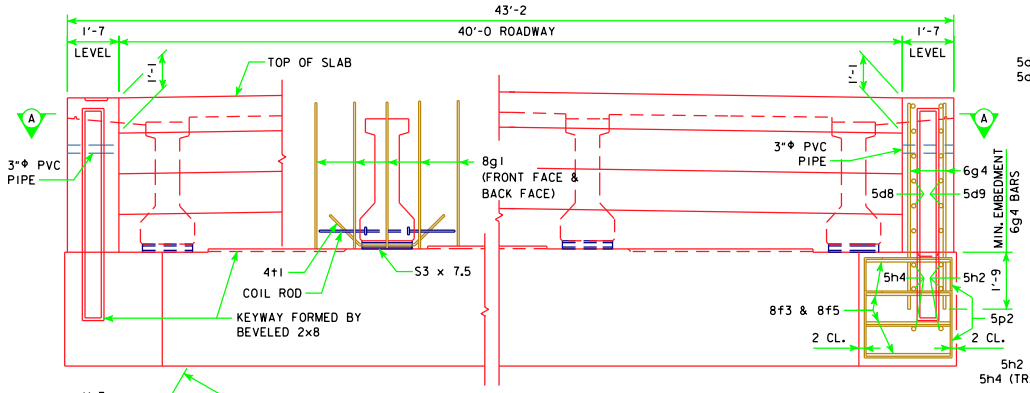
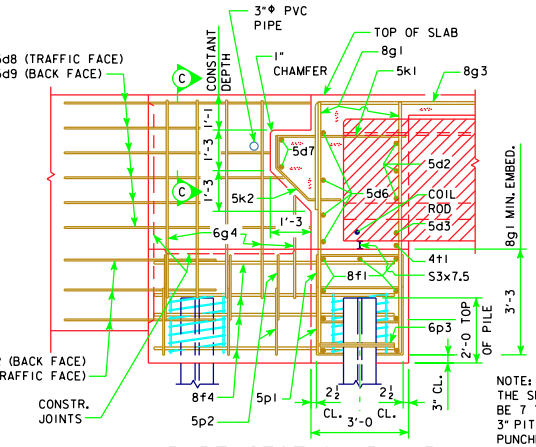


PART REAR ELEVATION AT ABUTMENT

NOTE: TOP OF ABUTMENT SHOWN FOR SOLID BARRIER RAIL



PART SECTION B - B

ABUTMENT NOTES:

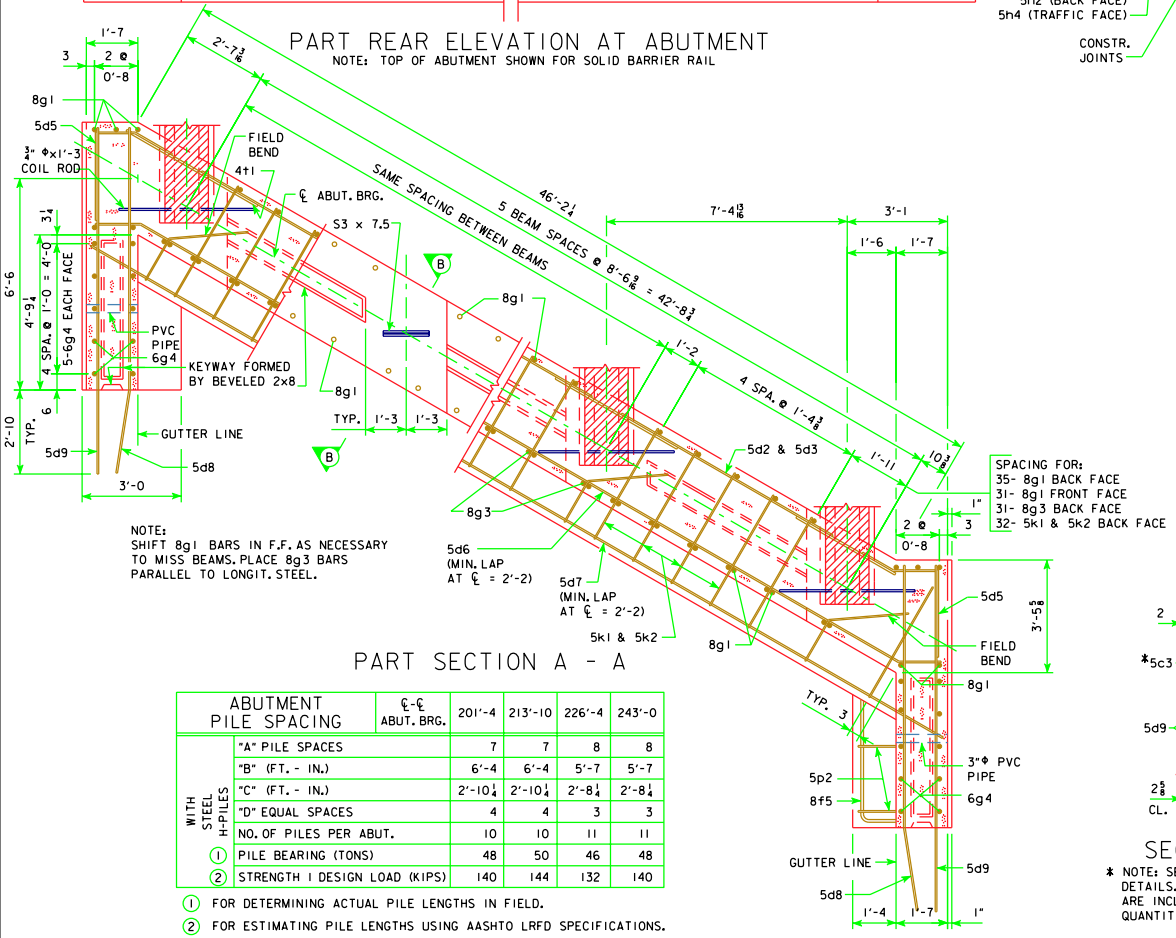
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

IF NECESSARY TO PREVENT DAMAGE TO THE END OF THE BRIDGE DECK OR BACKWALL FROM CONSTRUCTION EQUIPMENT, AN APPROPRIATE METHOD OF PROTECTION APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE BRIDGE CONTRACTOR AT NO EXTRA COST TO THE COUNTY OR STATE.

ABUTMENT PILES ARE TO BE DRIVEN TO THE DESIGN BEARING VALUE AS GIVEN IN THE ABUTMENT PILE SPACING TABLE.

BARRIER RAIL NOT SHOWN IN DETAILS.

NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 21" DIAMETER, 3" PITCH WITH 3 - $L\frac{7}{8} \times \frac{7}{8} \times \frac{1}{8}$ SPACERS PUNCHED TO HOLD SPIRAL.

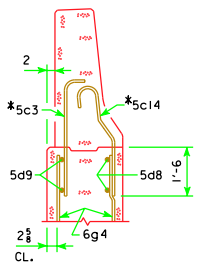


NOTE:
SHIFT 8g1 BARS IN F.F. AS NECESSARY TO MISS BEAMS. PLACE 8g3 BARS PARALLEL TO LONGIT. STEEL.

PART SECTION A - A

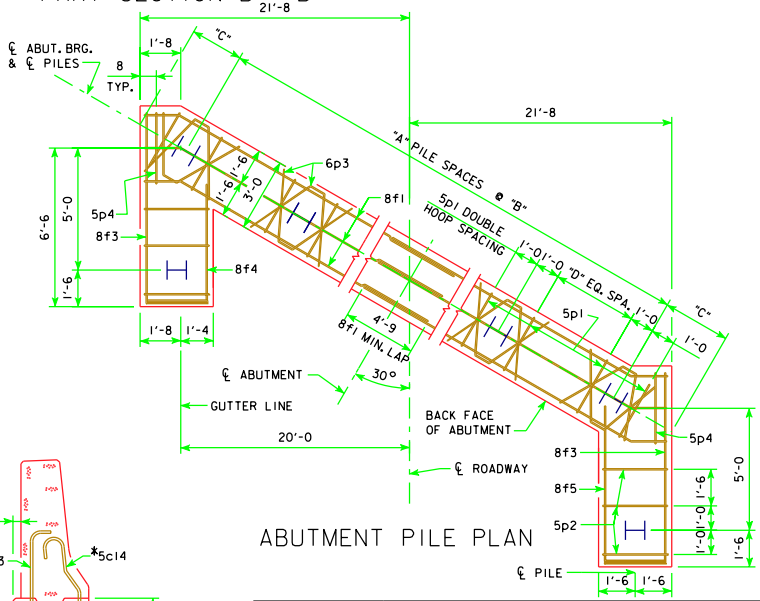
ABUTMENT PILE SPACING		℄-℄ ABUT. BRG.	201'-4	213'-10	226'-4	243'-0
WITH STEEL H-PILES	"A" PILE SPACES		7	7	8	8
	"B" (FT. - IN.)		6'-4	6'-4	5'-7	5'-7
	"C" (FT. - IN.)		2'-10¼	2'-10¼	2'-8¼	2'-8¼
	"D" EQUAL SPACES		4	4	3	3
	NO. OF PILES PER ABUT.		10	10	11	11
(1)	PILE BEARING (TONS)		48	50	46	48
(2)	STRENGTH I DESIGN LOAD (KIPS)		140	144	132	140

(1) FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
(2) FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.



PART SECTION C-C

* NOTE: SEE BARRIER RAIL SHEET FOR DETAILS. REINFORCING BARS 5c3 AND 5c14 ARE INCLUDED IN SUPERSTRUCTURE QUANTITIES.



ABUTMENT PILE PLAN

REVISED 01-10 - ADDED DETERMINING & ESTIMATING DESCRIPTIONS FOR PILE LENGTHS.

01-10
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

AUGUST, 2009

ABUTMENT DETAILS

30° SKEW C BEAMS

H40-19-06