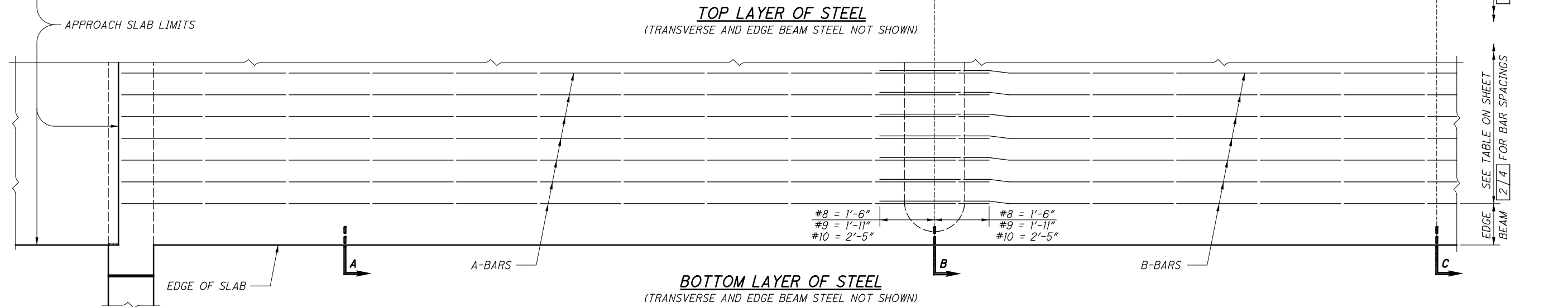
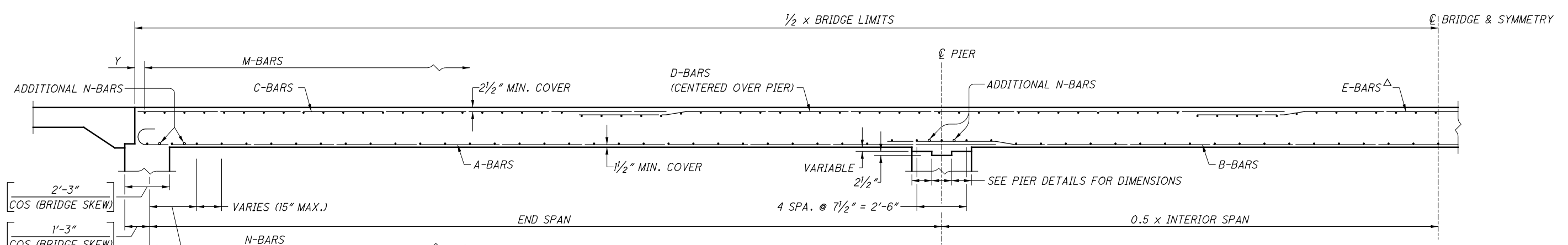


TOP LAYER OF STEEL
 (TRANSVERSE AND EDGE BEAM STEEL NOT SHOWN)



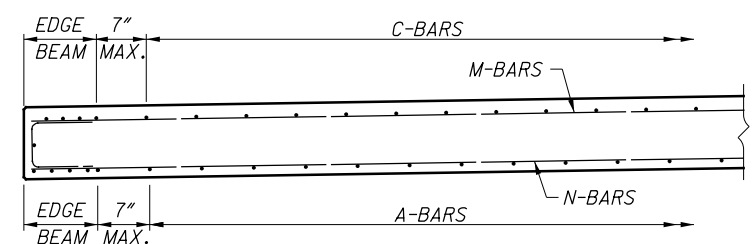
BOTTOM LAYER OF STEEL
 (TRANSVERSE AND EDGE BEAM STEEL NOT SHOWN)



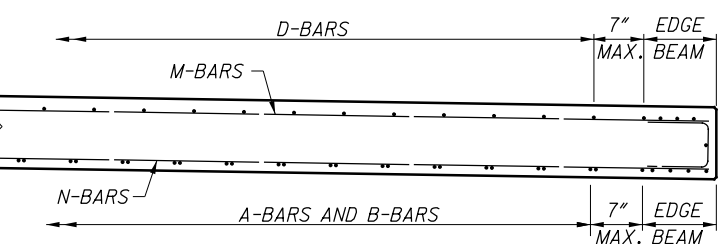
SLAB ELEVATION

$$Y \text{ (INCHES)} = \frac{1}{2} [\text{BRIDGE LIMITS (FEET)} - ((\text{NO. M BARS} - 1) * \text{M BAR SPACING (FEET)})] * 12$$

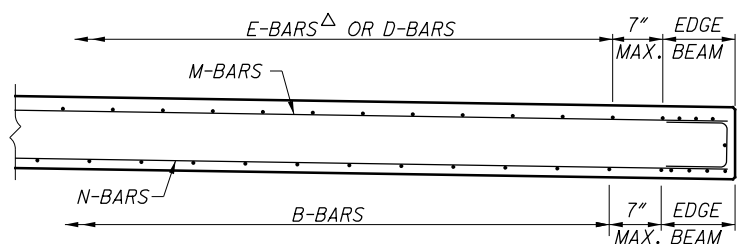
LEGEND:
 Δ - E-BARS ARE NOT ALWAYS REQUIRED; SEE SLAB DATA TABLE ON SHEET 2/4



SECTION A-A



SECTION B-B



SECTION C-C

NOTE:
 SEE SHEETS 3/4 & 4/4 FOR EDGE BEAM DETAILS

SLAB DATA

| | | LONGITUDINAL | | | | | | | | | | | | | | | TRANSVERSE | | | | | | | |
|-----------------|---------------|--------------|------|---------|---------|------|------|----------|------|------|---------|------|------|---------|------|------|------------|------|-------|--------|------|-------|----------------------|--------|
| | | BOTTOM BARS | | | | | | TOP BARS | | | | | | | | | BOTTOM | | | TOP | | | U BARS * | |
| SPANS (feet) | T (inches) | A BARS | | | B BARS | | | C BARS | | | D BARS | | | E BARS | | | N BARS | | | M BARS | | | (LAP WITH N BARS) | |
| | | SIZE | SPA. | a | LENGTH | SIZE | SPA. | LENGTH | SIZE | SPA. | LENGTH | SIZE | SPA. | LENGTH | SIZE | SPA. | LENGTH | SIZE | SPA. | NO.** | SIZE | SPA. | NO. | N BARS |
| 14 - 17.50 - 14 | 11 | 8 | 7 in | 16'-0" | 16'-11" | 8 | 7 in | 20'-6" | 5 | 7 in | 7'-6" | 8 | 7 in | 21'-0" | N/A | N/A | N/A | 6 | 15 in | 47 | 4 | 12 in | 47 | 78 |
| 15 - 18.75 - 15 | 11 1/2 | 8 | 7 in | 17'-0" | 17'-11" | 8 | 7 in | 21'-9" | 5 | 7 in | 7'-10" | 8 | 7 in | 22'-3" | N/A | N/A | N/A | 6 | 15 in | 48 | 4 | 12 in | 50 | 80 |
| 16 - 20.00 - 16 | 12 | 8 | 7 in | 18'-0" | 18'-11" | 8 | 7 in | 23'-0" | 5 | 7 in | 8'-3" | 8 | 7 in | 23'-6" | N/A | N/A | N/A | 6 | 15 in | 51 | 4 | 12 in | 53 | 86 |
| 17 - 21.25 - 17 | 12 1/2 | 8 | 7 in | 19'-0" | 19'-11" | 8 | 7 in | 24'-3" | 5 | 7 in | 8'-7" | 8 | 7 in | 24'-9" | N/A | N/A | N/A | 6 | 15 in | 54 | 4 | 12 in | 56 | 92 |
| 18 - 22.50 - 18 | 13 | 8 | 7 in | 20'-0" | 20'-11" | 8 | 7 in | 25'-6" | 5 | 7 in | 9'-0" | 8 | 7 in | 26'-0" | N/A | N/A | N/A | 6 | 15 in | 57 | 4 | 12 in | 60 | 98 |
| 19 - 23.75 - 19 | 13 1/2 | 8 | 7 in | 21'-0" | 21'-11" | 8 | 7 in | 26'-9" | 5 | 7 in | 9'-4" | 8 | 7 in | 27'-3" | N/A | N/A | N/A | 6 | 15 in | 60 | 4 | 12 in | 63 | 104 |
| 20 - 25.00 - 20 | 14 | 8 | 7 in | 22'-0" | 22'-11" | 8 | 7 in | 28'-0" | 5 | 7 in | 9'-9" | 8 | 7 in | 28'-0" | N/A | N/A | N/A | 6 | 15 in | 61 | 4 | 12 in | 66 | 106 |
| 21 - 26.25 - 21 | 14 1/2 | 8 | 7 in | 23'-0" | 23'-11" | 8 | 7 in | 29'-3" | 5 | 7 in | 10'-1" | 8 | 7 in | 29'-9" | N/A | N/A | N/A | 6 | 15 in | 64 | 4 | 12 in | 69 | 112 |
| 22 - 27.50 - 22 | 15 | 8 | 7 in | 24'-0" | 24'-11" | 8 | 7 in | 30'-6" | 5 | 7 in | 13'-8" | 8 | 7 in | 24'-8" | 5 | 7 | 9'-11" | 6 | 15 in | 67 | 4 | 12 in | 73 | 118 |
| 23 - 28.75 - 23 | 15 1/2 | 8 | 7 in | 25'-0" | 25'-11" | 8 | 7 in | 31'-9" | 5 | 7 in | 14'-3" | 8 | 7 in | 25'-5" | 5 | 7 | 10'-4" | 6 | 15 in | 70 | 4 | 12 in | 76 | 124 |
| 24 - 30.00 - 24 | 16 | 8 | 7 in | 26'-0" | 26'-11" | 8 | 7 in | 33'-0" | 5 | 6 in | 14'-10" | 8 | 6 in | 26'-3" | 5 | 6 | 10'-10" | 6 | 15 in | 73 | 4 | 12 in | 79 | 130 |
| 25 - 31.25 - 25 | 16 1/2 | 8 | 7 in | 27'-0" | 27'-11" | 8 | 7 in | 34'-3" | 5 | 6 in | 15'-5" | 8 | 6 in | 27'-1" | 5 | 6 | 11'-3" | 6 | 15 in | 74 | 4 | 12 in | 82 | 132 |
| 26 - 32.50 - 26 | 17 | 8 | 7 in | 28'-0" | 28'-11" | 8 | 7 in | 35'-6" | 5 | 6 in | 16'-1" | 8 | 6 in | 27'-10" | 5 | 6 | 11'-8" | 6 | 15 in | 77 | 4 | 12 in | 86 | 138 |
| 27 - 33.75 - 27 | 17 1/2 | 8 | 7 in | 29'-0" | 29'-11" | 8 | 7 in | 36'-9" | 5 | 6 in | 16'-8" | 8 | 6 in | 28'-8" | 5 | 6 | 12'-2" | 6 | 15 in | 80 | 4 | 12 in | 89 | 144 |
| 28 - 35.00 - 28 | 18 | 8 | 7 in | 30'-0" | 30'-11" | 8 | 7 in | 38'-0" | 5 | 6 in | 17'-3" | 8 | 6 in | 29'-6" | 5 | 6 | 12'-7" | 6 | 15 in | 83 | 4 | 12 in | 92 | 150 |
| 29 - 36.25 - 29 | 18 1/2 | 8 | 6 in | 31'-0" | 31'-11" | 8 | 6 in | 39'-3" | 5 | 6 in | 17'-10" | 8 | 6 in | 30'-3" | 5 | 6 | 13'-0" | 6 | 15 in | 86 | 4 | 12 in | 95 | 156 |
| 30 - 37.50 - 30 | 19 | 8 | 6 in | 32'-0" | 32'-11" | 8 | 6 in | 40'-6" | 5 | 7 in | 18'-5" | 9 | 7 in | 31'-1" | 5 | 7 | 13'-6" | 6 | 15 in | 87 | 4 | 12 in | 99 | 158 |
| 31 - 38.75 - 31 | 19 1/2 | 8 | 6 in | 33'-0" | 33'-11" | 8 | 6 in | 41'-9" | 5 | 7 in | 19'-0" | 9 | 7 in | 31'-11" | 5 | 7 | 13'-11" | 6 | 15 in | 90 | 4 | 12 in | 102 | 164 |
| 32 - 40.00 - 32 | 20 | 8 | 6 in | 34'-0" | 34'-11" | 8 | 6 in | 43'-0" | 5 | 7 in | 19'-8" | 9 | 7 in | 32'-8" | 5 | 7 | 14'-4" | 6 | 15 in | 93 | 5 | 12 in | 105 | 170 |
| 33 - 41.25 - 33 | 20 1/2 | 8 | 6 in | 35'-0" | 35'-11" | 8 | 6 in | 44'-3" | 5 | 7 in | 20'-3" | 9 | 7 in | 33'-6" | 5 | 7 | 14'-9" | 6 | 15 in | 96 | 5 | 12 in | 108 | 176 |
| 34 - 42.50 - 34 | 21 | 8 | 6 in | 36'-0" | 36'-11" | 8 | 6 in | 45'-6" | 5 | 7 in | 20'-10" | 9 | 7 in | 34'-4" | 5 | 7 | 15'-2" | 6 | 15 in | 99 | 5 | 12 in | 112 | 182 |
| 35 - 43.75 - 35 | 21 1/2 | 8 | 6 in | 37'-0" | 37'-11" | 8 | 6 in | 46'-9" | 5 | 6 in | 21'-5" | 9 | 6 in | 35'-2" | 5 | 6 | 15'-8" | 6 | 15 in | 100 | 5 | 12 in | 115 | 184 |
| 36 - 45.00 - 36 | 22 | 8 | 6 in | 38'-0" | 38'-11" | 8 | 6 in | 48'-0" | 5 | 6 in | 22'-0" | 9 | 6 in | 35'-11" | 5 | 6 | 16'-1" | 6 | 15 in | 103 | 5 | 12 in | 118 | 190 |
| 37 - 46.25 - 37 | 22 1/2 | 9 | 7 in | 39'-5" | 40'-8" | 9 | 7 in | 50'-1" | 5 | 6 in | 22'-7" | 9 | 6 in | 36'-9" | 5 | 6 | 16'-7" | 6 | 15 in | 106 | 5 | 12 in | 121 | 196 |
| 38 - 47.50 - 38 | 23 | 9 | 7 in | 40'-5" | 41'-8" | 9 | 7 in | 51'-4" | 5 | 6 in | 23'-3" | 9 | 6 in | 37'-6" | 5 | 6 | 17'-0" | 6 | 15 in | 109 | 5 | 12 in | 125 | 202 |
| 39 - 48.75 - 39 | 23 1/2 | 9 | 7 in | 41'-5" | 42'-8" | 9 | 7 in | 52'-7" | 5 | 6 in | 23'-10" | 9 | 6 in | 38'-4" | 5 | 6 | 17'-6" | 6 | 15 in | 112 | 5 | 12 in | 128 | 208 |
| 40 - 50.00 - 40 | 24 | 9 | 7 in | 42'-5" | 43'-8" | 9 | 7 in | 53'-10" | 5 | 6 in | 24'-5" | 9 | 6 in | 39'-1" | 5 | 6 | 17'-11" | 6 | 15 in | 113 | 5 | 12 in | 131 | 210 |
| 41 - 51.25 - 41 | 24 1/2 | 9 | 6 in | 43'-5" | 44'-8" | 9 | 6 in | 55'-1" | 5 | 6 in | 25'-0" | 10 | 6 in | 39'-11" | 5 | 6 | 18'-5" | 6 | 15 in | 116 | 5 | 12 in | 134 | 216 |
| 42 - 52.50 - 42 | 25 | 9 | 6 in | 44'-5" | 45'-8" | 9 | 6 in | 56'-4" | 5 | 6 in | 25'-8" | 10 | 6 in | 40'-8" | 5 | 6 | 18'-10" | 6 | 15 in | 119 | 5 | 12 in | 138 | 222 |
| 43 - 53.75 - 43 | 25 1/2 | 9 | 6 in | 45'-5" | 46'-8" | 9 | 6 in | 57'-7" | 5 | 6 in | 26'-3" | 10 | 6 in | 41'-6" | 5 | 6 | 19'-3" | 6 | 15 in | 122 | 5 | 12 in | 141 | 228 |
| 44 - 55.00 - 44 | 26 | 9 | 6 in | 46'-5" | 47'-8" | 9 | 6 in | 58'-10" | 5 | 6 in | 26'-10" | 10 | 6 in | 42'-4" | 5 | 6 | 19'-8" | 6 | 15 in | 125 | 5 | 12 in | 144 | 234 |
| 45 - 56.25 - 45 | 26 1/2 | 10 | 7 in | 47'-11" | 49'-4" | 10 | 7 in | 61'-1" | 5 | 6 in | 27'-5" | 10 | 6 in | 43'-1" | 5 | 6 | 20'-2" | 6 | 15 in | 126 | 5 | 12 in | 147 | 236 |
| 46 - 57.50 - 46 | 27 | 10 | 7 in | 48'-11" | 50'-4" | 10 | 7 in | 62'-4" | 5 | 6 in | 28'-1" | 10 | 6 in | 43'-10" | 5 | 6 | 20'-8" | 6 | 15 in | 129 | 5 | 12 in | 151 | 242 |

GENERAL: THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS FOR THREE SPAN SLAB BRIDGES. THE PROJECT PLANS FOR EACH STRUCTURE WILL SHOW SPAN LENGTHS, ROADWAY WIDTHS, SKEW, CURVE AND SUPERELEVATION (IF ANY), ELEVATIONS, SLAB REINFORCEMENT DETAILS IN PLAN AND TRANSVERSE SECTIONS, SUBSTRUCTURE DETAILS, ESTIMATED QUANTITIES, REINFORCING STEEL LIST AND OTHER NECESSARY DETAILS AND SPECIAL NOTES.

ADDITIONAL INTERIOR SPANS, THE SAME LENGTH AS THE MIDDLE SPAN, MAY BE INCORPORATED INTO THE STRUCTURE WITHOUT CHANGE IN SLAB THICKNESS OR AREA OF REINFORCING STEEL. WHEN SPANS ARE ADDED, THE PROJECT PLANS WILL SHOW THE REVISED DETAILS.

ROADWAY WIDTH: THE SLAB DESIGN IS APPLICABLE FOR THE FOLLOWING ROADWAY WIDTHS, MEASURED OUT TO OUT OF BRIDGE DECK: WIDTH ≥ 18ft

DESIGN SPECIFICATIONS:
THIS DRAWING CONFORMS TO THE "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOURTH EDITION" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2007, AND THE OHIO BRIDGE DESIGN MANUAL, 2007.

DESIGN DATA:
DESIGN METHOD - LOAD AND RESISTANCE FACTOR DESIGN
DESIGN LOADING - HL-93
FUTURE WEARING SURFACE - 60 LB/FT²
WEARING SURFACE - ONE INCH MONOLITHIC
DESIGN STRESSES:
CONCRETE - COMPRESSIVE STRENGTH = 4500 PSI
REINFORCING STEEL - MIN. YIELD STRENGTH = 60,000 PSI

EDGE BEAM OPTION: IN LIEU OF FORMING AN EDGE BEAM, AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR MAY FURNISH AN 18" SLAB OR A SLAB VARYING IN THICKNESS FROM 18" AT THE EDGE TO "T" AT THE CENTER OF THE ROADWAY. SEE SHEETS 3/4 AND 4/4 FOR EDGE BEAM DETAILS.

CAMBER: TO COMPENSATE FOR FALSEWORK DEFLECTION AND FOR THE DEFLECTION OF THE SLAB AFTER THE FALSEWORK IS REMOVED, BUILD CAMBER INTO THE FALSEWORK ACCORDING TO CMS 508.02.

SKEW: FOR BRIDGES WITH SKEW, PLACE LONGITUDINAL BARS PARALLEL TO THE CENTERLINE OF THE ROADWAY AND TRANSVERSE BARS PARALLEL TO THE CENTERLINE OF PIERS AND ABUTMENTS. DO NOT USE THIS STANDARD FOR SKEWS GREATER THAN 30°.

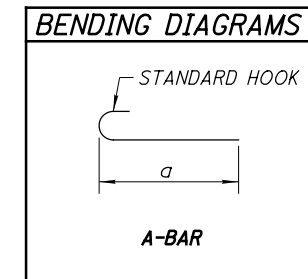
LEGEND:

- * - U BARS SHALL NOT BE LAPPED WITH THE ADDITIONAL N-BARS PROVIDED AT THE ABUTMENTS AND PIERS
- ** - TOTAL NUMBER OF N-BARS INCLUDES THE ADDITIONAL N-BARS PROVIDED AT THE ABUTMENTS AND PIERS

REINFORCING STEEL: FURNISH THE REINFORCING STEEL LENGTHS AS INDICATED IN THE TABLE OR STANDARD DRAWINGS. IF THE CONTRACTOR ELECTS TO UTILIZE SHORTER BAR LENGTHS, PROVIDE THE MINIMUM LAP LENGTHS SHOWN BELOW AT NO ADDITIONAL COST TO THE STATE:

- NO. 4 LAP = 3'-0"
- NO. 5 LAP = 3'-6"
- NO. 6 LAP = 4'-4"
- NO. 8 LAP = 6'-9"
- NO. 9 LAP = 8'-7"
- NO. 10 LAP = 10'-10"

THE LOCATIONS OF THE SPLICES SHALL BE APPROVED BY THE ENGINEER.



NOTE

A BAR LENGTHS INCLUDE THE 180° BEND STANDARD HOOK LENGTH.

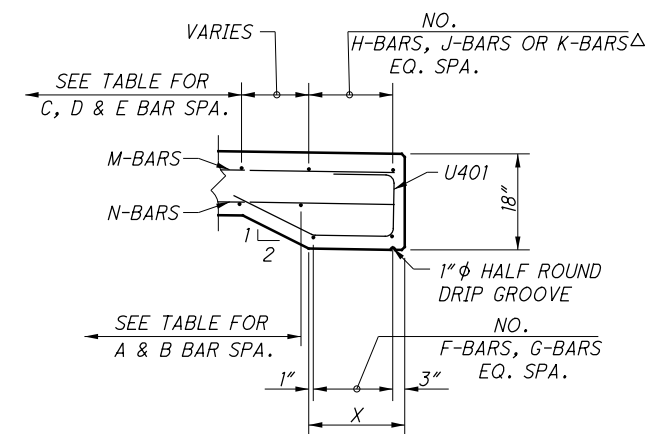
STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DATE: 07-18-08
ADMINISTRATOR: [Signature]

REVISIONS
01-19-18
DESIGNED: AME
CHECKED: DFT
DRAWN: DTA
RLE
CS-1-08

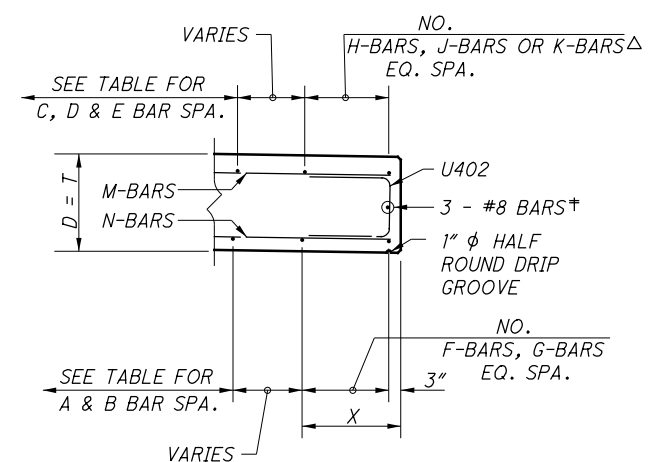
STANDARD
CONTINUOUS SLAB BRIDGE

EDGE BEAM SLAB DATA - OVER THE SIDE DRAINAGE

| | | | LONGITUDINAL | | | | | | | | | | | | | | | |
|-----------------|---------------|--------------|--------------|-----|---------|---------|------|-----|----------|------|-----|---------|------|-----|---------|------|-----|---------|
| | | | BOTTOM BARS | | | | | | TOP BARS | | | | | | | | | |
| SPANS (feet) | D (inches) | X (ft-in) | F BARS | | | G BARS | | | H BARS | | | J BARS | | | K BARS | | | |
| | | | SIZE | NO. | f | LENGTH | SIZE | NO. | LENGTH | SIZE | NO. | LENGTH | SIZE | NO. | LENGTH | SIZE | NO. | LENGTH |
| 14 - 17.50 - 14 | 18 | 3'-9" | 8 | 7 | 16'-0" | 16'-11" | 8 | 7 | 20'-6" | 5 | 7 | 7'-6" | 8 | 7 | 21'-0" | N/A | N/A | N/A |
| 15 - 18.75 - 15 | 18 | 3'-9" | 8 | 7 | 17'-0" | 17'-11" | 8 | 7 | 21'-9" | 5 | 7 | 7'-10" | 8 | 7 | 22'-3" | N/A | N/A | N/A |
| 16 - 20.00 - 16 | 18 | 3'-9" | 8 | 7 | 18'-0" | 18'-11" | 8 | 7 | 23'-0" | 5 | 7 | 8'-3" | 8 | 7 | 23'-6" | N/A | N/A | N/A |
| 17 - 21.25 - 17 | 18 | 4'-0" | 8 | 8 | 19'-0" | 19'-11" | 8 | 8 | 24'-3" | 5 | 8 | 8'-7" | 8 | 8 | 24'-9" | N/A | N/A | N/A |
| 18 - 22.50 - 18 | 18 | 4'-0" | 8 | 8 | 20'-0" | 20'-11" | 8 | 8 | 25'-6" | 5 | 8 | 9'-0" | 8 | 8 | 26'-0" | N/A | N/A | N/A |
| 19 - 23.75 - 19 | 18 | 4'-0" | 8 | 8 | 21'-0" | 21'-11" | 8 | 8 | 26'-9" | 5 | 8 | 9'-4" | 8 | 8 | 27'-3" | N/A | N/A | N/A |
| 20 - 25.00 - 20 | 18 | 4'-0" | 8 | 8 | 22'-0" | 22'-11" | 8 | 8 | 28'-0" | 5 | 8 | 9'-9" | 8 | 8 | 28'-6" | N/A | N/A | N/A |
| 21 - 26.25 - 21 | 18 | 4'-0" | 8 | 8 | 23'-0" | 23'-11" | 8 | 8 | 29'-3" | 5 | 8 | 10'-1" | 8 | 8 | 29'-9" | N/A | N/A | N/A |
| 22 - 27.50 - 22 | 18 | 4'-0" | 8 | 8 | 24'-0" | 24'-11" | 8 | 8 | 30'-6" | 5 | 8 | 13'-8" | 8 | 8 | 24'-8" | 5 | 8 | 9'-11" |
| 23 - 28.75 - 23 | 18 | 4'-0" | 8 | 8 | 25'-0" | 25'-11" | 8 | 8 | 31'-9" | 5 | 8 | 14'-3" | 8 | 8 | 25'-5" | 5 | 8 | 10'-4" |
| 24 - 30.00 - 24 | 18 | 4'-0" | 8 | 9 | 26'-0" | 26'-11" | 8 | 9 | 33'-0" | 5 | 9 | 14'-10" | 8 | 9 | 26'-3" | 5 | 9 | 10'-10" |
| 25 - 31.25 - 25 | 18 | 4'-0" | 8 | 9 | 27'-0" | 27'-11" | 8 | 9 | 34'-3" | 5 | 9 | 15'-5" | 8 | 9 | 27'-1" | 5 | 9 | 11'-3" |
| 26 - 32.50 - 26 | 18 | 4'-0" | 8 | 10 | 28'-0" | 28'-11" | 8 | 10 | 35'-6" | 5 | 10 | 16'-1" | 8 | 10 | 27'-10" | 5 | 10 | 11'-8" |
| 27 - 33.75 - 27 | 18 | 4'-0" | 8 | 10 | 29'-0" | 29'-11" | 8 | 10 | 36'-9" | 5 | 10 | 16'-8" | 8 | 10 | 28'-8" | 5 | 10 | 12'-2" |
| 28 - 35.00 - 28 | 18 | 4'-0" | 8 | 10 | 30'-0" | 30'-11" | 8 | 10 | 38'-0" | 5 | 10 | 17'-3" | 8 | 10 | 29'-6" | 5 | 10 | 12'-7" |
| 29 - 36.25 - 29 | 18 1/2 | 4'-0" | 8 | 10 | 31'-0" | 31'-11" | 8 | 10 | 39'-3" | 5 | 10 | 17'-10" | 8 | 10 | 30'-3" | 5 | 10 | 13'-0" |
| 30 - 37.50 - 30 | 19 | 4'-0" | 8 | 10 | 32'-0" | 32'-11" | 8 | 10 | 40'-6" | 5 | 9 | 18'-5" | 8 | 9 | 31'-1" | 5 | 9 | 13'-6" |
| 31 - 38.75 - 31 | 19 1/2 | 4'-0" | 8 | 10 | 33'-0" | 33'-11" | 8 | 10 | 41'-9" | 5 | 9 | 19'-0" | 9 | 9 | 31'-11" | 5 | 9 | 13'-11" |
| 32 - 40.00 - 32 | 20 | 4'-0" | 8 | 10 | 34'-0" | 34'-11" | 8 | 10 | 43'-0" | 5 | 9 | 19'-8" | 9 | 9 | 32'-8" | 5 | 9 | 14'-4" |
| 33 - 41.25 - 33 | 20 1/2 | 4'-3" | 8 | 11 | 35'-0" | 35'-11" | 8 | 11 | 44'-3" | 5 | 9 | 20'-3" | 9 | 9 | 33'-6" | 5 | 9 | 14'-9" |
| 34 - 42.50 - 34 | 21 | 4'-3" | 8 | 11 | 36'-0" | 36'-11" | 8 | 11 | 45'-6" | 5 | 9 | 20'-10" | 9 | 9 | 34'-4" | 5 | 9 | 15'-2" |
| 35 - 43.75 - 35 | 21 1/2 | 4'-3" | 8 | 11 | 37'-0" | 37'-11" | 8 | 11 | 46'-9" | 5 | 11 | 21'-5" | 9 | 11 | 35'-2" | 5 | 11 | 15'-8" |
| 36 - 45.00 - 36 | 22 | 4'-3" | 8 | 11 | 38'-0" | 38'-11" | 8 | 11 | 48'-0" | 5 | 11 | 22'-0" | 9 | 11 | 35'-11" | 5 | 11 | 16'-1" |
| 37 - 46.25 - 37 | 22 1/2 | 4'-3" | 9 | 9 | 39'-5" | 40'-8" | 9 | 9 | 50'-1" | 5 | 11 | 22'-7" | 9 | 11 | 36'-9" | 5 | 11 | 16'-7" |
| 38 - 47.50 - 38 | 23 | 4'-3" | 9 | 9 | 40'-5" | 41'-8" | 9 | 9 | 51'-4" | 5 | 11 | 23'-3" | 9 | 11 | 37'-6" | 5 | 11 | 17'-0" |
| 39 - 48.75 - 39 | 23 1/2 | 4'-6" | 9 | 10 | 41'-5" | 42'-8" | 9 | 10 | 52'-7" | 5 | 11 | 23'-10" | 9 | 11 | 38'-4" | 5 | 11 | 17'-6" |
| 40 - 50.00 - 40 | 24 | 4'-6" | 9 | 10 | 42'-5" | 43'-8" | 9 | 10 | 53'-10" | 5 | 11 | 24'-5" | 9 | 11 | 39'-1" | 5 | 11 | 17'-11" |
| 41 - 51.25 - 41 | 24 1/2 | 4'-6" | 9 | 11 | 43'-5" | 44'-8" | 9 | 11 | 55'-1" | 5 | 11 | 25'-0" | 10 | 11 | 39'-11" | 5 | 11 | 18'-5" |
| 42 - 52.50 - 42 | 25 | 4'-6" | 9 | 11 | 44'-5" | 45'-8" | 9 | 11 | 56'-4" | 5 | 11 | 25'-8" | 10 | 11 | 40'-8" | 5 | 11 | 18'-10" |
| 43 - 53.75 - 43 | 25 1/2 | 4'-6" | 9 | 11 | 45'-5" | 46'-8" | 9 | 11 | 57'-7" | 5 | 11 | 26'-3" | 10 | 11 | 41'-6" | 5 | 11 | 19'-3" |
| 44 - 55.00 - 44 | 26 | 4'-6" | 9 | 11 | 46'-5" | 47'-8" | 9 | 11 | 58'-10" | 5 | 11 | 26'-10" | 10 | 11 | 42'-4" | 5 | 11 | 19'-8" |
| 45 - 56.25 - 45 | 26 1/2 | 4'-6" | 10 | 11 | 47'-11" | 49'-4" | 10 | 11 | 61'-1" | 5 | 11 | 27'-5" | 10 | 11 | 43'-1" | 5 | 11 | 20'-2" |
| 46 - 57.50 - 46 | 27 | 4'-6" | 10 | 11 | 48'-11" | 50'-4" | 10 | 11 | 62'-4" | 5 | 11 | 28'-1" | 10 | 11 | 43'-10" | 5 | 11 | 20'-8" |

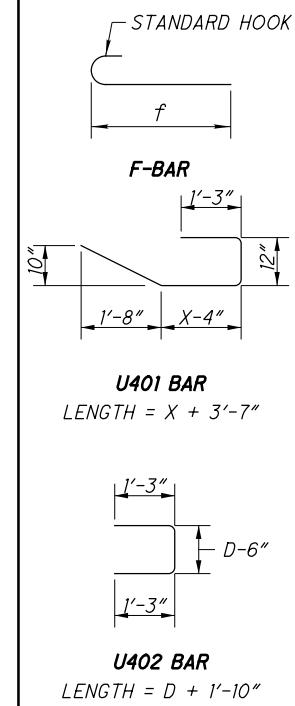


EDGE BEAM DETAIL
(FOR SLABS WITH T < 18")



EDGE BEAM DETAIL
(FOR SLABS WITH T ≥ 18")

BENDING DIAGRAMS

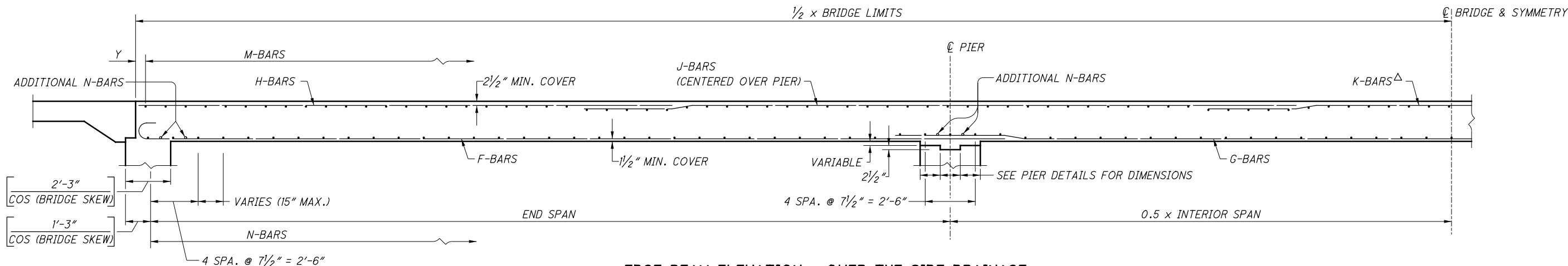


U401 BAR
LENGTH = X + 3'-7"



U402 BAR
LENGTH = D + 1'-10"

NOTE
F BAR LENGTHS INCLUDE THE 180° BEND STANDARD HOOK LENGTH.



EDGE BEAM ELEVATION - OVER THE SIDE DRAINAGE

$$Y \text{ (INCHES)} = \frac{1}{2} \left[\text{BRIDGE LIMITS (FEET)} - (\text{NO. M BARS} - 1) * \text{M BAR SPACING (FEET)} \right] * 12$$

LEGEND:

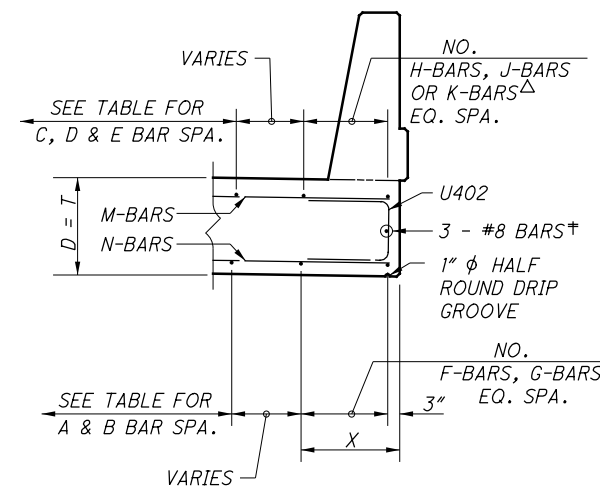
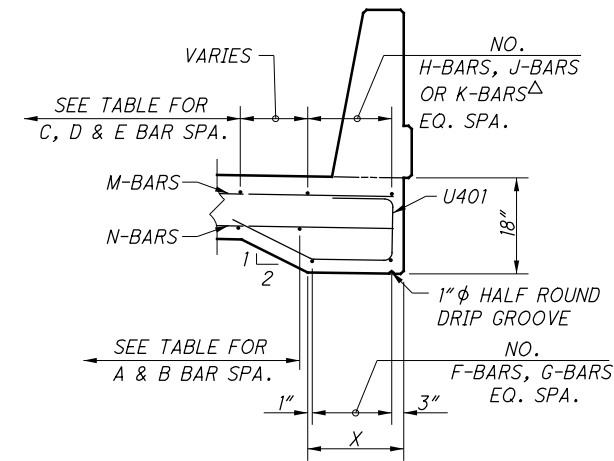
Δ - K-BARS ARE NOT ALWAYS REQUIRED; SEE SLAB DATA TABLE ON THIS SHEET

† - LENGTH = 1/3 [BRIDGE LIMITS (FEET) + 6.0]

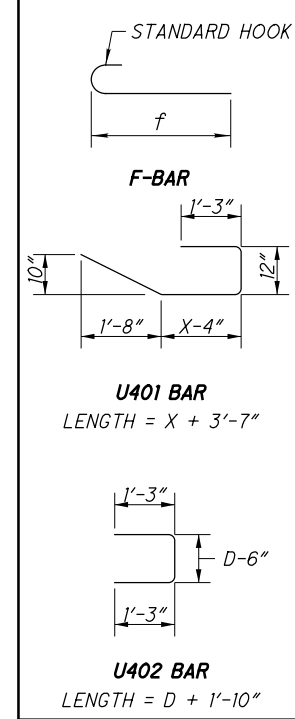
DESIGN REVIEW: OFFICE OF STRUCTURAL ENGINEERING ORIGINAL DESIGN PREPARED BY: E.L. ROBINSON
 STATE OF OHIO DEPARTMENT OF TRANSPORTATION
 07-18-08
 DATE
 ADMINISTRATOR
 REVIEWED: RLE
 CHECKED: DFT
 DESIGNED: AME
 DRAWN: DTA
 REVISIONS: 01-19-18
 CS-1-08
 CONTINUOUS SLAB BRIDGE
 3 / 4

EDGE BEAM SLAB DATA - PARAPET

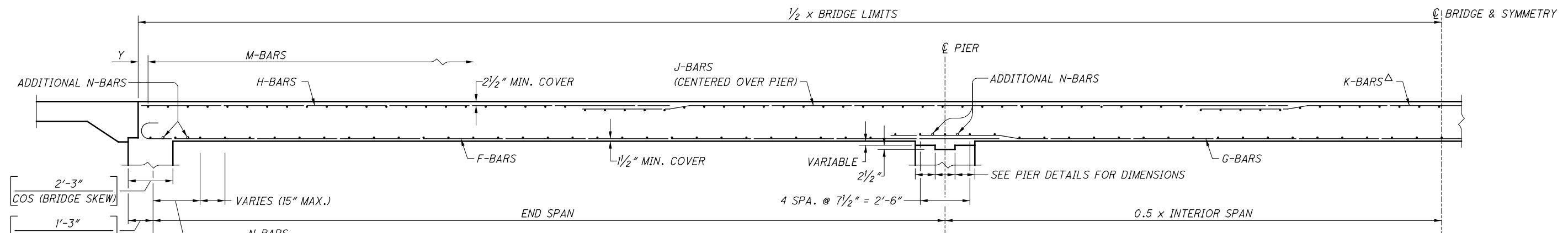
| | | LONGITUDINAL | | | | | | | | | | | | | | | | |
|-----------------|---------------|--------------|--------|-----|---------|---------|----------|-----|---------|------|--------|---------|------|-----|---------|------|-----|---------|
| | | BOTTOM BARS | | | | | TOP BARS | | | | | | | | | | | |
| SPANS (feet) | D (inches) | X (ft-in) | F BARS | | G BARS | | H BARS | | J BARS | | K BARS | | | | | | | |
| | | | SIZE | NO. | f | LENGTH | SIZE | NO. | LENGTH | SIZE | NO. | LENGTH | SIZE | NO. | LENGTH | SIZE | NO. | LENGTH |
| 14 - 17.50 - 14 | 18 | 5'-3" | 8 | 10 | 16'-0" | 16'-11" | 8 | 10 | 20'-6" | 5 | 10 | 7'-6" | 8 | 10 | 21'-0" | N/A | N/A | N/A |
| 15 - 18.75 - 15 | 18 | 5'-3" | 8 | 10 | 17'-0" | 17'-11" | 8 | 10 | 21'-9" | 5 | 10 | 7'-10" | 8 | 10 | 22'-3" | N/A | N/A | N/A |
| 16 - 20.00 - 16 | 18 | 5'-3" | 8 | 10 | 18'-0" | 18'-11" | 8 | 10 | 23'-0" | 5 | 10 | 8'-3" | 8 | 10 | 23'-6" | N/A | N/A | N/A |
| 17 - 21.25 - 17 | 18 | 5'-6" | 8 | 10 | 19'-0" | 19'-11" | 8 | 10 | 24'-3" | 5 | 10 | 8'-7" | 8 | 10 | 24'-9" | N/A | N/A | N/A |
| 18 - 22.50 - 18 | 18 | 5'-6" | 8 | 10 | 20'-0" | 20'-11" | 8 | 10 | 25'-6" | 5 | 10 | 9'-0" | 8 | 10 | 26'-0" | N/A | N/A | N/A |
| 19 - 23.75 - 19 | 18 | 5'-6" | 8 | 10 | 21'-0" | 21'-11" | 8 | 10 | 26'-9" | 5 | 10 | 9'-4" | 8 | 10 | 27'-3" | N/A | N/A | N/A |
| 20 - 25.00 - 20 | 18 | 5'-6" | 8 | 10 | 22'-0" | 22'-11" | 8 | 10 | 28'-0" | 5 | 10 | 9'-9" | 8 | 10 | 28'-6" | N/A | N/A | N/A |
| 21 - 26.25 - 21 | 18 | 5'-6" | 8 | 10 | 23'-0" | 23'-11" | 8 | 10 | 29'-3" | 5 | 10 | 10'-1" | 8 | 10 | 29'-9" | N/A | N/A | N/A |
| 22 - 27.50 - 22 | 18 | 5'-6" | 8 | 10 | 24'-0" | 24'-11" | 8 | 10 | 30'-6" | 5 | 10 | 13'-8" | 8 | 10 | 24'-8" | 5 | 10 | 9'-11" |
| 23 - 28.75 - 23 | 18 | 5'-6" | 8 | 10 | 25'-0" | 25'-11" | 8 | 10 | 31'-9" | 5 | 10 | 14'-3" | 8 | 10 | 25'-5" | 5 | 10 | 10'-4" |
| 24 - 30.00 - 24 | 18 | 5'-6" | 8 | 10 | 26'-0" | 26'-11" | 8 | 10 | 33'-0" | 5 | 12 | 14'-10" | 8 | 12 | 26'-3" | 5 | 12 | 10'-10" |
| 25 - 31.25 - 25 | 18 | 5'-6" | 8 | 10 | 27'-0" | 27'-11" | 8 | 10 | 34'-3" | 5 | 12 | 15'-5" | 8 | 12 | 27'-1" | 5 | 12 | 11'-3" |
| 26 - 32.50 - 26 | 18 | 5'-6" | 8 | 10 | 28'-0" | 28'-11" | 8 | 10 | 35'-6" | 5 | 12 | 16'-1" | 8 | 12 | 27'-10" | 5 | 12 | 11'-8" |
| 27 - 33.75 - 27 | 18 | 5'-6" | 8 | 10 | 29'-0" | 29'-11" | 8 | 10 | 36'-9" | 5 | 12 | 16'-8" | 8 | 12 | 28'-8" | 5 | 12 | 12'-2" |
| 28 - 35.00 - 28 | 18 | 5'-6" | 8 | 12 | 30'-0" | 30'-11" | 8 | 12 | 38'-0" | 5 | 12 | 17'-3" | 8 | 12 | 29'-6" | 5 | 12 | 12'-7" |
| 29 - 36.25 - 29 | 18 1/2 | 5'-6" | 8 | 12 | 31'-0" | 31'-11" | 8 | 12 | 39'-3" | 5 | 14 | 17'-10" | 8 | 14 | 30'-3" | 5 | 14 | 13'-0" |
| 30 - 37.50 - 30 | 19 | 5'-6" | 8 | 12 | 32'-0" | 32'-11" | 8 | 12 | 40'-6" | 5 | 12 | 18'-5" | 9 | 12 | 31'-1" | 5 | 12 | 13'-6" |
| 31 - 38.75 - 31 | 19 1/2 | 5'-6" | 8 | 12 | 33'-0" | 33'-11" | 8 | 12 | 41'-9" | 5 | 12 | 19'-0" | 9 | 12 | 31'-11" | 5 | 12 | 13'-11" |
| 32 - 40.00 - 32 | 20 | 5'-6" | 8 | 12 | 34'-0" | 34'-11" | 8 | 12 | 43'-0" | 5 | 12 | 19'-8" | 9 | 12 | 32'-8" | 5 | 12 | 14'-4" |
| 33 - 41.25 - 33 | 20 1/2 | 5'-9" | 8 | 12 | 35'-0" | 35'-11" | 8 | 12 | 44'-3" | 5 | 12 | 20'-3" | 9 | 12 | 33'-6" | 5 | 12 | 14'-9" |
| 34 - 42.50 - 34 | 21 | 5'-9" | 8 | 12 | 36'-0" | 36'-11" | 8 | 12 | 45'-6" | 5 | 12 | 20'-10" | 9 | 12 | 34'-4" | 5 | 12 | 15'-2" |
| 35 - 43.75 - 35 | 21 1/2 | 5'-9" | 8 | 12 | 37'-0" | 37'-11" | 8 | 12 | 46'-9" | 5 | 12 | 21'-5" | 9 | 12 | 35'-2" | 5 | 12 | 15'-8" |
| 36 - 45.00 - 36 | 22 | 5'-9" | 8 | 12 | 38'-0" | 38'-11" | 8 | 12 | 48'-0" | 5 | 12 | 22'-0" | 9 | 12 | 35'-11" | 5 | 12 | 16'-1" |
| 37 - 46.25 - 37 | 22 1/2 | 5'-9" | 9 | 11 | 39'-5" | 40'-8" | 9 | 11 | 50'-1" | 5 | 14 | 22'-7" | 9 | 14 | 36'-9" | 5 | 14 | 16'-7" |
| 38 - 47.50 - 38 | 23 | 5'-9" | 9 | 11 | 40'-5" | 41'-8" | 9 | 11 | 51'-4" | 5 | 14 | 23'-3" | 9 | 14 | 37'-6" | 5 | 14 | 17'-0" |
| 39 - 48.75 - 39 | 23 1/2 | 6'-0" | 9 | 11 | 41'-5" | 42'-8" | 9 | 11 | 52'-7" | 5 | 15 | 23'-10" | 9 | 15 | 38'-4" | 5 | 15 | 17'-6" |
| 40 - 50.00 - 40 | 24 | 6'-0" | 9 | 11 | 42'-5" | 43'-8" | 9 | 11 | 53'-10" | 5 | 15 | 24'-5" | 9 | 15 | 39'-1" | 5 | 15 | 17'-11" |
| 41 - 51.25 - 41 | 24 1/2 | 6'-0" | 9 | 13 | 43'-5" | 44'-8" | 9 | 13 | 55'-1" | 5 | 15 | 25'-0" | 10 | 15 | 39'-11" | 5 | 15 | 18'-5" |
| 42 - 52.50 - 42 | 25 | 6'-0" | 9 | 13 | 44'-5" | 45'-8" | 9 | 13 | 56'-4" | 5 | 15 | 25'-8" | 10 | 15 | 40'-8" | 5 | 15 | 18'-10" |
| 43 - 53.75 - 43 | 25 1/2 | 6'-0" | 9 | 13 | 45'-5" | 46'-8" | 9 | 13 | 57'-7" | 5 | 15 | 26'-3" | 10 | 15 | 41'-6" | 5 | 15 | 19'-3" |
| 44 - 55.00 - 44 | 26 | 6'-0" | 9 | 13 | 46'-5" | 47'-8" | 9 | 13 | 58'-10" | 5 | 15 | 26'-10" | 10 | 15 | 42'-4" | 5 | 15 | 19'-8" |
| 45 - 56.25 - 45 | 26 1/2 | 6'-0" | 10 | 11 | 47'-11" | 49'-4" | 10 | 11 | 61'-1" | 5 | 15 | 27'-5" | 10 | 15 | 43'-1" | 5 | 15 | 20'-2" |
| 46 - 57.50 - 46 | 27 | 6'-0" | 10 | 11 | 48'-11" | 50'-4" | 10 | 11 | 62'-4" | 5 | 15 | 28'-1" | 10 | 15 | 43'-10" | 5 | 15 | 20'-8" |



BENDING DIAGRAMS



NOTE
F BAR LENGTHS INCLUDE THE 180° BEND STANDARD HOOK LENGTH.



$$Y \text{ (INCHES)} = \frac{1}{2} \left[\text{BRIDGE LIMITS (FEET)} - (\text{NO. M BARS} - 1) * \text{M BAR SPACING (FEET)} \right] * 12$$

LEGEND:
 Δ - K-BARS ARE NOT ALWAYS REQUIRED; SEE SLAB DATA TABLE ON THIS SHEET
 † - LENGTH = 1/3 [BRIDGE LIMITS (FEET) + 6.0]