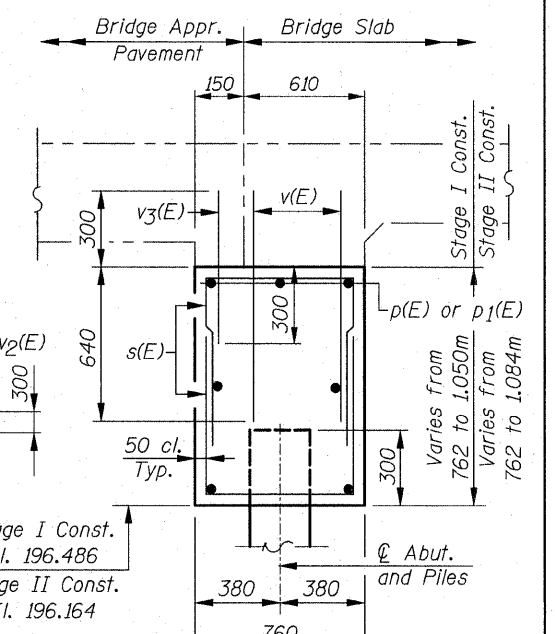
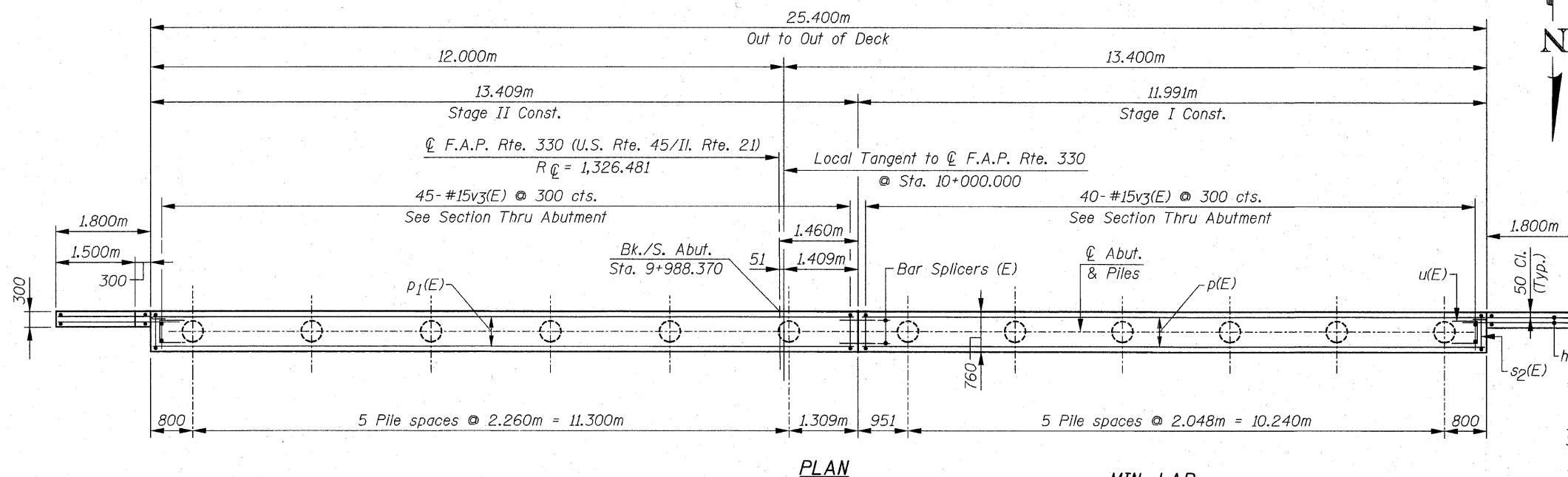
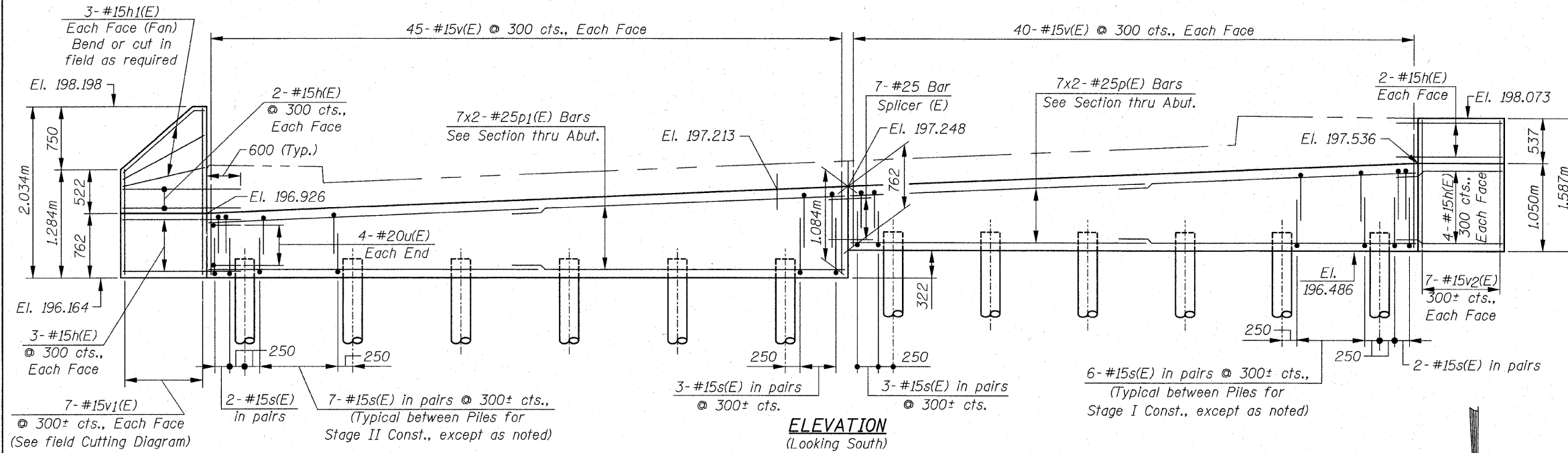


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	1Y-B-R-1	LAKE	12	61
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62032

**BILL OF MATERIAL**

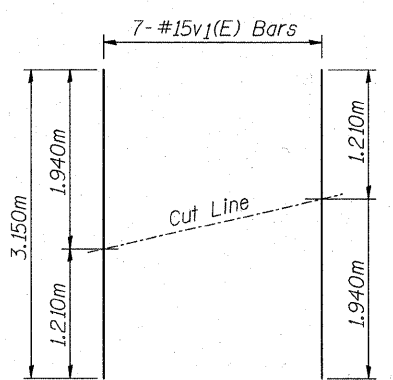
Bar	No.	Size	Length (m)	Shape
h(E)	22	#15	2.35	
h <sub>1</sub> (E)	6	#15	1.80	
p(E)	14	#25	6.48	
p <sub>1</sub> (E)	14	#25	7.19	
s(E)	150	#15	1.98	U
u(E)	8	#20	3.65	U
v(E)	170	#15	0.94	
v <sub>1</sub> (E)	7	#15	3.15	
v <sub>2</sub> (E)	14	#15	1.49	
v <sub>3</sub> (E)	85	#15	0.60	
Concrete Structures			Cu. m	19.5
Reinforcement Bars Epoxy Coated			kg	1,780
Structure Excavation			Cu. m	66
Furnishing Metal Shell Piles, 305mmx4.55mm			m	211
Driving Piles			m	211
Test Pile Metal Shell			Each	1
Bar Splicers			Each	7



**NOTES:**  
 Piles shall be driven through 305mm dia. holes extending to Elevation 192.200m according to Article 512.09 (c) of the Standard Specifications. Cost is included in Driving Piles.

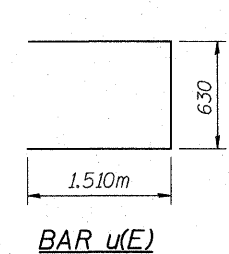
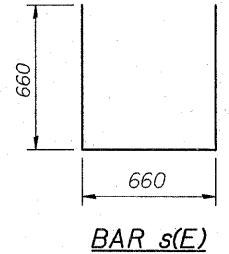
Excavation behind the existing Abutment Walls shall be performed to balance front and back Soil Pressure before removing the existing Superstructure. The Contractor shall Sawcut the upper portion of the existing Abutments at the Stage Removal Lines before Stage I Removal to ensure the remaining portion will not be prematurely damaged.

All Dimensions are in millimeters (mm) except as noted.



**FIELD CUTTING DIAGRAM**  
 Order v<sub>1</sub>(E) full length. Cut as shown and use remainder of Bars in opposite face

**MIN. LAP:**  
 #15 Bars = 640  
 #25 Bars = 1.060m



**PILE DATA**  
 Type & Size: Metal Shell-305mmx4.55mm Walls  
 Nominal Required Bearing: 1,139kN  
 Allowable Resistance Available: 380kN  
 Est. Length: 19.200m  
 No. of Production Piles: 11  
 No. of Test Piles: 1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SOUTH ABUTMENT  
 U.S. RTE. 45 / IL. RTE. 21  
 OVER  
 APTAKISIC CREEK  
 F.A.P. RTE. 330 SECTION: 1Y-B-R-1  
 LAKE COUNTY STATION 10+000.000  
 STRUCTURE NO. 049-0194  
 SCALE: NONE DRAWN BY: D.L./F.M.  
 DATE: OCTOBER 16, 2007 CHECKED BY: B.N.S.  
**CHRISTIAN-ROGE & ASSOC., INC.**  
 CHICAGO ILLINOIS