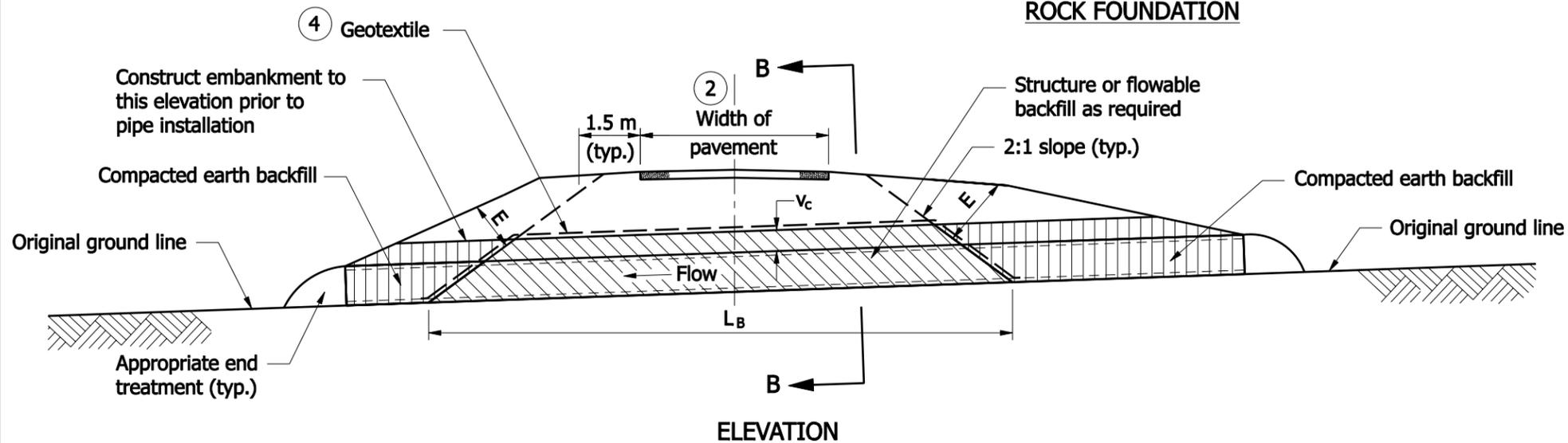
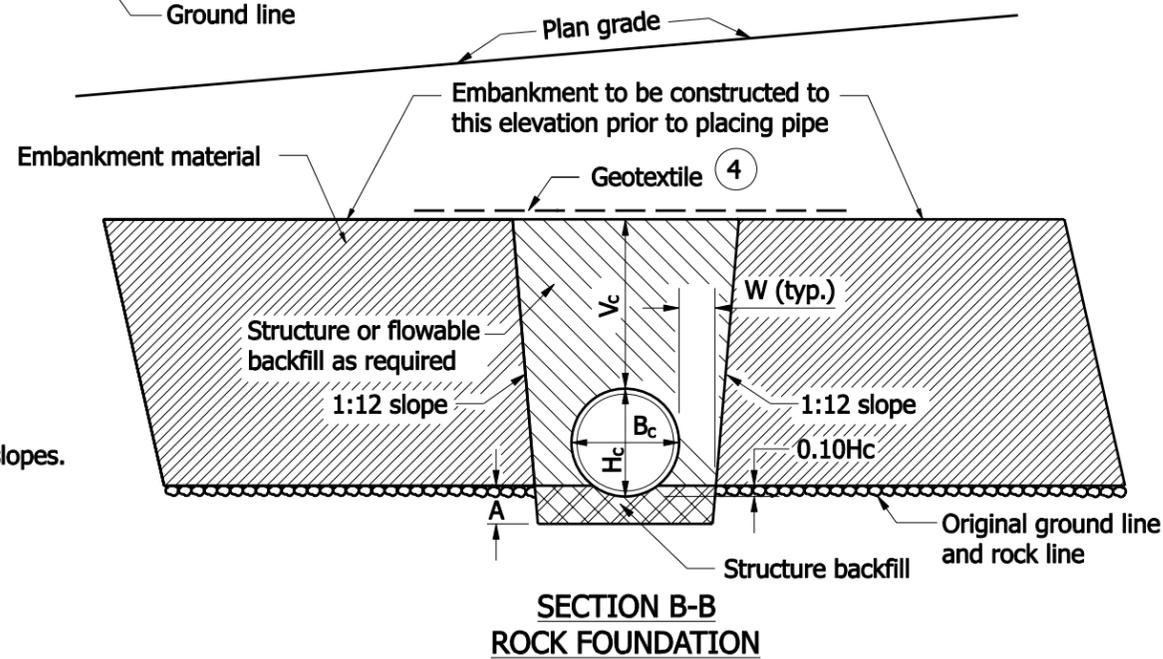


LEGEND

- H_c = Overall diameter or rise (typ.)
- B_c = Overall diameter or span
- A = 200 min. for fill height less than 5.0 m
= 300 min. for fill height of 5.0 m or more
- V_c = 300 for $B_c \leq 450$
450 for $B_c > 450$
- W = $0.3 B_c$ or 230, whichever is greater
- L_B = Backfill length measured from toe to toe of the 2:1 slopes.



NOTES :

1. Protective cover shall be constructed prior to running heavy equipment over installed pipes. The minimum covers are listed below:
 - a.) 0.5 m for $B_c \leq 450$
 - b.) 0.9 m for $18'' < B_c \leq 1350$
 - c.) 1.2 m for $B_c > 1350$
- 2 For backfill purposes, paved shoulders, curbs, and sidewalks are considered pavement. See Standard Drawing 715-BKFL-10 for pavement limits when curbs, paved shoulders, or sidewalks are present.
3. Flowable or structure backfill shall be encased by compacted earth backfill. The minimum encasement shall be 0.6 m. If necessary, the 2:1 slope between the flowable or structure backfill and the encasement shall be modified to maintain the minimum 0.6 m encasement.
- 4 Geotextile required if coarse aggregate is used. Geotextile should extend 300 beyond each edge of the excavated trench or toe of slope.

All Dimensions are in mm unless otherwise specified.

INDIANA DEPARTMENT OF TRANSPORTATION

**PIPE BACKFILL METHOD 1
NEW ROADWAY, EMBANKMENT**

SEPTEMBER 2007

STANDARD DRAWING NO. 715-BKFL-02



DESIGN STANDARDS ENGINEER

/s/ Richard L. VanCleave 09/04/07
DESIGN STANDARDS ENGINEER DATE

/s/ Mark A. Miller 09/04/07
CHIEF HIGHWAY ENGINEER DATE