SHELBY COUNTY DITARIO AVE. DUPONT BATKING WORTH ! AVE. ST. DUPONT AVE AVE E DAL 8 SIPES H AVE. • **200** RIVER WOLF 40 DRENDA - AVE I - 40 EAST BOUND CORRINE **OVER WOLF RIVER** AVE BRIDGE NO. 79100400059 CHICAGO PANE ELENA SCHOOL LOUISVELL AV STREET PARK FIRES TONE SHITHE STONE WALL FRESTONE. 57. INTER IAL AVE. STLYAN PARK KVET HINTER Uch WIDEOUE WEEK CLITHRIE CLEM. SCHOOL GREENVIEW CIR. HUBERT . CARCANO ST SECT. \$1. BRETOLOVE CYPRES VOLUMTIME LEBIS CARLAND ST. 8 6 LEE A WRLETT TERRY MALRY til \$1. VOLLINTING VOLLINTING DECA TUR SCHOOL SCHOOL PALMETTO AVE ADS/MCTON DECATOR ST. \$ E.d. RUDGE AVE. CRUMP LYMBALE AVE. MICHON

Phillip Shraybman - Br. No. 79-I40-5.09R

From:

Phillip Shraybman

To:

Akin, Jim

Date:

7/26/2005 4:16 PM Br. No. 79-I40-5.09R

Subject: CC:

Araim, Amin; Leatherwood, Terry.D; Simpson, Ken

Dear Jim,

We've received your report for the above mentioned bridge. We appreciate the thorough inspection and, especially, the detailed documentation of channel migration toward Bent 2. Your information includes measurements and sketches, illustrating the current condition and all the changes that have occurred since the previous inspection. Based on the provided information we have performed our analysis and have concluded the following:

- a) migration of the channel toward Bent 2 is taking place and may be considered as an established fact;
- b) there is a potential for its further progress toward Bent 2 and further undermining of the embankment around the bent;
- c) in the worst case scenario of b), even if the embankment around Bent 2 has been completely washed away, the exposure may reach the top of the footing;
- d) the footing of Bent 2 is sitting on 15' to 20' long concrete piles, and its stability will not be threatened even if the top of the footing is exposed;

Considering all of the above we've concluded that migration of the channel does not presently create a dangerous condition for the bridge, and therefore it's somewhat overstretching to call the overall condition of the bridge "poor" and code Item 60 ("Condition rating of Substructure") as a 4.

We've changed it to a 6, which sufficiently reflects the situation with the channel migration at this time. However, all of us have to keep in mind how treacherous Wolf River can be, especially after some serious flooding events, and how unpredictably an overall condition can change. Therefore, we count on you to keep doing your best in monitoring any further development in channel migration.

Sincerely, Phillip Shraybman



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION AND REPAIR OFFICE NASHVILLE, TENNESSEE 37243-0338 January 5, 1998

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

RE: Contract Maintenance – In House Construction No. 79959-4152-04

Bridge No. 79-I40-9.50 (R & L lane) / Wolf River Bridge No. 79-I40-8.25 (R & L lane) / I.C.R.R. Bridge No. 79-I40-7.60 (R & L lane) / Hollywood St.

Bridge No. 79-I40-5.09 (R & L lane) / Wolf River Bridge No. 79-4186-2.11 / I40

Bridge No. 79-2819-4.93 / I40

Shelby County

Dear Mr. Moore

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

PROPOSED REPAIRS:

1) Place seismic restraints on bridges.

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

Sincerely,

BRIAN EGLI

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

BKE:bke

cc: Mr. Ed Wasserman Mr. Paul Sharp √ Mr. Wayne Seger File Also, enclosed are two (2) copies of "Description of Work" sheets, "Layout of Bridge" sheets, and "Bridge Scour Repair Detail" sheets for NO PLANS SCOUR CONTRACT No. 8634 for the following bridges:

| COUNTY | BRIDGE NO. | DESCRIPTION |
|--------|---------------------|----------------------------------|
| Shelby | 79-I40-5.09 (Right) | I-40 over Wolf River (Eastbound) |
| Shelby | 79-I40-5.09 (Left) | I-40 over Wolf River (Westbound) |

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

Yours very truly,

(For) 'Larry E. Hinds

Civil Engineering Manager 2

RBG: gvi

cc: Mr. Joe Scott

File

Page 2 of 2



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BRIDGE INSPECTION AND REPAIR OFFICE

BRIDGE INSPECTION AND REPAIR OFFICE NASHVILLE, TENNESSEE 37243-0338

March 14, 1991

Mr. William L. Moore, Jr. Regional Engineering Director P. O. Box 429, 120 State Street Jackson, TN 38301

RE: Contract Maintenance

Bridge No. 79-I40-5.09, L and R Lanes/Wolf River

Shelby County

Dear Mr. Moore:

We wish to inform you of our plans to schedule the following scour bridge repair project for the May 10, 1991, letting. We have listed the tentative items of repair that we plan for the bridge. Please review these and if your personnel can add any input to our proposed repairs, we will certainly appreciate it.

PROPOSED REPAIRS

1) Exeavation and placement of rip-rap.

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

Yours very truly,

(for)

Larry E. Hinds

Civil Engineering Manager 2

Bridge Inspection and Repair Office

RBG: gap

cc: Mr. Richard Gentry

Mr Jim Akin

MY CHARLIE HUNTER

Mr RAY BRISSON



STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION**

P. O. BOX 429 JACKSON, TENNESSEE 38301

November 6, 1986

Mr. Richard Omohundro Director of Construction Suite 700 James K. Polk Bldg. Nashville, Tennessee 37219

COMPLETION NOTICE

Contract No: 5815

Project No: 79007-4159-04

County: Shelby

Dear Sir:

Please be advised that the above project was completed 11-3-86 and the final records will be submitted on or before 2-6-87.

Termini: I-40; (rom 1800' E

Hollywood Street to 1650' NW

Avenue

Length: 5.738 miles

Proposal Received: 8-9-85

Formal Notice of Award: 9-10-85

Contract Executed: 9-13-85

Contract Accepted: 9-20-85

Contract Effective: 10-4-85

Type: Joint seal & bridge deck repair

Contract Amount: \$382,163.36

Contract Time:

60 working days

10-4-85 Time Began:

Work Began:

Work Completed:

11-3-86

10-16-85

Time Consumed:

60 working days

Contractor: Kenneth R. Hartman, Inc.

Surety:

Insurance Company of North America

Engineer:

Mr. William B. Baker

You are requested to advertise this project for final settlement.

Yours very truly,

WI.M/JAB/dh

√a William L. Moore, Jr.

Regional Engineering Director

Cnstr.Contrs.Audr. Mtl's&Tests Engr. Admr.Prog.Opers. Comm.of Labor Admr.Prog.Dev&Sched. Admr.Map & Stats. Mgr.Utilities

Maint . Engr . Dir .

Hyd.&Stru.Design Dept.Empl.Security Surety Contractor District Engineer Project Engineer EEO Officer

Reg.Cnstr.Office

Reg.Final Rcds. Reg.Traffic Engr. Reg. Maint.Engr. Reg. Mtl's&Test Engr. Reg. Utl's Engr. Reg. Safety Coor. Reg. Bridge Insp.

BRIDGE MAINTENANCE RECOMMENDATIONS

COUNTY: SHELBY

LOCATION: 79-10040-05.09-R

co. SEQ.: 1

SPEC. CASE: 0

CROSSING: I40-RL / WOLF RIVER FED. BRIDGE NO.: 79100400059

MAINT. DIST.: 79

Tennessee Department of Transportation

REPAIR LIST NO .:

3

DATE ADDED:

11/10/2003

REVISED:

| FACILITY CARRIED: HIGHWAY SYSTEM: 02-INT BRIDGE WIDTH (CURB TO CURB): BRIDGE WIDTH (OUT TO OUT): APPROACH ROADWAY (W/SHOULDERS): | 140-RL | NUMBER OF MAIN SPANS: NUMBER OF APPROACH SPANS: BRIDGE LENGTH (FT): MAXIMUM SPAN LENGTH (FT): SKEW ANGLE (DEGREES): | 10 0 826 81 90 |
|--|--------------------------|---|----------------------------|
| MAINTAINED BY: MAIN SPAN MATERIAL: MAIN SPAN DESIGN TYPE: APPROACH SPAN MATERIAL: APPROACH SPAN DESIGN TYPE: | PRESTRESSED STRINGER/ | STATE HIGHWAY AGENCY CONCRETE CONTINUOUS MULTI-BEAM OR GIRDER HER OR NOT APPLICABLE HER OR NOT APPLICABLE | |
| INSPECTION DATE: 07/15/2003 EVALUATION DATE: 09/09/2003 PROPOSED REPLACEMENT: H TRUCK RATING @ INV.: 20 TONS | s | ENERAL CONDITION: TRUCTURALLY DEFICIENT: UFFICIENCY RATING: | FAIR NO 92.1 |

| No. | RECOMMENDATIONS | REPAIR DATE | REPAIRED BY |
|-----|--|----------------|----------------|
| ſi. | INSTALL SCOUR PROTECTION AT BENT NO. 2 | | |
| 2. | CLEAR DRIFT | | |
| 3. | CLEAR APPROACH DRAINS. | | |
| 4. | APPROACH GUARDRAILS ARE SUBSTANDARD | <u> </u> | |
| | REPAIR CONCRETE PARAPET IN SPAN NO. 11B | | |
| 6. | REPAIR BROKEN OR LOOSE SEISMIC DEVICES AT ABUTMENT NO. 1 | | |

COMMENTS:

CHANNEL MIGRATION TOWARD BENT NO. 2 HAS BEEN REPORTED. CHANGE OF PILE EXPOSURE AT BENT 3 FROM 34.8' TO 50.7'. CHANGE OF PILE EXPOSURE AT BENT 4 FROM 45.4' TO 50'. CHANGE OF PILE EXPOSURE AT BENT 10A FROM 17.3' TO 25.4'.

| Br | 4 - | | nendations | | | |
|------------|---|--------------------|----------------------|--------------|-----------------------|--------------|
| | idge Location No.: 79 - 10 | 0040 - 0509 R | | | Page 1 o | of 1 |
| | Co. R | oute Log Mile | Under/Over Pass No.: | - | _ | |
| Cr | ossing: WOLF RIVER | | Bridge Num | ber: ' | 7910040n | 050 |
| | ad Name: | | Region: | 04 | 200100 | 007 |
| | ad Name #2: | | District: | 45 | Spec.(| `ase- / |
| | dge Rating: FAIR | | Maint.Resp.: | 01 | Co.Sec | |
| | pection Cycle: 15 | County: Shelby | | @ | | |
| Insp | pection Date: 8/3/01 | City | Barr | els | Length | Wid |
| Con | nments: EARTHQUAKE DEV | ICES @ ABUTMENT | 1 PROVEN | | | |
| | | | · SKOKEN | | | |
| Mai | intenance Recommendation | ons: | | | | |
| 09 | | | | Ma | intenance C by/dat | omplet |
| 04 | CLEAN DRAINS AT APP | ROACH NO1 & 2 | | | byrdal | |
| 01 | CLEAN DRIFT | | | | | = |
| 28 | | | | | | = |
| 26 | APPROACH GUARDRAIL | S ARE SUBSTANDARI |) | | | - |
|)7 | GUARDRAIL TERMINAL | S AT APPROACH NO. | 1 & 2 ARE SUBSTANDAL | RD | | =- |
| 1 | THIE SEAL JOIN I | AT APPROACH NO. | 1 & 2 | === | | |
| 1 | LEVEL APPROACH NO. | 1 & 2 | | | | |
| | | 1 4 2 | | | | |
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| | | | | | | |
| MPL. | ETION NOTIFICATION: RET | TURN WITHIN 6 MONT | | | | |
| MPL. | ETION NOTIFICATION: REA | TURN WITHIN 6 MONT | HS OF INSPECTION DAT | Œ. | | |
| NTE | ENANCE ACTIVITIES ARE CO | TIONS WHEN COMPLET | ΓED. | | | |
| NTE | ENANCE ACTIVITIES ARE CO | TIONS WHEN COMPLET | ΓED. | | | |
| NTE NTE | ETION NOTIFICATION: RETAINED ATE RECOMMENDATE RECOMMENDATE AND COMMENTS ARE PARTIONS AND COMMENTS | OMPLETED (DATE) | TED. BY | _ | | |

SEE FILENET FOR 2003 INSP.



Bridge Condition

Revised 06/15/2000



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION **Coding Form**

County: 79

Route:

10040

Special Case:

0

Bridge Number: 791004000591 County Sequence:

(Includes Item 5A)

01

Feature Intersected:

[40-RL / WOLF RIVER

Log Mile: 5.09

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

| ITEM# | DESCRIPTION | VALUE | |
|-------|--|-------------------|----------|
| 90 | INSPECTION DATE | 09/16/1999 | |
| | 9 | 31312 | , 001 |
| 10 | MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS) | 99 FT. 99 | IN. |
| | | FT | |
| 520 | MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS) | | IN. |
| | August | FT | IN. |
| 36 | TRAFFIC SAFETY FEATURES | | |
| | Br. Rail Trans. Appr. R | tail Appr. Rail E | nds |
| | 1 0 | . 0 | |
| | | | |
| 41 | STRC OPEN/CLOSED/POSTE | D A | |
| 58 | DECK | 7 | |
| 59 | SUPERSTRUCTURE | 7 | |
| 60 | SUBSTRUCTURE | 7 | |
| 61 | CHANL/CHANL PROTECTION | 6 | |
| 62 | CULVERT AND RETAIN WALL | - N | |
| 71 | WATERWAY ADEQUACY | 8 | |
| 72 | APPROACH RDWY ALIGNMEN (USE VALUES OF 3, 6, OR 8) | NT 8 | |
| 521 | OVERALL CONDITION (Circle | One) | |
| | GOOD FAIR F | POOR CRI | ΓΙCAL |
| | | 1.2. | |

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

- N NOT APPLICABLE
- 9 EXCELLENT CONDITION
- **VERY GOOD CONDITION -**NO PROBLEMS NOTED.
- 7 GOOD CONDITION SOME MINOR PROBLEMS.
- SATISFACTORY CONDITION MINOR **DETERIORATION OF STRUCTURAL** ELEMENTS.
- 5 FAIR CONDITION ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
- 4 POOR CONDITION ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
- 3 SERIOUS CONDITION LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOURSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
- 2 CRITICAL CONDITION ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.
- 1 "!MMINENT" 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.

FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.

REVIEW DATE



STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION**

Bridge Condition

Coding Form

| County: | 79 |
|---------|----|
|---------|----|

Route:

10040

Special Case:

0

County Sequence:

1

(Includes Item 5A) Feature Intersected:

SIGNATURE

Bridge Number:

I40-RL / WOLF RIVER

791004000591

Log Mile: 5.09

FAILED CONDITION - OUT OF SERVICE AND

BEYOND CORRECTIVE ACTION.

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED ITEM # DESCRIPTION VALUE COMMENTS 90 INSPECTION DATE RATINGS FOR CODING ITEMS 58, 59, 60 AND 62 12/1/97 **NOT APPLICABLE** 99 FT. 10 MINIMUM V.C. OVER DECK **EXCELLENT CONDITION** (ROADWAY + SHOULDERS) **VERY GOOD CONDITION -**NO FT. IN. PROBLEMS NOTED. 99 FT. 99 IN. 520 MINIMUM V.C. OVER DECK GOOD CONDITION - SOME MINOR PROBLEMS. (EXCLUDES SHOULDERS) IN. SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL 54 MINIMUM VERTICAL N FT. O IN. ELEMENTS. **UNDERCLEARANCE** (EXCLUDES SHOULDERS) FAIR CONDITION - ALL PRIMARY Circle One: H STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS. 36 TRAFFIC SAFETY FEATURES CRACKING, SPALLING OR SCOUR. Br. Rail Appr. Rail Appr. Rail Ends Trans. POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR. SERIOUS CONDITION - LOSS OF SECTION. STRC OPEN/CLOSED/POSTED 41 DETERIORATION, SPALLING OR SCOUR HAVE SERIOURSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL **DECK** 58 FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT. 59 SUPERSTRUCTURE 2 CRITICAL CONDITION - ADVANCED **DETERIORATION OF PRIMARY STRUCTURAL** 60 SUBSTRUCTURE ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED 61 CHANL/CHANL PROTECTION SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL **CULVERT AND RETAIN WALL** 62 CORRECTIVE ACTION IS TAKEN. "IMMINENT" FAILURE CONDITION - MAJOR DETERIORATION OR SECTION LOSS APPROACH RDWY ALIGNMENT PRESENT IN CRITICAL STRUCTURAL (USE VALUES OF 3, 6, OR 8) COMPONENTS OR OBVIOUS VERTICAL OR HORIZONTAL MOVEMENT AFFECTING OVERALL CONDITION (Circle One) STRUCTURAL STABILITY. BRIDGE IS CLOSED TO TRAFFIC BUT CORRECTIVE FAIR **POOR** GOOD CRITICAL ACTION MAY PUT BACK IN LIGHT SERVICE.

DATE



STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

Bridge Number:

(includes item 5A)

| ri | dge | e Co | nd | liti | on |
|----|-----|------|----|------|----|
| (| Cod | ling | Fo | rn | 1 |

79 County: **I0040** Route:

Special Case:

a

County Sequence:

1

140-RL / WOLF RIVER Feature Intersected:

791004000591

Log Mile:

5.09

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED

| TEM# | DESCRIPTION | VAL | .UE | |
|-----------|--|-----------|---------------|-----|
| 90 | INSPECTION DATE | 12/ | 1/97 | |
| | 9 | 116 | 19 | 9_ |
| 10 | MINIMUM V.C. OVER DECK 9 (ROADWAY + SHOULDERS) | 9 FT | . 99 | IN. |
| | | _ FT. | | IN. |
| 520 | MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS) | 9 FT | . 99 | IN. |
| | | _ FT. | | IN. |
| 54 | MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) | O FT | . 0 | IN. |
| | Circle One: H R N | FT. | | IN. |
| 36 | TRAFFIC SAFETY FEATURES | | | |
| | Br. Rail Trans. Appr. Rail | Аррг. | Rail En | ds |
| | 1 1 1 | | 1 | |
| | | | | |
| 41 | STRC OPEN/CLOSED/POSTED | | A | |
| 7. | A K P | • | | |
| 58 | DECK | - | 7 | |
| 59 | SUPERSTRUCTURE | • | 7 | |
| | | | | |
| 60 | SUBSTRUCTURE | • | 7 | |
| | | - | | |
| 61 | CHANL/CHANL PROTECTION | • | 6 | |
| 62 | CULVERT AND RETAIN WALL | - | N | |
| 02 | OCCUPANT NETAN WALL | | 14 | |
| 72 | APPROACH ROWY ALIGNMENT | | 8 | |
| | (USE VALUES OF 3, 6, OR 8) | ·- | _ | |
| | OVERALL CONDITION (Circle One | <u>=)</u> | | |
| | GOOD FAIR POOR | | CRITIC | AL |

RATINGS FOR CODING ITEMS 58, 59, 60 AND 62

N NOT APPLICABLE

COMMENTS

- **EXCELLENT CONDITION**
- 8 VERY GOOD CONDITION -NO PROBLEMS NOTED.
- 7 GOOD CONDITION SOME MINOR PROBLEMS.
- 6 SATISFACTORY CONDITION MINOR **DETERIORATION OF STRUCTURAL** ELEMENTS.
- 5 FAIR CONDITION ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
- 4 POOR CONDITION ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
- 3 SERIOUS CONDITION LOSS OF SECTION, **DETERIORATION, SPALLING OR SCOUR** HAVE SERIOURSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
- 2 CRITICAL CONDITION ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS **CLOSELY MONITORED IT MAY BE** NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.
- "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.
- **FAILED CONDITION OUT OF SERVICE AND** BEYOND CORRECTIVE ACTION.

9/16/99

2019

TENNESSEE BRIDGE INSPECTION PROGRAM SUMMARY OF FVAI UATION

BRIDGE ID NO: 79100400059 LOCATION NO: 79 - 10040 - 5.01

(6A) CROSSING: I-40 E.B. / WOLF RIVER

CONDITION RATINGS

(505) METHOD OF ANALYSIS: LOAD RESISTANCE (548) RATING BASED ON: AASHTOWare Bridge Rating

FACTOR METHOD - RF

LOAD RATINGS IN TONS

INVENTORY (503) H 25 (518B) HS 23 (522) EVAL. DATE: 11/19/2018 LAST UPDATED BY: LINER

OPERATING (504) H 37 (519) HS 31 (29) ADT: 119,200 (30) ADT YR:

REQ. POSTING: (100) STRAHNET ROUTE: YES

(19) DETOUR LENGTH: 1 KM

APPRAISAL RATINGS

(520) VC OVER RDWY: 99.99 METERS

CODE VALUES

1 - FAILURE IS IMMINENT

(6" Asphalt)

(549) EVALUATOR: DCD

N - NOT APPLICABLE (58) DECK RATING: (67) STRUCTURAL EVALUATION: 9 - EXCELLENT CONDITION (59) SUPERSTRUCTURE RATING: 7 (68) DECK GEOMETRY: 8 - VERY GOOD CONDITION (60) SUBSTRUCTURE RATING: (69) UNDER CLEARANCE: Ν 7 - GOOD CONDITION 5 (61) CHANNEL PROTECTION: 6 (70) BRIDGE POSTING: 6 - SATISFACTORY (62) CULVERT RATING: Ν (71) WATERWAY ADEQUACY:

(113A) NBIS SCOUR CODE: 4 (72) APPROACH RDWY ALIGNMENT: 8 5 - FAIR CONDITION

(113B) TDOT SCOUR CODE: C 4- POOR CONDITION

OTHER RATING ITEMS

3 - SERIOUS CONDITION

2 - CRITICAL CONDITION

(521) OVERALL CONDITION: F

(513) TEXTURE COAT RATING: F 10 (36) TRAFFIC SAFETY 0 - FAILED CONDITION

(514) PAINT CONDITION RATING:N FEATURES: 1 1 1 1 (41) WEIGHT POSTING CODE: A (525) REPAIR LIST NO: 3

COMMENTS

IN 1998 AN EXTENSIVE AMOUNT OF RIP-RAP WAS PLACED (BY THE REGION) ON THE NORTH BANK AND AN OLD COFFER DAM WAS REMOVED FROM UPSTREAM. IN FOLLOW UP INSPECTIONS THROUGH 2013 IT APPEARS THAT THE CHANNEL IS MOVING TOWARD THE SOUTH BANK (BENT NO. 2). IN JULY 2013 COLUMNS "C" AND "D" OF BENT NO. 2 WERE LOCATED IN THE CHANNEL. IN DECEMBER 2016, COLUMN B WAS LOCATED IN THE CHANNEL. CONTINUE TO MONITOR THIS CONDITION CLOSELY.

ALL FOOTINGS ARE ON CONCRETE PILES AND NO FOOTING IS EXPOSED AT THIS TIME. KEEP MONITORING CHANNEL MIGRATION. (PJS 01-29-09)

Bridge Name: I-40 EB over Wolf River **NBI Structure ID:** 79I00400059

Bridge ID: 79I00400059

Analyzed By: bridgeware

Analyze Date: Wednesday, June 17, 2020 14:59:22

Analysis Engine: AASHTO LRFR Engine Version 6.8.1.3001

Analysis Preference Setting: None

Report By: bridgeware

Report Date: Wednesday, June 17, 2020 19:26:53

Structure Definition Name: Girder Lines **Member Name:** Ramp Exterior

Member Alternative Name: Ramp Exterior

Load and Resistance Factor Rating Summary

Girder Summary

| | | | Girue | er Summary | | | | | |
|-----------------------------|-----------|--------|----------------------------------|------------|------|----------|---------|--------------|--------------|
| | | Rating | | Capacity | | Location | | | |
| Live Load | | Factor | Controls | (Ton) | Span | (ft) | Percent | Impact | Lane |
| Annual Permit 1 | Permit | 1.347 | STRENGTH-II Concrete Flexure | 111.13 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Annual Permit 2 | Permit | 1.434 | STRENGTH-II Concrete Flexure | 118.28 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| EV2 | Legal | 2.921 | STRENGTH-I Concrete Flexure | 83.97 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| EV3 | Legal | 1.886 | STRENGTH-I Concrete Flexure | 81.10 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| Gravel Truck | Legal | 2.051 | STRENGTH-I Concrete Flexure | 75.90 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| Gravel Truck + Lane Load | Legal | 1.434 | STRENGTH-I Concrete Flexure | 79.56 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Н 15-44 | Inventory | 2.373 | STRENGTH-I Concrete Flexure | 35.59 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Н 15-44 | Operating | 3.076 | STRENGTH-I Concrete Flexure | 46.13 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HL-93 (US) | Inventory | 0.843 | STRENGTH-I Concrete Flexure | 30.37 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HL-93 (US) | Operating | 1.093 | STRENGTH-I Concrete Flexure | 39.36 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HS 20-44 | Inventory | 1.193 | SERVICE-III PS Tensile Stress | 42.95 | 1 | 39.16 | 49.6 | As Requested | As Requested |
| HS 20-44 | Operating | 2.307 | STRENGTH-I Concrete Flexure | 83.04 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Lane-Type Legal Load | Legal | 1.618 | STRENGTH-I Concrete Flexure | 64.72 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Overweight Permit | Permit | 1.049 | STRENGTH-II Concrete Flexure | 133.69 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| SU7 | Legal | 2.017 | STRENGTH-I Concrete Flexure | 78.16 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| School Bus - Standard | Legal | 5.026 | STRENGTH-I Concrete Flexure | 72.87 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| Type 3S2 | Legal | 2.445 | STRENGTH-I Concrete Flexure | 88.04 | 1 | 78.94 | 100.0 | As Requested | As Requested |

Note:

[&]quot;N/A" indicates not applicable "**" indicates not available

Bridge Name: I-40 EB over Wolf River **NBI Structure ID:** 79I00400059

Bridge ID: 79I00400059

Analyzed By: bridgeware

Analyze Date: Wednesday, June 17, 2020 14:59:22

Analysis Engine: AASHTO LRFR Engine Version 6.8.1.3001

Analysis Preference Setting: None

Report By: bridgeware

Report Date: Wednesday, June 17, 2020 19:26:58

Structure Definition Name: Girder Lines Member Name: Ramp Interior

Member Alternative Name: Ramp Interior

Load and Resistance Factor Rating Summary

Girder Summary

| | | Rating | Onuc | Capacity | | Location | | | |
|-----------------------------|-----------|--------|----------------------------------|----------|------|----------|---------|--------------|--------------|
| Live Load | | Factor | Controls | (Ton) | Span | (ft) | Percent | Impact | Lane |
| Annual Permit 1 | Permit | 1.206 | STRENGTH-II Concrete Flexure | 99.51 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Annual Permit 2 | Permit | 1.285 | STRENGTH-II Concrete Flexure | 106.04 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| EV2 | Legal | 2.131 | STRENGTH-I Concrete Flexure | 61.28 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| EV3 | Legal | 1.376 | STRENGTH-I Concrete Flexure | 59.19 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| Gravel Truck | Legal | 1.497 | STRENGTH-I Concrete Flexure | 55.39 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| Gravel Truck + Lane Load | Legal | 1.283 | STRENGTH-I Concrete Flexure | 71.21 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Н 15-44 | Inventory | 1.904 | SERVICE-III PS Tensile Stress | 28.56 | 4 | 39.30 | 50.0 | As Requested | As Requested |
| Н 15-44 | Operating | 2.750 | STRENGTH-I Concrete Flexure | 41.25 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HL-93 (US) | Inventory | 0.720 | SERVICE-III PS Tensile Stress | 25.91 | 4 | 39.30 | 50.0 | As Requested | As Requested |
| HL-93 (US) | Operating | 0.978 | STRENGTH-I Concrete Flexure | 35.20 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HS 20-44 | Inventory | 0.967 | SERVICE-III PS Tensile Stress | 34.82 | 4 | 39.30 | 50.0 | As Requested | As Requested |
| HS 20-44 | Operating | 1.821 | STRENGTH-I Concrete Flexure | 65.57 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| Lane-Type Legal Load | Legal | 1.447 | STRENGTH-I Concrete Flexure | 57.87 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Overweight Permit | Permit | 1.275 | STRENGTH-II Concrete Flexure | 162.53 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| SU7 | Legal | 1.529 | STRENGTH-I Concrete Flexure | 59.24 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| School Bus - Standard | Legal | 3.667 | STRENGTH-I Concrete Flexure | 53.18 | 11 | 31.20 | 60.0 | As Requested | As Requested |
| Type 3S2 | Legal | 2.192 | STRENGTH-I Concrete Flexure | 78.93 | 1 | 78.94 | 100.0 | As Requested | As Requested |

Note:

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

Bridge Name: I-40 EB over Wolf River **NBI Structure ID:** 79I00400059

Bridge ID: 79I00400059

Analyzed By: bridgeware

Analyze Date: Wednesday, June 17, 2020 14:59:22

Analysis Engine: AASHTO LRFR Engine Version 6.8.1.3001

Analysis Preference Setting: None

Report By: bridgeware

Report Date: Wednesday, June 17, 2020 19:27:03

Structure Definition Name: Girder Lines **Member Name:** Mainline Interior

Member Alternative Name: Mainline Interior

Load and Resistance Factor Rating Summary

Girder Summary

| | | Rating | | Capacity | | Location | | | |
|-----------------------------|-----------|--------|----------------------------------|----------|------|----------|---------|--------------|--------------|
| Live Load | | Factor | Controls | (Ton) | Span | (ft) | Percent | Impact | Lane |
| Annual Permit 1 | Permit | 1.349 | STRENGTH-II Concrete Flexure | 111.28 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Annual Permit 2 | Permit | 1.440 | STRENGTH-II Concrete Flexure | 118.83 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| EV2 | Legal | 2.208 | STRENGTH-I Concrete Flexure | 63.49 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| EV3 | Legal | 1.432 | STRENGTH-I Concrete Flexure | 61.55 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Gravel Truck | Legal | 1.547 | STRENGTH-I Concrete Flexure | 57.25 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Gravel Truck + Lane Load | Legal | 1.434 | STRENGTH-I Concrete Flexure | 79.57 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Н 15-44 | Inventory | 2.024 | SERVICE-III PS Tensile Stress | 30.36 | 8 | 40.61 | 50.0 | As Requested | As Requested |
| Н 15-44 | Operating | 3.067 | STRENGTH-I Concrete Flexure | 46.00 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HL-93 (US) | Inventory | 0.761 | SERVICE-III PS Tensile Stress | 27.40 | 6 | 40.61 | 50.0 | As Requested | As Requested |
| HL-93 (US) | Operating | 1.091 | STRENGTH-I Concrete Flexure | 39.28 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HS 20-44 | Inventory | 1.024 | SERVICE-III PS Tensile Stress | 36.88 | 8 | 40.61 | 50.0 | As Requested | As Requested |
| HS 20-44 | Operating | 1.858 | STRENGTH-I Concrete Flexure | 66.88 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Lane-Type Legal Load | Legal | 1.614 | STRENGTH-I Concrete Flexure | 64.57 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Overweight Permit | Permit | 1.422 | STRENGTH-II Concrete Flexure | 181.35 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| SU7 | Legal | 1.566 | STRENGTH-I Concrete Flexure | 60.68 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| School Bus - Standard | Legal | 3.821 | STRENGTH-I Concrete Flexure | 55.40 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Type 3S2 | Legal | 2.286 | STRENGTH-I Concrete Flexure | 82.30 | 11 | 35.34 | 60.0 | As Requested | As Requested |

Note:

[&]quot;N/A" indicates not applicable "**" indicates not available

THIS MEMBER CONTROLS LOAD RATING

Bridge Name: I-40 EB over Wolf River **NBI Structure ID:** 79I00400059

Bridge ID: 79I00400059

Analyzed By: bridgeware

Analyze Date: Wednesday, June 17, 2020 14:59:22

Analysis Engine: AASHTO LRFR Engine Version 6.8.1.3001

Analysis Preference Setting: None

Report By: bridgeware

Report Date: Wednesday, June 17, 2020 19:27:06

Structure Definition Name: Girder Lines **Member Name:** Mainline Exterior

Member Alternative Name: Mainline Exterior

Load and Resistance Factor Rating Summary

Girder Summary

| | | Rating | | Capacity | | Location | | | |
|-----------------------------|-----------|--------|----------------------------------|----------|------|----------|---------|--------------|--------------|
| Live Load | | Factor | Controls | (Ton) | Span | (ft) | Percent | Impact | Lane |
| Annual Permit 1 | Permit | 1.075 | STRENGTH-II Concrete Flexure | 88.65 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Annual Permit 2 | Permit | 1.147 | STRENGTH-II Concrete Flexure | 94.67 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| EV2 | Legal | 2.110 | STRENGTH-I Concrete Flexure | 60.67 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| EV3 | Legal | 1.368 | STRENGTH-I Concrete Flexure | 58.83 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Gravel Truck | Legal | 1.479 | STRENGTH-I Concrete Flexure | 54.71 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Gravel Truck + Lane Load | Legal | 1.142 | STRENGTH-I Concrete Flexure | 63.39 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Н 15-44 | Inventory | 1.683 | SERVICE-III PS Tensile Stress | 25.24 | 8 | 40.71 | 50.0 | As Requested | As Requested |
| Н 15-44 | Operating | 2.443 | STRENGTH-I Concrete Flexure | 36.65 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HL-93 (US) | Inventory | 0.636 | SERVICE-III PS Tensile Stress | 22.91 | 8 | 40.71 | 50.0 | As Requested | As Requested |
| HL-93 (US) | Operating | 0.869 | STRENGTH-I Concrete Flexure | 31.30 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| HS 20-44 | Inventory | 0.851 | SERVICE-III PS Tensile Stress | 30.65 | 8 | 40.71 | 50.0 | As Requested | As Requested |
| HS 20-44 | Operating | 1.775 | STRENGTH-I Concrete Flexure | 63.92 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Lane-Type Legal Load | Legal | 1.286 | STRENGTH-I Concrete Flexure | 51.44 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| Overweight Permit | Permit | 1.045 | STRENGTH-II Concrete Flexure | 133.19 | 1 | 78.94 | 100.0 | As Requested | As Requested |
| SU7 | Legal | 1.497 | STRENGTH-I Concrete Flexure | 57.99 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| School Bus - Standard | Legal | 3.652 | STRENGTH-I Concrete Flexure | 52.95 | 11 | 35.34 | 60.0 | As Requested | As Requested |
| Type 3S2 | Legal | 1.957 | STRENGTH-I Concrete Flexure | 70.46 | 1 | 78.94 | 100.0 | As Requested | As Requested |

Note:

[&]quot;N/A" indicates not applicable "**" indicates not available



BRIDGE NO.



SPAN #8

Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 08-03-01



LOOKING AHEAD ON ROUTE



VIEW ACROSS TOP OF DECK

Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 08-03-01



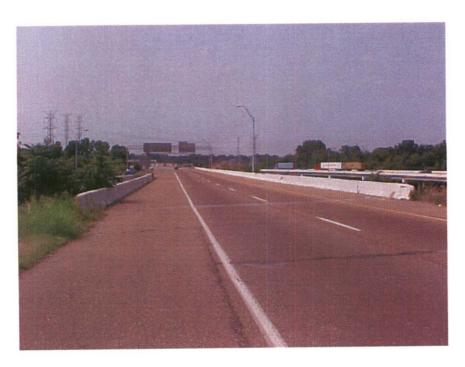
LOOKING UPSTREAM FROM TOP OF BRIDGE



LOOKING BACK ON ROUTE



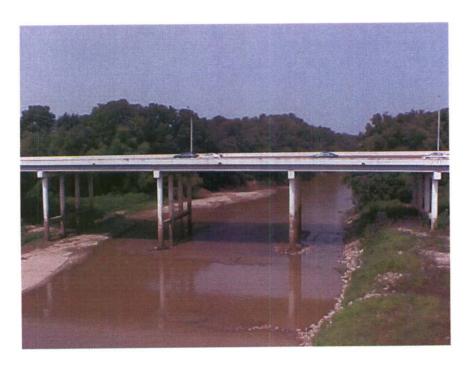
APPROACH #2 ASPHALT SPALLING



LOOKING BACK ON ROUTE

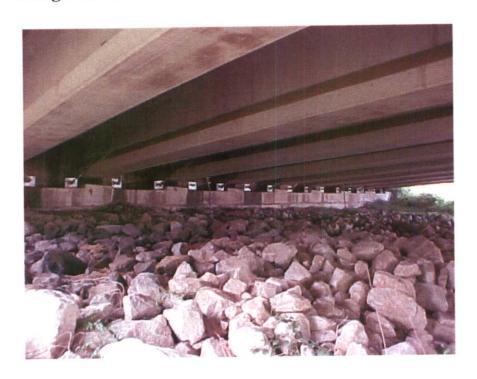


ABUTMENT #2 "A"

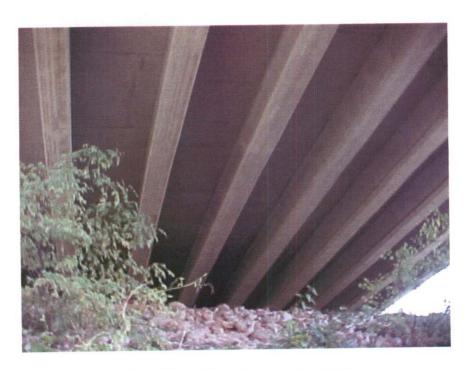


LOOKING DOWNSTREAM FROM TOP OF BRIDGE

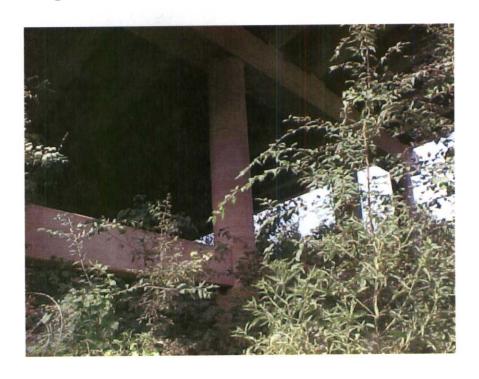
Bridge Loc. No: 79 - 10040 - 05.09 - R Date: 08-03-01



ABUTMENT #1



SPAN #1, BOTTOM OF DECK



BENT #1



BENT #4 & DRIFT



ELEVATION LEFT SIDE



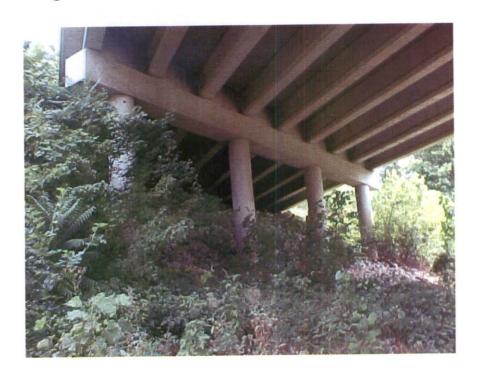
LEFT VIEW OF BENTS #5 & #6



APPROACH #1 HAS JOINT MATERIAL MISSING, TYPICAL OF APPROACH #2



ASPHALT SPALLING AT APPROACH #1



BENT #10



BENT #8, REAR SIDE



SPAN #1 EARTHQUAKE DEVICE IS BROKEN



SPAN #1 EARTHQUAKE DEVICE IS BROKEN



SPAN #1 EARTHQUAKE DEVICE IS BROKEN



SPAN #1 EARTHQUAKE DEVICE IS BROKEN



SPAN #1 EARTHQUAKE DEVICE IS BROKEN



SPAN #1 EARTHQUAKE DEVICE IS BROKEN

BRIDGE INSPECTION REPORT

Form BIR 3.0 (Rev. 9-22-98) Date Previous Report No. 14 DT-0069 Date 9 Plans: YES (X) Bridge No. 79100400059 Bridge Location No. 79 - 10040 -NO () 5.09 R Eleven Digit No. Route Log Mile OVER/UNDER PASS over WOLF RIVER Road Name Crossing Year Constructed Structure Name (If Named) County Shelby Maintenance District 45 Year Widened Year Rehabilitated **FEATURES** Wearing Surface Concrete () Timber () Asphalt (X) Depth INSPECTORS Flared Width Yes (X) No () (in.) Median Width Open ⋈ None () Closed () 1. COLLINS Navigational Control Yes () No (※) Bridge Skew 60 ° LT (※) RT () Structure Type (Main Span) CONC. I. BEAM Structure Type (Appr.Spans) No. Main Spans 11 No. Approach Spans Maximum Span Length 6. 81.7 (**.* ft.) Total Length 830.0 (** * ft.) 8. WIDTHS (*.* ft.) CLEARANCES Deck Out-to-Out 74/75 Min. Vertical Clearance over Deck Roadway Curb/Curb (ft.-in.) Min. Vertical Under Clearance Roadway Rail/Rail (ft.-in.) Min. Lateral Under Clearance Rt. Sidewalk Rt. (*.* ft.) Lt. Min. Lateral Under Clearance Lt. *Approach Roadway (*.* ft.) 60 *(Does Not Include Shoulders) FRACTURE CRITICAL: N/17 Approach Shoulder (If Yes, Include BIR 3.9) Rt. 12 NBIS Bridge Length (<25 ft.) ル/人 (ft.-in.) UNDERWATER INSPECTION To Be Performed By: Date DOT FIELD TEAM () CONTRACT DIVERS () NONE REQUIRED () Change in Structural Condition: Yes () No 🎮 COMMENTS: Major Repairs Made: Yes () No No

> BRIDGE RATING: () GOOD FAIR POOR

CRITICAL

Supervising Bridge Inspector:

Bridge Location No. 79 - 10040 - 5.09 R

Date

| 21-0000 | Co. Route Log Mile |
|--|-----------------------------------|
| PERFORMANCE EVALUATION | |
| Time of Day Inspected 10.00 | Weather Conditions |
| Vehicles Observed <u>ALC 191</u> | |
| LIVE LOAD BEHAVIOR | |
| ······································ | NO Comments |
| Horiz./ Vert. Defl. () | (V) |
| Vibration | |
| Superstructure () | (<i>X</i>) |
| Haria (Mari Barra) | (₇) |
| APL C | / \ |
| . , | (X) |
| Rating Rating | Comments |
| . | D |
| | NIV -COUERED WITH P.C |
| | APPHICHZ MATMISSING (007) |
| | APPHIFEZ UNEVEN 1" TOO!) |
| | |
| Drains G F P | |
| RAFFIC SAFETY FEATURES | OYGNING BLOCK SO |
| Rating | STANDARD/ SUB-STANDARD Comments |
| Bridgerailing GFP | · () |
| Transitions GFP | |
| Guardrail G F P (| |
| Guardrail Terminal GFP (| |
| GIGNING | YES NO NEEDED Weight Limit Posted |
| Paddleboards | () (X) () YES () NO (x) |
| Vertical Clearance (<14'-6") | () (×) () Gross Tons |
| NARROW () | () () 2 Axle Tons |
| ONE LANE BRIDGE () | () (×) () 3 or more Axles Tons |
| Other Signs or Plaques: OUST | HEAD TRIANGUS CONTHE BRIDGE |
| Comments Regarding any | |
| Problems with Signing: | |
| | |
| | |
| | |

406 6

| Rev. 9-22-98 | Form BIR 3.2 | | | $taoc$ (e_i) |
|--|--|---|---|--|
| DECK Rating Co. Route Log Mile Comments Co | (Rev. 9-22-98) | Bridge Location No. 7 | 9 - 10040 - 500 | B |
| DECK Rating Comments Wearing Surface G F P C C Deck - Structural Condition G F P C C Curbs G F P C C Median G F P C C Sidewalks G F P C C Parapet G F P C C Railing G F P C C Parapet G F P C C Paint G F P C C Uighting Standards G F P C C Uily Standards G F P C C Expansion Joints G F P C C Expansion Joints G F P C C Superstructure Bearing Devices G F P C Girders G F P C C Girders G F P C C Bounts (PCCs) G F P C C Stringers G F P C C | DT-0081 | | | |
| Deck - Structural Condition GFPC Curbs GFPC Median GFPC Sidewalks GFPC Parapet GFPC Railing GFPC Railing GFPC Paint GFPC Drains GFPC Drains GFPC Lighting Standards GFPC Expansion Joints GFPC Expansion Joints GFPC Expansion Joints GFPC Expansion Joints GFPC GFPC Griders GFPC Gorders GFPC Bounts GFPC Bracing GFPC Bracing GFPC Alignment of Members GFPC Needs Spot Painting VES() NOW) Needs Repainting VES() NOW) | DECK | Rating | | |
| Deck - Structural Condition G F P C 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 Drains G F P C Drains G F P C Utilities G F P C Superstructure Bearing Devices G F P C Girders G F P C BoLTS (PCCS) G F P C Diaphragms G F P C Bracing G F P C Reads Spot Painting G F P C Needs Spot Painting SES () NO (F) Needs Repainting SES () NO (F) | Wearing Surface | G E B C | | |
| Median Sidewalks GFPC Parapet GFPC Railing GFPC Railing GFPC Drains Lighting Standards GFPC Utilities GFPC Joint Leakage Expansion Joints GFPC Bearing Devices GFPC Girders GFPC Girders GFPC Girders GFPC Gorders GFPC BOLTS (PCCS) GFPC Bolts (PCCS) GFPC Diaphragms GFPC Bracing GFPC Portals GFPC Bracing GFPC Alignment of Members GFPC Needs Spot Painting VES() NOW) Needs Repainting VES() NOW) | | _ (). | | |
| Bearing Devices Beams GFPC Girders GFPC Girders GFPC BOLTS (PCCS) GFPC Boundary GFPC Stringers GFPC Diaphragms GFPC Bracing GFPC Needs Spot Painting YES() NO (A) | Median Sidewalks Parapet Railing Paint Drains Lighting Standards Utilities Joint Leakage Expansion Joints | | | |
| Condition Rating GFPC Fading GFPC Overall Appearance GFPC Staining Rating GFPC Needs Spot Painting YES() NO () Needs Repainting YES() NO () | Bearing Devices Beams Girders P C C S BOLTS (PCCS) Floor Beams Stringers Diaphragms Bracing Trusses - General Portals Bracing Paint Alignment of Members | O C C C C C C C C C C C C C C C C C C C | ABUT#1 | |
| RECOMMENDATIONS: Scaling Rating G F P C | Condition Rating G Overall Appearance G Staining Rating G Comments | PC PC | Needs Spot Painting Needs Repainting | YES() NO(Y) YES() NO(Y) Scaling Rating G F P C CLEAN SEAL JOINTS() |
| CLEAN DRAINS () | | | | CLEAN DRAINS () |

Form BIR 3.3 (Rev. 9-22-98) Bridge Location No. 79 - 10040 - 5.09 R Date DT-0082 Co. Route Log Mile PILES TO BE <u>SUBSTRUCTURE</u> REPLACED Rating **ABUTMENTS** Comments PILE(S) ABUTMENT Caps F) Ρ C Breastwall C Wings Р C Backwall C Plumb C Footing C Piles Р С Embankment C Bearing C Slope Paving FP C Rip Rap FPC G Earthquake Devices G F(P) Broke 130113 **PIERS** PILE(S) PIER Caps GFPC Columns G Р Plumb G F Ρ С **Footings** G F C Р Ρ Piles C G FP Bearing C Web C Earthquake Devices G **BENTS** PILE(S) BENT Caps Columns Plumb C **Footings** Piles DRIFT С Bearing C STPUTS Earthquake Devices G F С Piles Need Replacement: NO (✓) YES (**CUT VEGETATION** NO() YES(>) **CLEAR DRIFT** NO() YES (₹) RECOMMENDATIONS:

| Form | BIR | 3.8 |
|-------|------|-------|
| (Rev. | 9-22 | 2-98) |
| DT-15 | 800 | |

II. Reason for special inspection:

| Bridge Location No | 79 - | 10040 | - | 0509 | R | |
|--------------------|------|-------|---|----------|---|---|
| | Co | Route | | Log Mile | | • |

| Alle | | , | | : | ٠. |
|------|---|------|---|---|----|
| Date | * | - wi | - | ! | |

STREAM CHANNEL DATA AND CONDITIONS

| Stream Crossing: WOLF RIVER |
|--|
| I. 1. Type of bed material? SANO |
| 2. Has channel shifted? YES() NO() NOT APPARENT (X) |
| 3. Condition of rip-rap? GFPC Est. % failed % N/A () |
| 4. Overall condition of channel? GFPC |
| Item 61 - Code values 0 thru 9 according to the recording and coding guide currently in effect: (o |
| 6. Underwater diver inspection recommended? YES (X) NO () If yes, why? |
| II. Channel and bank stability conditions: (check if applicable) |
| Steep bank conditions: - Failures upstream () Failures downstream () |
| 2. Moderate bank erosion 💢 |
| 3. Bank vegetation: a. low growth (b. large timber (c. clear banks 💢 |
| d. dead trees upstream 💢 e. dead trees downstream 💢 |
| 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 applicable1. Bridge deck elevations: |
| |
| a. level with approach roadway(X) b. higher than approach roadway() |
| c. roadway approach >= 2 ft. above natural ground line. |
| 2. Abutment encroaches into channel () |
| 3. Large scour (blowhole) under bridge () |
| 4. Indications that flood waters overtop bridge: |
| NO (X) YES () OCASSIONALLY () FREQUENTLY () UNKNOWN () |
| Debris characteristics: a. debris/drift present YES (√) NO () |
| a. debris/drift present YES (火) NO () b. debris/drift likely to accumulate YES (χ) NO () |
| c. dead trees upstream (X) dead trees downstream |
| V. Comments: THERE IS A DRIFT ALL THE WAY ACROSS |
| BENT #4 AND ON THE RT SIDE OF BENT #5. |
| |
| SPECIAL INSPECTION DATA - FOR REASONS OTHER THAN FC OR SCOUR |

Inspection Team's Summary

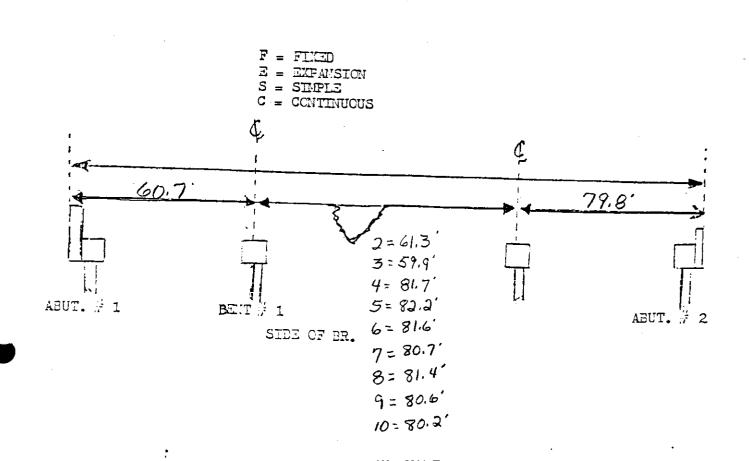
Bridge Location No. 79 - 10040 - 5.09 R
Inspection Date 8-2-01
Bridge Rating FAIR

| Bridge Rating FAIR AUG 03 200 |
|---|
| THIS ELEVEN SPAN C.I.B BRIDGE WITH |
| CONCRETE SUBSTRUCTURE IS IN FAIR CONDITION. |
| ALL TRAFFIC SAFETY FEATURES ARE PRESENT. |
| APP. # 1 & 2 PAVEMENT IS CRACHING & UNEVEN. |
| APP # 1 & 2 JOINTS HAVE MATERIAL MISSING. |
| DRAINS ARE 100% FILLED APP. # 122 RT SIDES. |
| Abut # 1 HAS FOUN EARTHQUAKE DEVICES |
| THOUT TO THE POOL LANGUED AGRILLO BENT#4. |
| BROKE - THERE IS A DRIFT AROUND BENT#4. |
| EtS MAR BRIDGE SCUN FRIR |
| |
| |
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| |
| |
| 01 |
| Carolina Cidanie |
| |

Cross Section: yes () no (∑)

Pontis: yes () no (X

DIR. OF ROUTE



| BRIDGE NO.: | 79100400059 | 79 | 10040 | 0509 | R | 60 | DATE: | 1 |
|--|-------------|---|----------------------|--|-------|--------|---------------|--|
| | = | co. | ROUTE | LOG MIL | E L/R | SKEW | CRAC | E UNEVEN |
| Europe Lange | SO HA | APPROACT FERIAL SPALING UNLEVEL UNLEVEL | STWAS SIET A. C. SOL | WASTER AND STATE OF THE STATE O | Conce | ANG | HISSIAG DEATH | D I R E C T 100% FILL I O N O E L O T T |
| | 12 | APPR | OACH#1 | CONC. | 121 | | | |
| ELEMENT | ()(| R | ATING | 40' C | ОММІ | ENTS | | |
| ALIGNMENT APPROACH I | | 9 | F P C F(P)C | <u>A</u> PP, ± | : \E | 2 - SE | E (1) | |
| APPROACH S | SLAB | G | FPC | <u>N/V</u> | | | | <u>. </u> |
| APPROACH (| GUARDRAIL | (G) | F P C | | | | | |
| EMBANKME | NT | $\check{\mathfrak{G}}$ | F P C | | | | | <u>—</u> |
| DRAINS | | G | F PC | APP. I | LΙĖ | 2 RT | - SEE (3 |)_ |
| APPROACH J | JOINT | G | F(P)C | APP. # | ١٤. | 2 ~ 5 | F = (2) | |
| SIGNS | | G | FPC | | 1 | | | |

NO. <u>79</u> <u>T-UC</u> <u>5.09</u> SK. <u>60</u> RT. BRIDGE DIR. OF ROUTE

| 1/2 CNACKS |
|-------------|
| FIRES CARCL |
| NIA |
| , |
| |
| |

BRIDGE NO. 79 7-40 5.09 BENT NO. ___ SPAN NO. __ ABT. NO. ___ PIER NO. ___ COMMENTS PATING ELEMENT GFPC BOTTOM DECK PANELC **GFPC** DIA. CONC. I. B. F P C A B GFPC C D GFPC E F GFPC G H GFPC I J GF P C BACKWALLS

A(H)

BR. NO. 79 T-45 3.09 SK.

SPAN NO. /

C

NO. 79 1240 5.03 SK. 60 RT. BRIDGE SPAN NO._2 000 ROUTE OF DIR

ECE GFPC FING CARCES

LAPET GFPC

NT GFPC

ARD GFPC

IL

| | • | | - | | • |
|-------------|----------|-----|-----------|--------------|-----------|
| | | | BRIDGE NO | o. <u>79</u> | I'40 5.09 |
| BENT NO. | SPAN NO. | 2 | ABT. No | o | PIER NO. |
| ELEMENT | PATING | | | co | MMENTS |
| BOTTOM DECK | GF PC | RA | NAUS | | |
| | | - | | | |
| DIA. | GF P C | | | <u></u> | |
| CONC. I. B. | | | | | |
| A B | G F P C | | | | |
| C D | GP P C | | | | |
| E F | GF P C | | | | |
| G H | GF PC | | | | |
| I J | G F P C | | | | |
| BACKWALLS | GFPC | Mar | 1.0 | | |
| | | | <u></u> | | |
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12

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|--------------|----------|
| A | |
| B | |
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| G | |
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| H | |
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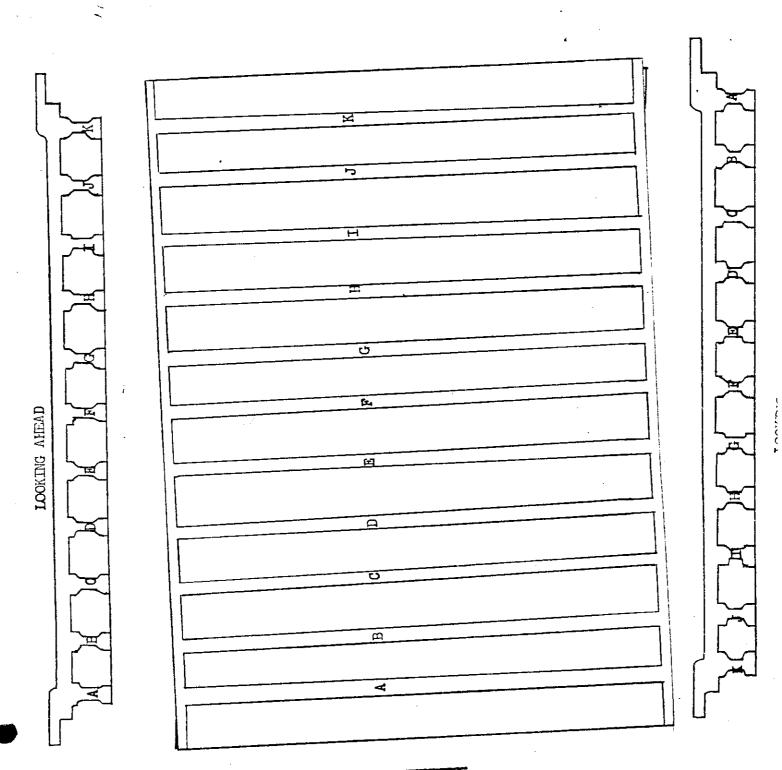
NO. <u>79</u> <u>T-20</u> <u>5.09</u> SK. <u>60</u> RT. BRIDGE ROUTE DIR.

| ECE | G F P C | FINB CHACK | 12-1'CMACKS |
|-------|---------|------------|-------------|
| RAPET | GFP C | 11 /1 | • |
| LINS | GFPC | | |
| INT | G F P C | | |
| DRAN | © . | | • |

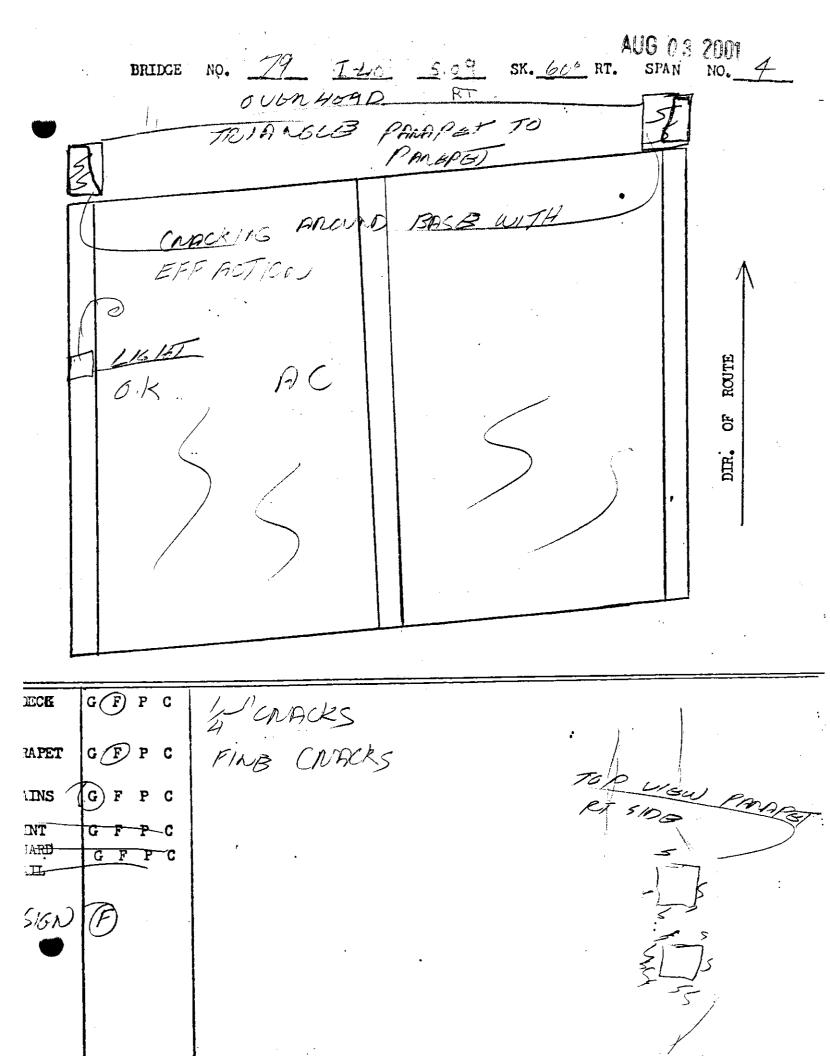
BRIDGE NO. 79 T-40 5.09 BENT NO. SPAN NO. 3 ABT. NO. PIER NO. COMMENTS PATING ELEMENT GFPC SANCIE BOTTOM DECK CONC. I. BEAMS GFPC FPC · В **FFC** GFPC D GFPC E G)FPC F G)FPC G)FPC H GPPC I G)FPC PPC (G)FPC DIA. GFPC BACKWALLS

BR. NO. 79 I-40 5.09 SK. 60 SPAN NO. 3

AUG 03 2001



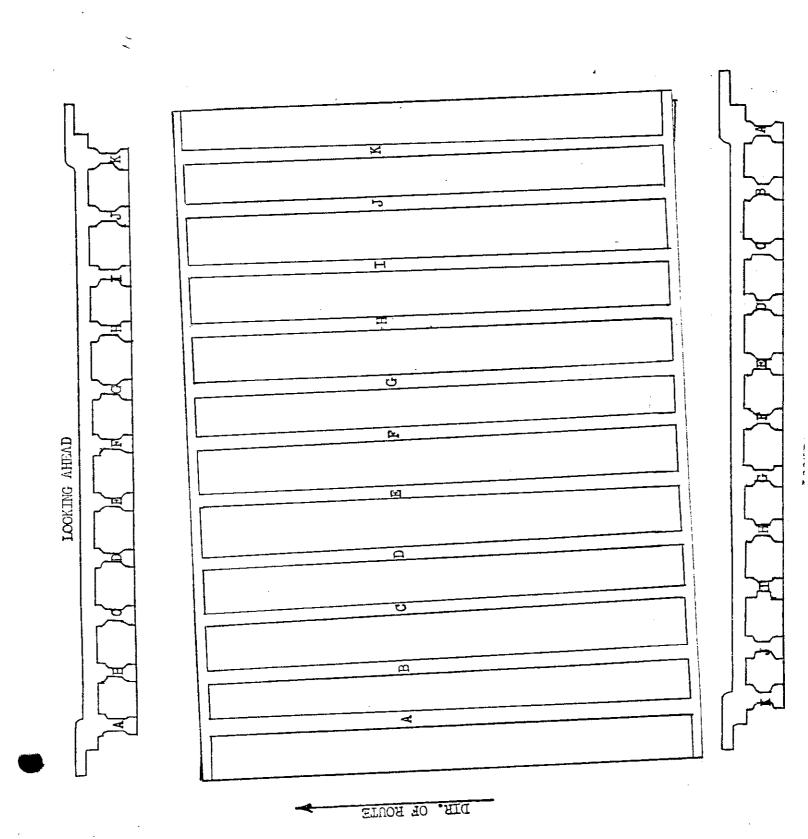
OF ROUTE



KI

| | | BRIDGE NO. 79 J-40 5.09 |
|--|----------|-------------------------|
| BENT NO. | SPAN NO. | |
| ELEMENT | PATING | COMMENTS |
| BOTTOM DECK | GFPC | PANUS |
| CONC. I. BEAMS | | |
| ************************************** | ©FPC | |
| В | GFPC | |
| C | GFPC | |
| D | GFPC | |
| E | GFPC | |
| . F | GFPC | |
| G | GFPC | |
| Н | G F P C | |
| I | GPPC | |
| J | GFPC | |
| К | 2 प म 2 | |
| DIA. | GFPC | |
| BACKWALLS | GFPC | |
| | | |
| | | |
| | | |
| | | |
| | | |

BR. NO. 79 7-45 5.09 SK. 662 27 SPAN NO.



509 SK. 60° RT. NO. 29 T-40 SPAN NO. 5 BRIDGE ROUTE OF. DIR

ECR GFPC J-CAACKS

APET GFPC

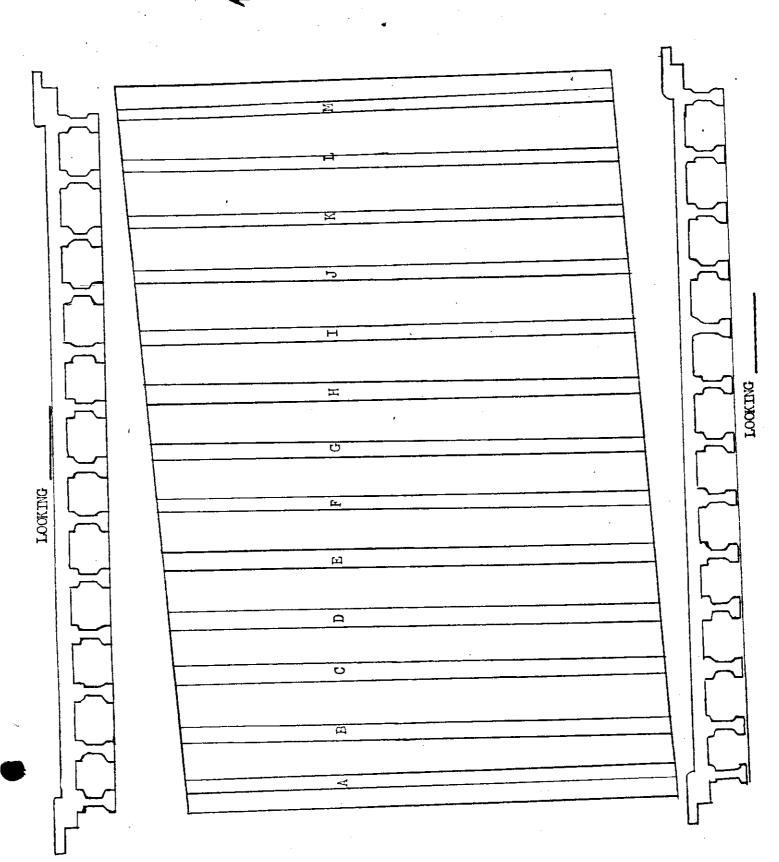
INS GFPC

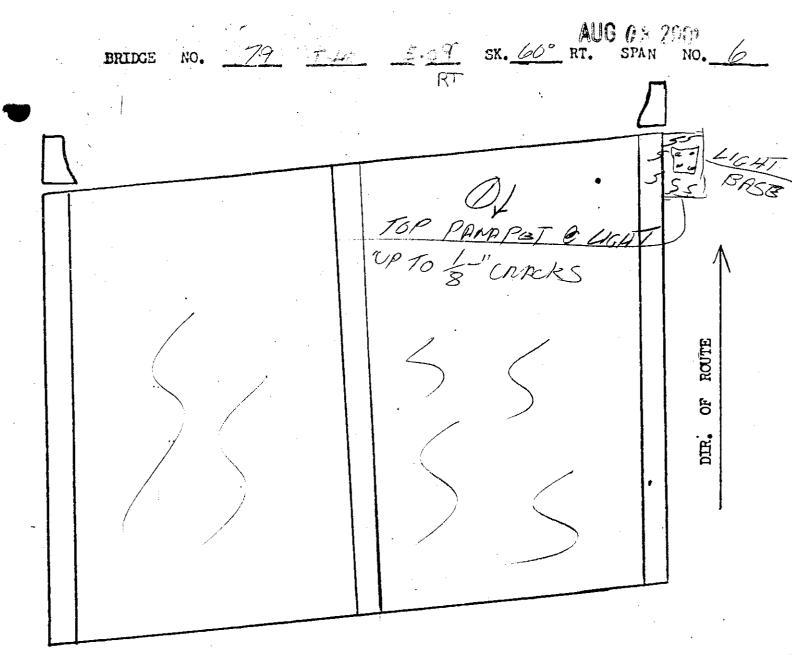
ARD
GFPC

BRIDGE NO. 79 7-40 5.09 BENT NO. SPAN NO. 5 ABT. NO. PIER NO. COMMENTS ELEMENT PATING MANGES GFPC BOTTOM DECK CONC. I. BEAMS GF P C GFPC GFPC GFPC GFPC GFPC E GFPC G)FPC GFPC H GFPC I G)FPC GFPC K GFPC L GFPC_ M DIA. GFPC 1/14 GFPC BACKWALLS

RT

DIR. OF ROUTE





| DECK | | 4"cancks |
|--------------------|---------|--------------------|
| RAPET | GF P C | FING (NACK) - SEBO |
| INS (| G F P C | |
| INT JARD LIL | G F P C | |
| • | | |

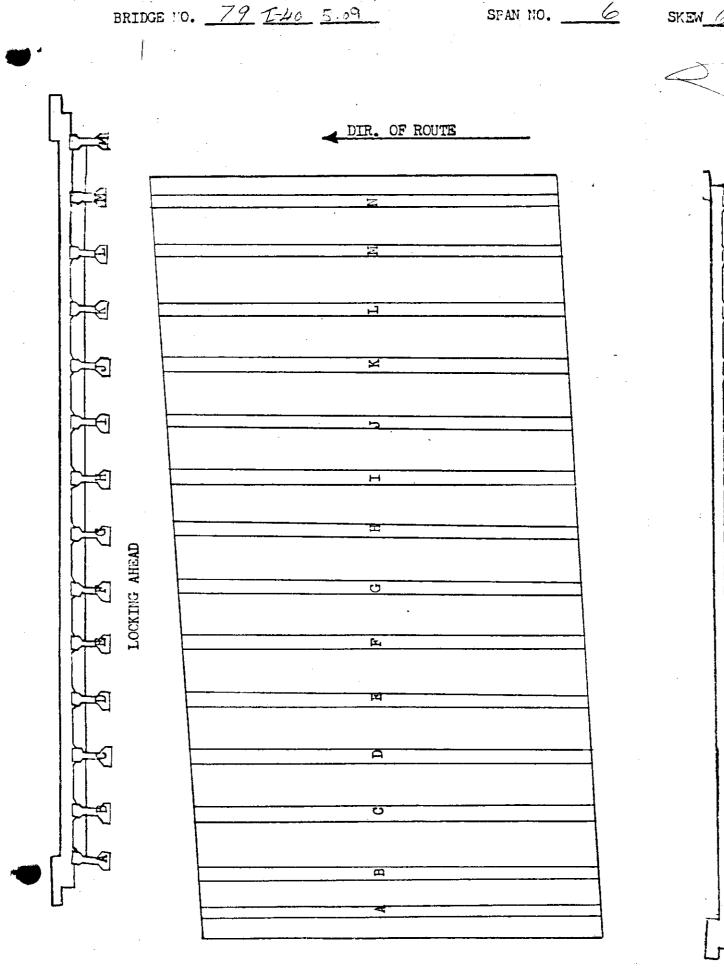
BRIDGE NO. 79 T-40 5.09

| BENT NO. | SPAN NO. | ABT. NO PIER NO |
|---------------|----------|-----------------|
| ELEMENT | PATING | COMMENTS |
| BOTTOM DECK | GF P C | PANELS. |
| · | | |
| CONC. I. BEAM | | |
| A | 1 / 1 | |
| В | GFPC | |
| C | GFPC | ! |
| D | G F P C | |
| . E | GFPC | |
| F | G F P C | |
| G | | |
| н | GFPC | |
| I | 1 | |
| J | GFPC | |
| K | | |
| L | GFPC | |
| М | G)FPC | |
| N | GFPC | |
| | | N/i |
| BACKWALLS | GFPC | 7. 7 |
| DTA | GFPC | |
| | | |
| | | |

AUG 0.3 2001

SPAN NO. 6

SKEW 600Rt.



BRIDGE NO. 79 1-40 5.09 SK. 60° RT. SPAN NO. 7 1; ROUTE DIR.

DECE GFPC

FING CARCKS

AINS GFPC

JARD GFPC

LIL

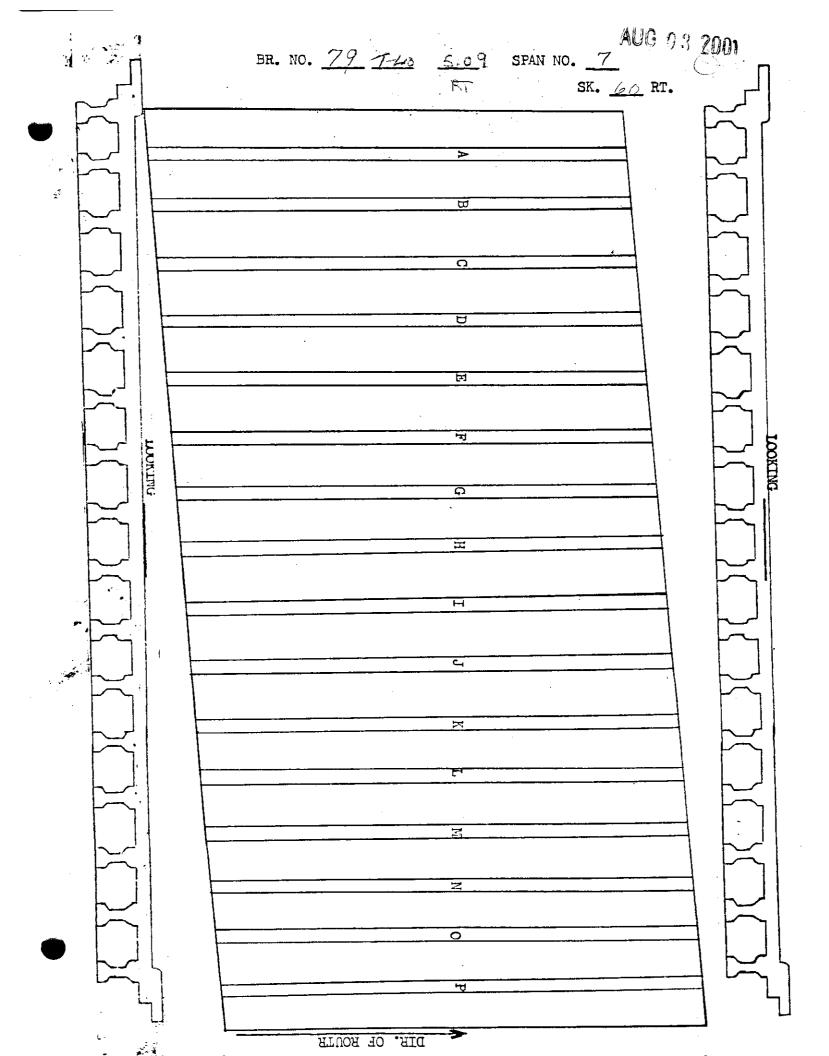
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Duran .

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BRIDGE NO. 79 T-40 5.09

| BENT NO. | SPAN NO. | 7 ABT. NO PIER NO |
|----------------|----------|-------------------|
| ELEMENT | RATING | COMMENTS |
| BOTTOM DECK | G F P C | 924, N. C.C. r |
| CONC. I. BEAMS | | |
| A B C | GFPC | |
| | GFPC | |
| | | |
| DEF | GFPC | |
| | GFPC | |
| | | |
| G H I | GFPC | |
| | GFPC | |
| | | |
| J K L | OF PC | |
| | GFPC | |
| | | |
| м и о | GFPC | |
| | GFPC | |
| | | |
| P | GFPC | |
| | | |
| BACKWALLS | GFPC | 2/4 |
| DTA . | र्व म ट | |



AUG 60 LONG SPAN NO. 8 NO. 79 The 509 SK. 66 RT. BRIDGE ROUTE DIR.

ECK GFPC FINS "

AINS GFPC

ENT GFPC

JARD GFPC

BRIDGE NO. 79 T-40 5.09. BENT NO. SPAN NO. ABT. NO. PIER NO. COMMENTS RATING ELEMENT FANELS G)FPC BOTTOM DECK CONC. I. BEAMS G)FPC A B C GFPC GFPC DEF GFPC GFPC G H I GFPC ØFPC J K L GFPC G)FPC M N O GFPC GFPC P - Q G F P C BACKWALLS

G)FPC

DIA.

AUG 03 2001

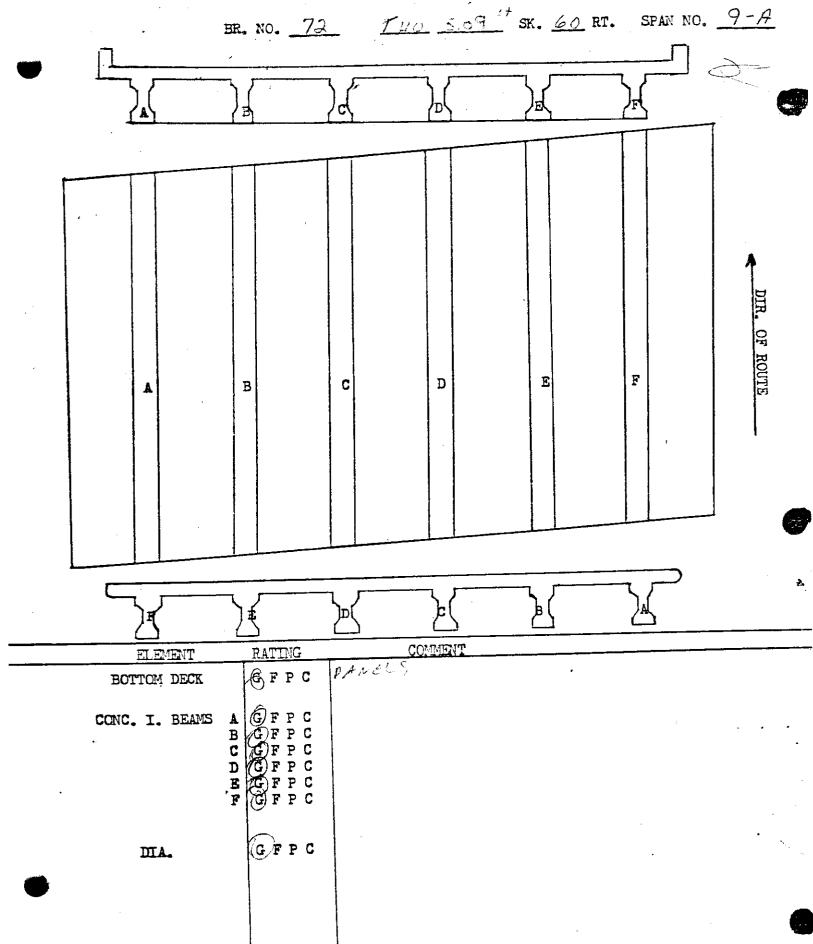
BRIDGE NO. 79 7-40 5.69 SK. 66 RT. NO. 9-A HOHT BASES ROUTE OF. DIR.

DECK GFPC GFPC FINB CARCKS

ARAPET GFPC

TAINS GFPC

OINT. GFPC



NO. 79 140 509 SX. 60° RT. NO. 9-B BRIDGE SPAN OLELAGO GOTOP 12'LX 2"D ROUTE DH. GFP C DECE TO CARCKS FNG (NACKS SEED) GF P C ARAPET

HAINS G F
DINT G F

BRIDGE NO. 79 T-40 5.09

| BENT NO. | SPAN NO. | 9-B ABT. NO | PIER NO. |
|------------------|-----------|-------------|----------|
| ELEMENT | PATING | | COMMENTS |
| BOTTOM DECK | G F P C | PANAIR | |
| CONC. I . BEAM A | G F P C | | |
| В | 3 | | |
| | G F P C | | |
| | F C P C | | |
| I | H G F P C | | |
| | I GFPC | | |
| DIA. | GFPC | | |
| | | Win | |
| BACKWALLS - | GFPC | | |
| | | | |
| | | | |
| | | | |

BR. NO. 79 Two 5.09 SK. 60° K SPAN NO. 9-B DIR. OF ROUTE Н Ħ Ö LOOKING 딸 ပ В

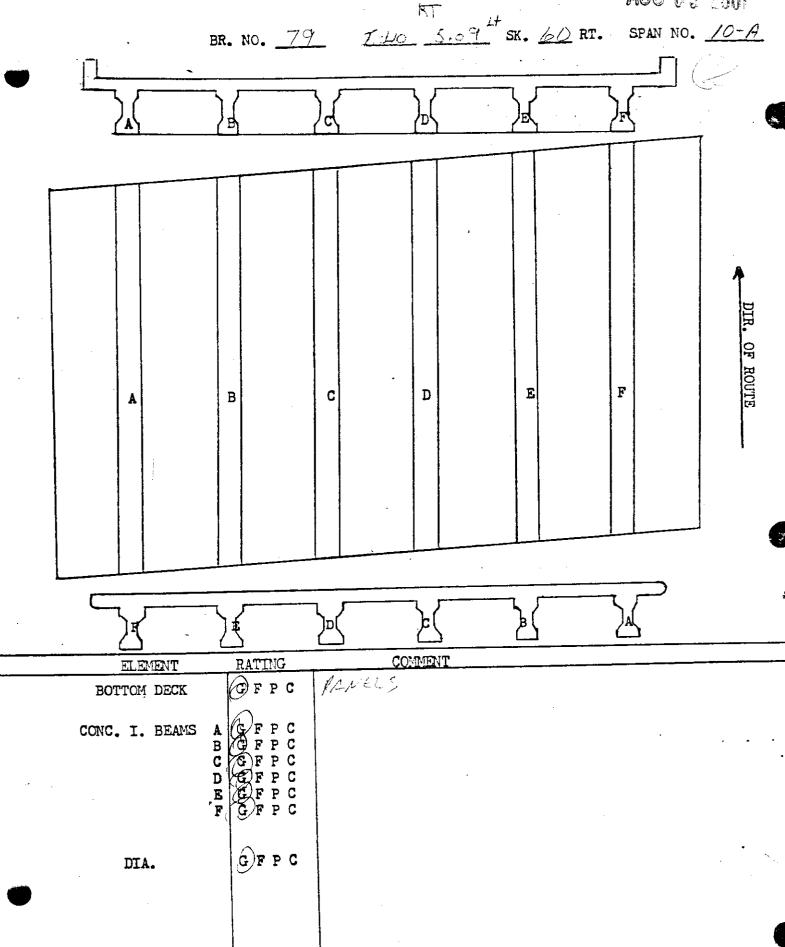
LOOKING

BRIDGE NO. 79 1-40 509 SK. 60° RT. SPAN NO. 10-A ROUTE Q. DIR.

DECK GFPC FING CARCES

HAINS GFPC

OINT GFPC



NO. 79 T20 5.09 FT SK. 60° RT. SPAN NO. 10-B

| DECE | G (F) | P C | 4- Cracks |
|-----------------|-------|-----|-------------|
| 'AR APET | G (F) | P C | FINB CAROLS |
| RAINS (| G F | P C | |
| OINT | G F | P C | |
| | | | , . |
| | | | |
| | | | |

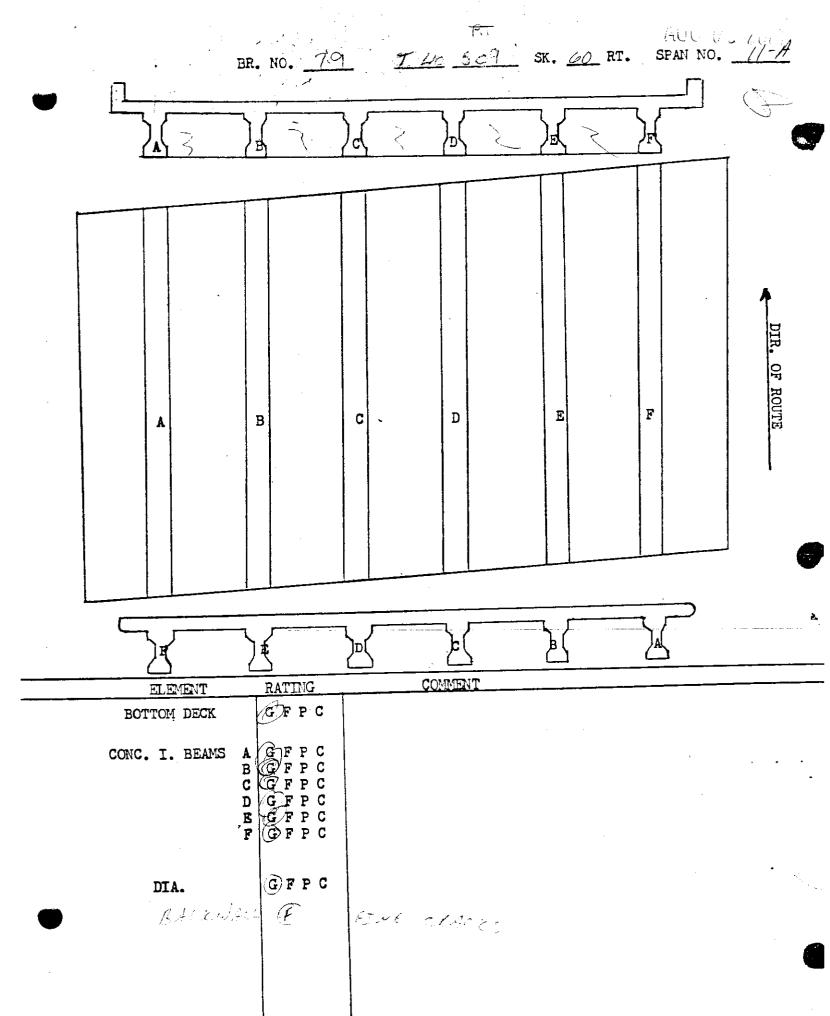
BRIDGE NO. 79 1-10 5.09

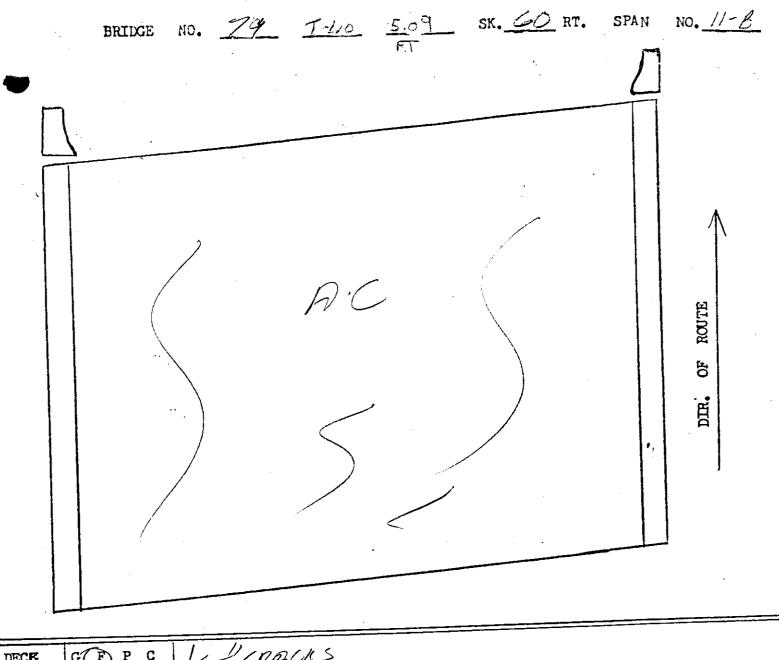
| BENT NO | SPAN NO. | 10-8 ABT. NO PIER NO |
|---------------------------------------|--------------|----------------------|
| ELEMENT | PATING | COMMENTS |
| BOTTOM DECK | Ø F P C | PANELS |
| CONC. I . BEAM A | GF PC | |
| в | | |
| П | | |
| <u>E</u> | GFPC GFPC | |
| G | 250 | |
| | GFPC GFPC | |
| | 73113 | |
| DIA. | GFPC | |
| , , , , , , , , , , , , , , , , , , , | | |
| BACKWALLS, | GFPC | N/A |
| | | |
| · · · · · · · · · · · · · · · · · · · | | |
| | | |

BR. NO. 79 740 5.09 SK. span no. 10BDIR. OF ROUTE Ç LOOKING LOOKING Œ Ö

5.09 SK. 60° RT. SPAN NO. 11-A BRIDGE NO. <u>79</u> <u>1-46</u> DIR. OF ROUTE

| DECE | G F | P | - 1 | 4- CARCKS |
|---------|-----|---|-----|--------------|
| 'ARAPET | G F | | | FING CARCLES |
| RAINS | G F | P | С | NID |
| TALC | G F | P | C | V |
| .• | | | | |
| | | | , | |
| | | | | |
| | | | | , |
| | 1 | | | |





DECK GFPC LACROCKS
ARAPET GFPC PING CRACKS
OINT GFPC

BRIDGE NO. 29 T-40 5.09 RT

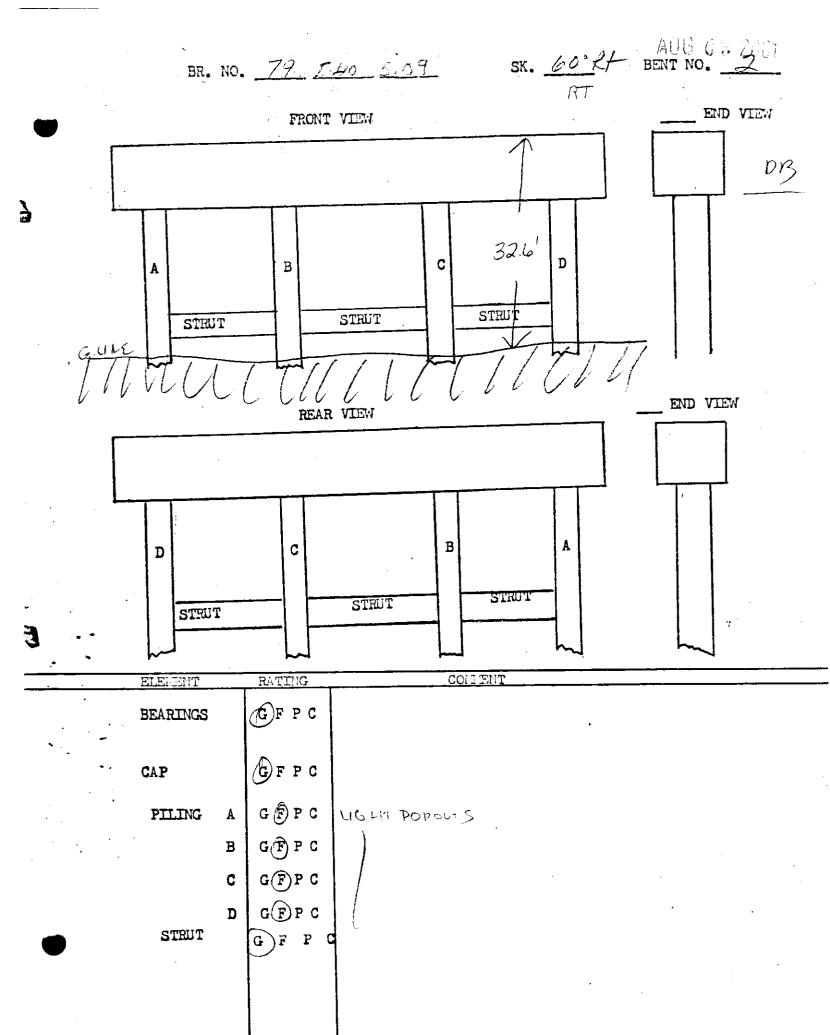
| BENT NO. | SPAN NO. | // / ABT. NO PIER NO |
|------------------|----------|----------------------|
| ELEMENT | RATING | COMMENTS |
| BOTTOM DECK | ØFPC | PANCES |
| CONC. I . BEAM A | | |
| . B | | |
| C | | , |
| <u>D</u> | GFPC | |
| | GFPC | |
| | GFPC | |
| H | GFPC | |
| | GFPC | |
| | | |
| DIA. | GFPC | |
| BACKWALLS, | G F P C | ENG CHO- ES |
| | | SPIONE STATING ON |
| | | PANELS METHERN (I) |
| | | G + + |
| | | |

DIR. OF ROUTE H Ü LOOKING ALLAND [±, LOOKING LOOKING ഥ П O B -α;

BRIDGE NO 79 I-44 5.09 NO. ABUT. AUG no 2001 RT 03 LOOKING Back VIEW NOTE: ALL HEIGHTS MEASUREDON RT. SIDE OF BRIDGE COMMENT RATING ELEMENT LIGHT. CORR. BEARING CAP FINE CRACKS WINGS EMBANKMENT NA SLOPAVEMENT G F P C HEHLY IN GEN-VEG. RIPRAP

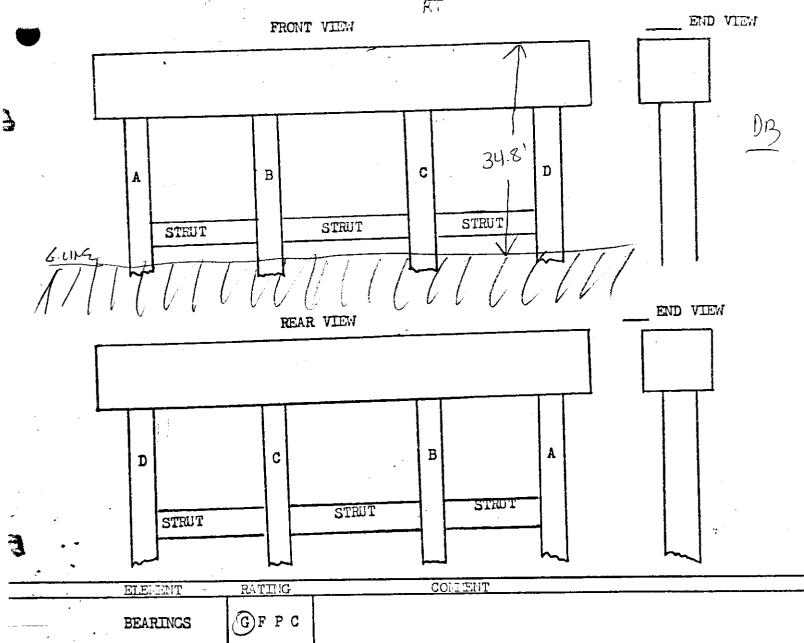
STRUT

G F P C



BR. NO. 79 I 40 5.09

sk. 60°ff Bent no. 3



CAP

GFPC

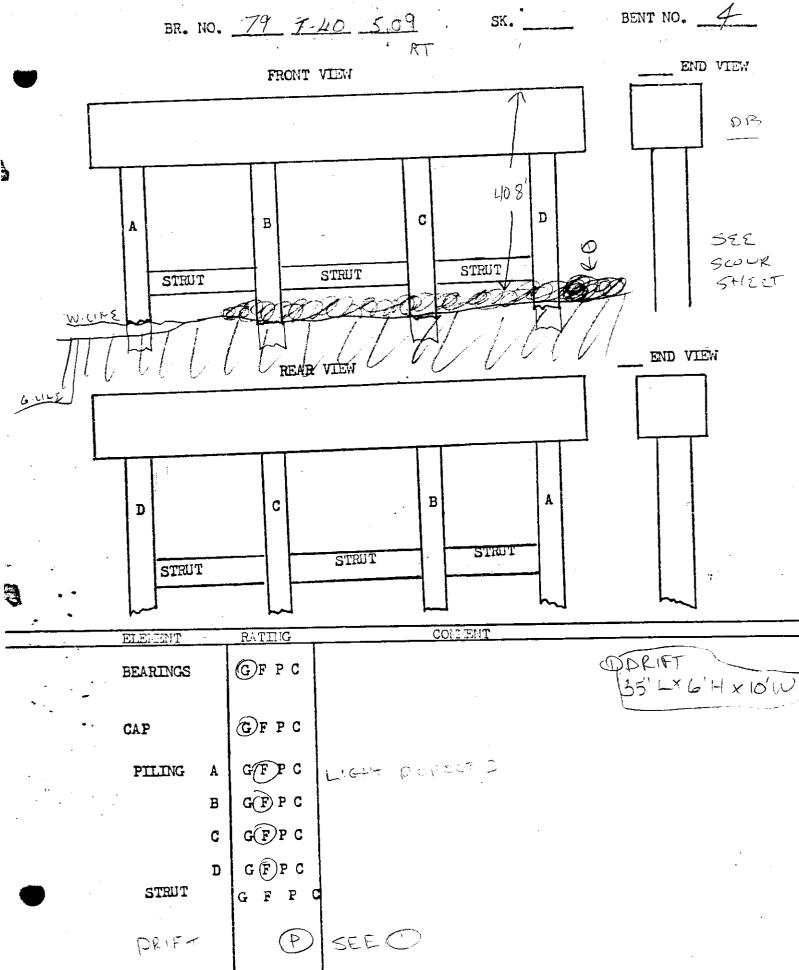
PILING A GFPC

GFPC

C GFPC

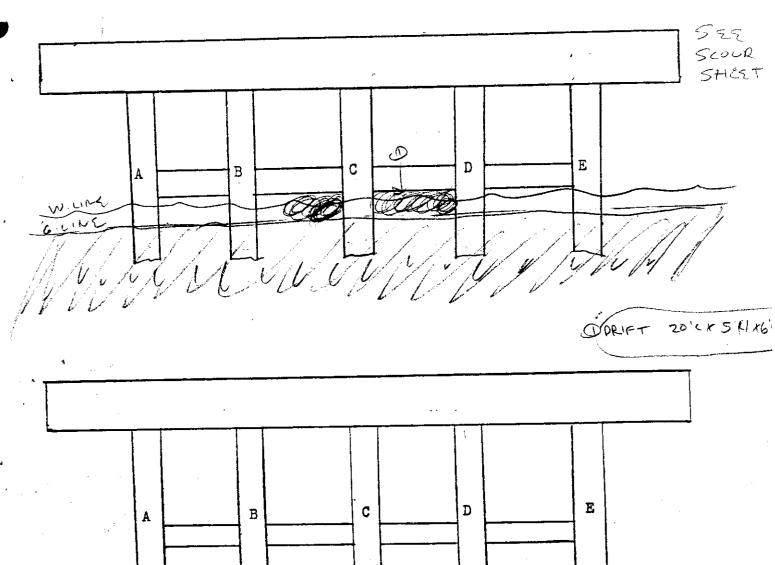
STRUT

GFPC

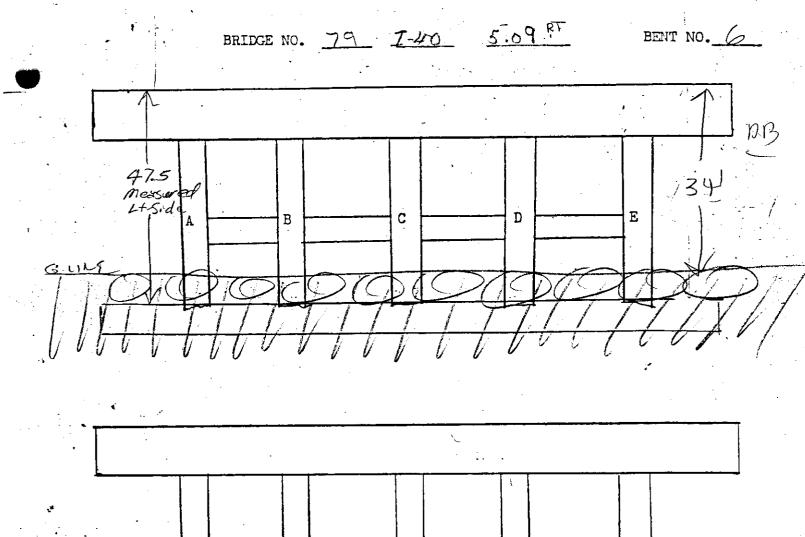


BRIDGE NO. 79 1.40 5.09 AT

BENT NO. 5



| ELEMENT | RATINGS | COMMENT |
|-----------------------|------------------------------|----------------------------|
| CAP COLUMN A-E | GFPC GFPC GFPC GFPC | LIGHT POPOUTS & WATER ABR. |
| BEARINGS STRUTS PRIFT | GFPC GFPC | SEE () |



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|---------------------------------------|--------------------------------------|---------------|--------------------|-------------|
| | .• | | <u> </u> | |
| ELEMENT | RATINGS | COMMENT | | |
| CAP COLUMN A- PLP PAO BEARINGS STRUTS | GFPC GFPC GFPC GFPC GFPC | LIGHT POPOUTS | | |

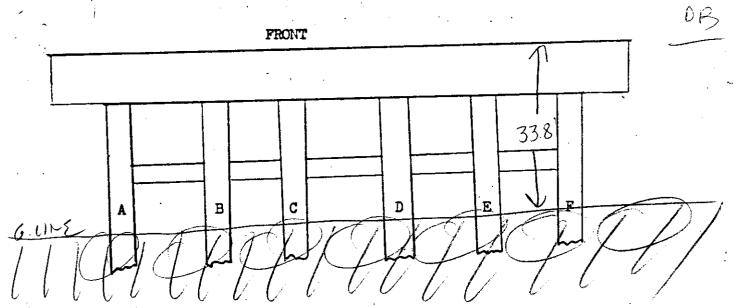
C

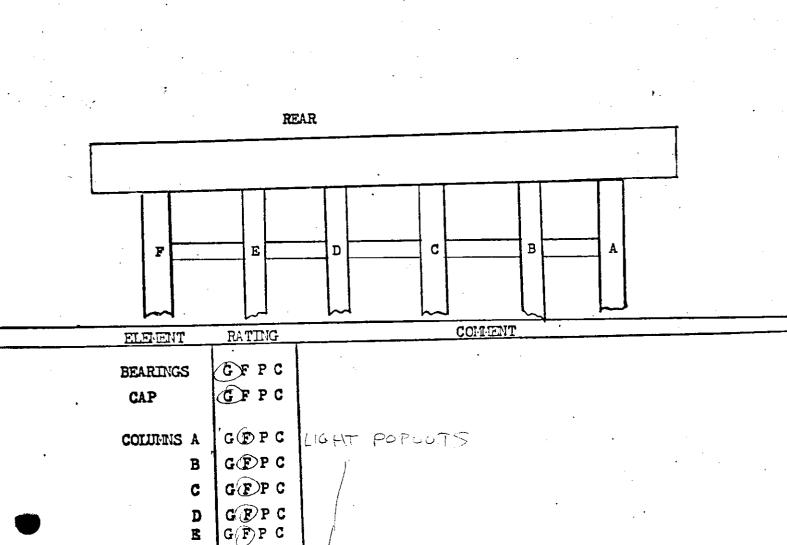
В

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 \mathbf{E}

BR. NO. 79 7-40 5.09 SK. __ BENT NO. 7



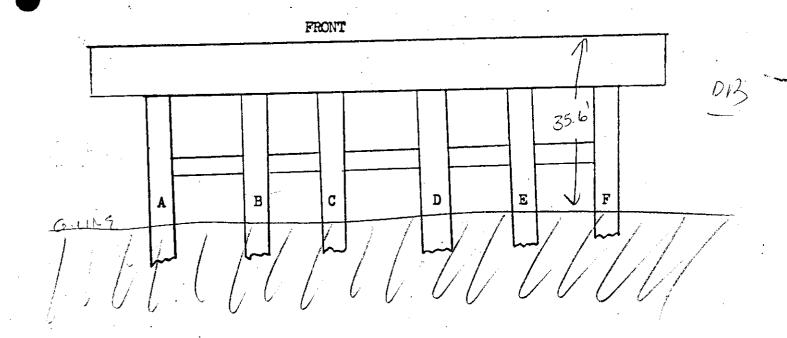


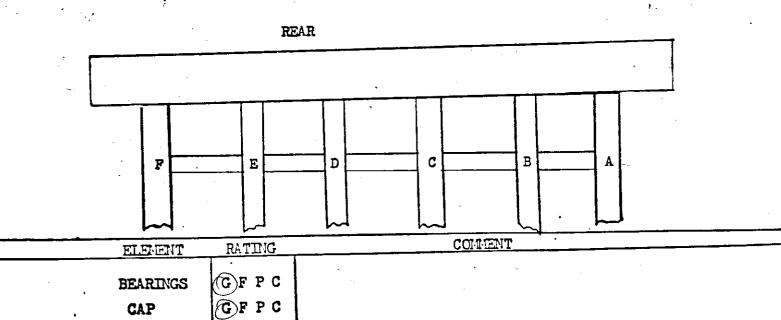
GFP C

GFPC

STRUTS

BENT NO. 8





BEARINGS
GFPC

CAP
GFPC

BGFPC

C GFPC

B GFPC

C GFPC

C GFPC

C GFPC

C GFPC

C GFPC

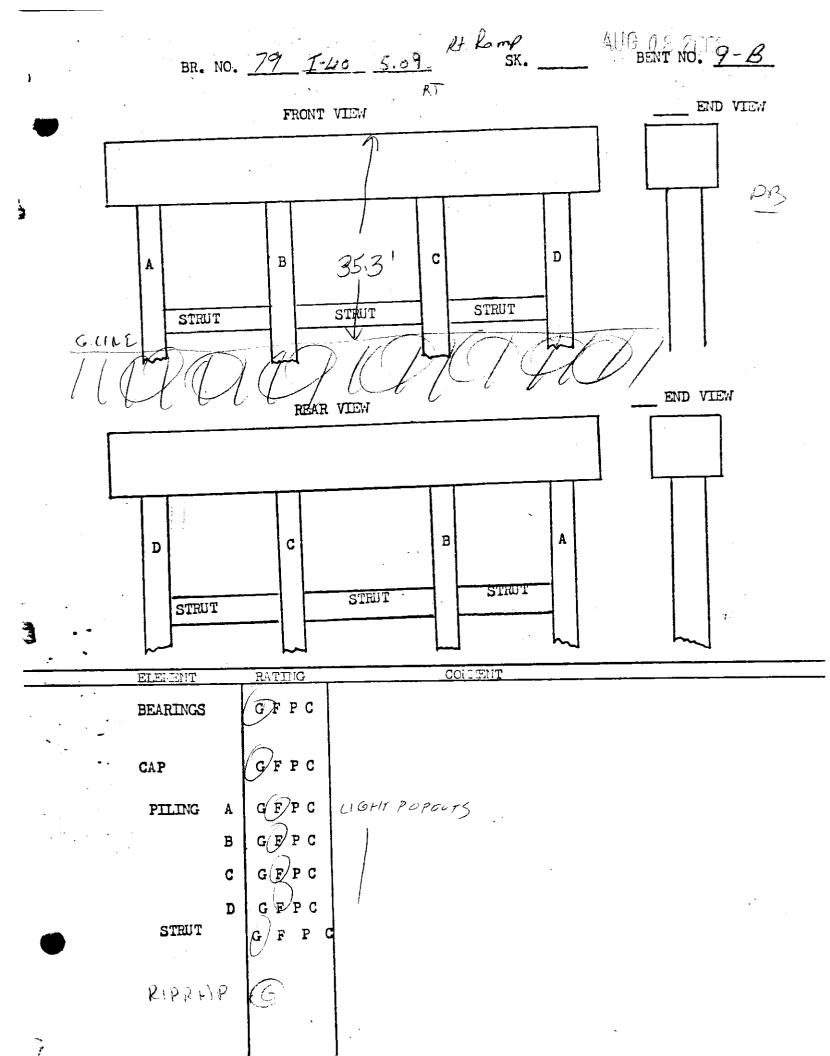
C GFPC

BR. NO. 79 I-40 5.09 RT BENT NO. 9-AEND VIEW FRONT VIEW 30.31 В C STRUT STRUT END VIEW C STRUT STRUT ELEI ENT RATING CONTENT G)FPC **BEARINGS** GFPC CAP GFPC NG-17 DOPOUTS PILING GFP C GFP C

RIPIZIA P

STRUT

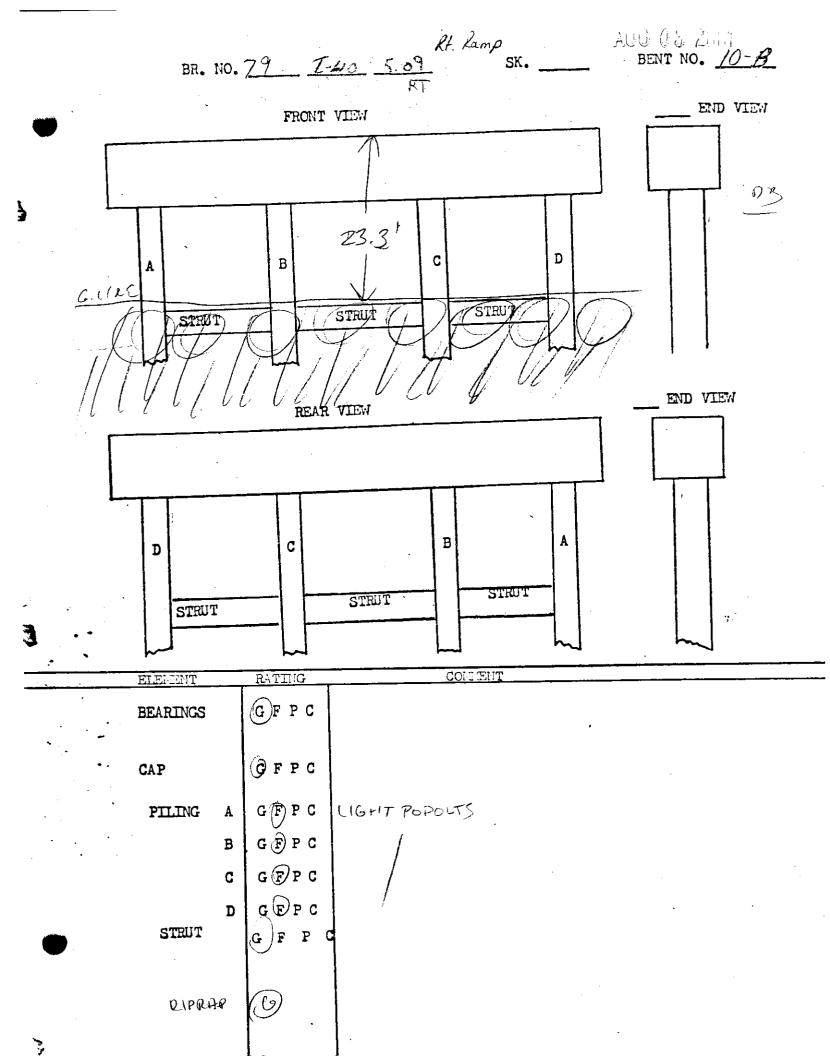
G)FPC



G F P

STRUT

BIDBAD



AUG AS 2001 ABUT. NO. 2019

LOOKING Ahead

OB

VIEW

| | • | | |
|--|---------------------------------|----------------------|--|
| ELEMENT | RATING | COMMENT | |
| BEARING CAP WINGS EMBANKMENT SLOPAVEMENT VEG. RIPRAP | G F P C G F P C G F P C G F P C | N/A HEAVY IN GEN. | |

ABUT. NO. 2-8

LOOKING Aherd

D)

VIEW

| ELEMENT | RATING | COMMENT | |
|--|---------------------------------|--------------|--|
| BEARING CAP WINGS EMBANKMENT SLOPAVEMENT VEG. QUP 2170 | G F P C G F P C G F P C G F P C | HEAUY INGEN. | |
| | | | |

| Rev. | 08/03/00 |
|------|----------|

| Date: | MILL, | 1918 - | į |
|-------|-------|--------|---|
| | | | |

| Pg. # of | _ |
|----------|---|
|----------|---|

BRIDGE NUMBER:

CROSSING:

| LAST EXPOSURE | ABUT/BENT/ PIER NUMBER | TOTAL HEIGHT TOP OF CAP TO (OR GROUND LINE/ DATE FOR PILES | (t) FOOTING THICKNESS | W/FTG @ H= TOP OF CAP TO TOP OF FOOTING | EXPOSURE |
|------------------|------------------------------|---|-----------------------------|---|----------|
| | A-1 | | | Q. | 2' |
| | ρ-1 | 45.2' | 4.25 | 42.44 L 38.90 R 38.9' | 27.8' |
| | P-2 | <i>55</i> ,8 | 4.5 | 52.862 49.70R 49.7 | 32-6 |
| | ρ-3 | 61.5 | 4.5 | 58.10L 55.90R 55.4 | 34.8 |
| 47.0 | P-4 | 61.6 | 3.75 | 59.412 56.10 R 56.1 | 45.41 |
| 46.0 | p-5 | 61.6 | 3.25 | 56.70R 56.7 | 51.6 |
| | P-60 | 52,5 | 3.25 | 30.95 L 47.17 R 49.06 | - 34' |
| | ρ-7 | <i>53</i> , 3 | 3.25 | 51.781 47.2 49.268 49.2 | 33.8 |
| | P-3 | 49.3 | 3.25 | 47.621 49.2 44.58R 44.5 | 35.6 |
| · | P-9A | 46.1 | 3.25 | 43.201 42.50R 42.5 | 30.3 |
| | P-0090 | 38.1 | 3,25 | 35.261 34,668 34.7 | 35.31 |
| | 3- 10-F | | | | 17:31 |
| | | | | | 23.3 |
| | | | | |) ' |
| | | | | | |

| TOP OF CAP TO TOP OF WATER: | RIP-RAP: YES: (x) NO: () @ BENT/PIER NO.: |
|-----------------------------|---|
| THRU STRUCTURE: | |
| COMMENTS: | |
| | |
| | |

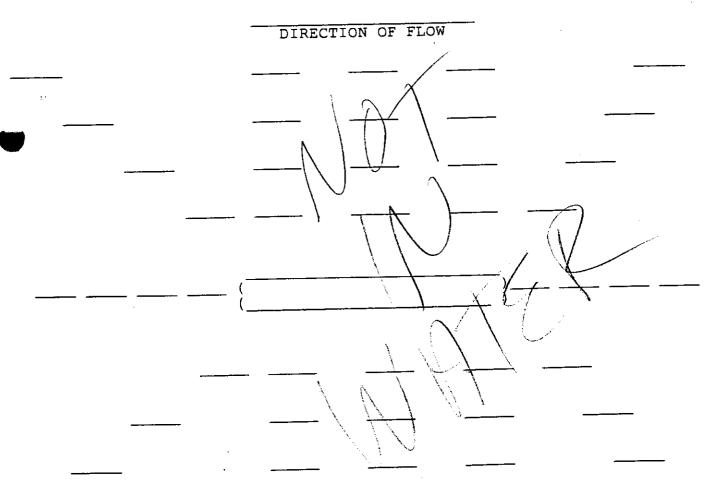
DATE:_ BRIDGE NO. CO. ROUTE L/M R/L (Top of Cap to Bottom of FTG) SCOUR: FOOTING THICKNESS (T) DRIFT: G F P C TOP OF CAP TO TOP OF FTG MAXIMUM EXPOSURE ____ TOP OF CAP TO TOP OF WATER WATER DEPTH TO TOP OF FTG: DEPTH DISTANCE DIRECTION OF FLOW

| | BRIDGE NO. <u>79100400059</u> | 79 10040 0509 R DATE: | - |
|--------|--|--|----------|
| | TOTAL HEIGHT (Top of Cap to Bottom of Ftg) FOOTING THICKNESS (T) TOP OF CAP TO TOP OF FTG (W / FTG @ H=) | BENT/PIER NO SCOUR: G F P DRIFT: G F P | C C |
| A H | TOP OF CAP TO TOP OF WAT | · · · · · · · · · · · · · · · · · · · | |
| G BET | 25' WHEN 15+0r- | BENT #5 | OSTREAM) |
| | 20 | | 3.5 |
| | DINZ | BENT #4 | 3'/4 |
| | DEPTH / DISTANCE | SENT # 3 SHOW DIRECTION OF FLOW | |
| | | 100. Domu - 18.8, | |

| | BRIDGE NO. <u>79100400059</u> | 79 10040 Co.: Route | <u>0509</u> <u>R</u> LogMile L/R | DATE: | |
|---|---|------------------------|-------------------------------------|--|------------------|
| | TOTAL HEIGHT (Top of Cap to Bottom of Ftg) FOOTING THICKNESS (T) TOP OF CAP TO TOP OF FTG TOP OF CAP TO TOP OF WA WATER DEPTH TO TOP OF F | 56 TER <u>43</u> | 10 RT 5 FB | BENT/PIER NO COUR: G F RIFT G F MAXIMUM EXPOSU DEPTH DISTANCE | P C P C IRE 45.4 |
| | | DIRECTIO | N OF FLOW | | • |
| | | 0.9' | | | |
| | 0.2 | 0.9 | 08' 1.6 | D. C. C. DRJET | |
| 3 | 6.4.2 | 0.5 | 0.7' 1.5 | | |
| | | | | | |

| BRIDGE NO. <u>79100400059</u> | |
|--|---|
| TOTAL HEIGHT (Top of Cap to Bottom of Ftg) FOOTING THICKNESS (T) TOP OF CAP TO TOP OF FTG TOP OF CAP TO TOP OF WATER WATER DEPTH TO TOP OF FTG: DEPTH DISTANCE | - |
| DIRECTION OF FLOW | |
| | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | _ |

| BRIDGE NO. <u>79</u> - <u>T40</u> - <u>509</u> CO. ROUTE L/M | · <u>R</u> /L | DATE: |
|---|---------------|-------------------------------|
| TOTAL HEIGHT (Top of Cap to Bottom of FTG |) | BENT/PIER NO. 96 |
| FOOTING THICKNESS (T) | 3,75 | SCOUR: G F P C DRIFT: G F P C |
| TOP OF CAP TO TOP OF FTG | 56.F | DRIFT: G F P C |
| TOP OF CAP TO TOP OF WATER | 43.8 RT | MAXIMUM EXPOSURE |
| WATER DEPTH TO TOP OF FTG: | | |
| | | DEPTH |
| | | DISTANCE |
| | | • |



100 FEET UPSTREAM , STREAMBED ELEVATIONS BANK TO BANK

RIGHT OR LEFT OF BRIDGE

FEDERAL NUMBER --- 79100400059

BRIDGE NO. · . : ----- 79-100400-509-r DATE: 10/26/98

NO CHANGE AS OF 08-03-01

CROSSING ----- wolf

NUMBER OF PIERS: -----

LOCATION OF PIERS: ---

BENCH MARK ELEV. --300 **INSPECTORS**

Williams

BENCH MARK LOC. ---- Parapet rail Parker

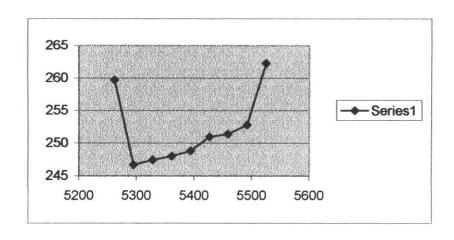
Coats

WATER ELEVATION: -----254.2 Kiestler

DISTANCE OF 0.00 = TOP OF BANK APPROACH 1 SIDE

DISTANCE AND ELEVATIONS IN LARE IN STANDARD MEASUREMENT

| 5262 | 259.7 |
|------|-------|
| 5295 | 246.7 |
| 5328 | 247.4 |
| 5361 | 248 |
| 5394 | 248.8 |
| 5427 | 251 |
| 5459 | 251.4 |
| 5492 | 252.8 |
| 5525 | 262.3 |



100 FEET UPSTREAM , STREAMBED ELEVATIONS BANK TO BANK

RIGHT OR LEFT OF BRIDGE

FEDERAL NUMBER --- 79100400059

DATE: 10/26/98 BRIDGE NO. · . : ----- 79100400509 r

CROSSING ----wolf

NUMBER OF PIERS: -----

LOCATION OF PIERS : ---

INSPECTORS 300 BENCH MARK ELEV. --

Williams

Parker BENCH MARK LOC. ---- Parapet rail

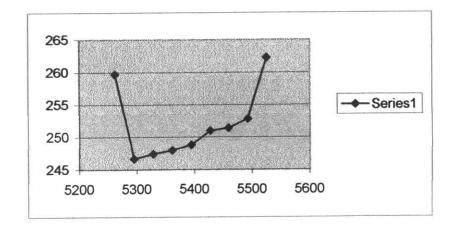
Coats

Kiestler 254.2 WATER ELEVATION: -----

DISTANCE OF 0.00 = TOP OF BANK APPROACH 1 SIDE

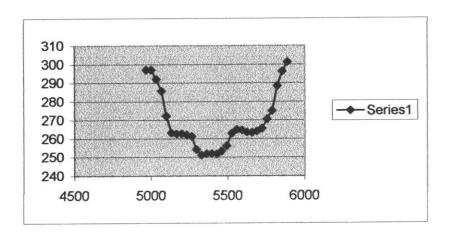
DISTANCE AND ELEVATIONS IN LARE IN STANDARD MEASUREMENT

| 5262 | 259.7 |
|------|-------|
| 5295 | 246.7 |
| 5328 | 247.4 |
| 5361 | 248 |
| 5394 | 248.8 |
| 5427 | 251 |
| 5459 | 251.4 |
| 5492 | 252.8 |
| 5525 | 262.3 |
| | |



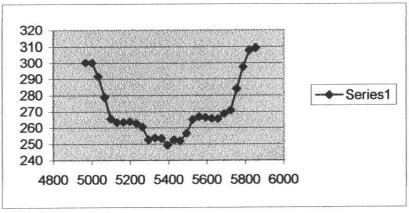
UPSTREAM GROUND ELEVATIONS @ EDGE OF BRIDGE

| 4967 | 297.1 |
|------|-------|
| 5000 | 297.1 |
| 5033 | 292 |
| 5066 | 285.8 |
| 5098 | 272.3 |
| 5131 | 263.1 |
| 5164 | 262.5 |
| 5197 | 262.6 |
| 5230 | 261.9 |
| 5263 | 261.2 |
| 5295 | 254.2 |
| 5328 | 251.2 |
| 5361 | 251.9 |
| 5394 | 252.1 |
| 5427 | 251.8 |
| 5459 | 253.3 |
| 5492 | 256.2 |
| 5525 | 262.8 |
| 5558 | 264.9 |
| 5591 | 264.5 |
| 5623 | 263.4 |
| 5656 | 263.3 |
| 5689 | 263.9 |
| 5722 | 265.6 |
| 5755 | 270.6 |
| 5788 | 275 |
| 5820 | 288.5 |
| 5853 | 296.2 |
| 5886 | 301.2 |
| | |



DOWNSTREAM GROUND ELEVATIONS @ EDGE OF BRIDGE

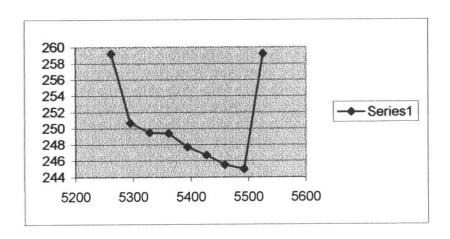
| 4967 | 300.4 |
|------|--------|
| 5000 | 300.1 |
| 5033 | 291.7 |
| 5066 | 279 |
| 5098 | 265.5 |
| 5131 | 263.3 |
| 5164 | 263.4 |
| 5197 | 263.8 |
| 5230 | 262.8 |
| 5263 | 260.5 |
| 5295 | 252.6 |
| 5328 | 253.7 |
| 5361 | 253.4 |
| 5394 | 249.4 |
| 5427 | 252.61 |
| 5459 | 251.9 |
| 5492 | 256.6 |
| 5525 | 265.1 |
| 5558 | 266.9 |
| 5591 | 266.4 |
| 5623 | 265.8 |
| 5656 | 265.6 |
| 5689 | 268.7 |
| 5722 | 270.8 |
| 5755 | 283.9 |
| 5788 | 297.6 |
| 5820 | 307.9 |
| 5853 | 309.4 |
| | |



100 FEET DOWNSTREAM, STREAM ELEVATIONS BANK TO BANK

| 5262 | 259.2 |
|------|-------|
| 5295 | 250.7 |
| 5328 | 249.5 |
| 5361 | 249.4 |
| 5394 | 247.7 |
| 5427 | 246.7 |
| 5459 | 245.5 |
| 5492 | 245 |
| 5525 | 259.2 |
| | |

ER



REV. 07-01-91

DATE : 9-16-99

BRIDGE NO. 79 T40 5.09 COUNTY ROUTE LOG MI

BENT/PER NO. 445

TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING)

SCOUR : G P P C DRIFT : G F P C MAXIMUM EXPOSURE :

FOOTING THICKNESS (t)

(TOP OF CAP TO TOP OF FOOTING) W/FTG @ H =

TOP OF CAP TO TOP OF WATER

.WATER DEPTH TO TOP FOOTING

Best

DEPTH

DISTANCE

SHOW DIRECTION OF FLOW

SEP 16 1999

| BRIDGE NO. 79 - 140 - 509 - R DATE: 9-16-99 |
|--|
| TOTAL HEIGHT 61.6 BENT/PER NO. 4 |
| FOOTING THICKNESS (T) $3.9'$ SCOUR: G F P C |
| TOP OF CAP TO TOP OF FTG $57.7'$ DRIFT: G F $\stackrel{\frown}{P}$ C |
| TOP OF CAP TO TOP OF FIG. $\frac{57.8}{45'}$ BRIFT: G F P C $\frac{1}{45'}$ TOP OF CAP TO TOP OF WATER $\frac{45'}{45'}$ MAXIMUM EXPOSURE $\frac{47}{45'}$ |
| WATER DEPTH TO TOP OF FTG: |
| G() DEPTH |
| Flow of CURRENT DISTANCE DISTANCE |
| 20 |
| DIRECTION OF FLOW |
| - 1.0° 1.0° 25° 25° WATE |
| |
| $\frac{CLT}{15'} \frac{\partial}{\partial O} \left(\frac{2.7'}{2O'} \right)$ |
| $\frac{\partial}{\partial v} \left\langle \frac{1.0'}{15} \right\rangle \frac{0.5'}{15'}$ |
| |
| 0,5' 2.0' - COUR BOR WI |
| TYPHAL TO' 10: SAND BAR WI DRIFT. SCATTERED |
| 00 00 00 |
| 20 10. 15 BENT # (4) |
| |
| 10 10' 15' 15' GL1 |
| |
| 5. 5. 10. 15. Cow 15 |
| <u>00</u> <u>20'</u> <u>1.5'</u> - 00 <u>15</u> |
| 10. 10. 15. 15. |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ |
| |
| |
| G. L. |

SEP 1 6 1999

| BRIDGE NO. 79 - I 40 5 09 | DATE: $9-16-99$ |
|--|--|
| TOTAL HEIGHT (Top of Cap to Bottom of FTG) | 53,3 BENT/PER NO \$ 5 |
| FOOTING THICKNESS (T) | 3.3 SCOUR: G F P C |
| TOP OF CAP TO TOP OF FTG | 50.0 DRIFT: G F (P) C |
| TOP OF CAP TO TOP OF WATER | 113.0 MAXIMUM EXPOSURE 46 |
| WATER DEPTH TO TOP OF FTG: | |
| | DEPTH |
| | DISTANCE |
| | |
| DIRECTI | ON OF FLOW |
| <u></u> | 1.8 0.8 |
| 1.8' | 13 10. |
| 10 | 10 10 |
| <u> </u> | 1.2.00 |
| | 70090000 |
| -290 Nose | 12 Orlet |
| 22/2/2010/05/05/05/05/05/05/05/05/05/05/05/05/05 | |
| 23 7.6 20 1.7 Col Be | + + 5 15 10 L5 |
| | المحتود المحتو |
| 28 3 | 1.8. |
| 36-38. | いいころうです |
| 5 5 | 3.3 0 (5,7) |
| | 2.6' 1.5 |
| 10, 50 | 10 10 . 3.2 1.7 |
| | <u> </u> |

| Rev.: 07/2 | 29/97 | | DATE | : | | |
|-----------------------------|---|---------------------------------------|----------------------------|----------------|-----------------------|-------------|
| BRIDGE NUM | MBER: 79 - 140 COUNTY ROUT | 5,0° LOG MII | P R LOG (km | | of | |
| ABUT/BENT PIER NUMBER | TOTAL HEIGHT TOP OF CAP TO (OR GROUND LINE/ DATE FOR PILES | (t) FOOTING THICKNESS | W/FTG @ FTOP OF CA | P TO | EXPOSURE | |
| <u> </u> | | | | 1/2 | | |
| P-1 | 45.2 | 4.25 | 42.44 38.90 | <u></u> | | |
| P-2 | 55.8 | 4.5 | 52.86 | R 49.7 | | _ |
| P-3 | 61.5 | 4.5 | 58.10 L 55.90 R | JJ.4 | | |
| P-4 | 61.6 | 3.75 | 59.41 L 56.10 R | 56.1 | 471 | -2 m 19 |
| P-5 | 61.6 | 3.25 | 56.70 R | 56.7 | 46 | Banto |
| ρ-6 | <u>52.5</u> | 3.25 | 50,95 L | 57.4 | | 1,000 |
| P-7 | 53.3 | 3.2 <u>5</u> | 51.78 L 49.20 R | 47.2 | | |
| p-8 | 49.3 | <u> 3.25</u> | 147.62 L 44.58 R | 44.5 | | |
| ρ_9 | 46.1 | <u> 3.25</u> | 43.20 L 42.50 R | 42.5 | | _ |
| P-10 | 38.1 | 3.25 | 35.26 L 34.66 R | 34.7 | | _ |
| A-2 | | · · · · · · · · · · · · · · · · · · · | | | | |
| | | | | | | |
| 1 | | | | | | <u></u> |
| | | | | | · · · · - | _ |
| TOP OF CAP TO | • | RIP-R. @ BE | YP: YES (X) NT/PIER NO. | NO:() #5, 6 | 789 | |
| 30.48 m UPSTRE. | | | | | | |
| THRU STRUCTUR | | | | - | <u>.</u> | |
| 30.48 m DOWNST | | 01 0 | 1 11 1 | سر | | |
| COMMENTS: | arge Drift | K+ Den | nt 74 | | | |
| | | | | | | z 1: |
| Bent 4= | 45' Top | CAP to | Water | In. | essorad | RH |
| 0.140 | = 43' Ton | CADtol | water |) (| < 1/2 | |

| ABUT/BENT PIER | TOTAL HEIGHT TOP OF CAP TO (OR GROUND LINE/ | (t) FOOTING THICKNESS | W/FTG @ H = TOP OF CAP TO TOP OF FOOTING | EXPOSURE |
|--|---|------------------------------------|--|---|
| NUMBER | DATE FOR PILES | MEASURER | o Rt. Side O | DARICTURE |
| A-1 | | | | .60 |
| P-1 | 13,17 | 1,29 | 11.85 | 8.07 m |
| F-2 | 17.00 | 137 | 15.14 | 9.60 m |
| 7-3 | 18.74 | 137 | 17.03 | 10,97 m |
| P14 | 1/8.46 | 137 | 17,09 | 13.85 m |
| P-5 | 18.17 | 0,99 | 17,28 | 14.67 m |
| P-6 | ten 16.06 | 37 | 4 4 6 7 | 13.45m |
| R7 | 16,29 16.2416.28 | 0,991.a | 14.995.26 | 10,45m |
| P-8 | 1502 | 0,99 | 1358 | 10.36 m |
| P.9 | 14,05 | 0.99 | 1295 | 10.27m |
| PD | 11,61 | 0.99 | 10,56 | 6.85m |
| AZ | | | | |
| | | | ## | |
| | | | | |
| | | <u></u> | | |
| P-3 P-4 P-5 P-6 P-7 P-8 P-9 P-D | 18.74 18.77 18.17 18.17 16.06 15.00 14.05 | 137 137 0,99 0,99 0,99 | 17.03 17.09 17.28 17.28 14.35 14.35 13.58 13.95 | 10,97 m 13.85 m 14.67 m 13.45 m 10,45 m 10,36 m 10,27 m |

| TOP OF CAP TO TOP OF WATER: \(\frac{12,85''}{2000}\) RIP-RAP: YES (X) NO: () @ BENT / PIER NO.: \(\frac{1000}{1000}\) BLE | BETH / THEY 4 |
|---|--|
| 30.48 m UPSTREAM: 13.60 M AROIN O BON-#6 | BUNTES & C |
| THRU STRUCTURE: 14.67 | BENT # 7 & 8 BENT # 9 M & (B) BENT M(DA) & (C) |
| 30.48 m DOWNSTREAM: /3,30 | Ber- + (OA) + (B) |
| COMMENTS: PLAN (VES) NOT IN OFFICE MEASUREMENT OF PLANS - COK - CAME | |
| (93) Report | |
| | |

| | BRIDGE NO | 79 COUNTY | T40 ROUTE | 5.09 LOG MILE | R _{LOG (km)} | _ DATE: <u>/2 -</u> | 16-97 | |
|---------------------|-------------------|------------------|--------------|--------------------------------|------------------------|---------------------|---------------|----------|
| | TOTAL HEIGH | | | . . | BENT/PIER NO | <u></u> | | |
| | FOOTING THIC | CKNESS (T) | | | SCOUR: | G F P C | | |
| 7 . 10 ^M | TOP OF CAP TO | O TOP OF FTO | 12.00m | | DRIFT, | G F P C | | |
| 35/200 | TOP OF CAP T | O TOP OF WAT | TER | and Loom | MEXIMUM EX | | | |
| | WATER DEPTH | H TO TOP OF F | • | -Mo. | A COLOR | (5) | EL PIER | (د. |
| | | | #6 | Ser. | 18:45 ; -1 -1 -1 -1 | | | |
| 34 = 0 | 2.25 ^m | | 0-15+ 7. | 1.00 | | SAR | lion | <u>.</u> |
| | | | Fio | <u></u> | | | | |
| | | | | <u>.</u> | 1.35 | m fo | To the second | F. 30.46 |
| 1/0 | (5m) | بد. | | 71. | 13" | 3,00 m | X 2,00 m X 21 | wich de |
| 2 - 0 | American Company | | , #5 | Bent | 750 | X | | |
| | | (1, | 827 | | | | | |
| , | | - 3 0 com | | | | ,,,,,, | (Flow | 2-6 |
| 1-0.15 | 5A: | NB 8 | 77 33 | <u> </u> | To see | 98 Kath | Sicom Tark | |
| | DEPTH DIS | TANCE | SHOW | DIRECTION | 0.25 m | | | |
| | - | 4 | | да х м с т ° | ¥' | | | 2082 |

| | BRIDGE NO. 79 COUNTY | T40 5 | G MILE LOG (km) | DATE: 12-16-97 | 170 |
|-----------|---|--------------|----------------------------|------------------|------------------|
| | TOTAL HEIGHT (Top of Cap to Bottom of FTG |) | BENT/PIER NO |) | |
| | FOOTING THICKNESS (T) | | SCOUR: | G F P C | e M |
| 70.48° | TOP OF CAP TO TOP OF W | Id.oom | #7(DRIFT) | GFPC | |
| 30,70 000 | TOP OF CAP TO TOP OF W | ATER 0:60°C | MAXIMUM E | | |
| | WATER DEPTH TO TOP OF | 1/24 | MOT THE | SEE PI | ERS |
| | | The Colo | 18/18/19 | | |
| 34=- | 0.25 ^m | Orist 1 100. | Le Company | SANO | loom |
| | | Flow | | | |
| | | | 1,35 | 5 m | W 0053000 |
| 1 £0. | 45 ^m) | #5 C | 13m Erumn 1226 Ben't | 3,00 m x 2,00 m, | X 2,00 m 3 = 0.7 |
| | | 1.82 | | | 1 2 0.2 |
| / | 30.00 | r | | For | _ |
| 1-0.15 | SAND E Grave | 7 3.30 D | olumn Good | 95 x 45 x 7 hich | * |
| _ | DEPTH | | 1,00 m | T - | |
| | DISTANCE/ | SHOW DIR | ECTION OF FLOW | 1,00m | 1 . |
| | | Embank | ment | | 4=0,60 |
| | | | | | |

| BRIDGE NO. | | F06.4=> | DATE://2-/9// | 171 |
|-------------------------------|------------------|---------------------------------------|------------------|-----------------|
| COUNTY | ROUTE LOG M | | | |
| | 18.77m? | Column | 10 A | |
| TOTAL HEIGHT | 2 | BENT/PER I | 10 | |
| (Top of Cap to Bottom of FTG) | 1.14 " | | G P C | |
| FOOTING THICKNESS (T) | 17,09m? | SCOUR: | | |
| TOP OF CAP TO TOP OF FTG | + 7.49 | DRIFT: | G F D C | |
| TOP OF CAP TO TOP OF WATE | R | MAXIMUM I | XPOSURE / 3,85 M | |
| WATER DEPTH TO TOP OF FTO | G: | | | |
| W 11122000 | | DEP | IΉ | |
| | | | | |
| A | | DISTA | NCE | |
| | DIRECTION OF FLO | OW. | | |
| • | | | | |
| | | _ | | |
| 5and 6rave 1 305-1152-0130 | 0.30 | 0,30 m 100 m 1,00 m 1,00 m 1,00 m | | mx2.00 Thick |

| BRIDGE NO. | 79 COUNTY | T40 ROUTE | 509 LOG MILE | R LOG (km) | DATE:/ <i>_a</i> | 2/16/97 | 173 |
|---------------------------------|------------------------|--|---|--|-------------------|---------------|----------------|
| TOTAL HEIGH (Top of Cap to B | T SOTIOM of FTG) | 16.24 | <u>-</u> | Column BENT/ESTRN | | | <u>C</u> |
| FOOTING THIC | IKNESS (T) | 0.99 | n ⊙ m | SCOUR: | G∕∋ P C | | |
| TOP OF CAP TO | O TOP OF FTO | 449 | | DRIFT: | G F (D) C | | |
| TOP OF CAP TO | O TOP OF WA | TER | | MAXIMUM E | xposure <u>/4</u> | 5,67 m | |
| WATER DEPTE | TO TOP OF | FTG: | | | | | |
| | | | | DEPT | H | | |
| | | | | DISTAN | CE | | |
| | | DIRECTION | OF FLOW | | | | |
| 0,45 | 0.60 0.31 1.52 0.30 | 0.45 3.65 0.60m 1.52m 0.30 0.30m 0.30m 0.10m 0.10m 1.82m 1.82m | 0,30 4.52 11.52 0.30 0.45 0.30 1.15 1.52 | 1.35 3105 1,15 1,15 0.3 0.3 0.3 0.3 | 0,45 0,7 | x 2.00 m. X c | i.oom Thick |
| - - | | | | 0,30 m | | | |

BRIDGE NO. 29 I-40 5,09R

| • | ~. | -ك | DATE 12-16-97 |
|---|--|------------|-------------------------------------|
| | TOTAL HEIGHT: (TOP OF CAP TO BOTTOM OF FTG.) | | Column BENT/PIER NO. 6 |
| • | FCCTING THICKNESS (t): | | SCOUR: G F P C DRIFT: G (\$) P C |
| | TOP OP CAP TO TOP OF FTG.: | 17,49m | • |
| | TOP OF CAP TO TOP OF WATER: | | LC RL |
| | WATER DEPTH TO TOP OF FTG.: | | - |
| | 13 | | DESTANCE |
| • | | R. OF FLOW | |
| | | Us stow | |
| | | | Lime stone Rock Visible |
| | | | Around Bent colums |
| | 3.05 3.05 3.05 | | |
| | 3.05 3 W 3.05 | | |
| , | 1,52 1,52 1,52 | | |
| | 0.45 0130 0.30 | | |
| | 3.05 1.52 0.30 TO SANO | | |
| | 3.05 1.52 0.30 | | To a Flow |
| | - 60.36 00.36 00.36 | | 150 1:00m |
| | 0,45 0 0,60 | | SAND |
| | <u>1.00</u> <u>1.00</u> <u>3.05</u> | | |
| - | | | |
| | | | |
| | | - | |
| | · · · · · · · · · · · · · · · · · · · | ر بر | |
| _ | | | |



STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION**

P. O. BOX 429 JACKSON, TENNESSEE 38302-0429 April 30, 1997

Memorandum

TO:

MR. PAUL SHARP, CIVIL ENGINEERING MANAGR I

FROM:

Circly Walker For P MR. BILL HAZLERIG, REGION BRIDGE ENGINEER

SUBJECT: BRIDGE #79 - 10040 - 5.09L & R

Please find enclosed scour notes on the above referenced structures. Also enclosed is a copy of the fax requesting this scour inspection footnoted with an explanation of the "reinforcing rods".

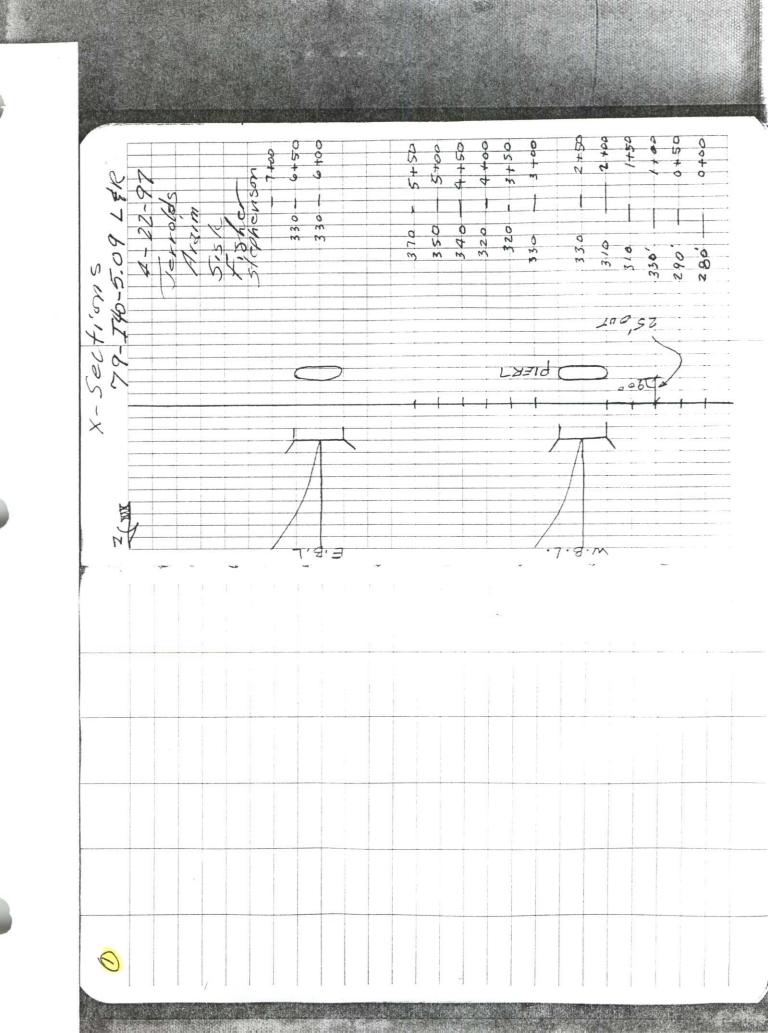
BH: csw

cc: File

RECEIVED

MAY 2 1997

D.O.T. BRIDGE INSPECTION & REPAIR



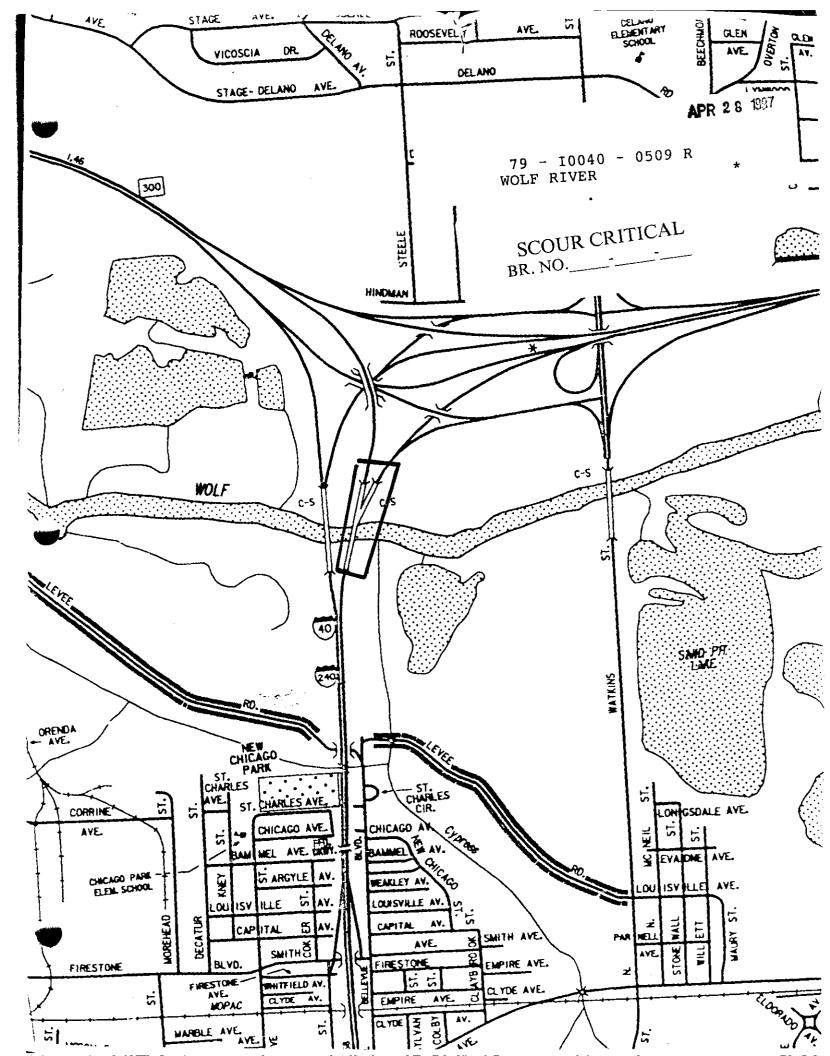
| 16-22 | 14/ 15 | 1.212.11 1.212.11 1.212.11 | 2,502, 2 3,202 204, 2 3,200, 2 |
|-----------------------------|---|--|--|
| 7:85 | 1 20 20 1 | 726/ 20 3 3 b 20 5 1 3 b 20 6 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 | 18,791, 25 2,505 HTZ |
| 4.97 | 6'6' | 75/20 | 13:561 20 |
| 18-90 | 5.3.4 4.1.0 6.5.3 | 13.115 36 00 | 4 005 7 208.31. 43.00 3.3.5. 206.81 |
| PIEK | 112 60 | 11:012 | 11.112 100 |
| BM: 217.25 BOTTON: 0F | 2/4.31 | | |
| | H.L. 210 | | |
| DINGERED ROD FROM R.R. 0.94 | 1+00 | 0420 | 0+00 |

| K : | υ | 620 | 2 2 8 | 08 | 202 N 20 | | 7,705 | 350 | | |
|---------------------------|--------|--------|-----------|------|---|---|-------|-------|-------|--|
| 25.9 | 200 | 440 | 2 00/00 | 98 | 07 0 m | | | 200 | | |
| 4 | 77 | 0.30 | 220.10.13 | 0 0 | 6 20 S 20 | | 0'90 | S POL | 7 | |
| | 4 | 646, | 15/0 | 2.38 | W 11- | | 2'66/ | 25 | | |
| | foot | 1186 | 1100 | €'8 | 6/1/9 | | €761 | 6/19 | | |
| | \$ | + 1'5b | 18/2 | 1'80 | | | 6751 | 0/00 | | |
| Fisher Seel Torolch | 6 | 0,20 | 2 0 Wh3 | 0 9 | 05 plug 3 | } | 0/90 | W/L | Walc, | |
| KBS | , ma | 0.0 | 15 NW | 9:0 | 12 m 00 | | E'11 | 415 | | |
| | Son | €"1 | 12 4 9 | 8, | 07 NO | | 1:01 | 240 | | |
| E/OL | 217.25 | | | | | | | | | |
| N. H. | | | | | | | | | | |
| · N | 4 | | | | - | | | | | |
| Ĭ. | 215 | | | | | | | | | |
| | | | | | | | | | | |
| 8.5, | -1.71 | | | | | | | | | |

| | 0.80% NW | 2,000 | 010 |
|--------------------|---|---------------|-------------------|
| | | 2,802018 | 5.803 0 0 |
| | 1.802 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 4,302 / W | 4,302 1,208,4 |
| | 8 206.0 | 0.305.0 | 0.305 plans 206.0 |
| | 686/30 | 0.661 318 | 0.005 700 |
| | 8'96/30 10 | 7261 200 | £391 270 W |
| | 7'9610 | 0.779.0 | 7.771 000 000 Da |
| | 0.30 S 06.0 | 0.305 W 125 | C.305 12 12 10 |
| | 7.112 0017 | 5/1/2 4 ZIV.3 | 5'112 0/ p |
| | E.015 N. 9 | 6:0/2 1/0:3 | E.0/2 10.3 |
| | | ed. | 47 |
| | | | N |
| E/1. | | | 217.25 |
| F.S. FF | | | 41.71 217. |
| 7.5. | | | |
| | | | |
| 14, I, F.S. 215,54 | | | |
| J. F.S. | | | 4/.71 |

| | 1,807 | 5.802 000 | £305 1/2 | 9 |
|---|---------------|-------------|----------------|---------------------------------------|
| , ale | 2,805 16 | 1:302,0 | 2,802 % | 2 |
| 1 2 | 0.30 5 06.03 | 0.302.00.0 | 0.205 0 WELL | K |
| 8th | E.191 AUN | 0.891 178.0 | 1.66/30 | 9 |
| X 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 1.961.00 | 226/200 | 726/48 | Soc Above |
| 124 | 4.005 A | 4.002 Ju | 8.797.3pv | 0 |
| 6 | 0:900 B 100:0 | 0'90200 | 6-305 80 0 233 | , , , , , , , , , , , , , , , , , , , |
| Hom | 0.012 0,14 | 27/2 318 | 4.115 | |
| 80 | L'0/Z n o | 8,0/2 00 | P.015 0,0 | |
| E/6.1 | | | | 21.75 |
| 75 | | | | 66.07 |
| L. m | | | | |
| 13 60 | | | | |
| H. Z. 15. 63 | | | | |
| (5) | | | | |

| 1 | | 3:805/1/2 | 8,805 1/2 | 9.802 4.8 | |
|---------|-------------------|----------------------------------|---------------|-------------|---|
| 1-25-97 | 10 | 2,015 2 10,5 3 10,5 3 10,5 | 7.015 Wh | 1.112 1100 | * 9 5 3 * 9 5 5 * 9 6 7 * 9 7 |
| 4 | N N | 2005 :206.0 | 0.302 0 3 | 305 8 206.0 | |
| - | 3 % | 376/00 | 2.791 | 8.29/ 3.8 | |
| | | 485/3/2 | 7.891 Mb | 2005 200, Z | # 26 2 4 - 2 7 7 4 4 4 8 |
| | Hom | 3.11.4 W 2.11.6 | 0.305 8 206.0 | 2,805 2,807 | 8 9 5 5 1 2 4 9 7 4 240 24 8 9 2 10 24 8 9 |
| | 100 | 1,805 0:10 | 0.80500 | 8.505 40 | |
| | Elev. 211475 | | | | |
| | E. | | | | |
| | 1, 40 | | | | |
| | , 4 | | | | |
| | H. 214 | | | | |
| | B.S. H 2.71 2. | | | | |



INSPECTION TEAMS' SUMMARY BRIDGE $\# 79 ext{ } 140 ext{ } 5.09 ext{ } R$

| - a scour check shows the channel to have moved |
|--|
| 100 t toward Bent 17 with Bent I to now Located in the |
| channel & the channel has moved within 12' of Bent 17. |
| Bet ITS has is large drift on the Ale and. |
| The secur Reted for due to the Movement of the |
| diennel |
| |
| Tor Janolla |
| |
| & steel sheet files in middle of chance up steem |
| 600' + from 13r., May Cause scour Problem @ Br. |
| |
| |
| |
| |
| |
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| |

BRIDGE INSPECTION REPORT

| | | 4-18-91 |
|---|---|-----------------|
| FORM BIR 3.0 Rev. 6-9-92 | FIELD REPORT NO.: | DATE: |
| DT-0069 | PREVIOUS REPORT NO.: PLANS YES [X] N | DATE: |
| BRIDGE NO.: 791004 00059 ELEVEN DIGIT NUMBER | BRIDGE LOC. NO.: 79- | |
| 1.40_R+Lane | CO. : | RTE. L.M. |
| CO. RTE. L.M. OVER WORTH KIN | STRUCTURE NAME | ME (if named) |
| YEAR CONSTRUCTED 1970 COUNTY 5/16/ (ESTIMATED OR ACTUAL) | by MAINTENANCE DISTRICT | r no. 45 |
| YEAR WIDENED | YEAR REHABILITATED | |
| ESTIMATED OR ACTUAL [] [] | ESTIMA | ATED OR ACTUA |
| FEATURES | [] | [] |
| MEDIAN TYPEOPEN [] NONE | R [] ASPHALT [] (DEPTH D [] D [] CLOSED [] | =") |
| BRIDGE SKEW 60°F- | Ī | NSPECTORS |
| STRUCTURE TYPE () NO. SPA | NS 1. Jorn | 10165 10 |
| STRUCTURE TYPENO. SPA | NS 2. 5/5/ | K. |
| Approach Spans | Approach Spans 3. Fist | ner |
| MAXIMUM SPAN LENGTH TOTAL LI | ENGTH4. <u>5≠e</u> | Pheuson |
| WIDTHS CLEAR | ANCES 5. | |
| DECK OUT-TO-OUT MIN. VERTICA | AL OVER DECK | |
| SIDEWALK RT LT MIN. LATERAL | AL UNDER CL. 7 | |
| *APPROACH ROADWAY APPR. SHOULDER RT LT | | <u> </u> |
| *DOES NOT INCLUDE SHOULDERS | 9 | |
| UNDERWATER INSPECTION | (< 25FT.) | ·. |
| INSPECTION PERFORMED BY: | NBIS BRIDGE LENGTH | |
| DOT FIELD TEAM [] DATE CONTRACT DIVERS [] DATE NONE REQUIRES [] | (FT.) | (INCHES) |
| TUANCE TV CERTICAL | FRACTURE CRIT DETAILS: YES | ICAL [] NO [] |
| CHANGE IN STRUCTURAL CONDITION YES [MAJOR REPIARS MADE YES [COMMENTS: |] NO [X] IF YES, INCLUI | DE BIR 3.9 |
| | GE RATING [] [] | 1 1 |
| | GOOD FAIR POO | OR CRITICAL |
| | CITODO | PECTOR |

BIR 3.8A - USE FOR ANY BRIDGE WITH OBSERVED OR POTENTIAL SCOUR Rev. 6-9-92 DT-1509

BRIDGE LOC. NO. 79 - <u>I40 - 5.09</u> 174.
CO. RTE. L.M.

DATE APR 28 1997

| <u>STREAM</u> | CHANNEL | DATA | AND | CONDITIONS |
|---------------|---------|------|-----|------------|
| | | | | |

| | STREAM CROSSING: | PIER & ABUTS | PILE |
|------|--|----------------------------|-------|
| | CHANNEL S | | |
| | BED MATERIAL STATES OF STA | | |
| I. | SCOUR LOCATIONS: | | 7 |
| | 1. ABUT/PIER/BENT 4 | | |
| | 3. ABUT/PIER/BENT 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | | |
| | 5. ABUT/PIER/BENT 7 6. ABUT/PIER/BENT | | |
| | 7. ABUT/PIER/BENT | | |
| II. | HAS THE CHANNEL SHIFTED? (CHECK ANSWER) LATERALLY VERTICALLY | Y | |
| | | - APPAREN ERATE | T [] |
| III. | ARE EMBANKMENT OR APPROACH SUBSTRUCTURE BEING THREATHENED FAILURE? YES [NO [] | BY BANK | |
| IV. | CHANNEL AND BANK STABILITY CONDITIONS: (CHECK IF APPLICA | ABLE) | |
| | (1) STEEP BANK - FAILURES UPSTREAM [] DOWNSTREAM [] CONDITIONS (2) MODERATE BANK EROSION [] (3) BANK (A) LOW GROWTH [] (B) LARGE TIME VEGETATION (C) DEAD TREES [] (D) CLEAR BANK (4) SEDIMENT OR GRAVEL ACCUMULATION: YES [] NO [] (5) CHANNEL ALTERED OR STRAIGHTENED: YES [] NO [] (6) STABLE CONDITIONS: (A) LIVE GROWTH [] (B) BEDR (C) BOULDERS [] (D) FLAT | UNKNOWN UNKNOWN OCK SLOPES | [] |
| | (C) BOULDERS [] (D) FLAT | | , |

BIR 3.8B - USE FOR ANY BRIDGE WITH OBSERVED OR POTENTIAL SCOUR Rev. 6-9-92 DT-1509

BRIDGE LOC. NO.: 79 - 140 - 509 Rt. CO. RTE. L.M.

DATE: APR 28 1997

STREAM CHANNEL DATA AND CONDITIONS (CON'T)

| v. | Wate | rway adequacy and debris characteristics: (check if applicable) |
|-------|-------|--|
| | | Bridge deck elevation: (a) level with approach roadway |
| | (2) | Abutment encroaches into channel |
| | (3) | Large scour (blowhole) under bridge [] |
| | (4) | Indications that flood waters overtop bridge: NO [] YES [] ->OCCASIONALLY [] FREQUENTLY [] UNKNOW [] |
| | (5) | Debris characteristics: (a) debris present: YES [NO [] (b) debris likely to accumulate: YES [NO [] (c) dead trees upstream: [or downstream [] |
| vi. | Cond | ition of rip-rap? G F P C Est. % failed: N/A: [/] |
| VII. | Under | rwater diver inspection recommended? YES [1] NO [] |
| vIII. | Overa | all condition of channel? G F Ø C |
| IX. | Item | 61 - Code values 0 thru 9 according to the recording and coding guide currently in effect: 4 |
| х. | Comme | channel moveing foward Abuto #2 with Bent # 6 NOW Located in Channel # Chennel Fage with in 12-of Bent #7. Channel has moved 100 to from original position. |
| * * * | * * * | . * * * * * * * * * * * * * * * * * * * |
| | | SPECIAL INSPECTION DATA (FOR REASONS OTHER THAN FC OR SCOUR) |
| I. | Does | this bridge need a special inspection? YES [] NO $[\![igwidge]\!]$ |
| II. | Reaso | n for special inspection: |
| | | |
| | | |

REV.: 07/29/93

| DATE | : | /_ | /_ |
|------|---|--------|----|
| | | | |

PAGE NUMBER : ___ OF

BRIDGE NUMBER :

79 - I-40 - 5

LOG MILE

ABUT/BENT
PIER
NUMBER

TOTAL HEICTT
TOP OF CAP TO BOTTOM OF FOOTING
(OR GROUND LINE /

(t) FOOTING THICKNESS W/FTG @ H =
TOP OF CAP TO
TOP OF FOOTING

EXPOSURE

| | DATE FOR PILES) | | | | |
|-------------|------------------|-------|--------------------|----------|---------------------------------------|
| A-1 | 4 | | | <u> </u> | |
| P-1 | 45,21 | 4.25 | 12.44 L 38.40 R | 38,9" | |
| P-2 | 55,8' | 4.5' | 52.861 49.70 R | 49.7 | |
| <u> </u> | 61,5' | 4,5 | 58,104 55,90 K | 55.9 | 35.9' |
| P-4 | 61,6 | 3.75 | 59.41L 56.10R | 56.1 | 41.7" |
| P-5 | 61,6 | 3.25' | 60,084 56.70R | | 44.4' |
| P-60 | 52.5 | 3,25' | 50,954 57.40R | 1 | 43.7′ |
| P-7 | <i>5</i> 3,3' | 3,25' | 51,782 49,20R | .,-1 | 33. Z' |
| P-8 | 49.3' | 3,25 | 47,626 44,588 | 47.58 | |
| P.7 | 46,1 | 3.25 | 43,004 42,50R | 43.5 | |
| P-11 | 38,1 | 3,25 | 35266 | 34.66 | |
| 1-2 | | | | | · · · · · · · · · · · · · · · · · · · |
| | | | | | |
| | | | | | |
| | | | | | ··· |

| TOP OF CAP TO TOP OF WATER: 36.7' BONT 16 | RIP - RAP : YES [] NO : |
|---|--------------------------|
| 100.00' UPSTREAM : 43.7' | @ BENT / PIER NO. : |
| THRU STRUCTURE : 47.7 | |
| 100.00' DOWNSTREAM : 43.7' | |
| COMMENTS: | |

the Channel has moved 100 t from eiginal Position toward Abut 02 - Bent # 6 Located in Channel # the Cannel is with in 1= of Eint # 7.

79-140-5.09 Rt.

| 148 | | | | | i.k | | | | | 100 | 0.0 300 | 17 |
|------------------------|-----------------|------------------------------|------------------------------------|----------------|-----------------------------|--|---|--------------------------|--|---------------------------------|------------------------------------|--|
| | 50101 5201 | 1.0. EF ! | to the stour | mania (3 | 1000 5 5.5 | t, <u>Lanes</u> | 9, 0. 1-540.) | | | | 28 199 | |
| | SPAN 4 | 0 | SPAN 5 | o o | SPAN 6 | Ö | SPAN 7 | .0. | SPAN B | 0 | SPAN 9 | 9. s |
| 0- | | 55.50 | | 9.20 | | 93.00 | | 7. 18.00 9.95 | | : 0 | | . 655 . 655 |
| 7. 201. 201.00 | | 700 E. 245 | | 7.38 | | ier "C 247+8 El. 249 | 11'out | . 63 | | 530 | | 125 J |
| .0C1 | | 6 Pier 510.24 F.C. El. | | 000 | | 9 Pie 810 22 7.6 EL | 1104. | Ja 60. | | 10. P. 10. E. 20. E. 20. E. 20. | | 9.00 |
| 0.00 | | 90° | | 40 K | | e our | | खिळ्ल | | 200 | THE RESERVE OF THE PERSON NAMED IN | FIRT. |
| D 5 | 1: 00° | _= F 608° | water 1 1.30 3 . 9 | 007)77 | 2 | 56 | El 23/2 | | | H.F. | | 1 2 |
| 7 | (1987 RCG.) | FE TOTAL | katenti Saglicido | 17(2) | no:tov | 850 | OYr ,Bockwa | ter) 7 | | 10 | | 117 |
| 7 | 1 | 114 | | | 500 | | | <>> | | | | |
| P | | lle | | F Doton | m tine (14) s 20 | The same of the sa | | 1 14 | | - I | | |
| | J. State | | | | 2r \ | 1111 | ^ | /:i\ | E, | xisting Gro | and Un | 10.574 |
| - 311 | | | | ELEVATION | wet begins | UOT. | E SZZ DIVO | g. M-64-131 estimotea | 20. | | 70,79 | <u>.</u> |
| | 1950 11 | | | 2¢a,≥. — 1°± 3 | 30' / | | z cut trr : 0 zvations. | 1.1 | 1 4/- | | 1 | de L |
| | 77'-11'a* | 702.140 | 5 26 to 36. | | ts (Along 1976) 761-9121 | <u>\$ Rome</u> 7 | 75'-7 ⁶ 8' | 70' | '- C'a" | 53'-0" | | 53:01 |
| 5.3. 1.200 | / | No. | | | /_ | | | | | SPAN 9B | <u>s</u> | PAN IOB |
| | 0.25.+54.46 | \ -Sta | . 280 ⁷ 76.58 | -Sta.7 | 279.98.G3 | _sta.? | 279+21.84 | - Sta. 27 | 8+46.23 | | 1 1 | fa.27_ e.51 |
| | | :Pizr E = ¢ | Light Standa | rd 51461 | No 93 A | 1 | ¥. | | & Pie | in I = Q Light S | tonpord | E H |
| 2.4 | Conquity | | | | ====== | | ======================================= | \ | ====================================== | | ==== | |
| 11.5 | 1251 | 77 | 2-53 (25(740.) | Z. 1280 | | 13 | 79 | | \$ 5751 < | | W. | 977 |
| 1205 | 5 7 | 101 | 15ta 245+8/12 | = 11/ - 500 | own Line | क्षेत्र. | tomo : gerence line | TOAFF: | > \ | 1 | | |
| | /- G9°.30'.21.7 | 7 | 200 | 10/10 3 | E. D. 1.290 | 177 | | - 1111 - 1 | 7 | 111 | | |
| - 15 | | | G7/42'-21.7' | 111/65: | 03'.00.7 | 1600 | 03.39.7 | | 1 | 500 | 279: 4: ESS | Pier U.S. Lator Devi Dwg. N-44-1 |
| ===== | | | -2.2 | 1 15 | | 1 | 0.04.7 | 1200 9 62! | 0.15.21 | 111 | 5 | |
| 2 more | Pier D' | · · · | Pier E | | | 111 | | 75 | QAEFIC T | 2/200: | 24' 57.7' | ;;; |
| PAN 3 | SP | PAN 4 | | | Pier F. | | | 11 | | | 20: 57.7 | 110903 |
| | 36.0. | i | SPAI | | | Ę. | pier G: | | | | | |
| - | / 1=1 | | 31:0. | 1_0 | 51.0. | N 6 | SP. | AN 7 | bish. | | | |
| int Pre | esent day | Ground | | 3 3x. Abu | Imenia (ok | 000 4, | 1.0. | ANT | SPA | 4 | Pie. I | |
| , ~ | -30-97 | | Sicrile: | AN 30' | e British are an | - C | B. 1.200) | 8 | -O- | AN 8 | SPA | La Kn |
| | 1 Re | _ | 2000 | - | | | * | (Jacques | # · · | <u>eō: 0.</u> | SPAN | SA |
| | Dwg. No. | | Title | | - . T | | | 101 | 797 | Cog | | 65.0 |
| | M-64-122 .Fr | froming F | 10.7 Econs 1 | 1 3 2 | H (DR | ROLOGICAL | DATA *) 5/2v. 236.00 (5.2v. 229.00 | 0(1937 F(cc | 00) | Chor | Bar. | plant gran. |
| | | | lan - Scans 3 Van - Scans 5 | | T Maga Vac | 10.11.40 |) | | | | | |
| | 11.21.125 F | ים פחייתמי | 101 - Secos 7 | 710 | Coaning P | Pagu isa i Provinsa it | 15 000 (24, 5). Briow 226.6 | j. 1. 15 5 3 € 50 | <i>z,</i> | LOCATIO | N SKET | ген |
| | | | Pan - Boons 9 Pan - Boons 9 | | OCETION P |) Escivor | 52.0W 235.0 | 50:21.755 50 | q. Fl. | = | ARIBA X | -/1 |
| 71 102114 | M C4- 120 F. | crestress.2 | za ki,am De | | | | ***** | | -we | 52, 3 | 302 2 30 5 -> | 1.1 |
| 3 40 into trip | 0. P21-55-W 6 | 313 63506 | evalions | | | -240 CURVE ი.ექტ - 92 | | | 17- | - | 1 | 1 |
| 1.50 | W 64-131 15 | Foundarion | 1.0010 | 1 2212 9 | 7.44 | 1 001 33° 1- 151 | | | - | 1.240 | 325 | |
| | 9.8.92 2 | | c on College, | :5:77:7:00 | 2.1 | 513 33' | | | | | fa gr | |
| 0.00374 | | รือเก.: ฮนเ | riistigii 26.72 ku in Guddani D | 2:05 | | 1 1 6. 35. 29. 36. | | | | | | and an |
| AF.L a B.E | L 50.00 F. | 57.33 20 | | | . 9 | 300.00 3°-45 | | | | 1 5 , | 19- | - 1 |
| 5.3.3 A 3,44 35 125 | 5 2 . 50 . 15 S | sta wara . Jishi inur | Pie Carcie. Tan'i Drains | sae Cera'is | 7.55 | 500.00° | | | | | | |
| 7 | | | E : 1,2'' | | 1 | | | | 1 | | = | |

BRIDGE NO. 79 140 5:09R+

DATE _APR 2 8 1997 TOTAL HEIGHT: BENT/PIER NO. 3(TOP OF CAP TO BOTTOM OF FTG.) SCOUR: Ø F P FCCTING THICKNESS (t): 4.5 DRIFT: 🐠 F P TOP OF CAP TO TOP OF FTG.: 5590 Pt end MAXIMUM EXPOSURE TOP OF CAP TO TOP OF WATER: 34.9 35.9 WATER DEPTH TO TOP OF ETC.: bin, or rich 5.01 40 5.0 20 30

BENT/PIER NO. 4

MAXIMUM EXPOSURE 41.7'

SCOUR : FPC

DRIFT : 6 F P C

TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING) FOOTING THICKNESS (t) (TOP OF CAP TO TOP OF FOOTING) W/FTG @ H = TOP OF CAP TO TOP OF WATER WATER DEPTH TO TOP FOOTING 30/4 20/4 10/4 1/5

DEPTH

: <u>57.8</u> £ : 35.7

: 3'9"

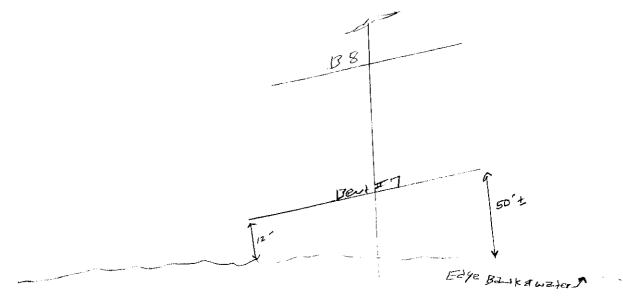
6 1 5 10 5 20 6 30

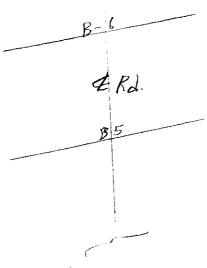
| • | | • | | | |
|-------------------------------------|---------------------|-----------------------|-----------|---|----------------------|
| BRIDGE NO. 79 COUNTY | T-40 5 ROUTE LOG | .09 R | | IER NO. <u>5</u> | |
| TOTAL HEIGHT (TOP OF CAP TO BOTT | OM OF FOOTIN | 1G): <u>Coli</u> C. E | DRIFT : | : G | |
| FOOTING THICKNESS (t |) | : <u>3.13</u> /1 | W1111 IMO | * ************************************ | . |
| (TOP OF CAP TO TOP O W/FTG @ H = | F FOOTING) | : <u>589</u> . 7 | | 44.4 | • |
| TOP OF CAP TO TOP OF | WATER | : 36.4 | 60 to 1 | | |
| WATER DEPTH TO TOP F | OOTING | : | Carr | e under weter driff | |
| | | | | | * |
| | 3 | 7 | <u>6</u> | | |
| | 7 | 7 30 | <u>6</u> | | ROUTE |
| | 2 | 3_20 | <u>6</u> | | OF RC |
| | <u>5</u> | <u>z</u> 10 | 2_ | \ | DIRECTION |
| | (3) | 3 | | | DIREC |
| | - | | | | |
| 30/10 20/10 10/10 1/8 | | | | 1 5 10 5 | 20 5 30 |
| 10 40 4 56 | | | | 1 5 10 5 | 5 4 0 5 |
| | , <u>6</u> | 5 | |) | 50 |
| | <u>.</u> 8 | 8 | 9 | |) |
| DEDMI | <u>\$</u> | 20 | 8_ | / | ı |
| DISTANCE | <u>7</u> 8 | 30 | 10 | | |
| | | * | | | |

| | | | , | | |
|---|------------------|--------------------------------------|-----------|--|-------------|
| BRIDGE NO. COUNTY | T-40 ROUTE LO | 5.09 R G MILE | | PIER NO. 6 | - - e/3) |
| TOTAL HEIGHT (TOP OF CAP TO BOTT | OM OF FOOTI | : <u>52.5</u> (| _ DIVLE. | R: GF C C | 7) - 7 |
| FOOTING THICKNESS (t |) | : 3-3" | MAX1 | MUM EXPOSURE | 43.7 |
| (TOP OF CAP TO TOP O W/FTG @ H = | F FOOTING) | : 49.2 | <u>/_</u> | | |
| TOP OF CAP TO TOP OF | WATER | : 36.7 | | | |
| WATER DEPTH TO TOP F 3 Scour Retes foot to movement of che | Lue & | 3 40 50 3 40 53 30 | (A) | drift, large kog | |
| #+2 · · · · · · · · · · · · · · · · · · · | 8 | <u>6</u> 20: | 3 | | Ė |
| | 8 | <u>8</u> 10 | 2_ | | / WOT HO |
| | 1 | <u>6</u> | <u></u> | `````````````````````````````````````` | ntor |
| | | | | | |
| 8 40 | () | | | 3 1 3 10 | 3 20 3 |
| 8 50. | | , | 5 | | |
| | 6 | <u>5</u> 10 | <u>4</u> | | , |
| \ | <u>5</u> | <u>5</u> 20 | 5 | |) / |
| DEPTH DISTANCE | <u>5</u> | 6 30 7 40 | 56 | | |

APR 28 1997

DIRECTION OF ROUTE





DATE

| BRIDGE NO. 79 COUNTY | 7-40 5. ROUTE LOG | 09 R MILE | BENT | T/PIER NO | .7 | _ | - |
|-------------------------------------|----------------------|-------------------|---------------|-----------|-------------|------|---------------|
| TOTAL HEIGHT (TOP OF CAP TO BOTT | OM OF FOOTING | : <u>53,3</u> | DRIE | R : G F I | ? C | | |
| FOOTING THICKNESS (t |) | : <u>3'3'</u> / | инд | IMUM EXPO | | | ' |
| (TOP OF CAP TO TOP OF W/FTG @ H = | F FOOTING) | : <u>50.0</u> | | | 3. | 3.2- | |
| TOP OF CAP TO TOP OF | WATER | | ٨,, | 1 | | | |
| WATER DEPTH TO TOP FO | DOTING | . : | | ot in wa | | | ٠. |
| | · | · - | - | | | | |
| | <u>·</u> | — | | | | | 100 |
| , | · | . | | | | | ני |
| | | | | | | \ | MOTTON |
| | 47.4 | | _ | | • | | חות |
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| | 4 <u> </u> | | | / | | | |
| | | | | | / | |) |
| DEPTH | _ | | | | | / | |
| DISTANCE | | | | | | | |

ATR 28 AV

DATE

| BRIDGE | NO. | 79 COUNTY | <u>T-40</u> ROUTE | <u>5.09</u> € LOG MILE |
|--------|-----|--------------|----------------------|---------------------------|
| | | | | |

BENT/PIER NO. 8

TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING): 49.3

SCOUR : G F P C DRIFT : G F P C

FOOTING THICKNESS (t) : 3'-

MAXIMUM EXPOSURE

(TOP OF CAP TO TOP OF FOOTING)
W/FTG @ H =

: 46.1

TOP OF CAP TO TOP OF WATER

:

WATER DEPTH TO TOP FOOTING

.

DEPTH

DISTANCE

SHOW DIRECTION OF FLOW

THECTION OF ROUTE





AUG 29 1998

STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION**

D.O.T. BRIDGE INSPECTION & REPAIR

P. O. BOX 429 JACKSON, TENNESSEE 38302-0429

August 27, 1996

MEMORANDUM

TO:

Mr. Paul Sharp, Civil Engineering Manager I

FROM:

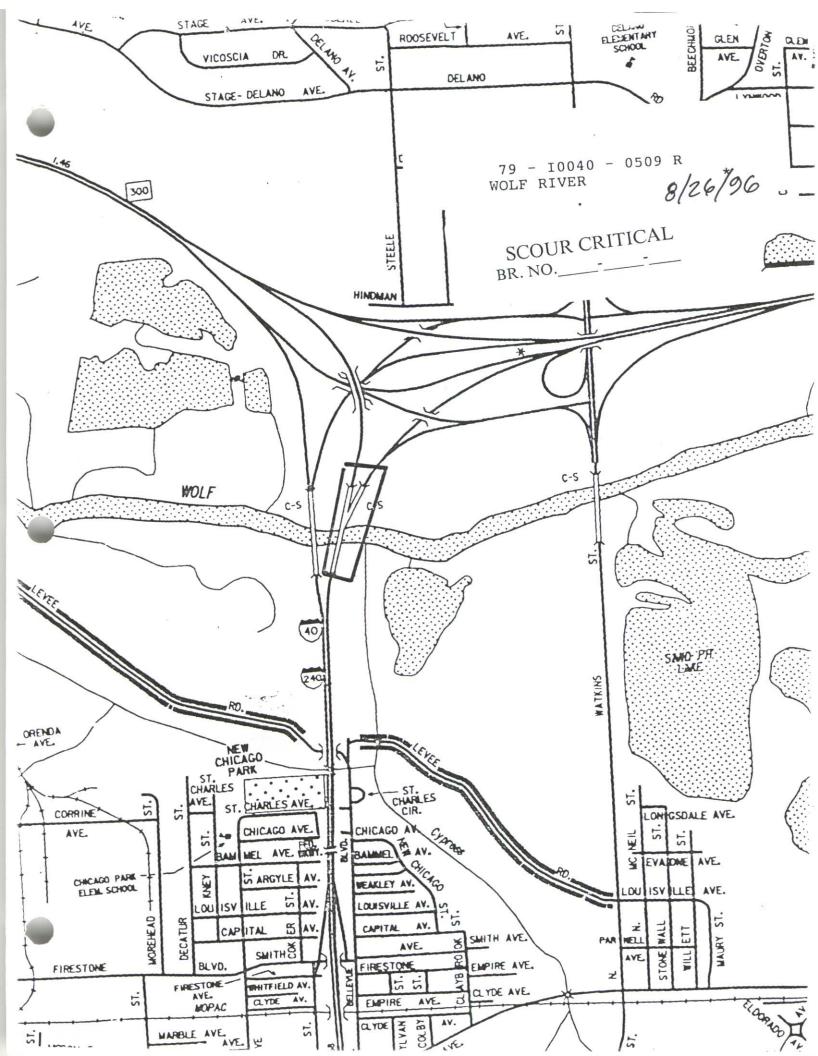
Mr. Bill Hazlerig, Regional Bridge Engineer

SUBJECT: Scour Information (Bridge #79 - I0040- 05.09R)

Please find enclosed Scour Information you requested on the above referenced bridge.

BWH: CW

cc: File



RECEIVED

INSPECTION TEAMS' SUMMARY AUG 29 1996

BRIDGE # 79 140 5091C. D.O.T.

| | BRIDGE I | NSPECTION REPOR | | |
|---|---------------------------------|---|-------------------------------|-------------------------------|
| FORM BIR 3.0 Rev. 6-9-92 DT-0069 | | FIELD R PREVIOUS | EPORT NO. | |
| BRIDGE NO.: 7 | 9100400059 EVEN DIGIT NUMBER | | YES [| X] NO[] |
| CO. RTE. L. | M. OVER WOLF | R i BRIDGE INC. | | |
| | 1970 COUNTY 5 | helby MAINTE | ENANCE DIS | STRICT NO. 45 |
| YEAR WIDENED EST | IMATED OR ACTUAL | YEAR REHABI | | STIMATED OR ACTUA |
| FEATURES | | | | |
| WEARING SURFACE FLARED WIDTH NAVIGATIONAL CONT MEDIAN TYPE | PROLYES []OPEN [] N | NO [] | LT [] (D | EPTH =") |
| BRIDGE SKEW 60° | <u>R</u> + | . , 3200. | | TWODE |
| STRUCTURE TYPE Ma | TB No. | SPANS Main Span | 1 | INSPECTORS |
| STRUCTURE TYPE App: | roach Spans | SPANSApproach S | | Sick |
| MAXIMUM SPAN LENGT | TOTAL | L LENGTH | paris 3. | Coptein |
| | | | | 1-75hor |
| WIDTHS | CLE | CARANCES | | Stephenson |
| DECK OUT-TO-OUT ROADWAY CURB-TO-CU SIDEWALKRT *APPROACH ROADWAY APPR. SHOULDERR | LT MIN. VERT | ICAL OVER DECK ICAL UNDER CL. RAL UNDER CL. | RTLT 8. | |
| *DOES NOT INCL | • | | 9. | |
| UNDERWATER INSPECT | | | | · •. |
| INSPECTION PERFORMS DOT FIELD TEAM CONTRACT DIVERS | | | (< 25FT.) NBIS BRID LENGTH (F | GE T.) (INCHES) |
| NONE REQUIRES | [] | #1 | FRACTURE | CRITICAT |
| COMMENTS: | L CONDITION YES EPIARS MADE YES | [] NO : - | DETAILS: | YES [] NO [] NCLUDE BIR 3.9 |
| Steen cheer & | BR | IDGE RATING [|] [] | |
| | | SUPERVISIN | FAIR | POOR CRITICAL |
| | | | BRIDGE | INSPECTOR |

| B R | GIR 3.8A - USE FOR ANY BRIDGE WITH OBSERVED OR POTENTIAL SCOUP | |
|----------|--|------------------|
| J 27 | T-1509 BRIDGE TO- | ₹ |
| | BRIDGE LOC. NO. 79 - TOOYO - OSO9 R DATE STREAM CHANNEL DATA AND | |
| | STREAM CULTURE L.M. DAT | 8-26 96 |
| | | |
| | | PIER & PI |
| | · · · · · · · · · · · · · · · · · · · | ABUTS BEN |
| - | CHANNEL STATE OF SED MATERIAL STATES | |
| | CHANNEL S | |
| | DED MATERIAL SE | |
| | | |
| | | |
| I. | · (scour locations: | |
| | 1. ASUTIFIER BENTYS NIN XIII XIII XIII XIII | |
| | 2. ABUTAPIER/BENT 7 X X X X X X X X X | <u>'</u> |
| | 3. ABUT/FIER/BENT | |
| | i. American Marian Mari | 1.1 |
| | 5. 2000/2000 | |
| | NOON : - LANGERY | $\dot{\uparrow}$ |
| | 1136 - 7 : 107 BENT | + |
| T ~ | " ABUTYFIER/BENT !!! | |
| <u>.</u> | HAS THE CHARMEL SHIFTED? (CHECK ANSWER) | |
| | LATERALLY | |
| | NO MOVEMENT [] NOT APPARENT [] NO MOVEMENT [] | |
| | SEVERE (> 5:) (MODERATE [] NOT APE | PARENT r |
| III. | ARE EMBANKMENT OR APPROACH SUBSTRUCTURE BEING THREATHENED BY CHANNEL AND DAME. | Έ |
| 737 | FAILURE? YES [N NO [] | 5 |
| 4 V . (| BAAK STABILITY CONDITIONS | SAUK |
| (| (1) STEEP BANK - FAILURES UPSTREAM [] DOWNSTREAM [] |) |
| | (2) MODERATE BANK EROSION [] DOWNSTREAM [] | |
| | VEGETATION (A) LOW GROWTH D | •• |
| (: | 5) CHANNET OR GRAVEL ACCUMULATION (D) CLEAR PRIMEER [| Y. |
| | STABLE CONDITIONS: (A) LIVE CROWNES NO UNKIN | OWN [] |
| | BEDROCK (B) BEDROCK | ०लम र्रे र् |
| | (D) FLAT SLOT (< = 2:1) | 223 |

BIR 3.8B - USE FOR ANY BRIDGE WITH OBSERVED OR POTENTIAL SCOUR BRIDGE LOC. NO.: 79 - T0040-0509 R DATE: 8-26-96 STREAM CHANNEL DATA AND CONDITIONS (CONTT) V. Waterway adequacy and debris characteristics: (check if applicable Abutment encreaches into channel [(2) (4) Indications that flood waters overtop bridge: NO [V] YES [] ->CCCASIONALLY [] FREQUENTLY [] UNKNOW [] (5) Debris characteristics: (a) depris likely to accommisse: AER [N] NO [] (c) dead trees apriream: [] or downstream [] Condition of rip-rope of D P c Put. % tailed: ____ W/A: [] Underwater diver inspection recommended: YES [/ NO[] Overall condition of channel? G @ P G Item 61 - Code values 0 thru 9 according to the recording and courne gurde currently in effect: 3 Comments: Thorated al Elin . E 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:

REV.: 07/29/93

DATE : 8 /26 86

PAGE NUMBER : ____ OF

BRIDGE NUMBER: 79 - I-40 - 5,09 | COUNTY ROUTE LOG MILE

| ABUT/BENT PIER NUMBER | TOTAL HEIGHT TOP OF CAP TO BOTTOM OF FOOTING (OR GROUND LINE / DATE FOR PILES) | (t) FOOTING THICKNESS | W/FTG @ H = TOP OF CAP TO TOP OF FOOTING | EXPOSURE R4. Eud Beut |
|-----------------------|--|-----------------------------|---|-----------------------------|
| A-1 | 4 | | <u>C</u> | |
| P-1 | - 45,01 | 4,25 | 17.44 L 38.25R 38.9 | |
| P-2 | 55.8' | 4,5' | 56.362 UA,7 | |
| P-3 | 615 | 4.5 | 50 110 L 50 110 L 50 110 L | |
| P-4. | 61,6 | 3.75' | 58.012 56.08 56.1 | 17.0 |
| 2-5 | 61,6 | 3.25 | 120,784 | 46.2 |
| P-60 | E. E. | 3,25' | 53.70% (73.7) 53.70% (73.7) 57.40% (57.0) 57.754 | 44.0 |
| P-7 | <u> </u> | 3,25 | 51.754 49 202 1773 | |
| - P- 8 | 49,3' | 3,25 | 47.366 | |
| - <i>D. I</i> | 46. | 3.25 | 43 50 4 43 50 4 45 50 4 | |
| F-1/1 | 38/1 | 3,25 | 35352 201468 2467 | |
| 13-3 | | | | |
| | | | | |
| | | | | |
| | BartIC | | | |

TOP OF CAP TO TOP OF WATER: 43.0 RIP - RAP : YES [] NO : [@ BENT / PIER NO. : 100.00' UPSTREAM : <u>A5.6</u> THRU STRUCTURE : 47.8 100.00' DOWNSTREAM : 45.0

COMMENTS :

| | | -11 |
|---------------------------------------|---|--------------------------------------|
| BRIDGE NO. 79 COUNTY | T-40 5.09 R ROUTE LOG MILE | BENT/PIER NO. 4 |
| TOTAL HEIGHT (TOP OF CAP TO BOTTO | | SCOUR : OF P C DRIFT : G F O C SCOUD |
| FOOTING THICKNESS (t) | MAXIMUM EXPOSURE 42.4 | |
| (TOP OF CAP TO TOP OF W/FTG @ H = | • 🗻 / | E S'AK |
| TOP OF CAP TO TOP OF | . <u>= 773</u> WATER : <u>= 41.9</u> | |
| WATER DEPTH TO TOP FO | | |
| | · | Odrift up to 8 high |
| | | |
| | 0.5' 0.5' | OF ROUTE |
| | 75 75 | DIRECTION |
| 30' TO F Find of 14' Heigh | 000 | 0 1 25 |
| | Dirt Drift 3'To 7'Heigh | 18 |
| · · · · · · · · · · · · · · · · · · · | | |
| DISTANCE | SHOW DIRECTION OF | 2.0 19 2.0 2.0 |
| · · · · · · · · · · · · · · · · · · · | DITON DIRECTION OF | FLOW |

| | | | • | _ | • • | |
|----------------------------------|--------------|---|---------------|---|------------|-----------|
| BRIDGE NO. 79 | T-40 C | 5.09 R | В | ENT/PIER NO | . <u>5</u> | |
| TOTAL HEIGHT (TOP OF CAP TO E | , s | SCOUR : G P C Section DRIFT : G F D C Section | | | | |
| FOOTING THICKNESS | | : <u>3./3</u> // | M | AXIMUM EXPO | SURE 46. | 2 |
| (TOP OF CAP TO TO W/FTG @ H = | | : <u>52</u> 4 | ے ت ن | Forbin -20; Sigle - Mot Jerrolds Ro | te | |
| TOP OF CAP TO TOP | OF WATER | : <u>42.7</u> | | JEFFS13/5 TVD | | |
| WATER DEPTH TO TO | | : | | | | , |
| | | | | | - 1 | |
| | | | | 0= dri- | up to 1c' | |
| | | | | | | |
| | | | | | | ROUTE |
| / | | | | | 73.5 | OF I |
| | | · · - | | | 45.2 | |
| | 0.D' | 41.41 | 3/ | • | | DIRECTION |
| | 1.8. | 2.8 | 3.3° | \ | | , |
| 1. 1.9' 1. 2.4 | 0.8 | | 1.5' | | | |
| 1 129 35 | 3.5 (A) 3.5. | 00 | (E) | DRIFT FOITH 3 TOT Heigh | 133 | 3. |
| | 2.6, | 37 | 2.7 75 | 3 Tot Heigh | <u> </u> | |
| | 313' | 38 20 | 3.8 | / | s | |
| \ | | | | , | | |
| | | | | | |) |
| DEPTH | | | | | | |
| DISTANCE | | | - | | | |

| BRIDGE NO. COUNTY | T-40 ROUTE LO | 5:09 R | ; | BENT/PIER NO | o. <u>6</u> | |
|-----------------------------------|------------------|--|-------------|----------------------------|----------------|------------|
| TOTAL HEIGHT (TOP OF CAP TO BOTTO | • | | £ I | SCOUR : G F DRIFT : G F | C C | |
| FOOTING THICKNESS (t) | | : 3431 | | MAXIMUM EXPO | OSURE 444 | |
| (TOP OF CAP TO TOP OF W/FTG @ H = | FOOTING) | : <u>49.2</u> | | Sisk - Mot Jerrolds - K | 70 Y | |
| TOP OF CAP TO TOP OF | WATER | : 43.2 | | | | |
| WATER DEPTH TO TOP FO | OTING | : | | 0= drift | up to 5 high | . 1 |
| | _ | · — | | | | 1 |
| | | | | | | |
| | | | | | , | 田 |
| | | | 1 | £ | ŗ | N OF ROUTE |
| 9370 | 5' He - h | 5 - \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \ | 15 H | | 7 - 7 - 1 | 11150110 |
| | 293 | 3.5 | | 2riFT. 3-5'Dia | 1,77 c 4095 | : |
| 2.7 10 00 20 10 00 | 0.5' | | | | 1 1 | - |
| | 0,5' | <u></u> | _ | ater F/3 | u | |
| | <u>0.8</u> ' | 1.5 | · — | / | | |
| DEPTH | 1.4' 20' | 1.6' 20' | | | · / | |
| DISTANCE | | | | | | |

Br. No. 79 I4U 5.09R

8-26-96

K.C.S.

Bent 7

D O O O O

15'E

25'

25'

21'

A' + Deepest

Water

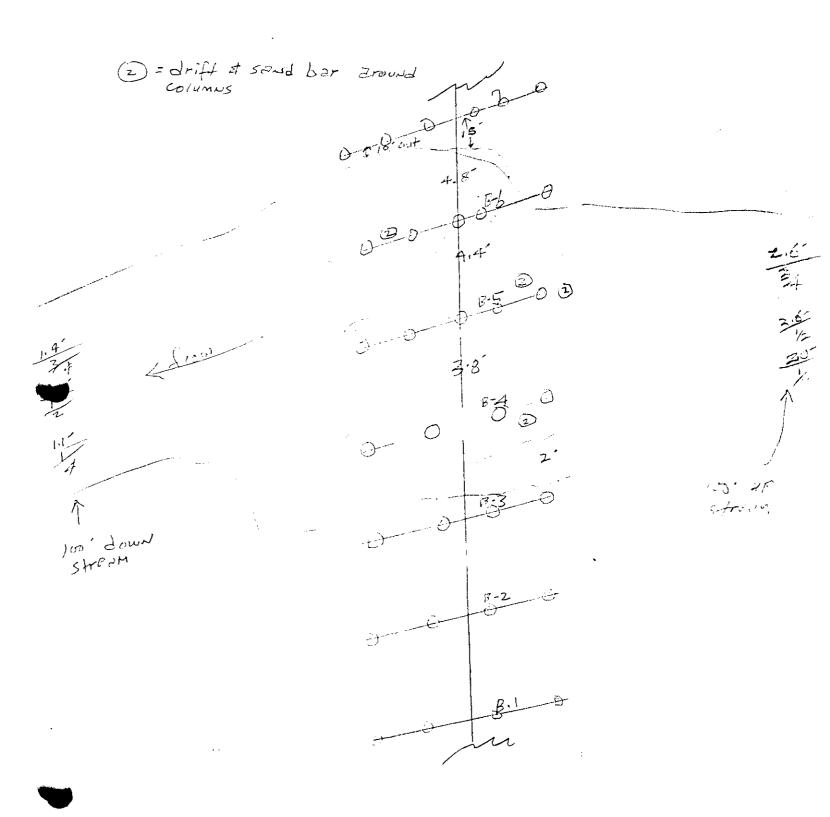
Note: 12,5 from Water

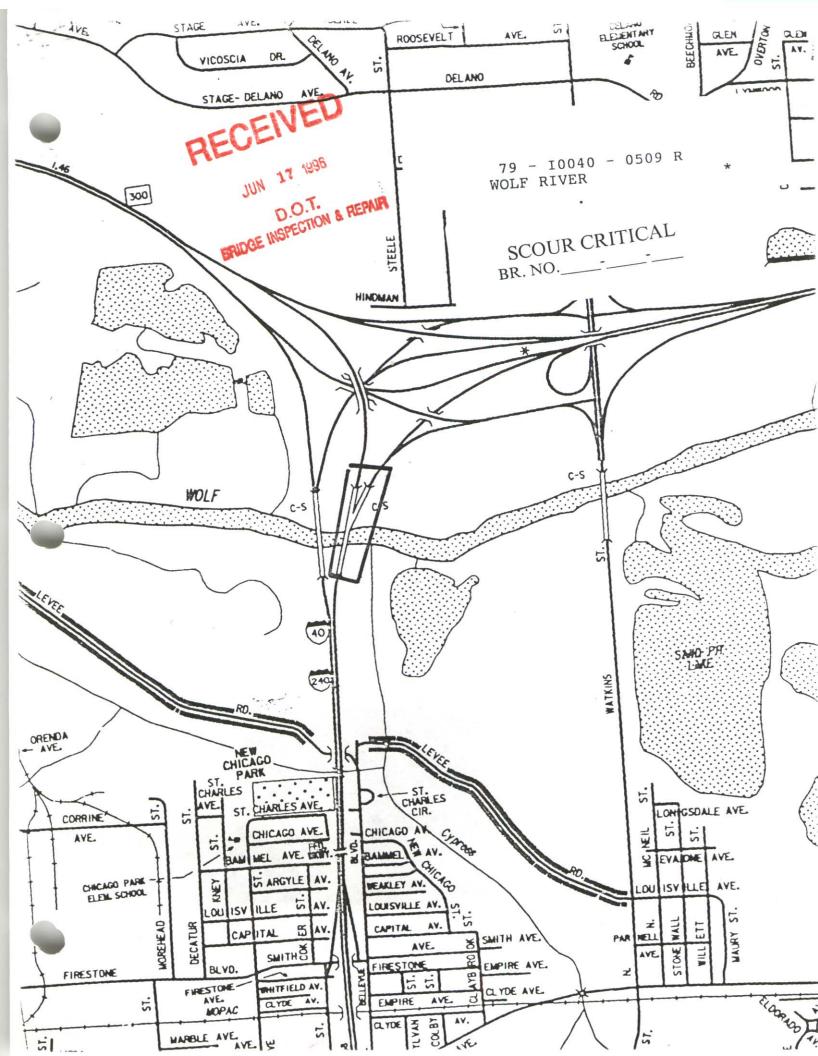
to Top Bank

34.2 from top exp

to ground Line

79-I40-5.09R





RECEIVED

INSPECTION TEAMS' SUMMARY

| 6-9-3 30 | JUN 11 1998 INSPECTION TEAMS' SUMMARY |
|-------------|--|
| BRED | DOT FRIDGE # 79 F 40 5.09 R. |
| | INSPECTION & |
| | this scarr check of BOLHS 4-2 MADIN |
| 1. 1 | The state of the s |
| | PEDIG (MEXINE) 9 |
| | THE Channel Banks are Have to |
| | THE WATER (Za) but MAN TIPPE |
| g 4 | To being flie Same as whom the |
| ites Eq. | specific this, of ge Zt il |
| | Francisco Mound North 140-(+) from Decing |
| ¥. | 4 MOUNG IN to BOIL IT 7 |
| | this is a scour critical Bridge with the |
| | Scour Reted Pour this pate (6-13-76) |
| | |
| | 1/ |
| | Kannet Jonald |
| | |
| 2 3 | |
| | |
| | |
| | |
| | |
| | |
| * | |
| - | |

RECEIVED
BRIDGE INSPECTION REPORT

| | | | DAIDOL INSPE | CTION REPO | RT | |
|-----|--|---------------------------------|---|---|------------------------|--|
| | FORM BIR 3.0 Rev. 6-9-92 DT-0069 | | | PREVIOUS PLANS- | REPORT I | s [X] NO [] |
| | | FIFUEN DICIM | NIMBER | BRIDGE LO | C. NO.: | $\frac{79}{\text{CO.}} - \frac{140}{\text{RTE.}} - \frac{5.09}{\text{L.M.}}$ |
| | I-40_R+L | | Wolf Riv | Je r | | CO. RTE. L.M. |
| 3.0 | YEAR CONSTRUCTION (ESTIMATED OF | CTED 1970 COR ACTUAL) | OUNTY Shel | by MAIN | FENANCE | DISTRICT NO. 45 |
| | YEAR WIDENED | ESTIMATED OR | ACTUAL [] | YEAR REHAI | BILITATE | ESTIMATED OR ACTUA |
| | FEATURES | | | | | |
| | WEARING SURFA FLARED WIDTH- NAVIGATIONAL MEDIAN TYPE | YES CONTROLYES | [] NO | R [] ASPH D [] D [] E [] CLC | | (DEPTH =") |
| | BRIDGE SKEW | 60 R+ | | | | INSDECTORS |
| | STRUCTURE TYPE | E CT B Main Span | NO. SPA | NS Main Spa | | INSPECTORS 1. Zerrolds |
| | STRUCTURE TYPI | .1000- | NO. SPA | - | | 2. <u>Sisic</u> |
| , | MAXIMUM SPAN I | ENCAR | | | Spans | 3. Lane |
| | THE PART OF THE PA | JENGIN | TOTAL L | ENGTH | | 4. Fisher |
| | WIDTHS | 5 | CLEAR | ANCES | | 5. Stephenson |
| 1 | DECK OUT-TO-OU ROADWAY CURB-T SIDEWALK | O-CURB | MIN. VERTICA MIN. VERTICA MIN. LATERA | AL UNDER CI | | 7 |
| 1 | APPROACH ROAD APPR. SHOULDER | WAYLT | | onder ch | | 8. |
| | *DOES NOT | INCLUDE SHOUL | DERS | | 1 | 9. |
| ι | UNDERWATER INS | | | | | • |
| | NSPECTION PER DOT FIELD TE | FORMED BY: | ATE | | (< 25 NBIS LENGT | BRIDGE H |
| | CONTRACT DIVI | ERS [] D | ATE | | FRACT | (FT.) (INCHES) URE CRITICAL |
| | HANGE IN STRUC MAS OMMENTS: | CTURAL CONDIT JOR REPIARS M. | ION YES [ADE YES [|] NO [] | DETAI | LS: YES [] NO [] S, INCLUDE BIR 3.9 |
| _ | | | BRID | GE RATING | [] [GOOD E | [] [] [] FAIR POOR CRITICAL |
| _ | | | | SUPERVIS | SING BRI | DGE INSPECTOR |
| | | | | | | |

RECEIVED

REV. : 07/29/93 DATE : ____ /____/___ JUN 17 1996 PAGE NUMBER : ___ OF BRIDGEDOWNSERCTION & FLERAIR

COUNTY - FOUTE - SLOT /2

LOG MILE TOTAL HEIGHT W/FTG 0 H = ABUT/BENT (t) TOP OF CAP TO FOOTING TOP OF CAP TO PIER BOTTOM OF FOOTING ENFOSURE NUMBER. (or ground time / THICKNESS TOP OF FOOTING DATE FOR FILES) Aborto 1 2 1 61.6-3.75 5640 Pt. en 411 61.6-3,25 56.76- Pt. end 49.5-52.5° 3.25 57.80' Rt. end 44.8-53.3' 3,25 49.20. Phas 36.5 10 Abut 2 TOP OF CAP TO TOP OF WATER : 22.1 Rt. end Bent #9 RIP - RAP : YES [] NO : [100.00' UPSTREAM : 4Z.) @ BENT / PIER NO. : THRU STRUCTURE : 46.1 XR.R. Not vis. due to High 100.00' DOWNSTREAM : 42/ water.

100.00! DOWNSTREAM: 421 We ter.

COMMENTS:

RECEIVED

RECEIVED

JUN 11 135

JUN 17 1996

D.O.T.

BRIDGE INSPECTION & REPAIR

REV. 07-01-91

D.O.T. BRIDGE INSPECTION & REPAIR

ROUTE LOG MILE

BENT/PER NO.4-7

TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING)

SCOUR : G F P C DRIFT : G F P C MAXIMUM EXPOSURE

FOOTING THICKNESS (t)

see Individual scour sheek

(TOP OF CAP TO TOP OF FOOTING) W/FTG @ H =

TOP OF CAP TO TOP OF WATER

.WATER DEPTH TO TOP FOOTING

: ZZII Rt. ENd BENTA

-100 't

But # 7

Bent #6

Bent #5

Bent # 4

DEPTH DISTANCE

SHOW DIRECTION OF FLOW

REV. 07-01-91

DATE

BENT/PIER NO. 4

TOTAL HEIGHT

SCOUR : G F P C DRIFT : G F P C

(TOP OF CAP TO BOTTOM OF FOOTING)

MAXIMUM EXPOSURE 466

FOOTING THICKNESS (t)

(TOP OF CAP TO TOP OF FOOTING)

W/FTG @ H =

: <u>57.8</u> 2 29.4

TOP OF CAP TO TOP OF WATER

: 22,1

: 3'7"

: 61.6 ?

L.L

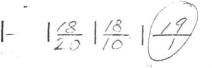
WATER DEPTH TO TOP FOOTING

:35,7

A.0

20

16



DEPTH

DISTANCE

| DATE | | |
|------|--|--|
| DATE | | |

BRIDGE NO. 79 I-40 ROUTE

BENT/PIER NO. 5

TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING)

SCOUR : G F P C DRIFT : G F P C

FOOTING THICKNESS (t)

MAXIMUM EXPOSURE 49.5

(TOP OF CAP TO TOP OF FOOTING)

: 3-13/1

W/FTG @ H =

JUN 17 1996

TOP OF CAP TO TOP OF WATER

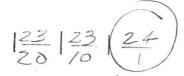
: 22.9

: 589 7.

D.O.T. BRIDGE INSPECTION & REPAIR

WATER DEPTH TO TOP FOOTING

23,0



$$\frac{23}{1} |\frac{21}{10}| \frac{29}{20}$$

DEPTH

DISTANCE

BENT/PIER NO. 6

SCOUR : G F P C

TOTAL HEIGHT

(TOP OF CAP TO BOTTOM OF FOOTING)

: 2-3"

FOOTING THICKNESS (t)

(TOP OF CAP TO TOP OF FOOTING) W/FTG @ H =

: 49.2 Z

JUN 17 1996

TOP OF CAP TO TOP OF WATER : 24.4

D.O.T.

: 24.8

WATER DEPTH TO TOP FOOTING

20 Mid

BRIDGE INSPECTION & REPAIR

70

18 18 18

DEPTH

DISTANCE

BRIDGE NO. 79 COUNTY

BENT/PIER NO. 7

TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING) SCOUR : G F P C DRIFT : G F P C

FOOTING THICKNESS (t)

MAXIMUM EXPOSURE 36~

(TOP OF CAP TO TOP OF FOOTING) W/FTG @ H =

TOP OF CAP TO TOP OF WATER

JUN 17 1996

WATER DEPTH TO TOP FOOTING

: 22.5 : 275

: 50.0

D.O.T. BRIDGE INSPECTION & REPAIR

<u>B</u>,0

120 | 6 | 6

8 Nerry bank

DEPTH DISTANCE REV.: 07/29/93

PAGE NUMBER : ___ OF

BRIDGE NUMBER : 79 COUNTY

| | ABUT/BENT PIER NUMBER | TOTAL HEIGHT TOP OF CAP TO BOTTOM OF FOOTING (OR GROUND LINE / DATE FOR PILES) | (t) FOOTING THICKNESS | W/FTG @ TOP OF CAP TOP OF FOO | H = TO | EXPOSURE |
|----|-----------------------|--|-----------------------------|-------------------------------------|--------|----------|
| | A-1 | 4 | | | C. I | Bm+ |
| | P-1 | - 45,2' | 4.25 | 42.44 L 38.40R | 38,9" | 26.5 |
| , | P-2 | 55,8' | 4.5' | 52.86L 49.70 R | 49.7 | 31.5 |
| , | P-3 | 61,5' | 4,5 | 58,10 L 55,90 ii | 55.9 | 36.0- |
| ı. | P-4 | 61.6' | 3.75 | 59,41L 56.10 R | 5611 | 4505 |
| | P-5 | 616 | 3.25 | 60,084 56.70R | 56.7 | 48.0' |
| 1 | P-60 | A VG PILE 52.5 | 3,25' | 50,954 57,40R | 57.4 | 47.3 |
| | P-7 | AVG. PILE 53,3 | 3,25' | 51.784. 49,202 | 417.2 | 34.3 |
| | P-8 | 49.3' | 3.25 | 47.656 | 4452 | 34.0- |
| | p.9 | 46,1 | 3.25 | 43,504 | 42.5 | 29,0- |
| _ | P-11 | 38,1 | 3,25 | 35.262 | 34.6% | 16.5 |
| _ | 1-2 | , | | | | |
| | ` \. | ii. | | | | |

| TOP OF CAP TO TOP OF WATER: 43.5 | RIP - RAP : YES [] NO . C |
|----------------------------------|----------------------------|
| 100.00' UPSTREAM : | RIP - RAP : YES [] NO : 5 |
| THRU STRUCTURE : 48.5 | |
| 100.00' DOWNSTREAM : 45.0 | |
| COMMENTS . | ý |

₹.7.

5000000 SPIN -\$2,00.00,28 SPAY 2 SPAN 2 Gueronal allocament \$ 15 CO 100 11 \$ 5 5 -515 182-85 31 SPAN 3 , acaucis 1.517 \$10 111.5 100 \$10 111.7 11 236 .C. .2.5 SOLN A Keer 7: \$ 1:51 \$ 1:1:39 - C: 250,77 34 E. B. 1: 240 CURVE DATA

P. 65 CO D. 40 CT

D. 10 CT D. (21)

D. 10 CT D. (21)

D. 10 CT D. (21)

D. 10 CT D. (21) DAT 0 d Plan II 5/0.235-9500 FG U 230.12 (O) - 11:1 SPAN 9 9-140-5.012 ::::]: 9 \$ P.W. U. \$ 1944.25 CO 01 11725 13.00 0 DEPARTMENT OF TRANSPORTAT E B 1-240 07E4 WOLF 8 O. 133+5

New gravered Une 8-23-85

REV. 07-01-91

BRIDGE NO.

I-40 5,09R ROUTE LOG MILE

DAFE

TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING) THICKNESS

(t) FOOTING

W/FTG @ H = (TOP OF CAP T) TOP OF FOOTING)

EXPOSURE

| | | | TOP OF FOOTING | |
|---|--------|----------------|-----------------|-----------|
| Abut.#1 | | | | · |
| | | | | |
| Bent#1 | | | | 28.0 |
| | | | | |
| Bent#2 | | | | 33,4' |
| Bent#3 | | | | |
| Dent 3 | | | | 38,5' |
| Ben+#4 | 61.6 | 3,8' | F70: | |
| | V1.6 | 3.18 | 57.8 | 47,1' |
| Bent#5 | 61,6' | 3.2 | 58,4 | 52.0' |
| 1 1/4 | - | · | | 10910 |
| Bent#6 | 52.4 | 3,2' | 49,2' | 49.0 |
| Bon+# 7 | 53,2' | 7 | | |
| <i>G</i> , <i>y</i> , <i>y</i> | 33,d | 3.2' | 50,0 | 36,3' |
| Bent#8 | 49.3 | 3.2' | 46,1' | 77// |
| | | | 10,1 | 33,6 |
| Bent#9 | | | | 25, 2' |
| 0 1# | | | | 1 |
| Bent#10 | | | | 25.5 |
| Ab ut, #2 | | | | |
| o'Upstream | measur | ments From Top | of Capof Column | Bon#6 |
| Avand Ada | | | | 48.91 |
| hrough Adar o' Down stream | | | • | 50,1' |
| · • • • • • • • • • • • • • • • • • • • | r e e | | | . , , , , |

BRIDGE INSPECTION REPORT

MAY 1 5 1991

| FORM BIR 3.0 3/30/78 REV. 01/01/90 DT-0069 | our Only | FIELD REPORT PREVIOUS REPORT PLANS ——— | NO. DATE |
|--|--|--|---|
| | te Log Mile | SYS. NO. <u>79</u> | <u>I-40 5.09</u> K |
| | Service | | ucture Name (if named) |
| YEAR CONSTRUCTED (ESTIMATED OR ACTUAL) | COUNTY Sho May M | AINTENANCE DI | ISTRICT NO. 45 |
| YEAR WIDENED ESTIMATED | YEAR REHA | ABILITATED ES | TIMATED OR ACTUAL |
| <u>FEATURES</u> | | | |
| WEARING SURFACE — CONCRE FLARED WIDTH — Y NAVIGATIONAL CONTROL — Y MEDIAN TYPE — OP | ES NO E | LT □ (DEPTH = | |
| BRIDGE SKEW 600 KF | | | INSPECTORS |
| STRUCTURE TYPE C. L.B. Main Span | NO. SPANS | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | Stanton |
| STRUCTURE TYPE | NO. SPANS | <u> </u> | Roubind |
| Approach Spa MAXIMUM SPAN LENGTH 82 | | | Sisk |
| WIDTHS | <u>CLEARANCES</u> | 5 | Fuller |
| DECK OUT-TO-OUT ROADWAY CURB-TO-CURB SIDEWALK RT LT APPROACH ROADWAY APPR. SHOULDER RT LT | MIN. VERTICAL OVER DEC MIN. VERTICAL UNDER CI MIN. LATEPAL UNDER CL. | J | Emerson |
| *DOES NOT INCLUDE SHO | ULDERS | - 9 | |
| UNDER WATER INSPECTION INSPECTION PERFORMED B DOT FIELD TEAM CONTRACT DIVERS NONE REQUIRED | Y: DATE DATE | LE FR | IS BRIDGE NGTH (FT.) (INCH.) ACTURE CRITICAL TAILS? YES NO |
| CHANGE IN STRUCTURAL CONDIT | | | YES, INCLUDE BIR 3.9 |
| COMMENTS: Scock | only | | |
| LATERAL 3H | IFT TO NOW | H MAY | UNDERMINE |
| PIER G WILLE | d Ita, Fig. | Expose | of of |
| | BRIDGE RATING | GOOD FAIR | D D |
| | S | UPERVISING BRID | GE INSPECTOR P.E. |

| | MAY 1 5 1991 |
|---|--------------------------------------|
| BIR 3.8 A - Use for any bridge with 01/01/90 | 1 Observed |
| 01/01/90 BRIDGE NO: 79 1-40 5. | observed or potential scour. |
| | |
| | DATA & CONDITIONS |
| STREAM CROSSING: | PIERS & P |
| - WOLF RIVES | PIERS & P ABUTS B |
| | |
| | CHANNEL BED MATERIAL OF CONTROL |
| <u> </u> | |
| | |
| I. SCOUR LOCATION: | |
| | |
| 1. ABUT/PIER/BENT | |
| 2. ABUT/PIER/BENT | |
| 3. ABUT/PIER/BENT | |
| 4. ABUT/PIER/BENT | |
| | |
| 5. ABUT/PIER/BENT | |
| 6. ABUT/PIER/BENT | |
| 7. ABUT/PIER/BENT | |
| II. Has the channel shifted? (| (check answer) |
| no movement not apparent[| no movementnot apparant |
| slight (<=1') moderate [severe (> 5') | slight (<=1') moderate severe (> 5') |
| III. Are embankment or approach sub | it to north bank " (neck previs |
| railure? I Naicate Ri | ver Trying to move North Brank |
| | |
| IV. Channel & bank stability condi | (|
| (1) Steep bank - Failures upst: conditions | ream:downstream: |
| (2) Moderate bank erosion: | · / |
| Vegetation: (c) dead trans | 107 14190 (1.1100) |
| (5) Channel altered or straight | Ation: YES NO UNKNOWN |
| (0) Stable conditions: (a) live | growth: (b) bedrock: |
| (c) boul | .ders: (d) flat slopes: |

| BIR 3.8 B - Use for any bridge with observed or potential scour. BRIDGE NO: 79 J-40 5.09 R DATE: 5/15/91 STREAM CHANNEL DATA & CONDITIONS (CON'T) V. Waterway adequacy and debris characteristics: (check if applicable of the price of the property of the | and the state of the | MAY 1 5 1991 |
|--|---|--------------------------|
| STREAM CHANNEL DATA & CONDITIONS (CON'T) V. Waterway adequacy and debris characteristics: (check if applicable of the price of the pri | BIR 3.8 B - Use for any bridge with observed or potential | scour. |
| V. Waterway adequacy and debris characteristics: (check if applicable) (1) Bridge deck elevation: (a) level with approach roadway: (b) higher than approach roadway: (c) roadway approach >= 2' above natural ground line: (2) Abutment encroaches into channel: 10 (3) Large scour (blowhole) under bridge: See sanding \$ (4) Indications that flood waters overtop bridge: NO() YESOccasionally Frequently Unknown (5) Debris characteristics: (a) debris present: YES NO Order Plant 5 (b) debris likely to accumulate: YES NO Order Plant 5 (c) dead trees upstream: or downstream: VI. Condition of rip-rap? G P C Est. % failed: N/A: VII. Underwater diver inspection recommended? YES NO OR OTHER SCOUND VIII. Overall condition of channel? G F P C Cyff Scound IX. Item 61 - Code values 0 thru 9 according to the recording and coding guide currently in effect: S X. Comments: Pooling Above Grand in Channel Arge Oriff on Pier 5 Pierth Set See Sandings Large Oriff on Pier 5 SPECIAL INSPECTION DATA (for reasons other than FC or scour) I. Does this bridge need a special inspection? YES NO OR | BRIDGE NO: 79 I-40 5,09 P DATE: 5/15/91 | <u>.</u> |
| (1) Bridge deck elevation: (a) level with approach roadway: (b) higher than approach roadway: (c) roadway approach >= 2' above natural ground line: (2) Abutment encroaches into channel: No (3) Large scour (blowhole) under bridge: Sec somling S (4) Indications that flood waters overtop bridge: NO YES Occasionally Frequently Unknown NO YES Occasionally Frequently Unknown Commenced Section of the present: YES NO OCCASIONAL SECTION DATA (for reasons other than FC or scour) I. Does this bridge need a special inspection? YES NO OCCASIONAL SECTION DATA (for reasons other than FC or scour) I. Does this bridge need a special inspection? YES NO OCCASIONAL SECTION NO OCCASIONAL SECTIONAL SECTION NO OCCASIONAL SECTIONAL SECTION NO OCCASIONAL SECTIONAL SECTION NO OCCASIONAL SECTIONAL SECTIONAL SECTION NO OCCASIONAL SECTIONAL SECT | | |
| Avge Driff on Pleat 5 Deepest wofer peut to North Pank 17.0 *********************************** | V. Waterway adequacy and debris characteristics: (characteristics: (characteristics) (d) Bridge deck elevation: (a) level with approach roadway: (b) higher than approach roadway: (c) roadway approach >= 2' above natural ground (2) Abutment encroaches into channel: No (3) Large scour (blowhole) under bridge: See Som (4) Indications that flood waters overtop bridge: NO YES Occasionally Frequently (5) Debris characteristics: (a) debris present: YES (b) debris likely to accumulate: YES (c) dead trees upstream: VI. Condition of rip-rap? G VII. Underwater diver inspection recommended? YES VIII. Overall condition of channel? G F C C X. Comments: Footing Above Above Above See Sommains | Unknown N/A: NO SCOUL |
| SPECIAL INSPECTION DATA (for reasons other than FC or scour) I. Does this bridge need a special inspection? YES NO FOR | - Deepest water part to North Pa | mk 17.0 |
| I. Does this bridge need a special inspection? YES NO 🔀 | | 6.e.ne |
| I. Does this bridge need a special inspection? YES NO 🔀 | (for reasons other than FC or scour) | |
| | T Does this bridge | |
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INSPECTION TEAMS SUMMARY BRIDGE NO. 79 I-40 5.09 R

| 10 5.09 K |
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| - Ocover on of Jana Tio |
| 1. 1Ava d-11 2 |
| Scow on Rt. Lane I-40 Piers 556 Of Large drift Cought on upstream side Footing Ethosol one Of the continuous and the continuo |
| Pier # 5 |
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| The part of the pa |
| Depth do not il |
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| - tootings of |
| Ground line are below Top of footings. |
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| James Beëne |
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79 - 140 - 5.09 RT

| PIER | FTG 't" | (TOP OF CAP- TOP OF POST ME) LTI | RT. |
|----------|------------|----------------------------------|-------|
| .6 | 4′-3″ | 42.44 | 3.8 € |
| C Z | 4' - 6" | 52.86 | 49.7 |
| p 3 | 4'-6" | 58.10 | 55.9 |
| E 4 | 3' - 9" | 59.41 | 54.1 |
| F 5 | 3 ' - 3 '' | 40.68' | 54.7 |
| 6 4 | 3' -3" | 50.29 | 47,40 |
| \\ 7 | 3'-3" | 51.7 <i>8</i> | 49.26 |
| \$ 8 | 3'-3" | 47.42 | 44.58 |
| у | 3'-3" | 45,20 | 42.5- |
| B 10 | 3 !- 3 " | 35,24 | 34.66 |

REV. 07-01-91

BRIDGE NO. 79 T-40 COUNTY ROUTE

5.09 R DATE 7-18-91

| TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING) | (t) FOOTING THICKNESS | W/FTG & H = (TOP OF CAP TO TOP OF FOOTING) | EXPOSURE Pien**/ Tuler. |
|--|---|--|--|
| P | ANS | | Copp. N. Str. Op |
| | Piling | | , |
| 45.2 | 4-3" | 42,44L / 4/11= | |
| 55,8 | 4'-6" | 52.864 / 5/.3 = | 31,4 Mb 33,8 Lt. |
| 61.5 | 4'-6" | 58.10L 57.0 | 39,4 1.7 |
| 61.6 | 3-9" | 59.4.12/57.8 | 44.5 |
| 61.6 | 3-3" | 6008L 58.4 | 49.5 |
| 52,5 | 3-3" | 147.45 R / 49.2 L | 49.5 |
| 53.3 | 3-13" | 51.782/50.0 E | 35,915 33,784 |
| 49.3 | 3′-3" | 47.621 46.1 | 38,841, 34 B RY |
| 4611 | 3'_3" | 43.20L / 4-Z.9 | 34.9 ky, 59, 73 |
| 38,1 | 3-3" | 34.66R / 34.9E | 25.12+ 15.2 FT |
| | Piling | / | 1.5 |
| | | | |
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| | Dind 1 | inde Const | |
| | 7/18/ | 7/ | · |
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| | (TOP OF CAP TO BOTTOM OF FOOTING) 45.2 55.8 61.5 61.6 52.5 53.3 49.3 46.1 | (TOP OF CAP TO BOTTOM OF FOOTING THICKNESS PLANS Piling 45.2 4'-3" 55.8 4'-6" 4'-6" 3'-9" 61.6 3'-9" 52.5 3'-3" 53.3 3'-3" 49.3 3'-3" 49.3 3'-3" 49.3 3'-3" 6:1:ng 6:1:ng 7:1:ng 7:1: | (TOP OF CAP TO BOTTOM OF FOOTING) PLANS PL |

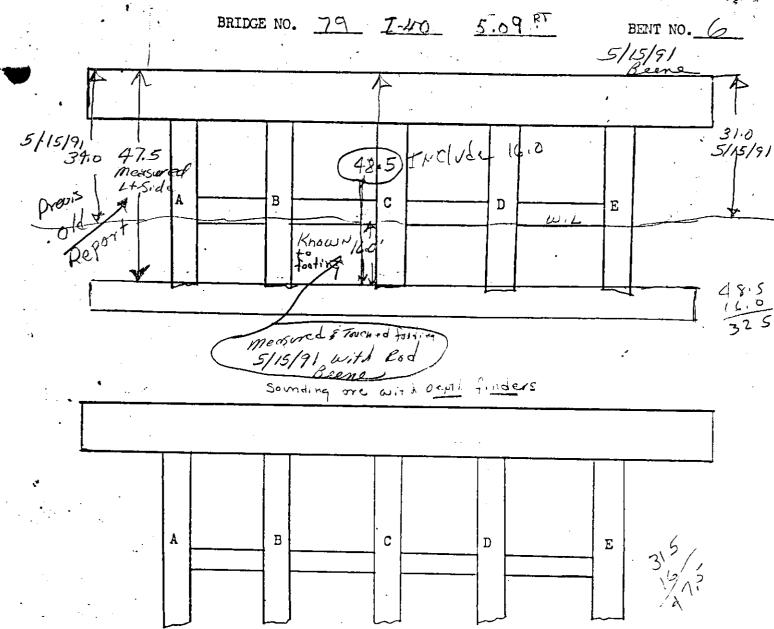
BRIDGE NO. 79 T-40 5.09 R DATE 7-18-91

| BENT/PIER NO. | TOTAL HEIGHT (TOP OF CAP TO BOTTOM OF FOOTING | | W/FTG @ H = (TOP OF CAP TO TOP OF FOOTING) | EXPOSURE Pier #/ |
|---------------|---|--------|--|----------------------|
| Plex | | | | Songiros from |
| ABH #1 | | Piling | | 2.5 |
| B- 1 | 45.2 | 4-13" | 39.90R / 41.18 | 24, 1R+ 28,5/t. |
| C-2 | 55.8 | 4:6" | 49.78R 52.864 5/.34 | 31.9 Kf. 33.8 Lt. |
| D-3 | 61.5 | 4'-6" | 55.95R 57.04 58.10L 57.0 | 38,1 KT. 39,4 LT |
| - E-4 | 61.6 | 3-9" | 56.13 £ 157.8 £ | 44.5 |
| F-5 | 61.6 | 3'-3" | 6008 L 58.4 | 49,5 |
| - G-6 | 52,5 | 3-3" | 47.45 R 49.2 L | 49.5 |
| <u>H-7</u> | 53.3 | 3-13" | 149.26R/ 50.0 E | 35,9157 33.7F |
| I-8 | 49.3 | 3′-3″ | 144.58k / 46.14 | 38,9 Lt. 34.0 F |
| 7-9 | 4611 | 3'-3" | 42.54R / 42.9 | 34.914 50 53 |
| K-10 | 38,1 | 3-3" | 34.66R 35.26 L / 34.9 | 25.12+ 15.2 f |
| A8UH Z | | Piling | | 1.5 |
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5-15-91 5 TOWARY FMIFRSON FULLER John Michael M To WASH. 1 LOV DE JOHNS Mit of the 200 £=32,1 200 miles Spansu & Wolf Will 1661 \$ 1 JAM

32.0 & Bes AGONE Sounded 5/16/91 measured by Rod 16.0 memol 5/15/91 Ecene footing E4-posed Bent#4 Bent-5 Bent6

MAY 1 5 1991 ,

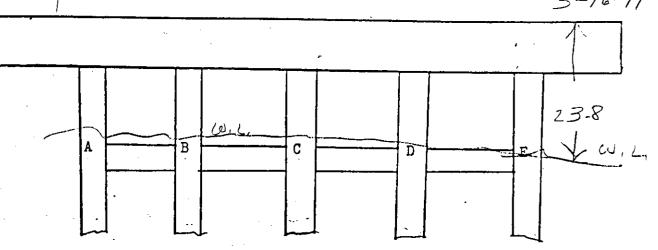


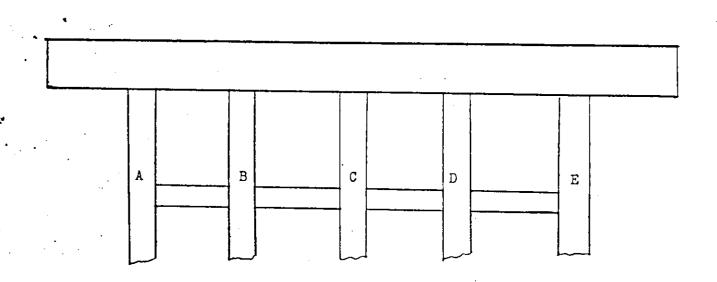
| ELEMENT | RATINGS | COMMENT |
|-----------|---------|---------|
| CAP | GFPC | |
| COLUMN A- | GFPG | |
| | GFPC | |
| | GFPC | |
| | GFPC | |
| BEARINGS | GFPC | |
| STRUTS | GFPC | |

BRIDGE NO. 29 I-10 MAY 1 5 1991 BENT/PIER NO. PIER. HEIGHT SCOUR = G F OC for DRIFT = G F PC TOP CAP TO TOP OF FOOTING TOP CAP TO TOP OF WATER Small Dirift on 6 mdu water CANIT determine size SAFE DEPTH 160 Top of footing measured 5/15/91 Beene DEPTH DISTANCE DIR. OF ROUTE

BRIDGE NO. 79 1-40 5.09 MT

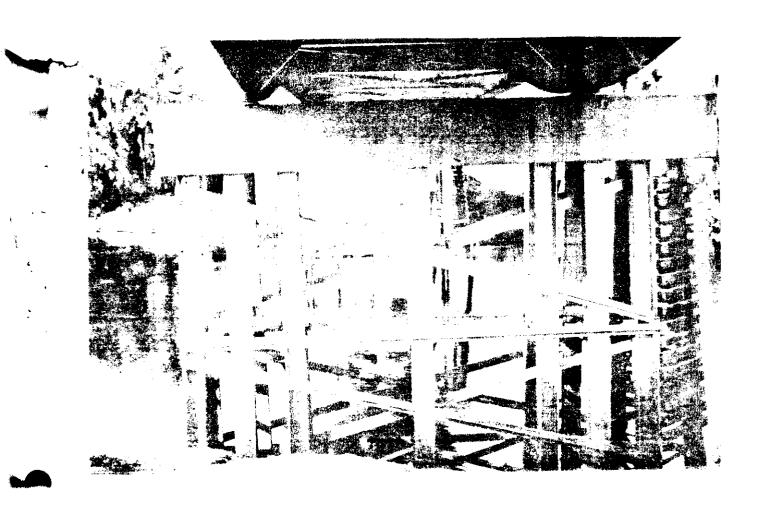
BENT NO. 5 5-16-91





| ELEMENT | RATINGS | COMMENT | | ·. | |
|-----------|---------|---------|---|----|--|
| CAP | GFPC | | · | | |
| COLUMN A- | GFPC | | | | |
| | GFPC | | | | |
| | GFPC | | | | |
| · | GFPC | | | | |
| BEARINGS | GFPC | | | | |
| STRUTS | GFPC | | | | |
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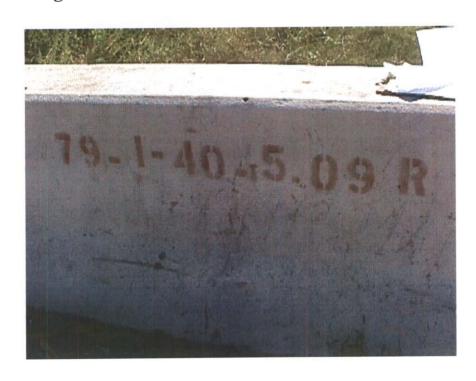
| BRIDGE NO. 79 | J-40 5.09 RT | PER NO. 5 |
|----------------------|-----------------------|--|
| PIER ELEV. | | BENT NO. |
| WATER ELEV. | SOUNDING SKETCH | 1) |
| BOTTOM FOOTING ELEV. | 0 | Deepost water |
| MAX. SAFE DEPTH | | NO SIGN AD |
| HIEGTH PIER | | No Sign of Scoup |
| | 0 | ~ |
| 49.3- top cop Hierd | 100 | |
| to top water | 1 2 63 | R.B. R.G. |
| | 2/03 | \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
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| DIR. OF ROUTE | | . * |
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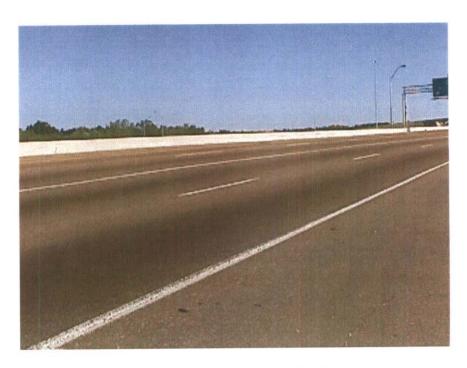
Steel Pile Pier Rated Good

1983 PROFILE

Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 09-16-99



BRIDGE NO.



VIEW ACROSS TOP OF DECK

Bridge Loc. No: 79 - 10040 - 05.09 - R Date: 09-16-99



APPROACH #1, BROKEN DRAIN CURBS



JEE PHOTO

RAIL MANSITION

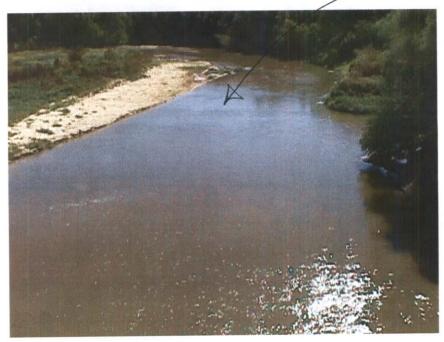
LOOKING AHEAD ON ROUTE

Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 09-16-99



RIGHT SIDE VIEW OF BRIDGE

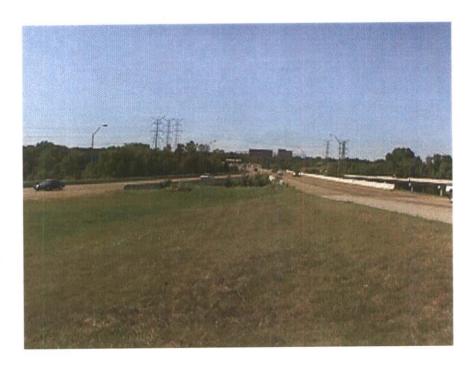
OLD COFFER PAM
REMOVED



LOOKING UPSTREAM, RIGHT SIDE

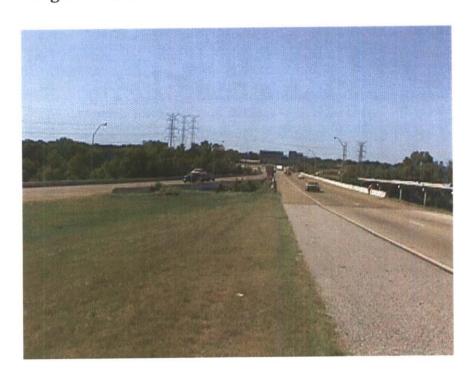


RIGHT SIDE VIEW OF RUBBLESTONE



LOOKING BACK ON ROUTE

Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 09-16-99



LOOKING BACK ON ROUTE



LEFT SIDE VIEW OF BRIDGE

Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 09-16-99



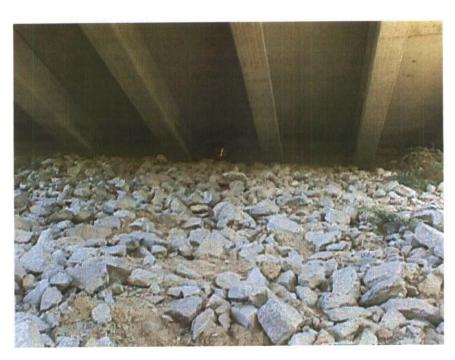
BOTTOM OF DECK, PART "A"



ABUTMENT #2, PART "B"



BOTTOM OF DECK CONNECTION PART "A" & PART "B"

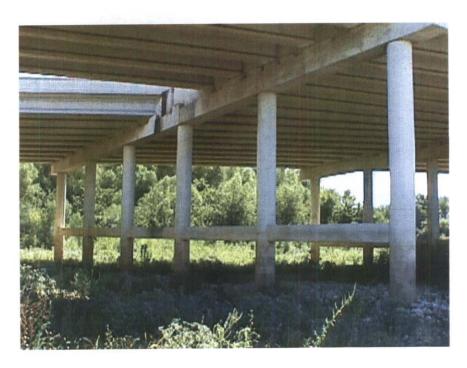


ABUTMENT #2, PART "A"

Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 09-16-99

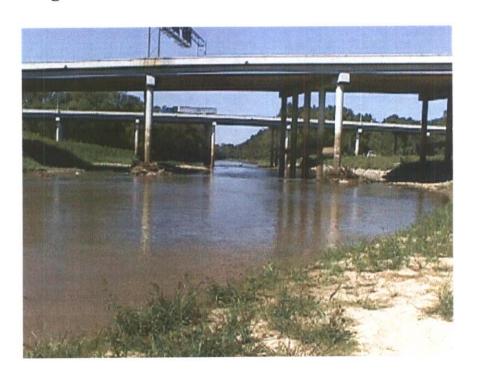


BOTTOM OF DECK, PART "B"



BENT #8

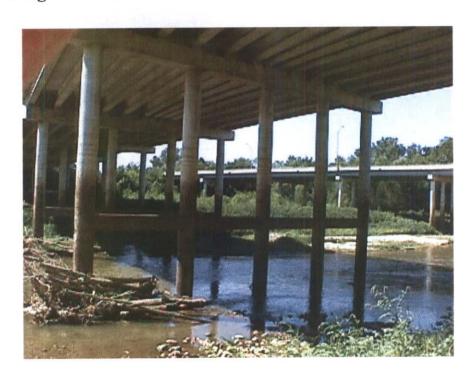
Bridge Loc. No: 79 - I0040 - 05.09 - R Date: 09-16-99



RIGHT SIDE VIEW OF CHANNEL



BENT #5



BENT #6

Bridge Loc. No: 79 - 10040 - 05.09 - R Date: 09-16-99



ABUTMENT #1



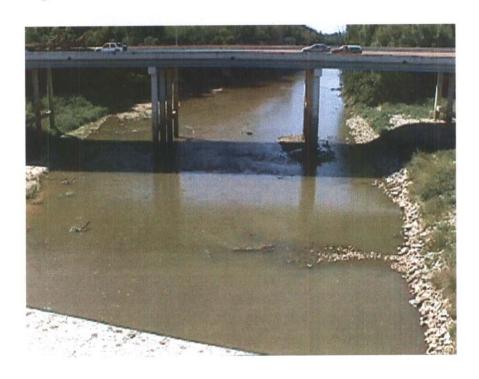
ABUTMENT #1, EARTHQUAKE CABLE CONNECTED TO GIRDER "G", BROKE LOOSE



ABUTMENT #1 EARTHQUAKE CABLE CONNECTED TO GIRDER "D", BROKE LOOSE



RIGHT SIDE VIEW OF CHANNEL



LOOKING DOWNSTREAM, LEFT SIDE

SEP 16 1999 BRIDGE INSPECTION REPORT FIELD REPORT NO. : /// DATE : 9-/6-9? PREVIOUS REPORT NO. : ____ DATE : 08/18/95FORM BIR 3.0 REV. 06/09/92 DT-0069 PLANS----YES[X] NO[] EDERAL NO. : 79100400059 CREEK NAME : WOLF RIVER 79 - 10040 - 0509 R CO. ROUTE L.M. L/R ROAD NAME : 000 ROAD NAME : CO. ROUTE L.M. YEAR REHABILITATED : ____ STRUCTURE NAME (IF NAMED) : COUNTY : Shelby MAINTENANCE DIST. NO.: ___45 **FEATURES** WEARING SURFACE---CONCRETE [] TIMBER [] ASPHALT [X] (DEPTH = 6)
FLARED WIDTH-----YES [X] NO [] CLOSED [] FLARED WIDTH-----YES [X]
NAVIGATIONAL CONTROL--YES [] NO [X] BRIDGE SKEW : 60 LT[] RT[X] MEDIAN TYPE----OPEN [X] NONE [] STRUCTURE TYPE : CIB NO. SPANS : MAIN SPAN STRUCTURE TYPE : NO. SPANS : APPROACH SPANS APPROACH SPANS MAXIMUM SPAN LENGTH: 81.7' TOTAL LENGTH: 830.1 WIDTHS (*.**m) CLEARANCES (*.**m)

SIDEWALK RT ___ LT *APPROACH ROADWAY : _____ APPR. SHLD. RT 12' LT 12' *DOES NOT INCLUDE SHOULDERS

DECK OUT-TO-OUT :74/75
ROADWAY CURB/CURB ! 72/106 MIN. VERT. OVER DECK : ______ MIN. LAT. UNDER CL. : ____ RT

UNDERWATER INSPECTION

INSPECTION PERFORMED BY :

DOT FIELD TEAM [\checkmark] DATE : 9-16-99 CONTRACT DIVERS [] DATE : ______

(<7.62m)NBIS BRIDGE LENGTH

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

COMMENTS:

FRACTURE CRITICAL DETAILS: YES[] NO[\}' IF YES, INCLUDE BIR.3.9

SUPERVISING BRIDGE

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

| SEP | 1 | 6 | 1999 | |
|-------|---|---|------|--|
| DATE: | | | - 30 | |

BRIDGE LOC. NO. 79 - 140 - 509R (LOG km) DT-0080 F FORMANCE EVALUATION Time of day inspected 10:00 Weather conditions (1/22 760 Vehicles observed A// COMMENTS YES NO LIVE LOAD BEHAVIOR Substructure Horiz. & Vert. Defl. - - - [] Vibration - - -Superstructure Horiz. & Vert. Defl. - - - [] Vibration - - - - - [] **APPROACH** Alignment Slab Joints Pavement Embankment Drains TRAFFIC SAFETY FEATURES SUB-STANDARD STANDARD [X]Bridgerailing C C Transitions [X]Guardrail Guardrail Terminal SIGNING NO NEEDED YES WEIGHT LIMIT POSTED [] Paddleboard - - - - ----[][V] YES [] NO [\(\section \) Vertical Clearance (< 4.4 m)---[] [χ] GROSS--TONS Narrow [] One Lane Bridge [] - [] 2 AXLE -TONS 3 OR MORE AXLES--- TONS Other Signs or Plaques Span #4 over Sign Comments Regarding Any Problems With Signing RECOMMENDATIONS Install Post Load Limit Signs [Bridgerail Is Substandard [] Level Approach Approach Rail Is Substandard [] Install Paddleboard Signs [] Other Recommendations

FORM BIR 3.1

Rev. 3-1-97

| FORM BIR 3.2 P 7. 3-1-97 BRID 0081 | GE | LOC. | . NO | | 9- <u>140-500</u> (LOG km) DATE: |
|--|--------|--------|----------|--------|-------------------------------------|
| DECK | | | | | COMMENTS |
| WEARING SURFACE | G | E | P | С | |
| DECK - STRUCTURAL CONDITION | G | (F) | P | С | |
| CURBS | G | F | P - | C | |
| MEDIAN | G | F | P | C | |
| SIDEWALKS PARAPET | G G | F E | P P | C C | |
| RAILING | G | F | P | C | |
| PAINT | G | F | P | С | |
| DRAINS | G | F | Ð | С | 5topped-up 5pm 1, 3, 4, 5 10-A |
| LIGHTING STD'S | G | F | P | С | |
| UTILITIES | G | F | P | C | ~ 01 1 |
| JOINT LEAKAGE | G | Ē | P | C | @ Abots |
| EXPANSION JOINTS | G | F | Р | С | |
| SUPERSTRUCTURE | | | | | COMMENTS |
| BEARING DEVICES | G | F | P | С | |
| GPRDERS OF BEAMS | G | (F) | P | C | |
| FLOOR BEAMS | G | F | P | C | |
| STRINGERS | G G | F F | P P | C C | |
| DIAPHRAGMS BRACING | G | F | P | C | |
| TRUSSES - GENERAL | G | F | P | C | |
| - PORTALS | G | F | P | С | |
| - BRACING | G | F | P | С | |
| PAINT | G | F | P | C | |
| ALIGNMENT OF | (G) | F | P | С | |
| MEMBERS | | | | | |
| TEXTURE COAT | | | | | |
| CONDITION RATING | G | F (| (P) | С | FADING G F P C |
| OVERALL APPEARANCE | G | F (| D | С | NEEDS SPOT PAINTING? YES [X] NO [] |
| STAINING | G | F | P | C | NEEDS REPAINTING? YES [] NO [] |
| COMMENTS: Joy So | 20 / | ing | P | ورد در | ets SCALING G (F) P C |
| RECOMMENDATIONS | | | | | CLEAN & SEAL JOINTS [] |
| (069) Textur | ٤ | Coa | + | Pa | ropers All CLEAN DRAINS [X] |
| | | | | | |

-0082

| S | UΒ | S | TRU | CT | URE |
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| CAPS G BREASTWALL G WINGS G BACKWALL G | F P C | <u></u> _ | | |
|--|---|----------------------------|----------|------|
| PLUMB FOOTING G PILES EMBANKMENT BEARINGS SLOPE PAVING RIP RAP Forthquak Devices PIERS | PPPPPPPPPFFFFFFFFFFFFFFFFFFFFFFFFFFFFF | NIN | PILE(S) | BENT |
| CAPS G COLUMNS G PLUMB G FOOTINGS G PILES G BEARINGS G WEB G | F P (F P | | | |
| BENTS | | | | |
| CAPS G COLUMNS G PLUMB G FOOTINGS G PILES G BEARINGS G BRACING G | P P C F P C F P P C F P P C F P P C F P P C F P P C F P P C F P P C F P P C F P P C F P P C F P P C F P P P P | | | |
| | LES NEE | REPLACEMENT NO [X] YES [] | | |
| cu | T VEGET | ATION NO [X] YES [] | | |
| CI | EAR DRI | T NO [] YES [X] | | |
| RECOMMENDATIONS: | Pepair_ | Earthquake devices Ja | Dan #1 @ | Abut |
| | | | | |

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

FORM BIR 3.8 BRIDGE LOC. NO. $\frac{79}{\text{CO.}} = \frac{140}{\text{ROUTE}} = \frac{509 \, \text{R}}{\text{L.M.}} \left(\frac{1}{\text{LOG km}} \right)$ DATE: $\frac{9 - 16.99}{\text{CO.}} = \frac{140}{\text{ROUTE}} = \frac{140}{\text{L.M.}} = \frac{140}{\text$ P~v. 3-1-97 **1**508 STREAM CHANNEL DATA AND CONDITIONS STREAM CROSSING: WOLF RIVER Type of bed material? Sand-5: IT And Clay
Has the channel shifted? YES [] NO [] NOT APPARENT [X]
Condition of rip-rap? G F P C Est. % failed N/A []
Overall condition of channel? G F P C I. 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? Channel and bank stability conditions: (check if applicable) II. Steep bank - Failures upstream [] downstream [] conditions Moderate bank erosion [X] 3. Bank (a) low growth [X] (b) large timber [X]
Vegetation (c) dead trees [X] (d) clear banks []

4. Sediment or gravel accumulation: YES [] NO [X] UNKNOWN []

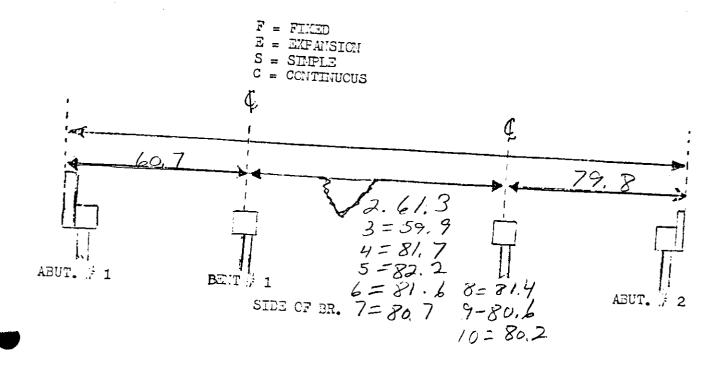
5. Channel altered or straightened: YES [] NO [X] UNKNOWN [] Stable conditions: (a) live growth $[\chi]$ (b) bedrock $[\]$ (c) boulders $[\]$ (d) flat slopes $[\]$ (<=2:1)III. Waterway adequacy and debris characteristics: (check if applicable) Bridge deck elevations: (a) level with approach roadway $\ldots \ldots \ldots \ldots \ldots$ (b) higher than approach roadway. [] (c) roadway approach >= 0.6 m above natural ground line. . [X] Indications that flood waters overtop bridge: NO [X] YES [] OCCASIONALLY [] FREQUENTLY [] UNKNOWN [] Debris characteristics: (a) debris present YES [X] NO [] (b) debris likely to accumulate: YES [X] NO [] (c) dead trees upstream: [X] or downstream: [X] IV. Comments: Large Drift on AT End of Bent SPECIAL INSPECTION DATA - FOR REASONS OTHER THAN FC OR SCOUR Does this bridge need a special inspection? YES [] NO [X] Reason for special inspection: II. NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2)

DECIMAL PLACES IN METERS.

BRIDGE NO. $\frac{79}{\text{CO}}$ $\frac{10040}{\text{ROUTE}}$ $\frac{0509}{\text{LM}}$ $\frac{\text{R}}{\text{R/L}}$

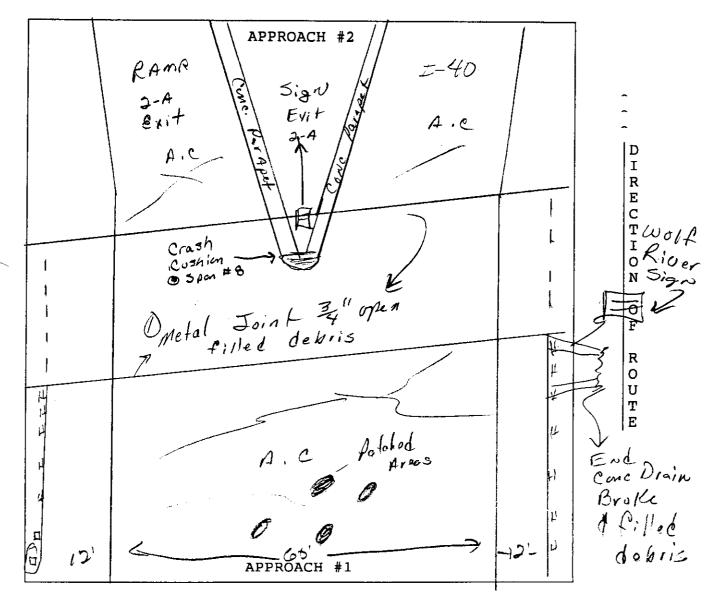
| This Bridge is in Fair Condition Approaches A.C. All Safety features |
|---|
| Approaches A.C. All Safety features |
| in place Approach #1 Drain Stopped-up |
| 1 N place. Approach #1 Drain Stopped-op A Consiste Broke. Top Deak & Concute |
| Parants no major proplem Drains |
| Stopped-up Spons 1, 3, 4, 5 & 10-A. Substructure |
| Concrete with no major problems. Carthooke |
| devices are broke Loose at Abut #1@ |
| Beam D&G. Superstructure Concrete with no major problems, Large Drift |
| with no major problems, Large Drift |
| Right Side Bents 485, No problem |
| with Scour at this time Can not hit |
| Footing |
| |
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DIR. OF ROUTE

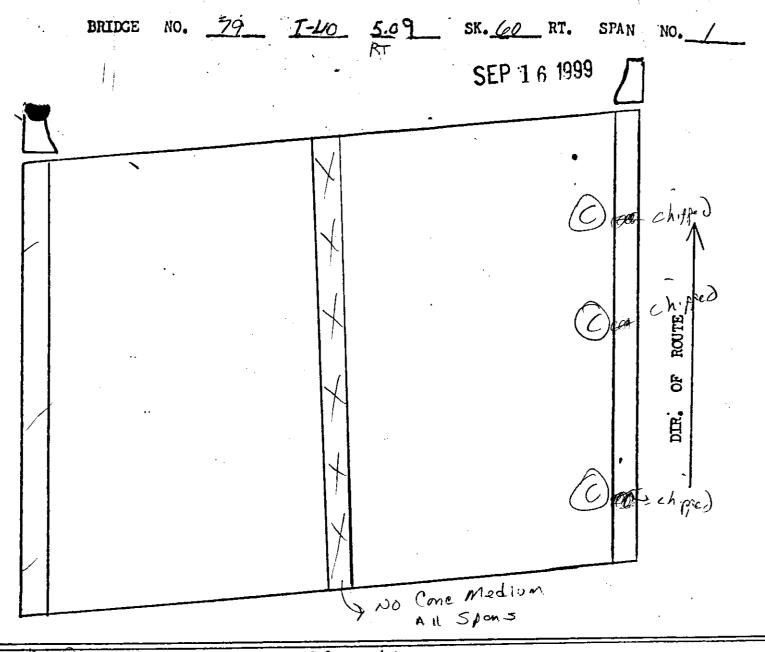


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60 SKEW DATE: SEP 1 6 1999



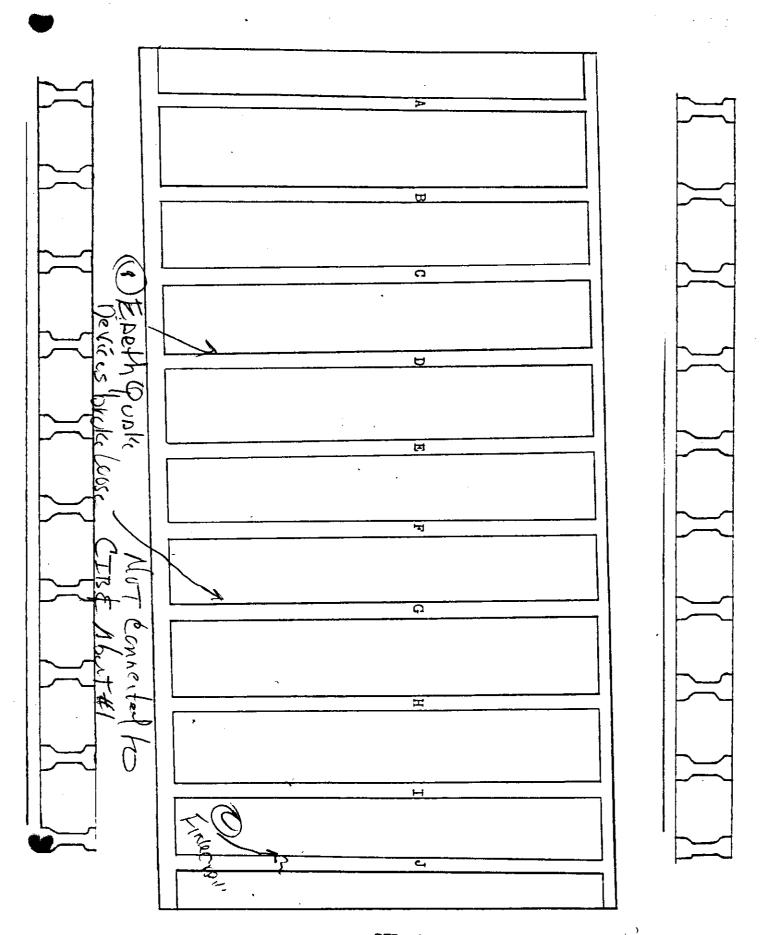
| ELEMENT | RATING | COMMENTS |
|--|-----------|------------------------------|
| ALIGNMENT | G F P C | fatored trees |
| APPROACH PAVEMENT | G (F) P C | Fine Crocks/Traffic Abra |
| APPROACH SLAB | G F P C | NIV |
| APPROACH GUARDRAIL Conc Parapet EMBANKMENT | G F P C | fine Cracks Appa # |
| DRAINS | G F P C | Broke / Stopped-up Rt Appe#1 |
| APPROACH JOINT | G F P C | See (1) |
| SIGNS | GFPC | Wolf River Sign |



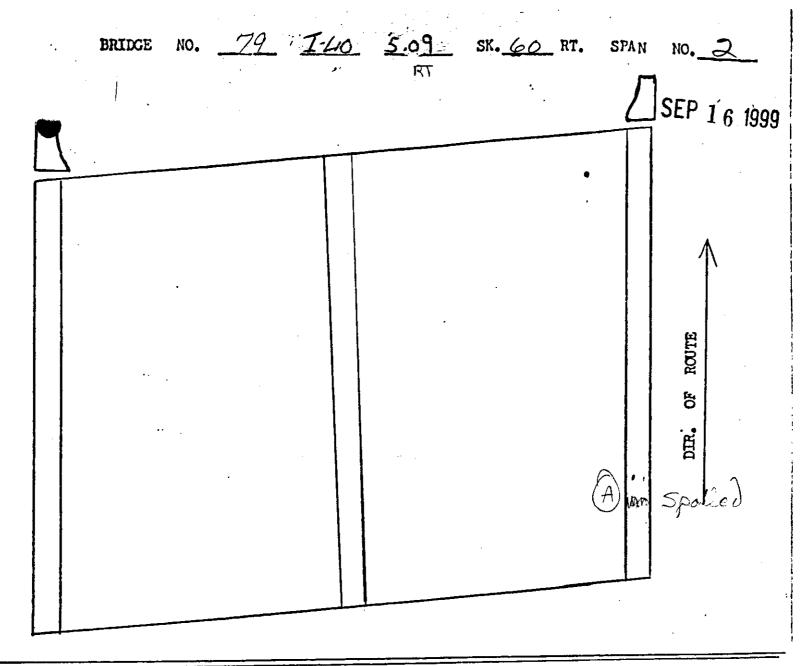
| CE | G F P C | Top Deck-Traffie Abra |
|---------|---------|---------------------------|
| PET | G F P C | Parajet - Chipper Paras (|
| NS . | G F D C | Drain - No Fraid |
| T ID | G F P C | |
| | | : : |
| • | | · · · · · · |
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| | | BRIDGE NO. 79 7-40 5.09 |
|-------------|----------|-------------------------|
| BENT NO. | SPAN NO. | ABT. NO PIER NO |
| ELEMENT . | RATING | COMMENTS |
| BOTTOM DECK | GFPC | acue Ponde |
| | | |
| DIA. | GFPC | NONE |
| CONC. I. B. | | |
| A B | G F P C | |
| C D | G F P C | |
| E F | GFPC | |
| G H | GFPC | |
| I J | G(F)PC | SECH(2) |
| BACKWALLS | G∕F)P C | FINE CRACKS |
| Eseth Quoke | 6FA | SEE#1 |
|) | | |
| | | |
| | <u> </u> | |

SEP 1 6 1999



DIR, OF ROUTE



| CE | GFPC | Normal Traffic Abr. |
|-----------------|---------|---------------------|
| PET | G F P C | Fine Cracked |
| NS | G P C | Light Dalonis |
| T | GFPC | |
| R D L | GFPC | |
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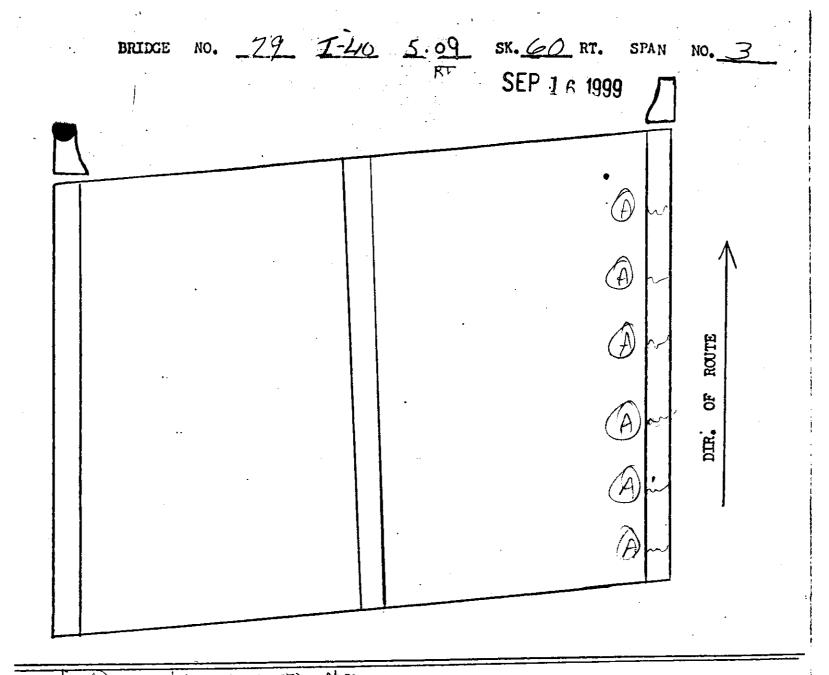
| | ŕ | BRIDGE NO. 79 I-40 5.09 |
|-------------|-----------|-------------------------|
| BENT NO | SPAN NO. | |
| ELEMENT | FATING | COMMENTS |
| BOTTOM DECK | € F P C | |
| DIA. | GFPC | |
| CONC. I. B. | (FPC | |
| C D | G/F) P C | FINECUA-12 |
| E F | (G) F P C | |
| G H | G F P C | |
| ΙJ | OFF C | |
| BACKWALLS | GF P C | |
| | | |
| | | |

BR. NO. 79 T-40 5.09 SK. SPAN NO. 2
SEP 16 1999

Five mens

DIR. OF ROUTE

(



| CE | G (F) P C | Normal liptric Horn | ļ |
|-------------------------|-----------|---------------------|---|
| PET | G F P C | FINE CHACKS (A) | |
| ens . | G F P C | STOPPED UP | |
| i T .RD .L | G F P C | | |
| | | | . |
| | | | |
| | | | |

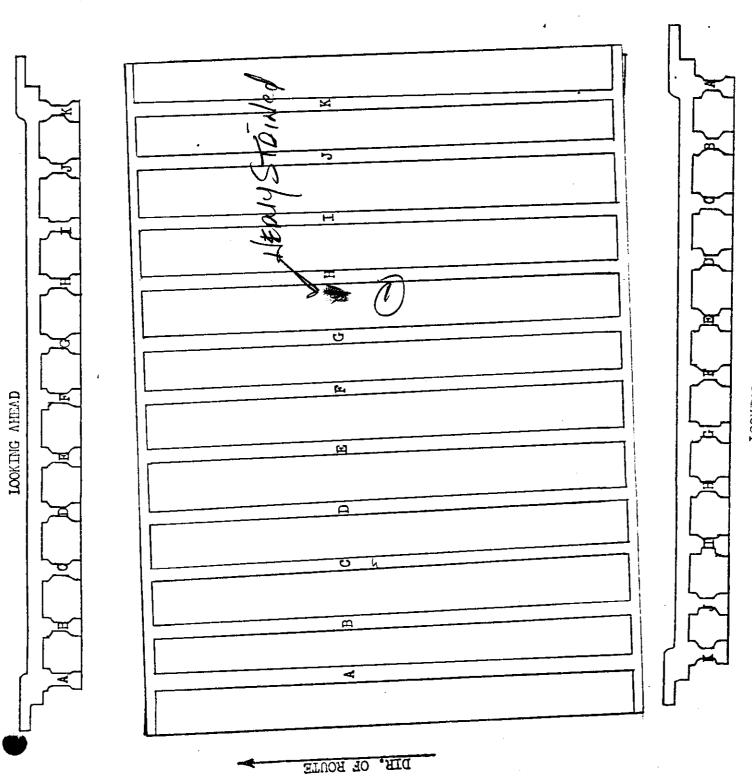
| BRIDGE | NO. | 79 I-40 | 5.00 | Ŧ |
|--------|-----|---------|------|---|
| | | | | |

| BENT NO | SPAN NO. | 3 ABT. NO PIER NO |
|----------------|--------------|-------------------|
| ELEMENT | PATING | COMMENTS |
| BOTTOM DECK | FP C | SEF#1 |
| CONC. I. BEAMS | | |
| A | GFPC | |
| В | G F P C | |
| C | & F P C | |
| מ | SFPC | |
| E | GFPC | |
| . F | FPC | |
| G | S FPC | |
| Н | F FPC | · |
| I | EFPC | |
| J | AFPC | |
| ĸ | OF P.C | |
| DIA. | GFPC | |
| BACKWALLS | FPC | |
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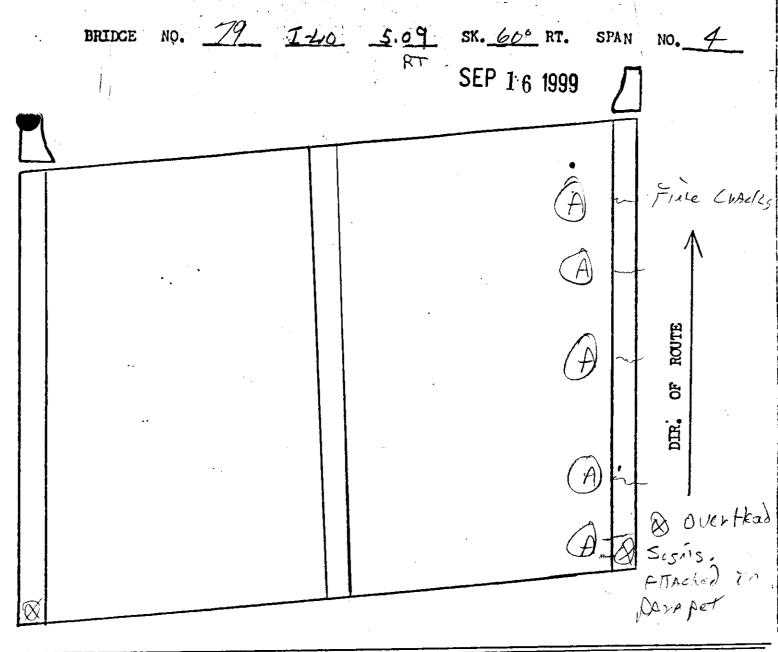
BR. NO. 79 I-40 5.09 SK. 60° KT

SPAN NO. 3

SEP 1 6 1999



LOOPING BACK



| Ł | <u> </u> | | | Mary Je |
|--------------|----------|-----------------------------|--------|---------|
| CE | G F P C | Normal Traffic Abra. | | : |
| PET | G F P C | Fine Conces A STOPPED UP | | |
| NS | G F D C | STOPPED UP | | |
| T RD L | G F P C | | | : |
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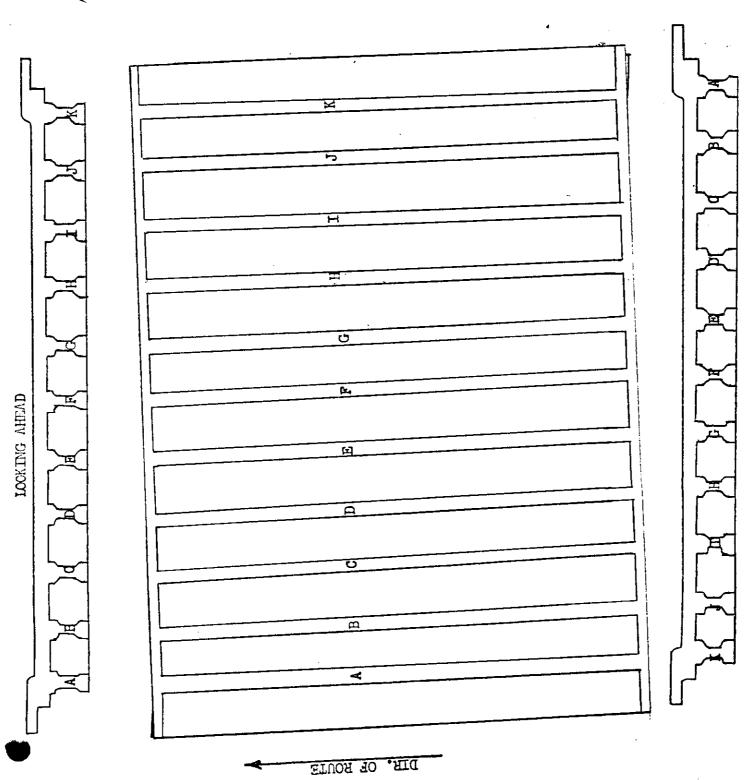
BRIDGE NO. 79 T-40 5.09

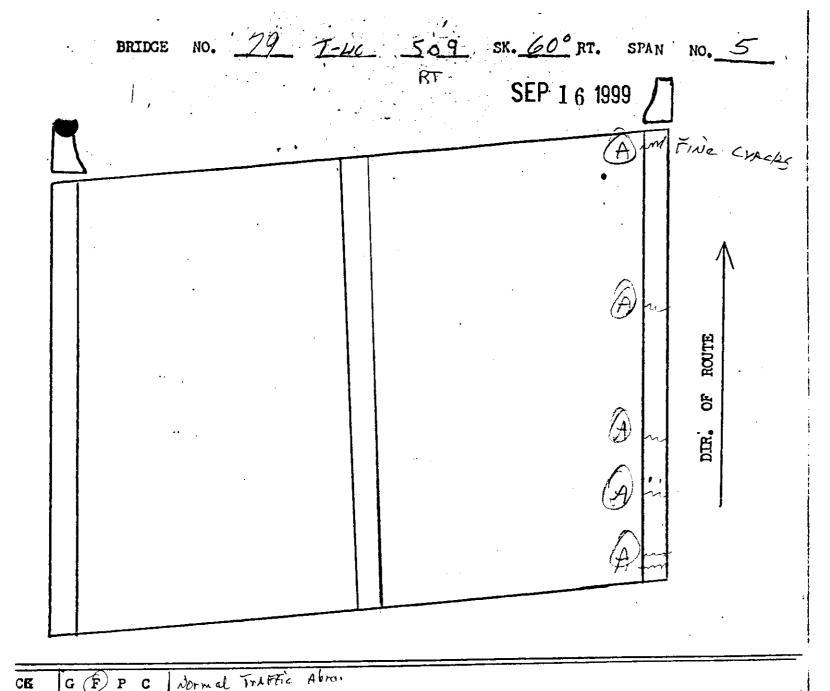
| BENT NO | SPAN NO. | ABT. NO PIER NO |
|---------------------------------------|--------------|-----------------|
| | | , |
| ELEMENT | PATING | COMMENTS |
| BOTTOM DECK | G F P C | |
| | | |
| | | |
| CONC. I. BEAMS | | |
| A | G FPC | |
| В | © F P C | |
| C | G FPC | |
| ת | GFPC | |
| E | GFPC | · |
| F | G F P C | |
| G | (G) F P C | |
| Н | F P C | |
| I | GFPC | |
| Ĵ | GFPC | |
| к | ØF P C | |
| DIA. | GFPC | |
| BACKWALLS | GFPC | |
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BR. NO. 79 7-46 5.09 SK. 66° SPAN NO. 4

SEP 1 6 1999







| CID | G (F) F C | NOT M ac 11711- |
|------|-----------|------------------|
| PET | G F P C | Fine Cracles (A) |
| NS . | G F P C | - Topped 17f. |
| T | GFPC | |
| .10 | GFPC | |
| دا | | |
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BRIDGE NO. 79 T-10 5.09 BENT NO. ____ SPAN NO. ___ PIER NO. ____ COMMENTS PATING ELEMENT BOTTOM DECK G)FPC CONC. I. BEAMS GFPC GFPC GFPC Ç GFPC D FF PC GFPC F GFPC G **GFPC** H FPC I CFPC GFPC F P C L M GFPC DIA. (GFPC BACKWALLS

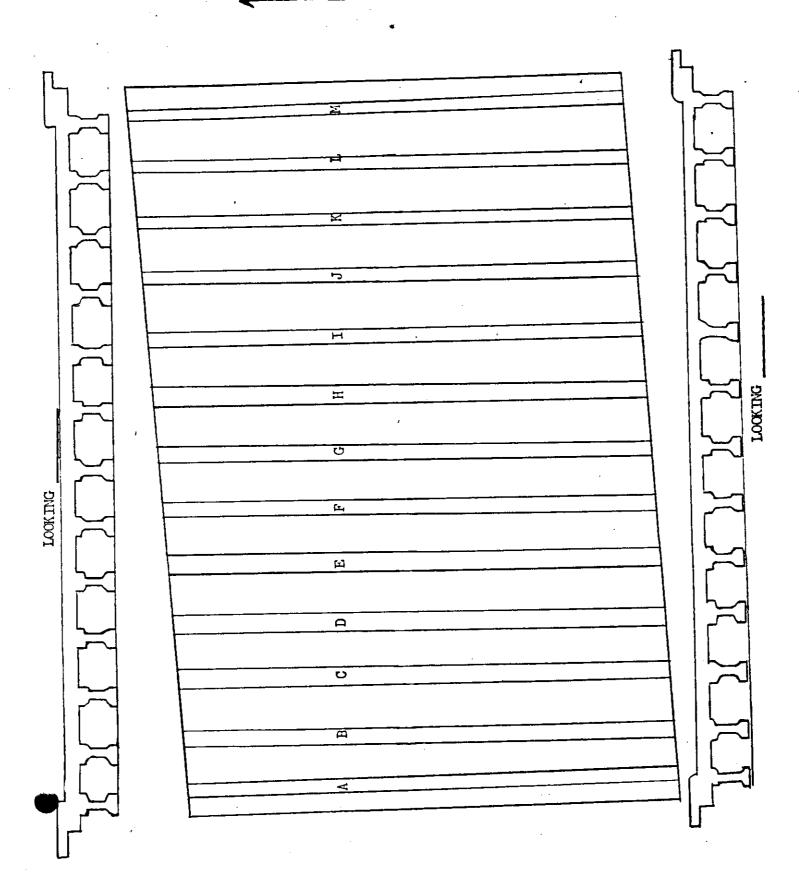
BR. NO. 79 140 5.09 SK

. SPAN NO. 5

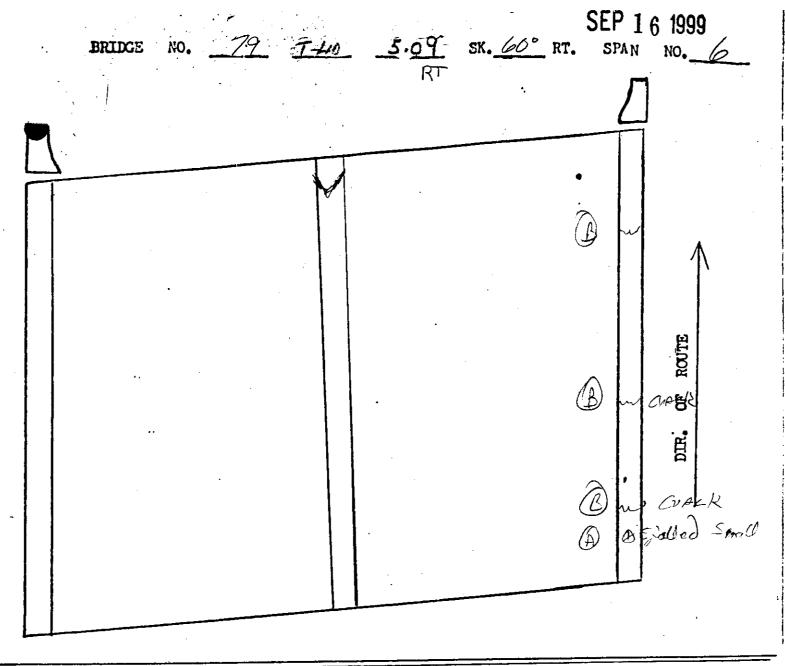
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SEP 16 1999

DIR. OF ROUTE



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| CE | G P C | Dormal Traffic Abra |
|---------------|---------|-----------------------|
| PET | G F P C | Fine Cypeks & Spolled |
| NS . | G F P C | |
| IT RD L | G F P C | |
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| | | |

BRIDGE NO. 79 T-40 5.09

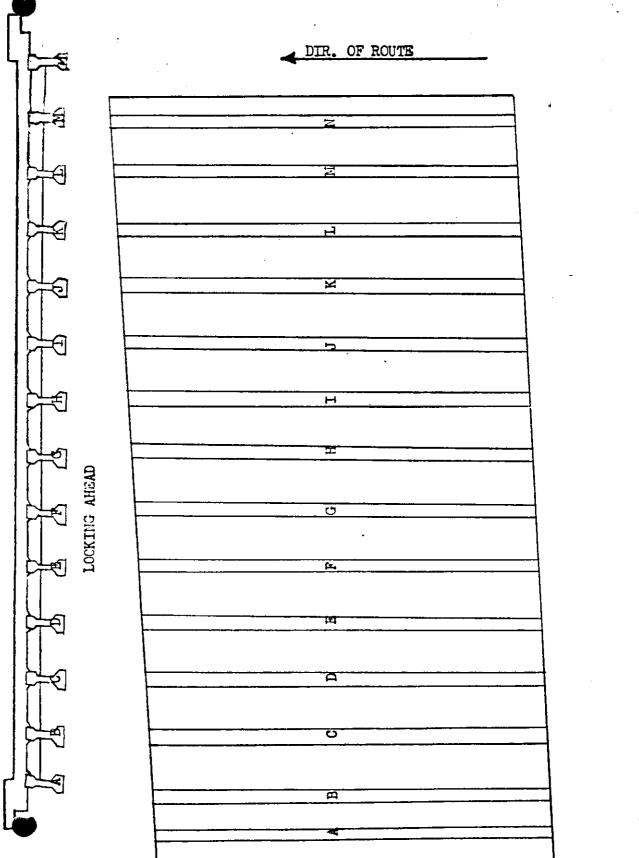
| BENT NO. | SPAN NO. | <u>6</u> A | et. no | PIER NO. |
|---------------|--------------|------------|--------|---------------------------------------|
| ELEMENT | PATING | | | COMMENTS |
| BOTTOM DECK | (GFPC | | | |
| CONC. I. BEAM | | | | |
| A | Ø F P C | | | |
| В | G FPC | | | |
| С | G FPC | | | ! |
| ם | & F P C | | | |
| E | GFPC | | | |
| F | (G, F P C | | | |
| G | (G) F P C | | | |
| н | 0G F P C | | | |
| I | (G) F P C | | | |
| J | _ | | | • |
| К | G FPC | | | |
| L | G F P C | | | |
| М | & F P C | | | |
| N | GFPC | | | |
| BACKWALLS | GFPC | | | |
| DTA | GFPC | | | |
| <u> </u> | <u> </u> | | | |
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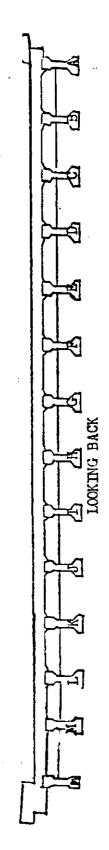
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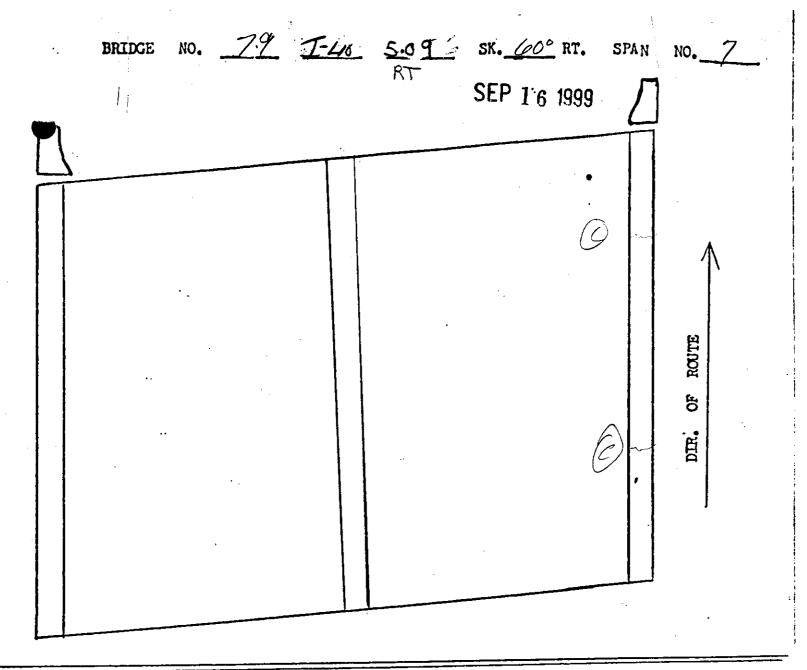
BRIDGE !'O. 79 1-40 5.09

SPAN NO. 60°Rt.

SEP 1 6 1999



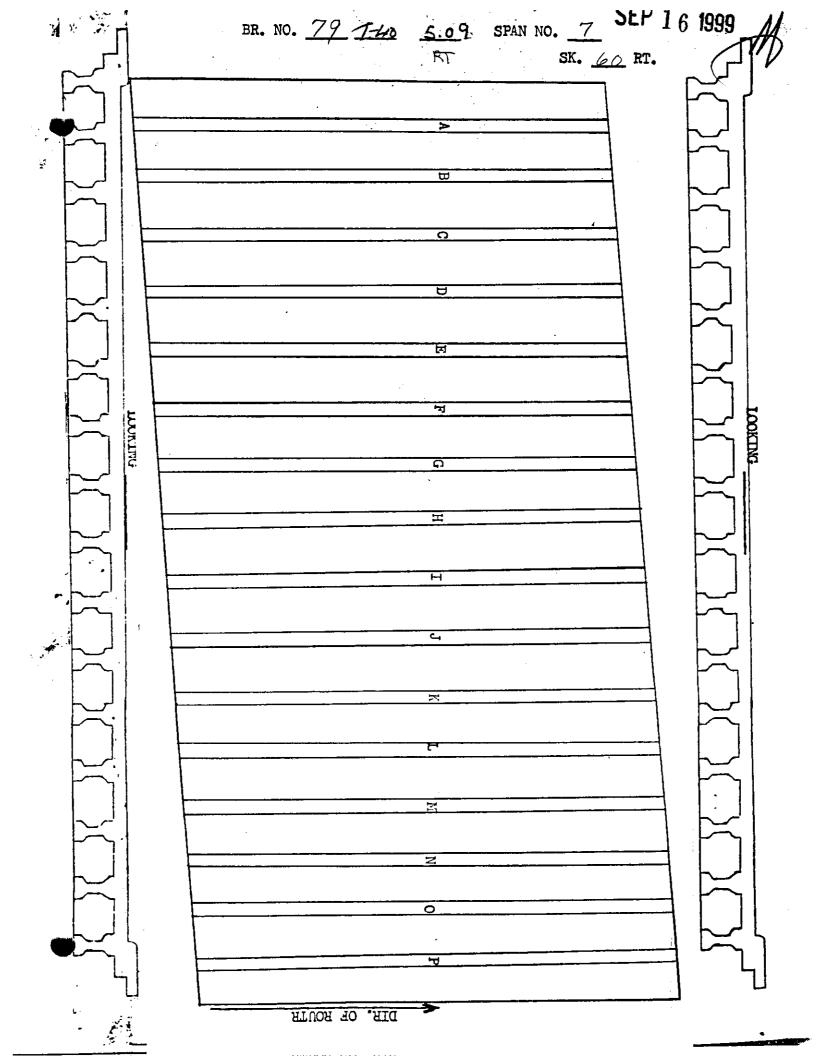


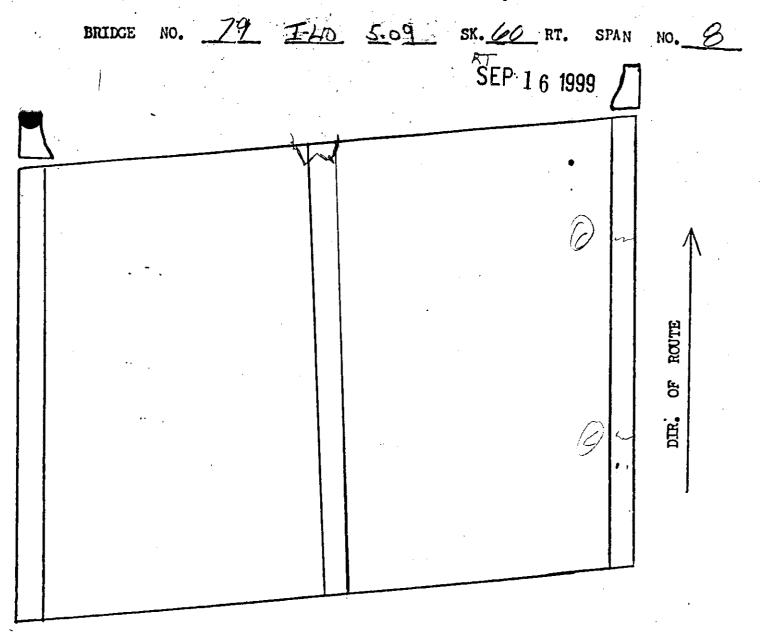


| ECE | G F P | С | Normal Traffic Abra |
|-----------|--------|---|---------------------|
| \PET | G FP | C | Small Cracks 6 |
| ins . | G F P | C | |
| ∤T | GFP | C | |
| .RD _L | GFP | C | |
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| | l A | | |
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BRIDGE NO. 79 1-40 5.09

| SPAN NO. | 7 ABT. NO. PIER NO |
|----------|---|
| RATING | COMMENTS |
| (G)FPC | |
| | |
| OFF C | |
| GFPC | |
| | |
| GFPC | |
| GFPC | |
| | |
| (G F P C | |
| GFPC | |
| | |
| GFPC | |
| GFPC | |
| | |
| GFPC | |
| GFPC | |
| | |
| 7 FPC | |
| | |
| © F P C | |
| GFPC | |
| | GFPC GFPC GFPC GFPC GFPC GFPC GFPC GFPC |





CE G P C Normal Traffic Abra

PET G P C Small Cradis

NS G P P C

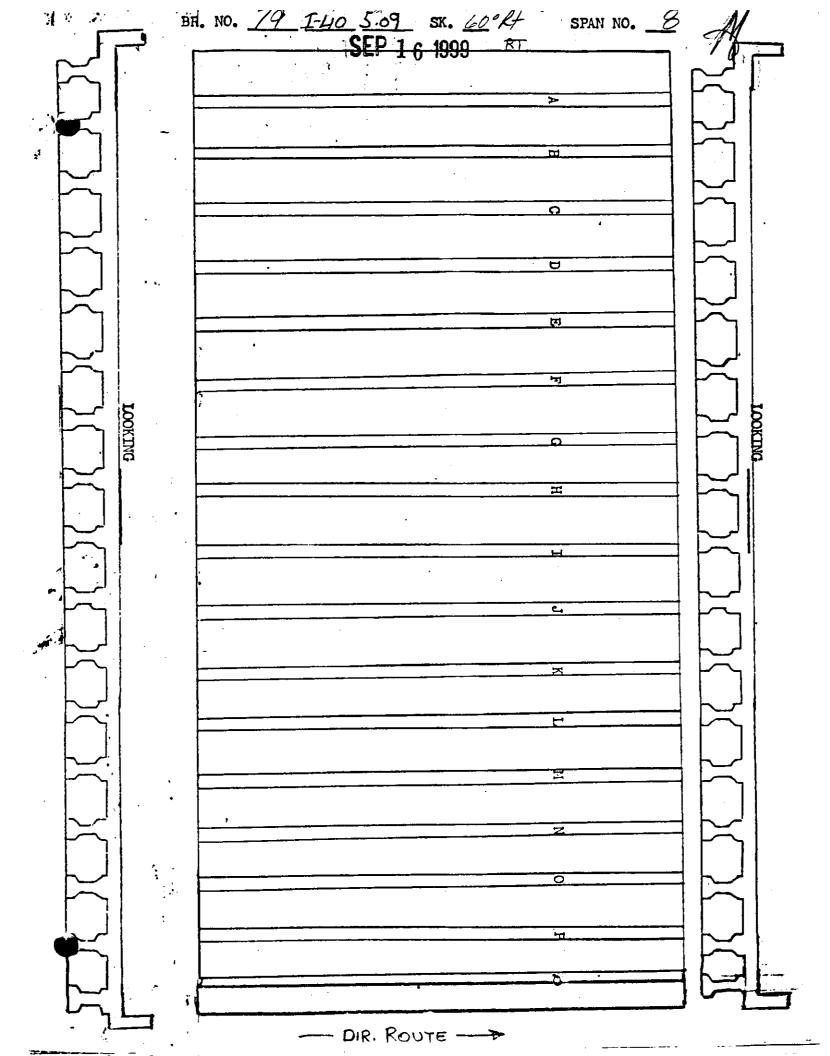
T G F P C

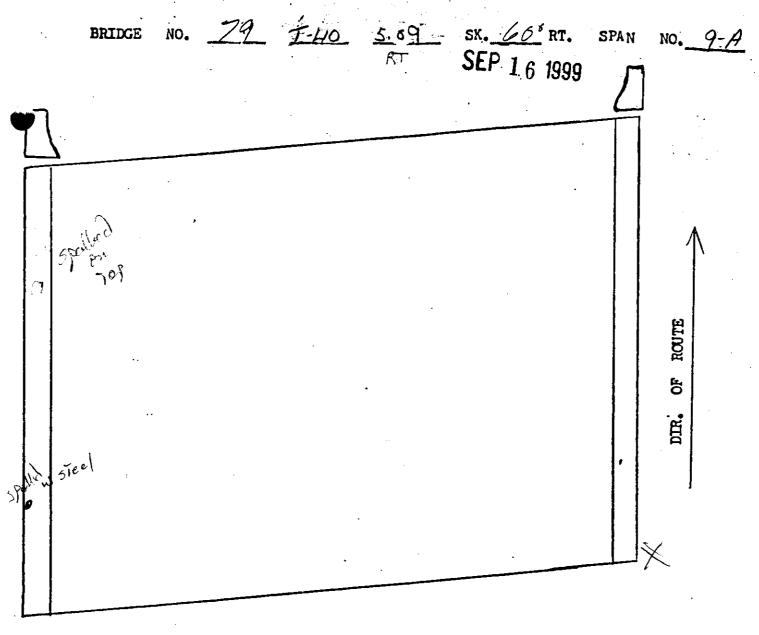
RD G F P C

L

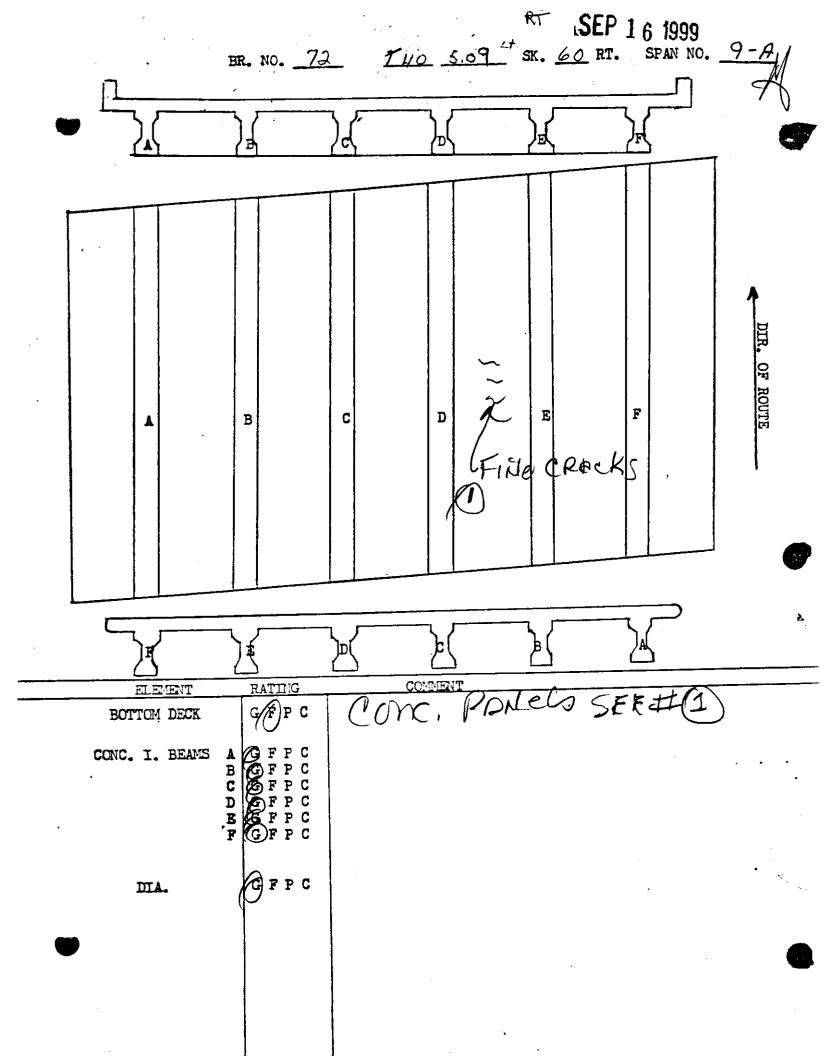
BRIDGE NO. 79 T-40 5.09

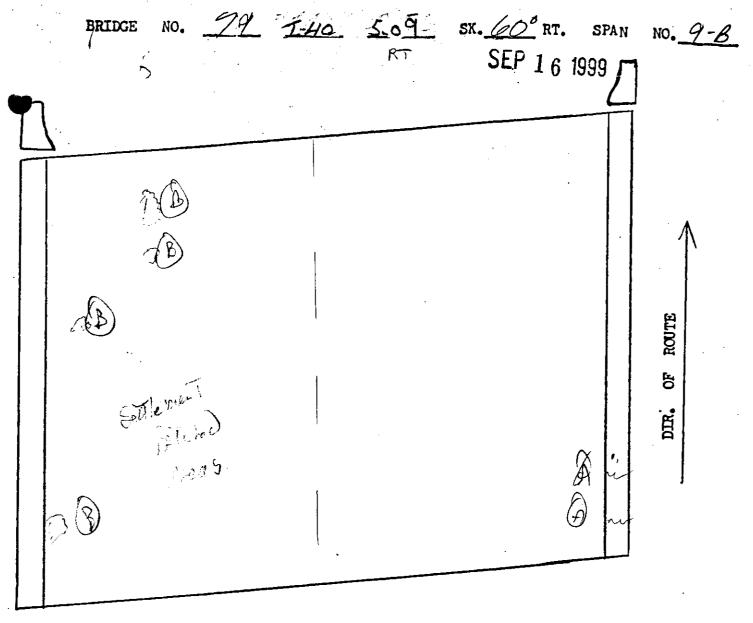
| BENT NO | SPAN NO. | ABT. NO | |
|----------------|----------------|---------|-------------|
| | t | | |
| ELEMENT | RATING | | COMMENTS |
| BOTTOM DECK | F P C | | |
| CONC. I. BEAMS | | | |
| A B C | G F P C | | |
| | GFPC | | |
| | | | |
| D E F | /G F P C | | |
| | GFPC | | |
| | ì | | |
| GHI. | G F P C | | |
| | GFPC | | |
| | | | |
| J K L | Ø F P C | | |
| | GFPC | | |
| | | | |
| M N O | OFPC | | |
| | GFPC | | |
| | | | |
| P - Q | ØFPC | | |
| | | | |
| BACKWALLS | G) F P C | | |
| DIA. | GFPC | | |
| | | | |





| DECK | G F P C | Jornal Traffic Abras |
|------|---------|--|
| APET | GFP C | Jornal Traffic Abras pulled w STeel (Small) + Spalled Top |
| INS | GFPC | |
| INT. | G F P C | |
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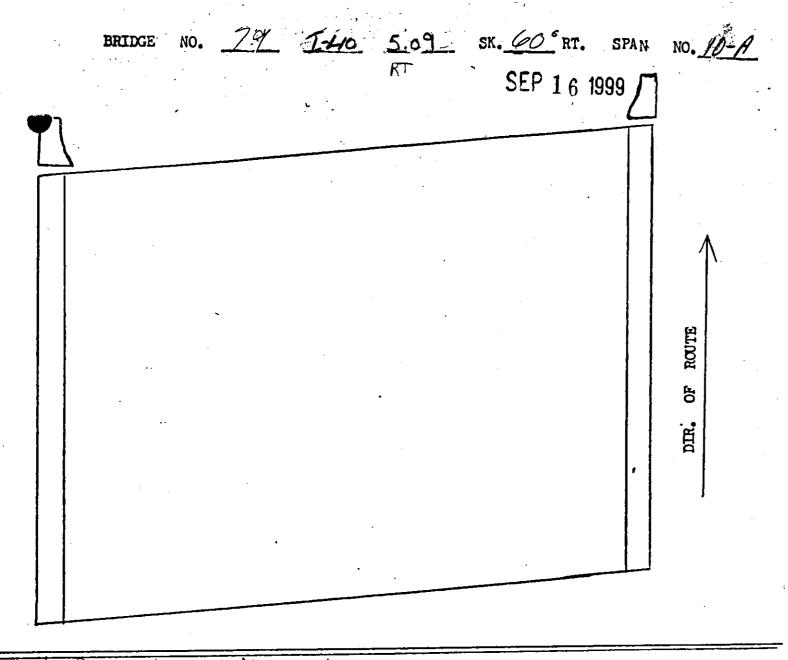
| ECK | G F P | С | Settlement forched frees (B) | | | · · |
|-----------|-------|---|------------------------------|-----------|---|---------|
| apet | G P | С | Five Cracks (B) | <i>*•</i> | | |
| .INS | G P | | | | | |
| NT | G F P | C | | | | : |
| • • | | | , | | | |
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BRIDGE NO. 79 1-40 5.09

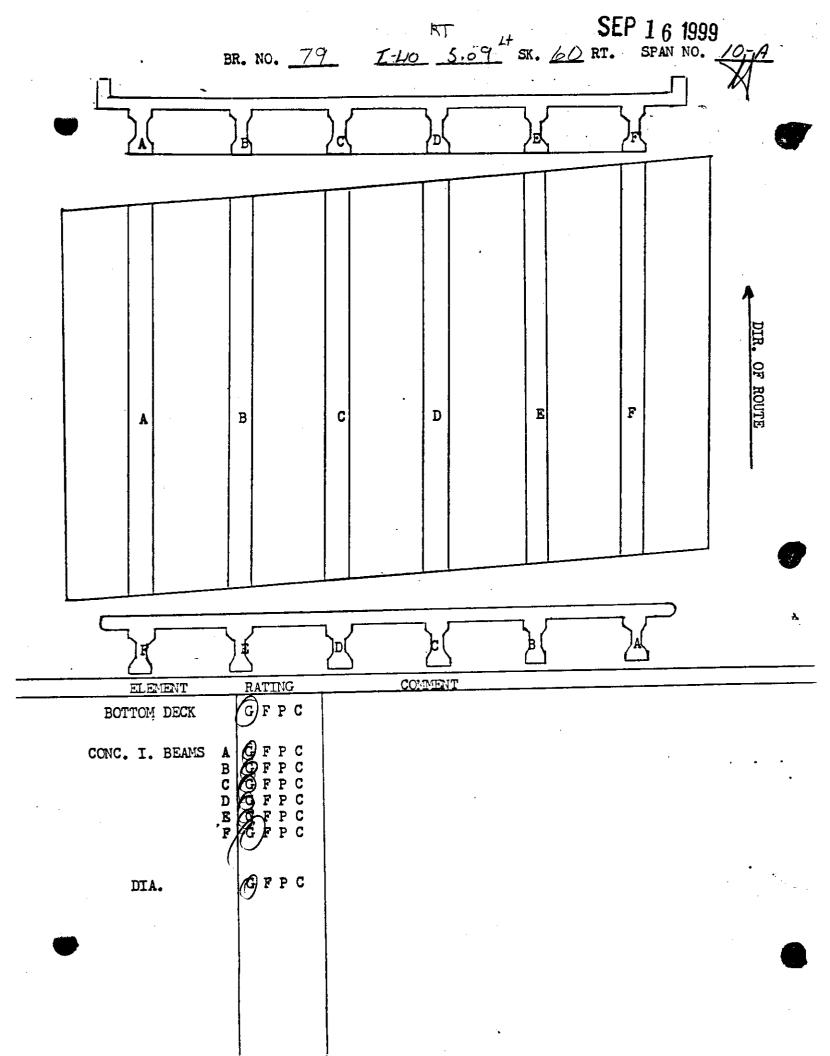
| BENT NO | SPAN NO. | 9-B ABT. NO PIER NO |
|----------------|------------------------|---------------------|
| ELEMENT | PATING | COMMENTS |
| BOTTOM DECK | G F P C | Conc. Pouels |
| CONC. I . BEAM | | |
| | B G F P C C G F P C | |
| | D FPC | |
| 4444 | E GFPC | |
| | FFC | |
| | G F P C | |
| | H GFPC | |
| | 1/(0)1-1-0 | |
| | | |
| DIA. | GFPC | |
| | | |
| BACKWALLS. | GFPC | |
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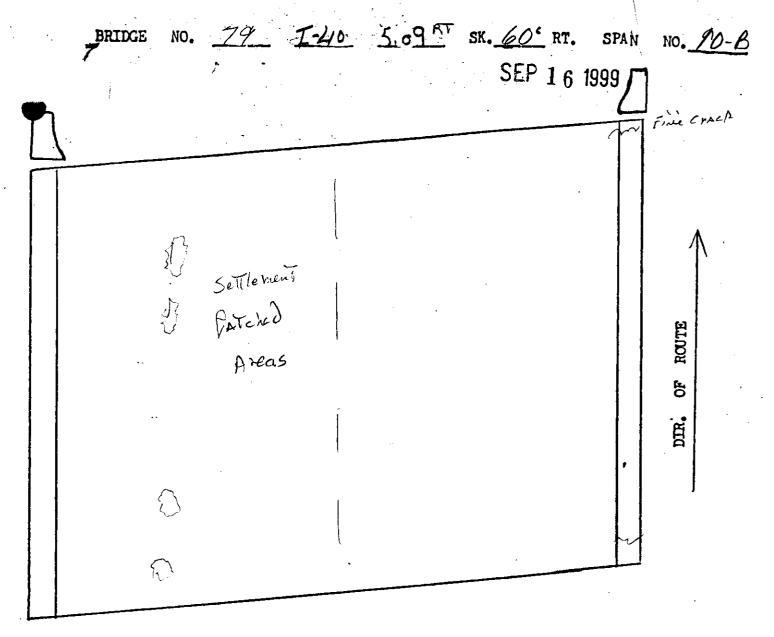
Rt. lamp

SEP 1 6 1999 BR. NO. 79 Tuo 5.09 RT DIR. OF ROUTE ਲ [z, IN OOCH TUNAS Le FT LOOKING LOOKING υ Д



| ECK | G F P C | Normal Traffic Abra. |
|------------|---------|----------------------|
| LAPET | G F P C | |
| INS | G F P C | De prin Etopped ut |
| NT. | GFPC | |
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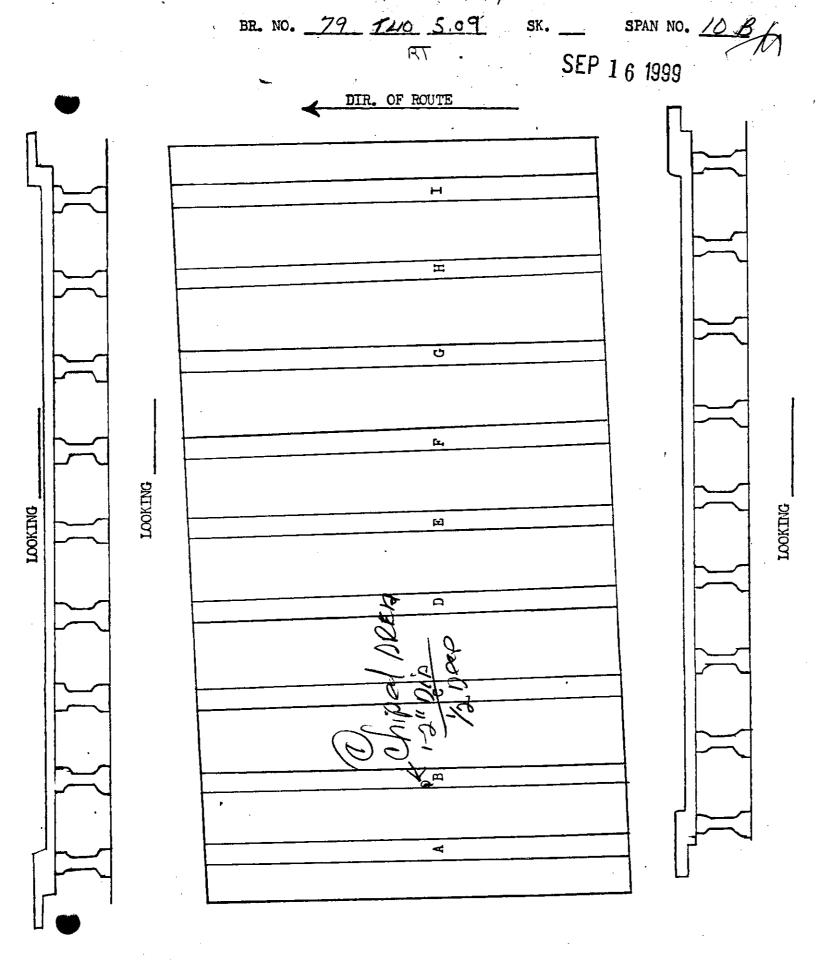


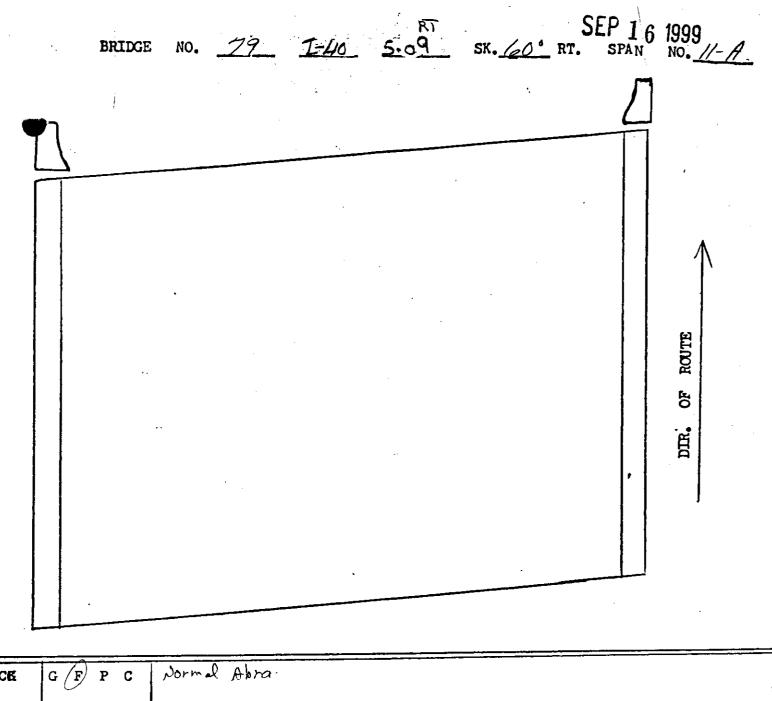


| ECE | G (1 |) : | P | C | Nor | mal | Abra | - 51 | Tleman | Potched | ALCON | | | | | | : |
|-------|------|------|---|---|------|-------|--------|------|--------|---------|-------|---|---|---|---|---|---|
| APET | G (I | | P | C | Fine | · CHD | -دایدی | | | | | : | | | | | |
| INS . | G (1 |) : | P | C | | | | | | | | | | | | | |
| NT | G I | ָר ק | P | C | | | | | | | | | | | | | : |
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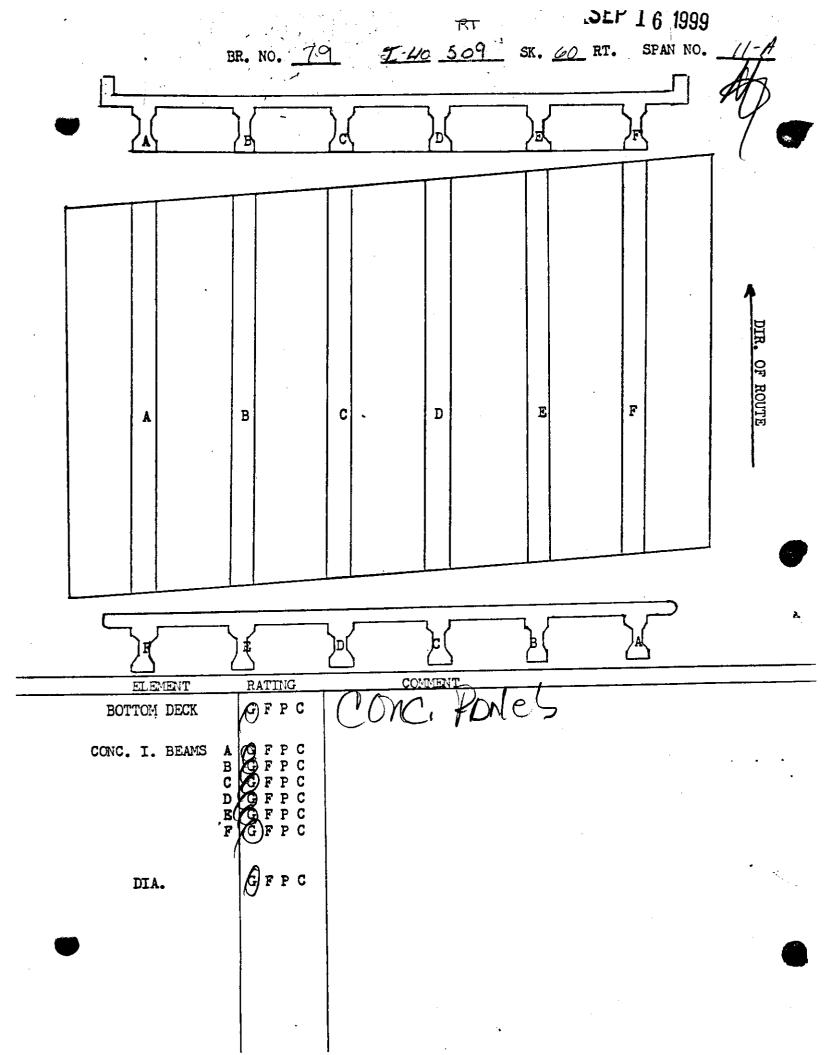
| BRIDGE | NO. | 79 | I-40 | 5.09 |
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|--------|-----|----|------|------|

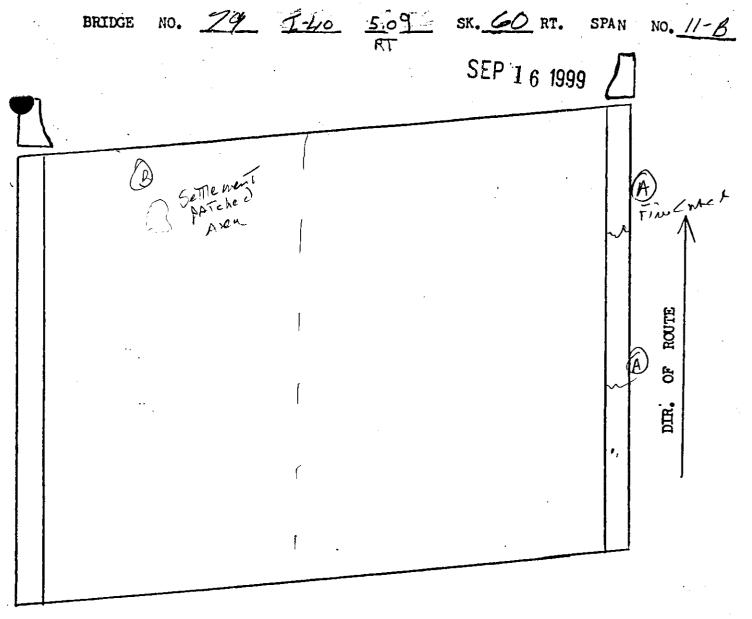
| BENT NO. | SPAN NO. | 10-B ABT. NO PIER NO |
|----------------|------------------|----------------------|
| ELEMENT | PATING | COMMENTS |
| BOTTOM DECK | GFPC | |
| CONC. I . BEAM | A GFPC B CFPC | SEE HO |
| į. | C GFPC | |
| | E GFPC F GFPC | |
| | G GFPC H GFPC | |
| _ | IGFPC | |
| DIA. | G P P C | |
| BACKWALLS. | GFPC | |
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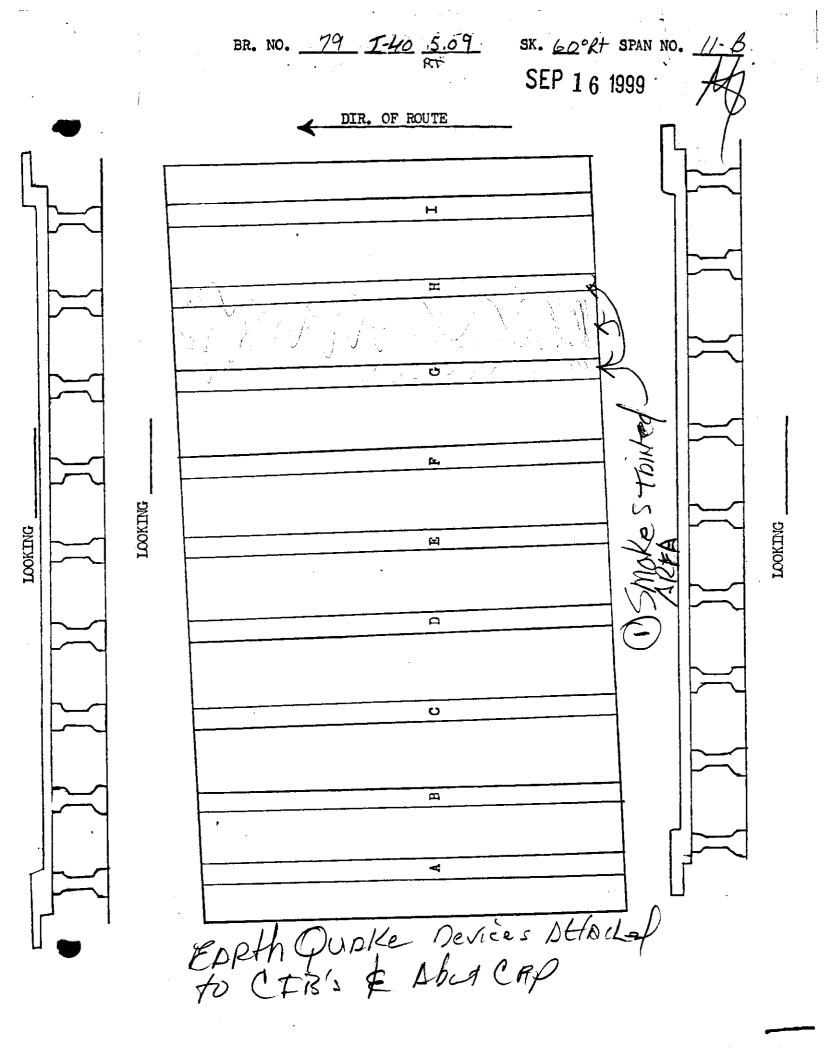
| ECE | G (F) | P | С | Normal Abra. |
|--------------|-------|---|----|--------------|
| a pet | G (F) | P | C | |
| LINS | G F | P | C | |
| NT | G F | P | C | |
| • • | | | | , |
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| ECK | G F P | С | SeTTlement Arched Area (F) Traff | Fic Abr. Normal | · |
|------|-------|---|---|-----------------|---|
| APET | G F P | C | Settlement Atched Area (Traff Fine Charle A) | <i>t</i> • | |
| | (1) | C | | | |
| NT | G F P | C | | | : |
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BRIDGE NO. 19 T-40 5.09 RT BENT NO. _____ SPAN NO. ____ PIER NO. ____ COMMENTS ELEMENT PATING **G**FPC BOTTOM DECK 6 FPC CONC. I . BEAM A C) FPC BFPC FFC GFPC F @FPC SFEHD G P C SERHO G P C **O**FPC GFPC DIA. G F P C BACKWALLS.



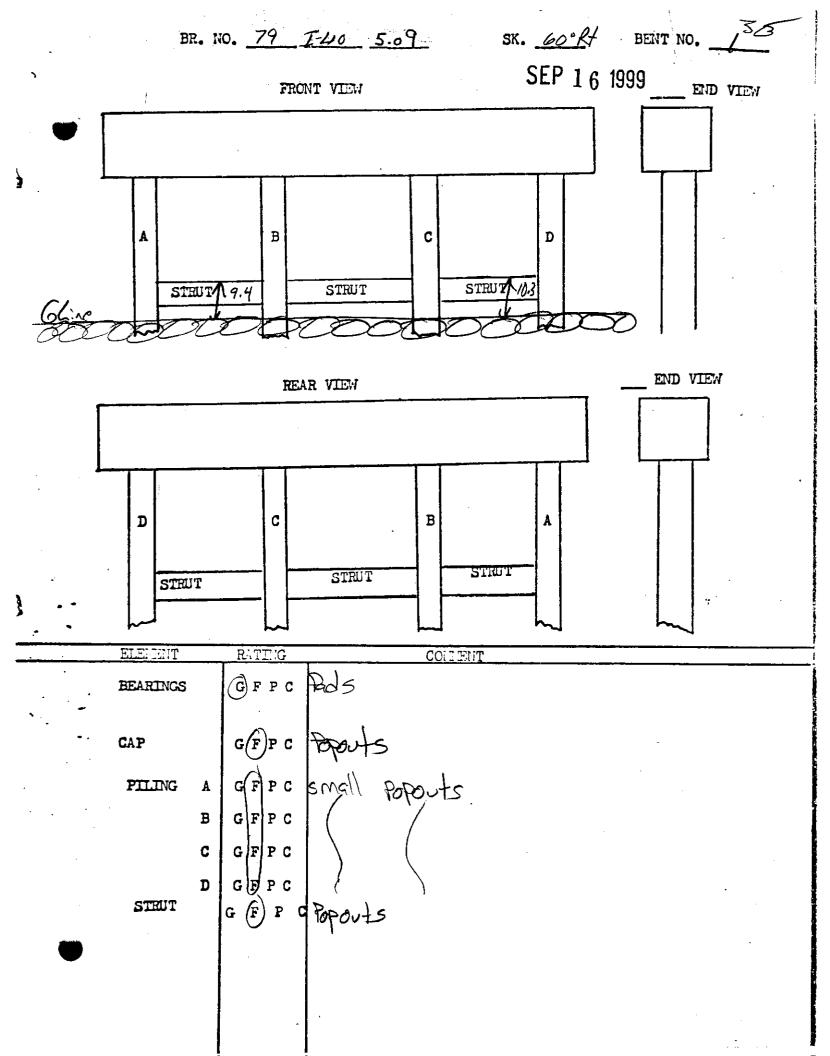
BRIDGE NO 79 1-46. 5.09

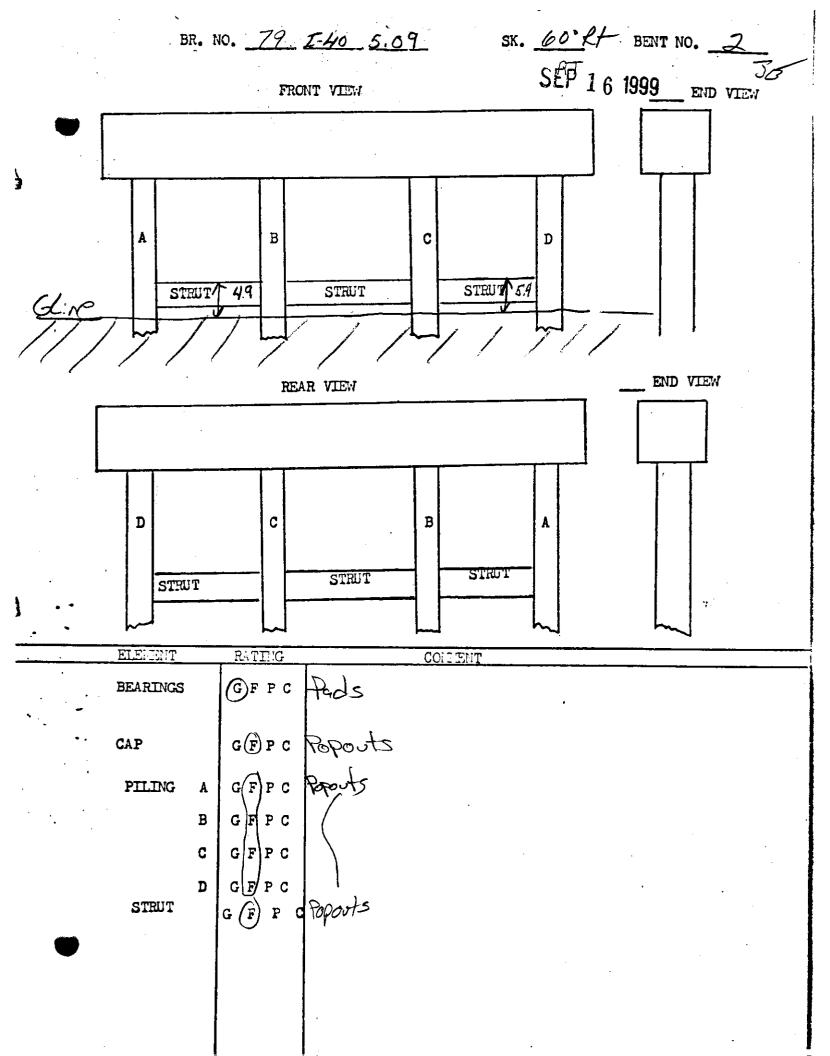
SEP 16 1999 RT

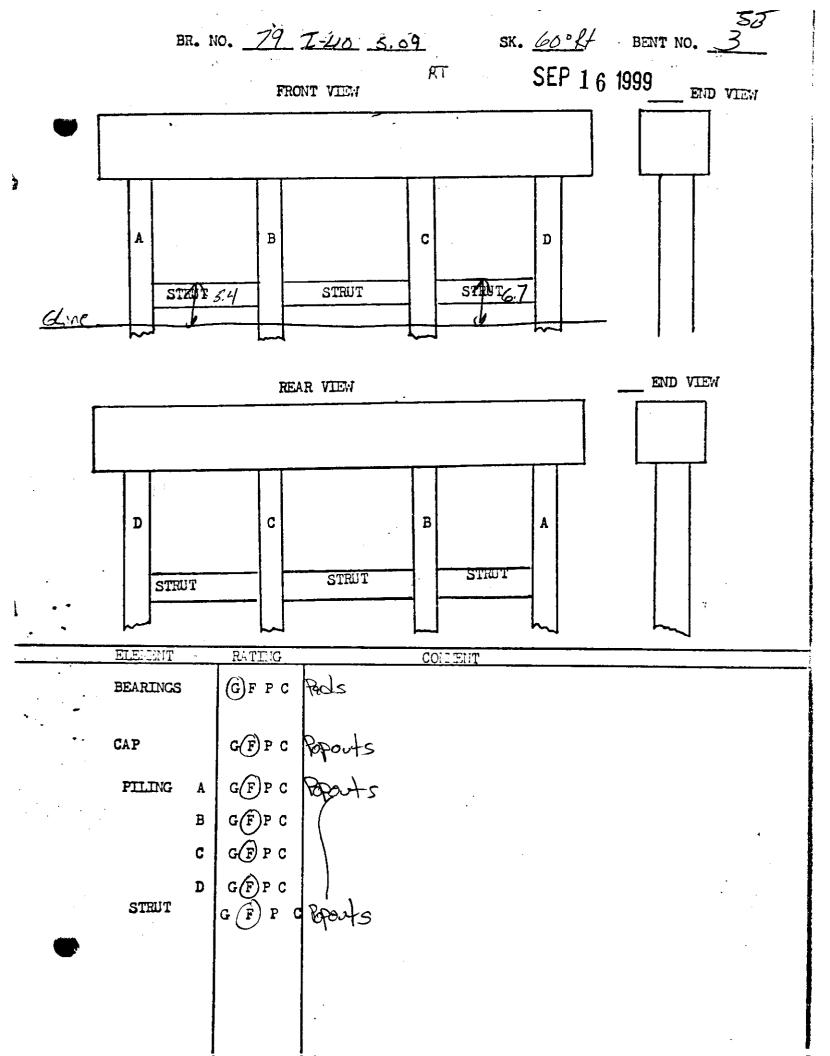
LOOKING Back

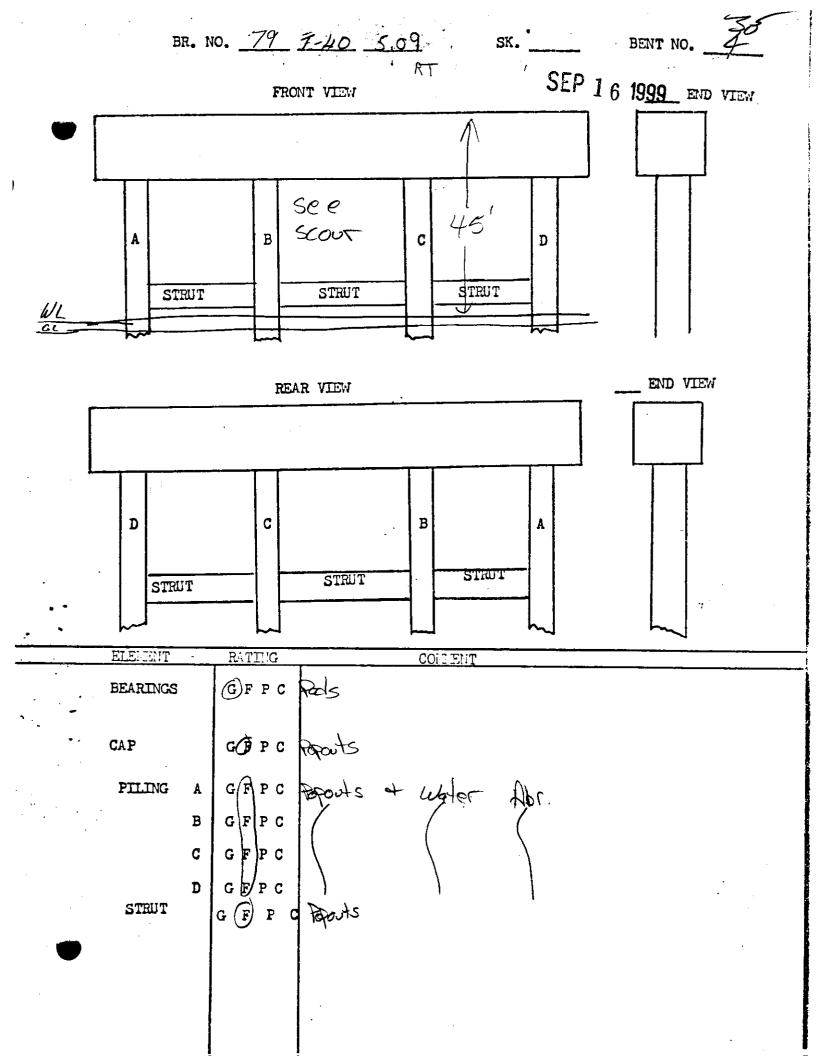
_____VIEW

| ELEMENT | RATING | COMMENT |
|--------------------|--------------|-----------------------|
| BEARING CAP | G F P C | Peds Popouts |
| WINGS MBANKMENT | GPPC GFPC | 8ports |
| OPAVEMENT | G F P C | none summer Growth |
| VEG. | G (F) P C | Summer Growth |
| • | , | |
| | | |
| | | |



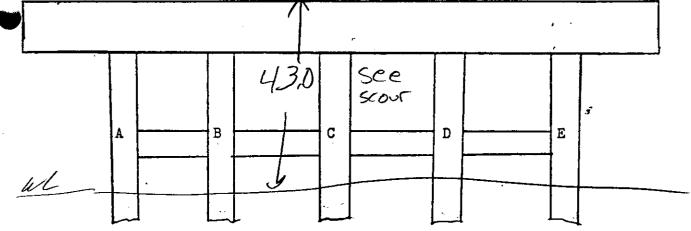


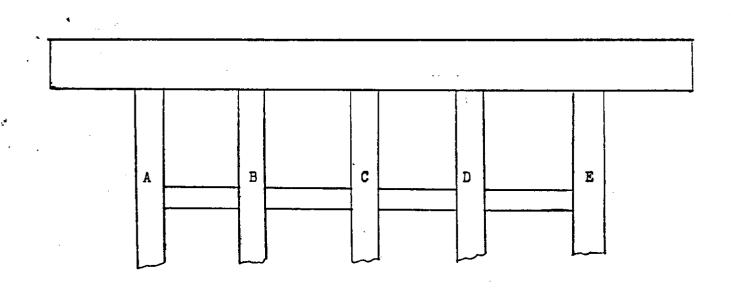




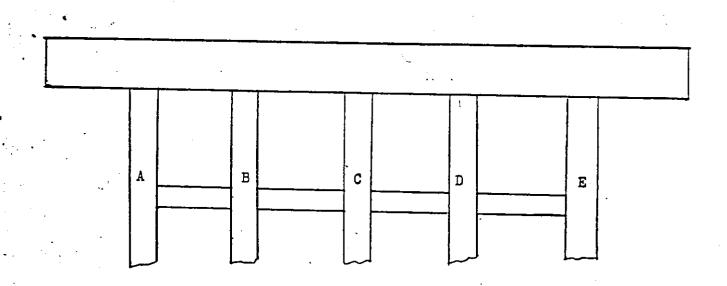
BRIDGE NO. 79 1-40 5.09 MT

BENT NO. 5





| ELEMENT | RATINGS | COMMENT | |
|--------------------|--------------------|--------------------|--|
| CAP COLUMN A-E | GPPC GPPC | Boots + Water Abr. | |
| • | G F P C G F P C | | |
| BFARINGS SIMUTS | GFPC GFPC | Rads Reports | |
| 3 | | | |

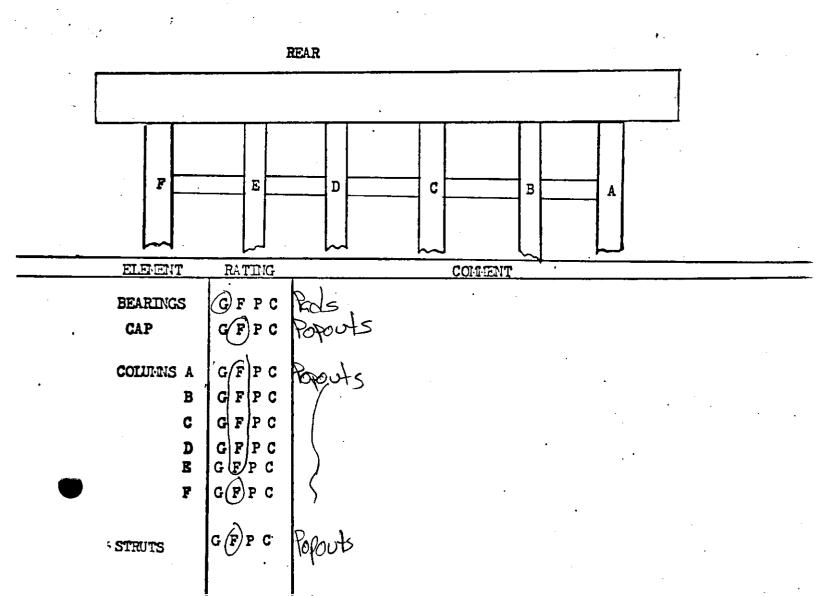


| ELEMENT | RATINGS | COMMENT | • |
|------------|----------|---------|---|
| CAP | GPP C | Reports | |
| COLUMN A-E | GFP C | Reports | |
| ———— | GFPC | | |
| | GFPC | | |
| · · · | GFPC | | |
| BEARINGS | GFPC | Rads | |
| RUTS | G(F) P C | Poports | |
| | | Ofoc 12 | |
| , | 1 | • | |

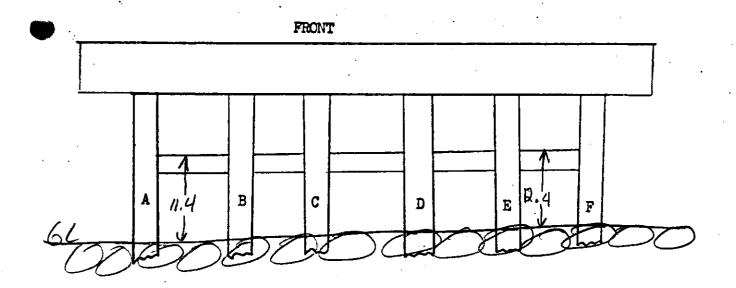
BR. NO. 79 1-40 5.09 SK. BENT NO. 7

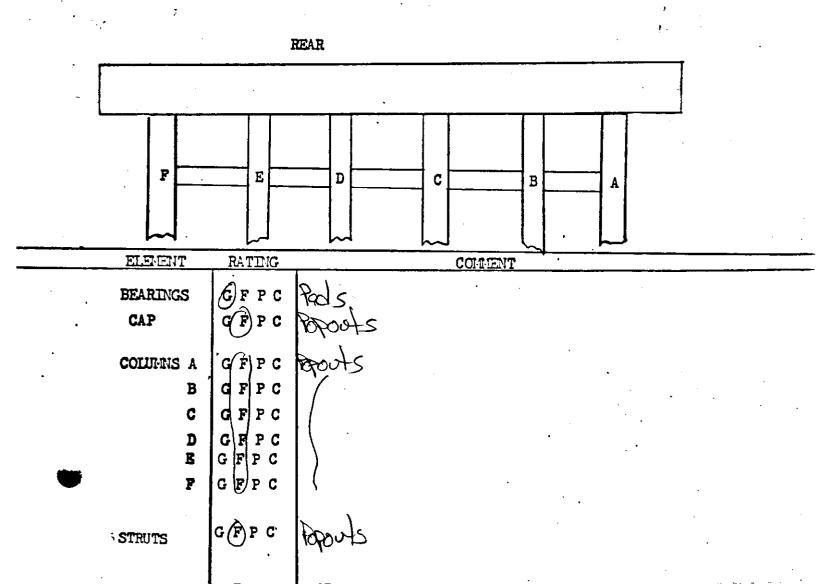
FRONT

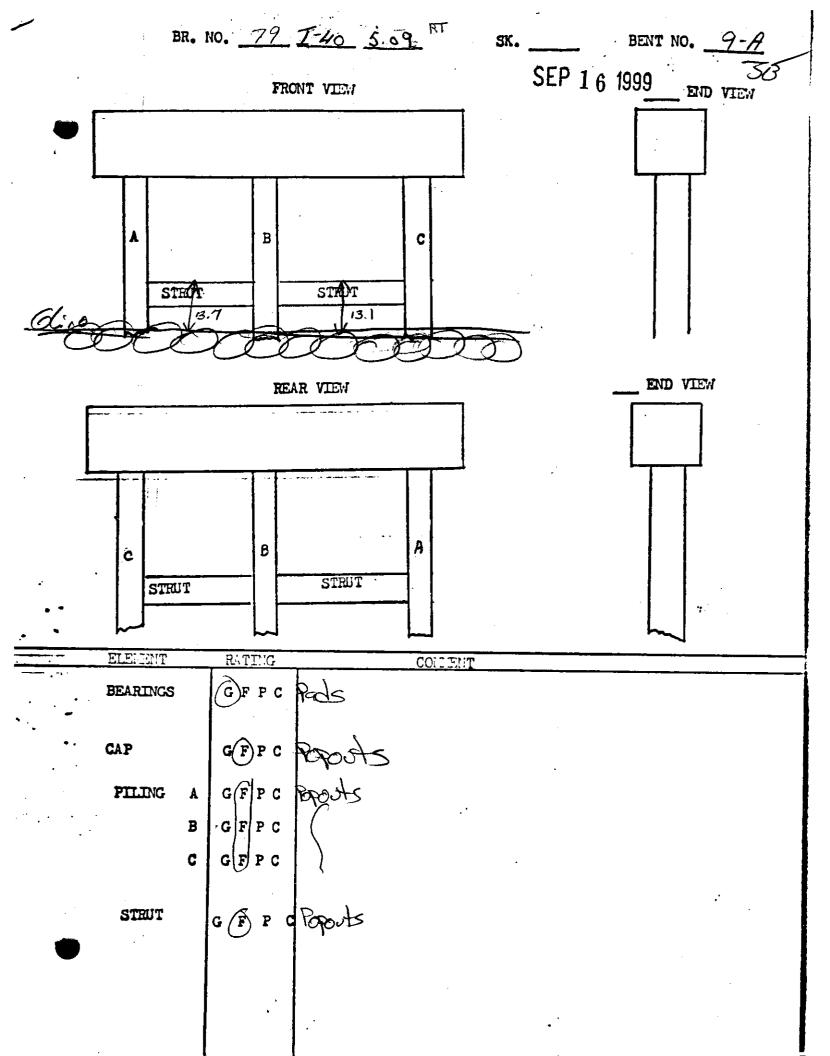
A 6.7 B C D E 8.9 F

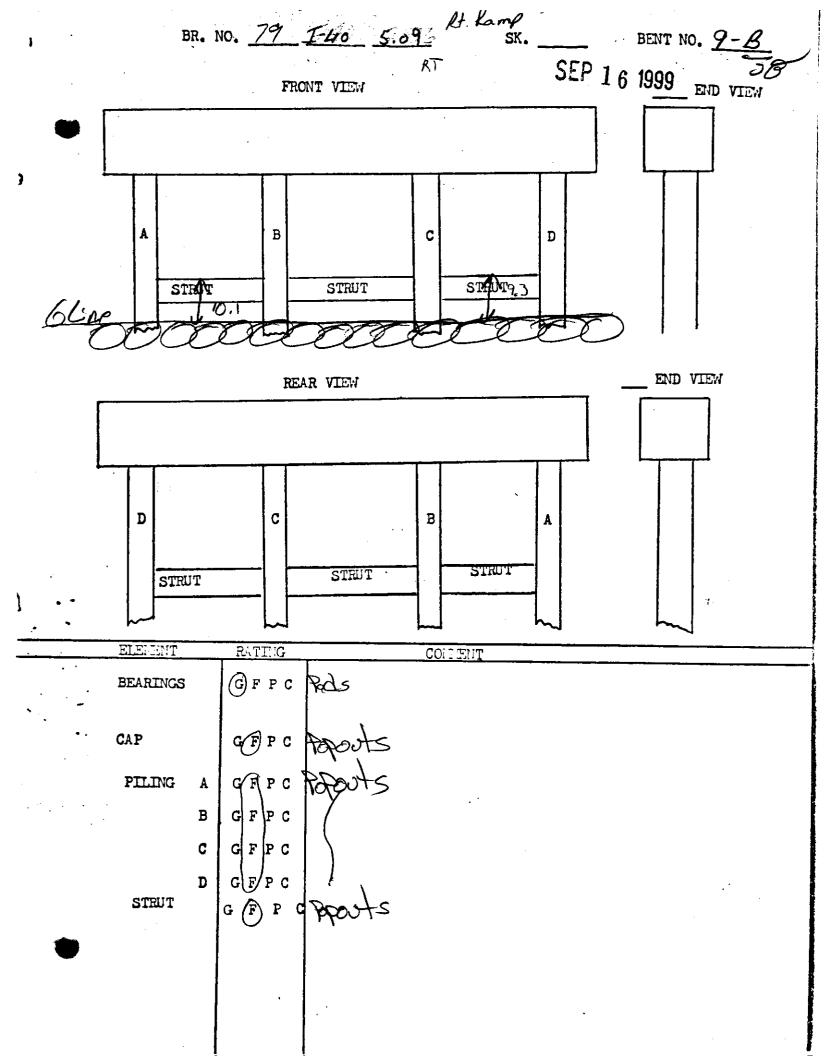


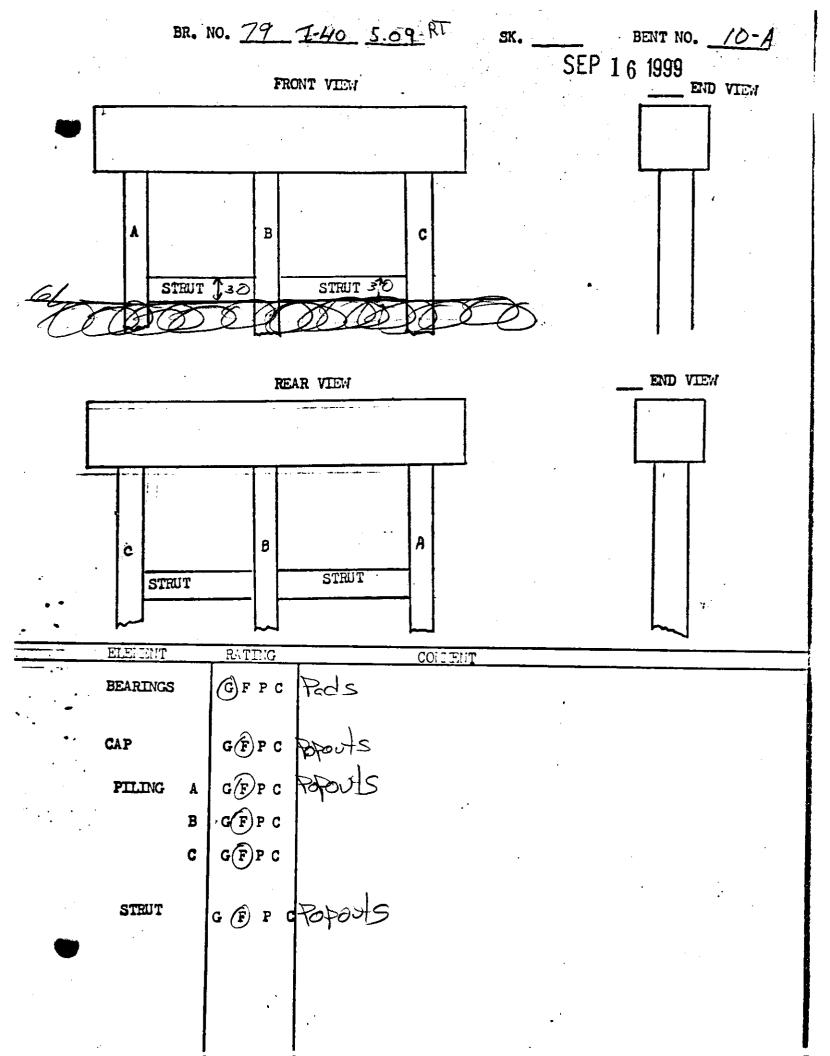
BR. NO. 79 T-40 5.09 SK.

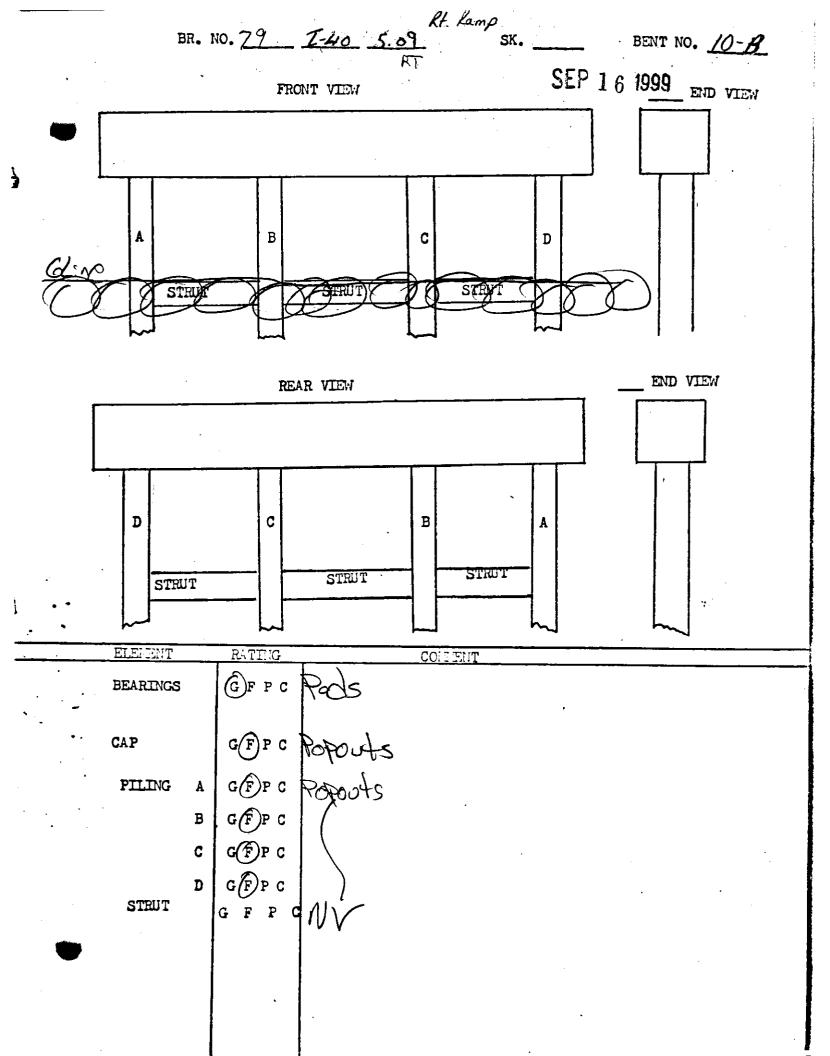






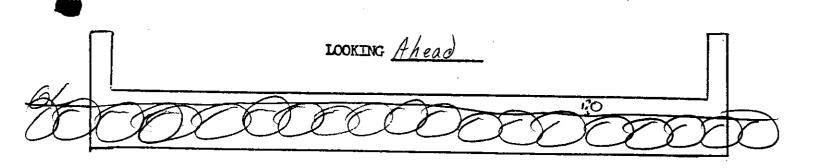






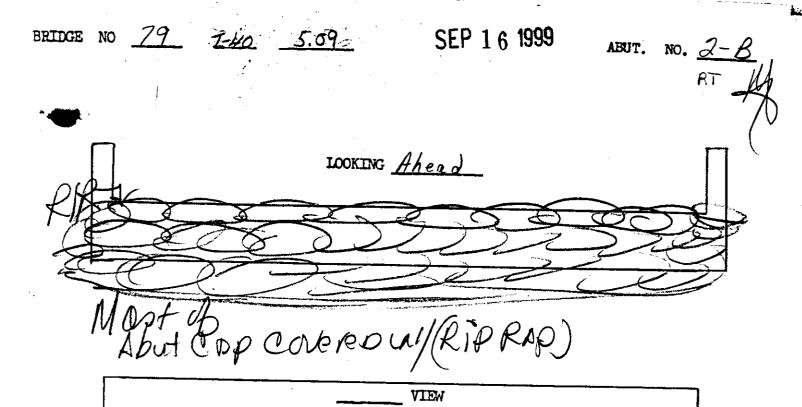
SEP 16 1999

ABUT. NO. 2-A



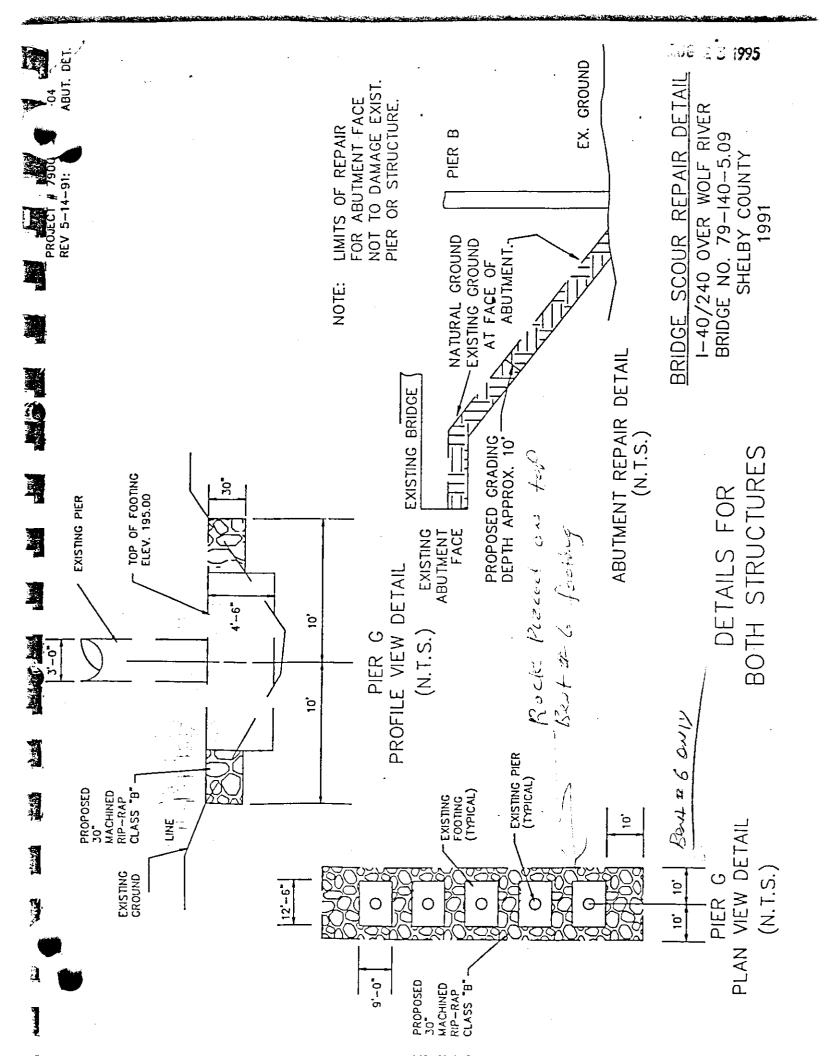
_____VIEW

| ELEMENT | RATING | COMMENT |
|-----------------------------|-----------------|-----------------------|
| BEARING CAP WINGS MBANKMENT | GFPC GFPC | Pads Papouts |
| OPAVEMENT VEG. | G F P C G F P C | none summer Growth |
| • | , | |
| | | |



COMMENT

| BEARING CAP CAP COPAVEMENT RIPPER G F P C VEG. ELEMENT RATING F P C F P C F P C F P C F P C | | |
|--|---|-------------------------|
| CAP CAP CAP CAP CAP CAP CAP CAP | ELEMENT | RATING |
| i i | cap Wings MBANKMENT OPAVEMENT RIPPAP | G F P C G F P C G F P C |



BRIDGE NO. 79-140-5.09

E.B.L.

48 piles driven Size $1 = 14' \times 14'$ Pile B = Bent 1 Test pile length 15' Original pile length 20' Test piles were 5 & 29 Min. req. bearing ton = 85 Min. req. bearing ton for test pile = 85 64 piles driven Size $1 = 14' \times 14'$ Pile C = Bent 2 Test pile length 20' Original pile length 20' Test piles were 7 & 39 Min. req. bearing ton = 54 Min. req. bearing ton for test pile = 85 Size $1 = 14' \times 14'$ 64 piles driven Pile D = Bent 3 Original pile length 45' & 55' Test pile length 55' Test piles were 7 & 39 Min. req. bearing ton = 54Min. req. bearing ton for test pile = 85 Size $1 = 14' \times 14'$ 64 piles driven Pile E = Bent 4 Original pile length 50' & 55' Test pile length 55' Test piles were 7 & 39 Min. req. bearing ton = 57Min. req. bearing ton for test pile = 90 Size $1 = 14' \times 14'$ Pile F = Bent 5 80 piles driven Size I = 14 x ITest pile length 55' Original pile length 1-48 = 35' 49-80 = 40' Test piles were 40 & 72 Min. req. bearing ton = Not Listed Min. req. bearing ton for test pile = 80 60 piles driven Size $1 = 14' \times 14'$ Pile G = Bent 6 Test pile length 55' Original pile length 50' & 55' Test piles were 29 & 53 Min. req. bearing ton = 65 Min. req. bearing ton for test pile = 95 Size $1 = 14' \times 14'$ 72 piles driven Pile H = Bent 7 Original pile length 1-36 = 45' 37-72 = 25'Test pile length 55' 37-72 = 25Test piles were 29 & 65 Min. req. bearing ton = Not Listed Min. req. bearing ton for test pile = 85 Pile I = Bent 8 72 piles driven Size 1 = 14' x 14' Original pile length 45' & 50' Test pile length 55' Min. req. bearing ton = 58 Test piles were 29 & 68 Min. req. bearing ton for test pile = 85

Pile JA = Bent 9 60 piles driven Size 1 = 14' x 14'
Original pile length 20' Test pile length 30'
Min. req. bearing ton = 30 Test piles were 5 & 23
Min. req. bearing ton for test pile = Not listed

Pile KA = Bent 10 36 piles driven Size 1 = 14' x 14'
Original pile length 30' Test pile length 55'
Min. req. bearing ton = 65 Test piles were 5 & 23
Min. req. bearing ton for test pile = 95

Pile JB & Ramp L = Bent 11 24 piles driven Size 1 = 14' x 14' Original pile length 25' Test pile length 25,30, & 15 Min. req. bearing ton = Not listed Test piles were 5, 12, & 13 Min. req. bearing ton for test pile = 75

Pile KB & Ramp L = Bent 12
Original pile length 25'
Min. req. bearing ton = 51

Min. req. bearing ton = 51

Min. req. bearing ton for test pile = 75

Pile LA = Abut. 2
Original pile length 20'
Min. req. bearing ton = 44

Test pile length 55
Test piles were 3 & 13
Min. req. bearing ton for test pile = 65

Pile LB = Abut. 3 9 piles driven
Original pile length 20' Test pi
Min. req. bearing ton = 44 Test pi

9 piles driven Size 1 = 14' x 14'

Test pile length 55

Test pile was 5

Min. req. bearing ton for test pile = 65

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Federal ID#: 79100400059 Page #:

Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| Subst Name | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|---------------|-----------------------|----------------|--------------|-------------------------|--------------------|---------------|
| - | 1 | 1 | 14" Conc. | 25. | 44. | 06/23/76 |
| ABUT | 1 | 2 | 14" Conc. | 25. | 51. | 06/23/76 |
| ABUT ABUT | 1 | 3 | 14" Conc. | 49. | 90. | 06/15/76 |
| ABUT | i | 4 | 14" Conc. | 25. | 73. | 06/23/76 |
| ABUT | 1 | 5 | 14" Conc. | 25. | 42. | 06/23/76 |
| ABUT | 1 | 6 | 14" Conc. | 25. | 39. | 06/23/76 |
| ABUT | 1. | 7 | 14" Conc. | 25. | 44. | 06/23/76 |
| ABUT | i | 8 | 14" Conc. | 25. | 43. | 06/24/76 |
| ABUT | 1 | 9 | 14" Conc. | 25. | 40. | 06/24/76 |
| ABUT | î | 10 | 14" Conc. | 25. | 42. | 06/24/76 |
| ABUT | 1 | 11 | 14" Conc. | 49. | 90. | 06/15/76 |
| ABUT | ī | 12 | 14" Conc. | 25. | 0. | 06/24/76 |
| ABUT | ī | 13 | 14" Conc. | 25. | 34. | 06/24/76 |
| ADQI | - | | | | | |
| | Avera | ge Pile | Length (ft) | = 28.6923 | | |
| ABUT | 2 | 1 | 14" Conc. | 19.41 | 156. | 06/22/77 |
| ABUT | 2 | 2 | 14" Conc. | 18.25 | 125. | 06/22/77 |
| ABUT | 2 | 3 | 14" Conc. | 35. | 50. | 06/21/77 |
| ABUT | 2 | 4 | 14" Conc. | 18. | 130. | 06/22/77 |
| ABUT | 2 | 5 | 14" Conc. | 18.16 | 177. | 06/22/77 |
| ABUT | 2 | 6 | 14" Conc. | 16.58 | 75. | 06/22/77 |
| ABUT | 2 | 7 | 14" Conc. | 19.16 | 132. | 06/22/77 |
| ABUT | 2 2 | 8 | 14" Conc. | 17.58 | 145. | 06/27/77 |
| ABUT | 2 | 9 | 14" Conc. | 17.16 | 135. | 06/27/77 |
| ABUT | 2 | 10 | 14" Conc. | 18.66 | 123. | 06/27/77 |
| ABUT | 2 2 2 2 2 | 11 | 14" Conc. | 18.66 | 123. | 06/27/77 |
| ABUT | 2 | 12 | 14" Conc. | 18. | 0. | 06/27/77 |
| ABUT | 2 | 13 | 14" Conc. | 45. | 62. | 06/21/77 |
| ABUT | . 2 | 14 | 14" Conc. | 17.33 | 120. | 06/22/77 |
| ABUT | 2 | 15 | 14" Conc. | 17.16 | 127. | 06/25/77 |
| | Auera | ace Pile | Length (ft) | = 20.9407 | | |
| | WAGTO | ye rive | | | | 06/00/77 |
| ABUT | 3 | ~ 1 | 14" Conc. | 20. | 80. | 06/22/77 |
| ABUT | 3 | 2 | 14" Conc. | 20. | 88. | 06/22/77 |
| ABUT | 3 | 3 | 14" Conc. | 20. | 91. | 06/22/77 |
| ABUT | 3 3 3 3 | 4 | 14" Conc. | 20. | 84. | |
| ABUT | 3 | 5 | 14" Conc. | 55. | 82. | 06/21/77 |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER

| Subst Name | | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|---------------|-------------|----------------|--------------|-------------------------|--------------------|----------------------|
| ABUT | 3 | 6 | 14" Conc. | 20. | 83. | 06/22/77 |
| ABUT | | 7 | 14" Conc. | 20. | 92. | 06/22/77 |
| ABUT | 3 | 8 | 14" Conc. | 20. | 85. | 06/22/77 |
| ABUT | 3 3 3 | 9 | 14" Conc. | 20. | 70. | 06/22/77 |
| | Averag | e Pile | Length (ft) | = 23.8889 | | |
| | | | | | 115. | 09/14/76 |
| BENT | 1 | 1 | 14" Conc. | 19. | 96. | 09/14/76 |
| BENT | 1 | 2 | 14" Conc. | 20. | 61. | 09/14/76 |
| BENT | 1 | 3 | 14" Conc. | 20. | 98. | 09/14/76 |
| BENT | 1 | 4 | 14" Conc. | 17. | 49. | 08/31/76 |
| BENT | 1 | 5 | 14" Conc. | 15. | 88. | 09/14/76 |
| BENT | 1 | 6 | 14" Conc. | 20. | 124. | 09/14/76 |
| BENT | 1 | 7 | 14" Conc. | 18. | | 09/14/76 |
| BENT | 1 | 8 | 14" Conc. | 20. | 144. | 09/03/76 |
| BENT | 1 | 9 | 14" Conc. | 18.16 | 0. | 09/03/76 |
| BENT | 1 | 10 | 14" Conc. | 19.41 | 0. | 09/03/76 |
| BENT | 1 | 11 | 14" Conc. | 20. | 0. | 09/03/76 |
| BENT | 1 | 12 | 14" Conc. | 20. | 0. | 09/03/76 |
| BENT | 1 | 13 | 14" Conc. | 20. | 43. | |
| BENT | 1 | 14 | 14" Conc. | 20. | 89. | 09/03/76 |
| BENT | 1 | 15 | 14" Conc. | 20. | 66. | 09/03/76 |
| BENT | 1 | 16 | 14" Conc. | 20. | 73. | 09/03/76 |
| BENT | 1 | 17 | 14" Conc. | 20. | 92. | 09/03/76 |
| BENT | 1 | 18 | 14" Conc. | 20. | 54. | 09/03/76 |
| BENT | 1 | 19 | 14" Conc. | 20. | 64. | 09/14/76 |
| BENT | 1 | 20 | 14" Conc. | 17. | 98. | 09/14/76 09/14/76 |
| BENT | 1 | 21 | 14" Conc. | 17.25 | 102. | 09/14/76 |
| BENT | 1 | 22 | 14" Conc. | 20. | 70. | |
| BENT | 1 | 23 | 14" Conc. | 20. | 72. | 09/14/76 |
| BENT | 1 | 24 | 14" Conc. | 20. | 56. | |
| BENT | 1 | 25 | 14" Conc. | 20. | 69. | |
| BENT | 1 | 26 | 14" Conc. | 20. | 74. | 09/03/76 |
| BENT | 1 | 27 | 14" Conc. | 20. | 65. | |
| BENT | 1 | 28 | 14" Conc. | 20. | 58. | |
| BENT | 1 | 29 | 14" Conc. | 15. | 47. | 08/31/76 |
| BENT | 1 | 30 | 14" Conc. | 20. | 44. | |
| BENT | 1 | 31 | 14" Conc. | 20. | 110. | |
| BENT | ī | 32 | 14" Conc. | 13.33 | 80. | 09/03/76 |
| BENT | 1 | 33 | 14" Conc. | 18.16 | 0. | 09/03/76 |
| | _ | | | | | |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| Substructure Pile Pile In Place *Bearing Name Number Number Size Length (ft) (Tons | |
|---|-------------|
| | |
| BENT 1 34 14" Conc. 20. 94 | 4. 09/15/76 |
| | 2. 09/02/76 |
| | 5. 09/02/76 |
| | 9. 09/16/76 |
| | 7. 09/16/76 |
| | 4. 09/16/76 |
| | 4. 09/16/76 |
| | 0. 09/16/76 |
| | 0. 09/16/76 |
| BENT 1 43 14" Conc. 12.16 4 | |
| BENT 1 44 14" Conc. 13.33 130 | |
| | 1. 09/16/76 |
| BENT 1 46 14" Conc. 20. 5 | |
| | |
| | |
| BENT 1 48 14" Conc. 20. 91 | 1. 05/10//0 |
| Average Pile Length (ft) = 18.9021 | |
| | 1. 08/12/76 |
| BENT 2 2 14" Conc. 20. 70 | 0. 08/12/76 |
| BENT 2 3 14" Conc. 20. 65 | 5. 08/12/76 |
| BENT 2 3 14" Conc. 20. 65 BENT 2 4 14" Conc. 15. 50 | 0. 08/13/76 |
| BENT 2 5 14" Conc. 20. | 0. 08/11/76 |
| BENT 2 6 14" Conc. 18. 50 | 5. 08/11/76 |
| BENT 2 7 14" Conc. 20. 87 | .7 08/07/76 |
| BENT 2 8 14" Conc. 18. 64 | 1. 08/11/76 |
| BENT 2 6 14" Conc. 18. 56 BENT 2 7 14" Conc. 20. 87 BENT 2 8 14" Conc. 18. 64 BENT 2 9 14" Conc. 17. 65 | 1. 08/13/76 |
| BENT 2 10 14" Conc. 18.66 | 0. 08/11/76 |
| BENT 2 11 14" Conc. 20. | 0. 08/11/76 |
| BENT 2 12 14" Conc. 20. | 0. 08/13/76 |
| BENT 2 13 14" Conc. 15. | 0. 08/13/76 |
| BENT 2 14 14" Conc. 15. | 0. 08/12/76 |
| <u> </u> | 3. 08/12/76 |
| | 0. 08/12/76 |
| | 1. 08/13/76 |
| - EDECTAL - A 17 LT LAUGUE A - AU | |
| | 3. 08/13/76 |
| BENT 2 18 14" Conc. 20. 58 | |
| BENT 2 18 14" Conc. 20. 50 BENT 2 19 14" Conc. 20. 50 | 5. 08/13/76 |
| BENT 2 18 14" Conc. 20. 50 BENT 2 19 14" Conc. 20. 50 BENT 2 20 14" Conc. 18. | |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| | | | | . | 4D | Drive |
|------|---------|--------|-----------|-------------------------|--------------------|----------|
| | ructure | Pile | Pile | In Place Length (ft) | *Bearing (Tons) | Drive |
| Name | Number | Number | Size | Length (It) | | |
| BENT | 2 | 23 | 14" Conc. | 20. | 50. | 08/14/76 |
| BENT | 2 | 24 | 14" Conc. | 18. | 65. | 08/14/76 |
| BENT | 2 | 25 | 14" Conc. | 20. | 59. | 08/12/76 |
| BENT | 2 | 26 | 14" Conc. | 18. | 76. | 08/12/76 |
| BENT | 2 | 27 | 14" Conc. | 19. | 53. | 08/12/76 |
| BENT | 2 | 28 | 14" Conc. | 20. | 56. | 08/12/76 |
| BENT | 2 | 29 | 14" Conc. | 20. | 56. | 08/12/76 |
| BENT | 2 | 30 | 14" Conc. | 20. | 56. | 08/12/76 |
| BENT | 2 | 31 | 14" Conc. | 15. | 61. | 08/12/76 |
| BENT | 2 | 32 | 14" Conc. | 20. | 82. | 08/13/76 |
| BENT | 2 | 33 | 14" Conc. | 20. | 0. | 08/16/76 |
| BENT | 2 | 34 | 14" Conc. | 15.08 | 52. | 08/16/76 |
| BENT | 2 | 35 | 14" Conc. | 20. | 72. | 08/16/76 |
| BENT | 2 | 36 | 14" Conc. | 20. | 64. | 08/16/76 |
| BENT | 2 | 37 | 14" Conc. | 20. | 69. | 08/14/76 |
| BENT | 2 | 38 | 14" Conc. | 20. | 73. | 08/14/76 |
| BENT | 2 | 39 | 14" Conc. | 20. | 73.2 | 08/07/76 |
| BENT | 2 | 40 | 14" Conc. | 20. | 0. | 08/14/76 |
| BENT | 2 | 41 | 14" Conc. | 20. | 0. | 08/14/76 |
| BENT | 2 | 42 | 14" Conc. | 20. | 0. | 08/14/76 |
| BENT | 2 | 43 | 14" Conc. | 15.41 | 0. | 08/16/76 |
| BENT | 2 | 44 | 14" Conc. | 20. | 115. | 08/16/76 |
| BENT | 2 | 45 | 14" Conc. | 20. | 89. | 08/16/76 |
| BENT | 2 | 46 | 14" Conc. | 19.25 | 92. | 08/17/76 |
| BENT | 2 | 47 | 14" Conc. | 18. | 93. | 08/17/76 |
| BENT | 2 | 48 | 14" Conc. | 20. | 65. | 08/16/76 |
| BENT | 2 | 49 | 14" Conc. | 20. | 80. | 08/17/76 |
| BENT | 2 | 50 | 14" Conc. | 20. | 90. | 08/17/76 |
| BENT | 2 | 51 | 14" Conc. | 20. | 60. | 08/17/76 |
| BENT | 2 | 52 | 14" Conc. | 19.41 | 34. | 08/17/76 |
| BENT | 2 | 53 | 14" Conc. | 20. | 51. | 08/16/76 |
| BENT | 2 | 54 | 14" Conc. | 20. | 66. | 08/16/76 |
| BENT | 2 | 55 | 14" Conc. | 20. | 93. | 08/16/76 |
| BENT | 2 | 56 | 14" Conc. | 20. | 90. | 08/16/76 |
| BENT | 2 | 57 | 14" Conc. | 20. | 118. | 08/17/76 |
| BENT | 2 | 58 | 14" Conc. | 20. | 105. | 08/17/76 |
| BENT | 2 | 59 | 14" Conc. | 20. | 114. | |
| BENT | 2 | 60 | 14" Conc. | 20. | 100. | 08/16/76 |
| BENT | 2 | 61 | 14" Conc. | 20. | 93. | 08/17/76 |
| BENT | 2 | 62 | 14" Conc. | 20. | 119. | 08/17/76 |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| Subst Name | | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|---------------|--|----------------|--------------|-------------------------|--------------------|---------------|
| BENT | 2 | 63 | 14" Conc. | 20. | 114. | 08/17/76 |
| BENT | 2 | 64 | 14" Conc. | 20. | 104. | 08/17/76 |
| | _ | | | | | |
| | Averag | e Pile | Length (ft) | = 19.1377 | | |
| BENT | 3 | 1 | 14" Conc. | 19. | 91. | 06/06/77 |
| BENT | 3 | 2 | 14" Conc. | 31. | 30. | 06/04/77 |
| BENT | 3 3 | 3 | 14" Conc. | 45.5 | 0. | 06/04/77 |
| BENT | 3 | 4 | 14" Conc. | 28. | 40. | 06/06/77 |
| BENT | 3 | 5 | 14" Conc. | 55. | 34. | 06/02/77 |
| BENT | 3 3 3 | 6 | 14" Conc. | 55. | 31. | 06/02/77 |
| BENT | 3 | 7 | 14" Conc. | 55. | 55. | 06/01/77 |
| BENT | 3 | 8 | 14" Conc. | 55. | 32. | 06/02/77 |
| BENT | 3 3 3 3 3 3 3 3 3 3 | 9 | 14" Conc. | 42. | 32. | 06/04/77 |
| BENT | 3 | 10 | 14" Conc. | 53. | 0. | 06/04/77 |
| BENT | 3 | 11 | 14" Conc. | 55. | 0. | 06/06/77 |
| BENT | 3 | 12 | 14" Conc. | 55. | 0. | 06/06/77 |
| BENT | 3 | 13 | 14" Conc. | 15. | 0. | 06/06/77 |
| BENT | 3 | 14 | 14" Conc. | 15.58 | 108. | 06/04/77 |
| BENT | 3 | 15 | 14" Conc. | 26.66 | 31. | 06/04/77 |
| BENT | 3 | 16 | 14" Conc. | 18. | 87. | 06/06/77 |
| BENT | 3 | 17 | 14" Conc. | 37. | 30. | 06/06/77 |
| BENT | 3 | 18 | 14" Conc. | 51. | 37. | 06/03/77 |
| BENT | 3 | 19 | 14" Conc. | 50. | 33. | 06/03/77 |
| BENT | 3 | 20 | 14" Conc. | 46. | 44. | 06/03/77 |
| BENT | 3 | 21 | 14" Conc. | 50. | 30. | 06/03/77 |
| BENT | 3 3 3 3 3 3 3 3 | 22 | 14" Conc. | 50. | 31. | 06/02/77 |
| BENT | 3 | 23 | 14" Conc. | 55. | 32. | 06/02/77 |
| BENT | 3 | 24 | 14" Conc. | 55. | 28. | 06/02/77 |
| BENT | 3 | 25 | 14" Conc. | 50. | 41. | 06/03/77 |
| BENT | 3 | 26 | 14" Conc. | 50. | 32. | 06/03/77 |
| BENT | 3 | 27 | 14" Conc. | 50. | 31. | 06/03/77 |
| BENT | 3 | 28 | 14" Conc. | 55. | 30. | 06/03/77 |
| BENT | 3 | 29 | 14" Conc. | 30. | 40. | 06/06/77 |
| BENT | 3 3 3 3 3 | 30 | 14" Conc. | 46. | 31. | 06/03/77 |
| BENT | 3 | 31 | 14" Conc. | 46. | 23. | 06/03/77 |
| BENT | 3 | 32 | 14" Conc. | 27. | 36. | 06/06/77 |
| BENT | 3 | 33 | 14" Conc. | 45. | 26. | 05/13/77 |
| BENT | 3 | 34 | 14" Conc. | 45. | 25. | 05/13/77 |
| BENT | 3 | 35 | 14" Conc. | 45. | 31. | 05/13/77 |

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Federal ID#: 79100400059

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Print Date: 08/30/95

Crossing...: WOLF RIVER

Project #..: 79007-3127-44 Contract #: 6978

Location #.: 79-I0040-0509-RL

| | | | | | | - |
|-------------|---------------------------------|-------|-------------|-------------|----------|----------|
| Subst | ructure P | ile | Pile | In Place | *Bearing | Drive |
| Name | | umber | Size | Length (ft) | (Tons) | Date |
| | | | | 45 | 33. | 05/13/77 |
| BENT | 333333333333333333333333 | 36 | 14" Conc. | 45. | 28. | 05/13/77 |
| BENT | 3 | 37 | 14" Conc. | 45. | 0. | 05/13/77 |
| BENT | 3 | 38 | 14" Conc. | 45. | 42. | 03/03/77 |
| BENT | 3 | 39 | 14" Conc. | 55. | 0. | 05/03/77 |
| BENT | 3 | 40 | 14" Conc. | 45. | 0. | 05/13/77 |
| BENT | 3 | 41 | 14" Conc. | 45. | | 05/13/77 |
| BENT | 3 | 42 | 14" Conc. | 45. | 25. | 05/13/77 |
| BENT | 3 | 43 | 14" Conc. | 45. | 31. | 05/13/77 |
| BENT | 3 | 44 | 14" Conc. | 45. | 27. | 05/13/77 |
| BENT | 3 | 45 | 14" Conc. | 45. | 26. | |
| BENT | 3 | 46 | 14" Conc. | 45. | 26. | 05/13/77 |
| BENT | 3 | 47 | 14" Conc. | 45. | 29. | 05/13/77 |
| BENT | 3 | 48 | 14" Conc. | 45. | 35. | 05/13/77 |
| BENT | 3 | 49 | 14" Conc. | 45. | 35. | 05/16/77 |
| BENT | 3 | 50 | 14" Conc. | 45. | 31. | 05/16/77 |
| BENT | 3 | 51 | 14" Conc. | 45. | 29. | 05/16/77 |
| BENT | 3 | 52 | 14" Conc. | 45. | 28. | 05/16/77 |
| BENT | 3 | 53 | 14" Conc. | 45. | 36. | 05/14/77 |
| BENT | 3 | 54 | 14" Conc. | 45. | 30. | 05/13/77 |
| BENT | 3 | 55 | 14" Conc. | 45. | 25. | 05/13/77 |
| BENT | 3 | 56 | 14" Conc. | 45. | 31. | 05/14/77 |
| BENT | 3 | 57 | 14" Conc. | 45. | 41. | 05/14/77 |
| BENT | 3 | 58 | 14" Conc. | 45. | 25. | 05/14/77 |
| BENT | 3 | 59 | 14" Conc. | 44.41 | 30. | 05/14/77 |
| BENT | 3 | 60 | 14" Conc. | 45. | 28. | 05/14/77 |
| BENT | 3 | 61 | 14" Conc. | 45. | 31. | 05/14/77 |
| BENT | 3 3 3 3 3 3 3 | 62 | 14" Conc. | 45. | 24. | 05/14/77 |
| BENT | 3 | 63 | 14" Conc. | 45. | 28. | 05/14/77 |
| BENT | 3 | 64 | 14" Conc. | 45. | 26. | 05/14/77 |
| | | | | | | |
| | Average | Pile | Length (ft) | = 44.0805 | | |
| BENT | 4 | 1 | 14" Conc. | 50. | 24. | 07/07/77 |
| BENT | 4 | 2 | 14" Conc. | 50. | 23. | 07/07/77 |
| BENT | 4 | 3 | 14" Conc. | 50. | 29. | 07/05/77 |
| BENT | 4 | 4 | 14" Conc. | 50. | 29. | 07/07/77 |
| BENT | 4 | 5 | 14" Conc. | 55. | 36. | 07/05/77 |
| BENT | 4 | 6 | 14" Conc. | 46.5 | 52. | 07/06/77 |
| BENT | 4 | 7 | 14" Conc. | 55. | 50. | |
| BENT | 4 | 8 | 14" Conc. | 55. | 34. | 07/01/77 |
| | _ | _ | | | | |

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Federal ID#: 79100400059 Page #: 7

Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| | | · · · · · · · · · · · · · · · · · · · | | | | |
|---------------|-------------------|---------------------------------------|------------------------|-------------------------|--------------------|----------------------|
| Subst Name | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
| BENT | 4 | 9 | 14" Conc. | 55. | 31. | 07/05/77 |
| BENT | 4 | 10 | 14" Conc. | 43.41 | 0. | 07/01/77 |
| BENT | 4 | 11 | 14" Conc. | 50. | 0. | 07/01/77 |
| BENT | 4 | 12 | 14" Conc. | 55. | 0. | 07/01/77 |
| BENT | 4 | 13 | 14" Conc. | 50. | 24. | 07/07/77 |
| BENT | 4 | 14 | 14" Conc. | 50. | 50. | 07/07/77 |
| BENT | 4 | 15 | 14" Conc. | 50. | 37. | 07/07/77 |
| BENT | 4 | 16 | 14" Conc. | 50. | 25. | 07/07/77 |
| BENT | 4 | 17 | 14" Conc. | 50. | 20. | 07/06/77 |
| BENT | 4 | 18 | 14" Conc. | 50. | 31. | 07/06/77 |
| BENT | 4 | 19 | 14" Conc. | 50. | 38. | 07/06/77 |
| BENT | 4 | 20 | 14" Conc. | 50. | 24. | 07/06/77 |
| BENT | 4 | 21 | 14" Conc. | 55. | 29. | 07/06/77 |
| BENT | 4 | * 22 | 14" Conc. | 55. | 30. | 07/05/77 |
| BENT | 4 | 23 | 14" Conc. | 55. | 29. | 07/05/77 |
| BENT | 4 | 24 | 14" Conc. | 55. | 27. | 07/05/77 |
| BENT | 4 | 25 | 14" Conc. | 50. | 31. | 07/06/77 |
| BENT | 4 | 26 | 14" Conc. | 55. | 39. | 07/05/77 |
| BENT | 4 | 27 | 14" Conc. | 55. | 25. | 07/05/77 |
| BENT | 4 | 28 | 14" Conc. | 55. | 34. | 07/06/77 |
| BENT | 4 | 29 | 14" Conc. | 50. | 30. | 07/07/77 |
| BENT | 4 | 30 | 14" Conc. | 50. | 33. | 07/07/77 |
| BENT | 4 | 31 | 14" Conc. 14" Conc. | 50. | 37. 29. | 07/07/77 |
| BENT BENT | 4 4 | 32 33 | | 50. 55. | 29. | 07/07/77 06/24/77 |
| BENT | 4 | 34 | 14" Conc. 14" Conc. | 55. | 0. | 07/07/77 |
| BENT | 4 | 34 | 14" Conc. | 55. | 25. | 06/24/77 |
| BENT | 4 | 35 | 14" Conc. | 55. | 25. | 06/24/77 |
| BENT | . 4 | 36 | 14" Conc. | 55 . | 21. | 06/24/77 |
| BENT | 4 | 37 | 14" Conc. | 50. | 32. | 06/20/77 |
| BENT | 4 | 38 | 14" Conc. | 45. | 32. | 06/20/77 |
| BENT | 4 | 39 | 14" Conc. | 55. | 53. | 06/12/77 |
| BENT | 4 | 40 | 14" Conc. | 55. | 0. | 06/20/77 |
| BENT | 4 | 41 | 14" Conc. | 55. | Ō. | 06/20/77 |
| BENT | 4 | 42 | 14" Conc. | 55. | 0. | 06/20/77 |
| BENT | 4 | 43 | 14" Conc. | 48. | 51. | 06/20/77 |
| BENT | 4 | 44 | 14" Conc. | 47. | 24. | 06/20/77 |
| BENT | 4 | 45 | 14" Conc. | 55. | 24. | 06/24/77 |
| BENT | 4 | 46 | 14" Conc. | 55. | 26. | 06/24/77 |
| BENT | 4 | 47 | 14" Conc. | 55. | 30. | 06/25/77 |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| | | | | | | |
|--|---------------------------------------|---|---|---|--|--|
| Subst Name | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
| BENT | 4 | 48 | 14" Conc. | 55. | 24. | 06/25/77 |
| BENT | 4 | 49 | 14" Conc. | 55. | 30. | 06/24/77 |
| BENT | 4 | 50 | 14" Conc. | 55. | 30. | 06/24/77 |
| BENT | 4 | 51 | 14" Conc. | 55. | 24. | 06/25/77 |
| BENT | 4 | 52 | 14" Conc. | 51.33 | 101. | 06/25/77 |
| BENT | 4 | 53 | 14" Conc. | 55. | 28. | 06/20/77 |
| BENT | 4 | 54 | 14" Conc. | 55. | 29. | 06/20/77 |
| BENT | 4 | 55 | 14" Conc. | 49. | 28. | 06/20/77 |
| BENT | 4 | 56 | 14" Conc. | 31. | 30. | 06/24/77 |
| BENT | 4 | 57 | 14" Conc. | 55. | 29. | 06/23/77 |
| BENT | 4 | 58 | 14" Conc. | 55. | 24. | 06/23/77 |
| BENT | 4 | 59 | 14" Conc. | 37. | 29. | 06/24/77 |
| BENT | 4 | 60 | 14" Conc. | 50. | 22. | 06/25/77 |
| BENT | 4 | 61 | 14" Conc. | 55. | 28. | 06/24/77 |
| BENT | 4 | 62 | 14" Conc. | 55. | 26. | 06/24/77 |
| BENT | 4 | 63 | 14" Conc. | 55. | 22. | 06/25/77 |
| BENT | 4 | 64 | 14" Conc. | 55. | 23. | 06/25/77 |
| | | | | | | |
| | Avera | ge Pile | Length (ft) | = 51.9729 | | |
| BENT | | ge Pile 1 | Length (ft) 14" Conc. | = 51.9729 | 25. | 09/23/77 |
| BENT BENT | 5 | 1 | <u> </u> | | 25. 36. | 09/23/77 09/23/77 |
| | 5 5 5 | | 14" Conc. | 25. | | |
| BENT | 5 5 5 | 1 2 3 4 | 14" Conc. 14" Conc. | 25. 30. | 36. | 09/23/77 |
| BENT BENT BENT BENT | 5 5 5 | 1 2 3 4 5 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 30. 31. 32. 17. | 36. 41. 32. 100. | 09/23/77 09/23/77 09/23/77 09/17/77 |
| BENT BENT BENT BENT BENT | 5 5 5 5 5 5 | 1 2 3 4 5 6 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 30. 31. 32. 17. 29. | 36. 41. 32. 100. 31. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT | 5 5 5 5 5 5 5 | 1 2 3 4 5 6 7 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 30. 31. 32. 17. 29. | 36. 41. 32. 100. 31. 32. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/17/77 |
| BENT BENT BENT BENT BENT BENT | 5 5 5 5 5 5 5 5 5 | 1 2 3 4 5 6 7 8 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. | 36. 41. 32. 100. 31. 32. 23. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT BENT | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 1 2 3 4 5 6 7 8 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. | 36. 41. 32. 100. 31. 32. 23. 52. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 1 2 3 4 5 6 7 8 9 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. 31. | 36. 41. 32. 100. 31. 32. 23. 52. 0. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 555555555555 | 1 2 3 4 5 6 7 8 9 10 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. 31. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 555555555555 | 1 2 3 4 5 6 7 8 9 10 11 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. 31. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 5555555555555 | 1 2 3 4 5 6 7 8 9 10 11 12 13 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. 31. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 5555555555555 | 1 2 3 4 5 6 7 8 9 10 11 12 13 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. 31. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. 41. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 5555555555555 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. 31. 30. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. 41. 35. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/17/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 5555555555555 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 32. 31. 30. 30. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. 41. 35. 31. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/17/77 09/17/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 5555555555555 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 30. 30. 30. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. 41. 35. 31. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/17/77 09/17/77 09/17/77 09/23/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 5555555555555 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 30. 30. 30. 30. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. 41. 35. 31. 33. 48. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/17/77 09/17/77 09/17/77 09/23/77 09/23/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 555555555555 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 | 14" Conc. | 25. 30. 31. 32. 17. 29. 31. 30. 30. 30. 30. 30. | 36. 41. 32. 100. 31. 32. 23. 52. 0. 30. 40. 41. 35. 31. | 09/23/77 09/23/77 09/23/77 09/17/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/16/77 09/17/77 09/17/77 09/17/77 09/23/77 |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| Subst Name | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|---------------|----------------------------|----------------|--------------|-------------------------|--------------------|----------------------|
| | | 21 | 14" Conc. | 31. | 38. | 09/16/77 |
| BENT BENT | 5 5 | 22 | 14" Conc. | 31. | 39. | 09/16/77 |
| BENT | ے ج | 23 | 14" Conc. | 32. | 42. | 09/16/77 |
| BENT | 5 | 24 | 14" Conc. | 31. | 55. | 09/16/77 |
| BENT | 5 | 25 | 14" Conc. | 31. | 45. | 09/16/77 |
| BENT | 5 5 5 5 5 5 | 26 | 14" Conc. | 31. | 30. | 09/16/77 |
| BENT | 5 | 27 | 14" Conc. | 32. | 52. | 09/16/77 |
| BENT | 5 | 28 | 14" Conc. | 31. | 0. | 09/16/77 |
| BENT | 5 | 29 | 14" Conc. | 31. | 37. | 09/23/77 |
| BENT | 5 | 30 | 14" Conc. | 31. | 33. | 09/23/77 |
| BENT | 5 5 5 5 | 31 | 14" Conc. | 31. | 31. | 09/23/77 |
| BENT | 5 | 32 | 14" Conc. | 31. | 40. | 09/23/77 |
| BENT | 5 | 33 | 14" Conc. | 34. | 36. | 09/19/77 |
| BENT | 5 | 34 | 14" Conc. | 34. | 51. | 09/19/77 |
| BENT | 5 | 35 | 14" Conc. | 32. | 45. | 09/19/77 |
| BENT | 555555555555 | 36 | 14" Conc. | 33. | 37. | 09/22/77 |
| BENT | 5 | 37 | 14" Conc. | 32. | 56. | 09/15/77 |
| BENT | 5 | 38 | 14" Conc. | 35. | 64. | 09/15/77 |
| BENT | 5 | 39 | 14" Conc. | 35. | 46. | 09/15/77 |
| BENT | 5 | 40 | 14" Conc. | 55. | 46. | 09/12/77 |
| BENT | 5 | 41 | 14" Conc. | 32. | 0. | 09/15/77 |
| BENT | 5 | 42 | 14" Conc. | 31. | 24. | 09/15/77 |
| BENT | 5 | 43 | 14" Conc. | 34. | 59. | 09/15/77 |
| BENT | 5 | 44 | 14" Conc. | 32. | 29. | 09/19/77 |
| BENT | 5 | 45 | 14" Conc. | 32. | 52. | 09/19/77 |
| BENT | | 46 | 14" Conc. | 32. | 46. | 09/19/77 |
| BENT | 5 | 47 | 14" Conc. | 32. | 46. | 09/19/77 |
| BENT | 5 | 48 | 14" Conc. | 32. | 60. | 09/22/77 |
| BENT | 5 5 5 5 5 | 49 | 14" Conc. | 35. | 27. | 10/03/77 |
| BENT | 5 | 50 | 14" Conc. | 34. | 45. | 10/03/77 10/03/77 |
| BENT | 5 | 51 | 14" Conc. | 35. | 51. | 10/03/77 |
| BENT | | 52 | 14" Conc. | 35. | 34. 49. | 09/21/77 |
| BENT | 5 | 53 | 14" Conc. | 33. | 39. | 09/21/77 |
| BENT | 5 5 | 54 | 14" Conc. | 33. | 33. | 09/21/77 |
| BENT | 5 | 55 | 14" Conc. | 34. | 25 | 09/21/77 |
| BENT | 5 | 56 | 14" Conc. | 33. | 51 | 09/21/77 |
| BENT | 5 | 57 | 14" Conc. | 33. | 45. | 09/21/77 |
| BENT | 5 | 58 | 14" Conc. | 33. | 35. | 09/21/77 |
| BENT | 5 | 59 | 14" Conc. | 33. | 39. | 09/21/77 |
| BENT | 5 | 60 | 14" Conc. | 34. | 33. | 43/41/1/ |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER

| Subst Name | | ile Tumber | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|---------------|---------|---------------|--------------|-------------------------|--------------------|---------------|
| BENT | 5 | 61 | 14" Conc. | 34. | 31. | 10/03/77 |
| BENT | 5 | 62 | 14" Conc. | 33. | 49. | 10/03/77 |
| BENT | 5 | 63 | 14" Conc. | 34. | 49. | 10/03/77 |
| BENT | 5 | 64 | 14" Conc. | 34. | 47. | 10/03/77 |
| BENT | 5 | 65 | 14" Conc. | 35. | 33. | 09/22/77 |
| BENT | 5 | 66 | 14" Conc. | 35. | 30. | 09/22/77 |
| BENT | 5 | 67 | 14" Conc. | 35. | 37. | 09/22/77 |
| BENT | 5 | 68 | 14" Conc. | 34. | 29. | 09/22/77 |
| BENT | 5 | 69 | 14" Conc. | 35. | 54. | 09/22/77 |
| BENT | 5 | 70 | 14" Conc. | 35. | 0. | 09/22/77 |
| BENT | 5 | 71 | 14" Conc. | 33. | 0. | 09/26/77 |
| BENT | 5 | 72 | 14" Conc. | 55. | 42. | 09/12/77 |
| BENT | 5 | 73 | 14" Conc. | 36. | 0. | 09/19/77 |
| BENT | 5 | 74 | 14" Conc. | 37. | 47. | 09/19/77 |
| BENT | 5 | 75 | 14" Conc. | 37. | 32. | 09/19/77 |
| BENT | 5 | 76 | 14" Conc. | 36. | 44. | 09/19/77 |
| BENT | 5 | 77 | 14" Conc. | 34. | 36. | 09/21/77 |
| BENT | 5 | 78 | 14" Conc. | 34. | 32. | 09/21/77 |
| BENT | 5 | 79 | 14" Conc. | 34. | 34. | 09/21/77 |
| BENT | 5 | 80 | 14" Conc. | 35. | 33. | 09/21/77 |
| | Average | Pile | Length (ft) | = 32.925 | | |
| BENT | 6 | 1 | 14" Conc. | 25. | 63. | 05/30/77 |
| BENT | 6 | 2 | 14" Conc. | 25. | 68. | 05/31/77 |
| BENT | 6 | 3 | 14" Conc. | 25. | 66. | 05/30/77 |
| BENT | 6 | 4 | 14" Conc. | 25. | 74. | 05/27/77 |
| BENT | 6 | 5 | 14" Conc. | 25. | 51. | 05/27/77 |
| BENT | 6 | 6 | 14" Conc. | 25. | 68. | 05/27/77 |
| BENT | 6 | 7 | 14" Conc. | 44. | 33. | 05/27/77 |
| BENT | 6 | 8 | 14" Conc. | 48. | ⊸38. | 05/27/77 |
| BENT | 6 | 9 | 14" Conc. | 46.25 | 47. | 05/27/77 |
| BENT | 6 | 10 | 14" Conc. | 25. | 0. | 05/27/77 |
| BENT | 6 | 11 | 14" Conc. | 25. | | 05/27/77 |
| BENT | 6 | 12 | 14" Conc. | 25. | 73. | 05/31/77 |
| BENT | 6 | . 13 | 14" Conc. | 22. | 92. | 05/31/77 |
| BENT | 6 | 14 | 14" Conc. | 22. | 73. | 05/31/77 |
| BENT | 6 | 15 | 14" Conc. | 25. | 78. | 05/30/77 |
| BENT | 6 | 16 | 14" Conc. | 22. | 127. | |
| BENT | 6 | 17 | 14" Conc. | 24.25 | 102. | 05/23/77 |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| | ± 12 . | | | | —- · | |
|--|--------------------------------------|--|---|--|---|--|
| Subst Name | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
| BENT BENT BENT BENT BENT BENT BENT BENT | 6 6 6 6 6 6 6 6 | 18 19 20 21 22 23 24 25 26 | 14" Conc. | 25. 25. 25. 47.66 25. 24. 25. 25. | 114. 91. 94. 39. 86. 0. 97. 0. | 05/23/77 05/27/77 05/27/77 05/27/77 05/30/77 05/30/77 05/30/77 05/30/77 05/30/77 |
| BENT BENT BENT BENT BENT BENT | 6 6 6 6 | 28 29 30 31 32 33 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 50. 50. 25. 49. | 139. 114. 45. 0. 70. 64. | 05/27/77 05/24/77 05/26/77 05/22/77 05/27/77 05/26/77 |
| BENT BENT BENT BENT BENT | 6 6 6 6 | 34 35 36 37 38 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 22.25 25. 24.41 25. | 61. 110. 63. 65. | 05/26/77 05/31/77 05/28/77 05/28/77 05/28/77 |
| BENT BENT BENT BENT BENT BENT | 6 6 6 6 | 39 40 41 42 43 44 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 45. 45. 45. 45. | 0. 0. 0. 0. | 05/28/77 05/28/77 05/28/77 05/28/77 05/28/77 05/28/77 |
| BENT BENT BENT BENT BENT | 6 6 6 6 | 45 46 47 48 49 50 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 46. 25. 25. 25. 25. 23.58 | 0. 62. 102. 72. 62. 145. | 05/26/77 05/26/77 05/26/77 05/28/77 05/28/77 05/07/77 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 6 6 6 6 6 | 51 52 53 54 55 56 57 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 25. 25. 50. 25. 25. 49.25 | 88. 83. 105. 111. 55. 68. | 05/07/77 05/07/77 05/24/77 05/28/77 05/28/77 |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| Subst Name | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|----------------------|-------------------|----------------|-------------------------------------|-------------------------|--------------------|----------------------------------|
| BENT BENT BENT | 6 6 6 | 58 59 60 | 14" Conc. 14" Conc. 14" Conc. | 25. 25. 25. | 89. 79. 52. | 05/30/77 05/28/77 05/30/77 |
| | Avera | ge Pile | Length (ft) | = 31.0677 | | |
| BENT | 7 | 1 | 14" Conc. | 45. | 31. | 11/14/76 |
| BENT | 7 | 2 | 14" Conc. | 45. | 29. | 11/10/76 |
| BENT | 7 | 3 | 14" Conc. | 37. | 0. | 11/10/76 |
| BENT | 7 | 4 | 14" Conc. | 25. | 0. | 11/05/76 |
| BENT | 7 | 5 | 14" Conc. | 45. | 37. | 11/04/76 |
| BENT | 7 | 6 | 14" Conc. | 45. | 36. | 11/04/76 |
| BENT | 7 | 7 | 14" Conc. | 45. | 32. | 11/05/76 |
| BENT | :7 | 8 | 14" Conc. | 45. | 35. | 11/04/76 |
| BENT | 7 | 9 | 14" Conc. | 45. | 37. | 11/04/76 |
| BENT | 7 | 10 | 14" Conc. | 45. | 37. | 11/04/76 |
| BENT | 7 | 11 | 14" Conc. | 45. | 32. | 11/04/76 |
| BENT | 7 | 12 | 14" Conc. | 45. | 0. | 11/04/76 |
| BENT | 7 | 13 | 14" Conc. | 42. | 29. | 11/15/76 |
| BENT | 7 | 14 | 14" Conc. | 45. | 30. | 11/15/76 |
| BENT | 7 | 15 | 14" Conc. | 45. | 39. | 11/04/76 |
| BENT | 7 | 16 | 14" Conc. | 45. | 38. | 11/04/76 |
| BENT | 7 | 17 | 14" Conc. | 45. | 42. | 11/04/76 |
| BENT | 7 | 18 | 14" Conc. | 45. | 41. | 11/04/76 |
| BENT | 7 | 19 | 14" Conc. | 45. | 40. | 11/04/76 |
| BENT | 7 | 20 | 14" Conc. | 45. | 45. | 11/04/76 |
| BENT | 7 | 21 | 14" Conc. | 45. | 44. | 11/12/76 |
| BENT | 7 | 22 | 14" Conc. | 25. | 0. | 11/12/76 |
| BENT | 7 | 23 | 14" Conc. | 45. | 29. | 11/12/76 |
| BENT | 7 | 24 | 14" Conc. | 45. | 31. | 11/12/76 |
| BENT | 7 | 25 | 14" Conc. | 45. | 34. | 11/03/76 |
| BENT | 7 | 26 | 14" Conc. | 45. | 49. | 11/03/76 |
| BENT | 7 | 27 | 14" Conc. | 45. | 42. | 11/05/76 |
| BENT | 7 | 28 | 14" Conc. | 45. | 57. | 11/05/76 |
| BENT | 7 | 29 | 14" Conc. | 55. | 75. | 10/29/76 |
| BENT | 7 | 30 | 14" Conc. | 45. | 45. | 11/05/76 |
| BENT | 7 | 31 | 14" Conc. | 45. | 29. | 11/05/76 |
| BENT | 7 | 32 | 14" Conc. | 45. | 42. | 11/03/76 |
| BENT | 7 | 33 | 14" Conc. | 45. | 65. | 11/05/76 |
| BENT | 7 | 34 | 14" Conc. | 45. | 44. | 11/05/76 |

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Location #.: 79-I0040-0509-RL

Print Date: 08/30/95

Crossing...: WOLF RIVER

*

Project #..: 79007-3127-44

Contract #: 6978

| | ructure | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|------|---------|----------------|--------------|-------------------------|--------------------|----------------------|
| Name | Number | Number | 217e | Length (It) | (10115) | |
| BENT | 7 | 35 | 14" Conc. | 45. | 38. | 11/05/76 |
| BENT | 7 | 36 | 14" Conc. | 35. | 0. | 11/08/76 |
| BENT | 7 | 37 | 14" Conc. | 25. | 46. | 11/01/76 |
| BENT | 7 | 38 | 14" Conc. | 25. | 60. | 11/11/76 |
| BENT | 7 | 39 | 14" Conc. | 25. | 0. | 11/11/76 |
| BENT | 7 | 40 | 14" Conc. | 25. | 0. | 11/06/76 |
| BENT | 7 | 41 | 14" Conc. | 25. | 0. | 11/06/76 |
| BENT | 7 | 42 | 14" Conc. | 25. | 0. | 11/06/76 |
| BENT | 7 | 43 | 14" Conc. | 25. | 136. | 11/08/76 |
| BENT | 7 | 44 | 14" Conc. | 25. | 112. | 11/08/76 |
| BENT | 7 | 45 | 14" Conc. | 25. | 0. | 11/08/76 |
| BENT | 7 | 46 | 14" Conc. | 25. | 94. | 11/12/76 |
| BENT | 7 | 47 | 14" Conc. | 25. | 61. | 11/11/76 |
| BENT | 7 | 48 | 14" Conc. | 25. | 57. | 11/11/76 |
| BENT | 7 | 49 | 14" Conc. | 25. | 60. | 11/12/76 |
| BENT | 7 | 50 | 14" Conc. | 25. | 0. | 11/09/76 |
| BENT | 7 | 51 | 14" Conc. | 25. | 0. | 11/12/76 |
| BENT | 7 | 52 | 14" Conc. | 25. | 100. | 11/12/76 |
| BENT | 7 | 53 | 14" Conc. | 25. | 100. | 11/14/76 |
| BENT | 7 | 54 | 14" Conc. | 25. | 92. | 11/14/76 |
| BENT | 7 | 55 | 14" Conc. | 25. | 84. | 11/08/76 |
| BENT | 7 | 56 | 14" Conc. | 25. | 81. | 11/08/76 |
| BENT | 7 | 57 | 14" Conc. | 25. | 96. | 11/08/76 |
| BENT | 7 | 58 | 14" Conc. | 25. | 98. | 11/12/76 |
| BENT | 7 | 59 | 14" Conc. | 25. | 71. | 11/12/76 |
| BENT | 7 | 60 | 14" Conc. | 25. | 74. | 11/12/76 11/12/76 |
| BENT | 7 | 61 | 14" Conc. | 25. | 64. | 11/12/76 |
| BENT | 7 | 62 | 14" Conc. | 25. | 62. 0. | 11/12/76 |
| BENT | 7 | 63 | 14" Conc. | 18.41 | | 11/09/76 |
| BENT | 7 | 64 | 14" Conc. | 25. | 0. 39. | 11/03/76 |
| BENT | 7 | 65 | 14" Conc. | 55. | 0. | 11/03/76 |
| BENT | 7 | 66 | 14" Conc. | 25. | 0. | 11/09/76 |
| BENT | 7 | 67 | 14" Conc. | 25. | 0. | 11/09/76 |
| BENT | 7 | 68 | 14" Conc. | 25. | 0. | 11/09/76 |
| BENT | 7 | 69 | 14" Conc. | 25. | 0. | 11/09/76 |
| BENT | 7 | 70 | 14" Conc. | 25. 25 | 0. | 11/09/76 |
| BENT | 7 | 71 | 14" Conc. | 25. | | 11/09/76 |
| BENT | 7 | 72 | 14" Conc. | 25. | 0. | 11/03/10 |

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Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER

Project #..: 79007-3127-44

Contract #: 6978

| | | | | | | |
|---------------|-------------|----------------|--------------|-------------------------|--------------------|----------------------|
| Subst Name | | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
| | | | | | | |
| | Averag | e Pile | Length (ft) | = 34.6168 | | |
| BENT | 8 | 1 | 14" Conc. | 45. | 27. | 12/07/76 |
| BENT | 8 | 2 | 14" Conc. | 45. | 29. | 12/07/76 |
| BENT | 8 | 3 | 14" Conc. | 45. | 26. | 12/07/76 |
| BENT | 8 | 4 | 14" Conc. | 45. | 25. | 12/06/76 |
| BENT | 8 | 5 | 14" Conc. | 43. | 25. | 12/06/76 |
| BENT | 8 | 6 | 14" Conc. | 45. | 27. | 12/03/76 |
| BENT | 8 | 7 | 14" Conc. | 45. | 26. | 12/03/76 |
| BENT | 8 | 8 | 14" Conc. | 45. | 25. | 12/03/76 |
| BENT | 8 | 9 | 14" Conc. | 45. | 26. | 12/03/76 |
| BENT | 8 | 10 | 14" Conc. | 45. | 0. | 12/07/76 |
| BENT | 8 | 11 | 14" Conc. | 45. | 0. | 12/07/76 |
| BENT | 8 | 12 | 14" Conc. | 45. | 0. | 12/07/76 |
| BENT | 8 | 13 | 14" Conc. | 45. | 24. | 12/04/76 |
| BENT | 8 | 14 | 14" Conc. | 45. | 25. | 12/06/76 |
| BENT | 8 | 15 | 14" Conc. | 45. | 28. | 12/06/76 |
| BENT | 8 | 16 | 14" Conc. | 45. | 33. | 12/06/76 |
| BENT | 8 | 17 | 14" Conc. | 45. | 31. | 12/07/76 |
| BENT | 8 | 18 | 14" Conc. | 45. | 24. | 12/02/76 |
| BENT | 8 | 19 | 14" Conc. | 45. | 30. | 12/06/76 |
| BENT | 8 | 20 | 14" Conc. | 40. | 25. | 12/03/76 |
| BENT | 8 | 21 | 14" Conc. | 45. | 27. | 12/03/76 |
| BENT | 8 | 22 | 14" Conc. | 45. | 26. | 12/03/76 12/06/76 |
| BENT | 8 | 23 | 14" Conc. | 45. | 38. | 12/06/76 |
| BENT | 8 | 24 | 14" Conc. | 45. | 36. | 12/06/76 |
| BENT | 8 | 25 | 14" Conc. | 45. | 30. | 12/03/76 |
| BENT | 8 | 26 | 14" Conc. | 45. | 24. 28. | 12/01/76 |
| BENT | 8 | 27 | 14" Conc. | 45. | 25. | 12/02/76 |
| BENT | 8 | 28 | 14" Conc. | 45. | 37. | 11/27/76 |
| BENT | 8 | 29 | 14" Conc. | 55. | 34. | 12/02/76 |
| BENT | 8 | 30 | 14" Conc. | 45. | 28. | 12/02/76 |
| BENT | 8 | 31 | 14" Conc. | 45. 45. | 25. | |
| BENT | 8 | 32 | 14" Conc. | | 26. | · |
| BENT | 8 | 33 | 14" Conc. | 45. | 28. | |
| BENT | 8 | 34 | 14" Conc. | 45. | 23. | 12/03/76 |
| BENT | 8 | 35 | 14" Conc. | 45. | 25. | 12/03/76 |
| BENT | 8 | 36 | 14" Conc. | 45. | 28. | 12/04/76 |
| BENT | 8 | 37 | 14" Conc. | 45. | 40. | 12/04/10 |

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Federal ID#: 79I00400059 Page #: 15

Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| Substi Name | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|----------------|-------------------|----------------|--------------|-------------------------|--------------------|---------------|
| | | | | 4 | | 12/05/76 |
| BENT | 8 | 38 | 14" Conc. | 45. | 35. | 12/05/76 |
| BENT | 8 | 39 | 14" Conc. | 45. | 26. | 12/05/76 |
| BENT | 8 | 40 | 14" Conc. | 45. | 0. | 12/05/76 |
| BENT | 8 | 41 | 14" Conc. | 45. | 0. | 12/05/76 |
| BENT | 8 | 42 | 14" Conc. | 45. | 33. | 12/05/76 |
| BENT | 8 | 43 | 14" Conc. | 45. | 27. | 12/01/76 |
| BENT | 8 | 44 | 14" Conc. | 45. | 32. | 12/01/76 |
| BENT | 8 | 45 | 14" Conc. | 45. | 30. | 12/01/76 |
| BENT | 8 | 46 | 14" Conc. | 45. | 45. | 12/03/76 |
| BENT | 8 | 47 | 14" Conc. | 45. | 40. | 12/04/76 |
| BENT | 8 | 48 | 14" Conc. | 45. | 33. | 12/03/76 |
| BENT | 8 | 49 | 14" Conc. | 45. | 32. | 12/01/76 |
| BENT | 8 | 50 | 14" Conc. | 45. | 32. | 12/01/76 |
| BENT | 8 | 51 | 14" Conc. | 45. | 28 ÷ | 12/01/76 |
| BENT | 8 | 52 | 14" Conc. | 45. | 36. | 11/30/76 |
| BENT | 8 | 53 | 14" Conc. | 45. | 38. | 11/30/76 |
| BENT | 8 | 54 | 14" Conc. | 45. | 32. | 11/30/76 |
| BENT | 8 | 5 5 | 14" Conc. | 45. | 33. | 11/30/76 |
| BENT | 8 | 56 | 14" Conc. | 45. | 30. | 11/30/76 |
| BENT | 8 | 57 | 14" Conc. | 45. | 40. | 11/30/76 |
| BENT | 8 | 58 | 14" Conc. | 45. | 31. | 12/01/76 |
| BENT | 8 | 59 | 14" Conc. | 45. | 31. | 11/30/76 |
| BENT | 8 | 60 | 14" Conc. | 45. | 32. | 12/01/76 |
| BENT | 8 | 61 | 14" Conc. | 45. | 30. | 11/30/76 |
| BENT | 8 | 62 | 14" Conc. | 45. | 24. | 11/27/76 |
| BENT | 8 | 63 | 14" Conc. | 45. | 31. | 11/30/76 |
| BENT | 8 | 64 | 14" Conc. | 45. | 27. | 11/25/76 |
| BENT | 8 | 65 | 14" Conc. | 45. | 35. | 11/25/76 |
| BENT | 8 | 66 | 14" Conc. | 45. | 28. | 11/25/76 |
| BENT | 8 | 67 | 14" Conc. | 45. | 29. | 11/25/76 |
| BENT | 8 | 68 | 14" Cons. | 55. | 39. | 11/22/76 |
| BENT | 8 | 69 | 14" Conc. | 45. | 24. | 11/28/76 |
| BENT | 8 | 70 | 14" Conc. | 45. | 31. | 11/28/76 |
| BENT | 8 | 71 | 14" Conc. | 45. | 41. | 11/28/76 |
| BENT | 8 | 72 | 14" Conc. | 45. | 25. | 11/28/76 |
| | Avera | ge Pile | Length (ft) | = 45.1806 | | |
| | | | 1411 | 20. | 40 | 08/26/76 |
| BENT | 9 | 1 | 14" Conc. | | | 08/26/76 |
| BENT | 9 | 2 | 14" Conc. | 20. | 74. | UU/ 20/ 10 |

Federal ID#: 79I00400059 Page #: 16

Location #.: 79-I0040-0509-RL Print Date: 08/30/95

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Crossing...: WOLF RIVER

| Subst | ructure | Pile | Pile | In Place | *Bearing | Drive |
|-------|------------------|----------|------------------------|-------------|------------|----------------------|
| Name | Number | Number | Size | Length (ft) | (Tons) | Date |
| | | | | | | |
| BENT | 9 | 3 | 14" Conc. | 20. | 104. | 08/26/76 |
| BENT | 9 | 4 | 14" Conc. | 20. | 93. | 08/25/76 |
| BENT | 9 | 5 | 14" Conc. | 30. | 61. | 08/19/76 |
| BENT | 9 | 6 | 14" Conc. | 20. | 92. | 08/25/76 |
| BENT | 9 | 7 | 14" Conc. | 20. | 68. | 08/25/76 |
| BENT | 9 | 8 | 14" Conc. | 20. | 75. | 08/25/76 08/25/76 |
| BENT | 9 | 9 | 14" Conc. | 20. | 64. | 08/27/76 |
| BENT | 9 | 10 | 14" Conc. | 20. | 49. | 08/27/76 |
| BENT | 9 | 11 | 14" Conc. | 20. | 0. | 08/27/76 |
| BENT | 9 | 12 | 14" Conc. | 20. | 0. | 08/27/76 |
| BENT | 9 | 13 | 14" Conc. | 20. | 0. | 08/27/76 |
| BENT | 9 | 14 | 14" Conc. | 50. | 78. | 08/27/76 |
| BENT | 9 | 15 | 14" Conc. | 20. | 49. | 08/23/76 |
| BENT | 9 | 16 | 14" Conc. | 20. | 49. | 08/23/76 |
| BENT | 9 | 17 | 14" Conc. | 20. | 85. | 08/23/76 |
| BENT | 9 | 18 | 14" Conc. | 20. | 33. | 08/27/76 |
| BENT | 9 | 19 | 14" Conc. | 20. | 68. | 08/27/76 |
| BENT | 9 | 20 | 14" Conc. | 20. | 52. | 08/27/76 |
| BENT | 9 | 21 | 14" Conc. | 17.41 | 53. | 08/27/76 |
| BENT | 9 | 22 | 14" Conc. | 20. | 26. | 08/19/76 |
| BENT | 9 | 23 | 14" Conc. | 25. | 55. | 08/27/76 |
| BENT | 9 9 9 9 | 24 | 14" Conc. | 20. | 68. | 08/27/76 |
| BENT | 9 | 25 | 14" Conc. | 20. | 49. | 08/27/76 |
| BENT | 9 | 26 | 14" Conc. | 20. | 53. | 08/27/76 |
| BENT | 9 | 27 | 14" Conc. | 20. 20. | 45. | 08/27/76 |
| BENT | 9 | 28 | 14" Conc. | 20. | 58. | 08/28/76 |
| BENT | 9 | 29 | 14" Conc. | 20. | 52. | 08/28/76 |
| BENT | 9 | 30 | 14" Conc. | 20. | 47. | 08/27/76 |
| BENT | 9 9 9 9 | 31 | 14" Conc. 14" Conc. | 20. | 45. | 08/28/76 |
| BENT | 9 | 32 | 14" Conc. 14" Conc. | 20. | 57. | 08/28/76 |
| BENT | 9 | 33 | 14" Conc. | 20. | 52. | 08/27/76 |
| BENT | | 34 35 | 14" Conc. | 20. | 45. | 08/28/76 |
| BENT | 9 | | | 20. | 57. | |
| BENT | 9 | 36 | | 20. | 58. | 08/30/76 |
| BENT | 9 | 37 | | 20. | 44. | 08/30/76 |
| BENT | 9 | 38 | 14" Conc. 14" Conc. | 20. | 53. | |
| BENT | 9 | 39 | 14" Conc. | 20. | 40. | 08/30/76 |
| BENT | 9 | 40 | 14" Conc. | 20. | 52. | 08/24/76 |
| BENT | 9 | 41 | | 20. | 0. | 08/28/76 |
| BENT | 9 | 42 | 14" Conc. | 20. | J . | |

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Federal ID#: 79I00400059

Page #: 17

Location #.: 79-I0040-0509-RL

Print Date: 08/30/95

Crossing...: WOLF RIVER

*

Project #..: 79007-3127-44

Contract #: 6978

| ======================================= | <u> </u> | | | | | |
|---|------------------|-------------|-------------|-------------|----------|----------|
| Subst | ructure | Pile | Pile | In Place | *Bearing | Drive |
| Name | Number | Number | Size | Length (ft) | (Tons) | Date |
| BENT | | 43 | 14" Conc. | 20. | 40. | 08/28/76 |
| BENT | 9 | 44 | 14" Conc. | 20. | 44. | 08/28/76 |
| BENT | 9 | 45 | 14" Conc. | 20. | 55. | 08/28/76 |
| BENT | 9 | 46 | 14" Conc. | 20. | 64. | 08/28/76 |
| BENT | | 47 | 14" Conc. | 20. | 52. | 08/28/76 |
| BENT | 9 9 9 9 | 48 | 14" Conc. | 20. | 44. | 08/28/76 |
| BENT | 9 | 49 | 14" Conc. | 20. | 80. | 08/30/76 |
| BENT | 9 | 50 | 14" Conc. | 20. | 67. | 08/30/76 |
| BENT | 9 | 51 | 14" Conc. | 20. | 54. | 08/30/76 |
| BENT | 9 | 5.2 | 14" Conc. | 20. | 83. | 08/30/76 |
| BENT | 9 | 53 | 14" Conc. | 20. | 81. | 08/30/76 |
| BENT | 9 | 54 | 14" Conc. | 20. | 74. | 08/30/76 |
| BENT | 9 9 | 55 | 14" Conc. | 20. | 72. | 08/30/76 |
| BENT | 9 | 56 | 14" Conc. | 20. | 53. | 08/28/76 |
| BENT | 9 | 57 | 14" Conc. | 20. | 52. | 08/28/76 |
| BENT | 9 | 58 | 14" Conc. | 20. | 71. | 08/28/76 |
| BENT | 9 | 59 | 14" Conc. | 20. | 55. | 08/28/76 |
| BENT | 9 | 60 | 14" Conc. | 20. | 64. | 08/28/76 |
| | Avera | ge Pile | Length (ft) | = 20.7068 | | |
| BENT | 10 | 1 | 14" Conc. | 30. | 114. | 08/15/77 |
| BENT | 10 | 2 | 14" Conc. | 30. | 100. | 08/15/77 |
| BENT | 10 | 3 | 14" Conc. | 30. | 121. | 08/15/77 |
| BENT | 10 | 4 | 14" Conc. | 30. | 126. | 08/08/77 |
| BENT | 10 | 5 | 14" Conc. | 55. | 58. | 08/09/77 |
| BENT | 10 | 6 | 14" Conc. | 30. | 100. | 08/11/77 |
| BENT | 10 | 7 | 14" Conc. | 30. | 103. | |
| BENT | 10 | 8 | 14" Conc. | 30. | 100. | |
| BENT | 10 | 9 | 14" Conc. | 30. | 100. | |
| BENT | 10 | 10 | 14" Conc. | 30. | 0. | 08/12/77 |
| BENT | 10 | 11 | 14" Conc. | 30. | 0. | 08/12/77 |
| BENT | 10 | 12 | 14" Conc. | 30. | 0. | 08/12/77 |
| BENT | 10 | 13 | 14" Conc. | 30. | 64. | 08/12/77 |
| BENT | 10 | 14 | 14" Conc. | 30. | 100. | 08/12/77 |
| BENT | 10 | 15 | 14" Conc. | 30. | 80. | 08/12/77 |
| BENT | 10 | 16 | 14" Conc. | 30. | 100. | 08/12/77 |
| BENT | 10 | 17 | 14" Conc. | 30. | 87. | 08/12/77 |
| BENT | 10 | 18 | 14" Conc. | 30. | 98. | 08/12/77 |
| BENT | 10 | 19 | 14" Conc. | 30. | 72. | 08/12/77 |
| | | | | | | |

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Federal ID#: 79100400059 Page #: 18

Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER

| Subst | ructure | Pile | Pile | In Place | *Bearing | Drive |
|--|--|---|---|--|---|--|
| Name | Number | Number | Size | Length (ft) | (Tons) | Date |
| BENT | 10 | 20 | 14" Conc. | 30. | 84. | 08/12/77 |
| BENT | 10 | 21 | 14" Conc. | 30. | 96. | 08/12/77 |
| BENT | 10 | 22 | 14" Conc. | 30. | 97. | 08/12/77 |
| BENT | 10 | 23 | 14" Conc. | 55. | 42. | 08/09/77 |
| BENT | 10 | 24 | 14" Conc. | 30. | 101. | 08/12/77 |
| BENT | 10 | 25 | 14" Conc. | 30. | | 08/15/77 |
| BENT | 10 | 26 | 14" Conc. | 30. | 115. | 08/15/77 |
| BENT | 10 | 27 | 14" Conc. | 30. | 102. | 08/15/77 |
| BENT | 10 | 28 | 14" Conc. | 30. | 101. | 08/15/77 |
| BENT | 10 | 29 | 14" Conc. | 30. | 95. | 08/15/77 |
| BENT | 10 | 30 | 14" Conc. | 30. | 94. | 08/15/77 |
| BENT | 10 | 31 | 14" Conc. | 30. | 77. | 08/15/77 |
| BENT | 10 | 32 | 14" Conc. | 30. | 73. | 08/15/77 |
| BENT | 10 | 33 | 14" Conc. | 30. | 89. | 08/15/77 |
| BENT | 10 | 34 | 14" Conc. | 30. | 100. | 08/15/77 |
| BENT | 10 | 35 | 14" Conc. | 30. | 101. | 08/15/77 |
| BENT | 10 | 36 | 14" Conc. | 30. | 104. | 08/15/77 |
| | | | | | | |
| | Avera | ge Pile | Length (ft) | = 31.3889 | | |
| BENT | | | | | 23. | 08/25/76 |
| BENT BENT | 11 | 1 | 14" Conc. | 16. | 23. 59. | 08/25/76 08/27/76 |
| | | | 14" Conc. | | 23. 59. 77. | 08/25/76 08/27/76 08/19/76 |
| BENT | 11 11 | 1 2 | 14" Conc. 14" Conc. | 16. 25. | 59. | 08/27/76 |
| BENT BENT BENT BENT | 11 11 11 | 1 2 3 4 5 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 16. 25. 21. | 59. 77. | 08/27/76 08/19/76 08/14/76 08/09/76 |
| BENT BENT BENT BENT BENT | 11 11 11 11 11 | 1 2 3 4 5 6 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 16. 25. 21. 22. 20. 25. | 59. 77. 120. 53. 100. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 |
| BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 | 1 2 3 4 5 6 7 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 16. 25. 21. 22. 20. 25. 19. | 59. 77. 120. 53. 100. 72. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/24/76 |
| BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 16. 25. 21. 22. 20. 25. 19. | 59. 77. 120. 53. 100. 72. 72. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/24/76 08/25/76 |
| BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 | 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. 14" Conc. | 16. 25. 21. 22. 20. 25. 19. 17. 25. | 59. 77. 120. 53. 100. 72. 72. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/24/76 08/25/76 08/20/76 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 9 | 14" Conc. | 16. 25. 21. 22. 20. 25. 19. 17. 25. 23. | 59. 77. 120. 53. 100. 72. 72. 55. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/24/76 08/25/76 08/20/76 08/20/76 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 9 10 | 14" Conc. | 16. 25. 21. 22. 20. 25. 19. 17. 25. 23. | 59. 77. 120. 53. 100. 72. 72. 55. 0. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/25/76 08/25/76 08/20/76 08/20/76 08/20/76 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 9 10 11 | 14" Conc. | 16. 25. 21. 22. 20. 25. 19. 17. 25. 23. 25. | 59. 77. 120. 53. 100. 72. 72. 55. 0. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/25/76 08/20/76 08/20/76 08/20/76 08/20/76 |
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| BENT BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 | 14" Conc. | 16. 25. 21. 22. 20. 25. 19. 17. 25. 23. 25. 23. | 59. 77. 120. 53. 100. 72. 72. 55. 0. 0. 53. 0. 54. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/24/76 08/25/76 08/20/76 08/20/76 08/20/76 08/04/76 08/04/76 08/23/76 |
| BENT BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 14" Conc. | 16. 25. 21. 22. 20. 25. 19. 17. 25. 23. 25. 23. | 59. 77. 120. 53. 100. 72. 72. 55. 0. 0. 53. 0. 54. 50. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/24/76 08/25/76 08/20/76 08/20/76 08/20/76 08/04/76 08/04/76 08/23/76 |
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| BENT BENT BENT BENT BENT BENT BENT BENT | 11 11 11 11 11 11 11 11 11 11 11 11 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | 14" Conc. | 16. 25. 21. 22. 20. 25. 19. 17. 25. 23. 25. 25. 25. 25. | 59. 77. 120. 53. 100. 72. 72. 55. 0. 53. 0. 54. 50. 57. 48. 55. | 08/27/76 08/19/76 08/14/76 08/09/76 08/24/76 08/25/76 08/20/76 08/20/76 08/20/76 08/20/76 08/04/76 08/04/76 08/23/76 08/23/76 08/23/76 08/23/76 08/20/76 |
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SEP 1 6 1999

Federal ID#: 79I00400059 Page #: 19

Location #.: 79-I0040-0509-RL Print Date: 08/30/95

Crossing...: WOLF RIVER *

| Subst: | ructure Number | Pile Number | Pile Size | In Place Length (ft) | *Bearing (Tons) | Drive Date |
|--------|-------------------|----------------|--------------|-------------------------|--------------------|---------------|
| BENT | 11 | 21 | 14" Conc. | 25. | 50. | 08/20/76 |
| BENT | 11 | 22 | 14" Conc. | 25. | 100. | 08/25/76 |
| BENT | 11 | 23 | 14" Conc. | 25. | 93. | 08/25/76 |
| BENT | 11 | 24 | 14" Conc. | 25. | 90. | 08/25/76 |
| | Avera | ge Pile | Length (ft) | = 22.9583 | | |
| BENT | 12 | 1 | 14" Conc. | 25. | 113. | 07/25/77 |
| BENT | 12 | 2 | 14" Conc. | 25. | 99. | 07/25/77 |
| BENT | 12 | 3 | 14" Conc. | 25. | 101. | 07/25/77 |
| BENT | 12 | 4 | 14" Conc. | 25. | 84. | 07/25/77 |
| BENT | 12 | 5 | 14" Conc. | 25. | 81. | 07/25/77 |
| BENT | 12 | 6 | 14" Conc. | 25. | 78. | 07/25/77 |
| BENT | 12 | 7 | 14" Conc. | 25. | 78. | 07/25/77 |
| BENT | 12 | 8 | 14" Conc. | 25. | 100. | 07/25/77 |
| BENT | 12 | 9 | 14" Conc. | 25. | 88. | 07/25/77 |
| BENT | 12 | 10 | 14" Conc. | 25. | 88. | 07/25/77 |
| BENT | 12 | 11 | 14" Conc. | 25. | 100. | 07/25/77 |
| BENT | 12 | 12 | 14" Conc. | 25. | 0. | 07/25/77 |
| BENT | 12 | 13 | 14" Conc. | 53. | 42. | 07/20/77 |
| BENT | 12 | 14 | 14" Conc. | 25. | 121. | 07/26/77 |
| BENT | 12 | 15 | 14" Conc. | 25. | 111. | 07/26/77 |
| BENT | 12 | 16 | 14" Conc. | 25. | 114. | 07/26/77 |
| BENT | 12 | 17 | 14" Conc. | 25. | 114. | 07/26/77 |
| BENT | 12 | 18 | 14" Conc. | 25. | 97. | 07/26/77 |
| BENT | 12 | 19 | 14" Conc. | 25. | 100. | 07/26/77 |
| BENT | 12 | 20 | 14" Conc. | 25. | 115. | 07/26/77 |
| BENT | 12 | 21 | 14" Conc. | 25. | 82. | 07/26/77 |
| BENT | 12 | 22 | 14" Conc. | 25. | 104. | 07/26/77 |
| BENT | 12 | 23 | 14" Conc. | 25. | 110. | 07/26/77 |
| BENT | 12 | 24 | 14" Conc. | 25. | 123. | 07/26/77 |
| | Avera | ge Pile | Length (ft) | = 26.1667 | | |

^{* 0. =} No Data Available

SCOUR REPAIR SHELBY COUNTY 79-I40-5.09/WOLF RIVER

PROJECT NO: 79002-4130-04

DONE BY REGION IV FORCES

WORK IN PROGRESS 5/19/98

FINAL COMPLETION PICTURES
IN REPAIR OFFICE NATED
10/2/98

PROJECT NUMBER REQUEST

| (Include | location | map) | MICHAEL | |
|----------|----------|------|---------|--|
|----------|----------|------|---------|--|

Jate: 1-21-98

ANDERSON

Requestor: BRIDGE REPAIR

Phone No: 741-8398

Preliminary Engineering No.: 79002-4129-04

County: SHELBY Bridge No.: 79-I40-5.09(LCR)/

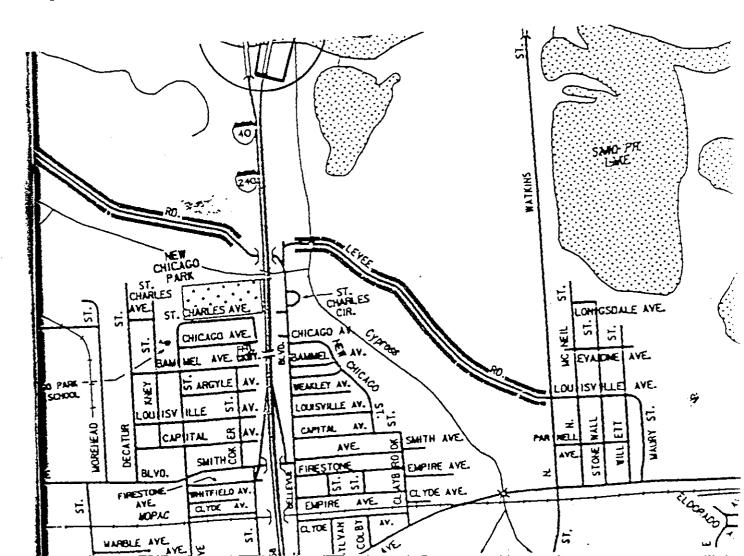
Crossing: WOLF RIVER

Type Work: INSTALLATION OF RIP-RAP AS BANK STABALIZATION

É REMOVAL OF STREAM OBSTRUCTION FROM CHANNEL

Est. Proj. Cost: \$ 262,500 Est. P.E. Cost: \$ 30,000.00

Proposed Letting: MAY '98 Consultant: GARVER+ GARVER





STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION AND REPAIR OFFICE NASHVILLE, TENNESSEE 37243-0338

Memorandum

DATE:

September 17, 1998

TO:

Mr. Bill Hazlerig, Region IV Bridge Engineer

FROM:

Wayne J. Seger, Civil Engineering Manager 1

MRA

RE:

79-I40-5.09/ WOLF RIVER

As discussed, I am sending you this memo to confirm permission for removal of the cofferdams that are obstructing flow in the area of these structures.

It is the opinion of Mr. John Hewitt from the permitting section that neither the Tennessee Department of Environment and Conservation nor the United States Army Corps of Engineers requires a permit to remove a structure from an area. Further, as long as you are not in "waters of the State", we will be in full compliance with both agencies' regulations.

If you find that you are unable to get to one or both of these structures without bringing machinery or equipment directly into the stream flow, please stop work before this occurs.

If you have any further questions, please feel free to call me.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

NASHVILLE, TENNESSEE 37243-0339

February 5, 1998

Mr. Daniel C. Eagar
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
Natural Resource Section
6th Floor L. & C. Annex
401 Church Street
Nashville, Tennessee 37243-1534

Subject:

Emergency Road Repair Interstates 40 and 240 At Wolf River Shelby County

Dear Mr. Eagar:

In accordance with the Tennessee Department of Environment and Conservation's General Permit for Emergency Road Repair, this office is providing a portion of the USGS quad map for Northwest Memphis, TN (404-NE), showing the location of an emergency road repair at the Wolf River, where the riverbank has scoured to the point of endangering the bridge piers. Immediate repairs are necessary to protect the safety of the motoring public. This is a "noplans" operation by TDOT maintenance forces.

The repair, which will be conducted the week of February 9, will consist of the placement of soil and rip-rap of approximately 15" diameter to temporarily repair approximately 590 linear feet of bank which have been severely scoured, and rip-rap covering the existing substrate adjacent to the bank. It is our understanding that the river flow has scoured the bank and moved several feet toward the pier within the last few months, endangering pier stability due to the relatively short piling used under these piers. We are enclosing aerial photographs taken in 1987 and January 1998, which show the movement of the bank toward pier # 7 on both bridges. We are also enclosing photographs taken at the site.

Please note that the current instability of the banks is resulting in considerable erosion and sedimentation. We believe this project will have an overall benefit to water quality.

Diagrams showing the approximate scope of work are enclosed. Due to the varying conditions at the site, and the highly erodible sediments in the river, the engineer on the site will determine the final scope of work at the time the rip-rap is placed. The thickness of the rip-rap layer will vary between 3' and 6', depending on conditions.

We also are preparing to develop project plans for a more permanent solution to the bank erosion problem, which appears to be caused in part by the configuration of the opposite bank

Mr. Daniel C. Eagar February 5, 1998 Page 2

and an existing obstruction in the river upstream of this site. At that time, we will apply for the appropriate permits for the additional work.

By copy of this letter, we request the concurrence of the Corps of Engineers, Memphis District, that this emergency work fits the criteria of one of the Nationwide Permits.

We also request that the Corps inform us at their early convenience if they are planning any related corrective or preservation work for this area of the Wolf River in the future, which may impact or aid potential TDOT work.

Please advise us if you have any questions or if we can be of any assistance.

Sincerely,

(for)

Edward P. Wasserman

Engineering Director, Structures

Enclosures

PDD:JLH:pc

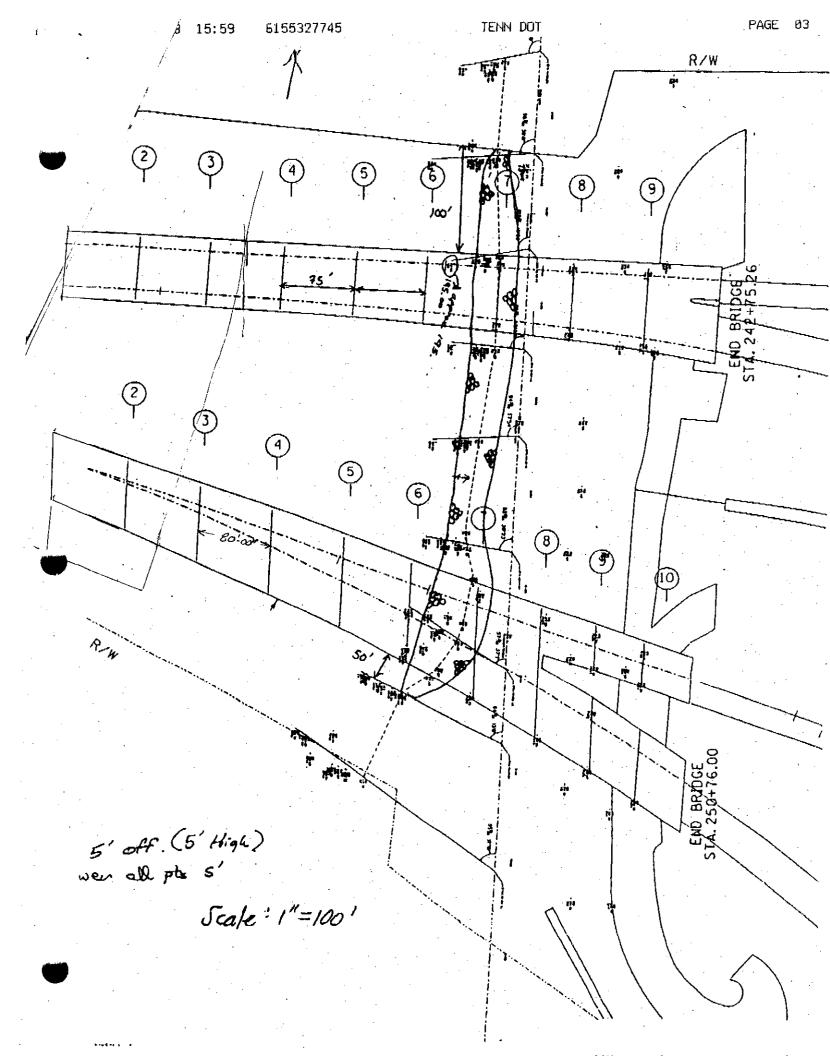
cc:

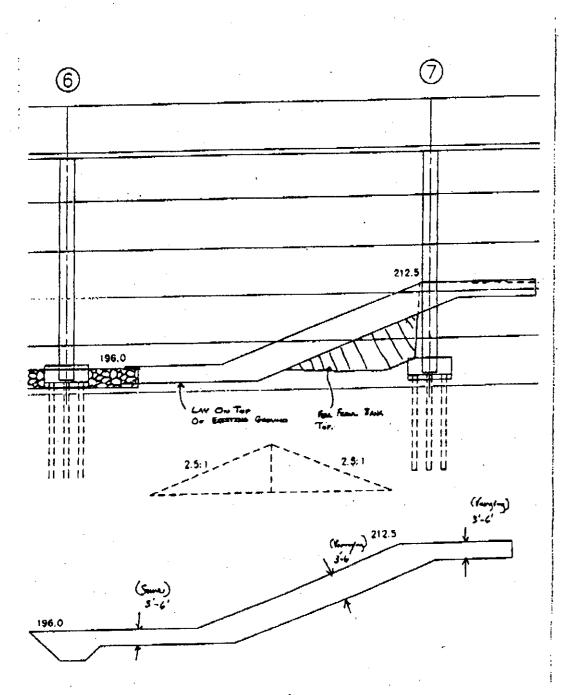
Col. Gregory Bean, USACE Memphis District

Mr. Wayne Seger

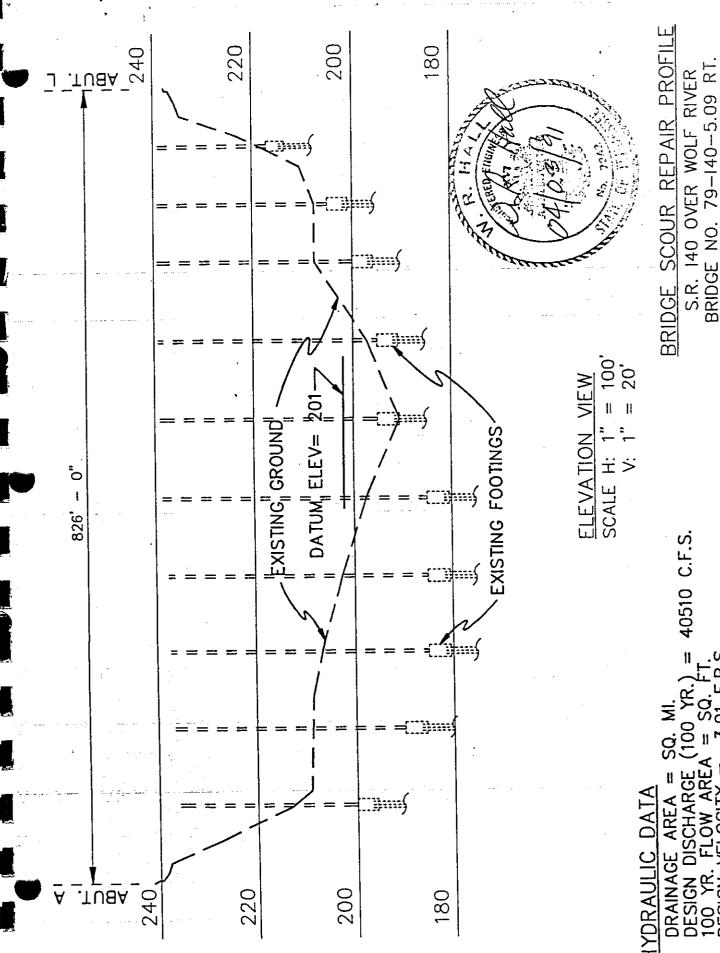
Mr. Bill Hazlerig

Mr. Bob Englert

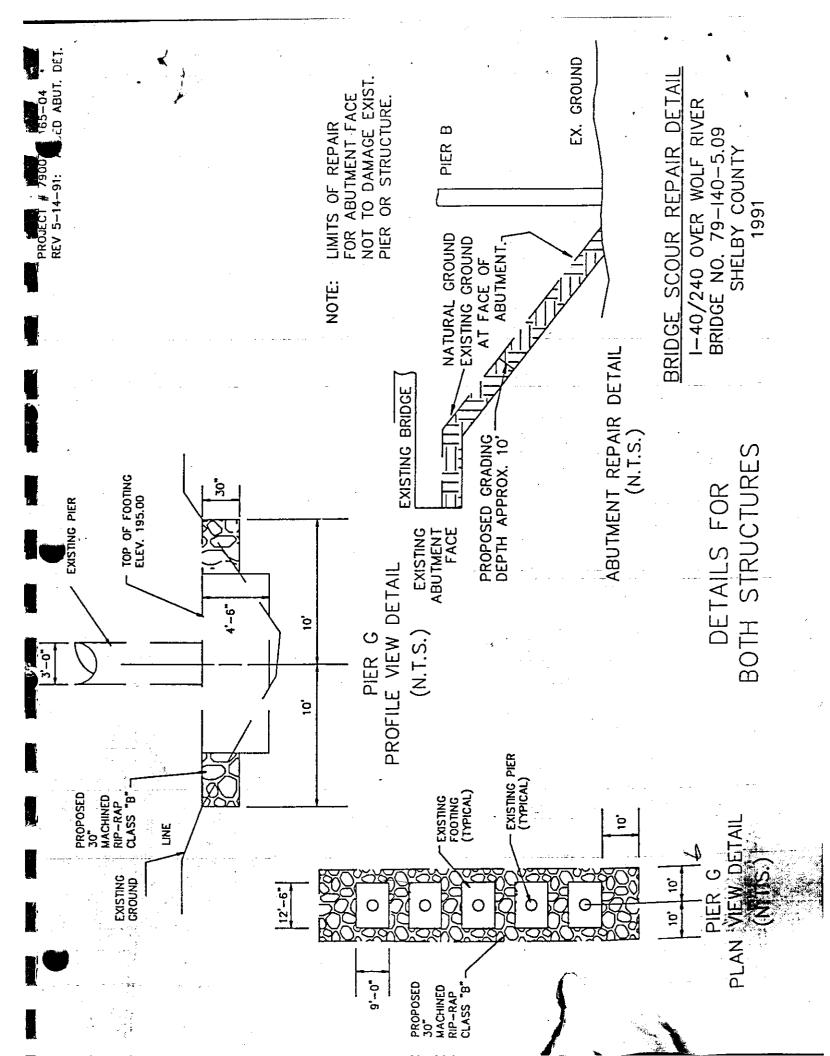




Scale: Hortz. 1"=20' Vert. not to scale



S.R. 140 OVER WOLF RIVER BRIDGE NO. 79-140-5.09 R



STATE

OF

TENNESSEE

SHEET 1 OF 2

Sign of the second seco

Bids to be Received until 10:00 A.M. on June 14, 1991.

DESCRIPTION OF WORK

In the State of
Tennessee, in the County of Shelby:
consisting of the Contract Rip-Rap
Installation in Shelby County on I40-5.09 left and right over Wolf
River.

| F | Project Ref. No. | Project No. | | | |
|----------------|--|---------------|----------|------|---------|
| - . <u></u> | en e | 79007-4165-04 | Road _ | 0.00 | _ Miles |
| <u> </u> | | <u></u> | Bridge _ | 0.00 | _ Miles |
| Cour | nty Shelby | | TOTAL _ | 0.00 | _ Miles |

ESTIMATE OF QUANTITIES AND SCHEDULE OF PRICES (Sequence Numbers are for Departmental Use Only)

TENNESSEE

SHEET 2 OF 2

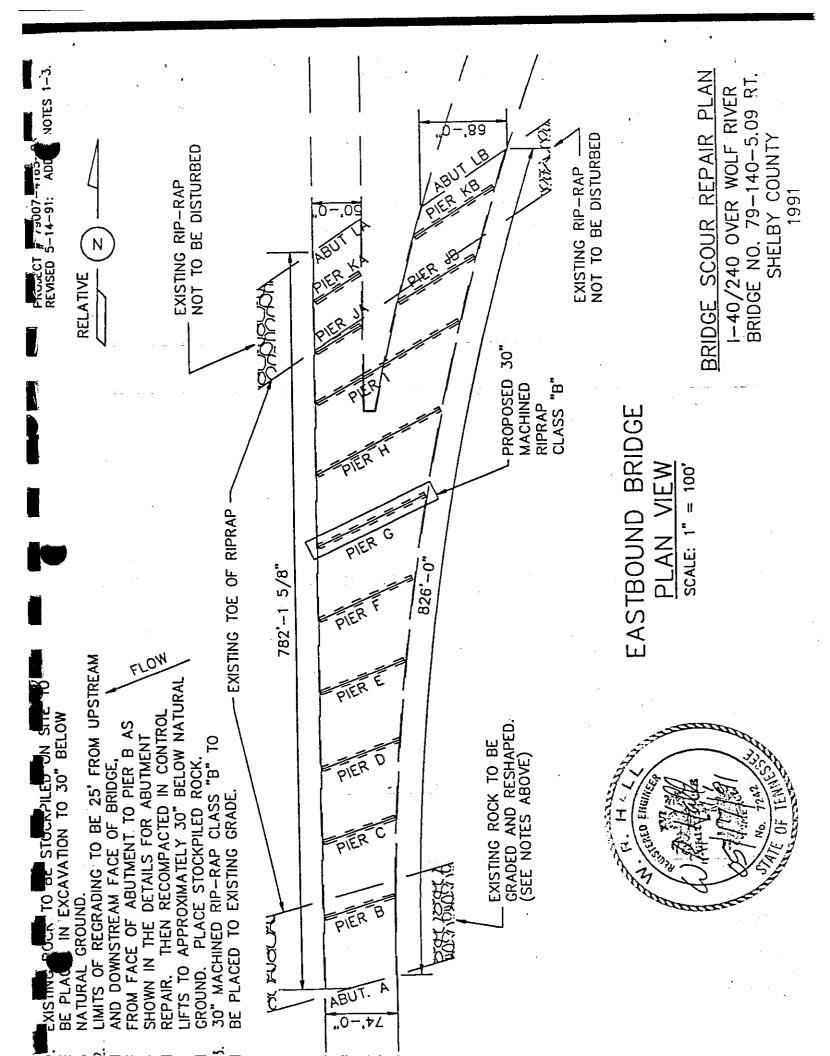
PROJECT NO. 79007-4165-04

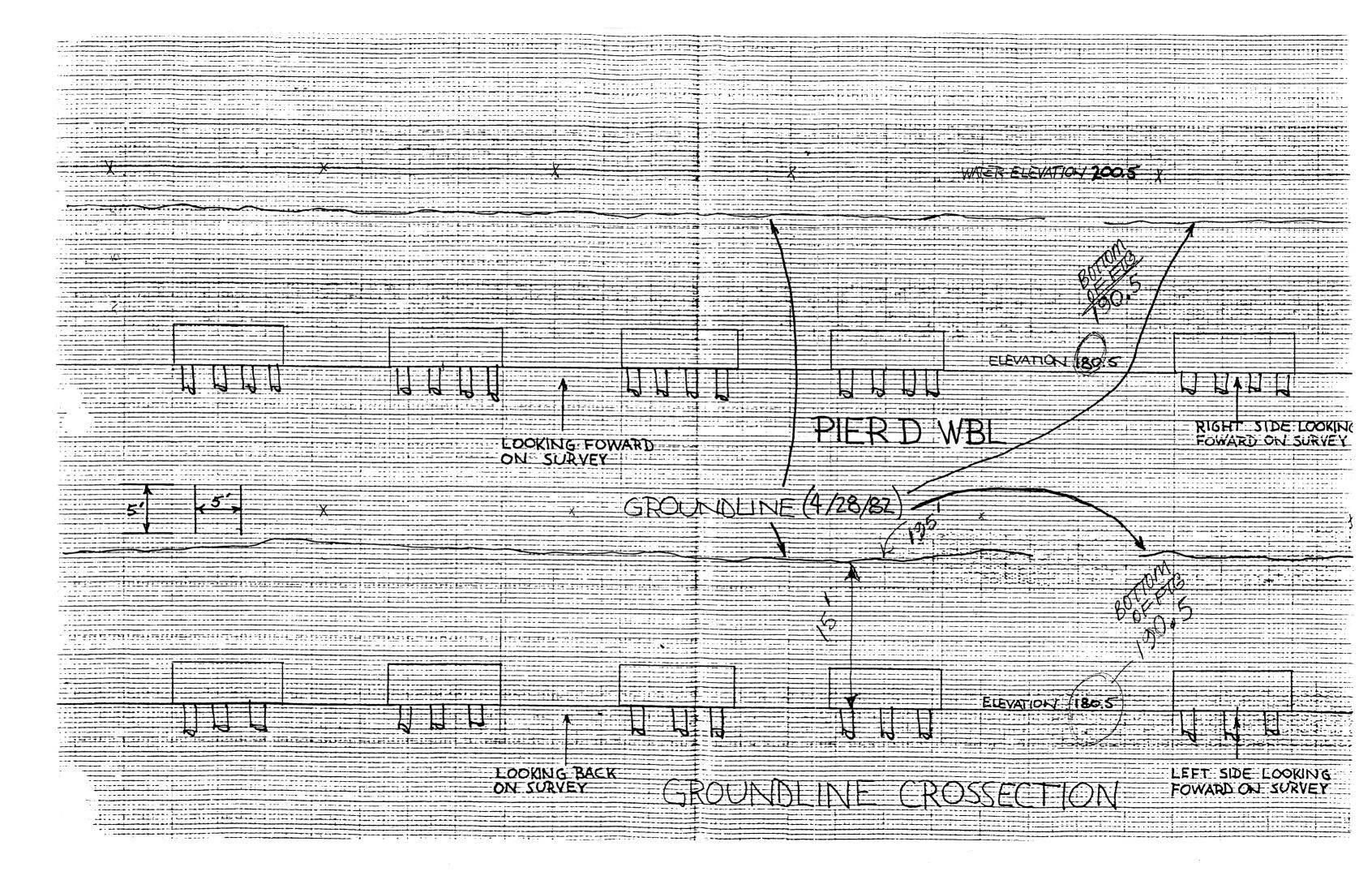
COUNTY: Shelby

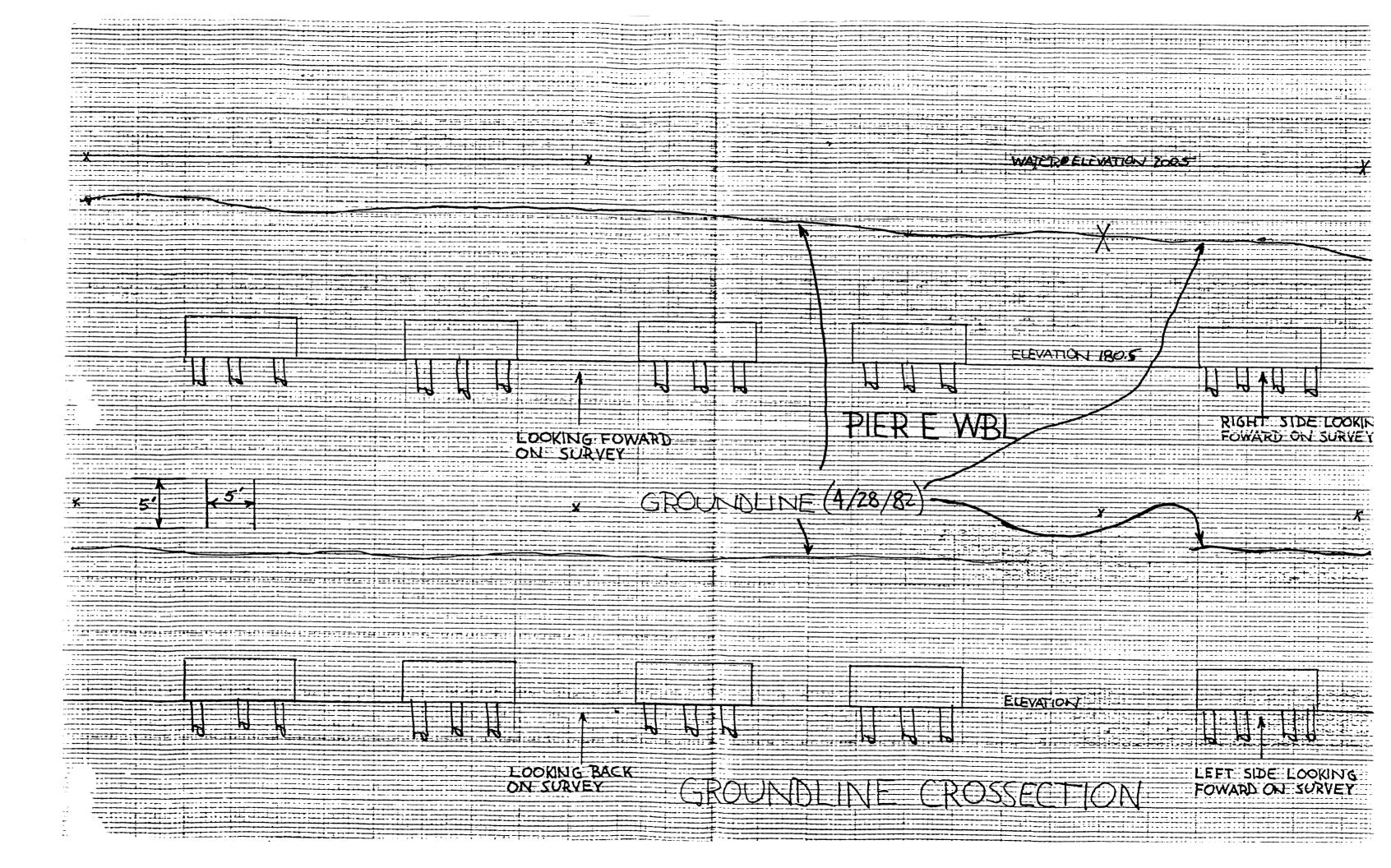
| SEQ. NO. | AND ONTY. | ITEMS AND UNIT PRICES (SEQ. NO. FOR DEPT. USE ONLY) | UNIT PRICE | AMOUNT |
|-----------|--------------|---|---------------|--------|
| 203-01 | CU. YD. | ROAD & DRAINAGE EXCAVATION(UNCLASS) ODLLARS | | |
| 20 | | CENTS | | |
| 209-06 | BALE 200 | BALED HAY OR STRAW EROSION CHECKS ODLLARS | | |
| 30 | | CENTS | | |
| | | | | |
| 209-08 | L.F. 400 | TEMPORARY SILT FENCES DOLLARS | | |
| 40 | | CENTS | | |
| 709-05.08 | TONS 1765 | MACHINED RIP-RAP [CLASS B] @DOLLARS | | |
| 50 | | CENTS | | |
| 712-01 | L.S. | TRAFFIC CONTROL DOLLARS | | |
| 60 | | CENTS | umai de la la | |
| 717-01 | L.S. | MOBILIZATION | | |
| 70 | - | @DOLLARSCENTS | | |
| | · | · · · · · · · · · · · · · · · · · · · | | |

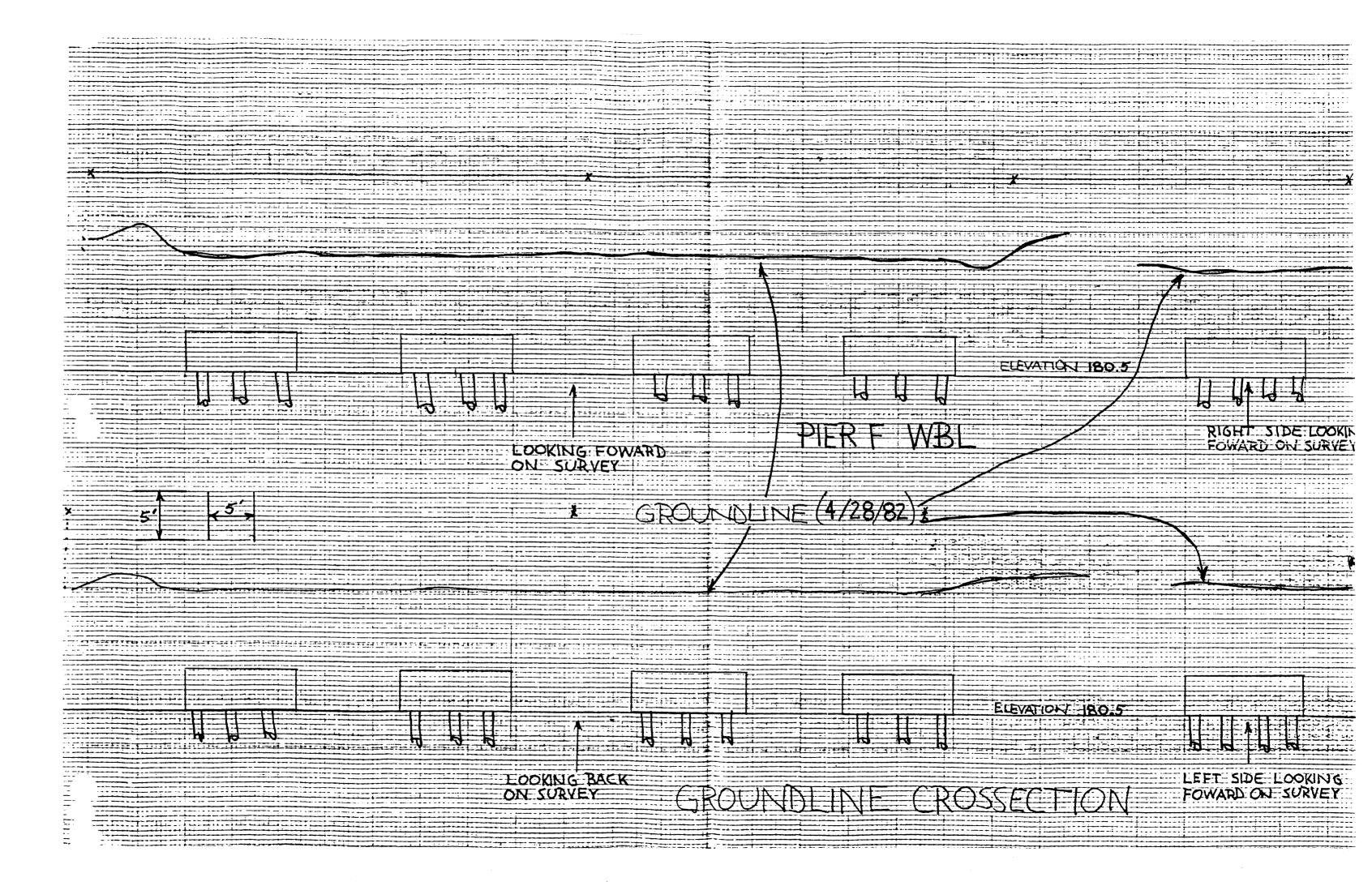
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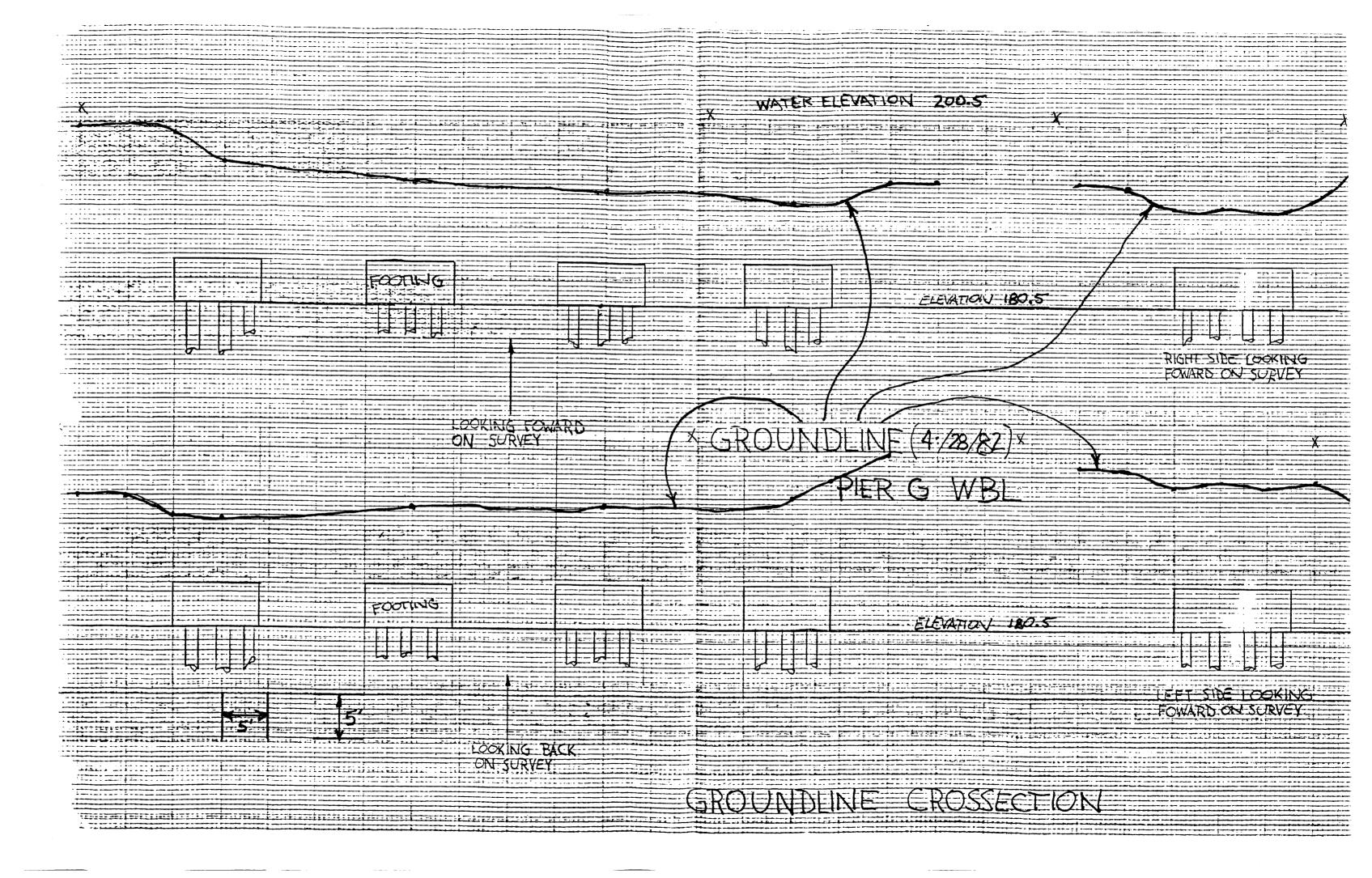
TOTAL CONTRACT



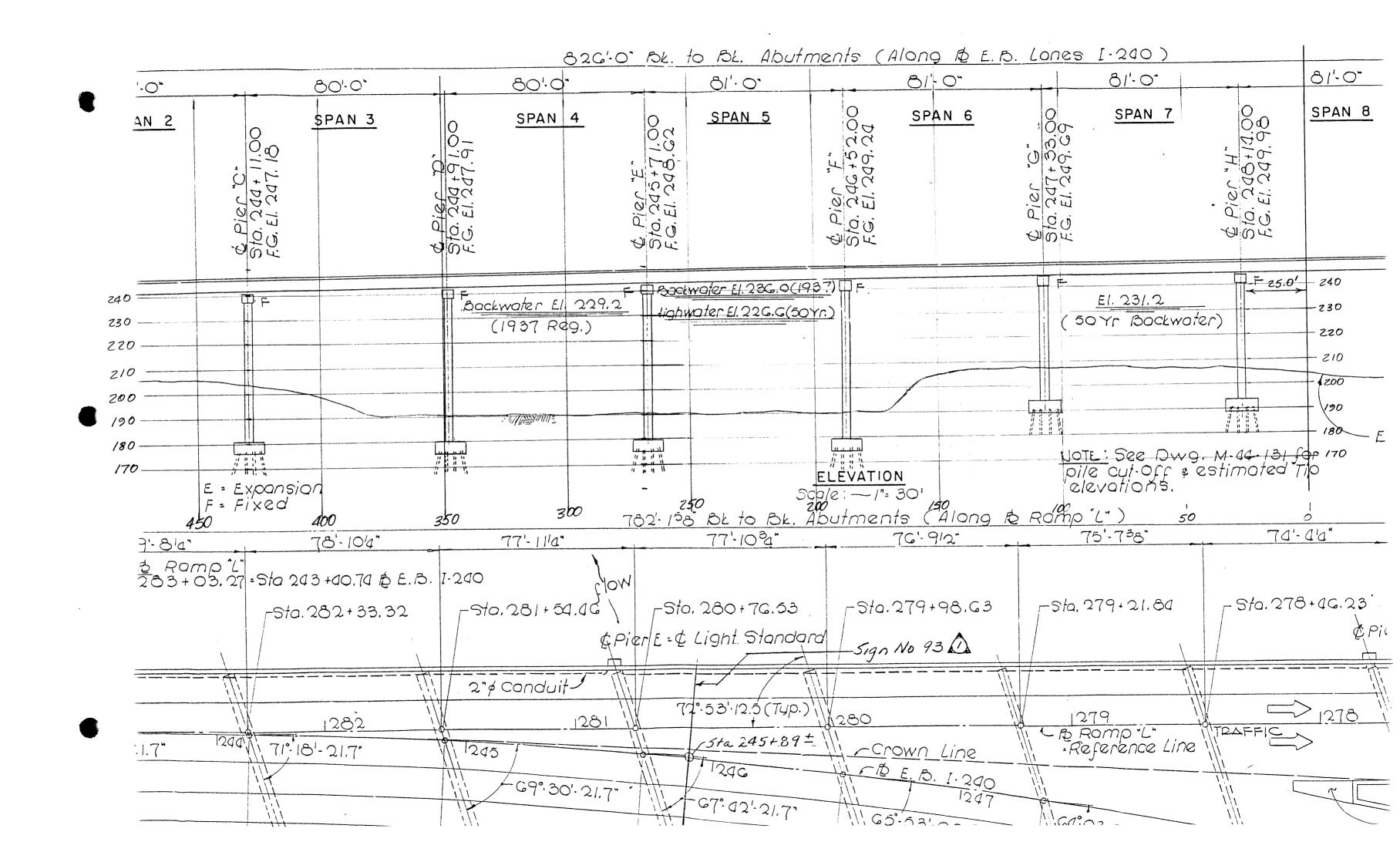


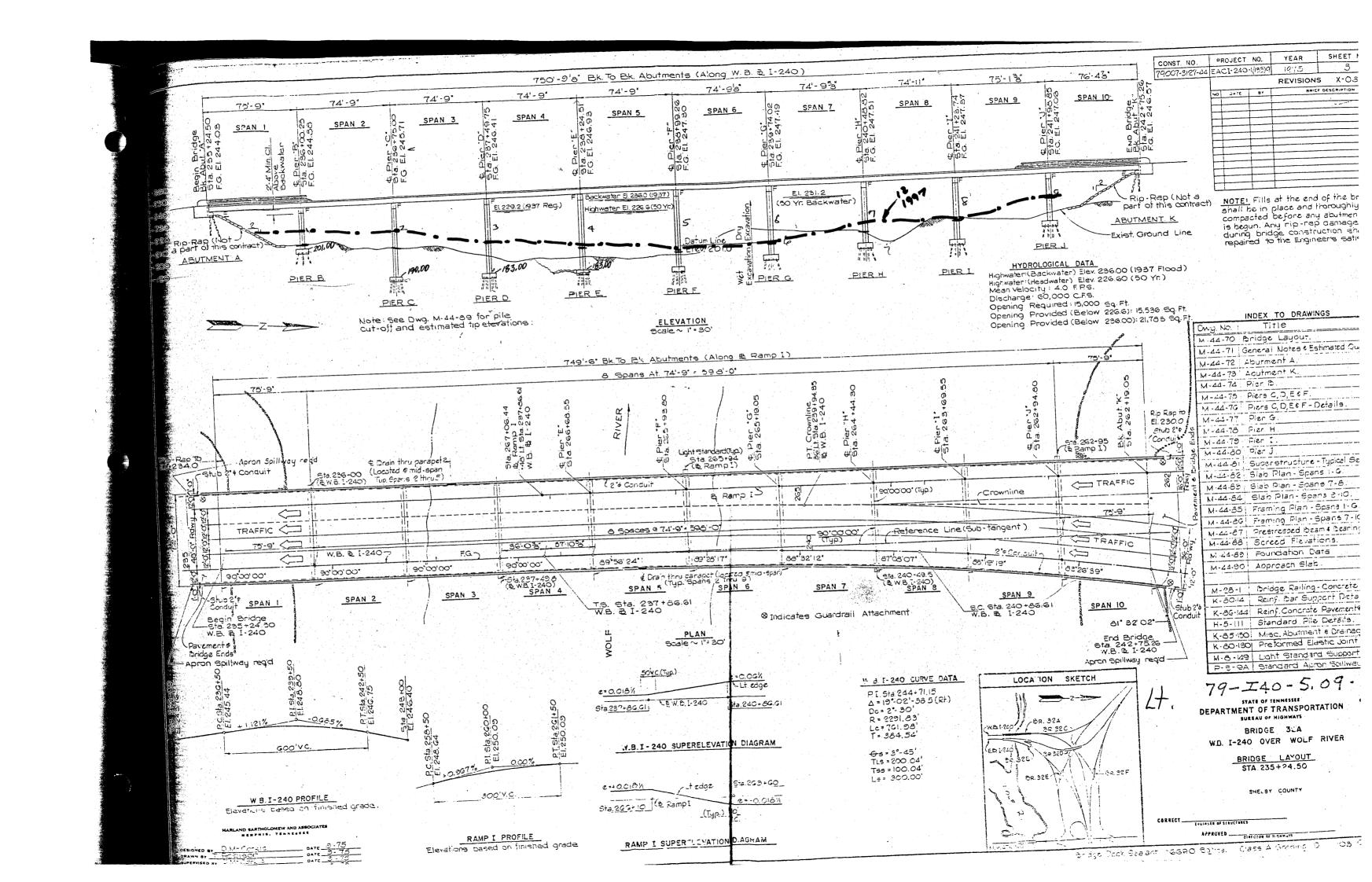


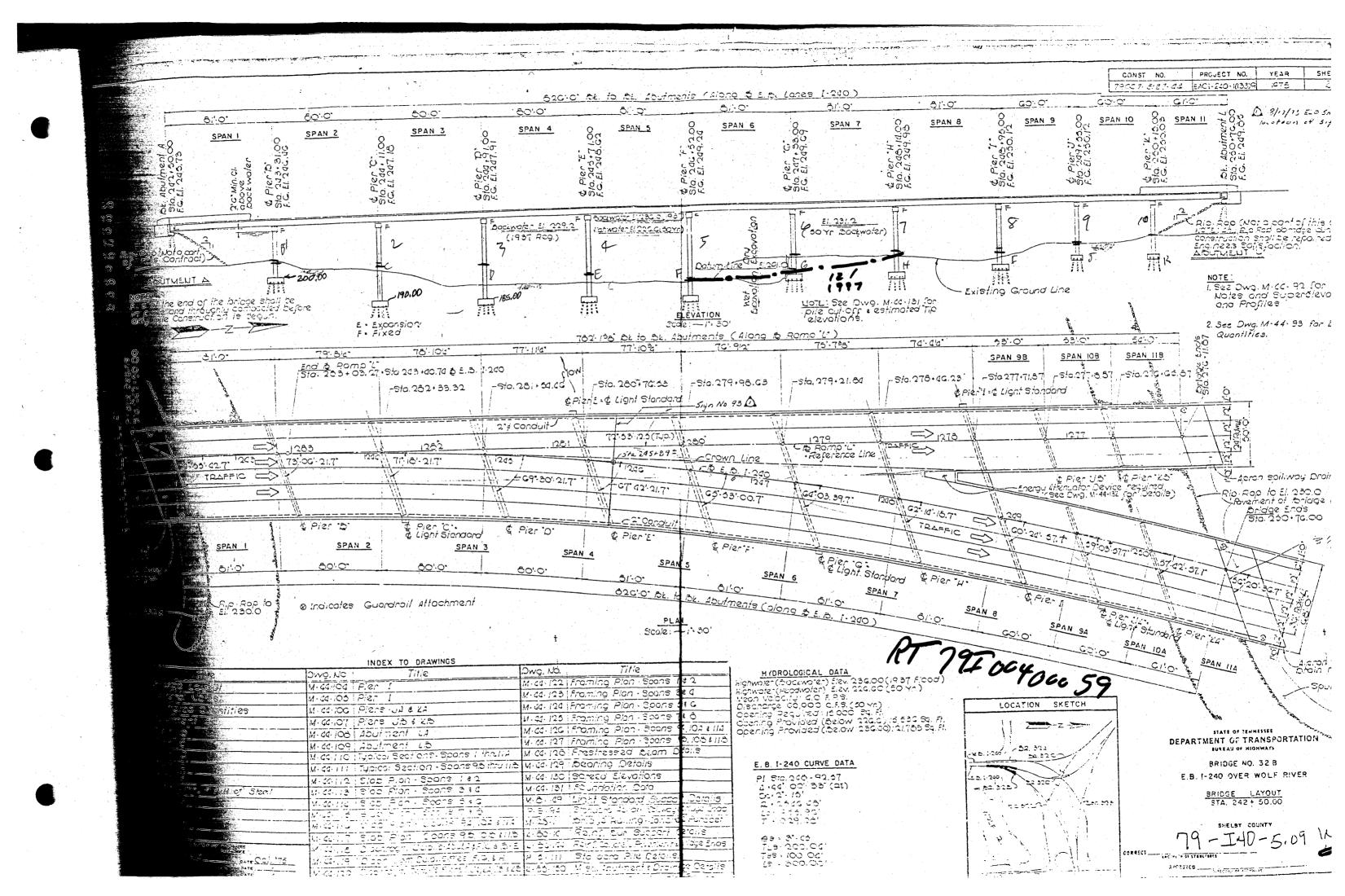


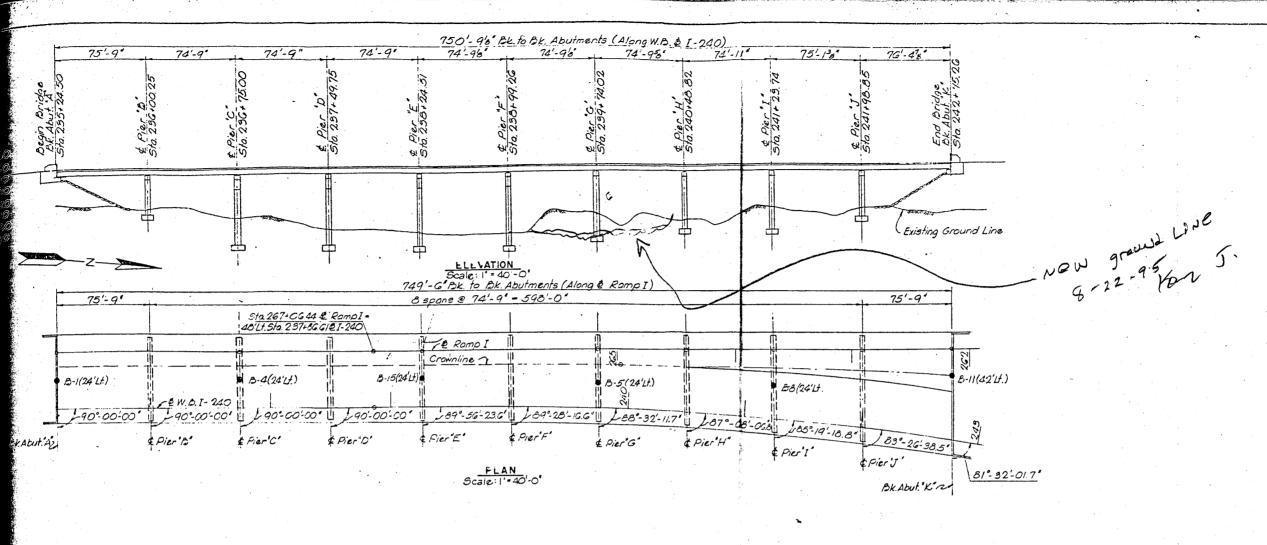


79-I40-5,09 R.C. 826'-0" Bk. to BL. Abutments (Along & E.B. Lones I-240) E.B.L. 81'-0" 81'-0 801.0 8/10 81'.0 80.0, '-O**`** 3+14.00 49.98 SPAN E SPAN 7 SPAN 6 SPAN 5 SPAN 4 007 AN 2 \$PAN 3 2002 \$ Pier F. Sto. 246+59 F.G. El. 249.9 100 \$ Pier "H Sto. 248+ F.C. El. 299 & P. Sto. 1. 色の月 = 25.0' 240 F - Backwater El. 236.0(1937) -E1. 231.2 Backwater El 229,2 230 lighwater El 22G.G(50 Yr.) 50 Yr Bockwoter) 730 -(1937 Reg.) -WATER ELEV. 206.0 220 1-20 -210 200 200 190 190 130 JOIE: See DWg. M-44-131 for 170 pile cut-off : estimated Tip elevations. 170-ELEVATION E = Expansion F = Fixed 782: 198 Bt to Bk. Abutments (Along & Romp LT) 300 350 70'-0'0" 75'-738" 77'-10%" 76'-912" 77'-11'4" 78'-104" 7-812 3 Romp "L" 203+03.27 = Sta 243+40.74 & E.B. 1.240 STA, 6+50 WOF -Sta.278+46.23 -Sta. 279+21.84 -Sta.279+98.G3 -5to.281+54.16 -Sto. 280+76.53 rSta. 282+33.32 & PierlE - & Light Standard -Sign No 93 🕰 2" & Conduit 77°.53'.12.5 (Typ.) 1278 1281 1282 - Reference Line 15ta 245+89 =_ 71:18'-21.7" :1.7" crown Line 245 FB E.B. 1.290 1246 -69°.30′.21.7° 67:021.21.77 M. GO-521-









| 210 | . 1 | | | • | i fi di erri basili | 210 Legend | (II) 34.5 Depth at |
|--------------|--------------------------------|--|--|--|--|------------|----------------------------------|
| | N = 8 F _s = 0.33 | 4 | 5 | 8 N = 4 F ₅ = 0.07 | N = 4 | 210 Legend | Hole no. |
| 200 | 4P = 0 | N=3 | 15 | ap±0 | 5 = 0.17 co = 0 | 200 SAND | N = "N" value |
| | | F ₆ = 0.12 q ₆ = 0 | N = 4 | N = 20 | N = 11 F ₅ = 0.20 | SILT | Fs = tons/ft 2 qb = tons/ft 2 |
| 190_ | N = 30 F = 0.58 | N = 25 F _a = 0.48 Q _a = 54 | | N = 20 F _a = 0.38 q _b = 43 | N = 30 F ₂ = 0.58 G ₂ = 65 | CLAY | |
| 180 | 46° 03 | | N = 30 N = 30 F ₈ = 0.58 F ₈ = 0.58 q _b = 65 q _b = 65 | N = 30 F _s = 0.58 q _b = 65 | | <u> </u> | |
| 170 <u>-</u> | | 7:-::- | | | | | |
| 160 | | | N = 16 F ₅ = 0.62 q _b = 17 N = 23 F ₅ = 0.87 q _b = 25 | N = 20 F _g = 0.77 q _b = 22 | | 160 | |

N = 30 F₃ = 1.06

qb = 33

N = 30 F_a = 124 q_b = 14

N = 30 F_a : 1.06 q_b : 43

| | , | | |
|---------------|------------------|------|-------|
| CONST. NO. | PROJECT NO. | YEAR | SHEET |
| 79007-3127-44 | EACI-240-1(153)9 | 1975 | 22 |

| ILE | DAT |
|-----|-----|
| | |
| | |

| | PILE | CATA | | |
|-----------|--------------------|------------------|-------------------|-----------|
| Location | Design Load (1) | Cut-off Elev. | Est. Tip Elev. | Pil Le |
| A'out. A. | 95 Tons | Varies | 192.0 | |
| Pier B. | 100 Tons | 200.0 | 130.0 | |
| Pier C | 95 Tons | 18G.5 | 166.5 | |
| Pier D | 95 Tons | 181.5 | 163.5 | |
| Pier E | 95 Tons | 181.5 | IGC.5 | |
| Pier F | 95 Tons | 181.5 | 166.5 | |
| Pier G | 85 Tons | 192.5 | 177.5 | |
| Pier H | 85 Tons | 192.5 | 177.5 | |
| Pier I | 90 Tans | 191.5 | 176.5 | |
| Pier J | 100 Tons | 193.5 | 178.5 | |
| Abut. K. | 95 Tons | Varies | 185.0 | |
| | | | | |

Design loads base on factored loads.
 Pile lengths subject to change after reviewing results of load rests.

NOTE: This drawing is not to be used as a layout.

PROJECT I-240-1(83)4 FOUNDATION DATA E.B. \$ W.B. I-240 OVER WOLF RIVE BRIDGE NO.32 A

SHELBY COUNTY

LIST OF SPECIAL PROVISIONS

** DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS

LAST

REGARDING REV. DATE 105A ----- APPROVAL OF SHOP DRAWINGS LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS)

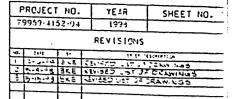
DRAWING NO. M-44-70, M-44-72 THRU 75, M-44-77 THRU 81, AND M-44-85 THRU 87, ---- EXISTING BRIDGE DRAWINGS

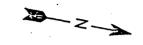
DRAWING

AAALIST OF DRAWINGS

LAST DRAWING NO. REV. DATE

DRAWING





| ③ - | SPAN 1 | SPAN 2 | SPAN | 3 SPA | I 4 SPAN | 5 SPAN | 6 SPAN | | SPAN 8 | SPAN 9 | SPAN 10 [Y] |
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| 3 | | 111 | | 1il | ļi! | <u> </u> | 114 114 | | | ## File | |
| | T -A- Y | PIER "B" | € PIER "C" | َوِ PIER "D" | و PIER "E" | E PIER "F" | € PIER "G" | FIER "H" | | • | 82,38.243 |
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LEGEND

DENOTES LATERAL RESTRAINT TYPE Y SEE BR-33-48 FOR DETAILS.

DENOTES SEISMIC RESTRAINT TYPE 3 SEE BR-33-44 FOR DETAILS. SEE BR-33-40 FOR TYPICAL CROSS-SECTIONS.

PLAN

(WEST BOUND LANE)

DIRECTION OF SURVEY

GENERAL SCOPE OF WORK

- 1) PROVIDE WIRE ROPE SEISHIC RESTRAINTS AT ABUTMENTS (TYPE 3).
 REFER TO LEGEND AND PLAN VIEW FOR DESCRIPTION AND LOCATION,
 THIS SHEET.
- 2) PROVIDE LATERAL SEISMIC RESTRAINTS AT ABUTMENTS
 REFER TO LEGEND AND PLAN VIEW FOR DESCRIPTION AND LOCATION.
 THIS SHEET.



ABUTMENT "K"

Trees or Medical DEPARTMENT OF TRANSPORTATION

SEISMIC RESTRAINER LAYOUT INTERSTATE 40 OVER WOLF RIVER BRIDGE NO. 79-140-5.09 : (WEST BOUND LANE)
SHELBY COUNTY
1998

BR-33-30

· ESTIMATED QUANTITIES

| | ITEM NO. | ITEM DESCRIPTION | UNIT | 79-140-5.09 L&R OVER WOLF RIVER | 79-2819-4.93 OVER 140-6.50 | 79-140-7.60 L&R OVER FAU 2821 | 79-140-9.25 L&R OVER 1.C.G.RAILROAD | 79-4186-2.11 OVER 140-9.36 | 79-140-9.50 L&R OVER WCLF RIVER | TCTAL |
|---|-----------|---|---------------|---------------------------------------|----------------------------------|-------------------------------------|---|----------------------------------|---------------------------------------|-----------|
| Q | 602-10.39 | STRUCTURAL STEEL BRIDGE (REPAIRS) BRIDGE JOINT SEISMIC MODIFICATION | EACH | 48 | 36 | . 36 | 24 | 40 | | 24 |
| 8 | 604-10.42 | CONCRETE REPAIRS | C.F. | 36 | | | | | 30 | 218 36 |
| | | TRAFFIC CONTROL INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 0.17 500 | 0.16 440 | 0.16 | 620 | 0.17 460 | 0.17 | 1 2420 |
| | 712-04-01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | | | 10 | 18 | | | 28 |
| | 712-06 | WARNING LIGHTS (TYPE A) SIGNS (CONSTRUCTION) | S.F. | | 116 | 44 | 120 | 116 | | 18 396 |
| Ø | 712-05.03 | WARNING LIGHTS (TYPE C) NEW SIGNS (CONSTRUCTION) | EACH S.F. | 232 | | | 8 | | 373 | 8 |
| ଞ | 712-06.16 | SIGNS (CONSTRUCTION) (REDUCE SPEED WARNING) | EACH | 4 | 2 | | | 2 | 232 | 12 |
| | | MOBILIZATION ARROW BOARDS (TYPE C) | L.S. | 0.17 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 1 |
| | 712 00103 | | | | | | | | | |
| | | | - | | | + | | | | |

- INCLUDES COST OF ALL LABOR AND MATERIALS NECESSARY TO PROVIDE STRUCTURAL STEEL LATERAL SEISMIC RESTRAINTS.
- 2 INCLUDES COST OF ALL LABOR AND MATERIALS NECESSARY TO PROVIDE PIRE ROPE SEISMIC RESTRAINTS.
- INCLUDES COST OF ALL LABOR AND MATERIALS NECESSARY TO PROVIDE CONCRETE LATERAL SEISMIC RESTRAINTS.
- (4) TO BE USED ON FLEXIBLE DRUMS THROUGH TAPERS.
- (5) INCLUDES THE INSTALLATION AND MAINTENANCE OF A NEW SIGN PANEL. SHEETING AND SUPPORTS.
- [ITEM TO BE USED ONLY WHEN CONTRACTOR ESTABLISHES A REDUCED SPEED LIMIT WITHIN THE PROJECT CONSTRUCTION WORK ZONE LIMITS. ITEM INCLUDES SIGN FACE. SUPPORTS AND TWO (2) TYPE "B" FLASHING LIGHTS AS PER THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TURNING ON THE TYPE "B" FLASHERS WHEN WORKERS ARE IN THE CONSTRUCTION WORK ZONE AND TURNING THEM OFF WHEN WORKERS ARE MO LONGER PRESENT IN THE CONSTRUCTION WORK ZONE.

GALVANIZING OF NEW STEEL

ALL NEW STEEL -SI ALL BE GALVANIZED TO ASTM A123 STANDARDS.

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

| #110-E7 E1 _ | BRIAN EGLI | ≥π | 01/1995 |
|--------------|----------------------------|-------|---------|
| Pres tr | SCOTT C. NELSON | De TE | C1/1333 |
| - | W.LIVSON & T. DIPISTINISON | | |
| ***** | W. LAWSON & B. EGLI | | 02/1335 |

UTILITY NOTES

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 1-900-351-1111.

UNLESS OTHERWISE NOTED. ALL UTILITY ADJUSTMENTS WILL BE PERFCRMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE RECUIRED 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 FROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

THE CONTRACTOR SHALL BE SCLELY 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 RECUIRED "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 CPERATION IN THE AREA OF THE UTILITIES. FRIOR 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.

CONST. WORK ZONE TRAFFIC CONTROL

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

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

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

TRAFFIC CONTROL DEFICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING MARRING.

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

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

| - | PROJECT | T NO. | YEAR | SHEET NO. |
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| 7 | 13-8-48 | 2×= | INDICED GENER | ユレ バンてる |

GENERAL NOTES

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

DESIGN SPECIFICATIONS: AASHTO 1992 EDITION WITH ADDENDA.

STRUCTURAL STEEL: SHALL CONFORM TO AASHTO M270 GRADE 36 LASTM A709 GRADE 361 UNLESS OTHERWISE NOTED.

REINFORCING STEEL: SEE THE STANDARD SPECIFICATIONS.

GROUTED BARS IN DRILLED MCLES: MORIZONTALLY ORILLED MCLES SMALL RE DRILLED 1/2" IN DIAMETER LARGER THAN THE BAR. CLEAMED. PACKED WITH MON-SHRINK GROUT AND BAR DRIVEN TO ITS SEAT. VERTICALLY DRILLED MCLES SMALL BE DRILLED 1/2" IN DIAMETER LARGER THAN THE BAR. CLEAMED. PACKED WITH EFOXY GROUT AND BAR DRIVEN TO ITS SEAT. ALL GROUTING MATERIAL SMALL BE APPROVED BY 1.0.0.T. MATERIALS AND TESTS.

SHOP DRAWINGS: SHALL BE SUBMITTED ACCORDING TO SPECIAL PROVISION NO. 1054.

EXCEPT SHOP DRAWINGS SHALL BE SUBMITTED TO THE MEADQUARTERS BRIDGE INSPECTION AND REPAIR OFFICE IN LIEU OF THE DIVISION OF STRUCTURES.

BOLTS: SHALL BE HIGH TENSILE STRENGTH BOLTS (ASTM-A325). UNLESS OTHER#ISE NOTED. SIZE TO BE AS NOTED ON PLANS. SEE AASHTO SPECIFICATIONS: ARTICLE 11.5.6 DIVISION II. EXISTING CONTRACT SUFFACES SHALL BE CLEANED TO SPECIFICATIONS PRIOR TO ATTACHMENT OF NEW MEMBERS.

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

CONCRETE CURING: ALL CONCRETE IN REPAIR APEAS SHALL BE CUPED ACCORDING TO THE STANDARD SPECIFICATIONS.

WELDING: ANSI/AASHTO/AMS DI.5-88 BRIDGE WELDING CODE AND THE STANDARD SPECIFICATIONS.

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

NOTE: ALL STRUCTURAL STEEL FOR SEISMIC RESTRAINER AND LATERAL RESTRAINERS. EXCEPT FOR NON-CCPROSIVE WIRE ROPE AND INIMBLES. SHALL BE FABRICATED BY ALSO. SIMPLE SPAN BRIDGES CATEGORY. CERTIFIED SHOP.

ASPECIAL NOTE CONCERVING OR LESS ANCHORS: AT ALL JOSATINE MARTE A DRILLOS MARI-BOLT OR ANCHOR SOLT IN SPECIFIED, A WILLIAM LUGGROUTING ANCHOR SHALL BE ACCEPTABLE AS WELL AS THE DRILLOS MAKI-BOLT.

A WIRE ROPE: WIRE ROPE SHALL BE AS SPECIFIED IN AASHTO DESIGNATION METT-SI (1970).

AWIRE ROPE CLIFS: EACH COLUECTION SHALL HAVE A MILIMUM OF FOUR (4) WIRE ROPE CLIFS AND CUMULATIVELY DEVELOP 125% OF THE YELD STREES OF THE MIRE ROPE. THE YELD STREES SHALL BE VERIFIED BY TEMBERGEE DEPARTMENT OF TRACESTRATION MATERIALS AND TEST.

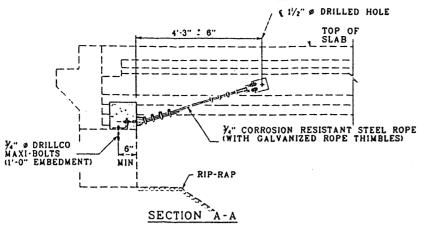
CEPARTMENT OF TRANSPORTATION
ESTIMATED OUANTITIES
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GENERAL NOTES
BRIDGE NO. 79-140-5.09 (L&R)
BRIDGE NO. 79-2819-4.93
BRIDGE NO. 79-140-7.60 (L&R)
BRIDGE NO. 79-140-8.25 (L&R)
BRIDGE NO. 79-4186-2.11
BRIDGE NO. 79-140-9.50 (L&R)
SHELBY COUNTY

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SR-33-29

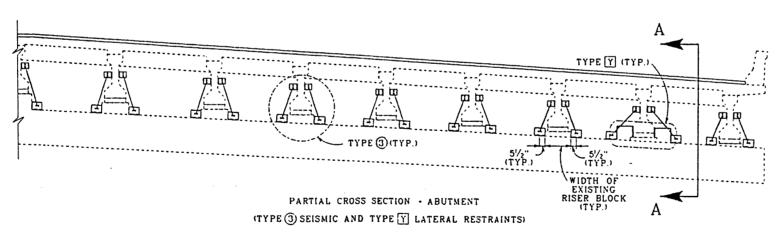


TYPE 3 SEISMIC RESTRAINER

TYPE Y LATERAL RESTRAINER

@ ABUTMENTS 'A', 'LA' AND 'LB'

(TYPE 3 - 23 REQ'D. WEST BOUND LANE)
(TYPE Y - 4 REQ'D. WEST BOUND LANE)



TYPICAL CROSS SECTION

NOTE DETAILS FOR TYPE Y SHOWN ON BR-33-48.
DETAILS FOR TYPE 3 SHOWN ON BR-33-44.



DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

INTERSTATE 40 OVER WOLF RIVER

BRIDGE NO. 79-140-5.09

(WEST BOUND LANE)

SHELBY COUNTY

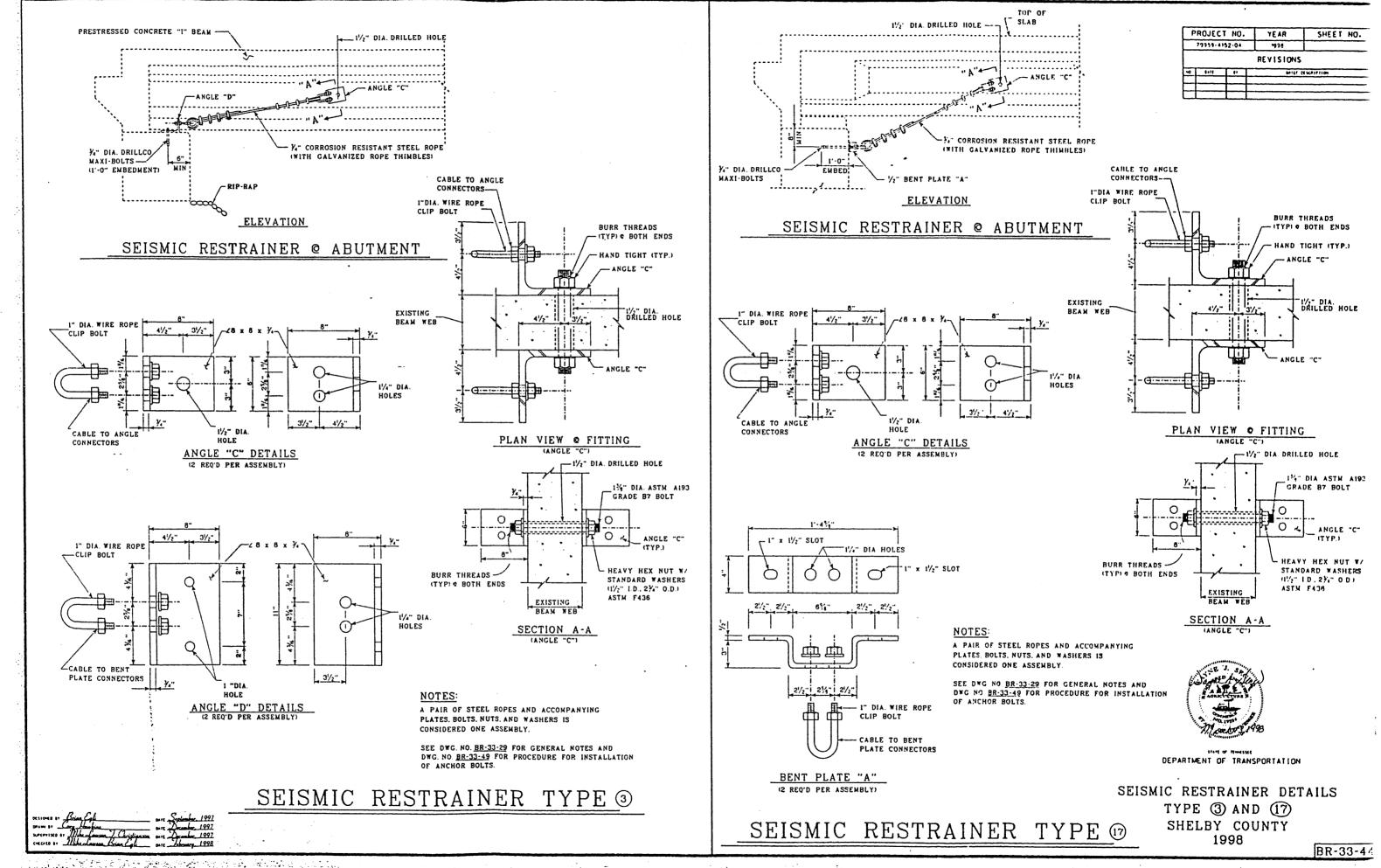
1998

BR-33-4

PROJECT NO. 79959-4152-04 1998

REVISIONS

BR-33-40



| | LATERAL BL | ОСК | REIN | FOR | CEMENT | | |
|-------------------|--------------------|------|------|-------|--------------|-------|---------|
| BRIDGE NO. | TYPE | BARS | SIZE | "A" | NO. REQUIRED | v | LENGTH |
| | | A800 | 8 | | 36 | - | 1'-11" |
| 79-140-5.09 | DDF67706670 | U501 | 5 | 90.82 | 32 | 7%" | 1'-11%" |
| EAST & WEST BOUND | PRESTRESSED I BEAM | U502 | 5 | 74.73 | 24 | 71/5" | 1'-117' |
| | | U503 | 5 | 57 | 16 | 8% | 20%. |

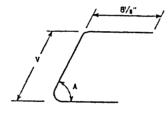


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BARS A800

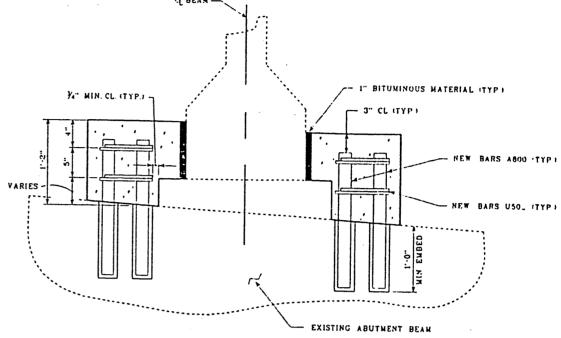


BARS U50_

BAR BENDS

NOTE COST OF DRILLING, GROUTING, BITUMINOUS FILLER, FORMING, REINFORCING STEEL, CONCRETE, LABOR, AND ANY MISCEILLANEOUS MATERIALS TO CONSTRUCT THE LATERAL SEISMIC RESTRAINTS AS SHOWN IN DETAILS THIS SHEET SHALL BE INCLUDED IN ITEM NUMBER 604-10.42, CONCRETE REPAIRS, C.F.

| 79359-4152-94 93# REVISIONS 9 1411 91 9117 (1974) | P | ROJEC | T NO. | YEAR | SHEET NO |
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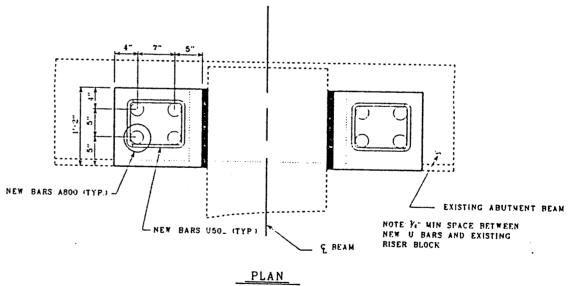


TYPICAL CROSS SECTION @ ABUTMENT (TYPE "Y")

NOTE CONTRACTOR TO KEEP CONCRETE OFF THE EXISTING BEARING PADS

NOTE CONTRACTOR TO KEEP BLOCK AT LEAST L' FROM FACE OF DIAPHRAGM OR BACKWALL.

NOTE CONTRACTOR TO REMOVE $\cdot \frac{1}{2}$ " OF CONCRETE IN BLOCK LOCATIONS FOR BONDABLE SURFACE



LATERAL RESTRAINER TYPE [Y]

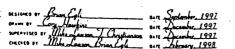


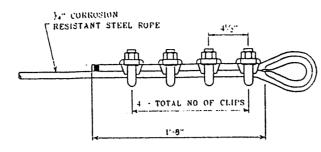
DEPARTMENT OF TRANSPORTATION

LATERAL RESTRAINER DETAILS TYPE Y SHELBY COUNTY

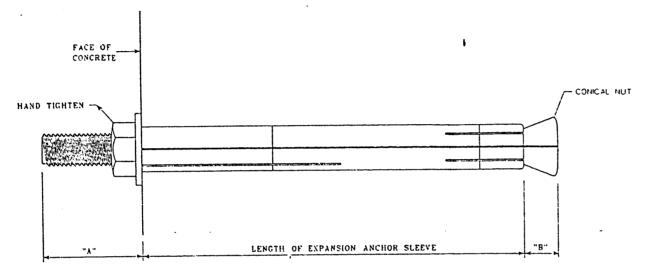
1998

BR-33-48





WIRE ROPE CLIPS



INITIAL POSITION FACE OF CONCRETE LENGTH OF EXPANSION ANCHOR SLEEVE

SET POSITION

PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS:

(3/4" DIAMETER DRILLCO MAXI-BOLT OR WILLIAMS BOLTSHUNDERCUTING 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 WINUS 3 INCHES IN ANY DIRECTION BUT THE HOLE SHALL BE DRILLED WITHIN 6 DEGREES OF PERFENDICULAR 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 SPECIFIED AS FOLLOWS:

 6) THE MAXIMUM DRILL BIT DIAMETER SHALL NOT EXCEED 1172 INCH DIAMETER.

 6) THE HOLE DEPTH SHALL NOT BE LESS THAN THE ARCHOR EMBEDMENT PLUS 1/2/INCHES

 BUT MAY EXCEED THE SPECIFIED HOLE DEPTH BY NOT MORE THAN 1 INCH
- 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 28400 LBS. SHALL BE AFPLIED. THE ANCHOR LOADS MAY BE APPLIED BY MANUAL TOROUING 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
- II BENT PLATES SHALL BE ASTN 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 CASLE IN THE FULL EXTENDED POSITION AND PLATE OR ANGLE POSITION MARKED THE PLATE OR ANGLE SHALL THEN BE SHIFTED TOWARD THE ABUTMENT 3" AND THE ANCHOR BOLT LOCATIONS MARKED THROUGH THE PLATE OR ANGLE ANCHOR HOLES BENTS (BEAM TO BEAM): AFTER ONE ANCHOR HAS BEEN ATTACHED THE ANGLE OF THE OTHER SHALL BE POSITIONED ON THE BEAM WITH CABLE IN THE FULL EXTENDED POSITION ANGLE POSITION MARKED. THE PLATE OR ANGLE SHALL THEN BE SHIFTED TOWARD THE BENT 3" AND THE ANCHOR BOLT LOCATIONS MARKED THROUGH THE ANGLE ANCHOR HOLE.

PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS:

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

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3448 8 4446 8 44ff 2 1965

SHEET NO.

YEAR

PROJECT NO.



DEPARTMENT OF TRANSPORTATION

BOLT INSTALLATION SHELBY COUNTY 1998

ANCHOR SETTING DETAILS

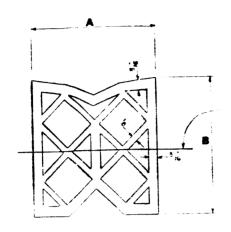
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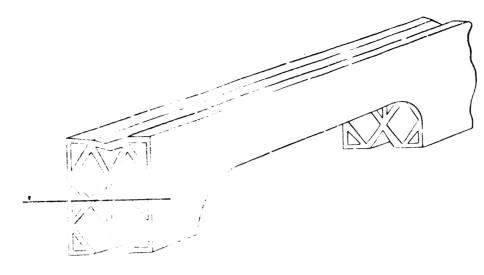


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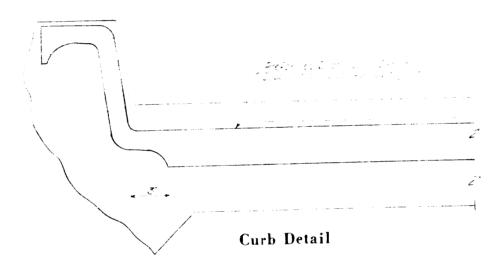


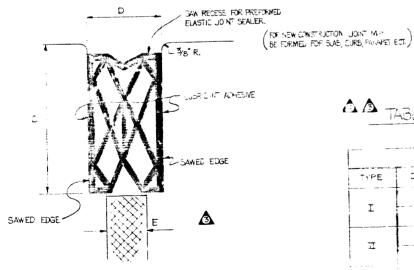
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| T | 3/2 | 370 | 41/4 | 134 | 1. | 345 | . £- |
| = | 4 | 4 } ₈ | 4 % | | | 3.25 | 2.4 |

- A TOTAL : MAXIMUM ALLOWABLE TITAL MOVEMENT.
- E CONCRETE: MANIBOLM ALLIBARIES LINCTH OF UNFESTAINED ELIANSON FOR CONCRETE TRUCTURES AND ESSENCE OF FAST TO # 95° F.

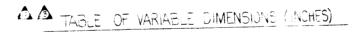
 TEMPERATURE RANGE OF FAST TO # 95° F.
- LISTEEL MANMON ALOME ELENSTHUS UNRESTRANCUE PANSON FOR ESTEU STRUSTORES AND IS BASED ON A TEMPERATURE COSES OF QUODOSIDES AND A SEMPERATURE RANGE OF O'TE +120"E.
- ① DIMENSIONS A, B & C MAY VARY WITH EACH MANUFACTURER OF PREFORMED ELASTIC JOINT SEALER, CONTRACTOR TO VERIFY DIMENSIONS BEFORE SAWING OPENING.



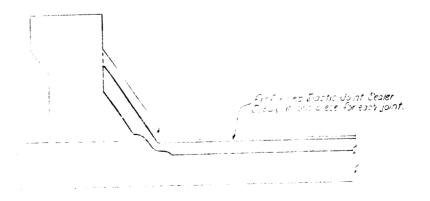


SECTION A-A

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| | | STI | RUCTURE T | EMPERATURE | (°F) (co | perete Steel |
|------|-----------------|------|-----------|------------|----------|--------------|
| TYPE | D M. | 350 | 42 30 | 60 60 | 15/20 | 35/18 |
| | D | 2/2/ | 21/8 | 134 | 178 | 1" |
| I | } § E | 3.4 | 138 | ١٠ | 5/8 | 1/4 |
| | | 3. | 21/2 | 2/8 | 15/8 | 11/4" |
| I | | | .58 | l'a" | 3/4 | 3/8 |
| | | · | ε7/ε | ≥3/8 | 17/8 | 138 |
| I | = | | 2 | Na. | , , | 1/2 |

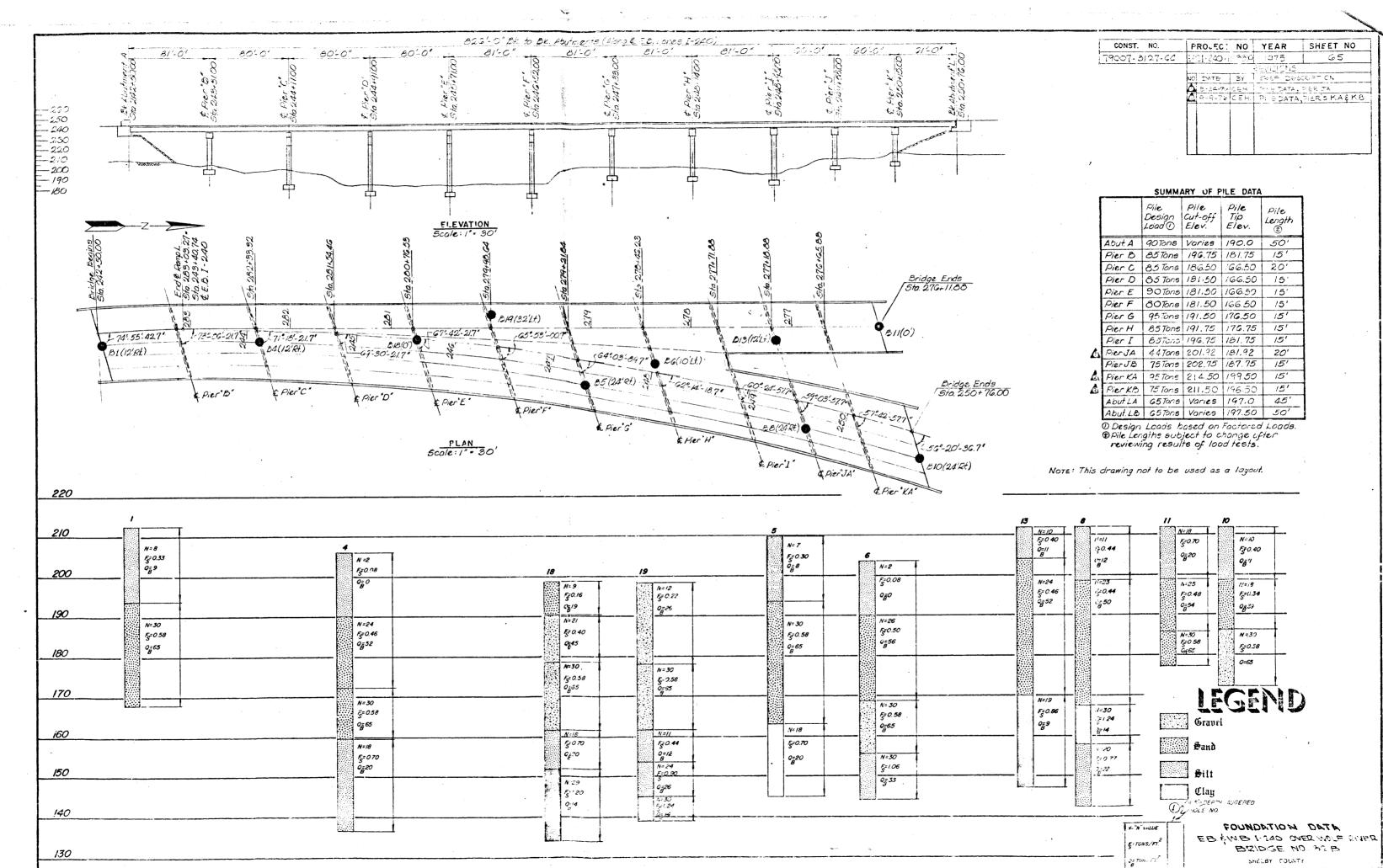


Perspet Detail

79-140-509R+

SHATE OF TERRNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD PREFORMED ELASTIC JOINT SEMER



MOROL THED

1 /4 21

GENERAL NOTES:

- SPECIFICATIONS: Standard Road and Bridge Specification of Tennessee Department of Highways (1968 Edition).
- LOADING: H5-20-44 plus Alternate Military.
- DESIGN SPECIFICATIONS: 1973 AASHTO and Addenda.
- CONCRETE: To be Class "A", fc = 3000 psi. See Special Provisions Regarding Section GO4 Concrete Structures.
- REINFORCING STEEL: To be ASTM AGI5 Grade GO. Standard CRSI hook details apply unless otherwise noted on Bill of Steel. Bending dimensions shown are based on Grade GO Steel. Spacing dimensions are center to center unless other noted on detail drawings.
- BRIDGE RAIL: Build bridge rail in accordance with Tenn. Std. Dwg. M-28-1.
- FINISHING CONCRETE SURFACES: Concrete finishing shall be in accordance with Section G04.22 of the Tennessee Standard Specifications except as modified by the Special Provision Regarding Section 604-Concrete Structures. A Textured Coated Finish shall be used in lieu of a Closs 2 Finish. The color of the finish shall be similiar to Federal Specification No. (See Detail) Federal Color Standard 595 a, and a color sample shall be submitted to the Engineer of Structures for approval. All exposed concrete surfaces, including concrete parapets and wingposts, piers and abutments above grade (but not including bridge slab) shall receive a textured cooted finish.
- FOUNDATION NOTE: FRICTION PILES: After excavating to the proposed footing elevations a test pile shall be driven at each substructure at the location designated on drawing numbers M-44-49 thru 54. A load test will then be applied to the test pile on Pier JB. The load test shall be in accordance with "Special Provision Regarding Load Test for Friction Piles. From the results of the load tests the Engineer of Structures will determine final pile tip elevations. For pile design loads, cut-off elevations and pile tip elevations see table on Dwg. M-44-131.
- ALTERNATE PILES: The contractor may use piling of a different material or Configuration from that shown on the plans provided the substitution meets minimum design standards and Specifications, is approved by the Engineer and Conforms to Conditions established by the Special Provision No. 181, Regarding Section GOC. Piling, dated October 1, 1975.
- 10. TEST PILES: Test piles in Abut. A. Piers D.C. D. & E. Shall be correlated to the load tast at Abut. A. Bridge 32A. Test piles in Piers F. C. "H," I, JA, KA, "JB, "KB" and Abut LA be correlated to the load test at Pier JB.
- 11. See Special Provision Regarding Subsection 908.13 Elastomeric Bearing Pads.
- 12. BRIDGE DECK SEALANT: The bridge deck and reinforced approach slab shall be sealed in a future paving contract. (9000 Sq.Yds. req'd)
 - 243.47 - & E.B. I-240 DO W +0.9039 c=0.0551 Rt. Edge E.B. 5-240 SUPERELEVATION DIAGRAM 700'V.C. HARLAND BARTHOLOMEW AND ASSOCIATES MEMPHIS, TENNESSEE

E.B. I- 240 PROFILE Elevations shown are based on finish amde

- 13 BRIDGE DECK FORMS: Bridge deck forms for concrete decks shall be constructed using either removable forms or permanent forms. In either case, forms shall be attached by means other than welding to support members. See Special Provision No. 450, "Special Provision Regarding Permanent Steel Bridge Deck Forms , Revised November 9, 1973.
- 14. COFFERDAM: Foundation Preparation, The lump sum bid for cofferdam items shall be full compensation to the contractor for preparation of foundations prior to pouring concrete for footings. The contractor shall be paid for excavation in accordance with the standard specifications and the contract unit bid price for each excavation item, except that no percent increase will be allowed for extra depth excavation. If cofferdams are required, they shall be in accordance with Section 204 of the Standard Specification's. Regardless of whether cofferdams are used the contractor shall be paid for Items 204.15.04,204.15.05 \$ 204.15.06The cost of seal concrete if required is to be included in the cofferdam lump sum bid.
- 15. LINSEED OIL PROTECTIVE TREATMENT: Surfaces receiving Textured Coated Finish shall not receive a linseed oil treatment. See Special Provision regarding Section 604 - Concrete Structures.
- 16. ELASTOMERIC BEARING PADS: In lieu of the bearing pads shown on these plans the contractor may submit shop plans and design calculations of alternate bearing devices to the Engineer of Structure for approval. Bearing seat elevations shall be adjusted to compensate for differences in bearing heights. The bearings shall be capable of providing the following minimum requirements under service loads. (Laminated pads - 50 durometer reg'd., plain pads 70 durometer reg'd.)

| | E-5 |
|-------------------------|-------|
| Total Movement Reg'd. | 0.167 |
| Dead Load Reaction | 67K |
| Live Load Reaction | . 55* |
| Total(DL+LL+I) Reaction | 136" |

BAR DESIGNATION: The first number of all bar marks is the size of the bar. e.g. H400 = "4bar; H1100 = "11bar

CONST. NO. PROJECT NO. YEAR SHEET NO. 79007-3127-40 EAC1-240-1(133)9 1975 REVISIONS BRIEF DESCRIPTION

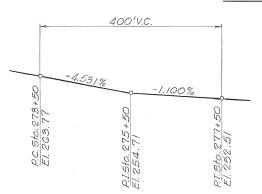
A 6-16-76 rat Changed Tast Pilo Locations
2 6-9-77 GJM Changed Textured Coot. Finish Colors

* Off White Azure Blue * * Off White

All surfaces marked with (*) shall have a textured coated finish similiar to Off White (Fed. Spec. No.37778), in addition to the surfaces marked, all exposed abutment, endwall, wingwall and wingpost surfaces shall receive the same finish. Surfaces marked with (**) shall receive a textured coated finish similiar to Azure Blue (Fed. Spec. No.35190.).

TEXTURED COATING DETAIL c=0.055% 0=0.018 /s - & Ramp L -Rt. Edge

RAMP L SUPERELEVATION DIAGRAM



DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 32 B E.B. I-240 OVER WOLF RIVER

> GENERAL NOTES STA. 242+50.00

> > SHELBY COUNTY

RAMP L PROFILE Elevations shown are based on finish Grade

ENGINEER OF STRUCTURES APPROVED_ DIRECTOR OF HIGHWAY

M-44-92

D. Mc Corkle

_ DATE Oct. 1972

(1) Excavation based on existing ground profile.

(2) See Alternate Pile Note on Dwg. M-44-92.

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

(4) The cost of furnishing and installing 1700 Lin. ft. of 2" & conduit, 4 junction boxes and expansion couplings, 20 anchor bolts, and all auxiliary equipment shall be included in the price bid for Structure Lighting Lump Sum.

QUANTITY NOTES

(5). The cost of 20 threaded steel inserts and 20- 78 " +× 4" hex head bolts (A 307) shall be included in Bridge Items bid on.

(G). The quantity given is out to out of wingposts. The cost of Light Standard Base including concrete & reinforcing to be included in price bid for Bridge Parapet.

(7). The cost of non-laminated bearing pads, rubber bonding cement and dowel bars to be included in the cost of Prestressed Concrete Beams.

(8). The cost of bituminous fiberboard, 2" & drains and all miscellaneous joint material to be included in Bridge Items bid on.

(9). The slab at the impact attenuation device shall receive a membrane sealant. Cost of the sealant system shall be included in the price of Bridge Items bid on.

(10). The cost of 3 Apron Spillway Drains shall be included in the cost of Roadway Items.

PROJECT NO. YEAR SHEET NO. 19007-3127-44 EACI-240-1(133)9 1975 REVISIONS NO DATE BY BRIEF DESCRIPTION

A G-16-16 TOT Changed Lead Test Leadings

8-17-76 CE H Changed Test Pile tength Pier KB

8-24-76 CEH. Revised Pier JA Quantities

9-9-76 C.E.H. Revised Dier KAEVE A 9-21-77 JWK Penf. Steel Quantities

9-21-77 JWK Penf. Steel Quantities

10-12-71 JWK Penf. Steel Quantities

CONST. NO.

SUMMARY OF ESTIMATED QUANTITIES

| Item No. | 204-02.01 | 204-03.01 | 204-15.04 | 204-15.05 | 204-15.00 | 602-05,07 | 604-03.01 | 604-03.02 | G04-03.03 | 604-25.0 | 4 GOG-09.01 | 606-09,02 | 1606-09.03 | 3 G15-01.03 | G1G.08 | 710-10 | 710-11 | 714-01.02 | 908-21.02 |
|--------------------|-----------------------------------|-----------------------------------|-----------|-----------|-----------|---|------------------------------------|---|--------------------------|---------------------------------|---|---|---------------------------------------|--|-----------------------------------|--|------------------------------------|------------------------------|-----------------|
| Description | Dry Excavation (Bridges)(1) | Wet Excavation (Bridges)(1) | Cofferdam | Cofferdam | Cofferdam | Preformed Elastic Joint Sealer-Type III | Class "A" Concrete (Bridges) | Steel Bar Reinforcement (Bridges) | Linseed Oil Treatment | Textured Coated Finishing | Test Piles (Precast Cond Size I.) | Looding Test (Precast Cond Size 1,) | Precast Conc. Piles (Size I)(2) | Prestressed Conc. I-Bean (Type III)(7) | Concrete Porapet (M-28-1)(Q | G"&perf.CMP (18ga)w/porous 6) Backfill (3) | G"# CMP Underdrain: (18 ga.) | Structure Lighting (4) | Bearings E-2 |
| Unit | Cu.Yds. | | Lump Sum | | | | Cu.Yds. | Pound | Sq. Yds. | Sq. Yds. | Lin. Ft. | Each | Lin. Ft. | Lin. Ft. | Lin. Ft. | Lin. Ft. | Lin. Ft. | Lump Sum | Each |
| Abutment A | 80 | | | | | 76 | 51.9 | 7890 | 30 | 25 | 100 | | 550 | | | 82 | 4 | | 10 |
| Pier B | 235 | 145 | | | | | 147.7 | 19060 | | 260 | 30 | | 690 | | | | | | |
| Pier C | 175 | 534 | | | | | 189.1 | 30910 | | 275 | 40 | | 1240 | | | | | | |
| Pier D | | 706 | / | | | | 197.3 | 32960 | | 315 | 30 | | 930 | | | | | | |
| Pier E | | 637 | | / | | | 202.5 | 34170 | | 330 | 30 | | 930 | | | | | | |
| Pier F | | 754 | | | / | | 247.9 | 39540 | | 395 | 30 | | 1170 | | | | | | |
| Pier G | 310 | 434 | | | | | 213.2 | 3/470 | | 365 | 30 | | 870 | | | | | | |
| Pier H | 125 | 495 | | | | | 247.1 | 32400 | | 465 | 30 | | 1050 | | | | | | |
| Pier I | 330 | 250 | 1 | | | | 250.8 | 37920 | | 485 | 30 | | /050 | | | | | | |
| Pier JA | 299 🛕 | | | | | | <u>\$143.8</u> | 18,438 | | 255 | 40 | | 1160 🐧 | . | | | | | |
| Pier KA | 400 | | | | | | 1 06.2 | 16,3344 | <u> </u> | 260 | 30 | | 510 | | | | | | |
| Pier JB | 165 | | | | | | 84.6 | 12820 | | 190 | 15 | 1 | 345 | | | | | | |
| Pier KB | 300 | | | | | | A 78.4 | 11,748 1 | | 190 | 30 🛕 | | 345 | | | | | | |
| Abutment LA | 85 | | | | | 52 | 54.7 | 8260 | 30 | 25 | 90 | | 585 | | | 87 | 4 | | 9 |
| Abutment LB | 60 | | | | | 81 | 36.4 | 5260 | 20 | 20 | 50 | | 400 | | | 58 | 4 | | 6 |
| Pvmt.@ Bridge Ends | | | | | | | 192.5 | 49180 | 515 | | | | 200 | | | | | | |
| Superstructure | | | | | | | 2075.8 | 5959596 | 8485 | 3/30 | | | | 10539 | 2052 | | | / | |
| Total | 2564 🛕 | 3,955 | / | / | / | 209 | 4519.9 | 984319 | 9,080 | 6,985 | 605 | 1 | 12,025 | 10,539 | 2,052 | 227 | 12 | / | 25 |
| | A | | | | | 20.70 | A B | | | | | Δ | | | * | | | | |

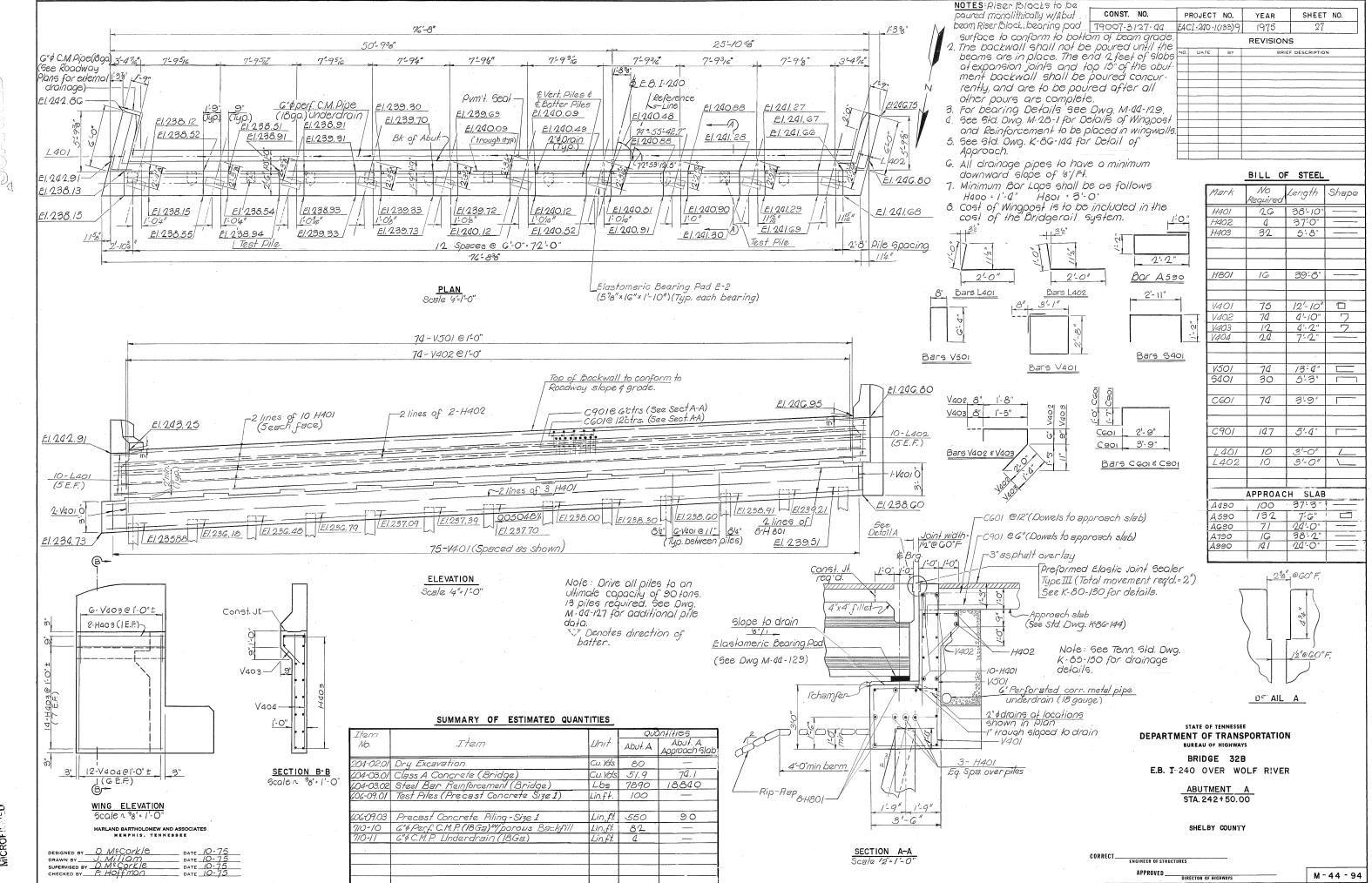
STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION**

BRIDGE NO. 32 B E.B. I-240 OVER WOLF RIVER

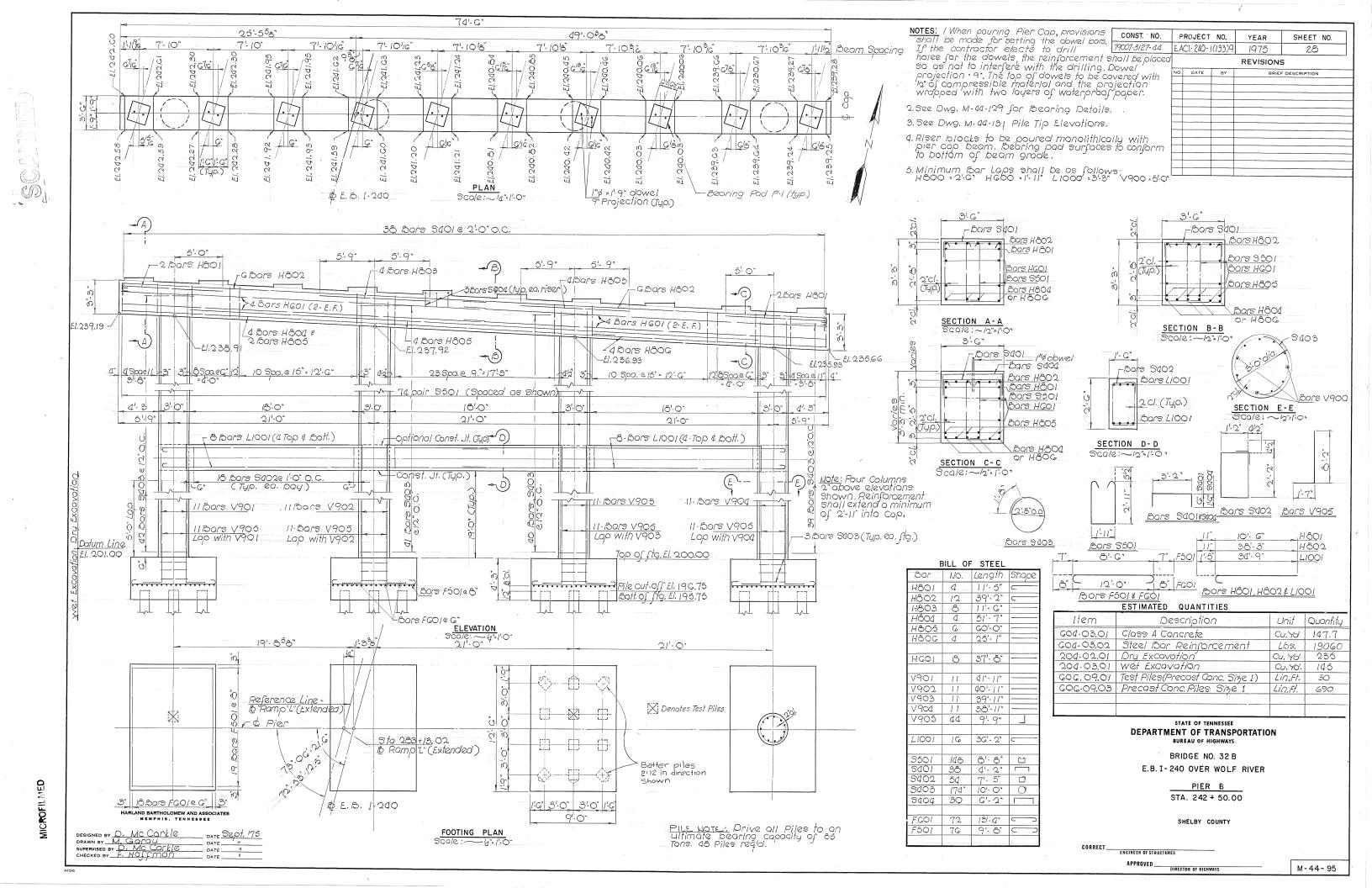
ESTIMATED QUANTITIES STA. 242 + 50.00

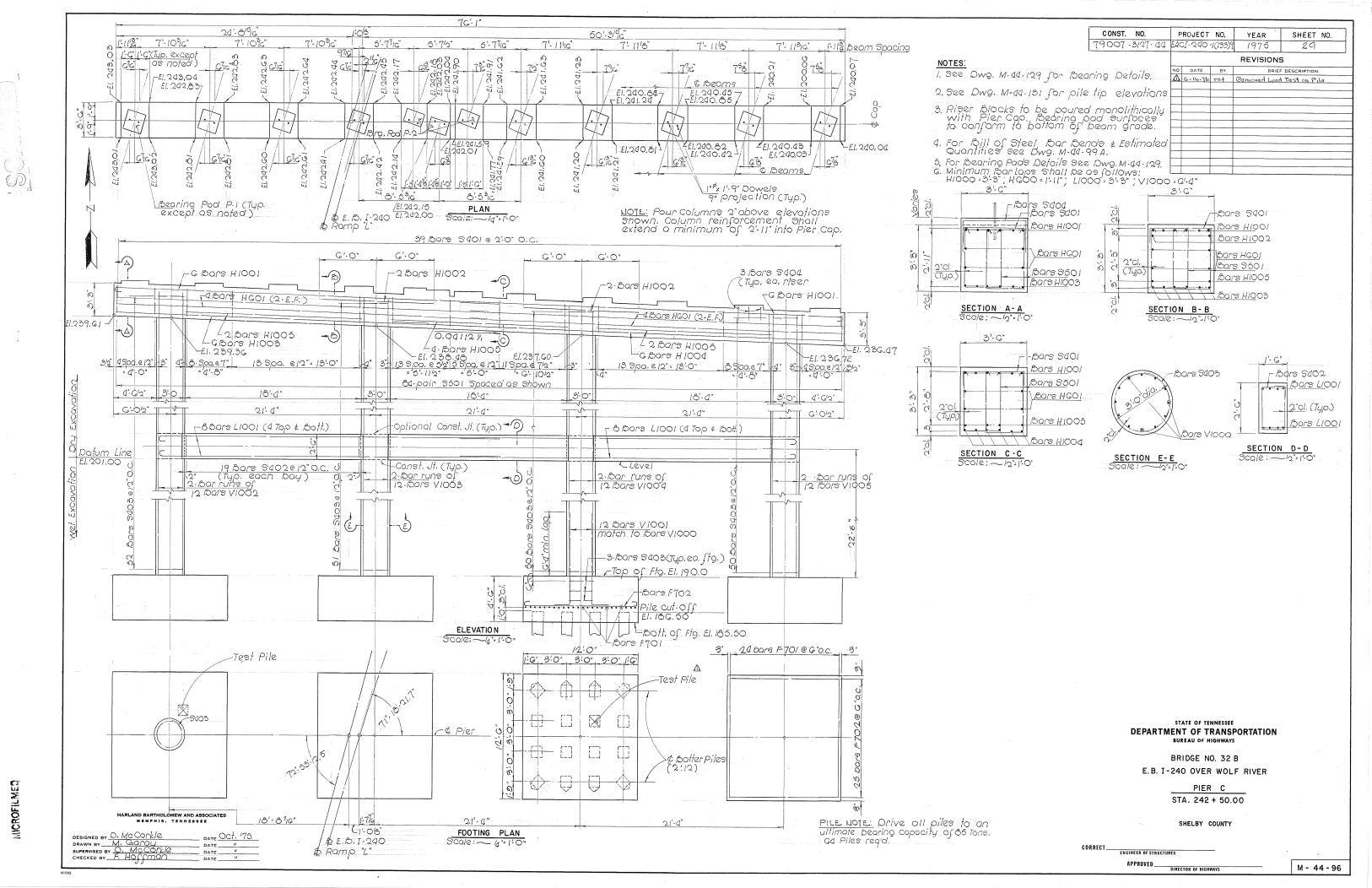
SHELBY COUNTY

CORRECT ______ENGINEER OF STRUCTURES APPROVED ___ DIRECTOR OF HIGHWAY

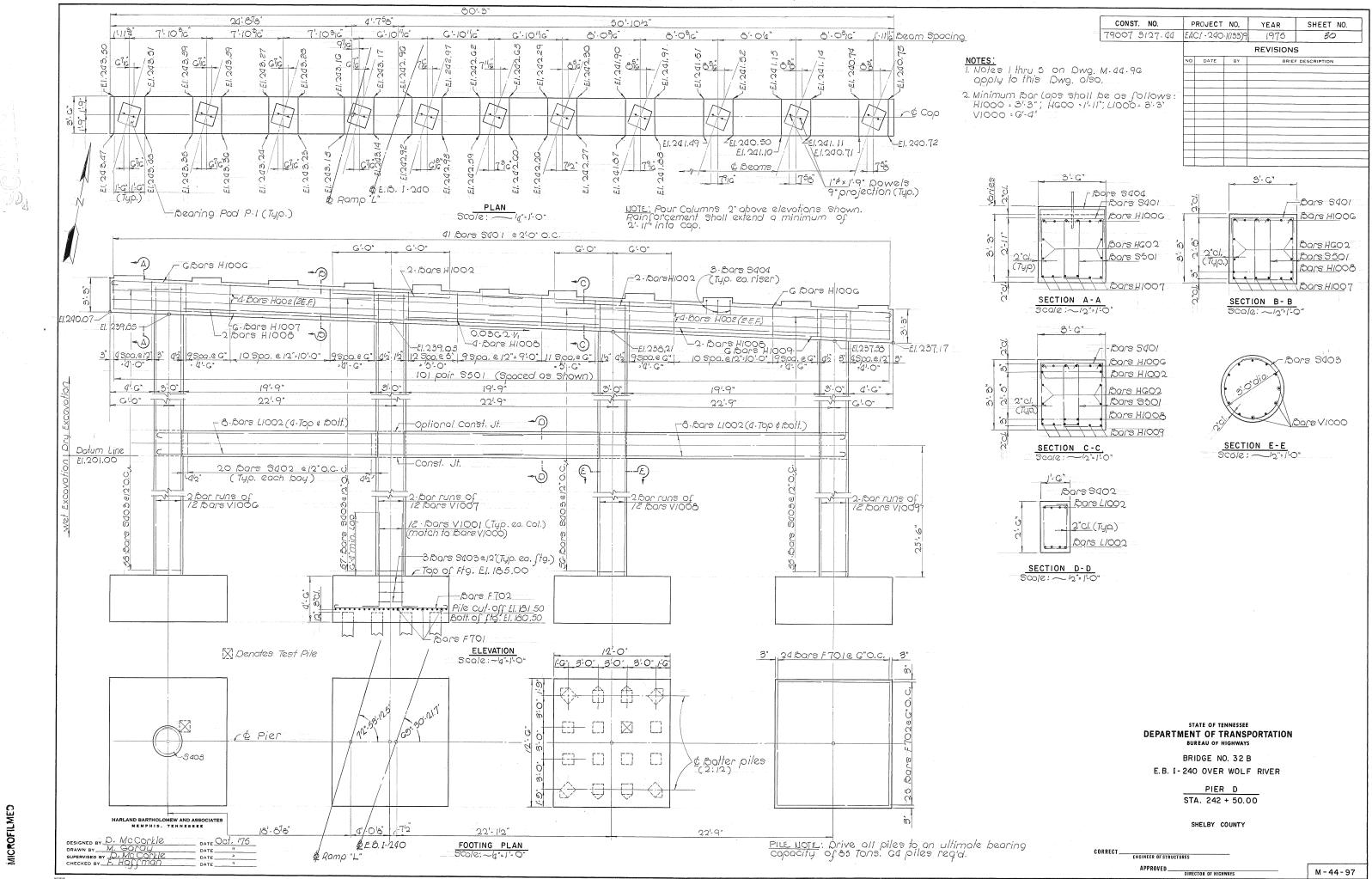


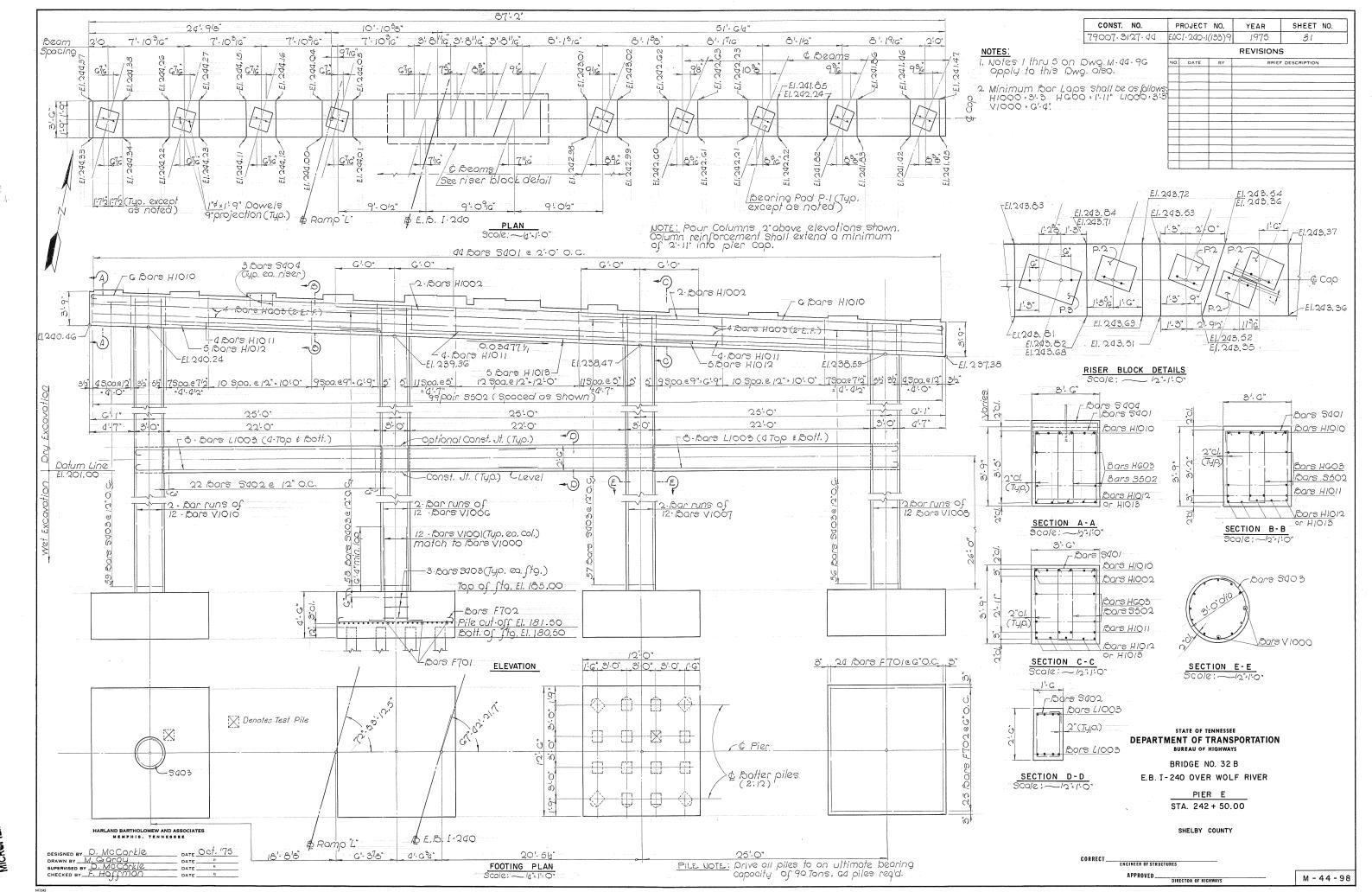
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|-------|--------------|---------------------|--------------|---|--|--|---------------|-----------------|------------|------------------------|--------------|--|---|
| Bar | Pier C" | No. red Pier "D" | | Pier F" | Length | Shape | Bor | Pien"C" | Pier D | required " Pier E" | Plec"F" | Length | Shape |
| H1001 | 12 | , , , , , , | T. TET L | 1, , 5, 1 | 41'-2" | | 3501 | 168 | 202 | 1.1.21.1. | | NEW STREET, CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAM | |
| H1007 | 12 | 4 | 4 | | 12'- 0" | | 5502 | 190 | 20.7 | 100 | 300 | 9'-8" | 11 |
| 11002 | G | 4 | 4 | | 32'- 5 | 12000 100000000 | 3002 | | | 198 | | 9.0 | |
| 11001 | G | | | | 47'- 1" | | | | | | | | |
| 11005 | 8 | | | | | | 6461 | 20 | | 2.1 | | | |
| 11003 | | 12 | <u> </u> | | 18'-4" | | 5401 | 39 | 41 | 44 | 49 | 3'.8' | |
| 11006 | | G | | | 33'.10" | | 5403 | 57 | 226 | | 7G | 7'-3" | |
| 41009 | | 8 | <u> </u> | | 19'-9" | - | 5404 | 203 | 33 | 230 | 291 | 10.0, | |
| 11000 | | G | | | 49'-10" | | 3404 | 3G | 55 | 39 | 42 | 4'-8" | |
| 11010 | - | 9 | 12 | <u> </u> | 46'-9" | c | | | | | | | |
| 11011 | | | 12 | <u> </u> | 22'-0" | | F701 | 96 | 96 | 00 | 100 | 101.0 | |
| 41012 | - | | 10 | <u> </u> | 29'-5" | | | | | 96 | 120 | 13'.8 | |
| H1012 | | | 5 | + | 35'-G" | | F702 | 100 | 100 | 100 | 125 | 13'-2* | |
| 71910 | | | ļ | | 22.0 | | | | | | | | |
| | | 91 111 121 | | | . 11781. 4252 | 100 m 10 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | . a mark of the | | | | | |
| 1901 | | | | 12 | 40'-4" | | | | | - | <u> </u> | | - |
| H902 | | | <u> </u> | G | 12'-0' | | | | | | | | |
| 1903 | | | | G | 24'-2" | | | | | | 1 | | |
| 1904 | | | | 12 | 31'- 5" | | | | | | | | - |
| H905 | | | | 8 | 18'-3" | | | | | | - | 1 | |
| 1906 | | | | G | 39'-G" | | | | 1 | | | | |
| 4.700 | | | | | 07-6 | | | | | | 1-5 | 34'-11" | LIC |
| | | | | | | | 1.5" | 39! | 9" | H1001 | <u>]'-5"</u> | 37'-0' | LIC |
| HG01 | රී | 1 | | | 38'-6' | | 1.5 | 41'- | 10" | H100G | 1'-5" | 10:5 | LIC |
| 1602 | | 8 | | | 40'-7" | | 1'-5" | 45'- | 4" | H1010 | 1'-5' | 33'-5" | LIC |
| 1603 | | | 8 | *************************************** | 14'-1" | | /:5" | 34' | /m | H901 | 1'-5" | 56'-6" | LIC |
| 1601 | | | | 8 | 38'-8" | | | | | | | | (== |
| 1605 | | | | 4 | 22'-11" | | | | | | | | |
| 1000 | | | | 7 | ~~ // | | | | | 11100 | | 11 1 | |
| | | | | <u> </u> | <u> </u> | | <u> 60012</u> | : H1001,H10 | 20G,HOIQ | 0.EH.901 | DOVETIC | 001 thru L | 1005 |
| /1001 | 48 | 48 | 48 | CO | 11'- 4" | | - Santa | | | | | 1'-2" 1/2 | k, |
| 11002 | 24 | 40 | | | 29'-3" | | 10" | 12'-0 |)4 | 10° , F701 | | 1-2" 1/2 | 4. |
| /1003 | 24 | | - | - | 28'-11" | | 10:1 | 111:0 | | 10° F702 | | | 12. |
| 11004 | 24 | | | <u></u> | 28'-G" | 1 11 11 | 1-10-1- | 11-0 | - | 10 F 102 | | | 7 |
| 11005 | 24 | | | 1 | 28:0" | | | | | | | - | G 0 |
| 11006 | | 24 | 24 | 24 | 32'- /" | | 1 | • | ر | | | | 90 |
| 11007 | | 24 | 24 | 24 | 31'-8" | | R | ors F70 | 1 & F702. | | | | C U |
| 11008 | | 24 | 24 | | 31'-3" | | 1 = | | | _ | | | |
| 11009 | | 24 | | | 30'-10" | | | | | | | Bars 540 | 22 / |
| V1019 | | | 21 | | 32'-G" | | 1 | | | 3'-2° | 22 | ,- 4, 5 000 | |
| V1011 | | | | 24 | 33'-0" | | jo j | T | 7 | - L | 340/ | | 950/ |
| 11012 | | | | 24 | 32'-8" | | | 2:00.0 |) | | (טוט) | | 950/ |
| 11013 | | | | 24 | 32'-3" | | | 1 | / | | 99 | | |
| | | | | 15 | | | 1 | \setminus $/$ | , | Bon Sin | 118401 | | 0,7, |
| | | | | | | | 1 | a 01- | ~ ~ . | <i>Bar</i> s 540 | 140404 | 1 | $ \sqrt{1} $ |
| | | | | 1 | | | 1 - 1 | 3ars 540 |) <u>)</u> | | | | 1 |
| | 16 | | | 1 | 3G'-4" | | | | | | | | 711-70 |
| 1001 | - 19 | 16 | | | 38'-5" | | 1 | | | | | | - 4 |
| 1001 | | | | | | | - | | | | | | |
| 1002 | | | 10 | | 1 11-10- | | 2 | | | | | | |
| 1002 | | | 1G | | 41'-10" | | | | | | | 1'-11 | W |
| 1002 | | | | 8 | 34'-10" | | | | | | |]'-11 Bars : | |

| ESTIMATED | QUANTITIES |
|-----------|------------|

| Item | Description | Unit | Quantities | | | | | | |
|-----------|-----------------------------------|----------|------------|---|---------------------------------------|----------|--|--|--|
| 116111 | 266 61 1/31 1/31 | Gilli | Pier *C" | Pier "D" | Pier "E" | Pier "F" | | | |
| 604-03.01 | Closs A Concrete | Cu, Yd. | 189,1 | 197.3 | 202.5 | 247.9 | | | |
| GO4-03.02 | Steel Bar Reinforcement | £.65. | 30,910 | 32,960 | 34,170 | 39,540 | | | |
| 204-02.01 | Dry Excavation | Cu. Yd. | 175 | A | * *** * * * * * * * * * * * * * * * * | | | | |
| 204.03.01 | Wet Excovotion | Cu, Yd. | 315 | 550 | 550 | G90 | | | |
| 606-09,01 | Test Piles (Precost Conc. Size 1) | Lin. Ft. | 40 | 30 | 30 | 30 | | | |
| GOG-09.03 | Precost Conc. Piles Size 1 | Lin. Ft. | 1240 | 930 | 930 | 1170 | | | |
| | | 1.44 | | 200 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | |
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HARLAND BARTHOLOMEW AND ASSOCIATES

| DESIGNED BY_ | F. Hoffman | DATE Oct. 175 | |
|---------------|--------------|---------------|---|
| DRAWN BY | M. Garoy | DATE | _ |
| SUPERVISED BY | D. McCorkie | DATE H | |
| CHECKED BY | D. Mc Corkle | DATE 4 | |

| F | PROJECT | NO. | YEAR | SHEET NO |). |
|-----|----------|------------|----------------|--|---|
| EAC | 01-240-1 | (133)9 | 1975 | 33 | - |
| | | | REVISIONS | 5 | |
| NO. | DATE | BY | BRIE | F DESCRIPTION | |
| (A) | 6-16-76 | rat | Ramoved Load T | ast, Piar C | |
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| | EAG | EAC1-240-1 | NO. DATE BY | EACI-240-1(193)9 1975 REVISION: NO DATE BY BRIE | EACI-240-1(198)9 1975 33 REVISIONS NO DATE BY BRIEF DESCRIPTION |

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

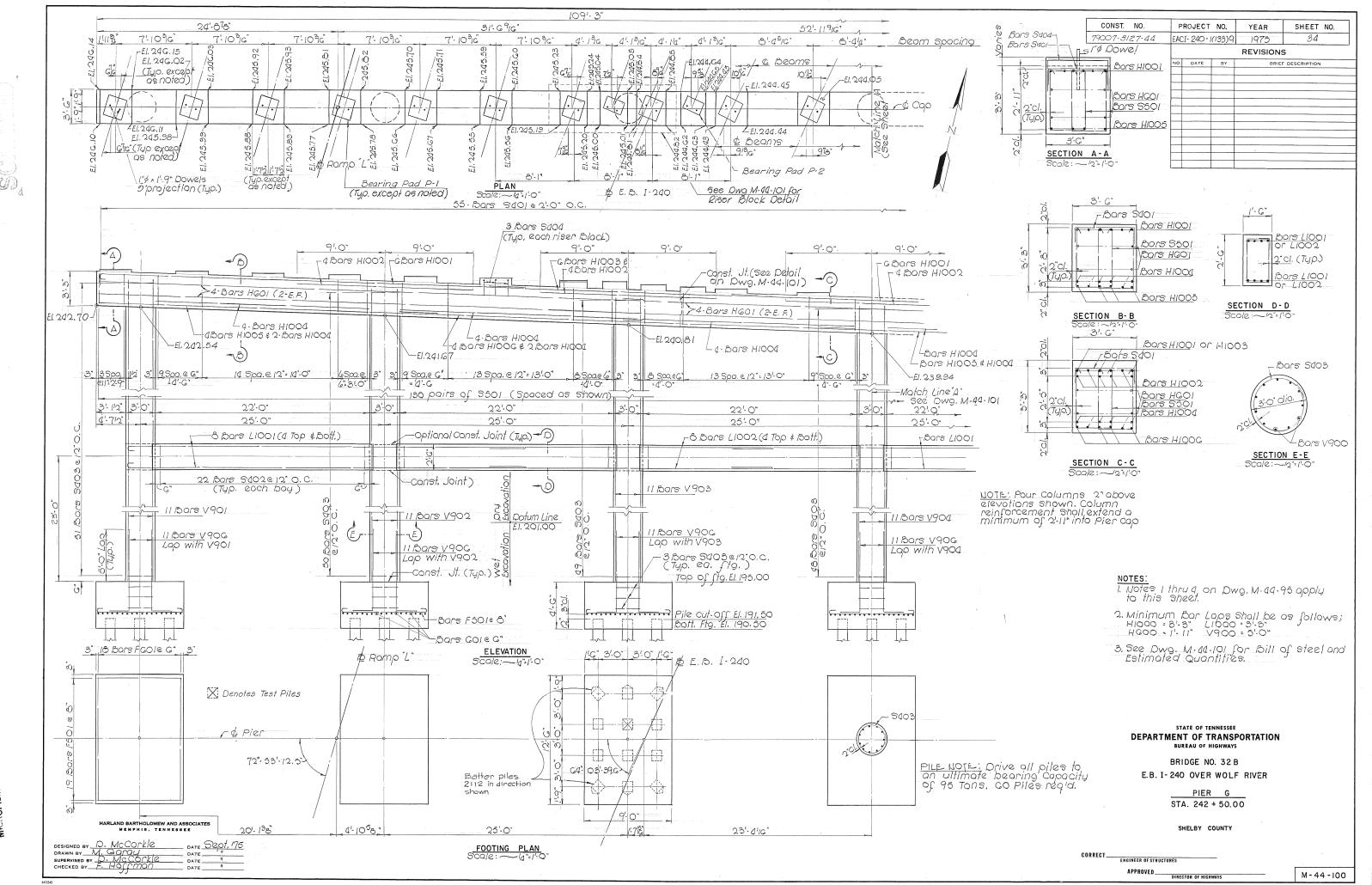
BRIDGE NO. 32B E.B. I-240 OVER WOLF RIVER

PIERS C THRU F - BILL OF STEEL
STA. 242 + 50.00

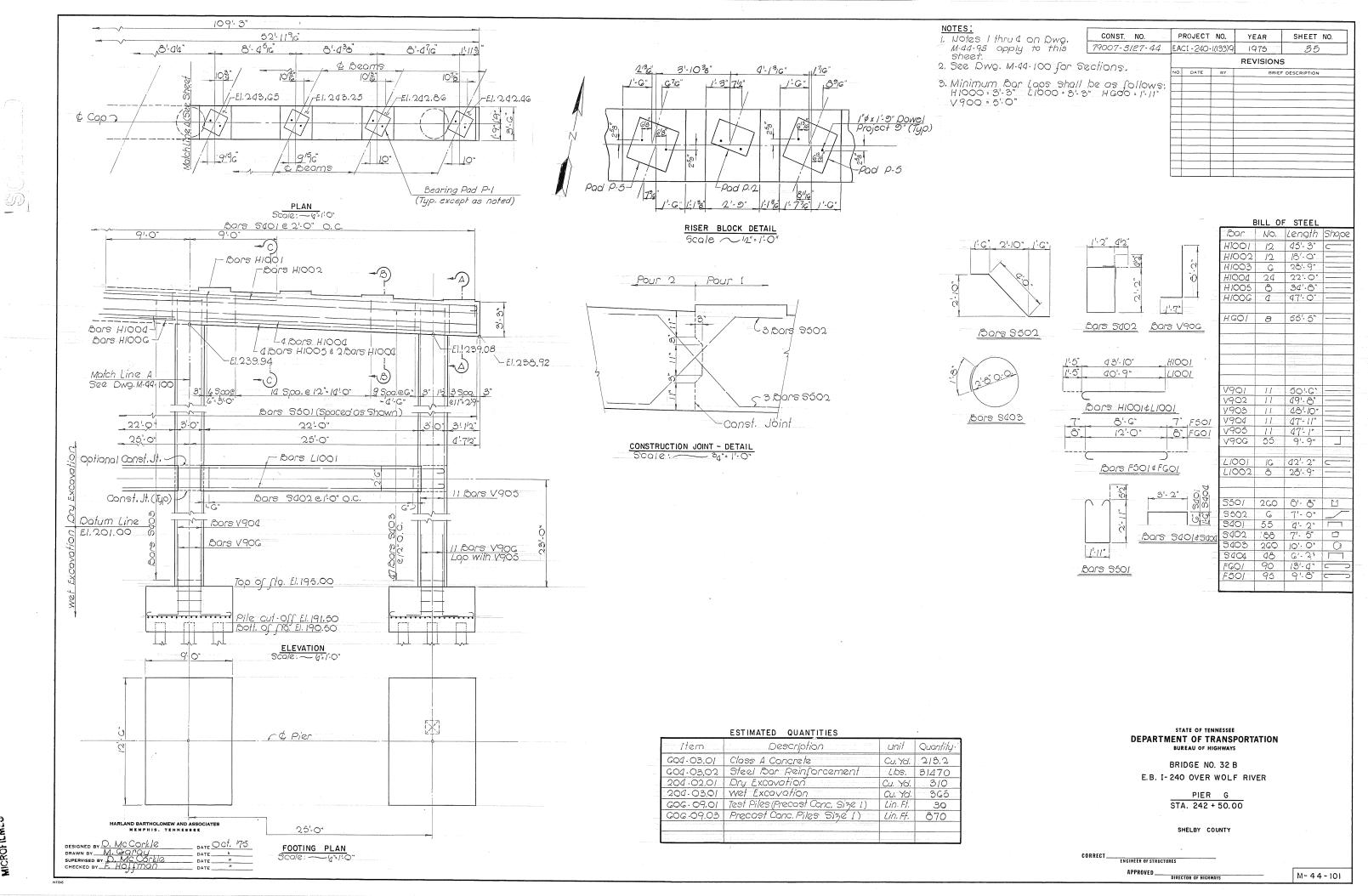
SHELBY COUNTY

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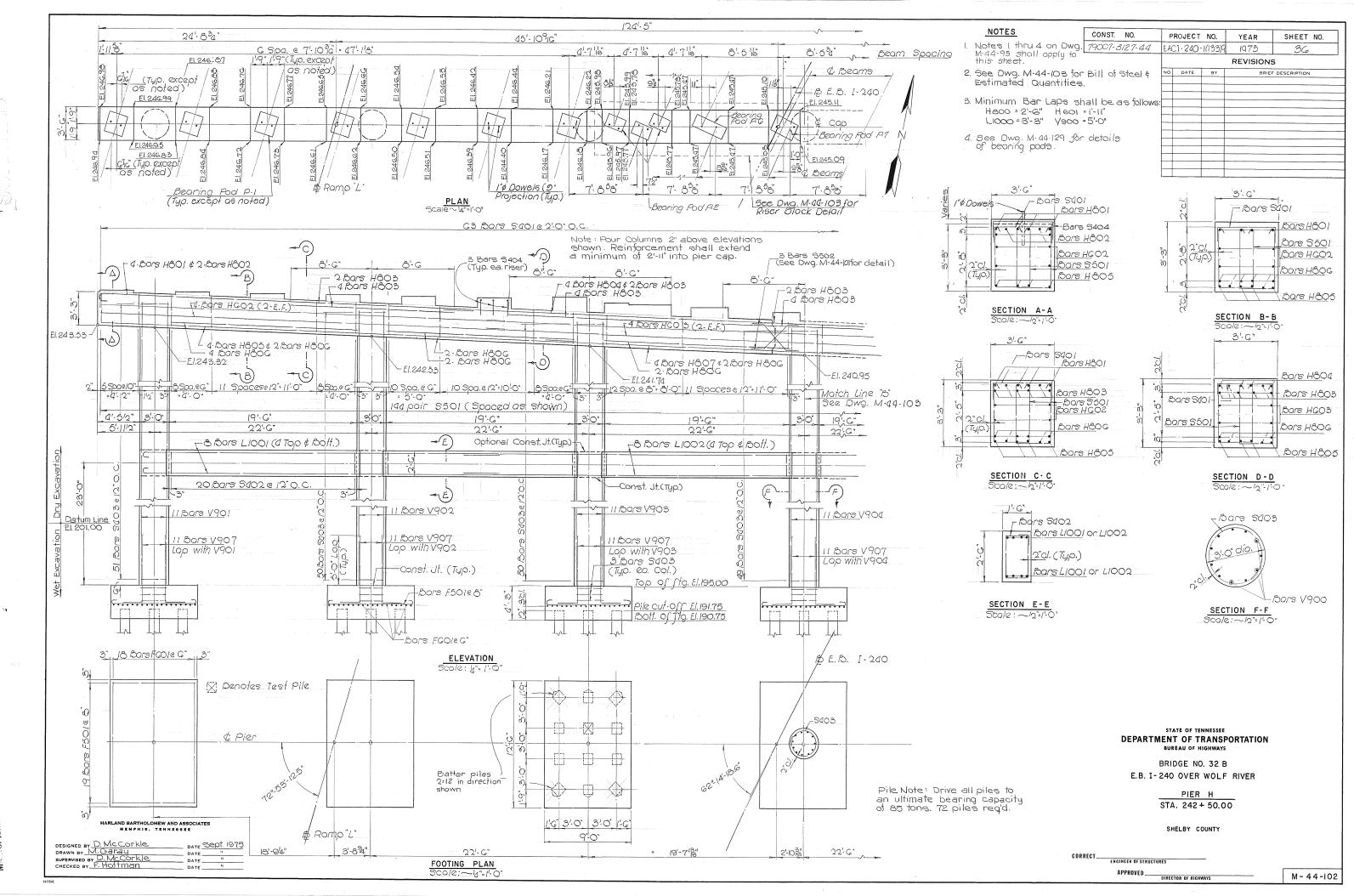
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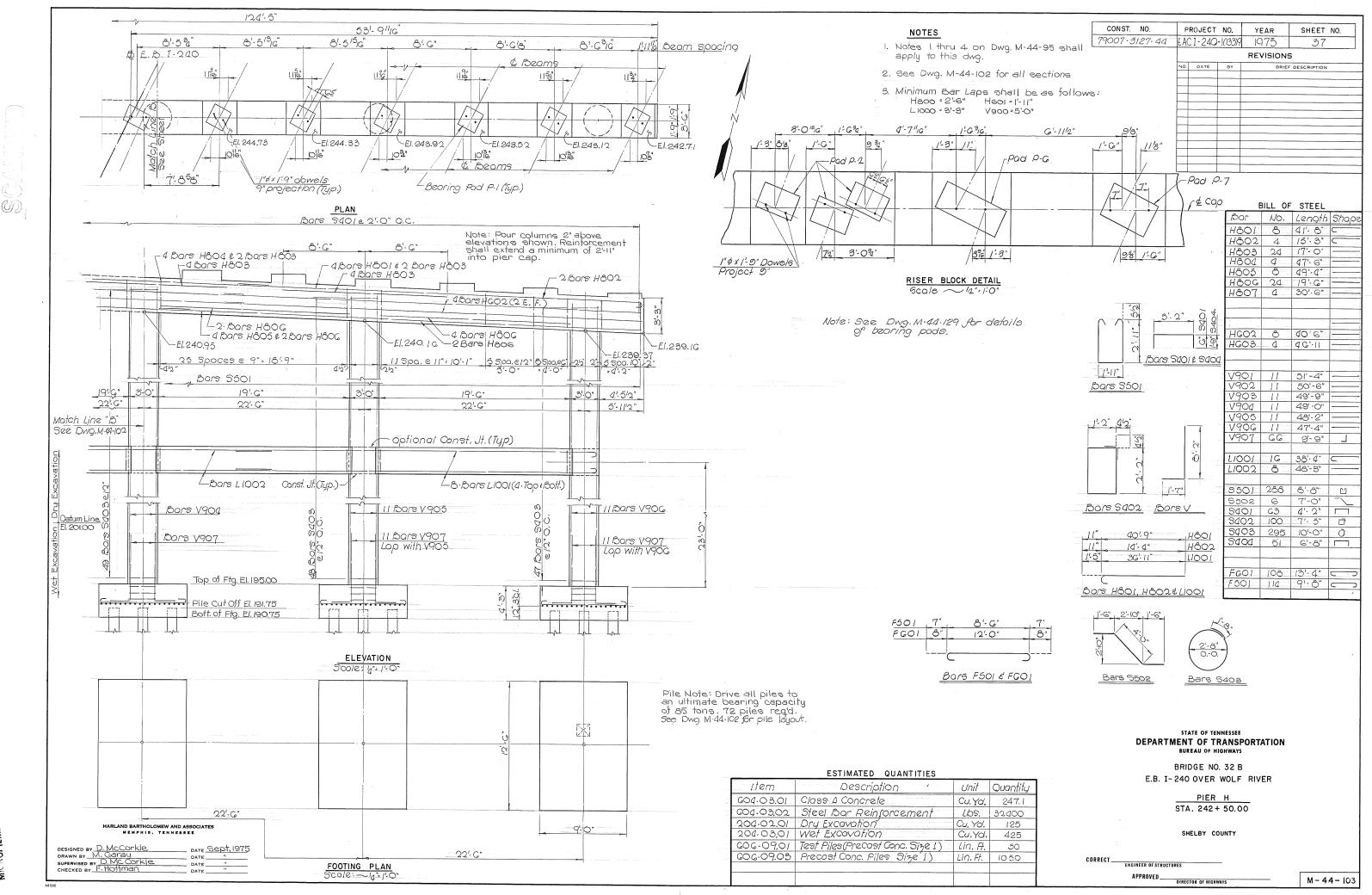
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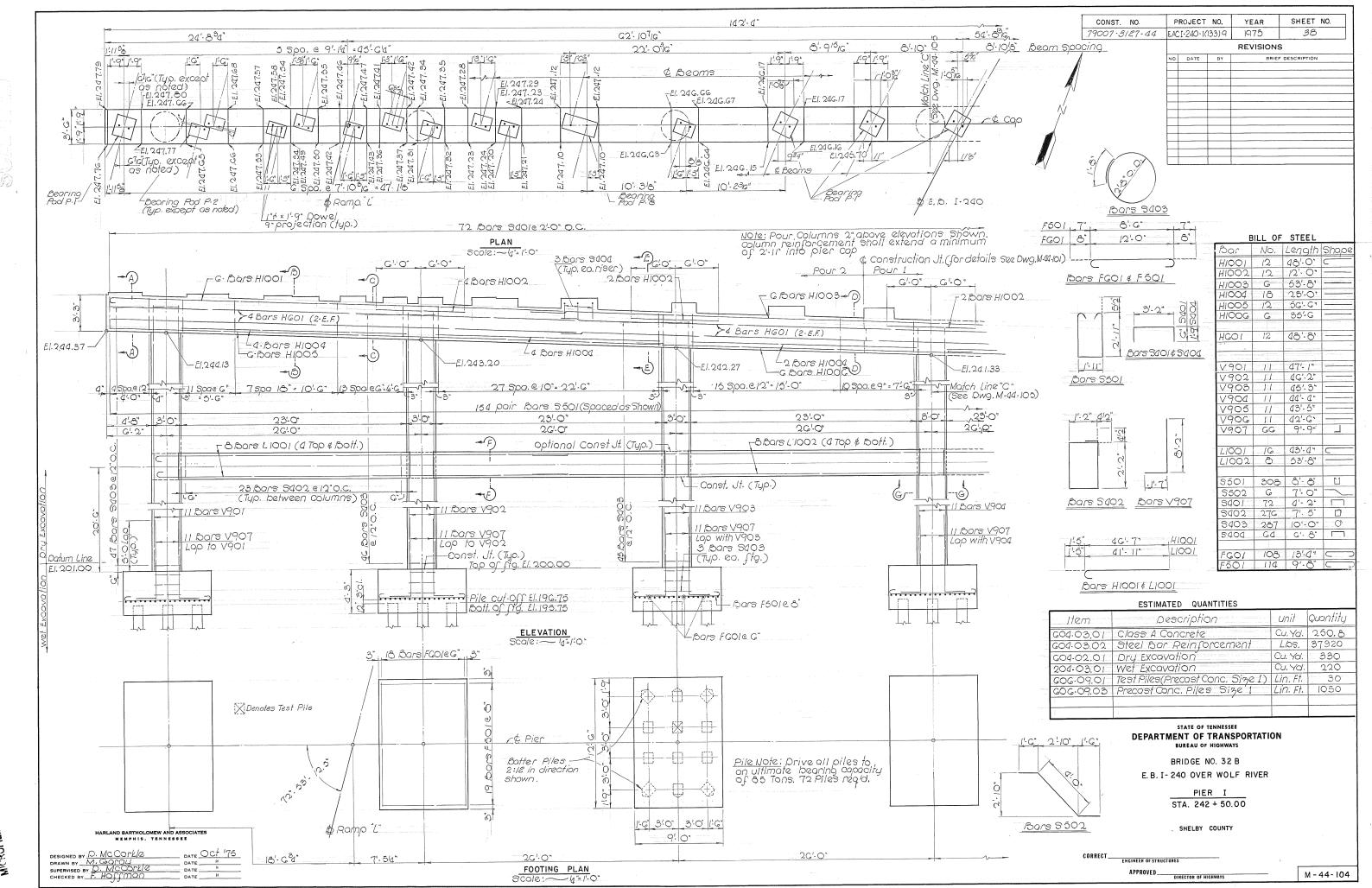
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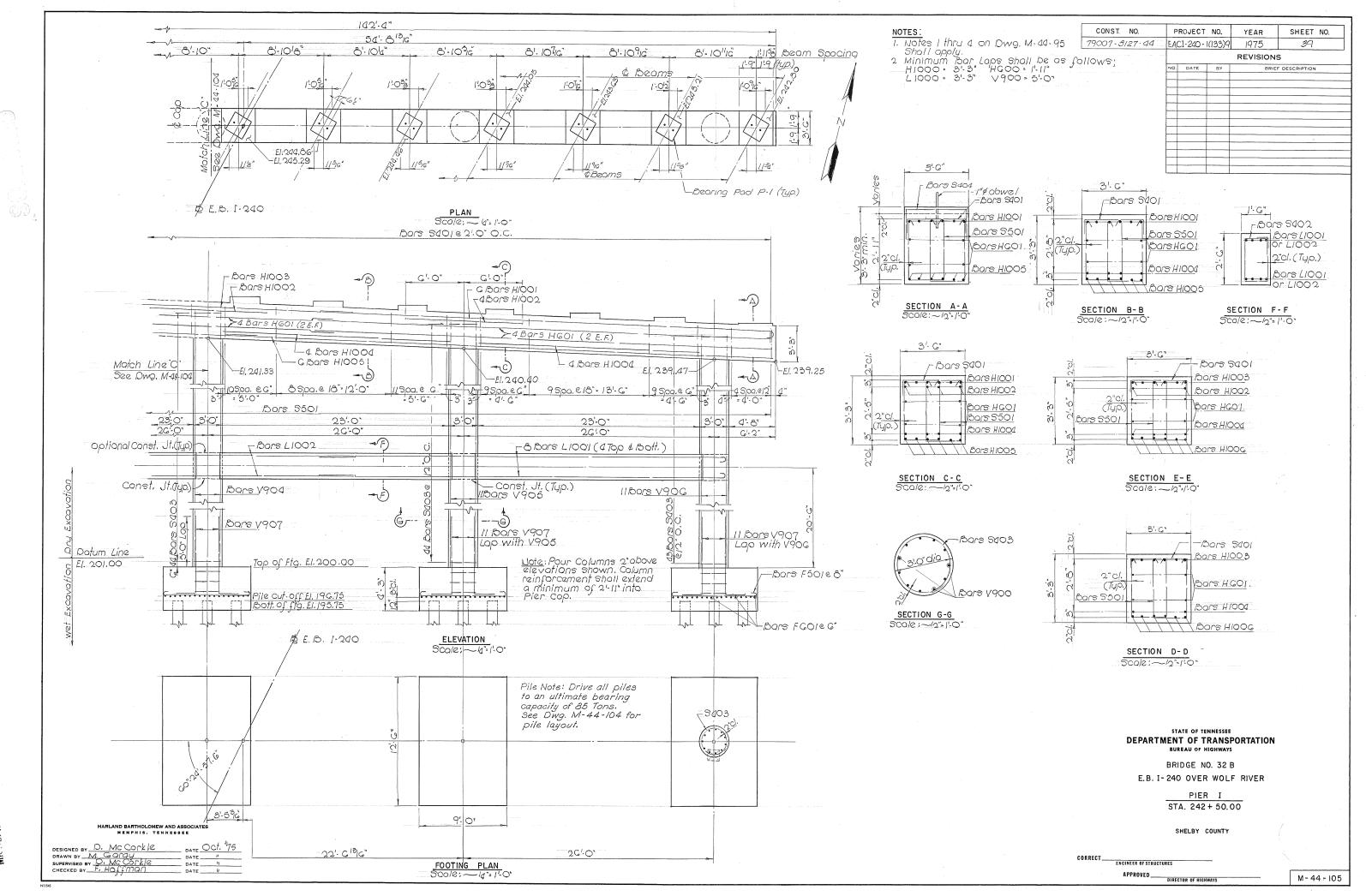
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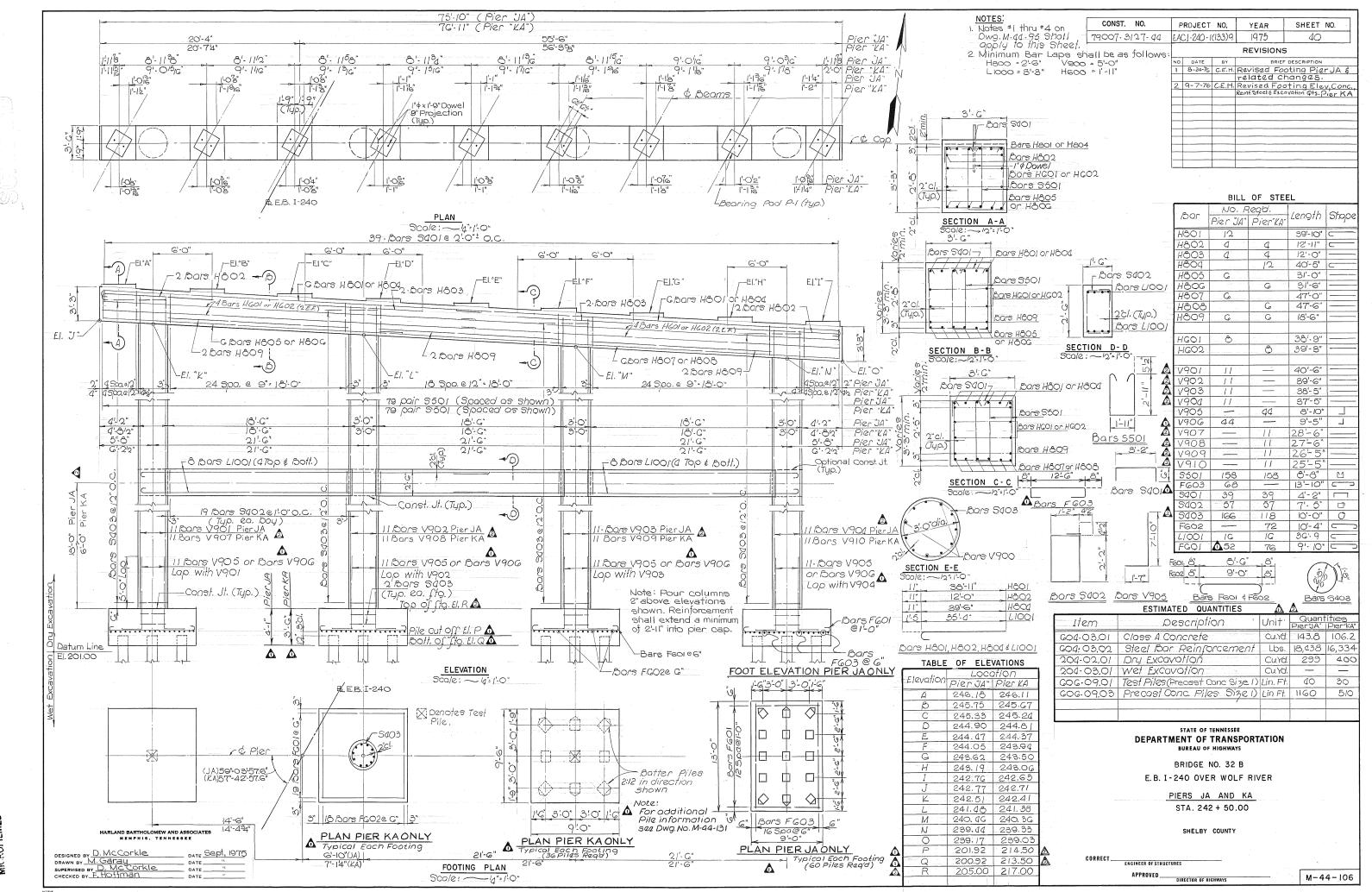
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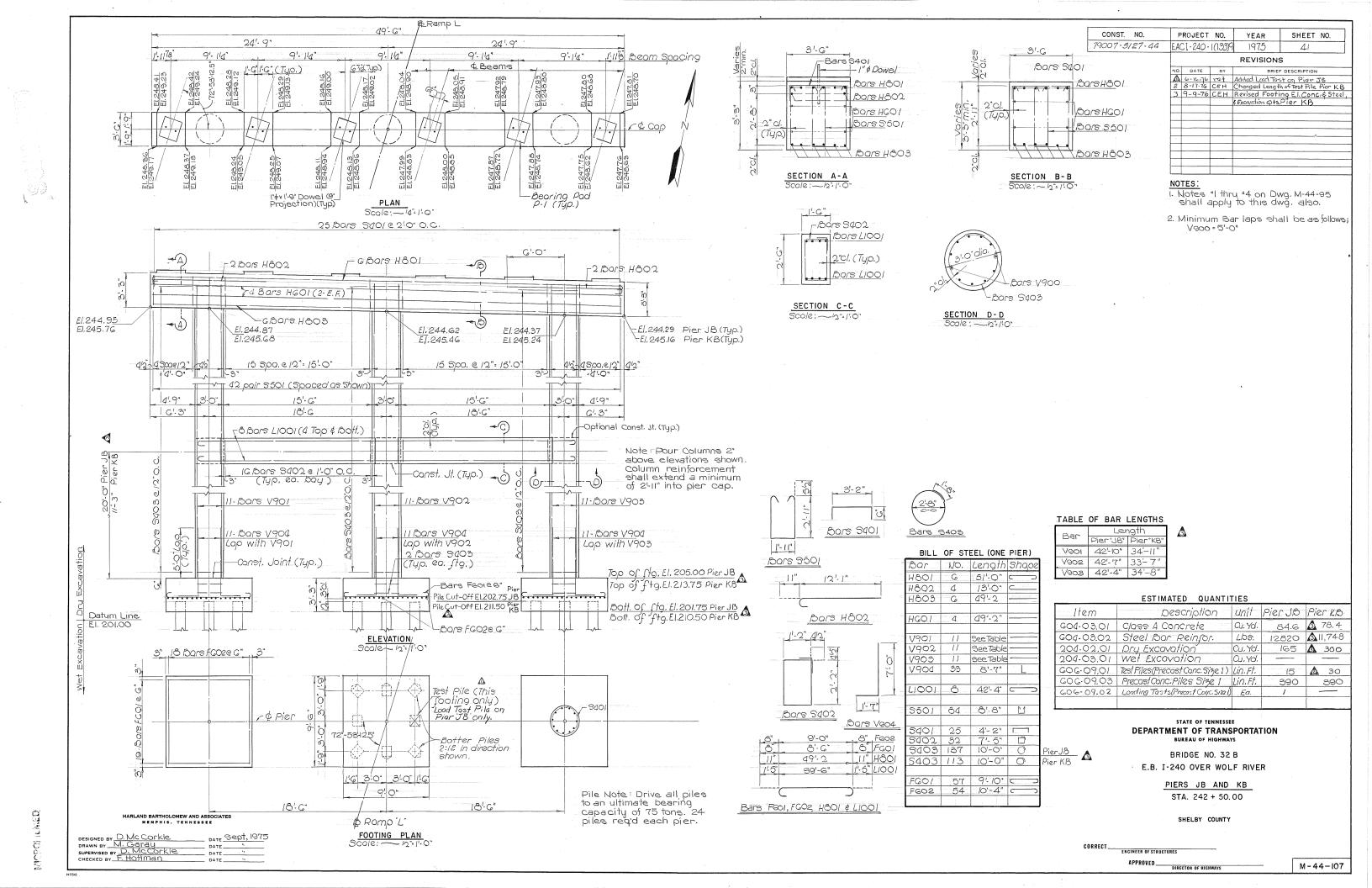
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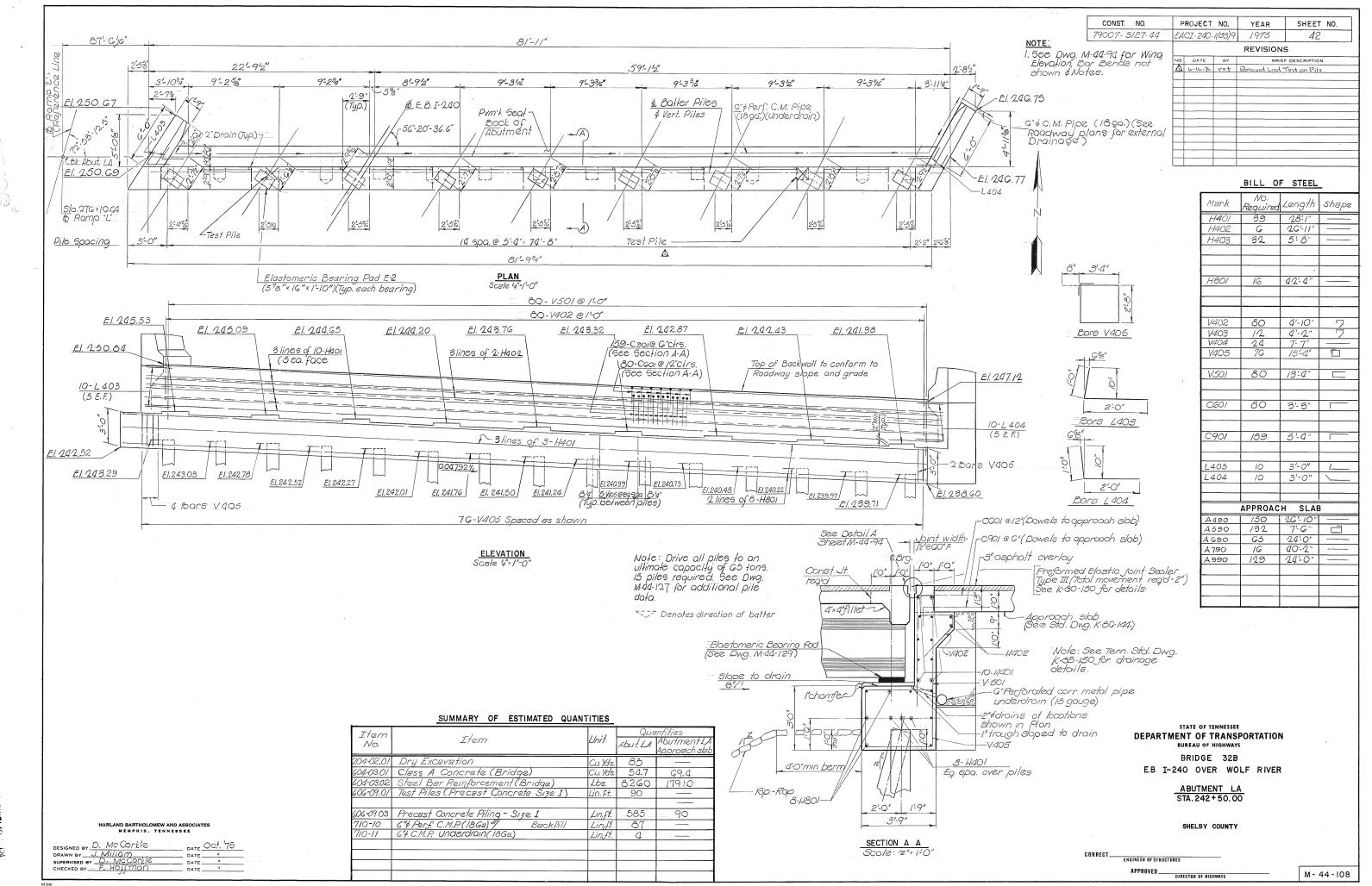


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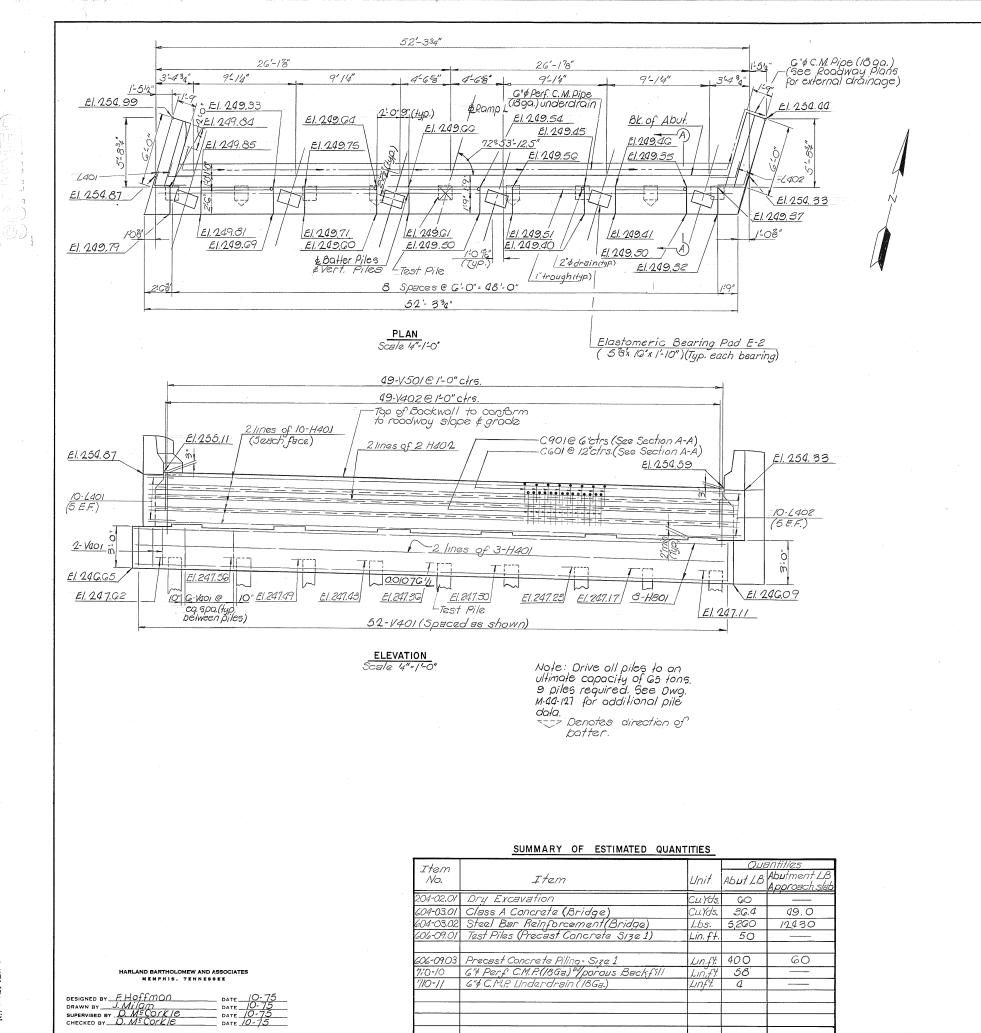


M. Coor





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NOTES:

I. Notes on Dwg M-44-94 apply to this dwg.also.

CONST. NO. PROJECT NO. YEAR SHEET NO. 79007-3127-44 EACI-240-1(133)9 1975 43 PEVISIONS 1. See Dwg. M-44-94 for Wing Elevation, Section. A-A and Bar Bends.

| NEVISIONS | | | | | | | | |
|-----------|------|----|-------------------|--|--|--|--|--|
| NO. | DATE | вү | BRIEF DESCRIPTION | | | | | |
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BILL OF STEEL

| Mark | No Required | | Shape |
|------|----------------|---------|-------|
| H401 | 2C | 2G'-7" | |
| H402 | 4 | 23'-0" | |
| H403 | 32 | 5'-8" | |
| / | | | |
| | | | |
| | | | |
| H801 | රි | 51'-9" | |
| | | | |
| | | | |
| V401 | 52 | 12:10" | |
| V402 | 49 | 4'-10" | 2 |
| V403 | 12 | 4-2" | 7 |
| V404 | 124 | 7:2" | |
| | | | |
| V501 | 49 | 13'-4" | |
| ,00, | 1 70 | 75 4 | |
| | | | |
| C601 | 49 | 3-9" | |
| | | | |
| | | | |
| C901 | 97 | 5'-4" | |
| | | | |
| L401 | 10 | 3:0" | |
| 1402 | /0 | 3:0" | \ |
| 2402 | 1-70- | | |
| | + | | -1 |
| | APPROAC | CH SLA | В . |
| A490 | 100 | 24'-10" | |
| A590 | 84 | 7'-G" | |
| A690 | 47 | 24:0" | |
| A790 | 16 | 25:4" | |
| A990 | 93 | 24'-0" | |
| | | | |
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STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** BUREAU OF HIGHWAYS

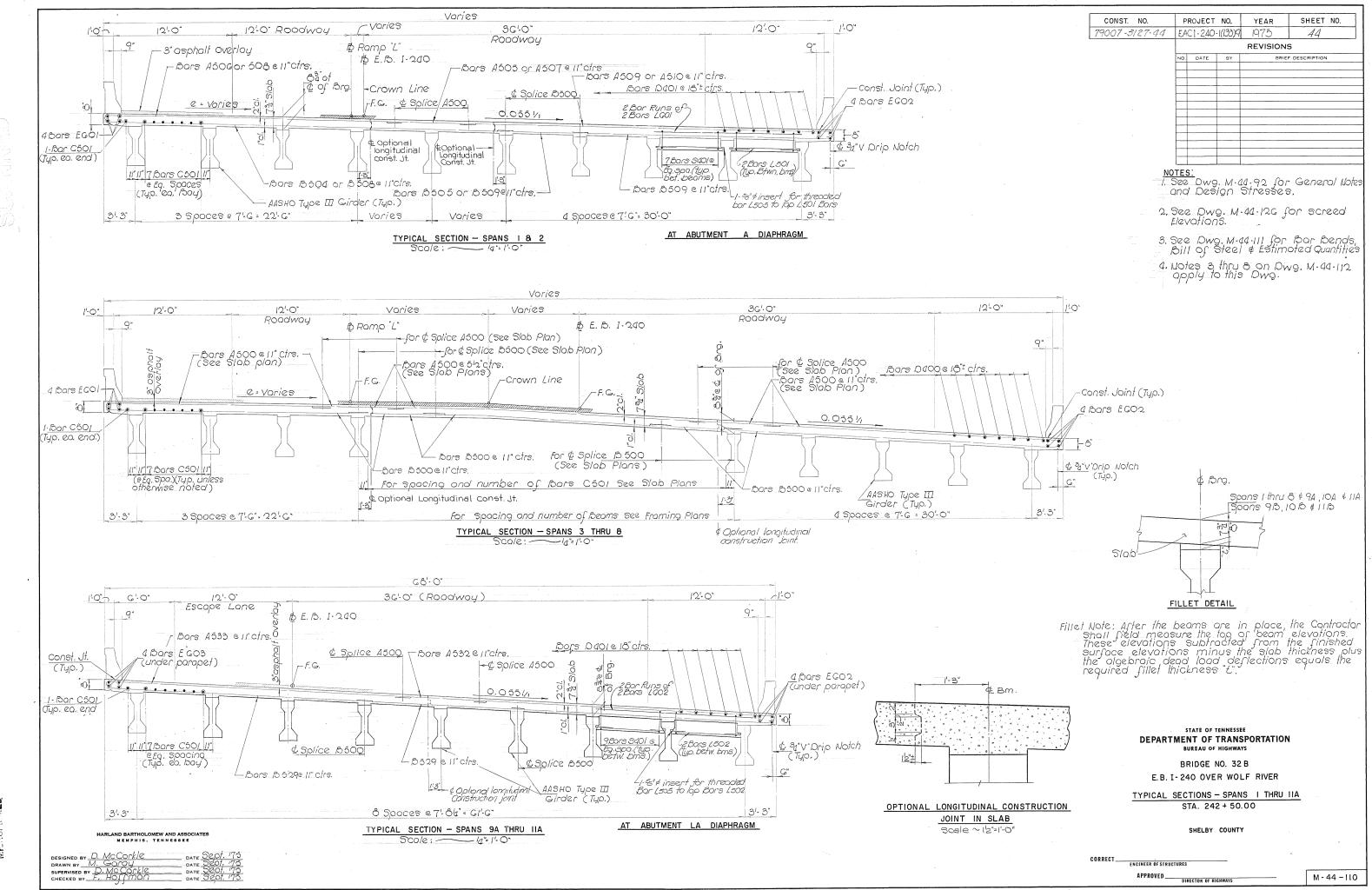
BRIDGE 32B E.B. I-240 OVER WOLF RIVER

> ABUTMENT LB STA.242 + 50.00

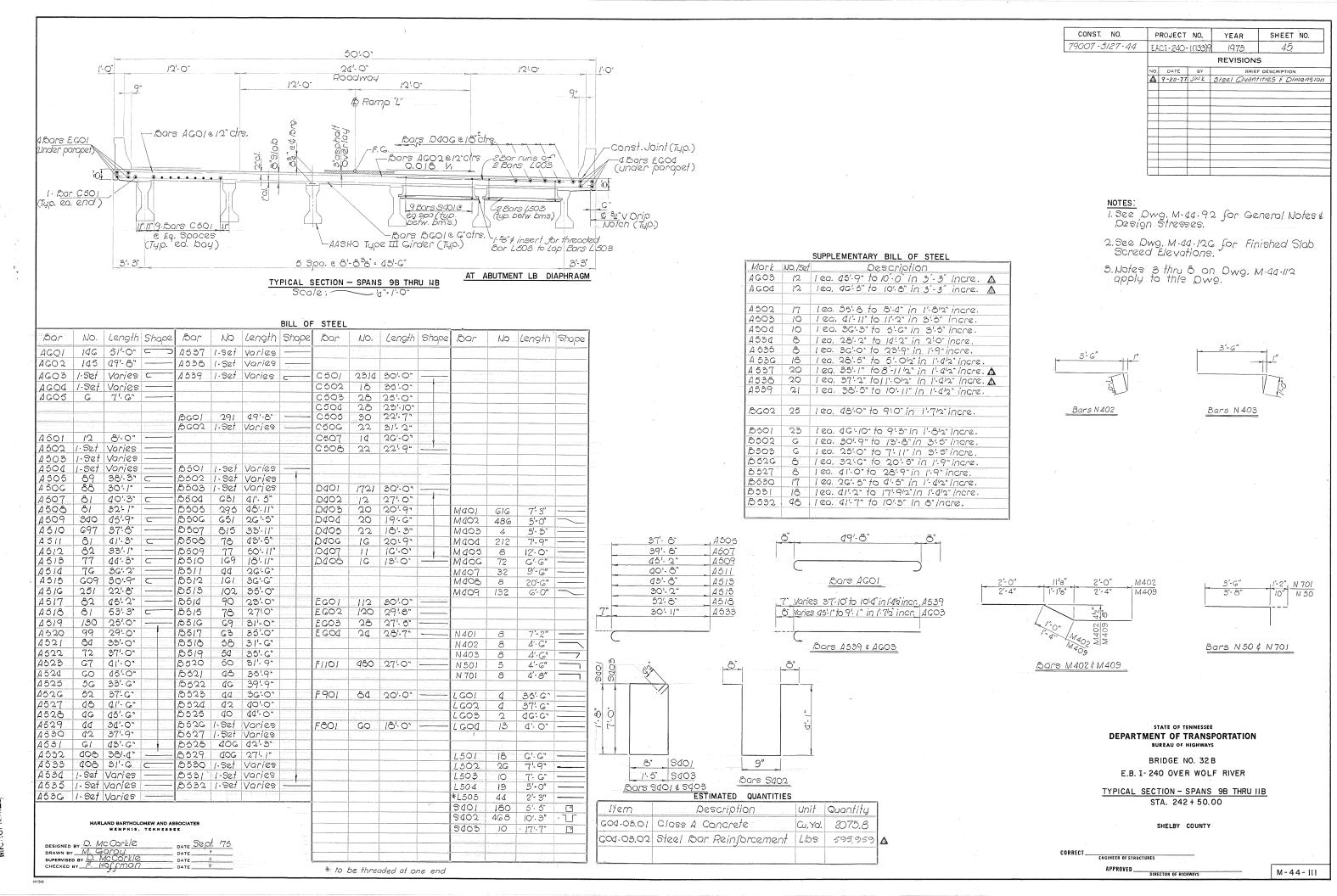
SHELBY COUNTY

M-44-109

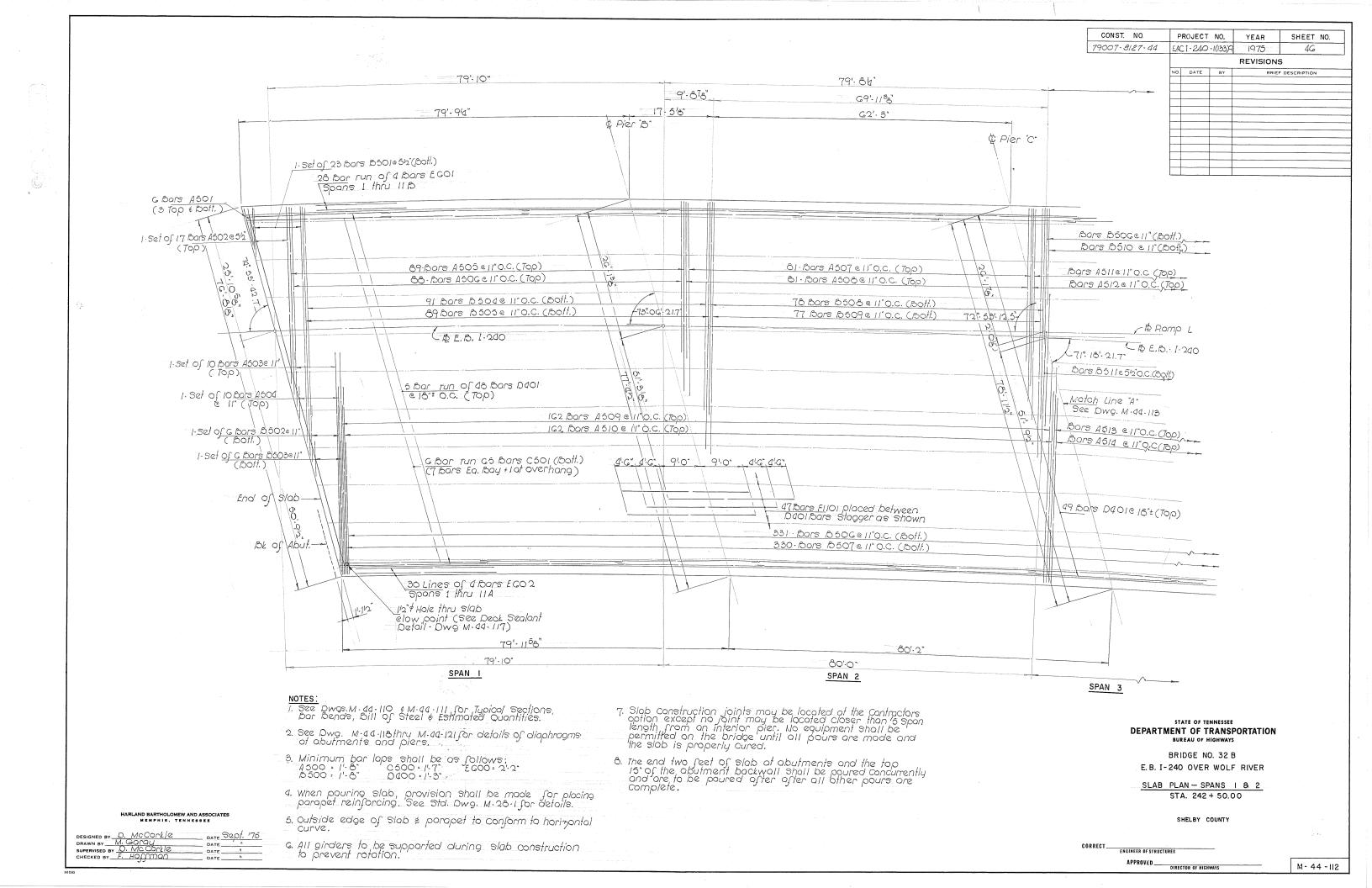
| CORRECT | |
|---------|------------------------|
| | ENGINEER OF STRUCTURES |
| | ADDROUGE |
| | APPROVED |
| | DIRECTOR OF MICHINATO |

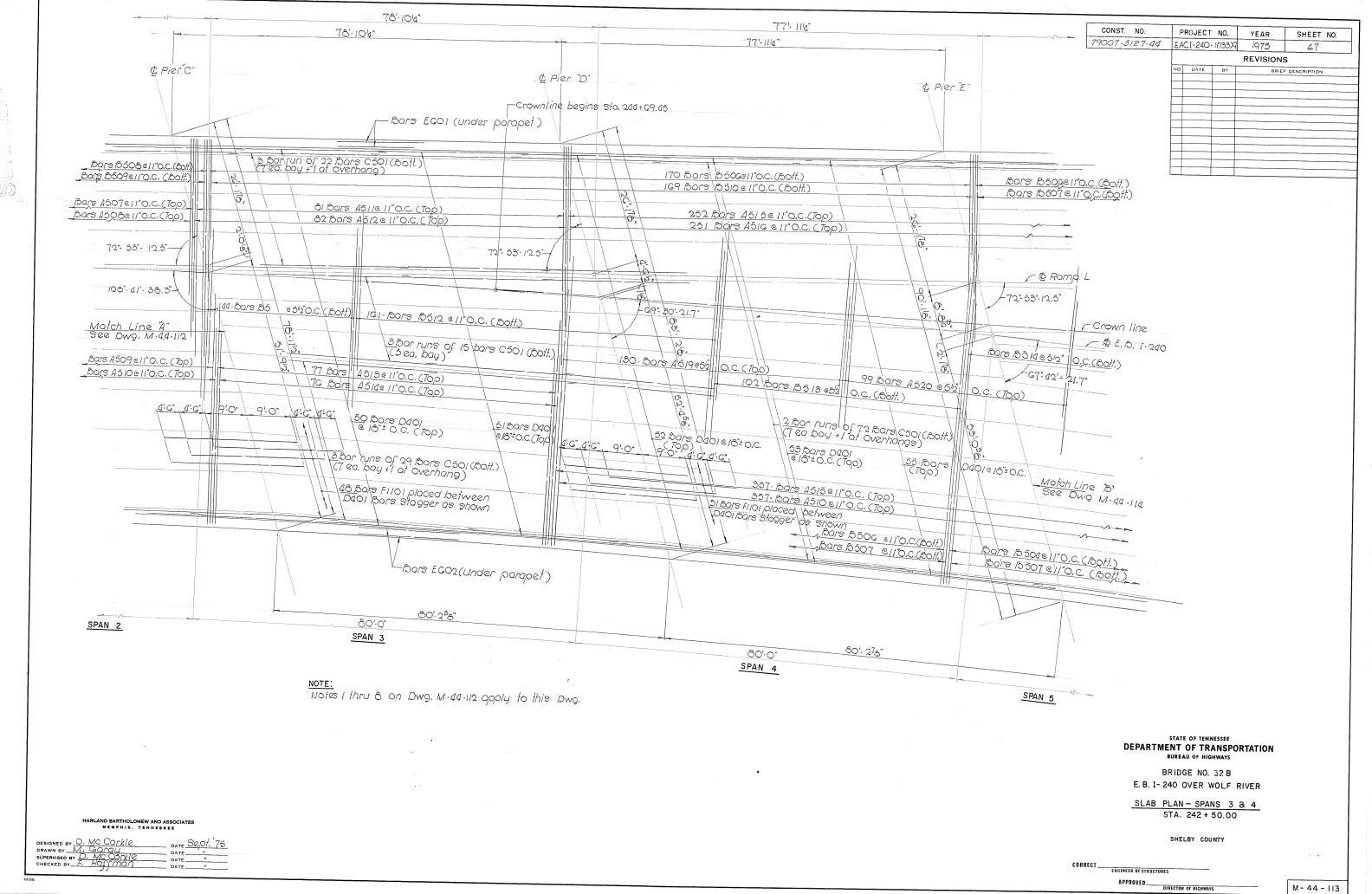


137 30a0W



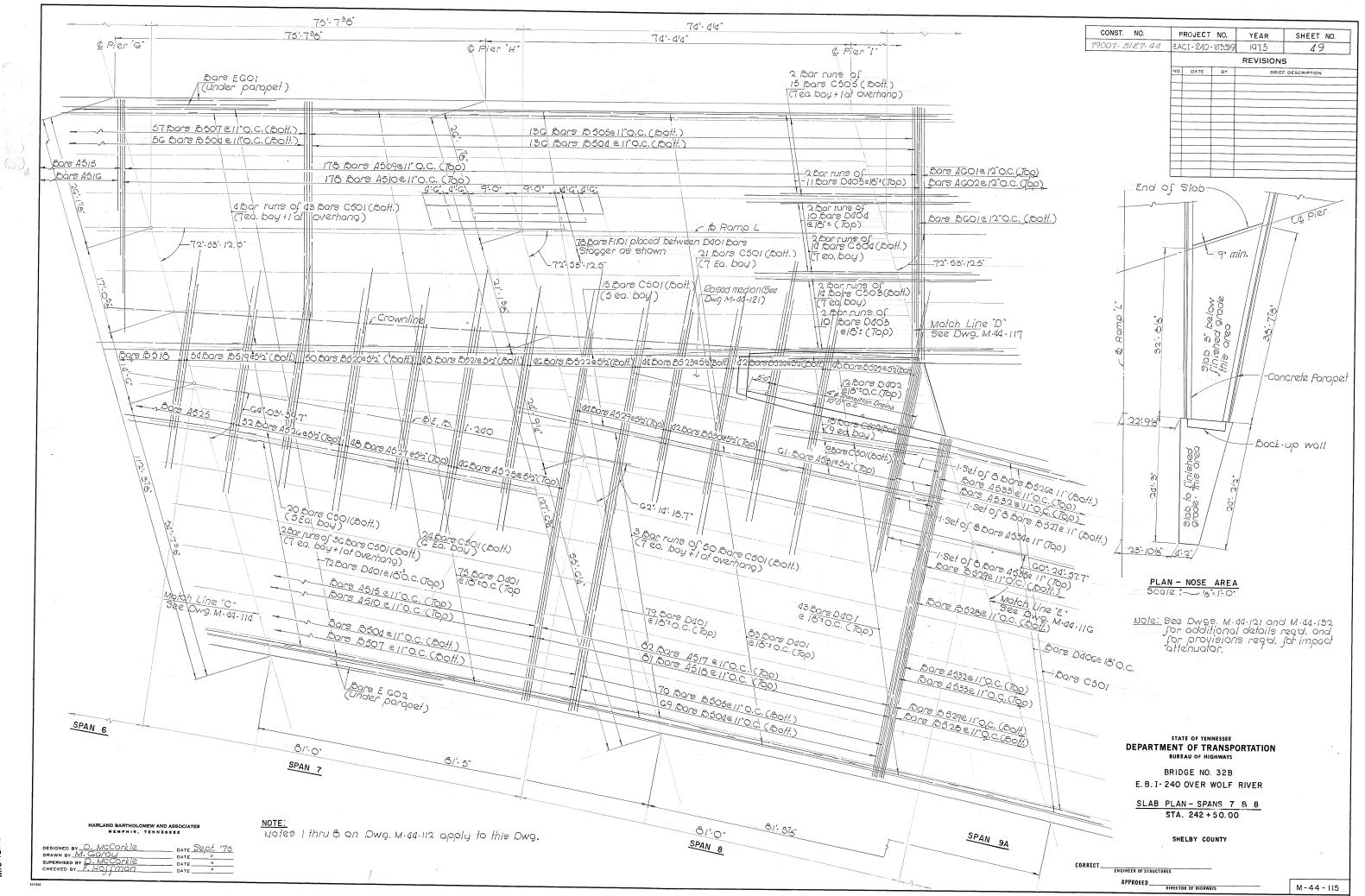
MICROFILMED



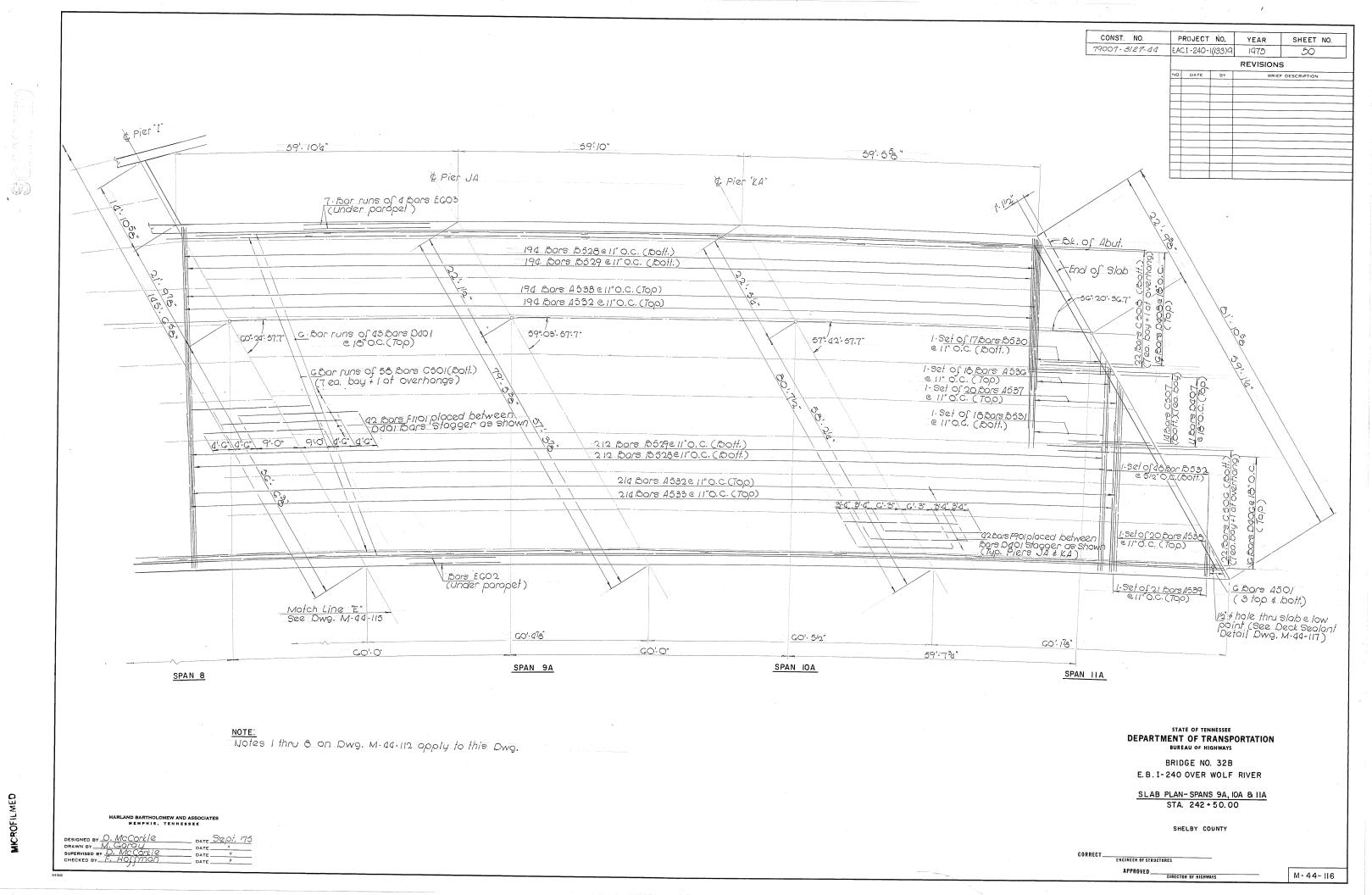


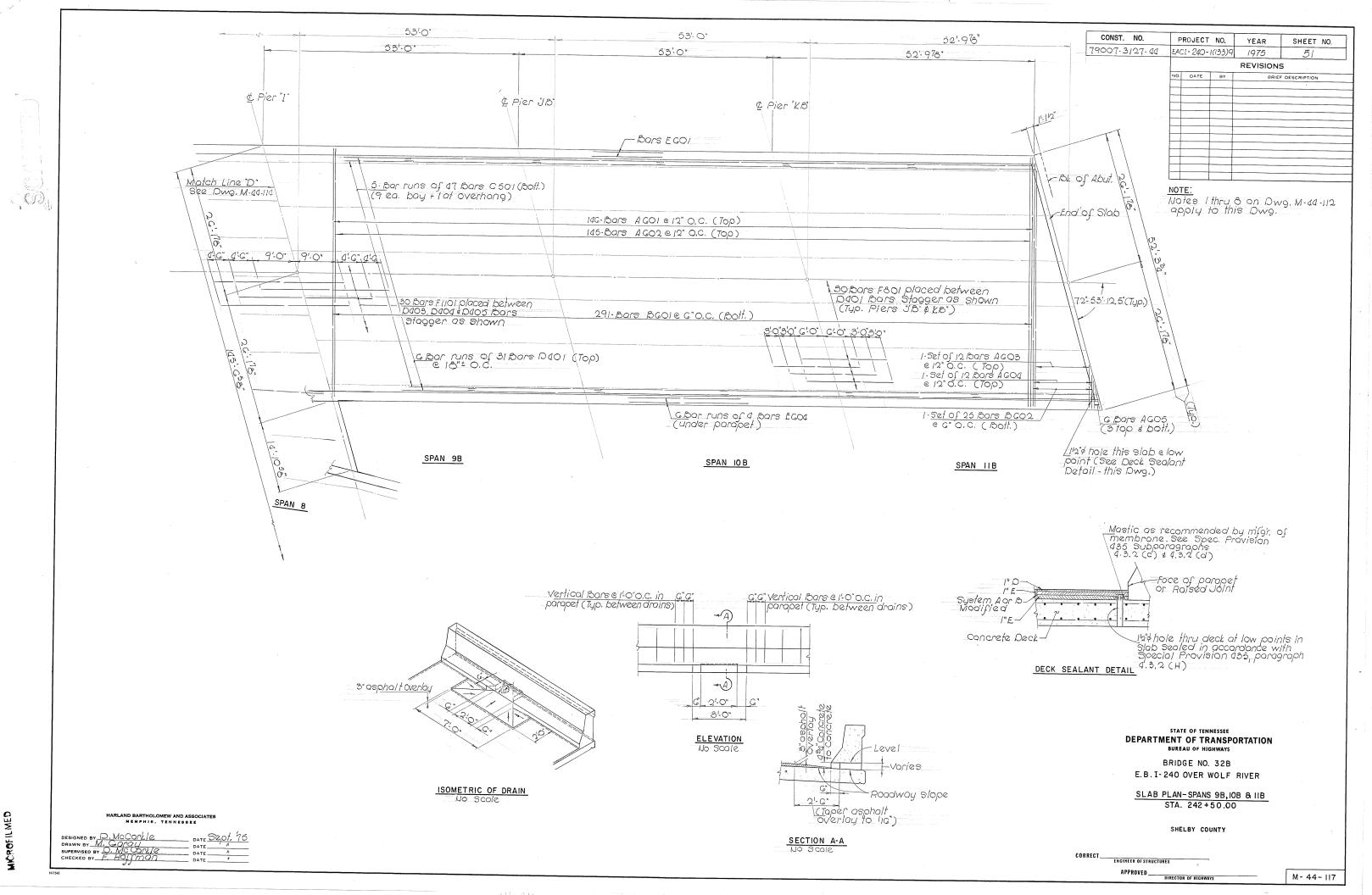
M - 44 - 113

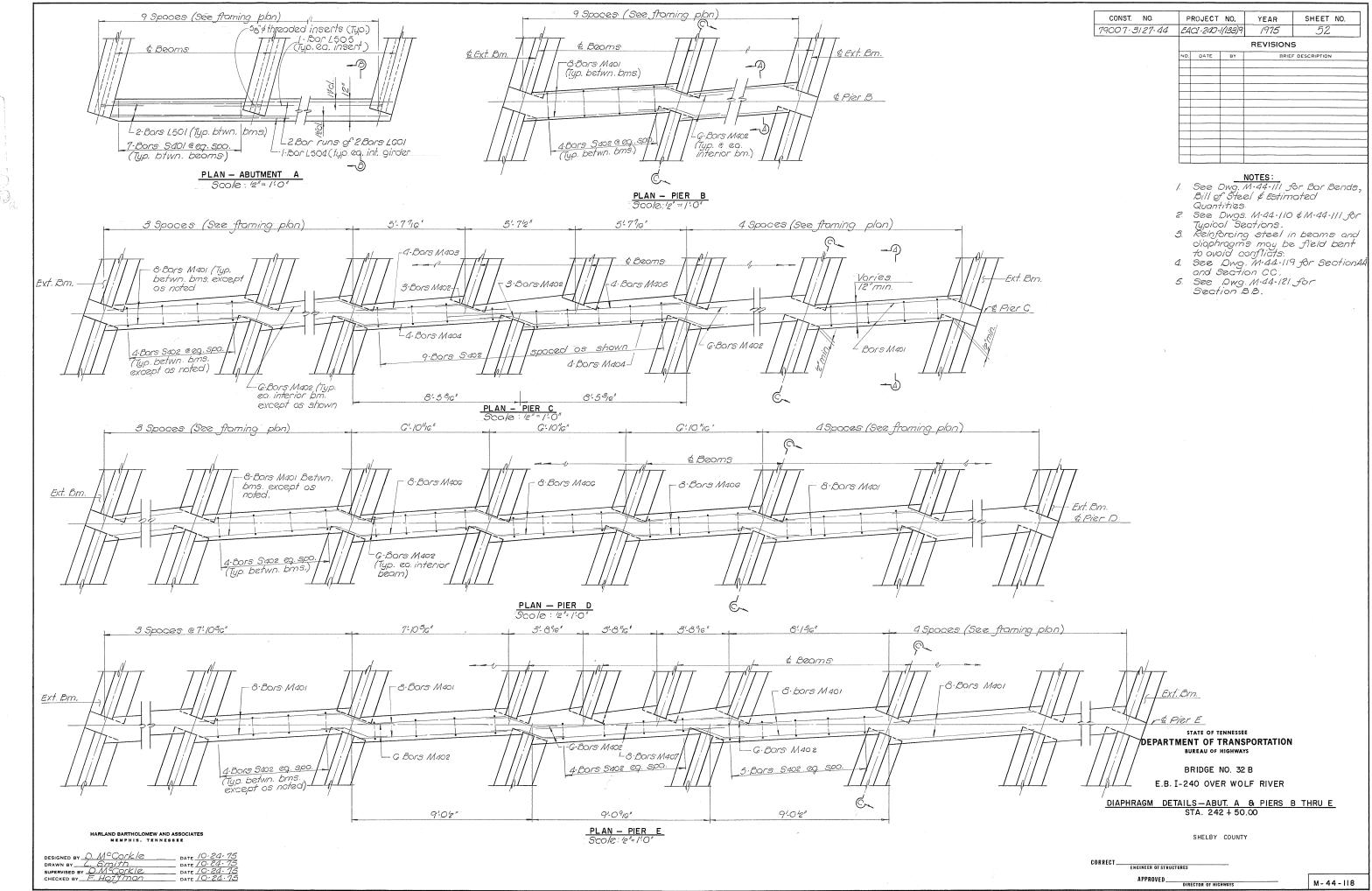
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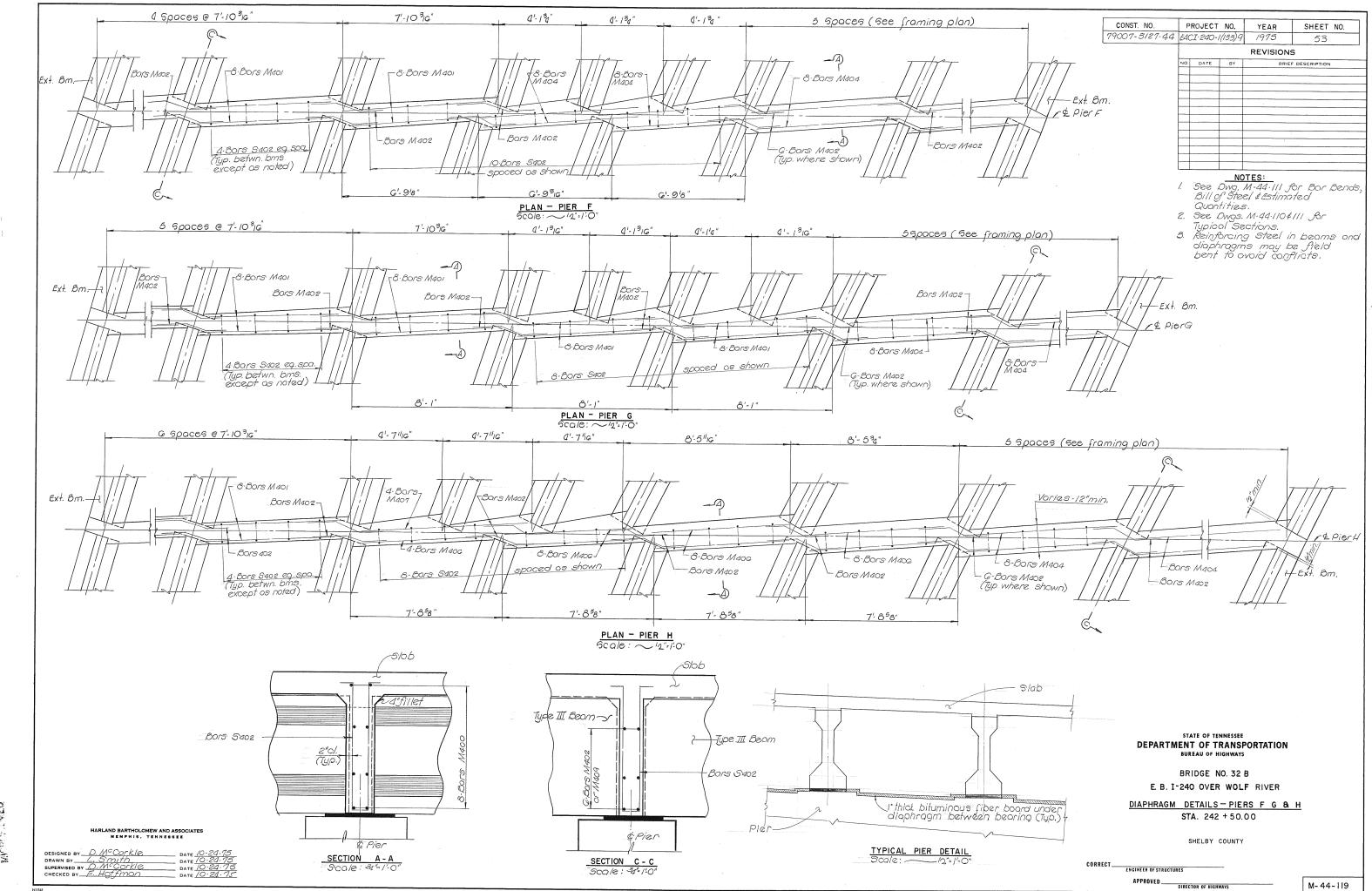




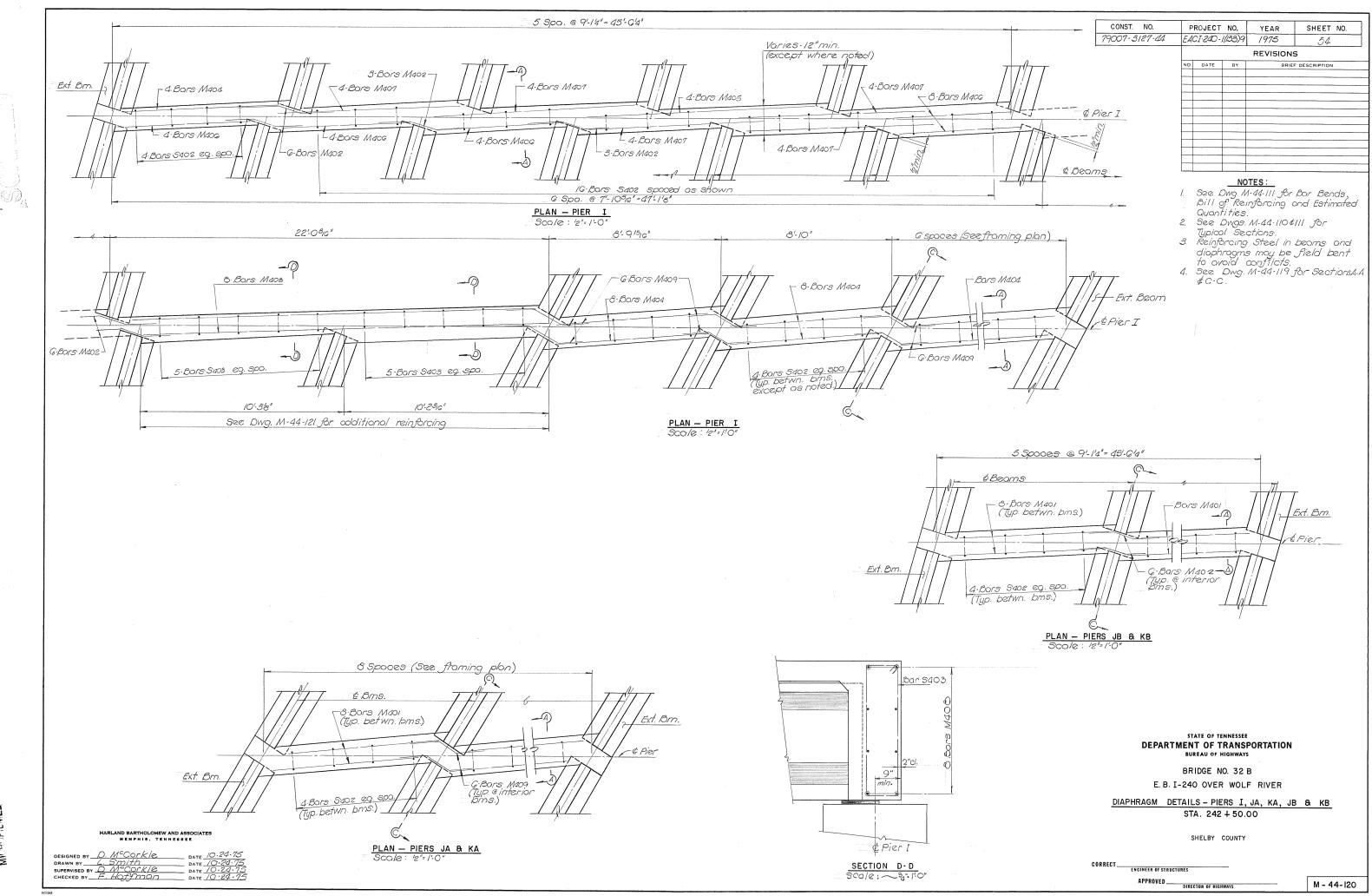


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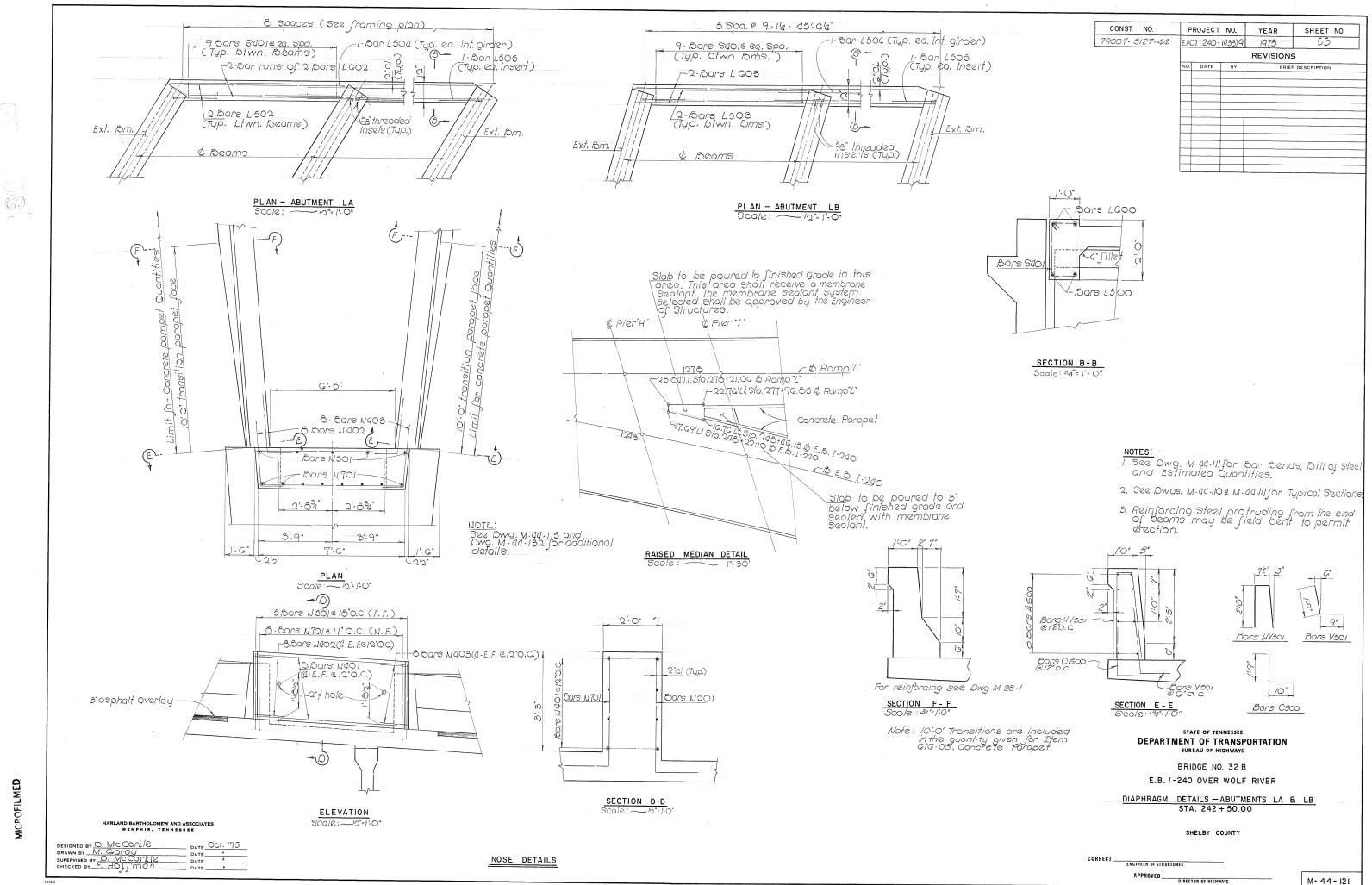
N115



OHA COURT



CHAN PROPERTY



--- End of Beam Bk. Abutment "A" - End of Beam Pier "B" End of Beam ← & Pier "C" 74°-09'-22.4° 107°-04'-31.4" ←105°-50'-37.6" 72.55'-28.6" 74°-0c'-30,9" 1496" 10,7%-061-06.6 1.0% -105°-53'-29.1" 72:54:53.4" 107° 03' 384" 107° 05' - 3G.7° 72:54:23.3 ₹105°-56'-21,6" 70°00' 91.7' | 45° 107° 06' 01.5" 72.53.58.5 42" 69'-112" ~105°.59'-15.3" 81'-0" 70'-3'8" -107° 30 -21.9" 1.65" 106°-02'-10" 72°-29′-30,1′-10,73°54',54.3° 10,7° 54' 30.C° ~106°-05'- 06.7" 72°-05'-29.4" 84 44"" 107° 57'-48.8" 72°-02';11.2' 1-78" _10G°-08'-02,G° 124 // 10₀8°-01′-06.3° -/0G°-11'-00.5" 71:58:51.7 134 73° 46'-00.4" -106°-13'-59.6" 108°-04'-29" 1-73 71°-55'-31' 100 73° 43'-00.2' 108'- 07' 51' -10G°-1G'-59,8° 71°-52'-09' SPAN I SPAN 2

CONST. NO. PROJECT NO. SHEET NO. YEAR 79007-3127-44 EACT-240-1(133)9 1975 56 REVISIONS

| NO. | DATE | BY | BRIEF DESCRIPTION |
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1. See Dwg. M-44-128 for Beam Detail.

2. See Dwg. M-44-110# 111 for Typical Sections.

3. See Dwg. M-44-118 thru 121 for diaphragm. details.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

BRIDGE NO. 32 B E.B. I-240 OVER WOLF RIVER

FRAMING PLAN - SPANS 18 2 STA. 242+ 50.00

SHELBY COUNTY

CORRECT _____ENGINEER OF STRUCTURES

M-44-122 DIRECTOR OF HIGHWAYS

DESIGNED BY D. Mc Corkle
DRAWN BY M. GORCY
DIPENVISED BY D. Mc Corkle
CHECKED BY F. Hoffman
DATE Sept. 1975
DATE Sept. 1975
DATE Sept. 1975
DATE Sept. 1975

APPROVED ____

Pier D Pier "C" ← & Pier "E" -End of Beams End of Beams End of Beams 72:53-12.5" 72°-53'-125" 10,7:00'-47.5" ~107°06'-47.5" 107°06'-47.5 -107°06'-47.5" 72° 53'-12.5" 72° 53' 125 45" 42" 107° 06'-47.5" ~ 107°06'-47.5" -107°06'-47.5" 78'-104" 77'-114" B5 72.00.31.7: 43" 4'2" 80'-0" 107: 59: 28,3 108:36:47.2" BG 80'-0" 5'8" 19.50 71°.08'-22" /// 110°.05'-13.4" -108°-51'-38" B7 70.10.44.0" 427.492" 32'.01.7" 69°-54'-46.6" 109° 43' 15.6" 109: 46'-55.5" GO-27'-50,3 7111:36:03.7" 70°.09'.232: /// 111°. 40'.07.3" 109:50:36.8" -109°-54'-19.5° 70:05':40.5' 7/9-54" // 111: 44: 12.5" 70.01.500.01.111.0.48.19.3. 7109° 58' 03,6° SPAN 3 SPAN 4

| CONST. NO. | Р | ROJECT | NO. | YEAR | SHEET | NO. |
|---------------|----------|----------|---------|-----------|-------------|-----|
| 79007-3127-44 | EA(| C[-240 - | 1(133)9 | 1975 | 57 | |
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NOTES:

1. See Dwg. M-44-128 for Beam Details

2. See Dwgs. M-44-110 & 111 for Typ. Section.

3. See Dwgs. M-44-118 thru 121 for Diaphragm Details.

STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** BUREAU OF HIGHWAYS

BRIDGE NO. 32 B E.B. I-240 OVER WOLF RIVER

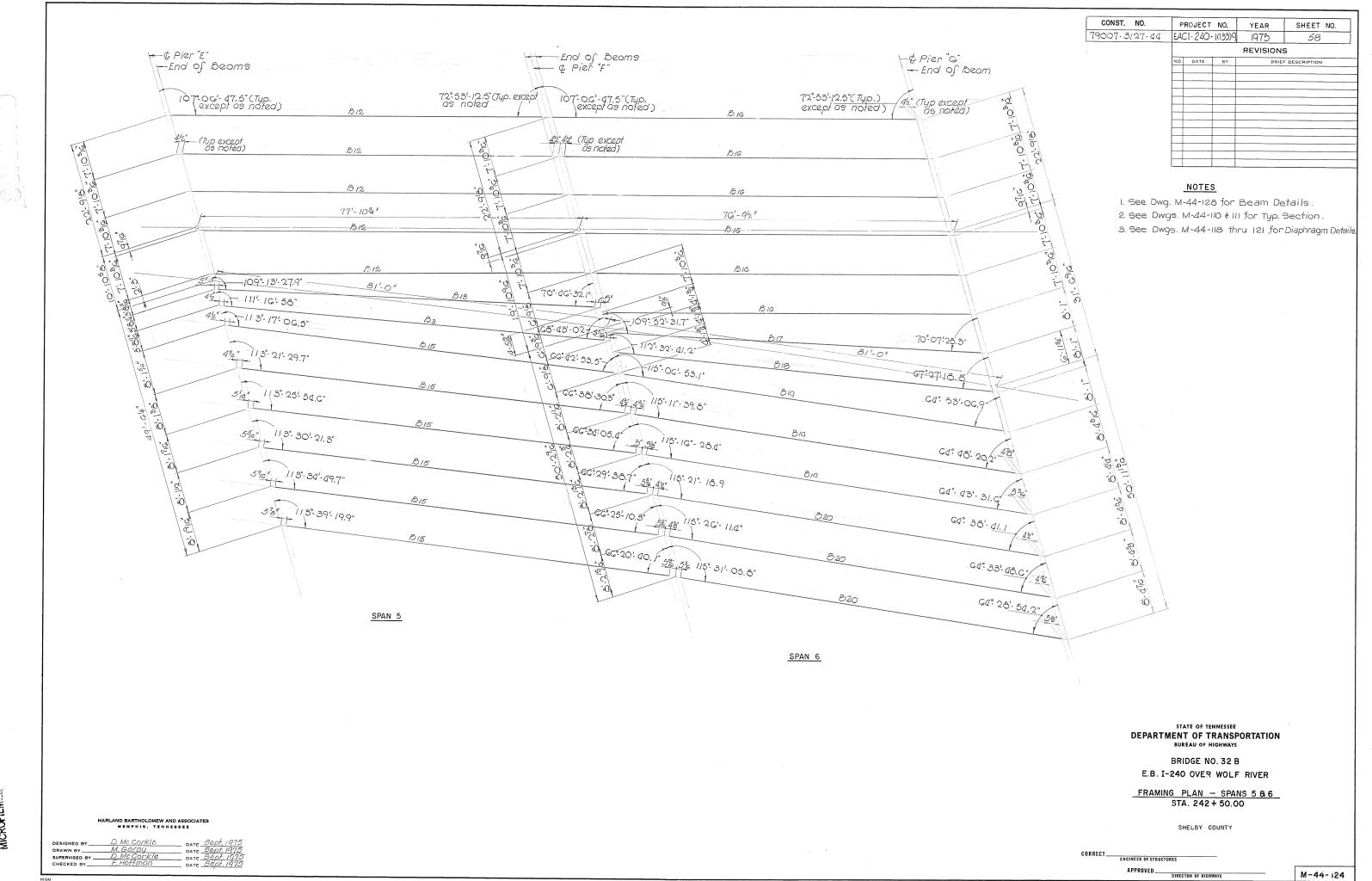
FRAMING PLAN - SPANS 3 G 4 STA. 242 + 50.00

SHELBY COUNTY

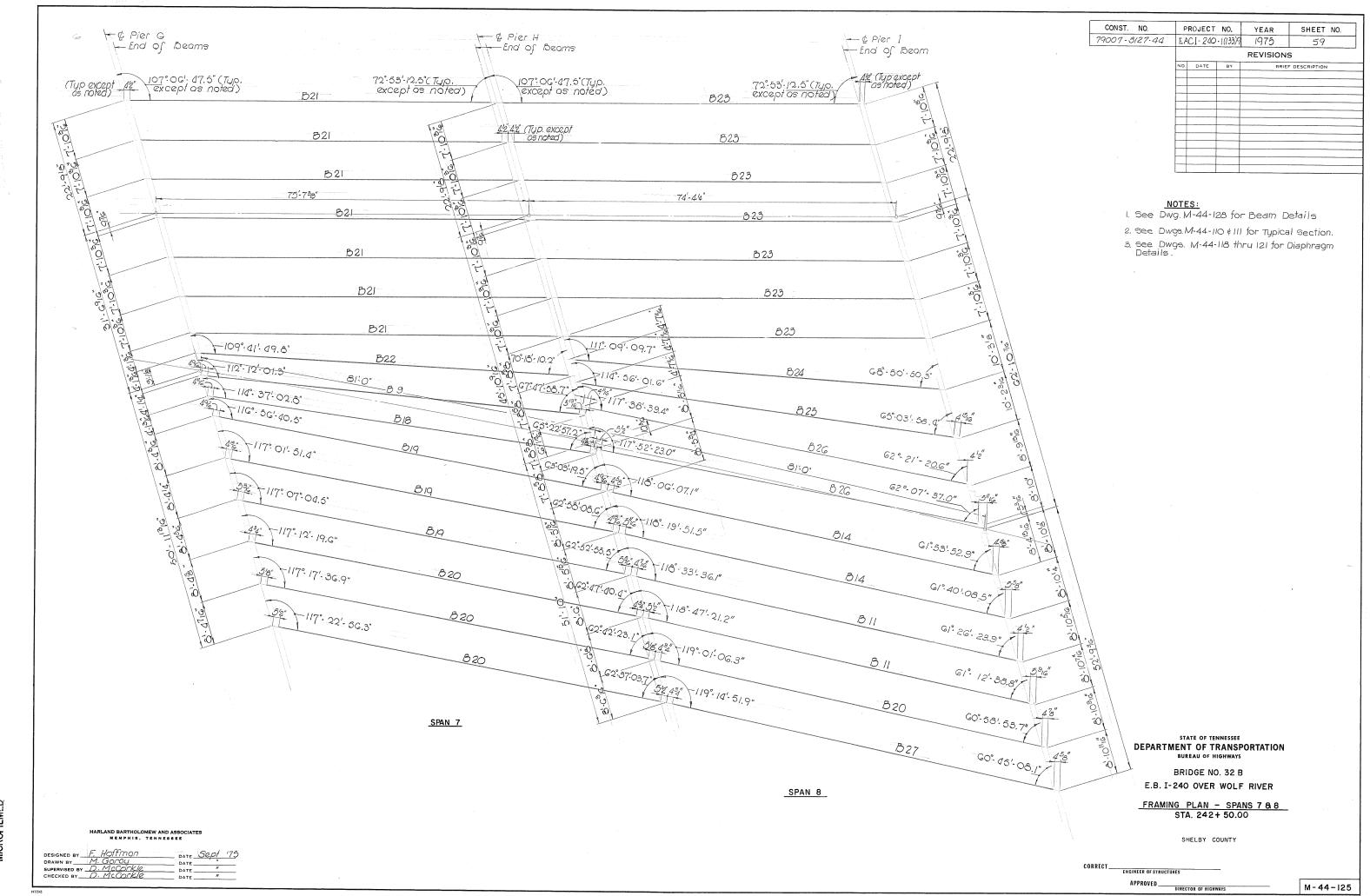
CORRECT_____ENGINEER OF STRUCTURES APPROVED DIRECTOR OF HIGHWAYS

M - 44 - 123

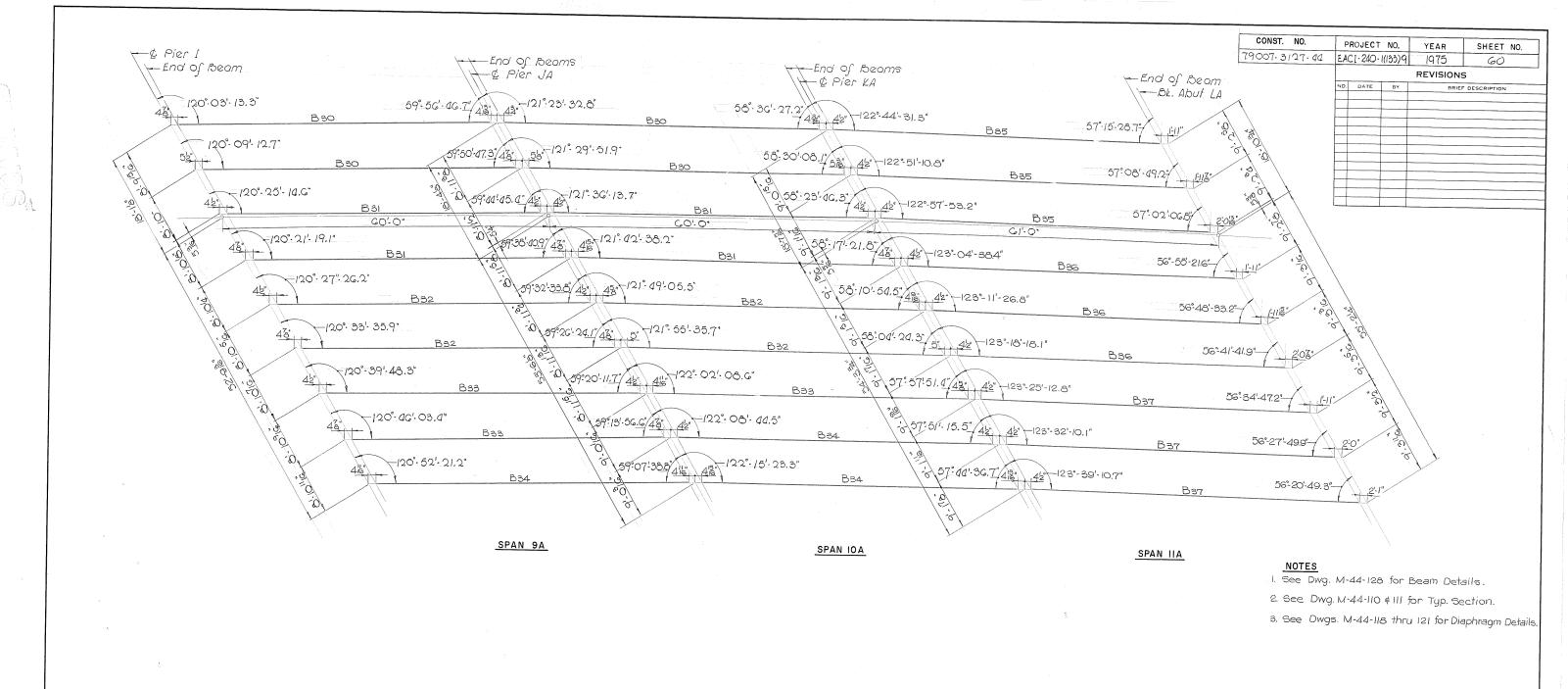
D. Mc Corkle M. Garay D. Mc Corkle F. Hoffman



CAM NOOCH



NODCE MEN



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 32 B E.B. I-240 OVER WOLF RIVER

FRAMING PLAN - SPANS 9A, 10A & 11A STA. 242+ 50.00

SHELBY COUNTY

| CORRECT | |
|---------|------------------------|
| | ENGINEER OF STRUCTURES |
| | APPROVED |
| | DIRECTOR OF HIGHWAYS |

HARLAND BARTHOLOMEW AND AS MEMPHIS, TENNESSE

DESIGNED BY D. Mc CORKIE

DRAWN BY M. GARAY

SUPERVISED BY D. Mc CORKIE

CHECKED BY F. HOTTMAN

DATE

"
DATE

"

NII

M-44-126

CONST. NO. PROJECT NO. YEAR - Bt. Abutment LB - 79007.3127.44 EAC1-240-1(1339) - End of Beoms Pier 1° End of Beom 1975 End of Beoms Pier JB"
HEND OF Beams REVISIONS BRIEF DESCRIPTION 1-6° 4'2" (typ) 4'2", (4'2" (typ) В29 B28 9-19 B28 B29 B28 22-918 -107'06'-17.5"(Typ.) NOTES:

1. See Dwg. M-44-128 for Beam Details. B 28 B29 53'-0" 53'.0" 54'-0" 2. See Dwg. M-44-111 for Typical Section. CA Ramp "L 3. See Dwgs. M-44-118 thru. M-44-121 for Diaphragm Details. B28 B28 B29 22, 918 107°-06'- 47,5"(Typ. @ abuts) B29 B28 B29 528 SPAN 9B SPAN IOB SPAN IIB

SHEET NO.

61

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

BRIDGE NO. 32 B E.B. I-240 OVER WOLF RIVER

FRAMING PLAN - SPANS 9B (0B&11B STA. 242 + 50.00

SHELBY COUNTY

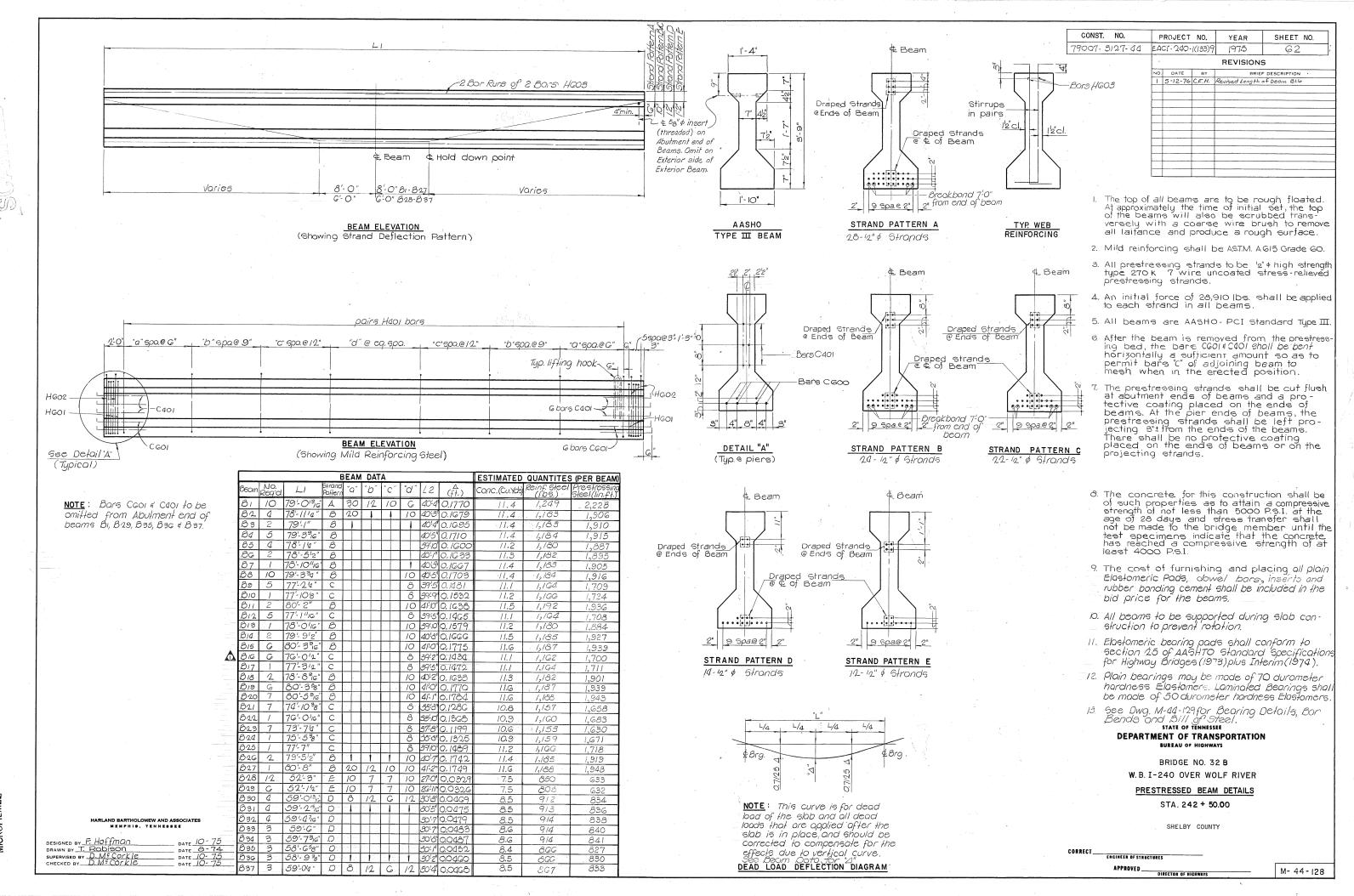
CORRECT ______ENGINEER OF STRUCTURES

HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

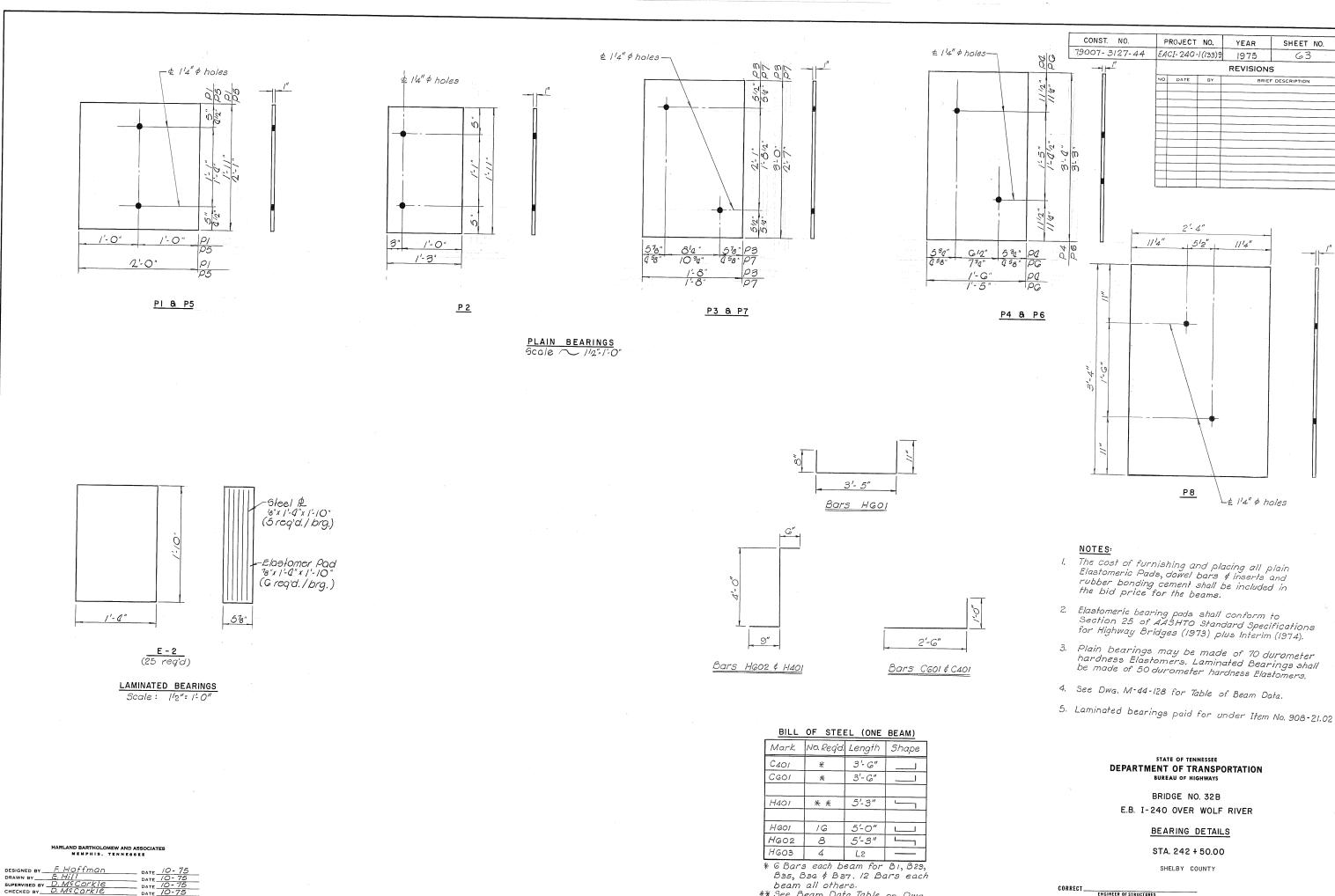
MICROFILMED

DESIGNED BY F. HOFFMAN
DRAWN BY M. GAPOU
SUPERVISED BY D. MCCOPKIE
CHECKED BY D. MCCOPKIE DATE Sept 175
DATE "
DATE "
DATE "

M-44-127



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beam all others.

** See Beam Data Table on Dwg.

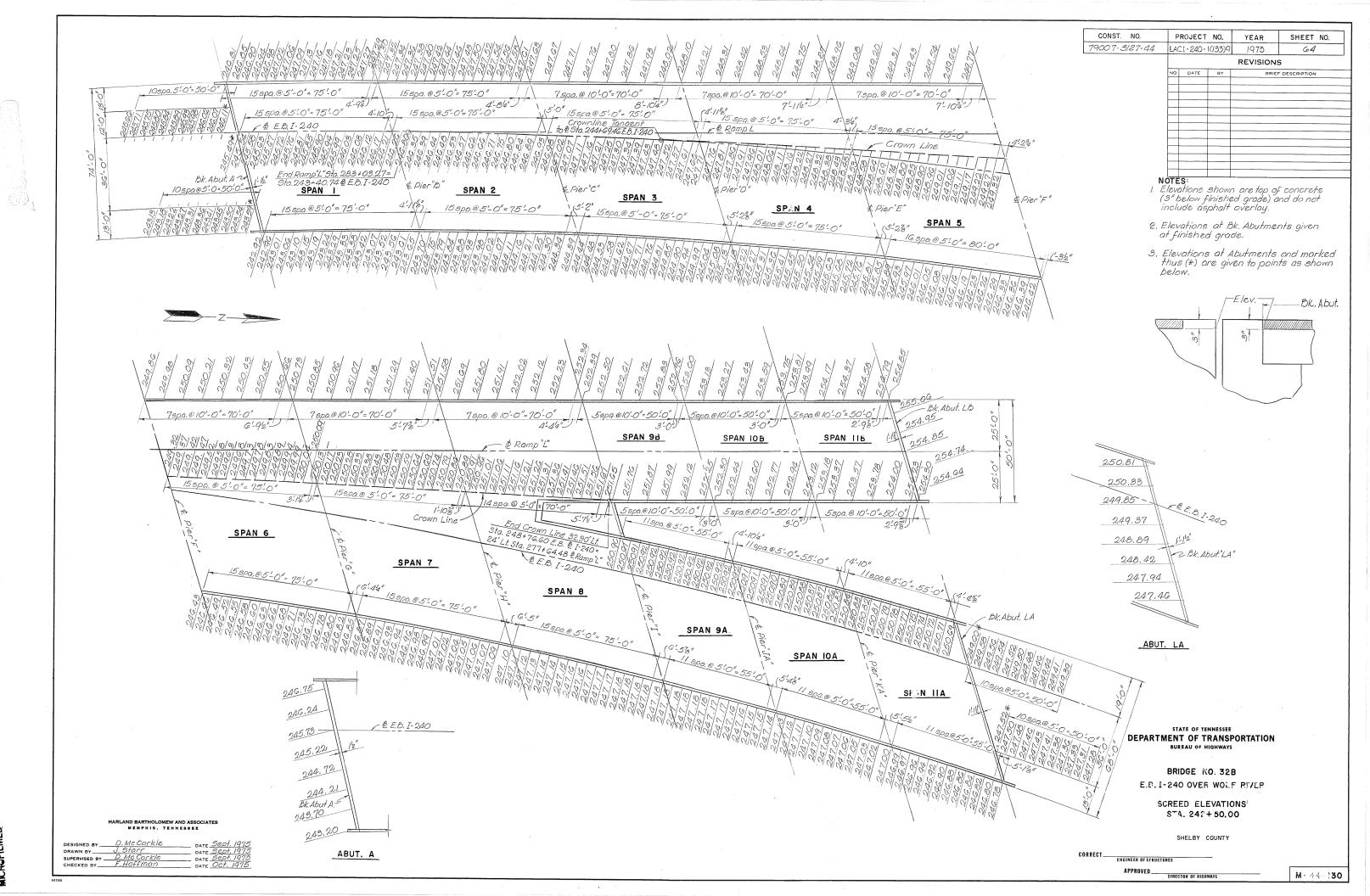
M-44-128 for number regid.

CORRECT _____ENGINEER OF STRUCTURES

M - 44- 129

SHEET NO.

63



CHA NECO