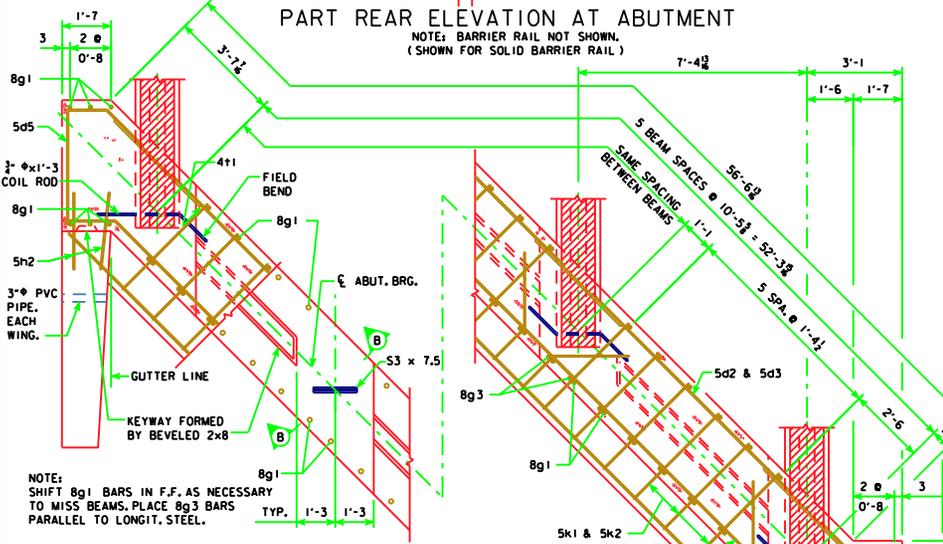


PART REAR ELEVATION AT ABUTMENT

NOTE: BARRIER RAIL NOT SHOWN.
(SHOWN FOR SOLID BARRIER RAIL)

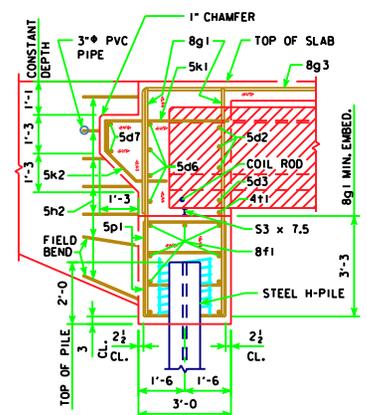


PART SECTION A - A

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

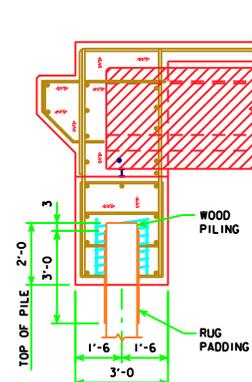
SPACING FOR:
47- 8g1 BACK FACE
36- 8g1 FRONT FACE
41- 8g3 BACK FACE
42- 5k1 & 5k2 BACK FACE

ABUTMENT PILE SPACING		℄-℄ ABUT. BRG.	138'-10	151'-4	163'-10	176'-4	188'-10
WITH WOOD PILES	"A" PILE SPACES		14	14	16	16	17
	"B" (FT. - IN.)		3'-10	3'-10	3'-5	3'-5	3'-2
	"C" (FT. - IN.)		3'-8	3'-8	3'-2	3'-2	3'-7
	"D" EQUAL SPACES		2	2	2	2	1
NO. OF PILES PER ABUT.			15	15	17	17	18
DESIGN PILE LOAD (TONS)			20	20	19	20	20
WITH STEEL H-PILES	"A" PILE SPACES		8	8	8	8	8
	"B" (FT. - IN.)		6'-10	6'-10	6'-10	6'-10	6'-10
	"C" (FT. - IN.)		3'-2	3'-2	3'-2	3'-2	3'-2
	"D" EQUAL SPACES		4	4	4	4	4
NO. OF PILES PER ABUT.			9	9	9	9	9
DESIGN PILE LOAD (TONS)			36	37	39	40	42



PART SECTION B-B (FOR STEEL H-PIILING)

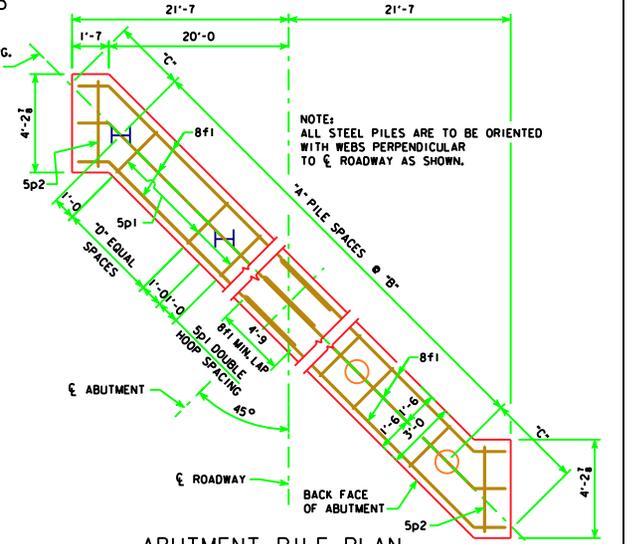
NOTE: THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 2" DIAMETER, 3" PITCH WITH 2 - 1/2" x 1/2" x 1/2" SPACERS PUNCHED TO HOLD SPIRAL.



PART SECTION B-B (FOR WOOD PILING)

WOOD PILING NOTE:
AFTER PILES ARE CUT OFF, THE UPPER 3', EXCEPT AS SHOWN, IS TO BE WRAPPED WITH A DOUBLE THICKNESS OF RUG PADDING HELD IN PLACE BY TACKING WITH GALVANIZED ROOFING NAILS AND WRAPPED WITH #14 GAUGE GALVANIZED WIRE AT A 4" PITCH, CARE IS TO BE TAKEN NOT TO DAMAGE PADDING WHEN PLACING CONCRETE. RUG PADDING MAY BE EITHER OF THE FOLLOWING:

- (1) HAIR AND JUTE RUG PADDING, RUBBERIZED ON BOTH SIDES, AND WEIGHING NOT LESS THAN 47 OZ. PER SQ. YD.
- (2) BONDED URETHANE OR BONDED POLYFOAM WITH A MINIMUM DENSITY OF 5 LBS. PER CU. FT. AND SHALL BE AT LEAST 1/2 IN. THICK, (MATERIAL LESS THAN 1/2 IN. THICKNESS MAY BE USED, BUT WILL REQUIRE ADDITIONAL WRAPS FOR A TOTAL OF AT LEAST ONE INCH).



ABUTMENT PILE PLAN

NOTE: ALL STEEL PILES ARE TO BE ORIENTED WITH WEBS PERPENDICULAR TO ℄ ROADWAY AS SHOWN.

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.

LATEST REVISION DATE	<i>Norman E. McQuinn</i> APPROVED BY BRIDGE ENGINEER	Iowa Department of Transportation <i>Highway Division</i>	
		STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE	
		PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES	
		HL93 SUPERSTRUCTURE	DECEMBER, 2006
		ABUTMENT DETAILS 45° SKEW A & B BEAMS	H40-25-06