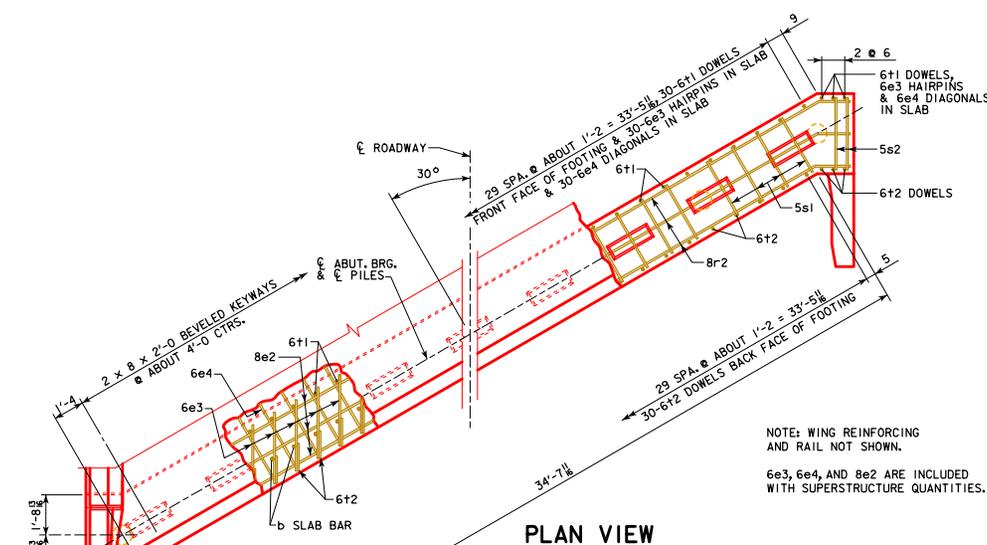
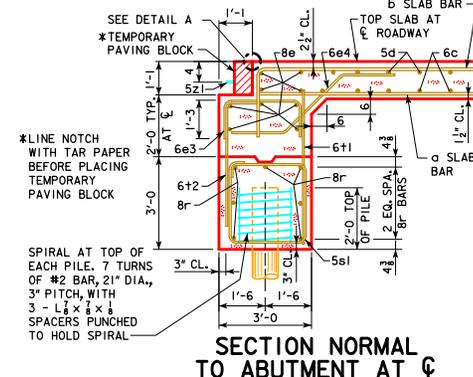
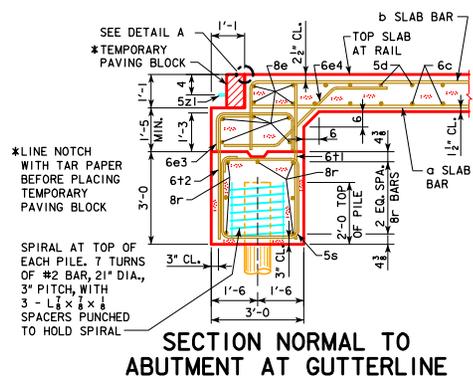
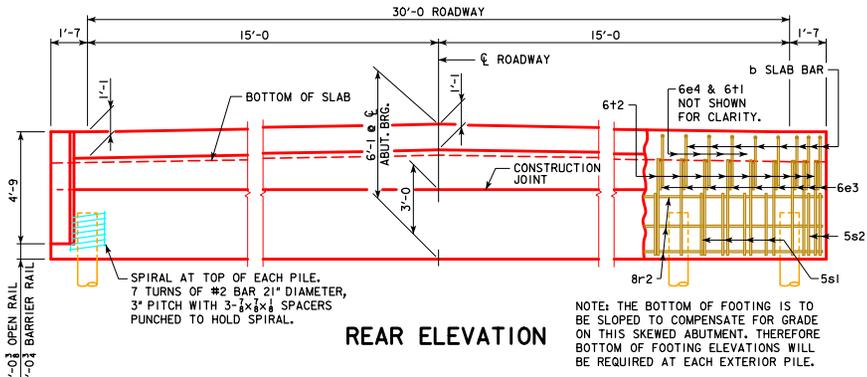


REVISED 06-2013; REVISION FOR LRFD PILE DESIGN. REVISED 09-2020; UPDATED BRIDGE ENGINEER SIGNATURE. CHANGED PAVING BLOCK LIFTING HOOP BAR MARK (WAS 5x1).



ABUTMENT NOTES:
 THE CONCRETE AND REINFORCING STEEL FOR THE WINGS IS INCLUDED WITH THE SUPERSTRUCTURE.
 DETAILS ON THIS SHEET ARE TO BE USED ONLY WHEN ABUTMENTS ARE PLACED ON TIMBER PILES.
 THE MINIMUM CLEAR DISTANCE FROM THE FACE OF THE CONCRETE TO NEAR REINFORCING BAR IS TO BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.
 TIMBER PILES SHALL BE DRIVEN TO FULL PENETRATION IF PRACTICABLE BUT IN NO CASE TO A BEARING VALUE LESS THAN SHOWN IN DESIGN PLANS. TIMBER PILES SHALL NOT BE DRIVEN TO MORE THAN 160 TONS.
 ALL REINFORCING STEEL IS TO BE GRADE 60.
 ABUTMENT PILING WAS DESIGNED FOR HL-93 LOADING WITH AN ALLOWANCE FOR 20 LBS. PER SQ. FT. FUTURE WEARING SURFACE.

| NUMBER OF PILES AND ABUTMENT DESIGN LOADS | | | | | | | | |
|---|-------|-------|-------|--------|--------|--------|--------|-------------|
| BRIDGE LENGTH | 70'-0 | 80'-0 | 90'-0 | 100'-0 | 110'-0 | 120'-0 | 130'-0 | 150'-0 |
| PILING - NUMBER | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 13 |
| PU, STRENGTH I DESIGN LOAD - KIPS | 393 | 418 | 442 | 472 | 501 | 535 | 567 | Δ 663 Δ 701 |

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

IOWADOT Highway Division

STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

30° ABUTMENT DETAILS SKEW - TIMBER PILING

J30-29-06