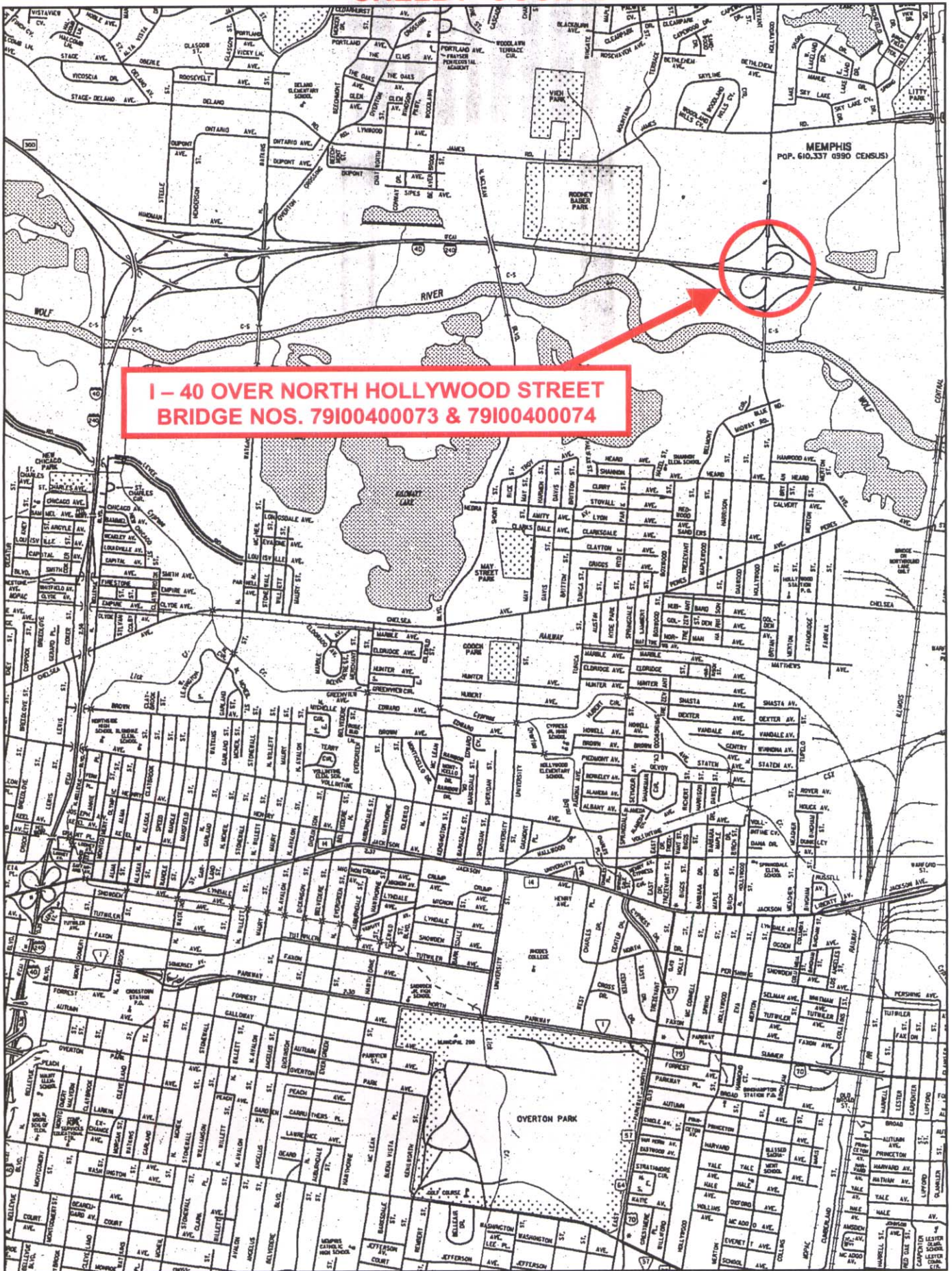


# SHELBY COUNTY





## CONDITION

41 - Structure Open/Posted/Closed	A - Open, no restriction
58 - Deck	7 - GOOD CONDITION - some minor problems.
59 - Superstructure	6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.
60 - Substructure	6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.
61 - Channel/Channel Protection	N - Not applicable.
62 - Culverts	N - Not applicable. Used if structure is not a culvert.
521 - Overall Bridge Cond	F - Fair

## Load Rating / Post

548 - Ratings Based On	AASHTOWare BrR (4" asphalt)
505 - TDOT rating method	LRFR-RF - LOAD & RESISTANCE FACTOR RATING (RF) - HL93
65 - Inventory Rating Method	8 - Load and Resistance Factor Rating (LRFR) rating reported by rating factor (RF) method using HL-93 loadings
66 - Inventory Rating	34.02
NBI_066A	1.05
63 - Operating Rating Method	8 - Load and Resistance Factor Rating (LRFR) rating reported by rating factor (RF) method using HL-93 loadings
64 - Operating Rating	45.36
NBI_064A	1.40
516B - Single Unit Posting	
517B - Multi Unit Posting	
70 - Bridge Posting	5 - Equal to or above legal loads
534 - Posting Log Note	
552 - Posting Closure Comp	

## Notes

Wearing Surf. thickness in load rating	4.00
ADTT used in Load rating	5000
547 - evaluation sheet note	

Load Rating Assumptions and QA Checklist - Consultant Calculations

Bridge ID	Bridge Location		
Load Rating Date	Inspection Date	Current ADTT	Considered
Plans Set			
Consultant			
Assumptions		QA	<div>APPROVED By Rebecca Hayworth, P.E. at 10:46 am, Feb 29, 2024</div> <div>REVIEWED By Rebecca Hayworth, P.E. at 2:59 pm, Feb 12, 2024</div>
Dimensions match plans & field conditions			
Cross section Checked			
Framing plan Checked			
Material Properties Checked			
Condition Assumed for Load rating			
Deterioration/Damage Captured			
Shear Considered			
Rails Distribution			
Asphalt Thickness (inches)			
Asphalt Considered Field Verified			
Distribution Factors Calc Method			
Impact Factor			
AASHTO Trucks & TDOT Trucks Rated			
Comments			

## Page 1 of 1

**EXPLANATIONS AND COMMENTS:**

# Bridge Maintenance Recommendations

Page No. \_\_\_\_\_

Page 1 of 1

Bridge Location No.: **79 - I0040 - 0759 L**Over/Under Pass No.: **79 - 02821 - 0532**

Co. Route Log Mile

Bridge Number: **79I00400074**

Crossing:

Region: 04

Road Name:

District: 45 Spec. Case: 0

Road Name #2: **NORTH HOLLYWOOD ST.**

Maint. Resp.: 01 Co. Seq: 01

Bridge Rating: **FAIR**

Inspection Cycle: 15

County: **Shelby**@ ' x '   
Barrels Length WidthInspection Date: **9/12/01**

City:

Comments:

**Maintenance Recommendations:**Maintenance Completed  
by/date

228	APPROACH GUARDRAILS ARE SUBSTANDARD
226	GUARDRAIL TERMINALS AT APPROACH NO. 1 & 2 ARE SUBSTANDARD
007	CLEAN AND SEAL JOINT AT APPROACH NO. _1 & 2
001	LEVEL APPROACH NO. _1
009	CLEAN DRAINS AT APPROACH NO. _1
069	REPAIR TEXTURE COAT ON SPAN NO. _ALL (NEEDS REPAINTING)
171	REPAIR BACKWALLS ON ABUTMENT NO. _2
233	UNDERPASS SUBSTRUCTURE PROTECTION GUARDRAILS ARE NON-EXISTENT

**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:



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

# Bridge Condition Coding Form

Revised 09/12/2001

Bridge Number: 79I004000741  
(Includes Item 5A)

Feature Intersected: I40-LL / N HOLLYWOOD ST

County: 79

Route: 10040

Special Case: 0

County Sequence: 01

Log Mile: 7.59

## CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	CONDITION CODING GUIDELINES (Values for Coding Items 58, 59, 60 and 62)
90	INSPECTION DATE	<u>09/12/2001</u> <u>8/1/21/2003</u>	N NOT APPLICABLE
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. _____ FT. _____ IN.	9 EXCELLENT CONDITION
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. _____ FT. _____ IN.	8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
36	TRAFFIC SAFETY FEATURES		7 GOOD CONDITION - SOME MINOR PROBLEMS.
	Br. Rail Trans. Appr. Rail Terminal SPEED LIMIT		6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
	1 0 0 0 55		5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
41	STRC OPEN/CLOSED/POSTED	A A K P	4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
58	DECK	7	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.
59	SUPERSTRUCTURE	7	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.
60	SUBSTRUCTURE	7	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.
61	CHANL/CHANL PROTECTION	N	0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.
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 <u>FAIR</u> POOR CRITICAL		

TEAM LEADER SIGNATURE

REVIEW DATE

8/1/21/2003



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

# Underpass Condition Coding Form

Revised 09/21/2001

Bridge Number: 79I004000742  
(Includes Item 5A)

Feature Intersected: I40-LL / N HOLLYWOOD ST

County: 79  
Route: 02821  
Special Case: 0  
County Sequence: 01  
Log Mile: 5.32

## CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	<u>09/12/2001</u> <u>8/12/2003</u>	515 (A) TYPE UNDERPASS BARRIER None Needed or N/A
10	MINIMUM V.C. OVER ROADWAY (ROADWAY + SHOULDERS)	16 FT. 3 IN. ____ FT. ____ IN.	Revised Barrier Type
520	MINIMUM V.C. OVER ROADWAY (EXCLUDES SHOULDERS)	16 FT. 3 IN. ____ FT. ____ IN.	(B) ADEQUACY OF BARRIER OR RAIL N
47	TOTAL HORIZONTAL UNDERCLEARANCE	<u>75</u> FT. <u>6</u> IN. <u>76</u> FT. <u>0</u> IN.	(C) ADEQUACY OF TRANSITIONS N
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS)	Circle One: <u>H</u> R <u>16</u> FT. <u>3</u> IN.	(D) ADEQUACY OF TERMINALS N
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE	Circle One: <u>H</u> R <u>0</u> FT. <u>0</u> IN.	554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING 99 FT. 99 IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	<u>0</u> FT. <u>0</u> IN.	____ FT. ____ IN.
521	OVERALL CONDITION (Circle One) GOOD <u>FAIR</u> POOR CRITICAL		HEIGHT POSTED AT BOTH APPROACHES? YES [ ] NO <u>X</u> N/A [ ]

555 COMMENTS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TEAM LEADER SIGNATURE

8/12/2003  
REVIEW DATE



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

# Bridge Condition Coding Form

Revised 06/15/2000

Bridge Number: 791004000741  
(Includes Item 5A)

Feature Intersected: I40-LL / N HOLLYWOOD ST

County: 79

Route: 10040

Special Case: 0

County Sequence: 01

Log Mile: 7.59

## CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	CONDITION CODING GUIDELINES (Values for Coding Items 58, 59, 60 and 62)
90	INSPECTION DATE	<u>01/18/2000</u> <i>9/12/2001</i>	N NOT APPLICABLE
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.	9 EXCELLENT CONDITION
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.	8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
36	TRAFFIC SAFETY FEATURES		7 GOOD CONDITION - SOME MINOR PROBLEMS.
	Br. Rail Trans. Appr. Rail Appr. Rail Ends		6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
	1 0 0 0		5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
41	STRC OPEN/CLOSED/POSTED	A	4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
	A K P		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.
58	DECK	7	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.
59	SUPERSTRUCTURE	7	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.
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 <u>FAIR</u> POOR CRITICAL		

TEAM LEADER SIGNATURE

REVIEW DATE

*9/12/2001*  
FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.





STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

# Underpass Condition Coding Form

Revised 06/15/2000

Bridge Number: 79I004000742  
(Includes Item 5A)  
Feature Intersected: I40-LL / N HOLLYWOOD ST

County: 79  
Route: 02821  
Special Case: 0  
County Sequence: 01  
Log Mile: 5.32

## CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	<u>01/18/2000</u> <u>9/12/2001</u>	515 (A) TYPE UNDERPASS BARRIER None Needed or N/A
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	16 FT. 3 IN. ____ FT. ____ IN.	Revised Barrier Type
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	16 FT. 3 IN. ____ FT. ____ IN.	(B) ADEQUACY OF BARRIER OR RAIL N
47	TOTAL HORIZONTAL UNDERCLEARANCE	<u>75</u> FT. <u>8</u> IN. <u>76</u> FT. <u>0</u> IN.	(C) ADEQUACY OF TRANSITIONS N
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: (H) R	<u>16</u> FT. <u>3</u> IN.	(D) ADEQUACY OF TERMINALS N
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: (H) R	<u>0</u> FT. <u>0</u> IN.	554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING 99 FT. 99 IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	<u>0</u> FT. <u>0</u> IN.	____ FT. ____ IN.
521	OVERALL CONDITION (Circle One) GOOD <u>FAIR</u> POOR CRITICAL		HEIGHT POSTED AT BOTH APPROACHES? YES [ ] NO [X] N/A [ ]

555 COMMENTS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TEAM LEADER SIGNATURE

9/12/2001  
REVIEW DATE

Bridge Loc. No: 79 - I0040 - 07.59 - L

Date: 08-12-03



BRIDGE NO. ON ABUTMENT #1 BREASTWALL



ABUTMENT #1

**Bridge Loc. No: 79 - I0040 - 07.59 - L .     Date: 08-12-03**



**LOOKING BACK ON ROUTE**



**APPROACH #2 JOINT**



**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 08-12-03**



**APPROACH #2 WITH ASPHALT SPALLING**



**APPROACH #1 WITH ASPHALT SPALLING**

**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 08-12-03**



**VIEW ACROSS TOP OF DECK**



**LOOKING AHEAD ON ROUTE**



**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 08-12-03**



**ELEVATION RIGHT SIDE**

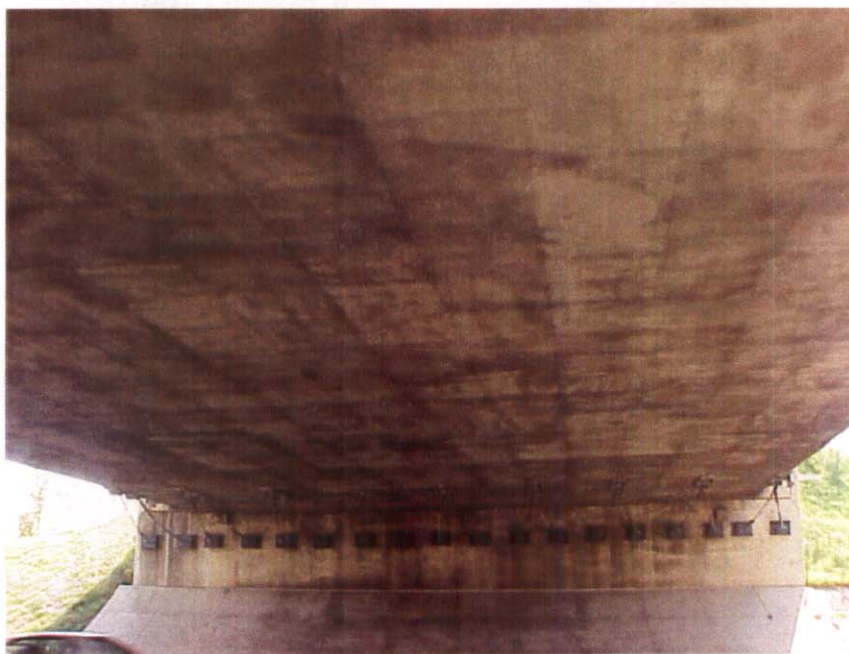


**ELEVATION RIGHT SIDE**

**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 08-12-03**



**ABUTMENT #2 WITH EARTHQUAKE DEVICE**



**BOTTOM OF DECK**



**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 08-12-03**



**ABUTMENT #2, LEFT BACKWALL SPALLED TO STEEL**



**ELEVATION LEFT SIDE**

AUG 12 2003

**BRIDGE INSPECTION REPORT**Form BIR 3.0  
(Rev. 9-22-98)  
DT-0069Field Report No. 16 Date 8-12-03  
Previous Report No. 15 Date 9-12-01  
Plans: YES ( ) NO ( )Bridge No. 79100400074 Bridge Location No. 79 - 10040 - 0759 L 79 - 02821 - 0532  
Eleven Digit No. Co. Route Log Mile OVER/UNDER PASSRoad Name \_\_\_\_\_ over \_\_\_\_\_ Crossing \_\_\_\_\_ CITY \_\_\_\_\_  
Year Constructed \_\_\_\_\_ County Shelby Maintenance District 45  
Year Widened \_\_\_\_\_ Year Rehabilitated \_\_\_\_\_**FEATURES**Wearing Surface Concrete ( ) Timber ( ) Asphalt ☒ Depth 4 (in.)  
Flared Width Yes ( ) No ☒ Median Width Open ☒ None ( ) Closed ( )  
Navigational Control Yes ( ) No ☒ Bridge Skew 85L ° LT ( ) RT ( )  
Structure Type (Main Span) CONC. BOX BEAM  
Structure Type (Appr. Spans) \_\_\_\_\_  
No. Main Spans 1 No. Approach Spans \_\_\_\_\_  
Maximum Span Length 125.0 (\*\*. ft.)  
Total Length 125.0 (\*\*. ft.)

Structure Name (If Named)

**INSPECTORS**

- 1.
- GREER
- 
- 2.
- LOVE
- 
- 3.
- ADAMS
- 
- 4.
- BYRD
- 
- 5.
- REEVES
- 
6. \_\_\_\_\_
- 
7. \_\_\_\_\_
- 
8. \_\_\_\_\_

**WIDTHS** (\*. ft.)Deck Out-to-Out 71.5  
Roadway Curb/Curb 69.5  
Roadway Rail/Rail \_\_\_\_\_  
Sidewalk Rt. \_\_\_\_\_ Lt. \_\_\_\_\_  
\*Approach Roadway 48  
\*(Does Not Include Shoulders)  
Approach Shoulder Rt. 11'  
Lt. 8'**CLEARANCES**Min. Vertical Clearance over Deck \_\_\_\_\_ (ft.-in.)  
Min. Vertical Under Clearance 16' 3" (ft.-in.)  
Min. Lateral Under Clearance Rt. 5' (\*. ft.)  
Min. Lateral Under Clearance Lt. 5' (\*. ft.)FRACTURE CRITICAL: \_\_\_\_\_  
(If Yes, Include BIR 3.9)

NBIS Bridge Length (&lt;25 ft.) \_\_\_\_\_ (ft.-in.)

**UNDERWATER INSPECTION**To Be Performed By: \_\_\_\_\_ Date \_\_\_\_\_  
DOT FIELD TEAM ( ) CONTRACT DIVERS ( ) NONE REQUIRED ☒Change in Structural Condition: Yes ( ) No ☒ Major Repairs Made: Yes ( ) No ☒**COMMENTS**N035 ° 11 ' 30.4 "W089 ° 58 ' 33.2 "

G.P.S. Location

BRIDGE RATING: ( ) ☒ ( ) ( )

GOOD FAIR POOR CRITICAL

Supervising Bridge Inspector: Greer

Form BIR 3.1  
(Rev. 9-22-98)  
DT-0080

Bridge Location No. 79 - I0040 - 7.59 L  
Co. Route Log Mile

AUG 1 1998  
Date \_\_\_\_\_

### PERFORMANCE EVALUATION

Time of Day Inspected 10:30 Weather Conditions SUNNY 78°  
Vehicles Observed ALL TYPES

### LIVE LOAD BEHAVIOR

Substructure	YES	NO	Comments
Horiz./ Vert. Defl.	( )	(X)	
Vibration	( )	(X)	
Superstructure			
Horiz./ Vert. Defl.	( )	(X)	
Vibration	( )	(X)	

### APPROACH

	Rating	Comments
Alignment	(G) F P C	
Slab PARAPET	G (E) P C	
Joints	(G) F P C	
Pavement	G F (E) C	APPROACH #1, 2 AC SPALLING AND SETTLED (G)
Embankment	(G) F P C	
Drains	G F (E) C	APPROACH #1 LEFT DRAIN FILLED WITH DEBRIS (G)

### TRAFFIC SAFETY FEATURES

	Rating	STANDARD/ SUB-STANDARD	Comments
Bridgerailing	G (E) P C	(X) ( )	
Transitions	(G) F P C	( ) (X)	
Guardrail	(G) F P C	( ) (X)	
Guardrail Terminal	(G) F P C	(X) (X)	

### SIGNING

	YES	NO	NEEDED	Weight Limit Posted
Paddleboards	( )	(X)	( )	YES ( ) NO (X)
Vertical Clearance (<14'-6")	( )	(X)	( )	Gross..... Tons
NARROW ( )	( )	(X)	( )	2 Axle..... Tons
ONE LANE BRIDGE ( )	( )	(X)	( )	3 or more Axles.. Tons

Other Signs or Plaques: \_\_\_\_\_

Comments Regarding any  
Problems with Signing: OVER HEAD SIGN ON LEFT SIDE



Form BIR 3.2  
(Rev. 9-22-98)  
DT-0081

Bridge Location No. 79 - 10040 - 7.59 L  
Co. Route Log Mile

DATE 12-2-98  
Date \_\_\_\_\_

**DECK**

	Rating	Comments
Wearing Surface	G <u>F</u> P C	
Deck - Structural Condition	G <u>F</u> P C	
Curbs	G F P C	
Median	G F P C	
Sidewalks	G F P C	
Parapet	G <u>F</u> P C	
Railing	G F P C	
Paint	G F P C	
Drains	G F P C	
Lighting Standards	G F P C	
Utilities	G F P C	
Joint Leakage	G F P C	
Expansion Joints	G F P C	

**SUPERSTRUCTURE**

Bearing Devices	G F P C	
Beams <i>Box</i>	G <u>F</u> P C	
Girders	G F P C	
P C C S	G F P C	
BOLTS (PCCS)	G F P C	
Floor Beams	G F P C	
Stringers	G F P C	
Diaphragms	G F P C	
Bracing	G F P C	
Trusses - General	G F P C	
Portals	G F P C	
Bracing	G F P C	
Paint	G F P C	
Alignment of Members	<u>G</u> F P C	

**TEXTURE COAT**

Condition Rating G F P C  
Overall Appearance G F P C  
Staining Rating G F P C

Fading G F P C  
Needs Spot Painting YES ( ) NO (X)  
Needs Repainting YES (X) NO ( )

Comments \_\_\_\_\_  
RECOMMENDATIONS: \_\_\_\_\_  
Scaling Rating G F P C  
CLEAN SEAL JOINTS ( )  
CLEAN DRAINS ( )

Form BIR 3.3  
(Rev. 9-22-98)  
DT-0082

Bridge Location No. 79 - 10040 - 7.59 L  
Co. Route Log Mile

AUG 7 2002

Date \_\_\_\_\_

**SUBSTRUCTURE**

**ABUTMENTS**

	Rating	Comments	PILE(S) TO BE REPLACED	ABUTMENT
Caps	G <u>F</u> P C			
Breastwall	G F P C			
Wings	G <u>F</u> P C			
Backwall	G F <u>P</u> C	AT ABUT #2 SPALLING		(171)
Plumb	<u>G</u> F P C			
Footing	G F P C			
Piles	G F P C			
Embankment	<u>G</u> F P C			
Bearing	<u>G</u> F P C			
Slope Paving	G <u>F</u> P C			
Rip-Rap LIGHT	<u>G</u> F P C			
Earthquake Devices	<u>G</u> F P C	ON ABUT #2 ONLY		

**PIERS**

	Rating	Comments	PILE(S)	PIER
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	G F P C			
Web	G F P C			
Earthquake Devices	G F P C			

**BENTS**

	Rating	Comments	PILE(S)	BENT
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	G F P C			
Bracing	G F P C			
Earthquake Devices	G F P C			

Piles Need Replacement: NO (☒) YES ( )

CUT VEGETATION NO (☒) YES ( )

CLEAR DRIFT NO (☒) YES ( )

RECOMMENDATIONS:

**INSPECTION REPORT FOR UNDERPASS ROUTE**

Form BIR 3.0A

(Rev. 9-22-98)

DT-1443

Field Report No. 16

Date \_\_\_\_\_

Previous Report No. 15Date 9-12-01Bridge No. 79100400074

Eleven Digit No.

Underpass Location No. 79 - 10040 - 0759 L-0-  
Railroad/Walkway

or

- - -  
Co. Route Log Mileover/  
under

Co. Route Log Mile

79 - 02821 - 0532

Co. Route Log Mile

County Shelby

Structure Name (If Named) \_\_\_\_\_

Year Constructed \_\_\_\_\_

Year Widened \_\_\_\_\_

Year Rehabilitated \_\_\_\_\_

**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' ft. Right 5 ft. Left\*Minimum Vertical Clearance: 16 ft. 3 in.

\*Show on Sketch

**TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE****STANDARD SUB-STANDARD NON EXIST**

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

**SIGNING FOR UNDERPASS ROUTE**

Paddleboards YES ( ) NO (X) NEEDED ( )

Vertical Clearance (&lt;14'-6") YES ( ) NO (X) NEEDED ( )

Narrow Passage YES ( ) NO (X) NEEDED ( )

One Lane Passage YES ( ) NO (X) NEEDED ( )

Other Underpass Signs Needed

NONE**INSPECTORS**1. REEVES

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

AUG 12 2011

Page 2 of 2

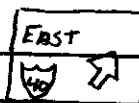
Form BIR 3.0A (Continued)

(Rev. 9-22-98)

DT-1443

Page No. \_\_\_\_\_

Date \_\_\_\_\_

Underpass Location No. 79 - 10040 - 0759 L  
Co. Route Log MileOther Signs or Plaques: LT. ABUT #1 SIDEComments Regarding any Problems with Signing: NONE**BRIDGE FEATURES** (\* \* ft.)Bridge Skew 85.4°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 ☒ P CDoes Potential Exist for Elements from Bridge Falling on Roadway Beneath YES ( ) NO (☒)Does Potential Exist Because of Deteriorated Condition or Failure of Major Member YES ( ) NO (☒)

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

NONE

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

Inspection Team's Summary

Bridge Location No. 79 -I0040 07.59L -

Inspection Date 08-12-03

Bridge Rating FAIR

This one span solid concrete box beams bridge with concrete substructure is in fair condition. Substandard and standard terminals, substandard guardrails and standard type bridge rails present. Approach #1 patch A.C. spalling out. Approach #2 A.C. spalling. Approach #1 left drain filled with debris. Span #1 backwall spalling over abut. #2. Texture coating on all parapet is poor. Min. vertical 16'03".

Randy Love

INSPECTOR

CROSS SECTION: YES ( ) NO (X)      PONTIS: YES ( ) NO (X)



AUG 12 2003

2003

79I00400074   79 I0040 0759   L   SKEW: 85L  
BRIDGE NO.:   CO.   ROUTE   L.M.   L/R

Direction of Route



A1

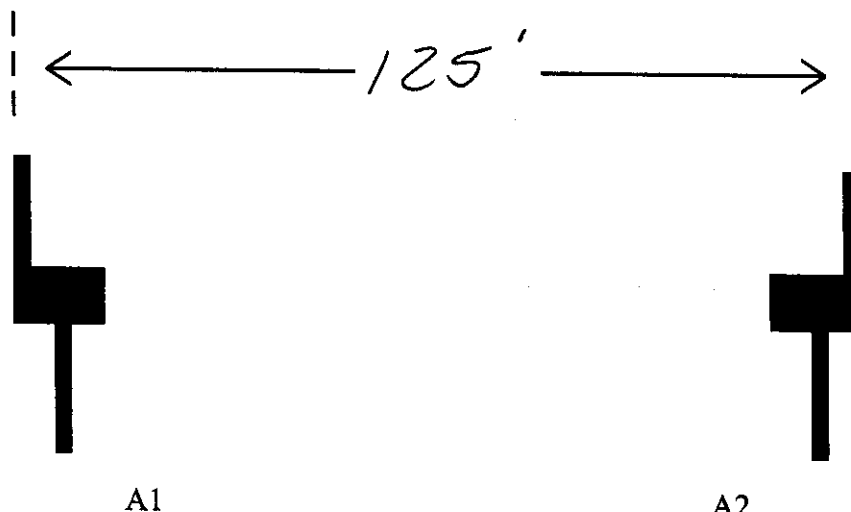
A2

F = FIXED

E = EXPANSION

S = SIMPLE

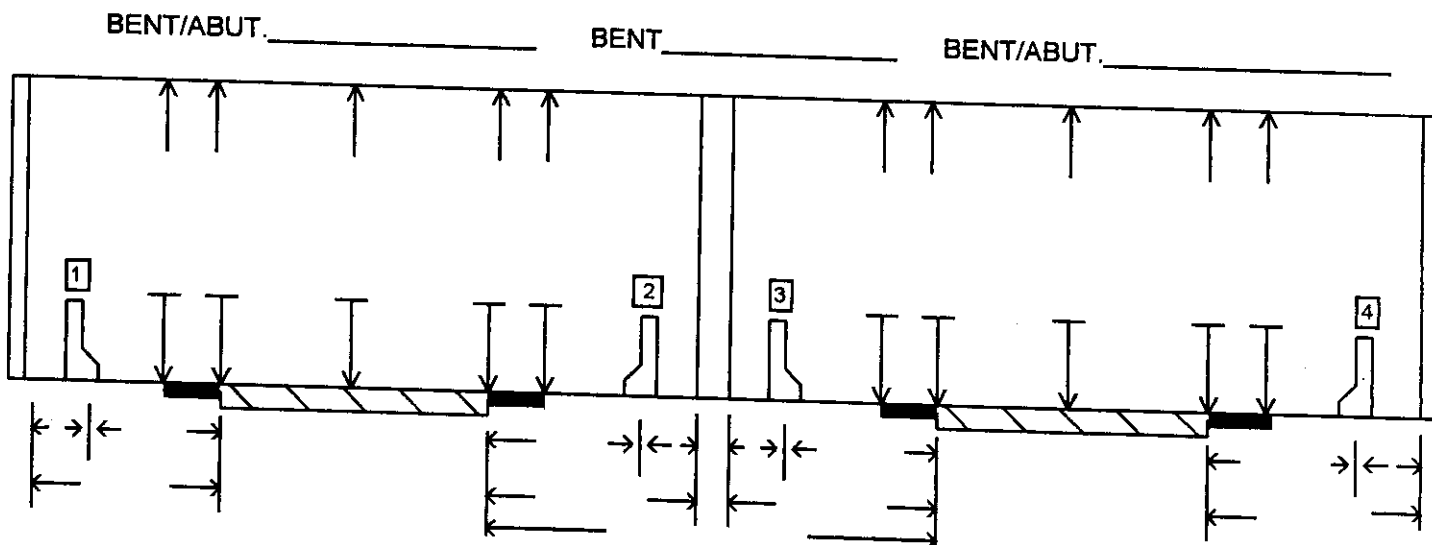
C = CONTINUOUS



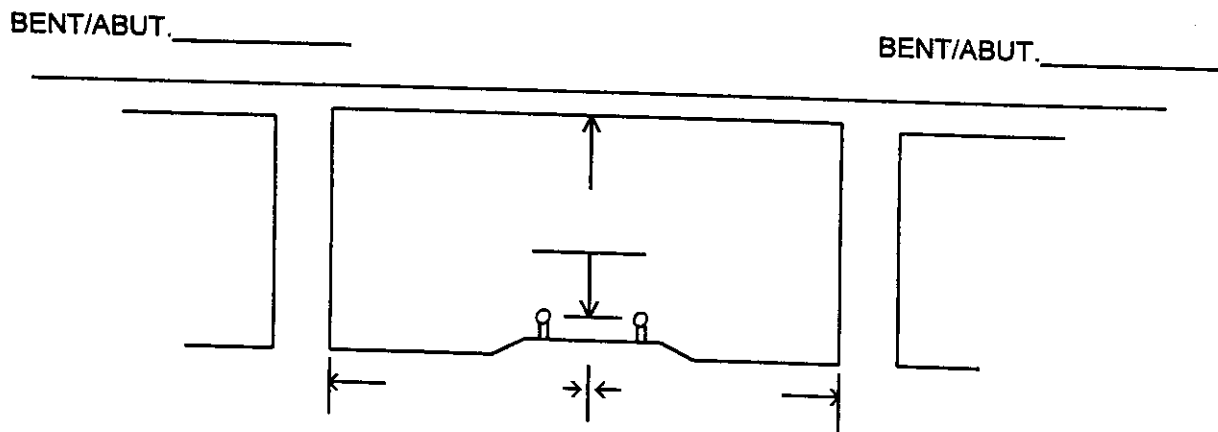
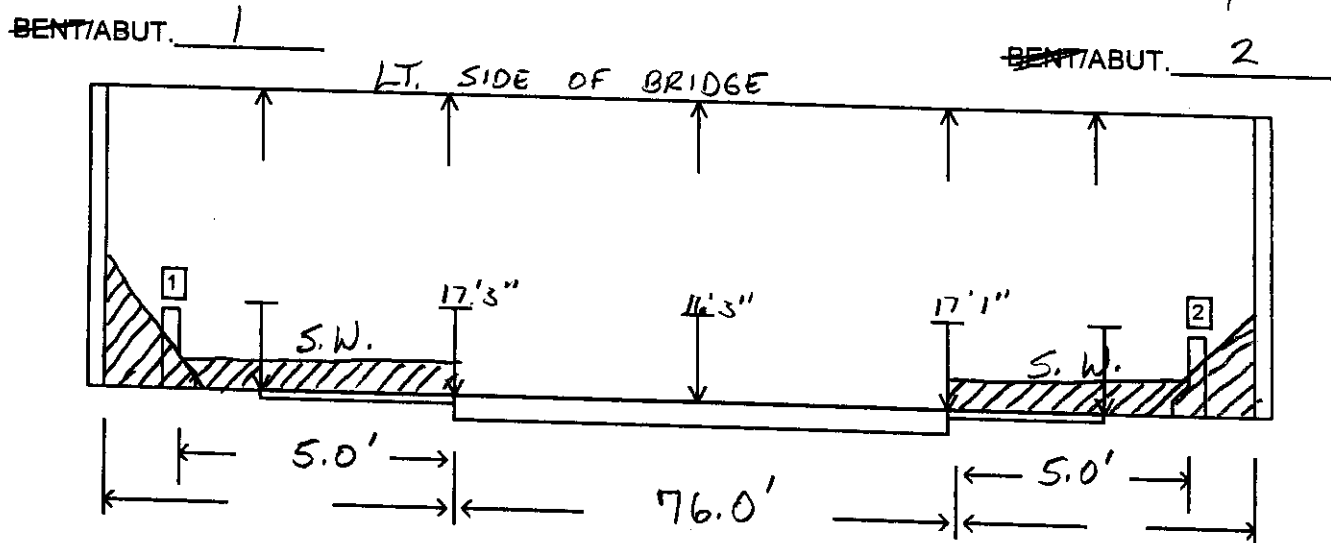
BRIDGE LOC. NO. 79 I0040 0759 L  
CO. ROUTE L. M. L/R

DATE: 2003


LATERAL AND VERTICAL CLEARANCES

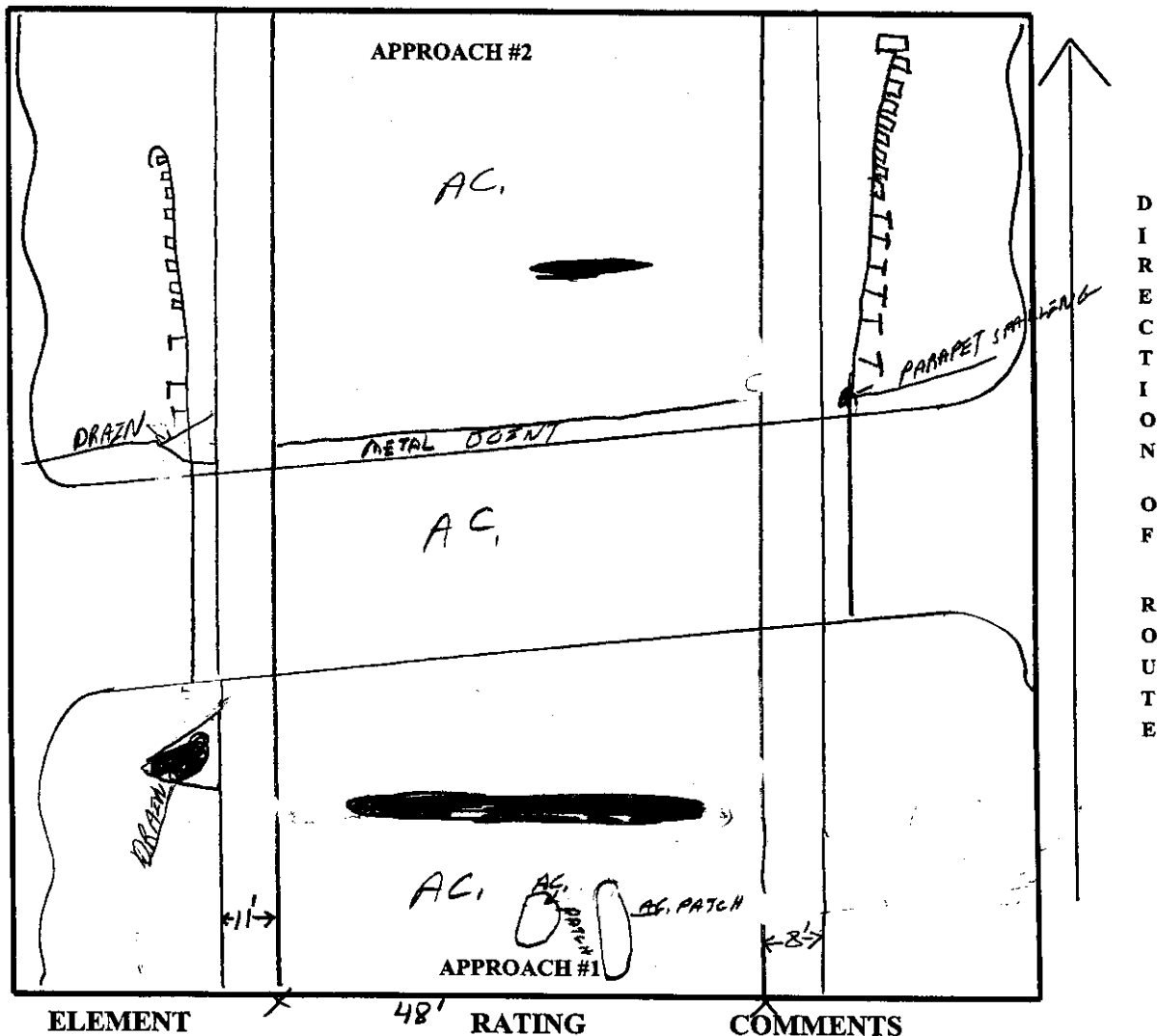


- |                       |         |     |               |     |      |                                     |
|-----------------------|---------|-----|---------------|-----|------|-------------------------------------|
| 1. RAIL/BARRIER TYPE: | W-SHAPE | [ ] | CONC. BARRIER | [ ] | NONE | <input checked=""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



AUG 12 2005

BRIDGE NO.: 79I00400073 79 I0040 0759  85R DATE: \_\_\_\_\_  
 CO. ROUTE LOG MILE L/R SKEW



ALIGNMENT

G F P C

APPROACH PAVEMENT

G F  C

APPROACH SLAB

G ~~F~~ P C

APPROACH GUARDRAIL

G F P C

EMBANKMENT

G F P C

DRAINS

G E  C

APPROACH JOINT

G F P C

SIGNS

G F P C

PARAPET

G  P C

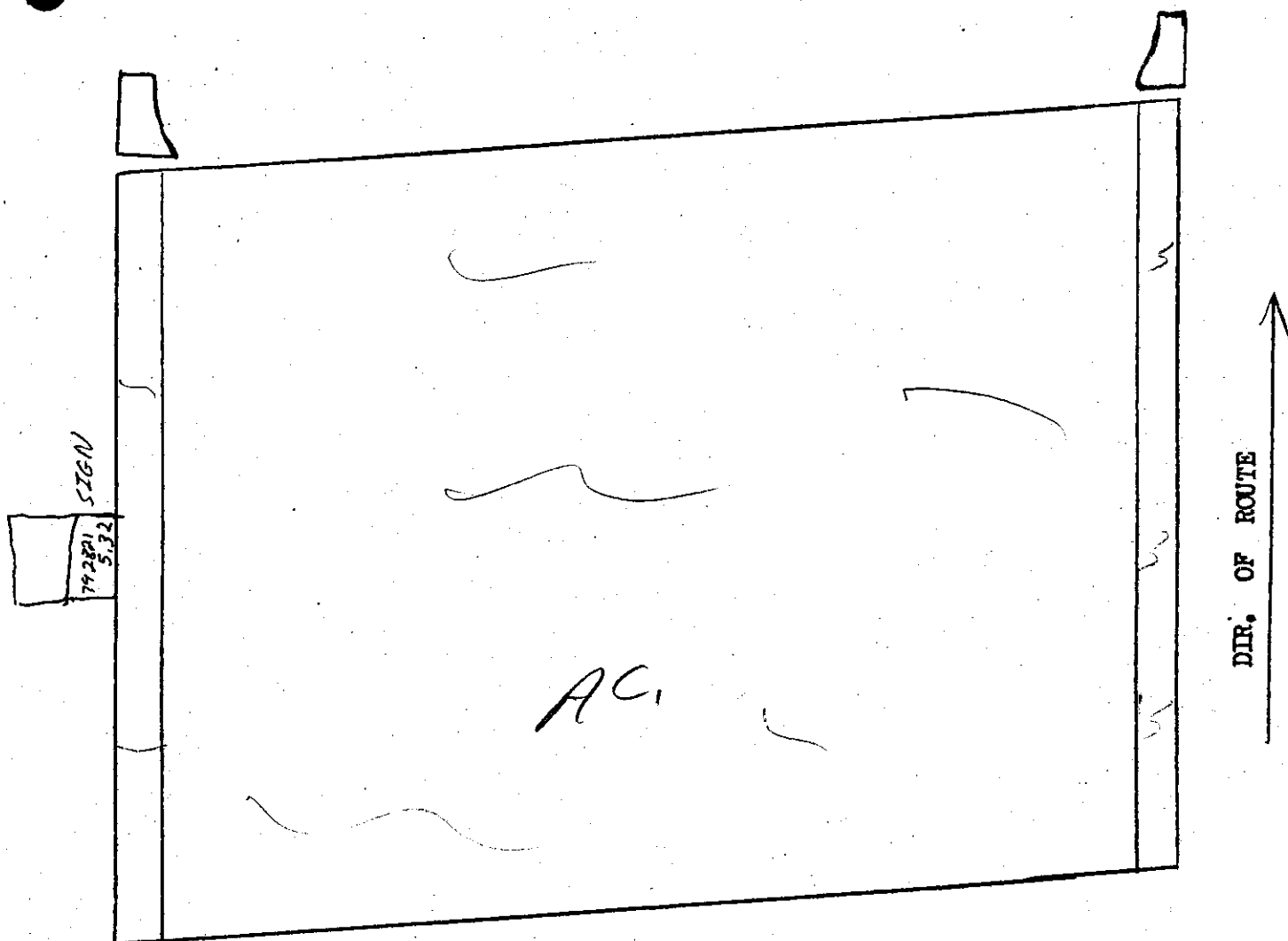
PATCH AC SPALLING OUT 48' x 1' x 3' AND SETTLED 1"   
 APPROACH #2 AC SPALLING 2' x 3' x 3'

FILLED WITH DEBRIS APPROACH #1

NONE

SPALLING NEXT TO JOINT 1' x 1' x 3' APPROACH #2 RIGHT SIDE

BRIDGE NO. 79 I 40 2.59 W.B.L. SK.        RT. SPAN NO. 1



DECK	G <u>(P)</u> P C	SCATTERED FINE CRACKS
PARAPET	G <u>(P)</u> P C	~ ~
DRAINS	G F P C	NONE
JOINT	G F P C	~
SIGN	<u>(G)</u>	

BRIDGE NO. 79 I-40 759 WBL SK. RT.

AUG 12 2002  
SPAN NO. 1

①  
SPALLED +  
BREAKING OUT  
2' BY 2' UP TO 4" D

LOOKING AHEAD

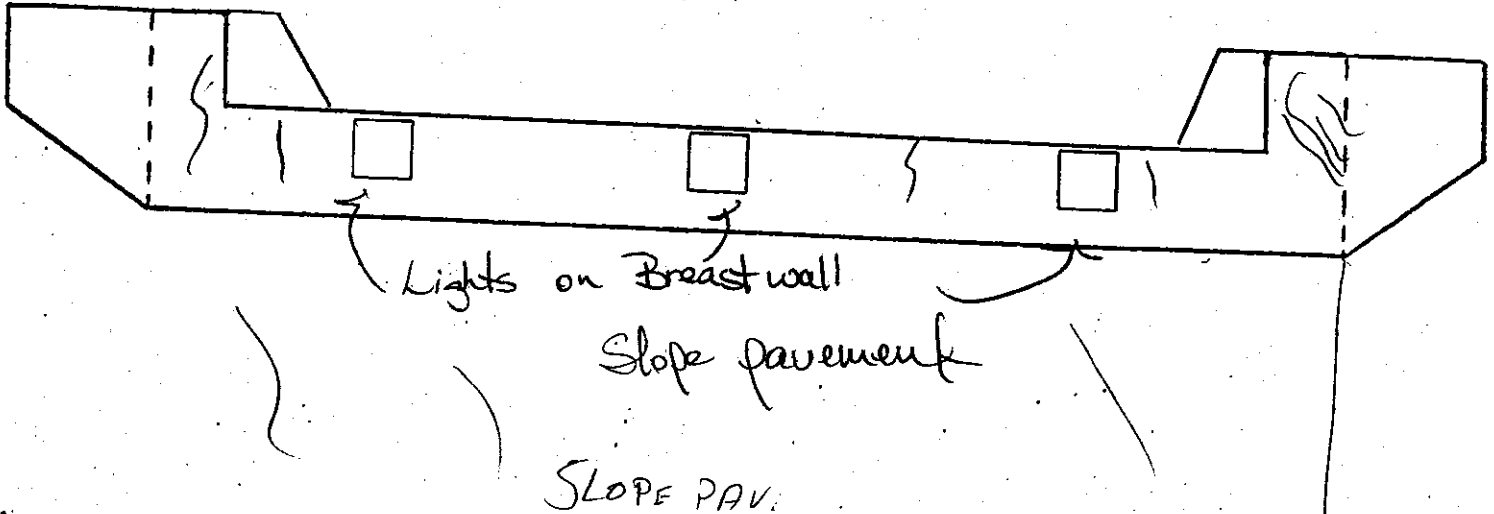
DIR. OF ROUTE

ELEMENT	RATING	COMMENT
BOTTOM DECK	G <sup>(F)</sup> P C	FINE CRACKS
BACKWALL	①	SEE ①



BRIDGE NO. 79 I 40 <sup>IT</sup> ~~259~~ <sup>481</sup> ABUT. NO. 1

LOOKING BACK



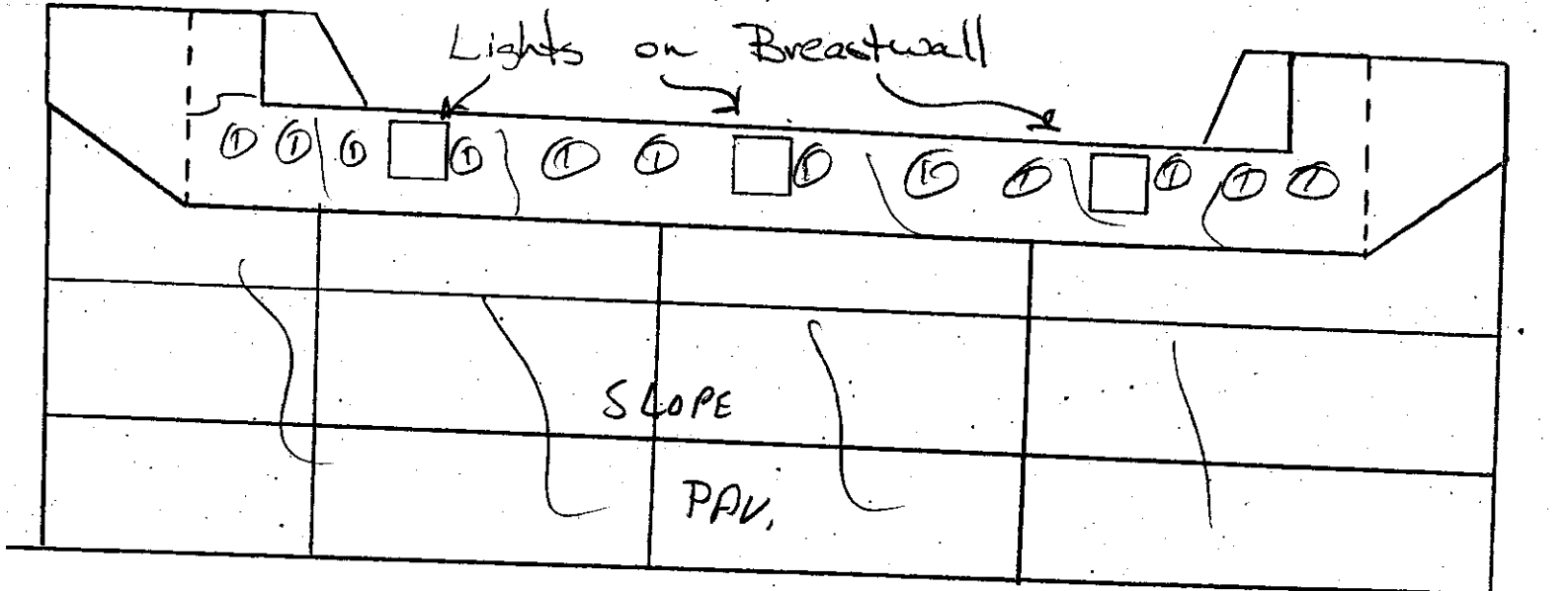
EMENT	RATING	COMMENTS
BEARING	G F P C	N/A
PAINT	G F P C	N/A
B. WALL <del>EMB.</del>	G <u>F</u> P C	FINE CRACKS
WINGS	G <u>F</u> P C	
EMB.	<u>G</u> F P C	
VEG.	<u>G</u> F P C	
RIP-RAP	G F P C	N/A
SLOPE PAV.	G <u>F</u> P C	FINE CRACKS
<del>BACKWALL</del> LIGHTS	<u>G</u> F P C	

BRIDGE NO. 79 I-90 5259 W.B.L. ABUT. NO. 2

AUG 19 2002

LOOKING AHEAD

Lights on Breastwall

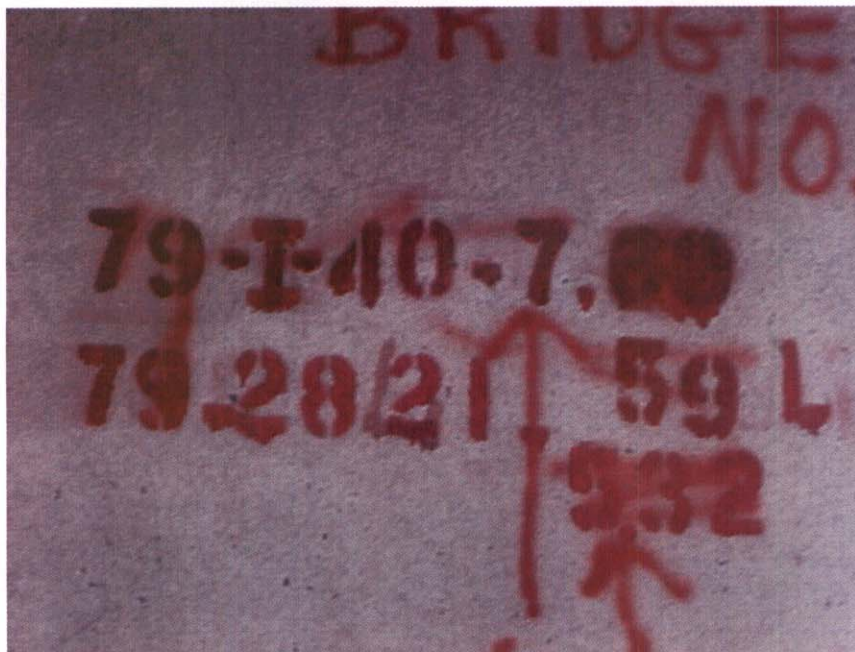


EMENT	RATING	COMMENTS
BEARING	(G) F P C	
PAINT	G F P C	
CAP	(G) F P C	FINE CRACKS
WINGS	(G) F P C	
EMB.	(G) F P C	
VEG.	(G) F P C	
RIP-RAP	G F P C	~ 1/4
SLOPE PAV.	(G) F P C	FINE CRACKS
BASEMENT	(G) F P C	
ENTS		
E.g.	(G)	(1)

Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 09-12-01



ELEVATION RIGHT SIDE



BRIDGE NO.

**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 09-12-01**



**LOOKING BACK ON ROUTE**



**VIEW ACROSS TOP OF DECK**



**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 09-12-01**



**APPROACH #2 PARAPET SPALLING AT JOINT**



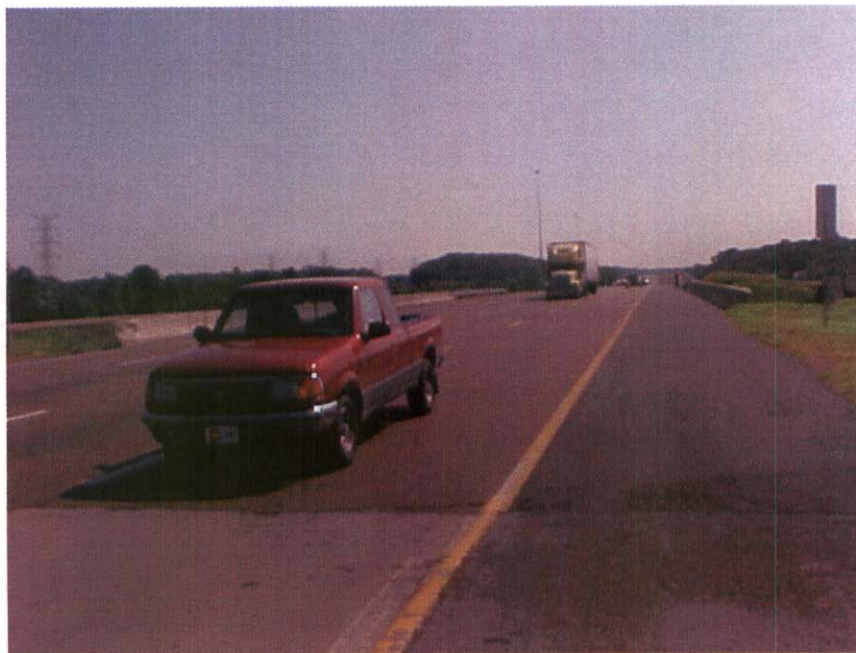
**APPROACH #2 JOINT**



**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 09-12-01**



**APPROACH #1 JOINT SPALLED**



**LOOKING AHEAD ON ROUTE**

**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 09-12-01**



**SPAN #1, BOTTOM OF DECK**



**ABUTMENT #2**

**Bridge Loc. No: 79 - I0040 - 07.59 - L      Date: 09-12-01**



**ABUTMENT #2 BACKWALL SPALLED**



**ELEVATION LEFT SIDE**



# BRIDGE INSPECTION REPORT

SEP 14 2001

Form BIR 3.0  
(Rev. 9-22-98)  
DT-0069

Field Report No. 15 Date 9-12-01  
Previous Report No. 14 Date \_\_\_\_\_  
Plans: YES ( ) NO ( )

Bridge No. 79I00400074 Bridge Location No. 79 - I0040 - 7.59 L 79 - 02821 - 0532  
Eleven Digit No. Co. Route Log Mile OVER/UNDER PASS

\_\_\_\_\_ over -0-  
Road Name Crossing Structure Name (If Named)  
Year Constructed \_\_\_\_\_ County Shelby Maintenance District 45  
Year Widened \_\_\_\_\_ Year Rehabilitated \_\_\_\_\_

## FEATURES

Wearing Surface Concrete ( ) Timber ( ) Asphalt (☒) Depth 2" (in.)  
Flared Width Yes ( ) No (☒) Median Width Open (☒) None ( ) Closed ( )  
Navigational Control Yes ( ) No (☒) Bridge Skew 85L° LT (☒) RT ( )  
Structure Type (Main Span) CONC. BOX BEAM  
Structure Type (Appr. Spans) \_\_\_\_\_  
No. Main Spans 1 No. Approach Spans \_\_\_\_\_  
Maximum Span Length 125' (\*\*.ft.)  
Total Length 125.0 (\*\*.ft.)

## INSPECTORS

1. COLLINS
2. BYRD
3. REEVES
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

## WIDTHS (ft.)

Deck Out-to-Out 71.5  
Roadway Curb/Curb 69.5  
Roadway Rail/Rail \_\_\_\_\_  
Sidewalk Rt. \_\_\_\_\_ Lt. \_\_\_\_\_  
\*Approach Roadway 48'  
\*(Does Not Include Shoulders)  
Approach Shoulder Rt. 11'  
Lt. 8'

## CLEARANCES

Min. Vertical Clearance over Deck N/A (ft.-in.)  
Min. Vertical Under Clearance 16'-3" (ft.-in.)  
Min. Lateral Under Clearance Rt. 5' (\*.ft.)  
Min. Lateral Under Clearance Lt. 5' (\*.ft.)

## FRACTURE CRITICAL: NIP

(If Yes, Include BIR 3.9)

NBIS Bridge Length (<25 ft.) NIP (ft.-in.)

## UNDERWATER INSPECTION

To Be Performed By: \_\_\_\_\_ Date \_\_\_\_\_  
DOT FIELD TEAM ( ) CONTRACT DIVERS ( ) NONE REQUIRED (☒)

Change in Structural Condition: Yes ( ) No (☒)

Major Repairs Made: Yes ( ) No (☒)

## COMMENTS:

N - 35° 11' 30.4"  
W - 89° 58' 33.2"

BRIDGE RATING: ( ) (☒) ( ) ( )

GOOD FAIR POOR CRITICAL

Supervising Bridge Inspector: gar/Call

**PERFORMANCE EVALUATION**

Time of Day Inspected 10:00

Weather Conditions Clear & 80°

Vehicles Observed ALL TYPES

**LIVE LOAD BEHAVIOR**

Substructure	YES	NO	Comments
Horiz./ Vert. Defl.	( )	(X)	
Vibration	( )	(X)	
Superstructure			
Horiz./ Vert. Defl.	( )	(X)	
Vibration	( )	(X)	

**APPROACH**

	Rating	Comments
Alignment	(G) F P C	
Slab	G F P C	N/V
Joints	G F (P) C	APP#1 & #2 SPALLING MAT MISSING (007)
Pavement	G F (P) C	APP#1 SPALLING @ JOINT (001)
Embankment	(G) F P C	
Drains	G F (P) C	APP#1 LT SIDE (009)

**TRAFFIC SAFETY FEATURES**

	Rating	STANDARD/ SUB-STANDARD	Comments
Bridgerailing	G (F) P C	(X) ( )	
Transitions	(G) F P C	( ) (X)	
Guardrail	(G) F P C	( ) (X)	
Guardrail Terminal	(G) F P C	( ) (X)	

**SIGNING**

	YES	NO	NEEDED	Weight Limit Posted
Paddleboards	( )	(X)	( )	YES ( ) NO (X)
Vertical Clearance (<14'-6")	( )	(X)	( )	Gross..... Tons
NARROW ( )	( )	(X)	( )	2 Axle..... Tons
ONE LANE BRIDGE ( )	( )	(X)	( )	3 or more Axles.. Tons

Other Signs or Plaques: OVERHEAD ON LT SIDE SPAN#1 - 79-2821-5.32

Comments Regarding any Problems with Signing:

NO SIGN



Form BIR 3.2  
(Rev. 9-22-98)  
DT-0081

Bridge Location No. 79 - 10040 - 7.59 L  
Co. Route Log Mile

SEP 12 2001  
Date

**DECK**

	Rating	Comments
Wearing Surface	G <u>F</u> P C	
Deck - Structural Condition	G <u>F</u> P C	
Curbs	G F P C	
Median	G F P C	
Sidewalks	G <u>F</u> P C	
Parapet	G <u>F</u> P C	
Railing	G F P C	
Paint	G F P C	
Drains	G F P C	
Lighting Standards	G F P C	
Utilities	<u>G</u> F P C	
Joint Leakage	<u>G</u> F P C	
Expansion Joints	G F P C	

**SUPERSTRUCTURE**

Bearing Devices	G <u>F</u> P C	
Beams	G <u>F</u> P C	
Girders	G F P C	
P C C S	G F P C	
BOLTS (PCCS)	G F P C	
Floor Beams	G F P C	
Stringers	G F P C	
Diaphragms	G F P C	
Bracing	G F P C	
Trusses - General	G F P C	
Portals	G F P C	
Bracing	G F P C	
Paint	G F P C	
Alignment of Members	<u>G</u> F P C	

**TEXTURE COAT**

Condition Rating	G F <u>P</u> C	(069)	Fading	G F <u>P</u> C
Overall Appearance	G F <u>P</u> C		Needs Spot Painting	YES ( ) NO (x)
Staining Rating	G F <u>P</u> C		Needs Repainting	YES (x) NO ( )
Comments				
RECOMMENDATIONS:	Scaling Rating G F <u>P</u> C			
	CLEAN SEAL JOINTS ( )			
	CLEAN DRAINS ( )			

**SUBSTRUCTURE**

PILES TO BE  
REPLACED

**ABUTMENTS**

	Rating	Comments	PILE(S)	ABUTMENT
Caps	G <u>F</u> P C			
Breastwall	G F P C			
Wings	G <u>F</u> P C			
Backwall	G F <u>P</u> C	ABUT #2 LT SIDE SPALLING		171
Plumb	<u>G</u> F P C			
Footing	G F P C			
Piles	G F P C			
Embankment	G <u>F</u> P C			
Bearing	<u>G</u> F P C			
Slope Paving	G <u>F</u> P C			
Rip Rap	G F P C			
Earthquake Devices	<u>G</u> F P C			

**LIGHTS**

**PIERS**

	Rating	Comments	PILE(S)	PIER
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	G F P C			
Web	G F P C			
Earthquake Devices	G F P C			

**BENTS**

	Rating	Comments	PILE(S)	BENT
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	G F P C			
Bracing	G F P C			
Earthquake Devices	G F P C			

Piles Need Replacement: NO (x) YES ( )

CUT VEGETATION NO (x) YES ( )

CLEAR DRIFT NO (x) YES ( )

RECOMMENDATIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

--over/  
under

Railroad/Walkway

Co.

Route

Log Mile

Co.

Route

Log Mile

79- 02821- 0532

Co.

Route

Log Mile

County Shelby

Structure Name (If Named) \_\_\_\_\_

Year Constructed \_\_\_\_\_

Year Widened \_\_\_\_\_

Year Rehabilitated \_\_\_\_\_

**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 26 ft. (Does Not Include Shoulders)Width of Median if Divided Highway N/A ft.Approach Shoulder Width N/A ft. RightN/A ft. Left\*Horizontal Clearance Under Bridge 86 ft.0 IN.\*Distance Between Pier Protection  
Guardrail and SubstructureN/A ft. RightN/A ft. Left

\*Width of Sidewalk Under Bridge

5' ft. Right5' 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 (X) NEEDED ( )

Vertical Clearance (&lt;14'-6") YES ( ) NO (X) NEEDED ( )

Narrow Passage YES ( ) NO (X) NEEDED ( )

One Lane Passage YES ( ) NO (X) NEEDED ( )

Other Underpass Signs Needed

**INSPECTORS**

1. REEVES
2. \_\_\_\_\_
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 85.4°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

Number of Lanes/Tracks on Bridge 6 Angle to Centerline of Bridge)**BRIDGE CONDITION:**G F P CDoes Potential Exist for Elements from Bridge Falling on Roadway Beneath YES ( ) NO (☒)Does Potential Exist Because of Deteriorated Condition or Failure of Major Member YES ( ) NO (☒)

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

Inspection Team's Summary

Bridge Location No. 79 - 10040 - 7.59 L

Inspection Date 9-12-01

Bridge Rating FAIR

SEP 12 2001

THIS ONE SPAN CONC. BOX BEAM WITH CONC.  
SUBSTRUCTURE BRIDGE IS IN FAIR CONDITION.  
ALL TRAFFIC SAFETY FEATURES ARE PRESENT.  
APP #1 & #2 JOINT & APP. #1 PAVEMENT IS  
SPALLING, CRACKING, & SETTLED. APP. #1 LT. DRAIN  
IS 100% FILLED WITH DEBRIS. APP. #2 RT.  
PARAPET IS SPALLING AT JOINT. ABUT. #2 LT.  
BACKWALL IS SPALLED TO STEEL. THE MINIMUM  
VERTICAL CLEARANCE IS 16'3"

Dewk Bp2

Cross Section: yes ( ) no (X)

Pontis: yes ( ) no (X)

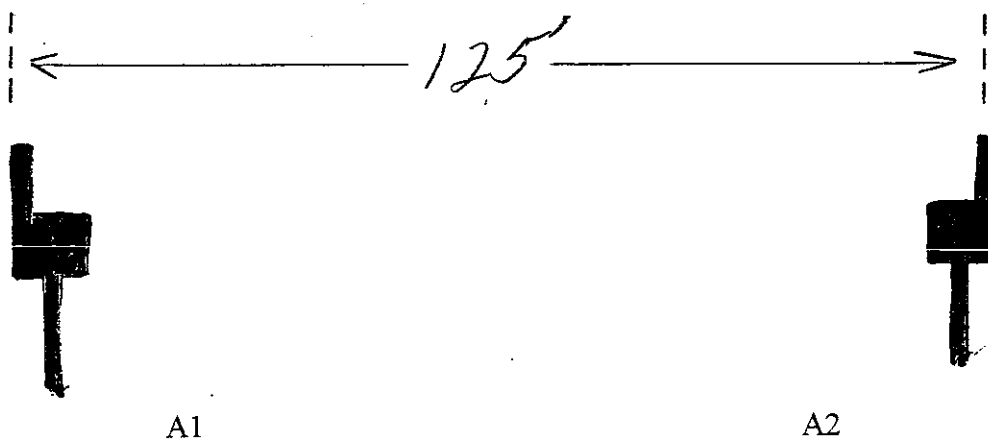
2001

BRIDGE NO. 29 10040 0.594 SKEW \_\_\_\_\_  
CO. ROUTE L. M. (LOG) km

A1

A2

F = FIXED  
E = EXPANSION  
S = SIMPLE  
C = CONTINUOUS



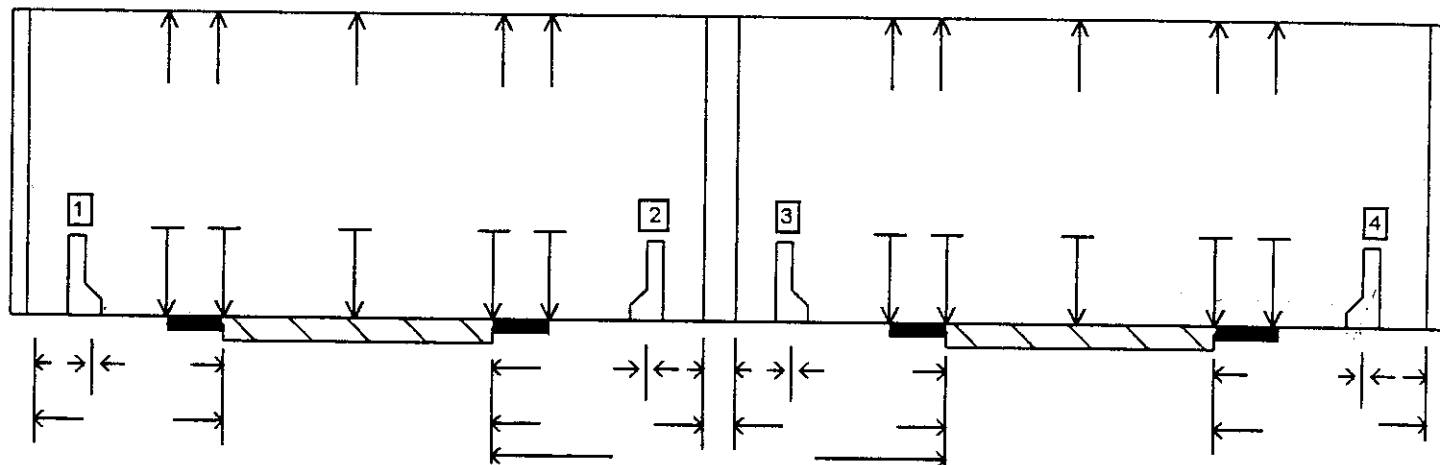


BRIDGE LOC. NO. 79 I0040 0759 L  
 CO. ROUTE L. M. L/R

DATE: 2001

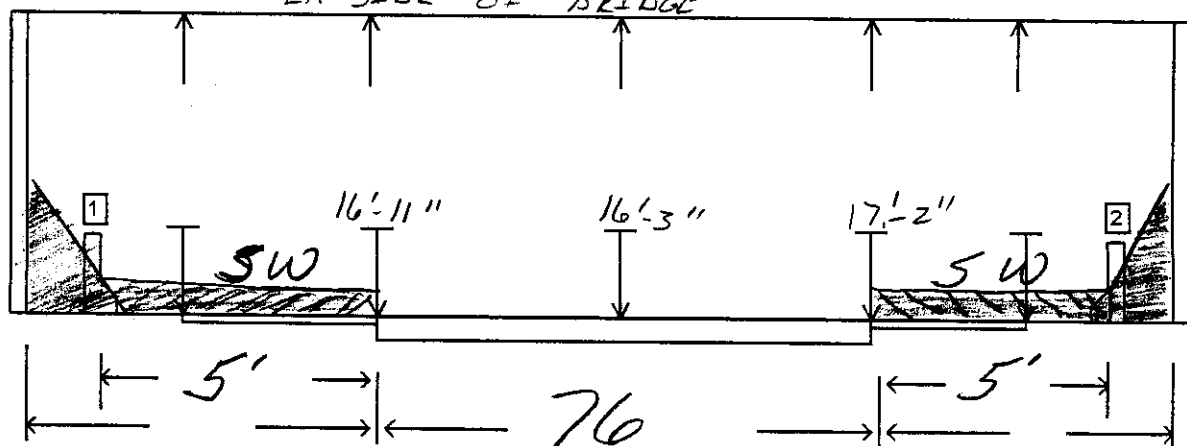
# LATERAL AND VERTICAL CLEARANCES

BENT/ABUT. \_\_\_\_\_ BENT \_\_\_\_\_ BENT/ABUT. \_\_\_\_\_

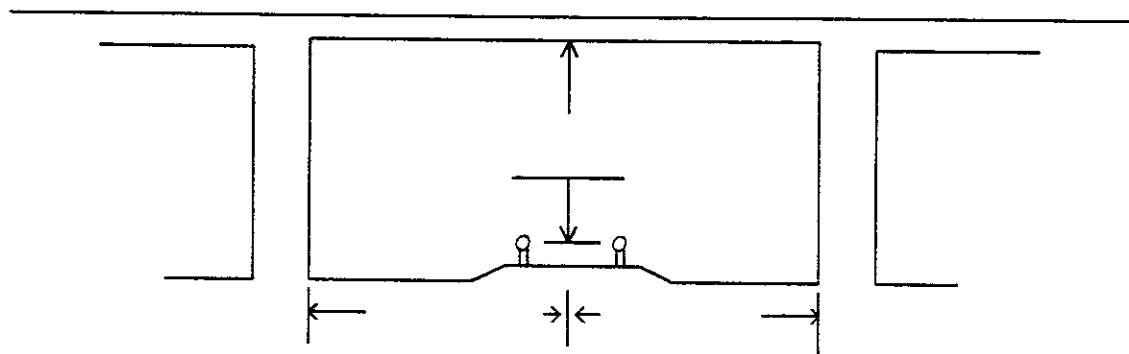


- |                       |         |     |               |     |      |                                     |
|-----------------------|---------|-----|---------------|-----|------|-------------------------------------|
| 1. RAIL/BARRIER TYPE: | W-SHAPE | [ ] | CONC. BARRIER | [ ] | NONE | <input checked=""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

BENT/ABUT. 1 LT. SIDE OF BRIDGE BENT/ABUT. 2 RT

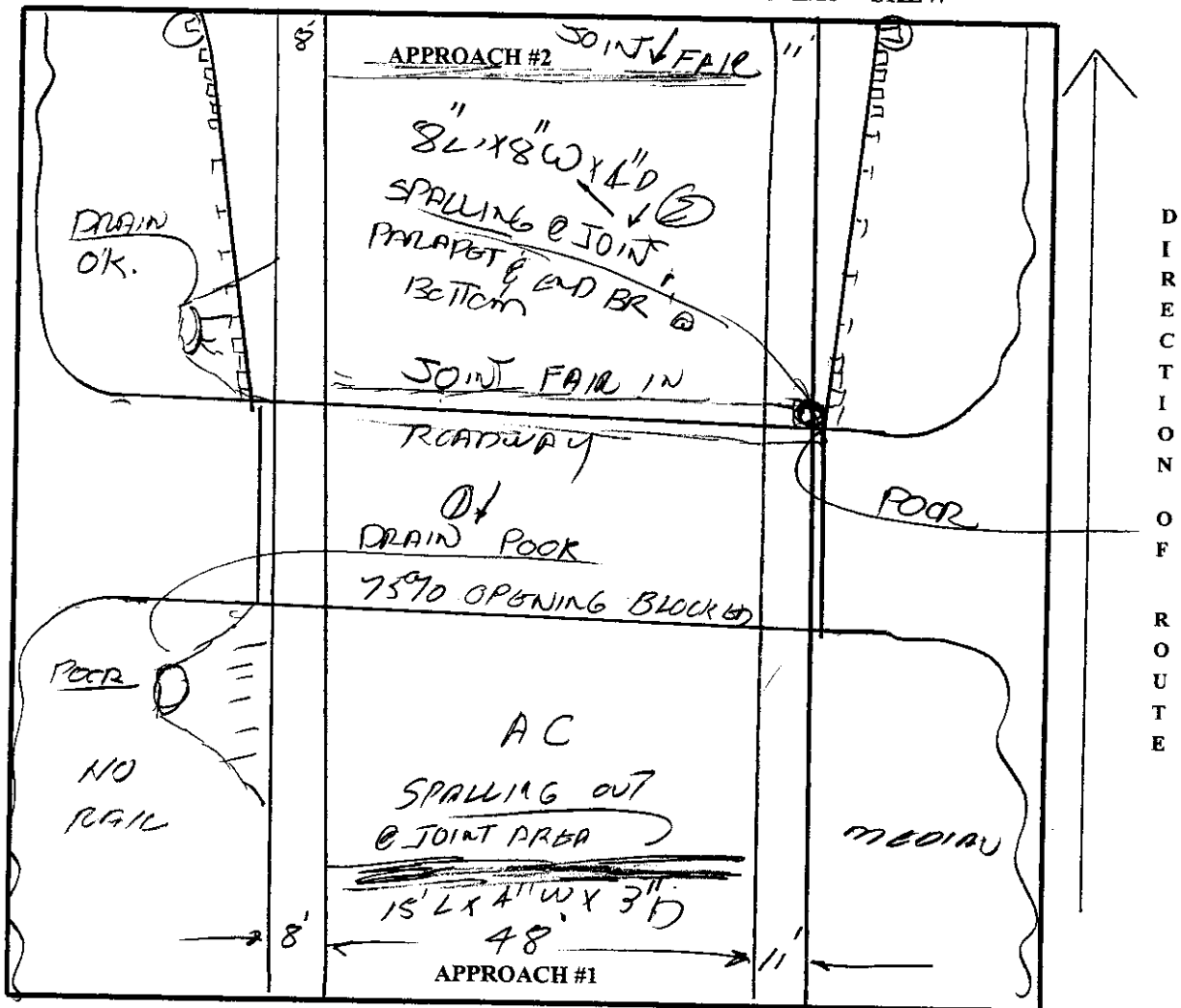


BENT/ABUT. \_\_\_\_\_ BENT/ABUT. \_\_\_\_\_



SEP 12 2001

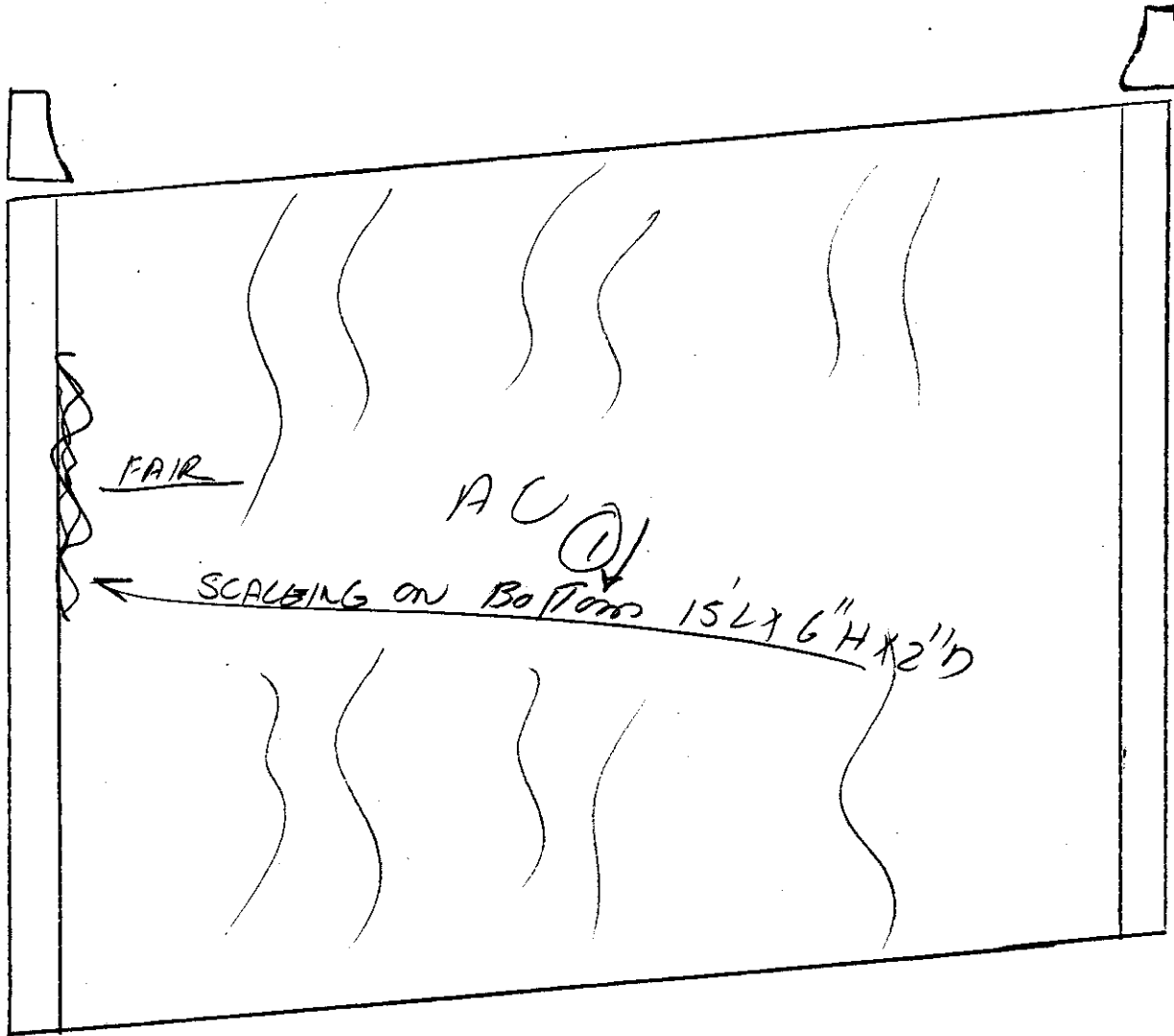
BRIDGE NO.: 79I00400074 79 I0040 0759 L 85L DATE: \_\_\_\_\_  
CO. ROUTE LOG MILE L/R SKEW



ELEMENT	RATING	COMMENTS
---------	--------	----------

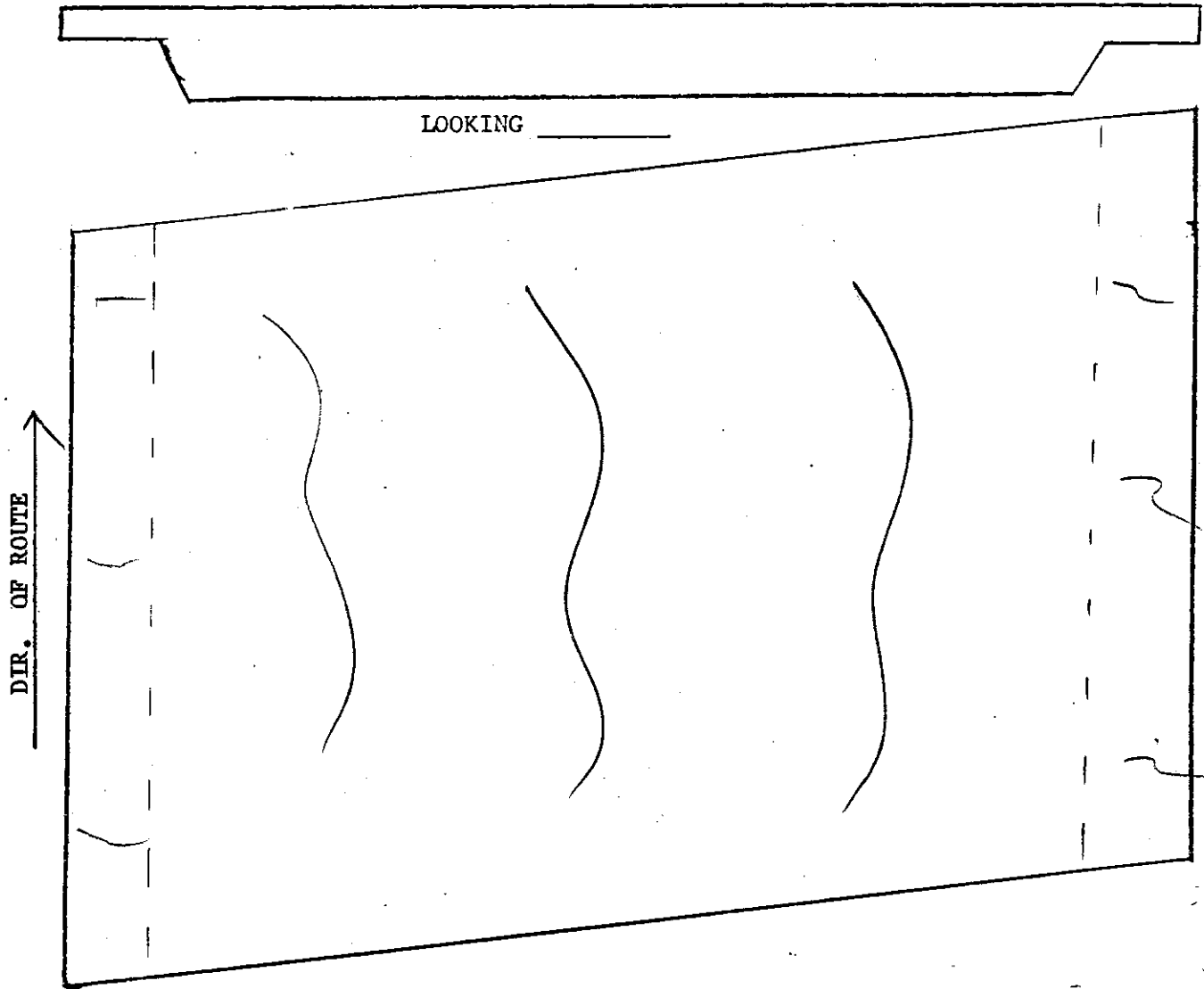
ALIGNMENT	(G) F P C	
APPROACH PAVEMENT	G F (P) C	APP #1 SPALLING @ JOINT
APPROACH SLAB	G F P C	N/Y
APPROACH GUARDRAIL	(G) F P C	
EMBANKMENT	(G) F P C	
DRAINS	G F (P) C	APP #1 LT SEE (1)
APPROACH JOINT	G F (P) C	APP #1 FILLER MISSING #2 SEE (2)
SIGNS	(G) F P C	N/ONT

BRIDGE NO. 79 I 40 7.59 <sup>LT</sup> W.B.L. SK. RT. SPAN NO. 1 SEP 12 2001



DECK	G (F) P C	RUTTED
PARAPET	G (F) P C	MED POINTS - SEEB (1)
DRAINS	G F P C	N/A
JOINT	G F P C	N/A

BRIDGE NO. 79 I 40 7.59 <sup>LT</sup> W.B.L. SK.        RT.        SPAN NO. 1

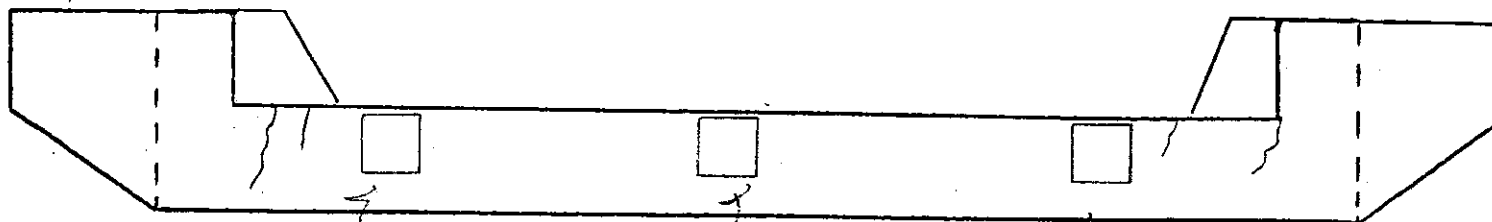


ELEMENT	RATING	COMMENT
BOTTOM DECK	G(Ⓕ) P C	FINE CRACKS

BRIDGE NO. 79 I 40 759 WBL. ABUT. NO. 1

SEP 12 200

LOOKING BACK



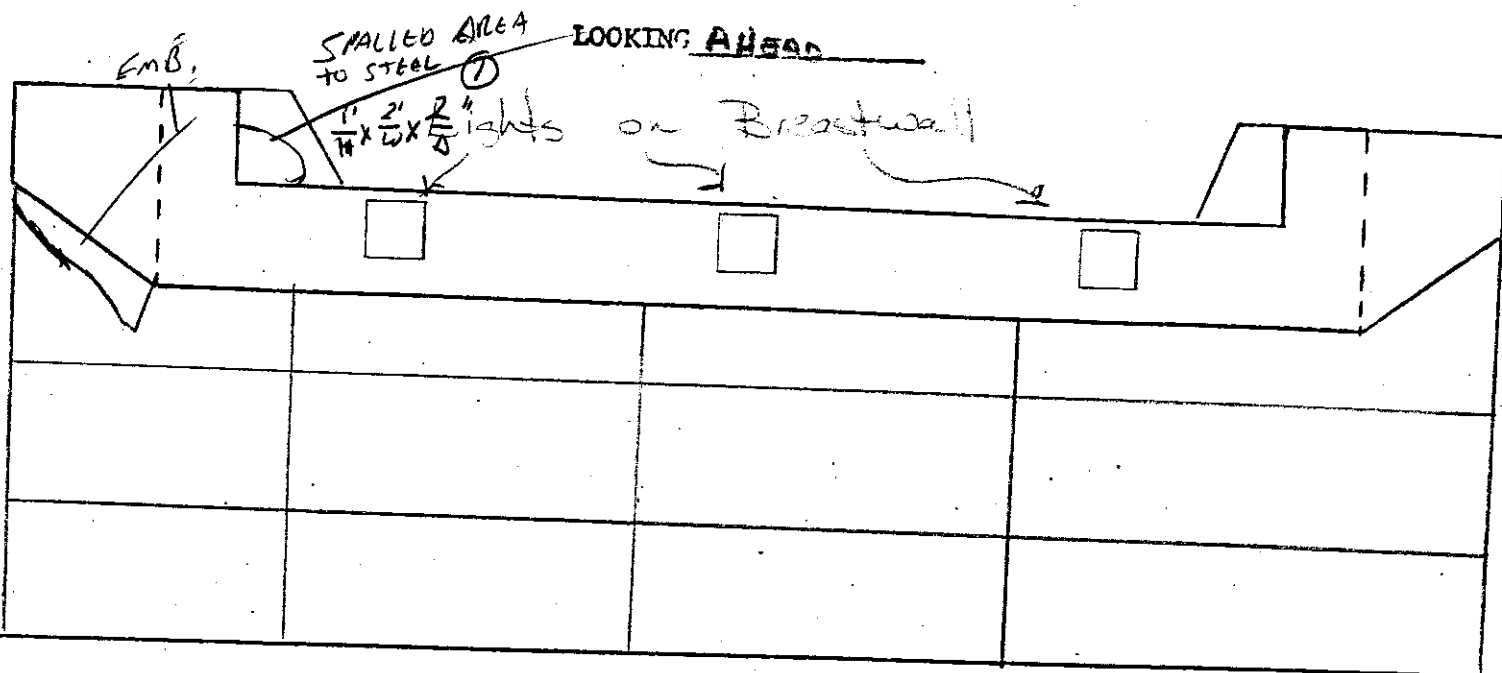
Lights on Breastwall

Slope pavement

LEMENT	RATING	COMMENTS
BEARING	G F P C	N/A
PAINT	G <u>F</u> P C	SCALLING
CAP	G <u>F</u> P C	1/4" OPEN CRACKS W/ EFF ACTION
WINGS	G <u>F</u> P C	FINE CRACKS W/ EFF ACTION
EMB.	<u>G</u> F P C	
VEG.	G <u>F</u> P C	MODERATE GROWTH
RIP-RAP	G F P C	N/A
SLOPE PAV.	G <u>F</u> P C	FINE CRACKS
BACKWALL	G <u>F</u> P C	FINE CRACKS
LIGHTS	<u>G</u>	



BRIDGE NO. 79 I-40 259 W.B.L. ABUT. NO. 2



ELEMENT	RATING	COMMENTS
BEARING	G F P C	
PAINT	G F P C	SCALLING
CAP	G F P C	FINE CRACKS
WINGS	G F P C	
EMB.	G F P C	WASHING BESIDE WING $\frac{15'}{2} \times \frac{6''}{12} \times \frac{1'}{12}$ LT. SIDE
VEG.	G F P C	MODERATE GROWTH
RIP-RAP	G F P C	N/A
SLOPE PAV.	G F P C	
BACKWALL	G F P C	SLG ①
LIGHTS	②	
EARTHQUAKE	②	



STATE OF TENNESSEE  
**DEPARTMENT OF TRANSPORTATION**  
BRIDGE INSPECTION AND REPAIR OFFICE  
NASHVILLE, TENNESSEE 37243-0338  
January 5, 1998

Mr. Jim Moore  
Program Scheduling Section  
Suite 600, James K. Polk Bldg.  
Nashville, TN. 37243

RE: Contract Maintenance – In House  
Construction No. 79959-4152-04  
Bridge No. 79-140-9.50 (R & L lane) / Wolf River  
Bridge No. 79-140-8.25 (R & L lane) / I.C.R.R.  
Bridge No. 79-140-7.60 (R & L lane) / Hollywood  
St.  
Bridge No. 79-140-5.09 (R & L lane) / Wolf River  
Bridge No. 79-4186-2.11 / I40  
Bridge No. 79-2819-4.93 / I40  
Shelby County

Dear Mr. Moore

We request scheduling the above Contract Maintenance Bridge Repair project for the May 1, 1998, letting.

**PROPOSED REPAIRS:**

- 1) Place seismic restraints on bridges.

If we can be of any further assistance, please contact us.

Sincerely,

*BRIAN EGLE*

( for )  
Hollis I. Tackitt,  
Civil Engineering Manager II  
Bridge Inspection and Repair

BKE:bke

cc: Mr. Ed Wasserman  
Mr. Paul Sharp ✓  
Mr. Wayne Seger  
File

## ESTIMATED QUANTITIES

PROJECT NO.		YEAR	SHEET NO.																								
79959-4152-04		1998	2																								
<p align="center"><b>REVISIONS</b></p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>BRIEF DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4-6-98</td> <td>BKE</td> <td>REVISED QUANTITY &amp; ADDED NOTE</td> </tr> <tr> <td>2</td> <td>5-8-98</td> <td>BKE</td> <td>ADDED GENERAL NOTE</td> </tr> <tr> <td>3</td> <td>5-15-98</td> <td>BKE</td> <td>ADDED GENERAL NOTE</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				NO.	DATE	BY	BRIEF DESCRIPTION	1	4-6-98	BKE	REVISED QUANTITY & ADDED NOTE	2	5-8-98	BKE	ADDED GENERAL NOTE	3	5-15-98	BKE	ADDED GENERAL NOTE								
NO.	DATE	BY	BRIEF DESCRIPTION																								
1	4-6-98	BKE	REVISED QUANTITY & ADDED NOTE																								
2	5-8-98	BKE	ADDED GENERAL NOTE																								
3	5-15-98	BKE	ADDED GENERAL NOTE																								

[illegible]

## GENERAL NOTES

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (MARCH 1, 1995 EDITION)

DESIGN SPECIFICATIONS: AASHTO 1992 EDITION WITH ADDENDA.

STRUCTURAL STEEL: SHALL CONFORM TO AASHTO M270 GRADE 36 (ASTM A709 GRADE 36)  
UNLESS OTHERWISE NOTED.

REINFORCING STEEL: SEE THE STANDARD SPECIFICATIONS.

ROUTED BARS IN DRILLED HOLES: HORIZONTALLY DRILLED HOLES SHALL BE DRILLED 1/2" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH NON-SHRINK GROUT AND BAR DRIVEN TO ITS SEAT. VERTICALLY DRILLED HOLES SHALL BE DRILLED 1/4" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT AND BAR DRIVEN TO ITS SEAT. ALL GROUTING MATERIAL SHALL BE APPROVED BY T.D.O.T. MATERIALS AND TESTS.

SHOP DRAWINGS: SHALL BE SUBMITTED ACCORDING TO SPECIAL PROVISION NO. 105A.  
EXCEPT SHOP DRAWINGS SHALL BE SUBMITTED TO THE HEADQUARTERS BRIDGE INSPECTION  
AND REPAIR OFFICE IN LIEU OF THE DIVISION OF STRUCTURES.

BOLTS: SHALL BE HIGH TENSILE STRENGTH BOLTS (ASTM-A325), UNLESS OTHERWISE NOTED. SIZE TO BE AS NOTED ON PLANS. SEE AASHTO SPECIFICATIONS; ARTICLE 11.5.6 DIVISION 11. EXISTING CONTRACT SURFACES SHALL BE CLEANED TO SSPC-10 SPECIFICATIONS PRIOR TO ATTACHMENT OF NEW MEMBERS.

CONCRETE: TO BE CLASS 'A' CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

CONCRETE CURING: ALL CONCRETE IN REPAIR AREAS SHALL BE CURED ACCORDING TO THE STANDARD SPECIFICATIONS.

WELDING: ANSI/AASHTO/AWS D1.5-88 BRIDGE WELDING CODE AND THE STANDARD SPECIFICATIONS.

SPECIAL NOTE TO CONTRACTOR: CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURE NECESSARY TO INSURE THAT NO DEBRIS IS DROPPED INTO THE STREAM. ANY DEBRIS WHICH IS ALLOWED TO DROP ON THE BANKS BELOW THE BRIDGE SHALL NOT BE ALLOWED TO ENTER THE STREAM AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. COST OF REMOVING AND DISPOSING OF DEBRIS SHALL BE INCLUDED IN ITEMS BID ON.

NOTE: ALL STRUCTURAL STEEL FOR SEISMIC RESTRAINER AND LATERAL RESTRAINERS, EXCEPT FOR NON-CORROSIVE WIRE ROPE AND THIMBLES, SHALL BE FABRICATED BY AISC, SIMPLE SPAN BRIDGES CATEGORY, CERTIFIED SHOP.

# CONST. WORK ZONE TRAFFIC CONTROL

ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF SIGN FACE IS FULLY COVERED

IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPERATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) S.F. AND 712-06.10, NEW SIGNS (CONSTRUCTION) S.F.

A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS FLAGGER SIGNS MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS THIRY (30) FEET SETBACK, THE ENGINEER SHALL APPROVE ALTERNATE LOCATIONS.

THE CONTRACTOR WILL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC, UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS THIRTY (30) FEET SETBACK, THE ENGINEER SHALL APPROVE ALTERNATE LOCATIONS.

# GALVANIZING OF NEW STEEL

ALL NEW STEEL SHALL BE GALVANIZED TO ASTM A123 STANDARDS.

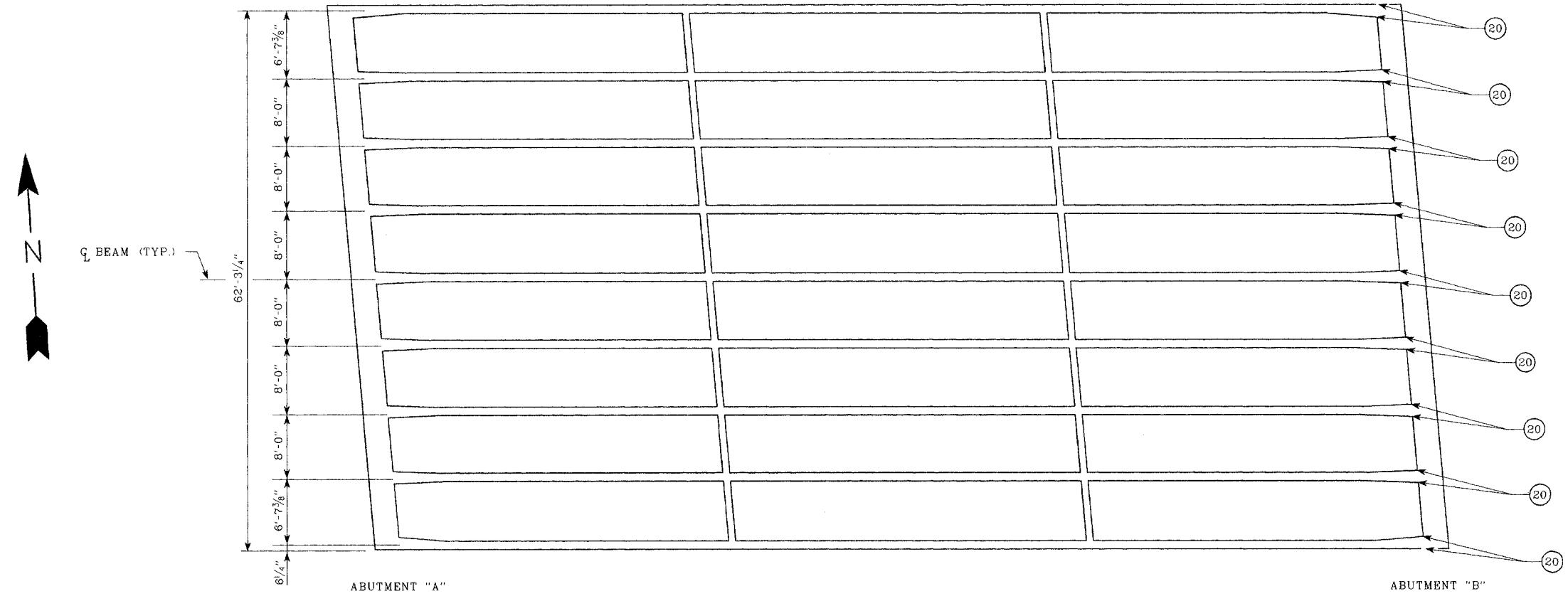
NOTE: ROADSIDE BANKS/SLOPES USED BY THE CONTRACTOR FOR WORK ACCESS, PARKING, AND ANY OTHER OPERATIONS THAT ARE DISTURBED BY HIS OPERATIONS SHALL BE REPAIRED BY REGRADING, RESEEDING, MULCHING OR WHATEVER MEANS ARE NECESSARY TO RESTORE THE BANKS/SLOPES TO THE ORIGINAL CONDITION. ALL RESTORATION WORK SHALL MEET THE FULL SATISFACTION OF THE ENGINEER. COST OF ALL RESTORATION WORK SHALL BE INCLUDED IN ITEMS BID ON.

DESIGNED BY	<u>BRIAN EGLI</u>	DATE	<u>01/1998</u>
DRAWN BY	<u>SCOTT C. NELSON</u>	DATE	<u>01/1998</u>
SUPERVISED BY	<u>M. LAWSON &amp; T. CHRISTIANSON</u>	DATE	<u>01/1998</u>
CHECKED BY	<u>M. LAWSON &amp; B. EGLI</u>	DATE	<u>02/1998</u>

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ESTIMATED QUANTITIES  
AND  
GENERAL NOTES

BRIDGE NO. 79-140-5.09 (L&R)  
BRIDGE NO. 79-2819-4.93  
BRIDGE NO. 79-140-7.60 (L&R)  
BRIDGE NO. 79-140-8.25 (L&R)  
BRIDGE NO. 79-4186-2.11  
BRIDGE NO. 79-140-9.50 (L&R)  
SHELBY COUNTY  
1998

PROJECT NO.		YEAR	SHEET NO.
79959-4152-04		1998	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-6-98	BKE	REVISED LIST OF DRAWINGS
2	4-15-98	BKE	REVISED LIST OF DRAWINGS
3	5-8-98	BKE	REVISED LIST OF DRAWINGS
4	5-15-98	BKE	REVISED LIST OF DRAWINGS



NOTE:  
DIMENSIONS GIVEN ARE RADIAL DIMENSIONS.  
MEASUREMENTS ARE ACROSS BOTTOM OF BRIDGE.

PLAN  
(EASTBOUND)

LEGEND  
(20) DENOTES SEISMIC RESTRAINT TYPE (20). SEE DRAWING BR-33-45 AND BR-33-46 FOR DETAILS.

BRIDGE NO. 79I00400073 &  
79I00400074

LIST OF DRAWINGS

DRAWING NO.	LAST REV. DATE	DRAWING
BR-33-34	5-15-98	SEISMIC RESTRAINER LAYOUT
BR-33-29	5-15-98	ESTIMATED QUANTITIES AND GENERAL NOTES
BR-33-45	4-15-98	LATERAL RESTRAINER DETAILS TYPE (20)
BR-33-46	4-15-98	LATERAL RESTRAINER DETAILS TYPE (20) CONTINUE
BR-33-49	5-8-98	BOLT INSTALLATION

LIST OF REFERENCE DRAWINGS  
(TO BE PRINTED WITH PLANS)

DRAWING NO.	DRAWING
M-44-33, M-44-36 THRU 38, M-44-41 THRU 43	EXISTING BRIDGE DRAWNGS

LIST OF SPECIAL PROVISIONS

NO.	LAST REV. DATE	REGARDING
105A	**	APPROVAL OF SHOP DRAWINGS

\*\* DENOTES CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.

GENERAL SCOPE OF WORK

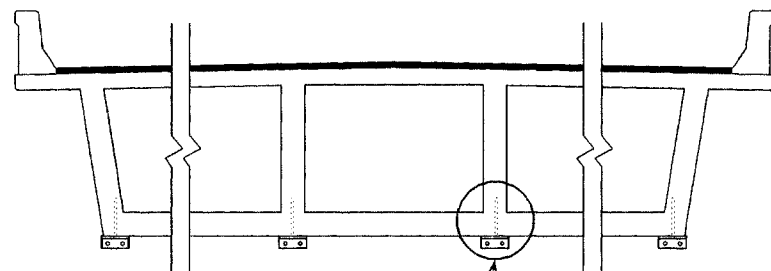
1) PROVIDE WIRE ROPE SEISMIC RESTRAINTS AT ABUTMENT "B" (TYPE 20).  
REFER TO LEGEND AND PLAN VIEW FOR DESCRIPTION AND LOCATIONS.



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
SEISMIC RESTRAINER LAYOUT  
INTERSTATE 40 (EASTBOUND) OVER  
NORTH HOLLYWOOD STREET  
BRIDGE NO. 79-140-7.60  
SHELBY COUNTY  
1998

DESIGNED BY Brian Egle DATE September, 1997  
DRAWN BY Cory Hufkins DATE December, 1997  
SUPERVISED BY Mike Lawson, J. Christianson DATE December, 1997  
CHECKED BY Mike Lawson, Brian Egle DATE February, 1998

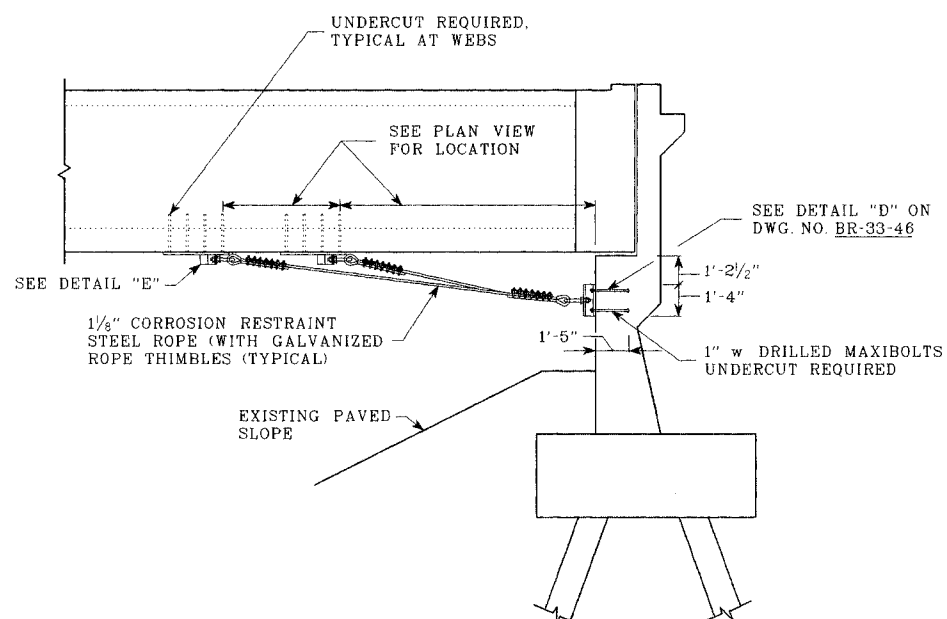
PROJECT NO.	YEAR	SHEET NO.	
79959-4152-04	1998		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-15-98	EKE	ADDED CUTS TO U-BOLTS



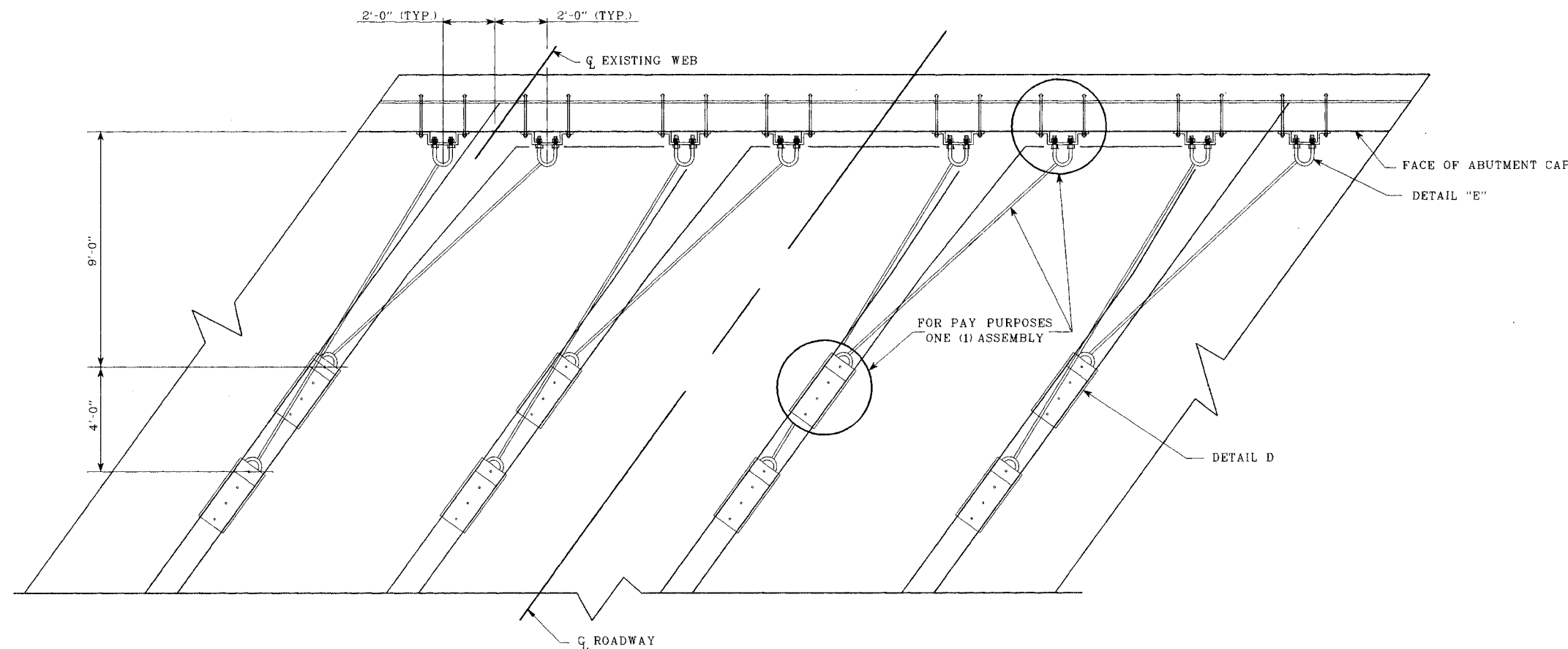
SEE DETAIL "E" ON  
DWG. NO. BR-33-46 (TYP.)

### CROSS SECTION

SHOWING SEISMIC RESTRAINTS AT WEBS TYPICAL AT BRIDGE NUMBERS:  
(79-140-7.60 (8 CELLS), 79-2819-4.93 (8 CELLS) & 79-4186-2.11 (9 CELLS))



### SEISMIC RESTRAINTS AT ABUTMENTS



### PLAN SHOWING SEISMIC RESTRAINTS LOCATIONS



#### NOTES:

THESE DETAILS ARE APPLICABLE FOR THE FOLLOWING BRIDGES:  
79-140-7.60, 79-2819-4.93 & 79-4186-2.11

FOR ADDITIONAL SEISMIC DETAILS, SEE DWG. NO. BR-33-46.



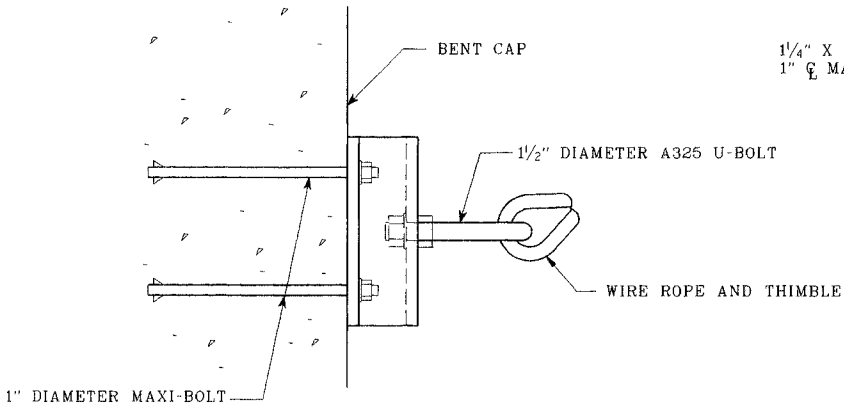
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
SEISMIC RESTRAINER DETAILS  
TYPE (20)  
SHELBY COUNTY  
1998

DESIGNED BY Brian Egli DATE September, 1997  
DRAWN BY Cory Haugins DATE December, 1997  
SUPERVISED BY Mike Lawson, J. Christensen DATE December, 1997  
CHECKED BY Mike Lawson, Brian Egli DATE February, 1998

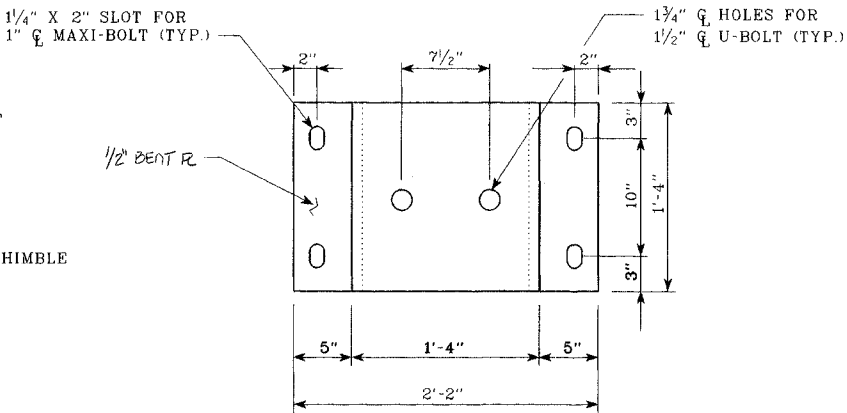
## SEISMIC RESTRAINT - BOX GIRDERS TYPE (20)

BR-33-45

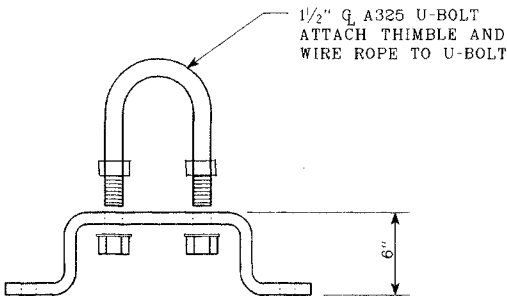
PROJECT NO.		YEAR	SHEET NO.
79959-4152-04		1998	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-15-98	BKE	ADDED NUT TO U-BOLT



DETAIL "D"



PLAN OF DETAIL "D"



SECTION OF DETAIL "D"

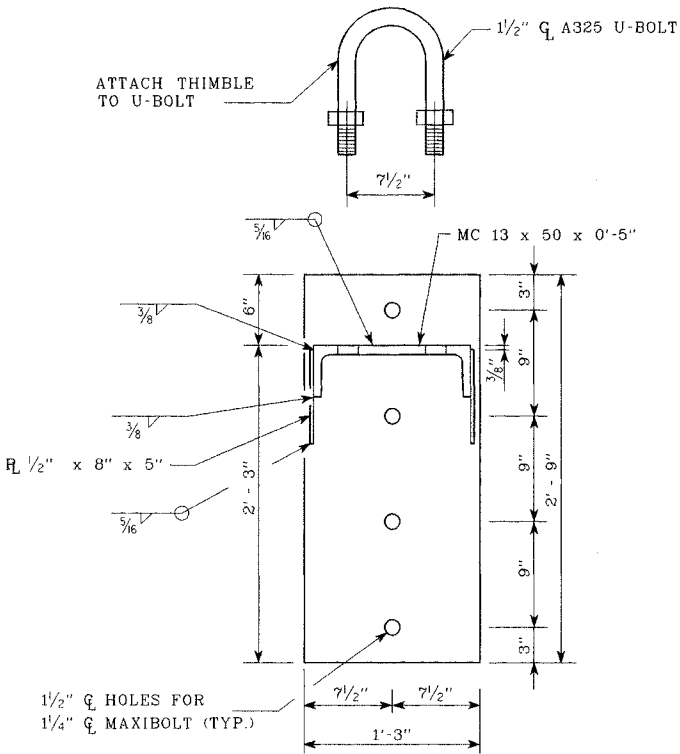
NOTES:

PROVIDE TYPE 20 SEISMIC RESTRAINTS AT BOTH ABUTMENTS AT BRIDGE NO. 79-2819-4.93 (36 ASSEMBLIES REQUIRED). ONE ABUTMENT AT BRIDGE NO.'S 79-140-7.60 (36 ASSEMBLIES REQUIRED) AND 79-4186-2.11 (40 ASSEMBLIES REQUIRED).

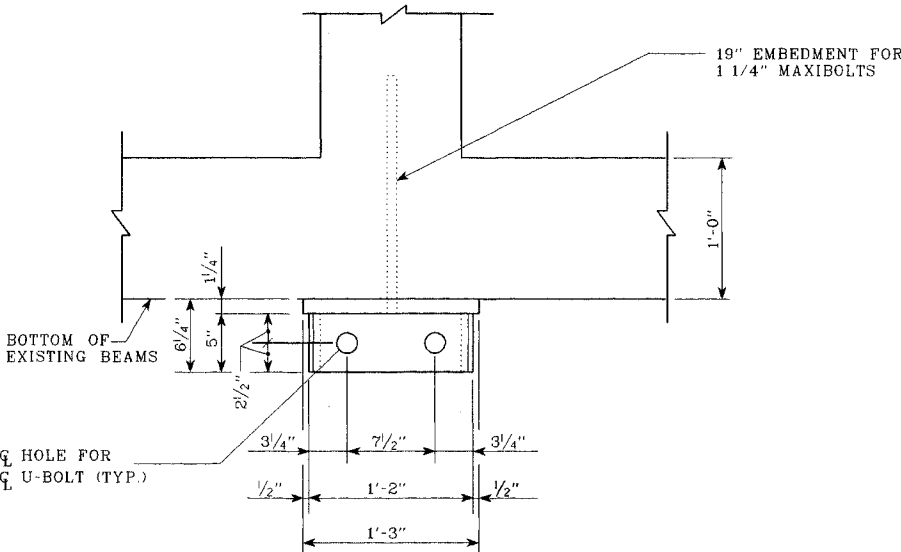
ALL STRUCTURAL STEEL PLATE AND SHAPES SHALL MEET ASTM A36, AND BOLTS AND RODS SHALL MEET ASTM A325. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE COST OF ALL LABOR AND MATERIALS REQUIRED FOR COMPLETE INSTALLATION OF TYPE 20 SEISMIC RESTRAINT IS TO BE INCLUDED IN THE PRICE BID FOR ITEM NO. 604-03.60, BRIDGE JOINT SEISMIC MODIFICATION, EACH ONE (1) WIRE ROPE AND ACCOMPANYING PLATES, BOLTS, NUTS, RODS, AND WASHERS IS CONSIDERED ONE ASSEMBLY.

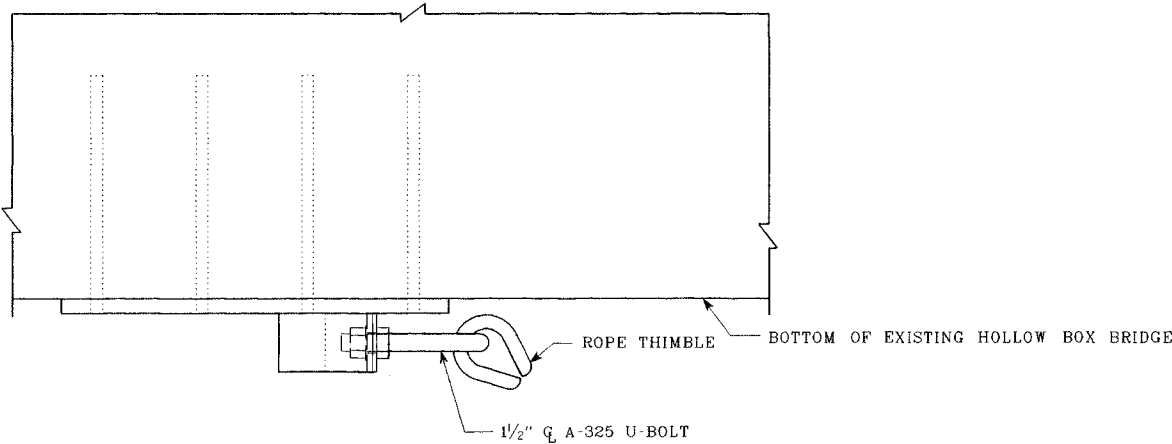
FOR PROCEDURES REGARDING THE INSTALLATION OF ANCHOR BOLTS SEE DWG. NO. BR-33-49.



PLAN OF DETAIL "E"



END VIEW OF DETAIL "E"



DETAIL "B"



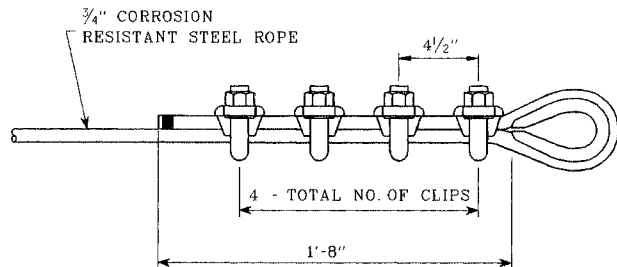
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
SEISMIC RESTRAINER DETAIL  
TYPE 20  
SHELBY COUNTY  
1998

# SEISMIC RESTRAINT - BOX GIRDERS TYPE 20 (CONTINUED)

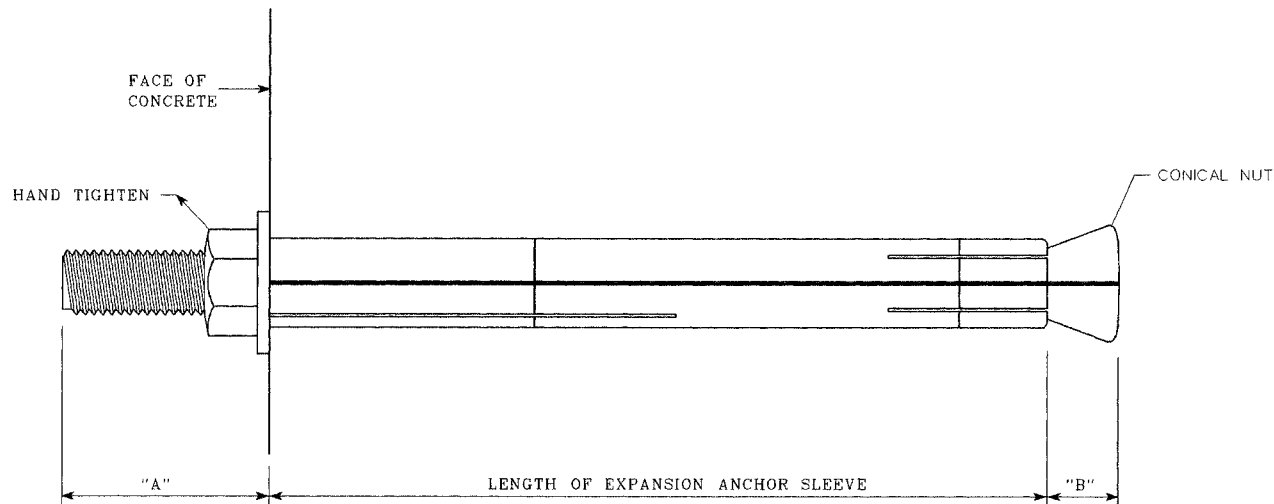
DESIGNED BY Brian Egli DATE September, 1997  
DRAWN BY Conn. Hawkins DATE December, 1997  
SUPERVISED BY Mike Lawson, J. Christensen DATE December, 1997  
CHECKED BY Mike Lawson, Brian Egli DATE February, 1998



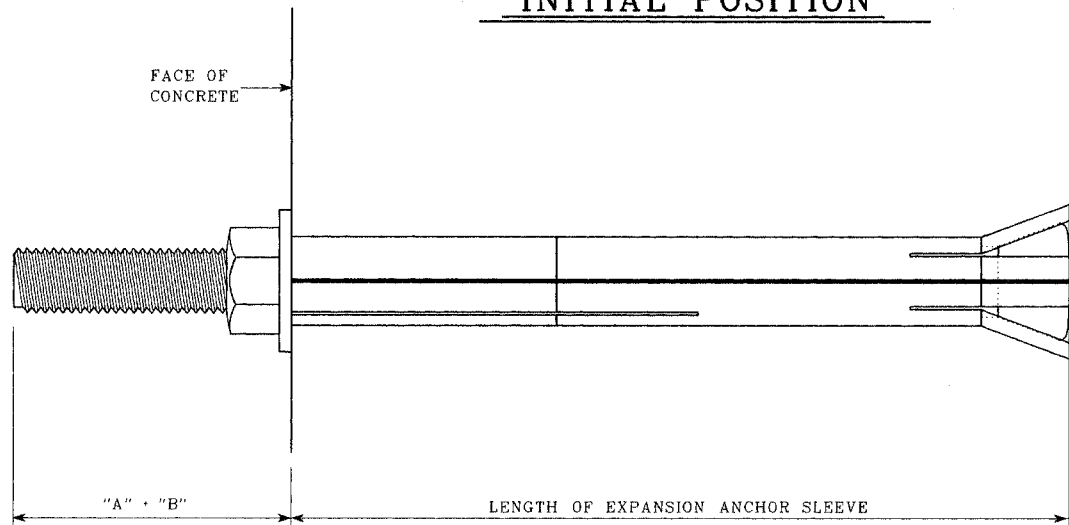
PROJECT NO.	YEAR	SHEET NO.	
79959-4152-04	1998		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	5-8-98	B.K.E.	REVISED SHEET



WIRE ROPE CLIPS



INITIAL POSITION



SET POSITION

### PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS:

(3/4" DIAMETER DRILLCO MAXI-BOLT OR WILLIAMS BOLTS)(UNDERCUTTING REQUIRED)

- LOCATE PLACEMENT OF EXISTING REBAR IN VICINITY OF ANCHORS WITH A REBAR LOCATING DEVICE AND MAKE NECESSARY CORRECTIONS IN LOCATIONS OF ANCHORS ON CONCRETE. ANCHOR LOCATION MAY VARY PLUS OR MINUS 3 INCHES IN ANY DIRECTION BUT THE HOLE SHALL BE DRILLED WITHIN 6 DEGREES OF PERPENDICULAR TO THE NOMINAL CONCRETE SURFACE. CUTTING OF REBAR WILL BE ALLOWED.
- HOLES SHALL BE DRILLED WITH A CARBIDE PERCUSSION DRILL BIT, A "REBAR EATER" BIT OR A DIAMOND CORE BIT.
- THE DRILL BIT DIAMETER AND HOLE DEPTHS ARE SPECIFIED AS FOLLOWS:
  - THE MAXIMUM DRILL BIT DIAMETER SHALL NOT EXCEED 1.172 INCH DIAMETER.
  - THE HOLE DEPTH SHALL NOT BE LESS THAN THE ANCHOR EMBEDMENT PLUS 1/2 INCHES BUT MAY EXCEED THE SPECIFIED HOLE DEPTH BY NOT MORE THAN 1 INCH.
- IF AN ANCHOR MUST BE RELOCATED AND A NEW HOLE DRILLED, THE OLD HOLE SHALL BE REPAIRED WITH A NON-SHRINKAGE PACK GROUT.
- UNDERCUT IN PRIMARY HOLE SHALL BE AS SPECIFIED BY THE MANUFACTURER OF THE UNDERCUTTING TOOL.
- CLEAN THE HOLE OF CONCRETE DUST AND DEBRIS USING OIL FREE COMPRESSED AIR OR BY VACUUMING. PLACE BEARING SLEEVE FLUSH WITH THE CONCRETE SURFACE.
- THE EXPANSION SLEEVE IS TO EXPAND INTO THE UNDERCUT CREATED BY THE UNDERCUTTING TOOL THEREFORE THE ANCHOR TUBE MUST TERMINATE AT THE BASE OF THE UNDERCUT SECTION.
- TO SET THE ANCHOR, IT IS NECESSARY TO DRAW THE CONICAL NUT OF THE STUD BOLT INTO THE ANCHOR SLEEVE. AFTER THE ASSEMBLY IS INSERTED INTO THE DRILLED HOLE, THE ANCHOR WILL BE CONSIDERED SET WHEN THE DIMENSION "A" (SEE ANCHOR SETTING DETAILS) HAS INCREASED BY AN AMOUNT EQUAL TO DIMENSION "B". AFTER THE STEEL PLATES ARE IN PLACE THE FINAL TENSION LOAD OF 28400 LBS. SHALL BE APPLIED. THE ANCHOR LOADS MAY BE APPLIED BY MANUAL TORQUING OR HYDRAULIC TENSIONING.
- BECAUSE OF CLOSE TOLERANCE BETWEEN CONICAL NUT O.D. AND HOLE I.D. IT MAY BE NECESSARY TO LIGHTLY HAMMER THE ANCHOR INTO THE HOLE. IF HAMMERING IS NECESSARY, STEPS SHALL BE EMPLOYED WHICH WILL PREVENT DAMAGE TO THE STUD BOLT THREADS.
- INSTALLATION PROCEDURES REQUIRED BY THE ANCHOR MANUFACTURER IN ADDITION TO THE INSTRUCTIONS LISTED ABOVE SHALL BE FOLLOWED.
- BENT PLATES SHALL BE ASTM A709 (GRADE 36) MATERIAL GALVANIZED TO ASTM A123 STANDARD.
- POSITION OF PLATE OR ANGLE ON BEAM:
 

ABUTMENTS: THE PLATE OR ANGLE SHALL BE POSITIONED ON THE BEAM WITH CABLE IN THE FULL EXTENDED POSITION AND PLATE OR ANGLE POSITION MARKED. THE PLATE OR ANGLE SHALL THEN BE SHIFTED TOWARD THE ABUTMENT 3" AND THE ANCHOR BOLT LOCATIONS MARKED THROUGH THE PLATE OR ANGLE ANCHOR HOLES.

BENTS (BEAM TO BEAM): AFTER ONE ANCHOR HAS BEEN ATTACHED THE ANGLE OF THE OTHER SHALL BE POSITIONED ON THE BEAM WITH CABLE IN THE FULL EXTENDED POSITION ANGLE POSITION MARKED. THE PLATE OR ANGLE SHALL THEN BE SHIFTED TOWARD THE BENT 3" AND THE ANCHOR BOLT LOCATIONS MARKED THROUGH THE ANGLE ANCHOR HOLE.

### PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS:

(3/4" HILTI BOLTS OR EQUAL)(NO UNDERCUTTING REQ'D)

- INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDED PROCEDURES.



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

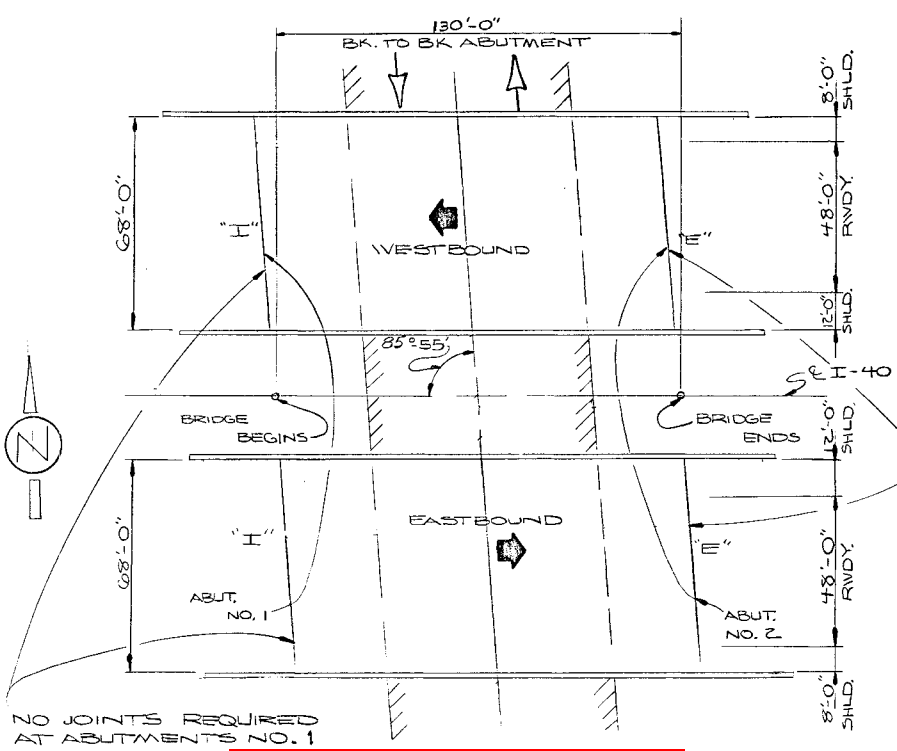
BOLT INSTALLATION  
SHELBY COUNTY  
1998

DESIGNED BY Brian Egle DATE February, 1998  
 DRAWN BY Cory Humphries DATE March, 1998  
 SUPERVISED BY Mike Lawson, J. Christensen DATE March, 1998  
 CHECKED BY Mike Lawson, Brian Egle DATE April, 1998

## ANCHOR SETTING DETAILS

NOTE: "E" DENOTES EXPANSION  
"F" DENOTES FIXED  
"I" DENOTES INTEGRAL

PROJECT NO.	YEAR	SHEET NO.	
79007-4158-04	1985	14	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

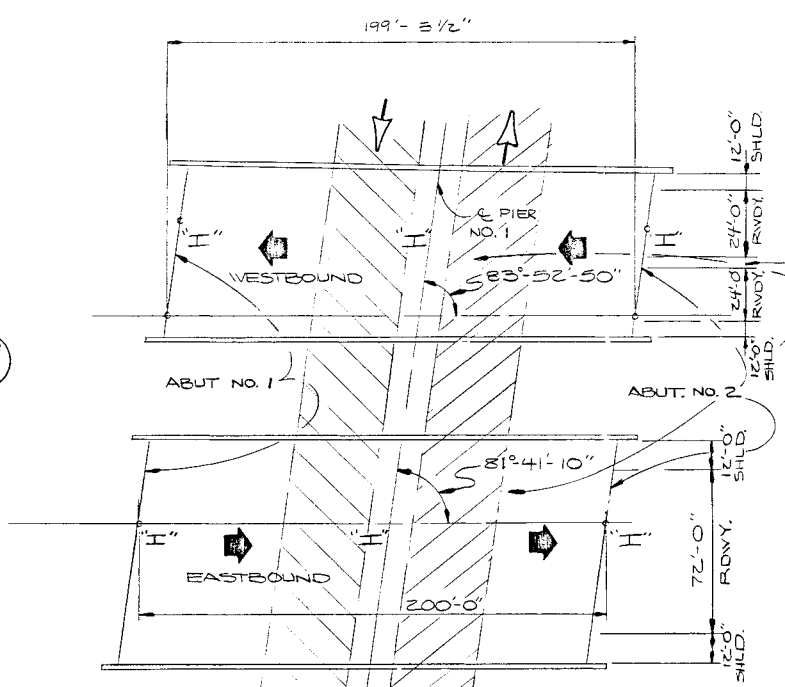


SCOPE OF WORK (GENERAL) BRIDGE NO. 4  
A. REMOVE AND REPLACE EXISTING PREFORMED ELASTIC STRIP SEAL AT ABUTMENT NO. 2 BOTH EAST & WESTBOUND LANES AS SHOWN IN DETAILS TYPE "E" ON DWG. NO. M-106-80.  
B. REPAVE THE EXISTING EAST AND WESTBOUND BRIDGE DECKS INCLUDING THE APPROACHES WITH NEW 1 1/2" THICK ASPHALT OVERLAY AS SHOWN IN DETAILS ON DWG. NO. M-106-75.

NOTE TO CONTRACTOR: ABUTMENT NO. 1 IS INTEGRAL. ABUTMENT NO. 2 HAS AN EXISTING PREFORMED ELASTIC STRIP SEAL THAT IS TO BE REMOVED AND REPLACED WITH THE EXPANSION JOINT REPLACEMENT DETAIL TYPE "E" (SEE DWG. NO. M-106-80) ITEM NO. 604-10.41. SET NEW JOINT @ 60° F WITH A TOTAL MOVEMENT OF 4" REQUIRED AT ABUTMENTS NO. 2 ONLY, EAST AND WESTBOUND LANES.

SCOPE OF WORK (GENERAL) BRIDGE NO. 6  
A. REMOVE AND REPAIR EXISTING EXPANSION JOINTS AT ABUTMENTS NO. 1 & 2 BOTH EAST AND WESTBOUND LANES AS SHOWN IN DETAILS TYPE "G" ON DWG. NO. M-106-81.  
B. REPAVE THE EXISTING EAST AND WESTBOUND BRIDGE DECKS INCLUDING THE APPROACHES WITH NEW 1 1/2" THICK ASPHALT OVERLAY AS SHOWN IN DETAILS ON DWG. NO. M-106-75.

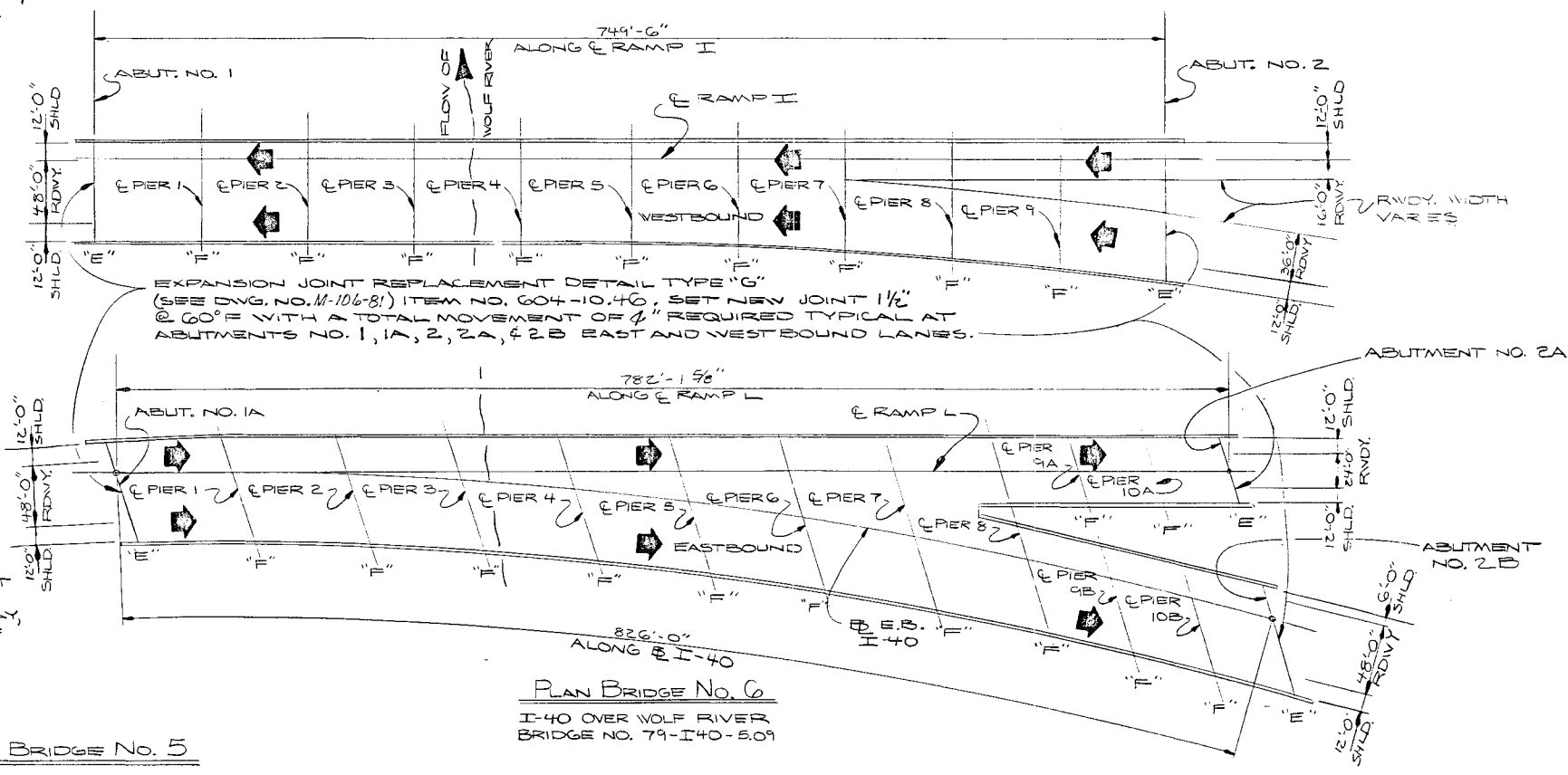
PLAN BRIDGE NO. 4  
I-40 OVER HOLLYWOOD STREET  
BRIDGE NO. 79-I40-7.60



NOTE TO CONTRACTOR: THIS BRIDGE IS INTEGRAL ON BOTH ENDS. THERE WILL BE NO EXPANSION JOINT REPLACEMENT ON THIS BRIDGE. THIS BRIDGE TO BE PAVED OVER WITH 1 1/2" ASPHALT OVERLAY, WITH A 75'-0" TAPER AT EACH END OF BRIDGE.

SCOPE OF WORK (GENERAL) BRIDGE NO. 5  
A. REPAVE THE EXISTING EAST AND WESTBOUND BRIDGE DECKS INCLUDING THE APPROACHES WITH NEW 1 1/2" THICK ASPHALT OVERLAY AS SHOWN IN DETAILS ON DWG. NO. M-106-75.

PLAN BRIDGE NO. 5  
I-40 OVER WATKINS STREET  
BRIDGE NO. 79-I40-8.77



PLAN BRIDGE NO. 6  
I-40 OVER VOLF RIVER  
BRIDGE NO. 79-I40-5.09

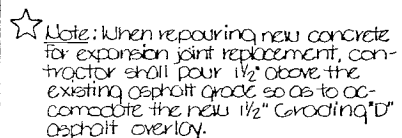
BRIDGE NO. 79I00400073 &  
79I00400074

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS  
BRIDGE REPAIR FOR BRIDGES  
NO. 4 THRU 6  
INTERSTATE 40  
SHELBY COUNTY  
1985

DESIGNED BY GREG ROSS DATE 5-85  
DRAWN BY GENTRY EMMETT DATE 5-85  
SUPERVISED BY GRAVES E. GLASZOW DATE 5-85  
CHECKED BY GRAVES E. GLASZOW DATE 5-85

CORRECT *Chellian L. Laveall*  
ENGINEER OF STRUCTURES  
APPROVED *Lewis E. Evans*  
DIRECTOR OF HIGHWAYS

M-106-74

[illegible]

## GENERAL NOTES

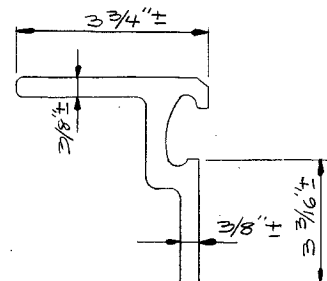
DESIGN SPECIFICATION: AASHTO 1983 EDITION.  
SPECIFICATIONS: STANDARD SPECIFICATIONS FOR ROAD AND  
BRIDGE CONSTRUCTION OF THE TENNESSEE DEPARTMENT  
OF TRANSPORTATION (MARCH, 1981 EDITION).

[illegible]

- ① DENOTES ITEMS FOR NEW 1 1/2" ASPHALT OVERLAY ON BRIDGES NO. 4 THRU 6. SEE PAVING DETAILS ABOVE AND PLAN OF BRIDGES ON DWG. NO. M-106-74
- ② DENOTES EXPANSION JOINT REPAIR ON BRIDGES NO. 4, 6. SEE DETAILS AND NOTES ON DWG. NO.'S. M-106-76, M-106-77, M-106-80, M-106-81, AND SEE SPECIAL NOTE BELOW..

Special Note Concerning Expansion Joint Repair Bid Item No's. 604-10.41, and 604-10.46.

The contractor shall inspect 450± Feet (22 individual pieces) of steel extrusions that are stored at the State Construction Office, located on Centennial Blvd. in Nashville, prior to submitting a bid for items no. 604-10.41 and 604-10.46. These extrusions are state property. The successful bidder on this project shall make provisions for picking up the extrusions and utilizing as much of the 450± Feet as reasonably possible in the fabrication of the expansion joints specified in items no. 604-10.41 and 604-10.46. Shop drawings for the expansion joints shall show each individual piece of these extrusions and where they are used. See detail below for configuration of extrusions that are stock piled at the State Construction Office.

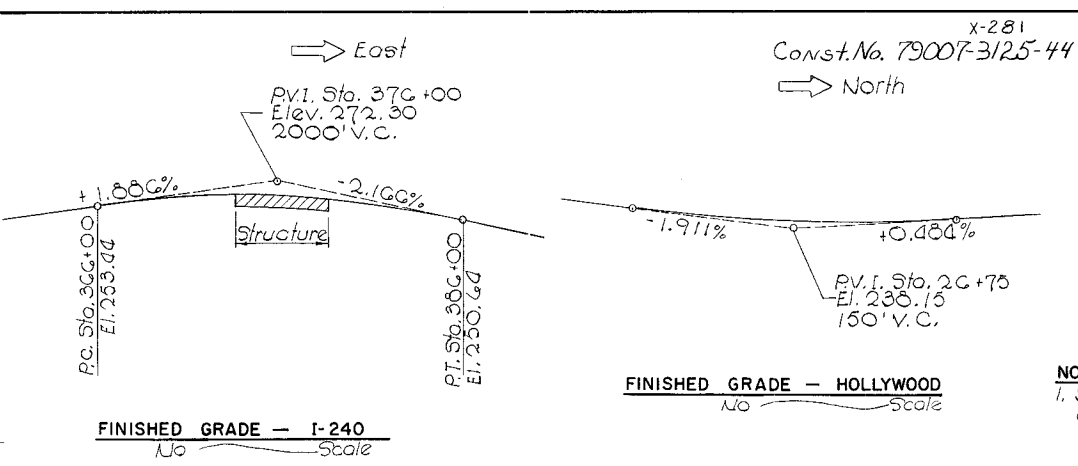
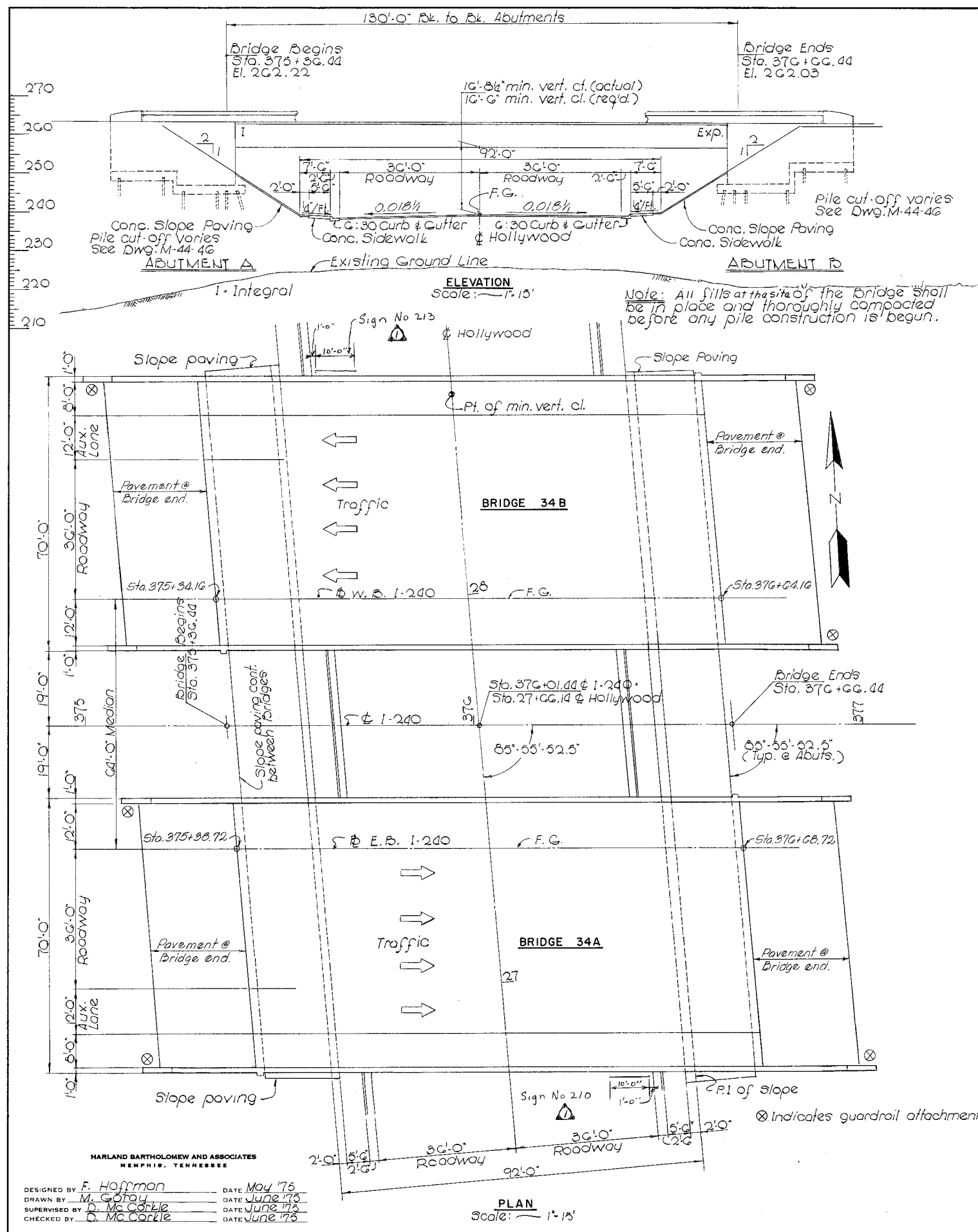


Extrusion Detail  
STOCK FILED BY STATE

DESIGNED BY \_\_\_\_\_ DATE \_\_\_\_\_  
DRAWN BY GLASGOW & ROSS DATE 6 - 85  
SUPERVISED BY GENTRY & MENTUREFF DATE 6 - 85  
CHECKED BY GRAVES & HALL DATE 8 - 85

CORRECT Clifton L. Lovell  
ENGINEER OF STRUCTURES  
APPROVED David Evans  
DIRECTOR OF HIGHWAYS

M-106-75



PROJECT NO.	YEAR	SHEET NO.
EACI-240-1(132)6	1975	

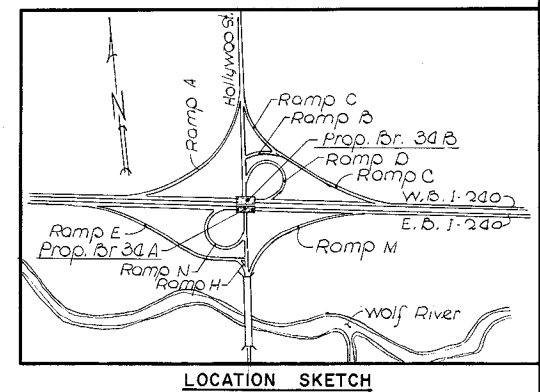
REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	6/4/78	ELD Showed location of Signs No 210 & 213

**NOTES:**  
1. See Dwg. M-44-34 for General Notes and Summary of Estimated Quantities.

INDEX OF DRAWINGS	
DWG. NO.	TITLE
M-44-33	Bridge Layout
M-44-34	General Notes & Estimated Quantities
M-44-35	Abutment A - E. B. Lanes
M-44-36	Abutment A - W. B. Lanes
M-44-37	Abutment B - E. B. Lanes
M-44-38	Abutment B - W. B. Lanes
M-44-39	Abutment Details
M-44-40	Footings Plan
M-44-41	Typical Sections
M-44-42	Top Slab Plan
M-44-43	Bottom Slab Plan
M-44-44	Post Tensioning Details
M-44-45	Screed Elevations
M-44-46	Foundation Data
M-8-149	Light Standard Support Details
M-28-1	Bridge Railing
K-80-14	Reinf. Bar Support Details
K-86-144	Reinf. Conc. Pavement at Bridge Ends
H-5-111	Standard Pile Details
K-80-130	Preformed Elastic Joint Sealer
K-85-150	Standard Misc. Abutment & Drainage Details

# BRIDGE NO. 79I00400073 & 79I00400074



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
I-240 OVER HOLLYWOOD ST.

BRIDGE LAYOUT  
STA. 376+01.44

SHELBY COUNTY

HARLAND BARTHOLOMEW AND ASSOCIATES  
MEMPHIS, TENNESSEE

DESIGNED BY: F. Hoffman  
DRAWN BY: M. G. G. G.  
SUPERVISED BY: D. Mc C. C.  
CHECKED BY: D. Mc C. C.

DATE: May '75  
DATE: June '75  
DATE: June '75  
DATE: June '75

CORRECT: \_\_\_\_\_  
ENGINEER OF STRUCTURES

APPROVED: \_\_\_\_\_  
DIRECTOR OF HIGHWAYS

M-44-33

Class "A" Grading "D" 2650 Cu. Yd. Bridge Deck Sealant 2650 Sq. Yd.

1. SPECIFICATIONS: Standard Road and Bridge Specifications of the Tennessee Department of Highways (1968 Edition)

3. DESIGN SPECIFICATIONS: 1973 AASHTO and Addendo.

4. CONCRETE: To be Class "A" f'c = 4000 psi for Superstructure concrete & 3000 psi for Substructure and parapets. See Special Provision Regarding Section 604 Concrete Structures.

5. REINFORCING STEEL: To be ASTM A615 Grade 60. Standard CRSI hook details apply unless otherwise noted on Bill of Steel. Bending dimensions shown are based on Grade 60 Steel. Spacing dimensions are center to center unless otherwise noted on detail drawings.

G. BRIDGE RAIL: Build bridge rail in accordance with Tenn. Std. Dwg. M-28-1

7. FINISHING CONCRETE SURFACES: Concrete finishing shall be in accordance with Section 604.22 of the Tennessee Standard Specifications except as modified by the Special Provision Regarding Section 604. Concrete Structures. A Textured Coated Finish shall be used in lieu of a Class 2 Finish. The color of the finish shall be similar to Federal Specification No. (See Detail) Federal Color Standard 595a, and a color sample shall be submitted to the Engineer of Structures for approval. All exposed concrete surfaces, including concrete parapets and wingposts, piers and abutments above grade (but not including bridge slab), shall receive a textured coated finish.

B. FOUNDATION NOTE: FRICTION PILES: After excavating to the proposed footing elevations a test pile shall be driven at each substructure at the locations designated on drawing number M-44-40. A load test will then be applied to the test pile on Abut A-E.B. lanes and Abut B-W.B. lanes. The load test shall be in accordance with Special Provision Regarding Load Test For Friction Piles. From the results of the load test the Engineer of Structures will determine final pile tip elevations. For pile design loads, cut-off elevations and pile tip elevations see table on Dwg. No. M-44-46.

2. Alternate piles: The contractor may use piling of a different materials or configuration from that shown on the plans provided the substitution meets minimum design standards and specifications, is approved by the Engineer and conforms to conditions established by the Special Provision No. 131, Regarding Section 606, Piling dated October 1, 1975.

11. LOADING TESTS: See Special Provision Regarding Load Tests for Friction Piles.

12. BRIDGE DECK SEALANT: The Bridge deck and reinforced approach slab shall be sealed in a future paving contract (2G50 Sp. Yds. required.)

13. BRIDGE DECK FORMS: Bridge deck forms for concrete decks shall be constructed using either removable forms or permanent forms. In either case, forms shall be attached by means other than welding to support members. See Special Provision No. 450, "Special Provision Regarding Permanent Steel Bridge Deck Forms," Revised November 9, 1973.

M. POST TENSIONING: See Special Provision No. 560, Special Provision Regarding Post-Tensioned Prestressed Concrete and Notes on Dwg. M-44-44.

15. LINSEED OIL PROTECTIVE TREATMENT: Surfaces receiving a Textured Coated Finish shall not receive a linseed oil treatment. See Special Provisions regarding Section 604 - Concrete Structures.

10. BEARING DEVICES: In lieu of the bearing devices shown on these plans the Contractor may submit shop plans and design calculations of alternate bearing devices to the Engineer of Structures for approval. Bearing seat elevations shall be adjusted to compensate for differences in bearing heights. The bearings shall be capable of providing the following minimum requirements under service loads. (Laminated pads - 50 durometer req'd., plain pads - 70 durometer req'd.)

Total Movement -  $\frac{3}{8}$ "  
Dead Load Reaction -  $150^k$   
Live Load Reaction -  $35^k$   
Total (D.L. + L.L. + Z) Reaction -  $185^k$

QUANTITY	NOTES
(1)	Excavation based on lower roadway profile.
(2)	See Alternate Pile note.

(3) The cost of polyethylene sheeting and all miscellaneous items necessary for installation to be included in the cost of perforated C.M. Pipe.

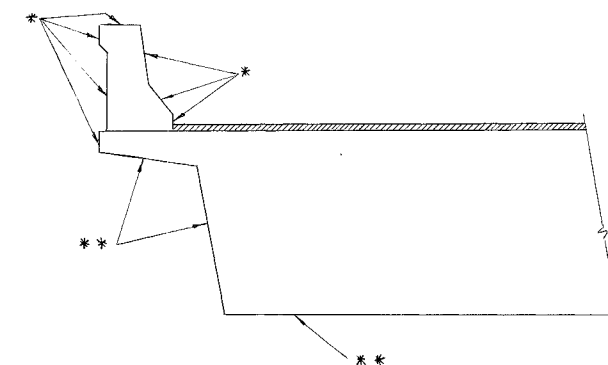
(4) Lump Sum for Structure Lighting includes 425± lin. ft. 2"Ø conduit with pull wires, 130± lin. ft. 1"Ø conduit with pull wires, 4 pull boxes, 6 conduitlets, and 8 anchor bolts on each structure, and all necessary materials for installation of future struct. lighting.

(5) The cost of 16 threaded steel inserts and 16-7/8" x 4" hex head bolts (A 307) shall be included in Bridge Items bid on.

(c) Quantity given is out-to-out of wingposts.

(7) The cost of light standard base including concrete and reinforcing to be included in price bid for bridge parapet.

(B) The cost of bituminous fiberboard, 2" # Abutment drains and miscellaneous joint material to be included in bridge items bid on.



\* Similar to Beige (Fed. Spec. No. 33690)  
 \*\* Similar to Olive (Fed. Spec. No. 34258)

In addition to the above surfaces, all exposed surfaces of abutments, wingwalls and wingposts & slope paving shall receive a texture coating finish similar to Beige (Fed. Spec. No. 53690).

		SUMMARY OF ESTIMATED QUANTITIES													
Item No.	204-02.01	604-03.01	604-03.02	604-25.04	606-09.01	606-09.02	606-09.03	616-05.03	616-06.	710-10	710-11	714-01.03	604-03.03	602-05.07	908-21.02
Description	Dry Excavation (Bridges)(1)	Class A Concrete (Bridges)	Steel Bar Reinforcement (Bridges)	Textured Coated Finish	Test Piles (Precast Conc. Size 1) (2)	Loading Test (Precast Conc. Size 1) (2)	Precast Conc. Piles- Size 1 (2)	Post-Tensioning	Concrete Parapet (6) (7)	6" Perf. C.M.P. (18 ga.) w/ Porous Backfill (3)	6" C.M.P. Underdrains (18 ga.)	Structure Lighting (4)	Linseed Oil Treatment	Preformed Elastic Joint Sealer Type I	Bearings (Laminated) E 1
Unit	Cu. Yds.	Cu. Yds.	Lbs.	Sq. Yds.	Lin. Ft.	Each	Lin. Ft.	Lump Sum	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lump Sum	Sq. Yds.	Lin. Ft.	Each
Bridge 34 A	Abutment A	280	203.0	16,994	300	40	2260			135	4			67	
	Abutment B	280	225.9	17,282	300	40	2260			135	4		136	67	
	Pym't at Br. Ends		139.9	33,046			80						362		
	Superstructure		620.4	108,217	1410			.5	376			.5	946		9
Bridge 36 B	Abutment A	280	203.0	16,994	300	45	2535			135	4			67	
	Abutment B	280	225.9	17,282	300	40	2260			135	4		136	67	
	Pym't at Br. Ends		139.9	33,046			80						362		
	Superstructure		620.4	108,217	1410			.5	376			.5	946		9
Total		1120	2378.4	351,678	4020	165	9475	1	752	540	16	1	2888	268	18

TEXTURED COATING DETAIL

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
1-240 OVER HOLLYWOOD ST.  
GENERAL NOTES AND ESTIMATED QUANTITIES  
STA. 376+01.44

SHELBY COUNTY

DESIGNED BY F. Hoffman DATE April '75  
DRAWN BY M. Gray DATE April '75  
SUPERVISED BY D. McCorkle DATE April '75  
CHECKED BY D. McCorkle DATE April '75

**CORRECT** \_\_\_\_\_  
ENGINEER OF STRUCTURES

**APPROVED** \_\_\_\_\_  
DIRECTOR OF HIGHWAYS

M-44-34



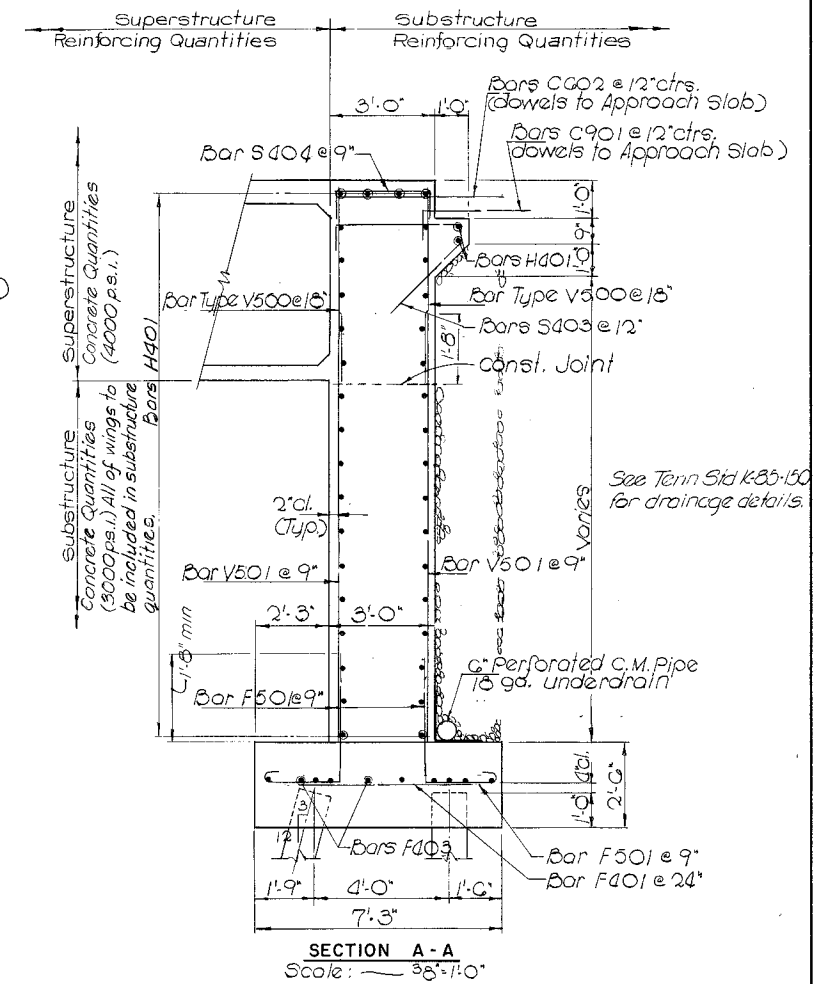


Note: Cost of wingposts is to be included in the cost of the Bridgerail System.

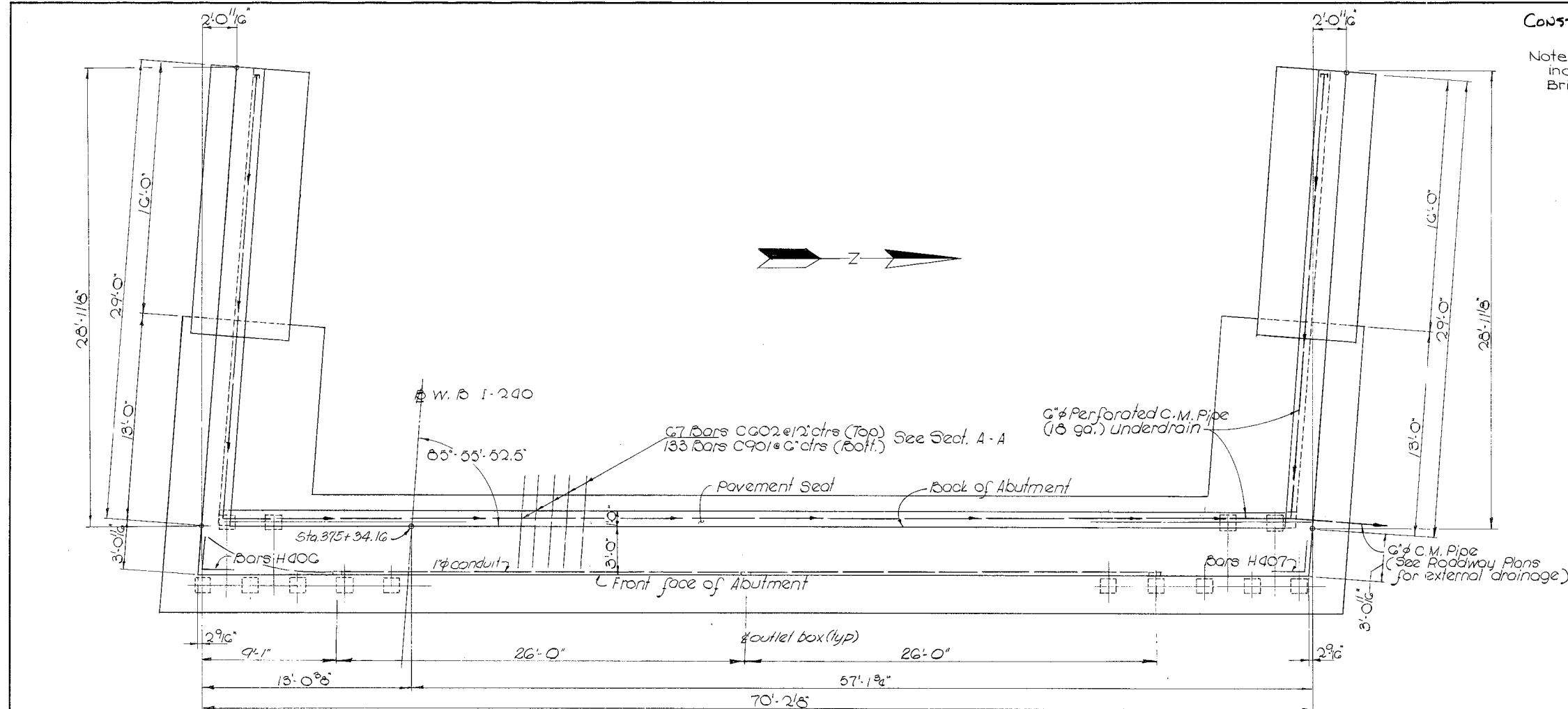
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NOTES:

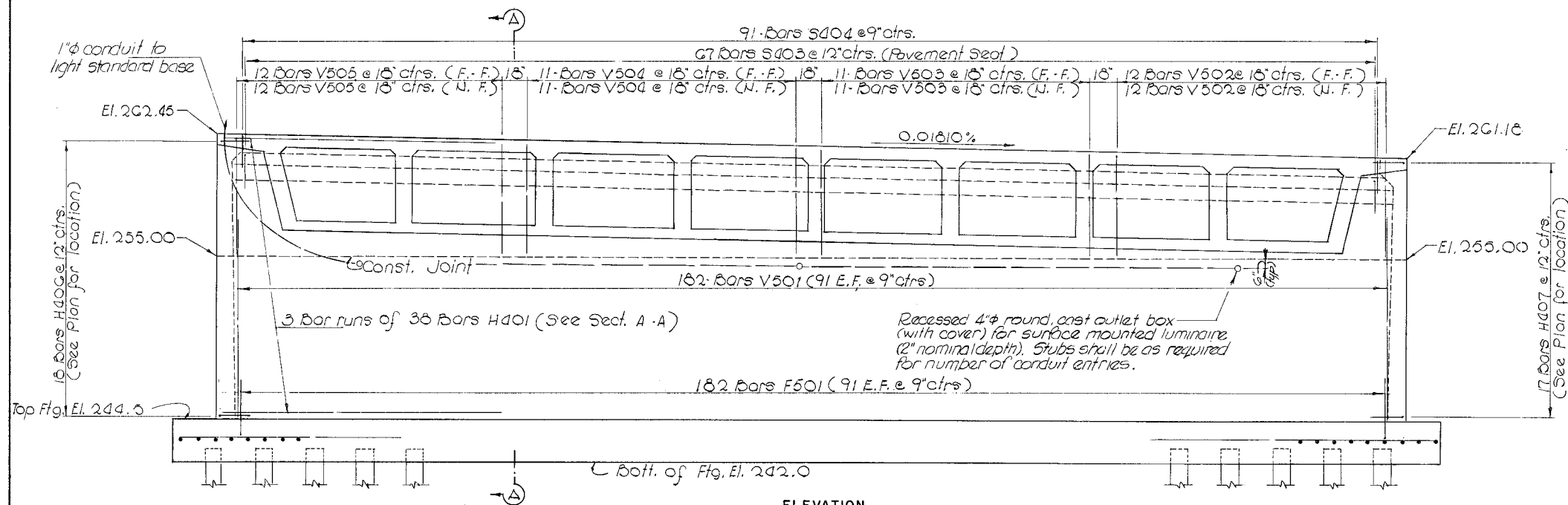
- NOTES:
1. See Dwg. M-44-40 for Footing Layout, Bill of Steel and number and location of piles.
  2. See Sid. Dwg. M-28-1 for parapet & wingpost reinforcement to be placed in Wingwalls.
  3. See Dwg. M-44-39 for Elevation View of Wings.



See Tenn Std K-85-150  
for drainage details.



PLAN  
Scale:  $\sim 1" = 1'-0"$



ELEVATION  
Scale:  $\sim 4'' = 1'-0''$

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
1-240 OVER HOLLYWOOD ST.

ABUTMENT A - W. B. LANES  
STA. 376+01.44

SHELBY COUNTY

DESIGNED BY F. Hoffman DATE June '75  
DRAWN BY M. Gofay DATE June '75  
SUPERVISED BY D. McCorkle DATE June '75  
CHECKED BY D. McCorkle DATE June '75

CORRECT \_\_\_\_\_  
ENGINEER OF STRUCTURES

APPROVED \_\_\_\_\_  
DIRECTOR OF HIGHWAYS

M-44-36

MINORILLI MED

[illegible]

NOTES:

- [illegible]

PLAN  
Scale:  $\frac{1}{4}$ " = 1'-0"

Construct light standard, base 8" be low top of wall, when pouring wall, provision shall be made for seating reinforcement for base. See Term 5th M.B. 47, 2 Bars H401 @ 12" ctrs. (See Plan for location)

Top of Fig. El. 244.5

Bottom of Fig. El. 242.0

11 Bars H401 @ 12" ctrs. (See Plan for location)

46 Bars V602 @ 18" ctrs. (N.F.)

46 Bars S401 @ 12" ctrs. (pavement seat)

Top of apron wall to conform to bottom of roadway slab (Typ.)

3" slope

0.0133 1/4

3" slope

11" (14p) (6")

9"

9"

9"

3 Bar runs of 14 Bars H401 (See Sect. B-B)

3 Bar runs of 24 Bars H401 (See Sect. B-B)

20 Bars V507 @ 9" ctrs. (N.F.)

20 Bars V507 @ 9" ctrs. (F.F.)

21 Bars V507 @ 9" ctrs. (N.F.)

21 Bars V507 @ 9" ctrs. (F.F.)

21 Bars V508 @ 9" ctrs. (N.F.)

21 Bars V508 @ 9" ctrs. (F.F.)

29 Bars V509 @ 9" ctrs. (N.F.)

29 Bars V509 @ 9" ctrs. (F.F.)

182 Bars F501 @ 9" ctrs. (N.F. & F.F.)

1" to conduit

6"

ELEVATION  
Scale:  $\sim 1" = 1'-0"$

SECTION B - B  
Scale:  $1'' = 3'0''$

BRIDGES 34A AND 34B  
I-240 OVER HOLLYWOOD ST.  
ABUTMENT B - E. B. LANES  
STA. 376+01.44

SHELBY COUNTY

DESIGNED BY F. Hoffman DATE June '75  
DRAWN BY M. Goray DATE June '75  
SUPERVISED BY D. McCorkle DATE June '75  
CHECKED BY D. McCorkle DATE June '75

CORRECT \_\_\_\_\_  
ENGINEER OF STRUCTURES

APPROVED \_\_\_\_\_  
DIRECTOR OF HIGHWAYS

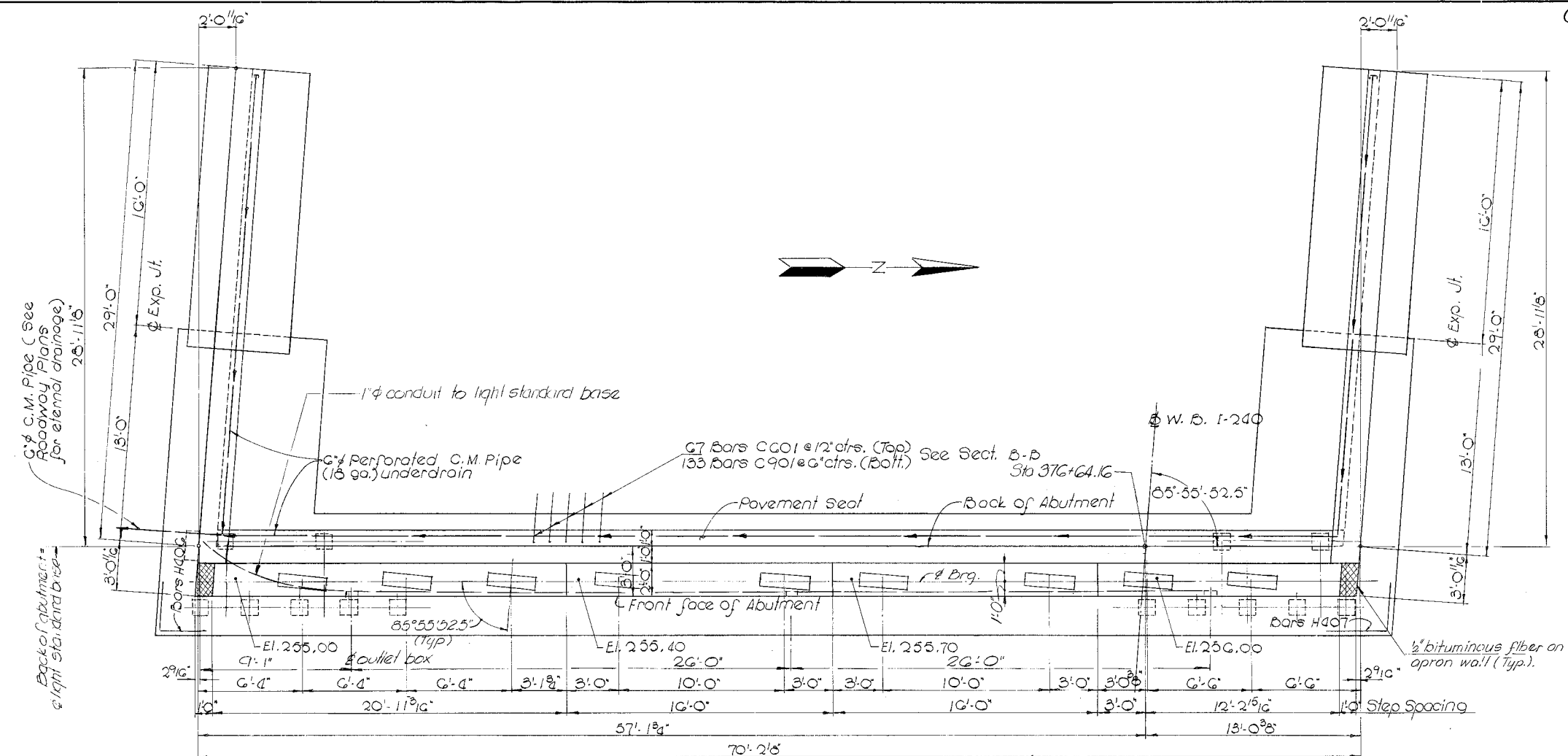
M-44-37

Note: Cost of wingposts is to be included in the cost of the Bridgerail System.

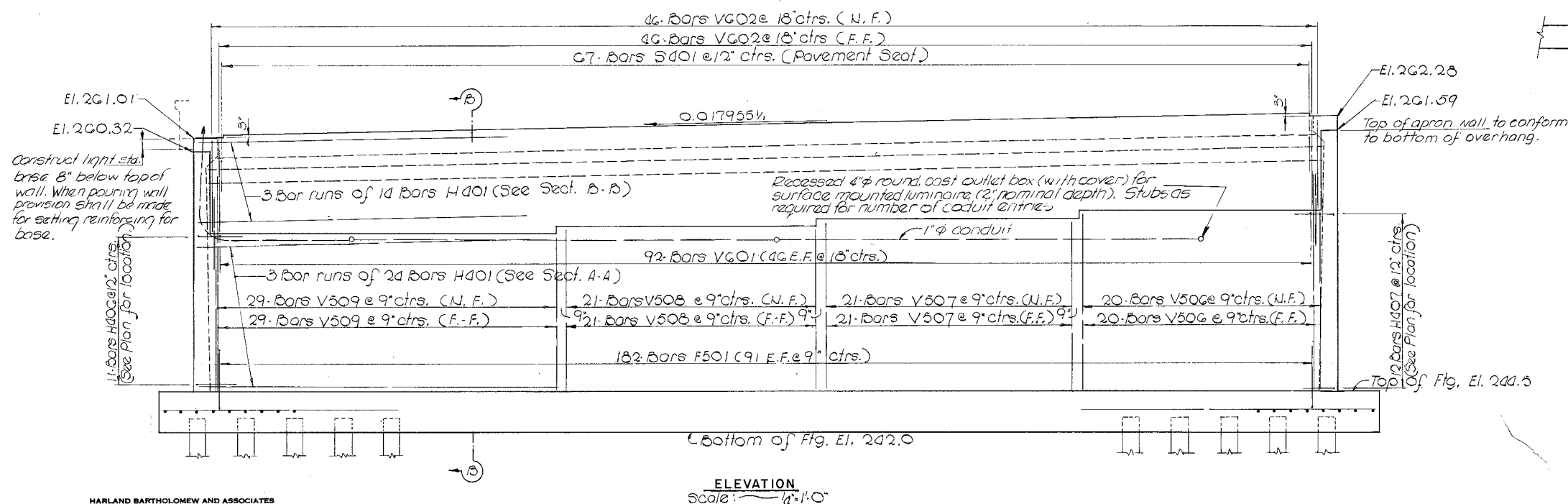
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**NOTES :**

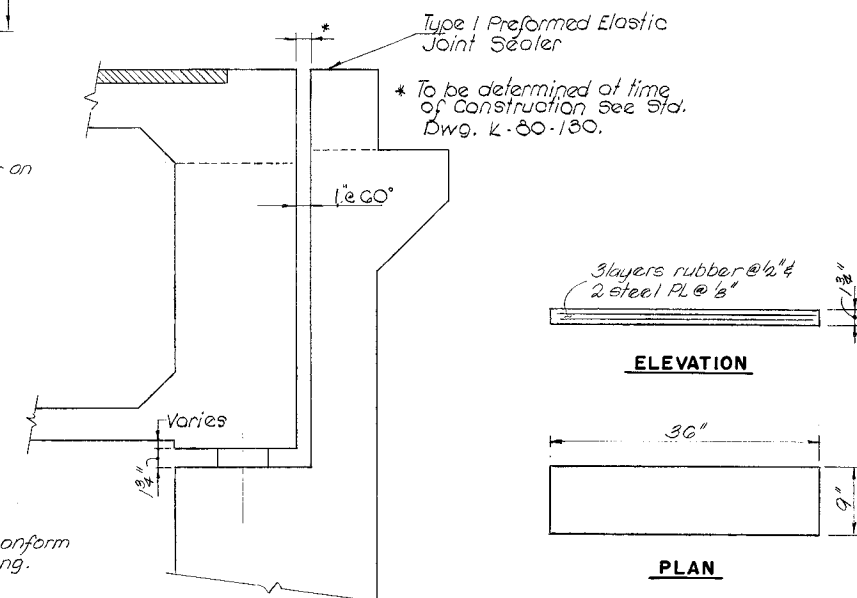
- NOTES:
1. See Dwg. M-44-40 for Footing Layout, Bill of Steel and number and location of piles.
  2. See Std. Dwg. M-28-1 for parapet & wingpost reinforcement to be placed in wingwall.
  3. See Dwg. M-44-39 for Elevation view of Wings.
  4. See Dwg. M-44-37 for Section B-B



PLAN  
Scale:  $\sim 1/4" = 1'-0"$



ELEVATION  
Scale:  $\sim 1'' = 10'$



ELEVATION  
Scale 3/4" = 1'-0"

### E-1 BEARING DETAILS

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
I-240 OVER HOLLYWOOD ST.

ABUTMENT B - W. B. LANES  
STA. 376+01.44

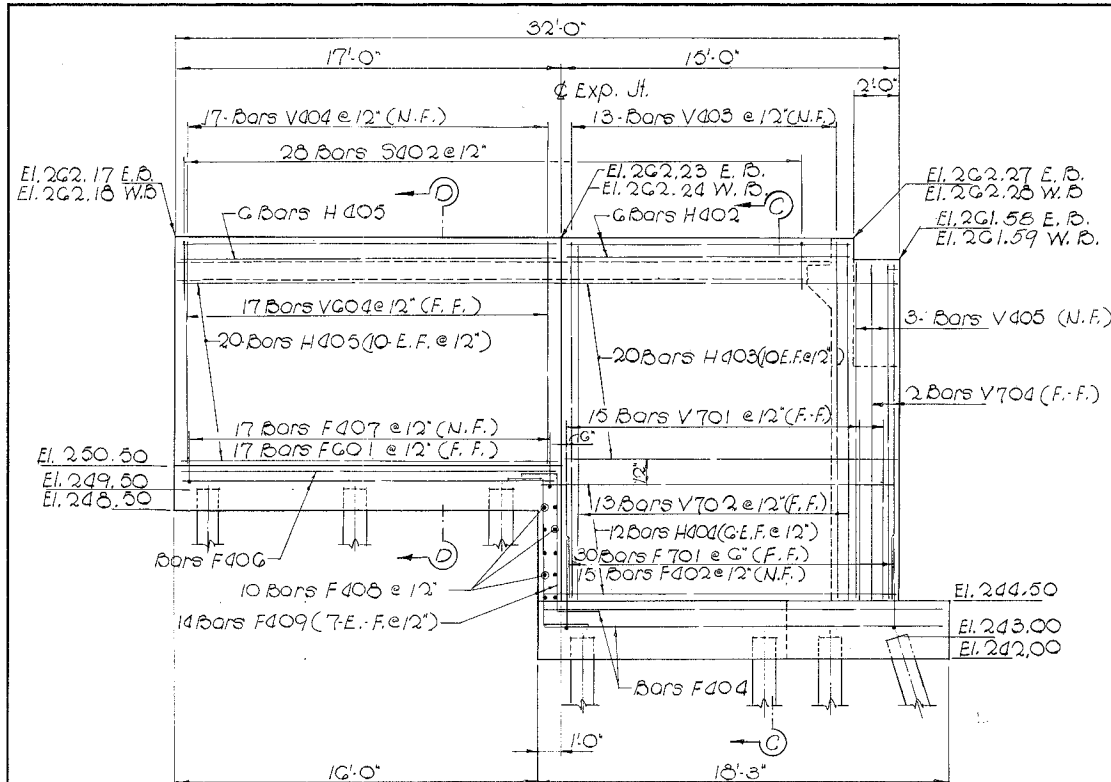
SHELBY COUNTY

DESIGNED BY F. Hoffman DATE June 175  
DRAWN BY M. Garay DATE June 175  
SUPERVISED BY D. McCorkle DATE June 175  
CHECKED BY D. McCorkle DATE June 175

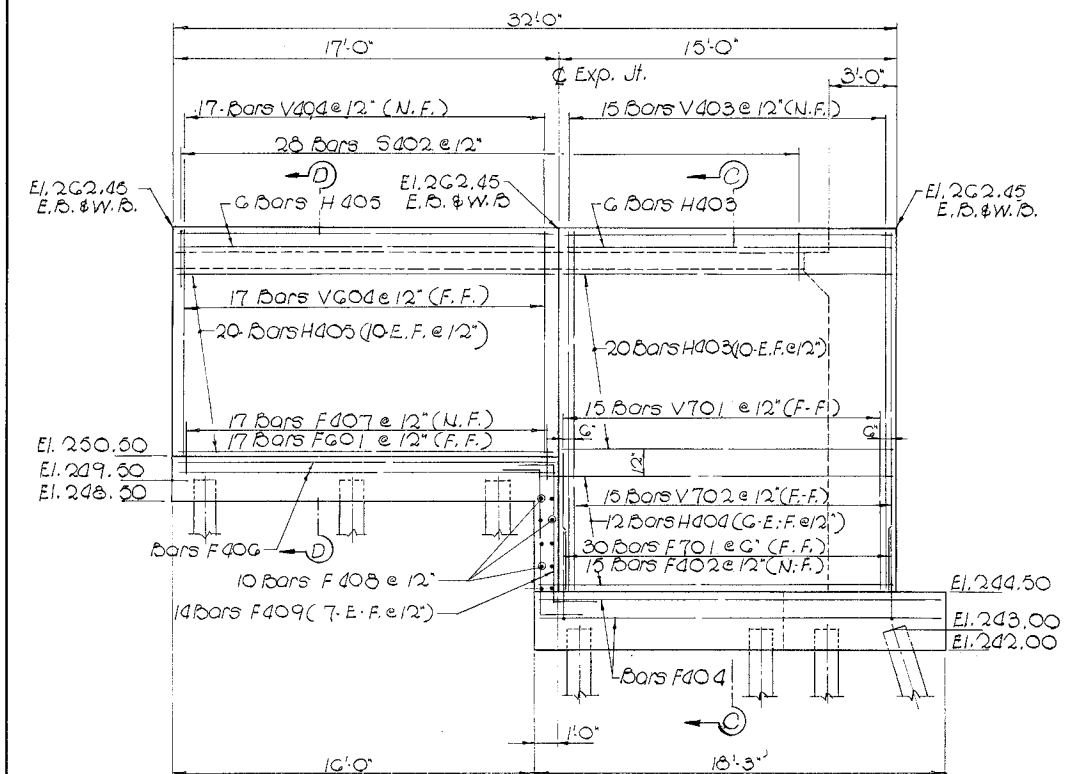
**CORRECT** \_\_\_\_\_  
ENGINEER OF STRUCTURES

**APPROVED** \_\_\_\_\_  
DIRECTOR OF HIGHWAYS

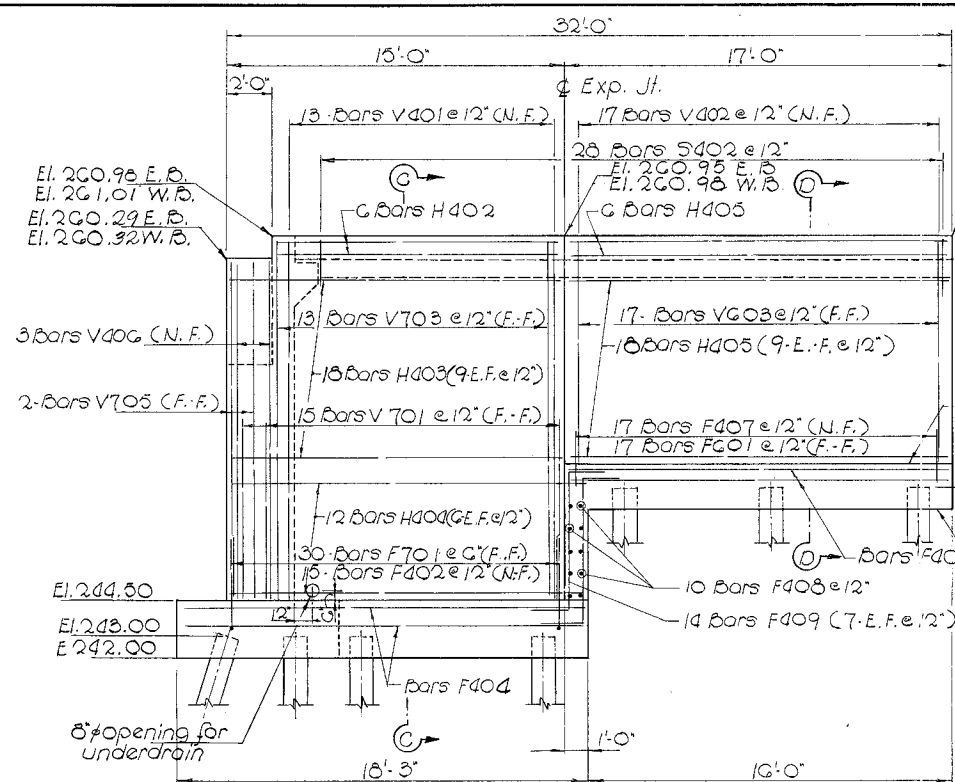
M-44-38



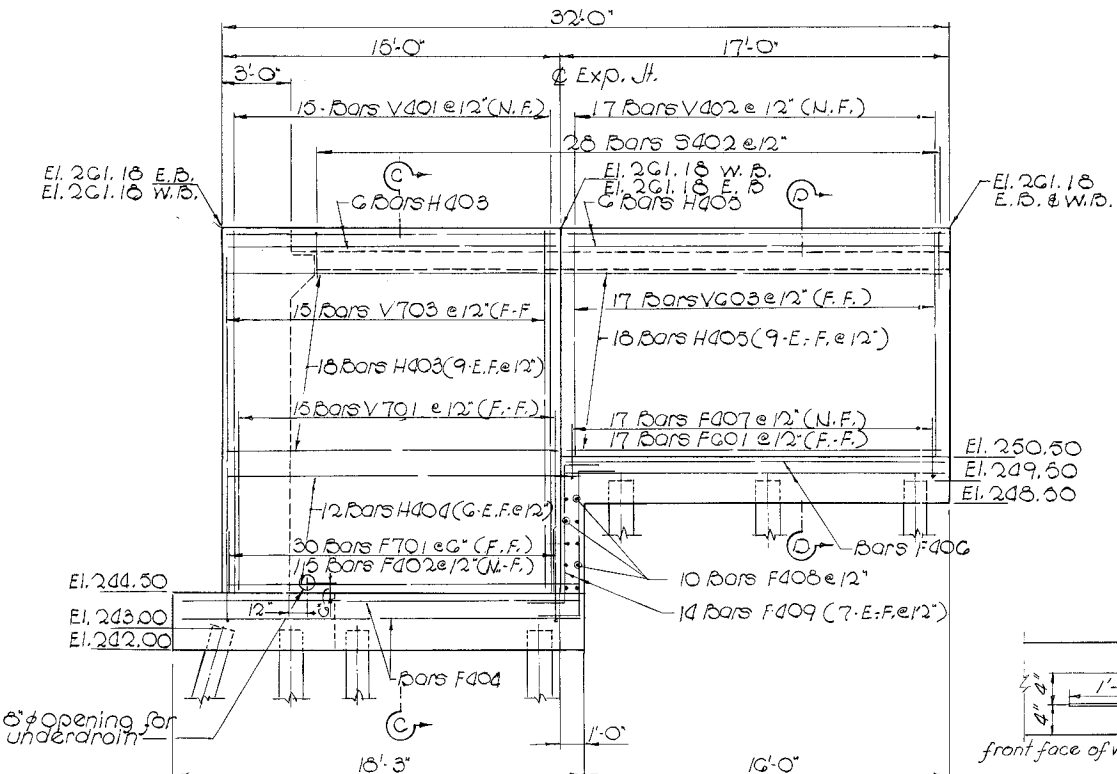
ABUTMENT B - E. B. LANES - NORTH WALL  
ABUTMENT B - W. B. LANES - SOUTH WALL  
Scale: 1/4" = 1'-0"



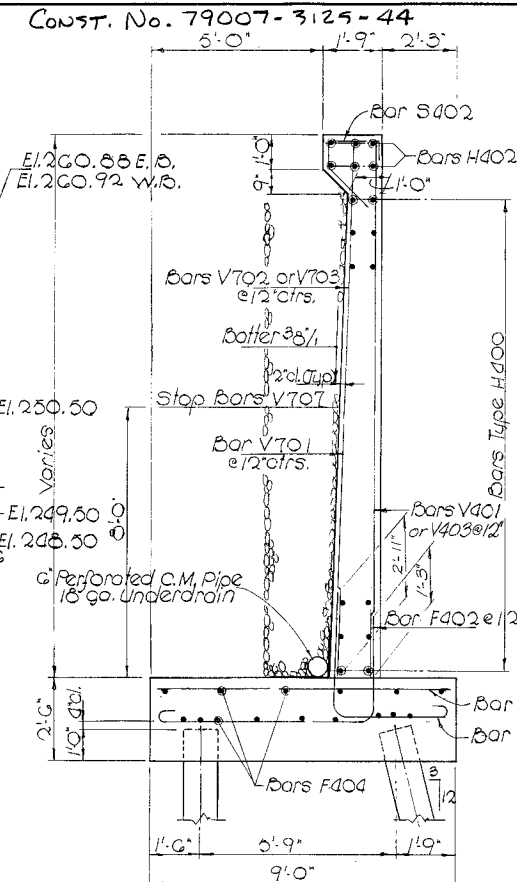
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ABUTMENT A - W. B. LANES - SOUTH WALL  
Scale: 1/4" = 1'-0"



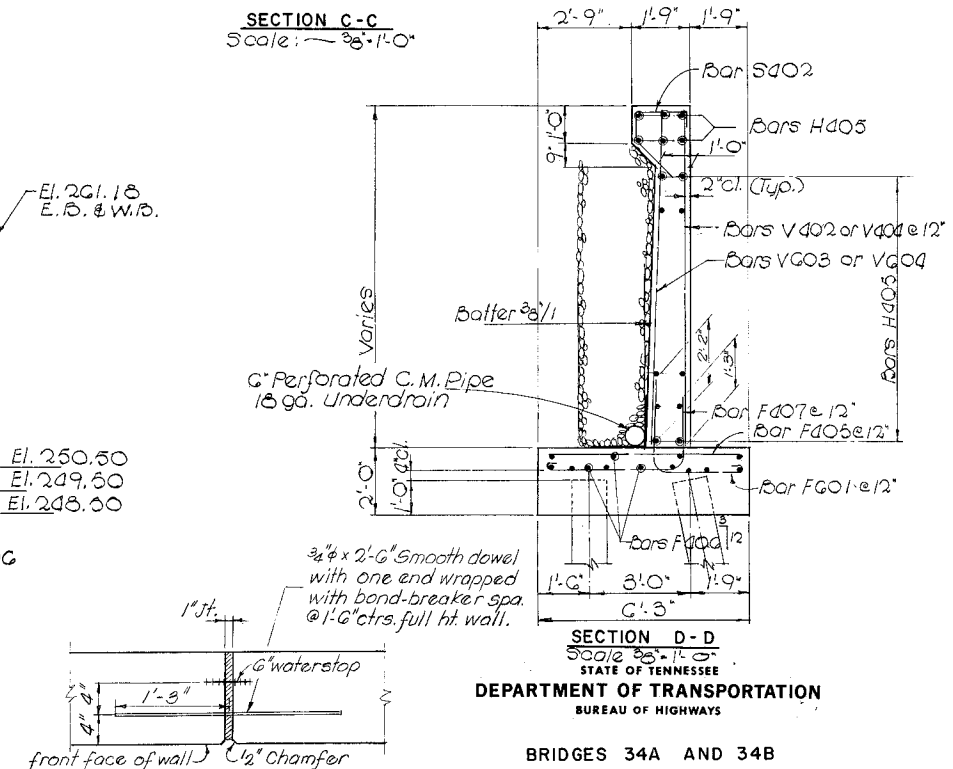
ABUTMENT B - E. B. LANES - SOUTH WALL  
ABUTMENT B - W. B. LANES - NORTH WALL  
Scale: 1/4" = 1'-0"



ABUTMENT A - E. B. LANES - SOUTH WALL  
ABUTMENT A - W. B. LANES - NORTH WALL  
Scale: 1/4" = 1'-0"



SECTION C-C  
Scale: 3/8" = 1'-0"



SECTION D-D  
Scale: 3/8" = 1'-0"

BITUMINOUS JOINT DETAIL  
Scale: 1" = 1'-0"

Note: Bituminous fiber and G" waterstop will not be paid for separately but shall be included in the cost of Glass A Concrete for payment.

PROJECT NO.	YEAR	SHEET NO.
EACI-240-1(132)	1975	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

NOTES:  
1. See Dwg. M-14-40 for Bill of Steel, Location & number of piles and footing layout.  
2. See Std. Dwg. K-85-150 for misc. drainage system details.  
3. When pouring abutment wings provision shall be made for setting reinforcing steel for parapet and wingpost.

BRIDGES 34A AND 34B  
1-240 OVER HOLLYWOOD ST.  
ABUTMENT DETAILS  
STA. 376+01.44

SHELBY COUNTY

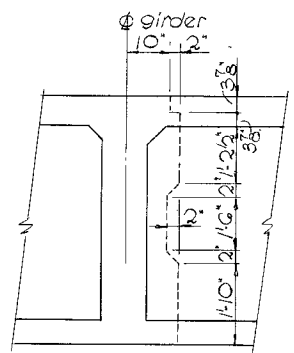
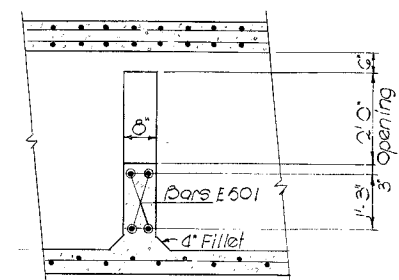
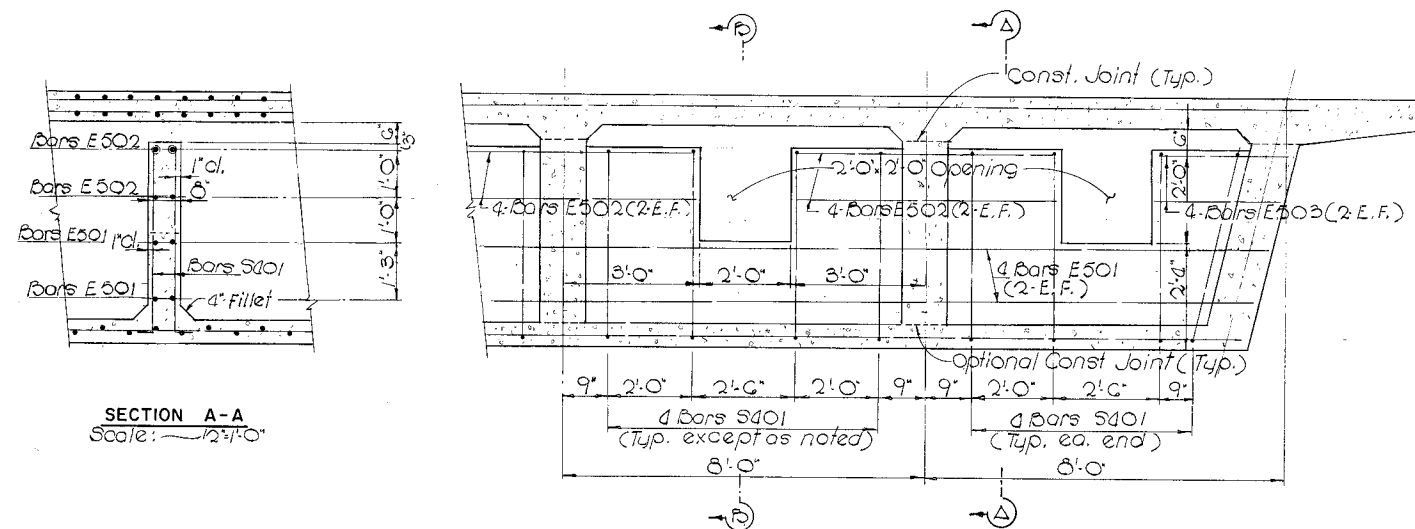
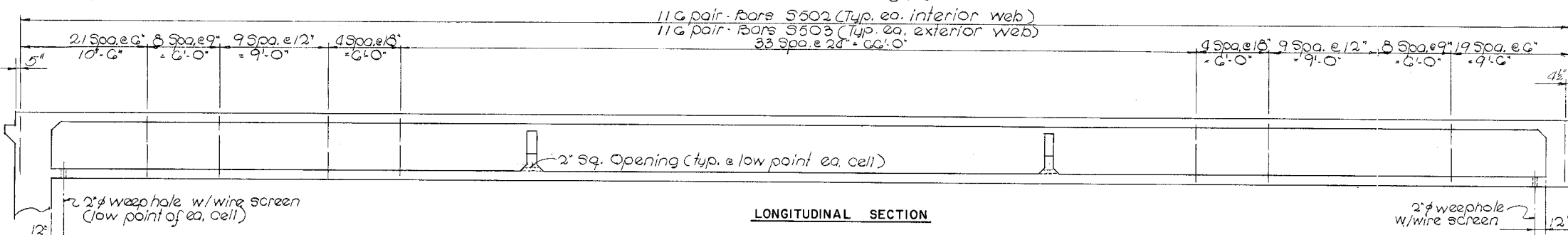
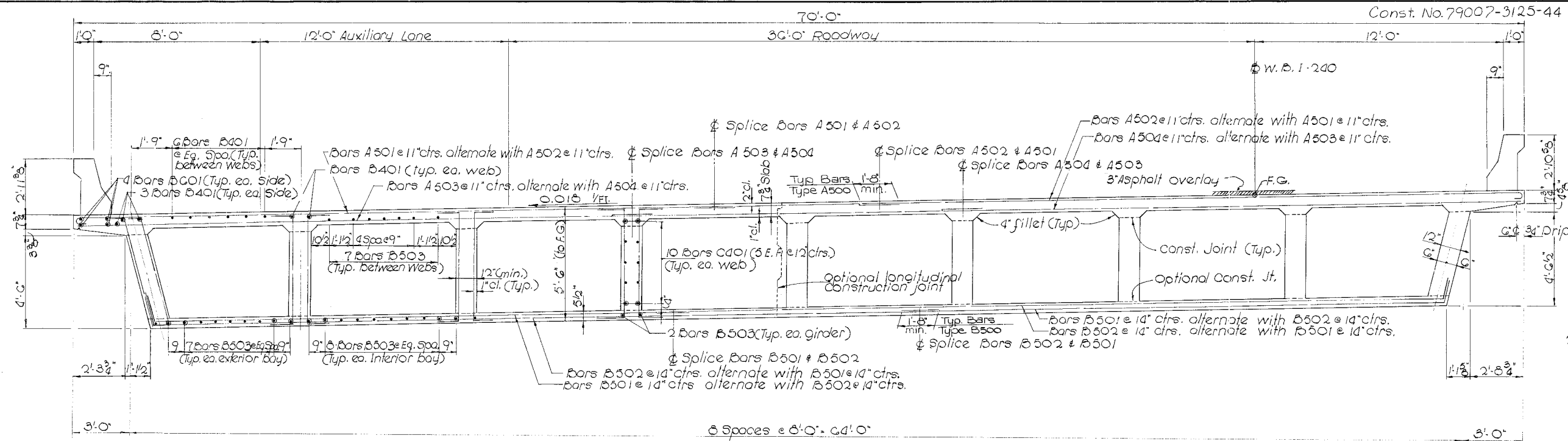
CORRECT  
ENGINEER OF STRUCTURES  
APPROVED  
DIRECTOR OF HIGHWAYS

M-44-39

DESIGNED BY F. Hoffman  
DRAWN BY M. Garay  
SUPERVISED BY D. McCorkle  
CHECKED BY D. McCorkle  
DATE June 1975  
DATE June 1975  
DATE June 1975  
DATE June 1975

HARLAND BARTHOLOMEW AND ASSOCIATES  
MEMPHIS, TENNESSEE



[illegible]

NOTES:

1. Sections shown are for W. B. Lanes Section for E. B. Lanes are similar.
2. Finished grade is to be located at top of concrete. 3" asphalt overlay is to be feathered out at end of approach slab.

### CONSTRUCTION SEQUENCE

Forms & supports for the entire bottom slab shall be in place prior to the placement of superstructure concrete. Concrete for the top & bottom slab and walls may be placed in any sequence, however, construction joints will be permitted at designated locations only. No top slab concrete may be placed until all walls have been completed.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
I-240 OVER HOLLYWOOD ST.

TYPICAL SECTIONS  
STA. 376 + 01.44

SHELBY COUNTY

ESTIMATED QUANTITIES				
Item No.	Description	Unit	Quantities	
			W. B. Lanes	E. B. Lanes
G04-03.01	Class A Concrete (Bridge)	Cu. Yds.	G20.4	G20.4
G04-03.02	Steel Bar Reinforcement	Lbs.	108,217	108,217

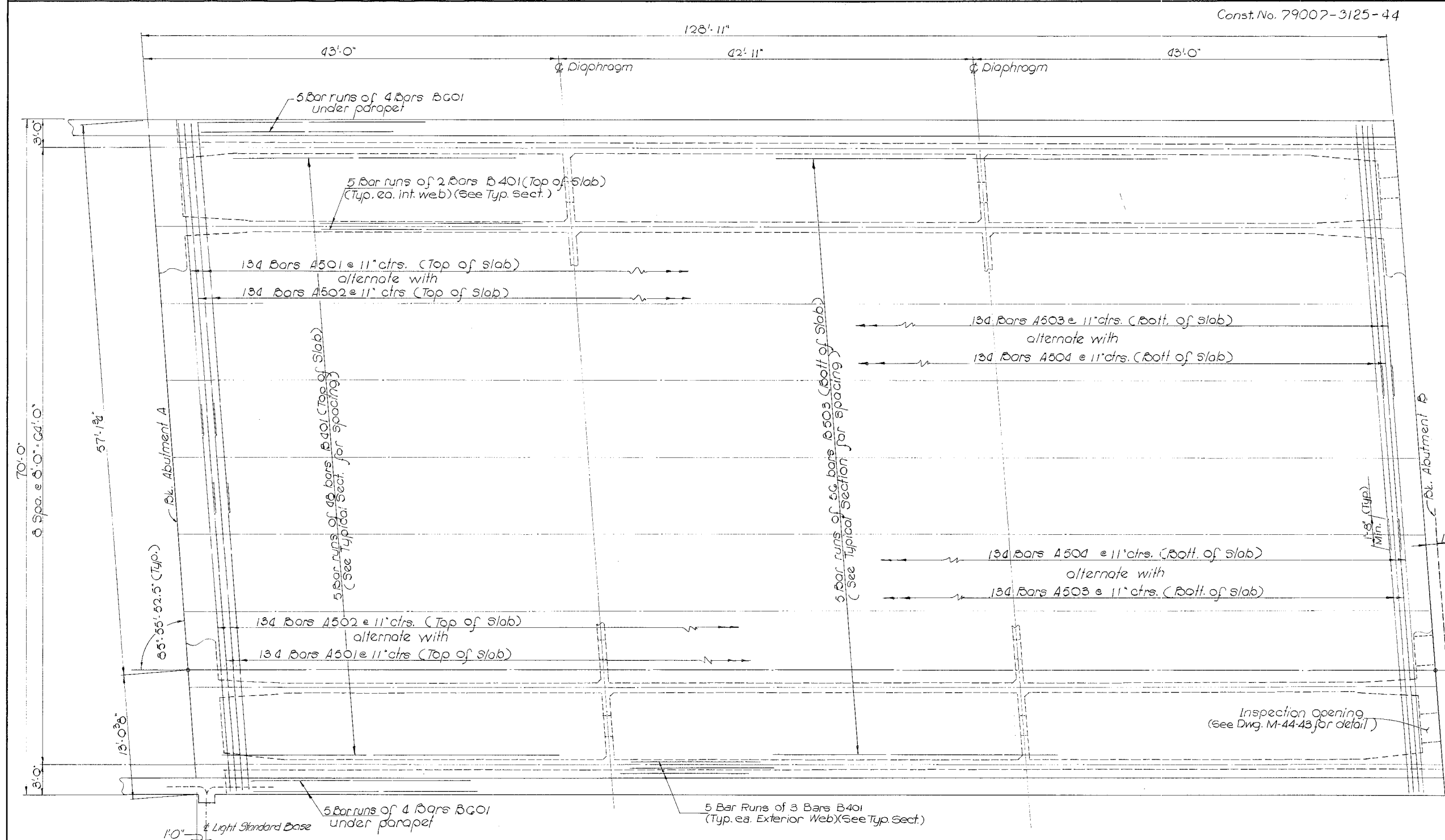
**CORRECT** \_\_\_\_\_  
**ENGINEER OF STRUCTURES**

APPROVED \_\_\_\_\_  
DIRECTOR OF HIGHWAYS

M-44-41

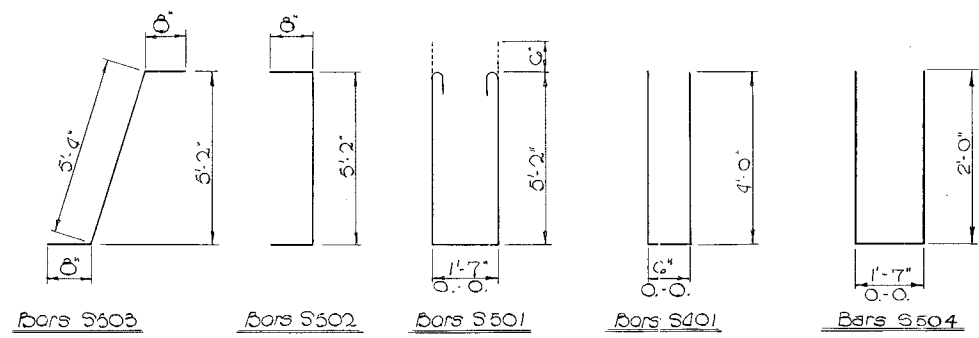
MICROFILMED





- NOTES:**
1. For Typical Section showing location of reinforcement, see Dwg. M-44-41
  2. When pouring top slab provision shall be made for placing parapet reinforcement. See Std. Dwg. M-28-1 for Details.
  3. For Estimated Quantities See Dwg. M-44-41
  4. For details of Abutments See Dwg. M-44-35 thru M-44-39
  5. Minimum Bar Lap for Longitudinal Reinforcing is as follows:  
 #4 bars — 1'-3"  
 #5 bars — 1'-7"  
 #6 bars — 2'-2"

**TOP SLAB PLAN**  
Scale: 1/4" = 1'-0"



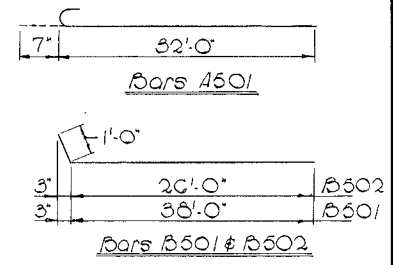
PROJECT NO.	YEAR	SHEET NO.
EAC I-240-11(326)	1975	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

BILL OF STEEL - W. B. LANES			
Mark	No. Req'd.	Length	Shape
A501	268	32'-7"	C
A502	268	40'-0"	—
A503	268	28'-0"	—
A504	268	44'-0"	—
B401	340	26'-11"	—
B501	212	39'-0"	✓
B502	212	27'-0"	✓
B503	680	27'-2"	—
B601	40	27'-8"	—
C401	450	26'-11"	—
E501	16	32'-3"	—
E502	56	5'-8"	—
E503	16	2'-0"	—
H501	44	33'-0"	—
H502	84	4'-8"	—
S401	64	8'-0"	U
S501	82	12'-11"	M
S502	1624	6'-9"	U
S503	464	6'-8"	✓
S504	82	5'-7"	U

Bill of Steel for E. B. Lanes is identical.



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
I-240 OVER HOLLYWOOD ST.

**TOP SLAB - PLAN**  
STA. 376+01.44

SHELBY COUNTY

DESIGNED BY F. Hoffman DATE May 75  
 DRAWN BY M. G. G. G. DATE June 75  
 SUPERVISED BY D. McCortle DATE June 75  
 CHECKED BY D. McCortle DATE June 75

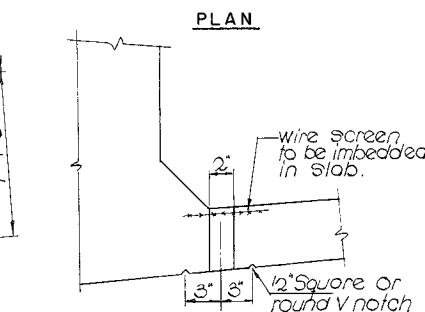
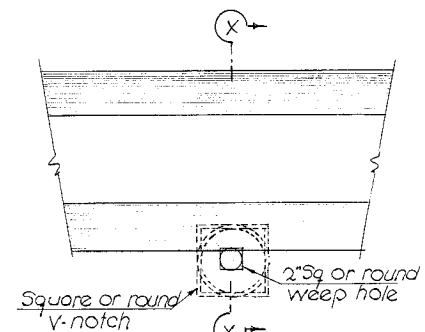
CORRECT \_\_\_\_\_  
 ENGINEER OF STRUCTURES  
 APPROVED \_\_\_\_\_  
 DIRECTOR OF HIGHWAYS

Const. No. 79007-3125-44

4	PROJECT NO.	YEAR	SHEET NO.
	EAC I-240-111326	1975	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

## NOTES:

1. See Dwg. M-44-41 for Typical Section and Estimated Quantities
2. See Dwg. M-44-42 for Bill of Steel.
3. For details of abutments see Dwg. M-44-35 thru M-44-39.
4. Minimum bar lap for longitudinal reinforcing is 1'-7".



SECTION X-X  
WEEP HOLE DETAILS

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
I-240 OVER HOLLYWOOD ST.

BOTTOM SLAB PLAN  
STA. 376+01.44

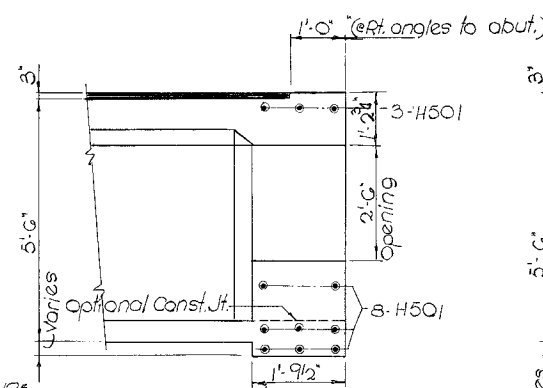
SHELBY COUNTY

CORRECT \_\_\_\_\_  
ENGINEER OF STRUCTURES  
APPROVED \_\_\_\_\_  
DIRECTOR OF HIGHWAYS

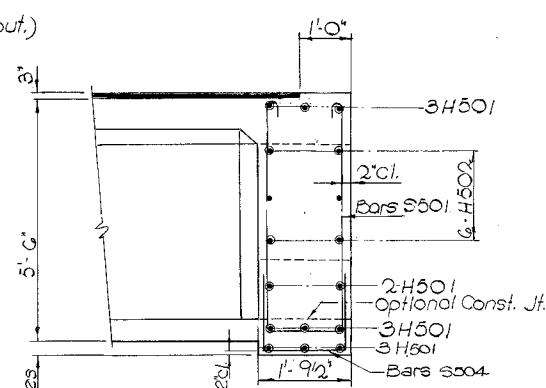
M-44-43



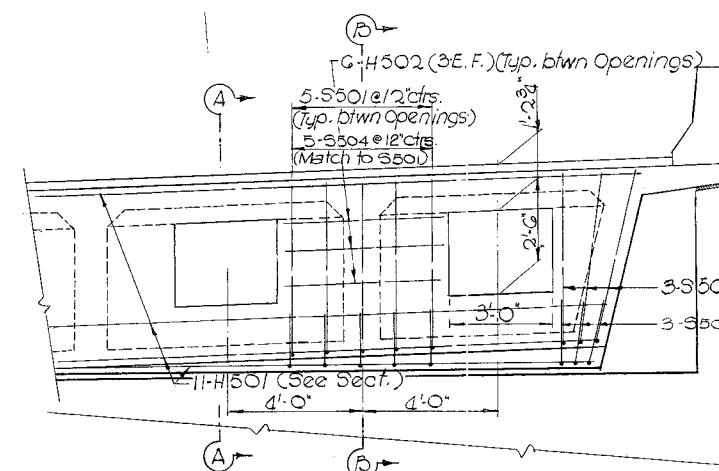
BOTTOM SLAB PLAN  
Scale: 3/16\"/>



SECTION A-A  
Scale: 1/2\"/>



SECTION B-B  
Scale: 1/2\"/>



INSPECTION OPENING DETAIL  
Scale: 3/8\"/>

Note: Inspection opening is to be closed with expansive grout after post-tensioning and before the backwall of the abutment is poured.

HARLAND BARTHOLOMEW AND ASSOCIATES  
MEMPHIS, TENNESSEE

DESIGNED BY E. Hoffman DATE June 176  
DRAWN BY M. Gray DATE June 176  
SUPERVISED BY D. McCortle DATE June 176  
CHECKED BY D. McCortle DATE June 176

1. POST-TENSIONING: See Special Provision No. 560, Special Provision Regarding Post-Tensioned Prestressed Concrete and notes this sheet.

2. CONCRETE: To be Class A,  $f_c = 4000$  psi. Stressing operations shall not begin until the concrete has reached a compressive strength of 3500 psi as indicated by test specimens, See Section G15-09 of the Tennessee Standard Specification.

3. DESIGN: Based on  $U = 0.25$  and  $K = 0.0002$ ,  $P/J$  Jack specified of the jacking ends includes friction losses plus provision for 4200 psi loss in stress at jacking plus 30000 psi long term loss in stress.

4. TENSIONING FORCE: The maximum required tensioning force at the jack is 20000 kips per web, which is 77 percent of the specified minimum ultimate tensile strength of the prestressing steel. Tendons shall be jacked to the above value and anchored at an equivalent anchor set of 5°.

5. STRESSING SEQUENCE: Jacking shall be done from both abutments. Avoid stressing sequence that will cause unsymmetrical forces about a vertical axis.

6. CLEARANCES FOR POST-TENSIONING UNIT: Horizontal clearance between units = 2 1/2" minimum. Units may be bundled vertically in groups of 3 maximum. Vertical clearance between bundled units = 3" minimum.

7. Bar reinforcement interfering with prestressing tendon alignment shall be adjusted by the Engineer.

8. Form work shall not be removed until all post-tensioning is complete.

9. If ducts are to be placed within limits of the bottom slab, provisions shall be made to tie the ducts to the vertical steel before the bottom slab is poured.

10. Anchorage details are to be determined by the fabricator.

11. In each web every other strand shall be jacked from the opposite end.

12. Losses given in note 3 above are consistent with forces given in note 4 and with cable drupe shown. The fabricator may substitute an equivalent system with the following limitations:

dist. to c.g. forces $\phi$ span	minimum effective prestress force $\phi$ span after all losses (per web)
10"	1550 kips
12"	1570
14"	1670
16"	1750

13. REINFORCING STEEL: Reinforcing steel required at each end anchorage shall not be paid for separately, but shall be included in the price bid for Post-Tensioned Prestressed Concrete. These details are to be included in the Shop drawings for post tensioning.

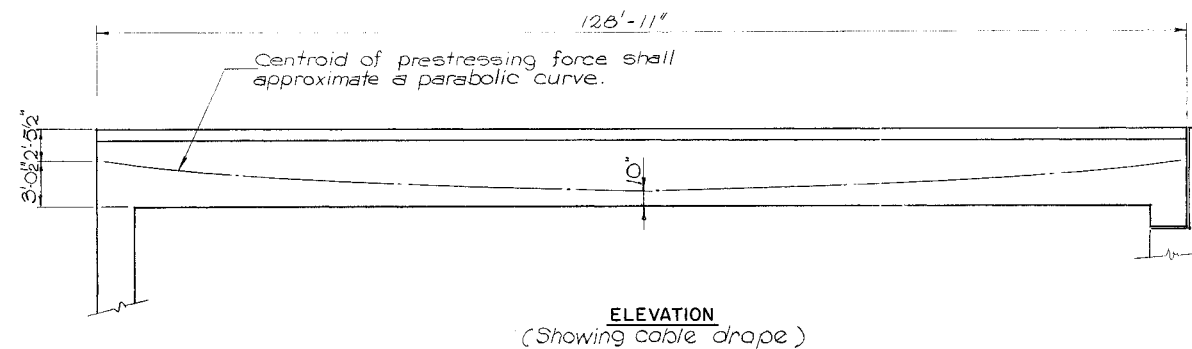
14. CAMBER: Dead Load Camber shown on the plans is based on  $E_c = 1,214,700$  psi. The Contractor shall submit calculations of deflections due to prestress load based on tendon arrangement selected and  $E_c = 1,214,700$  psi. These deflections shall be subtracted from the dead load camber shown on these plans and adjusted for the vertical curve to determine screed elevations for pouring.

15. SHOP DRAWINGS: The contractor shall submit five sets of shop drawings, together with three sets of design calculations to the State for approval. No concrete for the superstructure shall be poured until the Contractor has received from the State the approval of shop drawings.

16. OPTIONAL CONSTRUCTION JOINT AT BOTTOM SLAB: If the draped tendons extend into the bottom slab the optional construction joint will not be permitted.

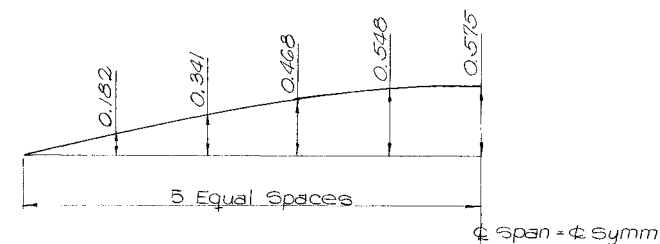
Construction No. 79007-3125-44

PROJECT NO.	YEAR	SHEET NO.	
EAC 1-240-1(132)6	1975		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



#### SECTION PROPERTIES

A	= 16374 in <sup>2</sup>
I	= 10490342 in <sup>4</sup>
Z <sub>t</sub>	= 355,657 in <sup>3</sup>
Z <sub>b</sub>	= 287,366 in <sup>3</sup>
y <sub>T</sub>	= 29.5 in
y <sub>B</sub>	= 36.5 in



DEAD LOAD CAMBER DIAGRAM

Note: The curve shows the dead load camber only. Camber shall be increased by the amount of anticipated take-up in the falsework. Camber values are based on  $E_c = 1,214,700$  psi. See Note 15 this Dwg. for adjustments necessary due to prestress forces and vertical curve.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGES 34A AND 34B  
1-240 OVER HOLLYWOOD ST.  
POST-TENSIONING DETAILS  
STA. 376+01.44

SHELBY COUNTY

HARLAND BARTHOLOMEW AND ASSOCIATES  
MEMPHIS, TENNESSEE

DESIGNED BY F. Hoffman DATE July '75  
DRAWN BY M. Goray DATE July '75  
SUPERVISED BY D. McCorkle DATE July '75  
CHECKED BY D. McCorkle DATE July '75

CORRECT

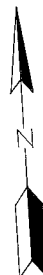
ENGINEER OF STRUCTURES

APPROVED

DIRECTOR OF HIGHWAYS

M-44-44

PROJECT NO.	YEAR	SHEET NO.
EAC I-240-11(132)G	1975	

[illegible]

HARLAND BARTHOLOMEW AND ASSOCIATES  
MEMPHIS, TENNESSEE

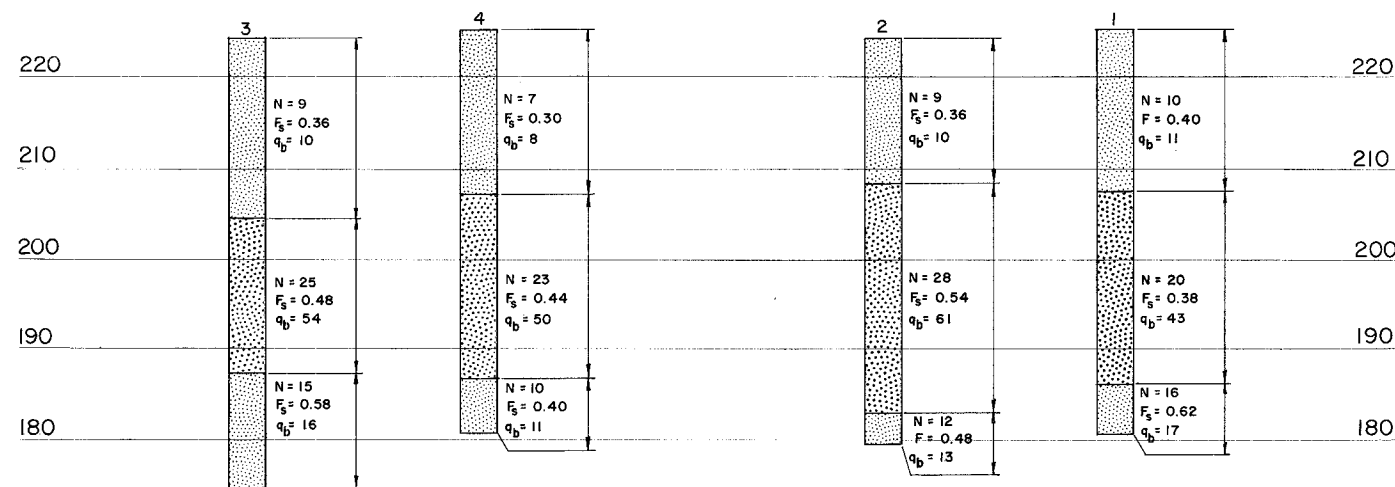
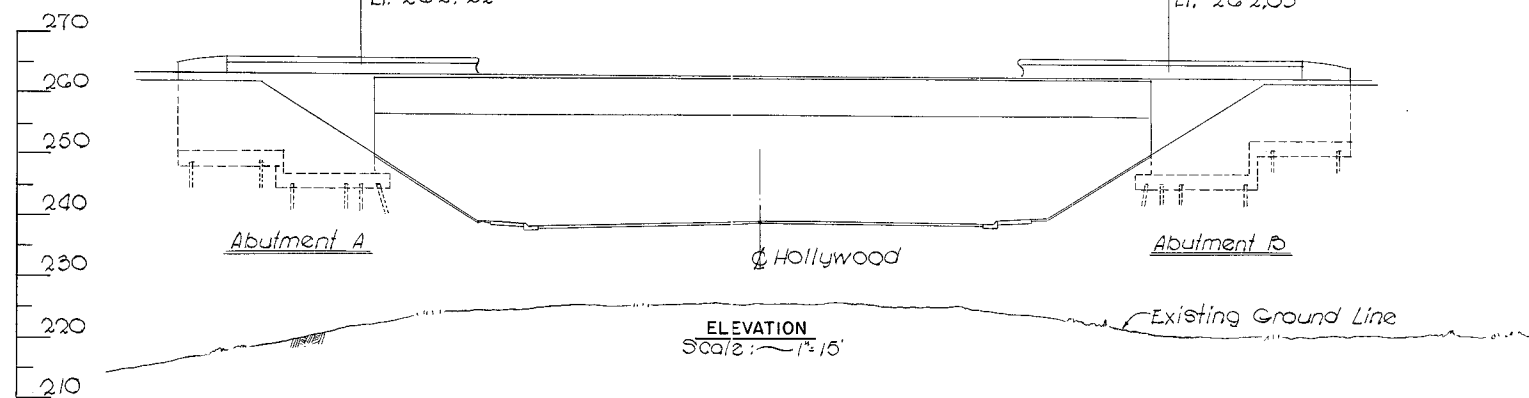
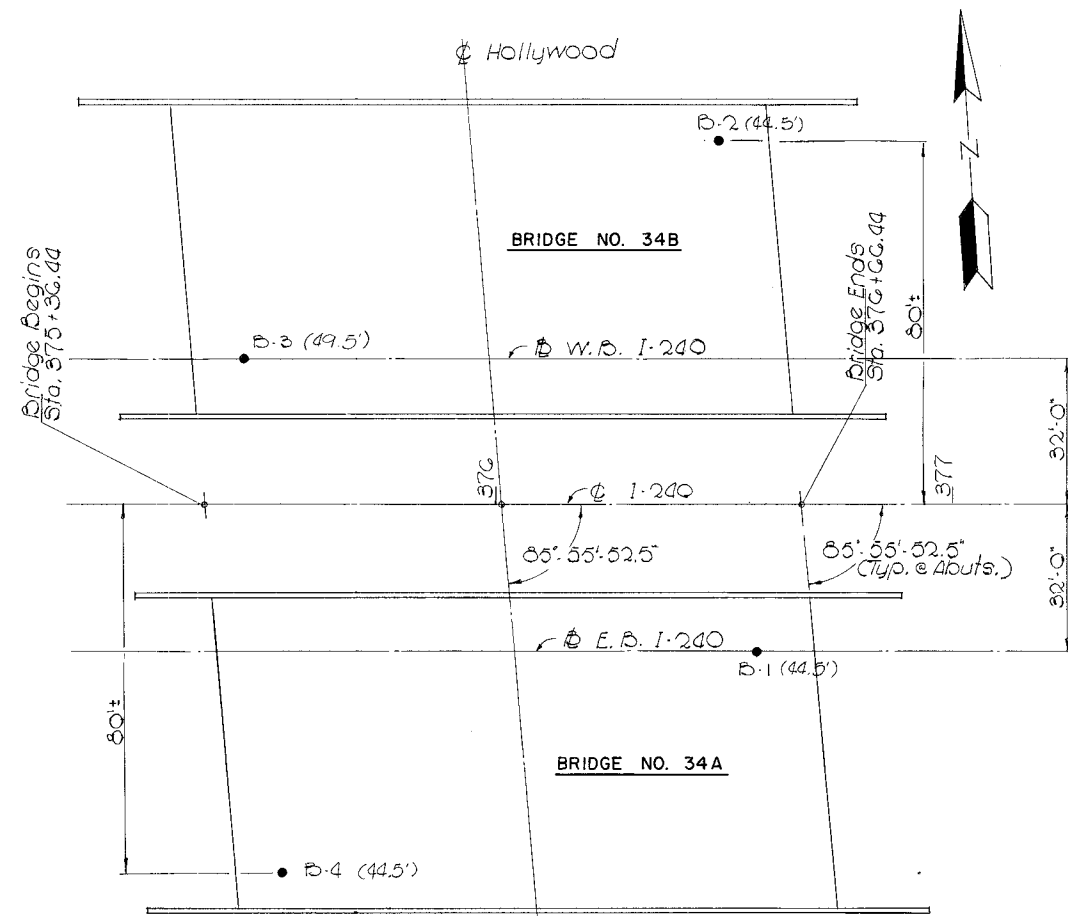
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

SCREED ELEVATIONS  
STA. 376+01.44

SHELBY COUNTY

M-44-45

MICROFILMED

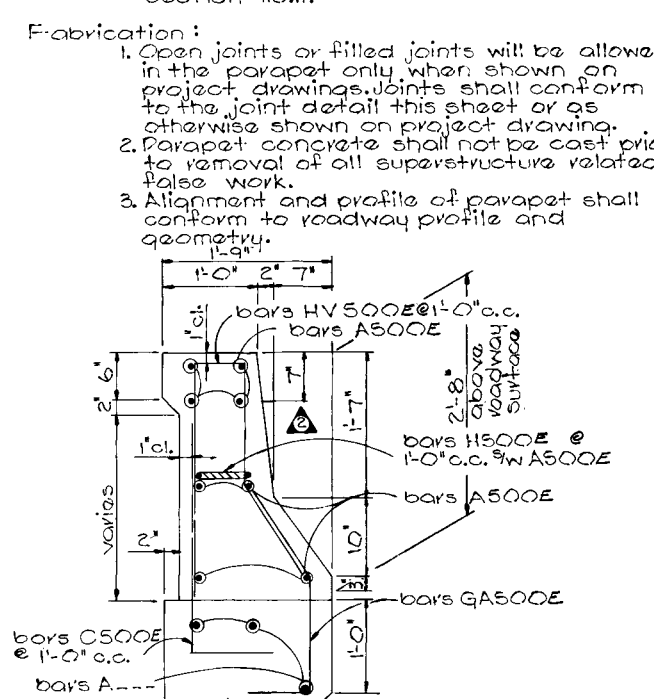
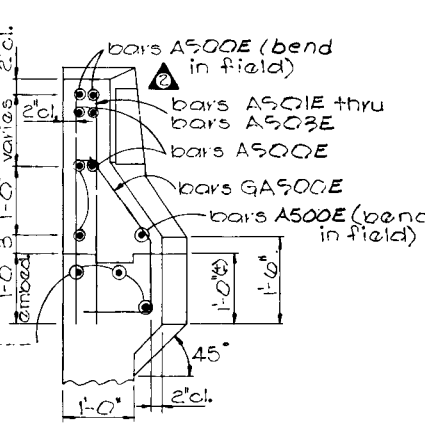
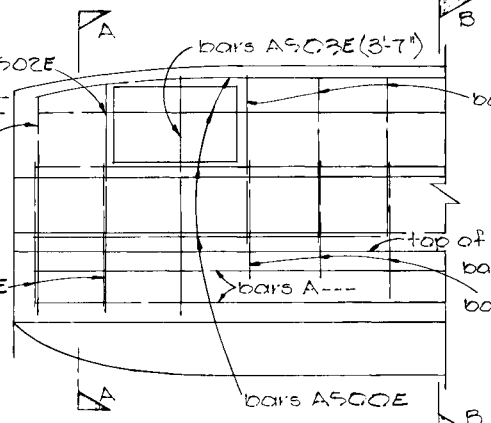
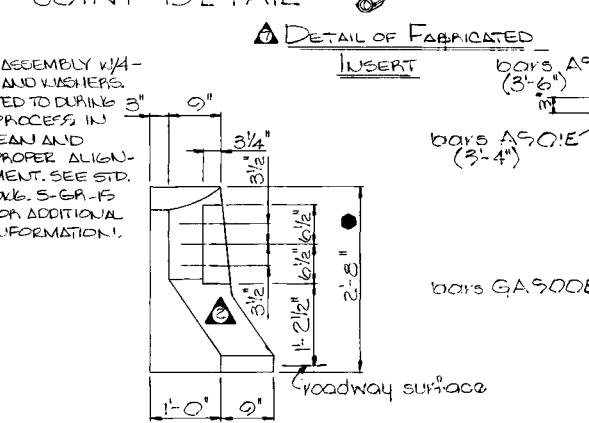
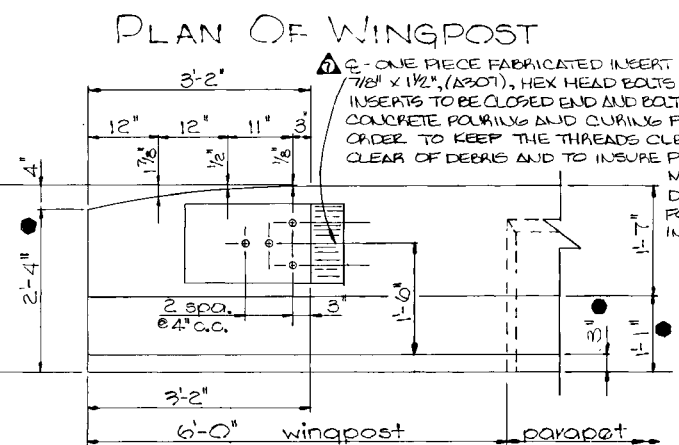
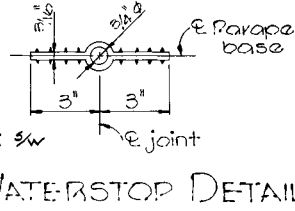
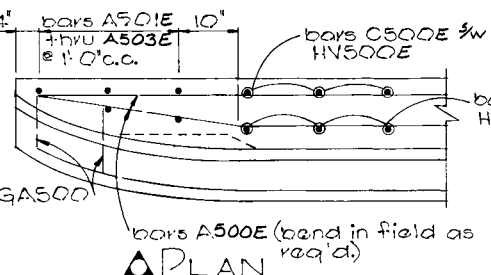
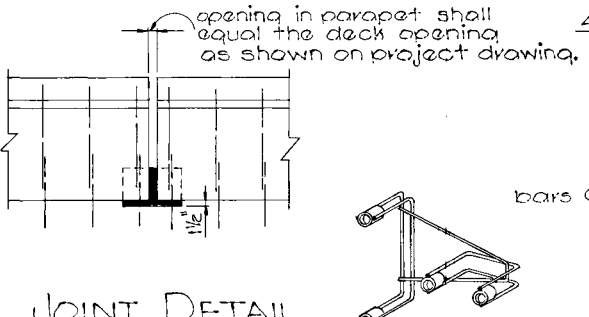
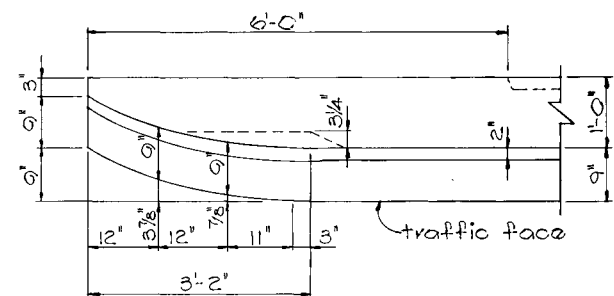
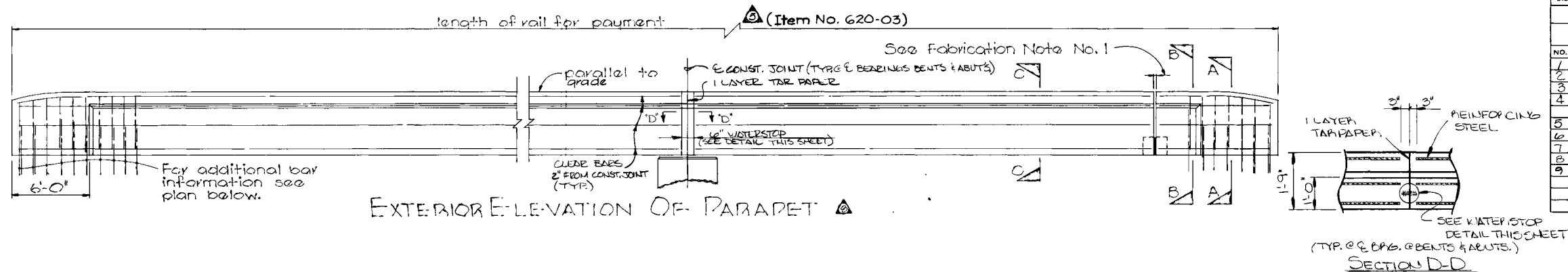


FOUNDATION DATA  
E.B. & W.B. I-240 OVER HOLLYWOOD ST.  
SHELBY COUNTY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		1973		

REVISIONS				
NO.	DATE	BY	BRIEF DESCRIPTION	
1	11-23-73	C.M.H.	General Revisions	
2	9-4-74	C.M.H.	vertical face to slope face	
3	9-19-74	C.M.H.	changed parapet height	
4	1-28-76	R.M.D.	changed guardrail	
5	7-7-81	R.M.D.	Item No. 610 to 723	
6	11-23-82	R.M.D.	HEIGHT CHANGE, GEN. REV.	
7	3-28-85	R.M.D.	ADDED NOTE & FAB. INSERT DET.	
8	4-11-85	R.M.D.	ADDED CONSTRUCTION JOINTS	
9	10/22/86	R.M.D.	CHANGED ALL BARS TO EPOXY AND ADDED SECTION D-D	



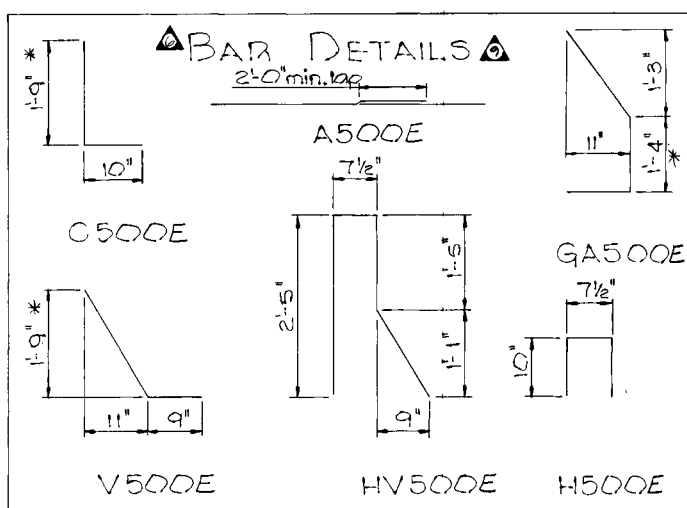
● based on no overlay on bridge for actual overlay dimensions. See Bridge Deck Sealant Note on Bridge Layout Sheet.

QUANTITIES FOR WING POST (EACH)

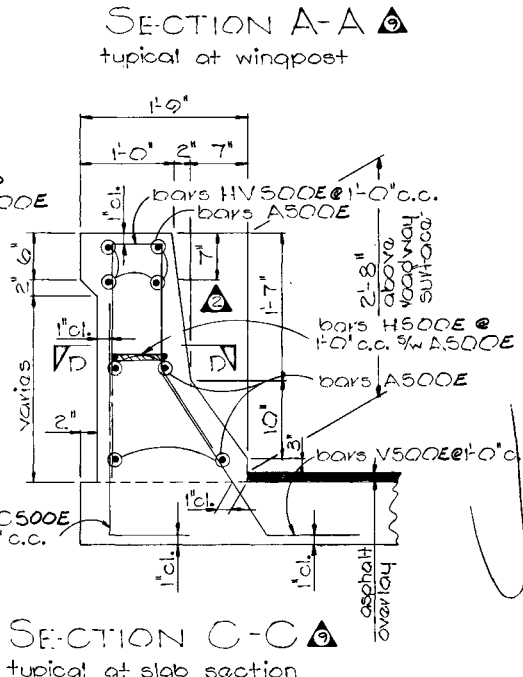
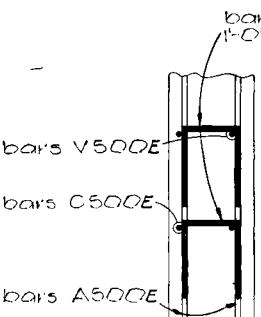
Class "A" Concrete	EPOXY REINF. STEEL
.62 c.y.	110 lbs.

PARAPET QUANTITIES PER LIN. FT.

Class "A" Concrete	EPOXY REINF. STEEL
.113 c.y.	21 lbs.



Note: N.F. = Near Face  
F.F. = Far Face



1. For dimensions are cut to out. First digit of the number indicates size.  
2. These bars shall be full length of parapet except that no bar will pass through open joints.  
3. \*EPOXY COAT NO OVERLAY ON THE BRIDGE. TO BE INCREASED AS REQUIRED FOR ASPHALT OVERLAY.

SECTION B-B  
typical at wing wall

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

BRIDGE RAILING  
CONCRETE PARAPET  
1973

CORRECTED: *W. R. H. H. H.*  
ENGINEER OF STRUCTURES

APPROVED: *Louis Buena*  
DIRECTOR OF HIGHWAYS

M-28-1

DESIGNED BY: C.M.H. DATE: May '73  
DRAWN BY: T. Wilson DATE: May '73  
SUPERVISED BY: C.M.H. & R.M.D. DATE: May '73  
CHECKED BY: C.M.H. DATE: May '73

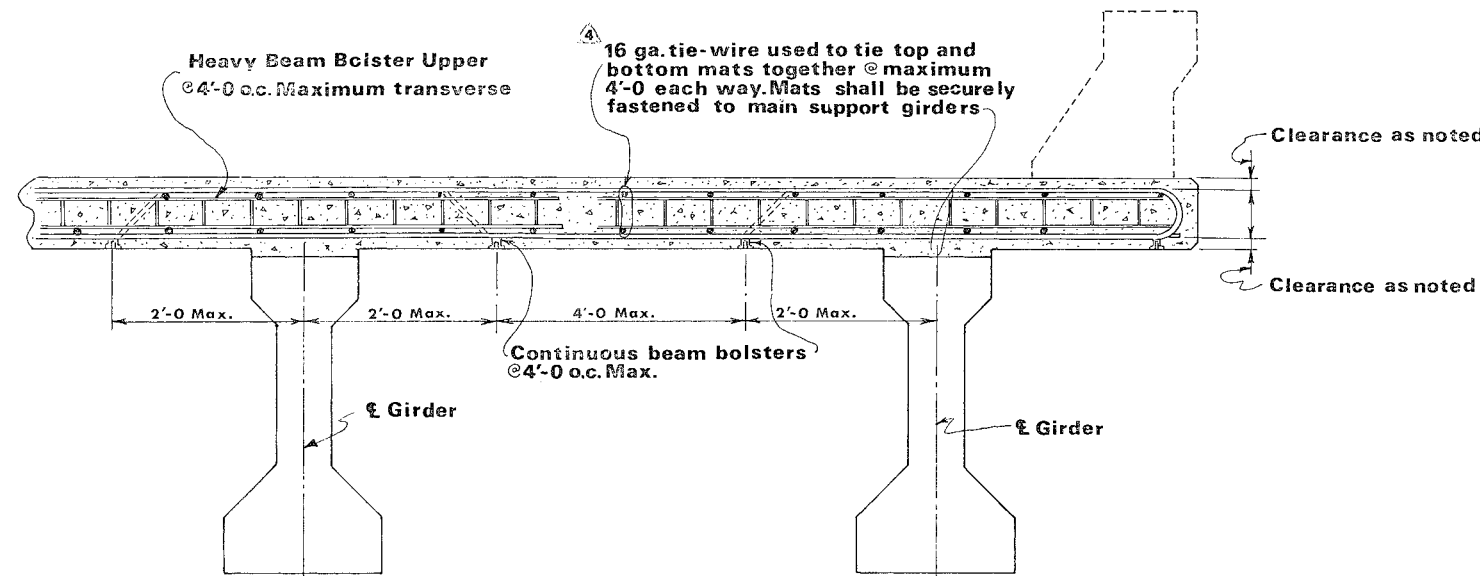
PROJECT NO.	YEAR	SHEET NO.
REVISIONS		
NO.	DATE	BY
1	10-13-59	
2	6-16-70	
3	9-12-74	
4	1-14-75	
5	8-27-76	
BRIEF DESCRIPTION		
Reinf. bar clearance		
Gen. Revisions		
Note 3 changed		
Revised Note		
Revised Note #10 & added TABLE A & B, added note 13.		

TABLE A

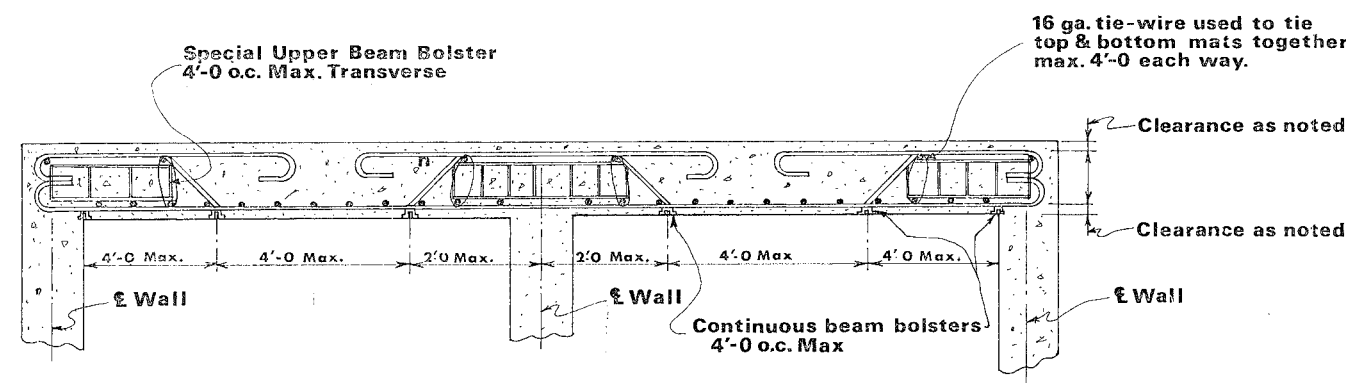
Bar Size	Approx. dia. outside deformations (inches)
#3	7/16
#4	9/16
#5	1 1/16
#6	7/8
#7	1

TABLE B

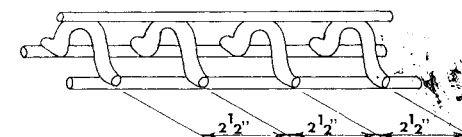
Bar Size	Approx. dia. outside deformations (inches)
8	1 1/8
9	1 1/4
10	1 7/16
11	1 5/8
14	1 7/8
13	2 1/2



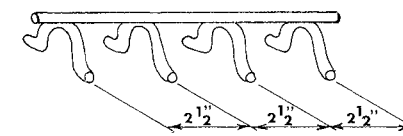
TYPICAL DETAILS FOR GIRDER TYPE BRIDGES



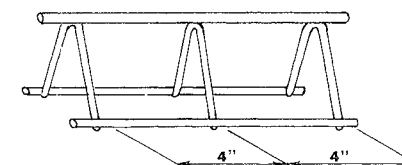
TYPICAL DETAILS FOR BOX TYPE STRUCTURES



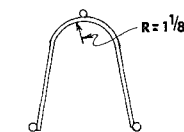
HEAVY BEAM BOLSTER UPPER (HBBU)



BEAM BOLSTER (BB)



SPECIAL UPPER BEAM BOLSTER



END VIEW

- Reinforcement in Bridge slabs and top slabs of boxes shall be securely spaced from the forms by metal spacers as indicated this sheet. Other type spacers will not be permitted.
- All beam bolsters (BB) & heavy beam bolster upper (HBBU) and Special Upper Beam bolster shall be made according to C.R.S.I. Specifications.
- Beam bolster (BB) legs in contact with forms and to be at exposed surface of concrete, shall be either "plastic protected" or "stainless steel protected"
- Reinforcing bars shall be securely fastened together at each intersection using a minimum 16 ga. tie wire, except where spacing is less than one foot in each direction, alternate intersections shall be fastened.
- Reinforcing bar supports shall be furnished to minus 1/16" or plus 1/8" of specified bar.
- The top and bottom reinforcing mats shall be tied together at maximum of 4'-0" o.c. each way.
- When any type shear connector protrudes from the top flange of the beam, the reinforcing steel shall be tied to these connectors at maximum 2'-0" o.c. along the beam.
- Reinforcing steel shall not be used to support concrete buggies, material carts, or bundles of re-bars.
- Cost of all bar supports and tie wire shall be included in bid price for reinforcing steel.
- A reinforcing bar may be substituted when a heavy Beam Bolster Upper of a 1" or less height is required. See Table A above.
- A special Upper Beam Bolster (as detailed this sheet) may be substituted for heavy Beam Bolster Uppers required in heights of 5 1/4" or greater.
- Steel in top & bottom of slabs of Reinforced Concrete Hollow Box Girders will be supported in accordance with this drawing.
- 3a. Plastic protected legs shall be dipped and baked onto the upturned legs per the latest C.R.S.I. specifications.
- 3b. Stainless protected legs shall be made from stainless steel with a minimum chromium content of 16% (similar to AISI TYPE 430). Per the latest C.R.S.I. specifications.

13. Use table A and/or B for bar sizes to determine beam bolster size to use.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

# STANDARD REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS


DESIGNED BY  
DRAWN BY G.P. Mullican  
SUPERVISED BY  
CHECKED BY  
DATE 8-29-73  
DATE  
DATE

CORRECT  
ENGINEER OF STRUCTURES  
APPROVED  
DIRECTOR OF HIGHWAYS

K-80-14



3'-8" + backwall ÷ sine



1'-0" Slope S'

3'-2"

1'-0"

**BARS F9--**

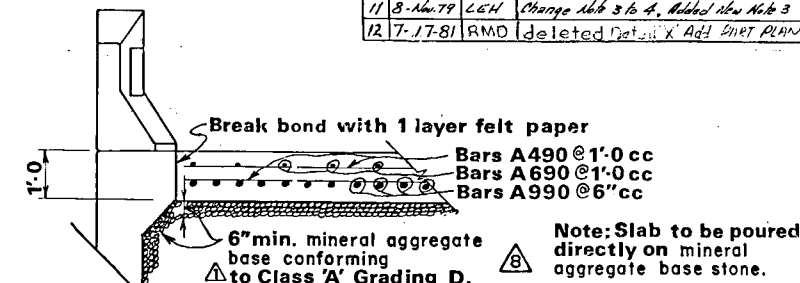
1'-0"

1'-2"

2'-1 1/2"

**BARS L**

Total Length: 7'-5"



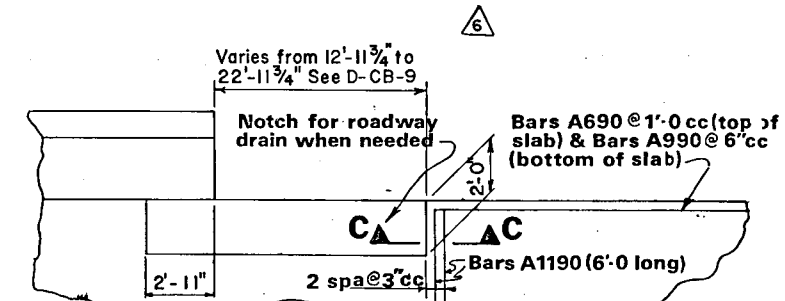
Bars A990 @ 6" cc  
 Bars A690 1'-0"  
 Bars L590 @ 1'-0" between piles spliced with Bars L590  
 Bars A790  
 1'-6"  
 1'-0"  
 3"  
 3"  
 3"

Shown with non-integral Abutment

Shown with non-integral Abutment

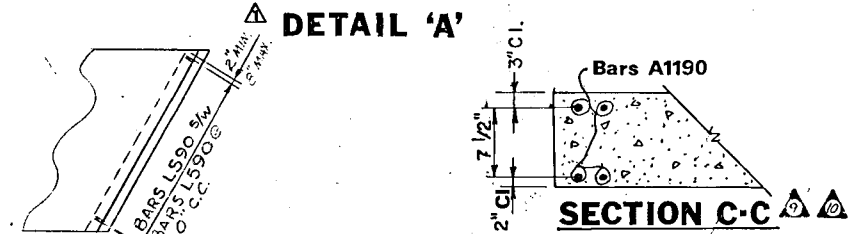
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1. *Journal of the American Medical Association*, 1997; 277: 1039-1043.

1. *Journal of the American Medical Association*, 1997; 277: 1039-1043.



**CONCRETE:** To be Class 'A' (1

**CONCRETE:** To be Class 'A' (1

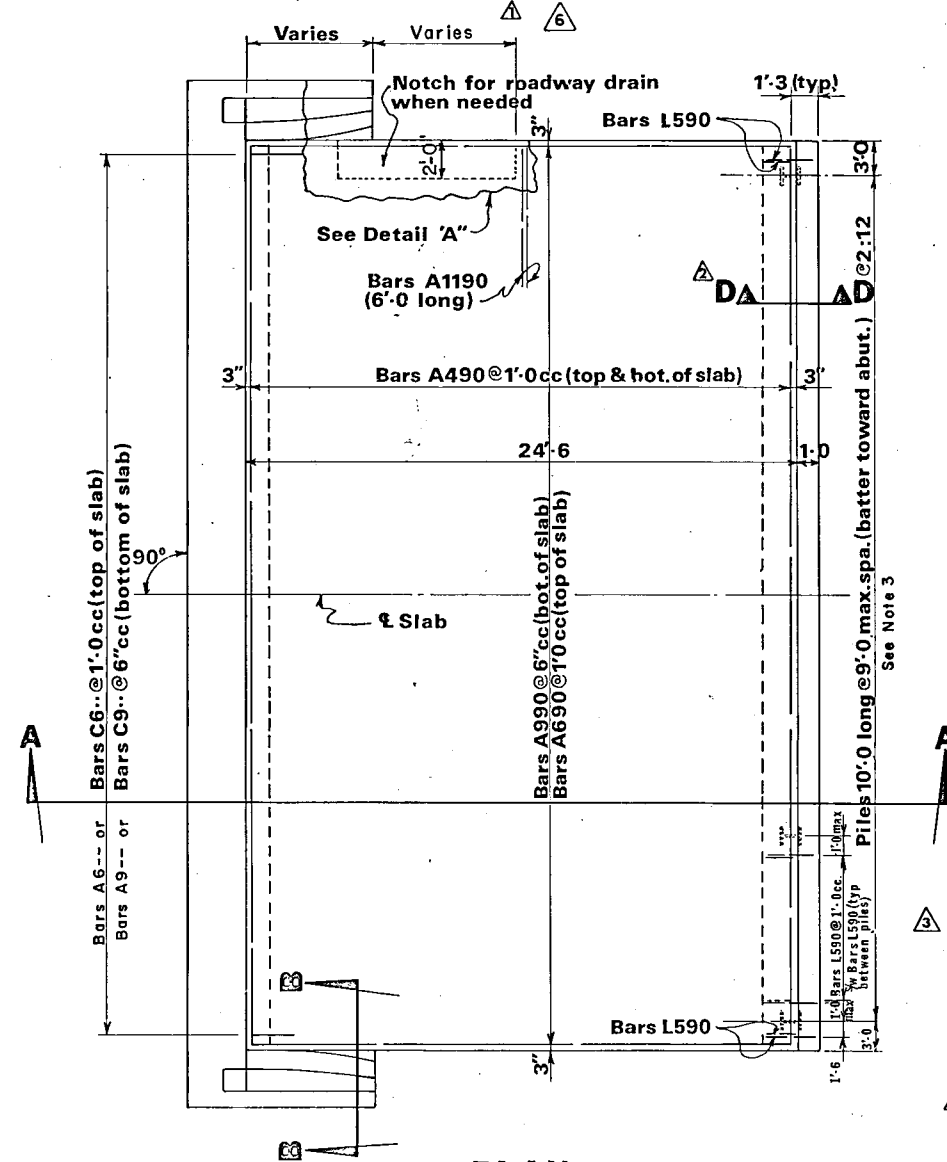
**SPECIFICATIONS: Standard Road & Bridge Specifications  
of the Tennessee Department of Highways  
(Current Edition)**

## STANDARD DRAWING

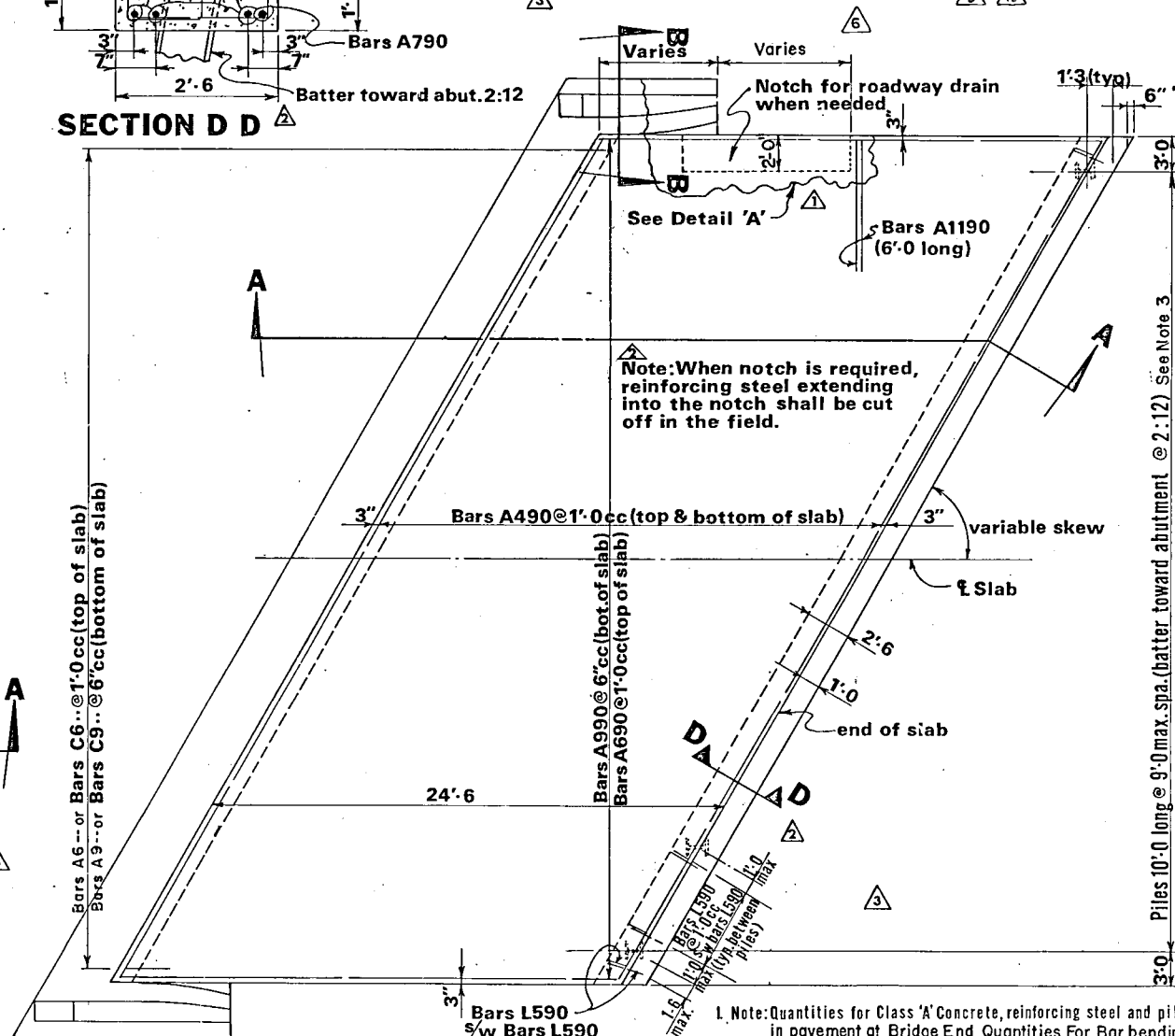
CORRECT *H. W. Smith*  
ENGINEER OF STRUCTURES  
APPROVED *John J. Evans*  
DIRECTOR OF HIGHWAYS

**K-86-144**

Copy - 1 OF 4 2-5.

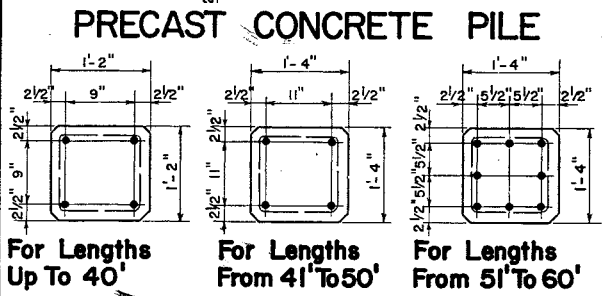
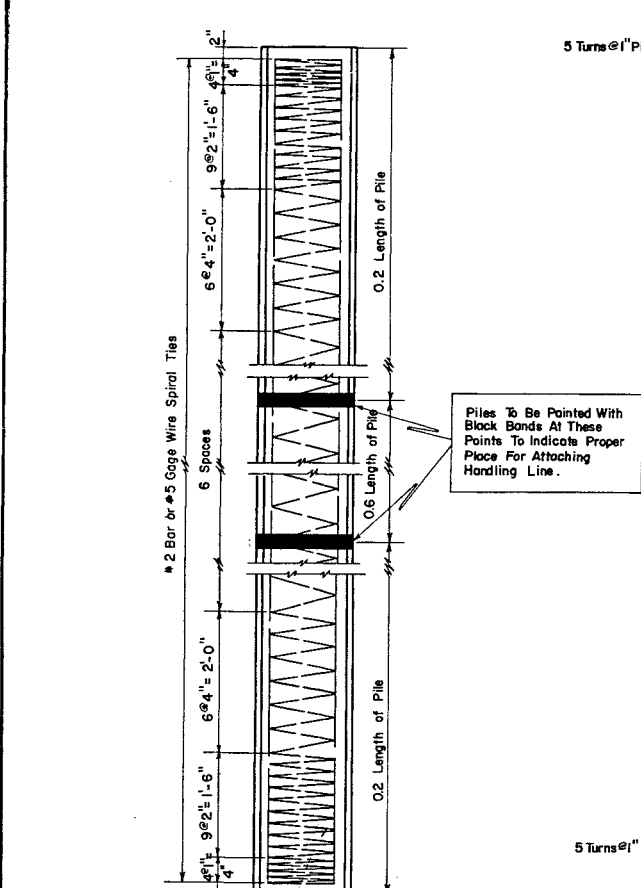


DESIGNED BY C.M.Hiles DATE 8-70  
 DRAWN BY GPM DATE \_\_\_\_\_  
 SUPERVISED BY C.M.Hiles DATE \_\_\_\_\_  
 CHECKED BY D.W.Fortner DATE 10-8-70



1. Note: Quantities for Class 'A' Concrete, reinforcing steel and piles are included in pavement at Bridge End Quantities. For Bar bending dimensions, see Bill of Steel.
2. Note: Cost of mineral aggregate base quantity to be paid as Item 303-0 Mineral Aggregate Class A, Grading D.
3. Note: In lieu of the Class A, Grading D material shown, Class B, Grading C or D may be used.
4. Note: Piles shall be HP10 @ 42' or Precast Concrete Size 1 as shown in Estimated Quantities. Piles shall have a maximum length of 10'-0" regardless of bearing and shall be spaced at 9'-0" maximum. Piles shall be omitted if beam is supported on rock or rock fill or if the Abutment is integral.

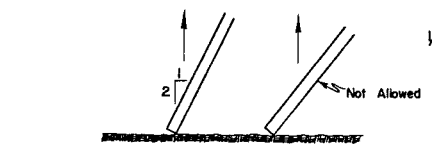
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3	TENN.		18		



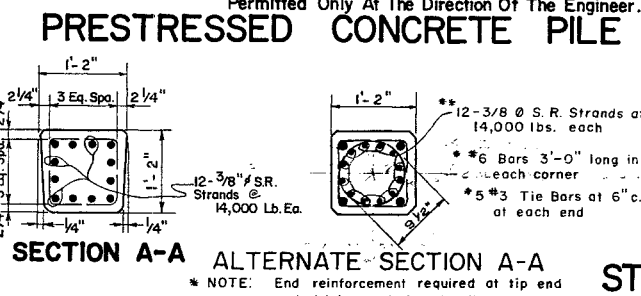
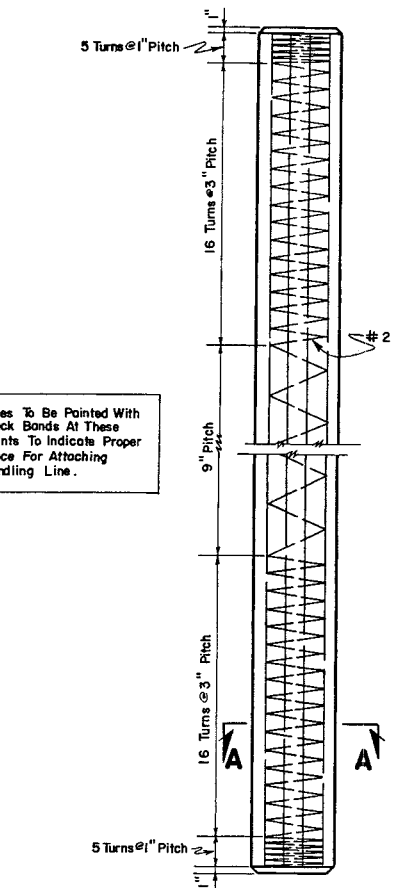
NOTE: If It Becomes Necessary To Use Size 2 Piles The Contractor Will Be Allowed An Increase In The Size 1 Bid Of 25 %.

Length Of Pile	Longitudinal Reinforcing	Weight Of Steel Per Ft.	Weight Of Pile Per Ft.
Up To 35'	4 # 7 Bars	9.6 #	205.3 #
36' To 40'	4 # 8 Bars	12.2 #	205.3 #
41' To 45'	4 # 9 Bars	15.1 #	265.3 #
46' To 50'	4 # 10 Bars	18.8 #	265.3 #
51' To 55'	8 # 9 Bars	28.9 #	265.3 #
56' To 60'	8 # 10 Bars	36.2 #	265.3 #

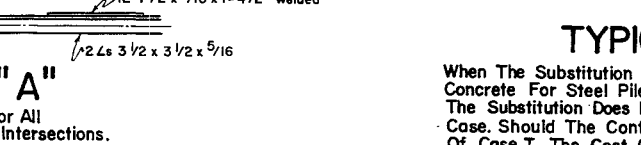
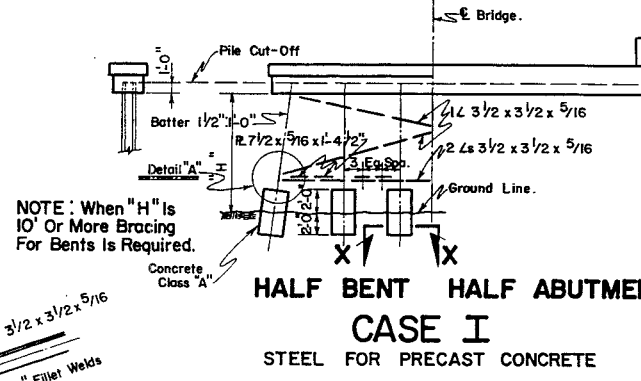
NOTE: In Handling The Piles, They Shall Be Supported At The Points Indicated. Piles To Be Picked Up By Pulling On Both Lines Uniformly. End Of Pile Not To Touch Ground Unless Piles Inclined 1:2 Or Steeper.



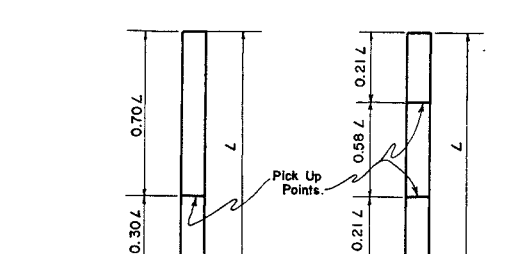
DESIGNED BY: J.W. SOUTHERLAND  
 DRAWN BY: J.W. SOUTHERLAND  
 CHECKED BY: J.W. SOUTHERLAND  
 DATE: 5-27-60  
 DATE: 2-6-62  
 DATE:



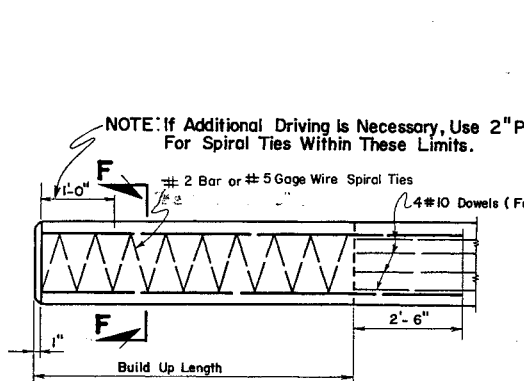
NOTE: When "H" Is 10' Or More Bracing For Bents Is Required.



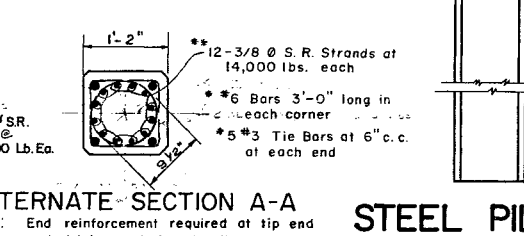
REV. - FEB. 6, 1962  
 REV. - MAR. 1, 1961 BATTER ON PRESTRESSED PILE  
 REV. - DEC. 8, 1960  
 REV. - OCT. 27, 1960  
 REV. - SEPT. 27, 1960 DELETE PILE SUBSTITUTIONS  
 REV. - JULY 25, 1960  
 REV. - DEC. 14, 1964 SPIRAL TIES  
 REV. - JAN. 22, 1964 COST OF WIRE FABRIC  
 REV. - FEB. 24, 1966 TIMBER PILE SPLICE, DETAIL OF PILE DRIVING POINT  
 REV. - NOV. 27, 1973 ADDED ALT. SECTION A-A



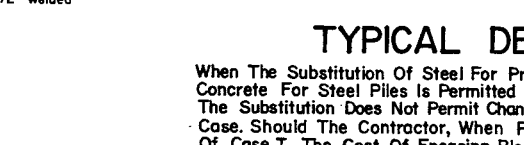
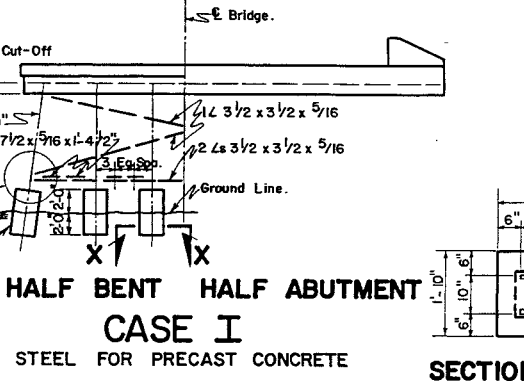
NOTES: (1) Maximum Length Single Pick Up Point - 60'-0"  
 (2) Maximum Length Double Pick Up Point - 85'-0"  
 (3) Piles To Be Marked At These Points To Indicate Proper Place For Attaching Handling Lines.  
 (4) For Greater Lengths Three Point Pick-up is Required.



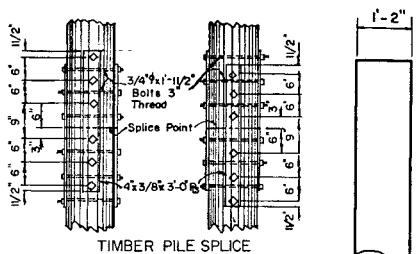
NOTE: Driving Of Built-Up Piles Shall Be Permitted Only At The Direction Of The Engineer.



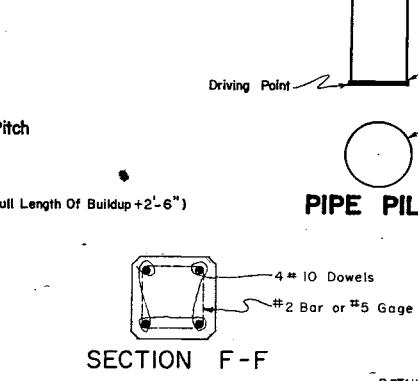
NOTE: Subject to the approval of the Engineer of Structures, alternate strand sizes and arrangements of equivalent total force may be substituted.



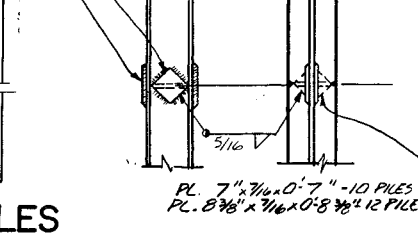
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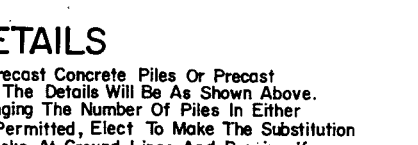
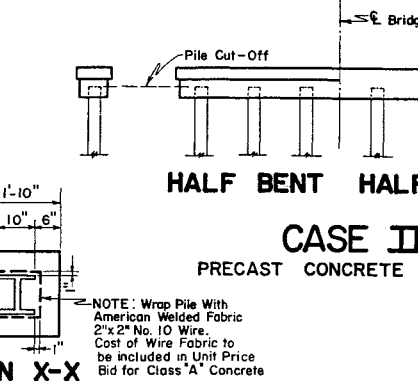
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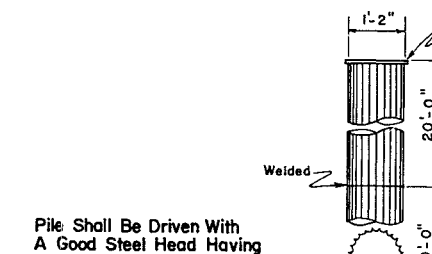
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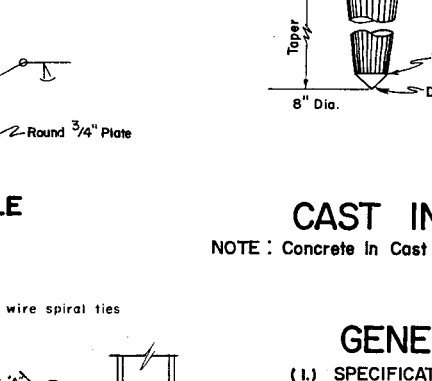
NOTE: Subject to the approval of the Engineer of Structures, alternate strand sizes and arrangements of equivalent total force may be substituted.



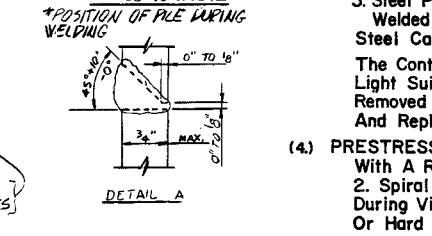
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 REV. - NOV. 27, 1973 ADDED ALT. SECTION A-A



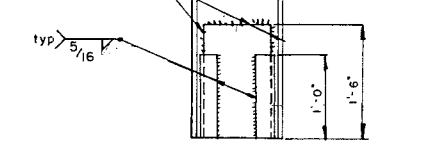
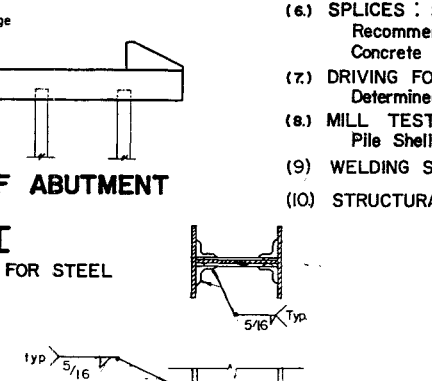
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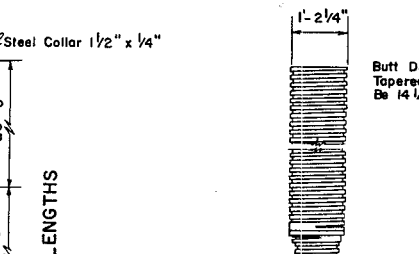
NOTE: Driving Of Built-Up Piles Shall Be Permitted Only At The Direction Of The Engineer.



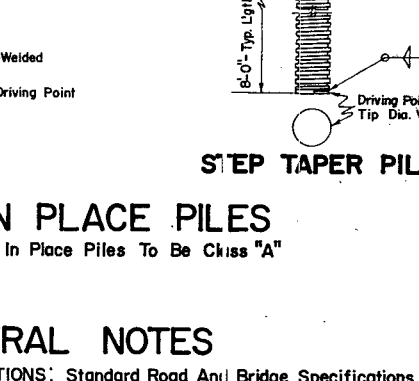
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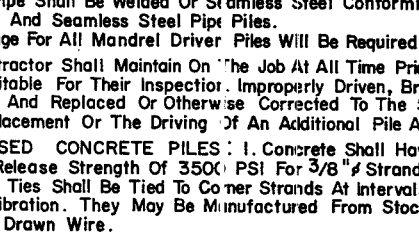
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 REV. - NOV. 27, 1973 ADDED ALT. SECTION A-A



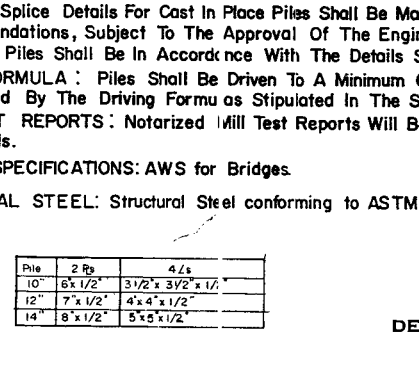
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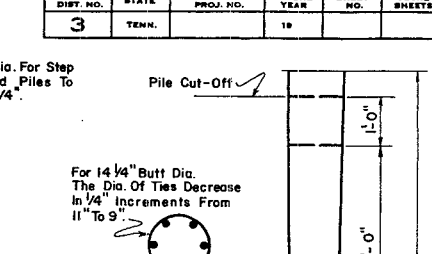
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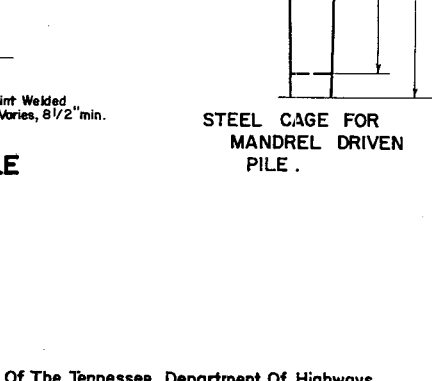
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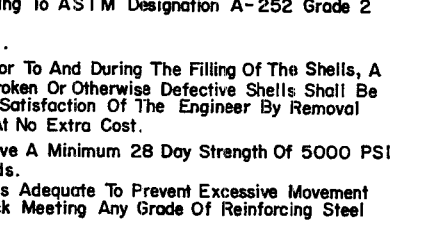
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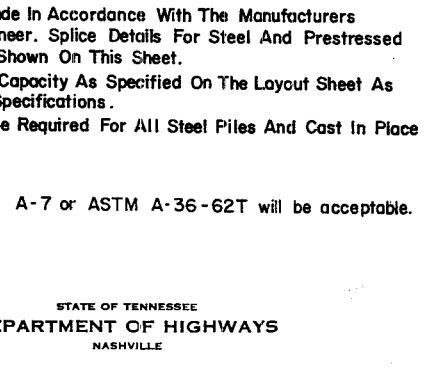
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 REV. - NOV. 27, 1973 ADDED ALT. SECTION A-A

## CAST IN PLACE PILES

NOTE: Concrete In Cast In Place Piles To Be Class "A"

## GENERAL NOTES

- (1) SPECIFICATIONS: Standard Road And Bridge Specifications Of The Tennessee Department Of Highways.
- (2) CHOICE OF PILES: To Be Specified On The Layout Sheet For Each Bridge.
- (3) CAST IN PLACE: Pile Shells Shall Have A Minimum Thickness As Follows:
  1. Piles Driven Without Mandrel - 7 Gage.
  2. Piles Driven With Mandrel Shall Be Of Sufficient Strength And Thickness To Hold Its Original Form And Show No Sign Of Distortion After The Core Has Been Withdrawn.
  3. Steel Pipe Shall Be Welded Or Seamless Steel Conforming To ASTM Designation A-252 Grade 2 Welded And Seamless Steel Pipe Piles.
 Steel Cage For All Mandrel Driver Piles Will Be Required.
- (4) PRESTRESSED CONCRETE PILES: 1. Concrete Shall Have A Minimum 28 Day Strength Of 5000 PSI With A Release Strength Of 3500 PSI For 3/8" Strands.
  2. Spiral Ties Shall Be Tied To Corner Strands At Intervals Adequate To Prevent Excessive Movement During Vibration. They May Be Manufactured From Stock Meeting Any Grade Of Reinforcing Steel Or Hard Drawn Wire.
- (5) PILE POINTS: All Cast In Place Piles Shall Be Equipped With A Steel Driving Point. Driving Points Shall Be Mill Welded To The Pile Shell. Driving Points May Be Either Structural Steel, Forged Steel Or Cast Steel. Steel Piles Shall Have A Square Cut End Only. No Driving Point Is Required Unless Shown On The Bridge Plans.
- (6) SPLICES: Splice Details For Cast In Place Piles Shall Be Made In Accordance With The Manufacturers Recommendations, Subject To The Approval Of The Engineer. Splice Details For Steel And Prestressed Concrete Piles Shall Be In Accordance With The Details Shown On This Sheet.
- (7) DRIVING FORMULA: Piles Shall Be Driven To A Minimum Capacity As Specified On The Layout Sheet As Determined By The Driving Formulas Stipulated In The Specifications.
- (8) MILL TEST REPORTS: Notarized Mill Test Reports Will Be Required For All Steel Piles And Cast In Place Pile Shells.
- (9) WELDING SPECIFICATIONS: AWS for Bridges.
- (10) STRUCTURAL STEEL: Structural Steel conforming to ASTM A-7 or ASTM A-36-62T will be acceptable.

Pile	2 Rb	4 Ls
10"	6 1/2"	3 1/2" x 3/2" x 1/2"
12"	7" x 1/2"	4" x 4" x 1/2"
14"	8" x 1/2"	5" x 5" x 1/2"

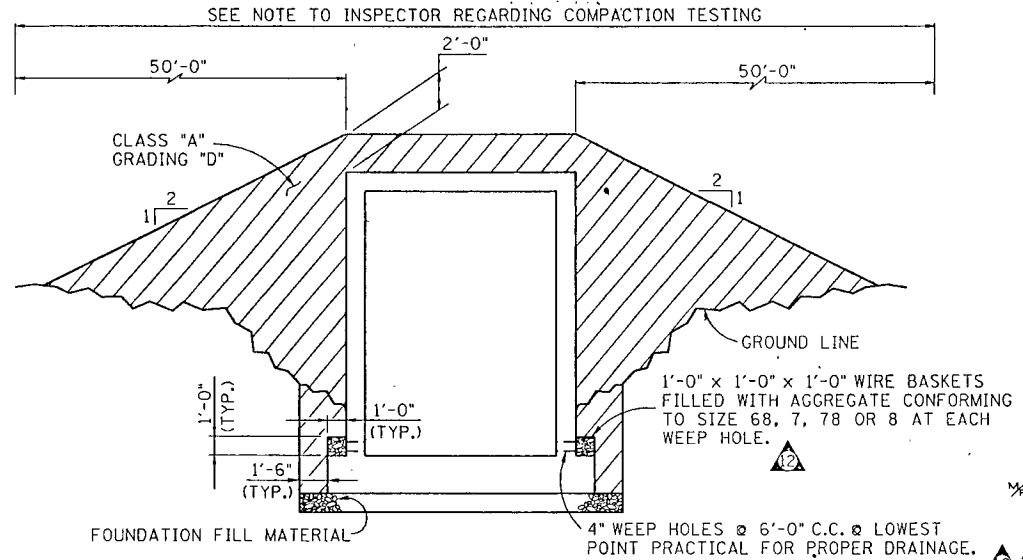
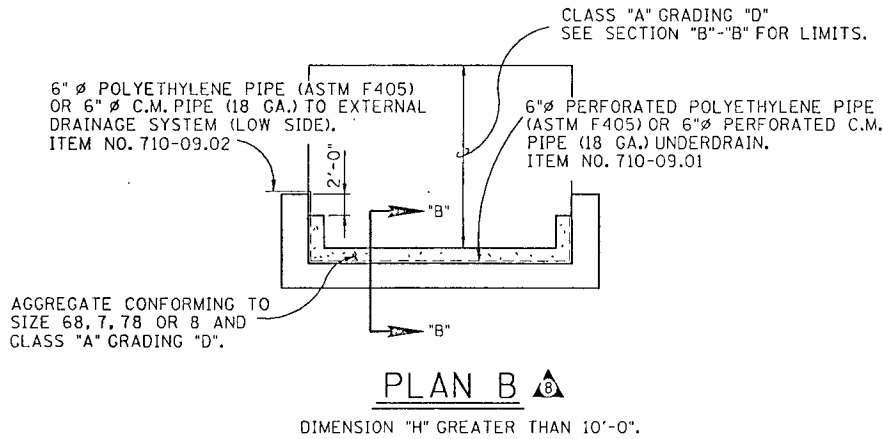
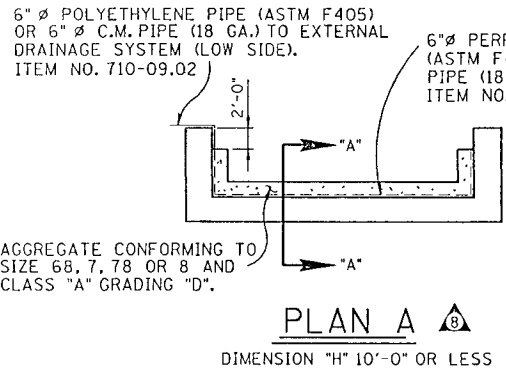
STATE OF TENNESSEE  
 DEPARTMENT OF HIGHWAYS  
 NASHVILLE

# STANDARD PILE DETAILS

DESIGNED BY: J.W. SOUTHERLAND  
 DRAWN BY: J.W. SOUTHERLAND  
 CHECKED BY: J.W. SOUTHERLAND  
 DATE: 5-27-60  
 DATE: 2-6-62  
 DATE:

H-5-III

SEE Std-5-1 & 5-2



PROJECT NO.		YEAR	SHEET NO.
		1971	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-24-71	R.G.	
2	3-18-71	E.R.G.	ADDED NOTE NO.3
3	10-8-71	R.M.D.	EXCAVATION SECTION "B"-B CLARIFIED
4	10-10-72	R.M.D.	
5	11-27-72	R.M.D.	
6	9-9-72	C.L.L.	CHANGE NOTE
7	1-9-75	R.M.D.	NOTE CHANGED
8	7-17-86	R.M.D.	ADDED POLYETHYLENE PIPE
9	2-9-87	D.W.F.	GENERAL REVISIONS
10	6-25-87	R.M.D.	REV. PAY LIMIT BOX CULVERT, REMOVED INSERT & ADDED ITEM NO. FOR CLASS "A" GRADING "D"
11	1-7-91	R.M.D.	REV. ITEM NO. 710-09.02 TO 710-09.01 AND REV. ITEM NO. 303-01.01 TO 303-01.02
12	2-8-91	R.M.D.	REV. NOTE 2 TO INCLUDE RETAINING WALLS AND REV. ITEM NO. 710-09.02 TO 710-09.01
13	6-24-91	M.A.H.	ADDED SECTION SHOWING GEOCOMPOSITE DRAINAGE SYSTEM AND NOTE NO.4
14	9-1-91	M.A.H.	CHANGED DWG. NO. FROM K-85-150
15	9-18-91	M.A.H.	REMOVED WATERPROOFING
16	5-11-92	M.A.H.	DELETED ALTERNATE "B" AND NOTES

NOTES

1. BACKFILLING: UNLESS OTHERWISE SPECIFIED OR DIRECTED, THE CONTRACTOR SHALL BACKFILL BEHIND ABUTMENTS, RETAINING WALLS OF BOX TYPE BRIDGES AND CULVERTS AS SOON AS THE FOLLOWING CONDITIONS ARE MET:

A. CONCRETE SURFACES AGAINST WHICH BACKFILL WILL BE PLACED HAVE BEEN GIVEN A CLASS 1 FINISH AS SPECIFIED IN SUBSECTION 604.22.

B. REPRESENTATIVE SPECIMENS OF THE CONCRETE IN THE STRUCTURE, SECTION OR UNIT, CURED BY THE METHODS AND IN THE MANNER THAT THE CONCRETE WHICH THE TEST SPECIMENS REPRESENT IS CURED, ATTAIN A COMPRESSIVE STRENGTH OF 3,000 POUNDS PER SQUARE INCH.

C. THE CONCRETE SHALL HAVE BEEN PLACED A MINIMUM OF 7 DAYS, NOT COUNTING THE DAYS OF TWENTY-FOUR HOURS EACH IN WHICH THE TEMPERATURE FALLS BELOW FOURTY DEGREES FAHRENHEIT, OR 21 CALENDAR DAYS WHICHEVER OCCURS FIRST.

THE PLACEMENT OF BACKFILL AND EMBANKMENT SHALL BE IN ACCORDANCE WITH SUBSECTION 204.11 AND SUBSECTION 205.04, RESPECTIVELY, AND AS SPECIFIED ON THE PLANS.

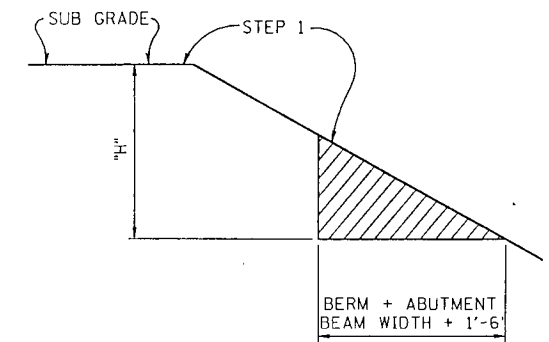
2. CLASS "A" GRADING "D" MATERIAL SHALL BE PAID FOR UNDER ITEM NO. 303-01.02, GRANULAR BACKFILL (BRIDGES) OR ITEM 303-01.03 THRU 303-01.08, GRANULAR BACKFILL (RETAINING WALLS).

3. IN LIEU OF THE CLASS "A" GRADING "D" MATERIAL SHOWN, CLASS "B" GRADING "C" OR "D" MAY BE USED.

4. LOCATE PIPE AT LOWEST POINT PRACTICAL FOR PROPER DRAINAGE WITH SLOPE PARALLEL TO ABUTMENT BEAM OR RETAINING WALL ( $\frac{1}{8}$ " PER FOOT MINIMUM). INSTALL PIPE AND 1'-0" OF COVER AS SOON AS POSSIBLE AFTER FORMING WALL.

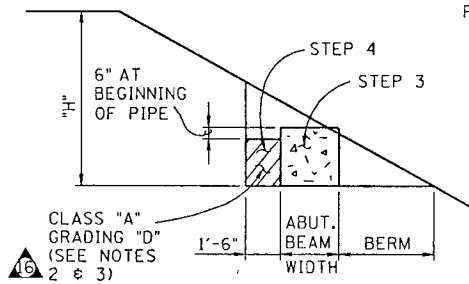
MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
MISCELLANEOUS ABUTMENT  
AND  
DRAINAGE DETAILS  
1971



STEP 1: PLACE AND COMPACT END FILL.

STEP 2: EXCAVATE SHADED AREA AS SHOWN. SHALL BE PAID AS DRY EXCAVATION (BRIDGE) OR UNCLASSIFIED EXCAVATION (BRIDGE).

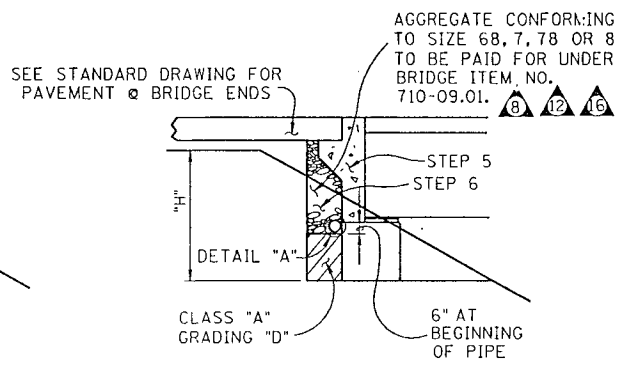


STEP 3: POUR ABUTMENT BEAM.

STEP 4: PLACE BACKFILL MATERIAL BEHIND ABUTMENT BEAM. SEE NOTE 1.

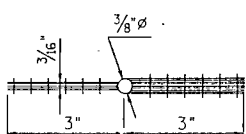
SECTION "A"-A

NOTE: THE CONSTRUCTION SEQUENCE SHOWN ABOVE IS APPLICABLE WHERE DIMENSION "H" IS LESS THAN OR EQUAL TO 10'-0".



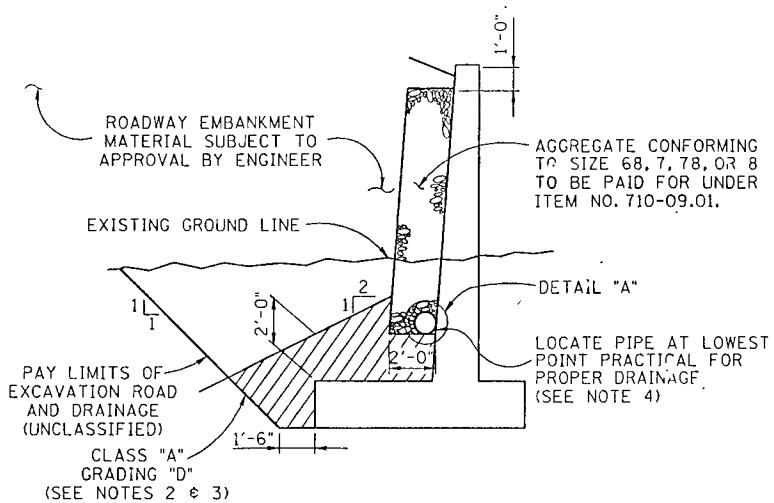
STEP 5: POUR ENDWALL.

STEP 6: PLACE BACKFILL MATERIAL BEHIND ENDWALL. SEE NOTE 1.



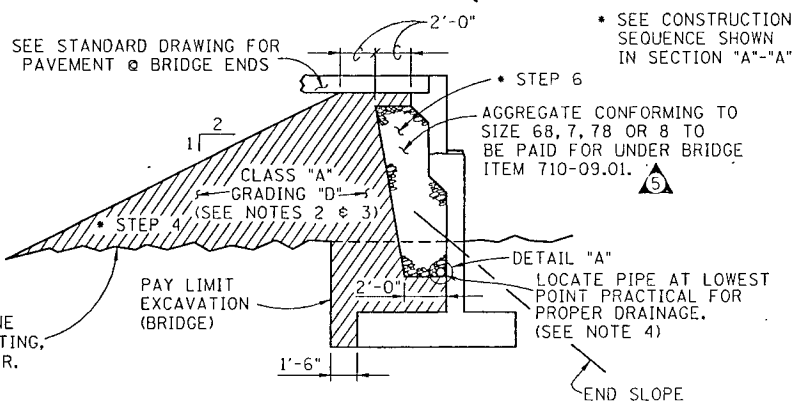
WATERSTOP DETAIL

(FOR LOCATION SEE DESIGN DRAWING)



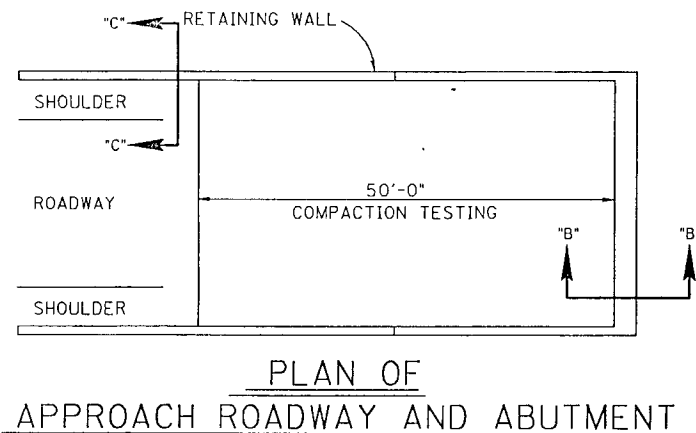
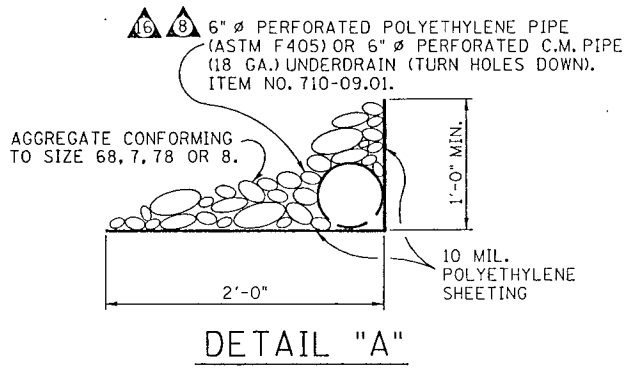
BOX CULVERT OR BRIDGE

NOTE: CLASS "A" GRADING "D" LIMITS ARE TYPICAL FOR BOX CULVERT OR BRIDGE AND WINGWALLS. CLASS "A" GRADING "D" MATERIALS SHALL BE PAID FOR UNDER ROADWAY ITEM NO. 303-01.01. (SEE ROADWAY PLANS.)



SECTION "B"-B

(TYPICAL FOR COUNTERFORT OR CANTILEVER CLOSED ABUTMENTS GREATER THAN 10' IN HEIGHT)



NOTE TO INSPECTOR: SEE MATERIALS AND TESTS SAMPLING AND TESTING SCHEDULE FOR FREQUENCY OF COMPACTION TESTING OF EMBANKMENT AND BACKFILL MATERIAL. ALSO NOTE 1.

RETAINING WALL SECTION "C"-C

DESIGNED BY R. DISHNER  
DRAWN BY KEITH DOUGLAS  
SUPERVISED BY  
CHECKED BY R. DISHNER

DATE 1-91  
DATE 1-91  
DATE 1-91  
DATE 1-91

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES