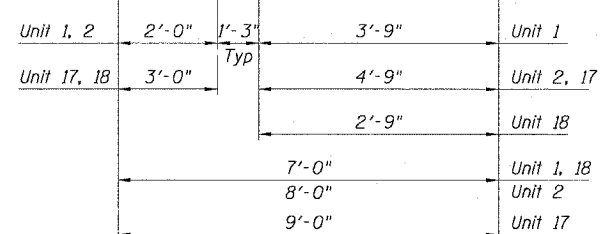
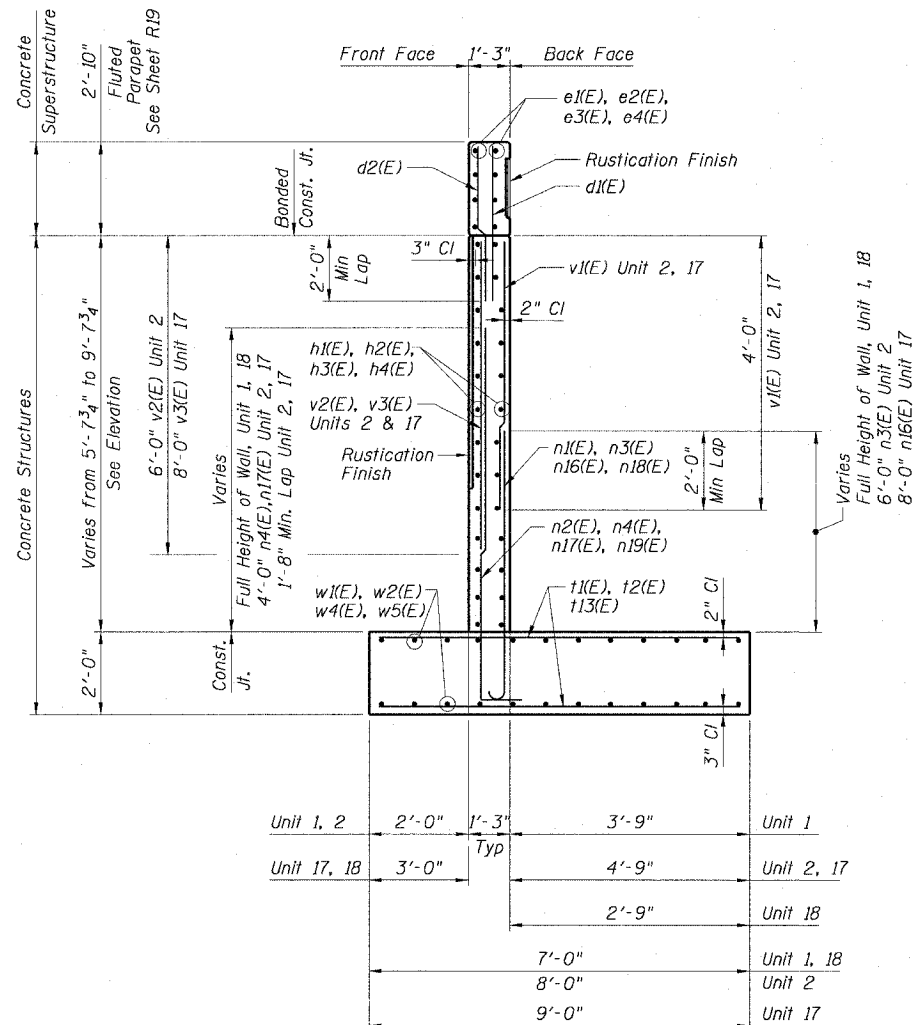


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2021-922PT.1-AC	COOK	460	242
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62693



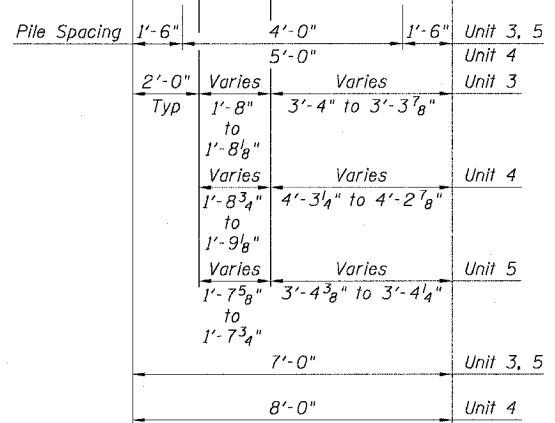
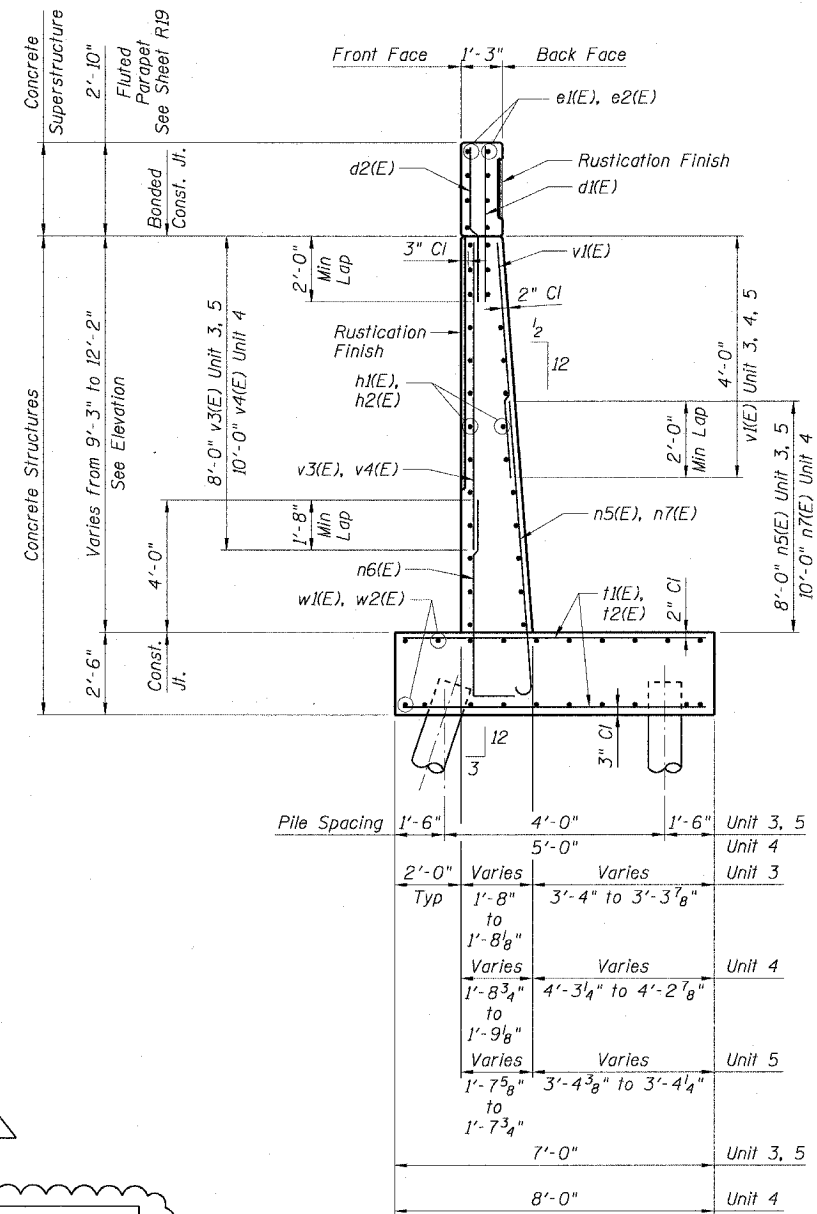
Unit	Maximum Applied Bearing Pressure
1	2.1 Ksf
2	2.4 Ksf
17	2.4 Ksf
18	2.2 Ksf

SECTION A-A

Unit 1, Sta 111+25.00 to Sta 112+00.00
Unit 2, Sta 112+00.00 to Sta 112+50.00
Unit 17, Sta 125+80.00 to Sta 126+24.99
Unit 18, Sta 126+24.99 to Sta 126+89.58

Unit	Number Required	Micropile Load Test	Micropile Proof Load Test	Micropile Design Loads		
				Front Row Horizontal Tons	Middle Row Horizontal Tons	Back Row Horizontal Tons
3	18	0	0	10		3
4	150	1	1	9		3
5	52	0	0	10		4
6	29	0	1	10		4
7	38	1	0	10		3
8	33	0	1	10	7	3
9	56	0	0	10	7	3
10	66	0	1	10	7	3
11	75	0	0	9	7	3
12	144	1	1	11	7	3
13	60	0	0	12	9	4
14	53	0	1	11	8	3
15	32	0	0	9		3
16	23	0	1	9		3

Notes:
1. Vertical design load for all Piles: 45 tons
2. Horizontal design load includes the horizontal component of the axial pile reaction.

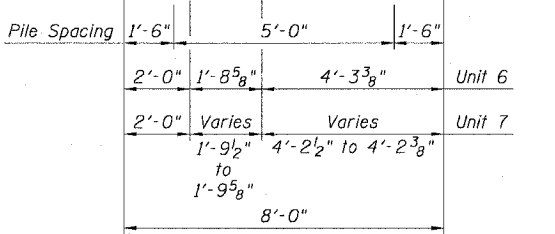
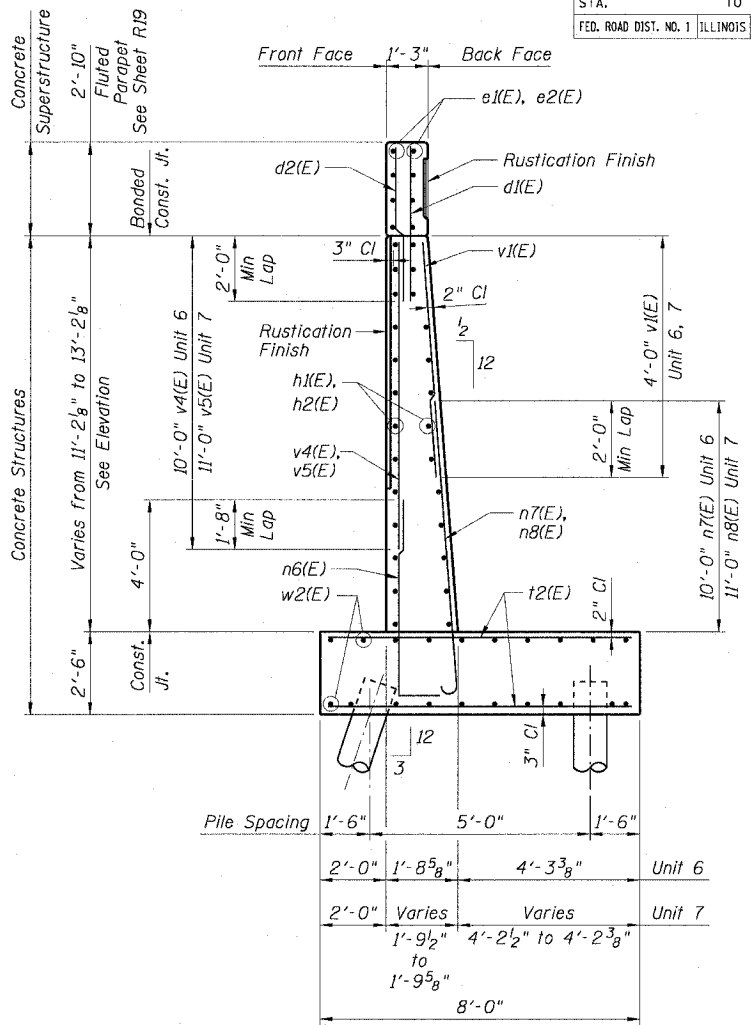


SECTION B-B

Unit 3, Sta 112+50.00 to Sta 113+50.00
Unit 4, Sta 113+50.00 to Sta 116+00.00
Unit 5, Sta 116+00.00 to Sta 117+50.00

MICROPILE NOTES:

- The Contractor shall submit complete computations and details to the Department for approval prior to ordering materials. (See Special Provisions).
- Steel Casing shall be Extra Strong Pipe, or equivalent.
- The Micropiles shall utilize either deformed bars or threadbars in the design of the reinforcement cross-sectional area. The reinforcement shall be sized to limit the stress to .65fpu (65% G.U.T.S.).
- Steel Casing shall not be spliced within 10 feet of the top of the Pile. Splices shall be capable of developing the full moment capacity of the Steel Casing.
- Bearing area of end of Micropile within the Footing shall be a minimum of 37 sq. in.



SECTION C-C

Unit 6, Sta 117+50.00 to Sta 118+25.00
Unit 7, Sta 118+25.00 to Sta 119+00.00

NOTES:

- For Bar Bending Diagrams see Sheet R20.
- Pile Type: Micropile
- Sub-base for wall footings shall be well compacted per the Standard Specifications.
- Work Sheets R15 thru R17 together.
- See Table "A" for Maximum Applied Bearing Pressure and Table "B" for Number of Piles Required.

Sheet R15 of 28

REVISIONS	
NAME	DATE
MK	01/06/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
WALL SECTIONS
SOUTH WENTWORTH AVENUE RETAINING WALL
WEST 59TH STREET TO WEST 63RD STREET
SECTION 2021-922 PT.1-AC
STATION 111+25.00 TO 126+89.58
COOK COUNTY S.N. 016-W886
SCALE: None DRAWN BY: ET
DATE: October 29, 2004 CHECKED BY: JSS/MM



01/06/2005 02:46:31 PM