

# INFORMATION HANDOUT

For Contract No. [10-1C0304](#)

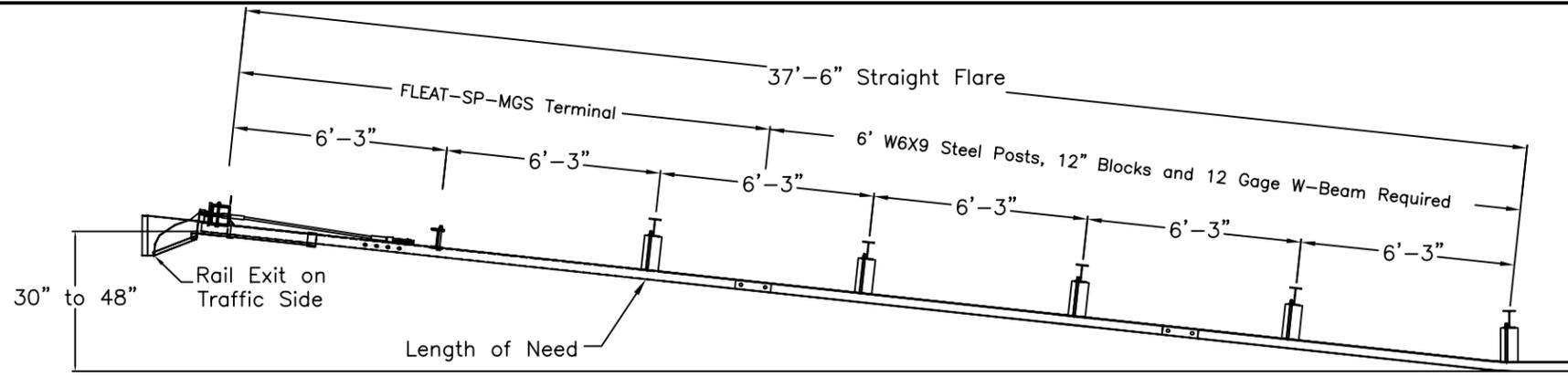
At [Tuo - 49,108 - var](#)

Identified by

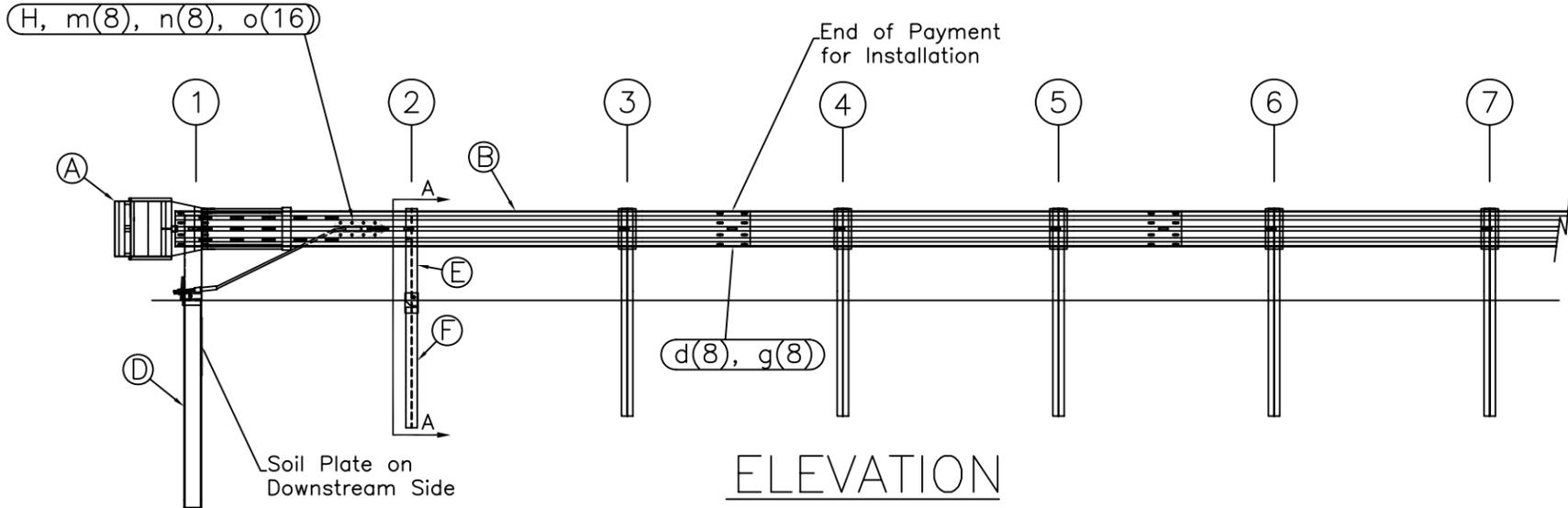
Project ID [1014000066](#)

## MATERIALS INFORMATION

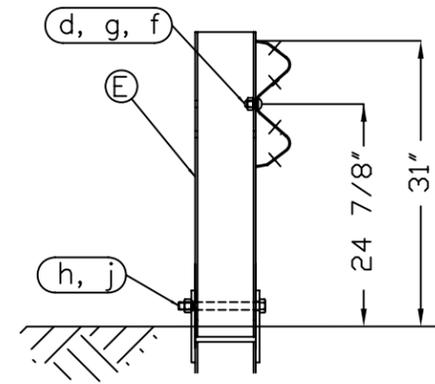
[Manufacturer's Drawings for Alternative Flared Terminal System](#)



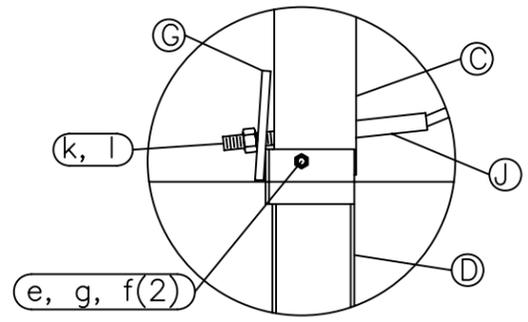
PLAN



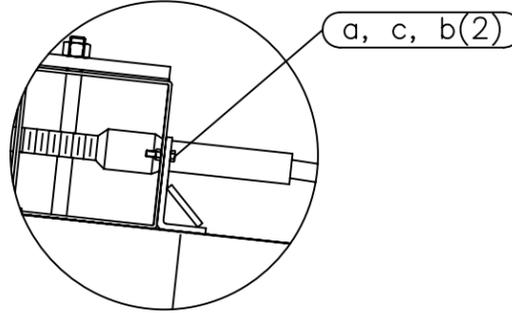
ELEVATION



SECTION A-A  
Post #2



Post #1 Connection Detail



Impact Head Connection Detail

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	F3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.	MGS-SF1303
C	1	FIRST POST TOP (6X6X $\frac{1}{8}$ " Tube)	TPHP1A
D	1	FIRST POST BOTTOM (6' W6X15)	TPHP1B
E	1	SECOND POST ASSEMBLY TOP	UHP2A
F	1	SECOND POST ASSEMBLY BOTTOM	HP3B
G	1	BEARING PLATE	E750
H	1	CABLE ANCHOR BOX	S760
J	1	BCT CABLE ANCHOR ASSEMBLY	E770

HARDWARE (ALL DIMENSIONS IN INCHES)			
a	2	5/16 x 1 HEX BOLT GRD 5	B5160104A
b	4	5/16 WASHER	W0516
c	2	5/16 HEX NUT	N0516
d	9	5/8 Dia. x 1 1/4 SPLICE BOLT (POST #2)	B580122
e	1	5/8 Dia. x 9 HEX BOLT GRD 5	B580904A
f	3	5/8 WASHER	W050
g	10	5/8 Dia. H.G.R NUT	N050
h	1	3/4 Dia. x 8 1/2 HEX BOLT GRD A449	B340854A
j	1	3/4 Dia. HEX NUT	N030
k	2	1 ANCHOR CABLE HEX NUT	N100
l	2	1 ANCHOR CABLE WASHER	W100
m	8	CABLE ANCHOR BOX SHOULDER BOLT	SB58A
n	8	1/2 A325 STRUCTURAL NUT	N055A
o	16	1 1/16 OD x 9/16 ID A325 STR. WASHER	W050A

GENERAL NOTES:

- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- The lower sections of the Posts 1&2 shall not protrude more than 4 in above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
- The lower sections of the hinged posts should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
- When competent rock is encountered, a 12" Ø post hole, 20 in. deep cored into the rock surface may be used if approved by the engineer for post 1. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
- The breakaway cable assembly must be taut. A locking device (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.

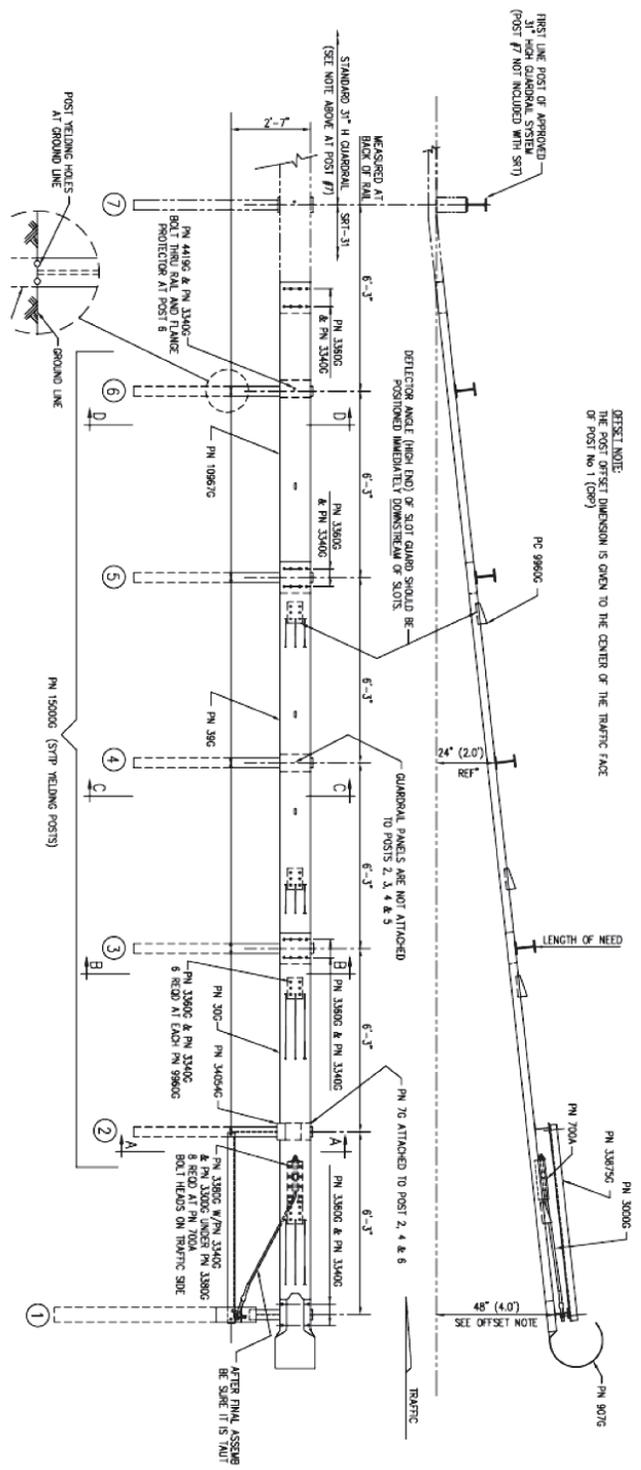
**Road Systems, Inc.**  
Big Spring, TX  
Phone: 432-263-2435  
or Phone: 330-346-0721

<b>FLEAT-SP-MGS Terminal Midwest Guardrail System 31" Top of Rail</b>		Sheet:	1
		Date:	02/24/10
Drawing Name: <b>FLT-SP-S-MGS</b>		By:	JRR
		Scale:	None
		Rev:	0

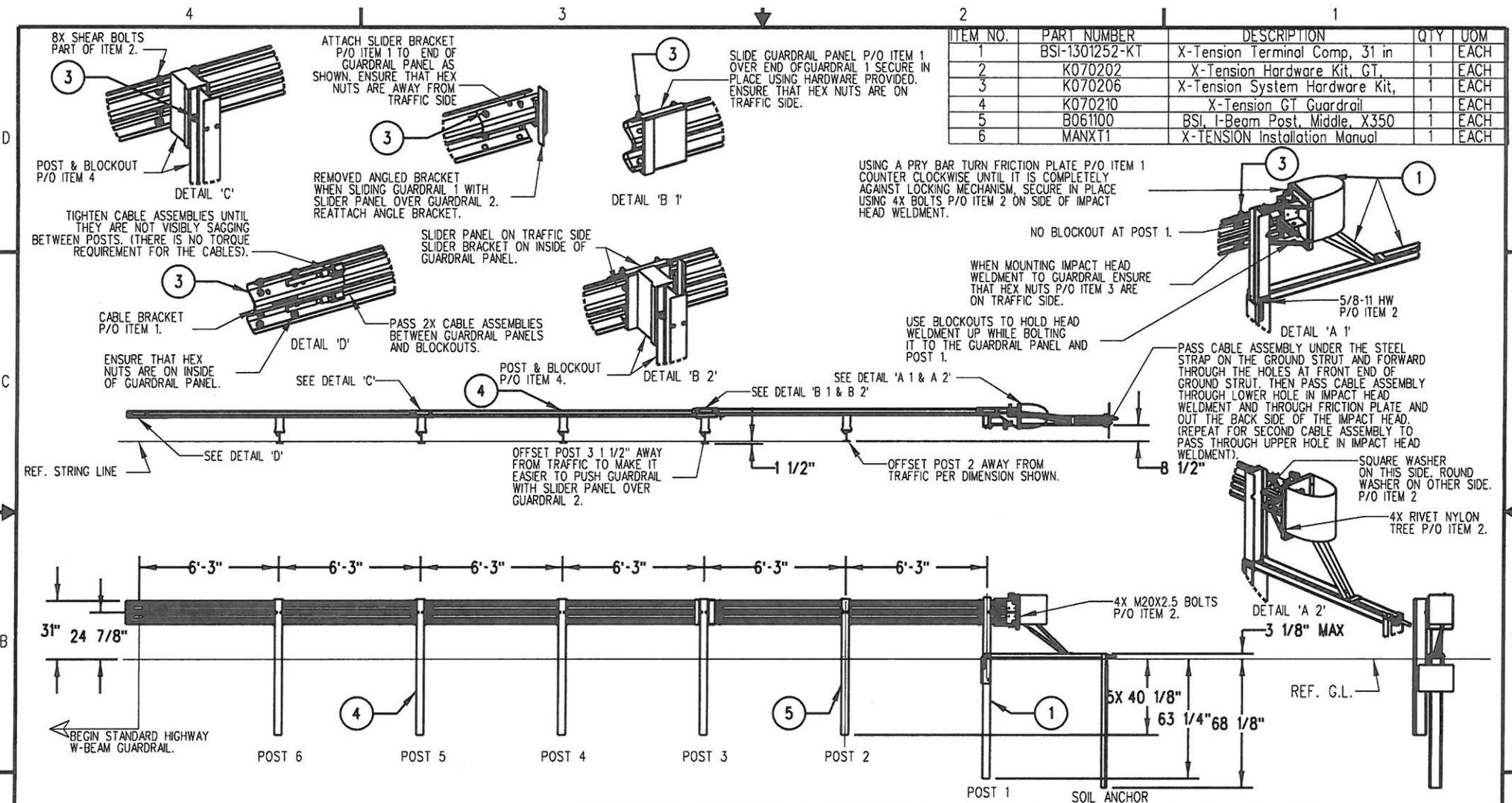
# KNOW YOUR SRT™ -31 SYSTEM

## SRT™ -31 SYSTEM

FOR SPECIFIC INSTALLATION, MAINTENANCE, OR REPAIR DETAILS,  
REFER TO  
THE STATE/SPECIFYING AGENCY'S STANDARD DRAWING(S) AND/OR  
TRINITY STANDARD LAYOUT DRAWINGS



DETAIL NOTE:  
MEASURED AT BACK OF POST IS OPEN TO THE CENTER OF THE TRAFFIC FACE  
OF POST NO. 1 (CSP)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	UOM
1	BSI-1301252-KT	X-Tension Terminal Comp, 31 in	1	EACH
2	K070202	X-Tension Hardware Kit, GT.	1	EACH
3	K070206	X-Tension System Hardware Kit,	1	EACH
4	K070210	X-Tension GT Guardrail	1	EACH
5	B061100	BSL I-Beam Post, Middle, X350	1	EACH
6	MANXT1	X-TENSION Installation Manual	1	EACH

- NOTES: UNLESS OTHERWISE SPECIFIED.
- SYSTEM TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
  - ONLY TIGHTEN THE CABLE ASSEMBLIES USING THE NUTS AT THE CABLE BRACKET (SEE DETAIL 'D'). DO NOT TIGHTEN THE CABLES AT THE FRONT OF THE GROUND ANCHOR.
  - WHEN DRIVING STEEL POST, ENSURE THAT A DRIVING CAP WITH TIMBER OR PLASTIC INSERT IS USED TO PREVENT DAMAGE TO THE GALVANIZING TO THE TOP OF THE POST.

<small>© 2012 BARRIER SYSTEMS INC. THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BARRIER SYSTEMS INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF BARRIER SYSTEMS INC. IS PROHIBITED.</small>		<small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:</small> <small>FRACTIONS DECIMAL ANGLES</small> <small>± 1/16 .003 ± .03 ± 1/2°</small> <small>.XXX ± .010</small>				<small>BARRIER SYSTEMS INC.</small> <small>3333 Voco Valley Parkway, Ste 800</small> <small>Waycross, GA 30568</small> <small>Tel: 800-800-5691</small> <small>www.barriersystemsinc.com</small>	
<b>APPROVALS</b> DRAWN BY: NMV DRAWN DATE: 2/08/13 APPR'D BY: JMT APPR'D DATE: 2/08/13				<small>THIRD ANGLE PROJECTION</small> 		TITLE <b>X-TENSION GUARDRAIL TERMINAL SYSTEM</b> <b>STEEL POST WITH COMPOSITE BLOCKOUT</b> <b>31" RAIL HEIGHT</b>	
REV: B		DATE: 2/08/13		SCALE: 1:50		SHEET: 1 OF 1	