

**PAINTING**

Shop and field painting to be governed by Item I-10. Using Section 9.4 or 9.5 of the "Material Details" for the shop coat and Section 9.3 of the "Material Details" for the two field coats of white paint.

**NOTE**

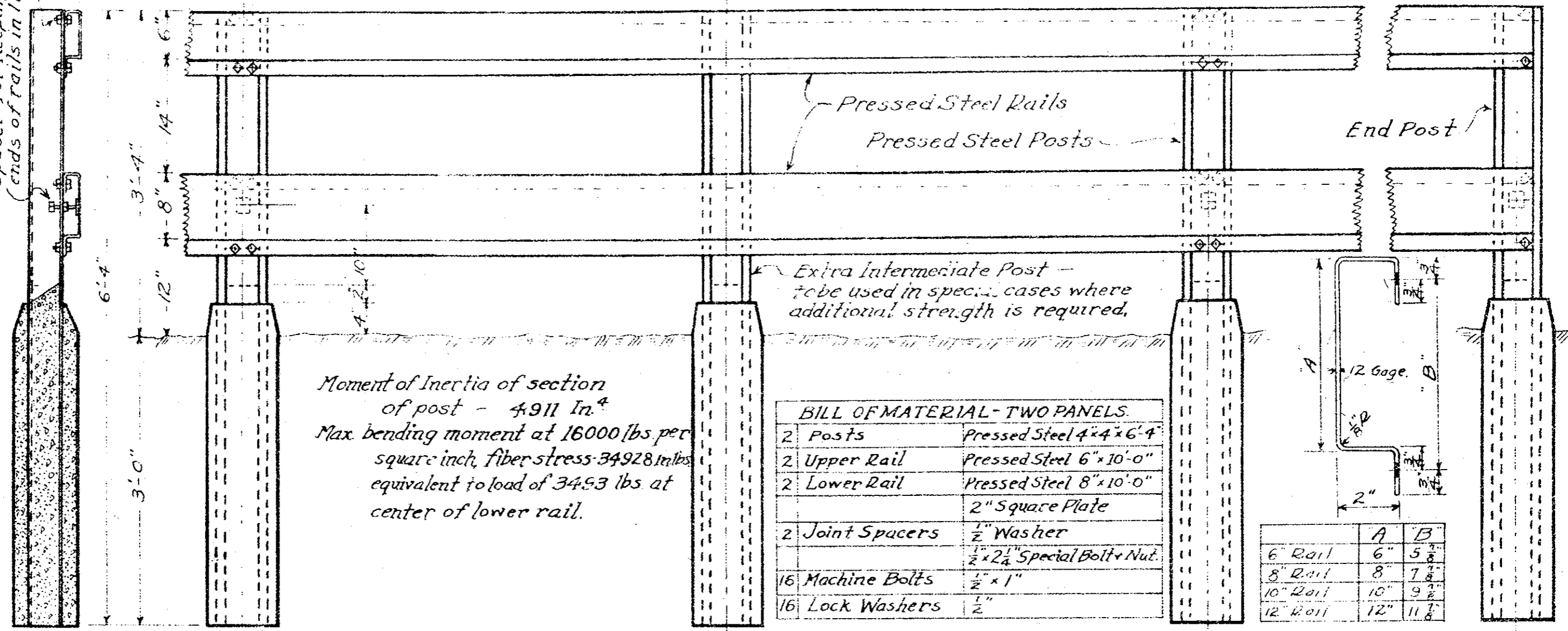
All beads in posts and rails have  $\frac{3}{8}$ " inside radius.

Spacer for keeping adjoining ends of rails in line.

Machine Bolt -  $\frac{1}{2}$ " x 1" with lock washer

10'-0" Rail Length  
10'-0" Panel Length

10'-0" Rail Length  
9'-10" Panel Length



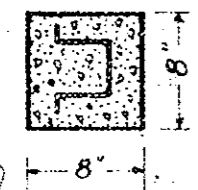
Moment of Inertia of section of post - 4911 In.<sup>4</sup>  
Max. bending moment at 16000 lbs per square inch, fiber stress 34928 in lbs equivalent to load of 3493 lbs at center of lower rail.

Extra Intermediate Post - to be used in special cases where additional strength is required.

**BILL OF MATERIAL - TWO PANELS.**

2 Posts	Pressed Steel 4x4x6'-4"
2 Upper Rail	Pressed Steel 6"x10'-0"
2 Lower Rail	Pressed Steel 8"x10'-0"
	2" Square Plate
2 Joint Spacers	$\frac{1}{2}$ " Washer $\frac{1}{2}$ " x 2 $\frac{1}{4}$ " Special Bolt + Nut.
16 Machine Bolts	$\frac{1}{2}$ " x 1"
16 Lock Washers	$\frac{1}{2}$ "

	A	B
6" Rail	6"	5 $\frac{7}{8}$ "
8" Rail	8"	7 $\frac{7}{8}$ "
10" Rail	10"	9 $\frac{7}{8}$ "
12" Rail	12"	11 $\frac{7}{8}$ "



All surfaces of posts and rails to be painted by manufacturer with one priming coat.  
All bolts to be dipped in paint just before using.  
Posts to be pressed from basic open-hearth steel sheets - 10 gauge.  
Rails to be pressed from basic open-hearth steel sheets - 12 gauge.  
All joints in lower rail to be provided with joint spacers as shown.  
Bolt holes in posts to be slotted horizontally.

**TYPE "F" GUARD RAIL**

DIVISION OF HIGHWAYS  
OHIO

DRAWING 107 CONST. MAY, 1926