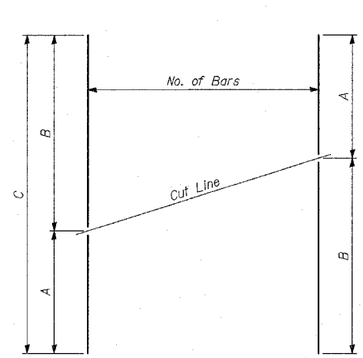
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	860	645
STA. 2200+00.00		TO STA. 2362+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• (1516.1, 1717 & 1818) R-8

62694

PILE LAYOUT

Pile	Station at Working Point	Top of Parapet El.	Top of Pile El.	Bot. of Wall El.	Section	Pile Tip El.	Pile Length
P-1	2355+19.23	10.71	6.54	4.04	HP14x117	-20.04	26'-7"
P-2	2355+12.23	10.73	6.56	4.06		-20.02	26'-7"
P-3	2355+05.23	10.74	6.58	4.08		-19.92	26'-6"
P-4	2354+98.23	10.76	6.60	4.10		-19.90	26'-6"
P-5	2354+87.43	10.79	6.62	4.05		-20.96	27'-7"
P-6	2354+79.93	10.81	6.64	3.60		-21.44	28'-1"
P-7	2354+72.43	10.83	6.66	3.15		-21.92	28'-7"
P-8	2354+64.93	10.85	6.68	2.69		-22.32	29'-0"
P-9	2354+57.43	10.86	6.70	2.24		-22.80	29'-6"
P-10	2354+49.93	10.88	6.72	1.79		-23.28	30'-0"
P-11	2354+42.43	10.90	6.73	1.34		-23.68	30'-5"
P-12	2354+34.93	10.92	6.75	0.89	HP14x117	-24.16	30'-11"
P-13	2354+27.43	10.94	6.77	0.68	W18x119	-26.39	33'-2"
P-14	2354+19.93	10.96	6.79	0.69		-26.38	33'-2"
P-15	2354+12.43	10.98	6.81	0.71		-26.36	33'-2"
P-16	2354+04.93	11.00	6.83	0.73		-26.34	33'-2"
P-17	2353+97.43	11.01	6.85	0.75		-26.32	33'-2"
P-18	2353+89.93	11.03	6.87	0.77		-26.30	33'-2"
P-19	2353+82.43	11.05	6.88	0.79		-26.28	33'-2"
P-20	2353+74.93	11.07	6.90	0.81		-26.26	33'-2"
P-21	2353+67.43	11.09	6.92	0.82		-26.24	33'-2"
P-22	2353+59.93	11.11	6.94	0.84		-26.23	33'-2"
P-23	2353+52.43	11.13	6.96	0.86		-26.21	33'-2"
P-24	2353+44.93	11.14	6.98	0.88		-26.19	33'-2"
P-25	2353+37.43	11.16	7.00	0.90		-26.17	33'-2"
P-26	2353+29.93	11.18	7.02	0.92		-26.15	33'-2"
P-27	2353+22.43	11.20	7.03	0.94		-26.13	33'-2"
P-28	2353+14.93	11.22	7.05	0.96		-26.11	33'-2"
P-29	2353+07.43	11.24	7.07	0.97		-26.09	33'-2"
P-30	2352+99.93	11.26	7.09	0.99		-26.07	33'-2"
P-31	2352+92.43	11.28	7.11	1.01		-26.06	33'-2"
P-32	2352+84.93	11.30	7.13	1.03		-26.04	33'-2"
P-33	2352+77.43	11.32	7.15	1.05		-26.02	33'-2"
P-34	2352+69.93	11.34	7.17	1.07		-26.00	33'-2"
P-35	2352+62.43	11.36	7.19	1.09		-25.98	33'-2"
P-36	2352+54.93	11.38	7.21	1.10		-25.96	33'-2"
P-37	2352+47.43	11.40	7.23	1.12		-25.94	33'-2"
P-38	2352+39.93	11.42	7.25	1.14		-25.92	33'-2"
P-39	2352+32.43	11.44	7.27	1.16		-25.90	33'-2"
P-40	2352+24.93	11.46	7.29	1.18		-25.88	33'-2"
P-41	2352+17.43	11.44	7.27	1.16		-25.90	33'-2"
P-42	2352+09.93	11.38	7.22	1.11		-25.95	33'-2"
P-43	2352+02.43	11.33	7.16	1.05		-26.01	33'-2"
P-44	2351+94.93	11.27	7.11	1.00		-26.06	33'-2"
P-45	2351+87.43	11.22	7.05	0.94		-26.11	33'-2"
P-46	2351+79.93	11.16	7.00	0.89		-26.17	33'-2"
P-47	2351+72.43	11.11	6.94	0.83		-26.22	33'-2"
P-48	2351+64.93	11.05	6.89	0.78		-26.28	33'-2"
P-49	2351+57.43	11.03	6.86	0.72		-27.30	34'-2"
P-50	2351+49.93	11.04	6.87	0.67		-27.38	34'-3"
P-51	2351+42.43	11.05	6.88	0.61		-27.45	34'-4"
P-52	2351+34.93	11.06	6.89	0.56		-27.44	34'-4"
P-53	2351+27.43	11.06	6.90	0.50		-27.52	34'-5"
P-54	2351+19.93	11.07	6.91	0.45		-27.59	34'-6"
P-55	2351+12.43	11.08	6.91	0.39		-27.67	34'-7"
P-56	2351+04.93	11.09	6.92	0.34	W18x119	-27.66	34'-7"
P-57	2350+94.14	11.10	6.93	3.07	HP14x117	-20.98	27'-11"
P-58	2350+87.14	11.11	6.94	3.49		-20.56	27'-6"
P-59	2350+80.14	11.12	6.95	3.92		-20.13	27'-1"
P-60	2350+73.14	11.12	6.96	4.34	HP14x117	-19.71	26'-8"



SERIES OF BAR CUTTING DIAGRAM

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

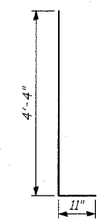
BAR TABLE SCHEDULE

Bar	No. of Sets Req'd	No. of Bars Per Set	A	B	C
v_1(E)	1	31	3'-5"	5'-3"	8'-8"
v_2(E)	1	31	5'-3"	7'-2"	12'-5"
v_4(E)	1	31	7'-2"	7'-5"	14'-7"
v_5(E)	1	31	7'-5"	7'-8"	15'-1"
v_6(E)	1	26	5'-0"	3'-7"	8'-7"

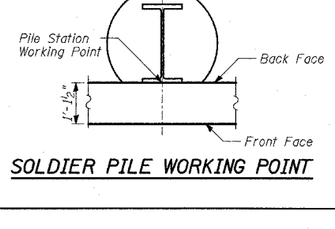
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	455	#4	5'-3"	L
d_1(E)	455	#6	6'-6"	——
e(E)	56	#5	32'-2"	——
e_1(E)	48	#5	29'-8"	——
e_2(E)	16	#5	24'-8"	——
h(E)	143	#5	32'-2"	——
h_1(E)	126	#5	29'-8"	——
h_2(E)	30	#5	24'-8"	——
v(E)	26	#4	3'-7"	——
v_1(E)	31	#4	8'-8"	——
v_2(E)	31	#4	12'-5"	——
v_3(E)	558	#4	7'-2"	——
v_4(E)	31	#4	14'-7"	——
v_5(E)	31	#4	15'-1"	——
v_6(E)	26	#4	8'-7"	——
Reinforcement Bars, Epoxy Coated			POUND	23,220
Concrete Structures			CU YD	187
Protective Coat			SQ YD	570
Furnishing Soldier Piles (HP Section)			FOOT	450
Furnishing Soldier Piles (W Section)			FOOT	1,470
Drilling and Setting Soldier Piles (in Soil)			CU FT	9,718

Reinforcement bars designated (E) shall be epoxy coated.



BAR d(E)



SOLDIER PILE WORKING POINT

LAP SPLICES

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

SHEET 5 OF 21

REVISIONS	
NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG STATE ST.
EXIT RAMP AT AIS #2
AIS #2

PILE LAYOUT, DETAILS & BILL OF MATERIAL

S.N. 016-W960 — DESIGNED BY: MI, DJR
SCALE: N.T.S. — DRAWN BY: DJR, TB
DATE: MARCH 18, 2005 — CHECKED BY: TD, MI

TY·LIN INTERNATIONAL

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