

BILL OF MATERIAL

Unit Quantity

26'

Foot

Foot

Item

Bicycle Railing

Parapet Railing

The Bicycle Railing fasteners for end posts near expansion joints may need to be installed prior to installing the bent plates. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 3/8" Ø fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.







TABLE OF DIMENSIONS

Location	T	A	В	С	D	E
Over Strip Seal Jt.	≤4″	21/2"	1'-2"	2'-4"	7 1⁄4"	7"
Over Finger or Modular Jt.	≤9 ¹ /2″	51/2"	1'-7¾"	3'-31/2"		
Over Finger or Modular Jt.	≤15"	8¼"	$2' - 1\frac{1}{4}''$	4'-21/2"		

T =; total movement based on total temperature range from -20°F to 120°F along centerline of roadway at expansion joint.

R-29

9-1-2022

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOT. SHTS.	
N/A	21-00163- 00-BT	WILLIAMSON	82	156	
ILLINOIS		CRAB ORCHARD GREENWAY			

CONTRACT NO. 99700

Notes:

Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used

in the Bicycle Railing. All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications. All HSS tubing used for the Parapet Railing shall be ASTM A500 grade C.

All base plates used for the Paraper Railing shall be AASHTO M270 grade 50.

All heavy hex nuts shall be according to ASTM A 563 grade DH. All fully threaded anchor rods shall be ASTM F1554 grade 105. The post base plate shall be fastened to the curb snug

tight and given an additional 1/3" turn.

Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.

When the contract specifies a galvanized railing, all steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications. When the contract specifies a painted railing, all posts, rail, splices, anchor devices and plates of the railing shall be painted according to the paint system for railings as specified in the General Notes.

See sheet _ of _ for dimensions of concrete openings at expansion joints.

NOTE: The Organic Zinc Rich Primer/Epoxy/Urethane paint system shall be used for painting the railing. The entire system shall be shop applied. The color of the final finish coat shall be Munsell Black N 1.

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515					
REVISIO	NS	ALL RIGHTS RESERVED			
DATE	NO.	CLARIDA & ZIEGLER			
06/08/2023	2	ENGINEERING CO.			
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		Marion, Illinois 62959			
		Phone - (618)993-6411, Fax - (618)993-6750			
		DETAILS - SIDEWALK RAILING			
		CRAB ORCHARD GREENWAY			
		WILLIAMSON COUNTY, ILLINOIS			
		Date FEB. 2023 DR. By CWB CK'D By CWB			
		Scale N.T.S. Job No. 21157 Sheet No. 82 of 156			