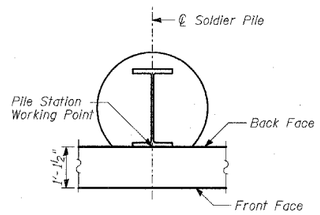
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	860	493
STA. 2200+00.00		TO STA. 2362+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• (1516.1, 1717 & 1818) R-8

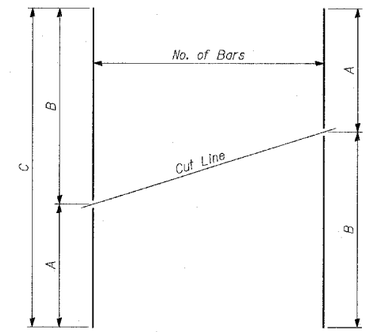
62694

PILE LAYOUT

Pile	Station at Working Point	Top of Wall El.	Top of Pile El.	Bot. of Wall El.	Section	Pile Tip El.	Pile Length
P-1	2240+14.91	8.98	6.98	4.30	HP14x117	-17.78	24'-9"
P-2	2240+07.42	8.98	6.98	3.94		-18.11	25'-1"
P-3	2239+99.93	8.98	6.98	3.58		-18.44	25'-5"
P-4	2239+92.45	8.98	6.98	3.22		-18.86	25'-10"
P-5	2239+84.96	8.98	6.98	2.86		-19.19	26'-2"
P-6	2239+77.48	8.98	6.98	2.51		-19.53	26'-6"
P-7	2239+69.99	8.98	6.98	2.15		-19.86	26'-10"
P-8	2239+62.51	8.98	6.98	1.79		-20.28	27'-3"
P-9	2239+58.37	8.91	6.91	1.55		-18.51	25'-5"
P-10	2239+56.22	8.54	6.54	1.19		-18.87	25'-5"
P-11	2239+51.73	7.51	5.51	0.18		-19.82	25'-4"
P-12	2239+47.25	6.48	4.48	-0.82		-20.86	25'-4"
P-13	2239+42.77	5.44	3.44	-1.83		-21.89	25'-4"
P-14	2239+38.29	4.41	2.41	-2.84	HP14x117	-22.84	25'-3"



SOLDIER PILE WORKING POINT



SERIES OF BAR CUTTING DIAGRAM

See table for dimensions.
Make all cuts normal to bar axis

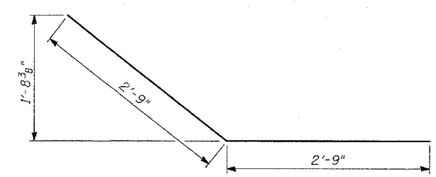
BAR TABLE SCHEDULE

Bar	No. of Sets Req'd	No. of Bars Per Set	A	B	C
v(E)	1	31	4'-3"	5'-8"	9'-11"
v_1(E)	1	31	5'-8"	7'-1"	12'-9"

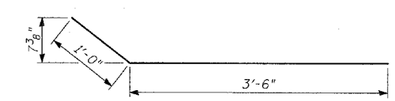
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	14	#5	32'-2"	
h_1(E)	16	#5	29'-8"	
h_2(E)	16	#5	29'-6"	
h_3(E)	8	#5	5'-6"	
h_4(E)	16	#5	4'-6"	
h_5(E)	8	#5	3'-10"	
v(E)	31	#4	9'-11"	
v_1(E)	31	#4	12'-9"	
v_2(E)	61	#4	7'-0"	
Reinforcement Bars, Epoxy Coated			POUND	2,370
Concrete Structures			CU YD	24
Protective Coat			SQ YD	72
Furnishing Soldier Piles (HP Section)			FOOT	360
Drilling and Setting Soldier Piles (in Soil)			CU FT	1,815

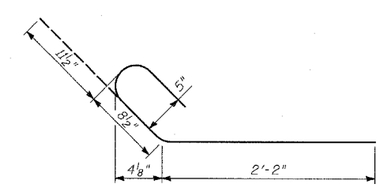
Reinforcement bars designated (E) shall be epoxy coated.



BAR h_3(E)



BAR h_4(E)



BAR h_5(E)

LAP SPLICES

Bar	Lap
#4	1'-8"
#5	2'-2"
#6	2'-7"
#8	4'-6"

TY·LIN INTERNATIONAL

REVISIONS NAME	DATE
REVISED	04/15/05

SHEET 3 OF 7

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG STATE ST.
AT BELT RY.
WALL 4

PILE LAYOUT, DETAILS & BILL OF MATERIAL

S.N. 016-W953 DESIGNED BY: MI, DJR
SCALE: N.T.S. DRAWN BY: DJR, TB
DATE: MARCH 18, 2005 CHECKED BY: TD, MI

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