



**BILL OF MATERIAL**  
(Two Piers)

Bar	No.	Size	Length	Shape
h2(E)	44	#6	31'-4"	—
h3(E)	28	#6	22'-6"	—
p1(E)	28	#7	31'-4"	—
s1(E)	72	#4	13'-11"	□
s2(E)	102	#4	3'-11"	U
s3(E)	502	#4	3'-3"	U
u1(E)	20	#6	15'-3"	U
u2(E)	44	#6	14'-3"	U
u3(E)	28	#6	12'-3"	U
v2(E)	280	#5	12'-6"	—
Concrete Structures		Cu. Yd.	98.8	
Concrete Encasement		Cu. Yd.	6.5	
Reinforcement Bars, Epoxy Coated		Pound	12,400	
Furnishing Steel Piles HP14x73		Foot	720	
Driving Piles		Foot	720	
Test Pile Steel HP14x73		Each	2	
Pile Shoes		Each	12	
Underwater Structure Excavation Protection - Location 1		Each	1	
Underwater Structure Excavation Protection - Location 2		Each	1	
Mechanical Splicers		Each	56	

**PILE DATA**  
(Two Piers)

Type: HP14x73 with Pile Shoes  
 Nominal Required Bearing: 578 kips  
 Factored Resistance Available: 289 kips  
 Est. Length: 72'  
 No. Production Piles: 10  
 No. Test Piles: 2

**DIMENSION & ELEVATION TABLE**

	A	B	C	D
Pier 1	484.35	484.08	480.08	10'-8 1/8"
Pier 2	484.12	483.85	479.85	10'-5 3/8"

- Notes:
- For details of piles and Concrete Encasement, see sheet 9 of 14.
  - Space reinforcement in cap to miss dowel rods.
  - Alternate s3(E) bars end for end as shown in Section B-B.
  - For details of Mechanical Splicers, see sheet 10 of 14.
  - One test pile shall be driven at each pier in a production pile location specified by the Engineer and incorporated into the structure.
  - If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



USER NAME =	DESIGNED - JAD	REVISED -
PLOT SCALE =	CHECKED - DGL	REVISED -
PLOT DATE =	DRAWN - JAD	REVISED -
	CHECKED - DGL	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIERS**  
**STRUCTURE NO. 060-3346**  
 SHEET NO. 8 OF 14 SHEETS

TWP Road	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305A	06-1114-00-BR	MADISON	25	15
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				