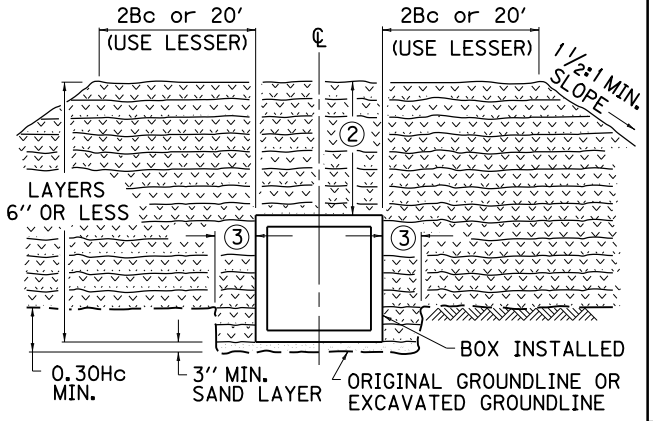
POSITIVE PROJECTION



a. IF ROCK FOUNDATION IS ENCOUNTERED, GO TO PARTS b. AND c. OF STEP 3 ZERO PROJECTION AND THEN PROCEED WITH PARTS b. AND c. OF THIS STEP .

b. UNIFORMLY COMPACT SAND IN TRENCH WITH APPROXIMATELY 3'' OF SAND BELOW BOTTOM OF BOX. LEVEL COMPACTED SAND WITH A TEMPLATE TO INSURE UNIFORM SUPPORT THROUGHOUT ENTIRE WIDTH AND LENGTH . ▭

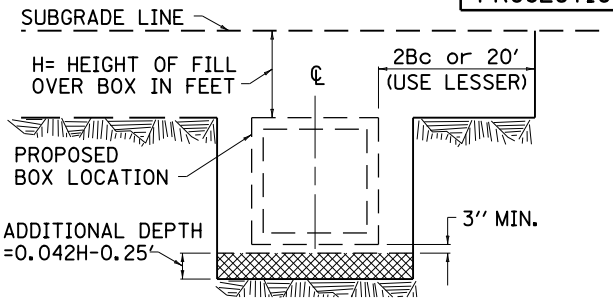
c. COMPACT SELECTED FINE SOIL TO ELEVATION ② IN LAYERS 6'' OR LESS TO MEET SAME DENSITY REQUIREMENTS SPECIFIED FOR ADJACENT EMBANKMENT . ▭

② 48'' REQUIRED, IF FILL HEIGHT PERMITS .

③ 0.3 Bc OR 1'-0'' (USE MAX.)

ROCK FOUNDATION DETAILS

STEP 3 ZERO PROJECTION

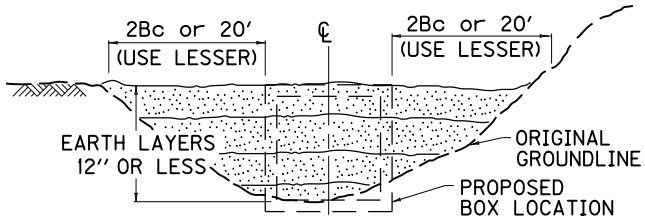


a. IF ROCK FOUNDATION IS NOT ENCOUNTERED, GO DIRECTLY TO STEP 4.

b. IF ROCK FOUNDATION IS ENCOUNTERED, EXCAVATE ADDITIONAL TRENCH DEPTH USING FORMULA GIVEN. THIS ADDITIONAL DEPTH SHALL ALWAYS BE AT LEAST 0.75' AND WILL NOT BE REQUIRED TO BE MORE THAN 0.75HC-0.25', REGARDLESS OF ABOVE FORMULA RESULT.

c. BACKFILL ADDITIONAL EXCAVATED AREA WITH EARTH CUSHION OF FIRMLY COMPACTED FINE SOILS IN LAYERS 6'' OR LESS. ▨

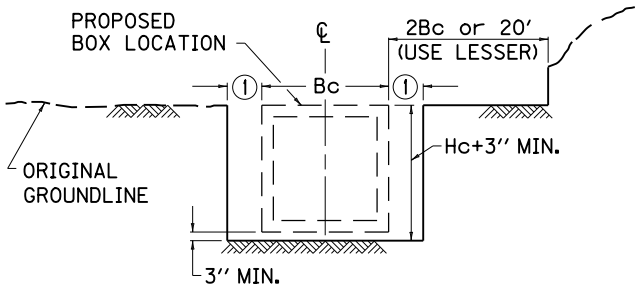
STEP 1 ZERO PROJECTION



a. IF ORIGINAL GROUNDLINE IS AT OR ABOVE THE TOP OF PROPOSED BOX FOR WIDTH OF 2Bc OR 20' (WHICHEVER IS LESS) ON EACH SIDE OF THE BOX, GO DIRECTLY TO STEP 2.

b. IF ORIGINAL GROUNDLINE IS BELOW THE TOP OF PROPOSED BOX, COMPACT EMBANKMENT IN LAYERS 12'' OR LESS TO ELEVATION AND WIDTH SHOWN. ▭ MEET DENSITY REQUIREMENTS FOR ADJACENT EMBANKMENT.

STEP 2 ZERO PROJECTION

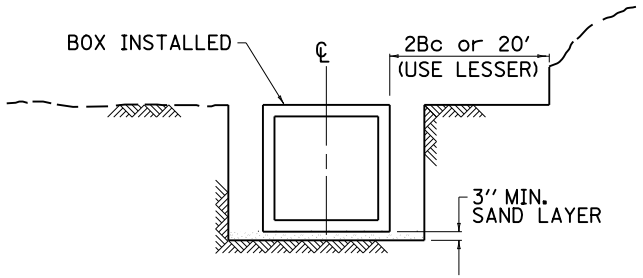


a. EXCAVATE TO TOP OF PROPOSED BOX A WIDTH OF 2Bc OR 20' (USE LESSER) ON EACH SIDE OF BOX.

b. EXCAVATE TRENCH TO WIDTH AND DEPTH SHOWN.

① AT LEAST 12'', BUT NOT MORE THAN 15''.

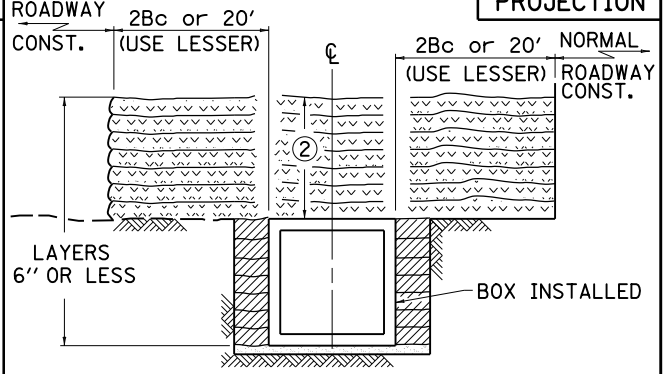
STEP 4 ZERO PROJECTION



a. UNIFORMLY COMPACT SAND IN TRENCH WITH APPROXIMATELY 3'' OF SAND BELOW BOTTOM OF BOX. LEVEL COMPACTED SAND WITH A TEMPLATE TO INSURE UNIFORM SUPPORT THROUGHOUT ENTIRE WIDTH AND LENGTH. ▭

b. INSTALL BOX AT CORRECT ALIGNMENT AND ELEVATION. RECOMPACT ANY LOOSE SAND DISTURBED DURING INSTALLATION.

STEP 5 ZERO PROJECTION



a. COMPACT SELECTED FINE SOIL, NATURAL SAND, OR NO. 10 COARSE AGGREGATE IN LAYERS 6'' OR LESS TO TOP OF THE BOX. ▨ THEN COMPACT SELECTED FINE SOIL TO ELEVATION ② ABOVE TOP OF BOX. ▭ MEET DENSITY REQUIREMENTS FOR ADJACENT EMBANKMENT.

b. PROCEED WITH NORMAL ROADWAY CONSTRUCTION.

② 48'' REQUIRED, IF FILL HEIGHT PERMITS.

NOTE: THE CONTRACTOR HAS THE OPTION TO, EITHER BED AND BACKFILL THE PRECAST BOX IN POSITIVE PROJECTION AS DESCRIBED ABOVE, OR MAY BED AND BACKFILL TO ZERO PROJECTION AS DETAILED AND DESCRIBED IN STEPS 1 THRU 5. IN EITHER CASE PARTS b. AND c. OF STEP 3 ZERO PROJECTION MUST BE PERFORMED IN THE EVENT ROCK FOUNDATION IS ENCOUNTERED.

~BOX SHAPES~

KENTUCKY
DEPARTMENT OF HIGHWAYS

BEDDING FOR PRECAST BOX CULVERTS, SEWERS, STORM DRAINS, AND THEIR COMBINATIONS

STANDARD DRAWING NO. RDI-120-03

SUBMITTED John B. Scalf 12-1-99
DIRECTOR DIVISION OF DESIGN — DATE

APPROVED [signature] 12-1-99
STATE HIGHWAY ENGINEER — DATE