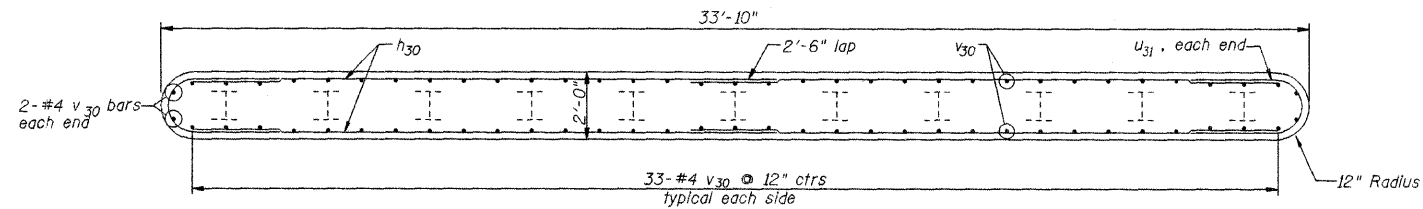
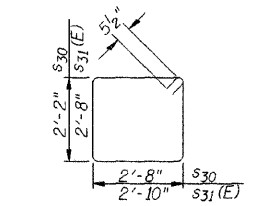


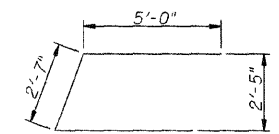
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 496	*	Vermilion	18	11
FED. ROAD DIST. N.S. 7		FED. AID PROJECT		



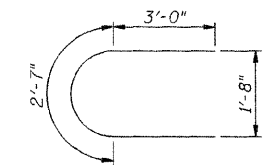
SECTION E-E



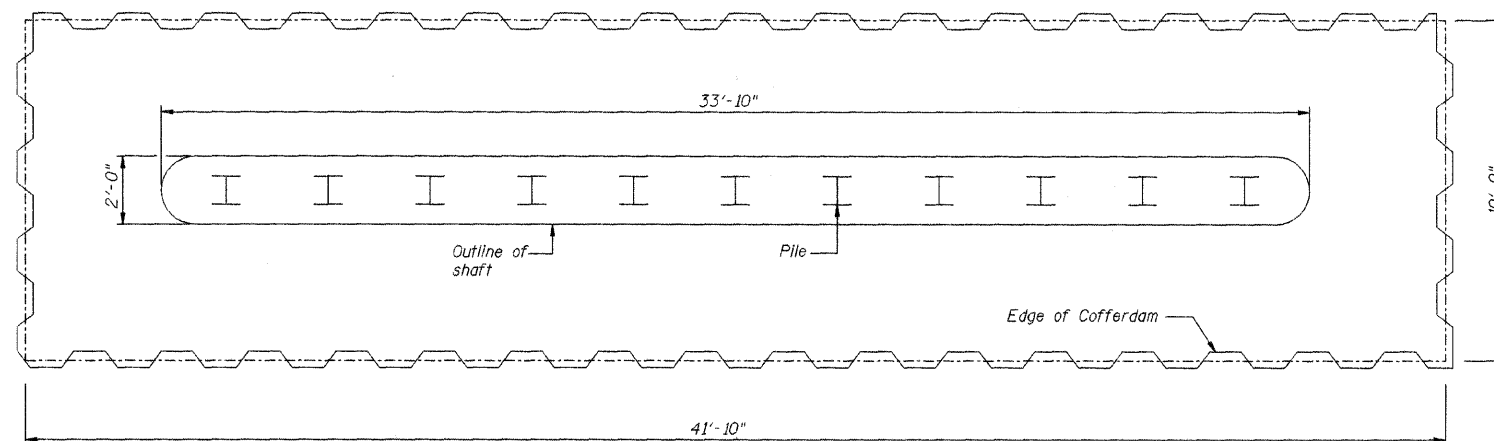
BARS s30 & s31 (E)



BAR U30



BAR U31



COFFERDAM PLAN

BILL OF MATERIAL - 2 PIERS

Bar	No.	Size	Length	Shape
h30	120	# 4	17'-3"	—
p30	40	# 5	18'-8"	—
s30	64	# 5	10'-7"	□
s31 (E)	8	# 5	11'-11"	□
u30	12	# 5	12'-7"	U
u31	60	# 4	8'-7"	U
v30	140	# 4	16'-2"	—
Concrete Structures		Cu. Yds.	98.2	
Reinforcement Bars		Lbs.	4890	
Reinforcement Bars, Epoxy Coated		Lbs.	100	
Test Pile, HP10x42		Each	2	
Furnishing Steel Piles HP10x42		Foot	1200	
Driving Piles		Foot	1200	
Pile Shears		Each	22	
Cofferdam		Each	2	
Cofferdam Excavation		Cu. Yds.	140	
Seal Coat Concrete		Cu. Yds.	80	

Reinforcement bars designated (E) shall be epoxy coated.

PILE DATA

Location: Piers
 Pile Type and Size: Steel HP 10x42
 Nominal Required Bearing: 240 kips
 Factored Resistance Available: 120 kips
 Estimated Pile Length: 60 ft.
 No. of Production Piles: 10 @ East Pier
 10 @ West Pier
 No. of Test Piles: 1 @ East Pier
 1 @ West Pier

Note: The Steel H-piles shall be according to AASHTO M270 Grade 50.

DSGN	K.J. Hoffmann				
DR	K.J. Hoffmann				
CHK	J.R. Wolf				
APVD	J.A. Fraenhoffer	NO.	DATE	REVISION	BY

FRAUENHOFER

Fraenhoffer and Associates, P.C. Consulting Engineers
 3002 Crossing Court Champaign, Il. 61822 217-351-6268

PIERS (SHEET 2 OF 2)

FAS 496 (C.H. 14) OVER MIDDLE BRANCH OF N. FORK
 SECTION 97-00141-00-BR
 VERMILION COUNTY

SHEET	11
DWG NO.	97051oler.dwg
DATE	APR 2009
PROJ NO.	97051