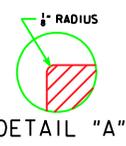


NOTE: WING REINFORCING AND RAIL NOT SHOWN.  
5p1, 5p3, 5p4, 6e3 AND 8e ARE INCLUDED WITH SUPERSTRUCTURE QUANTITIES.



**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 HS25 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	347	376	401	426	451	480	507	Δ 590	Δ 623
BEARING - TONS	20	19	20	20	19	20	20	20	20
PILING - NUMBER	9	10	10	11	12	12	13	15	16

Δ INCLUDES IMPACT

LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER	 <b>Iowa Department of Transportation</b> Highway Division	
		STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES <b>CONTINUOUS CONCRETE</b> <b>SLAB BRIDGES</b> NOVEMBER, 2006	
		0° ABUTMENT DETAILS SKEW - TIMBER PILING	J40-30-06