

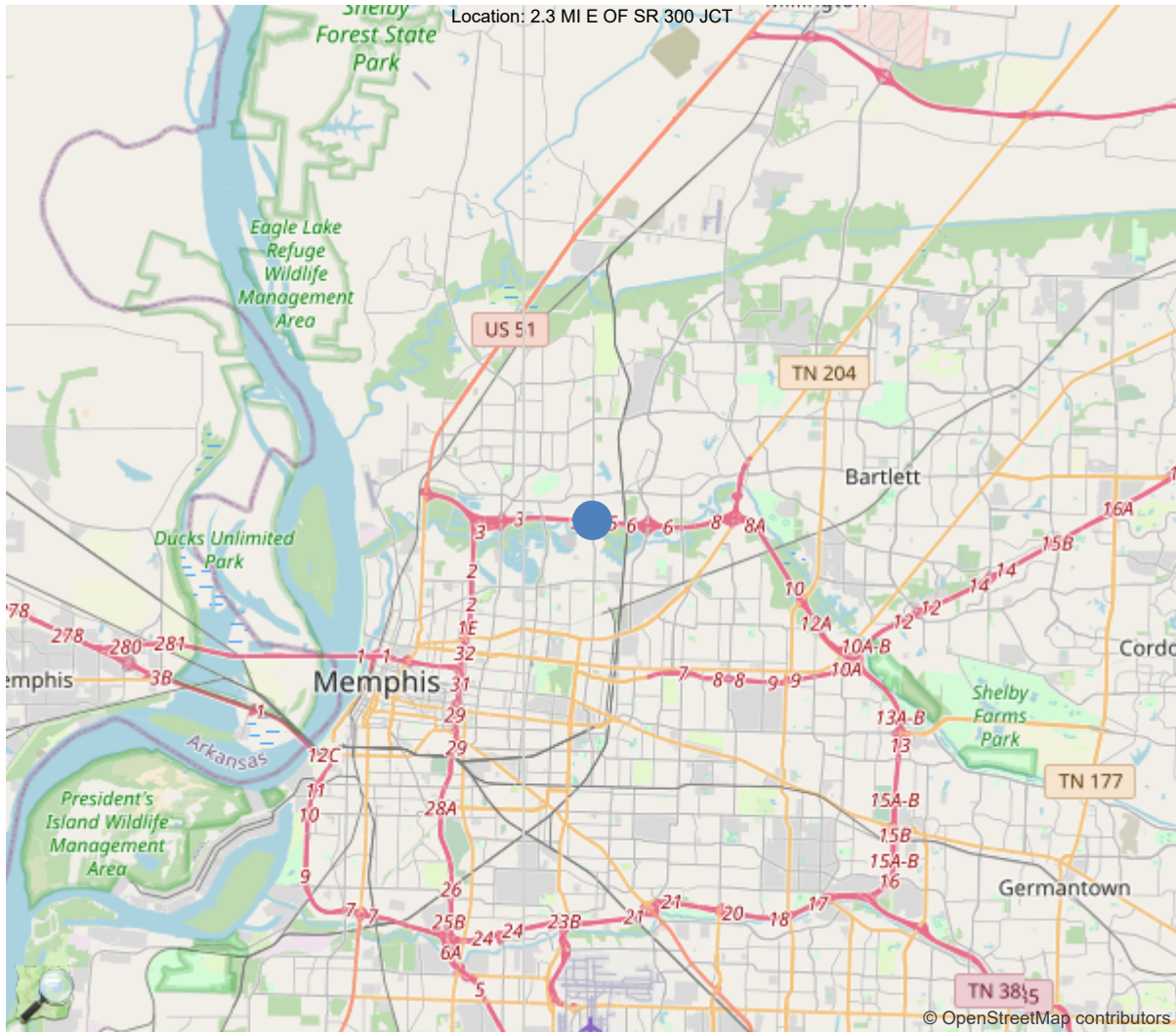


Latitude:35.19178, Longitude:-89.97589

Region 04, 79 - Shelby County

Team Leader: Nathan Bedford

Inspectors: Jacob Seager, Tonjuanita James, Jacob Castellaw, Shayne Hayes, Ty Patrick



I-40 Crossing I-40 WB / N HOLLYWOOD ST

35.19178, -89.97589

90 - LAST INSPECTION DATE 11/04/2024

10 - MIN. V.C. OVER DECK
(ROADWAY + SHOULDERS) 99.99 FT.

520 - MIN. V.C. OVER DECK
(EXCLUDES SHOULDERS) 99.99 FT.

36 - TRAFFIC SAFETY FEATURES

Br. Rail	Trans.	Appr. Rail	Terminal	SPEED LIM.
1	0	0	1	65

41 - STRC OPEN/CLOSED/POSTED A

58 - DECK 7

59 - SUPERSTRUCTURE 6

60 - SUBSTRUCTURE 6

61 - CHANL/CHANL PROTECTION N

62 - CULVERT AND RETAIN WALL N

71 - WATERWAY ADEQUACY N

72 - APPROACH RDWY ALIGNMENT 8

521 - OVERALL CONDITION 2 - Fair

16 - LATITUDE	17 - LONGITUDE
35.191778	-89.975889

N NOT APPLICABLE

9 EXCELLENT CONDITION

8 VERY GOOD CONDITION - NO
PROBLEMS NOTED.

7 GOOD CONDITION - SOME MINOR PROBLEMS.

6 SATISFACTORY CONDITION - MINOR
DETERIORATION OF STRUCTURAL
ELEMENTS.

5 FAIR CONDITION - ALL PRIMARY
STRUCTURAL ELEMENTS ARE SOUND BUT
MAY HAVE MINOR SECTION LOSS,
CRACKING, SPALLING OR SCOUR.

4 POOR CONDITION - ADVANCED SECTION
LOSS, DETERIORATION, SPALLING OR
SCOUR.

3 SERIOUS CONDITION - LOSS OF SECTION,
DETERIORATION, SPALLING OR SCOUR HAVE
SERIOUSLY AFFECTED PRIMARY
STRUCTURAL COMPONENTS. LOCAL
FAILURES ARE POSSIBLE. FATIGUE CRACKS
IN STEEL OR SHEAR CRACKS IN CONCRETE
MAY BE PRESENT.

2 CRITICAL CONDITION - ADVANCED
DETERIORATION OF PRIMARY STRUCTURAL
ELEMENTS. FATIGUE CRACKS IN STEEL OR
SHEAR CRACKS IN CONCRETE MAY BE
PRESENT OR SCOUR MAY HAVE REMOVED
SUBSTRUCTURE SUPPORT. UNLESS
CLOSELY MONITORED IT MAY BE
NECESSARY TO CLOSE THE BRIDGE UNTIL
CORRECTIVE ACTION IS TAKEN.

1 "IMMINENT" FAILURE CONDITION - MAJOR
DETERIORATION OR SECTION LOSS
PRESENT IN CRITICAL STRUCTURAL
COMPONENTS OR OBVIOUS VERTICAL OR
HORIZONTAL MOVEMENT AFFECTING
STRUCTURAL STABILITY. BRIDGE IS
CLOSED TO TRAFFIC BUT CORRECTIVE
ACTION MAY PUT IT BACK IN LIGHT SERVICE.

0 FAILED CONDITION - OUT OF SERVICE AND
BEYOND CORREC

TEAM LEADER SIGNATURE

IDENTIFICATION	
(1) State Names	47 - Tennessee
(8) Structure Number	79I00400074
(5) Inventory Route	1
(2) Highway Agency District	Region 4
(3) County Code	79 - Shelby
(4) Place Code	48000
(6) Features Intersected	I-40 WB / N HOLLYWOOD ST
(7) Facility Carried	I40-LL
(9) Location	2.3 MI E OF SR 300 JCT
(11) Mile Point	7.510 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	79I0040001
(16) Latitude	35.191778
(17) Longitude	-89.975889
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	16
Material	1 - Concrete
Type	6 - Box Beam or girders - Single or Spread
(44) Approach Structure Type	00
Material	0 - Other / None
Type	0 - Other / None
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1975
(106) Year Reconstructed	0
(42) Type of Service	11
On	1 - Highway
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	4
Under	6
(29) Average Daily Traffic	95722
(30) Year of ADT	2021
(109) Truck ADT	8 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	125.0 ft
(49) Structure Length	125.0 ft
(50) Curb or Sidewalk Width	
Left	0.0 ft
Right	0.0 ft
(51) Bridge Roadway Width Curb to Curb	69.5 ft
(52) Deck Width Out to Out	71.5 ft
(32) Approach Roadway Width (W/Shoulders)	67.0 ft
(33) Bridge Median	0 - No median
(34) Skew	85 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	69.5 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	16.25 ft
Ref:	
(55) Min Lat Underclear RT	0.0 ft
Ref:	
(56) Min Lat Underclear LT	0.0 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(111) Pier Protection	
(39) Navigation Vertical Clearance	0.0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	ft
(40) Navigation Horizontal Clearance	0.0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	1
(26) Functional Class	11 - Urban Principal Arterial
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	L - The left structure of para
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	1 - The inventory route is par
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	4 - Historical significance is
CONDITION	
(58) Deck	7
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	6 - MS 18+Mod / HS 20+Mod
(63) Operating Rating Method	8
(64) Operating Rating	
Type	8 - Load and Resistance Factor Rating (LRF
Rating	45.36
(65) Inventory Rating Method	8 - Load and Resistance Factor
(66) Inventory Rating	
Type	
Rating	34.02
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	6
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	3
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	N - Bridge not over waterway.
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	ft
(94) Bridge Improvement Cost	\$
(95) Roadway Improvement Cost	\$
(96) Total Project Cost	\$
(97) Year of Improvement Cost Estimate	
(114) Future ADT	153155
(115) Year of Future ADT	2042

INSPECTIONS *			
(90) Inspection Date	11/04/2024		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			

PERFORMANCE EVALUATION

Time of Day Inspected 1:30 PM

Weather Conditions Sunny 81°F

Vehicles Observed All types

LIVE LOAD BEHAVIOR

Sub Horiz./ Vert. Defl (No)

Sub Vibration (No)

Super Horiz./ Vert. Defl (No)

Super Vibration (No)

APPROACH

Alignment (Good)

Joints (Poor)

Approach 2 full of debris

Pavement (Poor)

Approach 1&2 have 1/2" cracks and spall

Embankment (Good)

Approach Drains (Poor)

Approach 1&2 full of debris

TRAFFIC SAFETY FEATURES

Bridge Railing Rating (Fair)

Transitions Rating (Good)

Guardrail Rating (Good)

Guardrail Terminal Rating (Good)

SIGNS POSTED ON ROUTE

Paddleboards No

Weight Limit Posted Not Needed

Vertical Clearance (<14'-6") No

Gross Tons

Posted Height

Single-unit Vehicle Tons

Narrow Bridge Signs No

Multi-unit Vehicle Tons

One Lane Bridge Signs No

Other Signs or Plaques

564 Assigned Bridge Name

ATTACHED SIGNS

Sign No	Location	Text on Sign	Noted Defects
79SIGN00 1143	SPAN 1 LEFT	EAST TO I40	

DECK

Wearing Surface Type	Asphalt	Wearing Surface Depth	4
-----------------------------	---------	------------------------------	---

Wearing Surface	(Fair)	Up to 1/8" cracks
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Deck - Structural Condition	(Good)
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Parapet	(Fair)	Hairline cracks and scaling
----------------	--------	-----------------------------

SUPERSTRUCTURE

Beams	(Good)
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Alignment of Members	(Good)
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TEXTURE COAT

ABUTMENTS

Abutment Caps	(Fair)	Hairline cracks with efflorescence , impending spall
Abutment Wings	(Fair)	1/8" cracks with efflorescence , impending spall , spalling
Abutment Backwall	(Poor)	Spall steel abut 2 back wall
Abutment Plumb	(Good)	
Abutment Piles	(Not Visible)	
Abutment Embankment	(Good)	
Abutment Bearing Surface	(Good)	
Abutment Slope Paving	(Good)	

PIERS

BENTS

Inspection Team's Summary

This is a one span concrete box beam bridge. The safety features include metal approach rails and concrete bridge parapets. The asphalt approach roadway has cracks up to 1/2" and potholes. The approach 2 joint is filled with debris. The asphalt wearing surface has cracks up to 1/8". The bottom deck has no problems. The concrete box beam has no problems. The abutment 2 backwall has spalling with exposed rebar. The concrete substructure has hairline cracks, efflorescence, and spalling. The minimum vertical clearance is 16'3".

General Inspection Comment

HQ notes to TL

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Re Concrete Deck	SF	8938	8937	1	0	0
1080	Delamination/Spall/Patched Area	SF	1	0	1	0	0
510	Wearing Surfaces	SF	8688	8488	200	0	0
3220	Crack (Wearing Surface)	SF	200	0	200	0	0
(12) Element record added 12/21/2016							
(1080-12) Element record added 9/28/2022							
(3220-510-12) Element record added 9/30/2020							
110	Re Conc Opn Girder/Beam	LF	125	125	0	0	0
(110) Element record added 12/21/2016							
215	Re Conc Abutment	LF	143	129	14	0	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1120	Efflorescence/Rust Staining	LF	5	0	5	0	0
1130	Cracking (RC and Other)	LF	8	0	8	0	0
(215) Element record added 12/21/2016							
(1120-215) Element record added 9/28/2022							
(1130-215) Element record added 9/30/2020							
310	Elastomeric Bearing	EA	1	1	0	0	0
(310) Element record added 12/21/2016							
331	Re Conc Bridge Railing	LF	250	228	22	0	0
1080	Delamination/Spall/Patched Area	LF	22	0	22	0	0
(331) Element record added 12/21/2016							

Equipment List

General Inspection

- ☐ Pocket knife
- ☐ Sounding/chipping hammer
- ☐ Chain drag
- ☐ Range pole
- ☒ 25' rod - depth and clearance

Visual Aid

- ☐ Binoculars
- ☐ Flashlight
- ☐ Magnifying glass
- ☐ Hand mirror

Cleaning

- ☐ Wisk broom
- ☐ Wire brush
- ☐ Flat bladed screwdriver
- ☐ Hand shovel
- ☐ Penetrating oil (WD-40, etc.)

Tools For Access

- ☐ Ladders
- ☐ Rope
- ☒ Waders
- ☐ Machete or bush axe

Comment

Tools For Measuring

- ☒ Masonry/Wood Ruler
- ☐ 6' Pocket Tape
- ☐ 25' and 100' Tape
- ☐ Calipers
- ☒ Thermometer
- ☐ Carpenter's Level
- ☐ String and Weighted line (plumb bob)

Special Purpose Equipment

- ☐ Reach All
- ☐ Bucket Truck
- ☒ Traffic control
- ☐ Boat
- ☐ Sonar depth finder
- ☐ Increment borer
- ☐ Survey equipment
- ☐ Safety Harness
- ☐ Climbing equipment
- ☐ Dye penetrant
- ☐ Drone
- ☐ Air Meter

Special Purpose Equipment

Reach-All Approval and Comments



Approach 2 asphalt



Approach 2 asphalt



Opposite direction of route



Direction of route



Approach 1 pavement



Looking right



Approach 2 joint



Approach 2 pavement



Back of bridge mounted sign



Bridge mounted sign upper connection



Left elevation



Front of bridge mounted sign



Back of bridge mounted sign



Bridge number



Abutment 1



Abutment 2



Abutment 2 spall



Abutment 2 impending spall



Bottom deck span 1



Spall steel back wall span 1



Spall steel back wall span 1

Maintenance Recommendations

525 - Repair List # N 523 - Repair List Add Date 524 - Repair List Revise Date 9/27/2022

Date Added	Recommendation	Priority
11/04/2024	REPAIR CONCRETE PARAPET IN SPAN NO.1 LT	
08/10/2005	APPROACH GUARDRAILS ARE SUBSTANDARD	
09/28/2022	UNDERPASS SUBSTRUCTURE PROTECTION GUARDRAILS ARE NON-EXISTENT	
11/04/2024	LEVEL THE WEARING SURFACE AT BOTH APPROACHES.	
11/04/2024	CLEAR APPROACH DRAINS.	
10/30/2024	REPAIR BACKWALL AT ABUTMENT NO.2	
11/04/2024	CLEAN AND SEAL APPROACH 2 JOINT	

SHELBY COUNTY

79-10040-0751 L

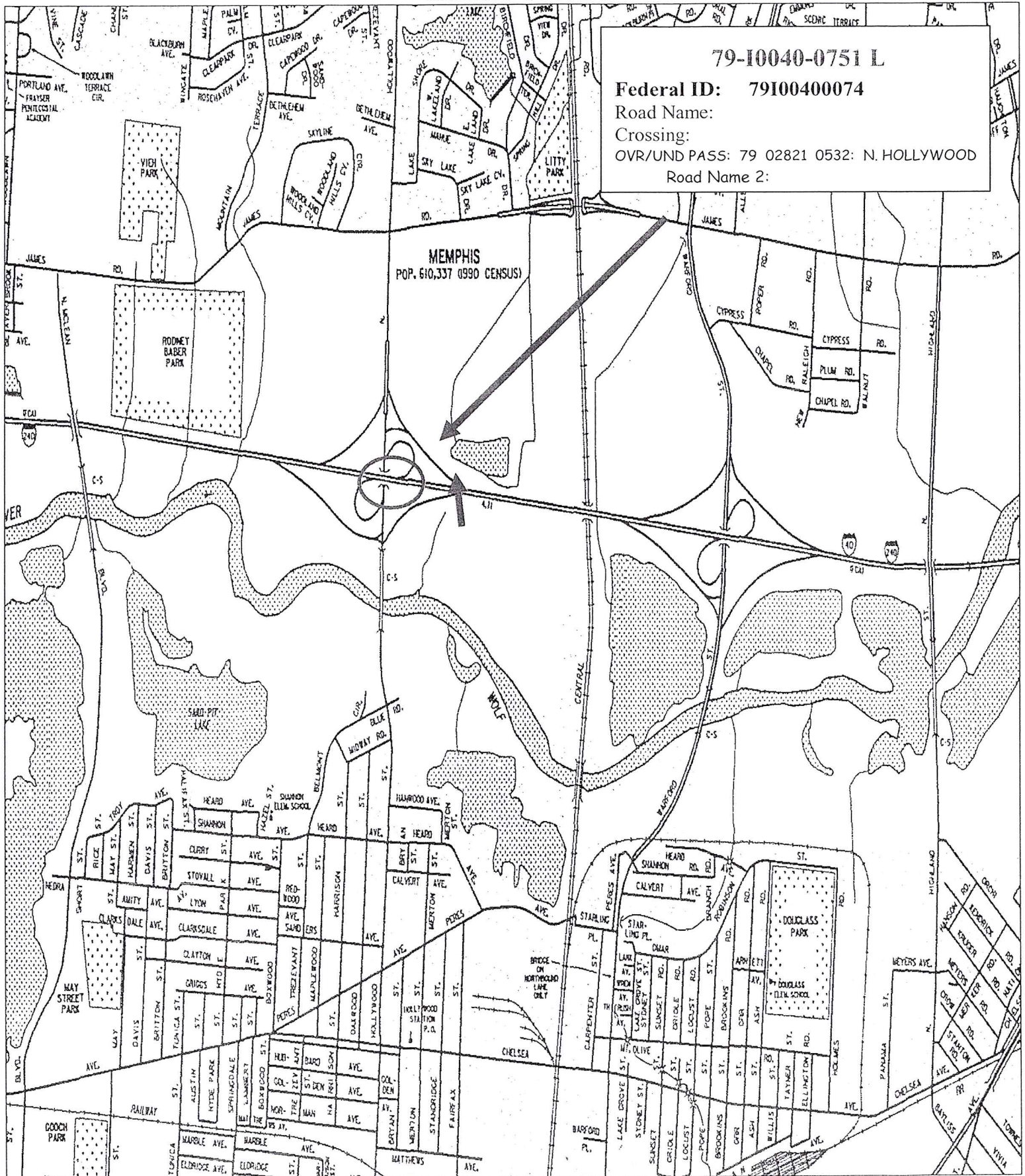
Federal ID: 79I00400074

Road Name:

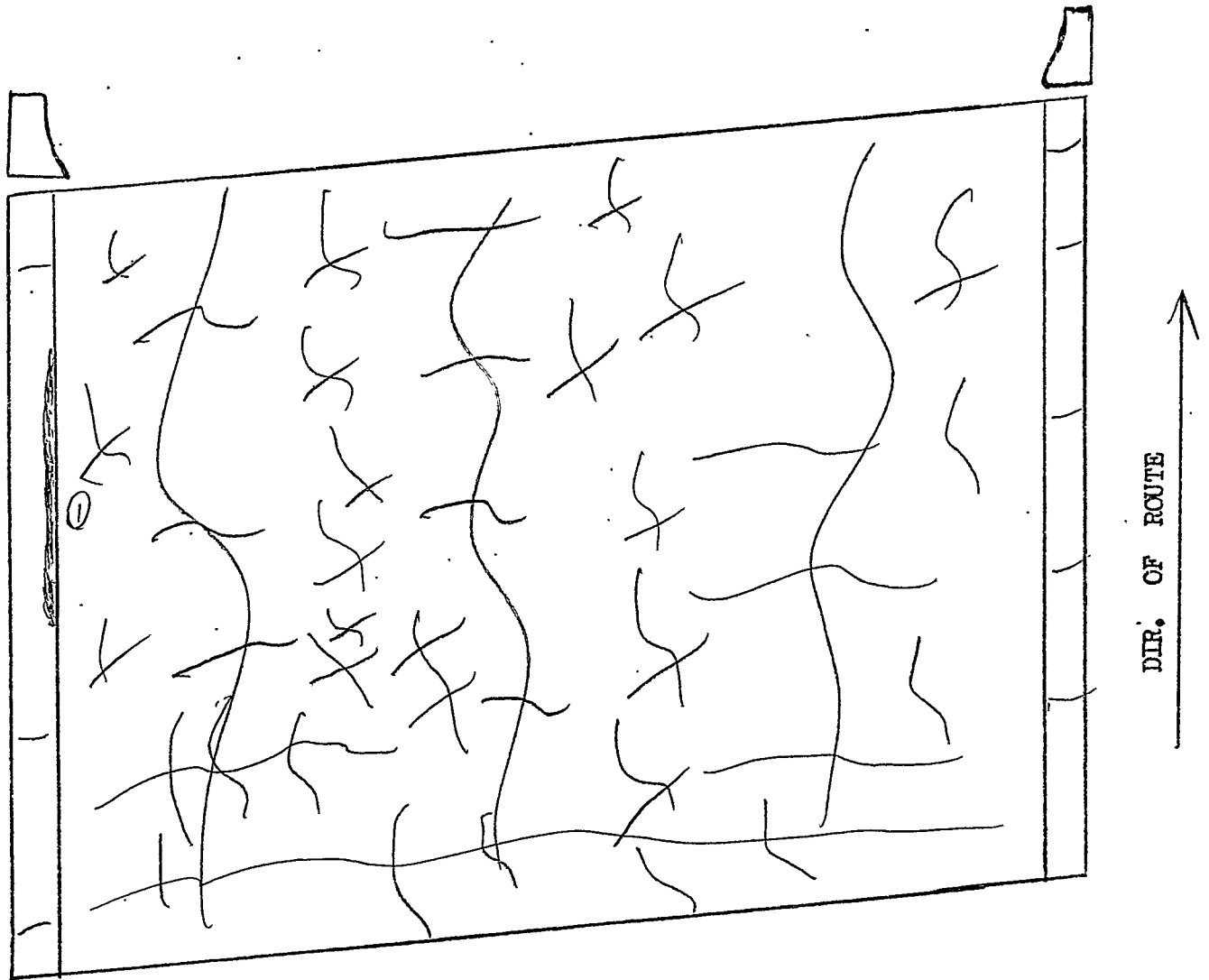
Crossing:

OVR/UND PASS: 79 02821 0532: N. HOLLYWOOD

Road Name 2:

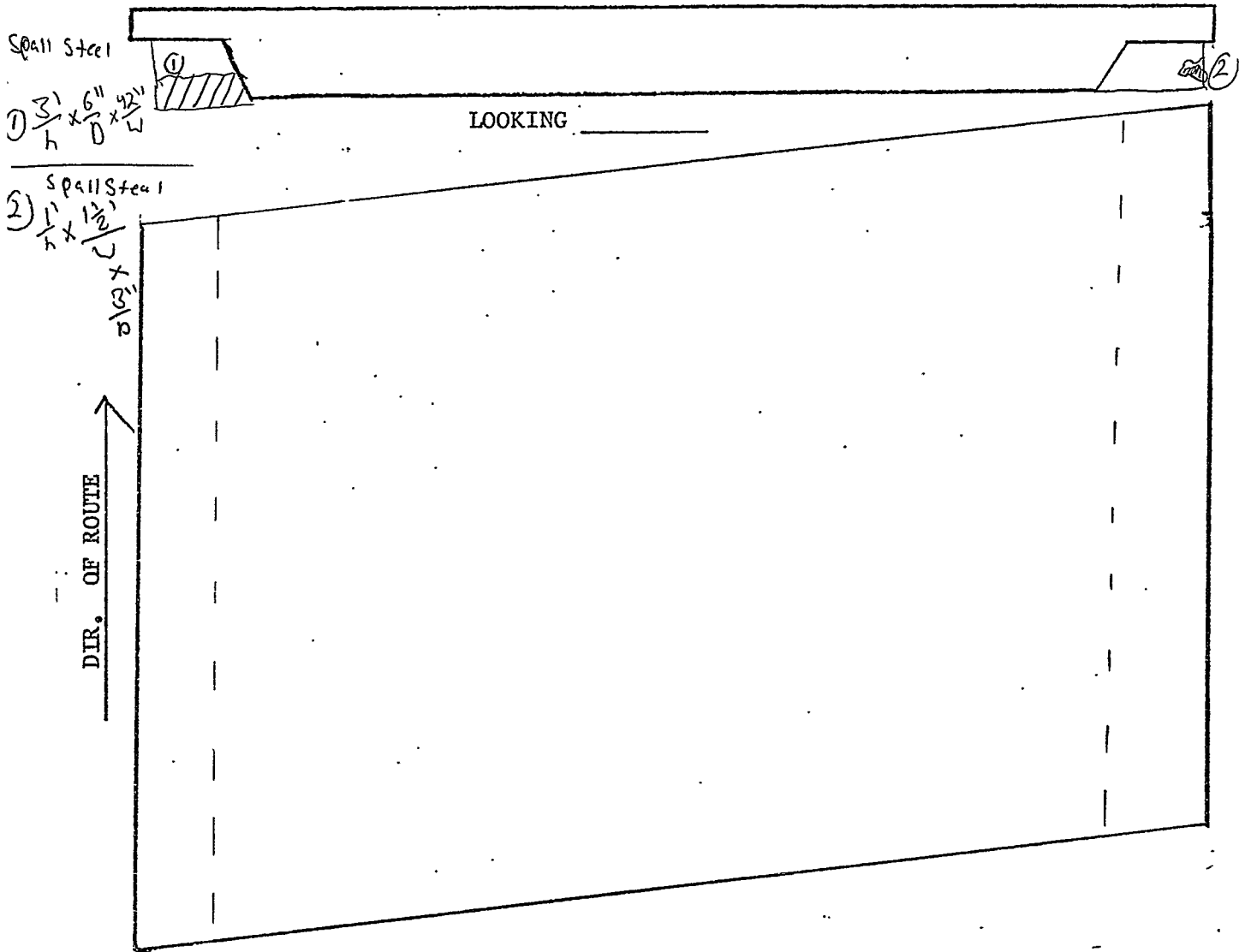


BRIDGE NO. 79 I 240 7.56 L.W.B.L. SK. RT. SPAN NO. 1



DECK	G (F) P C	up to $\sqrt{8}$ " cracking	① Scaling
PARAPET	G (F) P C	Hairline cracks & see ①	$10' / L \times 0.5" \times \frac{5"}{H}$
DRAINS	G F P C		
JOINT	G F P C		

BRIDGE NO. 79 I-240 7.51 E W.B.L. SK. RT. SPAN NO. 1

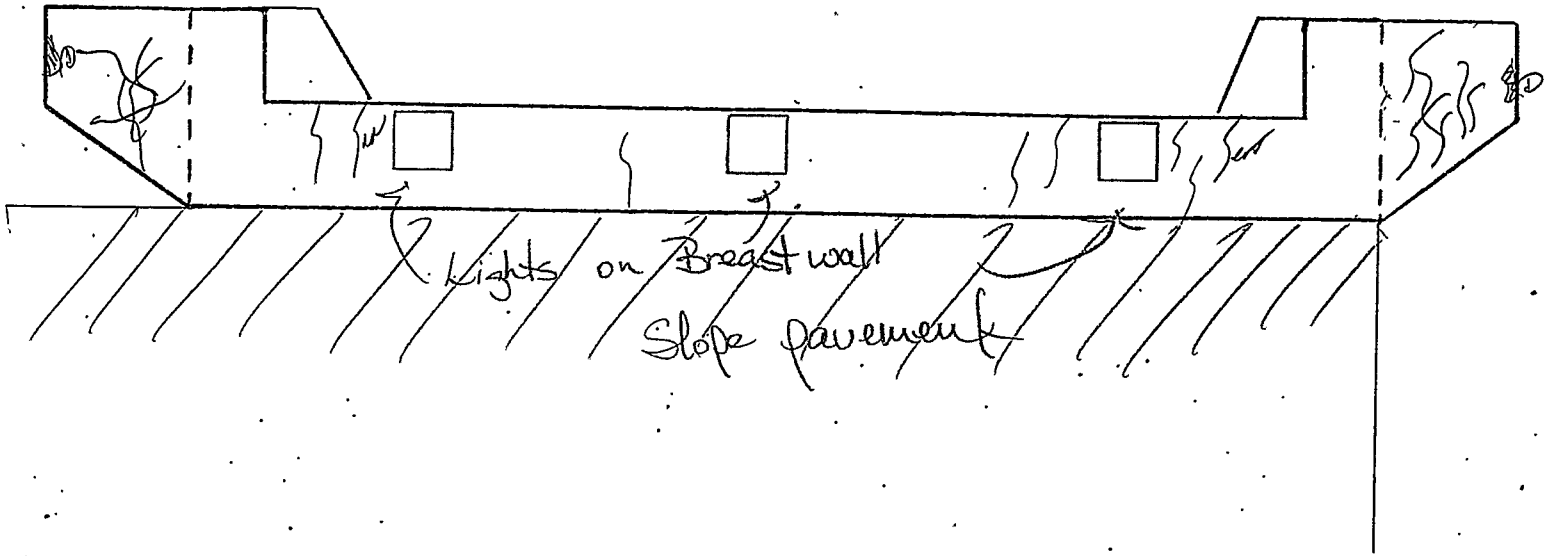


ELEMENT	RATING	COMMENT
BOTTOM DECK	G F P C	
E Q	G F P C	
Backwall	G F P C	see ① ②
Box Beam	⑤	

BRIDGE NO. 79 I 340 7.51 WBL ABUT. NO. 1

20

LOOKING BACK



LEMENT	RATING	COMMENTS
BEARING	G F P C	N/A
PAINT	G F (P) C	Dirty, peeling
CAP	G (F) P C	Horizontal cracks w/alt
WINGS	G (F) P C	1/8" cracks w/alt
EMB.	(G) F P C	
VEG.	(G) F P C	
RIP-RAP	G F P C	N/A
SLOPE PAV.	(G) F P C	
BACKWALL	(G) F P C	N/A

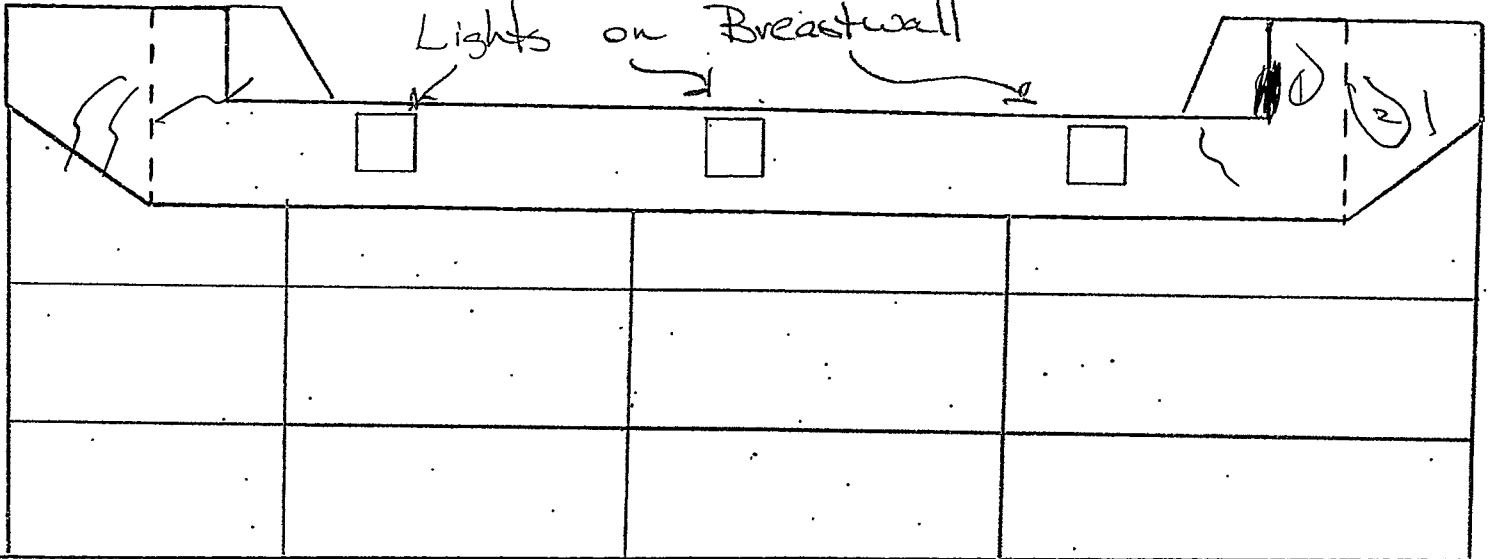
① Spall cap to
1' H x 4' W x 1/2" D

BRIDGE NO. 79 I-240 7515L W.B.L. ABUT. NO. 2

LOOKING AHEAD

① Spall
6" dia
1' x 1' deep

Lights on Breastwall



ELEMENT	RATING	COMMENTS
BEARING	Ⓒ F P C	
PAINT	G F P C	N/A
CAP	Ⓒ F P C	① Hairline cracks effr
WINGS	Ⓒ F P C	② Hairline cracks effr
EMB.	Ⓒ F P C	
VEG.	Ⓒ F P C	
RIP-RAP	G F P C	
SLOPE PAV	Ⓒ F P C	
BACKWALL	G F P C	

② Imp
spall 3' by
2' L

Form BIR 3.0A
(Rev. 9-22-98)
DT-1443

Field Report No. _____ Date _____
Previous Report No. _____ Date _____

Bridge No. 79100400074
Eleven Digit No.

Underpass Location No. 79 - 10040 - ~~0759~~ L

-0- _____ or - - -
Railroad/Walkway Co. Route Log Mile

over/ under	79	- 02821	- 0532
	Co.	Route	Log Mile

County Shelby

Structure Name (If Named) _____

Year Constructed 1979

Year Widened	Year Rehabilitated
1968	1970
1970	1972
1972	1974
1974	1976
1976	1978
1978	1980
1980	1982
1982	1984
1984	1986
1986	1988
1988	1990
1990	1992
1992	1994
1994	1996
1996	1998
1998	2000
2000	2002
2002	2004
2004	2006
2006	2008
2008	2010
2010	2012
2012	2014
2014	2016
2016	2018
2018	2020
2020	2022
2022	2024
2024	2026
2026	2028
2028	2030
2030	2032
2032	2034
2034	2036
2036	2038
2038	2040
2040	2042
2042	2044
2044	2046
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2060	2062
2062	2064
2064	2066
2066	2068
2068	2070
2070	2072
2072	2074
2074	2076
2076	2078
2078	2080
2080	2082
2082	2084
2084	2086
2086	2088
2088	2090
2090	2092
2092	2094
2094	2096
2096	2098
2098	2100

GEOMETRIC FEATURES UNDER BRIDGE (*. * ft. unless otherwise noted)

Divided Highway LEFT RDWY () RIGHT RDWY () N.A. (X)

Type of Wearing Surface CONCRETE (X) ASPHALT () GRAVEL ()

Width of Approach Traveled Roadway 76 ft. (Does Not Include Shoulders)

Width of Median if Divided Highway — ft.

Approach Shoulder Width — ft. Right — ft. Left

*Horizontal Clearance Under Bridge 76 ft. 0 IN.

*Distance Between Pier Protection
Guardrail and Substructure — ft. Right — ft. Left

*Width of Sidewalk Under Bridge 5.0 ft. Right ft. Left

*Minimum Vertical Clearance: 16 ft. 3 in.

*Show on Sketch

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE

STANDARD SUB-STANDARD NON EXIST

Pier Protection Railing or Parapet	G	F	P	C	()	()	(X)
Approach Guardrail Transitions	G	F	P	C	()	()	(X)
Approach Guardrail	G	F	P	C	()	()	(X)
Approach Guardrail Terminal	G	F	P	C	()	()	(X)

SIGNING FOR UNDERPASS ROUTE

Paddleboards	YES ()	NO (<input checked="" type="checkbox"/>)	NEEDED ()
Vertical Clearance (<14'-6")	YES ()	NO (<input checked="" type="checkbox"/>)	NEEDED ()
Narrow Passage	YES ()	NO (<input checked="" type="checkbox"/>)	NEEDED ()
One Lane Passage	YES ()	NO (<input checked="" type="checkbox"/>)	NEEDED ()
Other Underpass Signs Needed			

INSPECTORS

1. Bedford
2. Seager
- 3.
- 4.
- 5.
- 6.

Form BIR 3.0A (Continued)
(Rev. 9-22-98)
DT-1443

Date _____

Underpass Location No. 79 - 10040 - 0759 L
Co. Route Log Mile

Other Signs or Plaques: _____

Comments Regarding any Problems with Signing: _____

BRIDGE FEATURES (*.* ft.)

Bridge Skew 85.1[°]
Structure Type (Main Span) Box Beam No. Main Spans 1
Structure Type (Appr. Spans) _____ No. Appr. Spans _____
Maximum Span Length 125 (ft.) Total Length 125 (ft.)
Width of Bridge Out-to-Out 71.5 (ft.) Right Angle to Centerline of Bridge
Width of Bridge Along Skew _____ (ft.) (If Unable to Measure at Right Angle to Centerline of Bridge)
Number of Lanes/Tracks on Bridge 6

BRIDGE CONDITION: G (F) P C

Does Potential Exist for Elements from Bridge Falling on Roadway Beneath YES () NO (X)

Does Potential Exist Because of Deteriorated Condition or Failure of Major Member YES () NO (X)

Comment on any Conditions of Bridge that would Effect Roadway Beneath:

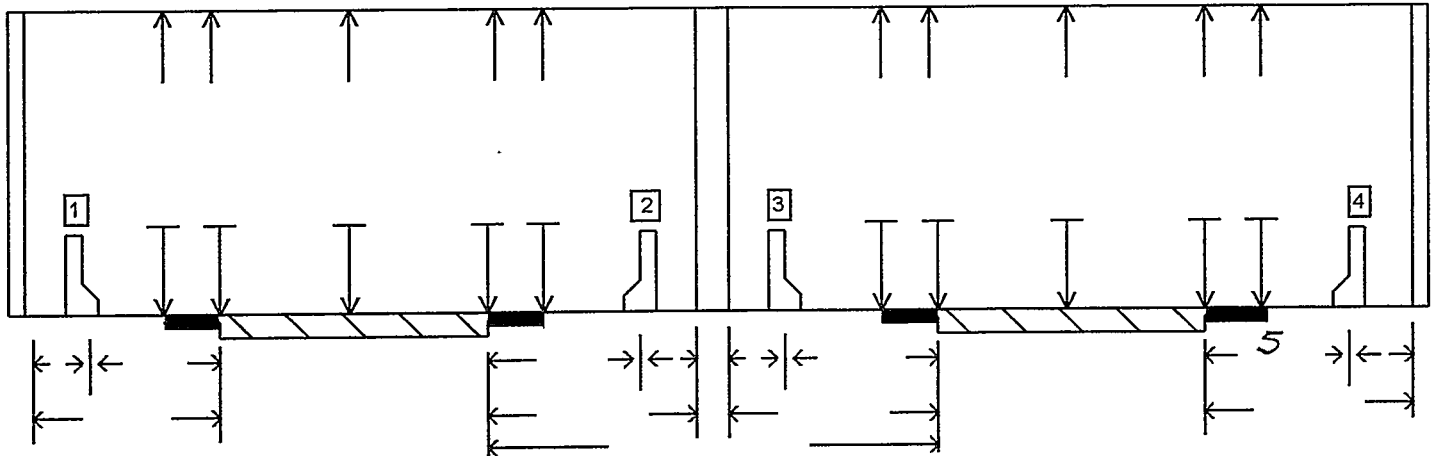
Note: If Underpass Route is Divided Highway, Use Two of These Forms, One for Each Roadway.

MINIMUM PICTURES REQUIRED

1. Elevation View of Bridge on Both Sides Showing Underpass
2. View Showing Both Approaches to Bridge
3. View Showing Safety Features
4. View Showing Any Problems

LATERAL AND VERTICAL CLEARANCES

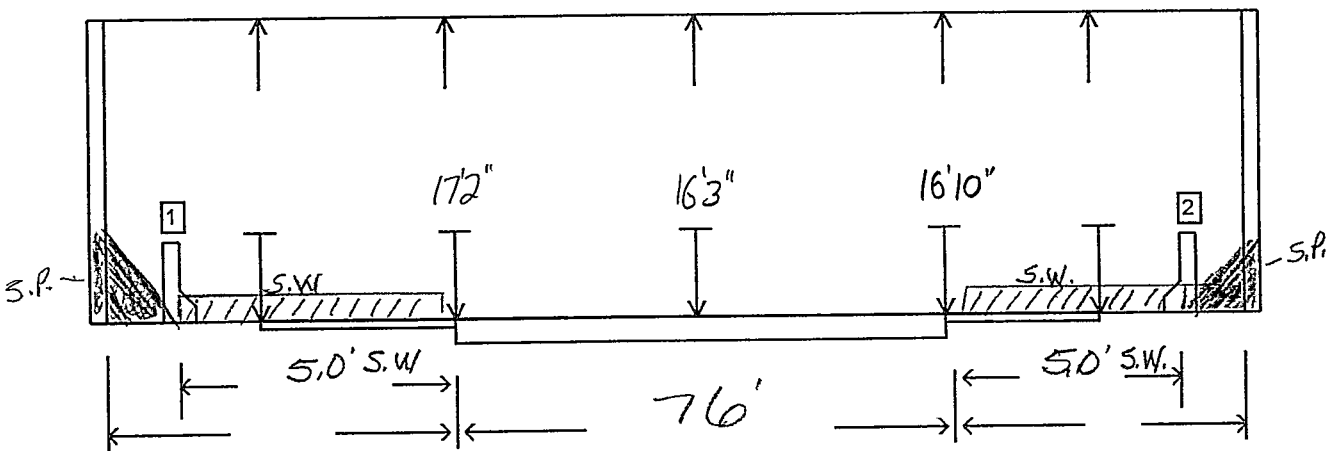
BENT/ABUT. _____ BENT _____ BENT/ABUT. _____



- | | | | | | | |
|-----------------------|---------|--------------------------|---------------|--------------------------|------|-------------------------------------|
| 1. RAIL/BARRIER TYPE: | W-SHAPE | <input type="checkbox"/> | CONC. BARRIER | <input type="checkbox"/> | NONE | <input checked="" type="checkbox"/> |
| 2. RAIL/BARRIER TYPE: | W-SHAPE | <input type="checkbox"/> | CONC. BARRIER | <input type="checkbox"/> | NONE | <input checked="" type="checkbox"/> |
| 3. RAIL/BARRIER TYPE: | W-SHAPE | <input type="checkbox"/> | CONC. BARRIER | <input type="checkbox"/> | NONE | <input type="checkbox"/> |
| 4. RAIL/BARRIER TYPE: | W-SHAPE | <input type="checkbox"/> | CONC. BARRIER | <input type="checkbox"/> | NONE | <input type="checkbox"/> |

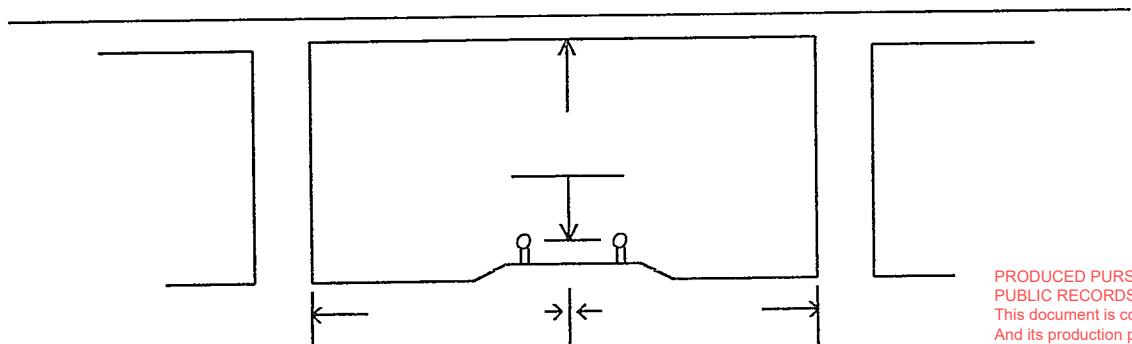
BENT/ABUT. 1

BENT/ABUT. 2



BENT/ABUT. _____

BENT/ABUT. _____



TDOT BRIDGE MOUNT SIGN INSPECTION REPORT

INSPECTION DATE: 11/4/20

SIGN NUMBER: 79SIGN001143

LOCATION: ATTACHED TO SPAN #1 LEFT OF
79-I0040-7.51 L (79I00400074)

DIRECTION OF UNDERPASS ROUTE: SB

BASE PLATE BOLT DIAMETER: 3/4"

NUMBER OF BOLTS PER BASE PLATE: 2

TOTAL NUMBER OF BOLTS ATTACHING SIGN TO BRIDGE: 8

BASE BOLTS CONDITION: G F P C

COMMENTS: _____

FOUNDATION (PARAPET/BEAM) CONDITION: G F P C

COMMENTS: _____

UPPER ARMS CONDITION: G F P C

COMMENTS: _____

LOWER ARMS CONDITION: G F P C

COMMENTS: _____

SIGN FACE CONDITION: G F P C

COMMENTS: _____

OVERALL CONDITION: G F P C

SIGNATURE: VB

