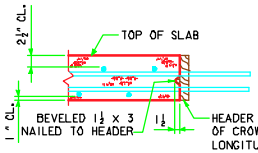
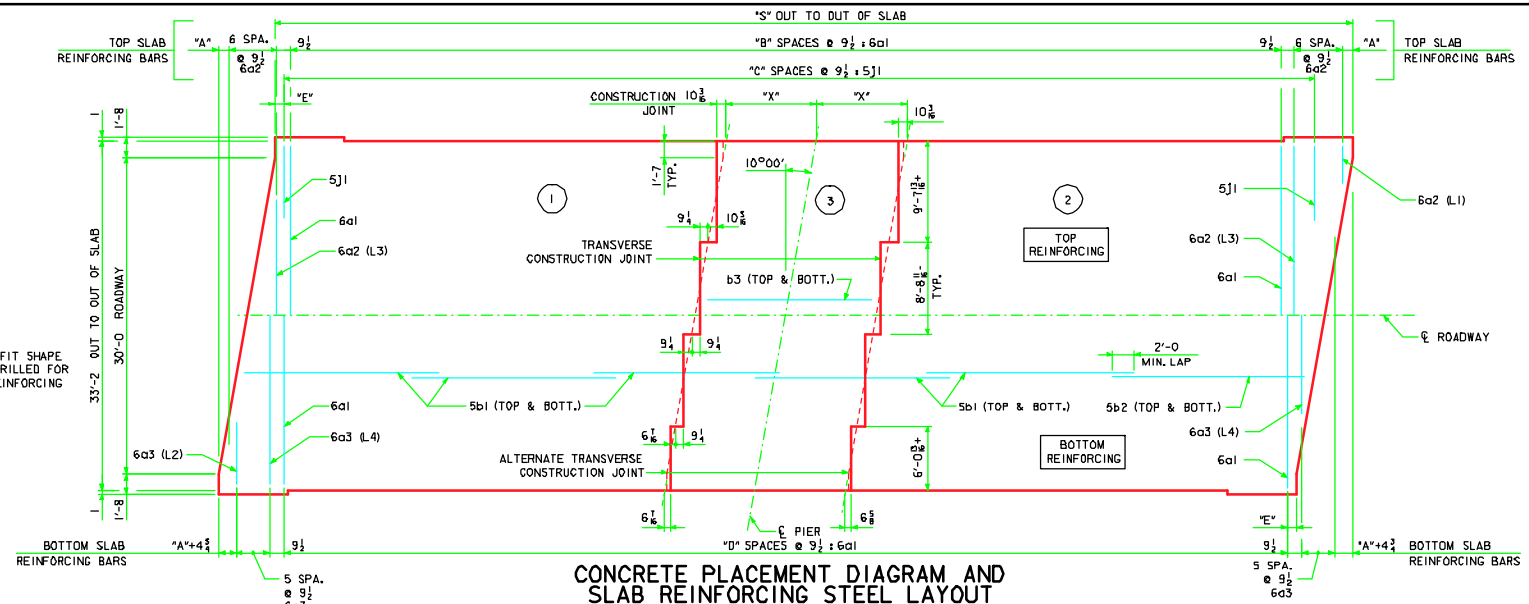


TRANSVERSE SLAB CONSTRUCTION JOINT



CONCRETE PLACEMENT DIAGRAM AND SLAB REINFORCING STEEL LAYOUT

ROADWAY SLAB SHALL BE PLACED IN SECTIONS AND IN SEQUENCE INDICATED. ALTERNATE PROCEDURES FOR PLACING SLAB CONCRETE MAY BE SUBMITTED FOR APPROVAL TOGETHER WITH A STATEMENT OF THE PROPOSED METHOD AND EVIDENCE THAT THE CONTRACTOR POSSESSES THE NECESSARY EQUIPMENT AND FACILITIES TO ACCOMPLISH THE REQUIRED RESULT.

CONCRETE PLACEMENT QUANTITIES - C.Y.

(SUPERSTRUCTURE PLUS TWO INTEGRAL ABUTMENTS)

LOCATION	℄-℄ ABUTMENT BEARING	222'-0	232'-0	242'-0	252'-0	262'-0
	BEAM SERIES	BTD110	BTD115	BTD120	BTD125	BTD130
SECTION 1 SLAB, WINGWALLS, ABUTMENT DIAPHRAGM, AND MASKWALL (B)		107.1	110.8	114.4	118.1	121.7
SECTION 2 SLAB, WINGWALLS, ABUTMENT DIAPHRAGM, AND MASKWALL (B)		107.1	110.8	114.4	118.1	121.7
SECTION 3 SLAB AND PIER DIAPHRAGM (B)		35.5	36.5	37.6	38.6	39.7
ABUTMENT WINGS		7.3	7.3	7.3	7.3	7.3
ABUTMENT FOOTINGS		35.3	35.3	35.3	35.3	35.3
TOTAL		292.3	300.7	309.0	317.4	325.7

GENERAL DATA - SUPERSTRUCTURE

LOCATION	℄-℄ ABUTMENT BEARING	222'-0	232'-0	242'-0	252'-0	262'-0
	BEAM SERIES	BTD110	BTD115	BTD120	BTD125	BTD130
END DISTANCE ON 6a2 BARS (TOP)	"A"	4½	7½	5¾	8¾	7
NO. OF SPACES FOR 6a1 BARS (TOP)	"B"	276	288	301	313	326
NO. OF SPACES FOR 5j1 BARS (TOP)	"C"	282	294	307	319	332
NO. OF SPACES FOR 6a1 BARS (BOTTOM)	"D"	277	289	302	314	327
END DISTANCE ON 6a1 BARS (BOTTOM) & 5J1 BARS (TOP)	"E"	2¾	5¾	4	7	5¼
OUT TO OUT OF SLAB	"S"	225'-0½	235'-0½	245'-0½	255'-0½	265'-0½
LENGTH OF SHORT 6a2 BAR (TOP)	"L1"	2'-7	4'-0	3'-2	4'-7	3'-9
LENGTH OF SHORT 6a3 BAR (BOTTOM)	"L2"	4'-9	6'-3	5'-5	6'-10	6'-0
LENGTH OF LONG 6a2 BAR (TOP)	"L3"	29'-6	30'-11	30'-1	31'-6	30'-8
LENGTH OF LONG 6a3 BAR (BOTTOM)	"L4"	27'-3	28'-8	27'-10	29'-3	28'-5
SLAB TRANSVERSE CONSTR. JT. DISTANCE FROM C.L. PIER	"X"	13'-11	14'-6	15'-2	15'-9	16'-5

ESTIMATED QUANTITIES - SUPERSTRUCTURE

(SUPERSTRUCTURE PLUS TWO INTEGRAL ABUTMENTS)

ITEM	℄-℄ ABUTMENT BEARING	222'-0	232'-0	242'-0	252'-0	262'-0
	BEAM SERIES	BTD110	BTD115	BTD120	BTD125	BTD130
EXCAVATION, CLASS 20	CY	109	109	109	109	109
STRUCTURAL CONCRETE (BRIDGE)	CY (B)	292.3	300.7	309.0	317.4	325.7
REINFORCING STEEL	LB	6,072	6,072	6,089	6,089	6,089
REINFORCING STEEL, EPOXY COATED	LB	73,033	76,002	79,044	83,330	86,322
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D110	EACH	8	—	—	—	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D115	EACH	—	8	—	—	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D120	EACH	—	—	8	—	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D125	EACH	—	—	—	8	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D130	EACH	—	—	—	—	8
STRUCTURAL STEEL	LB	3,759	3,759	3,759	11,277	11,277
NUMBER OF PILES, DRIVE STEEL BEARING, HP 10 X 57 (A)		20	20	22	22	22
NUMBER OF PILES, FURNISH STEEL BEARING, HP 10 X 57 (A)		20	20	22	22	22
PREBORED HOLES	LF	200.0	200.0	220.0	220.0	220.0

(A) THIS QUANTITY REPRESENTS THE NUMBER OF PILES. PILE LENGTH SHALL BE DETERMINED BASED ON SOIL INFORMATION AND TO BE INCLUDED ON THE "ESTIMATED PROJECT QUANTITIES" SHEET.

(B) DOES NOT INCLUDE HAUNCH QUANTITIES. SEE "GENERAL ELEVATION DATA" SHEET FOR HAUNCH QUANTITIES.

NOTES:

SEE BT30-SA7-04 FOR SUPERSTRUCTURE BAR LISTS.

SEE "SITUATION PLAN" FOR NORTH ARROW.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, 2 SPAN BRIDGES

PRETENSIONED PRESTRESSED BULB TEE CONCRETE BEAM BRIDGES

ALL SPANS — JULY, 2004

SUPERSTRUCTURE DETAILS

10° SKEW

BT30-SA3-04