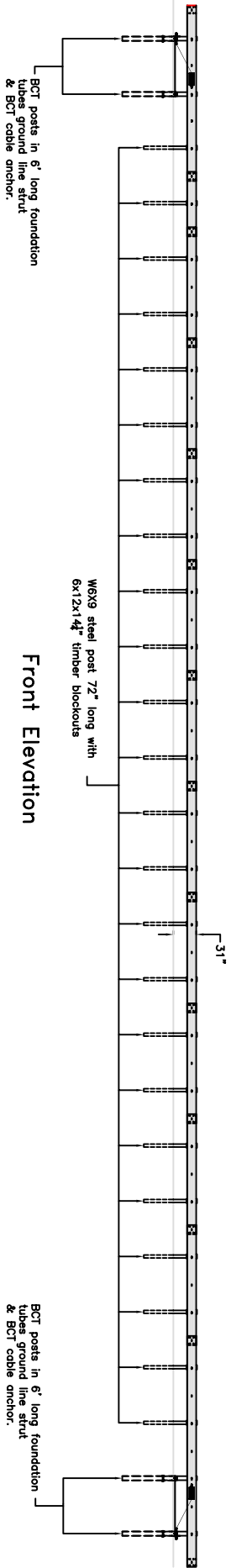


Plan View  
Flare Rate 7:1



Front Elevation



Midwest Roadside  
Safety Facility

Flare Rate Study (FRS)  
Midwest Guardrail System  
Layout for 7:1 Flare Impact  
with 820C Test Vehicle

Drawing Name:  
FRS-3 R2.dwg

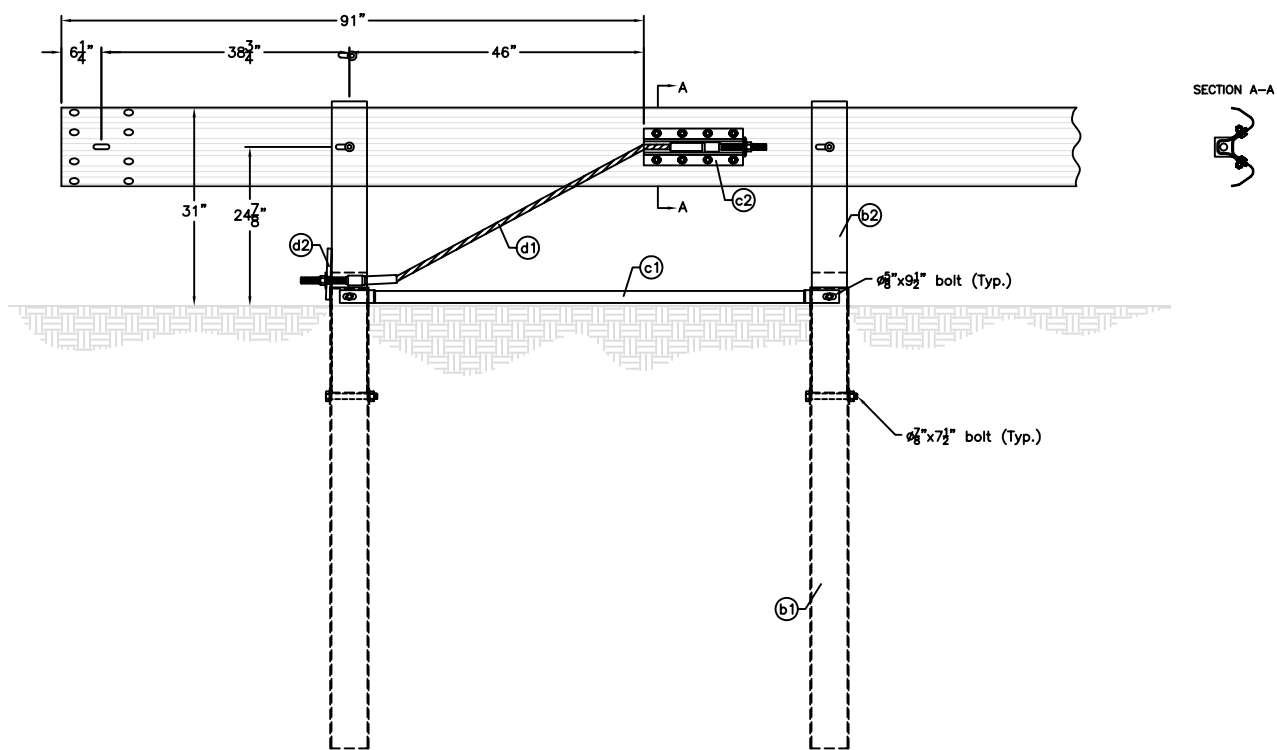
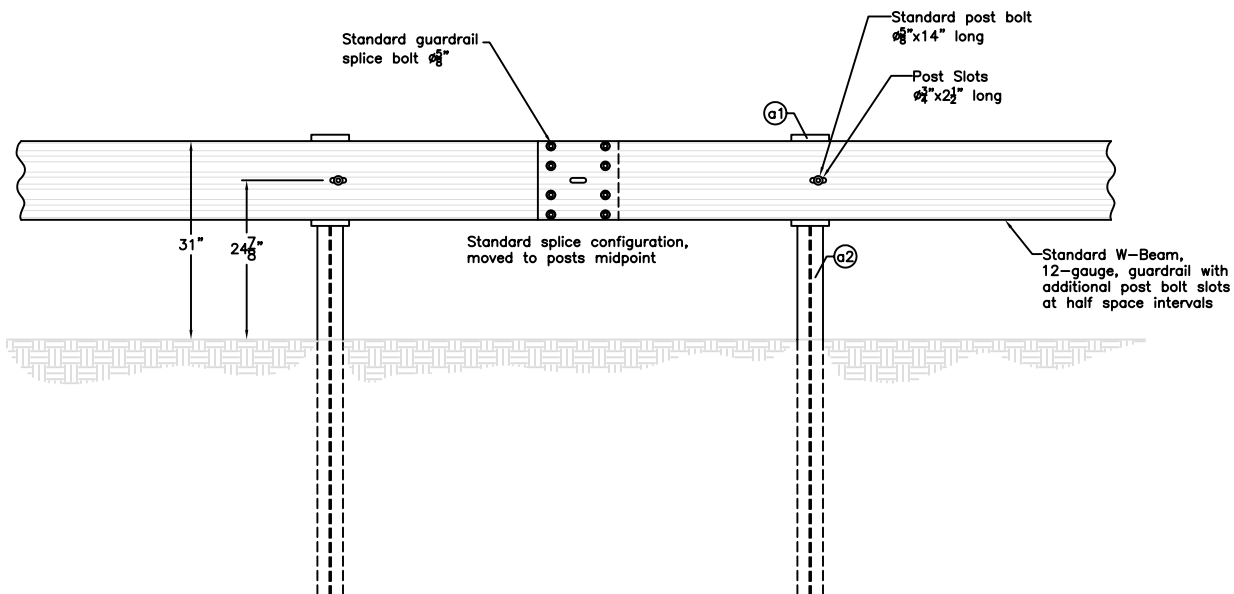
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Sheet:  
1 of 6

Date:  
08/15/2005

By:  
GEP

Rev:  
KAP



**Midwest Roadside  
Safety Facility**

Flare Rate Study (FRS)  
Midwest Guardrail System

Rail Detail

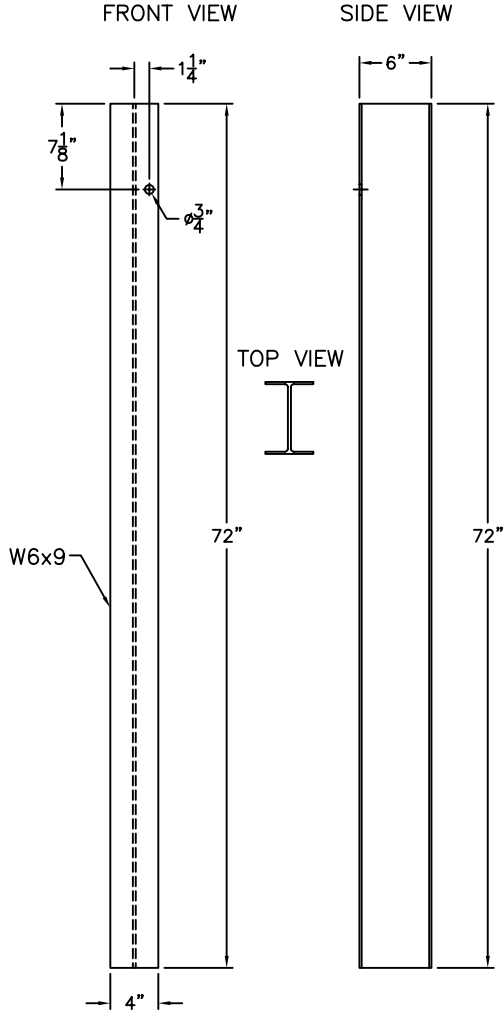
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08/15/2005  
By:  
GEP  
Rev:  
KAP

Drawing Name:  
FRS-3 R2.dwg

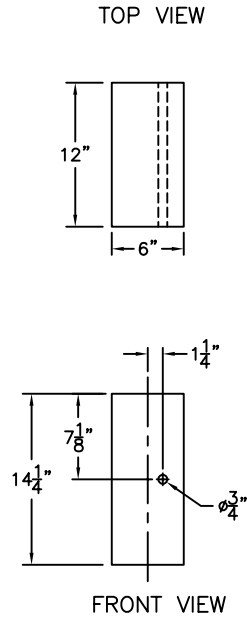
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ITEM	QTY	DESCRIPTION	MATERIAL
a1	25	Steel Posts	W6x9 (W152x13.4)
a2	25	Blockout 6x8x14 $\frac{1}{2}$ "	XXX

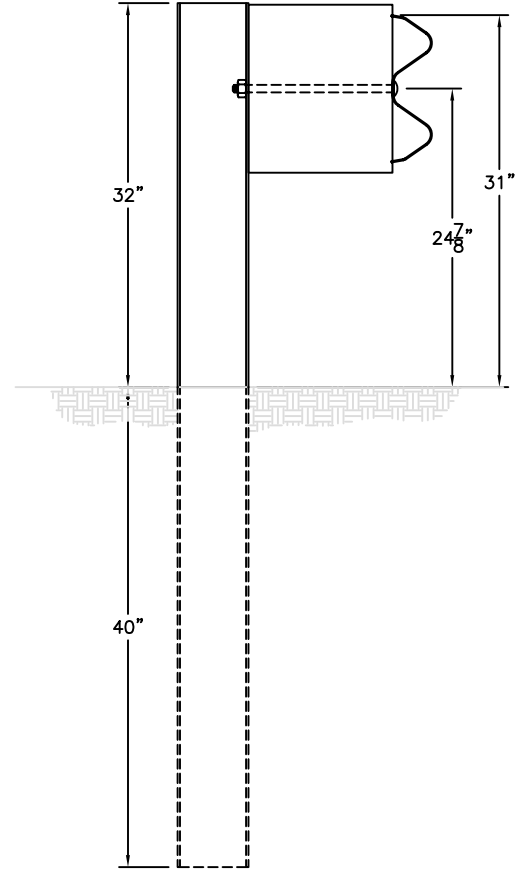
**W-BEAM POST  
(Part a1)**



**W-BEAM SPACER  
(Part a2)**



**W-BEAM SUPPORT DETAILS**



**Midwest Roadside  
Safety Facility**

Flare Rate Study (FRS)  
Midwest Guardrail System

Post Detail

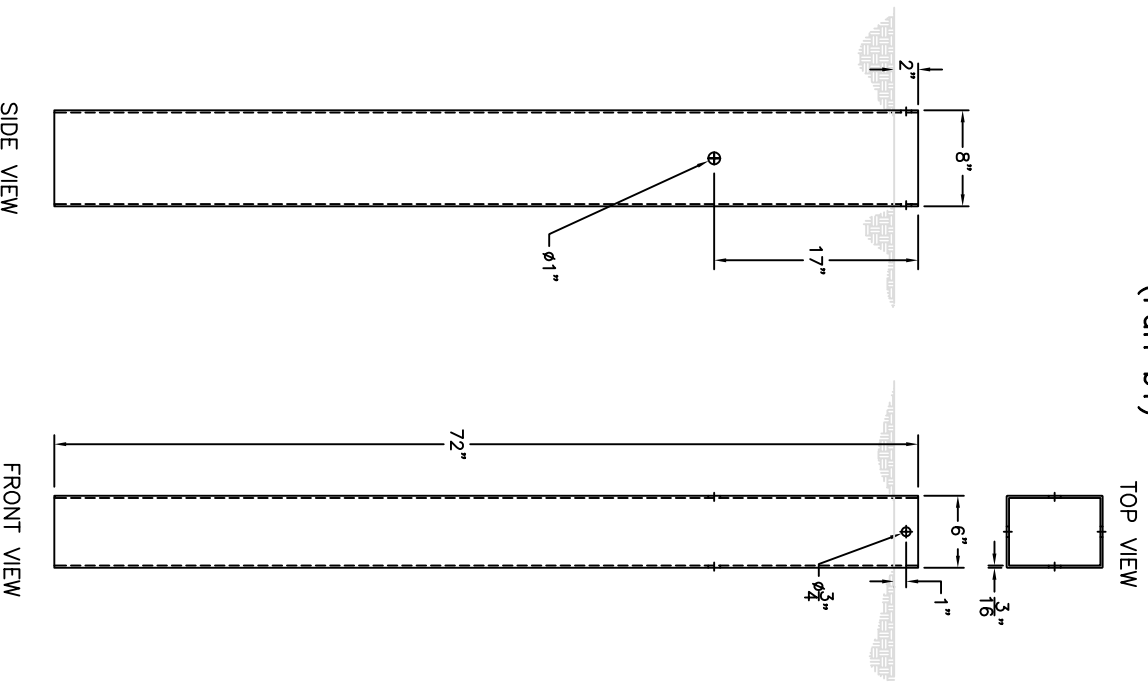
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3 of 6  
Date:  
08/15/2005  
By:  
GEP  
Rev:  
KAP

Drawing Name:  
FRS-3 R2.dwg

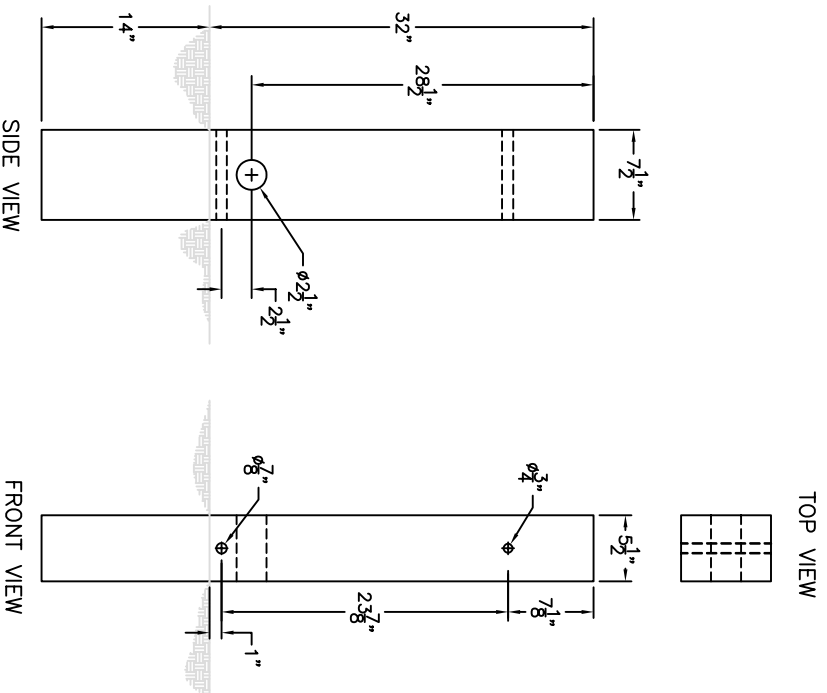
Scale:  
1=16

ITEM QTY	DESCRIPTION	MATERIAL
b1 2	Foundation Tubes	PTE05
b2 2	BCT Timber Post	PDF01

**FOUNDATION TUBE  
(Part b1)**



**BCT TIMBER POST  
(Part b2)**



**Midwest Roadside  
Safety Facility**

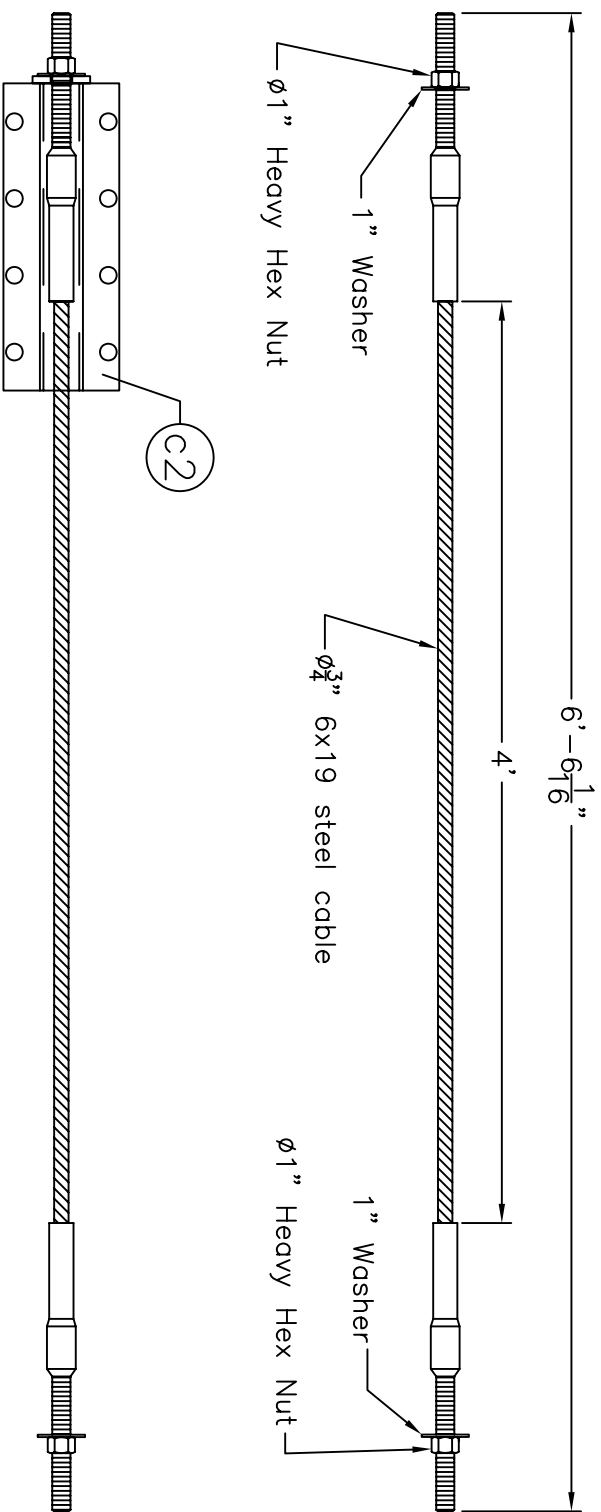
**Flare Rate Study (FRS)  
Midwest Guardrail System  
BCT Post & Tube Detail**

Drawing Name: FRS-3 R2.dwg	Scale: 1=16	Rev: KAP
Sheet: 4 of 6	By: GEP	Rev: KAP
Date: 08/15/2005	By: GEP	Rev: KAP

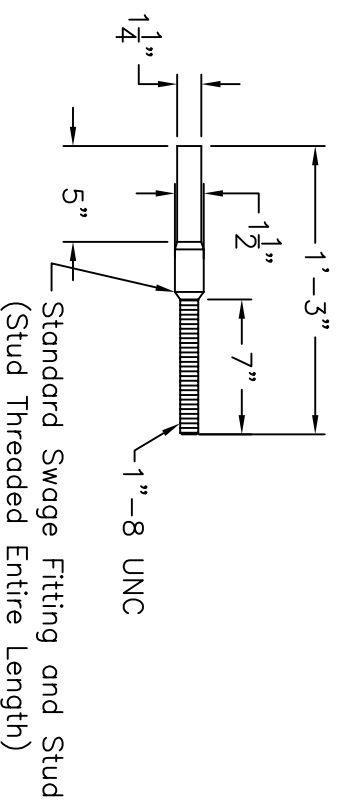
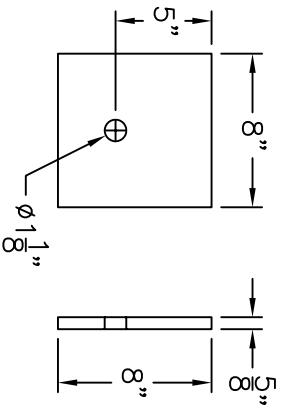



ITEM QTY	DESCRIPTION	MATERIAL
d1 2	Anchor Cable	FCA01
d2 2	Bearing Plate	FPPB01

Anchor Cable  
(Part d1)



Bearing Plate  
(Part d2)



	<b>Flare Rate Study (FRS) Midwest Guardrail System</b>		Sheet: 6 of 6
	<b>BCT Anchor Cable Detail</b>		Date: 08/15/2005
Drawing Name: FRS-3 R2.dwg	Scale: 1=10	By: GEP	Rev: KAP
Midwest Roadside Safety Facility			