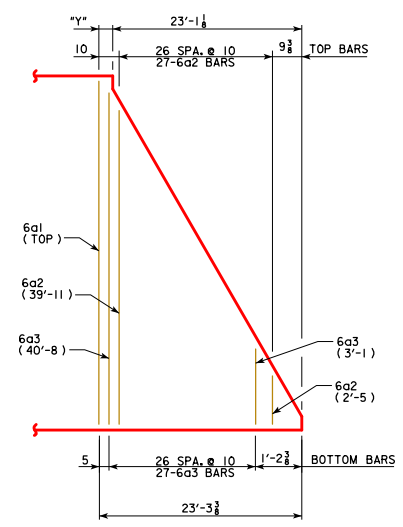
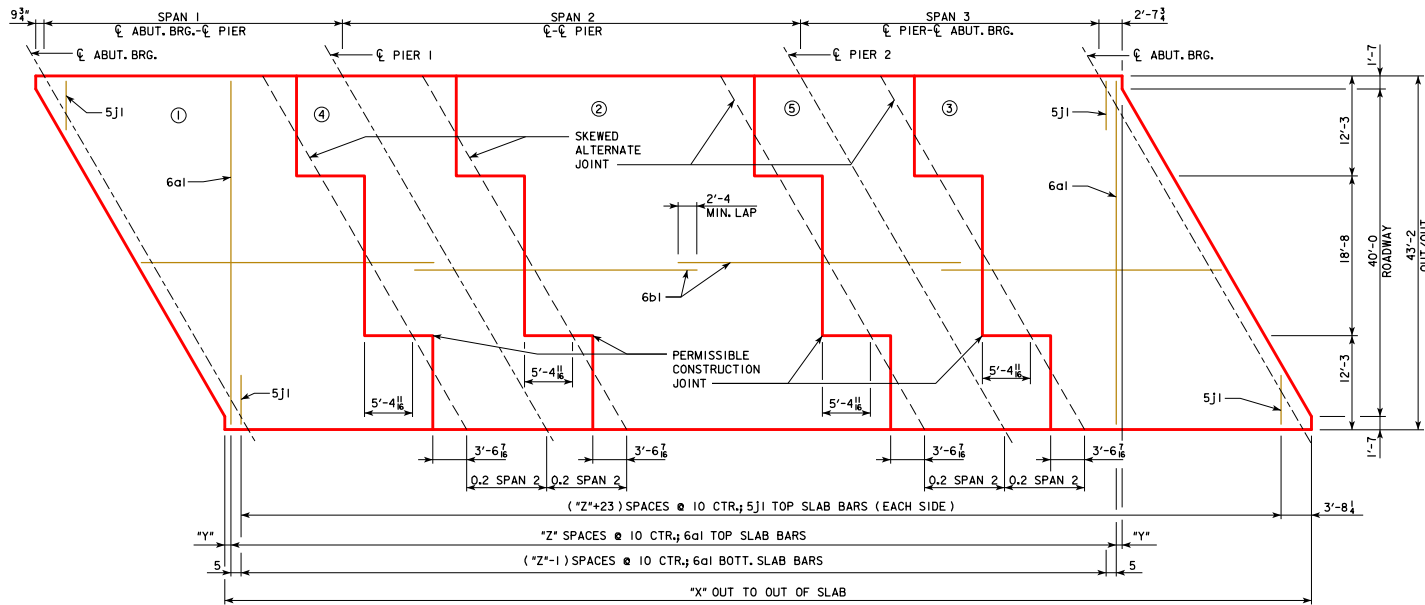


REVISED 07-2015 - CHANGED NOTE 1. CONCRETE PLACEMENT NOTE TO ACCOUNT FOR THE POSSIBLE ADDITION OF A RETARDING ADMIXTURE TO THE CONCRETE.
 REVISED 10-2016 - UPDATED ESTIMATED QUANTITY STRUCTURAL STEEL WEIGHT TO INCLUDE SHEAR STUDS AND DIAPHRAGMS FOR ALL BRIDGE LENGTHS.

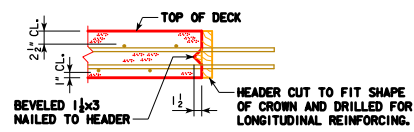
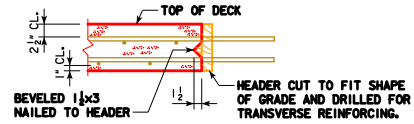


REINFORCEMENT DIMENSIONS CL-CL ABUTMENT BEARINGS	160'-0"	180'-0"	200'-0"	220'-0"	240'-0"	260'-0"	280'-0"	300'-0"	320'-0"	340'-0"
X (FT.-IN.)	163'-5 1/2"	183'-5 1/2"	203'-5 1/2"	223'-5 1/2"	243'-5 1/2"	263'-5 1/2"	283'-5 1/2"	303'-5 1/2"	323'-5 1/2"	343'-5 1/2"
Y (IN.)	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"
Z (SPACES)	168	192	216	240	264	288	312	336	360	384

**CONCRETE PLACEMENT DIAGRAM
 SHOWING SLAB REINFORCING**
 (RIGHT AHEAD SKEW SHOWN, LEFT AHEAD SKEW SIMILAR)

CONCRETE PLACEMENT QTYS. (SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)	160'-0"	180'-0"	200'-0"	220'-0"	240'-0"	260'-0"	280'-0"	300'-0"	320'-0"	340'-0"
SLAB, AND ABUT DIAPHRAGM, SECTION 1 & 3	CY 119.4	129.5	142.2	154.3	164.3	176.5	186.4	196.5	206.6	219.8
SLAB, SECTION 2	CY 42.1	47.4	52.7	58.0	63.2	68.7	74.0	79.2	84.5	89.8
SLAB, SECTION 4 & 5	CY 56.1	63.2	70.2	77.3	84.3	91.6	98.6	105.7	112.7	119.8
ABUTMENT WINGS	CY 7.2	7.2	7.2	7.6	7.6	7.6	7.6	7.6	7.6	13.9
ABUTMENT FOOTINGS	CY 40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	48.2
TOTAL	CY 265.2	287.7	312.7	337.6	359.8	384.8	407.0	429.4	451.8	491.5

ESTIMATED QTYS. (SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)	160'-0"	180'-0"	200'-0"	220'-0"	240'-0"	260'-0"	280'-0"	300'-0"	320'-0"	340'-0"
NO. OF STEEL H-PILES FOR TWO ABUTMENTS (HP 10 X 57)	NO. 16	16	18	18	18	20	20	20	20	26
STRUCTURAL CONCRETE, (BRIDGE)	CY 265.2	287.7	312.7	337.6	359.8	384.8	407.0	429.4	451.8	491.5
REINFORCING STEEL EPOXY COATED	LB 74,707	81,930	89,546	96,904	104,427	111,660	119,217	126,448	133,948	144,462
BARRIER RAILS	LF 354.9	394.9	434.9	474.9	514.9	554.9	594.9	634.9	674.9	734.0
STRUCTURAL STEEL	LB 118,890	155,997	190,448	234,097	294,231	335,228	389,009	470,337	521,761	574,426



- NOTES:
- CONCRETE DECK SHALL BE PLACED IN SECTIONS AND SEQUENCES INDICATED. ALTERNATE PROCEDURES FOR PLACING DECK 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 RESULTS. FOR APPROVED ALTERNATE PROCEDURES THE ENGINEER SHALL DETERMINE IF A RETARDING ADMIXTURE IS REQUIRED TO MAINTAIN PLASTICITY OF THE CONCRETE DECK DURING PLACEMENT.
 - WEIGHT OF STRUCTURAL STEEL SHOWN ON THIS SHEET INCLUDES: BEAMS, DIAPHRAGMS, SPLICES, SHEAR STUDS, BEARINGS, WELDS AND BOLT HARDWARE.
 - QUANTITY OF STRUCTURAL STEEL SHOWN ON THIS SHEET IS TABULATED FOR BENT PLATE DIAPHRAGM OPTION. PAYMENT FOR STRUCTURAL STEEL WILL BE BASED ON THE QUANTITIES SHOWN. THE CONTRACTOR MAY CHOOSE TO PROVIDE ROLLED CHANNEL DIAPHRAGMS AT NO ADDITIONAL COST.
 - QUANTITY OF STRUCTURAL STEEL SHOWN ON THIS SHEET IS BASED ON THE USE OF 5" HIGH SHEAR STUDS. CONTRACTOR WILL BE PAID ON AMOUNT SHOWN, BUT IS REQUIRED TO ADJUST HEIGHT OF STUDS AS REQUIRED PER "BEAM PLAN AND ELEVATION" SHEET.

SPAN LENGTHS			
BRIDGE LENGTH	SPAN 1	SPAN 2	SPAN 3
160'-0"	48'-0"	64'-0"	48'-0"
180'-0"	54'-0"	72'-0"	54'-0"
200'-0"	60'-0"	80'-0"	60'-0"
220'-0"	66'-0"	88'-0"	66'-0"
240'-0"	72'-0"	96'-0"	72'-0"
260'-0"	78'-0"	104'-0"	78'-0"
280'-0"	84'-0"	112'-0"	84'-0"
300'-0"	90'-0"	120'-0"	90'-0"
320'-0"	96'-0"	128'-0"	96'-0"
340'-0"	102'-0"	136'-0"	102'-0"

10-2016 LATEST REVISION DATE <i>Thomas E. McQuinn</i> APPROVED BY BRIDGE ENGINEER	
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010
	SUPERSTRUCTURE QUANTITIES 30° SKEW

RS40-034-10