

MICROFILMED
JUN 24 1997

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

MOT-675-0.00

MOT-LYONS ROAD EXTENSION

MIAMI & WASHINGTON TOWNSHIPS

MONTGOMERY COUNTY

I-675-8(14)41
M-IN26(3)

FHWA REGION	STATE	PROJECT
5	OHIO	I-675-8(14)41 M-IN26(3)

1
581

MONTGOMERY COUNTY
MOT-675-0.00
MOT-LYONS ROAD EXTENSION

LIMITED ACCESS

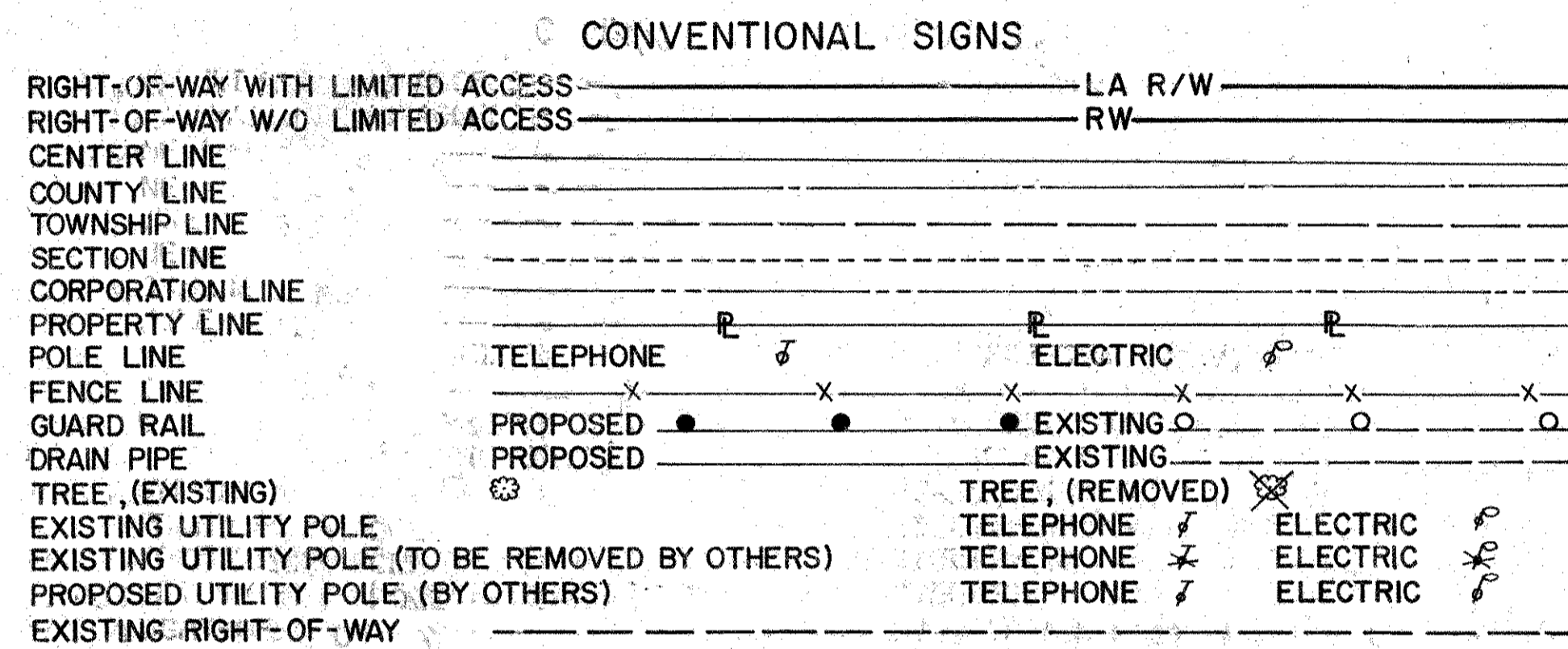
APR 16 1990

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

1979 SPECIFICATIONS

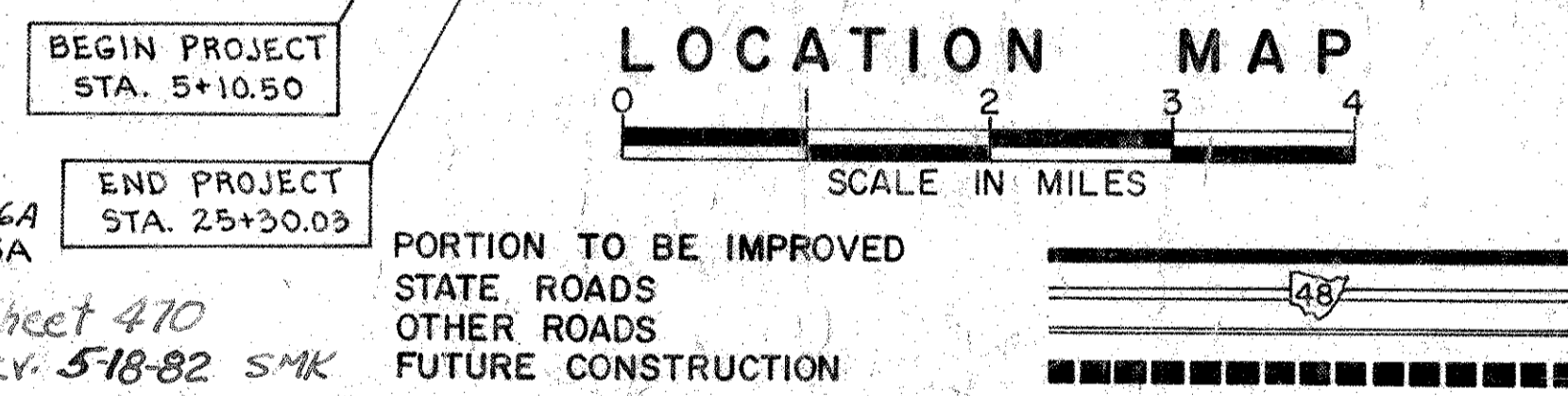
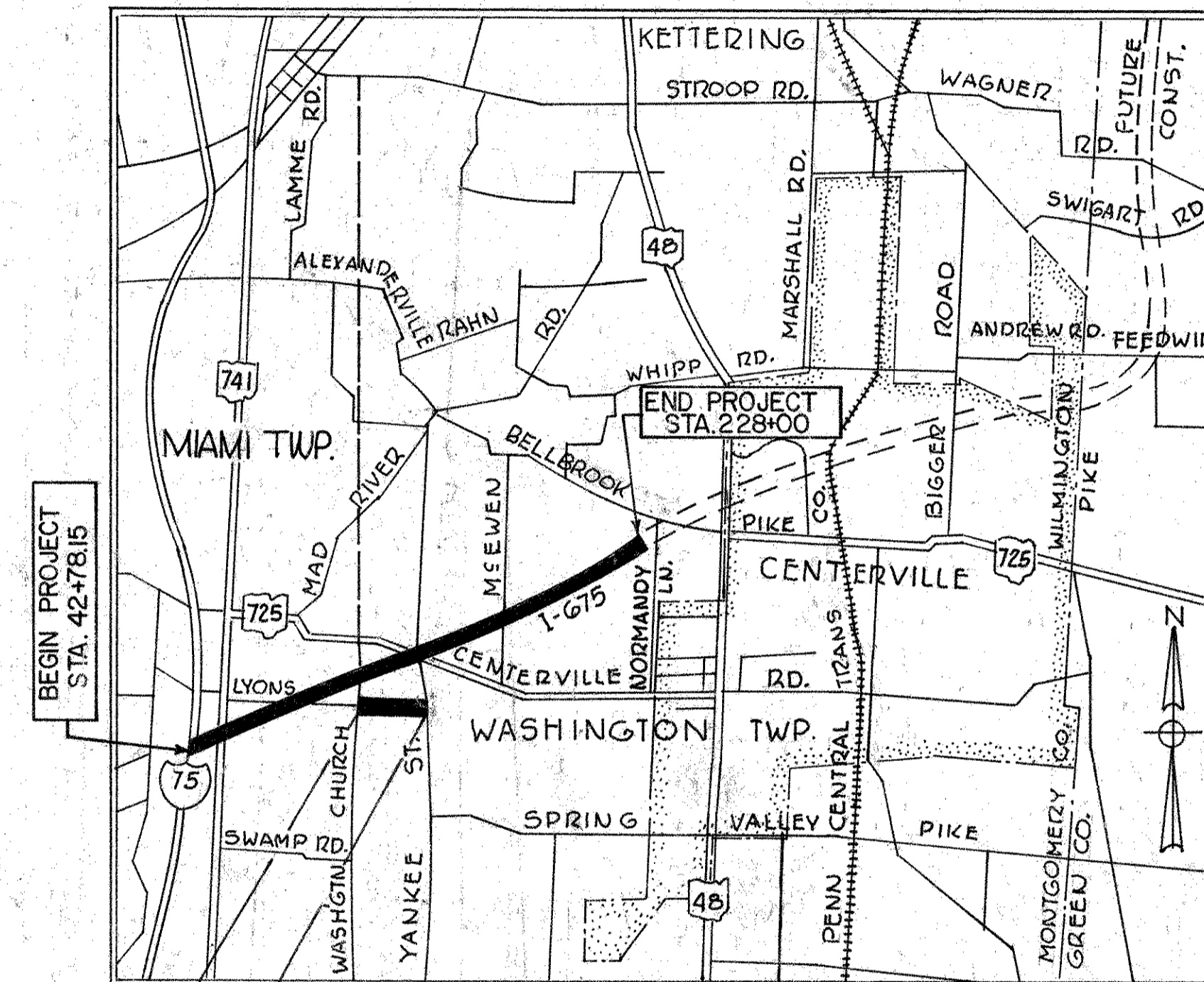
The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

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

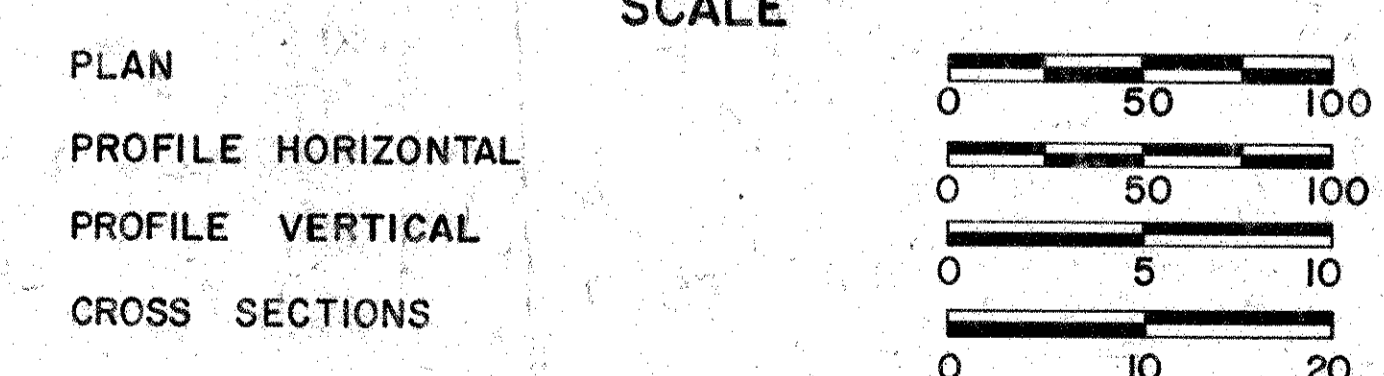


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LINE DATA	I-675-8(14)41	M-IN26(3)
BEGIN PROJECT	42+78.15	5+10.50
END PROJECT	228+00.00	25+30.03
NET LENGTH OF PROJECT	18,521.85 LIN. FT. OR 3.507 MILES	2019.53 LIN. FT. OR 0.382 MILES
ADD FOR APPROACHES (SHEET NO 19)	26,853.69 LIN. FT. OR 5.085 MILES	12.09 LIN. FT. OR 0.002 MILES
NET LENGTH OF WORK	45,375.54 LIN. FT. OR 8.593 MILES	2031.62 LIN. FT. OR 0.384 MILES
TOTAL LENGTH OF WORK = 47,401.16 LIN. FT. OR 8.978 MILES		
TOTAL LENGTH OF PROJECT = 20,541.38 LIN. FT. OR 3.890 MILES		



SUPPLEMENTAL SPECIFICATIONS

847	4-3-76
857	12-19-78
814	1-1-69
836	3-12-75
858	12-19-78
859	12-19-78
927	10-19-81
839	11-25-70
957	12-19-78
958	12-19-78
843	10-23-75
848	3-4-80
959	12-19-78
1001	1-3-77
956	6-26-78

Approved William W. Bragdon
Date 12-3-79 District Deputy Director of Transportation

Approved Robert B. Pfeiffer
Date 10-20-81 Engineer, Bureau of Bridges and Structural Design

Approved Howard E. Nolan
Date 12-21-81 Chief Engineer, Planning and Design

Approved Dwight A. Wain
Date 12-21-81 Director, Department of Transportation

Approved _____
Date _____ Montgomery County Engineer

PLANS PREPARED BY
A. M. KINNEY, INC.
CINCINNATI, OHIO

Supplemental Prints of Standard Construction Drawings

HL-1	9-6-73	HL-10	6-1-79	BR-5	7-16-81	CB-2-3&24	5-1-79	GR-1	12-6-76	MC-1	6-13-69	MH-1	6-12-75	TC-7.65	3-1-79	TC-31.21	3-6-79	TC-51.11	4-3-79	TC-83.20	4-17-79
HL-2	7-27-73	HL-11	6-1-79	BR-6	6-1-65	LA-1	6-1-79	HW-4A	4-1-80	MC-3	6-1-73	MH-3	6-12-75	TC-12.30	6-10-81	TC-32.10	3-8-79	TC-52.10	4-3-79	TC-84.20	4-17-79
HL-3	7-27-73	HL-12	4-6-73	BP-7	12-6-76			GR-2B	12-6-76	MC-4	7-26-76	MH-5	6-12-75	TC-16.20	3-1-79	TC-32.11	3-21-79	TC-52.20	4-3-79	TC-85.20	4-18-79
HL-4	1-21-76	HL-15	1-21-76	BR-9	12-6-76	F-1	5-1-76	GR-3	12-6-76	MC-5	6-12-75	TC-11.10	3-1-79	TC-18.24	4-25-79	TC-41.10	3-26-79	TC-61.10	3-29-79	TC-85.10	10-5-77
HL-5	9-6-73	HL-16	4-6-73	BP-10	1-3-75	F-3	5-1-76	GR-4	12-6-76	MC-7	10-15-76	AS-1-72	6-30-72	TC-18.26	5-31-79	TC-41.20	3-26-79	TC-71.10	4-9-79	TC-41.40	6-18-78
HL-6	3-22-77	BP-1	6-1-65	CB-2-A-B	5-1-79	F-4	5-1-76	GR-4A	7-26-76	MC-8	6-12-75	DBR-2-73	4-10-73	TC-21.10	5-24-79	TC-41.50	3-26-79	TC-72.20	10-26-81	CS-2-73	4-10-73
HL-7	1-21-76	BR-2	12-6-76	CB-4	5-1-79	F-5	5-1-76	GR-5	1-1-71	MC-9	11-1-77	BR-1-67	10-15-71	TC-21.20	5-31-79	TC-42.10	8-19-77	TC-81.10	4-10-79	CPP-2-73	4-10-73
HL-8	1-21-76	BR-3	12-6-76	CB-5	5-1-79	F-6	5-1-76	GR-6	1-1-71	MC-10	5-1-76	RB-1-65	2-2-59	TC-22.10	3-1-79	TC-42.20	3-26-79	TC-82.10	4-11-79	CPA-2-73	4-10-73
HL-9	3-22-77	BR-4	7-16-81	CB-6	5-1-79	GR-2C	12-6-76	HW-4B	4-1-80	MC-11	8-1-78	SD-1-69	6-12-69	TC-22.20	3-1-79	TC-51.10	3-30-79	TC-83.10	4-13-79	TC-41.41	8-2-79

MONTGOMERY COUNTY MOT-675-0.00	
FILE NO.	DATE OF LETTING
CONTRACT NO.	19

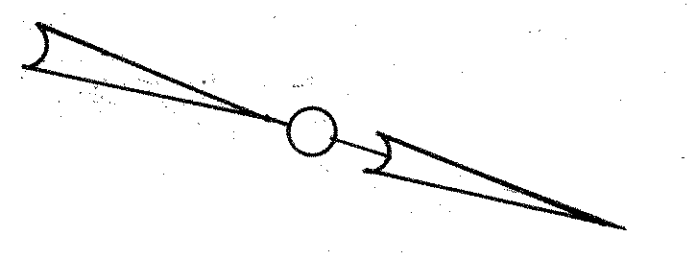
**DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

APPROVED: _____

DIVISION ADMINISTRATOR _____ DATE _____

REV. 12-30-81

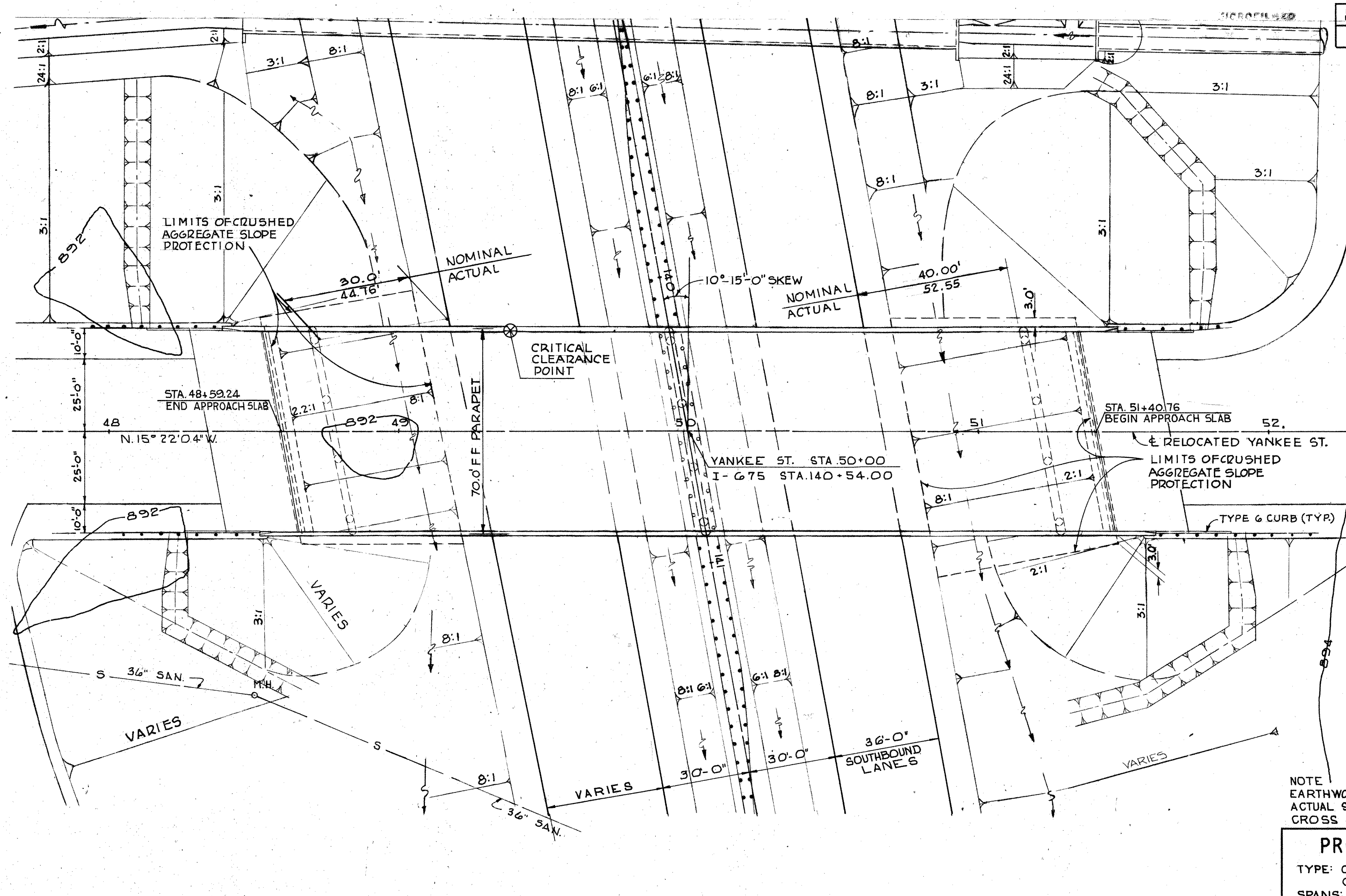
MONTGOMERY COUNTY
MOT-675-0.00



MICROFILMED
OCT 8 1985

ESTIMATED 2000 ADT
I.R. 675 = 25,664 V.P.D.
YANKEE RD = 7186 V.P.D.
1078 A.D.T.

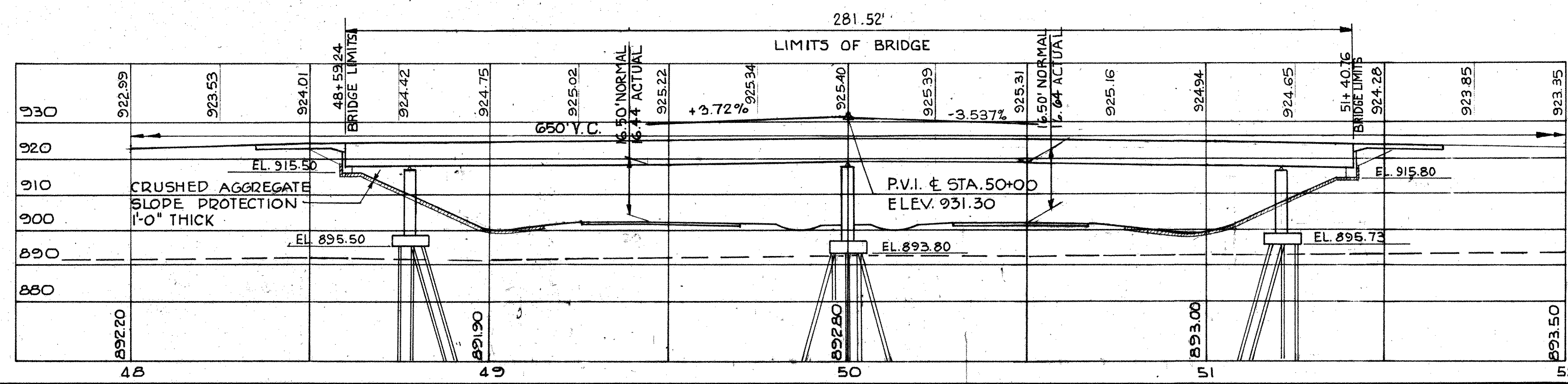
NOTE
EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
ACTUAL SLOPES SHALL CONFORM TO PLAN
CROSS SECTIONS



139+50	892.50				901.98
140+00	892.50				901.84
140+50	892.70				901.71
141+00	892.60				901.57
141+50	893.10				901.44
142+00	892.70				901.30

I.R. 675. PROFILE GRADE - 0.27%

ALL PILES ARE 12" Ø CAST-IN-PLACE
REINFORCED CONCRETE
ESTIMATED AVERAGE PILE LENGTHS
REAR PIER 45'
CENTER PIER 45'
FORWARD PIER 60'



PROPOSED STRUCTURE
TYPE: CONTINUOUS STEEL GIRDER W/ REINF.
CONCRETE DECK AND SUBSTRUCTURE
SPANS: 18'-0" 122'-0" 122'-0" 18'-0"
ROADWAY: 70'-0" F/F PARAPET
LOADING: HS-20-44, CASE II AND THE ALTERNATE MILITARY LOADING.
SKEW: 10°-15'-00" R.F.
ALIGNMENT: TANGENT
SURFACE COURSE: MONOLITHIC CONCRETE
APPROACH SLAB: AS-1-72 (25' LONG)

A. M. KINNEY, INC.
CINCINNATI, OHIO

SITE PLAN
BRIDGE NO. MOT-675-0185
PROPOSED I-675 UNDER
RELOCATED YANKEE STREET
SEC. MOT-675-0.00 STA. 140+54.00
SCALE: 1" = 20'

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED L. GRAFF & ASSOC.	DRAWN M.H.	DESIGNED J.E.N.	DRAWN J.E.H.	CHECKED R.P.D.	REVIEW J.C.O. 9-24-79

GENERAL NOTES

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:
 AS-1-72 DATED 6-30-72
 BR-1-67 REVISED 10-15-71
 SD-1-69 DATED 6-12-69
 RB-1-55 REVISED 2-2-59

AND TO SUPPLEMENTAL SPECIFICATIONS:
 836 DATED 3-12-75
 956 DATED 6-26-78

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD" SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1977 AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:
 DESIGN LOADING - HS 20-44 CASE II AND THE ALTERNATE MILITARY LOADING
 CONCRETE CLASS S - UNIT STRESS 1200 P.S.I. FOR SUPERSTRUCTURE
 CLASS C - UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE
 STRUCTURAL STEEL - ASTM A 36 - UNIT STRESS 20,000 P.S.I.

REINFORCING STEEL - ASTM A615, A616 OR A617 - UNIT STRESS 20,000 P.S.I.
 SPIRAL REINFORCEMENT MAY BE PLAIN BARS
 ASTM A82 OR A615

MONOLITHIC WEARING SURFACE THICKNESS IS ASSUMED TO BE 1"

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

EMBANKMENT CONSTRUCTION: THE MAINLINE EMBANKMENT IN THE AREA OF THE PIERS AND THE APPROACH EMBANKMENT OF YANKEE STREET FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE BACKWALL SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE BEFORE THE CONSTRUCTION OF THE ADJACENT SUBSTRUCTURE UNIT IS BEGUN.

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS PER PILE FOR THE PIERS.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WOULD BE HELD TO A MINIMUM.

THE JACKING HOLES AS CALLED FOR ON STANDARD DRAWING AS-1-72 WILL NOT BE REQUIRED FOR THIS STRUCTURE. ALSO, THE COVER ON THE TOP REINFORCING STEEL IN THE APPROACH SLAB SHALL BE 3" INSTEAD OF 2"

ATTACHMENT OF GUARDRAIL TO CONCRETE PARAPETS: CONCRETE INSERT ANCHOR ASSEMBLIES PER STANDARD CONSTRUCTION DRAWINGS GR-3 & GR-1 SHALL BE PLACED DURING PARAPET CONSTRUCTION.

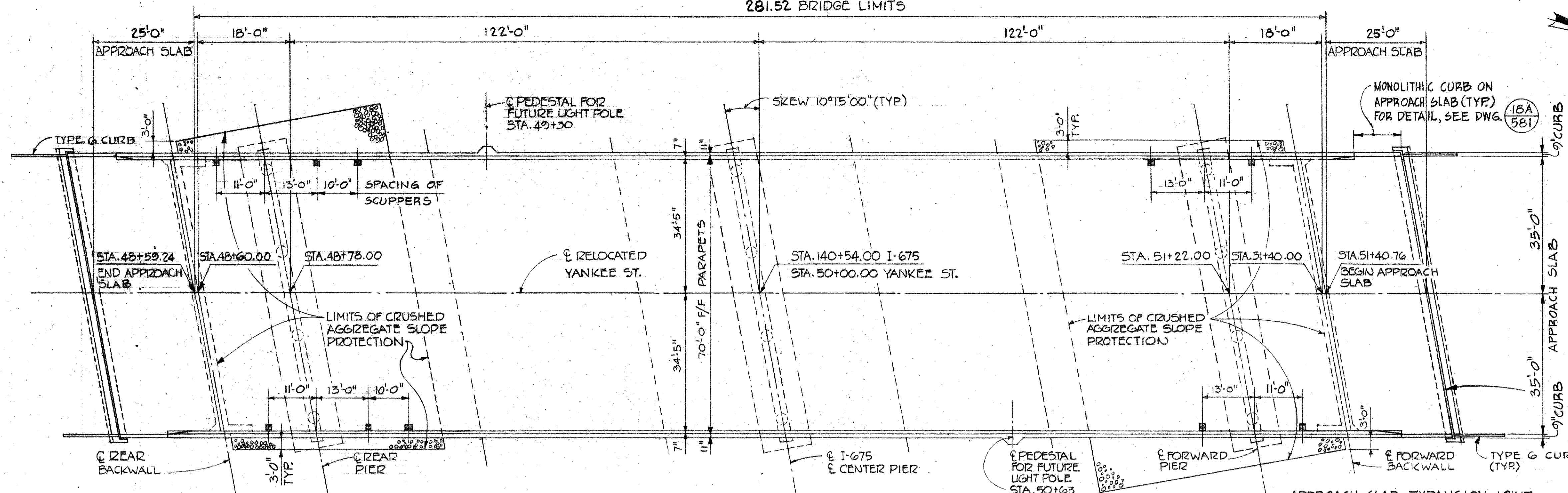
SEE DRAWING (530/581) FOR RESTRICTIONS APPLYING TO CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT, 701.03 FOR ADDITIONAL NOTES, SEE DRAWING (530/581) ALSO FOR NOTE ON CONCRETE PILE ALTERNATE.

A. M. KINNEY, INC.
CINCINNATI, OHIO

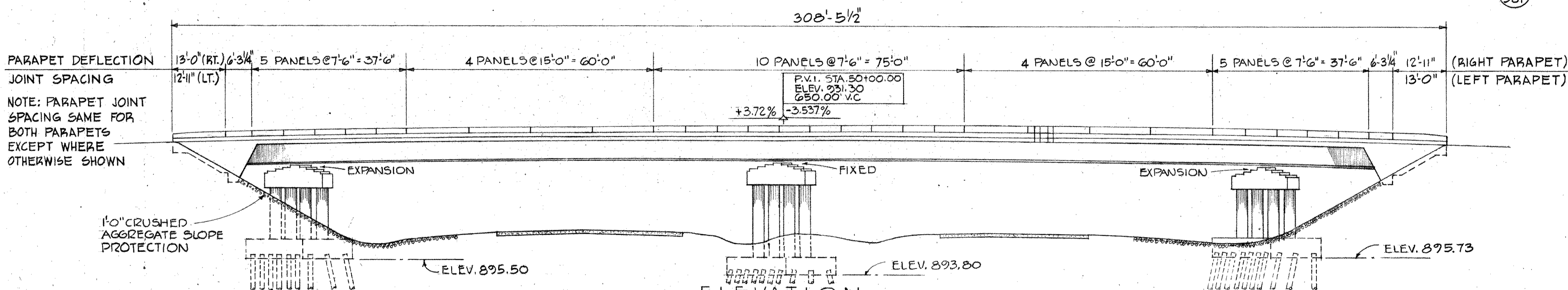
GENERAL PLAN & ESTIMATED QUANTITIES

BRIDGE NO. MOT-675-0185
PROPOSED I-675 UNDER
RELOCATED YANKEE STREET

DESIGNED		DRAWN		TRACED		CHECKED		REVIEWED		DATE		REVISED	
C.T.S.		W.S.		W.S.		J.I.K.		jco		9-24-79			



GENERAL PLAN



ELEVATION

ESTIMATED QUANTITIES

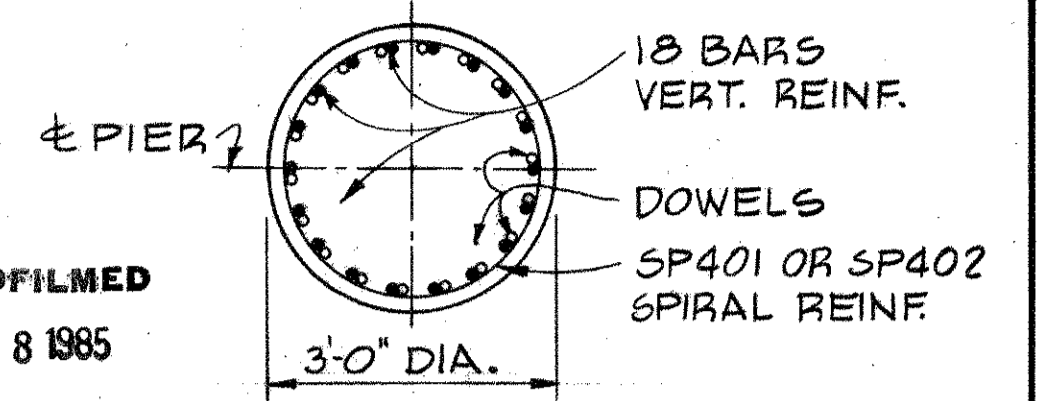
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	PIERS	BACKWALL	GENERAL
503	1464	CU. YD.	UNCLASSIFIED EXCAVATION		1397	67	
505	LUMP	SUM	TEST PILE				LUMP
506	LUMP	SUM	PILE TEST LOAD				LUMP
506	1	EACH	SUBSEQUENT PILE TEST LOAD				1
507	8550	LIN. FT.	12" Ø CAST-IN-PLACE REINFORCED CONCRETE PILES		8550		
509	256705	LB.	REINFORCING STEEL	108860	147845		
SPECIAL	101401	LB.	EPOXY COATED REINFORCING STEEL (SEE PROPOSAL NOTE)	101401			
511	672	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE **	672			
511	168	CU. YD.	CLASS C CONCRETE, PIERS ABOVE FOOTINGS		168		
511	463	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		463		
511	119	CU. YD.	CLASS C CONCRETE, INTEGRAL BACKWALLS & WINGWALLS			119	
512	112	SQ. YD.	TYPE A WATERPROOFING			112	
513	*930500	LB.	STRUCTURAL STEEL (AISC CATEGORY III)	930500			
513	5130	EACH	WELDED STUD SHEAR CONNECTORS	5130			
514	930500	LB.	Field painting of new structural steel, System A	930500			
518	10	EACH	SCUPPERS, INCLUDING SUPPORTS		10		
601	1251	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION			1251	
Special	Lump	SUM	Review of Shop Drawings, major structure design (See Proposal Note)				Lump
523	3	HOURS	DYNAMIC PILE TESTS				3

** USING SHRINKAGE COMPENSATING CEMENT, 701.03

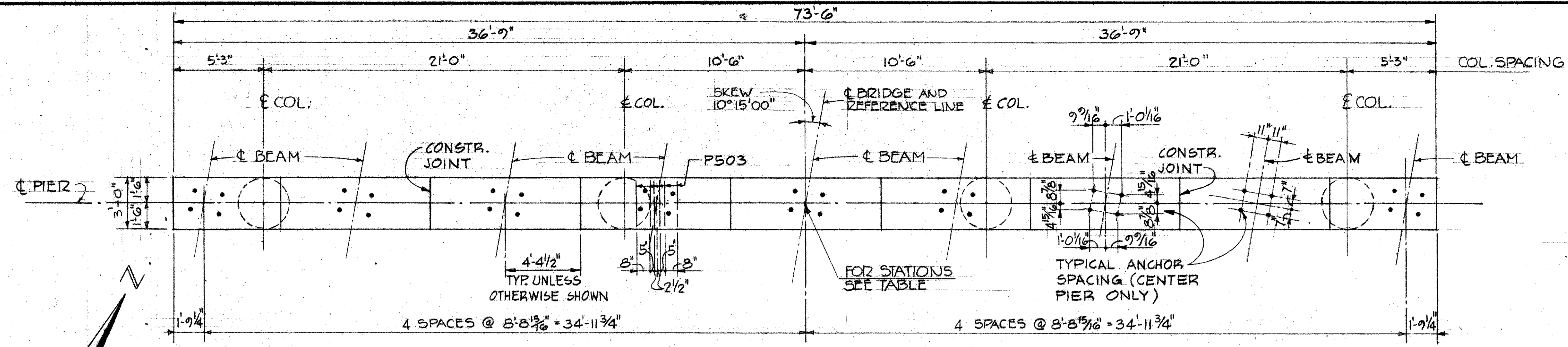
NOTE:
* INCLUDES 2,750 LB. FOR CONDUIT SUPPORTS TO BE PAID FOR BY DAYTON POWER AND LIGHT CO.

MONTGOMERY COUNTY
MOT-675-0.00

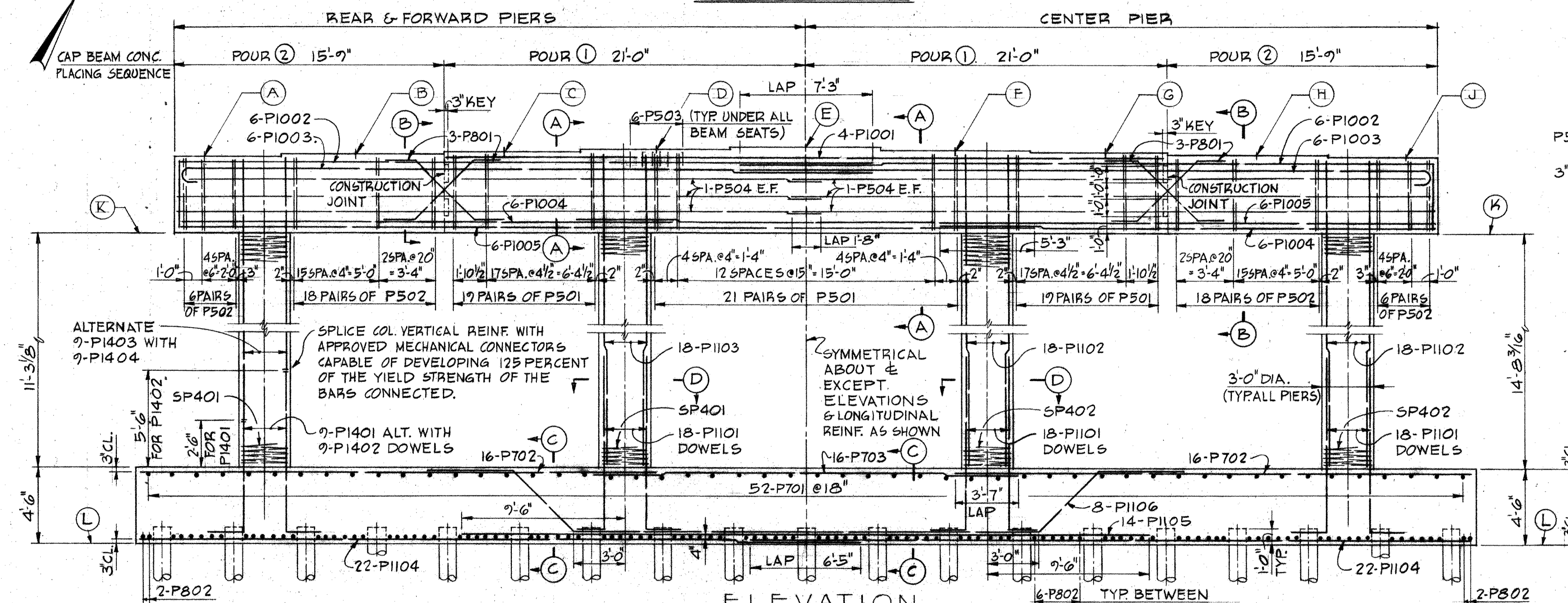
MICROFILMED
OCT 8 1985



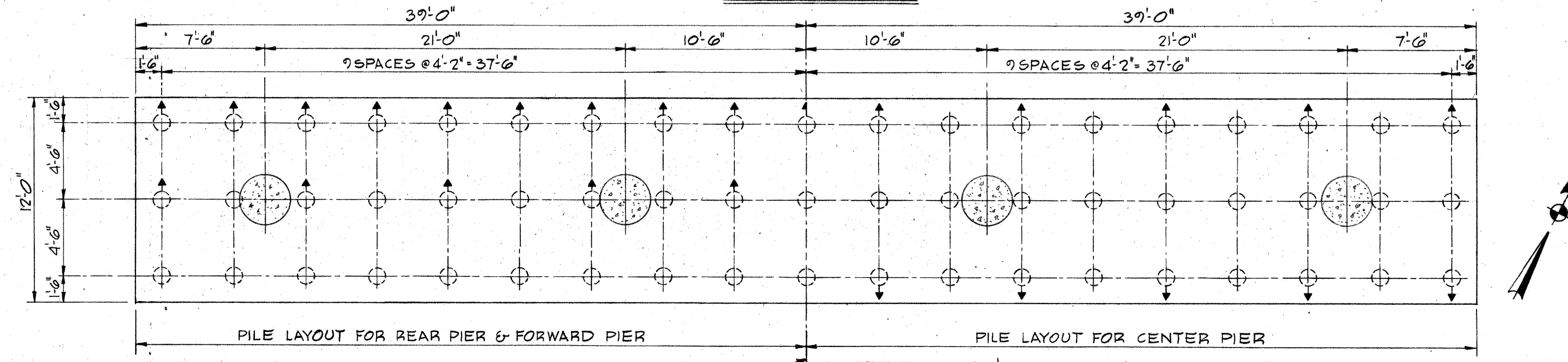
SECTION D-D



CAP PLAN

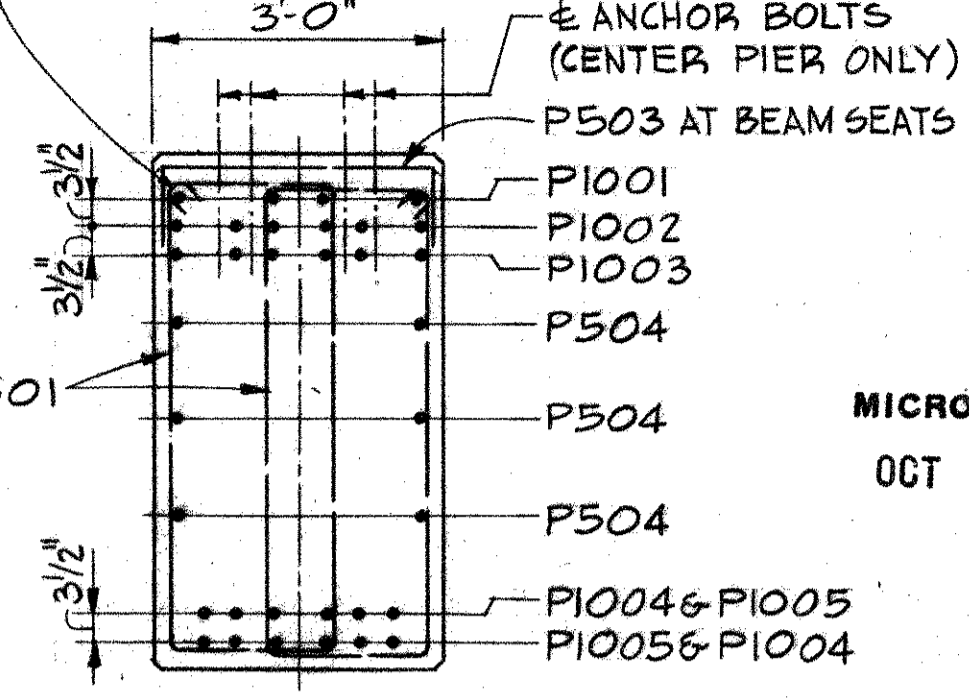


ELEVATION

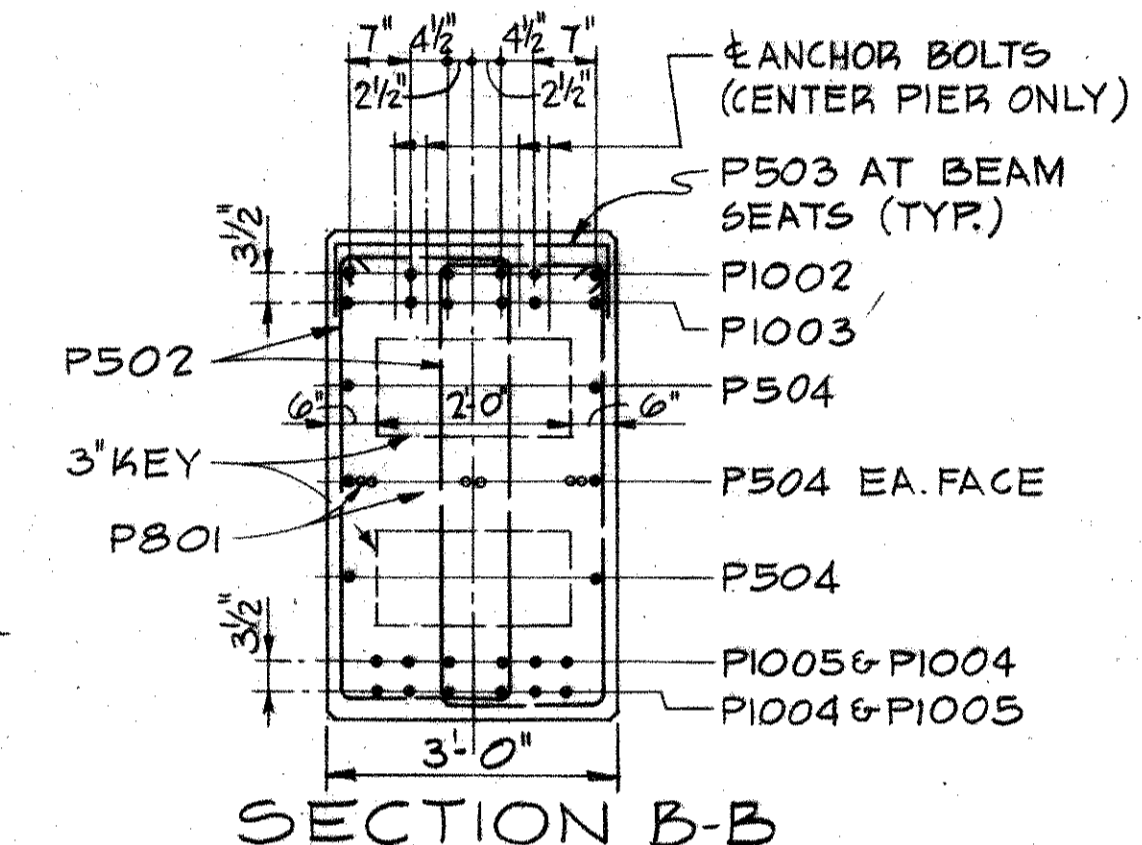


FOOTING & PILE PLAN

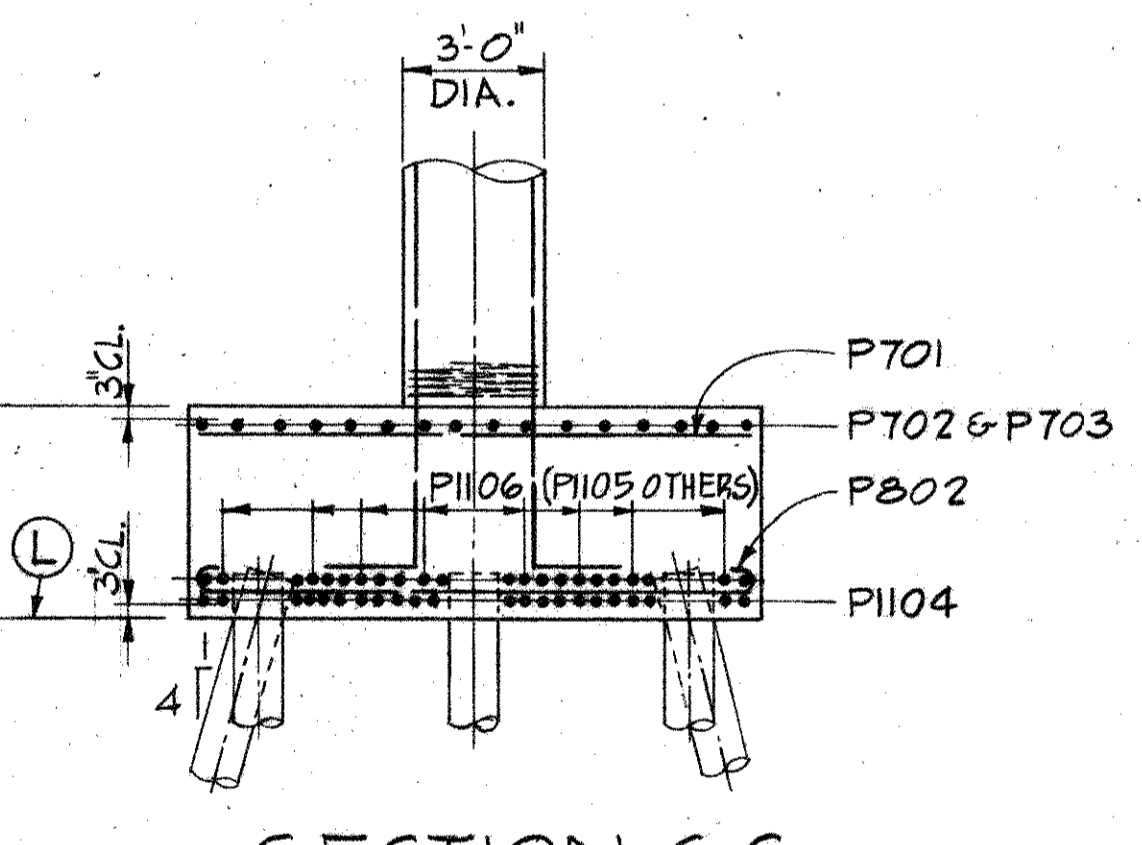
STIRRUPS IN THE MIDDLE HALF OF SPANS BETWEEN COLUMNS SHALL HAVE THE HOOKED CORNERS ANCHORED IN THE TOP OF THE BEAM. ALL OTHERS SHALL HAVE HOOKED CORNERS IN THE BOTTOM OF THE BEAM.



SECTION A-A



SECTION B-B



SECTION C-C

STATION	REAR PIER	CENTER PIER	FORWARD PIER
ELEV. A	916.26	917.98	916.65
ELEV. B	916.42	918.12	916.77
ELEV. C	916.57	918.26	916.88
ELEV. D	916.73	918.39	917.00
ELEV. E	916.89	918.53	917.11
ELEV. F	916.78	918.40	916.96
ELEV. G	916.66	918.26	916.80
ELEV. H	916.55	918.13	916.65
ELEV. J	916.44	917.99	916.49
ELEV. K	911.26	912.98	911.49
ELEV. L	895.50	893.80	895.73

NOTES:

BRIDGE SEAT REINFORCING: SPECIAL CARE SHALL BE TAKEN IN PLACING REINFORCING STEEL IN THE CAP OF THE CENTER PIER IN THE VICINITY OF THE BRIDGE SEAT SO AS TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF BEARING ANCHORS. BEARING ANCHORS: AT THE OPTION OF THE CONTRACTOR, BEARING ANCHORS (OR FORMED HOLES) LOCATED AND SUPPORTED BY TEMPLATES, MAY BE CAST IN PLACE. REINFORCING SAME FOR ALL PIERS EXCEPT FOR REINFORCEMENT IN COLUMNS

LEGEND

- = VERTICAL PILE
- = PILE TO BE BATTERED 1:4 IN THE DIRECTION OF THE ARROW

A. M. KINNEY, INC.
CINCINNATI, OHIO

PIER DETAILS

BRIDGE NO. MOT-675-0185
PROPOSED I-675 UNDER
RELOCATED YANKEE STREET

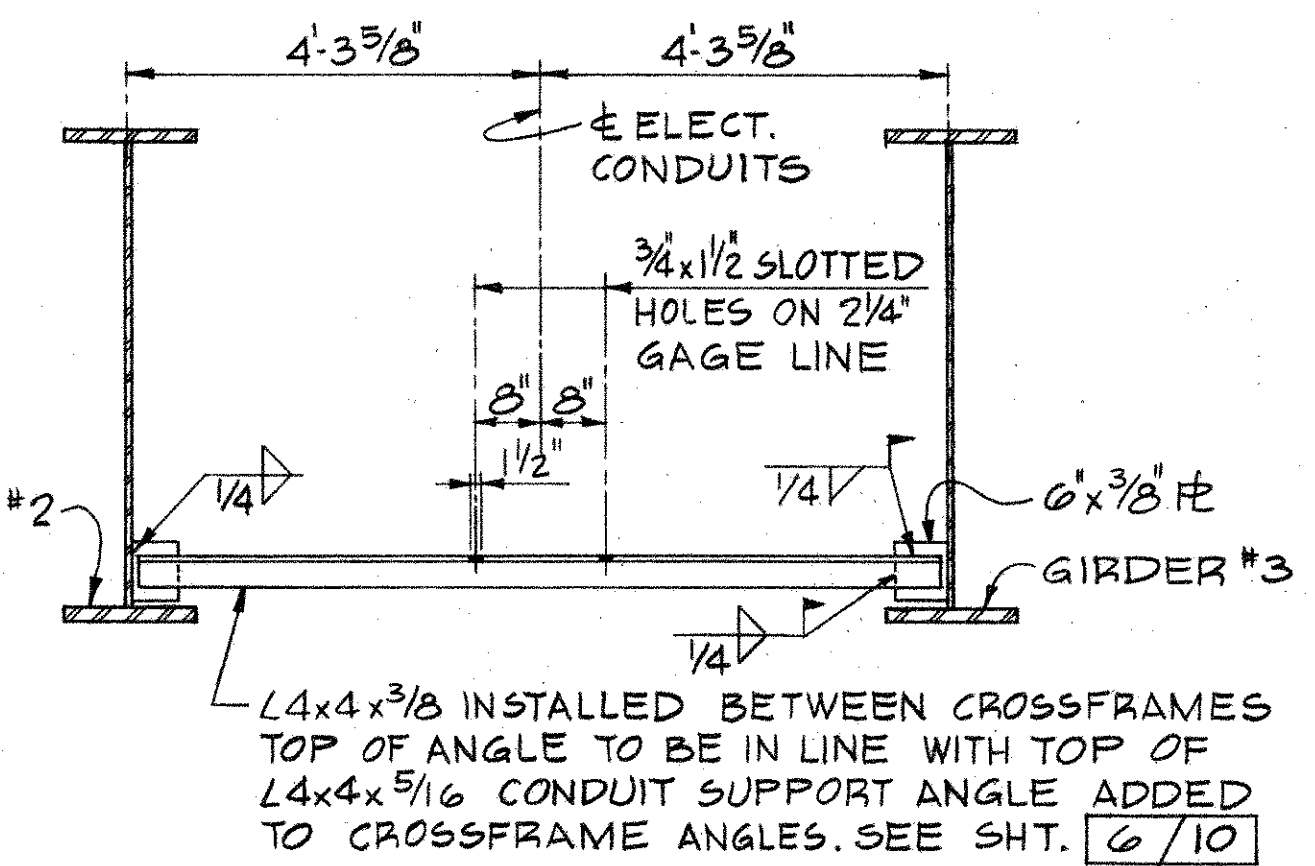
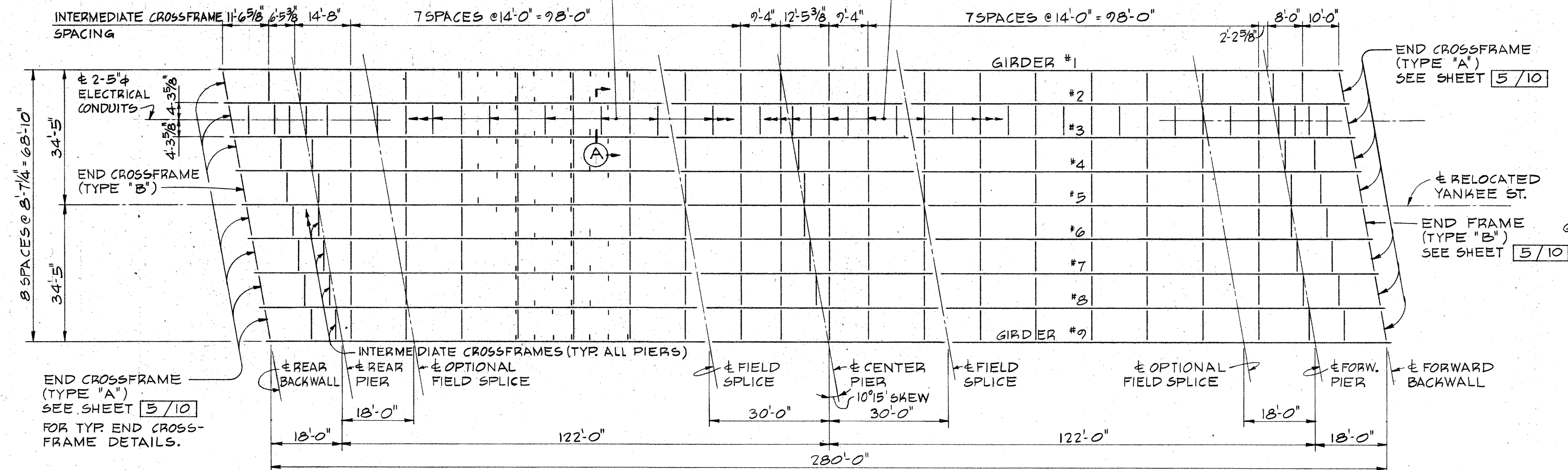
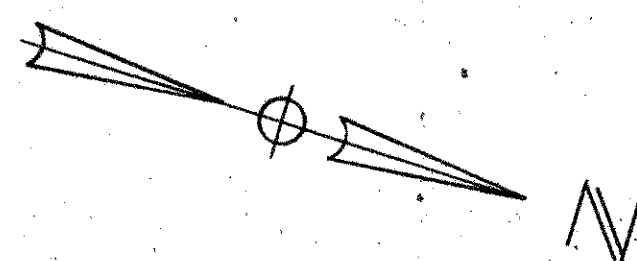
MONTGOMERY COUNTY STA. 140+54.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.T.S.	W.S.	W.S.	J.I.K.	gco	9-24-79	

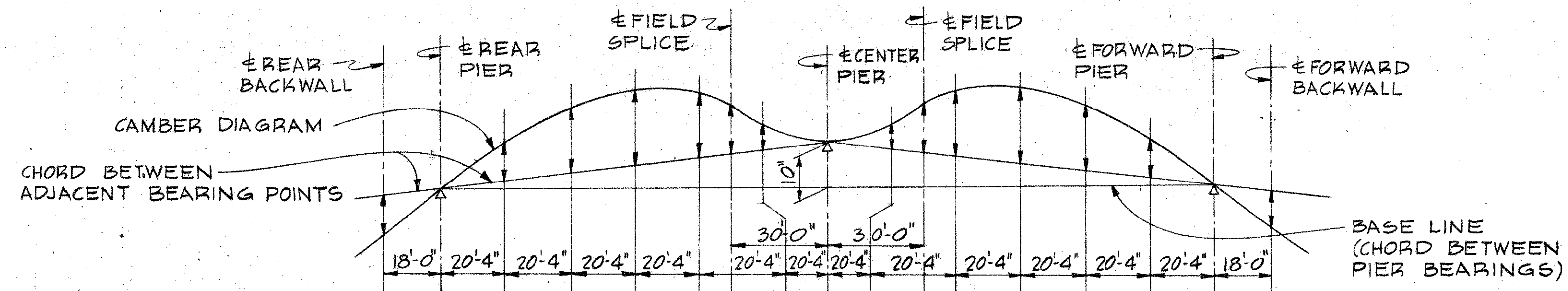
NOTE: BATTER PILES AS INDICATED FOR REAR PIER. FORWARD PIER SAME EXCEPT ROTATE PIER 180°

ADD BOTTOM L4x4x3/8 BETWEEN CROSSFRAMES TO SUPPORT ELECTRICAL CONDUITS. NO SPACE SHALL BE GREATER THAN 7'-0" (CHARGEABLE TO DAYTON POWER & LIGHT CO.)

USE L4x4x3/8 FOR BOTTOM STRUTS OF CROSSFRAMES BETWEEN GIRDERS #2 & #3 ONLY TO SUPPORT ELECTRICAL CONDUITS. THE DIFFERENCE IN THE COST OF THIS ANGLE OVER THE TYP. INTERMEDIATE CROSSFRAME ANGLE IS CHARGEABLE TO THE DAYTON POWER & LIGHT CO.



STEEL FRAMING PLAN



NOTES:

WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS.
HIGH STRENGTH BOLTS SHALL BE 7/8" DIAMETER A325 UNLESS OTHERWISE NOTED.
HEADED STUD SHEAR CONNECTORS, MATERIAL AND INSTALLATION SHALL BE AS PER AWS D1.1
ROCKERS AT REAR AND FORWARD PIERS SHALL BE R-300. SEE STD. DRAWING RB-1-55 FOR DETAILS.
FOR FIXED BEARINGS AT THE CENTER PIER, SEE DETAILS ON SHEET 5/10.
STUD SHEAR CONNECTORS, 3 PER SET, SHALL BE PLACED ON THE SKEW.

DEFLECTION DUE TO WEIGHT OF STEEL	-3/16"	0"	+1/4"	+3/8"	+3/8"	+1/4"	+3/16"	+1/16"	0"	+1/16"	+3/16"	+1/4"	+3/8"	+3/8"	+1/4"	0"	-3/16"
DEFLECTION DUE TO WEIGHT OF CONC. DECK	-5/8"	0"	+5/8"	+1 1/16"	+1 1/8"	+3/4"	+1/2"	+1/4"	0"	+1/4"	+1/2"	+3/4"	+1 1/8"	+1 1/16"	+5/8"	0"	-5/8"
DEFLECTION DUE TO WEIGHT OF BACKWALL	+1/4"	0"	-3/16"	-3/16"	-3/16"	-1/8"	-1/16"	-1/32"	0"	-1/32"	-1/16"	-1/8"	-3/16"	-3/16"	-3/16"	0"	+1/4"
DEFLECTION DUE TO SUPER-IMPOSED UNIFORM LOAD	-1/8"	0"	+1/8"	+1/4"	+1/4"	+3/16"	+1/8"	+1/16"	0"	+1/16"	+1/8"	+3/16"	+1/4"	+1/4"	+1/8"	0"	-1/8"
DEFLECTION DUE TO WEIGHT OF WINGWALLS AND APPROACH SLAB	+5/16"	0"	-3/16"	-1/4"	-3/16"	-1/8"	-1/16"	-1/32"	0"	-1/32"	-1/16"	-1/8"	-3/16"	-1/4"	-3/16"	0"	+5/16"
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	-1 1/16"	0"	+1 3/8"	+2 3/16"	+2 1/2"	+2 7/16"	+1 3/16"	+1 3/8"	0"	+1 3/8"	+1 13/16"	+2 3/16"	+2 1/2"	+2 3/16"	+1 3/8"	0"	-1 1/16"
REQUIRED SHOP CAMBER	-2 1/16"	0"	+2"	+3 7/16"	+3 7/8"	+3 3/8"	+2 1/2"	+1 1/16"	0"	+1 1/16"	+2 1/2"	+3 3/8"	+3 7/8"	+3 7/16"	+2"	0"	-2 1/16"

NOTE: REQUIRED SHOP CAMBER ORDINATES MEASURED TO A CHORD BETWEEN ADJACENT BEARING POINTS

GIRDER DEFLECTION & CAMBER

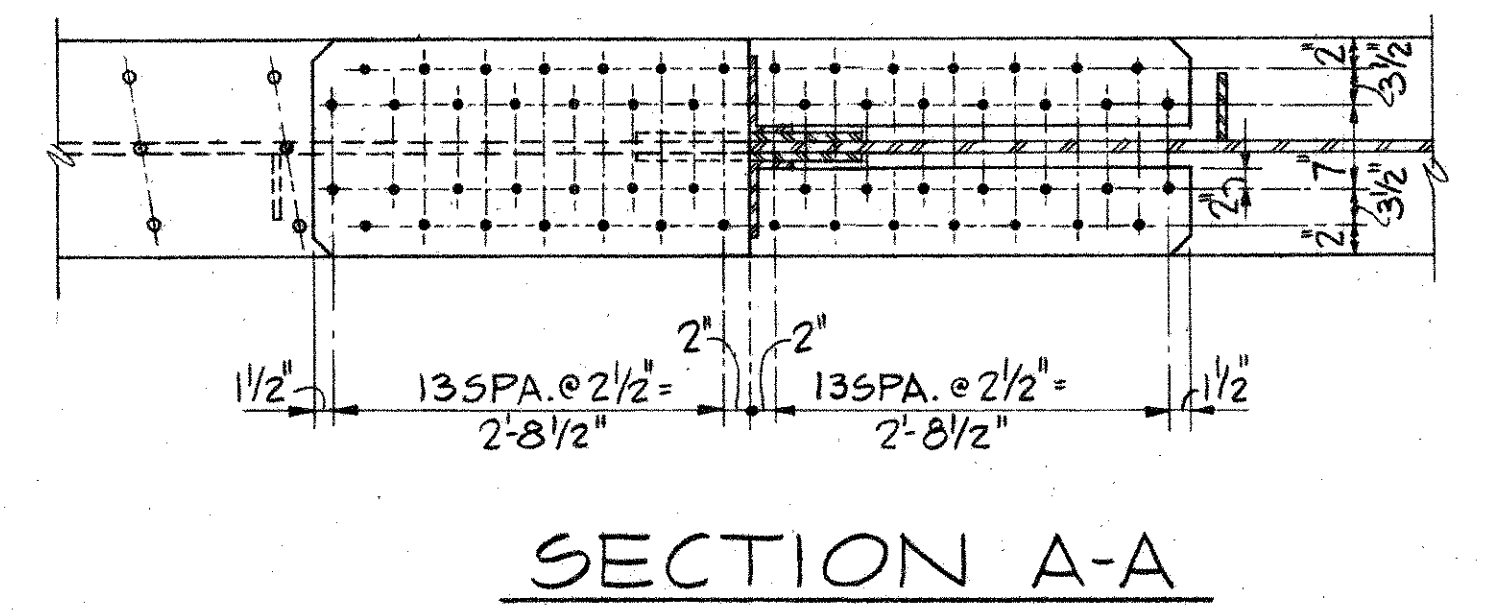
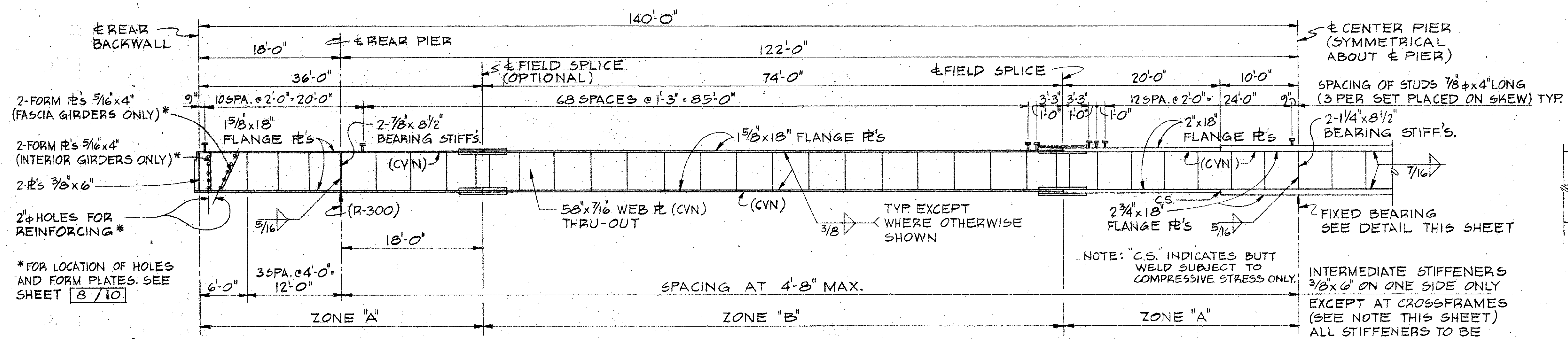
A. M. KINNEY, INC. CINCINNATI, OHIO						4/10
SUPERSTRUCTURE DETAILS						
BRIDGE NO. MOT- 675 - 0185 PROPOSED I-675 UNDER RELOCATED YANKEE STREET						
MONTGOMERY COUNTY				STA. 140+54.00		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.T.S.	W.S.	W.S.	J.I.K.	J.C.O.	9-24-79	

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OCT 8 1985

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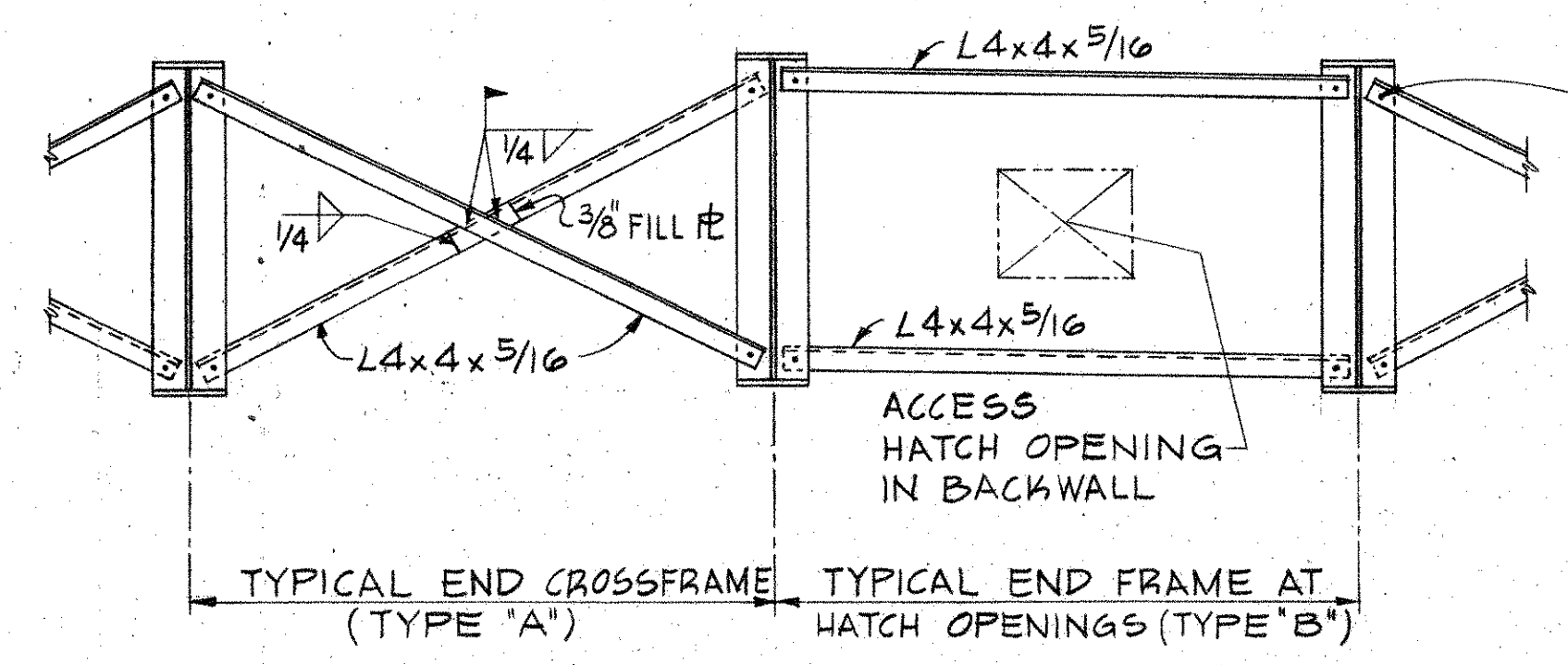
MONTGOMERY COUNTY
MOT-675-0.00



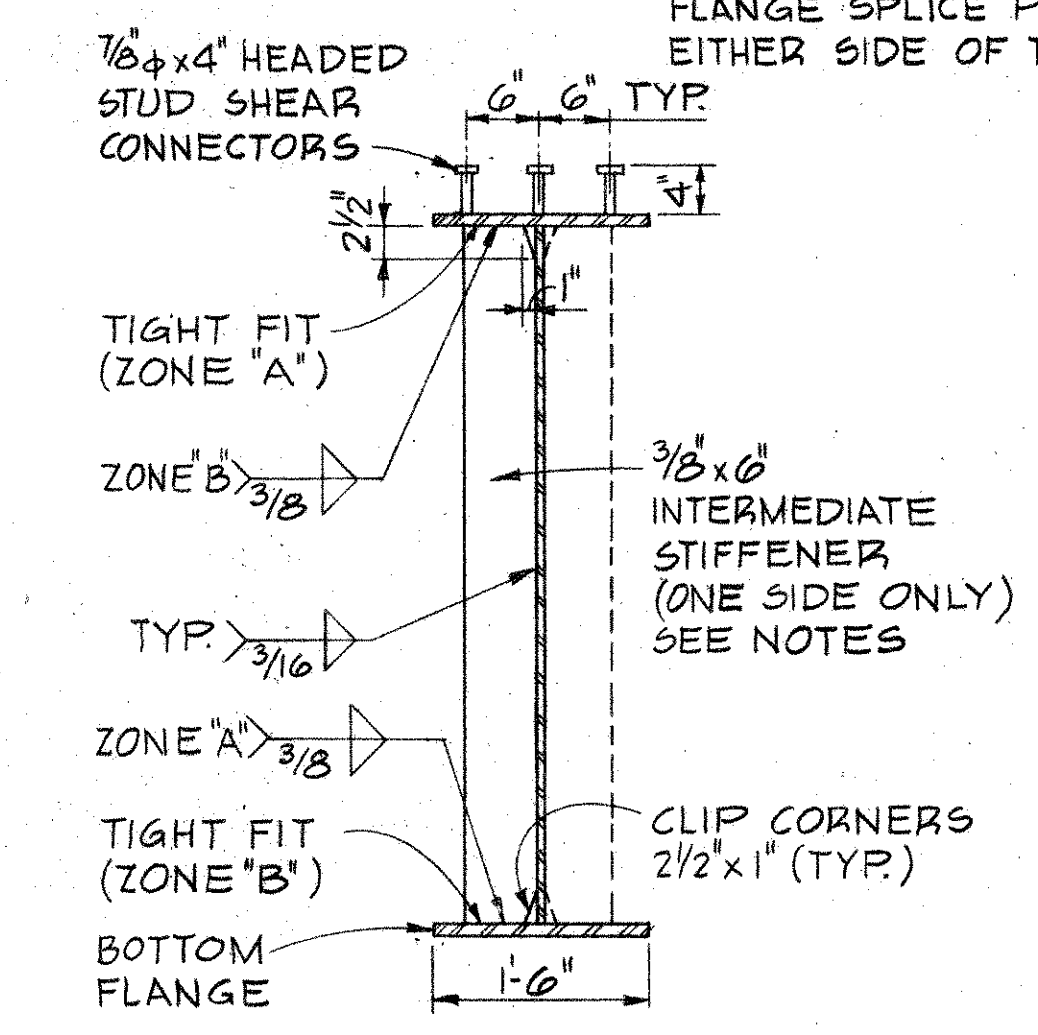
NOTE: WELD ATTACHMENTS MAY BE MADE TO THE TOP FLANGE OF GIRDERS WITHIN THE LIMITS OF ZONE "B" ONLY. ATTACHMENT DETAILS WHERE PERMITTED, SHALL NOT EMPLOY FILLET WELDS LONGER THAN 2" AND WELDS SHALL NOT BE CLOSER THAN 1" FROM THE EDGE OF FLANGE.

TYPICAL GIRDER ELEVATION

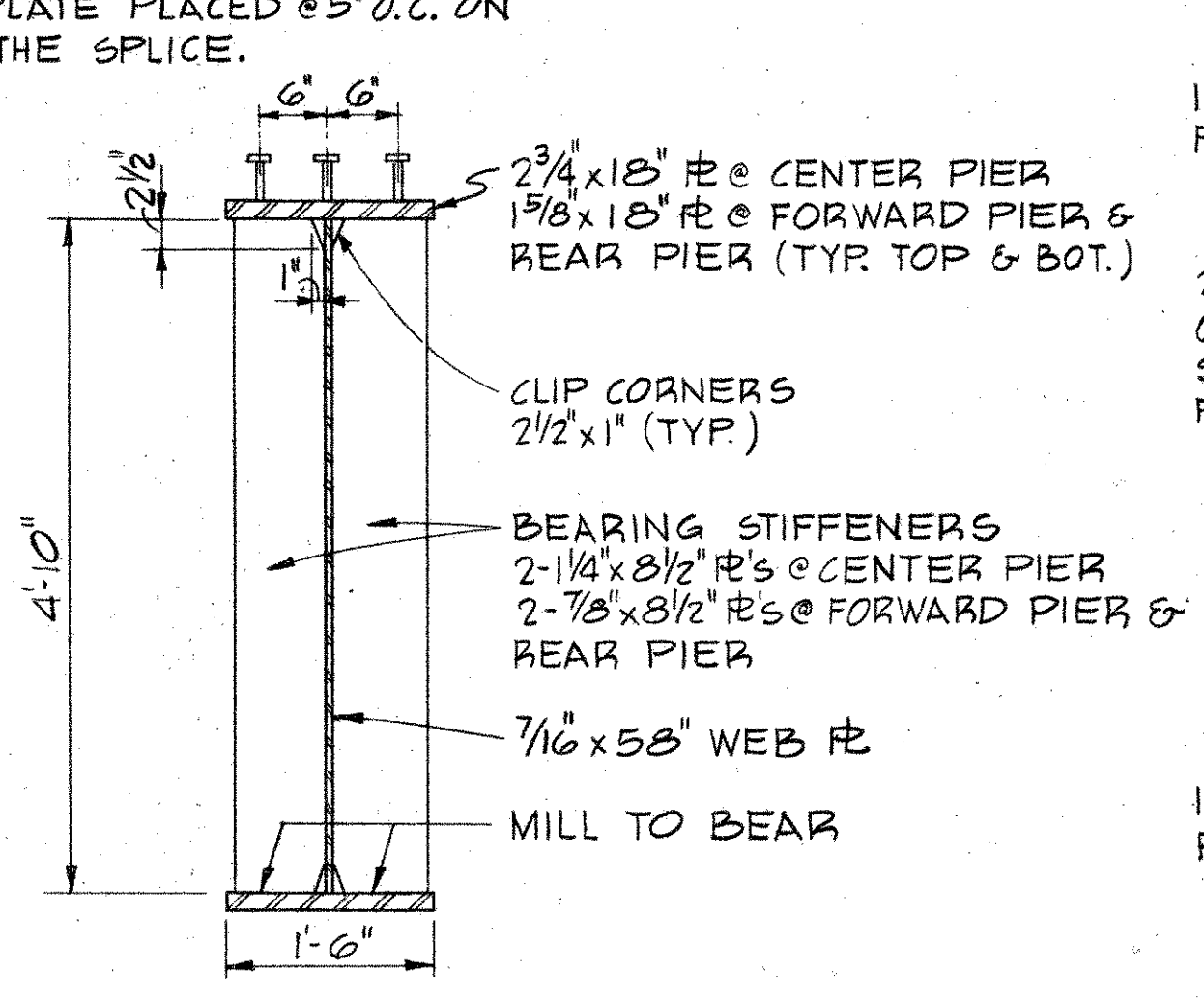
NOTE: IF THE OPTIONAL FIELD SPICE IS UTILIZED, THE SAME TOTAL NUMBER OF STUD SHEAR CONNECTORS SHALL BE PROVIDED, WITH THE STUDS THAT WOULD OTHERWISE FALL ON THE FLANGE SPICE PLATE PLACED @ 5" O.C. ON EITHER SIDE OF THE SPICE.



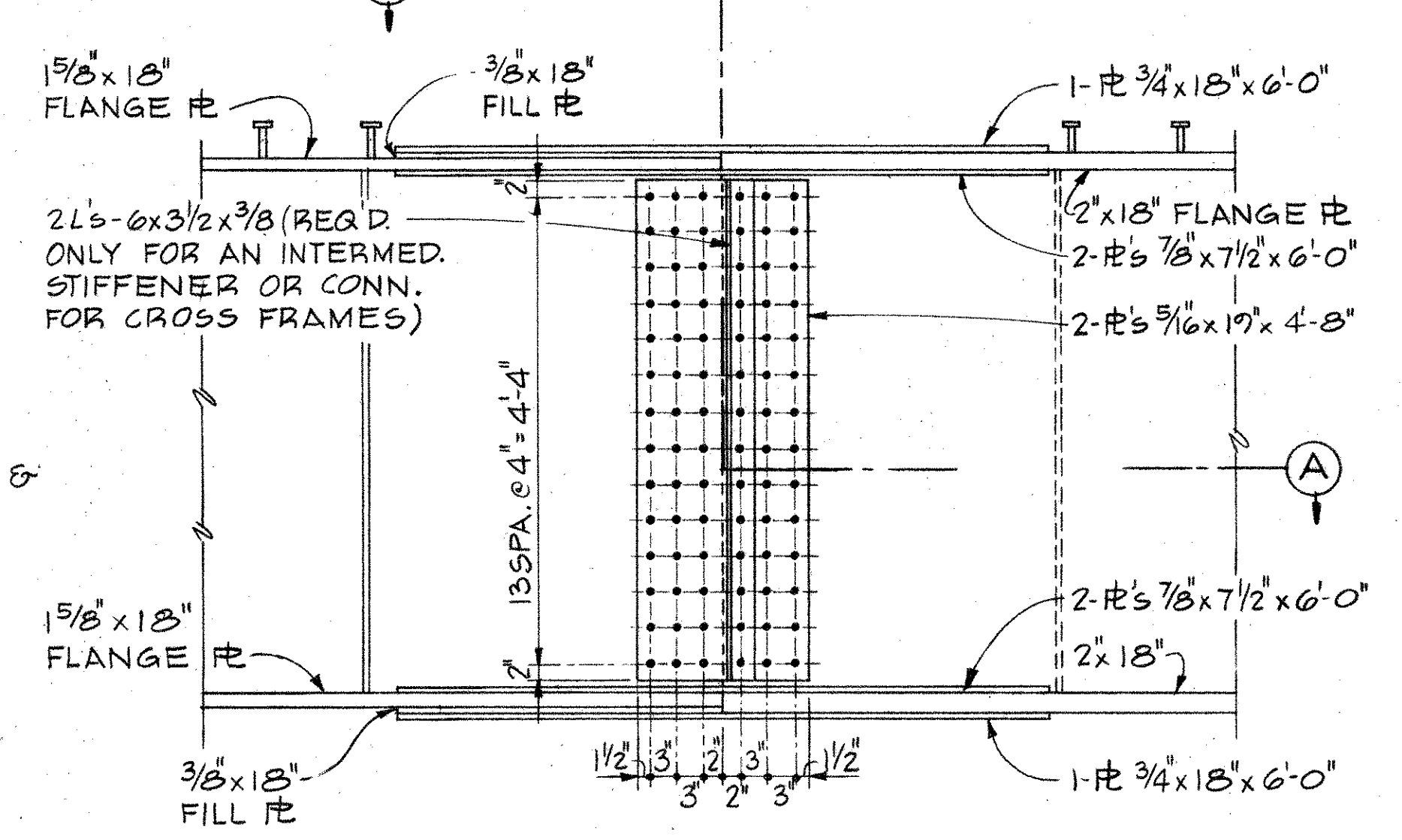
TYPICAL END CROSSFRAMES



TYPICAL GIRDER SECTION AT INTERMEDIATE STIFFENERS



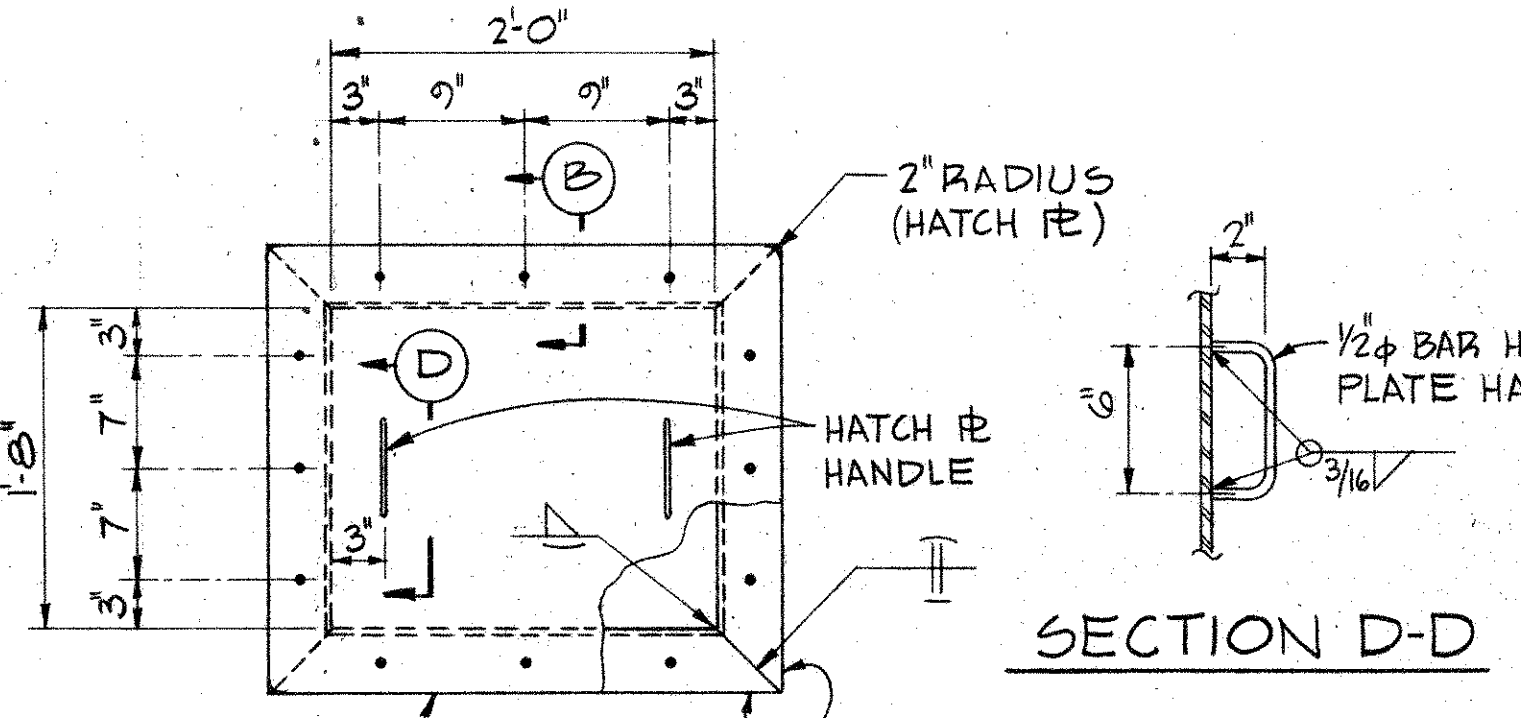
TYPICAL GIRDER SECTION AT PIERS



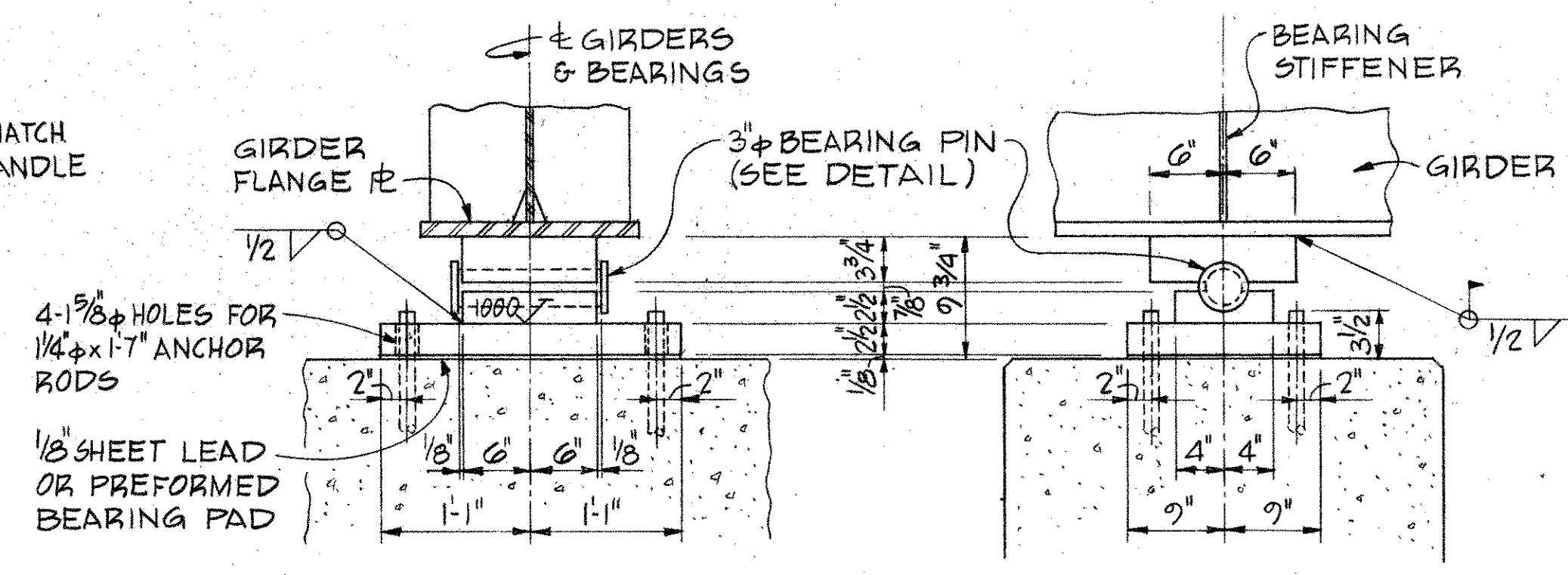
TYPICAL FIELD SPICE DETAIL

(OPTIONAL SPICE DETAIL SIMILAR EXCEPT FILL PLATES NOT REQ'D.)

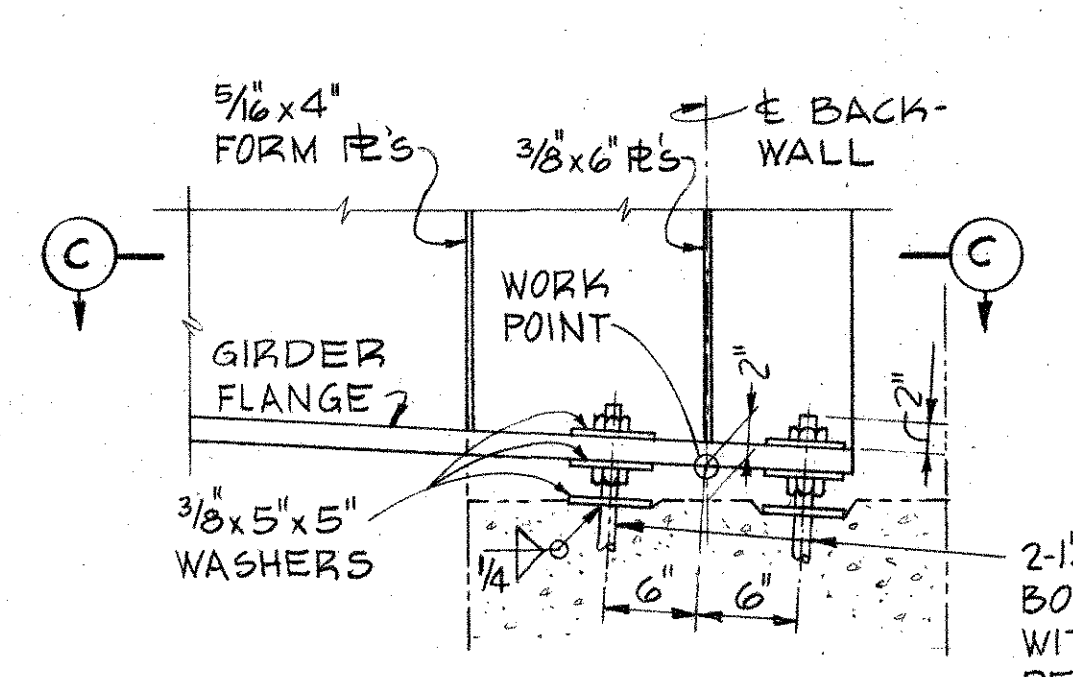
NOTE: REVERSE OUTSTANDING LEG OR MOVE STIFFENER ANGLE A DISTANCE EQUAL TO BOLT SPACING TO ADJUST TO INTERMEDIATE STIFFENER OR CROSSFRAME SPACING



SECTION D-D

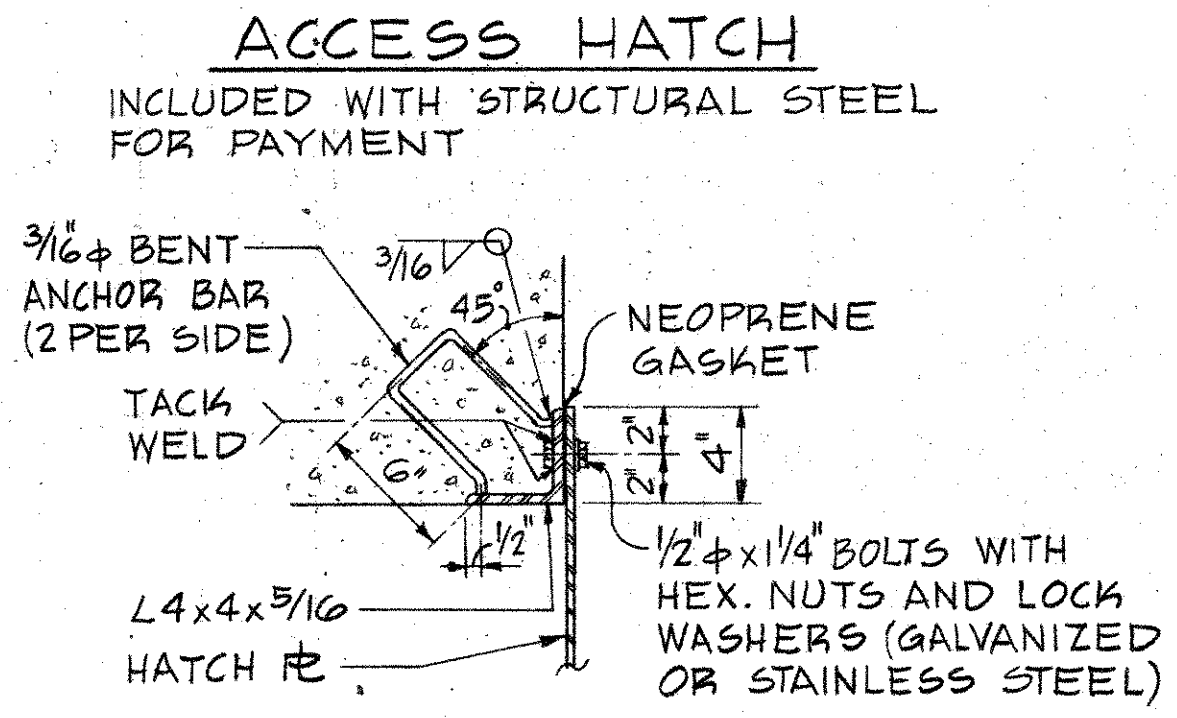


FIXED BEARING DETAIL AT CENTER PIER

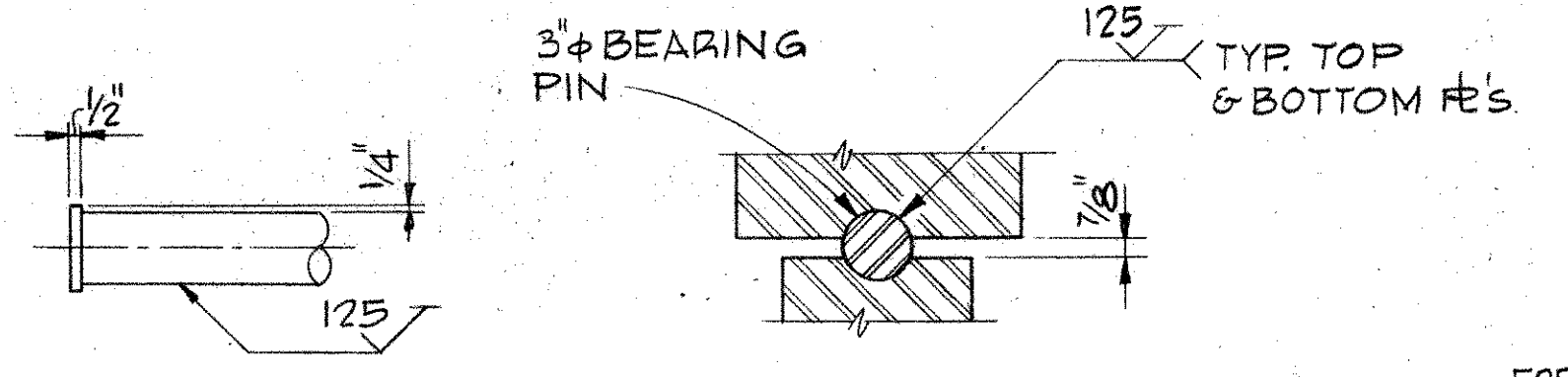


DETAIL "A"

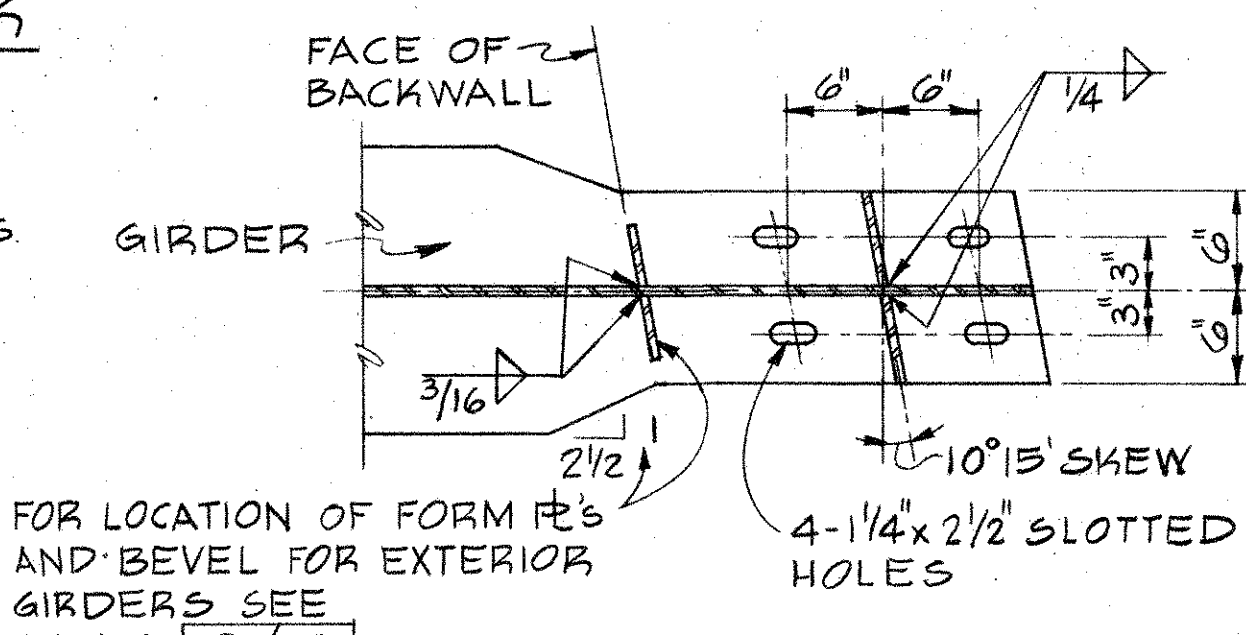
SEE SHEET 8/10 FOR LOCATION



SECTION B-B



BEARING PIN DETAIL



FOR LOCATION OF FORM PLS AND BEVEL FOR EXTERIOR GIRDERS SEE SHEET 8/10

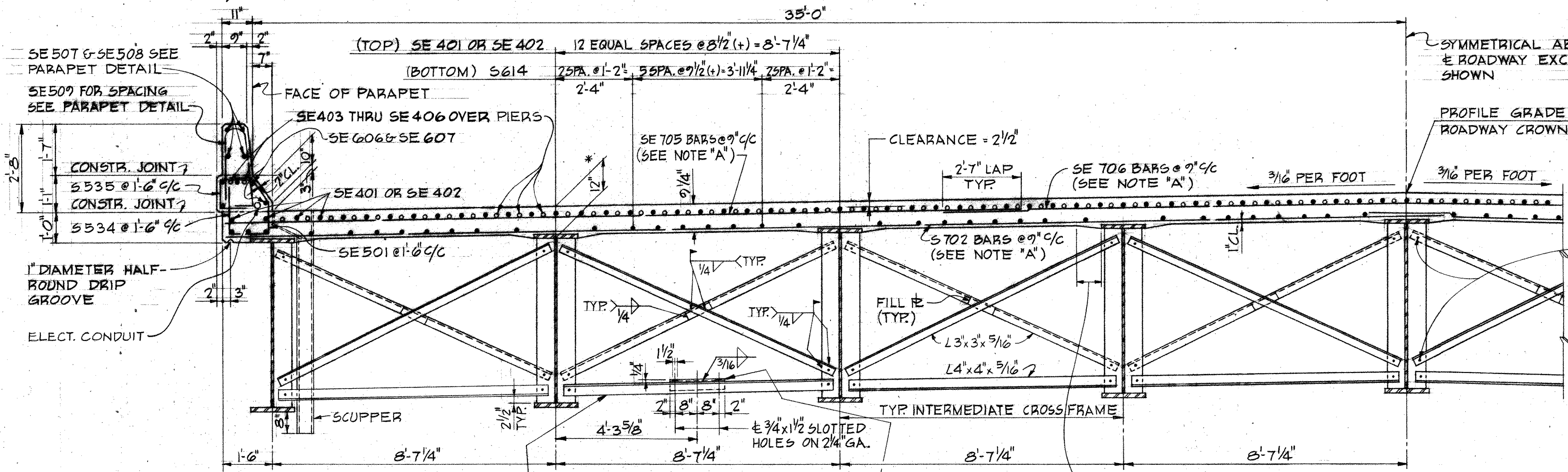
NOTES:
 SINGLE STIFFENERS SHALL BE PLACED ON ALTERNATE SIDES OF THE WEB OF INTERIOR GIRDERS AND ON THE INSIDE OF THE WEB OF FASCIA GIRDERS. ADD STIFFENERS AS REQUIRED FOR THE ATTACHMENT OF CROSSFRAMES.
 SEE SHEET 4/10 FOR ADDITIONAL NOTES.

A. M. KINNEY, INC. CINCINNATI, OHIO					5/10
SUPERSTRUCTURE GIRDER DETAILS					
BRIDGE NO. MOT-675-0185 PROPOSED I-675 UNDER RELOCATED YANKEE STREET					
MONTGOMERY COUNTY			STA. 140+54.00		
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE REVISED
C.T.S.	W.S.	W.S.	J.I.K.	J.C.O.	9-24-79

ALL LONGITUDINAL BARS IN THE TOP OF SLAB ARE SE 401 OR SE 402 AND THOSE BARS IN THE BOTTOM OF SLAB AND CURBS ARE S614 UNLESS OTHERWISE SHOWN. EACH LONGITUDINAL LINE OF BARS SHALL BE SET AS 9-SE 401 AND 1-SE 402 WITH 1'-4" MIN. LAPS (FOR TOP) AND 10-S614 OR 9-SE 606 AND 1-SE 607 WITH 2'-0" MIN. LAPS (FOR BOTTOM AND CURBS)

NOTE "A": S702, SE 705 & SE 706 BARS TO BE PLACED PARALLEL TO BACKWALL

MONTGOMERY COUNTY
MOT-675-0.00



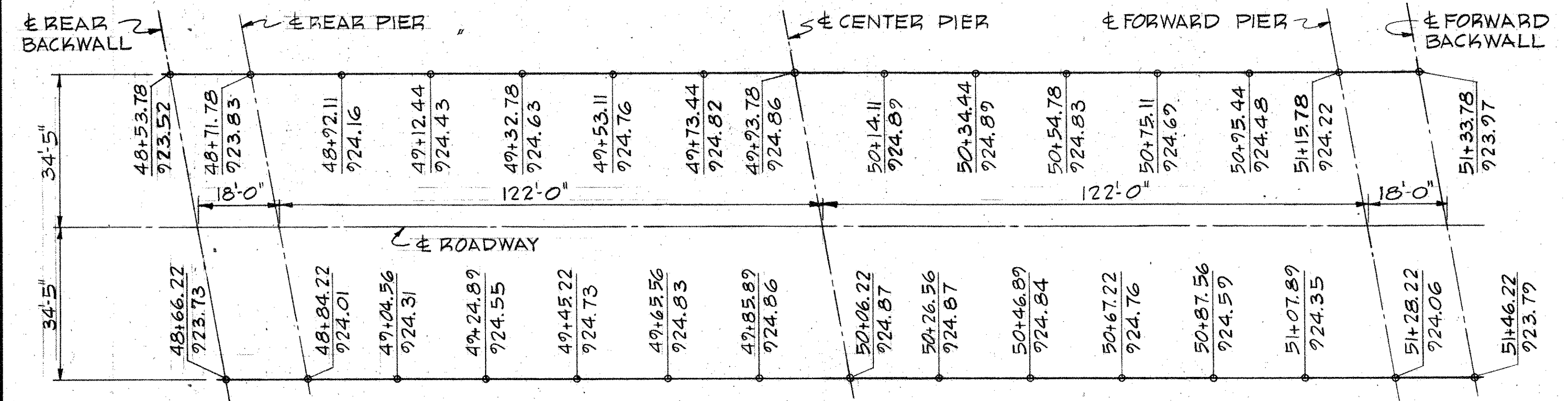
*THIS IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18

USE L4x4x3/8 FOR BOTTOM STRUT OF CROSS FRAME (WITH LEGS TURNED AS SHOWN) BETWEEN GIRDERS *2 & *3 ONLY, SEE NOTE ON FRAMING PLAN SHT. 4/10

L4x4x5/16x1'-8" LG. FOR ELEC. CONDUIT SUPPORT (CHARGEABLE TO DAYTON POWER & LIGHT CO.)

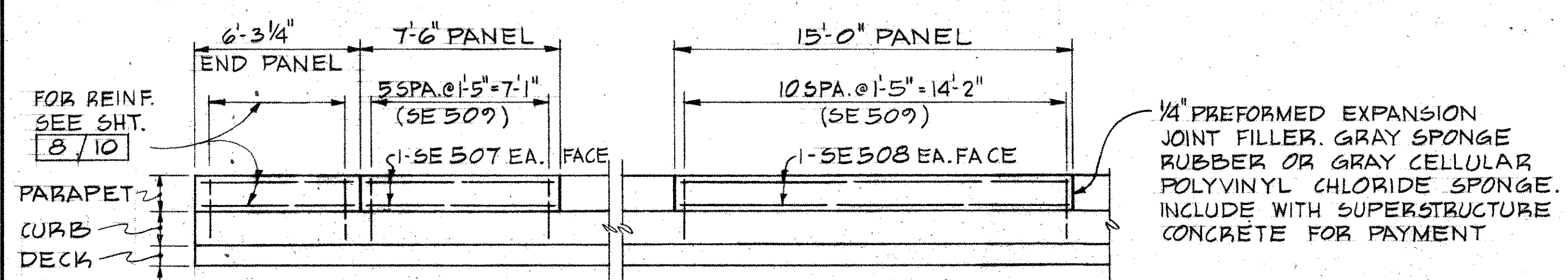
A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

HALF TRANSVERSE SECTION



SUPERSTRUCTURE CONCRETE PLACEMENT ELEVATIONS

THE TOP OF CONCRETE ELEVATIONS SHOWN ABOVE SHALL GOVERN THE PLACING OF FORMS OR SCREEDS PRIOR TO PLACING THE DECK CONCRETE. ALLOWANCE HAS BEEN MADE FOR THE DEFLECTION DUE TO THE WEIGHT OF CONCRETE.



TYPICAL PARAPET PANEL DETAILS
(FOR LOCATION OF PANELS SEE GENERAL PLAN)

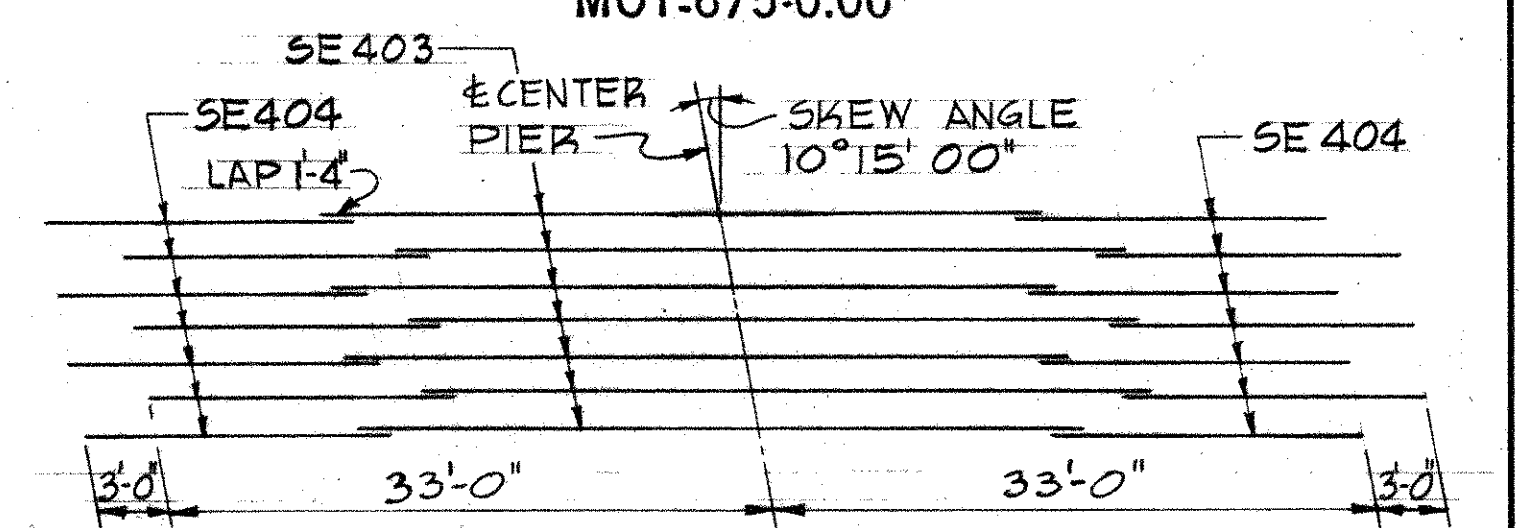


DIAGRAM SHOWING STAGGER OF SE 403 & SE 404 BARS OVER CENTER PIER

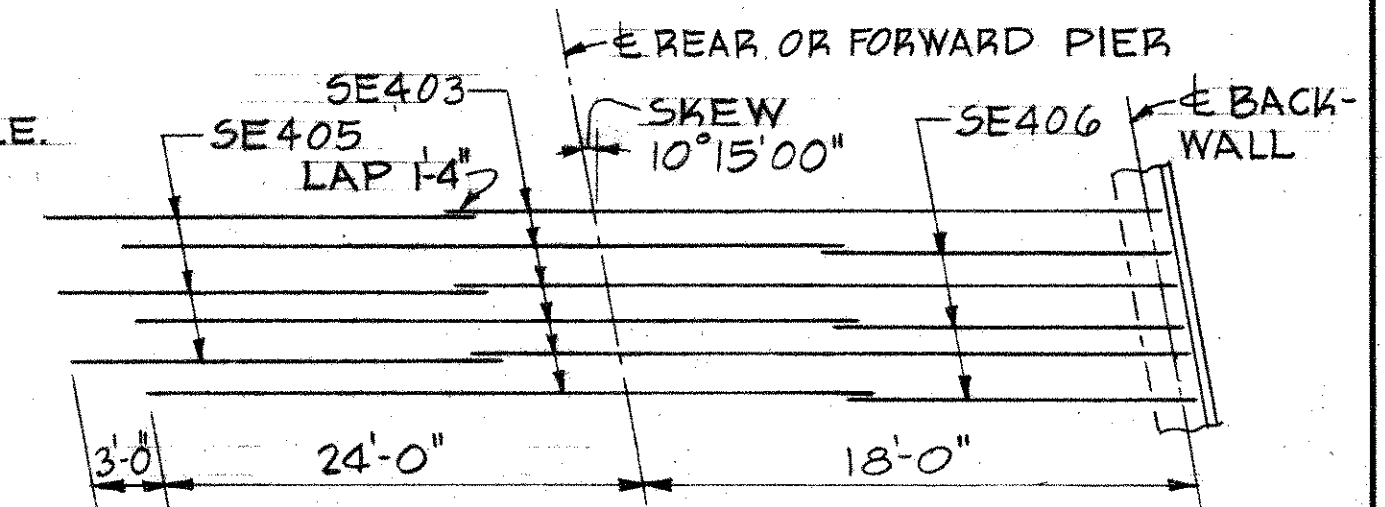


DIAGRAM SHOWING STAGGER OF SE 403, SE 405 & SE 406 BARS OVER REAR AND FORWARD PIERS

NOTES:

CONCRETE PARAPETS ABOVE UPPER CONSTRUCTION JOINT SHALL BE PLACED IN ALTERNATE SECTIONS BY THE USE OF BULKHEADS. CLOSING SECTIONS SHALL BE PLACED AFTER REMOVAL OF BULKHEADS AND AFTER PLACEMENT OF EXPANSION JOINT FILLER. EXPOSED EDGES OF THE FILLER SHALL BE FLUSH WITH THE SURFACE OF CONCRETE AND SHALL BE FREE OF MORTAR.

LOCATION OF LIGHT POLE PILASTERS SHOWN ON GENERAL PLAN SHEET 2/10. FOR DETAILS OF CONSTRUCTION SEE DWG. 936/581

SCUPPERS SHALL BE IN ACCORDANCE WITH STD DRAWING SD-1-69 EXCEPT THAT SCUPPER PIPES SHALL EXTEND 6" BELOW THE BOTTOM OF THE BEAMS INSTEAD OF 2".

A. M. KINNEY, INC. CINCINNATI, OHIO		6/10	
SUPERSTRUCTURE DETAILS			
BRIDGE NO. MOT-675-0185 PROPOSED I-675 UNDER RELOCATED YANKEE STREET			
MONTGOMERY COUNTY		STA. 140+54.00	
DESIGNED	DRAWN	TRACED	CHECKED
C.T.S.	W.S.	W.S.	J.I.K.
			9-24-79
REVIEWED	DATE	REVISED	

MONTGOMERY COUNTY
MOT-675-0.00

NOTES:

- INTEGRAL BACKWALL: STRINGERS SHALL BE FURNISHED WITH BOTTOM FLANGE ANCHORS, AS SHOWN, AND BACKWALL CONSTRUCTION SHALL BE ACCOMPLISHED AS ENUMERATED BELOW:
1. POSITION DECK STRINGERS ON TEMPORARY SUPPORTS.
 2. SET STRINGER ANCHOR BOLTS:
 - A. PLACE BOLTS IN CENTER OF FLANGE HOLES.
 - B. SET NUTS FINGER TIGHT IMMEDIATELY PRIOR TO PLACEMENT OF INITIAL BACKWALL CONCRETE.
 - C. PLACE BACKWALL CONCRETE UP TO THE ANCHOR BOLT CONSTRUCTION JOINT.
 - D. WHEN CONCRETE BEGINS TO SET, LOOSEN NUTS.
 - E. AFTER CONCRETE HAS BEEN IN PLACE FOR AT LEAST TWELVE HOURS AND DURING MODERATE AMBIENT TEMPERATURES (ABOUT 60°F), TIGHTEN NUTS.
 3. TEMPORARY STRINGER SUPPORTS MAY THEN BE REMOVED.
 4. FILL SPACE UNDER FLANGE WITH NON-SHRINKING EPOXY MORTAR.
 5. RESUME PLACEMENT OF BACKWALL CONCRETE.

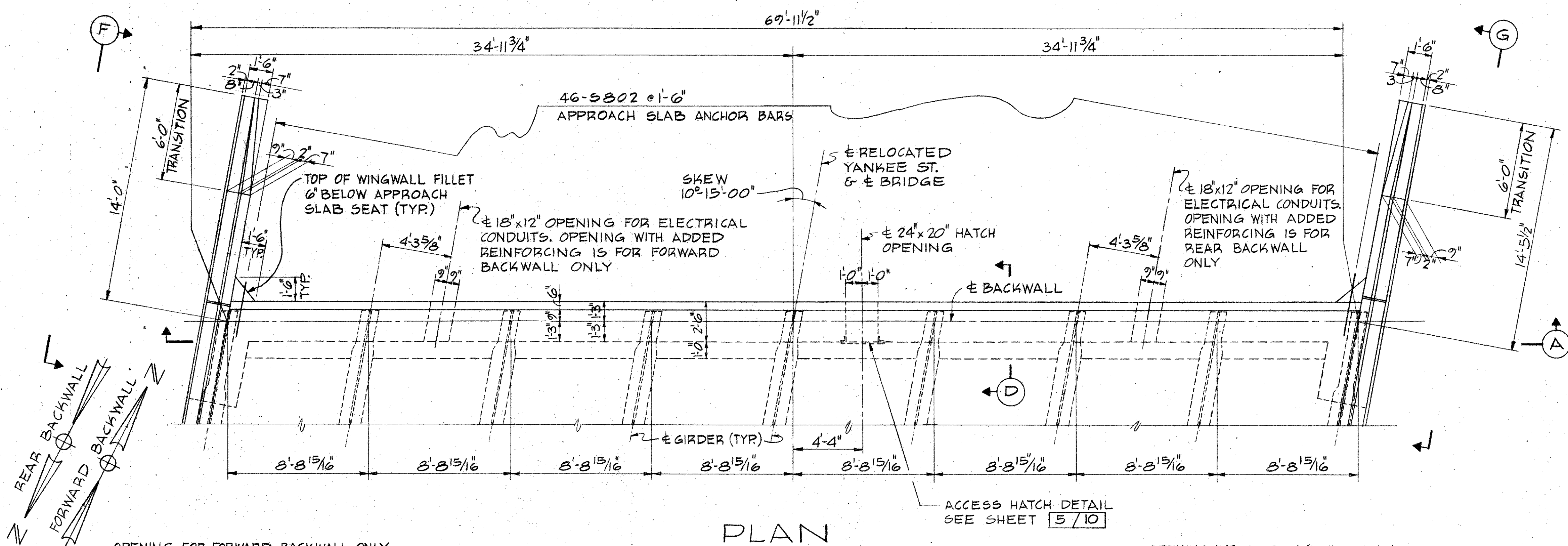
- AT THE OPTION OF THE CONTRACTOR, THE INITIAL BACKWALL CONCRETE MAY BE PLACED PRIOR TO STRINGER ERECTION PROVIDED THAT THE SEQUENCE BELOW IS FOLLOWED:
1. FASTEN ANCHOR BOLTS TO FORMS WITH SUBSTANTIAL TEMPLATES PRIOR TO PLACING INITIAL CONCRETE.
 2. AFTER STRINGERS ARE PLACED AND DURING MODERATE AMBIENT TEMPERATURES (ABOUT 60°F), TIGHTEN NUTS.
 3. FOLLOW PROCEDURES 4 AND 5 ABOVE.

WING WALLS: PLACE WING WALL CONCRETE DURING STABLE OR RISING AMBIENT TEMPERATURES. CONCLUDE PLACEMENT AT LEAST FOUR HOURS PRIOR TO THE DAY'S PEAK AMBIENT TEMPERATURE.

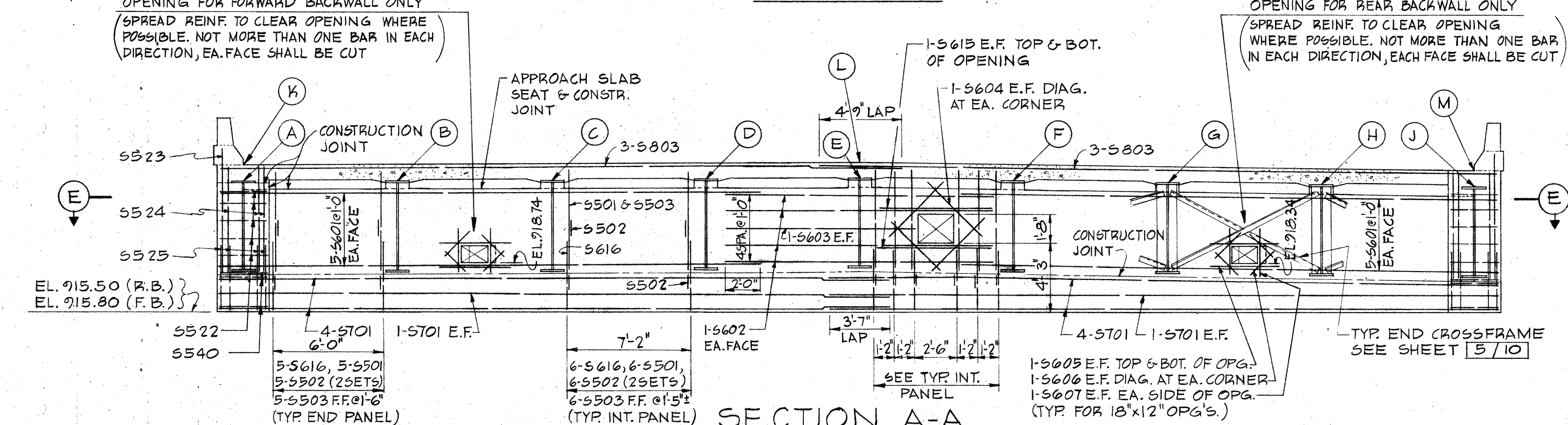
CONSTRUCTION JOINTS: CONSTRUCTION JOINT SURFACES SHALL BE SCRUBBED WITH CEMENT GROUT (EQUAL VOLUMES OF SAND AND CEMENT WITH ONLY ENOUGH WATER TO MAKE A THIN PASTE) IMMEDIATELY PRIOR TO CONCRETE PLACEMENT.

WATERPROOFING: THE DESIGNATED SURFACES OF THE BACKWALL SHALL BE WATERPROOFED WITH TYPE A WATERPROOFING (702.11 OR AASHTO M115 TYPE A). SEE SECTION D-D, SHEET 8/10.
SEE SUPPLEMENTAL SPECIFICATION 956 FOR NON-SHRINKING EPOXY MORTAR. THE MORTAR IS INCLUDED WITH SUPERSTRUCTURE CONCRETE FOR PAYMENT.

FOR SECTIONS D-D, E-E, F-F & G-G, SEE SHEET 8/10
FOR LOCATION OF SECTIONS B-B, C-C AND K-K, SEE SHEET 8/10



PLAN



SECTION A-A

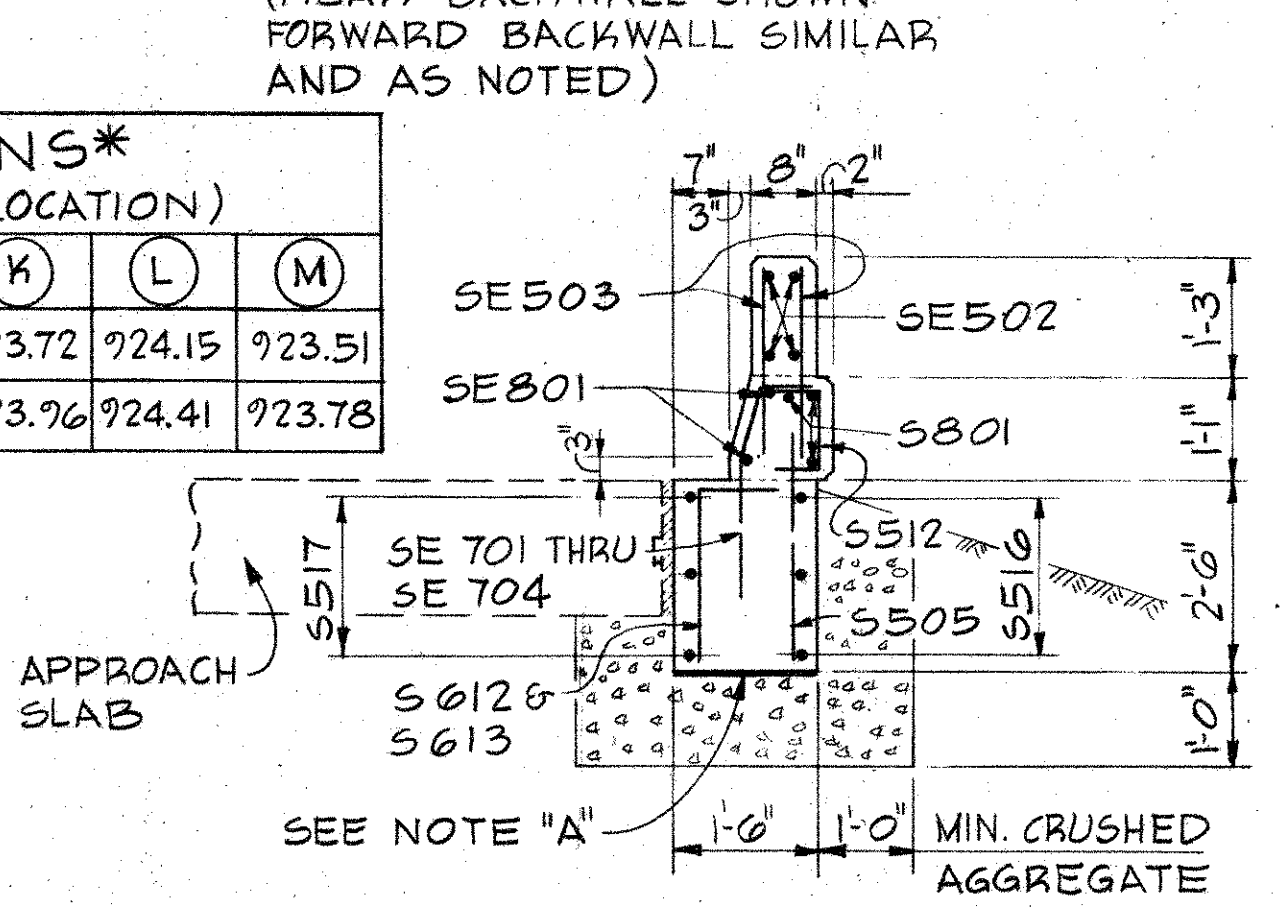
(REAR BACKWALL SHOWN
FORWARD BACKWALL SIMILAR
AND AS NOTED)

SUPERSTRUCTURE CONSTRUCTION ELEVATIONS*
(SEE SECT. A-A THIS SHEET & SECT. D-D ON SHEET 8/10 FOR LOCATION)

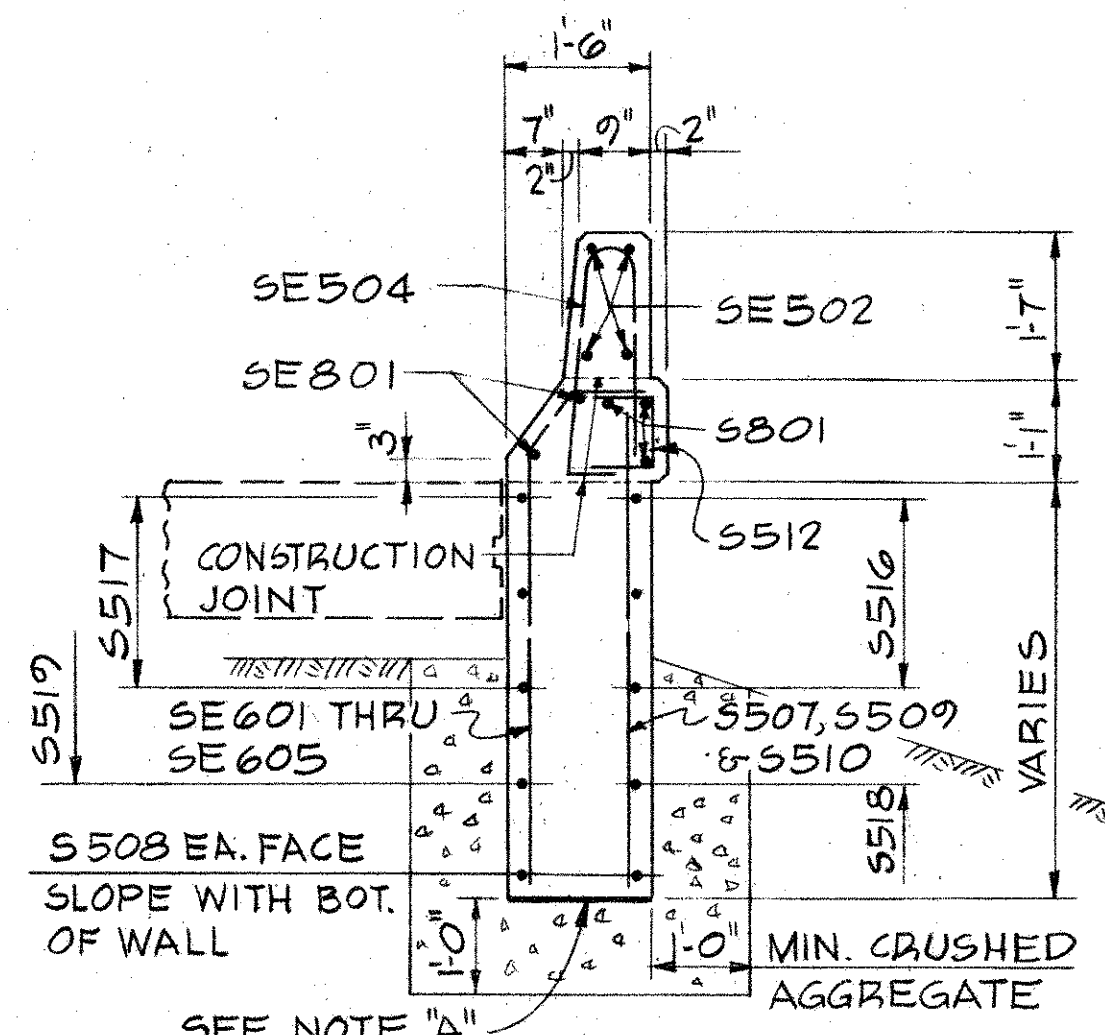
BACKWALL	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)	(K)	(L)	(M)
REAR	922.86	922.97	923.08	923.19	923.30	923.14	922.98	922.82	922.66	923.72	924.15	923.51
FORWARD	923.11	923.22	923.33	923.44	923.56	923.40	923.24	923.08	922.92	923.96	924.41	923.78

NOTE: * ELEVATIONS HAVE BEEN ADJUSTED DOWNWARD 3/16" (.016 FT.) TO ACCOUNT FOR THE NET EFFECT OF DEFLECTIONS DUE TO THE PLACEMENT OF ALL SUPERSTRUCTURE CONCRETE, INCLUDING THE APPROACH SLAB.

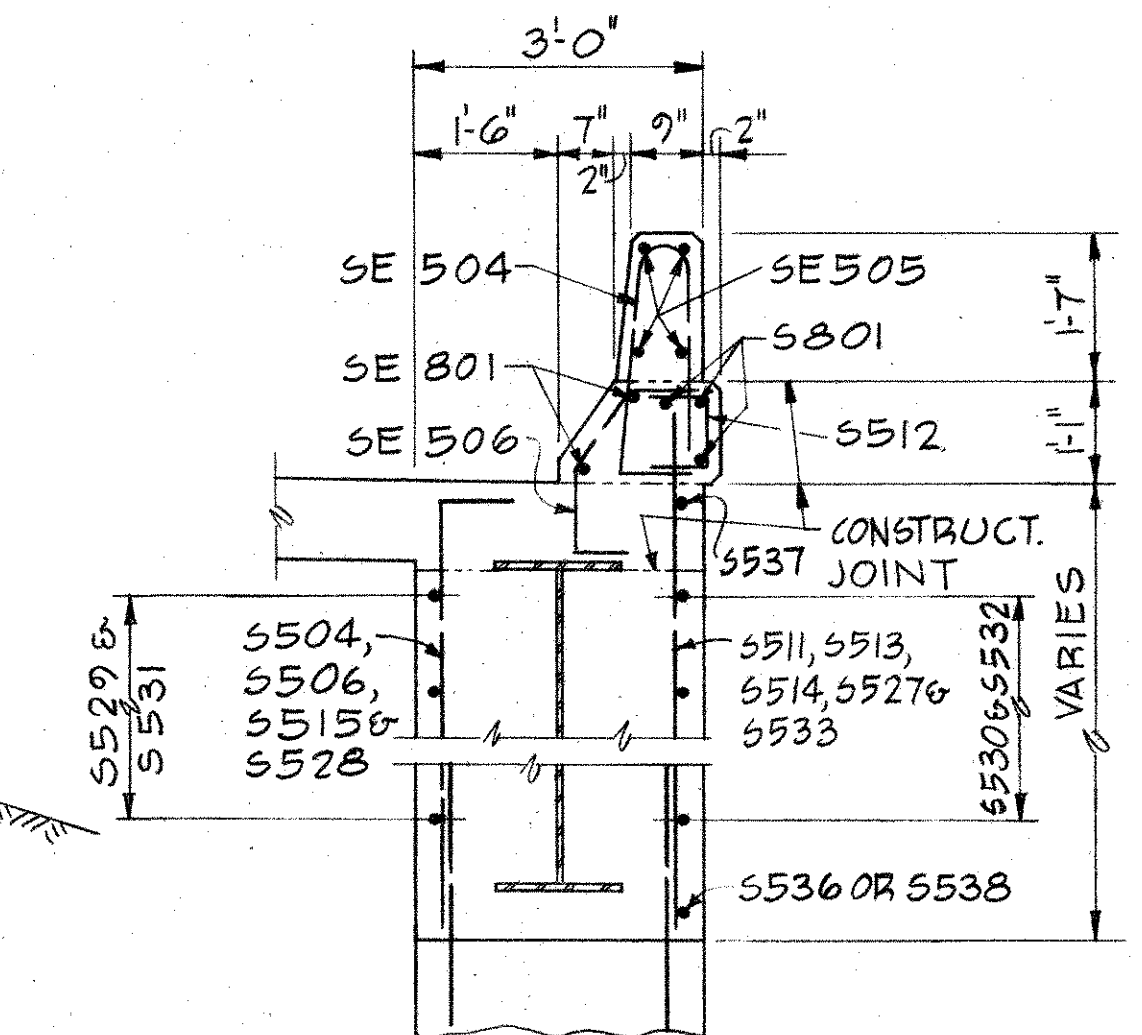
NOTE "A": PLACE BACKWALL AND WING WALL SIDE FORMS ON A POLYETHYLENE SHEET COVERING THOROUGHLY COMPACTED AGGREGATE. AFTER CONCRETE PLACEMENT AND FORM REMOVAL, TRIM AND REMOVE EXPOSED SHEET AND PLACE THE REMAINDER OF THE AGGREGATE TO THE PROPOSED SURFACE.



SECTION B-B



SECTION C-C



SECTION K-K

A. M. KINNEY, INC.
CINCINNATI, OHIO

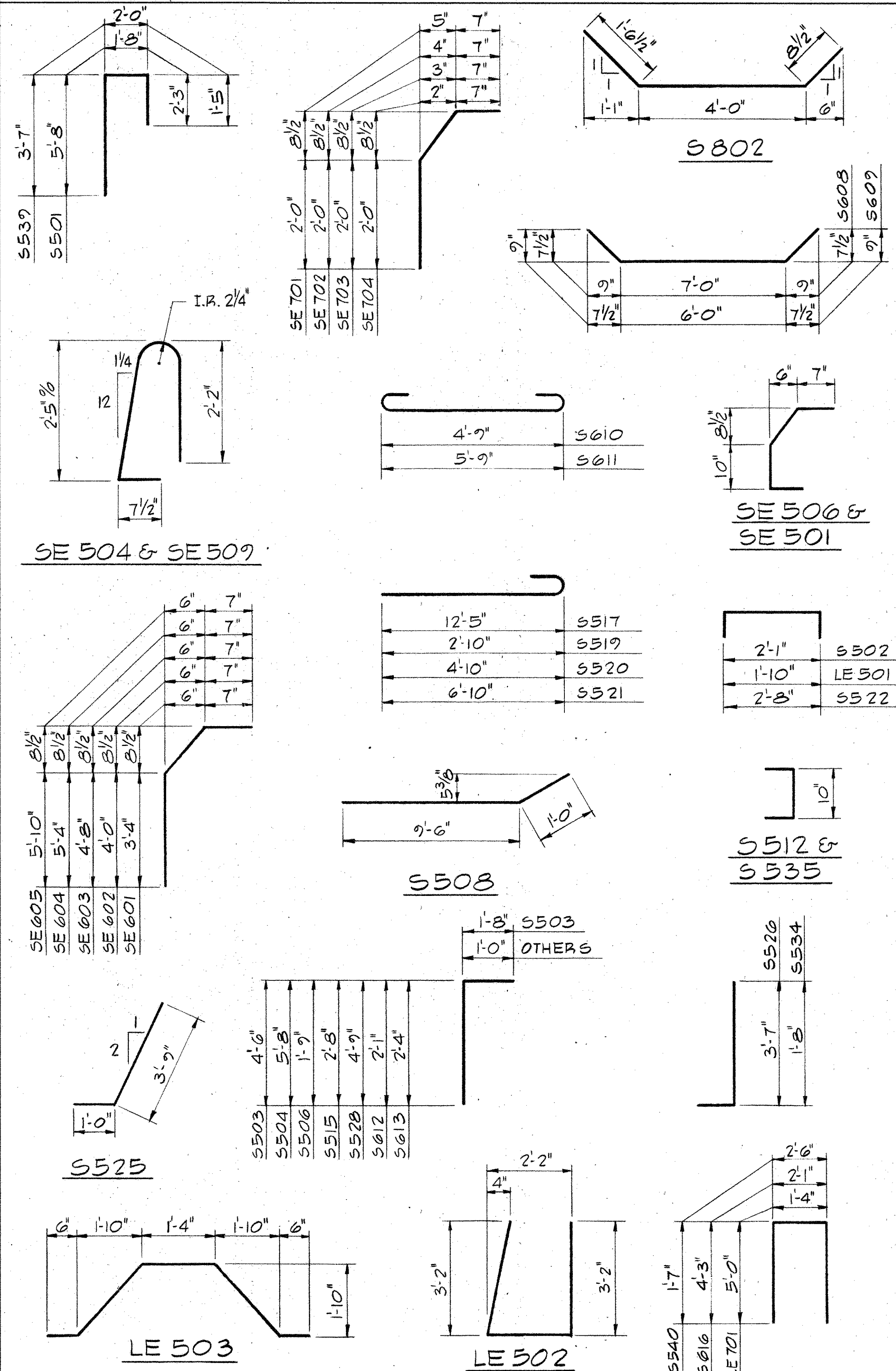
INTEGRAL BACKWALL DETAILS
BRIDGE NO. MOT-675-0185
PROPOSED I-675 UNDER
RELOCATED YANKEE STREET
MONTGOMERY COUNTY STA. 140+54.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.T.S.	W.S.	W.S.	J.I.K.	gco.	9-24-79	

MARK	NO.	LENGTH	WEIGHT	SHP	BACKWALL		DECK
					REAR	FWD	
SUPERSTRUCTURE							
SE 801	8	23'-0"	491	S*	4	4	
SE 701	4	3'-3"	27	B	2	2	
SE 702	4	3'-3"	27	B	2	2	
SE 703	4	3'-2"	26	B	2	2	
SE 704	4	3'-2"	26	B	2	2	
SE 705	752	24'-7"	37787	S	-	-	752
SE 706	376	28'-10"	22159	S	-	-	376
SE 601	4	4'-8"	28	B	2	2	
SE 602	4	5'-4"	32	B	2	2	
SE 603	4	6'-0"	36	B	2	2	
SE 604	4	6'-8"	40	B	2	2	
SE 605	8	7'-2"	86	B	4	4	
SE 606	36	30'-0"	1622	S	-	-	36
SE 607	4	15'-6"	93	S	-	-	4
SE 501	360	3'-0"	1126	B	-	-	360
SE 502	16	12'-7"	210	S*	8	8	
SE 503	32	2'-0"	67	S	16	16	
SE 504	44	5'-4"	245	B	22	22	
SE 505	16	5'-11"	99	S	8	8	
SE 506	20	3'-0"	63	B	10	10	
SE 507	160	7'-2"	1196	S	-	-	160
SE 508	64	14'-8"	979	S	-	-	64
SE 509	416	5'-4"	2314	B	-	-	416
SE 401	891	30'-0"	17856	S	-	-	891
SE 402	99	23'-1"	1527	S	-	-	99
SE 403	300	30'-0"	6012	S	-	-	300
SE 404	200	20'-10"	2783	S	-	-	200
SE 405	200	17'-0"	2271	S	-	-	200
SE 406	200	14'-0"	1870	S	-	-	200
S 801	12	23'-0"	737	S	6	6	
S 802	92	6'-1"	1494	B	46	46	
S 803	12	38'-9"	1242	S	6	6	
S 701	40	38'-1"	3114	S	20	20	
S 702	752	37'-8"	57897	S	-	-	752
S 601	40	30'-8"	1842	S	20	20	
S 602	16	15'-4"	368	S	8	8	
S 603	4	11'-0"	66	S	2	2	
S 604	16	4'-6"	108	S	8	8	
S 605	8	6'-0"	72	S	4	4	
S 606	16	4'-0"	96	S	8	8	
S 607	8	3'-9"	45	S	4	4	

STEEL LIST

BENDING DIAGRAM



(S 509) "A" = 4 SERIES OF 4, 4'-0" TO 6'-0" VARIES BY 8" INCREMENTS
(S 529) "B" = 2 SERIES OF 5, 3'-7" TO 5'-7" VARIES BY 6" INCREMENTS
(S 530) "C" = 2 SERIES OF 5, 6'-0" TO 8'-0" VARIES BY 6" INCREMENTS
(S 531) "D" = 2 SERIES OF 5, 3'-5" TO 5'-5" VARIES BY 6" INCREMENTS
(S 532) "E" = 2 SERIES OF 5, 5'-0" TO 7'-0" VARIES BY 6" INCREMENTS
(S 518) "F" = 4 SERIES OF 3, 3'-0" TO 7'-0" VARIES BY 2'-0" INCREMENTS

* BEND IN FIELD AS REQUIRED. INCLUDE WITH REINFORCING STEEL FOR PAYMENT.

MARK	NO.	LENGTH	WEIGHT	SHP	BACKWALL		DECK
					REAR	FWD	
SUPERSTRUCTURE							
S 608	8	8'-9"	105	B	4	4	
S 609	8	7'-9"	93	B	4	4	
S 610	2	6'-1"	18	B	1	1	
S 611	2	7'-1"	21	B	1	1	
S 612	12	2'-11"	53	B	6	6	
S 613	4	3'-2"	19	B	2	2	
S 614	760	30'-0"	34246	S	-	-	760
S 615	8	6'-0"	72	S	4	4	
S 616	92	10'-3"	1416	B	46	46	
S 501	92	9'-4"	895	B	46	46	
S 502	192	3'-7"	718	B	96	96	
S 503	92	6'-0"	576	B	46	46	
S 504	2	6'-6"	14	B	1	1	
S 505	12	3'-2"	40	S	6	6	
S 506	2	2'-7"	5	B	1	1	
S 507	4	3'-5"	14	S	2	2	
S 508	8	10'-6"	88	B	4	4	
S 509	16	"A"	83	S	8	8	
S 510	8	6'-7"	55	S	4	4	
S 511	2	6'-10"	14	S	1	1	
S 512	60	2'-4"	146	B	30	30	
S 513	10	7'-0"	73	S	5	5	
S 514	2	3'-10"	8	S	1	1	
S 515	2	3'-6"	7	B	1	1	
S 516	12	12'-7"	157	S	6	6	
S 517	12	13'-0"	163	B	6	6	
S 518	12	"F"	63	S	6	6	
S 519	4	3'-5"	14	B	2	2	
S 520	4	5'-5"	23	B	2	2	
S 521	4	7'-5"	31	B	2	2	
S 522	20	4'-2"	87	B	10	10	
S 523	4	7'-10"	33	S	2	2	
S 524	12	6'-7"	82	S	6	6	
S 525	16	4'-8"	78	B	8	8	
S 526	10	4'-4"	45	B	5	5	
S 527	2	2'-9"	6	S	1	1	
S 528	2	5'-7"	12	B	1	1	
S 529	10	"B"	48	S	5	5	
S 530	10	"C"	73	S	5	5	
S 531	10	"D"	46	S	5	5	
S 532	10	"E"	63	S	5	5	
S 533	2	5'-9"	12	S	1	1	
S 534	360	2'-5"	907	B	-	-	360
S 535	360	2'-4"	876	B	-	-	360
S 536	2	5'-9"	12	S	1	1	
S 537	4	8'-6"	35	S	2	2	
S 538	2	4'-8"	10	S	1	1	
S 539	8	6'-9"	56	B	4	4	
S 540	12	5'-5"	68	B	6	6	
LIGHTING							
LE 701	4	11'-0"	90	B			
LE 501	8	3'-4"	28	B			
LE 502	8	8'-3"	69	B			
LE 503	12	7'-3"	91	B			
LE 504	8	3'-0"	25	S			

MICROFILMED
OCT 8 1985

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

506
581

MONTGOMERY COUNTY
MOT-675-0.00

NOTES:

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.
ALL BARS WITH PREFIX "SE" OR "LE" INDICATES EPOXY COATED BARS.

A. M. KINNEY, INC. CINCINNATI, OHIO						
REINFORCING STEEL LIST						
BRIDGE NO. MOT- 675 - 0185 PROPOSED I-675 UNDER RELOCATED YANKEE STREET						
MONTGOMERY COUNTY						STA. 140+54.00
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
C.T.S.	W.S.	W.S.	J.I.K.	J.C.O.	9-24-79	

