Notes:
1. Protective cover shall be constructed prior to removing heavy equipment over backfilled pipe. The minimum covers are listed below:
   a. 0.5 m for $R_h \leq 1500$
   b. 0.8 m for $1500 < R_h \leq 1350$
   c. 1.2 m for $R_h > 1350$
2. For backfill purposes, paved shoulders, curbs, and sidewalks are considered pavement. See Standard Drawing 715-01FL-18 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 500 beyond each edge of the excavated trench or toe of slope.

Legend:
- $H_a$ = Overall diameter of pipe (ft. or m)
- $L_a$ = Overall diameter of span
- $A$ = 200 mm. for fill height less than 5.0 m,
  300 mm. for fill height of 5.0 m or more
- $T_a$ = Throat cover depth over pipe
- $W$ = 0.5 $L_a$ or 200, whichever is greater
- $E$ = Embankment
- $L_b$ = Backfill length measured from toe to toe of the 2:1 slopes.

Indiana Department of Transportation
Pipe Backfill Method 1
New Roadway, Trench
September 2007
Standard Drawing No. 715-BKFL-01

[Signature]
Chief Highway Engineer
[Date]
[Signature]
Design Standards Engineer
[Date]