

1/12/2010 9:57:17 AM

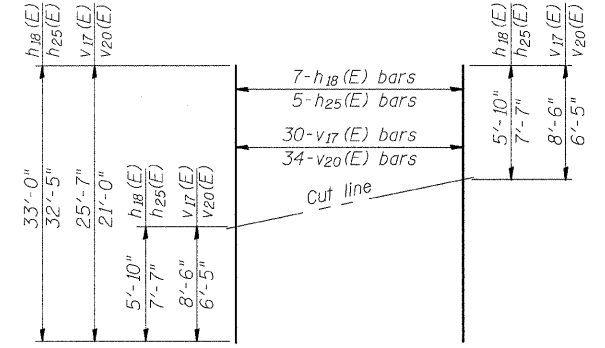
**Notes:**  
 Space reinforcement in cap to miss anchor bolts.  
 Work this sheet with sheets #32 & #33 of 47.  
 Pour steps monolithically.  
 Exposed concrete surfaces on the face of the abutment backwall, the abutment bearing seats, and the vertical surfaces on the front and sides of the abutment wall shall be treated with concrete sealer.

**APPR. BENT-PILE DATA**

Type & Size: Metal Shell - 14 in. dia x 0.250 in. walls  
 Nominal Required Bearing: 330 kips  
 Allowable Resistance Available: 110 kips  
 Est. Length: 54 ft  
 No. Req'd.: 8+1 Test Pile

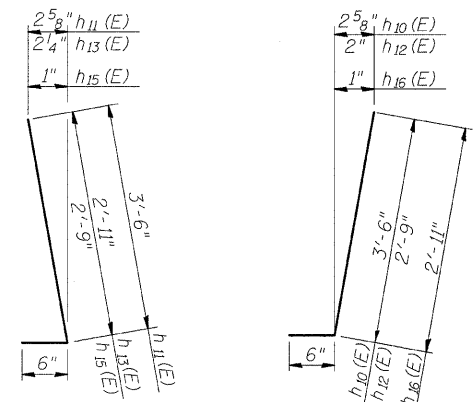
**ABUT.-PILE DATA**

Type & Size: Metal Shell - 14 in. dia x 0.250 in. walls  
 Nominal Required Bearing: 330 kips  
 Allowable Resistance Available: 110 kips  
 Est. Length: 47 ft  
 No. Req'd.: 19+1 Test Pile



**FIELD CUTTING DIAGRAM**

Order  $h_{18}(E)$ ,  $h_{25}(E)$ ,  $v_{17}(E)$  and  $v_{20}(E)$  bars full length. Cut to fit and use remainder of bars in opposite face of curtain wall.

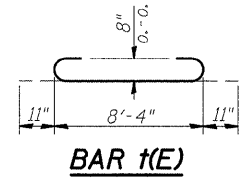


**BARS  $h_{11}(E)$ ,  $h_{13}(E)$  &  $h_{15}(E)$**

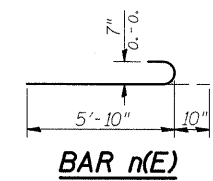
**BARS  $h_{10}(E)$ ,  $h_{12}(E)$  &  $h_{16}(E)$**

**BAR  $h_{14}(E)$**

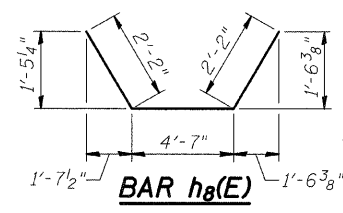
DESIGNED	ADL
CHECKED	WLW
DRAWN	BGJ
CHECKED	WLW



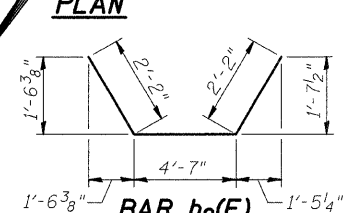
**BAR  $t(E)$**



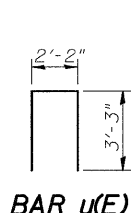
**BAR  $n(E)$**



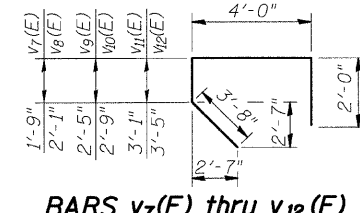
**BAR  $h_8(E)$**



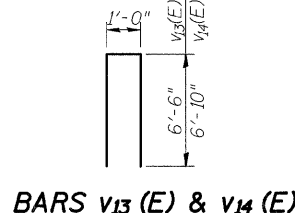
**BAR  $h_9(E)$**



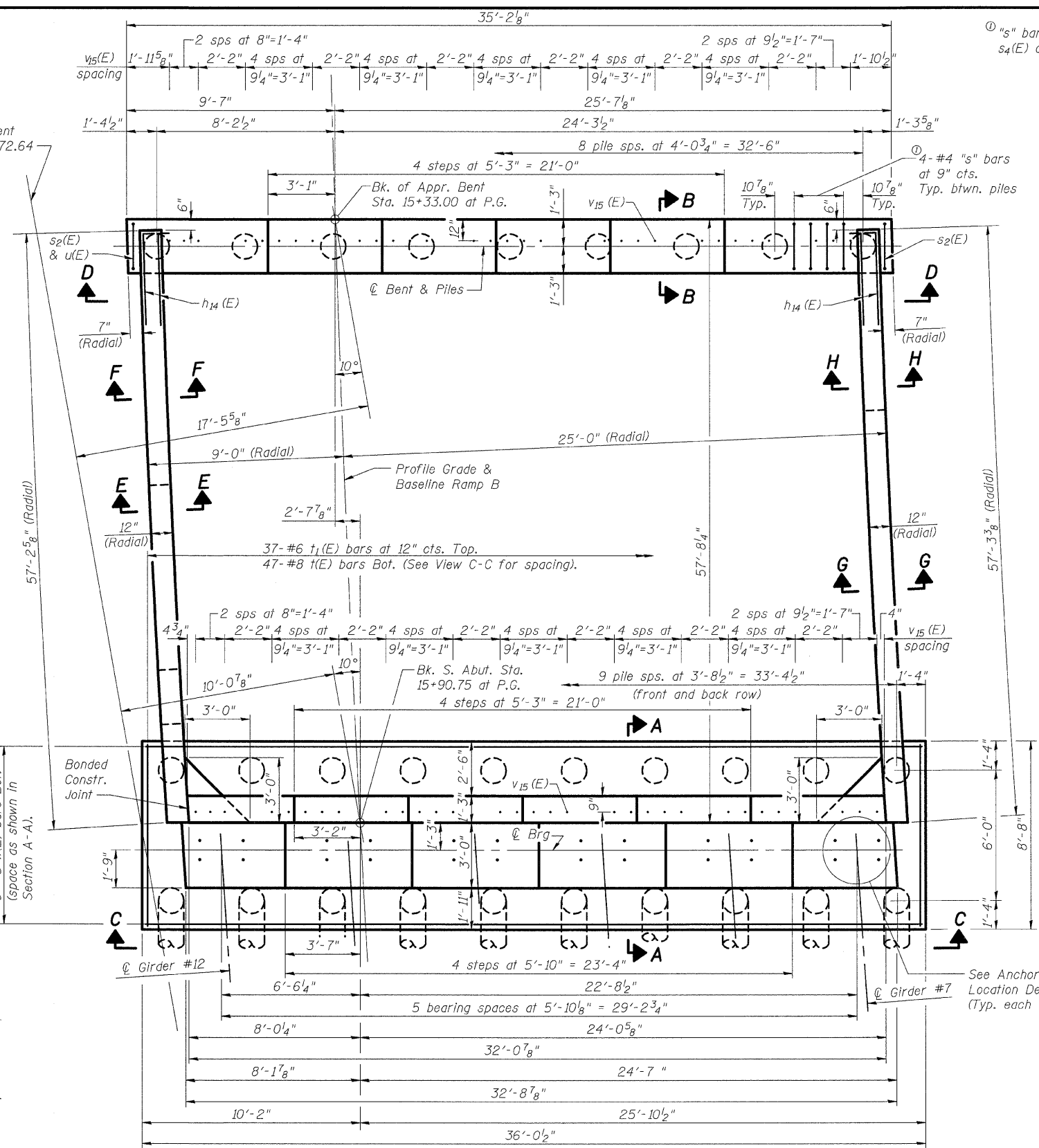
**BAR  $u(E)$**



**BARS  $v_7(E)$  thru  $v_{12}(E)$**



**BARS  $v_{13}(E)$  &  $v_{14}(E)$**

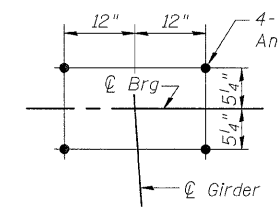


**PLAN**

① "s" bars include  $s_2(E)$ ,  $s_3(E)$ ,  $s_4(E)$  or  $s_5(E)$ . See View D-D.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.R.1	#	MADISON	93	53
F.A.P. 310				

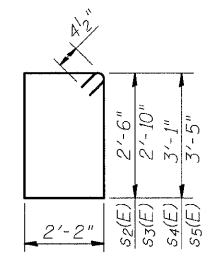
ILLINOIS FED. AID PROJECT - CONTRACT No. 76706



**ANCHOR BOLT LOCATION DETAIL**

Bar	No.	Size	Length (m)	Shape
$v_{12}(E)$	5	#5	13'-1"	
$v_{13}(E)$	6	#5	14'-0"	
$v_{14}(E)$	26	#5	14'-8"	
$v_{15}(E)$	70	#5	3'-0"	
$v_{16}(E)$	8	#5	19'-6"	
$v_{17}(E)$	30	#5	25'-7"	
$v_{18}(E)$	48	#5	8'-3"	
$v_{19}(E)$	8	#5	17'-8"	
$v_{20}(E)$	34	#5	21'-0"	
$v_{21}(E)$	40	#5	6'-4"	
$w(E)$	18	#5	35'-8"	
$n(E)$	82	#7	6'-8"	
$p(E)$	6	#7	34'-10"	
$p_1(E)$	10	#6	7'-10"	
$p_2(E)$	2	#6	21'-10"	
$p_3(E)$	3	#6	6'-1"	
$p_4(E)$	1	#6	10'-4"	
$s_2(E)$	19	#4	10'-1"	
$s_3(E)$	5	#4	10'-9"	
$s_4(E)$	4	#4	11'-3"	
$s_5(E)$	6	#4	11'-11"	
$t(E)$	47	#8	8'-4"	
$t_1(E)$	37	#6	8'-4"	
$u(E)$	11	#4	8'-8"	
$v_1(E)$	10	#7	9'-4"	
$v_2(E)$	12	#7	9'-8"	
$v_3(E)$	12	#7	10'-0"	
$v_4(E)$	12	#7	10'-4"	
$v_5(E)$	10	#7	10'-8"	
$v_6(E)$	10	#7	11'-0"	
$v_7(E)$	5	#5	11'-5"	
$v_8(E)$	6	#5	11'-9"	
$v_9(E)$	6	#5	12'-1"	
$v_{10}(E)$	6	#5	12'-5"	
$v_{11}(E)$	5	#5	12'-9"	

**BARS  $s_2(E)$  thru  $s_5(E)$**



**SOUTH ABUTMENT BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h(E)$	20	#5	32'-5"	
$h_1(E)$	16	#5	8'-0"	
$h_2(E)$	2	#5	16'-0"	
$h_3(E)$	4	#5	4'-4"	
$h_4(E)$	8	#5	31'-9"	
$h_5(E)$	2	#5	8'-5"	
$h_6(E)$	8	#5	7'-5"	
$h_7(E)$	2	#5	4'-7"	
$h_8(E)$	16	#5	8'-11"	
$h_9(E)$	16	#5	8'-11"	
$h_{10}(E)$	18	#5	4'-0"	
$h_{11}(E)$	14	#5	4'-0"	
$h_{12}(E)$	6	#5	3'-3"	
$h_{13}(E)$	6	#5	3'-5"	
$h_{14}(E)$	16	#5	4'-10"	
$h_{15}(E)$	6	#5	3'-3"	
$h_{16}(E)$	6	#5	3'-5"	
$h_{17}(E)$	14	#5	3'-6"	
$h_{18}(E)$	7	#5	33'-0"	
$h_{19}(E)$	2	#5	30'-9"	
$h_{20}(E)$	2	#5	34'-3"	
$h_{21}(E)$	24	#5	28'-9"	
$h_{22}(E)$	32	#5	29'-9"	
$h_{23}(E)$	3	#8	25'-9"	
$h_{24}(E)$	3	#8	37'-2"	
$h_{25}(E)$	5	#5	32'-5"	
$h_{26}(E)$	2	#5	29'-1"	
$h_{27}(E)$	2	#5	33'-5"	
$h_{28}(E)$	2	#5	37'-9"	
$h_{29}(E)$	3	#8	22'-2"	
$h_{30}(E)$	6	#8	22'-5"	

See Anchor Bolt Location Detail (Typ. each Girder)

**SOUTH ABUTMENT RAMP B OVER FAP RTE 310 SECTION 60-15HB-3 MADISON COUNTY STATION 17+72.64 (RAMP B) SN 060-0332**