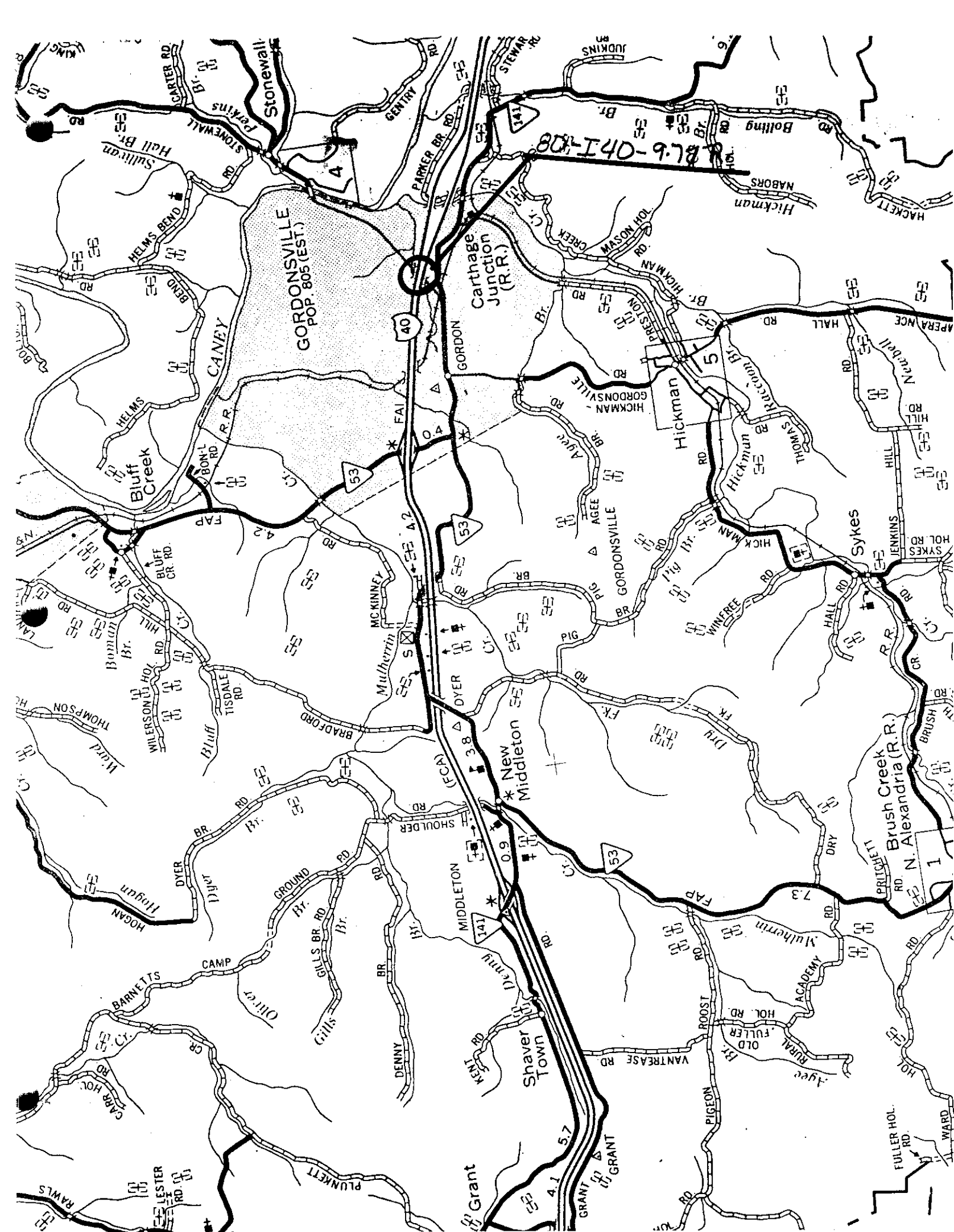




Bridge Maintenance Recommendations

Page No. _____

Page 1 of 1

Bridge Location No.: 80 - I0040 - 9.77 R

Co. Route Log Mile

Crossing: DRAINAGE CANAL & SR 264 *

Bridge Rating: GOOD

Inspection Cycle: 15

Inspection Date: 4/22/2003

Comments: *

Bridge Number: 80I00400019

County: Smith

Region: 03

District: 32

Maint.Resp.: 01

Spec.Case: 0

Co.Seq: 01

Maintenance Recommendations:

Maintenance Completed
By / Date

POST VERTICAL CLEARENCE

COMPLETION NOTIFICATION: RETURN WITHIN 6 MONTHS OF INSPECTION DATE.

INITIAL AND DATE RECOMMENDATIONS WHEN COMPLETED.

MAINTENANCE ACTIVITIES ARE COMPLETED (DATE) _____ BY _____

MAINTENANCE ACTIVITIES ARE PARTIALLY COMPLETED (DATE) _____ BY _____

MAINTENANCE ACTIVITIES ARE INCOMPLETE, SCHEDULED FOR (DATE) _____

EXPLANATIONS AND COMMENTS:

CONTACT:

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

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

Bridge Maintenance Recommendations

Page No. _____

Page 1 of 1

Bridge Location No.: 80 - I0040 - 9.77 R

Co. Route Log Mile

Crossing: DRAINAGE CANAL & SR 264 *

Bridge Rating: GOOD

Inspection Cycle: 15

Inspection Date: 6/11/01

Comments: *

Bridge Number: 80I00400019

County: Smith

Region: 03

District: 32

Maint.Resp.: 01

Spec.Case: 0

Co.Seq: 01

Maintenance Recommendations:

Maintenance Completed
By / Date

REPAIR ASPHALT AT JOINT ABUT. #1 & 2

POST VERTICAL CLEARENCE

COMPLETION NOTIFICATION: RETURN WITHIN 6 MONTHS OF INSPECTION DATE.

INITIAL AND DATE RECOMMENDATIONS WHEN COMPLETED.

MAINTENANCE ACTIVITIES ARE COMPLETED (DATE) _____ BY _____

MAINTENANCE ACTIVITIES ARE PARTIALLY COMPLETED (DATE) _____ BY _____

MAINTENANCE ACTIVITIES ARE INCOMPLETE, SCHEDULED FOR (DATE) _____

EXPLANATIONS AND COMMENTS:

CONTACT:

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

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

SMITH COUNTY INTERSTATE & STATE ROUTES

VERTICAL CLEARANCES LESS THAN 14'- 6"

JUNE 21, 2000

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

MEMORANDUM

DATE: 1-25-99

TO: Mr. Wayne Seger
Civil Engineering Manager I

FROM: Mr. Phillip Shraybman
Structural Specialist Supervisor II

SUBJECT: THE ADDITION OF 3.25" OF ASPHALT TO THE FOLLOWING

STRUCTURES(S): 80-I40-8.94/ CSX RR AND A COUNTY ROAD WBL & EBL
80-I40-9.77/ SR 264 AND A BRANCH WBL & EBL
80-I40-10.37/ HICKMAN CREEK AND NFA A156 WBL
80-I40-10.45/ HICKMAN CREEK AND NFA A156 EBL
80-I40-13.61/ CANEY FORK RIVER WBL & EBL
80-I40-15.43/ CANEY FORK RIVER WBL
80-I40-15.49/ CANEY FORK RIVER EBL
80-I40-16.14/ CANEY FORK RIVER EBL
80-I40-16.18/ CANEY FORK RIVER WBL
80-I40-17.13/ NFA A431 AND CANEY FK. RV.WBL & EBL

We have recently evaluated the above bridge(s) and have determined that the addition of the 3.25" of asphalt will be acceptable.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION AND REPAIR OFFICE
SUITE 1200, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0338

GERALD F. NICELY
COMMISSIONER

PHIL BREDESEN
GOVERNOR

March 6, 2009

MEMORANDUM

TO: Mr. Ray McClelland
Regional Bridge Engineer

FROM: Wayne J. Seger, Civil Engineering Manager 2 *PJS for*

SUBJECT: Attached is the newly added Repair List along with Supplemental Evaluation Findings for the following State maintained bridge in Smith County :

Records to be added

<u>Repair List Number</u>	<u>Bridge Loc. Number</u>	<u>Fed. Bridge ID Number</u>	<u>Crossing</u>
2	80-I0040-09.77-R	80I00400019	Drainage Canal & SR-264

Supplemental Evaluation Findings

<u>Repair List Number</u>	<u>Bridge Loc. Number</u>	<u>Fed. Bridge ID Number</u>	<u>Crossing</u>
2	80-I0040-09.77-R	80I00400019	Drainage Canal & SR-264

PJS: pjs

cc: Mr. Terry Mackie
Mr. Phillip Shraybman

BRIDGE MAINTENANCE RECOMMENDATIONS

COUNTY: SMITH

LOCATION: 80-I0040-09.77-R

CO. SEQ.: 1 SPEC. CASE: 0

MILEPOST: 259.84

CROSSING: DRAINAGE CANAL & SR 264

FED. BRIDGE NO.: 80I00400019

MAINT. DIST.: 80

Tennessee Department
of Transportation

REPAIR LIST NO.: 2

DATE ADDED: 03/06/2009

REVISED:

FACILITY CARRIED:	I40	NUMBER OF MAIN SPANS:	3
HIGHWAY SYSTEM:	01-INTERSTATE RURAL	NUMBER OF APPROACH SPANS:	0
BRIDGE WIDTH (CURB TO CURB):	41 FT 11 IN	BRIDGE LENGTH (FT):	168
BRIDGE WIDTH (OUT TO OUT):	43 FT 11 IN	MAXIMUM SPAN LENGTH (FT):	67
APPROACH ROADWAY (W/SHOULDERS):	41 FT 11 IN	SKEW ANGLE (DEGREES):	53
MAINTAINED BY: STATE HIGHWAY AGENCY			
MAIN SPAN MATERIAL: PRESTRESSED CONCRETE CONTINUOUS			
MAIN SPAN DESIGN TYPE: BOX BEAM OR GIRDERS - SINGLE OR SPREAD			
APPROACH SPAN MATERIAL: OTHER OR NOT APPLICABLE			
APPROACH SPAN DESIGN TYPE: OTHER OR NOT APPLICABLE			
INSPECTION DATE:	05/22/2007	GENERAL CONDITION:	GOOD
EVALUATION DATE:	05/23/2007	STRUCTURALLY DEFICIENT:	NO
PPRM PIN NUMBER:			
H TRUCK RATING @ INV.:	20 TONS	SUFFICIENCY RATING:	93.8

SUGGESTED ROUTINE MAINTENANCE AND COMMENTS

REPAIR ASPHALT AT JOINT ABUTMENT 1 & 2

UNDERPASS SUBSTRUCTURE PROTECTION GUARDRAILS ARE NON-EXISTENT

GENERAL COMMENTS:

ALL BEAMS IN SPAN NO.2 WERE DAMAGED FROM A COLLISION ON 2/17/2009. REPAIR ALL DAMAGED BEAMS AS SOON AS POSSIBLE TO PREVENT FURTHER DETERIORATION.

SMITH COUNTY
SUPPLEMENTAL EVALUATION FINDINGS FOR
STATE MAINTAINED HIGHWAY BRIDGE

Date: Mar 06, 2009

Repair List No: 2

Bridge No.: 80I00400019

Route No.: I0040 (I40)

Log Mile: 9.77

Crossing: DRAINAGE CANAL & SR 264

Supplemental Recommendation(s):

ALL BEAMS IN SPAN NO.2 WERE DAMAGED FROM A COLLISION ON 2/17/2009. REPAIR ALL DAMAGED BEAMS AS SOON AS POSSIBLE TO PREVENT FURTHER DETERIORATION.

NOTE: This Form is to be used in conjunction with the current Bridge Maintenance Recommendations pertaining to this structure.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

Revised 06/15/2000

Bridge Number: 80I004000191
(Includes Item 5A)

Feature Intersected: DRAINAGE CANAL & SR 264

County: 80
Route: I0040
Special Case: 0
County Sequence: 01
Log Mile: 9.77

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>06/11/2001</u> <u>4 122 1 03</u>	N NOT APPLICABLE
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. _____ FT. _____ IN.	9 EXCELLENT CONDITION
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. _____ FT. _____ IN.	8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
36	TRAFFIC SAFETY FEATURES		7 GOOD CONDITION - SOME MINOR PROBLEMS.
	Br. Rail Trans. Appr. Rail Appr. Rail Ends		6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
	1 1 1 1		5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
41	STRC OPEN/CLOSED/POSTED	A	4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
	A K P		3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOUSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
58	DECK	7	2 CRITICAL CONDITION - ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.
59	SUPERSTRUCTURE	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.
60	SUBSTRUCTURE	8	0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.
61	CHANL/CHANL PROTECTION	N	
62	CULVERT AND RETAIN WALL	N	
71	WATERWAY ADEQUACY	N	
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	8	
521	OVERALL CONDITION (Circle One)		
	<u>GOOD</u> FAIR POOR CRITICAL		
	<u>Martin Daniel</u>	<u>4 122 1 03</u>	
	TEAM LEADER SIGNATURE	REVIEW DATE	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

Revised 06/15/2000

Bridge Number: 80I004000192
(Includes Item 5A)

Feature Intersected: I40 / SR 264 STONEWALL R

County: 80

Route: SR264

Special Case: 0

County Sequence: 01

Log Mile: 5.55

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	<u>06/11/2001</u> <u>4 122 103</u>	515 (A) TYPE UNDERPASS BARRIER None Exists but Needed
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	14 FT. 3 IN. ____ FT. ____ IN.	Revised Barrier Type
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	14 FT. 3 IN. <u>14</u> FT. <u>3</u> IN.	(B) ADEQUACY OF BARRIER OR RAIL 0
47	TOTAL HORIZONTAL UNDERCLEARANCE	55 FT. 9 IN. ____ FT. ____ IN.	(C) ADEQUACY OF TRANSITIONS 0
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: <u>H</u> R	<u>14</u> FT. <u>3</u> IN.	(D) ADEQUACY OF TERMINALS 0
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: <u>H</u> R	<u>7</u> FT. <u>0</u> IN.	554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING 99 FT. 99 IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	<u>0</u> FT. <u>0</u> IN.	____ FT. ____ IN.
521	OVERALL CONDITION (Circle One) <u>GOOD</u> FAIR POOR CRITICAL		HEIGHT POSTED AT BOTH APPROACHES? YES [] NO [] N/A []
555	COMMENTS		

Martin Daniel
TEAM LEADER SIGNATURE

4 122 103
REVIEW DATE



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

Revised 06/15/2000

Bridge Number: 80I004000191
(Includes Item 5A)

Feature Intersected: DRAINAGE CANAL & SR 264

County: 80

Route: 10040

Special Case: 0

County Sequence: 01

Log Mile: 9.77

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>06/11/1999</u>	
		<u>6 / 11 / 01</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> <u>1</u> <u>1</u> <u>1</u>		
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	8	
60	SUBSTRUCTURE	8	
61	CHANL/CHANL PROTECTION	N	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.
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)		
	<u>GOOD</u> FAIR POOR CRITICAL		0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.
	<u>Martin Daniel</u>	<u>6 / 11 / 01</u>	
	TEAM LEADER SIGNATURE	REVIEW DATE	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

Revised 06/15/2000

Bridge Number: 801004000192
(Includes Item 5A)

Feature Intersected: I40 / SR 264 STONEWALL R

County: 80
Route: SR264
Special Case: 0
County Sequence: 01
Log Mile: 5.55

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	<u>06/11/1999</u> <u>6/11/101</u>	515 (A) TYPE UNDERPASS BARRIER None Exists but Needed
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	<u>14</u> FT. <u>3</u> IN. ____ FT. ____ IN.	Revised Barrier Type
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	<u>14</u> FT. <u>4</u> IN. <u>14</u> FT. <u>5</u> IN.	(B) ADEQUACY OF BARRIER OR RAIL 0
47	TOTAL HORIZONTAL UNDERCLEARANCE	<u>55</u> FT. <u>9</u> IN. ____ FT. ____ IN.	(C) ADEQUACY OF TRANSITIONS 0
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: (H) R	<u>14</u> FT. <u>5</u> " IN.	(D) ADEQUACY OF TERMINALS 0
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: (H) R	<u>7</u> FT. <u>0</u> IN.	554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING 99 FT. 99 IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	<u>0</u> FT. <u>0</u> IN.	____ FT. ____ IN.
521	OVERALL CONDITION (Circle One) <u>GOOD</u> FAIR POOR CRITICAL		HEIGHT POSTED AT BOTH APPROACHES? YES [] NO [X] N/A []

555 COMMENTS

Martin Daniel
TEAM LEADER SIGNATURE

6/11/101
REVIEW DATE



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

County: 80

Route: 10040

Special Case: 0

County Sequence: 1

Log Mile: 9.77

Bridge Number: 80I004000191
(Includes Item 5A)

Feature Intersected: DRAINAGE CANAL & SR 264

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	COMMENTS
90	INSPECTION DATE	5/1/97	RATINGS FOR CODING ITEMS 58, 59, 60 AND 62
		6 1 1 1 9 9	N NOT APPLICABLE
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN.	9 EXCELLENT CONDITION
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN.	8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS)	14 FT. 3 IN.	7 GOOD CONDITION - SOME MINOR PROBLEMS.
	Circle One: H R N	14 FT. 5 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		4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
	1 1 1 1		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.
41	STRC OPEN/CLOSED/POSTED	A	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.
	A K P		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.
58	DECK	7	0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.
59	SUPERSTRUCTURE	8	
60	SUBSTRUCTURE	8	
61	CHANL/CHANL PROTECTION	N	
62	CULVERT AND RETAIN WALL	N	
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	8	
	OVERALL CONDITION (Circle One)		
	GOOD FAIR POOR CRITICAL		
	SIGNATURE	DATE	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

County: 80

Route: SR264

Special Case: 0

County Sequence: 1

Log Mile: 5.55

Bridge Number: 80I004000192
(Includes Item 5A)

Feature Intersected: 140 / SR 264 STONEWALL R

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	5/1/97 <u>06/11/99</u>	(A) TYPE UNDERPASS BARRIER None Exists but Needed
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	14 FT. 3 IN. ____ FT. <u>5</u> IN.	Revised Barrier Type
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	14 FT. 4 IN. ____ FT. <u>5</u> IN.	(B) ADEQUACY OF BARRIER OR RAIL 0
47	TOTAL HORIZONTAL UNDERCLEARANCE	55 FT. 9 IN. <u>53</u> FT. <u>0</u> IN.	(C) ADEQUACY OF TRANSITIONS 0
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE	<u>H</u> 7 FT. 10 IN.	(D) ADEQUACY OF TERMINALS 0
	Circle One: <u>H</u> R N	____ FT. <u>0</u> IN.	VERTICAL CLEARANCE LISTED ON HEIGHT POSTING SIGNS
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	0 FT. 0 IN. ____ FT. ____ IN.	99 FT. 99 IN. ____ FT. ____ IN.
OVERALL CONDITION (Circle One)			
<u>GOOD</u> FAIR POOR CRITICAL		HEIGHT POSTED AT BOTH APPROACHES? YES [] NO ☒ N/A []	

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

COMMENTS

J. H. H.
SIGNATURE

6/11/99
DATE

Bridge No.: 80 — 10040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No.: 80I00400019 Date:

April 22, 2003

PIC1



VIEW ACROSS DECK FROM A-APPR

Bridge No.: 80 — 10040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No 80100400019

Date:

April 22, 2003

PIC2



BRIDGE NO. AT ABUTMENT # 1

PIC3



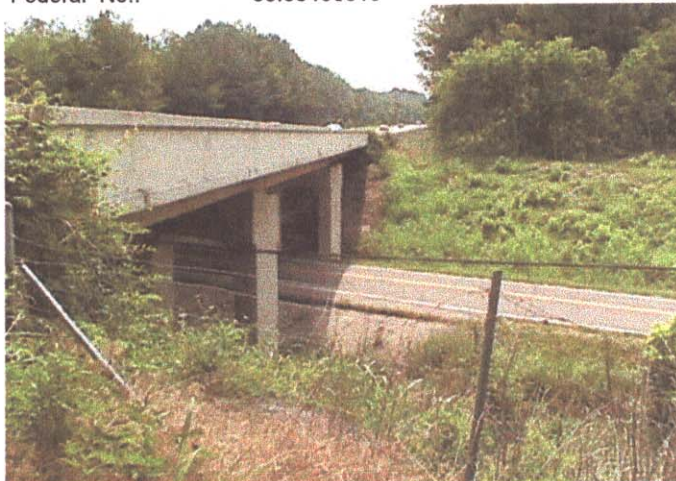
RIGHT SIDE VIEW W/CLEARANCE SIGN 14' 2"

Bridge No.: 80 — 10040 — 0977
Crossing: DRAINAGE CANAL & SR 264 *
Federal No.: 80I00400019

Date:

June 11, 2001

PIC1



RIGHT SIDE VIEW

Bridge No.: 80 — I0040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No 80I00400019

Date:

June 11, 2001

PIC2



VIEW ACROSS DECK

PIC3



POTHOLE @ JOINT B-APPR-TYPICAL

Bridge No.: 80 — 10040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No.: 80I00400019

Date:

June 11, 2001

PIC4



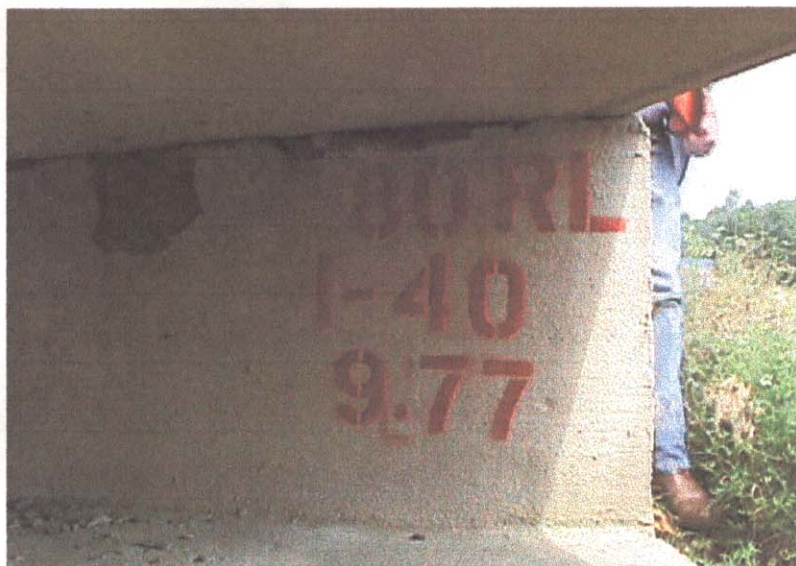
BRIDGE NO. AT ABUTMENT # 1

Bridge No.: 80 — 10040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No.: 80I00400019

Date:

June 11, 1999

PIC4



BRIDGE NO. AT ABUTMENT # 1

PIC5



ABUTMENT TYPICAL

Bridge No.: 80 — 10040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No.: 80I00400019

Date:

June 11, 1999

PIC1



APPROACH #1

Bridge No.: 80 — 10040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No 80I00400019

Date:

June 11, 1999

PIC2



APPROACH #2

PIC3



ACROSS TOP OF DECK

Bridge No.: 80 — 10040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No.: 80I00400019

Date: June 11, 1999

PIC6



BOTTOM OF DECK

PIC7



PIER TYPICAL

Bridge No.: 80 — I0040 — 0977
Crossing:: DRAINAGE CANAL & SR 264 *
Federal No.: 80I00400019

Date:

June 11, 1999

PIC8



RIGHT SIDE VIEW

PIC9



ABUTMENT #2 CRACK

Page No.____

Field Report No. 16 Date 4-22-03
Previous Report No. 15 Date 6/11/2001
Plans: yes

Bridge Location No.	80	-	10040	-	9.77	R
	Co.		Route		Log Mile	

Structure Type HBB FRACTURE CRITICAL: *NO*

INSPECTORS

Hunter	Thompson
Daniel	
Crutcher	
Waller	

Comments

G	
G	
G	
G	
G	
G	
G	
G	
G	
N/V	
G	
G	
N/A	

3 or more Axles.. / Tons

BRIDGE RATING: **GOOD**

SUMMARY
80-I40-9.77 RT
4/22/2003

I40/SR264
3 Span/H.B.B.

This bridge was inspected and found to be in **good** condition. Approach alignment and approach areas are good. The approach guardrail and bridge rail are standard type and good. There are no paddleboards.

The wearing surface is good, along with parapet and drains. Joints are good. Joint leakage is also good. The bottom deck is concrete deck panels and in good condition. The bearing devices and superstructure elements are good. Sub-structure units are good, but did show a 1/4" open vertical crack in #2 cap. There is also 1 1/4" deep breakout in abutment #2 backwall. Underpass guardrail is not in place making it sub-standard type at this time.

Martin Daniel

ROUTINE BRIDGE INSPECTION REPORT

Page No. _____

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

Field Report No. 14 Date 6/11/99
Previous Report No. 15 Date 6-11-01
Plans: yes

Bridge No. 80100400019
Eleven Digit No.

Bridge Location No. 80 - 10040 - 9.77 R
Co. Route Log Mile

I 40
Road Name

over DRAINAGE CANAL & SR 264 *
Crossing

Indepth Insp. Req'd: no
(If yes itemize limits under comment)

Structure Type HBB

FRACTURE CRITICAL: no

FEATURE CHANGES:

Wearing Surface _____ Type _____ Depth _____ (in.)
Bridge Rail _____ Describe changes:
Approach Rail _____

CLEARANCE CHANGES:

(If yes make changes below)

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

INSPECTORS

Daniel
Crutcher
Waller
Thompson

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

Comments

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

G	potholes @ joint
G	
G	
G	
G	
G	
G	
G	
G	
G	
N/V	
G	
—	
—	

UNDERWATER INSPECTION

To Be Performed By: N/A

Date Underwater Insp. —

BRIDGE is: open

COMMENTS:

Weight Limit Posted no

Gross..... 2 Tons

2 Axle..... 2 Tons

3 or more Axles.. 2 Tons

Supervising Bridge Inspector:

Martin Daniel

BRIDGE RATING: **GOOD**

SUMMARY
80-I40-9.77 RT
6-11-01

I40/SR264
3 Span/H.B.B.

This bridge was inspected and found to be in **good** condition. Approach alignment and approach areas are good. The approach guardrail and bridge rail are standard type and good. There are no paddleboards.

The wearing surface is good, along with parapet and drains. There are potholes at the joint at abutment #1 and 2. Joints are good. Joint leakage is also good. The bottom deck is concrete deck panels and in good condition. The bearing devices and superstructure elements are good. Sub-structure units are good, but did show a 1/4" open vertical crack in #2 cap. There is also 1 3/4" deep breakout in abutment #2 backwall. Underpass guardrail is not in place making it sub-standard type at this time.

Martin Daniel

BRIDGE INSPECTION REPORT

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

FIELD REPORT NO. 14 DATE 6-11-99
REVIOUS REPORT NO. 13 DATE 5-6-97
PLANS ---- YES ☒ NO ☐

BRIDGE NO. 80I00400019
ELEVEN DIGIT NO.

BRIDGE LOC. NO. 80 - I40 - 9.77 Rt
CO. ROUTE LOG MILE

I40 OVER SR 264 # Branch
ROAD NAME FEATURE INTERSECTED

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

☐ YEAR WIDENED 1985 ESTIMATED OR ACTUAL
☐ ☒

YEAR REHABILITATED 1985 ESTIMATED OR ACTUAL
☐ ☒

FEATURES

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

BRIDGE SKEW 53° LT ☒ RT ☐

INSPECTORS

STRUCTURE TYPE H66 NO. SPANS 3
Main Span Main Span

STRUCTURE TYPE - NO. SPANS -
Approach Spans Approach Spans

MAXIMUM SPAN LENGTH 67' TOTAL LENGTH 168.5'

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

WIDTHS
DECK OUT-TO-OUT 44'
ROADWAY CURB/CURB 42'
SIDEWALK - RT - LT
*APPROACH ROADWAY 24'
APPR. SHLD. 10 RT 4 LT
*DOES NOT INCLUDE SHOULDER

CLEARANCES
MIN. VERTICAL OVER DECK -
MIN. VERTICAL UNDER CL 14'-5"
MIN. LATERAL UNDER CL 8' RT
- LT

UNDERWATER INSPECTION

INSPECTION PERFORMED BY:
DOT FIELD TEAM ☐ DATE _____
CONTRACT DIVERS ☐ DATE _____
NONE REQUIRED ☒

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

CHANGE IN STRUCTURAL CONDITION YES ☐ NO ☒
MAJOR REPAIRS MADE YES ☐ NO ☒

FRACTURE CRITICAL
DETAILS: YES ☐ NO ☒
IF YES, INCLUDE BIR 3.9

COMMENTS: _____

Gilbert Wayne Hunter

SUPERVISING BRIDGE INSPECTOR

BRIDGE RATING ☒ ☐ ☐ ☐

GOOD FAIR POOR CRITICAL

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

BRIDGE LOC. NO. 80-140-977Rt
CO. ROUTE L.M.

DATE: 6-11-99

PERFORMANCE EVALUATION

Time of day inspected 9:45 Weather conditions Overcast 80°

Vehicles observed Tractor trailer & passenger type

<u>LIVE LOAD BEHAVIOR</u>	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
Substructure			
Horiz. & Vert. Defl. - - -	[]	[X]	
Vibration - - - - -	[]	[X]	
Superstructure			
Horiz. & Vert. Defl. - - -	[]	[X]	
Vibration - - - - -	[]	[X]	

APPROACH

	<u>G</u>	<u>F</u>	<u>P</u>	<u>C</u>	
Alignment	(G)	F	P	C	
Slab	G	F	P	C	<u>NA</u>
Joints	G	F	P	C	<u>NK</u>
Pavement	(G)	F	P	C	<u>New Ac overlay</u>
Embankment	(G)	F	P	C	
Drains	(G)	F	P	C	

TRAFFIC SAFETY FEATURES

	<u>G</u>	<u>F</u>	<u>P</u>	<u>C</u>	<u>STANDARD</u>	<u>SUB-STANDARD</u>	
Bridgerailing	(G)	F	P	C	[X]	[]	
Transitions	(G)	F	P	C	[X]	[]	
Guardrail	(G)	F	P	C	[X]	[]	
Guardrail Terminal	(G)	F	P	C	[X]	[]	

SIGNING

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

Other Signs or Plaques _____

Comments Regarding Any Problems With Signing _____

Other Recommendations _____

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

BRIDGE LOC. NO. 80-I40-9.77Rt
CO. ROUTE L.M.

DATE: 6-11-99

DECK

COMMENTS

WEARING SURFACE	(G)	F	P	C	<u>New AC. overlay</u>
DECK - STRUCTURAL	(G)	F	P	C	
CONDITION					
CURBS	G	F	P	C	<u>NA</u>
MEDIAN	G	F	P	C	<u>NA</u>
SIDEWALKS	G	F	P	C	<u>NA</u>
PARAPET	(G)	F	P	C	
RAILING	G	F	P	C	<u>NA</u>
PAINT	(G)	F	P	C	
DRAINS	(G)	F	P	C	
LIGHTING STD'S	G	F	P	C	<u>NA</u>
UTILITIES	G	F	P	C	<u>NA</u>
JOINT LEAKAGE	(G)	F	P	C	
EXPANSION JOINTS	G	F	P	C	<u>NA</u>

SUPERSTRUCTURE

COMMENTS

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

TEXTURE COAT

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

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

COMMENTS: _____

RECOMMENDATIONS: _____

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

BRIDGE LOC. NO. 80 - I40 - 9.77 Rt.
CO. ROUTE L.M.

DATE: 6-11-99

SUBSTRUCTURE

ABUTMENTS

COMMENTS

CAPS	(G)	F	P	C	Abut #1 has two piers with exposed rebar & Abut #2 open conc.
BREASTWALL	G	F	P	C	NA
WINGS	(G)	F	P	C	
BACKWALL	(G)	F	P	C	
PLUMB	(G)	F	P	C	
FOOTING	G	F	P	C	NV
PILES	G	F	P	C	NV
EMBANKMENT	(G)	F	P	C	
BEARING SURFACE	(G)	F	P	C	
BEARINGS	(G)	F	P	C	
SLOPE PAVING	(G)	F	P	C	

PIERS

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

CAPS	(G)	F	P	C	
COLUMNS	(G)	F	P	C	
PLUMB	(G)	F	P	C	
FOOTINGS	G	F	P	C	NV
PILES	G	F	P	C	NV
BEARING SURFACE	(G)	F	P	C	
BEARINGS	(G)	F	P	C	

SCOUR CONDITION NONE [X] _____

RECOMMENDATIONS: _____

STREAM CROSSING: DRAINAGE canal

- I. 1. Type of bed material? _____
2. Has the channel shifted? YES [] NO [] NOT APPARENT []
3. Condition of rip-rap? G F P C Est. % failed _____ N/A []
4. Overall condition of channel? G F P C
5. Item 61 - Code values 0 thru 9 according to the recording and coding guide currently in effect: _____
6. Underwater diver inspection recommended? YES [] NO []
If yes, why? _____

- II. Channel and bank stability conditions: (check if applicable)
1. Steep bank - Failures upstream [] downstream [] conditions
 2. Moderate bank erosion []
 3. Bank (a) low growth [] (b) large timber []
Vegetation (c) dead trees [] (d) clear banks []
 4. Sediment or gravel accumulation: YES [] NO [] UNKNOWN []
 5. Channel altered or straightened: YES [] NO [] UNKNOWN []
 6. Stable conditions: (a) live growth [] (b) bedrock []
(c) boulders [] (d) flat slopes []
(≤2:1)

- III. Waterway adequacy and debris characteristics: (check if applicable)
1. Bridge deck elevations:
 - (a) level with approach roadway []
 - (b) higher than approach roadway. []
 - (c) roadway approach ≥ 0.6 m above natural ground line. . []
 2. Abutment encroaches into channel []
 3. Large scour (blowhole) under bridge. []
 4. Indications that flood waters overtop bridge:
NO [] YES [] OCCASIONALLY [] FREQUENTLY [] UNKNOWN []
 5. Debris characteristics:
 - (a) debris present YES [] NO []
 - (b) debris likely to accumulate: YES [] NO []
 - (c) dead trees upstream: [] or downstream: []

IV. Comments: _____

* * * * *

SPECIAL INSPECTION DATA - FOR REASONS OTHER THAN FC OR SCOUR

- I. Does this bridge need a special inspection? YES [] NO []
- II. Reason for special inspection: _____
- _____
- _____

NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2) DECIMAL PLACES IN METERS.

SUMMARY
80-I40-9.77 RT
6-11-99

I40/SR264
3 Span/H.B.B.

This bridge was inspected and found to be in good condition. Approach alignment and approach areas are good. The approach guardrail and bridge rail are standard type and good. There are no paddleboards.

The wearing surface is good, along with parapet and drains. Joints are good. Joint leakage is also good. The bottom deck is concrete deck panels and in good condition. The bearing devices and superstructure elements are good. Sub-structure units are good, but did show a 1/4" open vertical crack in #2 cap. There is also 1 3/4" deep breakout in abutment #2 backwall. Underpass guardrail is not in place making it sub-standard type at this time.

Gilbert Hunter

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

CURRENT FIELD REPORT NO. 14
PREVIOUS FIELD REPORT NO. 13

DATE 6-11-98
DATE 5-6-97

INSPECTION REPORT FOR UNDERPASS ROUTE

BRIDGE NO. 80I00400019
ELEVEN DIGIT NUMBER

UNDERPASS LOC. NO. 80 - 264 - 5.55
CO. RTE. L.M.

80 - I40 - 9.77^{RT} OVER 80 - 264 - 5.55
CO. RTE. L.M. CO. RTE. L.M.

STRUCTURE NAME (IF NAMED)

COUNTY Smith

YEAR CONSTRUCTED 1959

YEAR WIDENED '85

YEAR REHABILITATED '85

ESTIMATED [] ACTUAL [X]

GEOMETRIC FEATURES UNDER BRIDGE

DIVIDED HIGHWAY - - - - LEFT RDWY [] RIGHT RDWY [] N.A. [X]
TYPE OF WEARING SURFACE - - - - CONCRETE [] ASPHALT [X] GRAVEL []
WIDTH OF APPROACH TRAVELED ROADWAY 19 FT. (DOES NOT INCLUDE SHOULDERS)
WIDTH OF MEDIAN IF DIVIDED HIGHWAY — FT.
APPROACH SHOULDER WIDTH 4 FT. (RT.) 4 FT. (LT.)
*HORIZONTAL CLEARANCE UNDER BRIDGE 53 FT. 0 IN.
*DISTANCE BETWEEN PIER PROTECTION GUARDRAIL AND
SUBSTRUCTURE — FT. (RT.) — FT. (LT.)
*WIDTH OF SIDEWALK UNDER BRIDGE — FT. (RT.) — FT. (LT.)
*MINIMUM VERTICAL CLEARANCE 14 FT. 5 IN.

*SHOW ON SKETCH

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE

STANDARD SUB-STANDARD

PIER PROTECTION RAILING
OR PARAPET

G F P (C)

[]

[] NON EXIST [X]

APPROACH GUARDRAIL
TRANSITIONS

G F P (C)

[]

[] NON EXIST [X]

APPROACH GUARDRAIL

G F P (C)

[]

[] NON EXIST [X]

APPROACH GUARDRAIL
TERMINAL

G F P (C)

[]

[] NON EXIST [X]

SIGNING FOR UNDERPASS ROUTE

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

INSPECTORS

1. HUNTER
2. LIKELLO
3. DANIEL
4. CRITCHER
5. WALLER
6. —

UNDERPASS LOC. NO. 80 - I40 - 9.77¹
CO. RTE. L.M.

COMMENTS REGARDING ANY PROBLEM WITH SIGNING

BRIDGE SKEW _____
STRUCTURE TYPE _____

NO. SPANS _____
MAIN TYPE _____

STRUCTURE TYPE

NO.	SPANS	APPROACH TYPE
1	10	10
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	10	10
9	10	10
10	10	10
11	10	10
12	10	10
13	10	10
14	10	10
15	10	10
16	10	10
17	10	10
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84	10	10
85	10	10
86	10	10
87	10	10
88	10	10
89	10	10
90	10	10
91	10	10
92	10	10
93	10	10
94	10	10
95	10	10
96	10	10
97	10	10
98	10	10
99	10	10
100	10	10

MAXIMUM SPAN LENGTH _____ FT.

TOTAL LENGTH FT.

WIDTH OF BRIDGE OUT-TO-OUT

FT. (RT. < TO L OF BRIDGE)

WIDTH OF BRIDGE ALONG SKEW

FT. (IF UNABLE TO MEASURE AT RT.) TO
L OF BRIDGE)

NUMBER OF LANES/TRACKS ON BRIDGE 2

BRIDGE CONDITION

G F P C

DOES POTENTIAL EXIST FOR ELEMENTS FROM BRIDGE FALLING ON ROADWAY
BENEATH? YES [] NO [X]

DOES POTENTIAL EXIST BECAUSE OF DETERIORATED CONDITION FOR FAILURE
OF MAJOR MEMBERS? YES [] NO [☒]

COMMENT ON ANY CONDITIONS OF BRIDGE THAT WOULD EFFECT ROADWAY BENEATH

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

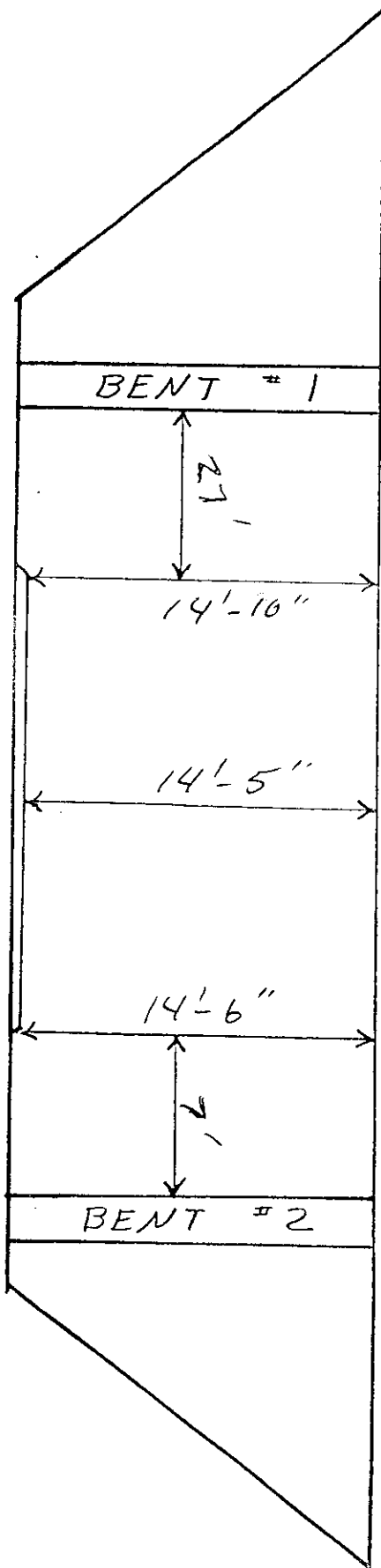
MINIMUM PICTURES REQUIRED

1. ELEVATION VIEW OF BRIDGE ON BOTH SIDES SHOWING UNDERPASS
2. VIEW SHOWING BOTH APPROACHES TO BRIDGE
3. VIEW SHOWING SAFETY FEATURES
4. VIEW SHOWING ANY PROBLEMS

6-10-99 Jm

Clearance Sketch

80-I40-9.77 RT. →



80-264-~~11~~
555

4' SA

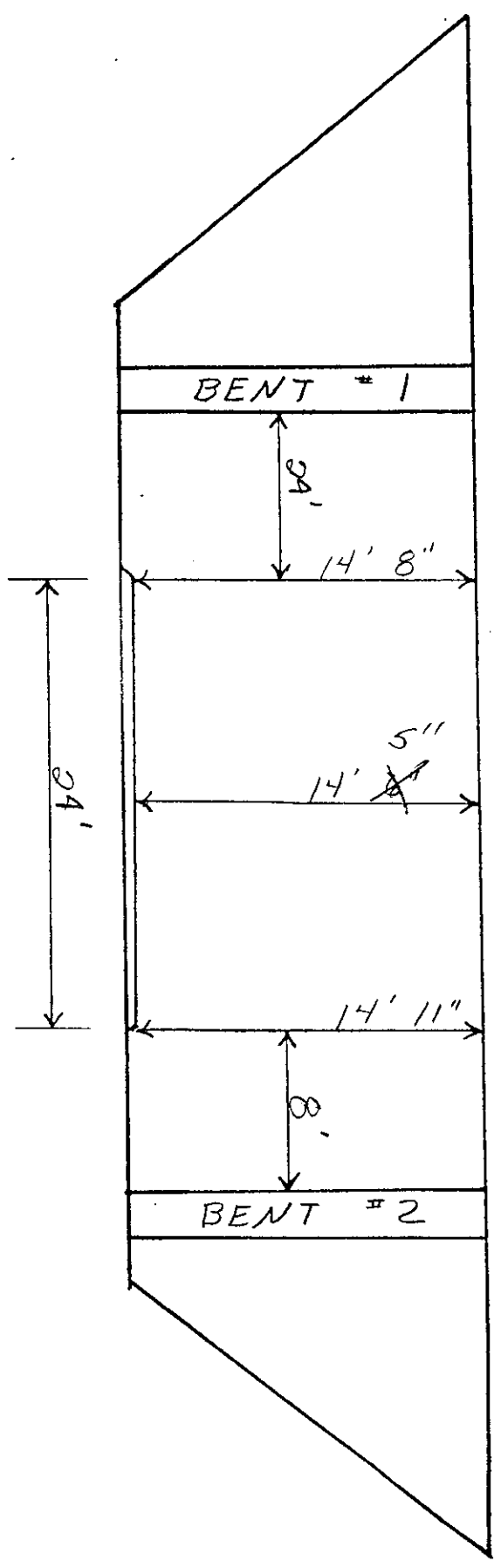
MAR 20 1992

~~10-20-95MP~~

8-22-95MP

5-6-97gm

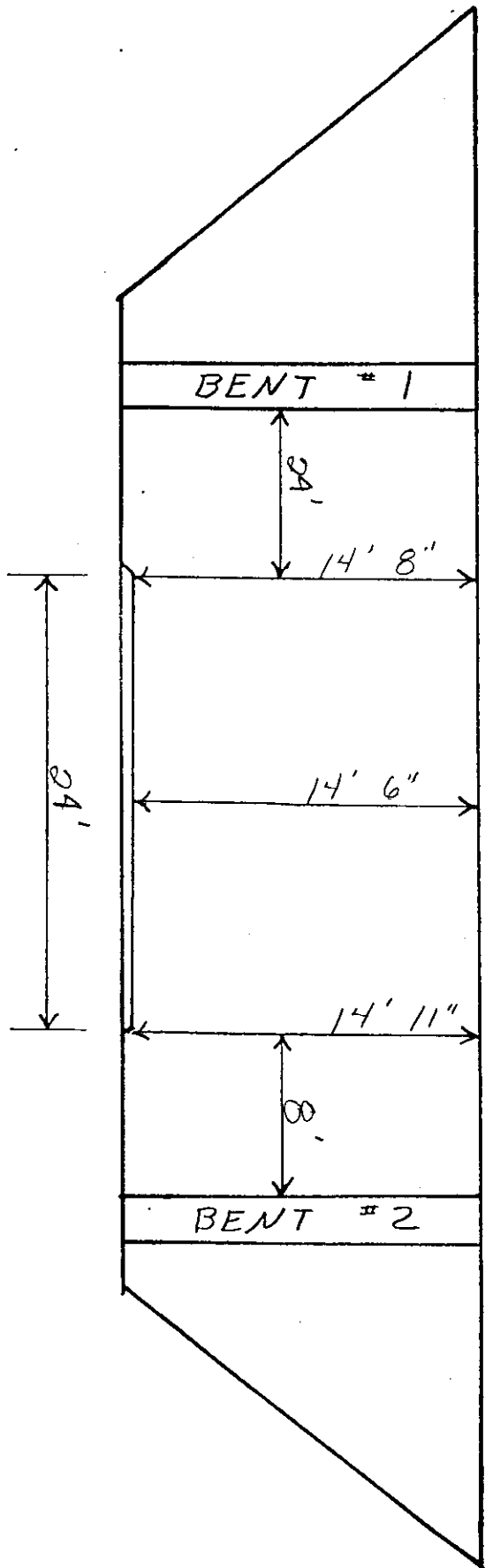
80-264-5.39



80-140-9.77 121.

MAR 20 1992

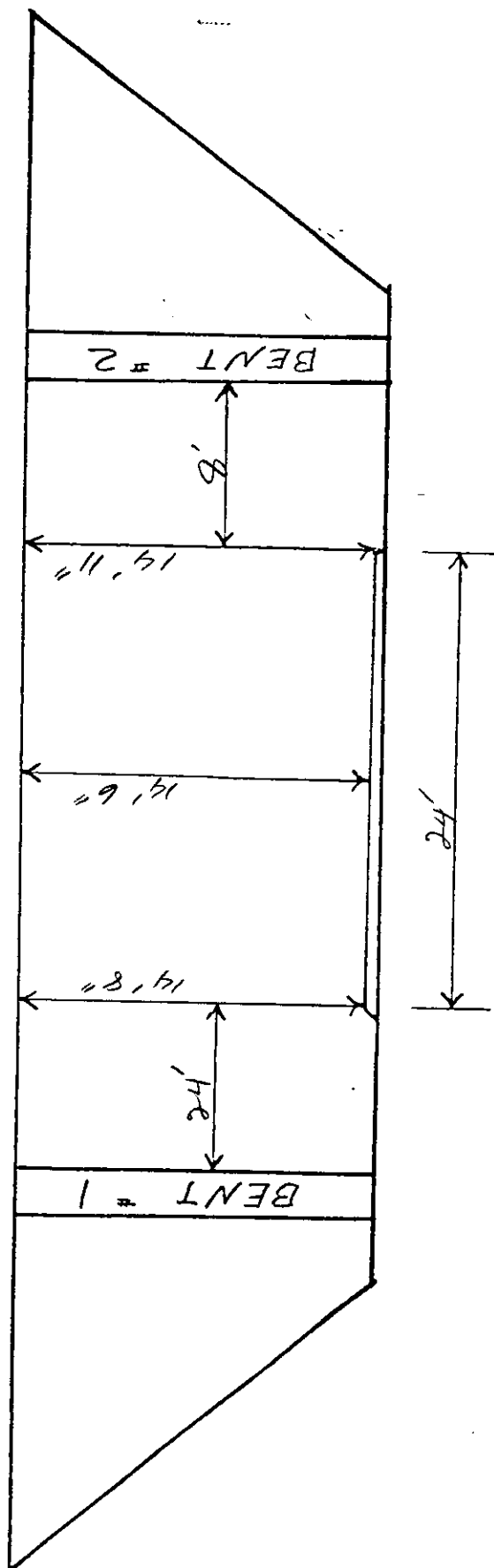
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80-140-9.77 RT.

FEB 05 1990

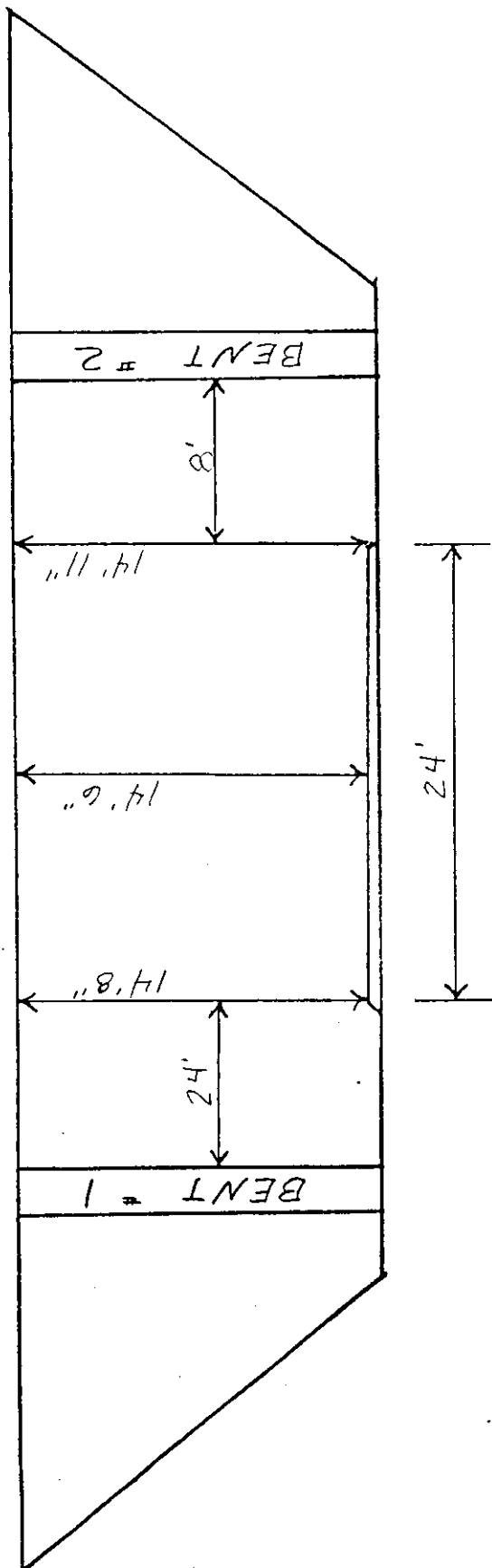
80-140-9.77 A.R.T.



80-264-5.43

JAN 28 1988

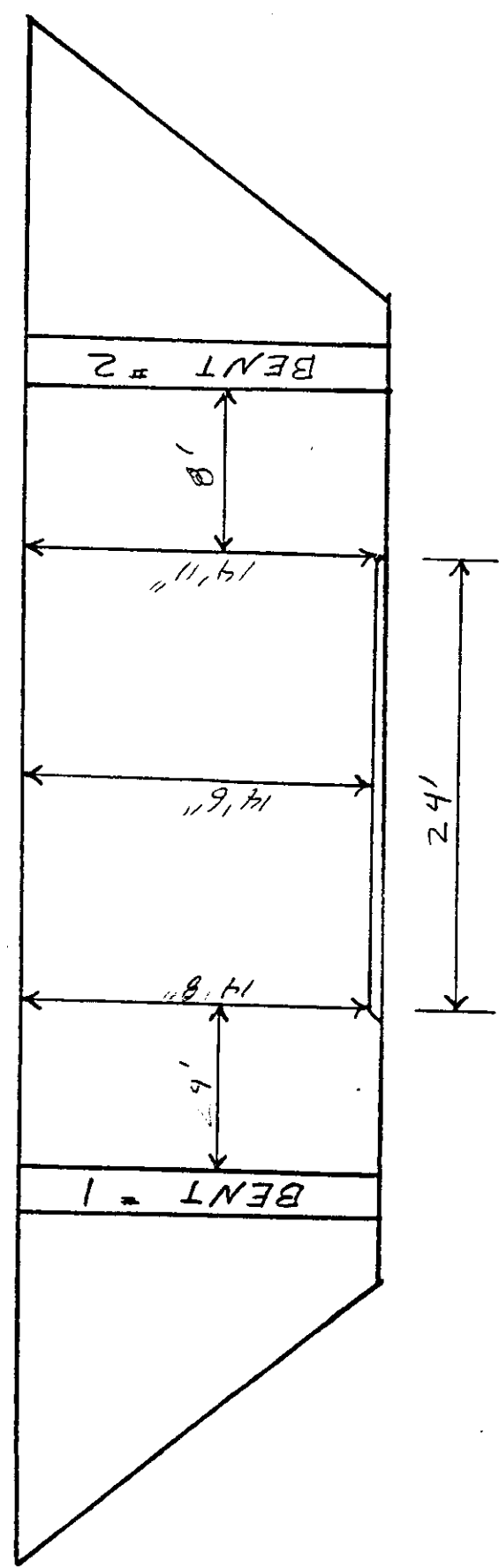
80-I40-9.7.7 RT.



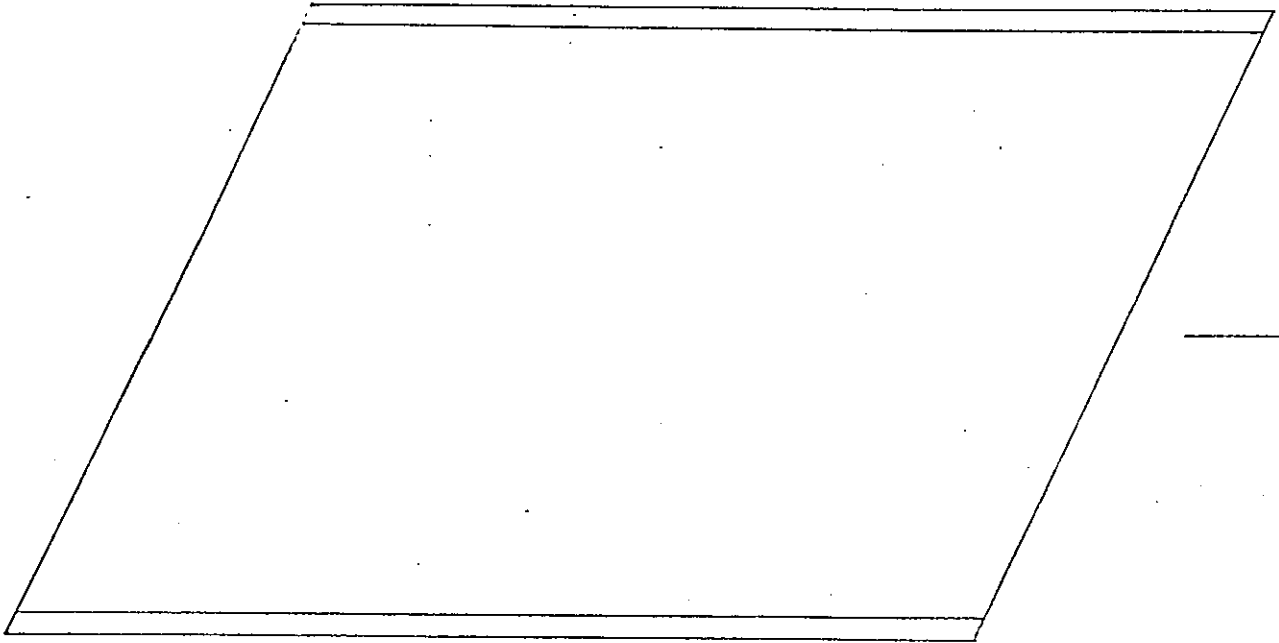
80-264-5.39

JUL 21 1986

80-140-9.78 RT.

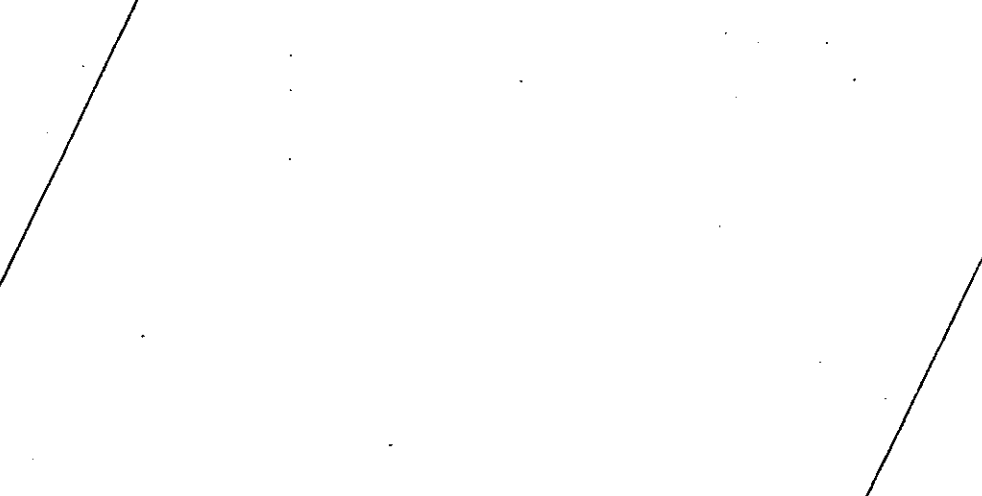


80-264-5.39



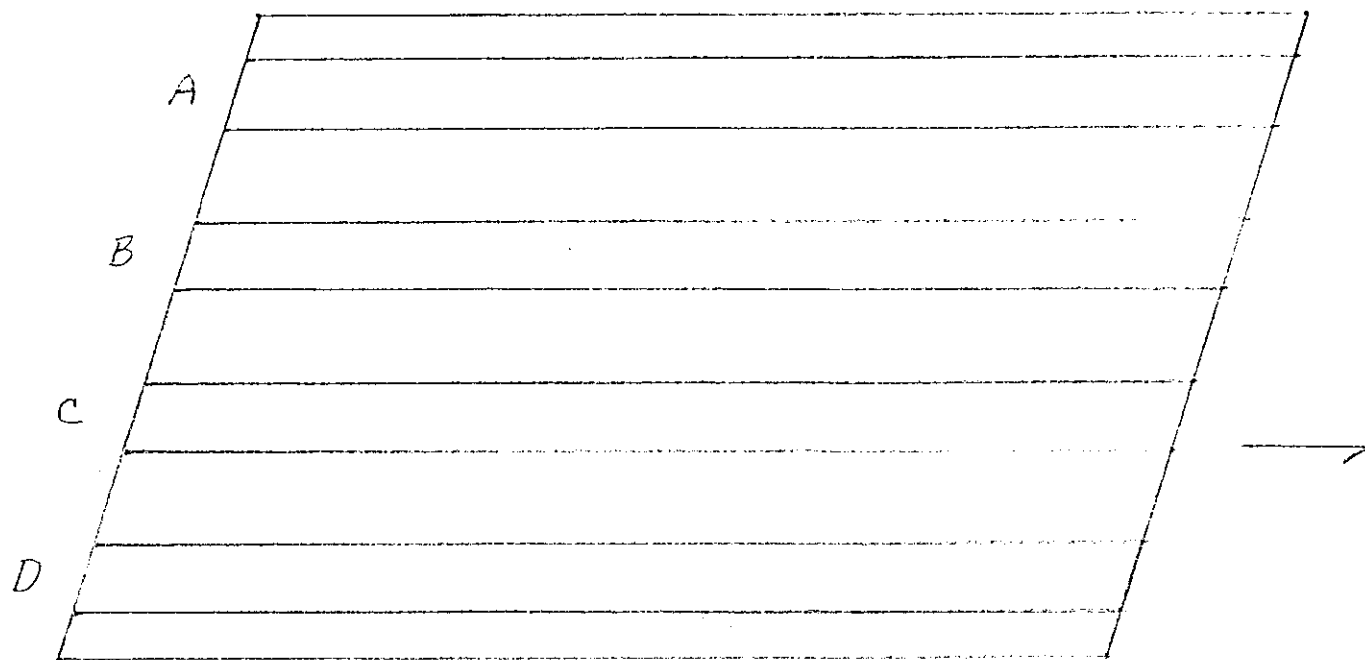
Top Slab # /

Deck	NV	NE OVERLAY
Parapet	G	
Drains	G	
Joints	NV	PAVED OVER



Br. ^{II} 80-140-9.77 RT.

Deck	NV	NO OVERLAY
Parapet	G	
Drains	G	
Joints	NV	PAVED OVER



BOTTOM slab # 1

Br. 80-I40-9.77R+

DECK

Good

Diaphragms

Good

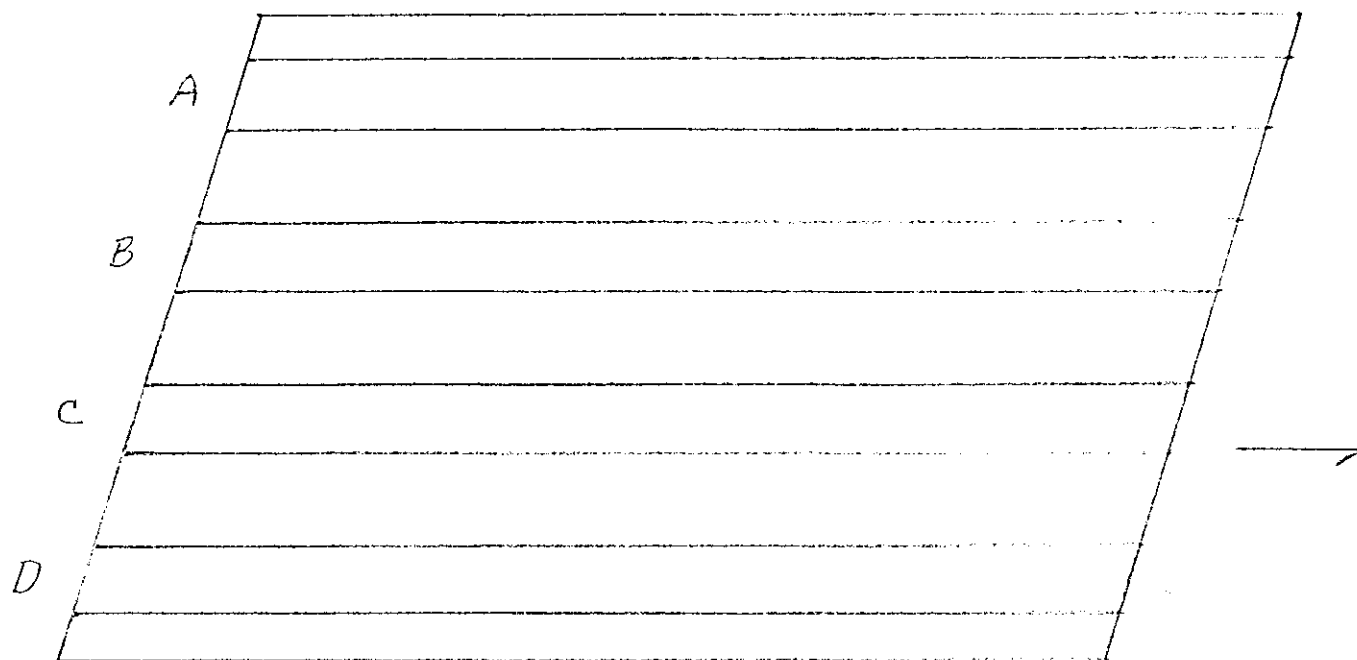
Beams

Good

Br. 80-I40-9.77Rt

[illegible]

6-11-99

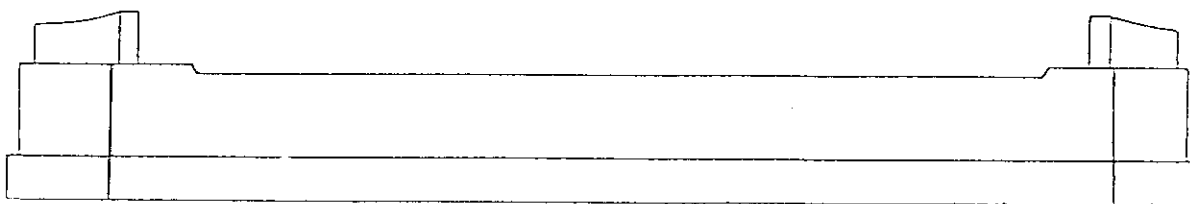


Bottom slab #3

Br. 80-140-9.77R+

[illegible]

6-11-79 MD



ABUT =

Br. = 80-I40-9.77 Rt

BACK

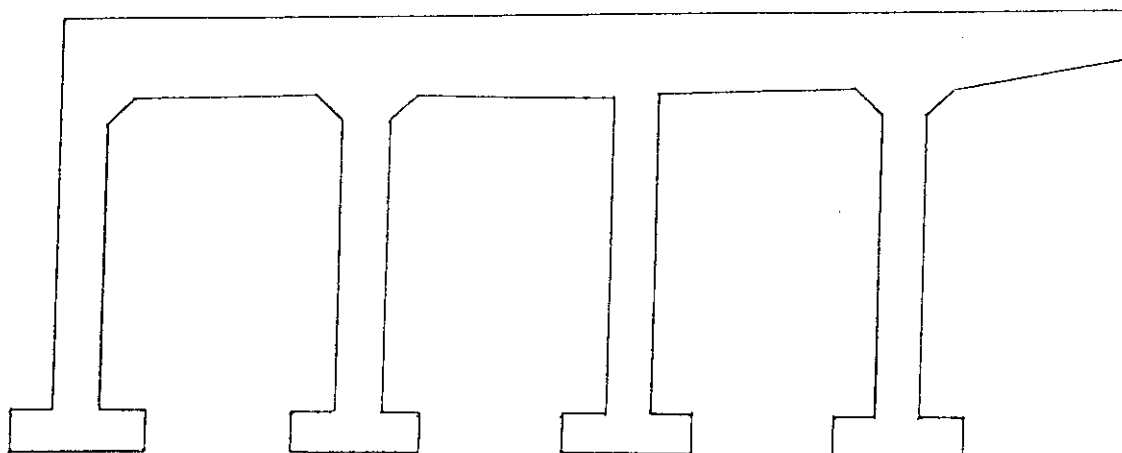
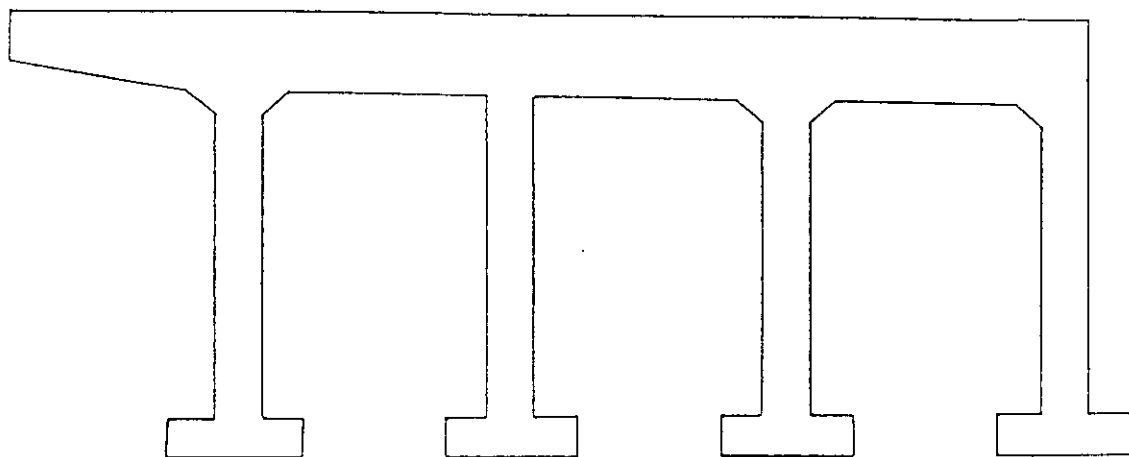
Wall NV

CAP G

WINGS G

Bearings G

6-11-99AD

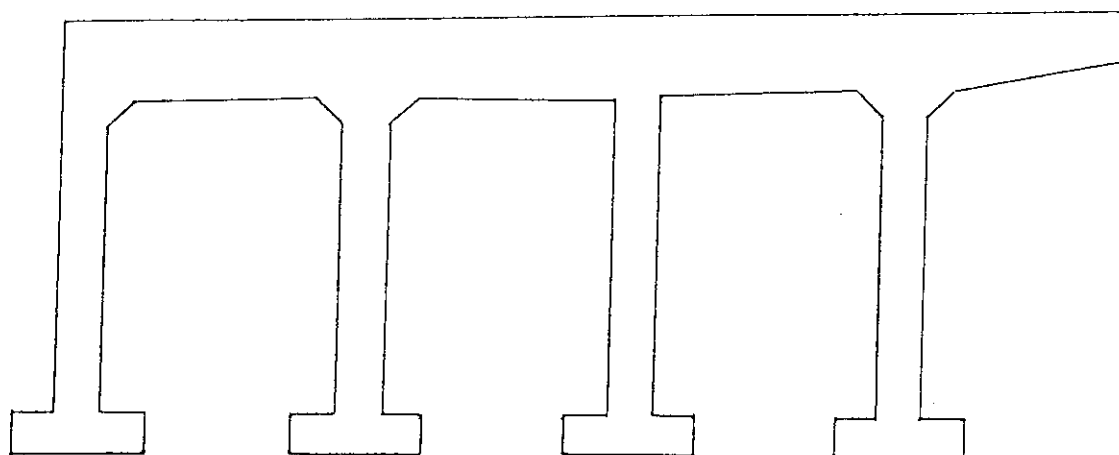
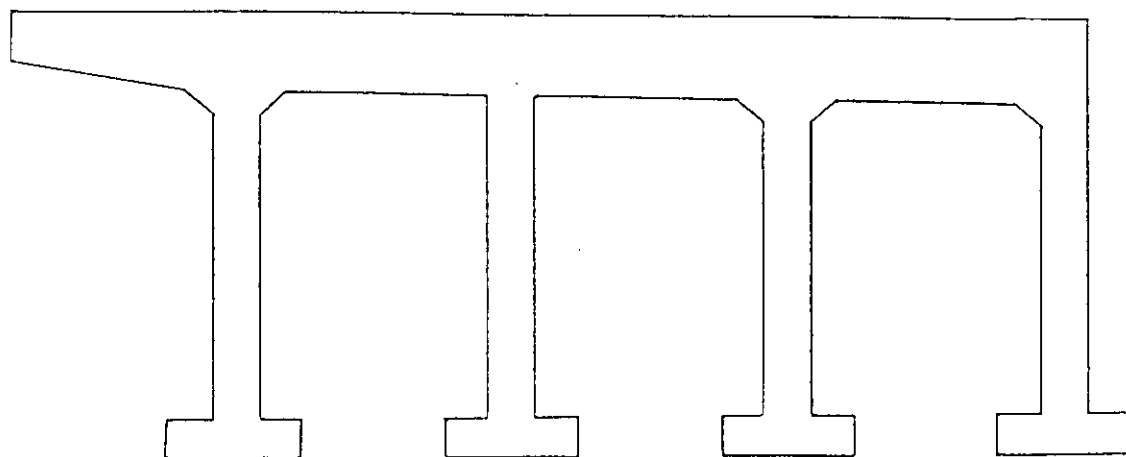


BENT # |

BR # 80-I40-9.77 ft

Cap	G	
Bearings	G	
Footings	N/V	
Cols.	G	

6-11-99AD



BENT # 2

BR # 80-I40-9.77 Rt.

Cap	G	
Bearings	G	
Footings	N/V	
Cols.	G	

$$Br. = 80 - 140 - 9.77 \text{ Rt.}$$

BACK

wait	NV
------	----

CAP

G

① $\frac{1}{8}$ " open vert. crack

wings

6

Bearings

5

FOR PLANS SEE:

80I00400020- INFO

State of Tennessee
DEPARTMENT OF TRANSPORTATION
Nashville, Tennessee 37243-0338

March 20, 1995

Mr. Jack Srouji
Right-of-Way Office, Utilities
Tennessee Department of Transportation
6601 Centennial Blvd.
Nashville, Tennessee 37243-0360

RE: Proposed Sewer Line Installation
under Interstate 40
Bridge Number 80-140-09.77
Smith County

Dear Mr. Srouji:

We are enclosing three copies of the drawings for the sewer line installation under the subject bridge. These drawings are marked "APPROVED".

Yours Very Truly,

Jay E. Scott, Jr.
(for)

Larry E. Hinds
Civil Engineering Manager 2
Bridge Inspection and Repair Office

HIT:jcs

Enclosure

cc: Mr. Alvin Zager
Mr. H.I. Tackitt
Mr. J.C. Scott

RONNIE G. REECE, P.E.
P.O. BOX 812
7A COOK STREET
SPARTA, TN 38583
(615) 836-3764
FAX (615) 836-3935



RICKY E. WHITE, P.E.
P.O. BOX 231
204 W. LOCUST STREET
LAFAYETTE, TN 37083
(615) 666-2385
FAX (615) 666-2519

March 10, 1995

Tennessee Department of Transportation
James K. Polk Building
Suite 1200
Nashville, Tennessee 37243-0338

Attention: Mr. Joe Scott

RE: Permit

Dear Mr. Scott:

Enclosed are five (5) copies with all pertinent information, of the permit application to lay force main sewer along Trousdale Ferry Pike under Interstate 40 in Smith County, Tennessee, as we previously discussed. This work is a portion of a Community Development Block Grant Project for the Town of Gordonsville.

Your urgent review and approval of this permit would be greatly appreciated. Please forward the permits to Mr. Roy Hall of Utilities when you have completed your review. If you have any questions or need any further information, please feel free to contact our office at (615)836-3764.

Sincerely,

PROFESSIONAL ENGINEERING SERVICES, INC.

A handwritten signature in black ink, appearing to read "Scott J. Christian E.I.T.", is written over a horizontal line.

Scott J. Christian, E.I.T.
rr

enclosures

RECEIVED
MAR 13 1995
D.O.T.
BRIDGE INSPECTION & REPAIR

PROFESSIONAL ENGINEERING SERVICES, INC.

7A COOK ST., PO BOX 812
SPARTA, TN 38583
(615)836-3764
(615)836-3935 FAX

LETTER OF TRANSMITTAL

DATE: <u>MARCH 15, 1995</u>	JOB NO. <u>GD9320</u>
ATTENTION: <u>MR. JOE SCOTT</u>	
RE: <u>GORDONSVILLE 1994 CDBG SEWER</u> <u>I-40 AT TROUSDALE FERRY PIKE PERMIT</u>	

TO: DEPARTMENT OF TRANSPORTATION

WE ARE SENDING YOU ☒ ATTACHED ☐ UNDER SEPARATE COVER VIA _____ THE FOLLOWING ITEMS:

☐ SHOP DRAWINGS ☐ PRINTS ☒ PLANS ☐ SAMPLES ☐ SPECIFICATIONS
☐ COPY OF LETTER ☐ CHANGE ORDER ☐ _____

COPIES	DATE	NO.	DESCRIPTION
5			REVISED SITE PLAN OF UTILITY
5			REVISED ELEVATION

THESE ARE TRANSMITTED AS CHECKED BELOW:

☒ FOR APPROVAL ☐ APPROVED AS SUBMITTED ☐ RESUBMIT _____ COPIES FOR APPROVAL
☐ FOR YOUR USE ☐ APPROVED AS NOTED ☐ SUBMIT _____ COPIES FOR DISTRIBUTION
☐ AS REQUESTED ☐ RETURNED FOR CORRECTIONS ☐ RETURN _____ CORRECTED PRINTS
☐ FOR REVIEW AND COMMENT ☐ _____
☐ FOR BIDS DUE _____ 10 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS ALSO DELETE SECTION B-B IN ITS ENTIRETY. THESE SHOULD
REPLACE THE PAGES IN THE PREVIOUS PERMIT SUBMITTAL AS PER
OUR TELEPHONE CONVERSATION. PLEASE CALL IF YOU HAVE ANY
FURTHER QUESTIONS.

COPY TO _____

SIGNED: Scott Scott EDT

TOWN OF GORDONSVILLE

63 EAST MAIN STREET
GORDONSVILLE, TN 38563
HON. JOE K. ANDERSON, MAYOR

3/15/85
I talked to Scott Christian
@ this - he is to
send in revised details

TO: Mr. Jack Srouji
Engineer 4, Utilities Section
2200 Charlotte Avenue
Highway Building
Nashville, Tennessee 37203

FROM: Scott J. Christian, E.I.T.
Professional Engineering Services, Inc.

DATE: February 6, 1995

SUBJECT: Town of Gordonsville

80-140-9.77

In accordance with the General Agreement dated June 21, 1993, between the Tennessee Department of Transportation and the Town of Gordonsville, we are requesting approval of:

INSTALLATION OF 8" DIA. FORCE MAIN SEWER IN TROUSDALE FERRY PIKE UNDER I - 40.

INSTALLATION OF 8" DIA. GRAVITY SEWER ACROSS TROUSDALE FERRY PIKE..

Enclosed please find three (5) copies of plans, sketches, details and location maps. If you have any questions, or would like to schedule a site visit, please contact:

6.5
Scott J. Christian, E.I.T.
Professional Engineering Services, Inc.
7A Cook Street
Sparta, Tennessee 38583
Ph. (615) 836-3764
Fax (615) 836-3935

RECEIVED

MAR 13 1995

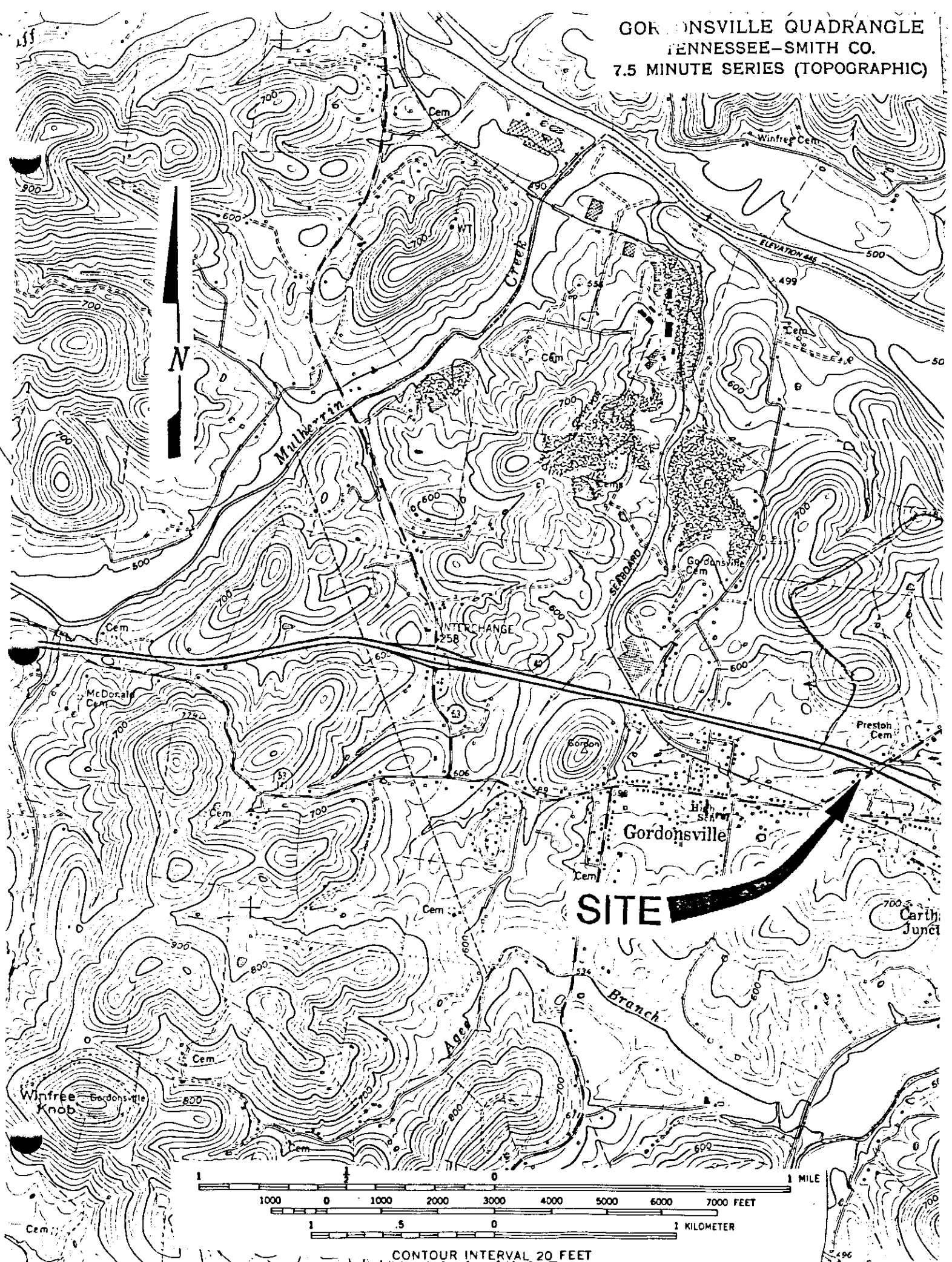
Permit requested by:

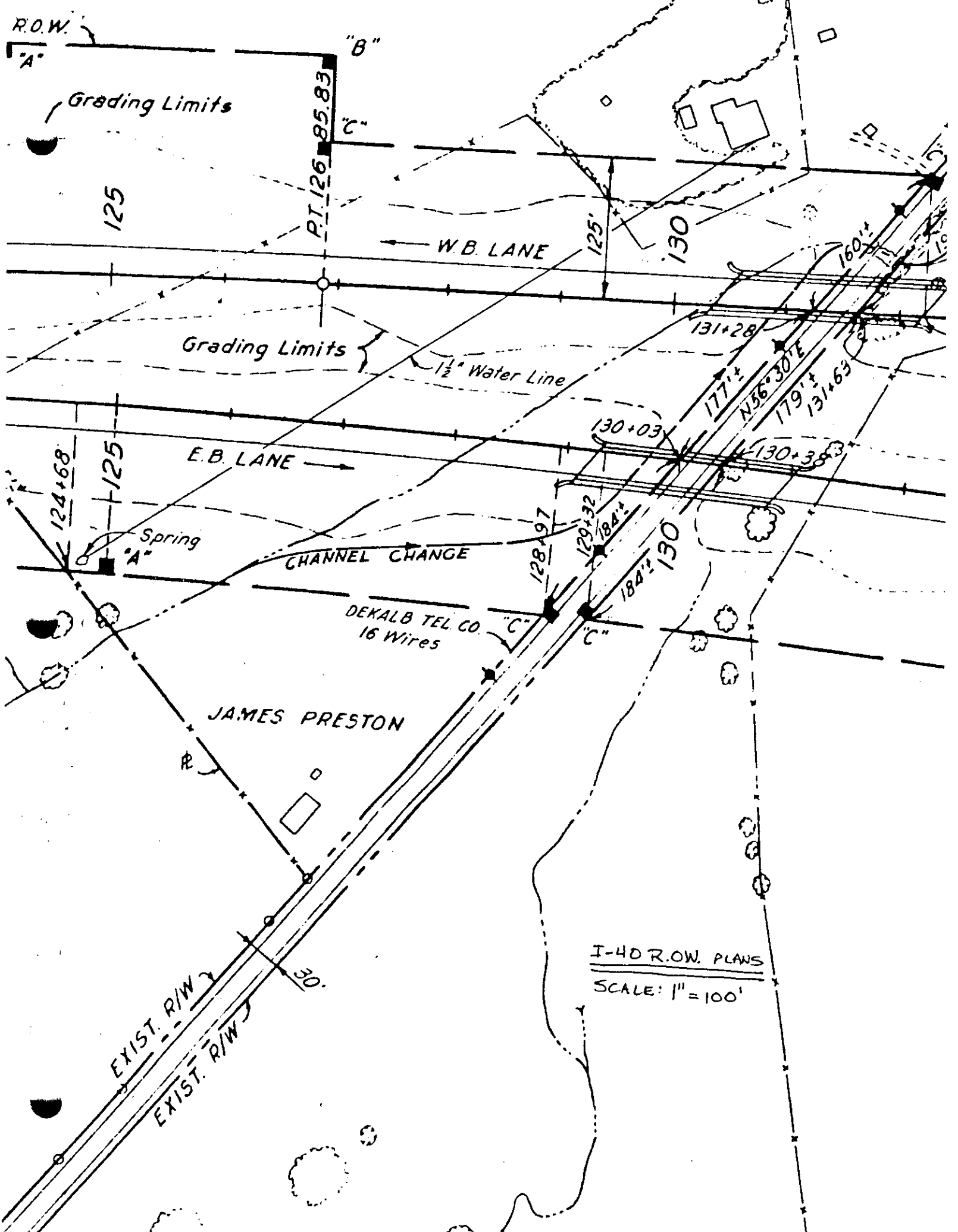
Scott J. Christian EIT

D.O.T.
BRIDGE INSPECTION & REPAIR

Work
Copy

GORDONSVILLE QUADRANGLE
TENNESSEE-SMITH CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)





R.O.W.
"A"

"B"

"C"

Grading Limits

125

P.T. 126.85.83

W.B. LANE

130

Grading Limits

1 1/2" Water Line

E.B. LANE

Spring
"A"

CHANNEL CHANGE

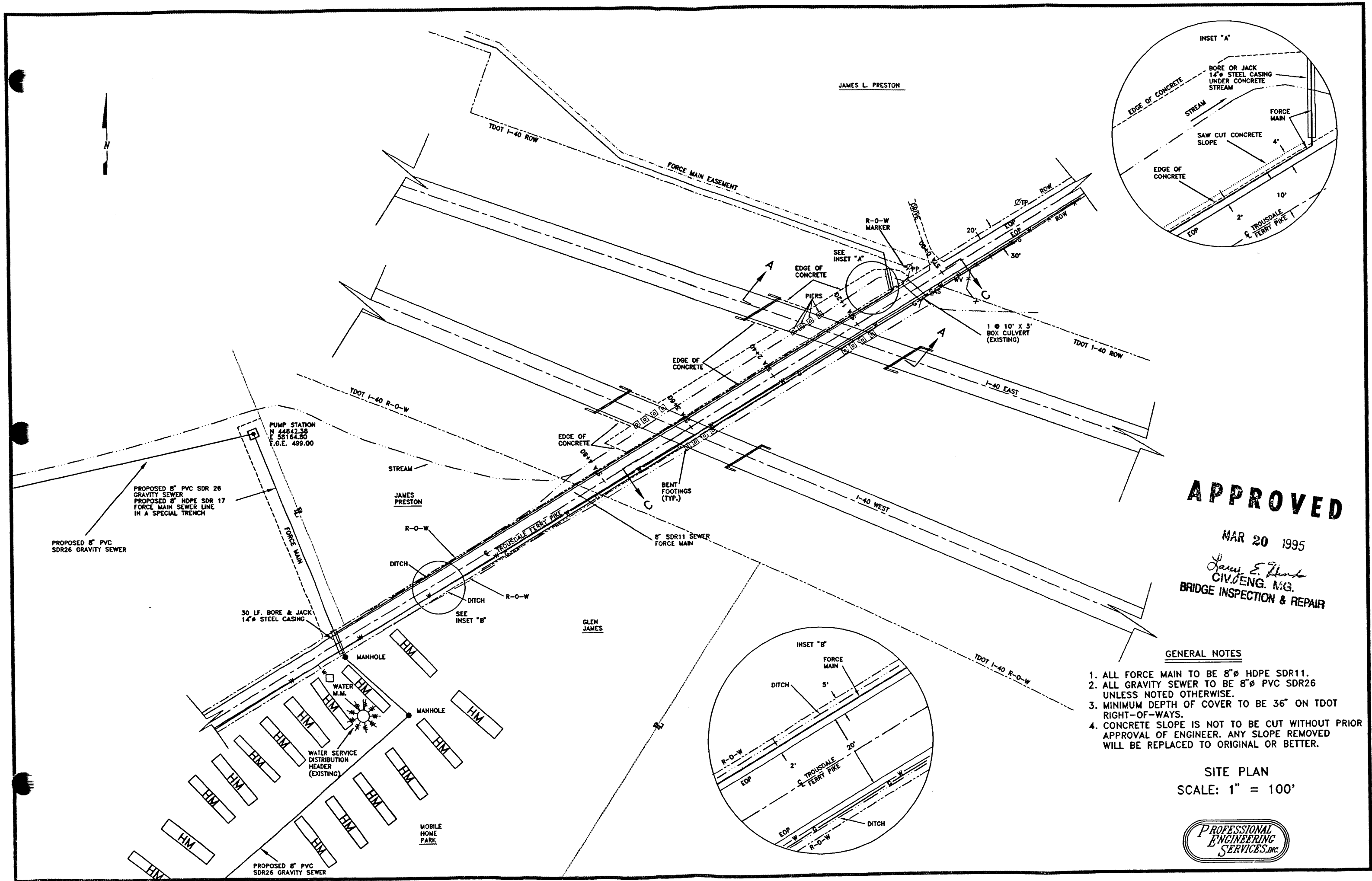
DEKALB TEL CO.
16 Wires

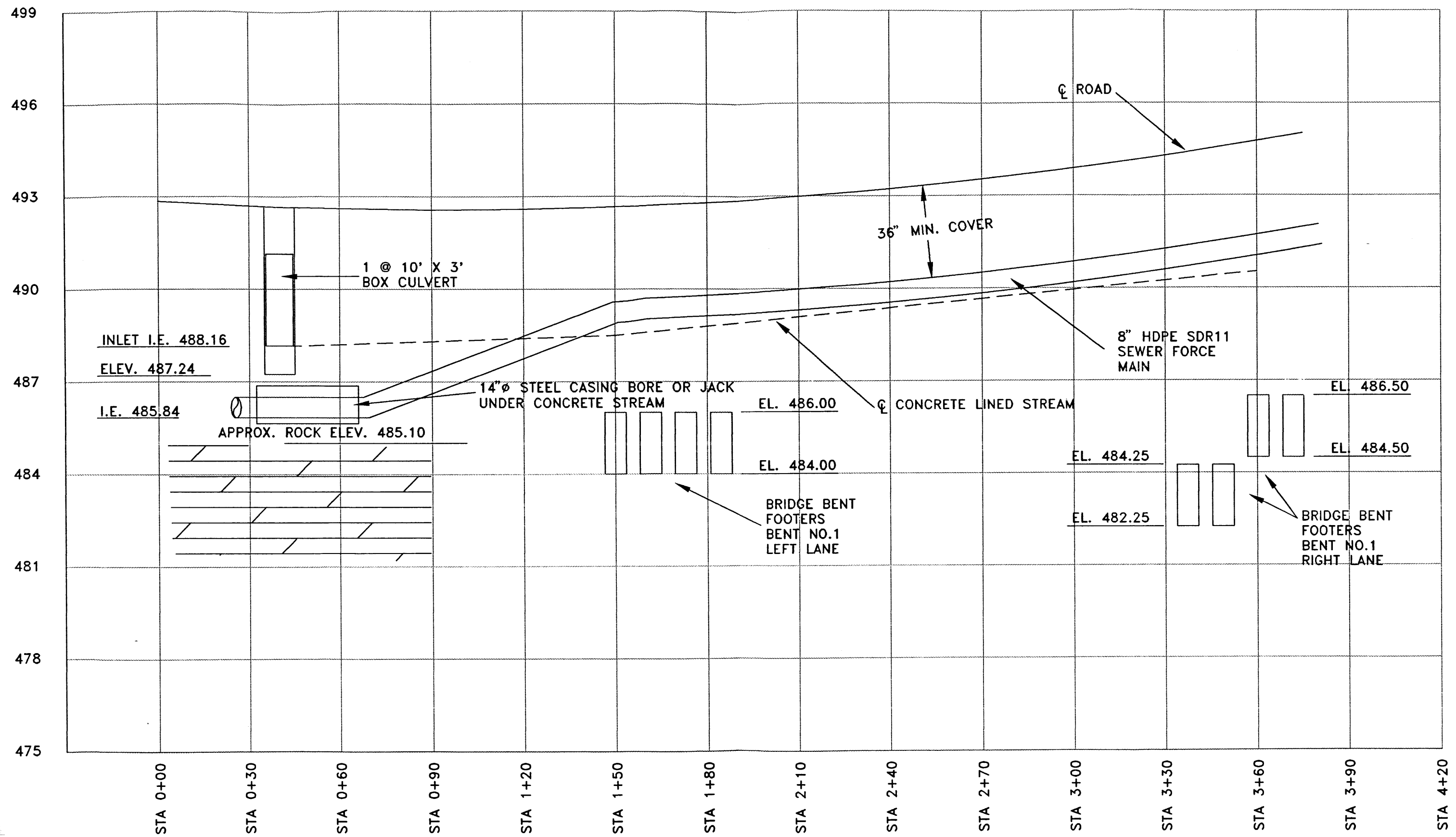
JAMES PRESTON

EXIST. R/W

EXIST. R/W

I-40 R.O.W. PLANS
SCALE: 1" = 100'

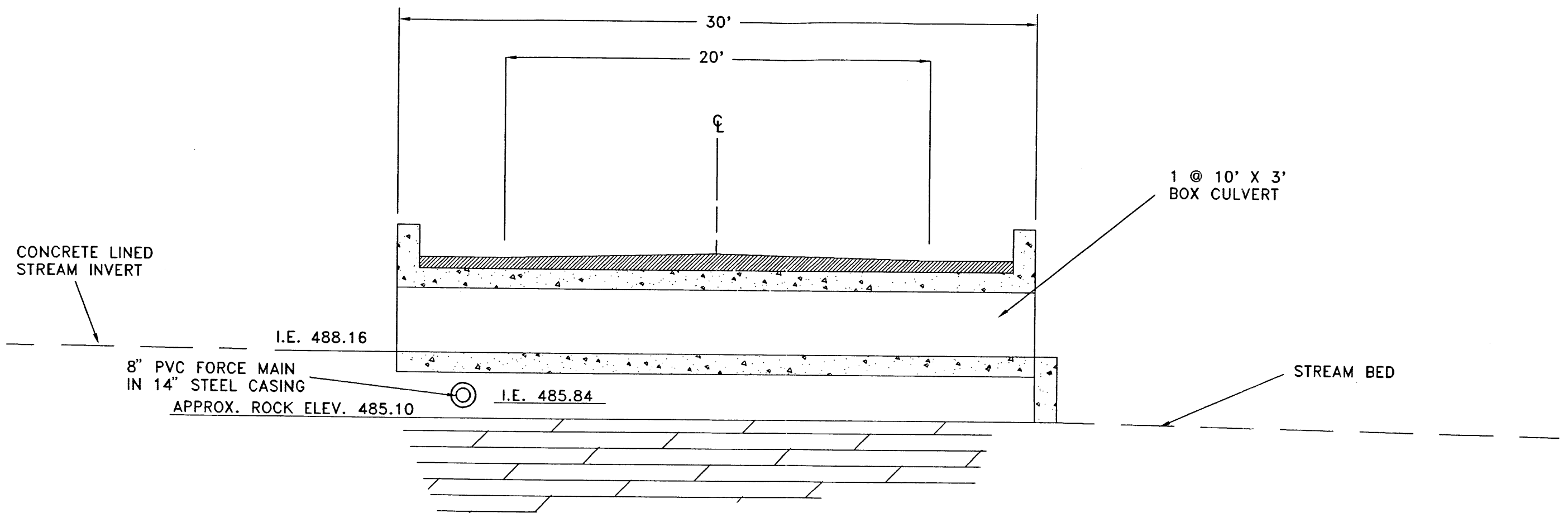




SECTION C-C



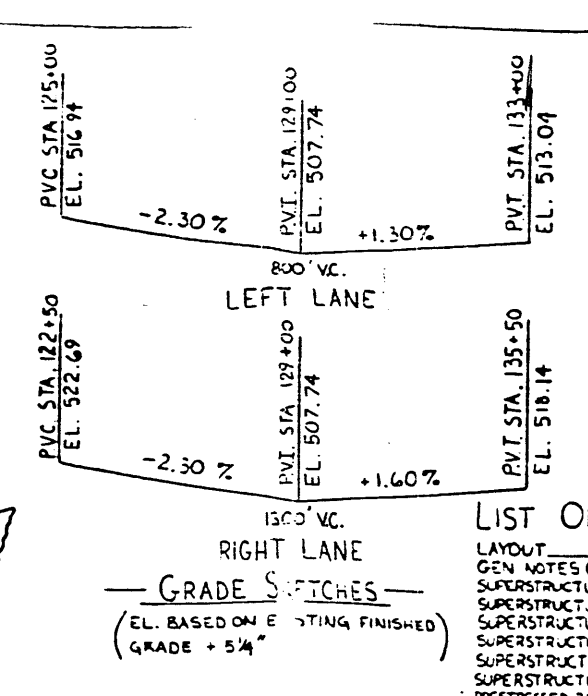
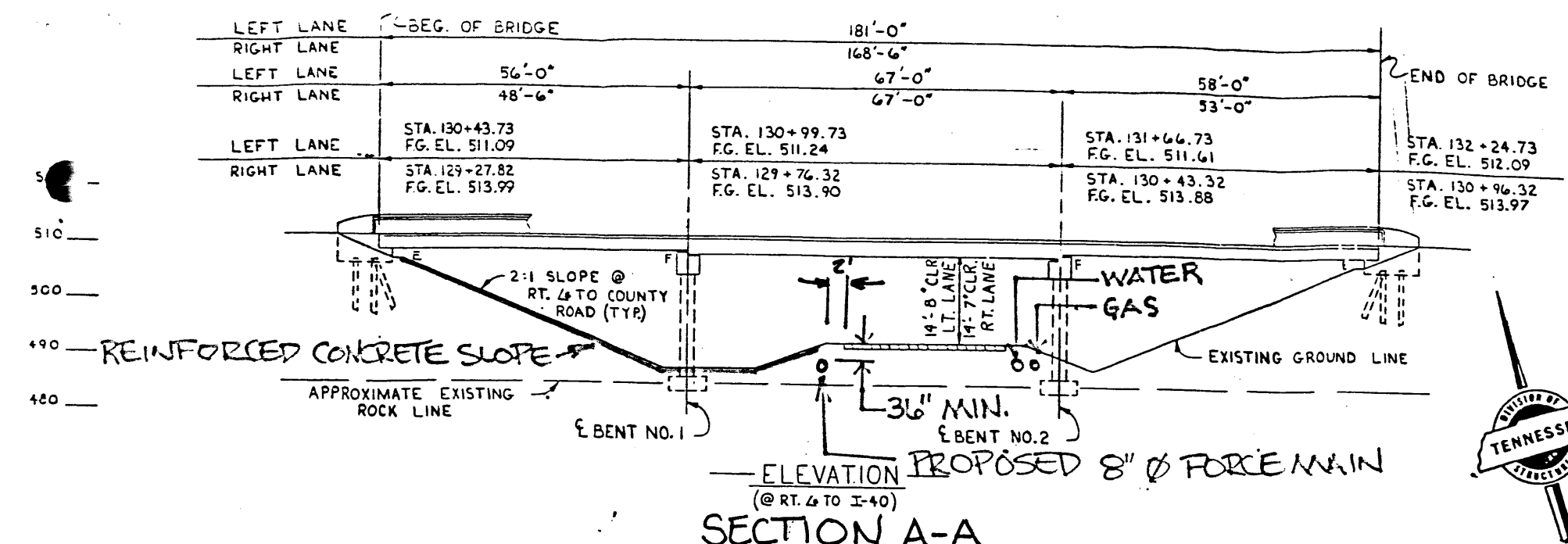
SCALE: 1" = 30'H
1" = 3'V



SECTION B-B



SCALE: 1" = 5'-0"

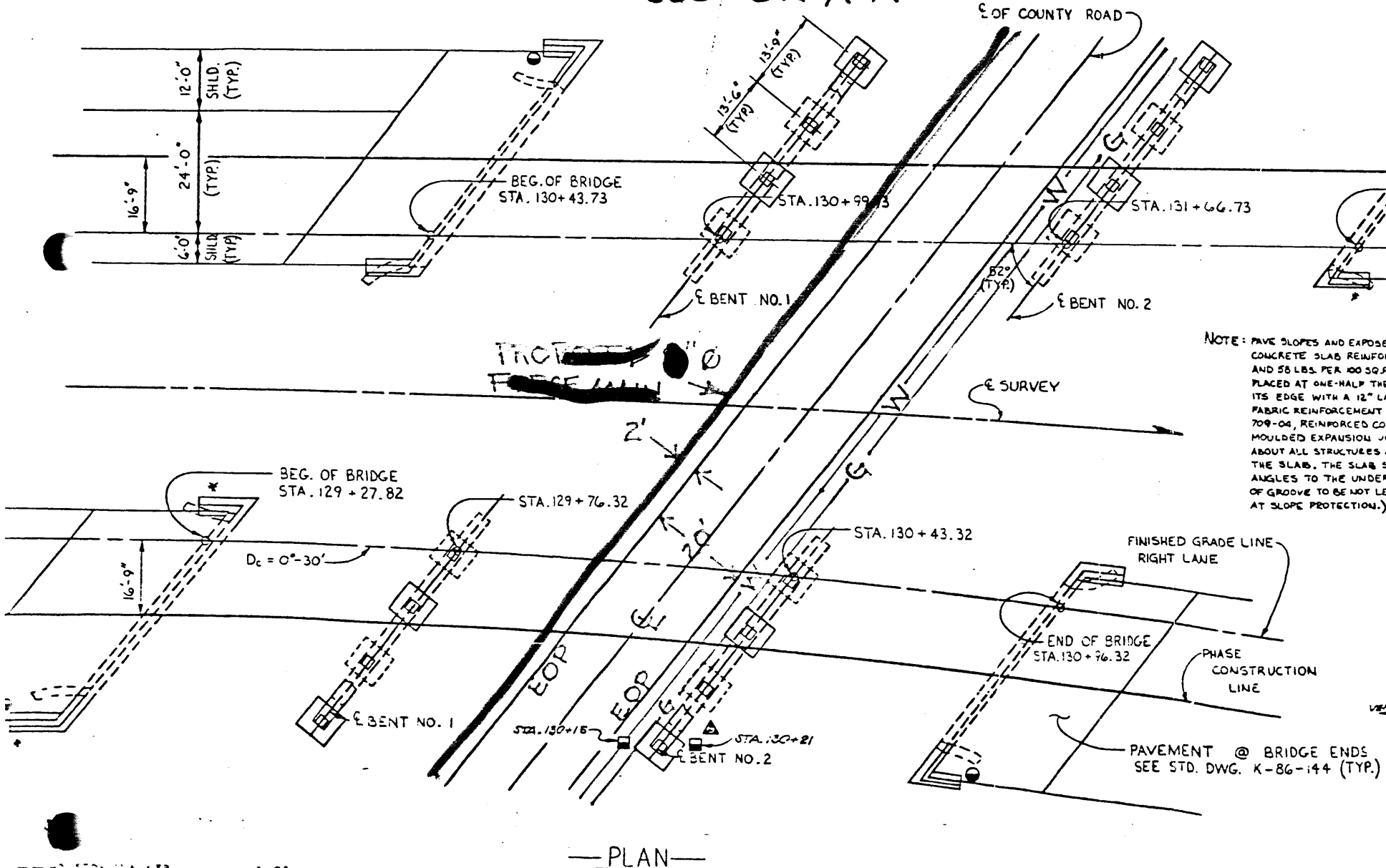


CONST. NO. 90001-3148-44			
PROJECT NO.	YEAR	SHEET NO.	
12-40-82	1984		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	12-3-82	JUN	REVISION DATE 50001-3148-44
2	3-30-82	CHN	CLARIFY AND DETAIL.

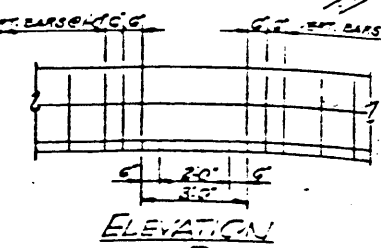
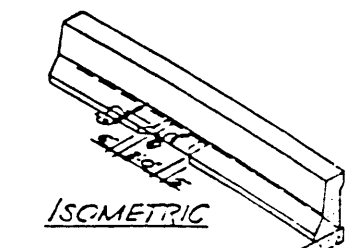
LIST OF DRAWINGS	DWG. NO.	LAST REV. DATE
LAYOUT	M-142-64	
GEN. NOTES (EST. PLAN)	M-142-65	
SUPERSTRUCTURE RT. LN.	M-142-66	
SUPERSTRUCTURE DETAIL @ ABUT. 1, RT. LN.	M-142-67	
SUPERSTRUCTURE DETAIL @ ABUT. 2, RT. LN.	M-142-68	
SUPERSTRUCTURE LT. LN.	M-142-69	
SUPERSTRUCTURE DETAIL @ ABUT. 1, LT. LN.	M-142-70	
SUPERSTRUCTURE DETAIL @ ABUT. 2, LT. LN.	M-142-71	
PRESTRESSED BOX BEAM SPANS 1 & 2, RT. LN.	M-142-72	
PRESTRESSED BOX BEAM SPAN 2, RT. LN.	M-142-73	
PRESTRESSED BOX BEAM SPANS 1 & 2, LT. LN.	M-142-74	
PRESTRESSED BOX BEAM SPAN 2, LT. LN.	M-142-75	
ABUTMENT 1, RT. LN.	M-142-76	
ABUTMENT 2, RT. LN.	M-142-77	
ABUTMENT 1, LT. LN.	M-142-78	
ABUTMENT 2, LT. LN.	M-142-79	
BENTS 1 & 2, RT. LN.	M-142-80	
BENTS 1 & 2, LT. LN.	M-142-81	
BILL OF STEEL	M-142-82	

LIST OF STANDARD DWGS.	DWG. NO.	LAST REV. DATE
STANDARD PILE DETAILS	H-5-111	11-12-82
REINFORCING BAR SUPPORT	K-80-14	8-27-76
MISC. ABUTMENT AND DRAINAGE DETAILS	K-85-150	1-9-75
PRECAST, PRESTRESSED, BRIDGE DECK PANELS	M-03-149 & 150	4-21-83
BRIDGERAILING - CONCRETE PARAPET	M-28-1	7-17-81
SLOPE PROTECTION	RD-SA-1	1-11-82

LIST OF SPECIAL PROVISIONS	PROV. NO.	LAST REV. DATE
REGARDING APPROVAL OF SHOP DWGS.	105A	9-8-81
REGARDING CLASS "A" CONCRETE BRIDGE DECKS	604A	12-20-82
REGARDING EPOXY COATED REINFORCING STEEL	907A	4-18-83



NOTE: PAVE SLOPES AND EXPOSED EARTH UNDER BRIDGES WITH 4" THICK CEMENT CONCRETE SLAB REINFORCED WITH NO. 4 GAUGE WIRE FABRIC @ 6" CENTERS AND 58 LBS. PER 100 SQ. FT. THE WIRE FABRIC REINFORCEMENT SHALL BE PLACED AT ONE-HALF THE DEPTH OF THE SLAB AND EXTEND TO WITHIN 5' OF ITS EDGE WITH A 12" LAP REQ'D. ON ALL SHEETS, THE COST OF THE WIRE FABRIC REINFORCEMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 709-04, REINFORCED CONCRETE SLOPE PAVEMENT. ONE-HALF INCH PRE-MOULDED EXPANSION JOINTS WITHOUT LOAD TRANSFERS SHALL BE FURNISHED ABOUT ALL STRUCTURES AND FEATURES PROJECTING THROUGH, OR AGAINST THE SLAB. THE SLAB SHALL BE GROOVED PARALLEL WITH AND AT RIGHT ANGLES TO THE UNDER ROADWAY CENTER LINE AT 6" CENTERS. DEPTH OF GROOVE TO BE NOT LESS THAN 1" (SEE STD. DWG. RD-SA-1 FOR LIMITS AT SLOPE PROTECTION.)



42' ROADWAY WITH M-28-1 BRIDGERAIL

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

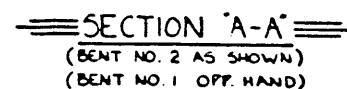
LAYOUT

WIDENING OF INTERSTATE-40 OVER COUNTY ROAD
STATION 130+43.73 (LEFT LANE I-40)
STATION 129+27.82 (RIGHT LANE I-40)
SMITH COUNTY

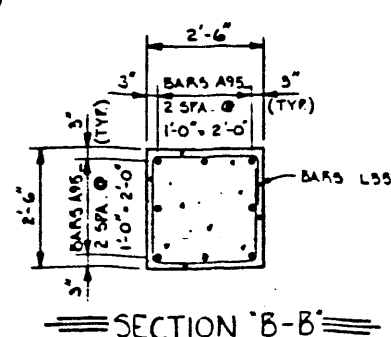
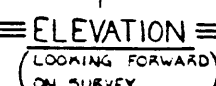
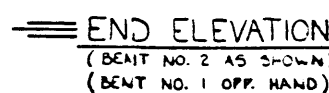
1984

APPROVED: *John L. Smith*
DATE: 11-84

CLASS "A" GRADING "D" 25 C.

[illegible]

NOTE: CROSS-HATCHED AREA DENOTES AREA OF EXISTING
STRUCTURE TO BE REMOVED. EXISTING HORIZONTAL STEEL TO
REMAIN IN PLACE.



SECTION 'B-B'

ELEVATION	BENT NO. 1	BENT NO.
A	507.73	508.19
B	507.23	507.69
C	503.41	503.87
D	503.68	504.08
E	486.00	486.50
F	486.00	486.50

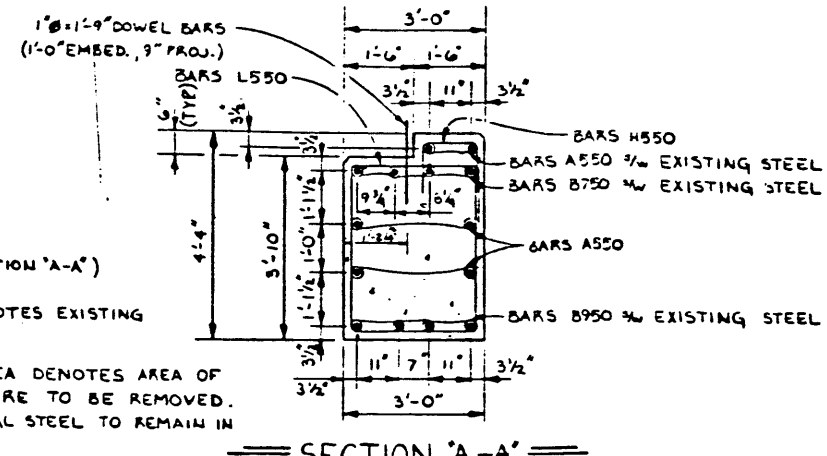
ITEM	REINFORCING STEEL LBS. 	CLASS 7 CONCRETE C.Y.
BENT NO. 1	3,073	21.0
BENT NO. 2	3,064	20.9

BENT NO. 1, AND
LEFT LANE
WIDENING OF INTERSTATE 40 OVER
COUNTY ROAD
STATION 130+43.73 (LEFT LANE)
STATION 129+27.22 (RIGHT LANE)
SMITH COUNTY

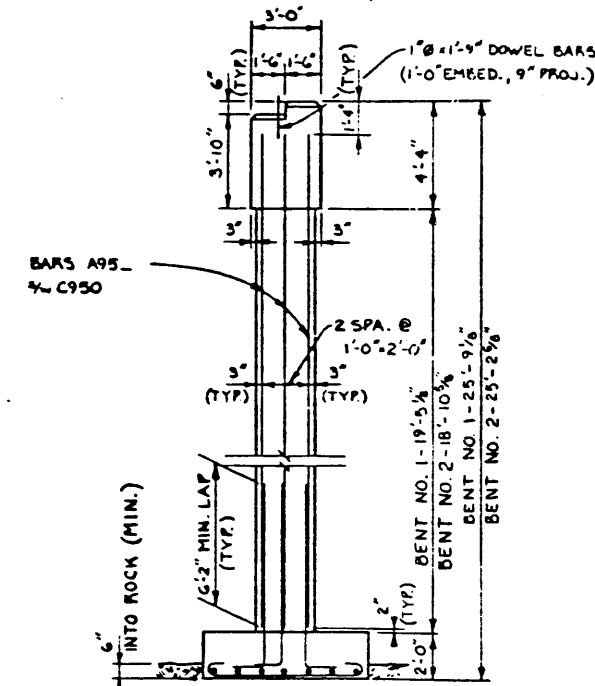
CORRECT Chilton L. Lovell 1984
ENGINEER OF STRUCTURES

DESIGNED BY HOUSTON WALKER DATE 12-83
 DRAWN BY A. L. WALKER DATE 1-84
 SUPERVISED BY HOUSTON WALKER DATE 1-84
 CHECKED BY HOUSTON WALKER DATE 1-84

PROJECT NO.	YEAR	SHEET NO.
IA-40-5(73)259	1984	

[illegible]

SECTION 'A-A'



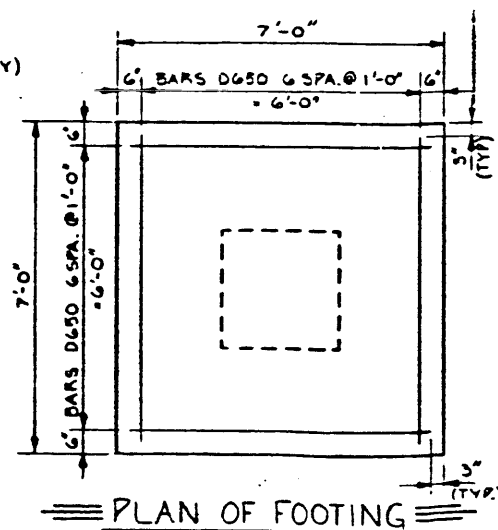
≡ END ELEVATION ≡
(BENT NO. 2 - AS SHOWN)
(BENT NO. 1 - OFF. HAND)

≡ ESTIMATED QUANTITIES ≡

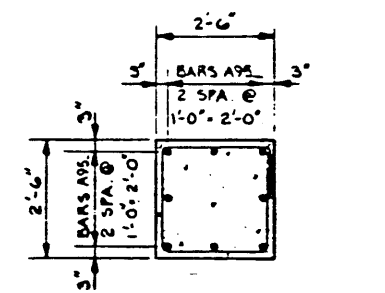
ITEM	REINFORCING STEEL LBS. 	CLASS 'A' CONCRETE CY.
BENT NO. 1	2,924	22.0
BENT NO. 2	2,753	20.8

= ANGLES CHART =

ANGLES	BENT 1	BENT 2
A	$55^{\circ}-48'-05''$	$56^{\circ}-05'-49''$
B	$55^{\circ}-31'-02''$	$55^{\circ}-48'-05''$
C	$55^{\circ}-45'-53''$	$56^{\circ}-03'-38''$
D	$55^{\circ}-28'-48''$	$55^{\circ}-45'-53''$
E	$53^{\circ}-43'-40''$	$56^{\circ}-01'-26''$
F	$55^{\circ}-26'-34''$	$55^{\circ}-43'-40''$
G	$55^{\circ}-41'-26''$	$55^{\circ}-59'-14''$
H	$55^{\circ}-24'-19''$	$55^{\circ}-41'-26''$
I	$55^{\circ}-37'-47''$	$55^{\circ}-57'-53''$



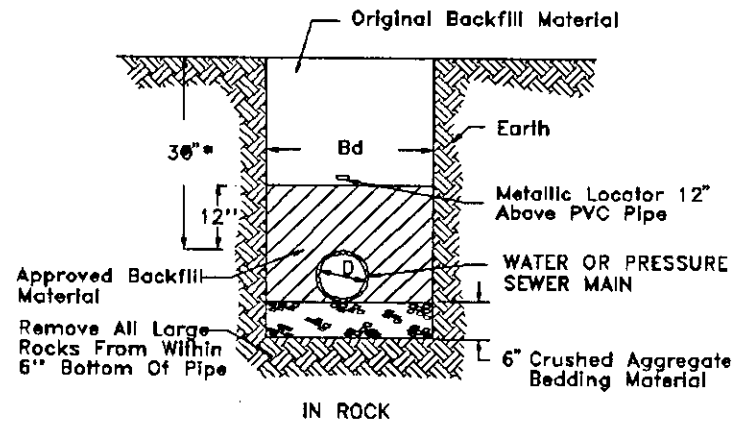
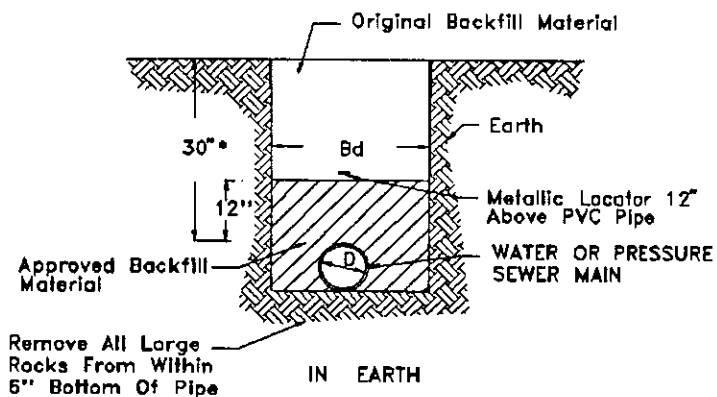
PLAN OF FOOTING



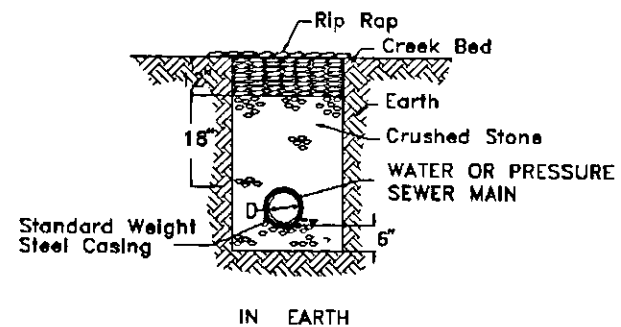
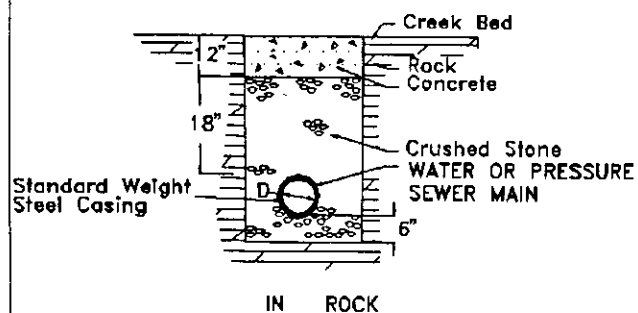
SECTION 'B-B'

DESIGNED BY HOUSTON WALKER DATE 12-83
 DRAWN BY RON P. FINK DATE 1-84
 SUPERVISED BY RON P. FINK DATE 1-84
 CHECKED BY HOUSTON WALKER DATE 1-84

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
BENT No. 1, AND 2
RIGHT LANE
WIDENING OF INTERSTATE 40 OVER
COUNTY ROAD
STATION 130+43.73 (LEFT LANE)
STATION 129+27.22 (RIGHT LANE)
SMITH COUNTY
1984
CORRECT Carlton L. Lovaal
ENGINEER OF STRUCTURES
APPROVED John E. Jones
SUPERVISOR

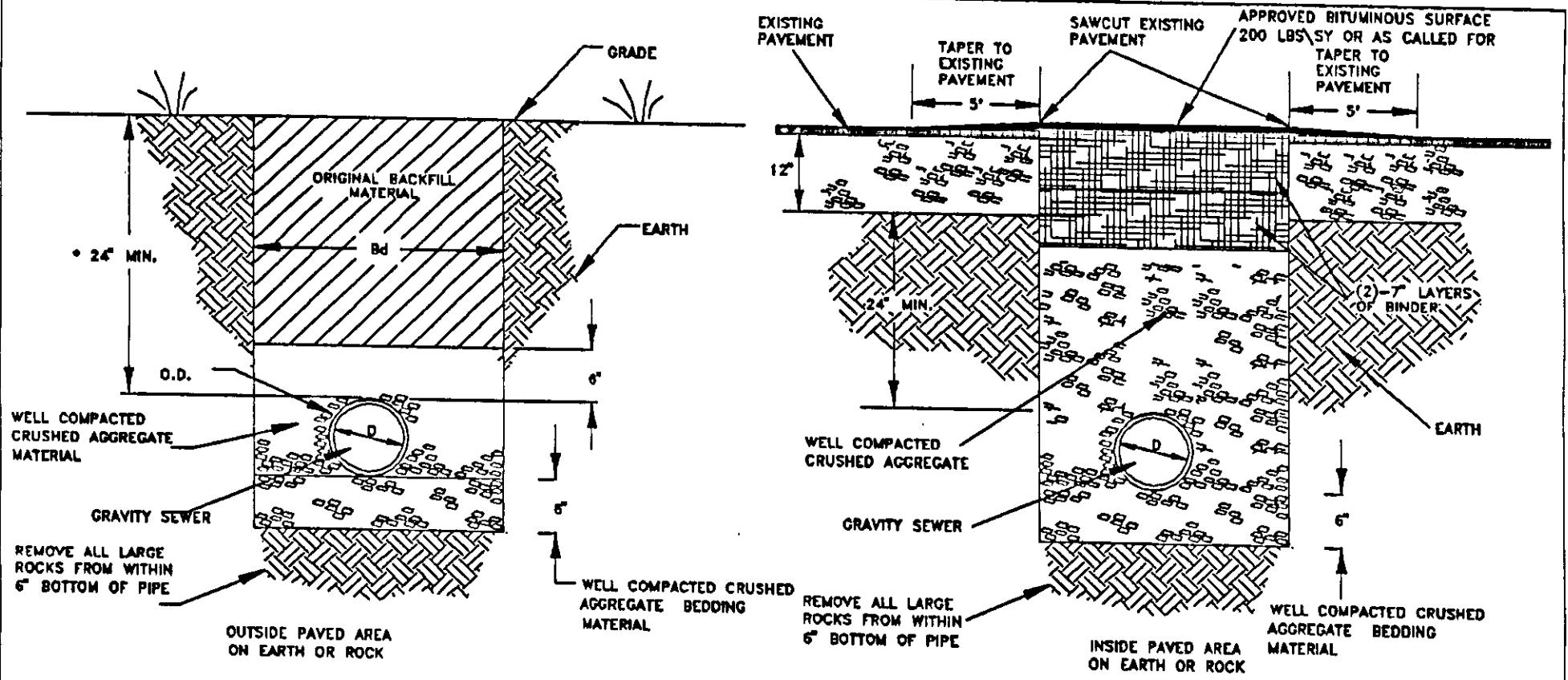


PIPE DIA. INCHES	MAX Bd TRENCH WIDTH TOP OF PIPE FEET
4"	2.00
6"	2.00
8"	2.33
10"	2.50
12"	2.67
15"	3.00
18"	3.25



TYPICAL TRENCH DETAILS

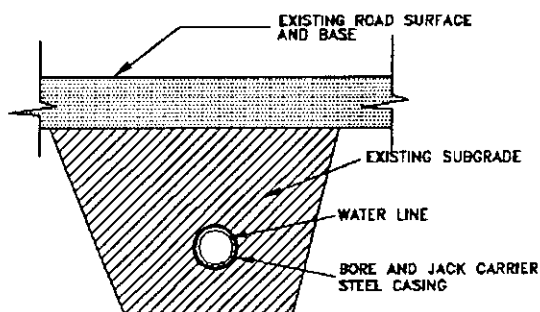
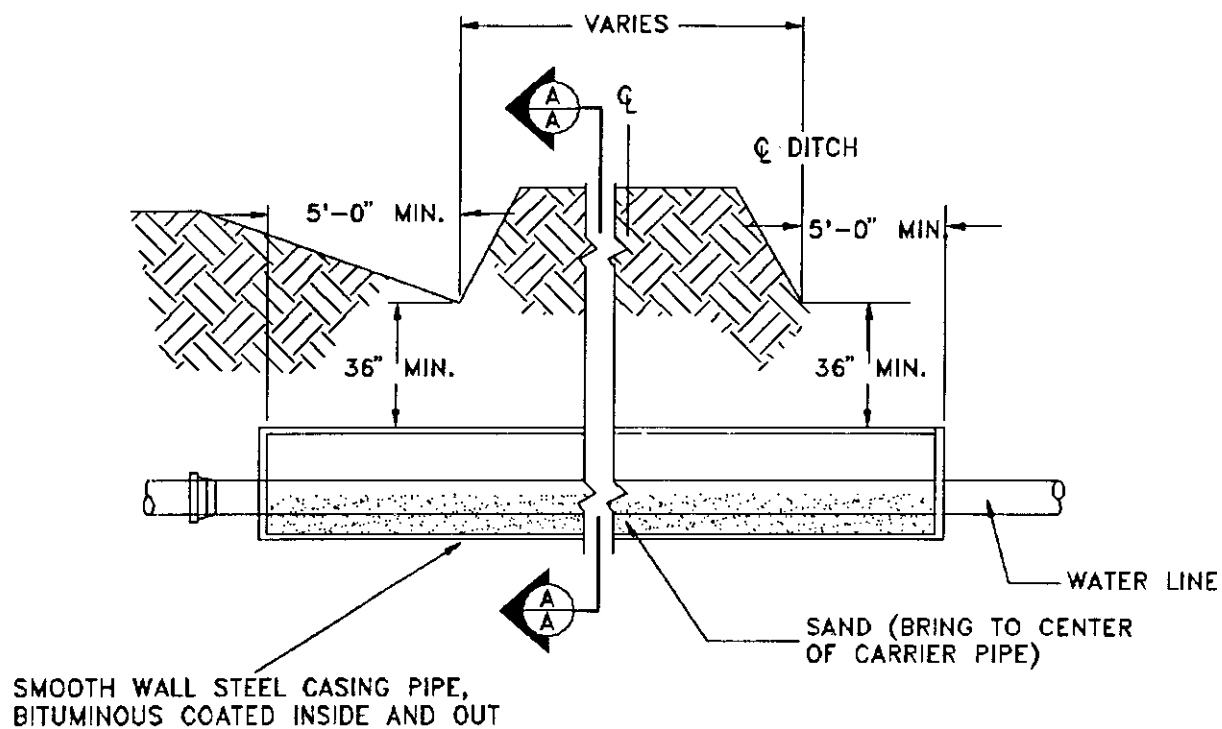
* MINIMUM DEPTH OF COVER SHALL BE 36" ON STATE RIGHT-OF-WAYS



TYPICAL GRAVITY SEWER TRENCH DETAIL

NOT TO SCALE

PIPE DIA. INCHES	MAX Bd TRENCH WIDTH TOP OF PIPE FEET
0-8"	2.33
10"	2.50
12"	2.67
15"	3.00
18"	3.25



SECTION A-A

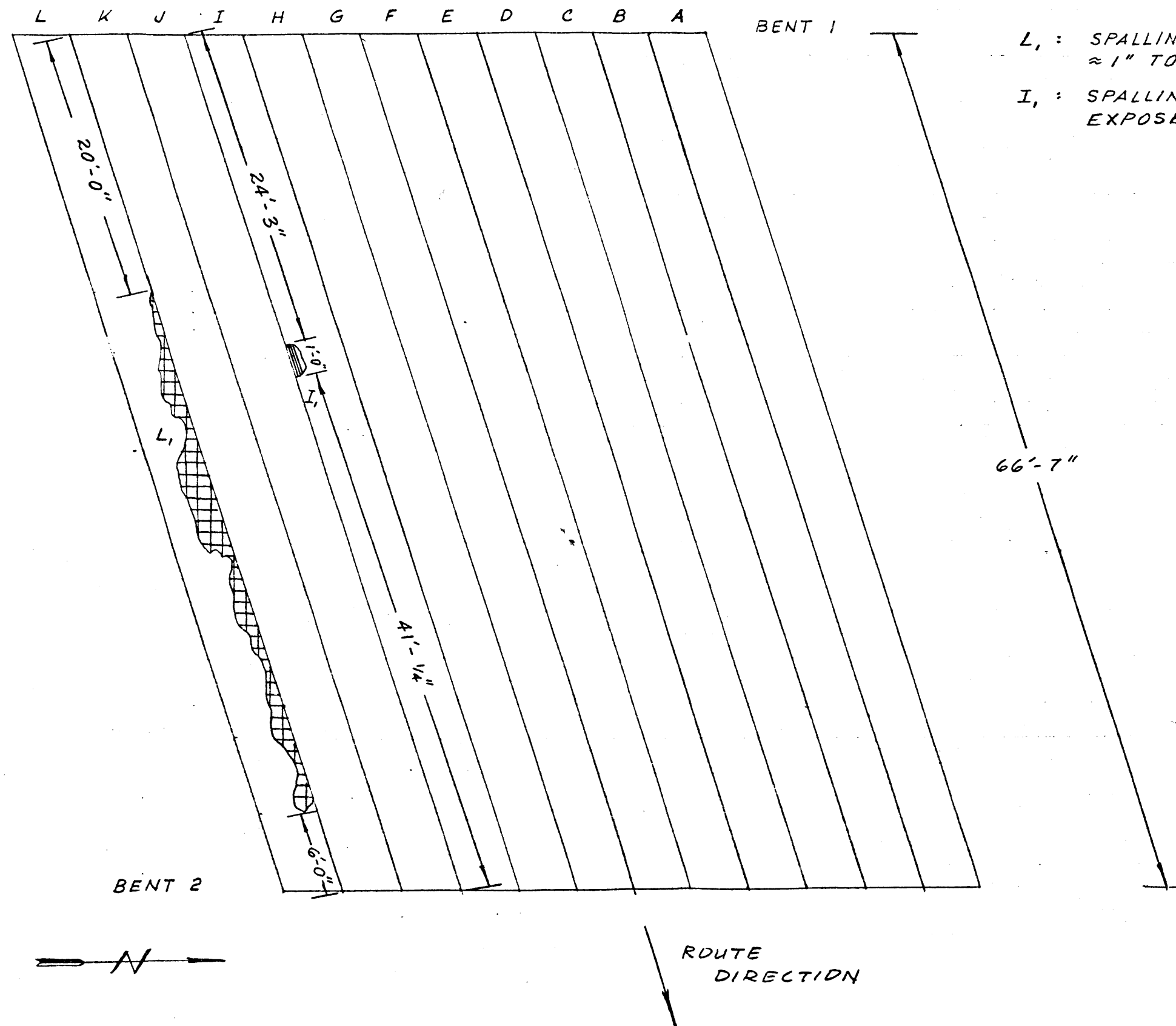
STEEL CASING PIPE	
NOMINAL DIAMETER (inches)	MINIMUM THICKNESS (inches)
Under 14	0.118
14-16	0.219
18	0.250
20	0.281
22	0.312
24	0.344
26	0.406
28-30	0.406
32	0.438
34-36	0.469
38-42	0.500

HIGHWAY CROSSING BORE AND JACK CASING (WHERE NOTED)

PAGE NO. _____

SHEET _____ OF _____

SPAN II



MAY 24 1983

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES

9.78

80-I40-983 SPAN II -
RT. LANE - BENT 1 TO 2

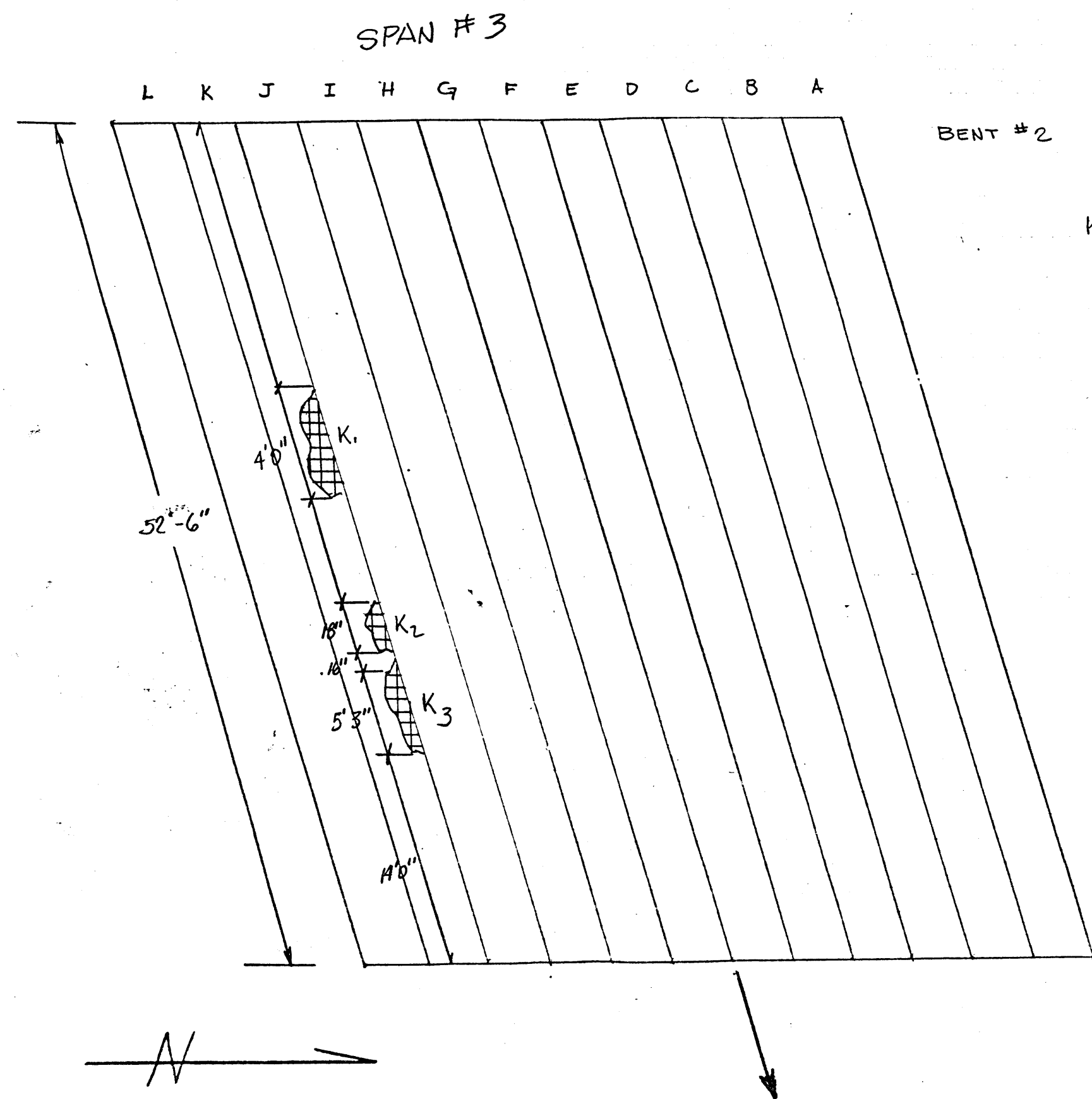
BRIDGE NO.
CROSSING:

COUNTY: SMITH

DRAWN LKB
DATE 12-29-82

REVISION
DATE

MAY 24 1983



BENT #2

- K₁: 4' x 1' area of spalling
- K₂: 5'3" x 1' area of spalling, exposed cables
4 exposed cables
1 broken cable
- K₃: 18" x 10" area of spalling
3 exposed cables

BENT #2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES
9.78 Rt Lane

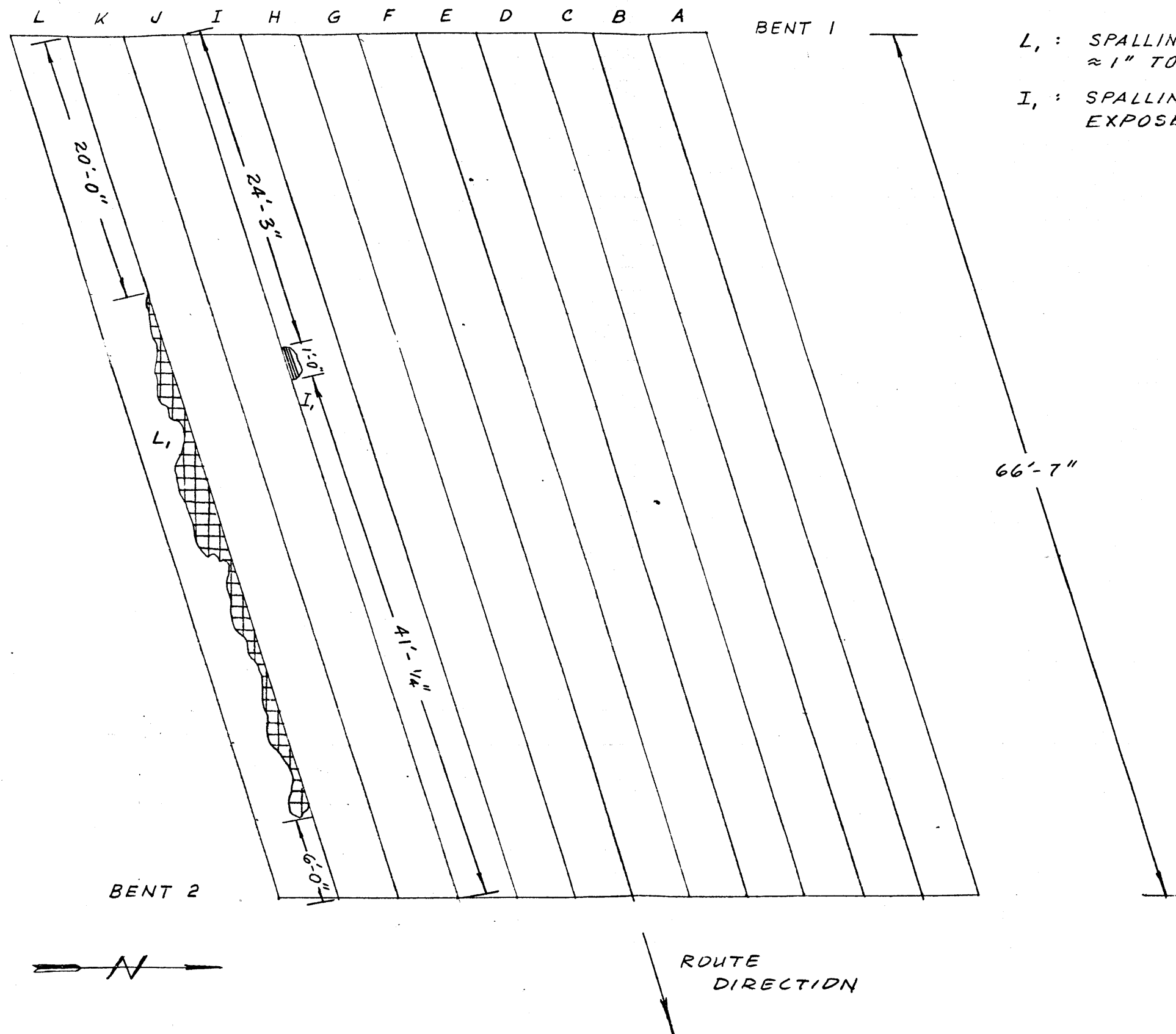
80 - I40 - 985 ~~Bridge~~
SPAN #3 BENT #1 TO ABUT #2

BRIDGE NO.
CROSSING:

COUNTY: SMITH COUNTY

DRAWN <u>VCT</u>	REVISION
DATE <u>12-27-82</u>	DATE

SPAN II



L, : SPALLING VARIES IN WIDTH FROM
≈ 1" TO ≈ 2'-0" ALONG ITS LENGTH

I, : SPALLING WIDTH ≈ 6" WITH 3
EXPOSED CABLES

DATE RECEIVED
2-3-83
2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES

80-I40-983 - SPAN II -
RT. LANE - BENT 1 TO 2

BRIDGE NO.
CROSSING:

COUNTY: SMITH

DRAWN LKB
DATE 12-29-82

REVISION
DATE



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUITE 1200, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0349

October 6, 2004

Mr. Terry Leatherwood
Bridge Inv. & Repair Office
Suite 1200
J. K. Polk Bldg.

RE: Contract Maintenance
September 3, 2004 Letting

Mr. Leatherwood;

Enclosed are two (2) 1/2 size sets of repair details of in house and/or consultant repair projects for the September 3, 2004 Letting.

<u>COUNTY</u>	<u>BRIDGE NO.</u>	<u>DESCRIPTION</u>	<u>DONE BY & CONTRACT NO.</u>
SHELBY	79-I40-0.00 (WORKING DAYS - SEE PROPOSAL)	I-40 / MISSISSIPPI RIVER	CONSULTANT NO. CNC913
HAMILTON	33-SR8-11.21 (WORKING DAYS - ON OR BEFORE MAY 15, 2005)	SR8 / E. ELMWOOD DR. & SOUTHERN RAILROAD	CONSULTANT NO. CNC330
HENRY	40-SR69-6.09 (WORKING DAYS - SEE PROPOSAL)	SR69 / WEST SANDY CREEK	CONSULTANT NO. CNC336
MADISON	57-SR5-9.32 (WORKING DAYS - SEE PROPOSAL)	SR5 / BOND CREEK	CONSULTANT NO. CNC337
MAURY	60-SR7-13.88 (WORKING DAYS - SEE PROPOSAL)	SR7 / DUCK RIVER	CONSULTANT NO. CNC335
SHELBY	79-I240-14.21 (LEFT) (NO PLANS) (WORKING DAYS - SEE PROPOSAL)	I-240 / I-40 (RAMP)	IN HOUSE NO. CNC345
SHELBY	79-SR57-8.09 " " 79-2826-6.80 (NO PLANS) (WORKING DAYS - SEE PROPOSAL)	SR57 (POPLAR AVE.) / I-240 2826 (PARK AVE.) / I-240	IN HOUSE NO. CNC343
SMITH	80-SR53-8.39 (WORKING DAYS - ON OR BEFORE DECEMBER 15, 2004)	SR53 / I-40	CONSULTANT NO. CNC344
UNICOI	86-SR36-21.20 (WORKING DAYS - ON OR BEFORE DECEMBER 31, 2004)	SR36 / CSX RAILROAD	CONSULTANT NO. CNC329

WILLIAMSON 94-SR441-1.56 RL SR441 (MOORE'S LN.) / I-65
(WORKING DAYS - ON OR BEFORE OCTOBER 04, 2004)

CONSULTANT
NO. CNC340

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

Yours very truly,



(for)

Wayne J. Seger
Civil Engineering Manager 2
Bridge Inspection and Repair

WJS:hl
Enclosure
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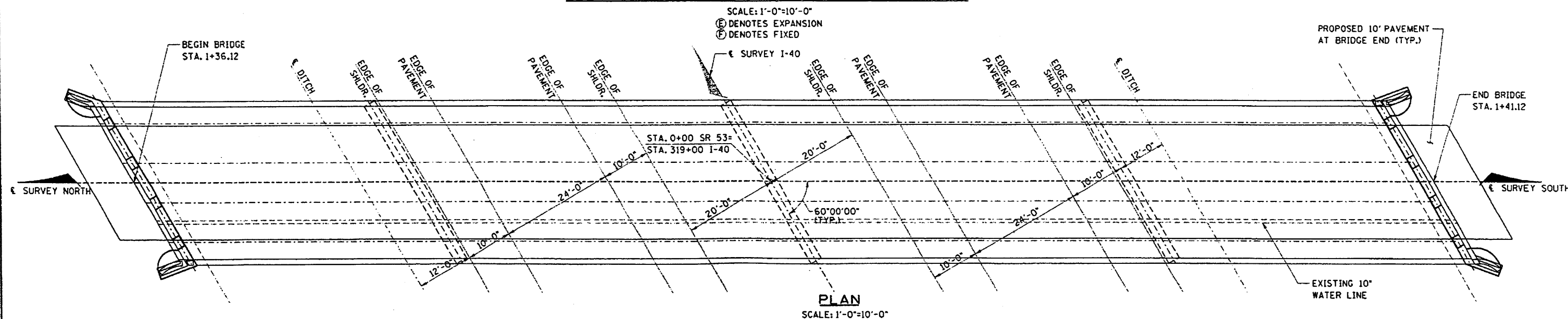
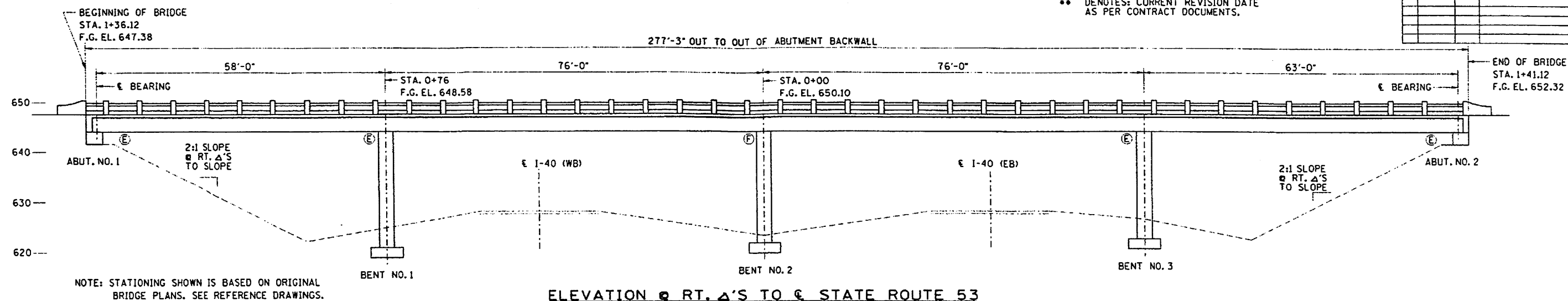
LIST OF STANDARD DRAWINGS

DWG. NO.	LAST REV. DATE	DRAWING
STD-1-5	7-31-00	REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS-1995
STD-9-1	12-19-94	REINFORCING BAR SUPPORT

LIST OF SPECIAL PROVISIONS

NO.	LAST REV. DATE	REGARDING
105A	..	APPROVAL OF SHOP DRAWINGS
108B	..	PROJECT COMPLETION AND INCENTIVE/DISINCENTIVE
604H	..	BRIDGE DECK PREPARATION USING HYDRODEMOLITION
604CR	..	REPAIR OF BRIDGE DECK CRACKS
619A	..	POLYMER MODIFIED CONCRETE (PMC) OVERLAY
** DENOTES: CURRENT REVISION DATE AS PER CONTRACT DOCUMENTS.		

PROJECT NO.		YEAR	SHEET NO.
80001-4177-04		2004	
REVISIONS			
NO.	DATE	BY	BREF DESCRIPTION
1	7-23-04	TAK	GENERAL REVISIONS
2	8-17-04	TDM	GENERAL REVISIONS



LIST OF BRIDGE DRAWINGS

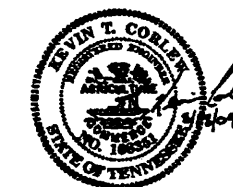
DWG. NO.	LAST REV. DATE	DRAWING
BR-71-1	8-17-04	LAYOUT OF BRIDGE TO BE REPAIRED (BR. NO. 80-SR053-8.39)
BR-71-2	8-17-04	ESTIMATED BRIDGE QUANTITIES
BR-71-3	7-23-04	BRIDGE GENERAL NOTES
BR-71-4	---	TYPICAL CROSS SECTION
BR-71-5	---	SUPERSTRUCTURE DETAILS
BR-71-6	8-17-04	SUPERSTRUCTURE DETAILS

LIST OF REFERENCE DRAWINGS

DWG. NO.	LAST REV. DATE	DRAWING
H-5-110	---	HANDRAIL
K-21-25	---	LAYOUT OF BRIDGE
K-21-26, K-21-27	---	SUPERSTRUCTURE
K-21-28	---	ABUTMENT NO. 1 AND 2
K-21-29	---	BENT NO. 1, 2 AND 3
H-5-146	---	ROADWAY EXPANSION DEVICE AND BEARING

SCOPE OF WORK

- BRIDGE TO BE CLOSED DURING CONSTRUCTION.
- REMOVE 3/4" OF EXISTING DECK BY HYDRO-DEMOLITION (ROTO-MILLING IS OPTIONAL).
- PERFORM FULL DEPTH AND PARTIAL DEPTH DECK REMOVAL OF BAD AREA OF DECK.
- COMPLETE FULL DEPTH DECK REPAIR.
- CLEAN AND MAINTAIN DECK DRAIN HOLES.
- MODIFY EXPANSION JOINTS AT ABUTMENTS.
- PLACE NEW PAVEMENT AT BRIDGE ENDS.
- PLACE NEW 2" PMC OVERLAY OVER ENTIRE DECK.
- PLACE HMM SEALER ALONG ALL EDGES OF DECK.
- HAND TOOL, CLEAN AND PAINT BEARINGS AT ABUTMENTS AND BENTS.
- PLACE GUARDRAILS AT BRIDGE ENDS.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE
TO BE REPAIRED

STATE ROUTE 53 OVER INTERSTATE 40
STA. 319+80.00
BRIDGE NO. 80-SR053-8.39
SMITH COUNTY
2004

DESIGNED BY: GSP DATE: 06/04
DRAWN BY: GARY YOUNG DATE: 06/04
SUPERVISED BY: TED A. KHAZEMWICZ DATE: 06/04
CHECKED BY: TED A. KHAZEMWICZ DATE: 06/04



BR-71-1

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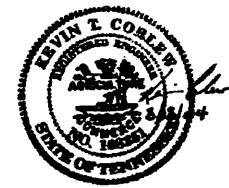
- ① THE COST OF REMOVING MISCELLANEOUS AREAS WITHIN THE BRIDGE LIMITS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 202-04.01.
- ② INCLUDES ALL LABOR AND MATERIALS TO REHABILITATE EXISTING BRIDGE BEARINGS. ITEMS TO BE COMPLETED INCLUDE, BUT ARE NOT LIMITED TO HAND TOOL CLEANING AND STRUCTURAL STEEL PAINTING.
- ③ INCLUDES ALL LABOR AND MATERIALS REQUIRED TO MECHANICALLY GROOVE THE BRIDGE DECK AND PAVEMENT AT BRIDGE ENDS AND REMOVAL OF GROOVING RESIDUE.
- ④ INCLUDES THE COST OF ALL LABOR, MATERIALS AND EQUIPMENT TO REMOVE AND DISPOSE OF ALL EXISTING CONCRETE AND OTHER DEBRIS TO A MINIMUM ¾" DEPTH BY HYDRODEMOLITION SUPPLEMENTED BY OTHER NECESSARY MEANS, INCLUDING VACUUMING, SHIELDING, CONTAINMENT, AND FILTRATION OF WASTE WATER. FOR NOTES AND DETAILS SEE SHEET BR-71-5 AND SPECIAL PROVISION 604H (ROTOR MILLING ½" WILL BE ALLOWED).
- ⑤ THIS ITEM SHALL BE BID WITH THE CONTINGENCY THAT IT MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.
- ⑥ COST OF INSTALLING ELASTOMERIC CONCRETE, BACKER ROD, NEW JOINT SEALER, CUTTING AND WELDING EXISTING JOINT, SANDBLASTING AND ANY MISCELLANEOUS MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF THE NEW EXPANSION DEVICE TO BE INCLUDED UNDER ITEM NO. 604-10.44, EXPANSION JOINT REPAIRS, L.F. FOR DETAILS SEE SHEET BR-71-6.
- ⑦ INCLUDES ALL LABOR AND MATERIALS NECESSARY TO PLACE A NEW 2" POLYMER MODIFIED CONCRETE OVERLAY AND INCLUDES THE COST ASSOCIATED WITH PLACING AND FINISHING OF POLYMER MODIFIED CONCRETE (PMC) OVERLAY. FOR NOTES AND DETAILS SEE DRAWING NO. BR-71-5 AND TENNESSEE DOT STANDARD SPECIFICATION AND SPECIAL PROVISION 619A.
- ⑧ INCLUDES ALL COST FOR INSTALLING THE BRIDGE DECK CRACK SEALER (HMWM) INCLUDING CRACK PREPARATION, CLEANING LABOR AND ALL MISCELLANEOUS MATERIALS REQUIRED TO SEAL THE LONGITUDINAL CONSTRUCTION JOINT ACCORDING TO SPECIAL PROVISION 604CR AND MANUFACTURERS SPECIFICATIONS. THIS ITEM DOES NOT INCLUDE THE COST OF FURNISHING THE BRIDGE SEALANT ITSELF.
- ⑨ INCLUDES ALL COST FOR FURNISHING THE SEALER (HMWM) FOR SEALING CRACKS. THE SEALER (HMWM) SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION 604CR.
- ⑩ PRIOR TO CONSTRUCTION OF PAVEMENT AT BRIDGE ENDS THE CONTRACTOR SHALL SUBMIT A PROPOSED BILL OF STEEL TO THE ENGINEER FOR APPROVAL. PAVEMENT AT BRIDGE END REQUIRED AT BOTH BRIDGE ENDS AND SHALL BE MODIFIED TO BE 10'-0" WIDE WITHOUT SUBFOOTINGS. FOR DETAILS AND NOTES SEE DRAWING NO. BR-71-6.
- ⑪ THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS. DETAILS OF ANY TEMPORARY SUPPORT SYSTEM OR FALSEWORK REQUIRED SHALL BE SUBMITTED TO THE ENGINEER BEFORE ANY REPAIR IS BEGUN. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 602-10.05. SEE SHEET BR-71-5 FOR NOTES AND DETAILS. THIS ITEM TO INCLUDE THE COST OF PLYWOOD DECKING REQUIRED TO KEEP DEBRIS FROM FALLING ON TO TRAFFIC BELOW DURING FULL DEPTH DECK REPAIRS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STATE ROUTE 53 OVER INTERSTATE 40
STA. 319+80.00
BRIDGE NO. 80-SR053-8.39
SMITH COUNTY
2004

DESIGNED BY GSP DATE 06/04
 DRAWN BY GARY YOUNG DATE 06/04
 SUPERVISED BY TED A. KMAZEWYCZ DATE 06/04
 CHECKED BY TED A. KMAZEWYCZ DATE 06/04

 GRESHAM
SMITH AND
PARTNERS



BR-71-2

GENERAL NOTES

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

DESIGN SPECIFICATIONS: AASHTO 2002 EDITION WITH ADDENDA.

LOADING: HS20-44

REINFORCING STEEL: SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTION 604 AND 907 OF THE STANDARD SPECIFICATIONS.

CONCRETE: TO BE CLASS "A" 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.

HIGH EARLY STRENGTH CONCRETE: SHALL BE HIGH EARLY STRENGTH CONCRETE (UNLESS OTHERWISE NOTED) WITH A COMPRESSIVE STRENGTH OF 3,000 PSI AT 18 HOURS. THE CONTRACTOR SHALL PROVIDE PROOF PRIOR TO BEGINNING WORK THAT THE PROPOSED CONCRETE MIX SHALL OBTAIN REQUIRED PROPERTIES. PROOF SHALL BE PROVIDED BY AN INDEPENDENT TESTING COMPANY AND SUBMITTED TO THE MATERIALS AND TEST DIVISION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION FOR APPROVAL. NO LOAD SHALL BE PERMITTED ON ANY OF THE REPAIR AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3,000 PSI MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF 48 HOURS.

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

NO PNEUMATIC CONCRETE ALLOWED.

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

ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE PARTIES INCLUDE, BUT ARE NOT LIMITED TO: (1) LOCAL LAW ENFORCEMENT OFFICE, (2) LOCAL FIRE DEPARTMENT, (3) AMBULANCE SERVICE, (4) LOCAL SCHOOL SUPERINTENDENT, (5) UNITED STATES POSTAL SERVICE AND (6) LOCAL ROAD SUPERINTENDENT.

SUGGESTED CURING PROCEDURE FOR POLYMER MODIFIED CONCRETE OVERLAY

COVER THE OVERLAY PROMPTLY WITH A SINGLE LAYER OF WET BURLAP. NEW BURLAP, EVEN WHEN PRESOAKED, CAN DRY OUT QUICKLY AND SHOULD BE AVOIDED OR PRESOAKED FOR SEVERAL DAYS. IT MAY REQUIRE THE BURLAP TO BE WET, LET DRY OUT, AND THIS PROCEDURE REPEATED SEVERAL TIMES TO ALLOW TOTAL ABSORPTION. USE WHITE VISQUEEN (PLASTIC) TO COVER THE WET BURLAP DURING THE OVERLAY IN HOT WEATHER.

PLACE THE WET BURLAP ON THE OVERLAY AS SOON AS POSSIBLE CONSISTENTLY SPRAY A MIST OF WATER OVER THE BURLAP BEFORE COVERING WITH WHITE VISQUEEN (PLASTIC) AND SHOULD NOT BE EXCESSIVE TO THE POINT THE WATER IS DAMAGING THE FRESH OVERLAY SURFACE.

THE WHITE VISQUEEN (PLASTIC) SHOULD BE PULLED, PLACED AND KEPT WITHIN TEN TO THIRTY FEET OF THE FRONT COVER OF BURLAP. THESE DISTANCES SHOULD BE ADJUSTED BASED ON THE WEATHER CONDITIONS AT THE TIME OF PLACEMENT. SECURE THE PLASTIC SO IT WILL NOT BLOW OFF THE BURLAP DURING THE WET CURE. THE LESS NUMBER OF SEAMS IN THE PLASTIC IS BEST SUITED AND EASIER TO SECURE.

SECURE THE PLASTIC BY USING THE RAILS, ROLLING OVER THE EDGES OF WET BURLAP ONTO THE PLASTIC. LAYING FOLDED WET BURLAP TRANSVERSELY ACROSS THE DECK OR BY KEEPING WATER ON THE SURFACE OF THE PLASTIC. SEAL THE PLASTIC TO AVOID THE WIND FROM PUFFING UP THE PLASTIC DURING THE WET CURE. EXERCISE CAUTION WHEN WETTING DOWN THE SURFACE OF THE PLASTIC SO AS NOT TO ALLOW THE WATER TO RUN INTO THE OVERLAY BEING PLACED.

DURING HOT SUMMER OVERLAYS, SOAKER HOSES SHOULD BE PLACED UNDER THE PLASTIC. THIS SHOULD BE DONE WHEN THE OVERLAY HAS SET LONG ENOUGH TO SUPPORT THE WEIGHT OF THE SOAKER HOSES AND AFTER THE OVERLAY PLACEMENT IS COMPLETED. USING THE COOLEST WATER POSSIBLE WILL GREATLY ENHANCE ALL THESE PROCEDURES IN HOT WEATHER.

ALSO SEE STANDARD SPECIFICATION 619.13 FOR ADDITIONAL NOTES ABOUT CURING.

1 GENERAL TIME LIMITATION AND WORK RESTRICTIONS

NO LANE CLOSURES ON I-40 WILL BE ALLOWED ON HOLIDAY WEEKENDS OR ON DAY OF TITAN HOME FOOTBALL GAMES. NO LANE CLOSURES WILL BE ALLOWED ON DAY OF IN-STATE UNIVERSITY OF TENNESSEE FOOTBALL GAMES. SEE ROADWAY TRAFFIC CONTROL SHEETS FOR OTHER RESTRICTIONS.

PROJECT NO.		YEAR	SHEET NO.
80001-4177-04		2004	2A
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	7-23-04	TAK	REVISE NOTE

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.

CRACK SEALING WITH METHACRYLATE: APPLY HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) CRACK SEAL IN LONGITUDINAL CONSTRUCTION JOINTS. SEALER SHALL BE APPLIED AFTER ALL CONCRETE HAS BEEN IN PLACE A MINIMUM OF FOUR (4) DAYS.

SPECIAL NOTE FOR UTILITIES: IT IS INTENDED THAT THE COST OF MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF UTILITIES SHOULD BE BORNE BY OTHERS AND SHALL NOT BE PAID FOR AS PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHERS IN THE INSTALLATION OF UTILITIES WITH NO ADDITIONAL COMPENSATION ALLOWED THE CONTRACTOR.

DAMAGE TO EXISTING STRUCTURES TO BE LEFT IN PLACE SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

FORMS AND FALSEWORK: ALL CONCRETE FORM WORK, FALSE WORK, AND TEMPORARY SUPPORTS SHALL BE REMOVED AFTER REPAIRS ARE COMPLETED. COST OF FORMS, FALSEWORK, AND TEMPORARY SUPPORT REMOVAL SHALL BE INCLUDED IN ITEMS BID ON. THIS WORK SHALL BE COMPLETED BEFORE FINAL PAYMENT IS APPROVED.

CLEANING AND PAINTING: ALL STEEL BEARINGS SHALL BE CLEANED IN ACCORDANCE WITH TENNESSEE STANDARD SPECIFICATION 603.05. HAND OR POWER TOOL CLEANING SHALL REMOVE ALL RUST, SCALE, LOOSE PAINT AND DIRT. AFTER CLEANING, THE CLEANED STEEL SHALL BE PAINTED WITH AN APPROVED EPOXY MASTIC PAINT APPLIED AT A MINIMUM 4.0 MILS. THE COLOR OF THE EPOXY MASTIC SHALL BE ALUMINUM OR GREY.

SEE THE TENNESSEE DEPARTMENT OF TRANSPORTATION'S QUALIFIED PRODUCTS LIST FOR ACCEPTABLE BRANDS OF EPOXY MASTIC. ALL PRODUCTS USED, INCLUDING THINNERS MUST BE SUPPLIED BY THE SAME MANUFACTURER.

APPLICATION: THE COATING APPLICATOR SHALL FOLLOW THE MANUFACTURER'S PRINTED INSTRUCTIONS AND SHALL HAVE THESE INSTRUCTIONS ON SITE DURING THE COURSE OF THE WORK.

WORKER PROTECTION: OUR MAINTENANCE RECORDS INDICATE THAT THE BEARINGS ON THIS BRIDGE WERE ORIGINALLY PAINTED WITH MATERIALS CONTAINING LEAD AND OR CHROMATES AND THE CONTRACTOR SHALL BE REQUIRED TO PROCEED ACCORDINGLY TO MAKE ALL MANDATORY SAFEGUARDS PRESCRIBED BY THE STATE AND FEDERAL LAW FOR WORKER PROTECTION AND HAZARDOUS MATERIAL DISPOSAL.

CONTAINMENT AND DISPOSAL OF EXISTING PAINT SYSTEM: ACCORDING TO OUR RECORDS THE EXISTING PAINT SYSTEM CONTAINS LEAD AND/OR CHROMATE PAINT, WHICH HAS BEEN DESIGNATED AS A HAZARDOUS MATERIAL. THE CONTRACTOR SHALL CONTAIN AND DISPOSE OF ALL PAINT REMOVAL WASTE IN ACCORDANCE WITH TENNESSEE STANDARD SPECIFICATION 603.13.

CONCERNING USE OF HYDRODEMOLITION FOR SCARIFYING DECK 3/4" PARTIAL DEPTH CONCRETE REMOVAL AND NEW CONCRETE.

THIS IS A GENERAL DESCRIPTION OF WORK REQUIRED AND PAYMENT FOR THAT WORK. SEE SPECIAL PROVISION 604H FOR EXACT LIMITS OF WORK AND PAYMENT CONCERNING HYDRODEMOLITION AND NEW PMC OVERLAY.

THE ENTIRE DECK AREA ON THE BRIDGE SHALL RECEIVE HYDRODEMOLITION AS DESCRIBED BELOW. THE AREA OF THE DECK SHALL BE SCARIFIED 3/4" 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.

THE NEW POLYMER MODIFIED CONCRETE PLACED IN AREAS OF PARTIAL DEPTH REMOVAL UP TO 3/4" BELOW THE ORIGINAL BRIDGE DECK ELEVATION SHALL BE PAID FOR UNDER ITEM NO. 619-01.10, POLYMER MODIFIED CONCRETE (VARIABLE DEPTH), C.Y. (SEE SPECIAL PROVISION 619A) AND WILL BE PLACED AT THE SAME TIME AS THE NEW 2" PMC OVERLAY. THE NEW 2" PMC OVERLAY WHICH INCLUDES THE PMC 3/4" BELOW ORIGINAL BRIDGE DECK ELEVATION, SHALL BE PAID FOR UNDER ITEM NO. 619-01, BRIDGE DECK OVERLAY (PMC), S.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE GENERAL NOTES

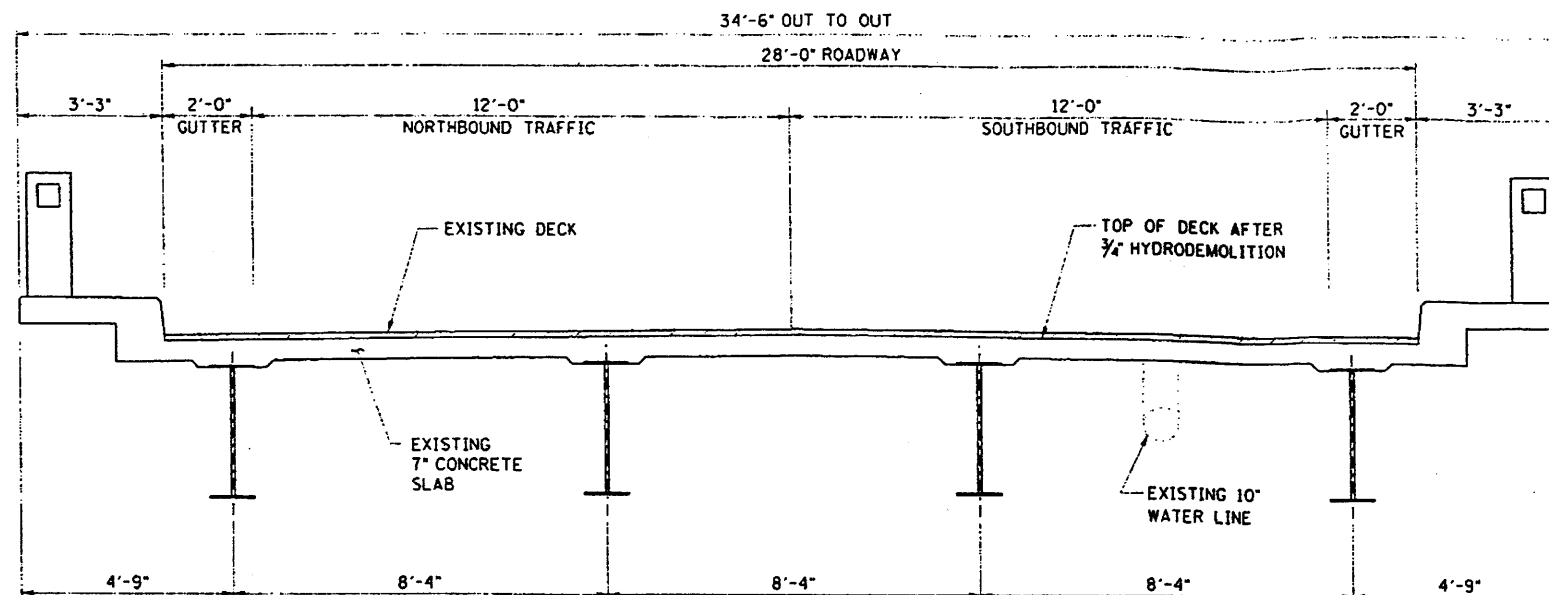
STATE ROUTE 53 OVER INTERSTATE 40
STA. 319+80.00
BRIDGE NO. 80-SR053-8.39
SMITH COUNTY
2004

DESIGNED BY: GSP DATE: 06/04
DRAWN BY: GARY YOUNG DATE: 06/04
SUPERVISED BY: TED A. KHAZAYECZ DATE: 06/04
CHECKED BY: TED A. KHAZAYECZ DATE: 06/04



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PARTNERS





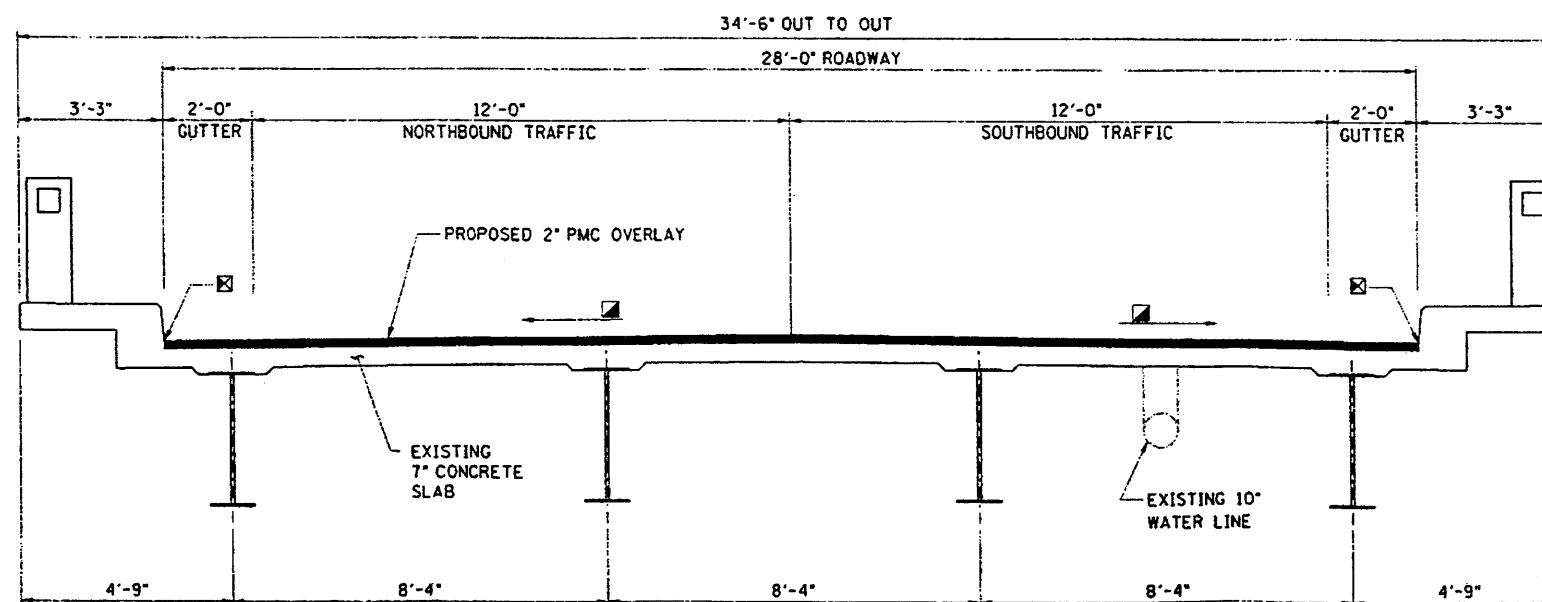
NOTE: ROAD TO BE CLOSED DURING CONSTRUCTION

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TYPICAL CROSS SECTION

SCALE: $\frac{1}{2}" = 1' - 0"$
(LOOKING SOUTH)

 INDICATES AREA OF REMOVAL BY HYDRODEMOLITION.
(ROTO-MILLING 1/2" IS OPTIONAL)
TO BE PAID FOR UNDER ITEM NO. 604-10.20,
HYDRODEMOLITION (S.Y.)



☒ DENOTES: APPLY HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM)
CRACK SEAL IN CONSTRUCTION JOINT.

TYPICAL CROSS SECTION

SCALE: $\frac{1}{2}" = 1' - 0"$
(LOOKING SOUTH)

■ DENOTES: MATCH EXISTING CROSS-SLOPE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTION

STATE ROUTE 53 OVER INTERSTATE 40
STA. 319+80.00
BRIDGE NO. 80-SR053-8.39
SMITH COUNTY
2004

BR-71-4

DESIGNED BY	GSP	DATE	06/04
DRAWN BY	GARY YOUNG	DATE	06/04
SUPERVISED BY	TED A. KWIATNYCZ	DATE	06/04
CHECKED BY	TED A. KWIATNYCZ	DATE	06/04



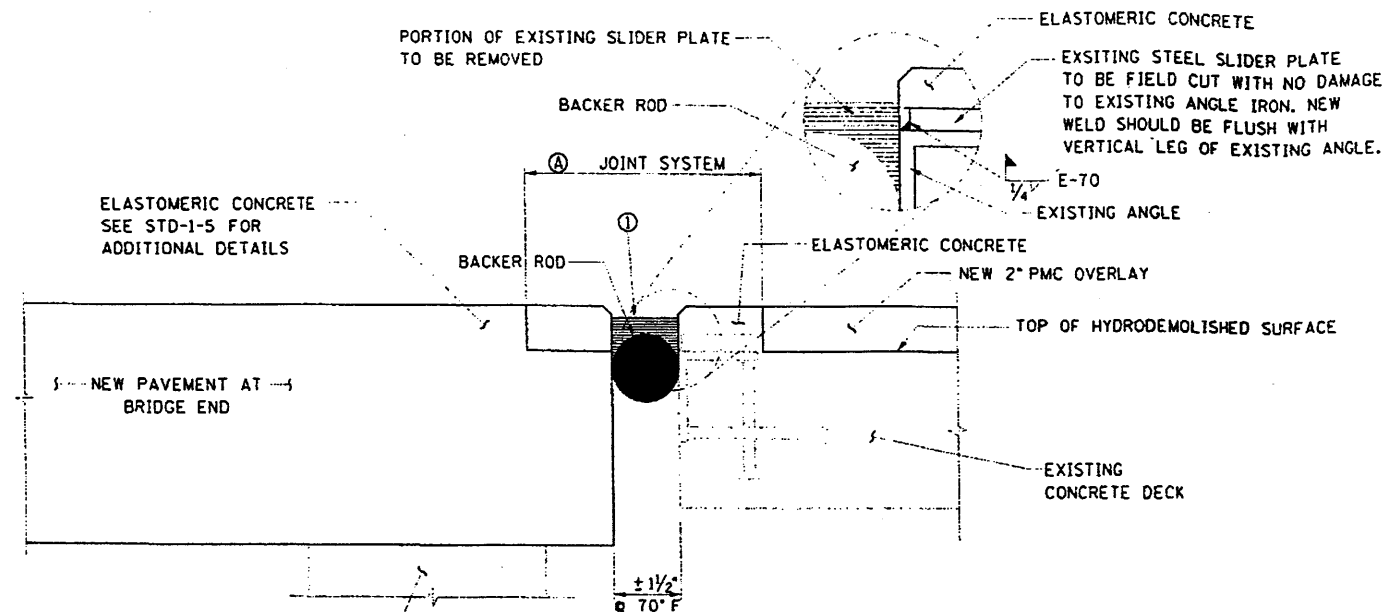
REVISIONS

BRIDGE DECK REPAIR DETAIL
(SHOWING FULL DEPTH REPAIR)

1. FULL DEPTH DECK REPAIRS SHALL BE COMPLETED ACCORDING TO RESTRICTIONS ON SHEET 2A.
2. CONCRETE FOR FULL DEPTH REPAIRS SHALL BE HIGH EARLY STRENGTH (18 HOUR). FOR HIGH EARLY STRENGTH CONCRETE NOTES, SEE DRAWING BR-71-3.



BR-71-5



1 EXPANSION JOINT REPAIR

(ABUTMENTS 1 & 2)
NOTE: COST TO BE INCLUDED IN ITEM NO. 604-10.44.

GENERAL NOTES

EXPANSION GAP WILL CHANGE AT OTHER TEMPERATURES AND THE CONTRACTOR SHALL COMPENSATE FOR JOINT MATERIAL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

THE DEPTH OF THE JOINT POURED SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'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.

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.

EXPANSION JOINT REPAIR:

INCLUDES FURNISHING ALL MATERIALS AND EQUIPMENT, COMPLETE INSTALLATION AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE JOINT SEALANT SYSTEM CONSISTS OF A SURFACE PRIMER: A SELF-LEVELING OR NON-SAG SEALANT AND BACKER MATERIAL. DETAILED SPECIFICATIONS AND INSTALLATION PROCEDURES SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. THE MANUFACTURER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORKMANSHIP AND PERFORMANCE OF THE INSTALLED JOINT.

THE ELASTOMERIC CONCRETE SHALL NOT BE PLACED IF ANY MOISTURE IS PRESENT AT THE AREAS WHERE IT IS TO BE PLACED. THE ELASTOMERIC CONCRETE PROVIDED SHALL BE CAPABLE OF BONDING TO STEEL, CONCRETE AND ASPHALT. CURING OF THE ELASTOMERIC CONCRETE SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATION WITH ANY REQUIRED SPECIAL EQUIPMENT PROVIDED.

SAND BLAST THE STEEL EXTRUSION TO SSPC-10 SPECIFICATIONS. PREPARE THE ELASTOMERIC CONCRETE ACCORDING TO MANUFACTURING RECOMMENDATIONS AND WORK THE MATERIAL INTO PREPARED AREA MAKING CERTAIN IT IS SOUNDLY PACKED AROUND THE STEEL PORTION OF THE EXPANSION DEVICES. TROWEL TO A SMOOTH FINISH.

DESIGNED BY: GSP DATE: 06/04
DRAWN BY: GARY YOUNG DATE: 06/04
SUPERVISED BY: TED A. KHAMATYEVICH DATE: 06/04
CHECKED BY: TED A. KHAMATYEVICH DATE: 06/04



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PARTNERS

A JOINT SEAL SYSTEM:

THE EXPANSION JOINT SYSTEM USED SHALL BE ON THE TDOT APPROVED QUALIFIED LISTS FOR ACCEPTABLE PRODUCTS. THE JOINT SYSTEM SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF AN AUTHORIZED TECHNICIAN PROVIDED BY THE EXPANSION JOINT SUPPLIER, FOR EACH JOINT AT EACH BRIDGE AND FOR EACH BRIDGE LOCATION WITHIN THE PROJECT. THE TECHNICIAN MUST APPROVE ALL ASPECTS OF THE GEOMETRY AND PREPARATION, INCLUDING GRINDING AND/OR GROOVING, PRIOR TO ANY JOINT MATERIAL INSTALLATION.

JOINT SEALANT:

THE SELF-LEVELING SILICONE JOINT SEALANT MATERIAL SHALL BE FROM THE TDOT QUALIFIED PRODUCTS LIST NO. 5 SECTION B.

SURFACE PRIMER:

THE JOINT SEALANT MUST BE APPLIED TO CONCRETE SURFACES WITH THE USE OF A SPECIAL PRIMER FOR EACH APPLICATION. THE VERTICAL FACES OF THE JOINT RECEIVING SURFACE PRIMER ARE TO BE FREE OF DUST PARTICLES, MOISTURE, OILS AND LAITANCE AT THE TIME SURFACE PRIMER IS APPLIED PER THE MANUFACTURER'S REQUIREMENTS. THE SURFACE PRIMER WILL BE FULLY CURED BEFORE THE JOINT SEALANT IS INSTALLED. THE MANUFACTURER'S APPROVAL AND INSTALLATION PROCEDURES FOR A SPECIAL PRIMER MUST BE GIVEN TO THE PROJECT ENGINEER IN WRITING BEFORE THE PRIMER IS INSTALLED.

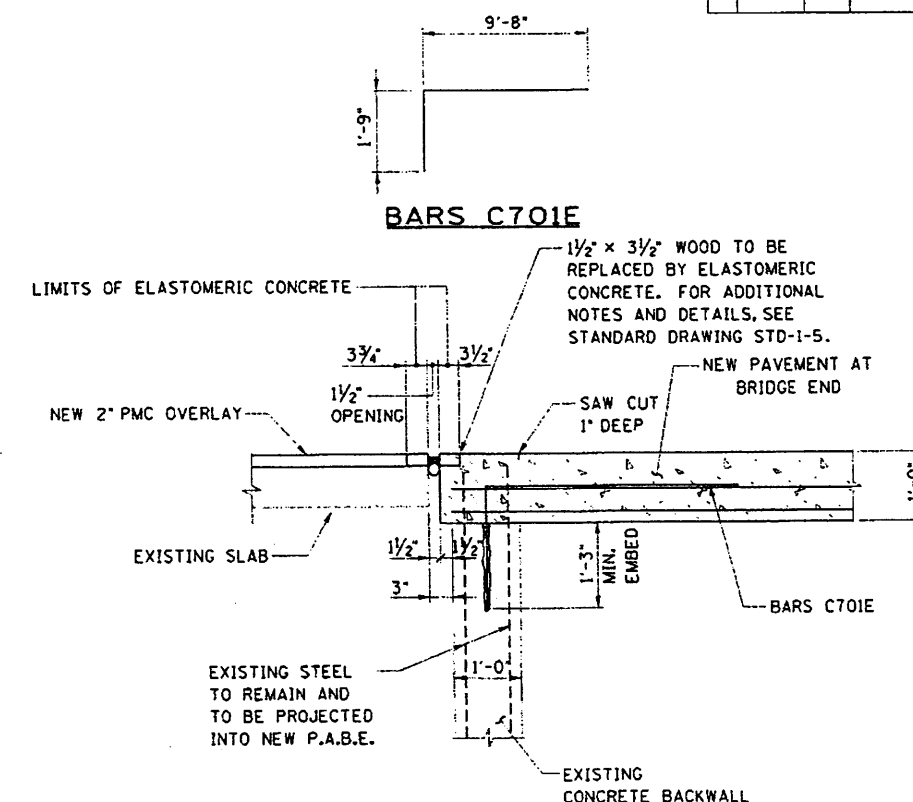
JOINTS:

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

THE NEW SEALER SHALL BE ONE AS FOUND IN T.D.O.T. PRODUCTS LIST. CONTRACTOR MAY CONTACT T.D.O.T. MATERIALS AND TESTS FOR PRODUCTS LIST.

ELASTOMERIC CONCRETE TO HAVE 3/8" CHAMFERS.

ABUTMENTS 1 & 2 EXPANSION JOINT REPAIR: COST OF INSTALLING ELASTOMERIC CONCRETE, BACKER ROD, NEW JOINT SEALER, CUTTING AND WELDING EXISTING JOINT, SANDBLASTING, GRINDING AND ANY MISCELLANEOUS MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF THE NEW EXPANSION DEVICE TO BE INCLUDED UNDER ITEM NO. 604-10.44, EXPANSION JOINT REPAIRS, L.F.



1 ROADWAY APPROACH BRACKET DETAIL

NOT TO SCALE

- *7 C-BARS SPACED AT 1'-0" SHALL BE DRILLED AND GROUTED INTO EXISTING BRIDGE ENDWALL. COST OF DRILLING AND GROUTING, SAW CUTTING, REINFORCING AND CONCRETE TO BE INCLUDED IN ITEM NO. 604-03.04.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
OF BRIDGE TO BE REPAIRED

STATE ROUTE 53 OVER INTERSTATE 40
STA. 319+80.00
BRIDGE NO. 80-SR053-8.39
SMITH COUNTY
2004