

GENERAL NOTES

All concrete to be Class S and shall be poured in the dry. All exposed corners to be chamfered $\frac{1}{4}$ " unless otherwise noted.

Reinforcing steel to be deformed bars of intermediate or hard grade.

Shop lists and bending diagrams are to be submitted for approval before fabrication is begun.

All piling shall be driven to a minimum capacity of 35 tons per pile.

Piling shall be either 12 BF 53 steel bearing piles or 16" octagonal precast concrete piles as shown on the layout.

Volume occupied by embedded pile heads will not be included in the pay quantities of concrete caps.

For Details of Standard 30'-0" R.C. Slab Spans see Drawing No. 5408-L.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, edition of 1959.

BAR LIST PER BENT

| MARK | SIZE | NO. PER BENT | END INT. | LENGTH | BENDING DIAGRAM |
|------|------|--------------|-----------------------|------------|-----------------|
| B1 | #6 | 4 | 4 | 23'-7" | |
| B2 | #6 | 4 | 4 | 30'-4" | |
| B3 | #6 | 4 | 4 | 28'-2" Str | |
| B4 | #4 | 48 | 48 | 8'-11" | |
| B5 | #6 | 15 | 15 | 6'-9" | |
| B6 | #4 | - | 36 in. Rn. 18 in. Dia | 2'-6" | |
| B7 | #4 | 12 | - | 5'-0" | |
| B8 | #4 | 8 | - | 1'-8" | |
| B9 | #4 | 8 | - | 3'-9" | |

Dimensions are to centers of bars

**DETAILS OF
STANDARD PILE BENTS
FOR STD. 30'-0" R.C. SLAB SPANS (WITH VOIDS)**

26'-0" CLEAR ROADWAY 2 CURBS @ 1'-6"

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

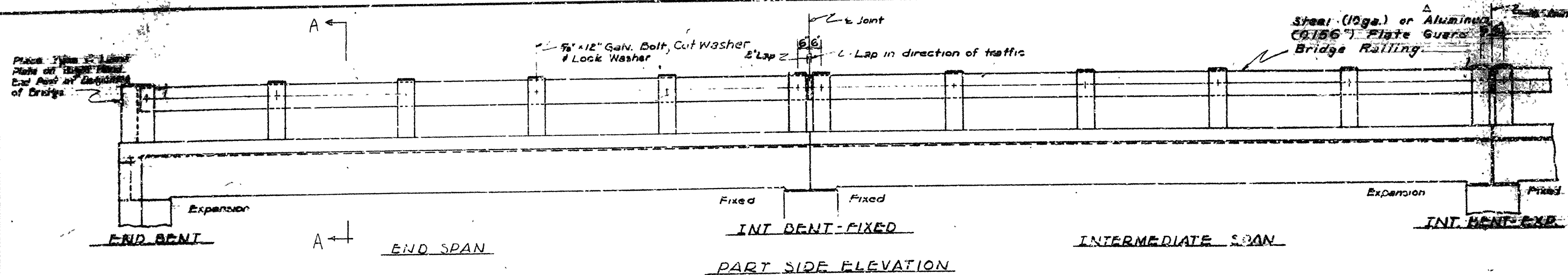
DRAWN BY: *h. r.* DATE: 6-20-57
TRACED BY: *g. r.* DATE: 6-21-57
CHECKED BY: *g. r.* DATE: 6-21-57

BRIDGE NO. DRAWING NO. 5408-A

SCALE: $\frac{3}{8}$ " = 1'-0"
Except as noted

Revised pile splice note 2-24-62 UDB

L. P. Carlson
BRIDGE DESIGN ENGINEER



DESIGN SPECIFICATIONS

Design Load: 120

Dead Load: 52 #/ft

Live Load: 770 lbs/sq ft with 50% Impact

Wind: Class 3, Category (A-10)

Bridge: Steel

GENERAL NOTES

All concrete to be Class 3. All exposed corners to be rounded unless otherwise noted.

Reinforcing steel to be furnished by the contractor. Shop lists and bending diagrams must be submitted and approved before fabrication is begun.

All cylindrical tubes used to form voids shall be moisture, protected, finished type construction minimum thickness 0.025, and shall be supported completely with and abutments.

All reinforcing steel and fiber tubes shall be accurately located in the forms and firmly held in place by means of steel wire supports and spacers for tubes of sufficient size and number to prevent displacement during the course of construction, but in no case of less design than that shown.

Wire supports for reinforcing bars will not be paid for directly but will be considered subsidiary to the item of Reinforcing Steel.

Tubes for forming voids and wire supports and spacers for tubes will not be paid for directly but will be considered subsidiary to the item of Class 3 Concrete.

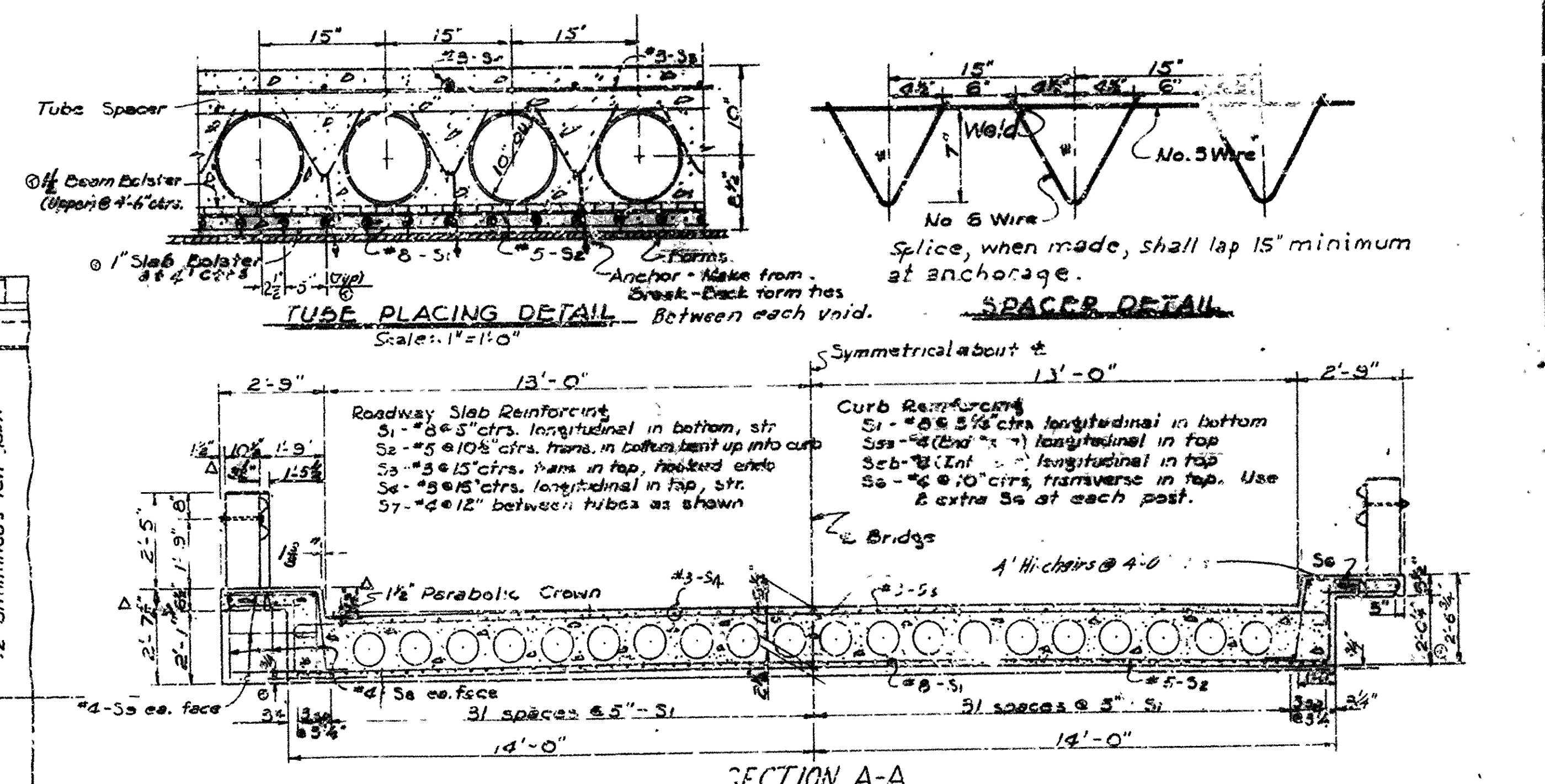
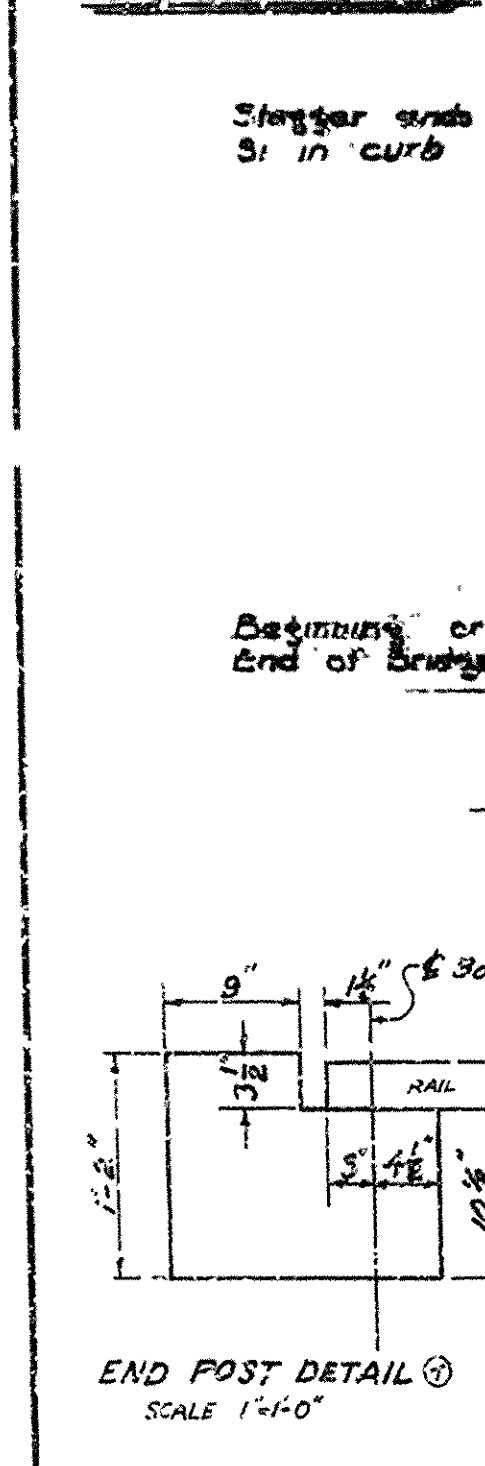
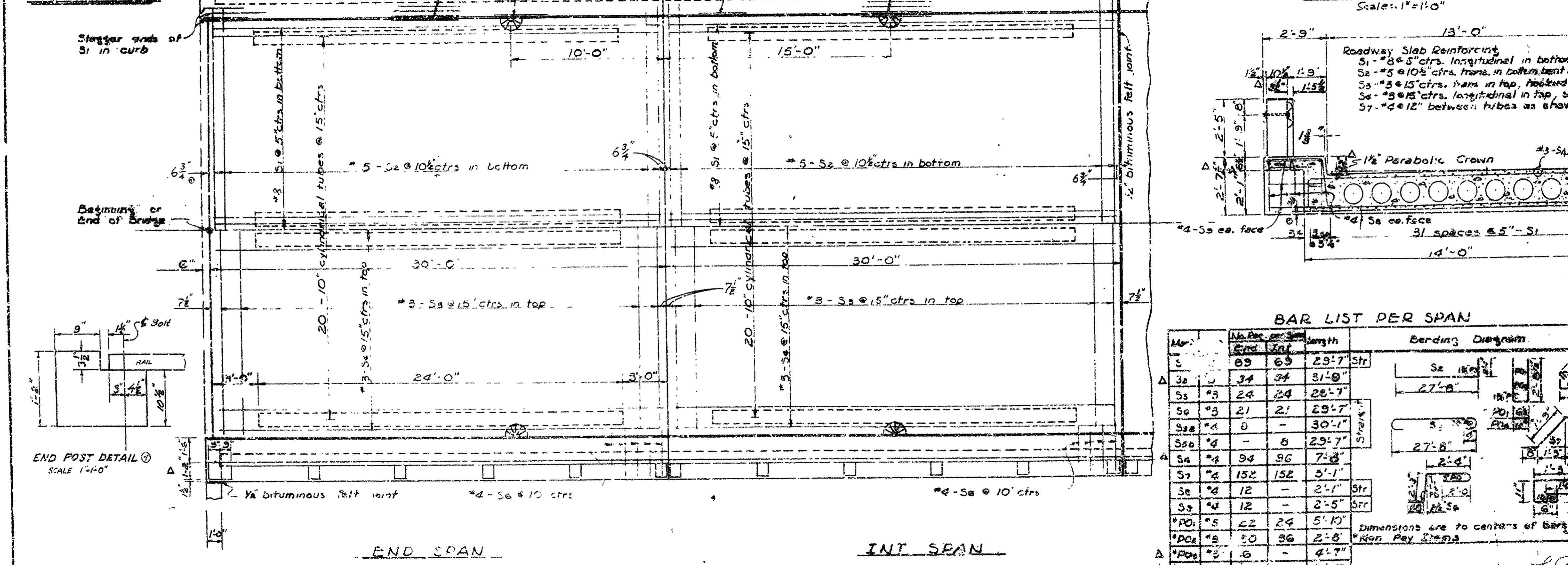
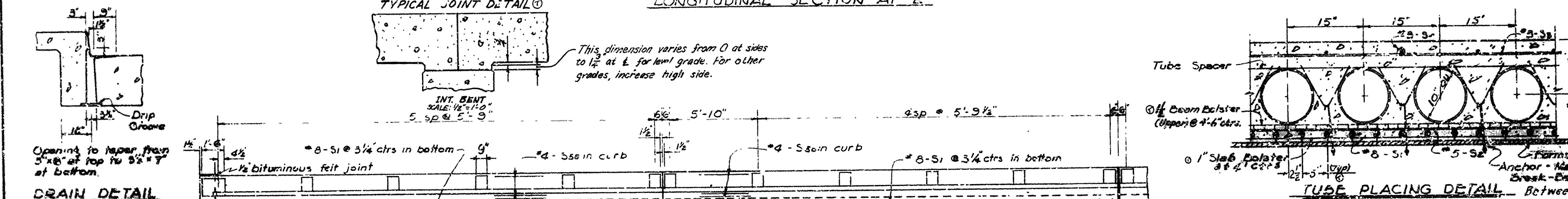
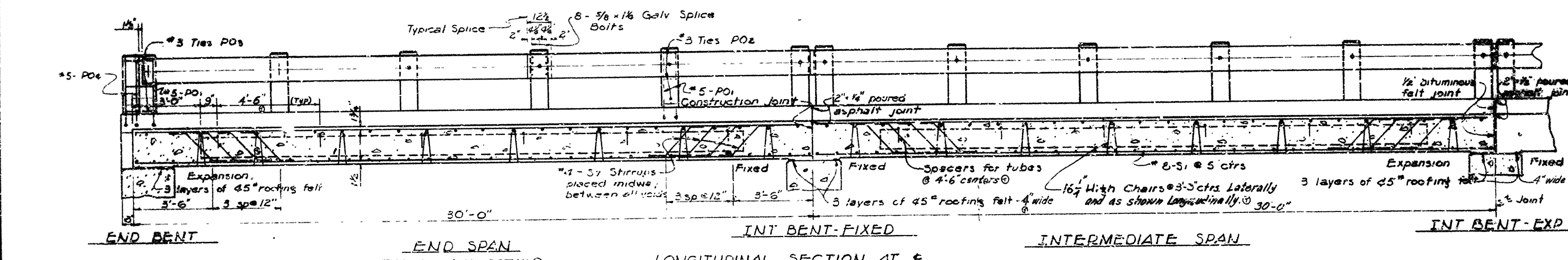
Shop lists and diagrams of wire supports and spacers for tubes shall be submitted for approval before fabrication is begun.

Roofing felt, bituminous felt and poured asphalt joints shall be measured and paid for as Class 3 Concrete.

Steel or Aluminum Plate Guard Bridge Railing shall be the type shown or an equivalent rigid type as approved by the Engineer.

The rail including nuts and fastenings shall be paid for at the unit price per linear foot for "Steel or Aluminum Plate Guard Bridge Railing."

SPECIFICATIONS Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1955.



BAR LIST PER SPAN

| Bar | No. per span | Length | Notes |
|-----|--------------|--------|-------|
| S1 | 69 | 29'-7" | Str |
| S2 | 34 | 31'-9" | Str |
| S3 | 24 | 28'-7" | Str |
| S4 | 21 | 29'-7" | Str |
| S5 | 0 | 30'-1" | Str |
| S6 | 4 | 29'-7" | Str |
| S7 | 94 | 7'-8" | Str |
| S8 | 152 | 5'-1" | Str |
| S9 | 12 | 2'-1" | Str |
| S10 | 12 | 2'-5" | Str |
| PO1 | 42 | 2'-4" | Str |
| PO2 | 50 | 2'-8" | Str |
| PO3 | 6 | 4'-7" | Str |
| PO4 | 4 | 6'-1" | Str |

Dimensions are to centers of bars.

Non-Rev. Items

DETAILS OF STANDARD 30'-0" R.C. SLAB SPANS (WITH VOIDS)

26'-0" CLEAR ROADWAY 2 CURBS @ 1'-6"

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: JAS

CHECKED BY: JAS

DATE: 7-7-57

BRIDGE NO.

DRAWING NO. 5408 A

| BRIDGE NO. | CODE NO. | NAME PLATE TITLE | UNIT OF BRIDGE | ITEM NO. | SP-801 | | SP-801 | SP-802 | SP-802 | SP-803 | SP-804 | SP-805 | SP-812 | SP-817 | |
|-------------------------|----------|------------------|------------------------------|----------|--------|----------------------------------|--------|--------------------------------|------------------|------------------|-------------------|-------------------------------------|--|-----------------------------|--------|
| | | | | UNIT | ITEM | Common Excavation For Structures | | Rock Excavation For Structures | Class A Concrete | Class S Concrete | Reinforcing Steel | Steel Bearing Piling (10" BP @ 42") | Steel Plate Guard Bridge Railing (10 Ga) | Bridge Name Plates (Type C) | Riprap |
| | | | | | Cu Yd. | | Cu Yd. | Cu Yd. | Cu Yd. | Lb. | Lin. Ft. | Lin. Ft. | Each | Cu Yd. | |
| 2804 E | Y050 | HURRICANE CREEK | End Bent No. 1 | 31 | - | - | - | 702 | 1023 | 65 | - | - | 1 | 101 | |
| | | | Piers No. 1-5 incl. | 127 | 63 | 127.19 | - | - | 11,637 | - | - | - | - | - | |
| | | | End Bent No. 2 | 31 | - | - | - | 702 | 1023 | 75 | - | - | - | 35 | |
| | | | 4-30' R.C. Slab Spans | - | - | - | - | 255.27 | 48,242 | - | 366 | - | - | - | |
| | | | Totals for Bridge No. 2804 E | 189 | 63 | 127.19 | 269.12 | 61,863 | 140 | 366 | 1 | 196 | | | |
| 2804 C | Y050 | HURRICANE CREEK | End Bent No. 1 | 31 | - | - | - | 702 | 1023 | 70 | - | - | 1 | 31 | |
| | | | Piers No. 1-5 incl. | 248 | 22 | 125.80 | - | - | 11,567 | - | - | - | - | - | |
| | | | End Bent No. 2 | 31 | - | - | - | 702 | 1023 | 75 | - | - | - | 35 | |
| | | | 4-30' R.C. Slab Spans | - | - | - | - | 255.08 | 48,242 | - | 366 | - | - | - | |
| | | | Totals for Bridge No. 2804 C | 310 | 22 | 125.80 | 269.12 | 61,863 | 145 | 366 | 1 | 145 | | | |
| 2804 B | Y050 | CROOKED CREEK | End Bent No. 1 | 31 | - | - | - | 702 | 1023 | 90 | - | - | 1 | 120 | |
| | | | Piers No. 1, 2 & 3 | 171 | 19 | 83.87 | - | - | 7,675 | - | - | - | - | - | |
| | | | End Bent No. 2 | 31 | - | - | - | 702 | 1023 | - | - | - | - | 115 | |
| | | | 4-30' R.C. Slab Spans | - | - | - | - | 170.44 | 32,163 | - | 246 | - | - | - | |
| | | | Totals for Bridge No. 2804 B | 233 | 19 | 83.87 | 184.48 | 41,916 | 175 | 246 | 1 | 131 | | | |
| 2804 A | Y050 | CROOKED CREEK | End Bent No. 1 | 31 | - | - | - | 702 | 1023 | 105 | - | - | 1 | 113 | |
| | | | Piers No. 1, 2 & 3 | 269 | 20 | 96.44 | - | - | 8,720 | - | - | - | - | - | |
| | | | End Bent No. 2 | 31 | - | - | - | 702 | 1023 | 110 | - | - | - | 32 | |
| | | | 4-30' R.C. Slab Spans | - | - | - | - | 170.44 | 32,163 | - | 246 | - | - | - | |
| | | | Totals for Bridge No. 2804 A | 331 | 20 | 96.44 | 184.48 | 42,017 | 215 | 246 | 1 | 205 | | | |
| Totals for Job No. 6653 | | | | 1063 | | 124 | 433.30 | 907.20 | 208,730 | 675 | 1224 | 4 | 775 | | |

SCHEDULE OF BRIDGE QUANTITIES
BENTON-LITTLE ROCK ADD'L FRONTAGE ROADS
SALINE & PULASKI COUNTIES

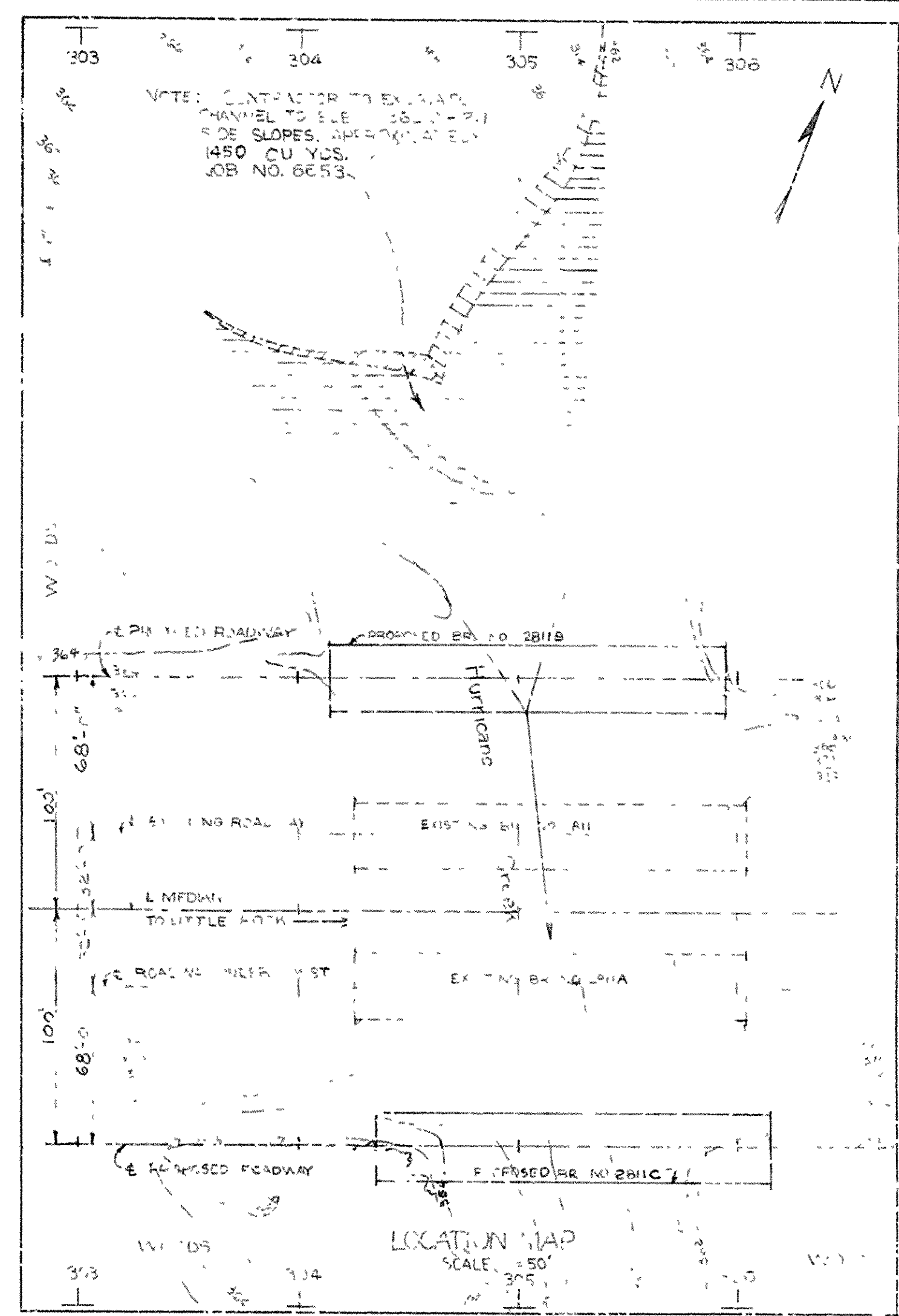
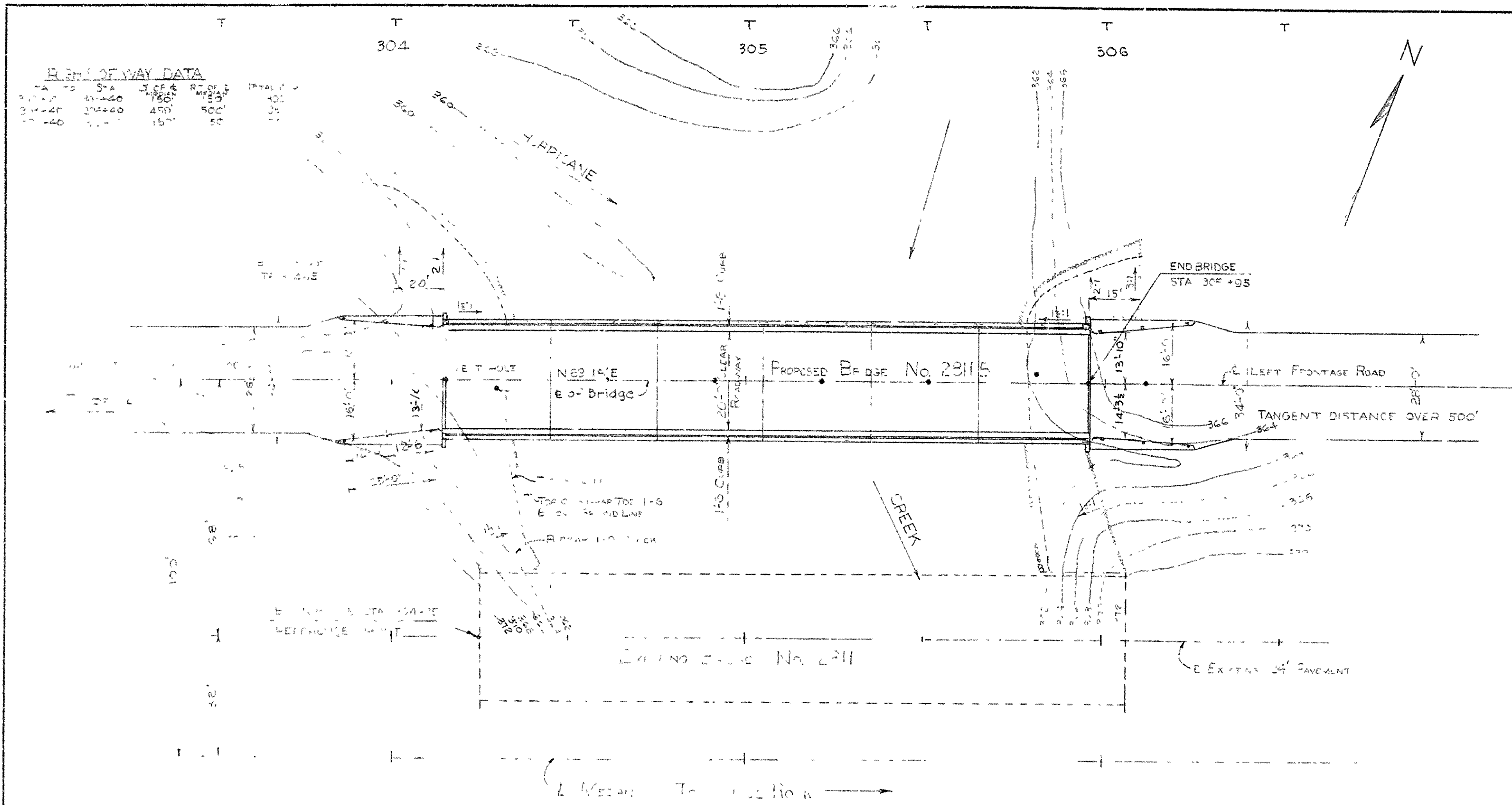
INTERSTATE ROUTE 30 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DATE: 7/15/53
TRACED BY: DATE: 7-22-53
CHECKED BY: DATE: 7-22-53
BRIDGE NO. 2804 B+C DRAWING NO. 9306

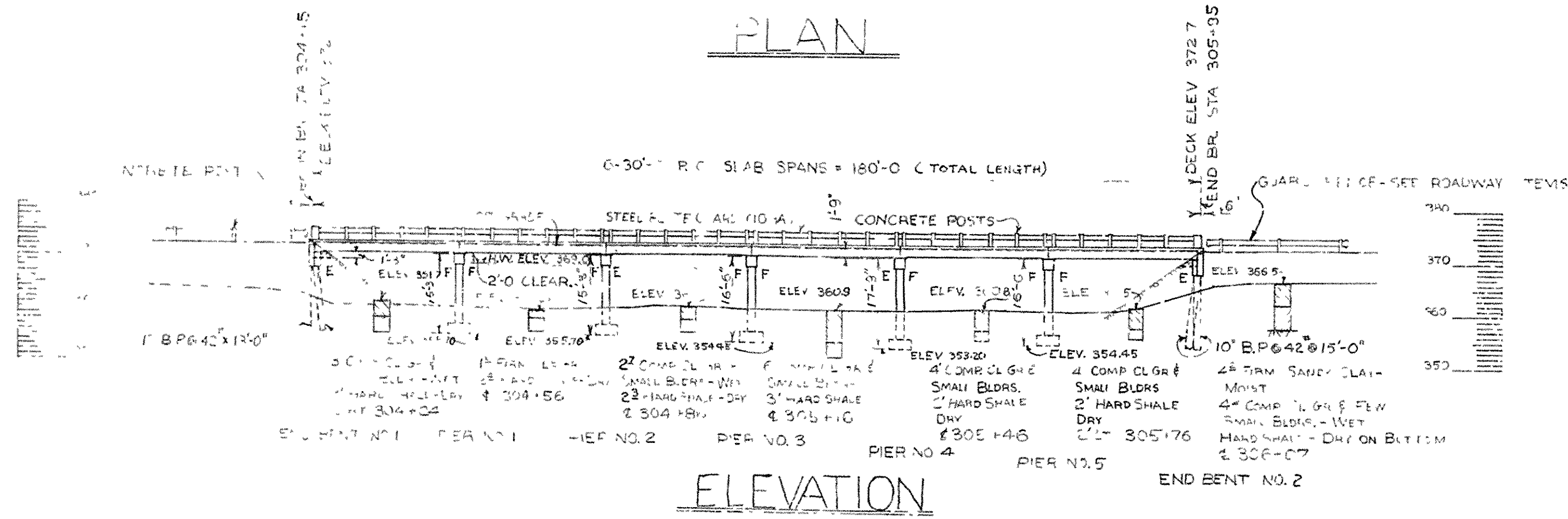
Revisions:
Item Nos. - 9-24-58 - L.B.

L. P. Carlson
BRIDGE DESIGN ENGINEER

100



| STATE | F. D. C. A. | SHEET NO. | TOTAL SHEETS |
|---------|-------------|-----------|--------------|
| 6 | Ark. | 15 | 37 |
| JOB NO. | 0053 | | |



GENERAL NOTES

All concrete to be placed in dry weather and be cured with water.

Rock excavation shall be done by hand or by use of pneumatic tools. All rock faces shall be protected by a layer of concrete or other material to prevent weathering.

All piers to be 10' B.P. @ 42" dia. to be placed in a concrete cap 35' dia. by 10' high. The material designated as hard shale in the sounding logs shall be used for the cap. If necessary, to be paid for in accordance with Special Provision 804.

Piling in end bents no. 1 & 2 to be driven after embankment is in place.

For details of end bents no. 1 & 2 see Drawing No. 5408 A.

For details of piers No. 1, 2, 3, 4 & 5 see Drawing No. 5408 B.

For details of 30' RC Slab Spans see Drawing No. 5408 B.

SPECIFICATIONS

Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 1, 1940, or as designated "Special Provisions".

DESIGN SPECIFICATIONS A.A.S.H.O. 1957

| | |
|-------------------|------------|
| Live Loading | H-20 |
| Unit Stress | |
| Concrete (f=15) | 3400 psi |
| Steel (f=10) | 12000 psi |
| Reinforcing Steel | 20,000 psi |

Maximum Foundation Pressure = 1.8 Tons/sq.ft.

B.M. Elev. 373.36
N. end Bridge No. 2811
at gutter line
Left Sta. 305+00

REVISION:
Revised location of E of Bridge - 9-18-58-H B

LAYOUT OF
BRIDGE OVER HURRICANE CREEK
BENTON-LITTLE ROCK ADD'L FRONTAGE ROADS
SALINE COUNTY
INTERSTATE ROUTE 30 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: *[Signature]* DATE: 12/58
TRACED BY: *[Signature]* DATE: 12/58
CHECKED BY: *[Signature]* DATE: 12/58
BRIDGE NO. 2811 B
DRAWING NO. 2811 B



| FED. ROAD No. | STATE | FED. AID PROJECT No. | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
|---------------|----------|----------------------|-------------|-----------|--------------|
| 6 | ARK | I-30-2801/17 | | 17 | 69 |
| JOB No. | G.S.F.B. | | | | |

| BRIDGE No. | VARIABLE FIGURES | | | | |
|--------------------|------------------|--------|--------|--------|--------|
| | 2811B | 2811C | 2811D | 2811E | 2811F |
| Pier No. | 1 & 2 | 3 & 4 | 5 | 6 | 7 |
| Bot. of Fly. Elev. | 355.70 | 354.45 | 353.2 | 355.70 | 354.45 |
| h | 11'-3" | 12'-6" | 13'-9" | 11'-3" | 12'-6" |
| H | 15'-3" | 16'-6" | 17'-9" | 15'-3" | 16'-6" |

DETAILS OF KEYWAY
Scale: 1"=1'-0"

BAR LIST - EACH PIER

| MARK | SIZE | No. REQUIRED | | | LENGTH | A | B | K | P END | BENDING DIAGRAM |
|-----------------|------|--------------|----------|----------|-----------|-----------|-----------|----|--------|-----------------|
| | | H=15'-3" | H=16'-6" | H=17'-9" | | | | | | |
| P ₁ | *8 | 12 | — | — | 13'-0" | Straight | | | | |
| | *8 | — | 12 | — | 14'-3" | | | | | |
| | *8 | — | — | 12 | 15'-6" | | | | | |
| P ₂ | *6 | 6 | 6 | 6 | 28'-1" | Straight | | | | |
| | *4 | 38 | — | — | 13'-0" | | | | | |
| | *4 | — | 38 | — | 14'-3" | | | | | |
| P ₃ | *4 | — | — | — | 15'-2" | Straight | | | | |
| | *4 | — | — | 38 | 15'-2" | | | | | |
| | *4 | 18 | 20 | 22 | 27'-0" | | | | | |
| P ₄ | *4 | 23 | 29 | 29 | 7'-1" | 1'-7 1/2" | 1'-7 1/2" | 4" | 1 1/2" | |
| P ₅ | *4 | 22 | 24 | 26 | 6'-5" | 1'-7 1/2" | 1'-3 1/2" | 4" | 1 1/2" | |
| *P ₆ | *4 | 19 or 38 | 19 or 38 | 19 or 38 | 3'-6" | 2'-6" | 1'-6" | — | — | |
| P ₇ | *4 | 38 | 38 | 38 | 3'-6" | Straight | | | | |
| F ₁ | *8 | 12 | 12 | 12 | 6'-1 1/2" | 5'-0" | — | 9" | 8" | |
| F ₂ | *5 | 14 | 14 | 14 | 5'-3" | 4'-0" | — | 5" | 3 1/2" | |
| F ₃ | *5 | 4 | 4 | 4 | 3'-6" | Straight | | | | |
| F ₄ | *5 | 6 | 6 | 6 | 29'-0" | Straight | | | | |
| F ₅ | *5 | 22 | 22 | 22 | 2'-7" | Straight | | | | |

*Fixed side only
Dimensions are to centers of bars, excepting P₆

GENERAL NOTES

All concrete to be Class A and shall be poured in the dry. All exposed surfaces to be finished with a trowel unless otherwise noted.
Reinforcing steel to be deformed bars of intermediate grade unless otherwise noted by Special Provisions. Shop lists and bending diagrams are to be submitted and approval secured before fabrication is begun.
All construction joints in piers shall be horizontal and shall be provided with keys not less than 3" deep covering the middle third of both dimensions.
For Layout see Dwg. No. 3909 & 3910.
For Details of Superstructure see Dwg. No. 5408B.
For Details of End Bents see Dwg. No. 5408A.
Specifications: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 1, 1948.

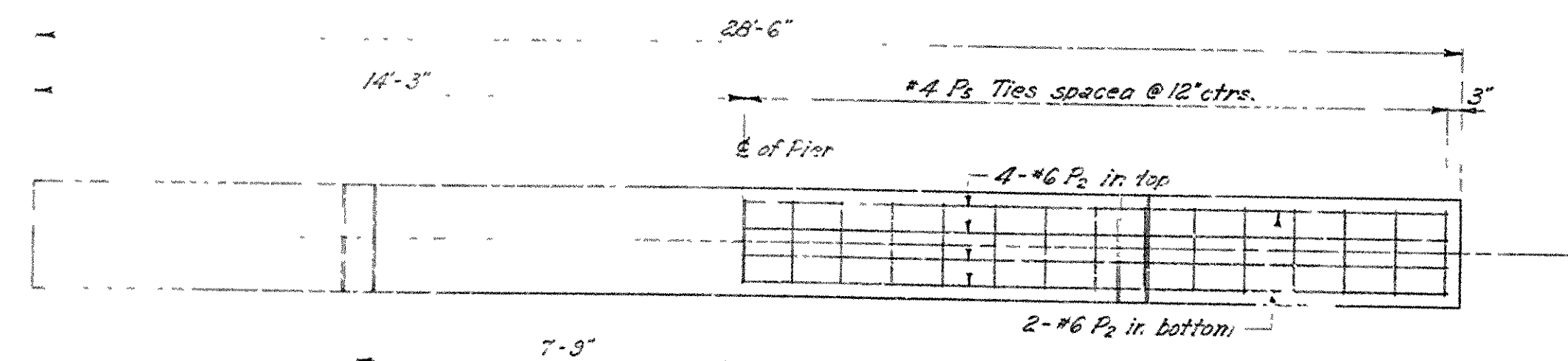
DETAIL OF PIERS
BRIDGES OVER HURRICANE CREEK
BENTON-LITTLE ROCK ADD'L FRONTAGE TO I-30
SALINE COUNTY

INTERSTATE ROUTE 30 SEC 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

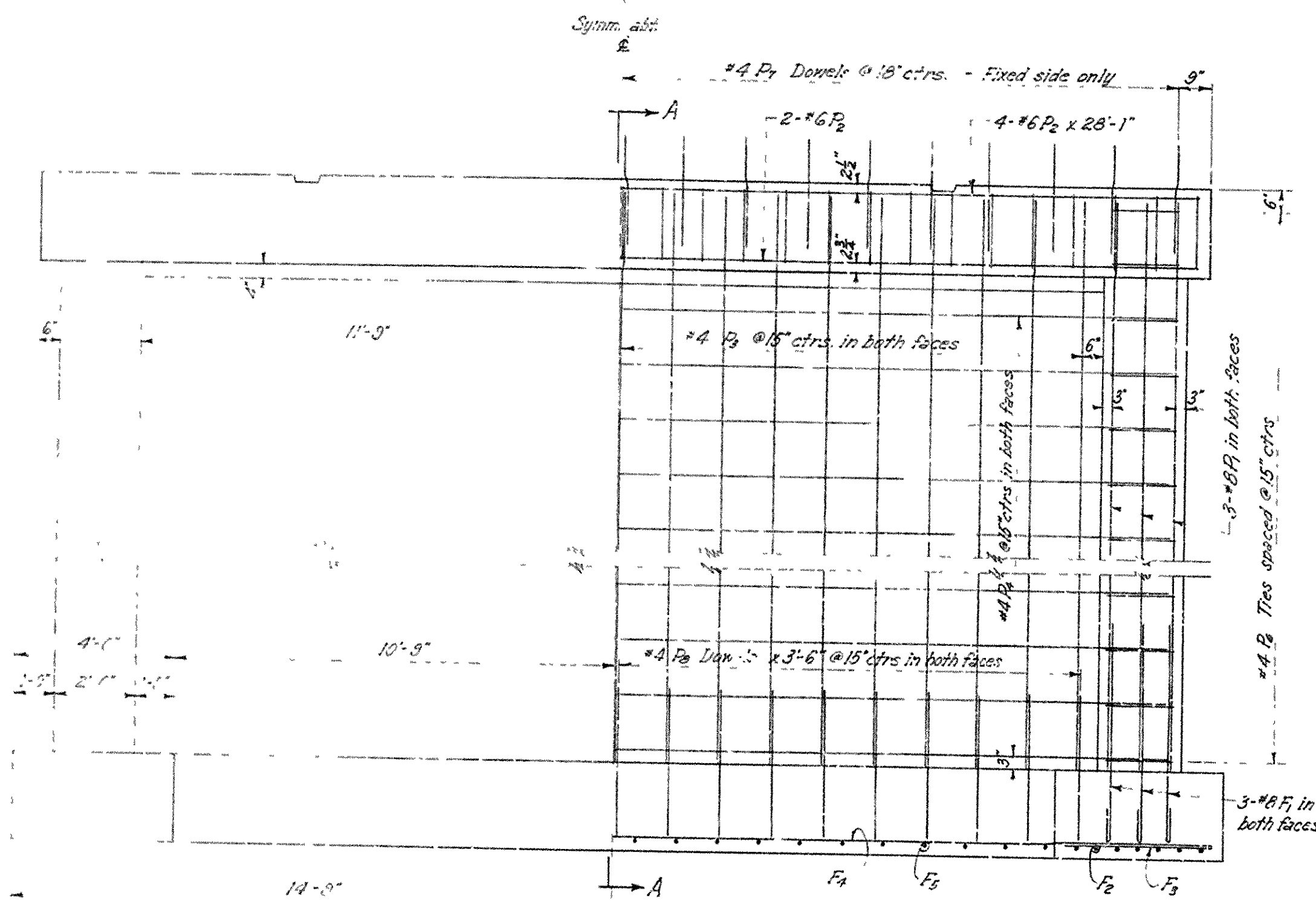
DRAWN BY: AS DATE: 1-15-58
TRACED BY: AS DATE: 1-15-58
CHECKED BY: AS DATE: 1-15-58
BRIDGE NO. 2811B & C DRAWING NO. 9911

L. E. Nelson
BRIDGE DESIGN ENGINEER

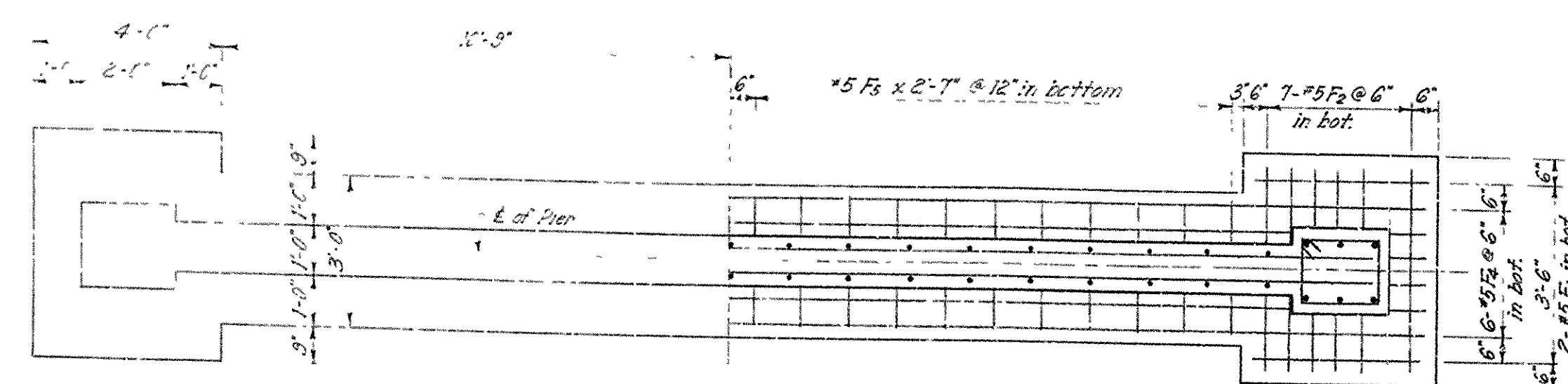
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EXCEPT AS NOTED



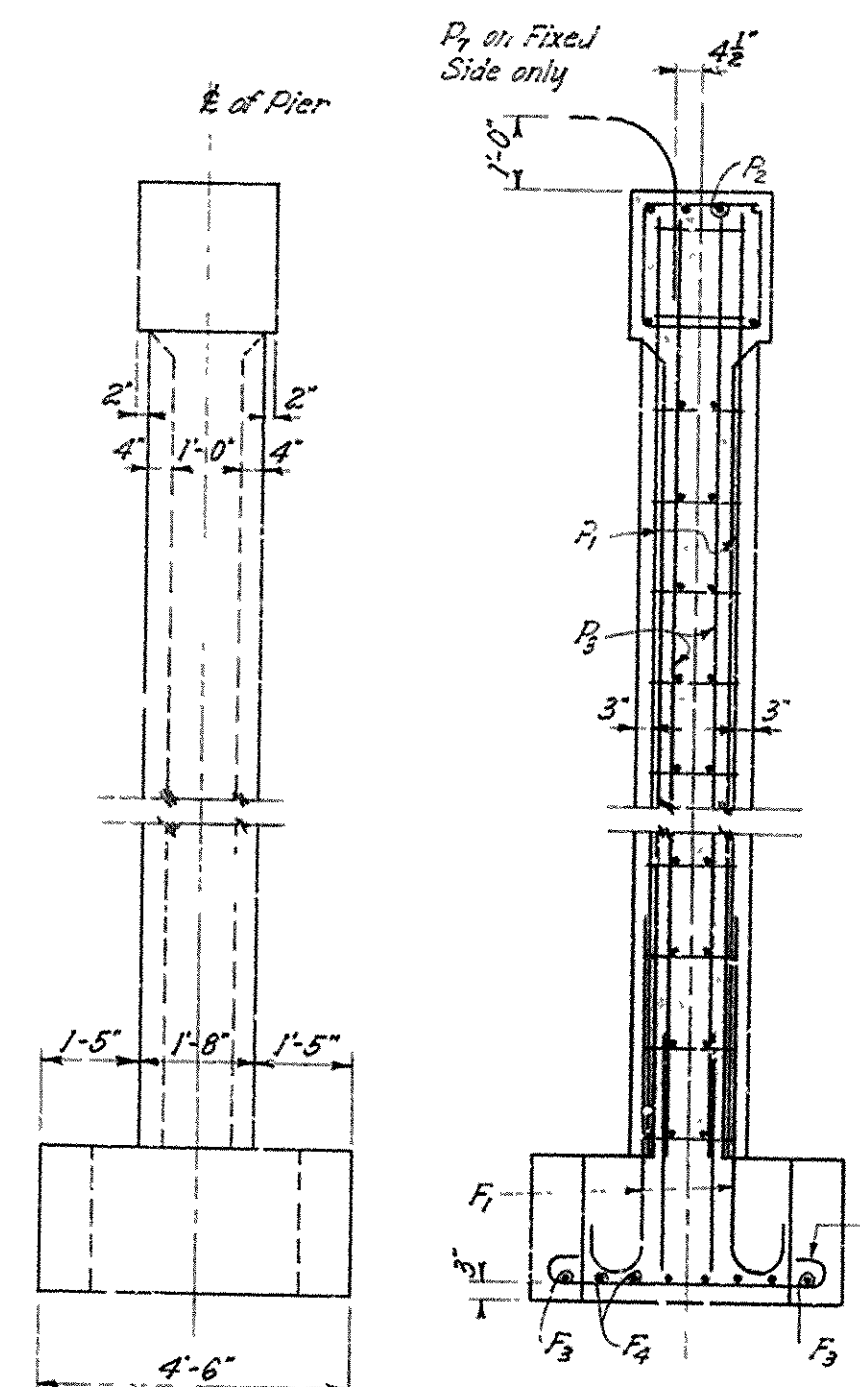
PLAN



ELEVATION



PLAN OF FOOTING



END VIEW

SECTION A-A