

INFORMATION HANDOUT

For Contract No. 06-0P0604

At 06-Fre,Tul-5, 33, 269, 216, 137, 245-VARIOUS

Identified by

Project ID 0612000163

AGREEMENTS

1602 Agreement Maintenance Notification Verification Request Form

MATERIALS INFORMATION

Manufacturer's Drawing for Alternative Flared Terminal Systems.

Manufacturer's Drawing for Alternative Crash Cushion Systems.



**DISTRICT 6 ENVIRONMENTAL
AGREEMENT 1602-2005-0097
MAINTENANCE NOTIFICATION
VERIFICATION REQUEST FORM (VRF)**

<input type="checkbox"/> ORIGINAL REQUEST
<input checked="" type="checkbox"/> REVISION NO. <u>1</u>
Date of Request October 13, 2014

Name of Requestor: Michelle Ray Cost Center (EA): 06 – 0P060 Maintenance Region: District 6	Phone Number: (559) 445-5286 Cell Number/ Pager: E-Mail: michelle.ray@dot.ca.gov
Project Start Date: Upon OK	Project End Date: June 12, 2015

Location of Work (County/Route/Postmile): FRESNO-SR 5-PM44.93
Name of Stream: Tumey Gulch
Nearest landmark: On State Route 5 in Fresno Co. just south of Manning Avenue
Latitude/Longitude (in Degrees and Minutes): latitude: 36°35'45.77"N longitude: 120°34'27.67"W

Maintenance Activities	
<u>Type of Work</u>	<u>Routine Work Requiring Variance</u>
<input type="checkbox"/> Sediment Removal (Amount of material to remove below obvious flow line <input type="checkbox"/> (cubic yards) <input type="checkbox"/> Sediment will be removed with Vactor <input type="checkbox"/> Equipment can work off bank <input type="checkbox"/> Equipment must work from within stream channel <input type="checkbox"/> Hand removal of vegetation <input type="checkbox"/> Tree Thinning <input type="checkbox"/> Tree Removal (By Hand) <input type="checkbox"/> Vegetation removal will include removal of roots <input type="checkbox"/> Herbicide to stump <input type="checkbox"/> Minor Bridge work (cleaning, painting etc.) <input type="checkbox"/> Repair of damaged RSP <input type="checkbox"/> Work will occur in live channel <input checked="" type="checkbox"/> Other: Minor impacts to the bank to stabilize jack to work on the abutments only.	<input type="checkbox"/> Work will occur outside RMA Dates <input type="checkbox"/> Access to be created down to waterway <input type="checkbox"/> Other: <p style="text-align: center;"><u>Equipment</u></p> <input type="checkbox"/> Chainsaw/Clippers <input type="checkbox"/> Backhoe/ grade-all <input type="checkbox"/> Excavator <input type="checkbox"/> Vactor <input checked="" type="checkbox"/> Other: Bobcat and a front loader

Description of Proposed Maintenance Work
<p>Bearings would be replaced at the abutments at bridge No. 42-046L/R at Tumey Gulch on State Route 5 at post mile 44.93 in Fresno County. The deck would need to be jacked up approximately 0.5 inches to access the existing bearing pads. Work would take place at the abutment locations only, and will be accessed from under the deck. An existing bench would be used to access the bearing pads, and material such as plywood or a steel pad would be placed on the bench for work stability. The jacks under the abutment by hand and not by use of larger equipment such as a front loader. To ensure a stable platform, up to a foot of soil may be cut into the existing bench. Once the bridge is jacked and stabilized, the existing masonry plates (supports) will be removed and the concrete pedestals will be increased in size prior to installing the new bearing pads. Standard BMP's will be in place to ensure no materials are washed into the channel way. Equipment and foot traffic will occur on the banks of Tumey Gulch. No invasive impacts (trenching, excavation, or fill) would occur in the channel. The work will not require a detour of traffic. It would take 10 days to complete the work. No tree or vegetation removal.</p>

Section 2: Biological Information

Area Biologist: Michelle Ray
Phone: (559) 445-5286
E-Mail: michelle.ray@dot.ca.gov

Field Review Conducted By: Michelle Ray

Date(s) of Biological Field Review: June 13, 2013

Need CESA/FESA Consultation/ Species:

Known Sensitive Resources:

Restrictions on Work:

Habitat Classification: perennial waterway

Comments:

Routine Work 10 days Notice

Urgent – minimum 2 day notice (describe urgency below)

Emergency – work to begin immediately (describe emergency below)

Section 3: CDFW Approval

In accordance with Provisions 1 and 2 of the Agreement between the California Department of Fish and Wildlife (CDFW) and the California Department of Transportation (Caltrans) for Routine Maintenance in waterways within/adjacent to State Right of Way for the purposes of protecting and maintaining the state highway system. Caltrans hereby notifies CDFW of its intent to perform routine maintenance work within a waterway covered in the Agreement.

CDFW Contact Information

Name: Laura Peterson-Diaz

Phone Number: (559)243-4014 x225

E-Mail: laura.peterson-diaz@wildlife.ca.gov

Date Submitted to CDFW by Caltrans: **10-13-14**

Date CDFW Responded to Caltrans: **10-13-14**

Laura Peterson-Diaz

Notice of Concurrence

Work can begin as scheduled

Work can begin immediately

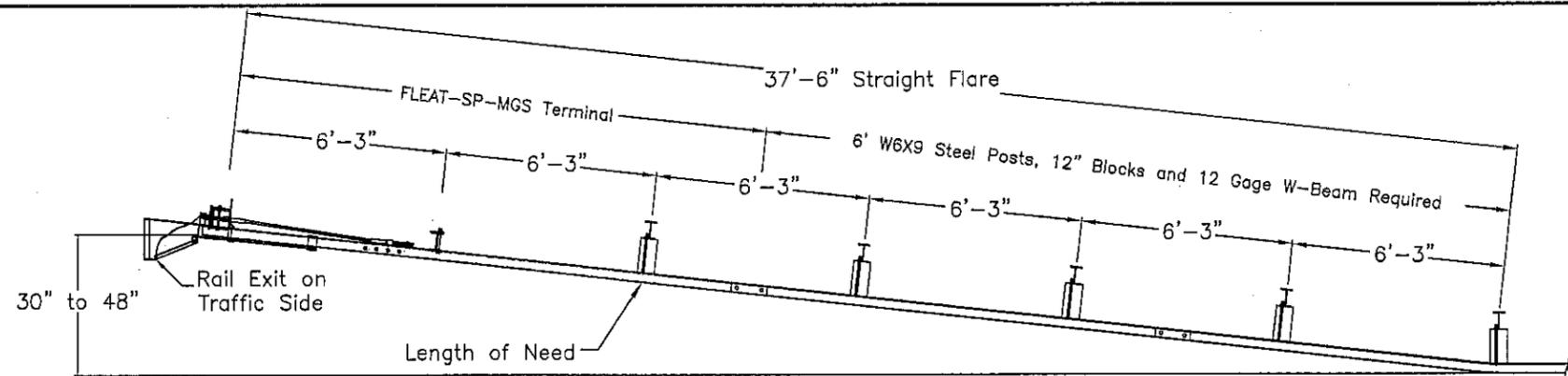
Notice of concurrence with conditions (See CDFW comments below)

Work can begin as scheduled

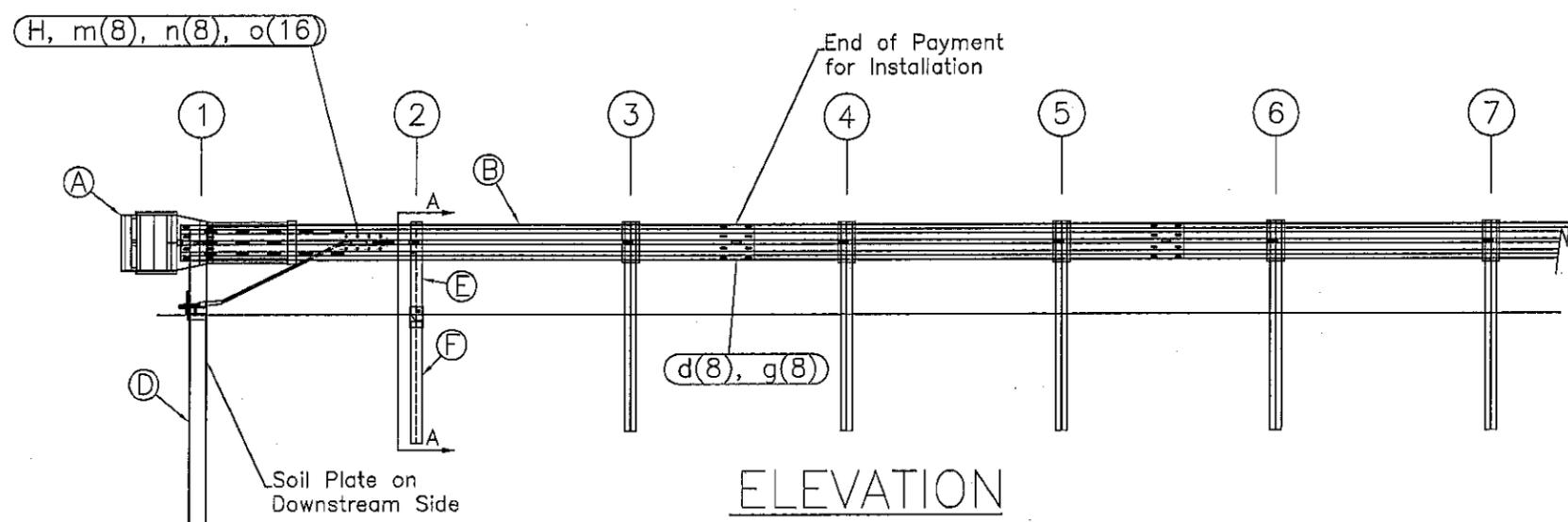
Work can begin immediately (**once the survey has been done**)

Notice of non-concurrence with comments (See CDFW Comments below)

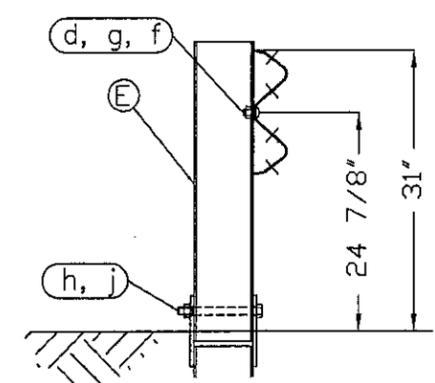
Conditions: Due to the elapsed time, a new biological survey will need to be done prior to start of work.



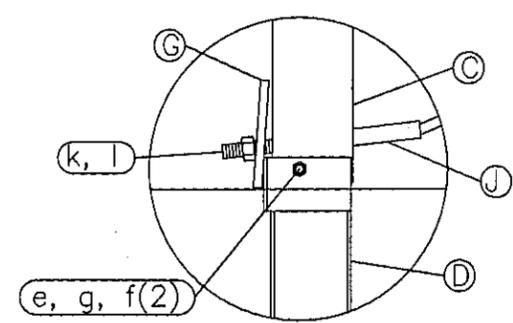
PLAN



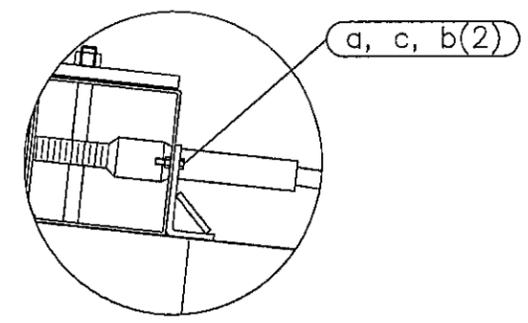
ELEVATION



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 $\frac{3}{4}$ " 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.

Big Spring, TX
Phone: 432-263-2435
or Phone: 330-346-0721

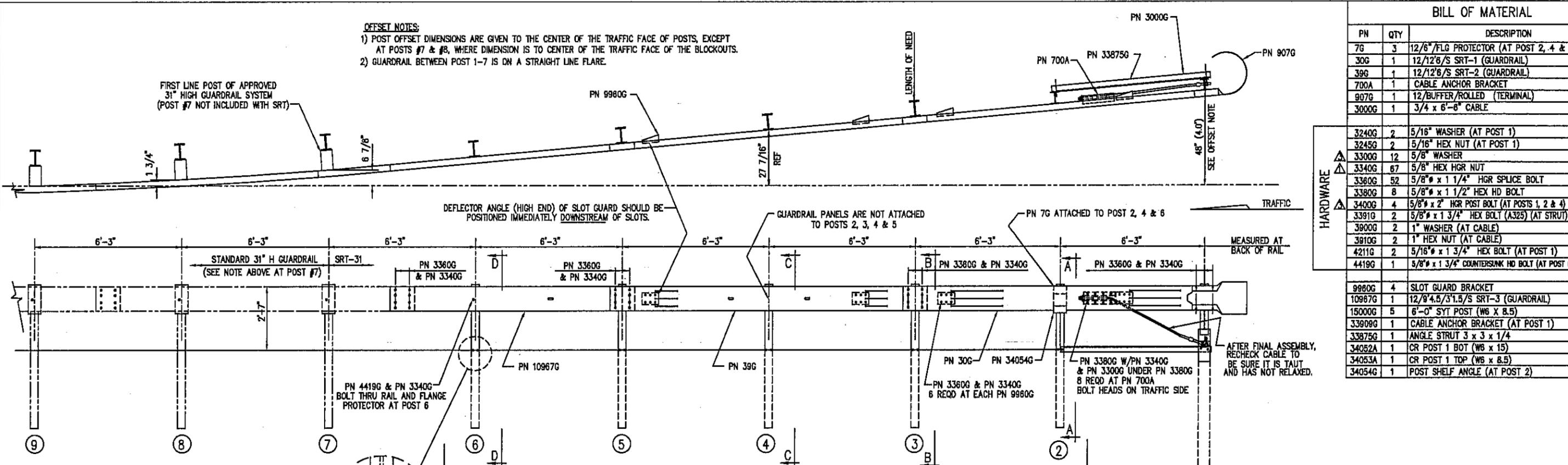
FLEAT-SP-MGS Terminal
Midwest Guardrail System
31" Top of Rail

Drawing Name: FLT-SP-S-MGS
Scale: None

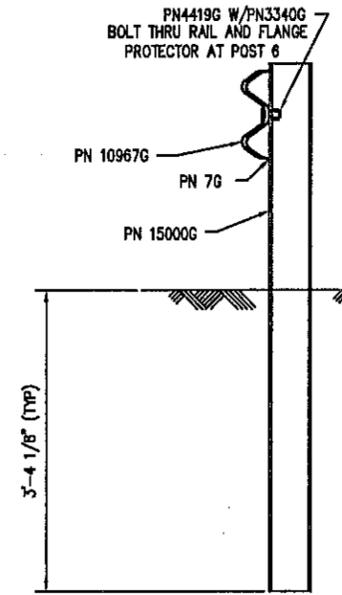
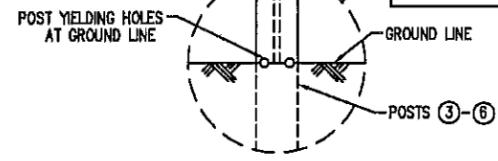
Sheet:	1
Date:	02/24/10
By:	JRR
Rev:	0

OFFSET NOTES:
 1) POST OFFSET DIMENSIONS ARE GIVEN TO THE CENTER OF THE TRAFFIC FACE OF POSTS, EXCEPT AT POSTS #7 & #8, WHERE DIMENSION IS TO CENTER OF THE TRAFFIC FACE OF THE BLOCKOUTS.
 2) GUARDRAIL BETWEEN POST 1-7 IS ON A STRAIGHT LINE FLARE.

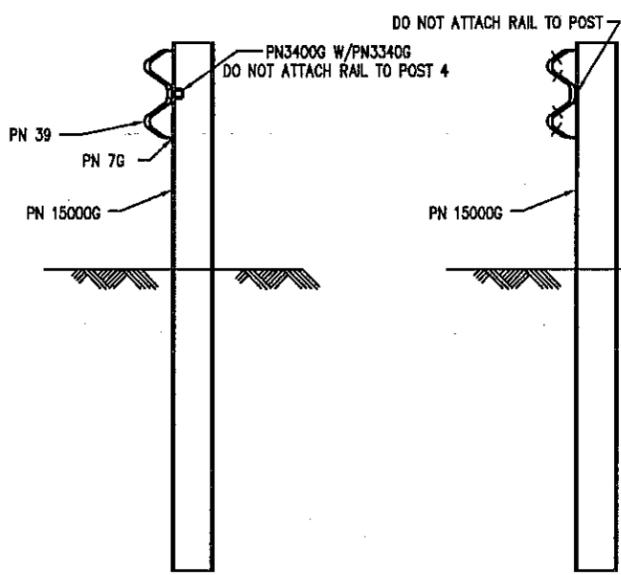
FIRST LINE POST OF APPROVED 31" HIGH GUARDRAIL SYSTEM (POST #7 NOT INCLUDED WITH SRT)



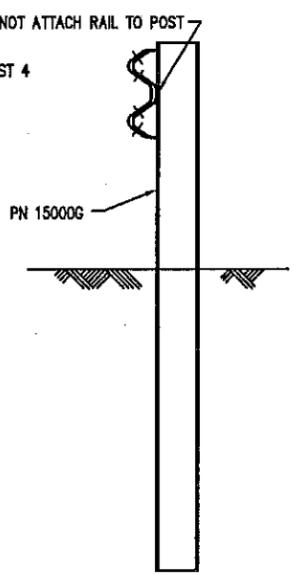
BILL OF MATERIAL		
PN	QTY	DESCRIPTION
7G	3	12/6" FLG PROTECTOR (AT POST 2, 4 & 6)
30G	1	12/12/6/S SRT-1 (GUARDRAIL)
39G	1	12/12/6/S SRT-2 (GUARDRAIL)
700A	1	CABLE ANCHOR BRACKET
907G	1	12/BUFFER/ROLLED (TERMINAL)
3000G	1	3/4 x 6'-6" CABLE
HARDWARE		
3240G	2	5/16" WASHER (AT POST 1)
3245G	2	5/16" HEX NUT (AT POST 1)
3300G	12	5/8" WASHER
3340G	67	5/8" HEX HGR NUT
3380G	52	5/8" x 1 1/4" HGR SPLICE BOLT
3380G	8	5/8" x 1 1/2" HEX HD BOLT
3400G	4	5/8" x 2" HGR POST BOLT (AT POSTS 1, 2 & 4)
3391G	2	5/8" x 1 3/4" HEX BOLT (A325) (AT STRUT)
3900G	2	1" WASHER (AT CABLE)
3910G	2	1" HEX NUT (AT CABLE)
4211G	2	5/16" x 1 3/4" HEX BOLT (AT POST 1)
4419G	1	5/8" x 1 3/4" COUNTERSINK HD BOLT (AT POST 6)
9960G	4	SLOT GUARD BRACKET
10967G	1	12/9'4.5/3'1.5/S SRT-3 (GUARDRAIL)
15000G	5	6'-0" SYT POST (W6 X 8.5)
33909G	1	CABLE ANCHOR BRACKET (AT POST 1)
33875G	1	ANGLE STRUT 3 x 3 x 1/4
34052A	1	CR POST 1 BOT (W6 X 15)
34053A	1	CR POST 1 TOP (W6 X 8.5)
34054G	1	POST SHELF ANGLE (AT POST 2)



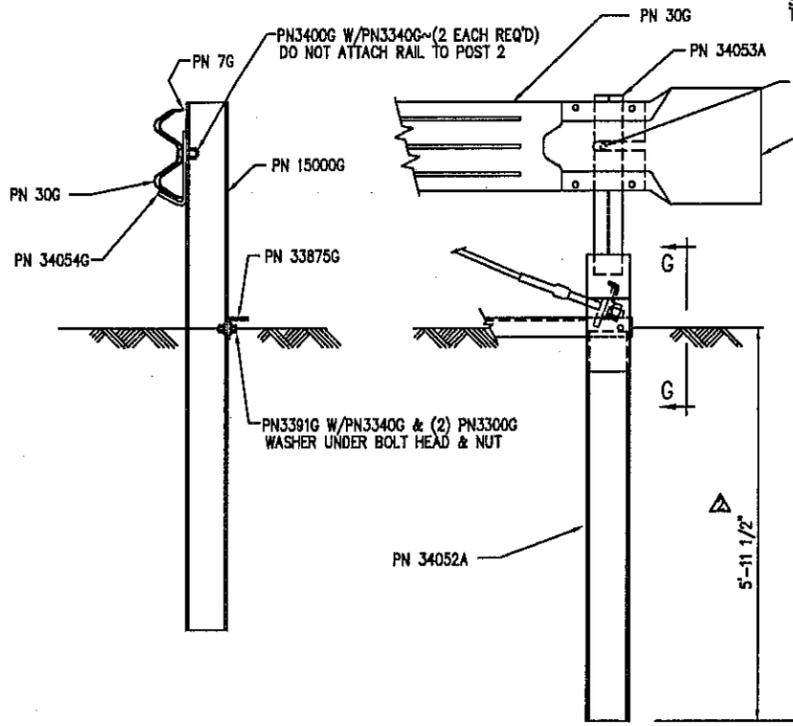
SECTION "D-D"
(@ POST #6)



SECTION "C-C"
(@ POST #4)

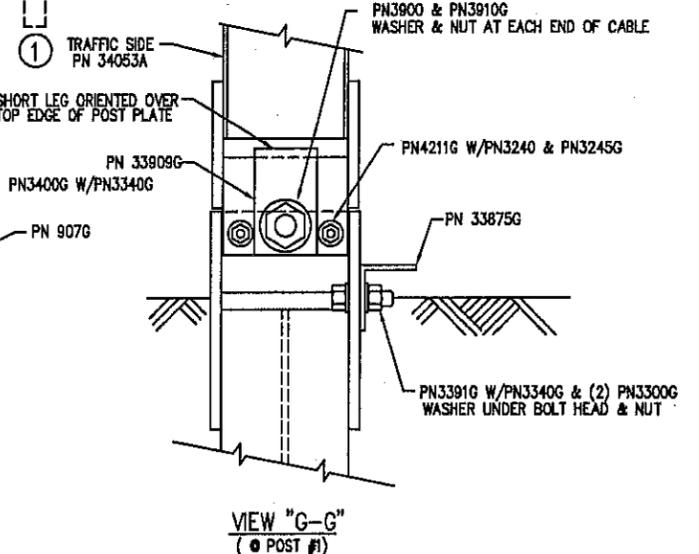


SECTION "B-B"
(@ POST #5)



SECTION "A-A"
(@ POST #2)

ENLARGED VIEW @ POST #1



VIEW "G-G"
(@ POST #1)

REV.	CHK'D	BY	DATE	REMARKS
4	BT	LH	10/6/10	OFFSET POSTS #7 & #8
3	BT	LH	2/26/09	REVISED HARDWARE
2	SG	LH	7/28/08	REVISED POST #1 LENGTH IN GROUND
1	SG	LH	1/16/08	REVISED HARDWARE QUANTITY IN BILL OF MATERIAL

SRT-31

SLOTTED RAIL TERMINAL SRT-31 (31" H)
 ERECTION DETAILS
 (3 PANELS, CR AND SYT POSTS)

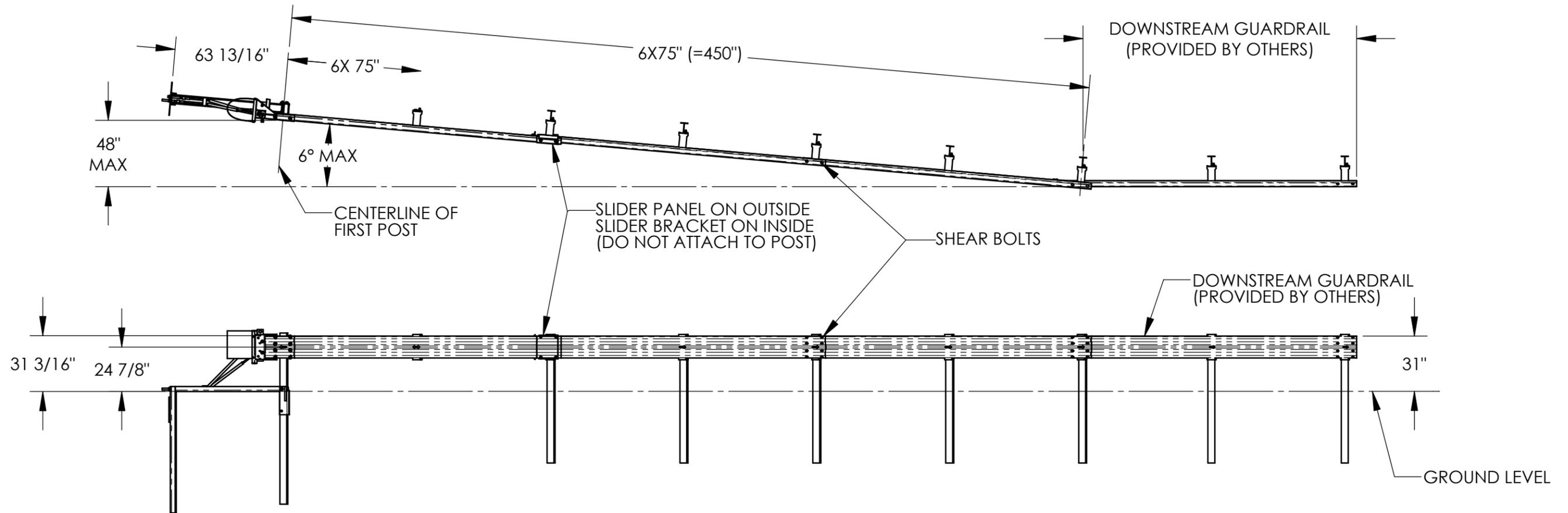
DRWN	BT
CHEKCD	SG
SCALE	NTS
DATE	10/30/07
ENL. FILE #	SS436-01E
SHT. NO.	E1 OF 1
DRAWING NO.	SS 436
REV.	4

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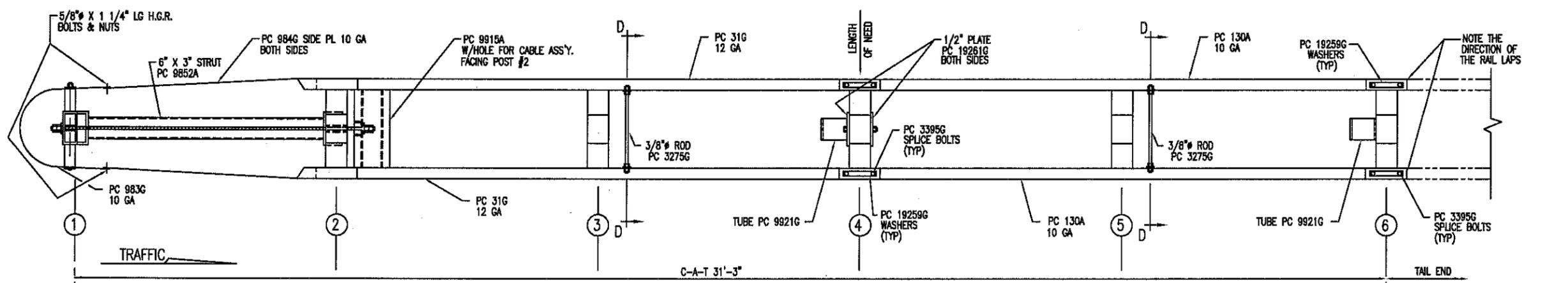
TRINITY HIGHWAY PRODUCTS, LLC.
 2525 STEMMONS FREEWAY
 DALLAS, TX 75207

NOTES: UNLESS OTHERWISE SPECIFIED.

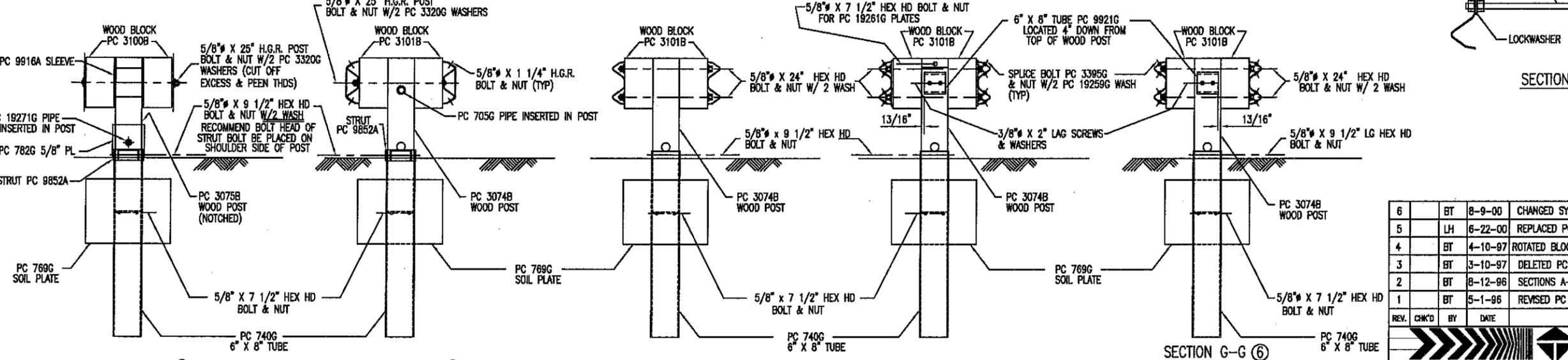
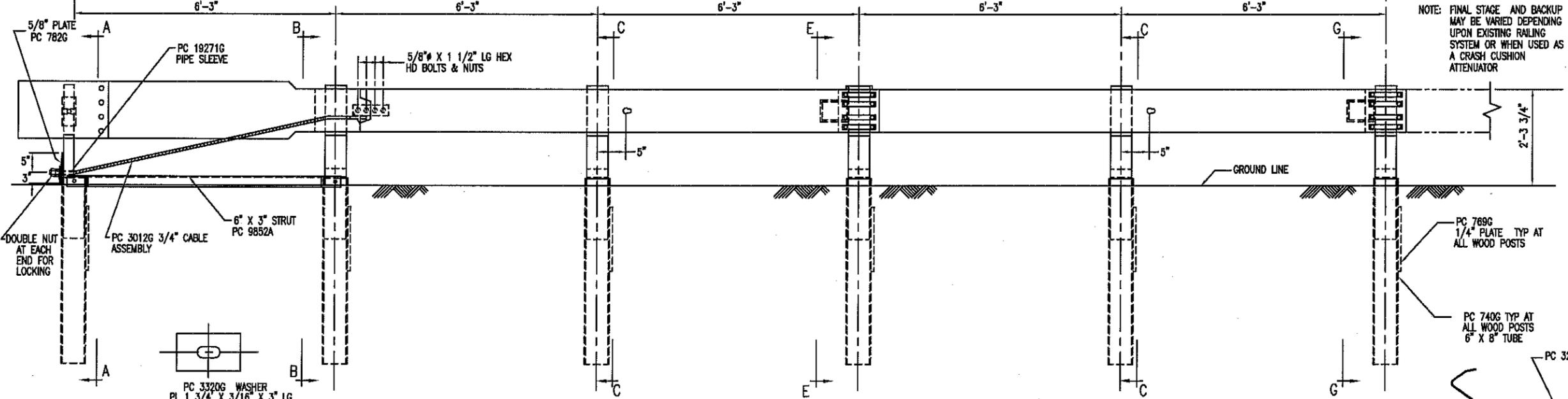
1. X-TENSION SYSTEM TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
2. SYSTEM SHOWN USING STEEL WIDE FLANGE POST WITH COMPOSITE OR PLASTIC BLOCKOUTS. POST 2 MUST BE A BREAKAWAY STYLE POST CRIMPED (AS SHOWN).
3. SYSTEM MAY ALSO USE TIMBER CRT POSTS WITH TIMBER BLOCKOUTS OR STEEL POSTS WITH TIMBER BLOCKOUTS.



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APPROVALS		INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994		TITLE		31" X-TENSION GUARDRAIL SYSTEM FLARED CALTRANS	
DRAWN BY: NMB		THIRD ANGLE PROJECTION		SIZE B		DWG NO. BSI-1405049-AP	
DRAWN DATE: 5/28/14				REV 0		ECN#	
APPR'D BY:		DO NOT SCALE DRAWING		DATE 5/28/14		SCALE 1:60	
APPR'D DATE:		REV		DATE		SHEET 1 OF 1	



C-A-T BILL OF MATERIAL		
PRODUCT CODE	QTY	DESCRIPTION
31G	2	12/12/6/D CAT (GUARDRAIL)
130A	2	10/12/6/8/10/6/8/SP CAT (GUARDRAIL)
705G	1	2' x 5 1/2" PIPE
740G	6	4'6" TUBE SLEEVE
769G	6	1/4 x 18 x 24 SOIL PLATE
782G	1	5/8" x 8" x 8" BEARING PLATE
983G	1	10/NOSE PLATE/CAT/ROLLED
984G	2	10/SIDE PLATE CAT
3012G	1	CABLE 3/4 x 8'0"/DBL SWG
3074B	5	WD 3/6 POST #2, 3, 4, 5, 6 CAT
3075B	1	WD 3/6 POST #1 CAT
3100B	2	WD BLOCK 1'2" #1 CAT
3101B	10	WD BLOCK 1'2" #2-6 CAT
3255G	4	3/8" FLAT WASHER
3263G	4	3/8" x 2" LAG SCREW
3275G	2	3/8" x 24 1/2" RESTRAINT ROD
3300G	20	5/8" FLAT WASHER
3320G	4	3/16" x 1 3/4" x 3" RECT WASHER
3340G	85	5/8" G.R. NUT
3360G	16	5/8" x 1 1/4" G.R. BOLT
3380G	8	5/8" x 1 1/2" HEX BOLT
3395G	32	5/8" x 1 3/4" HEX BOLT CAT
3478G	13	5/8" x 7 1/2" HEX BOLT
3497G	6	5/8" x 9 1/2" HEX BOLT
3650G	2	5/8" x 25" G.R. BOLT
3900G	2	1" FLAT WASHER
3910G	4	1" HEX NUT
4252G	8	3/8" HEX NUT
4258G	4	3/8" LOCK WASHER
4640G	8	5/8" x 24" HEX BOLT
9852A	1	CHANNEL STRUT x 6'-8"
9915A	1	SPACER CHANNEL CAT
9916A	1	10/BENT PLATE SLEEVE
9921G	2	6" SLEEVE 6 x 8
19259G	32	3/16" x 2" x 10" PLATE WASHER
19261G	2	1/2 x 3 x 7 POST PLATE
19271G	1	1" x 2 1/2" PIPE SLEEVE CAT



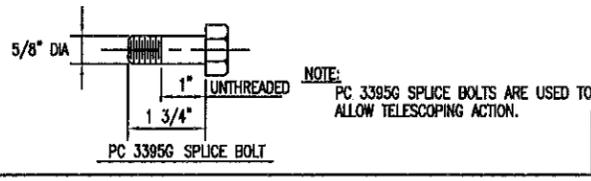
REV.	CHK'D	BY	DATE	REMARKS
6	BT	8-9-00		CHANGED SYSTEM HEIGHT, WAS 2'-3"
5	LH	6-22-00		REPLACED PC 766 WITH PC 769, CHANGED TITLE BLOCK
4	BT	4-10-97		ROTATED BLOCK PC 9921 90° AT POST 4 & 6
3	BT	3-10-97		DELETED PC 3072, 3073, 4470, CHG QTY 3074 & 3478
2	BT	8-12-96		SECTIONS A-A & B-B, CORRECTED PIPE SLEEVE PC No
1	BT	5-1-96		REVISED PC No 31G & 130A

C-A-T

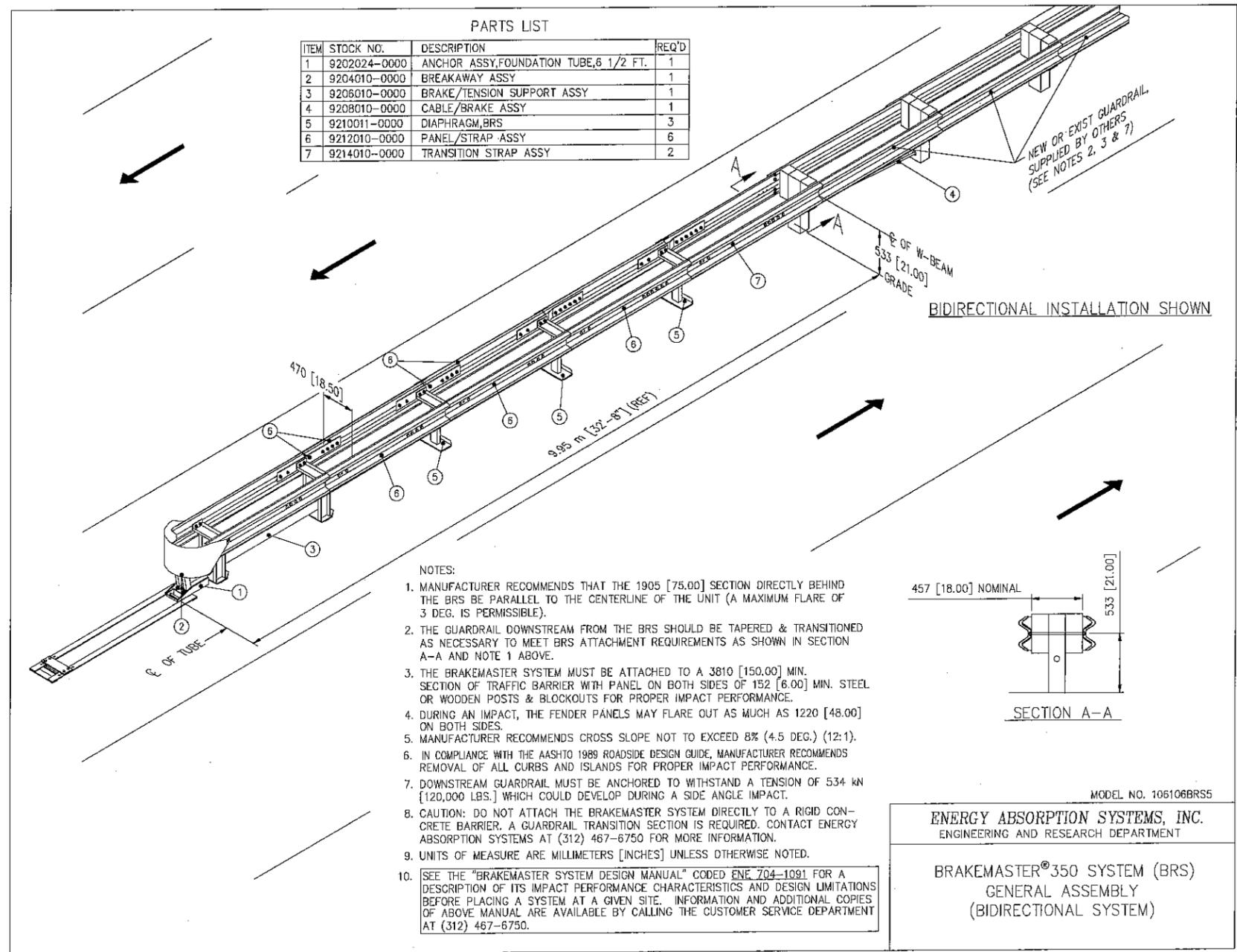
CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS FOR USE AS A LONGITUDINAL MEDIAN BARRIER TERMINAL OR CRASH CUSHION ATTENUATOR

TRINITY INDUSTRIES, INC.
HIGHWAY SAFETY PRODUCTS
2525 STEMMONS FREEWAY, DALLAS, TX 75207

DRAWN	BT
CHECKED	EN
SCALE	N.T.S.
DATE	7-15-94
ENG. FILE #	SS245-01E
SHEET NO.	E1 OF 1
DRAWING NO.	SS-245
REV.	6



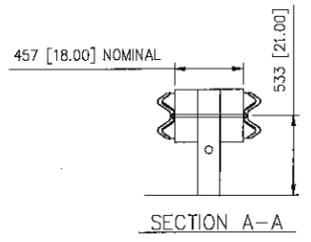
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PARTS LIST

ITEM	STOCK NO.	DESCRIPTION	REQ'D
1	9202024-0000	ANCHOR ASSY, FOUNDATION TUBE, 6 1/2 FT.	1
2	9204010-0000	BREAKAWAY ASSY	1
3	9206010-0000	BRAKE/TENSION SUPPORT ASSY	1
4	9208010-0000	CABLE/BRAKE ASSY	1
5	9210011-0000	DIAPHRAGM, BRS	3
6	9212010-0000	PANEL/STRAP ASSY	6
7	9214010-0000	TRANSITION STRAP ASSY	2

- NOTES:
1. MANUFACTURER RECOMMENDS THAT THE 1905 [75.00] SECTION DIRECTLY BEHIND THE BRS BE PARALLEL TO THE CENTERLINE OF THE UNIT (A MAXIMUM FLARE OF 3 DEG. IS PERMISSIBLE).
 2. THE GUARDRAIL DOWNSTREAM FROM THE BRS SHOULD BE TAPERED & TRANSITIONED AS NECESSARY TO MEET BRS ATTACHMENT REQUIREMENTS AS SHOWN IN SECTION A-A AND NOTE 1 ABOVE.
 3. THE BRAKEMASTER SYSTEM MUST BE ATTACHED TO A 3810 [150.00] MIN. SECTION OF TRAFFIC BARRIER WITH PANEL ON BOTH SIDES OF 152 [6.00] MIN. STEEL OR WOODEN POSTS & BLOCKOUTS FOR PROPER IMPACT PERFORMANCE.
 4. DURING AN IMPACT, THE FENDER PANELS MAY FLARE OUT AS MUCH AS 1220 [48.00] ON BOTH SIDES.
 5. MANUFACTURER RECOMMENDS CROSS SLOPE NOT TO EXCEED 8% (4.5 DEG.) (12:1).
 6. IN COMPLIANCE WITH THE AASHTO 1989 ROADSIDE DESIGN GUIDE, MANUFACTURER RECOMMENDS REMOVAL OF ALL CURBS AND ISLANDS FOR PROPER IMPACT PERFORMANCE.
 7. DOWNSTREAM GUARDRAIL MUST BE ANCHORED TO WITHSTAND A TENSION OF 534 kN [120,000 LBS.] WHICH COULD DEVELOP DURING A SIDE ANGLE IMPACT.
 8. CAUTION: DO NOT ATTACH THE BRAKEMASTER SYSTEM DIRECTLY TO A RIGID CONCRETE BARRIER. A GUARDRAIL TRANSITION SECTION IS REQUIRED. CONTACT ENERGY ABSORPTION SYSTEMS AT (312) 467-6750 FOR MORE INFORMATION.
 9. UNITS OF MEASURE ARE MILLIMETERS [INCHES] UNLESS OTHERWISE NOTED.
 10. SEE THE "BRAKEMASTER SYSTEM DESIGN MANUAL" CODED ENE 704-1091 FOR A DESCRIPTION OF ITS IMPACT PERFORMANCE CHARACTERISTICS AND DESIGN LIMITATIONS BEFORE PLACING A SYSTEM AT A GIVEN SITE. INFORMATION AND ADDITIONAL COPIES OF ABOVE MANUAL ARE AVAILABLE BY CALLING THE CUSTOMER SERVICE DEPARTMENT AT (312) 467-6750.

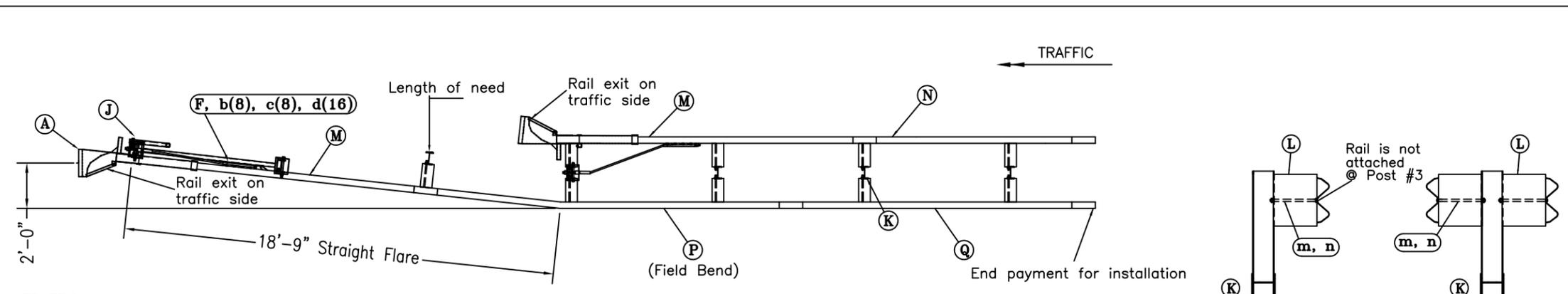


MODEL NO. 106106BRS5

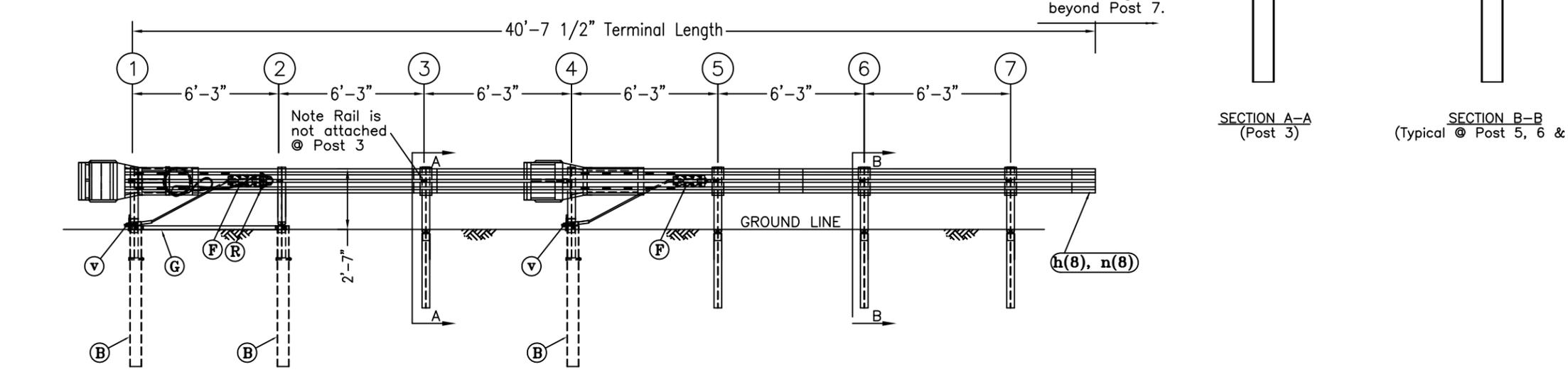
ENERGY ABSORPTION SYSTEMS, INC.
ENGINEERING AND RESEARCH DEPARTMENT

BRAKEMASTER®350 SYSTEM (BRS)
GENERAL ASSEMBLY
(BIDIRECTIONAL SYSTEM)

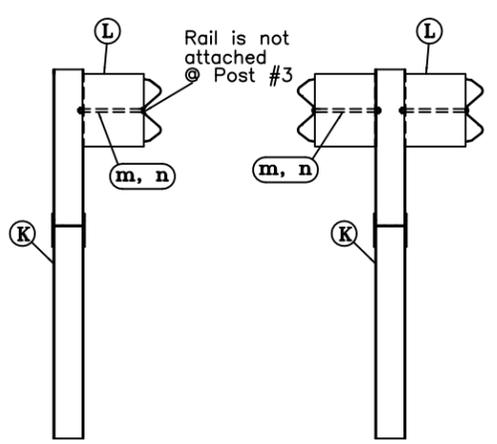
Brakemaster® 350



PLAN

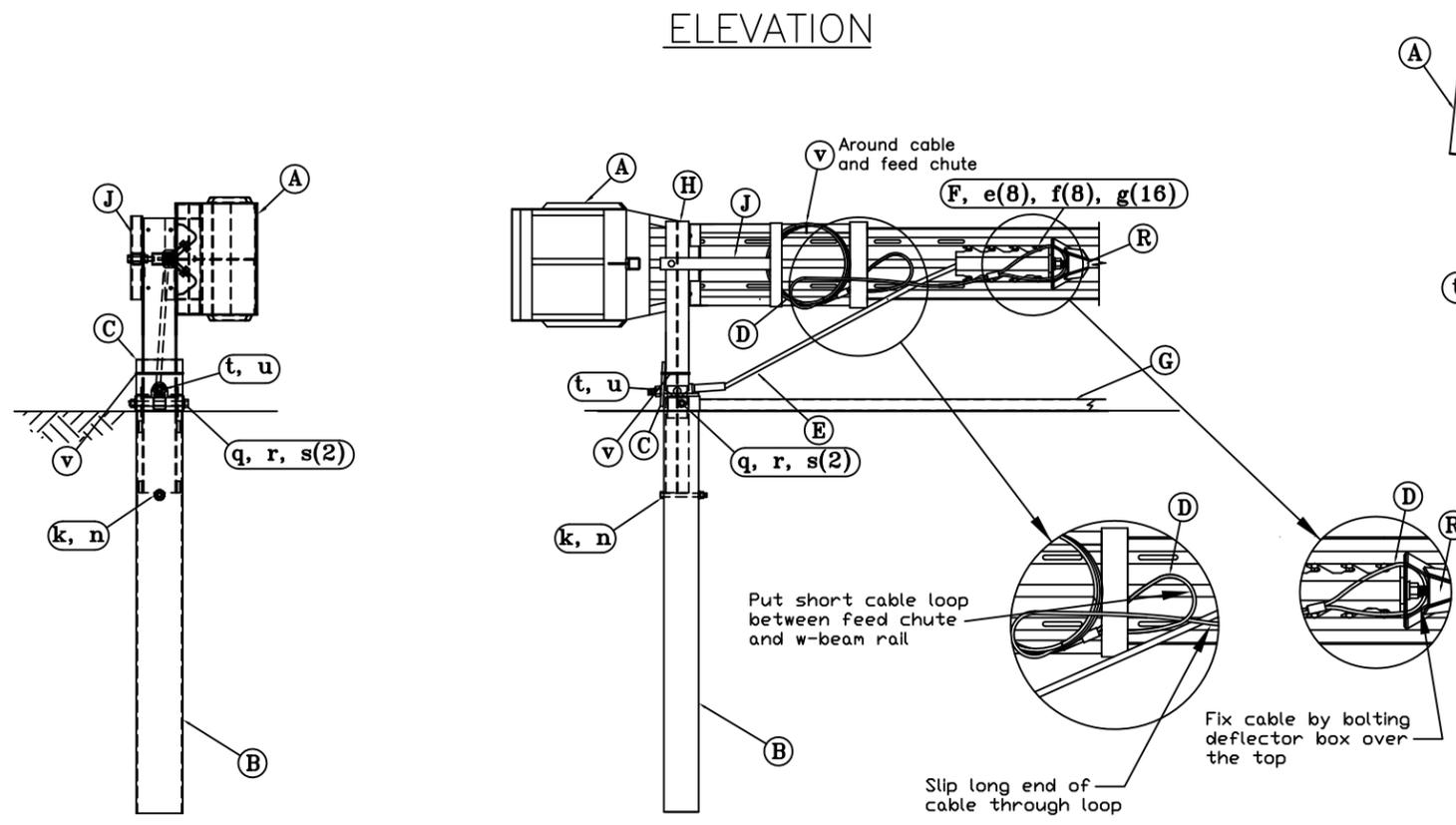


ELEVATION



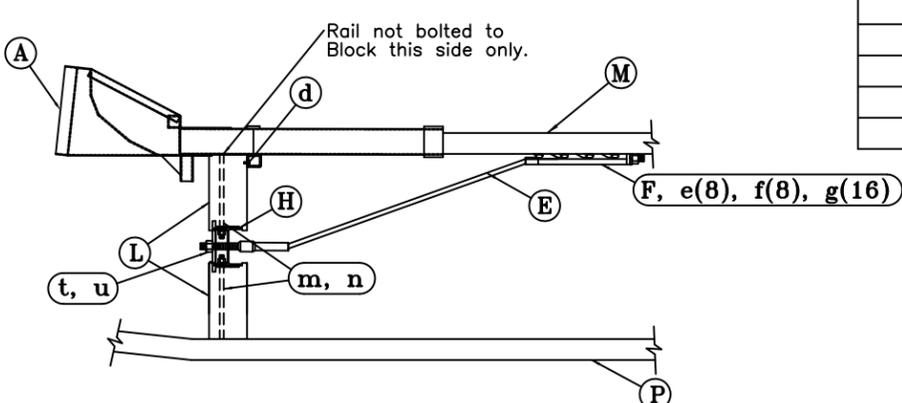
SECTION A-A
(Post 3)

SECTION B-B
(Typical @ Post 5, 6 & 7)

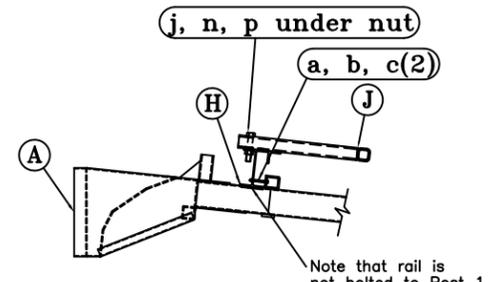


END VIEW OF POST 1

BACK VIEW OF POST 1



SECOND IMPACT HEAD CONNECTING DETAIL
(Post 4)



IMPACT HEAD CONNECTING DETAIL
(Post 1)

ITEM	QTY	DESCRIPTION	PART#
A	2	FLEAT IMPACT HEAD	F3000
B	3	SOIL TUBE, 6" x 8" x 6'-0"	S730
C	2	BEARING PLATE	E750
D	1	3/8" GALV Cable 20'-0"	C3820
E	2	BCT CABLE ANCHOR ASSEMBLY	E770
F	2	CABLE ANCHOR BOX	S760
G	1	GROUND STRUT	E780
H	3	BREAKAWAY END POSTS 1, 2, & 4	MGSPB620
J	1	POST BREAKER	PBMT
K	4	BREAKAWAY LINE POSTS 3, 5, 6 & 7	MGSPB621
L	9	TIMBER BLOCKOUT OR RECYCLED EQUIV	P675
M	2	W-BEAM END SECTION, 12 GA. 12.5'	SF1303
N	1	W-BEAM GUARDRAIL, 12 GA. 9'-4 1/4"	G1202A
P	1	W-BEAM GUARDRAIL, 12 GA. 15'-7 1/2"	G1204A
Q	1	W-BEAM GUARDRAIL, 12 GA. 12'-6"	G1203A
R	1	DEFLECTOR BOX	DBMT
HARDWARE			
a	2	5/16" DIA. x 3" HEX BOLT	B5160304A
b	2	5/16" HEX NUT	N0516
c	4	5/16" WASHER	W0516
d	2	3/8" DIA. x 3" LAG SCREW	E350
e	16	1/2" DIA. SHOULDER BOLT	SB58A
f	16	1/2" A325 NUT	N055A
g	32	1/2" WASHER	W050A
h	41	5/8" DIA. x 1 1/4" SPLICE BOLT	B580122
j	1	5/8" DIA. x 3" HEX BOLT	B580304
k	3	5/8" DIA. x 7 1/2" HEX BOLT	B580754
m	9	5/8" DIA. x 14" H.G.R. BOLT	B581402
n	54	5/8" H.G.R. NUT	N050
p	1	5/8" H.G.R. WASHER	W050
q	3	3/4" DIA. x 10" HEX BOLT	B341004
r	3	3/4" HEX NUT	N030
s	6	3/4" WASHER	W030
t	4	1" ANCHOR CABLE HEX NUT	N100
u	4	1" ANCHOR CABLE WASHER	W100
v	3	CABLE TIE	CT100ST

- GENERAL NOTES:
- Breakaway posts are required with the FLEAT-MT.
 - All bolts, nuts, cable assemblies, cable anchors and plates shall be galvanized.
 - The soil tubes shall not protrude more than 4" above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 - The soil tubes may be driven with an approved driving head. Soil tubes should not be driven with the post in the tube. If the tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent settlement.
 - When rock is encountered during excavation, a 12' Dia. post hole, 20" deep may be used if approved by the engineer. Granular material will be placed in the bottom of the hole approx. 2 1/2" deep to provide drainage. The soil tubes will be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
 - 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.

Median FLEAT Terminal
Midwest Guardrail System
Steel Posts

Sheet: **S1**

Date: 09/20/11

By: JRR

Rev:

Drawing Name: MEDFLT-S-MGS

Scale: NONE