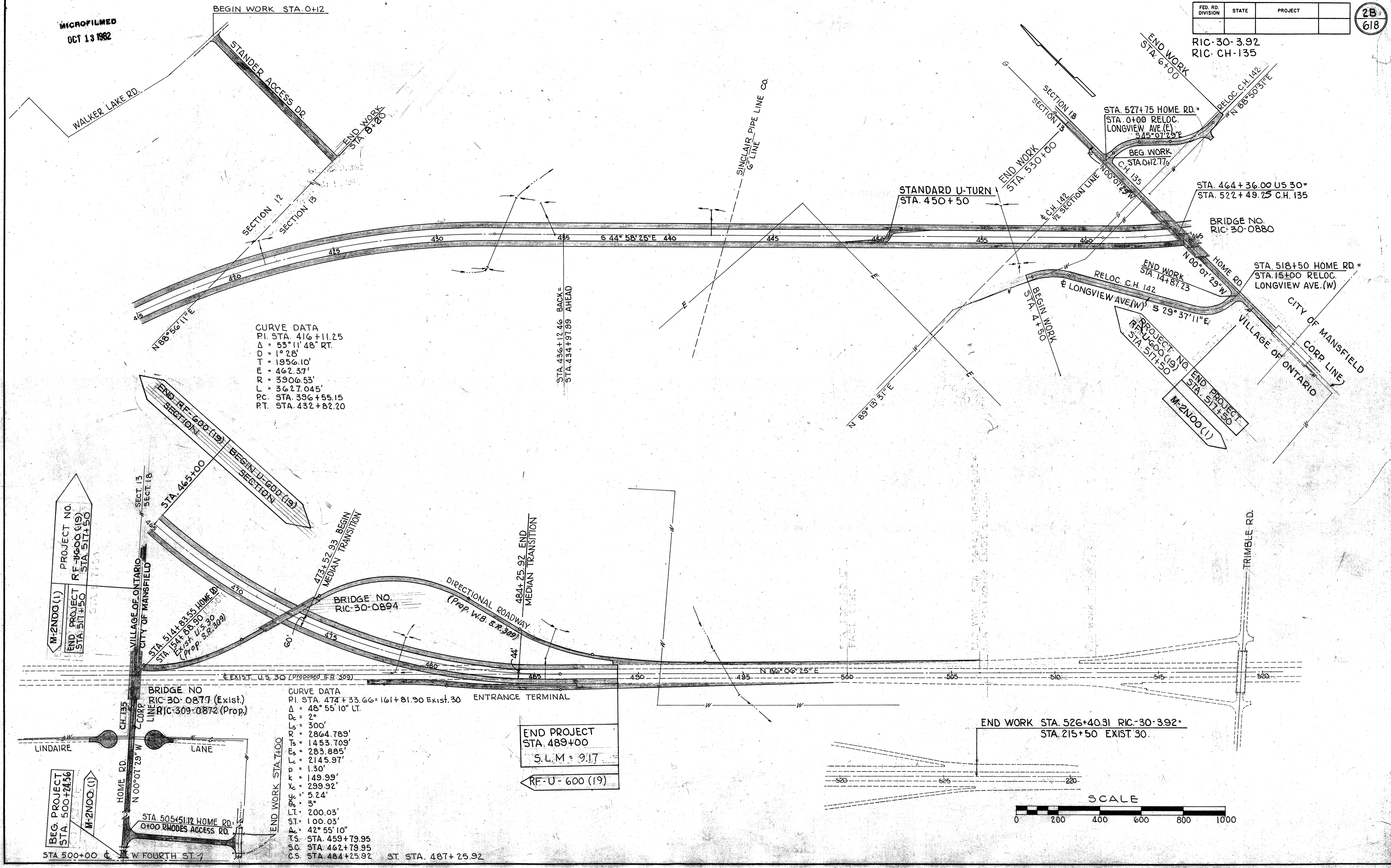




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| FED. RD. DIVISION | STATE | PROJECT | 28<br>618 |
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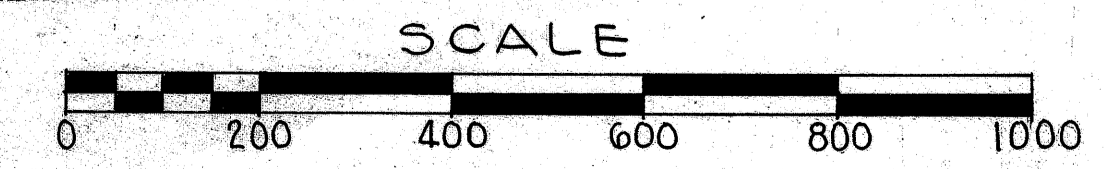
RIC-30-392  
RIC-CH-135



CURVE DATA  
 P.I. STA. 416+11.25  
 $\Delta = 53^{\circ}11'48"$  RT.  
 $D = 1^{\circ}28'$   
 $T = 1956.10'$   
 $E = 462.37'$   
 $R = 3906.53'$   
 $L = 3627.045'$   
 $P.C. STA. 396+55.15$   
 $P.T. STA. 432+82.20$

CURVE DATA  
 P.I. STA. 474+33.66 = 161+81.90 EXIST. 30  
 $\Delta = 48^{\circ}55'10"$  LT.  
 $D = 2^{\circ}$   
 $L = 300'$   
 $T = 2864.789'$   
 $T_s = 1453.709'$   
 $E = 283.885'$   
 $L_c = 2145.97'$   
 $L_s = 130'$   
 $X = 149.99'$   
 $Y = 299.92'$   
 $P.C. = 5.24'$   
 $P.T. = 5'$   
 $L.T. = 200.03'$   
 $S.T. = 100.03'$   
 $\Delta = 42^{\circ}55'10"$   
 $T.S. STA. 459+79.95$   
 $S.C. STA. 462+79.95$   
 $C.S. STA. 484+25.92$

END PROJECT  
 STA. 489+00  
 S.L.M. = 9.17  
 RF-U-600 (19)



|            |       |       |
|------------|-------|-------|
| QUANTITY   | INIT. | DATE  |
| CALCULATED | AW    | 8/70  |
| CHECKED    | JH    | 10/70 |
| REVISED    |       |       |

BM - RR Spike in 8" Cherry  
S.E. Corner Home & Longview  
E1. 1327.16

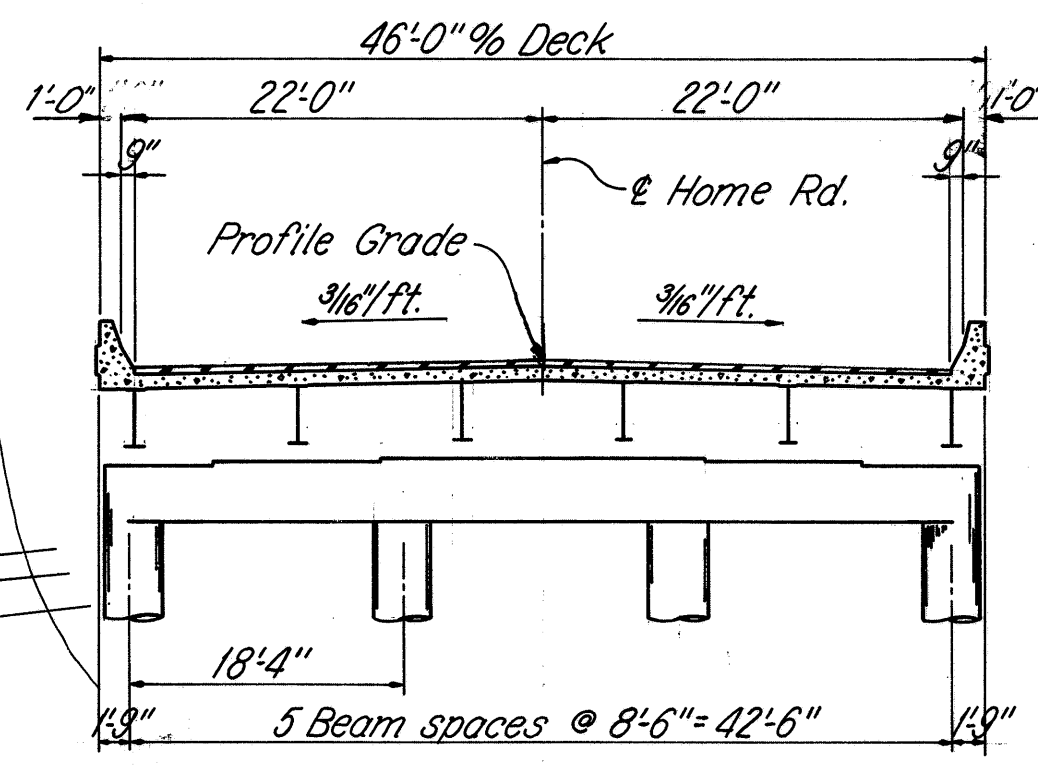
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OCT 14 1982

**CURVE DATA - U.S.R. 30**

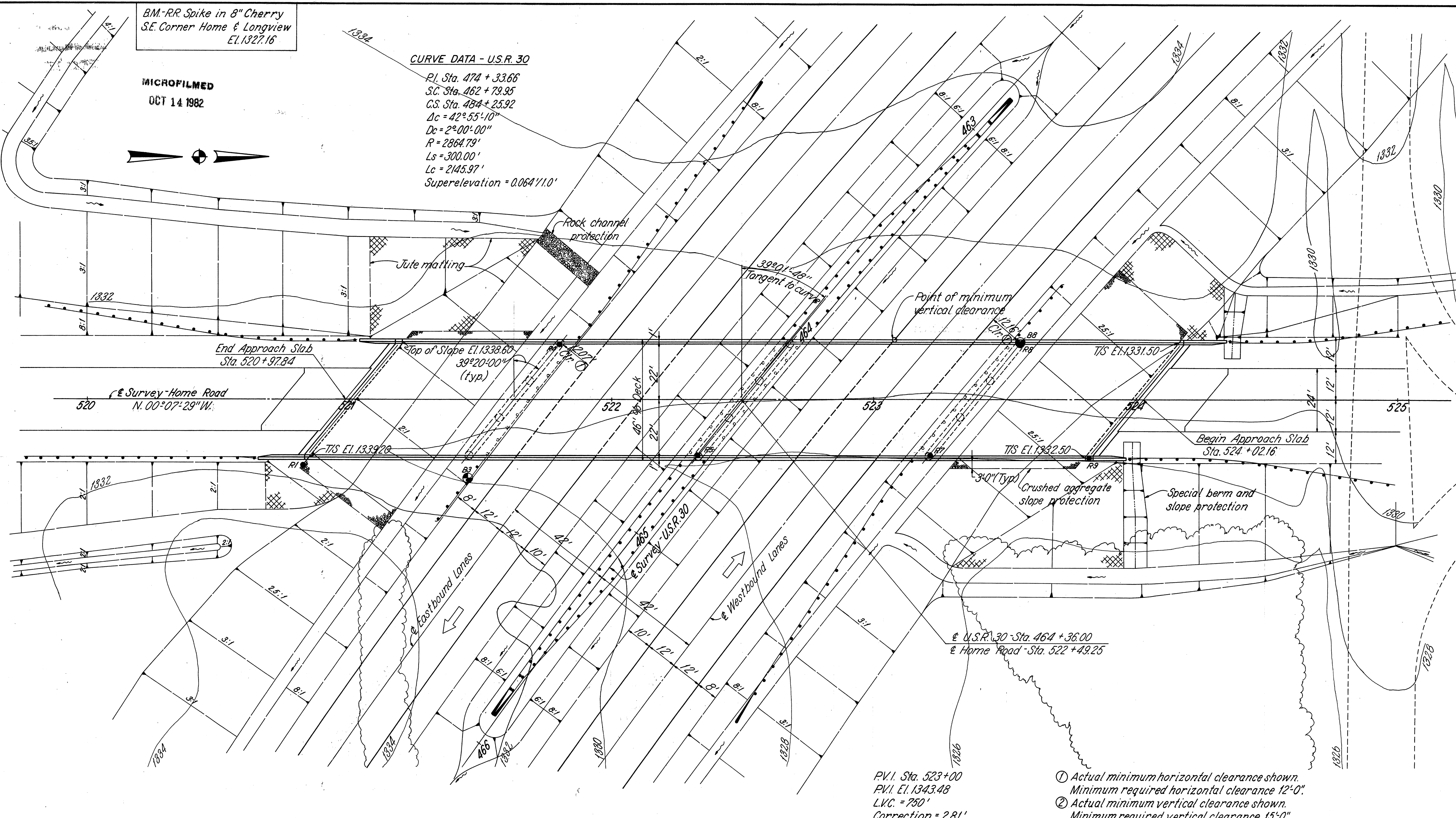
PI Sta. 474 + 33.66  
SC Sta. 462 + 79.95  
CS Sta. 484 + 25.92  
Dc = 42° 55' 10"  
R = 2864.79'  
Ls = 300.00'  
Lc = 2145.97'  
Superelevation = 0.064' / 11.0'

|                   |       |         |            |
|-------------------|-------|---------|------------|
| FED. RD. DIVISION | STATE | PROJECT | 489<br>618 |
| 2                 | OHIO  |         |            |

RIC-30-3.92  
RIC. C.H. 135



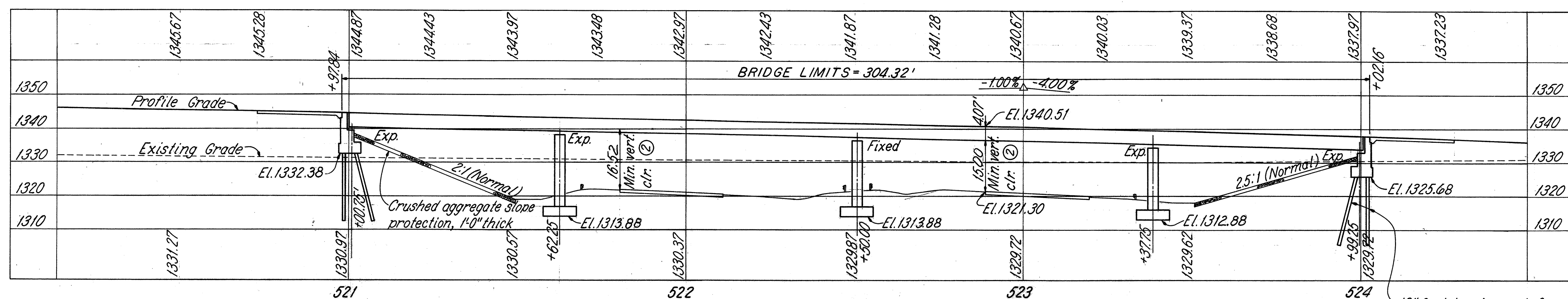
TRANSVERSE SECTION



EARTHWORK limits shown are schematic. Actual slopes shall conform to plan cross-sections.

**PROPOSED STRUCTURE**  
TYPE: Continuous steel beam bridge with reinforced concrete deck and substructure.  
SPANS: 61'-6"; 87'-9"; 87'-9"; 61'-6" % Bearings  
ROADWAY: 44'-0" Parapets  
LOADING: HS 20-44  
SKEW: 39° 20' 00" L.F.  
SURFACE COURSE: 1 1/2" Asphalt concrete  
APPROACH SLABS: AS-1-72 (25'-0" long) Modified  
ALIGNMENT: Tangent  
AVERAGE DAILY TRAFFIC: 3294 (1990)

**FOUNDATION INVESTIGATION LEGEND**  
⊕ Indicates core boring location.  
● Indicates rod sounding location.



12" Cast-in-place reinforced concrete piles. The estimated average pay length for the Abutments is 20 ft.

|   |         |           |         |
|---|---------|-----------|---------|
| PARRETT & MCCARTNEY<br>CONSULTING ENGINEERS |         | 1 / 9     |         |
| MANSFIELD                                   |         | OHIO      |         |
| <b>SITE PLAN</b>                            |         |           |         |
| <b>BRIDGE No. RIC - 30 - 0880</b>           |         |           |         |
| <b>UNDER HOME ROAD</b>                      |         |           |         |
| RICHLAND COUNTY                             |         | U.S.R. 30 |         |
| STA 464 + 41.56                             |         |           |         |
| DESIGNED                                    | DRAWN   | TRACED    | CHECKED |
| D.H.T.                                      | J.S.    | J.S.      | G.S.B.  |
| REVIEWED                                    | DATE    | REVISED   |         |
| D.H.T.                                      | 4/14/71 |           |         |

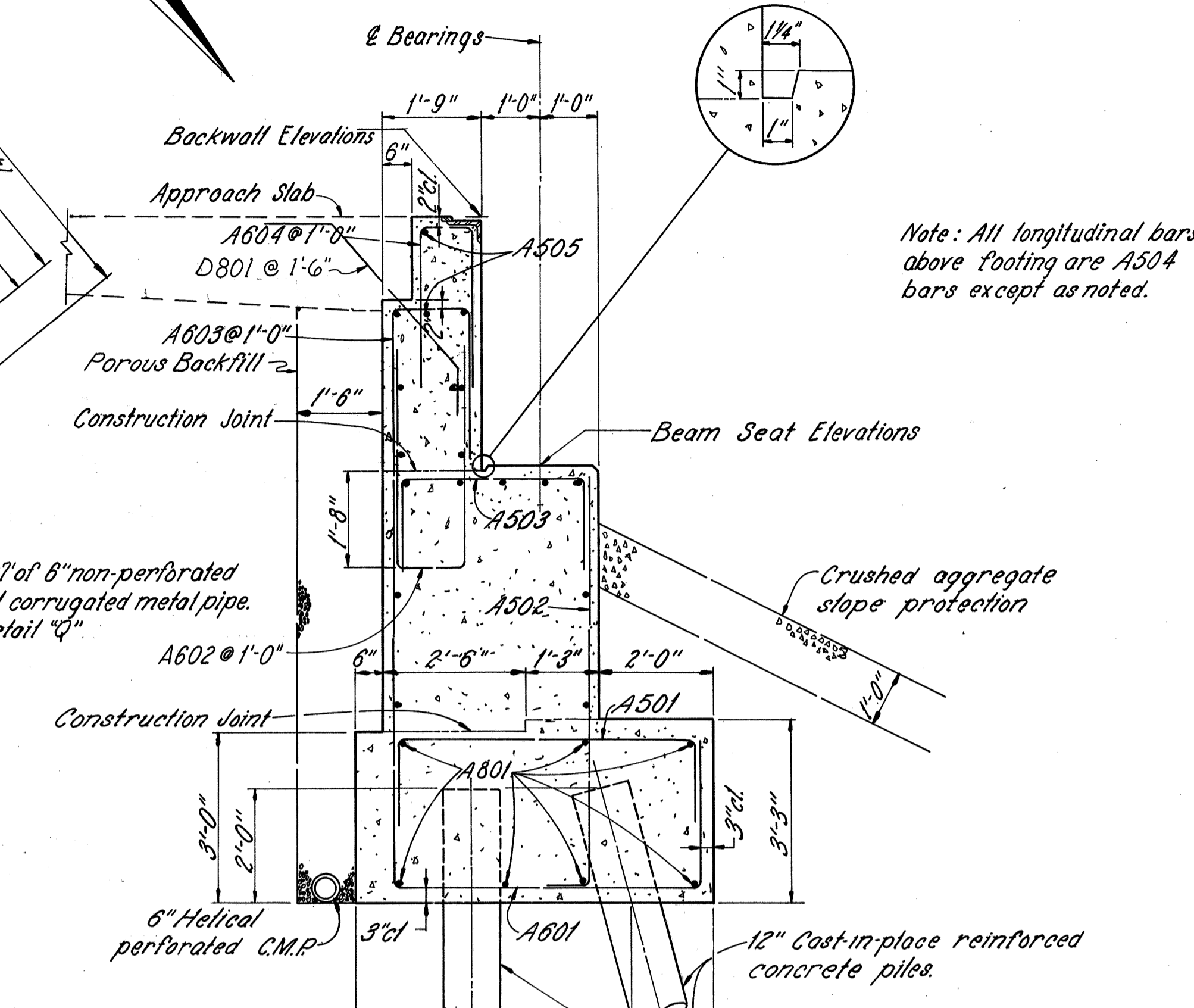
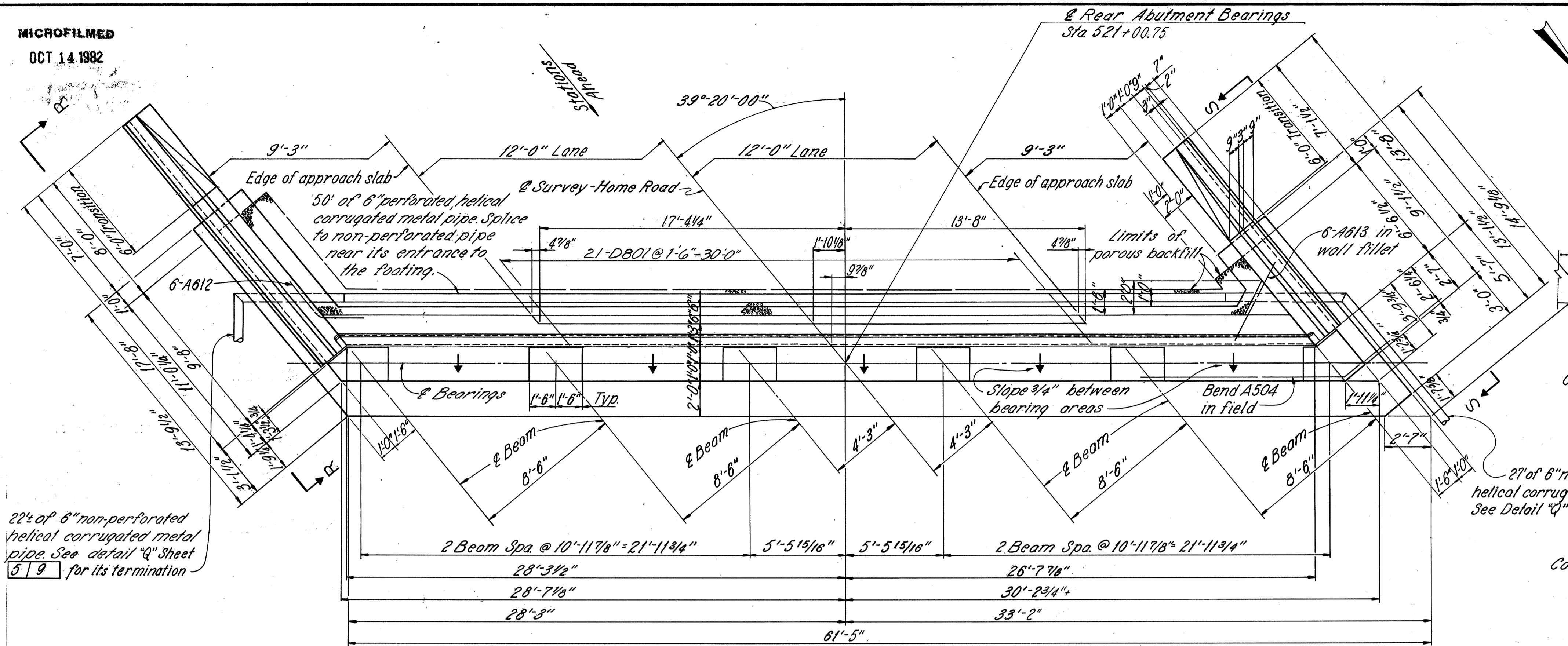


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| FED. RD. DIVISION | STATE | PROJECT |
| 2                 | OHIO  |         |

491  
618

RIC-30-392  
RIC. C.H.135



Note: All longitudinal bars above footing are A504 bars except as noted.

**ABUTMENT NOTES**

POROUS BACKFILL, 1'-6" thick for full length of abutment and 2'-0" thick for wings, shall extend up to the approach slab, subgrade and finished ground surface.

NOTATION: E.F.-each face, R.F.-rear face, F.F.-front face, R.A.-rear abutment, F.A.-forward abutment.

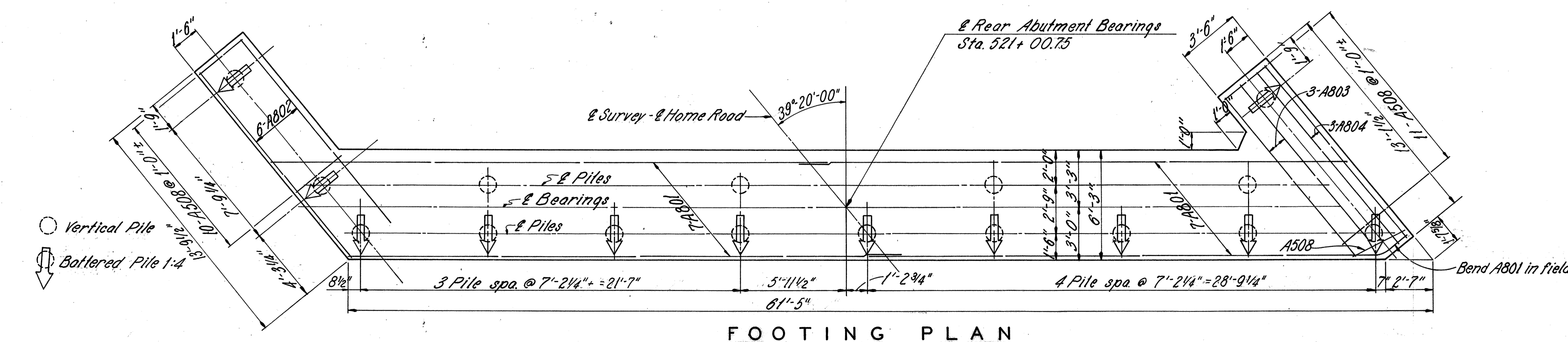
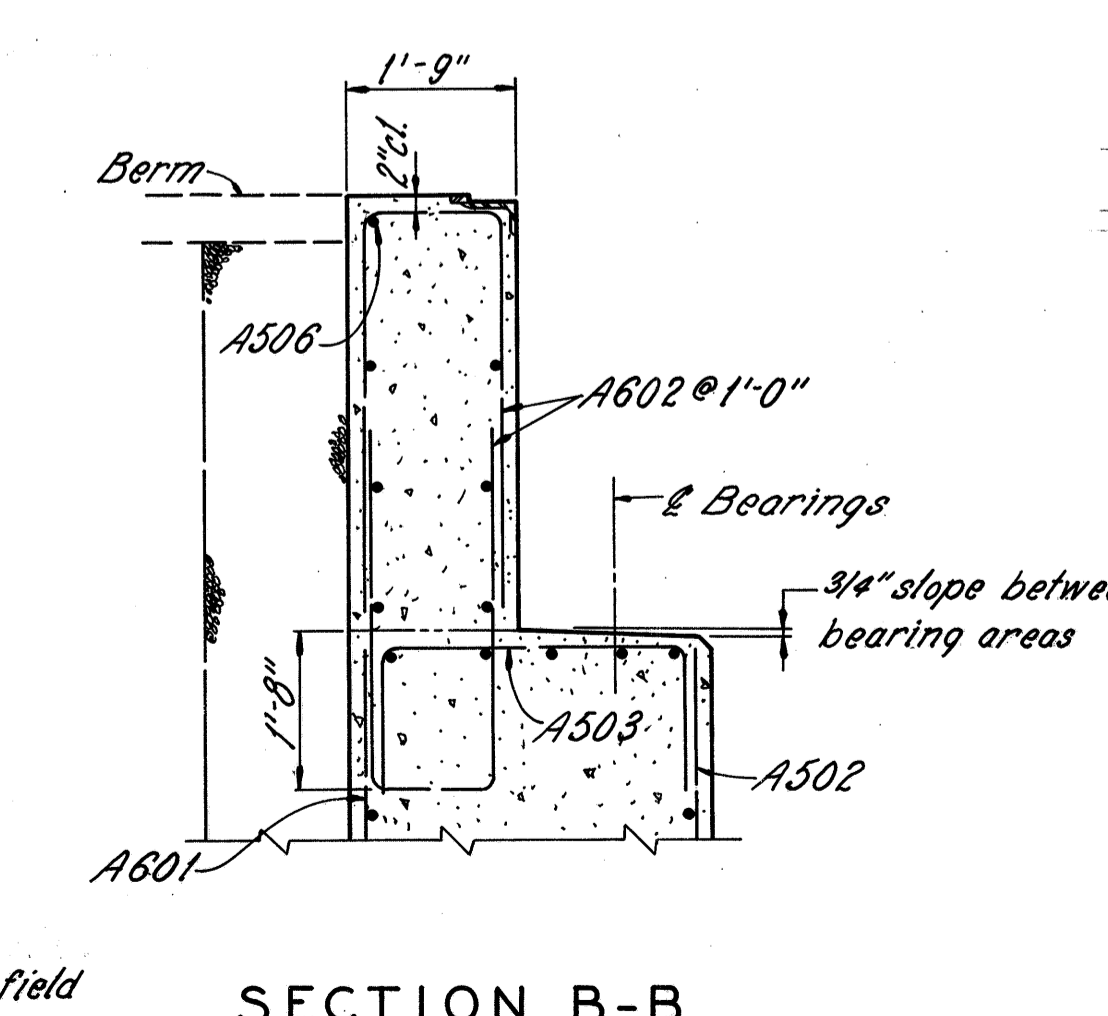
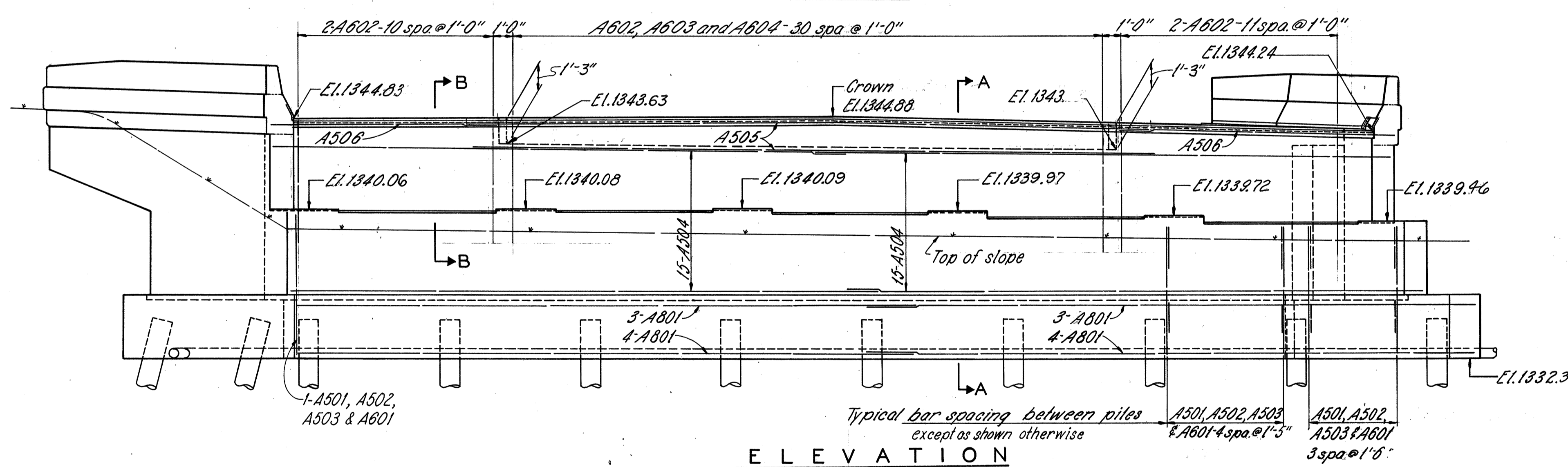
GENERAL NOTES: see sheet 2/9

ABUTMENT DETAILS: see sheet 5/9

Backwall Concrete: In addition to the provisions of 511.08, backwall concrete shall not be placed until after the deck concrete in the span adjacent to the backwall has been placed.

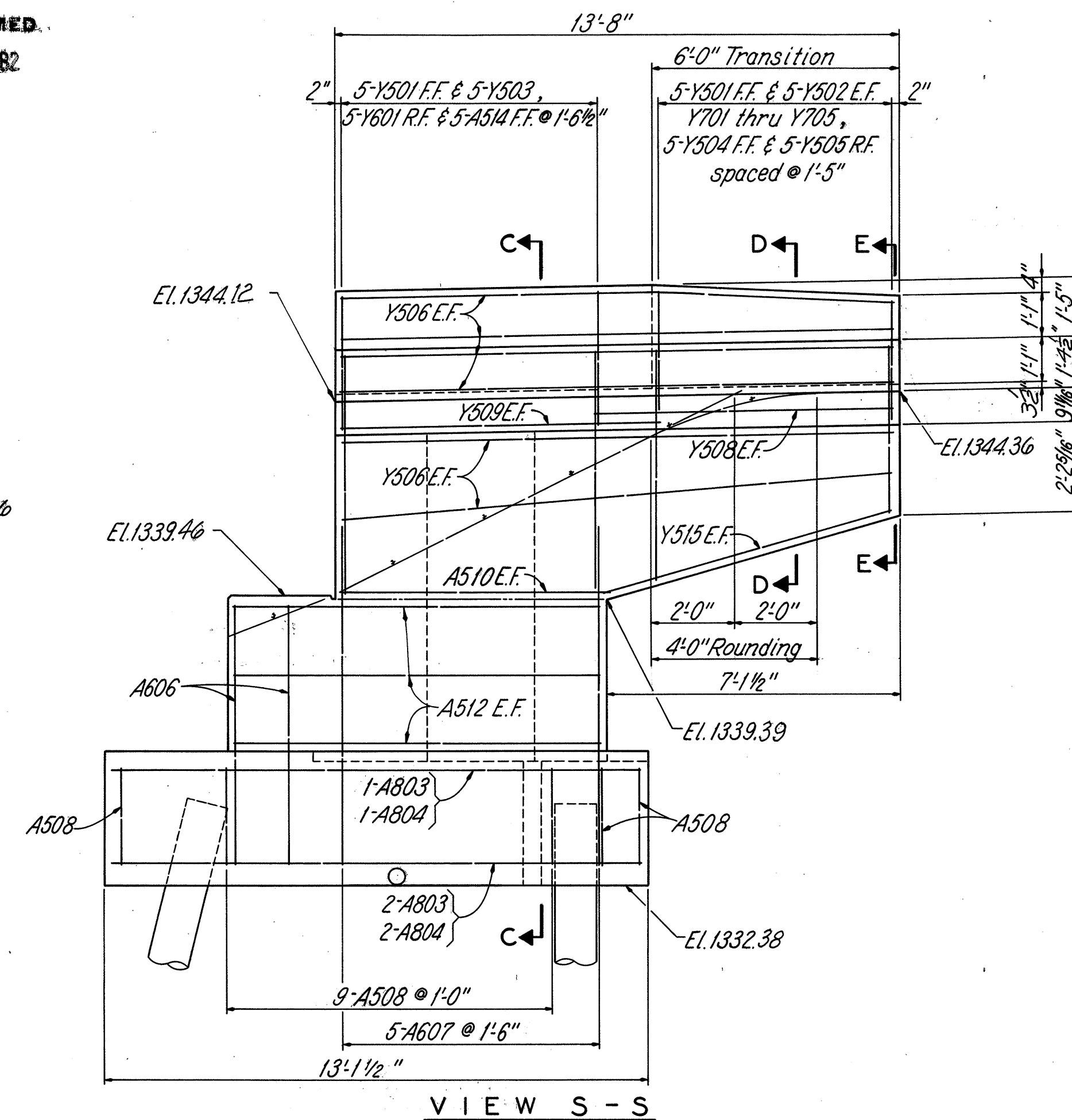
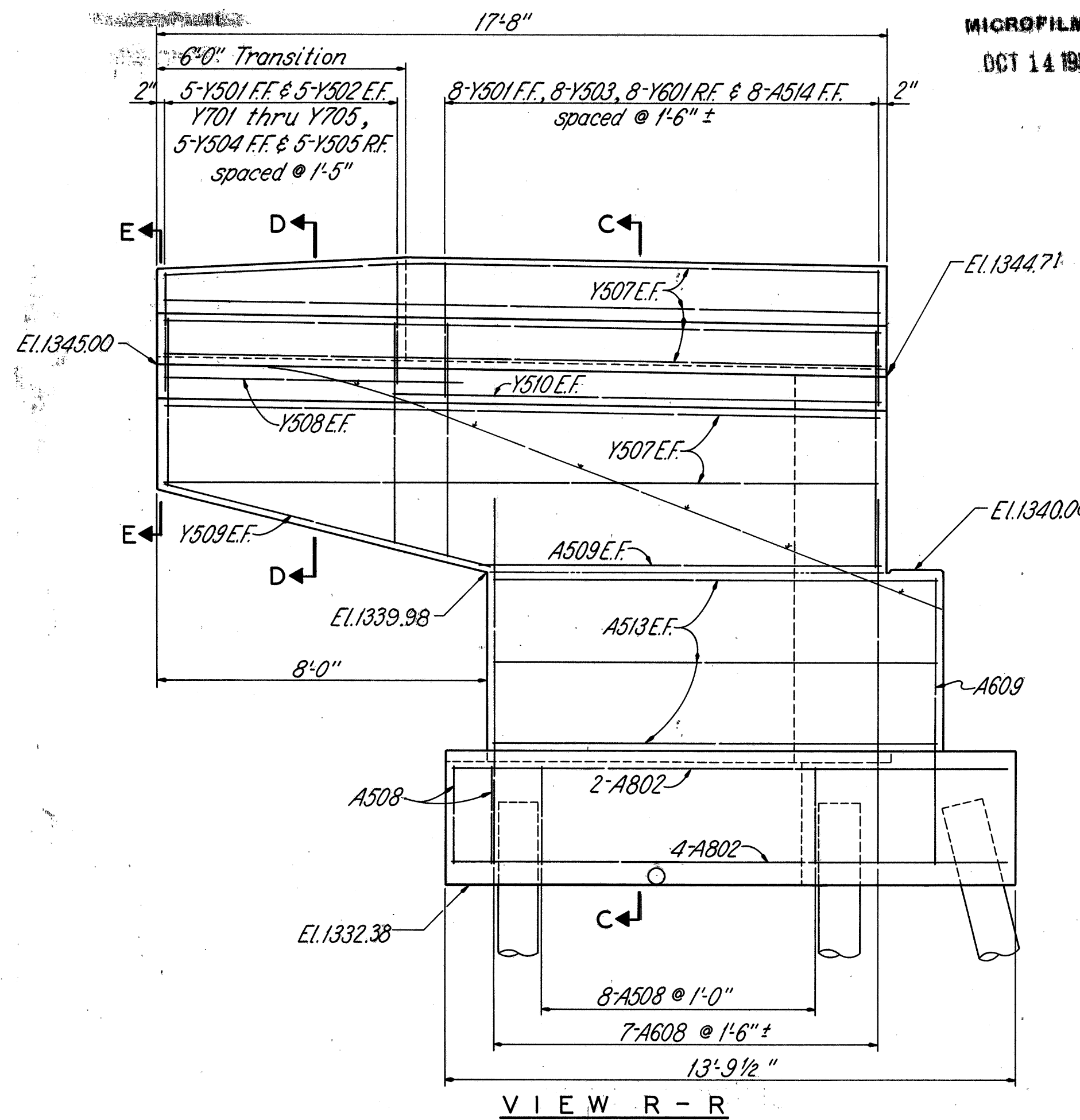
Standard Drawing AS-1-72 modified as follows

- 1.) Dimension W = 24'-0"
- 2.) Change 2" clearance to 3" clearance for top reinforcing steel.

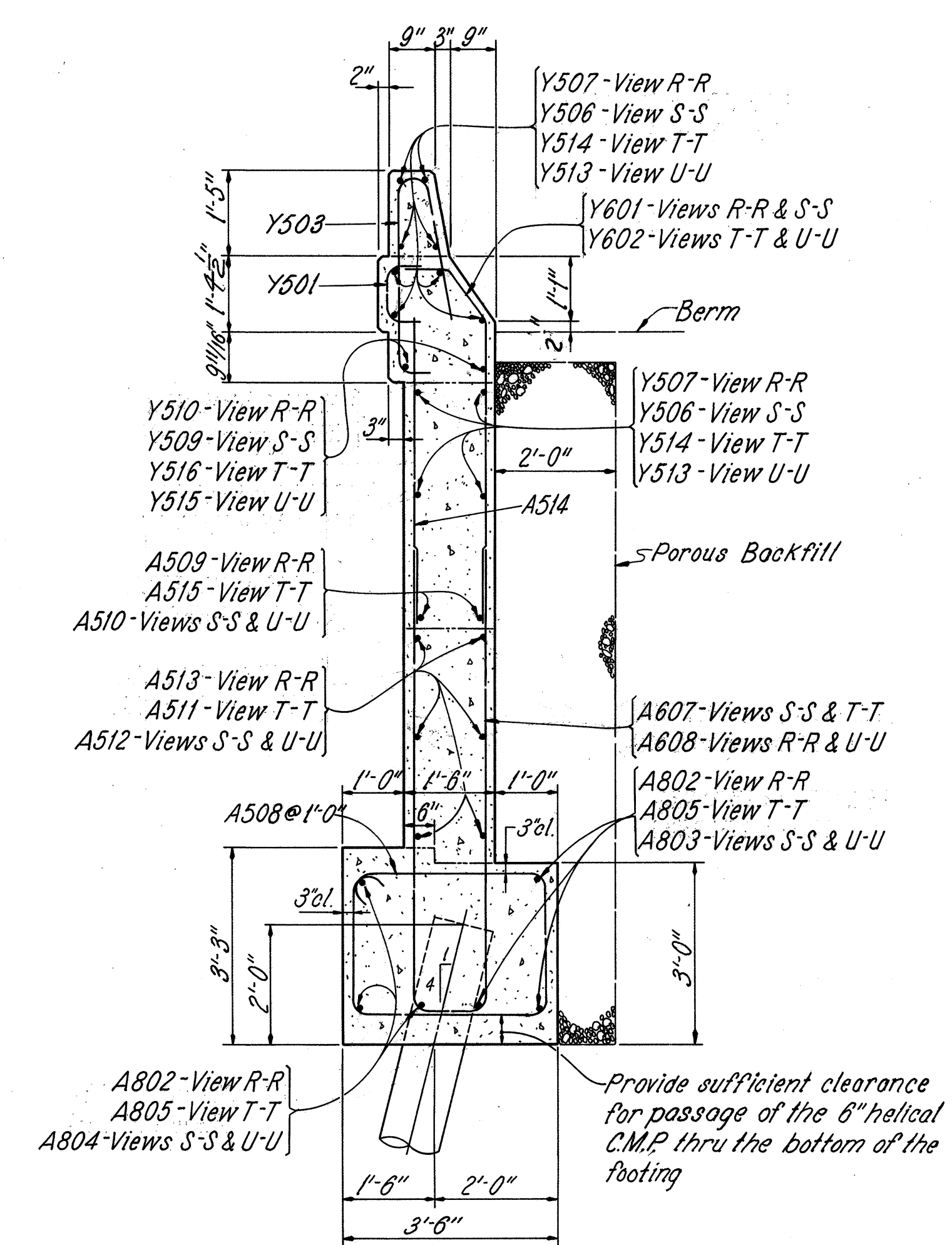


|  |       |        |         |          |         |           |
|--|-------|--------|---------|----------|---------|-----------|
| PARRETT & McCARTNEY CONSULTING ENGINEERS |       |        |         |          |         | 3/9       |
| MANSFIELD                                |       |        |         |          |         | OHIO      |
| <b>REAR ABUTMENT</b>                     |       |        |         |          |         |           |
| BRIDGE NO. RIC-30-0880                   |       |        |         |          |         |           |
| UNDER HOME ROAD                          |       |        |         |          |         |           |
| RICHLAND COUNTY                          |       |        |         |          |         | U.S.R. 30 |
| STA. 464+41.56                           |       |        |         |          |         |           |
| DESIGNED                                 | DRAWN | TRACED | CHECKED | REVIEWED | DATE    | REVISED   |
| D.H.T.                                   | U.S.  | H.V.   | G.S.B.  | D.H.T.   | 4/14/71 |           |

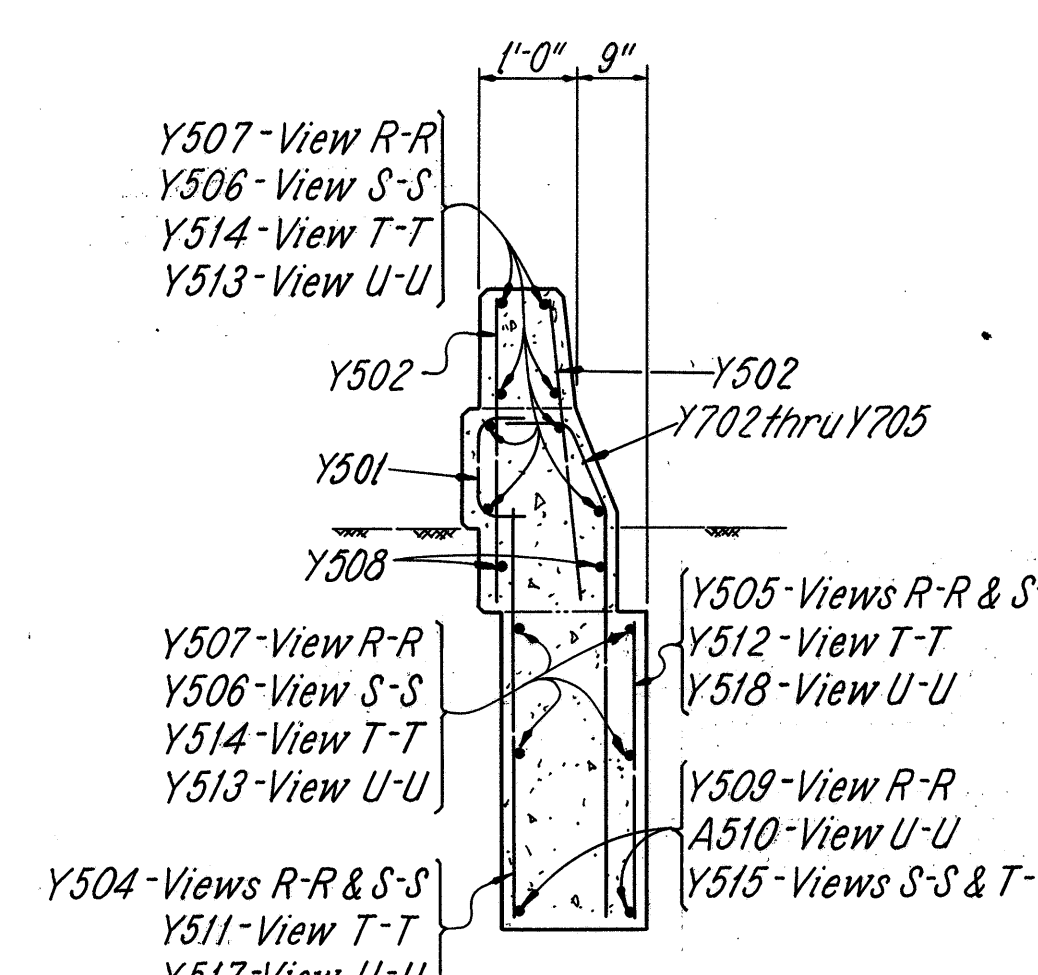




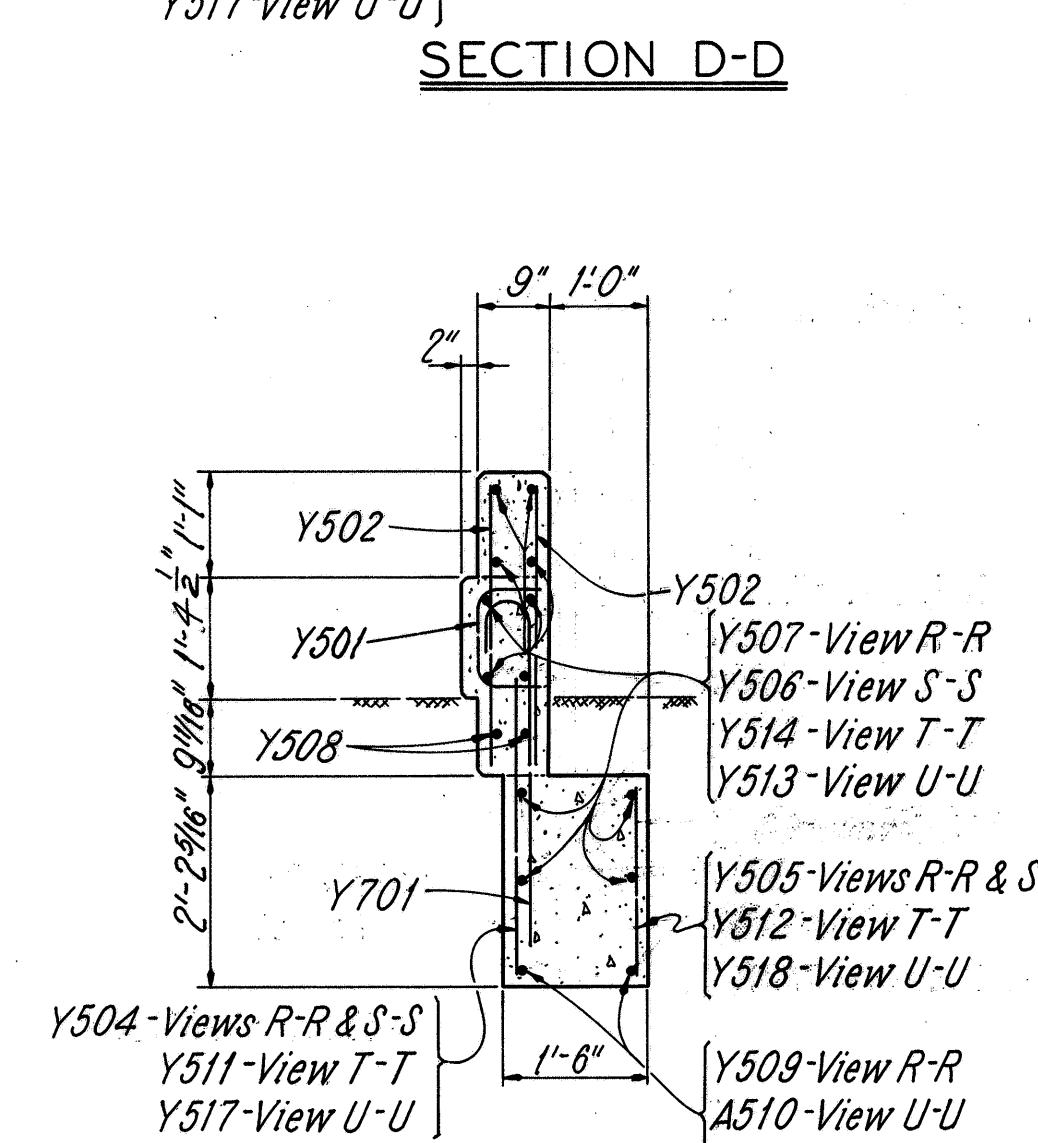
REAR ABUTMENT WINGWALLS



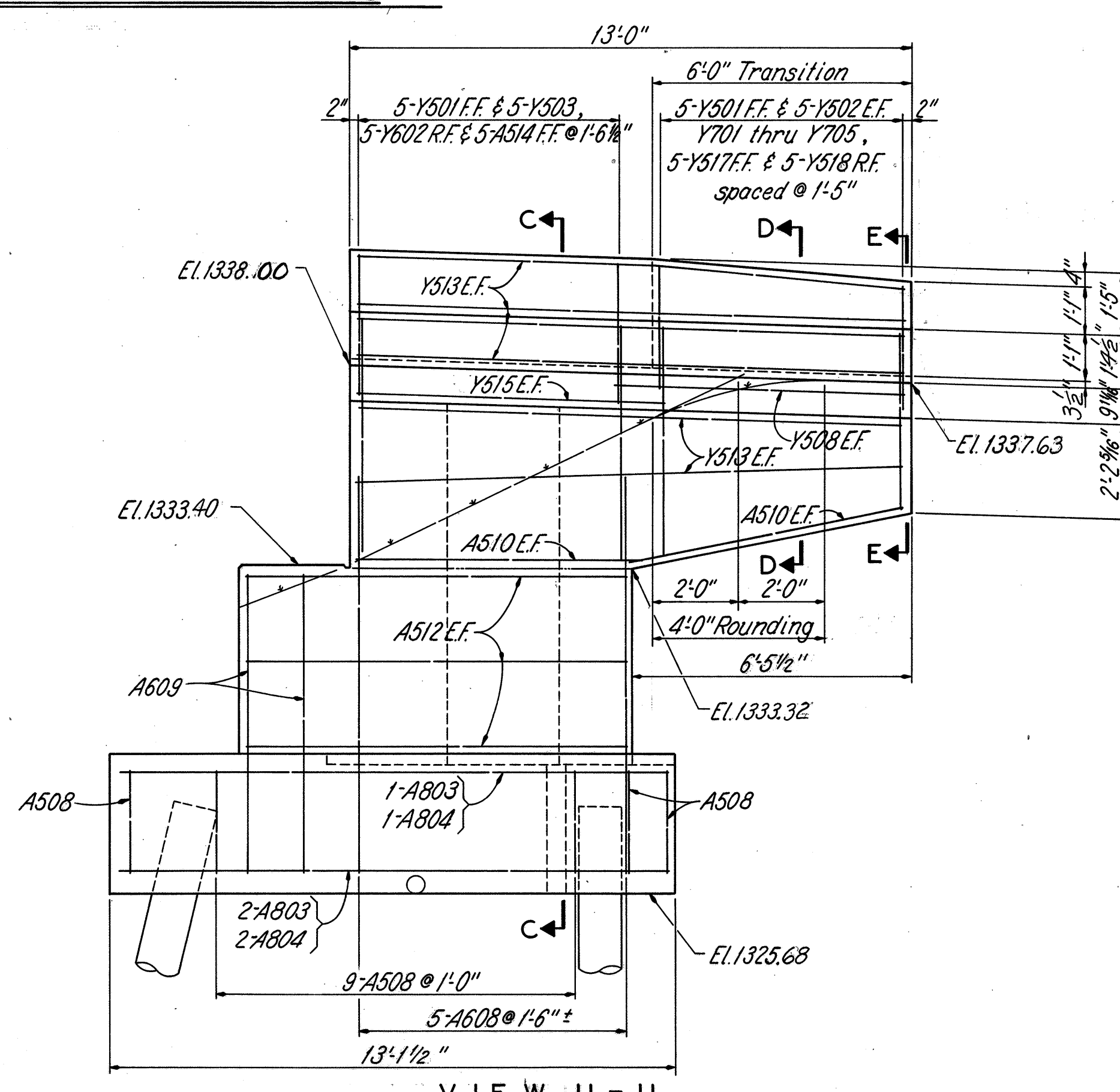
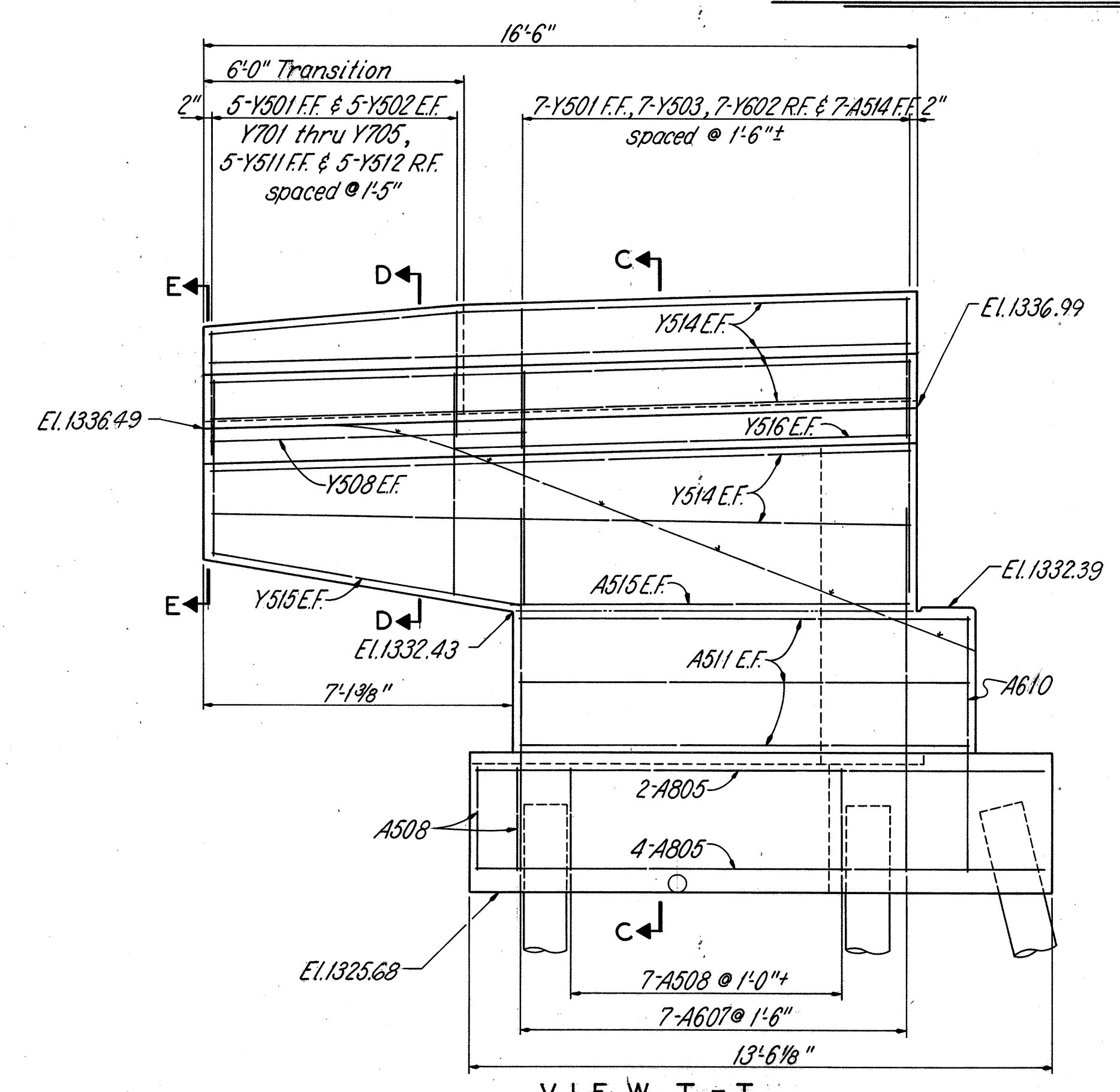
SECTION C - C



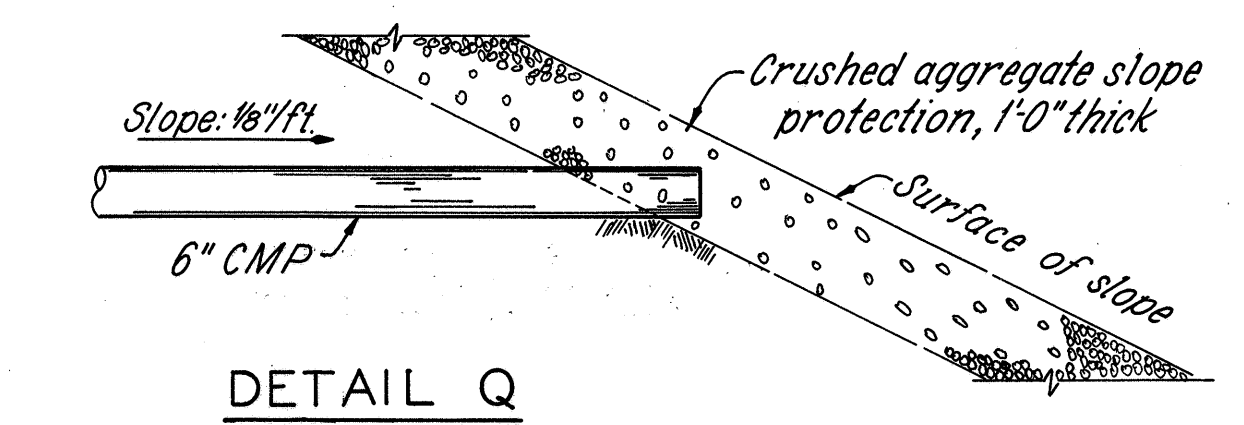
SECTION D - D



SECTION E - E

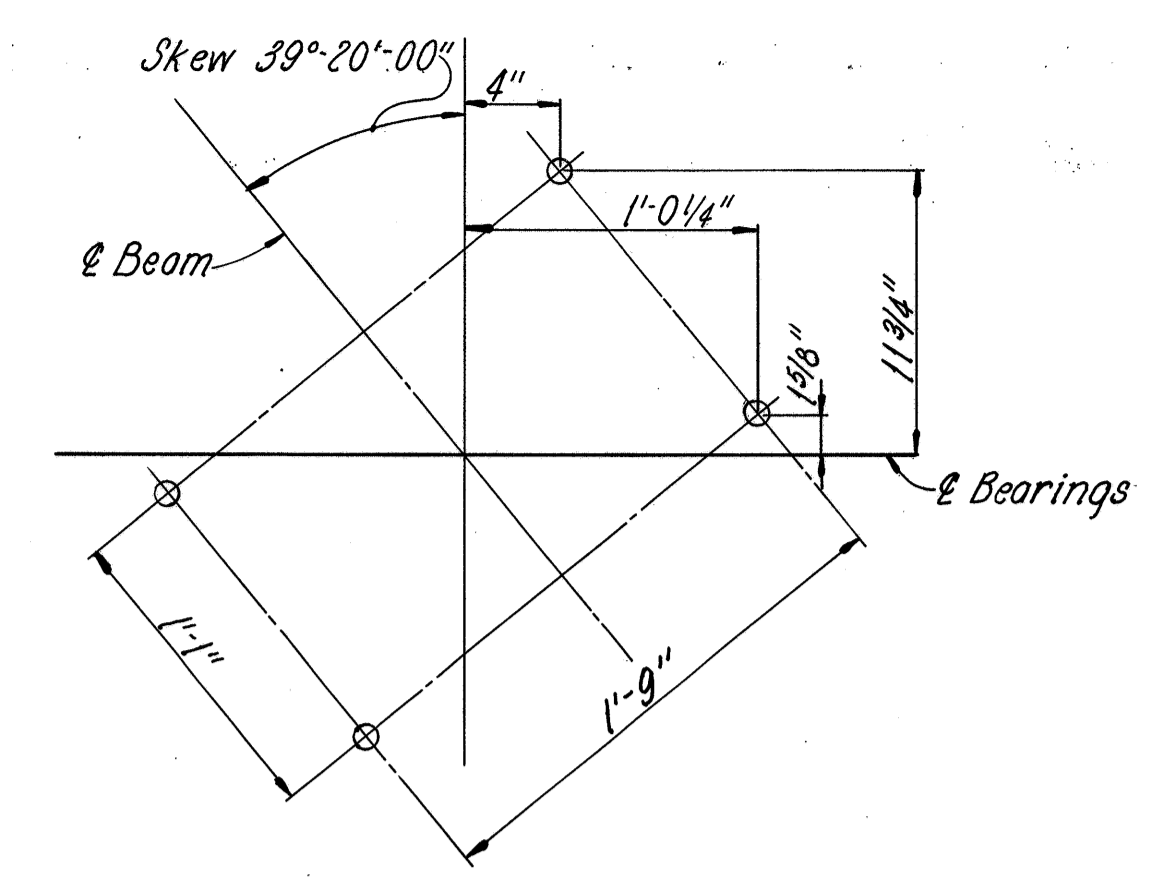
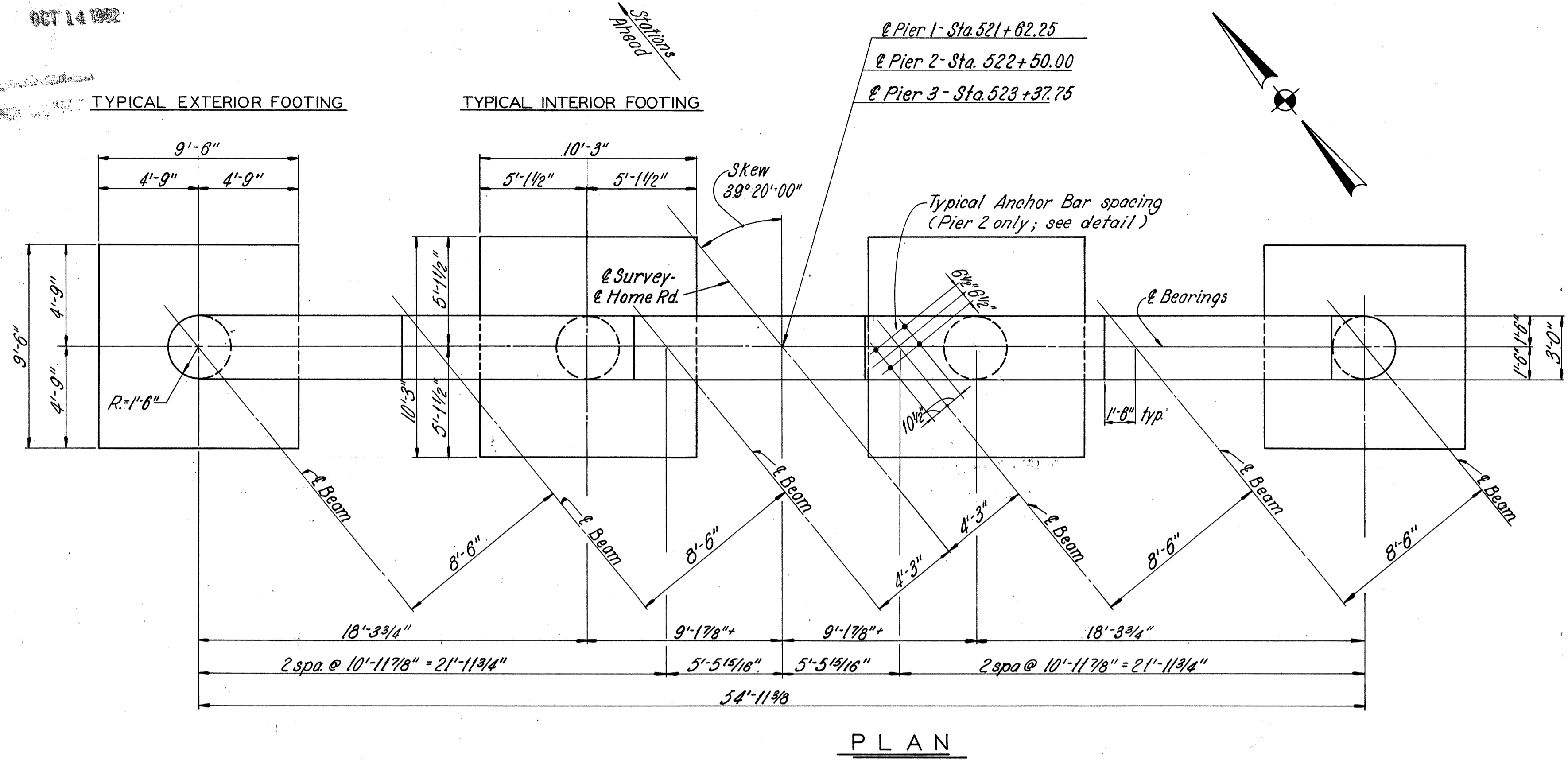


FORWARD ABUTMENT WINGWALLS

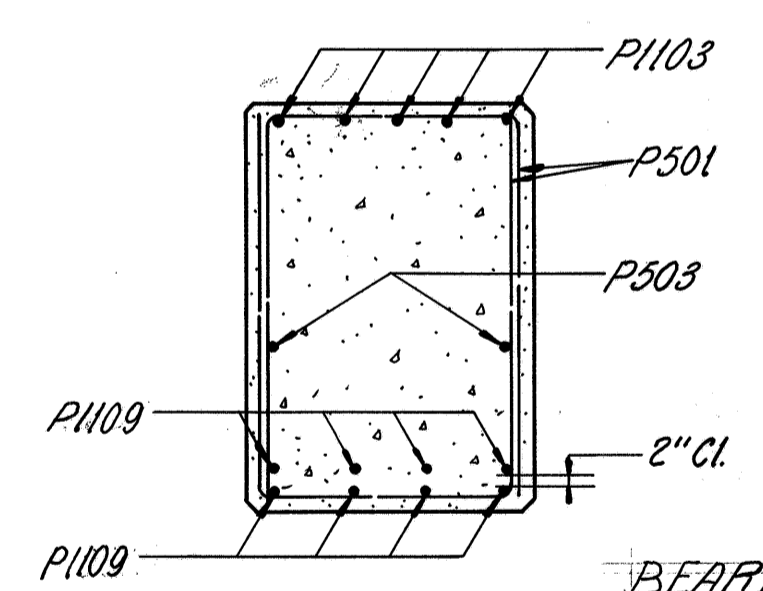
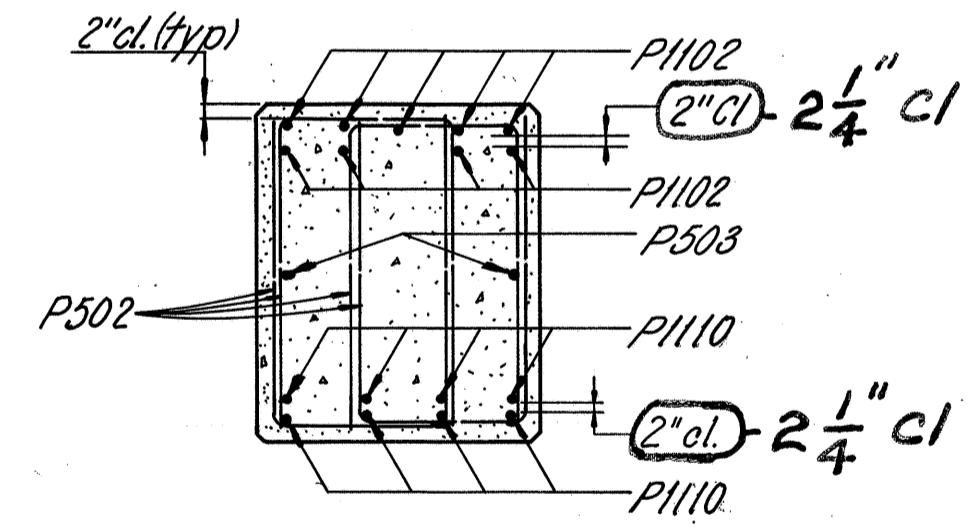
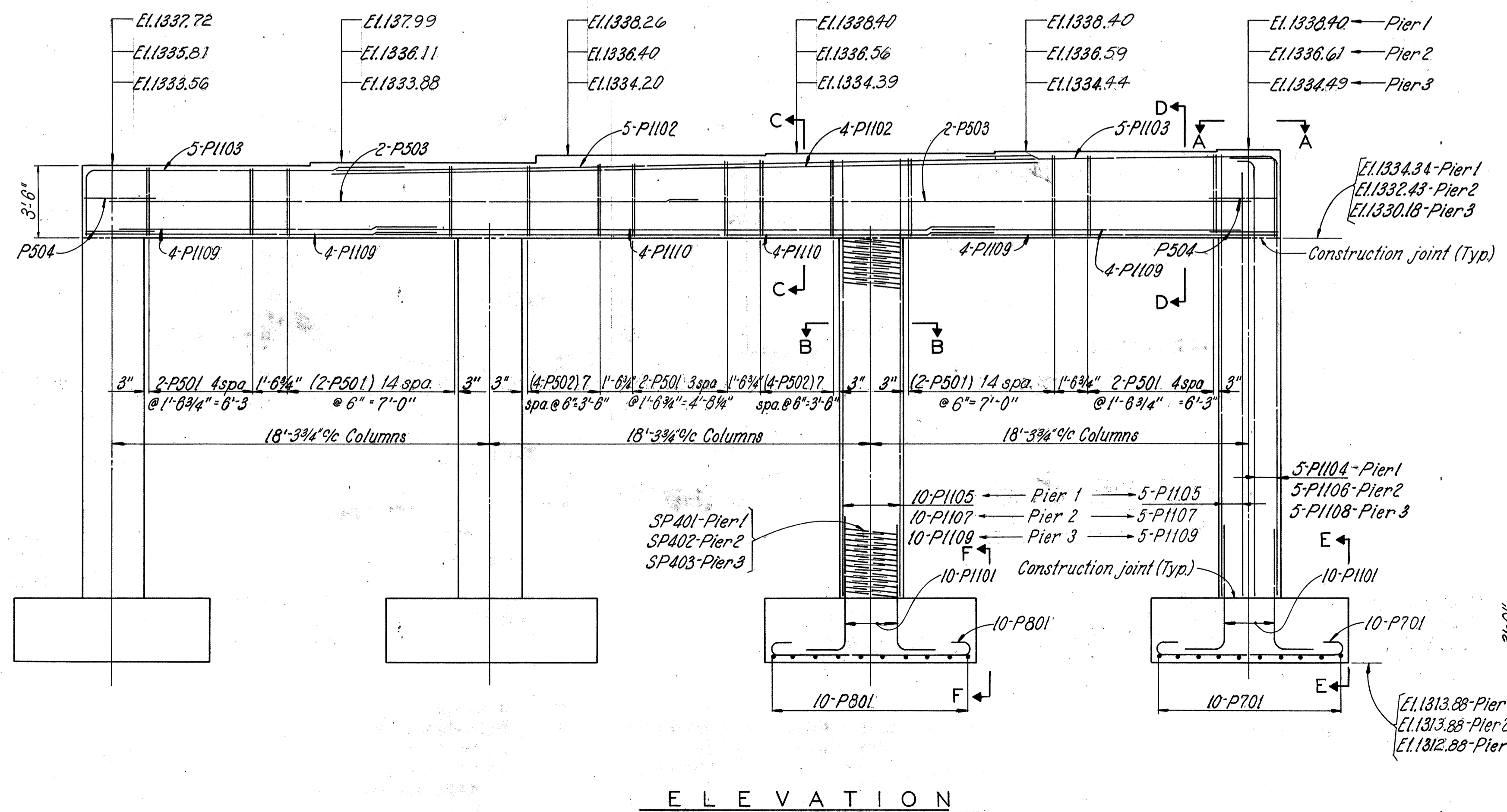
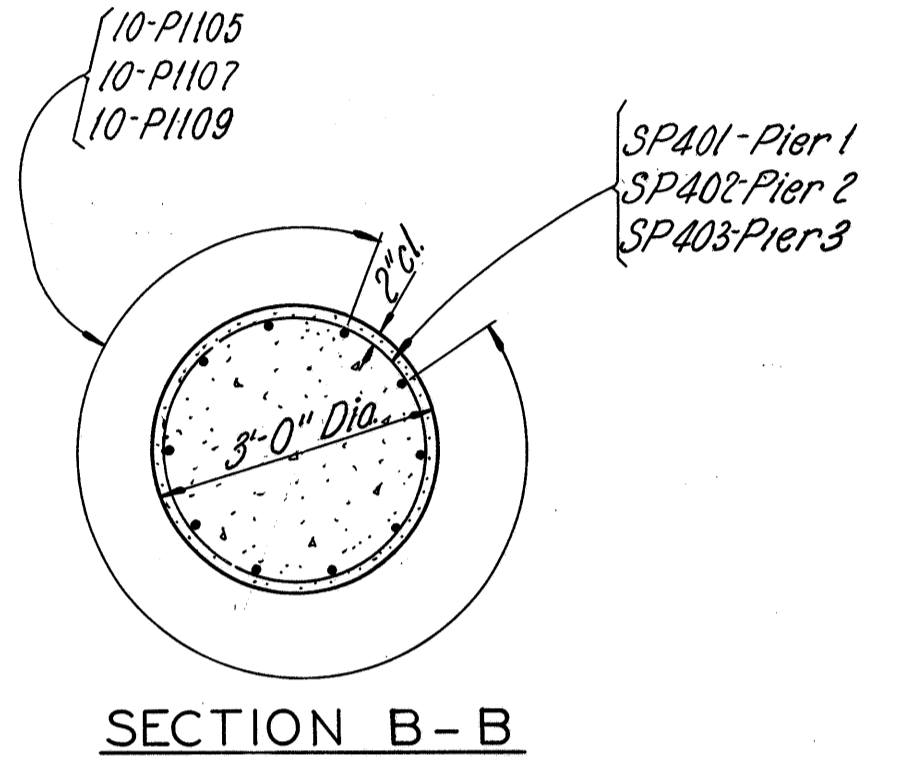
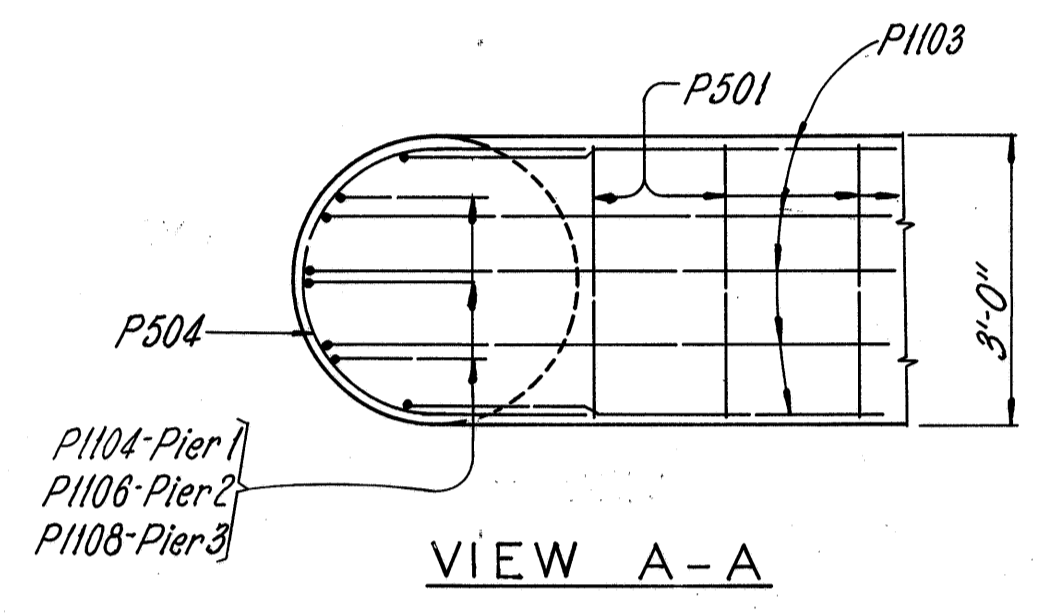


DETAIL Q

|                            |       |           |          |
|----------------------------|-------|-----------|----------|
| PARRETT & MCCARTNEY        |       | 5 / 9     |          |
| CONSULTING ENGINEERS       |       | OHIO      |          |
| <b>ABUTMENT DETAILS</b>    |       |           |          |
| BRIDGE NO. RIC - 30 - 0880 |       |           |          |
| UNDER HOME ROAD            |       |           |          |
| RICHLAND COUNTY            |       | U.S.R. 30 |          |
| STA. 464 + 41.56           |       |           |          |
| DESIGNED                   | DRAWN | TRACED    | CHECKED  |
| J.S.                       | J.S.  | A.M.      | G.S.B.   |
|                            |       |           | REVIEWED |
|                            |       |           | DHT      |
|                            |       |           | DATE     |
|                            |       |           | 4/14/71  |
|                            |       |           | REVISED  |



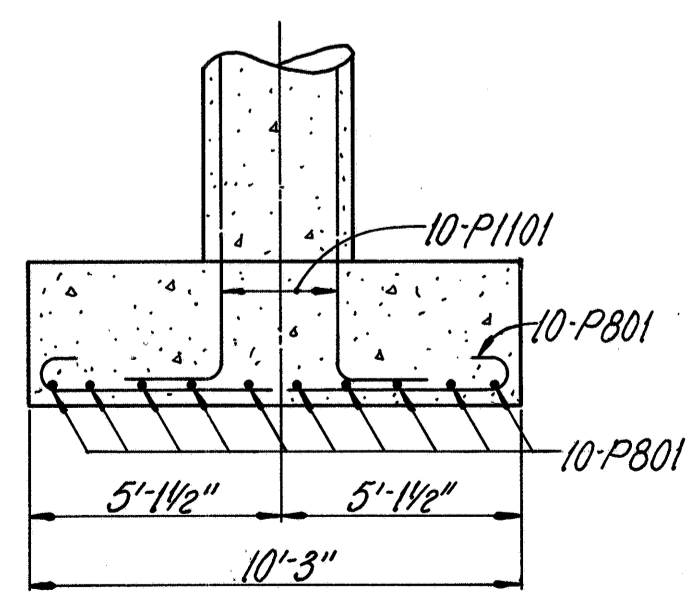
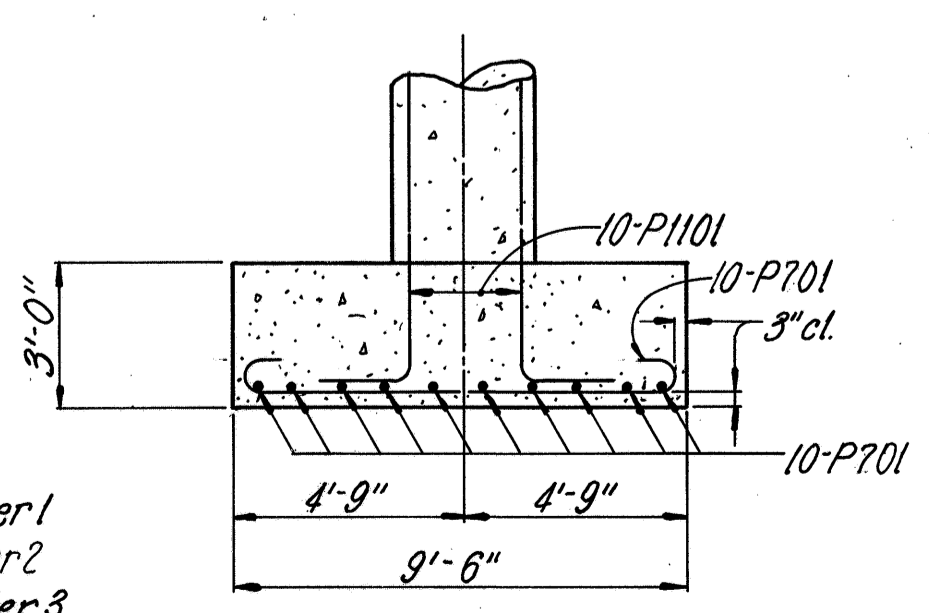
ANCHOR BAR LAYOUT  
SHOE B-175 PIER 2 ONLY



**BEARING ANCHORS:** At the option of the Contractor, bearing anchors (or formed holes), located and supported by templates, may be cast in place.

**BRIDGE SEAT REINFORCING:** Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.

**GENERAL NOTES:** See Sheet 2/9



|   |        |                |         |          |         |
|---|--------|----------------|---------|----------|---------|
| PARRETT & MCCARTNEY CONSULTING ENGINEERS      |        | MANSFIELD OHIO |         | 6/9      |         |
| <b>PIERS</b>                                  |        |                |         |          |         |
| BRIDGE NO. RIC - 30 - 0880<br>UNDER HOME ROAD |        |                |         |          |         |
| RICHLAND COUNTY U.S.R. 30                     |        |                |         |          |         |
| STA. 464 + 41.56                              |        |                |         |          |         |
| DESIGNED                                      | DRAWN  | TRACED         | CHECKED | REVIEWED | DATE    |
| G.S.B.  | H.A.V. | H.A.V.         | D.H.T.  | U.L.     | 4/14/71 |
|   |        |                |         |          | REVISED |
|   |        |                |         |          | 9.9.76  |

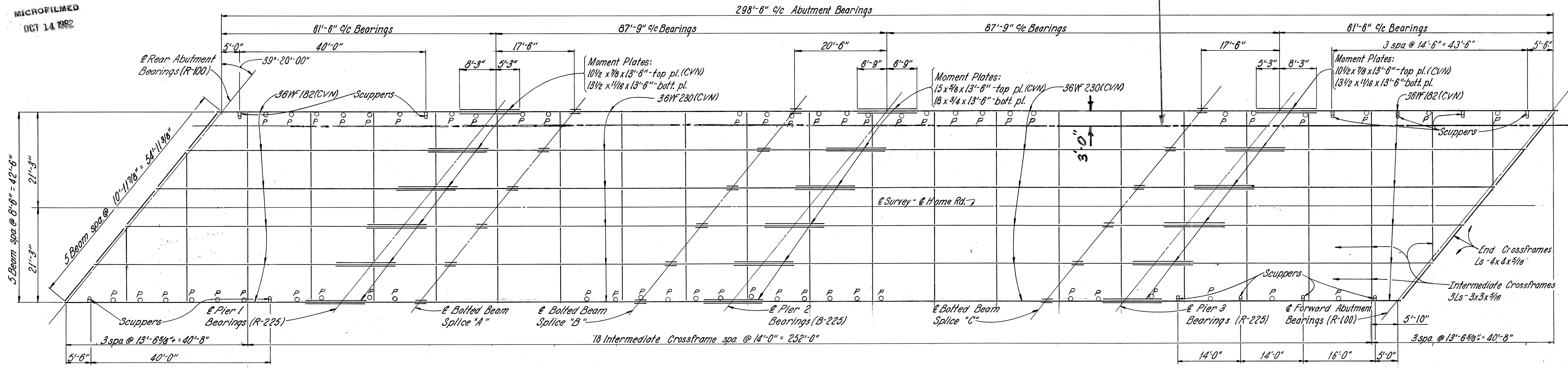


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of 2-4" conduits  
Materials and labor to be  
supplied by United Telephone  
Company of Ohio

|                   |       |         |            |
|-------------------|-------|---------|------------|
| FED. RD. DIVISION | STATE | PROJECT | 495<br>618 |
| 2                 | OHIO  |         |            |

RIC-30-392  
RIC. C.H.135



FRAMING PLAN

**STEEL ERECTION:** During the erection of end dams and crossframes care shall be taken to insure that stringers, bearing parts and bridge seats remain in bearing contact.

Where "(CVN)" follows a shape or plate size designation, the material shall meet specified minimum notch toughness requirements. The fabricator shall submit to the Director a procedure designed for positive identification of material through all phases of fabrication. No material shall be fabricated until the Director has approved the procedure.

**END CROSSFRAMES, END DAMS, SCUPPERS, CURB PLATES, MOMENT PLATE WELDING AND BOLTED BEAM SPLICE:** See Standard Drawing SD-1-69, Sheets 1 thru 4 of 4.

**PARAPET:** See Standard Drawing BR-1-67, Sheet 1 of 3.

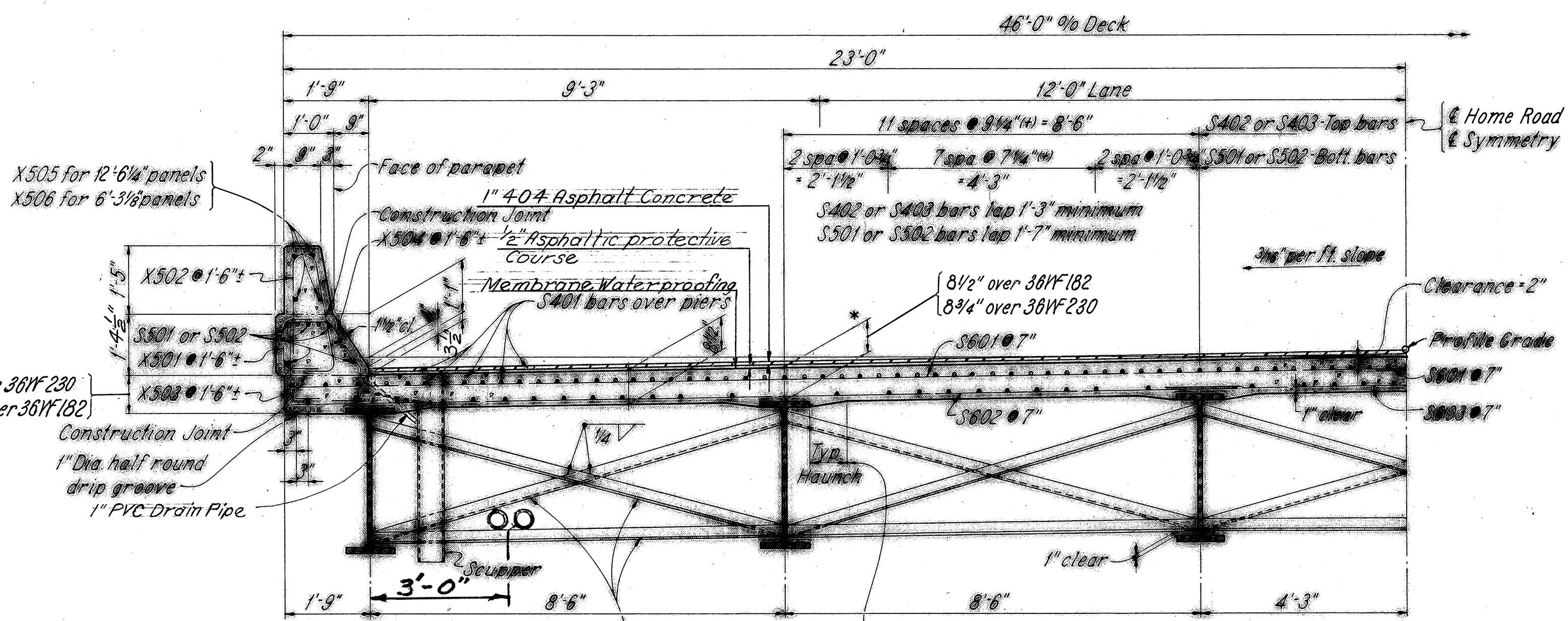
**BEARINGS:** See Standard Drawing RB-1-55 for the following: R-100 for Abutments, R-225 for Pier 1 & 3 and B-225 for Pier 2.

**GENERAL NOTES:** See Sheet 2 / 8

**PREFORMED EXPANSION JOINT FILLER:** See Standard Drawing BR-1-67, Sheet 1 of 3.

For Subdrainage Details, Scuppers box dimensions and vertical location of Scuppers with respect to the top of asphalt, see sheet 506A, Deck Drainage Details.

SUBDRAINAGE PIPE locations are indicated. See sheet 506A for additional location restrictions.

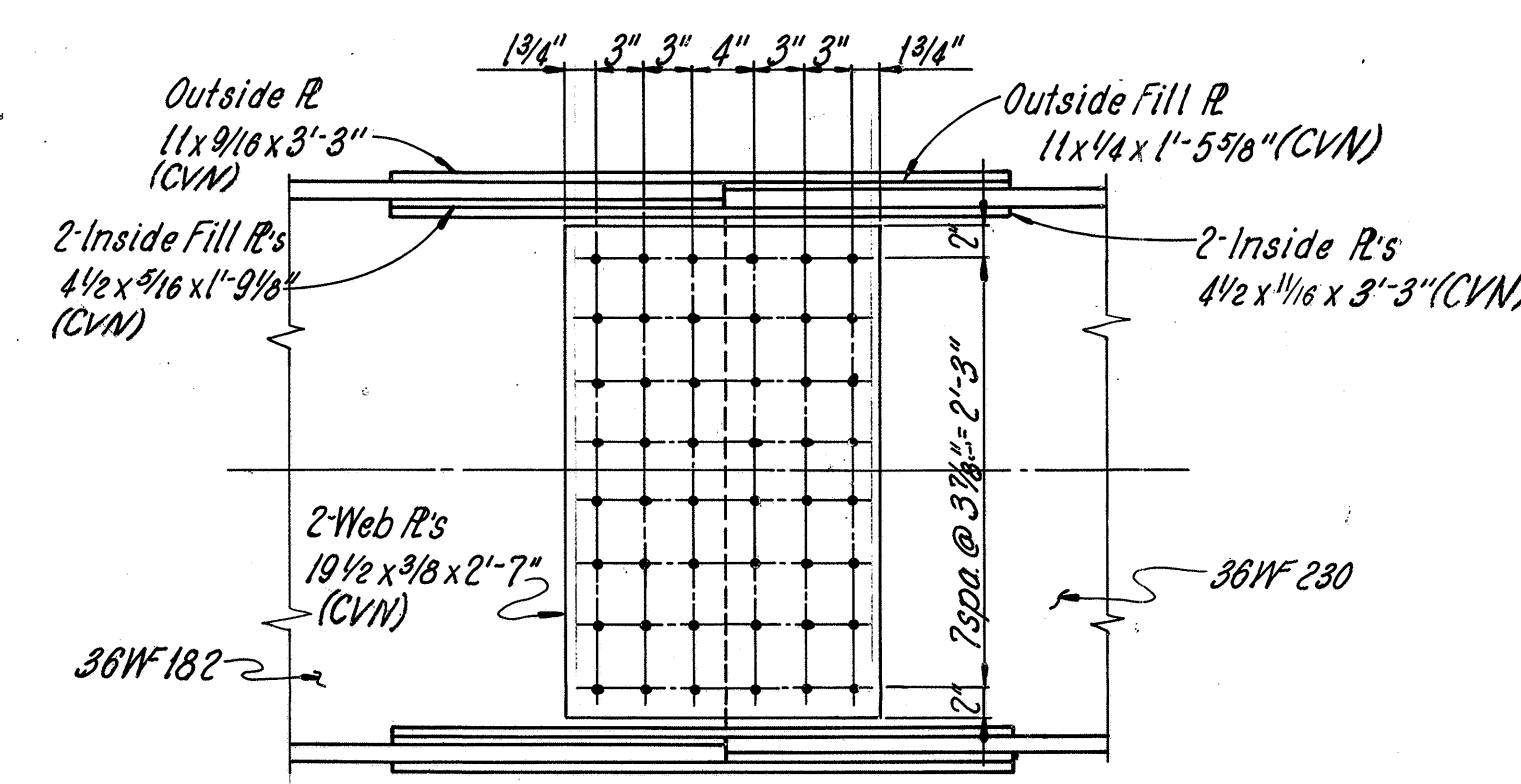
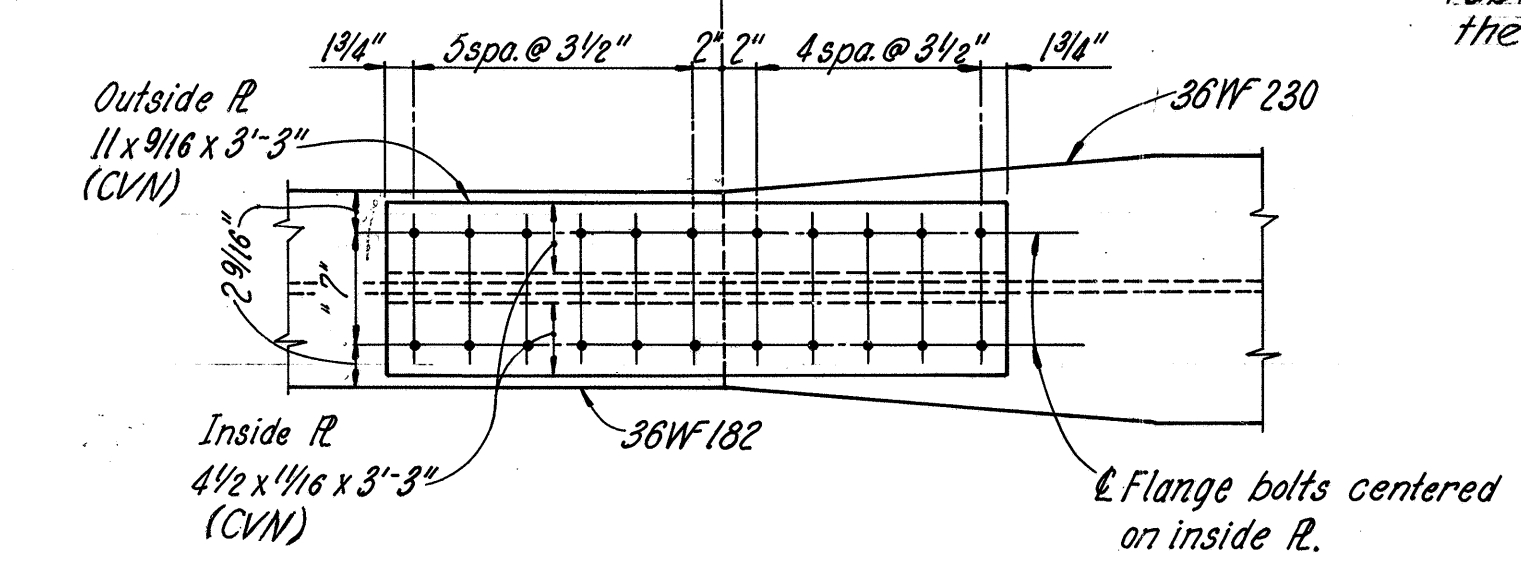


Intermediate crossframe angles 3x3x1/4. Weld both sides of vertical leg and top side of horizontal leg to beam with 1/4" continuous fillet weld.

A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

\* The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

HALF TRANSVERSE SECTION



BOLTED BEAM SPLICE "A" AND "C"

Notes: For additional details, notes and for Bolted Beam Splice "B", see Standard Drawings SD-1-69, Sheet 4 of 4. Scuppers shall be in accordance with Standard Drawing SD-1-69 except that scupper pipes shall extend 8" below the bottom of the beams instead of 2".

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MANSFIELD OHIO

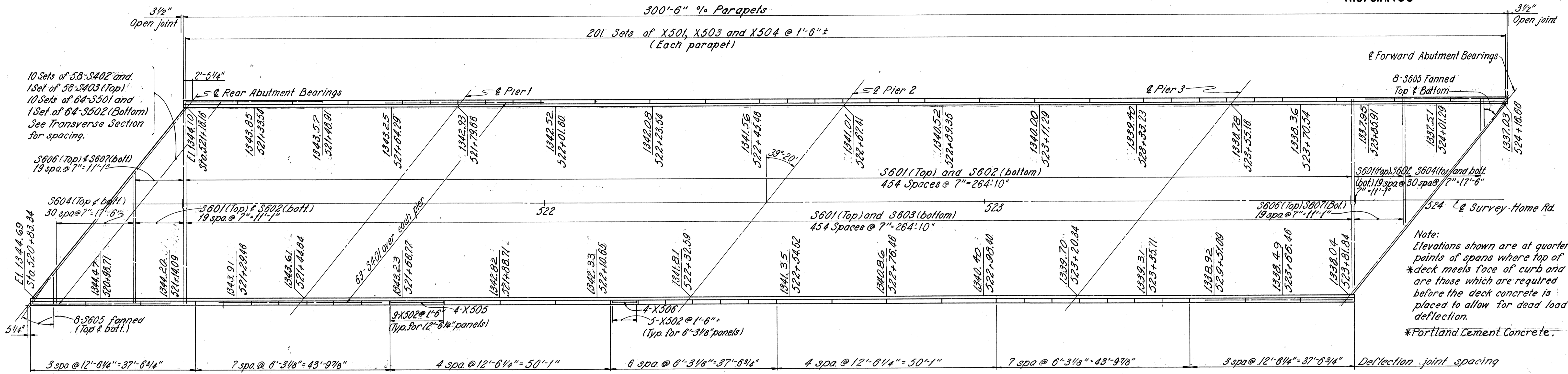
**SUPERSTRUCTURE-1**  
BRIDGE NO. RIC-30-0880  
UNDER HOME ROAD  
RICHLAND COUNTY U.S.R. 30

STA. 464 + 41.56

|          |        |       |        |        |      |         |        |          |        |      |         |         |         |
|----------|--------|-------|--------|--------|------|---------|--------|----------|--------|------|---------|---------|---------|
| DESIGNED | D.H.T. | DRAWN | H.A.V. | TRACED | H.V. | CHECKED | G.S.B. | REVIEWED | D.H.T. | DATE | 4/14/71 | REVISED | 9-20-76 |
|----------|--------|-------|--------|--------|------|---------|--------|----------|--------|------|---------|---------|---------|

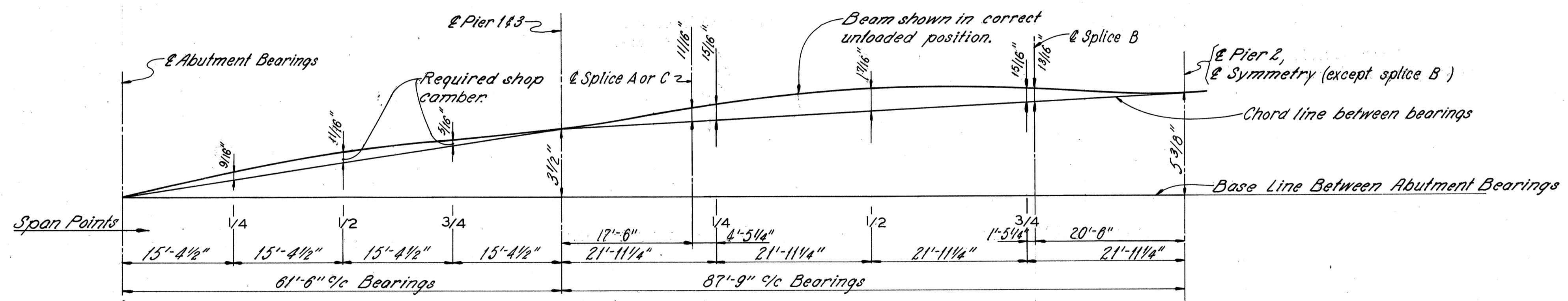
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RIC-30-3.92  
RIC. C.H. 135



SLAB PLAN

Note:  
Elevations shown are at quarter points of spans where top of deck meets face of curb and are those which are required before the deck concrete is placed to allow for dead load deflection.  
\*Portland Cement Concrete.

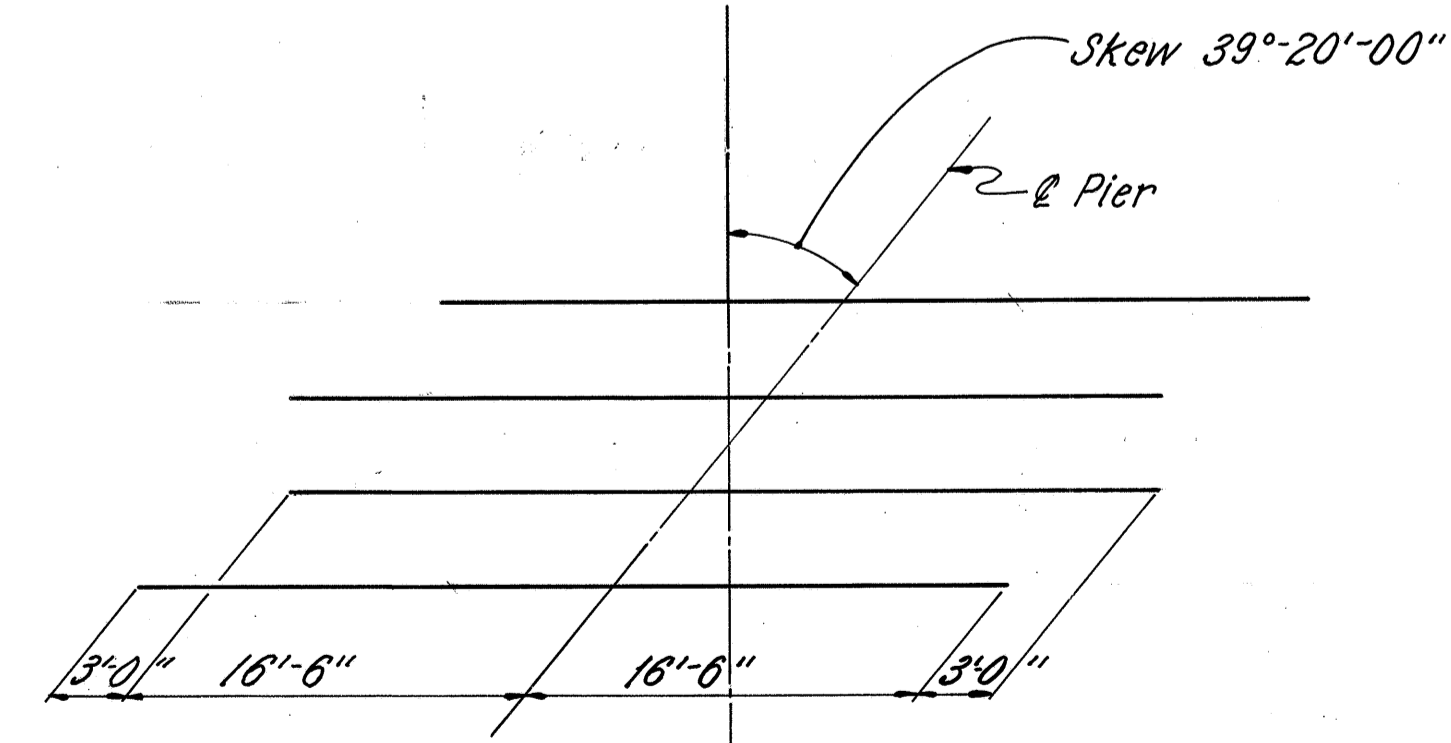


HALF BEAM LAYOUT DIAGRAM

CAMBERING of beams is required in accordance with the following table:

|  | DEFLECTION AND CAMBER - ALL BEAMS |       |       |               |             |         |        |          |
|--|-----------------------------------|-------|-------|---------------|-------------|---------|--------|----------|
|  | SPAN 1 OR 4                       |       |       |               | SPAN 2 OR 3 |         |        |          |
| SPAN POINTS                            | 1/4                               | 1/2   | 3/4   | SPLICE A OR C | 1/4         | 1/2     | 3/4    | SPLICE B |
| Deflection due to weight of steel      | 1/16"                             | 1/16" | 0     | 1/16"         | 1/16"       | 1/8"    | 1/16"  | 1/16"    |
| Deflection due to remaining dead load  | 5/16"                             | 3/8"  | 1/8"  | 3/8"          | 1/2"        | 7/8"    | 1/2"   | 7/16"    |
| Adjustment required for vertical curve | 3/16"                             | 1/4"  | 3/16" | 1/4"          | 3/8"        | 7/16"   | 3/8"   | 5/16"    |
| Required shop camber                   | 3/16"                             | 1/16" | 3/16" | 1/16"         | 13/16"      | 1 1/16" | 13/16" | 13/16"   |

Note: Deflection and Camber symmetrical about @ Pier 2 except bolted field splice "B"

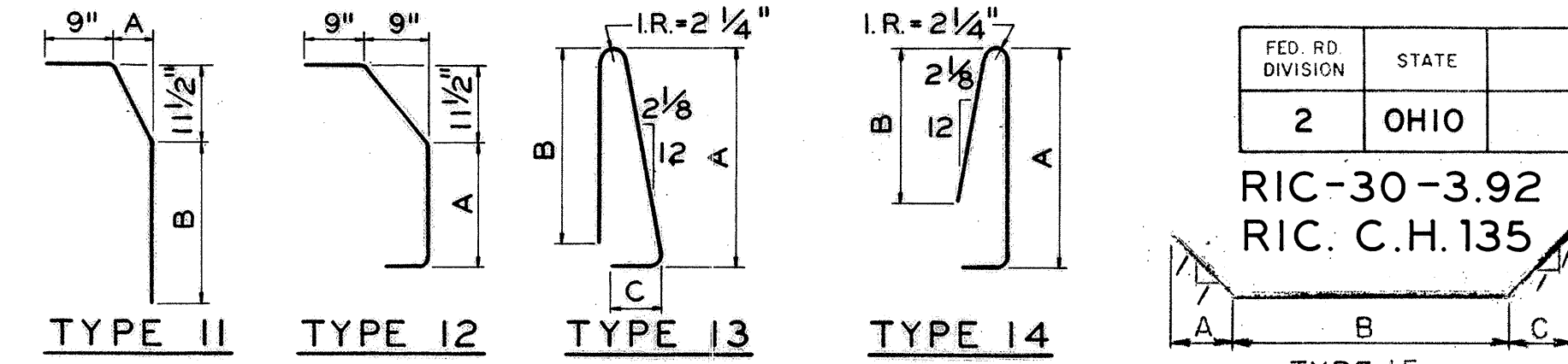
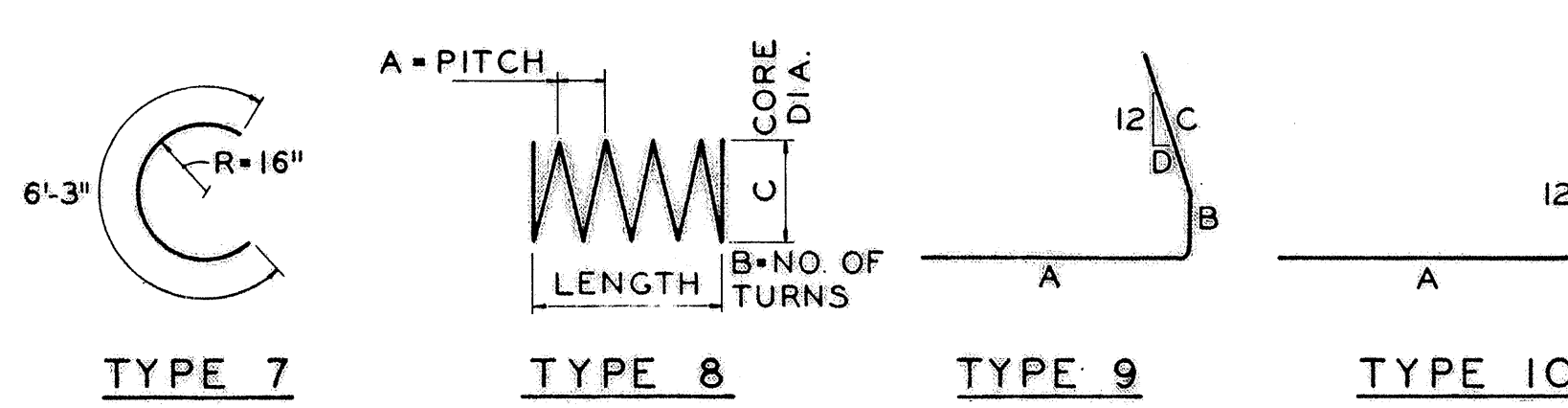
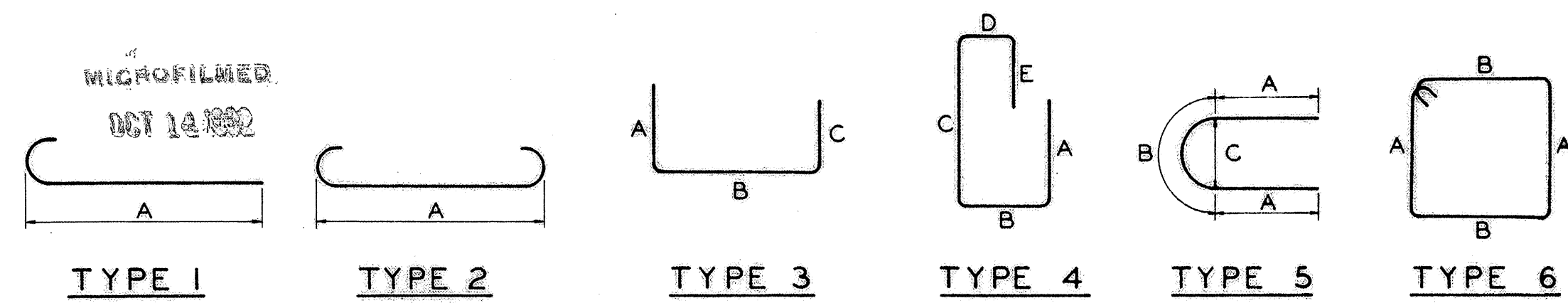


STAGGER OF S401 BARS OVER PIERS

|                         |          |           |
|-------------------------|----------|-----------|
| PARRETT & McCARTNEY     |          | 819       |
| CONSULTING ENGINEERS    |          | OHIO      |
| <b>SUPERSTRUCTURE-2</b> |          |           |
| BRIDGE NO. RIC-30-0880  |          |           |
| UNDER HOME ROAD         |          |           |
| RICHLAND COUNTY         |          | U.S.R. 30 |
| STA. 464 + 41.56        |          |           |
| DESIGNED                | DRAWN    | TRACED    |
| D.H.T.                  | H.A.V.   | H.A.V.    |
| CHECKED                 | REVIEWED | DATE      |
| G.S.B.                  | D.H.T.   | 4/14/71   |

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|-------------------|-------|---------|
| FED. RD. DIVISION | STATE | PROJECT |
| 2                 | OHIO  |         |

497  
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RIC-30-3.92  
RIC. C.H.135

ABUTMENTS

| MARK | NO. | LENGTH  | TYPE | A                | B      | C          | D              | E | WEIGHT |
|------|-----|---------|------|------------------|--------|------------|----------------|---|--------|
| A501 | 80  | 8'-5"   | 3    | 1'-8"            | 3'-4"  | 1'-8"      |                |   | 702    |
| A502 | 64  | 7'-4"   | 3    | 6'-8"            | 10"    | 0          |                |   | 490    |
| A503 | 80  | 7'-6"   | 3    | 2'-2"            | 3'-5"  | 2'-2"      |                |   | 626    |
| A504 | 60  | 30'-0"  | Str. |                  |        |            |                |   | 1,877  |
| A505 | 4   | 35'-0"  | Str. |                  |        |            |                |   | 146    |
| A506 | 4   | 12'-6"  | Str. |                  |        |            |                |   | 52     |
| A507 | 16  | 7'-0"   | 3    | 6'-3"            | 10"    | 0          |                |   | 117    |
| A508 | 43  | 10'-11" | 6    | 2'-2"            | 3'-0"  |            |                |   | 490    |
| A509 | 2   | 9'-9"   | Str. |                  |        |            |                |   | 20     |
| A510 | 6   | 6'-8"   | Str. |                  |        |            |                |   | 41     |
| A511 | 6   | 10'-4"  | Str. |                  |        |            |                |   | 65     |
| A512 | 12  | 8'-9"   | Str. |                  |        |            |                |   | 110    |
| A513 | 6   | 10'-8"  | Str. |                  |        |            |                |   | 67     |
| A514 | 25  | 5'-3"   | Str. |                  |        |            |                |   | 137    |
| A515 | 2   | 9'-0"   | Str. |                  |        |            |                |   | 19     |
| A601 | 64  | 14'-3"  | 3    | 6'-8"            | 5'-4"  | 2'-7"      |                |   | 1,370  |
| A602 | 154 | 9'-2"   | 3    | 4'-0"            | 1'-5"  | 4'-0"      |                |   | 2,120  |
| A603 | 62  | 6'-5"   | 3    | 2'-8"            | 1'-5"  | 2'-8"      |                |   | 598    |
| A604 | 62  | 6'-11"  | 3    | 3'-2"            | 11"    | 3'-2"      |                |   | 644    |
| A605 | 16  | 13'-10" | 3    | 6'-3"            | 5'-4"  | 2'-7"      |                |   | 332    |
| A606 | 2   | 6'-3"   | Str. |                  |        |            |                |   | 19     |
| A607 | 12  | 17'-6"  | 3    | 8'-4"            | 1'-2"  | 8'-4"      |                |   | 315    |
| A608 | 12  | 18'-10" | 3    | 9'-0"            | 1'-2"  | 9'-0"      |                |   | 339    |
| A609 | 3   | 6'-10"  | Str. |                  |        |            |                |   | 31     |
| A610 | 1   | 5'-11"  | Str. |                  |        |            |                |   | 9      |
| A801 | 28  | 31'-10" | Str. |                  |        |            |                |   | 2,380  |
| A802 | 6   | 13'-5"  | Str. |                  |        |            |                |   | 215    |
| A803 | 6   | 11'-6"  | Str. |                  |        |            |                |   | 184    |
| A804 | 6   | 12'-9"  | Str. |                  |        |            |                |   | 204    |
| A805 | 6   | 13'-2"  | Str. |                  |        |            |                |   | 211    |
| Y501 | 45  | 2'-0"   | 3    | 7 1/2"           | 1'-0"  | 7 1/2"     |                |   | 94     |
| Y502 | 40  | 2'-10"  | Str. |                  |        |            |                |   | 118    |
| Y503 | 25  | 6'-6"   | 14   | 3'-1"            | 2'-10" |            |                |   | 169    |
| Y504 | 10  | Varies  | Str. | 1'-10" to 3'-3"  |        | 2sets of 5 | Varies each    |   | 27     |
| Y505 | 10  | Varies  | Str. | 3'-1" to 4'-6"   |        | 2sets of 5 | by 4 1/4"      |   | 40     |
| Y506 | 12  | 13'-4"  | Str. |                  |        |            |                |   | 167    |
| Y507 | 12  | 17'-4"  | Str. |                  |        |            |                |   | 217    |
| Y508 | 8   | 7'-3"   | Str. |                  |        |            |                |   | 60     |
| Y509 | 4   | 7'-8"   | Str. |                  |        |            |                |   | 32     |
| Y510 | 2   | 11'-8"  | Str. |                  |        |            |                |   | 24     |
| Y511 | 5   | Varies  | Str. | 1'-10" to 2'-11" |        | 1set of 5  | Varies each by |   | 12     |
| Y512 | 5   | Varies  | Str. | 3'-1" to 4'-2"   |        | 1set of 5  | 3 1/4"         |   | 19     |
| Y513 | 12  | 12'-8"  | Str. |                  |        |            |                |   | 139    |
| Y514 | 12  | 16'-2"  | Str. |                  |        |            |                |   | 202    |
| Y515 | 6   | 7'-3"   | Str. |                  |        |            |                |   | 45     |
| Y516 | 2   | 10'-6"  | Str. |                  |        |            |                |   | 22     |
| Y517 | 5   | Varies  | Str. | 1'-10" to 3'-1"  |        | 1set of 5  | Varies each    |   | 13     |
| Y518 | 5   | Varies  | Str. | 3'-1" to 4'-4"   |        | 1set of 5  | by 3 3/4"      |   | 19     |
| Y601 | 13  | 6'-8"   | 11   | 9"               | 4'-10" |            |                |   | 130    |
| Y602 | 12  | 6'-4"   | 11   | 9"               | 4'-6"  |            |                |   | 114    |
| D801 | 42  | 6'-7"   | 15   | 1'-1"            | 4'-6"  | 6"         |                |   | 738    |
| Y701 | 4   | 4'-4"   | 1    | 3'-6"            |        |            |                |   | 35     |
| Y702 | 4   | 4'-9"   | 11   | 2 1/4"           | 3'-2"  |            |                |   | 39     |
| Y703 | 4   | 4'-10"  | 11   | 4"               | 3'-2"  |            |                |   | 40     |
| Y704 | 4   | 4'-11"  | 11   | 6"               | 3'-2"  |            |                |   | 40     |
| Y705 | 4   | 5'-0"   | 11   | 9"               | 3'-2"  |            |                |   | 41     |

Total Weight 16,546

PIERS

| MARK  | NO. | LENGTH  | TYPE | A      | B      | C     | D | E | WEIGHT |
|-------|-----|---------|------|--------|--------|-------|---|---|--------|
| SP401 | 4   | 17'-4"  | 8    | 4 1/2" | 44     | 2'-8" |   |   | 1,307  |
| SP402 | 4   | 15'-5"  | 8    | 4 1/2" | 44     | 2'-8" |   |   | 1,170  |
| SP403 | 4   | 14'-2"  | 8    | 4 1/2" | 41     | 2'-8" |   |   | 1,081  |
| P501  | 264 | 8'-9"   | 3    | 3'-2"  | 2'-8"  | 3'-2" |   |   | 2,409  |
| P502  | 192 | 7'-11"  | 3    | 3'-2"  | 1'-10" | 3'-2" |   |   | 1,585  |
| P503  | 12  | 28'-4"  | Str. |        |        |       |   |   | 355    |
| P504  | 12  | 7'-8"   | 5    | 1'-8"  | 4'-2"  | 2'-8" |   |   | 94     |
| P701  | 120 | 10'-8"  | 2    | 9'-0"  |        |       |   |   | 2,616  |
| P801  | 120 | 11'-11" | 2    | 9'-9"  |        |       |   |   | 3,818  |
| P1101 | 120 | 7'-11"  | 3    | 6'-3"  | 2'-0"  | 0     |   |   | 5,047  |
| P1102 | 27  | 36'-0"  | Str. |        |        |       |   |   | 5,164  |
| P1103 | 30  | 17'-0"  | 3    | 14'-4" | 3'-0"  | 0     |   |   | 2,710  |
| P1104 | 10  | 22'-2"  | 3    | 20'-6" | 2'-0"  | 0     |   |   | 1,178  |
| P1105 | 30  | 20'-4"  | Str. |        |        |       |   |   | 3,241  |
| P1106 | 10  | 20'-3"  | 3    | 18'-7" | 2'-0"  | 0     |   |   | 1,076  |
| P1107 | 30  | 18'-5"  | Str. |        |        |       |   |   | 2,935  |
| P1108 | 10  | 19'-0"  | 3    | 17'-4" | 2'-0"  | 0     |   |   | 1,009  |
| P1109 | 78  | 17'-3"  | Str. |        |        |       |   |   | 7,149  |
| P1110 | 24  | 29'-0"  | Str. |        |        |       |   |   | 3,698  |

Total Weight 47,642

SUPERSTRUCTURE

| MARK | NO. | LENGTH  | TYPE | A                    | B        | C                       | D | E | WEIGHT |
|------|-----|---------|------|----------------------|----------|-------------------------|---|---|--------|
| X501 | 402 | 2'-0"   | 3    | 7 1/2"               | 1'-0"    | 7 1/2"                  |   |   | 839    |
| X502 | 452 | 5'-4"   | 13   |                      | 2'-2"    |                         |   |   | 2,514  |
| X503 | 402 | 2'-1"   | 3    | 0                    | 1'-7"    | 7 1/2"                  |   |   | 873    |
| X504 | 402 | 3'-1"   | 12   | 9"                   |          |                         |   |   | 1,293  |
| X505 | 112 | 12'-2"  | Str. |                      |          |                         |   |   | 1,421  |
| X506 | 160 | 5'-11"  | Str. |                      |          |                         |   |   | 987    |
| S401 | 189 | 36'-0"  | Str. |                      |          |                         |   |   | 4,545  |
| S402 | 380 | 30'-0"  | Str. |                      |          |                         |   |   | 11,623 |
| S403 | 58  | 12'-0"  | Str. |                      |          |                         |   |   | 465    |
| S501 | 640 | 30'-0"  | Str. |                      |          |                         |   |   | 20,026 |
| S502 | 64  | 15'-4"  | Str. |                      |          |                         |   |   | 1,024  |
| S601 | 950 | 23'-10" | Str. |                      |          |                         |   |   | 34,008 |
| S602 | 495 | 19'-7"  | Str. |                      |          |                         |   |   | 14,360 |
| S603 | 455 | 28'-0"  | Str. |                      |          |                         |   |   | 19,135 |
| S604 | 124 | Varies  | Str. | 8'-0" to 29'-3"      | 4sets of | 31' vary each by 8 1/2" |   |   | 3,469  |
| S605 | 32  | 7'-3"   | Str. |                      |          |                         |   |   | 348    |
| S606 | 40  | Varies  | Str. | 8'-4" to 21'-9 1/2"  | 2sets of | 20' vary each by 8 1/2" |   |   | 905    |
| S607 | 40  | Varies  | Str. | 12'-6 1/2" to 26'-0" | 2sets of | 20' vary each by 8 1/2" |   |   | 1,158  |

Total Weight 119,193

NOTES:

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap. The "NO. of Turns" shown is the "Length" divided by the pitch, plus three turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformation but shall in other respects conform to Item 509. 1/2 closed coils shall be provided at the ends of each spiral unit. Four steel channels, tee or angle spacers, weighing approximately 0.80 lbs. per lin. ft. of spacers, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.80 lbs. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

Refer to GMS Sections 106.03, 700, 709.01 thru 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structures by the additional steel, spliced in accordance with 509.08.

PARRETT & McCARTNEY  
CONSULTING ENGINEERS  
MANSFIELD, OHIO 9/9

**REINFORCING STEEL**  
BRIDGE NO. RIC-30-0880  
UNDER HOME ROAD  
RICHLAND COUNTY U.S.R. 30

STA. 464 + 41.56

|          |        |        |         |          |         |
|----------|--------|--------|---------|----------|---------|
| DESIGNED | DRAWN  | TRACED | CHECKED | REVIEWED | DATE    |
| G.S.B.   | H.A.V. | H.V.   | D.H.T.  | U.       | 4/14/77 |



**EXISTING STRUCTURE VERIFICATION:**

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATION AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

**ORIGINAL CONSTRUCTION PLANS:**

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OHIO.

**DESIGN SPECIFICATIONS:**

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 INCLUDING THE 2003 AND 2004 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

**DESIGN DATA:**

STRUCTURAL STEEL - ASTM A709, GRADE 36-YIELD STRENGTH 36,000 PSI

CVN IS NOT REQUIRED FOR CROSS FRAME MATERIALS

**UTILITY LINES:**

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

**ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN:**

ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN SUPPLEMENT 1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE, 501.06, TO THE ENGINEER. PROVIDE SHOP DRAWINGS ACCORDING TO 513.04 OR SUPPLY THE ENGINEER WITH "AS-BUILT" DRAWINGS MEETING 513.04 AFTER COMPLETION OF FIELD FABRICATION. THE ENGINEER WILL REVIEW THE SUBMITTED DRAWINGS FOR CONCURRENCE WITH THE FINAL AS-BUILT CONDITION. IF NECESSARY, THE ENGINEER MAY CONTACT THE OFFICE OF STRUCTURAL ENGINEERING FOR TECHNICAL ASSISTANCE. IF THE ENGINEER IS SATISFIED WITH THE "AS-BUILT" DRAWINGS AND THE DELIVERED MATERIALS, SUPPLY A COPY OF THE DRAWINGS, STAMPED AND DATED, ALONG WITH MICROFILM, TO THE STRUCTURAL, WELDING AND METALS SECTION OF THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

COST TO REMOVE EXISTING CROSS FRAME MEMBERS AND ALL NECESSARY GRINDING SHALL BE INCLUDED IN THIS ITEM.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: 3 X 3 X 5/16 ANGLE.

**ITEM 514- FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN:**

THIS ITEM SHALL BE USED TO PAINT THE AFFECTED AREAS ON STRUCTURE RIC-30-0879. THIS STRUCTURE WAS PAINTED IN 1977 AND HAS RED LEAD PAINT ON IT.

THIS ITEM CONSISTS OF FIELD PAINTING DAMAGED STRUCTURAL STEEL AND NEW REPLACEMENT STEEL BY PERFORMING SURFACE PREPARATION AND APPLYING A TWO COAT PAINT SYSTEM TO THE UNCOATED STEEL AND FEATHERED REMOVAL AREAS OF EXISTING COATINGS.

CMS 514.06 THROUGH 514.10 APPLY. REMOVE EXISTING PAINT COATING TO CONTRACT LIMITS OR AS DIRECTED BY THE ENGINEER ACCORDING TO SSPC-SP 15, COMMERCIAL GRADE POWER TOOL CLEANING, OR EQUAL AS SHOWN ON THE PICTORIAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES SHOWN IN SSPC-VIS 3. THE ENGINEER WILL USE THE SSPC-VIS 3 TO DETERMINE THE ACCEPTANCE OF THE COMMERCIAL GRADE POWER TOOL CLEANING. FEATHER THE EXISTING PAINT TO EXPOSE A MINIMUM OF 1/2 INCH OF EACH COAT. CONTAIN AND DISPOSE OF WASTE GENERATED BY THE CLEANING ACCORDING TO CMS 514.13.D.

ROUND ALL EXPOSED CORNERS OF MAIN MATERIAL AS NECESSARY TO ACHIEVE A 1/16 INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A 45 DEGREE ANGLE.

(CONTINUED)

DISTRICT THREE  
OFFICE OF PRODUCTION

|          |      |
|----------|------|
| DATE     | 5/06 |
| REVIEWED | JR   |
| OWNER    | DCM  |
| DESIGNED | DCM  |
| CHECKED  | DJV  |

GENERAL NOTES

MED-71-12.21

2  
B

**ITEM 514- FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (CONTINUED):**

APPLY THE PRIME COAT AND INTERMEDIATE COATS OF THE SPECIFIED THREE-COAT PAINT SYSTEM, CMS 708.02, ACCORDING TO CMS 514.15, 514.16, 514.17 AND 514.20 TO CONTRACT LIMITS OR AS DIRECTED BY THE ENGINEER. TINT THE INTERMEDIATE COAT TO APPROXIMATELY THE SAME COLOR AS THE EXISTING FINISH COLOR. MATCH THE COLOR TO THE ENGINEERS SATISFACTION. THE ENGINEER WILL DETERMINE THE PRIME COAT THICKNESS; PRIME AND INTERMEDIATE COAT THICKNESS USING A TYPE 2 MAGNETIC GAGE AT SPOT LOCATIONS. EACH COAT OF PAINT SHALL MEET THE MINIMUM DRY FILM THICKNESS REQUIREMENTS OF CMS 514.20. APPLY PAINT AS FOLLOWS:

A. APPLY THE PRIME COAT ONLY TO THE SURFACE OF THE BARE STEEL AND THE EXISTING PRIME COAT EXPOSED BY FEATHERING. DO NOT APPLY THE PRIME COAT TO THE ADJACENT INTERMEDIATE COAT.

B. APPLY THE INTERMEDIATE COAT ONLY TO THE NEW PRIME COAT AND THE EXISTING INTERMEDIATE COAT EXPOSED BY FEATHERING. DO NOT APPLY THE INTERMEDIATE COAT TO THE ADJACENT FINISH COAT.

AT THE PERIMETER OF THE REPAIR AREA, APPLY THE PRIME AND INTERMEDIATE COATS USING A BRUSH. APPLY THE FINISH COAT USING EITHER BRUSH OR SPRAY. IN LIEU OF BRUSHING THE USE OF MASKING AREAS NOT TO BE COATED AND SPRAY TO FEATHER REMOVAL LINES MAY BE PERFORMED.

BLEND REPAIR AREAS WITH THE ADJACENT COATING AND PROVIDE A FINISHED SURFACE IN THE PATCHED AREAS THAT IS SMOOTH AND HAS AN EVEN PROFILE WITH THE ADJACENT SURFACE.

THE DEPARTMENT WILL MEASURE FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN BY THE NUMBER OF SQUARE FEET OF STRUCTURAL STEEL PAINTED. ALL REQUIREMENTS OF THIS SPECIFICATION ARE CONSIDERED INCIDENTAL TO THE WORK. THE DEPARTMENT WILL DETERMINE THE SURFACE AREA BY TAKING EXACT FIELD MEASUREMENTS OF ALL PAINTED SURFACES AND CALCULATIONS.

DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR:

| ITEM | UNIT        | DESCRIPTION   |
|------|-------------|---|
| 514  | SQUARE FEET | FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN |

**ITEM SPECIAL- HEAT STRAIGHTENING OF DAMAGED STRUCTURAL STEEL:**

THIS ITEM SHALL BE IN ACCORDANCE WITH THE PROPOSAL NOTE FOR HEAT STRAIGHTENING OF DAMAGED STRUCTURAL STEEL.

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

**ITEM 614 - MAINTAINING TRAFFIC:**

TRAFFIC SHALL BE MAINTAINED AS INDICATED IN THE PLANS AND AS OUTLINED IN THE " OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION WITH LATEST REVISIONS AT THE TIME THE CONTRACT IS AWARDED. THE PLANS SHALL CONSTITUTE THE MINIMUM PROVISIONS FOR TRAFFIC CONTROL DEVICES, TO MEET FIELD CONDITIONS. THE CONTRACTOR SHALL ALSO PROVIDE ADDITIONAL TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AREA AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE STATE.

**STRUCTURE MED-71-1221**

THE CONTRACTOR MAY CLOSE ONE LANE UNDER THE STRUCTURE AS PER STANDARD DRAWINGS MT-95.30, BETWEEN 8:00 P.M. SUNDAYS AND 11:00 A.M. FRIDAYS FROM JANUARY 7, 2007 TO FEBRUARY 23, 2007. NO LANE CLOSURES WILL BE ALLOWED AT ANY OTHER TIME .

THERE SHALL BE NO LANE CLOSURES UNLESS WORK IS CURRENTLY BEING DONE THAT WARRANTS SUCH A CLOSURE ON MED-71-1221.

THE FEBRUARY 23, 2007 DATE SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND FEBRUARY 23, 2007 THAT THE ROADWAY HAS A LANE CLOSURE TO TRAFFIC, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES, AS PER SECTION 108.07 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LUMP SUM FOR ITEM 614- MAINTAINING TRAFFIC WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

**STRUCTURE RIC 30-0879**

THE CONTRACTOR MAY CLOSE ONE LANE UNDER THE STRUCTURE AS PER STANDARD DRAWINGS MT-95.30.

THERE SHALL BE NO LANE CLOSURES UNLESS WORK IS CURRENTLY BEING DONE THAT WARRANTS SUCH A CLOSURE ON RIC-30-0879.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LUMP SUM FOR ITEM 614- MAINTAINING TRAFFIC WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

**HOLIDAY NOTE FOR STRUCTURE RIC-30-0879:**

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

|              |              |
|--------------|--------------|
| CHRISTMAS    | NEW YEARS    |
| MEMORIAL DAY | THANKSGIVING |

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

| DAY OF THE WEEK | TIME ALL LANES MUST BE OPEN TO TRAFFIC |
|-----------------|--|
| SUNDAY          | 12:00N FRIDAY THROUGH 12:00N MONDAY    |
| MONDAY          | 12:00N FRIDAY THROUGH 12:00N TUESDAY   |
| TUESDAY         | 12:00N MONDAY THROUGH 12:00N WEDNESDAY |
| WEDNESDAY       | 12:00N TUESDAY THROUGH 12:00N THURSDAY |
| THURSDAY        | 12:00N WEDNESDAY THROUGH 12:00N MONDAY |
| FRIDAY          | 12:00N THURSDAY THROUGH 12:00N MONDAY  |
| SATURDAY        | 12:00N FRIDAY THROUGH 12:00N MONDAY    |

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE,

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07.

DISTRICT THREE  
OFFICE OF PRODUCTION

DATE 5/06

REVIEWED BAD

DCM

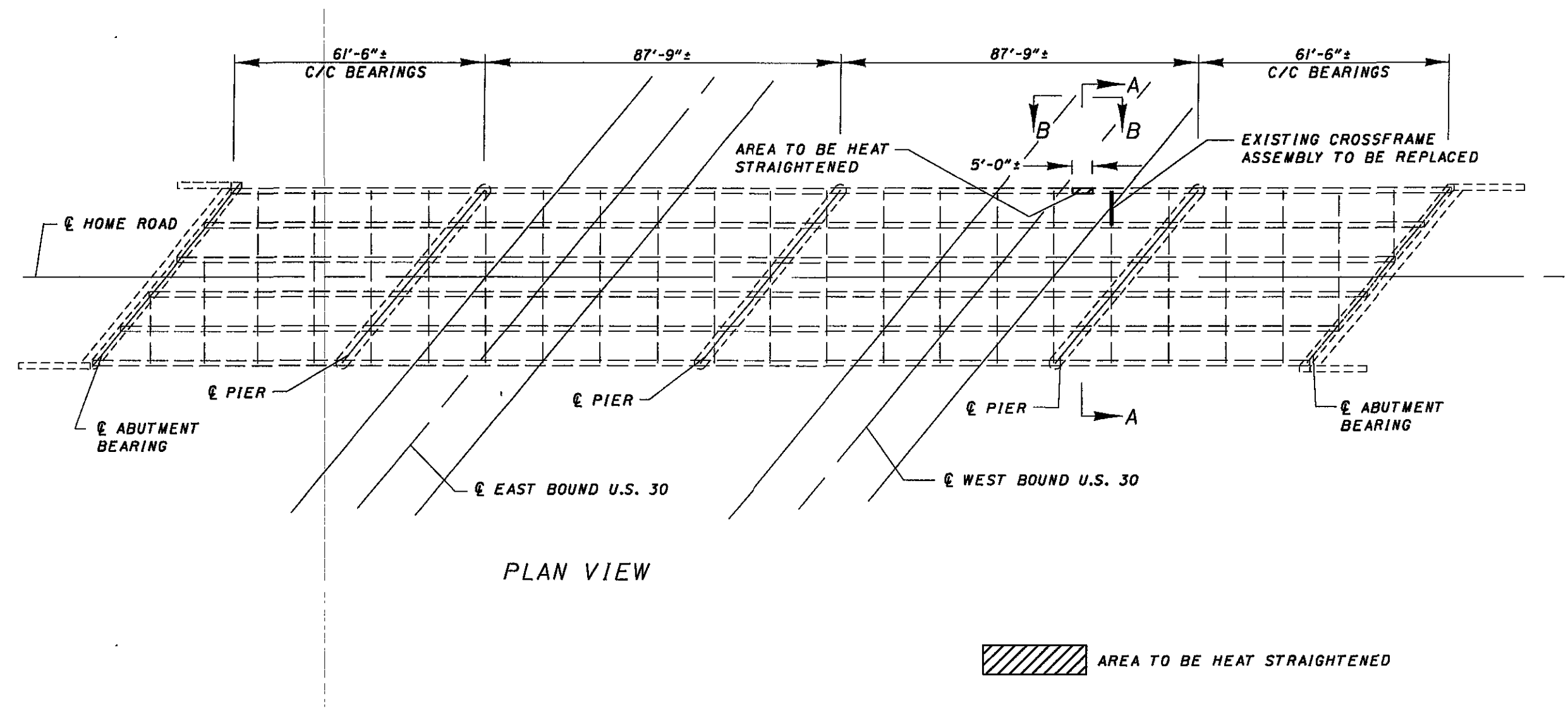
DCM  
CHECKER  
DJV

GENERAL NOTES

MED-71-12.21

DESIGN FILE: I:\projects\8119\Struct\notes.dgn  
WORKSTATION: dmj/lens DATE: 5/18/2006





PLAN VIEW

AREA TO BE HEAT STRAIGHTENED

**PROPOSED WORK:**

- 1) REMOVE EXISTING CROSS FRAME ASSEMBLY THAT IS TO BE REPLACED, COST INCLUDED IN ITEM 513.
- 2) GRIND ALL NICKS, BURRS, GOUGES, SCRAPS, ETC. SMOOTH AND TAPER TO THE ORIGINAL SURFACE USING A 1:10 SLOPE, PROVIDE A SURFACE FINISH ACCORDING TO ANSI B46.1 OF 250 MIL. COST INCLUDED IN ITEM SPECIAL.
- 3) HEAT STRAIGHTEN BEAM PER ITEM SPECIAL.
- 4) CHECK FOR CRACKS IN THE FLANGE EDGES AS PER THE HEAT STRAIGHTENING PROPOSAL NOTE, COST INCLUDED IN ITEM SPECIAL.
- 5) INSTALL NEW CROSS FRAME ASSEMBLY PER ITEM 513.
- 6) PAINT REPAIR AREAS PER ITEM 514.
- 7) FOR SECTION VIEWS A-A AND B-B, SEE SHEET 8.

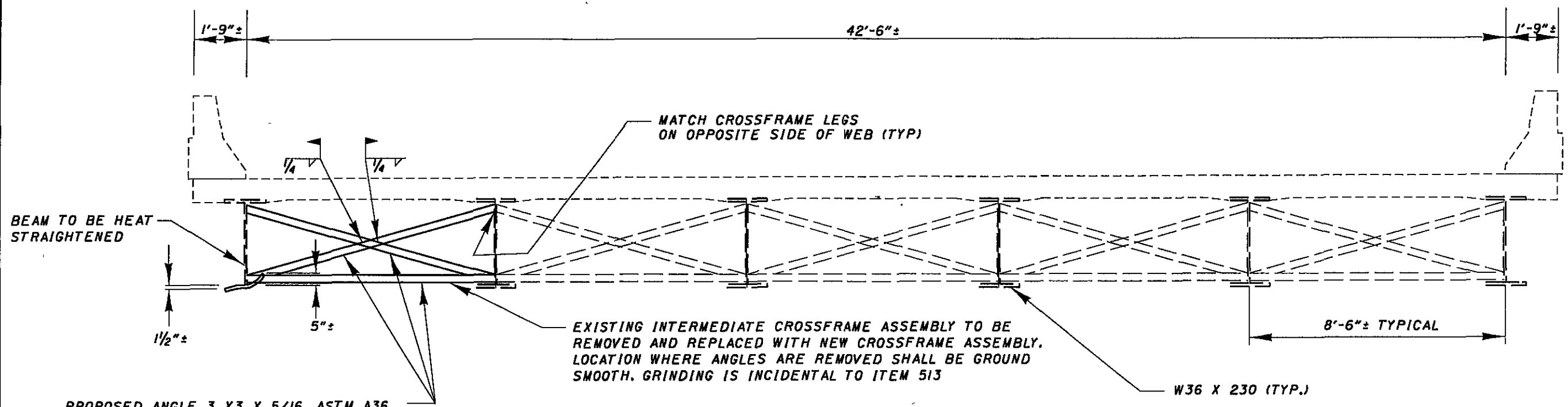
| ITEM    | QUANTITY | UNIT  | DESCRIPTION   |
|---------|----------|-------|---|
| 513     | 159      | POUND | STRUCTURAL STEEL MEMBERS, LEVEL UP, AS PER PLAN         |
| SPECIAL | LUMP     |       | HEAT STRAIGHTENING OF DAMAGED STRUCTURAL STEEL          |
| 514     | 165      | 50 FT | FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN |
|         |          |       |   |
|         |          |       |   |
|         |          |       |   |

QUANTITIES CARRIED TO GENERAL SUMMARY

DESIGN FILE: I:\projects\81119\Struct\details.dgn  
 WORKSTATION: dmollens DATE: 5/18/2006

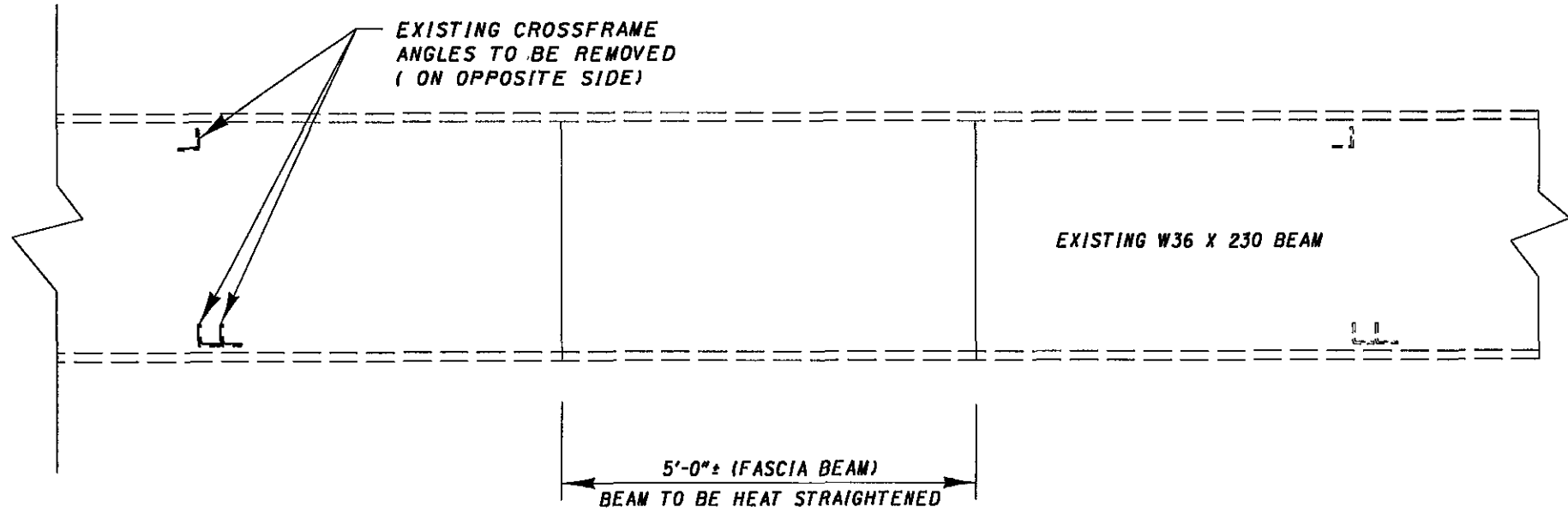
|  |   |   |
|--|---|---|
| DESIGN AGENCY<br><b>DISTRICT THREE</b><br>OFFICE OF PRODUCTION   |   |   |
| DATE<br>5/06<br>RDN<br>STRUCTURE FILE NUMBER<br>7001053  |   |   |
| DRAWN<br>DCU<br>CHECKED<br>DCU   |   |   |
| DESIGNED<br>DCU<br>CHECKED<br>DJV  |   |   |
| PLAN VIEW<br>RIC-30-0879 UNDER HOME ROAD   |   |   |
| MED-71-12.21   |   |   |
| <table border="1" style="width: 30px; height: 30px; margin: auto;"> <tr> <td style="text-align: center;">7</td> </tr> <tr> <td style="text-align: center;">8</td> </tr> </table> | 7 | 8 |
| 7  |   |   |
| 8  |   |   |





PROPOSED ANGLE 3 X 3 X 5/16. ASTM A36. WELD BOTH SIDES OF VERTICAL LEGS AND TOP SIDE OF HORIZONTAL LEG WITH 1/4" CONTINUOUS FILLET WELD. DO NOT WELD AROUND CORNERS.

SECTION A-A



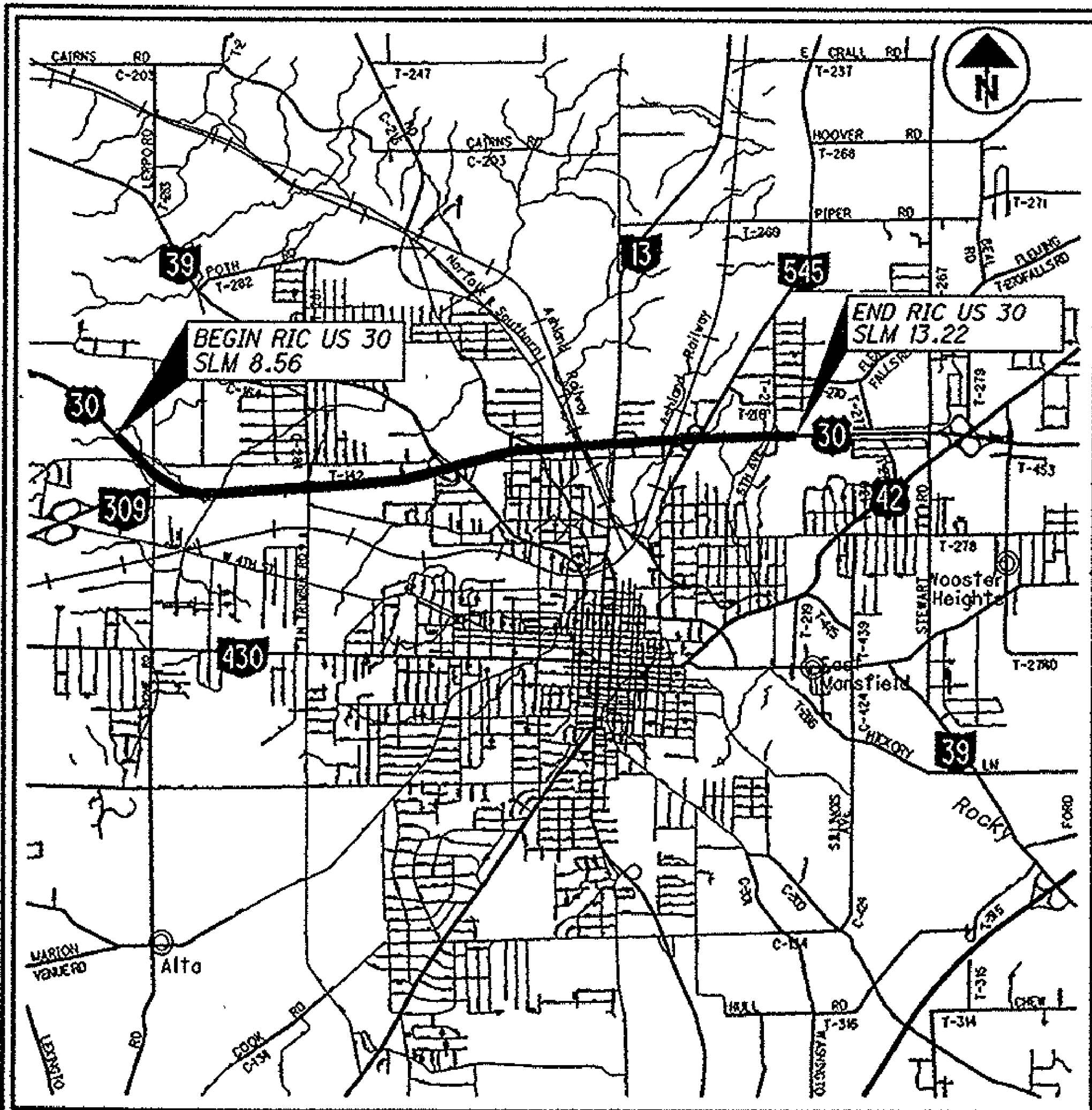
SECTION B-B

DESIGN FILE: i:\projects\8119\Struct\details.dgn  
 WORKSTATION: dmo//lens DATE: 5/18/2006

|   |                                  |
|---|----------------------------------|
| DESIGN AGENCY<br>DISTRICT THREE<br>OFFICE OF PRODUCTION |                                  |
| DATE<br>5/06  | STRUCTURE FILE NUMBER<br>7001053 |
| REVIEWED<br>RDN   | DRAWN<br>DCM                     |
| CHECKED<br>DCM  | DESIGNED<br>DCM                  |
| APPROVED<br>DJV   | REVISIONS<br>DJV                 |

SECTION VIEWS  
 RIC-30-0879 UNDER HOME ROAD  
 MED-71-12.21

Dist 3 1/28/2010  
 100038 PID - 23815  
 RIC - US-30-8.56



LOCATION MAP

LATITUDE: 40 °46'36" LONGITUDE: 82 °31'54"



PORTION TO BE IMPROVED \_\_\_\_\_  
 INTERSTATE & DIVIDED HIGHWAY \_\_\_\_\_  
 UNDIVIDED STATE & FEDERAL ROUTES \_\_\_\_\_  
 OTHER ROADS \_\_\_\_\_

STATE OF OHIO,  
 DEPARTMENT OF TRANSPORTATION

**RIC-30-8.56**

**CITY OF MANSFIELD  
 CITY OF ONTARIO  
 SPRINGFIELD TOWNSHIP  
 MADISON TOWNSHIP  
 RICHLAND COUNTY**

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PROJECT DESCRIPTION

RESURFACING, INCLUDING PAVEMENT PLANING, PAVEMENT REPAIRS, CONCRETE BARRIER FOR ROCK FALL AREA, GUARDRAIL REPAIR, TRAFFIC CONTROL ITEMS, AND STRUCTURE MAINTENANCE.

PROJECT EARTH DISTURBED AREA: N/A  
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A  
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2008 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED IN THIS PLAN, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED *John Hart*  
 DATE 10/29/09 DISTRICT DEPUTY DIRECTOR

APPROVED *John M. Maltonis*  
 DATE 11-12-09 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.  
**E033(753)**

PID NO.  
**23815**

CONSTRUCTION PROJECT NO.

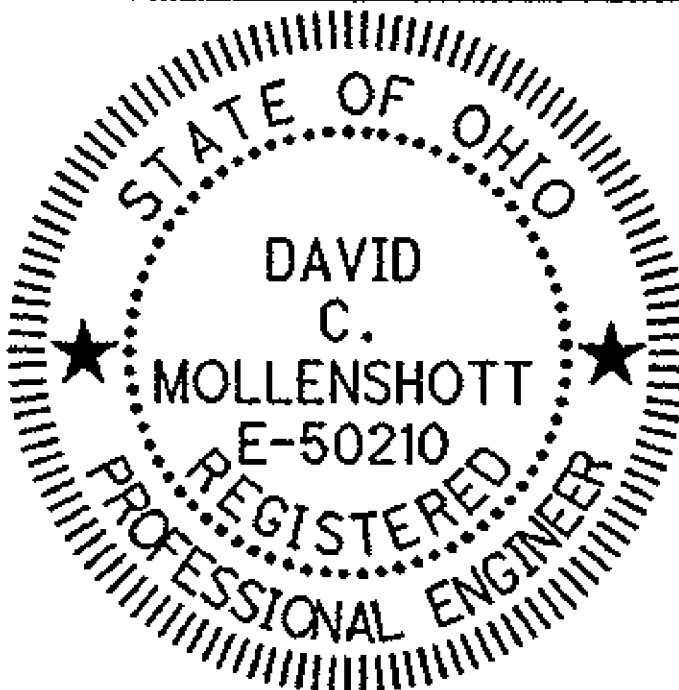
RAILROAD INVOLVEMENT  
**ASHLAND RAILWAY**

**RIC-30-8.56**

1  
 78

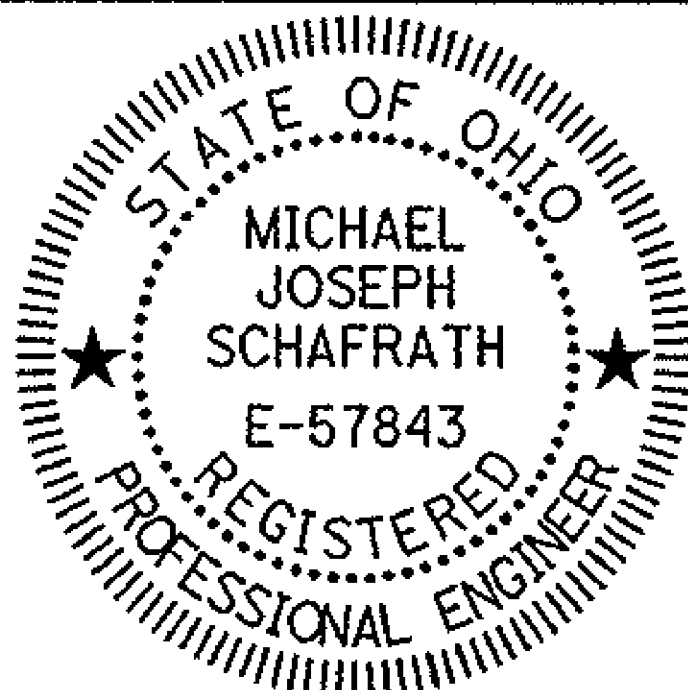
DESIGN FILE: I:\projects\23815\roadway\sheets\23815GTO01.dgn  
 WORKSTATION: mschafra DATE: 10/29/2009

STRUCTURAL ENGINEERS SEAL:



SIGNED: *David C. Mollenhott*  
 DATE: 10/29/09

ROADWAY ENGINEERS SEAL:



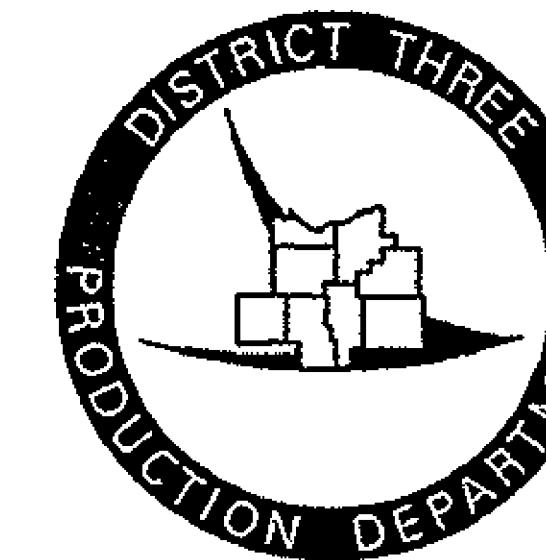
SIGNED: *Michael J. Schafra*  
 DATE: 10/29/09

STANDARD CONSTRUCTION DRAWINGS

| STANDARD CONSTRUCTION DRAWINGS |          |          |          |           |         |          |          | SUPPLEMENTAL SPECIFICATIONS |          |
|--------------------------------|----------|----------|----------|-----------|---------|----------|----------|-----------------------------|----------|
| BP-2.5                         | 7/18/08  | RM-4.2   | 10/19/07 | MT-97.12  | 4/17/09 | TC-52.10 | 1/19/07  | SS800                       | 10/16/09 |
| BP-3.1                         | 10/19/07 | RM-4.5   | 10/16/09 | MT-98.10  | 7/17/09 | TC-52.20 | 1/19/07  | SS832                       | 5/5/09   |
| BP-5.1                         | 7/28/00  | RM-4.6   | 10/16/09 | MT-98.11  | 7/17/09 | TC-61.30 | 4/17/09  | SS847                       | 10/16/09 |
| BP-9.1                         | 4/15/05  |          |          | MT-98.20  | 7/17/09 | TC-65.10 | 1/21/05  |                             |          |
|                                |          | GSD-1-96 | 7/19/02  | MT-98.22  | 7/17/09 | TC-65.11 | 1/21/05  |                             |          |
| DM-4.3                         | 4/17/09  | PCB-91   | 7/19/02  | MT-98.28  | 7/17/09 | TC-71.10 | 1/16/09  |                             |          |
| DM-4.4                         | 4/17/09  | RB-1-55  | 2/2/59   | MT-98.29  | 7/17/09 | TC-72.20 | 10/16/09 |                             |          |
|                                |          | FB-1-82  | 5/10/82  | MT-98.20  | 1/16/09 | TC-73.10 | 1/19/01  |                             |          |
| GR-1.1                         | 7/16/04  |          |          | MT-101.60 | 4/17/09 | TC-82.10 | 10/16/09 |                             |          |
| GR-2.1                         | 1/16/04  | MT-35.10 | 4/20/01  | MT-101.70 | 1/16/09 |          |          |                             |          |
| GR-3.1                         | 10/16/09 | MT-95.30 | 7/17/09  | MT-101.90 | 1/16/09 |          |          |                             |          |
| GR-3.2                         | 10/16/09 | MT-95.50 | 4/17/09  | MT-105.10 | 1/16/09 |          |          |                             |          |
| GR-3.4                         | 10/16/09 | MT-96.11 | 1/16/09  |           |         |          |          |                             |          |
| GR-4.2                         | 1/19/07  | MT-96.20 | 1/16/09  | TC-41.20  | 1/19/01 |          |          |                             |          |
| GR-5.1                         | 4/18/03  | MT-96.26 | 1/16/09  | TC-42.10  | 1/19/07 |          |          |                             |          |
| GR-6.1                         | 4/18/03  | MT-97.10 | 4/17/09  | TC-42.20  | 7/16/04 |          |          |                             |          |

SPECIAL PROVISIONS

PLAN PREPARED BY:



**UNDERGROUND UTILITIES**  
 CONTACT BOTH SERVICES  
 CALL TWO WORKING DAYS  
 BEFORE YOU DIG

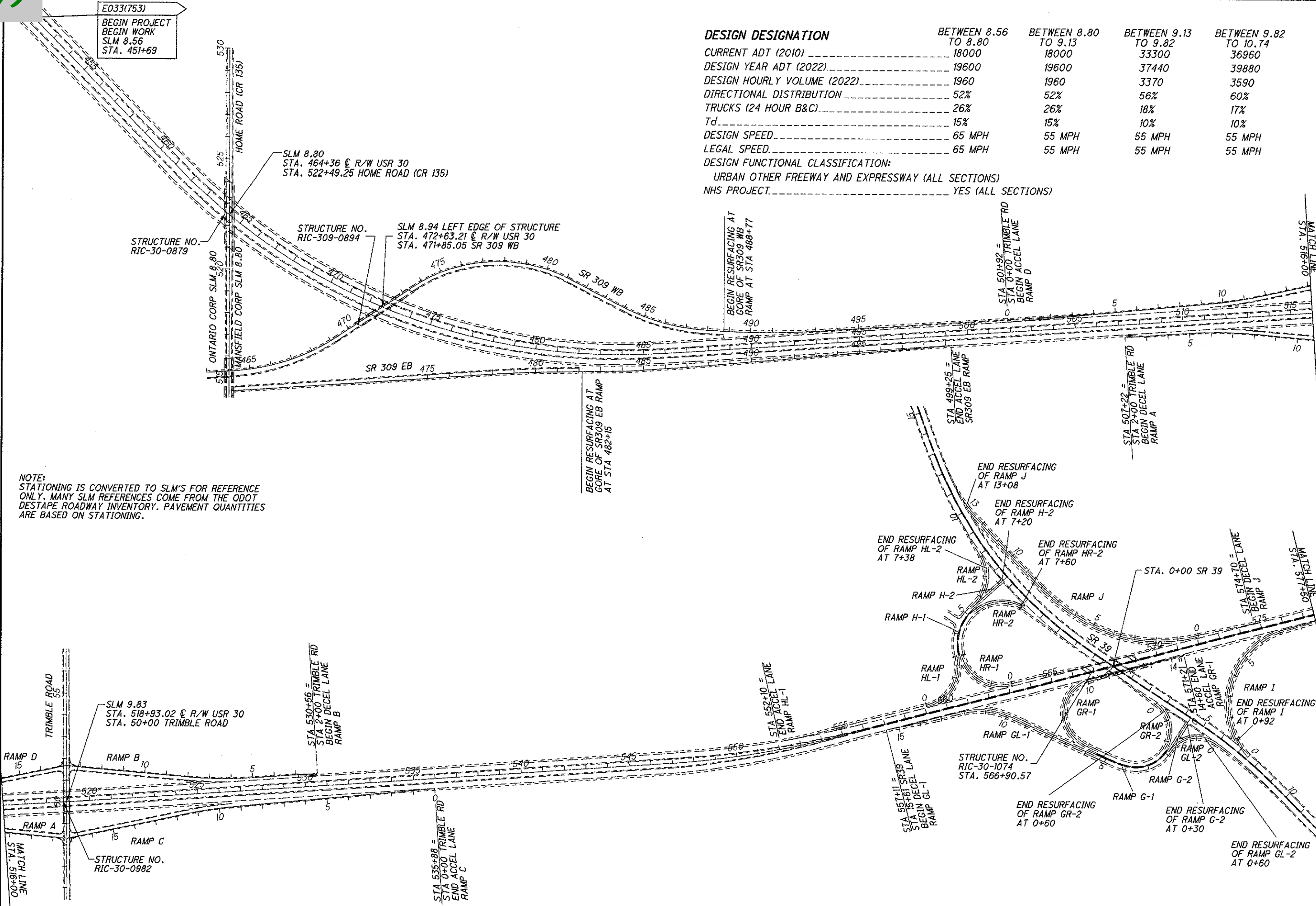
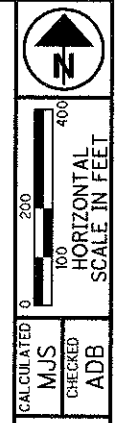
CALL 1-800-362-2764 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE  
 NON-MEMBERS  
 MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

E033(753)  
 BEGIN PROJECT  
 BEGIN WORK  
 SLM 8.56  
 STA. 451+69

| DESIGN DESIGNATION                | BETWEEN 8.56 TO 8.80                              | BETWEEN 8.80 TO 9.13 | BETWEEN 9.13 TO 9.82 | BETWEEN 9.82 TO 10.74 |
|-----------------------------------|---|----------------------|----------------------|-----------------------|
| CURRENT ADT (2010)                | 18000   | 18000                | 33300                | 36960                 |
| DESIGN YEAR ADT (2022)            | 19600   | 19600                | 37440                | 39880                 |
| DESIGN HOURLY VOLUME (2022)       | 1960  | 1960                 | 3370                 | 3590                  |
| DIRECTIONAL DISTRIBUTION          | 52%   | 52%                  | 56%                  | 60%                   |
| TRUCKS (24 HOUR B&C)              | 26%   | 26%                  | 18%                  | 17%                   |
| Td                                | 15%   | 15%                  | 10%                  | 10%                   |
| DESIGN SPEED                      | 65 MPH  | 55 MPH               | 55 MPH               | 55 MPH                |
| LEGAL SPEED                       | 65 MPH  | 55 MPH               | 55 MPH               | 55 MPH                |
| DESIGN FUNCTIONAL CLASSIFICATION: | URBAN OTHER FREEWAY AND EXPRESSWAY (ALL SECTIONS) |                      |                      |                       |
| NHS PROJECT                       | YES (ALL SECTIONS)                                |                      |                      |                       |



NOTE:  
 STATIONING IS CONVERTED TO SLM'S FOR REFERENCE ONLY. MANY SLM REFERENCES COME FROM THE ODOT DESTAPE ROADWAY INVENTORY. PAVEMENT QUANTITIES ARE BASED ON STATIONING.

DESIGN FILE: I:\projects\roadway\sheets\23815GB001.dgn  
 WORKSTATION: mschofra  
 DATE: 10/30/2009

SCHEMATIC / DESIGN DESIGNATION

RIC-30-8.56

RIC-30-0879 SFN 7001053 (CO CC1)

| ITEM | EXTENSION | QUANTITY | UNIT  | DESCRIPTION  | REFERENCE SHEET |
|------|-----------|----------|-------|--|-----------------|
| 512  | 10100     | 1127     | SQ YD | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)                |                 |
| 516  | 45305     | 1        | EACH  | REFURBISH BEARING DEVICE, AS PER PLAN                        | 56              |
| 516  | 47001     | LUMP     |       | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | 56              |

RIC-30-0894 SFN 7001894 (CO CC1)

| ITEM | EXTENSION | QUANTITY | UNIT  | DESCRIPTION                                    | REFERENCE SHEET |
|------|-----------|----------|-------|--|-----------------|
| 202  | 11300     | 2        | CU YD | PORTIONS OF STRUCTURE REMOVED (PARAPET)        |                 |
| 511  | 46001     | 2        | CU YD | CLASS C CONCRETE, AS PER PLAN (PARAPET REPAIR) | 55              |
| 512  | 10100     | 933      | SQ YD | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)  |                 |
|      |           |          |       |  |                 |

RIC-30-0982 SFN 7001088 (CO CC1)

| ITEM | EXTENSION | QUANTITY | UNIT  | DESCRIPTION  | REFERENCE SHEET |
|------|-----------|----------|-------|--|-----------------|
| 202  | 11300     | 1        | CU YD | PORTIONS OF STRUCTURE REMOVED (ABUTMENT SEAT)                |                 |
| 509  | 10000     | 551      | POUND | EPOXY COATED REINFORCING STEEL                               |                 |
| 511  | 45701     | 1        | CU YD | CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)             | 55              |
| 511  | 43201     | 6        | CU YD | CLASS C CONCRETE, PIER, AS PER PLAN (REPAIR)                 | 55              |
| 512  | 10100     | 840      | SQ YD | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)                |                 |
| 512  | 10300     | 1593     | SQ YD | SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN                |                 |
| 516  | 46700     | 3        | EACH  | RESET BEARING  |                 |
| 516  | 47001     | LUMP     |       | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN | 56              |

DESIGN FILE: I:\projects\23815\structures\strsum.dgn  
 WORKSTATION:ksalay DATE:11/2/2009

DESIGN AGENCY  
 DISTRICT THREE  
 OFFICE OF PRODUCTION

REVIEWED  
 RDN 10/09

DESIGNED  
 GTS  
 CHECKED  
 DJV

DRAWN  
 GTS  
 REVISION  
 KRB

**STRUCTURE SUMMARY**

RIC-30-8.56  
 1 / 4  
 50  
 78

**REFERENCES SHALL BE MADE TO STANDARD DRAWINGS:**

|          |       |          |
|----------|-------|----------|
| BP-3.1   | DATED | 10/19/07 |
| GSD-1-96 | DATED | 7/19/02  |
| FB-1-82  | DATED | 5/10/82  |
| RB-1-55  | DATED | 2/2/59   |

**REFERENCES SHALL BE MADE TO SUPPLEMENTAL SPECIFICATION:**

|     |       |          |
|-----|-------|----------|
| 847 | DATED | 10/16/09 |
|-----|-------|----------|

**DESIGN SPECIFICATIONS:**

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, INCLUDING THE 2003, 2004, 2005 AND 2006 SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

**EXISTING STRUCTURE VERIFICATION:**

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE BID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

**EXISTING PLANS:**

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OH.

| STRUCTURE # | PLAN NAME                   | DATE |
|-------------|-----------------------------|------|
| RIC-30-0879 | RIC-30-3.74/RIC-C.H.135     | 1976 |
| RIC-30-0894 | RIC-30-3.74/RIC-C.H.135     | 1976 |
| RIC-30-0982 | RIC-30-1.40                 | 1962 |
| RIC-30-1074 | RIC-30SR-6.21/RIC-30R-0.00B | 1955 |
| RIC-30-1133 | RIC-30R-3.00                | 1956 |
| RIC-30-1219 | RIC-30R-3.00                | 1956 |
| RIC-30-1235 | RIC-30R-3.00                | 1956 |
| RIC-30-1283 | RIC-30-4.74                 | 1970 |

THE FOLLOWING PLANS ARE ALSO AVAILABLE:

| PLAN NAME               | DATE |
|-------------------------|------|
| RIC-30-(9.17-12.32)     | 1977 |
| RIC-30-3.47             | 1987 |
| RIC-30-12.37            | 1985 |
| TRIMBLE ROAD (C.H. 281) | 1979 |

**DESIGN DATA:**

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4,000 PSI  
 REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI  
 STRUCTURAL STEEL - ASTM A709 GRADE 50W OR GRADE 50 - YIELD STRENGTH 50,000 PSI  
 A709 GRADE 36 - YIELD STRENGTH 36,000 PSI

**DECK PROTECTION METHOD:**

SUPERPLASTICIZED DENSE CONCRETE OVERLAY  
 SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN

**PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES:**

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE BUTT JOINT TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES.

**CUT LINE CONSTRUCTION JOINT PREPARATION:**

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL IN PLACE. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

**CONSTRUCTION CLEARANCE:**

MAINTAIN A CONSTRUCTION CLEARANCE OF 13'-0" FEET HORIZONTALLY FROM THE CENTER OF TRACKS AND 22'-0" FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL.

**ITEM 202-REMOVAL MISC.: SUBDECK**

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN TO REMOVE THE EXISTING WOOD PLYWOOD AND BEAMS.

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

DESIGN AGENCY  
 DISTRICT THREE  
 OFFICE OF PRODUCTION

DATE  
 10/09  
 REVIEWED  
 RDN  
 STRUCTURE FILE NUMBER

DRAWN  
 KRB  
 REVISED

DESIGNED  
 KRB  
 CHECKED  
 DUJ

STRUCTURE NOTES

RIC-30-8-56

1 / 3

54  
 78

DESIGN FILE: i:\projects\23815\structures\stnotes.dgn  
 WORKSTATION:ksalay DATE:11/2/2009

**ITEM 202 - REMOVAL MISC.: PORTION OF STEEL BEAM**

THIS ITEM SHALL BE USED TO REMOVE A PORTION OF THE STEEL BEAM ON STRUCTURE RIC-30-1074 AT THE LOCATIONS INDICATED IN THE PLAN.

- 1) DRILL COPE HOLES AT LOCATIONS INDICATED ON PLAN.
- 2) SAW CUT AREA OF STEEL BEAM TO BE REMOVED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 202 - REMOVAL MISC.: PORTION OF STEEL BEAM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

**ITEM 202 - REMOVAL MISC.: COMPRESSION SEAL**

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING COMPRESSION SEAL BETWEEN THE DECK AND BACKWALL/APPROACH SLAB.

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

**ITEM 511 - CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)**

**ITEM 511 - CLASS C CONCRETE, AS PER PLAN (PARAPET REPAIR)**

THESE ITEMS SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND OTHER CONTAMINANTS DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

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

**ITEM 511 - CLASS C CONCRETE, PIER, AS PER PLAN (REPAIR)**

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND OTHER CONTAMINANTS DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

ALL EXCAVATION REQUIRED TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THIS ITEM.

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

**ITEM 511 - CONCRETE, MISC.: BACKWALL REPAIR**

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE CONCRETE SHALL BE THE SAME TYPE AS USED IN THE SUPERPLASTICIZED DENSE CONCRETE OVERLAY AS PER 847.06.

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

**ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN**

ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN SUPPLEMENT 1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE, 501.06, TO THE ENGINEER. PROVIDE SHOP DRAWINGS ACCORDING TO 513.04 OR SUPPLY THE ENGINEER WITH "AS-BUILT" DRAWINGS MEETING 513.04 AFTER COMPLETION OF FIELD FABRICATION. THE ENGINEER WILL REVIEW THE SUBMITTED DRAWINGS FOR CONCURRENCE WITH THE FINAL AS-BUILT CONDITION. IF NECESSARY, THE ENGINEER MAY CONTACT THE OFFICE OF STRUCTURAL ENGINEERING FOR TECHNICAL ASSISTANCE. IF THE ENGINEER IS SATISFIED WITH THE "AS-BUILT" DRAWINGS AND THE DELIVERED MATERIALS, SUPPLY A COPY OF THE DRAWINGS, STAMPED AND DATED, ALONG WITH MICROFILM, TO THE STRUCTURAL, WELDING AND METALS SECTION OF THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

COST TO REMOVE EXISTING CROSS FRAME MEMBERS AND ALL NECESSARY GRINDING SHALL BE INCLUDED IN THIS ITEM.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: 4 X 4 X 5/16 ANGLE, 3 X 3 X 5/16 ANGLE.

**ITEM SPECIAL - STRUCTURE, MISC.: TIMBER SUBDECKING**

THIS ITEM SHALL INCLUDE THE SUPPLYING OF MATERIAL AND THE INSTALLATION OF THE TIMBER SUBDECK. ALL WORK SHALL CONFORM TO THE APPROPRIATE SECTIONS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE 4 X 4'S CONFORMING TO ITEM 711.26 OF THE CMS SHALL BE GRADE 2 OR BETTER, TREATED IN ACCORDANCE WITH 712.06. THE PLYWOOD SHEETING SHALL BE 3/4" CCA TREATED PLYWOOD.

THE SCREWS SHALL BE 3" GALVANIZED WOOD SCREWS WITH GALVANIZED FENDER WASHERS. SPACING OF THE SCREWS SHALL BE A MAXIMUM OF 1'-9".

FIELD MEASUREMENTS SHALL BE TAKEN FOR VERIFICATION BEFORE ANY FABRICATION IS PERFORMED.

THE TIMBER SUBDECK SHALL BE CLEANED OF ANY FALLEN DEBRIS AFTER ALL OTHER WORK ON THE STRUCTURE IS COMPLETED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM SPECIAL- STRUCTURE, MISC.: TIMBER SUBDECKING WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DESIGN AGENCY  
 DISTRICT THREE  
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DATE  
 10/09  
 RDN  
 STRUCTURE FILE NUMBER

DRAWN  
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 REVISED

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**STRUCTURE NOTES**

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**ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN**

THIS WORK CONSISTS OF RAISING OR REPOSITIONING EXISTING STRUCTURE TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

**ITEM 516 - REFURBISH BEARING DEVICE, AS PER PLAN:**

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN THE BRIDGE BEARING AS WELL AS ITS CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARING, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PAD (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARING TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARING IS VERTICALLY ALIGNED AT 60° F (15° C), LUBRICATING SLIDING SURFACES, REASSEMBLY OF THE BEARING, AND RESETTING OF THE BEARING. ASSURE THE BEARING IS SHIMMED ADEQUATELY AND THAT NO BEAMS AND/ OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL A NEW BEARING OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARING. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516-REFURBISH BEARING DEVICE, AS PER PLAN

**ITEM 847 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN (2" NOMINAL THICKNESS)**

**ITEM 847 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN (2 1/2" NOMINAL THICKNESS)**

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING OVERLAY AS PER DETAILS IN THE PLANS.

THE THICKNESS OF THE EXISTING CONCRETE OVERLAY TO BE REMOVED SHALL BE AS SPECIFIED IN THE PLANS.

THE EXISTING OVERLAY SHALL BE SAW CUT 1" DEEP AT THE LOCATIONS SHOWN IN THE PLANS.

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

**ITEM 847 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY, AS PER PLAN (2" THICK)**

**ITEM 847 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY, AS PER PLAN (2 1/2" THICK)**

**ITEM 847 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), AS PER PLAN**

THESE ITEMS SHALL BE APPLIED WITH A THICKNESS OF 2" TO THE DRIVING AND PASSING LANES OF THE DECK IN EACH DIRECTION AT STRUCTURES RIC-30-1074, RIC-30-1133, RIC-30-1219, AND RIC-30-1235. THESE ITEMS SHALL BE APPLIED WITH A THICKNESS OF 2 1/2" TO THE LANES OF THE DECK IN EACH DIRECTION AT STRUCTURE RIC-30-1283.

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION 847 "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING SCARIFICATION AND CHIPPING" WITH THE FOLLOWING REVISIONS:

THE THICKNESS OF THE EXISTING CONCRETE OVERLAY REMOVED AND PROPOSED OVERLAY SHALL BE AS SPECIFIED IN THE PLANS.

ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED BY ASTM C-127.

ALL SAW CUTTING REQUIRED TO PERFORM THE ABOVE WORK, AS OUTLINED ON THE STRUCTURE DETAIL SHEETS, SHALL BE INCLUDED IN THESE ITEMS.

**IN ADDITION TO THE ABOVE REQUIREMENTS, THE FOLLOWING REVISIONS SHALL APPLY TO THE WORK PERFORMED IN THE DRIVING LANES OF STRUCTURES RIC-30-1219 AND RIC-30-1235:**

(SEE 847.17) THE REMOVAL OPERATIONS SHALL NOT BEGIN IF SUSTAINED RAINS (5 HOURS OR MORE WITH BREAKS BETWEEN SHOWERS LESS THAN 1 1/2 HOURS) ARE PREDICTED WITHIN 48 HOURS OF COMMENCEMENT.

(SEE 847.18) THE FINAL DECK SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF A RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

(SEE 847.19) FULL DEPTH REPAIR IS NOT REQUIRED IF LESS THAN ONE HALF OF THE ORIGINAL DECK CONCRETE THICKNESS IS SOUND.

(SEE 847.25) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 24 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF CURING MATERIAL OF 705.07, TYPE 1 OR 1D, AS PER CMS 511.17 METHOD (B) MEMBRANE CURING. IF THE CURING COMPOUND CAN NOT BE PLACED WITHIN THE SAME SHORT TERM CLOSURE PERIOD AS THE OVERLAY, THE CONTRACTOR MAY ALLOW TRAFFIC ONTO THE OVERLAY, AND SHALL AT THE NEXT AVAILABLE SHORT TERM CLOSURE PERIOD, APPLY THE MEMBRANE CURING COMPOUND.

(SEE 847.25) TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 24 HOUR WET CURE, AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PSI (4.2 Mpa).

(SEE 847.26) THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 9:30 AM TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 9:30 AM.

(SEE 847.27) FOR EACH PHASE THE CONTRACTOR SHALL PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TESTS AND DOCUMENT THE TIME OF THE POUR, THE TIME OF THE BEAM BREAK TESTS, AND THE MODULUS OF RUPTURE FOR EACH BEAM UNTIL THE MODULUS OF RUPTURE OF THE TWO TESTS IS NOT LESS THAN 650 PSI (4.5 Mpa). TRAFFIC IS ALLOWED ON THE OVERLAY AT 600 PSI (4.2 Mpa).

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

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DISTRICT THREE  
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STRUCTURE NOTES

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| STRUCTURE FILE NO. | BRIDGE NO.   | LOCATION                             | BRIDGE TYPE            | SKEW        | BRIDGE LIMITS | DECK WIDTH   | PROPOSED WORK  |
|--------------------|--------------|--------------------------------------|------------------------|-------------|---------------|--|--|
| 7001053            | RIC-30-0879  | UNDER HOME ROAD                      | 4-SPAN STEEL BEAM      | 39° 01' 48" | 304'-4"±      | 42'-6"±  | DECK & SUBSTRUCTURE SEALING, REFURBISH BEARING   |
| 7001894            | RIC-30-0894  | UNDER S.R. 309                       | 4-SPAN STEEL BEAM      | 34° 30' 00" | 285'-6"±      | 28'-6"±  | DECK & SUBSTRUCTURE SEALING, PARAPET REPAIR  |
| 7001088            | RIC-30-0982  | UNDER TRIMBLE ROAD                   | 4-SPAN STEEL BEAM      | 3° 50' 00"  | 200'-6"±      | 59'-0"±  | DECK & SUBSTRUCTURE SEALING, PILE ENCASUREMENT, ABUTMENT REPAIR, RESET BEARINGS                                  |
| 7001118            | RIC-30-1074  | OVER S.R. 39                         | 3-SPAN STEEL BEAM      | 47° 26' 00" | 200'-1"±      | 27'-6"± LT.<br>3'-0" MEDIAN PARAPET<br>39'-6"± RT. | CONCRETE OVERLAY, SUBDECKING, STRUCTURAL STEEL REPAIR, ABUTMENT BACKWALL REPAIR, REFURBISH BEARINGS              |
| 7001142            | RIC-30-1133  | OVER BOWMAN STREET                   | 3-SPAN STEEL BEAM      | 3° 10' 00"  | 174'-0"±      | 27'-6"± LT.<br>3'-0" MEDIAN PARAPET<br>27'-6"± RT. | CONCRETE OVERLAY, SUBDECKING, ABUTMENT BACKWALL REPAIR   |
| 7001169            | RIC-30-1156R | OVER NORFOLK SOUTHERN R.R. & S.R. 13 | 13-SPAN PRESTRESS BEAM | 22° 26' 00" | 1631'-11"±    | 52'-0"±  | NO STRUCTURE WORK  |
| 7001185            | RIC-30-1156L | OVER NORFOLK SOUTHERN R.R. & S.R. 13 | 13-SPAN PRESTRESS BEAM | 22° 26' 00" | 1631'-11"±    | 52'-0"±  | NO STRUCTURE WORK  |
| 7001207            | RIC-30-1212  | SPUR TRACK                           | 3-SPAN STEEL BEAM      | 10° 30' 00" | 186'-4"       | 52'-0"± LT.<br>2'-6" MEDIAN PARAPET<br>52'-0"± RT. | NO STRUCTURE WORK  |
| 7001231            | RIC-30-1219  | OVER ASHLAND RAILWAY                 | 3-SPAN STEEL BEAM      | 23° 17' 00" | 256'-11"±     | 39'-6"± LT.<br>3'-0" MEDIAN PARAPET<br>39'-6"± RT. | CONCRETE OVERLAY, ABUTMENT REPAIR, ABUTMENT BACKWALL REPAIR  |
| 7001266            | RIC-30-1235  | OVER S.R. 545                        | 3-SPAN STEEL BEAM      | 33° 54' 27" | 200'-7"±      | 39'-6"± LT.<br>3'-0" MEDIAN PARAPET<br>39'-6"± RT. | CONCRETE OVERLAY, SUBDECKING, PARAPET REPAIR, SLOPE REPAIR, ABUTMENT BACKWALL REPAIR, RESET BEARINGS             |
| 7001290            | RIC-30-1283  | UNDER 5TH AVENUE                     | 6-SPAN STEEL BEAM      | 20° 05' 20" | 288'-6"±      | 42'-6"±  | CONCRETE OVERLAY, DECK & SUBSTRUCTURE SEALING, PILE ENCASUREMENT, PIER PATCHING, ABUTMENT REPAIR, RESET BEARINGS |
|                    |              |                                      |                        |             |               |  |  |
|                    |              |                                      |                        |             |               |  |  |

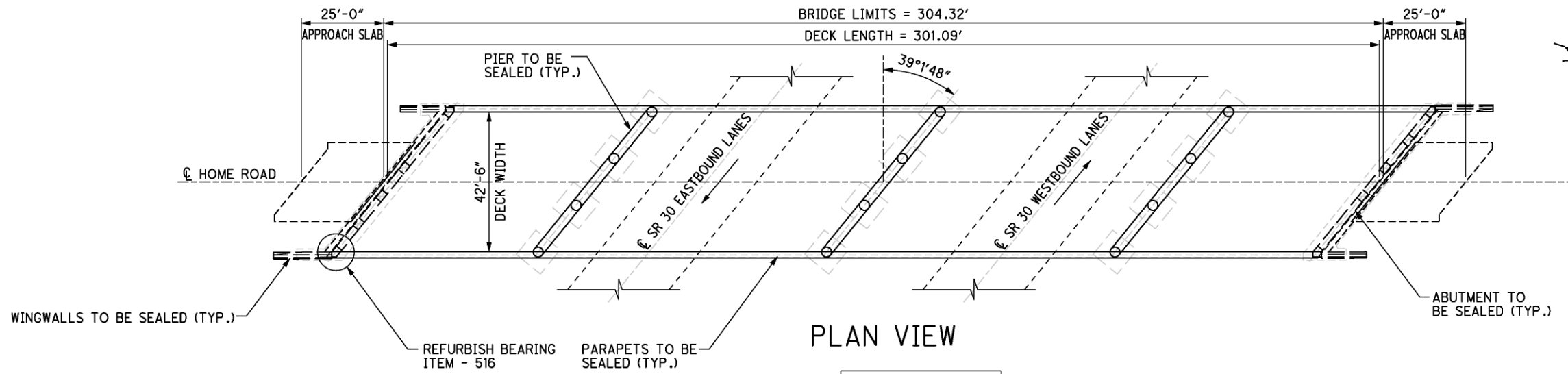
DESIGN AGENCY  
 DISTRICT THREE  
 OFFICE OF PRODUCTION

DATE 10/09  
 REVIEWED RDN  
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 CHECKED DJV

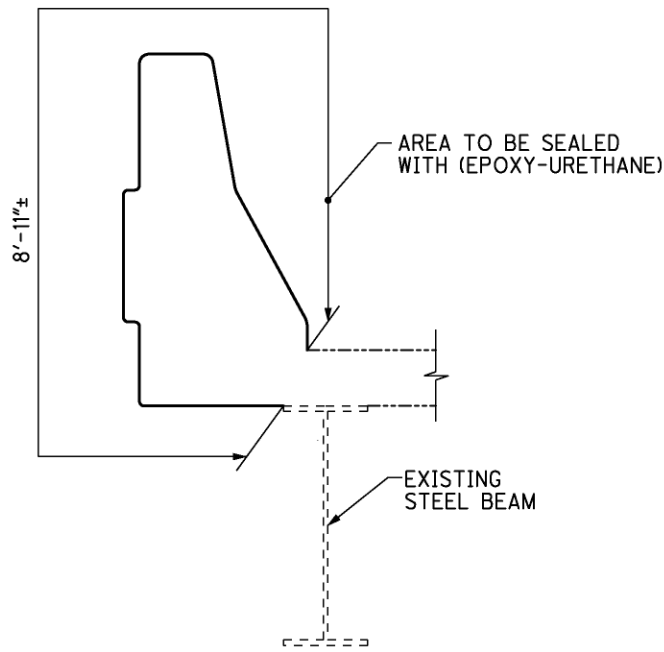
STRUCTURE INFORMATION

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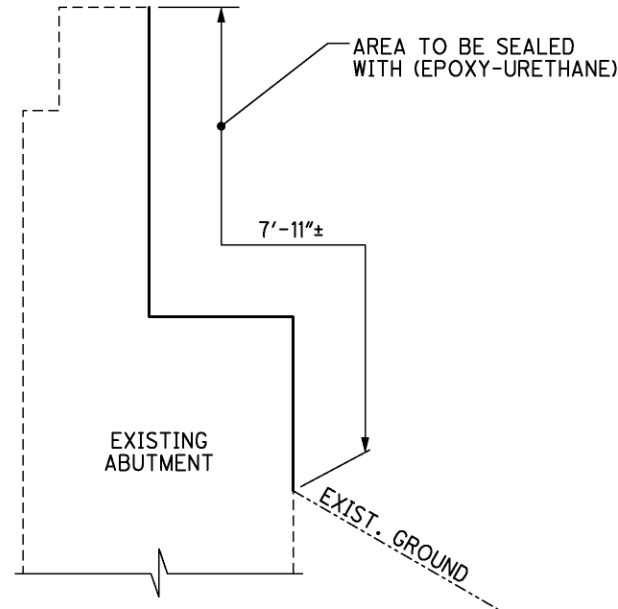




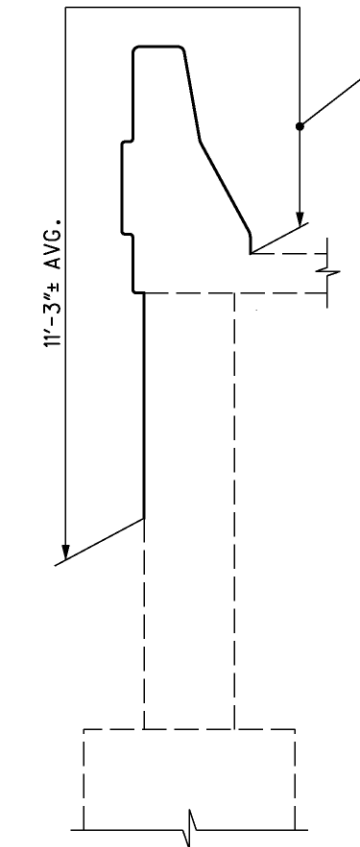
PLAN VIEW



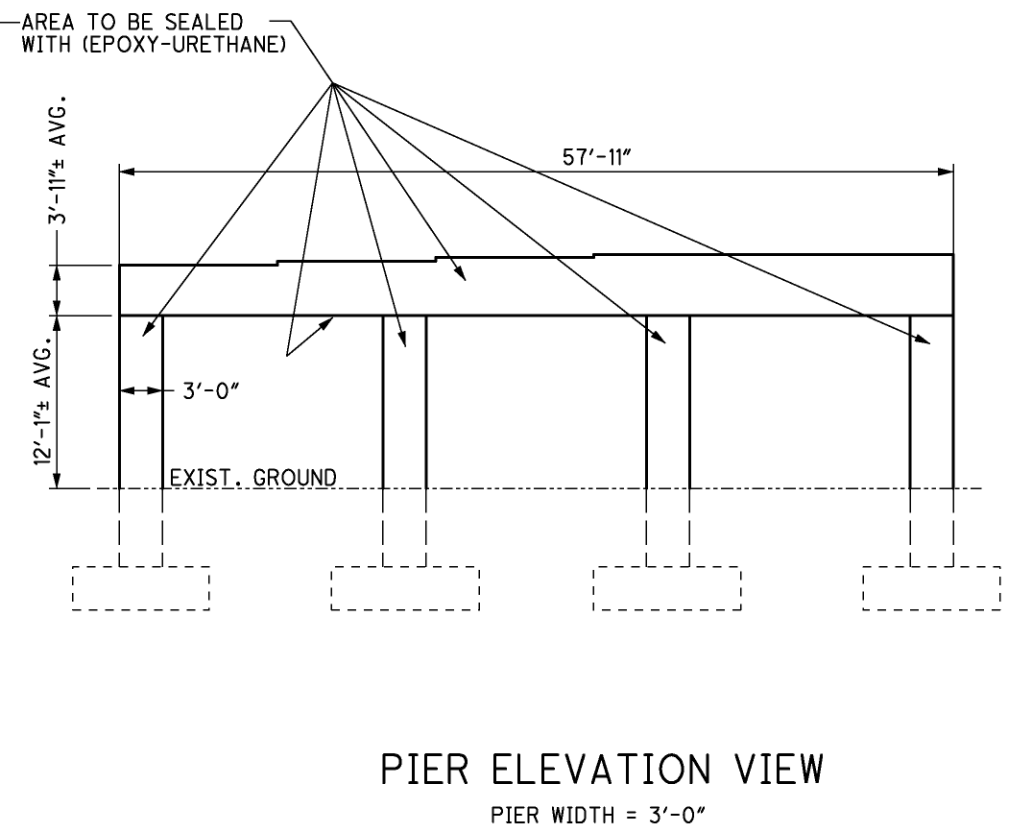
TYPICAL SECTION AT PARAPET  
LENGTH = 301'-1"±



TYPICAL SECTION AT ABUTMENT  
(ABUTMENTS ARE 56'-11"± LONG)



TYPICAL SECTION AT WINGWALL  
LENGTH = 15'-2"± AVG.



PIER ELEVATION VIEW  
PIER WIDTH = 3'-0"

| ITEM | QUANTITY | UNIT  | DESCRIPTION  |
|------|----------|-------|--|
| 512  | 1127     | SQ YD | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)                |
| 516  | 1        | EACH  | REFURBISH BEARING DEVICE, AS PER PLAN                        |
| 516  | LUMP     |       | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN |
|      |          |       |  |
|      |          |       |  |
|      |          |       |  |

NOTES:

- 1) THE PARAPETS, ABUTMENTS AND ALL EXPOSED AREAS OF THE WINGWALLS AND PIER CAPS AND COLUMNS SHALL BE SEALED WITH ITEM 512.
- 2) REFURBISH BEARING WITH ITEM 516.
- 3) GUARDRAIL NOT SHOWN.

QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET

DESIGN FILE: i:\projects\23815\structures\RIC30\ric300879.dgn  
WORKSTATION:ksalay DATE:11/2/2009

DESIGN AGENCY  
DISTRICT THREE  
OFFICE OF PRODUCTION

DATE  
10/09

REVIEWED  
RDN

STRUCTURE FILE NUMBER  
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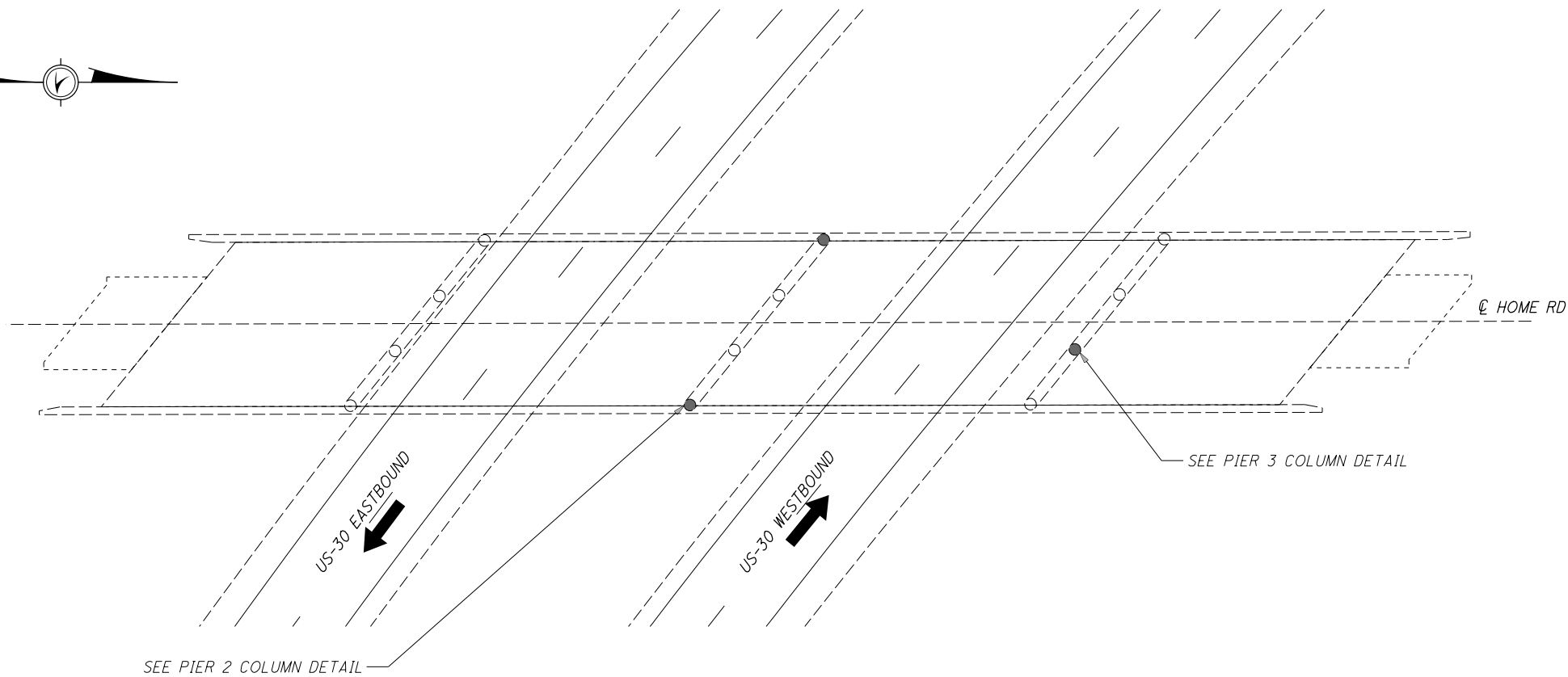
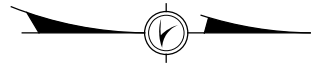
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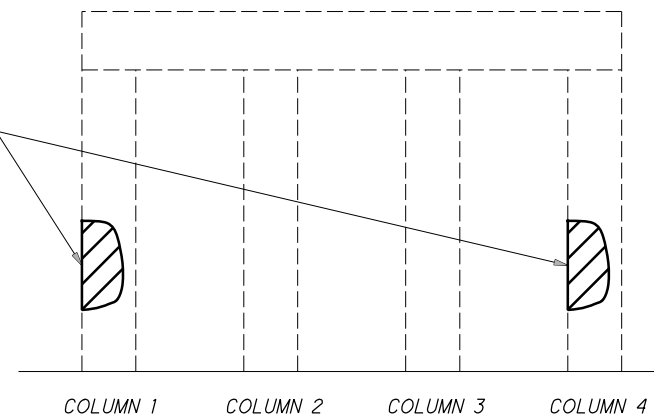
PLAN VIEW UNDER HOME ROAD  
RIC-30-0879

RIC-30-8.56



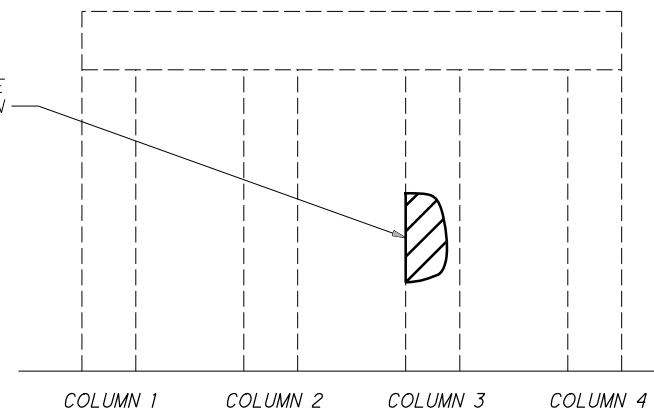
PLAN VIEW

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN



PIER COLUMN 2 DETAIL

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN



PIER COLUMN 3 DETAIL

- NOTES:
- 1) ACTUAL REPAIR LOCATIONS TO BE IDENTIFIED BY THE ENGINEER.
  - 2) EXISTING STEEL SHALL BE PRESERVED.

| ITEM | QUANTITY | UNIT | DESCRIPTION                              |
|------|----------|------|--|
| 519  | 93       | SF   | PATCHING CONCRETE STRUCTURE, AS PER PLAN |

ALL QUANTITIES CARRIED TO THE STRUCTURE SUMMARY

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