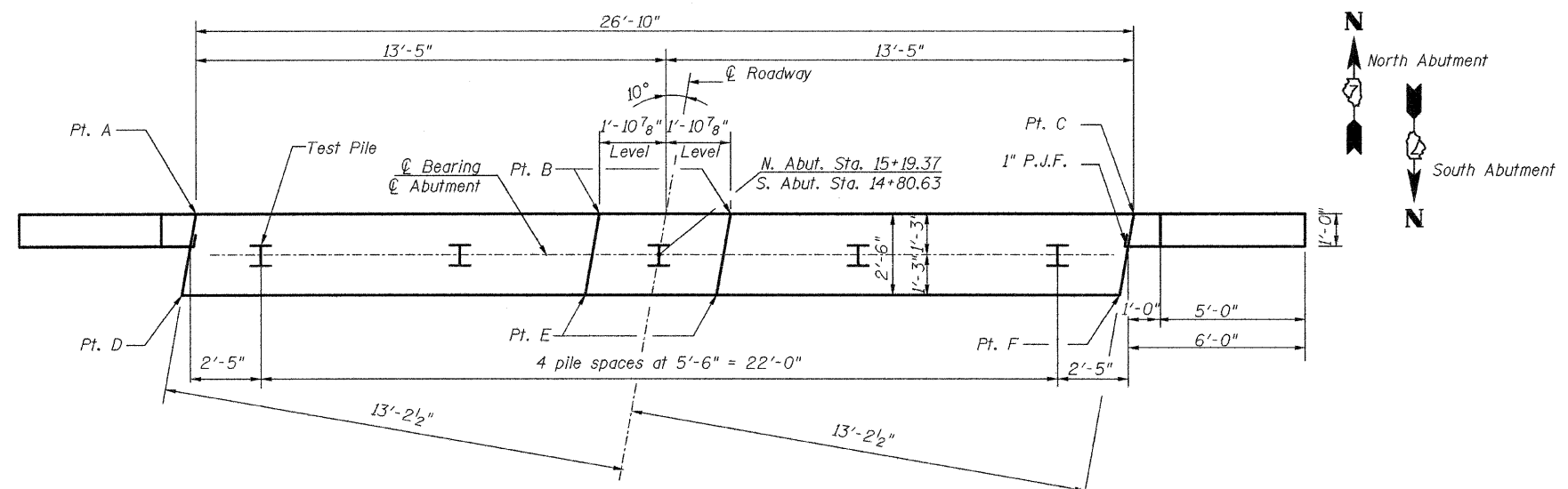


**BILL OF MATERIAL**

(BOTH ABUTMENTS AND FOUR WINGS)

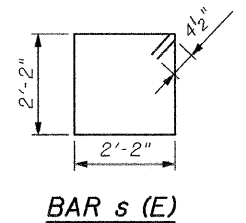
BAR	NO. REQ'D.	SIZE	LENGTH	SHAPE	
h (E)	48	#5	7'-9"	—	
h <sub>1</sub> (E)	6	#5	26'-6"	—	
p (E)	20	#7	26'-6"	—	
s (E)	60	#4	9'-5"	□	
u (E)	16	#6	12'-2"	—	
v (E)	28	#5	7'-2"	—	
v <sub>1</sub> (E)	54	#5	4'-5"	—	
Structure Excavation				Cu. Yd.	75
Concrete Structures				Cu. Yd.	19.7
Concrete Encasement				Cu. Yd.	3.4
Reinforcement Bars, Epoxy Coated				Pound	2770
Furnishing Steel Piles HPI0x42				Foot	160
Driving Piles				Foot	160
Test Steel Piles HPI0x42				Each	2



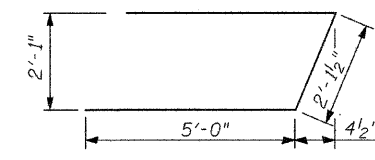
**PLAN**

**TABLE OF BEAM SEAT ELEVATIONS**

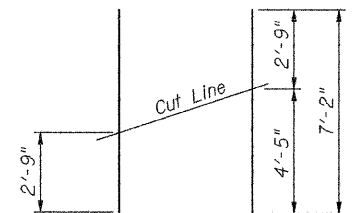
	Pt. A	Pt. B	Pt. C	Pt. D	Pt. E	Pt. F
N. Abut.	629.35	629.57	629.43	629.31	629.53	629.39
S. Abut.	628.71	628.85	628.63	628.75	628.89	628.67



**BAR s (E)**



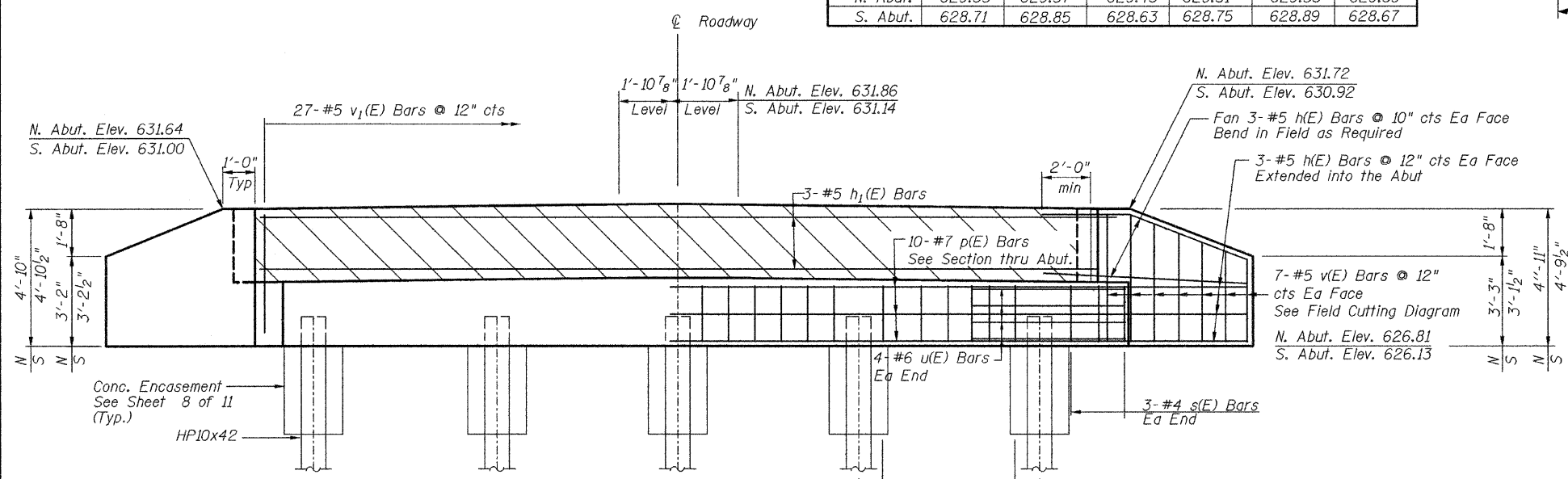
**BAR u (E)**



**FIELD CUTTING DIAGRAM**

Order v(E) bars full length. Cut as shown and use remainder of bars in opposite face.

After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure (min. 24 hours) prior to grouting the shear keys.



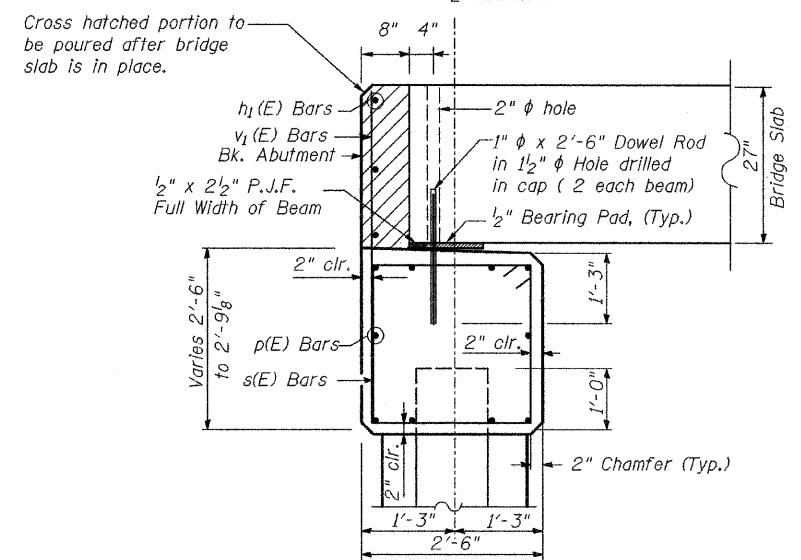
**ELEVATION**

(N. Abut. looking North)  
(S. Abut. looking South)

**PILE DATA**

Type & Size:	HPI0x42
No. Required:	10*
Nominal Required Bearing:	250 kips
Allowable Resistance Available:	110 kips
Est. Length (N. Abut.):	20 Ft.
Est. Length (S. Abut.):	20 Ft.

\*Includes one Test Pile at North & South Abutments  
The test pile(s) shall be driven to 110% of the normal required bearing indicated in the pile data information.



**SECTION THRU ABUT**

**ABUTMENT DETAILS**

**STRUCTURE NO. 015-3424**

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR16A	07-09123-00-BR	COLES	11	7
CONTRACT NO. 95624				

**THE UPCHURCH GROUP, INC.**