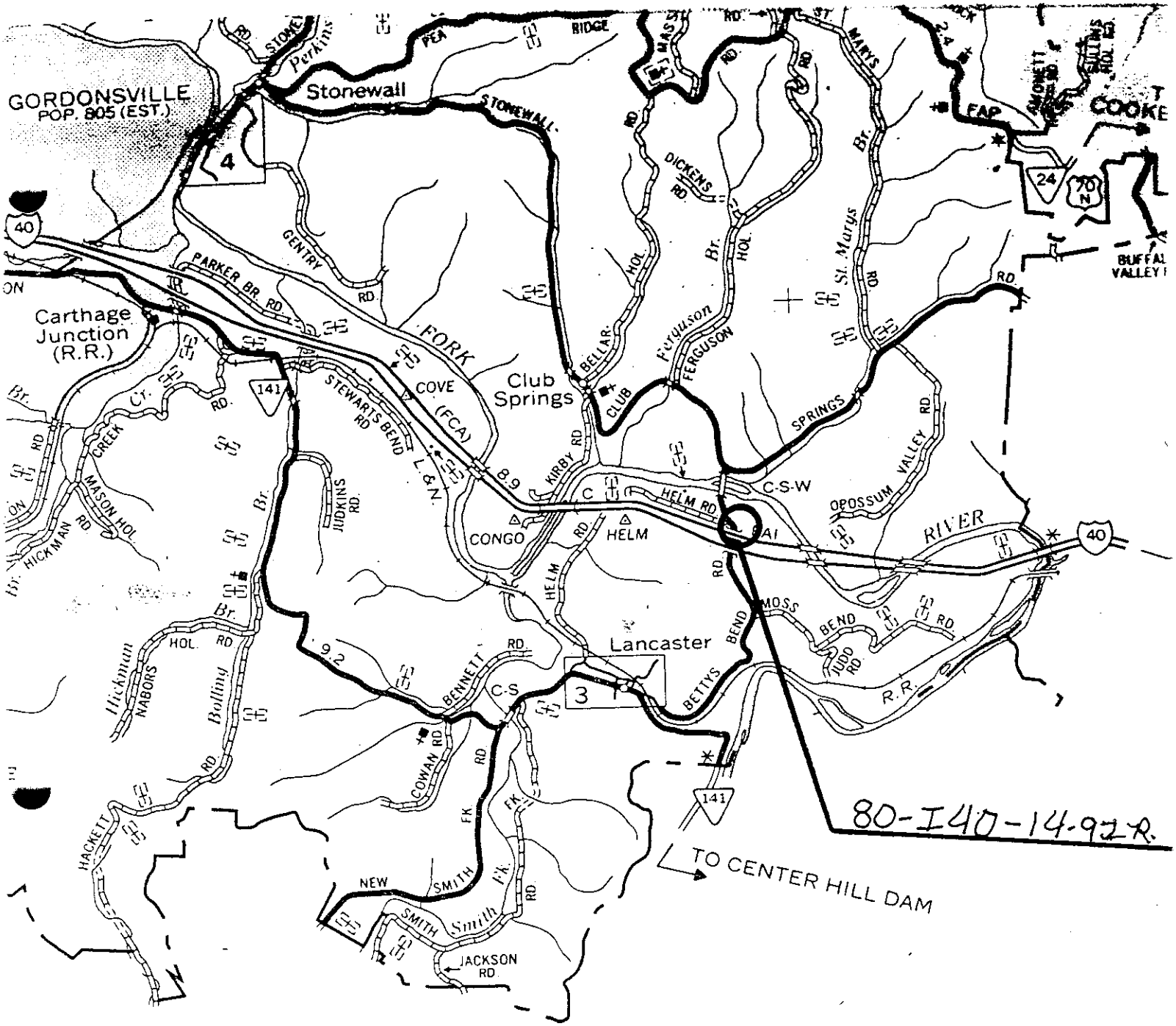
GORDONSVILLE
POP. 805 (EST.)
Stonewall
STONEWALL
PEA RIDGE
Perkins
MASTERS
ST. MARYS
FAP
COOKE
DICKENS RD.
Br.
HOL.
St. Marys
RD.
GENTRY RD.
PARKER BR. RD.
Carthage Junction (R.R.)
FORK
COVE (FCA)
Club Springs
BELLAR
CLUB
Ferguson
FERGUSON
SPRINGS
VALLEY RD.
STEWARTS BEND
L&N
8.9
KIRBY RD.
C
HELM RD.
C.S-W
OPOSSUM
RIVER
CONGO
HELM
JUDKINS RD.
MASON HOL. RD.
HICKMAN
CREEK
Hickman
NABORS
Bolling
HOL.
9.2
BENNETT RD.
C.S
Lancaster
3
MOSS BEND
JUDD RD.
BETTYS
R.R.
COWAN RD.
FK.
HACKETT
NEW SMITH FK. RD.
Smith
JACKSON RD.
TO CENTER HILL DAM
80-I40-14-92R.
COUNTY

Bridge Maintenance Recommendations

Bridge Location No.: 80 - I0040 - 14.92 R
Co. Route Log Mile

Crossing: BETTYS BEND RD (A138)*

Bridge Rating: GOOD

Inspection Cycle: 16

Inspection Date: 4/25/2003

Comments:

Bridge Number: 80I00400029
County: Smith
Region: 03
District: 32
Maint.Resp.: 01
Spec.Case: 0
Co.Seq: 01

Maintenance Recommendations:

Maintenance Completed By / Date

COMPLETION NOTIFICATION: RETURN WITHIN 6 MONTHS OF INSPECTION DATE.
INITIAL AND DATE RECOMMENDATIONS WHEN COMPLETED.
MAINTENANCE ACTIVITIES ARE COMPLETED (DATE) _____ BY_____
MAINTENANCE ACTIVITIES ARE PARTIALLY COMPLETED (DATE) _____ BY_____
MAINTENANCE ACTIVITIES ARE INCOMPLETE, SCHEDULED FOR (DATE) _____
EXPLANATIONS AND COMMENTS:

CONTACT:

MR. RAY MCCLELLAND
D.O.T. BRIDGE INSPECTION
6601 CENTENNIAL BLVD.
NASHVILLE, TN 37243

MR. DON GREER
D.O.T. BRIDGE INSPECTION
6601 CENTENNIAL BLVD.
NASHVILLE, TN 37243

Bridge Maintenance Recommendations

Bridge Location No.: 80 - I0040 - 14.92 R
Co. Route Log Mile

Crossing: BETTYS BEND RD (A138)*

Bridge Rating: GOOD

Inspection Cycle: 15

Inspection Date: 6/12/01

Comments:

Bridge Number: 80I00400029
County: Smith
Region: 03
District: 32
Maint.Resp.: 01
Spec.Case: 0
Co.Seq: 01

Maintenance Recommendations:

Maintenance Completed By / Date

COMPLETION NOTIFICATION: RETURN WITHIN 6 MONTHS OF INSPECTION DATE.

INITIAL AND DATE RECOMMENDATIONS WHEN COMPLETED.

MAINTENANCE ACTIVITIES ARE COMPLETED (DATE) _____ BY_____

MAINTENANCE ACTIVITIES ARE PARTIALLY COMPLETED (DATE) _____ BY_____

MAINTENANCE ACTIVITIES ARE INCOMPLETE, SCHEDULED FOR (DATE) _____

EXPLANATIONS AND COMMENTS:

CONTACT:

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NASHVILLE, TN 37243

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D.O.T. BRIDGE INSPECTION
6601 CENTENNIAL BLVD.
NASHVILLE, TN 37243

BRIDGE MAINTENANCE RECOMMENDATIONS

BRIDGE SEQ. NO. : 80I00400029 BRIDGE NO. : 80 - I0040 - 1492 - R
OVER : BETTYS BEND RD (A138)*

DATE : 06/16/99 BRIDGE RATING : GOOD COUNTY : Smith
CO. SEQ. : 01 INSPECTION CYCLE : 14 MAINT DIST : 32
SPEC. CASE : 1 INSPECTION DATE : 06/16/99 REGION : 03

007 - FACILITY CARRIED BY STRUCT : I40
021 - MAINTENANCE RESPONSIBILITY : 01
022 - OWNER : 01
042 - TYPE OF STRUCTURE : 11
043 - STRUCTURE TYPE, MAIN : 505
044 - STRUCTURE TYPE, APPROACH : 000
045 - SPANS, MAIN UNIT : 001
046 - SPANS, APPROACH : 0000
049 - STRUCTURE LENGTH : 000076
032 - APPROACH ROADWAY WIDTH : 038
034 - SKEW : 87
051 - BRDG RDWY WID, CRB-TO-CRB : 0400
052 - DECK WIDTH, OUT-TO-OUT : 0466
500 - HWY OF THE INVENTORY ROUTE : 01

: MAINTENANCE & REPAIR RECOMMENDATIONS : : MAINTENANCE COMPLETED :

1 LEVEL APPROACH NO. 0002__ 1 BY _____ DATE _____

: COMMENTS FOR BRIDGE SEQ. NO. : 80I00400029 :

REPAIR COLLISION DAMAGE LEFT SIDE 'A' END.

COMPLETION NOTIFICATION : RETURN WITHIN 6 MONTHS OF INSPECTION DATE

MAINTENANCE ACTIVITIES ARE
--- COMPLETED (DATE) --------
--- PARTIALLY COMPLETE (DATE) --------
--- INCOMPLETE SCHEDULED FOR (DATE) --------

EXPLANATIONS AND COMMENTS:

SMITH COUNTY INTERSTATE & STATE ROUTES

VERTICAL CLEARANCES LESS THAN 14'- 6"
JUNE 21, 2000

BRIDGE NUMBER	AT	MEASURED HEIGHT	POSTED HEIGHT	POSTING RECOMENDED HEIGHT
80-SR264-5.55	I-40	14'-5"	NONE	14'-3"
80-A138-0.64	I-40	14'-4"	NONE	14'-2"

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

Revised 06/15/2000

County:	80
Route:	I0040
Special Case:	0
County Sequence:	01
Log Mile:	14.92

Bridge Number: (Includes Item 5A) 80I004000291

Feature Intersected: BETTYS BEND RD (A138)

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	06/12/2001 4125103
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
36	TRAFFIC SAFETY FEATURES Br. Rail / Trans. / Appr. Rail / Appr. Rail Ends	1 1 1 1 ___ ___ ___ ___
41	STRC OPEN/CLOSED/POSTED A K P	A ___
58	DECK	7 ___
59	SUPERSTRUCTURE	7 ___
60	SUBSTRUCTURE	7 ___
61	CHANL/CHANL PROTECTION	N ___
62	CULVERT AND RETAIN WALL	N ___
71	WATERWAY ADEQUACY	N ___
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	8 ___
521	OVERALL CONDITION (Circle One)	

GOOD FAIR POOR CRITICAL

Gilbert Wayne Hunter 4125103

TEAM LEADER SIGNATURE REVIEW DATE

CONDITION CODING GUIDELINES
(Values for Coding Items 58, 59, 60 and 62)

- 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 SERIOURSLY 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 BACK IN LIGHT SERVICE.
- 0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

Revised 06/15/2000

County:	80
Route:	0A138
Special Case:	0
County Sequence:	01
Log Mile:	0.64

Bridge Number: (Includes Item 5A) 80I004000292

Feature Intersected: I40/A138 BETTYS BEND RD.

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	06/12/2001
		4 12 5 103
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	14 FT. 4 IN.
		____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	14 FT. 4 IN.
		____ FT. ____ IN.
47	TOTAL HORIZONTAL UNDERCLEARANCE	28 FT. 10 IN.
		____ FT. ____ IN.
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: (H) R	14 FT. 4 IN.
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: (H) R	3 FT. 0 IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	0 FT. 0 IN.

UNDERPASS SAFETY FEATURES

515 (A) TYPE UNDERPASS BARRIER
None Exists but Needed

Revised Barrier Type

(B) ADEQUACY OF BARRIER OR RAIL 0

(C) ADEQUACY OF TRANSITIONS 0

(D) ADEQUACY OF TERMINALS 0

554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING
99 FT. 99 IN.
____ FT. ____ IN.

521 OVERALL CONDITION (Circle One)
(GOOD) FAIR POOR CRITICAL

HEIGHT POSTED AT BOTH APPROACHES? YES [✓] NO [ ] N/A [ ]

555 COMMENTS

Gilbert Wayne Hunter
TEAM LEADER SIGNATURE

4/25/01
REVIEW DATE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

Revised 06/15/2000

County:	80
Route:	I0040
Special Case:	0
County Sequence:	01
Log Mile:	14.92

Bridge Number: (Includes Item 5A) 80I004000291

Feature Intersected: BETTYS BEND RD (A138)

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	06/16/1999 6/12/01
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
36	TRAFFIC SAFETY FEATURES	

Br. Rail	Trans.	Appr. Rail	Appr. Rail Ends
1	1	1	1
---	---	---	---

41	STRC OPEN/CLOSED/POSTED (A K P)	A
58	DECK	7
59	SUPERSTRUCTURE	7
60	SUBSTRUCTURE	7
61	CHANL/CHANL PROTECTION	N
62	CULVERT AND RETAIN WALL	N
71	WATERWAY ADEQUACY	N
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	8

521 OVERALL CONDITION (Circle One)

(GOOD) FAIR POOR CRITICAL

Gilbert Wayne Hunter — TEAM LEADER SIGNATURE

6/12/01 — REVIEW DATE

CONDITION CODING GUIDELINES
(Values for Coding Items 58, 59, 60 and 62)

- 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 SERIOURSLY 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 BACK IN LIGHT SERVICE.
- 0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.

Revised 06/15/2000

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

County: 80
Route: 0A138
Special Case: 0
County Sequence: 01
Log Mile: 0.64

Bridge Number: (Includes Item 5A) 80I004000292
Feature Intersected: 140/A138 BETTYS BEND RD.

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	06/16/1999 → 6/1/2101
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	14 FT. 4 IN. / ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	14 FT. 4 IN. / ____ FT. ____ IN.
47	TOTAL HORIZONTAL UNDERCLEARANCE	28 FT. 10 IN. / ____ FT. ____ IN.
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: (H) R	14 FT. 4 IN.
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: (H) R	6 FT. 0 IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	0 FT. 0 IN.

UNDERPASS SAFETY FEATURES

515 (A) TYPE UNDERPASS BARRIER
None Exists but Needed

Revised Barrier Type

(B) ADEQUACY OF BARRIER OR RAIL 0

(C) ADEQUACY OF TRANSITIONS 0

(D) ADEQUACY OF TERMINALS 0

554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING
99 FT. 99 IN.
____ FT. ____ IN.

521 OVERALL CONDITION (Circle One)
(GOOD) FAIR POOR CRITICAL

HEIGHT POSTED AT BOTH APPROACHES? YES [ ] NO [✓] N/A [ ]

555 COMMENTS

Gilbert Wayne Hughes
TEAM LEADER SIGNATURE

6/1/2101
REVIEW DATE

Bridge Condition Coding Form

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

County: 80
Route: I0040
Special Case: 0
County Sequence: 1
Log Mile: 14.92

Bridge Number: (Includes Item 5A) 80I004000291
Feature Intersected: BETTYS BEND RD (A138)

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	5/1/97 6/16/99
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS)	H 14 FT. 4 IN. Circle One: H R N ____ FT. ____ IN.
36	TRAFFIC SAFETY FEATURES	Br. Rail: 1 / Trans.: 1 / Appr. Rail: 1 / Appr. Rail Ends: 1
41	STRC OPEN/CLOSED/POSTED (A K P)	A
58	DECK	7
59	SUPERSTRUCTURE	7
60	SUBSTRUCTURE	7
61	CHANL/CHANL PROTECTION	N
62	CULVERT AND RETAIN WALL	N
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	8

OVERALL CONDITION (Circle One)

(GOOD) FAIR POOR CRITICAL

Gilbert Wayne Hester — SIGNATURE
6/16/99 — DATE

COMMENTS

RATINGS FOR CODING ITEMS 58, 59, 60 AND 62

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 SERIOURSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.

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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 BACK IN LIGHT SERVICE.

0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

County: 80
Route: 0A138
Special Case: 0
County Sequence: 1
Log Mile: 0.64

Bridge Number: (Includes Item 5A) 80I004000292
Feature Intersected: I40/A138 BETTYS BEND RD.

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	5/1/97 6/16/99
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	14 FT. 4 IN. ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	14 FT. 4 IN. ____ FT. ____ IN.
47	TOTAL HORIZONTAL UNDERCLEARANCE	28 FT. 10 IN. ____ FT. ____ IN.
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE [H]	6 FT. 6 IN. Circle One: (H) R N ____ FT. ____ IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	0 FT. 0 IN. ____ FT. ____ IN.

UNDERPASS SAFETY FEATURES

(A) TYPE UNDERPASS BARRIER
None Exists but Needed

_____
Revised Barrier Type

(B) ADEQUACY OF BARRIER OR RAIL 0

(C) ADEQUACY OF TRANSITIONS 0

(D) ADEQUACY OF TERMINALS 0

VERTICAL CLEARANCE LISTED ON HEIGHT POSTING SIGNS
99 FT. 99 IN.
____ FT. ____ IN.

OVERALL CONDITION (Circle One)
(GOOD) FAIR POOR CRITICAL

HEIGHT POSTED AT BOTH APPROACHES? YES [ ] NO [ ] N/A [X]

NOTE: DESCRIBE ANY PROBLEMS ON BRIDGES THAT THE STATE DOES NOT INSPECT (SUCH AS RAILROAD OR PRIVATE BRIDGES) THAT WOULD AFFECT THE ROADWAY SUCH AS LOOSE MEMBERS, SEVERELY SPALLED OR CRACKED CONCRETE, EXCESSIVE SECTION LOSS ON STEEL, EXCESSIVE TIMBER DECAY, ETC. ALSO, DESCRIBE ANY UNSAFE ITEMS.

COMMENTS

David Wayne Hunter — SIGNATURE
6/16/99 — DATE

TENNESSEE BRIDGE INSPECTION PROGRAM
SUMMARY OF EVALUATION

REV. 03-05-2003

BRIDGE ID NO: 80I00400029 *LOCATION NO:* 80 - I0040 - 14.94 R

(6A) CROSSING: BETTYS BEND RD (A138)

(505) METHOD OF ANALYSIS: LOAD FACTOR METHOD

(548) RATING BASED ON: AASHTOWARE BRIDGE RATING (3" OF ASPHALT)

LOAD RATINGS IN TONS

INVENTORY (503) H	20	*(518B) HS*	36
OPERATING (504) H	63	*(519) HS*	84

(549) EVALUATOR: DCD
(522) EVAL. DATE: 6/2/2017
LAST UPDATED BY: DOMM
(29) ADT: 39,420 *(30) ADT YR:* 2017
(100) STRAHNET ROUTE: YES
(19) DETOUR LENGTH: 2 *KM*
(520) VC OVER RDWY: 99.99 *METERS*

CONDITION RATINGS

(58) DECK RATING:	7
(59) SUPERSTRUCTURE RATING:	7
(60) SUBSTRUCTURE RATING:	7
(61) CHANNEL PROTECTION:	N
(62) CULVERT RATING:	N
(113A) NBIS SCOUR CODE:	N
(113B) TDOT SCOUR CODE:	

APPRAISAL RATINGS

(67) STRUCTURAL EVALUATION:	7
(68) DECK GEOMETRY:	7
(69) UNDER CLEARANCE:	4
(70) BRIDGE POSTING:	5
(71) WATERWAY ADEQUACY:	N
(72) APPROACH RDWY ALIGNMENT:	8

CODE VALUES

N - NOT APPLICABLE
9 - EXCELLENT CONDITION
8 - VERY GOOD CONDITION
7 - GOOD CONDITION
6 - SATISFACTORY
5 - FAIR CONDITION
4 - POOR CONDITION
3 - SERIOUS CONDITION
2 - CRITICAL CONDITION
1 - FAILURE IS IMMINENT
0 - FAILED CONDITION

OTHER RATING ITEMS

(521) OVERALL CONDITION:	G		
(513) TEXTURE COAT RATING:	G	10	
(514) PAINT CONDITION RATING:	N		
(41) WEIGHT POSTING CODE:	A		

(36) TRAFFIC SAFETY FEATURES: 1 0 0 N
(525) REPAIR LIST NO: N

COMMENTS

(502) SUFF. RATING: 91.2
(528) STR. DEFICIENT: NO
(529) FUNC. OBSOLETE: NO

Bridge Name: I-40 OVER BETTY'S BEND RD
NBI Structure ID: 80I00400029
Bridge ID: 80I00400029

Analyzed By: bridgeware
Analyze Date: Wednesday, February 06, 2019 15:53:56
Analysis Engine: AASHTO LFR Engine Version 6.8.1.3001
Analysis Preference Setting: None

Report By: bridgeware
Report Date: Wednesday, February 06, 2019 15:55:10

Structure Definition Name: GSS
Member Name: G2
Member Alternative Name: INT

Load Factor Rating Summary

Girder Summary

Live Load		Rating Factor	Controls	Capacity (Ton)	Span	Location (ft)	Percent	Impact	Lane
H 15-44	Inventory	2.468	PS Tensile Stress - Concrete	37.02	1	37.25	50.0	As Requested	As Requested
H 15-44	Operating	4.253	Design Flexure - Concrete	63.79	1	37.25	50.0	As Requested	As Requested
HS 20-44	Inventory	1.360	PS Tensile Stress - Concrete	48.95	1	37.25	50.0	As Requested	As Requested
HS 20-44	Operating	2.343	Design Flexure - Concrete	84.33	1	37.25	50.0	As Requested	As Requested
Type 3S2	Inventory	1.672	PS Tensile Stress - Concrete	60.18	1	37.25	50.0	As Requested	As Requested
Type 3S2	Operating	2.880	Design Flexure - Concrete	103.68	1	37.25	50.0	As Requested	As Requested
	Inventory	1.097		90.47	1	37.25	50.0	As Requested	As Requested

Annual Permit 1			PS Tensile Stress - Concrete						
Annual Permit 1	Operating	1.889	Design Flexure - Concrete	155.87	1	37.25	50.0	As Requested	As Requested
Annual Permit 2	Inventory	0.836	PS Tensile Stress - Concrete	68.99	1	37.25	50.0	As Requested	As Requested
Annual Permit 2	Operating	1.441	Design Flexure - Concrete	118.86	1	37.25	50.0	As Requested	As Requested
Gravel Truck	Inventory	1.247	PS Tensile Stress - Concrete	46.14	1	37.25	50.0	As Requested	As Requested
Gravel Truck	Operating	2.149	Design Flexure - Concrete	79.50	1	37.25	50.0	As Requested	As Requested
Overweight Permit	Inventory	0.818	PS Tensile Stress - Concrete	104.24	1	37.25	50.0	As Requested	As Requested
Overweight Permit	Operating	1.409	Design Flexure - Concrete	179.61	1	37.25	50.0	As Requested	As Requested
EV2	Operating	2.790	Design Flexure - Concrete	80.21	1	37.25	50.0	As Requested	As Requested
EV3	Operating	1.796	Design Flexure - Concrete	77.24	1	37.25	50.0	As Requested	As Requested
SU6 LFR	Operating	2.308	Design Flexure - Concrete	80.20	1	37.25	50.0	As Requested	As Requested
SU7 LFR	Operating	2.110	Design Flexure - Concrete	81.76	1	37.25	50.0	As Requested	As Requested

Note:
"N/A" indicates not applicable
"**" indicates not available

BARS INPUT FILE DATA REPORT

- General Data -

FILE NAME: 80- 122.DAT

REGION: 3

ROUTE: I0040

LOGMILE: 1492

SYSTEM BRIDGE?: YES

LANE (R/L): R

CROSSING: BETTYS BEND ROAD

LEFT AND RIGHT LANE

- Specific Data -

STD. OVERLOAD BRIDGE?: YES

TIMBER SUBSTRUCTURE?: NO

STRUCTURE TYPE - I43: 505

ASPHALT DEPTH ON DECK: 4.

LAST REVISION DATE: 10/29/97

TYPE OF RATING ANALYSIS: LF

OVERALL CONDITION: G

TOTAL NUMBER OF SPANS: 1

IS BRIDGE POSTED?: NO

MAXIMUM SPAN LENGTH - I48: 75

YEAR BRIDGE WAS BUILT: 1960

DISTRIBUTION FACTOR FOR SIDE BY SIDE
PRESTRESSED BOX BEAMS OR PCCS BRIDGES

A.R.M. DATE: 10/29/97

INPUT DATA

(1) Enter your K value...: 1.000
See table ----------> K Value Table

Beam Type	K
Non-void rectangular	0.7
Rectangular with Circular voids	0.8
Rectangular with Square voids	1.0
Precast Channel beams	2.2

(2) Enter the overall bridge width in feet.....: 40.000

(3) Enter the span length in feet.....: 75.000

(4) Enter the number of lanes on the bridge.....: 2.000

(5) Enter the width of the PCBB or PCCS beam in feet.....: 4.000

(6) If the value of C (given below) is > 5 then enter 1.000
.....else enter 0.000 .....: 1.000

OUTPUT RESULTS

C Value.....= 0.533 DISTRIBUTION FACTOR..= 0.842

D Value.....= 4.750

*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*

AMERICAN ASSOCIATION OF STATE HIGHWAY
AND TRANSPORTATION OFFICIALS

A PROPRIETARY COMPUTER SOFTWARE PRODUCT

AASHTOWARE™ BRIDGE ANALYSIS AND RATING SYSTEM

RELEASE 5.5 - MOD 3.3

FEBRUARY 5, 1997

*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*AASHTO*

```
                                  RECORD                                                                REC.NO.
01      102997A. MCNABB           H15 HS20                          *LF*                                  100
02ARM122A. MCNABB                       PCBB  61    77 0 0    40 0 0 1                                  100
05ARM122L.M.14423 80 I-40                                                                               200
06ARM122 I-40 OVER BETTYS BEND ROAD - WITH 4.0 INCHES OF ASPHALT OVERLAY                                300
08ARM122G01  1        75 0 0                    PSC          0.842                                      400
10ARM122G01  1                  W 285.          75 0 0                                                  500
11ARM122G01  1 1    75 0 001                                                                            600
15ARM122G01  01   35.539.0018.3  4200480        480          01A 2906  1.75                           700
15ARM122G01  01                                               02A 0906  3.25                           800
```

THE FOLLOWING STRUCTURES WERE SELECTED

ARM122

```
**********************************************************************************************************************************
*                                                STRUCTURE HEADER AND DESCRIPTION                                                *
**********************************************************************************************************************************

   100-- 2    A. MCNABB          EA/I/O/P =                FILE REQUESTS AND OUTPUT DATA EXCEPTIONS
                    TYPE =  PCBB      YEAR =   61  LEN =    77.00 FT.       WIDTH =    40.00 FT.       1 SPANS SP.LOAD =
                    INV.LL.TRK.=        OP.LL.TRK.=


**********************************************************************************************************************************
*                                     STRUCTURE LOCATION AND PERMANENT IDENTIFICATION FACTORS                                    *
**********************************************************************************************************************************

   200-- 5    BRIDGE=L.M.1442   DIST./CO.= 3    80  CONST. ROUTE =  I-40       CONST. SECT.=             CONST. STA.=   0+  .
              MICROFILM REEL NO.    DESIGN PLANS=           COMPUTATIONS=           CORRESPONDENCE=
                  ROUTE I.D.=             MARKED ROUTE =


**********************************************************************************************************************************
*                                                        COMMENTS                                                                *
**********************************************************************************************************************************

   300-- 6    0  I-40 OVER BETTYS BEND ROAD - WITH 4.0 INCHES OF ASPHALT OVERLAY


**********************************************************************************************************************************
*                             MEMBER SPECIFICATIONS AND REQUIRED ANALYSIS-GIRDER,STRINGER AND FLOOR BEAM                         *
**********************************************************************************************************************************

          MEMBER SPANS  STIFF. SPAN 1     SPAN 2     SPAN 3   MATL   ALLOWABLE STRESS    LL DIST.  END  THRU  MAX  IMPACT  FACTOR
            ID       SYMM CODE (SPAN 4)  (SPAN 5)   (SPAN 6)  CODE     FY   FB FC* FC**  FACTOR  FL.BM DECK  INV  OP.  POST  SPEC

   400-- 8  G 1    1          75.000       .000       .000   PSC       .00       .00     .842              .00  .00  .00   .00


**********************************************************************************************************************************
*                                     SUPERIMPOSED DEAD LOADS-GIRDERS,STRINGERS AND FLOOR BEAMS                                  *
**********************************************************************************************************************************

              MEMBER SYMM. SPAN   DISTANCE FR. LOAD          LOAD            LENGTH
                ID          NO.    LEFT SUPP.  TYPE  P OR W(L)     W(R)

   500--10    G 1          1          .000FT.   W      285.0        .0        75.000FT.


**********************************************************************************************************************************
*                                                SECTION RANGE SPECIFICATIONS                                                    *
**********************************************************************************************************************************

              MEMBER SYMM. SPAN  RANGE   RANGE     SECTION NO. SEC. VAR. HINGE   HINGE 1    HINGE 2        HYBRID GIRDER
```

	ID	NO.	NO.	LENGTH	LEFT	RIGHT	CODE	DIST.	DIST.	CODE	FY	CODE	FY
600--11	G 1	1	1	75.000FT.	1	0		.000FT.	.000FT.		0.		0.

****
* SECTION PROPERTIES (PRESTRESSED CONCRETE) - GIRDERS,STRINGERS,FLOOR BEAMS *
****

	MEMBER ID.	SECT	SAME ADR	** VOIDS DESCRIPTION ** DEPTH	WIDTH	DIST.	BEAM DESCRIPTION CODE	DEPTH	TFLW	TFLT	TFIT	WEBT	BFIT	BFLT	BFLW	I	STRANDS ASI	DI
700--15	G 1	1	0	35.5	39.00	18.3	42.00	48.0	.0	.00	48.00	.00	.0	.0	1	A	2906.00	1.75
800--15	G 1	1	0	.0	.00	.0	.00	.0	.0	.00	.00	.00	.0	.0	2	A	906.00	3.25

SUMMARY OF RATING CALCULATIONS------STRUCTURE MEMBER G 1 BARS-PC RELEASE 5.5
INVENTORY AND/OR OPERATING ANALYSIS

INPUT CODING -- STRUCTURE L.M.1442 D/P STR. I.D.-- ARM-122

DATE 10/29/97
BY A. MCNABB

	INVENTORY		OPERATING	
	LIVE LOAD	RATING	LIVE LOAD	RATING
	H15	H 31.56	HS20	HS 38.53

STRUCTURE DESCRIPTION --

IDENTIFICATION	L.M.1442
TYPE	PCBB
YEAR OF CONSTR.	1961
LENGTH	77.00 FEET
ROADWAY WIDTH	40.00 FEET
NUMBER OF SPANS	1

LOCATION --

DISTRICT	3
COUNTY	80
CONSTR. RTE.	I-40
CONSTR. SEC.	
CONSTR. STA.	0- .
KEY RTE.	
MARKED RTE.	

MICROFILM REEL NUMBERS --

DESIGN PLANS
COMPUTATIONS
CORRESPONDENCE

ANALYST REMARKS --

I-40 OVER BETTYS BEND ROAD - WITH 4.0 INCHES OF ASPHALT OVERLAY

INVENTORY RATING SUMMARY --

MEMBER ID.	G 1
SPAN	1
CRITICAL C.P. DIST.	37.5 FEET
LIVE LOAD DESIGNATION	H15

	MOMENT (FT. KIPS)
MEMBER CAPACITY	1330.1
DL EFFECT	676.1
CAPACITY FOR (LL+I)	654.0
ACTUAL (LL+I)	310.8

INVENTORY RATING H 31.56

OPERATING RATING SUMMARY --

MEMBER ID.	G 1
SPAN	1
CRITICAL C.P. DIST.	37.5 FEET
LIVE LOAD DESIGNATION	HS20

	MOMENT (FT. KIPS)
MEMBER CAPACITY	1760.8
DL EFFECT	676.1
CAPACITY FOR (LL+I)	1084.7
ACTUAL (LL+I)	563.1

OPERATING RATING HS 38.53

*** FINAL SUMMARY OF RATING RESULTS FOR --- STRUCTURE ID. ARM-122 BARS-PC RELEASE 5.5
INVENTORY AND/OR OPERATING ANALYSIS

STRUCTURE L.M.1442 D/P STR. ID-- ARM-122

INPUT CODING--

	INVENTORY		OPERATING	
DATE 10/29/97	LIVE LOAD	RATING	LIVE LOAD	RATING
	H15	H 31.6	HS20	HS 38.5
BY A. MCNABB				

STRUCTURE DESCRIPTION--

IDENTIFICATION	L.M.1442
TYPE	PCBB
YEAR OF CONSTR.	1961
LENGTH	77.00 FEET
ROADWAY WIDTH	40.00 FEET
NUMBER OF SPANS	1

LOCATION--

DISTRICT	3
COUNTY	80
CONSTR. RTE.	I-40
CONSTR. SEC.	
CONSTR. STA.	0+ .
KEY RTE.	
MARKED RTE.	

MICROFILM REEL NUMBERS--

DESIGN PLANS
COMPUTATIONS
CORRESPONDENCE

ANALYST REMARKS--

I-40 OVER BETTYS BEND ROAD - WITH 4.0 INCHES OF ASPHALT OVERLAY

INVENTORY RATING SUMMARY

MEMBER I.D.	G 1
SPAN	1
CRITICAL C.P. DIST.	37.5 FEET
LIVE LOAD DESIGNATION	H15

	MOMENT (FOOT-KIPS)
MEMBER CAPACITY	1330.1
DL EFFECT	676.1
CAPACITY FOR (LL+I)	654.0
ACTUAL (LL+I)	310.8

INVENTORY RATING H 31.56

OPERATING RATING SUMMARY

MEMBER I.D.	G 1
SPAN	1
CRITICAL C.P. DIST.	37.5 FEET
LIVE LOAD DESIGNATION	HS20

	MOMENT (FOOT-KIPS)
MEMBER CAPACITY	1760.8
DL EFFECT	676.1
CAPACITY FOR (LL+I)	1084.7
ACTUAL (LL+I)	563.1

OPERATING RATING HS 38.53

DETAIL DATA FOR FLEXURAL MEMBER

DATE 10/29/97

D/P STRUCTURE I.D. ARM-122
MEMBER I.D.--G01
MATERIAL--PSC
LL DIST. FACT. = .842

NO. SPANS = 1
NOT SYMMETRICAL

SPAN NO.	LENGTH FT.	RNG. NO.	LENGTH FT.	SEC.NO. LT	SEC.NO. RT	VAR CODE T P	VAR CODE T B	DL DUE TO MEM. WEIGHT W(LT) LBS/FT	DL DUE TO MEM. WEIGHT W(RT) LBS/FT	SUPERIMPOSED DISTRIBUTED DL(S) LENGTH DISTRIBUTED********** SPAN NO.	W(LT) LBS/FT	W(RT) LBS/FT	* FT.	* FT.	SUPERIMPOSED CONCENTRATED DL(S) DIST. FROM LT SUPPORT**** STIFF TRANS.	SPAN LONG. NO.	P KIPS	* FT.
1	75.000	1	75.000	01	01			676.6	676.6	1	285.0	285.0	.000	75.000				

CHECK POINTS RATED--

SPAN NO.	DIS FRM LT SPRT FT.	FUNC M	FUNC VL	FUNC VR	SPAN NO.	DIS FRM LT SPRT FT.	FUNC M	FUNC VL	FUNC VR
1	.000			X					
1	37.500	X							
1	75.000		X						

DETAIL DATA AT MOMENT CHECK POINT FOR
PRESTRESSED CONCRETE FLEXURAL MEMBER

BARS RELEASE 5.5

DATE 10/29/97

D/P STRUCTURE I.D. ARM-122
MEMBER I.D.--G01
C.P. LOCATION 1.50

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 1

H	AREA	AS	CT	DA	ECC	FI	IX + BEND	IX - BEND	C (BOT)	SECTION MODULUS TOP + BEND	SECTION MODULUS TOP - BEND	SECTION MODULUS BOTTOM + BEND	SECTION MODULUS BOTTOM - BEND
IN.	SQ.IN.	SQ.IN.	IN.	IN.	IN	KIPS	IN**4	IN**4	IN.	IN**3	IN**3	IN**3	IN**3
42.00	649.50	3.04	15.88	1.75	24.01	527.1	134048.2	134048.2	26.12	8441.0	.0	5132.2	39.9

LOSS = 50502.8
FF = 373.7

NON-COMP: D = 39.89 KD = 8.40 JD = 37.10

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)	.000	37.500	75.000	POS AREA = 703.1
Y-ORDINATE	.000	18.750	.000	

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN	SPAN	SPAN	SPAN	SPAN	SPAN	
T 0							
E 1							
N 2							
T 3							
H 4							
5							
P 6							
O 7							
I 8							
N 9							
T 0							
POS AREA	.0	.0	.0	.0	.0	.0	.0
NEG AREA	.0	.0	.0	.0	.0	.0	.0

***** ULTIM. STRENGTH ***** MOMENT CAPACITY

	PRESTRESS STEEL PSI	CONC PSI	TOP + BEND FT-KIPS	TOP - BEND FT-KIPS	BOTTOM + BEND FT-KIPS	BOTTOM - BEND FT-KIPS
INVENTORY	248000.0	5000.0	1059.6	.0	1059.6	.0
OPERATING	248000.0	5000.0	1766.1	.0	1766.1	.0
POST VEH1	.0	.0	.0	.0	.0	.0
POST VEH2	.0	.0	.0	.0	.0	.0
POST VEH3	.0	.0	.0	.0	.0	.0
POST SPEC	.0	.0	.0	.0	.0	.0

***** TOTAL DL MOMENT EFFECT

FT-KIPS
676.1

AREA *** ULTIMATE MOMENT CAPAC.
TOTALS FT-KIPS
.0 2295.9

***** AVAIL.CAPAC.FOR LL+IMPACT

	TOP +BEND F-KPS	TOP -BEND F-KPS	BOT +BEND F-KPS	BOT -BEND F-KPS
INVENTORY	654.0	.0	654.0	.0
OPERATING	1090.0	.0	1084.7	.0
VEH. 1	.0	.0	.0	.0
VEH. 2	.0	.0	.0	.0
VEH. 3	.0	.0	.0	.0
SPECIAL	.0	.0	.0	.0

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .250 FOR +BEND AND = .250 FOR -BEND)

LIVE LOAD		TRUCK LOAD LL+IMP FT-KIPS	TRUCK LOAD LL FT-KIPS	LOC.NO. 1 WHEEL FT.	DIR	AXLE SPACE FT.	LANE LOAD LL+IMP FT-KIPS	LANE LOAD LL FT-KIPS	LOC.CONC LOAD FT.	LOC.CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
INV H15	+BEND	273.9	219.1	23.500	L	.0	310.8	248.7	37.500		2.104	31.6	H 31.6
	-BEND	.0	.0	.000	L	.0	.0	.0	.000	.000			
OPER HS20	+BEND	563.1	450.5	23.500	L	.0	414.4	331.5	37.500		1.926	69.4	HS 38.5
	-BEND	.0	.0	.000	L	.0	.0	.0	.000	.000			
POST	+BEND	.0	.0	.000							.000	.0	
	-BEND	.0	.0	.000									
POST	+BEND	.0	.0	.000							.000	.0	
	-BEND	.0	.0	.000									
POST	+BEND	.0	.0	.000							.000	.0	
	-BEND	.0	.0	.000									
POST SPEC	+BEND	.0	.0	.000							.000	.0	
	-BEND	.0	.0	.000									

H_{INV} $\frac{654.0}{310.8} \times 15 = 31.6$ TONS

H_{OPER} $\frac{1084.7}{310.8} \times 15 = 52.4$ TONS

$H_{S\ INV}$ $\frac{654.0}{563.1} \times 36 = 41.8$ TONS

$H_{S\ OPER}$ $\frac{1084.7}{563.1} \times 36 = 69.3$

SUMMARY OF SHEAR ANALYSIS

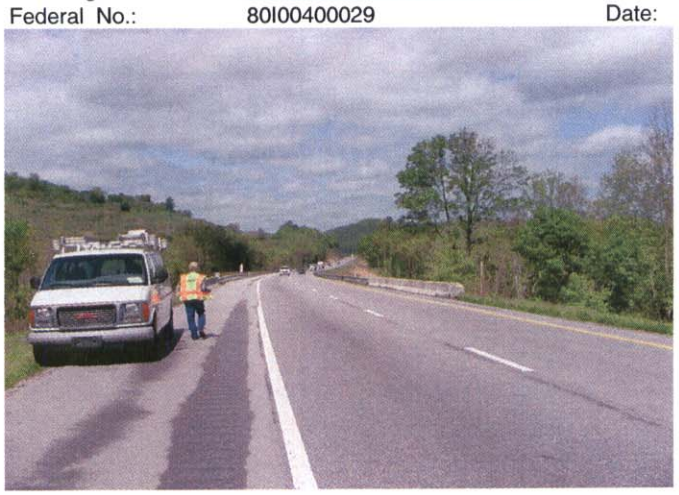
DATE 10/29/97

D/P STRUCTURE I.D. ARM-122

MEMB. ID	MATL	SPAN NO.	DIS FRM L LT SPRT R FT.	DL SHEAR KIPS	SDL SHEAR KIPS	---INVENTORY--- LL+I MAX.V KIPS	T L	LL+I MIN.V KIPS	T L	---OPERATING--- LL+I MAX.V KIPS	T L	LL+I MIN.V KIPS	T L	--VEH. 1 -- LL+I MAX.V KIPS	LL+I MIN.V KIPS	--VEH. 2 -- LL+I MAX.V KIPS	LL+I MIN.V KIPS	--VEH. 3 -- LL+I MAX.V KIPS	LL+I MIN.V KIPS	--SPECIAL-- LL+I MAX.V KIPS	LL+I MIN.V KIPS
G01	PSC	1	.000 L	25.4	10.7	19.7	L	.0	T	33.2	T	.0	T								
		1	37.500 L	.0	.0	7.6	T	7.6	T	14.8	T	14.8	T								
		1	75.000 L	25.4	10.7	.0	T	20.5	L	.0	T	34.5	T								

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No.: 80I00400029 Date: April 25, 2003

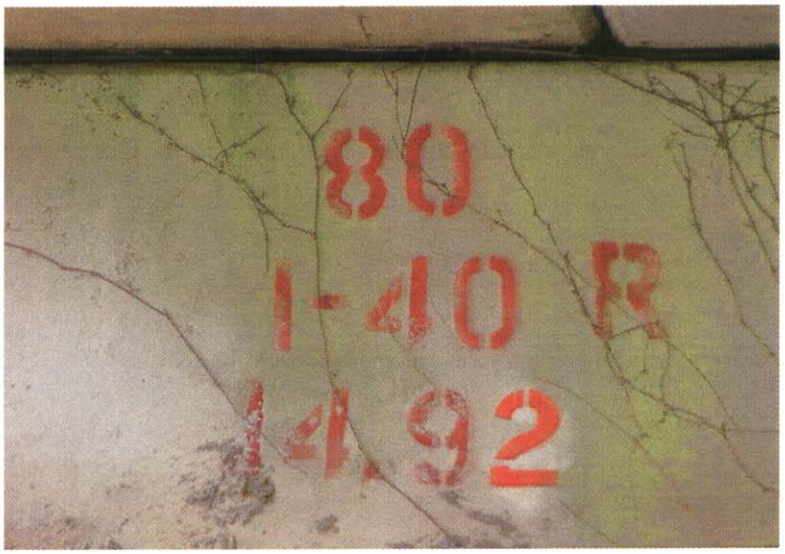
PIC1



VIEW ACROSS DECK FROM B-APPR

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No 80I00400029 Date: April 25, 2003

PIC2



BRIDGE NO. AT ABUTMENT # 1

PIC3

RIGHT SIDE VIEW

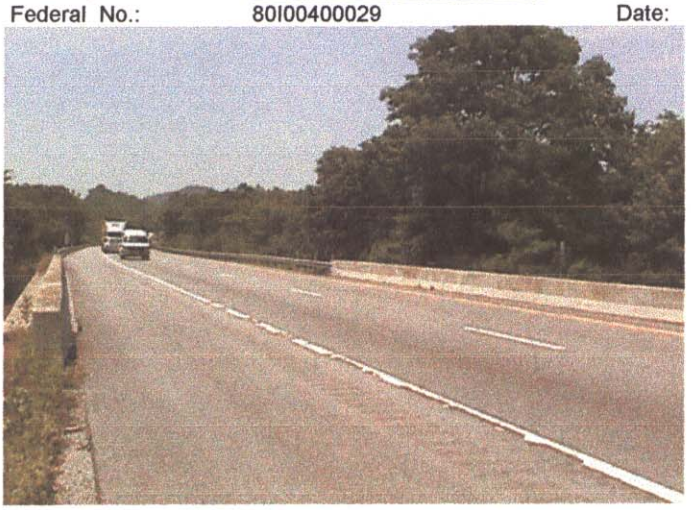
Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No.: 80I00400029 Date: April 25, 2003

PIC4

CLEARENCE SIGN (14'2" @ R.S. APPR

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No.: 80I00400029 Date: June 12, 2001

PIC1



VIEW ACROSS DECK

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No 80I00400029 Date: June 12, 2001

PIC2

BRIDGE NO. AT ABUTMENT # 1

PIC3

LEFT SIDE VIEW

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No.: 80I00400029 Date: June 16, 1999

PIC4

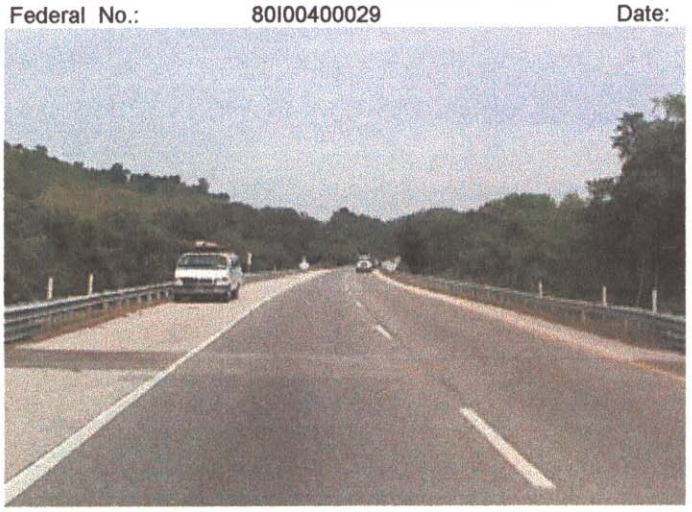
DAMAGED (CRACK) APPROACH 'A' LEFT SIDE PARAPET

PIC5

BRIDGE NO. AT ABUTMENT # 1

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No.: 80I00400029 Date: June 16, 1999

PIC1



APPROACH #1

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No 80I00400029 Date: June 16, 1999

PIC2

APPROACH #2

PIC3

ACROSS TOP OF DECK

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No.: 80I00400029 Date: June 16, 1999

PIC6

ABUTMENT TYPICAL

PIC7

BOTTOM OF DECK

Bridge No.: 80 — I0040 — 1492
Crossing:: BETTYS BEND RD (A138)*
Federal No.: 80I00400029 Date: June 16, 1999

PIC8

RIGHT SIDE ELEVATION

ROUTINE BRIDGE INSPECTION REPORT

Page No.___

Form BIR 3.0C
(Rev. 9-22-98)
DT-1537

Field Report No. 16 Date 4-25-03
Previous Report No. 15 Date 6/12/2001
Plans: Yes

Bridge No. 80I00400029 (Eleven Digit No.)
Bridge Location No. 80 - I0040 - 14.92 R (Co. Route Log Mile)

I 40 (Road Name) over BETTYS BEND RD (A138)* (Crossing)
Indepth Insp. Req'd: NO
(If yes itemize limits under comment

Structure Type HBB
FRACTURE CRITICAL: NO

FEATURE CHANGES:
Wearing Surface ____ Type ____ Depth ____ (in.)
Bridge Rail ____ Describe changes:
Approach Rail ____

CLEARANCE CHANGES: (If yes make changes below)

Vertical Clearance over deck		(ft.-in.)
Vertical Under Clearance		(ft.-in.)
Horizontal Under Clearance		(*.* ft.)
Deck Width Curb/Curb		(*.* ft.)
Deck Width Rail/Rail		(*.* ft.)
Sidewalk Width	Rt.	Lt.

INSPECTORS
Hunter
Crutcher
Waller
Thompson

Condition: **GOOD** (If change describe in comments)

		Comments
Approaches	G	
Deck Condition (Item 58)	NV	
Superstructure (Item 59)		
a. Beams	G	
b. Bearings	G	
c. Diaphragms	NA	
Substructure (Item 60)		
a. Caps/Bridge Seats	G	
b. Columns/Piles	NA	
c. Footings	NV	
d. Wing W./Breast W.	G	
Scour/Erosion	G	
Channel (Item 61)	NA	

UNDERWATER INSPECTION
To Be Performed By: N/A
Date Underwater Insp. ____
BRIDGE is: ____
COMMENTS:

Weight Limit Posted NO
Gross..... ____ Tons
2 Axle..... ____ Tons
3 or more Axles.. ____ Tons

Supervising Bridge Inspector: Gilbert Wayne Hunter BRIDGE RATING: **GOOD**

SUMMARY
80-I40-14.92 RT
4/25/2003

I40/Betty's Bend Rd.
1 Span/B.B.

This bridge was inspected and found to be in **good** condition. The approaches are good. The vertical clearence is posted for 14' 2" The parapet and approach rail are standard type and in good condition. The parapet on left side 'A' has collision damage and has a ½" separation crack. There are no paddleboards.

A.C. wearing surface is good. The bottom deck is not visible. Beams and alignment of beams are good. The bearing devices are in good condition. Sub-structure units are also good.

Gilbert Hunter

ROUTINE BRIDGE INSPECTION REPORT

Page No.___

Form BIR 3.0C
(Rev. 9-22-98)
DT-1537

Field Report No. 14 Date 6/16/99
Previous Report No. 15 Date 6-12-01
Plans: Yes

Bridge No. 80I00400029 (Eleven Digit No.)
Bridge Location No. 80 - I0040 - 14.92 R (Co. - Route - Log Mile)

I40 (Road Name) over BETTYS BEND RD (A138)* (Crossing)
Indepth Insp. Req'd: NO (If yes itemize limits under comment)

Structure Type HBB
FRACTURE CRITICAL: NO

FEATURE CHANGES:
Wearing Surface ___ Type ___ Depth ___ (in.)
Bridge Rail ___ Describe changes:
Approach Rail ___

CLEARANCE CHANGES: (If yes make changes below)
Vertical Clearance over deck ___ (ft.-in.)
Vertical Under Clearance ___ (ft.-in.)
Horizontal Under Clearance ___ (*.* ft.)
Deck Width Curb/Curb ___ (*.* ft.)
Deck Width Rail/Rail ___ (*.* ft.)
Sidewalk Width Rt. ___ Lt. ___

INSPECTORS
Hunter
Daniel
Waller
Thompson

Condition: **GOOD** (If change describe in comments)

		Comments
Approaches	G	
Deck Condition (Item 58)	NV	AC. Overlay
Superstructure (Item 59)		
a. Beams	G	
b. Bearings	G	
c. Diaphragms	~~G~~	N/A
Substructure (Item 60)		
a. Caps/Bridge Seats	G	
b. Columns/Piles	NV	
c. Footings	NV	
d. Wing W./Breast W.	G	
Scour/Erosion	G	
Channel (Item 61)	NA	

UNDERWATER INSPECTION
To Be Performed By: NA
Date Underwater Insp. ___
BRIDGE is: ___

Weight Limit Posted No
Gross..... ___ Tons
2 Axle..... ___ Tons
3 or more Axles.. ___ Tons

COMMENTS:

Supervising Bridge Inspector: Gilbert Wayne Hunter BRIDGE RATING: **GOOD**

SUMMARY
80-I40-14.92 RT
6-12-01

I40/Betty's Bend Rd.
1 Span/B.B.

This bridge was inspected and found to be in **good** condition. The approaches are good. The parapet and approach rail are standard type and in good condition. The parapet on left side 'A' has collision damage and has a ½" separation crack. There are no paddleboards.

A.C. wearing surface is good. The bottom deck is not visible. Beams and alignment of beams are good. The bearing devices are in good condition. Sub-structure units are also good.

Gilbert Hunter

BRIDGE INSPECTION REPORT

FORM BIR 3.0
Rev. 09/24/98
DT-0069

FIELD REPORT NO. 14 DATE 6/16/99
REVIOUS REPORT NO. 13 DATE 5-7-97
PLANS ---- YES [X] NO [ ]

BRIDGE NO. 80I0040007 9
ELEVEN DIGIT NO.

BRIDGE LOC. NO. 80 - I40 - 14.92 Rt
CO. ROUTE LOG MILE

I40 E.B.L. OVER Bettys Bend Rd.
ROAD NAME FEATURE INTERSECTED

STRUCTURE NAME (IF NAMED)

YEAR CONSTRUCTED 1959 COUNTY Smith MAINTENANCE DISTRICT NO. 32
(ESTIMATED OR ACTUAL)
[ ] [X]

YEAR WIDENED _____ YEAR REHABILITATED _____
ESTIMATED OR ACTUAL ESTIMATED OR ACTUAL
[ ] [ ] [ ] [ ]

FEATURES

WEARING SURFACE-- CONCRETE [ ] TIMBER [ ] ASPHALT [X] (DEPTH= 2")
FLARED WIDTH --------- YES [ ] NO [X]
NAVIGATIONAL CONTROL-- YES [ ] NO [X]
MEDIAN WIDTH -------- OPEN [X] NONE [ ] CLOSED [ ]

BRIDGE SKEW 87° LT [X] RT [ ]

STRUCTURE TYPE HBG NO. SPANS 1
Main Span Main Span

STRUCTURE TYPE - NO. SPANS -
Approach Spans Approach Spans

MAXIMUM SPAN LENGTH 74' TOTAL LENGTH 75.5'

INSPECTORS
1. Hunter
2. Daniel
3. Crutcher
4. Waller
5.
6.
7.
8.
9.

WIDTHS
DECK OUT-TO-OUT 46.6'
ROADWAY CURB/CURB 46'
SIDEWALK - RT - LT
*APPROACH ROADWAY 24'
APPR. SHLD. 10' RT 4' LT
*DOES NOT INCLUDE SHOULDER

CLEARANCES
MIN. VERTICAL OVER DECK -
MIN. VERTICAL UNDER CL 14'-4"
MIN. LATERAL UNDER CL 6.5 RT
- LT

(<25')
NBIS BRIDGE LENGTH Over 25'
(ft) (in)

UNDERWATER INSPECTION
INSPECTION PERFORMED BY:
DOT FIELD TEAM [ ] DATE _____
CONTRACT DIVERS [ ] DATE _____
NONE REQUIRED [X]

FRACTURE CRITICAL DETAILS: YES [ ] NO [X]
IF YES, INCLUDE BIR 3.9

CHANGE IN STRUCTURAL CONDITION YES [ ] NO [X]
MAJOR REPAIRS MADE YES [ ] NO [X]

COMMENTS: -

Gilbert Wayne Hunter
SUPERVISING BRIDGE INSPECTOR

BRIDGE RATING [X] [ ] [ ] [ ]
GOOD FAIR POOR CRITICAL

FORM BIR 3.1
Rev. 09/24/98
DT-0080

BRIDGE LOC. NO. 80 (CO.) - I40 (ROUTE) - 14.92 Rt. (L.M.)

DATE: 6/16/99

PERFORMANCE EVALUATION

Time of day inspected 9:30 Weather conditions 70° Partly Cloudy

Vehicles observed Tractor Trailer & Passenger Type

LIVE LOAD BEHAVIOR	YES	NO	COMMENTS
Substructure			
Horiz. & Vert. Defl.	[ ]	[X]	
Vibration	[ ]	[X]	
Superstructure			
Horiz. & Vert. Defl.	[ ]	[X]	
Vibration	[ ]	[X]	

APPROACH

Alignment	(G)	F	P	C	
Slab	G	F	P	C	NA
Joints	G	F	P	C	NA
Pavement	G	(F)	P	C	Settlement at each end
Embankment	(G)	F	P	C	
Drains	G	F	P	C	NA

TRAFFIC SAFETY FEATURES

					STANDARD	SUB-STANDARD	
Bridgerailing	G	(F)	P	C	[X]	[ ]	Col damage LT side "A" end
Transitions	(G)	F	P	C	[X]	[ ]	
Guardrail	(G)	F	P	C	[X]	[ ]	
Guardrail Terminal	(G)	F	P	C	[X]	[ ]	

SIGNING

	YES	NO	NEEDED	
Paddleboard	[ ]	[X]	[ ]	WEIGHT LIMIT POSTED YES [ ] NO [X]
Vertical Clearance (< 14')	[ ]	[ ]	[ ]	
Narrow [ ] One Lane Bridge [ ]	[ ]	[ ]	[ ]	GROSS _____ TONS 2 AXLE _____ TONS 3 OR MORE AXLES _____ TONS

Other Signs or Plaques _____

Comments Regarding Any Problems With Signing _____

Other Recommendations _____

FORM BIR 3.2
Rev. 09/24/98
DT-0081

BRIDGE LOC. NO. 80 - I40 - 14.92 Rt. (CO. - ROUTE - L.M.) DATE: 6/16/99

DECK

					COMMENTS
WEARING SURFACE	(G)	F	P	C	AC. overlay
DECK - STRUCTURAL CONDITION	G	F	P	C	NV
CURBS	G	F	P	C	NA
MEDIAN	G	F	P	C	NA
SIDEWALKS	G	F	P	C	NA
PARAPET	G	(F)	P	C	Col damage 5' open sep crack Lt. side "A" end
RAILING	G	F	P	C	NA
PAINT	G	F	P	C	NA
DRAINS	G	F	P	C	NA
LIGHTING STD'S	G	F	P	C	NA
UTILITIES	G	F	P	C	NA
JOINT LEAKAGE	G	F	P	C	NA
EXPANSION JOINTS	G	F	P	C	NA

SUPERSTRUCTURE

					COMMENTS
BEARING DEVICES	(G)	F	P	C	
GIRDERS OR BEAMS	(G)	F	P	C	
FLOOR BEAMS	G	F	P	C	NA
STRINGERS	G	F	P	C	NA
DIAPHRAGMS	G	F	P	C	NA
BRACING	G	F	P	C	NA
TRUSSES - GENERAL	G	F	P	C	
- PORTALS	G	F	P	C	
- BRACING	G	F	P	C	
PAINT	G	F	P	C	NA
ALIGNMENT OF MEMBERS	(G)	F	P	C	

TEXTURE COAT

CONDITION RATING	G	F	P	C
OVERALL APPEARANCE	G	F	P	C
STAINING	G	F	P	C
SCALING	G	F	P	C
FADING	G	F	P	C

NEEDS SPOT PAINTING? YES [ ] NO [ ]
NEEDS REPAINTING? YES [ ] NO [ ]

COMMENTS: _____

RECOMMENDATIONS _____

FORM BIR 3.3
Rev. 09/24/98
DT-0082

BRIDGE LOC. NO. 80 - I40 - 14.92 Rt. (CO. - ROUTE - L.M.)

DATE: 6/16/99

SUBSTRUCTURE

ABUTMENTS					COMMENTS
CAPS	(G)	F	P	C	
BREASTWALL	G	F	P	C	NA
WINGS	(G)	F	P	C	
BACKWALL	G	F	P	C	NV
PLUMB	(G)	F	P	C	
FOOTING	G	F	P	C	NV
PILES	G	F	P	C	NV
EMBANKMENT	(G)	F	P	C	
BEARING SURFACE	(G)	F	P	C	
BEARINGS	(G)	F	P	C	
SLOPE PAVING	(G)	F	P	C	

PIERS					
CAPS	G	F	P	C	
COLUMNS	G	F	P	C	
PLUMB	G	F	P	C	
FOOTINGS	G	F	P	C	
PILES	G	F	P	C	
BEARING SURFACE	G	F	P	C	
BEARINGS	G	F	P	C	

BENTS					
CAPS	G	F	P	C	
COLUMNS	G	F	P	C	
PLUMB	G	F	P	C	
FOOTINGS	G	F	P	C	
PILES	G	F	P	C	
BEARING SURFACE	G	F	P	C	
BEARINGS	G	F	P	C	

SCOUR CONDITION NONE [X]

RECOMMENDATIONS:

SUMMARY
80-I40-14.92 RT
6-16-99

I40/Betty's Bend Rd.
1 Span/B.B.

This bridge was inspected and found to be in good condition. The approaches have settled 1" - 2" at the ends of the bridge. The parapet and approach rail are standard type and in good condition. The parapet on left side 'A' has collision damage and has a ½" separation crack. There are no paddleboards.

A.C. wearing surface is good. The bottom deck, beams, and alignment of beams are good. The bearing devices are in good condition. Sub-structure units are also good.

Gilbert Hunter

CURRENT FIELD REPORT NO. 14 DATE 6/16/99
PREVIOUS FIELD REPORT NO. 13 DATE 5-7-97

FORM BIR 3.0A
Rev. 6-9-92
DT-1443

INSPECTION REPORT FOR UNDERPASS ROUTE

BRIDGE NO. 80I0040002 9 (ELEVEN DIGIT NUMBER) UNDERPASS LOC. NO. 80 (CO.) - A138 (RTE.) - 0.64 (L.M.)

80 (CO.) - I40 (RTE.) - 14.92 (L.M.) OVER 80 (CO.) - A138 (RTE.) - 0.64 (L.M.) STRUCTURE NAME (IF NAMED)

COUNTY Smith

YEAR CONSTRUCTED 1959 YEAR WIDENED ____ YEAR REHABILITATED ____
ESTIMATED [ ] ACTUAL [X]

GEOMETRIC FEATURES UNDER BRIDGE

DIVIDED HIGHWAY - - - - LEFT RDWY [ ] RIGHT RDWY [ ] N.A. [X]
TYPE OF WEARING SURFACE - - - - CONCRETE [ ] ASPHALT [X] GRAVEL [ ]
WIDTH OF APPROACH TRAVELED ROADWAY 13' FT. (DOES NOT INCLUDE SHOULDERS)
WIDTH OF MEDIAN IF DIVIDED HIGHWAY ____ FT.
APPROACH SHOULDER WIDTH 6 FT. (RT.) 0 FT. (LT.)
*HORIZONTAL CLEARANCE UNDER BRIDGE 29' FT. 0 IN.
*DISTANCE BETWEEN PIER PROTECTION GUARDRAIL AND SUBSTRUCTURE ____ FT. (RT.) ____ FT. (LT.)
*WIDTH OF SIDEWALK UNDER BRIDGE ____ FT. (RT.) ____ FT. (LT.)
*MINIMUM VERTICAL CLEARANCE 14 FT. 4" IN.

*SHOW ON SKETCH

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE		STANDARD	SUB-STANDARD	
PIER PROTECTION RAILING OR PARAPET	G F P C	[ ]	[ ]	NON EXIST [X]
APPROACH GUARDRAIL TRANSITIONS	G F P C	[ ]	[ ]	NON EXIST [X]
APPROACH GUARDRAIL	G F P C	[ ]	[ ]	NON EXIST [X]
APPROACH GUARDRAIL TERMINAL	G F P C	[ ]	[ ]	NON EXIST [X]

SIGNING FOR UNDERPASS ROUTE

PADDLEBOARD	YES [ ]	NO [X]	NEEDED [ ]
VERTICAL CLEARANCE (< 14'6")	YES [ ]	NO [X]	NEEDED [ ]
NARROW PASSAGE	YES [ ]	NO [X]	NEEDED [ ]
ONE LANE PASSAGE	YES [ ]	NO [X]	NEEDED [ ]
CURVE	YES [ ]	NO [X]	NEEDED [ ]
SPEED LIMIT	YES [ ]	NO [X]	NEEDED [ ]

INSPECTORS
1. Hunter
2. Daniel
3. Crutcher
4. Waller
5. ____
6. ____

FORM BIR 3.0A (CONTINUED)
Rev. 6-9-92
DT-1443

UNDERPASS LOC. NO. 80 (CO.) - A138 (RTE.) - 0.64 (L.M.)

OTHER SIGNS OR PLAQUES —

COMMENTS REGARDING ANY PROBLEM WITH SIGNING —

BRIDGE FEATURES

BRIDGE SKEW 87°
STRUCTURE TYPE HBP (MAIN SPAN) NO. SPANS 1 (MAIN TYPE)
STRUCTURE TYPE — (APPROACH SPAN) NO. SPANS — (APPROACH TYPE)
MAXIMUM SPAN LENGTH 74 FT., TOTAL LENGTH 75.5 FT.
WIDTH OF BRIDGE OUT-TO-OUT 46.6 FT. (RT. < TO L OF BRIDGE)
WIDTH OF BRIDGE ALONG SKEW — FT. (IF UNABLE TO MEASURE AT RT. ∢ TO L OF BRIDGE)
NUMBER OF (LANES)/TRACKS ON BRIDGE 2

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 FOR FAILURE OF MAJOR MEMBERS? YES [ ] NO [X]

COMMENT ON ANY CONDITIONS OF BRIDGE THAT WOULD EFFECT ROADWAY BENEATH —

NOTE: IF UNDERPASS ROUTE IS DIVIDED HIGHWAY, USE TWO (2) OF THESE FORMS, ONE FOR EACH ROADWAY.

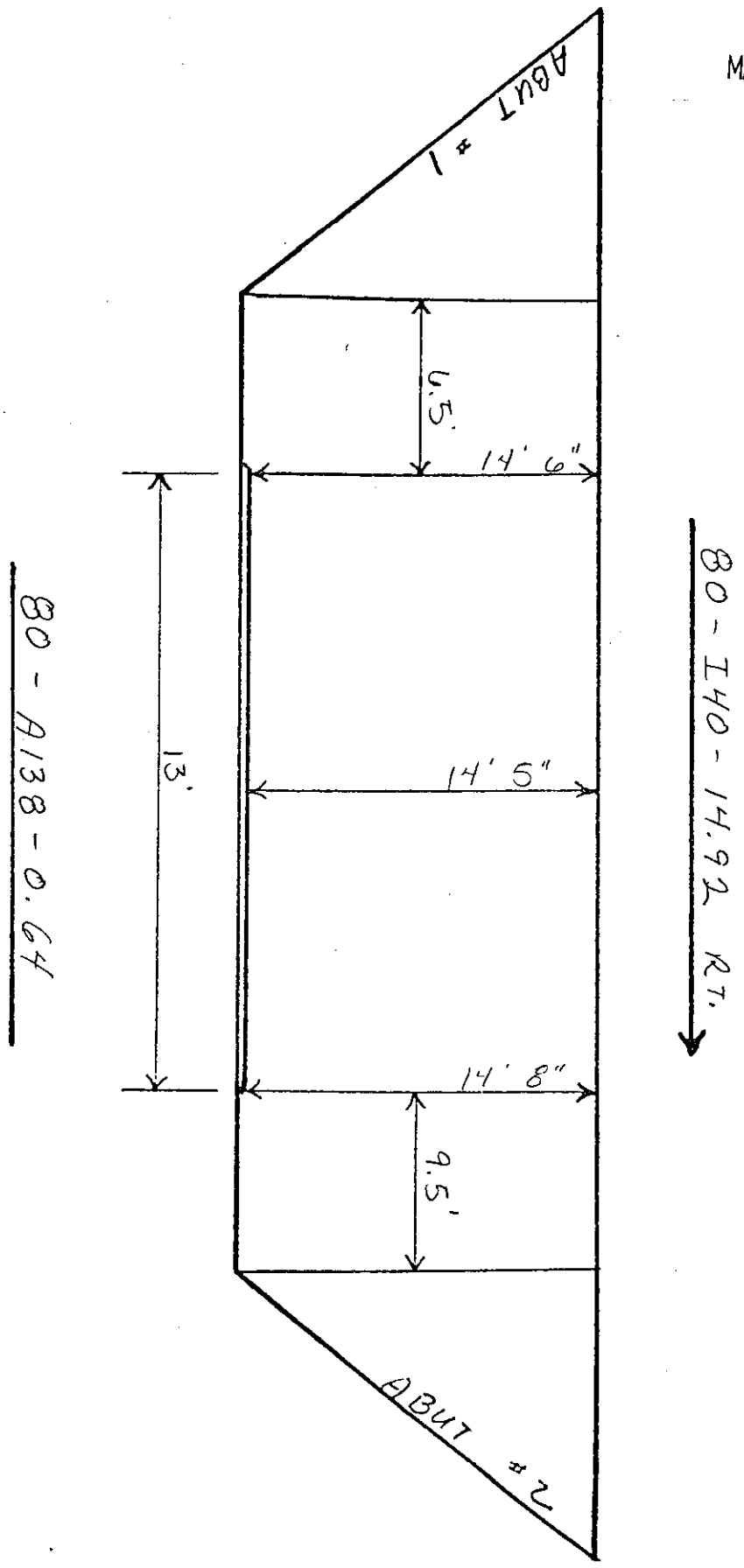
MINIMUM PICTURES REQUIRED

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

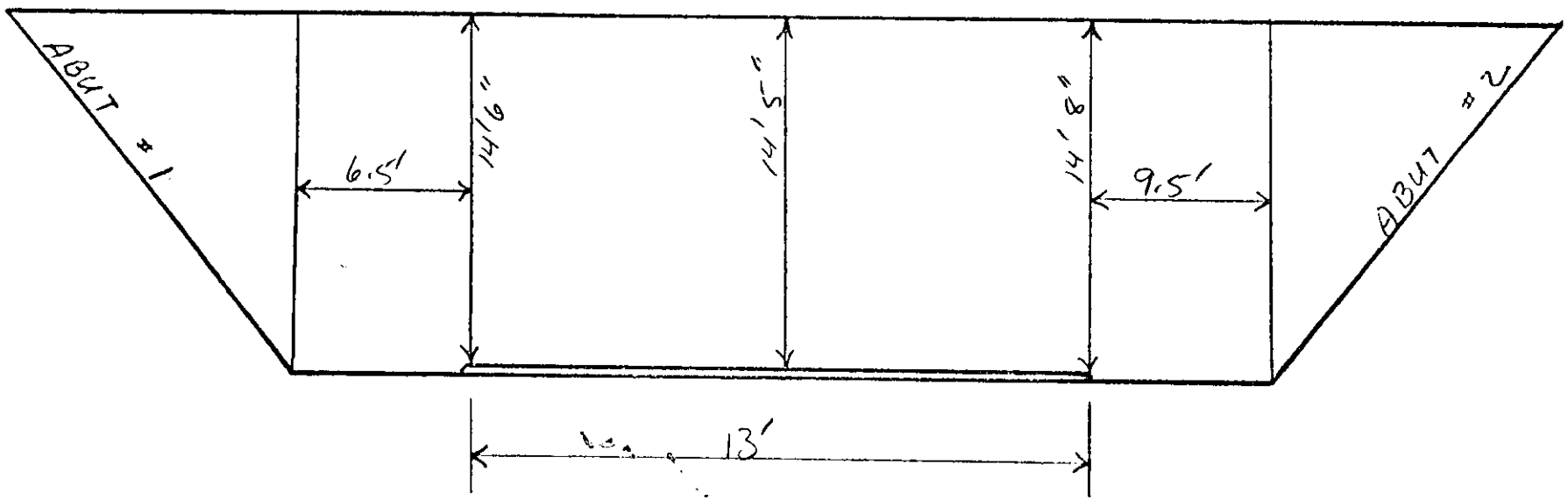
6-16-99MD

ABUT # 1
6.0
14'-5"
13'-0"
14'-4"
14'-6"
10.5
ABUT # 2
80 - A138 - 0.64
80 - I40 - 14.92 RT.
CL Pavement Skew

MAR 2 4 1992



80 - I40 - 14.92 Rt.



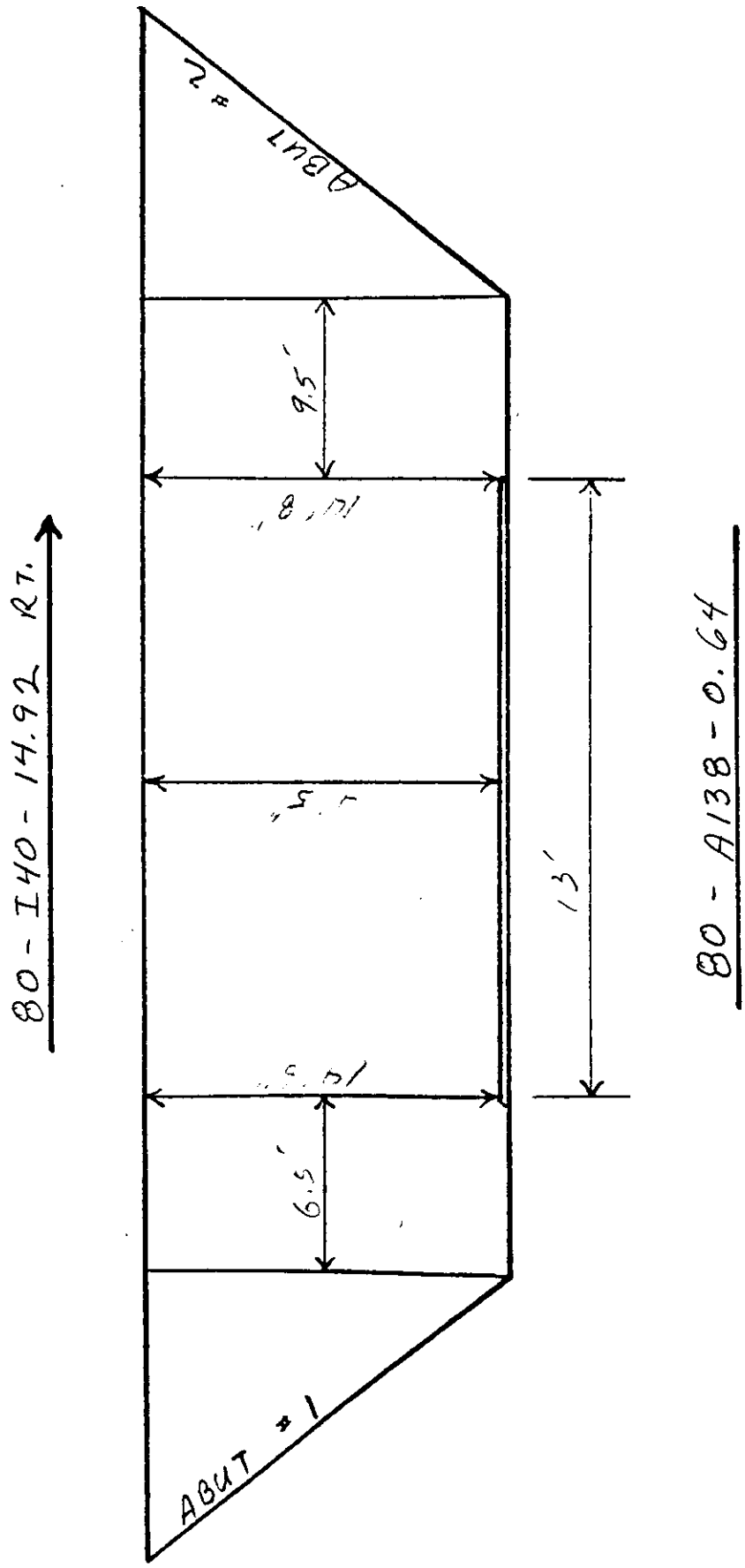
80 - A138 - 0.64

FEB 05 1990

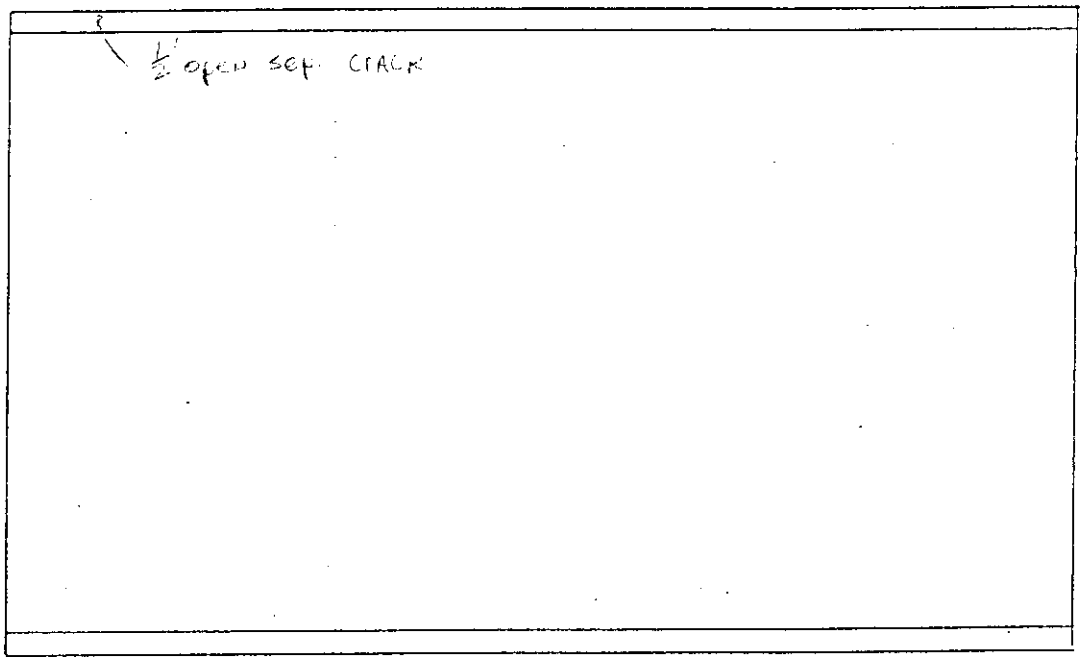
16

JAN 2 9 1988

JUL 2 3 1986



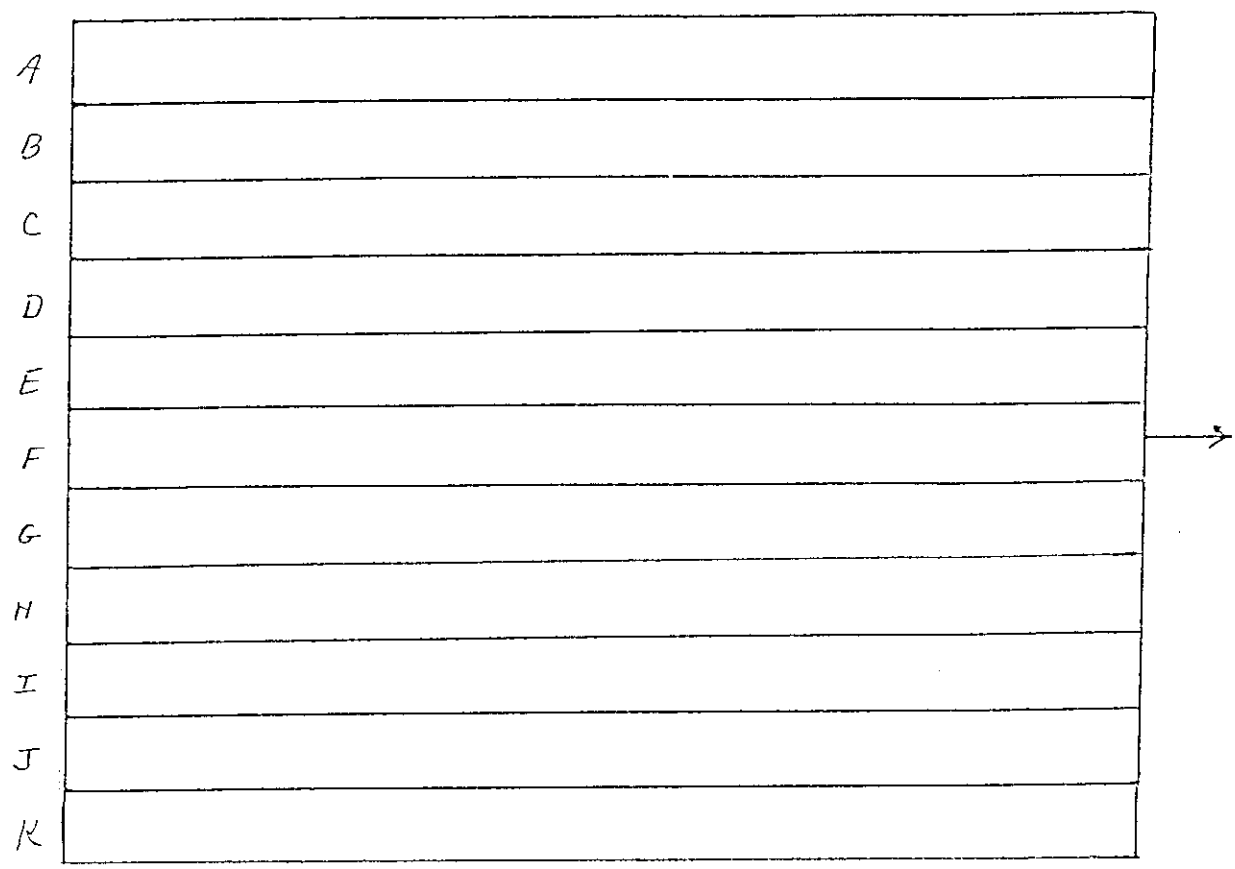
6-16-99
*LOK



Top Slab = Br.# 80-I40-14.92

Deck	G	
Parapet	F	Col dominant LT side parapet wall ½" open sep crack
Drains	NA	
Joints	NA	

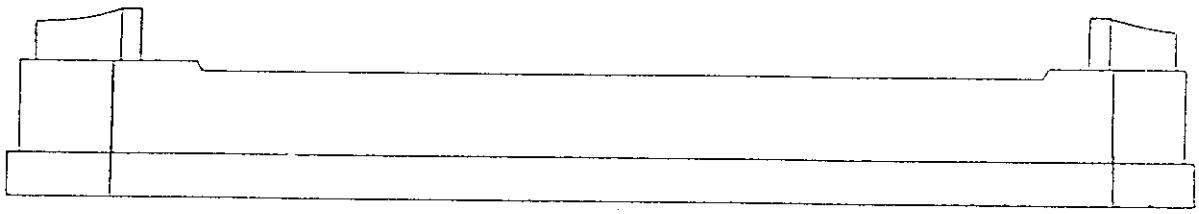
6·16·99MD



Bottom Slab = 1 Br. # 80-I40-14.92 Rt.

Beams (Box)	Good	

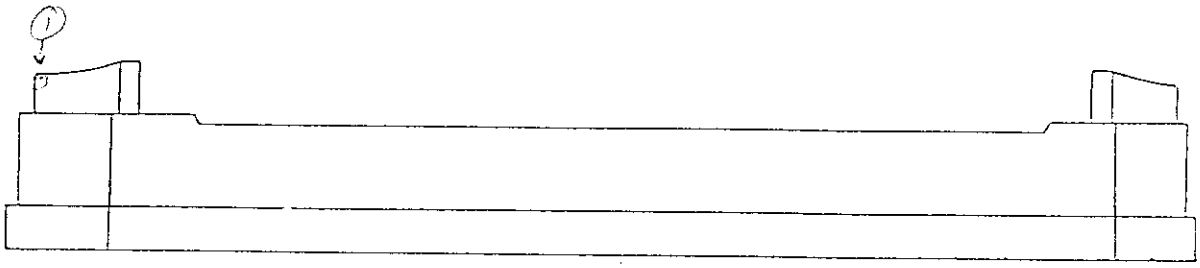
6-16-77
R



ABUT = 1 Br. = 80 - I40 - 14.92 RT.

Back wall	G
CAP	G
wings	G
Bearings	G

6-16-11
D



ABUT = 2 Br. = 80 - I40 - 14.92 RT.

Back wall	G	
CAP	G	
Wings	G	(1) 1" x 2" BREAK OUT
Bearings	G	

FOR PLANS SEE:

80100401030- INFO