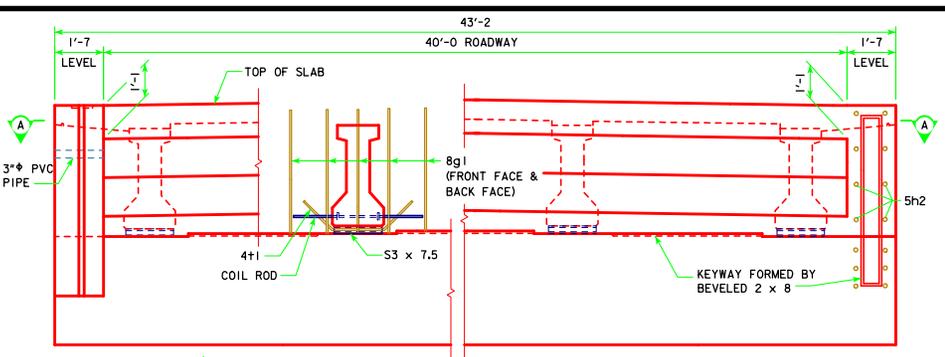
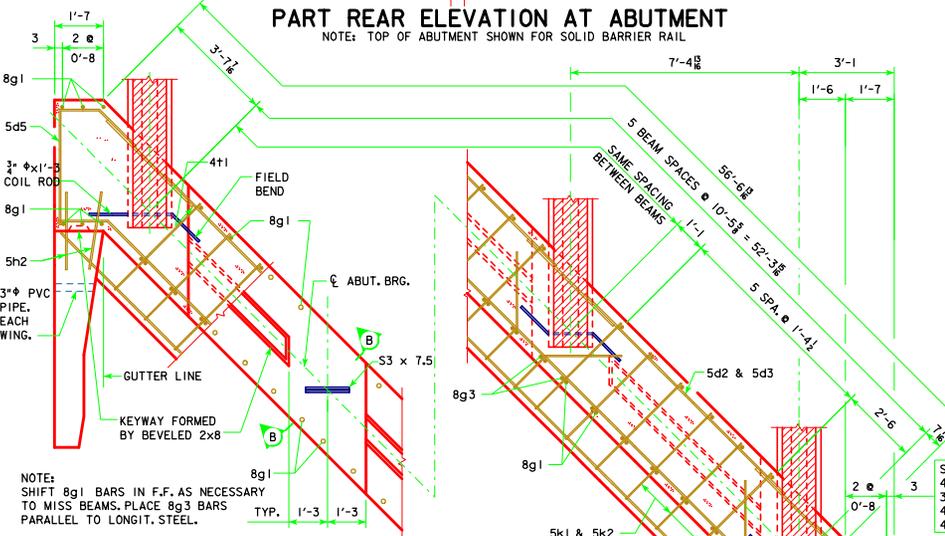


REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.



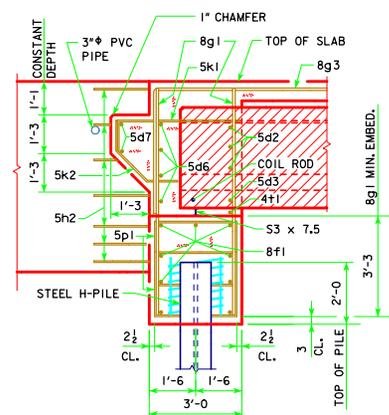
PART REAR ELEVATION AT ABUTMENT
NOTE: TOP OF ABUTMENT SHOWN FOR SOLID BARRIER RAIL



PART SECTION A-A

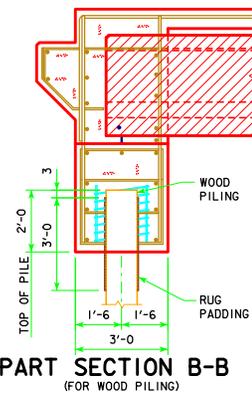
| ABUTMENT PILE SPACING | | CL-CL ABUT. BRG. | 138'-10" | 151'-4" | 163'-10" | 176'-4" | 188'-10" |
|-----------------------------------|------------------------|------------------|-----------|-----------|-----------|-----------|-----------|
| WOOD PILES | *A* PILE SPACES | | 14 | 15 | 16 | 17 | 17 |
| | *B* (FT. - IN.) | | 3'-10" | 3'-7" | 3'-5" | 3'-2" | 3'-2" |
| | *C* (FT. - IN.) | | 3'-8 1/2" | 3'-7 1/2" | 3'-2 1/2" | 3'-7 1/2" | 3'-7 1/2" |
| | *D* EQUAL SPACES | | 2 | 2 | 2 | 1 | 1 |
| | NO. OF PILES PER ABUT. | | 15 | 16 | 17 | 18 | 18 |
| PU, STRENGTH I DESIGN LOAD (KIPS) | | | 58 | 56 | 57 | 55 | 57 |
| STEEL H-PILES | *A* PILE SPACES | | 7 | 7 | 7 | 7 | 7 |
| | *B* (FT. - IN.) | | 7'-9" | 7'-9" | 7'-9" | 7'-9" | 7'-9" |
| | *C* (FT. - IN.) | | 3'-4 1/2" | 3'-4 1/2" | 3'-4 1/2" | 3'-4 1/2" | 3'-4 1/2" |
| | *D* EQUAL SPACES | | 5 | 5 | 5 | 5 | 5 |
| | NO. OF PILES PER ABUT. | | 8 | 8 | 8 | 8 | 8 |
| PU, STRENGTH I DESIGN LOAD (KIPS) | | | 118 | 122 | 130 | 135 | 139 |

NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



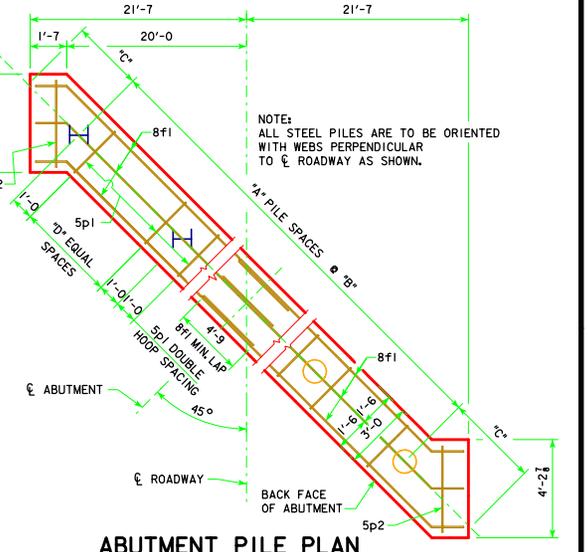
PART SECTION B-B (FOR STEEL H-PIILING)

NOTE: THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 21\"/>



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\"/>



ABUTMENT PILE PLAN

ABUTMENT NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2\"/>

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 SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

PLACE 5h2 BAR AT 1:6 SLOPE TO MATCH TRAFFIC FIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)

BARRIER RAIL NOT SHOWN IN DETAILS.

IF ROCK IS CLOSER THAN 15' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.

LATEST REVISION DATE
05-13
APPROVED BY BRIDGE ENGINEER
Thomas E. M. Donnell

Iowa Department of Transportation
Highway Division
STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
AUGUST, 2009

ABUTMENT DETAILS
45° SKEW A & B BEAMS
H40-25-06