

SPAN	THICKNESS T	REINFORCING		
		SPACING	BAR SIZE	B501 SPACING (BOTTOM)
11'-0"	11 1/4"	6 1/4"	7	10 1/2"
12'-0"	11 3/4"	6"	7	10 1/2"
13'-0"	12 1/2"	6"	7	11"
14'-0"	13"	7 1/2"	8	11 1/4"
15'-0"	13 1/2"	7 1/2"	8	11 3/4"
16'-0"	14"	7"	8	11 1/2"
17'-0"	14 3/4"	7"	8	12"
18'-0"	15 1/4"	7"	8	11 1/2"
19'-0"	15 3/4"	6 3/4"	8	12"
20'-0"	16 1/4"	6 3/4"	8	11 1/2"
21'-0"	16 3/4"	8"	9	12"
22'-0"	17 1/4"	8"	9	11 1/2"
23'-0"	17 3/4"	8"	9	11 1/2"
24'-0"	18 1/4"	7 3/4"	9	11 1/2"
25'-0"	18 3/4"	7 1/2"	9	12"
26'-0"	19 1/4"	7 1/2"	9	12"
27'-0"	19 3/4"	7 1/4"	9	12"
28'-0"	20 1/2"	7"	9	12"
29'-0"	21"	8 1/2"	10	12"
30'-0"	21 1/2"	8 1/4"	10	11"
31'-0"	22"	8 1/4"	10	11"
32'-0"	22 3/4"	8"	10	11"
33'-0"	23 1/4"	7 3/4"	10	11 1/2"
34'-0"	23 3/4"	7 1/2"	10	11"
35'-0"	24 1/4"	7 1/2"	10	11"
36'-0"	25"	7 1/4"	10	11"
37'-0"	25 1/2"	7"	10	10 1/2"
38'-0"	26"	7"	10	10 1/4"

**GENERAL:** THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS FOR SINGLE 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 CROSS SECTIONS, SUBSTRUCTURE DETAILS, ESTIMATED QUANTITIES, REINFORCING STEEL LIST AND OTHER NECESSARY DETAILS AND SPECIAL NOTES.

**ROADWAY WIDTH:** THE SLAB ON THIS SHEET IS DESIGNED FOR THE FOLLOWING ROADWAY WIDTHS, MEASURED BETWEEN FACE OF BRIDGE RAILS: WIDTH ≥ 18 FT

**NARROW ROADWAY:** THESE DESIGNS SHALL NOT BE USED FOR ROADWAY WIDTHS LESS THEN 18 FEET.

**DESIGN SPECIFICATIONS:** THIS DRAWING CONFORMS TO THE "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS NINTH EDITION" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020, AND THE OHIO BRIDGE DESIGN MANUAL, 2020.

**DESIGN DATA:**  
 DESIGN METHOD - LOAD AND RESISTANCE FACTOR DESIGN  
 DESIGN LOADING - HL-93  
 SUPERIMPOSED DEAD LOAD = 60 LB/FT<sup>2</sup> (FUTURE WEARING SURFACE)  
 WEARING SURFACE - ONE INCH MONOLITHIC  
**DESIGN STRESSES:**  
 CONCRETE - COMPRESSIVE STRENGTH = 4500 PSI  
 REINFORCING STEEL - MIN. YIELD STRENGTH = 60 KSI

**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.

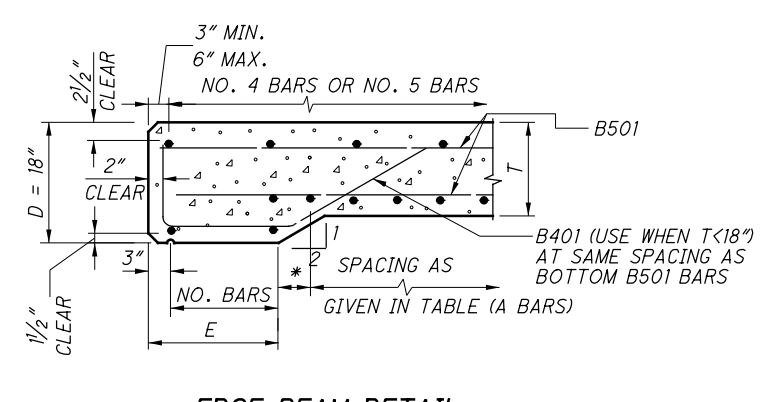
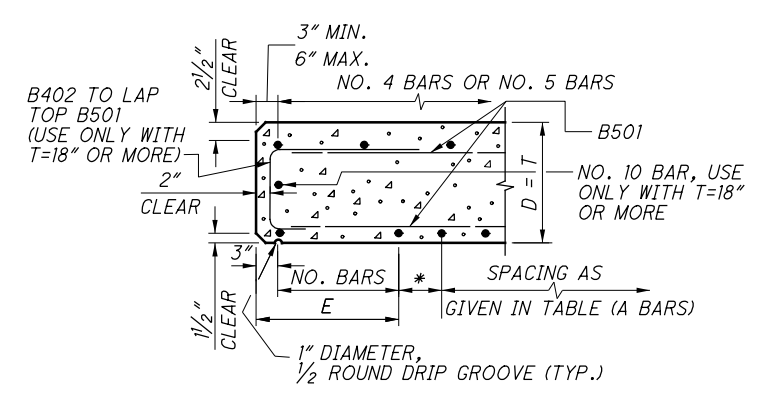
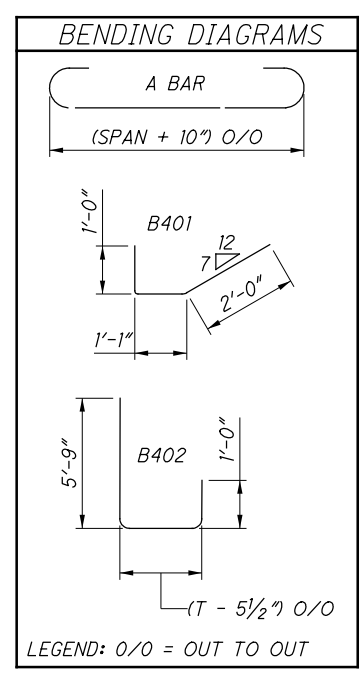
**CAMBER:** TO COMPENSATE FOR FALSEWORK DEFLECTION AND FOR THE DEFLECTION OF THE SLAB AFTER THE FALSEWORK IS REMOVED, BUILD CAMBER INTO THE FALSEWORK ACCORDING TO CMS 508.02.

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

**REINFORCING STEEL:** FURNISH THE REINFORCING STEEL LENGTHS AS INDICATED IN THE TABLE OR PROVIDE LAP SPLICES WITH THE MINIMUM LAP LENGTHS SHOWN BELOW. IF LAP SPLICES ARE PROVIDED, STAGGER THE LOCATION OF THE SPLICES.

- NO. 4 LAP = 2'-4"
- NO. 5 LAP = 2'-11" (TOP)
- NO. 5 LAP = 2'-10" (BOT)
- NO. 7 LAP = 4'-5"
- NO. 8 LAP = 5'-7"
- NO. 9 LAP = 6'-10"
- NO. 10 LAP = 8'-5"

EDGE BEAM SLAB DATA							
SPANS (feet)	D (inches)	OVER THE SIDE DRAINAGE			WITH PARAPET		
		E (Ft-in)	SIZE	NO. BARS	E (Ft-in)	SIZE	NO. BARS
11	18	3'-6"	10	5	5'-0"	10	6
12	18	3'-7"	10	5	5'-1"	10	6
13	18	3'-7"	10	5	5'-1"	10	6
14	18	3'-7"	10	5	5'-1"	10	6
15	18	3'-8"	10	5	5'-2"	10	7
16	18	3'-8"	10	6	5'-2"	10	7
17	18	3'-8"	10	6	5'-2"	10	7
18	18	3'-9"	10	6	5'-3"	10	8
19	18	3'-9"	10	6	5'-3"	10	8
20	18	3'-9"	10	7	5'-3"	10	8
21	18	3'-10"	10	7	5'-4"	10	8
22	18	3'-10"	10	7	5'-4"	10	9
23	18	3'-10"	10	8	5'-4"	10	9
24	18 1/4	3'-11"	10	8	5'-5"	10	9
25	18 3/4	3'-11"	10	9	5'-5"	10	9
26	19 1/4	3'-11"	10	9	5'-5"	10	10
27	19 3/4	3'-11"	10	9	5'-5"	10	10
28	20 1/2	4'-0"	10	9	5'-6"	10	10
29	21	4'-0"	10	9	5'-6"	10	10
30	21 1/2	4'-0"	10	9	5'-6"	10	11
31	22	4'-0"	10	10	5'-6"	10	11
32	22 3/4	4'-1"	10	10	5'-7"	10	11
33	23 1/4	4'-1"	10	10	5'-7"	10	12
34	23 3/4	4'-1"	10	10	5'-7"	10	12
35	24 1/4	4'-1"	10	11	5'-7"	10	12
36	25	4'-1"	10	11	5'-7"	10	13
37	25 1/2	4'-2"	10	11	5'-8"	10	13
38	26	4'-2"	10	11	5'-8"	10	13



**LEGEND**  
 \* VARIES, SHOULD NOT EXCEED SPACING OF "A" BARS