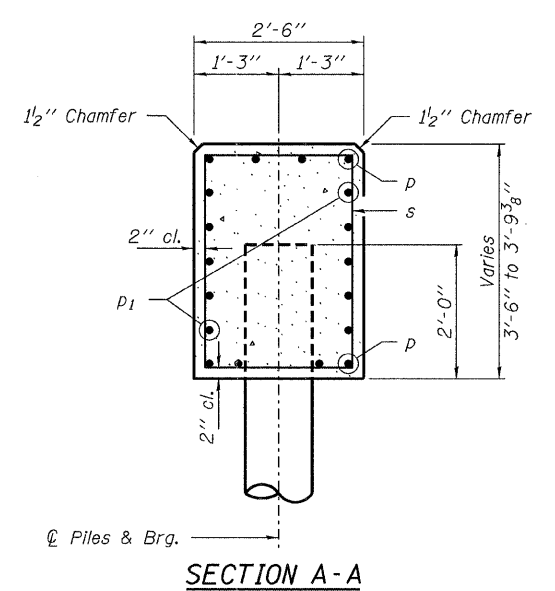
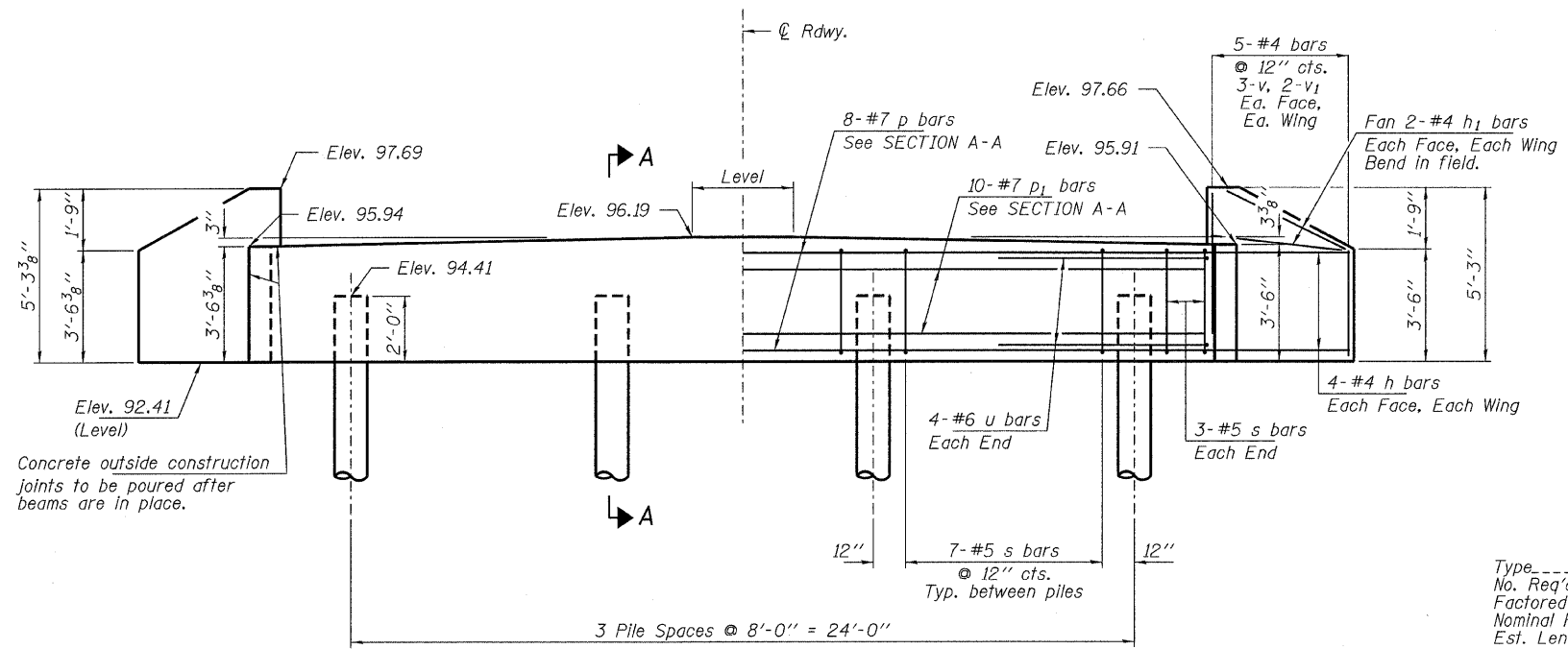
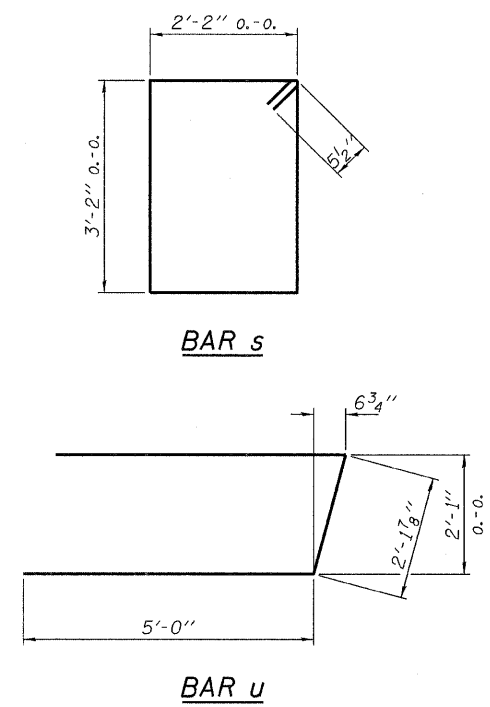


**PLAN**



**SECTION A-A**



**PILE DATA**

Type ----- Metal Shell, 12", dia. x 0.25 in. walls  
 No. Req'd. (N. Abut.) ----- \*4  
 Factored Resistance Available (Rf) ----- 152 Kips/Pile  
 Nominal Required Bearing (Rn) ----- 304 Kips/Pile  
 Est. Length ----- 50 Ft/Pile

Notes: \* Includes one test pile to be driven in permanent location at the North Abutment.

The Metal Shell Piles shall be according to ASTM A 252 Grade 3.

The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

**BILL OF MATERIAL - N. ABUT.**

BAR	NO.	SIZE	LENGTH	SHAPE
h	16	#4	5'-9"	—
h1	8	#4	4'-3"	—
p	8	#7	29'-3"	—
p1	10	#4	29'-3"	—
s	27	#5	11'-7"	□
u	8	#6	12'-2"	U
v	12	#4	4'-4"	—
v1	8	#4	3'-4"	—
Concrete Structures			Cu. Yd.	11.2
Reinforcement Bars			Pound	1,280
Metal Pile Shells 12"			Foot	150
Test Pile Metal Shells			Each	1

DESIGNED - A.S.L.
CHECKED - M.G.B.
DRAWN - D.A.B.
CHECKED - D.T.M.

**HAMPTON, LENZINI & RENWICK, INC.**  
 CIVIL & STRUCTURAL ENGINEERS  
 LAND SURVEYORS  
**HLR**  
 3085 STEVENSON DRIVE, SUITE 201  
 SPRINGFIELD, ILLINOIS 62703  
 (217) 546-3400  
 PROJECT NUMBER: 07.0435.130      DATE: 03/31/09

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
340	09-00107-00-BR	FORD	32	29
CONTRACT NO. 87411				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		