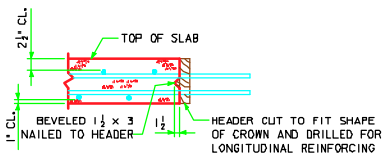
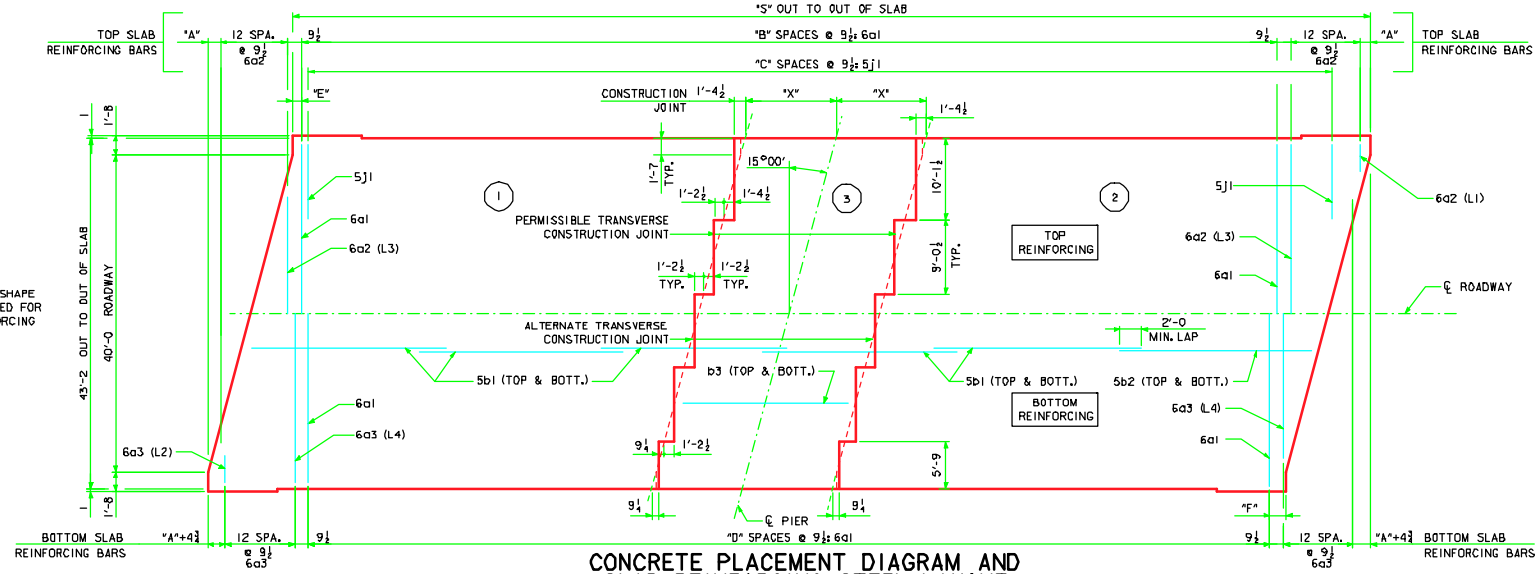


TRANSVERSE SLAB CONSTRUCTION JOINT



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)		137.8	142.5	147.2	152.0	156.7
SECTION 2 SLAB, WINGWALLS, ABUTMENT DIAPHRAGM, AND MASKWALL (B)		137.8	142.5	147.2	152.0	156.7
SECTION 3 SLAB AND PIER DIAPHRAGM (B)		48.8	50.1	51.5	52.8	54.2
ABUTMENT WINGS		7.3	7.3	7.3	7.3	7.3
ABUTMENT FOOTINGS		44.5	44.5	44.5	44.5	44.5
TOTAL		376.2	386.9	397.7	408.6	419.4

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	130	130	130	130	130
STRUCTURAL CONCRETE (BRIDGE)	CY (B)	376.2	386.9	397.7	408.6	419.4
REINFORCING STEEL	LB	7,114	7,114	7,114	7,132	7,132
REINFORCING STEEL, EPOXY COATED	LB	88,062	92,694	97,960	101,658	105,282
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D110	EACH	10	—	—	—	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D115	EACH	—	10	—	—	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D120	EACH	—	—	10	—	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D125	EACH	—	—	—	10	—
BEAMS, BULB TEE PRETENSIONED PRESTRESSED CONCRETE, D130	EACH	—	—	—	—	10
STRUCTURAL STEEL	LB	4,618	4,618	4,618	13,854	13,854
NUMBER OF PILES, DRIVE STEEL BEARING, HP 10 X 57 (A)		24	24	24	26	26
NUMBER OF PILES, FURNISH STEEL BEARING, HP 10 X 57 (A)		24	24	24	26	26
PREBORED HOLES	LF	240.0	240.0	240.0	260.0	260.0

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"	6¾	5	8	6¼	4½
NO. OF SPACES FOR 6a1 BARS (TOP)	"B"	270	283	295	308	321
NO. OF SPACES FOR 5j1 BARS (TOP)	"C"	281	294	306	319	332
NO. OF SPACES FOR 6a1 BARS (BOTTOM)	"D"	269	282	294	307	320
END DISTANCE ON 6a1 BARS (TOP)	"E"	6	4¼	7¼	5½	3¾
END DISTANCE ON 6a1 BARS (BOTTOM)	"F"	10¾	9	12	10¼	8½
OUT TO OUT OF SLAB	"S"	225'-1¼	235'-1¼	245'-1¼	255'-1¼	265'-1¼
LENGTH OF SHORT 6a2 BAR (TOP)	"L1"	2'-10	2'-4	3'-3	2'-8	2'-2
LENGTH OF SHORT 6a3 BAR (BOTTOM)	"L2"	4'-4	3'-9	4'-9	4'-2	3'-8
LENGTH OF LONG 6a2 BAR (TOP)	"L3"	38'-4	37'-9	38'-8	38'-2	37'-7
LENGTH OF LONG 6a3 BAR (BOTTOM)	"L4"	39'-9	39'-2	40'-2	39'-7	39'-1
SLAB TRANSVERSE CONSTR. JT. DISTANCE FROM C.L. PIER	"X"	13'-11	39'-3	15'-2	15'-9	16'-5

(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 BT40-SA8-04 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 - 40' ROADWAY, 2 SPAN BRIDGES

PRETENSIONED PRESTRESSED BULB TEE CONCRETE BEAM BRIDGES

ALL SPANS — JULY, 2004

SUPERSTRUCTURE DETAILS
15° SKEW

BT40-SA4-04