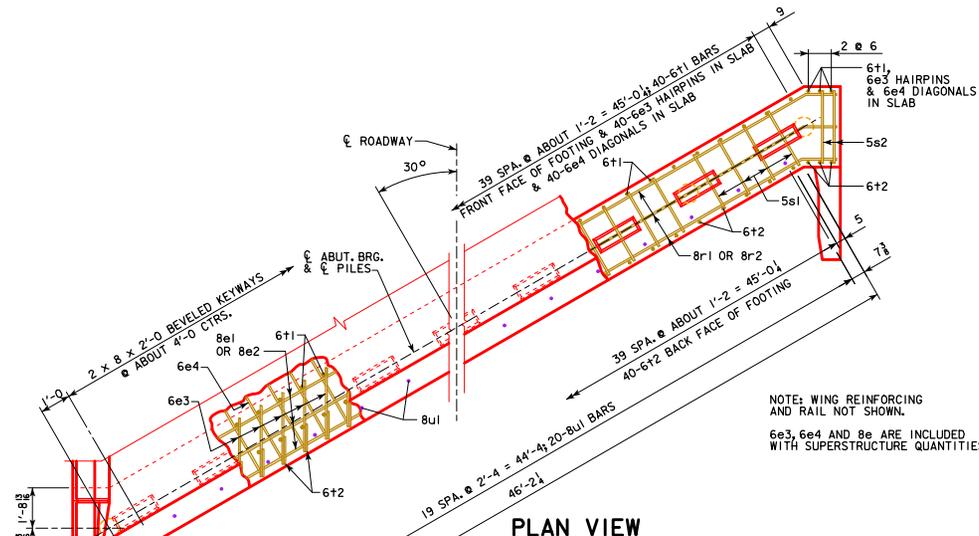


**ABUTMENT NOTES:**

- 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" | 140'-0" | 150'-0" |
| PILING - NUMBER                           | 10     | 11     | 11     | 12      | 12      | 13      | 14      | 16      | 17      |
| PU, STRENGTH I DESIGN LOAD - KIPS         | 503    | 536    | 566    | 606     | 644     | 687     | 729     | Δ 852   | Δ 901   |

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 - 40' ROADWAY, 3 SPAN BRIDGES

**CONTINUOUS CONCRETE SLAB BRIDGES**

JULY, 2014

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**30° ABUTMENT DETAILS**  
**SKEW - TIMBER PILING**

**J40-34-14**

REVISED 03-2016 - REVISION FOR ADDITION OF PAVING NOTCH BAR 8u1.