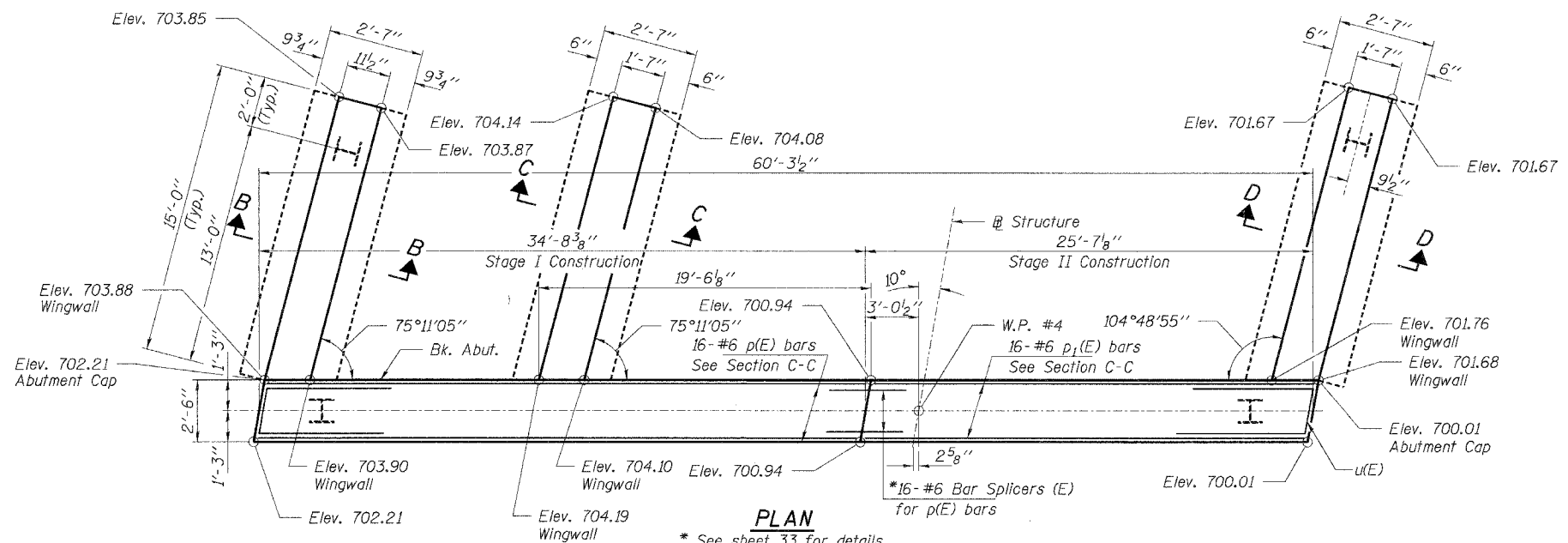
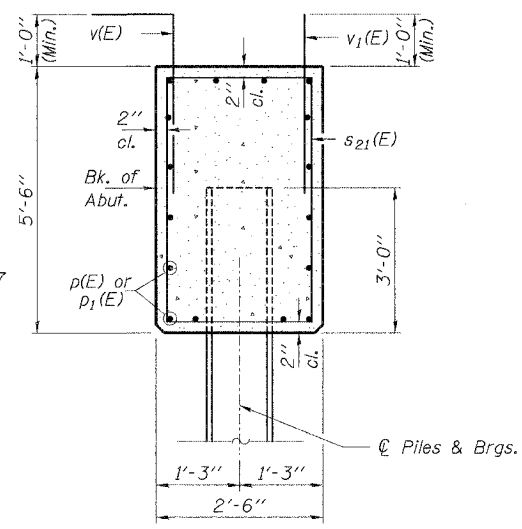


ROUTE NO.	SECTION	COUNTY	DATE	SHEET
C.H. 14	99-00076-11-BR	LAKE	66	36
FED. ROAD DIST. NO.	ILL. DIST.	FED. AID PROJECT		

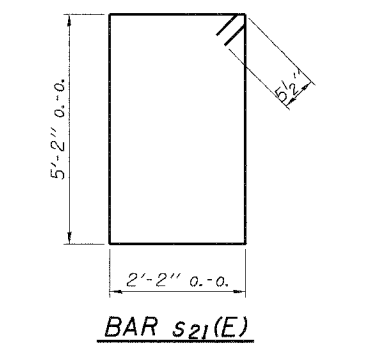
CONTRACT NO. 83763



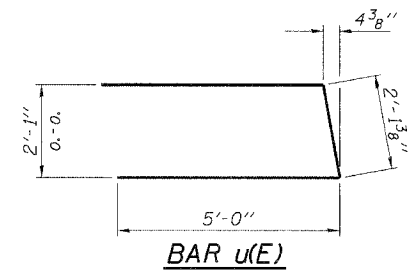
**PLAN**  
\* See sheet 33 for details.



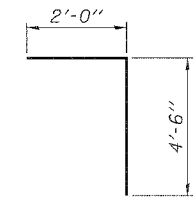
**SECTION A-A**  
Dimensions are at Rt. Ls



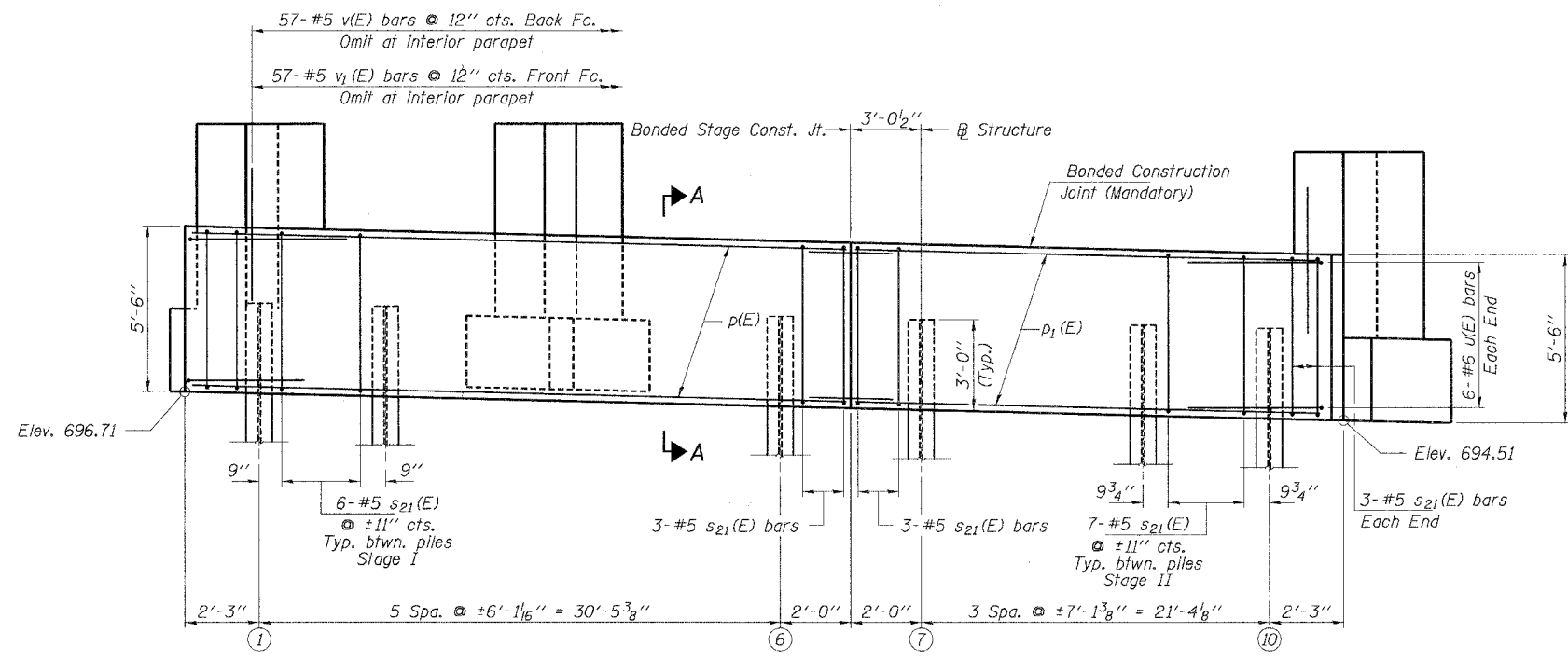
**BAR s21(E)**



**BAR u(E)**



**BAR v(E)**



**ELEVATION**  
(Looking East)

**Notes:**  
All reinforcement bars shall be epoxy coated.  
See sheet 36 for Section B-B and wingwall reinforcement.  
Pile spacing may be adjusted up to a 9'-0" spacing in order to span the existing gas line along the north ROW line. Only as approved by the Engineer.

**BILL OF MATERIAL - E. ABUT.**

BAR	NO.	SIZE	LENGTH	SHAPE	
d6(E)	28	#4	5'-9"	—	
d7(E)	62	#5	4'-9"	—	
h(E)	30	#5	14'-8"	—	
h1(E)	36	#5	9'-0"	—	
p(E)	16	#6	34'-4"	—	
p1(E)	16	#6	25'-3"	—	
s21(E)	62	#5	15'-7"	□	
s22(E)	48	#5	9'-9"	□	
u(E)	12	#6	12'-2"	—	
v(E)	57	#5	5'-6"	—	
v1(E)	57	#5	3'-6"	—	
v2(E)	96	#5	8'-4"	L	
w(E)	30	#5	14'-8"	—	
Concrete Structures				Cu. Yd.	52.2
Reinf. Bars, Epoxy Coated				Pound	6,190
Steel Piles HP12x53				Foot	740
Bar Splicers				Each	16

**TOP PILE ELEVATIONS**

Pile	1	2	3	4	5	6	7	8	9	10
Elevation	699.63	699.40	699.18	698.96	698.74	698.51	698.37	698.11	697.85	697.59

WINGWALLS			CAP		
Type	Steel HP12x53	No. Req'd. (Wings)	3	Type	Steel HP12x53
Capacity	20 Tons/Pile	Est. Length	30 Ft./Pile @ E. Abut.	Type	Steel HP12x53
				Capacity	63 Tons/Pile
				Est. Length	65 Ft./Pile @ E. Abut.

**HLR**  
Rice, Berry and Associates  
A Division of Hampton, Lenzini and Renwick, Inc.  
Civil & Structural Engineers  
801 S. Durkin Drive  
Springfield, Illinois 62704  
217-546-3400  
Account Number 12-07-0043-1  
Date: 05/23/05  
DESIGNED: S.M.S. CHECKED: S.W.M. DRAWN: D.B.

**EAST ABUTMENT**  
MILLBURN ROAD / CH 14  
SECTION 99-00076-11-BR  
LAKE COUNTY  
STATION 17+65