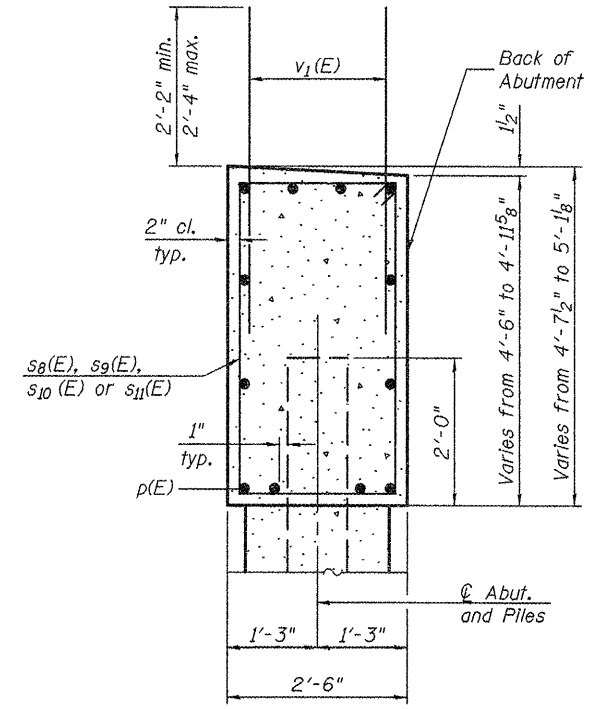
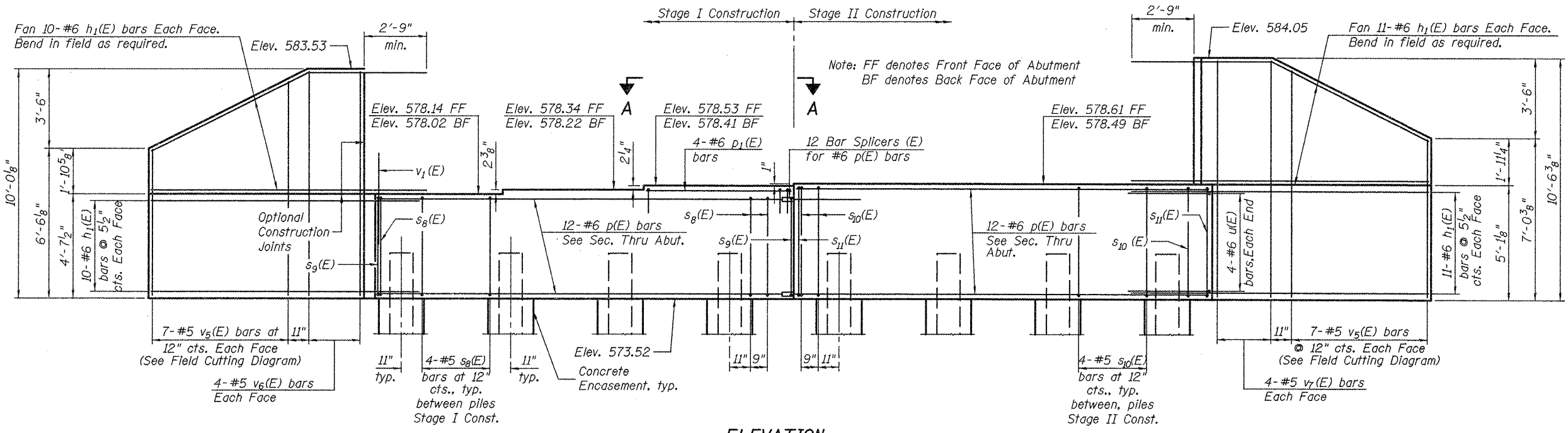


Notes:  
Pour steps monolithically with cap.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_1(E)$	84	#6	13'-6"	—
$p(E)$	24	#6	18'-2"	—
$p_1(E)$	4	#6	5'-5"	—
$s_8(E)$	15	#5	13'-7"	□
$s_9(E)$	2	#5	13'-9"	□
$s_{10}(E)$	15	#5	14'-7"	□
$s_{11}(E)$	2	#5	14'-9"	□
$s_{12}(E)$	1	#5	4'-9"	□
$s_{13}(E)$	6	#5	4'-8"	□
$u(E)$	8	#6	9'-5"	∩
$v_1(E)$	69	#5	4'-6"	—
$v_5(E)$	14	#5	16'-0"	—
$v_6(E)$	8	#5	9'-8"	—
$v_7(E)$	8	#5	10'-2"	—
Structure Excavation		Cu. Yd.	121.0	
Concrete Structures		Cu. Yd.	23.5	
Reinforcement Bars, Epoxy Coated		Pound	3,770	
Furnishing Steel Piles, HP12x53		Foot	469	
Driving Piles		Foot	469	
Test Pile Steel HP12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.8	

For details of Bar Splicers, see sheet 20 of 21.  
For details of piles and Concrete Encasement, see sheet 19 of 21.

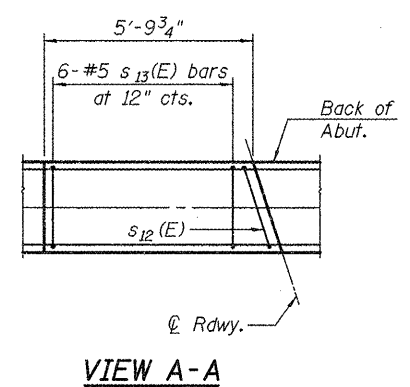
**WEST ABUTMENT**

STRUCTURE NO. 055-0079

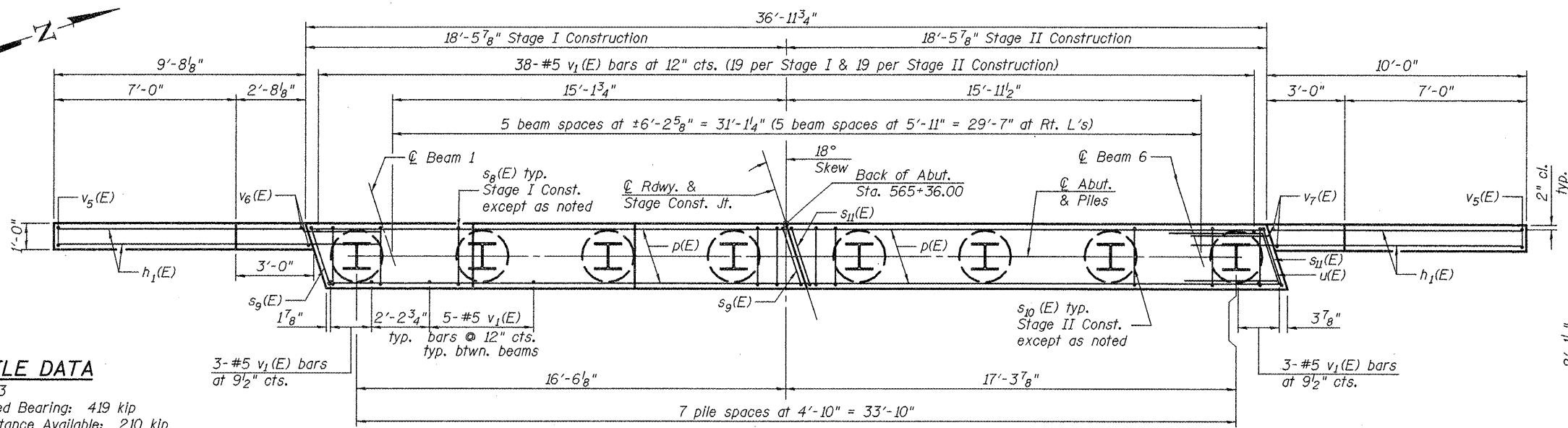
<b>EFK Moen, LLC</b> Civil Engineering Design		331 Salem Place Suite 225 Fairview Heights, IL 62208	Phone 618-206-4250 Fax 618-206-4253
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
685	37BR-1	MCDONOUGH	138
SHEET NO. 18		CONTRACT NO. 68352	
21 SHEETS		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

**PILE DATA**

Type: HP12x53  
Nominal Required Bearing: 419 kip  
Factored Resistance Available: 210 kip  
Est. Length: 67 ft  
No. Production Piles: 7  
No. Test Piles: 1



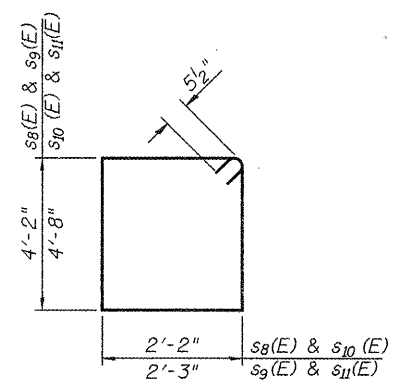
**PLAN**



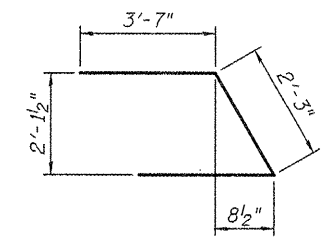
**FIELD CUTTING DIAGRAM**

Order  $v_5(E)$  full length. Cut as shown and use remainder of bars in opposite face.

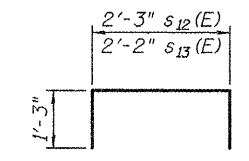
**BARS  $s_8(E), s_9(E), s_{10}(E)$  &  $s_{11}(E)$**



**BAR  $u(E)$**



**BAR  $s_{12}(E)$  &  $s_{13}(E)$**



DESIGNED SEC
CHECKED CDL
DRAWN SEC
CHECKED CDL