKOHL
COMMISSIONER
(404) 656-5206

PAUL V. MULLINS
CHIEF ENGINEER
(404) 656-5277

Department of Transportation
State of Georgia

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EARL MAHFUZ
TREASURER
(404) 656-5224

INTERDEPARTMENT CORRESPONDENCE

October 4, 2004

FROM: Bryant Poole, State Maintenance Engineer

TO: Ben Buchan, P.E., State Urban Design Engineer
Attn: Albert Shelby

SUBJECT: Bridge Rehabilitation

BRMLB-9007(14) Fulton
P.I. No. 752015
Structure ID 121-0322-0
Location ID 121-09007M-002.60N
Courtland Street over CSX RR/Marta/Decatur Street

This bridge was built in 1906, rehabilitated in 1958 and 1971 and partially replaced in 1995. It consists of original concrete bents, steel helper bents, concrete T-beam superstructure supported by steel beams in the original portion and steel girders in the 1971 addition over Marta, and a concrete deck. The original design load capacity is H-15. The sufficiency rating on the structure is 47.3, and the bridge is classified as Structurally Deficient and requires replacement. A detailed survey of the existing structure has recently been performed as requested. Since this bridge has been built piecemeal, the entire structure does not require replacement.

Spans 1-7 were constructed in 1971 as part of the MARTA construction and include the span over CSX Railroad. These spans are in good condition and are suitable for widening or reconstruction. The following maintenance items should be included in the construction project.

1. Clean and paint the existing structural steel with System VII paint system. The existing paint system contains lead paint.
2. Clean and seal the expansion joints with evazote material.
3. Remove the existing steel armored joint and edgebeams at Bent #8 and reconstruct the edgebeams and joint to be sealed with evazote.
4. Seal the existing deck with an epoxy overlay material such as Polycarb.

Spans 8-18 and 20-29 were constructed in 1906 and rehabilitated by constructing a steel bridge under the concrete structure in 1958. The steel structure is coated with lead paint. The 100 year old concrete is in poor condition and is cracking and crushing on top of the steel supports. Extensive netting has been constructed to catch falling debris so it doesn't impact GSU students walking under the bridge. The stability of the concrete between the steel supports is questionable and the bridge is currently load limited. The condition will only deteriorate with time. It is strongly recommended that the original portion of the bridge be completely replaced.

Attachment 3

Span 19 was replaced in 1995 and is in good condition. It is recommended that the asphalt overlay on this span be removed in conjunction with replacement of the adjacent spans.

If further information is required, please contact Brian Summers at (404) 635-8179.

BP/BKS

cc: Jamie Simpson
Mike Davis (J.B. Trimble)
Mike Clements

BRIDGE INVENTORY DATA LISTING GEOR A DEPARTMENT OF TRANSPORTATION

Structure ID: 121-0322-0 **Fulton Area 7** SUFF. RATING 48.09

Location & Geography

*	Structure I.D.No:	121-0322-0	
	200 Bridge Information	05	
*	6A Feature Int:	M9003 DECATUR ST-CSX RR	
*	6B Critical Bridge:	0	
*	7A Route Number Carried:	CS01868	
*	7B Facility Carried:	COURTLAND STREET	
*	9 Location:	IN ATLANTA	
	2 DOT District:	7	
	207 Year Photo:	1999	
*	91 Inspection Frequency:	24	Date: 12/14/2004
	92A Fract Crit Insp Freq:	00	Date: 02/01/1901
	92B Underwater Insp Freq:	00	Date: 02/01/1901
	92C Other Spc. Insp Freq:	00	Date: 02/01/1901
*	4 Place Code:	04000	
*	5 Inventory Route (O/U):	1	
	Type:	5	
	Designation:	1	
	Number:	09007	
	Direction:	0	
*	16 Latitude: 33-45.1	MMS Prefix:	
*	17 Longitude: 084-23.1	MMS Suffix:	MP: 0.00
	98 Border Bridge: 000	%Shared: 00	
	99 ID Number: 000000000000000		
*	100 STRAHNET: 0		
	12 Base Highway Network:	1	
	13A LRS Inventory Route:	1213186803	
	13B Sub Inventory Route:	0	
*	101 Parallel Structure:	N	
*	102 Direction of Traffic:	1	
*	264 Road Inventory Mile Post:	001.34	
*	208 Inspection Area: 07	Initials: DAS	
	Engineer's Initial: jal		

* Location I.D. No.: 121-09007M-002.60N

*	104 Highway System:	0	
*	26 Functional Classification:	16	
*	204 Federal Route Type:	M	No.: 09007
	105 Federal Lands Highway:	0	
*	110 Truck Route:	0	
	206 School Bus Route:	1	
	217 Benchmark Elevation:	0000.00	
	218 Datum:	0	
*	19 Bypass Length:	01	
*	20 Toll:	3	
*	21 Maintenance:	04	
*	22 Owner:	04	
*	31 Design Load:	2	
	37 Historical Significance:	5	
	205 Congressional District:	05	
	27 Year Constructed:	1906	
	106 Year Reconstructed:	1995	
	33 Bridge Median:	0	
	34 Skew:	00	
	35 Structure Flared:	0	
	38 Navigation Control:	N	
	213 Special Steel Design:	0	
	267 Type of Paint:	1	
*	42 Type of Service on:	5	
		4	
	214 Movable Bridge:	0	
	203 Type Bridge:	O-N-N-O	
	259 Pile Encasement:	3	
*	43 Structure Type Main:	5	02
	45 No. Spans Main:	001	
	44 Structure Type Appr:	3	02
	46 No. Spans Appr:	0028	
	226 Bridge Curve Horz:	1	Vert: 1
	111 Pier Protection:	0	
	107 Deck Structure Type:	1	
	108 Wearing Surface Type:	6	
	M	1	
	I	8	

Signs & Attachments

	225 Expansion Joint Type:	04	
	242 Deck Drains:	0	
	243 Parapet Location:	0	
	Height:		0.00
	Width:		0.00
	238 Curb:		0.60 1
	239 Handrail:	5	5
*	240 Median Barrier Rail:	0	
	241 Bridge Median Height:		0.00
	Width:		0.00
*	230 Guardrail Loc Dir Rear:	0	
	Fwrd:	0	
	Oppo Dir Rear:	0	
	Fwrd:	0	
	244 Approach Slab:	0	
	224 Retaining Wall:	1	
	233 Posted Speed Limit:	30	
	236 Warning Sign:	0	
	234 Delineator:	0	
	235 Hazard Boards:	0	
	237 Utilities Gas:	00	
	W	00	
	Ele	21	
	Telephone:	00	
	Sc	00	
	247 Lighting Street:	1	
	Naviagtion:	0	
	Aerial:	0	
*	248 County Continuity No.:	00	

BRIDGE INVENTORY DATA LISTING GEOR A DEPARTMENT OF TRANSPORTATION

Structure ID: 121-0322-0 **Fulton Area 7** SUFF. RATING 48.09

Programming Data

201 Project No.: CITY DESIGN/BRSLB-9007(12
202 Plans Available: 4
249 Prop. Proj. No. BRMLB-9007 (14)
250 Approval Status: 0000
251 P.I. No.: 752015-
252 Contract Date: 02/01/2004
260 Seismic No.: 00000
75 Type Work: 31 1
94 Bridge Imp. Cost: $ 6,216
95 Roadway Imp. Cost: $ 417
96 Total Imp Cost: $ 7,723
76 Imp. Length: 001288
97 Imp. Year: 1990
114 Future ADT: 026475 Year: 2024

Hydraulic Data

215 Waterway Data
Highwater Elev.: 0000.0 Year: 1900
Avg. Streambed Elev.: 0000.0 Freq.: 00
Drainage Area: 00000
Area Of Opening: 000000
113 Scour Critical: N
216 Water Depth: 00.0 Br. Height: 00.0
222 Slope Protection: 0
221 Spur Dikes Rear: 0 Fwrd: 0
219 Fender System: 0
220 Dolphin: 0
223 Culvert Cover: 000
Type: 0
No. Barrels: 0
Width: 0.00 Height: 0.00
Length: 0 Apron: 0
* 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No.: 121-09007M-002.60N

Measurements

* 29 ADT: 017650 Year: 2004
109 % Trucks: 2
* 28 Lanes On: 04 Under: 04
210 No. Tracks On: 00 Under: 04
* 48 Max. Span Length: 0084
* 49 Structure Length: 1,077
51 Br. Rwdy. Width: 45.00
52 Deck Width: 60.00
* 47 Tot. Horz. Cl: 45.00
50 Curb/Sdewlk Width: 7.00/7.00
32 Approach Rdwy Width: 041
* 229 Shoulder Width:
Rear Lt: 0.00 Type: 1 Rt: 0.00
Fwrd Lt: 0.00 Type: 1 Rt: 0.00
Pavement Width:
Rear: 44.00 Type: 2
Fwrd: 41.00 Type: 2
Intersection Rear: 1 Fwrd: 1
36 Safety Features Br. Rail: 3
Transition: 0
App. G. Rail: 0
App. Rail End: 0
53 Minimum Cl.Over: 99 ' 99 "
Under: H 18 ' 10 "
* 228 Min. Vertical Cl
Act. Odm Dir: 99 ' 99 "
Oppo. Dir: 99 ' 99 "
Posted Odm. Dir: 00 ' 00 "
Oppo. Dir: 00 ' 00 "
55 Lateral Undercl. Rt: H 9.50
56 Lateral Undercl. Lt: 0.00
* 10 Max Min Vert Cl: 99 ' 99 " Dir: 0
39 Nav Vert Cl: 000 Horz: 0000
116 Nav Vert Cl Closed: 000
245 Deck Thickness Main: 9.80
Deck Thick Approach: 7.00
246 Overlay Thickness: 1.50
212 Year Last Painted: Sup: 1940 Sub: 1965

Ratings

65 Inventory Rating Method: 2
63 Inventory Rating Method: 2
66 Inventory Type: 2 Rating: 23
64 Operating Type: 2 Rating: 30
231 Calculated Loads
H-Modified: 15 1
HS-Modified: 23 0
Type 3: 18 1
Type 3s2: 32 1
Timber: 25 1
Piggyback: 00 0
261 H Inventory Rating: 15
262 H Operating Rating: 21
67 Structural Evaluation: 5
58 Deck Condition: 5
59 Superstructure Condition: 5
* 227 Collision Damage: 0
60A Substructure Condition: 5
60B Scour Condition: N
60C Underwater Condition: N
71 Waterway Adequacy: N
61 Channel Protection Cond: N
68 Deck Geometry: 2
69 UnderClr. Horz/Vert: 4
72 Appr. Alignment: 8
62 Culvert: N

Posting Data

70 Bridge Posting Required: 4
41 Struct Open, Posted, Cl: P
* 103 Temporary Structure: 0
232 Posted Loads H-Modified: 15
HS-Modified: 00
Type 3: 18
Type3s2: 32
Timber: 25
Piggyback: 00
253 Notification Date 02/01/1901
253 Fed Notify Date: 02/01/1901 0

Attachment 4