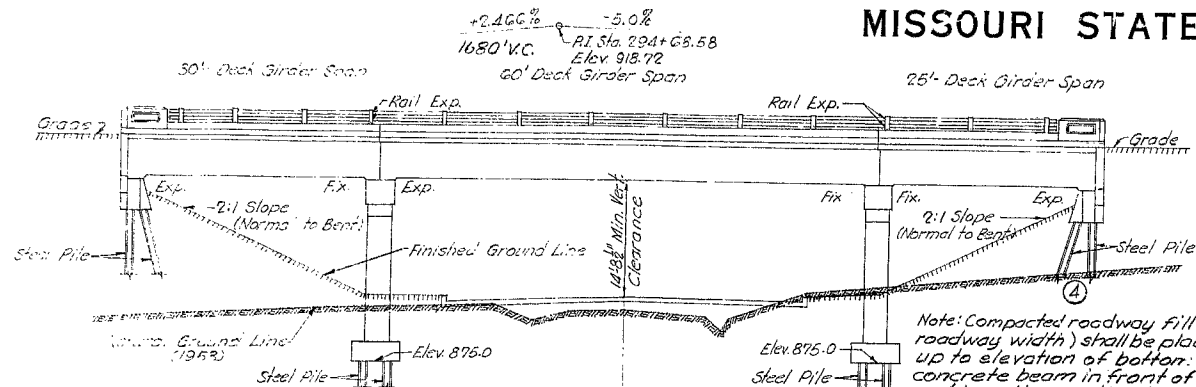


MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	11-99(6)	19		

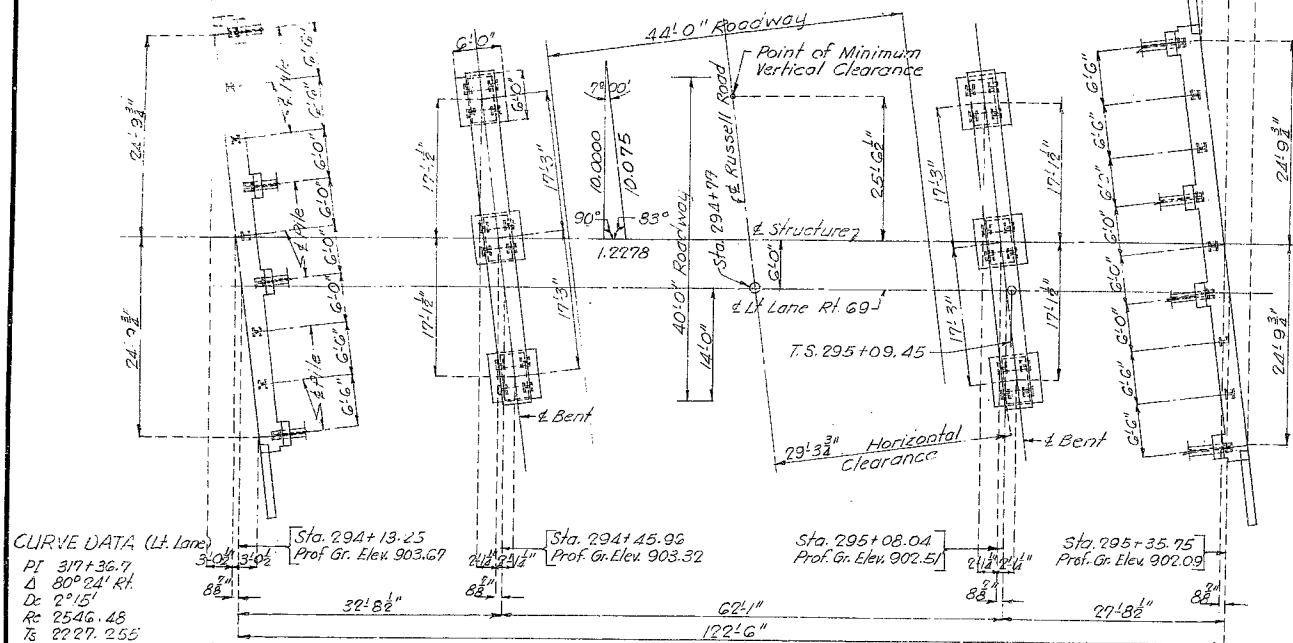


GENERAL ELEVATION

Note: All piling shall be 12" Bearing Pile at 53" and shall conform with details and notes on S.D. No. 2 of design plans. All Steel Pile required for this structure will be furnished by the State. See Special Provisions.

All piles shall be driven to or into solid rock, boulders, shale, or cemented gravel or to not less than full length authorized and to sustain a load of at least 46 ton per pile. All piles shall be driven with a steam hammer.

Note: Compacted roadway fill (Full roadway width) shall be placed up to elevation of bottom of concrete beam in front of and not less than 25' back of End Bents 1 and 4 before steel piles are driven.



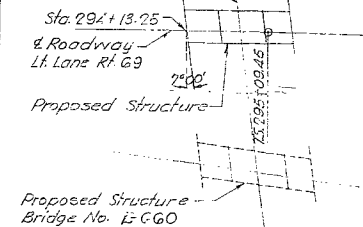
CURVE DATA (L.F. Lane)

PI 317+36.7
 Δ 80° 24' R.
 Dc 2° 15'
 R 2546.48
 Ts 2227.255
 Ls 150.00
 K 15.0
 P .37
 SE .04 1/4 H.

GENERAL NOTES:

Design Specifications A.A.S.H.O. 1953
 Loading H20-S16-44
 Reinforcing Steel Stress 18,000 psi
 Class B Concrete Stress 1,000 psi
 All concrete shall be Class B (Air Entrained)
 Where joint filler is specified on plans it shall conform with the requirements for Gray Rubber Compound Joints as given in section 38-198(2) of the Standard Specifications.
 For requirements on welding electrodes see Special Provisions.
 Surfaces of piles at Bents No. 1 & 4 from bottom of concrete cap to 3'0" below bottom of concrete cap shall be painted with one coat of an approved brand of emulsified asphalt paint. Payment for excavating around piles to 3'0" below bottom of cap and backfilling same, furnishing emulsified asphalt paint and cleaning and painting steel surfaces specified will be included in the unit price bid for other items.
 A rubbed surface finish will be required on all exposed surfaces of concrete end posts above top of curbs.

LOCATION SKETCH



COMPLETE BILL OF REINFORCING STEEL

No.	Size	Length	Mark	Location
END BENTS NO. 1 & 4				
6	#4	12'0"	H1	Wing
20	#6	10'0"	H2	"
4	#6	7'0"	H3	"
32	#7	23'0"	H4	Beam
16	#6	28'0"	H5	"
8	#6	14'0"	T1	Wing
8	#6	12'0"	T2	"
184	#5	7'0"	U1	Beam
64	#7	8'9"	U2	"
16	#7	8'3"	U3	"
16	#7	8'0"	U4	"
28	#4	3'3"	U5	"
12	#	11'3"	V1	Wing
20	#6	9'0"	V2	"
32	#4	8'9"	V3	Beam
INT. BENTS NO. 2 & 3				
48	#2	1'3"	D1	Footling
48	#6	7'6"	D2	"
32	#6	8'6"	F1	Col. Haunch
16	#6	8'6"	F2	"
28	#9	12'3"	G1	Beam
8	#6	21'9"	G2	"
26	#11	22'6"	G3	"
16	#10	22'3"	G4	"
93	#3	10'9"	P1	Col. 18" 2' 45" Bt.
72	#5	12'9"	U6	Beam
40	#5	10'9"	U7	"
24	#4	1'3"	U8	"
48	#3	19'3"	V4	Column
SUPERSTRUCTURE				
240	#4	10'9"	B1	Gir. Sp. (1-2) 8(3-4)
235	#4	11'9"	B2	" " (2-3)
15	#11	34'6"	B3	" " (1-2)
4	#9	36'9"	B4	" " "
6	#10	36'9"	B5	" " "
3	#10	29'9"	B6	" " "
30	#11	47'3"	B7	Gir. Sp. (2-3)
30	#11	72'0"	B8	" " "
30	#11	52'3"	B9	" " "
30	#11	19'0"	B10	" " "
15	#11	52'3"	B11	" " "
15	#11	45'8"	B12	" " "
10	#11	38'0"	B13	" " "
10	#11	31'0"	B14	" " "
15	#11	29'6"	B15	Gir. Sp. (3-4)
6	#8	31'9"	B16	" " "
50	#6	4'3"	B17	" (2-3)
40	#6	3'9"	B18	" (1-2) 8(3-4)
210	#4	3'9"	C1	Curb
244	#5	4'6"	C2	"
10	#5	27'6"	C3	Curb. Sp. (1-2)
BENDING SKETCHES & CUTTING DIAGRAMS				
Superstructure (Cont'd)				
20	#5	32'3"	C4	Curb. Sp. (2-3)
10	#5	22'6"	C5	Curb. Sp. (3-4)
4	#5	7'3"	C6	Flare Curb
4	#5	8'6"	C7	"
4	#5	6'0"	C8	"
12	#4	6'0"	R1	End Post
12	#4	6'9"	R2	"
56	#4	3'9"	R3	"
432	#5	23'9"	S1	Slab
63	#5	27'0"	S2	Slab Sp. (1-2) 8(3-4)
53	#5	23'6"	S3	" " "
58	#6	24'6"	S4	Slab
8	#5	25'3"	S5	Slab Sp. (1-2) 8(3-4)
10	#5	27'3"	S6	" " "
4	#5	35'9"	S7	Slab Sp. (1-2)
5	#5	33'3"	S8	" " "
220	#5	32'3"	S9	Slab Sp. (2-3)
56	#5	5'0"	S10	Slab Flare
4	#5	31'0"	S11	Slab Sp. (3-4)
5	#5	32'6"	S12	" " "
84	#5	27'3"	S13	" " "
53	#6	27'6"	S14	Slab Sp. (2-3)
53	#6	23'3"	S15	" " "
10	#5	28'9"	S16	" " "
8	#5	25'6"	S17	" " "
16	#6	41'0"	W1	Webs
8	#6	23'9"	W2	End Web Sp. (1-2) 8(3-4)
4	#8	41'0"	W3	" " (2-3)
12	#8	22'3"	W4	" " "
48	#4	20'3"	W5	Webs
72	#5	8'3"	W6	End Web Sp. (1-2) 8(3-4)
48	#5	12'0"	W7	" " "
20	#5	12'0"	W8	" " "
96	#4	13'3"	W9	Int. Web
128	#5	10'0"	W10	End Web

ESTIMATED QUANTITIES

Item	Substr.	Super str.	Total
Class I Excavation for Structures Cu. Yds.	150	150	
Class B Concrete Cu. Yds.	132.9	363.4	496.3
Reinforcing Steel Lbs.	20,120	84,870	104,990
Gray Iron Alloy Castings Lbs.		3610	3610
Aluminum Alloy Handrail Lin. Ft.		215	215
Steel Piling in Place (State furnished) Lin. Ft.	1232		1232

B.M. #1 Elev. 878.52 R.R. Spike in. W. side T.P. 10' L.F. Sta. 281+76 R.F. Lane.

BRIDGE OVER RUSSELL ROAD

STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E. ABOUT 2 MILES NORTH OF NORTH KANSAS CITY

PROJECT NO. UI-99(6) (RT. 69) STA. 294+13.25 (LEFT LANE)

CLAY COUNTY

FINISHED

SUBMITTED BY *J. A. Williams* DATE 6/10/1954
 APPROVED BY *Res. McWhorter* DATE 6/10/1954

FINISHED

Sheet No. 1 of 7

SEE FINAL PLANS BROWN-LINES

FINISHED

STO C-10 R3

L-659

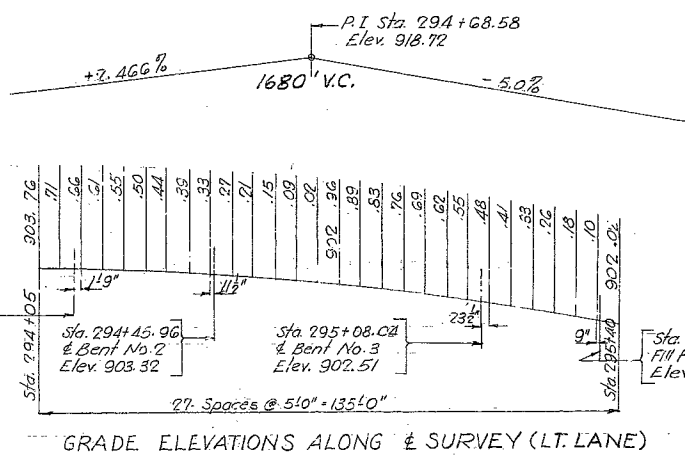
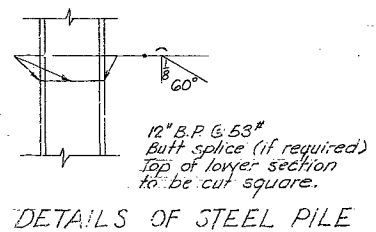
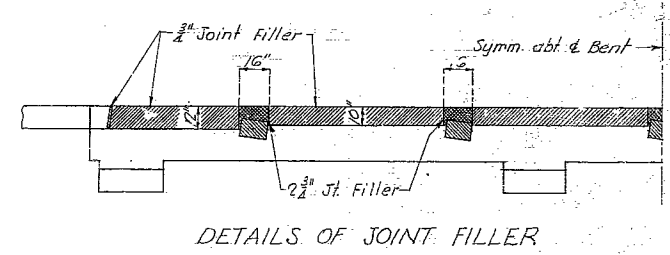
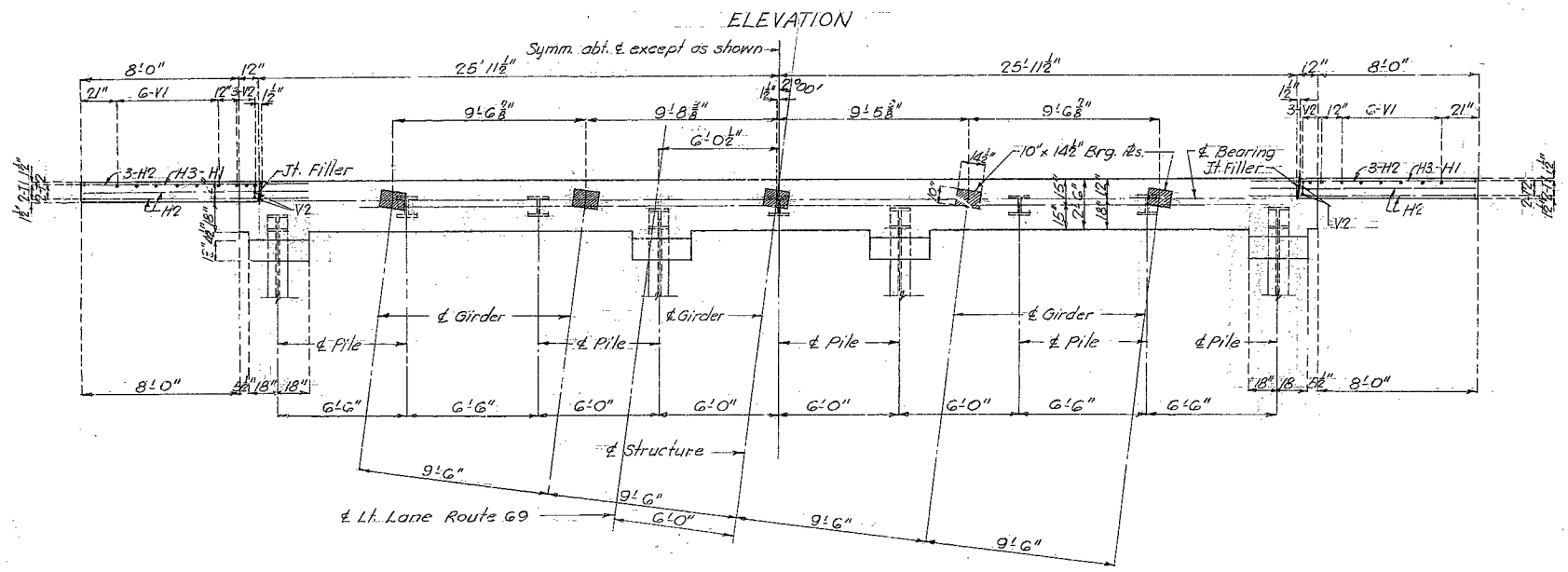
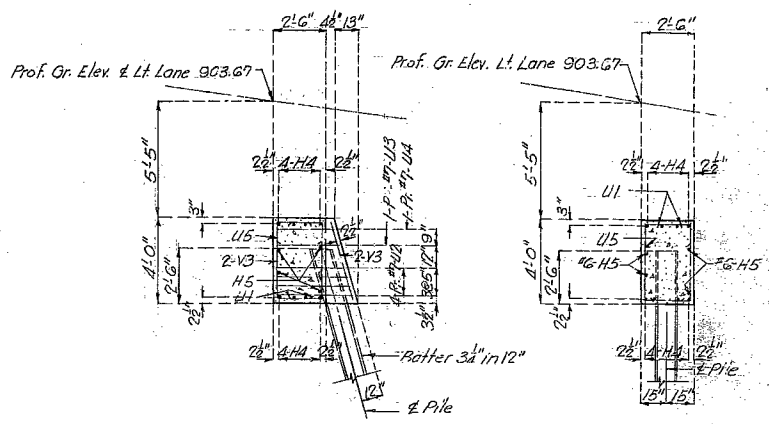
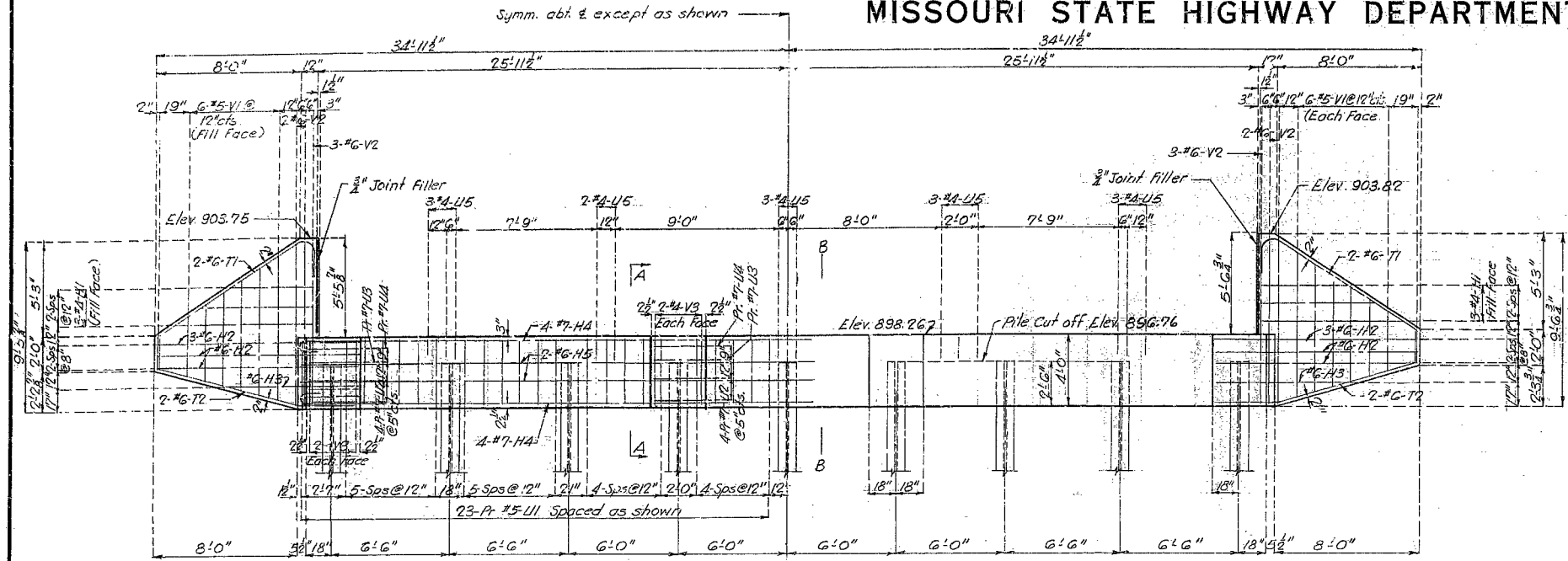
Drawn April 1954 by M.E.L.
 Checked May 1954 by J.E.L.

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

12

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	11-99(6) (RT. 69)	19		



BRIDGE OVER RUSSELL ROAD
STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. U1-99(6) (RT. 69) STA. 294+13.25 (LEFT LANE)
COUNTY

Drawn April 1954 by M.E.L.
Checked May 1954 by J.E.L.

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

Sheet No. 2 of 7.

FINISHED CLAY

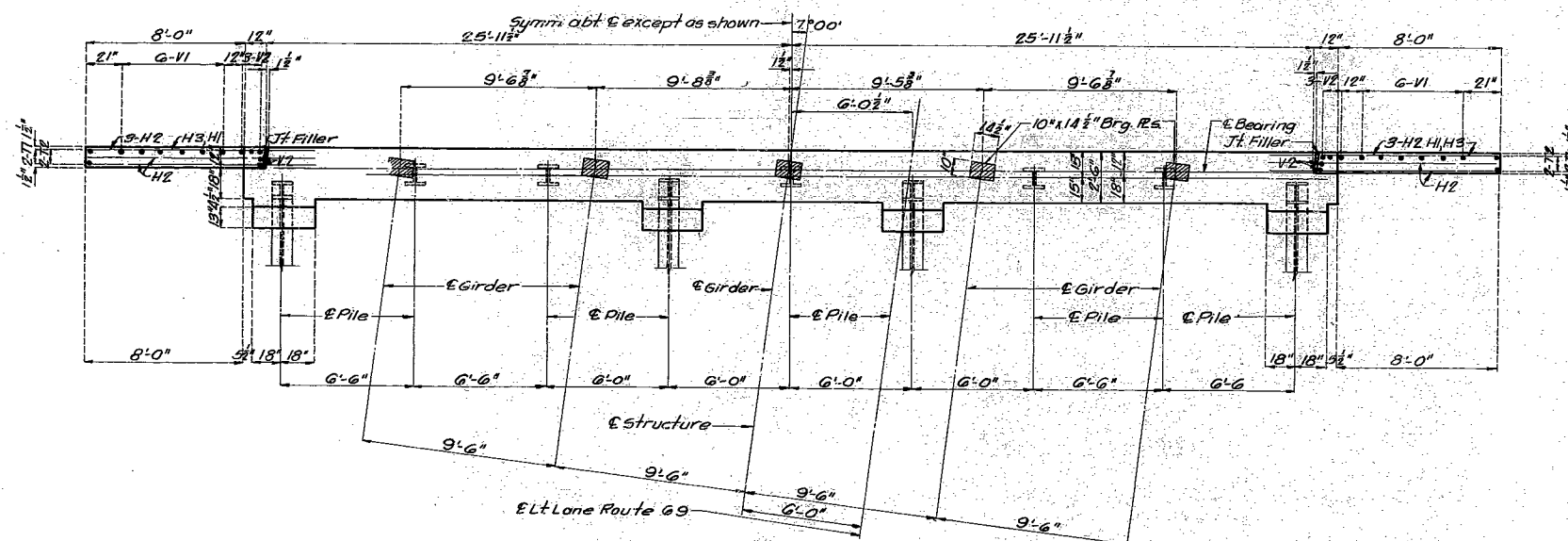
FINISHED

FINISHED
L-659

NO CONSTRUCTION CHANGES

[illegible]

SECTION BB



Technical drawing of a symmetrical bent joint. The drawing shows a cross-section of a joint with a central gap. The joint is labeled "Joint Filler" and "2 3/4" Filler". The joint is symmetrical about a central axis, labeled "Symm. abt. & Bent". The joint is bent, with the top and bottom sections labeled "16\"".

DETAILS OF JOINT FILLER

DETAILS OF END BENT NO. 4

STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6) (RT.69) STA. 294+13.25 (LEFT LANE)

COUNTY

1. *Staphylococcus aureus*

Note: This drawing is not to scale. Follow Dimensions

Sheet No. 4 of 7

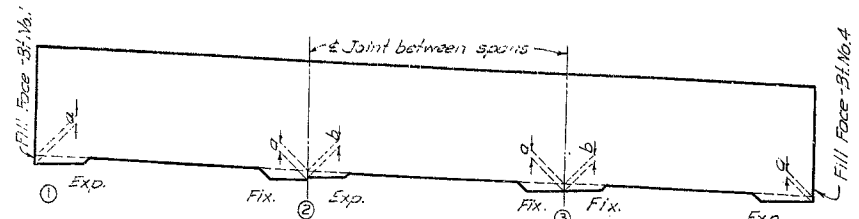
NO CONSTRUCTION CHARGES

L-659

L-659

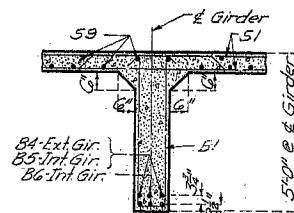
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	UI-99(6) (RT. 69)	19		

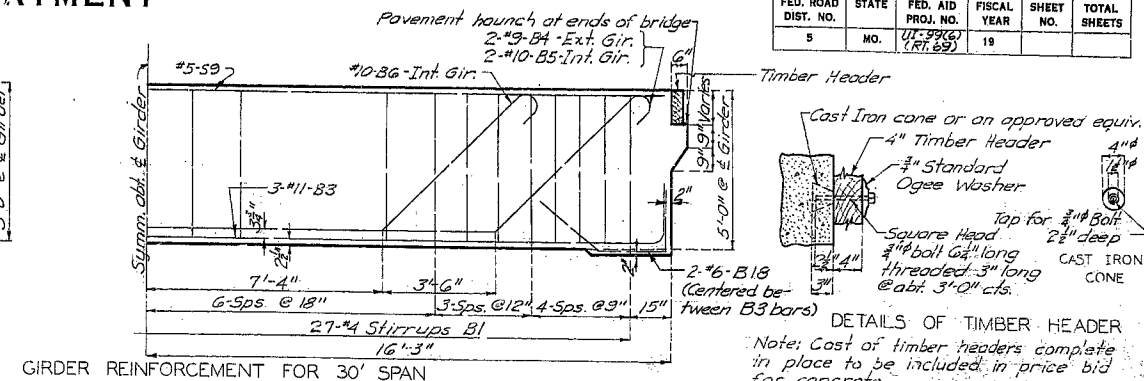


DETAILS OF GIRDER HAUNCHES

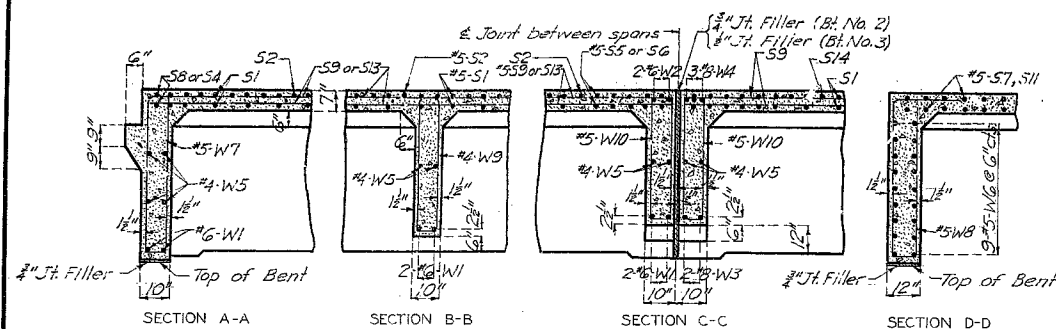
Girder	GIRDER HAUNCHES			
	Bl. No. 1	Bl. No. 2	Bl. No. 3	Bl. No. 4
1	1"	1"	1"	1"
2	2"	2"	2"	2"
3	3"	3"	3"	3"
4	4"	4"	4"	4"
5	5"	5"	5"	5"



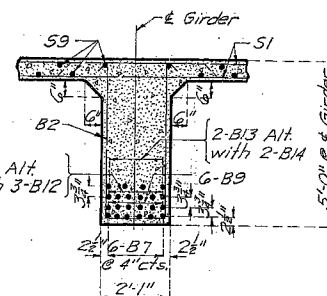
SECTION THRU GIRDER



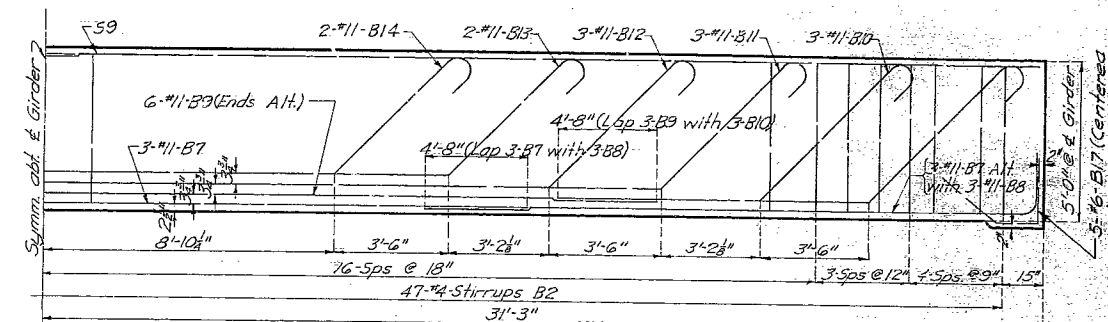
GIRDER REINFORCEMENT FOR 30' SPAN



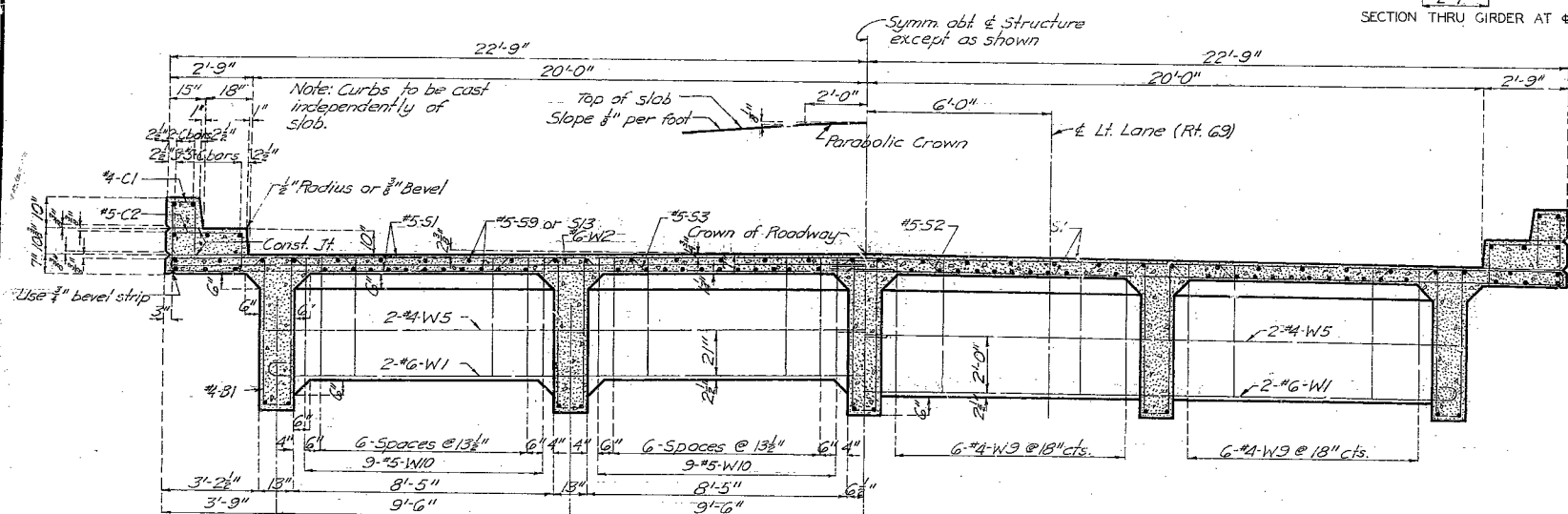
PART LONGITUDINAL SECTION
Note: See sheet 6 of 7 for location of sections.



SECTION THRU GIRDER AT

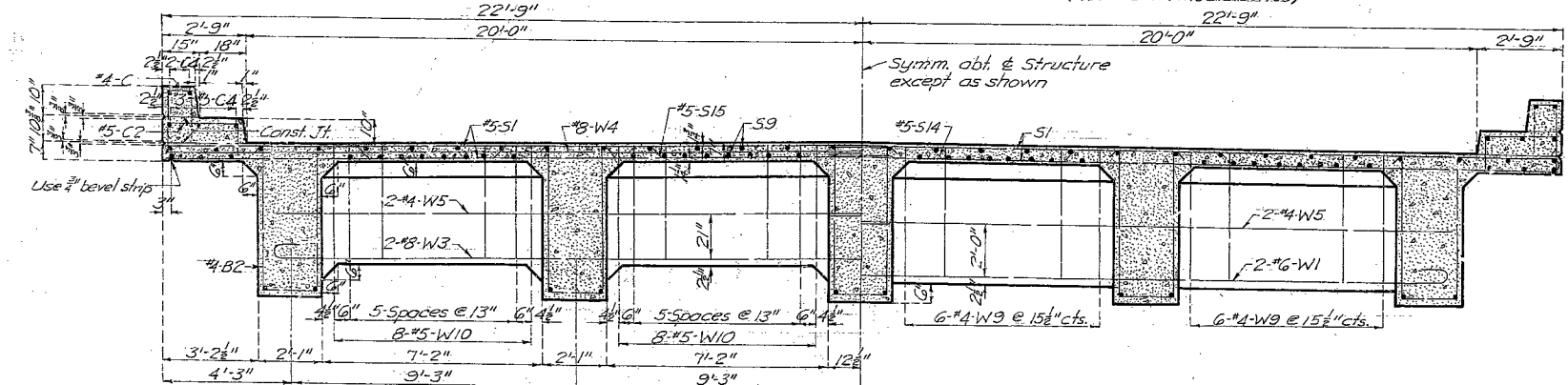


GIRDER REINFORCEMENT FOR 60' SPAN



HALF SECTION THRU SPANS (1-2) & (3-4)
(Near Intermediate Bent)

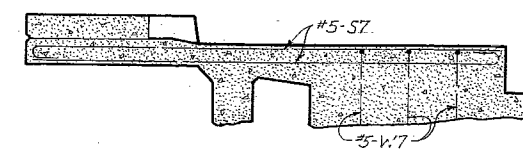
HALF SECTION THRU SPANS (1-2) & (3-4)
(Near Intermediate Web)



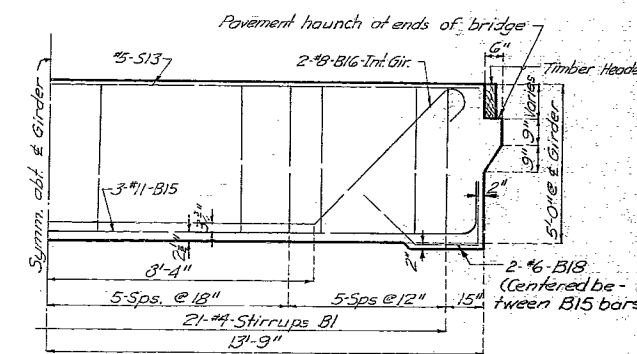
HALF SECTION THRU SPAN (2-3)
(Near Intermediate Bent)

HALF SECTION THRU SPAN (2-3)
(Near Intermediate Web)

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

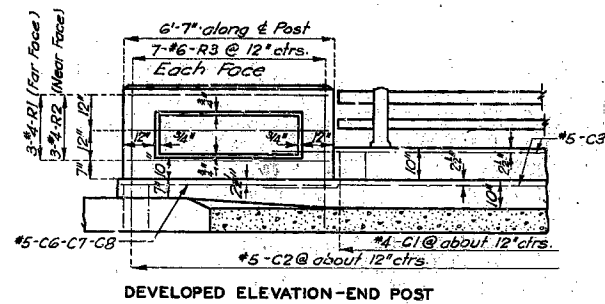


PART SECTION E-E
Note: See sheet 6 of 7 for location of section

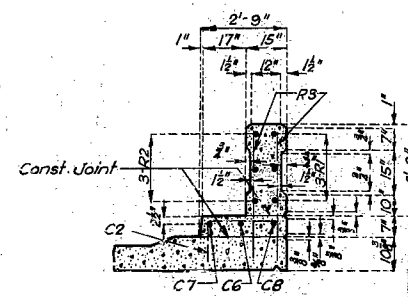


GIRDER REINFORCEMENT FOR 25' SPAN

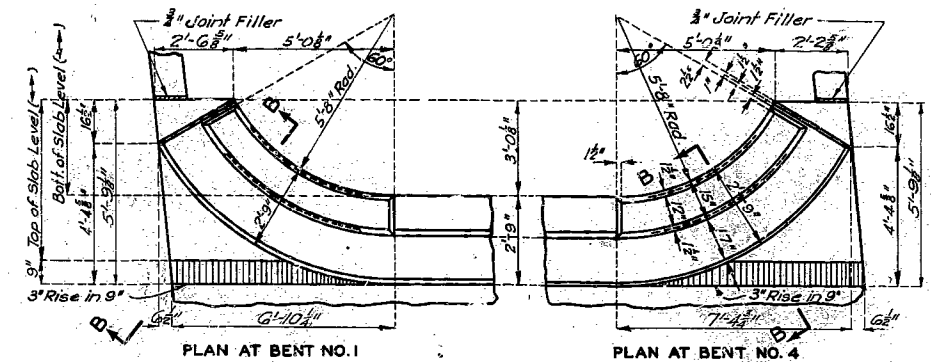
BRIDGE OVER RUSSELL ROAD
STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6)(RT. 69) STA. 294+13.25 (LEFT LANE)
CLAY COUNTY FINISHED



DEVELOPED ELEVATION-END POST



SECTION B-B



PLAN AT BENT NO. 1

PLAN AT BENT NO. 4

END VIEW

4 1/2"

3 1/2"

17" Rad.

Cast Aluminum Post

Fillet

Anchor Bolts

1/2" x 12" Steel Anchor Bolts, sq. heads, washers and hex. nuts. All galvanized.

Roadway face of curb

ELEVATION

1/2"

1/8"

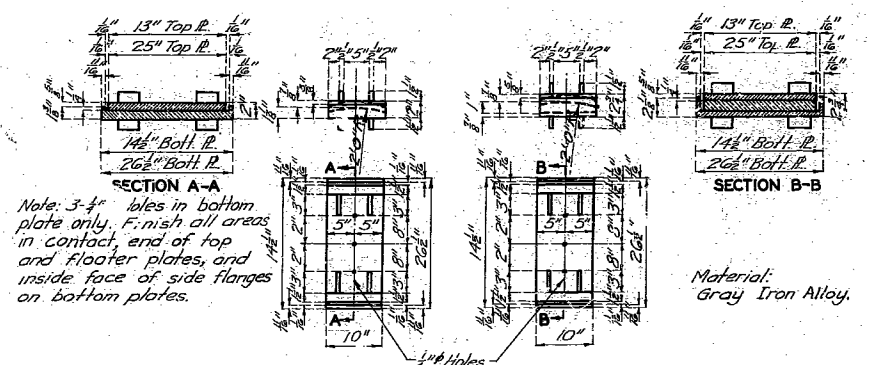
17" Radius

End Post

Aluminum Tube

Burr Threads

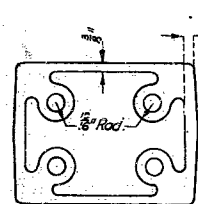
ELEVATION



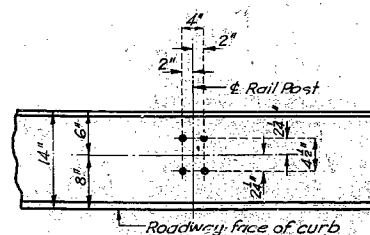
Material:
Gray Iron Alloy.

FIXED END	EXP. END
GRAY IRON ALLOY BEARING PLATES	

Note: Bearing plates to be furnished in sets. Each set consisting of 1 top and 1 bottom plate for fixed end and 1 top plate, 1 floatier plate and 1 bottom plate for expansion end.
Required: 10 Sets 10" x 13" plates.
5-Sets 10" x 25" plates.



SECTION A-A



TYPICAL ANCHOR BOLT PLAN
DETAILS OF HANDRAIL

Note: All parts of hindrail except steel anchor bolts and their washers and nuts to be aluminum. Bolt holes in tubes to be 1/4" x 1/4" slotted holes centered on both ends. Ambient temperature of 55° except, at expansion posts where holes shall be 1/4" x 1/4" slots.

Aluminum washer shims between Fabreka pad and post base may be used for adjusting rail alignment. Maximum thickness of shim to be 3/4". Where more tilting of post is required for proper alignment, concrete bearing area shall be ground down.

Drawn Apr. 1954 By M.H.P.
Traced Apr. 1954 By M.H.P.
Checked May 1954 By J.E.L.

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

Sheet No. 7 of 7

NO CONSTRUCTION CHANGES

BRIDGE OVER RUSSELL ROAD

STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6) (RT. 69) STA. 294+13.25(LEFT LANE)

FINISHED CLAY

COUNTY

FINAL

五、五、五

L-659

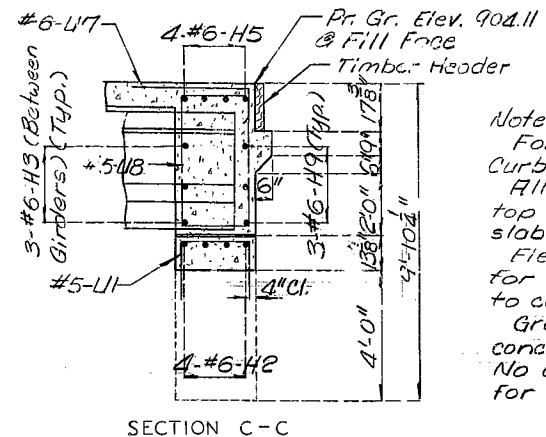
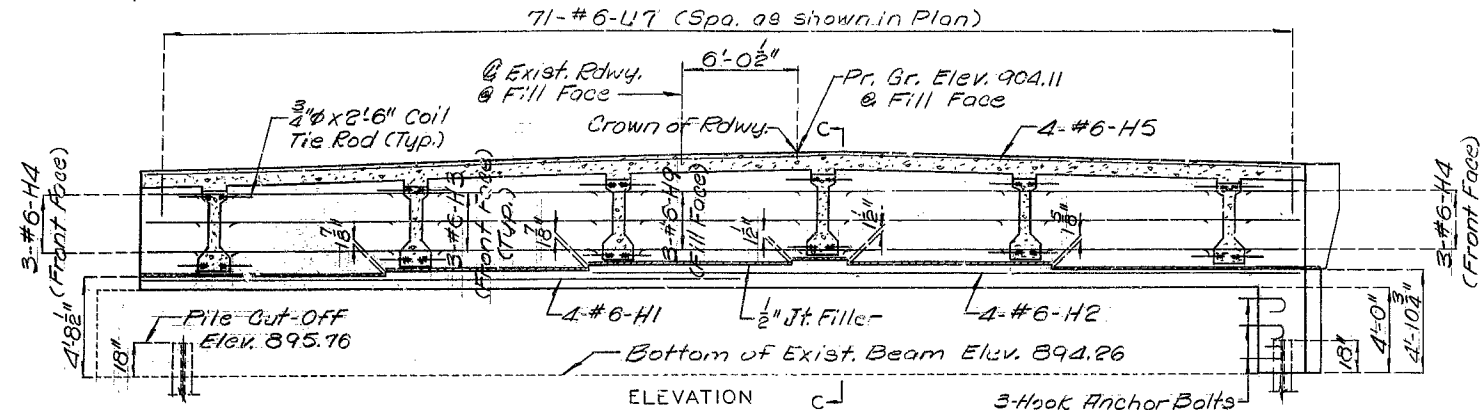
503

DESIGNED AUG. 19 81
 DETAILED NOV. 19 81
 CHECKED DEC. 19 81

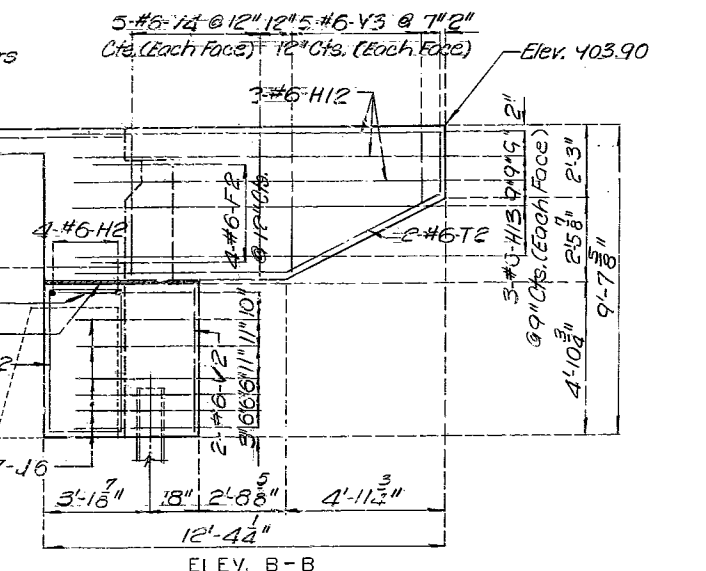
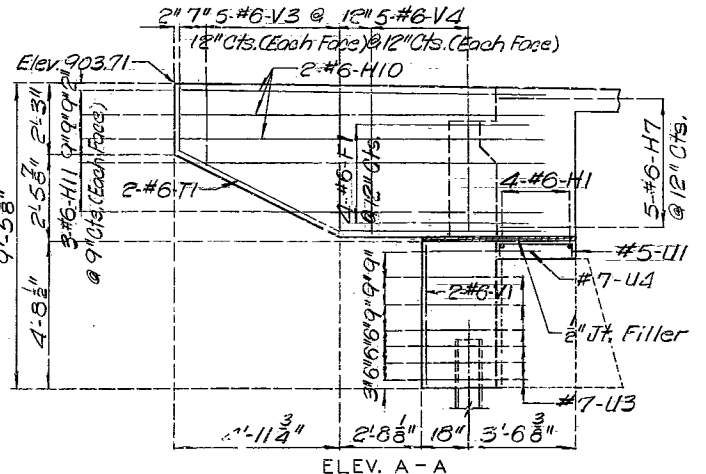
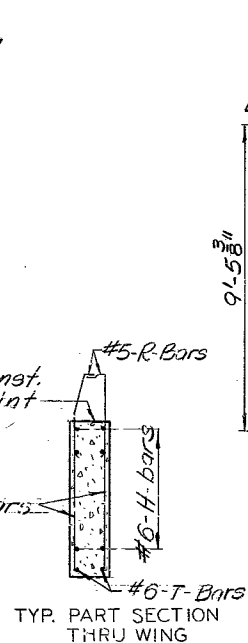
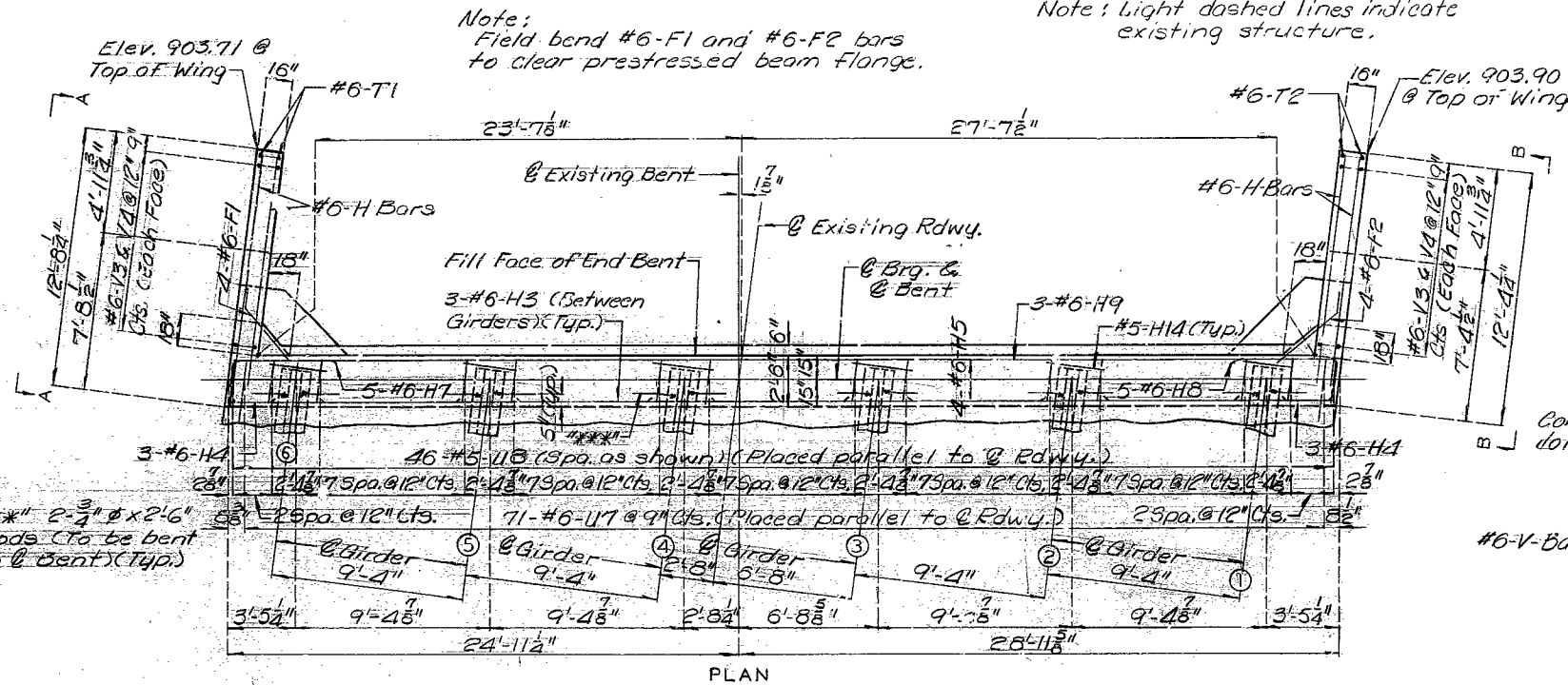


307

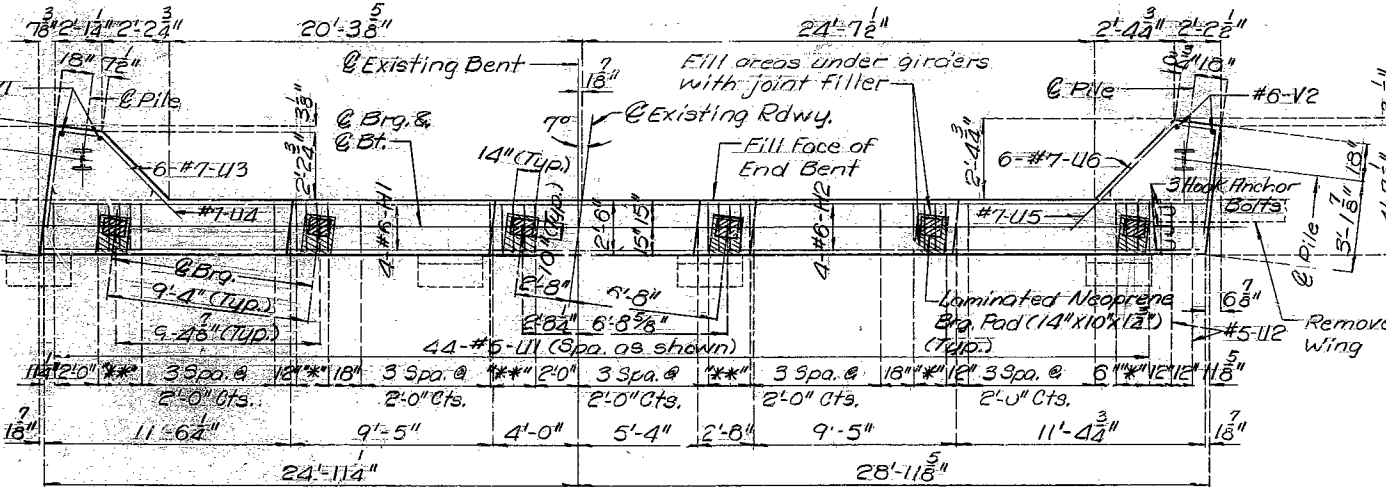
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		13	32	



Note:
For details of Safety Barrier Curb see sheet No. 12.
All concrete in the end bent above top of beam and below top of slab shall be Class BE.
Field bending shall be required for F1 & F2 Bars when necessary to conform to slope of wing.
Grout #5-U1 bars into existing concrete with expansive mortar. No direct payment will be made for drilling and mortar.



Note:
For Pile Splice detail see sheet No. 4.
For details of Hook Anchor Bolts see sheet No. 4.
For details of Laminated Neoprene Brg. Pad see Sht. No. 4.



PLAN OF BEAM
(BELOW LOWER CONST. JT.)

DETAILS OF END BENT NO. 1

DETAILED Sept. 1981
CHECKED Nov. 1981

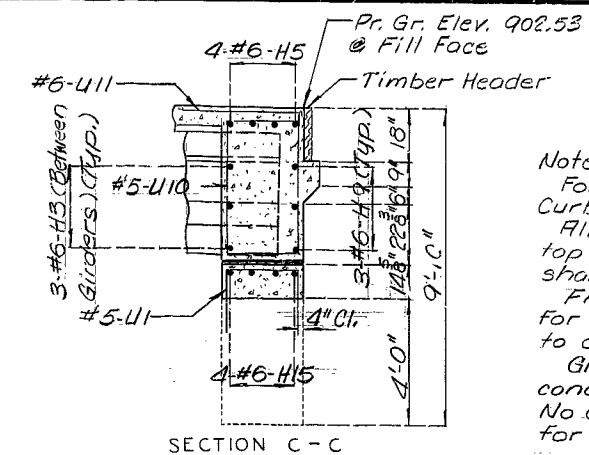
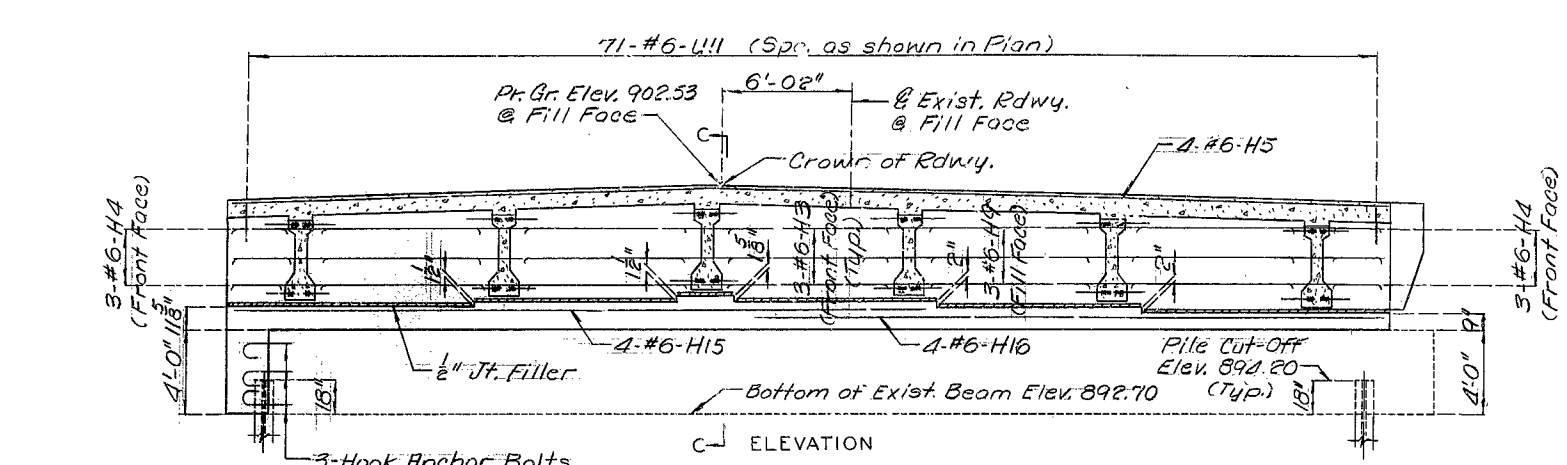
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 3 of 14.

CLAY COUNTY L-659R

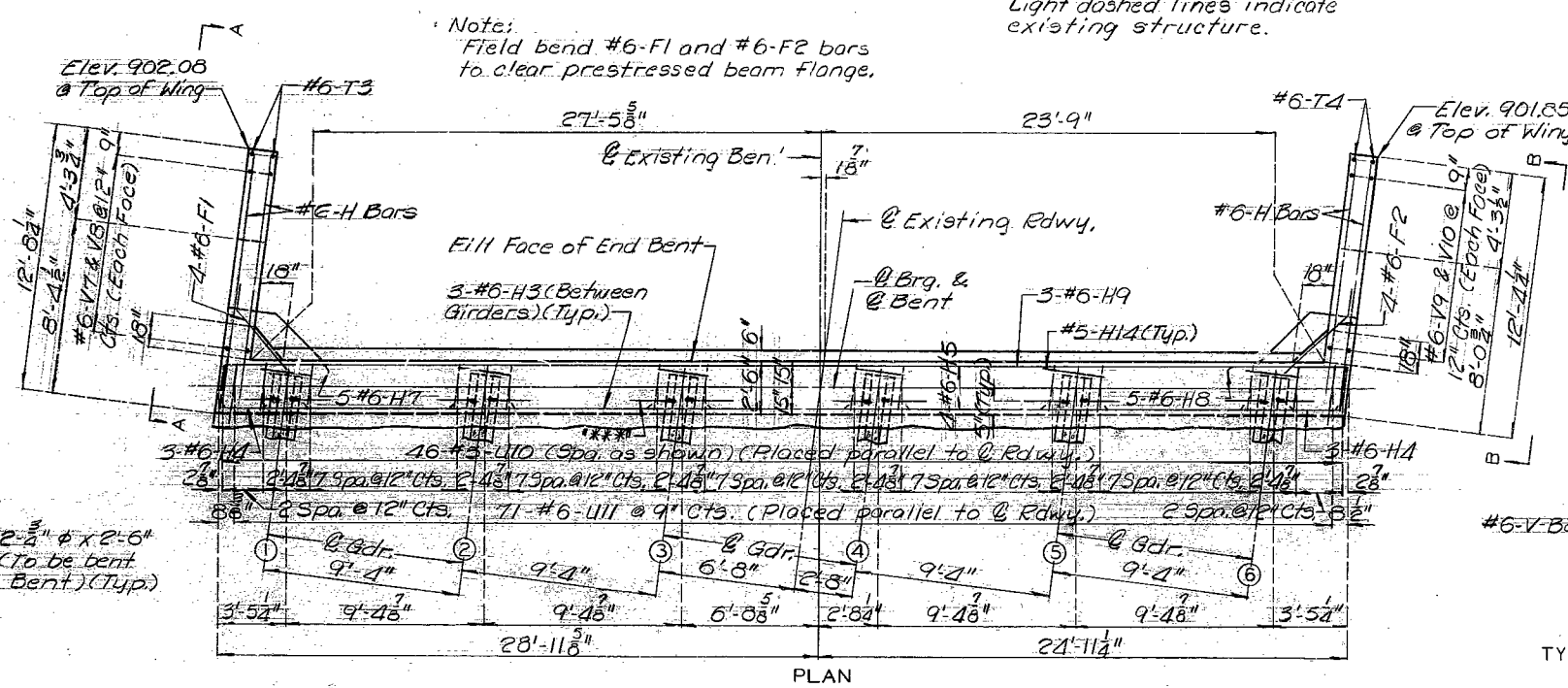


309

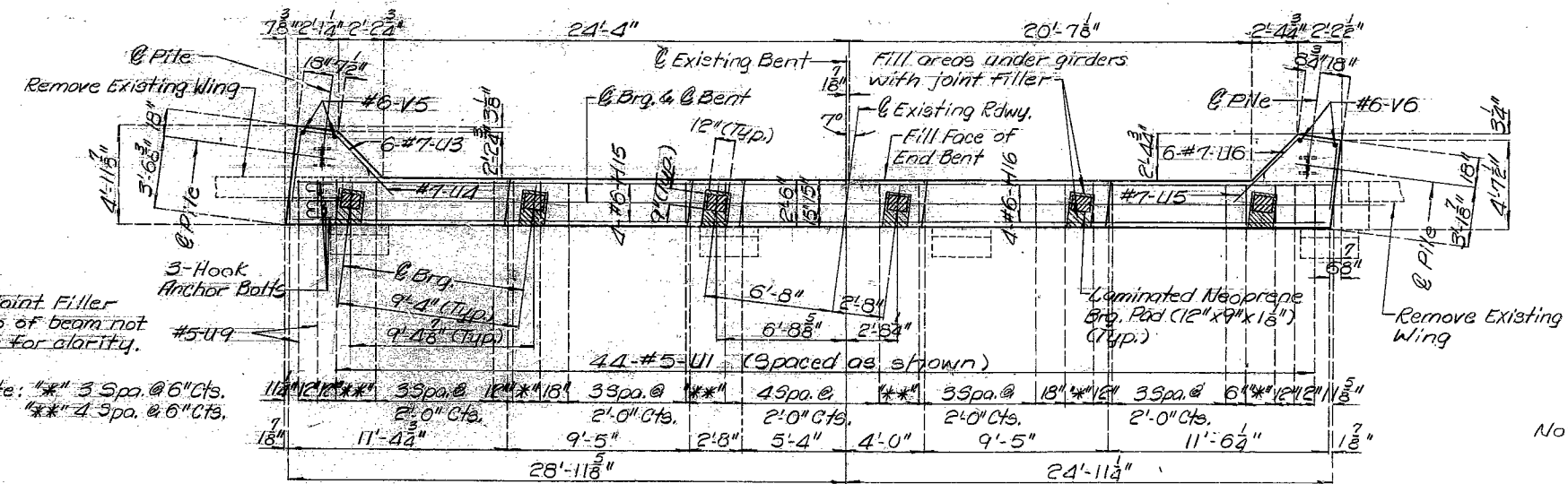
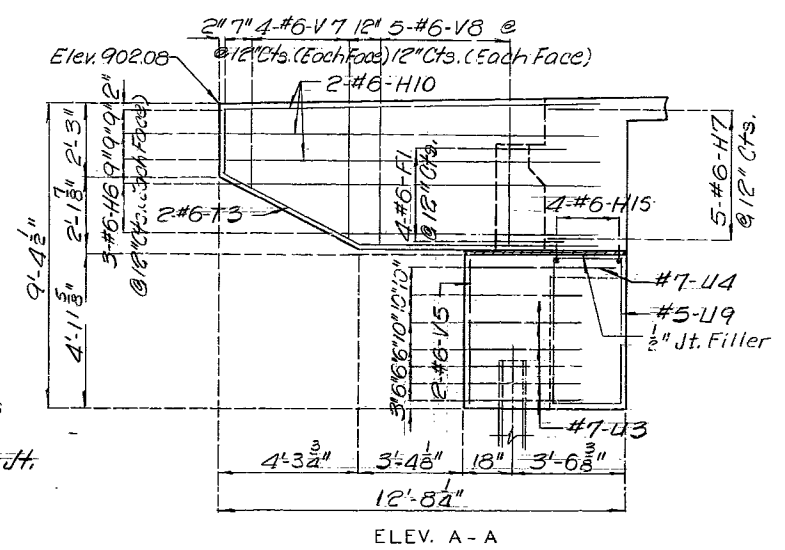
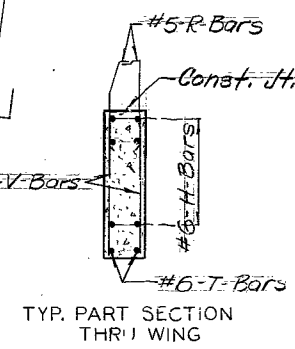


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	34	

Note:
For details of Safety Barrier Curb see sheet No. 12.
All concrete in the end bent above top of beam and below top of slab shall be Class B2.
Field bending shall be required for F1 & F2 bars when necessary to conform to slope of wing.
Grout #5-U1 bars into existing concrete with expansive mortar. No direct payment will be made for drilling and mortar.

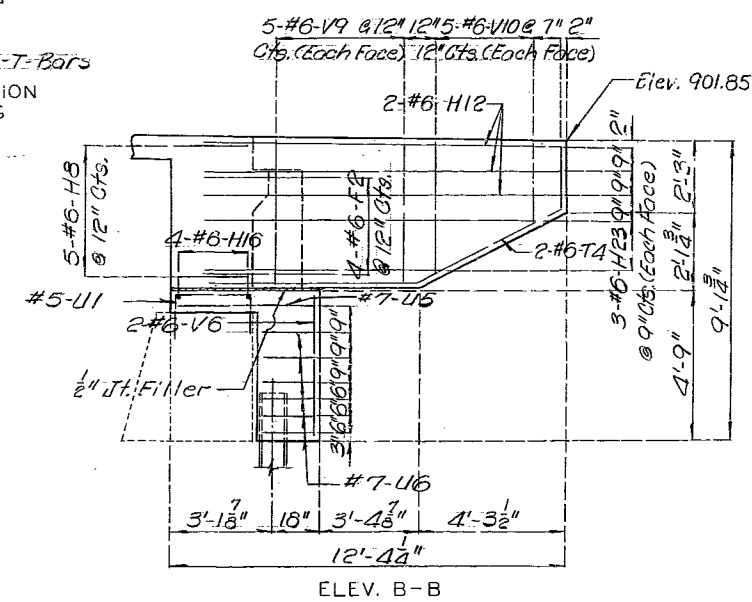


Note: "2-#6" 2-#6" x 2-#6" Coil Tie Rods (To be bent parallel to @ Bent) (Typ.)



Note: 2" Joint Filler on top of beam not shown for clarity.

Note: "3" 3 Spaced @ 6" Cts. "4" 4 Spaced @ 6" Cts.



Note:
For Pile Splice detail see sheet No. 4.
For details of Hook Anchor Bolts see sheet No. 4.
For details of Laminated Neoprene Brq. Pod see Sht. No. 4.

DETAILED Oct. 1981
CHECKED Nov. 1981

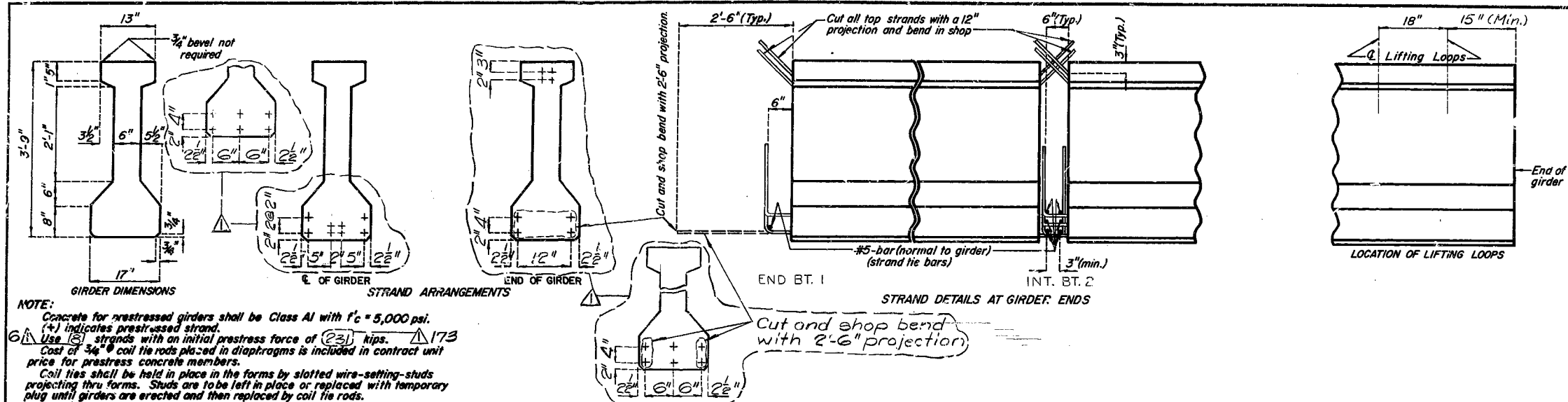
Note: This drawing is not to scale. Follow dimensions.

DETAILS OF END BENT NO. 4





Sheet No. 5 of 14.

CLAY COUNTY

L-659R



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
5	MO.		19	35	

BILL OF REINFORCING STEEL - EACH GIRDER				BENDING DIAGRAMS	
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE		
2	6 A1	31'-5"	20		
42	5 B1	5'-3"	11		
4	5 B2	4'-3"	19		
21	4 C1	13"	10		
42	4 D1	3'-0"	9		

NOTE:

All dimensions are out to out.

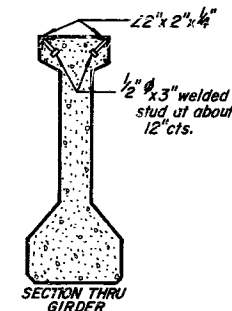
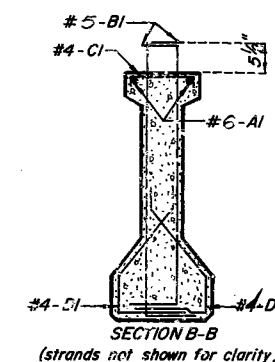
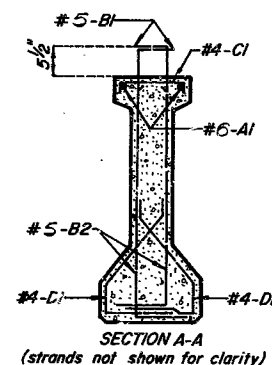
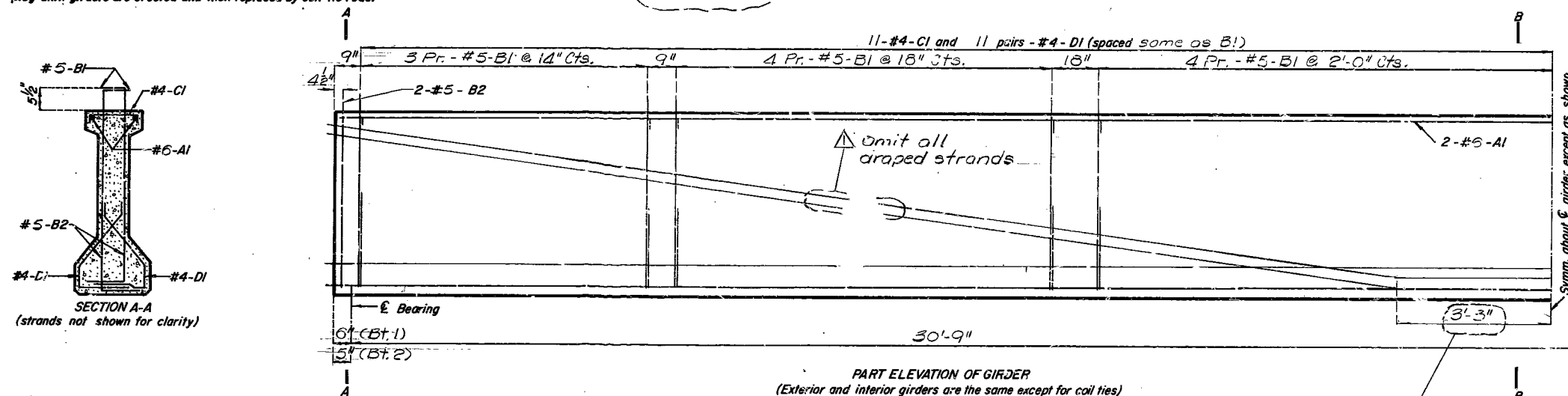
Where deflecting strands interfere with placement, some in-place bending may be necessary.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures stirrup and its 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.



Note: Angles and welded studs to be cast-in-place on girders when alternate stay-in-place forms for slabs are used.

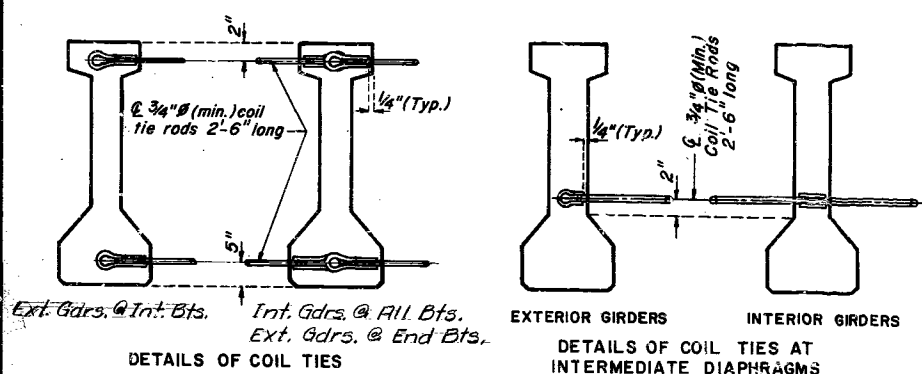
Angles to be placed no closer than 12" from end of girders.

Splices in the angles may be made at convenient lengths by a qualified welder.

Cost of angles and welded studs to be included in contract unit price for prestress concrete members.

Steel angles shall be galvanized in accordance with ASTM A123.

Note:-
For location of Coil Ties
see Sht. No. 3, 5 and 9.



DETAILS OF PRESTRESSED GIRDERS (SPAN 1-2)

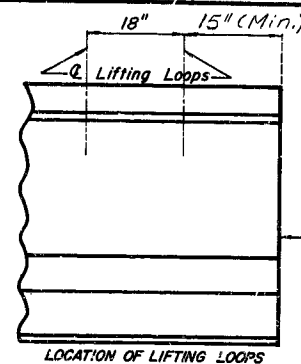
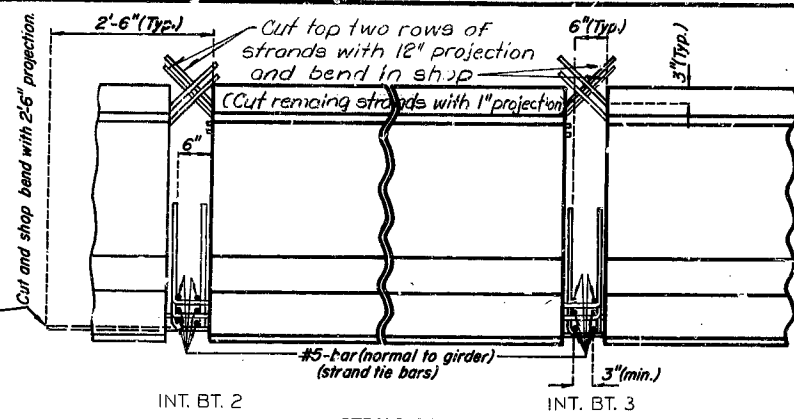
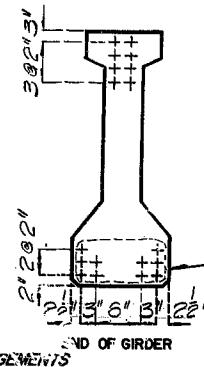
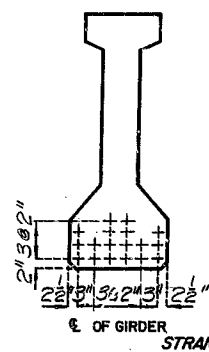
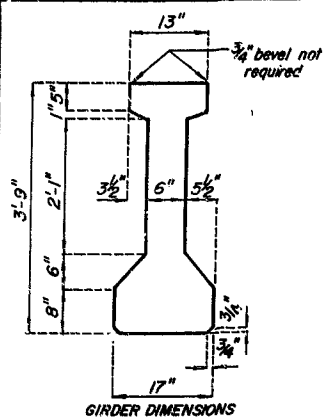
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 14.

⚠ Revised 6-20-83 CLAY

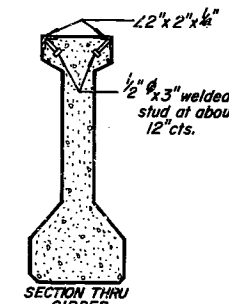
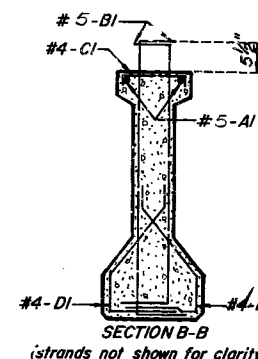
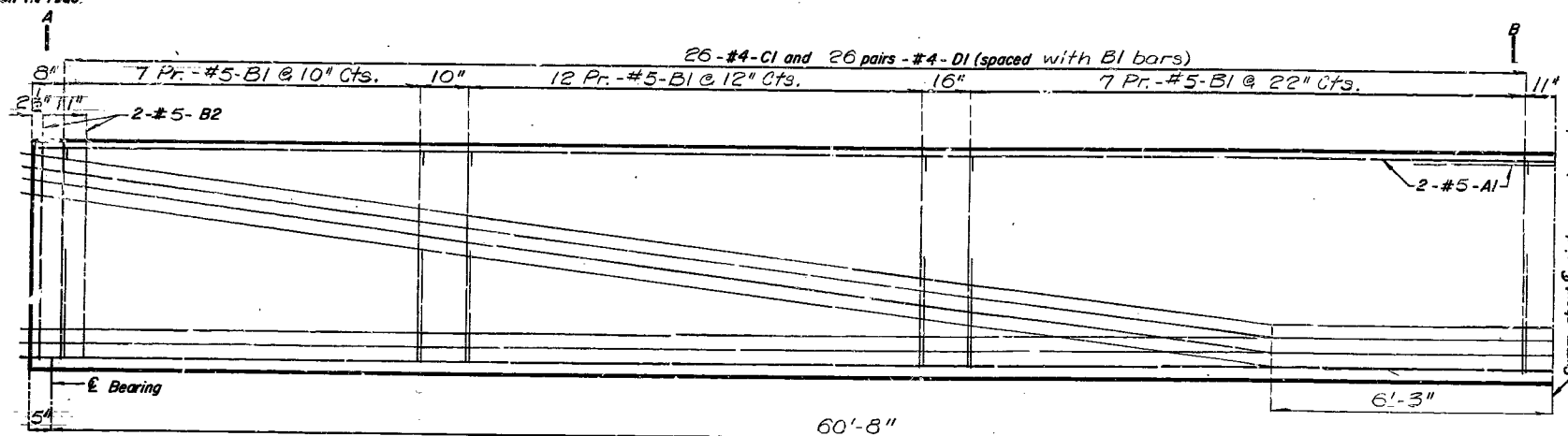
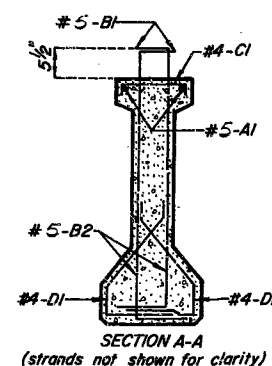
COUNTY

1-659R



BILL OF REINFORCING STEEL - EACH GIRDER									
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE	BENDING DIAGRAMS					
4	5 A1	32'-4"	20						
104	5 B1	5'-3"	11						
5	5 B2	4'-3"	19						
52	4 C1	13"	10						
104	4 D1	3'-0"	9						

NOTE:
All dimensions are out to out.
Where deflecting strands interfere with placement, some in-place bending may be necessary.
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.



Note: Angles and welded studs to be cast-in-place on girders when alternate stay-in-place forms or slabs are used.
Angles to be placed no closer than 12" from ends of girders.
Splices in the angles may be made at convenient lengths by a qualified welder.
Cost of angles and welded studs to be included in contract unit price for prestress concrete members.
Steel angles shall be galvanized in accordance with ASTM A123.

Note:
For Details of Coil Tie Rods see Sht. No. 6.

DETAILS OF PRESTRESSED GIRDERS (SPAN 2-3)

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

Sheet No. 7 of 12.

CLAY COUNTY

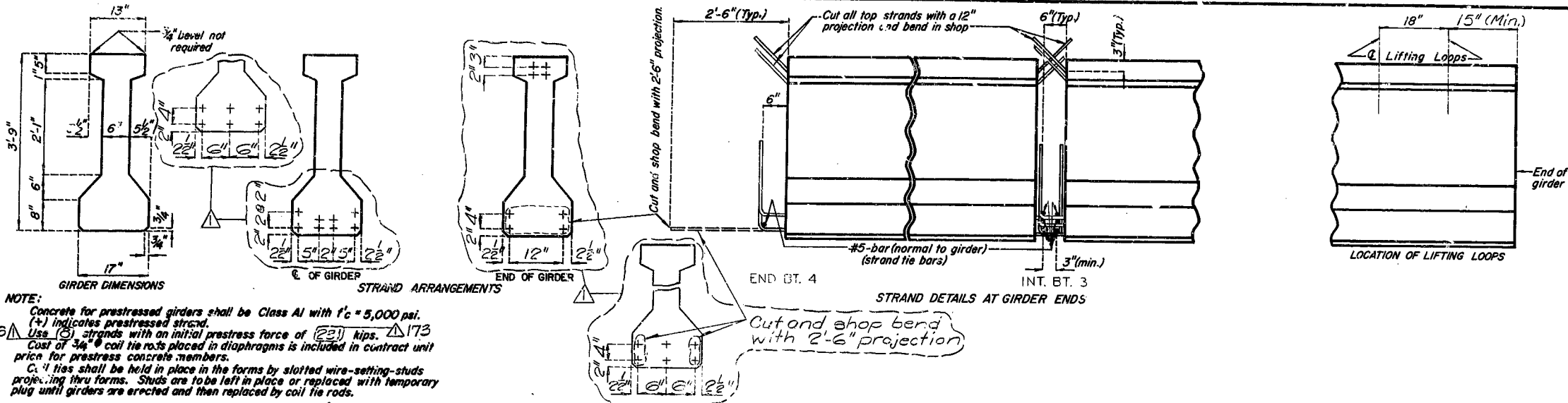
L-659R

SPS 53.4.6 Revised April 1973 MAY 1981

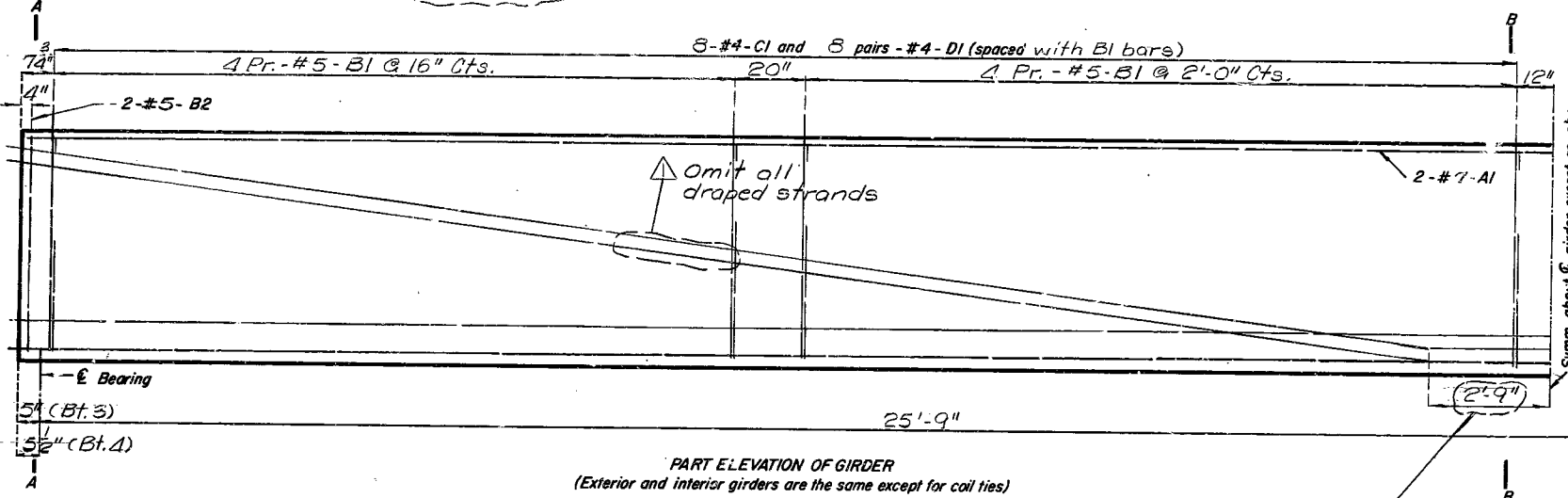
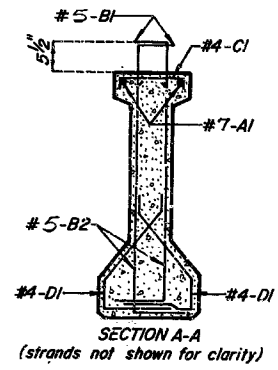
DETAILED Nov. 1981
CHECKED Nov. 1981

311

312



NOTE:
Concrete for prestressed girders shall be Class A1 with $f'_c = 5,000$ psi.
(+) indicates prestressed strand.
Use (B) strands with an initial prestress force of (23) kips.
Cost of 3/4" coil tie rods placed in diaphragms is included in contract unit price for prestress concrete members.
C. 1 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 plug until girders are erected and then replaced by coil tie rods.

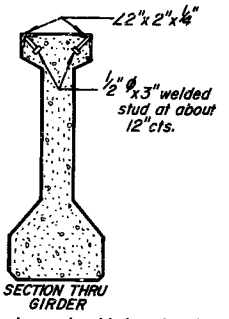
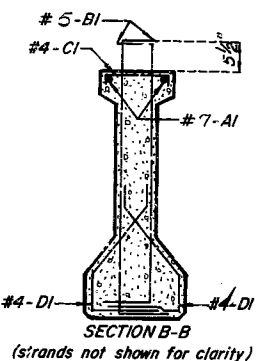


FED. ROAD DIST. NO.		STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
S		MO.	18	37		

BILL OF REINFORCING STEEL - EACH GIRDER			
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE
2	7 A1	26'-2"	20
32	5 B1	5'-3"	11
4	5 B2	4'-3"	19
16	4 C1	13"	10
32	4 D1	3'-0"	9

BENDING DIAGRAMS	
SHAPE 9	SHAPE 10
SHAPE 20	SHAPE 19

NOTE:
All dimensions are out to out.
Where deflecting strands interfere with placement, some in-place bending may be necessary.
Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures stirrups 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.



Note: Angles and welded studs to be cast-in-place on girders when alternate stay-in-place forms for slabs are used.
Angles to be placed no closer than 12" from end of girders.
Splices in the angles may be made at convenient lengths by a qualified welder.
Cost of angles and welded studs to be included in contract unit price for prestress concrete members.
Steel angles shall be galvanized in accordance with ASTM A123.

Note:
For Details of Coil Tie Rods see Sht. No. 6.

DETAILS OF PRESTRESSED GIRDERS (SPAN 3-4)

SPS 55.4.6
April 1973
Revised
MAY 1981

DETAILED Nov. 1981
CHECKED Nov. 1981

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

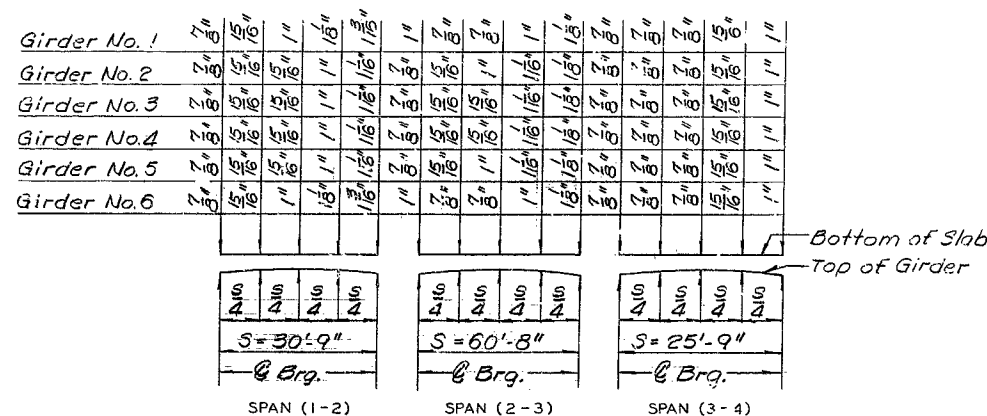
Sheet No. 8 of 14.

Revised 6-20-83

CLAY COUNTY

L-659R

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.		19	38	

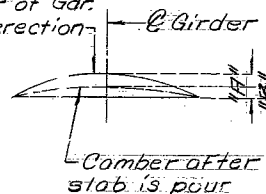


THEORETICAL SLAB HAUNCHING DIAGRAM

Note: Slab to be built parallel to grade and to a minimum thickness of 8". Slab haunches to be adjusted for any difference in girder camber from that shown in the Camber Diagram. Concrete in slab haunches is included in the Estimated Quantities for Alternate Slabs.

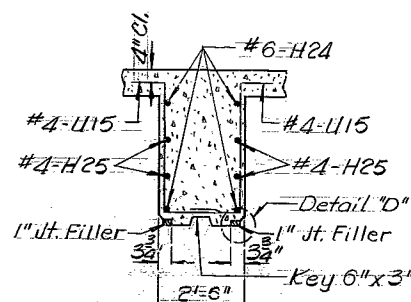
GDR. NO.	SPAN (1-2)		SPAN (2-3)		SPAN (3-4)	
	"A"	"B"	"A"	"B"	"A"	"B"
1	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
2	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
3	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
4	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
5	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
6	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"

Theoretical Camber of Gdr. after erection



GIRDER CAMBER DIAGRAM

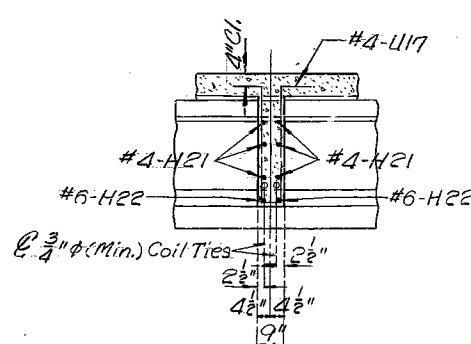
Note: Theoretical camber at .25 and .75 points equal 0.7125 of camber at half span.



SECTION C-C

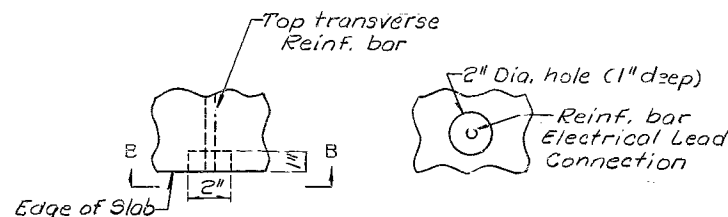


DETAIL "D"



SECTION B-B

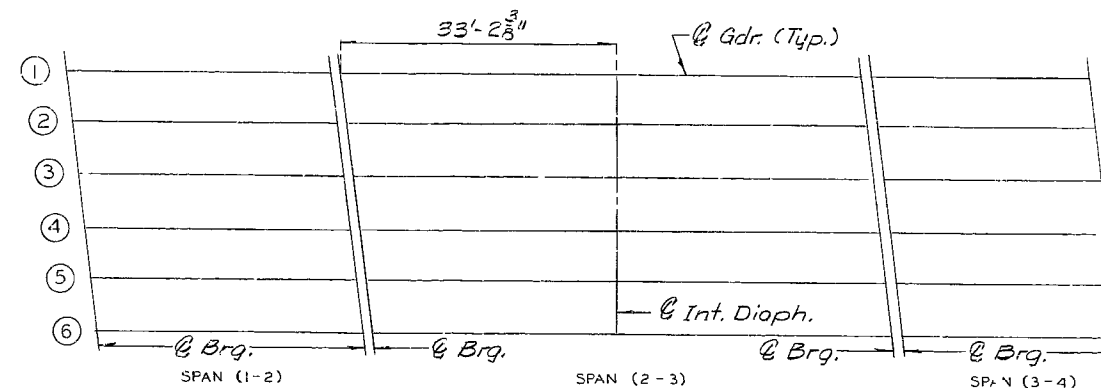
Note: For location of Detail "A" see Sht. No. 10.



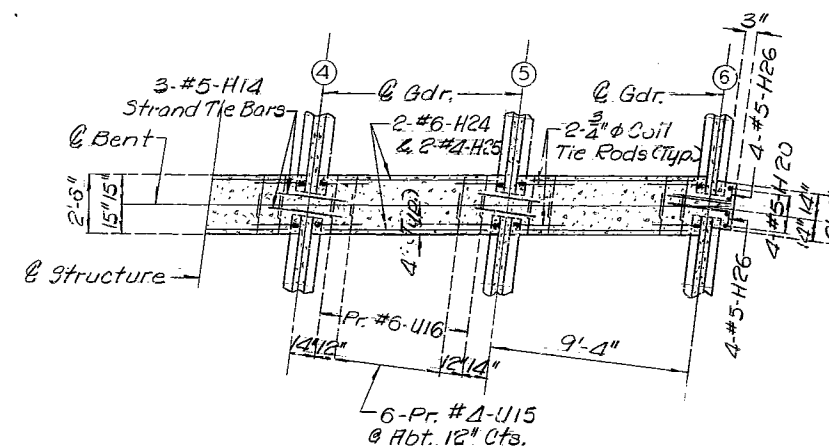
DETAIL "A"

Note: 2 Electrical Lead Connections required. Actual location to be designated by the Engineer as part of the test system.

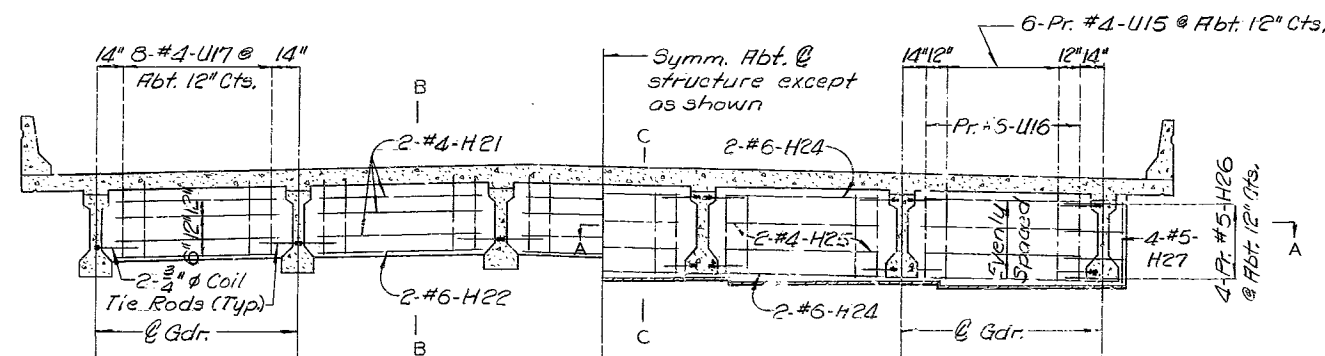
Note: For Details of Coil Ties see Sht. No. 5. Intermediate diaphragms are normal to grade. Diaphragms at intermediate bents are vertical.



PLAN OF GIRDERS SHOWING LOCATION OF INTERMEDIATE DIAPHRAGMS



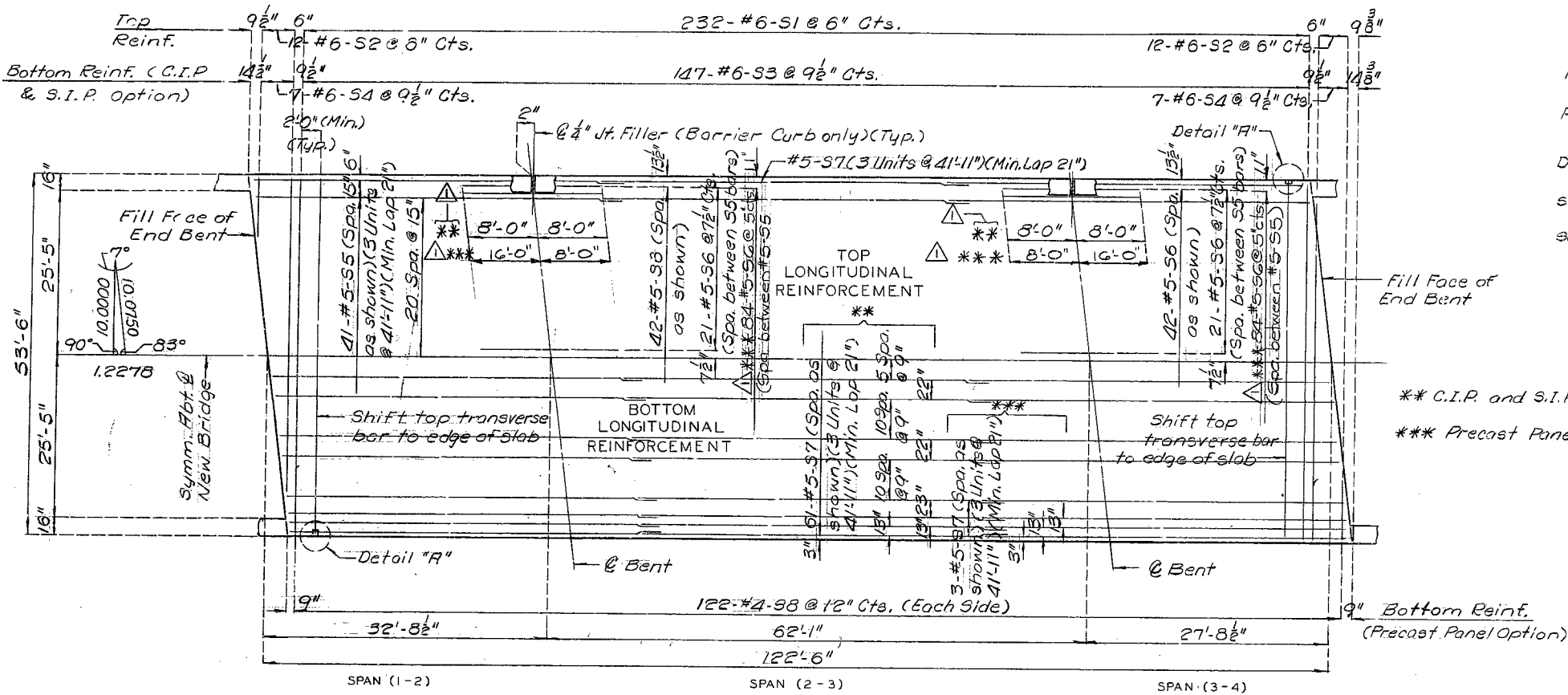
SECTION A-A



TYR HALF SECTION NEAR INT. DIAPH.

TYR HALF SECTION NEAR INT. BENTS

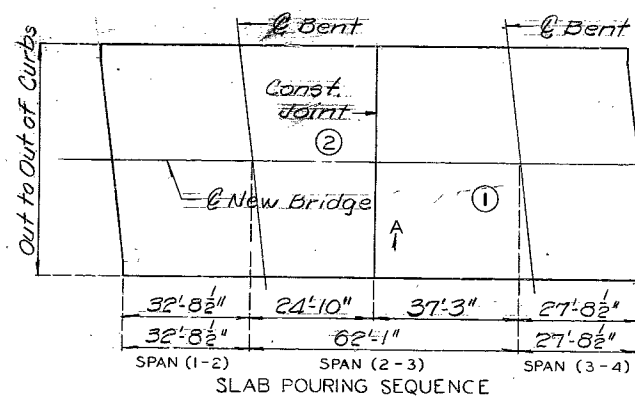
314



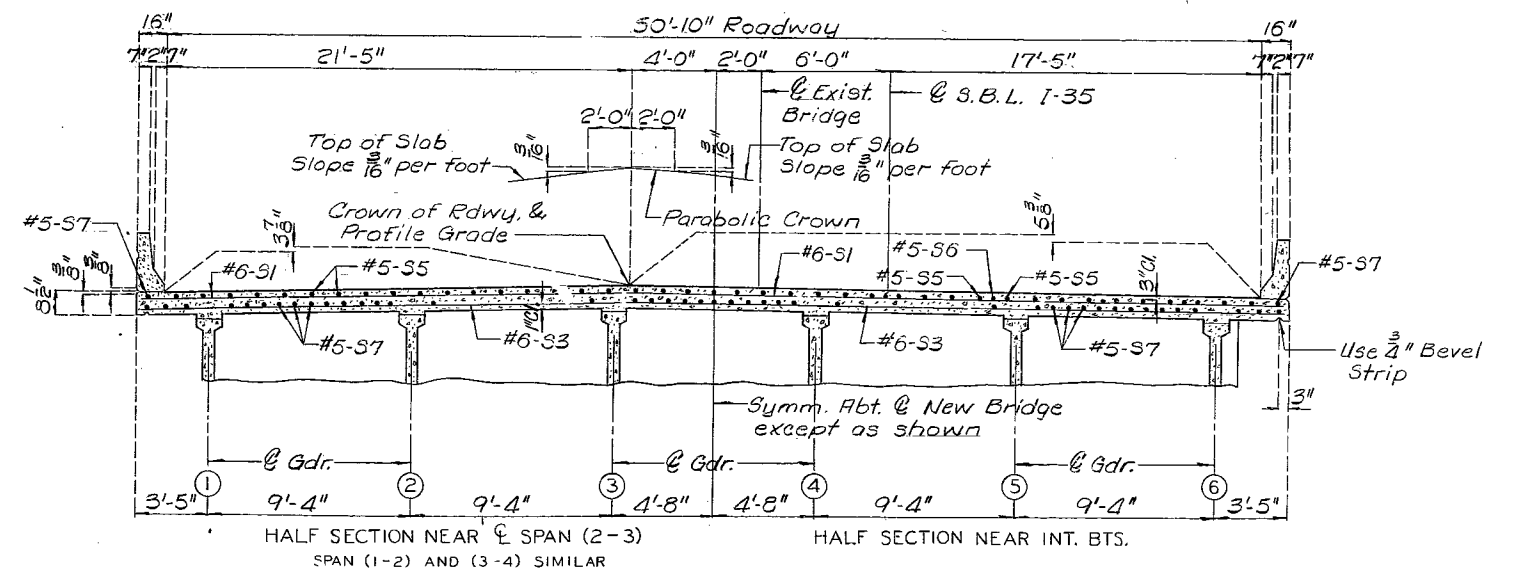
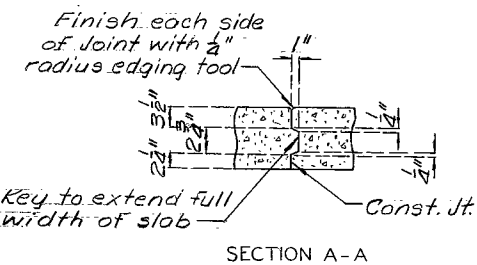
Note:
Longitudinal dimensions shown are taken parallel to grade along @ new bridge @ top of slab.
For Detail "R" see Sht. No. 9.
For Girder Camber and Slab Haunching Diagram see Sht. No. 9.
For Details of Prestressed Panel Option, see Sht. No. 11.
For Details of Safety Barrier Curb not shown see Sht. No. 12.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	39	

** C.I.P. and S.I.P. Option
*** Precast Panel Option

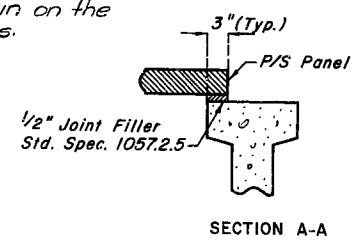
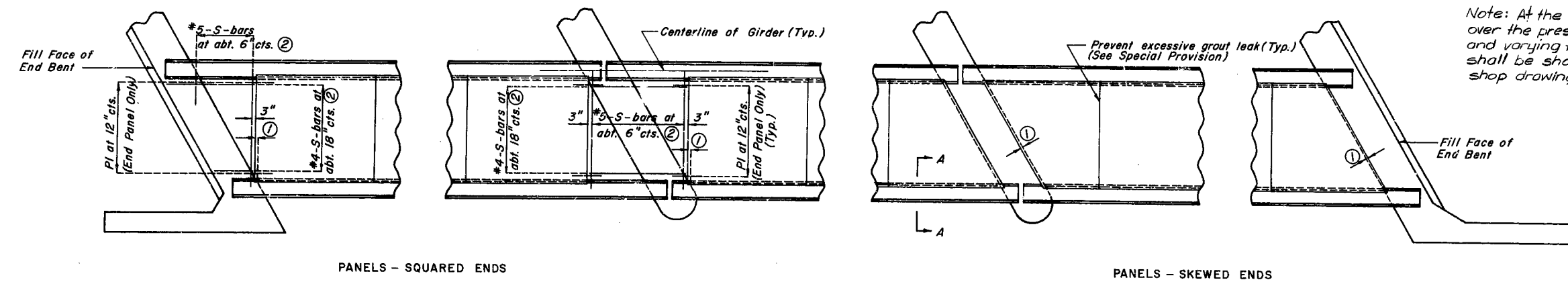


Note:
The contractor shall furnish an approved retarder to retard the set of the concrete to 2.5 hours and shall pour and satisfactorily finish the slab pours at the rate given.
The diaphragm at the intermediate bents and end bents shall be poured a minimum of 30 minutes and a maximum of 2 hours before the slab is poured.
Intermediate diaphragms within spans may be poured with the construction joint between the diaphragm and slab or monolithic with slab.

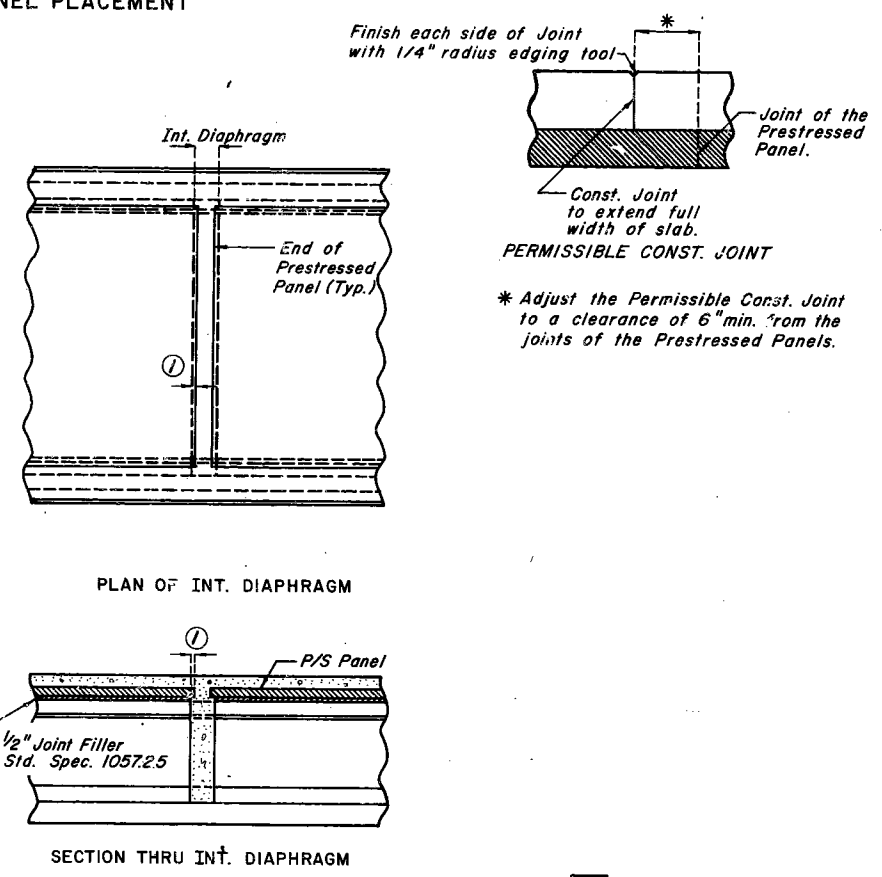
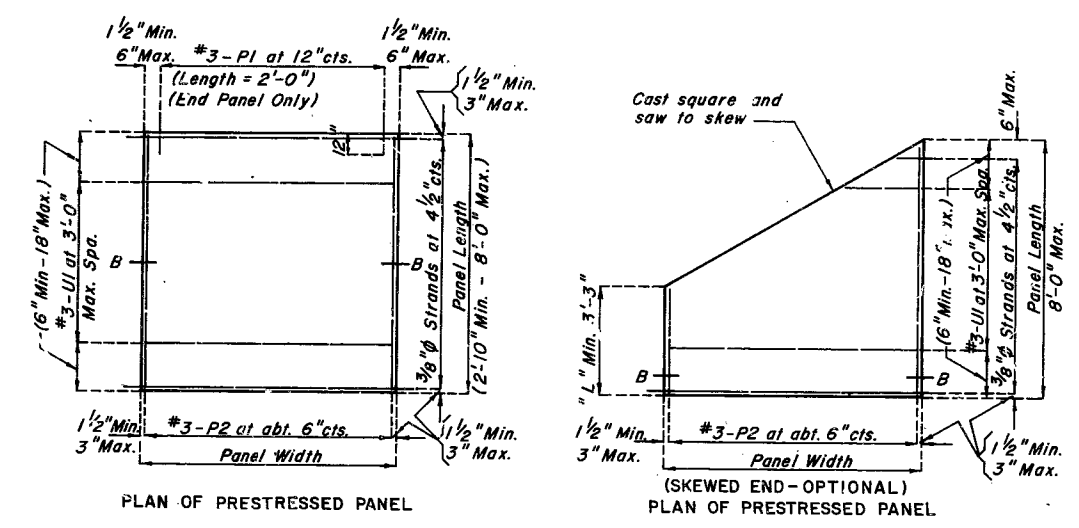


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	40	

Note: At the contractors option a 5 3/8" min. depth slab over the prestressed panel may be used by increasing and varying the girder top flange depth. Dimensions shall be shown on the shop drawings.



PLAN OF PRESTRESSED PANEL PLACEMENT



GENERAL NOTES:

PRESTRESSED PANELS:
CONCRETE FOR PRESTRESSED PANELS SHALL BE CLASS A1 WITH $f'c = 5,000$ psi.

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

PRESTRESSING TENDON SHALL BE HIGH-TENSILE STRENGTH UNCOATED SEVEN-WIRE (7) STRESS RELIEVED STRANDS FOR PRESTRESSED CONCRETE CONFORMING TO A.S.T.M A-416 EXCEPT THAT NOMINAL DIAMETER OF STRAND = 3/8" AND NOMINAL AREA = 0.085 SQ. IN. AND MINIMUM ULTIMATE STRENGTH = 23,000 LBS. (270 KSI). LARGER STRANDS MAY BE USED WITH THE SAME SPACING AND INITIAL TENSION.

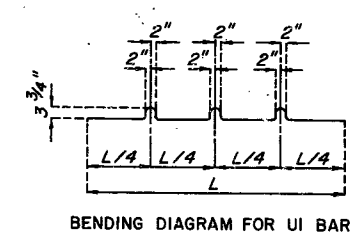
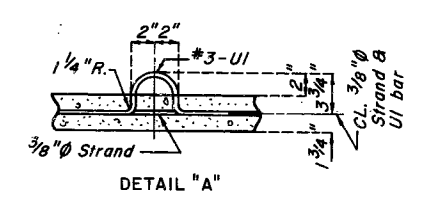
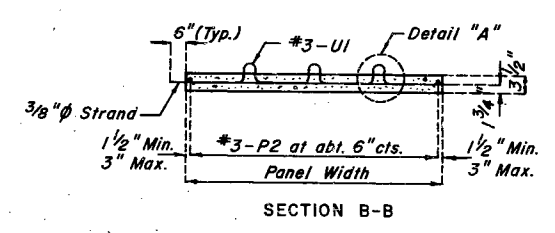
INITIAL PRESTRESSING FORCE = 16.1 KIPS/STRAND.

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

SUITABLE HOLES OR 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 SUPPORTS IT IS REQUIRED THAT THE SKEWED PORTION TO BE CAST-IN-PLACE. QUANTITIES ARE INCLUDED IN PAYMENT FOR SLAB ON CONCRETE I GIRDERS.

REINFORCING STEEL:
ALL DIMENSIONS ARE OUT TO OUT.
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1-1/2" 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 BAR TO THE NEAREST INCH.
THE PRESTRESSED PANEL QUANTITIES ARE NOT INCLUDED IN THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS.



NOTE:

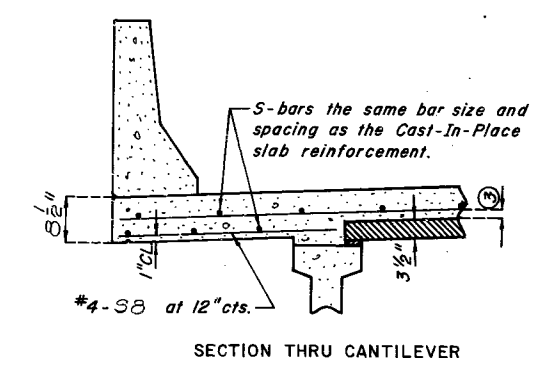
① End panel to be dimensioned 1" inside face of diaphragm.

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 sq. yd.

NOTES CON'T.

Support from diaphragm forms required under optional skewed end until Cast-In-Place concrete has reached its minimum compressive strength.



③ 1" CL. Min. #5 and #6 bars.

NOTE: Slab exterior girder haunch to be the same as Cast-In-Place.
Slab depth over Prestressed Panel varies due to girder number. Top of slab above Prestressed Panels to be built parallel to grade and to a min. thickness of 5 3/8"

DETAILS OF PRECAST PRESTRESSED PANELS

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

Sheet No. 11 of 14.

CLAY COUNTY

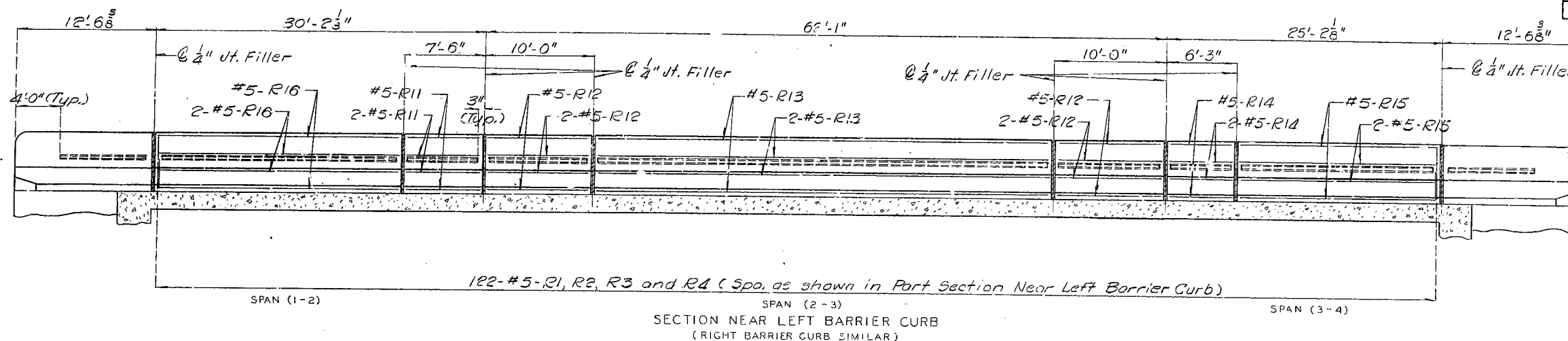
L-659R

P/S Panel Revised JAN. 1980 SEPT. 1981

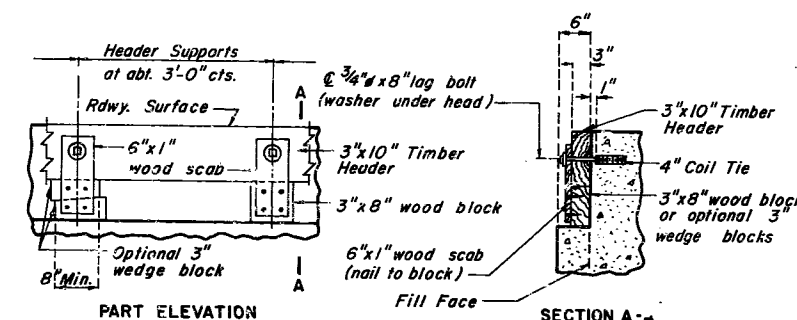
DETAILED Nov. 1981
CHECKED Nov. 1981

315

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	NC		18	41	



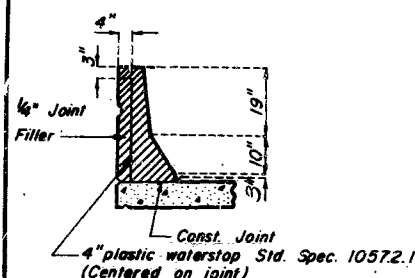
Note:
Longitudinal dimensions are along top edge of slab parallel to grade.
All reinforcing steel in barrier curbs shall be epoxy coated.



DETAILS OF TIMBER HEADER AT END BENTS

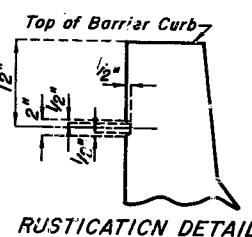
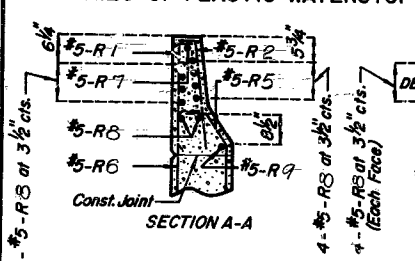
NOTES:

Top of barrier curb to be built parallel to grade with barrier curb joints (except at end bents) normal to grade.
All exposed edges of barrier curb shall have 1/2" radius or 3/8" bevel unless otherwise noted.
When the barrier curb is bid by linear foot, the contract unit price shall include the cost of all concrete and reinforcement.
Concrete in the safety barrier curb shall be Class B1.

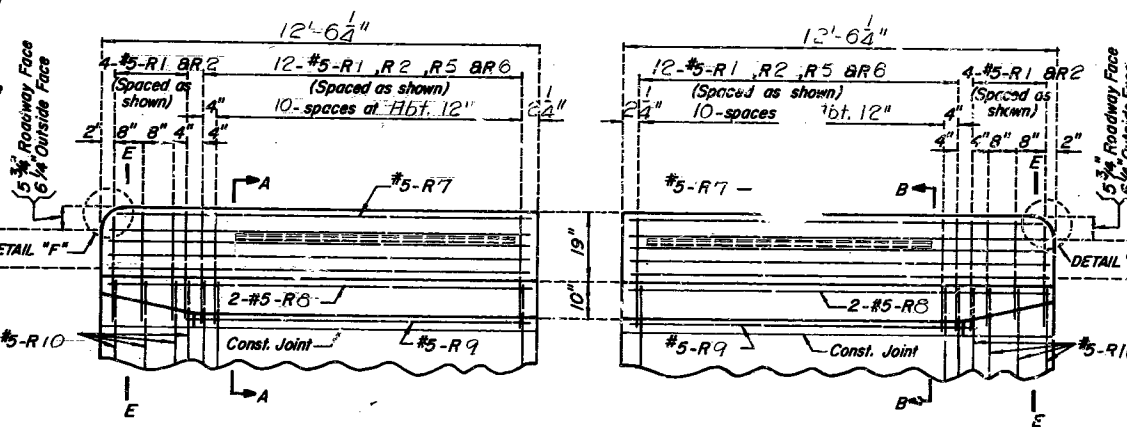


Notes: Plastic waterstop shall be placed in all safety barrier curb filled joints.
Cost of plastic waterstop complete in place to be included in unit price bid for Safety Barrier Curb.

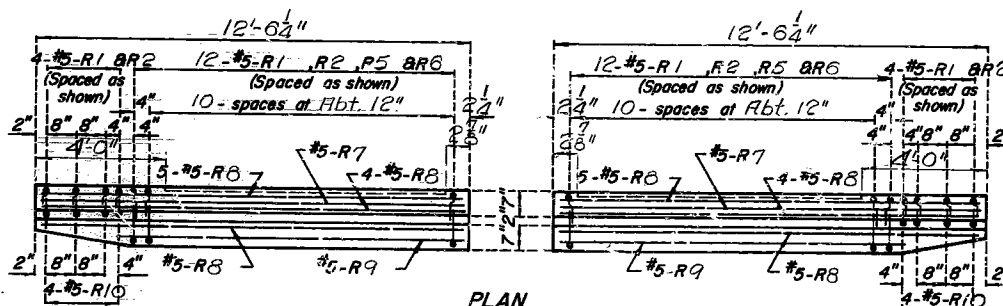
DETAILS OF PLASTIC WATERSTOP



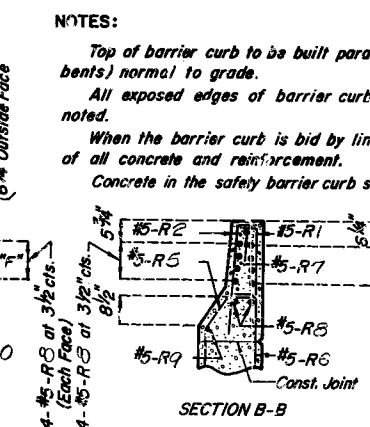
RUSTICATION DETAIL



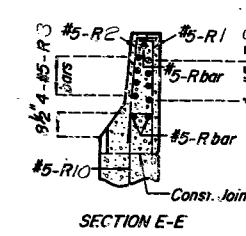
ELEVATION



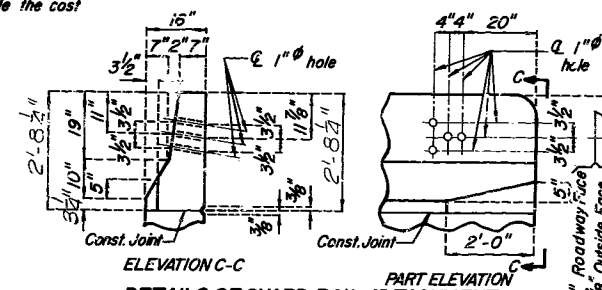
PLAN



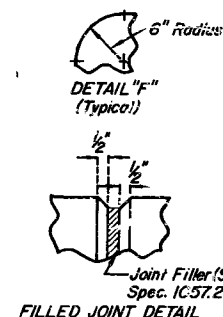
SECTION B-B



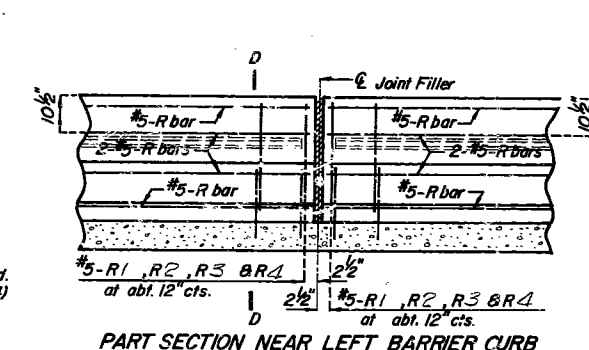
SECTION E-E



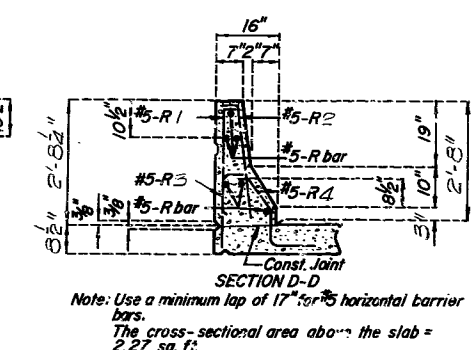
DETAILS OF GUARD RAIL AT TACHMENT



FILLED JOINT DETAIL



PART SECTION NEAR LEFT BARRIER CURB



Note: Use a minimum lap of 17" for horizontal barrier bars.
The cross-sectional area above the slab = 2.27 sq. ft.

DETAILS OF BARRIER CURB AT END BENTS

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

Sheet No. 12 of 14.

CLAY COUNTY

L-659R

SPS 17.6(1) REVISED AUG. 1978 JUNE 1981

DETAILED Nov. 1981
CHECKED Nov. 1981

315

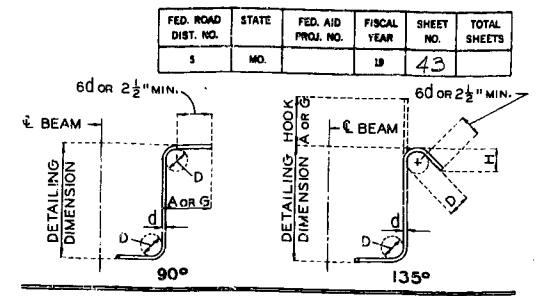
COMPLETE BILL OF REINFORCING STEEL																										
NO. REQD.	MARK NO.	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS												NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT		
										B		C		D		E		F		H					K	
										FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.				FT.	IN.
			SUBSTRUCTURE																							
			ENC BENT NO. 1																							
4	6H1		BEAM		20	X			25	0.									25	0	150					
4	6H2		BEAM		20	X			32	8.000									32	8	194					
44	5U1		BEAM		10	S	X				12.000	22.000							3	10	168					
2	5U2		BEAM		13	S	X		2	3.000	4	7.750	2	3.000	4	7.750			14	9	30					
6	7U3		BEAM		14	X			2	2.000	23.000	2	7.625				20.500	2	0.000	6	9	80				
1	7U4		BEAM		14	X			4	1.000	23.000	4	9.250				2	10.750	3	9.500	10	9	23			
1	7U5		BEAM		14	X			3	8.500	2	0.500	4	11.000				3	10.000	3	1.000	16	8	21		
6	7U6		BEAM		14	X			22.000	2	0.500	2	11.625				2	4.000	22.000	6	10	81				
2	6V1		BEAM		20	X			4	5.000									4	5	13					
2	6V2		BEAM		20	X			4	7.000									4	7	14					
			INT. BENT NO. 2																							
9	6D1		FOOTING		17	X			6	2.000									7	1	170					
2	6D2		FOOTING		10	S	X				3	2.000	16.000						7	8	22					
7	7H17		BEAM		17	X			40	7.000									41	5	593					
7	8H18		BEAM		17	X			14	9.000									15	8	293					
2	6H19		BEAM		20	X			50	0.000									50	0	150					
7	8H20		BEAM		20	X			50	0.000									50	0	935					
14	4P1		COLUMN		16	X			2	3.000									7	11	74					
6	4P2		COLUMN		13	S	X		2	3.000	2	9.000	2	3.000	2	9.000			10	9	41					
37	6U12		BEAM		13	S	X		2	11.000	2	11.000	2	11.000	2	11.000			12	10	685					
10	6U13		BEAM		13	S	X		2	11.000	2	9.000	2	11.000	2	9.000			12	6	180					
16	4U14		BEAM		10	S	X			6.000	2	11.000							3	11	40					
9	8V11		COLUMN		20	X			16	6.000									16	6	396					
24	8V13		COLUMN		20	X			4	3.000									4	3	272					
			INT. BENT NO. 3																							
9	8D1		FOOTING		17	X			6	2.000									7	1	170					
2	6D2		FOOTING		10	S	X				3	2.000	16.000						7	8	22					
7	7H17		BEAM		17	X			40	7.000									41	5	593					
7	8H18		BEAM		17	X			14	9.000									15	8	293					
2	6H19		BEAM		20	X			50	0.000									50	0	150					
7	8H20		BEAM		20	X			50	0.000									50	0	935					
14	4P1		COLUMN		16	X			2	3.000									7	11	85					
6	4P2		COLUMN		13	S	X		2	3.000	2	9.000	2	3.000	2	9.000			10	9	41					
37	6U12		BEAM		13	S	X		2	11.000	2	11.000	2	11.000	2	11.000			12	10	685					
10	6U13		BEAM		13	S	X		2	11.000	2	9.000	2	11.000	2	9.000			12	6	180					
16	4U14		BEAM		10	S	X			6.000	2	11.000							3	11	40					
9	8V12		COLUMN		20	X			17	8.000									17	8	425					
24	8V13		COLUMN		20	X			4	3.000									4	3	272					

COMPLETE BILL OF REINFORCING STEEL																									
NO. REQD.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	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.
		END BENT NO. 4																							
4	6H15	BEAM		20	X			32	8.000									32	8	196					
4	6H16	BEAM		20	X			25	0.000									25	0	150					
44	5U1	BEAM		10	S	X				12.000	22.000							3	10	168					
6	7U3	BEAM		14	X			2	2.000	23.000	2	7.625			20.500	2	0.000	6	9	80					
7	7U4	BEAM		14	X			4	1.000	23.000	4	9.250			2	10.750	3	9.500	10	9	22				
1	7U5	BEAM		14	X			3	8.500	2	0.500	4	11.000		3	10.000	3	1.000	10	8	21				
6	7U6	BEAM		14	X				22.000	2	0.500	2	11.625		2	4.000		22.000	6	10	81				
2	5U9	BEAM		13	S	X		2	3.000	4	8.000	2	3.000	4	8.000			14	9	30					
2	6V5	BEAM		20	X			4	8.000									4	8	14					
2	6V6	BEAM		20	X			4	6.000									4	6	14					
		SUPERSTRUCTURE																							
		END BENT NO. 1																							
4	6F1	WING		23	S				14.125	4	5.000	14.125	9.500	10.500	9.500	10.500	6	9	6	8	40				
4	6F2	WING		23	S				14.125	5	0.500	14.125	10.500	9.500	10.500	9.500	7	5	7	4	44				
15	6H3	DIAPHRAGM		20				7	4.000								7	4	7	4	165				
6	6H4	DIAPHRAGM		20				2	6.000								2	6	2	6	23				
4	6H5	SLAB		20				53	8.000								53	8	53	8	322				
5	6H7	DIAPHRAGM		23	S			2	3.250	5	2.000			2	3.000	3.375	7	5	7	4	55				
5	6H8	DIAPHRAGM		21	S			2	3.250	5	2.000			2	3.000	3.375	7	5	7	3	54				
3	6H9	DIAPHRAGM		20				53	8.000								53	8	53	8	242				
6	6H10	WING		20				11	8.000								11	8	11	8	105				
6	6H11	WING		20		V	2	7	7.000								7	7	7	7					
		INCR = 18.500 IN						10	8.000								10	8	10	8	82				
6	6H12	WING		20				11	6.000								11	6	11	6	104				
6	6H13	WING		20		V	2	7	5.000								7	5	7	5					
		INCR = 18.500 IN						10	6.000								10	6	10	6	81				
6	5H14	DIAPHRAGM		20				3	11.000								3	11	3	11	25				
2	6T1	WING		25	S			2	1.500	5	5.250	7	0.000		2	4.000	4	11.000	14	7	44				
2	6T2	WING		25	S			2	1.500	5	5.250	6	7.000		2	4.000	4	11.000	14	2	42				
71	6U7	SLAB	E	19	S				12.000	4	2.000						5	2	5	0	533				
46	5U8	DIAPHRAGM		13	S			2	3.125	4	0.000	2	3.125	4	0.000		13	5	13	2	631				
20	6V3	WING		20		V	4	2	3.000								2								
		INCR = 6.000 IN						4	3.000								4	3			98				
20	6V4	WING		20				4	3.000								4	4	4	4	130				
		END BENT NO. 4																							
4	6F1	WING		23	S				14.125	4	5.000	14.125	9.500	10.500	9.500	10.500	6	9	6	8	40				
4	6F2	WING		23	S				14.125	5	0.500	14.125	10.500	9.500	10.500	9.500	7	5	7	4	44				
15	6H3	DIAPHRAGM		20				7	4.000								7	4	7	4	165				
6	6H4	DIAPHRAGM		20				2	6.000								2	6	2	6	23				
4	6H5	SLAB		20				53	8.000								53	8	53	8	322				
6	6H6	WING		20		V	2	7	11.000								7	11	7	11					
		INCR = 17.500 IN						10	10.000								10	10	10	10	84				
5	6H7	DIAPHRAGM		23	S			2	3.250	5	2.000			2	3.000	3.375	7	5	7	4	55				
5	6H8	DIAPHRAGM		21	S			2	3.250	5	2.000			2	3.000	3.375	7	5	7	3	54				
3	6H9	DIAPHRAGM		20				53	8.000								53	8	53	8	242				
6	6H10	WING		20				11	8.000								11	8	11	8	105				
6	6H12	WING		20				11	6.000								11	6	11	6	104				
6	5H14	DIAPHRAGM		20				3	11.000								3	11	3	11	25				

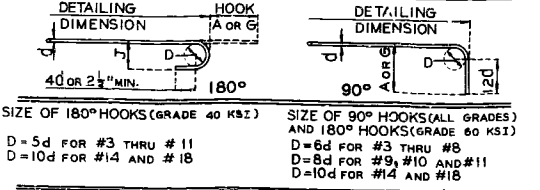
COMPLETE BILL OF REINFORCING STEEL																											
NO.	REQD.	MARK NO.	MARK	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS												NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT		
											B		C		D		E		F		H					K	
											FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.				FT.	IN.
		6H23	WING		20		V	2	7	5.000										7 5 7 5							
			INCR = 18.500 IN							10	6.000									10 6 10 6			81				
		2	6T3	WING		25	S			2	1.500	4	7.750	7	3.000			2	0.125	4	2.250	14	0	13 11	42		
		2	6T4	WING		25	S			2	1.500	4	7.500	6	5.000			2	0.000	4	2.000	13	2	13 1	39		
		71	6U11	SLAB	E	19	S				12.000	4	2.000								5	2	5 0	533			
		46	5U10	DIAPHRAGM		13	S				2	3.125	4	0.000	2	3.125	4	0.000				13	5	13 2	631		
		8	6V7			20		V	2	2	3.000										2	3	2 3				
			INCR = 7.375 IN							4	1.000											4	1	4 1	38		
		10	6V8			20				4	3.000											4	3	4 3	64		
		10	6V9			20				4	3.000											4	3	4 3	64		
		10	6V10			20		V	2	2	3.000										2	3	2 3				
			INCR = 5.250 IN							4	0.000											4	0	4 0	47		
			DIAPHRAGMS INT.																								
			ANC END																								
		72	5H14	END DIAPHS.		20					3	11.000										3	11	3 11	294		
		40	6H24	END DIAPHS.		20					7	10.000										7	10	7 10	471		
		40	4H25	END DIAPHS.		20					7	10.000										7	10	7 10	209		
		32	5H26	END DIAPHS.		19	S				11.000	2	3.000									3	2	3 1	103		
		16	5H27	END DIAPHS.		20					3	10.000										3	10	3 10	64		
		30	4H21	INT. DIAPH.		20					7	9.000										7	9	7 9	155		
		10	5H22	INT. DIAPH.		20					7	9.000										7	9	7 9	116		
		120	4U15	END DIAPHS.	E	28	S					20.000	3	10.000	12.000							6	6	6 4	508		
		40	6U16	END DIAPHS.	E	28	S					20.000	3	10.000	12.000							6	6	6 2	370		
		40	4U17	INT. DIAPH.	E	10	S				12.000	3	5.000	6.000	12.000							9	4	9 0	240		
			CAST-IN-PLACE																								
			CONVENTIONAL																								
			FORMS OR																								
			STAY-IN-PLACE																								
			FORMS																								
		234	6S1	SLAB-TOP	E	20					53	3.000										53	3	53 3	18716		
		24	6S2	SLAB-TOP	E	20		V	2	5	4.000											5	4	5 4			
			INCR = 48.675 IN								50	1.000										50	1	50 1	999		
		147	6S3	SLAB-BOTTOM		20					53	3.000										53	3	53 3	11757		
		14	6S4	SLAB-BOTTOM		20		V	2	8	9.000											8	9	8 9			
			INCR = 77.125 IN								47	4.000										47	4	47 4	590		
		123	5S5	SLAB-TOP	E	20					41	11.000										41	11	41 11	5377		
		84	5S6	SLAB-TOP	E	20					16	0.000										16	0	16 0	1402		
		189	5S7	SLAB		20					41	11.000										41	11	41 11	8263		
			PRECAST PANEL																								
			FORMS																								
		234	6S1	SLAB-TOP	E	20					53	3.000										53	3	53 3	18716		
		24	6S2	SLAB-TOP	E	20		V	2	5	4.000											5	4	5 4			
			INCR = 48.675 IN								50	1.000										50	1	50 1	999		
		123	5S5	SLAB-TOP	E	20					41	11.000										41	11	41 11	5377		
		24	5S6	SLAB-TOP	E	20					16	0.000										16	0	16 0	1402		
		24	5S7	SLAB		20					41	11.000										41	11	41 11	1049		
		244	4S8	SLAB-BOTTOM		20					3	6.000										3	6	3 6	570		
			BARRIER CURB																								
		308	5R1	BARRIER CURB	E	19	S				2	6.000		3.500								2	10	2 8	857		
		308	5R2	BARRIER CURB	E	19	S				2	6.125		3.500								2	10	2 9	883		
		244	5R3	BARRIER CURB	E	19	S				17.000		6.000					2	6.000		3.000	2	10	2 9	467		

COMPLETE BILL OF REINFORCING STEEL																				
NO.	REQD.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	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.				
244	5R4	BARRIER CURB	E 27 S								6.000	11.125	7.000	12.000	9.125	6.375	3 0 2 10	721		
48	5R5	BARRIER CURB	E 27 S								6.000	11.125	15.000		9.125	6.375	2 8 2 7	130		
48	5R6	BARRIER CURB	E 19 S							2	0.000	6.000					2 6 2 5	121		
4	5R7	BARRIER CURB	E 20							12	0.000						12 0 12 0	50		
40	5R8	BARRIER CURB	E 20							12	3.000						12 3 12 3	511		
4	5R9	BARRIER CURB	E 20							10	6.000						10 6 10 6	44		
16	5R10	BARRIER CURB	E 10 S							2	0.000	4.000					4 4 6 2	70		
12	5R11	BARRIER CURB	E 20							7	3.000						7 3 7 3	91		
24	5R12	BARRIER CURB	E 20							9	9.000						9 9 9 9	244		
12	5R13	BARRIER CURB	E 20							42	10.000						42 10 42 10	556		
12	5R14	BARRIER CURB	E 20							6	0.000						6 0 6 0	75		
12	5R15	BARRIER CURB	E 20							18	8.000						18 8 18 8	234		
12	5R16	BARRIER CURB	E 20							22	5.000						22 5 22 5	281		
		END OF BAR LIST																		

4205



STIRRUP HOOK DIMENSIONS				
GRADES 40-50-60 KSI				
BAR SIZE	D (IN.)	90° HOOK A OR G	135° HOOK A OR G	APPROX. H
#3	1-1/2"	4"	4"	2-1/2"
#4	2"	4-1/2"	4-1/2"	3"
#5	2-1/2"	6"	5-1/2"	3-3/4"
#6	4-1/2"	8"	7"	4-1/2"



END HOOK DIMENSIONS				
180° HOOKS				
BAR SIZE	GRADE 40 A OR G	GRADE 60 J	GRADE 60 A OR G	90° HOOKS A OR G
#3	5"	2-3/4"	5"	3"
#4	6"	3-1/2"	6"	4"
#5	7"	4-1/2"	7"	5"
#6	8"	5-1/4"	8"	6"
#7	9"	6-1/4"	10"	7"
#8	10"	7"	11"	8"
#9	12"	8"	15"	11-1/4"
#10	13"	9"	17"	12-3/4"
#11	14"	10"	19"	14-1/4"
#14	21-2"	20-1/2"	21-2"	20-1/2"
#18	21-11"	21-3"	21-11"	21-3"

NOTES: ALL STANDARD HOOKS AND BENDS OTHER THAN 130 DEG. TO BE BENT WITH 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.

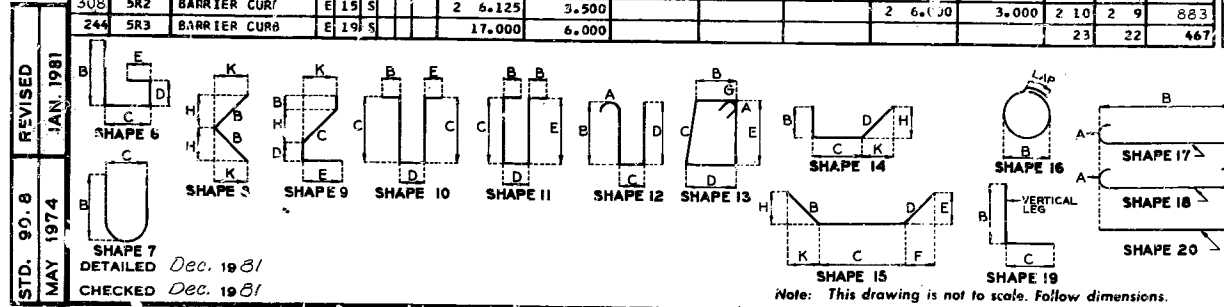
NO. EA. - NUMBER OF BARS OF EACH LENGTH.

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.

Note: Two additional #6-S1 and #5-S2 are included in bar bill for testing. See Special Provisions.

318



BENDING DIAGRAMS

QUANTITIES			
ITEM		SUBSTR.	SUPERSTR.
Special Work	Lump Sum		1
Removal Of Existing Bridge Deck	Sq. Ft.		5,574
Class I Excavation	Cu. Yd.	35.5	35.5
Structural Steel Piles (10 In.)	Lin. Ft.	240	240
Class B Concrete	Cu. Yd.	68.3	68.3
Reinforcing Steel	Pound	9,300	9,300
Slab On Concrete I-Girder "X"	Sq. Yd.		728
Safety Barrier Curb	Lin. Ft.		285
Plain Neoprene Bearing Pads	Each		24
Laminated Neoprene Bearing Pads	Each		12
Prestressed Concrete I-Girder 30 Ft. Span Each			6
Prestressed Concrete I-Girder 60 Ft. Span Each			6
Prestressed Concrete I-Girder 25 Ft. Span Each			6
CONTINGENT			
504.01 Reinforcing Steel	Lb.		2800

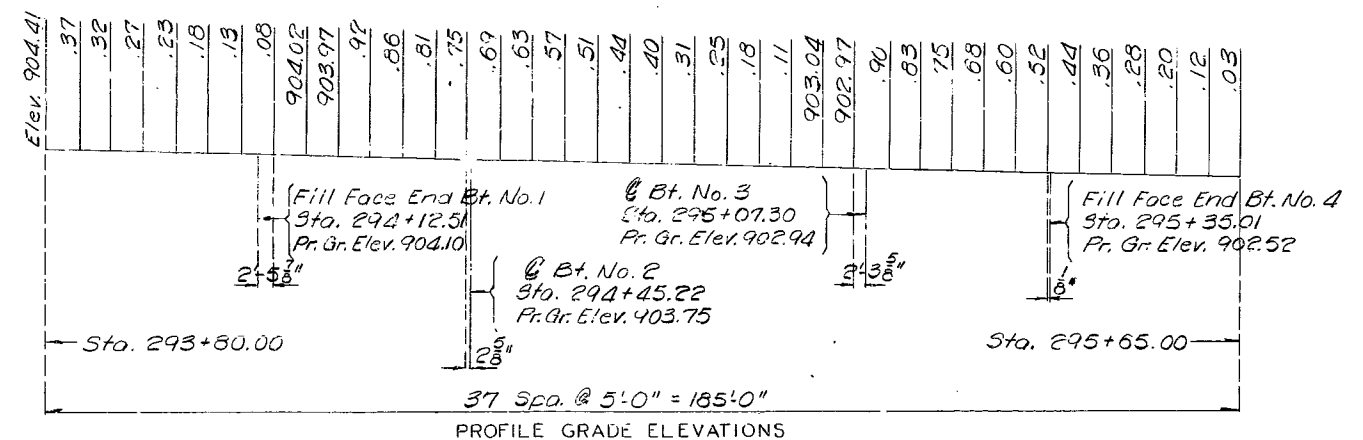
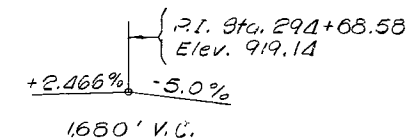
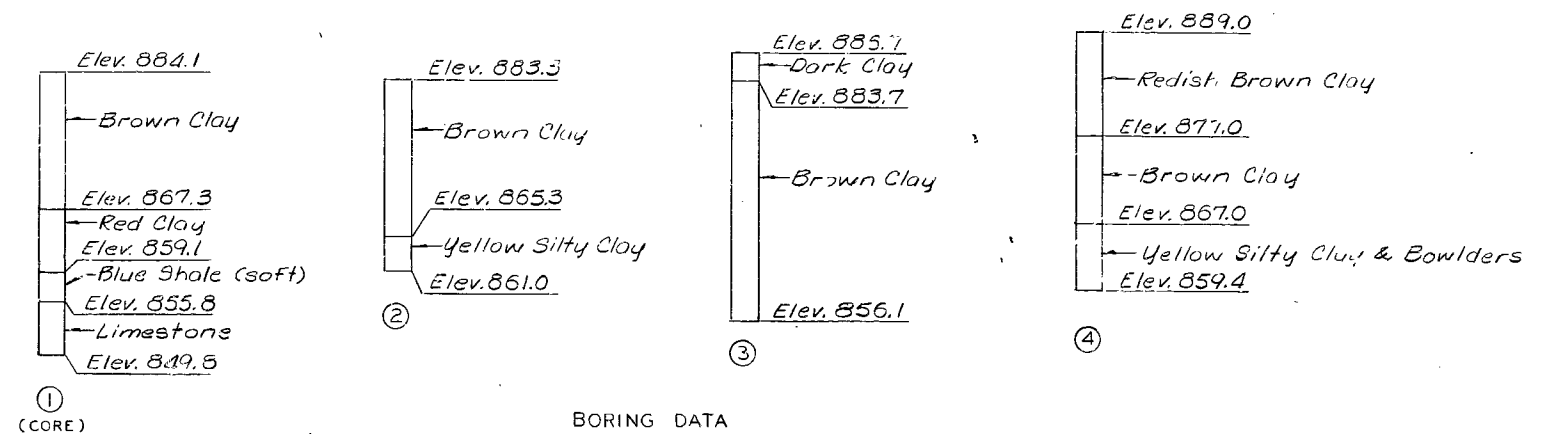
Note:
 All concrete and reinforcement above lower construction joint in end bents are included with superstructure quantities.
 Cost of $\frac{3}{4}$ " ϕ coil tie rods placed in diaphragms is included in contract unit price for P/S members.
 "X" See Special Provisions.

PILE DATA					
BENT NO.		1	2	3	4
Pile Type and size		HP10x42	HP10x42	HP10x42	HP10x42
Number		2	2	2	2
Approximate length	Ft.	38	24	21	37
Design Bearing	Tons	24	43	43	24
Hammer Energy required	Ft. Lbs	7,000	9,600	9,600	7,000

Minimum energy requirement of hammer based on plan length and design bearing value of piles.
 All pile were driven to practical refusal.

QUANTITIES FOR SLAB			
TYPE OF SLAB	Slab on Conc. I-Gir.		
	Reinf. (Lbs.)		Conc.
	Epoxy	Plain	Cu. Yd.
Precast Panel Forms	31,480	7,590	219.2

Precast panel quantities based on skewed end panels.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	51	

FINAL PLANS

DETAILED Nov. 1981
 CHECKED Nov. 1981

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

Sheet No. 2A of 14.

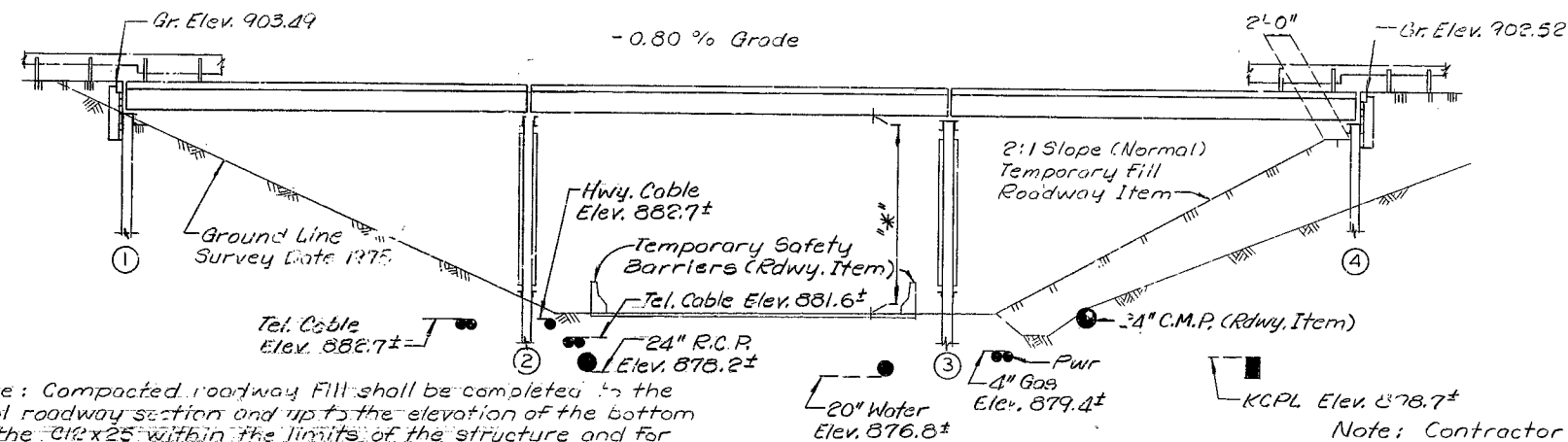
CLAY COUNTY

L-659R

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

(40'-40'-40') PREFABRICATED SEGMENTED WF BEAM SPANS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	26	
SEC. 1 & 12 TWP. 50N RGE. 33W					



Note: Compacted roadway fill shall be completed to the final roadway section and up to the elevation of the bottom of the 24"x25" within the limits of the structure and for not less than 25' in back of the fill face of the end bents before piles are driven for any bents falling within the embankment section.

ELEVATION

Note: Contractor shall exercise caution during construction to prevent damage to existing underground utilities.

A minimum vertical clearance of 13'-6" from crown of existing lane to nearest temporary construction falsework shall be maintained during construction.

*" Final vertical clearance from top of roadway to bottom of superstructure to be at least 15'-0".

GENERAL NOTES:

Design Specifications: R.R.S.H.T.O. - 1977 Load Factor Design

Design Loading: H20-44

Design Unit Stresses:

Structural Steel (A.S.T.M. A588) $F_y = 50,000$ psi

Structural Carbon Steel (Piling & Sway Bracing) $F_s = 20,000$ psi

Steel Pile $F_b = 9,000$ psi

Timber:

All timber shall be standard rough sawn.

All timber shall be treated with creosote or pentachlorophenol solution.

All timber shall have a minimum strength of 1500 psi and shall be either douglas fir conforming to the requirements of paragraph 123b (MC-19), 124b (MC-19) and 130bb of the Standard Grading Rules for West Coast Lumber, No. 16, December 1, 1976 Revised Edition or southern pine conforming to the requirements of paragraphs 312 (MC-19), 342 (MC-19) and 405.1 of the Southern Pine Inspection Bureau Grading Rules, 1977 Edition or a satisfactory grade of sound native oak.

Note: All bolts shall be High Tensile Strength Bolts.

ESTIMATED QUANTITIES		
ITEM		TOTAL
Structural Steel Pile (10")	Lin. Ft.	991
Furnishing Superstructure	Lump Sum	1
Erecting Superstructure	Lump Sum	1
Removing & Storing Superstructure	Lump Sum	1

PILE DATA				
BENT NO.	1	2	3	4
Pile Type and Size	HP10x42	HP10x42	HP10x42	HP10x42
Number	7	5	5	7
Approximate Length Ft.	43	41	41	40
Design Bearing Tons	15	22	22	15
Hammer Energy Req'd. Ft. Lbs.	7000	7000	7000	7000

Note: Minimum energy requirement of hammer based on plan length and design bearing value of piles.
All pile shall be driven to practical refusal.

B.M. Elev. 902.15 on top of Rt. wing bent No. 4
Sta. 295+35.75

TEMPORARY BRIDGE OVER RUSSELL ROAD

STATE ROAD FROM ROUTE 210 NORTH

IN KANSAS CITY

PROJECT NO. I-1R-35-1(120)

STA. 9+30.52

JOB NO. 4-I-35-340

RTE. I-35

CLAY

COUNTY

DATE 1/13/83

STD.

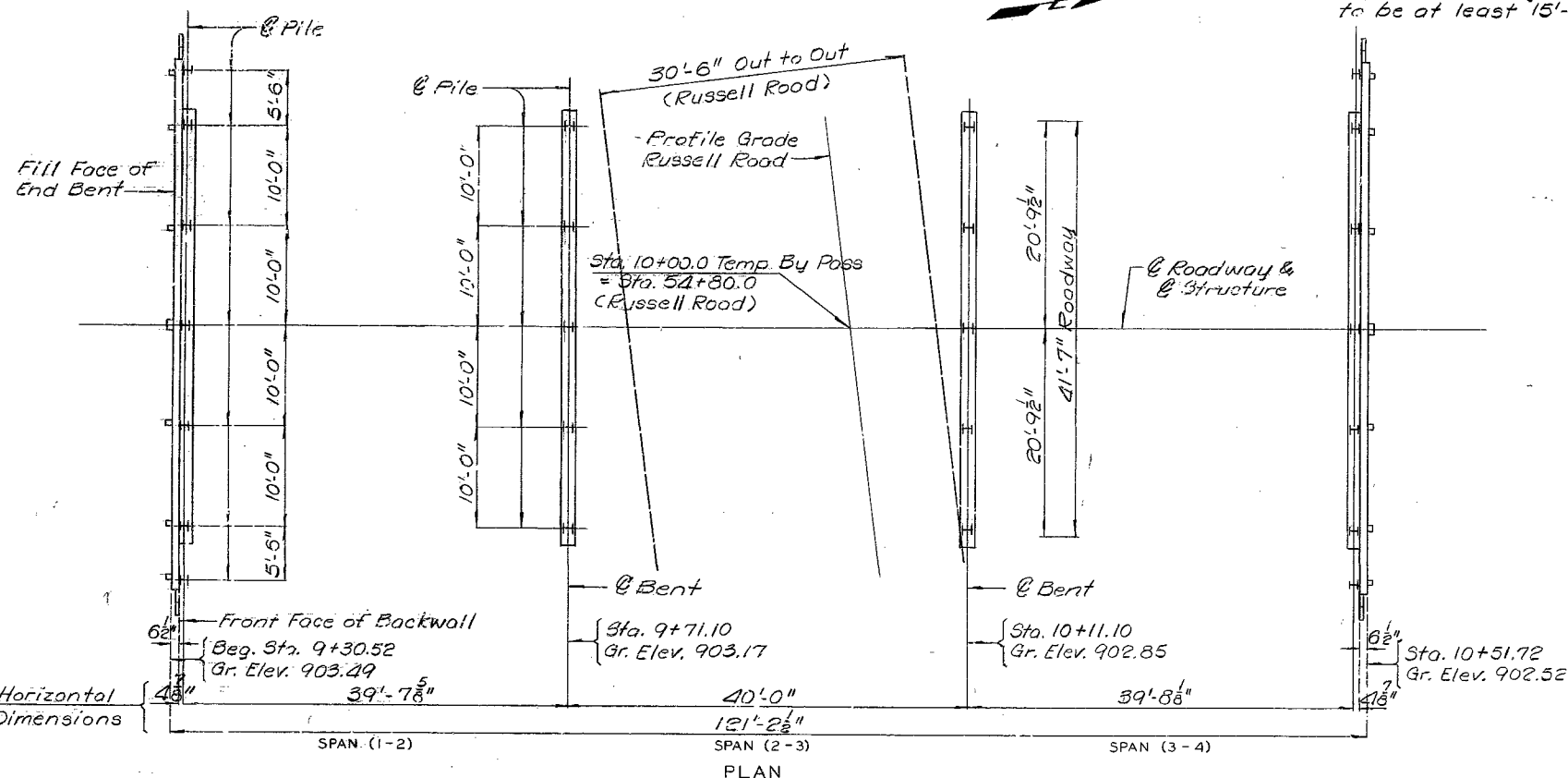
STD.

L-659T

DESIGNED Sept. 1981
DETAILED Nov. 1981
CHECKED Dec. 1981

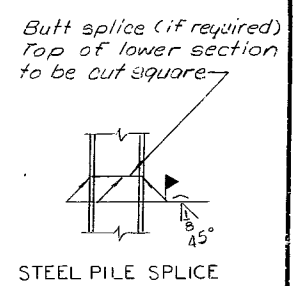
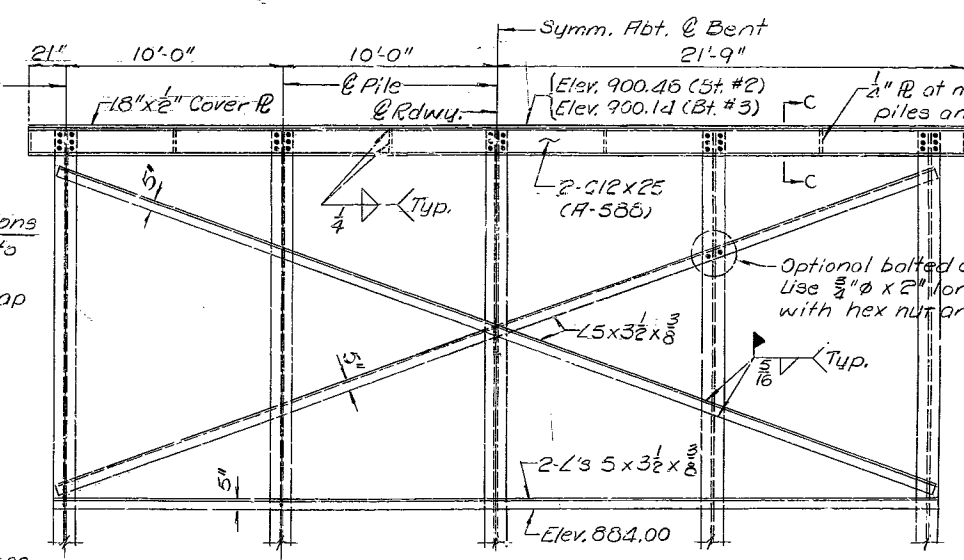
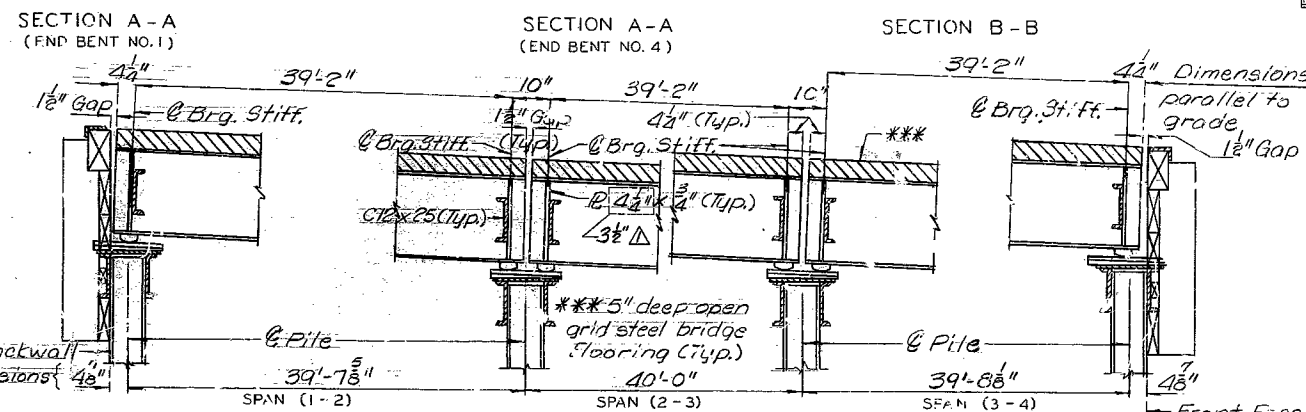
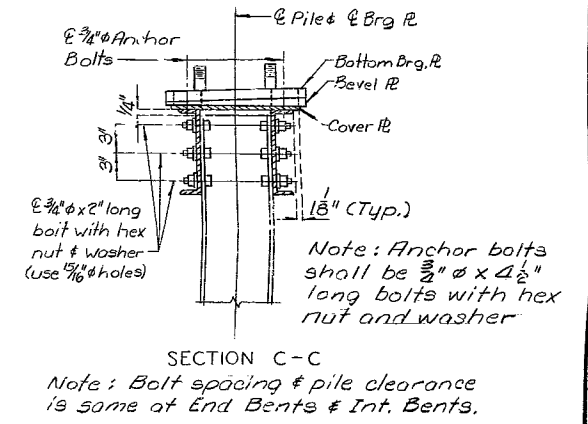
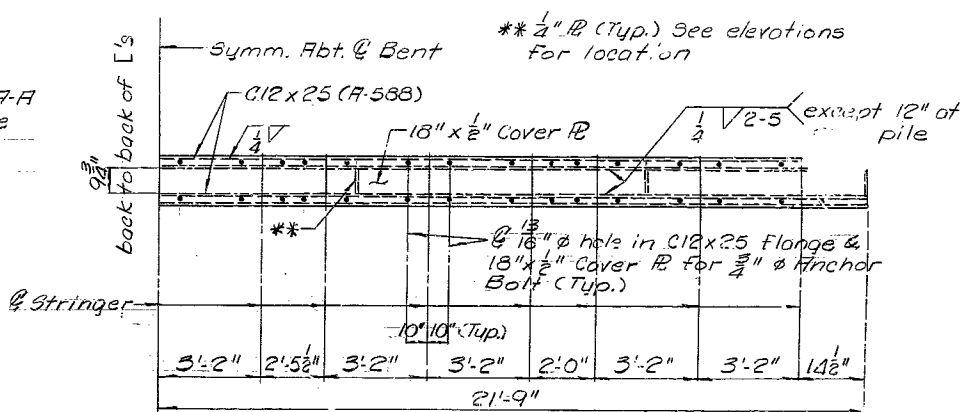
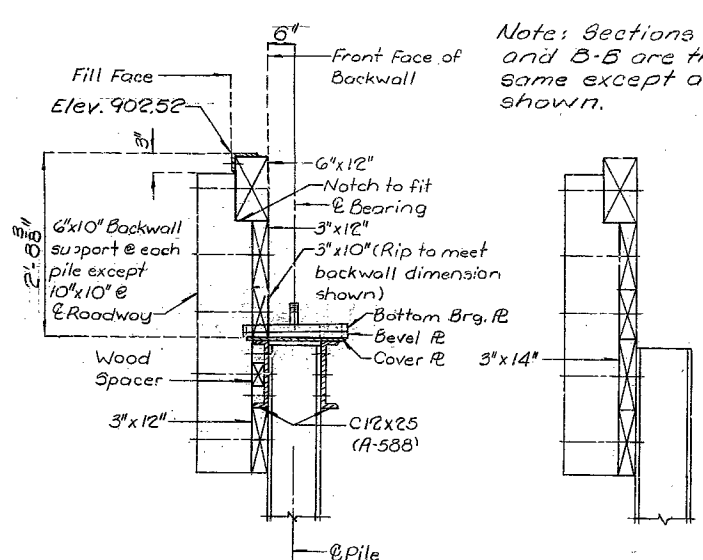
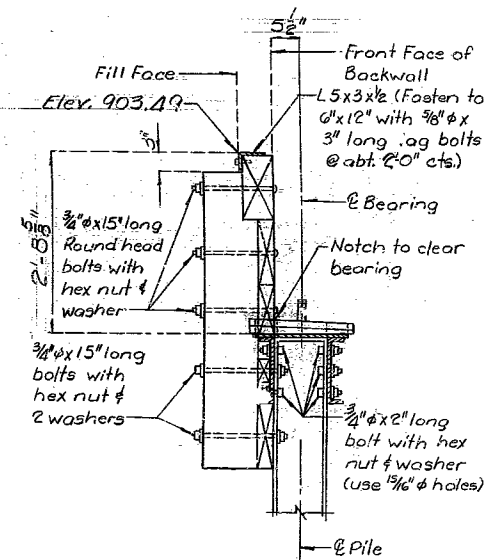
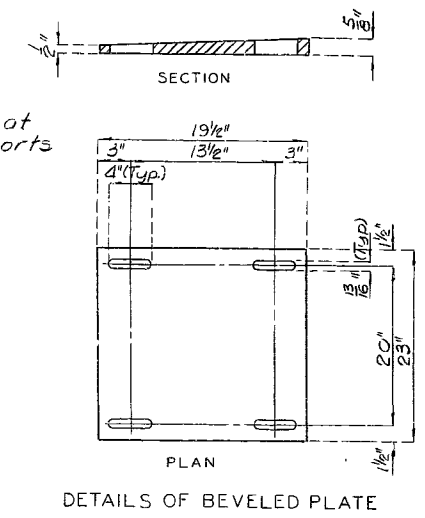
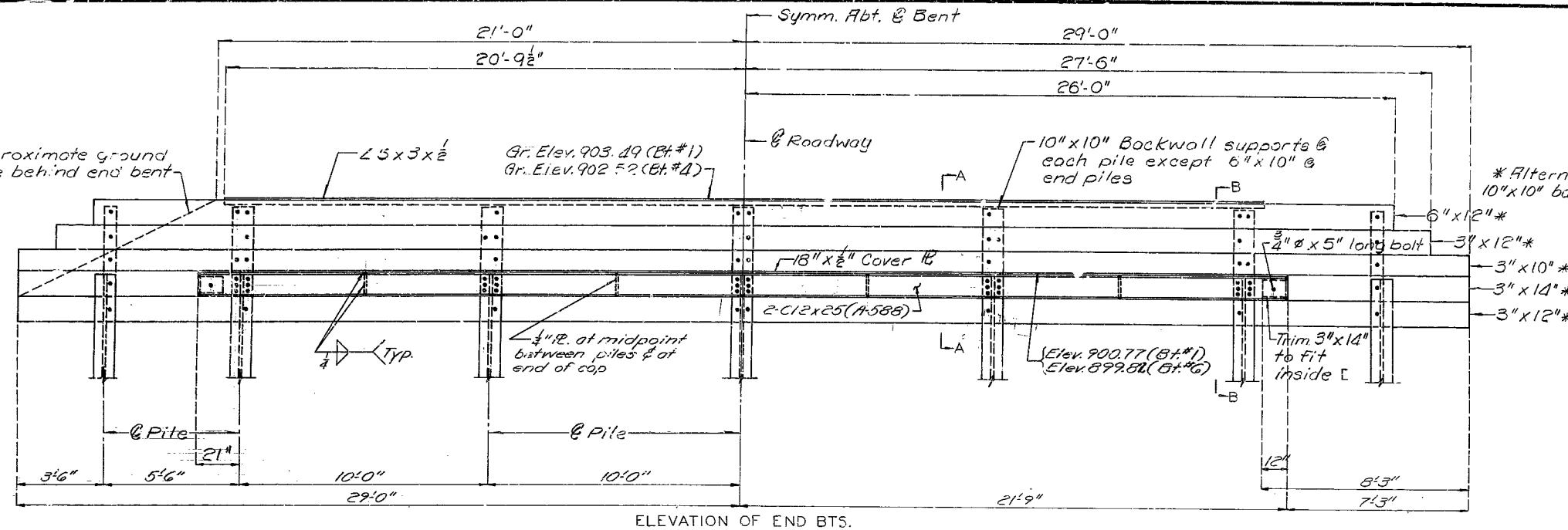
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 4



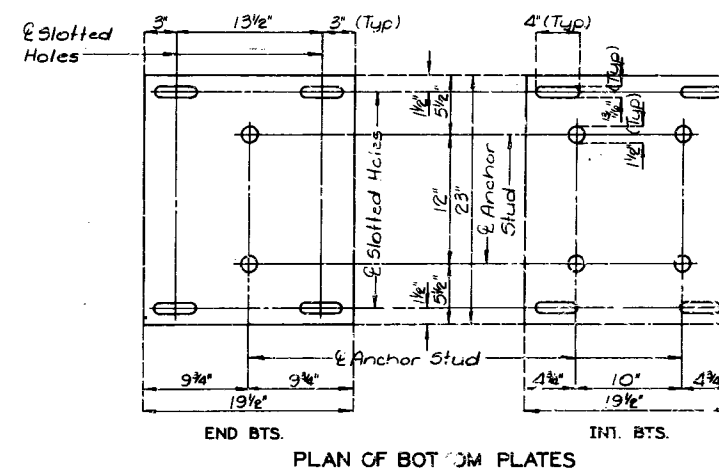
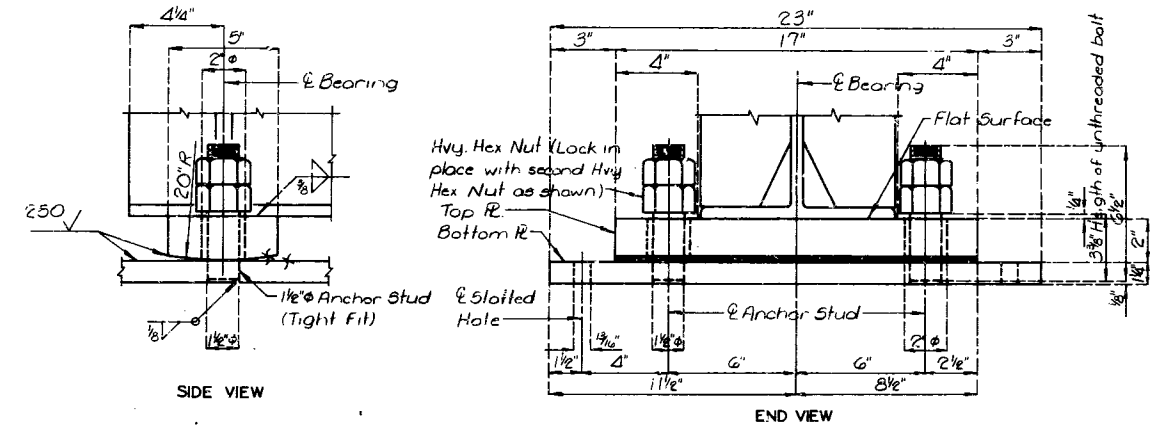
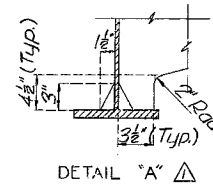
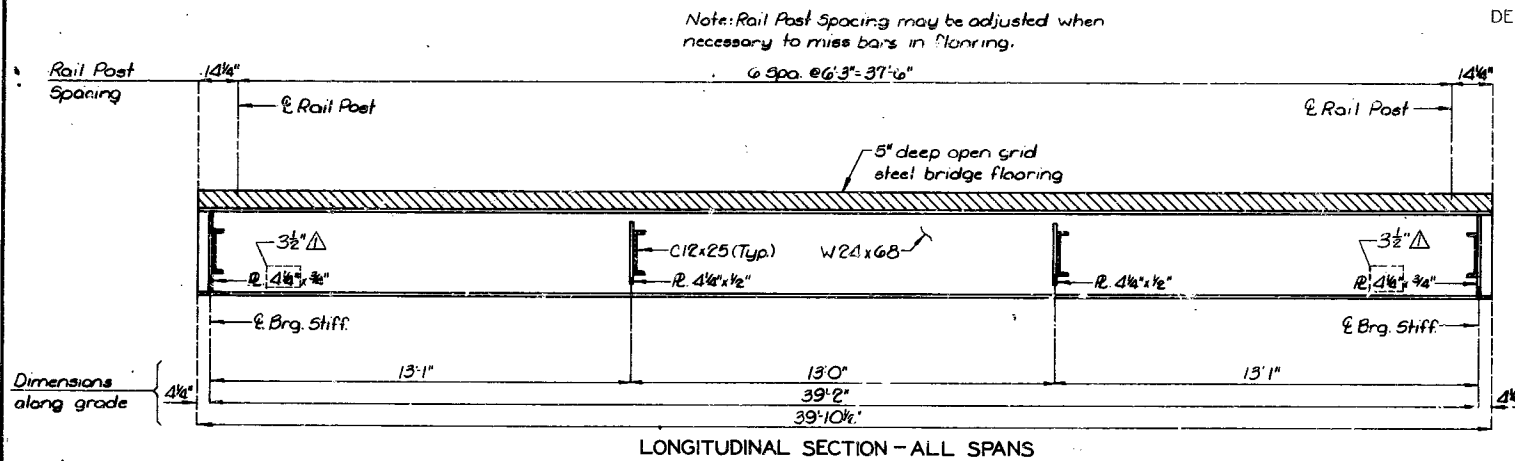
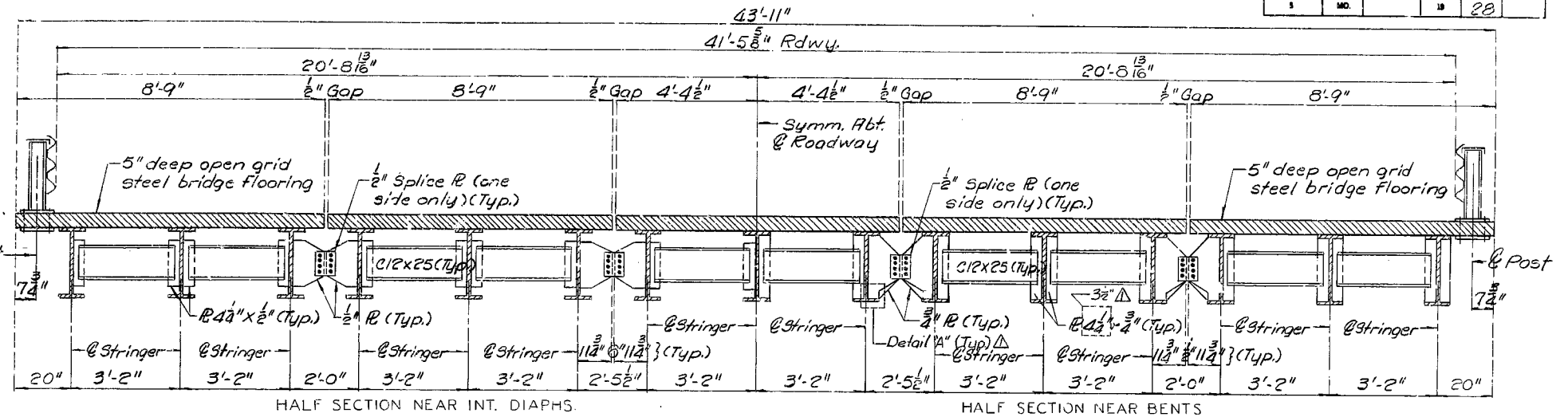
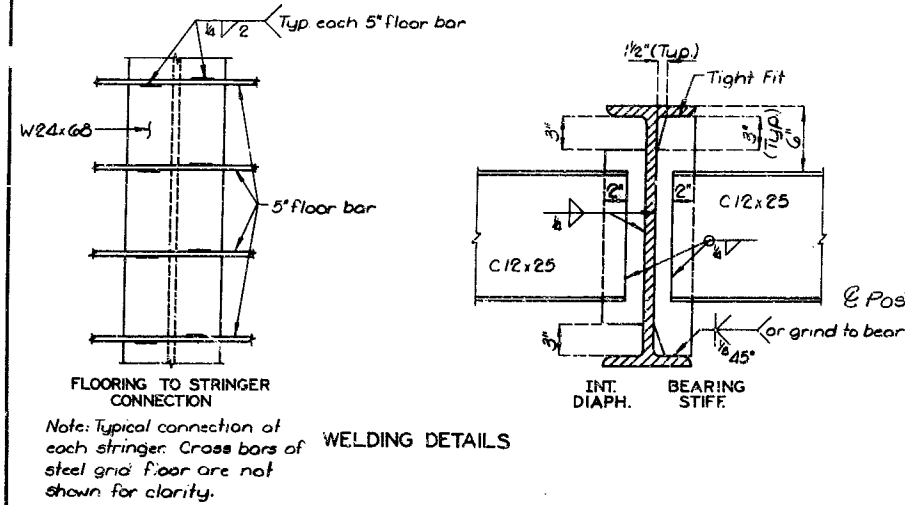
321

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	27	

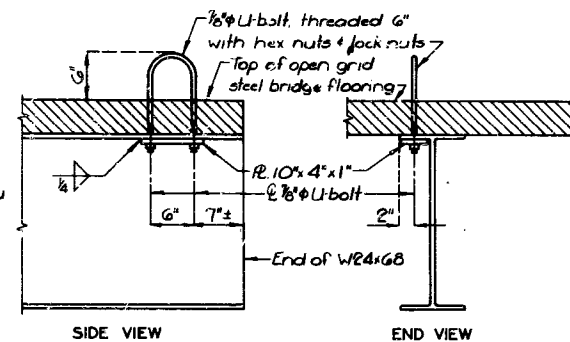


Note: Field Connections, High Strength
Bolts $\frac{7}{8}" \phi$, holes $1\frac{1}{8}" \phi$ except as shown

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	28	



No. Required: 50 Top R's.
30 Bottom R's (Int. Bts)
30 Bottom R's (End Bts)



Note: U-bolt Lifting Device to be on the inside top flange at both ends of each exterior stringer of each unit. U-bolts to be removed during the time the bridge is open to traffic. Position of U-bolts may be shifted slightly to miss bars in flooring. 40 U-bolt Lifting Devices required.

Note: Steel bridge flooring shall be Greulich 5-Inch RB/6.0M, Reliance 5" Weldlock Type "H", or Foster 5" Open Steel Bridge Flooring. Trim bars will be required at the sides and ends of each 39'-10 1/2 inch unit.

Note: All Structural Steel shall be A-53B except piles and sway bracing which shall be A-36.

DETAILED Nov. 1981
CHECKED Dec. 1981

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

Revised March 7, 1983

Sheet No. 3 of 4

DETAILS OF BEARINGS

CLAY

COUNTY

L-659T

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	29	

GENERAL NOTES:

DESIGN BASED TO 1977 SPECIFICATIONS.

PANEL LENGTHS OF CHANNEL MEMBERS SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF SIX (EXC PT AT END BENTS).

ALL BOLTS, NUTS, WASHERS, AND PLATES ARE CONSIDERED AS PARTS OF THE RAIL FOR PAYMENT.

ALL STEEL CONNECTING BOLTS AND FASTENERS FOR POST, RAILING AND ALL ANCHOR BOLTS, NUTS, WASHERS AND BOTTOM PLATES SHALL BE GALVANIZED AFTER FABRICATION. FOR PROTECTIVE COATING AND MATERIAL REQUIREMENT OF STEEL RAILING SEE SECTION 1040 OF THE STANDARD SPECIFICATIONS.

RAIL POSTS SHALL BE SET PERPENDICULAR TO ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION, AND ALIGNED ACCORDING TO SECTION 713 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT THE RAIL POST SHALL BE ALIGNED BY THE USE OF SHIMS SO THAT IN FINAL ADJUSTMENT NO PART SHALL DEVIATE MORE THAN ONE INCH FROM TRUE HORIZONTAL ALIGNMENT. THE SHIMS SHALL BE 3" X 1-3/4" AND PLACED BETWEEN THE POST AND W-BEAM RAIL. THE THICKNESS OF THE SHIMS SHALL BE DETERMINED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER BEFORE ORDERING MATERIAL FOR THIS WORK.

AT EXPANSION SLOTS IN W-BEAM RAILS AND CHANNELS, TIGHTEN BOLTS, BACK OFF ONE-HALF TURN AND BURR THREADS.

MINIMUM LENGTH OF W-BEAM SECTIONS IS EQUAL TO ONE POST SPACE.

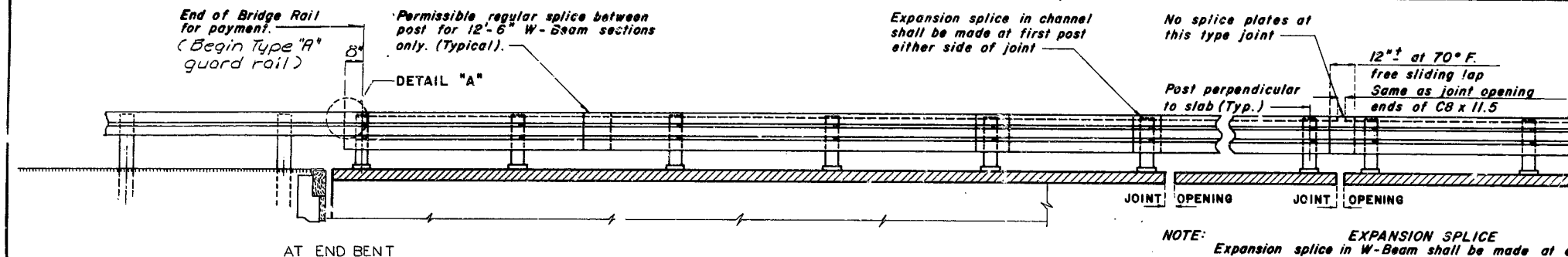
W-BEAM GUARD RAIL TO BE MADE OF STEEL AND SHALL BE 12 GAGE, AND ERECTED IN ACCORDANCE WITH STANDARD PLAN 606.00.

POST, BASE PLATES, CHANNELS AND CHANNEL SPLICE PLATES TO BE FABRICATED FROM A-36 STEEL AND GALVANIZED.

THREADED RODS GRADE A-321 WITH 2 HEX. NUTS AND WASHERS MAY BE SUBSTITUTED FOR THE A-307 ANCHOR BOLTS.

WASHERS SHALL BE USED AT ALL POST BOLTS (BETWEEN BOLT HEAD AND BEAM). THEY SHALL BE RECTANGULAR IN SHAPE (3" X 1-3/4" X 3/16" MIN.) AND FLAT, OR WHEN NECESSARY OF SUCH DESIGN TO FIT THE CONTOUR OF THE BEAM. WASHER SHALL HAVE 1/16" X 1" HOLE.

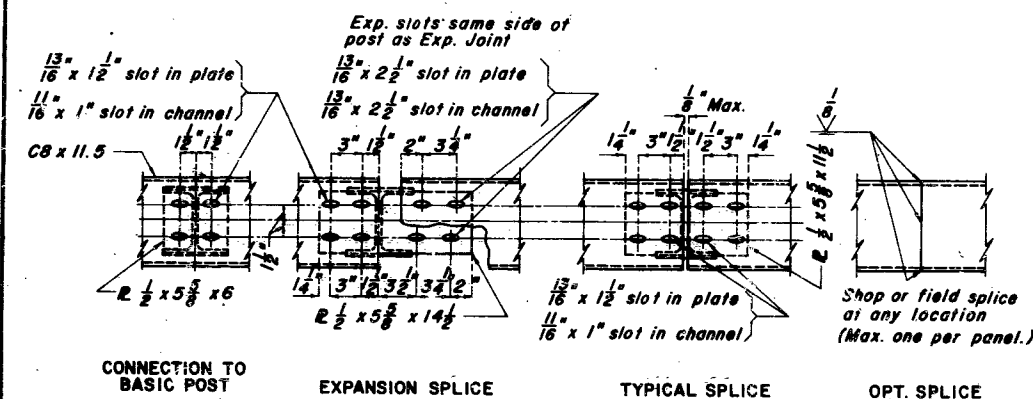
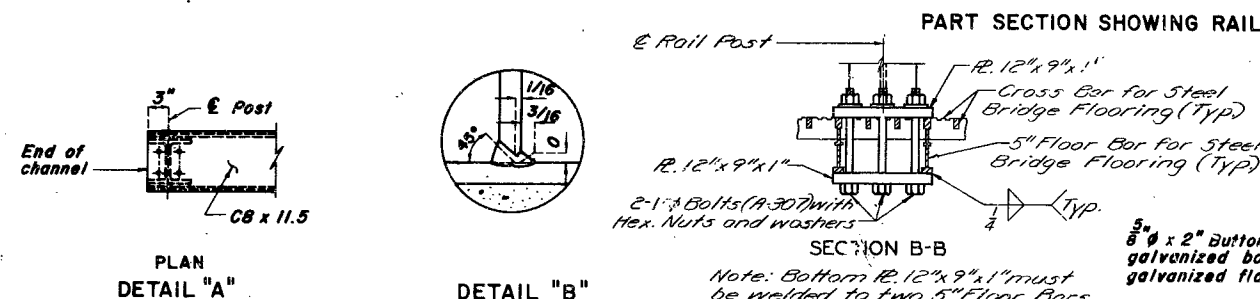
FABRICATION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH SECTION 712 OF THE STANDARD SPECIFICATIONS.



Note: See SHT. NO. 3. for rail post spacing

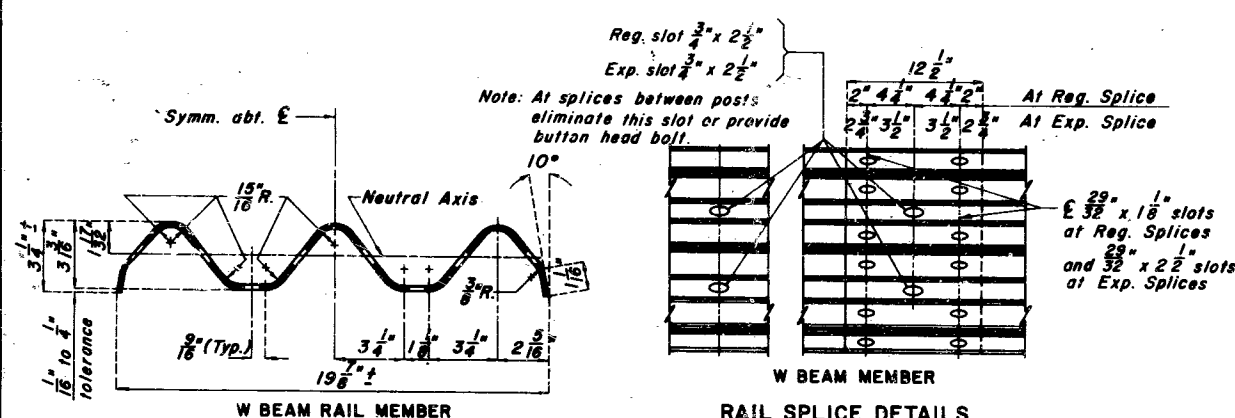
NOTE: Expansion splice in W-Beam shall be made at either the first or second post either side of joint. When splice is made at second post, an expansion slot shall be provided in W-Beam for connection to first post to allow for movement.

EXPANSION JOINTS
In addition to expansion provisions at these expansion joints, expansion splices in channel member only shall be provided at other locations so that the maximum length of channel without expansion provisions does not exceed 200 Ft.

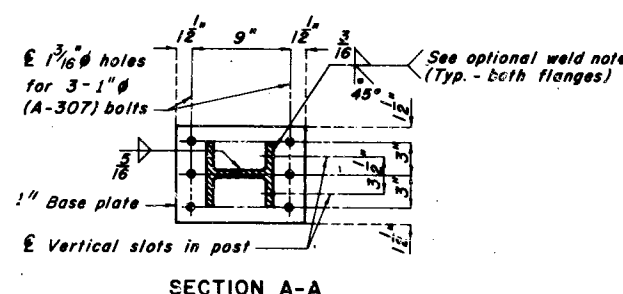


CHANNEL MEMBER DETAILS

Note: Shim plates 6" x 6" x 1/8" may be used between top of post and channel member as required for vertical alignment.



Note: Optional weld-post to base plate; 5/16" fillet weld all around (including edges of flanges) in lieu of weld shown.



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

Sheet No. 4 of 4

CLAY

COUNTY

L-659 T

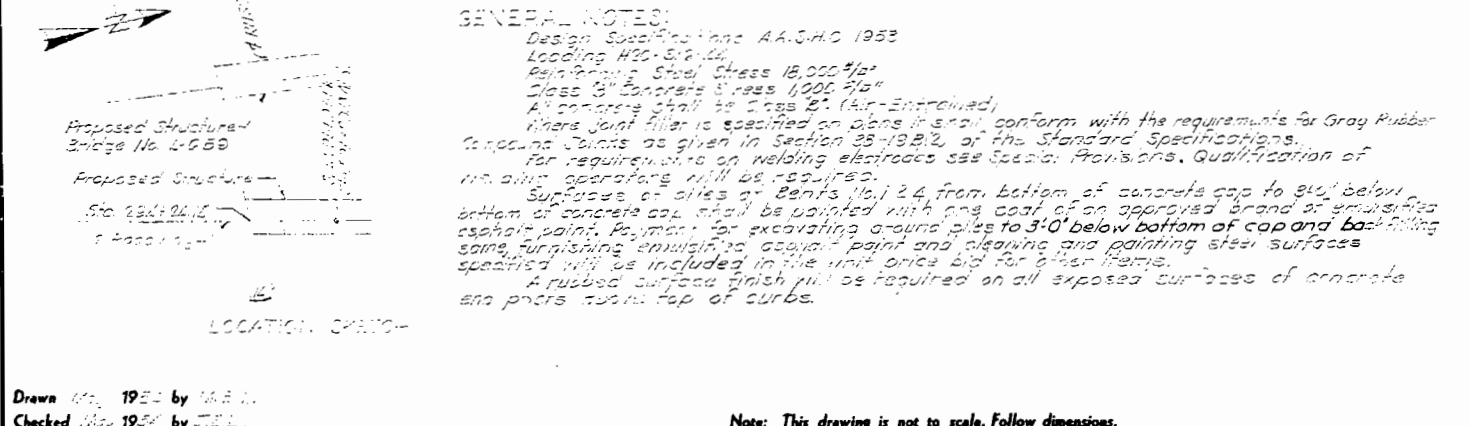
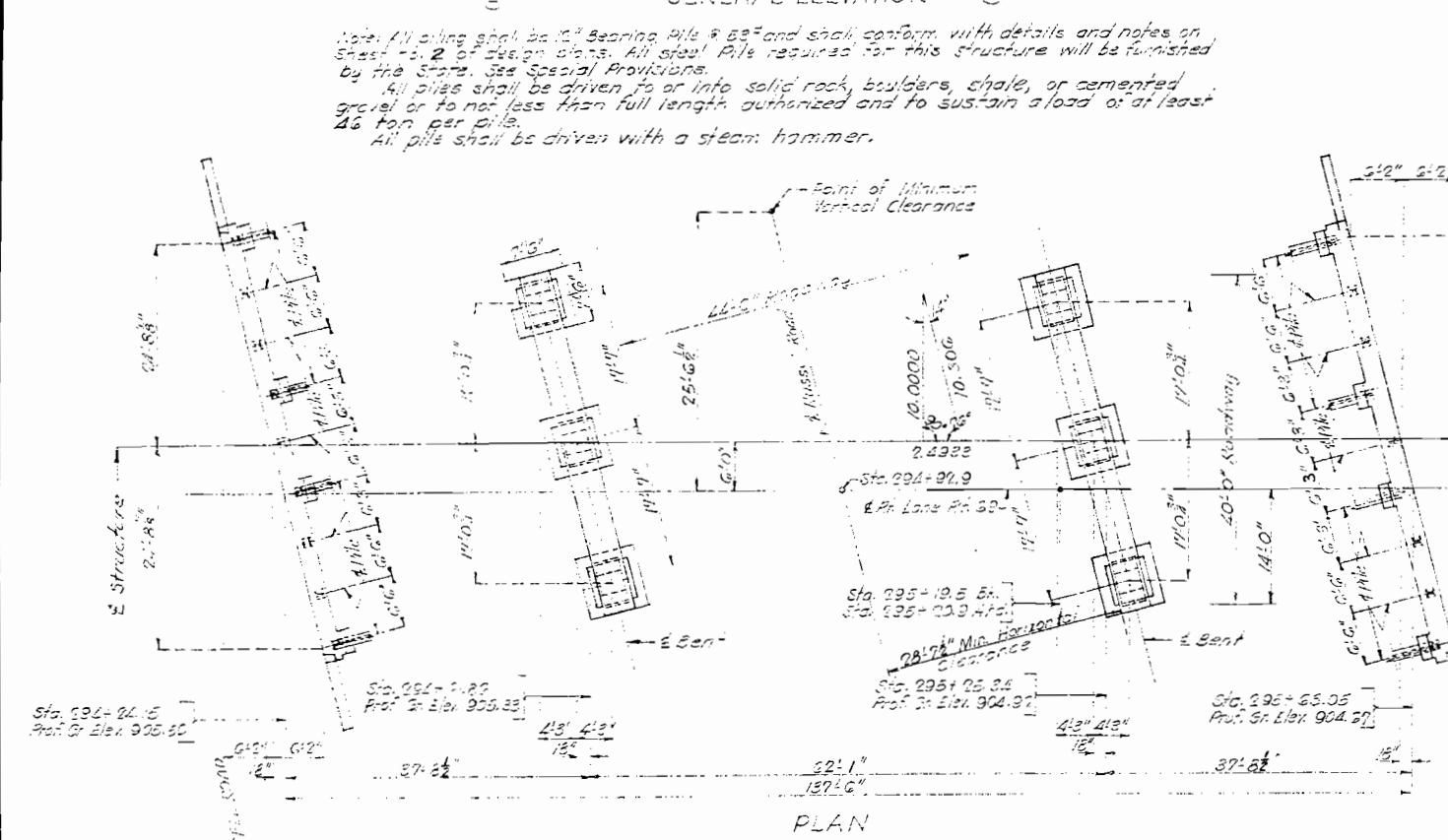
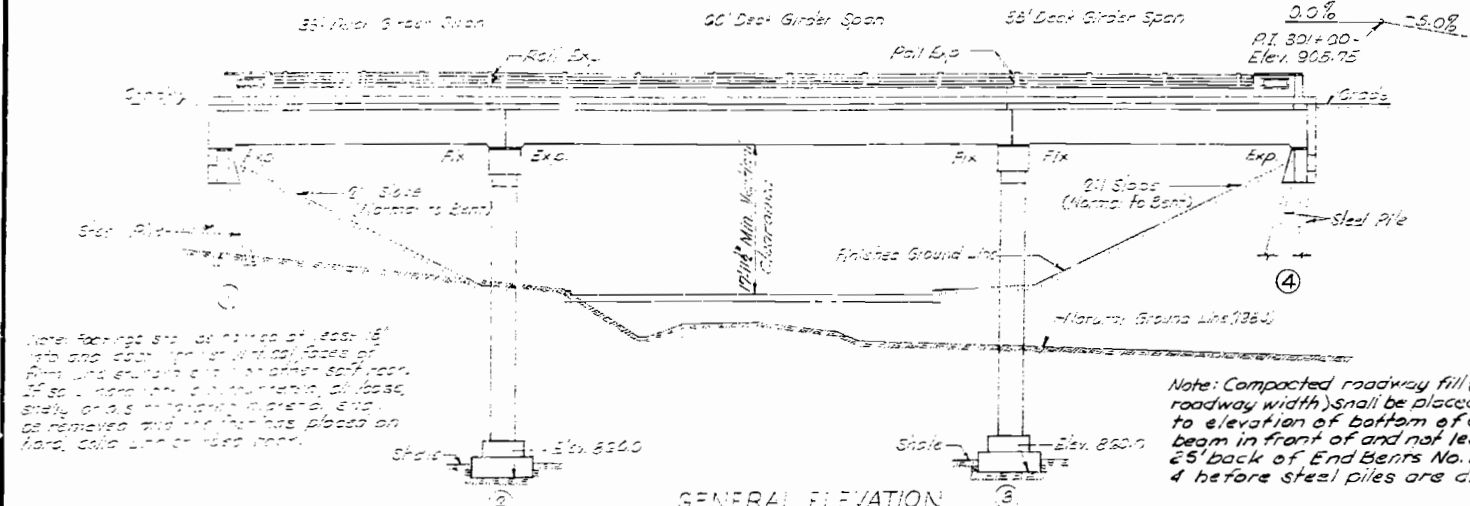
324

SPS W-BEAM Revised OCT. 1976 JUNE 1981

DETAILED SEPT. 1981
CHECKED Dec. 1981

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	19		



Drawn May 1954 by M.B.L.
Checked May 1954 by J.B.L.

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

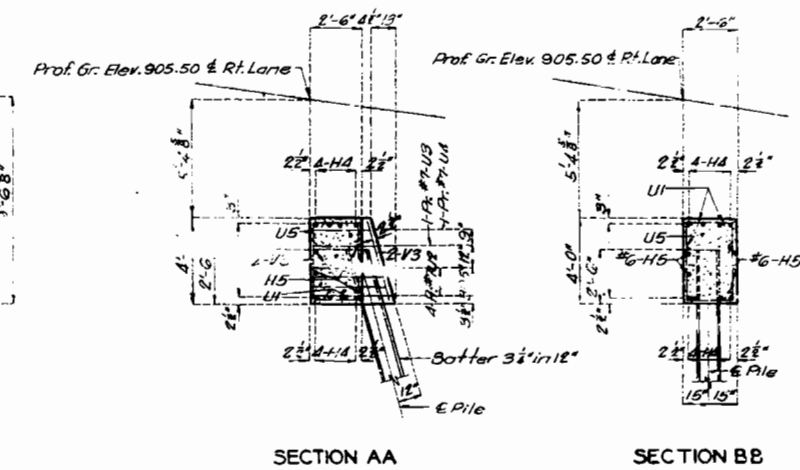
No.	Size	Length	Mark	Location
3	24	12'6"	H1	Wing Bt #1
10	24	12'0"	H2	" "
2	24	8'0"	H2	" "
22	24	8'0"	H2	Beam
16	24	8'8"	H2	" "
3	24	12'6"	H2	Wing Bt #4
10	24	10'6"	H2	" "
2	24	7'8"	H2	" "
4	24	15'2"	H1	Wing Bt #1
4	24	12'2"	H2	" "
1	24	14'9"	H2	Wing Bt #4
2	24	12'6"	H2	" "
200	24	7'0"	H1	Beam
54	24	8'2"	H2	" "
16	24	8'8"	H2	" "
16	24	8'8"	H2	" "
26	24	8'8"	H2	" "
7	24	10'9"	H1	Wing Bt #1
20	24	3'0"	H2	Wing
32	24	3'12"	H2	Em. Head
6	24	11'6"	H2	Wing Bt #4
43	24	8'6"	H1	Footings
32	24	8'6"	H1	Ch. Head
16	24	8'6"	H2	" "
24	24	2'15"	H1	Beam
8	24	22'6"	H2	" "
28	24	24'9"	H2	" "
16	24	10'10"	H2	" "
186	24	10'3"	H1	Column
74	24	13'8"	H2	Beam
40	24	11'0"	H2	" "
22	24	4'6"	H2	" "
48	24	24'9"	H2	Column
310	24	10'10"	H1	Sp. 35-19.2
285	24	11'9"	H2	Sp. 35-19.2
30	24	8'9"	H2	Sp. 35-19.2
20	24	4'12"	H2	" "
10	24	3'12"	H2	" "
12	24	3'12"	H2	" "
30	24	4'12"	H2	Sp. 35-19.2
30	24	22'10"	H2	" "
30	24	52'3"	H2	" "
30	24	12'0"	H2	" "
15	24	52'3"	H2	" "
16	24	45'13"	H2	" "
16	24	58'0"	H2	" "
16	24	51'0"	H2	" "
50	24	4'3"	H2	B15
272	24	3'9"	H1	Sp. 35-19.2
10	24	35'5"	H2	Sp. 35-19.2

Item	Quantity	Unit	Estimated
Class B Concrete for Structures	350	cu. yds.	350
Class B Concrete	125.3	cu. yds.	125.3
Reinforcing Steel	22,410	lbs.	22,410
Gray Iron Alloy Castings	3610	lbs.	3610
Aluminum Alloy Castings	245	lbs.	245
Steel Piling in a Box (Steel Castings, etc.)	620	sq. ft.	620

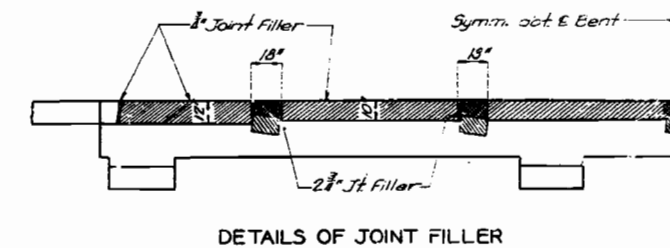
BRIDGE OVER RUSSELL ROAD
STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY, NE.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6) (RT. 69) STA. 294+24.15 (R. 5-17 LANE)
CLAY COUNTY

SUBMITTED BY J. A. Williams 6/10/1954
APPROVED BY Rex M. Whitton 6/10/1954
SHEET NO. 1 OF 7
SEE FINAL PLANS BROWN LINES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO	17-99763 (RT. 59)	19		



SECTION B2



DETAILS OF JOINT FILLER



DETAILS OF END BENT NO. 1

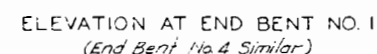
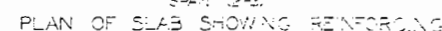


STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6) (RT.69) STA. 29+24.15 (RIGHT LANE)

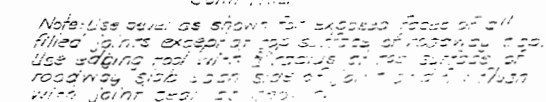
Sheet No. 2 of 7.

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

L-660



Note: Stirrups NT & W3 to be placed parallel to the Roadway.



DETAILS OF BEVEL FOR FILLED JOINTS

BRIDGE OVER RUSSELL CREEK
STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. 61-99.6 (RT-69) STA 294+24.15 TO 294+14.5

CLAY COUNTY

Drawn Apr 1954 by M.A.P.
Checked May 1954 by J.E.L.

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

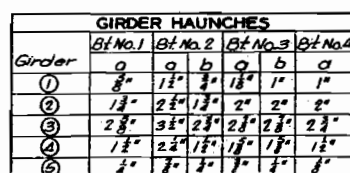
Sheet No. 5 of 7

NO CONSTRUCTION CHANGES

— *Journal of the American Medical Association*

1. *Chlorophyll a*

FED. ROAD DIST. NO.	STATE	FED. AND PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
5	MO.	01-98(6) (see p. 1)	19		



SECTION THRU GIRDER

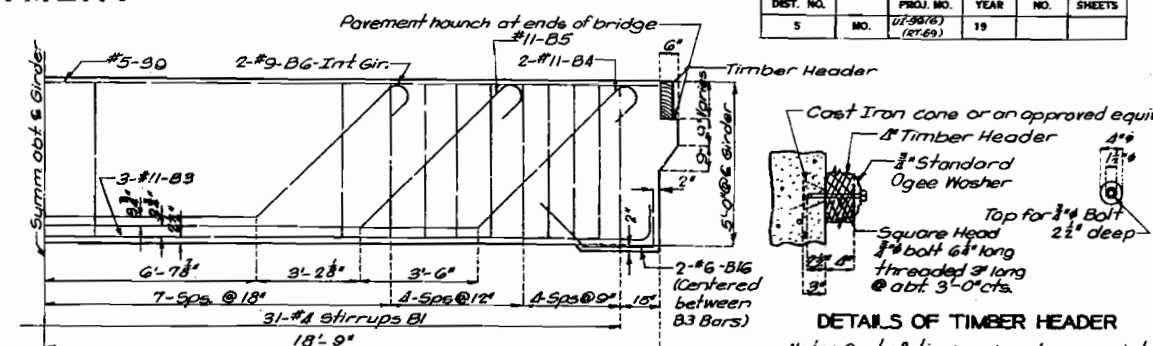


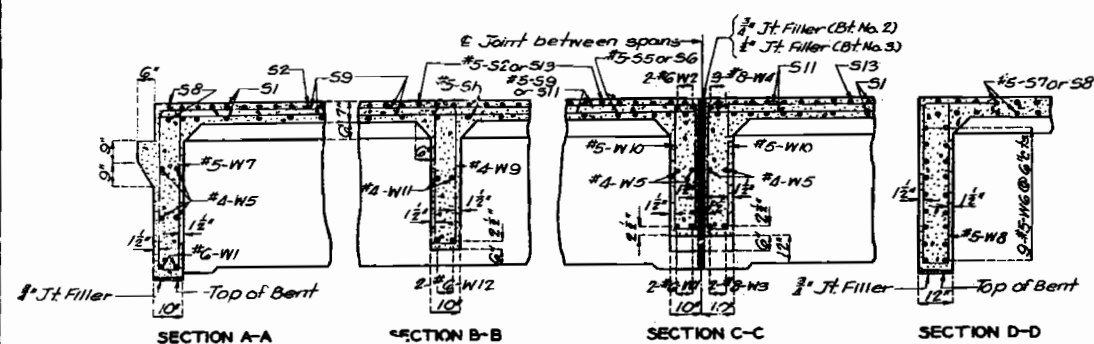
Diagram illustrating the connection of a timber header to a timber beam using a cast iron cone and a bolt.

Labels and Dimensions:

- Cast Iron cone or an approved equivalent
- Timber Header
- Standard Ogee Washer
- Top for Bolt
- 2 1/2" deep
- 6" long
- 3/4" Bolt
- 3/4" long threaded
- 2 1/2" long
- 2 1/2" long

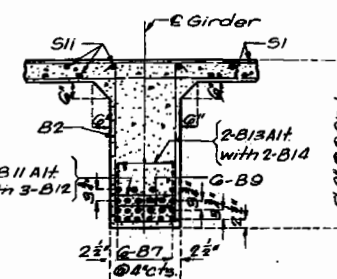
DETAILS OF TIMBER HEADER

Note: Cost of timber header complete in place to be included in price bid for concrete.

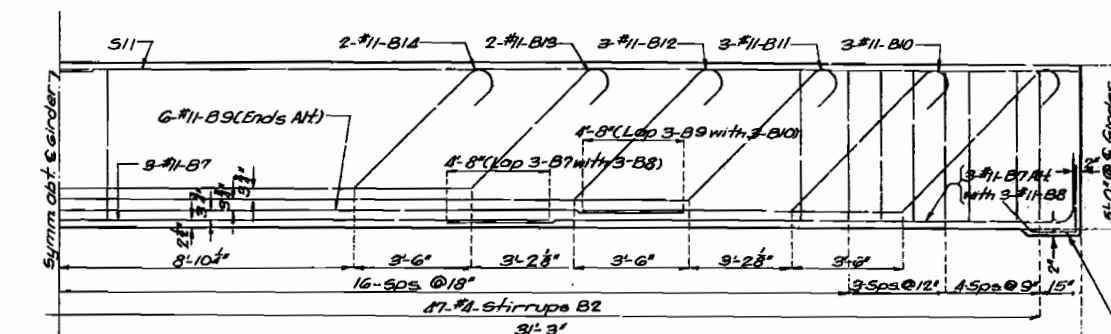


PART LONGITUDINAL SECTION

Part Longitudinal Section
Note: See sheet of 7 for location of sections

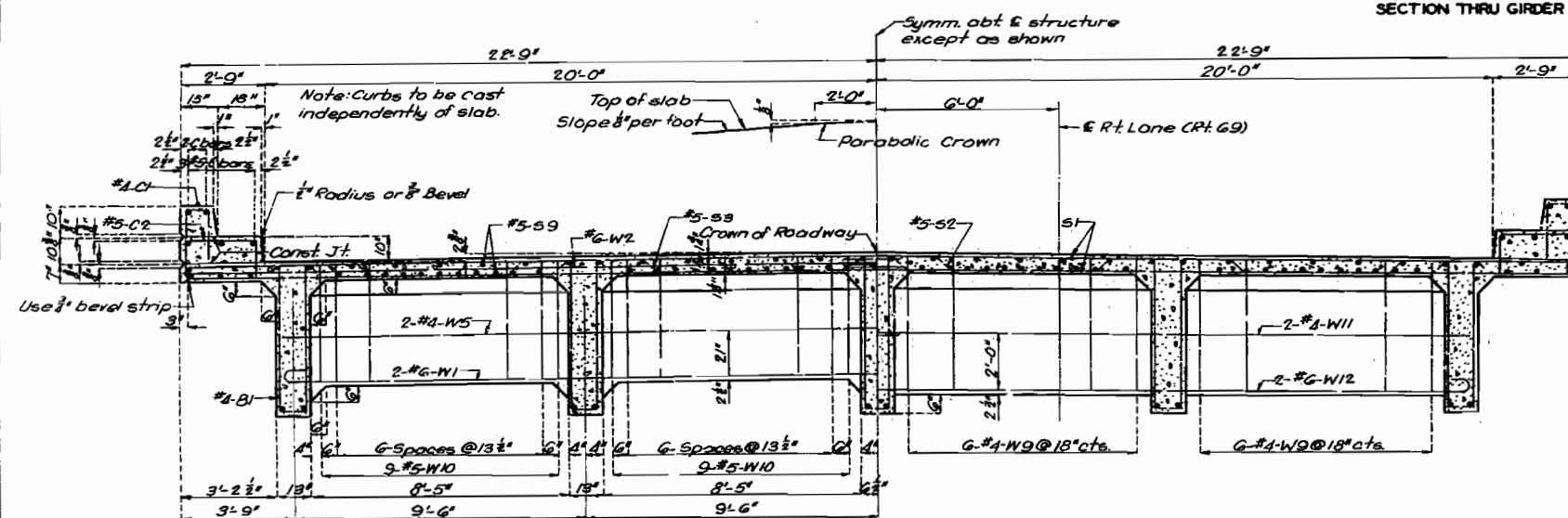


SECTION THRU GIRDER C



GIRDER REINFORCEMENT 60' SPAN

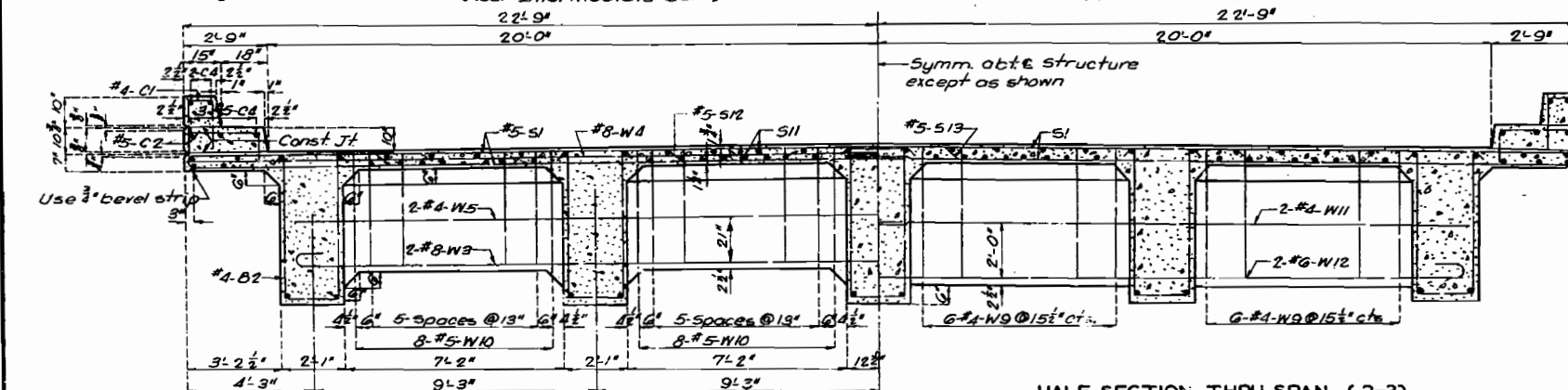
5-46-B15
(Centered between
B7 & B8 Bars)



HALF SECTION THRU SPANS (1-2) & (3-4)
(Near Intermediate Bent)

Note: Stirrups W10 to be placed parallel to Roadway.

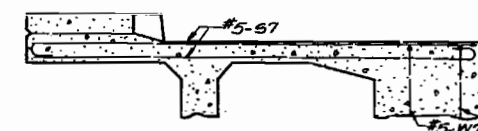
HALF SECTION THRU SPANS (1-2) & (3-4)
(Near Intermediate Web)



HALF SECTION THRU SPAN (2-3)
(Near Intermediate Bent)

HALF SECTION THRU SPAN (2-3)
(Near Intermediate Web)

Note: This drawing is not to scale. Follow Dimensions



PART SECTION E-E

STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6) (RT.69) STA.294+24.15 (RIGHT LANE)

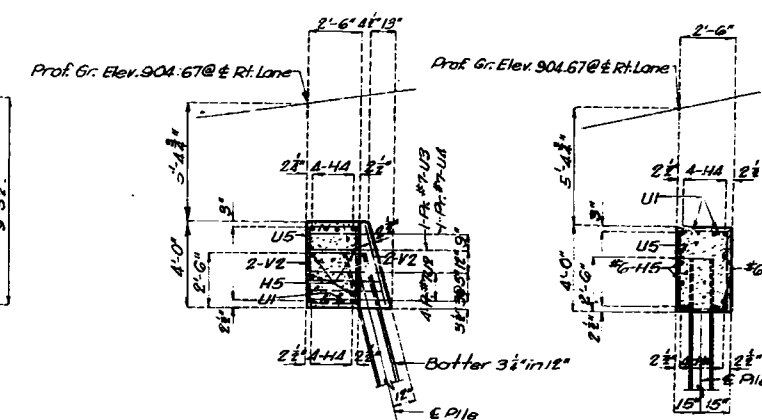
CLAY COUNTY

Drawn April 1954 by M.H.R. & W.G.S.
Checked May 1954 by J.E.L.

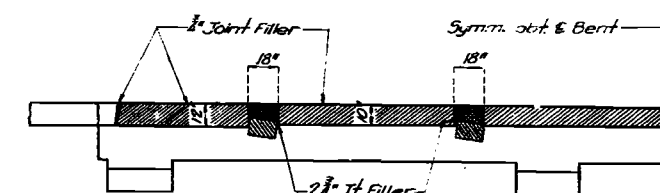
Sheet No. 5 of 7

L-660

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. #	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	01-99(6) (RT-001)	19		



SECTION BB



DETAILS OF JOINT FILLER

DETAILS OF END BENT NO. 4

STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. 01-99(6) (RT.69) STA. 294+24.15 (RIGHT LANE)

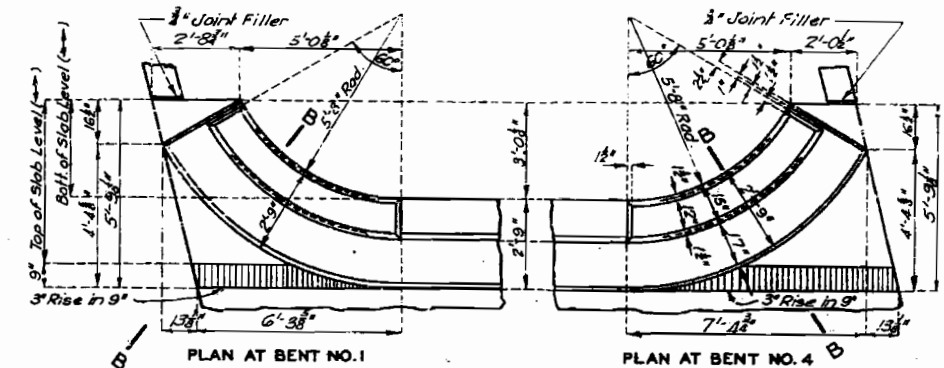
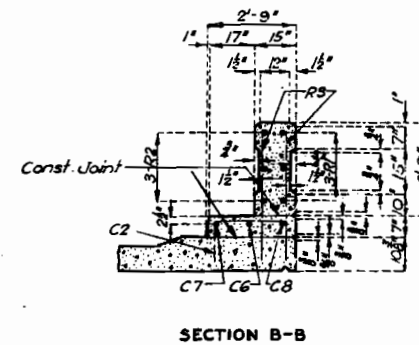
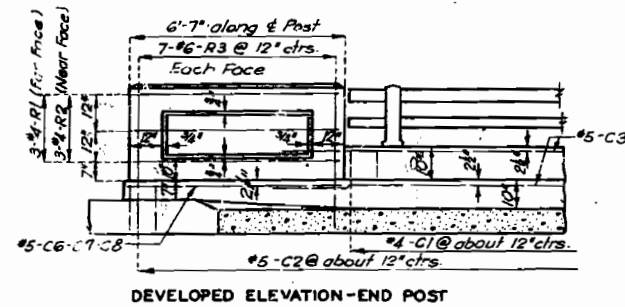
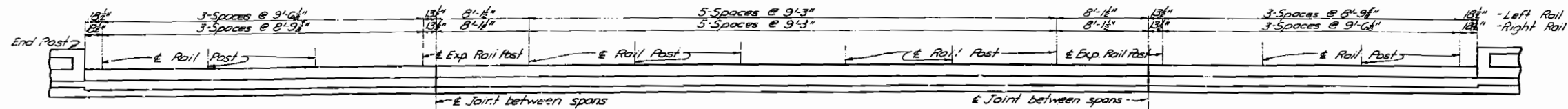
COUNTY

Sheet No. 4 of 7.

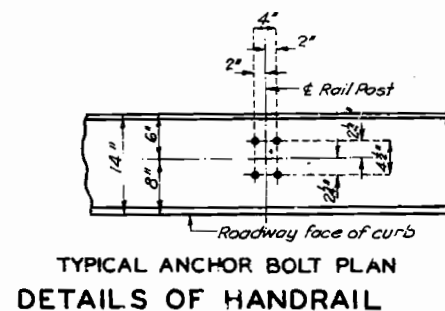
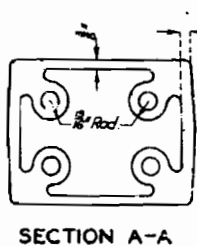
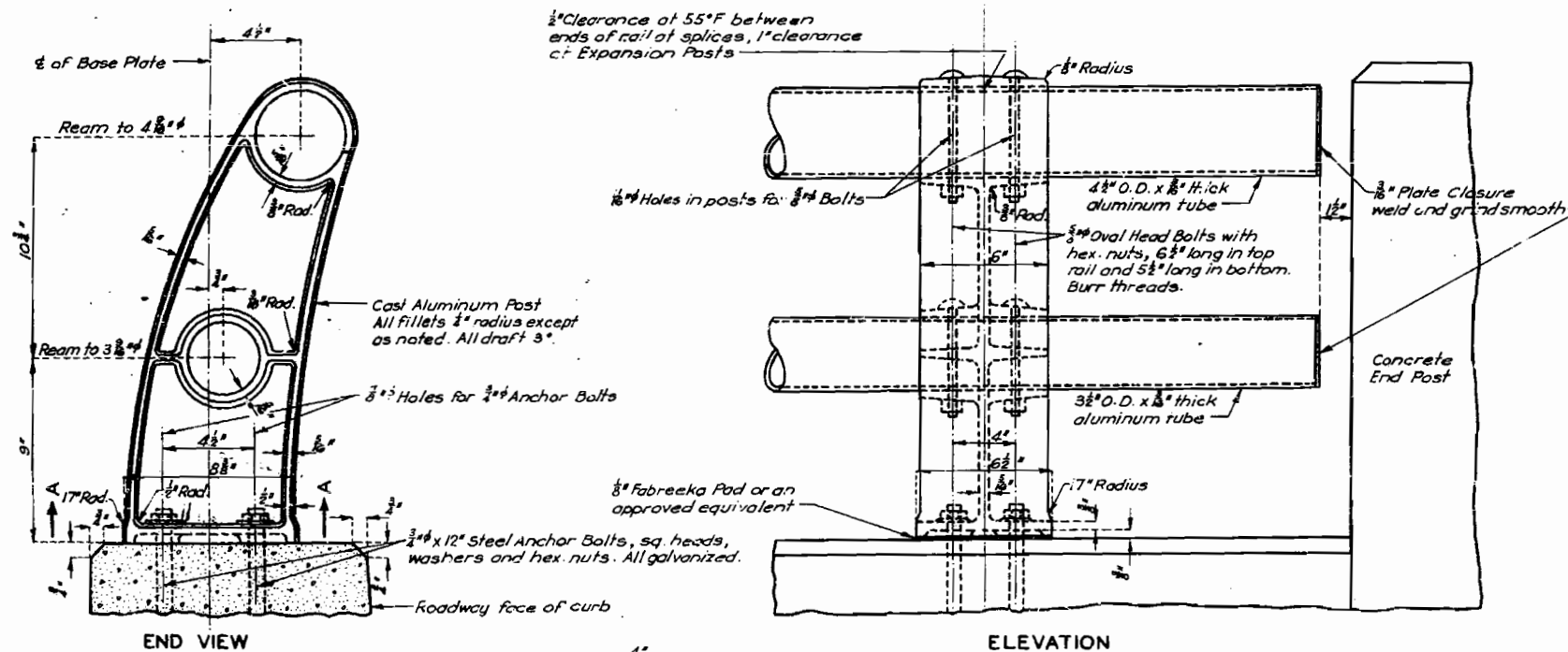
L-660

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	UI-59(6) (RT. 69)	19		

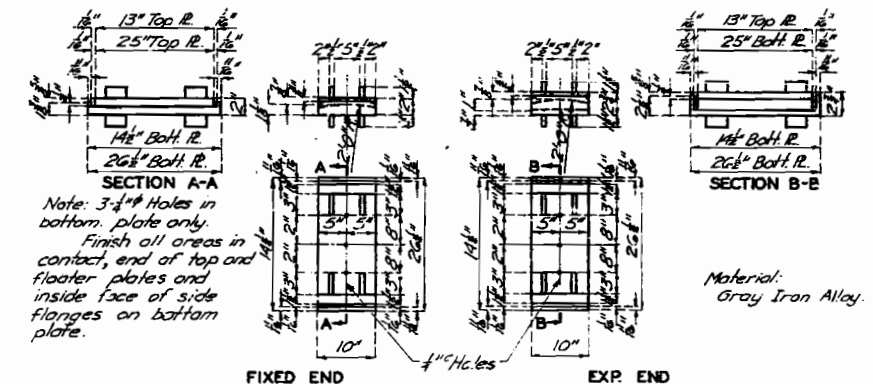


DETAILS OF END POSTS & FLARED CURB



Note: All parts of handrail except steel anchor bolts and their washers and nuts to be aluminum. Bolt holes in tubes to be 1/8" x 1/8" slotted holes centered on bolts at normal temperature of 55° except, at expansion posts where holes shall be 1/8" x 1/2" slots.

Aluminum washer shims between Fabeeka pad and post base may be used for adjusting rail alignment. Maximum thickness of shim to be 3/8". Where more tilting of post is required for proper alignment, concrete bearing area shall be ground down.



GRAY IRON ALLOY BEARING PLATES

Note: Bearing plates to be furnished in sets. Each set consisting of 1 top and 1 bottom plate for fixed end and 1 top plate, 1 flatter plate and 1 bottom plate for expansion end.

Required: 10-Sets 10" x 13" plates.
5-Sets 10" x 25" plates.

BRIDGE OVER RUSSELL ROAD

STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6) (RT. 69) STA. 294+24.15 (RIGHT LANE)

CLAY COUNTY

Drawn Apr. 1954 By M.H.P.
Traced Apr. 1954 By M.H.P.
Checked May 1954 By J.E.L.

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

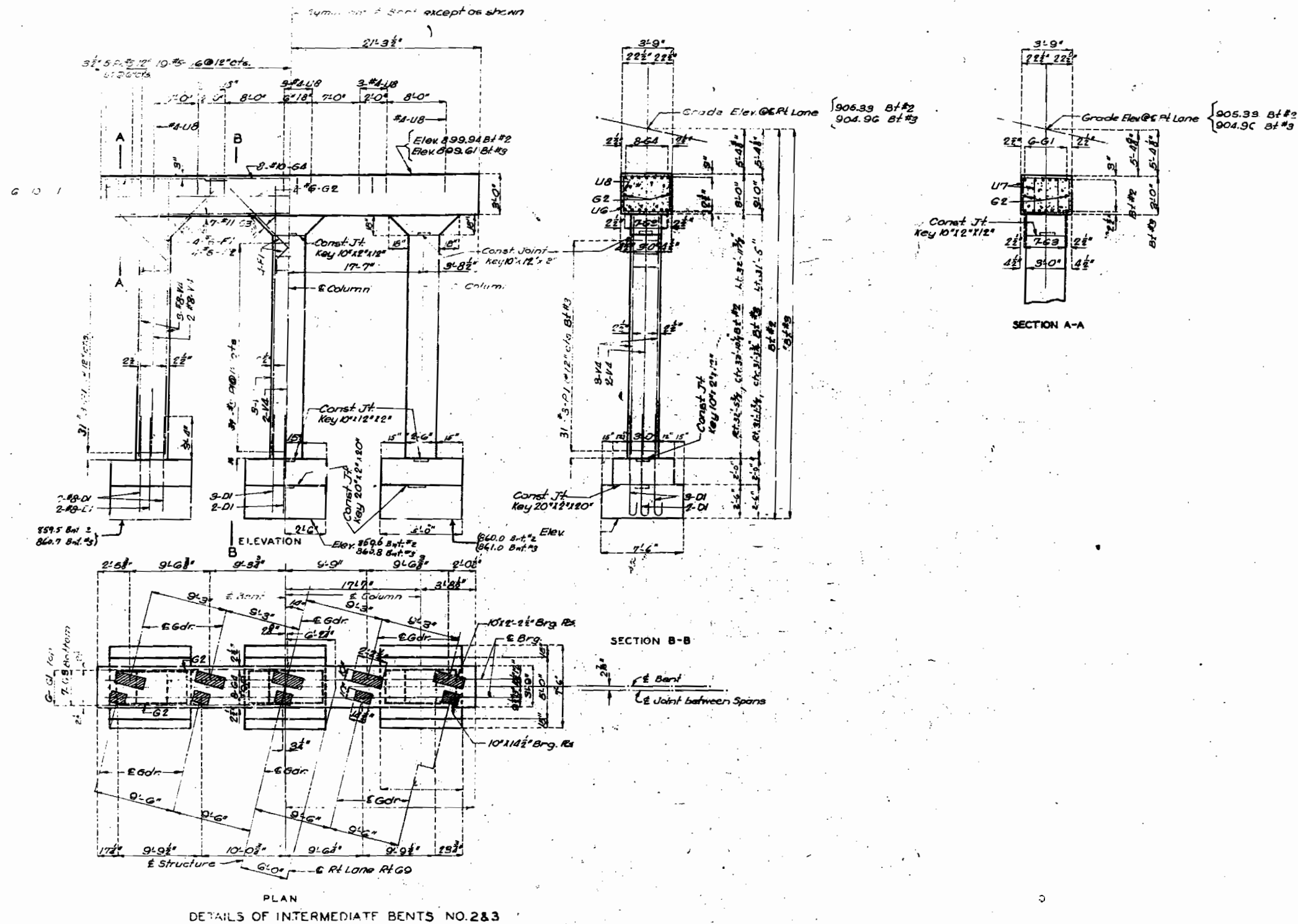
Sheet No. 7 of 7

NO CONSTRUCTION CHANGES

L-660

FINAL PLANS

FINAL PLANS



BRIDGE OVER RUSSELL ROAD

STATE ROAD FROM ARMOUR ROAD IN NORTH KANSAS CITY N.E.
ABOUT 2 MILES NORTH OF NORTH KANSAS CITY
PROJECT NO. UI-99(6) (RT.69) STA 294+24.15 (RIGHT LANE)

CLAY COUNTY

$$E_{\text{eff}} = E - \frac{1}{2} \frac{E^2}{E_0}$$

Issued April 1954 by M.E.L. & W.G.S.
May 1954 by J.E.L.

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

Sheet No 3A of 2.

L-660

2 or 3 Col. Int. All Loadings
Square or Skewed

FINAL PLANS

P.I. Sta. 301+00
Elev. 906.25

-5.0% Abd.

00+V.C.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		20	44	

SEC. 1412 TWP. 50 N RGE. 33 W.

Gr. Elev. 905.93 -
@ E Exist. Structure

Gn. Elev. 905.10@
 & Exist. Structure

Design Specifications:
A.A.S.H.T.O. 1977 Load Factor Design and
Interim Specifications 1980
Design Loading:
HS20-44
15* per sq. ft. Future Wearing Surface
Modified 24,000* Tandem Axle
Earth, 120*, Equivalent Fluid Pressure 30*
Superstructure: Simply supported non-composite
for Dead Load. Continuous composite for
live load.

Design Unit Stresses:

- Class B Concrete (Substructure) $f_c = 3,000$ psi
- Class B1 Concrete (Safety Barrier Curb) $f_c = 4,000$ psi
- Class B2 Concrete (Superstructure except Prestressed Girders and Safety Barrier Curb) $f_c = 4,000$ psi
- Reinforcing Steel (Grade 60) $f_y = 60,000$ psi
- Steel Pipe $f_b = 3,000$ psi

Note: For Pre-stressed Girder Stresser see Sheet Nos. 9 & 10.

Neoprene Pads:
Bearings shall be 60 durometer Neoprene Pads.
Cost of furnishing, fabricating and installing Neoprene Bearing Pads complete in place, shall be paid for at the contract unit bid price for Plain and Laminated Neoprene Bearing Pads per each.

Joint Filler:
All joint filler shall meet the requirement
of Std. Spec. 1057.2.4 except as noted.

Reinforcing Steel:
Minimum clearance to reinforcing steel
shall be 1 1/2" unless otherwise shown.

Construction Clearance:
A minimum vertical clearance of 13'6" from the existing ground surface to the lowest internal clearance of 33'0" centered on existing lanes shall be maintained during construction.

Widen, Extension and Repair:
Outline of old work is indicated by light dashed lines. Heavy lines indicate new work.
Bars bonded in old concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, old bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars.

BM Elev. 902.15 = on top of Rt. wing
Bent No. 4 Sta. 295+35.75

STATE ROAD FROM RTE. 210 NORTH

IN KANSAS CITY

PROJECT NO. I-IR-35-1(120)

JOB NO. 4-I-35-340

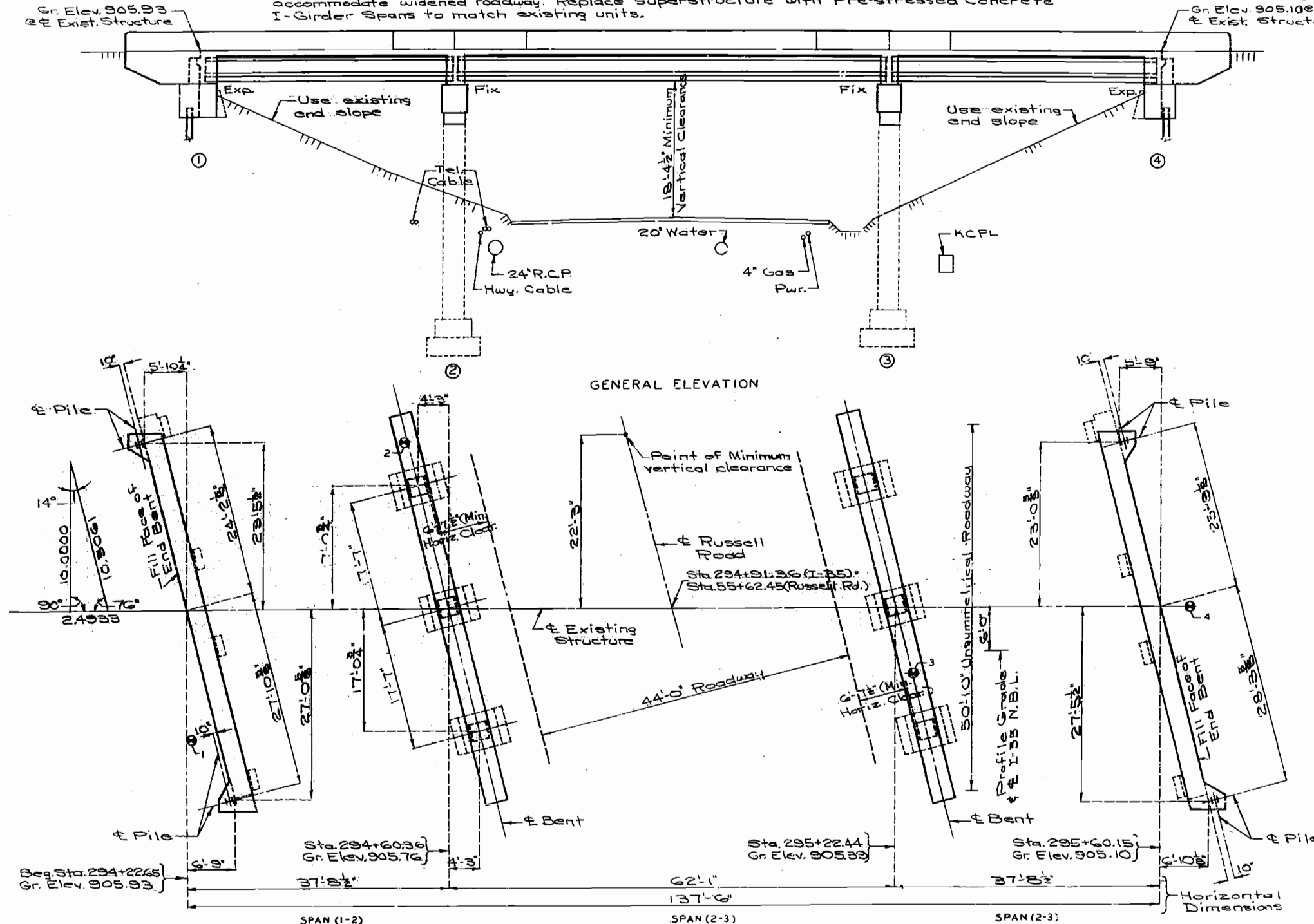
CLAY

STA. 294+22.65

RTE. I-35 N.B.L.

COUNTY

STD.
STD. 706.35
L-660R



Note: "B" Indicates location of Borings.
For Boring Data see sheet No. 2.

Note: Estimated Quantities and File Data see sheet No. 2.

DESIGNED DEC. 1981
 DETAILED JAN. 1982
 CHECKED FEB. 1982

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

Sheet No. 1 of 16 .

DATE 1/13/23

326

STATE	FED. AID	FISCAL	SHEET	TOTAL
MO.	PROG. NO.	YEAR	NO.	SHEETS
1		19	25	

ESTIMATED QUANTITIES				
ITEM	SUBSTR.	SUPERSTR.	TOTAL	
Special Work	Wmp Sum		1	
Removal of Existing Bridge Deck	Sq. Ft.	6298	6298	
Structural Steel Piles (10')	Lin. Ft.	144	144	
Class B Concrete	Cu. Yd.	70.5	70.5	
() Slab On Concrete I-Girder *	Sq. Yd.	817	817	
Safety Barrier Curb	Lin. Ft.	315	315	
Plain Neoprene Bearing Pads	Each	24	24	
Laminated Neoprene Bearing Pads	Each	12	12	
Prestressed Concrete I-Girder 35 Ft. Span Each		12	12	
Prestressed Concrete I-Girder 60 Ft. Span Each		6	6	
Reinforcing Steel	Lb.	9460	9460	

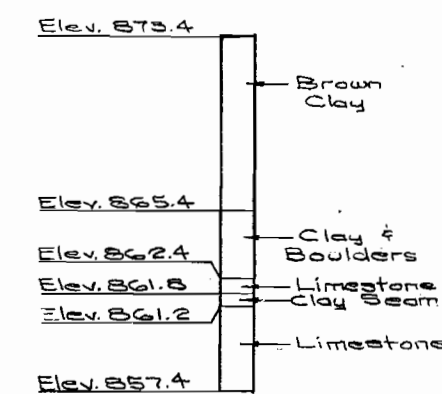
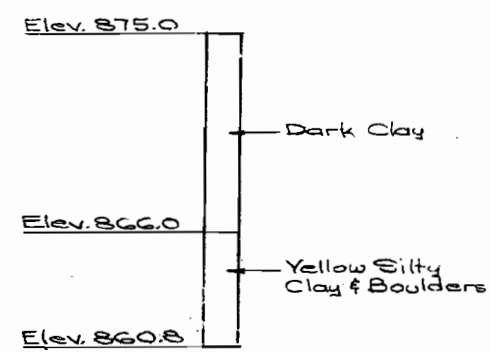
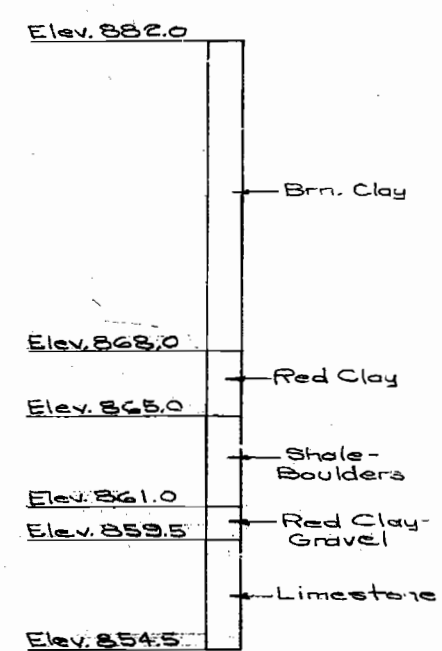
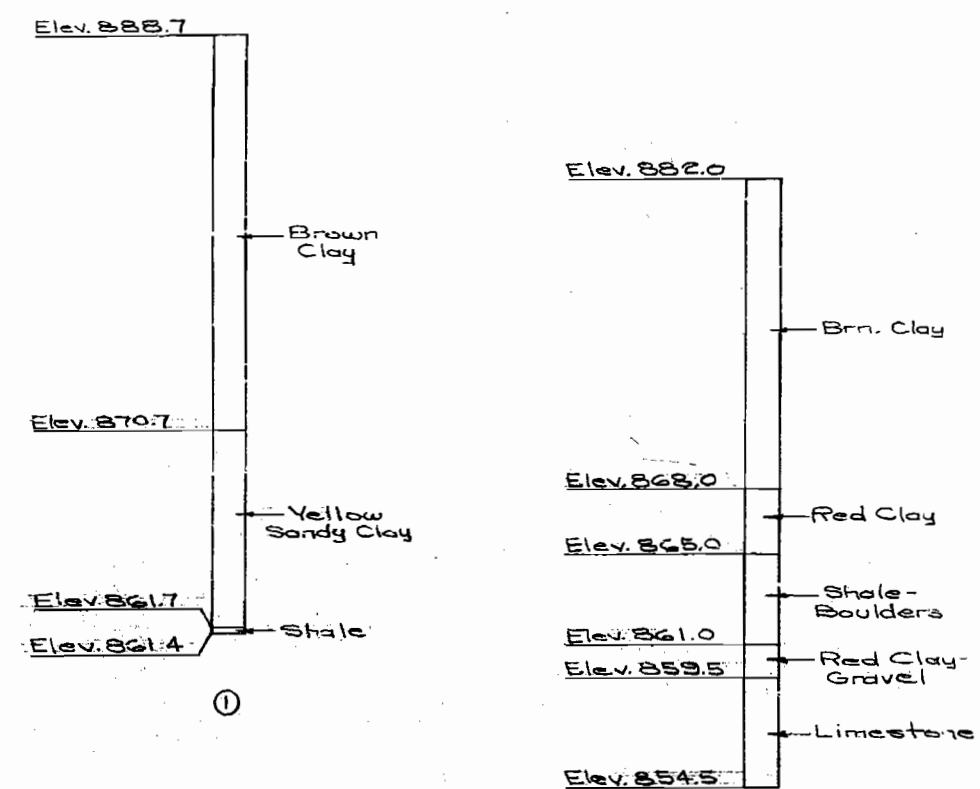
Note:
All concrete and reinforcement above lower construction joint in end bents are included with superstructure quantities.
Cost of $\frac{3}{4}$ " coil tie rods placed in diaphragms is included in contract unit price for P/S members.
* See Special Provisions.

ESTIMATED QUANTITIES FOR ALTERNATE SLABS			
TYPE OF SLAB	SLAB ON CONC. I-GDR.		
	REINF. (L.S.) CONC.		
	EPOXY PLAIN	CU. YD.	
Cast-In-Place Conventional Forms	40250	27230	277.8
Precast Panel Forms	37150	5860	228.4
Stay-In-Place Forms	** 40250	27230	277.8

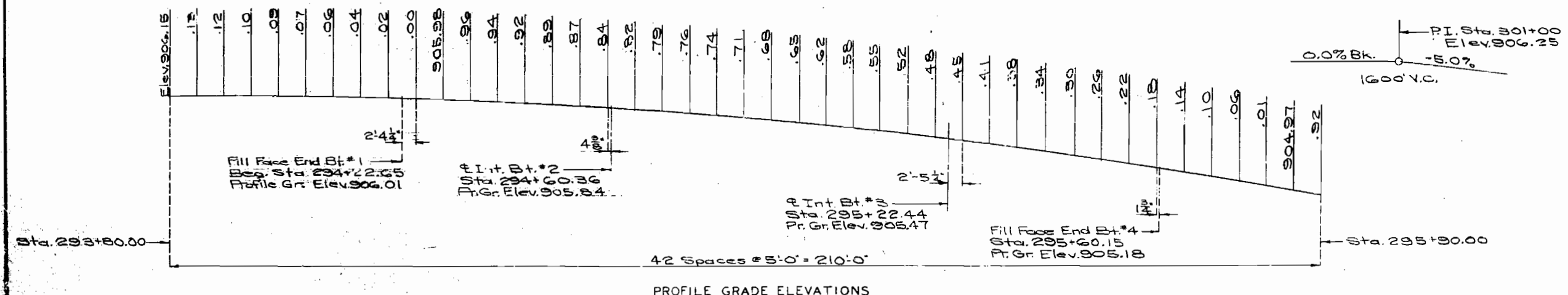
The table of Estimated Quantities for Alternate Slabs represents the quantities used by the state in preparing the cost estimate for concrete slabs. Variations may be encountered in these estimated quantities but these variations cannot be used for an adjustment in the Contract Unit Price per square yard of Alternate Slab used.
See Special Provisions for alternate methods of forming slabs.
Precast panel quantities based on skewed end panels.
** Does not include concrete required to fill corrugation of S.I.P. forms.

PILE DATA				
BENT NO.	1	2	3	4
Pile Type and Size	HP10x42			HP10x42
Number	2			2
Approximate Length	37			35
Design Bearing	Tons 26.3			26.3
Hammer Energy Required	FLb 7000			7000

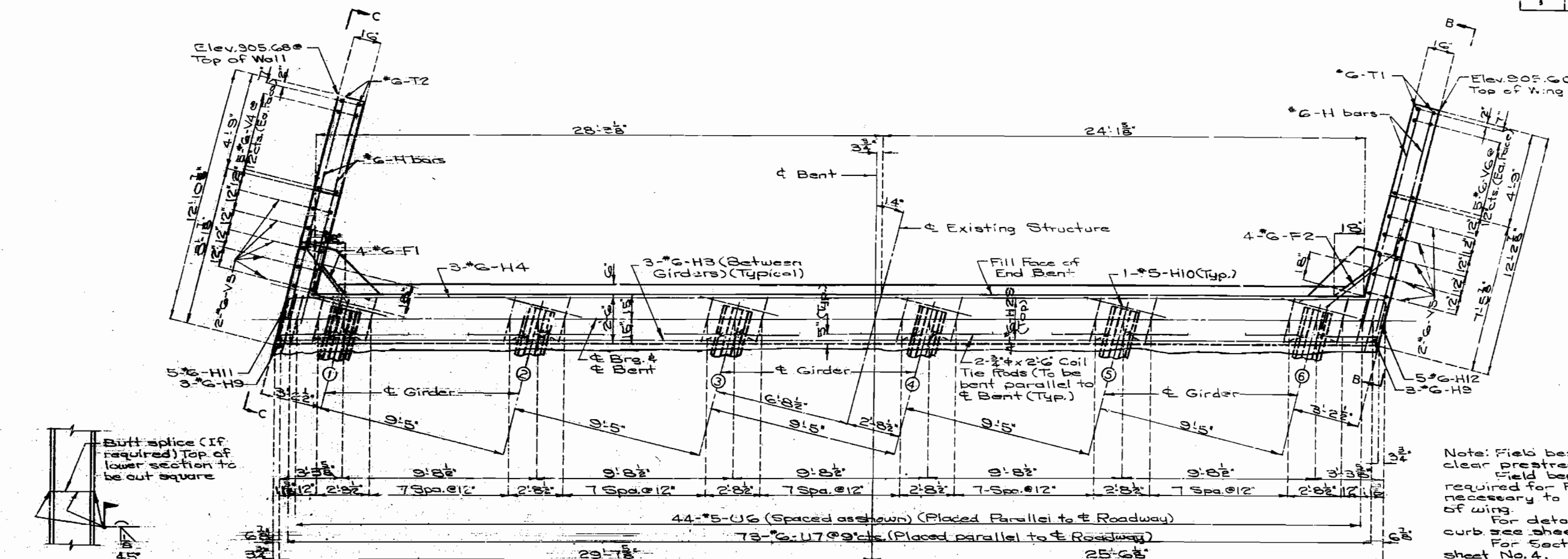
Minimum energy requirements of hammer based on length and design bearing value of piles.
All piles shall be driven to practical refusal.



Note: For location of Borings see sheet No. 1.

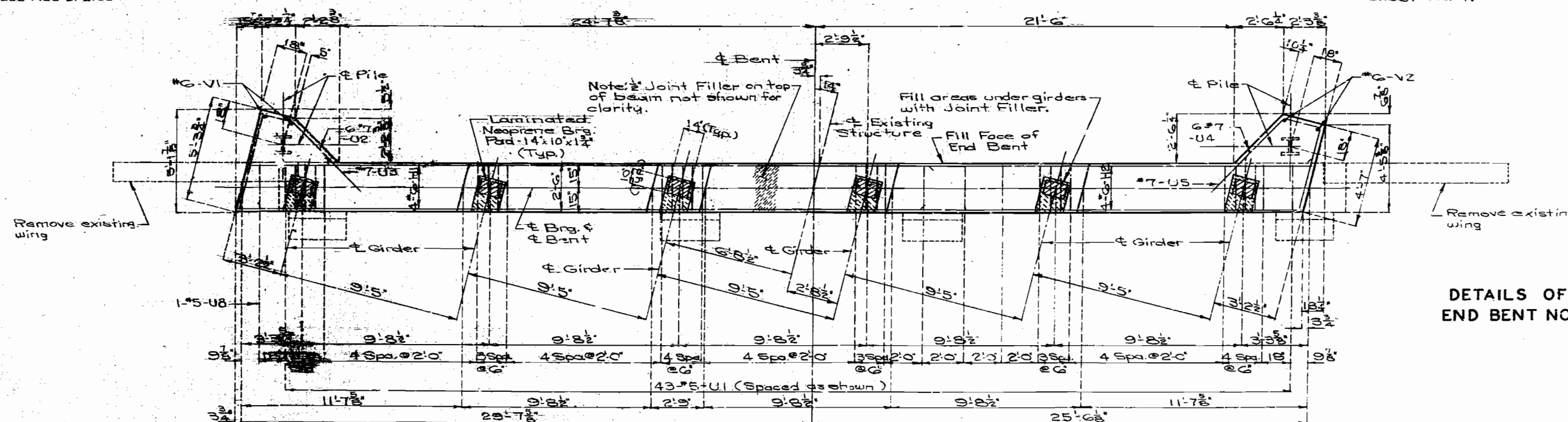


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	46	



PART PLAN

DETAILED OF STEEL PILE SPLICE



PLAN OF BEAM (BELOW LOWER CONST. JT.)

DETAILS OF END BENT NO. 1

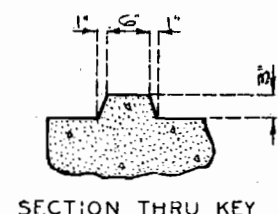
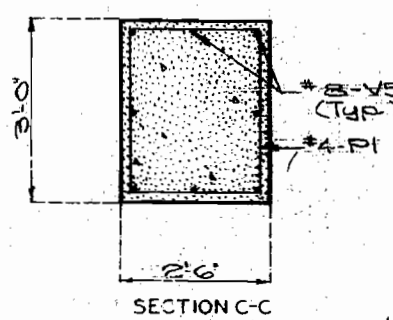
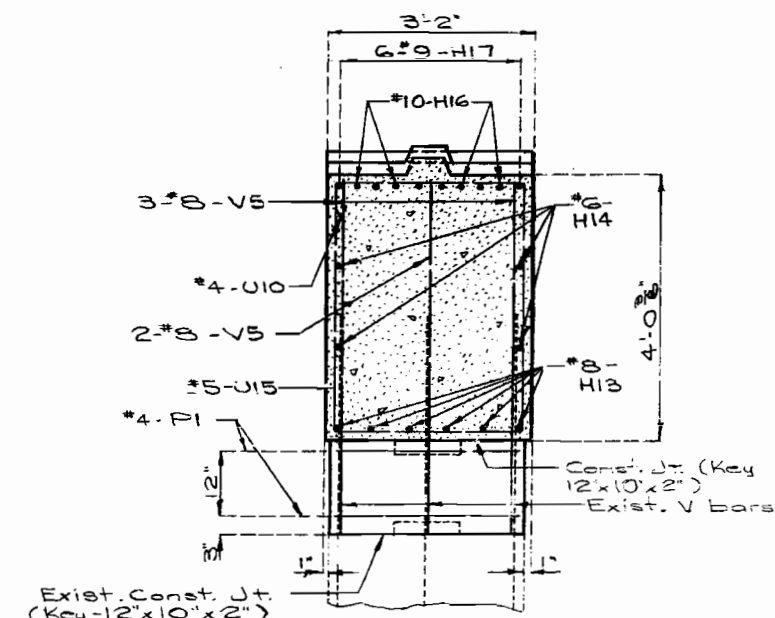
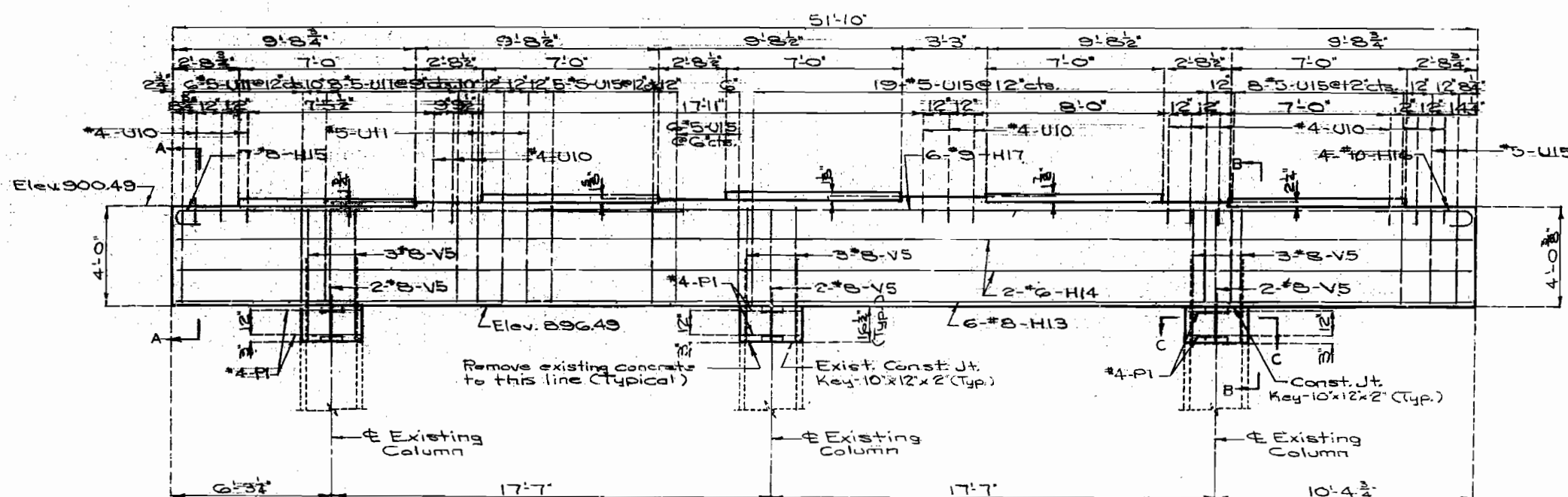
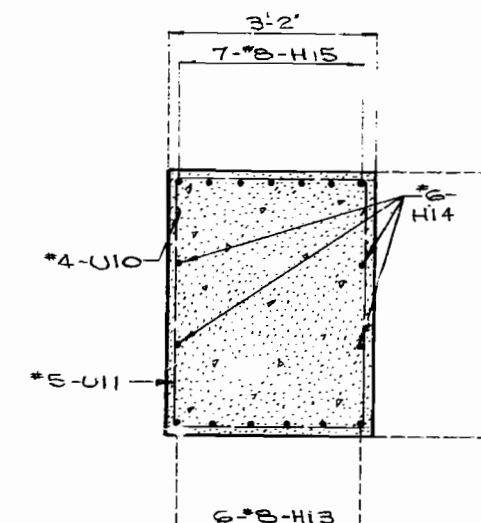
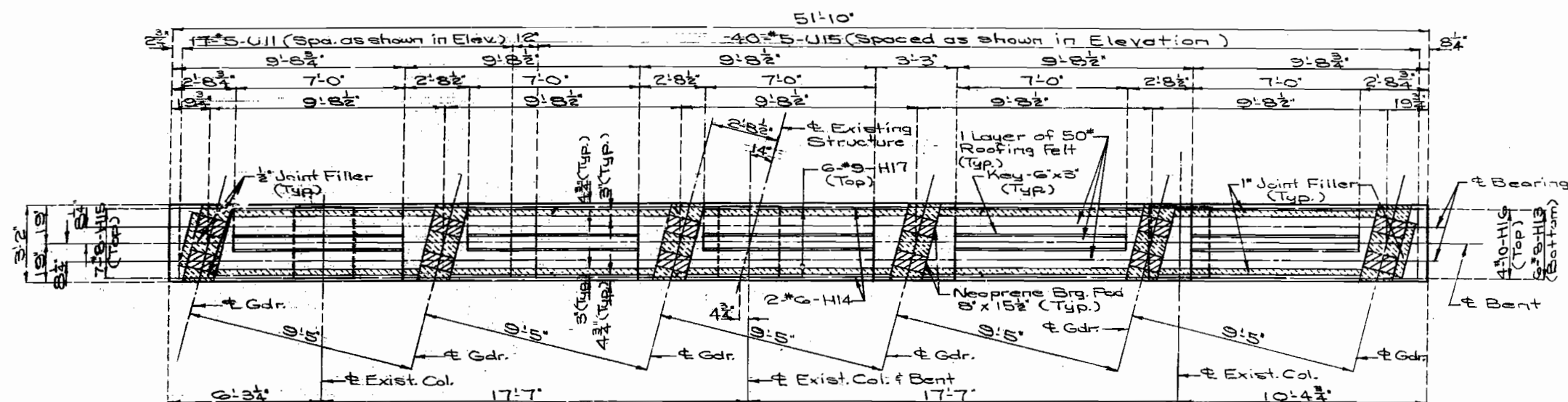
DESIGNED DEC. 1961
CHECKED FEB. 1962

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

Sheet No. 3 of 4

CLAY COUNTY

L-660R



DETAILS OF INT. BENT NO. 3

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

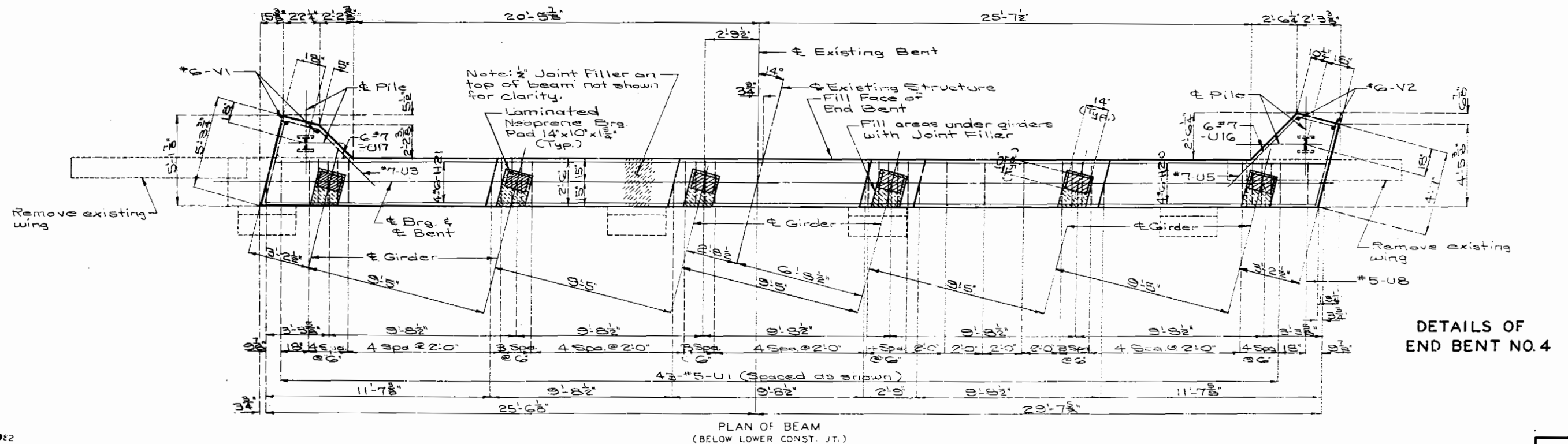
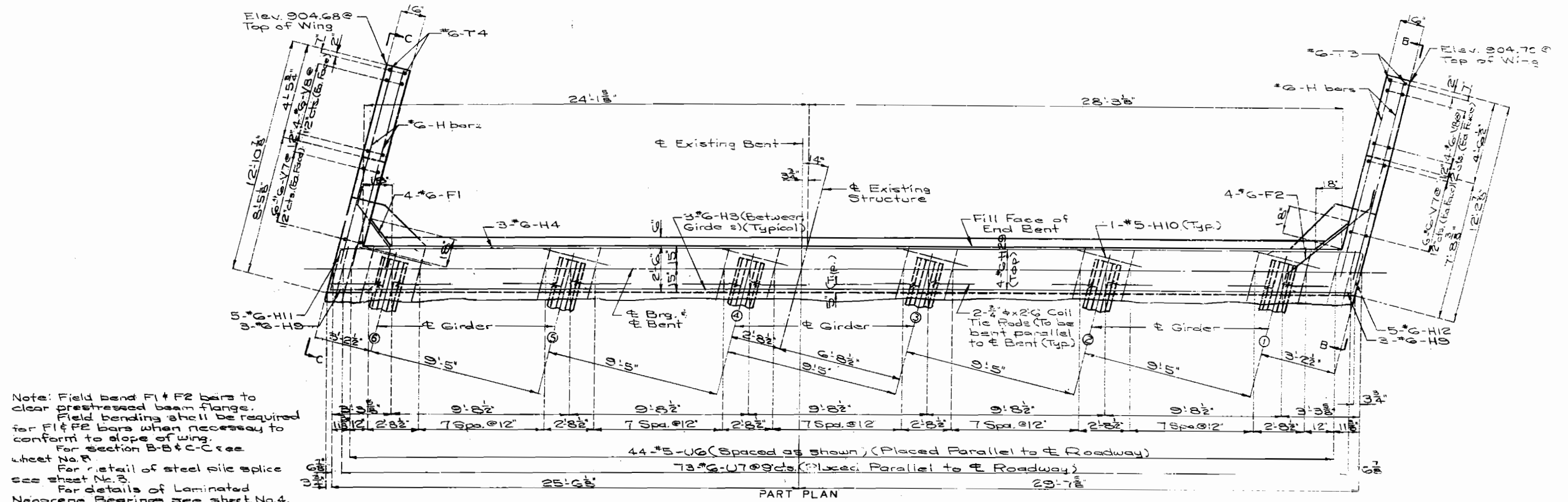
DETAILED DEC. 1981
CHECKED FEB. 1982

Sheet No. 6 of 16

CLAY COUNTY

L-660R

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		50		



DETAILS OF END BENT NO. 4

DETAILED JAN. 1962
CHECKED FEB. 1962.

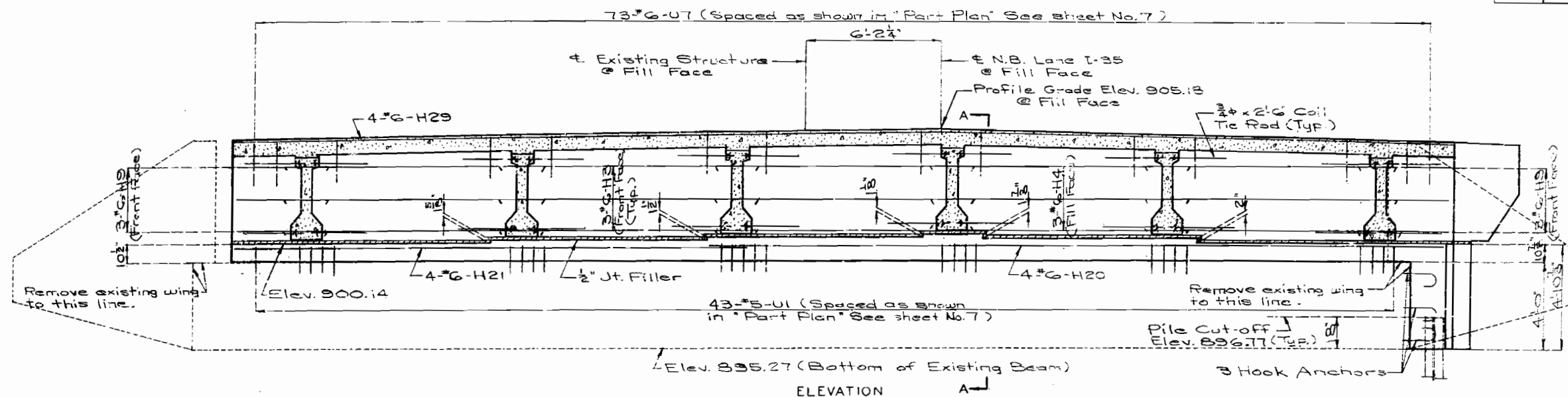
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 7 of 10.

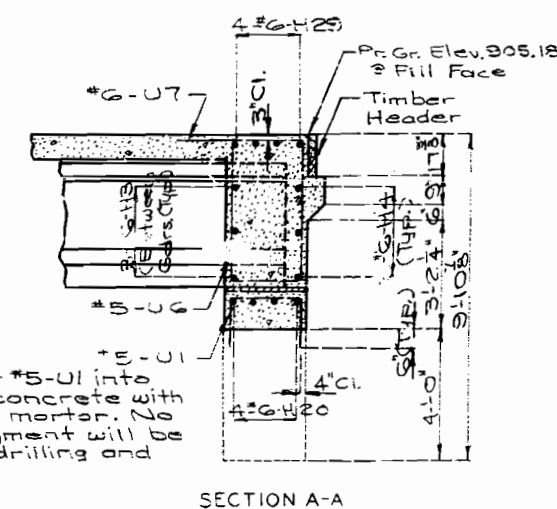
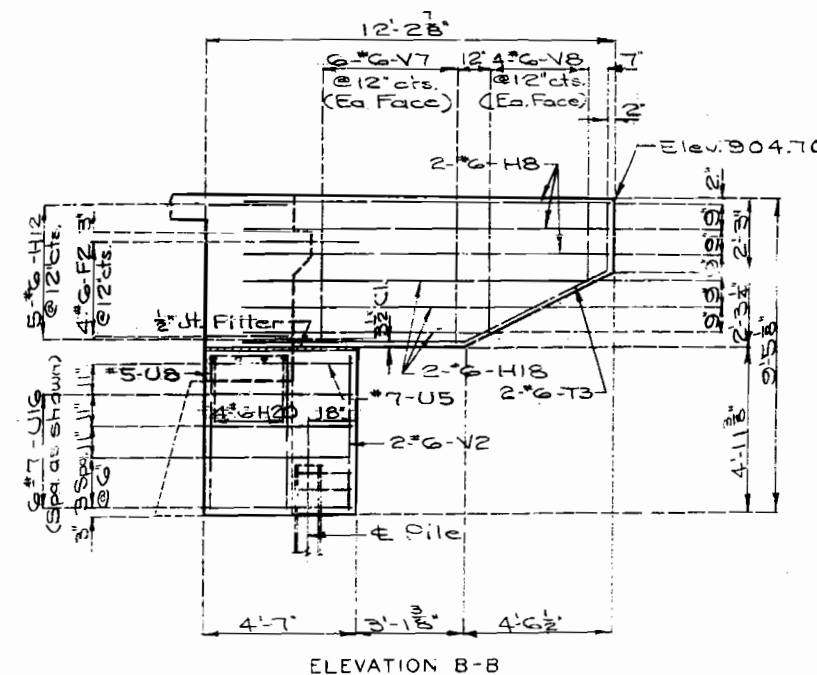
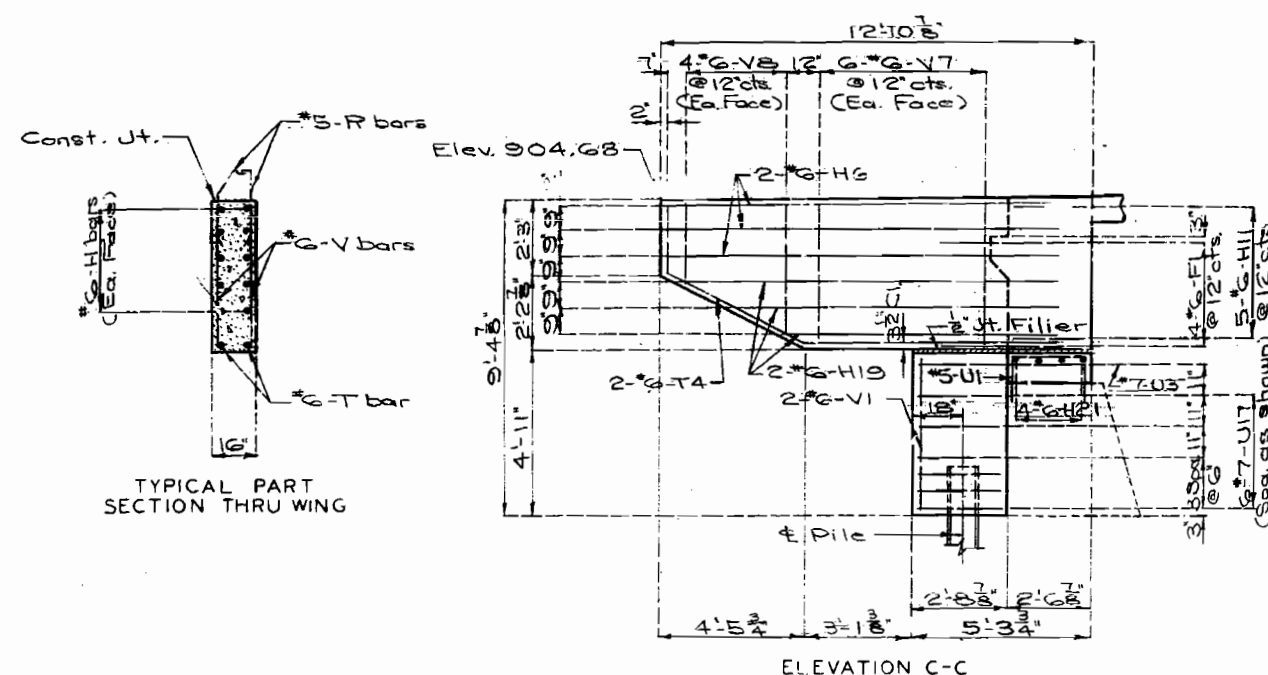
CLAY COUNTY

L-860R

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		79	51	



Note: All concrete in the end bent above top of beam and below top of slab shall be Class B2.



Note: Grout #5-U1 into existing concrete with expensive mortar. No direct payment will be made for drilling and mortar.

DETAILS OF END BENT NO. 4 (CONT.)

Note: For hook anchor bolt details see sheet No. 4.
For details of safety barrier curb see sheet No. 14.
For location of Elevation B-B C-C see sheet No. 7.

DETAILED JAN. 1982
CHECKED FEB. 1982

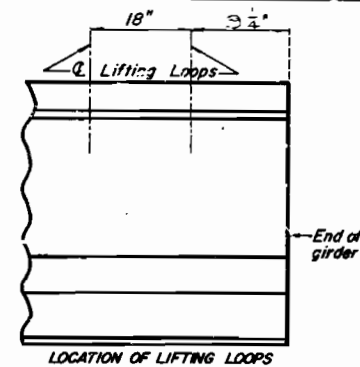
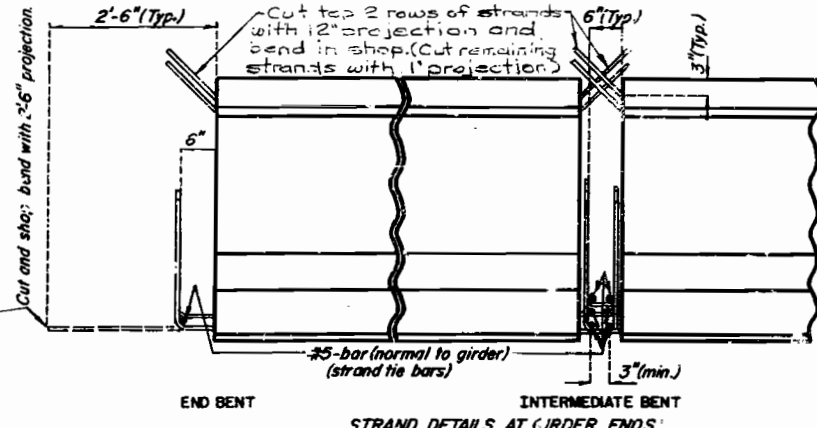
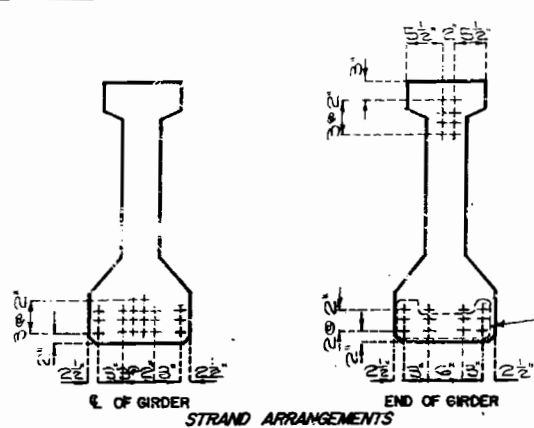
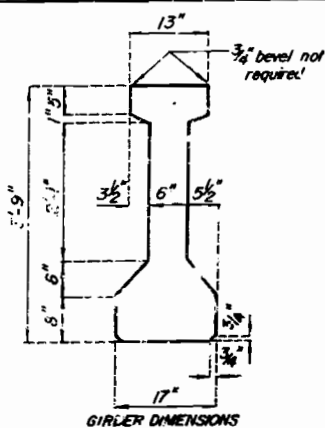
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Sheet No. 5 of 16

CLAY COUNTY

L-660R

333



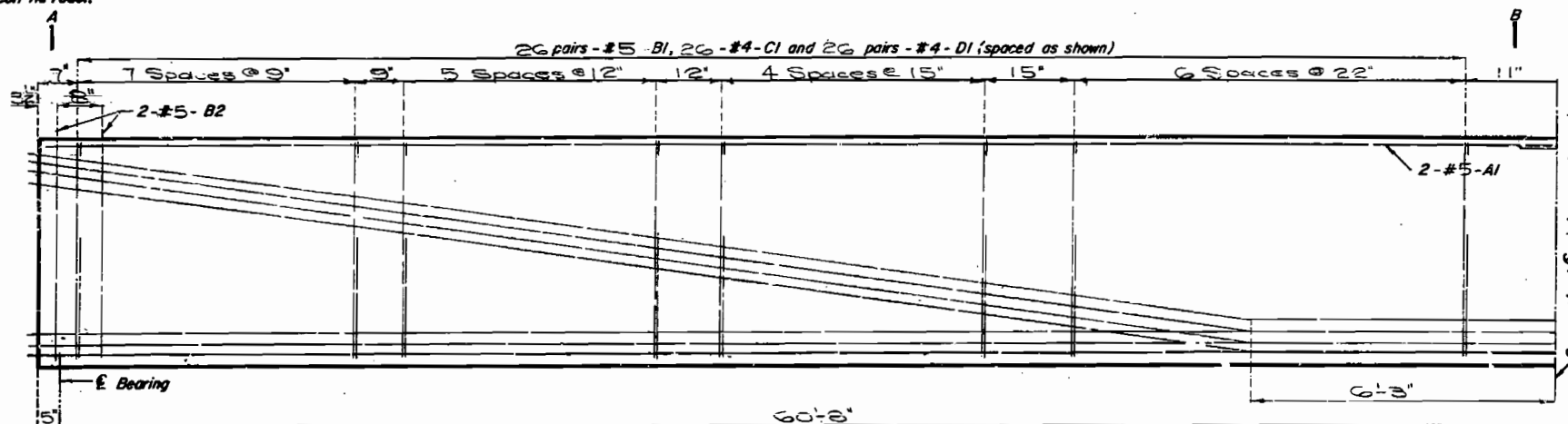
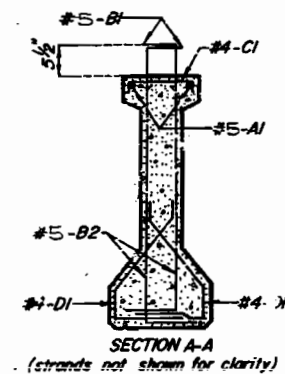
FED. ROAD DIST. NO.		STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1		MO.		19	52	

NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE
4	5 A1	31.7'	20
104	5 B1	5'-3"	11
8	5 B2	4'-3"	19
52	4 C1	13"	10
134	4 D1	3'-0"	9

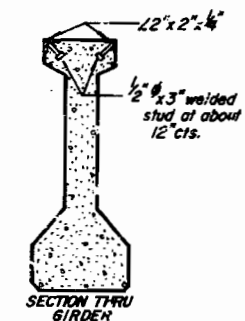
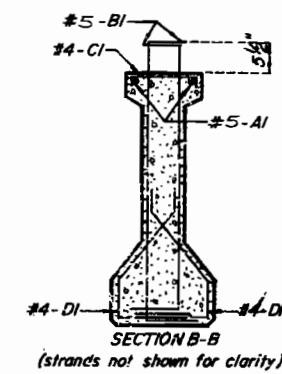
SHAPE	SHAPE 9	SHAPE 10	SHAPE 11	SHAPE 19	SHAPE 20
9 1/2"	13"	11"	4'-11 1/2"	3'-1 1/2"	9 1/2"

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 578 kips.
Cost of 3/4" coil tie rods placed in diaphragms is included in contract unit price for prestress 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 plug until girders are erected and then replaced by coil tie rods.

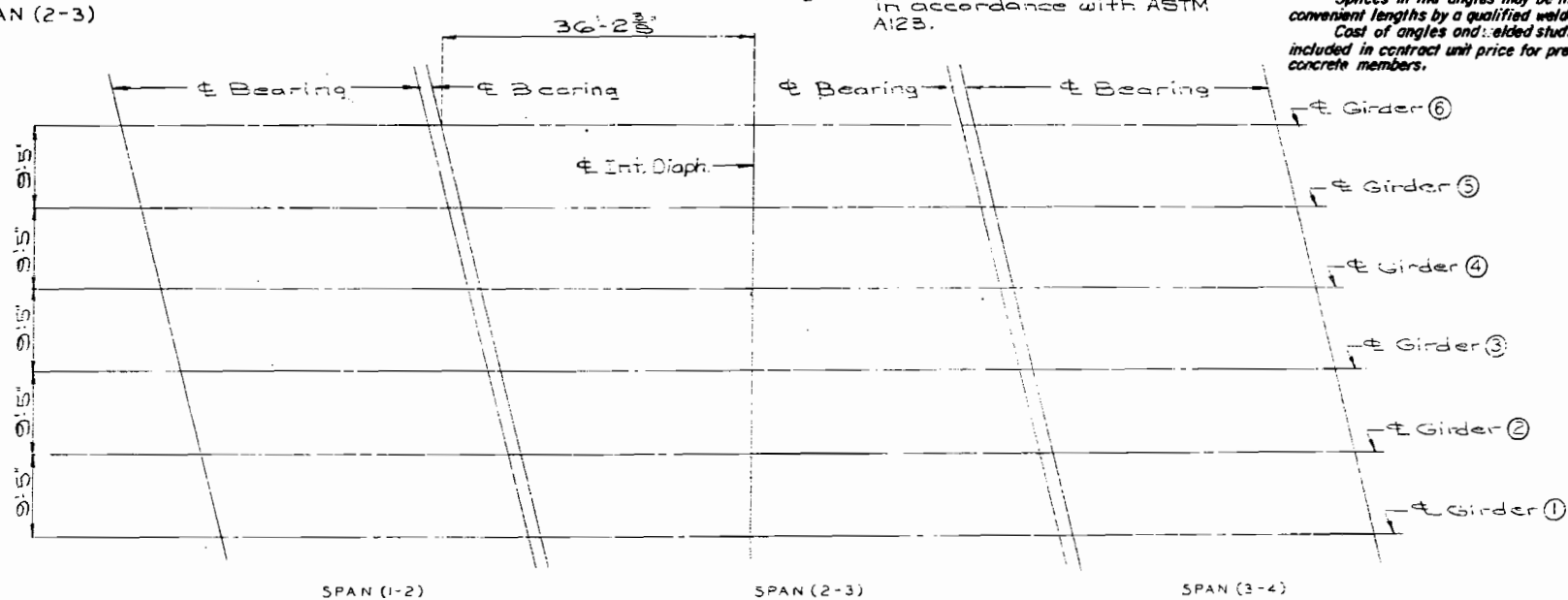
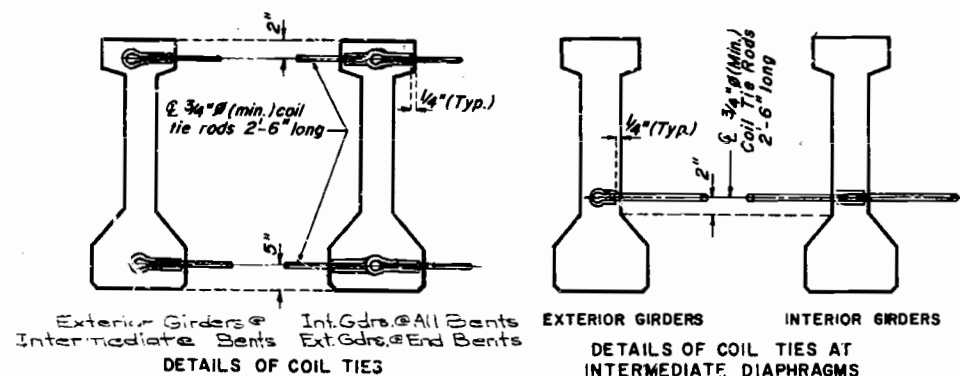
NOTE:
All dimensions are out to out.
Where deflecting strands interfere with placement, come in-place bending may be necessary.
Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures stirrup and tie dimensions.
Actual lengths are measured along centerline bar to the nearest inch. Minimum clearance to reinforcing shall be 1".
All reinforcement shall be Grade 60.



PART ELEVATION OF GIRDER
(Exterior and interior girders are the same except for coil ties)
SPAN (2-3)



Note: Angles and welded studs to be cast-in-place on girders when alternate stay-in-place forms for slabs are used.
Angles to be placed no closer than 12" from end of girders.
Splices in the angles may be made at convenient lengths by a qualified welder.
Cost of angles and welded studs to be included in contract unit price for prestress concrete members.



PLAN OF GIRDERS SHOWING LOCATION OF INTERMEDIATE DIAPHRAGMS

SPS 55.4.6
April 1973
Revised
MAY 1981

DETAILED JAN. 1982
CHECKED FEB. 1982

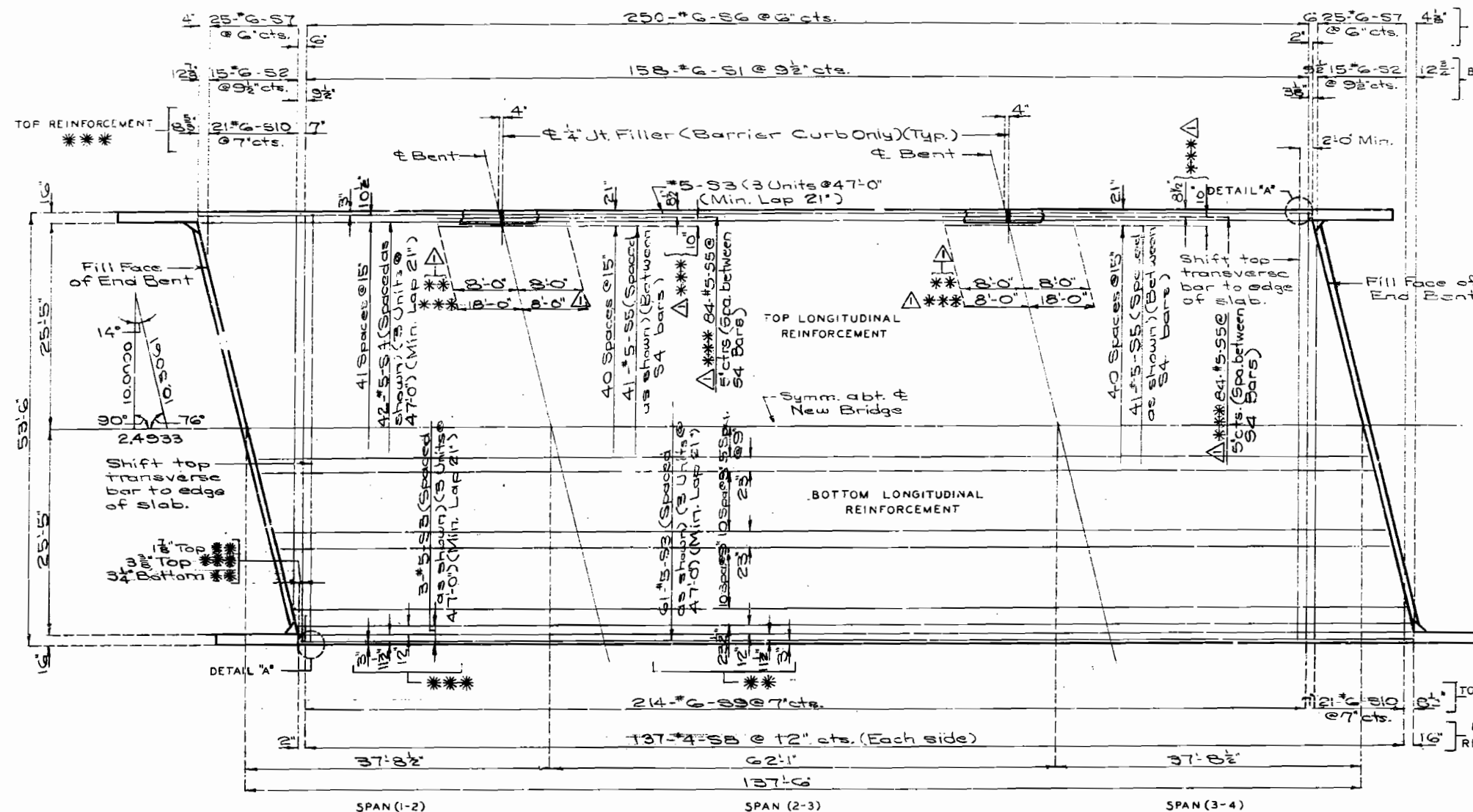
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 9 of 16.

CLAY COUNTY

L-660R

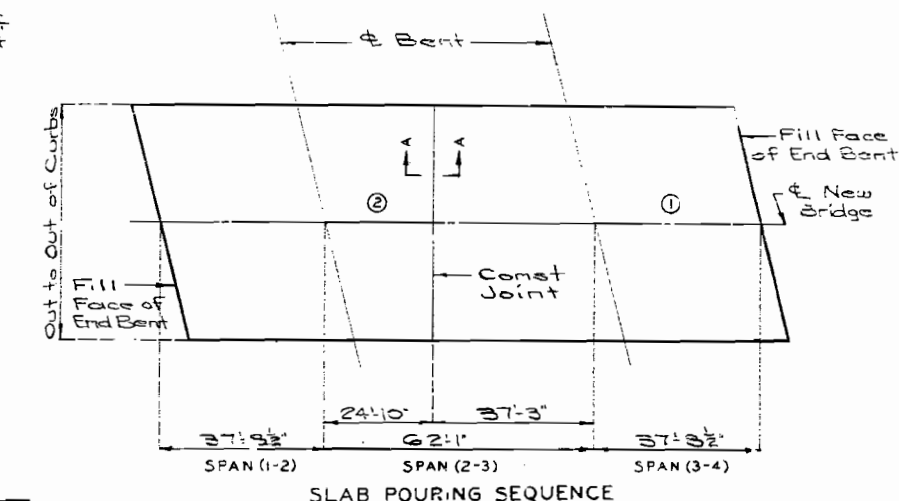
PTD. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		18	55	



PLAN OF SLAB SHOWING REINFORCEMENT

Note: *** C.I.P. & S.I.P. Option
 *** Precast Panel Option

Note: Longitudinal dimensions shown are taken parallel to grade along the new bridge at top of slab.
 For Detail "A" see sheet No. 11.
 For Girder Camber and Slab Haunching Diagrams see sheet No. 11.
 For Details of Prestressed Panel Option see sheet No. 13.
 For Details of Safety Barrier Curb not shown see sheet No. 14.



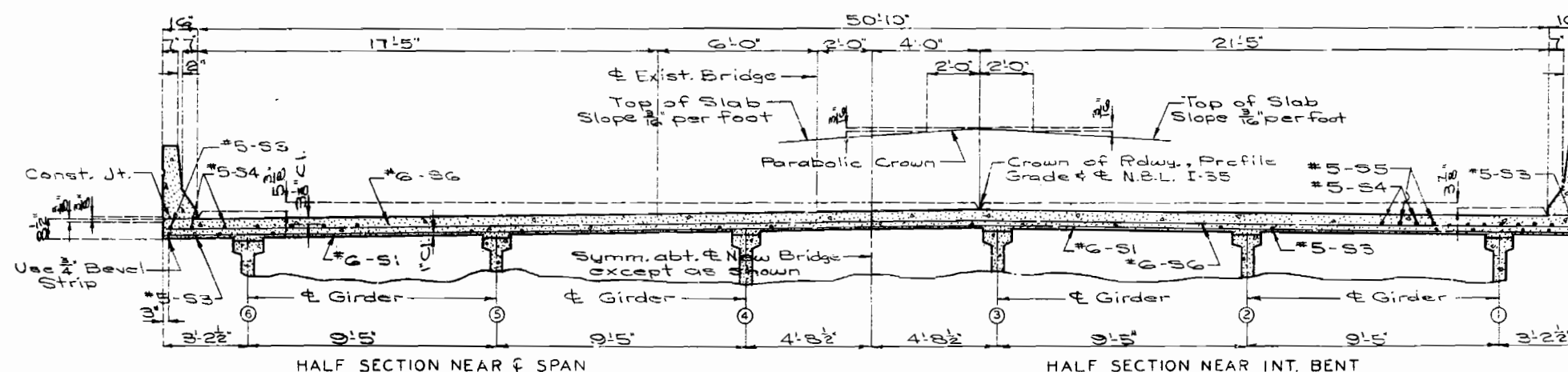
BASIC SEQUENCE	SEQUENCE OF POURS		#
	1	2	
	END TO 2	1 TO END	28
ALTERNATE "A" POURS	1+2	END TO END	28

* Min. Rate of Pour (Cu. Yds. / Hr.)

Note: The contractor shall furnish an approved retarder to retard the set of the concrete to 25 hours and shall pour and satisfactorily finish the slab pours at the rate given.

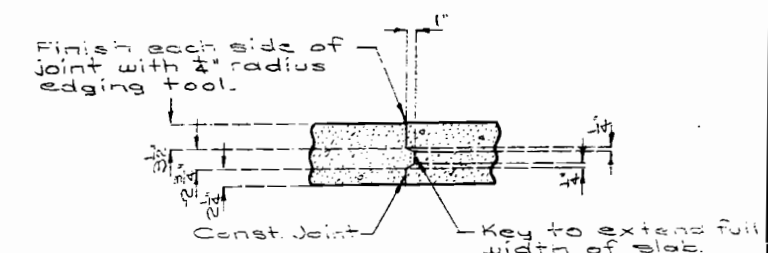
The diaphragm at the intermediate bents and end bents shall be poured a minimum of 30 minutes and a maximum of 2 hours before the slab is poured.

Intermediate diaphragms within spans may be poured with the construction joint between the diaphragms and slab or monolithic with slab.



HALF SECTION NEAR ϕ SPAN

HALF SECTION NEAR INT. BENT



SECTION A-A

DETAILED JAN. 1982
 CHECKED FEB. 1982

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

Sheet No. 12 of 16. Δ Revised 3/25/83

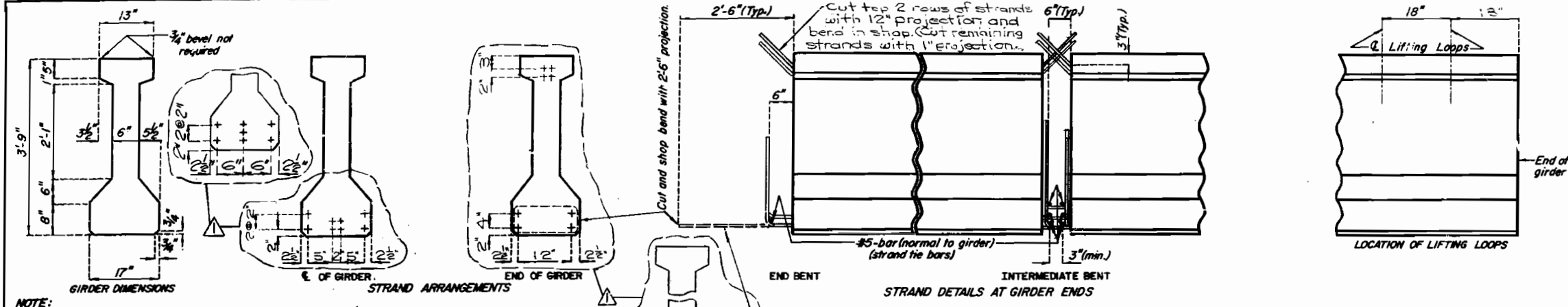
CLAY COUNTY

L-660R

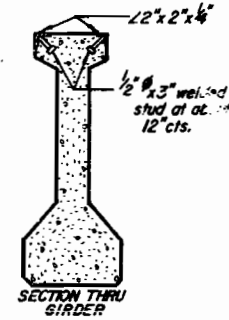
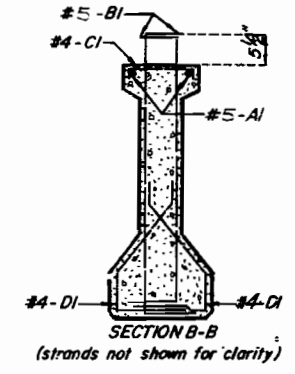
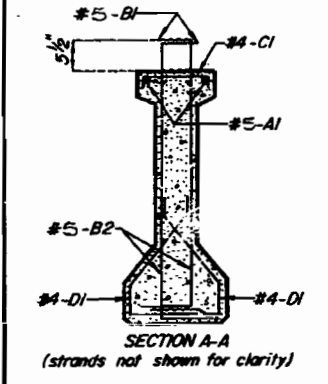
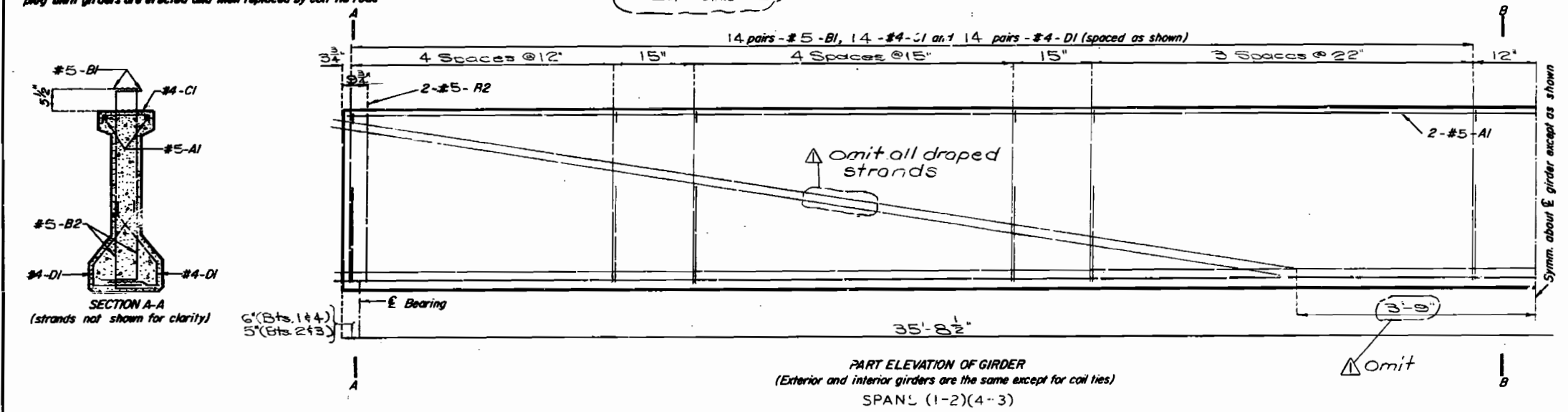
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		78	53	

BILL OF REINFORCING STEEL - EACH GIRDER					BENDING DIAGRAMS	
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE			
2	5 A1	26'-4"	20		SHAPE II	
5	5 B1	5'-3"	11		SHAPE 9	
4	5 B2	4'-3"	19		SHAPE 10	
28	4 C1	13"	10		SHAPE 2C	
56	4 D1	3'-0"	9		SHAPE 19	

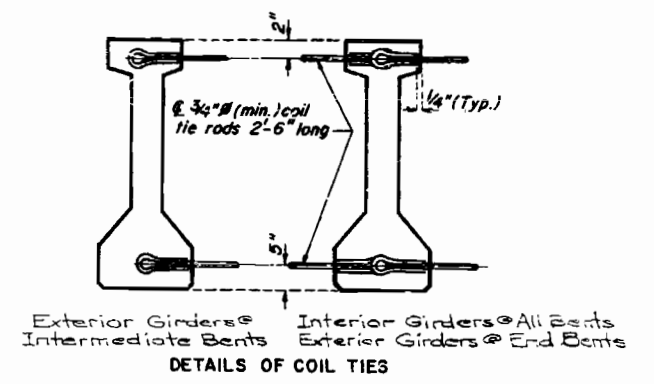
NOTE:
 All dimensions are out to out.
 Where deflecting strands interfere with placement, some in-place bending may be necessary.
 Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures stirrup and tie dimensions.
 Actual lengths are measured along centerline bar to the nearest inch. Minimum clearance to reinforcing shall be 1".
 All reinforcement shall be Grade 60.



NOTE:
 Concrete for prestressed girders shall be Class A1 with $f'_c = 5,000$ psi.
 (+) indicates prestressed strand.
 Use (S) strands with an initial prestress force of (231) kips. $\Delta 202$
 Cost of 3/4" coil tie rods placed in diaphragms is included in contract unit price for prestress 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 plug until girders are erected and then replaced by coil tie rods.



Note: Angles and welded studs to be cast-in-place on girders when alternate stay-in-place forms for slabs are used.
 Angles to be placed no closer than 12" from end of girders.
 Splices in the angles may be made at convenient lengths by a qualified welder.
 Cost of angles and welded studs to be included in contract unit price for prestress concrete members.
 Angles to be galvanized in accordance with ASTM A123.



SPS 33.4.6 Revised April 1973 MAY 1981

DETAILED JAN. 1982
 CHECKED FEB. 1982

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

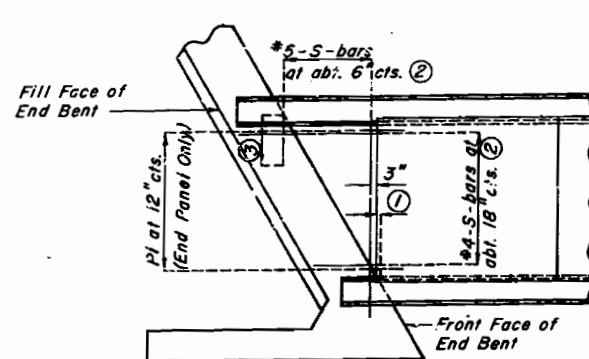
Sheet No. 10 of 16.

Revised 6-25-83

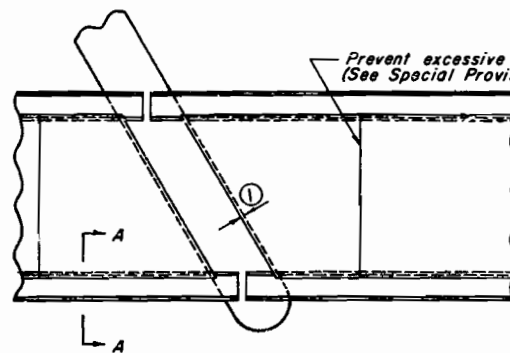
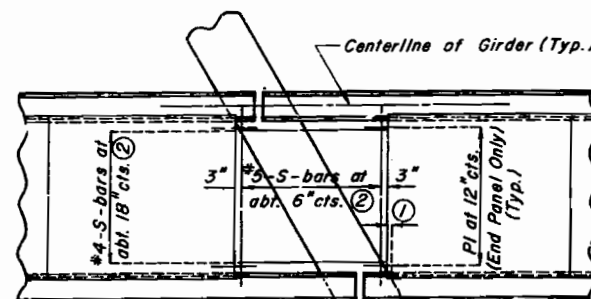
CLAY COUNTY

L-660R

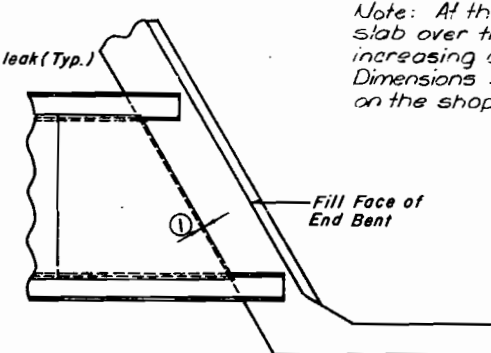
FED. ROAD DIST. NO.	STATE	FED. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		18	56	



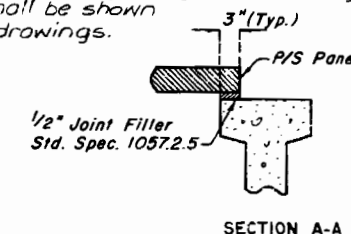
PANELS - SQUARED ENDS



PANELS - SKEWED ENDS

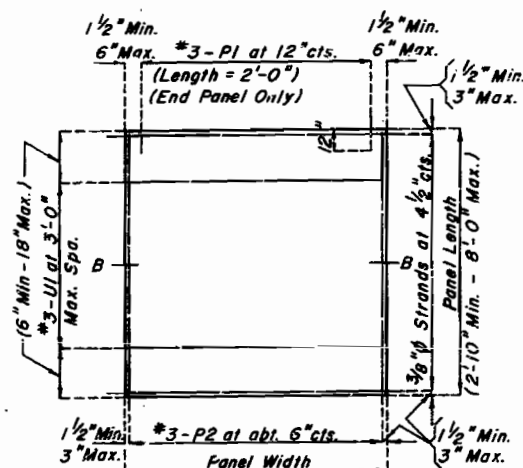


Note: At the contractor's option a 5/8" min. depth slab over the prestress panel may be used by increasing and varying the girder top flange depth. Dimensions shall be shown on the shop drawings.

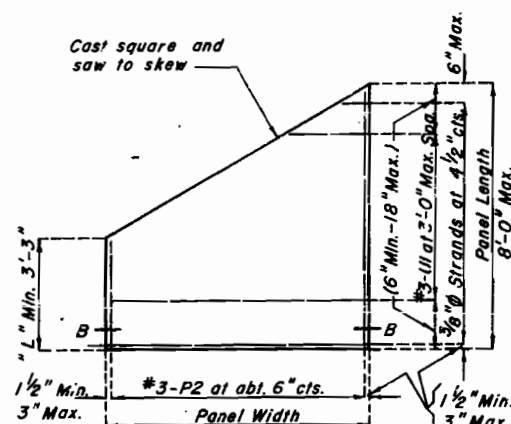


SECTION A-A

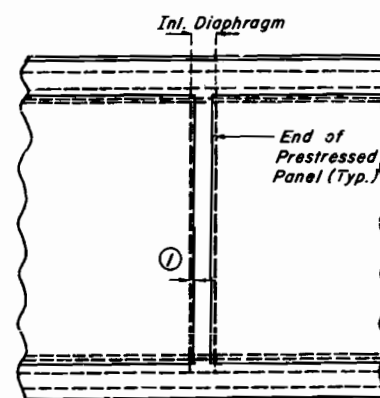
PLAN OF PRESTRESSED PANEL PLACEMENT



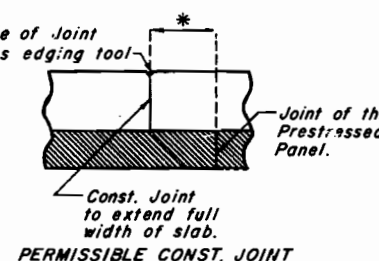
PLAN OF PRESTRESSED PANEL



PLAN OF PRESTRESSED PANEL (SKEWED END-OPTIONAL)



PLAN OF INT. DIAPHRAGM



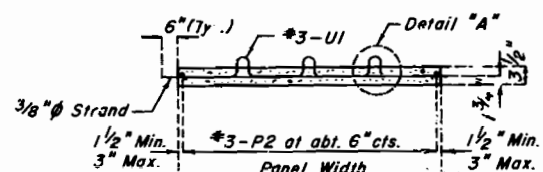
PERMISSIBLE CONST. JOINT

* Adjust the Permissible Const. Joint to a clearance of 6" min. from the joints of the Prestressed Panels.

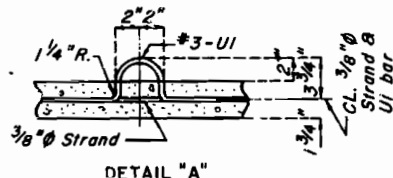
GENERAL NOTES:

PRESTRESSED PANELS:
CONCRETE FOR PRESTRESSED PANELS SHALL BE CLASS A1 WITH $f'c = 5,000$ psi.
THE TOP SURFACE OF ALL PLANKS SHALL RECEIVE A SCORED FINISH WITH A DEPTH OF SCORING OF 1/3" PERPENDICULAR TO THE PRESTRESSING STRANDS IN THE PLANK (SEE SPECIAL PROVISIONS).
PRESTRESSING TENDON SHALL BE HIGH-TENSILE STRENGTH UNCOATED SEVEN-WIRE (7) STRESS RELIEVED STRANDS FOR PRESTRESSED CONCRETE CONFORMING TO A.S.T.M A-416 EXCEPT THAT NOMINAL DIAMETER OF STRAND = 3/8" AND NOMINAL AREA = 0.085 SQ. IN. AND MINIMUM ULTIMATE STRENGTH = 23,000 LBS. (270 KSI). LARGER STRANDS MAY BE USED WITH THE SAME SPACING AND INITIAL TENSION.
INITIAL PRESTRESSING FORCE = 16.1 KIPS/STRAND.
THE METHOD AND SEQUENCE OF RELEASING THE STRANDS SHALL BE SHOWN ON THE SHOP DRAWINGS.
SUITABLE HOLES OR 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 SUPPORTS IT IS REQUIRED THAT THE SKEWED PORTION TO BE CAST-IN-PLACE. QUANTITIES ARE INCLUDED IN PAYMENT FOR SLAB ON CONCRETE I GIRDERS.

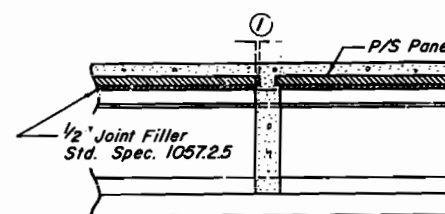
REINFORCING STEEL:
ALL DIMENSIONS ARE OUT TO OUT.
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1-1/2" UNLESS OTHERWISE SHOWN.
HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE CRCT MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, STIRRUP AND TIE DIMENSIONS.
ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
THE PRESTRESSED PANEL QUANTITIES ARE NOT INCLUDED IN THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS.



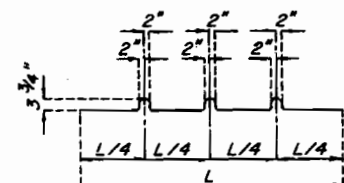
SECTION B-B



DETAIL "A"



SECTION THRU INT. DIAPHRAGM



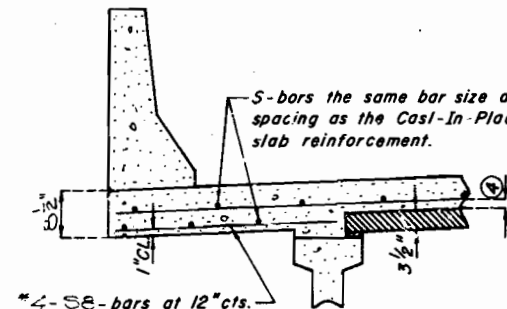
BENDING DIAGRAM FOR UI BAR

NOTE:

- End panel to be dimensioned 1" inside face of diaphragm.
 - 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 sq. yd.
- S-bars are not listed in bill of reinforcing.

NOTES CONT.

- Support from diaphragm forms required under optional skewed end until Cast-In-Place concrete has reached its minimum compressive strength.
- Extend S-bars 18" beyond Front Face of End Bent only.



SECTION THRU CANTILEVER

- 1" CL. Min. #5 and #6 bars.

NOTE: Slab exterior girder haunch to be the same as Cast-In-Place.
Slab depth over Prestressed Panel varies due to girder camber. Top of slab above Prestressed Panels to be built parallel to grade and to a min. thickness of 5 1/2".

DETAILS OF PRECAST PRESTRESSED PANELS

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

Sheet No. 13 of 16.

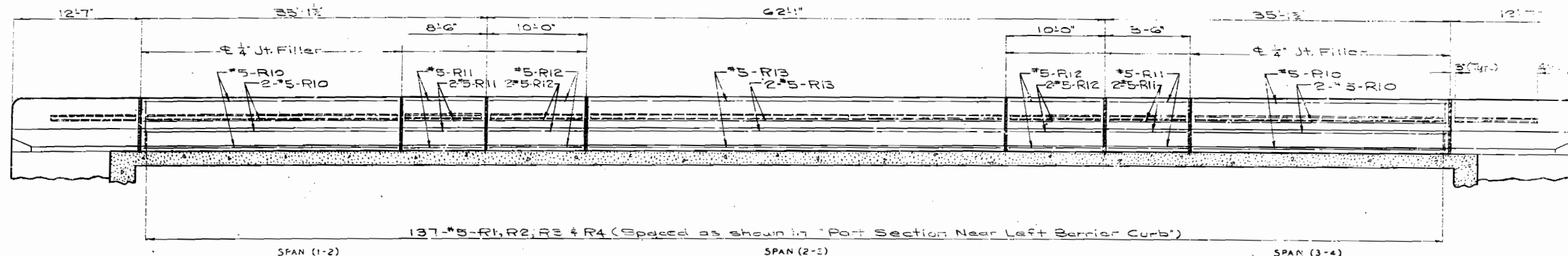
CLAY COUNTY

L-660R

338

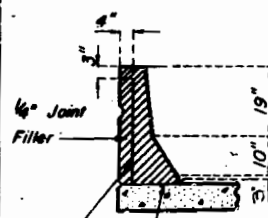
P/S Panel Revised JAN. 1980 NOV. 1981

DETAILED JAN. 1982
CHECKED FEB. 1982



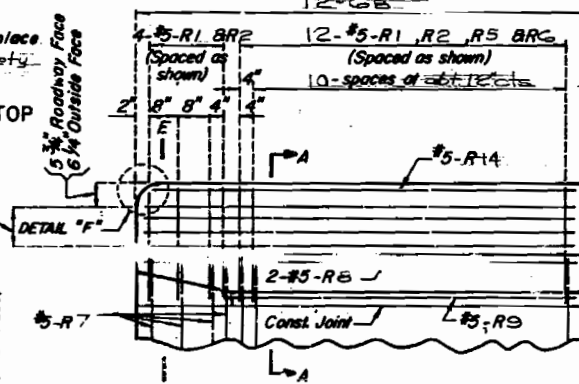
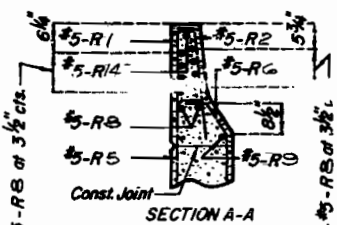
SECTION NEAR LEFT BARRIER CURB
(RIGHT BARRIER CURB SIMILAR)

Note: Longitudinal dimensions are along top edge of slab parallel to grade.
All reinforcing steel in barrier curbs shall be epoxy coated.

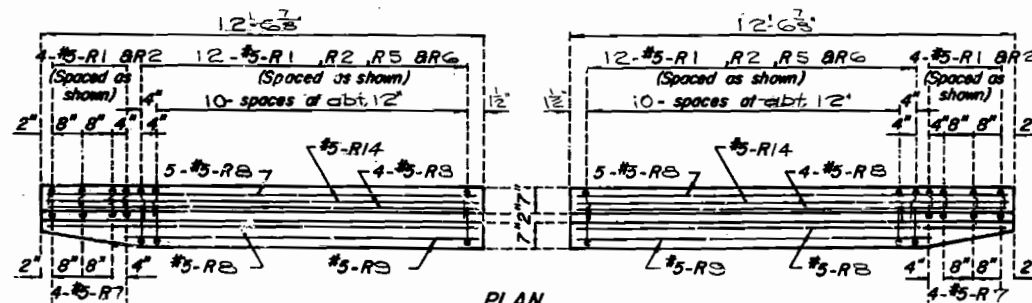


4" plastic waterstop Std. Spec. 10572.1
(Centered on joint)
Note: Plastic waterstop shall be placed in all safety barrier curb filled joints.
Cost of plastic waterstop complete in place to be included in unit price bid for safety barrier curb.

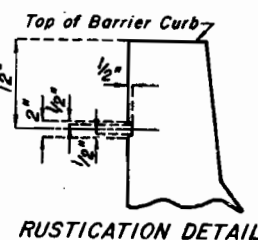
DETAILS OF PLASTIC WATERSTOP



ELEVATION



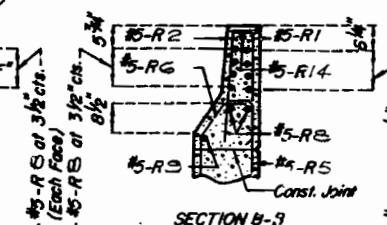
PLAN



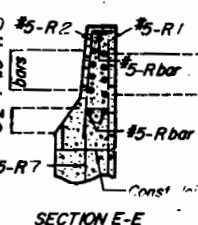
RUSTICATION DETAIL

NOTES:

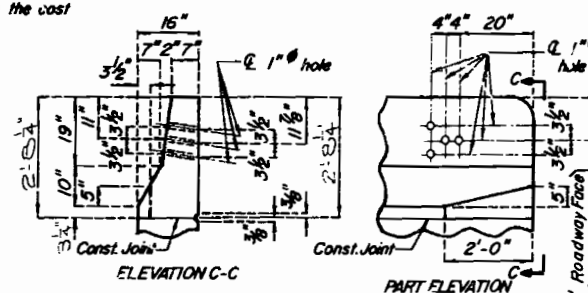
Top of barrier curb to be built parallel to grade with barrier curb joints (except at end bents) normal to grade.
All exposed edges of barrier curb shall have 1/2" radius or 3/8" bevel unless otherwise noted.
When the barrier curb is bid by linear feet, the contract unit price shall include the cost of all concrete and reinforcement.
Concrete in the safety barrier curb shall be Class B1.



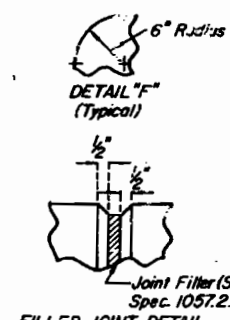
SECTION B-B



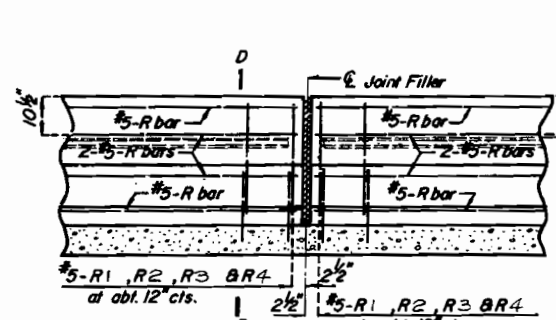
SECTION E-E



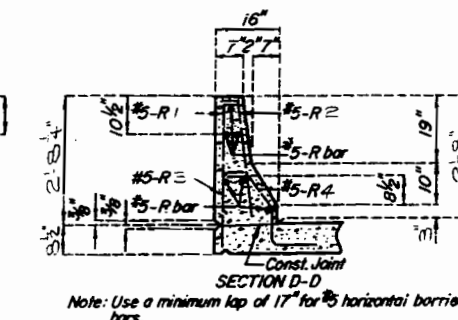
ELEVATION C-C



DETAIL 'F' (Typical)

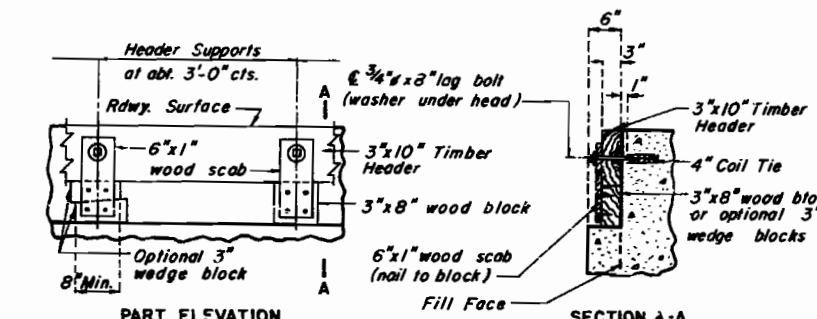


PART SECTION NEAR LEFT BARRIER CURB



SECTION D-D

Note: Use a minimum lap of 17" for #5 horizontal barrier bars.
The cross-sectional area above the slab = 2.27 sq. ft.



PART ELEVATION

SECTION A-A

Note: Cost of timber headers complete in place to be included in contract unit price for concrete.

DETAILS OF TIMBER HEADER AT END BENTS

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

DETAILS OF BARRIER CURB AT END BENTS

Sheet No. 14 of 16.

CLAY COUNTY

L-660R

DETAILED JAN. 1982
CHECKED FEB. 1982

SPS 17.8(1)
AUG. 1978
REVISED
JUNE 1981

COMPLETE BILL OF REINFORCING STEEL																									
NO. REQD.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	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.
		SUBSTRUCTURE																							
		END BENT NO. 1																							
4	6H1	BEAM		20	X			35	10.000									35	10	215					
4	6H2	BEAM		20	X			21	3.000									21	3	128					
43	5U1	BEAM		10	S	X				6.875	2	3.000						3	5	3	2	142			
6	7U2	BEAM		14	X			5	0.875	21.030	2	10.625			18.250	2	5.375	9	9	9	6	117			
1	7U3	BEAM		14	X			5	0.875	21.000	4	9.250			2	6.000	4	0.750	11	7	11	5	23		
6	7U4	BEAM		14	X			21.000	2	1.875	3	2.750			2	9.125	20.000	7	2	6	11	84			
1	7U5	BEAM		14	X			4	4.000	2	1.875	5	2.625			4	5.750	2	8.125	11	9	11	5	23	
1	5U3	BEAM		10	S	X			4	7.875	2	3.000						11	7	11	4	12			
2	6V	BEAM		20	X			4	8.000									4	8	4	8	14			
2	6V2	BEAM		20	X			4	7.000									4	7	4	7	14			
		INT. BENT NO. 2																							
4	6H13	BEAM		20	X			51	7.000									51	7	51	7	826			
4	6H14	BEAM		20	X			51	7.000									51	7	51	7	310			
7	6H15	BEAM		17	X			20	2.000									21	1	21	1	394			
4	6H16	BEAM		17	X			21	2.000									22	7	22	7	389			
6	6H17	BEAM		17	X			37	4.000									38	7	38	7	787			
6	4P1	COLUMN		13	S	X		2	3.000	2	9.000	2	3.000	2	9.000			10	9	10	6	42			
40	5U9	BEAM		13	S	X		2	11.000	3	9.875	2	11.000	3	9.875			14	5	14	1	588			
15	4U10	BEAM		10	S	X				6.000	2	11.000						3	11	3	9	38			
17	5U11	BEAM		13	S	X		2	11.000	3	9.000	2	11.000	3	9.000			14	3	13	11	247			
24	8V5	COLUMN		20	X			5	3.000									5	3	5	3	336			
		INT. BENT NO. 3																							
6	6H13	BEAM		20	X			51	7.000									51	7	51	7	826			
4	6H14	BEAM		20	X			51	7.000									51	7	51	7	310			
7	6H15	BEAM		17	X			20	2.000									21	1	21	1	394			
4	6H16	BEAM		17	X			21	2.000									22	7	22	7	389			
6	6H17	BEAM		17	X			37	4.000									38	7	38	7	787			
6	4P1	COLUMN		13	S	X		2	3.000	2	9.000	2	3.000	2	9.000			10	9	10	6	42			
40	5U15	BEAM		13	S	X		2	11.000	3	9.375	2	11.000	3	9.375			14	4	14	0	584			
15	4U10	BEAM		10	S	X				6.000	2	11.000						3	11	3	9	38			
17	5U11	BEAM		13	S	X		2	11.000	3	9.000	2	11.000	3	9.000			14	3	13	11	247			
24	8V5	COLUMN		20	X			5	3.000									5	3	5	3	336			
		END BENT NO. 4																							
4	6H20	BEAM		20	X			33	8.000									33	8	33	8	202			

COMPLETE BILL OF REINFORCING STEEL																									
NO. REQD.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	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.
4	6H21	BEAM		20	X				23	5.000								23	5	23	5	141			
43	5U1	BEAM		10	S	X					6.875	2	3.000					3	5	3	2	142			
6	7U2	BEAM		14	X				2	6.000	21.000	2	10.625		18.250	2	5.375	7	7	7	4	90			
1	7U3	BEAM		14	X				5	0.875	21.000	4	9.250		2	6.000	4	0.750	11	7	11	5	2		
6	7U4	BEAM		14	X				4	4.000	2	1.875	3	2.750		2	9.125	20.000	9	9	9	6	11		
1	7U5	BEAM		14	X				4	4.000	2	1.875	5	2.625		4	5.750	2	8.125	11	9	11	5	2	
1	5U8	BEAM		10	S	X					4	7.875	2	3.000				11	7	11	4	1			
2	6V1	BEAM		20	X					2.000								4	8	4	8	1			
2	6V2	BEAM		20	X					4	7.000							4	7	4	7	1			
SUPERSTRUCTURE																									
END BENT NO. 1																									
4	6F1	WING & DIAPHRAGM		23					14.250	3	4.500	14.250	11.250	8.750	11.250	8.750	5	9	5	8	3				
4	6F2	WING & DIAPHRAGM		23					14.250	4	4.750	14.250	8.750	11.250	8.750	11.250	6	9	6	9	4				
15	6H3	DIAPHRAGM		20					7	8.000							7	8	7	8	17				
3	6H4	DIAPHRAGM		20					54	10.000							54	10	54	10	24				
6	6H5	WING		20	V	2			8	3.250							8	3	8	3					
		INCR = 18.500 IN							11	3.500							11	4	11	4	8				
6	6H6	WING		20					11	9.000							11	9	11	9	10				
6	6H7	WING		20	V	2			7	5.500							7	6	7	6					
		INCR = 18.000 IN							10	5.500							10	10	0	8					
6	6H8	WING		20					11	1.000							11	1	11	1	10				
6	6H9	DIAPHRAGM		20					2	4.000							2	4	2	4	2				
6	5H10	DIAPHRAGM		20					3	11.000							3	11	3	11	2				
5	6H11	DIAPHRAGM		15					2	3.875	4	8.750			2	3.000	6.750	7	1	6	11	5			
5	6H12	DIAPHRAGM		21					2	3.875	5	1.250			2	3.000	6.750	7	5	7	2	5			
4	6H29	DIAPHRAGM		20					54	10.000							54	10	54	10	32				
2	6Y1	WING		25	S				2	6.000	4	9.750	7	4.750			2	1.750	4	3.750	14	3	14	1	4
2	6Y2	WING		25	S				2	0.000	4	9.500	6	8.000			2	1.500	4	3.500	13	6	13	4	4
44	5U6	DIAPHRAGM		19	S				2	4.000	4	0.000	2	4.000	4	0.000		13	7	13	3	60			
73	6U7	DIAPHRAGM & SLAB		19	S				4	3.000	4	1.500					8	5	8	3	90				
20	6Y3	WING		20					4	4.000							4	4	4	4	13				
20	6Y4	WING		20	V	4			2	4.500							2	5	2	5					
		INCR = 5.750 IN							4	4.000							4	4	4	4	10				
END BENT NO. 4																									
4	6F1	WING & DIAPHRAGM		23					14.250	3	4.500	14.250	11.250	8.750	11.250	8.750	5	9	5	8	3				
4	6F2	WING & DIAPHRAGM		23					14.250	4	4.750	14.250	8.750	11.250	8.750	11.250	6	9	6	9	4				
4	6H29	DIAPHRAGM		20					54	10.000							54	10	54	10	32				
6	6H9	DIAPHRAGM		20					2	4.000							2	4	2	4	2				
15	6H3	DIAPHRAGM		20					7	8.000							7	8	7	8	17				
3	6H4	DIAPHRAGM		20					54	10.000							54	10	54	10	24				
6	6H6	WING		20					11	9.000							11	9	11	9	10				
6	6H8	WING		20					11	1.000							11	1	11	1	10				
6	5H10	DIAPHRAGM		20					3	11.000							3	11	3	11	2				
5	6H11	DIAPHRAGM		15					2	3.875	4	8.750			2	3.000	6.750	7	1	6	11	5			
5	6H12	DIAPHRAGM		21					2	3.875	5	1.250			2	3.000	6.750	7	5	7	2	5			

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		88	45	

FINAL PLANS

Note:
All concrete and reinforcement above inlet construction joint in end bents are included with superstructure quantities.
Cost of $\frac{1}{2}$ " coil tie rods placed in diaphragms is included in contract unit price for P/S members.
* See Special Provisions.

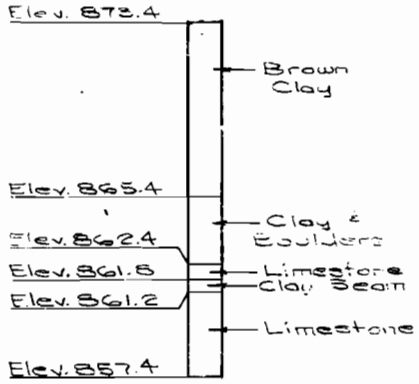
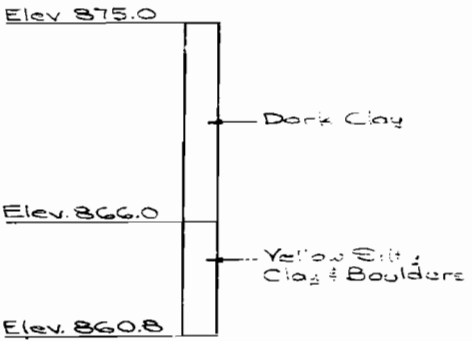
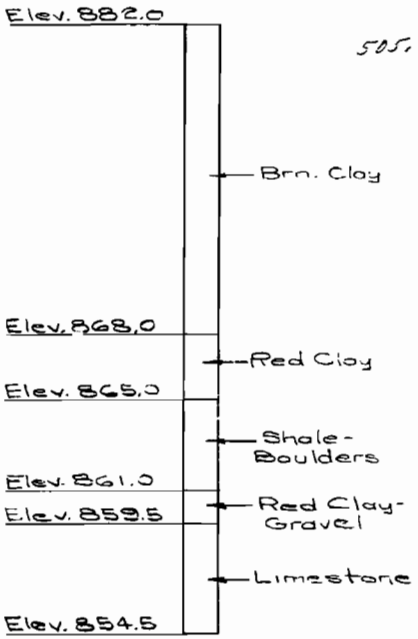
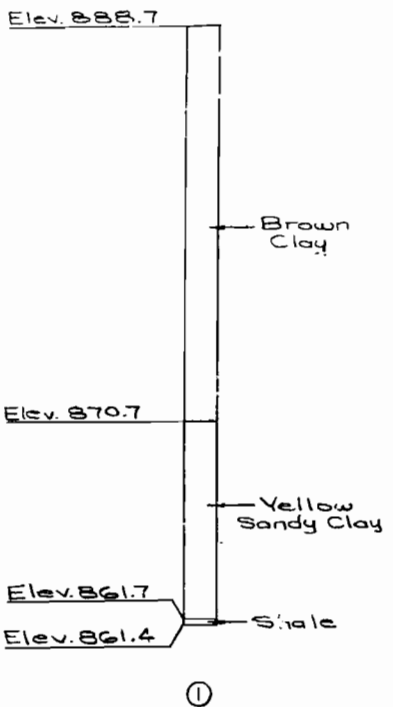
QUANTITIES FOR		SLAB	
TYPE OF SLAB		SLAB ON CONC. I-GDR.	REINF. (LBS.) CONC.
		EPGXY PLAIN CU. YD.	
Precast Panel Forms		37150	5860
		2234	

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 curb quantities based on skewer and curbs.

PILE DATA				
BENT NO.	1	2	3	4
Pile Type and Size	HP10x42			HP10x42
Number	2			2
Approximate Length Ft.	37			36
Design Bearing Tons	26.3			26.3
Hammer Energy Required Ft. Lbs.	7000			7000

Minimum energy requirements of hammer based on plan length and design bearing value of piles.
All piles were driven to practical refusal.

QUANTITIES			
ITEM	SUBSTR.	SUPERSTR.	TOTAL
Special Work	Lump Sum		1
Removal of Existing Bridge Deck	Sq. Ft.	6298	6298
Structural Steel Piles (10")	Lin. Ft.	143	143
Class B Concrete	Cu. Yd.	70.5	70.5
() Slab On Concrete I-Girder *	Sq. Yd.	817	817
Safety Barrier Curb	Lin. Ft.	215	215
Plain Neoprene Sealing Pad	Each	24	24
Laminated Neoprene Bearing Pads	Each	12	12
Prestressed Concrete I-Girder 35 Ft. Span	Each	12	12
Prestressed Concrete I-Girder 60 Ft. Span	Each	6	6
Reinforcing Steel	Lb.	9460	9460
505.01 Reinforcing Steel	Lb.	3190	3190
CONTINGENT			

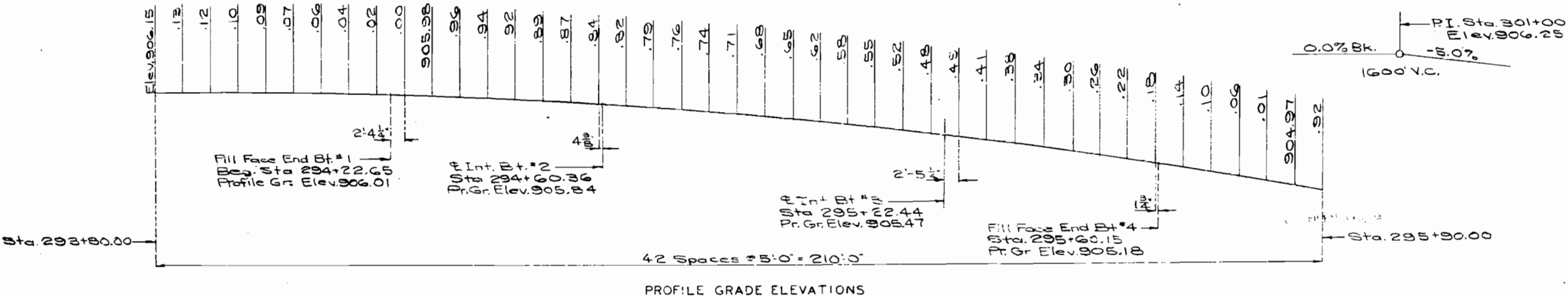


② CORE

④ CORE

Note: For location of Borings see sheet No. 1.

BORING DATA



PROFILE GRADE ELEVATIONS

342

7

Note: Quantities and Price
Data see sheet No. 2.

Sheet No. 1A of 16 .

FINAL PLANS

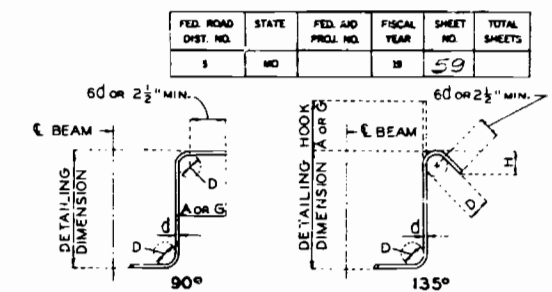
Widen, Extension and Repair:
Outline of old work is indicated by light dashed lines. Heavy lines indicate new work. Bars bonded in old concrete not removed were cleanly stripped and embedded into new concrete where possible. If length available, old bars did extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars.

STD.
STD. 706.35
L-660R

DESIGNED DEC. 1981
 DETAILED JAN. 1982
 CHECKED FEB. 1982

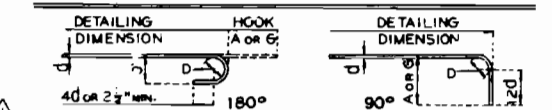
COMPLETE BILL OF REINFORCING STEEL																									
NO. REQD.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS								NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT						
									B	C	D	E	F	H	K	FT.				IN.	FT.	IN.	FT.	IN.	FT.
6	6H18	WING		20				2	8	2.000								8	2	8	2				
		INCR = 18.503 IN							11	3.000								11	3	11	3			87	
6	6H19	WING		20				2	8	0.000								8	0	8	0				
		INCR = 23.000 IN							11	10.000								11	10	11	10			89	
2	6T3	WING		25	S			2	0.000	4	6.875	6	11.020		2	0.250	4	1.250	13	6	13	5			40
2	6T4	WING		25	S			2	0.000	4	6.625	7	7.000		2	0.250	4	1.000	14	2	14	1			42
44	5J6	DIAPHRAGM	E	13	S			2	4.000	4	0.000	2	4.000	4	0.000				13	7	13	3			678
75	6J7	DIAPHRAGM	E	19	S			4	3.000	4	1.500								8	5	8	1			929
24	6V7	WING		20				4	3.000										4	3	4	3			153
16	6V8	WING		20				2	4.000										2	4	2	4			
		INCR = 6.000 IN							3	10.000									3	10	3	10			74
		DIAPH.-INT.BT.																							
60	5H10	DIAPHRAGM		20				3	11.000										3	11	3	11			246
40	6H24	DIAPHRAGM		20				7	0.000										7	0	7	0			421
40	4H25	DIAPHRAGM		20				7	7.000										7	7	7	7			203
32	5H26	DIAPHRAGM		19				11.000	2	9.500									3	9	3	7			120
16	5H27	DIAPHRAGM		20				3	7.000										3	7	3	7			60
24	5H28	DIAPHRAGM		20				2	8.000										2	8	2	8			67
122	4U12	DIAPHRAGM	E	28	S				2	0.000	3	11.000	12.000						6	11	6	9			550
40	6U13	DIAPHRAGM	E	25	S				2	2.000	3	11.000	12.000						7	1	6	9			406
		INT. DIAPH.																							
10	6H27	INT. DIAPH.		20				7	9.000										7	9	7	9			116
30	4H23	INT. DIAPH.		20				7	5.000										7	5	7	5			149
40	4U14	INT. DIAPH.	E	10	S				2.000	4	5.500	6.000	12.000						9	2	8	10			245
		BARRIER CURB																							
338	5R1	BARRIER CURB	E	19	S			2	6.000	3.500									2	10	2	8			940
338	5R2	BARRIER CURB	E	15	S			2	6.125	3.500					2	6.000	3.000		2	10	2	9			969
274	5R3	BARRIER CURB	E	19	S				17.000	6.000										23		22			524
274	5R4	BARRIER CURB	E	27	S				6.000		11.125	7.000	12.000	9.125	6.375				3	0	2	10			810
48	5R5	BARRIER CURB	E	19	S			3	6.500	6.000									4	1	3	11			196
48	5R6	BARRIER CURB	E	27	S				6.000		11.125	14.625		9.125	6.375				2	8	2	7			129
16	5R7	BARRIER CURB	E	16	S			3	6.500	5.500									4	0	3	11			65
40	5R8	BARRIER CURB	F	20				12	3.000										12	3	12	3			511
4	5R9	BARRIER CURB	E	20				10	5.000										10	5	10	5			43
24	5R10	BARRIER CURB	E	20				26	4.000										26	4	26	4			659
26	5R11	BARRIER CURB	E	20				8	3.000										8	3	8	3			224
24	5R12	BARRIER CURB	E	20				9	9.000										9	9	9	9			244
12	5R13	BARRIER CURB	F	20				41	10.000										41	10	41	10			524
4	5R14	BARRIER CURB	E	20				12	0.000										12	0	12	0			50

COMPLETE BILL OF REINFORCING STEEL																
NO. REQD.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS							
									B	C	D	E	F	H	K	WEIGHT
									FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.
		C-ST-IN-PLACE														
		CONVENTIONAL														
		FORMS OR STAY-														
		IN-PLACE FORMS														
158	651	SLAB		20				53	3.000							12637
30	652	SLAB		20				5	0.125							
		INCR = 38.125 IN							49	5.625						1228
189	553	SLAB		20				47	0.000							9265
126	554	SLAB	E	20				47	0.000							6177
82	555	SLAB	E	20				16	0.000							1368
250	656	SLAB	E	20				53	3.000							19995
50	657	SLAB	E	20				2	1.000							1965
		INCR = 24.125 IN							50	2.625						
		PRECAST-P/S														
		PANEL FORMS														
24	553	SLAB		20				47	0.000							1177
126	554	SLAB	E	20				47	0.000							6177
126	555	SLAB	E	20				16	0.000							1368
274	458	SLAB		20				3	2.000							589
214	659	SLAB	E	20				53	3.000							17116
42	6510	SLAB	E	20				3	7.000							1735
		INCR = 28.750 IN							51	5.000						



STIRRUP HOOK DIMENSIONS				
GRADES 40-50-60 KSI				
BAR SIZE	D (IN.)	90° HOOK	135° HOOK	APPROX. H
#3	1-1/2"	4"	4"	2-1/2"
#4	2"	4-1/2"	4-1/2"	3"
#5	2-1/2"	6"	5-1/2"	3-3/4"
#6	4-1/2"	8"	7"	4-1/2"

NOTE: UNLESS OTHERWISE NOTED DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



SIZE OF 180° HOOKS (GRADE 40 KSI) D = 5d FOR #3 THRU #11 D = 10d FOR #14 AND #18
 SIZE OF 90° HOOKS (ALL GRADES) AND 180° HOOKS (GRADE 60 KSI) D = 6d FOR #3 THRU #8 D = 8d FOR #9, #10 AND #11 D = 10d FOR #14 AND #18

END HOOK DIMENSIONS				
BAR SIZE	180° HOOKS		90° HOOKS	
	GRADE 40	GRADE 60	ALL GRADES	
#3	5"	2-3/4"	5"	6"
#4	6"	3-1/2"	6"	8"
#5	7"	4-1/2"	7"	10"
#6	8"	5-1/4"	8"	12"
#7	9"	6-1/4"	10"	14"
#8	10"	7"	11"	16"
#9	12"	8"	15"	19"
#10	13"	9"	17"	22"
#11	14"	10"	19"	21-0"
#14	21-2"	20-1/2"	21-2"	21-7"
#18	21-11"	21-3"	21-11"	31-5"

NOTES: ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH 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.

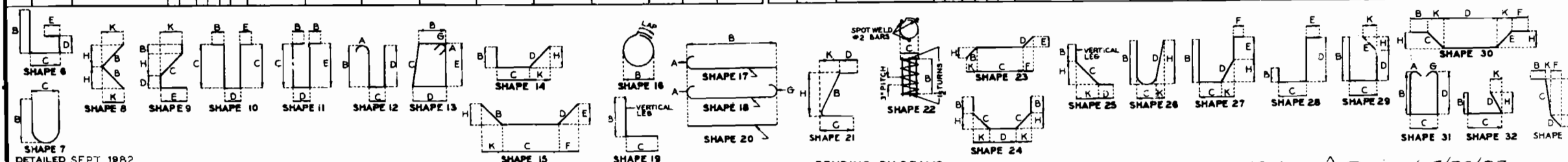
V - BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.

NO. EA. - NUMBER OF BARS OF EACH LENGTH.

NOMINAL LENGTHS - ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAM 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



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

BENDING DIAGRAMS

Sheet No. 16 of 16. Revised 3/25/83

CLAY COUNTY

L-660R



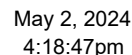
Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 2, 2024
4:18:47pm

COUNTY : CLAY BRIDGE : L0659 R REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/7/2024 SUBMITTAL YEAR : 2023

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE CARRIED 'ON' STRUCT
2	District	KC	5B	Route Signing Prefix	IS
3	County	CLAY	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	6412	5D	Route Number	00029
27	Year Built	1954	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	0	7	Facility Carried	IS 29 S
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	YES
21	Structure Maintenance	STATE HIGHWAY AGENCY	13A	LRS Inventory Route No.	0000005878
22	Structure Owner	STATE HIGHWAY AGENCY	13B	Subroute No.	00
33	Br. Median Code	NO MEDIAN	20	Toll Status	ON FREE ROAD
37	Historical Significance	NOT ELIGIBLE FOR NR OF HP	26	Functional Classification	11-UR PRNCPL ARTERIAL-IS
101	Parallel Struc Desg	LEFT	28A	Lanes on Structure	03
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	ON A DEFENSE HWY
112	NBIS Bridge Length	YES	104	National Highway System	ON NHS
			105	Federal Lands Highway	NOT APPLICABLE
			110	Designated Nat. Network	YES
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	AVONDALE CITY	29	AADT	43245
	Code	02800	30	AADT Year	2023
9	Location	S 1 T 50 N R 33 W	102	Direction of Traffic	1-WAY TRAFFIC
11	Milepoint	123.90 miles	109	AADT Truck Percent	12%
16	Latitude	39 D 9 M 60 S	114	Future AADT	77841
17	Longitude	94 D 33 M 33 S	115	Future AADT Year	2043
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	CST NE PARVIN RD	10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
42B	Type of Service Under	HIGHWAY	19	By pass Detour Length	0.62 miles
28B	Lanes Under Structure	02	32	Approach Roadway Width	51 Ft. 10 In.
54A	Vert. Clearance Ref.	HIGHWAY	34	Skew	7.00 Degrees
54B	Vert. Clearance	14 Ft. 12 In.	35	Struct. Flared	NO
55A	Rt. Lat Clear Ref.	HIGHWAY	47	Total Horiz. Clear	51 Ft. 10 In.
55B	Rt. Lat Clearance	6 Ft. 11 In.	48	Maximum Span Length	62 Ft. 0 In.
56	Left Lat Clearance	0 Ft. 0 In.	49	Structure Length	123 Ft. 0 In.
38	Navigation Control	N/A	50A	Left Curb/Sidewalk Width	0 Ft. 0 In.
39	Nav Vertical Clear	0 Ft. 0 In.	50B	Right Curb/Sidewalk Width	0 Ft. 0 In.
40	Nav Horizontal Clear	0 Ft. 0 In.	51	Curb to Curb Br. Width	50 Ft. 10 In.
111	Nav. Pier Protection		52	Deck Width (Out-Out)	53 Ft. 6 In.
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	99 Ft. 99 In.

Design_No = 10659





Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 2, 2024
4:18:47pm

COUNTY : CLAY BRIDGE : L0659 R REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE 'UNDER' STRUCT RUN DATE : 3/7/2024 SUBMITTAL YEAR : 2023

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE 'UNDER' STRUCT Code : 2
2	District	KC	5B	Route Signing Prefix	CST
3	County	CLAY	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	6412	5D	Route Number	00000
27	Year Built	1954	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	0	7	Facility Carried	IS 29 S
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	
21	Structure Maintenance		13A	LRS Inventory Route No.	
22	Structure Owner		13B	Subroute No.	
33	Br. Median Code		20	Toll Status	ON FREE ROAD
37	Historical Significance		26	Functional Classification	16-URBAN MINOR ARTERIAL
101	Parallel Struc Desg	LEFT	28A	Lanes on Structure	03
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	RTE NOT A DEFENSE HWY
112	NBIS Bridge Length		104	National Highway System	NOT ON NHS
			105	Federal Lands Highway	
			110	Designated Nat. Network	NO
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	AVONDALE CITY	29	AADT	5728
	Code	02800	30	AADT Year	2023
9	Location	S 1 T 50 N R 33 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	0.79 miles	109	AADT Truck Percent	8%
16	Latitude	39 D 9 M 60 S	114	Future AADT	
17	Longitude	94 D 33 M 33 S	115	Future AADT Year	
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	CST NE PARVIN RD	10	Inventory Rte. Vert. Clear	14 Ft. 12 In.
42B	Type of Service Under	HIGHWAY	19	By pass Detour Length	0.00 miles
28B	Lanes Under Structure	02	32	Approach Roadway Width	
54A	Vert. Clearance Ref.		34	Skew	
54B	Vert. Clearance		35	Struct. Flared	
55A	Rt. Lat Clear Ref.		47	Total Horiz. Clear	15 Ft. 5 In.
55B	Rt. Lat Clearance		48	Maximum Span Length	62 Ft. 0 In.
56	Left Lat Clearance		49	Structure Length	123 Ft. 0 In.
38	Navigation Control		50A	Left Curb/Sidewalk Width	
39	Nav Vertical Clear		50B	Right Curb/Sidewalk Width	
40	Nav Horizontal Clear		51	Curb to Curb Br. Width	
111	Nav. Pier Protection		52	Deck Width (Out-Out)	
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	

Design_No = 10659



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 2, 2024
4:18:47pm

COUNTY : CLAY BRIDGE : L0659 R REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE 'UNDER' STRUCT RUN DATE : 3/7/2024 SUBMITTAL YEAR : 2023

LOAD RATING AND POSTING INFORMATION		MATERIAL/CONSTRUCTION INFORMATION	
<div>31</div> Design Load		<div>43A</div> Main Struc. Mat type	PRESTRSED CONCRETE CONTIN
<div>41</div> Structure Status		<div>43B</div> Main struc Constr. Type	STRINGER/MULTIBEAM - GRD
<div>63</div> Oper. Rating Meth.		<div>45</div> # of Main Spans	
<div>64</div> Operating Rating		<div>44A</div> Appr Struc. Mat type	
<div>65</div> Inventory Rating Meth		<div>44B</div> Appr Struc. Cnstr. type	
<div>66</div> Inventory Rating		<div>46</div> # of Approach Span	
<div>70</div> Bridge Posting Code		<div>107</div> Deck Mat/Constr.	
		<div>108A</div> Wear Surf Mat/Constr.	
		<div>108B</div> Membrane Mat/Constr.	
		<div>108C</div> Deck Protect Mat/Constr.	
PROPOSED IMPROVEMENT INFORMATION		CONDITION RATING INFORMATION	
Sufficiency Rating		<div>58</div> Deck Cond. Rating	
Deficiency Rating		<div>59</div> Superstructure Cond. Rating	
Funding Eligibility		<div>60</div> Substructure Cond. Rating	
<div>75A</div> Proposed Work		<div>61</div> Channel /Channel Protection Cond. Rating	
<div>75B</div> Work Done By		<div>62</div> Culvert Cond. Rating	
<div>76</div> New Struc Length			
<div>94</div> Struc Improve Cost		INSPECTION INFORMATION	
<div>95</div> Roadway Improve Cost		<div>90</div> Gen. Insp Date	
<div>96</div> Total Project Cost		<div>91</div> Gen. Insp. Frequency	
<div>97</div> Year of Cost Estimates		<div>92A</div> Frac. Critical Inspection	
		<div>93A</div> Frac. Critical Insp. Date	
		<div>92B</div> Underwater Inspection	
		<div>93B</div> Underwater Insp. Date	
		<div>92C</div> Special Inspection	
		<div>93C</div> Special Inspection Date	
APPRAISAL RATING INFORMATION		BORDER BRIDGE INFORMATION	
<div>36A</div> Br. Rail App. Rating		<div>98</div> Neighboring State Code	
<div>36B</div> Transition Rail App. Rating		<div>98B</div> Neighboring State % Respon	
<div>36C</div> Approach Rail App. Rating		<div>99</div> Neighboring State Struc. No.	
<div>36D</div> Rail End Treat. App. Rating			
<div>67</div> Struc Eval App. Rating			
<div>68</div> Deck Geometry App. Rating			
<div>69</div> Underclearance App. Rating			
<div>71</div> Waterway Adeq. App. Rating			
<div>72</div> Approach Road App. Rating			
<div>113</div> Scour Assess App. Rating			
APPROVED POSTING INFORMATION		FIELD POSTING INFORMATION	
Approved Posting Category		Field Posting Category	
Ton1 Ton2 Ton3		Ton1 Ton2 Ton3	
Tonnage Values for Posting Sign		Tonnage Values for Posting Sign	
General Text for Posting Sign		General Text for Posting Sign	

Design_No = 10659



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 2, 2024
4:19:37pm

COUNTY : CLAY BRIDGE : L0660 R REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/7/2024 SUBMITTAL YEAR : 2023

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE CARRIED 'ON' STRUCT
2	District	KC	5B	Route Signing Prefix	IS
3	County	CLAY	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	6413	5D	Route Number	00029
27	Year Built	1954	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	1983	7	Facility Carried	IS 29 N
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	YES
21	Structure Maintenance	STATE HIGHWAY AGENCY	13A	LRS Inventory Route No.	0000005865
22	Structure Owner	STATE HIGHWAY AGENCY	13B	Subroute No.	00
33	Br. Median Code	NO MEDIAN	20	Toll Status	ON FREE ROAD
37	Historical Significance	NOT ELIGIBLE FOR NR OF HP	26	Functional Classification	11-UR PRNCPL ARTERIAL-IS
101	Parallel Struc Desg	RIGHT	28A	Lanes on Structure	03
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	ON A DEFENSE HWY
112	NBIS Bridge Length	YES	104	National Highway System	ON NHS
			105	Federal Lands Highway	NOT APPLICABLE
			110	Designated Nat. Network	YES
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	AVONDALE CITY	29	AADT	56042
	Code	02800	30	AADT Year	2023
9	Location	S 1 T 50 N R 33 W	102	Direction of Traffic	1-WAY TRAFFIC
11	Milepoint	4.53 miles	109	AADT Truck Percent	12%
16	Latitude	39 D 9 M 60 S	114	Future AADT	100876
17	Longitude	94 D 33 M 31 S	115	Future AADT Year	2043
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	CST NE PARVIN RD	10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
42B	Type of Service Under	HIGHWAY	19	By pass Detour Length	0.62 miles
28B	Lanes Under Structure	02	32	Approach Roadway Width	51 Ft. 10 In.
54A	Vert. Clearance Ref.	HIGHWAY	34	Skew	14.00 Degrees
54B	Vert. Clearance	17 Ft. 11 In.	35	Struct. Flared	NO
55A	Rt. Lat Clear Ref.	HIGHWAY	47	Total Horiz. Clear	51 Ft. 10 In.
55B	Rt. Lat Clearance	6 Ft. 7 In.	48	Maximum Span Length	62 Ft. 0 In.
56	Left Lat Clearance	0 Ft. 0 In.	49	Structure Length	138 Ft. 1 In.
38	Navigation Control	N/A	50A	Left Curb/Sidewalk Width	0 Ft. 0 In.
39	Nav Vertical Clear	0 Ft. 0 In.	50B	Right Curb/Sidewalk Width	0 Ft. 0 In.
40	Nav Horizontal Clear	0 Ft. 0 In.	51	Curb to Curb Br. Width	50 Ft. 10 In.
111	Nav. Pier Protection		52	Deck Width (Out-Out)	53 Ft. 6 In.
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	99 Ft. 99 In.

Design_No = 10660



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 2, 2024
4:19:37pm

COUNTY : CLAY BRIDGE : L0660 R REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/7/2024 SUBMITTAL YEAR : 2023

LOAD RATING AND POSTING INFORMATION			MATERIAL/CONSTRUCTION INFORMATION		
31	Design Load	HS 20+MOD	43A	Main Struc. Mat type	PRESTRSED CONCRETE CONTIN
41	Structure Status	A - OPEN NO RESTRICTIONS	43B	Main struc Constr. Type	STRINGER/MULTIBEAM - GRD
63	Oper. Rating Meth.	LOAD FACTOR	45	# of Main Spans	3
64	Operating Rating	61 Tons.	44A	Appr Struc. Mat type	
65	Inventory Rating Meth	LOAD FACTOR	44B	Appr Struc. Cnstr. type	
66	Inventory Rating	26 Tons.	46	# of Approach Span	0
70	Bridge Posting Code	=>LEGAL LOADS	107	Deck Mat/Constr.	1 CONCRETE CIP
			108A	Wear Surf Mat/Constr.	1 MONO CONCRETE
			108B	Membrane Mat/Constr.	0 NONE
			108C	Deck Protect Mat/Constr.	1 EPOXY
PROPOSED IMPROVEMENT INFORMATION			CONDITION RATING INFORMATION		
Sufficiency Rating		71.6 Percent	58	Deck Cond. Rating	7
Deficiency Rating		NOT DEFICIENT	59	Superstructure Cond. Rating	5
Funding Eligibility			60	Substructure Cond. Rating	6
75A	Proposed Work		61	Channel /Channel Protection Cond. Rating	N
75B	Work Done By		62	Culvert Cond. Rating	N
76	New Struc Length	0 Ft. 0 In.			
94	Struc Improve Cost	\$ 0,000	INSPECTION INFORMATION		
95	Roadway Improve Cost	\$ 0,000	90	Gen. Insp Date	9 / 22
96	Total Project Cost	\$ 0,000	91	Gen. Insp. Frequency	24 Months
97	Year of Cost Estimates	0	92A	Frac. Critical Inspection	N Months
			93A	Frac. Critical Insp. Date	
			92B	Underwater Inspection	N Months
			93B	Underwater Insp. Date	
			92C	Special Inspection	N Months
			93C	Special Inspection Date	
APPRAISAL RATING INFORMATION			BORDER BRIDGE INFORMATION		
36A	Br. Rail App. Rating	MEETS ACCEPTBLE STND	98	Neighboring State Code	
36B	Transition Rail App. Rating	MEETS ACCEPTBLE STND	98B	Neighboring State % Respon	
36C	Approach Rail App. Rating	MEETS ACCEPTBLE STND	99	Neighboring State Struc. No.	
36D	Rail End Treat. App. Rating	MEETS ACCEPTBLE STND			
67	Struc Eval App. Rating	5	APPROVED POSTING INFORMATION		
68	Deck Geometry App. Rating	5	FIELD POSTING INFORMATION		
69	Underclearance App. Rating	4	Approved Posting Category		S-1
71	Waterway Adeq. App. Rating	N	Field Posting Category		S-1
72	Approach Road App. Rating	8	Ton1 Ton2 Ton3		Ton1 Ton2 Ton3
113	Scour Assess App. Rating	N	Tonnage Values for Posting Sign		Tonnage Values for Posting Sign
			General Text for Posting Sign		General Text for Posting Sign
			NO POSTING REQUIRED		NO POSTING REQUIRED

Design_No = 10660



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 2, 2024
4:19:37pm

COUNTY : CLAY BRIDGE : L0660 R REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE 'UNDER' STRUCT RUN DATE : 3/7/2024 SUBMITTAL YEAR : 2023

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE 'UNDER' STRUCT Code : 2
2	District	KC	5B	Route Signing Prefix	CST
3	County	CLAY	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	6413	5D	Route Number	00000
27	Year Built	1954	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	0	7	Facility Carried	IS 29 N
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	
21	Structure Maintenance		13A	LRS Inventory Route No.	
22	Structure Owner		13B	Subroute No.	
33	Br. Median Code		20	Toll Status	ON FREE ROAD
37	Historical Significance		26	Functional Classification	16-URBAN MINOR ARTERIAL
101	Parallel Struc Desg	RIGHT	28A	Lanes on Structure	03
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	RTE NOT A DEFENSE HWY
112	NBIS Bridge Length		104	National Highway System	NOT ON NHS
			105	Federal Lands Highway	
			110	Designated Nat. Network	NO
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	AVONDALE CITY	29	AADT	5728
	Code	02800	30	AADT Year	2023
9	Location	S 1 T 50 N R 33 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	0.82 miles	109	AADT Truck Percent	8%
16	Latitude	39 D 9 M 60 S	114	Future AADT	
17	Longitude	94 D 33 M 31 S	115	Future AADT Year	
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	CST NE PARVIN RD	10	Inventory Rte. Vert. Clear	17 Ft. 11 In.
42B	Type of Service Under	HIGHWAY	19	By pass Detour Length	0.00 miles
28B	Lanes Under Structure	02	32	Approach Roadway Width	
54A	Vert. Clearance Ref.		34	Skew	
54B	Vert. Clearance		35	Struct. Flared	
55A	Rt. Lat Clear Ref.		47	Total Horiz. Clear	18 Ft. 4 In.
55B	Rt. Lat Clearance		48	Maximum Span Length	62 Ft. 0 In.
56	Left Lat Clearance		49	Structure Length	138 Ft. 1 In.
38	Navigation Control		50A	Left Curb/Sidewalk Width	
39	Nav Vertical Clear		50B	Right Curb/Sidewalk Width	
40	Nav Horizontal Clear		51	Curb to Curb Br. Width	
111	Nav. Pier Protection		52	Deck Width (Out-Out)	
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	

Design_No = 10660




Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet


May 2, 2024
4:19:37pm

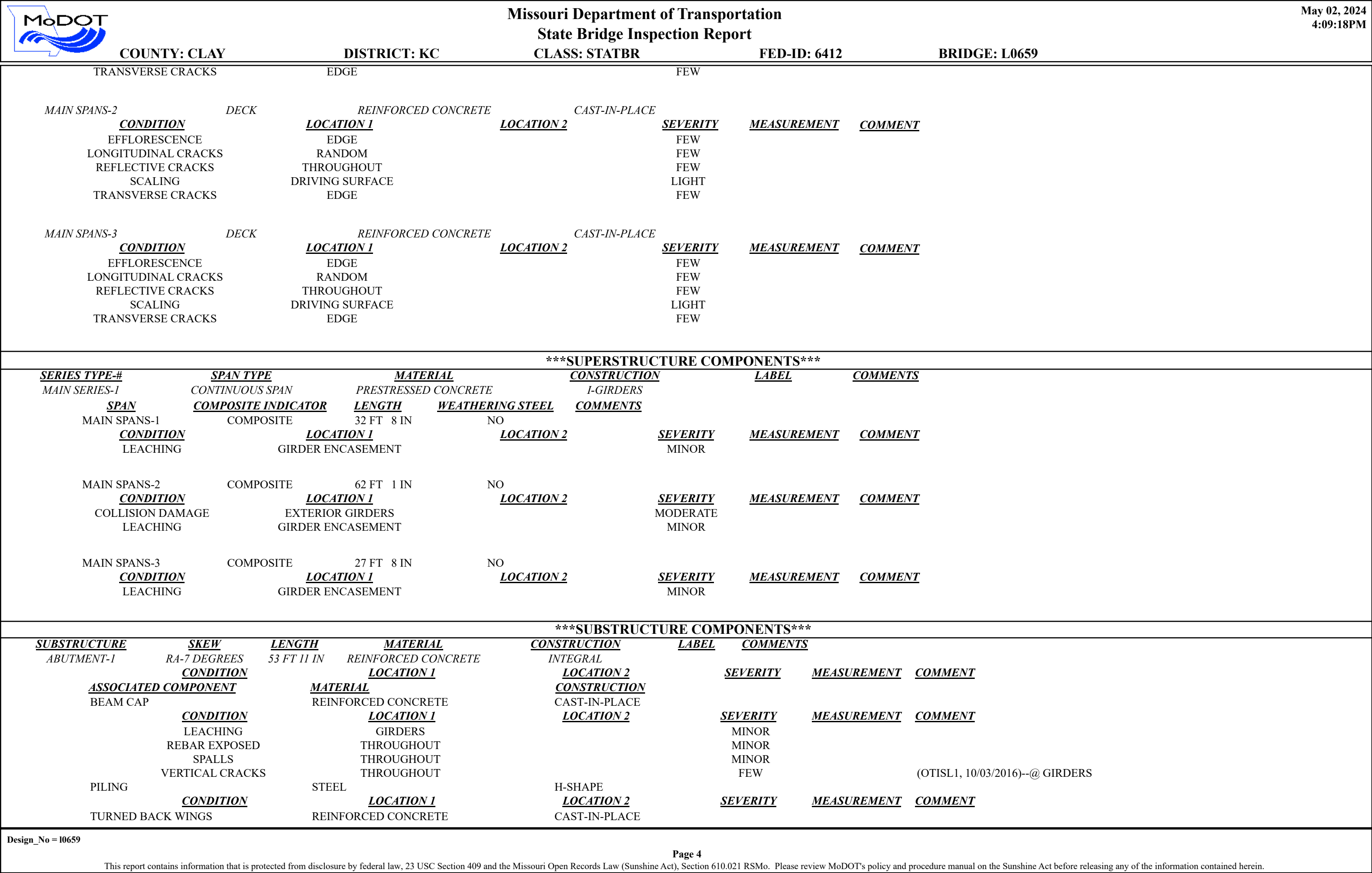
COUNTY : CLAY BRIDGE : L0660 R REVIEW STATUS : APPROVED NBI STATUS : P
RECORD TYPE : ROUTE 'UNDER' STRUCT RUN DATE : 3/7/2024 SUBMITTAL YEAR : 2023

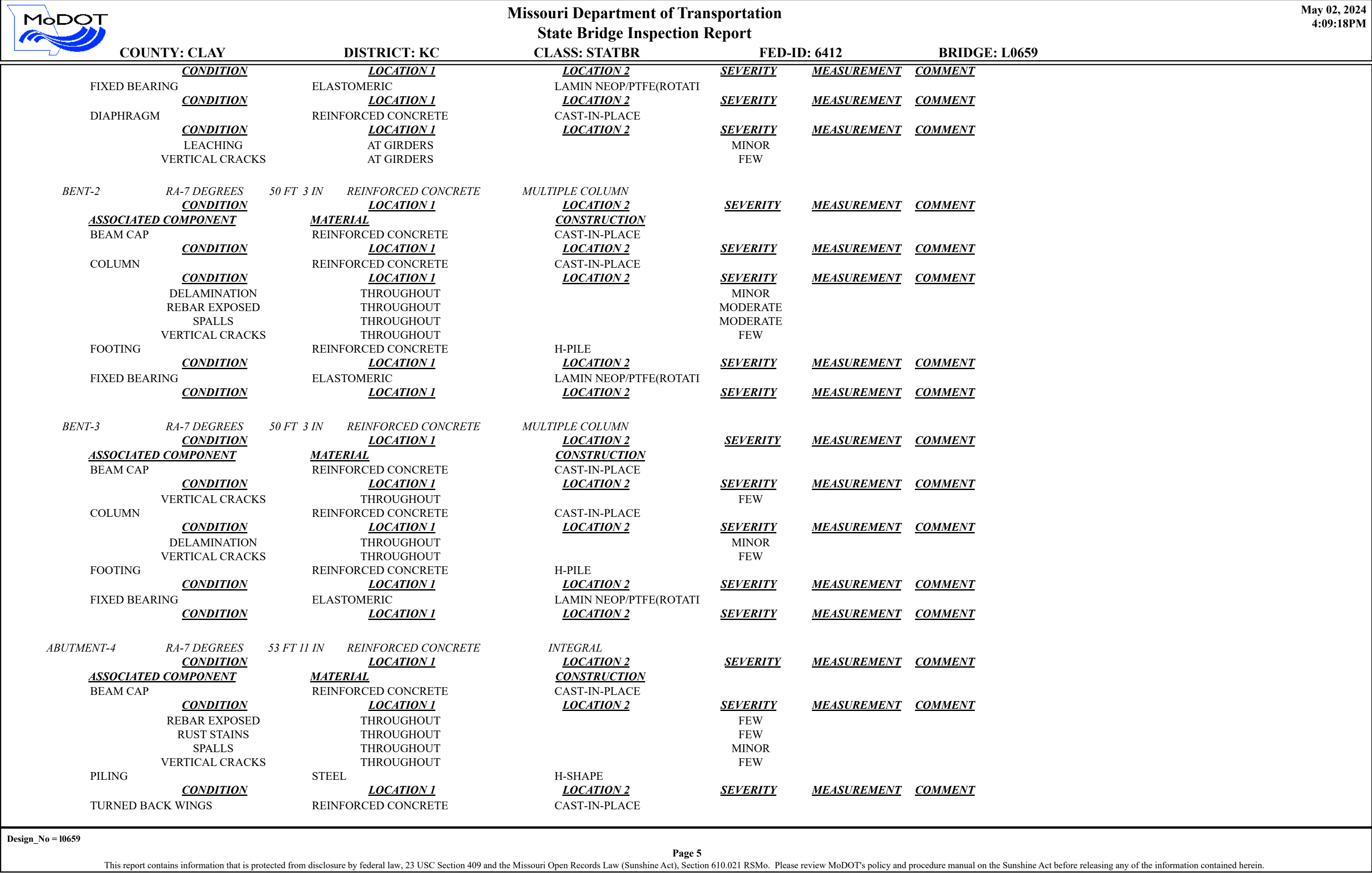
LOAD RATING AND POSTING INFORMATION		MATERIAL/CONSTRUCTION INFORMATION	
31	Design Load	43A	Main Struc. Mat type PRESTRSED CONCRETE CONTIN
41	Structure Status	43B	Main struc Constr. Type STRINGER/MULTIBEAM - GRD
63	Oper. Rating Meth.	45	# of Main Spans
64	Operating Rating	44A	Appr Struc. Mat type
65	Inventory Rating Meth	44B	Appr Struc. Cnstr. type
66	Inventory Rating	46	# of Approach Span
70	Bridge Posting Code	107	Deck Mat/Constr.
PROPOSED IMPROVEMENT INFORMATION		108A	Wear Surf Mat/Constr.
Sufficiency Rating		108B	Membrane Mat/Constr.
Deficiency Rating		108C	Deck Protect Mat/Constr.
Funding Eligibility		CONDITION RATING INFORMATION	
75A	Proposed Work	58	Deck Cond. Rating
75B	Work Done By	59	Superstructure Cond. Rating
76	New Struc Length	60	Substructure Cond. Rating
94	Struc Improve Cost	61	Channel /Channel Protection Cond. Rating
95	Roadway Improve Cost	62	Culvert Cond. Rating
96	Total Project Cost	INSPECTION INFORMATION	
97	Year of Cost Estimates	90	Gen. Insp Date
APPRAISAL RATING INFORMATION		91	Gen. Insp. Frequency
36A	Br. Rail App. Rating	92A	Frac. Critical Inspection
36B	Transition Rail App. Rating	93A	Frac. Critical Insp. Date
36C	Approach Rail App. Rating	92B	Underwater Inspection
36D	Rail End Treat. App. Rating	93B	Underwater Insp. Date
67	Struc Eval App. Rating	92C	Special Inspection
68	Deck Geometry App. Rating	93C	Special Inspection Date
69	Underclearance App. Rating	BORDER BRIDGE INFORMATION	
71	Waterway Adeq. App. Rating	98	Neighboring State Code
72	Approach Road App. Rating	98B	Neighboring State % Respon
113	Scour Assess App. Rating	99	Neighboring State Struc. No.
APPROVED POSTING INFORMATION		FIELD POSTING INFORMATION	
Approved Posting Category		Field Posting Category	
Ton1 Ton2 Ton3		Ton1 Ton2 Ton3	
Tonnage Values for Posting Sign		Tonnage Values for Posting Sign	
General Text for Posting Sign		General Text for Posting Sign	


Design_No = 10660


		Missouri Department of Transportation			May 02, 2024	
		State Bridge Inspection Report			4:09:18PM	
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR	FED-ID: 6412	BRIDGE: L0659
STRUCTURE POSTING						
APPROVED CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:		
COMMENTS:						
FIELD CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:	PROBLEM:	PROBLEM DIRECTION:
COMMENTS:						
GENERAL COMMENTS/MAJOR RATED ITEMS						
GENERAL COMMENTS: (BOWDEJ1, 09/30/2008)--(32'-62'-27") CONT P/S CONC I-GDR SPANS (WIDENED)						
[ITEM 58] DECK: 7-GOOD CONDITION		COMMENTS: (BATUSJ1, 09/19/2012)--T-CRACKS				
RATING : 02/02/2007		(KIMM1, 10/02/2018)--WEAR				
[ITEM 59] SUPER: 6-SATISFACTORY CONDITION		COMMENTS: (OTISL1, 10/05/2020)--LEACHING @ GIDER ENDS/ENCASEMENTS				
RATING : 08/23/2023		(RAITHK, 08/23/2023)--MOD COLLISION DAMAGE MIDSPAN				
[ITEM 60] SUB: 6-SATISFACTORY CONDITION		COMMENTS: (OTISL1, 10/05/2020)--SPALLS BENT 2 COLUMNS & BOTH ABUTMENTS				
RATING : 02/02/2007						
[ITEM 61] BANK/CHANNEL: N-NOT APPLIC NO WATRWAY		COMMENTS:				
RATING : 05/18/2001						
[ITEM 113] SCOUR: N-NOT APPLIC NOT WATERW		COMMENTS:				
RATING : 05/18/2001						
EVALUATION TYPE :						
[ITEM 71] WATERWAY ADEQUACY: NOT APPLICABLE		COMMENTS:				
RATING : 05/18/2001						
[ITEM 72] APPRRDWY ALIGNMENT: 8-VERYGOOD		COMMENTS:				
RATING : 05/18/2001						
RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS						
[ITEM 36A] BRIDGE RAILING RATING: MEETS CURRENT STANDARDS-1		RATING : 05/18/2001		COMMENTS:		
<u>MATERIAL</u>	<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>			
REINFORCED CONCRETE	SAFETY BARRIER CURB	BOTH	(OTISL1, 10/03/2016)--FEW SCRAPES THROUGHOUT			
<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>		
PATCHES	RANDOM		MODERATE			
VERTICAL CRACKS	THROUGHOUT		FEW			
[ITEM 36B] TRANSITION RAILING RATING: MEETS CURRENT STANDARDS-1		RATING : 11/13/2008		COMMENTS:		
<u>MATERIAL</u>	<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>			
GALVANIZED STEEL	THRIE BEAM TO W-BEAM	BOTH-NORTH				
GALVANIZED STEEL	THRIE BEAM TO W-BEAM	SOUTHWEST				
[ITEM 36C] APPROACH RAILING RATING: MEETS CURRENT STANDARDS-1		RATING : 05/18/2001		COMMENTS:		
Design_No = 10659						
Page 2						
This report contains information that is protected from disclosure by federal law, 23 USC Section 409 and the Missouri Open Records Law (Sunshine Act), Section 610.021 RSMo. Please review MoDOT's policy and procedure manual on the Sunshine Act before releasing any of the information contained herein.						


		Missouri Department of Transportation				May 02, 2024	
		State Bridge Inspection Report				4:09:18PM	
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR		FED-ID: 6412	
				BRIDGE: L0659			
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>COMMENTS</u>	
GALVANIZED STEEL		W-BEAM		BOTH-NORTH			
GALVANIZED STEEL		W-BEAM		SOUTHWEST			
[ITEM 36D] RAIL END TREATMENT RATING: MEETS CURRENT STANDARDS-1				RATING : 03/05/2002		COMMENTS:	
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>COMMENTS</u>	
GALVANIZED STEEL		BREKAWAY SYSTEM		BOTH-NORTH			
APPROACH PAVEMENT: *Overall condition assigned for each approach pavemenet component is shown below.							
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>CONDITION*</u>	
ASPHALT/CONCRETE		BITUMINOUS MAT/SLAB		NORTH		FAIR	
ASPHALT/CONCRETE		BITUMINOUS MAT/SLAB		SOUTH		FAIR	
DRAINAGE, EXPANSION DEVICES, BANK/SLOPE, AND DECK PROTECTIVE COMPONENTS							
DECK PROTECTIVE COMPONENTS:							
<u>SERIES TYPE-#</u>		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
MAIN SERIES-1		WEARING SURFACE		PLAIN CONCRETE		MONOLITHIC	
<u>COMMENT:</u>							
		DECK PROTECTION		EPOXY POLYMER		COATED REBAR	
<u>COMMENT:</u>							
		MEMBRANE		NOTAPPLICABLE		NONE	
<u>COMMENT:</u>							
DRAINAGE COMPONENTS:							
<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>	
DRAINAGE		REINFORCED CONCRETE		DRAIN BASIN-END BENT			
EXPANSION DEVICE COMPONENTS:							
<u>SUB UNIT-#</u>		<u>SUB LABEL</u>		<u>COMPONENT</u>		<u>MATERIAL</u>	
						<u>CONSTRUCTION</u>	
<u>COMMENT:</u>						<u>GAP</u>	
						<u>YEAR APPLIED</u>	
						<u>MANUFACTURE</u>	
						<u>OVERALL CONDITION</u>	
BANK/SLOPE PROTECTION COMPONENTS:							
<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>	
SLOPE PROTECTION		PLAIN CONCRETE		PAVEDSLOPE			
DECK COMPONENTS							
<u>SPAN TYPE-#</u>		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
MAIN SPANS-1		DECK		REINFORCED CONCRETE		CAST-IN-PLACE	
<u>CONDITION</u>		<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>	
EFFLORESCENCE		EDGE				FEW	
LONGITUDINAL CRACKS		RANDOM				FEW	
REFLECTIVE CRACKS		THROUGHOUT				FEW	
SCALING		DRIVING SURFACE				LIGHT	
Design_No = 10659							
Page 3							
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		Missouri Department of Transportation				May 02, 2024	
		State Bridge Inspection Report				4:09:18PM	
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR		FED-ID: 6412	
						BRIDGE: L0659	
FIXED BEARING		ELASTOMERIC		LAMIN NEOP/PTFE(ROTATI			
DIAPHRAGM		REINFORCED CONCRETE		CAST-IN-PLACE			
LEACHING		AT GIRDERS		MINOR			
VERTICAL CRACKS		AT GIRDERS		FEW			
OVER/UNDER ROUTES CLEARANCE INFORMATION							
CLEARANCES OVER DECK **NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.							
<u>VERTICAL CLEARANCE TYPE**</u>		<u>VALUE</u>	<u>DIRECTION</u>	<u>DATE</u>	<u>COMMENT</u>		
CLEARANCES UNDER BRIDGE **NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.							
<u>RECORD #</u>	<u>ROUTE</u>	<u># LANES</u>	<u>DIRECTION OF TRAFFIC</u>	<u>RIGHT LATERAL CLEARANCE</u>	<u>LEFT LATERAL CLEARANCE</u>	<u>UR-ID</u>	
1	CST NE PARVIN RD E	2	2-WAY TRAF	7 FT 0 IN		14191	
<u>VERTICAL CLEARANCE TYPE**</u>		<u>VALUE</u>	<u>DIRECTION</u>	<u>DATE</u>	<u>COMMENT</u>		
ACTUAL		15 FT 6 IN					
STRUCTURE PAINT INFORMATION							
CONDITION:		RUST AMOUNT :		STEEL TONS :			
<u>ORIGINAL PAINT</u>		<u>CONTRACT REPAINT</u>		<u>DEPARTMENT REPAINT</u>			
PAINT TYPE :		PAINT TYPE :		PAINT TYPE :		MANUFACTURE :	
NAME :		NAME :		NAME :		SURFACE PREP :	
PAINT COLOR :		PAINT COLOR :		PAINT COLOR :			
PAINT YEAR :		PAINT YEAR :		PAINT YEAR :			
MILS :		MILS :		MILS :			
REQUESTED WORK ITEMS							
GENERAL WORK COMMENTS:							
Design_No = 10659							
Page 6							
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		Missouri Department of Transportation				May 02, 2024	
		State Bridge Inspection Report				4:09:18PM	
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR		FED-ID: 6412	
						BRIDGE: L0659	
RESPONSIBILITY DISTRICT SPECIAL		LOCATION ROADWAY SURFACE		ITEM SEAL WITH SILANE		CATEGORY DECK	
				PRIORITY 3		DATE 04/22/2024	
						WORK ITEM COMMENT	
UTILITY ATTACHMENTS							
UTILITY		OWNER		METHOD		MEASUREMENT TYPE	
				VALUE		NUMBER	
						UTILITY ATTACHMENT COMMENT	
PROGRAM NOTES INFORMATION							
YEAR		PROJECT #		MONTH LET		YEAR LET	
		ITEMS				COMMENT	
COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS							
NOTE: The items listed in this section are updated whenever computer edits are ran on a structure after the inspection updates have been entered in to TMS.				***ADVANCED SIGN INFORMATION***			
<u>Rated Item</u>				<u>Rating</u>			
[Item 67] Structure Evaluation Rating:				6-EQ TO PRESENT MIN CRITR			
[Item 68] Deck Geometry Rating:				5-BETTER THAN MINIMUM			
[Item 69] Underclearance:				4-MEETS MINIMUM TOLERABLE			
Sufficiency Rating:				92.9%			
Deficiency:				NOT DEFICIENT			
Funding Eligibility:				----			
Estimated New Structure Length:				----			
Estimated Structure Cost:				----			
Estimated Total Project Cost:				----			
Year of Cost Estimate:				----			
NOTE: The above structure length and cost estimates are computer generated using algorithms in the TMS system. These algorithms are generalized to use NBI items to come up with a new structure length and width to calculate a new area which is taken times a representative cost per square foot. The actual structure size and cost may vary significantly from these numbers once site specific engineering is done.				SIGN # 1			
				SIGN TYPE			
				PROBLEM			
				PROBLEM DIRECTION			
				OUTFALL INSPECTION INFORMATION			
# OUTFALLS:				INSPECTOR:			
STATUS:				DATE:			
NOTES:							


		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>May 02, 2024</div> <div>4:10:14PM</div>			
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR		FED-ID: 6413		BRIDGE: L0660	
GENERAL STRUCTURE INFORMATION							***BRIDGE INSPECTION INFORMATION***		
<div>ROUTE: IS29N</div> <div>FEATURE: CST NE PARVIN RD</div> <div>STATUS: A-OPEN</div> <div>LOG MILE: 4.539</div> <div>DETOUR: 1.00 MILES</div> <div>NHS: YES</div> <div>BUILT: 1954</div> <div>REHAB: 1983</div> <div>LOCATION: S 1 T 50 R 33 W</div> <div>LATITUDE: 39 9 59.73 (DMS)</div> <div>LONGITUDE: 94 33 30.57 (DMS)</div>		<div># SPANS: 3</div> <div>LANES ON: 3</div> <div>LANES UNDER: 2</div> <div>COMPASS DIRECTION: SOUTH to NORTH</div> <div>DIRECTION OF TRAFFIC: 1-WAY TRAF</div> <div>FUNCTIONAL CLASS: UR-INTERSTATE</div> <div>NBI OWNER: MODOT</div> <div>NBI MAINTAINED: MODOT</div> <div>MAINTENANCE DISTRICT: KC</div> <div>MAINTENANCE COUNTY: CLAY</div> <div>SUB AREA: 7C25</div>		<div>PLACE CODE: 02800 AVONDALE CITY</div> <div>LENGTH: 138 FT 0 IN</div> <div>MAXIMUM SPAN: 62 FT 1 IN</div> <div>APPROACH ROADWAY: 52 FT 0 IN</div> <div>CURB TO CURB: 50 FT 10 IN</div> <div>OUT TO OUT: 53 FT 6 IN</div> <div>AADT: 56042</div> <div>AADT YEAR: 2023</div> <div>AADT TRUCK: 11.8%</div> <div>FUTURE AADT: 100876</div> <div>FUTURE AADT YEAR: 2043</div>		<div>DATE: 09/26/2022</div> <div>RESPONSIBILITY: DISTRICT</div> <div>FREQUENCY: 24</div> <div>CALCULATED INTERVAL**: 24</div> <div>TEAM LEADER: TIMOTHY HAZLETT</div> <div>ELEMENT: YES</div> <div>INSPECTOR 2:</div> <div>INSPECTOR 4:</div> <div>INSPECTOR 3:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>			
						GENERAL INSPECTION COMMENTS			
FRACTURE CRITICAL INSPECTION INFORMATION					***INDEPTH INSPECTION INFORMATION***				
<div>DATE:</div> <div>FREQUENCY:</div> <div>TEAM LEADER:</div> <div>INSPECTOR 2:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>					<div>RESPONSIBILITY:</div> <div>CALCULATED INTERVAL**:</div> <div>INSPECTOR 3:</div> <div>INSPECTOR 4:</div> <div>CATEGORY:</div> <div>NBI:</div> <div>METHOD:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>				
FRACTURE CRITICAL INSPECTION COMMENTS					INDEPTH INSPECTION COMMENTS				
SPECIAL INSPECTION INFORMATION					***UNDERWATER INSPECTION INFORMATION***				
<div>DATE:</div> <div>FREQUENCY:</div> <div>TEAM LEADER:</div> <div>INSPECTOR 2:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>					<div>RESPONSIBILITY:</div> <div>CALCULATED INTERVAL**:</div> <div>INSPECTOR 3:</div> <div>INSPECTOR 4:</div> <div>CATEGORY:</div> <div>NBI:</div> <div>METHOD:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>				
SPECIAL INSPECTION COMMENTS					UNDERWATER INSPECTION COMMENTS				
OTHER SPECIAL INSPECTIONS					OTHER UNDERWATER INSPECTIONS				
<div>DATE</div> <div>FREQUENCY</div> <div>CATEGORY</div> <div>NBI</div> <div>CALCULATED INTERVAL</div> <div>RESPONSIBILITY</div> <div>METHOD</div>					<div>DATE</div> <div>FREQUENCY</div> <div>CATEGORY</div> <div>NBI</div> <div>CALCULATED INTERVAL</div> <div>RESPONSIBILITY</div> <div>METHOD</div>				

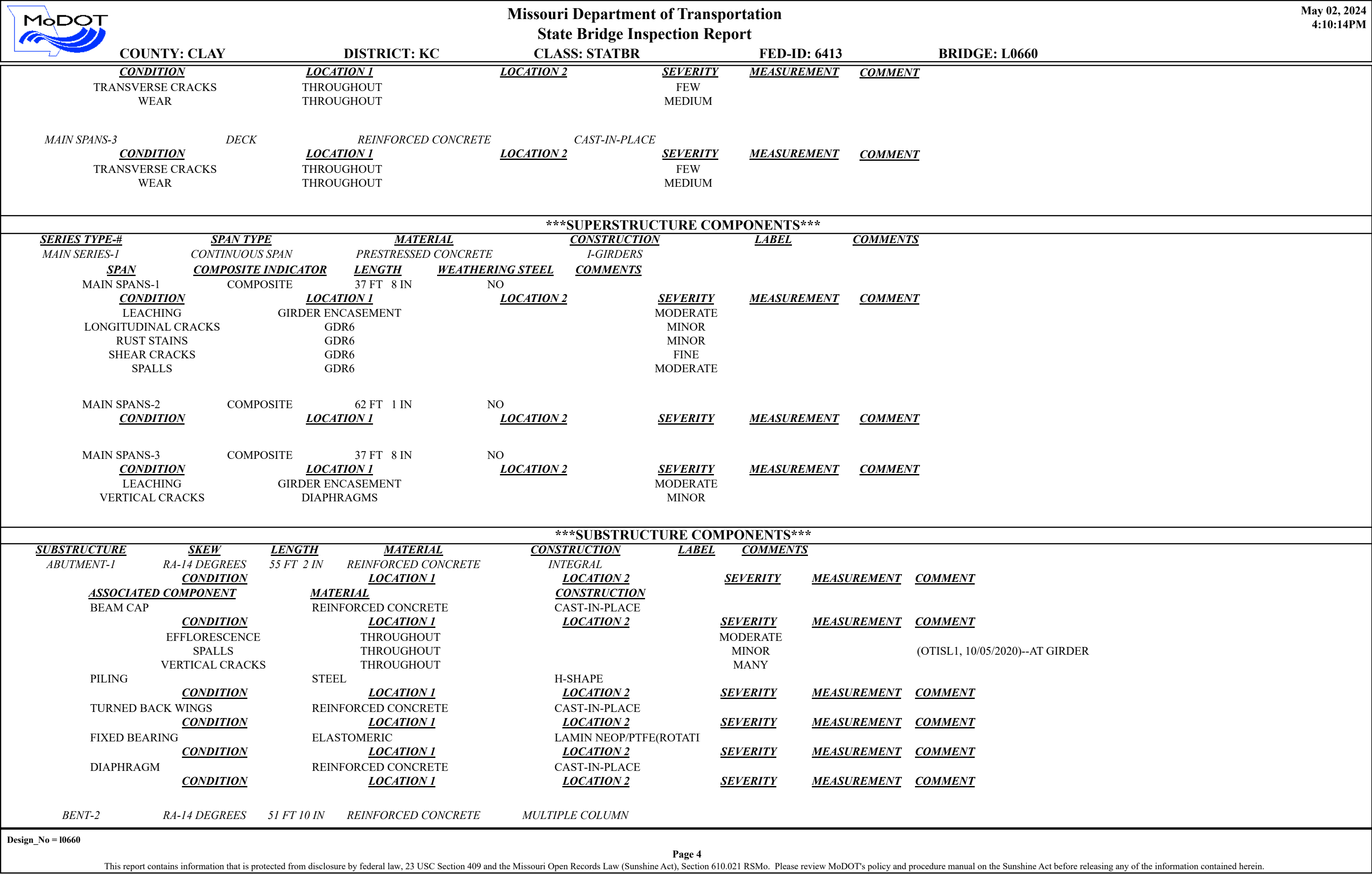
Design_No = 10660

Page 1

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		Missouri Department of Transportation			May 02, 2024	
		State Bridge Inspection Report			4:10:14PM	
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR	FED-ID: 6413	BRIDGE: L0660
STRUCTURE POSTING						
APPROVED CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:		
COMMENTS:						
FIELD CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:		PROBLEM:
COMMENTS:		PROBLEM DIRECTION:				
GENERAL COMMENTS/MAJOR RATED ITEMS						
GENERAL COMMENTS: (BOWDEJ1, 09/30/2008)--(37'-62'-37') CONT P/S CONC I-GDR SPANS						
[ITEM 58] DECK: 7-GOOD CONDITION		COMMENTS: (OTISL1, 09/29/2016)--T CRACKS				
RATING : 02/02/2007		(OTISL1, 10/10/2018)--WEAR				
[ITEM 59] SUPER: 5-FAIR CONDITION		COMMENTS: (OTISL1, 10/10/2018)--OPEN CRACKING, SPALLING GIRDER 6, SPAN 1				
RATING : 10/10/2018						
[ITEM 60] SUB: 6-SATISFACTORY CONDITION		COMMENTS: (OTISL1, 10/05/2020)--MODERATE SPALLS @ COLUMNS				
RATING : 10/02/2014						
[ITEM 61] BANK/CHANNEL: N-NOT APPLIC NO WATRWAY		COMMENTS:				
RATING : 05/18/2001						
[ITEM 113] SCOUR: N-NOT APPLIC NOT WATERW		COMMENTS:				
RATING : 05/18/2001						
EVALUATION TYPE :						
[ITEM 71] WATERWAY ADEQUACY: NOT APPLICABLE		COMMENTS:				
RATING : 05/18/2001						
[ITEM 72] APPRRDWY ALIGNMENT: 8-VERYGOOD		COMMENTS:				
RATING : 05/18/2001						
RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS						
[ITEM 36A] BRIDGE RAILING RATING: MEETS CURRENT STANDARDS-1		RATING : 05/18/2001		COMMENTS:		
<u>MATERIAL</u>	<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>			
REINFORCED CONCRETE	SAFETY BARRIER CURB	BOTH				
[ITEM 36B] TRANSITION RAILING RATING: MEETS CURRENT STANDARDS-1		RATING : 11/13/2008		COMMENTS:		
<u>MATERIAL</u>	<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>			
GALVANIZED STEEL	THRIE BEAM TO W-BEAM	BOTH-SOUTH				
GALVANIZED STEEL	THRIE BEAM TO W-BEAM	NORTHEAST				
[ITEM 36C] APPROACH RAILING RATING: MEETS CURRENT STANDARDS-1		RATING : 05/18/2001		COMMENTS:		
Design_No = 10660						
Page 2						
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		Missouri Department of Transportation				May 02, 2024	
		State Bridge Inspection Report				4:10:14PM	
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR		FED-ID: 6413	
				BRIDGE: L0660			
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>COMMENTS</u>	
GALVANIZED STEEL		W-BEAM		BOTH-SOUTH			
GALVANIZED STEEL		W-BEAM		NORTHEAST			
[ITEM 36D] RAIL END TREATMENT RATING: MEETS CURRENT STANDARDS-1				RATING : 03/05/2002		COMMENTS:	
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>COMMENTS</u>	
GALVANIZED STEEL		BREKAWAY SYSTEM		SOUTH			
APPROACH PAVEMENT: *Overall condition assigned for each approach pavemenet component is shown below.							
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>CONDITION*</u>	
ASPHALT/CONCRETE		BITUMINOUS MAT/SLAB		BOTH		GOOD	
<u>CONDITION</u>		<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>	
SPALLS		ENDS				MODERATE	
DRAINAGE, EXPANSION DEVICES, BANK/SLOPE, AND DECK PROTECTIVE COMPONENTS							
<u>DECK PROTECTIVE COMPONENTS:</u>							
<u>SERIES TYPE-#</u>		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
MAIN SERIES-1		WEARING SURFACE		PLAIN CONCRETE		MONOLITHIC	
<u>COMMENT:</u>							
		DECK PROTECTION		EPOXY POLYMER		COATED REBAR	
<u>COMMENT:</u>							
		MEMBRANE		NOTAPPLICABLE		NONE	
<u>COMMENT:</u>							
<u>DRAINAGE COMPONENTS:</u>							
<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>	
						<u>COMMENTS</u>	
<u>EXPANSION DEVICE COMPONENTS:</u>							
<u>SUB UNIT-#</u>		<u>SUB LABEL</u>		<u>COMPONENT</u>		<u>MATERIAL</u>	
						<u>CONSTRUCTION</u>	
<u>COMMENT:</u>						<u>GAP</u>	
						<u>YEAR APPLIED</u>	
						<u>MANUFACTURE</u>	
						<u>OVERALL CONDITION</u>	
<u>BANK/SLOPE PROTECTION COMPONENTS:</u>							
<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>	
SLOPE PROTECTION		PLAIN CONCRETE		PAVEDSLOPE		BOTH	
<u>COMMENTS</u>							
DECK COMPONENTS							
<u>SPAN TYPE-#</u>		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
MAIN SPANS-1		DECK		REINFORCED CONCRETE		CAST-IN-PLACE	
<u>CONDITION</u>		<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>	
TRANSVERSE CRACKS		THROUGHOUT				FEW	
WEAR		THROUGHOUT				MEDIUM	
MAIN SPANS-2		DECK		REINFORCED CONCRETE		CAST-IN-PLACE	
Design_No = 10660							
Page 3							
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Missouri Department of Transportation State Bridge Inspection Report

May 02, 2024
4:10:14PM

COUNTY: CLAY

DISTRICT: KC


CLASS: STATBR


FED-ID: 6413

BRIDGE: L0660

				<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>	<u>CONDITION</u>	<u>MATERIAL</u>	<u>LOCATION 1</u>	<u>CONSTRUCTION</u>		
BEAM CAP		REINFORCED CONCRETE		CAST-IN-PLACE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>
	DELAMINATION		THROUGHOUT		MINOR	
COLUMN		REINFORCED CONCRETE		CAST-IN-PLACE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>
	DELAMINATION		THROUGHOUT		MANY	
	REBAR EXPOSED		BOTTOM		FEW	
	SPALLS		BOTTOM		MODERATE	
FOOTING		REINFORCED CONCRETE		SPREAD		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>
FIXED BEARING		ELASTOMERIC		LAMIN NEOP/PTFE(ROTATI		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>
BENT-3	RA-14 DEGREES	51 FT 10 IN	REINFORCED CONCRETE	MULTIPLE COLUMN		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>
	<u>ASSOCIATED COMPONENT</u>		<u>MATERIAL</u>	<u>CONSTRUCTION</u>		
BEAM CAP		REINFORCED CONCRETE		CAST-IN-PLACE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>
COLUMN		REINFORCED CONCRETE		CAST-IN-PLACE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>
	DELAMINATION		BOTTOM		MODERATE	
	VERTICAL CRACKS		THROUGHOUT		FEW	
FOOTING		REINFORCED CONCRETE		SPREAD		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>
FIXED BEARING		ELASTOMERIC		LAMIN NEOP/PTFE(ROTATI		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>
ABUTMENT-4	RA-14 DEGREES	55 FT 2 IN	REINFORCED CONCRETE	INTEGRAL		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>
	<u>ASSOCIATED COMPONENT</u>		<u>MATERIAL</u>	<u>CONSTRUCTION</u>		
BEAM CAP		REINFORCED CONCRETE		CAST-IN-PLACE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>
	DELAMINATION		THROUGHOUT		MINOR	
	LEACHING		TOP		MINOR	
	SPALLS		THROUGHOUT		MINOR	
	VERTICAL CRACKS		THROUGHOUT		FEW	
PILING		STEEL		H-SHAPE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>
TURNED BACK WINGS		REINFORCED CONCRETE		CAST-IN-PLACE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>
	SPALLS		THROUGHOUT		FEW	
FIXED BEARING		ELASTOMERIC		LAMIN NEOP/PTFE(ROTATI		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>
DIAPHRAGM		REINFORCED CONCRETE		CAST-IN-PLACE		
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>COMMENT</u>

OVER/UNDER ROUTES CLEARANCE INFORMATION

		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>May 02, 2024</div> <div>4:10:14PM</div>																								
COUNTY: CLAY		DISTRICT: KC		CLASS: STATBR		FED-ID: 6413		BRIDGE: L0660																						
<div><div>CLEARANCES OVER DECK</div><div><div>VERTICAL CLEARANCE TYPE**</div><div>VALUE</div><div>DIRECTION</div><div>DATE</div><div>COMMENT</div></div></div> <div><div>**NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.</div></div>																														
<div><div>CLEARANCES UNDER BRIDGE</div><div><div>RECORD #</div><div>ROUTE</div><div># LANES</div><div>DIRECTION OF TRAFFIC</div><div>RIGHT LATERAL CLEARANCE</div><div>LEFT LATERAL CLEARANCE</div><div>UR-ID</div></div><div><div>1</div><div>CST NE PARVIN RD E</div><div>2</div><div>2-WAY TRAF</div><div>6 FT 6 IN</div><div></div><div>14193</div></div><div><div>VERTICAL CLEARANCE TYPE**</div><div>VALUE</div><div>DIRECTION</div><div>DATE</div><div>COMMENT</div></div><div><div>ACTUAL</div><div>18 FT 2 IN</div><div></div><div></div><div></div></div></div> <div><div>**NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.</div></div>																														
STRUCTURE PAINT INFORMATION																														
<div><div>CONDITION:</div><div>RUST AMOUNT :</div><div>STEEL TONS :</div></div> <div><div><div><div>ORIGINAL PAINT</div><div>PAINT TYPE :</div><div>NAME :</div><div>PAINT COLOR :</div><div>PAINT YEAR :</div><div>MILS :</div></div><div><div>CONTRACT REPAINT</div><div>PAINT TYPE :</div><div>NAME :</div><div>PAINT COLOR :</div><div>PAINT YEAR :</div><div>MILS :</div></div><div><div>DEPARTMENT REPAINT</div><div>PAINT TYPE :</div><div>NAME :</div><div>PAINT COLOR :</div><div>PAINT YEAR :</div><div>MILS :</div></div><div><div>MANUFACTURE :</div><div>SURFACE PREP :</div></div></div></div>																														
REQUESTED WORK ITEMS																														
<div><div>GENERAL WORK COMMENTS:</div><table><tr><td>RESPONSIBILITY</td><td>LOCATION</td><td>ITEM</td><td>CATEGORY</td><td>PRIORITY</td><td>DATE</td><td>WORK ITEM COMMENT</td></tr><tr><td>DISTRICT ROUTINE</td><td>SOUTH EAST</td><td>REPAIR EROSION</td><td>SLOPE</td><td>3</td><td>09/21/2016</td><td></td></tr><tr><td>DISTRICT SPECIAL</td><td>ROADWAY SURFACE</td><td>SEAL WITH SILANE</td><td>DECK</td><td>3</td><td>04/11/2023</td><td></td></tr></table></div>										RESPONSIBILITY	LOCATION	ITEM	CATEGORY	PRIORITY	DATE	WORK ITEM COMMENT	DISTRICT ROUTINE	SOUTH EAST	REPAIR EROSION	SLOPE	3	09/21/2016		DISTRICT SPECIAL	ROADWAY SURFACE	SEAL WITH SILANE	DECK	3	04/11/2023	
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UTILITY ATTACHMENTS																														
<table><tr><td>UTILITY</td><td>OWNER</td><td>METHOD</td><td>MEASUREMENT TYPE</td><td>VALUE</td><td>NUMBER</td><td>UTILITY ATTACHMENT COMMENT</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										UTILITY	OWNER	METHOD	MEASUREMENT TYPE	VALUE	NUMBER	UTILITY ATTACHMENT COMMENT														
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<div>Design_No = 10660</div> <div>Page 6</div> <div>This report contains information that is protected from disclosure by federal law, 23 USC Section 409 and the Missouri Open Records Law (Sunshine Act), Section 610.021 RSMo. Please review MoDOT's policy and procedure manual on the Sunshine Act before releasing any of the information contained herein.</div>																														

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COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS					***ADVANCED SIGN INFORMATION***																																																			
<div>NOTE: The items listed in this section are updated whenever computer edits are ran on a structure after the inspection updates have been entered in to TMS.</div> <table><tr><td><u>Rated Item</u></td><td><u>Rating</u></td><td><u>Rating Date</u></td></tr><tr><td>[Item 67] Structure Evaluation Rating:</td><td>5-BETTER THAN MINIMUM</td><td>3/5/2018</td></tr><tr><td>[Item 68] Deck Geometry Rating:</td><td>5-BETTER THAN MINIMUM</td><td>5/18/2001</td></tr><tr><td>[Item 69] Underclearance:</td><td>4-MEETS MINIMUM TOLERABLE</td><td>3/25/2003</td></tr><tr><td>Sufficiency Rating:</td><td>71.6%</td><td>3/7/2024</td></tr><tr><td>Deficiency:</td><td>NOT DEFICIENT</td><td>5/18/2001</td></tr><tr><td>Funding Eligibility:</td><td></td><td>----</td></tr><tr><td>Estimated New Structure Length:</td><td></td><td>----</td></tr><tr><td>Estimated Structure Cost:</td><td></td><td>----</td></tr><tr><td>Estimated Total Project Cost:</td><td></td><td>----</td></tr><tr><td>Year of Cost Estimate:</td><td></td><td>----</td></tr></table> <div>NOTE: The above structure length and cost estimates are computer generated using algorithms in the TMS system. These algorithms are generalized to use NBI items to come up with a new structure length and width to calculate a new area which is taken times a representative cost per square foot. The actual structure size and cost may vary significantly from these numbers once site specific engineering is done.</div>					<u>Rated Item</u>	<u>Rating</u>	<u>Rating Date</u>	[Item 67] Structure Evaluation Rating:	5-BETTER THAN MINIMUM	3/5/2018	[Item 68] Deck Geometry Rating:	5-BETTER THAN MINIMUM	5/18/2001	[Item 69] Underclearance:	4-MEETS MINIMUM TOLERABLE	3/25/2003	Sufficiency Rating:	71.6%	3/7/2024	Deficiency:	NOT DEFICIENT	5/18/2001	Funding Eligibility:		----	Estimated New Structure Length:		----	Estimated Structure Cost:		----	Estimated Total Project Cost:		----	Year of Cost Estimate:		----	<table><tr><td>SIGN #</td><td>SIGN TYPE</td><td>PROBLEM</td><td>PROBLEM DIRECTION</td></tr><tr><td>1</td><td></td><td></td><td></td></tr></table> <div>***OUTFALL INSPECTION INFORMATION***</div> <table><tr><td># OUTFALLS:</td><td>INSPECTOR:</td></tr><tr><td>STATUS:</td><td>DATE:</td></tr><tr><td>NOTES:</td><td></td></tr></table>					SIGN #	SIGN TYPE	PROBLEM	PROBLEM DIRECTION	1				# OUTFALLS:	INSPECTOR:	STATUS:	DATE:	NOTES:	
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