

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

WAY-30-16.72
FR-49(32)

OHIO
FHWA REGION 5
FEDERAL PROJECT

1
83

DESIGN	DESIGNATION
1983 ADT	= 9,800
2003 ADT	= 14,000
DHV	= 1,120
D	= 50%
T	= 20%
V	= 60MPH

WAY-30-16.72
VILLAGE OF DALTON
EAST UNION AND SUGAR CREEK TOWNSHIPS
WAYNE COUNTY

FR-49(32)

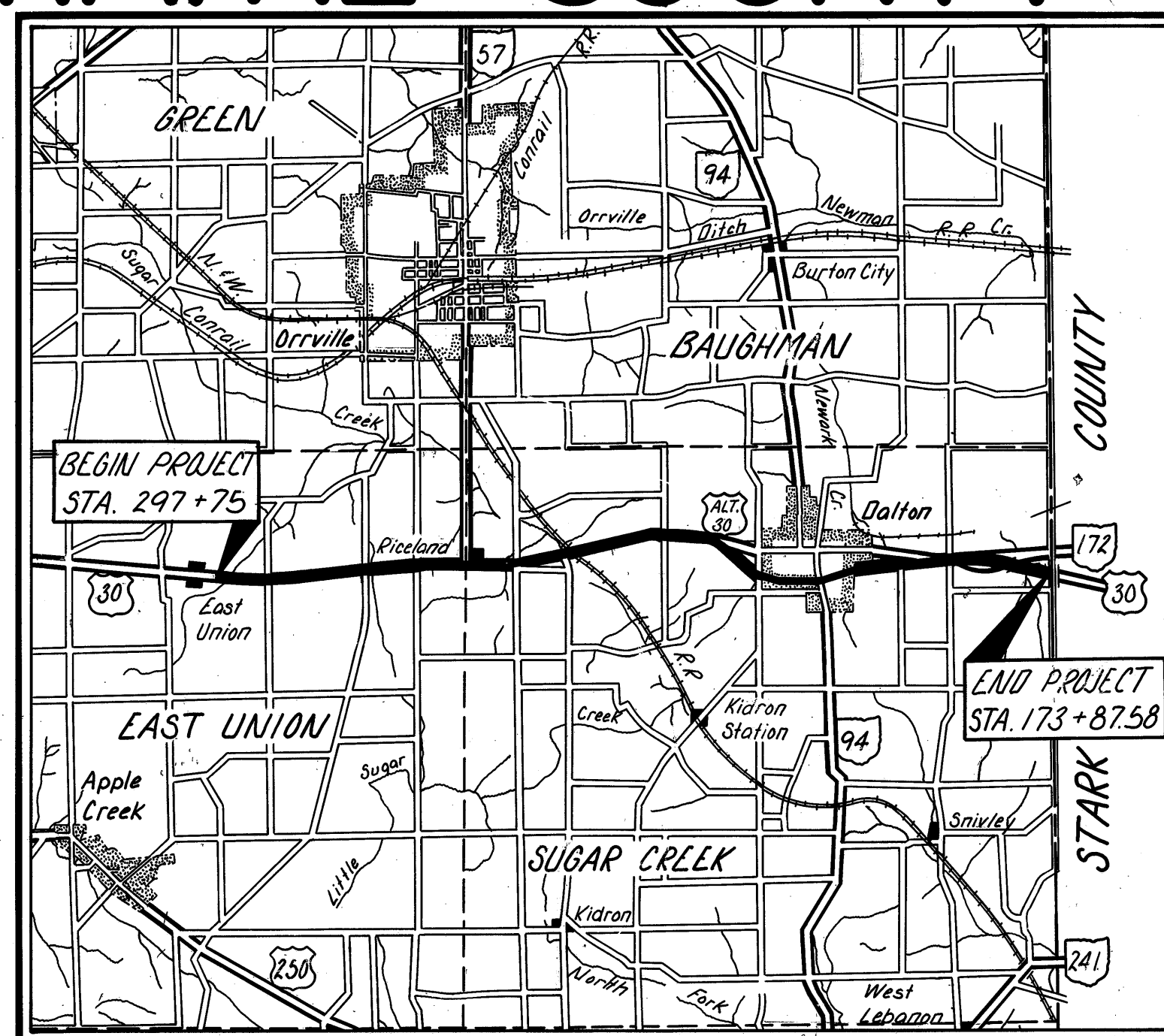
CONVENTIONAL SIGNS

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-	Property Line (in existing fence)	-x-x-
Center Line	-----	Railroad	----- or -----
Trees, Stumps (to be removed)	☺, ☹, ☹	Guardrail (existing)	----- (proposed) -----
Utility Poles: Telephone	φ		
Power	φ		
Light	φ		

INDEX OF SHEETS

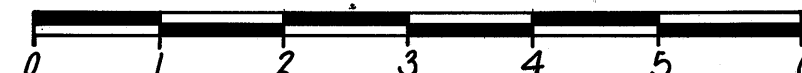
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shts. 1 & 57 revised 4-10-84 BRA



LOCATION MAP

SCALE IN MILES



Portion to be improved: _____
State & Federal Routes _____
Other Roads _____

SCALES

Plan: _____
Profile: _____ Horizontal _____, Vertical _____
Cross Section: Horizontal _____, Vertical _____

1-13-84

SUPPLEMENTAL SPECIFICATIONS			
845	6-7-83	824	10-8-82
847	4-3-76	939	6-28-82
848	2-17-83	803	5-27-83
953	8-21-80		
836	3-12-75		
849	10-19-81		

Approved: Larry M. Poirer
Date: 4/29/83 District Deputy Director of Transportation

Approved: Robert B. Pfeifer, P.E.
Date: 7-20-83 Engineer, Bureau of Bridges and Structural Design

Approved: Wayne H. Kouble
Date: 10-13-83 Chief Engineer, Planning and Design

Approved: Warren J. Smith
Date: 10-13-83 Director, Department of Transportation

LINE DATA

BEGIN PROJECT	STA. 297+75	1,625.00 LIN. FT.
STATION EQUATION	STA. 314+00 BK. STA. 895+95.3 AH.	
STATION EQUATION	STA. 1333+16.94 BK. STA. 150+34.96 AH.	43,721.64 LIN. FT.
END PROJECT	STA. 173+87.58	2,352.62 LIN. FT.
DEDUCT FOR STATION EQUATION		-49.54 LIN. FT.
NET PROJECT LENGTH		47,649.72 LIN. FT. OR 9.025 MILES

UNDERGROUND UTILITIES
48 HOURS
BEFORE YOU DIG
Call 800-362-2764 (Toll free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

ADD FOR WORK:

USR.30 - STA. 296+50 TO STA. 297+75	+125.00 LIN. FT.
S.R.172EB - STA. 1332+64.4 TO STA. 1356+22.97	+2,368.57 LIN. FT.
NET WORK LENGTH	50,133.29 LIN. FT. OR 9.495 MILES

Plan Prepared By:
ODOT DISTRICT 3

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS							
BP-5	7-16-81	GR-3A	2-5-82	RB-1-47	9-18-47	TC-35.10	10-5-77
BP-6	6-1-65	GR-3B	2-5-82	HW-4A	4-1-80	TC-41.10	12-23-81
BP-7	12-6-76	GR-4	2-5-82	HW-4B	4-1-80	TC-41.20	3-26-79
BP-11	1-3-75	GR-4A	2-5-82			TC-41.50	3-26-79
CB-2-2-A+B	5-1-79	GR-5	2-5-82			TC-42.10	8-19-77
CB-2-3&2-4	5-1-79	GR-6	2-5-82	MC-3	6-1-73	TC-42.20	3-26-79
CB-3A	5-1-79	GR-6A	2-5-82	MC-4	7-26-76	TC-51.10	3-30-79
CB-5	5-1-79	GR-3	2-5-82	MC-6	6-1-65	TC-51.11	4-3-79
CB-6	5-1-79	DBR-2-73	4-10-73	MC-9	11-1-77	TC-71.10	4-9-79
		AS-1-81	11-27-81	MC-9A	5-1-81	TC-72.20	2-26-82
GR-1	2-5-82			MC-10	5-1-76		
GR-2B	2-5-82	BR-1	5-29-79	MH-1	6-12-75		

SEAL

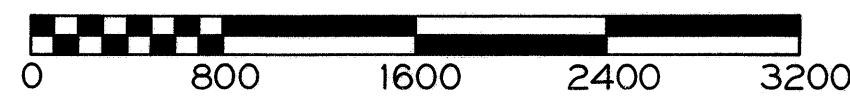
Project: WAY-30-16.72 WAYNE COUNTY
Date of Letting: 19____, Contract No. _____
LD0300 Rev. 1-1-81

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

REV. 4-10-84

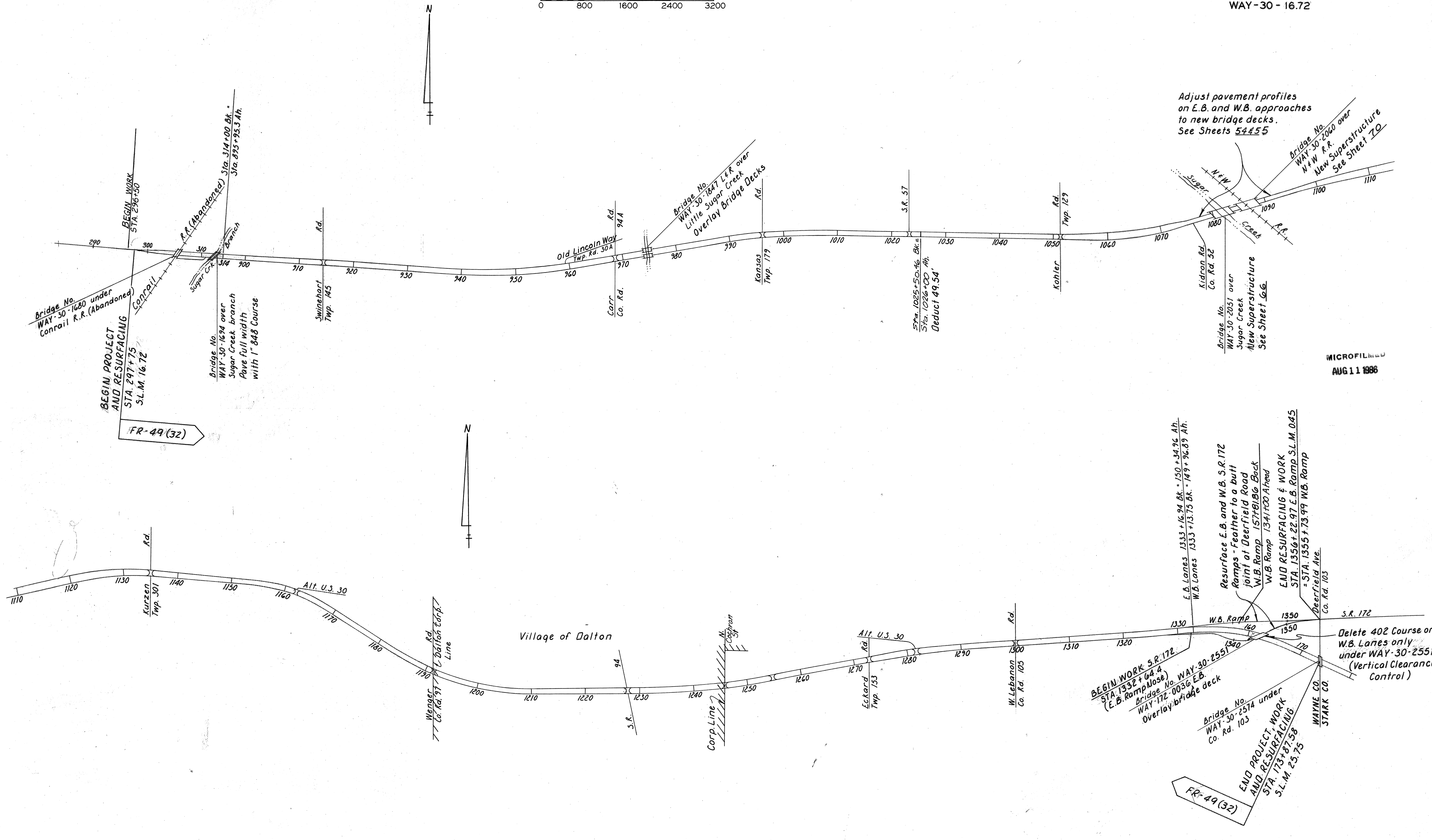
SCHEMATIC PLAN



FHWA REGION	STATE	PROJECT
5	OHIO	

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83

WAY-30 - 16.72



MICROFILMED
AUG 11 1986

GENERAL NOTES

FHWA REGION	STATE	PROJECT	
5	OHIO		

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WAY-30-16.72

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.02.

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

PLANS OF THE EXISTING BRIDGE ARE AVAILABLE AT THE DISTRICT 3 OFFICE IN ASHLAND FOR USE BY PROSPECTIVE BIDDERS.

ITEM 202 PORTIONS OF STRUCTURES REMOVED, BACKWALL

THE BACKWALLS WILL BE REMOVED AS SHOWN IN DETAIL ON SHEET NO. 67 & 71. IF EXISTING REINFORCING STEEL REQUIRED FOR LAP LENGTH IS DAMAGED DURING BACKWALL REMOVAL, DOWELS MUST BE ADDED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 202 PORTIONS OF STRUCTURES REMOVED, BACKWALL WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DESIGN SPECIFICATIONS: THE REHABILITATION OF THESE STRUCTURES CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977, INCLUDING THE 1978, 1979, 1980, 1981, AND 1982 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING BRIDGE DECK HS20-44

DECK PROTECTION METHOD: EPOXY COATED REINFORCING STEEL, TOP MAT ONLY.

ITEM 202 PORTIONS OF STRUCTURES REMOVED, AS PER PLAN

THIS ITEM OF WORK WILL BE USED TO REMOVE THE EDGES OF THE DECKS ON STRUCTURES WAY-30-1847 LEFT AND RIGHT, AS PER THE DETAILS ON SHEET NO. 60. THE USE OF A HOE RAM TO PERFORM THIS WORK WILL NOT BE PERMITTED. JACK HAMMERS SHALL NOT BE HEAVIER THAN THE NORMAL NINETY (90) POUND CLASS, EXCEPT THAT FINAL FINISH WORK SHALL BE LIMITED TO FIFTEEN (15) POUND CLASS HAMMERS. CONCRETE SHALL BE REMOVED IN A MANNER THAT PREVENTS CUTTING, ELONGATING, OR DAMAGING THE EXISTING REINFORCING STEEL TO BE SALVAGED. IF EXISTING REINFORCING STEEL DESIGNATED FOR SALVAGE IS DAMAGED DURING REMOVAL OPERATIONS, DOWELLED REINFORCING STEEL MUST BE ADDED AT THE CONTRACTORS EXPENSE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 202, PORTION OF STRUCTURES REMOVED, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511, CLASS S CONCRETE, AS PER PLAN

IN LIEU OF THE PROPORTIONING SPECIFIED IN 499.03 AND 511.02, THE FOLLOWING TABLE SHALL BE USED TO ESTABLISH THE QUANTITIES PER CUBIC YARD FOR CONCRETE. THE COARSE AGGREGATE SHALL BE LIMESTONE.

CONCRETE IN THE PARAPETS NEED NOT BE PLACED AT NIGHT.

QUANTITIES PER CUBIC YARD				
(USING NO. 8 LIMESTONE)				
FINE AGGREGATE (LB)	COARSE AGGREGATE (LB)	CEMENT (LB)	WATER-CEMENT RATIO	
1555	1100	2655	715	0.39
AIR CONTENT - 8±2%				

HIGH RANGE WATER REDUCER MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE DOSAGE RATE WILL BE DETERMINED BY THE CONTRACTOR BASED ON MANUFACTURER'S RECOMMENDATION TO ACHIEVE THE DESIRED WORKABILITY LEVEL.

HIGH RANGE WATER REDUCER SHALL CONFORM TO 705.12, ASTM-C494 TYPE "F" AND SHALL NOT CONTAIN CALCIUM CHLORIDE.

THE CEMENT CONTENT SHALL BE MAINTAINED AND A MAXIMUM WATER-CEMENT RATIO OF 0.39 SHALL NOT BE EXCEEDED. THE SLUMP OF THE UNPLASTICIZED CONCRETE DELIVERED TO THE JOB SITE SHALL BE 1 1/2 ± 1/2 INCH. THE SUPERPLASTICIZING ADMIXTURE SHALL BE ADDED AT THE JOB SITE AND MIXED A MINIMUM OF FIVE (5) MINUTES. AFTER THE SUPERPLASTICIZER HAS BEEN ADDED, THE SLUMP SHALL BE 6 1/2 ± 1/2 INCH. THE CONTRACTOR SHALL FURNISH A VOLUMETRIC DISPENSER FOR THE SUPERPLASTICIZER.

CONCRETE MIXTURES CONTAINING A HIGH RANGE WATER REDUCER SHALL MEET THE SAME REQUIREMENTS FOR ENTRAINED AIR ^{CONTENT} MINIMUM STRENGTH, AND MAXIMUM WATER-CEMENT RATIO AS REQUIRED FOR THE RESPECTIVE GRADE OF CONCRETE WITHOUT A HIGH RANGE WATER REDUCER.

SAMPLING AND TESTING FOR ENTRAINED AIR CONTENT AND MINIMUM STRENGTH SHOULD BE TAKEN FROM THE CONCRETE THAT HAS BEEN TREATED WITH A HIGH RANGE WATER REDUCER.

CURING SHALL BE IN ACCORDANCE WITH 511.14 TYPE "A" WATER CURING.

PLACEMENT:

PLACEMENT OF THE DECKS SHALL BE COMPLETED DURING THE NIGHT BETWEEN OFFICIAL SUNSET AND SUNRISE. THE CONTRACTOR SHALL SUBMIT A PLAN FOR PROVIDING ADEQUATE LIGHTING FOR THE WORK AREA AT LEAST FIFTEEN (15) CALENDAR DAYS IN ADVANCE, AND RECEIVE WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER, BEFORE PLACING THE CONCRETE. THE LIGHTS SHALL BE SO DIRECTED THAT THEY DO NOT AFFECT OR DISTRACT APPROACHING TRAFFIC. IN EARLY SPRING OR LATE FALL THE DECKS MAY BE PLACED DURING DAYLIGHT HOURS BY PERMISSION OF THE ENGINEER, IF ALL OF THE FOLLOWING CONDITIONS ARE MET AND DOCUMENTED:

- WIND SPEED.....10 MPH OR LESS
- RELATIVE HUMIDITY.....40% OR GREATER
- CONCRETE TEMPERATURE.....70 OR LESS
- AIR TEMPERATURE.....70 OR LESS
- ALL REQUIRED CHARACTERISTICS (AIR, SLUMP, ETC.) OF THE MIX SHALL BE ADJUSTED OFF THE DECK BEFORE PLACEMENT ON THE DECK STARTS.
- THE CEMENT TEMPERATURE SHALL NOT EXCEED 90° F. AT THE TIME OF MIXING.

BASIS OF PAYMENT:

THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" WIDTH).

PAYMENT FOR COMPLETED ACCEPTED QUANTITIES AS MEASURED ABOVE WILL BE MADE AT THE CONTRACT BID PRICE FOR:

ITEM	UNIT	DESCRIPTION
511	CU. YD.	CLASS "S" CONCRETE, DECK, AS PER PLAN
511	CU. YD.	CLASS "S" CONCRETE, PARAPET, AS PER PLAN

ITEM 511 CLASS "C" CONCRETE, BACKWALL, AS PER PLAN

WITHIN 24 HOURS BEFORE PLACING CONCRETE, THE SURFACE OF EXISTING BACKWALLS AGAINST WHICH THE CONCRETE SHALL BE PLACED AND EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. SEE DETAIL ON SHEET NO. 67 & 71. THE EXISTING CONCRETE SURFACE AGAINST WHICH CONCRETE SHALL BE PLACED SHALL BE KEPT WET FOR AT LEAST ONE (1) HOUR BEFORE PLACING CONCRETE, AND BE APPROACHING DRYNESS AT THE TIME OF THE PLACING OF THE CONCRETE TO FACILITATE THE BOND. THE SIZE OF THE COARSE AGGREGATE SHALL BE NO. 8. THE QUANTITIES OF AGGREGATE PER CUBIC YARD SHALL BE AS FOLLOWS:

FINE AGGREGATE (LBS.)	COARSE (LIMESTONE) AGG. (LBS.)	TOTAL AGG.	CEMENT CONTENT	MAXIMUM WATER/CEMENT RATIO
1440	1410	2850	600	0.50

ALL OTHER PROVISIONS OF ITEM 511 SHALL REMAIN IN EFFECT.

FORMS WILL BE WEDGED AGAINST BRIDGE WITH BLOCKS THAT CAN BE REMOVED AFTER THE CONCRETE HAS INITIALLY SET. THE BACKWALL CONCRETE SHALL BE PLACED DURING STABLE OR DROPPING AMBIENT TEMPERATURES. AFTER THE CONCRETE HAS INITIALLY SET AND BEFORE THE AMBIENT TEMPERATURE BEGINS TO RISE THE BLOCKS WEDGED AGAINST THE BRIDGE MUST BE REMOVED. THE FORMS WILL ALSO HAVE A REMOVABLE CLEAN-OUT AT THE BOTTOM OF THE FORM TO REMOVE ANY DEBRIS THAT MAY COLLECT BEHIND THE FORMS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 511 CLASS "C" CONCRETE, BACKWALL, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

MICROFILM
AUG 11 1986

NOTES FOR REHABILITATING
BRIDGE DECKS
WAY-30-2051 L & R AND
WAY-30-2060 L & R

GENERAL NOTES

FHWA REGION	STATE	PROJECT	
5	OHIO		

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ITEM 516 BEARING DEVICES, AS PER PLAN

THE EXISTING R-75 AND R-125 ROCKERS SHALL BE RESET AS PER STANDARD DRAWING RB-1-47. THE BOTTOM ROCKER PLATE AND THE 1/8" THICK SHEET LEAD UNDER THE ROCKER WILL BE REPLACED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM 516, BEARING DEVICES, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 520 PNEUMATICALLY PLACED MORTAR, AS PER PLAN

THIS ITEM SHALL BE USED TO REPAIR PIERS, ABUTMENTS, BOTTOM OF SLABS ALONG CENTER JOINT, EDGE BEAMS AND OTHER PARTS OF THE SUBSTRUCTURE AS DIRECTED BY THE ENGINEER.

WITHIN TWENTY-FOUR (24) HOURS BEFORE PLACING CONCRETE, THE EXISTING SURFACE AGAINST WHICH THE CONCRETE SHALL BE PLACED, AND EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. SANDBLASTING SHALL BE AT LEAST EQUAL TO SA2 "THOROUGH BLAST CLEANING" AS OUTLINED IN ASTM D-2200 OR SSPC-SP6. ALL LOOSE AND DETERIORATED CONCRETE AND CALCIUM CARBONATE DEPOSITS SHALL BE REMOVED WITH HAND TOOLS BEFORE SANDBLASTING. CONCRETE QUANTITIES SHALL BE ADJUSTED TO INCLUDE ADDITIONAL VOLUMES REQUIRED.

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER TO PATCH BOTH STRUCTURES:

520 PNEUMATICALLY PLACED MORTAR, AS PER PLAN 100 SQ. FT.

PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 520 PNEUMATICALLY PLACED MORTAR, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 STRUCTURAL STEEL EXPANSION JOINTS INCLUDING ELASTOMERIC COMPRESSION SEALS

THIS ITEM SHALL INCLUDE ALL WORK REQUIRED TO PROVIDE AND INSTALL THE ELASTOMERIC COMPRESSION SEAL AND ALL ARMOR AND SUPPORT STEEL.

THE ELASTOMERIC COMPRESSION SEAL SHALL BE A WD-300 AS MANUFACTURED BY WATSON BOWMAN ASSOCIATES INC., 1280 NIAGARA STREET, BUFFALO, NEW YORK 14213; A J-300 AS MANUFACTURED BY ACME HIGHWAY PRODUCTS CORPORATION, 33 CHANDLER STREET, BUFFALO, NEW YORK 14207, OR AN APPROVED EQUAL.

ALL STRUCTURAL STEEL SHALL BE GALVANIZED AS PER 711.02.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 516, STRUCTURAL STEEL EXPANSION JOINTS INCLUDING ELASTOMERIC COMPRESSION SEALS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL - PILE ENCASEMENT PREPARATION:

THE PILE TO BE ENCASED SHALL BE FIRST CLEANED OF LOOSELY ADHERING SURFACE CONTAMINATION SUCH AS RUST SCALES, DETERIORATED AND SPALLED CONCRETE, AND MARINE ORGANISMS. CLEANING SHALL BE AT LEAST EQUAL TO SA-1 AS OUTLINED IN ASTM D2200 OR SSPC - SP7, EXCAVATION NECESSARY TO PREPARE FOR ENCASEMENT SHALL BE PERFORMED UNDER THIS ITEM SPECIAL - PILE ENCASEMENT PREPARATION.

THE BID PRICE FOR ITEM SPECIAL, PILE ENCASEMENT PREPARATION SHALL BE PER LINEAL FOOT AND SHALL INCLUDE THE COST OF LABOR, TOOLS, EQUIPMENT AND MATERIAL REQUIRED TO PREPARE PILING FOR ENCASEMENT.

ITEM SPECIAL - PILE ENCASEMENT:

THE PURPOSE OF THIS PILE ENCASEMENT IS TO RESTORE THE STRUCTURAL INTEGRITY OF THE ENCASED PORTION OF THE PILE AND/OR TO PROTECT THE PILE AGAINST MECHANICAL, CHEMICAL, AND BIOLOGICAL DAMAGE. FOLLOWING SPECIFIED CLEANING AND PREPARATION OF THE SURFACE OF EXPOSED PILES. EACH PILE SHALL BE ENCASED WITH CLASS "C" CONCRETE, MODIFIED AS FOLLOWS. THE SIZE OF THE COARSE AGGREGATE SHALL BE NO. 8. COARSE AGGREGATE SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF 703.02 OF THE SPECIFICATIONS. THE QUANTITIES FOR 1 CUBIC YARD OF CONCRETE SHALL BE AS FOLLOWS:

TYPE OF COARSE AGG.	FINE AGG. LBS.	COARSE AGG. NO. 8 LBS.	TOTAL AGG. LBS.	CEMENT LBS.	MAX. WATER CEMENT RATIO
GRAVEL	1365	1510	2875	600	0.50
LIMESTONE	1440	1410	2850	600	0.50

ALL PROVISIONS OF 511 SHALL REMAIN IN EFFECT.

FORMS SHALL BE SET TO PROVIDE ONE (1) FOOT OF COVER ON THREE (3) SIDES OF THE PILING. THE FOURTH SIDE SHALL BE FORMED A MAXIMUM OF SIX (6) INCHES OUTSIDE THE FACE OF THE EXISTING CONCRETE TO PROVIDE ACCESS FOR PLACING AND VIBRATING THE CONCRETE. AS A MEANS OF PREVENTING A VOID IN THE CONCRETE AT THE TOP OF THE PILE, THE FORM OUTSIDE THE FACE OF THE EXISTING CONCRETE SHALL EXTEND TWELVE (12) INCHES ABOVE THE BOTTOM OF THE EXISTING CONCRETE, CREATING A SURCHARGE OF CONCRETE.

THE BID PRICE FOR ITEM SPECIAL-PILE ENCASEMENT SHALL BE PER LINEAL FOOT AND SHALL INCLUDE THE COST OF ALL LABOR, EQUIPMENT, TOOLS AND ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK.

ALTERNATE METHODS MAY BE SUBMITTED FOR APPROVAL BY THE DISTRICT CONSTRUCTION ENGINEER THIRTY (30) DAYS PRIOR TO USE. APPROVAL SHALL BE BASED ON THE UNDERSTANDING THAT THE WORK SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE STATE.

ITEM 516 LAMINATED ELASTOMERIC BEARINGS (8"X11"X1 1/4" LAMINATED ELASTOMERIC PAD WITH 9"X12 1/2"X1" STEEL LOAD PLATE), AS PER PLAN

THE LAMINATED ELASTOMERIC BEARINGS SHALL BE BUILT AND INSTALLED AS PER DETAILS ON SHEET NO. 75. ALSO INCLUDED IN THIS ITEM IS THE REMOVAL OF THE OLD BEARINGS. AFTER THE OLD BEARINGS HAVE BEEN REMOVED THE AREA SHALL BE GROUND SMOOTH.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR THIS ITEM, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL - JACKING AND REPOSITIONING SUPERSTRUCTURE

AFTER THE REMOVAL OF THE EXISTING DECK AND BEFORE THE PLACING OF THE NEW DECK THE SUPERSTRUCTURE AT THE ABUTMENTS OF WAY-030-2051 L&R AND WAY-30-2060 L&R WILL BE ADJUSTED TO THE PROFILE AS INDICATED IN THE PLANS. THE TOTAL OF THESE ADJUSTMENTS IS SHOWN IN THE TABLE ON SHEET NO. 67 & 71 UNDER "PEDESTAL HEIGHT".

DETAILED PLANS OF THE JACKING PROCEDURES SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND SHALL BEAR HIS SIGNATURE AND NUMBER OR PROFESSIONAL ENGINEERING SEAL.

THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF THE PLANS AND TWO (2) COPIES OF DESIGN CALCULATIONS TO THE DIRECTOR FIFTEEN (15) DAYS PRIOR TO JACKING OPERATIONS, AND RECEIVE APPROVAL BEFORE STARTING JACKING OPERATIONS.

ATTACHEMENTS MADE BY WELDING TO ANY MAIN STRUCTURAL MEMBER SHALL BE APPROVED BY THE DIRECTOR BEFORE SUCH ATTACHEMENTS ARE MADE. DETAILS OF THE ATTACHEMENTS SHALL BE SUBMITTED FOR APPROVAL AS PART OF THE JACKING PROCEDURE PLANS, OR INDEPENDENTLY BY A SIMILAR SUBMISSION.

APPROVAL OF THE ABOVE PLANS SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR THE BEHAVIOR OF THE JACKING PROCEDURES PROPOSED.

PAYMENT SHALL BE AT THE UNIT PRICE BID PER EACH BRIDGE FOR ITEM SPECIAL JACKING AND REPOSITIONING SUPERSTRUCTURE, AND SHALL INCLUDE ALL NECESSARY TOOLS, LABOR, EQUIPMENT, AND MATERIALS TO COMPLETE THE ABOVE WORK. (INCLUDING STEEL PIEDISTAL ASSEMBLY AND CONCRETE ENCASEMENT).

STREAM POLLUTION

THE CONTRACTOR SHALL MAKE PROVISIONS DURING THE BRIDGE REPAIR OPERATION NOT TO ALLOW ANY MATERIALS, EQUIPMENT, ETC., TO FALL INTO OR ENTER THE WATER. MATERIALS MAY BE ALLOWED TO FALL ONTO THE STREAM BANK IF ALL THESE MATERIALS ARE REMOVED THE SAME DAY.

ALL WASTE MATERIAL FROM THE STRUCTURE OR APPROACHES SHALL BE DISPOSED OF BY THE CONTRACTOR BUT IN NO CASE SHALL THE CONTRACTOR OR HIS AGENT USE THE MATERIALS AS FILL AT ANY LOCATION ON THE CHIPPEWA RIVER FLOOD PLAN. THE COST TO COMPLY WITH THE ABOVE SHALL BE INCLUDED IN THE RESPECTIVE BID ITEMS.

MICROFILMED
AUG 11 1986

NOTES FOR REHABILITATING
BRIDGE DECKS
WAY -30 -2051 L & R
AND WAY-30-2060 L & R

GENERAL NOTES

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ITEM SPECIAL, SURFACE PREPARATION

ALL SURFACES TO BE PAINTED SHALL BE WASHED WITH WATER HAVING A NOZLE PRESSURE OF AT LEAST 1,000 PSI AND A DELIVERY RATE OF NOT LESS THAN 4 GALLON PER MINUTE. THE CONTRACTOR, SHALL PROVIDE EQUIPMENT SPECIFICATIONS TO VERIFY THE ABOVE. THE EQUIPMENT SHALL ALSO BE EQUIPPED WITH GAGES TO VERIFY THE PRESSURE. THE WATER SHALL CONTAIN A DETERGENT AT THE RATE SPECIFIED BY THE MANUFACTURER, TO REMOVE OIL GREASE, SALT AND DIRT TO THE ENGINEER'S SATISFACTION. BEFORE THE SURFACES DRY, A RINSE OF CLEAR WATER SHALL REMOVE ALL REMAINING DETERGENT. A SECOND RINSE SHALL FOLLOW IMMEDIATELY. THE NOZLE SHALL BE HELD A MAXIMUM OF TWELVE (12) INCHES FROM THE SURFACE BEING WASHED OR RINSED. THE FINISH COAT SHALL BE APPLIED WITHIN ONE (1) MONTH OF WASHING THE STRUCTURE.

ALL DIRT, SAND, AND DEBRIS SHALL BE COMPLETELY REMOVED FROM THE STRUCTURE SCUPPERS, BULB ANGLES, AND ANY OTHER SECTION OF THE BRIDGE AS DIRECTED BY THE ENGINEER.

ALL STEEL TO BE PAINTED SHALL BE BLASTED CLEANED TO GRADE Sa-2 1/2 ACCORDING TO ASTM D2200 OR SSPC-SP10. BLASTING SHALL NOT PROCEED WHEN THE STEEL TEMPERATURE IS WITHIN 5° OF THE DEW POINT TO PREVENT RUST BACK. ASTM D2200, SSPC-SP10, AND SSPC-SP1 ARE AVAILABLE FROM THE DISTRICT 3 OFFICE IN ASHLAND, OHIO OR THE BRIDGE BUREAU IN COLUMBUS, OHIO.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SPECIAL, SURFACE PREPARATION WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ABOVE WORK.

BRIDGE PAINTING, COMPLETE SYSTEM

THIS ITEM SHALL CONSIST OF FURNISHING ALL PAINT AND INCIDENTAL MATERIAL, AND APPLYING THE PAINT AS SPECIFIED.

ALL STRUCTURAL STEEL SHALL BE PAINTED ON WAY-30-2051, AND WAY-30-2060. PAINTING WILL NOT BEGIN UNTIL THE NEW DECKS ARE COMPLETE.

ONE OF THE FOLLOWING MANUFACTURERS AND PAINT SYSTEMS SHALL BE USED ON THIS PROJECT. ALL MIL THICKNESSES ARE DRY.

SYSTEM I

MANUFACTURER: KOPPERS COMPANY, INC.
ORGANIC MATERIALS GROUP
ELMHURST, ILLINOIS 60126
TELEPHONE: (312)-530-6300

MATERIAL: PRIME COAT: KOPPERS ORGANIC ZINC 3.0 MILS
INTERMEDIATE COAT: KOPPERS 25 PRIMER 2.0 MILS
FINISH COAT: KOPPERS 401 VINYL 6.0 MILS
COLOR: LIGHT GREY 306

OR SYSTEM II

MANUFACTURER: AMERON
PROTECTIVE COATINGS DIVISION
P. O. BOX 349
AKRON, OHIO 44309
TELEPHONE: (216)-896-3602

MATERIAL: PRIME COAT: DIMETCOTE E-Z11A 5.0 MILS
FINISH COAT: AMERCOAT 99HS VINYL 5.0 MILS
COLOR: LIGHT BLUE BL-4

OR SYSTEM III

CONSTRUCTION AND MATERIAL SPECIFICATIONS 708.17, 708.18
PRIME COAT (708.17) 5.0 MILS
TOP COAT (708.18) 3.0 MILS

MANUFACTURER

SUFFICIENT IDENTIFIABLE CHARACTERISTICS OTHER THAN TRADE OR BRAND NAME OR DESIGNATED NUMBER OR SYMBOL SHALL BE PROVIDED TO PERMIT LABORATORY TEST VERIFICATION OF COATING IDENTITY. THESE CHARACTERISTICS SHALL INCLUDE FORMULATION INFORMATION READILY DERIVABLE IN A LABORATORY, INCLUDING THE GENERAL NATURE OF THE VEHICLE, PIGMENT, AND VOLATILE PORTIONS, THE WEIGHT PER GALLON, THE PERCENT SOLIDS BY VOLUME, THE ZINC CONTENT, AND OTHER PROCEDURES USED FOR QUALITY CONTROL DURING MANUFACTURE OF THE COATING.

MATERIALS HANDLING AND USE

ALL PAINT SHALL BE DELIVERED TO THE SHOP OR JOB SITE IN ORIGINAL, UNOPENED CONTAINERS WITH LABELS INTACT. MINOR DAMAGE TO CONTAINERS IS ACCEPTABLE PROVIDED THE CONTAINER HAS NOT BEEN PUNCTURED OR THE LID SEAL BROKEN.

EACH CONTAINER OF PAINT SHALL BE CLEARLY MARKED OR LABELLED TO SHOW PAINT IDENTIFICATION, DATE OF MANUFACTURE, BATCH NUMBER, ANALYSIS OF COMPONENTS, IDENTIFICATION OF ALL TOXIC SUBSTANCES, AND SPECIAL INSTRUCTIONS.

ALL CONTAINERS OF PAINT SHALL REMAIN UNOPENED UNTIL REQUIRED FOR USE. THOSE CONTAINERS WHICH HAVE BEEN PREVIOUSLY OPENED SHALL BE USED FIRST. THE LABEL INFORMATION SHALL BE LEGIBLE AND SHALL BE CHECKED AT THE TIME OF USE.

PAINT WHICH HAS LIVERED, GELLED, OR OTHERWISE DETERIORATED DURING STORAGE SHALL NOT BE USED; HOWEVER, THIXOTROPIC MATERIALS WHICH CAN BE STIRRED TO ATTAIN NORMAL CONSISTENCY MAY BE USED.

THE OLDEST PAINT OF EACH KIND SHALL BE USED FIRST. IN EVERY CASE, PAINT IS TO BE USED BEFORE ITS SHELF LIFE HAS EXPIRED. IN ORDER TO USE PAINTS WHICH HAVE EXCEEDED THEIR SHELF LIFE OR HAVE NO STATED SHELF LIFE AND ARE MORE THAN ONE YEAR OLD, THE SPECIFIER OR MANUFACTURER MUST CERTIFY THAT THE PAINT IS STILL SUITABLE FOR USE.

MIXING AND THINNING

ALL INGREDIENTS IN ANY CONTAINER OF PAINT SHALL BE THOROUGHLY MIXED BEFORE USE AND SHALL BE AGITATED OFTEN ENOUGH DURING APPLICATION TO KEEP THE PAINT UNIFORM. THE PAINT SHALL BE MIXED IN A MANNER WHICH WILL INSURE THE BREAK-UP OF ALL LUMPS, COMPLETE DISPERSION OF PIGMENT, AND A UNIFORM COMPOSITION. PAINT SHALL BE CAREFULLY EXAMINED AFTER MIXING FOR UNIFORMITY AND TO VERIFY THAT NO UNMIXED PIGMENT REMAINS ON THE BOTTOM OF THE CONTAINER. THE PAINT SHALL BE MIXED WITH MECHANICAL PAINT SHAKERS OR MIXERS.

ALL PIGMENTED PAINT SHALL BE STRAINED AFTER MIXING EXCEPT WHERE APPLICATION EQUIPMENT IS PROVIDED WITH STRAINERS. STRAINERS SHALL BE OF A TYPE TO REMOVE ONLY SKINS AND UNDESIRABLE MATTER BUT NOT TO REMOVE THE PIGMENT.

WHERE A SKIN HAS FORMED IN THE CONTAINER, THE SKIN SHALL BE CUT LOOSE FROM THE SIDES OF THE CONTAINER, REMOVED AND DISCARDED. IF THE VOLUME OF SUCH SKINS ARE MORE THAN 2% OF THE REMAINING PAINT, THE PAINT SHALL NOT BE USED.

MIXING IN OPEN CONTAINERS SHALL BE DONE IN A WELL VENTILATED AREA AWAY FROM SPARKS OR FLAMES.

PAINT SHALL NOT BE MIXED OR KEPT IN SUSPENSION BY MEANS OF AN AIR STREAM BUBBLING UNDER THE PAINT SURFACE.

DRY PIGMENTS WHICH ARE SEPARATELY PACKAGED SHALL BE MIXED INTO PAINTS IN SUCH A MANNER THAT THEY ARE UNIFORMLY BLENDED AND ALL PARTICLES OF THE DRY POWDER ARE WETTED BY THE VEHICLE.

PASTES SHALL BE MADE INTO PAINTS IN SUCH A MANNER THAT THE PASTE SHALL BE UNIFORMLY BLENDED AND ALL LUMPS AND PARTICLES BROKEN UP TO FORM A HOMOGENOUS PAINT.

TINTING PASTES OR COLORS SHALL BE WETTED WITH A SMALL AMOUNT OF THINNER, VEHICLE, OR PAINT AND THOROUGHLY MIXED. NEXT, THE THINNED MIXTURE SHALL BE STRAINED. FINALLY, IT SHALL BE ADDED TO THE LARGE CONTAINER OF PAINT AND MIXED UNTIL THE COLOR IS UNIFORM. SMALL AMOUNTS OF PAINT MAY BE TINTED BY THE CONTRACTOR.

WHEN SUCCESSIVE COATS OF PAINT OF THE SAME COLOR HAVE BEEN SPECIFIED, ALTERNATE COATS OF PAINT SHALL BE TINTED, SUFFICIENTLY TO PROVIDE ENOUGH CONTRAST TO INDICATE COMPLETE COVERAGE OF THE SURFACE. THE TINTING SHALL BE DONE BY THE MANUFACTURER BEFORE THE PAINT IS DELIVERED TO THE JOB SITE.

PAINT WHICH DOES NOT HAVE A LIMITED POT LIFE (TIME INTERVAL) OR DOES NOT DETERIORATE ON STANDING MAY BE MIXED AT ANY TIME BEFORE USING, BUT IF SETTTLING HAS OCCURRED IT MUST BE REMIXED IMMEDIATELY BEFORE USING.

PAINT SHALL NOT REMAIN IN SPRAY POTS, PAINTERS BUCKETS, ETC. OVERNIGHT, BUT SHALL BE STORED IN A COVERED CONTAINER AND REMIXED BEFORE USE.

NO THINNER SHALL BE ADDED TO THE PAINT WITHOUT THE ENGINEER'S APPROVAL, AND ONLY IF NECESSARY FOR PROPER SPRAY APPLICATION AS RECOMMENDED BY THE MANUFACTURER. PAINTS TO BE APPLIED BY BRUSH WILL USUALLY REQUIRE NO THINNING. WHEN THE USE OF THINNER IS PERMISSIBLE, THINNER SHALL BE ADDED SLOWLY TO PAINT DURING THE MIXING PROCESS. THE TYPE OF THINNER SHALL COMPLY WITH THE MANUFACTURER'S INSTRUCTIONS. ALL THINNING SHALL BE DONE UNDER SUPERVISION OF THE ENGINEER. IN NO CASE SHALL MORE THINNER BE ADDED THAN THAT RECOMMENDED BY THE MANUFACTURER'S INSTRUCTIONS.

APPLICATION

IF THE SURFACE IS DEGRADED OR CONTAMINATED SUBSEQUENT TO SURFACE PREPARATION AND PRIOR TO PAINTING, THE SURFACE SHALL BE RESTORED BEFORE PAINT APPLICATION. ALL SURFACE CLEANING SHALL BE APPROVED BY THE ENGINEER PRIOR TO PAINTING. IN ORDER TO PREVENT THE DEGRADATION OR CONTAMINATION OF CLEANED SURFACES, THE PRIME COAT OF PAINT SHALL BE APPLIED THE SAME DAY THE SURFACE HAS BEEN CLEANED. SUCCEEDING COATS SHALL BE APPLIED BEFORE CONTAMINATION OF THE UNDER SURFACE OCCURS.

CLEANING AND PAINTING SHALL BE SO PROGRAMMED THAT DETRIMENTAL AMOUNTS OF DUST OR OTHER CONTAMINANTS DO NOT FALL ON WET, NEWLY-PAINTED SURFACES. SURFACES NOT INTENDED TO BE PAINTED SHALL BE SUITABLY PROTECTED FROM THE EFFECTS OF CLEANING AND PAINTING OPERATIONS.

OVERSPRAY OF THE ZINC RICH PRIMER WILL RESULT IN IMPROPER ADHESION OF THE TOPCOAT. OVERSPRAY SHALL BE REMOVED WITH A STIFF BRISTLE BRUSH OR WIRE SCREEN.

TEMPERATURE

PAINT SHALL NOT BE APPLIED WHEN THE TEMPERATURE OF THE STEEL, OR PAINT IS BELOW 40° F (4° C) OR WHEN THE AIR TEMPERATURE IS BELOW 40° F (4° C). PAINT SHALL NOT BE APPLIED WHEN THE SURFACE TEMPERATURE IS EXPECTED TO DROP TO 40° F (4° C) BEFORE THE PAINT HAS DRIED. PAINT SHALL NOT BE APPLIED TO STEEL WHICH IS AT A TEMPERATURE THAT WILL CAUSE BLISTERING OR POROSITY OR OTHERWISE WILL BE DETRIMENTAL TO THE LIFE OF THE PAINT. WHEN PAINT IS APPLIED IN HOT WEATHER, OR THINNED IN COLD WEATHER, PRECAUTIONS MUST BE TAKEN TO INSURE THAT THE SPECIFIED THICKNESS OF PAINT IS OBTAINED.

MOISTURE

PAINT SHALL NOT BE APPLIED IN RAIN, WIND, SNOW, FOG, OR MIST, OR WHEN THE STEEL SURFACE TEMPERATURE IS LESS THAN 5° F (3° C) ABOVE THE DEW POINT. PAINT SHALL NOT BE APPLIED TO WET OR DAMP SURFACES UNLESS THE PAINT IS OF THE WATER-THINNED TYPE. PAINT SHALL NOT BE APPLIED ON FROSTED OR ICE-COATED SURFACES.

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GENERAL NOTES

FHWA REGION	STATE	PROJECT	
5	OHIO		

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83

WAY-30-1672

DAMAGE

DAMAGED AREAS OF PAINT WHICH ARE DETRIMENTAL TO THE SERVICE LIFE SHALL BE REMOVED, THE SURFACE AGAIN PREPARED AND REPAINTED WITH THE SAME NUMBER OF COATS OF PAINT OF THE SAME KIND AS THE UNDAMAGED AREAS.

CONTINUITY

TO THE MAXIMUM EXTENT PRACTICAL, EACH COAT OF PAINT SHALL BE APPLIED AS A CONTINUOUS FILM OF UNIFORM THICKNESS FREE OF PORES. ALL THIN SPOTS OR AREAS MISSED IN THE APPLICATION SHALL BE REPAINTED AND PERMITTED TO DRY BEFORE THE NEXT COAT OF PAINT IS APPLIED.

THICKNESS

EACH COAT OF PAINT MUST HAVE THE REQUIRED MIL THICKNESS AS REQUIRED BY THE MANUFACTURER. A TOOKE GAGE WILL BE USED BY THE ENGINEER TO VERIFY THE REQUIRED MIL THICKNESS.

IN THE EVENT THE REQUIRED MINIMUM THICKNESS IS NOT ACHIEVED, AS SPECIFIED, ADDITIONAL COATS SHALL BE APPLIED UNTIL THE REQUIRED THICKNESS IS OBTAINED. THE INORGANIC ZINC-RICH COATINGS SHALL NOT BE CORRECTED IN THIS MANNER UNLESS THE MANUFACTURER'S INSTRUCTIONS SPECIFICALLY PERMIT THIS PRACTICE.

RECOATING

EACH COAT OF PAINT SHALL BE IN A PROPER STATE OF CURE OR DRYNESS BEFORE THE APPLICATION OF THE SUCCEEDING COAT. PAINT SHALL BE CONSIDERED DRY FOR RECOATING WHEN AN ADDITIONAL COAT CAN BE APPLIED WITHOUT THE DEVELOPMENT OF ANY DETRIMENTAL FILM IRREGULARITIES, SUCH AS LIFTING, WRINKLING, OR LOSS OF ADHESION OF THE UNDERCOAT. THE TIME INTERVAL BETWEEN COATING APPLICATIONS SHALL BE IN COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS.

THE MAXIMUM PRACTICAL TIME SHALL BE ALLOWED FOR PAINT TO DRY BEFORE RECOATING. SOME PAINTS MAY DRY TOO HARD FOR GOOD ADHESION OF SUBSEQUENT COATS, THESE SHALL BE RECOATED WITHIN THE TIME PERIOD IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. IF NOT RECOATED WITHIN THE SPECIFIED TIME THEN THE PREVIOUSLY APPLIED COATINGS SHALL BE ROUGHENED PRIOR TO RECOATING.

NO DRIER SHALL BE ADDED TO PAINT ON THE JOB UNLESS SPECIFICALLY CALLED FOR IN THE MANUFACTURER'S INSTRUCTIONS.

PAINT SHALL BE PROTECTED FROM RAIN, CONDENSATION, CONTAMINATION, SNOW, AND FREEZING UNTIL DRY TO THE FULLEST EXTENT PRACTICAL.

INTERCOAT ADHESION

UNDERCOATS HAVING A GLOSSY SURFACE WHICH DETRIMENTALLY AFFECTS THE ADHESION OF THE SUBSEQUENT COAT SHALL BE TREATED BY MILD SURFACE ABRASION, SOLVENT TREATMENT, OR OTHER SUITABLE PROCESSES WHICH WILL NOT CUT THROUGH OR DETRACT FROM THE PERFORMANCE OF THE UNDERLYING PAINT.

SPRAY APPLICATION (GENERAL)

ALL SPRAY APPLICATION OF PAINT, WHETHER AIR SPRAY, AIRLESS SPRAY, HOT AIR SPRAY OR HOT AIRLESS SPRAY, SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

THE EQUIPMENT USED SHALL BE SUITABLE FOR THE INTENDED PURPOSES, SHALL BE CAPABLE OF PROPERLY ATOMIZING THE PAINT TO BE APPLIED, AND SHALL BE EQUIPPED WITH SUITABLE PRESSURE REGULATORS AND GAGES. THE EQUIPMENT SHALL BE MAINTAINED IN PROPER WORKING CONDITION.

PAINT INGREDIENTS SHALL BE KEPT UNIFORMLY MIXED IN THE SPRAY POTS OR CONTAINERS DURING PAINT APPLICATION EITHER BY CONTINUOUS MECHANICAL AGITATION OR BY INTERMITTENT AGITATION AS FREQUENTLY AS NECESSARY.

SPRAY EQUIPMENT SHALL BE KEPT SUFFICIENTLY CLEAN SO THAT DIRT, DRIED PAINT AND OTHER FOREIGN MATERIALS ARE NOT DEPOSITED IN THE PAINT FILM. ANY SOLVENTS LEFT IN THE EQUIPMENT SHALL BE COMPLETELY REMOVED BEFORE USING.

PAINT SHALL BE APPLIED IN A UNIFORM LAYER WITH OVERLAPPING AT THE EDGES OF THE SPRAY PATTERN. DURING APPLICATION, THE GUN SHALL BE HELD PERPENDICULAR TO THE SURFACE AND AT A DISTANCE WHICH WILL ENSURE THAT A WET LAYER OF PAINT IS DEPOSITED ON THE SURFACE. THE TRIGGER OF THE GUN SHOULD BE RELEASED AT THE END OF EACH STROKE. ALL BOLTS AND RIVET HEADS SHALL BE SPRAYED FROM AT LEAST TWO (2) DIRECTIONS.

ALL RUNS AND SAGS SHALL BE BRUSHED OUT IMMEDIATELY OR THE COATING SHALL BE REMOVED AND THE SURFACE REPAINTED.

IF MUD CRACKING OCCURS, THE AFFECTED AREA SHALL BE CLEANED TO BARE METAL AND REPAINTED.

CRACKS, CREVICES, BLIND AREAS OF ALL RIVETS AND BOLTS, AND ALL OTHER INACCESSIBLE AREAS SHALL BE PAINTED BY BRUSH, DAUBERS, OR SHEEPSKINS.

PAINT SHALL BE SUITABLE FOR THE PARTICULAR SPRAY APPLICATION METHOD USED.

CAUTION MUST BE EXERCISED SO THAT HOT COATINGS ARE NOT APPLIED TO COLD SURFACES AND, CONVERSELY, THAT COLD COATINGS ARE NOT APPLIED TO HOT SURFACES.

ALL CRACKS AND CREVICES SHALL BE FILLED WITH PAINT IF PRACTICAL.

WET PAINT SHALL BE PROTECTED AGAINST DAMAGE FROM DUST OR OTHER DETRIMENTAL FOREIGN MATTER.

AIRLESS SPRAY APPLICATIONS

AIRLESS OR HIGH PRESSURE SPRAY APPLICATION OF PAINT SHALL BE IN ACCORDANCE WITH THE ABOVE PROVISIONS AND IN ADDITION SHALL COMPLY WITH THE FOLLOWING.

FLUID TIPS SHALL BE OF PROPER ORIFICE SIZE AND FAN ANGLE, AND THE FLUID CONTROL GUN OF PROPER CONSTRUCTION, AS RECOMMENDED BY THE MANUFACTURER OF THE MATERIAL BEING SPRAYED AND THE EQUIPMENT BEING USED. FLUID TIPS SHALL BE OF THE SAFETY TYPE WITH SHIELDS TO PREVENT PENETRATION OF THE SKINS BY THE HIGH PRESSURE STREAM OF PAINT.

THE AIR PRESSURE TO THE PAINT PUMP SHALL BE ADJUSTED SO THAT THE PAINT PRESSURE TO THE GUN IS PROPER FOR OPTIMUM SPRAYING EFFECTIVENESS. THIS PRESSURE SHALL BE SUFFICIENTLY HIGH TO PROPERLY ATOMIZE THE PAINT. PRESSURES CONSIDERABLY HIGHER THAN THOSE NECESSARY TO PROPERLY ATOMIZE THE PAINT SHOULD NOT BE USED.

SPRAYING EQUIPMENT SHALL BE KEPT CLEAN AND SHALL UTILIZE PROPER FILTERS IN THE HIGH PRESSURE LINE SO THAT DIRT, DRY PAINT, AND OTHER FOREIGN MATERIALS ARE NOT DEPOSITED IN THE PAINT FILM. ANY SOLVENTS LEFT IN THE EQUIPMENT SHALL BE COMPLETELY REMOVED BEFORE APPLYING PAINT.

THE TRIGGER OF THE GUN SHOULD BE PULLED FULLY OPEN AND HELD FULLY OPEN DURING ALL SPRAYING TO INSURE PROPER APPLICATION OF PAINT.

AIRLESS PAINT SPRAY EQUIPMENT SHALL ALWAYS BE PROVIDED WITH AN ELECTRIC GROUND WIRE IN THE HIGH PRESSURE LINE BETWEEN THE GUN AND THE PUMPING EQUIPMENT. FURTHER THE PUMPING EQUIPMENT SHALL BE SUITABLE GROUNDED TO AVOID THE BUILD-UP OF ANY ELECTROSTATIC CHARGE ON THE GUN. THE MANUFACTURER'S INSTRUCTIONS ARE TO BE FOLLOWED REGARDING THE PROPER USE OF THE EQUIPMENT.

INSPECTION

ALL WORK AND MATERIALS SUPPLIED UNDER THIS SPECIFICATION SHALL BE SUBJECT TO TIMELY INSPECTION BY THE ENGINEER. THE CONTRACTOR SHALL CORRECT SUCH WORK OR REPLACE SUCH MATERIAL AS IS FOUND DEFECTIVE UNDER THE SPECIFICATION.

SAMPLES OF PAINTS USED UNDER THIS SPECIFICATION SHALL BE SUPPLIED UPON REQUEST ALONG WITH THE SUPPLIER'S NAME AND IDENTIFICATION FOR THE MATERIALS.

THE CONTRACTOR SHALL LEAVE HIS LADDERS, PLATFORM OR SCAFFOLD IN PLACE FOR A SUFFICIENT LENGTH OF TIME AND IN SUCH A MANNER TO PERMIT THE ENGINEER TO SAFELY EXAMINE THE WORK PERFORMED.

STATE SAFETY REQUIREMENTS

THE CONTRACTOR IS REQUIRED TO MEET THE APPLICABLE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION. THE CONTRACTOR SHALL PROVIDE MATERIAL SAFETY DATA SHEETS FOR ALL PAINTS AND THINNERS USED.

PRIOR INSPECTION OF WORK

PROSPECTIVE BIDDERS ARE REQUIRED TO MAKE AN INSPECTION OF THE BRIDGES IN THE FIELD AND TO REVIEW THE PLANS AND SPECIFICATIONS BEFORE SUBMITTING BIDS. SEE SECTION 102.05 OF THE "CONSTRUCTION AND MATERIALS SPECIFICATIONS", DATED JANUARY 1, 1983.

DATE PAINTED

THE COMPLETION DATE OF THE FINISH COAT OF PAINT (MONTH AND YEAR I.E., 9-73) SHALL BE STENCILED ON THE STRUCTURE, AS DIRECTED BY THE ENGINEER IN A CONTRASTING COLOR.

PAYMENT SHALL BE INCLUDED IN PRICE BID FOR ITEM SPECIAL BRIDGE PAINTING.

PROTECTION OF PERSONS AND PROPERTY

THE CONTRACTOR SHALL COLLECT, REMOVE AND DISPOSE OF ALL BUCKETS, RAGS, OR OTHER DISCARDED MATERIALS AND HE SHALL LEAVE THE JOB SITE IN A CLEAN CONDITION.

THE CONTRACTOR SHALL PROTECT ALL PORTIONS OF THE STRUCTURE WHICH ARE NOT TO BE PAINTED, AGAINST DAMAGE OR DISFIGUREMENT BY SPLASHES, SPATTERS, AND SMIRCHES OF PAINT.

WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY BY OR ON ACCOUNT OF ANY ACT, OMISSION, NEGLIGENCE, OR MISCONDUCT IN THE EXECUTION OF THE WORK, OR IN CONSEQUENCE OF THE NON-EXECUTION THEREOF BY THE CONTRACTOR, HE SHALL RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE, BY REPAIRING, REBUILDING OR OTHERWISE RESTORING AS MAY BE DIRECTED, OR HE SHALL MAKE GOOD SUCH DAMAGE OR INJURY IN AN ACCEPTABLE MANNER.

POLLUTION CONTROL

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO COMPLY WITH POLLUTION CONTROL LAWS, RULES OR REGULATIONS OR FEDERAL, STATE OR LOCAL AGENCIES.

WORK LIMITATIONS

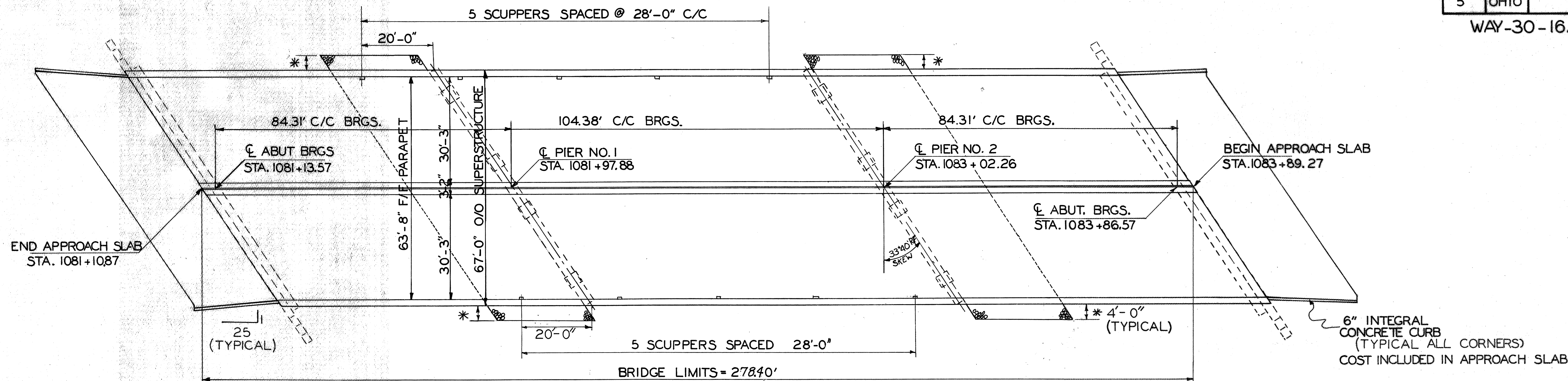
THE CONTRACTOR SHALL NOT PERFORM WORK ON SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE APPROVAL OF THE DIRECTOR. ON SATURDAYS THE CONTRACTOR MAY PAINT THE WESTBOUND LANES ONLY.

ALL WORK SHALL SUSPEND BETWEEN THE HOURS OF 5:00 P.M. SATURDAY AND 5:00 A.M. MONDAY. WORK SHALL ALSO BE SUSPENDED AT 5:00 P.M. OF THE DAY PRECEEDING ALL LEGAL HOLIDAYS AND SHALL NOT RESUME UNTIL 7:00 A.M. OF THE DAY FOLLOWING THE HOLIDAY.

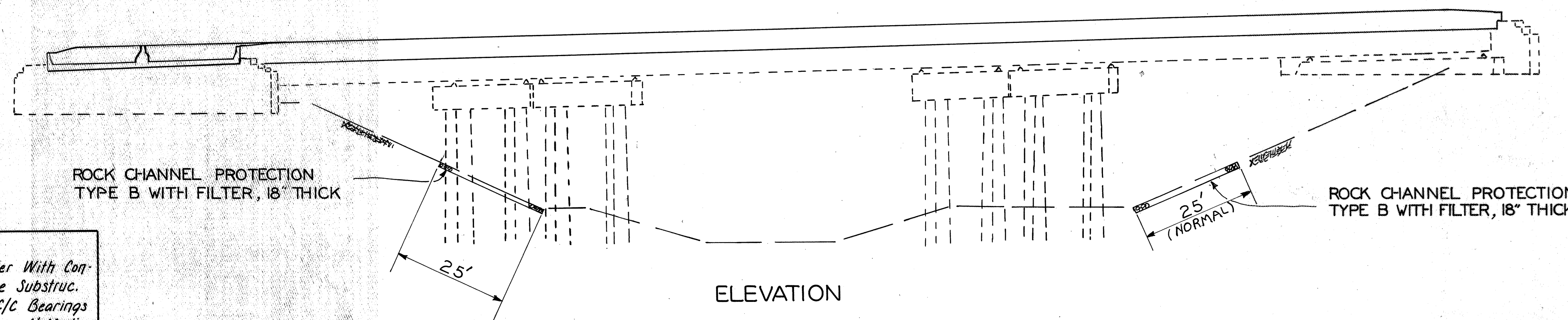
PAYMENT FOR ALL OF THE ABOVE WILL BE MADE AT THE CONTRACT BID PRICE FOR:

ITEM	UNIT	DESCRIPTION
SPECIAL	LUMP SUM	BRIDGE PAINTING

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GENERAL PLAN



ELEVATION

ESTIMATED QUANTITIES

EXISTING STRUCTURE	
TYPE	: Continuous Steel Girder With Concrete Deck and Concrete Substruc.
SPAN	: 84.31-104.38-84.31 C/C Bearings
ROADWAY	: 60' F/F Curbs Including 4' Median Plus 1'-9" Safety Curbs
LOADING	: S = 20-46
SKEW	: 33°-40' RF
SURFACE COURSE	: Bituminous
PROPOSED STRUCTURE	
TYPE	: Existing Continuous Steel Girder and Concrete Substructure. Proposed Concrete Deck
SPAN	: 84.31-104.38-84.31 C/C Bearings
ROADWAY	: 30'-3" F/F Safety Parapet
	: Each Roadway
LOADING	: HS-20-44 (Deck Only)
SKEW	: 33°-40'-RF
WEARING SURFACE	: Concrete
APPROACH SLABS	: AS-1-81 (25' Long)

ITEM	TOTAL	UNIT	DESCRIPTION	ITEM	TOTAL	UNIT	DESCRIPTION
202	LUMP SUM	LUMP SUM	PORTIONS OF STRUCTURES REMOVED, DECK				
202	23	CU.YD.	PORTIONS OF STRUCTURES REMOVED, BACKWALL	510	156	EACH	DOWEL HOLES
511	459	CU.YD.	CLASS S CONCRETE, DECK, AS PER PLAN	516	20	EACH	BEARING DEVICES, AS PER PLAN
511	113	CU.YD.	CLASS S CONCRETE, PARAPET, AS PER PLAN	518	10	CU.YD.	POROUS BACKFILL
511	23	CU.YD.	CLASS C CONCRETE, BACKWALL	518	10	EACH	SCUPPERS
509	52946	LB.	REINFORCING STEEL				
824	69755	LB.	EPOXY COATED REINFORCING STEEL	SPECIAL	2	EACH	JACKING AND REPOSITIONING SUPERSTRUCTURE
516	164	LIN. FT.	STRUCTURAL STEEL EXPANSION JOINTS INCLUDING ELASTOMERIC COMPRESSION SEALS	SPECIAL LUMP SUM	LUMP SUM		SURFACE PREPARATION
				SPECIAL LUMP SUM	LUMP SUM		BRIDGE PAINTING

BENCHMARK

R/R SPIKE IN TREE NORTH SIDE 1100+01
W.B. LANES = ELEV. 1027.471

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AUG 11 1986

STATE OF OHIO		1 / 5	
DEPARTMENT OF TRANSPORTATION			
DISTRICT THREE			
GENERAL PLAN, ELEVATIONS			
AND ESTIMATED QUANTITIES			
WAY-30-2051 L & R			
DESIGNED	DRAWN	TRACED	CHECKED
REVISED	DATE	REVISED	DATE
KW	DES	DES	DES
			4/83
			4-28-83

WAY-30-16.72

DECK GRADES

LOCATION		LEFT BRIDGE		RIGHT BRIDGE	
		A	B	C	D
CL BEARING FWD. ABUT.	STATION	1083+66.03	1083+85.12	1083+88.02	1084+07.11
	ELEVATION	1042.16	1042.88	1042.92	1042.72
3/4 POINT	STATION	1083+44.95	1083+64.04	1083+66.94	1083+86.03
	ELEVATION	1041.88	1042.61	1042.66	1042.47
1/2 POINT	STATION	1083+23.87	1083+42.96	1083+45.86	1083+64.95
	ELEVATION	1041.56	1042.30	1042.35	1042.19
1/4 POINT	STATION	1083+02.79	1083+21.88	1083+24.78	1083+43.87
	ELEVATION	1041.19	1041.96	1042.00	1041.86
CL BEARING PIER NO. 2	STATION	1082+81.72	1083+00.81	1083+03.71	1083+22.80
	ELEVATION	1040.81	1041.59	1041.64	1041.50
3/4 POINT	STATION	1082+55.62	1082+74.71	1082+77.61	1082+96.70
	ELEVATION	1040.37	1041.16	1041.21	1041.10
1/2 POINT	STATION	1082+29.53	1082+48.62	1082+51.52	1082+70.61
	ELEVATION	1039.90	1040.70	1040.76	1040.67
1/4 POINT	STATION	1082+03.43	1082+22.52	1082+25.42	1082+44.51
	ELEVATION	1039.35	1040.18	1040.23	1040.17
CL BEARING PIER NO. 1	STATION	1081+77.34	1081+96.43	1081+99.33	1082+18.42
	ELEVATION	1038.77	1039.62	1039.69	1039.62
3/4 POINT	STATION	1081+56.27	1081+75.36	1081+78.26	1081+97.35
	ELEVATION	1038.33	1039.20	1039.26	1039.22
1/2 POINT	STATION	1081+35.19	1081+54.28	1081+57.18	1081+76.27
	ELEVATION	1037.88	1038.75	1038.82	1038.79
1/4 POINT	STATION	1081+14.11	1081+33.20	1081+36.10	1081+55.19
	ELEVATION	1037.37	1038.27	1038.33	1038.32
CL BEARING REAR ABUT.	STATION	1080+93.03	1081+12.12	1081+15.02	1081+34.11
	ELEVATION	1036.83	1037.74	1037.81	1037.81

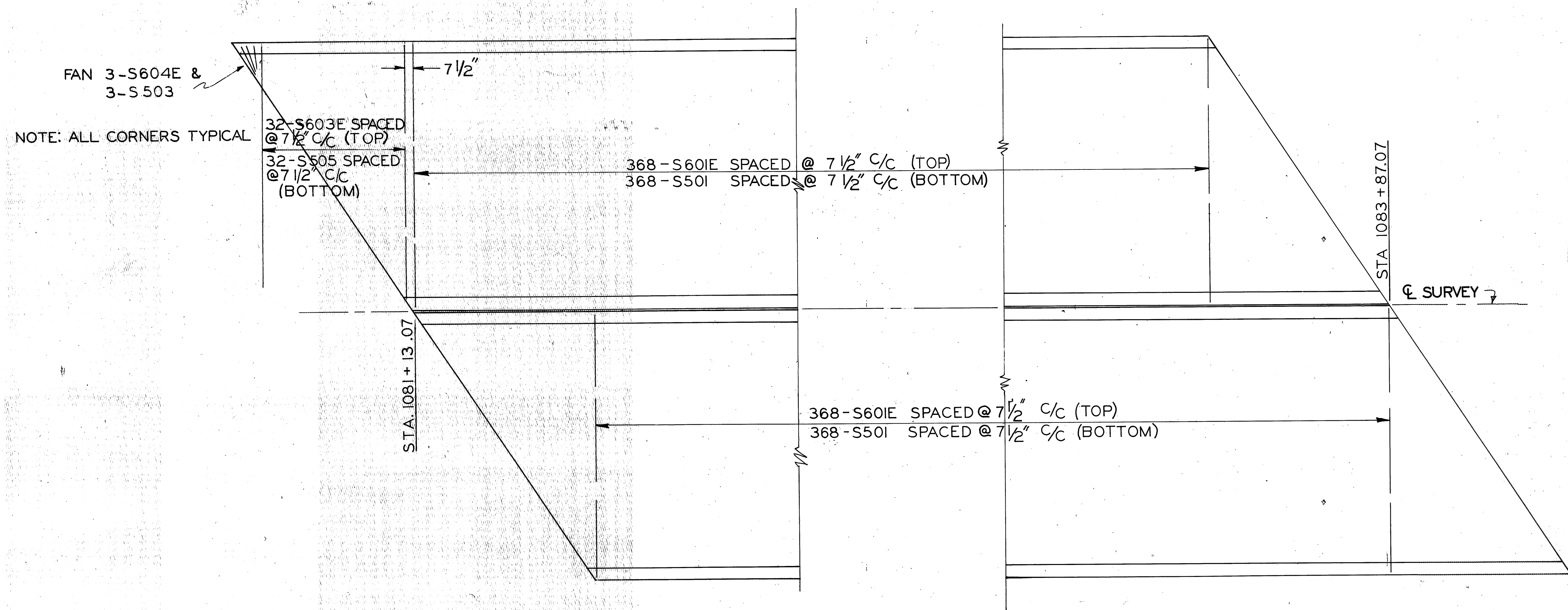
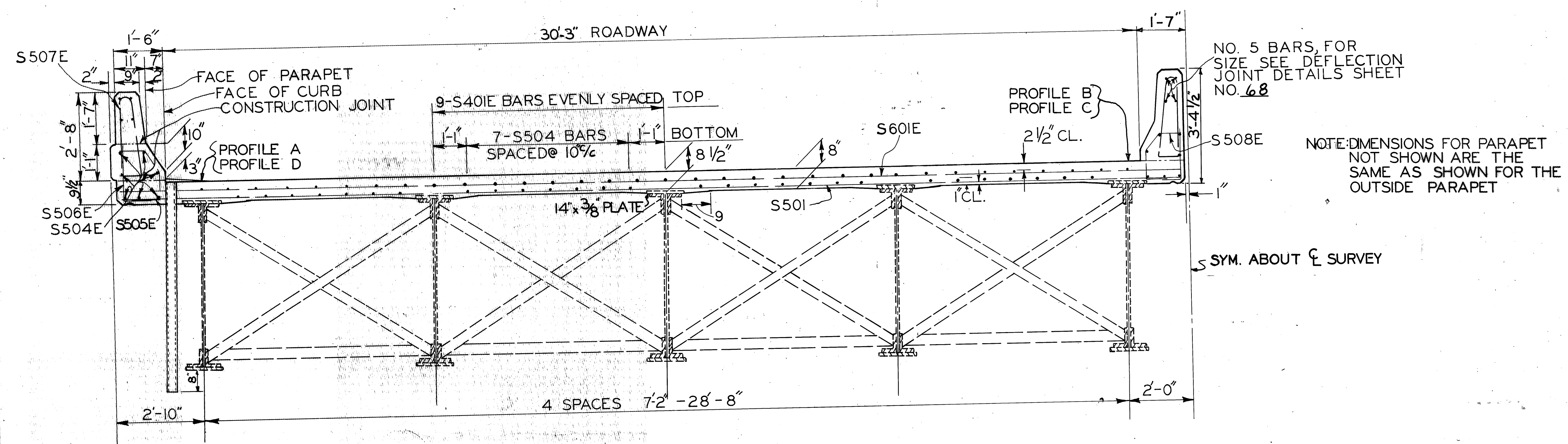
NOTE: ELEVATIONS SHOWN ARE AT QUARTER POINTS OF SPANS OVER OUTSIDE BEAMS OF EACH STRUCTURE. ELEVATIONS ARE THOSE WHICH ARE REQUIRED BEFORE DECK CONCRETE IS PLACED TO ALLOW FOR DEAD LOAD DEFLECTION.

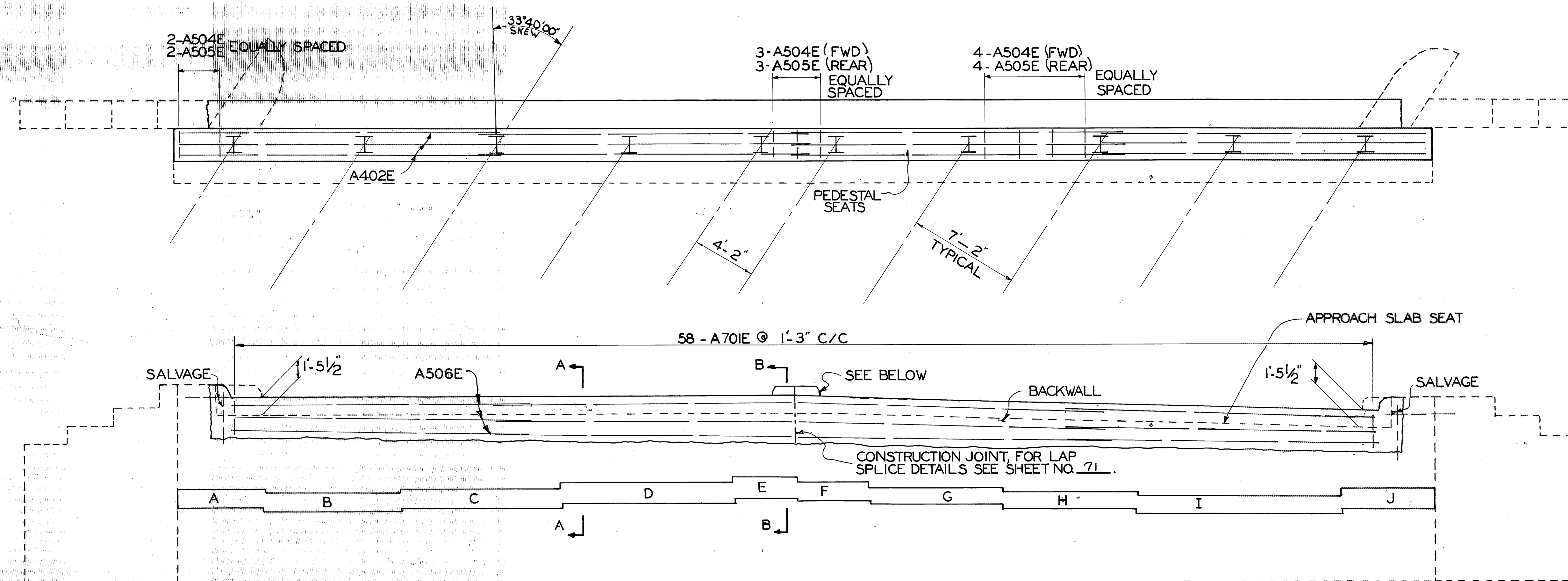
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AUG 11 1986

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

SUPERSTRUCTURE
DETAILS
BRIDGE NO. WAY-30-2051
R & L

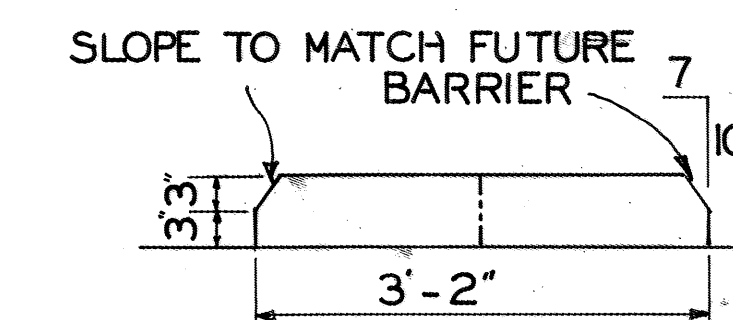
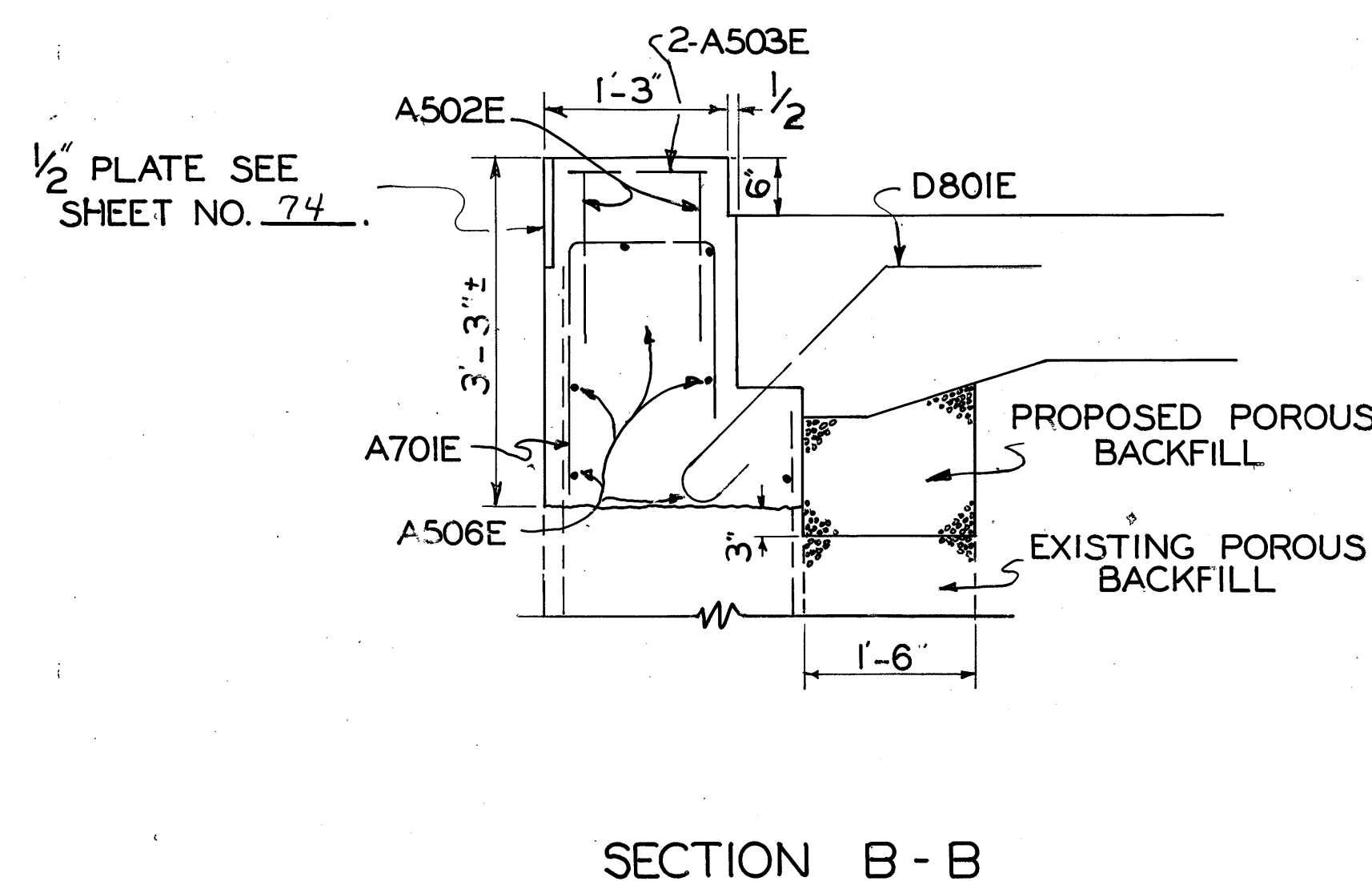
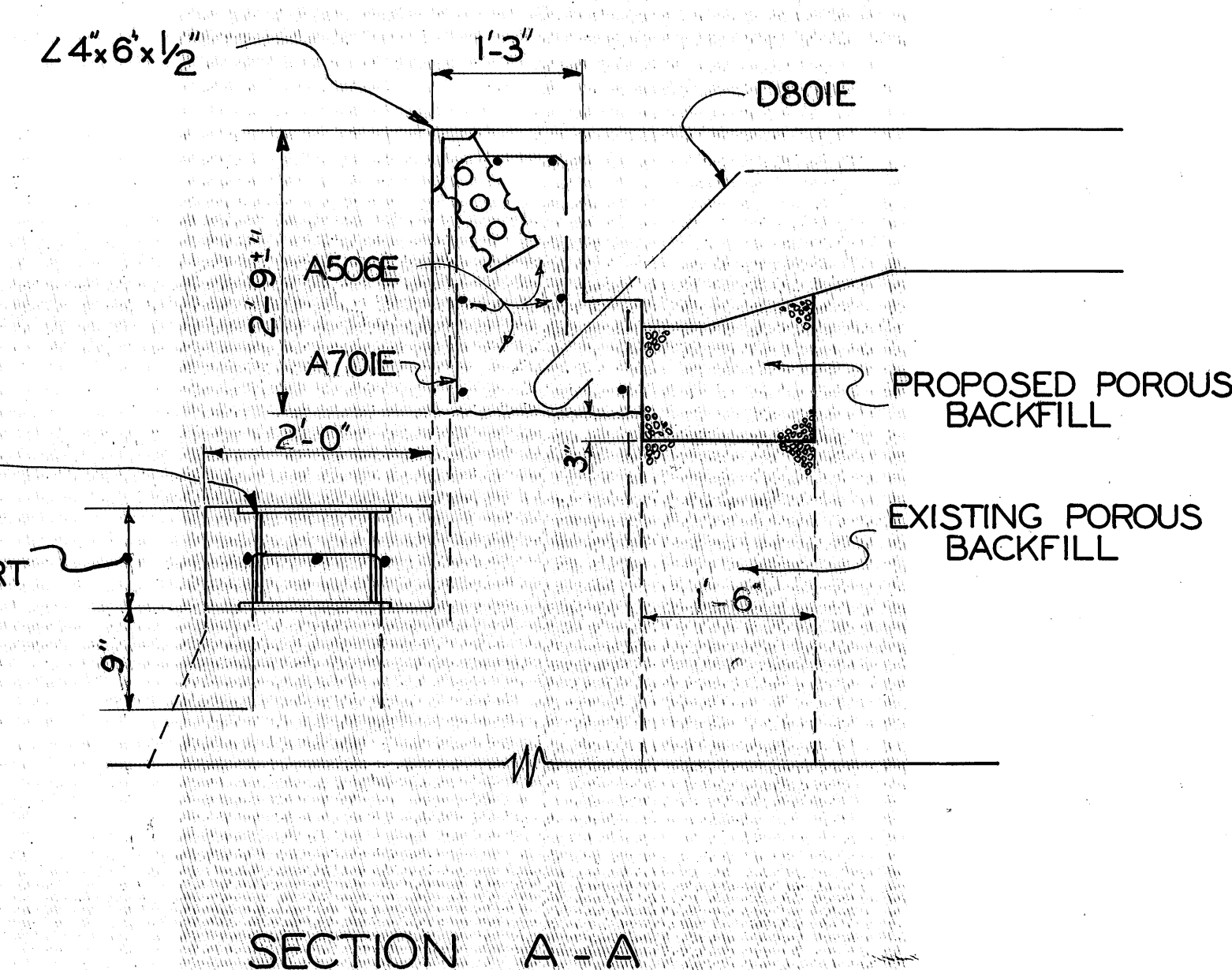
DESIGNED	DRAWN	CHECKED	APPROVED	DATE	REVISION
KW	RAM	RAM	ALB	4-28-83	





PEDESTAL HEIGHT

	EAST ABT	WEST ABT
A	12 1/8"	8 1/2"
B	12 1/2"	8 7/8"
C	13"	9 1/4"
D	13 1/8"	9 3/8"
E	13 3/8"	9 3/8"
F	13 1/8"	10 1/4"
G	13 1/8"	10 1/4"
H	13 1/8"	10 3/8"
I	13"	10 3/8"
J	12 1/2"	10 1/4"



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STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

3/5

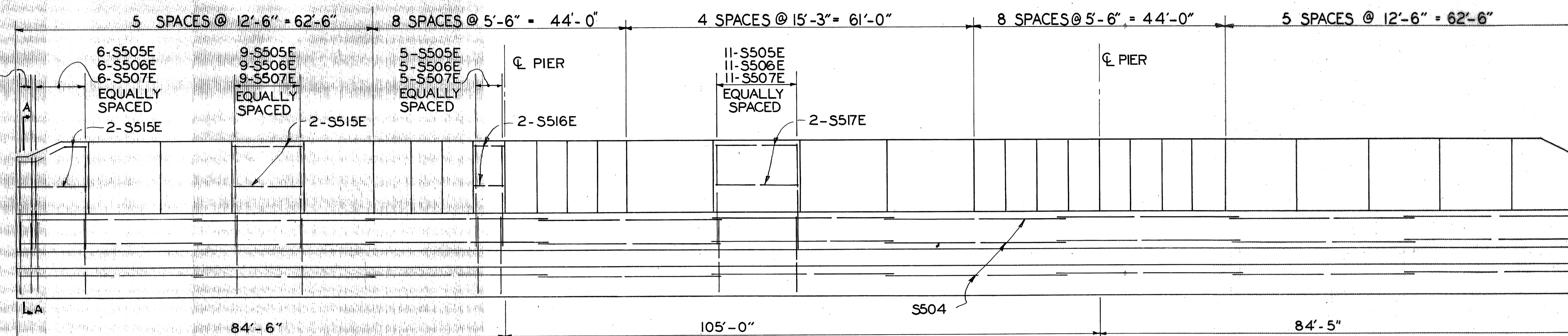
ABUTMENT DETAILS
WAY -30 -2051 L&R

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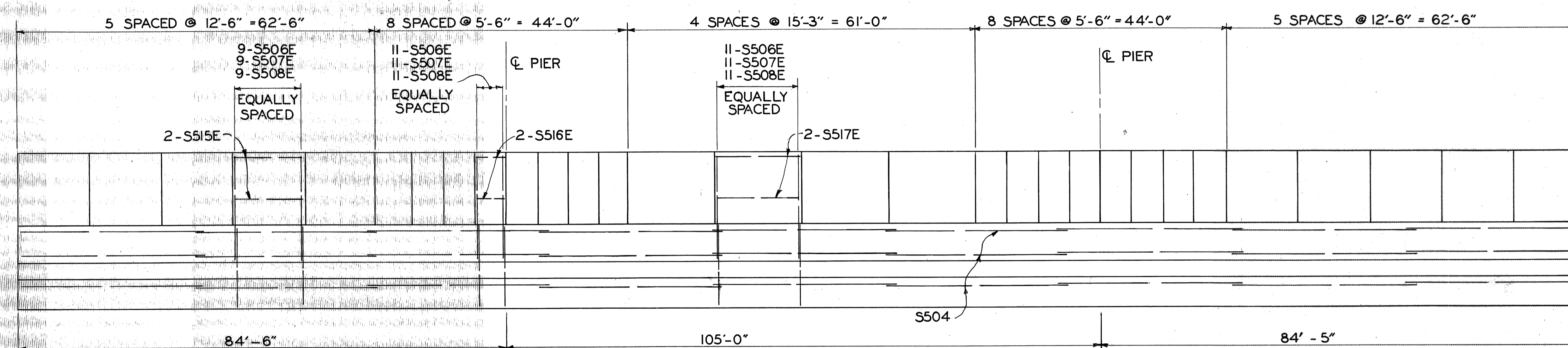
FHWA REGION	STATE	PROJECT
5	OHIO	

68
83

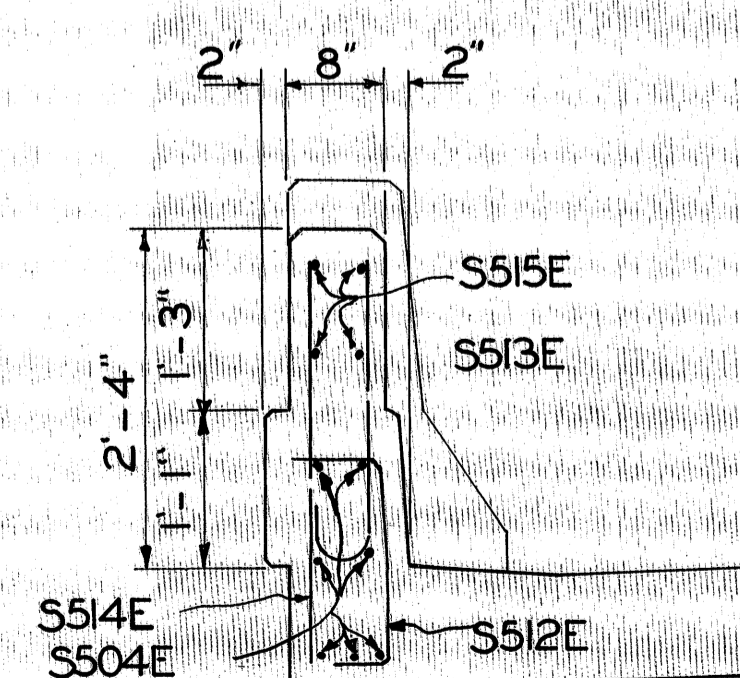
WAY-30-16.72



DEFLECTION JOINT SPACING AT PARAPET



DEFLECTION JOINT SPACING AT MEDIAN PARAPET



SECTION A-A

NOTE: HOLES FOR SPLICE BOLTS ATTACHING GUARDRAIL TO THE TERMINAL CONNECTOR AT ENDS OF PARAPETS SHALL BE SLOTTED 29/32" x 3" AND ALL BOLTS SHALL BE TIGHTENED AS SPECIFIED FOR EXPANSION JOINTS AS PER CMS 606.05 TO ALLOW FOR BRIDGE MOVEMENT.

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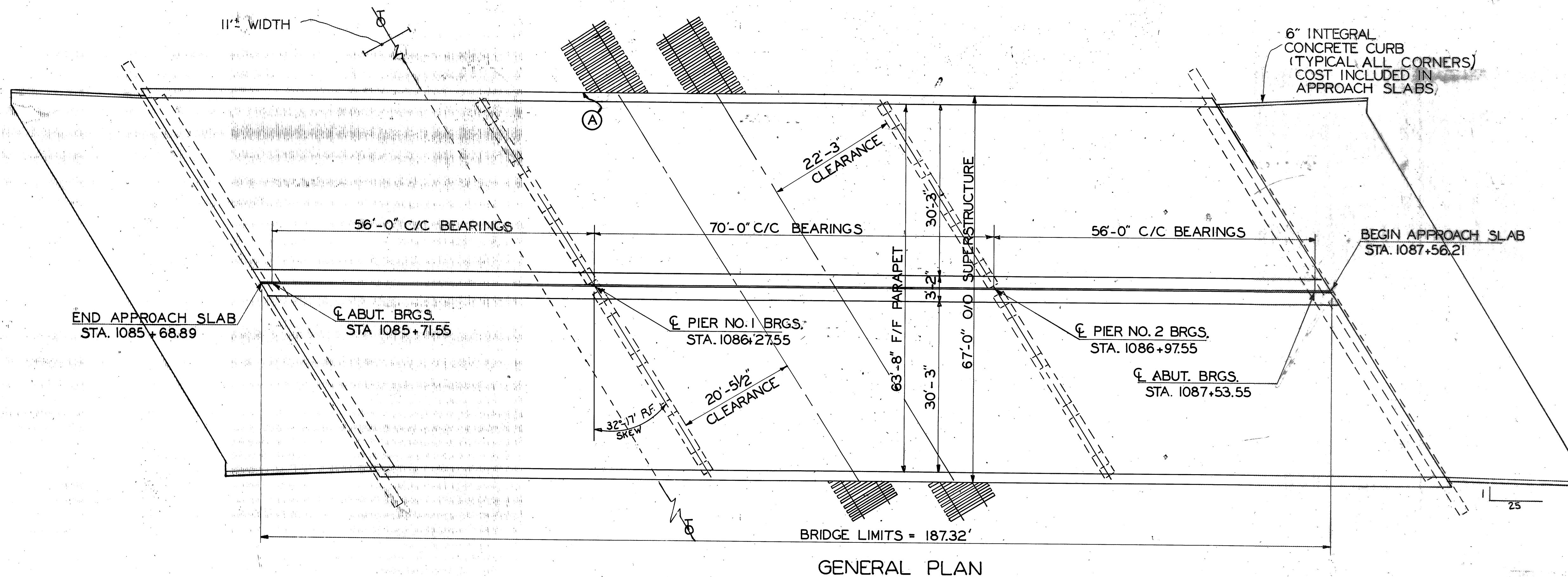
FOR REINFORCING STEEL LIST
SHEET 5/5 SEE SHEET 73

STATE OF OHIO 4 / 5
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

DEFLECTION JOINT SPACING

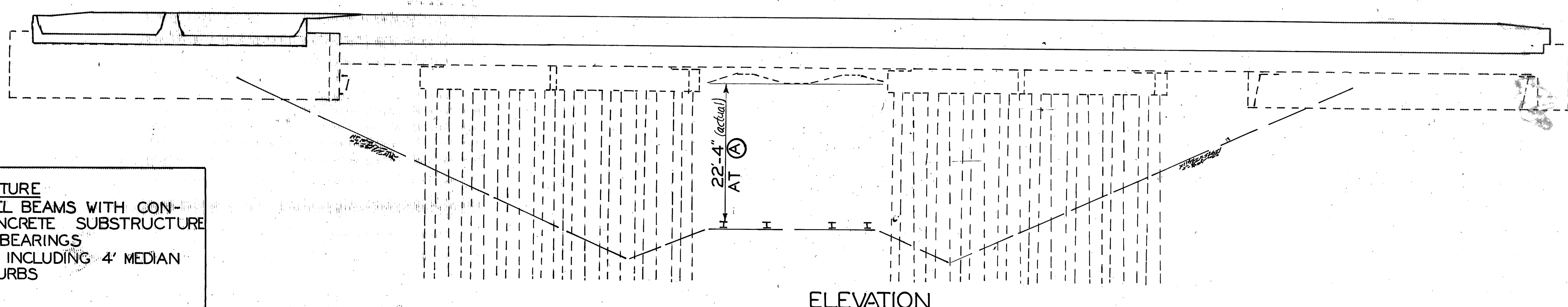
WAY-30-2051 L&R

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	CHECKED
KW	DES	DES		<i>[Signature]</i>	4-28-83	



RAILROAD AERIAL LINE
THE CONTRACTOR SHALL USE ALL PRECAUTIONS NECESSARY TO SEE THAT LINES ARE NOT DISTURBED DURING THE CONSTRUCTION STAGE.

CONSTRUCTION CLEARANCE
CONSTRUCTION CLEARANCE OF EIGHT (8) FEET HORIZONTAL FROM THE CENTER OF TRACKS AND TWENTY-ONE (21) FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL AND FOUR (4) FEET FROM THE CENTER OF TRACKS, SHALL BE MAINTAINED AT ALL TIMES.



ELEVATION

ESTIMATED QUANTITIES

EXISTING STRUCTURE
TYPE: CONTINUOUS STEEL BEAMS WITH CONCRETE DECK AND CONCRETE SUBSTRUCTURE
SPAN: 56'-70'-56' C/C BEARINGS
ROADWAY: 60' F/F CURBS INCLUDING 4' MEDIAN PLUS 1'-9" SAFETY CURBS
LOADING: S-20-46
SKEW: 32°-17' RF
SURFACE COURSE: BITUMINOUS

PROPOSED STRUCTURE
TYPE: EXISTING CONTINUOUS STEEL BEAMS AND CONCRETE SUBSTRUCTURE. PROPOSED CONCRETE DECK.
SPAN: 56'-70'-56' C/C BEARINGS
ROADWAY: 30'-3" F/F SAFETY PARAPET EACH ROADWAY
LOADING: HS-20-44 (DECK ONLY)
SKEW: 32°-17' RF
WEARING SURFACE: CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)

ITEM	TOTAL	UNIT	DESCRIPTION	ITEM	TOTAL	UNIT	DESCRIPTION
202	LUMP SUM	LUMP SUM	PORTIONS OF STRUCTURES REMOVED, DECK				
202	24	CU.YD.	PORTIONS OF STRUCTURES REMOVED, BACKWALL				
511	312	CU.YD.	CLASS S CONCRETE, DECK, AS PER PLAN	516	180	LIN.FT.	STRUCTURAL STEEL EXPANSION JOINTS INCLUDING ELASTOMERIC COMPRESSION SEALS
511	75	CU.YD.	CLASS S CONCRETE, PARAPET, AS PER PLAN	510	140	EACH	DOWEL HOLES
511	22	CU.YD.	CLASS C CONCRETE, BACKWALL	516	20	EACH	LAMINATED ELASTOMERIC BEARINGS (8'X11'X1/4" LAMINATED ELASTOMERIC PAD WITH 9'X12'1/2'X1" STEEL LOAD PLATE), AS PER PLAN (50 DUREMETER)
509	34636	LB	REINFORCING STEEL	518	10	CU.YD.	POROUS BACKFILL
824	45384	LB	EPOXY COATED REINFORCING STEEL	SPECIAL	3	LIN FT	PILE ENCASEMENT PREPARATION
				SPECIAL	2	EACH	JACKING AND REPOSITIONING SUPERSTRUCTURE
				SPECIAL	3	LIN FT	PILE ENCASEMENT
				SPECIAL	LUMP SUM	LUMP SUM	SURFACE PREPARATION
				SPECIAL	LUMP SUM	LUMP SUM	BRIDGE PAINTING

ITEM 202 PORTIONS OF STRUCTURE REMOVED, DECK
DECK REMOVAL PLANS SHALL BE APPROVED BY THE DIRECTOR. FOR SUCH APPROVAL, SEVEN (7) COPIES OF THE PLANS SHALL BE SUBMITTED AT LEAST FIFTEEN (15) DAYS BEFORE WORK IS SCHEDULED TO BEGIN. APPROVAL OF THE DECK REMOVAL PLANS MUST BE OBTAINED BEFORE WORK MAY BEGIN. APPROVAL OF THE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF THE DECK REMOVAL METHOD.
NO MATERIAL SHALL BE ALLOWED TO DROP ONTO THE RAILROAD TRACK AT ANY TIME. WHEN REMOVING THE DECK, THE CONTRACTOR SHALL EXERCISE CARE TO PREVENT DAMAGE TO THOSE 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.
PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, DECK; WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

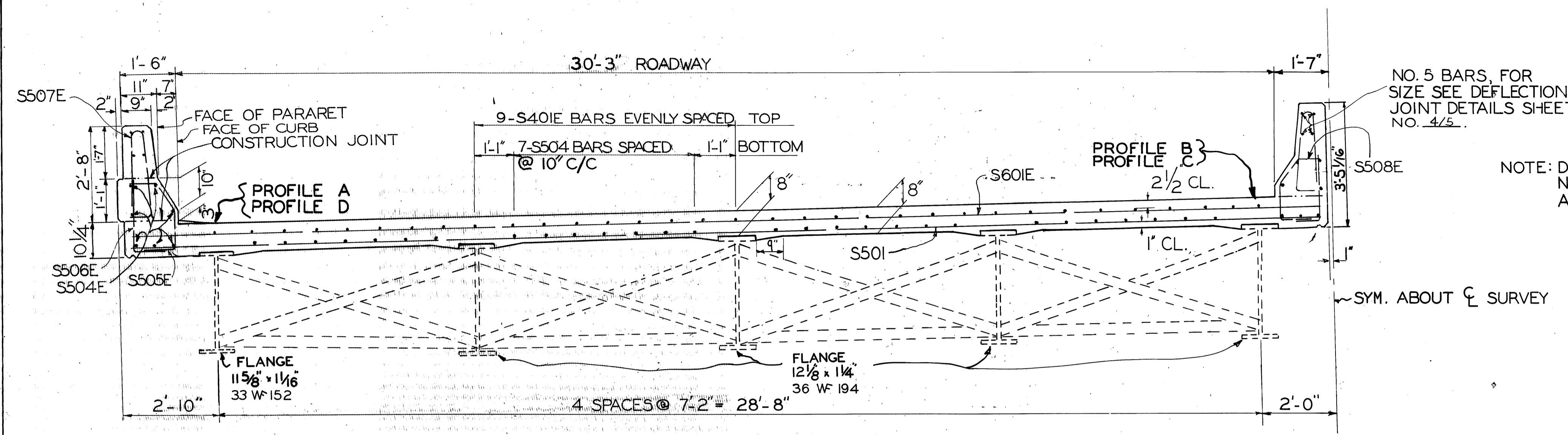
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STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

GENERAL PLAN, ELEVATION
AND ESTIMATED QUANTITIES

WAY-30-2060 R & L

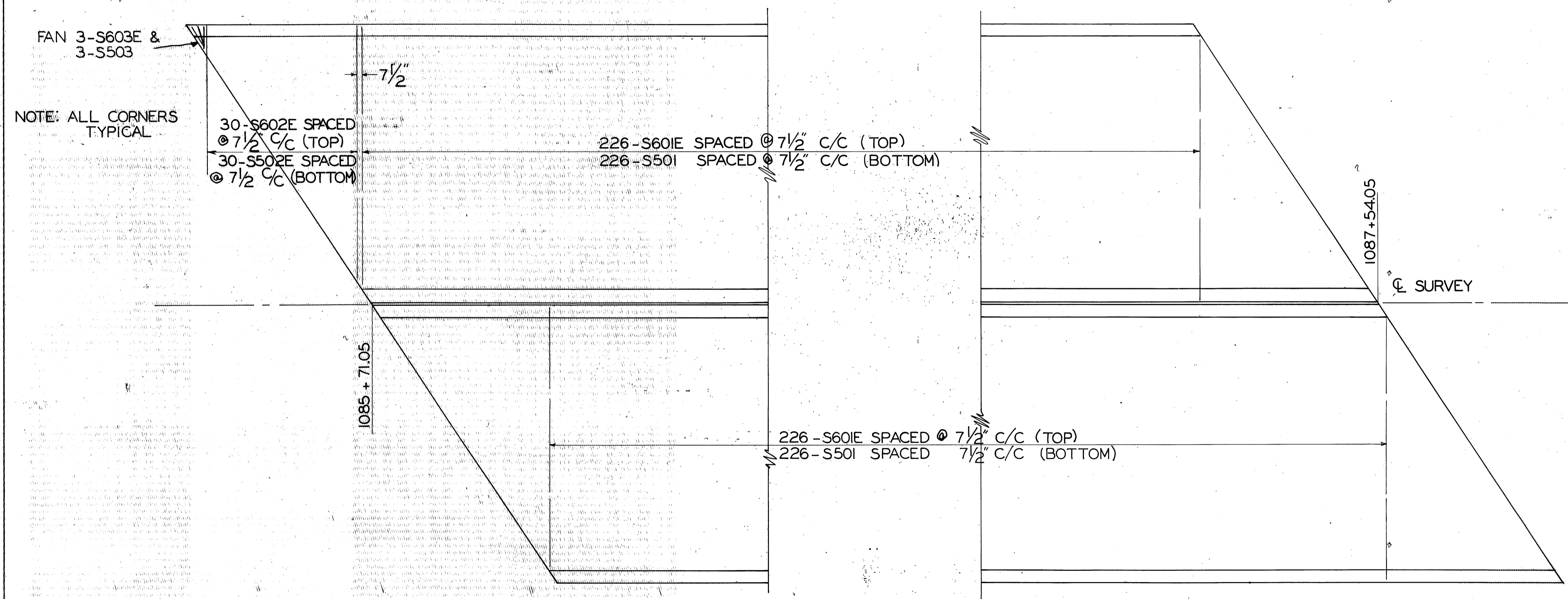
DESIGNED	DRAWN	TRAGED	CHECKED	REVIEWED	DATE	REVISION
KW	DES	DES	BOB	Hand	4-18-83	



DECK GRADES

LOCATION		LEFT BRIDGE		RIGHT BRIDGE	
		A	B	C	D
C BEARING FWD. ABUT.	STATION	1087+34.17	1087+52.29	1087+54.81	1087+72.93
	ELEVATION	1045.03	1045.48	1045.48	1045.03
3/4 POINT	STATION	1087+20.17	1087+38.29	1087+40.81	1087+58.93
	ELEVATION	1045.05	1045.51	1045.51	1045.06
1/2 POINT	STATION	1087+06.17	1087+24.29	1087+26.81	1087+44.93
	ELEVATION	1045.05	1045.52	1045.52	1045.08
1/4 POINT	STATION	1086+92.17	1087+10.29	1087+12.81	1087+30.93
	ELEVATION	1045.00	1045.48	1045.48	1045.06
C BEARING PIER NO. 2	STATION	1086+78.17	1086+96.29	1086+98.81	1087+16.93
	ELEVATION	1044.94	1045.43	1045.43	1045.01
3/4 POINT	STATION	1086+60.67	1086+78.79	1086+81.31	1086+99.43
	ELEVATION	1044.91	1045.41	1045.42	1045.01
1/2 POINT	STATION	1086+43.17	1086+61.29	1086+63.81	1086+81.93
	ELEVATION	1044.88	1045.39	1045.39	1045.00
1/4 POINT	STATION	1086+25.67	1086+43.79	1086+46.31	1086+64.43
	ELEVATION	1044.77	1045.29	1045.31	1044.91
C BEARING PIER NO. 1	STATION	1086+08.17	1086+26.29	1086+28.81	1086+46.93
	ELEVATION	1044.65	1045.19	1045.20	1044.83
3/4 POINT	STATION	1085+94.17	1086+12.29	1086+14.81	1086+32.93
	ELEVATION	1044.60	1045.15	1045.16	1044.80
1/2 POINT	STATION	1085+80.17	1085+98.29	1086+00.81	1086+18.93
	ELEVATION	1044.54	1045.09	1045.10	1044.76
1/4 POINT	STATION	1085+66.17	1085+84.29	1085+86.81	1086+04.93
	ELEVATION	1044.42	1044.99	1045.00	1044.66
C BEARING REAR ABUT.	STATION	1085+52.17	1085+70.29	1085+72.81	1085+90.93
	ELEVATION	1044.29	1044.87	1044.88	1044.55

NOTE: ELEVATIONS SHOWN ARE AT QUARTER POINTS OF SPANS OVER OUTSIDE BEAMS OF EACH STRUCTURE. ELEVATIONS ARE THOSE WHICH ARE REQUIRED BEFORE DECK CONCRETE IS PLACED TO ALLOW FOR DEAD LOAD DEFLECTION.



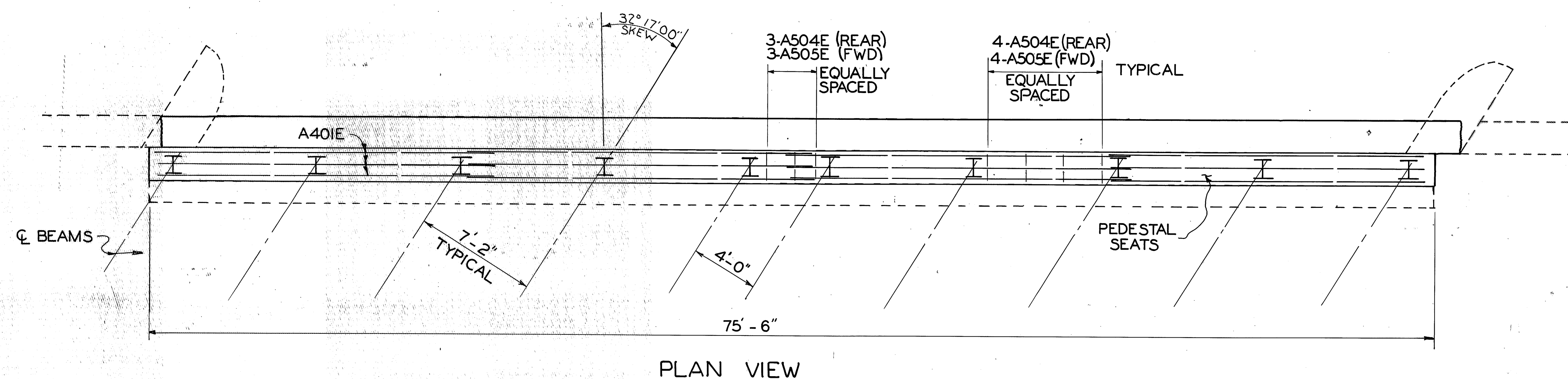
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AUG 11 1986

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

SUPERSTRUCTURE DETAILS

WAY-30-2060 R & L

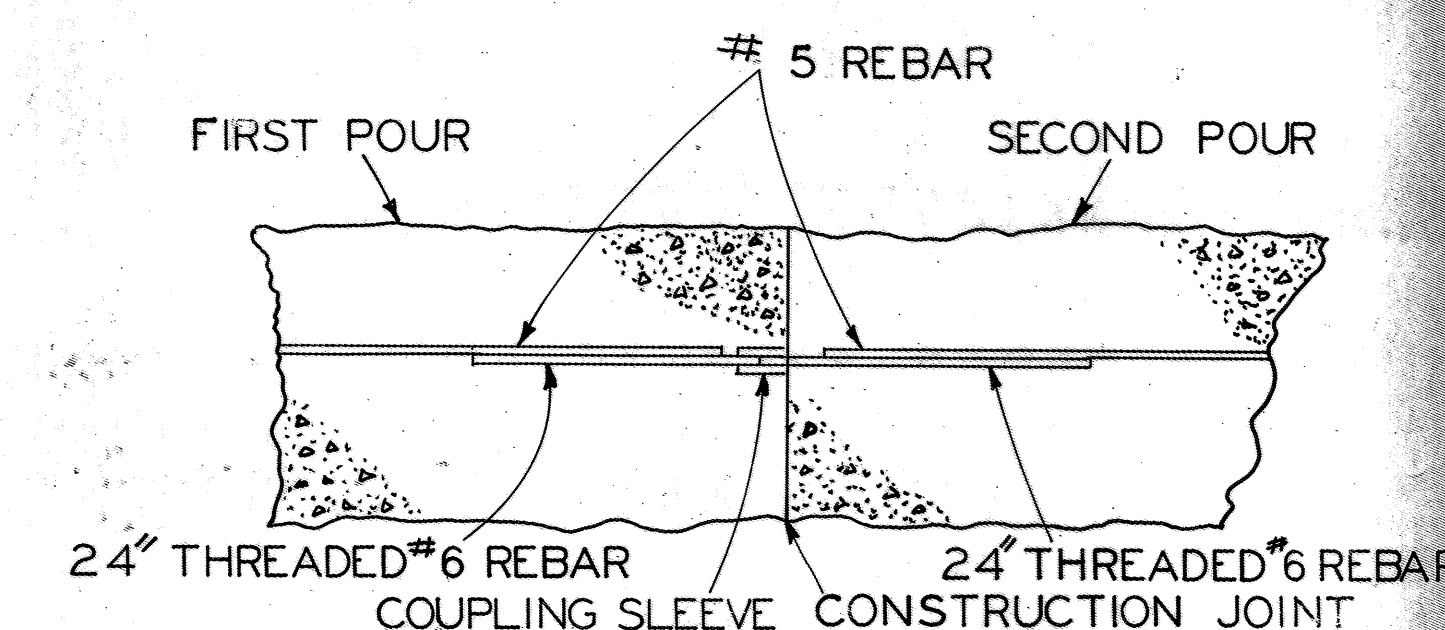
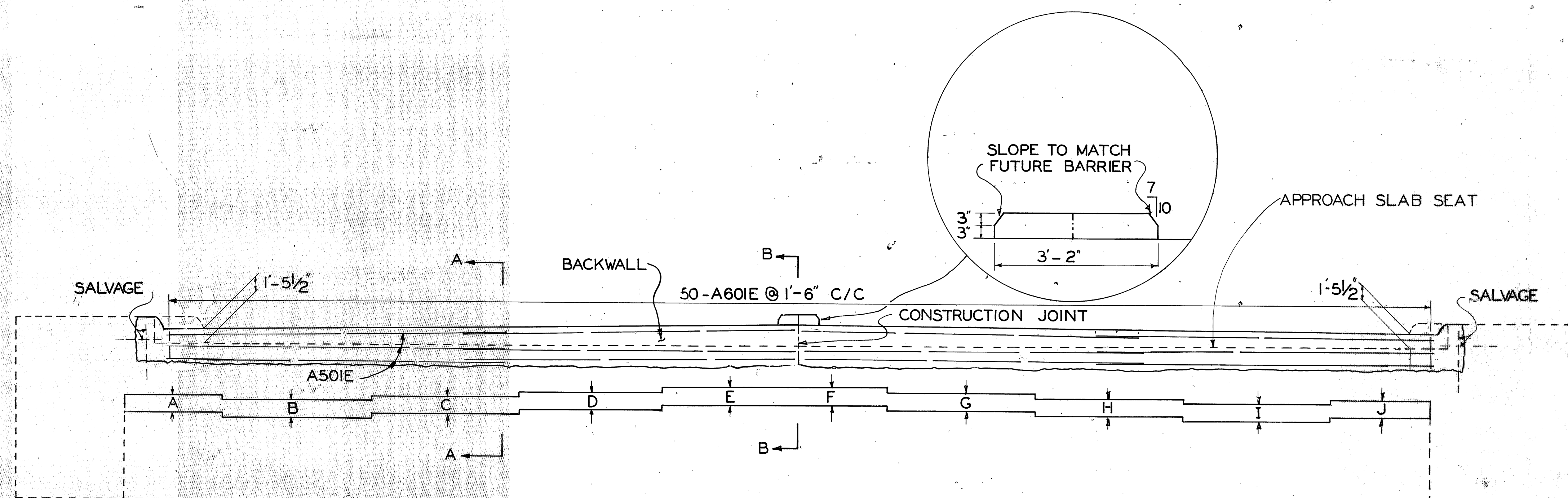
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATL	REVISED
KW	DS	DS		A. Boyd		4-28-83



PLAN VIEW

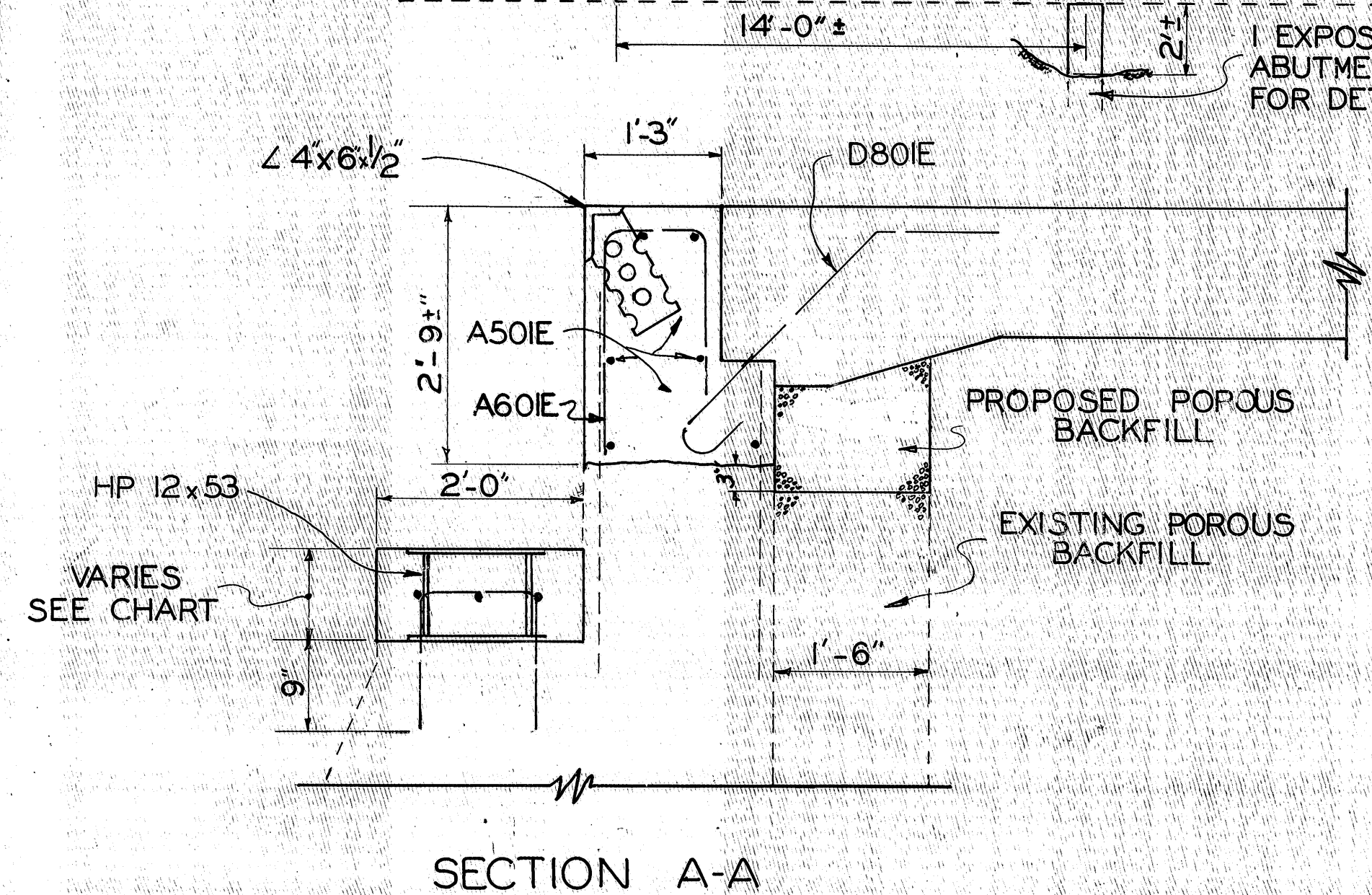
PEDESTAL HEIGHT

	EAST ABUT.	WEST ABUT.
A	7 1/2	12
B	7 3/8	12 7/8
C	7 3/4	12 3/8
D	7 7/8	12 1/4
E	8 1/8	13 1/8
F	8 5/8	12 1/2
G	9 1/8	12 3/8
H	9 3/8	12
I	9 3/4	12 1/4
J	10	11 5/8

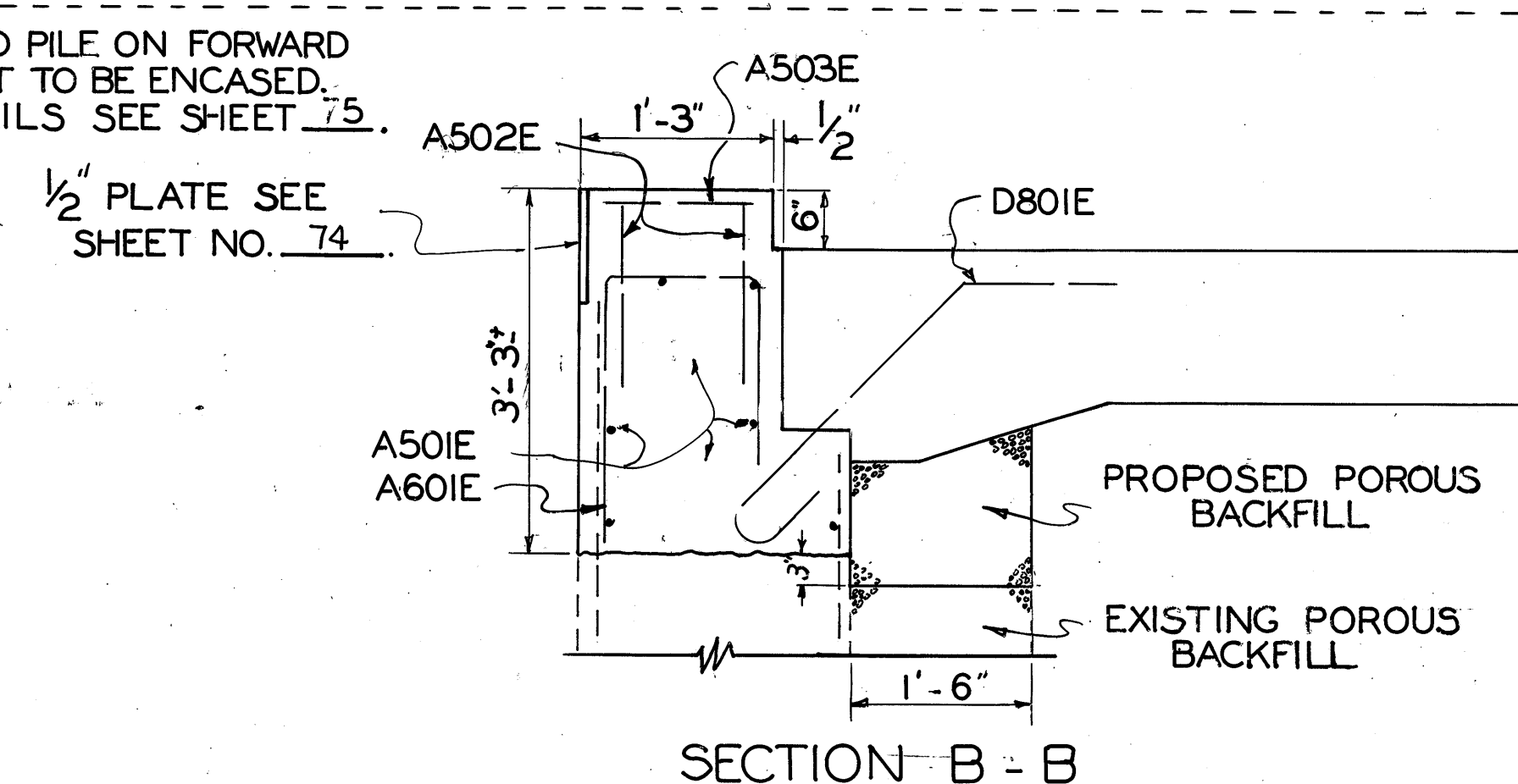


THE ABOVE DETAIL SHALL BE USED WHERE REQUIRED FOR LAPS WHEN INSUFFICIENT ROOM IS AVAILABLE FOR THE LAP LENGTH EXTENDING INTO THE NEXT POUR. THE SYSTEM USED SHALL BE THAT PROVIDED BY WILLIAMS FORM ENGINEER CORP., P.O. BOX 7343, GRAND RAPIDS, MI 49510 OR EQUAL. COST OF THE ABOVE CONNECTION SHALL BE INCLUDED IN ITEM 824-EPOXY COATED REINFORCING STEEL.

LAP SPLICE AT CONSTRUCTION JOINT



SECTION A-A



SECTION B-B

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AUG 1 1986

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

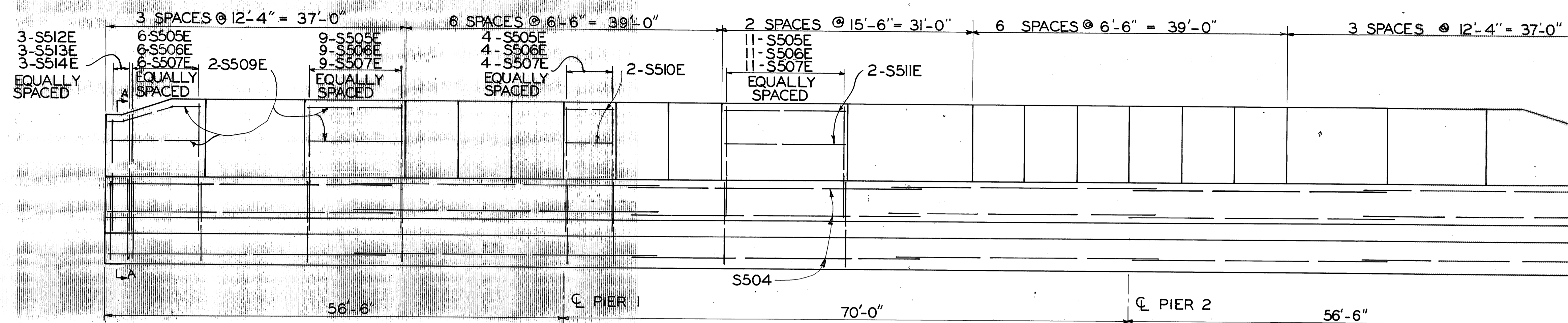
3/5

ABUTMENT DETAILS

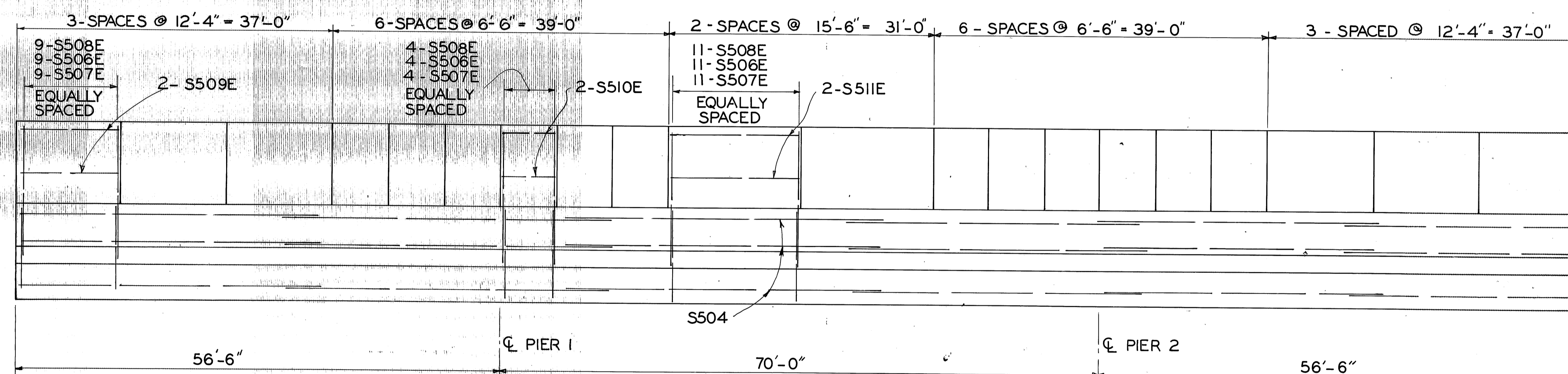
WAY -30-2060

DESIGNED	DRAWN	TRAGED	CHECKED	REVIEWED	DATE	REVISED
KW	DES	DES		<i>[Signature]</i>	4-28-83	

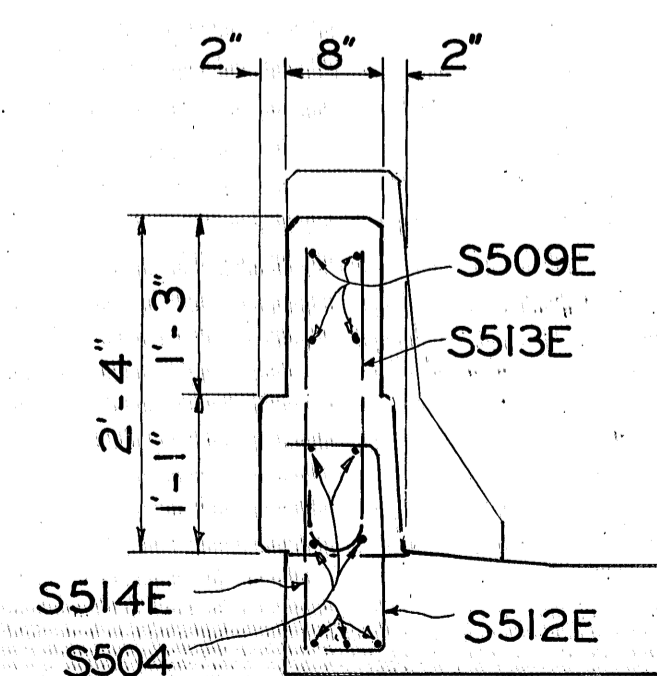
NOTE: HOLES FOR SPLICE BOLTS ATTACHING GUARDRAIL TO THE TERMINAL CONNECTOR AT ENDS OF PARAPETS SHALL BE SLOTTED 29/32 x 3 AND ALL BOLTS SHALL BE TIGHTENED AS SPECIFIED FOR EXPANSION JOINTS AS PER CMS 606.05 TO ALLOW FOR BRIDGE MOVEMENT.



DEFLECTION JOINT SPACING AT PARAPET



DEFLECTION JOINT SPACING AT MEDIAN PARAPET



SECTION A-A

FOR REINFORCING STEEL LIST, SHEET 5/5, SEE SHEET 73

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AUG 11 1986

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

4/5

DEFLECTION JOINT SPACING

WAY-30-2060 R & L

DESIGNED	DRAWN	TRAGED	CHECKED	REVIEWED	DATE	REVISED
KW	DES	DES		Flap top	4-28-83	

REINFORCING STEEL LIST

BRIDGE NO. WAY-30-2051 R&L					BENDING DIAGRAMS		BRIDGE NO. WAY-30-2060 R&L				
MARK	NO.	LENGTH	SHP.	WEIGHT			MARK	NO.	LENGTH	SHP.	WEIGHT
S501	736	33'-1"	S	25396			S501	452	33'-1"	S	15597
S503	17	2'-6"	S	31			S502	120	3'-5 5/8" TO 32'-2" BY 11 3/8"	S	2230
S504	756	31'-11"	S	25167			S503	12	2'-6"	S	31
S505	128	3-1 TO 32'-1 3/4" BY 11 1/4"	S	2352			S504	504	31'-11"	S	16778
TOTAL				52 946			TOTAL				34636
EPOXY BARS							EPOXY BARS				
S401E	594	31'-8"	S	12565			S401E	396	31'-8"	S	8377
S505E	422	3'-2"	B	1395			S505E	242	3'-2"	B	800
S506E	844	2'-6"	B	2201			S506E	484	2'-6"	B	1262
S507E	844	5'-3"	B	4622			S507E	484	5'-3"	B	2650
S508E	422	2'-11"	B	1284	S508E	242	2'-11"	B	736		
S512E	12	2'-2"	B	27	S509E	96	11'-10"	S	1185		
S513E	12	2'-8"	B	33	S510E	192	6'-0"	S	1202		
S514E	12	2'-9"	S	34	S511E	32	15'-0"	S	501		
S515E	160	12'-0"	S	2003	S512E	12	2'-2"	B	27		
S516E	256	5'-0"	S	1335	S513E	12	2'-8"	B	33		
S517E	64	14'-9"	S	985	S514E	12	2'-9"	S	34		
S601E	736	33'-1"	S	36572	S601E	452	33'-1"	S	22460		
S603E	128	3-1 TO 32'-1 3/4" BY 11 1/4"	S	3387	S602E	120	3'-5 5/8" TO 32'-2" BY 11 7/8"	S	3212		
S604E	12	2'-6"	S	45	S603E	12	2'-6"	S	45		
A402E	24	22'-0"	S	353	A401E	24	20'-0"	S	321		
A504E	39	3'-0"	B	122	A504E	35	3'-0"	B	110		
A505E	39	2'-10"	B	115	A505E	35	2'-10"	B	103		
A502E	4	5'-5"	B	23	A501E	48	21'-0"	S	1051		
A503E	4	1'-0"	S	4	A502E	4	5'-5"	B	23		
A506E	48	20'-6"	S	1026	A503E	4	1'-0"	S	4		
A701E	116	4'-4"	B	1027	A601E	100	4'-4"	B	651		
D801E	44	5'-1"	B	597	D801E	44	5'-1"	B	597		
TOTAL				69755	TOTAL				45384		

REINFORCING STEEL SAMPLES
REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.

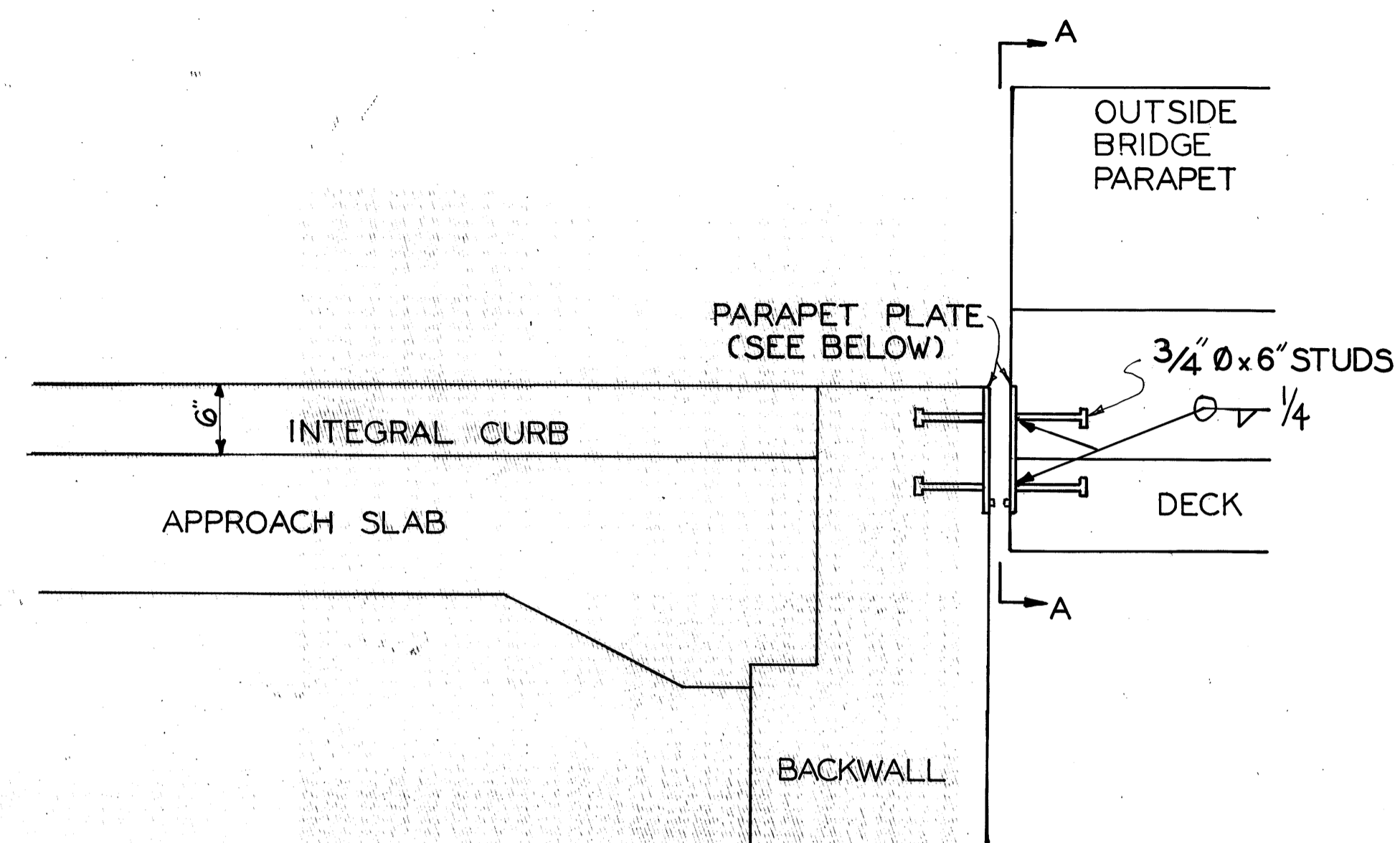
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AUG 11 1988

REINFORCING STEEL LIST

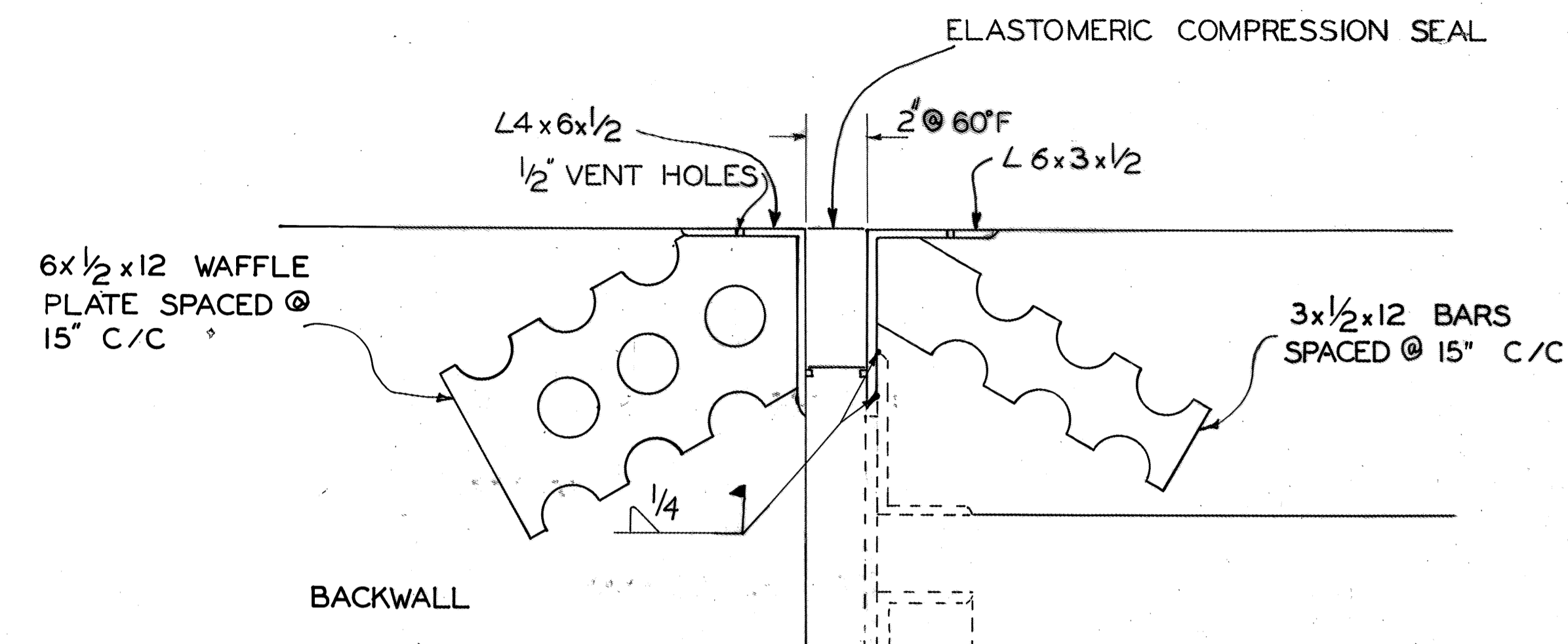
WAY-30-2051 L & R
WAY-30-2061 L & R

Calc. YK
Chkd. DE

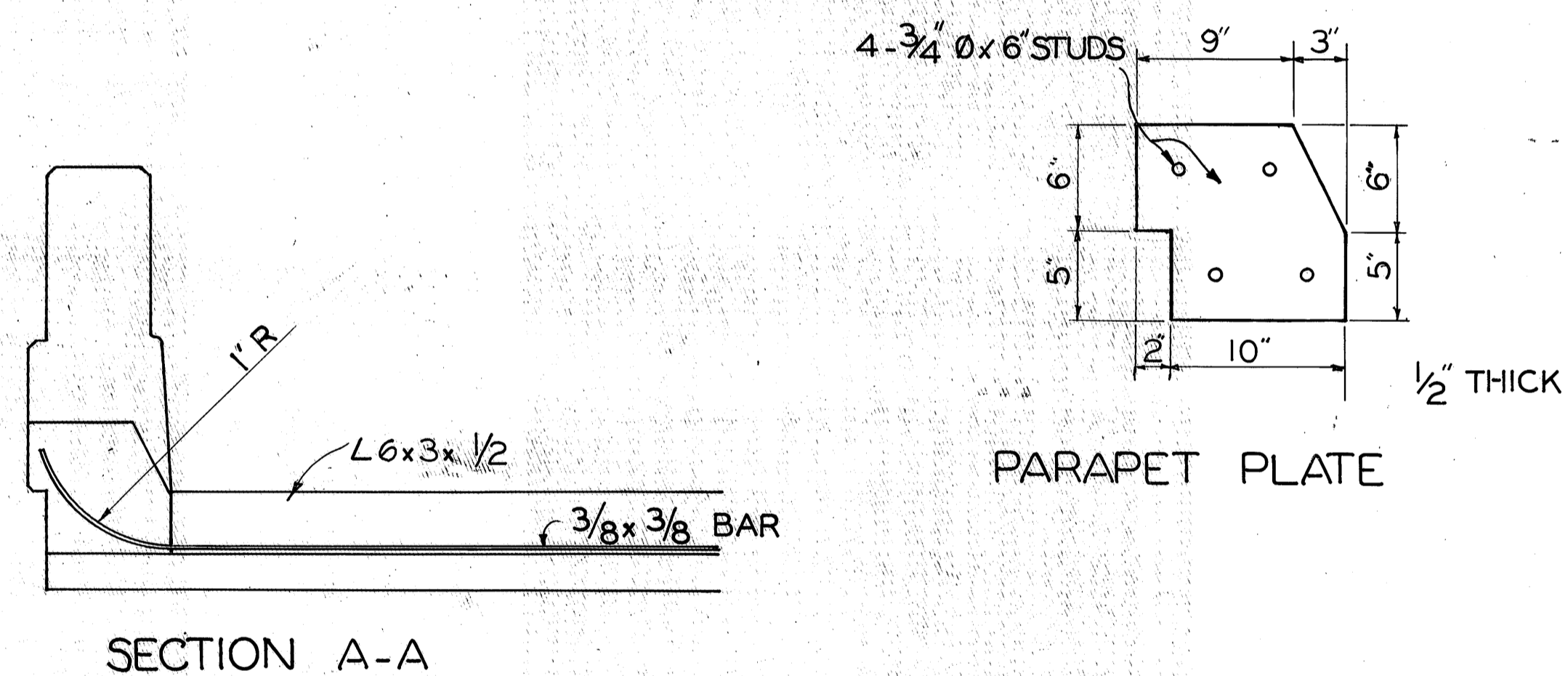
NOTE: STEEL MEMBERS SHALL BE FURNISHED IN LENGTHS AS LONG AS PRACTICABLE. AT ALL FIELD BUTT JOINTS THEY SHALL BE RIGIDLY FASTENED TOGETHER AS REQUIRED PRIOR TO PLACING OF CONCRETE.



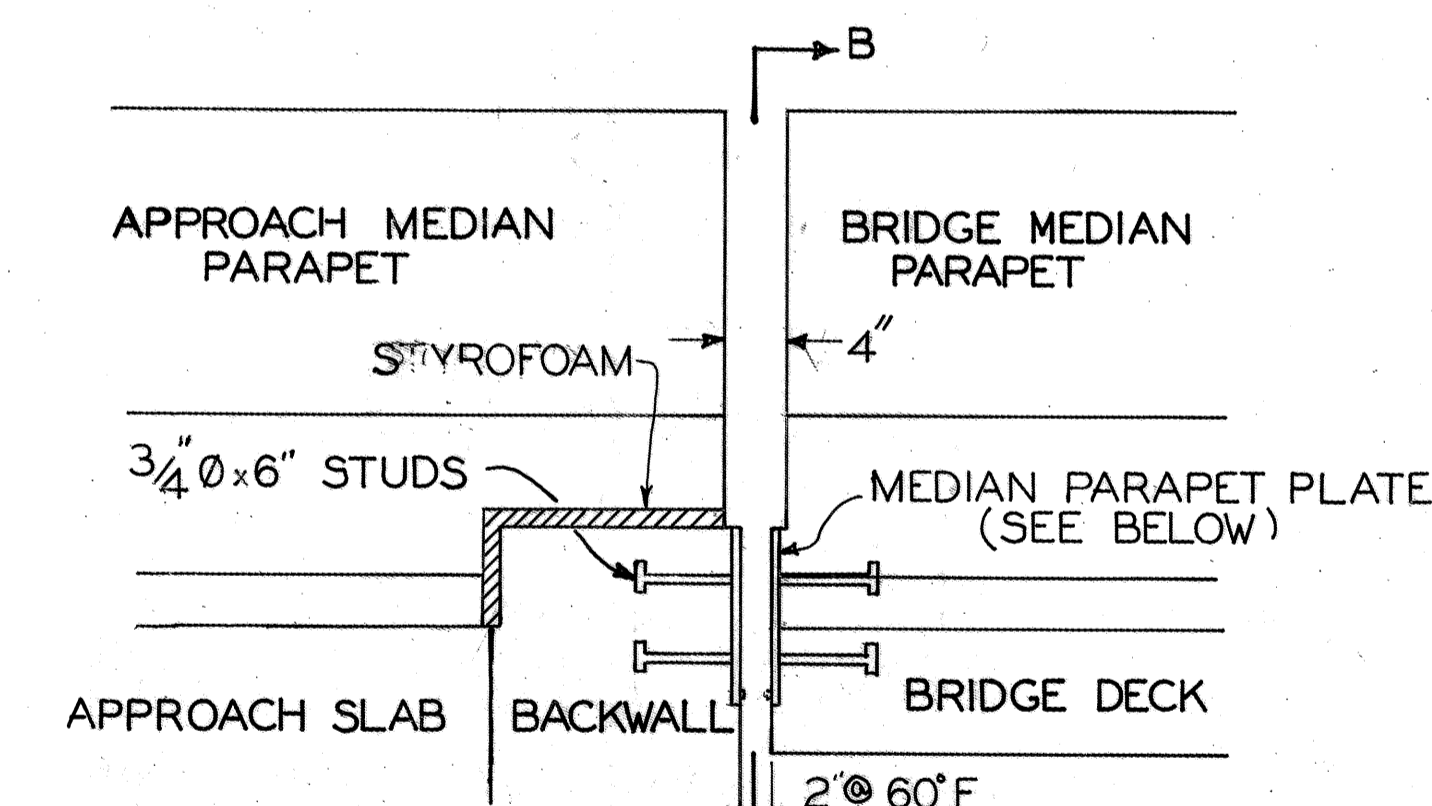
OUTSIDE PARAPET EXPANSION JOINT



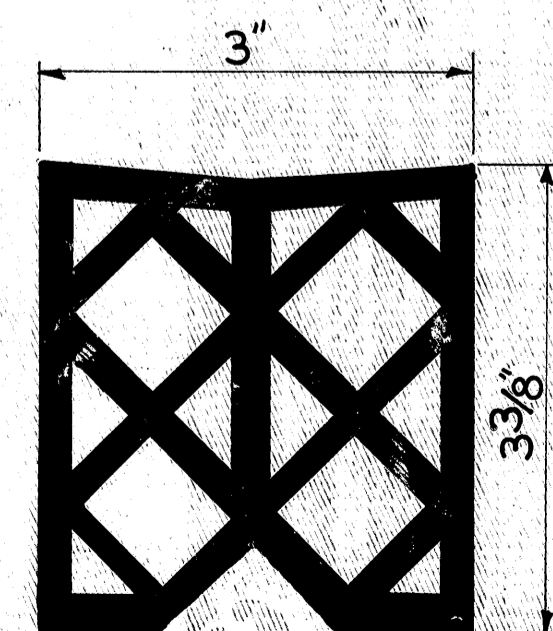
ROADWAY EXPANSION JOINT



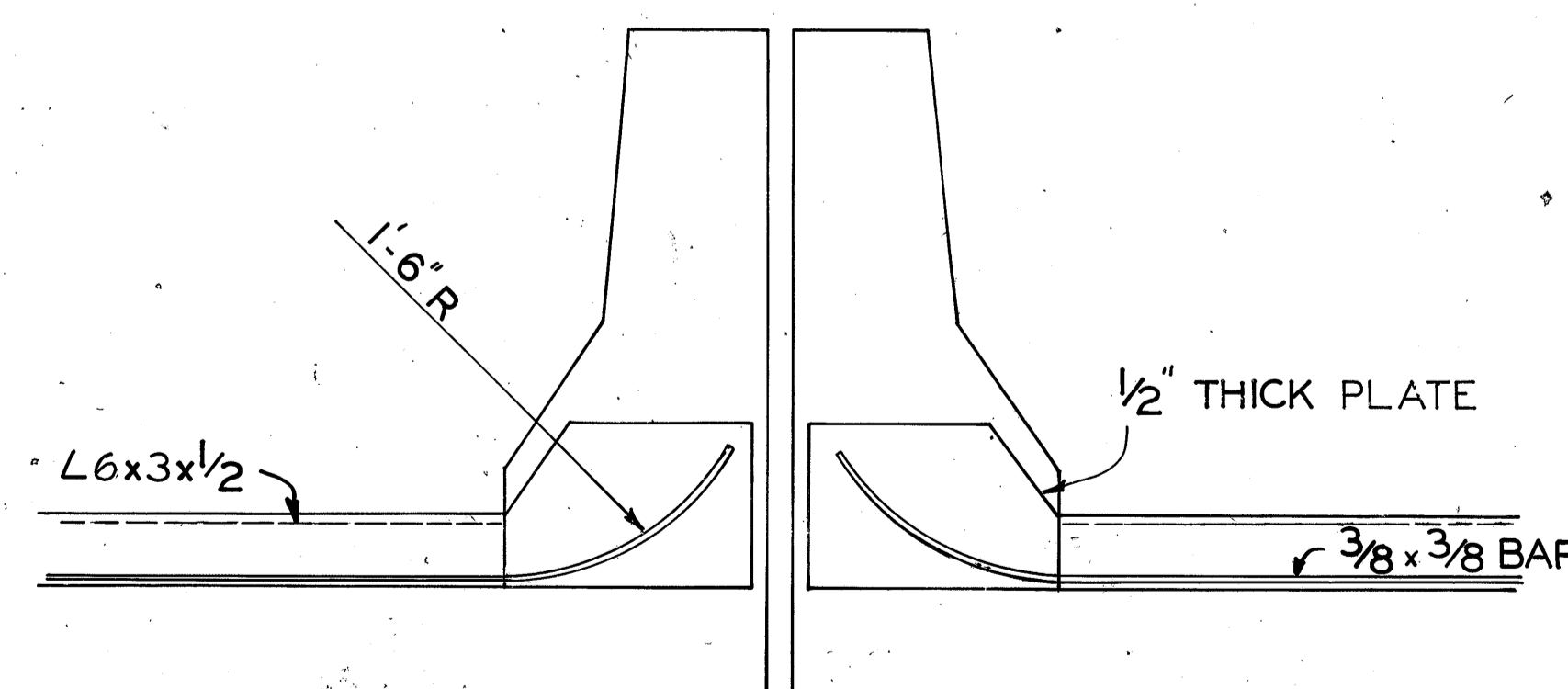
PARAPET PLATE



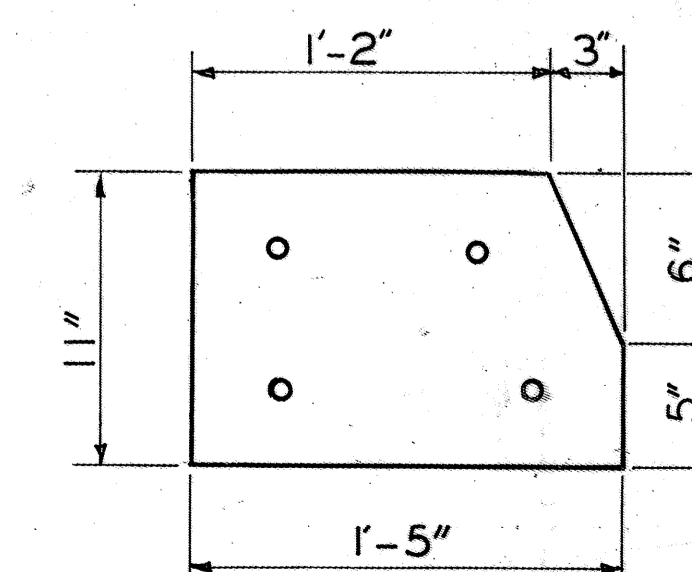
MEDIAN PARAPET EXPANSION JOINT



WD-300 ELASTOMERIC COMPRESSION SEAL



SECTION B-B

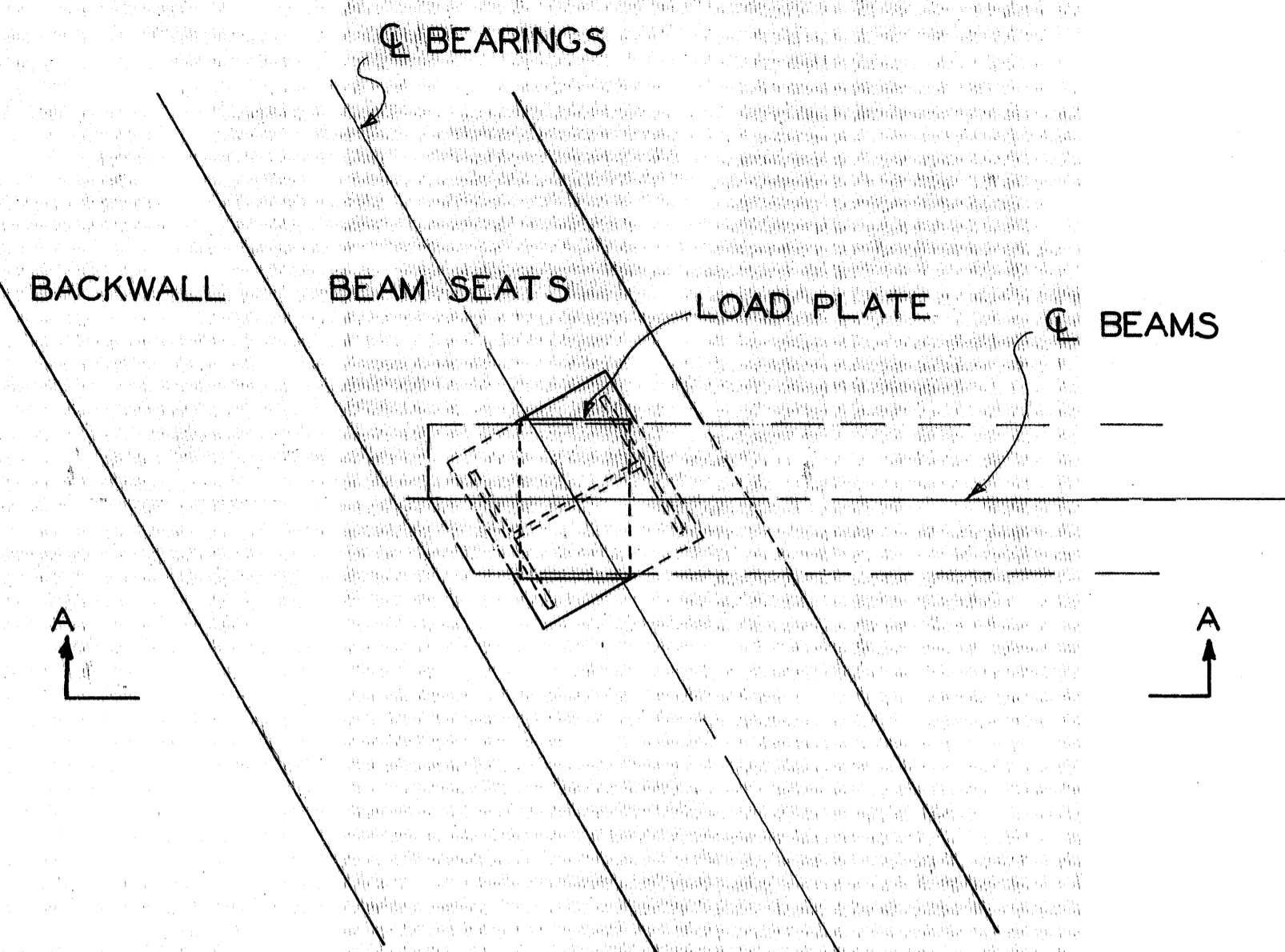


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AUG 11 1986

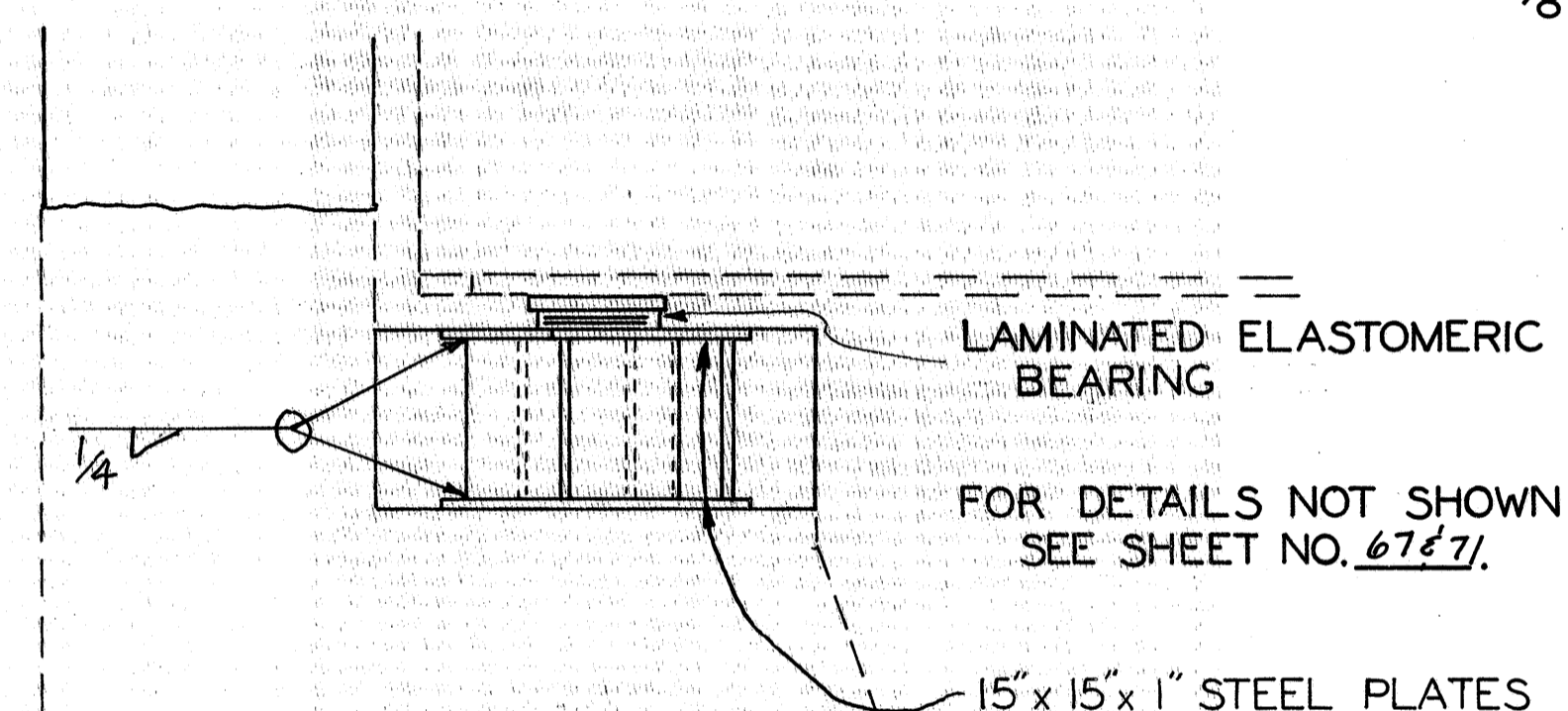
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

EXPANSION JOINT DETAILS
WAY-30-2051 L&R
WAY-30-2060-L&R

DESIGNED	DRAWN	TRAGED	CHECKED	REVIEWED	DATE	REVISED
kw	SES	SES			4-28-83	

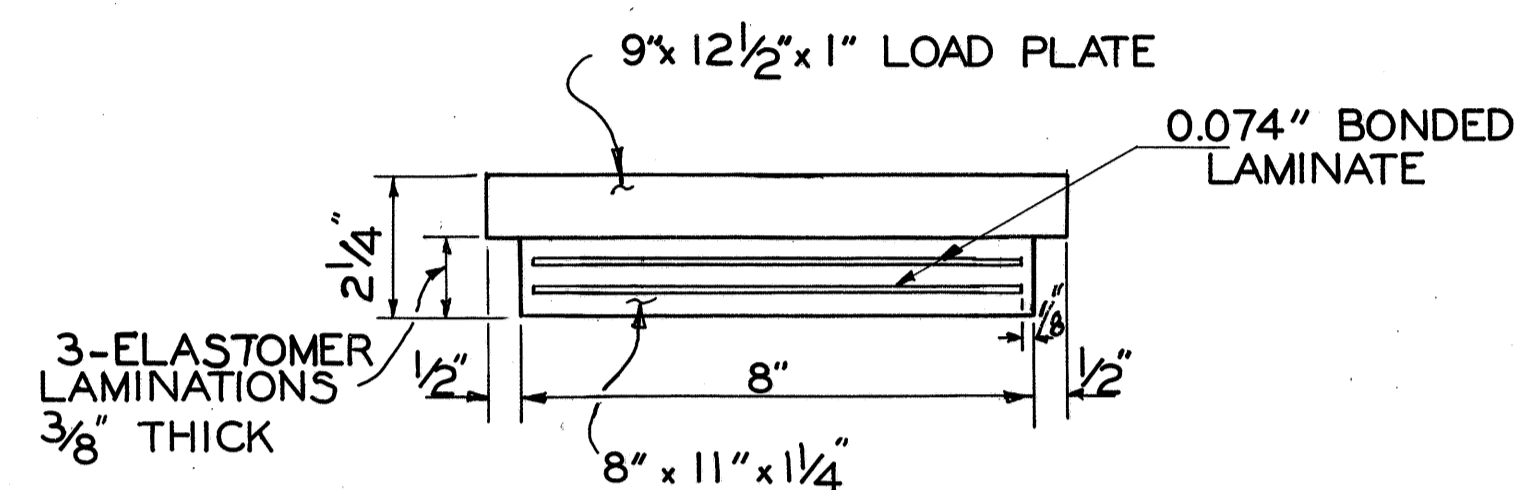


BEARING DETAILS
WAY-30-2060



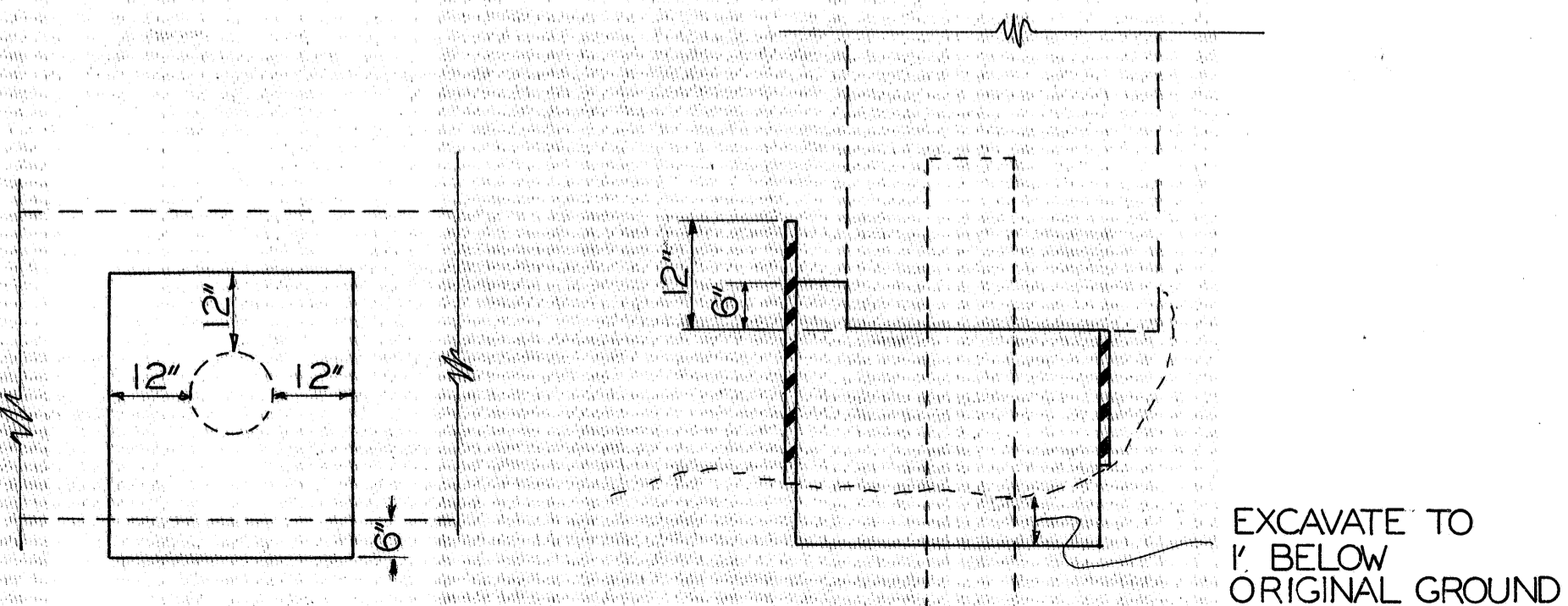
SECTION A-A

NOTE: WELDING SHALL BE CONTROLLED SO THAT THE LOAD PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

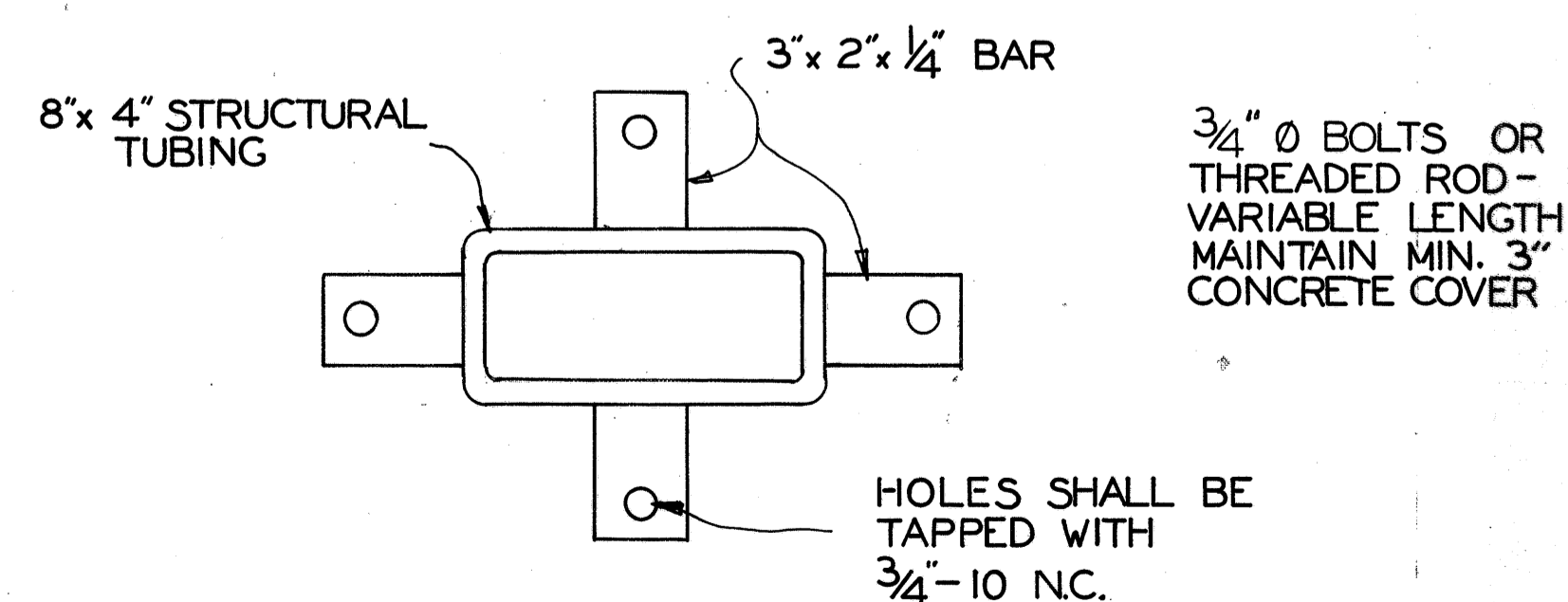


LAMINATED ELASTOMERIC BEARING

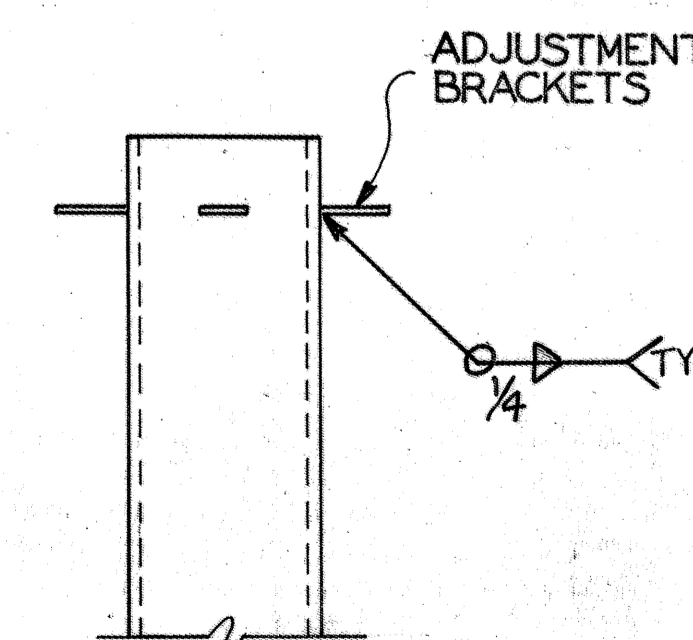
NOTE: FOR LOCATION SEE SHEET NO. 71



PILE ENCASEMENT AT ABUTMENT
WAY-30-2060



SCUPPER DETAILS
WAY-30-2051



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AUG 11 1986

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

MISC. DETAILS
WAY-30-2051 L&R
WAY-30-2060 L&R

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
KW	P27	P23		Ally 4/25/83	4-25-83	