



<u>BAR u(E)</u>



<u>BAR ui(E)</u>



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	105BR-5	CHAMPAIGN	31	17
STA.		TO STA.		
		IOIS FED. AID		
	ACT 90933	-	OF 11 S	HEE IS
<u>P1</u>	BAR S BAR S	<u>56 (E)</u>	walls	
r	Metal Shi 10 @ Pie		walls	-
	9+1 Test 40 Tons		2	

Туре	Metal Shell 12" w/4" walls
No. Required	10 @ Pier 1
	9+1 Test Pile @ Pier 2
Capacity	40 Tons *
Est. Length Pier 1	42 Ft.
	40 Ft.
* Drive to 50 Ton. Be	aring

Note: Do not overdrive Piles

<u>BILL OF MATERIAL</u>

BOTH PIERS Bar No. Size Length Shape h(E) 52 #5 21'-4"		DILL			
h(E) 52 #5 21'-4" h_1(E) 52 #5 20'-4" p(E) 12 #6 21'-4" p(E) 12 #6 20'-4" p_1(E) 12 #6 20'-4" s_5(E) 72 #5 9'-7" s_6(E) 4 #5 8'-9" 1 u(E) 16 #6 7'-3" 1 u(E) 16 #6 7'-3" 1 u(E) 16 #6 7'-3" 1 u(E) 168 #5 3'-6" 1 v(E) 180 #5 14'-0" 1 Concrete Structures CuYd. 99.3 768 Furnishing Metal Pile Shells,12" Ft. 780 7568 Furnishing Metal Shells Each 1 1 Underwater Structure Excavation Each 1 1 Underwater Structure Excavation Each 1 1			BOTH PIER	۹S	
$h_1(E)$ 52 $\#5$ $20' \cdot 4''$ $p(E)$ 12 $\#6$ $21' \cdot 4''$ $p_1(E)$ 12 $\#6$ $20' \cdot 4''$ $s_3(E)$ 72 $\#5$ $9' \cdot 7''$ \Box $s_4(E)$ 4 $\#5$ $8' \cdot 9''$ \Box $u(E)$ 16 $\#6$ $7' \cdot 3''$ \Box $u_1(E)$ 22 $\#5$ $6' \cdot 6''$ \Box $u_1(E)$ 168 $\#55$ $3' \cdot 6''$ \Box $v_1(E)$ 180 $\#55$ $14' \cdot 0''$ \Box $Concrete Structures CuYd. 99.3 Reinforcement Bars Lbs. 7568 Tsucture Structure Structure Each 1 Driving and Filling Shells Each 1 1 1 1 1$	Bar	No.	Size	Length	Shape
p(E) 12 #6 21'-4" p(E) 12 #6 20'-4" s3(E) 72 #5 9'-7" s6(E) 4 #5 8'-9" s7(E) 4 #5 7'-9" u(E) 16 #6 7'-3" u(E) 16 #6 7'-3" u(E) 16 #6 7'-3" v(E) 168 #5 3'-6" v(E) 168 #5 14'-0" Concrete Structures Cu,Yd. 99.3 Reinforcement Bars Lbs. 7568 Furnishing Metal Pile Shells,12" Ft. 780 Driving and Filling Shells Fi. 780 Test Pile Metal Shells Each 1 Underwater Structure Excavation Each 1 Underwater Structure Excavation 1 1	h(E)	52	#5	21'-4"	
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$s_5(E)$ 72 #5 9'-7" \Box $s_6(E)$ 4 #5 8'-9" \Box $s_7(E)$ 4 #5 7'-9" \Box $u(E)$ 16 #6 7'-3" \Box $u(E)$ 168 #5 3'-6" \Box $v(E)$ 180 #5 14'-0" \Box Concrete Structures CuYd. 99.3 $T68$ Furnishing Metal Pile Shells.12" Ft. 780 Driving and Filling Shells Each 1 Underwater Structure Excavation Each 1 Underwater Structure Excavation Each 1 Underwater Structure Excavation E			-		
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Driving and Filling Shells Ft. 780 Test Pile Metal Shells Each 1 Underwater Structure Excavation Each 1 Underwater Structure Excavation Each 1	Reinforce	ement Bars	s	Lbs.	7568
Test Pile Metal Shells Each 1 Underwater Structure Excavation Each 1 Protection Location 1 1 Underwater Structure Excavation Each 1	Furnishin	g Metal Pi	le Shells,12"	Ft.	780
Underwater Structure Excavation Each 1 Protection Location 1 Underwater Structure Excavation Each 1	Driving a	nd Filling	Shells	Ft.	780
Protection Location 1 Underwater Structure Excavation Each 1	Test Pile	Metal She	ells	Each	1
Underwater Structure Excavation Each 1				Each	1
Protoction Logation 2				Each	1
I TOTECTION LOCUTION Z	Protectior	n Location	2		

Reinforcement bars designated (E) shall be Epoxy coated.

STA. 2078 • 57.63 CHAMPA IGN COUNTY STR. NO. 010-0276 SCALE: NTS DRAWN BY LP	IRU PIER	REVISIONS NAME	DATE	PIER DETAIL US ROUTE 136 OVER FAP RTE. 709 SECTIO		S NG DITCH N 105BR-5	
	-			CHAMPAIGN COUNTY		NO. 010-01	LP