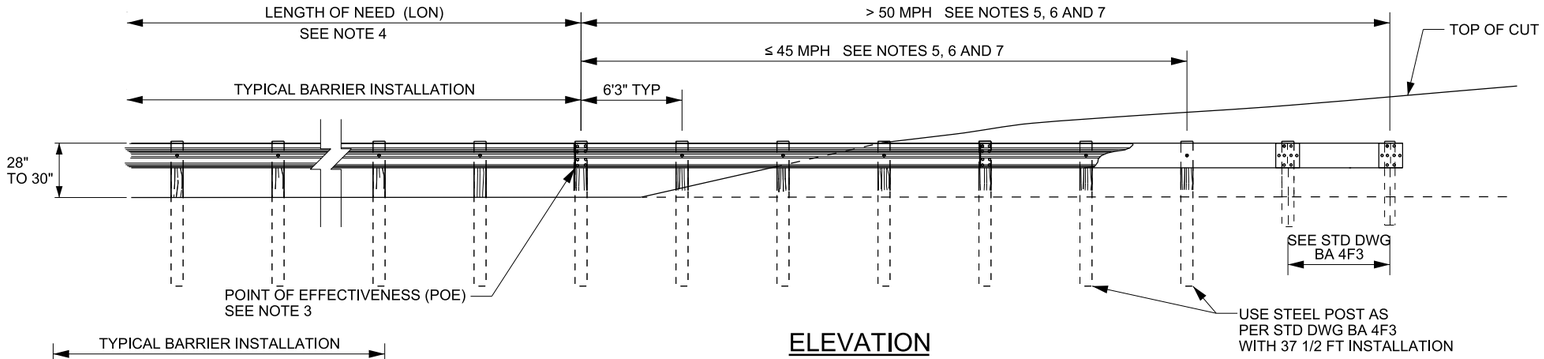
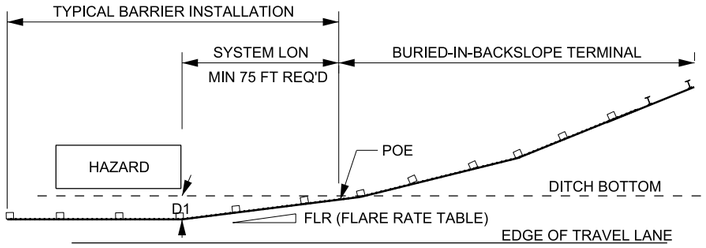


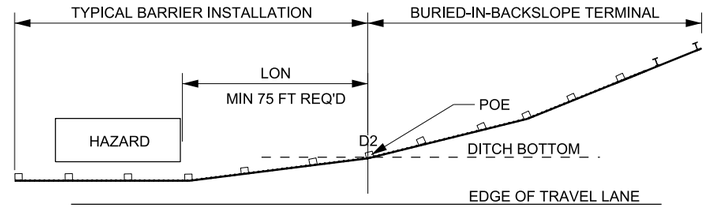
ELEVATION

FLARE RATE TABLE (FLR)	
POSTED SPEED (mph)	RATE
40 OR LESS	9:1
45	10:1
50	11:1
55	12:1
60	14:1
65 OR GREATER	15:1



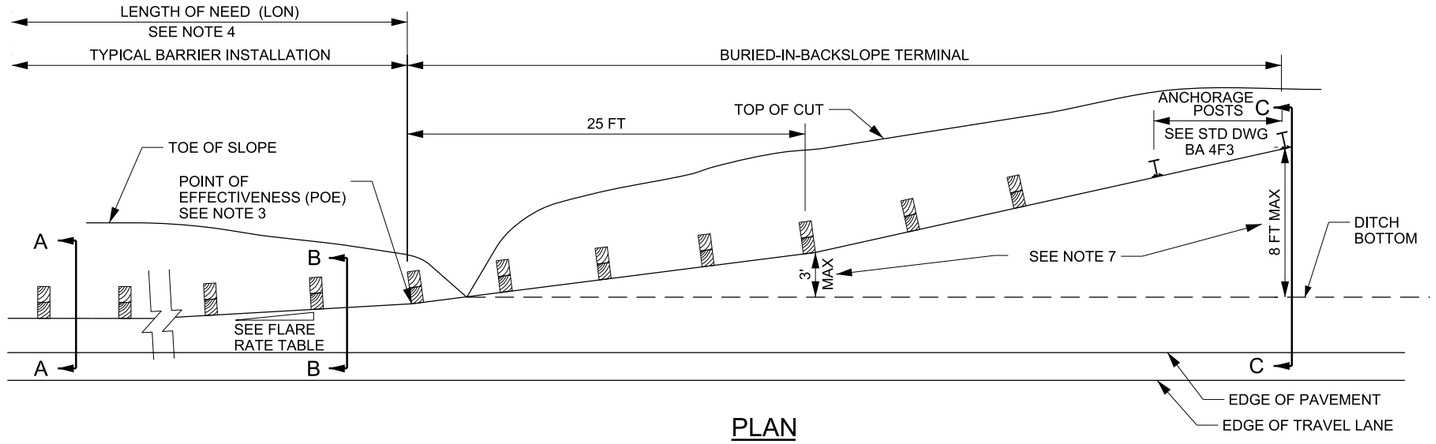
SYSTEM LON = FLR x D1
USE THIS DETAIL IF BACKSLOPE IS STEEPER 3:1.
THIS DETAIL APPLIES AT ALL SPEED LEVELS.

DETAIL A

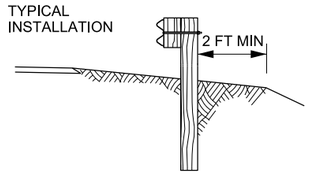


≥ 50 MPH "LON" = 450 - (15 x D2)
≤ 45 MPH "LON" = 250 - (15 x D2)
USE THIS DETAIL IF BACKSLOPE IS 3:1 TO A MINIMUM 4:1
SEE NOTE 6

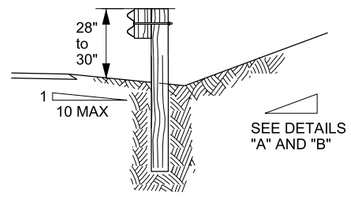
DETAIL B



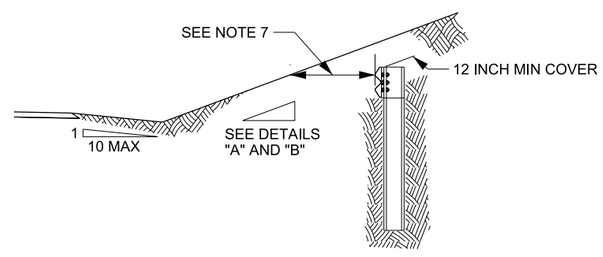
PLAN



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:

1. PRIOR TO USING THIS DESIGN, CONSULT AREA SUPERVISOR TO ENSURE NO NEED EXISTS FOR ACCESS BEHIND THE BARRIER INSTALLATION AND THAT DRAINAGE ISSUES ARE ADDRESSED.
2. DO NOT USE BURIED-IN-BACKSLOPE TERMINAL IN LOCATIONS WHERE THE BACKSLOPE IS FLATTER THAN 3:1, AND THERE IS NO DITCH OR A NARROW SHALLOW DITCH AND THE TOE OF SLOPE IS WITHIN 20 FT OF THE TRAVEL LANE.
3. THE POINT OF EFFECTIVENESS (POE) IS AT THE RAIL FACE OF THE FIRST POST OF THE TERMINAL PRIOR TO CROSSING THE DITCH BOTTOM OR TOE OF SLOPE.
4. SEE DETAILS "A" AND "B" FOR LENGTH OF NEED (LON) REQUIREMENTS AND BACKSLOPE REQUIREMENTS.
5. REFER TO STD DWG BA 4F3 FOR BURIED-IN-BACKSLOPE TERMINAL ANCHORAGE POST DETAILS.
6. CONSTRUCT BURIED IN BACKSLOPE TERMINALS AT 37 1/2 FT FOR SPEEDS 45 MPH AND LESS, AND 50 FT FOR SPEED 50 MPH AND GREATER.
7. INSTALLATION: STARTING AT THE "POE" SOFTLY BEND RAIL ELEMENT 3 FT MAXIMUM FROM THE TOE OF SLOPE AT THE 25 FT POINT OF TERMINAL. SOFTLY BEND RAIL BACK UNTIL THE 1 FT BURIAL HAS BEEN OBTAINED TO A MAXIMUM OF 8 FT FROM THE TOE OF SLOPE FROM THE 25 FT POINT OF THE TERMINAL TO THE END OF THE TERMINAL. THE BURIED-IN-BACKSLOPE TERMINAL WILL BE SLOPED DOWN WHERE THE END IS 8 FT BEHIND THE TOE OF SLOPE AND 1 FT UNDER THE ORIGINAL GROUND LINE IF THE MAXIMUM 8 FT OFFSET IS REACHED AND THE 1 FT BURIAL HAS NOT BEEN ACHIEVED. THE BACK SLOPE AT THE ANCHORAGE POSTS SHOULD LOOK THE SAME AFTER INSTALLATION AS PRIOR TO INSTALLATION.
8. INSTALL A STABILIZATION MAT OVER DISTURBED AREA TO CONTROL EROSION, UNLESS DIRECTED DIFFERENTLY BY PROJECT SPECIFICATION OR ENGINEER.
9. USE IN ESTABLISHED SLOPES. DO NOT BUILD A MOUND TO USE THIS TERMINAL.

SUPPLEMENTAL DRAWING

REVISIONS

NO.	DATE	APPR.	REMARKS
1	08/30/12	SDD	CORRECTED LON DIMENSION IN DETAIL B.

UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL — AUG.30.2012 DATE
CHAIRMAN STANDARDS COMMITTEE APPROVED — AUG.30.2012 DATE
DEPUTY DIRECTOR

STANDARD DRAWING TITLE
W-BEAM GUARDRAIL BURIED IN BACKSLOPE TERMINAL

STD. DWG. NO.
BA 4F1

DGN File: L:\Standard Drawings\Imperial\2012Approved_Supplemental_Issues\Supp14approved\BA04F1.dgn
12-SEP-2012