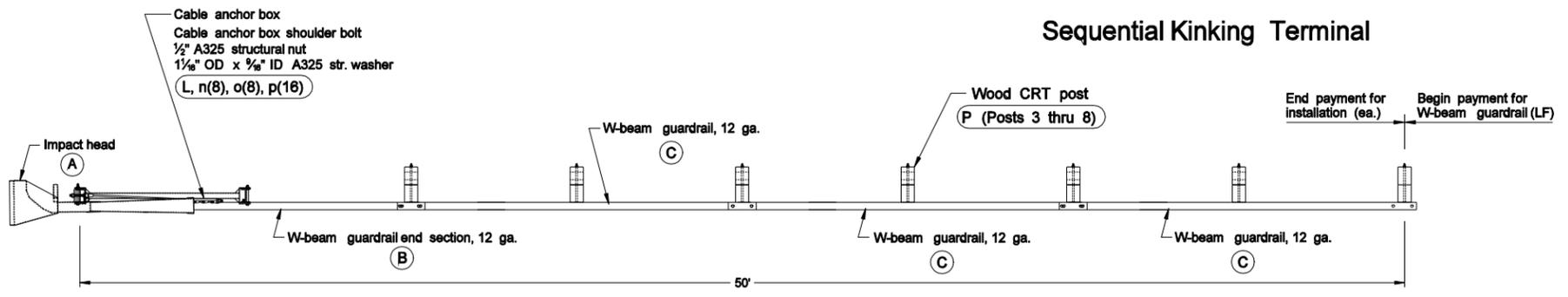
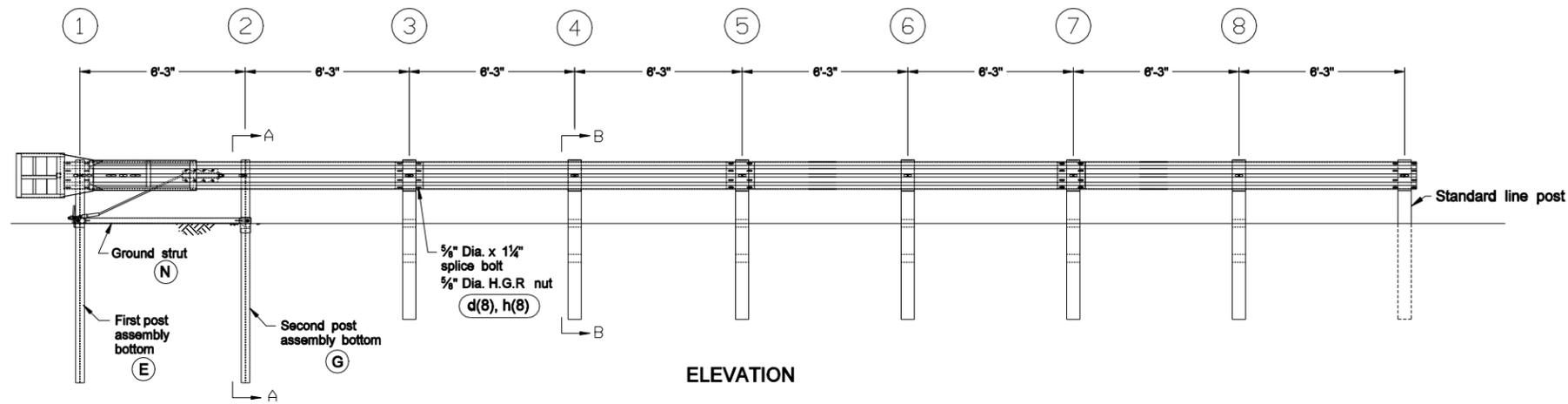


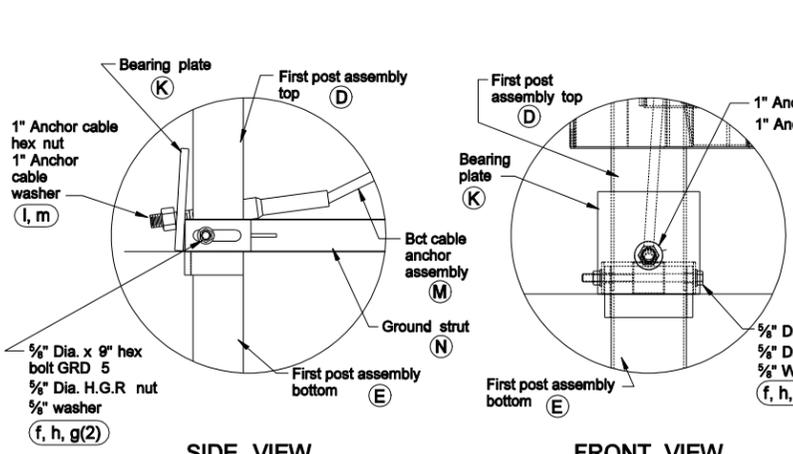
Sequential Kinking Terminal



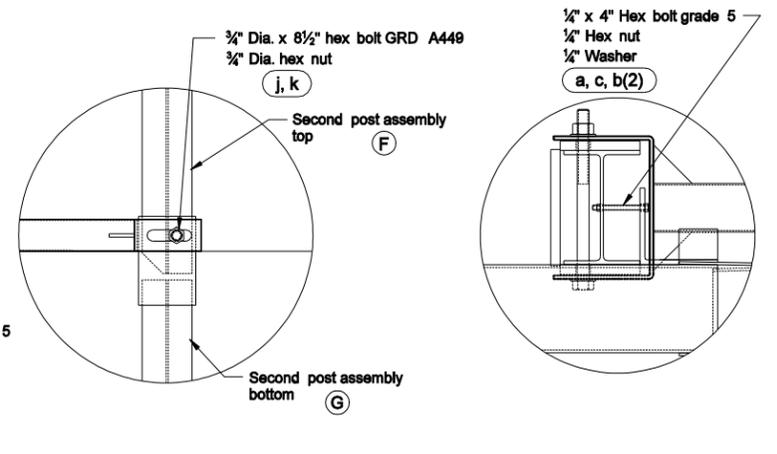
PLAN



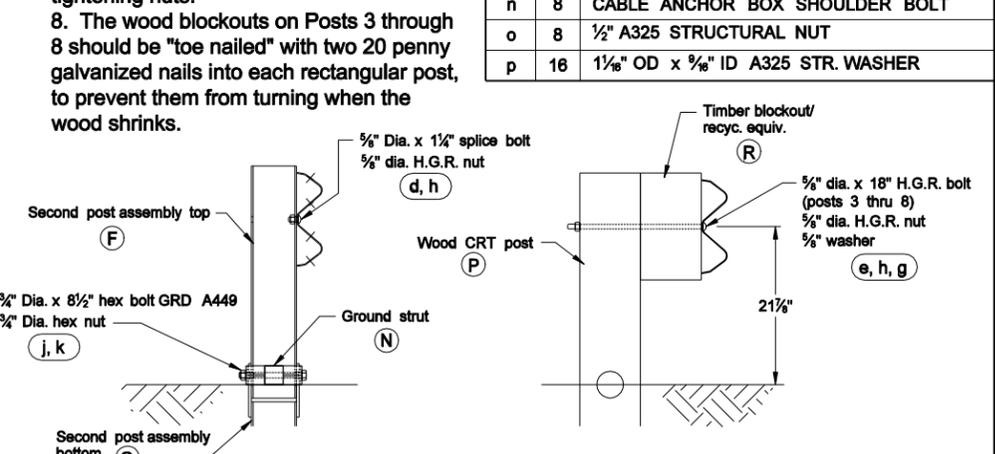
ELEVATION



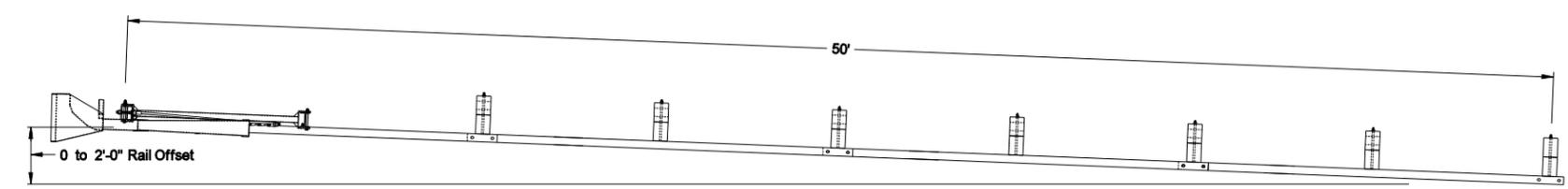
SIDE VIEW FRONT VIEW
POST #1 CONNECTION DETAILS



SIDE VIEW DETAIL OF POST #2 IMPACT HEAD CONNECTION DETAIL



SECTION A-A SECTION B-B
Post #2 Posts 3 thru 8



FLARED INSTALLATION
25:1 maximum flare rate

GENERAL NOTES:

1. Breakaway posts are required with the SKT.
2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
3. The SKT can be flared at a rate of up to 25:1 to prevent the impact head from encroaching on the shoulder.
4. The lower sections of the posts shall not protrude more than 4" above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
5. The lower section 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.
6. When rock is encountered, a 10" diameter post hole, 20" into the rock surface may be used if approved by the engineer. Granular material will be placed in the bottom of the hole, approximately 2 1/2" deep to provide drainage. Posts 1 & 2 can be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
7. 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.
8. The wood blockouts on Posts 3 through 8 should be "toe nailed" with two 20 penny galvanized nails into each rectangular post, to prevent them from turning when the wood shrinks.

ITEM		QTY		BILL OF MATERIALS	
A	1	IMPACT HEAD			
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.			
C	3	W-BEAM GUARDRAIL, 12 Ga.			
D	1	FIRST POST ASSEMBLY TOP			
E	1	FIRST POST ASSEMBLY BOTTOM			
F	1	SECOND POST ASSEMBLY TOP			
G	1	SECOND POST ASSEMBLY BOTTOM			
K	1	BEARING PLATE			
L	1	CABLE ANCHOR BOX			
M	1	BCT CABLE ANCHOR ASSEMBLY			
N	1	GROUND STRUT HINGED POST			
P	6	WOOD CRT POST			
R	6	TIMBER BLOCKOUT/RECYC. EQUIV.			
HARDWARE					
a	2	1/4" x 4" HEX BOLT Grade 5			
b	4	1/4" WASHER			
c	2	1/4" HEX NUT			
d	25	5/8" Dia. x 1 1/4" SPLICE BOLT, POST #2			
e	6	5/8" Dia. x 18" H.G.R. BOLT (POSTS 3 THRU 8)			
f	1	5/8" Dia. x 9" HEX BOLT GRD 5			
g	8	5/8" WASHER			
h	32	5/8" Dia. H.G.R. NUT			
j	1	3/4" Dia. x 8 1/2" HEX BOLT GRD A449			
k	1	3/4" Dia. HEX NUT			
l	2	1" ANCHOR CABLE HEX NUT			
m	2	1" ANCHOR CABLE WASHER			
n	8	CABLE ANCHOR BOX SHOULDER BOLT			
o	8	1/2" A325 STRUCTURAL NUT			
p	16	1 1/8" OD x 5/8" ID A325 STR. WASHER			

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 9-12-07	
REVISIONS	
DATE	CHANGE

This document was originally issued and sealed by Mark S Gaydos, Registration Number PE- 4518 , on 09/12/07 and the original document is stored at the North Dakota Department of Transportation