

ROUTE	ROUTE SECTION TR 437 05-10121-00-BR		COUNTY	TOTAL SHEETS	SHEET NO.	
TR 437			FAYETTE	10	10	
FED. ROAD	ED. ROAD DIST. NO. 7 ILLINOIS			FEDERAL AID PROJECT		

CONTRACT NO. 95550

PILE DATA						
Size:	Steel HP12x53					
Pequired Bearin	g: 419 kips					
Resistance Av	ailable: 139 kips					
' Length: t Abutment: t Abutment:	38 Foot 39 Foot					
f Production P t Abutment: t Abutment:	iles: 4 Each 3 Each					
f Test Piles: t Abutment: t Abutment:	None 1 Each					

BILL OF MATERIALS									
ONE ABUTMENT W/ WINGWALLS									
Bar	No.	Size	Length	Shape					
h	20	#5	5′-6″						
h ₁	12	#5	4'-3"						
h ₂	3	#5	25′-0"						
n	51	#5	4'-0"	\square					
p	12	#7	26'-4"						
S	24	#4	9′-5"	Ð					
U	8	#6	8'-0"						
v	24	#5	4'-0"	CUT IN FIELD					
Concrete S	Structures	Cu Yd	8.7						
Concrete l	Encasement	Cu Yd	1.4						
Reinforcer	nent Bars	Pound	1450						

GENERAL NOTES

All exposed edges shall have standard ${\bf 3}_{\rm 4}{\rm "}$ chamfer, unless otherwise noted.

All clearances between rebar and form surface shall be 2", unless otherwise noted.

Space reinforcement in cap to miss PPCDB dowel rods.

The Contractor shall drive one (1) Steel HP12x53 Test Pile in a permanent location at the East Abutment as directed by the Engineer before ordering the remainder of the piles.

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

In addition to all other requirements of Section 512 of the Standard Specifications, splices for Steel H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.

