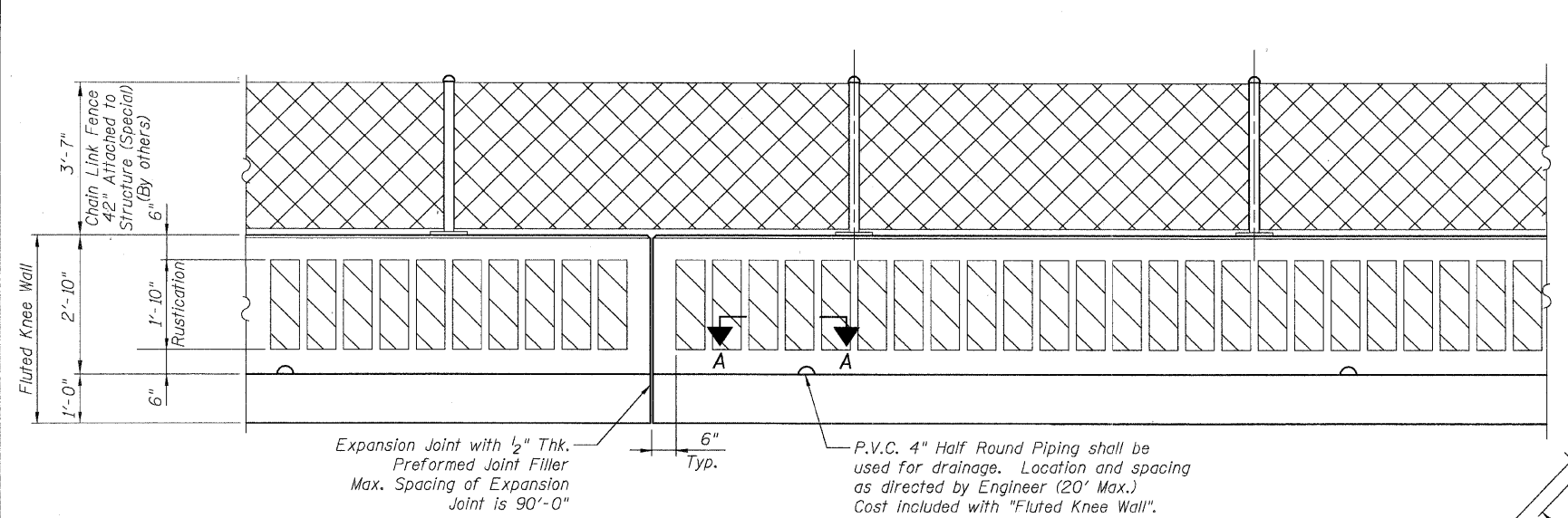
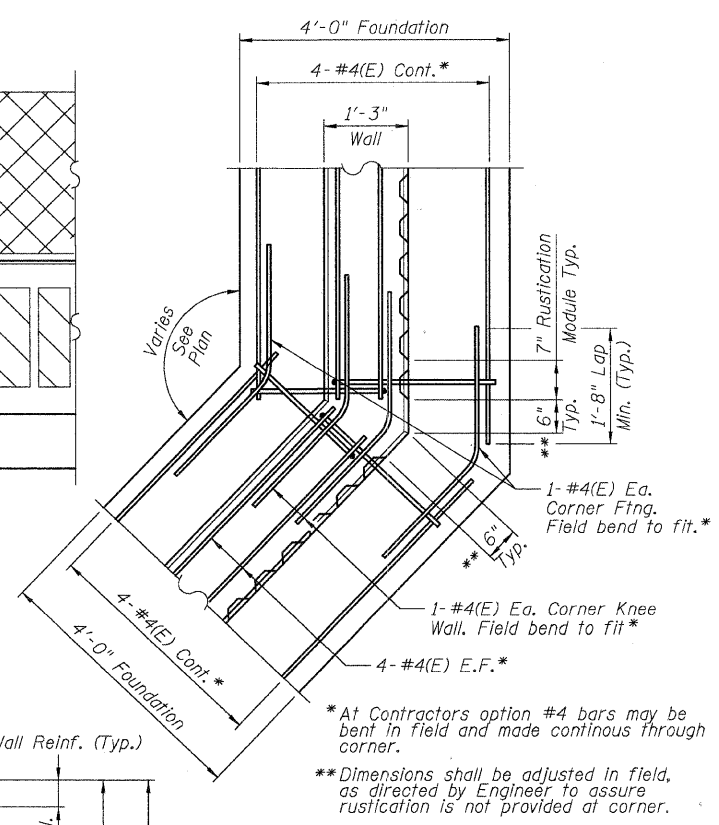


F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	27	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62990				



**BACK FACE ELEVATION - FLUTED KNEE WALL**



**TYPICAL FLUTED KNEE WALL CORNER DETAIL**

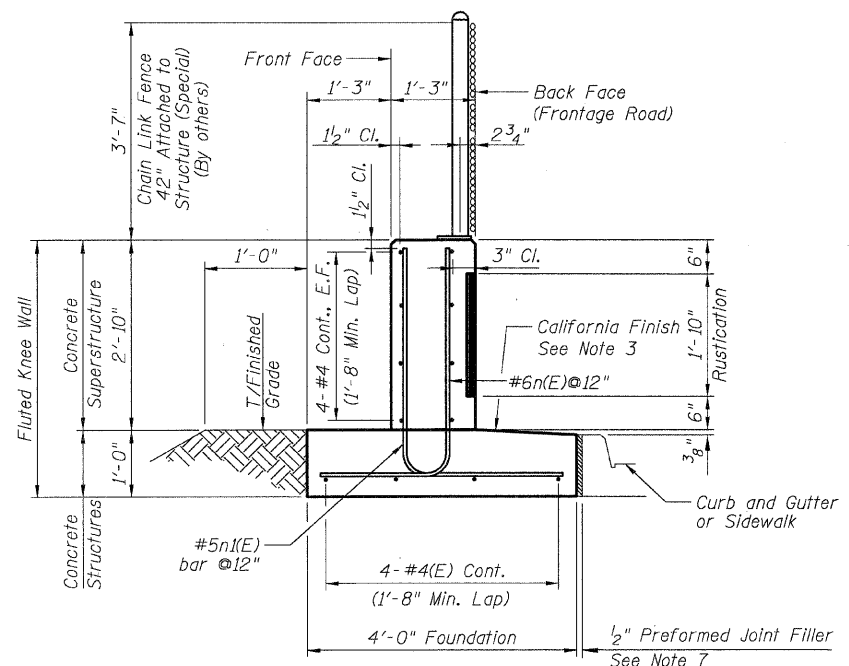
**BILL OF MATERIAL**

Item	Unit	Qty.*
Concrete Structures	Cu. Yd.	0.15
Concrete Superstructure	Cu. Yd.	0.13
Reinforcement Bars, Epoxy Coated	Pound	22.69
Rustication Finish	Sq. Ft.	1.83
Protective Coat	Sq. Yd.	0.62

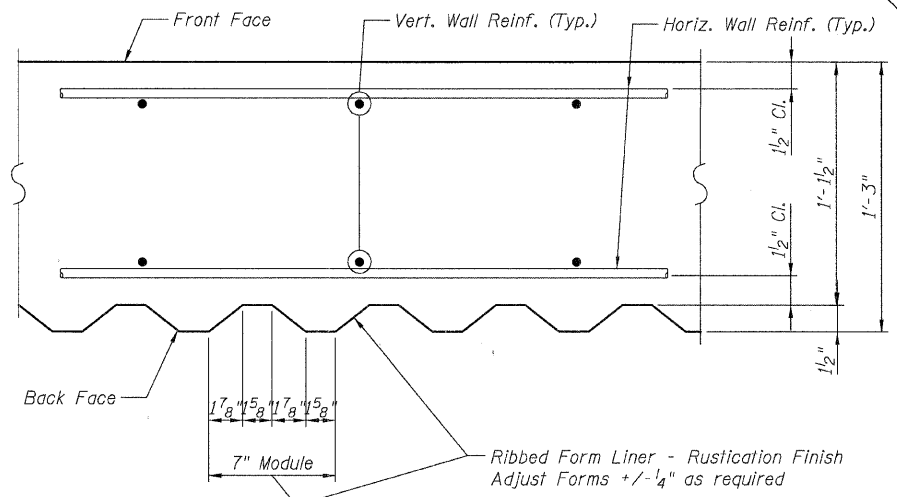
\* Quantities are per foot of Fluted Knee Wall and are provided for estimating purposes only. See Note 5.

**NOTES:**

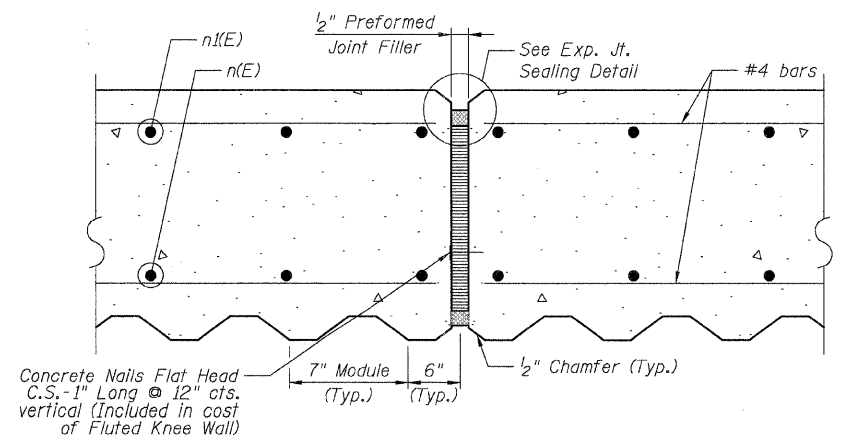
1. Back Face is face adjacent to Frontage Rd. and Front Face is face adjacent to Expressway.
2. Concrete: f'c = 3500 psi
3. Provide California Finish on top of foundation between stem and Frontage Road. See Roadway Details. Cost included with "Fluted Knee Wall".
4. At locations where Fluted Knee Wall abuts a rigid Structure, a 1/2" thick Preformed Expansion Joint Filler conforming to the shape of the Structure shall be installed between the Wall and the Structure.
5. "Fluted Knee Wall" shall include Concrete Superstructure stem, Concrete Structures foundation, Reinforcement Bars, Epoxy Coated, all form liners for Rustication Finish, Protective Coat and Preformed Joint Filler (P.J.F.).
6. Apply Protective Coat to top and front face of stem and top of Frontage Road side of foundation.
7. Cost included with "Fluted Knee Wall."
8. Chain Link Fence 42" Attached to Structure (Special) will not be paid for in this Contract, but shall be furnished and installed in a future Contract by others.
9. See Roadway Plans for limits of excavation for Fluted Knee Wall.



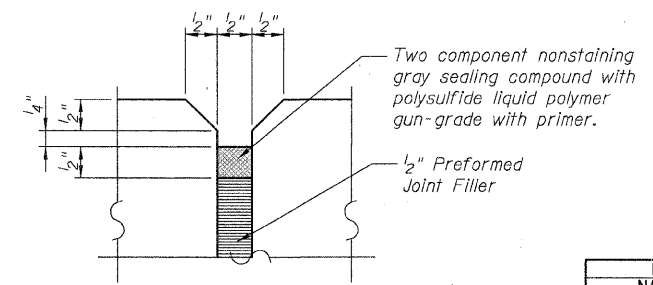
**TYPICAL SECTION FLUTED KNEE WALL**



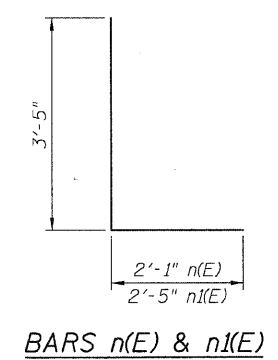
**SECTION A-A**



**EXPANSION JOINT DETAIL**



**EXPANSION JOINT SEALING DETAIL**



**BARS n(E) & n(E)**

**LEGEND:**

- Chain Link Fabric
- Rustication Finish
- E.F. = Each Face

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NORTHBOUND KNEE WALLS (43RD ST TO ROOT ST)

**FLUTED KNEE WALL**

SCALE: NTS  
 DATE: 04/25/08

DRAWN BY: LAM  
 CHECKED BY: BLU

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

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