

**CASE 1
POST LENGTH AND
DRILLED ROCK FORMULA**

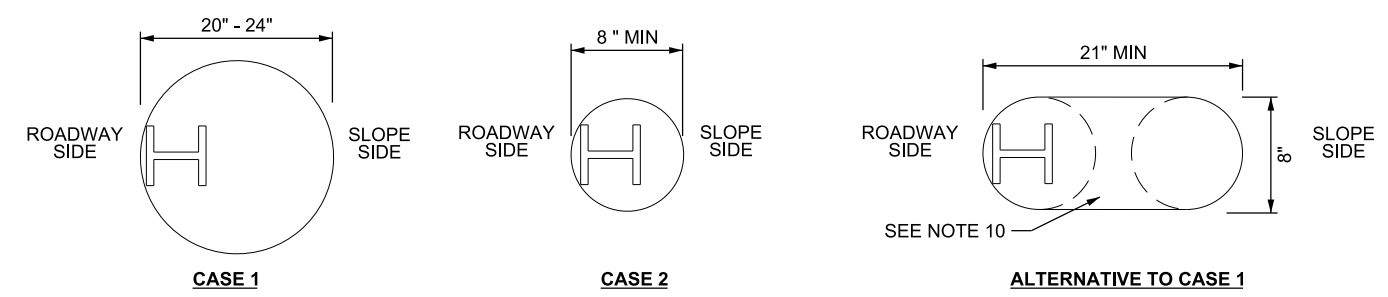
40" - A = B

40" = TYPICAL FULL POST EMBEDMENT
A = COMPACTED GRADE MATERIAL
(0 INCHES TO 18 INCHES)
B = DRILLED ROCK HOLE DEPTH
(CUT POST TO MEET DEPTH
REQUIREMENT NOT TO
EXCEED 24 INCHES. SEE NOTE 3)

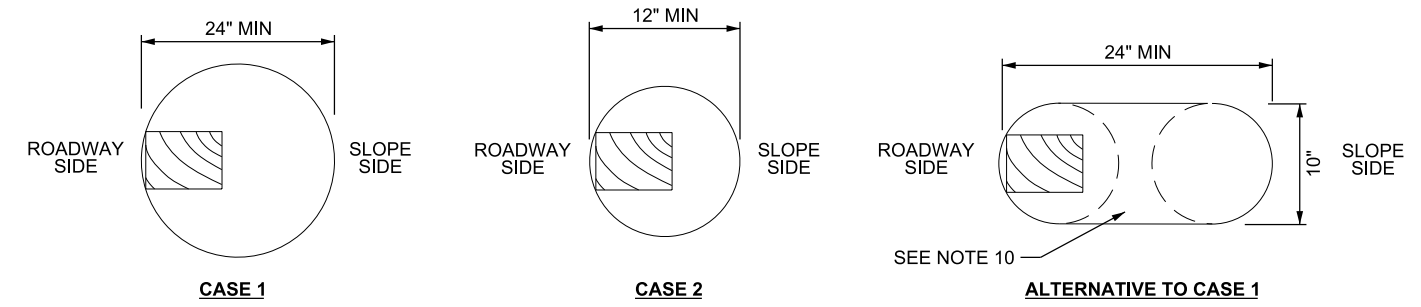
**CASE 2
DRILLED ROCK FORMULA**

40" - A = B

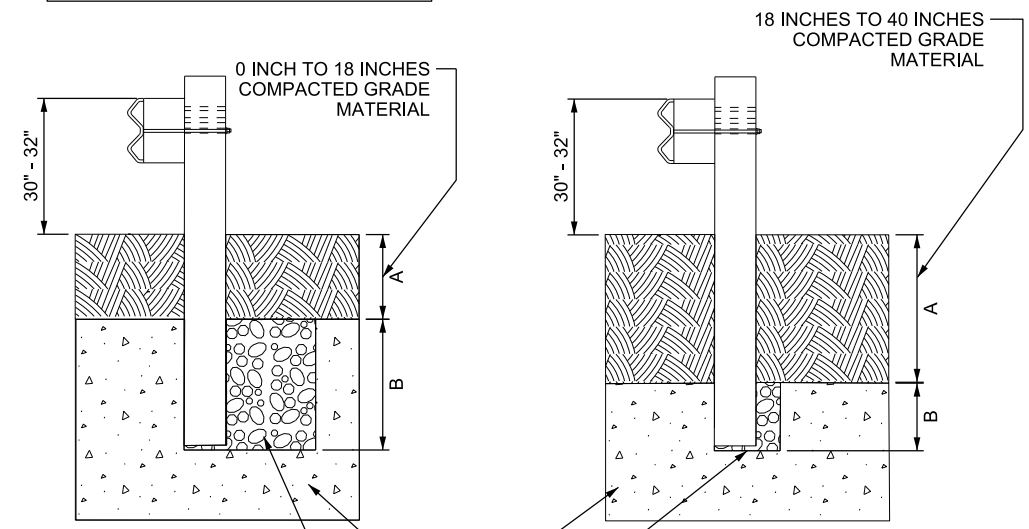
40" = TYPICAL FULL POST EMBEDMENT
A = COMPACTED GRADE MATERIAL
(18 INCHES TO 40 INCHES)
B = DRILLED ROCK HOLE DEPTH



PLAN VIEW STEEL POST



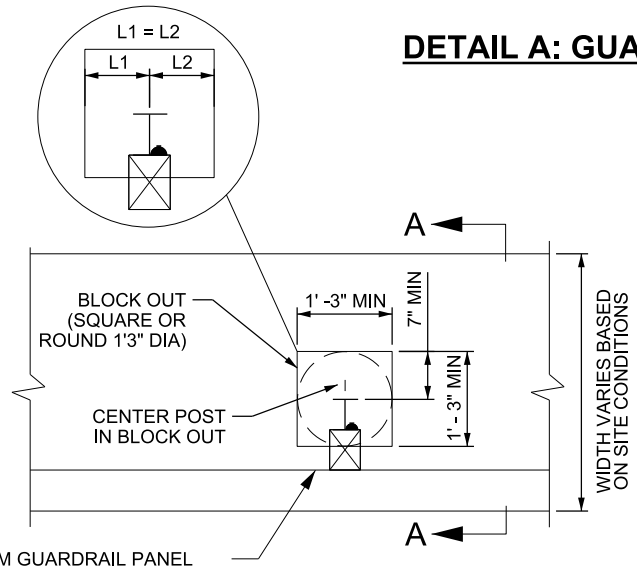
PLAN VIEW WOOD POSTS



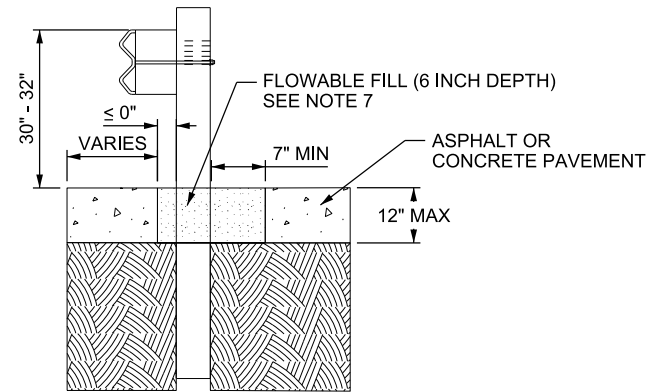
CASE 1
SEE NOTES 3, 4, 6, & 11

CASE 2
SEE NOTES 4, 6, & 11

DETAIL A: GUARDRAIL POST IN ROCK FORMATION



POSTS DETAIL
STEEL POST SHOWN
WOOD POST SIMILAR



SECTION A-A
SEE NOTES 4, 5, 7, 8 & 9

DETAIL B: GUARDRAIL POST IN HMA / CONCRETE PAVEMENT

NOTES:

1. USE DETAIL "A" WHEN SOLID ROCK CONDITIONS PROHIBIT THE STANDARD GUARDRAIL POST INSTALLATION.
2. USE DETAIL "B" WHEN GUARDRAIL POST, TYPE "G" OR "H" END TREATMENT POST INSTALLATION IS REQUIRED THROUGH HMA OR CONCRETE PAVEMENT.
3. CUT BOTTOM OFF POST AT THE REQUIRED LENGTH SUFFICIENT TO MEET TOP OF RAIL HEIGHT REQUIREMENT WHEN INSTALLING POSTS WITHIN SOLID ROCK FORMATIONS. COAT ALL FIELD-CUT STEEL POSTS WITH A FIELD-APPLIED COLD ZINC MATERIAL.
4. PLACE POST TO ROADWAY SIDE OF HOLE.
5. THESE METHODS ARE APPLICABLE TO TYPICAL W-BEAM GUARDRAIL. ALSO APPLICABLE TO TYPE "F", "G", AND "H" END TREATMENTS WITH FOUNDATION TUBES, STEEL BREAKAWAY POSTS AND CRT POSTS.
6. CONSULT TYPE "F", "G," AND "H" END TREATMENT MANUFACTURER FOR INSTALLATION REQUIREMENTS IN SOLID ROCK FORMATIONS.
7. USE FLOWABLE FILL MEETING STANDARD SPECIFICATION 03575 WITH 28 DAY COMPRESSIVE STRENGTH OF 50 PSI TO 120 PSI. COMPACT EXISTING MATERIAL AROUND GUARDRAIL POST PRIOR TO INSTALLATION OF FLOWABLE FILL.
8. SEE INSTALLATION DETAIL STD DWG BA 4D1 OR BA 4D2 FOR POST LENGTH REQUIREMENTS.
9. CREATE BLOCK OUT BY FORMING, SAW CUTTING OR OTHER SIMILAR METHOD.
10. EXCAVATE AREA BETWEEN DRILLED HOLES. MEET CASE 1 OR CASE 2 BACKFILL REQUIREMENTS.
11. COMPACT BACKFILL ACCORDING TO STANDARD SPECIFICATION 02841.

SUPPLEMENTAL DRAWING

NO.	DATE	APPR.	REMARKS
1	2/22/2018	SDD	CORRECTED BARRIER HEIGHT REQUIREMENT.

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

RECOMMENDED FOR APPROVAL
[Signature]
CHAIRMAN STANDARDS COMMITTEE
APPROVED

DEPUTY DIRECTOR
[Signature]

DATE: FEB 22, 2018
DATE: FEB 22, 2018

**W-BEAM GUARDRAIL
TYPICAL LINE POST
EMBEDMENT SPECIAL
CONDITIONS**

STANDARD DRAWING TITLE

STD. DWG. NO.
BA 4D3