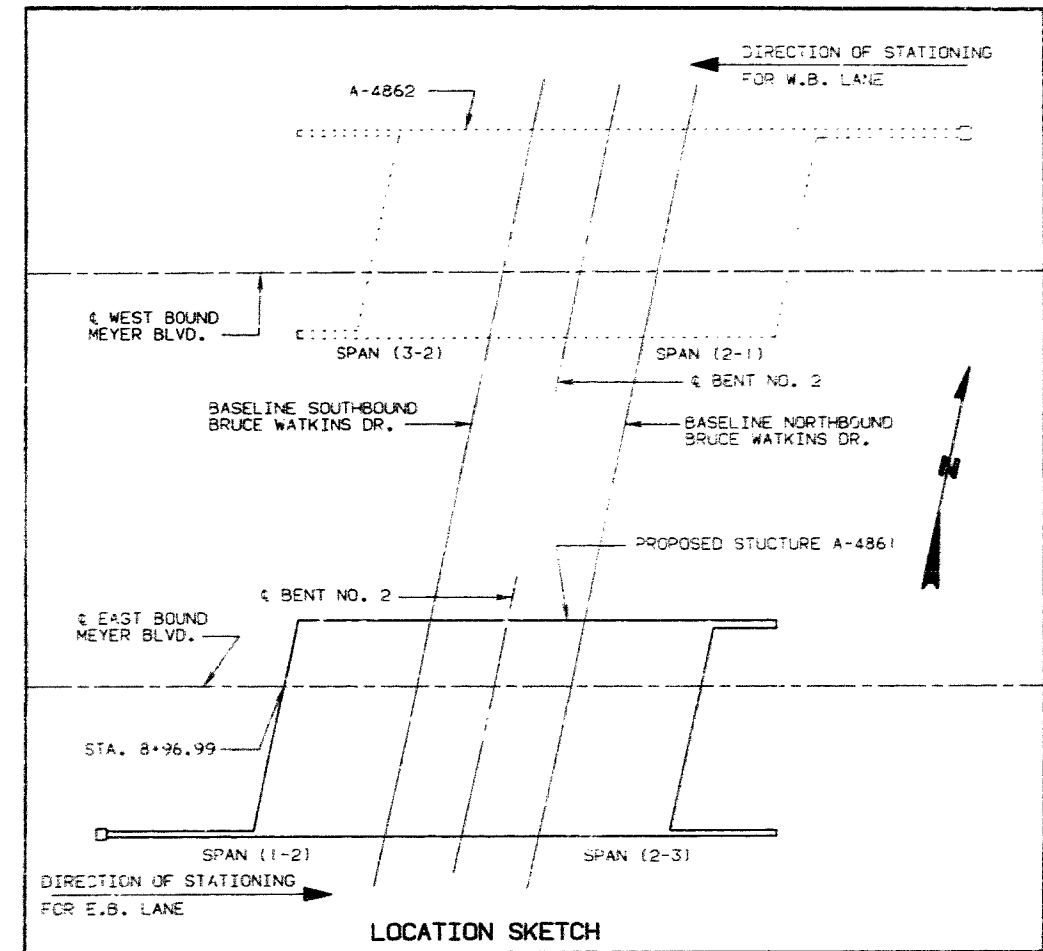


MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE:	PROJ. NO.	SHEET NO.
MO.		1155
SEC./SUR.	3 TWP. 43 RGE. 33	

- 1 INDEX OF DRAWINGS
- 2 PLAN AND ELEVATION
- 3 QUANTITIES, GEN. NOTES, AND PILE DATA
- 4 BORINGS
- 5 ABUTMENT NO. 1
- 6 ABUTMENT NO. 1
- 7 ABUTMENT NO. 1
- 8 ABUTMENT NO. 1
- 9 ABUTMENT NO. 1
- 10 ABUTMENT NO. 1
- 11 ABUTMENT NO. 1
- 12 ABUTMENT NO. 1
- 13 ABUTMENT NO. 1
- 14 ABUTMENT NO. 1
- 15 ABUTMENT NO. 1 (WING WALL)
- 16 ABUTMENT NO. 1 (PEDESTRIAN HANDRAIL)
- 17 INT. BENT NO. 2
- 18 INT. BENT NO. 2
- 19 INT. BENT NO. 2
- 20 ABUTMENT NO. 3
- 21 ABUTMENT NO. 3
- 22 ABUTMENT NO. 3
- 23 ABUTMENT NO. 3
- 24 ABUTMENT NO. 3
- 25 ABUTMENT NO. 3
- 26 ABUTMENT NO. 3
- 27 ABUTMENT NO. 3
- 28 ABUTMENT NO. 3
- 29 ABUTMENT NO. 3
- 30 VERTICAL DRAINS AT ABUTMENT NO. 1
- 31 VERTICAL DRAINS AT ABUTMENT NO. 3
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- 33 PRESTRESSED GIRDER ELEVATION
- 34 FASCIA GIRDER ELEVATION
- 35 PLAN OF TOP SLAB (ALL OPTIONS)
- 36 PLAN OF BOTTOM SLAB (C.I.P. OPTION)
- 37 PLAN OF BOTTOM SLAB (PRECAST PANEL OPTION)
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- 39 SECTION THRU SLAB (PRECAST PANEL OPTION)
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- 41 END ABUTMENT DIAPH. DETAILS
- 42 INT. BENT DIAPH. AND INT. DIAPH. DETAILS
- 43 PRECAST PANEL OPTION
- 44 PREFORMED COMPRESSION JOINT SEAL DETAILS
- 45 PREFORMED COMPRESSION JOINT SEAL DETAILS
- 46 PART PLAN OF SIDEWALK AND PLANTER
- 47 PART PLAN OF SIDEWALK AND PLANTER
- 48 DETAILS OF RIGHT CURB AND PLANTER WALL
- 49 SECTION NEAR RIGHT PLANTER WALL
- 50 DETAILS OF LEFT PARAPET AND CURB
- 51 PLAN OF PLANTER WALLS AT ABUTMENT NO. 1 & 3
- 52 DETAILS OF PLANTER WALLS AT ABUTMENT NO. 1 & 3
- 53 DETAILS OF TRELLIS / PRECAST COLUMN
- 54 DETAILS OF INTERMEDIATE TRELLIS COLUMN
- 55 DETAILS OF TRELLIS POST
- 56 ELEVATION OF BRIDGE FENCE
- 57 BRIDGE FENCE DETAILS
- 58 PLANTER DRAINAGE DETAILS
- 59 DETAILS OF CONDUIT SYSTEM
- 60 PLANTER CONDUIT AND LIGHTING DETAILS
- 61 DETAILS OF UNDERDECK LIGHTING
- 62 BAR LIST
- 63 BAR LIST
- 64 BAR LIST
- 65 BAR LIST
- 66 BAR LIST



B.M. #134 "R" ELEV. 943.30 "+" E.N.E. TOP FLANGE BOLT F.H., AT N.W. CORNER MEYER BLVD. AND CHESTNUT AVE.

BRIDGE MEYER BLVD. (E.B.L.) OVER RT. 71

STATE ROAD FROM 63RD ST. TO 75TH ST. IN KANSAS CITY

PROJECT NO. PA-71-4(56) STA. 385+56.71
 JOB NO. 4U-10-71 RTE. 71

JACKSON COUNTY

Date 2/14/91

STD. 611.60
STD. 706.35
A-4861

DESIGNED JUNE 1990
 DETAILED NOV. 1990
 CHECKED DEC. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

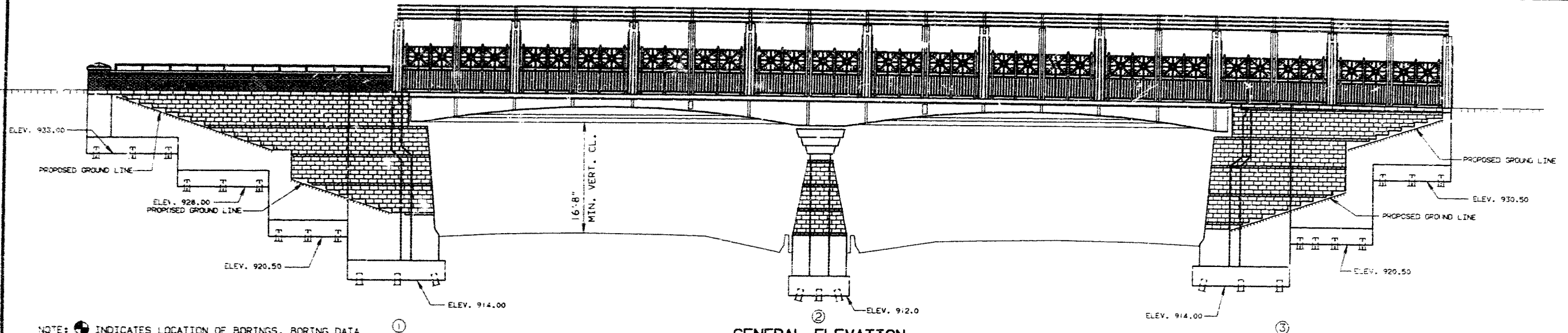
SHEET NO. 1 OF 66.

366 390

STATE	PROJ. NO.	SHEET NO.
MO.		2

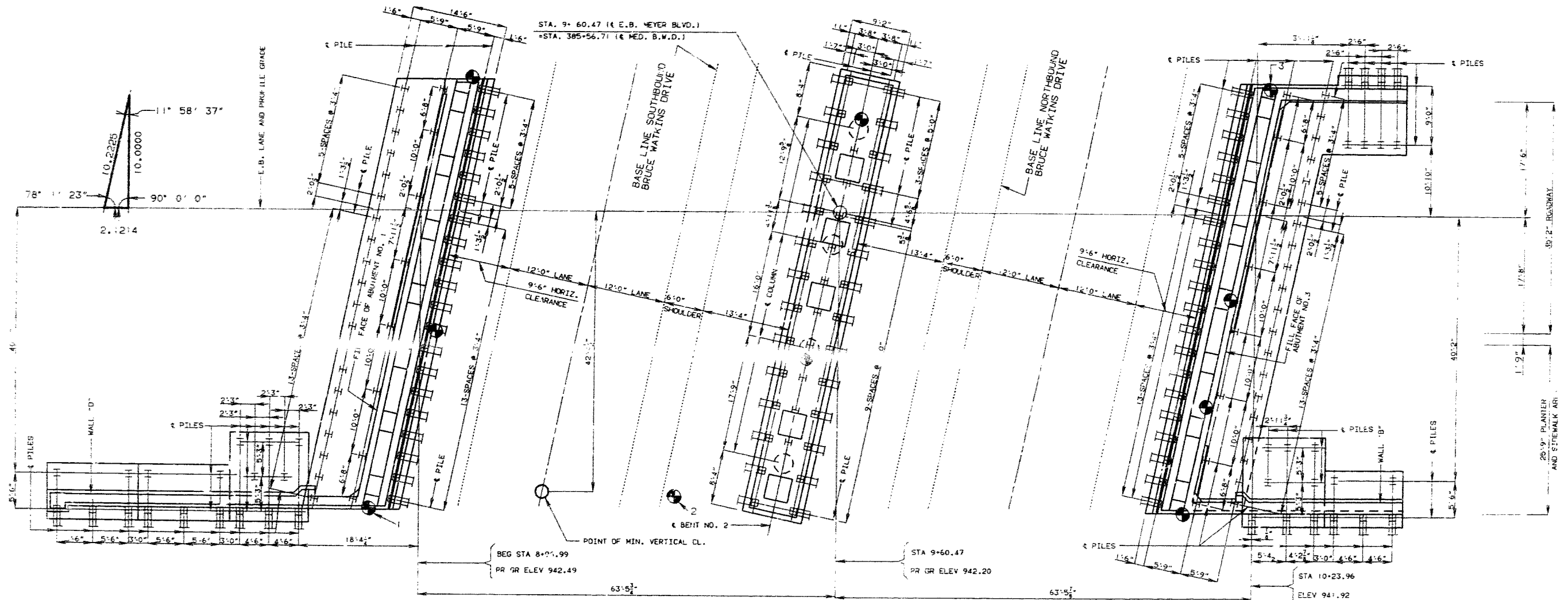
(61.7', 61.7') PRESTRESSED CONCRETE I-GIRDER SPANS

-0.45% GRADE



NOTE: ● INDICATES LOCATION OF BORINGS. BORING DATA FOR ALL LOCATIONS IS AVAILABLE UPON REQUEST FROM DISTRICT OFFICE. BORING DATA FOR NUMBERED LOCATIONS IS DETAILED ON SHEET NO. 4 OF 66.

GENERAL ELEVATION



SPAN (1-2)

PLAN

SPAN (2-3)

DETAILED OCT. 1990
 CHECKED NOV. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 2 OF 66

JACKSON

COUNTY

A-4861

367 389

STATE	PROJ. NO.	SHEET NO.
MO.		337

GENERAL NOTES:

DESIGN SPECIFICATIONS: A.A.S.H.T.O.-1989
LOAD FACTOR DESIGN
A.A.S.H.T.O.-1983 GUIDE SPECIFICATIONS
FOR SEISMIC DESIGN
SEISMIC PERFORMANCE CATEGORY A

DESIGN LOADING:
HS20-44 MODIFIED 24,000# TANDEM AXLE
35#/SQ. FT. FUTURE WEARING SURFACE
EARTH 120#/CU. FT., EQUIVALENT FLUID PRESSURE 45#/CU. FT.

DESIGN UNIT STRESSES:
CLASS B CONCRETE (SUBSTRUCTURE) F'C=3,000 PSI.
CLASS B1 CONCRETE (PARAPET AND CURB) F'C=4,000 PSI.
CLASS B2 CONCRETE (SUPERSTRUCTURE EXCEPT PRESTRESSED GIRDERS AND PARAPET AND CURB) F'C=4,000 PSI.
CLASS A1 CONCRETE F'C=5,000 PSI. PRECAST CONCRETE (SEE SPECIAL PROVISIONS)
REINFORCING STEEL (GRADE 60) F_y=60,000 PSI.
STRUCTURAL CARBON STEEL F_y=36,000 PSI.
STAINLESS STEEL (A.S.T.M. A276) F_y=40,000 PSI
STRUCTURAL STEEL TUBING (A.S.T.M. A-500) GRADE 3 F_y=46,000 PSI
STEEL PILE F_y=9,000 PSI.
FOR PRESTRESSED GIRDER STRESSES, SEE SHEET NO. 33

FABRICATED STEEL CONNECTION:
FIELD CONNECTIONS, HIGH STRENGTH BOLTS 3/4"Ø, HOLES 13/16"Ø,
EXCEPT AS NOTED.

REINFORCING STEEL:
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1/2", UNLESS OTHERWISE SHOWN.
ALL REINFORCING BARS IN TOPS OF SUBSTRUCTURE BEAMS OR CAPS SHALL BE SPACED TO CLEAR ANCHOR BOLTS FOR BEARINGS BY AT LEAST 1/2".

LAMINATED NEOPRENE BEARING:
BEARINGS SHALL BE 60 DUROMETER NEOPRENE PADS.

PAINT:
FOR PAINTING OF STRUCTURAL STEEL AND ORNAMENTAL STEEL SEE SPECIAL PROVISIONS.
AREAS TO BE ENCASED IN END BENT CONCRETE SHALL BE PAINTED ONE COAT OF SYSTEM C PRIMER AND SCRATCHED OR DAMAGED SURFACES ARE TO BE TOUCHED UP IN THE FIELD BEFORE CONCRETE IS POURED.

JOINT FILLER:
ALL JOINT FILLER SHALL MEET THE REQUIREMENTS OF STD. SPEC. 1057.2.4,
EXCEPT AS NOTED.

NOTE: ALL STEEL SHALL BE A-36 EXCEPT AS NOTED.

ESTIMATED QUANTITIES			
ITEM		SUBSTR.	SUPERSTR. TOTAL
CLASS I EXCAVATION	CU. YD.	1300	1300
STRUCTURAL STEEL PILE (10")	LIN. FT.	418	418
STRUCTURAL STEEL PILES (12")	LIN. FT.	1,818	1,818
PREBORE FOR PILING	LIN. FT.	2,082	2,082
CLASS B CONCRETE (SUBSTR.)	CU. YD.	960.4	960.4
PROTECTIVE COATING-CONCRETE BENTS(DELETERIOUS AGENTS)	LUMP SUM		1
SLAB ON CONCRETE I-GDR.	SQ.YDS.		900
LEFT PARAPET AND CURB	LIN.FT.		147
RIGHT CURB AND PLANTER WALL	LIN.FT.		125
RIGHT PLANTER WALL	LIN.FT.		115
PLANTER WALLS AT END ABUTMENTS	LIN.FT.		66
WING WALL AT ABUTMENT NO. 1	LIN. FT.		48
LAMINATED NEOPRENE BEARING PADS	EACH		14
COMPRESSION EXP. JT. SEAL (2.5 IN.)	LIN. FT.		93
PRESTRESSED CONCRETE I-GDR. (60' SPAN)	EACH		14
REINFORCING STEEL (GRADE 60)	LB.	98,180	88,180
REINFORCING STEEL (GRADE 60) EPOXY	LB.	4,060	4,060
CONDUIT SYSTEM ON STRUCTURE (1-1/2"Ø)(4"Ø)	LUMP SUM		1
PLANTER LIGHTING ON STRUCTURE	LUMP SUM		1
LIGHTING CONDUIT(2"Ø)	LUMP SUM		1
FABRICATED STRUCTURAL CARBON STEEL(MISC.)	LB.	12,020	12,020
PLANTER DRAIN SYSTEM	LUMP SUM		1
VERTICAL DRAINS AT END ABUTMENTS	EACH		2
PAINTING	LUMP SUM		1
PEDESTRIAN HANDRAIL	LIN.FT.		43
PRECAST COLUMN	EACH		20
TRELLIS	LUMP SUM		1
MASONRY PROTECTION SYSTEM	LUMP SUM		1
GRAFFITI PROTECTION SYSTEM	LUMP SUM		1
FASCIA BRICK, CONCRETE BLOCK AND CMU BLOCK	SQ.FT.	4,700	4,700
ORNAMENTAL FENCE PANEL (8'-11")	EACH		14
ORNAMENTAL FENCE PANEL (8'-5-1/8")	EACH		4
SIDEWALK PAVING BRICK	SQ.FT.		1,050
LAMINATED NEOPRENE BEARING PADS (P/S STRUCTURE)	EACH		14

THE COST OF FURNISHING, FABRICATING AND INSTALLING LAMINATED NEOPRENE BEARING PADS, COMPLETE-IN-PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR LAMINATED NEOPRENE BEARING PADS PER EACH. PAYMENT FOR PARAPET AND CURB AND PLANTER WALL SHALL INCLUDE BRICK VENEER, PRECAST CAP, REINFORCING STEEL, AND CONCRETE COMPLETE-IN-PLACE, PER LIN. FT.

CONCRETE ABOVE UPPER CONSTRUCTION JOINT IN BACKWALL AT END ABUTMENTS NO. 1 AND NO. 3 IS INCLUDED WITH CLASS B (SUBSTRUCTURE) QUANTITIES.

THE COST OF PAINTING FASCIA GIRDER, PED. RAIL, TRELLIS AND ORNAMENTAL FENCE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PAINTING LUMP SUM.(SEE SPECIAL PROVISIONS).

FOR SIDEWALK PAVING BRICK REQUIREMENTS SEE SPECIAL PROVISIONS.

ITEMS TO BE GALVANIZED SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A123 AND A.S.T.M. A153 (SEE SPECIAL PROVISIONS).

ESTIMATED QUANTITIES FOR ALTERNATE SLABS			
TYPE OF SLAB	REINF. (LBS.)		CONC. (CU. YD.)
	EPOXY	PLAIN	
CAST-IN-PLACE CONVENTIONAL FORMS	70,170	2,230	245.0
PRECAST PANEL FORMS	64,570	2,230	204.9

NOTE: THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS REPRESENTS THE QUANTITIES USED BY THE STATE IN PREPARING THE COST ESTIMATE FOR CONCRETE SLABS. VARIATIONS MAY BE ENCOUNTERED IN THESE ESTIMATED QUANTITIES BUT THESE VARIATIONS CANNOT BE USED FOR AN ADJUSTMENT IN THE CONTRACT UNIT PRICE PER SQUARE YARD OF ALTERNATE SLAB USED.
SEE SPECIAL PROVISIONS FOR ALTERNATE METHODS OF FORMING SLABS

PRECAST PANEL QUANTITIES ARE BASED ON SKEWED END PANELS.

* BASED ON MINIMUM TOP FLANGE THICKNESS AND MINIMUM JOINT FILLER THICKNESS.

PILE DATA								
BENT NO.	1	WALL "D"		2	3	WALL "B"		
PILE TYPE AND SIZE	HP12x53	HP12x53		HP10x42	HP12x53	HP12x53		
NUMBER	48	8	5	5	38	56	8	5
APPROXIMATE LENGTH FT.	11	17	25	30	11	11	16	27
DESIGN BEARING TONS	64	42	29	20	52	64	41	19
HAMMER ENERGY REQUIRED FT.-LBS.	15,700	10,400	7300	7000	12,200	15,700	10,200	7,000

NOTE: MINIMUM ENERGY REQUIREMENT OF HAMMER IS BASED ON PLAN LENGTH AND DESIGN BEARING VALUE OF PILES.

ALL PILES SHALL BE DRIVEN TO PRACTICAL REFUSAL.
MANUFACTURED PILE POINT SHALL BE USED ON ALL PILES IN THIS STRUCTURE.
SEE SPECIAL PROVISIONS.

PREBORE FOR PILES AT ABUT. NO.1, BENT NO. 2, AND ABUT. NO. 3 TO ELEVATIONS 904.0, 902.0, AND 904.0 RESPECTIVELY.

3688 400

STATE	PROJ. NO.	SHEET NO.
MO.		333

STANDARD PENETRATION TEST

DEPTH	BLOWS/6"	POCKET PEN. TSF
10'	5-3-3	1.5
15'	4-5-4	1.5
20'	4-5-6	1.75
25'	5-7-7	2.5
30'	7-7-9	2.5
35'	11-15-22	3.25
40'	25-76 in 3"	-

ELEV. 942.7
 → BROWN CLAY, MEDIUM STIFF, WITH TRACE ORGANIC IN UPPER 0.5±

ELEV. 937.6
 → GRAY COBBLES, GRAVEL WITH FINE TO COARSE SAND.

ELEV. 933.6
 → BROWN CLAY WITH LIGNITE STAINS, STIFF, MOIST.

ELEV. 922.2
 → DARK GRAY CLAY, STIFF TO VERY STIFF, MOIST.

ELEV. 914.0
 → BROWN TO GRAY MOTTLED CLAY WITH LIMONITE STAINS, VERY STIFF.

ELEV. 907.5
 → RED WAXY SHALE, VERY STIFF, THIN LIMESTONE LEDGE NOTED @ 36.5±

ELEV. 905.5
 → GRAY SHALE, VERY HARD.

ELEV. 897.2
 → GRAY CRYSTALLINE LIMESTONE, THIN TO MEDIUM BEDDED HARD. (WATER LOSS @ 6.5'.)

ELEV. 896.1

①
(CORE)

ELEV. 942.4
 → BROWN CLAY, SOFT, P.A.W.T. FROM 0 TO 5.0±'

ELEV. 937.1
 → BOULDERS, COBBLES AND COARSE GRAVEL.

ELEV. 929.8
 → BROWN TO GRAY CLAY, MEDIUM STIFF, P.A.W.T. FROM 12.6±' TO 21±' WITH SOME RESISTANCE.

ELEV. 920.7
 → GRAY CLAY, MEDIUM STIFF, P.A.W.T. FROM 22±' TO 32±' WITH SOME RESISTANCE, COULD NOT P.A.W.T. @ 32±'.

ELEV. 910.3
 → GRAY CLAY STIFF, COULD NOT P.A.W.T.

ELEV. 906.2
 → RED WEATHERED SHALE, STIFF.

ELEV. 903.0
 → GRAY SHALE, VERY HARD.

ELEV. 899.6

②

STANDARD PENETRATION TEST

DEPTH	BLOWS/6"	POCKET PEN. TSF
5'	3-4-6	1.25
10'	4-3-4	2.25
15'	3-3-5	1.25
20'	3-3-4	0.75
25'	4-4-6	1.5
30'	3-3-2	0.75
35'	8-14-11	5.0
40'	24-34-66 in 4"	9.0+

ELEV. 942.3
 → BROWN CLAY WITH SOME LIGNITE STAINING, STIFF TO VERY STIFF, MOIST.

ELEV. 927.5
 → BROWN TO GRAY MOTTLED CLAY WITH LIMONITE STAINS, STIFF, MOIST.

ELEV. 924.8
 → GRAY SILTY CLAY WITH LIGNITE STAINS, MEDIUM STIFF TO STIFF, MOIST, COBBLE SEAM NOTED AT 24.3'.

ELEV. 914.8
 → BROWN CLAY WITH LIGNITE STAINS, MEDIUM STIFF, MOIST.

ELEV. 907.6
 → RED WAXY WEATHERED SHALE, HARD.

ELEV. 904.0
 → GRAY SHALE, VERY HARD.

ELEV. 898.7
 → GRAY CALCAREOUS LIMESTONE, HARD.

ELEV. 898.1

③
(CORE)

NOTE: FOR LOCATION OF BORINGS, SEE SHEET NO. 2. BORING DATA FOR ALL LOCATIONS IS AVAILABLE UPON REQUEST FROM THE DISTRICT OFFICE.

BORING DATA

SEE SHEET 3

369 401
 DETAILED JUNE 1990
 CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 4 OF 56

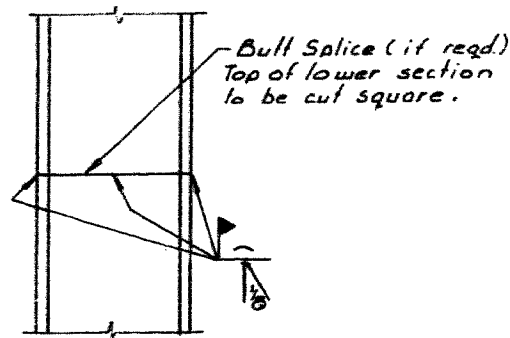
JACKSON

COUNTY

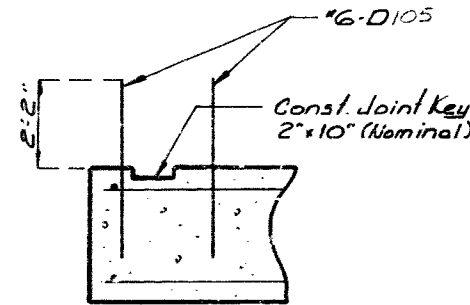
A-4861

STATE	PROJ NO	SHEET NO
MO		537

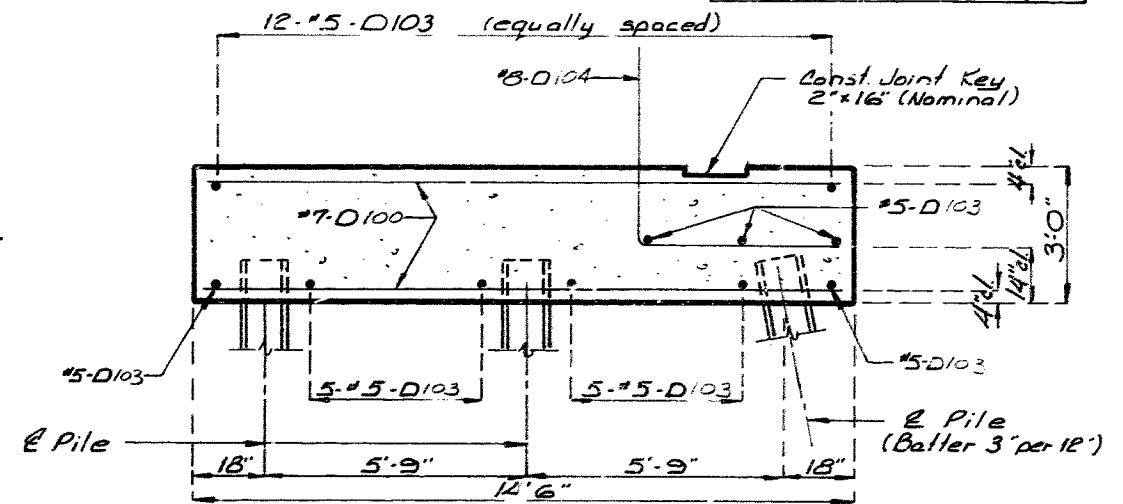
Note: For R-bar spacing in footing see sheet No. 7



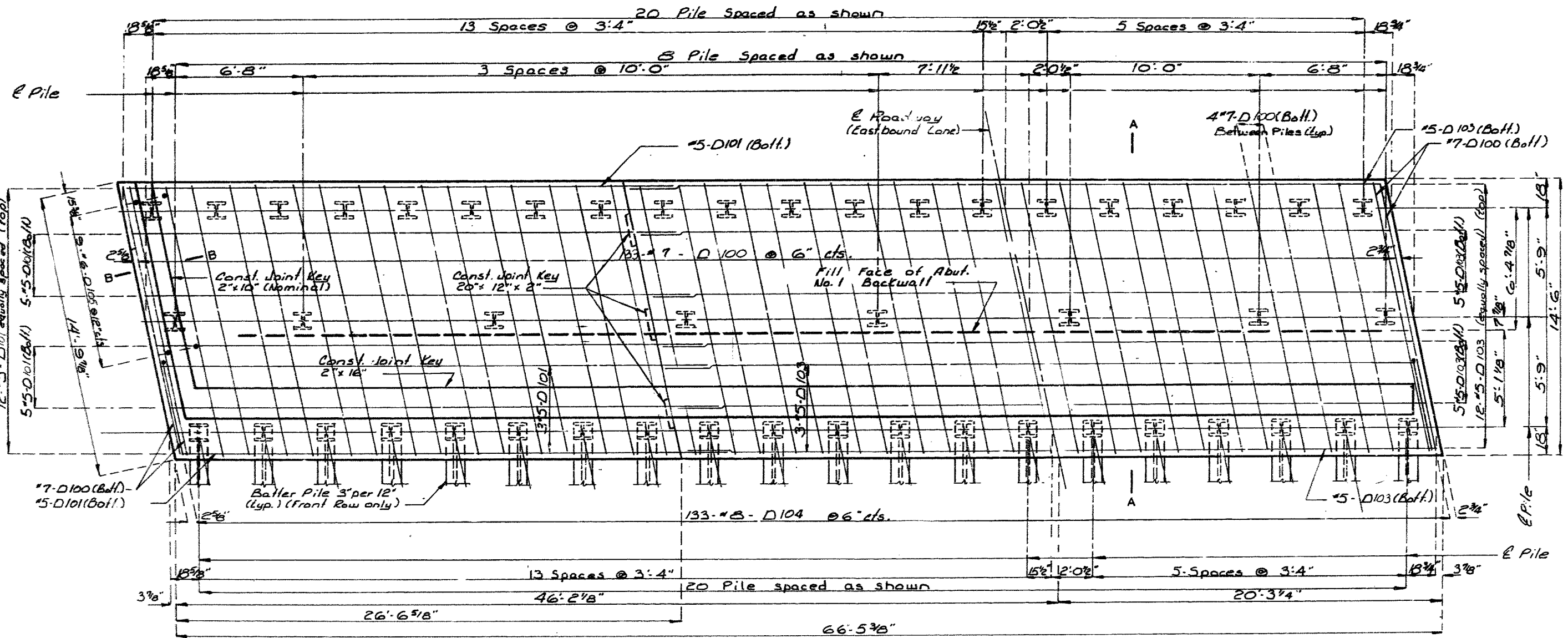
DETAIL OF STEEL PILE SPLICE



PART SECTION B-B



SECTION A-A



PLAN OF FOOTING AT ABUTMENT NO. 1

372 407

DETAILED Aug. 1990
CHECKED Oct. 1990

Note: This drawing is not to scale. Follow dimensions.

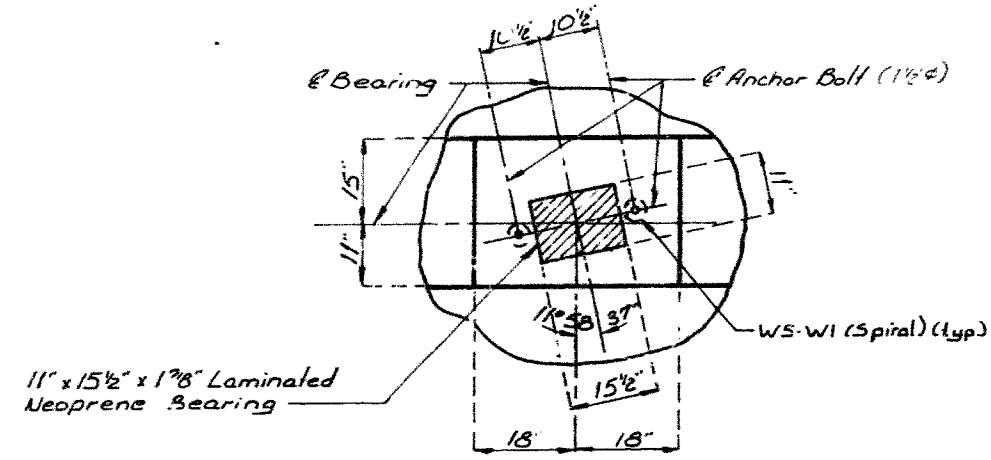
Sheet No. 5 of 10.

JACKSON

COUNTY

A-4861

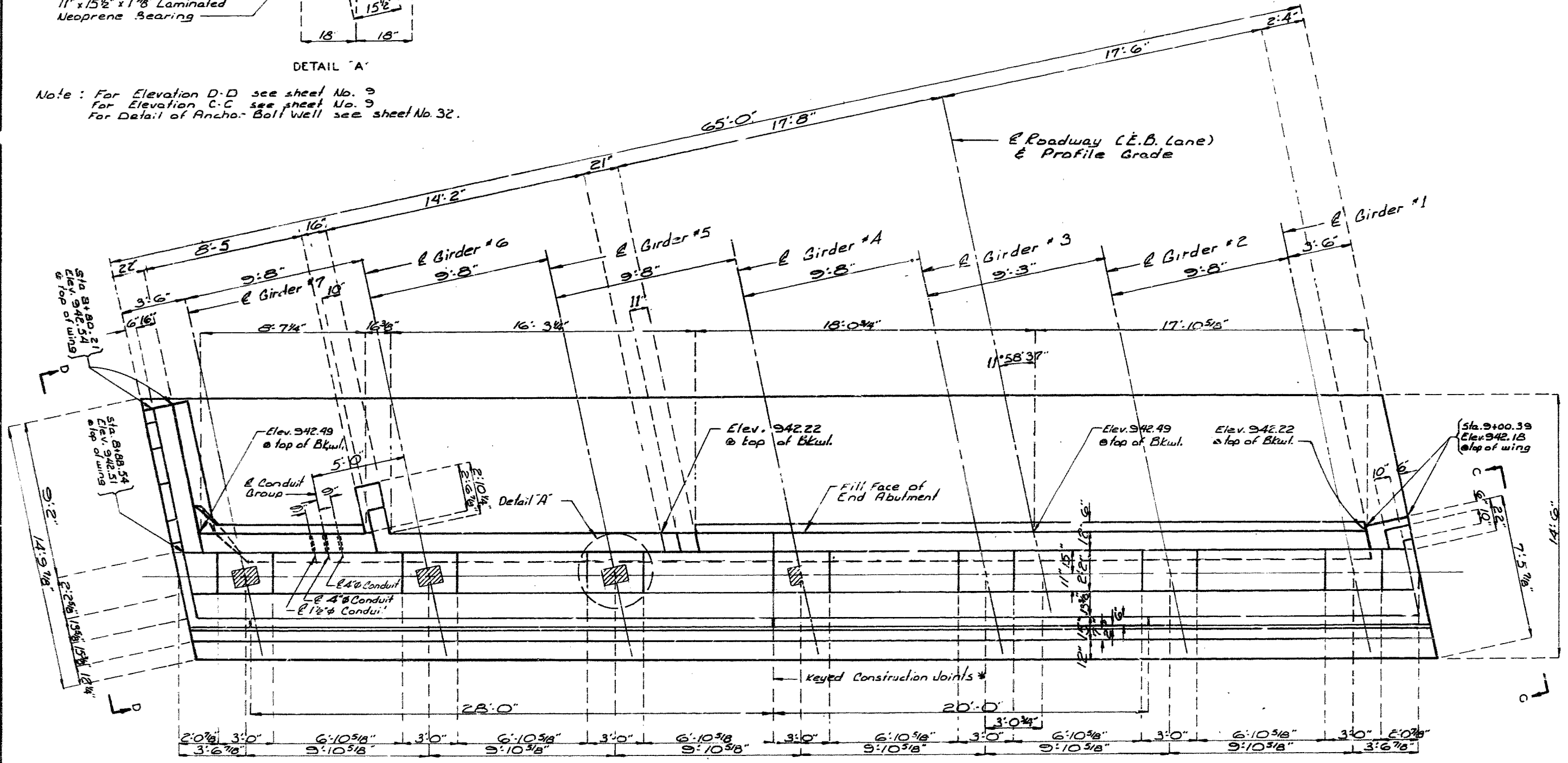
STATE	PROJ NO	SHEET NO
MO		3-2



DETAIL 'A'

Note: For Elevation D-D see sheet No. 9
 For Elevation C-C see sheet No. 9
 For Detail of Anchor Bolt Well see sheet No. 32.

371403



* See Elevation, sheet No. 7 for size of Keyed Construction Joints.

PLAN
 DETAILS OF ABUTMENT NO. 1

DETAILED Aug. 1990
 CHECKED Oct. 1992

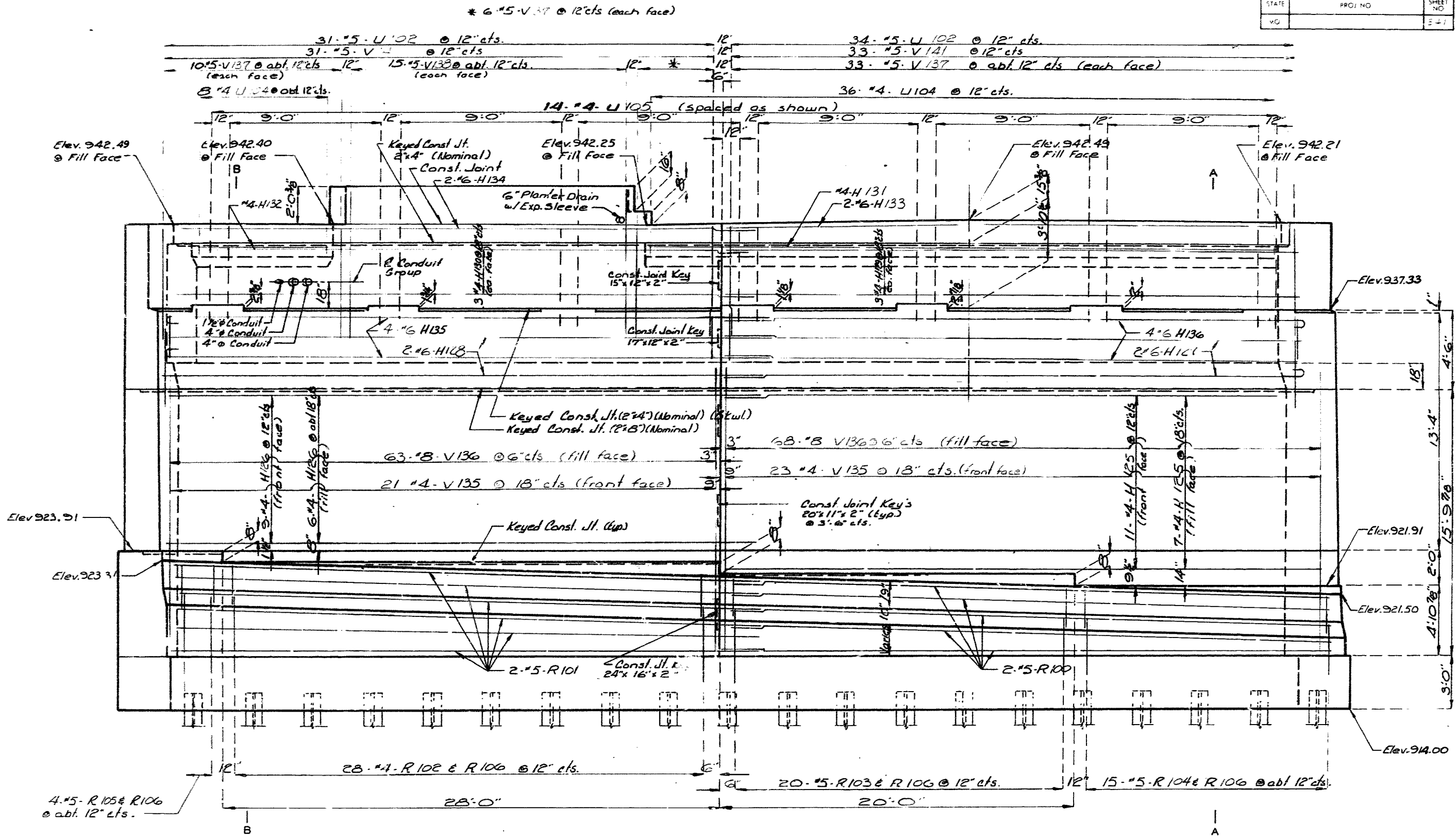
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 6

JACKSON COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO		34



372 404

ELEVATION

DETAILS OF ABUTMENT NO. 1

Note: For Details and reinforcement of Footing see sheet A48611.5 For section A-A & B-B see sht No. 6

QUALITY REVIEW
DETAILED Aug. 1990
CHECKED Dec. 1990

Note: This drawing is not to scale. Follow dimensions.

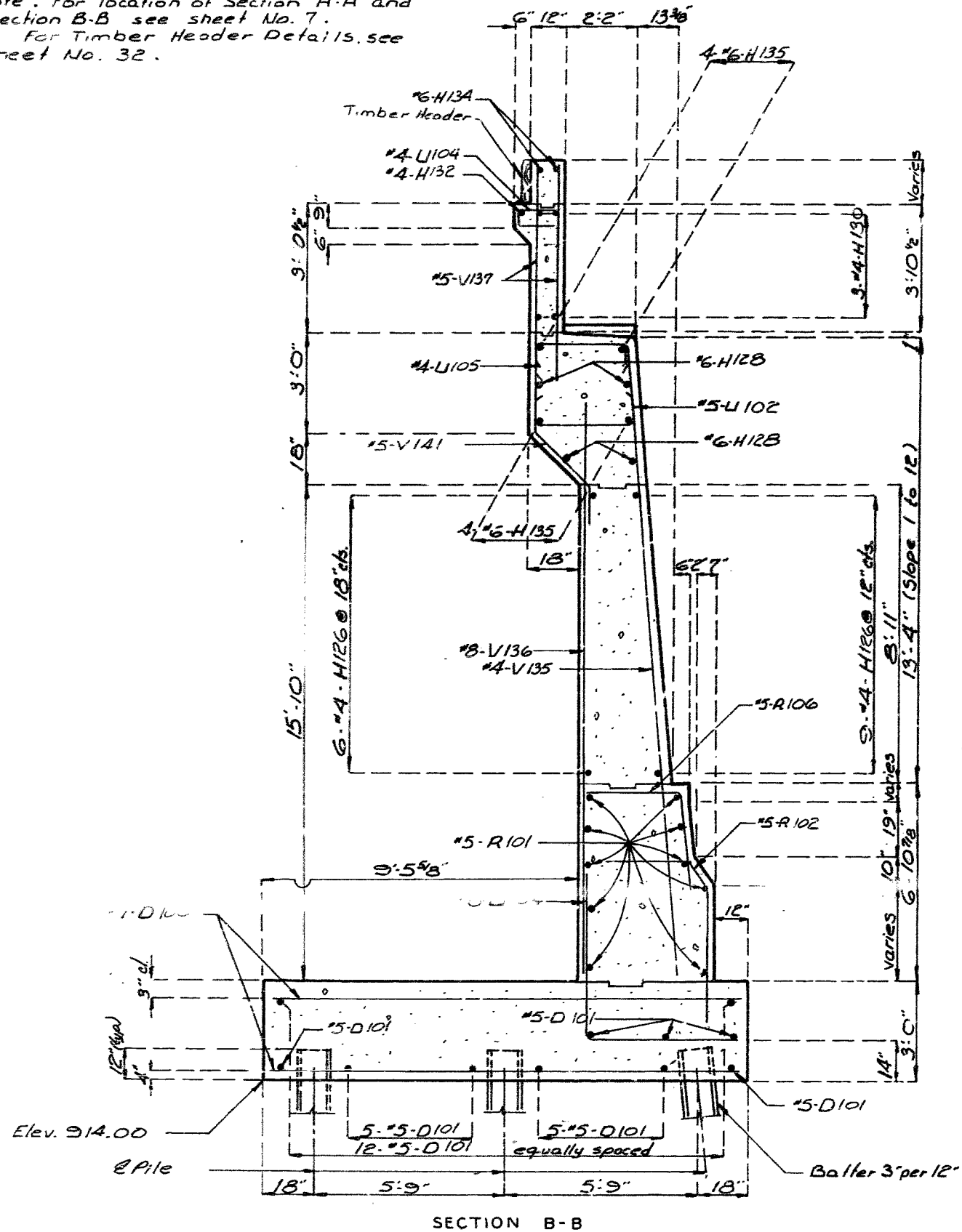
Sheet No. 7 of 26

JACKSON COUNTY

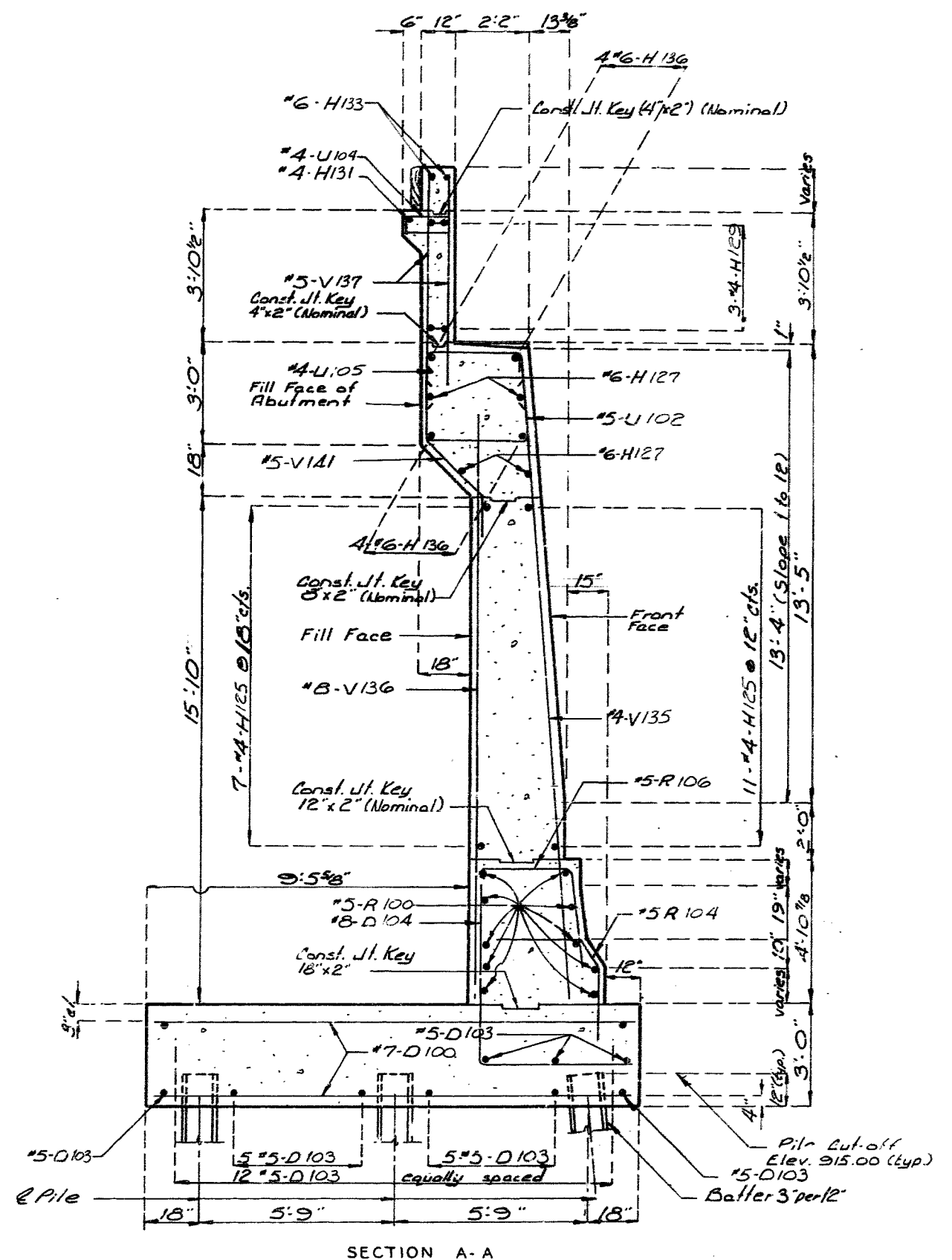
A-4861

STATE	PROJ NO	SHEET NO
MO		322

Note: For location of Section A-A and Section B-B see sheet No. 7.
For Timber Header Details, see sheet No. 32.



SECTION B-B



SECTION A-A

373405

DETAILED Dec. 1930
CHECKED Dec. 1930

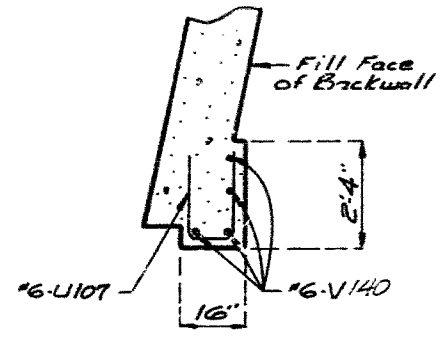
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 8 of 66

JACKSON COUNTY

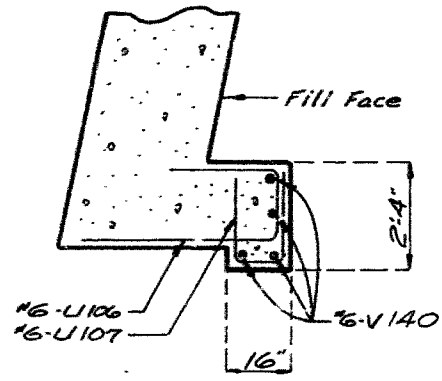
A-4861

STATE	PROJ NO	SHEET NO
MO		343

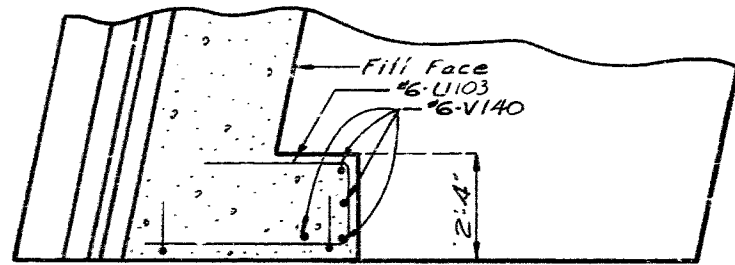


SECTION A-A

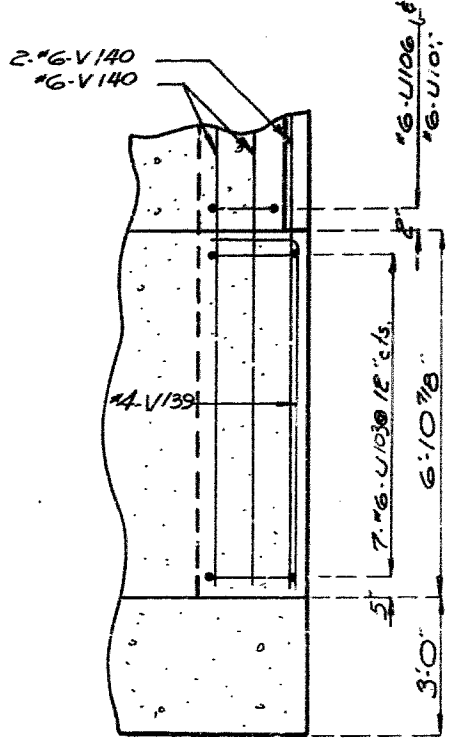
Note: Backwall, Beam, and Footing reinforcement not shown for clarity. For location of Elevation C-C see sheet No. 6



SECTION B-B

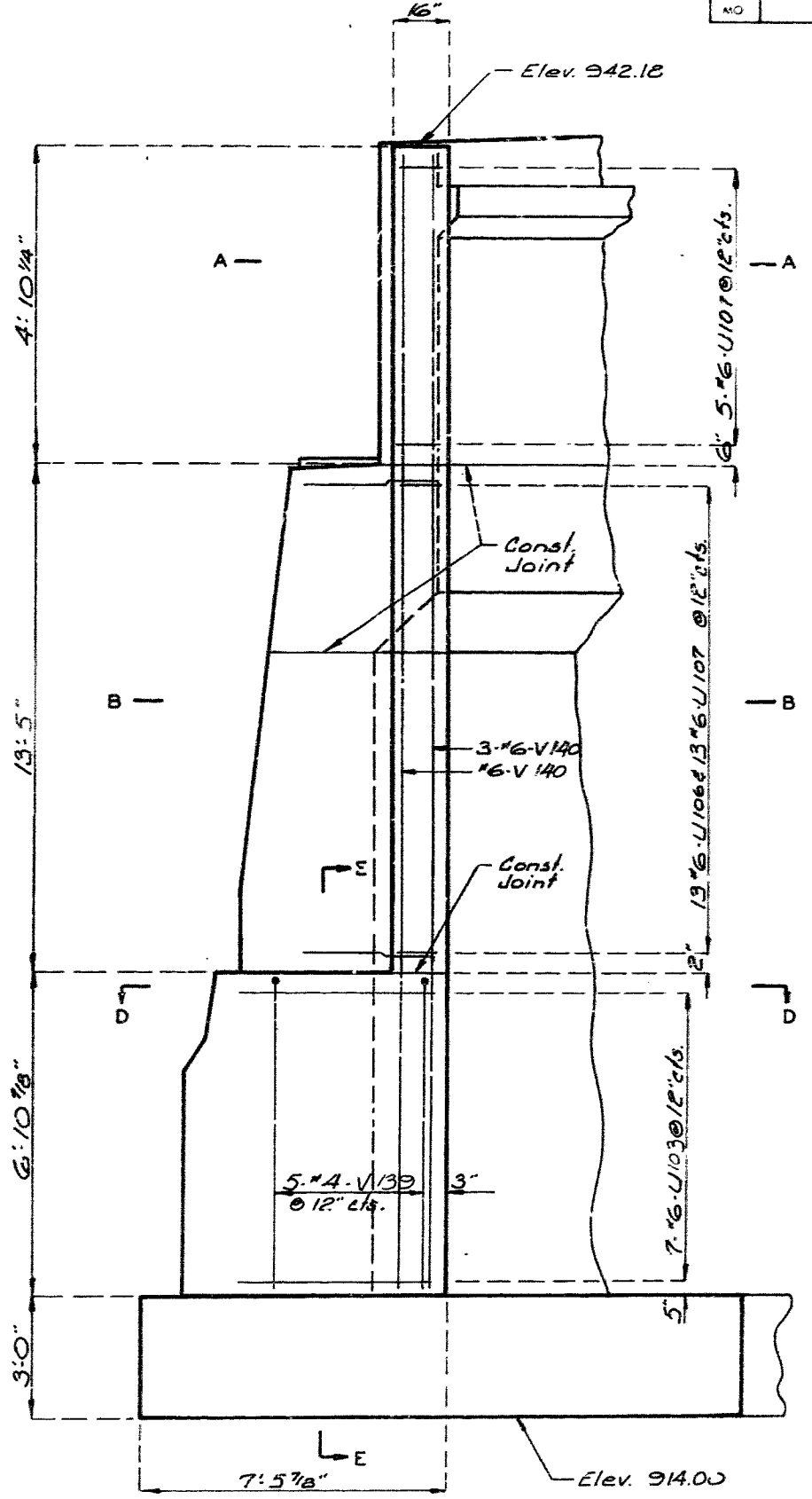


SECTION D-D



SECTION E-E

DETAILS OF ABUTMENT NO. 1



ELEVATION C-C

374 906

QUALITY REVIEW
 DETAILED Dec. 1990
 CHECKED Dec. 1990

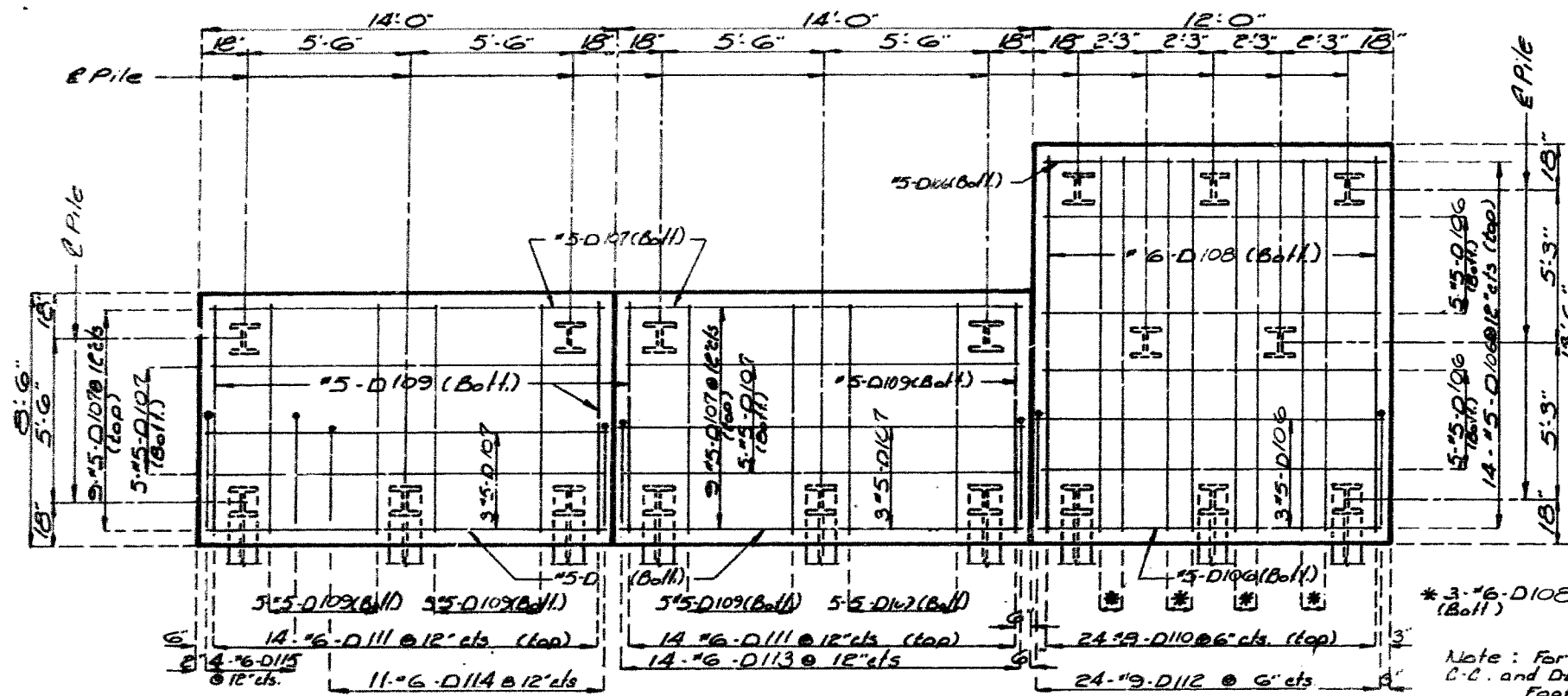
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 9 of 66

JACKSON COUNTY

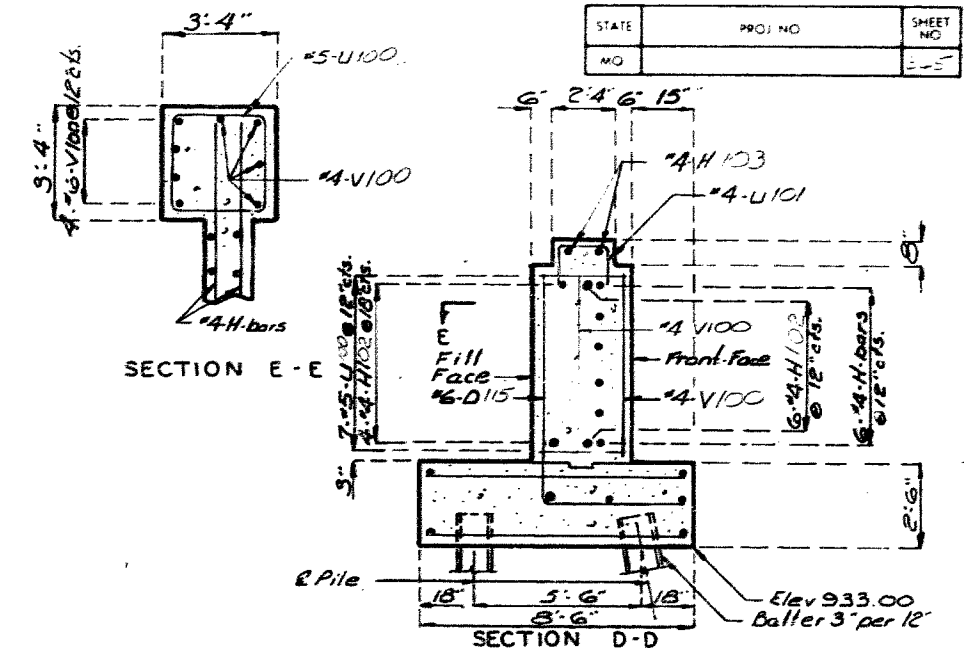
A-4861

STATE	PROJ. NO.	SHEET NO.
NO.		10



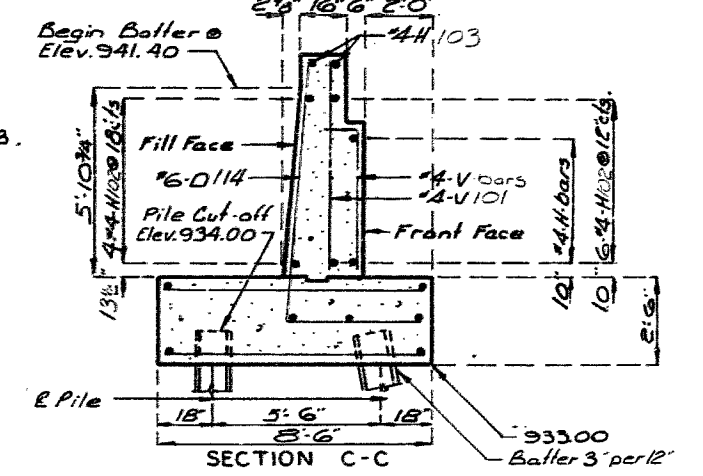
PLAN OF FOOTINGS

Note: For location of Section B-B, C-C, and D-D see sheet No. 12. Footing reinforcement in Section L-C and D-D is typical as shown in section B-B. For Pile splice Detail see sheet No. 5.



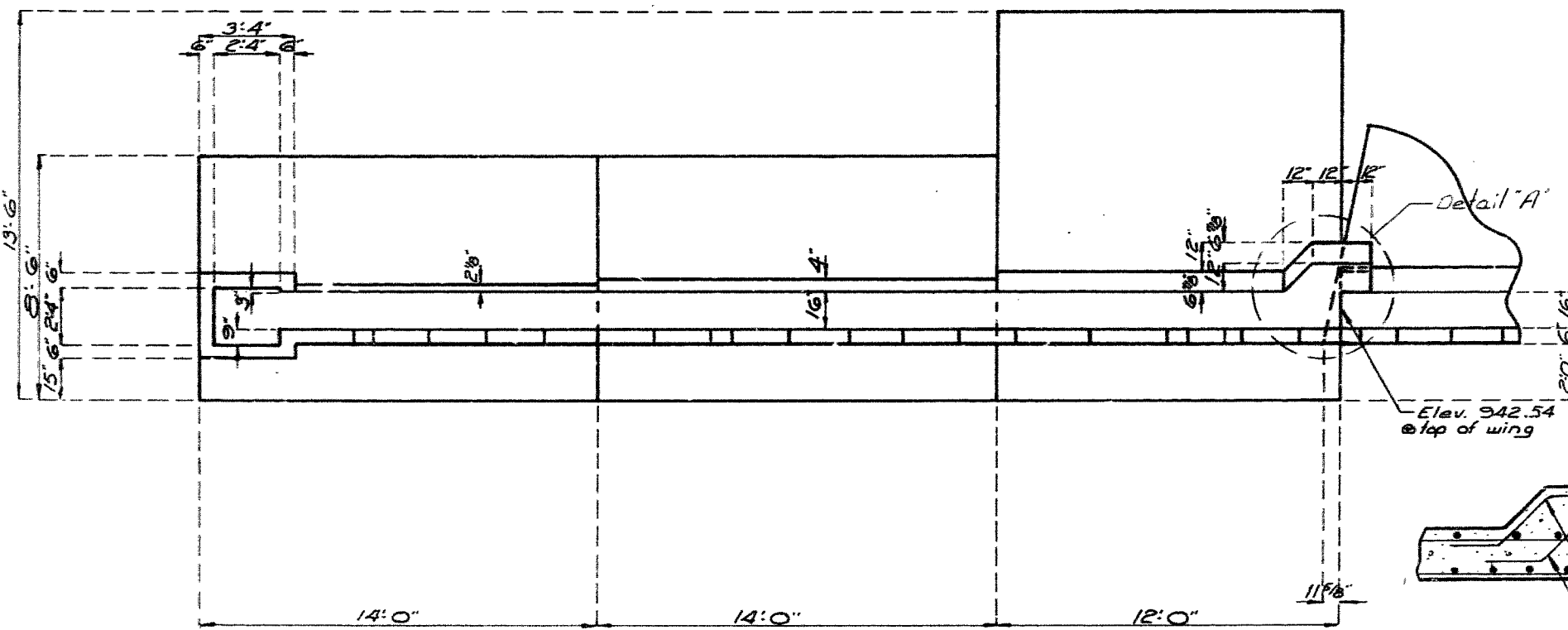
SECTION E-E

SECTION D-D

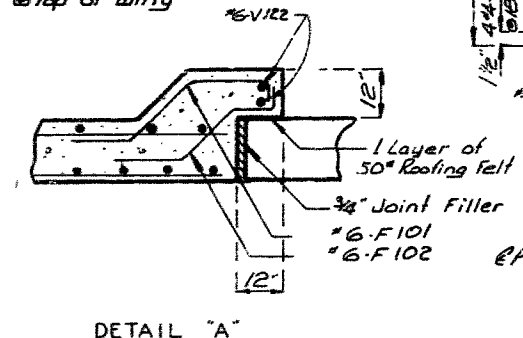


SECTION C-C

SECTION B-B



PLAN
DETAIL OF WALL "D"



DETAIL "A"

375 407

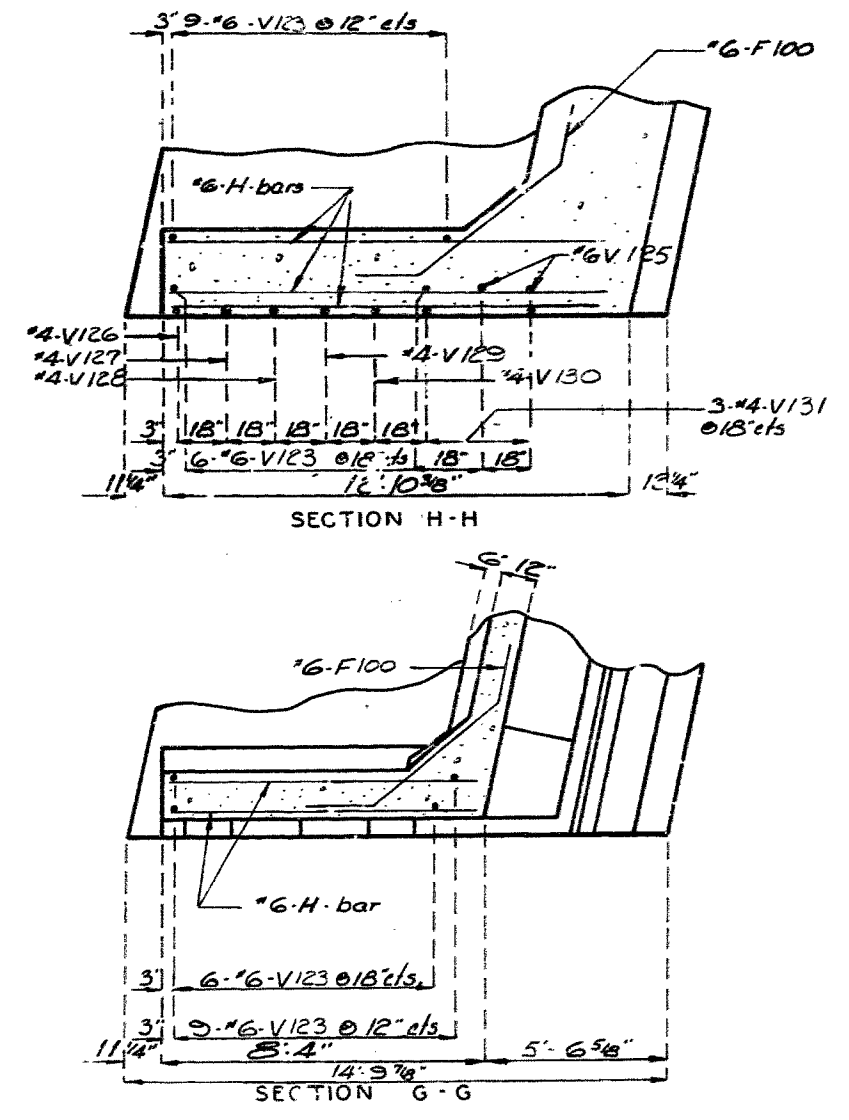
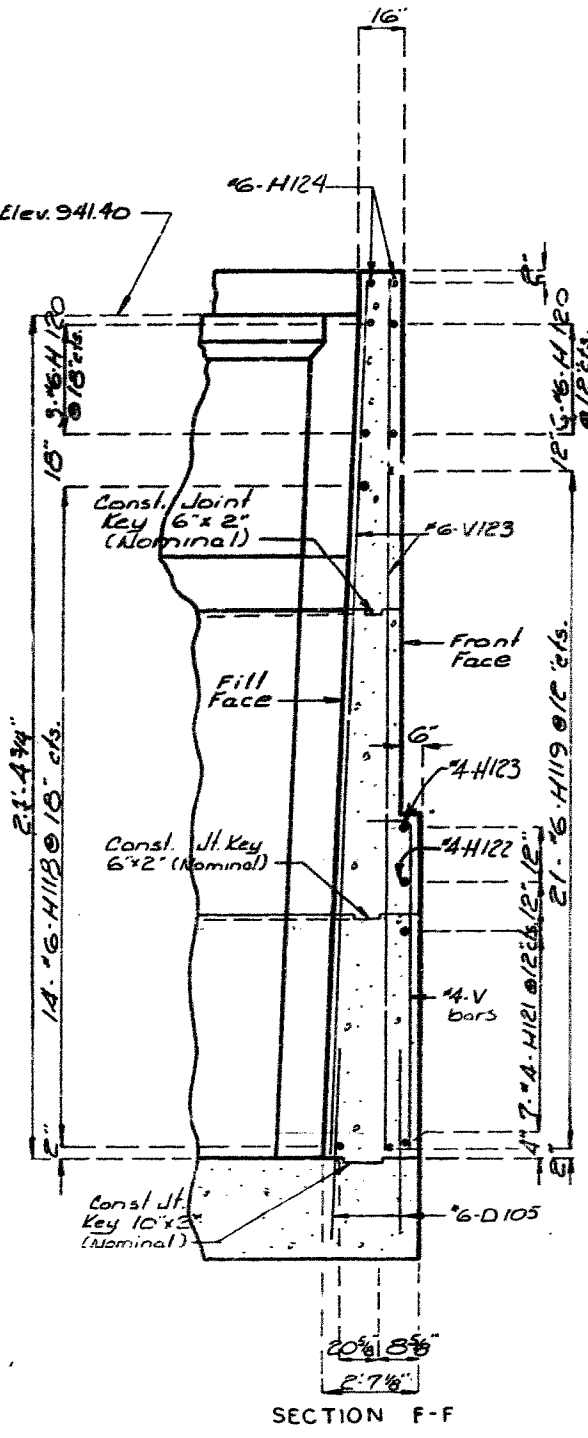
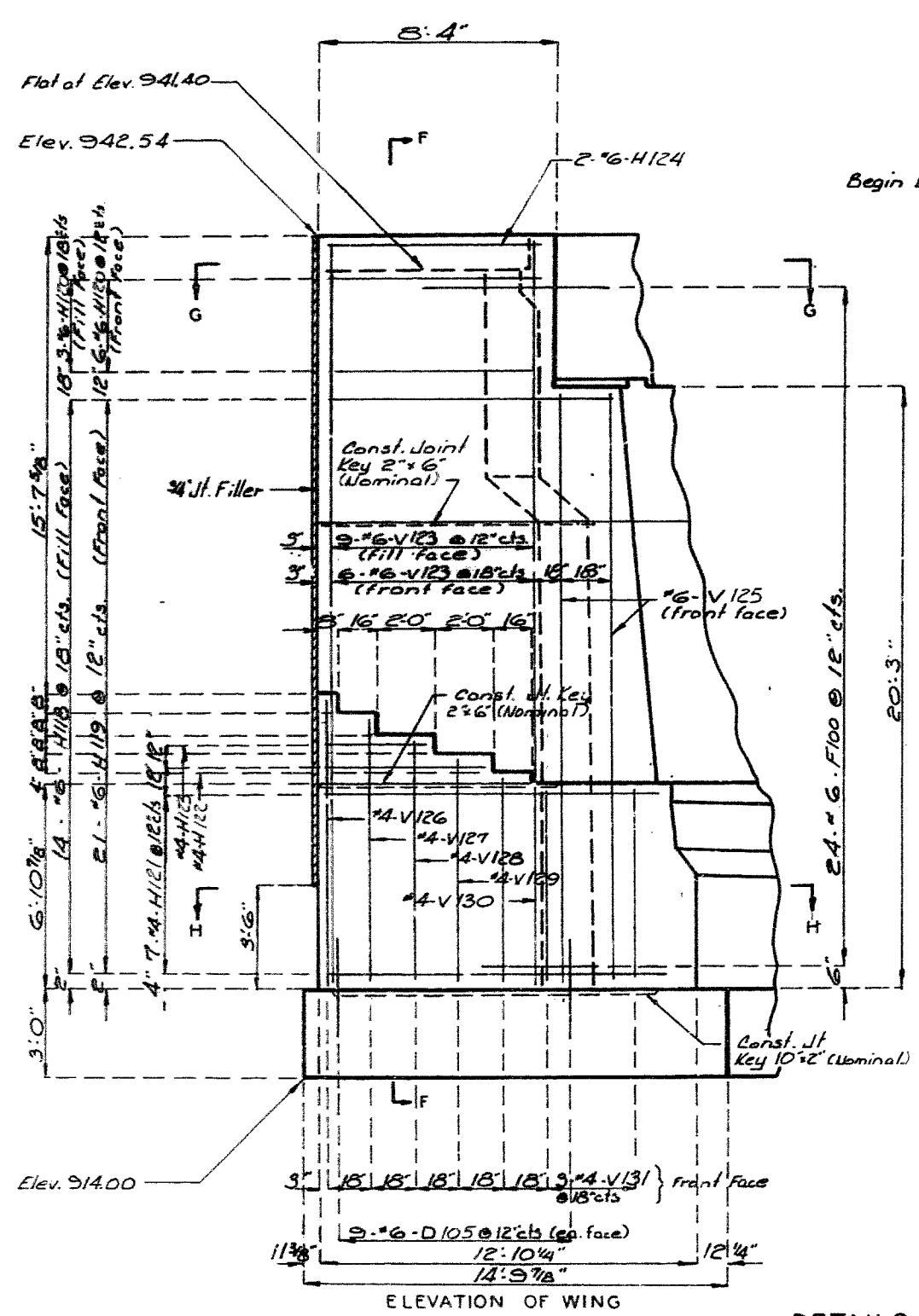
DETAILED Sept. 1990
CHECKED Nov. 1990

Note: This drawing is not to scale. Full w. dimensions.

Sheet No. 11 of 66

STATE	PROJ. NO	SHEET NO
MO		11

376 408



DETAILS OF ABUTMENT NO. 1

DETAILED SEPT. 1930
CHECKED Dec. 1930

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 10 of 26

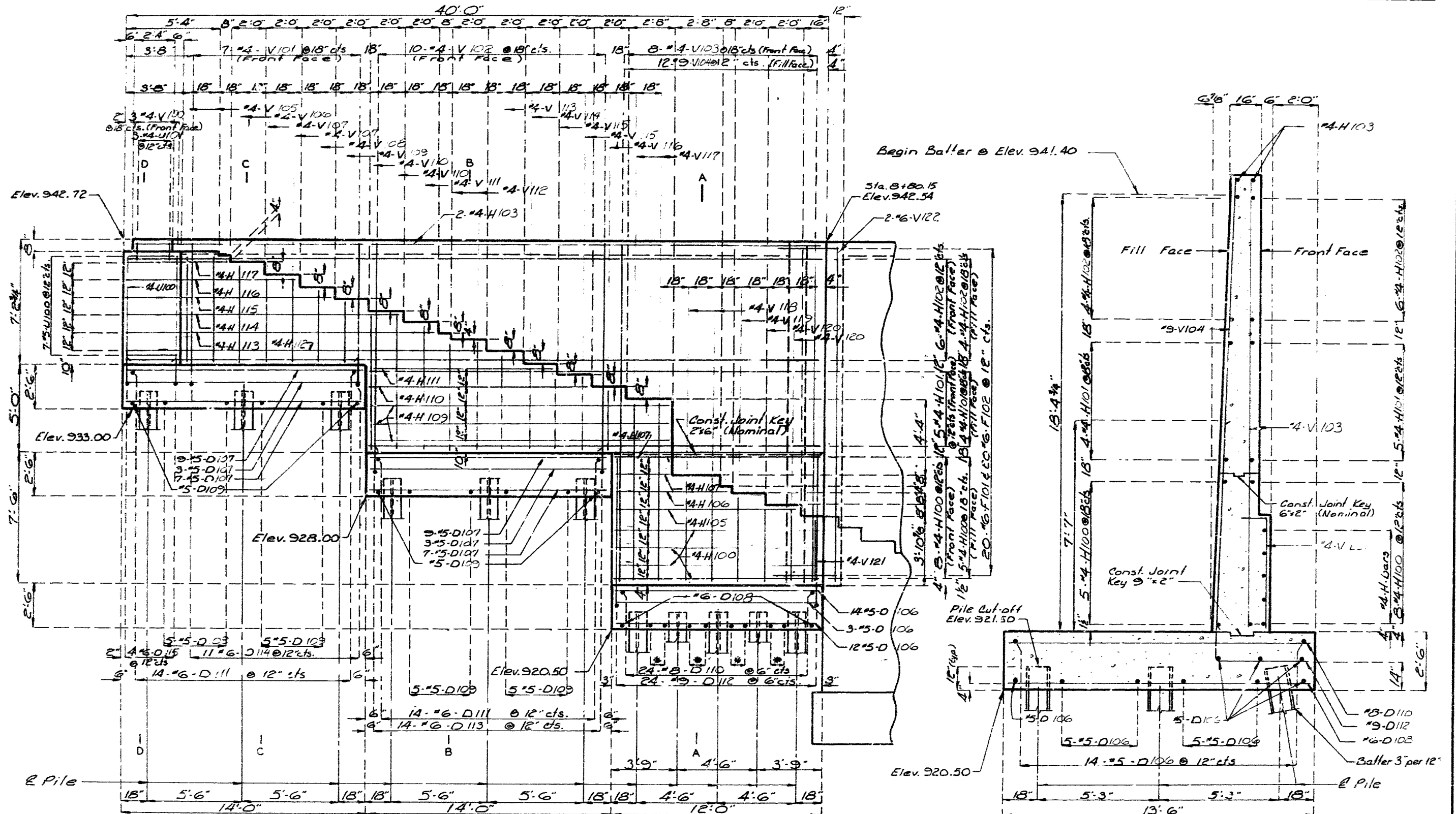
JACKSON COUNTY

A-4861

Note: For Section B-B, C-C, and D-D see sheet No. 11.

STATE	PROJECT NO.	SHEET NO.
MO		12

377409



ELEVATION

SECTION A-A

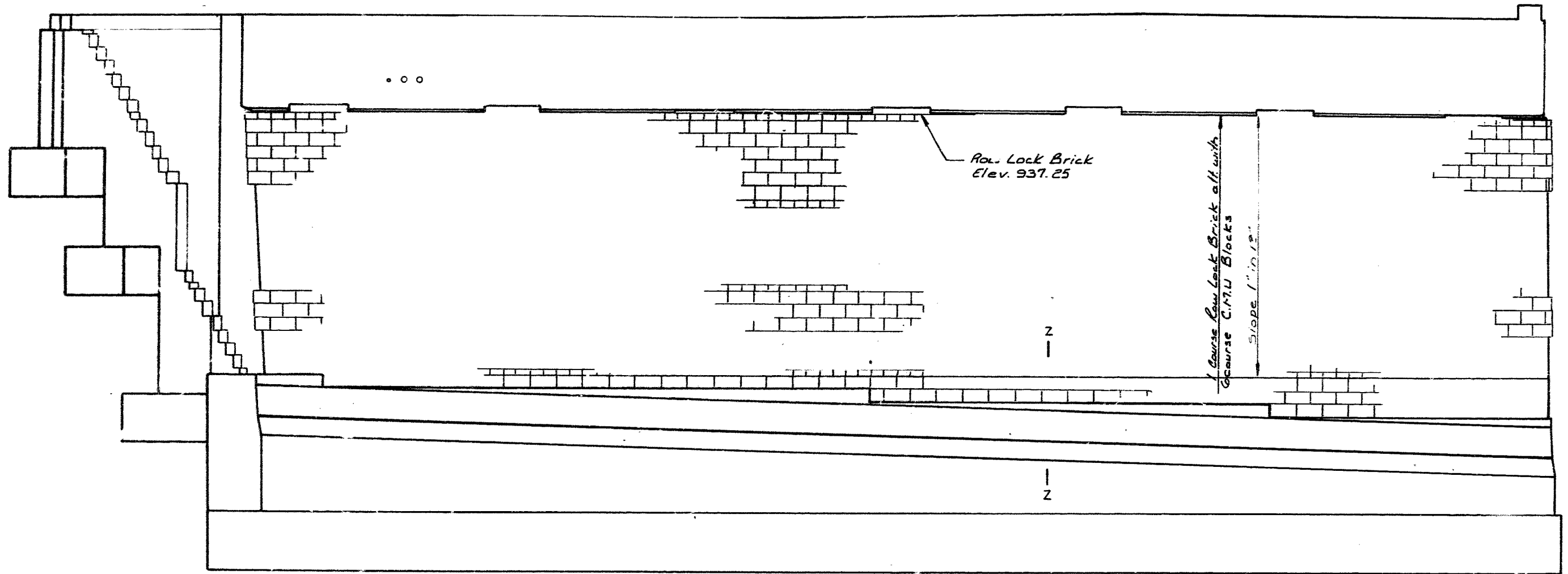
DETAILS OF WALL "D"

DETAILED Sept 1990
CHECKED Nov 1990

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 12 of 22

STATE	PROJ NO	SHEET NO
MO		347



FRONT ELEVATION

Note: weepholes shall be placed along bottom course of Masonary spaced at 16" centers. For Part Section Z-Z see sheet No. 14

DETAILS OF MASONRY FACING AT END ABUTMENT NO. 1

578 410

QUALITY REVIEW
 DETAILED Oct. 1990
 CHECKED Dec. 1990

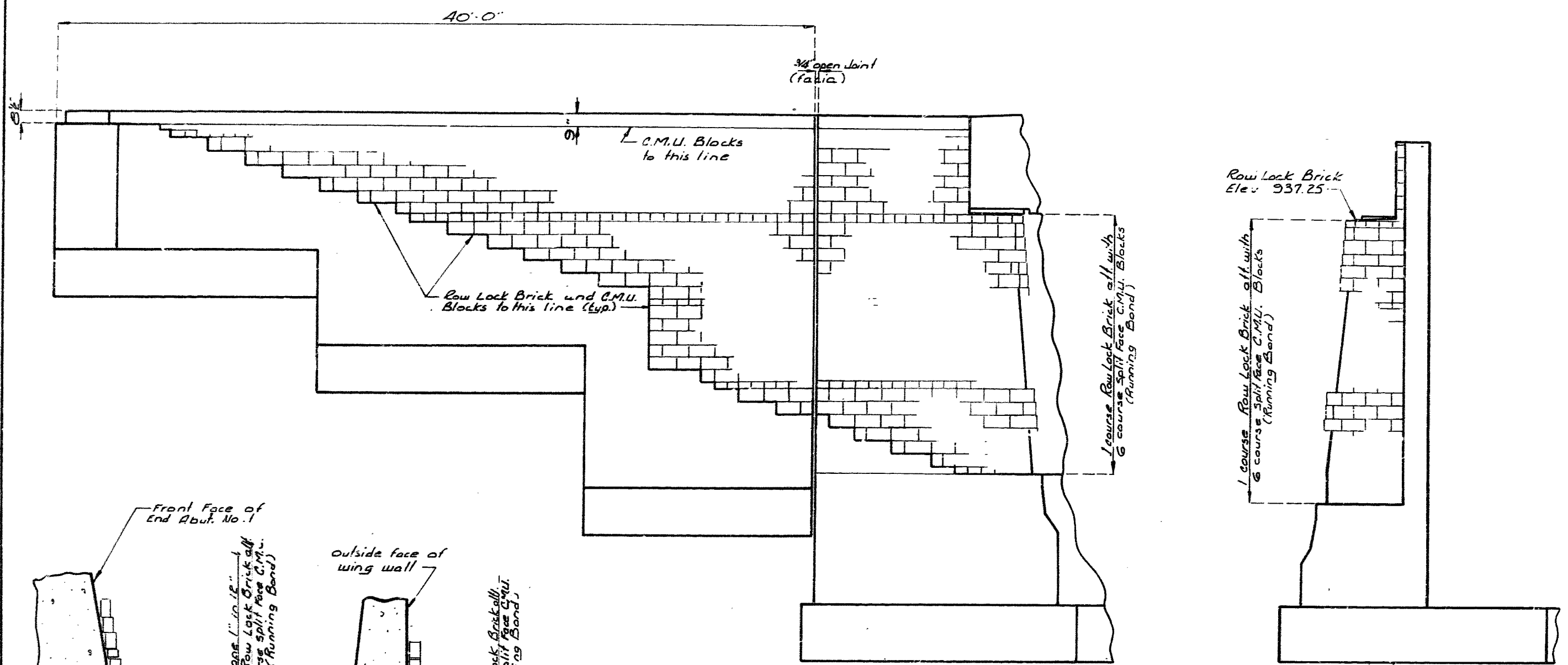
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 13 of 26

JACKSON COUNTY

A-4861

STATE	PROJ NO	SHEET NO
MO		143



ELEVATION OF RIGHT WING AND WALL "D"

ELEVATION OF LEFT WING

Note: Weepholes shall be placed along bottom course of masonry spaced at 16 centers. For location of Section Z-2 see sheet No. 13

37241

PART SECTION Z-Z

PART SECTION THRU WINGS AND WALL "D"

DETAILS OF MASONRY FACING AT END ABUTMENT NO. 1

QUALITY REPORT

DETAILED Oct. 1990

CHECKED Nov. 1990

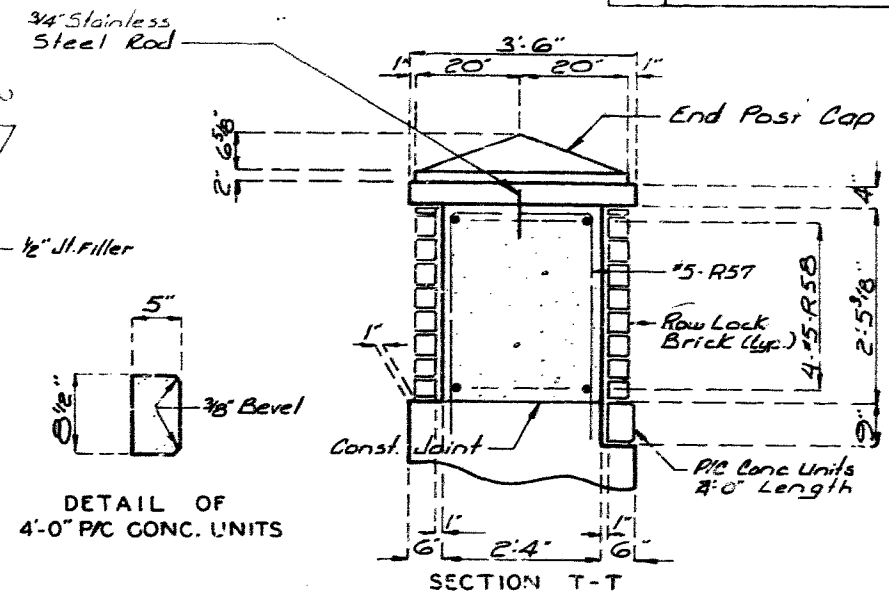
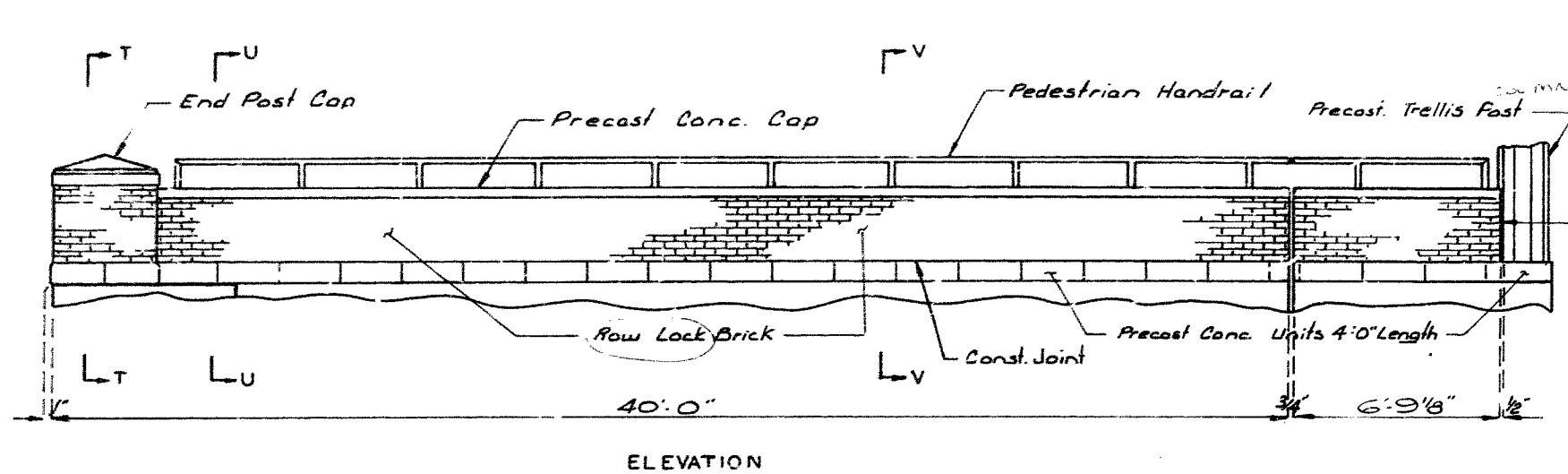
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 14 of 26

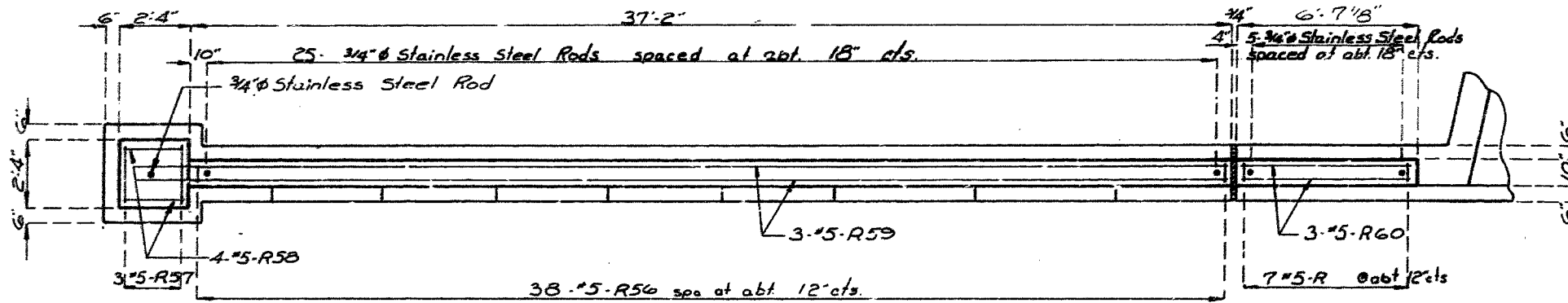
JACKSON COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		15

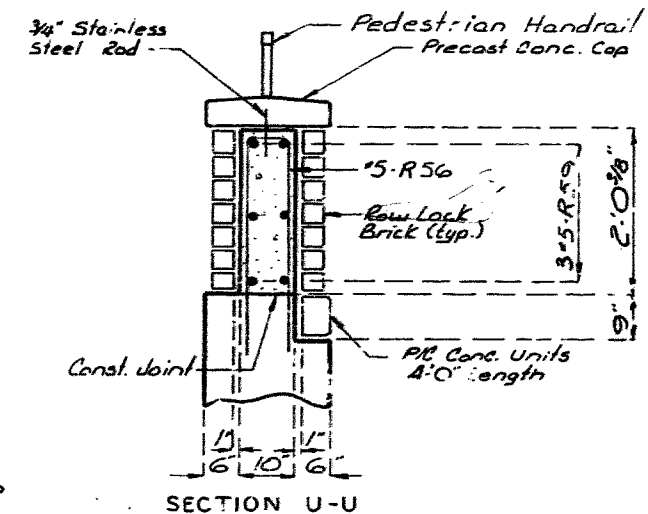


DETAIL OF 4'-0" PC CONC. UNITS

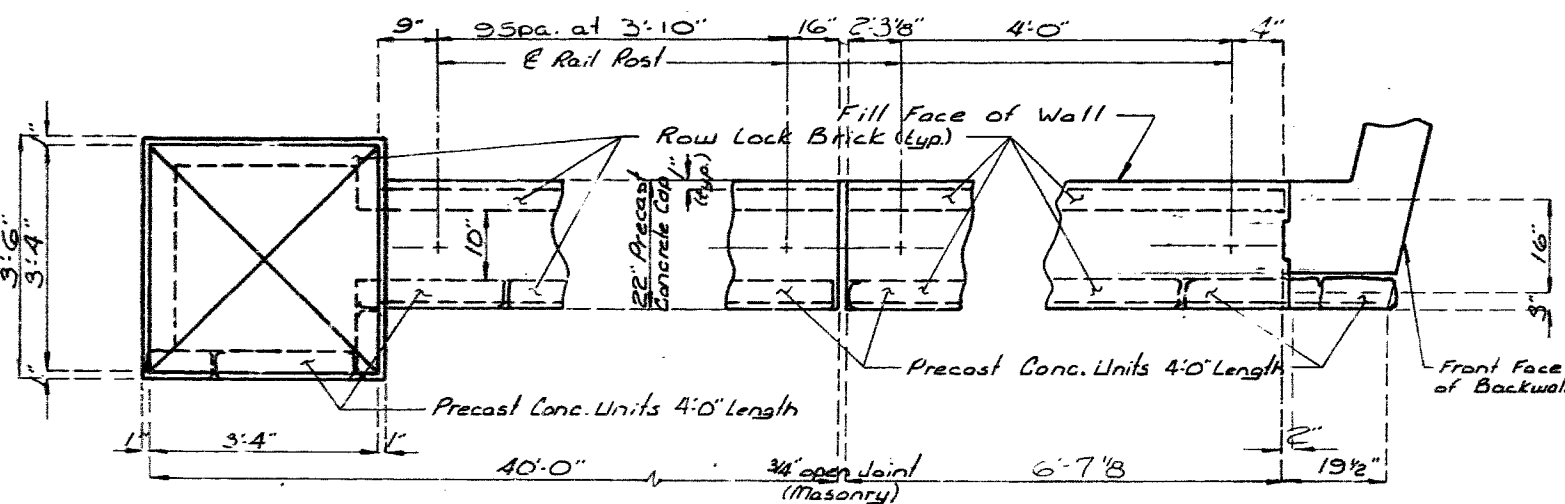


PLAN OF CONCRETE PARAPET (BELOW PRECAST CONC. CAP)

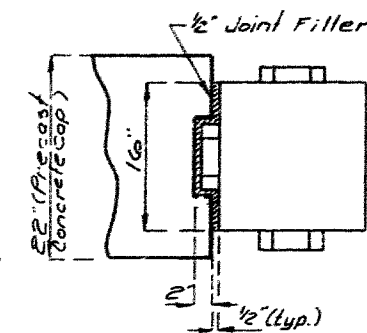
Note: For Details of Precast Conc. Cap see sheet No. 16
 For Details of Curb Rail and Rail Post see sheet No. 16
 For Details of 3/4" stainless steel rods see sheet No. 50.



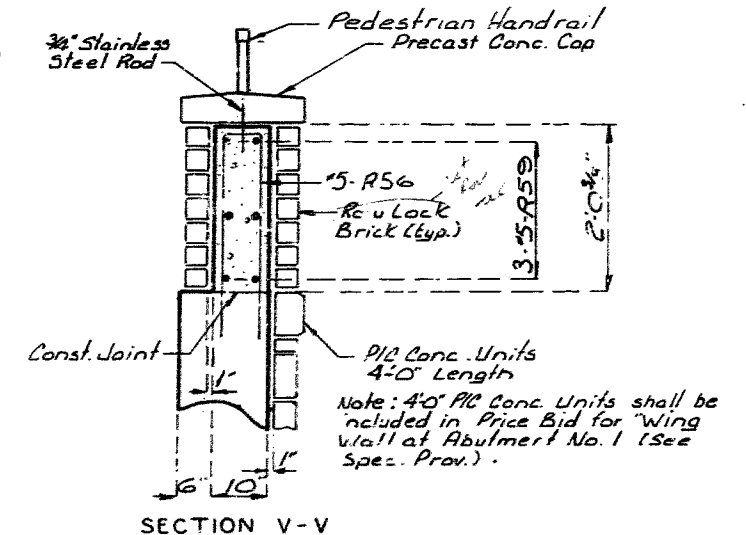
SECTION U-U



PART PLAN SHOWING MASONRY



DETAIL OF FILLED JOINT AT PRECAST CONCRETE CAP



SECTION V-V

Note: All Concrete, Reinforcing Steel, Brick Fascia, 3/4" stainless steel rods, Precast Conc. Caps, and End Post Cap, above const. joint shall be included in the Bid Item for Wing Wall at Abutment No. 1 (Lin. Ft.) complete in-place (See Spec. Prov.).

DETAILS OF RIGHT WING WALL AT END ABUT. NO. 1 ABOVE UPPER CONST. JOINT

QUALITY REVIEW
 DETAILED Oct 1990
 CHECKED DEC. 1990

Note: This drawing is not to scale. Follow dimensions.

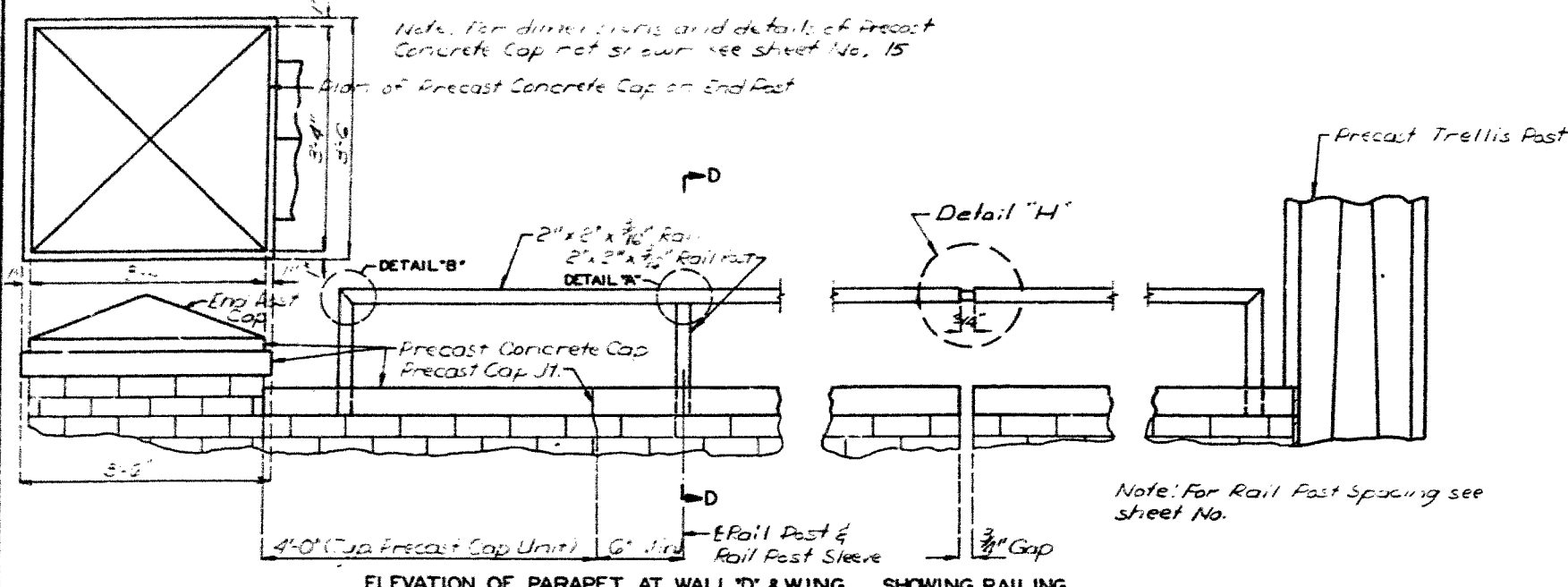
Sheet No. 15 of 66

JACKSON COUNTY

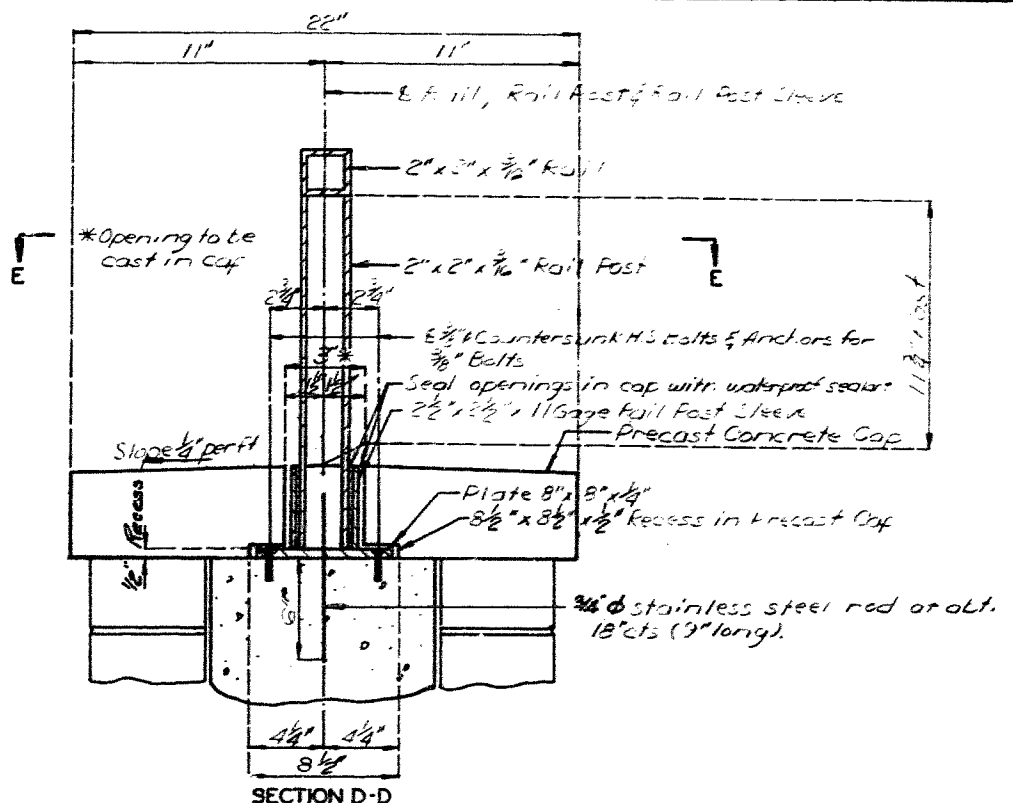
A-4861

STATE	PROJ NO	SHEET NO
MO		25

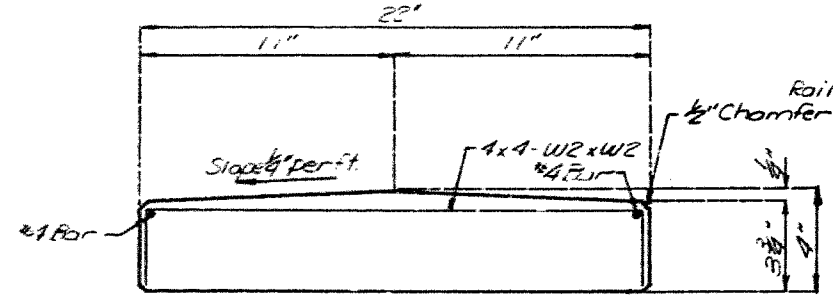
Note: For dimensions and details of Precast Concrete Cap not shown see sheet No. 15



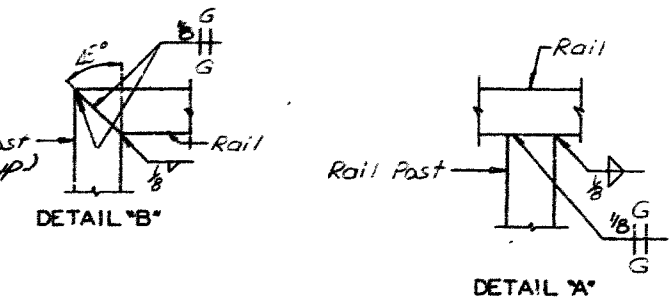
ELEVATION OF PARAPET AT WALL 'D' & WING SHOWING RAILING



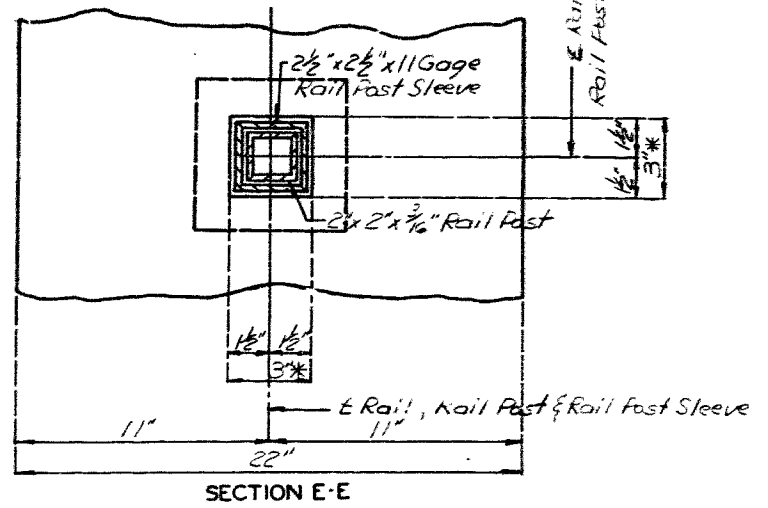
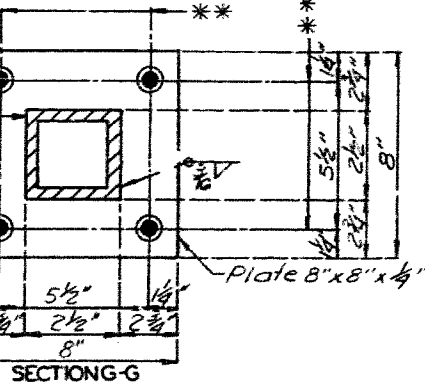
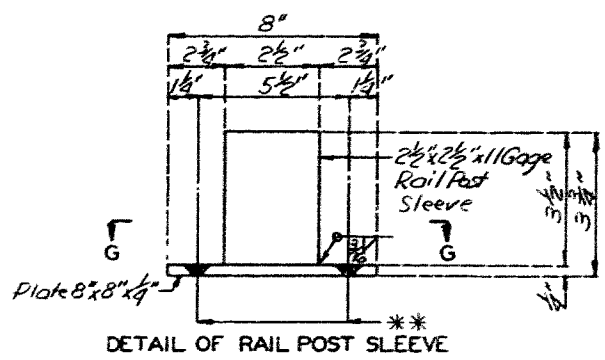
SECTION D-D



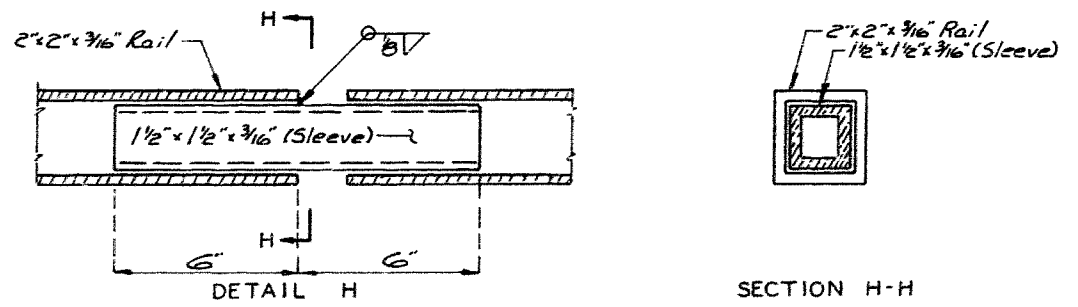
TYPICAL SECTION THRU PRECAST CAP SHOWING REINFORCEMENT



** 1/2" hole with countersunk hole for 3/8" high strength countersunk bolt



SECTION E-E



DETAILS OF RAIL EXPANSION JOINT

Note: Rail, Rail Post and Rail Post Sleeve shall be square tubing ASTM A500

Rail Post Sleeve Base Plate 8"x8"x1/4" shall be of A36 material.

Fabrication of structural steel shall be in accordance with Section 712 of the standard specifications.

Concrete anchors shall be the cone expansion type for hot-dip galvanized bolts. Concrete anchors shall have a concrete pull-out strength (Ultimate Load) of at least 15,500 pounds in 3,000 psi concrete.

Rail Post Sleeve and Base Plate to be painted in the shop or field with one coat of inorganic zinc prime paint Std. Spec. 1045.

Payment for fabrication and installation of Rail, Rail Post, sleeve, sleeve Base Plate, Anchors and Bolts shall be included in the Bid Item for Pedestrian Handrail (Lin. Ft.).

DETAILS OF PEDESTRIAN HANDRAIL AT ABUTMENT NO. 1

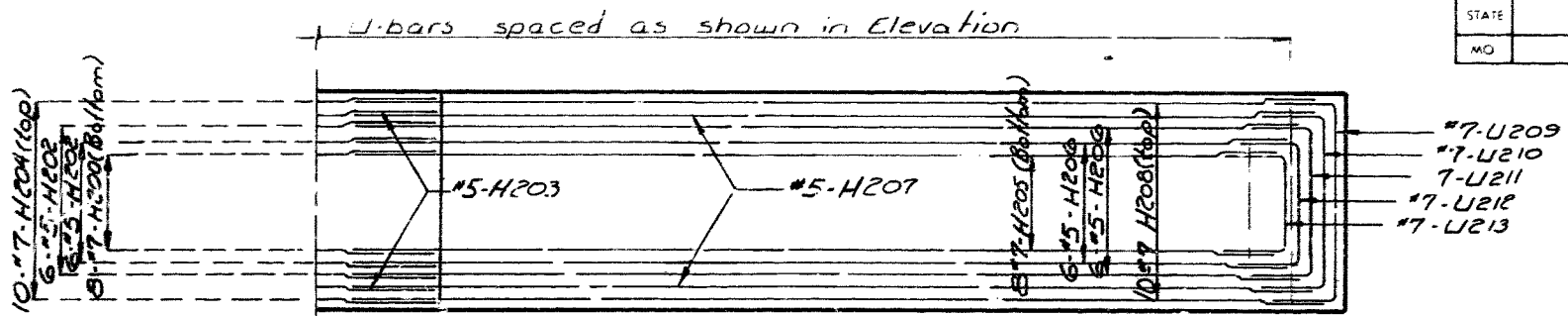
DATE: Dec 1990
CHECKED: Dec 1990

Note: This drawing is not to scale. Follow dimensions.

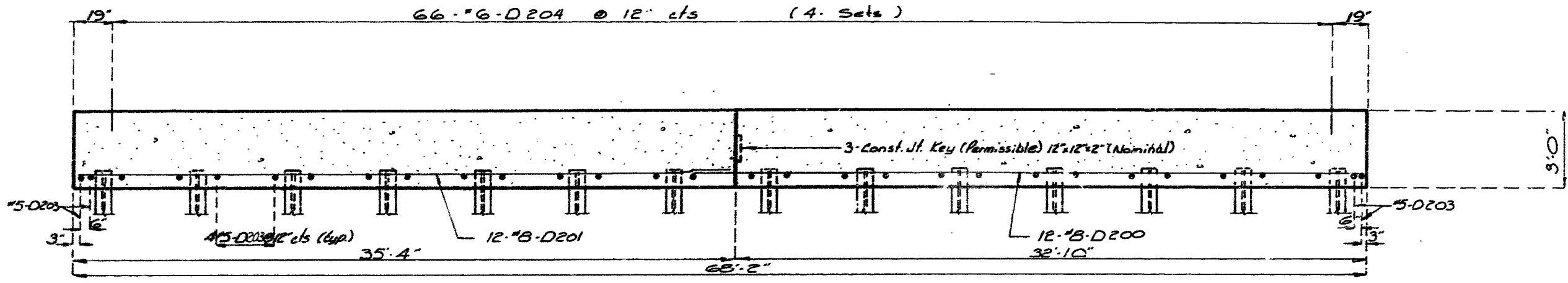
Sheet No. 16 of 61

STATE	PROJ NO	SHEET NO
MO		37

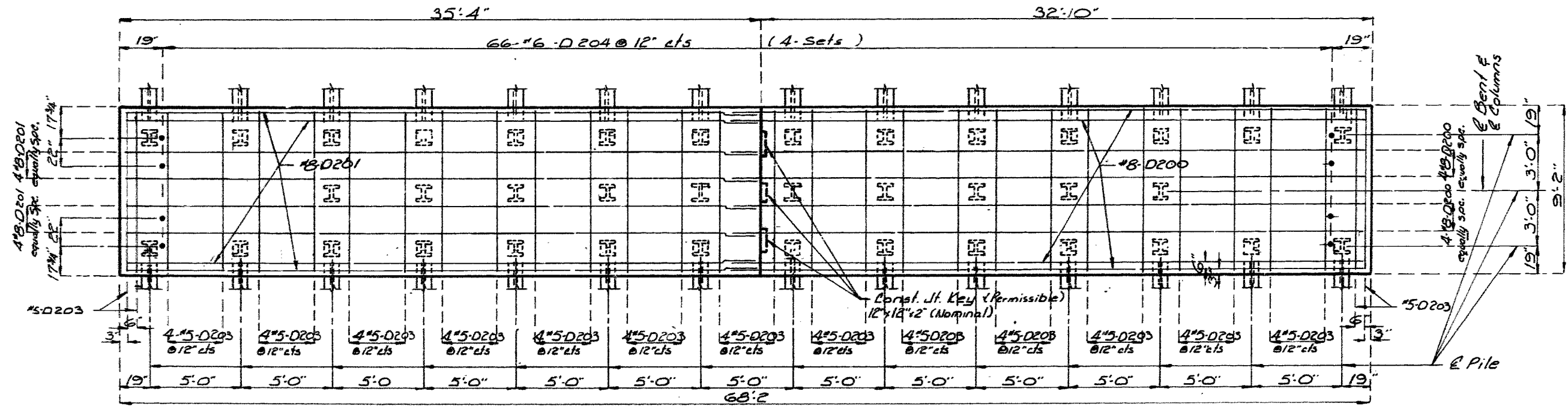
Note: For Elevation showing Beam reinforcement see sheet No. 18



HALF PLAN OF BEAM SHOWING REINFORCEMENT



SECTION THRU FOOTING SHOWING REINFORCEMENT



PLAN OF FOOTING

DETAILS OF INTERMEDIATE BENT NO. 2

38244

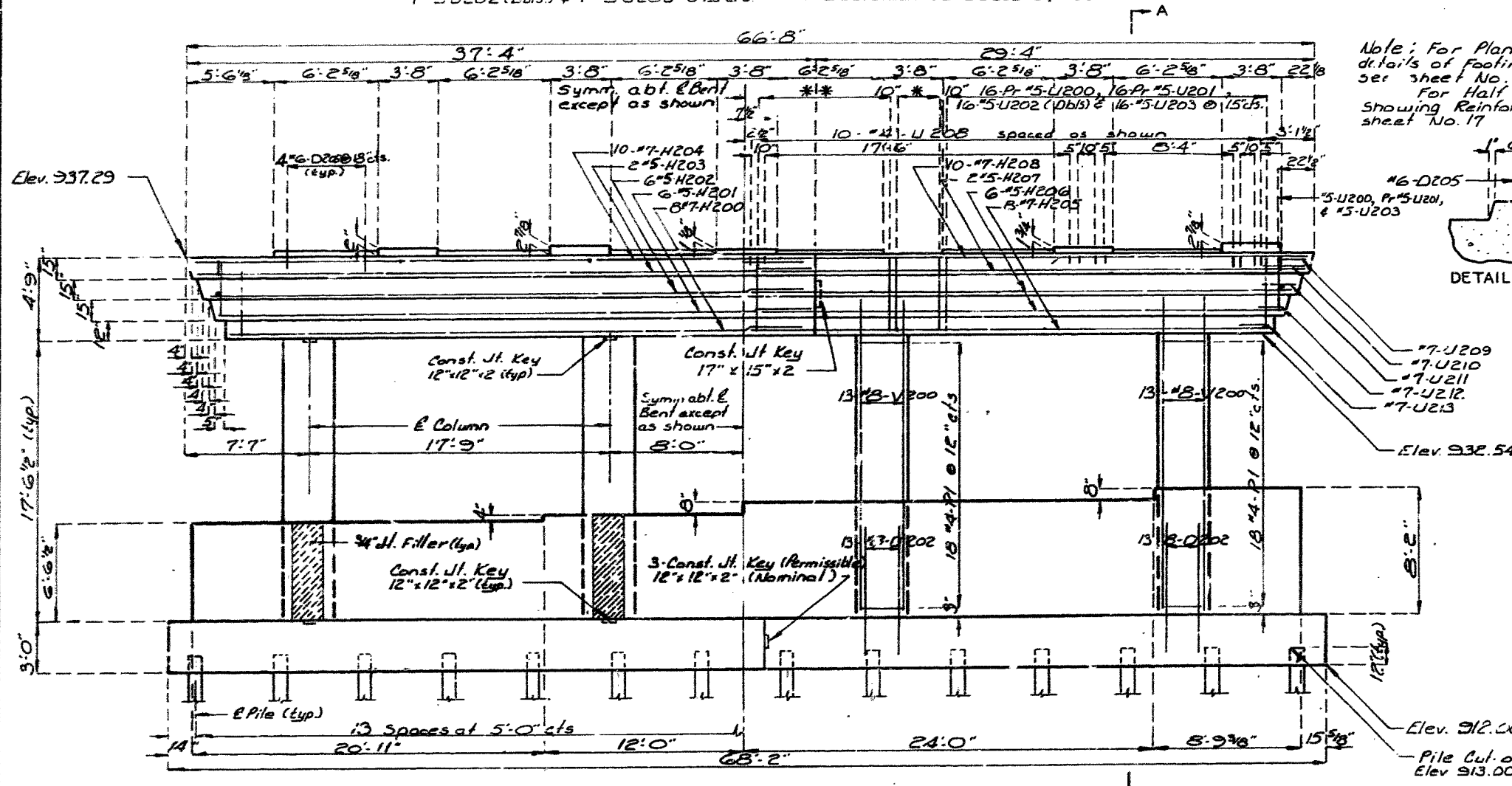
QUANTITY REVIEWED
 DETAILED July 1990
 CHECKED NOV 1990

Note: This drawing is not to scale. Follow dimensions.

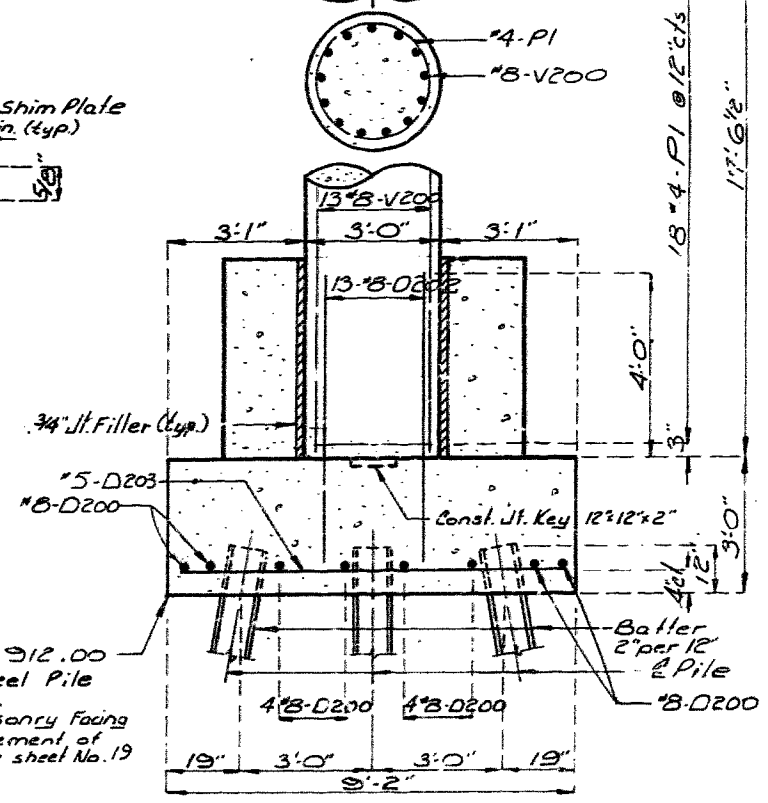
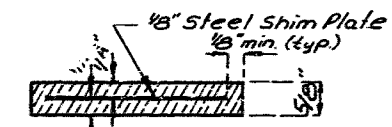
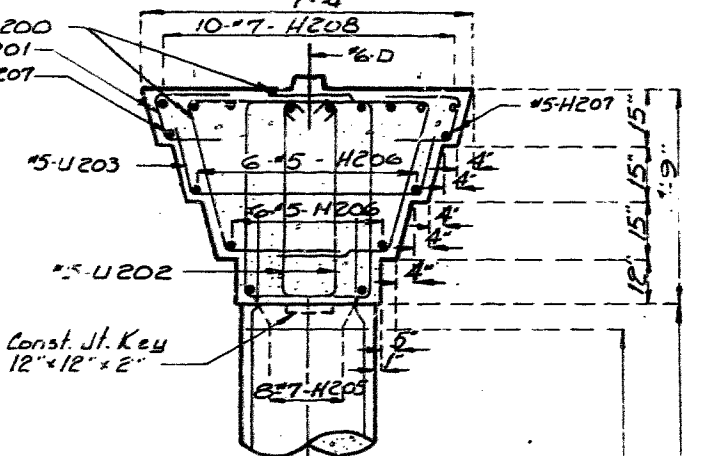
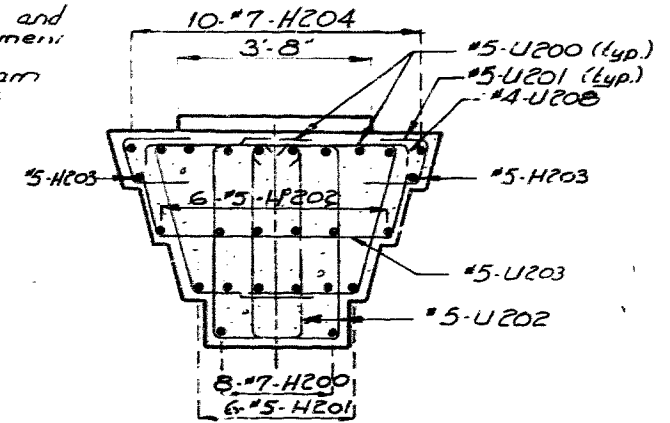
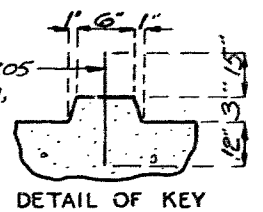
Sheet No. 17 of 66

** 7-Pr #5-U200, 7-Pr #5-U201, 7-#5-U202 (Dbls) & 7-#5-U203 @ 15' cts * 6-Pr #5-U200, 6-Pr #5-U201, 6-#5-U202 (Dbls) & 6-#5-U203 @ 5' cts

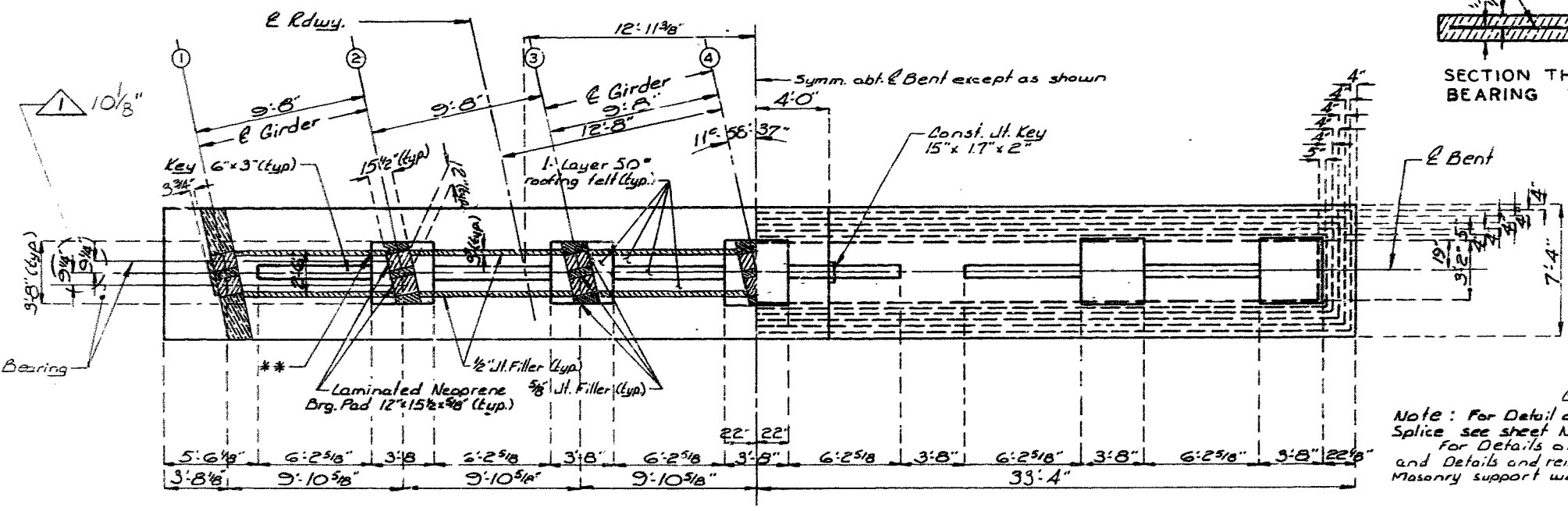
STATE	PROJ NO	SHEET
MO		18



Note: For Plan of Footing and details of footing reinforcement see sheet No. 17
For Half Plan of Beam showing Reinforcement see sheet No. 17



** For 2" step or more use 1/2" Joint Filler on vertical face.



Note: For Detail of Steel Pile Splice see sheet No. 5
For Details of Masonry Facing and Details and reinforcement of Masonry support wall see sheet No. 19

DETAILS OF INTERMEDIATE BENT NO. 2 SEE FINAL PLANS

DETAILED July 1990
CHECKED 1990

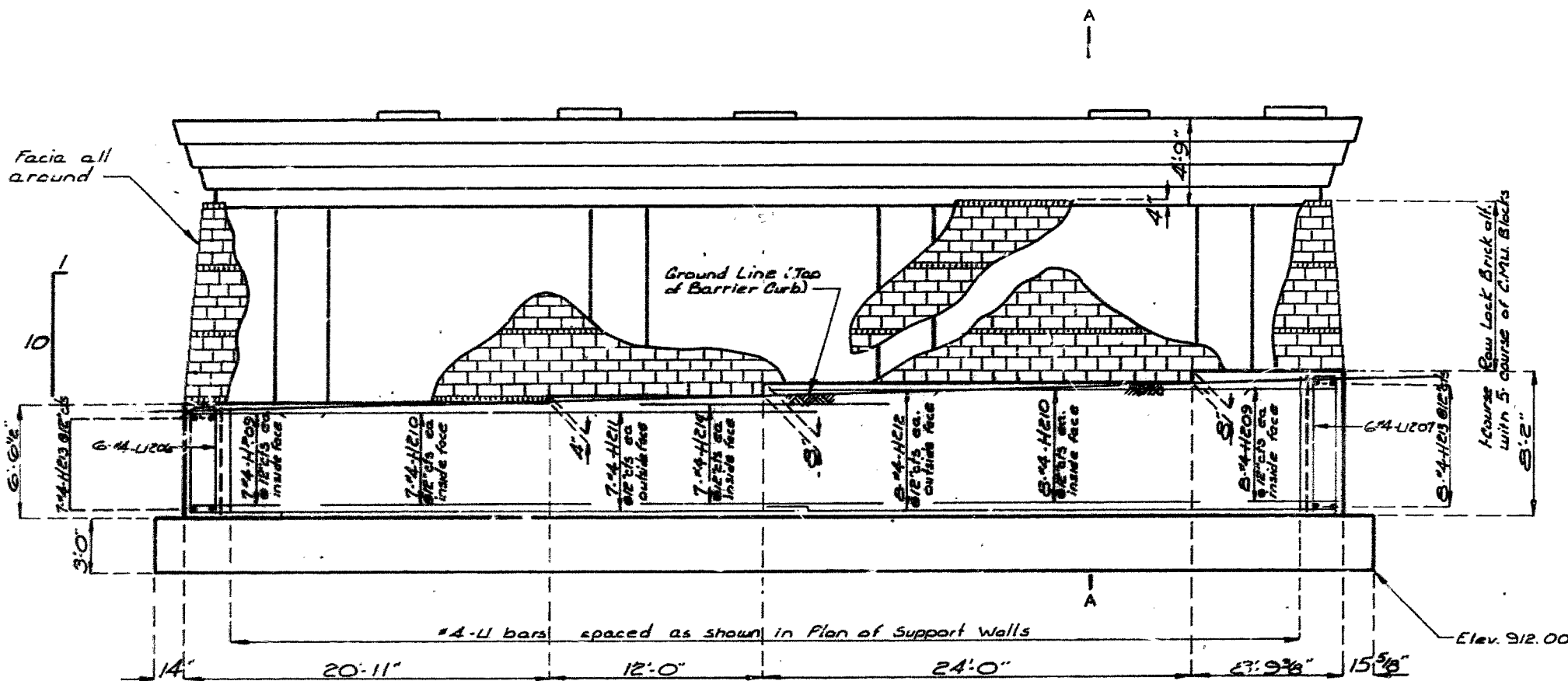
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 18 of 22 Revised 2/7/91 JACKSON COUNTY

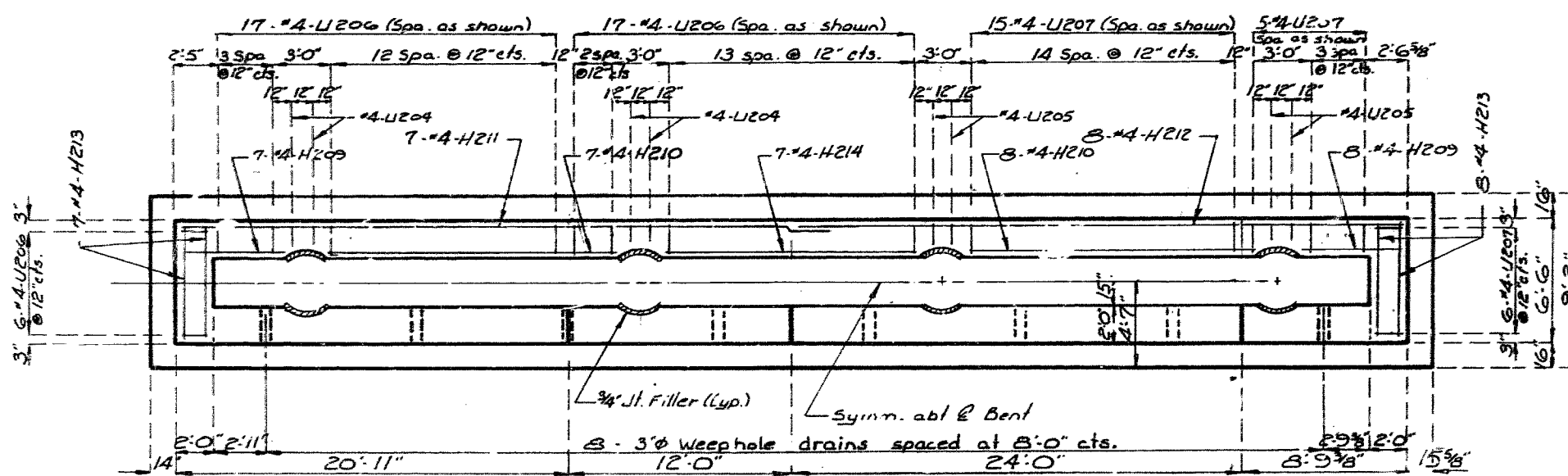
A-4861

383 445

STATE	PROJ NO	SHEET NO
MO		19

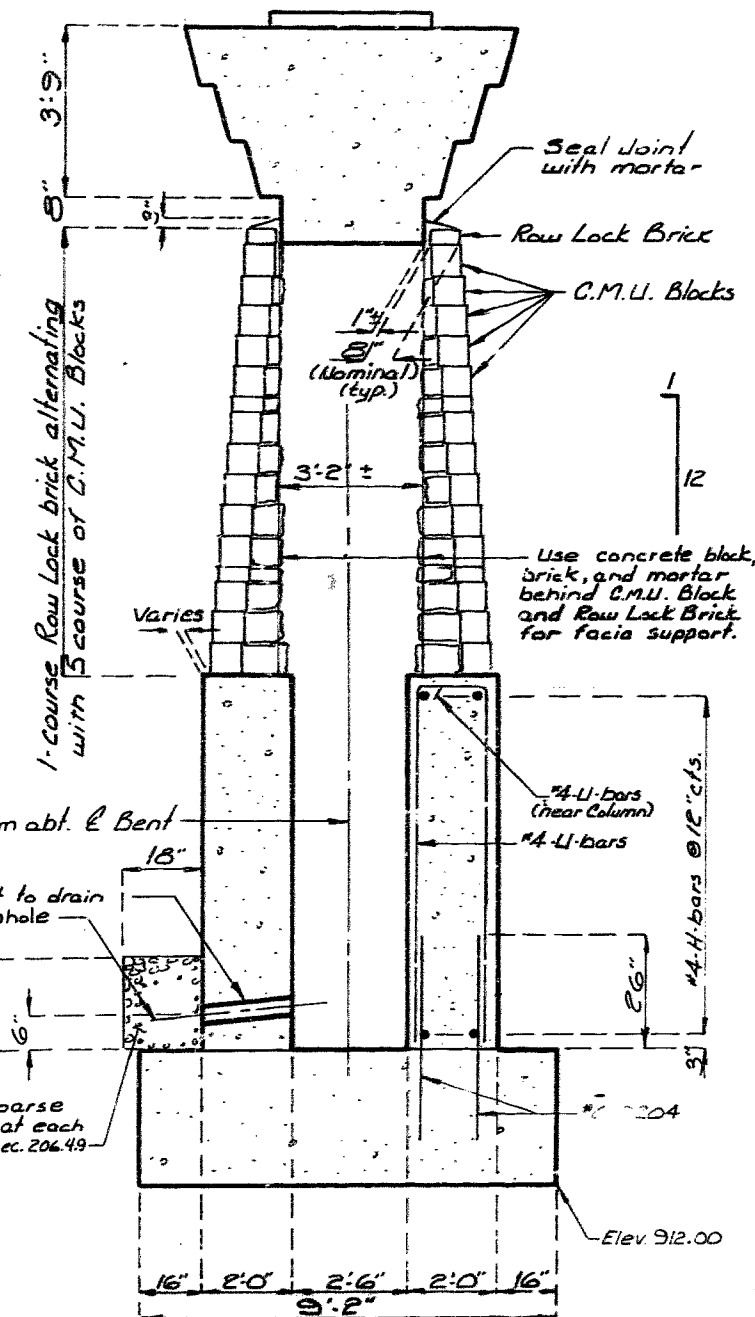


ELEVATION



PLAN OF SUPPORT WALLS

DETAILS OF MASONRY FACING AT INT. BENT NO. 2



SECTION A-A

38946

DETAILED July 1990
CHECKED NOV. 1990

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 19 of 26

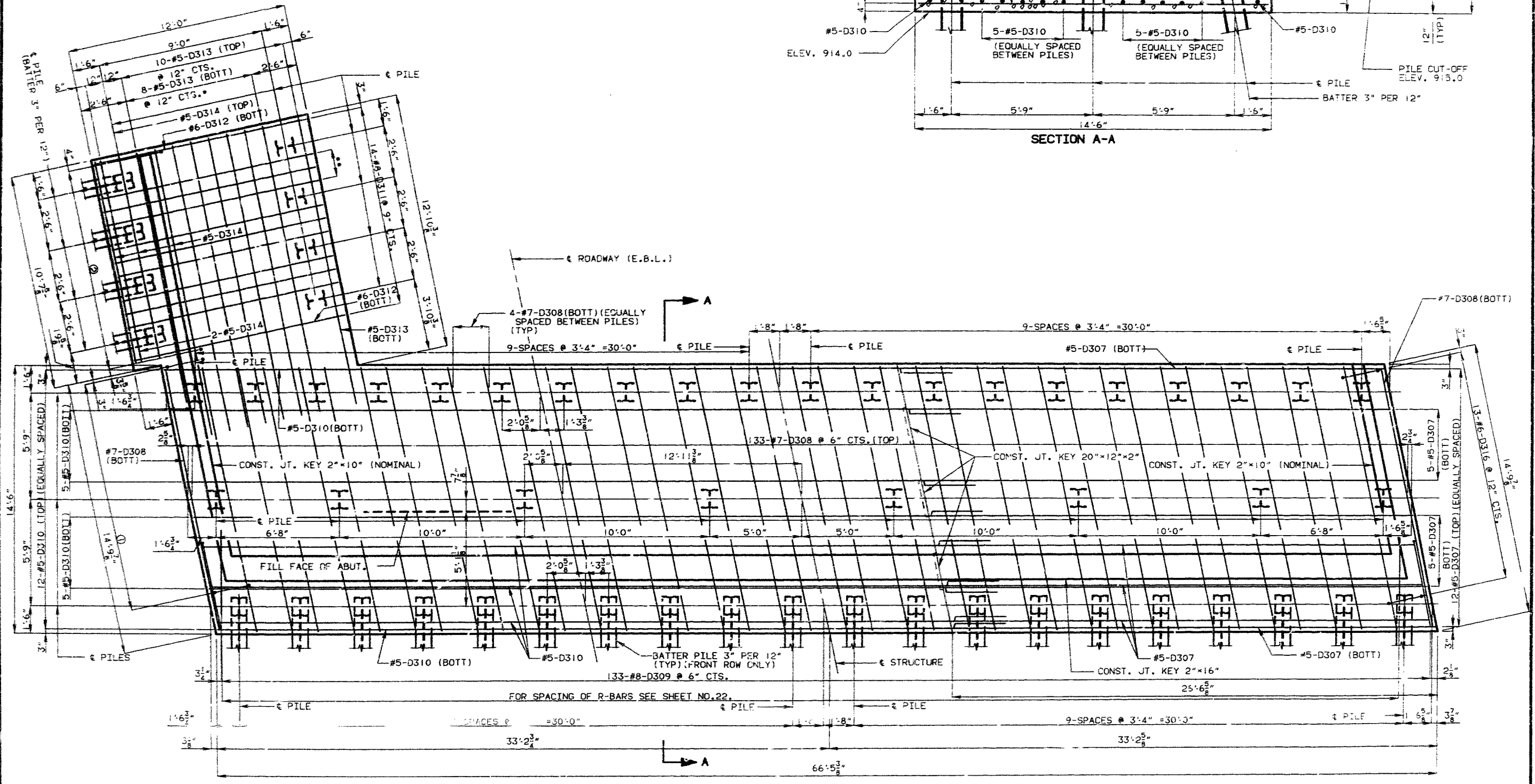
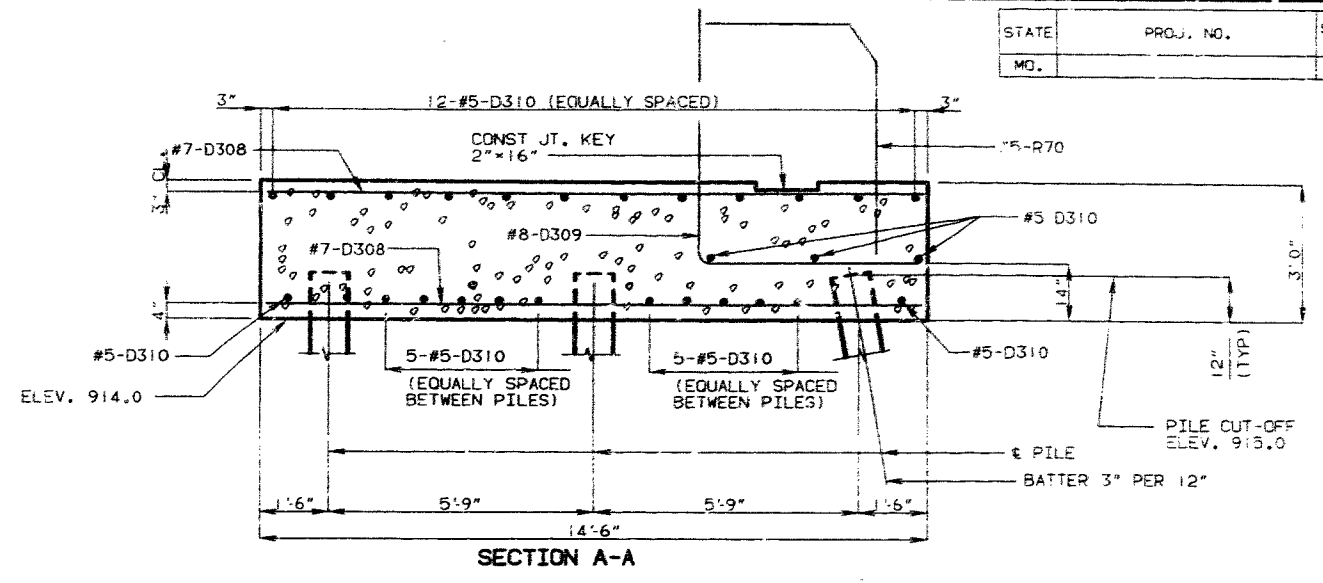
JACKSON COUNTY

A-4861

- SHIFT BARS TO MISS PILES
- 3-#6-D312 (BOT) (EQUALLY SPACED BETWEEN PILES)
- ⊙ 21-#10-D315 @ 6" CTS.
- ⓪ 13-#6-D316 @ 12" CTS.

NOTE: FOR DETAILS OF STEEL SPLICE SEE SHEET NO.5.

STATE	PROJ. NO.	SHEET NO.
MO.		



385-417

PLAN OF FOOTING AT ABUT. NO. 3

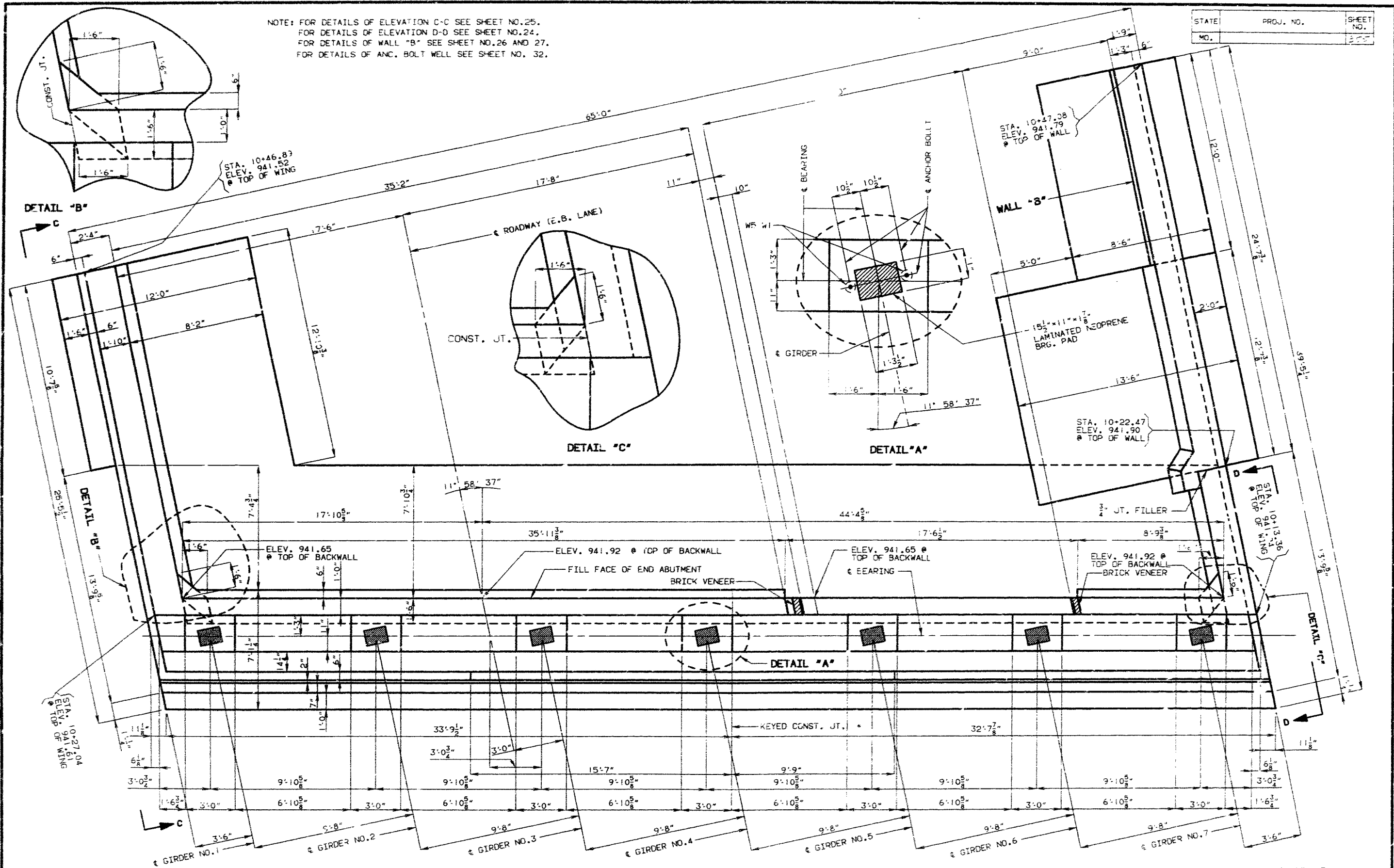
DETAILED AUG. 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 20 OF 66

STATE	PROJ. NO.	SHEET NO.
MO.		21

NOTE: FOR DETAILS OF ELEVATION C-C SEE SHEET NO. 25.
 FOR DETAILS OF ELEVATION D-D SEE SHEET NO. 24.
 FOR DETAILS OF WALL "B" SEE SHEET NO. 26 AND 27.
 FOR DETAILS OF ANC. BOLT WELL SEE SHEET NO. 32.



388 418

PLAN
 DETAILS OF END ABUT. NO. 3

* SEE ELEVATION, SHEET NO. 22. FOR SIZE OF KEYED CONST. JT.

DETAILED AUG 1990
 CHECKED OCT. 1990

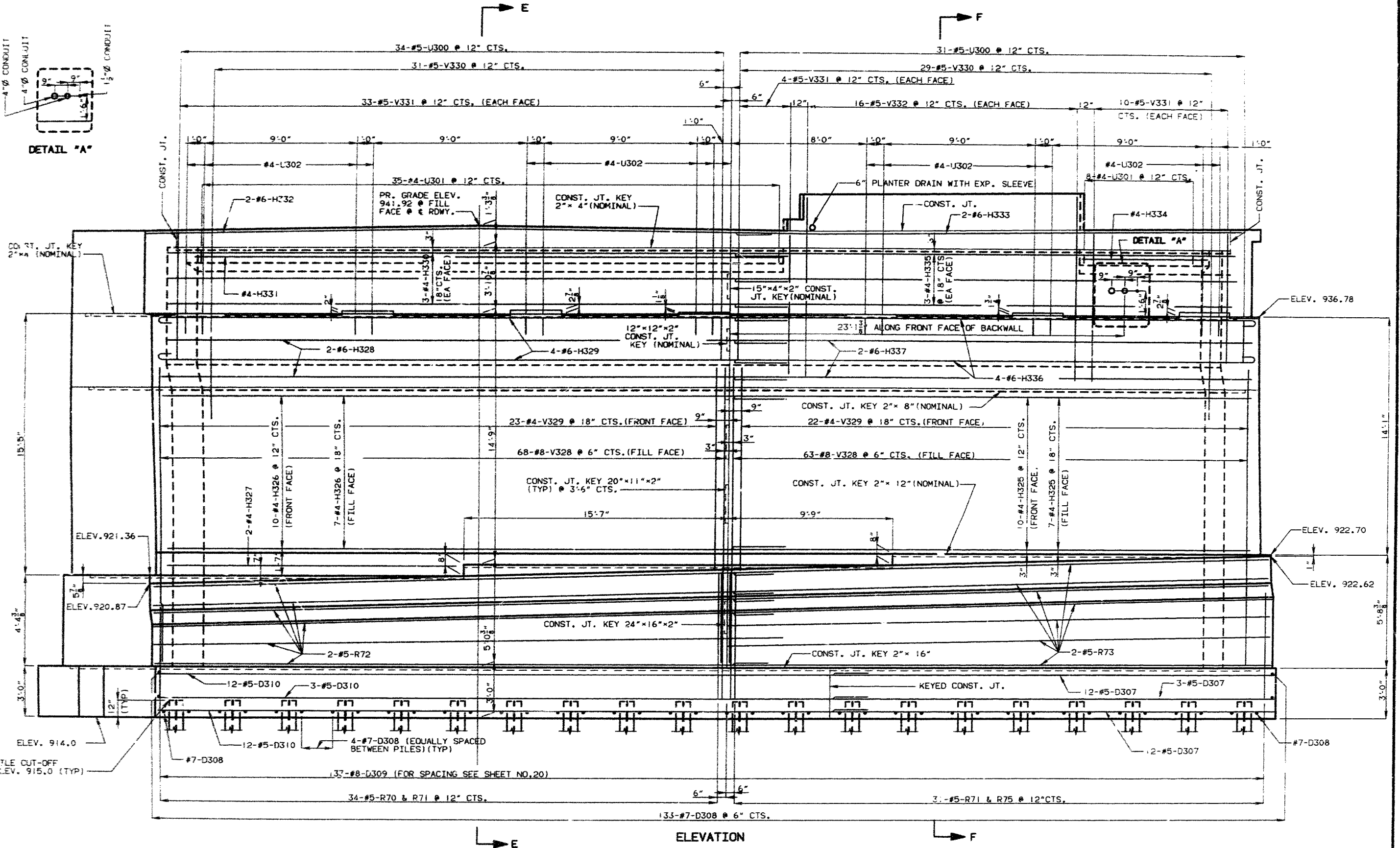
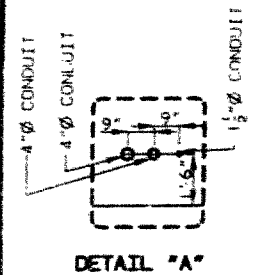
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 21 OF 66

JACKSON COUNTY A-4861

NOTE: FOR DETAILS OF SECTION E-E AND F-F SEE SHEET NO. 23.
FOR DETAILS OF PLANTER DRAIN SEE SHEET NO. 58.
FOR DETAILS OF CONDUIT SEE SHEET NO. 59.

STATE	PROJ. NO.	SHEET NO.
MO.		58



38749

DETAILED AUG. 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

ELEVATION
DETAILS OF ABUTMENT NO. 3

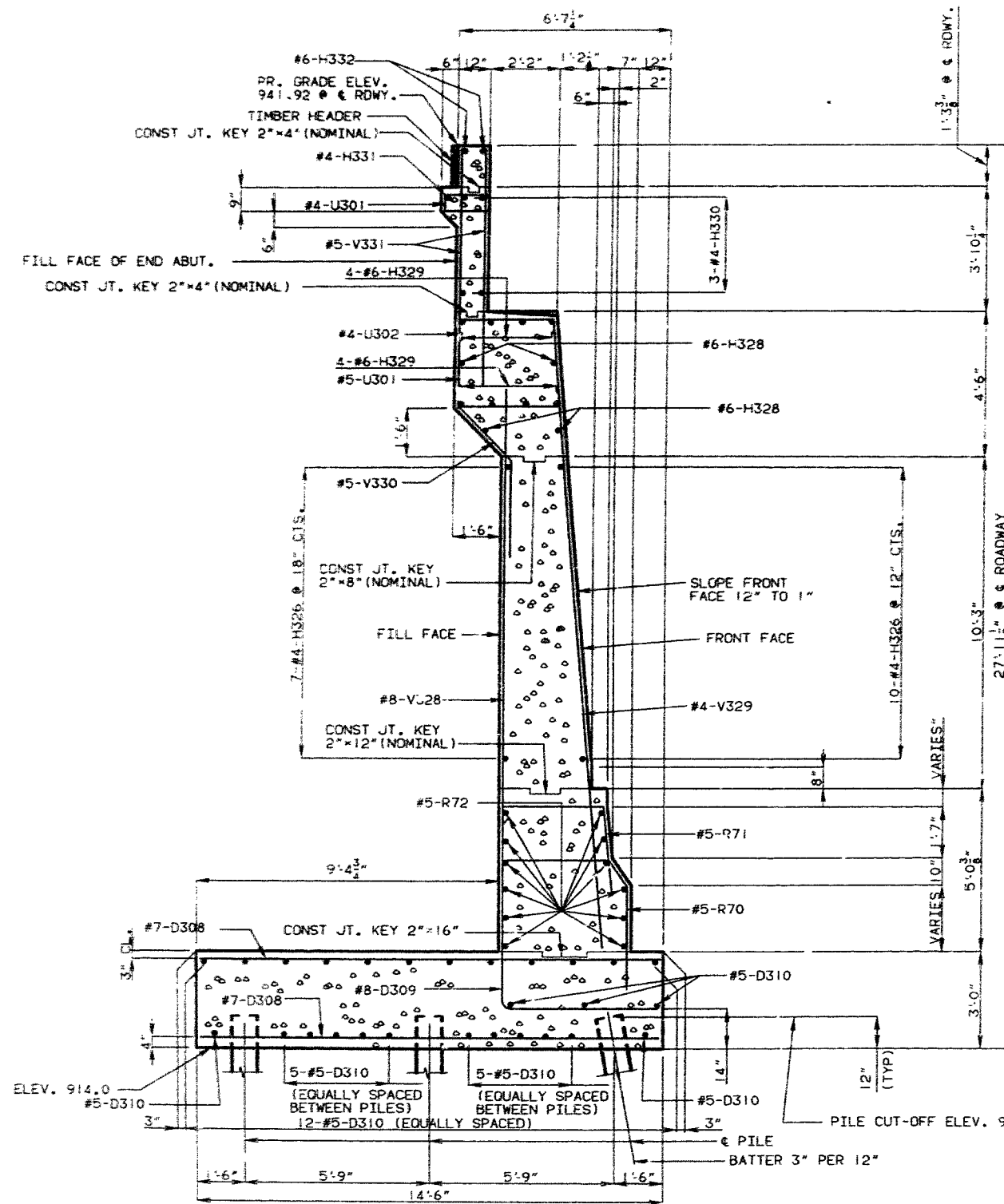
SHEET NO. 22 OF 66

JACKSON COUNTY

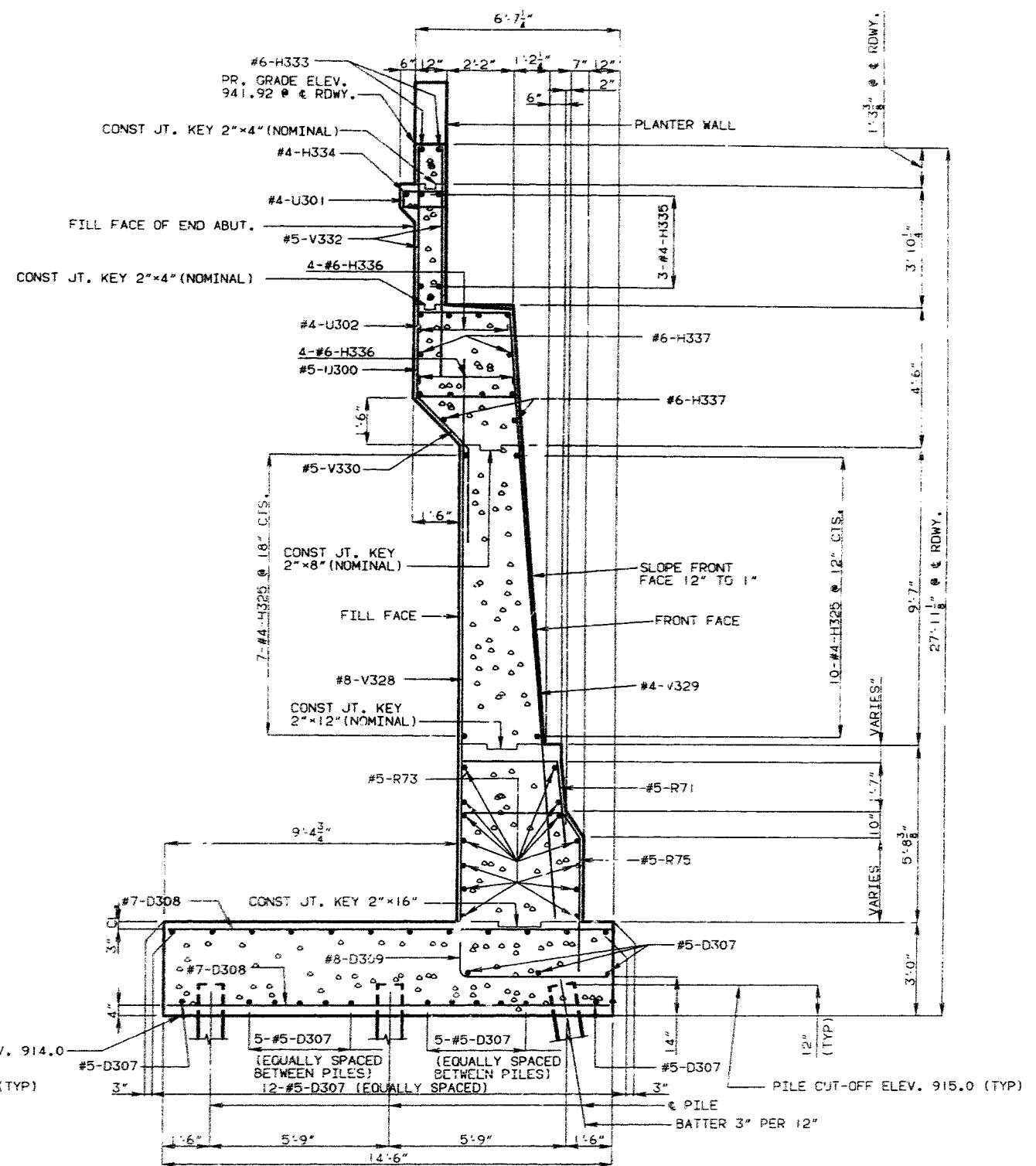
A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		327

NOTE: FOR LOCATION SECTION E-E AND F-F SEE SHEET NO. 22.
FOR DETAILS OF TIMBER HEADER SEE SHEET NO. 32.



SECTION E-E



SECTION F-F

308 420

DETAILED AUG. 19 90
CHECKED OCT. 19 90

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 23 OF 66

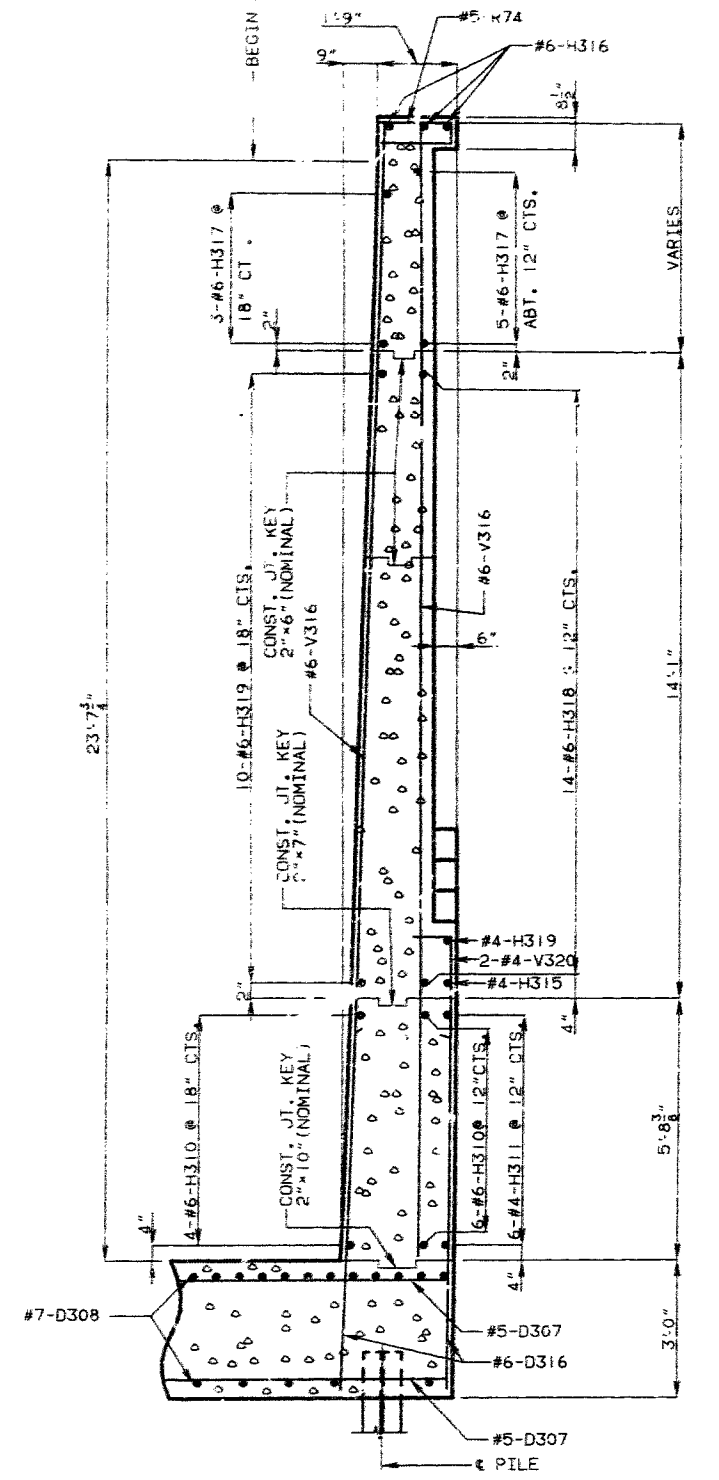
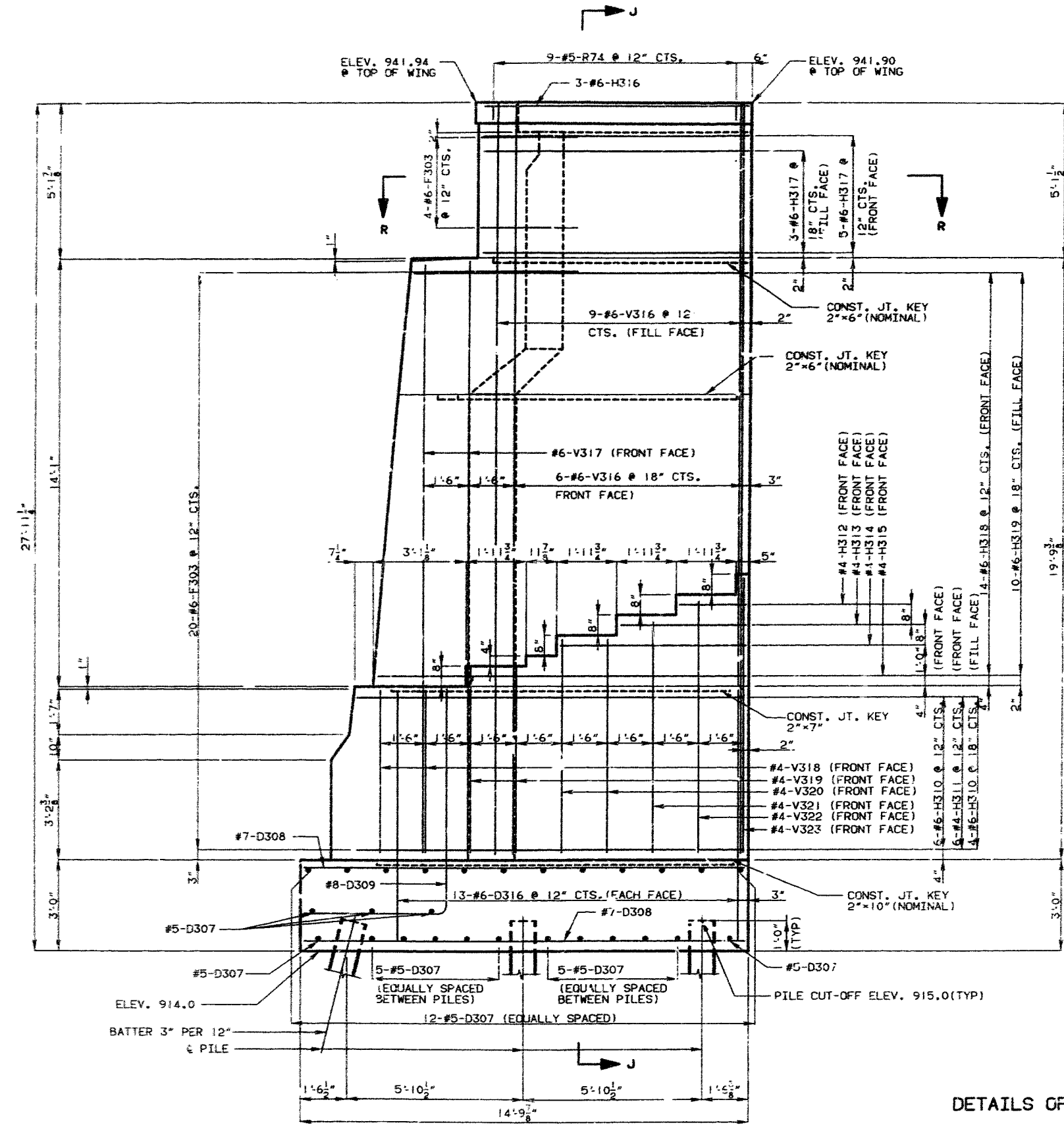
JACKSON

COUNTY

A-4861

NOTE: FOR LOCATION OF ELEVATION D-D SEE SHEET NO.21.
FOR DETAILS OF SECTION R-R SEE SHEET NO.28.

STATE	PROJ. NO.	SHEET NO.
MO.		27



DETAILS OF ABUTMENT NO. 3

ELEVATION D-D

SECTION J-J

389 4021

DETAILED SEPT 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 24 OF 66

JACKSON

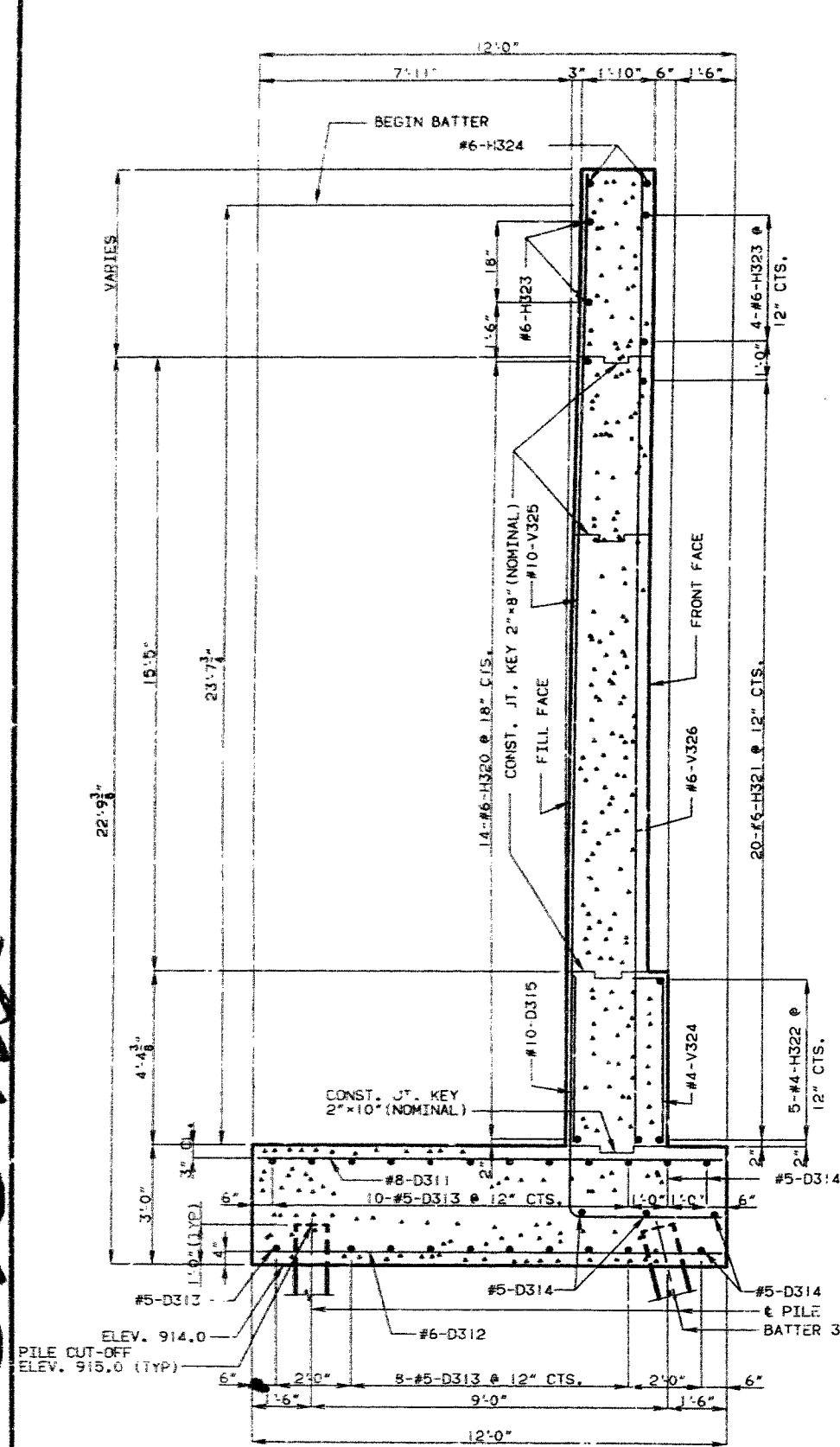
COUNTY

A-4861

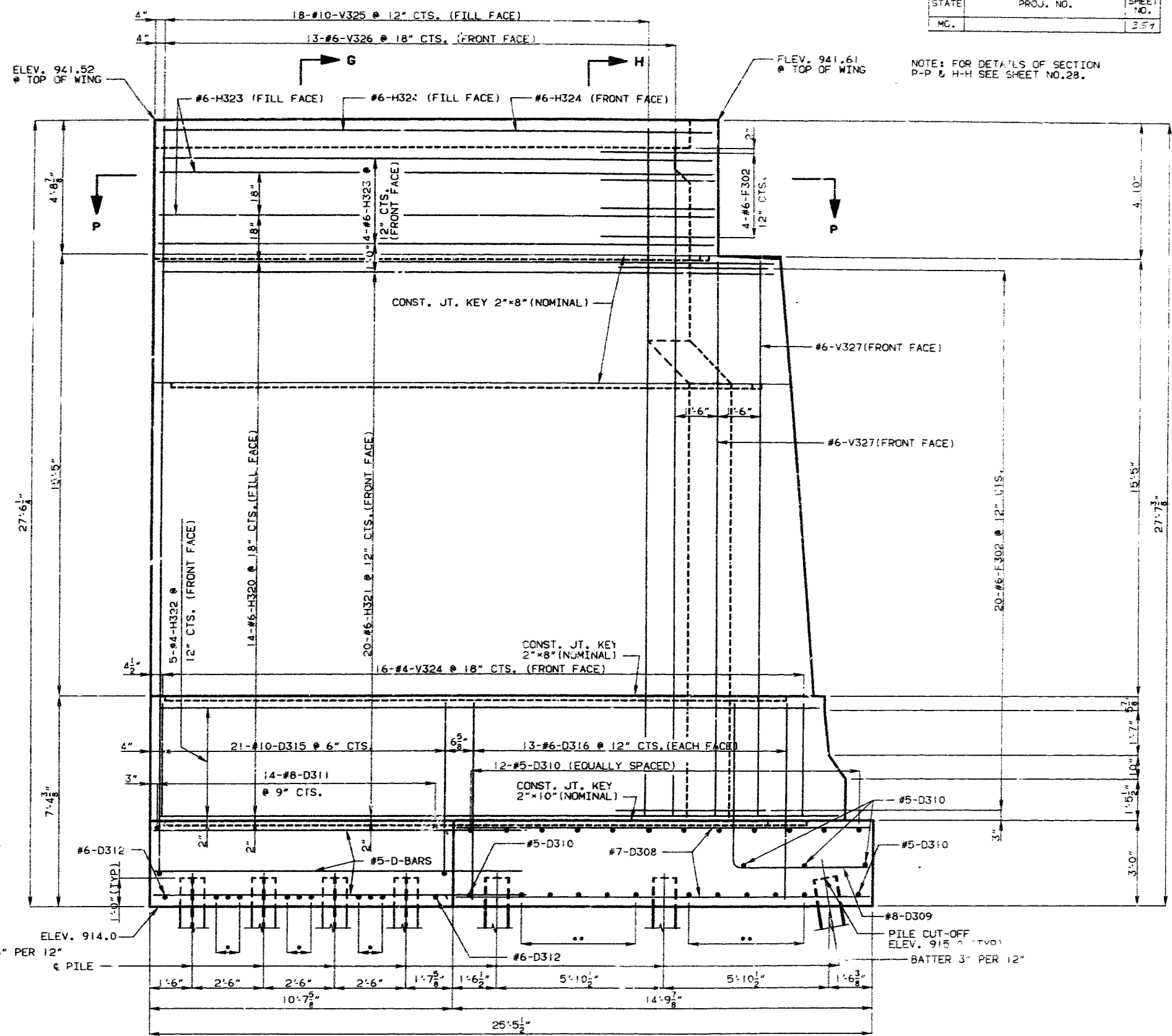
STATE	PROJ. NO.	SHEET NO.
MO.		257

NOTE: FOR DETAILS OF SECTION P-P & H-H SEE SHEET NO.29.

398482



SECTION G-G



DETAILS OF ABUTMENT NO. 3

NOTE: FOR LOCATION OF ELEVATION C-C SEE SHEET NO.21.

DETAILED SEPT. 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

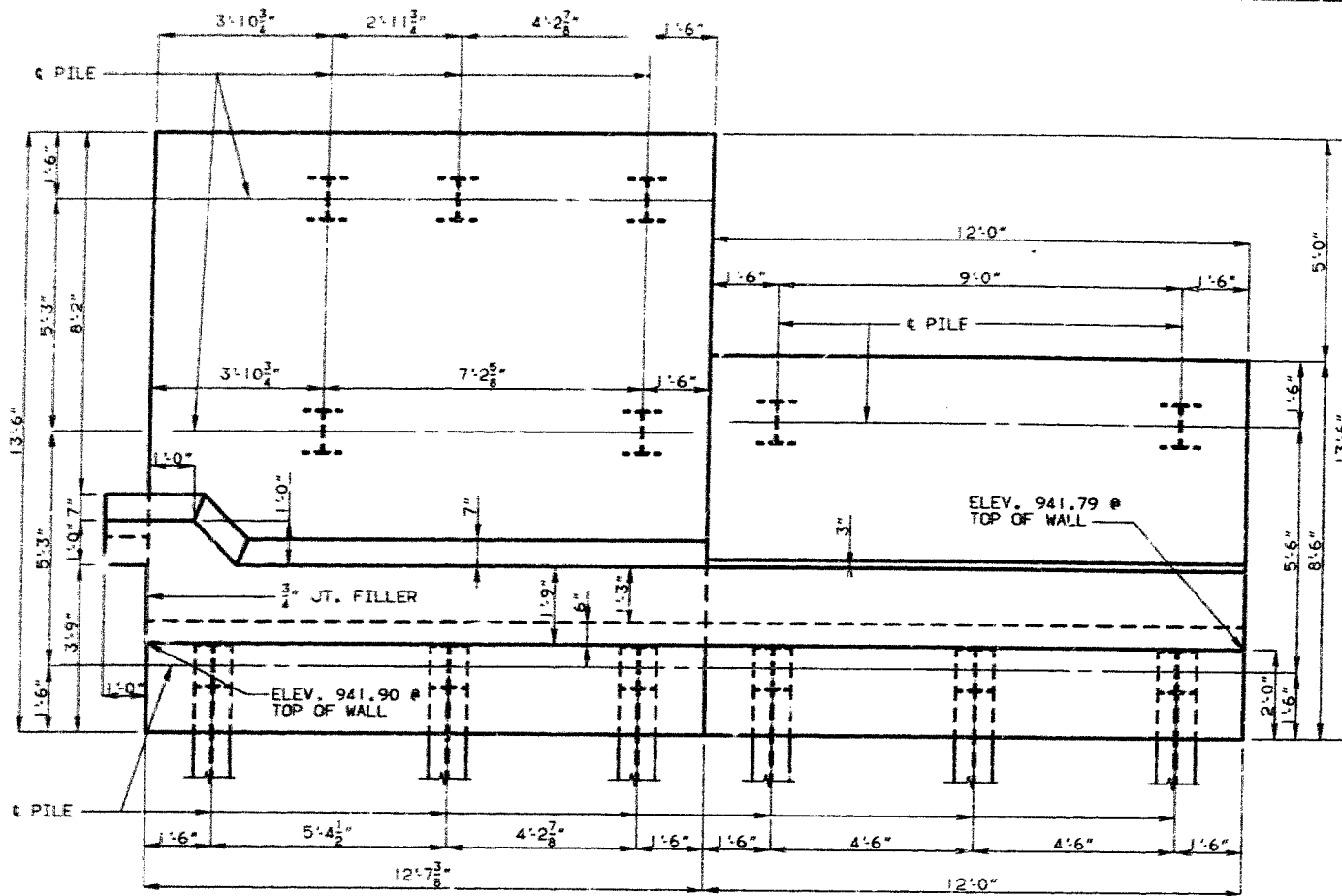
SHEET NO. 25 OF 66

JACKSON

COUNTY

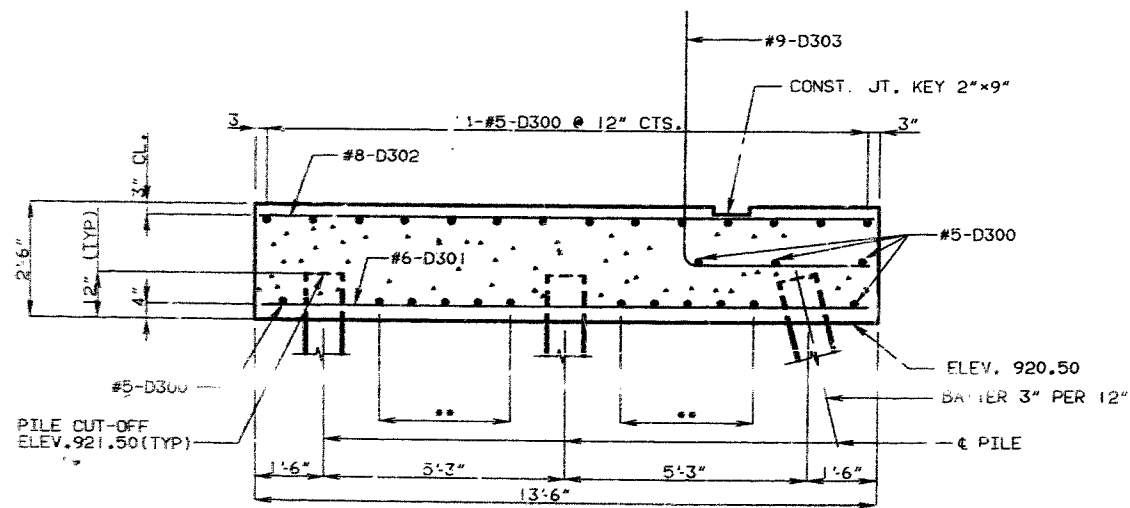
A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		26



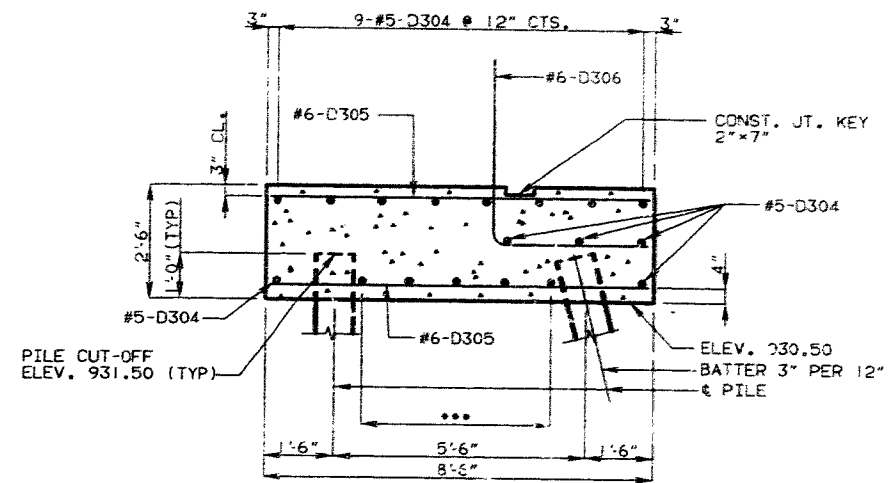
PLAN

NOTE: FOR DETAILS OF WALL "B" NOT SHOWN SEE SHEET NO. 27.
FOR DETAILS OF STEEL PILE SPLICE SEE SHEET NO. 5.

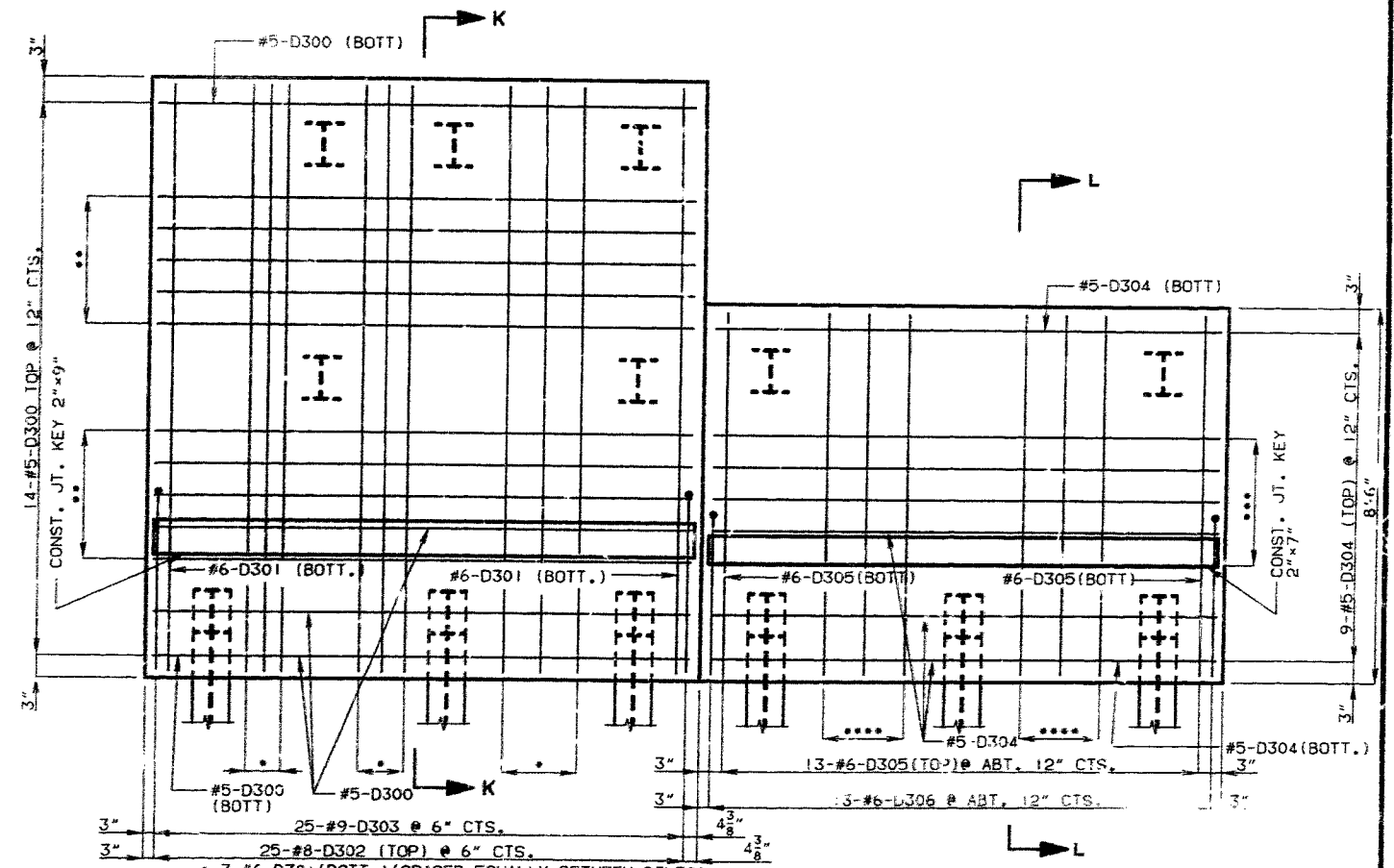


SECTION K-K

DETAILS OF WALL "B"



SECTION L-L



DETAIL OF FOOTING SHOWING REINFORCEMENT

591 423

DETAILED SEPT 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 26 OF 66

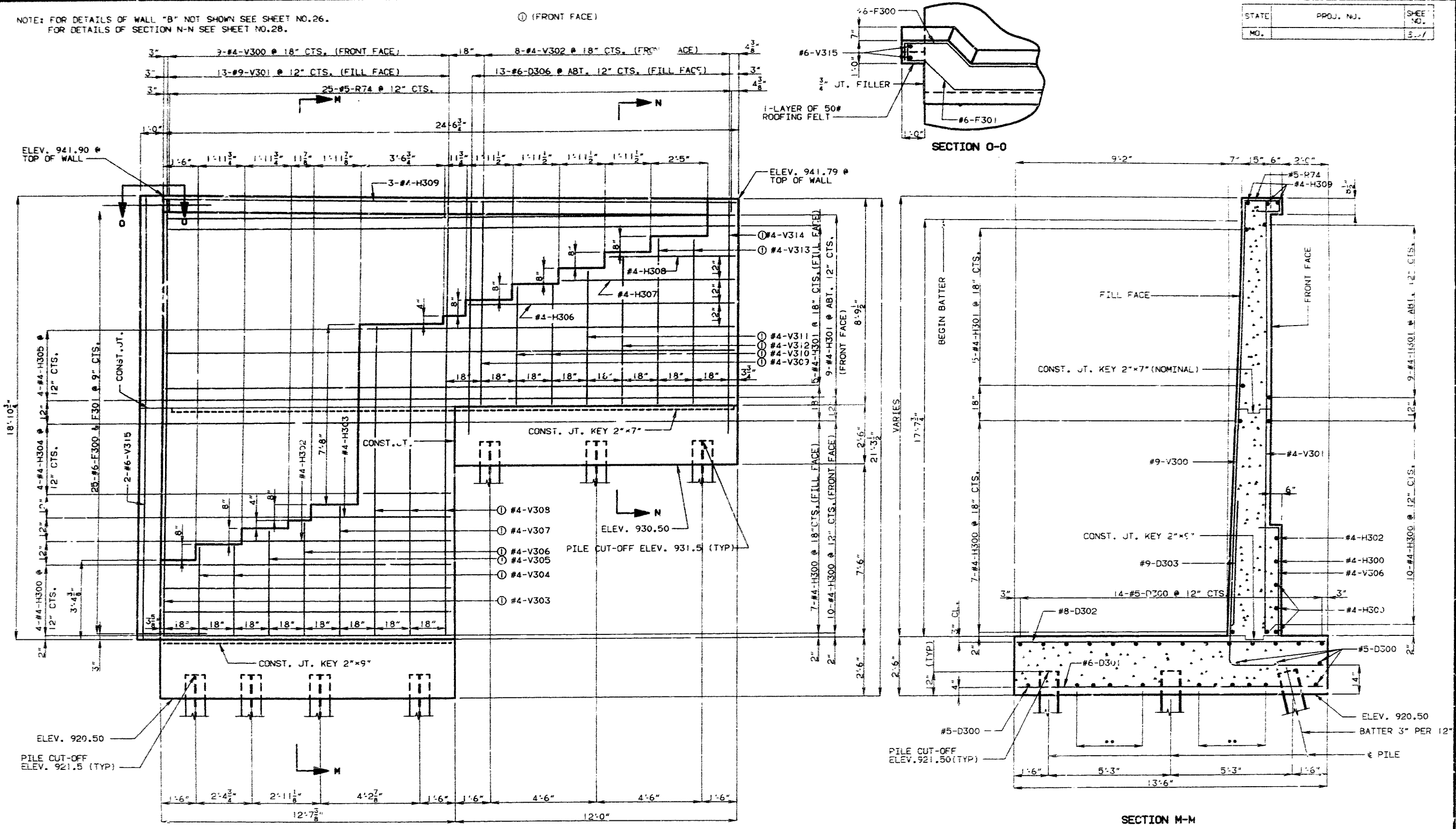
JACKSON

COUNTY

A-4861

NOTE: FOR DETAILS OF WALL "B" NOT SHOWN SEE SHEET NO.26.
FOR DETAILS OF SECTION N-N SEE SHEET NO.28.

STATE	PROJ. NO.	SHEET NO.
MO.		5-1



392 4874

ELEVATION

SECTION M-M

DETAILS OF WALL "B"

DETAILS OF ABUTMENT NO. 3

•• #5-D300 (SPACED EQUALLY BETWEEN PILES)

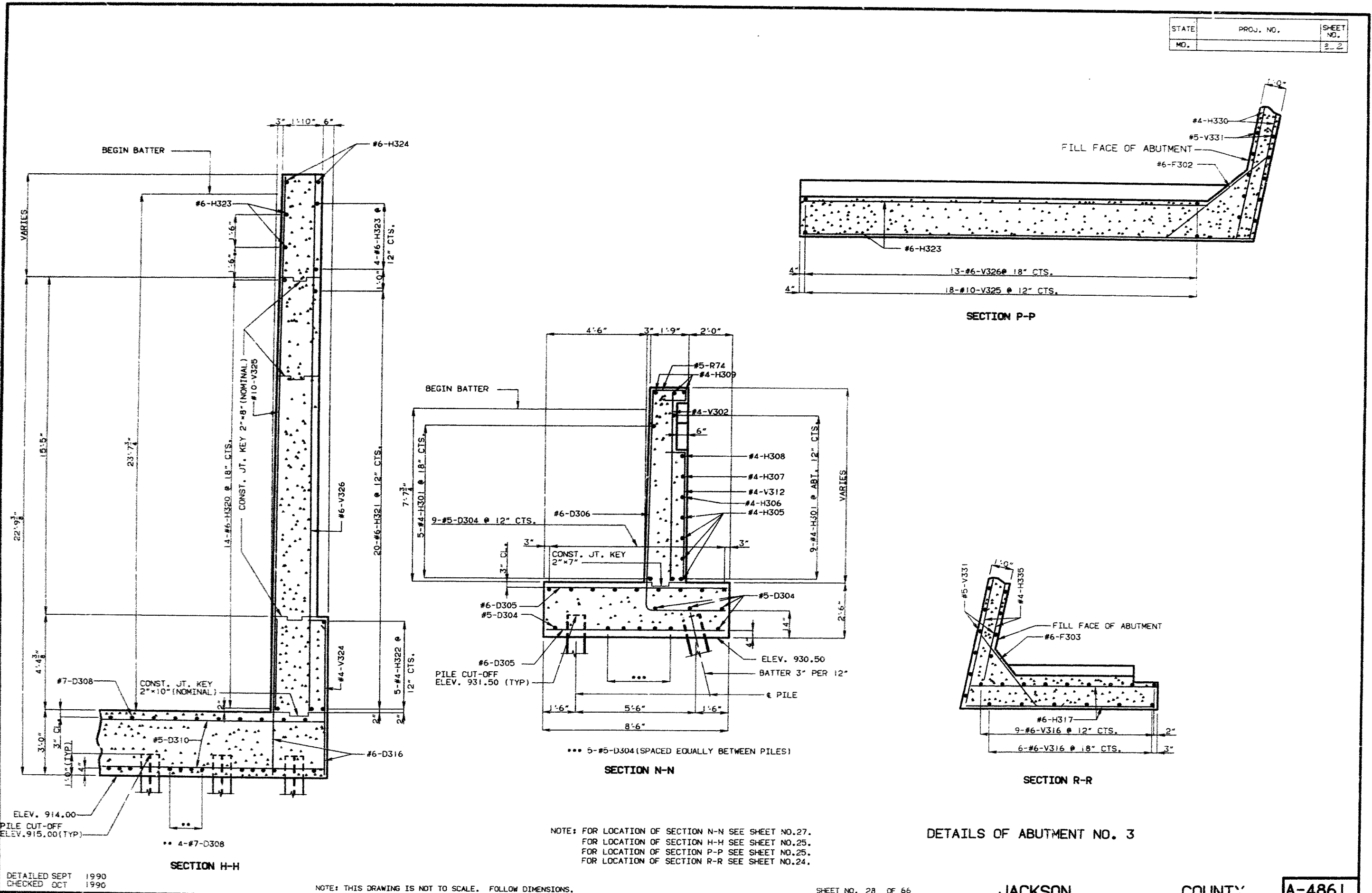
DETAILED SEPT 1990
CHECKED DC 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 27 OF 66

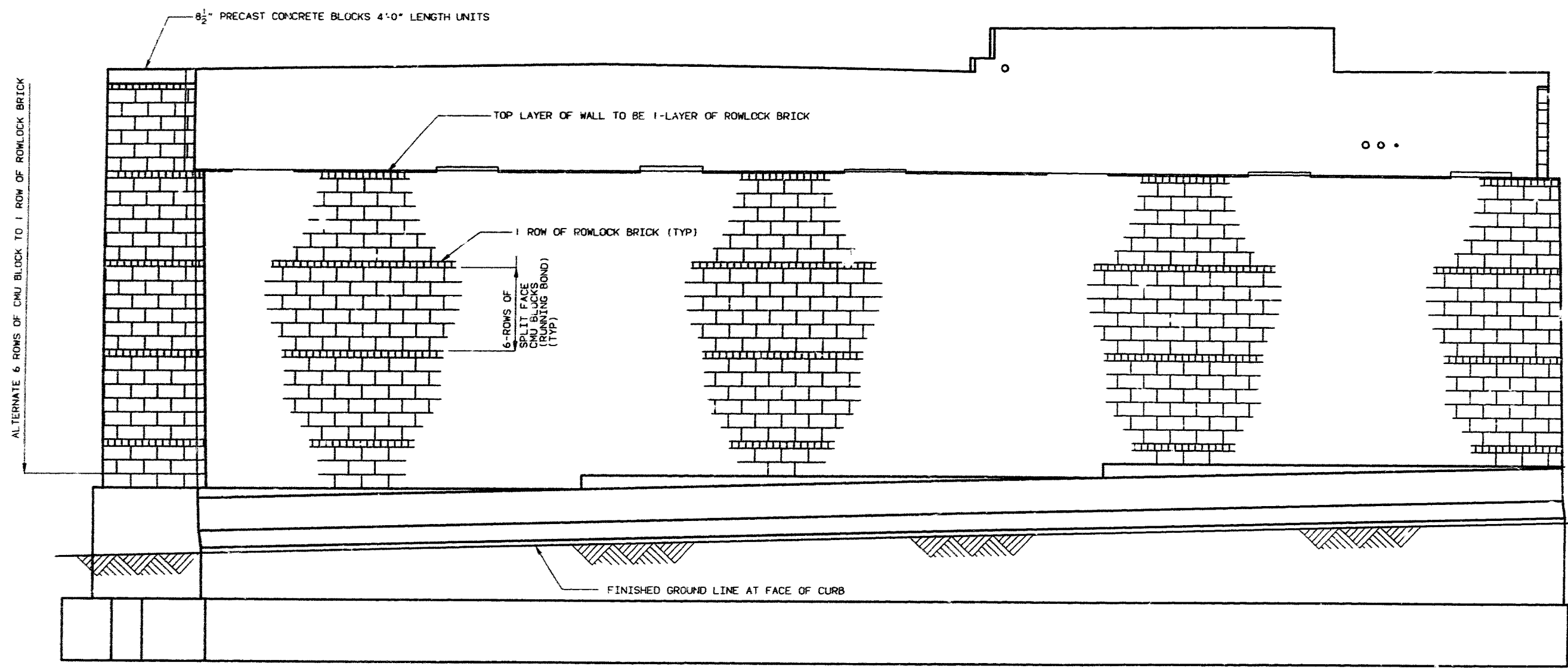
JACKSON COUNTY A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		2-2



DETAILED SEPT 1990
 CHECKED OCT 1990

STATE	PROJ. NO.	SHEET NO.
MO.		323



394 486

DETAILS OF MASONRY FACING AT END ABUTMENT NO. 3

NOTE: WEEPHOLES SHALL BE PLACED ALONG BOTTOM COURSE OF MASONRY SPACED AT 16" CTS.

DETAILED OCT. 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

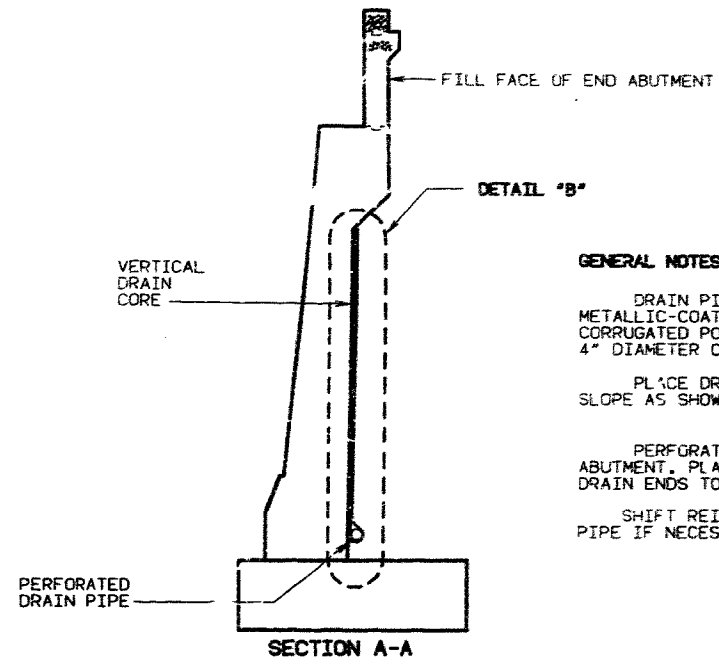
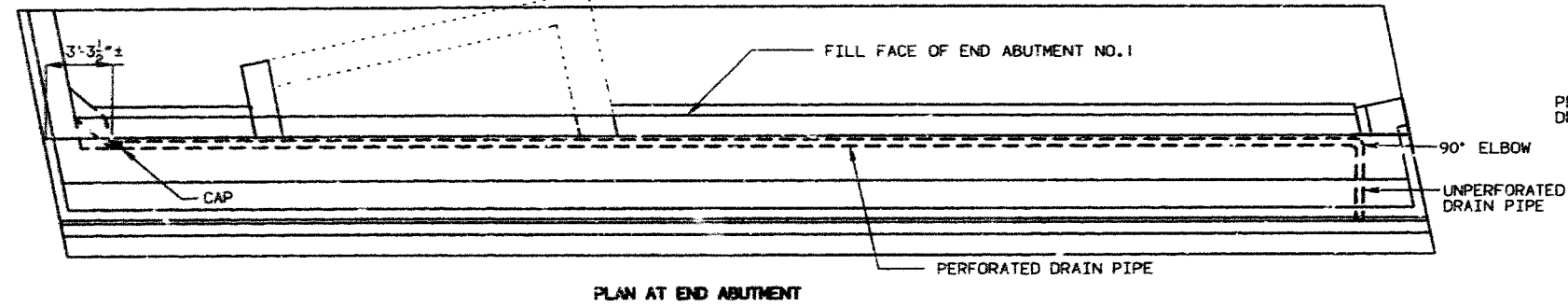
SHEET NO. 29 OF 66

JACKSON

COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		30



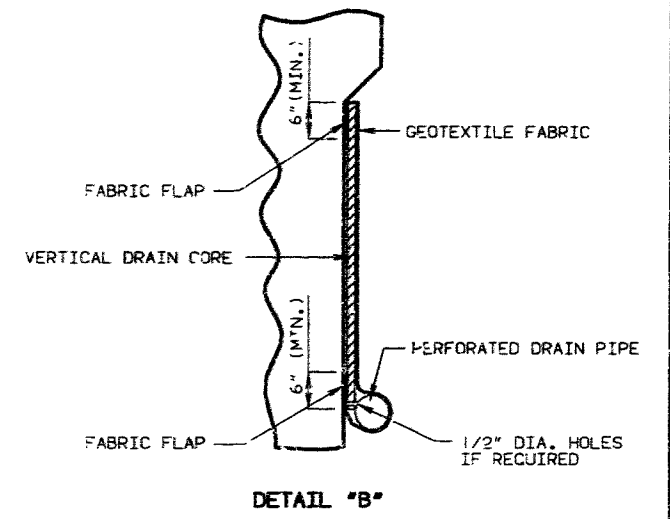
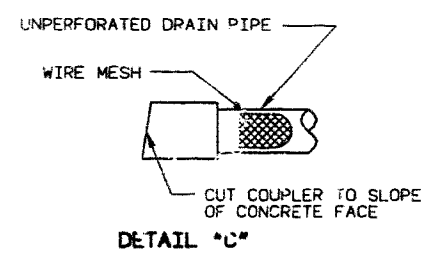
GENERAL NOTES:

DRAIN PIPE MAY BE EITHER 6" DIAMETER CORRUGATED METALLIC-COATED STEEL PIPE UNDERDRAIN, 4" DIAMETER CORRUGATED POLY VINYL CHLORIDE (PVC) DRAIN PIPE, OR 4" DIAMETER CORRUGATED POLYETHYLENE (PE) DRAIN PIPE.

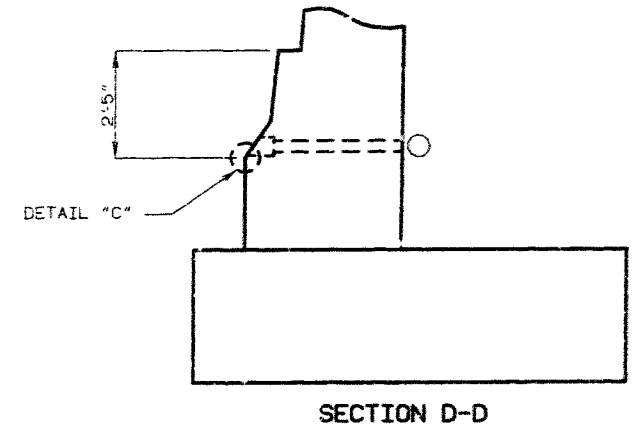
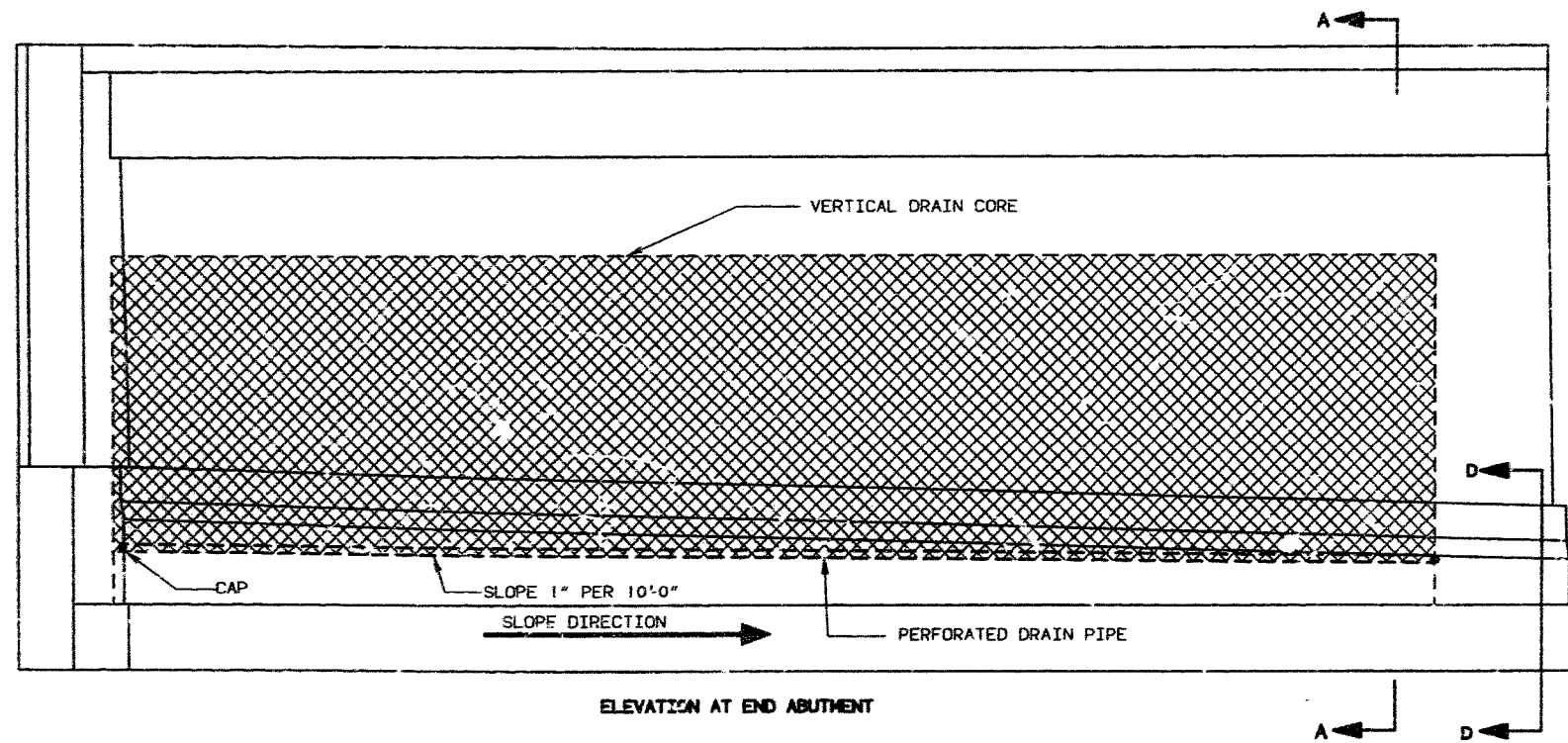
PLACE DRAIN PIPE AT END ABUTMENT AND SLOPE AS SHOWN (SEE ELEVATION AT END ABUTMENT).

PERFORATED PIPE SHALL BE USED ALONG THE WALL OF THE ABUTMENT. PLAIN PIPE SHALL BE USED WHERE THE VERTICAL DRAIN ENDS TO THE EXIT AT FRONT FACE OF ABUTMENT.

SHIFT REINFORCING BARS IN WALL TO MISS THE DRAIN PIPE IF NECESSARY.



395 487



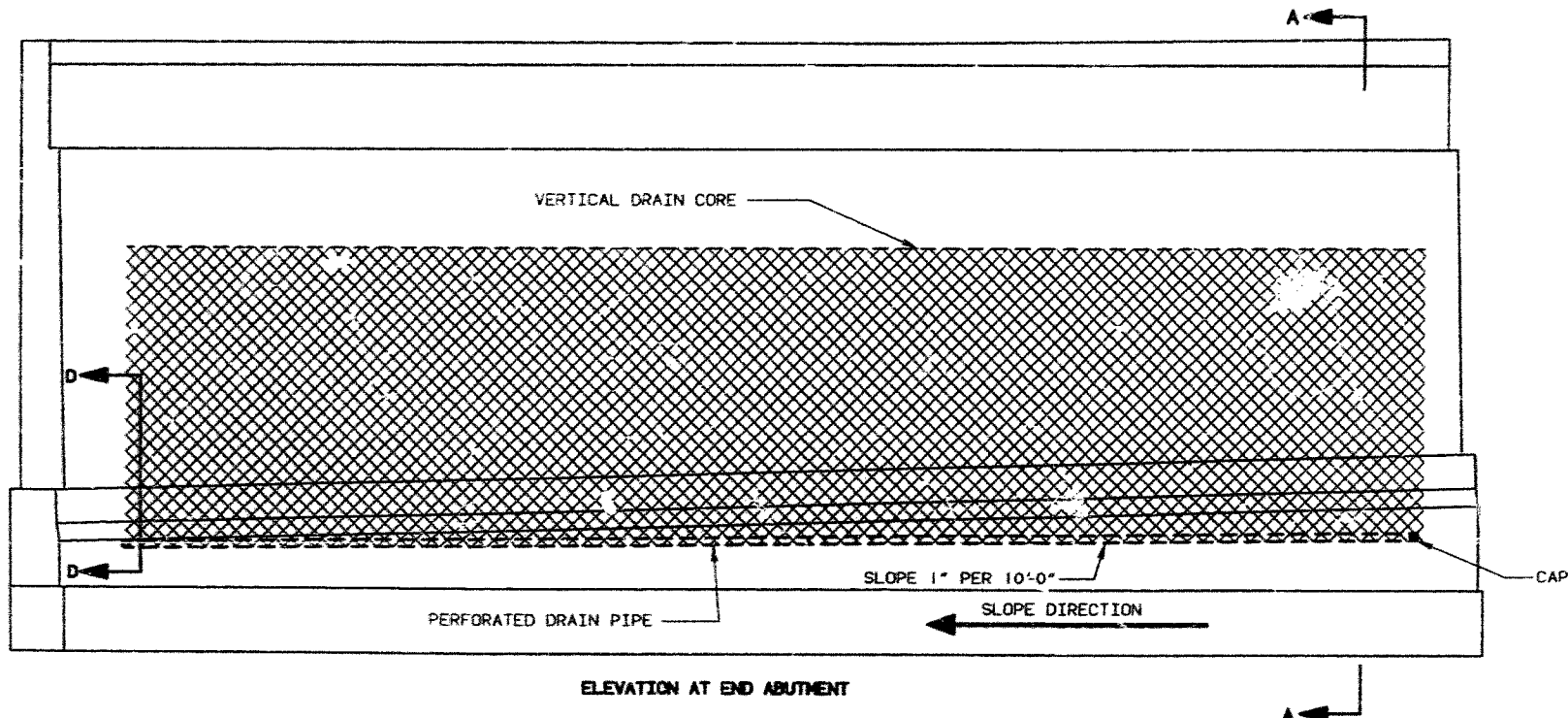
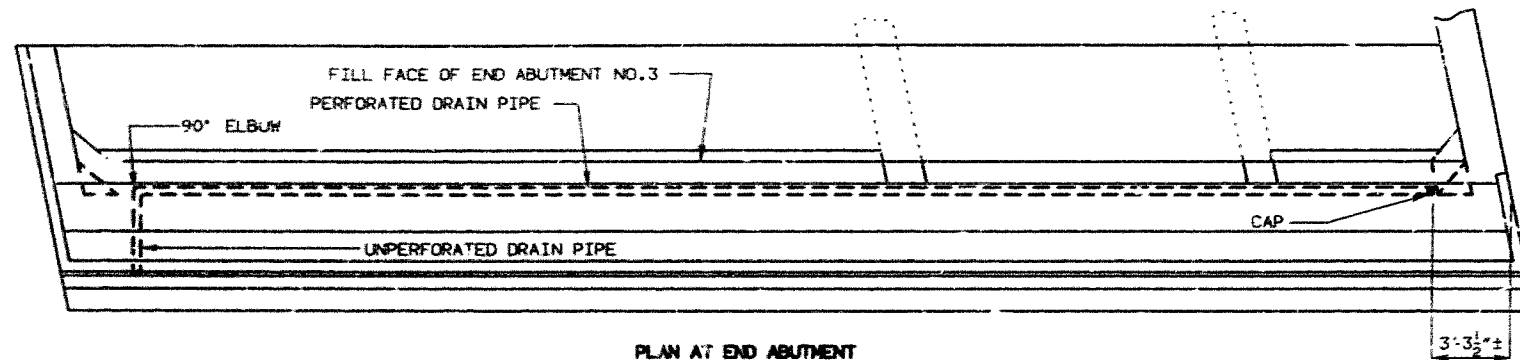
VERTICAL DRAIN AT ABUTMENT NO. 1

DETAILED AUG. 1990
CHECKED SEPT. 1990

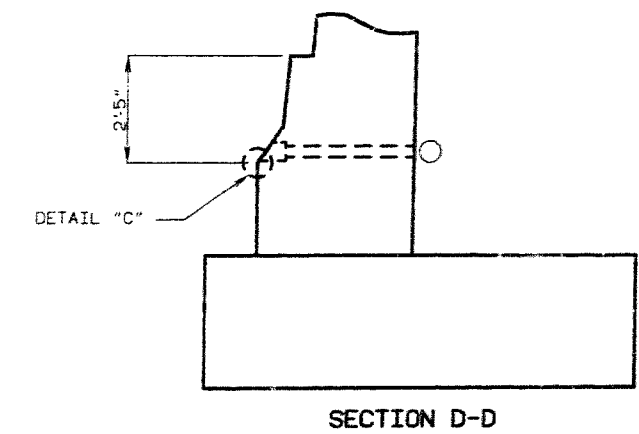
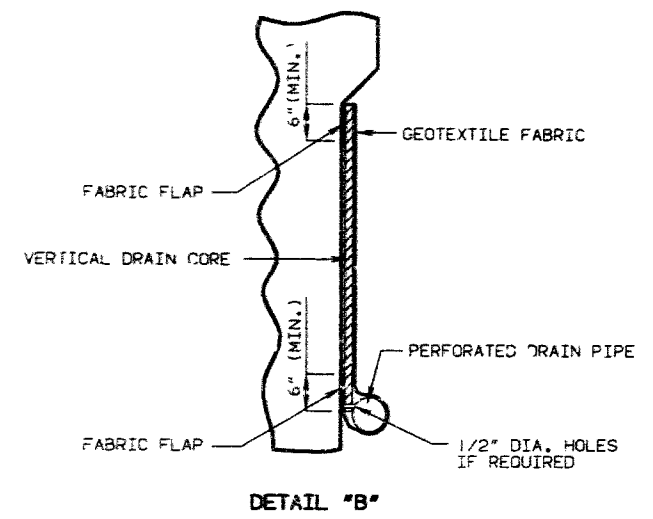
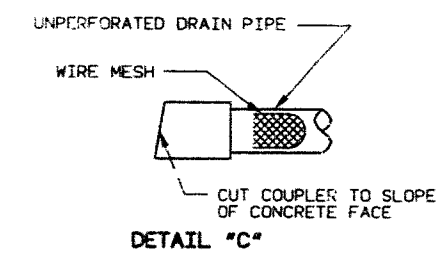
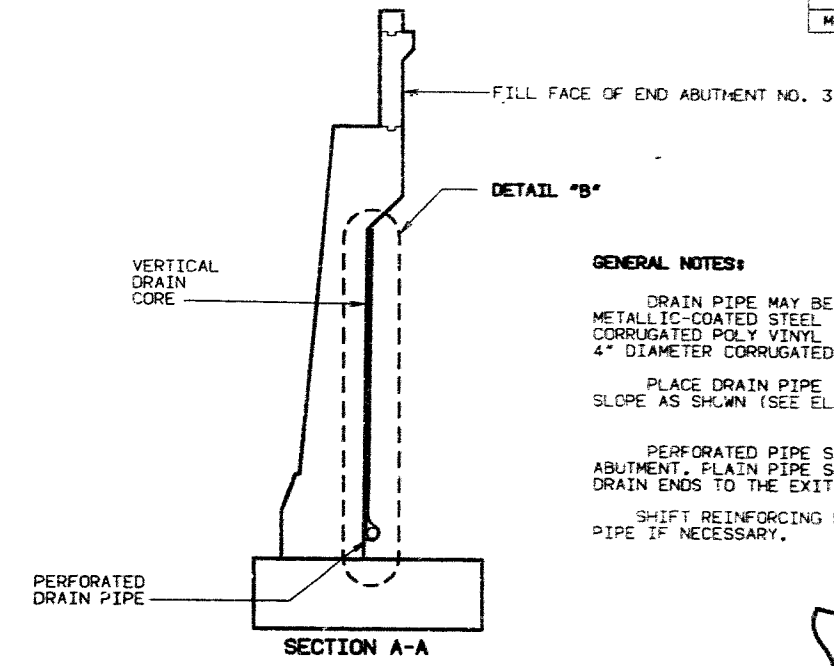
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 30 OF 66

STATE	PROJ. NO.	SHEET NO.
MO.		325



VERTICAL DRAIN AT ABUTMENT NO. 3



GENERAL NOTES:

DRAIN PIPE MAY BE EITHER 6" DIAMETER CORRUGATED METALLIC-COATED STEEL PIPE UNDERDRAIN, 4" DIAMETER CORRUGATED POLY VINYL CHLORIDE (PVC) DRAIN PIPE, OR 4" DIAMETER CORRUGATED POLYETHYLENE (PE) DRAIN PIPE.

PLACE DRAIN PIPE AT END ABUTMENT AND SLOPE AS SHOWN (SEE ELEVATION AT END ABUTMENT).

PERFORATED PIPE SHALL BE USED ALONG THE WALL OF THE ABUTMENT. FLAIN PIPE SHALL BE USED WHERE THE VERTICAL DRAIN ENDS TO THE EXIT AT FRONT FACE OF ABUTMENT.

SHIFT REINFORCING BARS IN WALL TO MISS THE DRAIN PIPE IF NECESSARY.

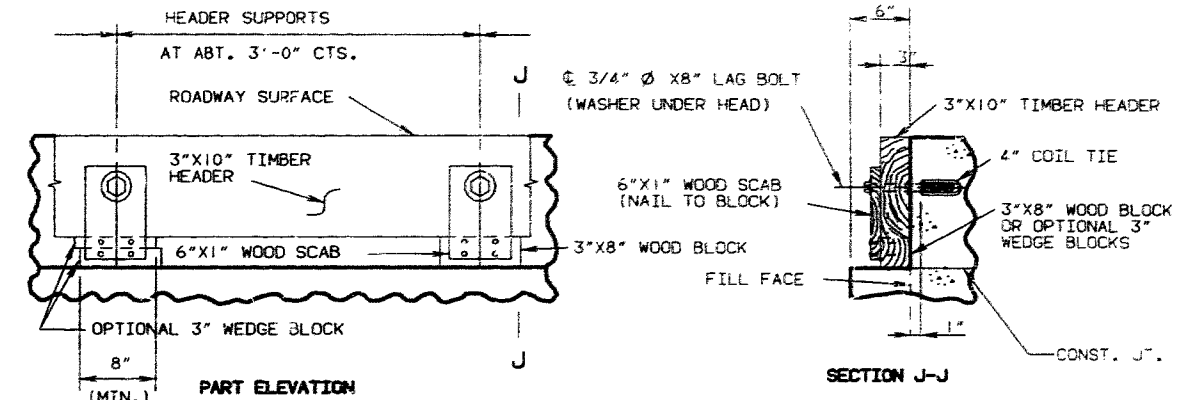
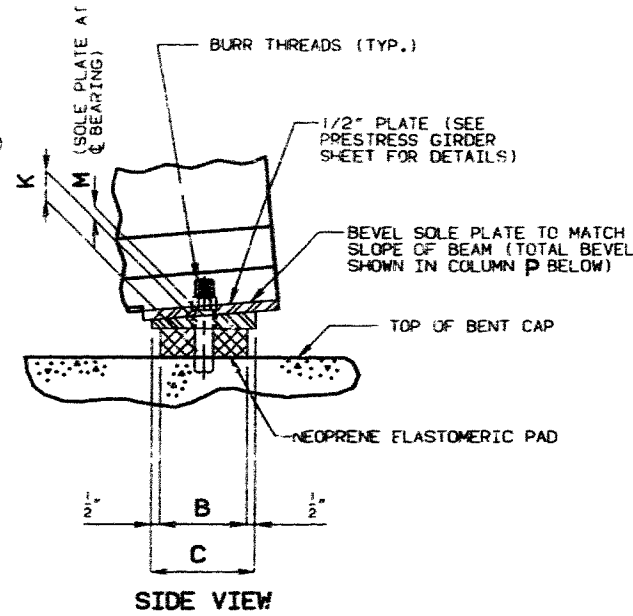
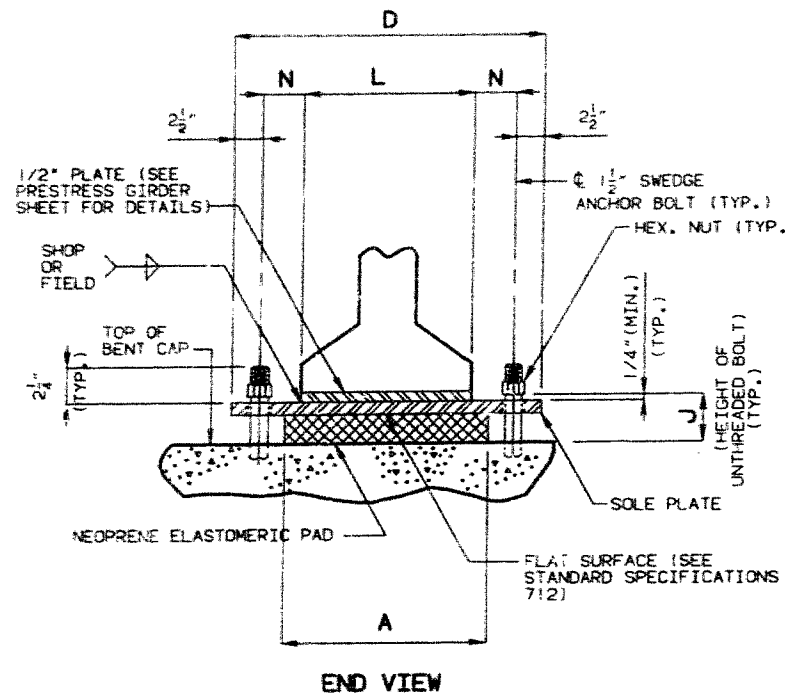
396 428

DETAILED AUG. 19 90
CHECKED SEPT 19 90

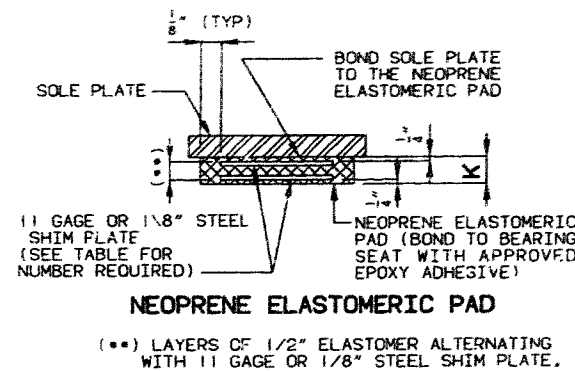
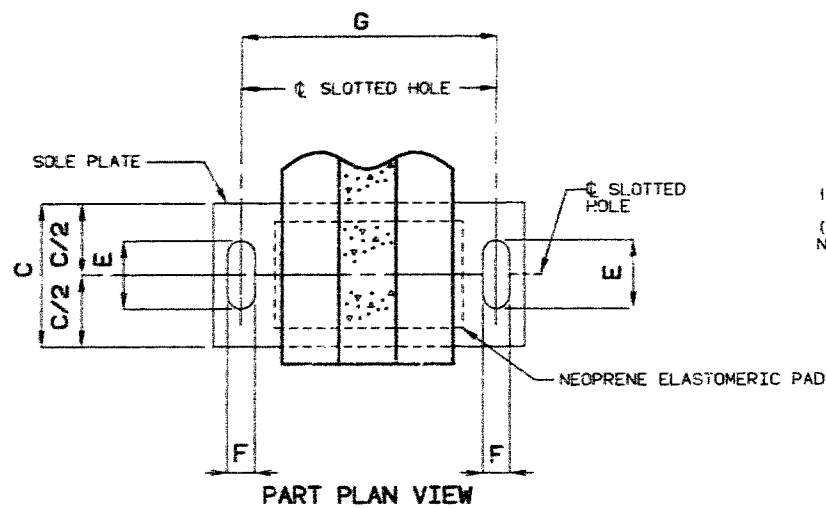
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 31 OF 66

STATE	PROJ. NO.	SHEET NO.
MO.		32



NOTE: COST OF TIMBER HEADERS COMPLETE IN PLACE TO BE INCLUDED IN CONTRACT UNIT PRICE FOR CONCRETE.
DETAILS OF TIMBER HEADER AT END ABUTMENTS



GENERAL NOTES:

ANCHORS BOLTS SHALL BE 1/2" Ø A588 STEEL SWEDGED BOLTS AND SHALL EXTEND 15" INTO THE CONCRETE WITH A194-2, 2H OR A563-C, C3, D, DH, DH3 HEAVY HEXAGON NUTS. ACTUAL MANUFACTURER'S CERTIFIED MILL TEST REPORTS (CHEMICAL AND MECHANICAL) SHALL BE PROVIDED. (SWEDGING SHALL BE 1" LESS THAN THE EXTENSION INTO THE CONCRETE.)

ALL STRUCTURAL STEEL FOR THE SOLE PLATE, ANCHOR BOLTS AND THE HEAVY HEXAGON NUTS SHALL BE PAINTED WITH 2 COATS (5 MILS MIN) ZINC BE TOUCHED UP AFTER ASSEMBLY.

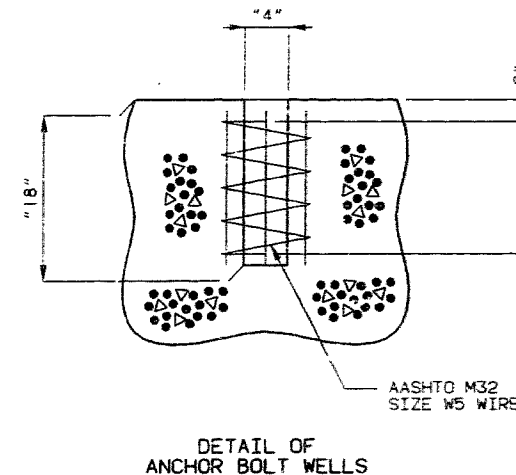
THE NEOPRENE ELASTOMERIC PADS SHALL BE 60 DUROMETER

THE SOLE PLATE SHALL BE FURNISHED WITH THE BEARING AND FIELD OR SHOP WELDED TO THE GIRDERS.

STRUCTURAL STEEL FOR THE SOLE PLATE SHALL BE A-36.

PAYMENT FOR THE SOLE PLATE, ANCHOR BOLTS AND HEAVY HEXAGON NUTS SHALL BE INCLUDED IN THE COST OF THE BEARING ASSEMBLY. SEE SPECIAL PROVISIONS.

THE ACCEPTED QUANTITY OF THE ELASTOMERIC BEARING ASSEMBLIES, COMPLETE-IN-PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR LAMINATED NEOPRENE BEARING PADS (PRESTRESS STRUCTURES), EACH.



NOTE: THE LOCATION OF THE ANCHOR BOLTS IN RELATION TO THE SLOTTED HOLES IN THE SOLE PLATE SHALL CORRESPOND WITH THE TEMPERATURE AT THE TIME OF ERECTION. AT 60° F. THE SLOTTED HOLES SHOULD CENTER ON THE ANCHOR BOLTS.

EXPANSION BEARINGS														NUMBER OF SHIM PLATES (**)	NUMBER REQUIRED
BENT NO.	A	B	C	D	E	F	G	J	K	L	M	N	P		
1	15 1/2"	11"	12"	26"	4 1/2"	15 5/8"	21"	3 5/8"	17 7/8"	17"	1 1/2"	2"	-	3	7
3	15 1/2"	11"	12"	26"	4 1/2"	15 5/8"	21"	3 5/8"	17 7/8"	17"	1 1/2"	2"	-	3	7
														TOTAL BEARINGS	14

(*) THE REQUIRED SHIM PLATE SHALL BE PLACED BETWEEN EQUAL LAYERS OF ELASTOMER AND MOLDED TOGETHER TO FORM AN INTEGRAL UNIT.

DETAILS OF LAMINATED NEOPRENE BEARINGS (PRESTRESS STRUCTURES)

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 32 OF 66

JACKSON

COUNTY

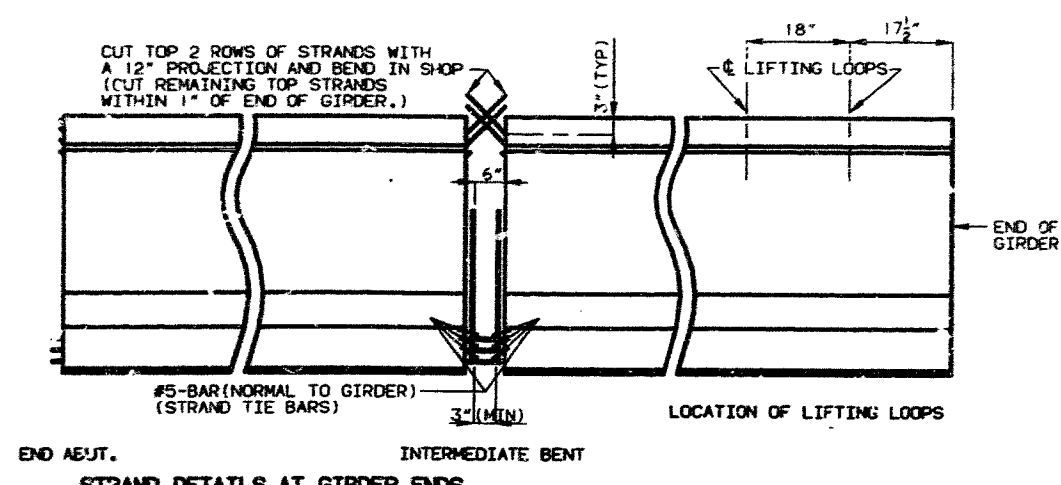
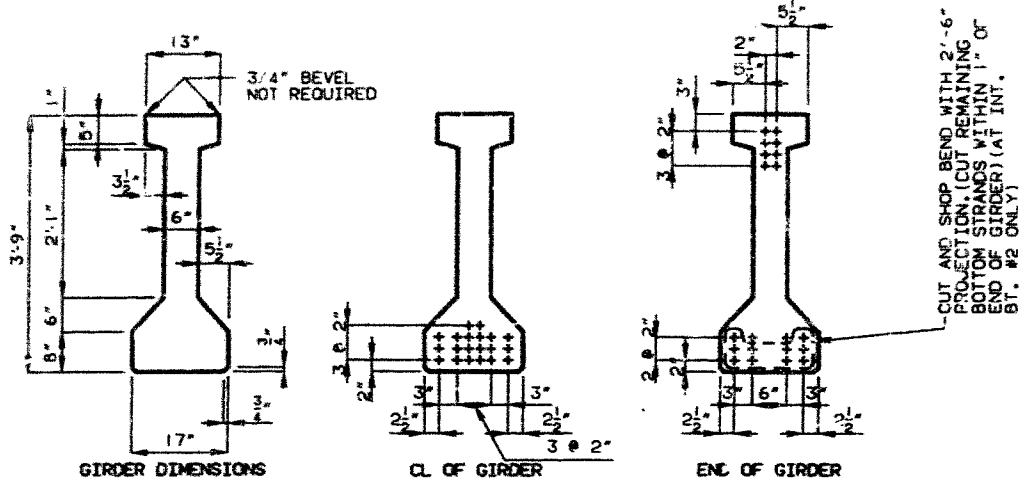
A-4861

DETAILED AUG 19 90

CHECKED AUG. 19 90

LAMINATED BRG. REVISED
 P/S JAN. 1980 DEC. 1989

399 429

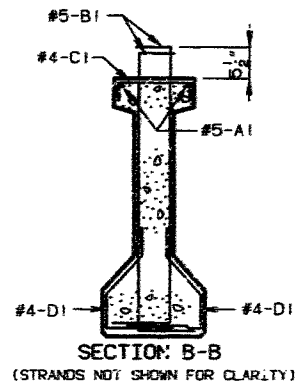
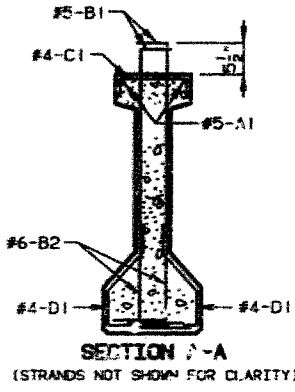
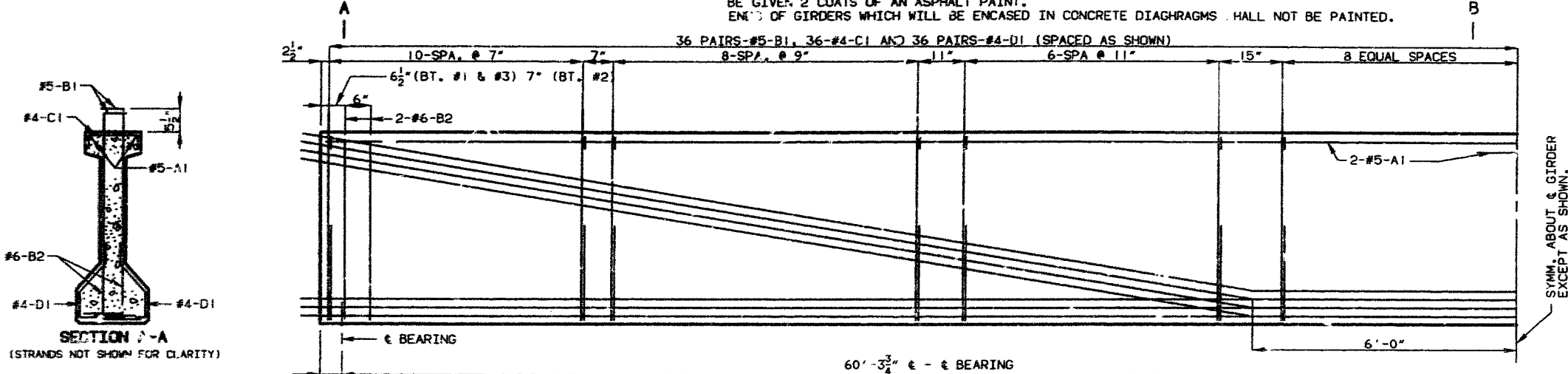


STATE		PRGJ. NO.		SHEET NO.
NO.	NO.	NO.	NO.	NO.
BILL OF REINFORCING STEEL - EACH GIRDER				
NO.	SIZE MARK	ACTUAL LENGTH	SHAPE	BENDING DIAGRAMS
4	#5-A1	31'-6"	20	SHAPE 10
142	#5-B1	5'-2"	11	
8	#6-B2	4'-7"	11	SHAPE 9
71	#4-C1	13"	10	
142	#4-D1	2'-7"	9	SHAPE 11

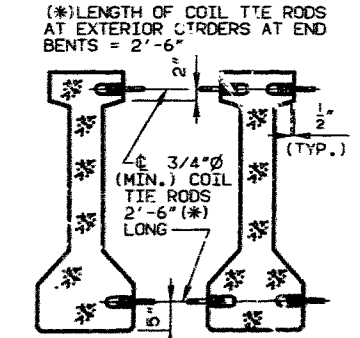
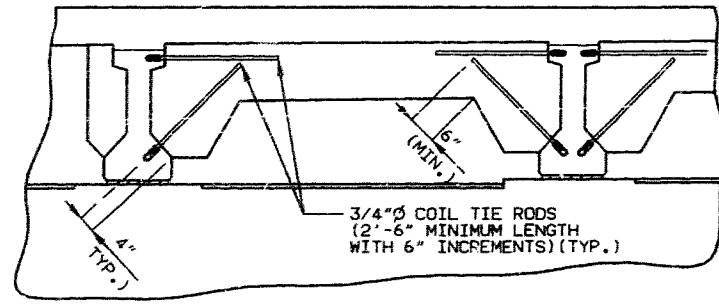
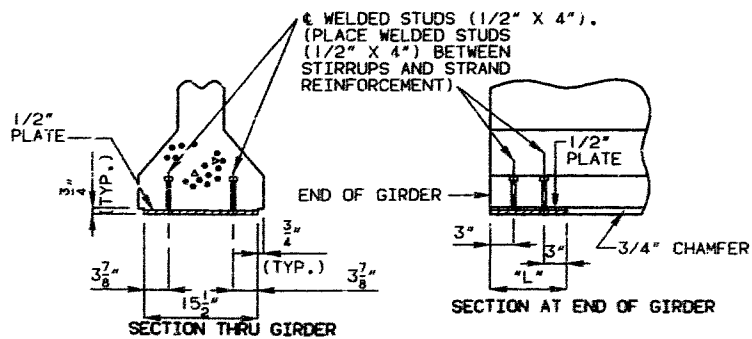
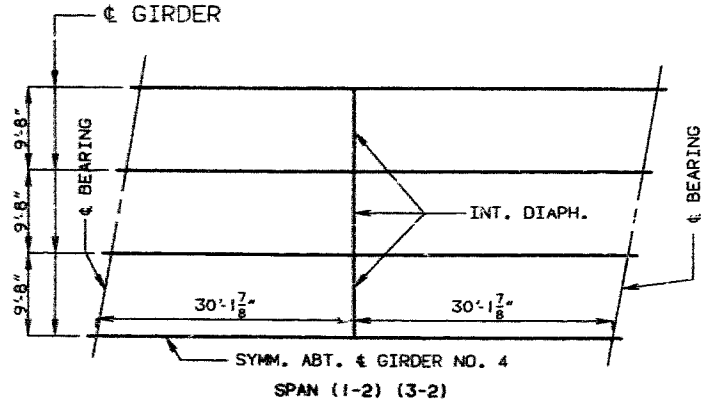
NOTE:
 CONCRETE FOR PRESTRESSED GIRDERS SHALL BE CLASS A1 WITH F'C = 5,000 PSI.
 (*) INDICATES PRESTRESSED STRAND.
 USE 20 STRANDS WITH AN INITIAL PRESTRESS FORCE OF 620 KIPS.
 PRESTRESSING TENDONS SHALL BE UNCOATED, SEVEN-WIRE, LOW RELAXATION STRANDS, - 1/2 INCH DIAMETER CONFORMING TO A.A.S.H.T.O. M203, GRADE 270. SEE MC. STD. SPECIFICATIONS 705.4.8

NOTE: PAINT THE 1/2" SOLE PLATE WITH 2 COATS OF INORGANIC ZINC (5 MILS MINIMUM) OR GALVANIZE IN ACCORDANCE WITH A.S.T.M. A123.
 COST OF FURNISHING, PAINTING AND INSTALLING THE 1/2" SOLE PLATE AND WELDED STUDS IN THE PRESTRESSED GIRDER SHALL BE INCLUDED IN THE PRICE BID FOR PRESTRESSED CONCRETE I-GIRDER PER EACH.
NOTE: PRESTRESSING STRANDS AT END ABUT. NO. 1 AND 3 SHALL BE TRIMMED TO WITHIN 1/8" OF CONCRETE IF EXPOSED, OR 1" OF CONCRETE IF ENCASED. EXPOSED ENDS OF GIRDERS SHALL BE GIVEN 2 COATS OF AN ASPHALT PAINT.
 ENDS OF GIRDERS WHICH WILL BE ENCASED IN CONCRETE DIAPHRAGMS SHALL NOT BE PAINTED.

NOTE:
 ALL DIMENSIONS IN BENDING DIAGRAM ARE OUT TO OUT.
 HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES STIRRUP AND TIE DIMENSIONS.
 ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
 MINIMUM CLEARANCE TO REINFORCING SHALL BE 1".
 ALL REINFORCEMENT SHALL BE GRADE 60.
 THE TWO D1 BARS MAY BE FURNISHED AS ONE BAR AT THE FABRICATOR'S OPTION.



NOTE:
 COST OF 3/4" Ø COIL TIE RODS PLACED IN DIAPHRAGMS IS INCLUDED IN CONTRACT UNIT PRICE FOR PRESTRESSED CONCRETE MEMBERS.
 COIL TIES SHALL BE HELD IN PLACE IN THE FORMS BY SLOTTED WIRE-SETTING-STUDS PROJECTING THRU FORMS. STUDS ARE TO BE LEFT IN PLACE OR REPLACED WITH TEMPORARY PLUGS UNTIL GIRDERS ARE ERECTED AND THEN REPLACED BY COIL TIE RODS.
 (*LENGTH OF COIL TIE RODS AT EXTERIOR GIRDERS AT END BENTS = 2'-6"

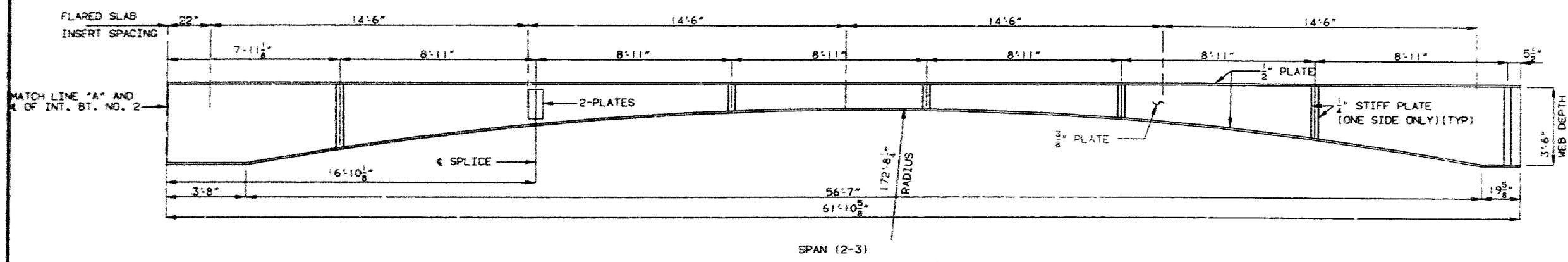
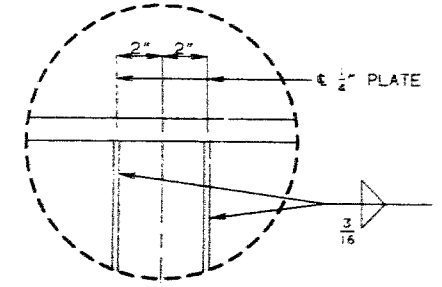
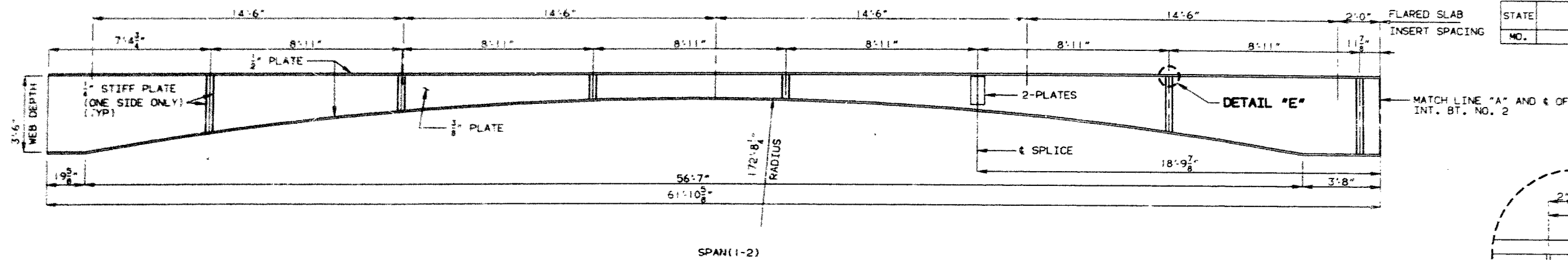


NOTE: FOR DETAIL OF DIAPHRAGMS NOT SHOWN SEE SHEET NO. 42.

*L" 13" @ ABUT. NO. 1 & 3
 14" @ BENT NO. 2

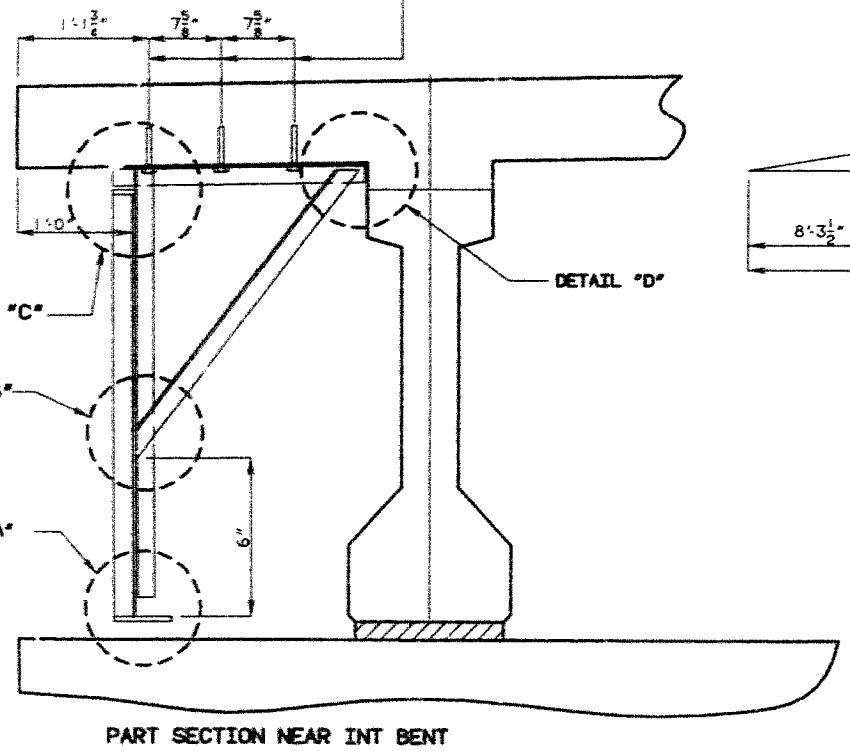
398 430

STATE	PROJ. NO.	SHEET NO.
MO.		368



SPAN (2-3)
PART ELEVATION OF FASCIA GIRDER

- ⊕ 13/16" Ø HOLES (IN ANGLE)
- ⊕ 3/4" Ø x 3" LONG H.S. BOLTS AND
- ⊕ FLARED THIN SLAB INSERT



PART SECTION NEAR INT BENT

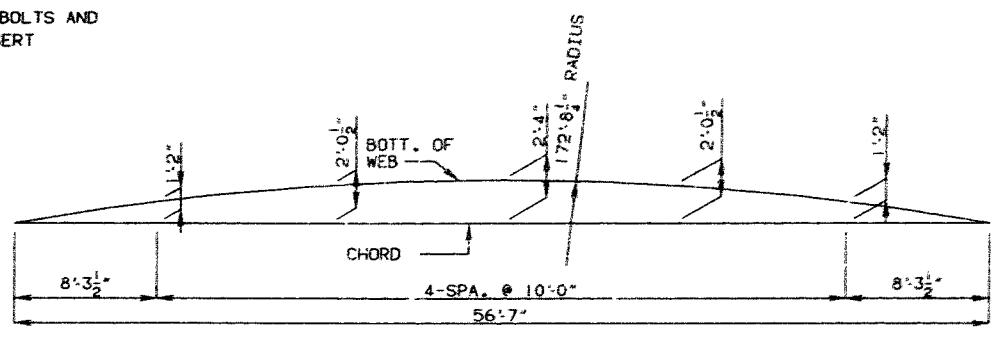
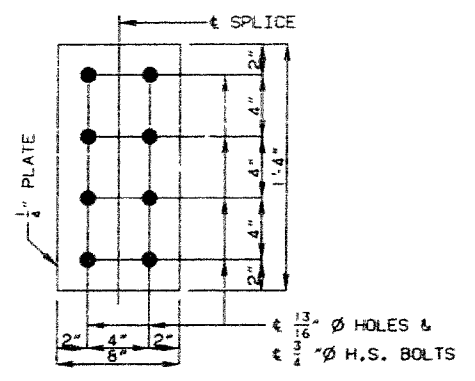
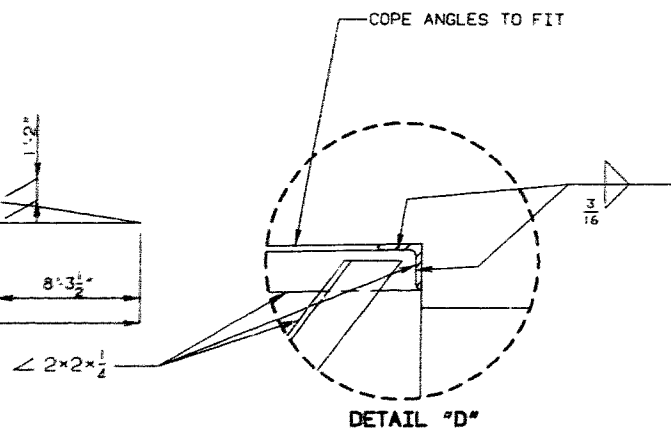


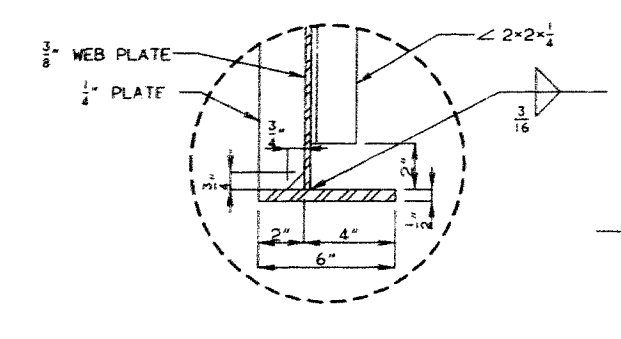
DIAGRAM SHOWING WEB OFFSETS



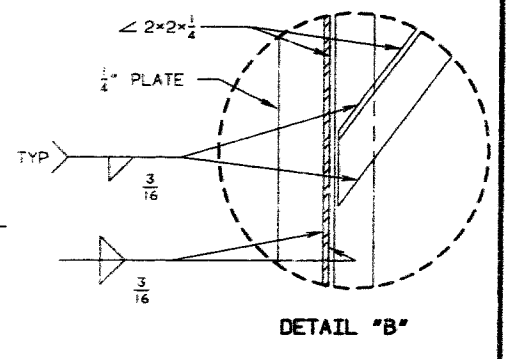
DETAIL OF SPLICE PLATES



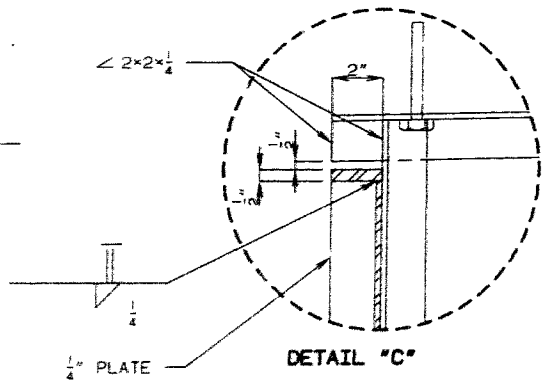
DETAIL "D"



DETAIL "A"



DETAIL "B"



DETAIL "C"

399431

DETAILED SEPT 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 34 OF 66

JACKSON

COUNTY

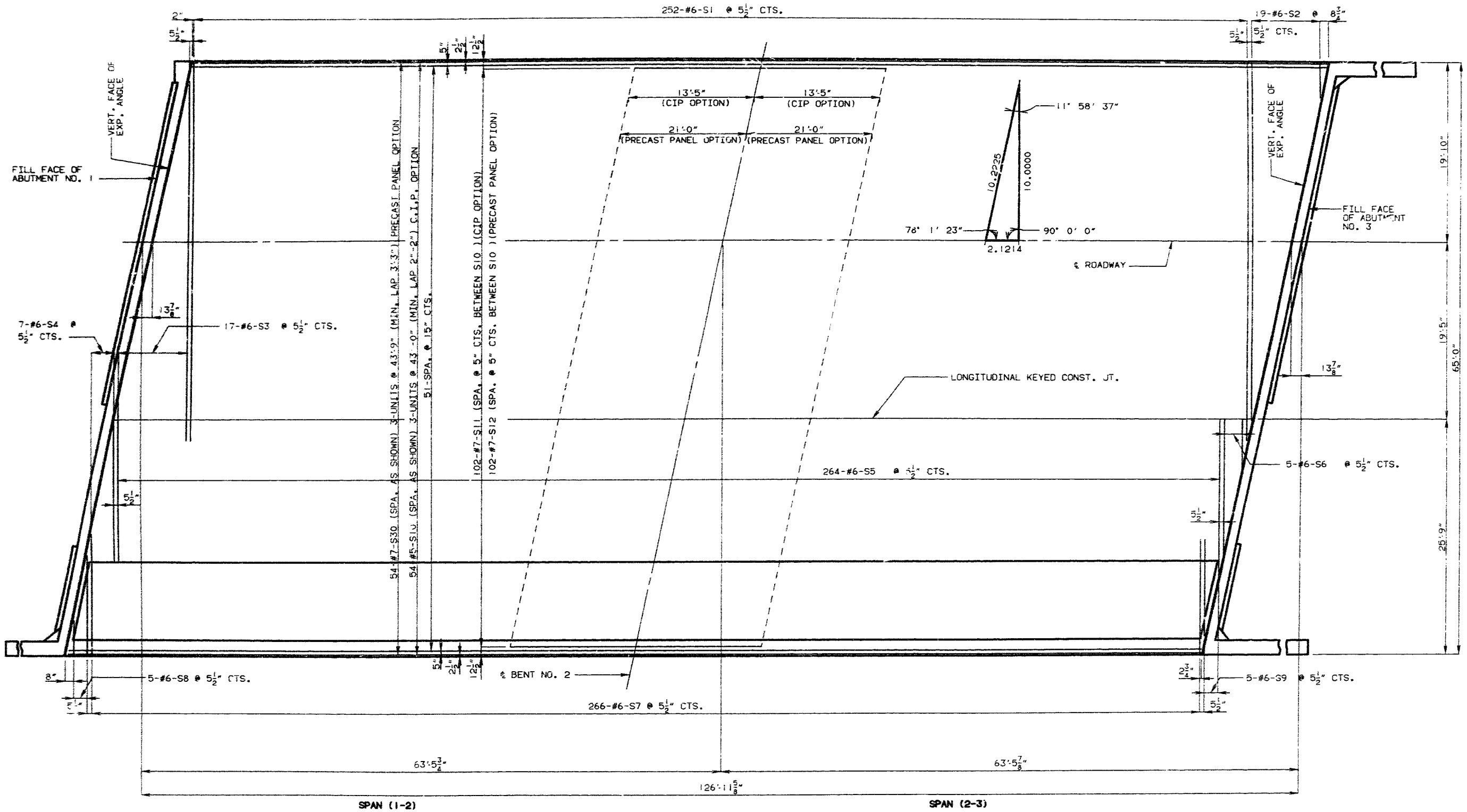
A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		307

NOTE: DIMENSION SHOWN ARE HORIZONTAL DIMENSIONS.
FOR DETAILS OF PRESTRESSED PANELS SEE SHEET NO.43.

NOTE: LONGITUDINAL REINFORCING STEEL SHALL BE PLACED SO THAT ENDS SHALL NOT BE MORE THAN 1"± FROM VERTICAL FACE OF EXP. DEVICE.

NOTE: FOR DETAILS OF PLANTER, DRAINS, AND LIGHTING SEE SHEET NO.46, 47, 58 AND 60 RESPECTIVELY.
FOR DETAILS OF THEORETICAL SLAB HAUNCHING DIAGRAM SEE SHEET NO.40.
FOR DETAILS OF CURB AND PARAPET NOT SHOWN SEE SHEET NO.48, 49 AND 50.



450 432

PLAN OF SLAB SHOWING TOP REINFORCEMENT
(CIP AND PRECAST PANEL OPTION EXCEPT AS NOTED)

DETAILED JULY 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 35 OF 66

JACKSON

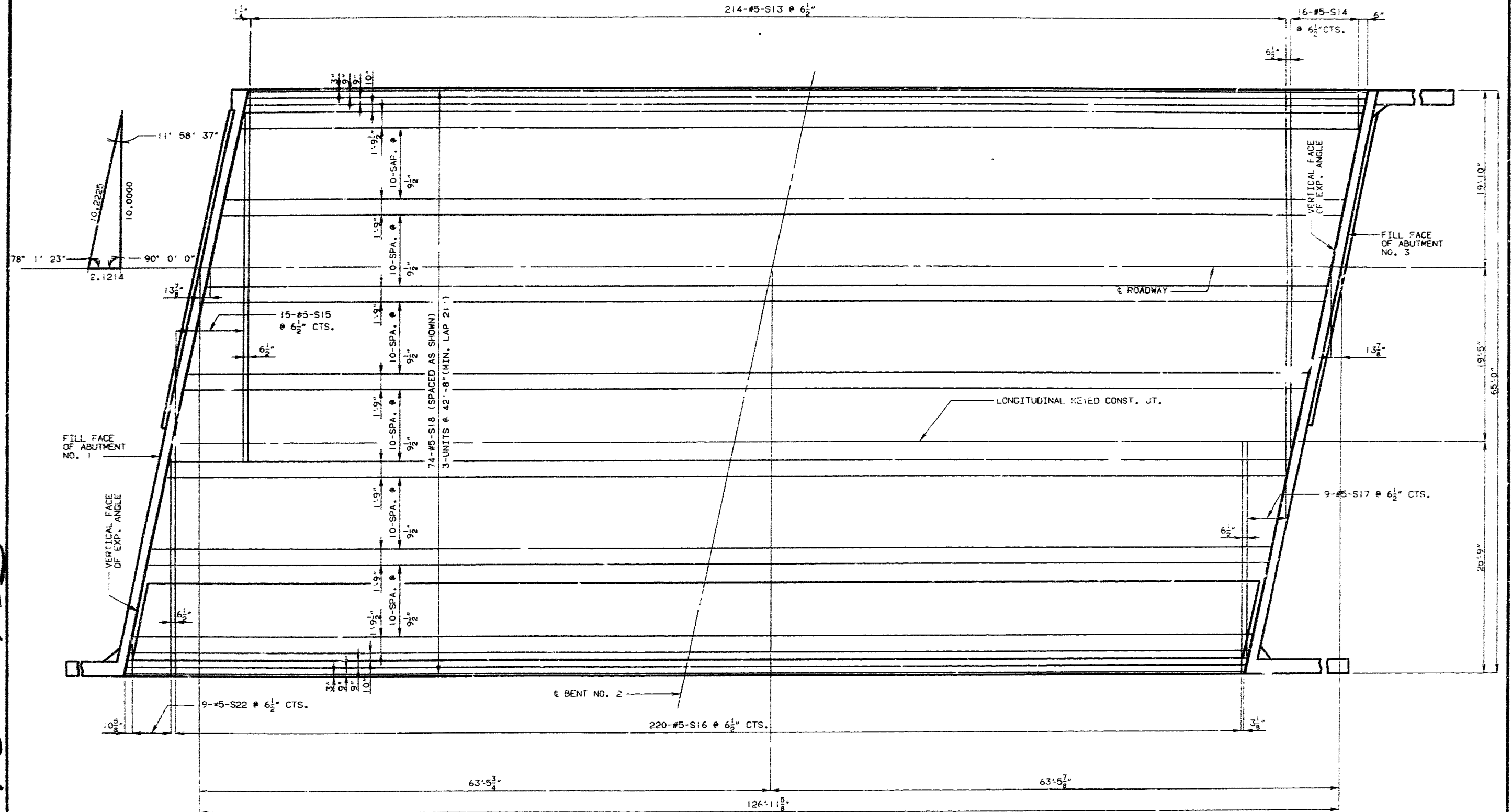
COUNTY

A-4861

NOTE: DIMENSION SHOWN ARE HORIZONTAL DIMENSIONS.

NOTE: FOR DETAILS OF PLANTER, DRAINS, AND LIGHTING SEE SHEET NO.46, 47, 58 AND 60.
FOR DETAILS OF THEORETICAL SLAB HAUNCHING DIAGRAM SEE SHEET NO.40.
FOR DETAILS OF CURB AND PARAPET NOT SHOWN SEE SHEET NO.48, 49 AND 50.

STATE	PROJ. NO.	SHEET NO.
MO.		370



401 433

PLAN OF SLAB SHOWING BOTTOM REINFORCEMENT
(CIP OPTION)

NOTE: LONGITUDINAL REINFORCING STEEL SHALL BE PLACED SO THAT ENDS SHALL NOT BE MORE THAN 1"± FROM VERTICAL FACE OF EXP. DEVICE.

DETAILED JULY 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 36 OF 66

JACKSON

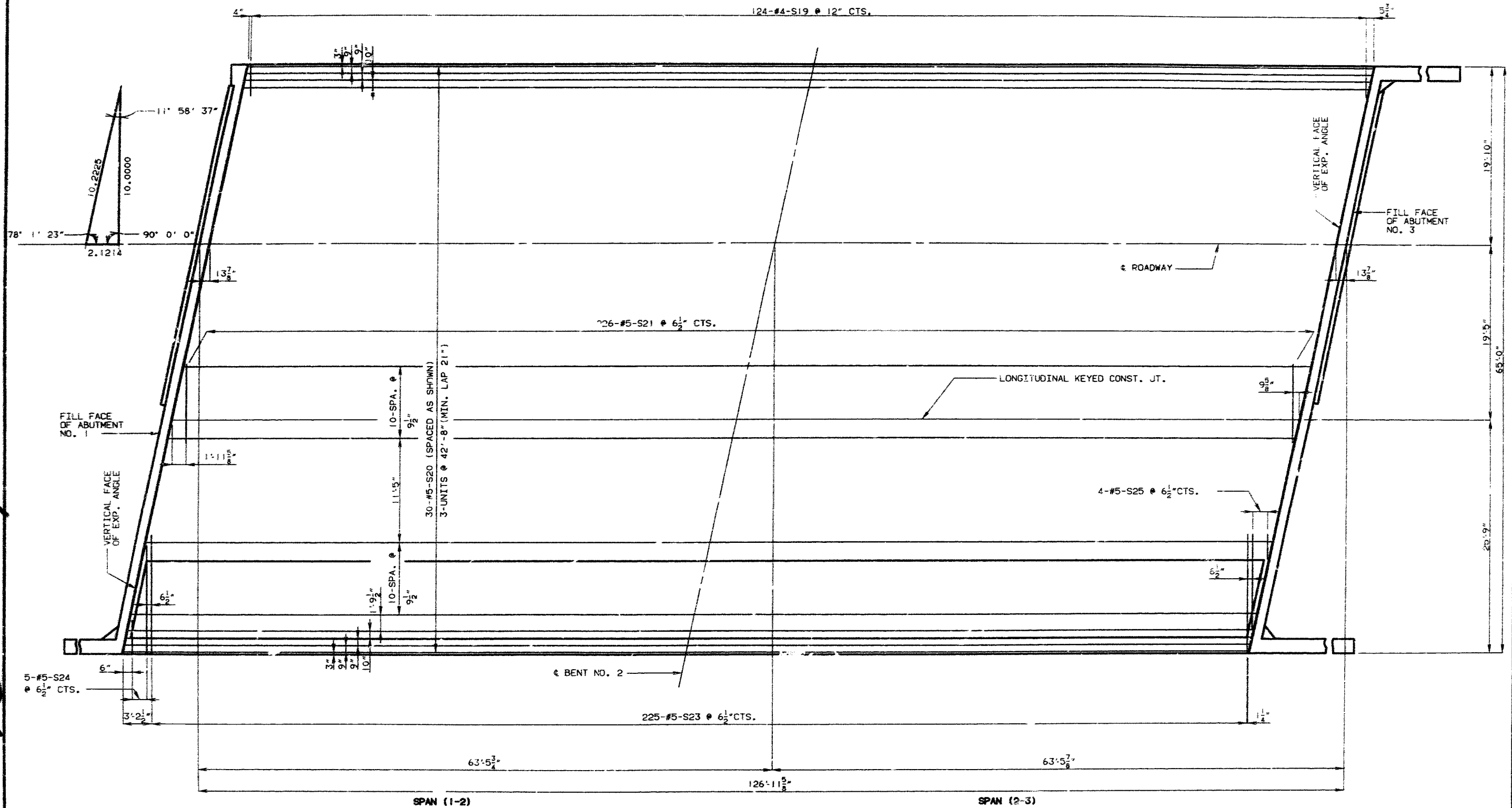
COUNTY

A-4861

NOTE: DIMENSION SHOWN ARE HORIZONTAL DIMENSIONS.
FOR DETAILS OF PRESTRESSED PANELS SEE SHEET NO. 43.

NOTE: FOR DETAILS OF PLANTER, DRAINS, AND LIGHTING SEE SHEET NO. 46, 47, 58 AND 60.
FOR DETAILS OF THEORETICAL SLAB HAUNCHING DIAGRAM SEE SHEET NO. 40.
FOR DETAILS OF CURB AND PARAPET NOT SHOWN SEE SHEET NO. 48, 49 AND 50.

STATE	PROJ. NO.	SHEET NO.
MO.		371



482434

PLAN OF SLAB SHOWING BOTTOM REINFORCEMENT
(PRECAST PANEL OPTION)

NOTE: LONGITUDINAL REINFORCING STEEL SHALL BE PLACED SO THAT ENDS SHALL NOT BE MORE THAN 1 1/2 FROM VERTICAL FACE OF EXP. DEVICE.

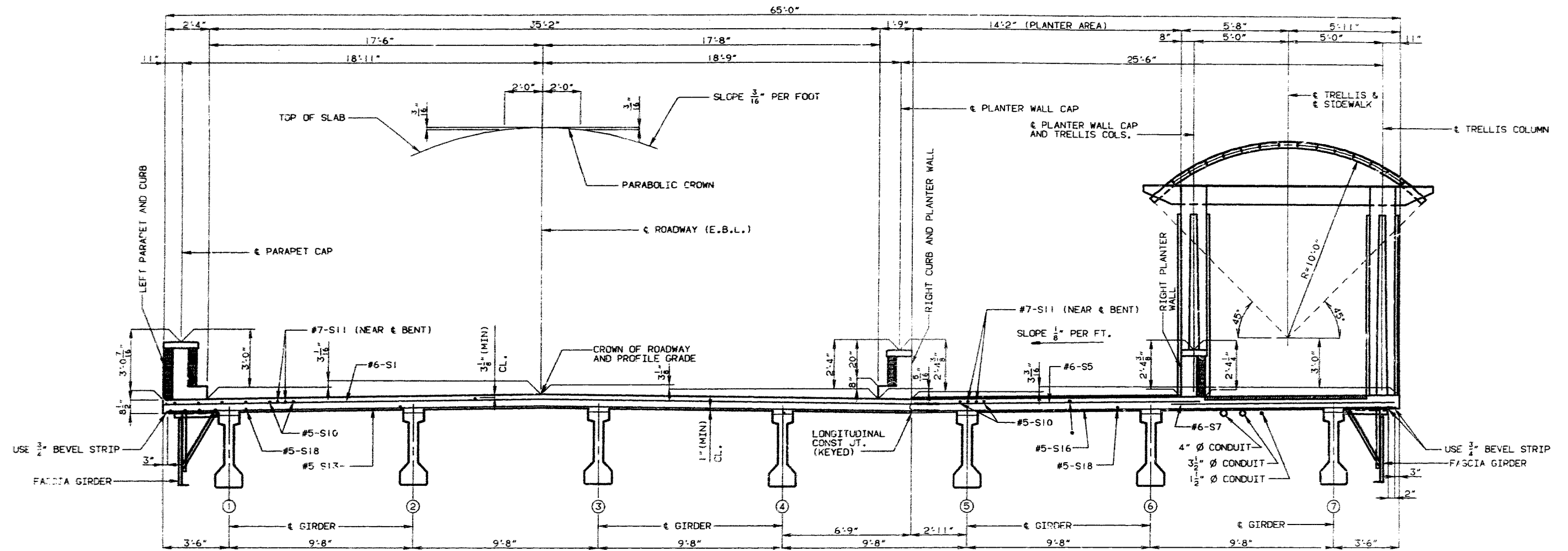
DETAILED JULY 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE, FOLLOW DIMENSIONS.

SHEET NO. 37 OF 66

JACKSON COUNTY A-4861

STATE	PROJ. NO.	SHEET NO.
MD.		372



SECTION THRU SLAB NEAR & SPAN
(CIP OPTION)

NOTE: FOR DETAILS OF TRELLIS SEE SHEET NO.53, 54 AND 55.
 FOR DETAILS OF CURB AND PARAPET NOT SHOWN SEE SHEET NO.48, 49 AND 50.
 FOR DETAILS OF FASCIA GIRDER SEE SHEET NO.34.
 FOR DETAILS OF CONDUIT SEE SHEET NO.59.
 FOR DETAILS OF PLANTER CONDUIT SEE SHEET NO. 60.

483 435

DETAILED JUNE 1990
 CHECKED SEPT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

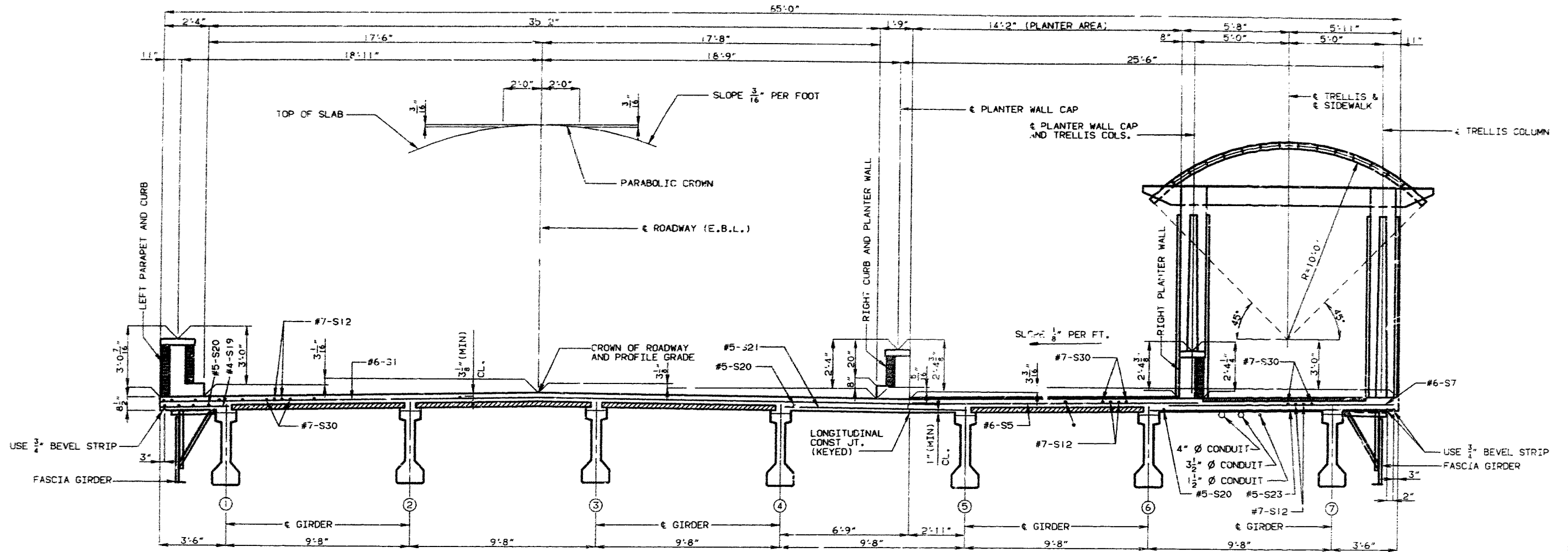
SHEET NO. 38 OF 66

JACKSON

COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		373



SECTION THRU SLAB NEAR € SPAN
(PRECAST PANEL OPTION)

• 2" Ø CONDUIT FOR PLANTER LIGHTING.

NOTE: FOR DETAILS OF TRELLIS SEE SHEET NO.53, 54 AND 55.
 FOR DETAILS OF CURB AND PARAPET NOT SHOWN SEE SHEET NO.48, 49 AND 50.
 FOR DETAILS OF FASCIA GIRDER SEE SHEET NO.34.
 FOR DETAILS OF CONDUIT SEE SHEET NO.59.
 FOR DETAILS OF PLANTER CONDUIT SEE SHEET NO. 60.

404 436

DETAILED JUNE 1990
 CHECKED SEPT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

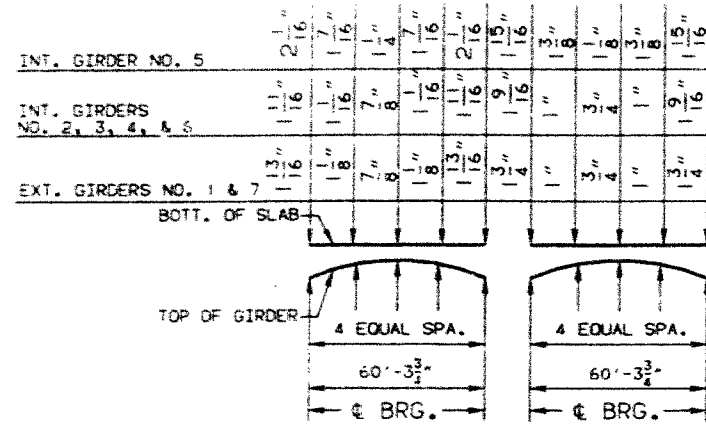
SHEET NO. 39 OF 66

JACKSON

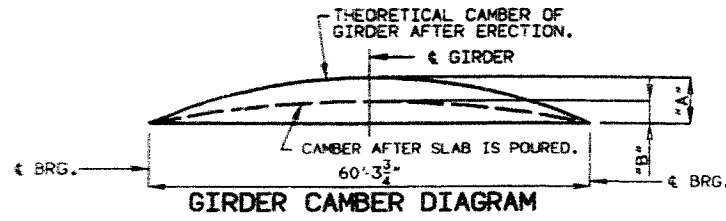
COUNTY

A-4861

NOTE: IF GIRDER CAMBER IS DIFFERENT FROM THAT SHOWN IN THE CAMBER DIAGRAM, IT SHALL BE NECESSARY TO ADJUST THE SLAB HAUNCHES, INCREASE THE SLAB THICKNESS, OR TO RAISE THE GRADE UNIFORMLY THROUGHOUT THE STRUCTURE. NO PAYMENT WILL BE MADE FOR ADDITIONAL LABOR OR MATERIALS REQUIRED FOR VARIATION IN HAUNCHING, SLAB THICKNESS, OR GRADE ADJUSTMENT. CONCRETE IN THE SLAB HAUNCHES IS INCLUDED IN THE ESTIMATED QUANTITIES FOR ALTERNATE SLABS.

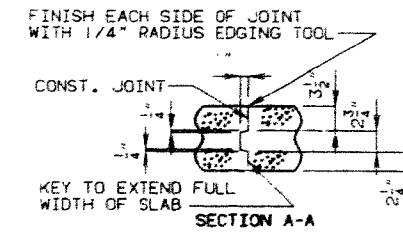


THEORETICAL SLAB HAUNCHING DIAGRAM



GIRDER	SPAN (1-2)		SPAN (2-3)	
	"A"	"B"	"A"	"B"
EXTERIOR	1 3/8"	1"	1 3/8"	1"
INTERIOR	1 5/8"	1 3/16"	1 5/8"	1 3/16"

NOTE: GIRDER CAMBER @ 0.25 PT. = 0.7125 X 0.5 PT.



	SEQUENCE OF POURS		MIN. RATE OF POUR CU. YDS./HR.
	DIRECTION		
BASIC SEQUENCE	1	2	25
	EITHER DIRECTION		
ALTERNATE "A" POURS	1 + 2		25
	END TO END		

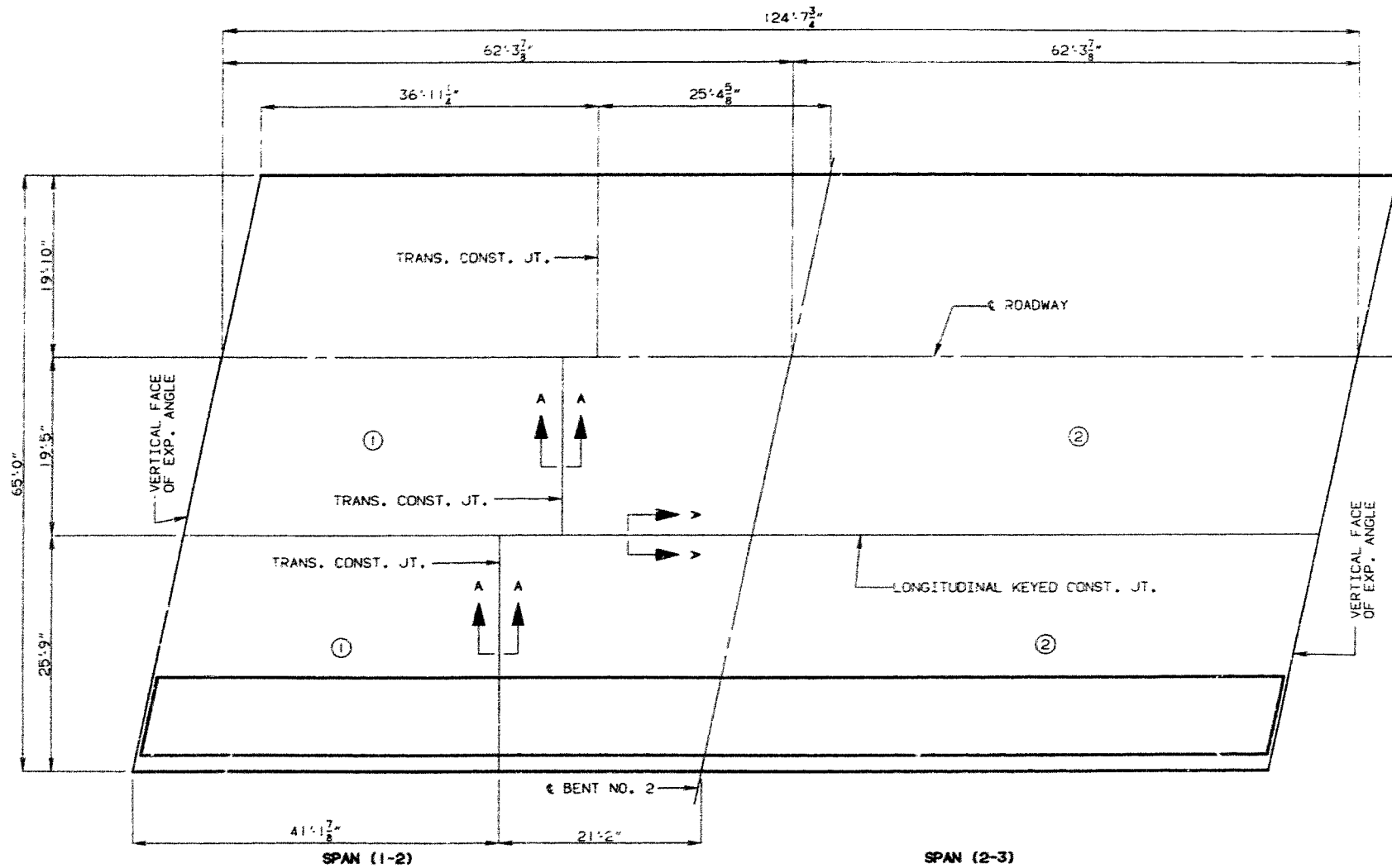
SLAB POURING SEQUENCE

NOTE: THE CONTRACTOR SHALL FURNISH AN APPROVED RETARDER TO RETARD THE SET OF THE CONCRETE TO 2.5 HOURS AND SHALL POUR AND SATISFACTORILY FINISH THE SLAB POURS AT THE RATE GIVEN.

END DIAPHRAGMS AT EXPANSION DEVICES MAY BE POURED WITH A CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND SLAB, OR MONOLITHIC WITH THE SLAB.

THE CONCRETE DIAPHRAGM AT THE INTERMEDIATE BENTS SHALL BE POURED A MINIMUM OF 30 MINUTES AND A MAXIMUM OF 2 HOURS BEFORE THE SLAB IS POURED.

IF THE PRECAST PRESTRESSED PANEL OPTION IS USED, THE VALUES SHOWN FOR THE MINIMUM RATE OF POUR MAY BE REDUCED BY 25%. HOWEVER, IN NO CASE SHALL THE MINIMUM RATE OF POUR BE LESS THAN 25 YD³/HR.



SLAB POURING SEQUENCE

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 40 OF 66

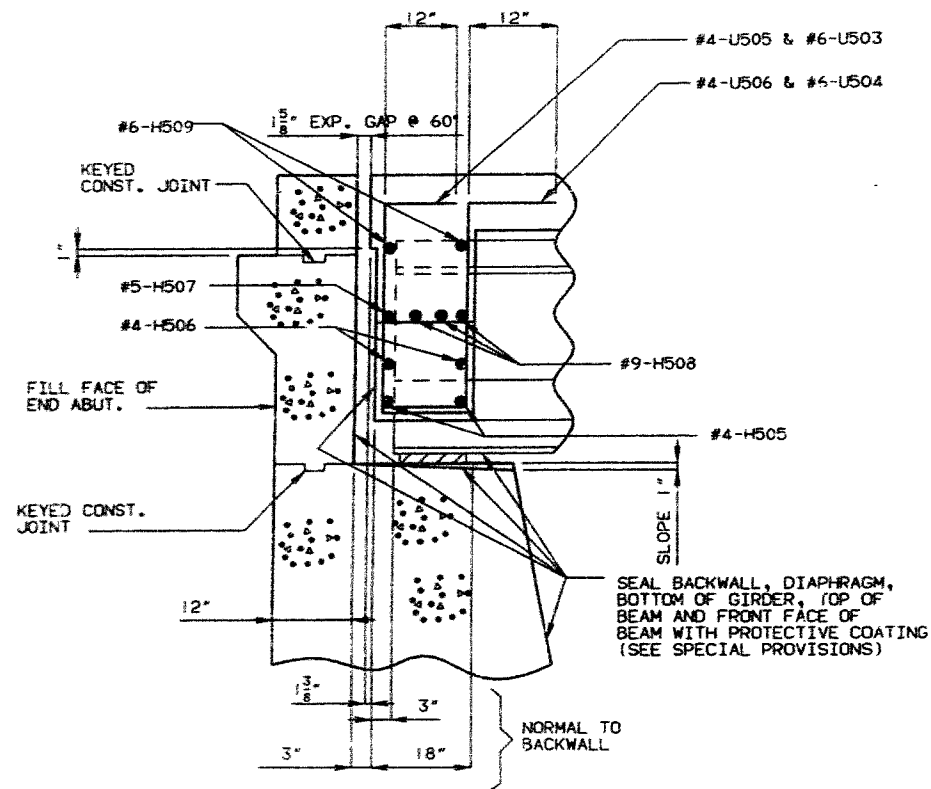
JACKSON

COUNTY

A-4861

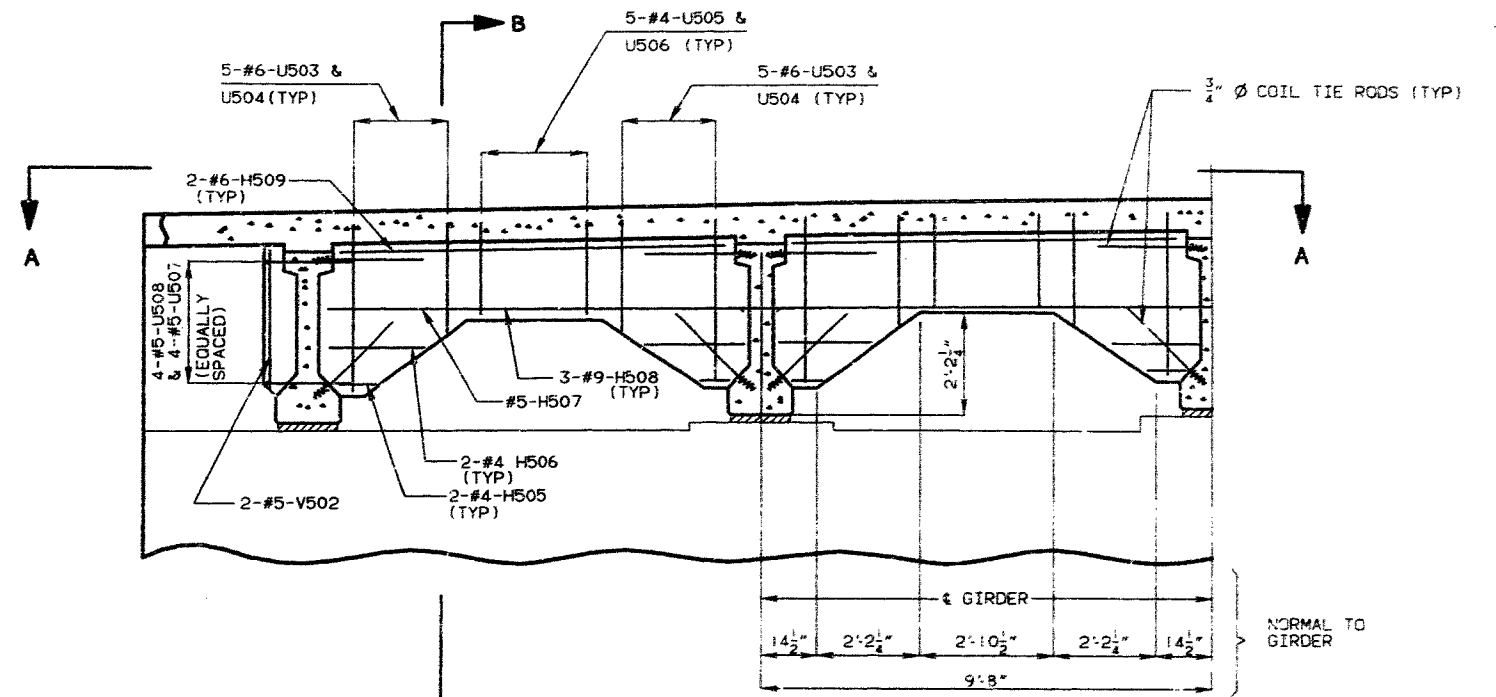
DETAILED JULY 1990
CHECKED AUG. 1990

405-437

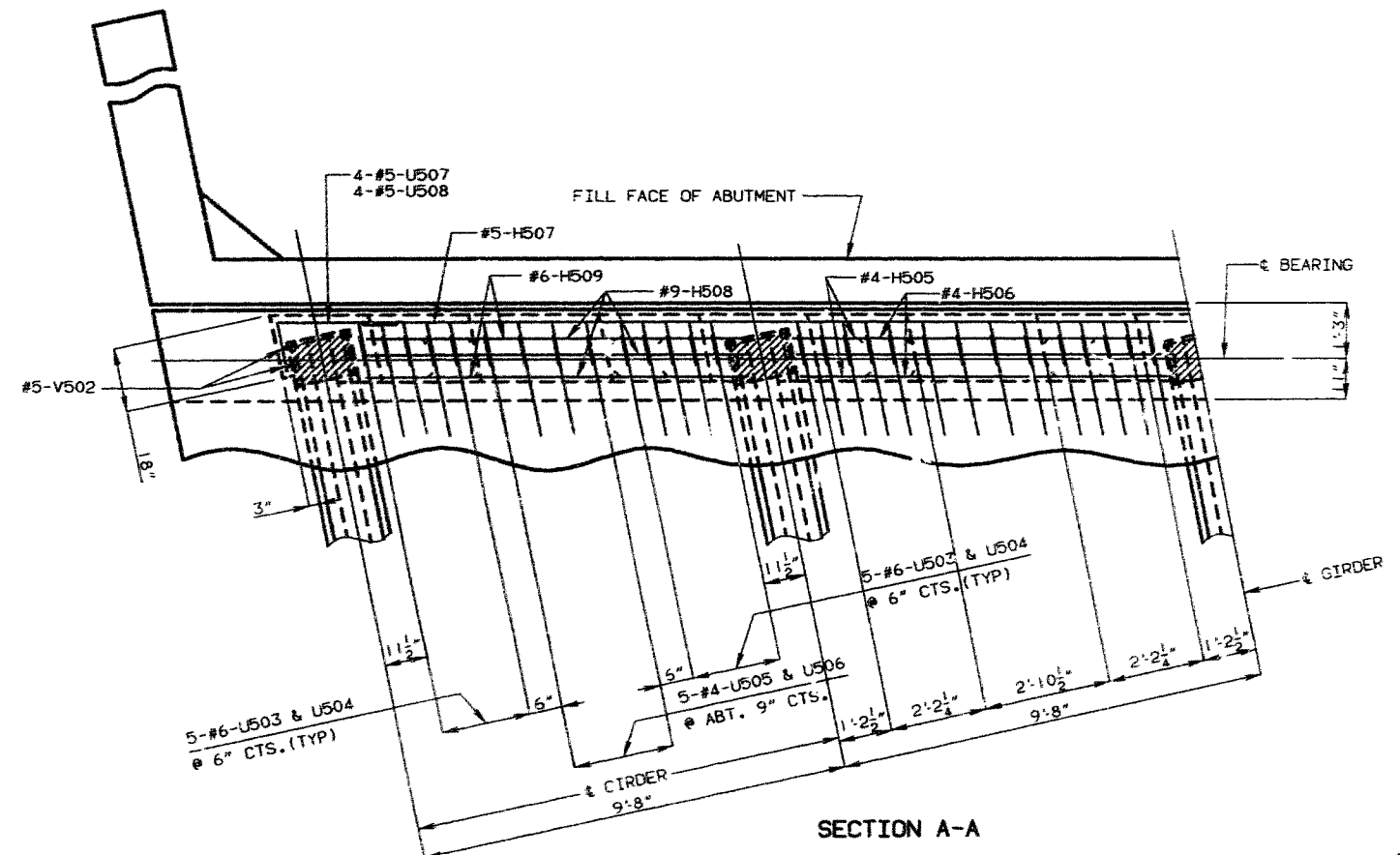


PART SECTION B-B

DETAILS OF DIAPH. AT ABUTMENT NO. 1 AND 3



PART SECTION NEAR END ABUTMENT



SECTION A-A

8/25/90
4338

DETAILED JULY 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

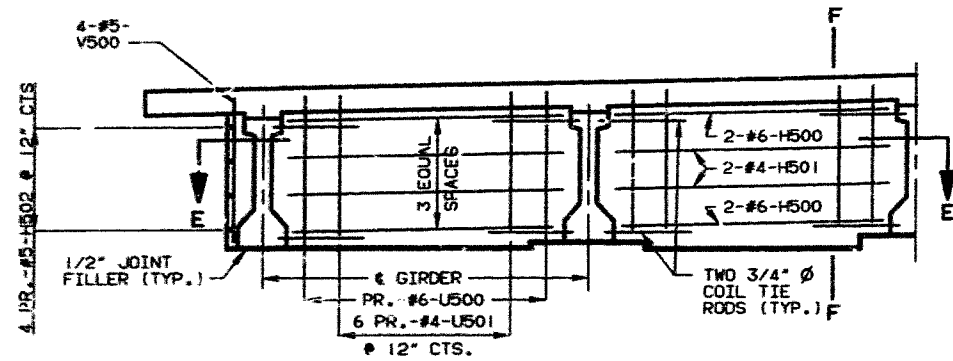
SHEET NO. 41 OF 66

JACKSON

COUNTY

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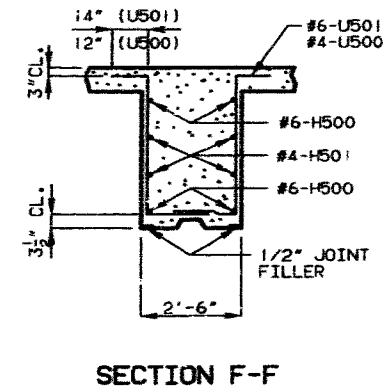
STATE	PROJ. NO.	SHEET NO.
MO.		



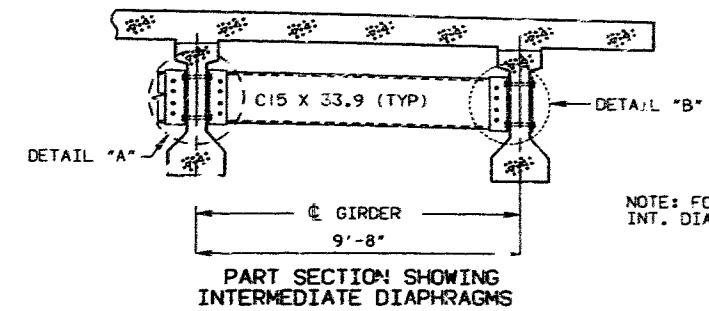
HALF SECTION NEAR INTERMEDIATE BENT

NOTE: FOR LOCATION OF H503 & H504 (STRAND TIE BARS) OF INT. BENTS SEE GIRDER SHEET NO.33.

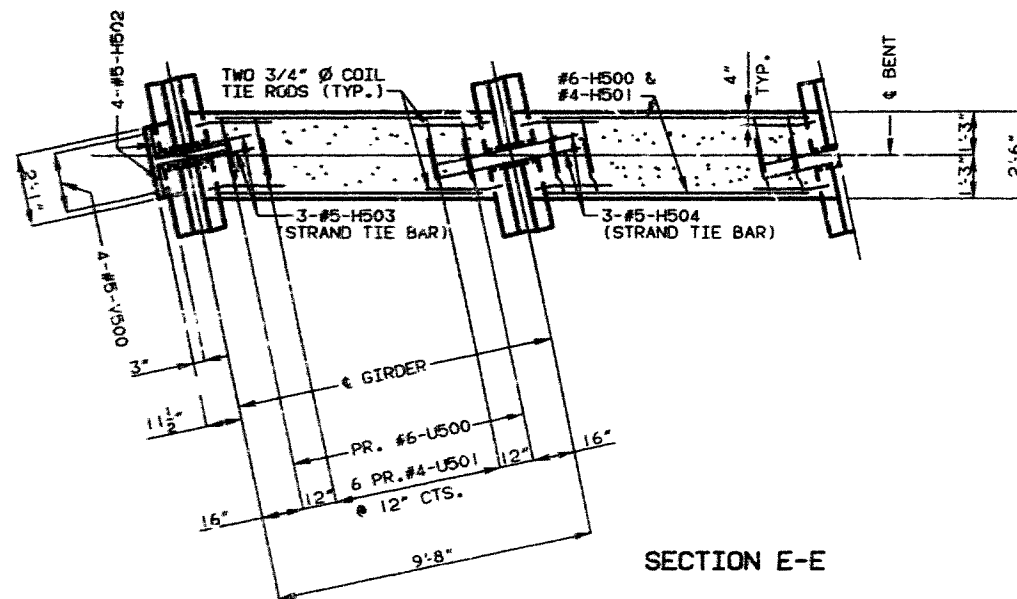
NOTE: DIAPHRAGMS AT INTERMEDIATE BENT ARE VERTICAL.



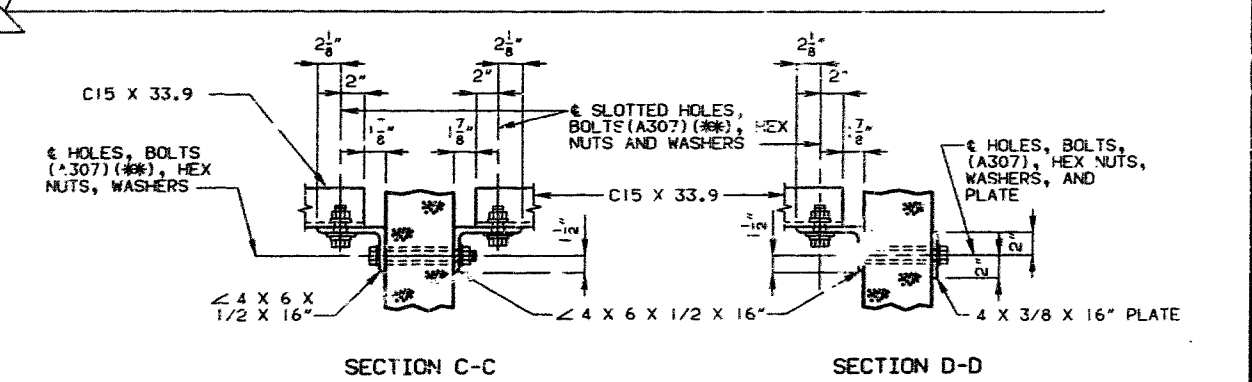
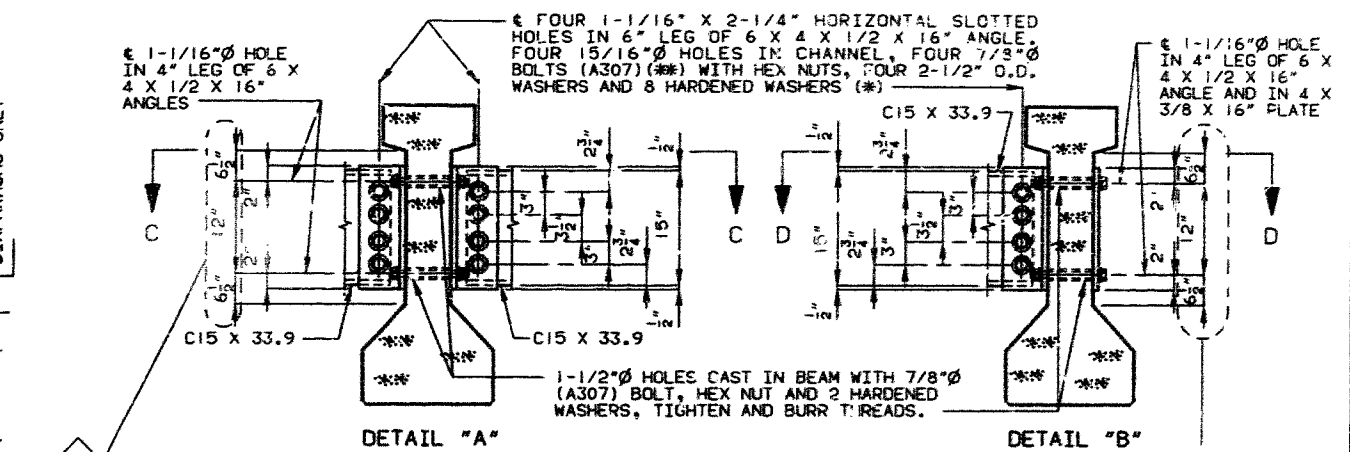
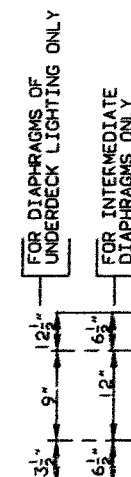
SECTION F-F



NOTE: FOR LOCATION OF STEEL INT. DIAPH. SEE SHEET NO.33.



SECTION E-E



STEEL DIAPHRAGM NOTES:

- (*) IN LIEU OF 2 1/2" O.D. WASHERS, CONTRACTOR MAY SUBSTITUTE A 3/16" (MIN. THICKNESS) PLATE WITH FOUR 15/16" HOLES AND 1 HARDENED WASHER PER BOLT.
- (**) THESE BOLTS SHALL BE TIGHTENED TO PROVIDE A TENSION OF ONE-HALF THAT SPECIFIED BY SECTION 712.10.2 OF THE MISSOURI STANDARD SPECIFICATIONS.
- ALL DIAPHRAGM MATERIALS INCLUDING BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.
- FABRICATED STRUCTURAL STEEL SHALL BE A36 EXCEPT AS NOTED.
- PAYMENT FOR FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED IN CONTRACT UNIT PRICE FOR PRESTRESSED CONCRETE I-GIRDERS.
- SHOP DRAWINGS WILL NOT BE REQUIRED FOR STEEL INTERMEDIATE DIAPHRAGMS AND ANGLE CONNECTIONS.

SEE FINAL PLANS

407 439

DETAILED JULY 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

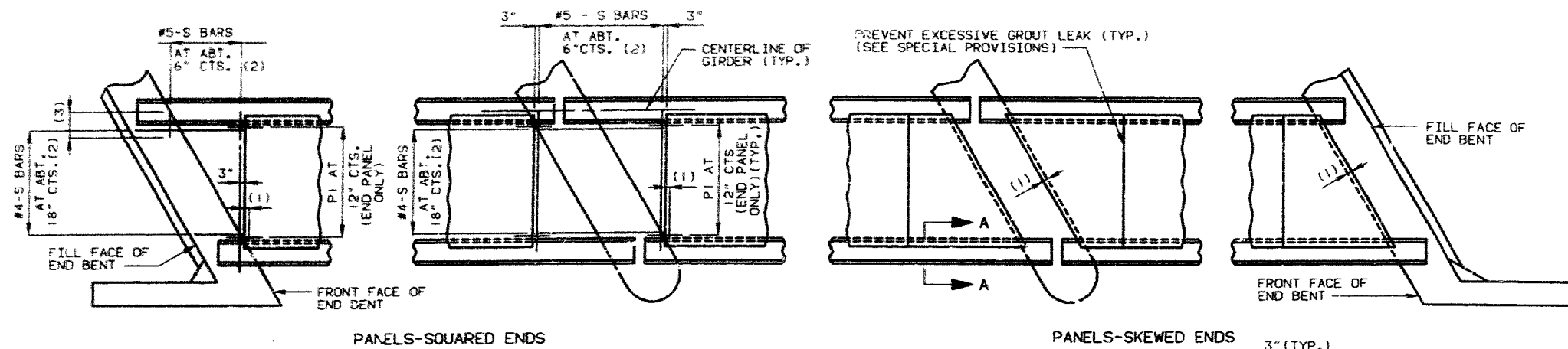
SHEET NO. 42 OF 66



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NOTE:

USE SLAB HAUNCHING DIAGRAM ON SHEET NO. 40 FOR DETERMINING THICKNESS OF JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL WITHIN THE LIMITS NOTED BELOW.

GENERAL NOTES:

PRESTRESSED PANELS:

CONCRETE FOR PRESTRESSED PANELS SHALL BE CLASS A1 WITH F'c = 5,000 PSI, F'ci = 3,500 PSI.

THE TOP SURFACE OF ALL PANELS SHALL RECEIVE A SCORED FINISH WITH A DEPTH OF SCORING OF 1/8 INCH PERPENDICULAR TO THE PRESTRESSING STRANDS IN THE PANELS (SEE SPECIAL PROVISIONS).

PRESTRESSING TENDONS SHALL BE HIGH-TENSILE STRENGTH UNCOATED SEVEN WIRE (7), LOW-RELAXATION STRANDS FOR PRESTRESSED CONCRETE CONFORMING TO AASHTO M203, EXCEPT THAT NOMINAL DIAMETER OF STRAND = 3/8 INCH AND NOMINAL AREA = 0.085 SQ. IN. AND MINIMUM ULTI STRENGTH = 23,000 LBS. (270 KSII). LARGER STRANDS MAY BE USED WITH THE SAME SPACING AND INITIAL TENSION.

INITIAL PRESTRESSING FORCE = 14.9 KIIPS/STRAND.

THE METHOD AND SEQUENCE OF RELEASING THE STRANDS SHALL BE SHOWN ON THE SHOP DRAWINGS.

SUITABLE ANCHORAGE DEVICES FOR LIFTING PANELS MAY BE CAST IN PANELS, PROVIDED THEY ARE SHOWN ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER. PANEL LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR AND SHOWN ON THE SHOP DRAWINGS.

WHEN SQUARE END PANELS ARE USED AT SKEWED BENTS, IT IS REQUIRED THAT THE SKEWED PORTION BE CAST FULL DEPTH. NO SEPARATE PAYMENT WILL BE MADE FOR THE ADDITIONAL CONCRETE AND REINFORCING REQUIRED.

MINIMUM JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL THICKNESS SHALL BE 1/2 INCH. THICKER JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL MAY BE USED ON ONE OR BOTH SIDES OF THE GIRDER TO REDUCE CAST-IN-PLACE CONCRETE THICKNESS, WITHIN TOLERANCES. NO MORE THAN 2 INCHES TOTAL THICKNESS OF JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL SHALL BE USED.

THE SAME THICKNESS OF JOINT FILLER MATERIAL SHALL BE USED UNDER ANY ONE EDGE OF ANY PANEL AND THE MAXIMUM CHANGE IN THICKNESS BETWEEN ADJACENT PANELS SHALL BE 1/4 INCH. THE POLYSTYRENE BEDDING MATERIAL MAY BE CUT TO MATCH HAUNCH HEIGHT ABOVE TOP OF FLANGE.

AT THE CONTRACTORS OPTION, THE VARIATION IN SLAB THICKNESS OVER PRESTRESSED PANELS MAY BE ELIMINATED OR REDUCED BY INCREASING AND VARYING THE GIRDER TOP FLANGE THICKNESS. DIMENSIONS SHALL BE SHOWN ON THE SHOP DRAWINGS.

REINFORCING STEEL:

ALL DIMENSIONS ARE OUT TO OUT.

MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1-1/2" INCH, UNLESS OTHERWISE SHOWN.

HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE C.R.S.I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, STIRRUP AND TIE DIMENSIONS.

ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE OF BAR TO THE NEAREST INCH.

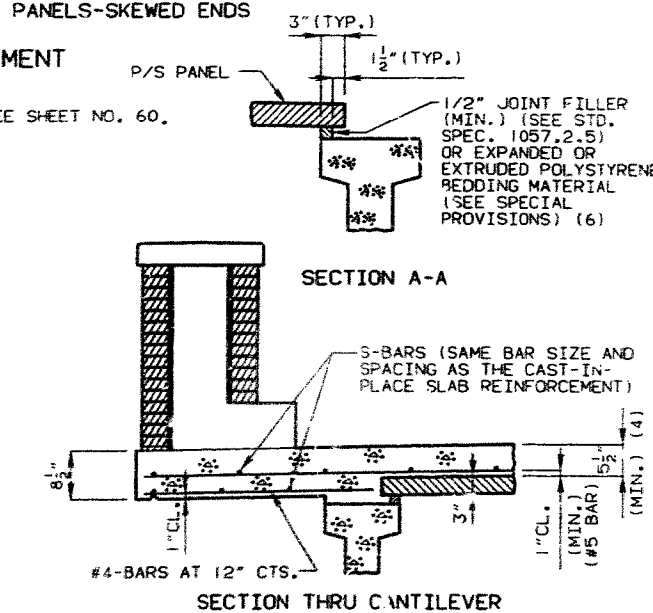
THE PRESTRESSED PANEL QUANTITIES ARE NOT INCLUDED IN THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS.

IF U1 BARS INTERFERE WITH PLACEMENT OF SLAB STEEL, U1 LOOPS MAY BE BENT OVER, AS NECESSARY, TO CLEAR SLAB STEEL.

WELDED WIRE FABRIC OR WELDED DEFORMED BAR MATS PROVIDING A MINIMUM AREA OF REINFORCING PERPENDICULAR TO STRANDS OF 0.22 SQ. IN./FT. WITH SPACING PARALLEL TO STRANDS SUFFICIENT TO INSURE PROPER HANDLING, MAY BE USED IN LIEU OF THE #3-P2 BARS SHOWN. WIRE OR BAR DIAMETER SHALL NOT BE LARGER THAN 0.375 INCHES.

THE REINFORCING STEEL SHALL BE TIED SECURELY TO THE 3/8"Ø STRANDS WITH THE FOLLOWING MAXIMUM SPACING IN EACH DIRECTION: #3-P2 BARS AT 16 INCHES. WELDED WIRE FABRIC OR WELDED DEFORMED BAR MATS AT 24 INCHES.

TIE THE #3-U1 BARS TO THE #3-P2 BARS, TO THE WELDED WIRE FABRIC OR THE WELDED DEFORMED BAR MATS AT ABOUT 36 INCH CENTERS.



NOTES:

(1) END PANELS TO BE DIMENSIONED 1-1/2" INCHES FROM THE INSIDE FACE DIAPHRAGM.

(2) S-BARS SHOWN ARE BOTTOM STEEL IN SLAB BETWEEN PANELS AND USED WITH SQUARED END PANELS ONLY.

COST OF S-BARS SHALL BE INCLUDED IN PRICE BID FOR SLAB PER SQUARE YARD.

S-BARS ARE NOT LISTED IN BILL OF REINFORCING.

SLAB EXTERIOR GIRDER HAUNCH SHALL BE THE SAME AS CAST-IN-PLACE.

SLAB THICKNESS OVER PRESTRESSED PANELS VARIES DUE TO GIRDER CAMBER.

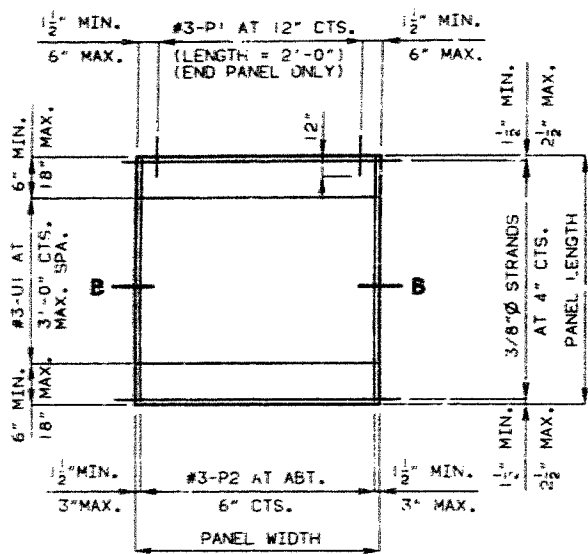
(3) EXTEND S-BARS 18 INCHES BEYOND THE FRONT FACE OF END BENTS ONLY.

SUPPORT FROM DIAPHRAGM FORMS IS REQUIRED UNDER THE OPTIONAL SKEWED END UNTIL CAST-IN-PLACE CONCRETE HAS REACHED 3,000 PSI COMPRESSIVE STRENGTH.

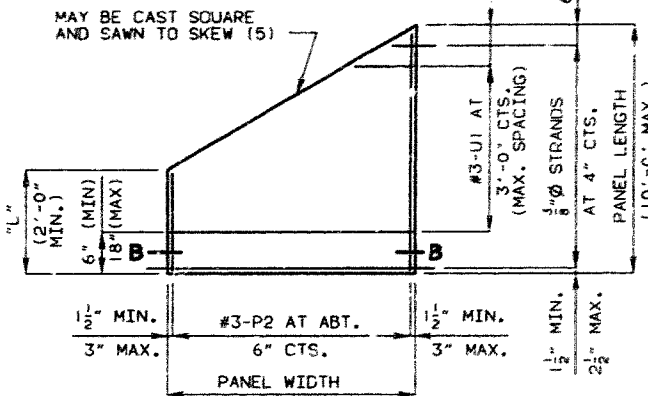
(4) IN ORDER TO MAINTAIN MINIMUM SLAB THICKNESS, IT MAY BE NECESSARY TO RAISE THE GRADE UNIFORMLY THROUGHOUT THE STRUCTURE. NO PAYMENT WILL BE MADE FOR ADDITIONAL LABOR OR MATERIALS REQUIRED FOR NECESSARY GRADE ADJUSTMENT.

(5) ANY STRAND 2'-0" OR SHORTER SHALL HAVE A #4 REINFORCING BAR ON EACH SIDE OF IT CENTERED BETWEEN STRANDS. STRANDS 2'-0" OR SHORTER MAY THEN BE DEBOILED AT THE FABRICATORS OPTION.

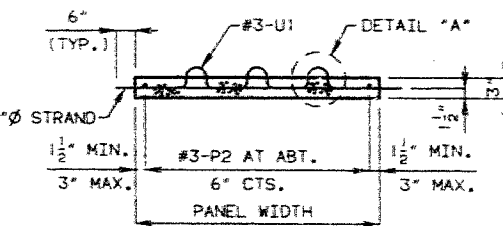
(6) ALL PANEL SUPPORT PADS SHALL BE GLUED TO THE GIRDER. WHEN SUPPORT THICKNESS EXCEEDS 1-1/2", THE PADS SHALL BE GLUED TOP AND BOTTOM. THE GLUE USED SHALL BE THE TYPE RECOMMENDED BY THE PANEL SUPPORT PADS MANUFACTURER.



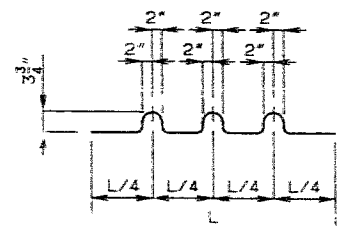
NOTE: FOR DETAILS OF HOLES IN PANEL FOR LIGHTING CONDUIT SEE SHEET NO. 60.



PLAN OF PRECAST PRESTRESSED PANEL (SKEWED END-OPTIONAL)

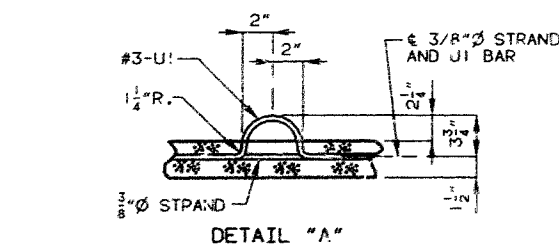


SECTION B-B

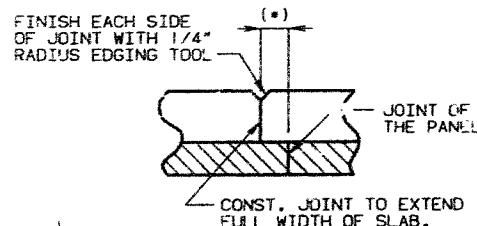


BENDING DIAGRAM FOR U1 BAR

(U1 BARS MAY BE ORIENTED AT RIGHT ANGLES TO LOCATION AND SPACING SHOWN. U1 BARS SHALL BE PLACED BETWEEN P1 BARS)



DETAIL "A"



PERMISSIBLE CONST. JOINT

(*) ADJUST THE PERMISSIBLE CONSTRUCTION JOINT TO A CLEARANCE OF 6 INCHES MINIMUM FROM THE JOINTS OF THE PANELS.

DETAILS OF PRECAST PRESTRESSED PANELS

408 440

3" PANEL (P/S) REVISED: SEPT. 1989
AUG. 1984

DETAILED JUNE 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

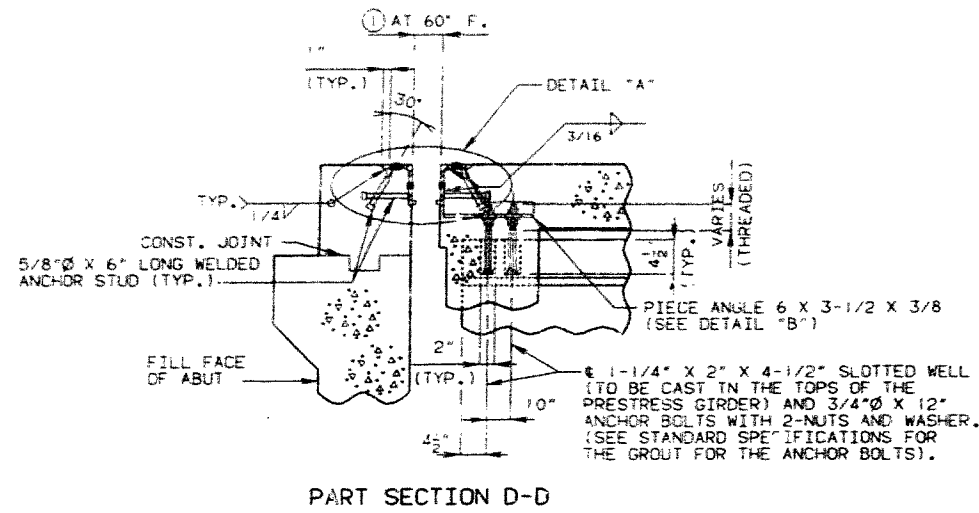
SHEET NO. 43 OF 66

JACKSON

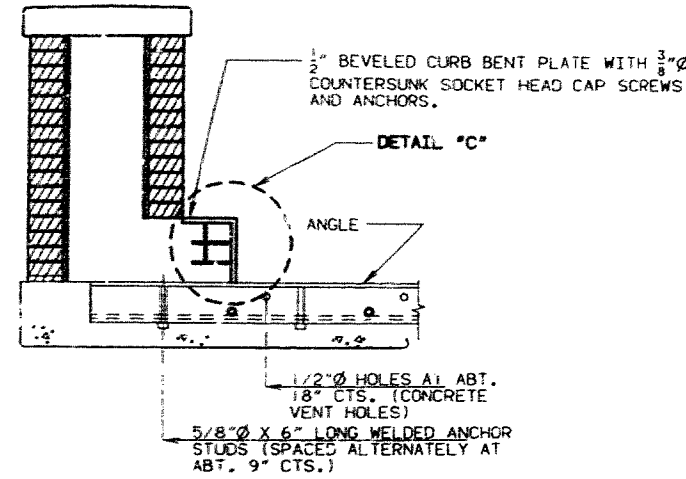
COUNTY

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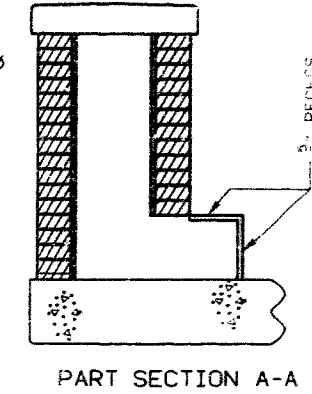
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PART SECTION D-D



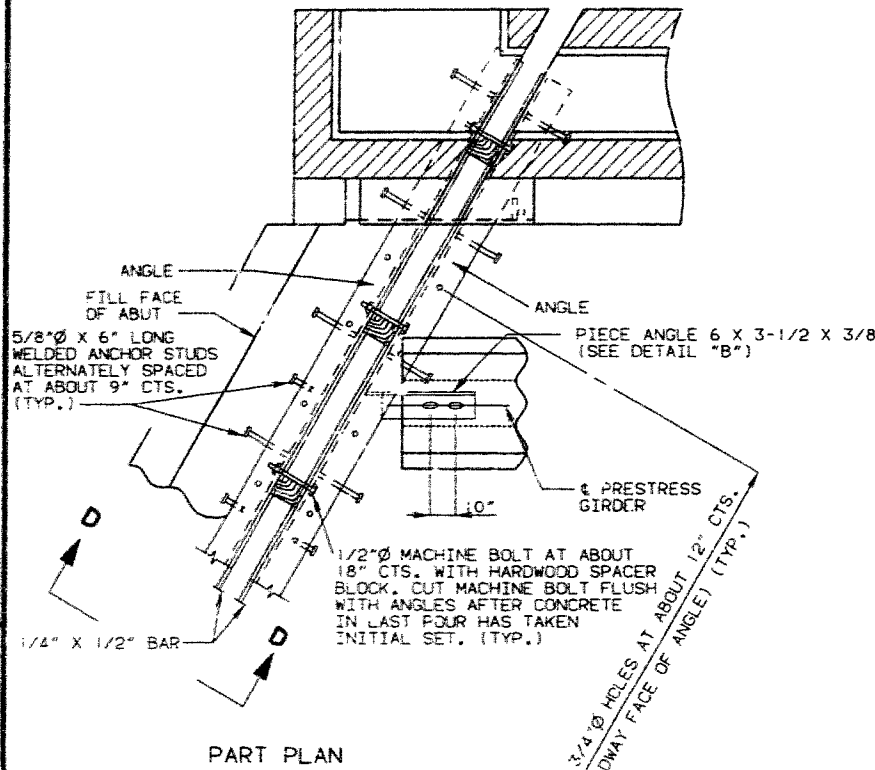
PART SECTION B-B



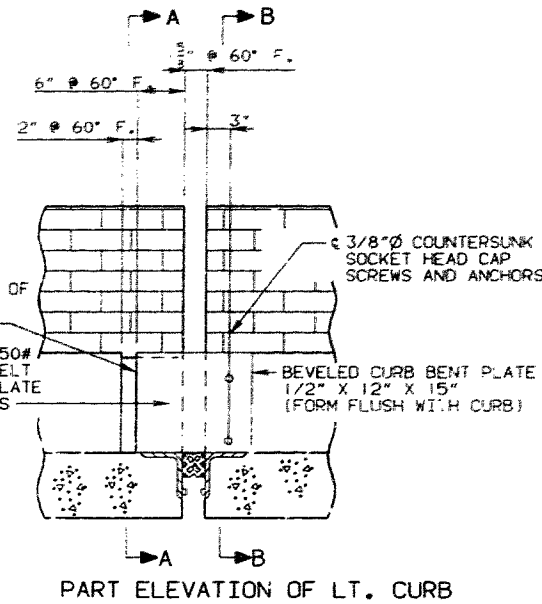
PART SECTION A-A

GENERAL NOTES:

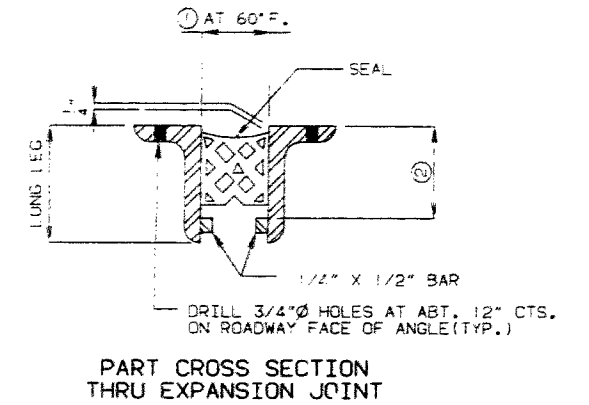
- STRUCTURAL STEEL FOR EXPANSION DEVICE SHALL BE FABRICATED IN ONE SECTION, EXCEPT THAT WHEN THE LENGTH IS OVER 50', SPlicing IS PERMISSIBLE.
- THE EXPANSION DEVICE SHALL BE BENT TO CONFORM TO CROWN AND GRADE OF ROADWAY.
- STRUCTURAL STEEL FOR THE ARMORED JOINT SHALL BE GRADE A36.
- ANCHORS FOR COMPRESSION SEAL ARMOR SHALL BE APPROVED STUD WELDED ANCHORS (C1010 THRU C1020).
- PLAN DIMENSIONS ARE BASED ON INSTALLATION AT 60°F.
- DIMENSION ① SHALL BE INCREASED 1/8" FOR EACH 10° FALL IN TEMPERATURE AND DECREASED 1/8" FOR EACH 10° RISE IN TEMPERATURE AT INSTALLATION.
- SEE SPECIAL PROVISIONS FOR THE REQUIREMENTS OF COMPRESSION JOINT SEAL.
- FURISHING, PAINTING AND INSTALLING THE STRUCTURAL STEEL ARMORED JOINT AND CURB PLATES SHALL BE INCLUDED IN CONTRACT UNIT PRICE FOR PREFORMED EXPANSION JOINT SEAL.
- NEOPRENE EXTRUSIONS SHALL MEET A.S.T.M. D3542-83.



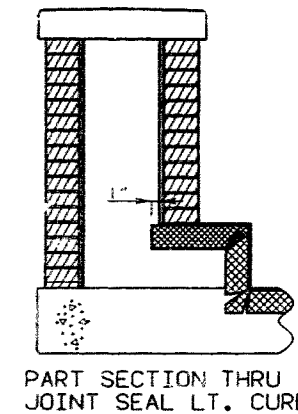
PART PLAN



PART ELEVATION OF LT. CURB



PART CROSS SECTION THRU EXPANSION JOINT



PART SECTION THRU JOINT SEAL LT. CURB

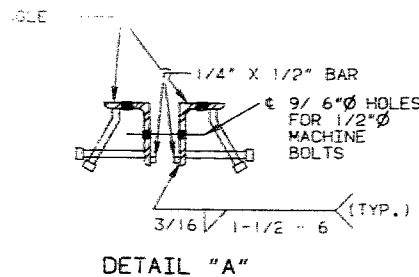
SEAL WIDTH	①	②	REQUIRED MOVEMENT RANGE
2.5"	1-5/8"	SEAL DEPTH + 3/4"	0.9"

NOTE: DEPTH OF SEAL SHALL NOT BE LESS THAN WIDTH OF SEAL.

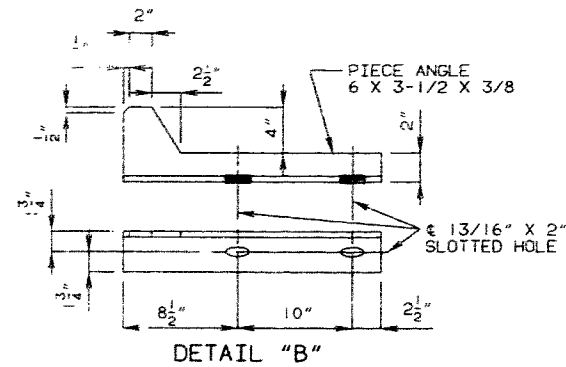
SIZE OF ARMOR JOINT

VERTICAL LEG OF ANGLE SHALL BE A MINIMUM OF DEPTH OF SEAL + 1/2". HORIZONTAL LEG OF ANGLE SHALL BE A MINIMUM OF 3". MINIMUM THICKNESS OF ANGLE SHALL BE 1/2"...

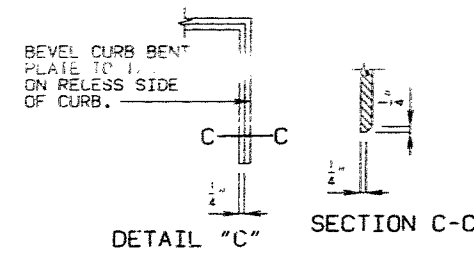
IF A SEAL SIZE LARGER THAN THAT INDICATED ON THE PLANS IS USED, THE MOVEMENT RANGE, THE OPENING AT 60° AND ALL DIMENSIONS FOR THE ARMOR ANGLES SHALL BE SHOWN ON THE SHOP DRAWINGS.



DETAIL "A"



DETAIL "B"



DETAILS OF PREFORMED COMPRESSION JOINT SEAL AT ABUT NO. 1 & 3.

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

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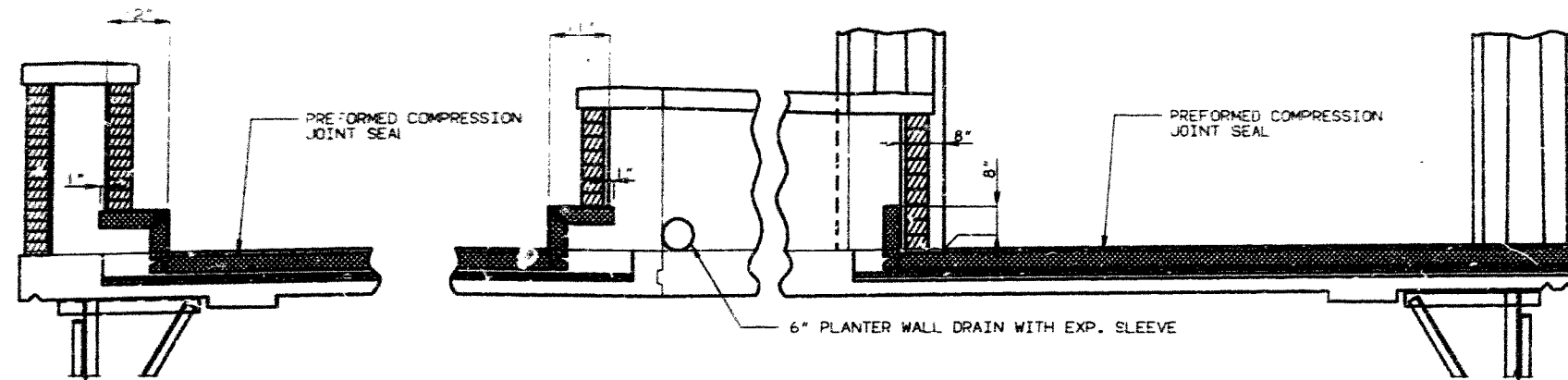
PCJS-P/S EB-LA
OCT. 1973
REVISID
MAR 1990

DETAILED JULY 1990
CHECKED SEPT. 1990

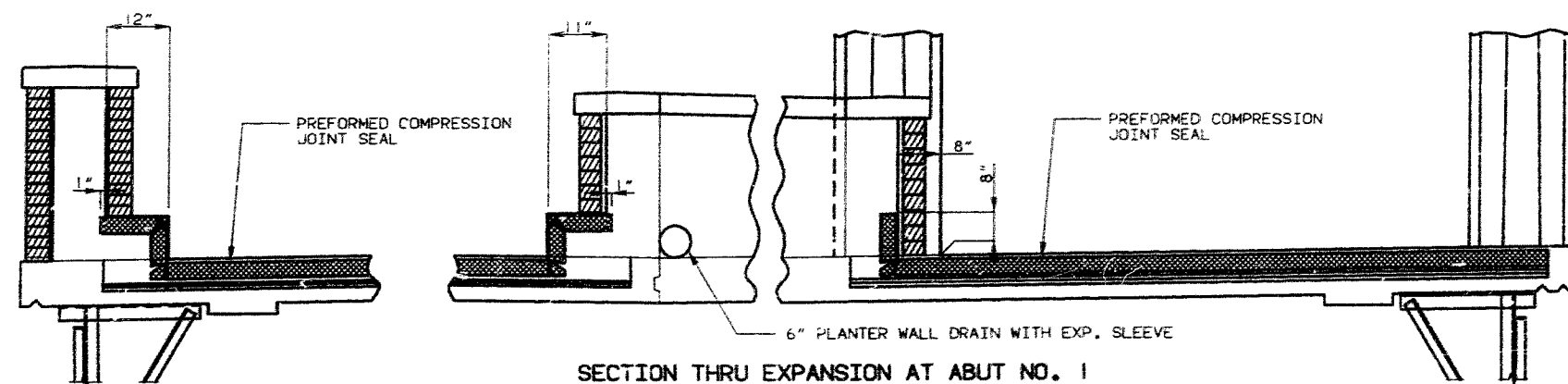
444

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NOTE: FOR DETAILS NOT SHOWN SEE SHEET NO. 44.



SECTION THRU EXPANSION AT ABUT NO. 3



SECTION THRU EXPANSION AT ABUT NO. 1

VIEWS SHOWING LIMITS OF EXP. DEVICE

Handwritten signature or initials, possibly 'RHS'.

DETAILED SEPT 1990
CHECKED NOV. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 45 OF 66

JACKSON

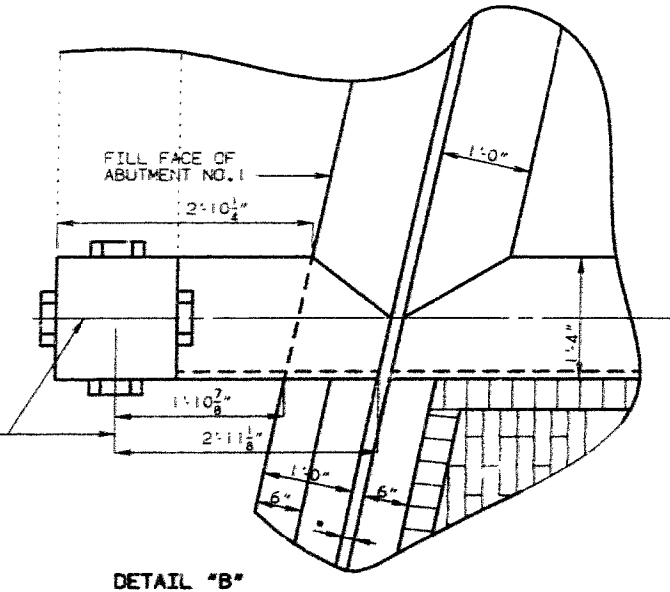
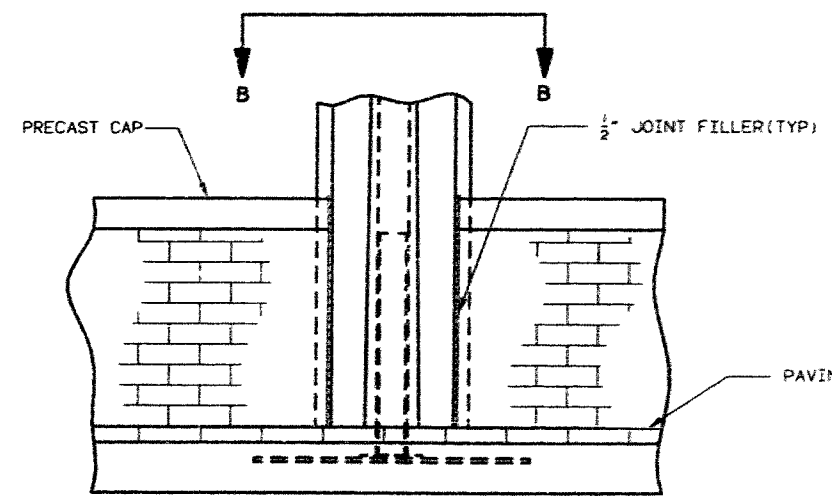
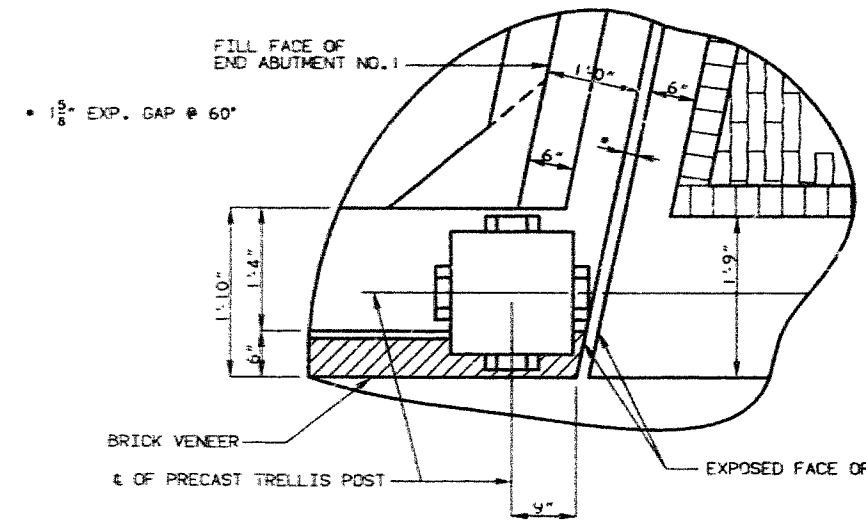
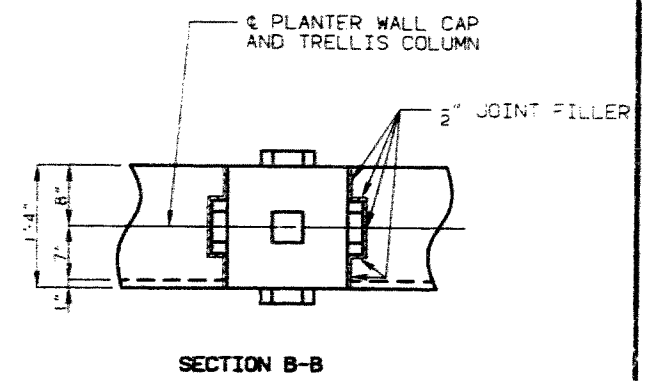
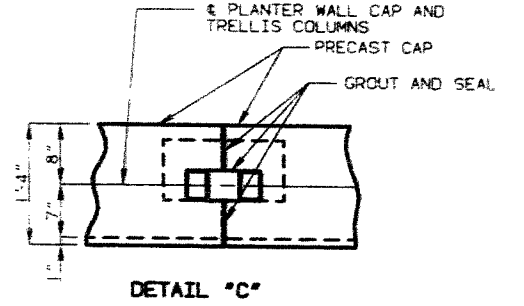
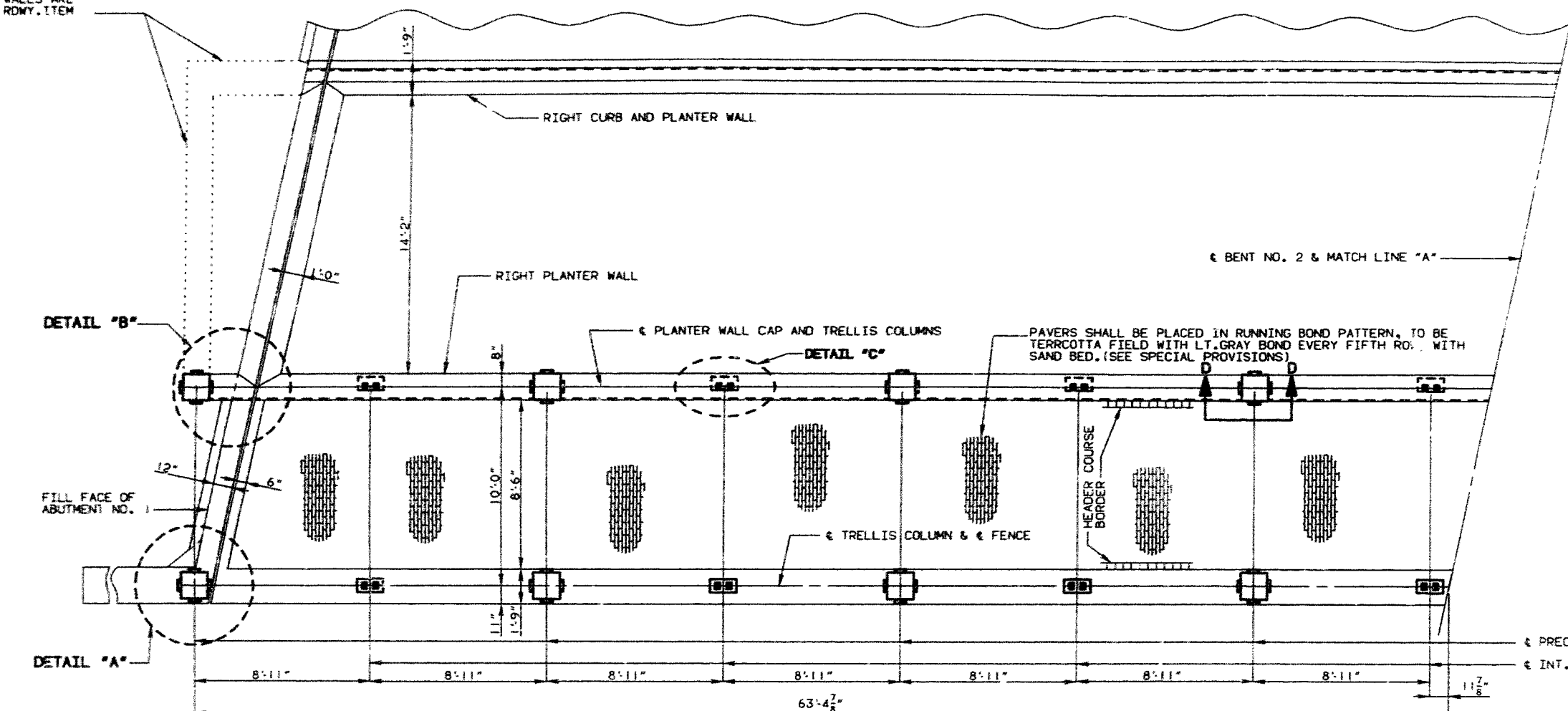
COUNTY

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NOTE: FOR DETAILS OF PRECAST TRELIS COLUMN SEE SHEET NO.55.
 FOR DETAILS OF INT. TRELIS COLUMN SEE SHEET NO.54.
 FOR DETAILS OF TRELIS AT PRECAST COLUMN SEE SHEET NO.53.

WALLS ARE RDMY. ITEM



PART PLAN OF SIDEWALK AND PLANTER SHOWING TRELIS SPACING

Handwritten scribbles

DETAILED JULY 1990
CHECKED SEPT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

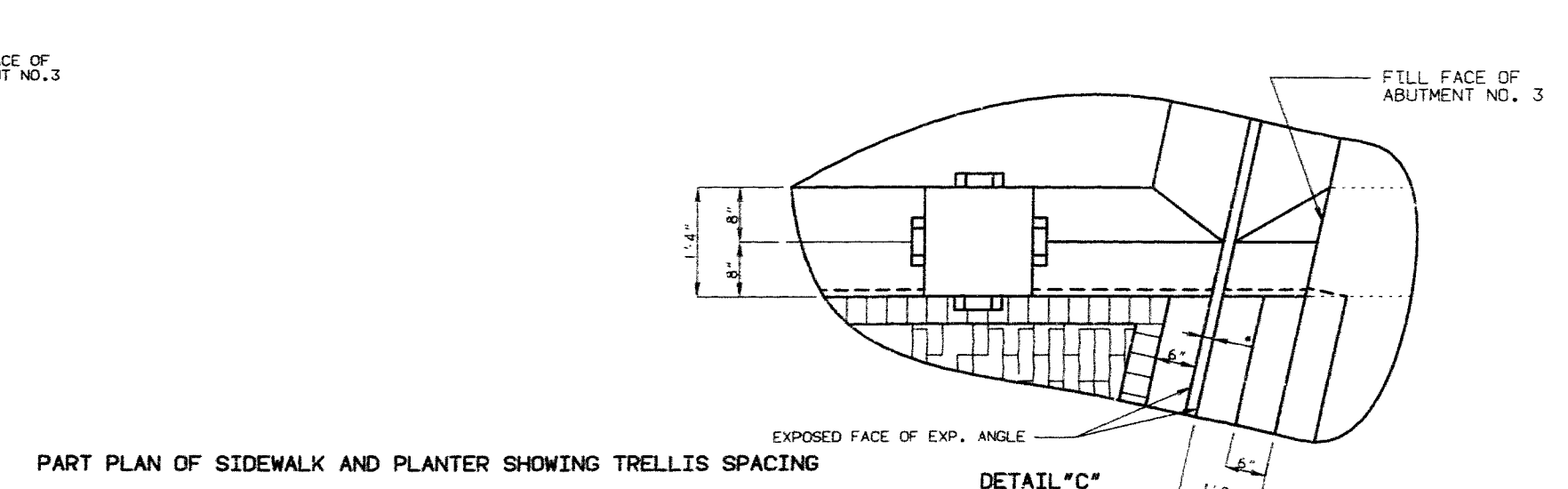
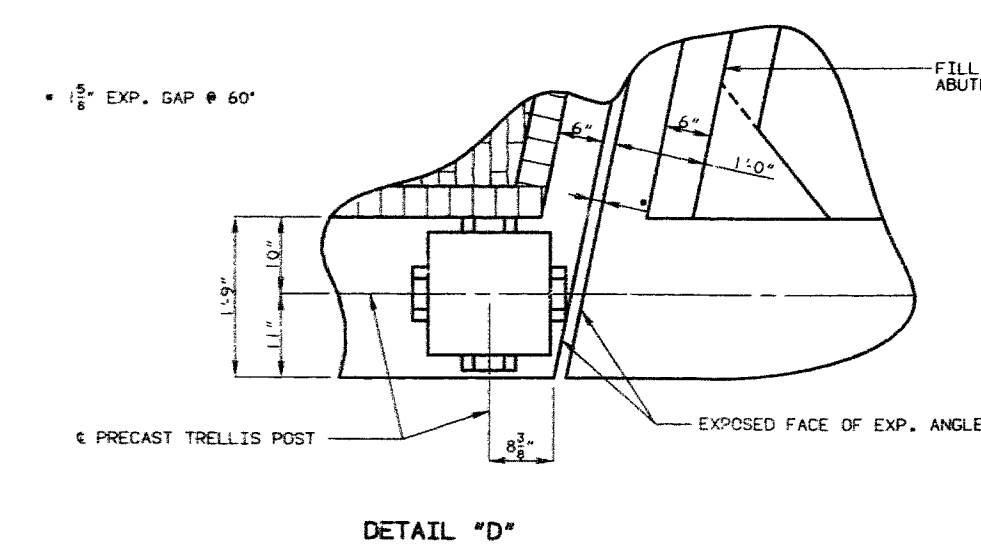
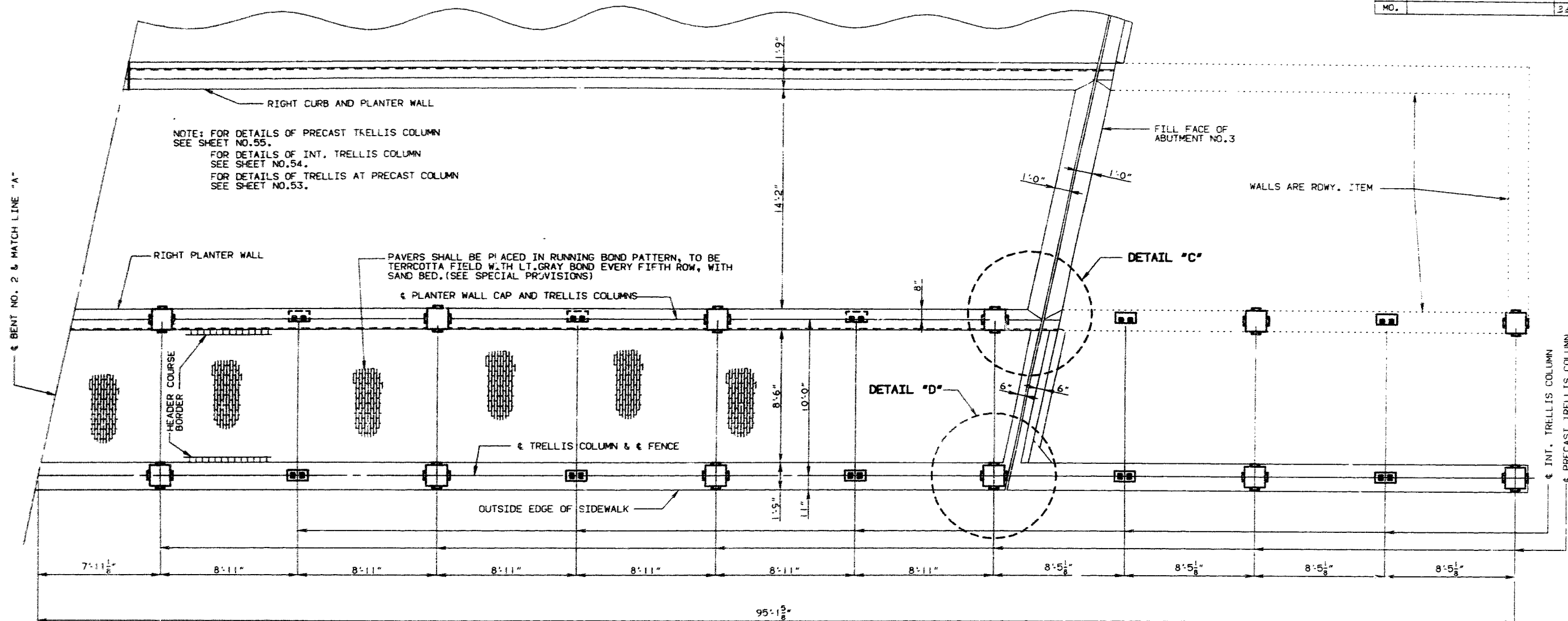
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442 944

DETAILED JULY 1990
CHECKED SEPT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

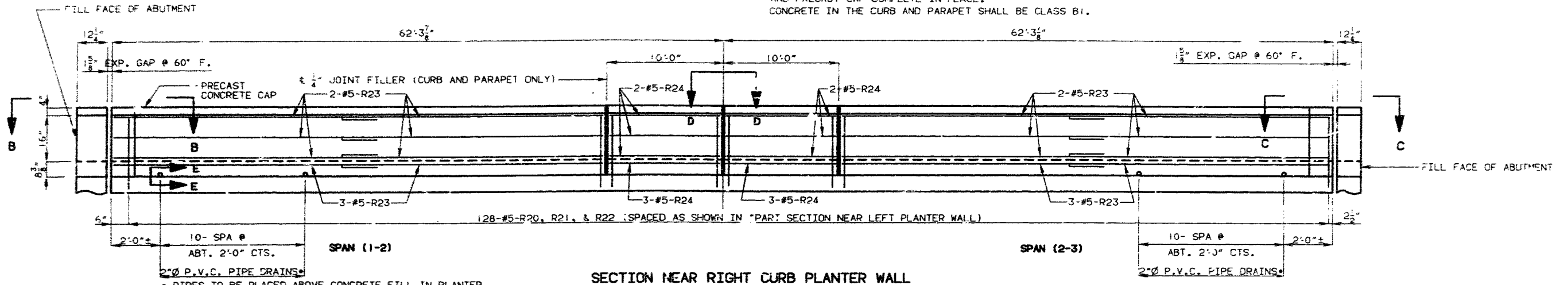
SHEET NO. 47 OF 66

NOTE: BRICK SHALL BE SECURED TO CONCRETE BACKING BY USE OF FLEXIBLE ANCHOR. SEE SPECIAL PROVISION FOR TYPE, SIZE, AND SPACING.

NOTE: DIMENSIONS SHOWN ARE HORIZONTAL DIMENSIONS ALONG CURB LINE.

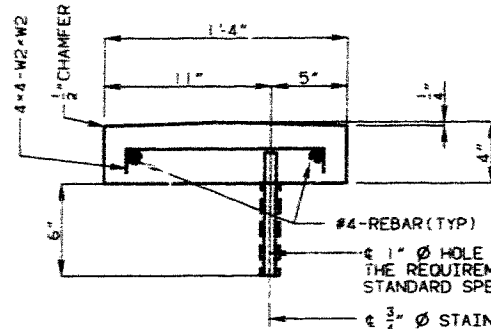
NOTE: TOP OF PARAPET SHALL BE BUILT PARALLEL TO GRADE WITH JOINT FILLER PLACED NORMAL TO GRADE. ALL EXPOSED EDGES OF CURB SHALL HAVE EITHER A 1/2" RADIUS OR A 3/8" BEVEL, UNLESS OTHERWISE NOTED. THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, BRICK VENEER AND PRECAST CAP COMPLETE-IN-PLACE. CONCRETE IN THE CURB AND PARAPET SHALL BE CLASS B1.

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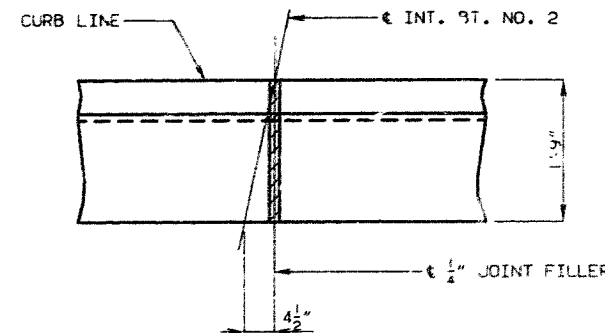
NOTE: FOR DETAILS OF PLANTER WALL AT ABUTS. SEE SHEET NO.51 AND 52.

NOTE: USE A MINIMUM LAP OF 17" FOR #5 HORIZONTAL BARS IN CURB AND PARAPET.

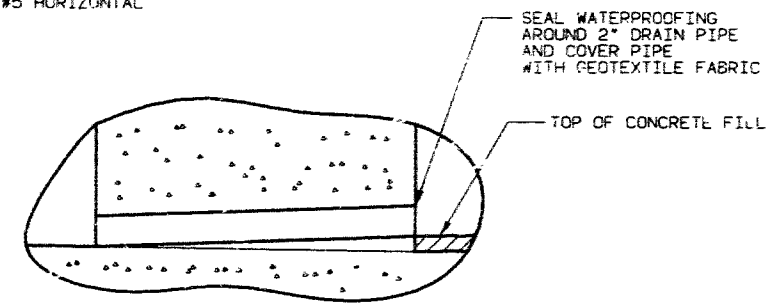


TYPICAL SECTION THRU PRECAST CAP

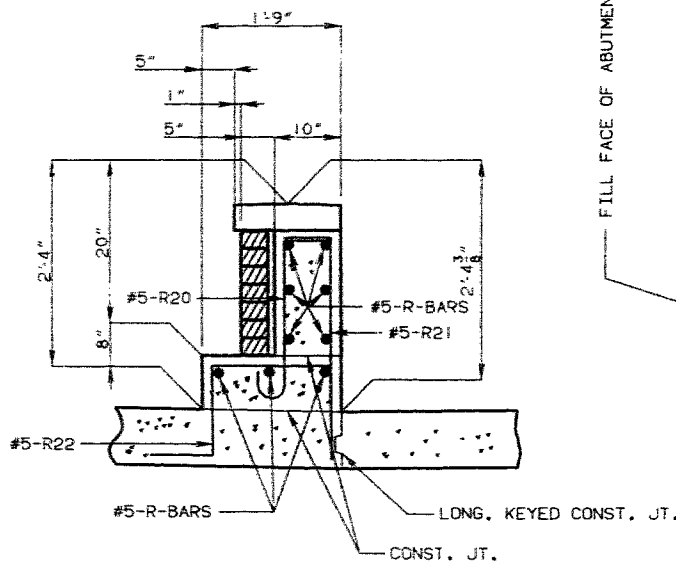
NOTE: FOR R-BARS NOT SHOWN SEE SHEET NO. 51 AND 52.



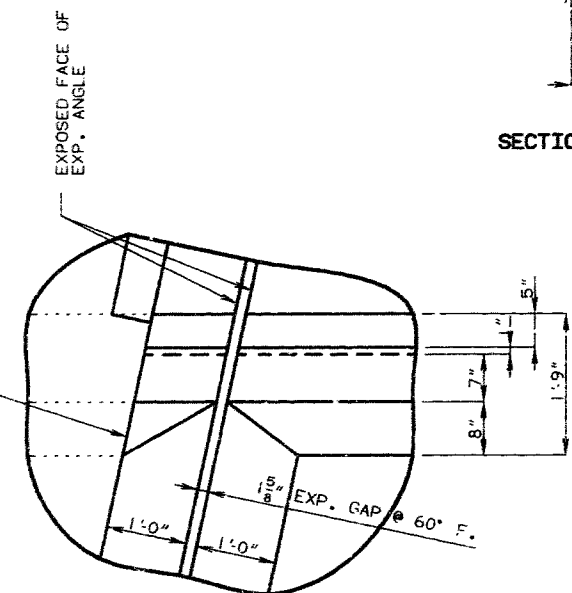
SECTION D-D



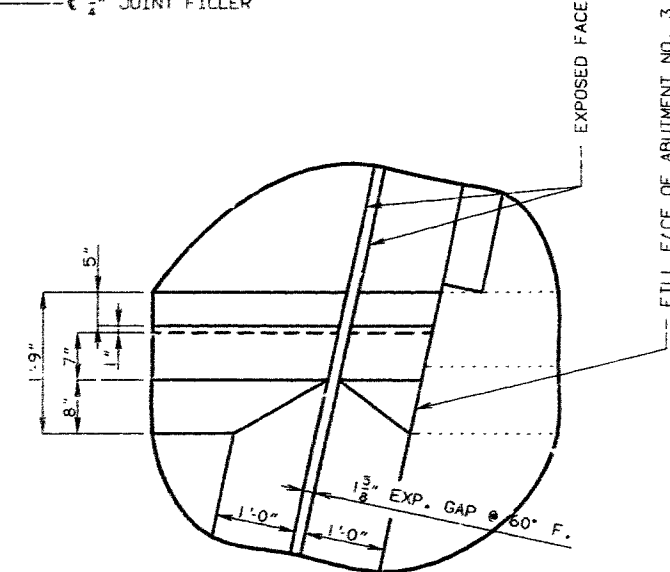
SECTION E-E



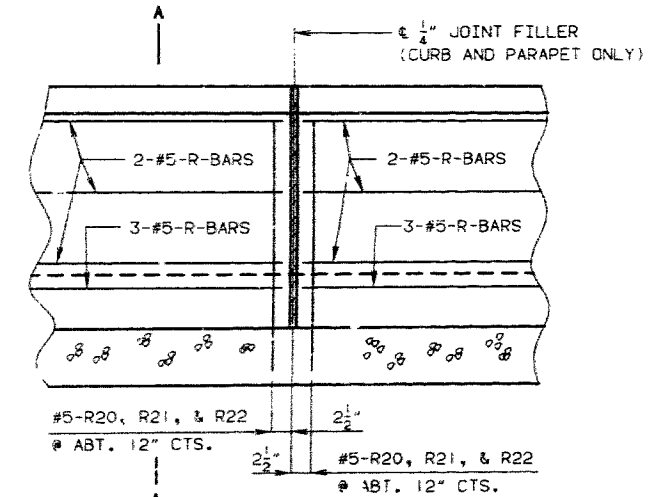
SECTION A-A



SECTION B-B



SECTION C-C



PART SECTION NEAR RT. PLANTER WALL

DETAILS OF RIGHT CURB AND PLANTER WALL

443 445

DETAILED SEPT 1990
CHECKED SEPT 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

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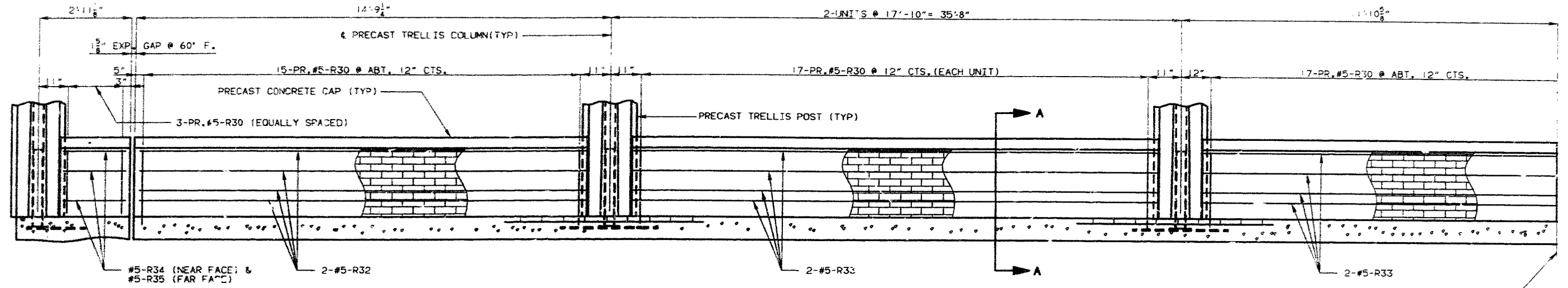
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A-4861

NOTE: BRICK SHALL BE SECURED TO CONCRETE BACKING BY USE OF FLEXIBLE ANCHOR. SEE SPECIAL PROVISION FOR TYPE, SIZE, AND SPACING.

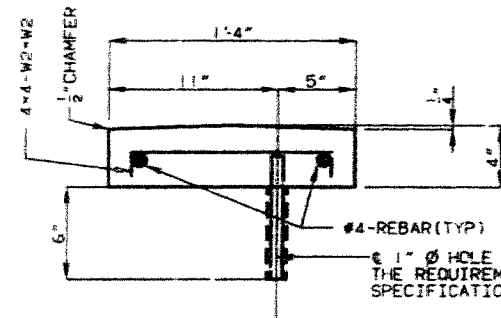
NOTE: LONGITUDINAL DIMENSIONS ARE ALONG TOP OF SLAB AT EDGE OF WALKWAY AT THE FACE OF PLANTER THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, BRICK VENEER AND PRECAST CAP COMPLETE-IN-PLACE.

STATE	PROJ. NO.	SHEET NO.
MO.		333

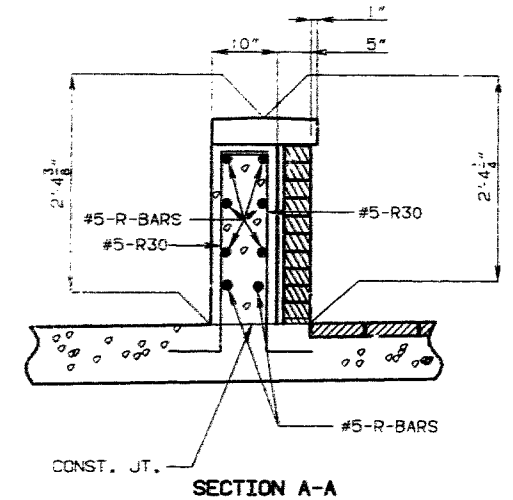


SPAN (1-2)

NOTE: FOR R-BARS NOT SHOWN SEE SHEET NO. 51 AND 52.

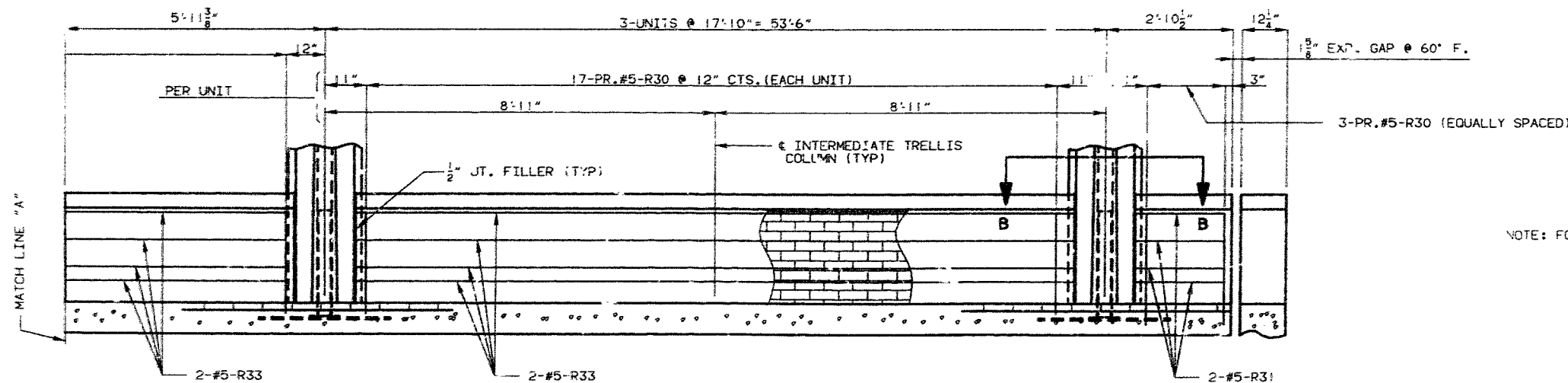


TYPICAL SECTION THRU PRECAST CAP



SECTION A-A

NOTE: FOR DETAILS OF SECTION 3-B SEE SHEET NO. 46.



SPAN (2-3)

SECTION NEAR RT. PLANTER WALL AND TRELLIS COLUMNS

444 4446

DETAILED AUG 19 90
CHECKED SEPT. 19 90

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 49 OF 66

JACKSON

COUNTY

A-4861

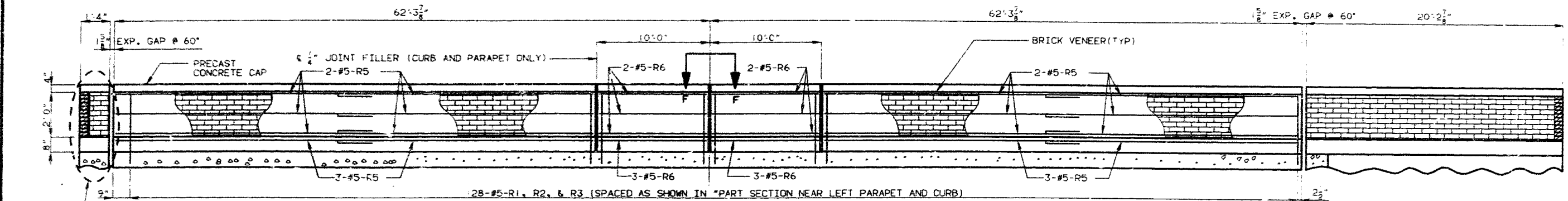
NOTE: BRICK SHALL BE SECURED TO CONCRETE BACKING BY USE OF FLEXIBLE ANCHOR. SEE SPECIAL PROVISION FOR TYPE, SIZE, AND SPACING.

NOTE: DIMENSIONS SHOWN ARE HORIZONTAL DIMENSIONS ALONG CURB LINE.

NOTE: TOP OF PARAPET SHALL BE BUILT PARALLEL TO GRADE WITH JOINT FILLER PLACED NORMAL TO GRADE. ALL EXPOSED EDGES OF CURB SHALL HAVE EITHER A 1/2" RADIUS OR A 3/8" BEVEL. UNLESS OTHERWISE NOTED. THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, BRICK VENEER AND PRECAST CAP COMPLETE-IN-PLACE. CONCRETE IN THE CURB AND PARAPET SHALL BE CLASS B1.

NOTE: USE A MINIMUM LAP OF 17" FOR #5 HORIZONTAL BARS IN CURB AND PARAPET.

STATE	PROJ. NO.	SHEET NO.
MO.		50

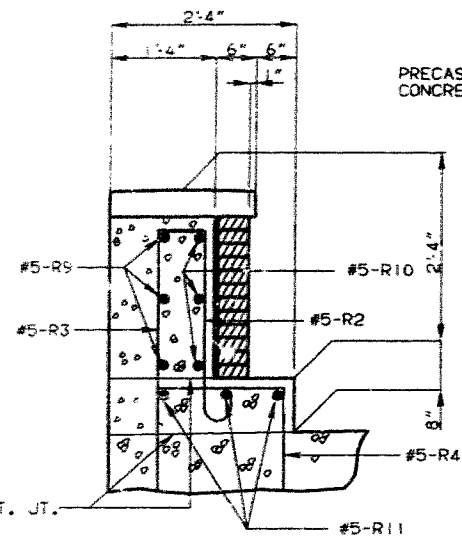


DETAIL "A"

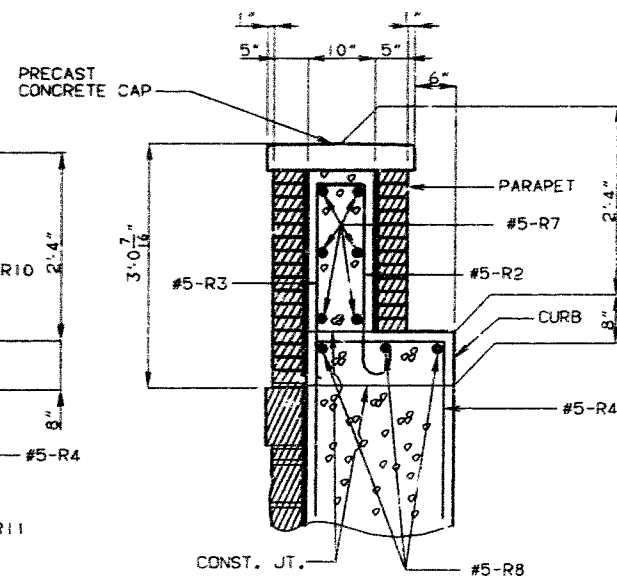
SPAN (1-2)

SECTION NEAR LEFT PARAPET AND CURB

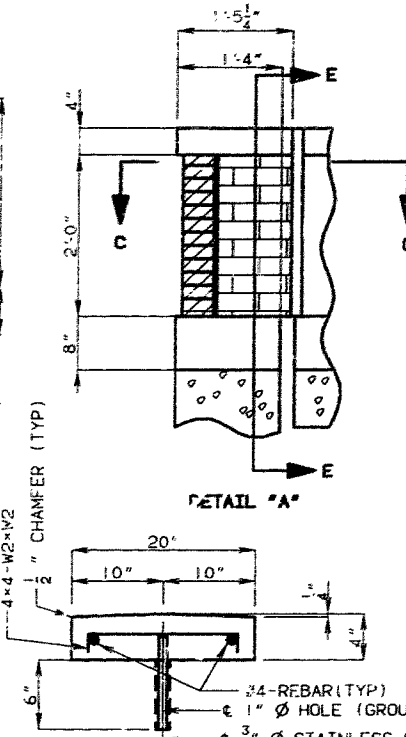
SPAN (2-3)



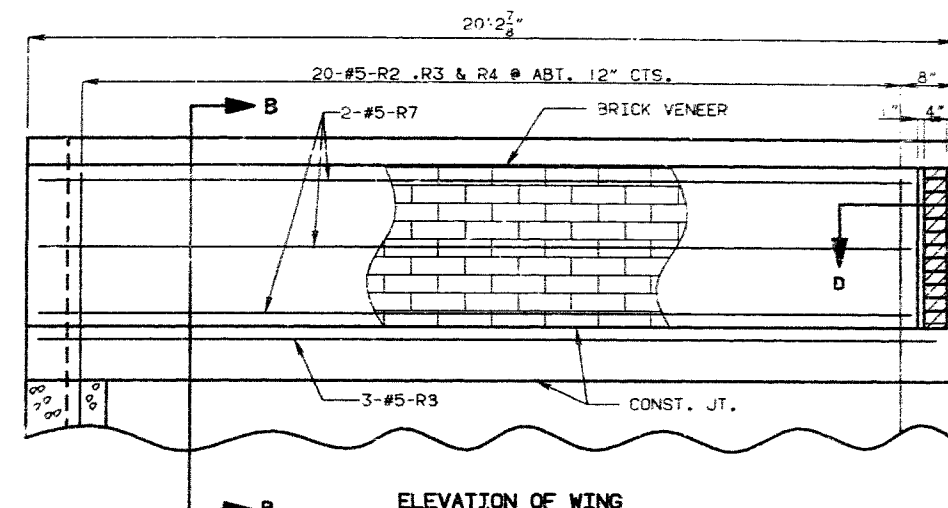
SECTION E-E



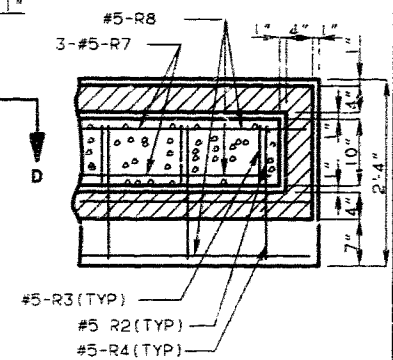
SECTION B-B



DETAIL "A"

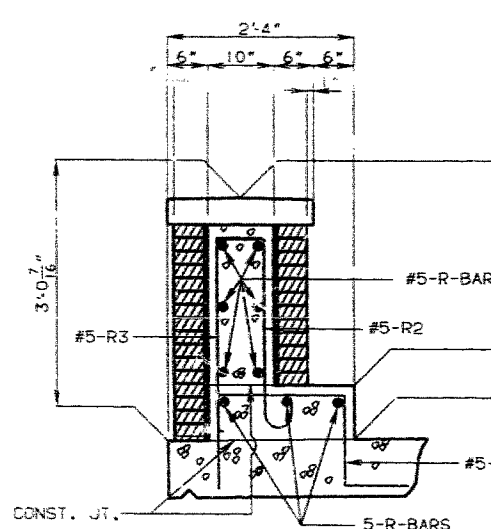


ELEVATION OF WING

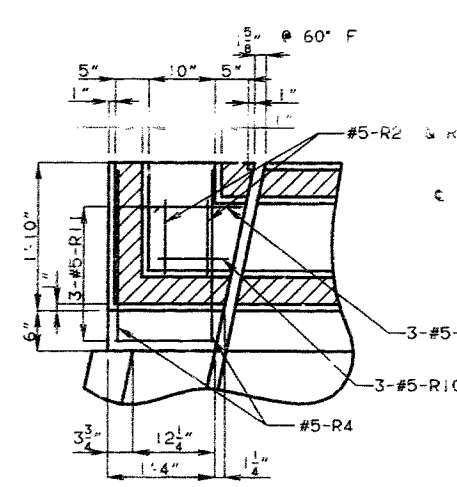


PART SECTION D-D

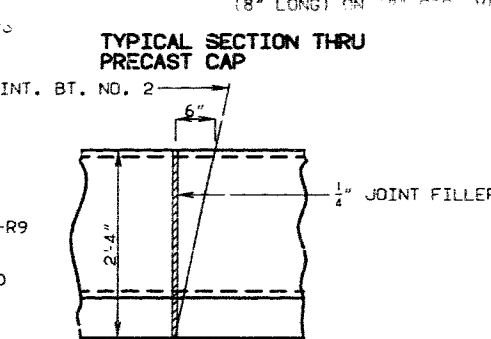
* MORTAR SHALL MEET THE REQUIREMENTS OF SECTION 1066 OF MISSOURI STANDARD SPECIFICATIONS.



SECTION A-A

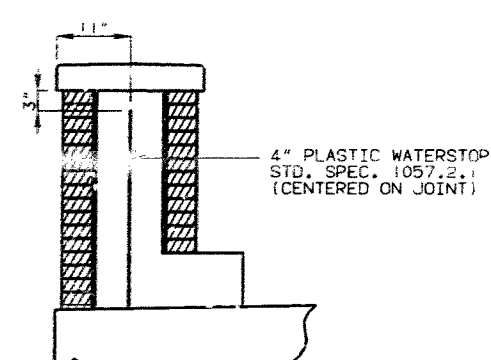


SECTION C-C



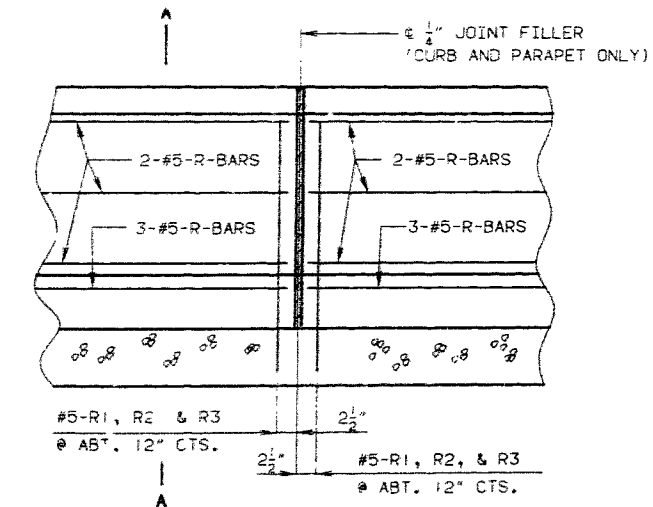
TYPICAL SECTION THRU PRECAST CAP

SECTION F-F



DETAIL OF PLASTIC WATERSTOP

NOTE: PLASTIC WATERSTOP SHALL BE PLACED IN ALL FILLED JOINTS. COST OF PLASTIC WATERSTOP COMPLETE IN PLACE TO BE INCLUDED IN CONTRACT UNIT PRICE FOR PARAPET AND CURB.



PART SECTION NEAR LEFT CURB AND PARAPET

DETAILS OF LEFT PARAPET AND CURB

775 447

DETAILED JULY 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 50 OF 66

JACKSON

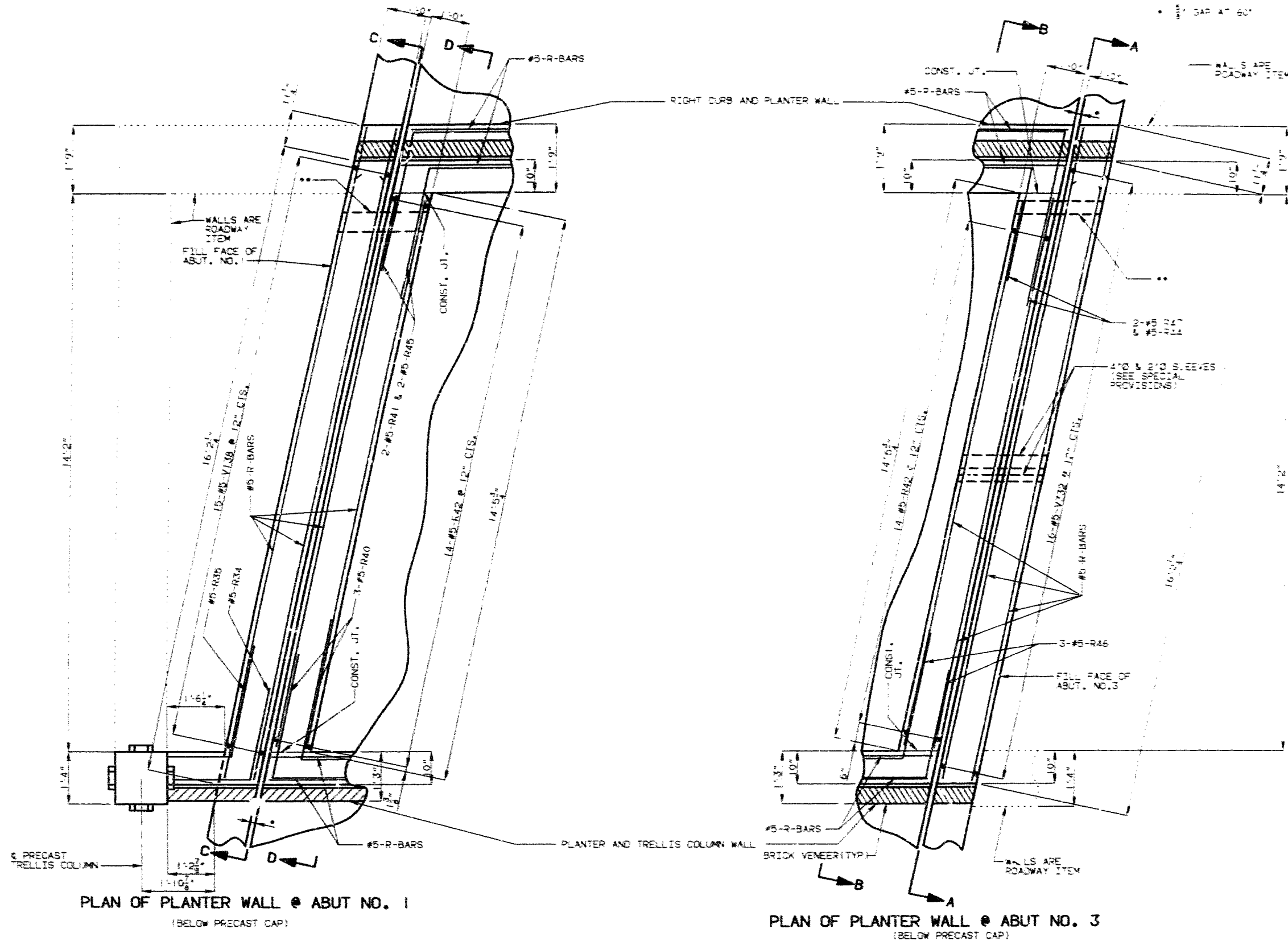
COUNTY

A-4861

•• 6"Ø P.V.C. PLANTER DRAIN WITH EXT. SLEEVE. FOR DETAILS NOT SHOWN SEE SHEET NO.58.

STATE	PROJ. NO.	SHEET NO.
MO.		55

NOTE: FOR DETAILS OF SECTION A-A,B-B,C-C, AND D-D SEE SHEET NO.52.



8255 915

DETAILED AUG. 19 90
CHECKED SEPT. 19 90

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 51 OF 66

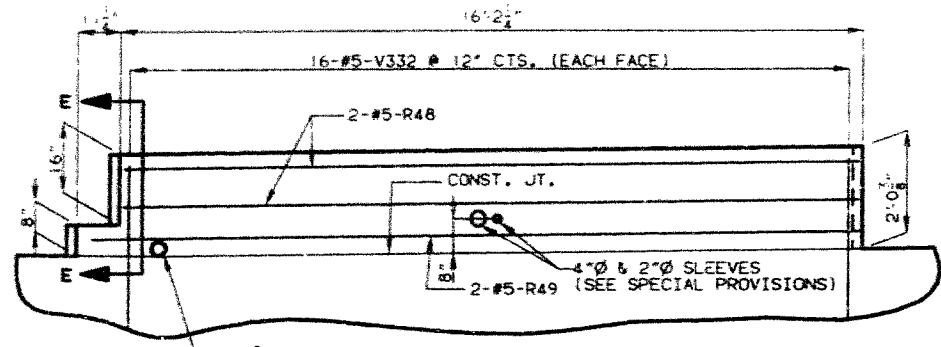
JACKSON COUNTY

A-4861

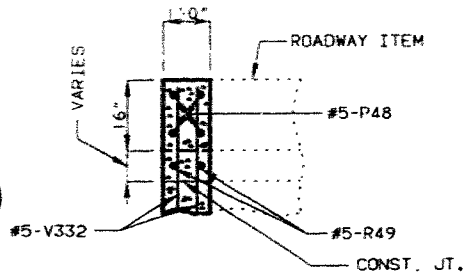
STATE	PROJ. NO.	SHEET NO.
MO.		33

• 6"Ø P.V.C. PLANTER DRAIN WITH EXP. SLEEVES. FOR DETAILS NOT SHOWN SEE SHEET NO.58.

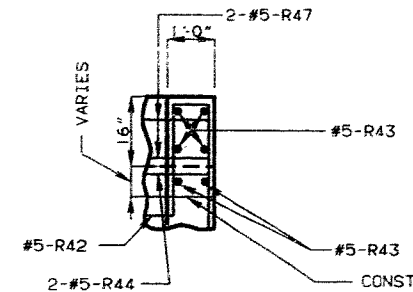
NOTE: FOR LOCATION OF SECTION A-A, B-B, C-C, AND D-D SEE SHEET NO.51.



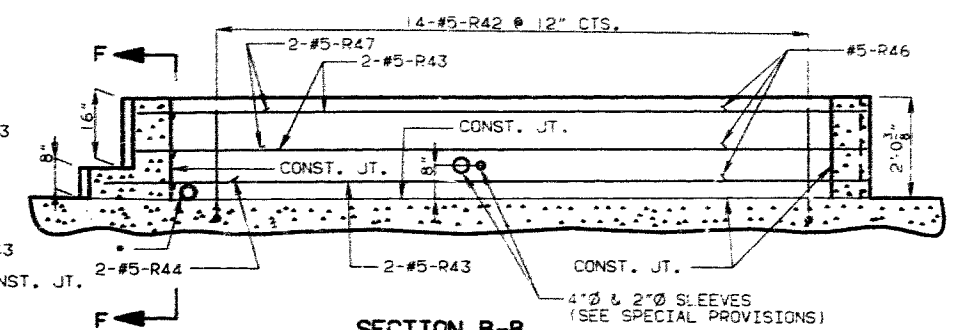
SECTION A-A



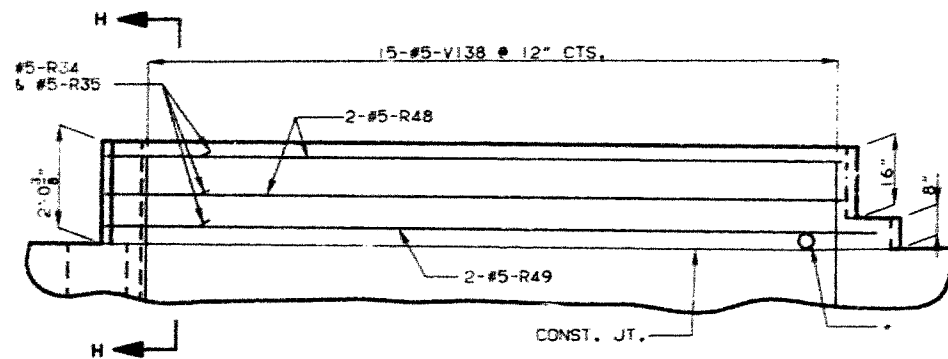
SECTION E-E



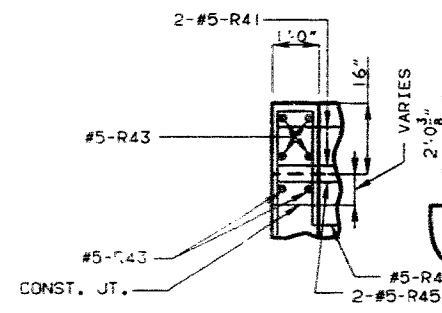
SECTION F-F



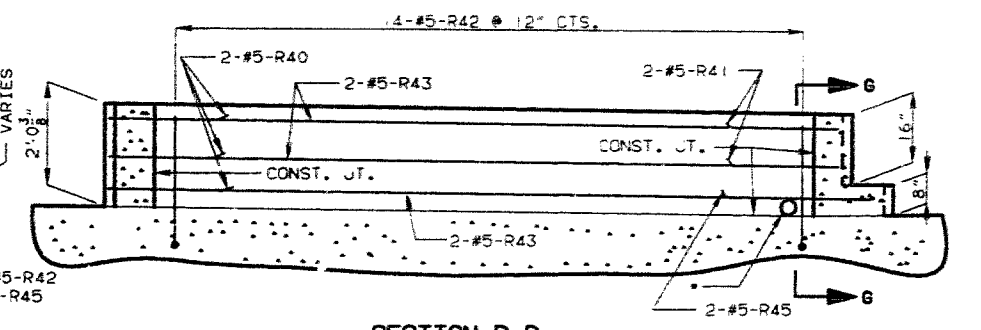
SECTION B-B



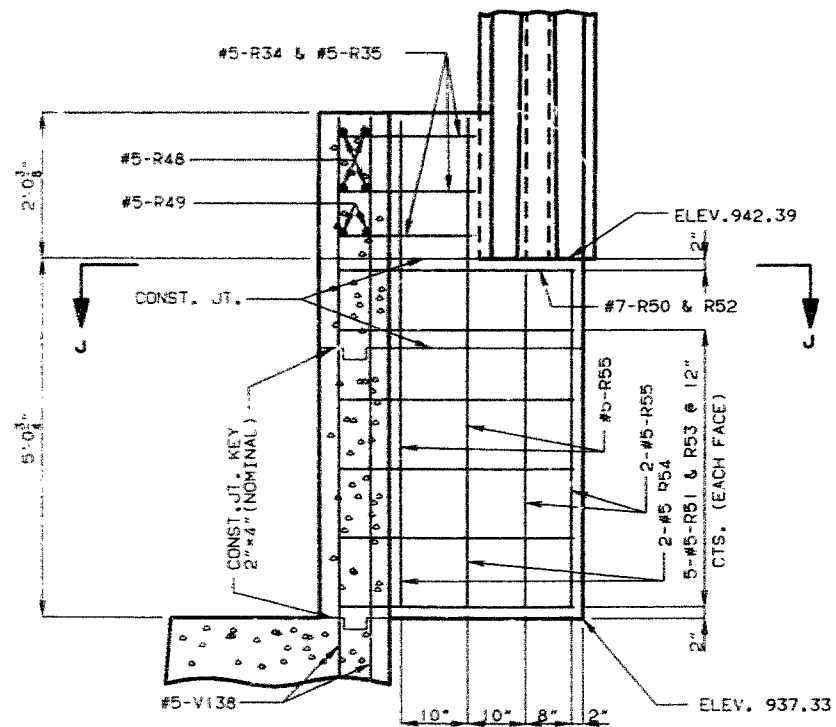
SECTION C-C



SECTION G-G

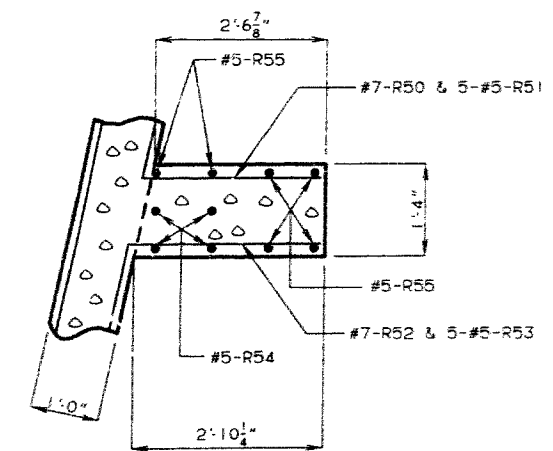


SECTION D-D



SECTION H-H

NOTE: ALL EXPOSED EDGES OF PLANTER HEADWALLS SHALL HAVE EITHER A 1/2" RADIUS OR A 3/8" BEVEL, UNLESS OTHERWISE NOTED. CONCRETE IN THE PLANTER HEADWALLS SHALL BE CLASS B1. WHEN THE PLANTER HEADWALLS ARE BID BY THE LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE CONCRETE AND REINFORCING COMPLETE-IN-PLACE.



SECTION J-J

DETAILS OF PLANTER HEADWALL AT ABUT. NO. 1 AND 3.

4449

DETAILED SEPT. 1990
CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

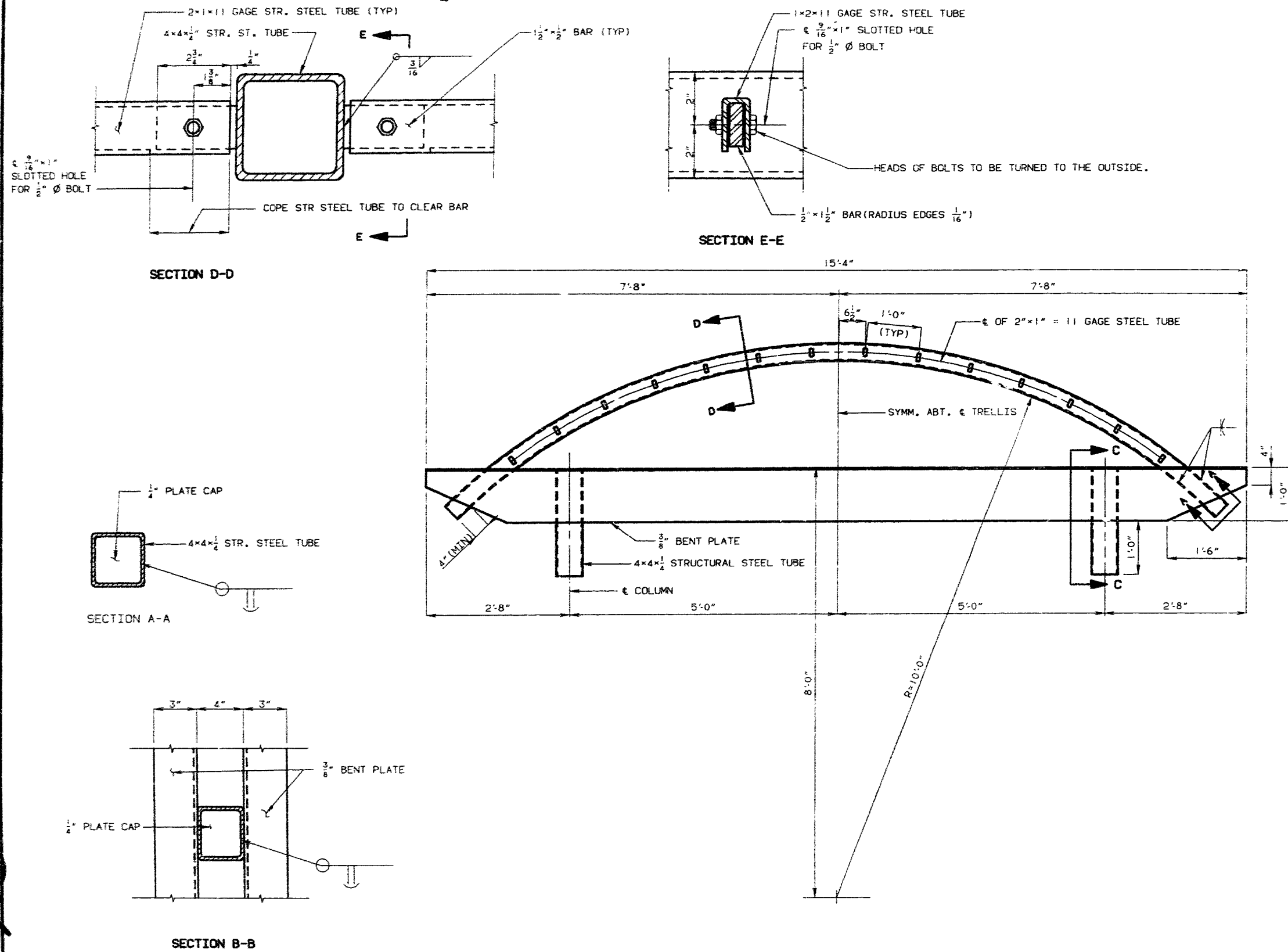
SHEET NO. 52 OF 66

JACKSON

COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		227



418 450

DETAILS OF TRELLIS AT PRECAST COLUMN

NOTE: COST OF TRELLIS AT PRECAST COLUMN IS INCLUDED WITH TRELLIS COMPLETE IN PLACE.

DETAILED AUG 1990
 CHECKED SEPT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

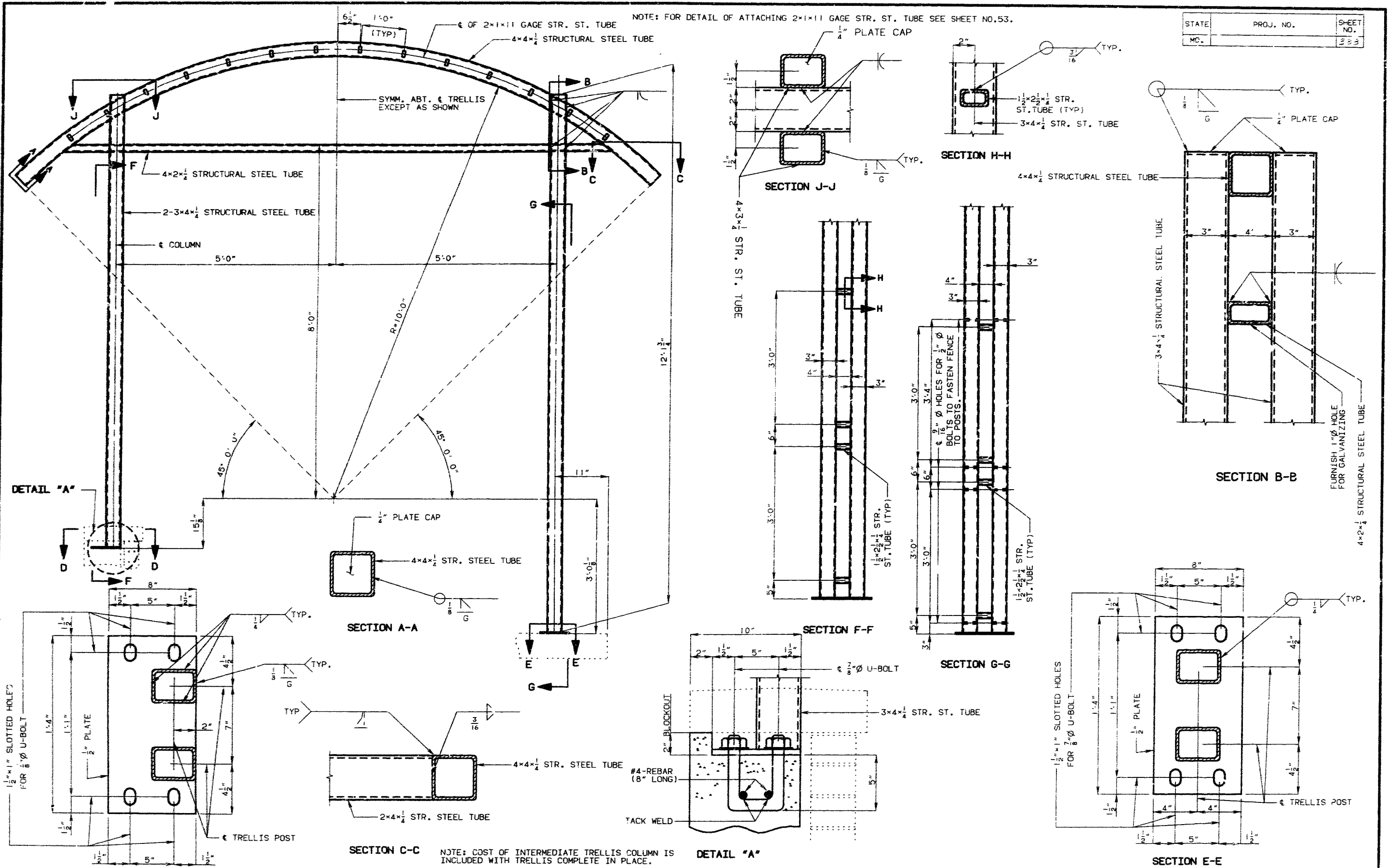
SHEET NO. 53 OF 66

JACKSON

COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MD.		555



449 457

DETAILED AUG 1990
CHECKED NOV. 1990

SECTION D-D

SECTION C-C

NOTE: COST OF INTERMEDIATE TRELLIS COLUMN IS INCLUDED WITH TRELLIS COMPLETE IN PLACE.

DETAIL "A"

DETAILS OF INTERMEDIATE TRELLIS COLUMN

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

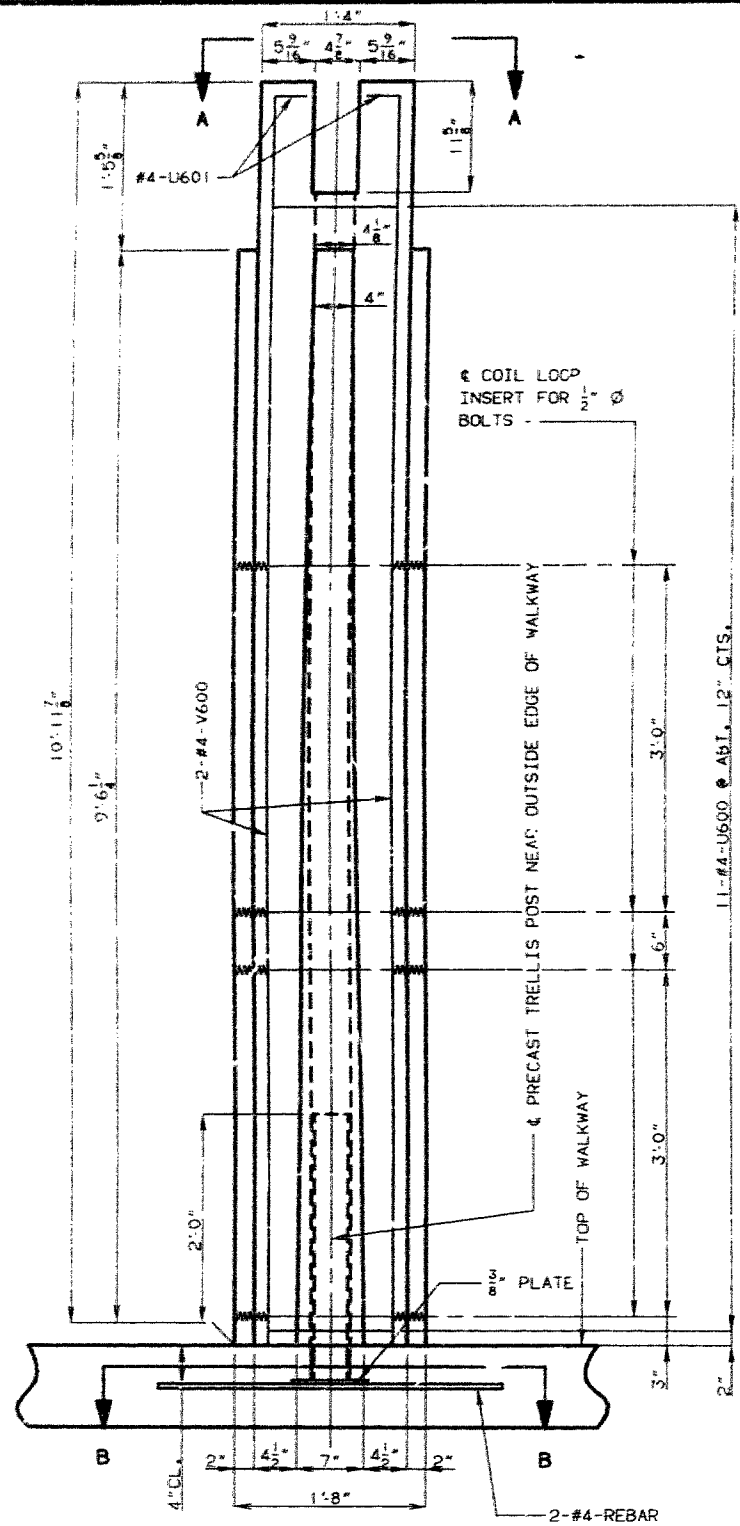
SHEET NO. 54 OF 66

JACKSON

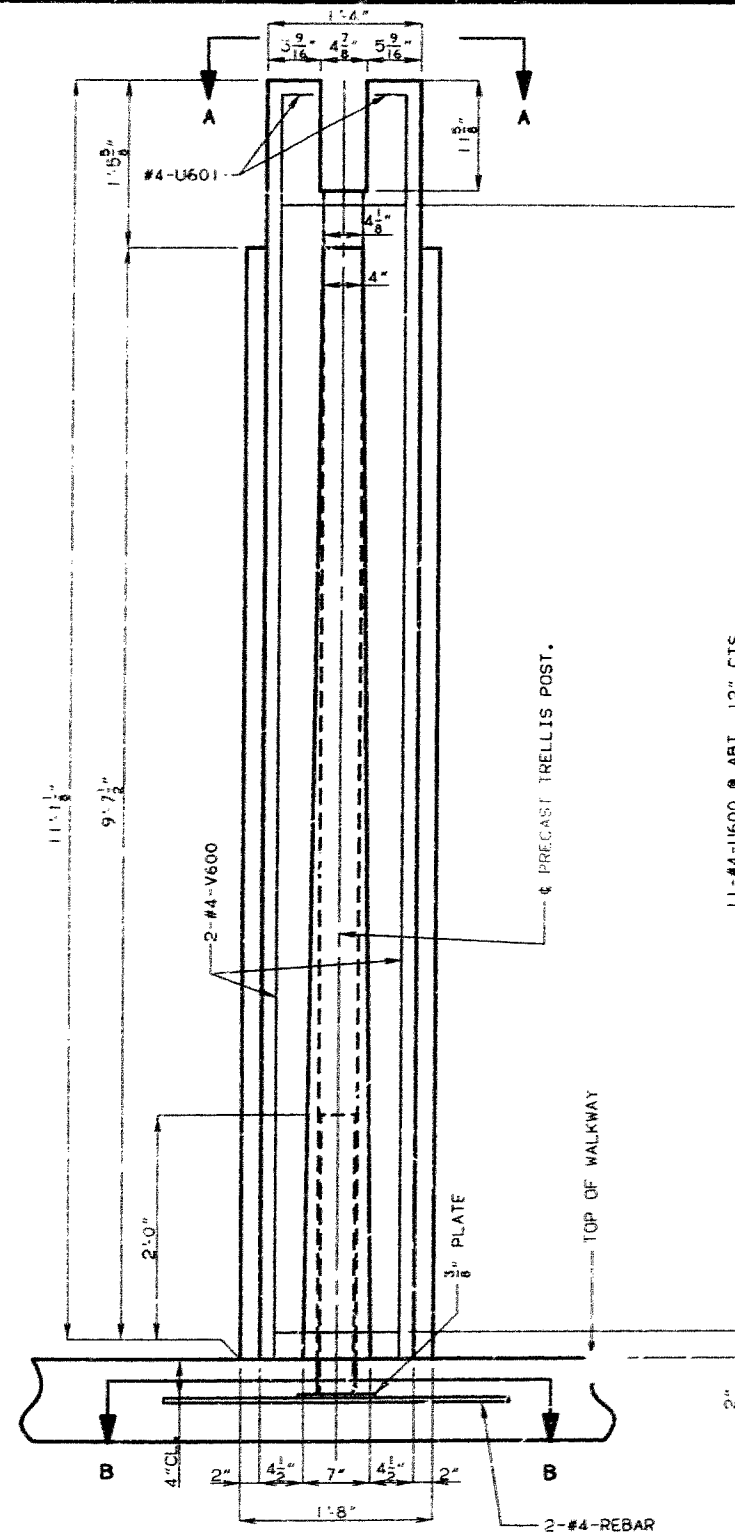
COUNTY

A-4861

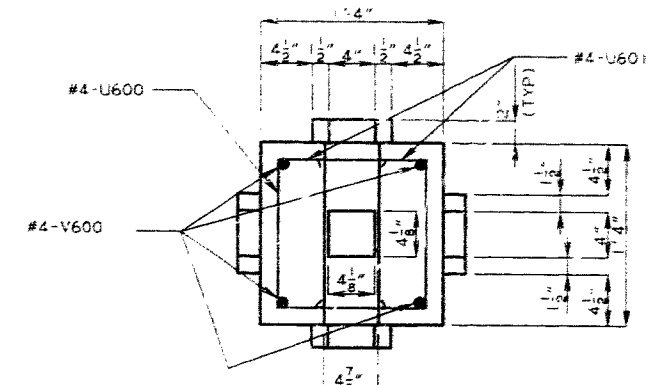
STATE	PROJ. NO.	SHEET NO.
MO.		55



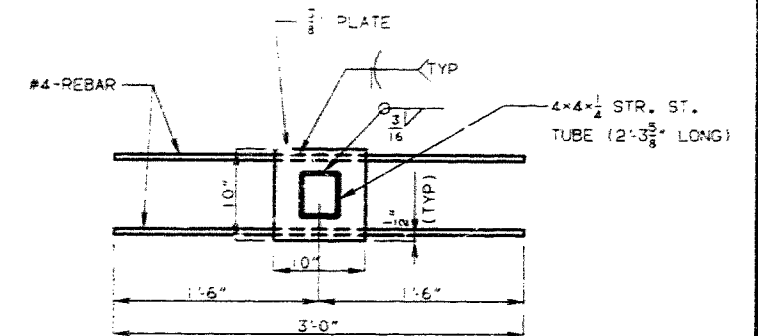
DETAIL OF TRELLIS POST AT OUTSIDE OF WALKWAY



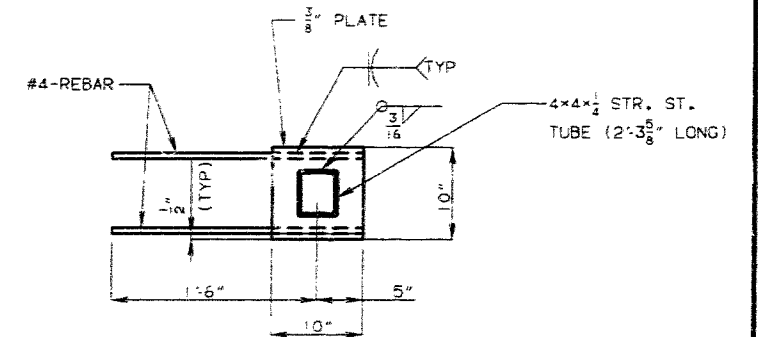
DETAIL OF TRELLIS POST AT ϵ OF PLANTER WALL



SECTION A-A



SECTION B-B



TYPICAL DETAIL OF ANCHOR SYSTEM FOR PRECAST COLUMN AT END OF WING, WALLS (RDWY. ITEM) AND AT FILL FACE OF END BENT

NOTE: ALL 4x4x1/2 STR. ST. TUBE SHALL BE CAST VERTICAL
 NOTE: FOR LOCATION OF ALL PRECAST TRELLIS POSTS SEE SHEET NO. 46 AND 47.
 NOTE: FABRICATION AND INSTALLATION OF ANCHOR SYSTEM COMPLETE.
 IN PLACE SHALL BE INCLUDED WITH PRICE BID FOR SLAB ON CONCRETE I-GIRDER.

4502

DETAILED JULY 1990
 CHECKED NOV. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

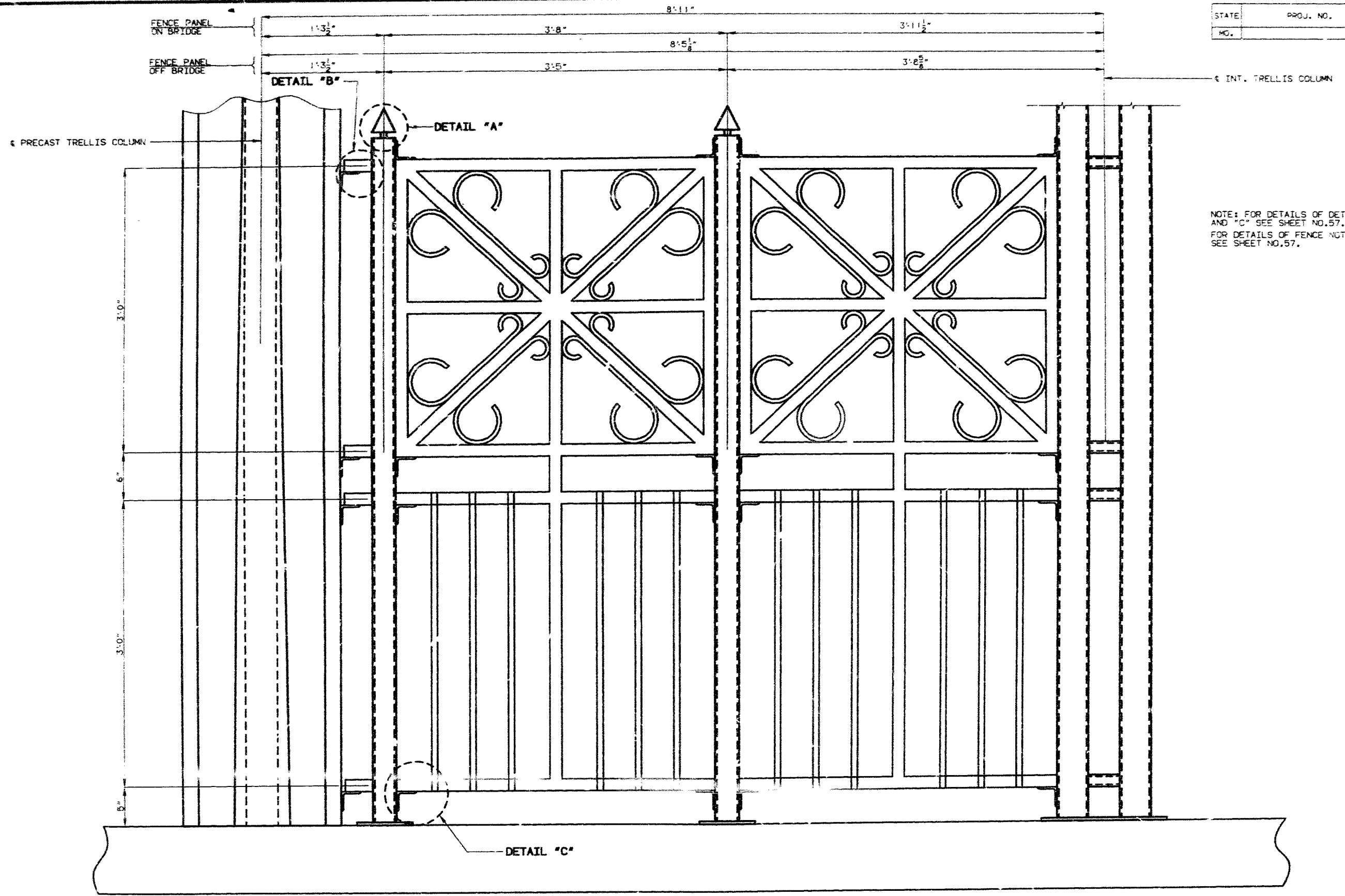
SHEET NO. 55 OF 66

JACKSON

COUNTY

A-4861

STATE:	PROJ. NO.	SHEET NO.
MO.		57



NOTE: FOR DETAILS OF DETAIL "A", "B", AND "C" SEE SHEET NO. 57.
FOR DETAILS OF FENCE NOT SHOWN SEE SHEET NO. 57.

482/453

PART ELEVATION OF BRIDGE FENCE

DETAILED JULY 1990
CHECKED SEPT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

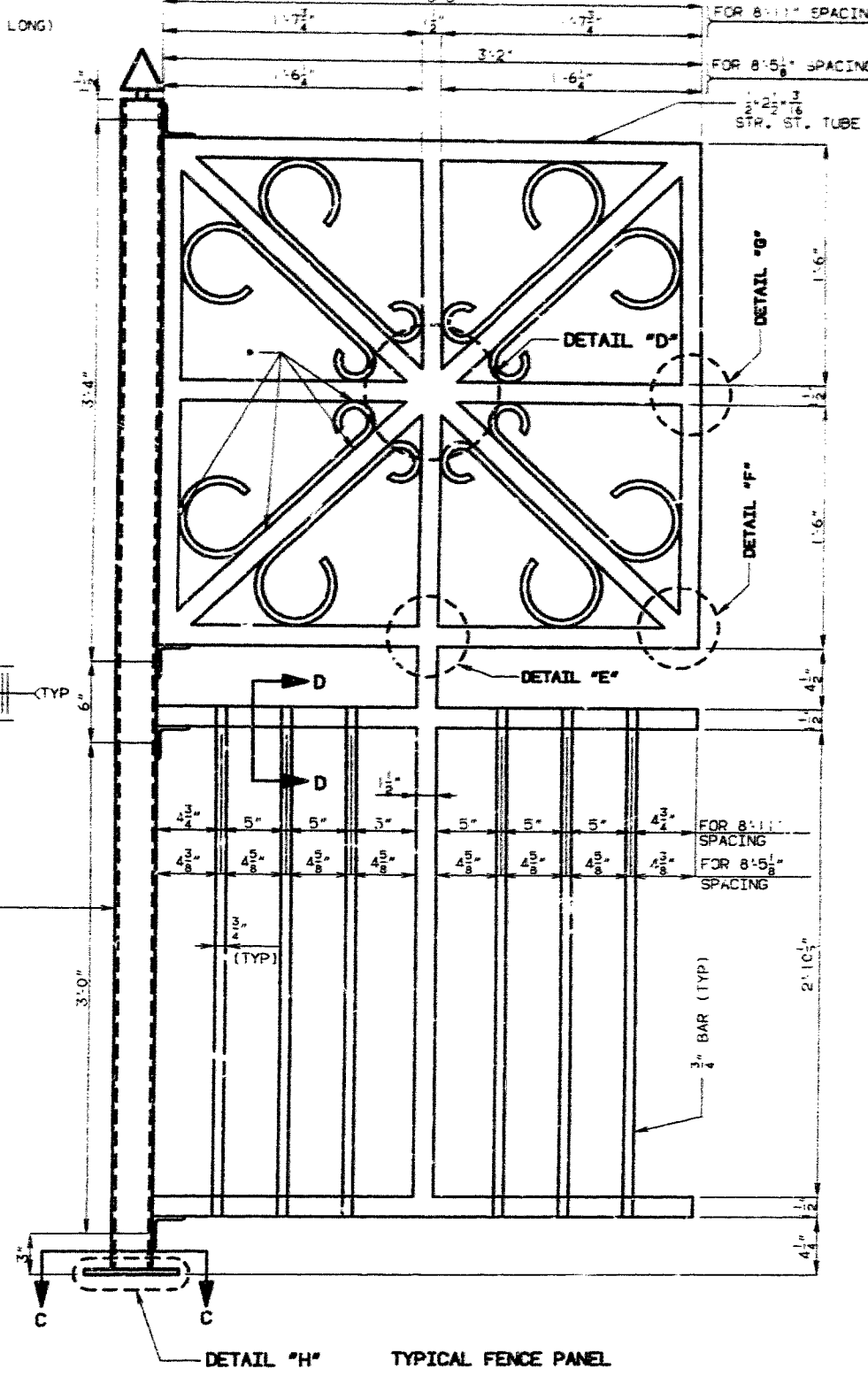
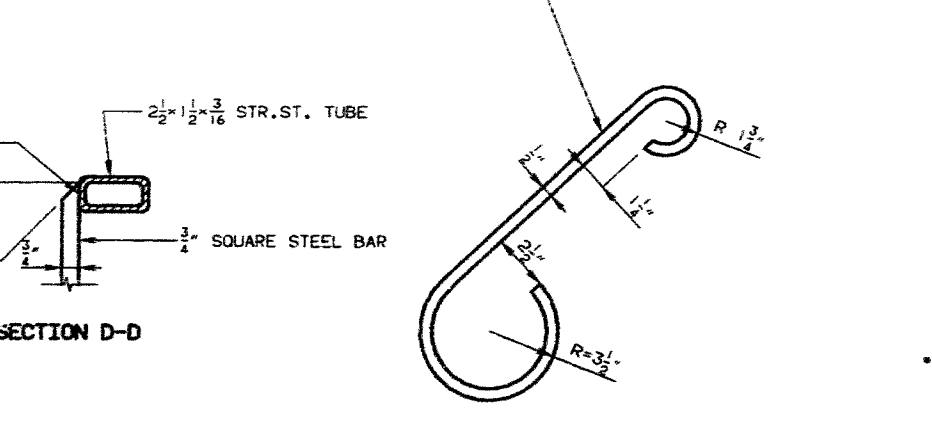
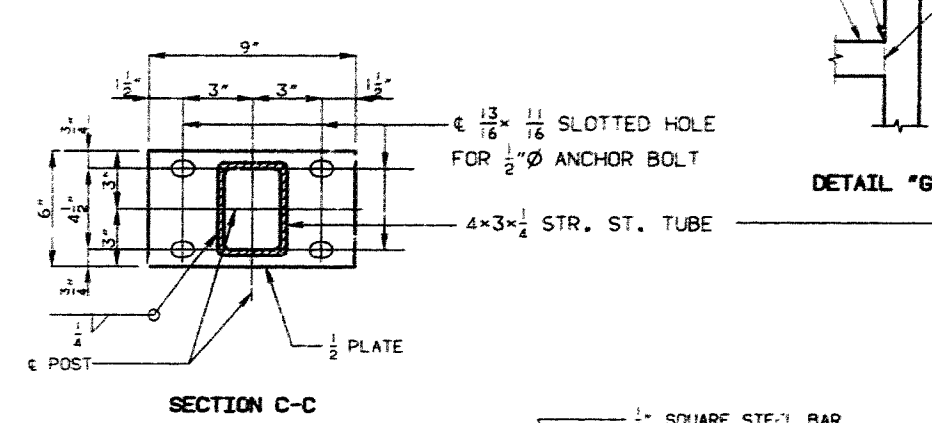
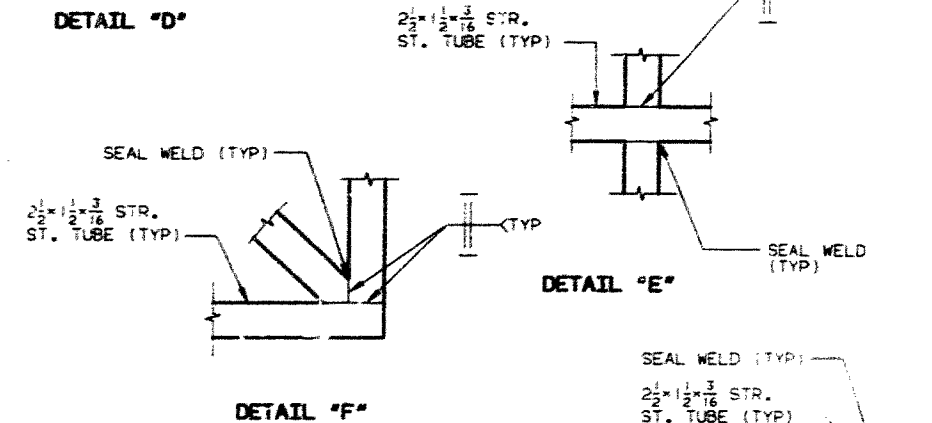
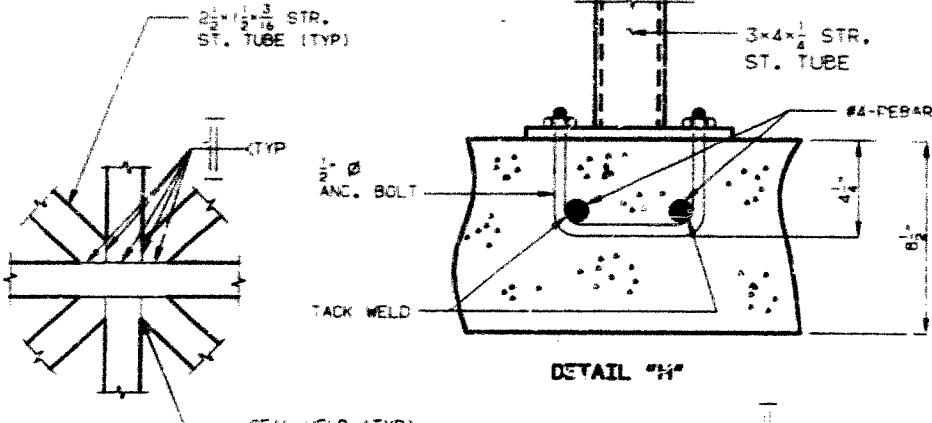
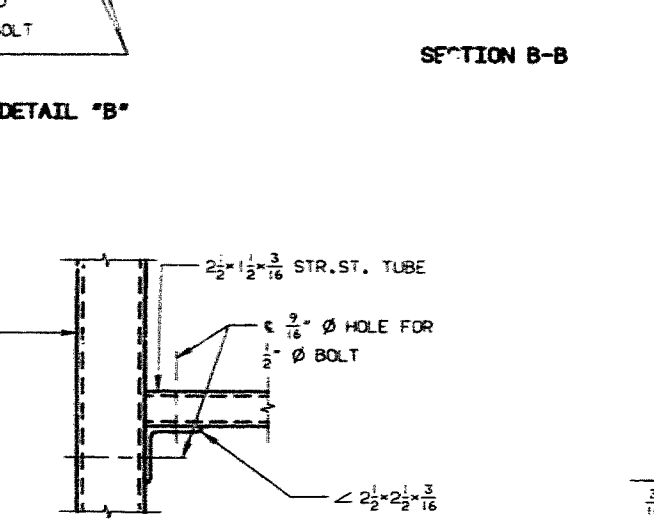
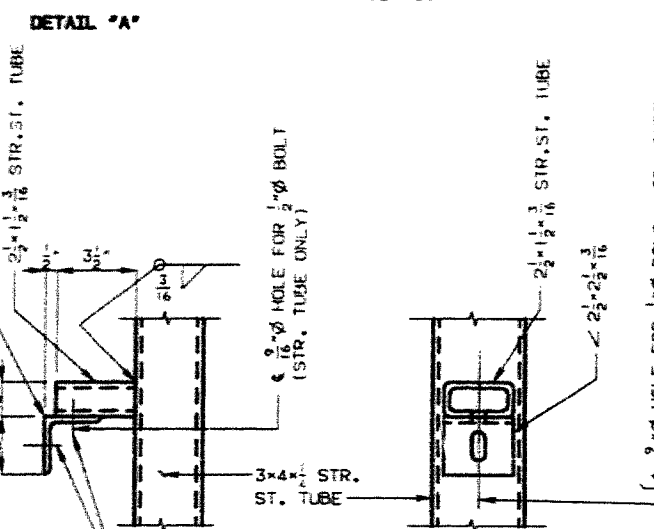
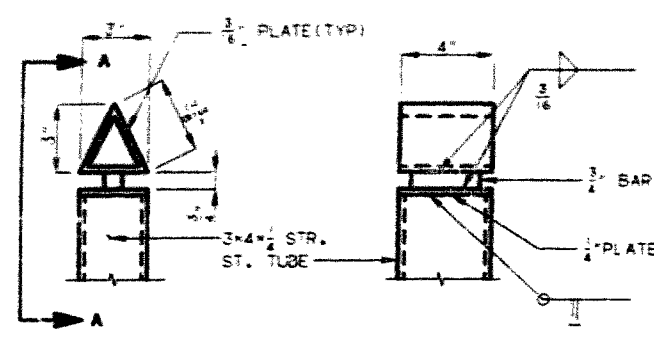
SHEET NO. 56 OF 66

JACKSON

COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		37



482 454

NOTE: FOR LOCATION OF DETAIL "A", "B", AND "C" SEE SHEET NO.56.

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

• TACK WELD (BOTH SIDES)

DETAILED AUG. 1990
CHECKED NOV. 1990

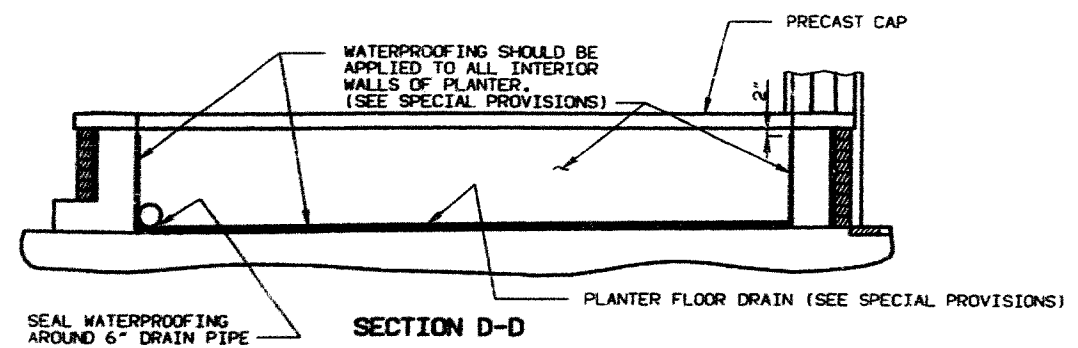
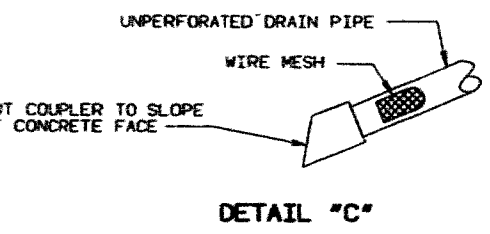
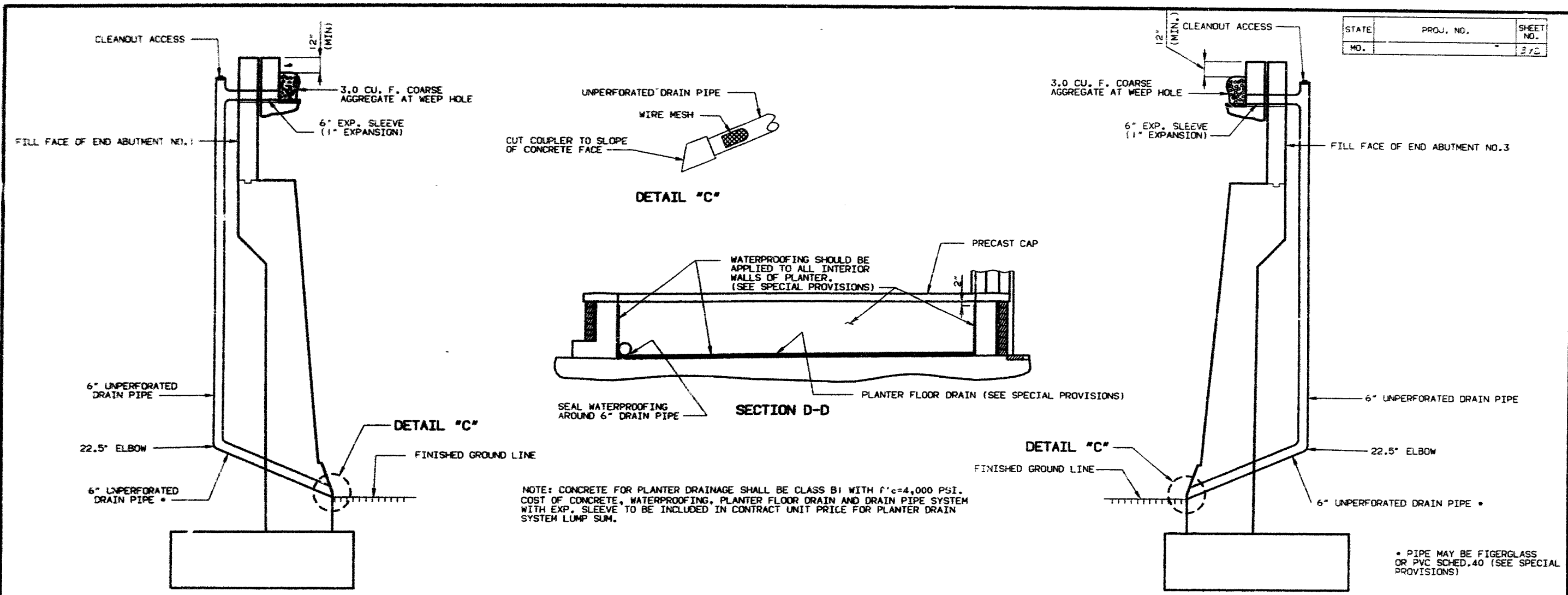
SHEET NO. 57 OF 66

JACKSON

COUNTY

A-4861

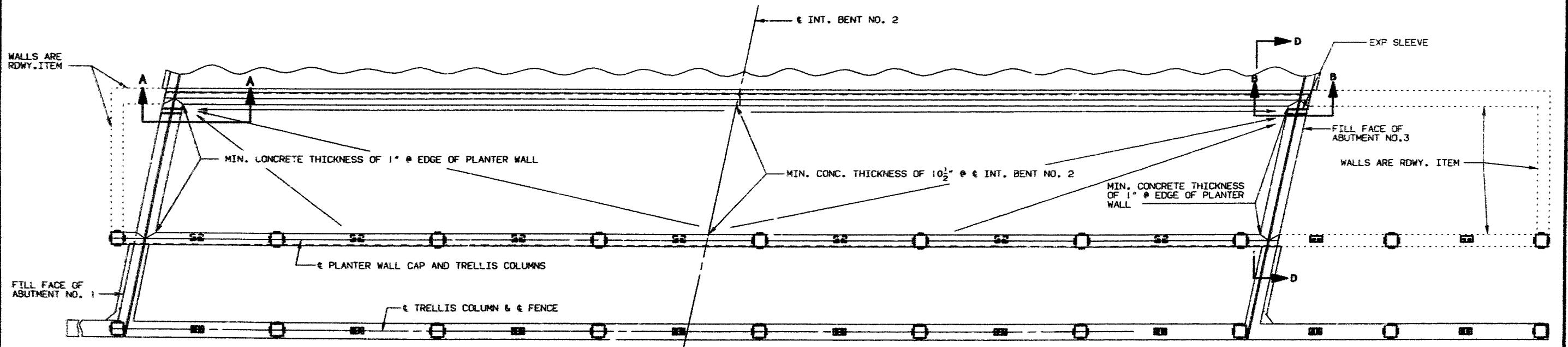
STATE	PROJ. NO.	SHEET NO.
MO.		372



NOTE: CONCRETE FOR PLANTER DRAINAGE SHALL BE CLASS B1 WITH f'c=4,000 PSI. COST OF CONCRETE, WATERPROOFING, PLANTER FLOOR DRAIN AND DRAIN PIPE SYSTEM WITH EXP. SLEEVE TO BE INCLUDED IN CONTRACT UNIT PRICE FOR PLANTER DRAIN SYSTEM LUMP SUM.

* PIPE MAY BE FIBERGLASS OR PVC SCHED.40 (SEE SPECIAL PROVISIONS)

483 455



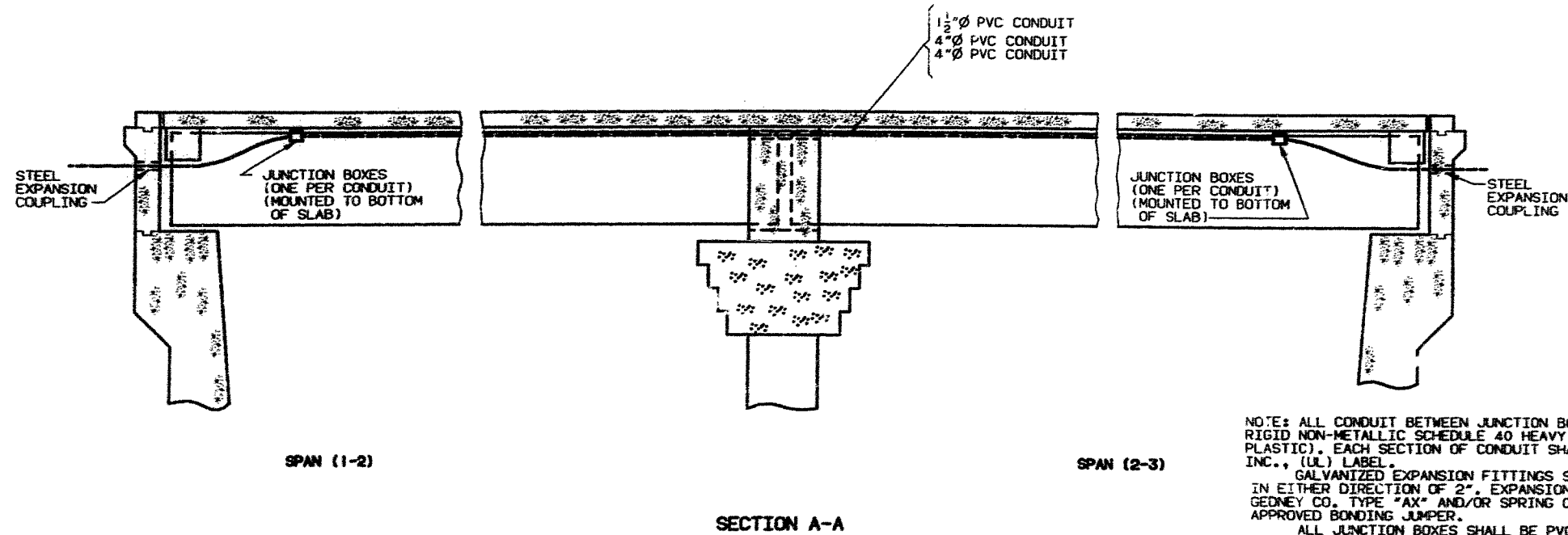
DETAILED NOV. 1990
CHECKED NOV. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SPAN(1-2) SPAN(2-3)
SHEET NO. 58 OF 66

JACKSON COUNTY A-4861

STATE	PROJ. NO.	SHEET
MO.		372



NOTE: ALL CONDUIT BETWEEN JUNCTION BOXES ON STRUCTURE SHALL BE RIGID NON-METALLIC SCHEDULE 40 HEAVY WALL PVC (POLYVINYL CHLORIDE PLASTIC). EACH SECTION OF CONDUIT SHALL BEAR THE UNDERWRITERS' LABORATORIES, INC., (UL) LABEL.

GALVANIZED EXPANSION FITTINGS SHALL PROVIDE A MINIMUM MOVEMENT IN EITHER DIRECTION OF 2". EXPANSION FITTINGS SHALL BE EQUAL TO O.Z. GEDNEY CO. TYPE "AX" AND/OR SPRING CITY ELEC. MFG. CO. TYPE "AF" WITH APPROVED BONDING JUMPER.

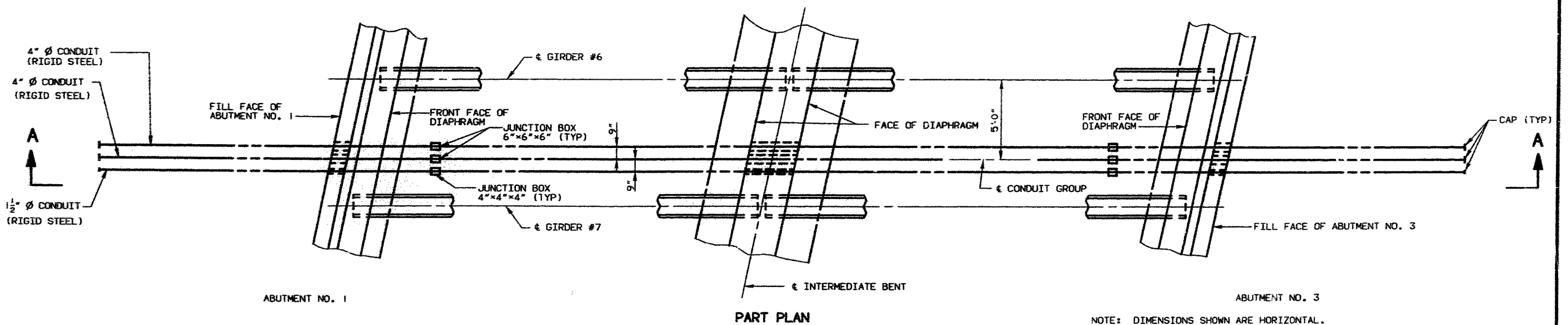
ALL JUNCTION BOXES SHALL BE PVC MOLDED AND SURFACE MOUNTED AND EQUAL TO CARLON ELECTRICAL CONSTRUCTION PRODUCTS OF TRIANGLE CONDUIT AND CABLE COMPANY, INC. THE CONDUIT TERMINATIONS BE PERMANENT OR SEPARABLE. THE TERMINATIONS AND COVERS SHALL BE OF WATERTIGHT CONSTRUCTION.

WEEPHOLES SHALL BE PROVIDED AT APPROPRIATE LOCATIONS TO DRAIN ANY MOISTURE IN THE CONDUIT LINES.

CONDUITS SHALL BE SECURED TO THE BOTTOM OF SLAB WITH CLAMPS AT ABOUT 5'-0" CTS.

WIRING TO BE FURNISHED AND INSTALLED BY OTHERS.

424 456



NOTE: DIMENSIONS SHOWN ARE HORIZONTAL.

DETAILED AUG. 1990
CHECKED SEPT. 1990

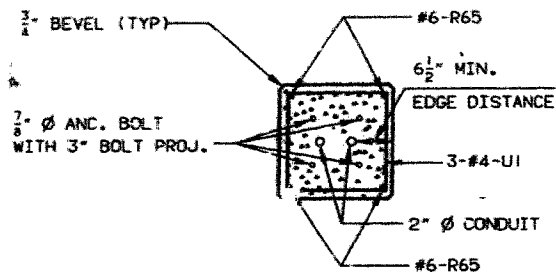
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 59 OF 66

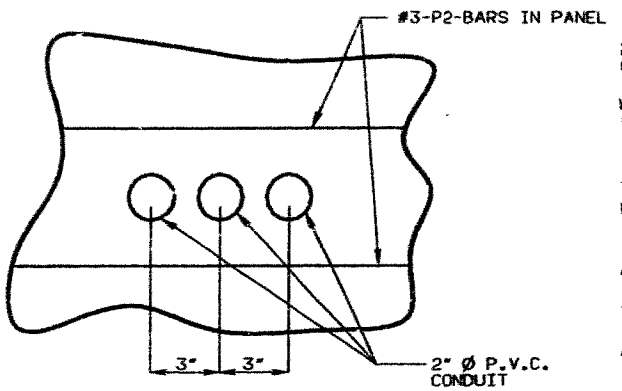
JACKSON COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		372

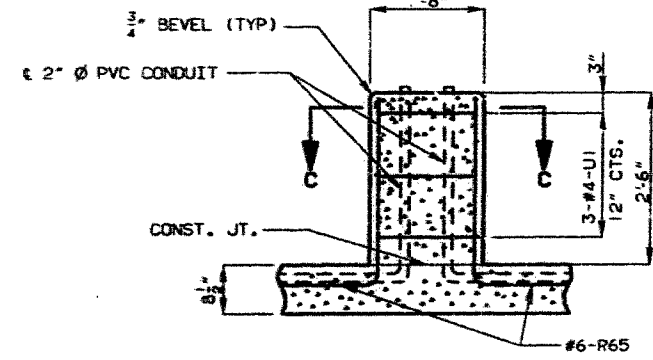


SECTION C-C



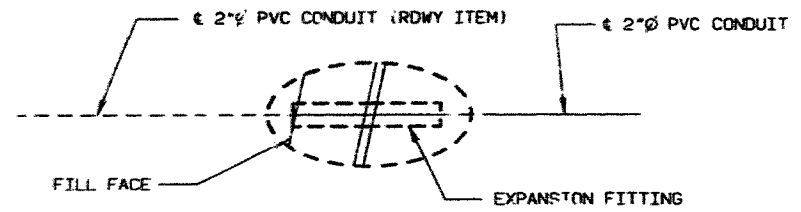
DETAIL SHOWING HOLES IN PRECAST PRESTRESSED PANELS

NOTE: COST OF FURNISHING AND PLACING ANCHOR BOLTS FOR LIGHT STANDARD SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PLANTER LIGHTING ON STRUCTURE.
 ALL CONDUIT SHALL BE RIGID NON-METALLIC SCHEDULE 40 HEAVY WALL PVC (POLYVINYL CHLORIDE PLASTIC) WITH 3" MINIMUM COVER IN CONCRETE. EACH SECTION OF CONDUIT SHALL BEAR THE UNDERWRITERS LABORATORIES, INC. (UL) LABEL.
 SHIFT REINFORCING STEEL IN FIELD WHERE NECESSARY TO CLEAR CONDUIT.
 TOP OF LIGHT STANDARD SUPPORTS SHALL BE MADE HORIZONTAL; ANCHOR BOLTS SHALL BE PLACED VERTICALLY. WEEP HOLES SHALL BE PROVIDED AT APPROPRIATE LOCATIONS TO DRAIN ANY MOISTURE IN THE CONDUIT LINES.
 THE JUNCTION BOXES SHALL BE P.V.C. MOLDED, FLUSH MOUNTED, SIZES AS SHOWN. THEY SHALL BE EQUAL TO "CARLON" ELECTRICAL CONSTRUCTION PRODUCTS OR "TRIANGLE CONDUIT AND CABLE CO. INC." THE CONDUIT TERMINATIONS AND COVERS SHALL BE OF WATER TIGHT CONST.
 EXPANSION FITTINGS SHALL PROVIDE A MINIMUM MOVEMENT IN EITHER DIRECTION OF 2" AND SHALL BE EQUAL TO "CARLON" ELECTRICAL CONSTRUCTION PRODUCTS OR TRIANGLE CONDUIT AND CABLE COMPANY INC.
 CONCRETE AND REINFORCEMENT FOR LIGHT SUPPORT STANDARD IS INCLUDED IN ESTIMATED QUANTITIES FOR ALTERNATE SLAB.
 LIGHT STANDARDS, WIRING AND FIXTURES SHALL BE FURNISHED AND INSTALLED BY OTHERS. (SEE SPECIAL PROVISION)

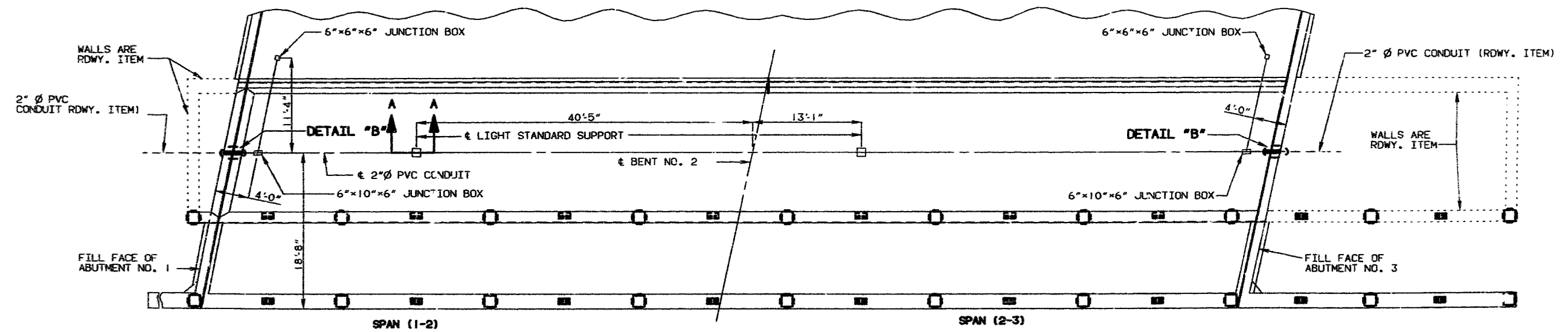


SECTION A-A

NOTE: ANCHOR BOLT PATTERN AND EMBEDMENT SHALL BE ACCORDING TO LIGHT POLE MANUFACTURER'S RECOMMENDATIONS. (SEE SPECIAL PROVISIONS)



DETAIL "B"



PLAN SHOWING LOCATION OF PLANTER LIGHT SUPPORTS

425 457

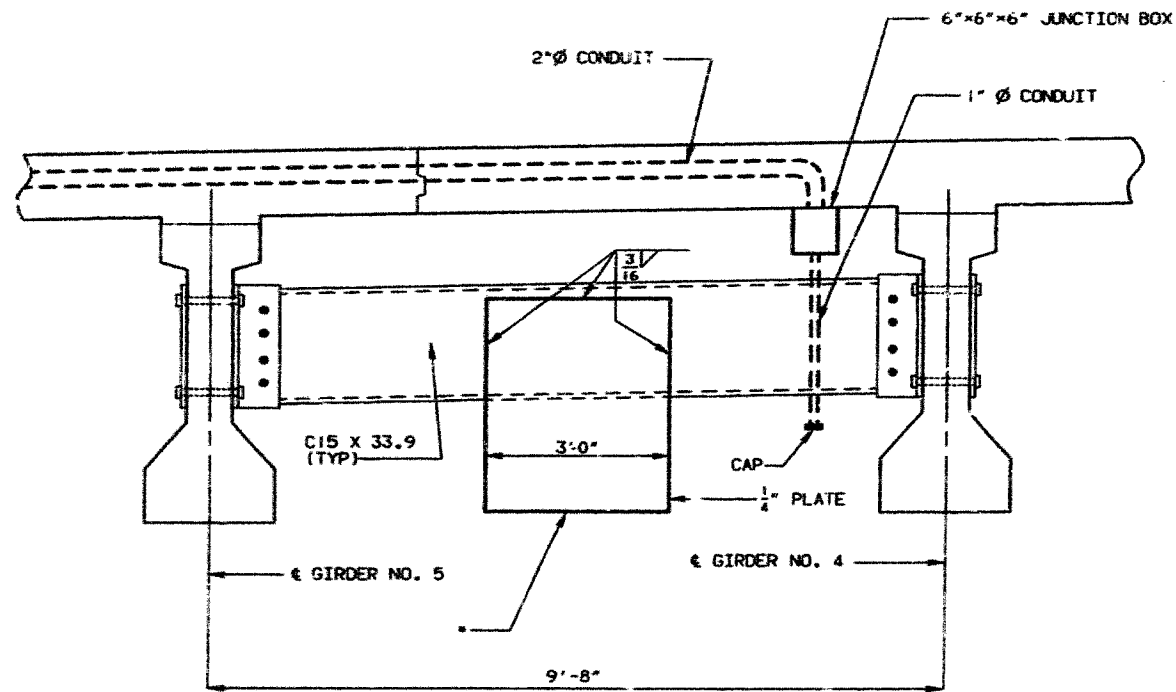
DETAILED OCT. 1990
 CHECKED OCT. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 60 OF 66

JACKSON COUNTY A-4861

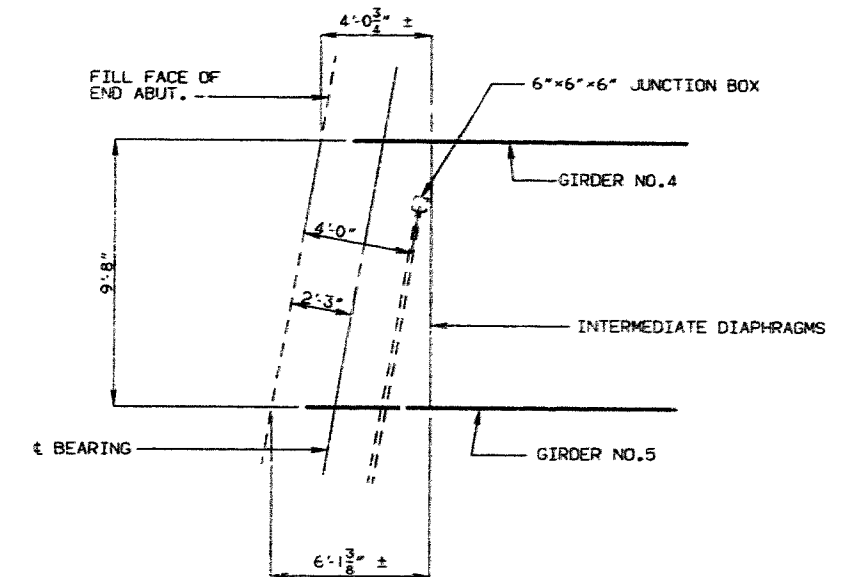
STATE	PROJ. NO.	SHEET NO.
NC.		215



* PLACE 1/4" PLATE EVEN WITH THE BOTTOM OF GIRDER NO. 4 AND CENTER BETWEEN GIRDER NO. 4 AND NO.5

PART SECTION SHOWING INTERMEDIATE DIAPHRAGM

NOTE: FOR DETAILS OF DIAPHRAGM NOT SHOWN SEE SHEET NO.42.



SPAN (1-2) (3-2)

NOTE: PLACEMENT OF ALL LUMINAIRES SHALL BE IN THE DIRECTION PRESCRIBED BY THE ENGINEER.

DETAILS OF UNDERDECK LIGHTING

426 458

DETAILED DEC. 1990
CHECKED DEC. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 61 OF 66

JACKSON

COUNTY

A-4861

COMPLETE BILL OF REINFORCING STEEL

COMPLETE BILL OF REINFORCING STEEL

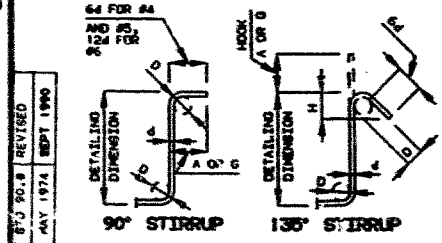
NO.	REV'D.	MARK NO.	LOCATION	EXPT. NO.	SHAPE NO.	NO. EACH	DIMENSIONS							NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT											
							B	C	D	E	F	H	K														
							FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	LBS.				
30		5017	BACKWALL				7	0.000						8	0									250			
5		4017	LEFT WING				6	8.000		7	1.000			5	9									29			
4		4018	LEFT WING				24	11.000						24	11									150			
64		5014	FOOTING				14	0.000		2	2.125		14	0.000							14.000				1157		
14		5016	BEAM				15	0.000		9	1.25			23	0										54		
INT. PT. NO. 2																											
17		5027	FOOTING				36	10.000						36	10										1180		
12		5028	FOOTING				35	1.000						35	1										1124		
52		5029	FTG. COL.				6	4.000						6	4										879		
46		5030	FOOTING				8	11.000						8	11										521		
264		5034	FOOTING				3	5.000						3	5										1355		
24		5035	BEAM				2	6.000						2	6										90		
7		5036	BEAM				35	0.000						35	0										572		
6		5037	BEAM				35	5.000						35	5										222		
8		5038	BEAM				36	1.000						36	1										226		
2		5039	BEAM				36	9.000						36	9										77		
10		5040	BEAM				36	9.000						36	9										751		
8		5041	BEAM				30	11.000						30	11										506		
12		5042	BEAM				30	9.000						30	9										385		
2		5043	BEAM				31	5.000						31	5										66		
10		5044	BEAM				33	7.000						33	7										686		
37		4029	WALLS				6	1.000						6	1										122		
30		4030	WALLS				15	11.000						15	11										319		
14		4031	WALLS				34	7.000						34	7										323		
16		4032	WALLS				32	6.000						32	6										347		
30		4033	WALLS				6	3.000						6	3										125		
14		4034	WALLS				14	2.000						14	2										132		
72		401	COLUMNS				2	9.000						9	6										457		
116		5020	BEAM				3	7.500		3	8.000		2	9.000			3	6.000		11.25		10	1	9	10	1190	
116		5021	BEAM					12.375		17.000		9.000			12.000		3.250		3	2	3	0	3	0	3	1	
116		5022	BEAM				2	0.100		4	6.000		2	0.000		4	6.000					13	11	13	7	1643	
58		5023	BEAM				15	5.000		5	1.000		15.500		15.000		4.000		15.000		4.000		7	8	7	6	454
8		4026	WALLS				6	5.000		18.000				7	11											42	
8		4025	WALLS				7	5.000		18.000				8	11											47	
74		4026	WALLS				6	5.000		21.000				14	7											713	
46		4027	WALLS				7	5.000		21.000				16	7											504	
20		4028	BEAM					6.000		5	8.000			6	8											87	
2		7029	BEAM					21.000		7	1.000			10	7											42	
2		70210	BEAM					21.000		6	5.000			9	11											39	
2		70211	BEAM					21.000		5	1.000			8	7											34	
2		70212	BEAM					21.000		3	9.000			7	3											28	
2		70213	BEAM					21.000		2	10.000			6	4											25	
52		RV200	COLUMNS				19	9.000						19	9											2742	

TWO ADDITIONAL #4-H309 ARE INCLUDED IN THE BAR BILL FOR TESTING.

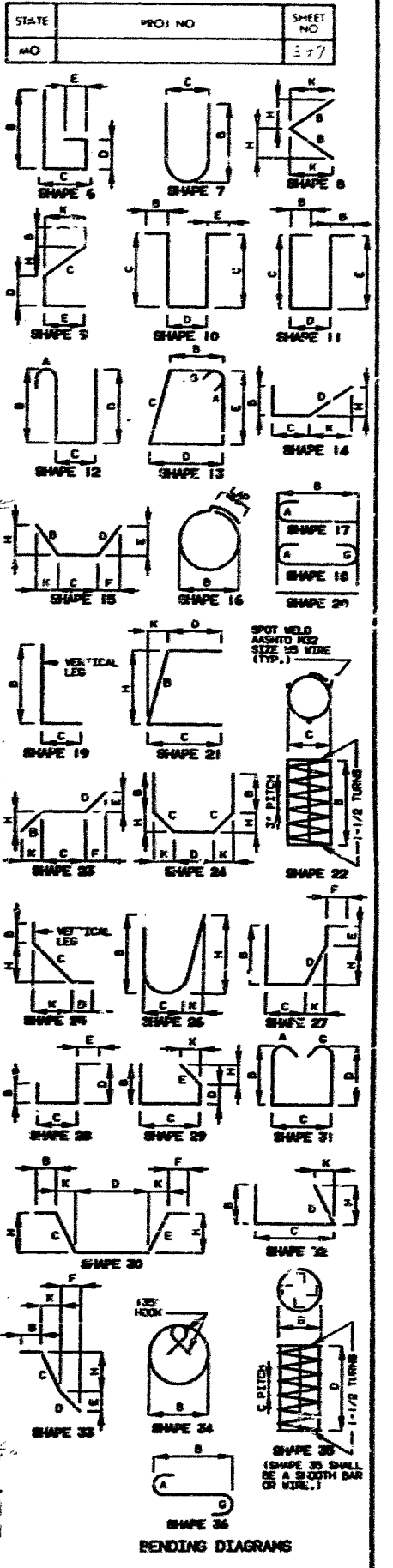
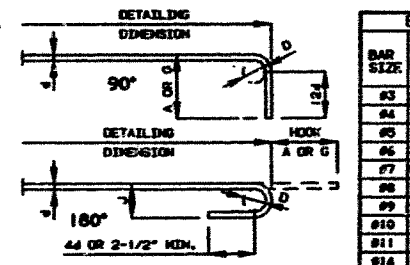
488 460

BAR SIZE (IN.)	D	100 HOODS	100 HOODS	100 HOODS
#3	2-1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3-3/4"	7"	5"	10"
#6	4-1/2"	8"	6"	12"
#7	5-1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	6-1/2"	13"	11-3/4"	19"
#10	7-3/4"	15"	13-1/4"	22"
#11	8-1/2"	17"	14-3/4"	25"
#12	9-1/4"	19"	16-3/4"	28"

NOTES:
 ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH THE SAME PROCEDURE AS FOR 90 DEG. STD. HOOKS.
 HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.
 E = EPOXY COATED REINFORCEMENT.
 S = STIRRUP.
 X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
 V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
 NO. EA. = NUMBER OF BARS OF EACH LENGTH.
 NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)
 ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
 PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.
 FOUR ANGLES OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED ON INSIDE OF SPIRALS. LENGTH AND WEIGHT OF COLUMN SPIRALS DO NOT INCLUDE SPLICES OR SPACERS.
 REINFORCING STEEL (GRADE 60) = F_y 60,000 PSI.



BAR SIZE (IN.)	D	GRADES 40 - 50 - 60 KSI		
		HYP HOOK	LWP HOOK	APPROX. H
#4	2"	4-1/2"	4-1/2"	3"
#5	2-1/2"	6"	5-1/2"	3-3/4"
#6	4-1/2"	12"	8"	4-1/2"



DETAILED Dec. 1930
 CHECKED Dec. 1930

Note: This drawing is not to scale. Follow dimensions.

COMPLETE BILL OF REINFORCING STEEL

COMPLETE BILL OF REINFORCING STEEL

NO. REQ'D.	MARK NO.	LOCATION	EPXY	SHAPE NO.	NO. EACH	DIMENSIONS							NOMINAL LENGTH FT. IN.	ACTUAL LENGTH FT. IN.	WEIGHT LBS.		
						B	C	D	E	F	H	K					
						FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.					
27	6W31	LEFT WING			1	21	3.000							21 8	21 8		
		INCREMENT =				23	3.000							23 3	23 3	675	
		1.000 INCH															
7	4W30	LEFT WING			23	3.000								23 3	23 3	78	
6	6W32	LEFT WING			19	7.000								19 7	19 7	176	
3	6W34	LEFT WING			19	7.000								19 7	19 7	59	
17	4W32	APRON			31	9.000								31 0	31 0	352	
17	4W32	APRON			36	9.000								36 9	36 9	417	
2	4W37	APRON			17	11.000								17 11	17 11	24	
6	6W37	BEAM			38	3.000								38 3	38 3	230	
6	6W38	BEAM			38	3.000								38 11	38 11	468	
6	4W32	BACKWALL			36	1.000								36 1	36 1	145	
1	4W37	TACKWALL			35	0.000								35 0	35 0	23	
3	6W37	BACKWALL			37	4.000								37 4	37 4	112	
2	4W37	TACKWALL			31	0.000								31 0	31 0	93	
1	4W34	BACKWALL			8	8.000								8 8	8 8	6	
6	4W35	BACKWALL			30	9.000								30 9	30 9	123	
8	6W36	BEAM			30	9.000								31 5	31 5	378	
4	6W37	BEAM			31	9.000								31 0	31 0	186	
34	5W37	APRON			1	3	1.000	12.125	3	1.250	6.875	7.000	7	2	7	2	
		INCREMENT =			4	0.000	12.125	3	1.250	6.875	7.000	8	1	8	1	270	
		0.375 INCH															
65	5W37	APRON			2	6.125	3	1.375		2	6.000	3.000	5	8	5	6	
12	5W37	APRON			37	4.000				37	4	37	4			467	
12	5W37	APRON			31	3.000				31	3	31	3			391	
34	5W37	WING						18.000						3	6	3	
21	5W37	APRON			1	4	0.000	12.125	3	1.250	9.875	7.000	8	1	8	1	
		INCREMENT =			4	10.000	12.125	3	1.250	9.875	7.000	8	11	8	11	275	
		0.375 INCH															
65	5W37	BEAM			2	11.000	2	8.125	3	2.000	2	8.000		12	4	12	0
43	4W31	APP. HAMPER						15.000						3	0	2	10
15	4W32	BEAM						6.000	2	8.000				3	8	3	6
9	4W30	MALL B			18	7.000								18 7	18 7	112	
13	4W31	MALL B			18	7.000								18 7	18 7	821	
8	4W32	MALL B			8	7.000								8 7	8 7	46	
1	4W33	MALL B			3	1.000	12.000							4	1	4	0
2	4W34	MALL B			3	9.000	12.000							4	9	4	8
1	4W35	MALL B			4	5.000	12.000							5	5	4	4
1	4W36	MALL B			4	9.000	12.000							5	9	5	8
1	4W37	MALL B			5	5.000	12.000							6	5	6	4
3	4W38	MALL B			13	1.000	12.000							14	1	14	0
1	4W39	MALL B			4	1.000	12.000							5	1	5	0
2	4W30	MALL B			4	9.000	12.000							5	9	5	8
1	4W31	MALL B			5	5.000	12.000							6	5	6	4
1	4W32	MALL B			6	1.000	12.000							7	1	7	0
1	4W33	MALL B			6	9.000	2.000							7	9	7	8
1	4W34	MALL B			8	6.000	12.000							9	6	9	5
2	6W35	MALL B			19	7.000								18	7	18	7
15	6W36	RIGHT WING			24	7.000								24	7	24	7
2	6W37	RIGHT WING			19	5.000								19	5	19	5

NO. REQ'D.	MARK NO.	LOCATION	EPXY	SHAPE NO.	NO. EACH	DIMENSIONS							NOMINAL LENGTH FT. IN.	ACTUAL LENGTH FT. IN.	WEIGHT LBS.				
						B	C	D	E	F	H	K							
						FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.							
2	4W310	RIGHT WING			5	3.000								5 3	5 3	7			
2	4W319	RIGHT WING			5	11.000								5 11	5 11	8			
2	4W320	RIGHT WING			6	11.000								6 11	6 11	9			
1	4W321	RIGHT WING			7	7.000								7 7	7 7	5			
1	4W322	RIGHT WING			8	3.000								8 3	8 3	6			
1	4W323	RIGHT WING			8	11.000								8 11	8 11	6			
16	4W324	LEFT WING			4	1.000	12.000							5	1	5	0		
13	10W325	LEFT WING			24	3.000								24	3	24	3		
13	4W326	LEFT WING			24	3.000								24	3	24	3		
2	6W327	LEFT WING			19	5.000								19	5	19	5		
131	6W328	APRON			17	7.000								17	7	17	7		
45	4W329	APRON			16	3.000								16	3	16	3		
67	5W330	APPROXIMATE						12.000	2	1.500	12.000	8.500	8.500	8.500	8.500	4	2	4	1
94	5W331	TACKWALL			5	11.000								5 11	5 11	580			
32	5W332	TACKWALL			7	11.000								7 11	7 11	264			
14	6W31	A-B WELLS						15.000		9.125				23	0	23	0		
		SUPPER STRUCTURE																	
		C.I.P. OPTION																	
252	651	SLAB			41	11.000								41 11	41 11	15866			
19	652	SLAB			1	2	6.000							2 8	2 8	631			
		INCREMENT =			41	7.000								41 7	41 7	631			
		26.000 INCH																	
17	653	SLAB			1	5	5.000							5 5	5 5	580			
		INCREMENT =			40	0.000								40 0	40 0	580			
		25.875 INCH																	
7	654	SLAB			1	15	4.000							15 4	15 4	96			
		INCREMENT =			3	0.000								3 0	3 0	96			
		24.625 INCH																	
264	655	SLAB			15	3.000								15 3	15 3	6047			
5	656	SLAB			1	13	3.000							13 3	13 3	67			
		INCREMENT =			4	7.000								4 7	4 7	67			
		26.000 INCH																	
268	657	SLAB			12	11.000								12 11	12 11	5199			
5	658	SLAB			1	11	2.000							11 2	11 2	51			
		INCREMENT =			2	6.000								2 6	2 6	51			
		26.000 INCH																	
5	659	SLAB			1	2	7.000							2 7	2 7	52			
		INCREMENT =			11	3.000								11 3	11 3	52			
		26.000 INCH																	
162	5510	SLAB			43	0.000								43 0	43 0	7266			
104	7511	SLAB			26	10.000								26 10	26 10	5704			
214	5513	SLAB			41	2.000								41 2	41 2	9188			
16	5514	SLAB			1	39	11.000							39 11					

STATE	PROJ. NO.	SHEET NO.
MO.		117

GENERAL NOTES:

DESIGN SPECIFICATIONS: A.A.S.H.T.O.-1989
LOAD FACTOR DESIGN
A.A.S.H.T.O.-1983 GUIDE SPECIFICATIONS
FOR SEISMIC DESIGN
SEISMIC PERFORMANCE CATEGORY A

DESIGN LOADING:
HS20-44 MODIFIED 24,000# TANDEM AXLE
35#/'SQ. FT. FUTURE WEARING SURFACE
EARTH 120#/'CU. FT., EQUIVALENT FLUID PRESSURE 45#/'CU. FT.

DESIGN UNIT STRESSES:
CLASS B CONCRETE (SUBSTRUCTURE) F'C=3,000 PSI.
CLASS B1 CONCRETE (PARAPET AND CURB) F'C=4,000 PSI.
CLASS B2 CONCRETE (SUPERSTRUCTURE EXCEPT PRESTRESSED GIRDERS AND PARAPET AND CURB) F'C=4,000 PSI.
CLASS A1 CONCRETE F'C=5,000 PSI, PRECAST CONCRETE (SEE SPECIAL PROVISIONS)
REINFORCING STEEL GRADE 60) F_y=60,000 PSI.
STRUCTURAL CARBON STEEL F_y=36,000 PSI.
STAINLESS STEEL (A.S.T.M. A276) F_y=40,000 PSI
STRUCTURAL STEEL TUBING (A.S.T.M. A-300) GRADE B F_y=46,000 PSI
STEEL PILE F_b=9,000 PSI.
FOR PRESTRESSED GIRDER STRESSES, SEE SHEET NO. 33

FABRICATED STEEL CONNECTIONS:
FIELD CONNECTIONS, HIGH STRENGTH BOLTS 3/4"Ø. HOLES 13/16"Ø.
EXCEPT AS NOTED.

REINFORCING STEEL:
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2". UNLESS OTHERWISE SHOWN.
ALL REINFORCING BARS IN TOPS OF SUBSTRUCTURE BEAMS OR CAPS SHALL BE SPACED TO CLEAR ANCHOR BOLTS FOR BEARINGS BY AT LEAST 1/2".

LAMINATED NEOPRENE BEARING:
BEARINGS SHALL BE 60 DUROMETER NEOPRENE PADS.

PAINT:
FOR PAINTING OF STRUCTURAL STEEL AND ORNAMENTAL STEEL SEE SPECIAL PROVISIONS.
AREAS TO BE ENCASED IN END BENT CONCRETE SHALL BE PAINTED ONE COAT OF SYSTEM C PRIMER AND SCRATCHED OR DAMAGED SURFACES ARE TO BE TOUCHED UP IN THE FIELD BEFORE CONCRETE IS POURED.

JOINT FILLER:
ALL JOINT FILLER SHALL MEET THE REQUIREMENTS OF STD. SPEC. 1057.2.4.
EXCEPT AS NOTED.

NOTE: ALL STEEL SHALL BE A-36 EXCEPT AS NOTED.

ESTIMATED QUANTITIES				
ITEM		SUBSTR.	SUPERSTR.	TOTAL
CLASS I EXCAVATION	CU. YD.	2228.5		2228.5
STRUCTURAL STEEL PILE (10")	LIN. FT.	826		826
STRUCTURAL STEEL PILES (12")	LIN. FT.	3378		3378
PREBORE FOR PILING	LIN. FT.	2098		2098
CLASS B CONCRETE (SUBSTR.)	CU. YD.	960.4		960.4
PROTECTIVE COATING-CONCRETE BENTS(DELETERIOUS AGENTS)	LUMP SUM			-
SLAB ON CONCRETE I-GDR.	SG.YDS.		900	900
LEFT PARAPET AND CURB	LIN.FT.		147	147
RIGHT CURB AND PLANTED WALL	LIN.FT.		125	125
RIGHT PLANTER WALL	LIN.FT.		115	115
PLANTER WALLS AT END ABUTMENTS	LIN.FT.		66	66
WING WALL AT ABUTMENT NO. 1	LIN. FT.		48	48
LAMINATED NEOPRENE BEARING PADS	EACH		14	14
COMPRESSION EXP. JT. SEAL (2.5 IN.)	LIN. FT.		93	93
PRESTRESSED CONCRETE I-GDR. (60' SPAN)	EACH		14	14
REINFORCING STEEL (GRADE 60)	LB.	88,180		88,180
REINFORCING STEEL (GRADE 60) EPOXY	LB.	4,060		4,060
CONDUIT SYSTEM ON STRUCTURE(1-1/2"Ø)(4"Ø)	LUMP SUM			-
PLANTER LIGHTING ON STRUCTURE	LUMP SUM			-
LIGHTING CONDUIT(2"Ø)	LUMP SUM			-
FABRICATED STRUCTURAL CARBON STEEL(MISC.)	LB.		12020	12020
PLANTER DRAIN SYSTEM	LUMP SUM			-
VERTICAL DRAINS AT END ABUTMENTS	EACH		2	2
PAINTING	LUMP SUM			-
PEDESTRIAN HANDRAIL	LIN.FT.		43	43
PRECAST COLUMN	EACH		20	20
TRELLIS	LUMP SUM			-
MASONRY PROTECTION SYSTEM	LUMP SUM			-
GRAFFITI PROTECTION SYSTEM	LUMP SUM			-
FASCIA BRICK, CONCRETE BLOCK AND CMU BLOCK	SQ.FT.	4754		4754
ORNAMENTAL FENCE PANEL (8'-11")	EACH		14	14
ORNAMENTAL FENCE PANEL (8'-5-1/8")	EACH		4	4
SIDEWALK PAVING BRICK	SQ.FT.		0	0
LAMINATED NEOPRENE BEARING PADS (P/S STRUCTURE)	EACH		14	14
CONTINGENT ITEMS:				
PILE TIP REINF.	EACH	173		173

THE COST OF FURNISHING, FABRICATING AND INSTALLING LAMINATED NEOPRENE BEARING PADS, COMPLETE-IN-PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR LAMINATED NEOPRENE BEARING PADS PER EACH. PAYMENT FOR PARAPET AND CURB AND PLANTER WALL SHALL INCLUDE BRICK VENEER, PRECAST CAP, REINFORCING STEEL, AND CONCRETE COMPLETE-IN-PLACE, PER LIN. FT.

CONCRETE ABOVE UPPER CONSTRUCTION JOINT IN BACKWALL AT END ABUTMENTS NO. 1 AND NO. 3 IS INCLUDED WITH CLASS B (SUBSTRUCTURE) QUANTITIES.

THE COST OF PAINTING FASCIA GIRDER, PED. RAIL, TRELLIS AND ORNAMENTAL FENCE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PAINTING LUMP SUM.(SEE SPECIAL PROVISIONS).

FOR SIDEWALK PAVING BRICK REQUIREMENTS SEE SPECIAL PROVISIONS.

ITEMS TO BE GALVANIZED SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A123 AND A.S.T.M. A153 (SEE SPECIAL PROVISIONS).

ESTIMATED QUANTITIES FOR ALTERNATE SLABS			
TYPE OF SLAB	REINF. (LBS.)		CONC. (CU. YD.)
	EPOXY	PLAIN	
CAST-IN-PLACE CONVENTIONAL FORMS	70,170	2,230	245.0
PRECAST PANEL FORMS	64,570	2,230	204.9

NOTE: THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS REPRESENTS THE QUANTITIES USED BY THE STATE IN PREPARING THE COST ESTIMATE FOR CONCRETE SLABS. VARIATIONS MAY BE ENCOUNTERED IN THESE ESTIMATED QUANTITIES BUT THESE VARIATIONS CANNOT BE USED FOR AN ADJUSTMENT IN THE CONTRACT UNIT PRICE PER SQUARE YARD OF ALTERNATE SLAB USED.
SEE SPECIAL PROVISIONS FOR ALTERNATE METHODS OF FORMING SLABS

PRECAST PANEL QUANTITIES ARE BASED ON SKEWED END PANELS.

• BASED ON MINIMUM TOP FLANGE THICKNESS AND MINIMUM JOINT FILLER THICKNESS.

B.M. ELEV. 942.13 □ CURB INSIDE WING EAST END E.B. MEYER BRIDGE

PILE DATA								
BENT NO.	1	WALL "D"		2	3	WALL "B"		
PILE TYPE AND SIZE	HP12x53	HP12x53		HP10x42	HP12x53	HP12x53		
NUMBER	48	8	5	5	38	56	8	5
APPROXIMATE LENGTH FT.	16	21	26	30	14	16	23	31
DESIGN BEARING TONS	64	42	29	20	52	64	41	19
HAMMER ENERGY REQUIRED FT.-LBS.	15,700	10,400	7300	7000	12,200	15,700	10,200	7,000

NOTE: MINIMUM ENERGY REQUIREMENT OF HAMMER IS BASED ON PLAN LENGTH AND DESIGN BEARING VALUE OF PILES.

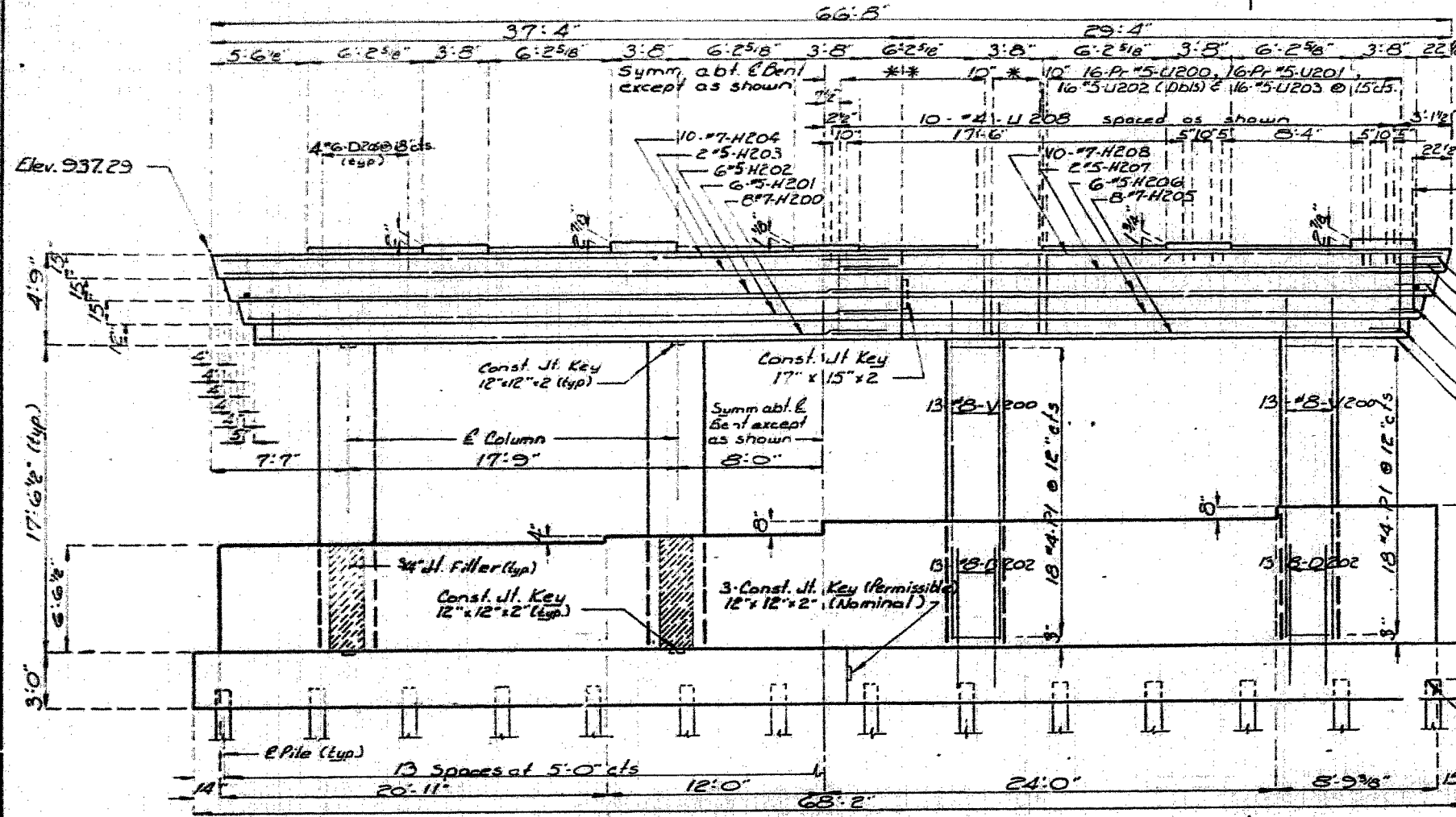
ALL PILES SHALL BE DRIVEN TO PRACTICAL REFUSAL.
MANUFACTURED PILE POINT SHALL BE USED ON ALL PILES IN THIS STRUCTURE.
SEE SPECIAL PROVISIONS.

PREBORE FOR PILES AT ABUT. NO.1, BENT NO. 2, AND ABUT. NO. 3 TO ELEVATIONS 904.0, 902.0, AND 904.0 RESPECTIVELY.

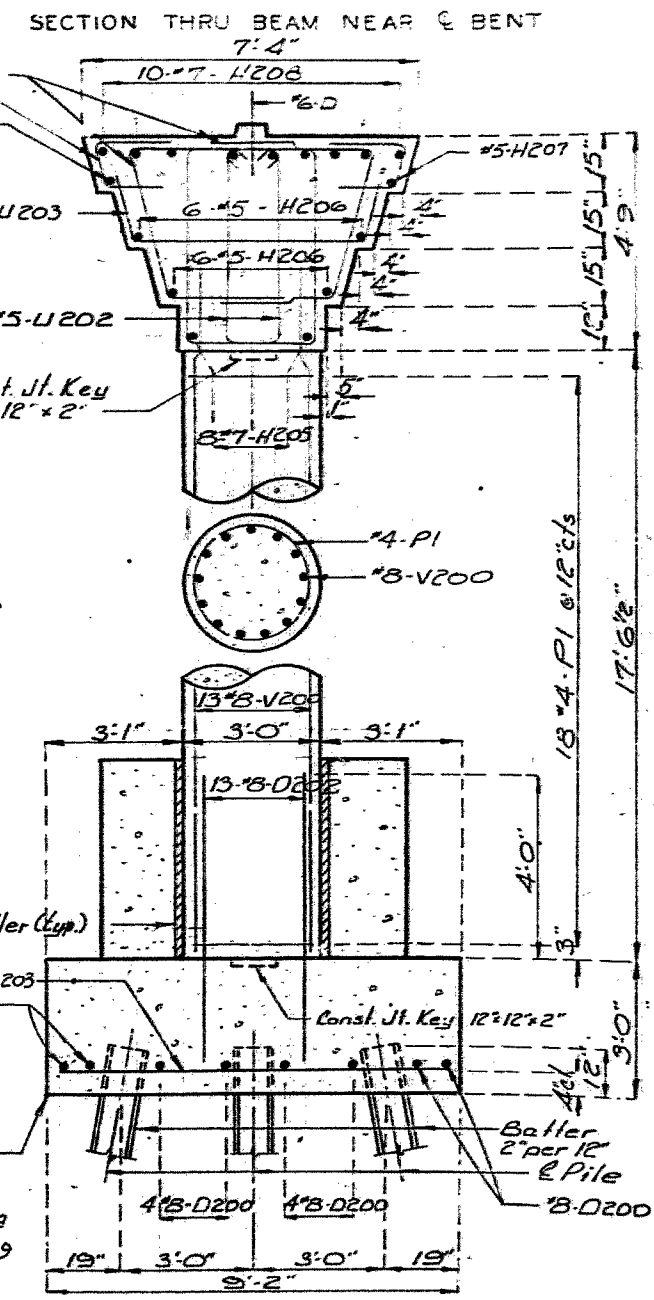
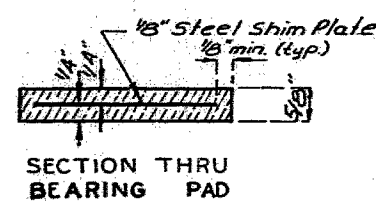
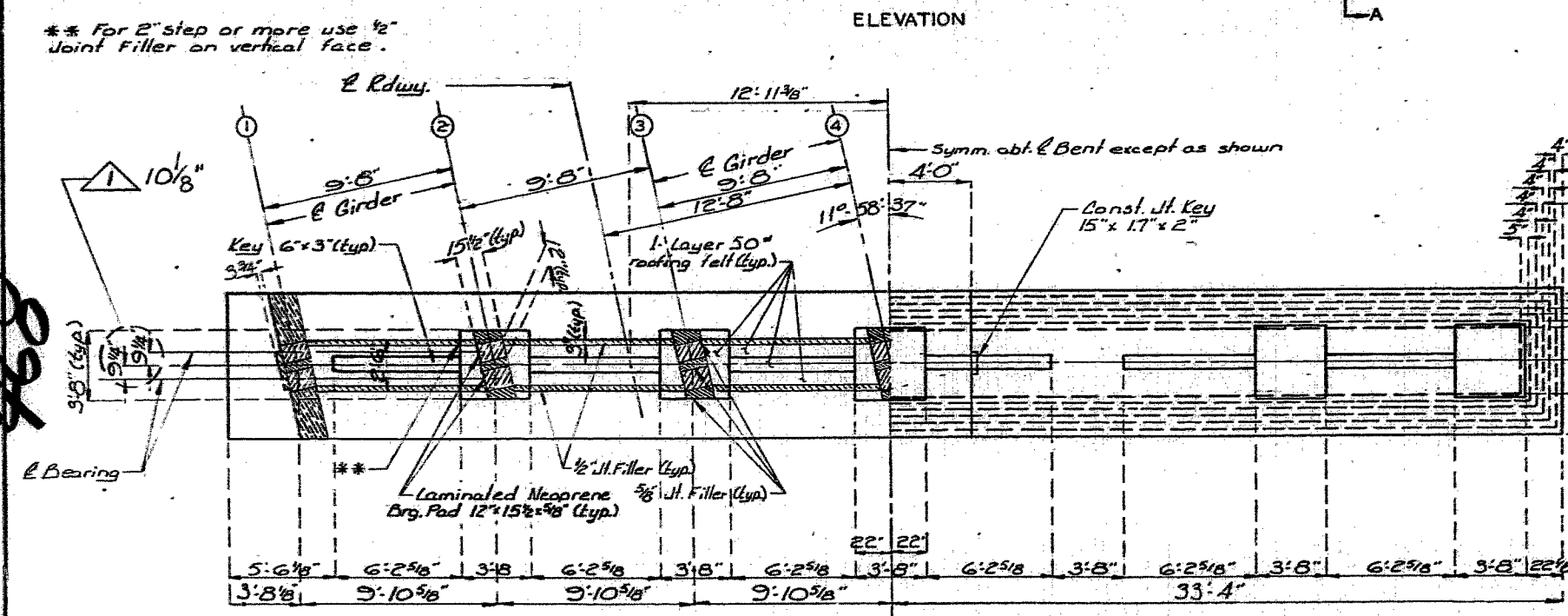
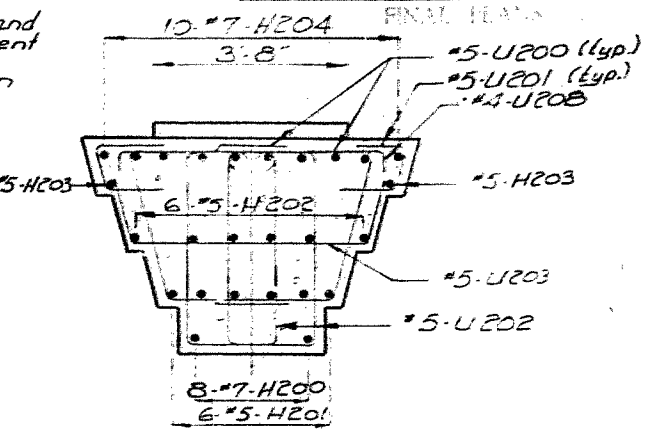
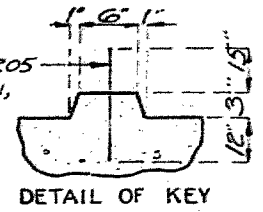
5082-469

4-F #5-U200, 7-F #5-U201, 7-F #5-U202 (DBS), 7-F #5-U203 @ 15' c/s
* 6-F #5-U200, 6-F #5-U201, 6-F #5-U202 (DBS) & 6-F #5-U203 @ 5' c/s

DATE	PROJ. NO.	SHEET NO.
		352



Note: For Plan of Footing and details of footing reinforcement see sheet No. 17
For Half Plan of Beam showing Reinforcement see sheet No. 17



Note: For Detail of Steel Pile Splice see sheet No. 5.
For Details of Masonry Facing and Reinforcement of Masonry support wall see sheet No. 19

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DETAILED July 1990
CHECKED Nov. 1990

Note: This drawing is not to scale. Follow dimensions.

DETAILS OF INTERMEDIATE BENT NO. 2

Sheet No. 18A of 66

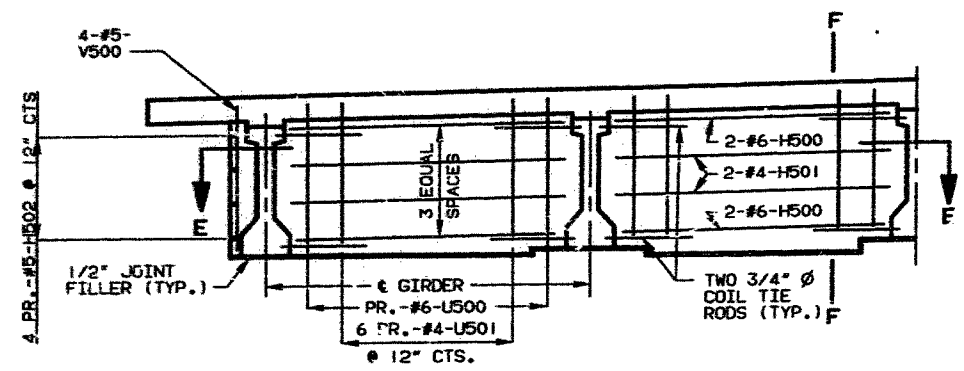
Revised 6/7/91

JACKSON COUNTY

A-4861

STATE	PROJ. NO.	SHEET NO.
MO.		376

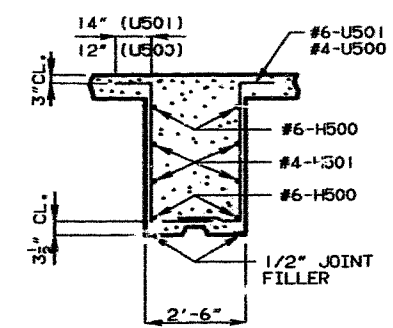
FINAL PLANS



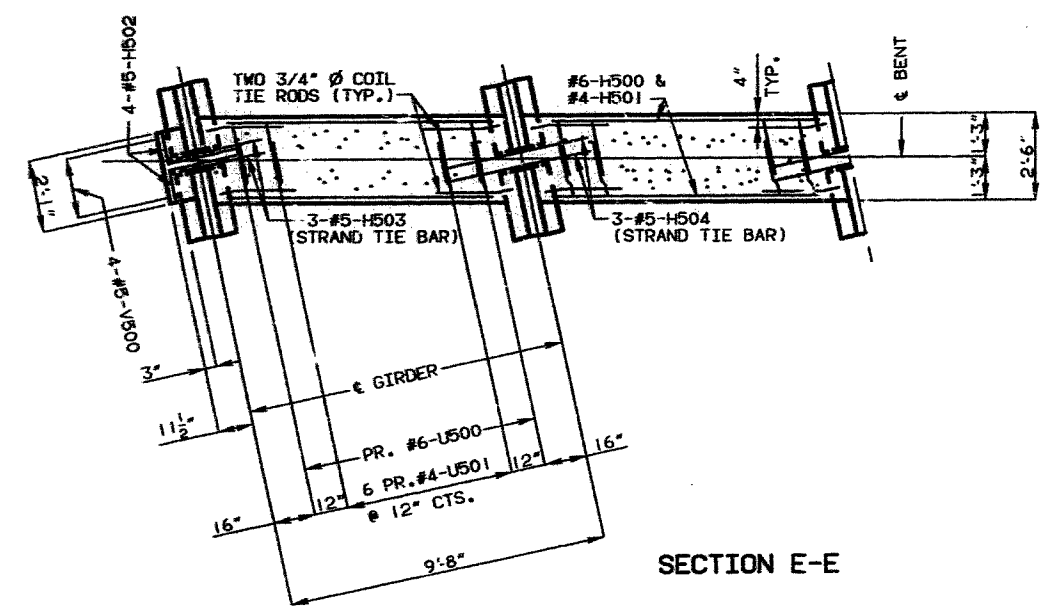
HALF SECTION NEAR INTERMEDIATE BENT

NOTE: FOR LOCATION OF H503 & H504 (STRAND TIE BARS) OF INT. BENTS SEE GIRDER SHEET NO.33.

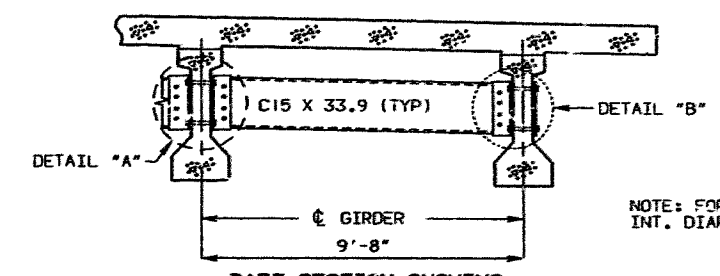
NOTE: DIAPHRAGMS AT INTERMEDIATE BENT ARE VERTICAL.



SECTION F-F



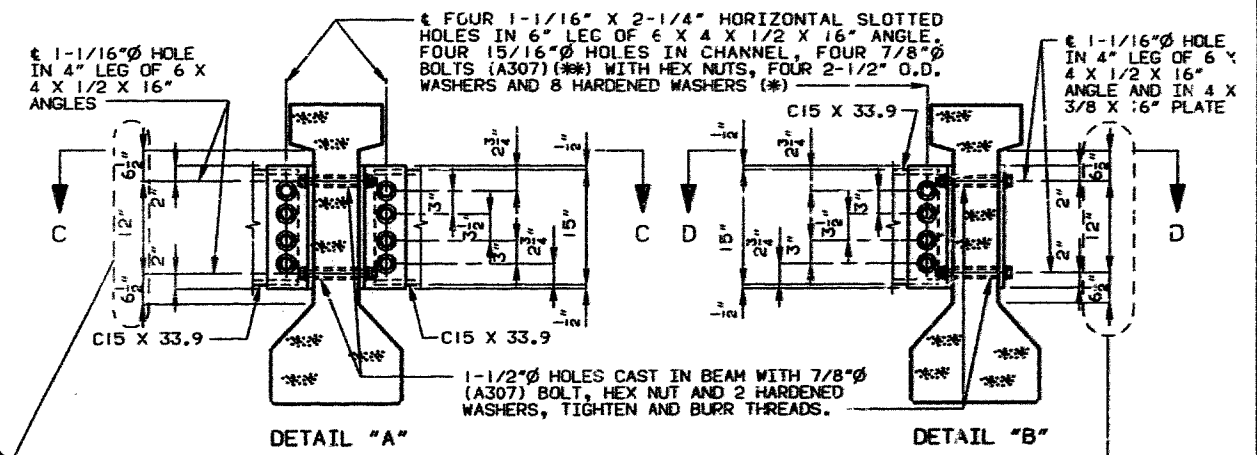
SECTION E-E



PART SECTION SHOWING INTERMEDIATE DIAPHRAGMS

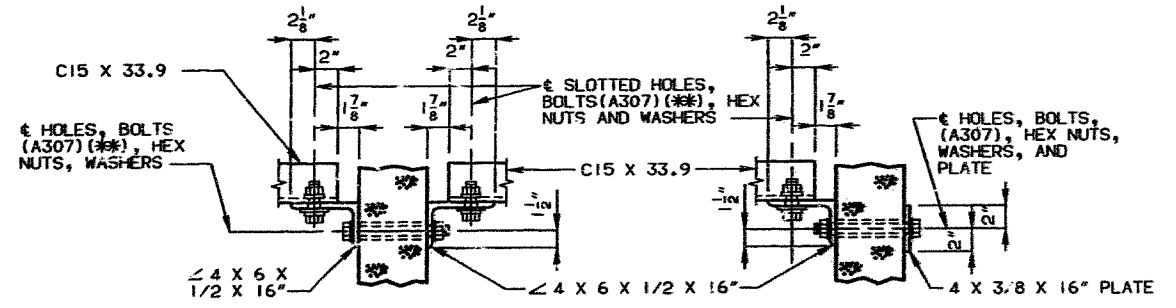
NOTE: FOR LOCATION OF STEEL INT. DIAPH. SEE SHEET NO.33.

FOR DIAPHRAGMS OF UNDERDECK LIGHTING ONLY
FOR INTERMEDIATE DIAPHRAGMS ONLY



DETAIL "A"

DETAIL "B"



SECTION C-C

SECTION D-D

STEEL DIAPHRAGM NOTES:

- (*) IN LIEU OF 2 1/2" O.D. WASHERS, CONTRACTOR MAY SUBSTITUTE A 3/16" (MIN. THICKNESS) PLATE WITH FOUR 15/16" HOLES AND 1 HARDENED WASHER PER BOLT.
- (**) THESE BOLTS SHALL BE TIGHTENED TO PROVIDE A TENSION OF ONE-HALF THAT SPECIFIED BY SECTION 712.10.2 OF THE MISSOURI STANDARD SPECIFICATIONS
- ALL DIAPHRAGM MATERIALS INCLUDING BOLTS, NUTS, AND WACHERS SHALL BE GALVANIZED.
- FABRICATED STRUCTURAL STEEL SHALL BE A36 EXCEPT AS NOTED.
- PAYMENT FOR FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED IN CONTRACT UNIT PRICE FOR PRESTRESSED CONCRETE I-GIRDERS.
- SHOP DRAWINGS WILL NOT BE REQUIRED FOR STEEL INTERMEDIATE DIAPHRAGMS AND ANGLE CONNECTIONS.

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DETAILED JULY 1990
CHECKED AUG. 1990

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.