

- SUB-NOTES**
- * a AT POST NO. 7 BACK-UP PLATE BOLTED TO BLOCK ONLY.
 - * b POSTS NOS. 1, 2, 3, 4, & 6 REQUIRE AN ADDITIONAL HOLE TO ATTACH RUBRAIL AND/OR RUBRAIL BLOCKOUTS.
 - * c POSTS NOS. 4 & 6 REQUIRE A GUARDRAIL BOLT & RECESS NUT W/RECTANGULAR PLATE WASHER UNDER THE BOLT HEAD AND A STEEL WASHER UNDER THE NUT.
 - * d DO NOT BOLT W-BEAM OR RUBRAIL W-BEAM TO POSTS NOS. 1, 2, 3, 5, & 7.

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	07-92	MSM	6	05-06	MSM		
2	08-00	MSM	7	09-10	PLR		
3	01-01	MSM					
4	06-01	MSM					
5	10-04	MSM					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: g1k_1010.dgn

DRAWING DATE: MARCH, 1992

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

GUARDRAIL TERMINAL TYPE 9

REQUIRES SHEET 2 OF 2 & STD. DWGS. G-1-A-1 THRU G-1-A-4

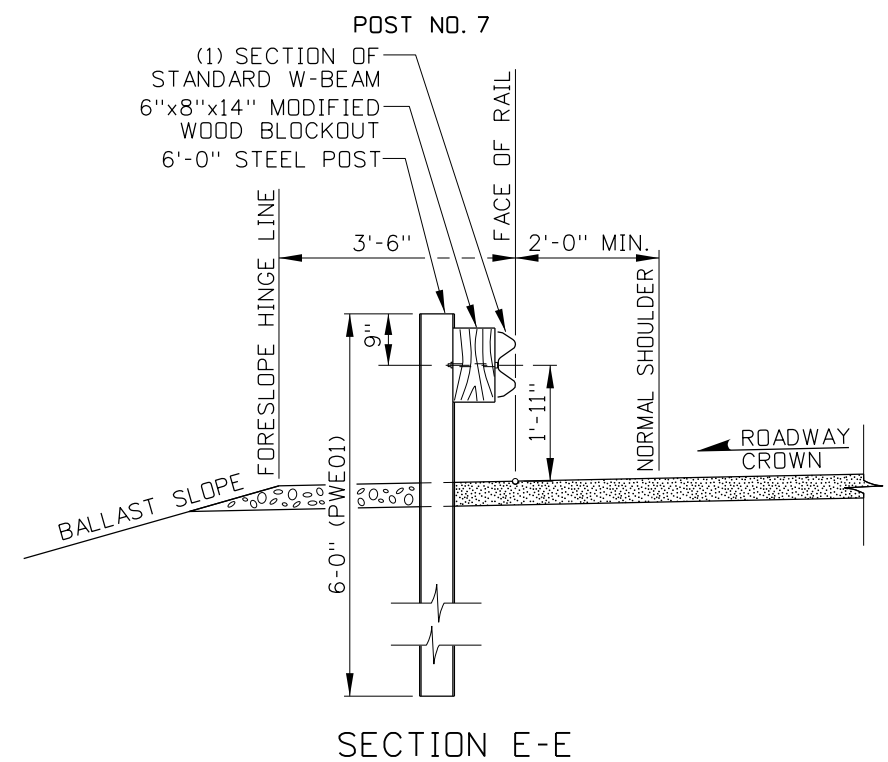
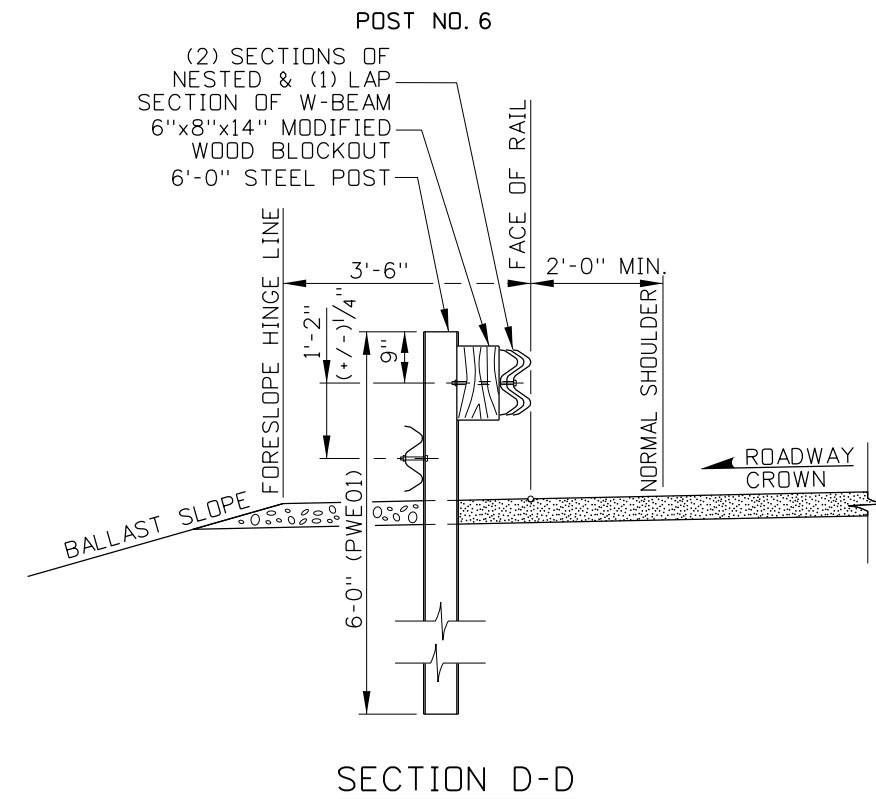
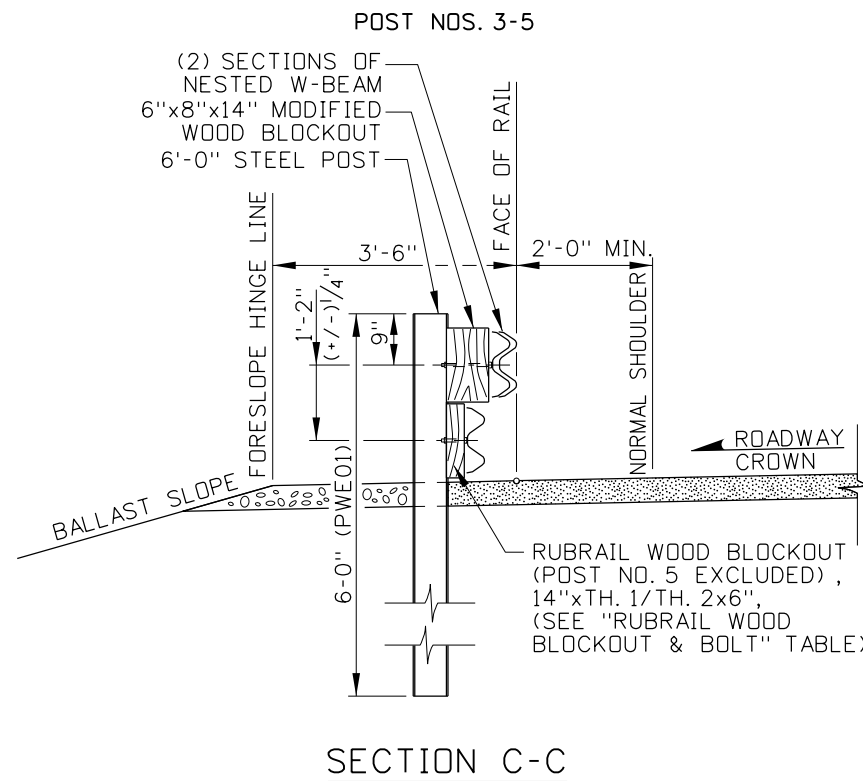
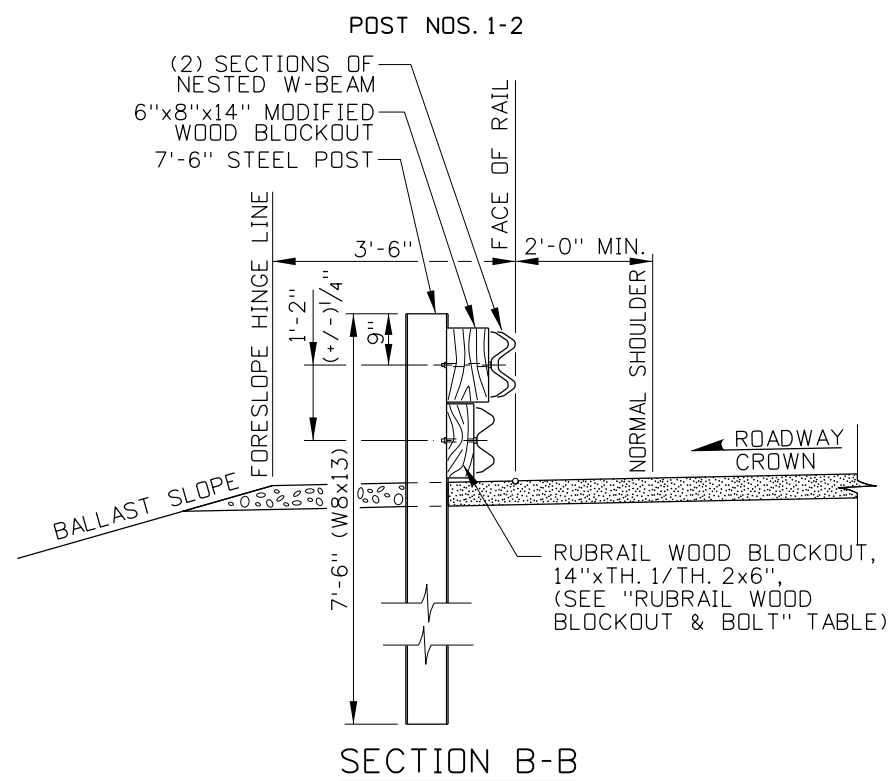
English

STANDARD DRAWING NO.
G-1-K

SHEET 1 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: TED E. MASDN
DATE ORIGINAL SIGNED: OCTOBER 26, 2010



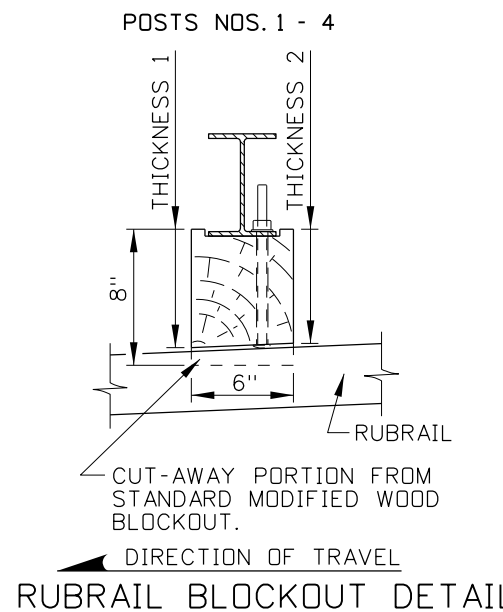
**TABLE OF
MAXIMUM TAPERS**

DESIGN SPEED (mph)	TAPER
75	16:1
70	15:1
65	14:1
60	13:1
55	12:1
50	11:1
45	10:1
40	9:1
<35	8:1

RUBRAIL WOOD BLOCKOUT & BOLTS

POST NO.	* THICKNESS 1	* THICKNESS 2	BOLT SIZE
1	7 1/4"	6 3/4"	5/8" DIA. x 10"
2	6"	5 1/2"	5/8" DIA. x 8"
3	4 3/4"	4 1/4"	5/8" DIA. x 8"
4	3 1/2"	3"	5/8" DIA. x 6"
5	NO BLOCKOUT		5/8" DIA. x 4"
6	RUBRAIL END POST		5/8" DIA. x 4"

* SEE RUBRAIL BLOCKOUT DETAIL



NOTES

1. THIS TERMINAL IS TO BE USED AS A RETROFIT FOR THE OLD STYLE TYPE 3 TERMINALS. FOR NEW INSTALLATION USE TYPE 3 TERMINAL AS SHOWN ON STD. DWG. G-1-E.
2. SEE STANDARD DRAWINGS G-1-A-1 THROUGH G-1-A-4 FOR INSTALLATION DETAILS, POST AND BLOCKOUT DETAILS FOR W-BEAM GUARDRAIL AND GUARDRAIL HARDWARE.
3. ALL BOLTS FOR RUBRAIL BEAM AND WOOD BLOCKOUTS WILL HAVE A MINIMUM OF 5" OF COURSE THREADING.
4. W-BEAM MEASUREMENTS ARE MADE ALONG THE FACE OF RAIL FROM THE CENTER OF RAIL TO THE ROADWAY SURFACE. RUBRAIL MEASUREMENTS ARE FROM THE CENTER OF RAIL TO THE CENTER OF RUBRAIL.
5. GUARDRAIL FOR END SHOE SHALL BE LAPPED IN THE DIRECTION OF NEAREST TRAFFIC LANE TO PREVENT SNAGGING, SEE DETAILS A & B.
6. THE RUBRAIL MAY BE SHOP BENT TO FACILITATE INSTALLATION.
7. USE THE "TABLE OF MAXIMUM TAPERS" WHEN TAPERING GUARDRAIL TO MATCH BRIDGE PARAPET.
8. NOT TO SCALE.

ORIGINAL STORED
AT: ITD,
Headquarters
3311 West State
Boise, Idaho

ORIGINAL SIGNED BY:
TED E. MASDN
DATE ORIGINAL SIGNED:
OCTOBER 26, 2010

REVISIONS

NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	07-92	MSM	6	05-06	MSM			
2	08-00	MSM	7	09-10	PLR			
3	01-01	MSM						
4	06-01	MSM						
5	10-04	MSM						

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
g1k_1010.dgn

DRAWING DATE:
MARCH, 1992

**IDAHO
TRANSPORTATION
DEPARTMENT**

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

**GUARDRAIL TERMINAL
TYPE 9**

REQUIRES SHEET 1 OF 2 &
STD. DWGS. G-1-A-1 THRU G-1-A-4

English

STANDARD DRAWING NO.
G-1-K

SHEET 2 OF 2