

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

MONTGOMERY COUNTY	OHIO
MOT - 75 - 13.88	FHWA REGION 5
I.R.-75-1(135)55	FEDERAL PROJECT

1
192

MOT-75-13.88 CITY OF DAYTON HARRISON TOWNSHIP MONTGOMERY COUNTY

DRAWN BY
SEP 23 1983

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio.

1989 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway, except as noted on sheets 27-34, and that provisions for the maintenance and safety of traffic will be set forth on the plans and estimates.

CONVENTIONAL SIGNS

County Line ————	Limited Access (only) ———— LA ————
Township Line ————	Right of Way (only) ———— RW ————
Section Line ————	Limited Access & Right of Way ———— LA&RW ————
Corporation Line ———— or ————	Existing Right of Way ————
Fence Line (existing) —x—x— (proposed) —x—x—	Property Line —E— (in existing fence) —E—
Center Line ———— or ————	Railroad ———— or ————
Trees (to be removed) —X—	Guardrail (existing) —o—o— (proposed) —•—•—
Utility Poles: Telephone φ, Power φ, Light φ	

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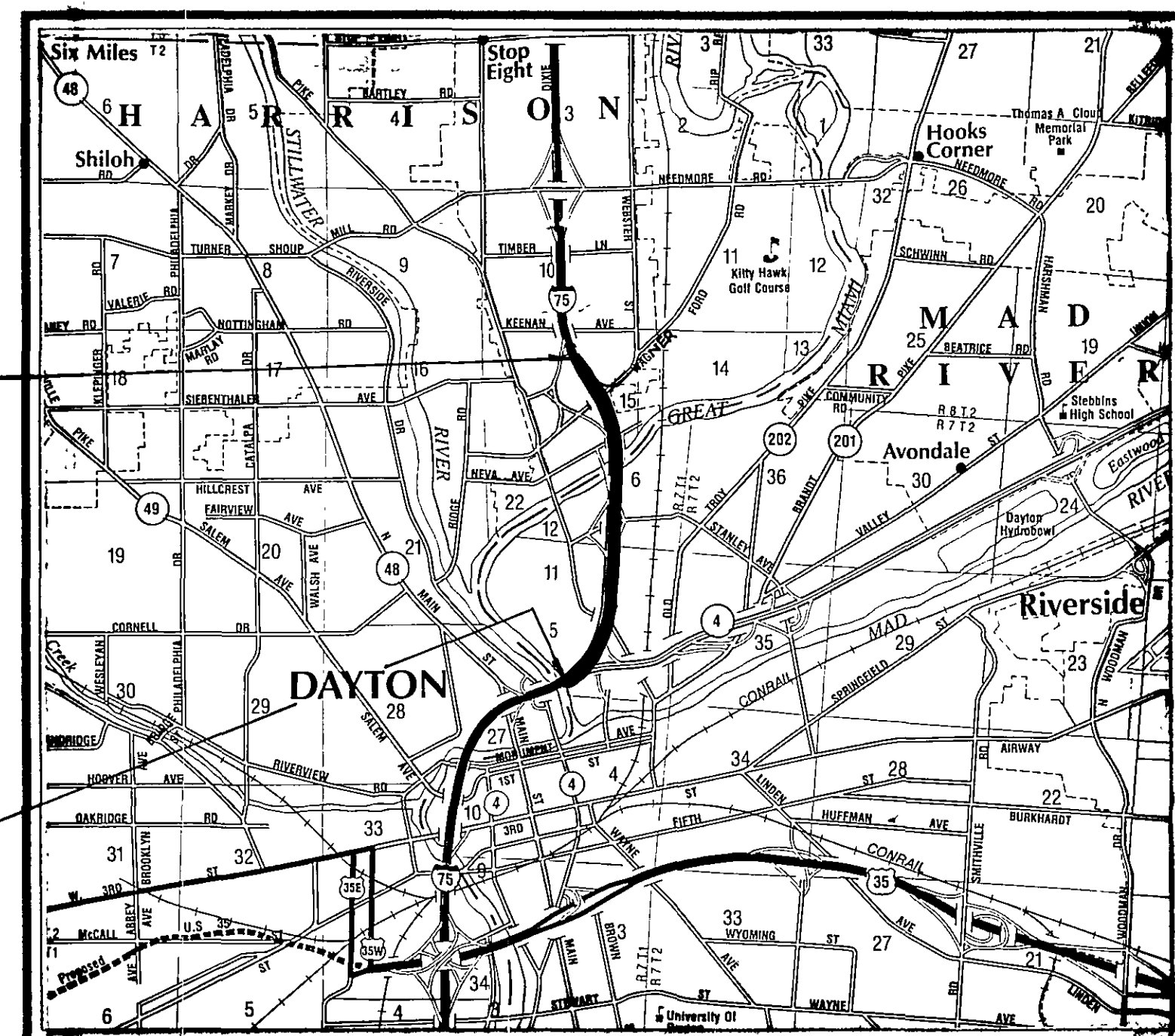
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LINE DATA

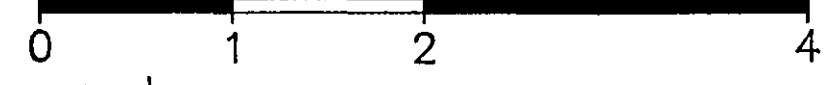
Begin Project	Sta. 383+48.57	
End Project	Sta. 500+81.22	
Length of Project	11732.65 Lin. Ft.	or 2.222 Miles
Begin Work	Sta. 383+48.57	
End Work	Sta. 503+31.22	
Length of Work	11982.65 Lin. Ft.	or 2.27 Miles
ADD FOR WORK ON E.B.- W.B. EXPRESSWAY		
Begin Work	Sta. 2+21.26	
End Work	Sta. 12+70	
Length of Work	1048.74 Lin. Ft.	or 0.20 Miles
ADD FOR WORK ON RIVERSIDE DRIVE		
Begin Work	Sta. 3+85	
End Work	Sta. 12+60	
Length of Work	875.00 Lin. Ft.	or 0.17 Miles
TOTAL LENGTH OF WORK = 13906.39 LIN. FT. OR 2.634 MILES		

END PROJECT
STA. 500+81.22

BEGIN PROJECT
STA. 383+48.57

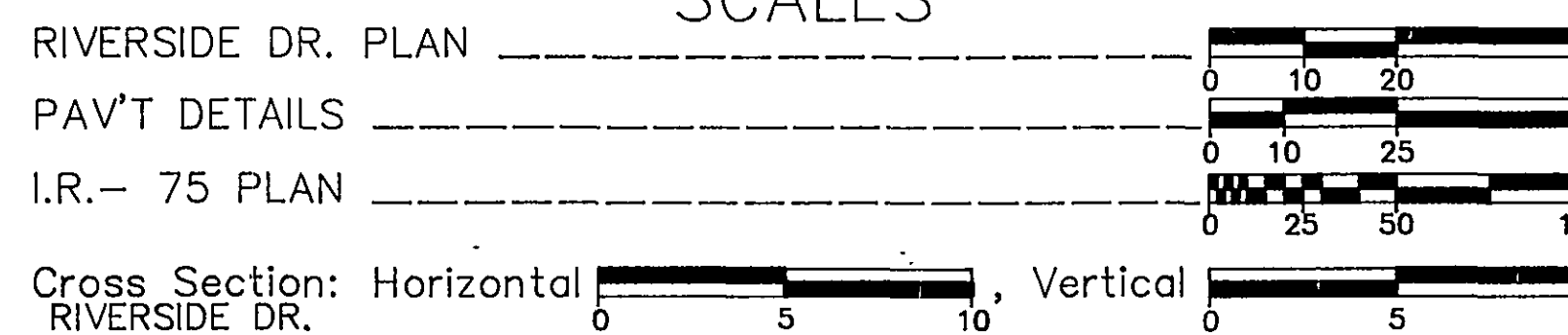


LOCATION MAP
SCALE IN MILES



Portion to be Improved ————
State & Federal Routes ————
Other Roads ————

SCALES



Cross Section: Horizontal 0 5 10, Vertical 0 5 10

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call...800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

SUPPLEMENTAL SPECIFICATIONS			
803	5-2-89		
802	5-4-88	847	10-17-83
836	11-12-85	947	10-17-83
852	6-10-87	942	10-29-86
853	6-26-78	944	6-24-89
931	6-18-85	862	12-16-88
952	12-14-88	962	8-14-89
956	6-26-78	905	5-2-89

Approved J. Kenneth Capella, P.E.
Date 5/2/89 District Deputy Director of Transportation

WTF Approved B.D. Hashilani
Date 6/7/89 Engineer, Bureau of Bridges and Structural Design

Approved Chadwick Smith
Date 8/10/89 Chief Engineer, Planning & Design

Approved Bernard B. Hurst
Date 8/10/89 Director, Department of Transportation

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS				
BP-3 12-6-76	GR-3 1-21-85	MC-9 1-30-84	TC-9.10 4-24-80	TC-41.20 3-26-79
BP-4 10-1-87	GR-4 2-5-82	MC-9A 1-11-85	TC-12.30 1-20-84	TC-41.40 6-18-79
BP-5 10-1-87	GR-4A 1-30-84	MC-11 8-1-78	TC-18.26 5-31-79	TC-41.50 3-26-79
BP-7 10-1-87	GR-6A 2-5-82	MH-1 12-18-84	TC-21.20 1-20-84	TC-42.10 8-19-77
BP-12 10-1-87	I-3A & B 4-1-80	MH-3 12-18-84	TC-21.41 3-1-79	TC-42.20 3-26-79
BP-13 5-8-87	HL-20.13 5-1-87	MH-5 6-12-75	TC-22.10 3-1-79	TC-51.10 1-20-84
CB-2-2-A&B 5-1-79	HL-30.11 5-1-87	MT-95.30 10-10-88	TC-22.20 3-1-79	TC-51.11 1-20-84
CB-3 5-1-79	HL-30.33 5-1-87	MT-99.10 11-14-86	TC-31.21 3-6-79	TC-52.10 4-3-79
F-1 11-10-83	HL-50.11 5-1-87	MT-99.20 4-29-88	TC-32.10 3-8-79	TC-52.20 4-3-79
F-3 5-1-76	MC-1 6-13-69	CB-5 11-10-83	TC-32.11 3-21-79	TC-61.10 4-5-82
F-4 11-10-83	MC-4 7-26-76	CB-3A 5-1-79	TC-35.10 8-29-84	TC-71.10 4-9-79
F-5 5-1-76	MC-5 6-12-75	AS-1-81 11-27-81	TC-41.10 8-29-84	TC-72.20 2-26-82
GR-1 1-11-85	MC-6 1-30-84	BR-1 5-29-79		TC-65.10 2-26-82
GR-2B 2-5-82	MC-7 10-15-76	SD-1-69 6-12-69		TC-65.11 4-5-82

Plan Prepared By:
DISTRICT NO. 7
OHIO DEPARTMENT OF
TRANSPORTATION

SEAL

Project: MOT - 75 - 13.88
Date of Letting: _____ 19__ Contract No. _____

REVISED 9-28-89

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR _____ DATE _____

BRIDGE GENERAL NOTES

MONTGOMERY COUNTY
MOT - 75 - 13.88

FHWA REGION	STATE	PROJECT	118 192
5	OHIO		

BRIDGE IDENTIFICATION SIGNS

THE EXISTING BRIDGE IDENTIFICATION SIGNS SHALL BE REMOVED FOR RE-ERECTION BY THE CONTRACTOR. AFTER THE PROPOSED BRIDGE RAILING HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL ATTACH THE SALVAGED SIGNS TO THE RAILING IN A MANNER ACCEPTABLE TO AND AT LOCATIONS DETERMINED BY THE ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THIS ITEM OF WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 511, CLASS S CONCRETE, SUPERSTRUCTURE.

REMOVAL AND CONSTRUCTION

THE CONTRACTOR SHALL EXERCISE SUFFICIENT CARE IN REMOVING EXISTING MATERIALS TO PREVENT ANY DAMAGE TO PARTS OF THE STRUCTURE WHICH WILL REMAIN IN PLACE. ANY PORTION OF THE STRUCTURE DAMAGED DURING REMOVAL AND/OR CONSTRUCTION AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

ITEM 517, RAILING, FACED, AS PER PLAN

THE CONTRACTOR SHALL CAREFULLY REMOVE THE EXISTING ALUMINUM RAILING AND STACK NEATLY ALONG THE RIGHT-OF-WAY FOR SUBSEQUENT PICKUP BY STATE FORCES. THE CONCRETE SAFETY CURB AND THE REMAINING VERTICAL LEG OF THE BULB ANGLE WHICH PROTRUDES ABOVE THE SCARIFIED DECK SHALL BE REMOVED. 1" DIA. HOLES 6" DEEP (MIN.), SHALL BE DRILLED AT 15" c/c AND AT 2'-6" c/c AS SHOWN ON THE DRAWING. THE HOLES SHALL BE THOROUGHLY CLEANED OF ALL DUST AND OTHER DELETERIOUS MATERIAL.

THE GROUT SHALL CONSIST OF CEMENT AND WATER USING TYPE I, TYPE III, OR SHRINKAGE COMPENSATING CEMENT. CLEAN HOLES SHALL BE SATURATED THOROUGHLY WITH WATER FOR A MINIMUM OF 5 MINUTES PRIOR TO PLACING GROUT. IMMEDIATELY PRIOR TO GROUTING, ALL FREE STANDING WATER SHALL BE REMOVED FROM HOLES. AFTER INITIAL MIXING, THINNING OR RETEMPERING OF GROUT WITH EXTRA WATER SHALL NOT BE ALLOWED. HARDENED OR SET GROUT WHICH HAS BECOME TOO STIFF OR DRY TO PROVIDE A GOOD BOND SHALL BE DISCARDED. DOWELS SHALL NOT BE INSTALLED IF THE MEAN AIR OR GROUT TEMPERATURES ARE LESS THAN 45°F. FURTHERMORE, AFTER PLACING, THE FRESH GROUT SHALL BE MAINTAINED AT A TEMPERATURE OF NOT LESS THAN 45°F FOR 72 HOURS, AND AT NOT LESS THAN 40°F FOR AN ADDITIONAL 4 DAYS. THE TEMPERATURE OF THE MIXED GROUT, IMMEDIATELY BEFORE PLACING, SHALL BE NOT LESS THAN 50° NOR MORE THAN 90°. THE CEMENT GROUT SHALL BE CURED CONTINUOUSLY WITH EITHER WET RAGS OR A SATISFACTORY CURING COMPOUND (WHICH MUST BE SUBSEQUENTLY REMOVED) FOR A MINIMUM PERIOD OF THREE DAYS WITHOUT DISTURBING THE DOWELS.

GROUT ANCHORING USING EPOXY AS PER SS 853 AND 956* MAY BE USED IN LIEU OF THE ABOVE REQUIREMENTS WITH THE EXCEPTION THAT THE HOLE SIZE NEEDS TO BE ONLY 1/8" IN DIAMETER GREATER THAN THE DOWEL DIAMETER.

ALL LOOSE AND UNSOUND CONCRETE IN THE AREA OF THE PARAPET TO BE FACED, SHALL BE REMOVED. ALL REMAINING SOUND CONCRETE SHALL THEN BE MECHANICALLY SCARIFIED 1/4" DEEP. THE MINIMUM THICKNESS FOR THE PROPOSED FACING SHALL BE 4". ALL RESTEEL SHALL BE EPOXY COATED AS PER 509 EPOXY COATED RESTEEL WHICH IS DAMAGED DUE TO CUTTING, BENDING, ETC. SHALL BE REPAIRED AS PER 509 CONCRETE COVER ALL RESTEEL SHALL BE 2". THE CONCRETE SURFACES TO BE FACED SHALL BE THOROUGHLY DRENCHED WITH CLEAN WATER AND ALLOWED TO DRY TO A DAMP CONDITION JUST BEFORE PLACING THE CONCRETE.

EXISTING CURBS AND PARAPET ON THE ABUTMENT WINGWALLS SHALL BE REMOVED AND REPLACED WITH DEFLECTOR TYPE CURB AND PARAPET.

* OR POLYESTER / VINYLESTER RESIN AS PER SS 852 & 952.

THE EXISTING DEFLECTION JOINTS SHALL BE EXTENDED COMPLETELY THROUGH THE PROPOSED FACING AND SHALL BE MADE BY FORMING OR SAWCUTTING THE HARDENED CONCRETE WITHIN 3 DAYS AFTER POURING. THE 1/4" JOINTS SHALL BE SEALED 3/4" DEEP (MIN.) WITH AN IMPREGNATED PRECOMPRESSED EXPANDING FOAM SEALANT TAPE KNOWN AS WILL-SEAL, MANUFACTURED BY ILLBRUCK/USA INC., RAVENA, NY. OR A LOW DENSITY, CLOSED CELL, CROSSLINKED ETHYLENE VINYL ACETATE FOAM KNOWN AS EVASOTE 50, MANUFACTURED BY E-POXY INDUSTRIES, INC., RAVENA, NY. OR E.V.A. AS MANUFACTURED BY THERMAL CHEM., ELK GROVE, IL., OR APPROVED EQUAL.

MATERIALS SHALL INCLUDE :

CONCRETE AS PER 511, CLASS S
REINFORCING STEEL AS PER 509
GROUT, JOINT SEALANT, INCIDENTALS

ALL OF THE ABOVE WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 517, RAILING, FACED, AS PER PLAN.

NIGHTTIME WORK

NIGHTTIME WORK WILL BE PERMITTED. A PLAN FOR NECESSARY LIGHTING AND OPERATIONS SHALL BE SUBMITTED TO THE ENGINEER OF CONSTRUCTION FOR PRIOR APPROVAL. PAYMENT FOR LIGHTING SHALL BE INCLUDED IN ITEM 517, RAILING FACED, AS PER PLAN.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN IN THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED APPROXIMATE. THE CONTRACTOR IS REFERRED TO THE CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTIONS 102.05 AND 105.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS, WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ITEM SPECIAL, SEALING OF CONCRETE SURFACES

SPECIFIED CONCRETE SURFACES SHALL BE SEALED USING EITHER A NON EPOXY OR AN EPOXY SEALER. SEE THE PROPOSAL FOR AREAS TO BE SEALED, SURFACE PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND APPLICATION PROCEDURES.

ITEM 518 - SCUPPERS, LENGTHENING

BRIDGE SCUPPER DRAINS ARE TO BE EXTENDED AS DETAILED ON SH. 136 AT EACH BRIDGE DESIGNATED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD EXAMINE EACH BRIDGE TO DETERMINE THE TYPE OF EXISTING SCUPPER AND TO EXTEND THE EXISTING SCUPPER IN KIND. THE EXTENSION SHALL BE FIELD WELDED TO THE EXISTING SCUPPER TO THE SATISFACTION OF THE ENGINEER. THE QUANTITY SHALL BE MEASURED BY THE UNIT FOR EACH SCUPPER EXTENSION COMPLETED IN PLACE AND THE PRICE BID SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

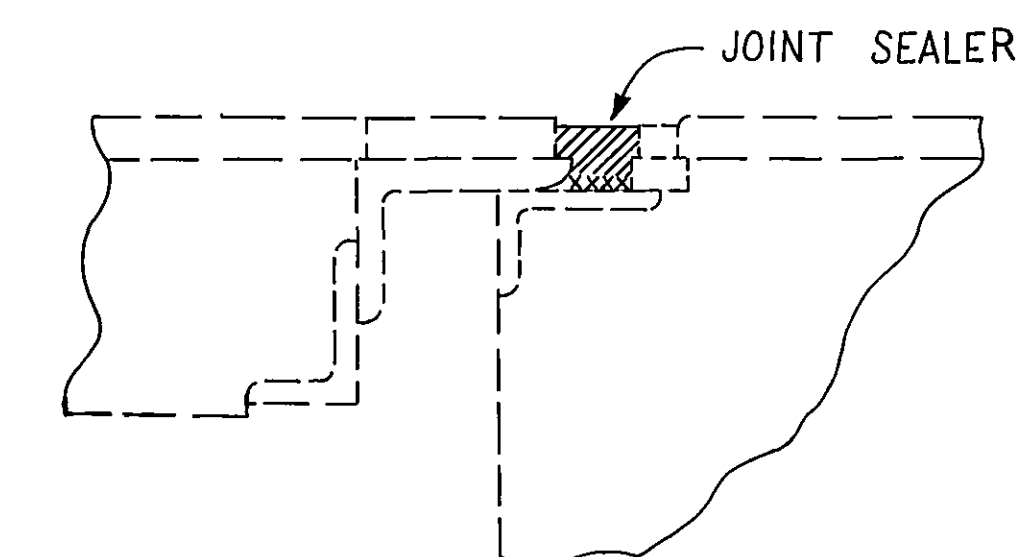
THE CONTRACTOR SHALL EXTEND THE SCUPPERS FOR THE FOLLOWING STRUCTURE AS PER THE ABOVE NOTE AND DETAILS ON SHEET 136.

BRIDGE NO. MOT-75-1392R 2 EACH

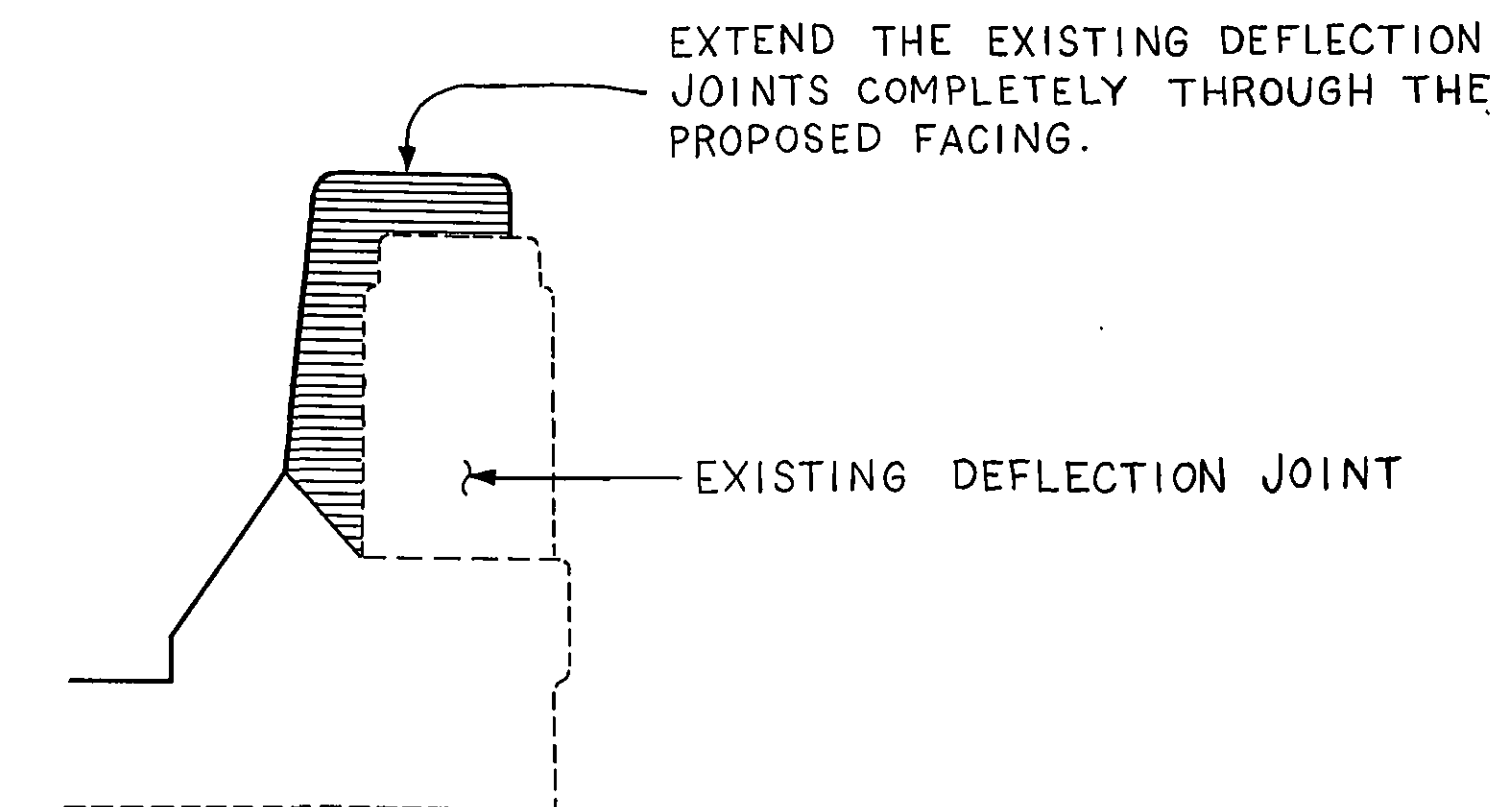
SEALING EXPANSION JOINTS AT ABUTMENT END DAMS

SEAL JOINT WITH A HOT - APPLIED BRIDGE DECK WATERPROOFING MATERIAL WHICH ALSO MEETS THE REQUIREMENTS OF 705.04. SANDBLAST VERTICAL SURFACES AND WIPE CLEAN. SEAL JOINT BEFORE RUST FORMS. IF RUST FORMS, RE-SANDBLAST. USE BOND BREAKER ON HORIZONTAL SURFACE DESIGNATED AS (xxxx) - SEE DETAIL.

PAYMENT FOR THE ABOVE WORK, INCLUDING MATERIAL, LABOR AND EQUIPMENT SHALL BE UNDER ITEM 516 - JOINT SEALER.



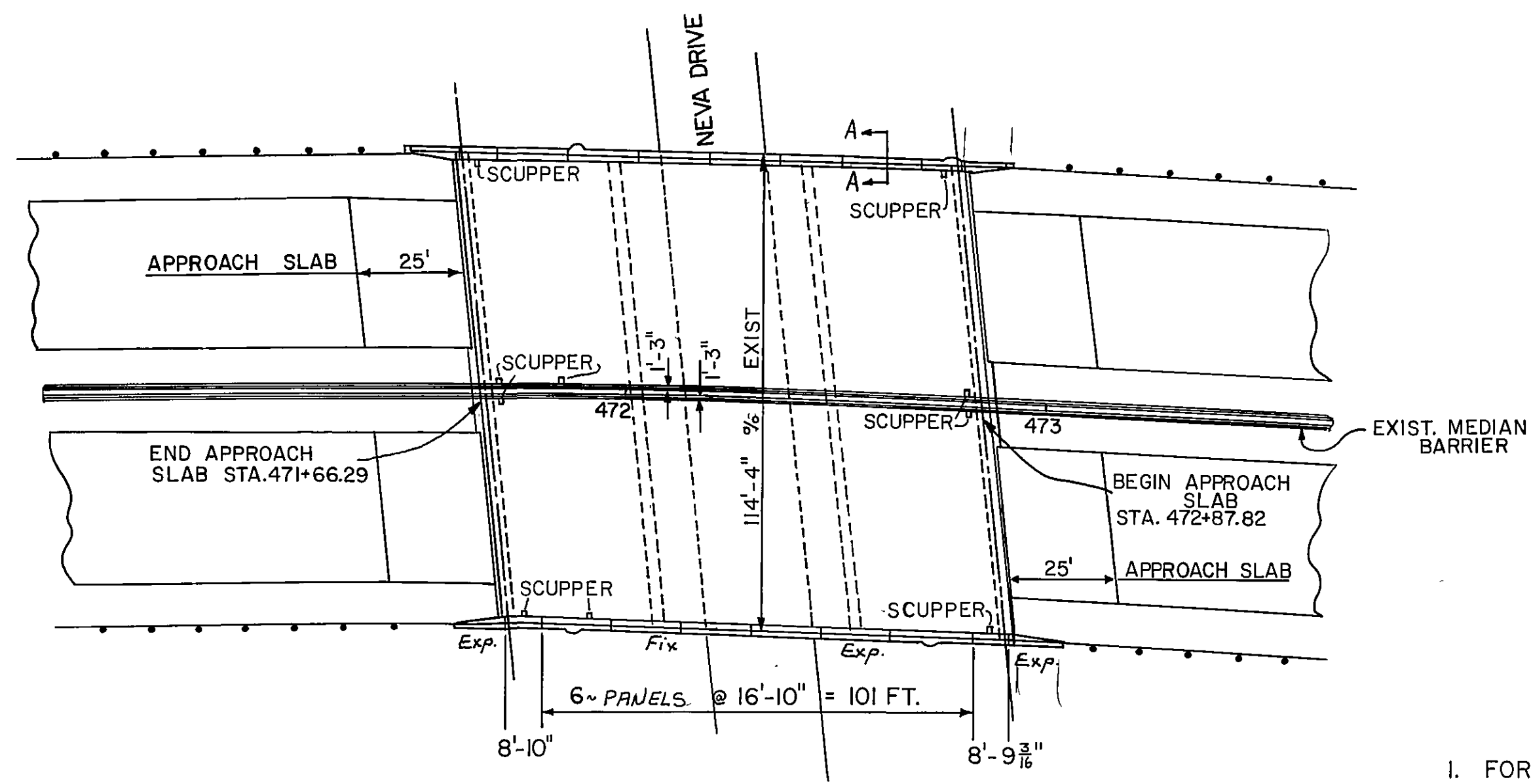
EXPANSION JOINT SEALER DETAIL



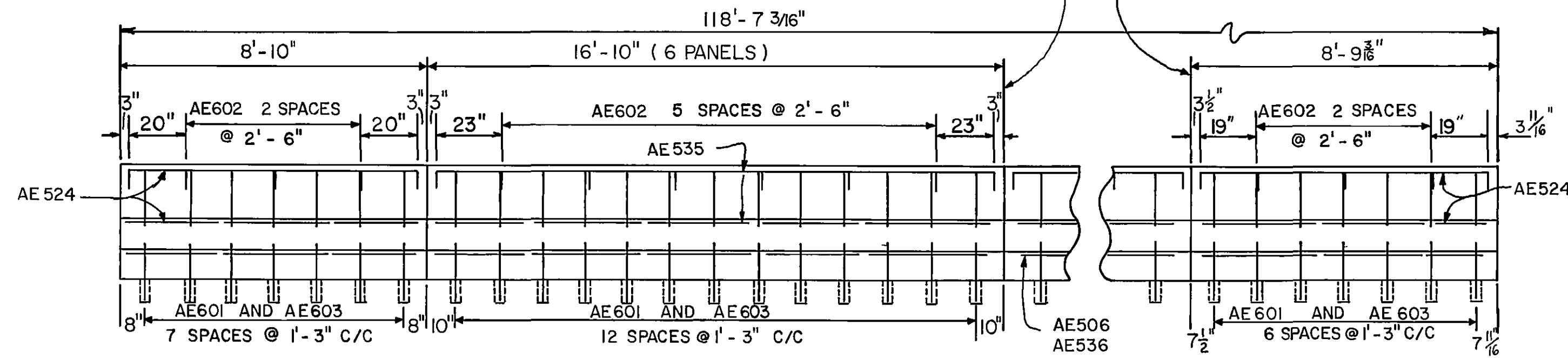
DEFLECTION JOINT DETAIL

BRIDGE NO. MOT-75-1554
 (OVER NEVA DRIVE)
 EXISTING MINIMUM VERTICAL CLEARANCE = 15'-1"

MONTGOMERY COUNTY
 MOT - 75 - 13.88



PLAN



REINFORCING BAR SPACING FOR BRIDGE RAIL PANELS

* ITEM 511 CLASS S CONCRETE, SUPERSTRUCTURES FOR BRIDGE RAILS: 7.4 X 2 RAILS = 14.8 C.Y.

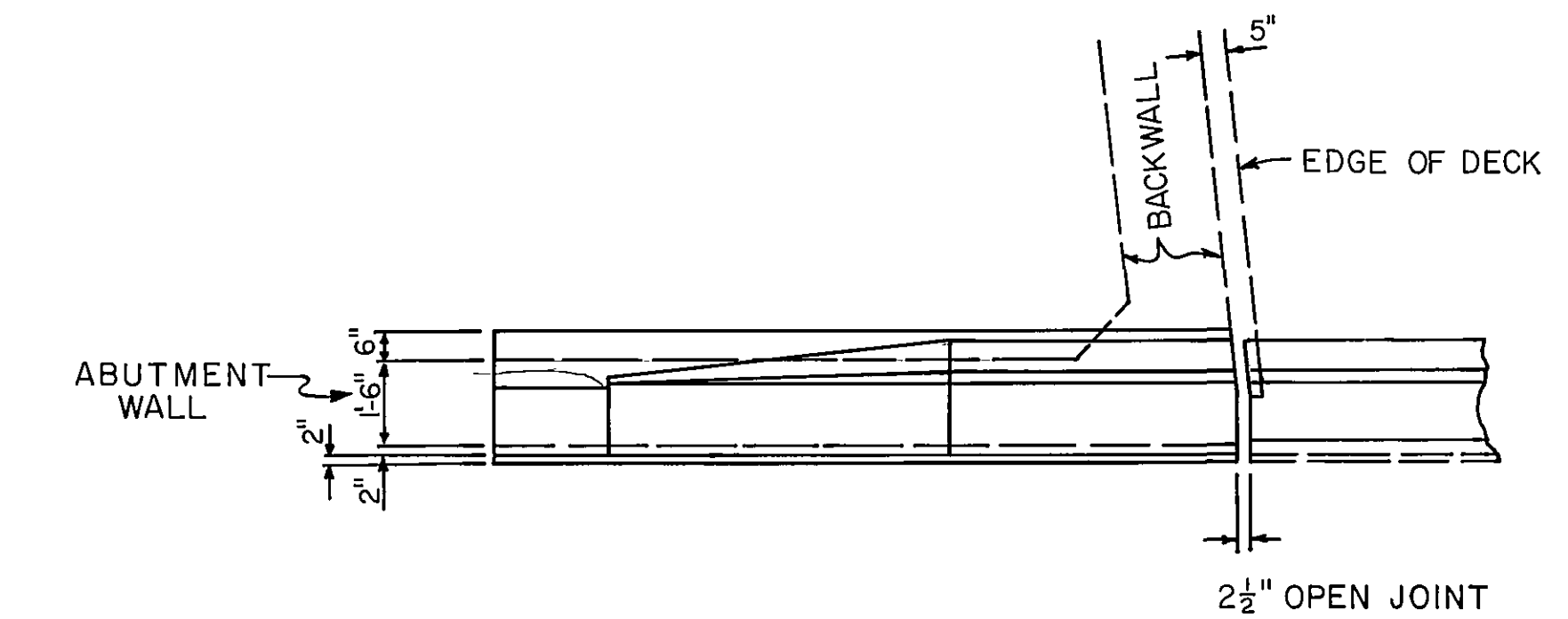
* ITEM 510 DOWEL HOLES: 151 X 2 RAILS = 302 EACH

NOTE:

1. FOR SECTIONS B-B, C-C AND D-D SEE SHT. 131
2. FOR REINFORCING STEEL LIST SEE SHT. 133
3. FOR CURB PLATE DETAIL SEE SHT. 136 DETAIL B

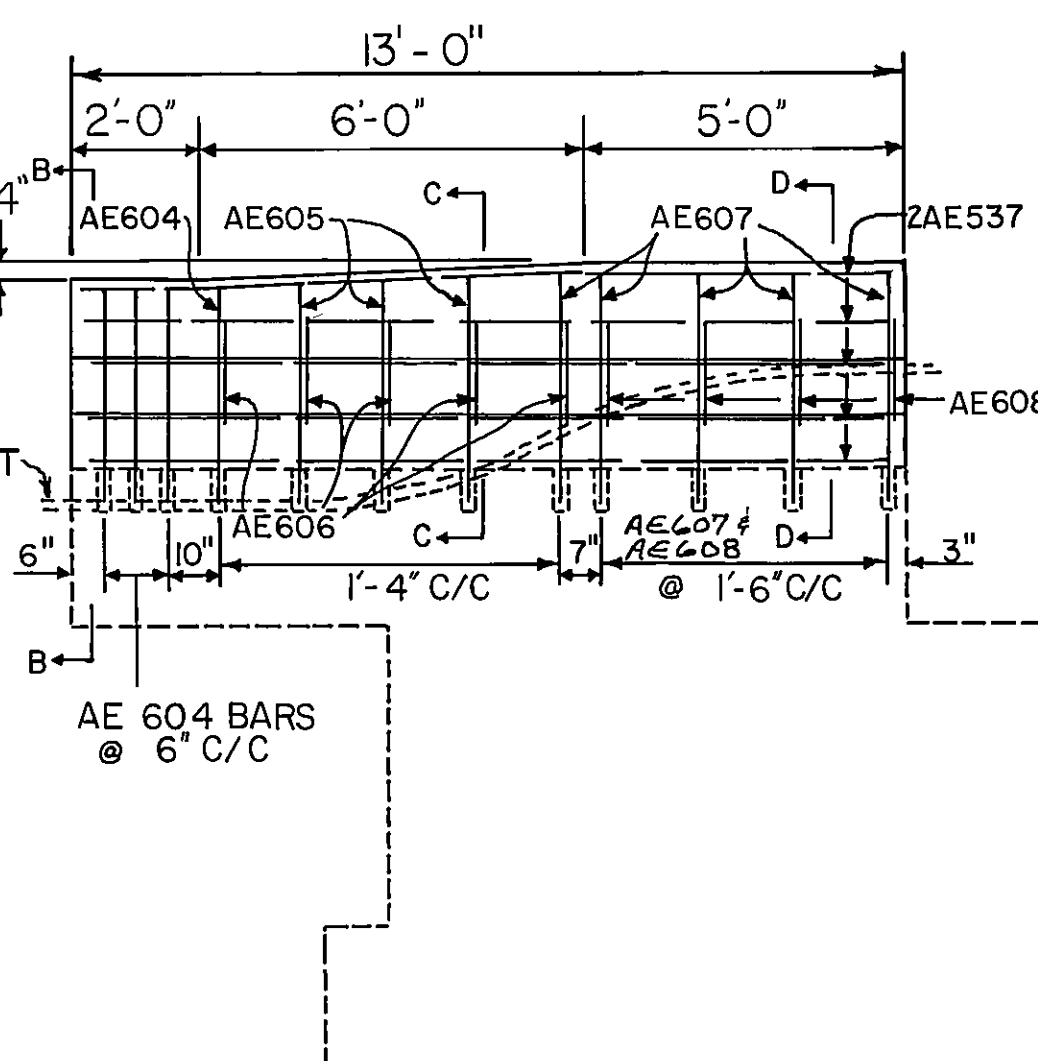
WORK REQUIRED

1. REMOVE EXIST. ALUMINUM RAILING AND CURB
2. FACE RAILING AND INSTALL CURB PLATES AS DETAILED.
3. REMOVE ABUTMENT WALLS AND CONSTRUCT BARRIER RAIL WITH TRANSITION AS DETAILED.
4. SEAL EXPANSION JOINTS.
5. SEAL CONCRETE SURFACES.



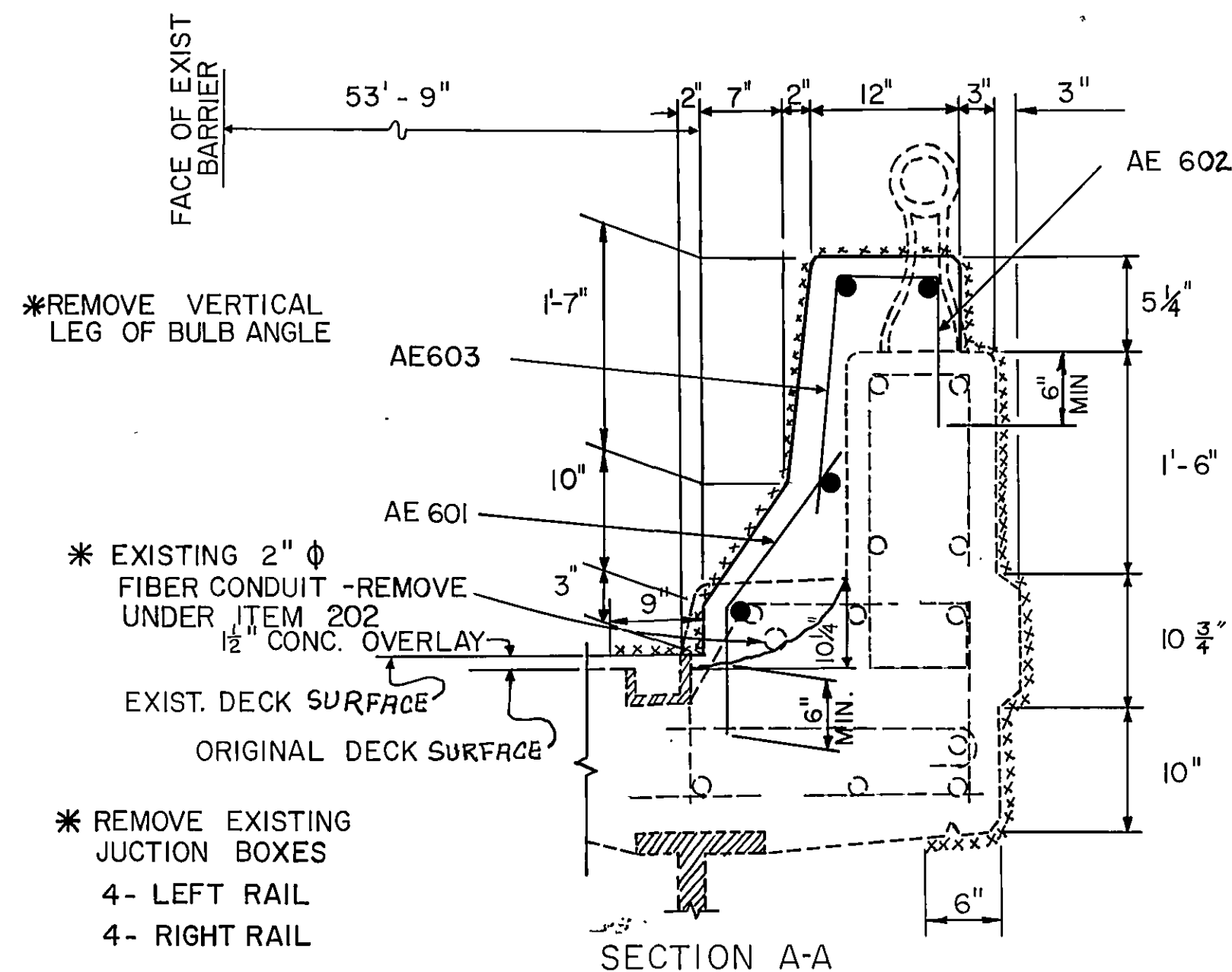
WINGWALL ELEVATION

* REMOVE EXISTING BRIDGE RAILING, CURB, 2" Ø CONDUIT, AND PARAPET WALLS TO EXISTING CONSTRUCTION JOINT.



* ITEM 511 CLASS S CONCRETE, SUPERSTRUCTURE FOR ABUTMENT WALLS: 2.9 X 4 WALLS = 11.6 C.Y.

* ITEM 510 DOWEL HOLES: 24 X 4 WALLS = 96 EACH



SECTION A-A

* REMOVE VERTICAL LEG OF BULB ANGLE

* EXISTING 2" Ø FIBER CONDUIT - REMOVE UNDER ITEM 202 1/2" CONC. OVERLAY

* REMOVE EXISTING JUNCTION BOXES
 4- LEFT RAIL
 4- RIGHT RAIL

xxx = SEALING OF CONCRETE SURFACES (EPOXY)
 SEE PROPOSAL NOTE

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
516	JOINT SEALER, 705.04	LIN. FT.	221
517	RAILING FACED, AS PER PLAN	LIN. FT.	289
SPECIAL	SEALING CONCRETE SURFACES (EPOXY)	SQ. YD.	310

CALC BY: PRJ 7-88
 CHECK BY: MSM 1-89

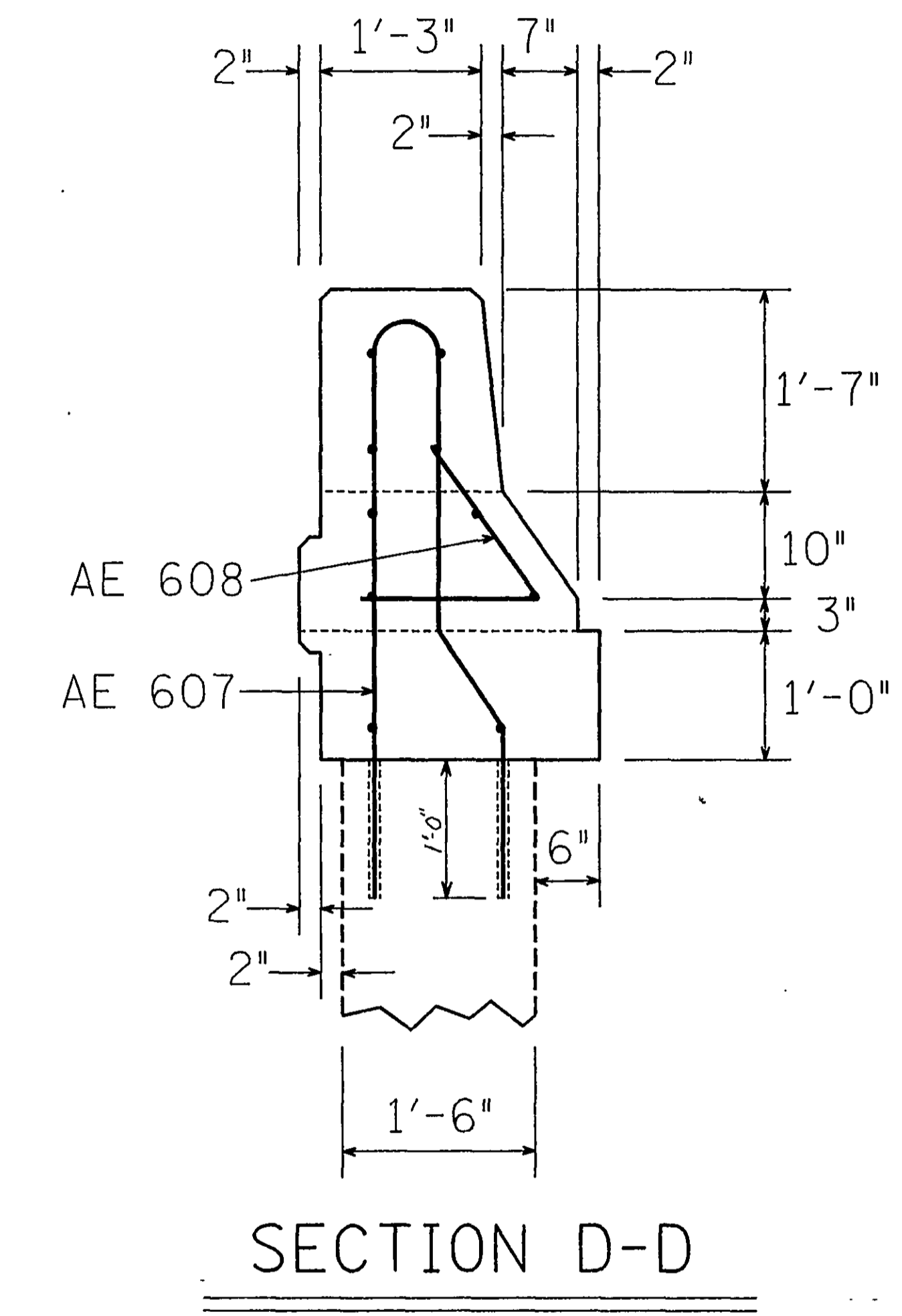
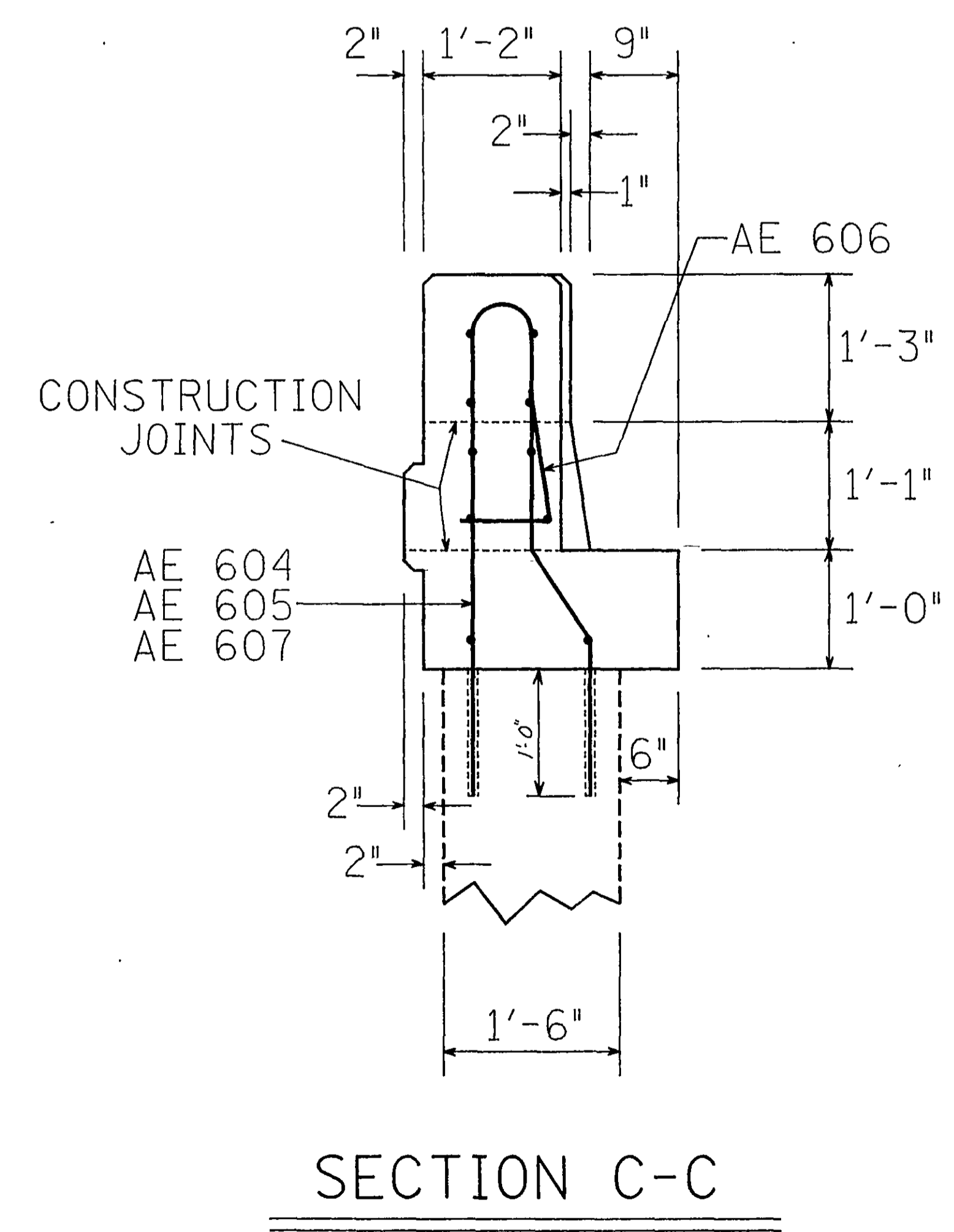
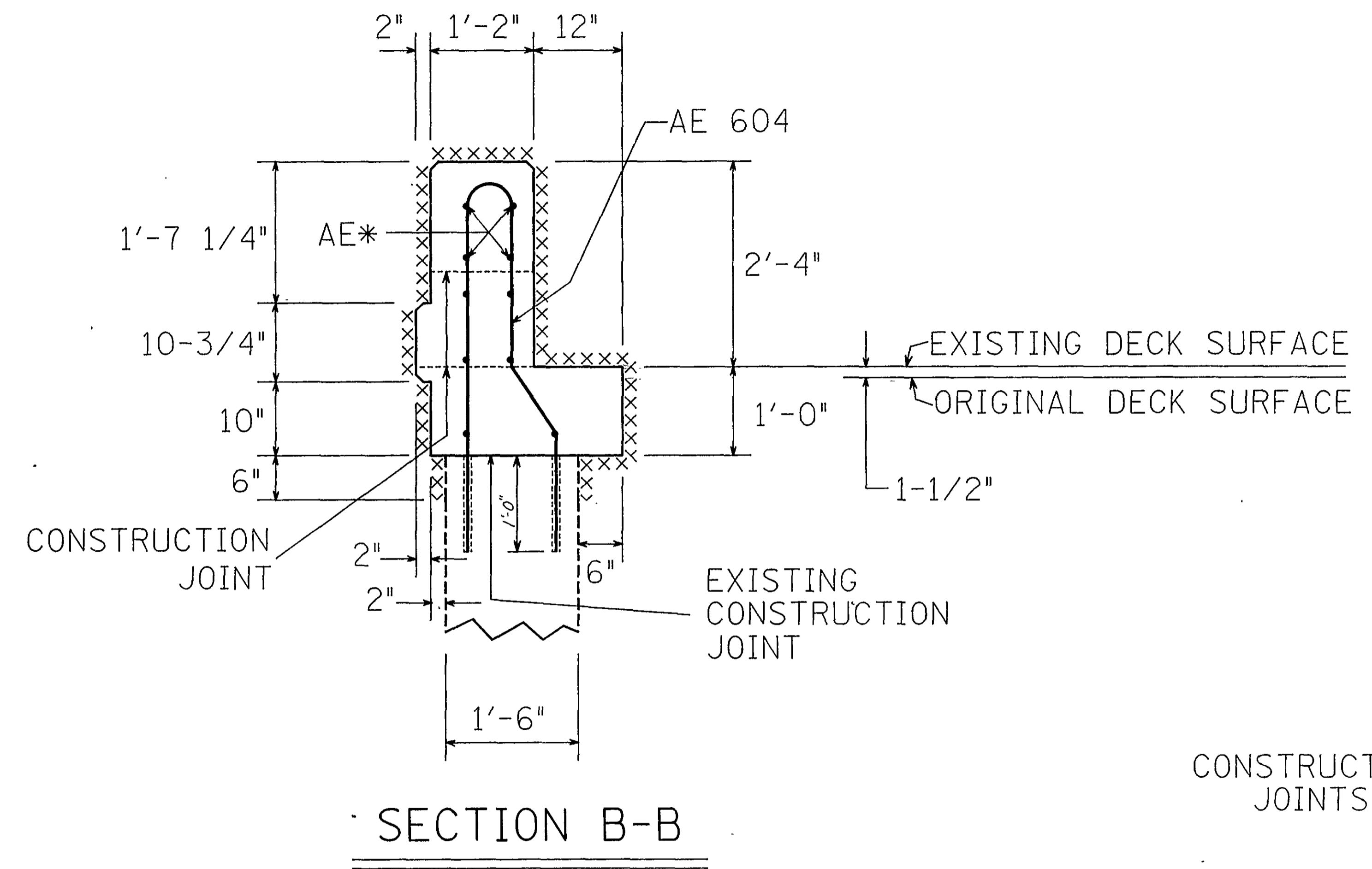
* Cost shall BE INCLUDED IN UNIT PRICE BID FOR ITEM 517- RAILING FACED, AS PER PLAN

NOV 13 1992

MOT-75-1392 S, MOT-75-1466, MOT-75-1554, MOT-75-1582 SECTIONS

FHWA REGION	STATE	PROJECT	131 192
5	OHIO		

MONTGOMERY COUNTY
MOT - 75 - 13.88



* AE 509 + 510 FOR STR. NO. MOT-75-1392 S
 AE 507 FOR STR. NO. MOT-75-1466
 AE 537 FOR STR. NO. MOT-75-1554
 AE 537 + 526 FOR STR. NO. MOT-75-1582

XXX = SEALING OF CONCRETE SURFACES
 SEE PROPOSAL NOTE
 TYPICAL FOR ALL SECTIONS

MR BO