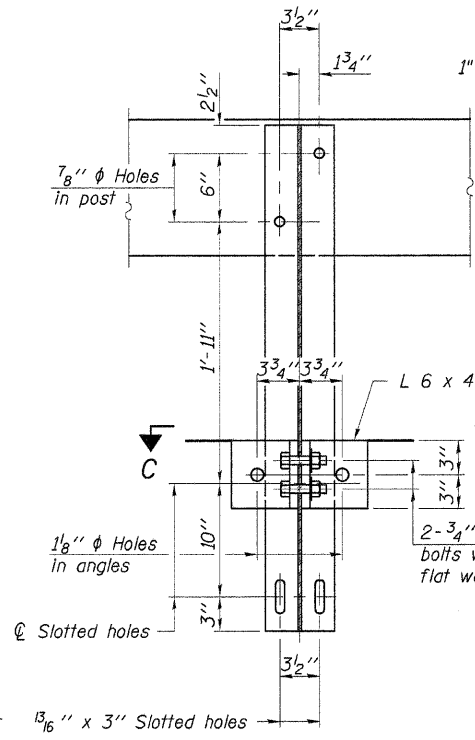


Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 *** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

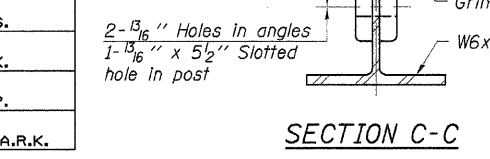
CURLED END SECTION DETAILS
 (4 Required)



SECTION E-E

SECTION B-B

SECTION AT RAILING POST



SECTION C-C

SECTIONS AT RAIL SPLICE

ANCHOR DEVICE
 * Threaded areas shall be plugged or blocked off during casting of beam.

RAIL SPLICE CONNECTION AT EXPANSION JT.

PLAN-BOTT. SPLICE P TYPICAL

END OF RAIL DETAILS

ROUND HEAD BOLT

P 1/2" x 7" x 6"

VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	317

STEEL RAILING, TYPE S-1
 S.N. 021-4307

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

R-S-1 (3) 03-12-10 (10'-9" Maximum Post Spacing)

FILE: 09-455_RAIL-S1.DGN DATE: 11/08/10

FEHR-GRAHAM & ASSOCIATES, LLC
 ENGINEERING AND SCIENCE CONSULTANTS
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4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	10
GARRETT ROAD DIST. ILLINOIS				CONTRACT NO. 91433