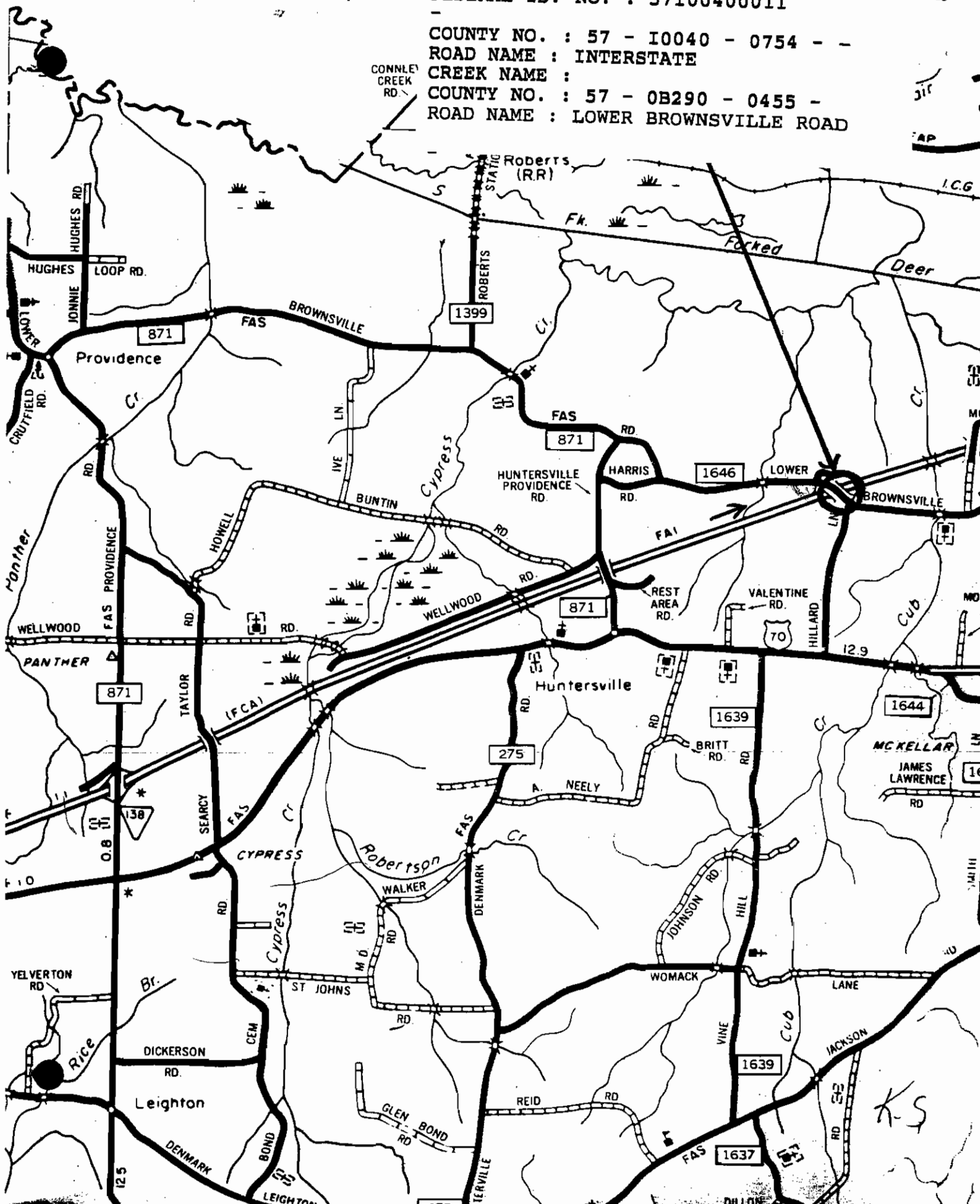


FEDERAL ID. NO. : 57I00400011

FEB 19 2002

COUNTY NO. : 57 - I0040 - 0754 - -
ROAD NAME : INTERSTATE
CREEK NAME :
COUNTY NO. : 57 - 0B290 - 0455 -
ROAD NAME : LOWER BROWNSVILLE ROAD







David Domm

From: TDOT BridgeEval
Sent: Wednesday, May 17, 2023 8:44 AM
To: David Domm
Cc: TDOT BridgeEval
Subject: FW: Bridge Fed.ID. # 57I00400011 (57 - 0B290 - 4.54) Posting Required
Attachments: 57I00400011_PICS.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

From: Jennifer Blankenship <Jennifer.Blankenship@tn.gov>
Sent: Wednesday, May 17, 2023 6:42 AM
To: TDOT BridgeEval <TDOT.BridgeEval@tn.gov>
Cc: Rebecca Hayworth <Rebecca.Hayworth@tn.gov>; Steven Paulson <Steven.Paulson@tn.gov>
Subject: RE: Bridge Fed.ID. # 57I00400011 (57 - 0B290 - 4.54) Posting Required

See the attached weight posting pictures.

Thanks!



Jennifer Blankenship | Trans. Proj. Spec. Sr.
Bridge Inspection - Region 4
300 Benchmark Place
Jackson, TN 38301
p. 731-935-0245 c. 731-225-6430
jennifer.blankenship@tn.gov

From: TDOT BridgeEval <TDOT.BridgeEval@tn.gov>
Sent: Wednesday, May 10, 2023 4:04 PM
To: Jennifer Blankenship <Jennifer.Blankenship@tn.gov>
Cc: Rebecca Hayworth <Rebecca.Hayworth@tn.gov>; Steven Paulson <Steven.Paulson@tn.gov>; TDOT BridgeEval <TDOT.BridgeEval@tn.gov>
Subject: Bridge Fed.ID. # 57I00400011 (57 - 0B290 - 4.54) Posting Required

Good afternoon Jennifer,

The subject bridge requires 34 tons gross weight limit posting. Please see attached letter for details.

Thank you,



Na'il Alammori | Transp. Project Spec. Sr.



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
STRUCTURES DIVISION**

BRIDGE INSPECTION AND REPAIR OFFICE

SUITE 1200, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TN 37243-1403
(615) 741-0776

BUTCH ELEY

Deputy Governor
Commissioner of Transportation

BILL LEE

GOVERNOR

May 10, 2023

To: Jennifer Blankenship
Tennessee Department of Transportation
Region 4 Bridge Engineer

Subject: New Weight Limit Posting Requirement
Bridge Federal ID No. 57100400011
Bridge Location No. 57 - 0B290 - 4.54
NFA B290 (SA 5725) over I40
Madison County

We have completed the most recent evaluation of the subject bridge and have determined that the bridge is now required to be posted for a gross weight limit of 34 tons for all vehicles

The new weight limit posting signs shall be installed by May 24, 2023. Compliance with the weight limit posting requirements can be confirmed by taking photographs of all the bridge weight posting signs and emailing these photographs to TDOT.BridgeEval@tn.gov. Each photograph must show the face of the sign clearly so that the weight limit values can be confirmed.

Posting signs shall meet the minimum requirements of the MUTCD (Manual of Uniform Traffic Control Devices). See the attached "Tennessee Standard Weight Posting Signs" for additional details.

If structural repairs are completed, the TDOT Regional Bridge Engineer should be notified so a follow-up inspection can be completed. Please email any construction plans or as-built drawings to TDOT.BridgeEval@tn.gov so that we can better evaluate the work performed.

Should you have any questions, please advise.

Sincerely,

A handwritten signature in black ink, reading "Ted A. Kniazewycz".

Ted Kniazewycz, PE
Director of Structures

Bridge Maintenance Recommendations

Page No. _____

Page 1 of 1

Bridge Location No.: **57 - I0040 - 0754**

Over/Under Pass No. **57 - 0B290 - 0455**

Co. Route Log Mile

Bridge Number: **57I00400011**

Crossing:

Region: 04

Road Name:

District: 44 Spec. Case: -0-

Road Name #2: **LOWER BROWNSVILLE ROAD**

Maint. Resp.: 01 Co. Seq: 01

Bridge Rating: **FAIR**

Inspection Cycle: 16

County: **Madison**

@ ' x '
Barrels Length Width

Inspection Date: **2/19/2002** City:

Comments:

Maintenance Recommendations:

Maintenance Completed: by/date

228	APPROACH GUARDRAILS ARE SUBSTANDARD
226	GUARDRAIL TERMINALS AT APPROACH NO. 1 & 2 ARE SUBSTANDARD
235	THE TERMINAL(S) FOR THE UNDERPASS APPR. GUARDRAIL IS/ARE SUBSTANDARD

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 06/15/2000

Bridge Number: 57I004000111
(Includes Item 5A)

Feature Intersected: I40

County: 57

Route: 0B290

Special Case: 0

County Sequence: 01

Log Mile: 4.55

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>06/08/2000</u> <u>2/19/2002</u>	N NOT APPLICABLE
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN.	9 EXCELLENT CONDITION
		_____ FT. _____ IN.	8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN.	7 GOOD CONDITION - SOME MINOR PROBLEMS.
		_____ FT. _____ IN.	6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
36	TRAFFIC SAFETY FEATURES		5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
	Br. Rail Trans. Appr. Rail Appr. Rail Ends		
	<u>1</u> 0 0 0		
41	STRC OPEN/CLOSED/POSTED	A	4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
	A K P		
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	<u>6</u>	
60	SUBSTRUCTURE	5	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.
61	CHANL/CHANL PROTECTION	6	
62	CULVERT AND RETAIN WALL	N	
71	WATERWAY ADEQUACY	N	
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	8	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.
521	OVERALL CONDITION (Circle One)		
	GOOD <u>FAIR</u> POOR CRITICAL		

TEAM LEADER SIGNATURE

REVIEW DATE

2/19/2002
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: 57I004000112
(Includes Item 5A)

Feature Intersected: NFA B290 / I40

County: 57

Route: I0040

Special Case: 0

County Sequence: 01

Log Mile: 7.54

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	<u>06/08/2000</u> <u>2/19/2002</u>	515 (A) TYPE UNDERPASS BARRIER Metal Barrier or Rail
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	16 FT. 0 IN. ____ FT. ____ IN.	Revised Barrier Type
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	16 FT. 0 IN. ____ FT. ____ IN.	(B) ADEQUACY OF BARRIER OR RAIL 0
47	TOTAL HORIZONTAL UNDERCLEARANCE	<u>54</u> FT. <u>19</u> IN. <u>60</u> FT. <u>11</u> IN.	(C) ADEQUACY OF TRANSITIONS 0
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: <u>(H)</u> R <u>16</u> FT. <u>0</u> IN.		(D) ADEQUACY OF TERMINALS 0
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: <u>(H)</u> R <u>10</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>28</u> FT. <u>8</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

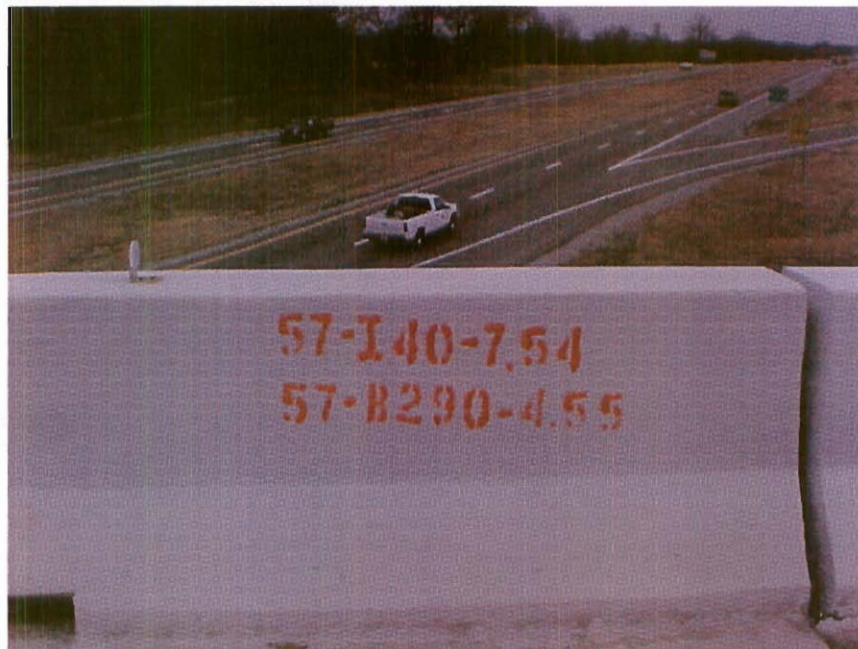
REVIEW DATE

2/19/2002

Bridge Loc. No: 57 - I0040 - 07.54 Date: 02-19-02



LOOKING AHEAD ON ROUTE



BRIDGE NO.

Bridge Loc. No: 57 - I0040 - 07.54 Date: 02-19-02



VIEW ACROSS TOP OF DECK

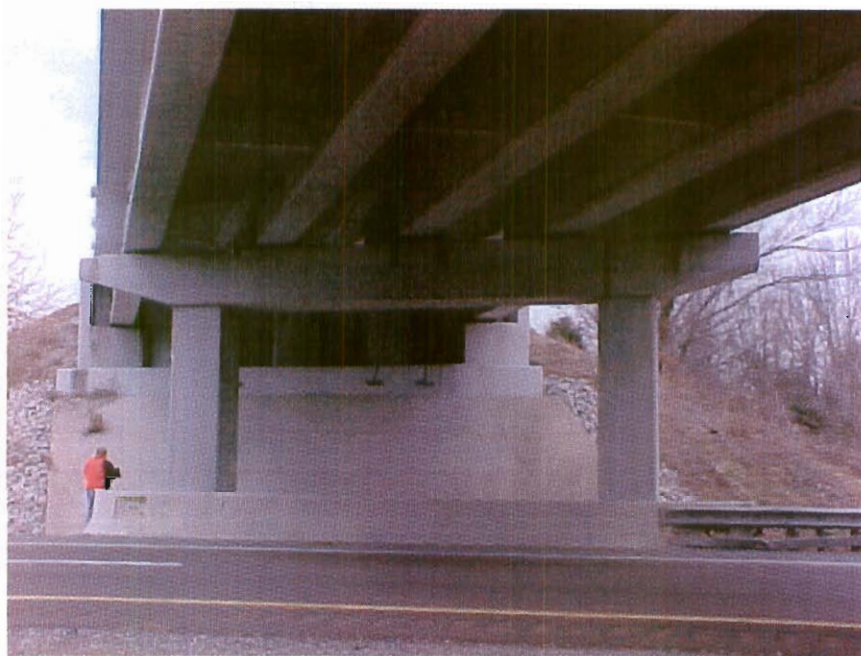


LOOKING BACK ON ROUTE

Bridge Loc. No: 57 - I0040 - 07.54 Date: 02-19-02



ELEVATION UNDER BRIDGE, DIRECTION OF ROUTE

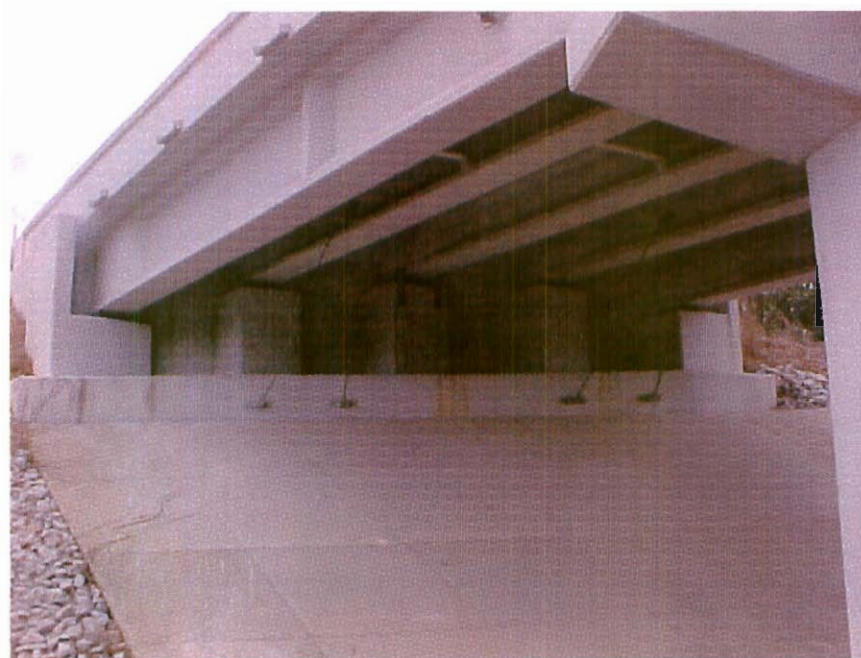


BENT #3

Bridge Loc. No: 57 - I0040 - 07.54 Date: 02-19-02



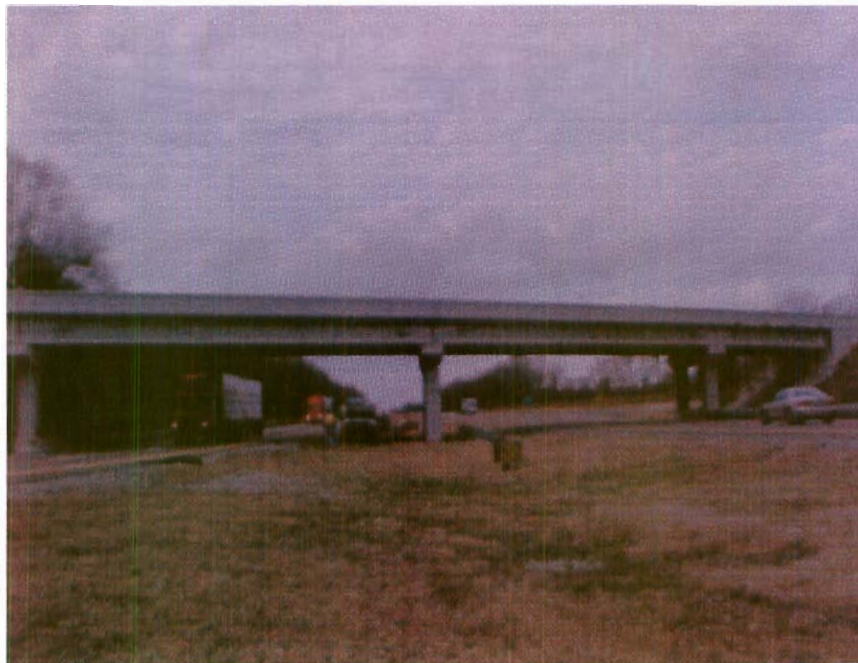
SPAN #2, BOTTOM OF DECK



ABUTMENT #1

Bridge Loc. No: 57 - I0040 - 07.54

Date: 02-19-02



ELEVATION UNDER BRIDGE, LOOKING BACK ON ROUTE

BRIDGE INSPECTION REPORT

FEB 19 2002

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

Field Report No. 16 Date 2-19-02
Previous Report No. 15 Date 6-8-00
Plans: YES () NO ()

Bridge No. 57I00400011 Bridge Location No. 57 - I0040 - 0754 57 - 0B290 - 0455
Eleven Digit No. Co. Route Log Mile OVER/UNDER PASS

INTERSTATE over
Road Name Crossing CITY
Year Constructed 1957 County Madison Maintenance District 44
Year Widened Year Rehabilitated

FEATURES

Wearing Surface Concrete ☒ Timber () Asphalt () Depth (in.)
Flared Width Yes () No ☒ Median Width Open () None ☒ Closed ()
Navigational Control Yes () No ☒ Bridge Skew 62L ° LT () RT ()
Structure Type (Main Span) P. C. C. I. B.
Structure Type (Appr. Spans)
No. Main Spans 2 No. Approach Spans 2
Maximum Span Length 75' (**. ft.)
Total Length 236.0 (**. ft.)

Structure Name (If Named)

INSPECTORS

- SCOTT
- NEWTON
- PATRICK
- LANE
- HAMILTON
-
-
-

WIDTHS (*. ft.)

Deck Out-to-Out 34.7
Roadway Curb/Curb 28.1
Roadway Rail/Rail
Sidewalk Rt. Lt.
*Approach Roadway 22
*(Does Not Include Shoulders)
Approach Shoulder Rt. 6'
Lt. 6'

CLEARANCES

Min. Vertical Clearance over Deck (ft.-in.)
Min. Vertical Under Clearance 16.0' (ft.-in.) 16
Min. Lateral Under Clearance Rt. 10' (*. ft.) 10
Min. Lateral Under Clearance Lt. 28.8' (*. ft.) 28.8

FRACTURE CRITICAL:
(If Yes, Include BIR 3.9)

NBIS Bridge Length (<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:

35° 037' 58.6
088° 56' 56.1
G.P.S. Location

BRIDGE RATING: () ☒ () ()
GOOD FAIR POOR CRITICAL

Supervising Bridge Inspector:

JERRY M. SCOTT

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

Bridge Location No. 57 - I0040 - 0754
Co. Route Log Mile

FEB 19 2002

Date 2-19-02

PERFORMANCE EVALUATION

Time of Day Inspected 9:20 Weather Conditions Plc / cool
Vehicles Observed CARS + TRUCKS

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/A
Joints	G F P C	N/A
Pavement	G (F) P C	
Embankment	G (F) P C	
Drains	G F P C	N/A

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	() (228) (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: _____

Comments Regarding any Problems with Signing: _____

FEB 19 2002

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

Bridge Location No. 57 - I0040 - 0754
Co. Route Log Mile

Date 2-19-

DECK

	Rating	Comments
Wearing Surface	(G) F P C	
Deck - Structural Condition <i>panels</i>	G (F) P C	<i>Span #1 Patched Area</i>
Curbs	G F P C	
Median	G F P C	
Sidewalks	G F P C	
Parapet	G (F) 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>C.I.B</i>	(G) F 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	<i>Metal on All Spans C.I.B (C)</i>
Trusses - General	G F P C	
Portals	G F P C	
Bracing	G F P C	
Paint	G F P C	
Alignment of Members	(G) 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 () NO (X)

Comments _____ Scaling Rating (G) F P C

RECOMMENDATIONS: _____ CLEAN SEAL JOINTS ()
_____ CLEAN DRAINS ()

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

Bridge Location No. 57 - I0040 - 0754
Co. Route Log Mile

FEB 19 2002

Date _____

SUBSTRUCTURE

**PILES TO BE
REPLACED**

ABUTMENTS

Rating

Comments

PILE(S)

ABUTMENT

Caps (G) F P C

Breastwall G F P C

Wings (G) F P C

Backwall (G) F P C

Plumb (G) F P C

Footing G F P C

~~Piles~~ (G) F P C

Embankment (G) F P C

Bearing (G) F P C

Slope Paving (G) F P C

~~Rip Rap~~ (G) F P C

Earthquake Devices (G) F P C

NV

PIERS

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

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

X

NV

Piles Need Replacement: NO () YES ()

CUT VEGETATION NO () YES ()

CLEAR DRIFT NO () YES ()

RECOMMENDATIONS:

INSPECTION REPORT FOR UNDERPASS ROUTEFEB 19 2002
Page No. 1

Form BIR 3.0A

(Rev. 9-22-98)

DT-1443

Field Report No. 16Date 2-19-02Previous Report No. 15Date 6-08-00Bridge No. 57I00400011

Eleven Digit No.

Underpass Location No. 57 - I0040 - 0754

Co. Route Log Mile

57 - 0B290 - 0455

Co. Route Log Mile

Railroad/Walkway

or - -
Co. Route Log Mileover/
underCounty Madison

Structure Name (If Named) _____

Year Constructed 1957

Year Widened _____

Year Rehabilitated _____

GEOMETRIC FEATURES UNDER BRIDGE (*. * ft. unless otherwise noted)Divided Highway LEFT RDWY () RIGHT RDWY (X) N.A. () E.B.

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

Width of Approach Traveled Roadway 23 ft. (Does Not Include Shoulders)Width of Median if Divided Highway 60.4 ft.Approach Shoulder Width 10 ft. Right 5 ft. Left*Horizontal Clearance Under Bridge 60 ft. 11 in.*Distance Between Pier Protection Guardrail and Substructure 0.5 ft. Right 0 ft. Left

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

*Minimum Vertical Clearance: 16 ft. 2 in.*Show on Sketch 16 1**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 (<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.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____

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

57 - I0040 - 0754

Co. Route Log Mile

FEB 19 2002
Page No. 2

Date

Underpass Location No. 57 - 0B290 - 0455

Co. Route Log Mile

Other Signs or Plaques: _____

Comments Regarding any
Problems with Signing: _____

BRIDGE FEATURES (*.* ft.)

Bridge Skew 62L °

Structure Type (Main Span) P. C. C. I. B. No. Main Spans 2

Structure Type (Appr. Spans) No. Appr. Spans 2

Maximum Span Length 75' (ft.) Total Length 236.0 (ft.)

Width of Bridge Out-to-Out 34.7 (ft.) Right Angle to Centerline of Bridge

Width of Bridge Along Skew 38 (ft.) (If Unable to Measure at Right
Angle to Centerline of Bridge)

Number of Lanes/Tracks on Bridge 2

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 REPORT FOR UNDERPASS ROUTE

Form BIR 3.0A

(Rev. 9-22-98)

DT-1443

Field Report No. 16Date 2-19-02Previous Report No. 15Date 6-08-00Bridge No. 57I00400011

Eleven Digit No.

Underpass Location No. 57 - I0040 - 0754_____
Railroad/Walkway

or

Co. Route Log Mileover/
under

Co. Route Log Mile

57 - 0B290 - 0455

Co. Route Log Mile

County Madison

Structure Name (If Named) _____

Year Constructed 1957

Year Widened _____

Year Rehabilitated _____

GEOMETRIC FEATURES UNDER BRIDGE (*. * ft. unless otherwise noted)Divided Highway LEFT RDWY ☒ RIGHT RDWY () N.A. ()

W. Bound

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

Width of Approach Traveled Roadway 23 ft. (Does Not Include Shoulders)Width of Median if Divided Highway 60.4 ft.Approach Shoulder Width 10 ft. Right 5 ft. Left*Horizontal Clearance Under Bridge 60 ft. 11 in.*Distance Between Pier Protection
Guardrail and Substructure0.5 ft. Right _____ ft. Left

*Width of Sidewalk Under Bridge

_____ ft. Right _____ ft. Left

*Minimum Vertical Clearance:

16 ft. 0 in.
16 0

*Show on Sketch

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

Pier Protection Railing or Parapet

G ☒ F P C

()

☒

()

Approach Guardrail Transitions

G ☒ F P C

()

☒

()

Approach Guardrail

G ☒ F P C

()

☒

()

Approach Guardrail Terminal

G ☒ F P C

()

☒

()

SIGNING FOR UNDERPASS ROUTE

Paddleboards

YES () NO ☒ NEEDED ()

Vertical Clearance (<14'-6")

YES () NO ☒ NEEDED ()

Narrow Passage

YES () NO ☒ NEEDED ()

One Lane Passage

YES () NO ☒ NEEDED ()

Other Underpass Signs Needed

INSPECTORS

1. Scott
2. _____
3. _____
4. _____
5. _____
6. _____

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

57 - I0040 - 0754
Co. Route Log Mile

FEB 19 2003
Page No. 2

Date _____

Underpass Location No. 57 - 0B290 - 0455
Co. Route Log Mile

Other Signs or Plaques: _____

Comments Regarding any
Problems with Signing: _____

BRIDGE FEATURES (*.* ft.)

Bridge Skew 62L °

Structure Type (Main Span) P. C. C. I. B. No. Main Spans 2

Structure Type (Appr. Spans) _____ No. Appr. Spans 2

Maximum Span Length 75' (ft.) Total Length 236.0 (ft.)

Width of Bridge Out-to-Out 34.7 (ft.) Right Angle to Centerline of Bridge

Width of Bridge Along Skew 38' (ft.) (If Unable to Measure at Right
Angle to Centerline of Bridge)

Number of Lanes/Tracks on Bridge 2

BRIDGE CONDITION: G **(F)** P C

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

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

FEB 19 2002

Inspection Team's Summary

Bridge Location No. 57 - 10040 - 0754

Inspection Date 2-19-02

Bridge Rating FAIR

A FOUR SPAN C.I.B BRIDGE IN
FAIR CONDITION.

TRAFFIC SAFETY FEATURES ARE IN
PLACE.

WEARING SURFACE IS CONC. CONC.

PARAPETS HAVE SCATTERED FINE
CRACKS.

MIN VERTICAL CLEARANCE IS 16'0"

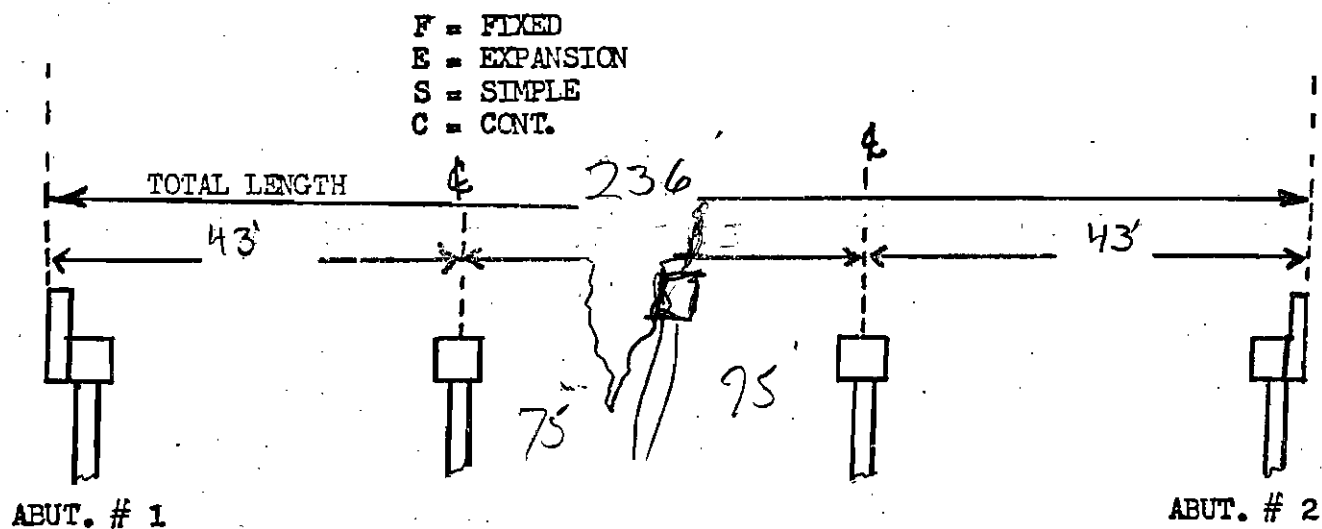
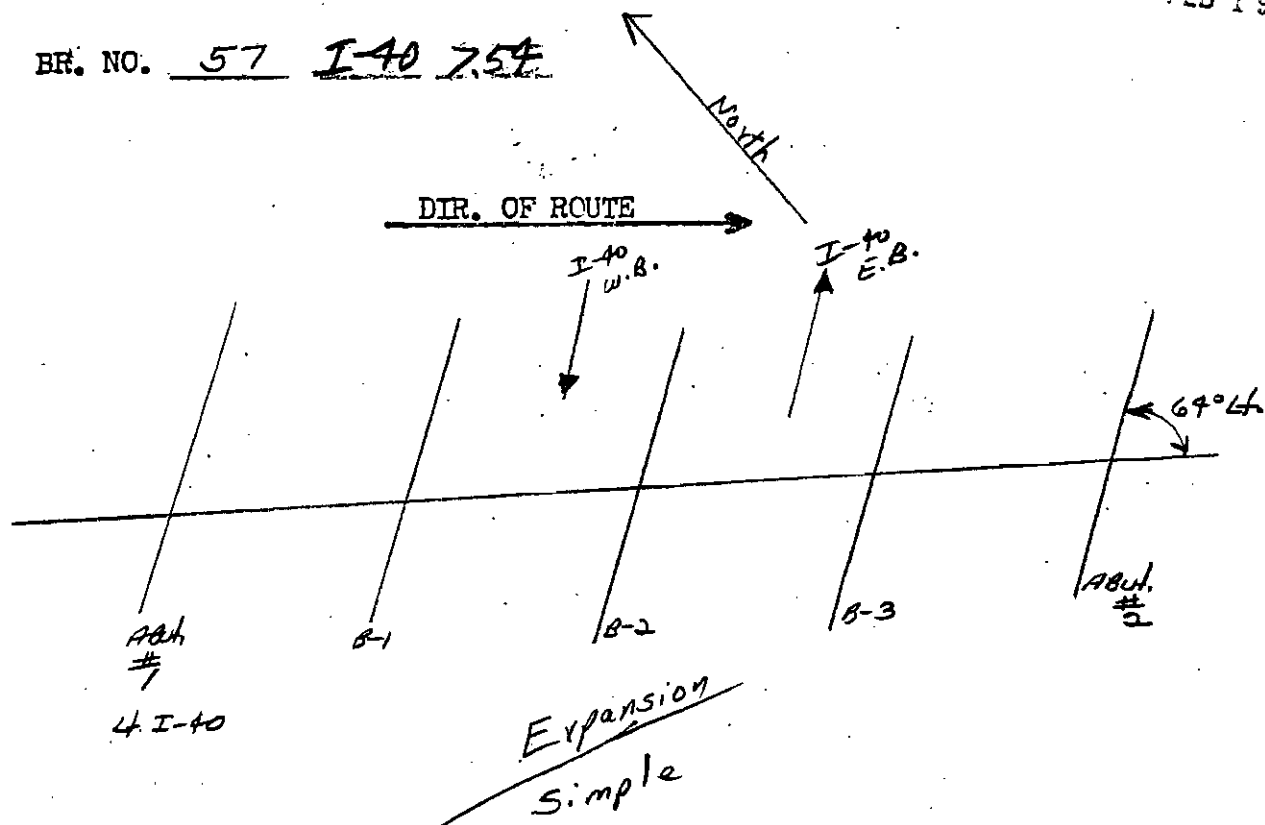
Jerry M Scott

Cross Section: yes () no ☒

Pontis: yes () no ☒

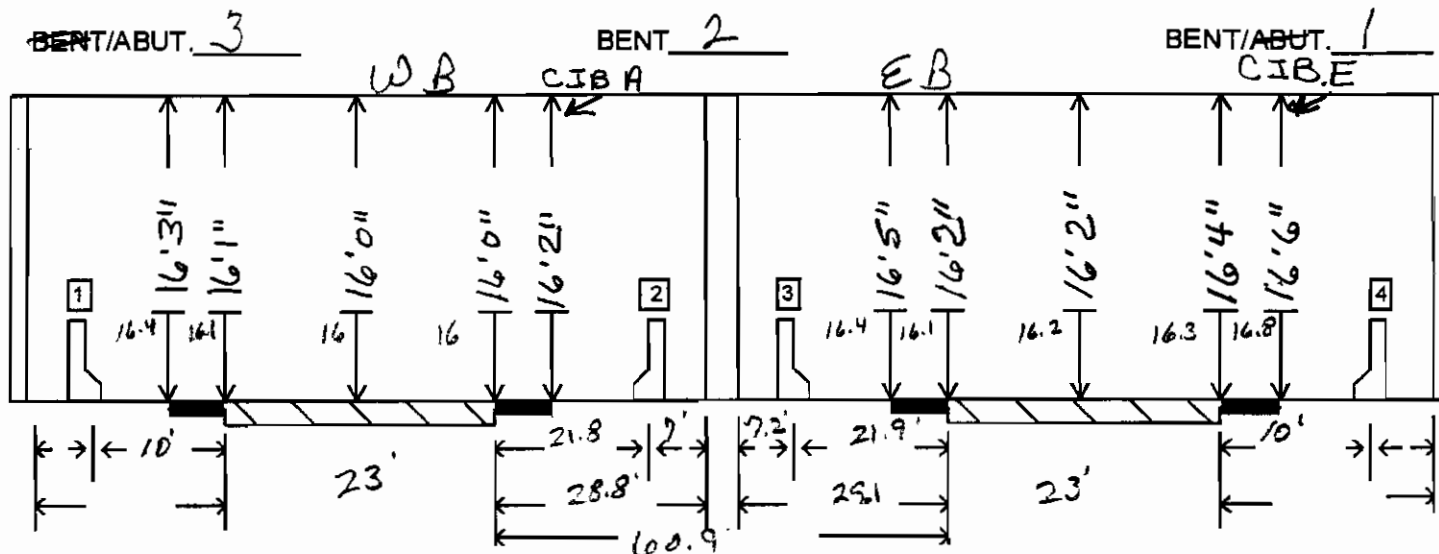
FEB 19 2002

BR. NO. 57 I-40 7.5E

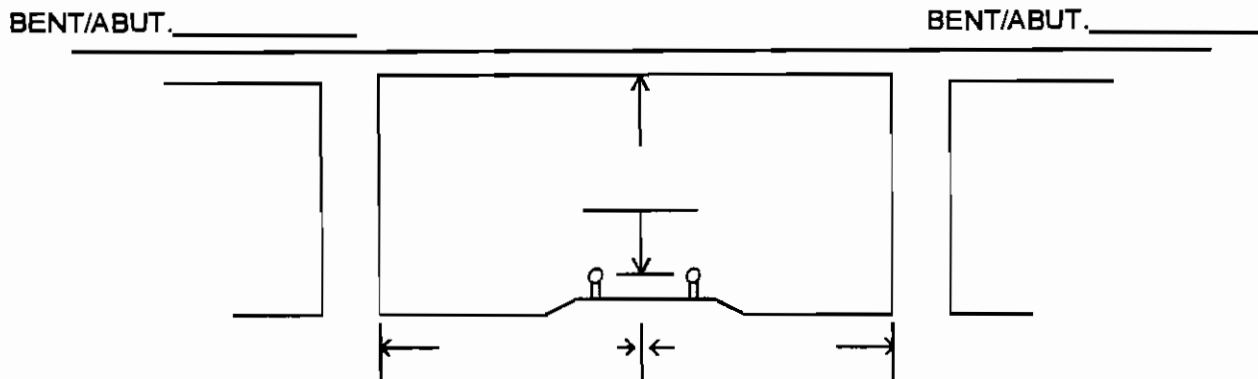
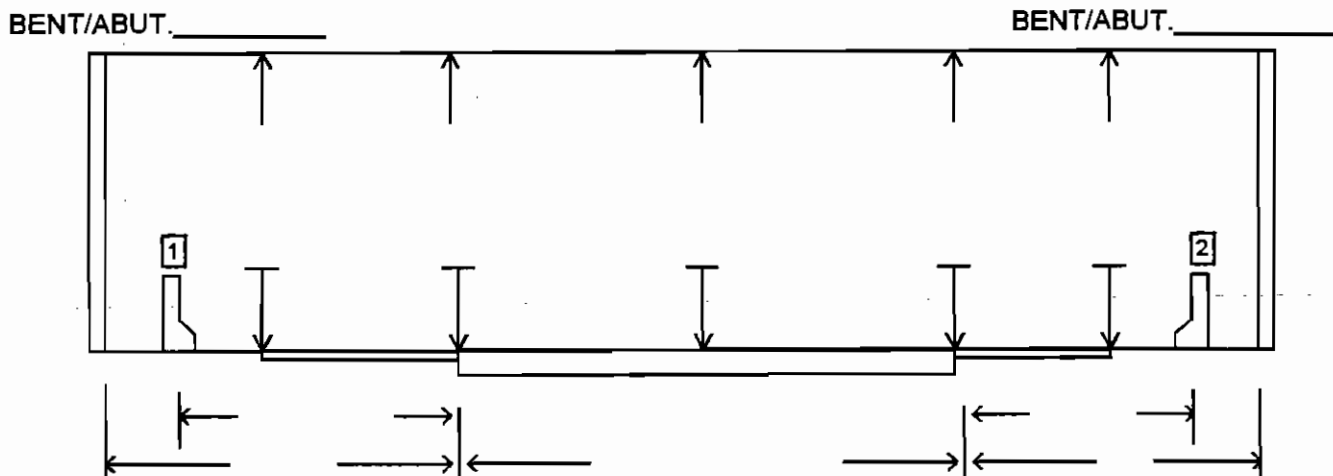


SIDE VIEW OF BR.

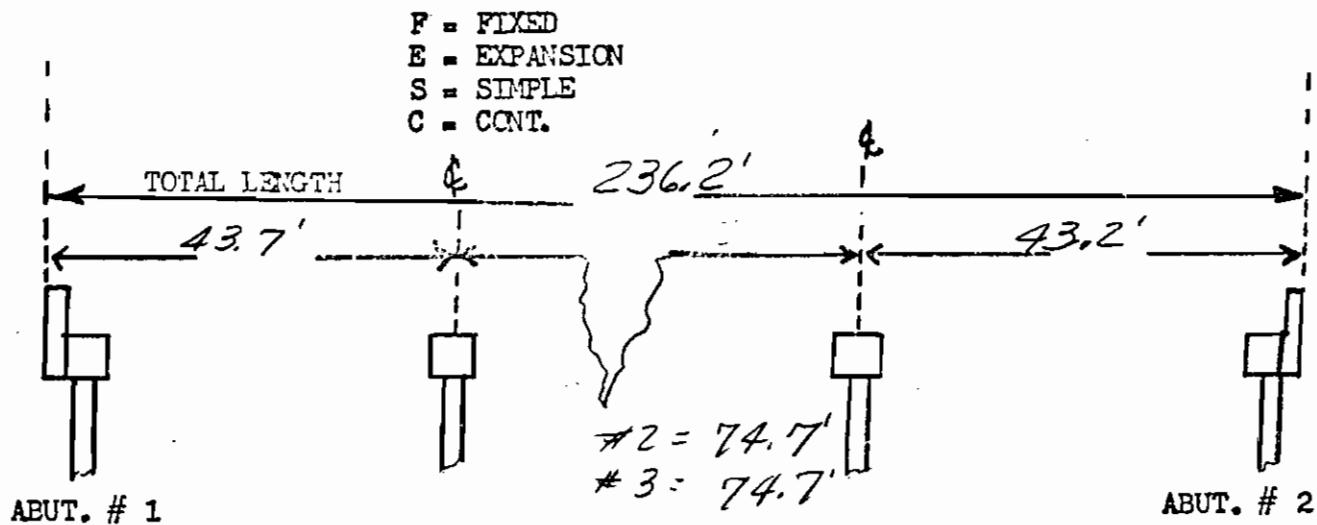
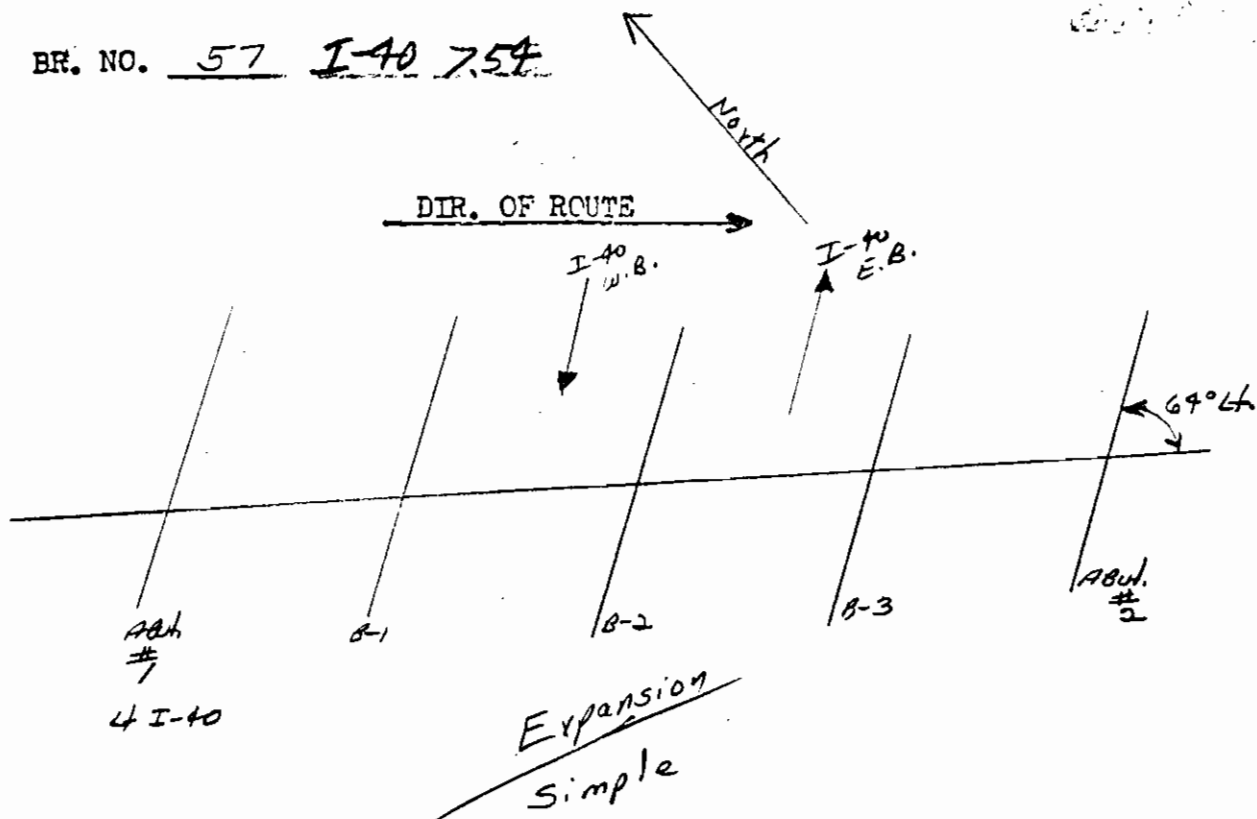
LATERAL AND VERTICAL CLEARANCES



- | | | | | | | |
|-----------------------|---------|-------------------------------------|---------------|-------------------------------------|------|--------------------------|
| 1. RAIL/BARRIER TYPE: | W-SHAPE | ☐ | CONC. BARRIER | ☒ | NONE | ☐ |
| 2. RAIL/BARRIER TYPE: | W-SHAPE | ☒ | CONC. BARRIER | ☐ | NONE | ☐ |
| 3. RAIL/BARRIER TYPE: | W-SHAPE | ☒ | CONC. BARRIER | ☐ | NONE | ☐ |
| 4. RAIL/BARRIER TYPE: | W-SHAPE | ☐ | CONC. BARRIER | ☒ | NONE | ☐ |



BR. NO. 57 I-40 7.54



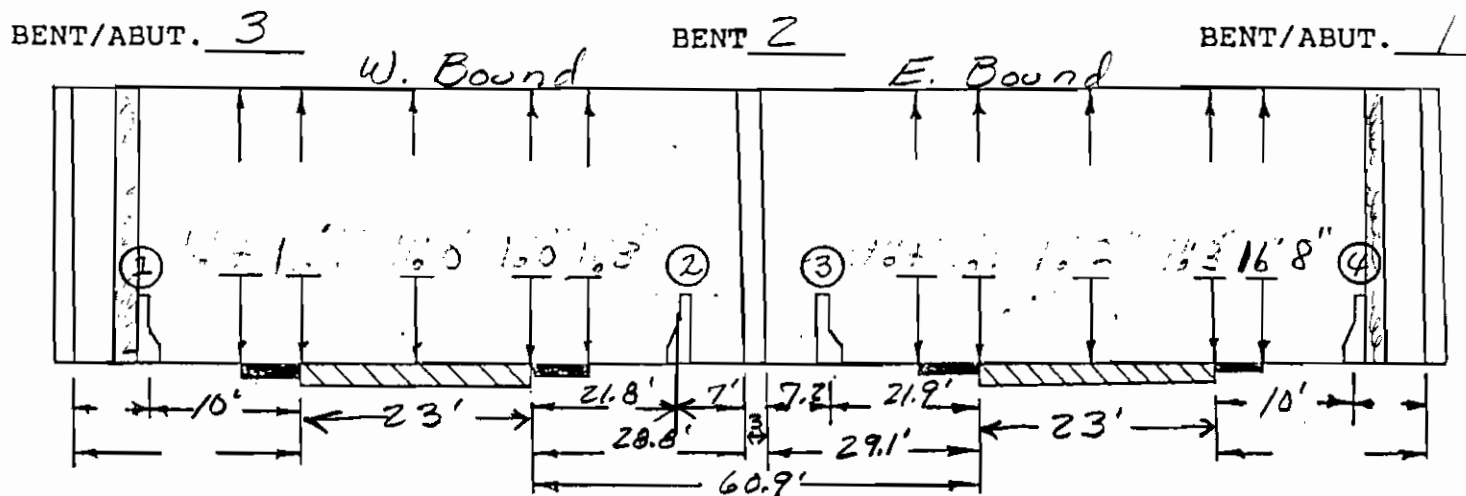
SIDE VIEW OF BR.

BIR 3.10
Rev. 6-9-92
DT-1510

BRIDGE LOC. NO. 57 -I40- 7.54
CO. RTE. L.M.

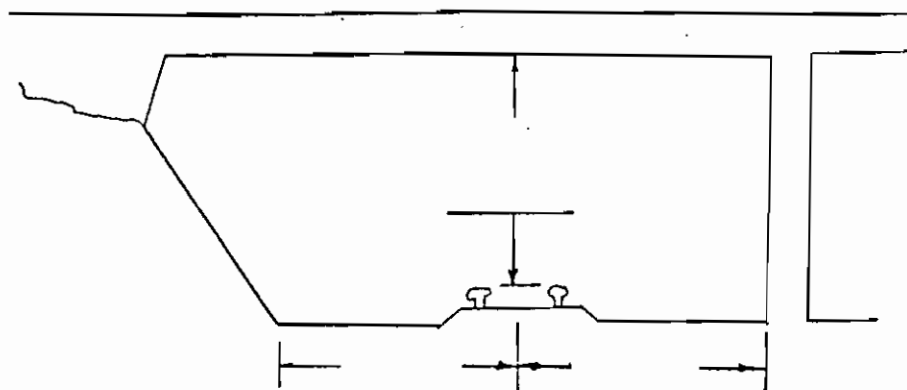
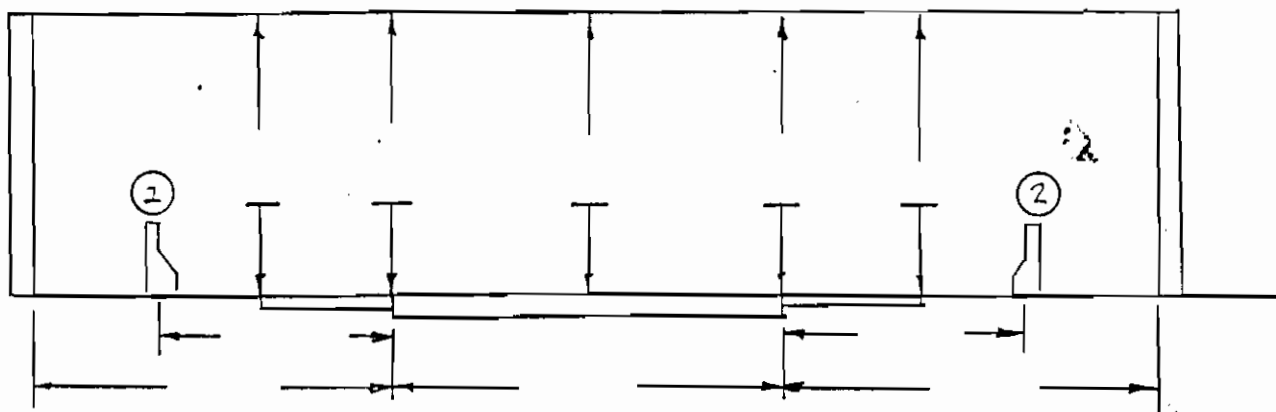
JUN 08 2000
DATE 6.8.00

LATERAL AND VERTICAL CLEARANCES



BENT/ABUT. _____

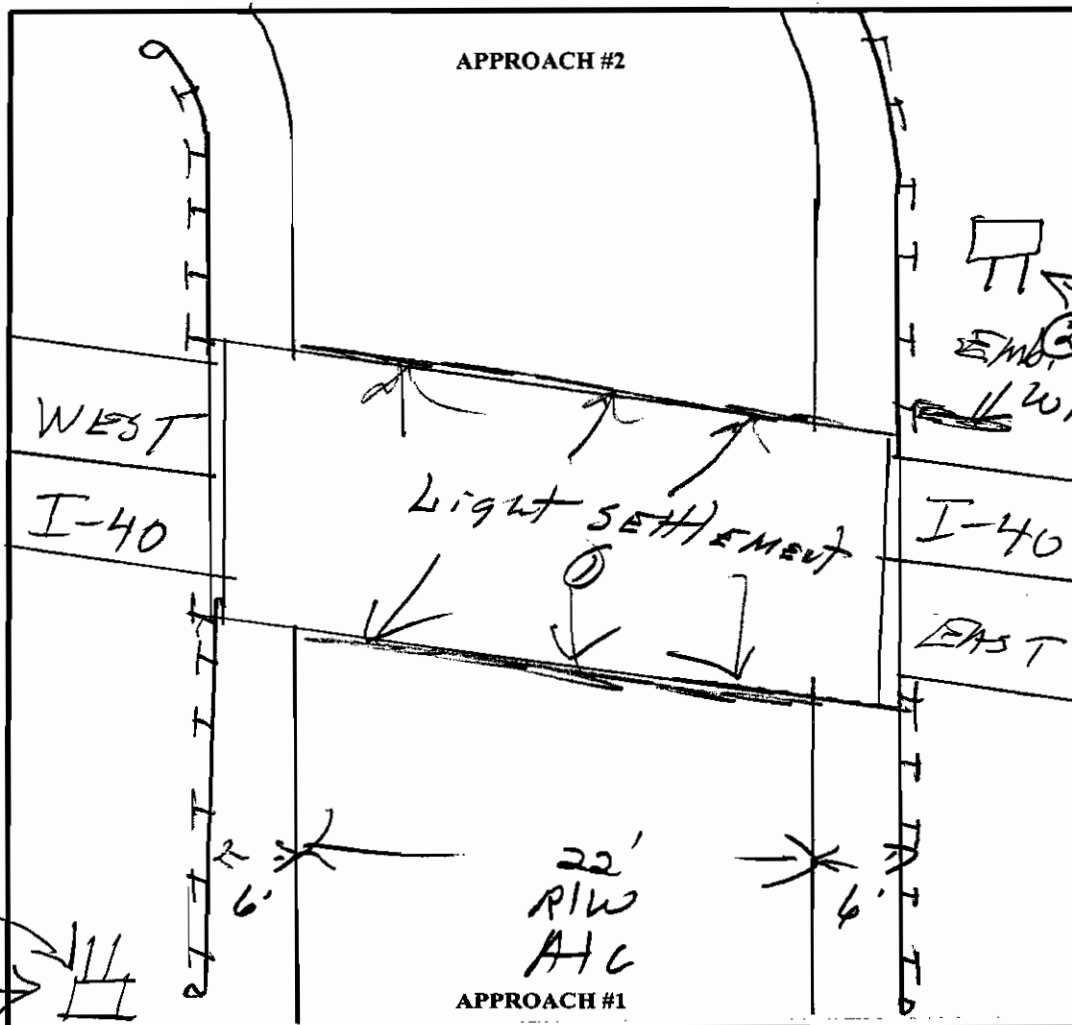
BENT/ABUT. _____



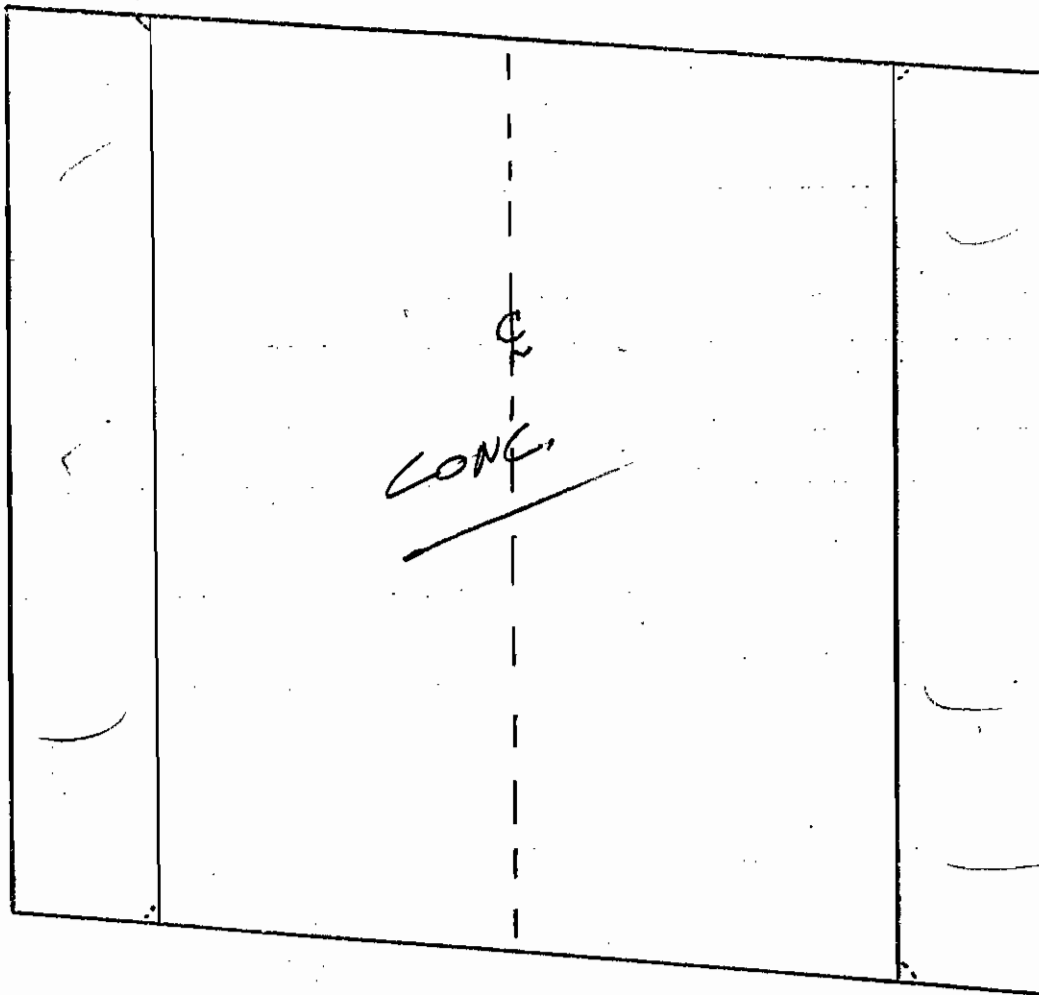
FEB 19 2002

BRIDGE NO.: 57I00400011 57 I0040 0754 62L DATE: 2-19-02

CO. ROUTE LOG MILE L/R SKEW

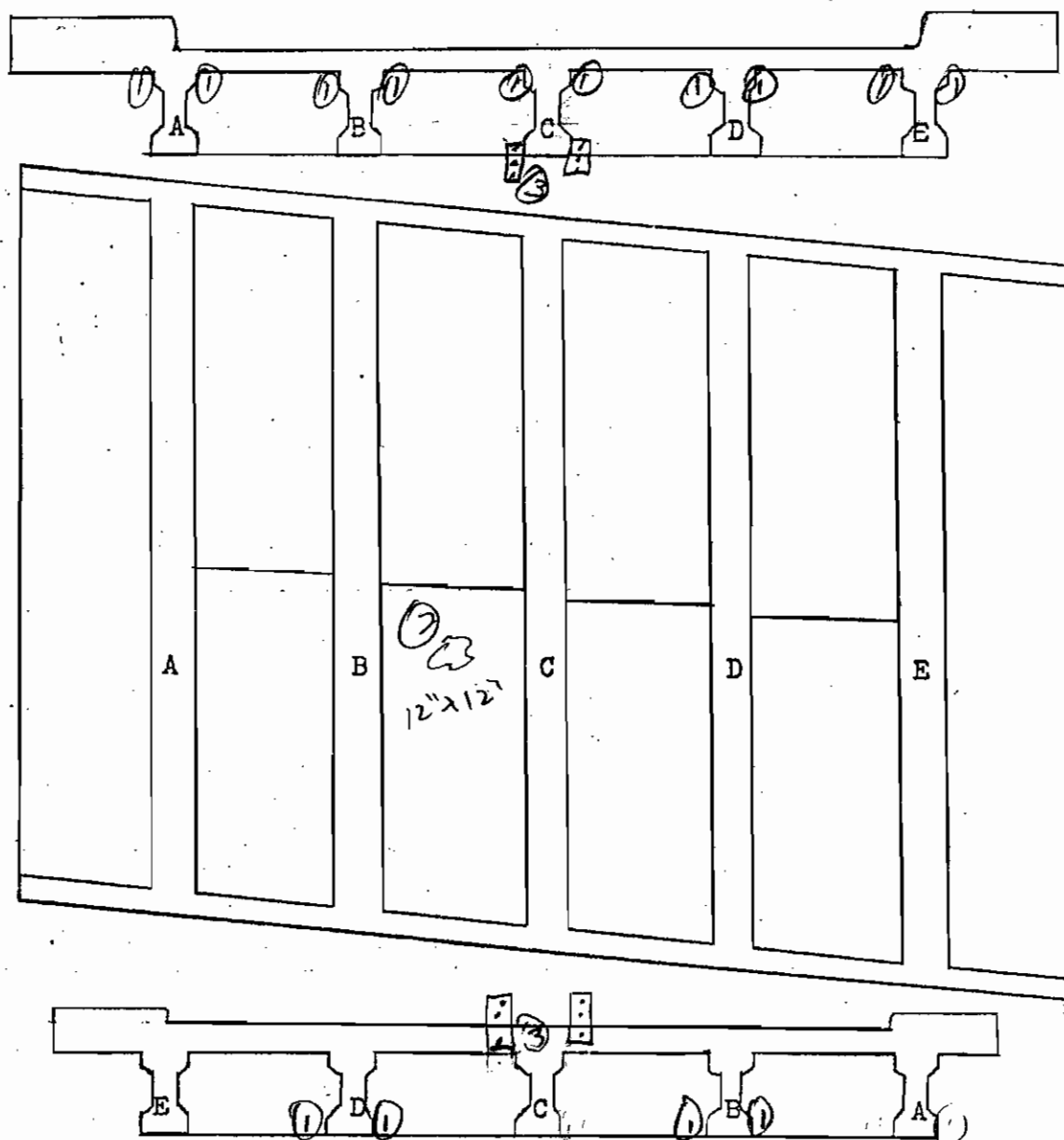


ELEMENT	RATING	COMMENTS
ALIGNMENT	G (F) P C	CURVE A + APP-2.
APPROACH PAVEMENT	G (F) P C	SEE-①
APPROACH SLAB	G F P C	N/A
APPROACH GUARDRAIL	G (F) P C	
EMBANKMENT	G (F) P C	SEE-②
DRAINS	G F P C	N/A
APPROACH JOINT	G F P C	N/A
SIGNS	G (F) P C	

BR. NO. 57 I-40 7.54SK. 62° LT.FEB 19 2001
SPAN NO. 1

ELEMENT	RATING	COMMENT
TOP DECK	<u>G</u> F P C	
CURBS	G F P C	N/A
RAILROAD RAILS & POST	<u>G</u> F P C	FINE VERT. CRACKS
DRAINS	<u>G</u> F P C	
JOINTS	<u>G</u> F P C	
SIDEWALK	G F P C	N/A

FEB 19 1966

BR. NO. 57 140 7.54 SK. 62° LT. SPAN NO. 1

DIR. OF ROUTE

ELEMENT

RATING

COMMENT

BOTTOM DECK

G F P C

Patched Area

CONC. I. BEAMS

A
B
C
D
EG F P C
G F P C
G F P C
G F P C
G F P C

DIA.

G F P C

BACKWALLS

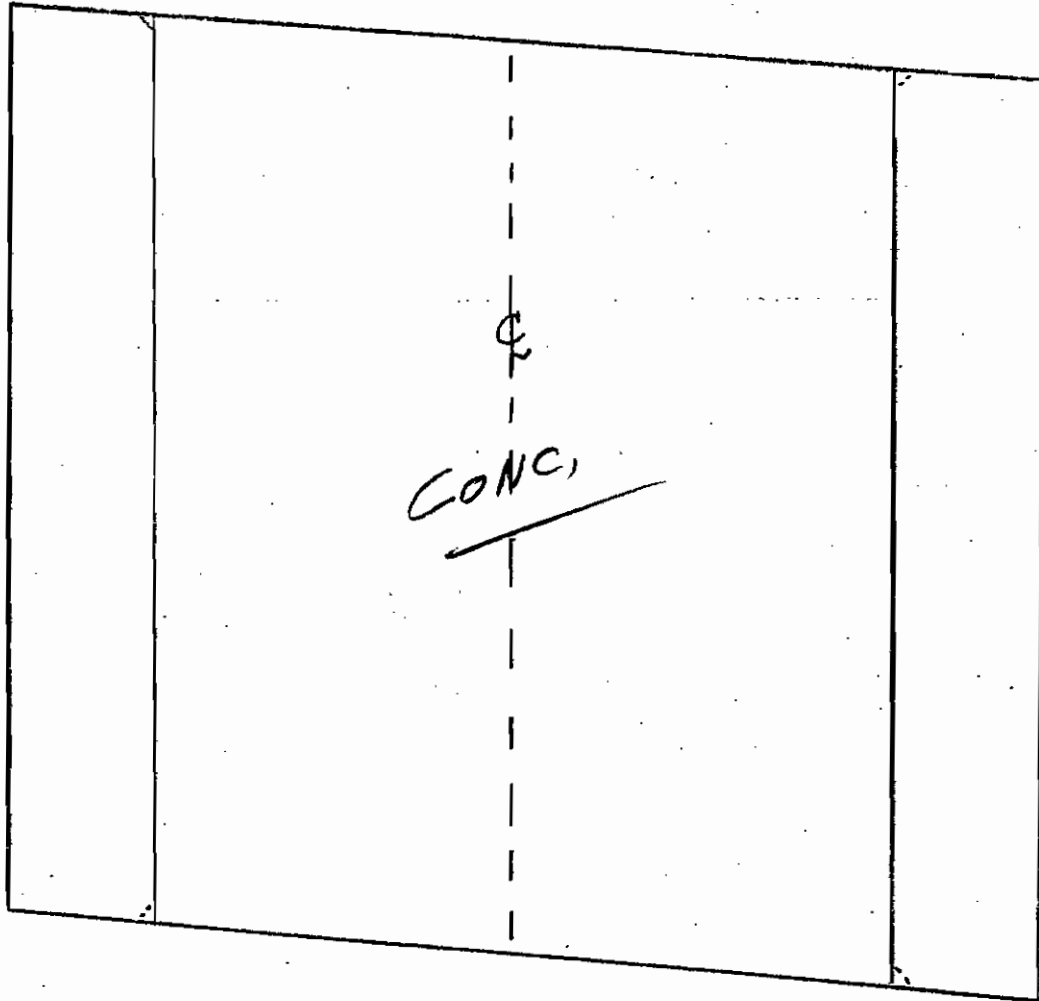
G F P C

E.A. Device

(C)

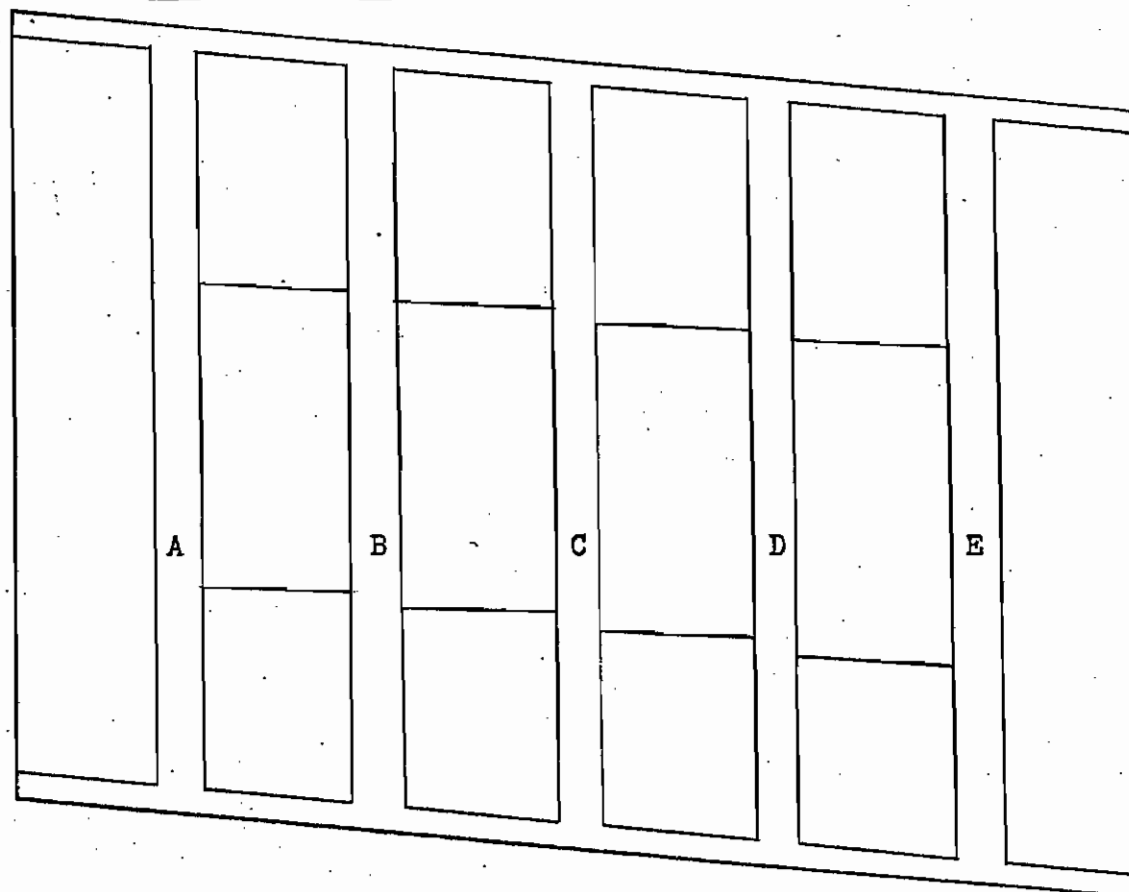
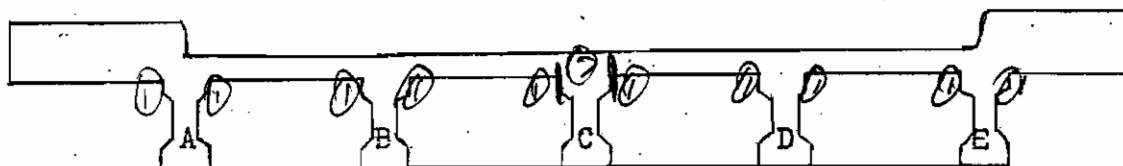
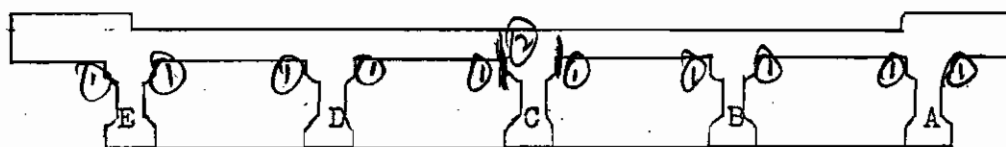
① Earthquake Device
 ② Patched Area
 ③ Bracing Metal
 Same All Spans
 24" L. x 3" W

BR. NO. 57 I-40 7.54 SK. 62° LT. SPAN NO. FEB 19 2002



ELEMENT	RATING	COMMENT
TOP DECK	G F P C	
CURBS	G F P C	N/A
PARAPET RAILS & POST	G F P C	FINE VERT. CRACKS
DRAINS	G F P C	
JOINTS	G F P C	SOME HOLES IN JOINT MATERIAL.
SIDEWALK	G F P C	N/A

FEB 19 2002

BR. NO. 57 E-40 254 SK. 62° LT. SPAN NO. 2↑
DIR. OF ROUTE

ELEMENT

RATING

COMMENT

BOTTOM DECK

(G) F P C

① Earthquake Device
② BracingCONC. I. A
BEAMS B

(G) F P C

C
D
E

(G) F P C

(G) F P C

(G) F P C

DIA.

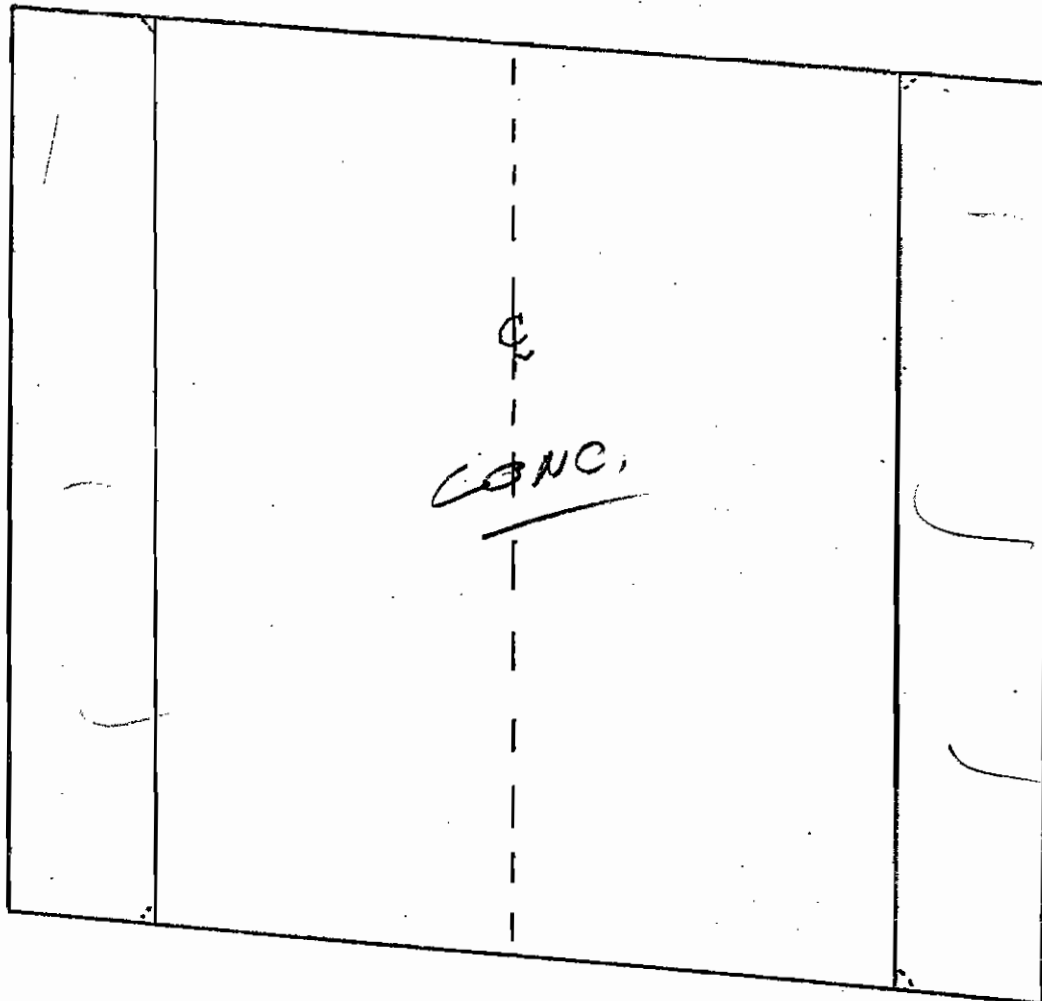
(G) F P C

~~BACKSTAYS~~

(G) F P C

Earthquake

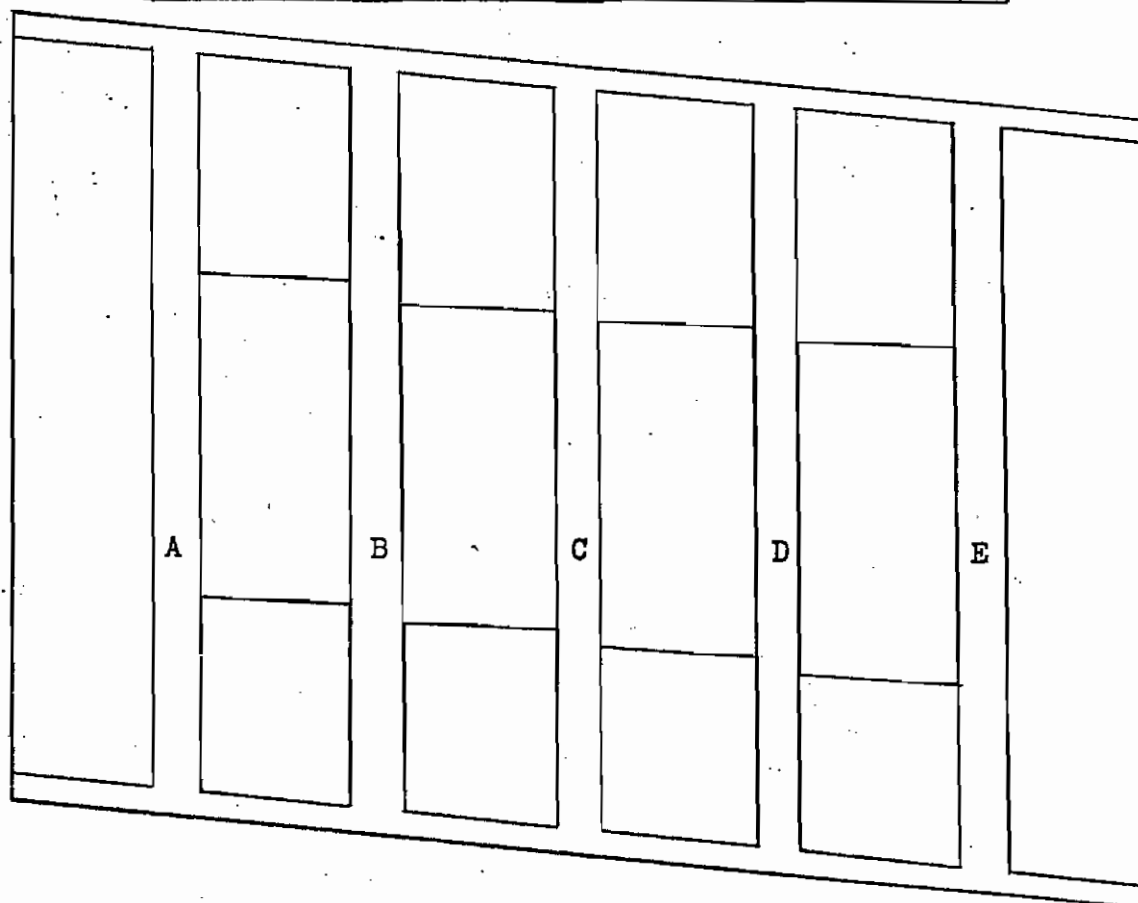
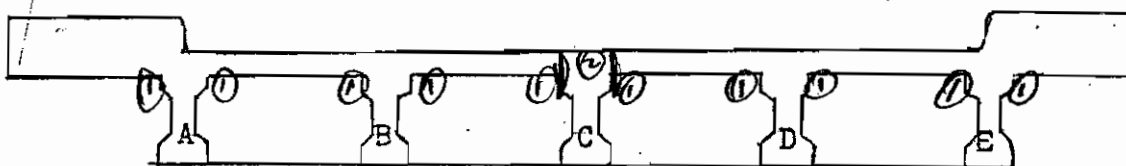
BR. NO. 57 I-40 7.54 SK. 62° LT. SPAN NO. 3 FEB 19 2007



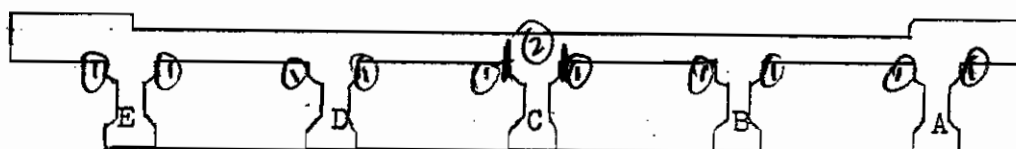
ELEMENT	RATING	COMMENT
TOP DECK	G F P C	
CURBS	G F P C	N/A
RAILS & POST	G F P C	FINE VERT. CRACKS
DRAINS	G F P C	
JOINTS	G F P C	
SIDEWALK	G F P C	N/A

FEB 1.9 2002

BR. NO. 57 E-40 7.54 SK. 62° LT. SPAN NO. 3



↑
DIR. OF ROUTE



ELEMENT RATING COMMENT

BOTTOM DECK

(G) F P C

① Earthquake devices
② Bracing

CONC. I. A
BEAMS B

(F) F P C
(F) F P C
(F) F P C
(F) F P C
(G) F P C

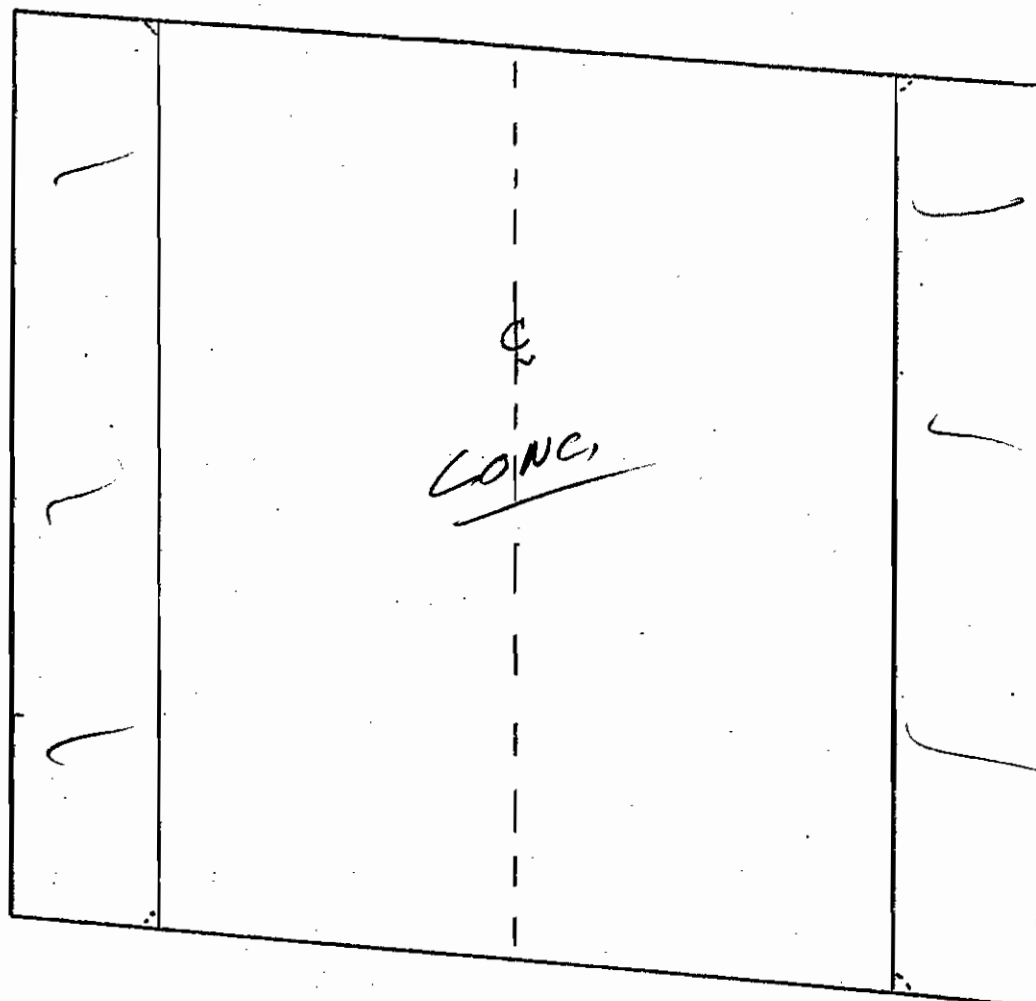
DIA.

(G) F P C

Earthquake
~~BEAMS~~

(G) F P C

FEB 19 2002

BR. NO. 57 I-40 7.5A SK. 62° LT. SPAN NO. 4

ELEMENT	RATING	COMMENT
---------	--------	---------

TOP DECK

(G) F P C

CURBS

G F P C

N/A

~~PARADE~~
~~RAILS & POST~~

(G) F P C

FINE VERT. CRACKS

DRAINS

(G) F P C

JOINTS

G F P C

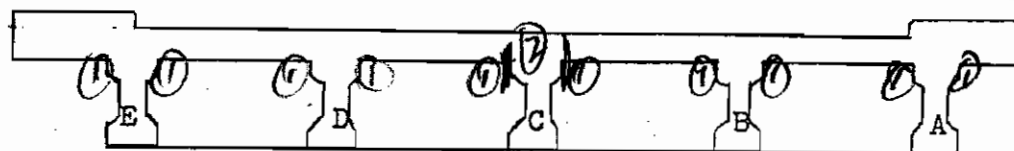
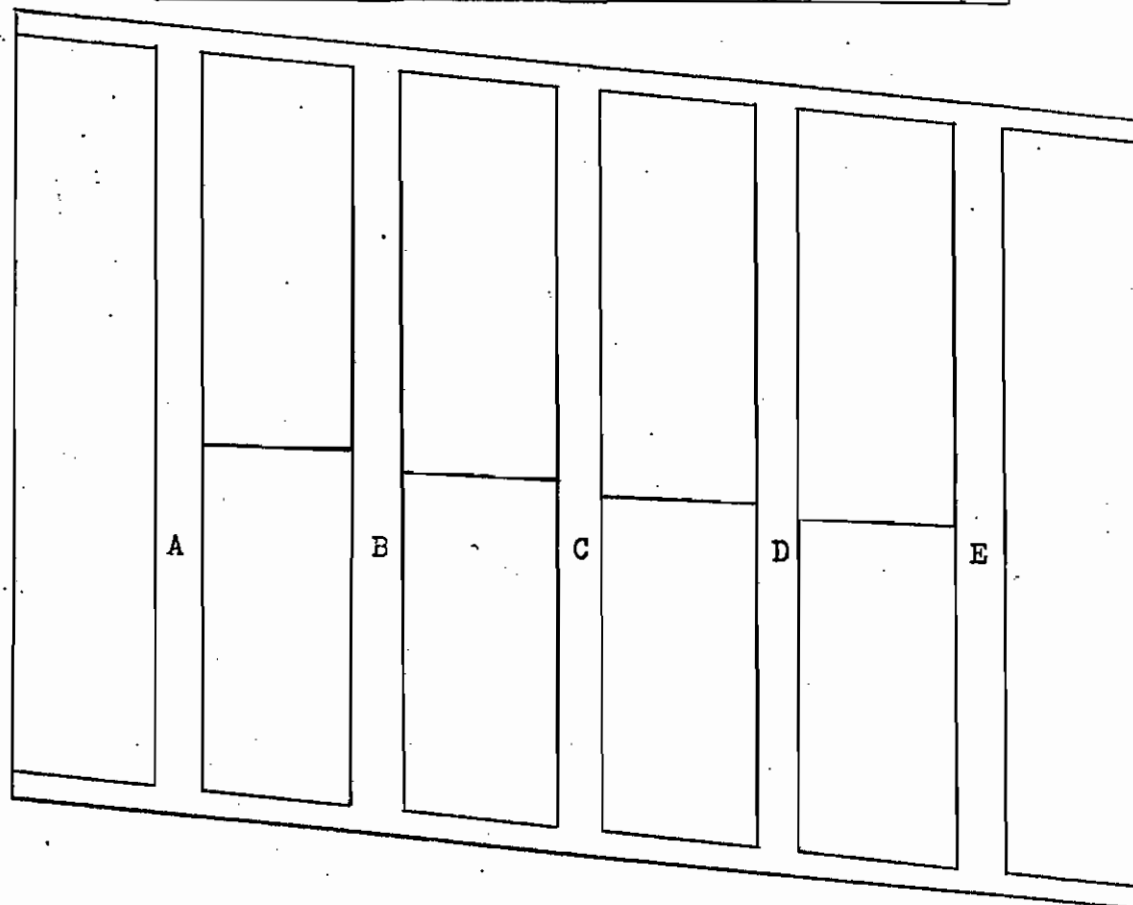
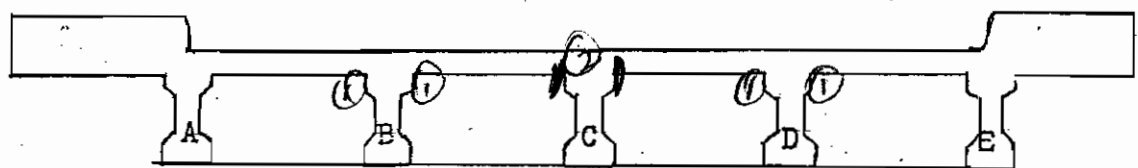
N/A

SIDEWALK

G F P C

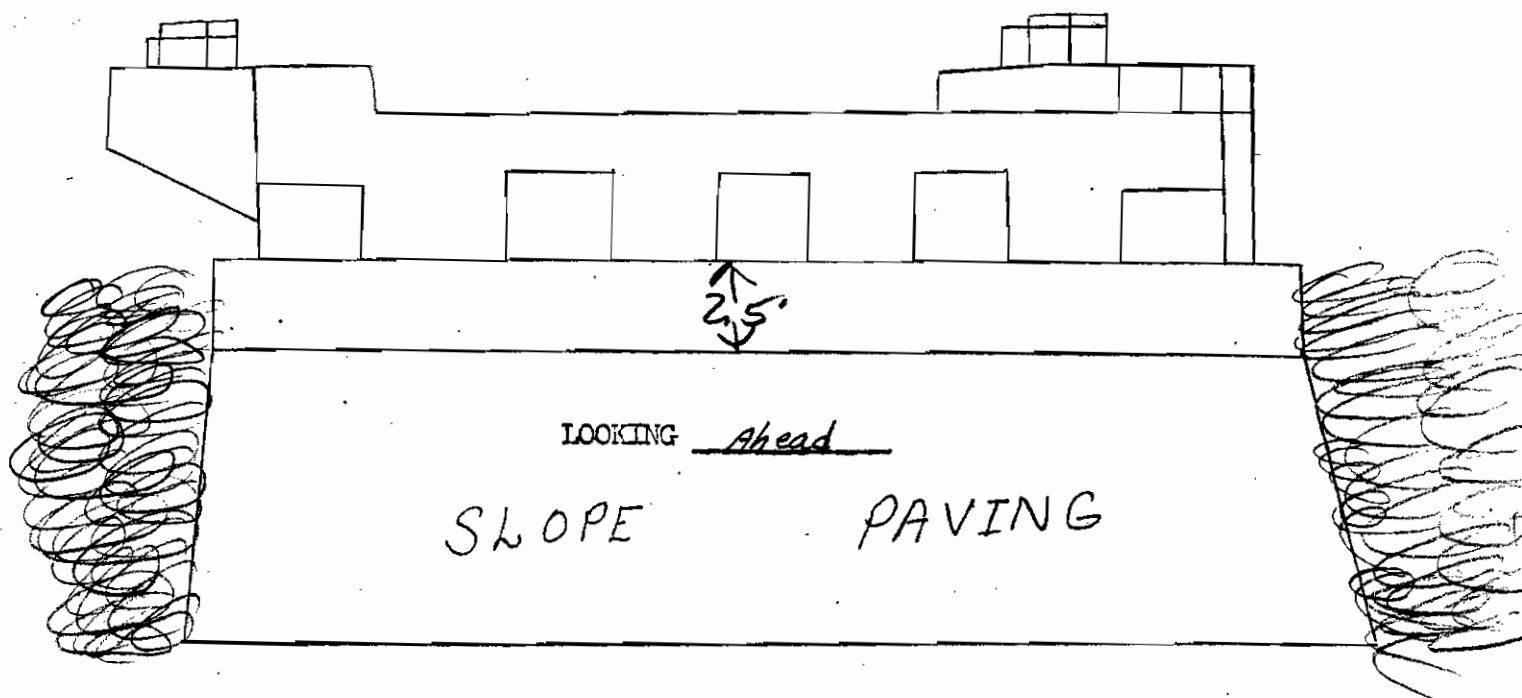
N/A

BR. NO. 57 I-40 7.54 SK. 62° LT. FEB 19 2000 SPAN NO. 4



ELEMENT	RATING	COMMENT
BOTTOM DECK	(G) F P C	① Earthquake Devices ② Bracing
CONC. T. BEAMS	A (G) F P C B (G) F P C C (G) F P C D (G) F P C E (G) F P C	
DIA.	(G) F P C	
BACKWALLS	(G) F P C	
6 P. Joints	(G)	

FEB 19 2002

BR. NO. 5 I-40 7.54 ABUT NO. 1

ELEMENT

RATING

COMMENT

BEARINGS

G F P C

CAP

G F P C

PILING

G F P C

NIV

WINGS

G F P C

VEG.

G F P C

NORMAL GROWTH

EMBANKMENT

G F P C

RIP - RAP

G F P C

SLOPE PAVING

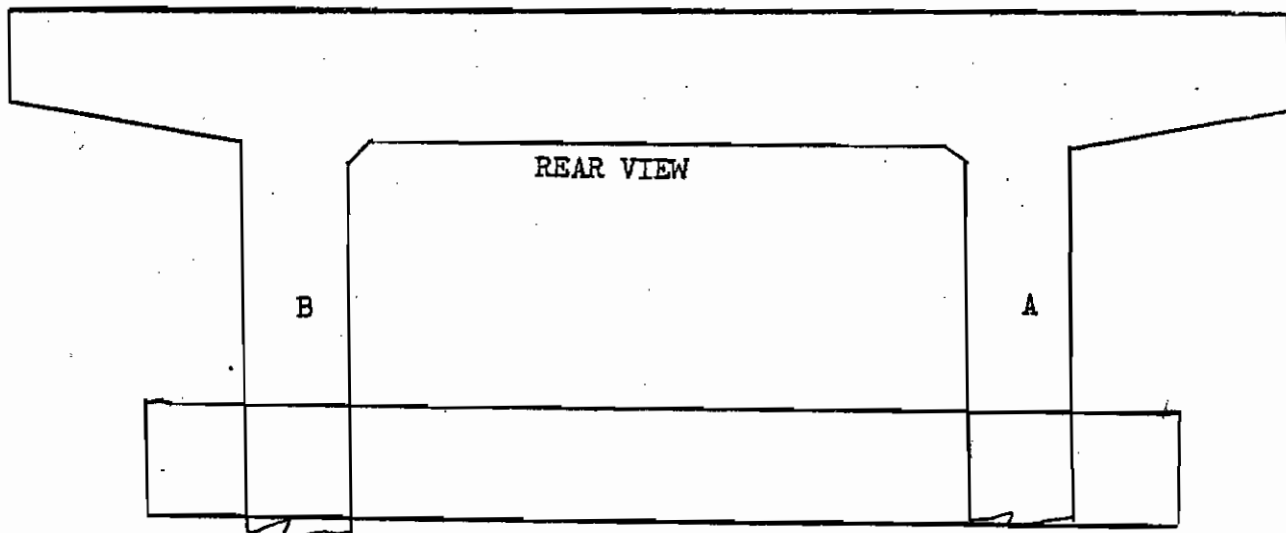
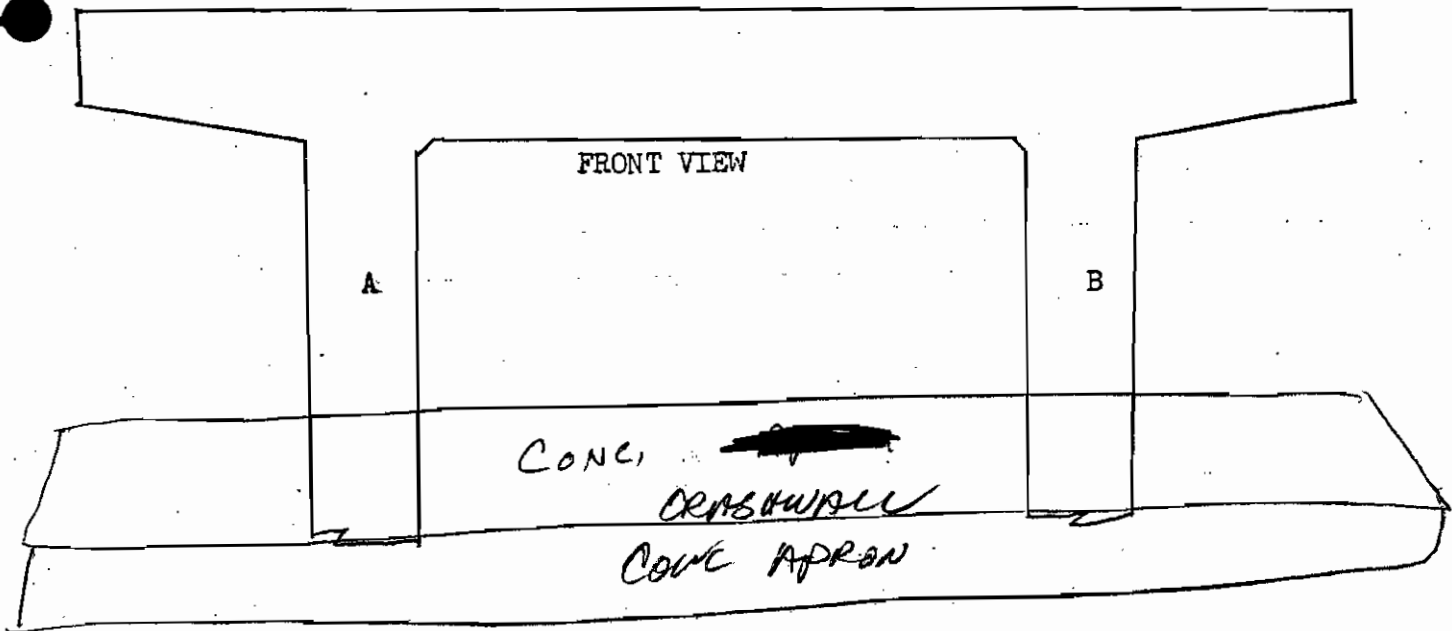
G F P C

Rise Blocks (E)

Pavil

(G)

Random CRACK & Popouts with NEED
Texture coating.

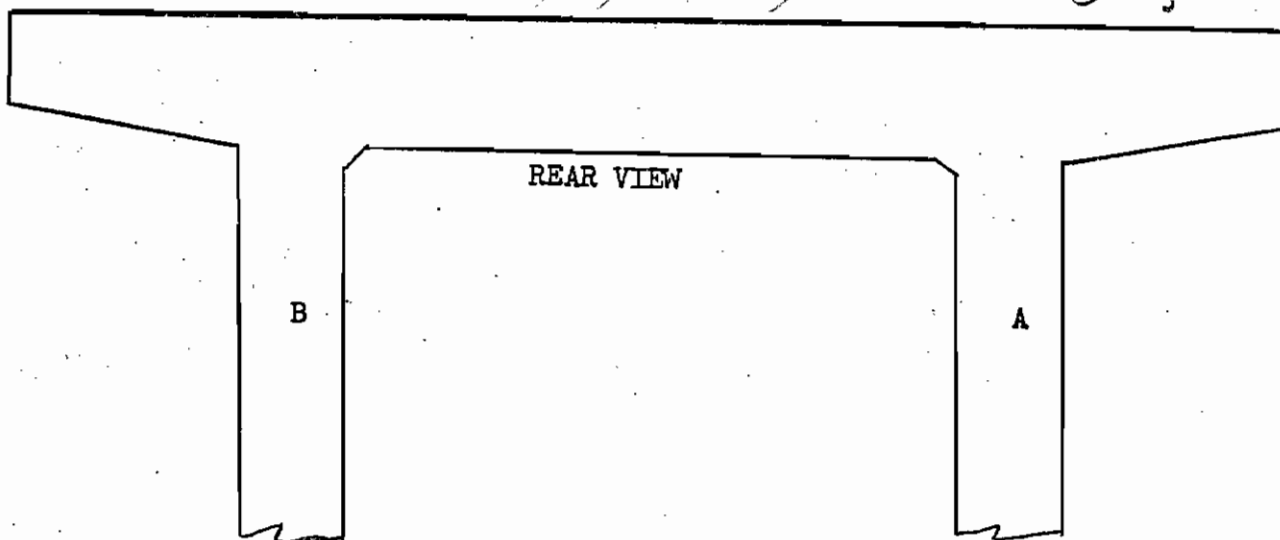
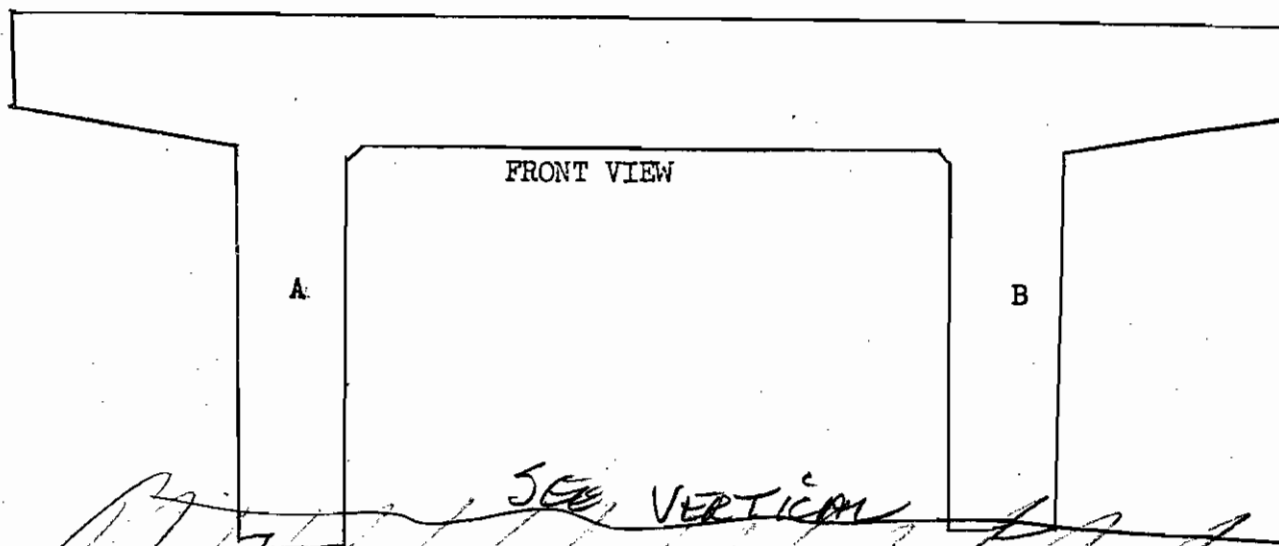
BR. NO. 57 I-40 7.54BENT NO. 1 FEB 19 2002

ELEMENT		RATING	COMMENT
BEARINGS		(G) F P C	Random cracks and Popouts
		(C) F P C	
PAINT		(G) F P C	
CAP		(G) F P C	
COLUMNS	A	(G) F P C	
	B	(G) F P C	

FEB 19 2002

BR. NO. 57 140 754

BENT NO. 2

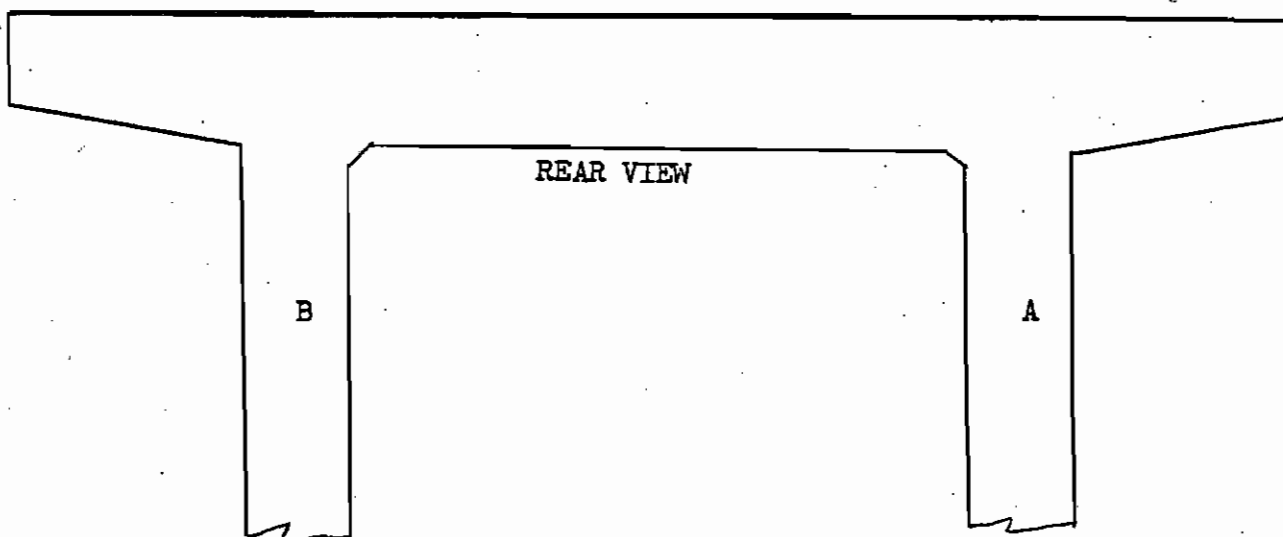
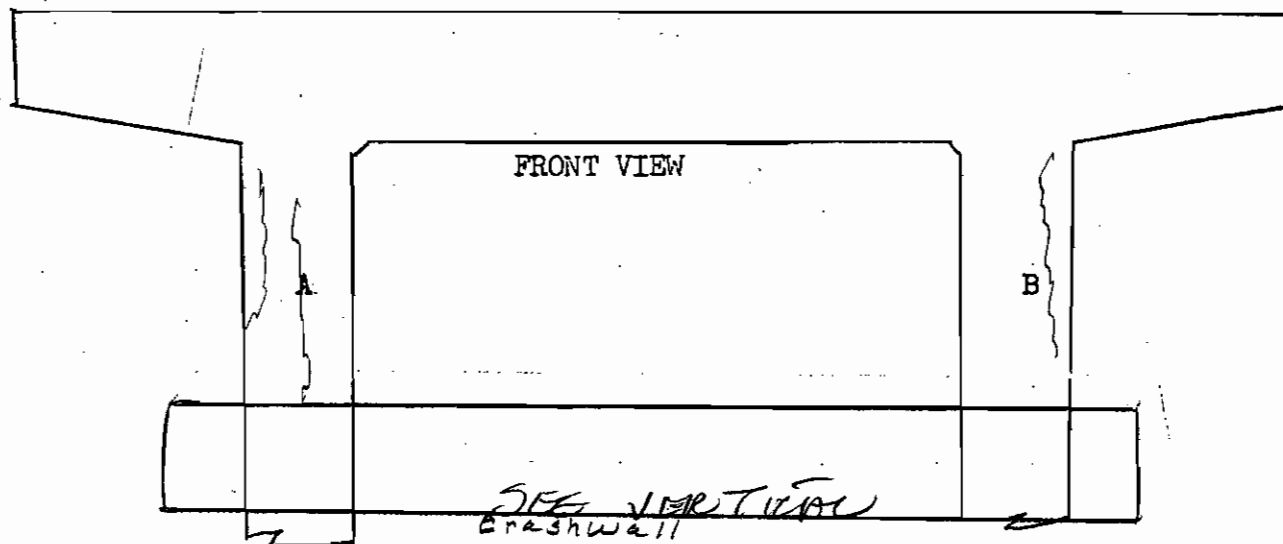


ELEMENT	RATING	COMMENT
BEARINGS <i>Print</i> CAP	(G) F P C (G) F P C (G) F P C	> Random CRACKS & Popouts
COLUMNS	A (G) F P C B (G) F P C	

FEB 19 2002

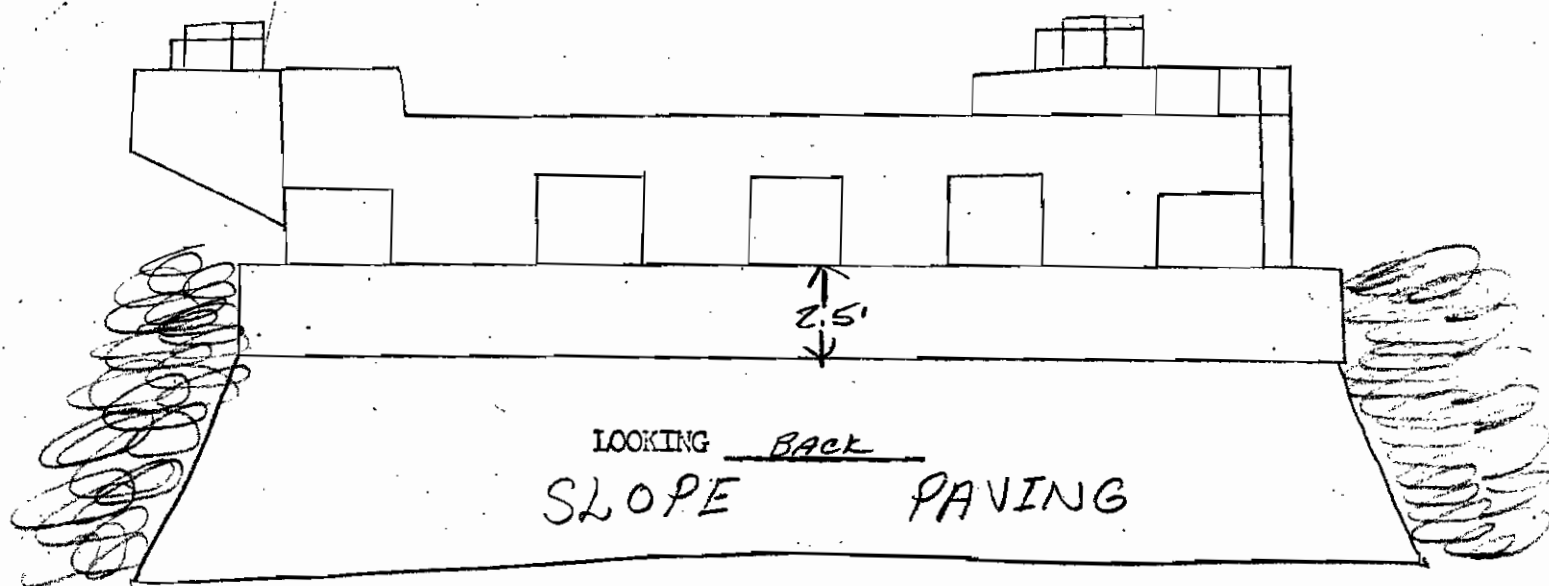
BR. NO. 57 I-40 7.54

BENT NO. 3



ELEMENT		RATING	COMMENT
BEARINGS		G F P C	> Random cracks & Repairs
Paint		G	
CAP		G F P C	
COLUMNS	A	G F P C	
	B	G F P C	

FEB 19 1962

BR. NO. 57 I-40 254 SK 62°44' ABUT NO. 2

ELEMENT	RATING	COMMENT
BEARINGS	G F P C	
Paint	G F P C	
CAP	G F P C	Random CRACKS & Repairs NEW TEXTURE COATING
PILING	G F P C	NIV
WINGS	G F P C	Random CRACKS & Repairs
VEG.	G F P C	NORMAL GROWTH
EMBANKMENT	G F P C	
RIP - RAP	G F P C	
SLOPE PAVING	G F P C	
Rise Blocks	(F)	NEW TEXTURE continue with Random CRACKS AND Repairs



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION AND REPAIR OFFICE
NASHVILLE, TENNESSEE 37243-0338

March 29, 1999

Mr. Donald Dahlinger
Special Design and Estimates Office
Suite 1000, J.K. Polk Bldg.
Nashville, TN. 37243

RE: Contract Maintenance
Project No. 57946-4213-04
Bridge No. 57-SR186-1.56/Hollywood Dr.
Bridge No. 57-B290-4.55/I40
Madison County

Dear Mr. Dahlinger:

Enclosed are the repair drawings, reference drawings, estimated quantities, and cost estimate for the above referenced project, which is scheduled for the April 30, 1999 letting.

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

Sincerely,

A handwritten signature in dark ink, appearing to read "Hollis Tackitt", is written over the word "Sincerely,".

(for)
Hollis Tackitt
Civil Engineering Manager 2
Bridge Inspection and Repair

ML:tbc

cc: Mr. Mike Lawson
Mr. Terry Leatherwood



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION AND REPAIR OFFICE
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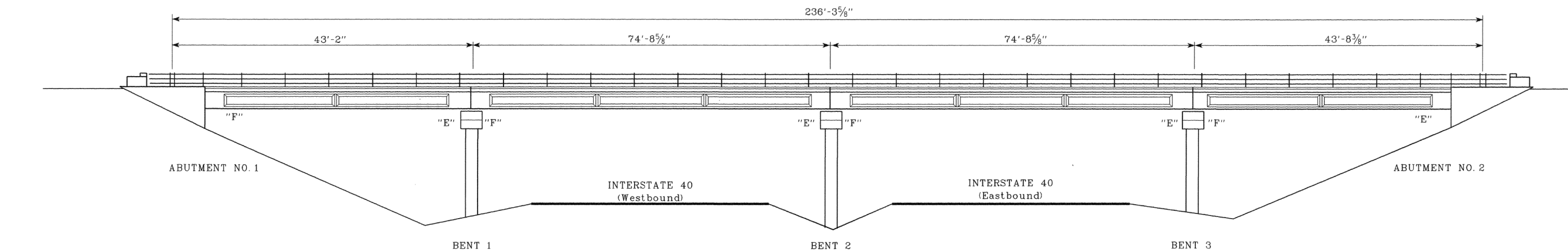
A handwritten signature in dark ink, appearing to read "Hollis Tackitt", written over a horizontal line.

(for)

Hollis Tackitt
Civil Engineering Manager 2
Bridge Inspection and Repair

ML:tbc

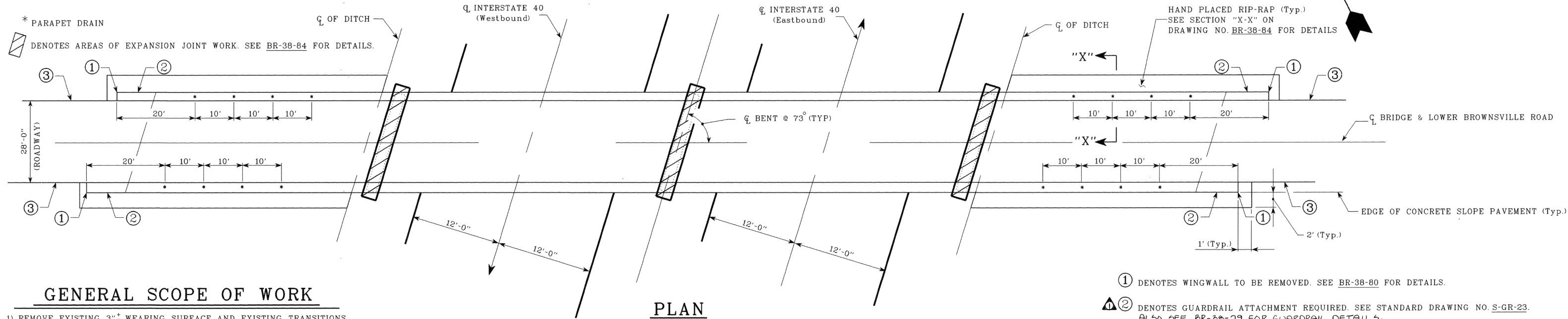
cc: Mr. Mike Lawson
Mr. Terry Leatherwood



PROJECT NO.		YEAR	SHEET NO.
57946-4213-04		1999	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-9-99	BKE	ADDED REVISION DATE + NOTE
2	5-28-99	BKE	ADDED 108B
3	6-4-99	BKE	REVISED LIST OF DRAWINGS
			REVISED LIST OF DRAWINGS

ELEVATION

"E" DENOTES EXPANSION BEARINGS
"F" DENOTES FIXED BEARINGS



GENERAL SCOPE OF WORK

- 1) REMOVE EXISTING 3"± WEARING SURFACE AND EXISTING TRANSITIONS APPROXIMATELY 150'-0" PAST THE ENDS OF THE BRIDGE.
- 2) PERFORM HYDRO-DEMOLITION TO THE EXISTING DECK.
- 3) REMOVE AND REPLACE SPAN NO.1 AND EXTERIOR BAYS OF SPAN NO. 4. SEE BR-38-71 FOR LOCATIONS.
- 4) REMOVE AND REPLACE OVERHANGS AND PLACE STD-1-1 BRIDGE RAILS WITH PARAPET DRAINS. REMOVE EXISTING DRAINS AT BRIDGE ENDS.
- 5) PLACE 4 1/2" CONCRETE OVERLAY.
- 6) PATCH SUBSTRUCTURE. SEE BR-38-83 FOR DETAILS.
- 7) DIAPHRAGM REMOVAL AND REPLACEMENT. SEE BR-38-79 FOR DETAILS
- 8) NEW APPROACH GUARD RAILS.
- 9) REMOVE AND REPLACE EXPANSION JOINT MATERIAL.
- 10) PLACE SEISMIC RESTRAINTS.
- 11) TEXTURE COAT BRIDGE. SEE BR-38-65 FOR DETAILS.
- 12) CLEAN AND PAINT EXISTING BEARINGS.
- 13) HAND PLACE RIP-RAP AT CONCRETE SLOPE PAVEMENT.
- 14) STRENGTHEN SHOULDERS AND NEW PAVEMENT TRANSITIONS. SEE BR-38-84 FOR DETAILS.
- 15) PLACE HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) ALONG CONSTRUCTION JOINT

LIST OF DRAWINGS

DRAWING NO.	LAST REV. DATE	DRAWING
BR-38-64	6-4-99	LAYOUT OF BRIDGE TO BE REPAIRED
BR-38-65	6-4-99	ESTIMATED QUANTITIES
BR-38-66	5-28-99	GENERAL NOTES
BR-38-69		CONSTRUCTION PHASING
BR-38-71		FRAMING PLAN
BR-38-72		TYPICAL CROSS-SECTIONS
BR-38-75		SLAB PLAN
BR-38-76		SLAB PLAN
BR-38-77		SLAB PLAN
BR-38-79	4-9-99	DIAPHRAGM REMOVAL AND REPAIR
BR-38-80		APPROACH AND WINGWALL DETAILS
BR-38-82		SEISMIC CROSS SECTIONS
BR-38-83		CONCRETE REPAIR DETAILS
BR-38-84	4-9-99	EXPANSION JOINT DETAILS
BR-38-85		SEISMIC RESTRAINER DETAILS
BR-38-86		LATERAL RESTRAINER DETAILS
BR-38-87		UNDERCUTTING BOLT INSTALLATION
BR-38-88		BILL OF STEEL

LIST OF REFERENCE DRAWINGS

(To Be Printed With Plans)

DRAWING NO.	DRAWING
G-2-44 THRU G-2-50	EXISTING BRIDGE DRAWNGS

LIST OF STANDARD DRAWINGS

DRAWING NO.	LAST REV. DATE	DRAWING
STD-1-1	4-28-97	BRIDGE RAILING CONCRETE PARAPET
STD-1-2	9-11-95	STEEL SLIDER PLATE ASSEMBLIES FOR CONCRETE PARAPET AND BRIDGE DECK DRAIN DETAILS
STD-9-1	12-19-94	REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS
SBR-2-124	1-04-96	DETAILS SHOWING REPLACEMENT OF EXISTING BRIDGERAIL SYSTEM WITH NEW JERSEY SHAPE CONCRETE PARAPET AND NEW 10'-2" ENDPOST
SBR-2-125	1-04-96	DETAILS SHOWING REPLACEMENT OF EXISTING BRIDGERAIL SYSTEM WITH NEW JERSEY SHAPE CONCRETE PARAPET AND NEW 10'-2" ENDPOST
SBR-2-126	1-04-96	DETAILS SHOWING REPLACEMENT OF EXISTING BRIDGERAIL SYSTEM WITH NEW JERSEY SHAPE CONCRETE PARAPET AND NEW 10'-2" ENDPOST

LIST OF SPECIAL PROVISIONS

NO.	LAST REV. DATE	REGARDING
105A	**	APPROVAL OF SHOP DRAWINGS
604CR	**	REPAIR OF BRIGE DECK CRACKS
604HD	**	BRIDGE DECK PREPARATION, REPAIR AND CONCRETE OVERLAY USING HYDRODEMOLITION
108B	**	PROJECT COMPLETION + INCENTIVE/DISCENTIVE
** DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.		

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
LAYOUT OF BRIDGE TO BE REPAIRED
LOWER BROWNSVILLE ROAD OVER
INTERSTATE 40
BRIDGE NO. 57-B290-4.55
MADISON COUNTY

1999

BR-38-64

DESIGNED BY Brian Egli DATE April, 1998
DRAWN BY Cory Hawkins DATE May, 1998
SUPERVISED BY Mike Lawson, J. Christianson DATE May, 1998
CHECKED BY Wayne Sagar, Brian Egli DATE March, 1999

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES

57-SR186-1.56
SR186
OVER
HOLLYWOOD DR.

57-B290-4.55
LOWER
BROWNSVILLE
ROAD
OVER
I-40

NOTE: FOR MORE ROADWAY QUANTITIES SEE SHEET NO. 5.

PROJECT NO.		YEAR	SHEET NO.
57946-4213-04		1999	3
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-9-99	BKE	REVISED QUANTITY + ADDED NOTES
2	6-4-99	BKE	REVISED QUANTITY

TRAFFIC CONTROL PHASING

B290/I-40

ADVANCE ROAD WORK SIGNAGE (STD T-WZ-10)

PHASE A:
CLOSE OUTSIDE I-40 WESTBOUND LANE (STD T-WZ-11 NO PORTABLE BARRIER RAIL SETUP)

PHASE B:
CLOSE INSIDE I-40 EASTBOUND AND WESTBOUND LANE (STD T-WZ-11 NO PORTABLE BARRIER RAIL SETUP)

PHASE C:
CLOSE OUTSIDE I-40 EASTBOUND LANE (STD T-WZ-11 NO PORTABLE BARRIER RAIL SETUP)

PHASE D:
CLOSE B290 SOUTHBOUND LANE (STD T-WZ-32 THRU T-WZ-35)

PHASE E:
CLOSE B290 NORTHBOUND LANE (STD T-WZ-32 THRU T-WZ-35)

PHASE F:
CLOSE INSIDE AND OUTSIDE SHOULDERS OF I-40 EASTBOUND AND WESTBOUND (STD T-WZ-18)

SR186/HOLLYWOOD DRIVE

ADVANCE ROAD WORK SIGNAGE (STD T-WZ-10)

PHASE A:
CLOSE OUTSIDE EASTBOUND LANE OF HOLLYWOOD DRIVE (STD T-WZ-11 NO PORTABLE BARRIER RAIL SETUP)

PHASE B:
CLOSE THE INSIDE EASTBOUND AND INSIDE WESTBOUND LANE OF HOLLYWOOD DRIVE (STD T-WZ-11 NO PORTABLE BARRIER RAIL SETUP)

PHASE C:
CLOSE OUTSIDE WESTBOUND LANE AND RAMP LANE OF HOLLYWOOD DRIVE (STD T-WZ-11 NO PORTABLE BARRIER RAIL SETUP ALSO SEE SHEET 6 FOR RAMP LANE CLOSURES.)

PHASE D:
CLOSE THE INSIDE NORTHBOUND AND SOUTHBOUND LANES OF SR186 (STD T-WZ-11 PORTABLE BARRIER RAIL (PBR) SETUP, DO NOT TAPER FAR ENDS WITH PBR)

PHASE E:
CLOSE THE OUTSIDE NORTHBOUND AND SOUTHBOUND LANES AND NORTHBOUND RAMP LANE OF SR186 (STD T-WZ-11 PORTABLE BARRIER RAIL (PBR) SETUP, DO NOT TAPER FAR ENDS WITH PBR ALSO SEE SHEET 6 FOR EXIT TRAFFIC CONTROL)

PHASE F:
CLOSE THE OUTSIDE SHOULDER (STD T-WZ-18) OF EASTBOUND HOLLYWOOD DR. AND THE OUTSIDE RAMP LANE ONTO WESTBOUND HOLLYWOOD. CONTRACTOR IS TO KEEP RAMP OPEN. (STD T-WZ-11 PORTABLE BARRIER RAIL (PBR) SETUP, DO NOT TAPER FAR END WITH PBR ALSO SEE SHEET 6 FOR RAMP LANE CLOSURE)

PHASE G:
CLOSE THE INSIDE LANES OF EASTBOUND AND WESTBOUND HOLLYWOOD DR. (STD T-WZ-11 PORTABLE BARRIER RAIL SETUP, DO NOT TAPER FAR END WITH PBR). LEAVE SHOULDER UNDER THE LEFT LANE IN THE EASTBOUND DIRECTION CLOSED TO PROTECT SUPPORTS AT BENT 1.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

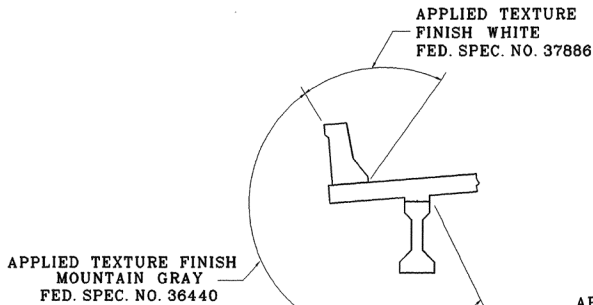
ESTIMATED QUANTITIES

BRIDGE NO. 57-SR186-1.56
BRIDGE NO. 57-B290-4.55
MADISON COUNTY
1999

ITEM NO.	DESCRIPTION	UNIT	57-SR186-1.56	57-B290-4.55	TOTALS
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	-	533	533
307-03.09	BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING A	TON	-	24	24
307-07.07	PERF. GR (PG76-22) (BPMB-HM) GR B-M2	TON	395	135	530
403-01	BITUMINOUS MATERIAL FOR TACK COAT (T.C.) @ 0.02 GAL/S.Y.	TON	1	1	2
411-01.01	MINERAL AGGREGATE (ACS) GRADING "D"	TON	295	106	401
411-01.02	ASPHALT CEMENT (ACS) GRADING "D"	TON	18	6	24
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	560	1210	1770
415-02.02	SALVAGE VALUE OF COLD PLANINGS	S.Y.	560	1210	1770
604-03.60	BRIDGE JOINT SEISMIC MODIFICATION	EACH	52	19	71
604-04.02	APPLIED TEXTURE FINISH (EXISTING STRUCTURES)	S.Y.	4,022	2,525	6,547
604-05.31	BRIDGE DECK GROOVING (MECHANICAL)	S.Y.	1,637	758	2,395
604-10.13	CONCRETE SLAB REMOVAL	L.S.	0.5	0.5	1
604-10.14	REMOVAL OF WEARING SURFACE	L.S.	-	1	1
604-10.17	NON-PENETRATING CONCRETE SEAL	S.Y.	112	146	258
604-10.18	REINFORCING STEEL (REPAIRS)	LB.	78,186	33,498	111,684
604-10.20	HYDRODEMOLITION	S.Y.	1,436	537	1,973
604-10.26	BRACING	EACH	2	-	2
602-10.39	STRUCTURAL STEEL BRIDGE (REPAIRS)	EACH	-	8	8
604-10.42	CONCRETE REPAIRS	C.F.	116	-	116
604-10.44	EXPANSION JOINT REPAIRS	L.F.	103	192	295
604-10.54	CONCRETE REPAIRS	S.F.	404	186	590
604-10.84	PULL DEPTH REPAIR	S.Y.	151	71	222
604-10.85	CLASS "D" CONCRETE (OVERLAY)	C.Y.	370	162	532
617-02	BRIDGE DECK CRACK SEALING	L.F.	433	237	670
617-05	SEALANT (HMWM)	GAL.	6	4	10
620-10.01	PARAPET	L.F.	866	514	1,380
705-01.04	GUARDRAIL AT BRIDGE ENDS	L.F.	162	108	270
705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	50	500	550
705-04.21	GUARDRAIL TERMINAL ANCHOR (TYPE 21)	EACH	-	4	4
705-04.38	GUARDRAIL TERMINAL ANCHOR (TYPE 38)	EACH	2	-	2
706-01	GUARDRAIL REMOVED	L.F.	241	705	946
709-07	RUBBLE STONE RIP-RAP (PLAIN)	C.Y.	-	18	18
714-01.01	STRUCTURAL LIGHTING (57-SR186-1.56)	L.S.	1	-	1
714-05.01	PULL BOXES (TYPE A, B, OR C)	EACH	4	-	4
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	LIN. MI.	0.968	0.159	1.127
717-01	MOBILIZATION	L.S.	0.5	0.5	1
501-01	PORTLAND CEMENT CONCRETE PAVEMENT (REPLACEMENT)	S.Y.	-	760	760

- 1 COST TO INCLUDE CLEANING TOP OF ABUTMENTS AND BENTS, SEE APPLIED TEXTURE FINISH SKETCH, THIS SHEET.
- 2 CONCRETE REMOVAL TO BE PAID FOR UNDER ITEM NUMBER 604-10.13 SLAB REMOVAL, L.S. SEE BR-38-70 OR BR-38-71 FOR DETAILS
- 3 DECK AREA TO RECEIVE HYDRODEMOLITION TO BE PAID FOR UNDER ITEM NO. 604-10.20 OR 604-10.84 SEE BR-38-67 OR BR-38-68 OR BR-38-69 FOR DETAILS
- 4 THE COST OF THE TEMPORARY SUPPORT SYSTEM, ANY REQUIRED JACKING, ANY EXCAVATION AND REMOVAL OF ANY ASPHALT REQUIRED TO SUPPORT THE SUPERSTRUCTURE AND REPLACEMENT OF ANY DAMAGED SHOULDER MATERIAL, DAMAGED PIER PROTECTION AND REPLACEMENT OF ANY MATERIAL REMOVED FOR SUPPORT, TO EXISTING CONDITIONS SHALL BE INCLUDED UNDER ITEM NO. 604-10.26, BRACING, EACH. SEE BR-38-84 FOR DETAILS
- 5 THE COST OF CONCRETE REMOVAL, FORMING, NEW CLASS "A" CONCRETE BLAST CLEANING, STEEL PLATES, THREADED BOLTS, NUTS, WASHERS, DRILLING, GROUTING, PAINTING, NEW NEOPRENE PADS, LABOR, AND ALL MISCELLANEOUS MATERIALS REQUIRED TO PLACE NEW BENT OVERHANG SHALL BE INCLUDED UNDER ITEM NO. 604-10.42, CONCRETE REPAIRS, C.F. (INCLUDES 886 LBS. OF STRUCTURAL STEEL). ALSO INCLUDES 50 C.F. FOR LATERAL RESTRAINTS ON SR186. SEE BR-38-83 FOR DETAILS
- 6 COST OF INSTALLING BACKER ROD, NEW JOINT SEALER, LABOR, AND ANY MISCELLANEOUS MATERIALS NECESSARY TO INSTALL THE NEW EXPANSION JOINT TO BE INCLUDED UNDER ITEM NO. 604-10.44 EXPANSION JOINT REPAIRS, L.F. SEE BR-38-84 FOR DETAILS
- 7 COST OF SAW CUTTING, REMOVING SPALLED CONCRETE, COMPLETELY CLEANING EXPOSED REINFORCING STEEL, POLYMER-MODIFIED CEMENTITIOUS STRUCTURAL PATCHING VERTICAL AND OVERHEAD MATERIAL, LABOR, AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN SHALL BE INCLUDED IN ITEM NO. 604-10.54, CONCRETE REPAIRS, S.F. SEE BR-38-83 FOR DETAILS
- 8 INCLUDES ALL COST FOR INSTALLING THE BRIDGE DECK CRACK SEALER (HMWM) INCLUDING CRACK PREPARATION, CLEANING, LABOR, AND ALL MISCELLANEOUS MATERIALS REQUIRED TO FLOOD THE LONGITUDINAL CONSTRUCTION JOINT ACCORDING TO SPECIAL PROVISION 604CR AND MANUFACTURERS SPECIFICATIONS. THIS ITEM DOES NOT INCLUDE THE COST OF FURNISHING THE BRIDGE CRACK SEALANT ITSELF.
- 9 INCLUDES ALL COST FOR FURNISHING THE SEALER MATERIAL (HMWM) FOR SEALING CRACKS. THE SEALER (HMWM) SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION 604CR.

- 10 ITEM INCLUDES 510 FT. OF 2" SCHEDULE 40 PVC CONDUIT, 4 JUNCTION BOXES, AND 16 ANCHOR BOLTS. CONTRACTOR IS TO REUSE EXISTING LIGHT STANDARDS. CONTRACTOR IS TO MATCH EXISTING BOLT CIRCLE DIAMETER.
- 11 APPROXIMATELY 3" - 735 S.Y. TO BE PAID FOR UNDER ITEM NO. 604-10.14 REMOVE EXISTING WEARING SURFACE, L.S.
- 12 INCLUDES 1067 S.Y. FOR REMOVAL OF EXISTING TAPER FOR B290.
- 13 ITEM NO DOES NOT INCLUDE COST OF THE CONCRETE
- 14 SEE SHEET BR-38-79.



EXTERIOR BEAMS

APPLIED TEXTURE FINISH SKETCH

NOTE: IN ADDITION TO THE SURFACES SHOWN IN THE APPLIED TEXTURE FINISH SKETCH ALL EXPOSED SURFACES OF THE WINGWALLS, ABUTMENT BEAMS, PIERS AND EXTERIOR PORTIONS OF ENDWALLS ARE TO RECEIVE AN APPLIED TEXTURE FINISH (MOUNTAIN GRAY, FED. SPEC. NO. 36440).



HYDRO-DEMOLITION WORK
DECK OVERHANG REMOVAL
NEW DECK OVERHANG FORMING

DECK REPAIR WORK

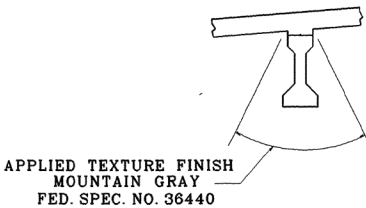
BENT REPAIR

HYDRO-DEMOLITION WORK
DECK OVERHANG REMOVAL
NEW DECK OVERHANG FORMING

DECK REPAIR WORK

BENT 1 & 3 REPAIR

BENT 2 REPAIR



INTERIOR BEAMS

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
DRAWN BY BRIAN K. EGLI DATE JAN/1999
SUPERVISED BY MIKE LAWSON DATE JAN/1999
CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

GENERAL NOTES

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

DESIGN SPECIFICATIONS: AASHTO 1996 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.

MECHANICAL BAR SPlicERS: MUST BE ON THE APPROVED LIST MAINTAINED BY THE DIVISION OF MATERIALS AND TESTS. THE BAR SPlicER SHALL MEET ASSHTO STANDARD SPECIFICATIONS FOR MECHANICAL CONNECTION. WHEN EPOXY COATING IS REQUIRED, THE EXPOSED THREADS SHALL BE REPAIRED AFTER SPlicING ACCORDING TO THE STANDARD SPECIFICATIONS, SECTION 907. THE COST OF FURNISHING THE BAR SPlicERS (AND EPOXY COATING WHEN REQUIRED), INCLUDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 604-10.18, LBS.

SHOP DRAWINGS: SHALL BE SUBMITTED ACCORDING TO SPECIAL PROVISION NO.105A. SHOP DRAWINGS SHALL BE SUBMITTED TO THE BRIDGE REPAIR OFFICE 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 II.

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

BRIDGE DECK CONCRETE: SHALL BE CLASS "D" CONCRETE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

BRIDGE DECK SURFACE FINISH: SHALL BE IN ACCORDANCE WITH METHOD (C) IN SUBSECTION 604.23 OF THE STANDARD SPECIFICATIONS.

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

WELDING: SHALL BE IN ACCORDANCE WITH ANSI/AASHTO/AWS D1.5-88 BRIDGE WELDING CODE AND THE STANDARD SPECIFICATIONS.

DEMOLITION: THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ANY PARTS OF THE STRUCTURE THAT ARE NOT TO BE REMOVED SPECIFICALLY. THE CONTRACTOR IS NOT ALLOWED TO USE A HYDRAULIC RAM MOUNTED ON A BACKHOE (COMMONLY CALLED A HOE RAM) OR OTHER SIMILARLY HEAVY EQUIPMENT FOR CONCRETE REMOVAL. PNEUMATIC HAMMERS MAY BE USED TO REMOVE UNSOUND CONCRETE. FOR FULL DEPTH OF CONCRETE SLAB REMOVAL EXCEPT OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 90 POUND CLASS. FOR PARTIAL DEPTH OF CONCRETE SLAB REMOVAL AND ANY WORK OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 60 POUND CLASS. SAWING OR CUTTING OF THE CONCRETE IS ACCEPTABLE SO LONG AS ANY SPECIFIED PROJECTION OF THE EXISTING REINFORCING STEEL IS MAINTAINED. ALL DEVICES PROPOSED FOR CONCRETE DEMOLITION SHALL MEET THE APPROVAL OF THE ENGINEER.

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

WIRE ROPE: SPECIFICATIONS FOR WIRE ROPE SHALL BE: ALL WIRE ROPE SHALL MEET ASTM A603 3/4" DIA.- CLASS A ZINC COATING, MINIMUM BREAKING STRENGTH OF 26 TONS

GALVANIZING OF NEW STEEL FOR SEISMIC AND LATERAL RESTRAINERS: ALL NEW STEEL SHALL BE GALVANIZED TO ASTM A123 STANDARDS.

GROUTED 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 THE BAR ROTATED (NOT DRIVEN) TO IT'S SEAT. VERTICALLY DRILLED HOLES SHALL BE DRILLED 1/4" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT AND BAR DRIVEN TO IT'S SEAT. ALL GROUTING MATERIAL SHALL BE APPROVED BY THE T.D.O.T. MATERIALS AND TESTS.

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.

U-BOLTS AND BOLTS THROUGH WEBS FOR SEISMIC RESTRAINERS SHALL BE A36 STEEL.

NOTE: CONTRACTOR SHALL USE EXTREME CARE TO INSURE THAT NO DEBRIS IS ALLOWED TO DROP ONTO THE ROADWAY BELOW WHEN MAKING REPAIRS TO THE EXISTING STUCTURE.

NOTE: CONTRACTOR IS TO CUT POWER OFF TO EXISTING LIGHT STANDARDS BEFORE REMOVING THEM. LIGHT STANDARDS ARE TO BE STORED AND PROTECTED FOR USE ON THE REPAIRED STRUCTURE.

WIRE ROPE CLIPS: EACH CONNECTION SHALL HAVE A MINIMUM OF FOUR (4) WIRE ROPE CLIPS AND CUMULATIVELY DEVELOP 125% OF THE YIELD STRESS OF THE WIRE ROPE. THIS YIELD STRESS SHALL BE VERIFIED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION MATERIALS AND TEST.

CONCRETE SEALER: CONCRETE SEALER SHALL BE APPLIED TO SUBSTRUCTURES COINCIDING WITH EXPANSION JOINT LOCATIONS BEFORE PLACEMENT OF BEARING DEVICES (SR186) AND APPLYING TEXTURE COATING (SEALER SHALL BE APPLIED TO THE TOP AND VERTICAL SURFACES OF THE BENT CAP).

CONCRETE SHALL BE CLEAN AND DRY BEFORE APPLYING THE CONCRETE SEAL, AND THE THICKNESS OF THE SEAL SHALL BE AS RECOMMENDED BY THE SEALANT MANUFACTURER. ACCEPTABLE CONCRETE SEALERS ARE INCLUDED IN THE QUALIFIED PRODUCTS LIST FOR NON-PENETRATING CONCRETE SEALS MAINTAINED BY THE DIVISION OF MATERIALS AND TESTS. THE SEALER SHALL BE CLEAR OR SIMILAR TO THE COLOR OF EXISTING CONCRETE SURFACES TO BE SEALED. THE COST OF THE SEALER, COMPLETE AND IN PLACE, SHALL BE INCLUDED IN ITEM NO. 604-10.17 NON-PENETRATING CONCRETE SEAL, S.Y.

UTILITIES

THE LOCATION OF UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR, AND BY CONTACTING THE UTILITY COMPANIES INVOLVED. SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-351-1111.

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO CO-OPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES. THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTACTING ALL AFFECTED UTILITIES PRIOR TO SUBMITTING HIS BID, IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF THE WORK FOR THE PROJECT. SOME UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS, WHILE SOME WORK MAY BE REQUIRED "AROUND" UTILITY FACILITIES THAT WILL REMAIN IN PLACE. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY THE UTILITY ADJUSTMENTS.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.

GUARDRAIL

THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE AND IN PLACE.

IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.

SPECIAL NOTE TO CONTRACTOR:

LANE CLOSURES ON I-40 WILL BE REQUIRED FOR OVERHEAD WORK ON B290. WHEN REQUIRED, LANE CLOSURES WILL BE ACCOMPLISHED UTILIZING STANDARD DRAWING NUMBER T-WZ-11 (NO PORTABLE BARRIER RAIL SETUP). AT NO TIME SHALL TRAFFIC ON I-40 BE RESTRICTED UNLESS WORK AS DEFINED BY THE ENGINEER IS OCCURING OVERHEAD.

THE COSTS ASSOCIATED WITH THE REMOVAL AND REPLACEMENT OF TRAFFIC CONTROL DEVICES ON A DAY BY DAY BASIS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR TRAFFIC CONTROL ITEMS.

PROJECT NO.	YEAR	SHEET NO.	
57946-4213-04	1999	4	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	5/28/99	BKE	ADDED SPECIAL NOTES

LIGHTING

INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTIONS 714 AND 917 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED MARCH 1, 1995 AND WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRIC CODE, NFPA 70.

STANDARDS SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS.

ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCESSFULL EXECUTION OF THIS WORK SHALL BE FURNISHED IN 714 ITEMS WHETHER SPECIFICALLY NOTED OR NOT.

PAVEMENT - RESURFACING

THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

MISCELLANEOUS

NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

PAVEMENT MARKINGS

PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), LIN. MI.

BEFORE OPENING THE LANE CLOSURES/SHIFTS TO TRAFFIC. THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. THESE MARKINGS SHALL BE MEASURED AND PAID FOR UNDER ITEM NO. 712-09.01, REMOVABLE MARKING LINE, LIN. FT. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE ITEM NO. 712-01, TRAFFIC CONTROL, LUMP SUM.

SPECIAL NOTE TO CONTRACTOR:

TYPE OF CONCRETE WORK	DAYS TO REMOVE FORMS	DAYS TO LOAD OR OPEN TO TRAFFIC	TOTAL
CONCRETE BRIDGE DECK OVERLAY WITH FULL AND PARTIAL DEPTH CONCRETE REPAIRS AND CANTILEVER REPLACEMENT	7 (+ 3000 psi CYLINDER BREAK)	10	17
PARAPET RAIL	12 TO 48 HOURS (NOT APPLICABLE IF SLIP FORMED)	10 (+ 3000 psi CYLINDER BREAK)	10 1/2 - 14
BENT CAP REPAIRS	7 (+ 3000 psi CYLINDER BREAK)	10	17

NOTE: THE PARAPET RAIL MAY BE POURED AFTER THE CANTILEVER FORMS HAVE BEEN REMOVED (7 DAYS) AND THE TEST CYLINDERS MEET THE 3000 psi COMPRESSIVE STRENGTH REQUIREMENT AS LONG AS THE STRUCTURE IS NOT LOADED. SHOULD THE CONTRACTOR ELECT TO SLIP FORM THE PARAPET OR POUR THE PARAPET FROM THE BRIDGE, THE 17-DAY WAIT AND 3000 psi COMPRESSIVE STRENGTH REQUIREMENT WILL BE REQUIRED.

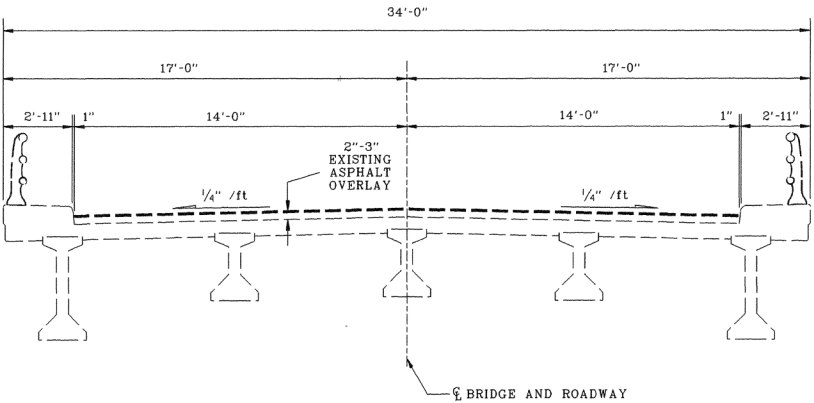
DESIGNED BY	BRIAN K. EGLI	DATE	JAN/1999
DRAWN BY	BRIAN K. EGLI	DATE	JAN/1999
SUPERVISED BY	MIKE LAWSON	DATE	JAN/1999
CHECKED BY	W. SEGER & M. LAWSON	DATE	JAN/1999



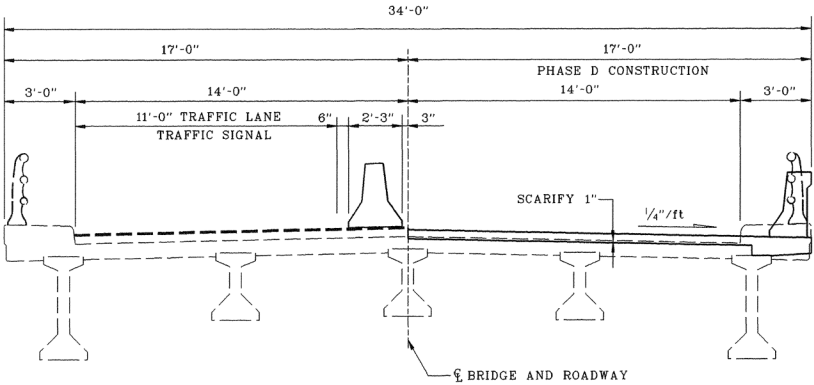
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
BRIDGE NO. 57-SR186-1.56
BRIDGE NO. 57-B290-4.55
MADISON COUNTY
1999

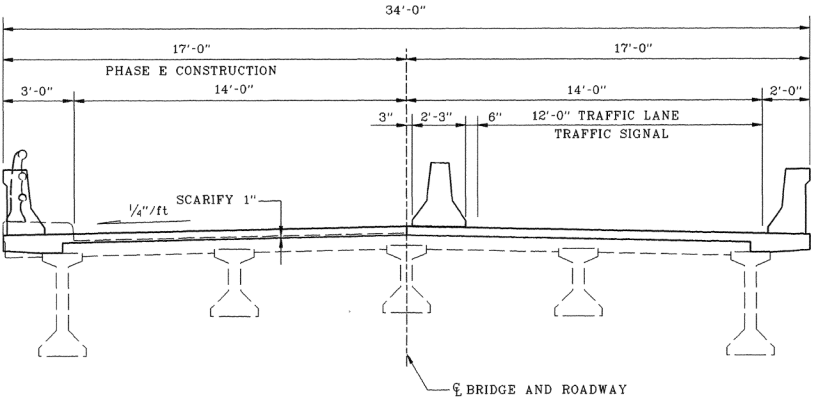
PROJECT NO.	YEAR	SHEET NO.
57946-4213-04	1999	
REVISIONS		
NO.	DATE	BY
		BRIEF DESCRIPTION



EXISTING TYPICAL SECTION
(LOOKING AHEAD ON SURVEY)

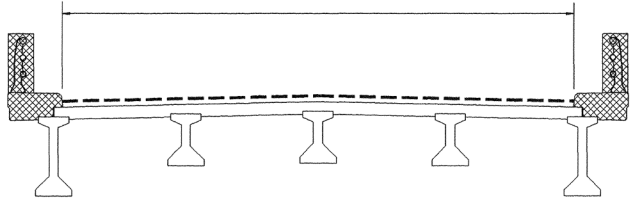


PHASE D CONSTRUCTION
(LOOKING AHEAD ON SURVEY)



PHASE E CONSTRUCTION
(LOOKING AHEAD ON SURVEY)

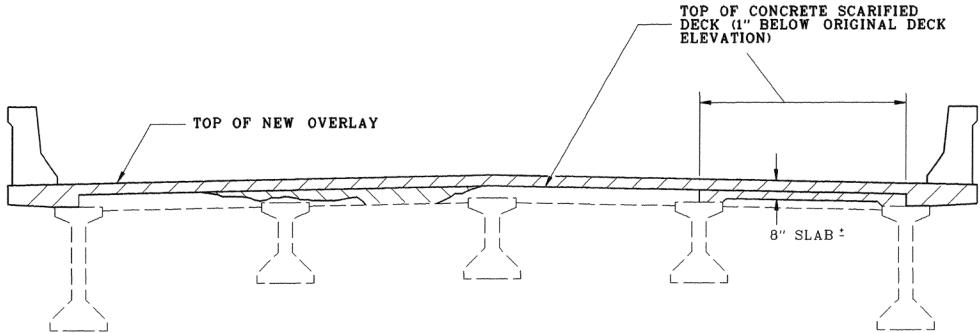
LIMITS OF DECK AREA TO RECEIVE HYDRODEMOLITION
TO BE PAID FOR UNDER ITEM NO. 604-10.20 OR 604-10.84



 DENOTES AREA TO BE REMOVED
TO BE PAID FOR UNDER ITEM
NO 604-10.13
EXISTING TRANSVERSE SLAB STEEL
TO REMAIN IN PLACE.

IN AREAS WHERE THE SLAB IS REMOVED FULL
DEPTH FROM BEAM TO BEAM IN AN ENTIRE
SPAN THE NEW CONCRETE SHALL BE PAID FOR
UNDER ITEM NO. 604-10.85 CLASS "D"
CONCRETE OVERLAY, C.Y. (SEE DWG. NO.
BR-38-71 FOR BAYS TO BE REMOVED)

LEGEND:
 --- DENOTES EXISTING STRUCTURE
 --- DENOTES PROPOSED STRUCTURE



 DENOTES NEW CONCRETE PLACED IN AREAS OF FULL AND PARTIAL DEPTH DECK REMOVAL
(1" BELOW ORIGINAL DECK ELEVATION) TO BE PAID FOR UNDER ITEM NO. 604-10.86,
CLASS "D" CONCRETE (REPAIRS). THIS DOES NOT INCLUDE NEW CONCRETE PLACED IN AREAS
OF FULL DECK REMOVAL DESIGNATED ON THE FRAMING PLAN ON DWG. NO. BR-38-71.

 DENOTES LIMITS OF NEW CONCRETE IN THE 4 1/2" MIN. OVERLAY. CANTILEVERS, ALL NEW CONCRETE
IN FULL BAY REMOVAL AREAS DESIGNATED ON THE FRAMING PLAN ON DWG. BR-38-71 AND ALL
CONCRETE PLACED ABOVE 1" BELOW EXISTING TOP OF DECK ELEVATION TO TOP OF NEW
DECK ELEVATION TO BE PAID FOR UNDER ITEM NO. 604-10.85, CLASS "D" CONCRETE
(OVERLAY), C.Y.

DETAIL SHOWING LIMITS FOR CONCRETE PAY ITEMS

NOTE: CONCRETE FOR ITEM NOS. 604-10.85 &
604-10.86 SHALL BE PLACED MONOLITHICALLY

SPECIAL NOTE CONCERNING USE OF HYDRODEMOLITION FOR SCARIFYING DECK 1" PARTIAL DEPTH
CONCRETE REMOVAL, FULL DEPTH CONCRETE REMOVAL AND NEW CONCRETE.

(THIS IS A GENERAL DESCRIPTION OF WORK REQUIRED AND PAYMENT FOR THAT WORK. SEE SPECIAL
PROVISION 604HD FOR EXACT LIMITS OF WORK AND PAYMENT CONCERNING HYDRODEMOLITION AND NEW
CONCRETE OVERLAY.)

THE ENTIRE DECK AREA ON THE BRIDGE SHALL RECEIVE HYDRODEMOLITION AS DESCRIBED BELOW.
THE AREAS OF THE DECK NOT DESIGNATED FULL DEPTH REMOVAL SHALL BE SCARIFIED 1" MINIMUM
AND HAVE PARTIAL DEPTH DETERIORATED CONCRETE REMOVED USING HYDRODEMOLITION. PARTIAL DEPTH AREAS
WILL NOT BE MARKED ON THE DECK BUT WILL BE REMOVED AS THE HYDRODEMOLITION COMES IN CONTACT
WITH PARTIAL DEPTH DETERIORATED CONCRETE WHILE SCARIFYING. THESE AREAS SHALL BE PAID FOR UNDER
ITEM NO. 604-10.20 HYDRODEMOLITION, S.Y.

AREAS TO HAVE CONCRETE REMOVED FULL DEPTH BY HYDRODEMOLITION WILL BE MARKED BY THE ENGINEER FROM
THE BRIDGE REPAIR OFFICE. AFTER WORK IS UNDER WAY THIS INCLUDES ALL AREAS THAT ARE DESIGNATED ON
THE FRAMING PLAN ON BR-38-71 AND ANY ADDITIONAL AREAS MARKED BY THE ENGINEER. THESE AREAS SHALL BE
PAID FOR UNDER ITEM NO. 604-10.84, FULL DEPTH REPAIR, S.Y.

THE NEW CLASS "D" CONCRETE PLACED IN AREAS OF FULL AND PARTIAL DEPTH REMOVAL UP TO 1" BELOW THE
ORIGINAL BRIDGE DECK ELEVATION (EXCLUDING NEW CANTILEVERS, DIAPHRAGMS AND AREAS OF FULL BAY
REMOVAL DESIGNATED ON THE FRAMING PLAN ON DWG. NO. BR-38-71) SHALL BE PAID FOR UNDER ITEM NO.
604-10.86, CLASS "D" CONCRETE (REPAIR). SEE SPECIAL PROVISION 604HD, AND WILL BE PLACED AT THE
SAME TIME AS THE NEW 4 1/2" MINIMUM CONCRETE OVERLAY.
THE NEW 4 1/2" MINIMUM CONCRETE OVERLAY WHICH INCLUDES NEW CANTILEVERS, DIAPHRAGMS, CONCRETE ABOVE 1"
BELOW ORIGINAL BRIDGE DECK ELEVATION, AND AREAS OF FULL BAY REMOVAL DESIGNATED ON THE FRAMING PLAN
ON BR-38-71 SHALL BE PAID FOR UNDER ITEM NO. 604-10.85 CLASS "D" CONCRETE (OVERLAY), C.Y.



STATE OF TENNESSEE

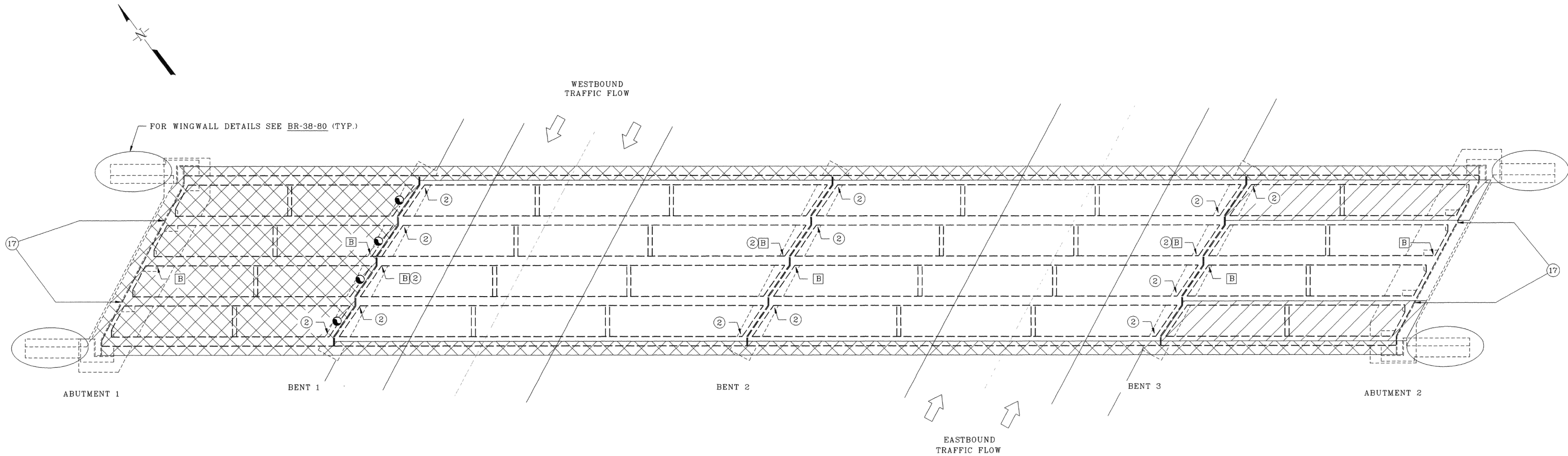
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PHASING
LOWER BROWNSVILLE ROAD OVER I-40
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

AFTER THE ASPHALT OVERLAY HAS BEEN REMOVED FROM THE
BRIDGE DECK, TENNESSEE DEPARTMENT OF TRANSPORTATION
PERSONNEL WILL VERIFY AND RECORD THE CROSS-SLOPES OF
THE EXISTING DECKS AND DESIGNATE AREAS OF FULL DEPTH
CONCRETE REMOVAL

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
 DRAWN BY BRIAN K. EGLI DATE JAN/1999
 SUPERVISED BY MIKE LAWSON DATE JAN/1999
 CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

PROJECT NO.		YEAR		SHEET NO.	
57946-4213-04		1999			
REVISIONS					
NO.	DATE	BY	BRIEF DESCRIPTION		



- LEGEND:**
- DENOTES LIMITS OF CONCRETE REMOVAL TO BE PAID FOR UNDER ITEM NUMBER 604-10 13 SLAB REMOVAL, L S NEW DECK CONCRETE SHALL BE PAID FOR UNDER ITEM NO 604-10.85 CLASS "D" CONCRETE (OVERLAY), C Y
 - DENOTES AREAS OF CONCRETE DECK TO BE REMOVED FULL DEPTH BY HYDRODEMOLITION, COST OF FULL DEPTH REMOVAL SHALL BE PAID FOR UNDER ITEM NUMBER 604-10 84 FULL DEPTH REPAIR, S Y ALL NEW DECK CONCRETE SHALL BE PAID FOR UNDER ITEM NO 604-10 85 CLASS "D" CONCRETE (OVERLAY) C Y
 - DENOTES DIAPHRAGMS TO BE REMOVED, SEE BR-38-79 FOR DETAILS. COST OF DIAPHRAGM REMOVAL TO BE PAID FOR UNDER ITEM NO 604-10 13 SLAB REMOVAL, L S
 - DENOTES SEISMIC RESTRAINT TYPE (2) ,SEE BR-38-85 FOR DETAILS
 - DENOTES SEISMIC RESTRAINT TYPE (17) ,SEE BR-38-85 FOR DETAILS
 - DENOTES LATERAL RESTRAINT TYPE (B) ,SEE BR-38-86 FOR DETAILS

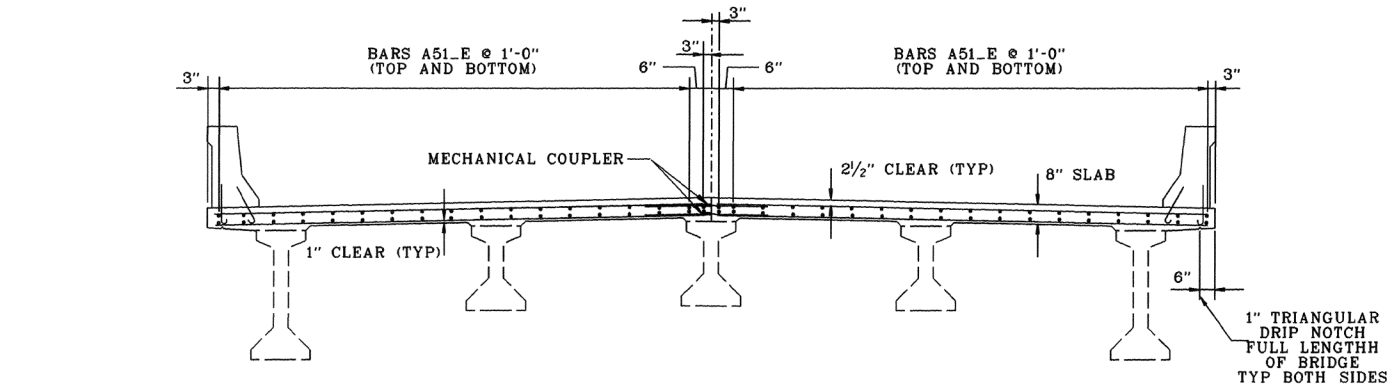


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

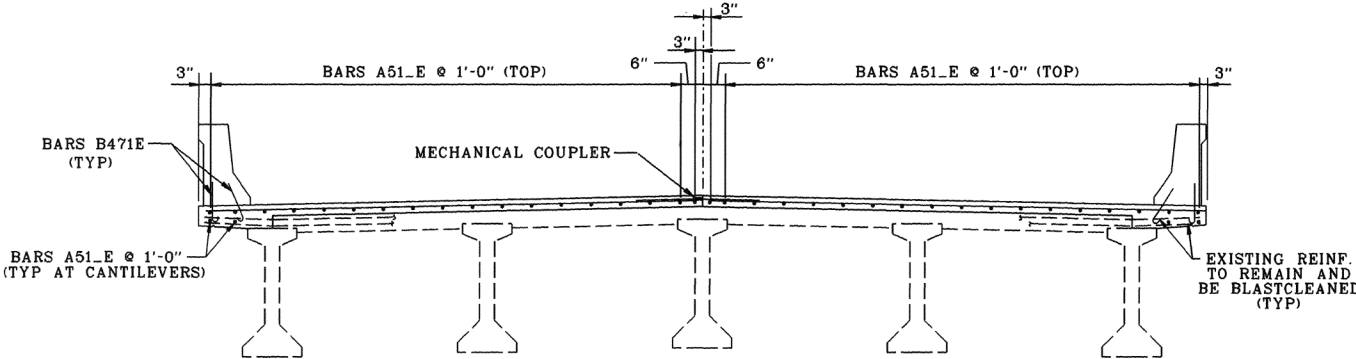
FRAMING PLAN
LOWER BROWNSVILLE ROAD OVER I-40
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
DRAWN BY BRIAN K. EGLI DATE JAN/1999
SUPERVISED BY MIKE LAWSON DATE JAN/1999
CHECKED BY W SEGER & M LAWSON DATE JAN/1999

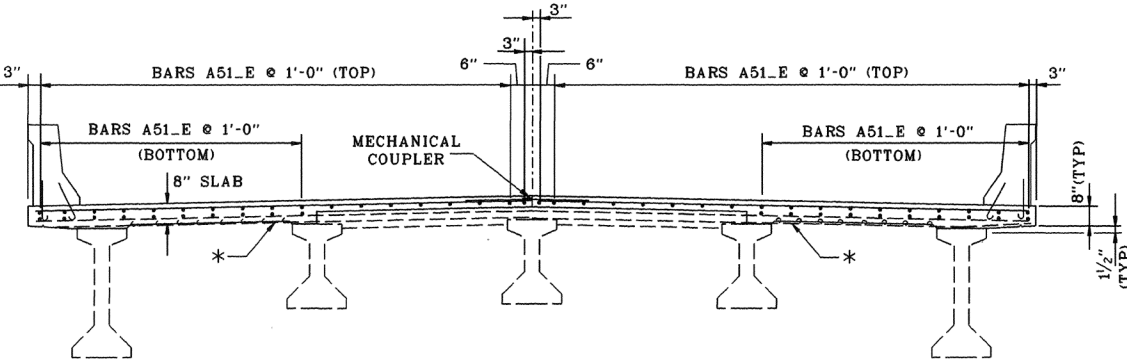
PROJECT NO.	YEAR	SHEET NO.
57946-4213-04	1999	
REVISIONS		
NO.	DATE	BY



BRIDGE NO 57-B290-4.55
SPAN 1

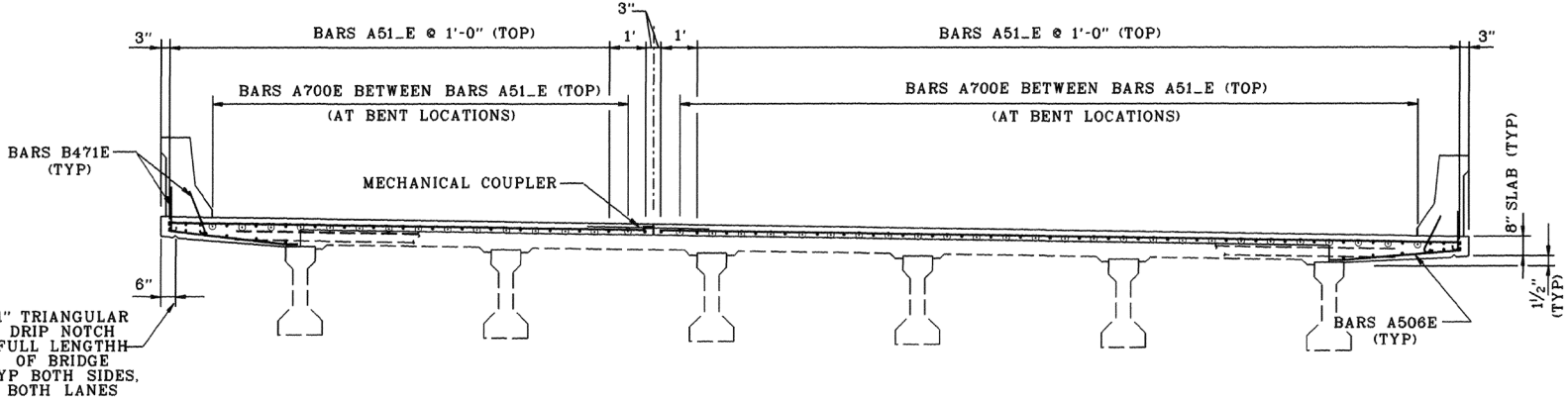
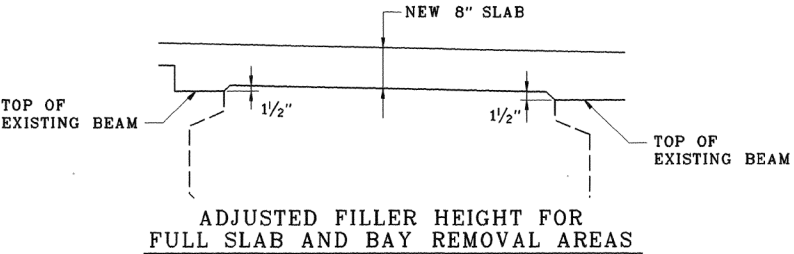


BRIDGE NO 57-B290-4.55
SPANS 2,3



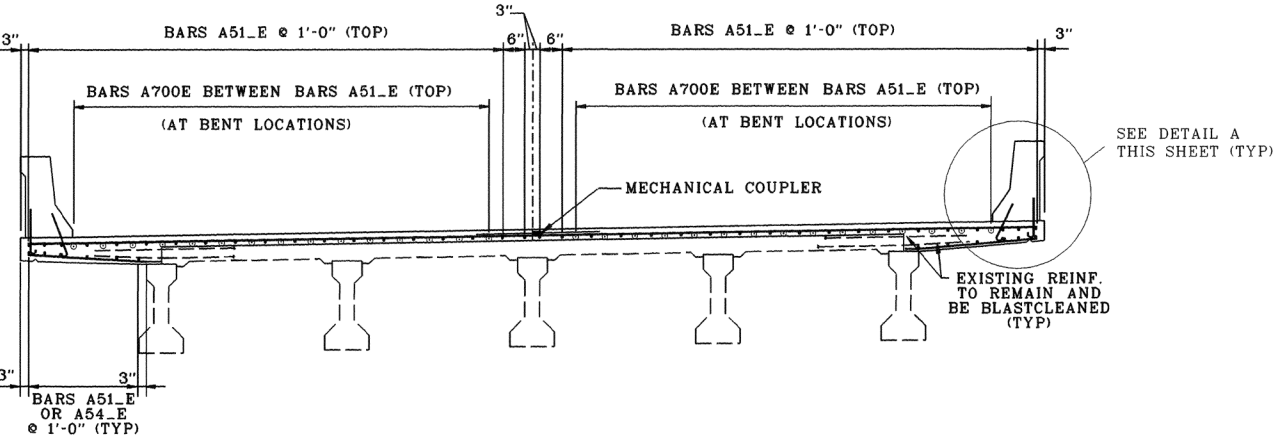
BRIDGE NO 57-B290-4.55
SPAN 4

* CUT EXISTING BOTTOM MAT OF TRANSVERSE STEEL 2'-6" PAST EDGE OF BEAM. BEND PROJECTING STEEL INTO NEW SLAB STEEL (TYP). LONGITUDINAL STEEL TO BE REMOVED. EXISTING TOP MAT OF TRANSVERSE STEEL IN THESE AREAS BECOMES THE BOTTOM MAT OF TRANSVERSE STEEL.

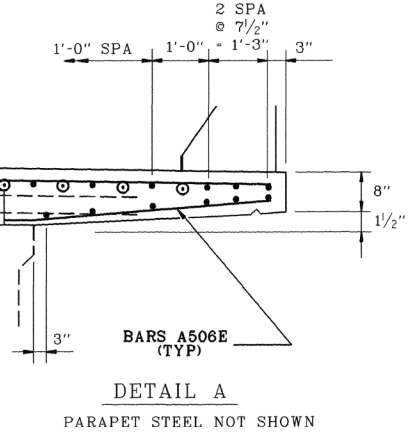


BRIDGE NO 57-SR186-1.56
RIGHT LANE

○ BARS A700E OR A701E PLACED AT BENTS. SEE DRAWING BR-38-73 OR BR-38-74 FOR DETAILS.



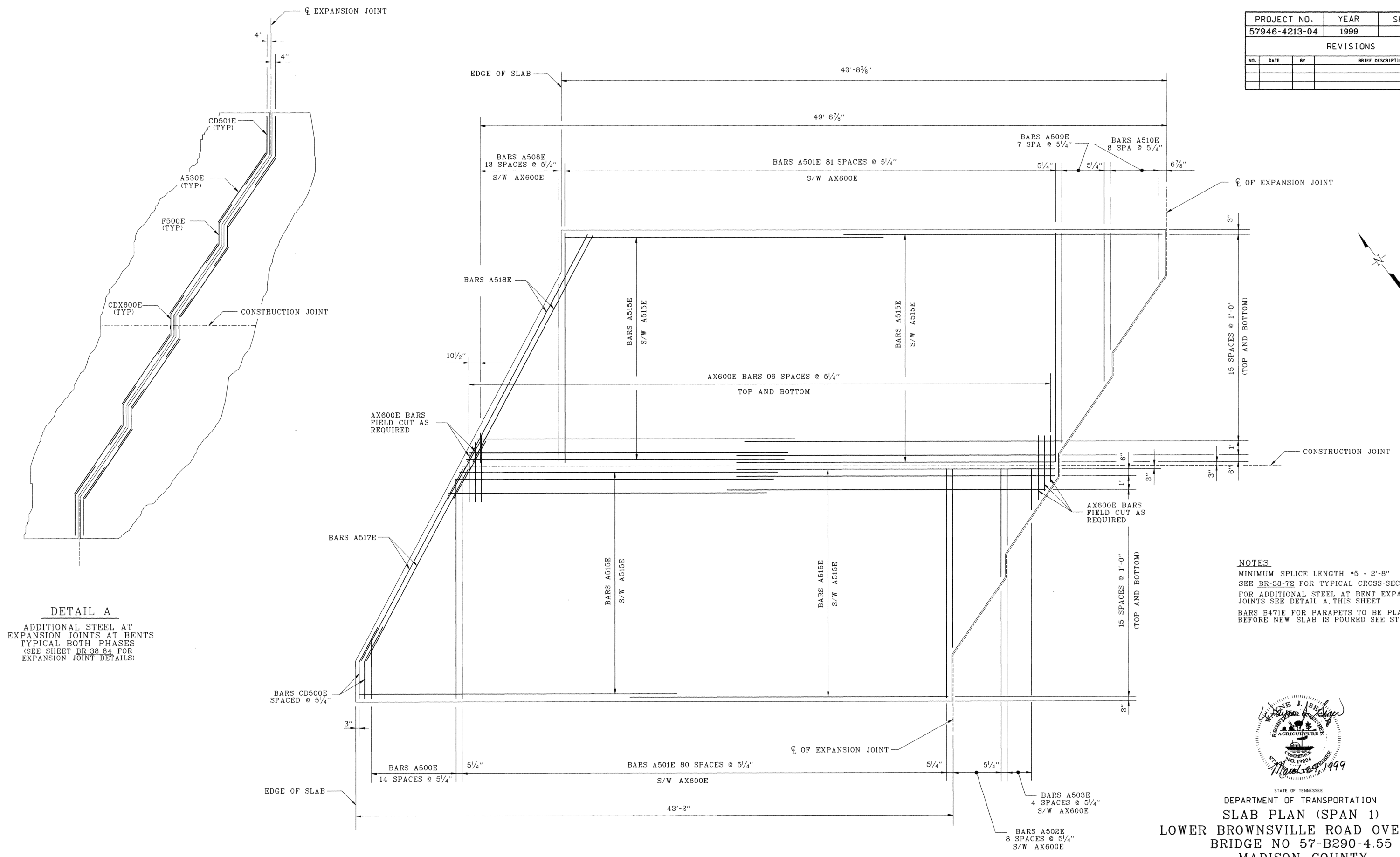
BRIDGE NO 57-SR186-1.56
LEFT LANE



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
TYPICAL CROSS-SECTIONS
BRIDGE NO 57-SR186-1.56
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
DRAWN BY BRIAN K. EGLI DATE JAN/1999
SUPERVISED BY MIKE LAWSON DATE JAN/1999
CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

PROJECT NO.		YEAR	SHEET NO.
57946-4213-04		1999	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



DETAIL A
 ADDITIONAL STEEL AT
 EXPANSION JOINTS AT BENTS
 TYPICAL BOTH PHASES
 (SEE SHEET BR-38-84 FOR
 EXPANSION JOINT DETAILS)

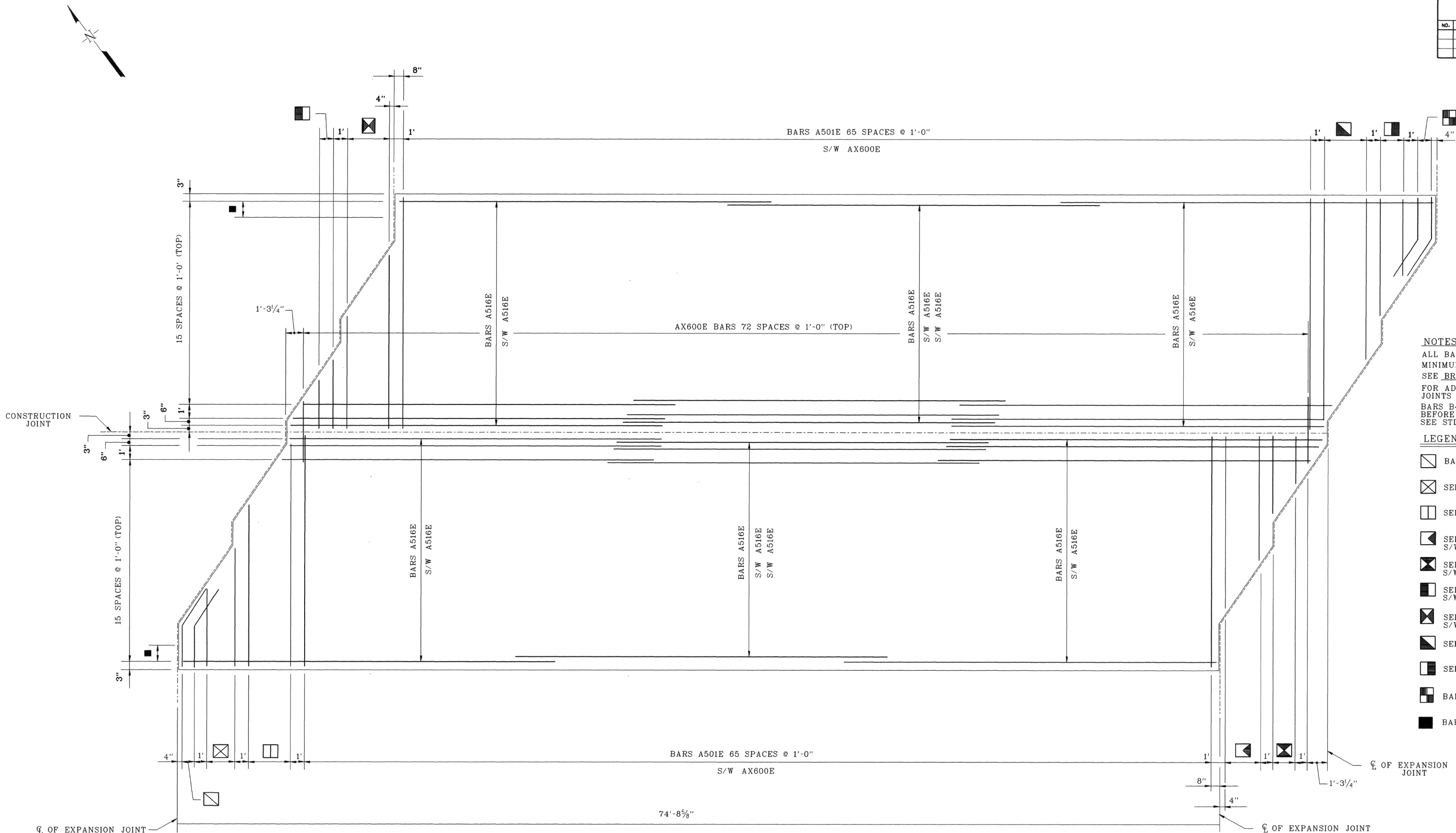
NOTES
 MINIMUM SPLICE LENGTH *5 - 2'-8"
 SEE BR-38-72 FOR TYPICAL CROSS-SECTION
 FOR ADDITIONAL STEEL AT BENT EXPANSION
 JOINTS SEE DETAIL A, THIS SHEET
 BARS B471E FOR PARAPETS TO BE PLACED
 BEFORE NEW SLAB IS POURED SEE STD-1-1



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 SLAB PLAN (SPAN 1)
 LOWER BROWNSVILLE ROAD OVER I-40
 BRIDGE NO 57-B290-4.55
 MADISON COUNTY
 1999

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
 DRAWN BY BRIAN K. EGLI DATE JAN/1999
 SUPERVISED BY MIKE LAWSON DATE JAN/1999
 CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

PROJECT NO.		YEAR	SHEET NO.
57946-4213-04		1999	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



NOTES:
 ALL BARS IN TOP OF SLAB
 MINIMUM SPLICE LENGTH *5 - 2'-8"
 SEE BR-38-72 FOR TYPICAL CROSS-SECTION
 FOR ADDITIONAL STEEL AT BENT EXPANSION
 JOINTS SEE DETAIL A ON DWG BR-38-75.
 BARS B471E FOR PARAPETS TO BE PLACED
 BEFORE NEW CANTILEVERS ARE POURED.
 SEE STD-1-1

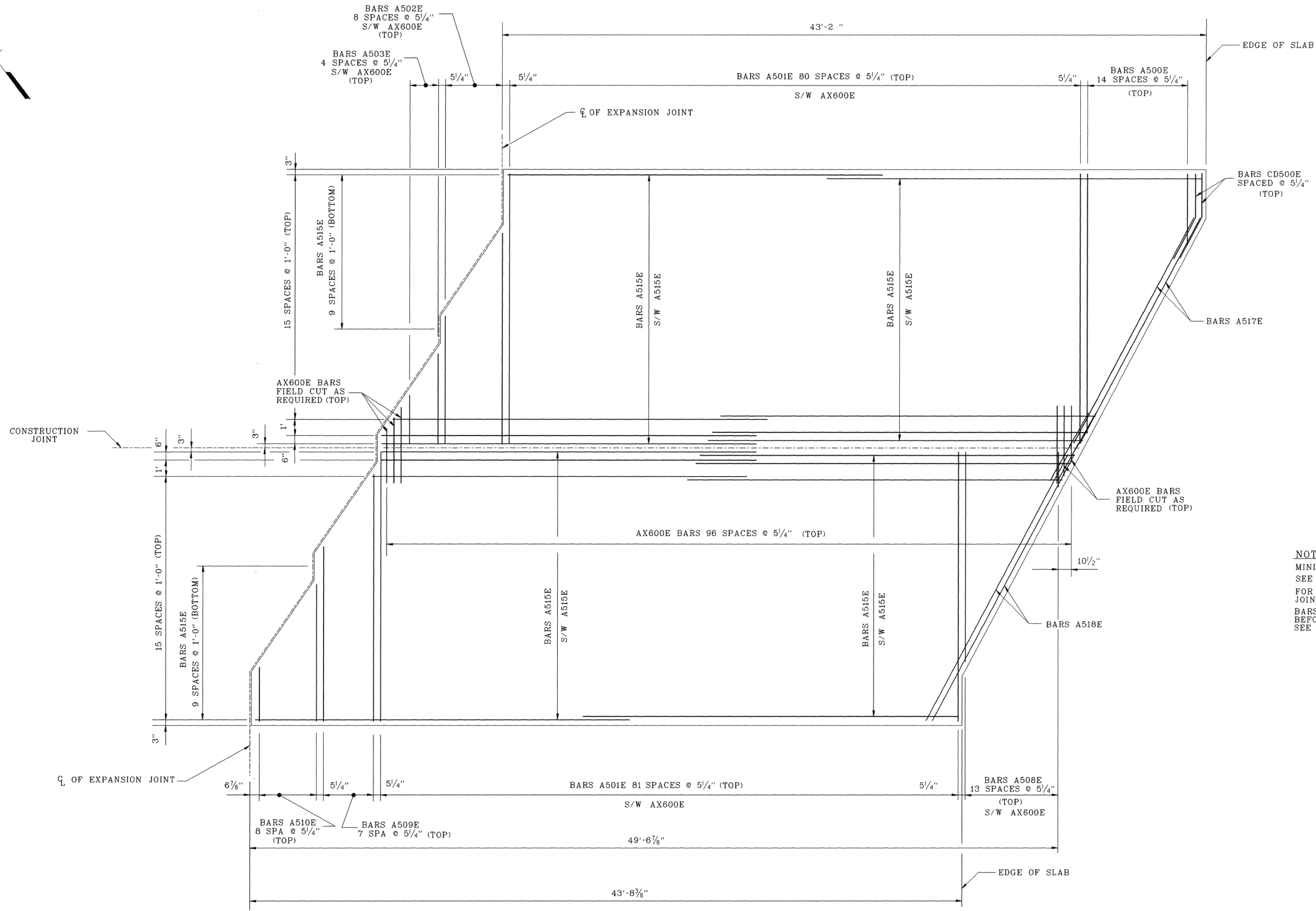
- LEGEND**
- BARS CD501E - 1 SPACE @ 1'-0"
 - SERIES BARS A504E - 2 SPACES @ 1'-0"
 - SERIES BARS A505E - 3 SPACES @ 1'-0"
 - SERIES BARS A506E - 2 SPACES @ 1'-0"
S/W AX600E
 - SERIES BARS A507E - 2 SPACES @ 1'-0"
S/W AX600E
 - SERIES BARS A511E - 1 SPACE @ 1'-0"
S/W AX600E
 - SERIES BARS A512E - 3 SPACES @ 1'-0"
S/W AX600E
 - SERIES BARS A513E - 3 SPACES @ 1'-0"
 - SERIES BARS A514E - 2 SPACES @ 1'-0"
 - BARS CD501E - 1 SPACE @ 1'-0"
 - BARS A515E - 1 SPACE @ 1'-0"



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 SLAB PLAN (SPAN 2 OR 3)
 LOWER BROWNSVILLE ROAD OVER I-40
 BRIDGE NO 57-B290-4.55
 MADISON COUNTY
 1999

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
 DRAWN BY BRIAN K. EGLI DATE JAN/1999
 SUPERVISED BY MIKE LAWSON DATE JAN/1999
 CHECKED BY W SEGER & M LAWSON DATE JAN/1999

PROJECT NO.		YEAR	SHEET NO.
57946-4213-04		1999	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



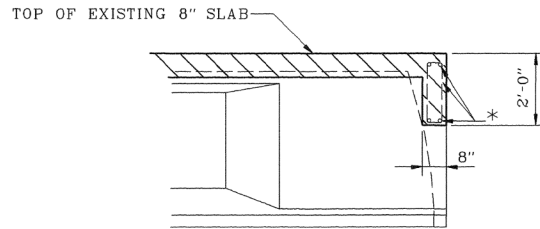
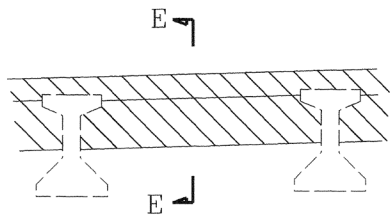
NOTES
 MINIMUM SPLICE LENGTH *5 - 2'-8"
 SEE BR-38-72 FOR TYPICAL CROSS-SECTION
 FOR ADDITIONAL STEEL AT BENT EXPANSION JOINTS SEE DETAIL A ON DWG BR-38-75
 BARS B471E FOR PARAPETS TO BE PLACED BEFORE NEW CANTILEVERS ARE POURED
 SEE STD-1-1



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 SLAB PLAN (SPAN 4)
 LOWER BROWNSVILLE RD OVER I-40
 BRIDGE NO 57-B290-4.55
 MADISON COUNTY
 1999

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
 DRAWN BY BRIAN K. EGLI DATE JAN/1999
 SUPERVISED BY MIKE LAWSON DATE JAN/1999
 CHECKED BY W SEGER & M LAWSON DATE JAN/1999

PROJECT NO.	YEAR	SHEET NO.	
57946-4213-04	1999		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-9-99	BKE	REVISED GUARDRAIL DETAIL

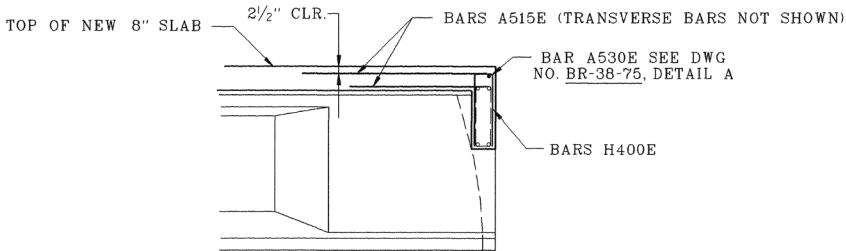


SECTION E-E
DIAPHRAGM

* EXISTING REINFORCEMENT
TO REMAIN AND BE BLAST
CLEANED.

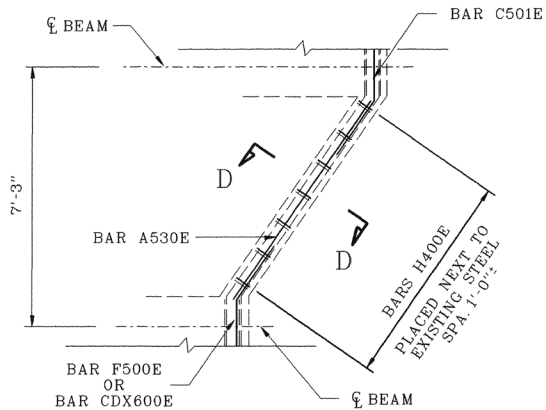
DIAPHRAGM REMOVAL SKETCHES

SPAN 1



SECTION D-D
DIAPHRAGM

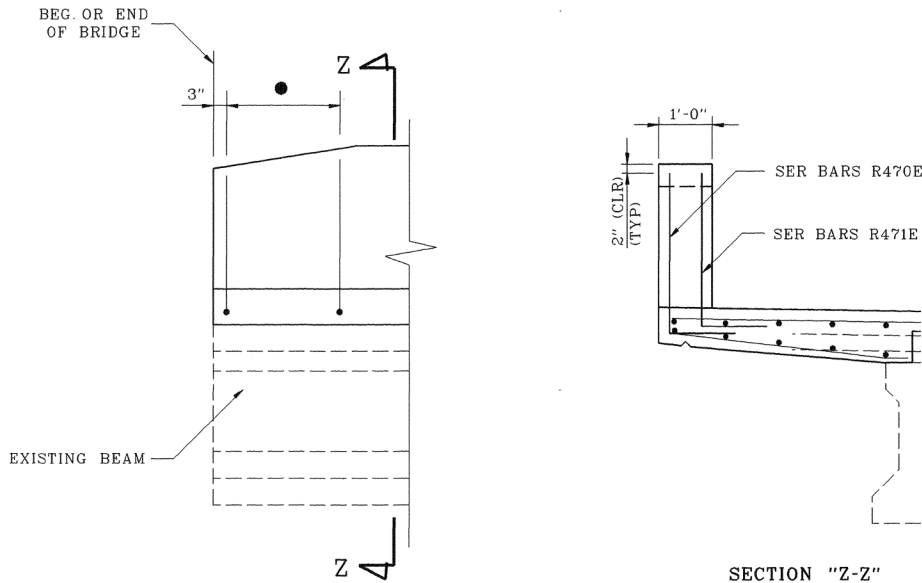
DIAPHRAGM REPAIR DETAILS



TYPICAL DIAPHRAGM

EXTREME CARE SHALL BE TAKEN WHEN REMOVING
EXISTING CONCRETE SO AS NOT TO DAMAGE ANY
REINFORCING STEEL. ANY STEEL DEEMED UNSEABLE
BY THE ENGINEER SHALL BE REPLACED WITH AN
EQUIVALENT SIZE DOWEL OR SPLICED BAR AT THE
CONTRACTORS EXPENSE.

THE COST OF CONCRETE REMOVAL, FORMING, NEW CLASS "D" CONCRETE
BLAST CLEANING, DRILLING, GROUTING, LABOR, AND ALL MISCELLANEOUS
MATERIALS REQUIRED TO PLACE NEW ENDWALLS SHALL BE INCLUDED
UNDER ITEM NO. 604-10.86, CONCRETE REPAIRS, C.F. COST OF STRUCTURAL
STEEL TO BE INCLUDED IN ITEM NO. 604-10.18, REINFORCING STEEL
(REPAIRS) L.S.



ELEVATION VIEW OF ENDPOST

SECTION "Z-Z"

ENDPOST DETAILS FOR 57-SR186-1.56

- DENOTES: SERIES BARS R470E AND R471E 4 SPA. @ 6" - 2'-0"

NOTE: THE ENDPOST SHOWN ON STD. DWG. STD-1-1 SHALL BE
MODIFIED TO BE INTEGRAL WITH THE SLAB AS SHOWN
ABOVE BARS A470E ARE TO BE REPLACED BY SERIES BARS
C470E AND C471E. COST OF THESE BARS TO BE INCLUDED
IN PRICE BID FOR ITEM NO. 604-10.18, REINFORCING STEEL
(REPAIRS), LBS.

NOTE: STEEL FOR ENDPOSTS AND PARAPET IS TO BE IN PLACE
BEFORE SLAB IS POURED.

- A 705-04.21 - 25'-0"
- B 705-02.02 - 100'-0"
- C 705-01.04 - 26'-10 3/4"
- D 705-02.02 - 12'-6"
- E 705-04.38 - 50'-0"

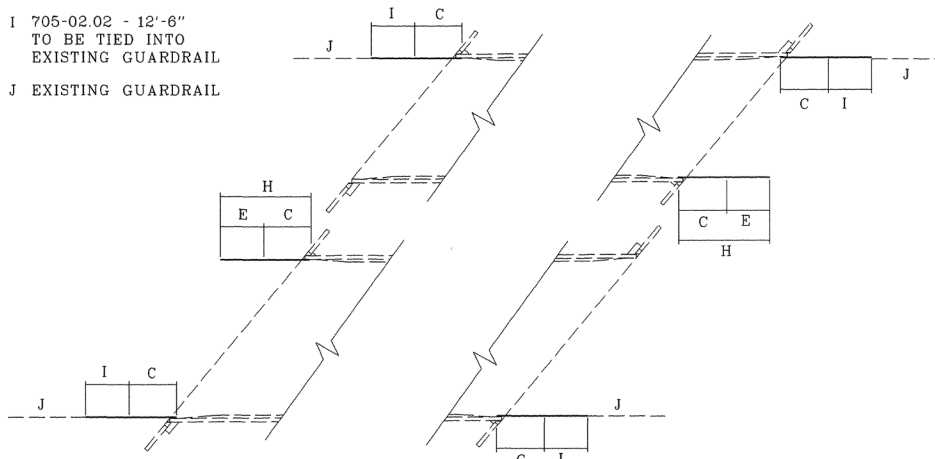
G MIN. GUARDRAIL LENGTH
SEE STD DWG S-GR-24
TYPE 21

H MIN. GUARDRAIL LENGTH
SEE STD DWG S-GR-24
TYPE 38

I 705-02.02 - 12'-6"
TO BE TIED INTO
EXISTING GUARDRAIL

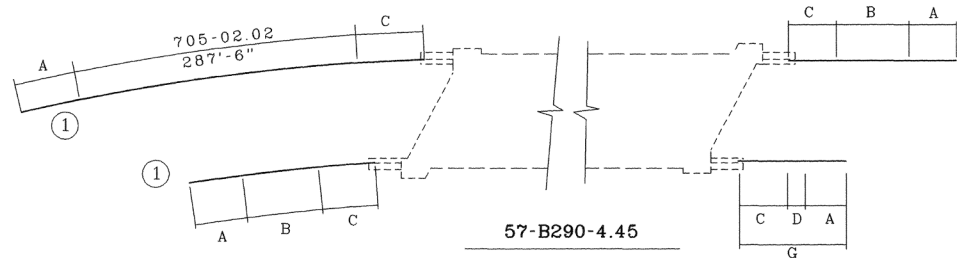
J EXISTING GUARDRAIL

- 1 CONTRACTOR TO MATCH
EXISTING CURVE IN GUARDRAIL



57-SR186-1.56

1 GUARDRAIL DETAILS



57-B290-4.45

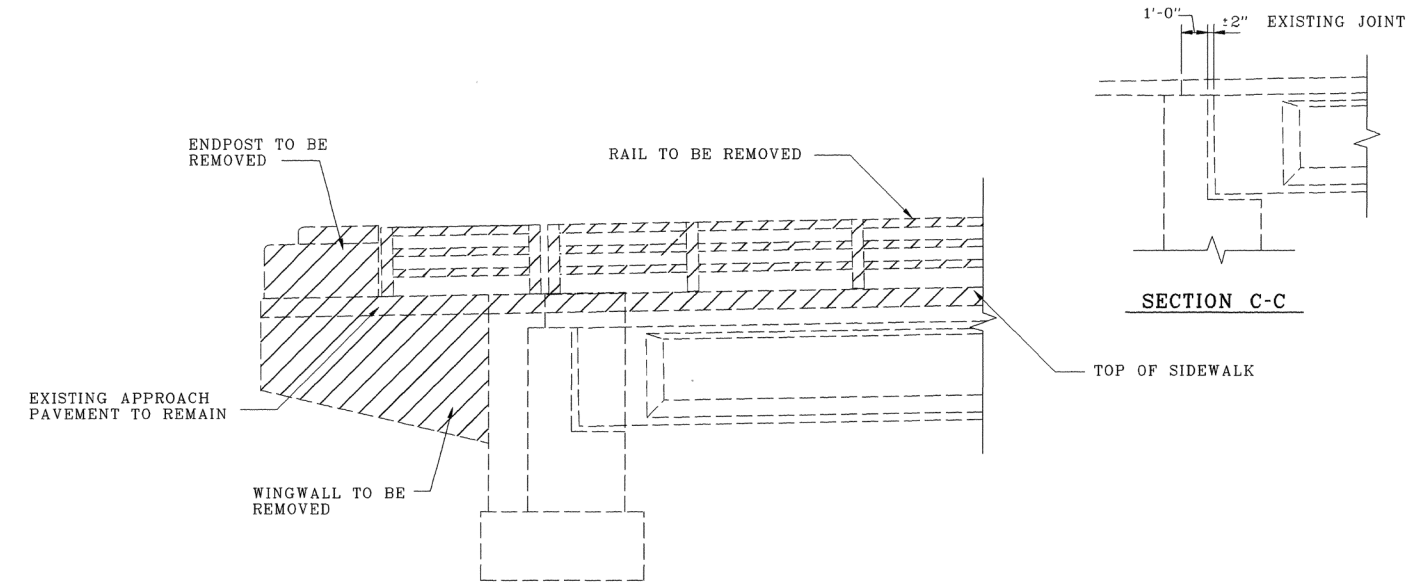


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM REMOVAL AND REPAIR DETAILS
LOWER BROWNSVILLE ROAD OVER I-40
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

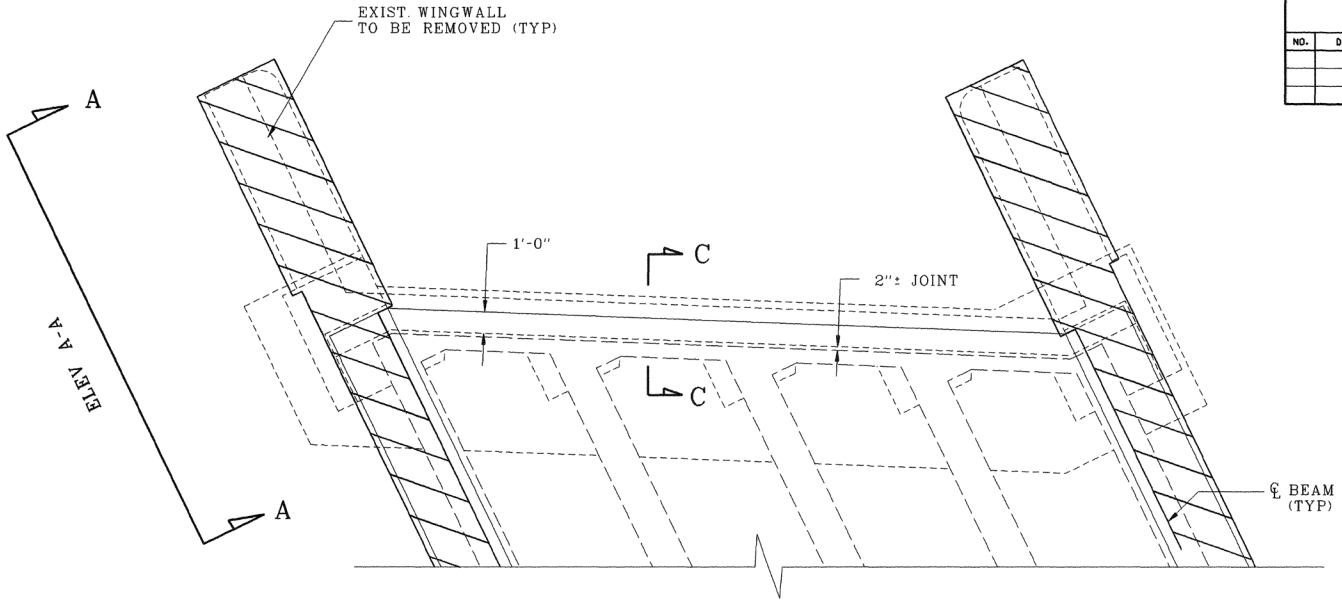
DESIGNED BY BRIAN K. EGLI DATE JAN/1999
DRAWN BY BRIAN K. EGLI DATE JAN/1999
SUPERVISED BY MIKE LAWSON DATE JAN/1999
CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

PROJECT NO.		YEAR		SHEET NO.	
57946-4213-04		1999			
REVISIONS					
NO.	DATE	BY	BRIEF DESCRIPTION		

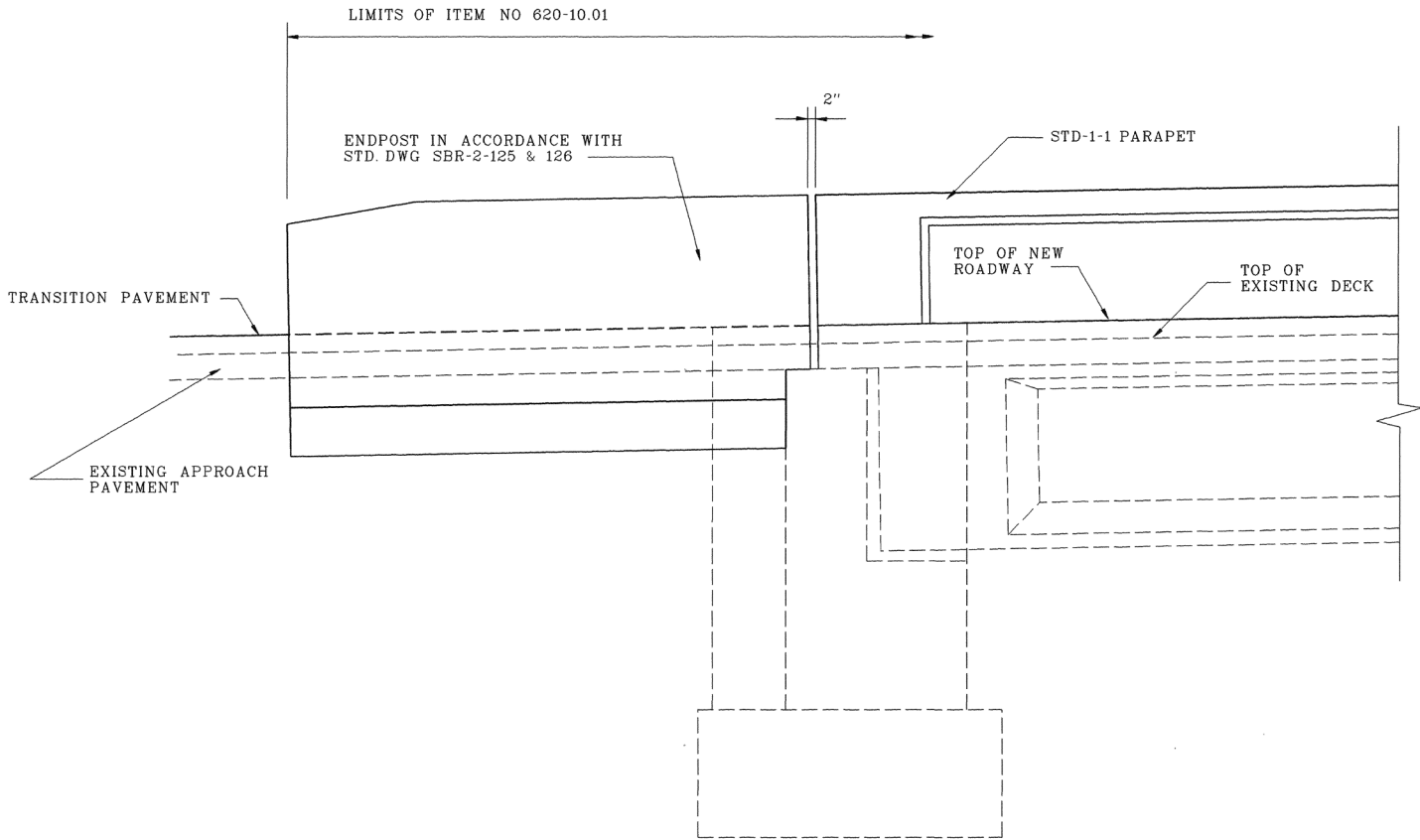


ELEVATION A-A

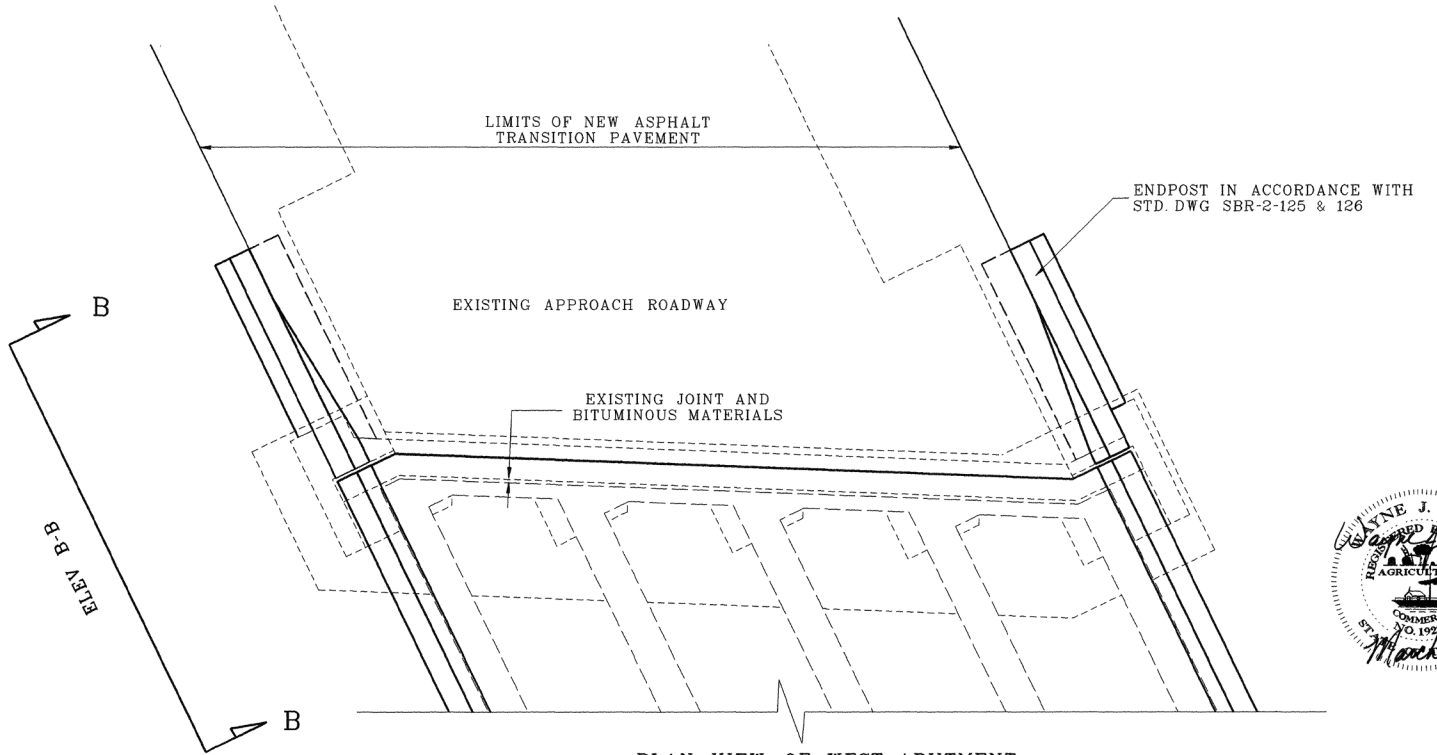
REMOVAL SKETCHES



PLAN VIEW OF WEST ABUTMENT
(EAST ABUTMENT SIMILAR)



ELEVATION B-B



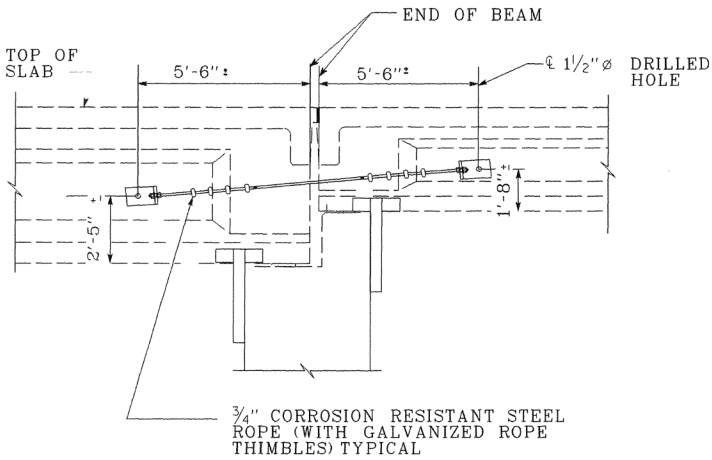
PLAN VIEW OF WEST ABUTMENT
(EAST ABUTMENT SIMILAR)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
APPROACH AND WING WALL DETAILS
LOWER BROWNSVILLE ROAD OVER I-40
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

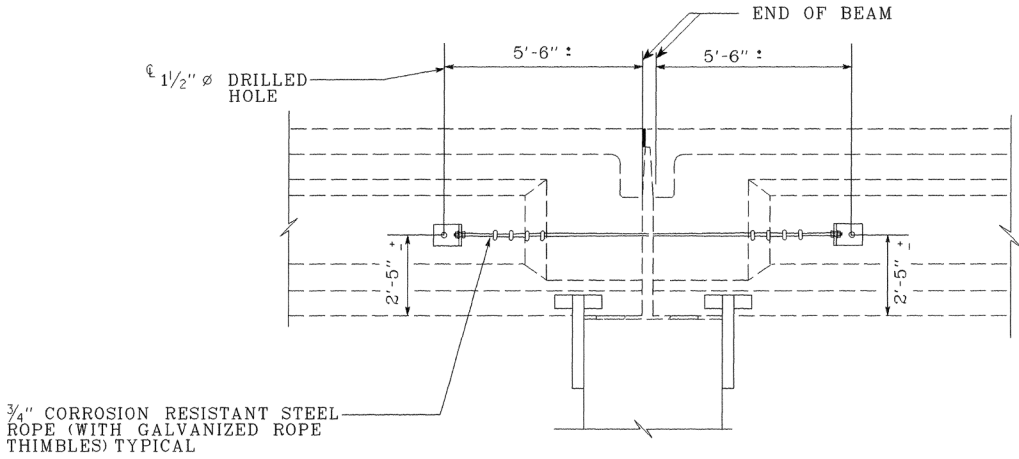
DESIGNED BY BRIAN K. EGLI DATE JAN/1999
DRAWN BY BRIAN K. EGLI DATE JAN/1999
SUPERVISED BY MIKE LAWSON DATE JAN/1999
CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

PROJECT NO.	YEAR	SHEET NO.	
57946-4213-04	1999		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

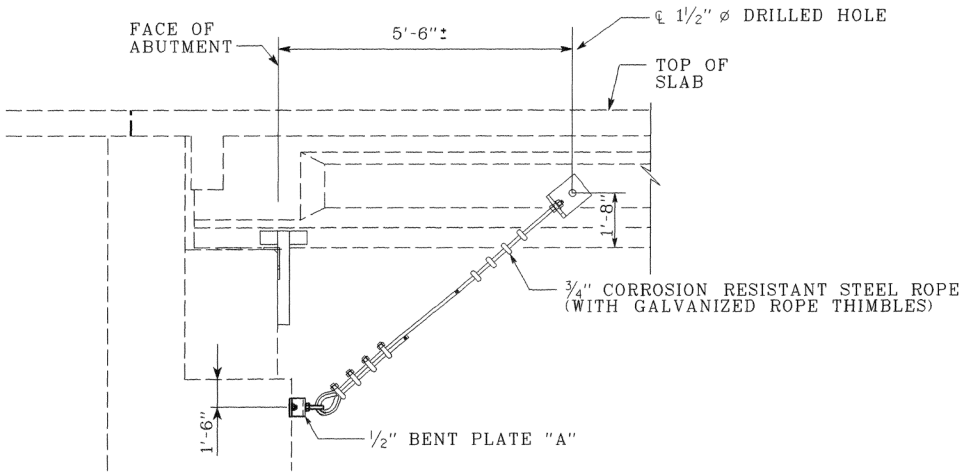


SECTION B-B

TYPE ② AND TYPE B RESTRAINERS
@ BENTS 1 AND 3 (SIMILAR)

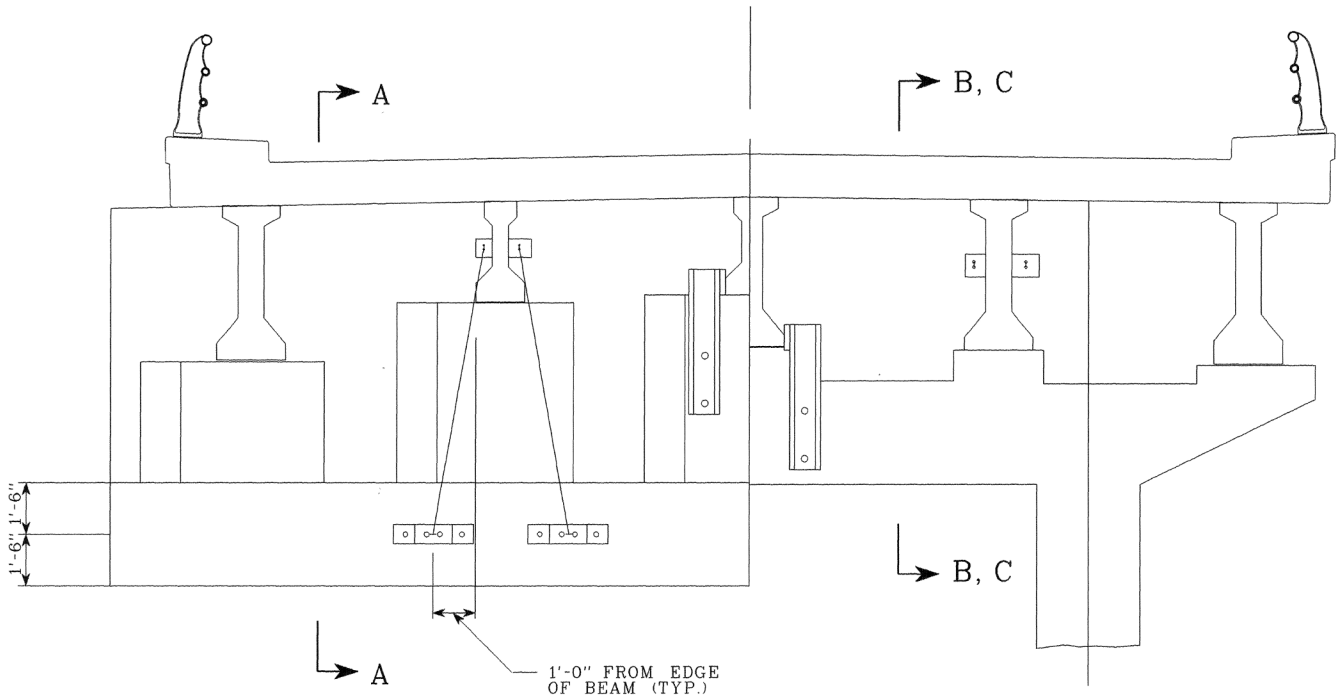


SECTION C-C
TYPE ② AND TYPE B RESTRAINERS
@ BENT 2 AND FASCIA BEAMS



SECTION A-A
TYPE ①⑦ AND TYPE B RESTRAINERS
@ ABUTMENTS 1 AND 2

NOTE: DETAILS FOR TYPE ② SHOWN ON BR-38-85.
DETAILS FOR TYPE ①⑦ SHOWN ON BR-38-85.
DETAILS FOR TYPE B SHOWN ON BR-38-86.



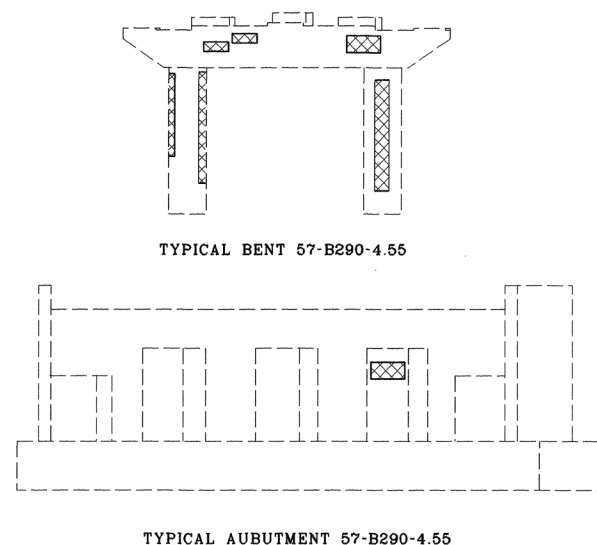
TYPICAL PARTIAL SECTION
AT ABUTMENT 1 AND 2

TYPICAL PARTIAL SECTION
AT BENT 1, 2, AND 3



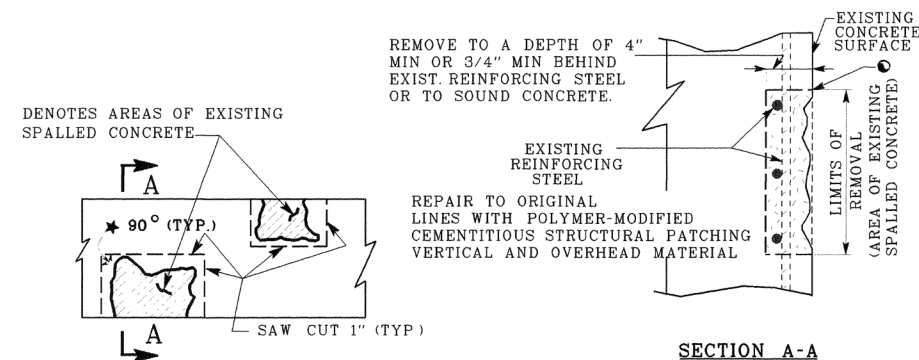
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SEISMIC CROSS SECTIONS
LOWER BROWNSVILLE ROAD OVER I-40
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

DESIGNED BY: Brian Egli DATE: September 1998
DRAWN BY: Sherif M. Alao DATE: September 1998
SUPERVISED BY: J. Christensen / W. Sigler DATE: September 1998
CHECKED BY: Brian Egli / Wayne Sigler DATE: March 1999



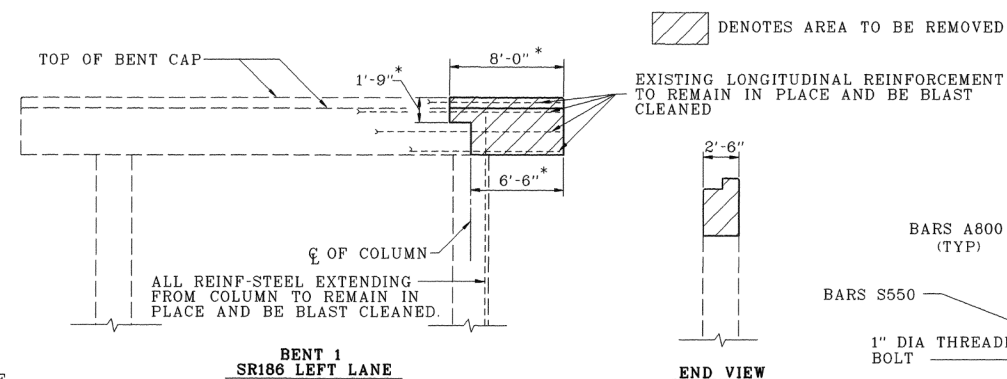
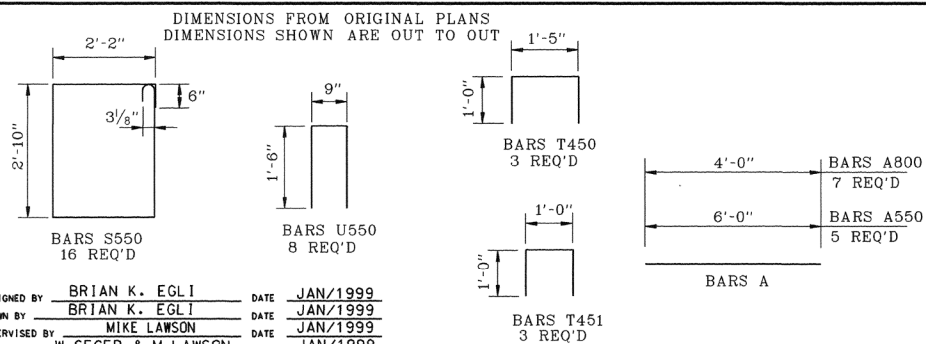
SPALLED CONCRETE REPAIR ESTIMATED QUANTITIES (ITEM NO 604-10.54)			
LOCATION	57-SR186-1.56 ⬢(S.F.)		57-B290-4.55 ⬢(S.F.)
	LT LANE	RT LANE	
ABUTMENT 1	—	4	3
ABUTMENT 2	—		2
BENT 1	97	41	85
BENT 2	64	100	48
BENT 3	55	43	48
TOTAL	216	188	186

● SAW CUT 1" (TYP)



SPALLED CONCRETE REPAIR DETAILS

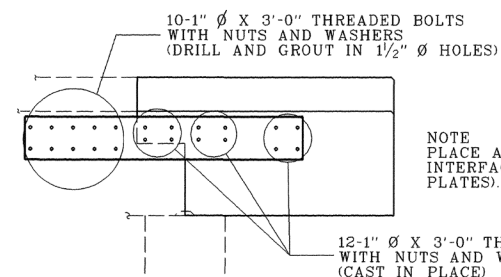
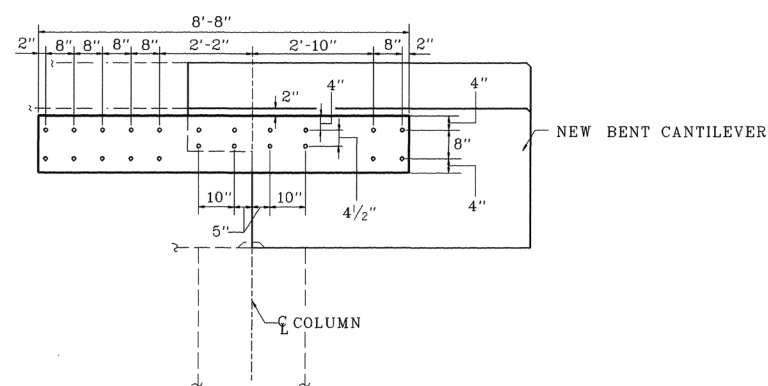
- NOTE COST OF SAW CUTTING, REMOVING SPALLED CONCRETE, COMPLETELY
CLEANING EXPOSED REINFORCING STEEL, POLYMER-MODIFIED CEMENTITIOUS
STRUCTURAL PATCHING VERTICAL AND OVERHEAD MATERIAL,
LABOR, AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE
REPAIRS AS SHOWN SHALL BE INCLUDED IN ITEM NO. 604-10.54, CONCRETE
REPAIRS. S.F.



* NOTE. SR186 LEFT LANE
LIMITS OF CONCRETE REMOVAL SHOWN CAN BE INCREASED OR DECREASED PER THE DIRECTION THE ENGINEER FROM THE OFFICE OF INSPECTION AND REPAIR

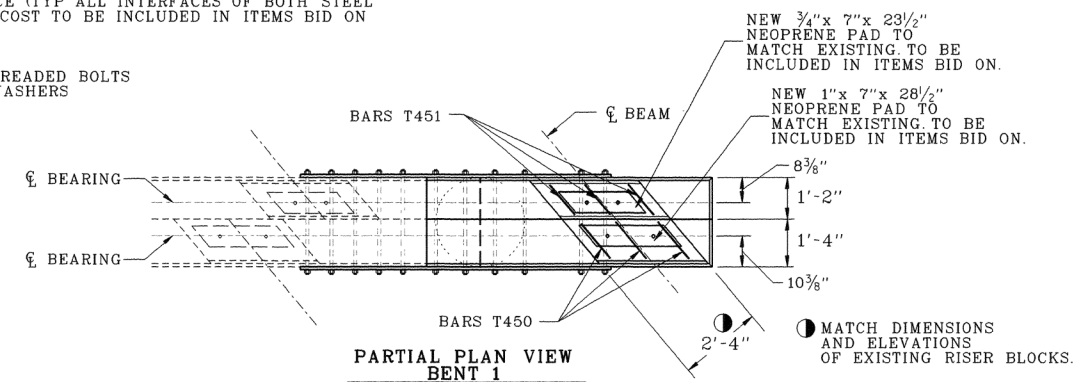
SPECIAL NOTE TO CONTRACTOR:
AFTER CONCRETE REMOVAL IS COMPLETED TO THE LIMITS SHOWN IN THE REMOVAL SKETCHES ON THIS DWG AND ADDITIONAL DETERIORATED CONCRETE IS ENCOUNTERED THE ENGINEER FROM THE OFFICE OF INSPECTION AND REPAIR SHALL BE CONTACTED FOR FURTHER INSPECTION AND RECOMMENDATIONS.

REMOVAL SKETCH



ELEVATION SHOWING
BENT PLATE

PL 16" X 1" X 8'-8"
2 PLATES REQ'D

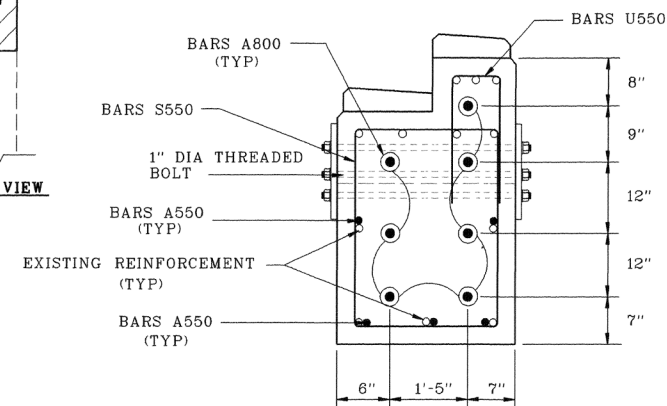


PARTIAL PLAN VIEW
BENT 1

NEW PLATES AND EXPOSED 1" DIA. BOLTS AND NUTS TO BE PAINTED WITH SYSTEM A - INORGANIC ZINC WITH URETHANE FINISH - GRAY TOP COAT. SEE STANDARD SPECIFICATIONS SECTION 603.05 AND 603.06.

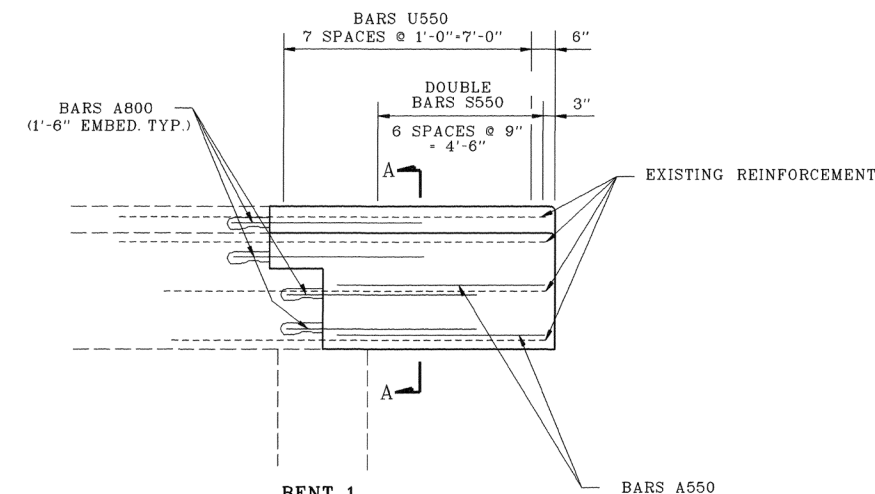
NOTE: FOR ELEVATIONS OF RISER BLOCKS
AND EXISTING DIMENSIONS SEE
REFERENCE DWG K-22-73.

PROJECT NO.		YEAR		SHEET NO.	
57946-4213-04		1999			
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SECTION A-A

RISER BLOCK REINFORCEMENT
 NOT SHOWN

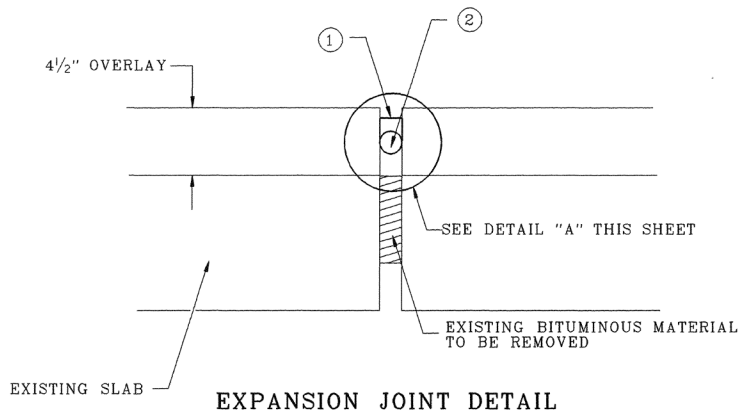


BENT 1
SR186 LEFT LANE

COLUMN STEEL NOT SHOWN



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
CONCRETE REPAIR DETAILS
BRIDGE NO 57-SR186-1.56
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999



EXPANSION JOINT DETAIL

(REQ'D @ BENT 2
BRIDGE NO 57-SR186-1.56
FULL LENGTH OF JOINT)

(REQ'D @ BENTS 1,2 AND 3,
BRIDGE NO 57-B290-4.55
FULL LENGTH OF JOINT)

① TWO PART SILICONE SEALANT

② BACKER ROD SHALL BE A CLOSED CELL
NON-GASSING FOAM MATERIAL CAPABLE
OF WITHSTANDING ELEVATED TEMPERATURE
RESULTING FROM THE REACTION OF THE TWO
COMPONENT JOINT SEAL.

NOTES:

EXPANSION GAP WILL CHANGE AT OTHER TEMPERATURES AND
THE CONTRACTOR SHALL COMPENSATE FOR JOINT MATERIAL
IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
NO INCREASE IN THE UNIT BID PRICE SHALL BE ALLOWED.

THE DEPTH OF THE JOINT POURED SHALL BE IN ACCORDANCE
WITH THE MANUFACTURE'S SPECIFICATIONS FOR PROPER
INSTALLATION. THE PAVEMENT AND AIR TEMPERATURE
SHALL BE 40°F AND RISING AND SHALL NOT FALL BELOW
40°F PRIOR TO COMPLETE CURE OF THE SEALANT.

THE SEALANT THICKNESS PLACED SHALL BE CHECKED PRIOR TO
CURING, AT A MINIMUM OF THREE (3) LOCATIONS ACROSS A
TWELVE (12) FOOT LENGTH OF JOINT TO ASSURE PROPER THICKNESS.

THE MOVEMENT GAP SHALL BE CAULKED WITH A BACKER ROD OF SUITABLE
DIAMETER. THE ROD SHALL BE PLACED AT A DEPTH TO ENSURE THE CORRECT
WIDTH/DEPTH RATIO OF THE NEW BRIDGE JOINT SEALANT. BACKER ROD AND
CAULK SHALL BE AS PER THE SEALANT MANUFACTURER.

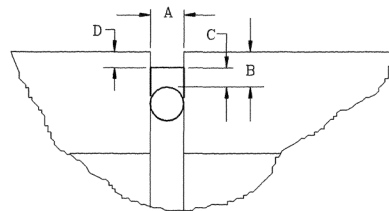
NOTES:

COST OF INSTALLING BACKER ROD, NEW JOINT SEALER,
LABOR, AND ANY MISCELLANEOUS MATERIALS NECESSARY TO INSTALL
THE NEW EXPANSION JOINT TO BE INCLUDED UNDER ITEM NO.
604-10 44 EXPANSION JOINT REPAIRS, L.F.

TOP 3" OF JOINT SHALL BE BLAST CLEANED TO REMOVE LAITANCE AND OTHER
DELETERIOUS MATERIAL BEFORE INSTALLATION OF BACKER ROD OR SEALANT.

ALL DEBRIS AND EXISTING JOINT MATERIAL SHALL BE REMOVED FOR THE FULL
DEPTH OF THE EXISTING JOINT OPENING.

ALL EXISTING JOINT OPENINGS SHALL BE THOROUGHLY CLEANED OF FOREIGN
MATERIAL AND EXISTING JOINT MATERIAL BEFORE PLACING THE NEW
EXPANSION JOINTS.



DETAIL "A"

A
JOINT OPENING
AT TIME OF
SEALING

B
DISTANCE
FROM TOP OF
BACKER ROD TO
DRIVE SURFACE

C
DEPTH OF SEALANT
FROM TOP OF
BACKER ROD TO
SURFACE OF SEALANT

D
DISTANCE
FROM TOP OF
SEALANT TO
DRIVE SURFACE

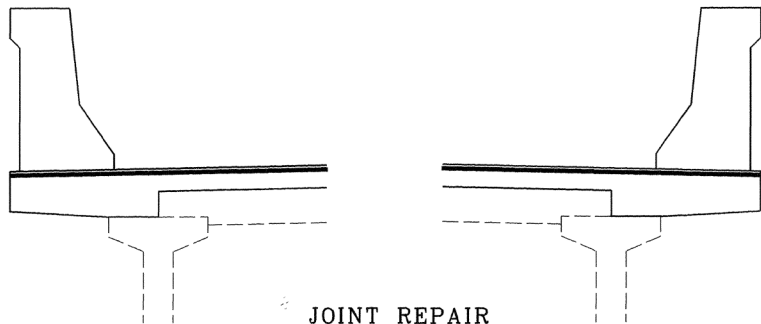
UP TO 3"

1" MIN - 1 1/8" MAX

1/2"

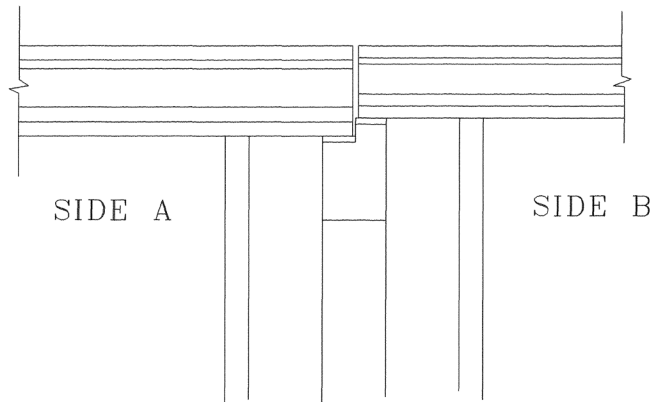
1/2" - 5/8"

BASED ON TEMPERATURE OF 77°F. +/- 2° AND 50% RH +/- 5%



JOINT REPAIR
LIMITS DETAIL

SHOWING LIMIT OF SILICONE SEALANT
MATERIAL AT PARAPETS



BENT 1 LEFT LANE
(2 BRACING SYSTEMS REQUIRED)
(57-SR186-1.56)

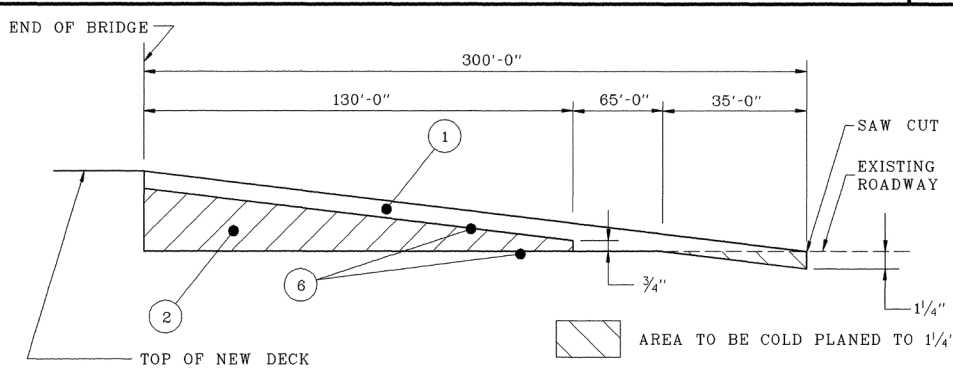
THE CONTRACTOR SHALL FURNISH STRUCTURAL DESIGNS AND PLANS OF PROPOSED
TEMPORARY SUPPORTS TO THE ENGINEER FOR REVIEW. THE SUPPORTS SHALL BE
DESIGNED FOR NOT LESS THAN THE LOADS SHOWN IN "TABLE OF REACTIONS" ON
THIS DRAWING.

THE CONTRACTOR SHALL SUPPORT THE EXISTING BRIDGE AT BENT 1 AND PLACE TEMPORARY SUPPORTS
UNDER EXTERIOR BEAMS. TEMPORARY SUPPORTS SHALL BE PROVIDED IN ORDER TO SUPPORT THE DEAD LOAD
SHOWN IN THE TABLE OF REACTIONS. REMOVE THE EXISTING BEARING PADS AND BENT OVERHANG AS
DETAILED ON DWG NO BR-38-83. AFTER THE NEW BEARING SURFACE ELEVATIONS HAVE BEEN ESTABLISHED
THE NEW BEARING PADS SHALL BE INSTALLED. ANY JACKING, SUPPORTING AND BENT OVERHANG REMOVAL
SHALL BE COMPLETED IN PHASE E CONSTRUCTION WHEN LIVE LOAD IS ON THE RIGHT SIDE OF THE BRIDGE
(LOOKING NORTH) WORK ON BENT OVERHANG SHALL BE IN PLACE AND CURED BEFORE NEW OVERLAY
IS POURED.

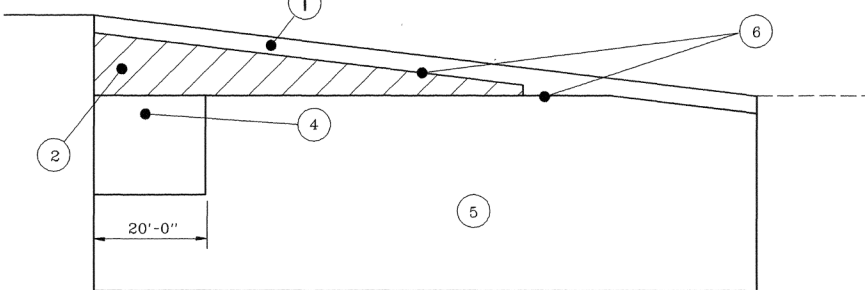
THE COST OF THE TEMPORARY SUPPORT SYSTEM, ANY REQUIRED JACKING, ANY EXCAVATION AND REMOVAL
OF ANY ASPHALT REQUIRED TO SUPPORT THE SUPERSTRUCTURE AND REPLACEMENT OF ANY DAMAGED
SHOULDER MATERIAL, DAMAGED PIER PROTECTION, AND REPLACEMENT OF ANY MATERIAL REMOVED, TO
EXISTING CONDITIONS SHALL BE INCLUDED UNDER ITEM NO. 604-10.26, BRACING, EACH. COST OF ANY
TEMPORARY INTERCONNECTED BARRIER RAIL REQUIRED TO PROTECT BRACING SYSTEM SHALL BE PAID FOR
UNDER ITEM NO. 712-02.02, INTERCONNECTED PORTABLE BARRIER RAIL, L.F.

PROJECT NO.	YEAR	SHEET NO.	
57946-4213-04	1999		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-9-99	BKE	DELETE NOTE

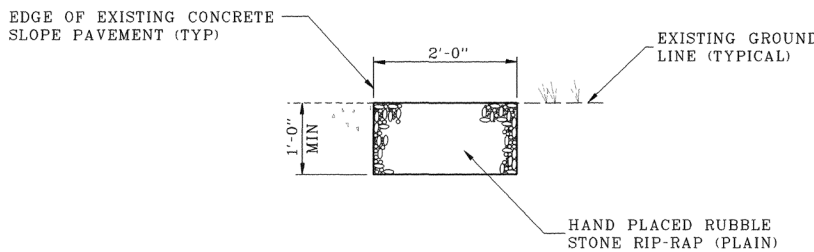
TABLE OF REACTIONS		
LOADS	SIDE A	SIDE B
	KIP/BEAM	KIP/BEAM
DEAD LOAD	76	40



ROADWAY TRANSITION
TYPICAL FOR B290 AND SR186



SHOULDER TRANSITION
TYPICAL FOR B290
(SHOULDER TAPER DIMENSIONS TO
MATCH ROADWAY TAPER)



SECTION "X-X"

SHOWING DETAILS OF NEW RUBBLE STONE RIP-RAP. COST OF PLACING NEW
RIP-RAP AS SHOWN IN SECTION X-X ABOVE TO BE INCLUDED IN ITEM NO.
709-07, RUBBLE STONE RIP-RAP (PLAIN), C.Y. APPROXIMATELY 59 LINEAR
FEET OF RIP-RAP WILL BE NEEDED ALONG EACH SIDE OF THE CONCRETE
SLOPE PAVEMENT AND WINGWALLS AT EACH ABUTMENT. SEE BR-38-64
FOR LOCATIONS

RIP RAP DETAIL

PROPOSED PAVEMENT SCHEDULE FOR TRANSITIONS

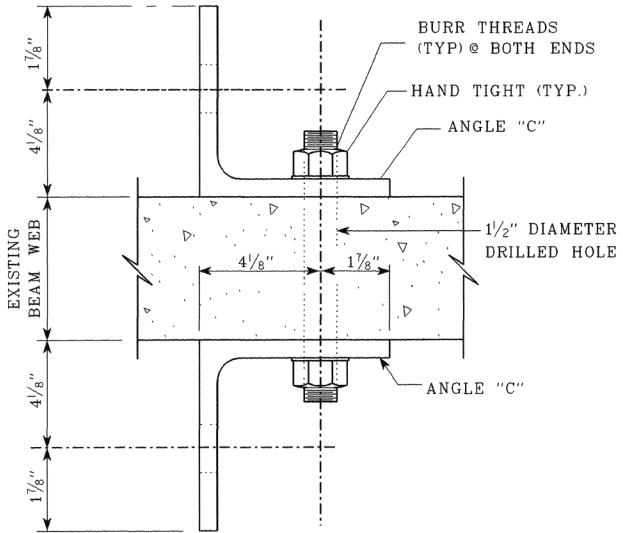
- BITUMINOUS SURFACE @ 1.25" THICK GRADING "D" (APPROX. 132.5 LBS/S.Y.)
411-01.01 MINERAL AGGREGATE (ACS) GRADING "D"
411-01.02 ASPHALT CEMENT (ACS) GRADING "D"
- BITUMINOUS BINDER @ 2.25" THICK GRADE "B-M2" (APPROX. 254.25 LBS/S.Y.)
307-07.11 PERF GR (PG76-22) (BPMB-HM) GR B-M2
- BITUMINOUS BASE @ 4" THICK GRADING "A" (APPROX. 460 LBS/S.Y.)
307-03.09 BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING A
- MINERAL AGGREGATE BASE @ 12" THICK (APPROX. 0.68 TON/S.Y.)
303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
- TACK COAT
403-01 BITUMINOUS MATERIAL FOR TACK COAT (T.C.) @ 0.02 GAL/S.Y.

TRANSITION DETAILS

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
DRAWN BY BRIAN K. EGLI DATE JAN/1999
SUPERVISED BY MIKE LAWSON DATE JAN/1999
CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

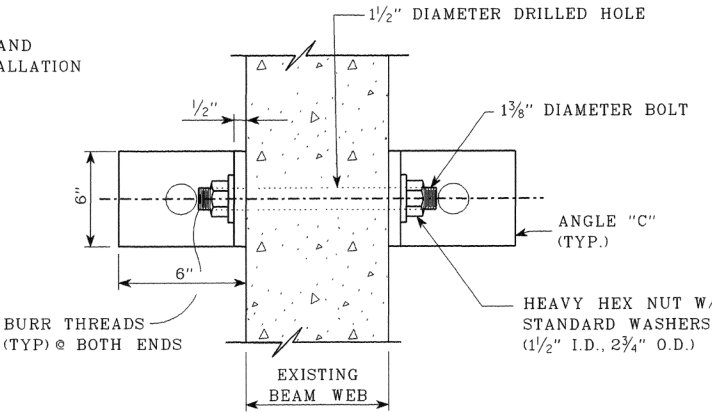
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
EXPANSION JOINT DETAILS
BRIDGE NO 57-SR186-1.56
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

PROJECT NO.	YEAR	SHEET NO.	
57946-4213-04	1999		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

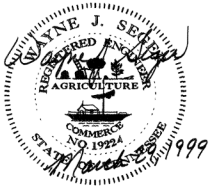


PLAN VIEW @ FITTING

(ANGLE "C")

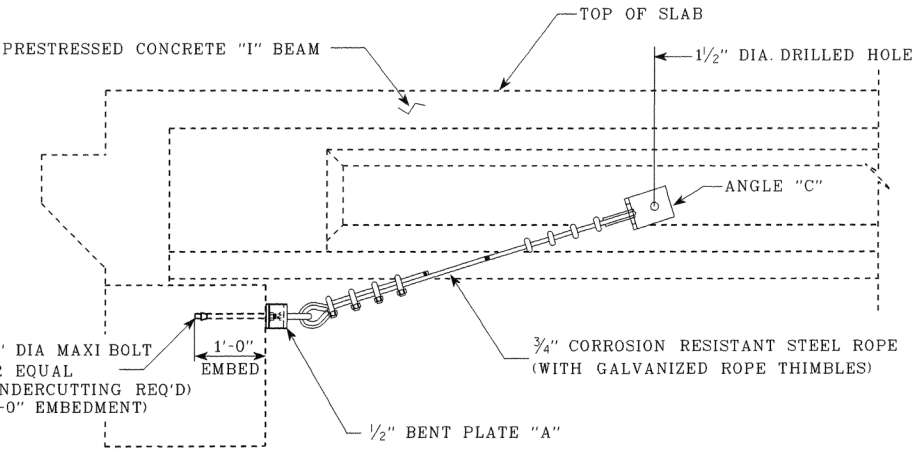


SECTION "A-A"

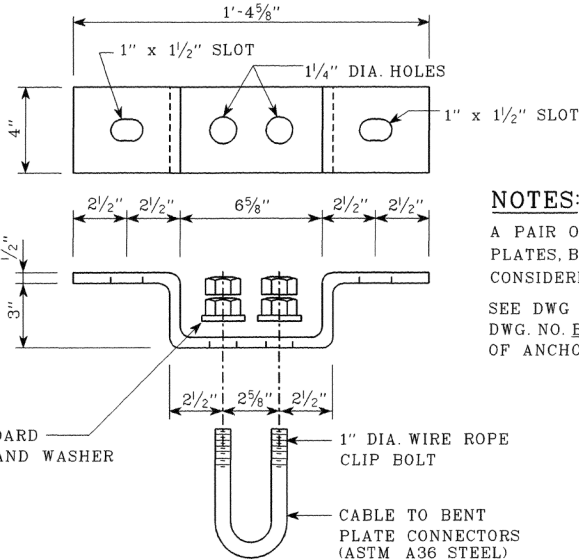


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SEISMIC RESTRAINER DETAILS
TYPE ② AND TYPE ⑰
BRIDGE NO. 57-SR186-1.56
BRIDGE NO. 57-B290-4.55
MADISON COUNTY
1999

BR-38-85



SEISMIC RESTRAINER @ ABUTMENT OR BENTS



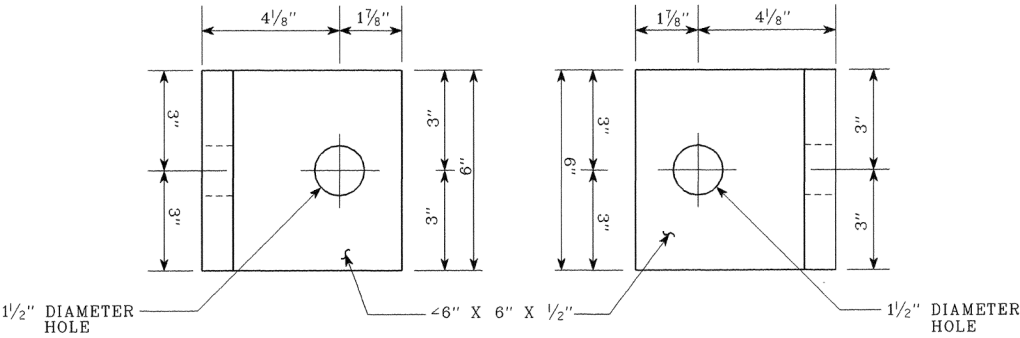
BENT PLATE "A"

(2 REQ'D PER ASSEMBLY)

NOTES:

A PAIR OF STEEL ROPES AND ACCOMPANYING PLATES, BOLTS, NUTS, AND WASHERS IS CONSIDERED ONE ASSEMBLY.

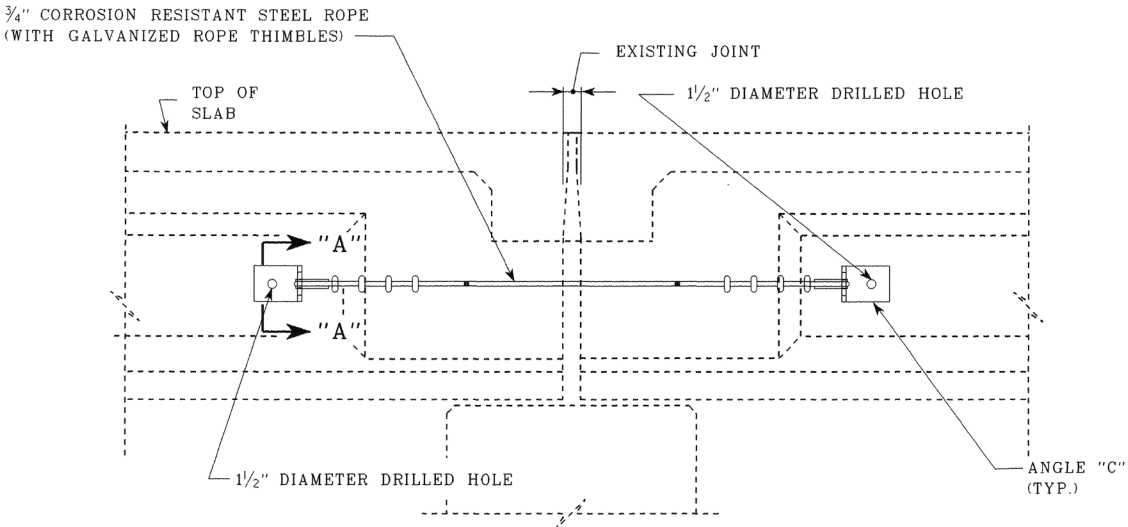
SEE DWG. NO. BR-38-66 FOR GENERAL NOTES AND DWG. NO. BR-38-87 FOR PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS



ANGLE "C" DETAILS

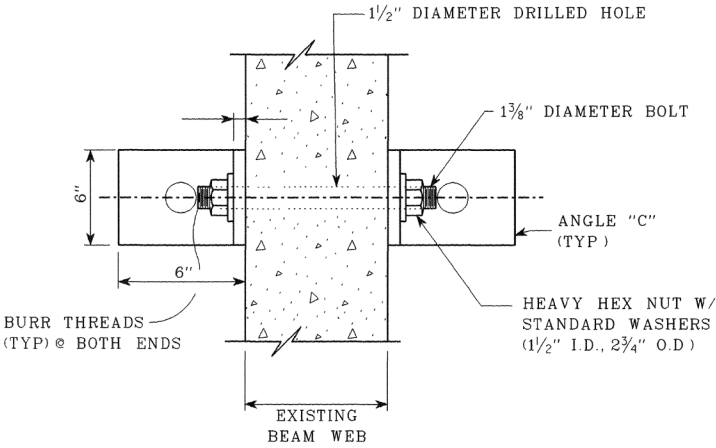
(2 REQ'D PER ASSEMBLY)

SEISMIC RESTRAINER TYPE ⑰

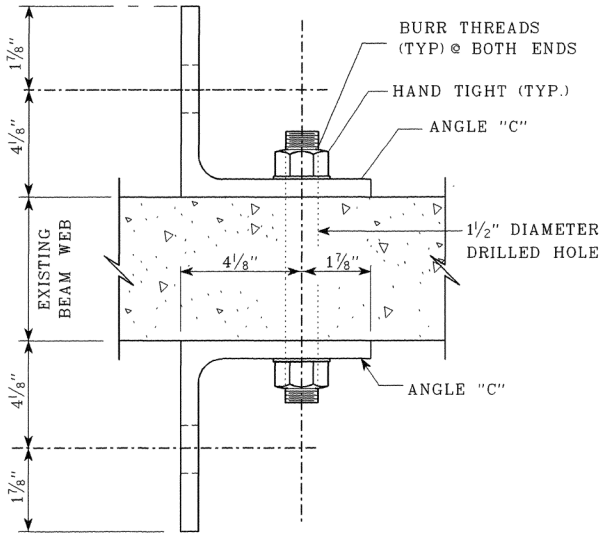


ELEVATION
SEISMIC RESTRAINER @ BENT

(PRESTRESSED I BEAM)

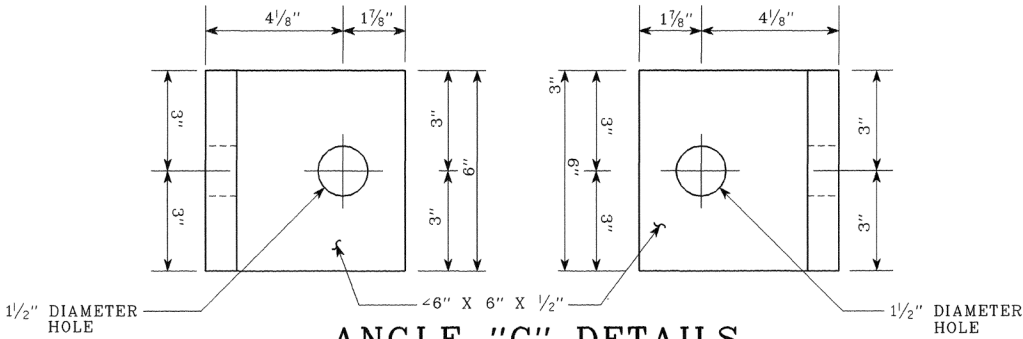


SECTION "A-A"



PLAN VIEW @ FITTING

(ANGLE "C")



ANGLE "C" DETAILS

(4 REQ'D PER ASSEMBLY)

SEISMIC RESTRAINER TYPE ②

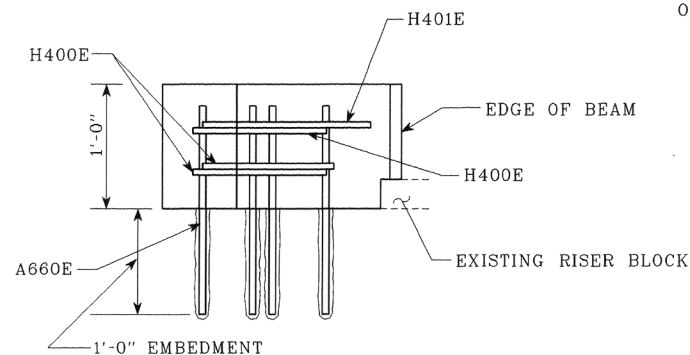
SEE DWG. NO. BR-38-66 FOR GENERAL NOTES AND DWG. NO. BR-38-87 FOR PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS.

NOTE

A PAIR OF STEEL ROPES AND ACCOMPANYING PLATES, BOLTS, NUTS, AND WASHERS IS CONSIDERED ONE ASSEMBLY.

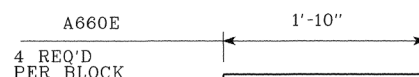
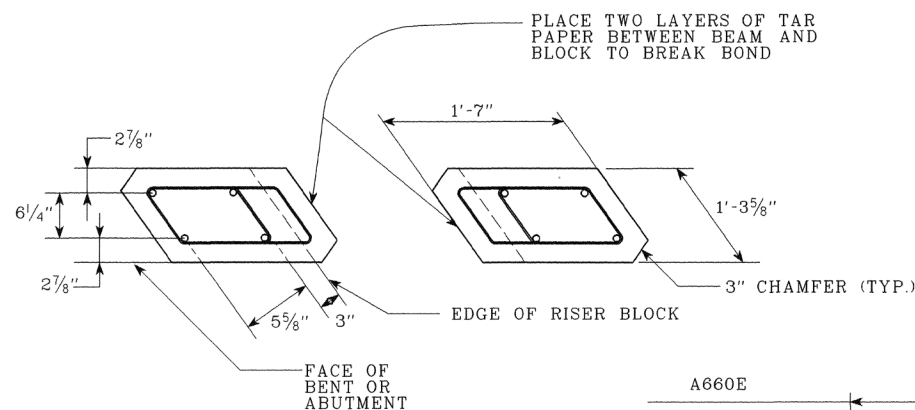
DESIGNED BY: Brian Egli DATE: February 1998
DRAWN BY: Sheri McAdoo DATE: March 1998
SUPERVISED BY: J. Christianson / Mike Lawson DATE: March 1998
CHECKED BY: Mike Lawson / Wayne Seger DATE: April 1998

AN ASSEMBLY CONSISTS OF TWO (2) BLOCKS, ONE ON EACH SIDE OF AN END OF A BEAM ON AN ABUTMENT OR BENT.

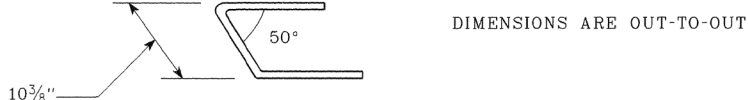


CONCRETE	STEEL
3.1 C.F.	35 LBS

PER ASSEMBLY



H401E 1'-0 3/8" 1 REQ'D PER BLOCK
H400E 8 1/2" 3 REQ'D PER BLOCK



DIMENSIONS ARE OUT-TO-OUT

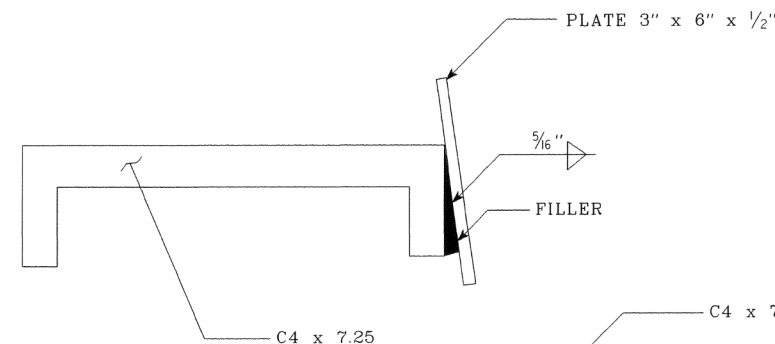
THE COST OF FORMING, NEW CLASS "A" CONCRETE, REINFORCING STEEL, DRILLING, GROUTING, LABOR AND ALL MISCELLANEOUS MATERIALS REQUIRED TO PLACE TYPE [A] LATERAL RESTRAINER SHALL BE INCLUDED UNDER ITEM NO. 604-10.42

TYPE [A]

SEE DRAWING NO. BR-38-66 FOR GENERAL NOTES.

57-SR-186-1.56
LATERAL RESTRAINERS

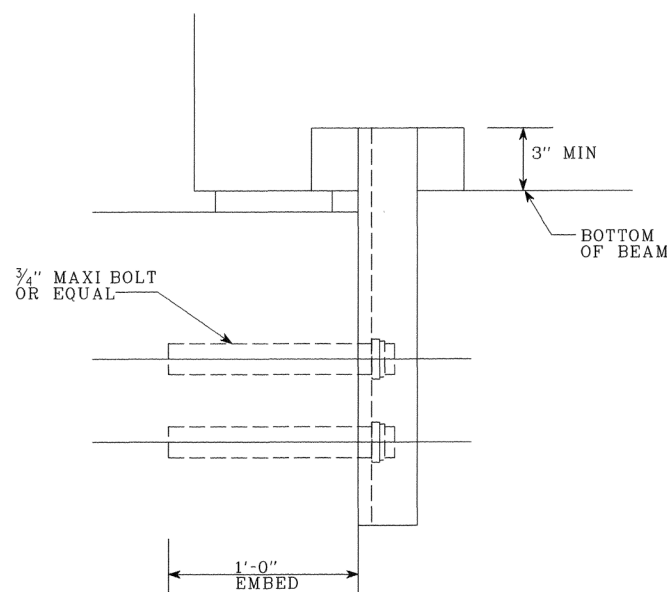
DESIGNED BY Brian Cyle DATE March 1999
DRAWN BY Sheryl McAllen DATE March 1999
SUPERVISED BY B. Cristoforetti / J. Quinn DATE March 1999
CHECKED BY Brian Cyle / Ann Quinn DATE March 1999



NOTE: A PAIR OF CHANNELS INSTALLED ON ONE SIDE OF BENT CAP OR ABUTMENT WITH ACCOMPANYING PLATE, FILLER, BOLTS, NUTS, WASHERS, AND ANY REQUIRED CONCRETE REMOVAL IS CONSIDERED ONE (1) ASSEMBLY TO BE PAID FOR UNDER ITEM NO 602-10.39, STRUCTURAL STEEL BRIDGE (REPAIRS), EACH

SEE DRAWING NO. BR-38-66 FOR GENERAL NOTES AND MANUFACTURES SPECIFICATIONS FOR PROCEDURE FOR INSTALLATION OF BOLTS.

CONTRACTOR SHALL FIELD VERIFY SKEW ANGLE BEFORE ANY FABRICATION OF TYPE [B] RESTRAINERS.

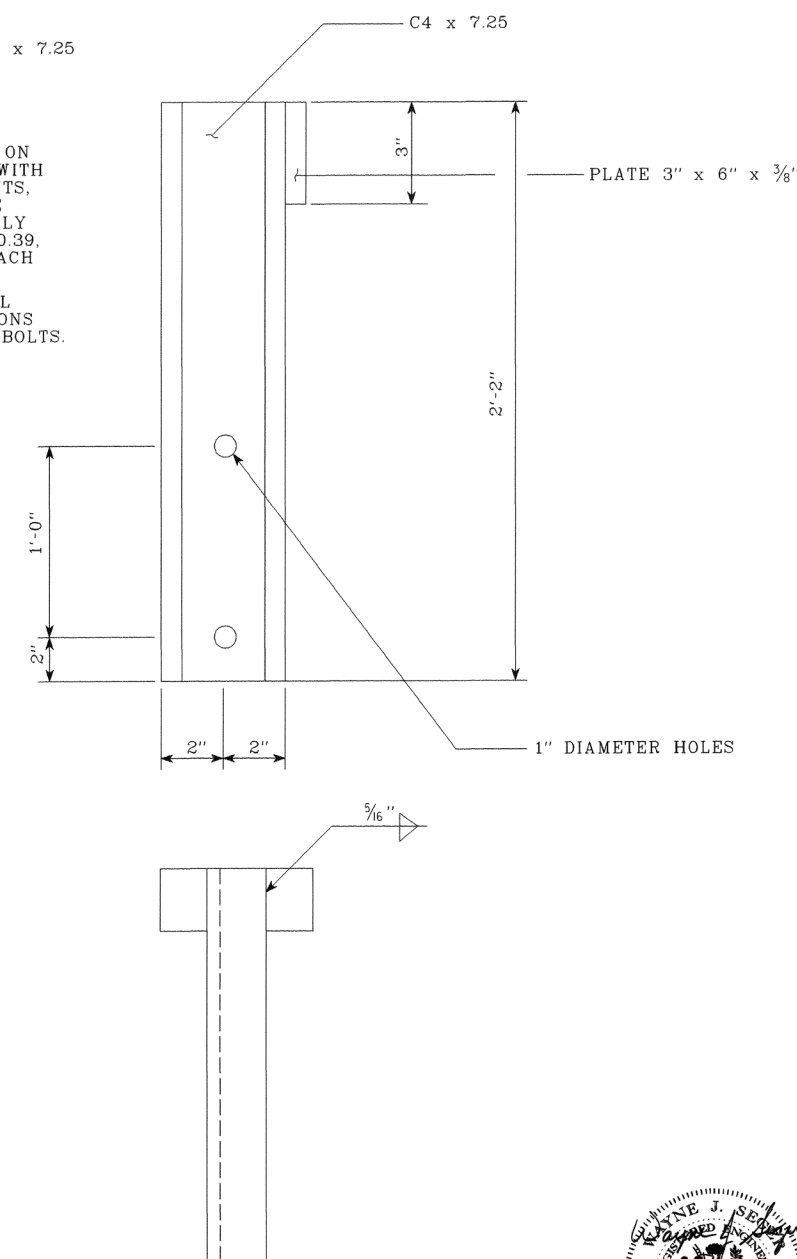


FACE OF BENT OR ABUTMENT PEDESTAL

TYPE [B]

57-B290-4.55
LATERAL RESTRAINERS

PROJECT NO.		YEAR		SHEET NO.	
57946-4213-04		1999			
REVISIONS					
NO.	DATE	BY	BRIEF DESCRIPTION		

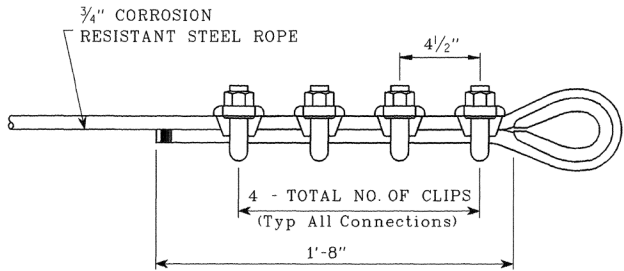


DEPARTMENT OF TRANSPORTATION
LATERAL RESTRAINER SHEET

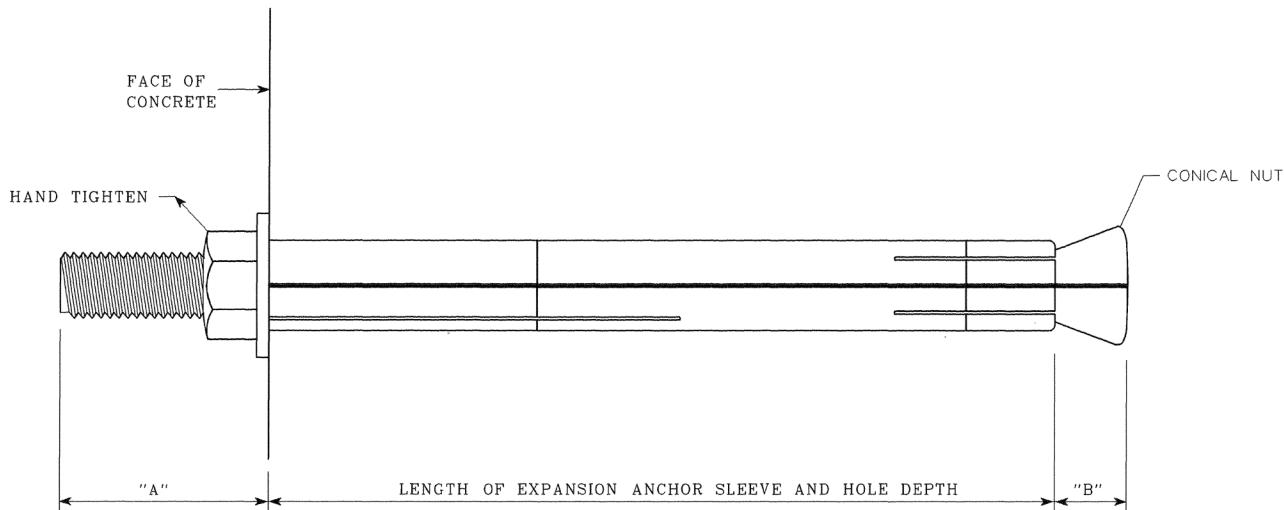
BRIDGE NO. 57-SR186-1.56
BRIDGE NO 57-B290-4.55
MADISON COUNTY
1999

BR-38-86

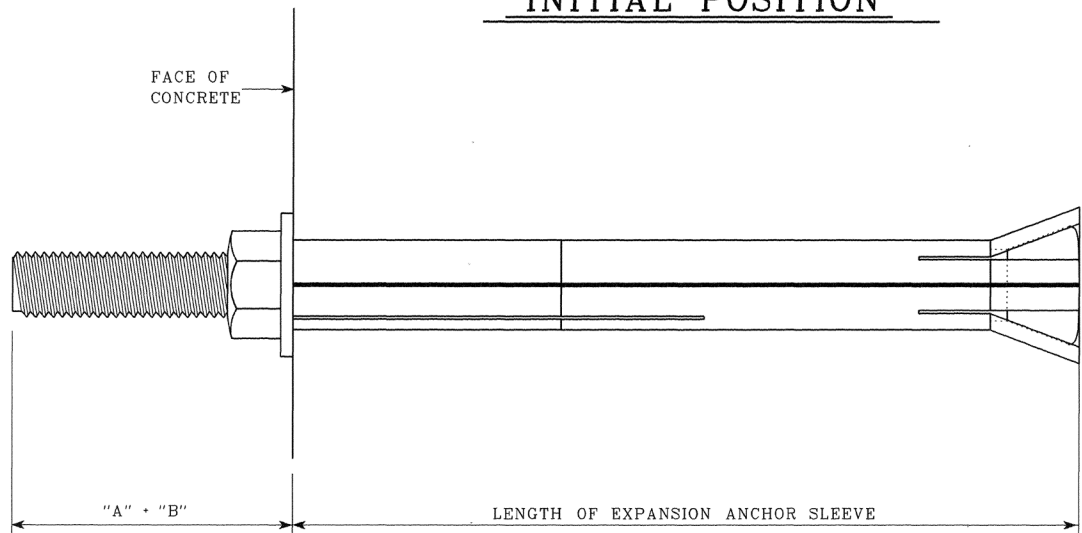
PROJECT NO.		YEAR	SHEET NO.
57946-4213-04		1999	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



WIRE ROPE CLIPS



INITIAL POSITION



SET POSITION

PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS:

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

1. 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.
2. HOLES SHALL BE DRILLED WITH A CARBIDE PERCUSSION DRILL BIT, A "REBAR EATER" BIT OR A DIAMOND CORE BIT
3. THE DRILL BIT DIAMETER AND HOLE DEPTHS ARE AS MANUFACTURER'S SECIFICATIONS.
4. IF AN ANCHOR MUST BE RELOCATED AND A NEW HOLE DRILLED, THE OLD HOLE SHALL BE REPAIRED WITH A NON-SHRINKAGE PACK GROUT
5. UNDERCUT IN PRIMARY HOLE SHALL BE AS SPECIFIED BY THE MANUFACTURER OF THE UNDERCUTTING TOOL.
6. CLEAN THE HOLE OF CONCRETE DUST AND DEBRIS USING OIL FREE COMPRESSED AIR OR BY VACUUMING. PLACE BEARING SLEEVE FLUSH WITH THE CONCRETE SURFACE.
7. 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.
8. 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 22,000 LBS. SHALL BE APPLIED. THE ANCHOR LOADS MAY BE APPLIED BY MANUAL TORQUING OR HYDRAULIC TENSIONING
9. 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.
10. INSTALLATION PROCEDURES REQUIRED BY THE ANCHOR MANUFACTURER IN ADDITION TO THE INSTRUCTIONS LISTED ABOVE SHALL BE FOLLOWED.
11. BENT PLATES SHALL BE ASTM A709 (GRADE 36) MATERIAL GALVANIZED TO ASTM A123 STANDARD.
12. 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.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

UNDERCUTTING BOLT INSTALLATION
BRIDGE NO. 57-SR186-1.56
BRIDGE NO. 57-B290-4.55
MADISON COUNTY

1999

BR-38-87

DESIGNED BY Brian Egle DATE February 1998
DRAWN BY Sherry McAdoo DATE March 1998
SUPERVISED BY J. Christianson / Mike Lawson DATE March 1998
CHECKED BY Mike Lawson / Wayne Seger DATE April 1998

ANCHOR SETTING DETAILS

BILL OF STEEL

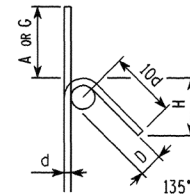
BRIDGE NO. 57-SR186-1.56 RT. LANE									
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	
				A	B	C	D		
B471E	PARAPET	4	866	2'-8"				3'-4"	
R470E	ENDPOST	4	4	SEE BELOW FOR DIM				17'-6"	
R471E	ENDPOST	4	4	SEE BELOW FOR DIM.				17'-10"	
A500E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 15'-5 1/2" TO 3'-4 1/2" IN INC OF 1'-2 1/2" = 11 BARS				103'-7"	
A501E	OVERLAY	5	188					16'-3"	
A502E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 15'-10" TO 8'-7" IN INC OF 1'-2 1/2" = 7 BARS				85'-5 1/2"	
A503E	OVERLAY	5	412					8'-6"	
A504E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 26'-6 1/4" TO 8'-4 3/4" IN INC OF 1'-2 1/2" = 16 BARS				279'-4"	
A505E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 26'-6" TO 3'-6 1/2" IN INC OF 1'-2 1/2" = 20 BARS				300'-5 1/4"	
A506E	CANTILEVER (BOT.)	5	807					4'-5"	
A507E	OVERLAY	5	37					11'-0"	
A508E	OVERLAY	5	37					5'-10"	
A509E	OVERLAY	5	8					21'-2 1/2"	
A510E	OVERLAY	5	59					27'-9 1/2"	
A511E	OVERLAY	5	280					30'-0"	
A540E	OVERLAY	5	170					27'-3"	
A541E	OVERLAY	5	8					35'-6 1/8"	
A542E	OVERLAY	5	59					21'-9"	
A550E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 15'-8 1/4" TO 8'-5 1/4" IN INC OF 1'-2 1/2" = 7 BARS				84'-5 1/4"	
A551E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 15'-3 1/2" TO 3'-2 1/2" IN INC OF 1'-2 1/2" = 11 BARS				101'-9"	
A552E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 26'-4" TO 3'-4 1/2" IN INC OF 1'-2 1/2" = 20 BARS				297'-1"	
A553E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 26'-4 1/4" TO 9'-5 1/4" IN INC OF 1'-2 1/2" = 15 BARS				268'-5 1/4"	
AX600E	OVERLAY	6	218	3'-0"				6'-0"	
R600E	ENDWALL	6	16	3'-1"	2'-8"			5'-9"	
R601E	DIAPHRAGM	6	12	2'-0"	2'-8"			4'-8"	
A700E	OVERLAY	7	82					30'-0"	

BRIDGE NO. 57-SR186-1.56 LT. LANE									
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	
				A	B	C	D		
B471E	PARAPET	4	866	2'-8"				3'-4"	
R470E	ENDPOST	4	4	SEE BELOW FOR DIM.				17'-6"	
R471E	ENDPOST	4	4	SEE BELOW FOR DIM.				17'-10"	
A503E	OVERLAY (TOP)	5	426					8'-6"	
A506E	CANTILEVER (BOT.)	5	799					4'-5"	
A507E	OVERLAY	5	18					11'-0"	
A508E	OVERLAY	5	18					5'-10"	
A510E	OVERLAY	5	46					27'-7"	
A511E	OVERLAY	5	276					35'-0"	
A515E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 16'-1 1/2" TO 8'-11 1/4" IN INC OF 1'-2 3/8" = 7 BARS				87'-8 5/8"	
A516E	OVERLAY	5	404					16'-9"	
A517E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 16'-1 1/2" TO 4'-1 3/4" IN INC OF 1'-2 3/8" = 11 BARS				111'-6"	
A518E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 15'-6 3/4" TO 3'-7" IN INC OF 1'-2 3/8" = 11 BARS				105'-3 5/8"	
A519E SERIES	OVERLAY	5	1	LENGTH VARIES FROM 16'-2 1/6" TO 9'-0 5/8" IN INC OF 1'-2 3/8" = 7 BARS				88'-6 1/4"	
A520E	OVERLAY	5	16					21'-10 3/8"	
A542E	OVERLAY	5	46					21'-9"	
SERIES A554E	OVERLAY	5	1	LENGTH VARIES FROM 15'-11 1/8" TO 8'-8 5/8" IN INC OF 1'-2 1/2" = 7 BARS				86'-4 1/8"	
SERIES A555E	OVERLAY	5	1	LENGTH VARIES FROM 15'-3 1/2" TO 3'-2 1/2" IN INC OF 1'-2 1/2" = 11 BARS				101'-9"	
SERIES A556E	OVERLAY	5	1	LENGTH VARIES FROM 15'-5" TO 3'-4" IN INC OF 1'-2 1/2" = 11 BARS				103'-1 1/2"	
SERIES A557E	OVERLAY	5	1	LENGTH VARIES FROM 15'-10 1/4" TO 8'-7 1/4" IN INC OF 1'-2 1/2" = 7 BARS				85'-7 1/4"	
AX600E	OVERLAY	6	218	3'-0"				6'-0"	
R600E	ENDWALL	6	16	3'-1"	2'-8"			5'-9"	
R601E	DIAPHRAGM	6	26	2'-0"	2'-8"			4'-8"	
A700E	OVERLAY	7	68					30'-0"	

BRIDGE NO. 57-B290-4.55									
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	
				A	B	C	D		
B471E	PARAPET	4	944	2'-8"				3'-4"	
H400E	DIAPHRAGM	4	28	6"	2'-0"			4'-6"	
A500E SERIES	SPAN 1 (TOP & BOT.) SPAN 4 (TOP)	5	3	LENGTH VARIES FROM 15'-10" TO 4'-3 3/4" IN INC OF 9 1/8" = 15 BARS				151'-1 1/8"	
A501E	SPAN 1 (TOP & BOT.)	5	326					16'-6"	
A501E	SPAN 2 & 3 (TOP)	5	264					16'-6"	
A501E	SPAN 4 (TOP)	5	163					16'-6"	
A502E SERIES	SPAN 1 (TOP & BOT.) SPAN 4 (TOP)	5	3	LENGTH VARIES FROM 12'-10" TO 7'-9" IN INC OF 7 1/8" = 9 BARS				92'-5 1/2"	
A503E SERIES	SPAN 1 (TOP & BOT.) SPAN 4 (TOP)	5	3	LENGTH VARIES FROM 5'-6" TO 2'-11 1/2" IN INC OF 7 1/8" = 5 BARS				21'-1 3/4"	
A504E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 8'-5" TO 5'-6 1/4" IN INC OF 1'-5 5/8" = 3 BARS				20'-10 7/8"	
A505E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 15'-10" TO 11'-5 1/8" IN INC OF 1'-5 5/8" = 4 BARS				54'-7 3/4"	
A506E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 12'-3" TO 9'-4 1/4" IN INC OF 1'-5 5/8" = 3 BARS				32'-4 7/8"	
A507E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 6'-5" TO 3'-6 1/4" IN INC OF 1'-5 5/8" = 3 BARS				14'-10 7/8"	
A508E SERIES	SPAN 1 (TOP & BOT.) SPAN 4 (TOP)	5	3	LENGTH VARIES FROM 12'-10" TO 2'-1 1/8" IN INC OF 9 1/8" = 14 BARS				104'-9 3/8"	
A509E SERIES	SPAN 1 (TOP & BOT.) SPAN 4 (TOP)	5	3	LENGTH VARIES FROM 15'-2" TO 10'-8 5/8" IN INC OF 7 1/8" = 8 BARS				103'-6 1/2"	
A510E SERIES	SPAN 1 (TOP & BOT.) SPAN 4 (TOP)	5	3	LENGTH VARIES FROM 8'-5" TO 3'-4" IN INC OF 7 1/8" = 9 BARS				52'-10 1/2"	
A511E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 4'-11" TO 3'-5 5/8" IN INC OF 1'-5 5/8" = 2 BARS				8'-4 5/8"	
A512E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 12'-4" TO 7'-11 1/8" IN INC OF 1'-5 5/8" = 4 BARS				40'-7 3/4"	
A513E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 15'-10" TO 11'-5 1/8" IN INC OF 1'-5 5/8" = 4 BARS				54'-7 3/4"	

BRIDGE NO. 57-B290-4.55 CONT.									
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS				LENGTH	
				A	B	C	D		
A514E SERIES	SPAN 2 & 3 (TOP)	5	2	LENGTH VARIES FROM 8'-4" TO 5'-5 1/4" IN INC OF 1'-5 5/8" = 3 BARS				20'-7 1/8"	
A515E	OVERLAY	5	256					23'-0"	
A516E	OVERLAY	5	240					26'-8"	
A517E	OVERLAY	5	4					15'-7"	
A518E	OVERLAY	5	4					18'-5"	
A530E	OVERLAY	5	16					5'-0"	
CD500E	OVERLAY	5	4	2'-8"	2'-10"	2'-6"		5'-6"	
CD501E	OVERLAY	5	8	2'-3"	2'-3"	1'-10 1/4"		4'-6"	
F500E	OVERLAY	5	8	1'-4 1/2"	1'-0 3/8"	1'-4 1/2"	8 1/2"	4'-0"	
AX600E	OVERLAY	6	348	3'-0"				6'-0"	
CDX600E	OVERLAY	6	4	7"	1'-4 1/2"	1'-1 1/8"		3'-11"	

PROJECT NO.	YEAR	SHEET NO.
57948-4213-04	1999	
REVISIONS		
NO.	DATE	BY



BAR SIZE	D (IN.)	135° HOOK A OR G	H APPROX.
#3	1 1/2	5	3 1/2
#4	2	6 1/2	4 1/2
#5	2 1/2	8	5 1/2
#6	4 1/2	10 1/4	6 1/2
#7	5 1/4	1-0 1/4	7 1/4
#8	6	1-2 1/4	9

135° SEISMIC STIRRUP/TIE HOOK DIMENSIONS (ALL GRADES)

REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK DETAILS SHALL APPLY, EXCEPT AS NOTED.
NOTE: THE SUFFIX E FOR BARS SO MARKED DENOTES EPOXY COATED REINFORCEMENT.

LENGTH

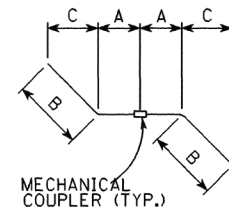
BARS A

A

BARS B

C A

BARS CD



BARS CDX

A

BARS D

A

BARS AX

A B

BARS H

B

BARS R

A B C

BARS F

DESIGNED BY BRIAN K. EGLI DATE JAN/1999
DRAWN BY BRIAN K. EGLI DATE JAN/1999
SUPERVISED BY MIKE LAWSON DATE JAN/1999
CHECKED BY W. SEGER & M. LAWSON DATE JAN/1999

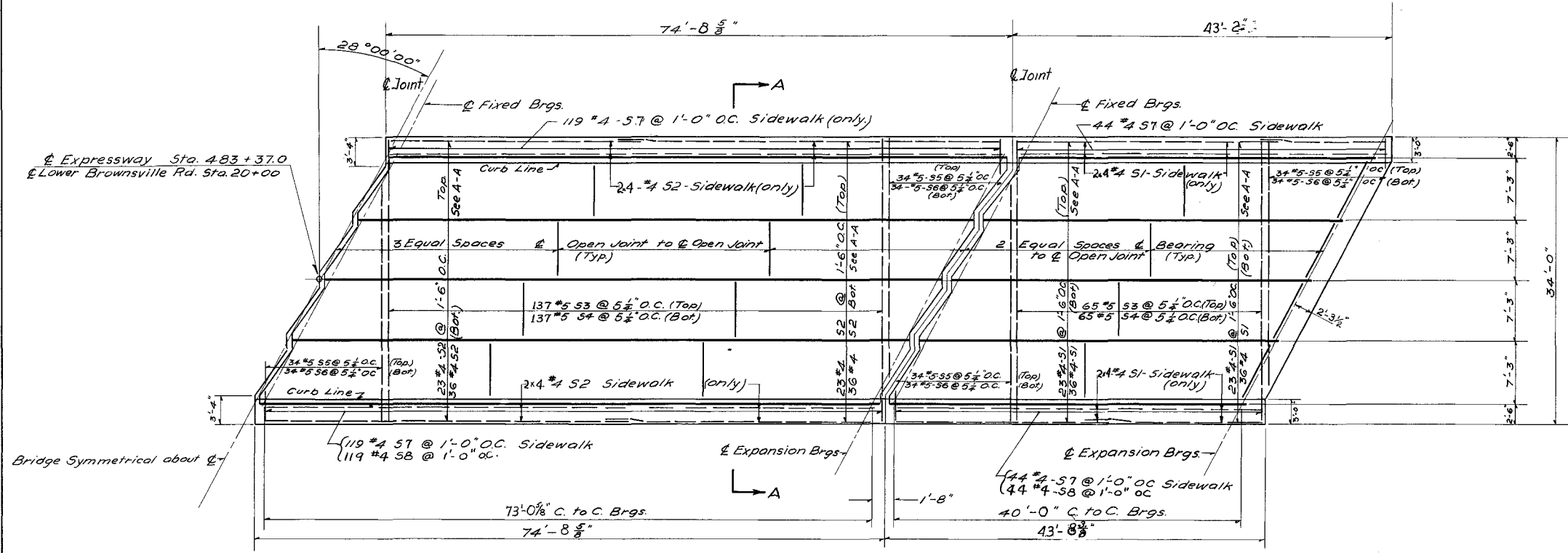


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BILL OF STEEL
BRIDGE NO. 57-SR186-1.56
BRIDGE NO. 57-B290-4.55
MADISON COUNTY
1999

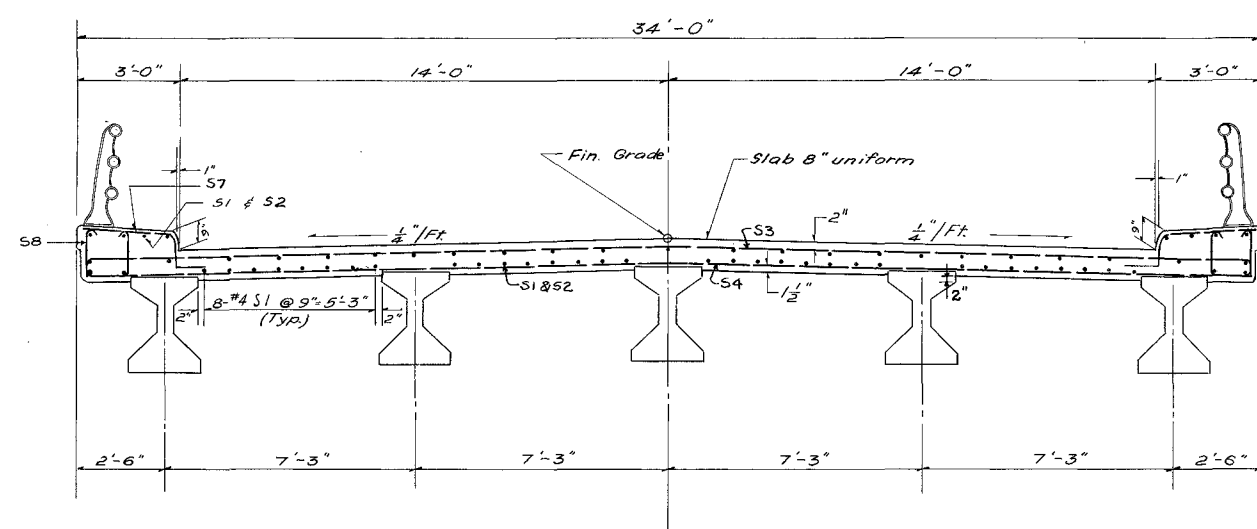
BR-38-88

FED. RD. DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		1957	55	198
1 - 505 (9)					



PLAN
SCALE: 1/8" = 1'-0"

SUPERSTRUCTURE QUANTITIES		
DESCRIPTION	UNIT	NEAT
Class "A" Concrete	C.Y.	240
Bar Reinforcement	Lb.	53,310
Tubular Aluminum Railing	L.F.	499' 10 1/2"
Precast & Prestress Memb.	L.F.	175.0



SECTION A-A
SCALE: 3/8" = 1'-0"

NOTES:
Reinforcement cover - 2" unless otherwise noted.
For details of sidewalk and intermediate diaphragms see Sheet N953.
For details of end diaphragms see Sheet N956.
For details of prestressed concrete members see Sheet N957.
S4 to be bent in field to provide 12" cover at span between stringers.
For details of Alum Handrailing see Dwg. F-10-47

PREPARED AND RECOMMENDED BY
Edmund J. Kessler PE Lic. No. 3552 DATE 12/8/57
LOCKWOOD, KESSLER & BARTLETT, INC. CONSULTING ENGINEERS

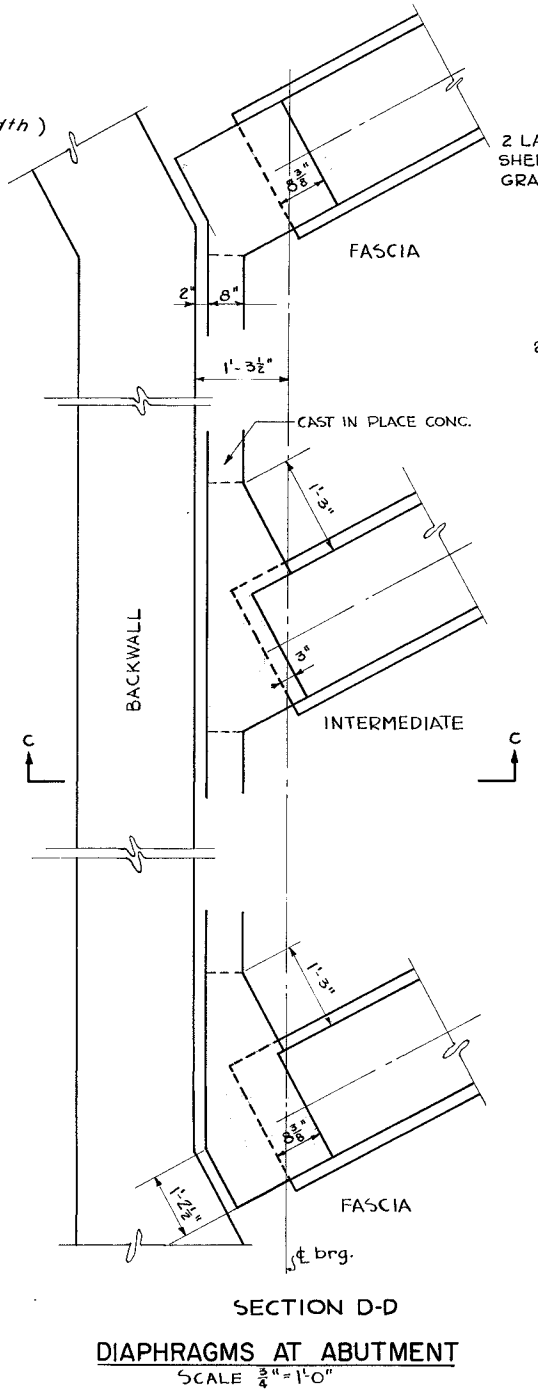
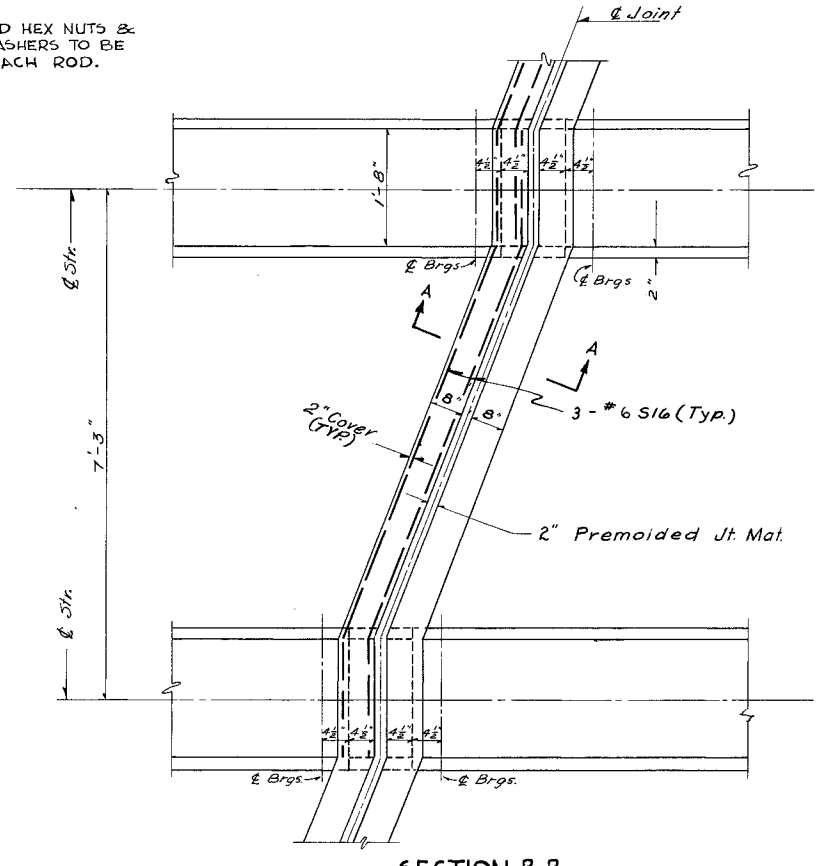
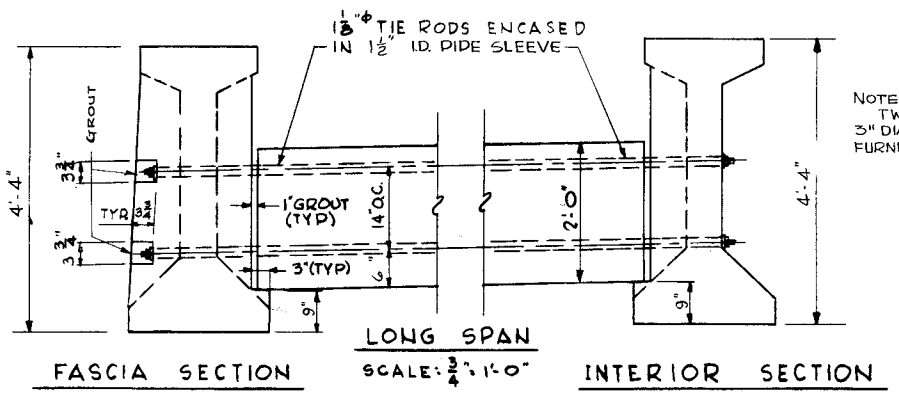
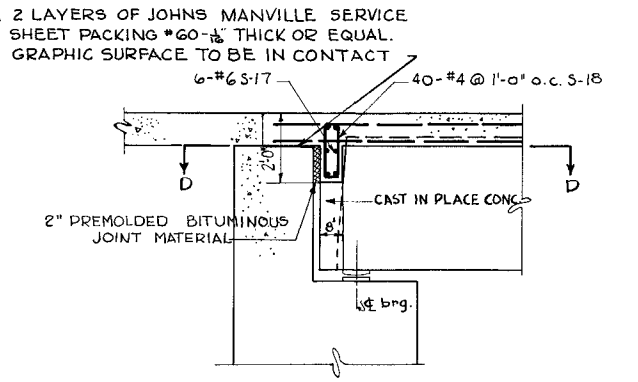
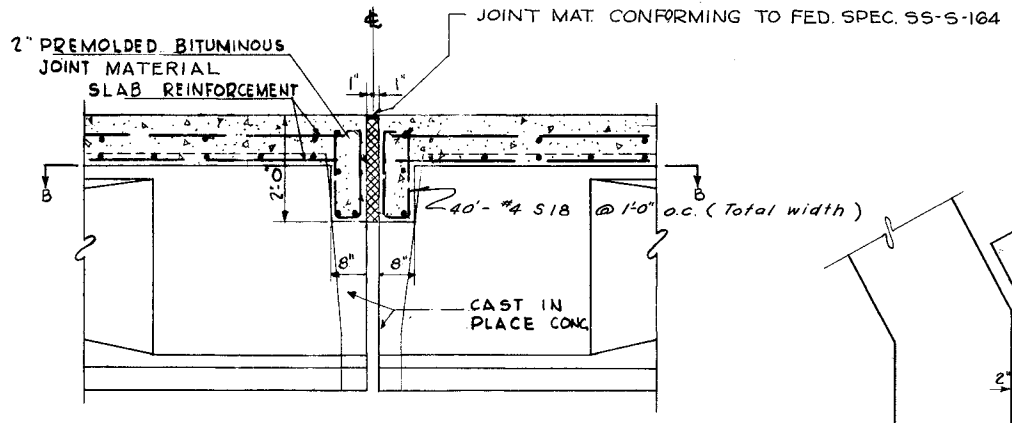
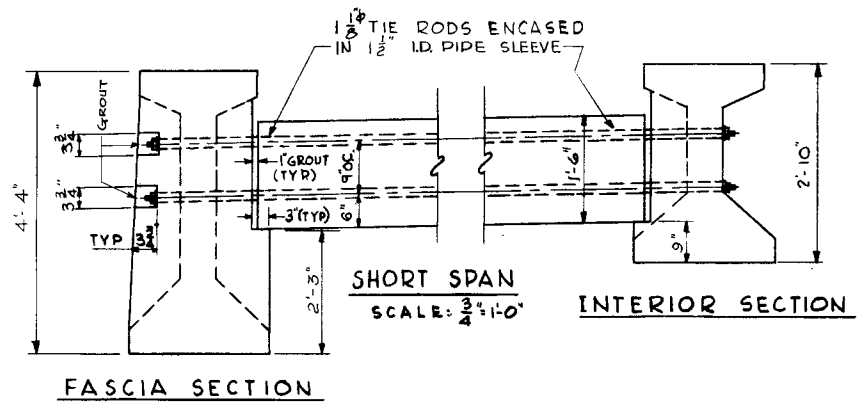
H.G.S. LOWER BROWNSVILLE RD. SUPERSTRUCTURE - SHEET No 1	
LOCKWOOD, KESSLER & BARTLETT, INC. ENGINEERS & SURVEYORS SYOSSET, NEW YORK	MADE BY D.S. TRACED BY B.L. CHECKED BY B.L. DATE MAY 1957 DWG. NO. 7007-LB-2

SCALE: As NOTED

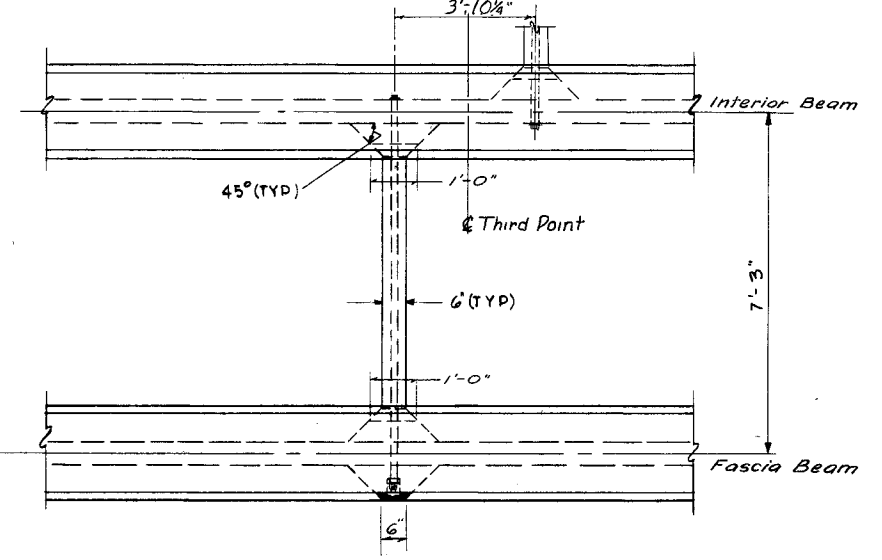
REVISIONS
1. Revised Jan. 6, 1958

Sheet No 55

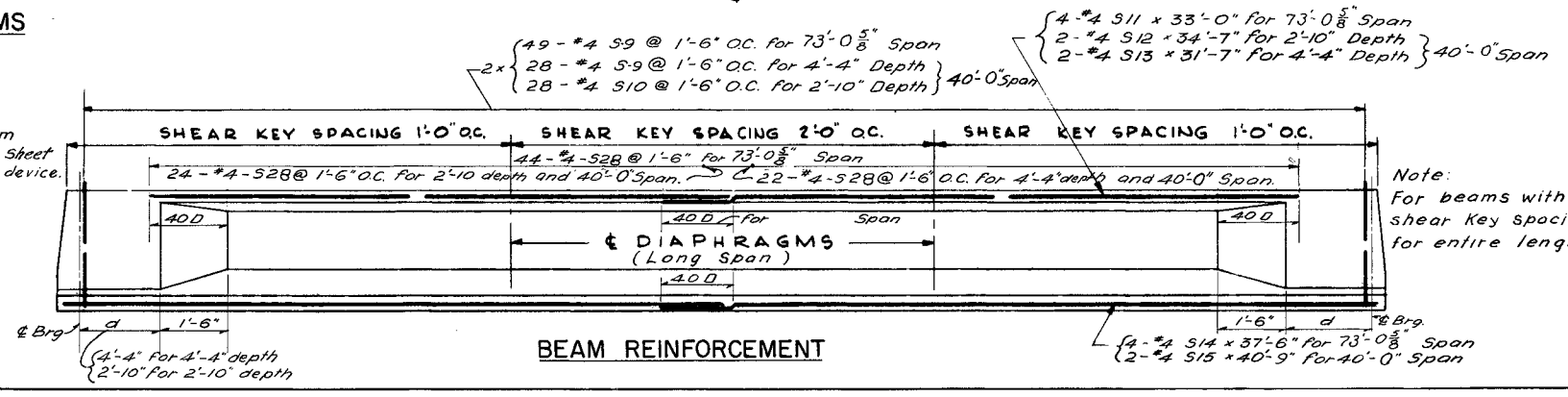
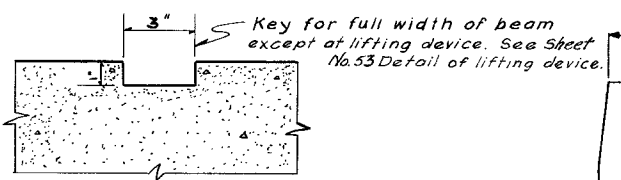
FED. RD. DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		1957	56	198
1 - 505 (9)					



ELEVATION - INTERMEDIATE DIAPHRAGMS



PLAN - INTERMEDIATE DIAPHRAGMS
SCALE: $\frac{1}{2}$ " = 1'-0"



Note: For general notes and details of bearings and various details for prestressed concrete members see Sheet No. 53.

PREPARED AND RECOMMENDED BY
Edmund J. Bartlett P.E. Lic. No. 2557 DATE 12/8/57

LOCKWOOD, KESSLER & BARTLETT, INC.

H.G.S. LOWER BROWNSVILLE ROAD SUPERSTRUCTURE - SHEET No. 2

LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS
SYOSSET NEW YORK

MADE BY DS
TRACED BY DS
CHECKED BY EDL
DATE AUGUST 1957
DWG. NO. 7007-LB-2

SCALE AS INDICATED

Revised Jan 6, 1958

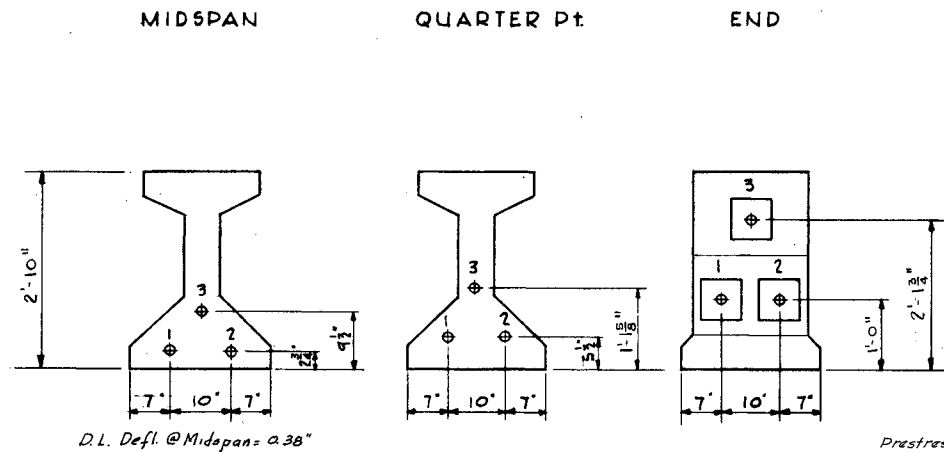
Sheet No. 56

INTERIOR BEAMS

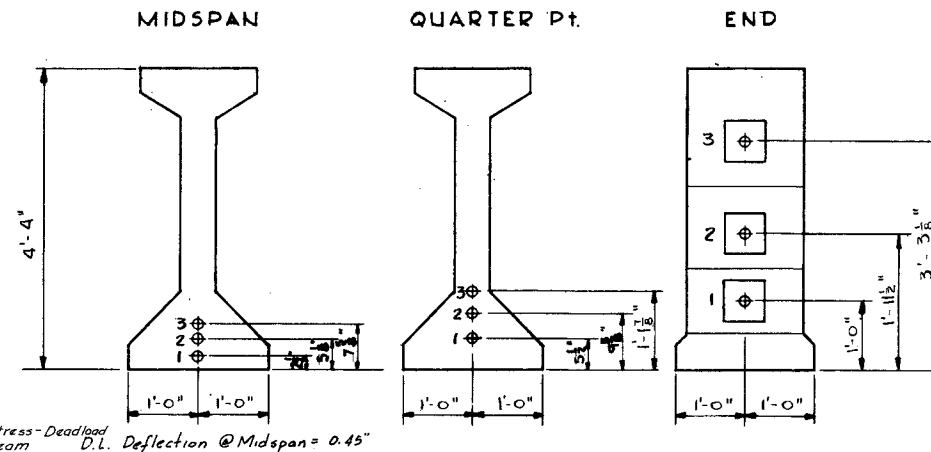
Scale $\frac{3}{4}$ " = 1'-0"

FASCIA BEAMS

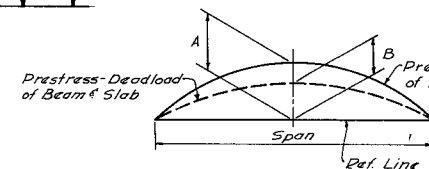
FED. RD. DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		1957	57	198
I - 505 (9)					



LENGTH



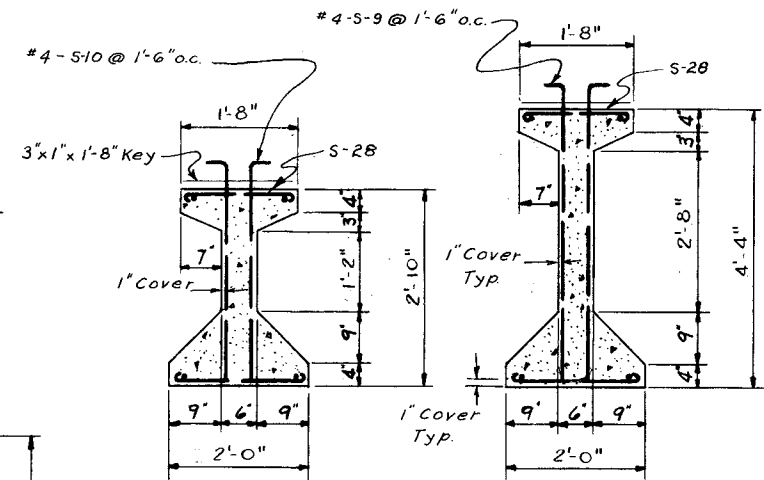
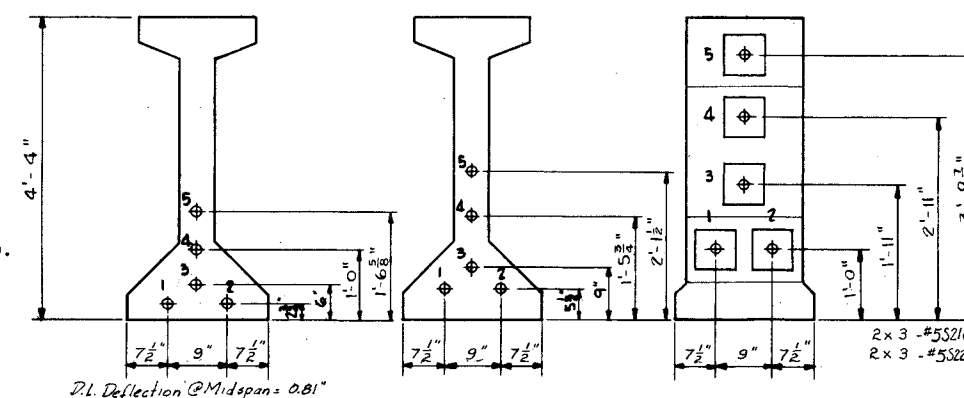
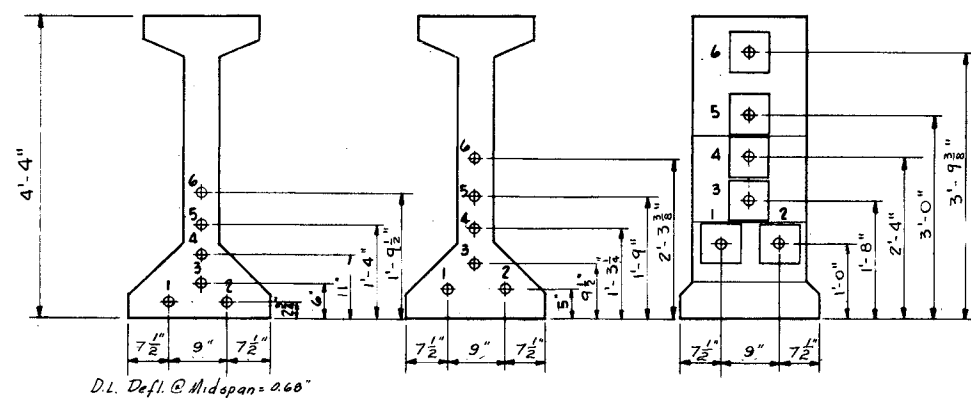
40'-0" C.to C. brg.



DEFLECTION DIAGRAM

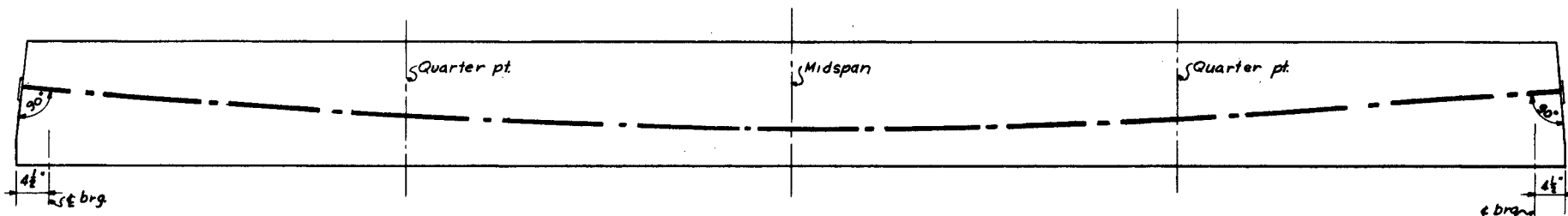
Span	Beam	A	B
73'	Interior	1.19"	0.51"
"	Fascia	1.06"	0.25"
40'	Interior	0.81"	0.43"
"	Fascia	0.56"	0.11"

73'-0" C.to C. brg.



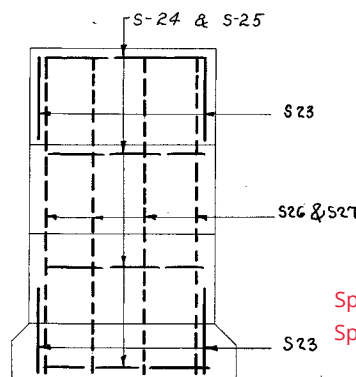
TYPICAL CROSS SECTION

Scale $\frac{3}{4}$ " = 1'-0"



TYPICAL PARABOLIC CABLE PROFILE

No Scale



END BLOCK VIEW

No Scale

Spans 1 & 4
Spans 2 & 3

Spans 1 & 4
Spans 2 & 3

Note: 1/4" wires have a cross section area of 0.036 sq. in.

Note: 174 wires have a cross section area of 0.050 sq. in.

PRESTRESSING TABLE												
INTERIOR BEAMS												
BEAM	UNIT						INITIAL PRESTRESSING FORCE (lb)					
	1	2	3	4	5	6	1	2	3	4	5	6
40'-0"	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	—	—	—	128,800	128,800	128,800	—	—	—
73'-0 $\frac{3}{8}$ "	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	133,500	133,500	133,500	133,500	133,500	133,500
FASCIA BEAMS												
BEAM	UNIT						INITIAL PRESTRESSING FORCE (lb)					
	1	2	3	4	5	6	1	2	3	4	5	6
40'-0"	8- $\frac{1}{2}$ wires	8- $\frac{1}{2}$ wires	8- $\frac{1}{2}$ wires	—	—	—	62,000	62,000	62,000	—	—	—
73'-0 $\frac{3}{8}$ "	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	16- $\frac{1}{2}$ wires	—	131,400	131,400	131,400	131,400	131,400	—

NOTE: Initial Prestressing values given do not include force lost due to wobble effects, friction, Jack losses and elongation of wires.

END BLOCK DIMENSIONS							
SPAN	A	B	C	D	E	F	G
73'-0"	6"	1'-4"	2'-8"	4'-4"	3"	1 1/8"	3 1/8"
Interior	6"	1'-6"	—	2'-10"	1"	—	3"
40'-0"	6"	1'-5 1/2"	3'-4 1/2"	4'-4"	1 1/2"	2 3/8"	4"
Interior	6"	1'-5 1/2"	2'-7 1/4"	4'-4"	7/8"	3"	8 3/8"
Fascia	6"	1'-5 1/2"	2'-7 1/4"	4'-4"	7/8"	3"	8 3/8"
40'-0"	6"	1'-5 1/2"	2'-7 1/4"	4'-4"	7/8"	3"	8 3/8"
Fascia	6"	1'-5 1/2"	2'-7 1/4"	4'-4"	7/8"	3"	8 3/8"

END BLOCK DETAIL

No Scale

- Note:
- Cover 2" - except as noted.
 - See Sheet No. 53 for detail of Lifting Device.
 - Casting Bed for all Prestressed Beams in this Contract to be constructed to give a 1/2" camber at center of Beam.

PREPARED AND RECOMMENDED BY

Lockwood, Kessler & Bartlett, Inc. DATE 12/8 1957

LOCKWOOD, KESSLER & BARTLETT, INC.

H.G.S. LOWER BROWNSVILLE ROAD
SUPERSTRUCTURE - SHEET 3

LOCKWOOD, KESSLER & BARTLETT, INC.

CONSULTING ENGINEERS

SYOSSET NEW YORK

SCALE AS NOTED

MADE BY DS

TRACED BY DS

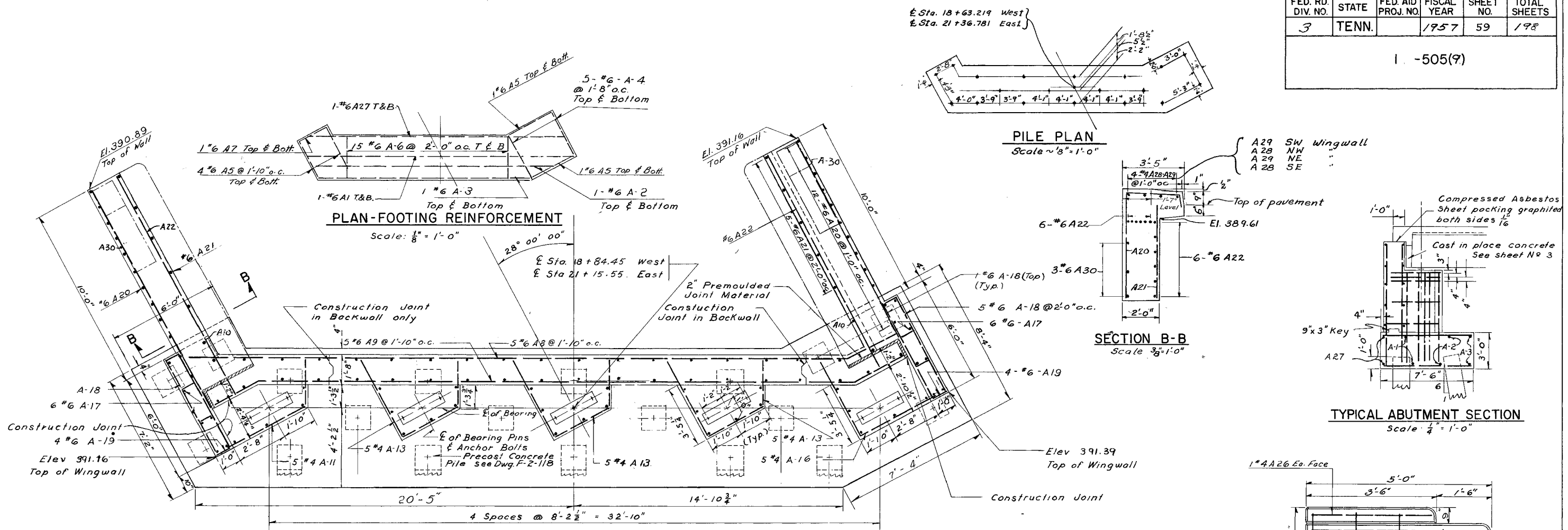
CHECKED BY E.M.G.

DATE MAY 8 1957

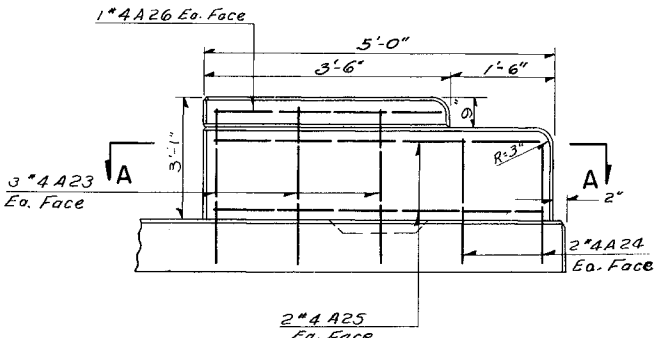
DWG. NO. 7-907-LB-4

G-2-47

FED. RD. DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		1957	59	198
I - 505(9)					



PLAN - WEST AND EAST ABUTMENT
Scale: 1/8" = 1'-0"



SECTION A-A
Scale: 1/2" = 1'-0"

ELEVATIONS

Elev	East	West
A	385.07	385.22
B	386.78	386.92
C	387.01	387.16
D	386.90	387.05
E	385.31	385.46

QUANTITIES

DESCRIPTION	UNIT	NEAT
Concrete - Class A	C.Y.	156
Steel Bar Reinforcement	Lb.	8100
Precast Conc. Test Piling	LF	80
Precast Conc. Piling 'Size I'	LF	1440

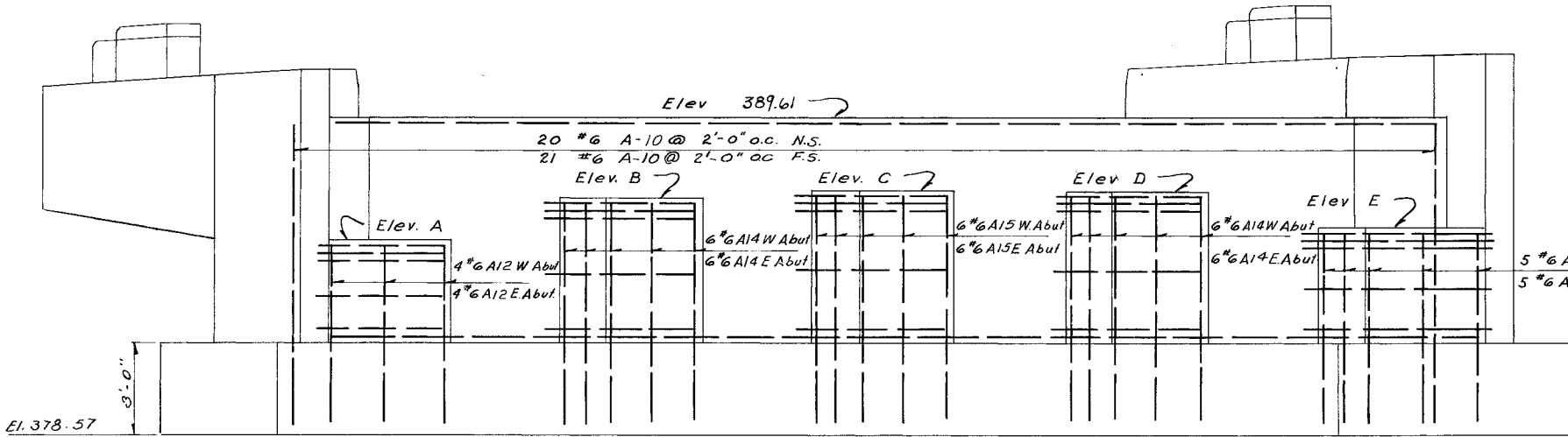
- NOTES:
- All reinforcing cover 2", 3" in footing.
 - All anchor bolts for bearings shall be 1" dia. roughened or swaged bolts and shall be accurately placed by means of a template and set 10" into masonry.
 - All chamfering 1".
 - See sheet no. 60 for Elevation of Wingwall.
 - Top of pylon to be parallel to roadway grade.
 - For details of Precast Conc. Piles see Dwg. F-2-118.

PREPARED AND RECOMMENDED BY
Edward J. Kessler PE Lic. No. 3557 DATE 12/8/57
LOCKWOOD, KESSLER & BARTLETT, INC. CONSULTING ENGINEERS

H.G.S. LOWER BROWNSVILLE ROAD ABUTMENTS

LOCKWOOD, KESSLER & BARTLETT, INC. ENGINEERS & SURVEYORS SYOSSET, NEW YORK	MADE BY <i>B.J. AJN</i> TRACED BY <i>A.J.N.</i> CHECKED BY <i>BDL</i> DATE AUGUST 1957 DWG NO. 7007-18-6
--	--

SCALE AS SHOWN



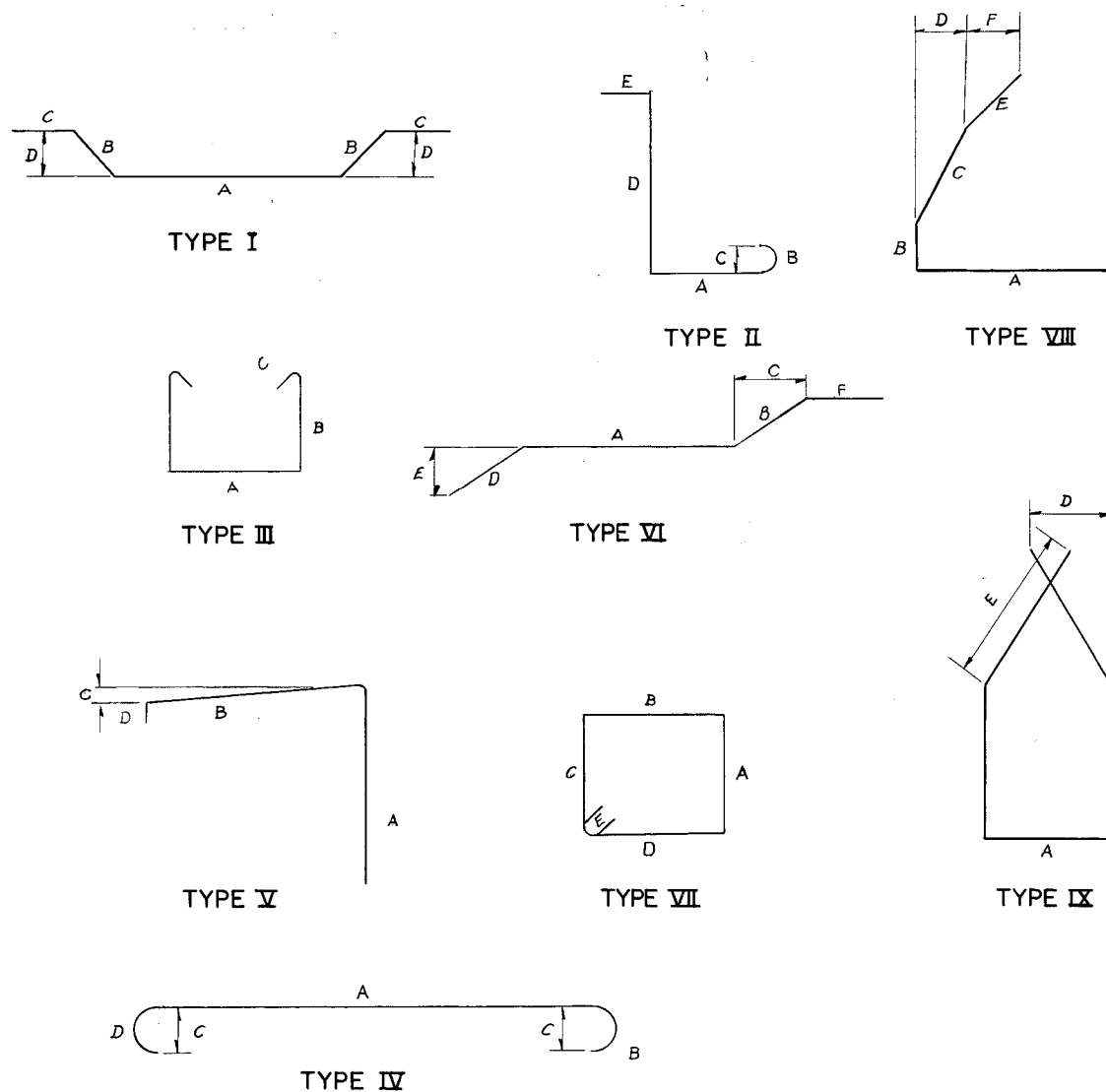
TYPICAL ELEVATION
Scale: 1/8" = 1'-0"

FED. RD. DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		1957	60	193
I -505(9)					

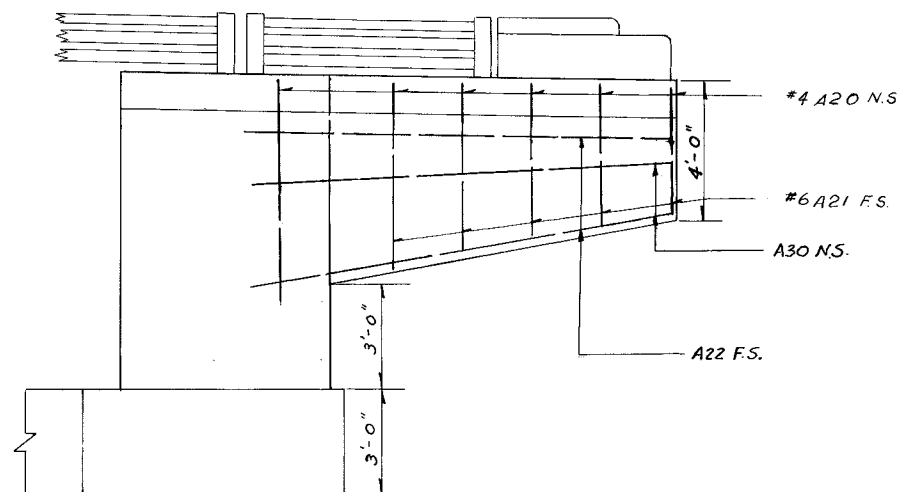
BAR SCHEDULE												
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	COMMENTS
S1	4	268	22'-7"	Str.								
S2	4	268	38'-0"	Str.								
S3	5	404	34'-7"	IV	33'-5"	0'-7"	0'-5"	0'-7"				
S4	5	404	33'-5"	Str.								To be bent in field - See Dwg LB2
S5	5	272	Varies	IV		0'-7"	0'-5"	0'-7"				A Varies From 2'-5" to 33'-5"
S6	5	272	Varies	Str.								Varies from 2'-5" to 33'-5"
S7	4	476	4'-8"	VI	2'-8"	1'-0"	0'-1"			1'-0"		
S8	4	476	4'-6"	III	1'-6"	1'-2"	0'-4"					
S9	4	704	6'-5"	II	1'-1"	0'-6"	0'-4"	4'-6"	0'-4"			
S10	4	336	4'-11"	II	1'-1"	0'-6"	0'-4"	3'-0"	0'-4"			
S11	4	40	33'-0"	Str.								
S12	4	12	34'-7"	Str.								
S13	4	8	31'-7"	Str.								
S14	4	40	37'-6"	Str.								
S15	4	20	40'-9"	Str.								
S16	6	144	9'-4"	VI	6'-0"	1'-8"	0'-9"	1'-8"	0'-9"			
S17	6	12	34'-5"	Str.								
S18	4	320	4'-10"	VII	1'-8"	0'-5"	1'-8"	0'-5"	0'-4"			
S19	5	616	9'-4"	VII	2'-10"	1'-6"	2'-10"	1'-6"	0'-4"			
S20	5	168	7'-2"	VII	1'-9"	1'-6"	1'-9"	1'-6"	0'-4"			
S21	5	168	Varies	VII	2'-10"		2'-10"		0'-4"	(56 Sets of 3) (B & D Varies From 0'-4" to 1'-6")		
S22	5	72	Varies	VII	1'-9"		1'-9"		0'-4"	(32 Sets of 3) (B & D Varies From 0'-4" to 1'-6")		
S23	4	160	6'-4"	III	1'-0"	2'-8"						
S24	5	112	13'-8"	IX	1'-6"	4'-4"			0'-9"	1'-9"		
S25	5	48	11'-0"	IX	1'-6"	3'-0"			0'-9"	1'-9"		
S26	6	112	10'-0"	VIII	6'-0"	0'-6"	2'-2"	0'-3"	1'-4"	0'-1"		
S27	6	48	7'-8"	VIII	4'-6"	0'-6"	2'-8"	0'-3"				
S28	4	680	2'-6"	IV	1'-6"	0'-6"	0'-4"	0'-6"				
S100	4	48	3'-10"	VII	0'-4"	1'-4"	0'-4"	1'-4"	0'-4"			
S101	4	96	4'-10"	VII	0'-4"	1'-10"	0'-4"	1'-10"	0'-4"			
S102	4	144	5'-4"	Str.								
S103	4	80	2'-0"	IV	1'-6"	0'-6"						
P1	11	12	38'-3"	I	27'-3"	5'-6"		1'-6"				
P2	11	12	38'-3"	Str.								
P3	11	24	25'-4"	I	21'-4"	2'-0"		2'-0"				
P4	11	84	13'-0"	Str.								
P6	9	96	13'-0"	Str.								
P7	9	102	9'-6"	Str.								
P8	4	192	8'-0"	VII	1'-0"	2'-8"	1'-0"	2'-8"	0'-4"			
P9	4	96	11'-4"	VII	2'-8"	2'-8"	2'-8"	2'-8"	0'-4"			
P10	4	12	38'-3"	I	27'-3"	5'-6"		1'-6"				
P12	4	84	Varies	VII		2'-7"		2'-7"	0'-4"	(A & C Vary 1'-10" to 2'-8") (12 Sets of 7 Each)		
P13	4	36		VII		2'-7"		2'-7"	0'-4"	(A & C Vary 1'-6" to 1'-10") (12 Sets of 3 Each)		
P15	4	78	3'-7"	IV	3'-0"	0'-7"	0'-5"					
P16	4	162	11'-2"	VII	2'-8"	2'-7"	2'-8"	2'-7"	0'-4"			
P17	4	6	11'-4"	X	1'-0"	3'-4"	2'-8"	3'-8"	0'-4"			
P18	11	48	23'-4"	I	19'-4"	2'-0"		2'-0"				
A1	6	4	43'-0"	Str.								
A2	6	4	38'-10"	Str.								
A3	6	4	34'-9"	Str.								
A4	6	20	7'-10"	Str.								
A5	6	24	6'-8"	Str.								
A6	6	60	7'-0"	Str.								
A7	6	4	5'-6"	Str.								
A8	6	10	38'-1"	VI	35'-0"	3'-0"	1'-5"					
A9	6	10	38'-0"	VI	32'-3"	3'-0"	1'-5"	2'-9"	1'-3"			
A10	6	82	10'-6"	Str.								
A11	4	10	7'-9"	VIII		5'-2"	2'-7"	3'-5"				
A12	6	18	6'-0"	Str.								
A13	4	30	10'-8"	VIII	4'-9"	3'-4"	2'-7"	3'-5"				
A14	6	24	7'-8"	Str.								
A15	6	12	8'-0"	Str.								
A16	4	10	9'-11"	VIII	5'-2"	4'-9"						
A17	6	24	12'-0"	Str.								
A18	6	24	5'-8"	Str.								
A19	6	16	5'-8"	VII	2'-6"	0'-8"						
A20	6	48	Varies	V	3'-0"	0'-0 3/4"	0'-6"					(A Varies 3'-8" to 5'-7") (4 Sets of 12)
A21	6	20	Varies	Str.								(Varies 3'-0" to 5'-0") (4 Sets of 5)
A22	6	48	15'-8"	Str.								
A23	4	24	2'-6"	Str.								
A24	4	16	2'-0"	Str.								
A25	4	16	4'-8"	Str.								
A26	4	8	3'-2"	Str.								
A27	6	4	41'-0"	Str.								
A28	4	8	11'-7"	Str.								
A29	4	8	12'-1"	Str.								
A30	6	12	15'-8"									

*Included in the bid price for precast, prestressed concrete bridge members

Note:
All Dimensions are out to out unless otherwise shown.



BAR BENDING DIAGRAMS



WINGWALL ELEVATION

PREPARED AND RECOMMENDED BY
Edward J. Kessler PE Lic. No. 3557 DATE 12/8 1957
LOCKWOOD, KESSLER & BARTLETT, INC.

H G S LOWER BROWNSVILLE ROAD
BAR SCHEDULE

LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS
SYOSSET NEW YORK

MADE BY C.O.M.
TRACED BY BDL
CHECKED BY BDL
DATE AUGUST 1957
DWG. NO. 7007-LB-7

SCALE