

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	565	380
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62301		*(2021-922 PT2 ETC 2324.6-1P) R-10		

**PILE LAYOUT**

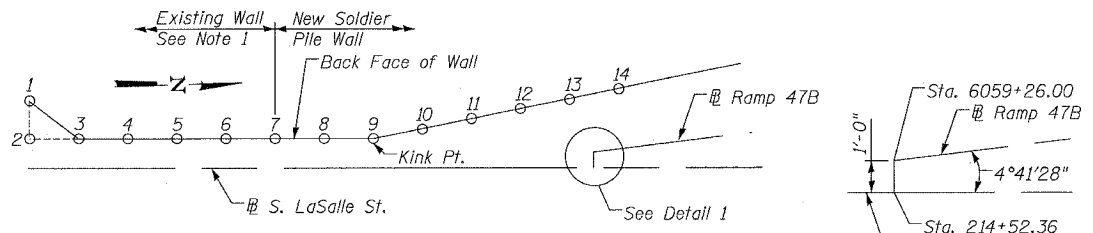
Pile	Offset (Ft.)	Top of Wall El.	Top of Pile Elevation	Bott. of Facing Elevation	Section	Pile Tip Elevation	Pile Length (Ft.)
P-1	88.47	16.26	15.26	6.32	W24x68	-12.35	27.61
P-2	88.80	16.16	15.16	6.52	W24x68	-12.35	27.51
P-3	89.13	16.07	15.07	6.71	W24x68	-12.35	27.41
P-4	89.46	15.97	14.97	6.91	W24x68	-12.35	27.31
P-5	89.74	15.90	14.90	7.48	W24x68	-11.17	26.07
P-6	89.95	15.88	14.88	7.65	W24x68	-11.17	26.05
P-7	90.16	15.86	14.86	7.83	W24x68	-11.17	26.03
P-8	90.37	15.84	14.84	8.01	W24x68	-11.17	26.01
P-9	90.30	15.84	14.84	8.48	W24x76	-11.10	25.94
P-10	89.77	15.85	14.85	8.60	W24x76	-11.10	25.95
P-11	89.24	15.87	14.87	8.72	W24x76	-11.10	25.97
P-12	88.71	15.88	14.88	8.85	W24x76	-11.10	25.99
P-13	88.22	15.89	14.89	9.06	W24x68	-10.16	25.04
P-14	87.56	15.89	14.89	9.06	W24x68	-10.16	25.04
P-15	86.90	15.88	14.88	9.05	W24x68	-10.16	25.04
P-16	86.23	15.88	14.88	9.04	W24x68	-10.16	25.04
P-17	85.73	15.89	14.89	9.02	W24x68	-10.21	25.11
P-18	85.06	15.94	14.94	9.01	W24x68	-10.21	25.15
P-19	84.39	15.98	14.98	9.00	W24x68	-10.21	25.19
P-20	83.72	16.02	15.02	8.99	W24x68	-10.21	25.23
P-21	83.21	16.05	15.05	8.97	W24x68	-10.27	25.32
P-22	82.54	16.09	15.09	8.96	W24x68	-10.27	25.36
P-23	81.87	16.13	15.13	8.95	W24x68	-10.27	25.40
P-24	81.20	16.17	15.17	8.94	W24x68	-10.27	25.44
P-25	80.69	16.20	15.20	8.91	W24x68	-10.23	25.43
P-26	80.02	16.25	15.25	8.90	W24x68	-10.23	25.48
P-27	79.35	16.30	15.30	8.89	W24x68	-10.23	25.53
P-28	78.68	16.35	15.35	8.88	W24x68	-10.23	25.58
P-29	-20.51	16.38	15.38	8.85	W24x68	-10.34	25.73
P-30	-20.51	16.43	15.43	8.84	W24x68	-10.34	25.77
P-31	-20.51	16.48	15.48	8.83	W24x68	-10.34	25.82
P-32	-20.51	16.53	15.53	8.82	W24x68	-10.34	25.87
P-33	-20.51	16.57	15.57	8.80	W24x68	-10.40	25.96
P-34	-20.51	16.61	15.61	8.79	W24x68	-10.40	26.01
P-35	-20.51	16.66	15.66	8.78	W24x68	-10.40	26.06
P-36	-20.51	16.71	15.71	8.77	W24x68	-10.40	26.11
P-37	-20.51	16.75	15.75	8.74	W24x68	-12.59	28.33
P-38	-20.51	16.79	15.79	8.73	W24x68	-12.59	28.37
P-39	-20.51	16.83	15.83	8.72	W24x68	-12.59	28.41
P-40	-20.36	16.87	15.87	8.70	W27x114	-16.35	32.22
P-41	-20.36	16.95	15.95	8.69	W27x114	-16.35	32.30
P-42	-20.51	16.99	15.99	8.67	W24x68	-12.66	28.65
P-43	-20.51	17.03	16.03	8.66	W24x68	-12.66	28.69
P-44	-20.51	17.07	16.07	8.65	W24x68	-12.66	28.73
P-45	-20.51	17.08	16.08	8.63	W24x68	-12.71	28.79
P-46	-20.51	17.06	16.06	8.62	W24x68	-12.71	28.77
P-47	-20.51	17.04	16.04	8.61	W24x68	-12.71	28.75
P-48	-20.51	17.02	16.02	8.60	W24x68	-12.71	28.73
P-49	-20.50	16.97	15.97	8.57	W24x76	-13.48	29.45
P-50	-20.50	16.91	15.91	8.56	W24x76	-13.48	29.39
P-51	-20.50	16.86	15.86	8.55	W24x76	-13.48	29.33
P-52	-20.50	16.80	15.80	8.54	W24x76	-13.48	29.28
P-53	-20.50	16.74	15.74	8.51	W24x76	-13.53	29.27
P-54	-20.50	16.63	15.63	8.50	W24x76	-13.53	29.16
P-55	-20.50	16.52	15.52	8.49	W24x76	-13.53	29.05
P-56	-20.50	16.41	15.41	8.48	W24x76	-13.53	28.94
P-57	-20.51	16.30	15.30	8.46	W24x68	-11.38	26.68
P-58	-20.51	16.11	15.11	8.45	W24x68	-11.38	26.49
P-59	-20.51	15.93	14.93	8.44	W24x68	-11.38	26.31
P-60	-20.51	15.74	14.74	8.43	W24x68	-11.38	26.12

**PILE LAYOUT**

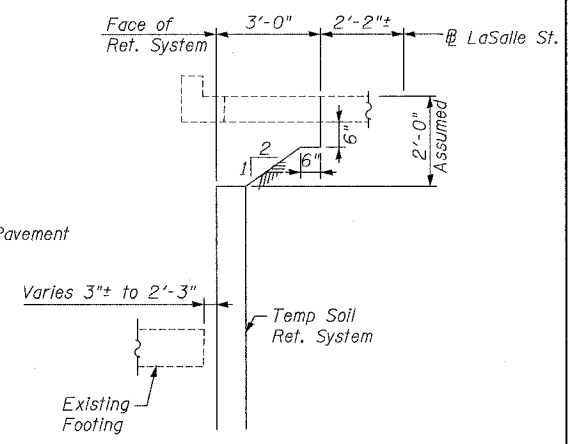
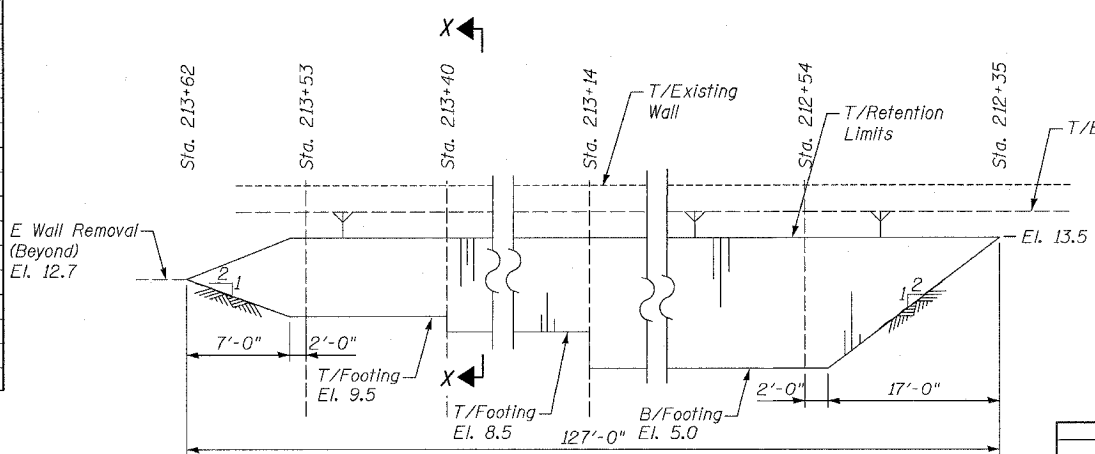
Pile	Offset (Ft.)	Top of Wall El.	Top of Pile Elevation	Bott. of Facing Elevation	Section	Pile Tip Elevation	Pile Length (Ft.)
P-61	-20.51	15.59	14.59	8.41	W24x68	-11.40	25.99
P-62	-20.51	15.36	14.36	8.40	W24x68	-11.40	25.76
P-63	-20.51	15.13	14.13	8.40	W24x68	-11.40	25.53
P-64	-20.51	14.90	13.90	8.40	W24x68	-11.40	25.30
P-65	-20.51	14.75	13.75	8.41	W24x68	-11.40	25.15
P-66	-20.51	14.55	13.55	8.42	W24x68	-11.40	24.95
P-67	-20.51	14.35	13.35	8.43	W24x68	-11.40	24.74
P-68	-20.51	14.14	13.14	8.45	W24x68	-11.40	24.54
P-69	-20.51	14.00	13.00	8.62	W24x68	-10.86	23.86
P-70	-20.51	13.82	12.82	8.74	W24x68	-10.86	23.68
P-71	-20.51	13.64	12.64	8.87	W24x68	-10.86	23.50
P-72	-20.51	13.46	12.46	9.00	W24x68	-10.86	23.32
P-73	-20.51	13.34	12.34	9.13	W24x68	-10.11	22.45
P-74	-20.51	13.18	12.18	9.06	W24x68	-10.11	22.29
P-75	-20.51	13.03	12.03	8.98	W24x68	-10.11	22.14
P-76	-20.51	12.88	11.88	8.91	W24x68	-10.11	21.99
P-77	-20.51	12.77	11.77	8.67	W24x68	-9.42	21.19
P-78	-20.51	12.65	11.65	8.59	W24x68	-9.42	21.07
P-79	-20.51	12.52	11.52	8.51	W24x68	-9.42	20.94
P-80	-20.51	12.40	11.40	8.43	W24x68	-9.42	20.82
P-81	-20.51	12.28	11.28	8.21	W24x68	-8.98	20.26
P-82	-20.51	12.14	11.14	8.15	W24x68	-8.98	20.12
P-83	-20.51	12.02	11.02	8.08	W24x68	-8.98	19.99

**OFFSET TABLE**

PT.	Station	Offset
1	211+27.35	17.12
2	211+29.26	10.51
3	211+37.31	10.00
4	211+65.75	10.18
5	211+95.23	10.33
6	212+24.71	10.48
7	212+54.39	10.58
8	212+80.55	10.63
9	213+06.61	10.68
10	213+36.55	13.14
11	213+66.46	15.59
12	213+96.35	18.05
13	214+26.25	20.50
14	214+56.15	22.95



- NOTES**
- All piles have drilled shaft dia = 3'-0".
  - Utilize Back Face of existing wall as W.P. for top modification.



**BILL OF MATERIAL**

Item	Unit	Quantity
Furnishing Soldier Piles (W Sections)	Foot	2,150
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	12,973

**TEMPORARY SOIL RETENTION SYSTEM**

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

REVISIONS	
NAME	DATE
REVISD	6/15/06
REVISD	07/13/06

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)  
 COOK COUNTY  
 STA. 4529+75.90 TO STA. 4537+30.74  
 RETAINING WALL N-47N-R  
 PILE LAYOUT & TEMP. SOIL RET. SYSTEM  
 S.N. 016-W977  
 SCALE: NTS  
 DATE: JUNE 9, 2006  
 DRAWN BY: MTR  
 CHECKED BY: BLU

BOWMAN, BARRETT & ASSOCIATES INC.  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
 www.bbainc.com

450-43 PM 7/13/2006