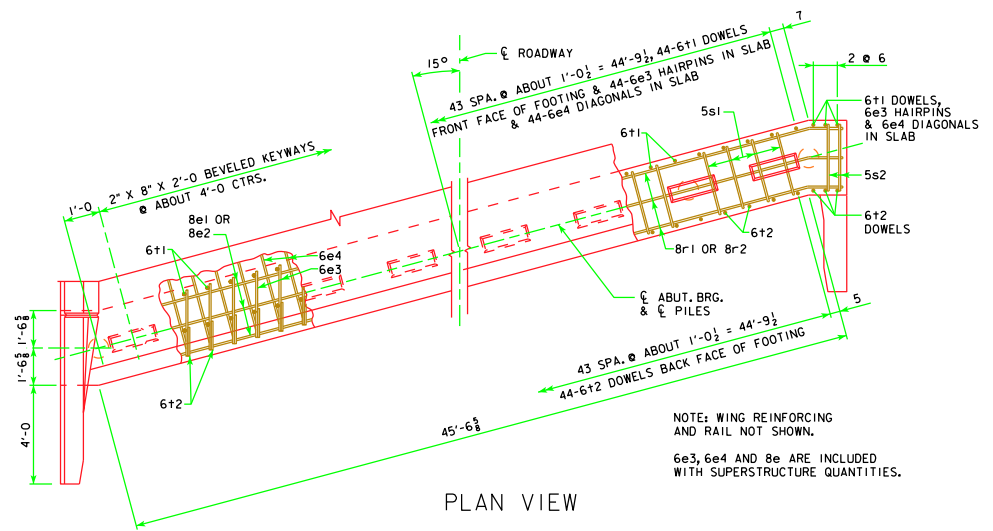
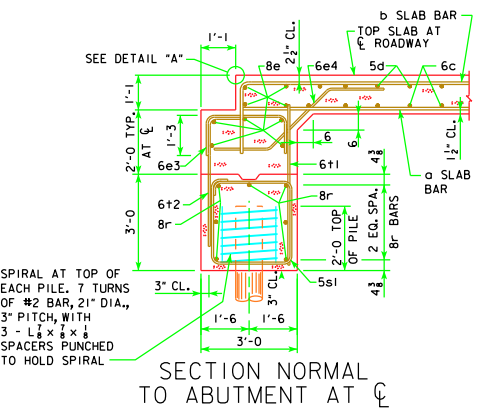
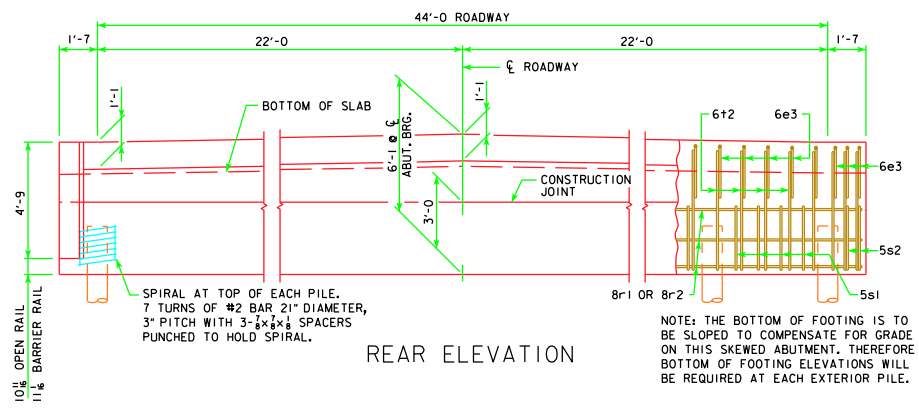
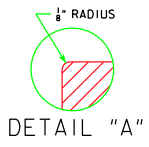
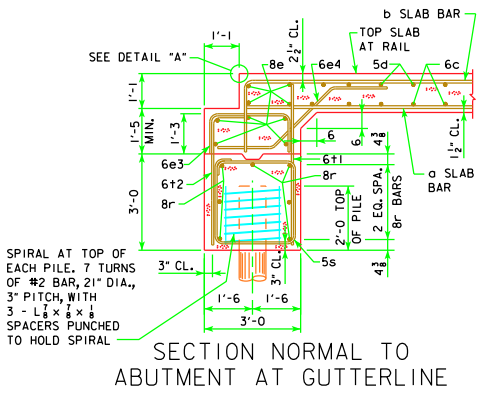


REVISED 11-08 - REVISED SHEET FOR NEW PAVING NOTCH & WING. DESIGN FOR HL-93 LOADING.



**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.

THE ABUTMENT PILES ARE TO BE DRIVEN TO FULL PENETRATION, IF PRACTICABLE, BUT IN NO CASE TO A BEARING VALUE LESS THAN THE PILE BEARING REQUIRED FOR EACH BRIDGE LENGTH AS SHOWN ON THIS SHEET, NOR TO MORE THAN 40 TONS PER BEARING PILE.

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.

REACTION, PILE NUMBER & BEARING									
BRIDGE LENGTH	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
REACTION - KIPS	386	410	432	460	487	519	550	Δ 627	Δ 664
BEARING - TONS	20	19	20	20	19	20	20	20	20
PILING - NUMBER	10	11	11	12	13	13	14	16	17
STRENGTH + REACTION - KIPS	509	544	577	618	658	705	749	Δ 875	Δ 927

Δ INCLUDES IMPACT

11-08  
LATEST REVISION DATE

*Thomas E. McQuinn*  
APPROVED BY BRIDGE ENGINEER

**Iowa Department of Transportation**  
**Highway Division**

STANDARD DESIGN - 44' ROADWAY, 3 SPAN BRIDGES

**CONTINUOUS CONCRETE**  
**SLAB BRIDGES**

NOVEMBER, 2006

11-08  
LATEST REVISION DATE

*Thomas E. McQuinn*  
APPROVED BY BRIDGE ENGINEER

11-08  
LATEST REVISION DATE

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15° ABUTMENT DETAILS  
SKEW - TIMBER PILING

11-08  
LATEST REVISION DATE

*Thomas E. McQuinn*  
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J44-32-06