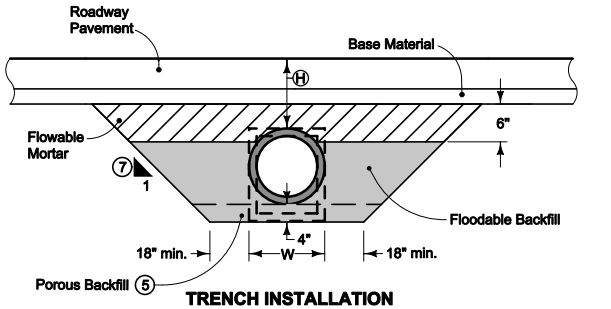
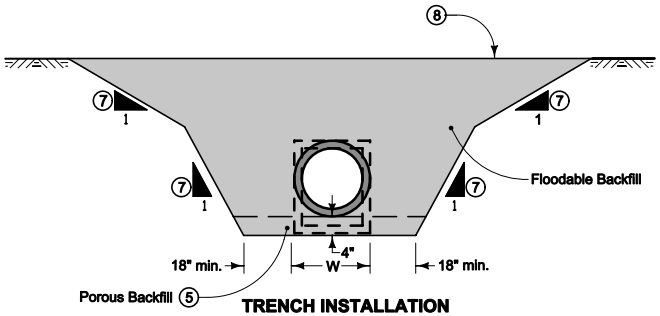
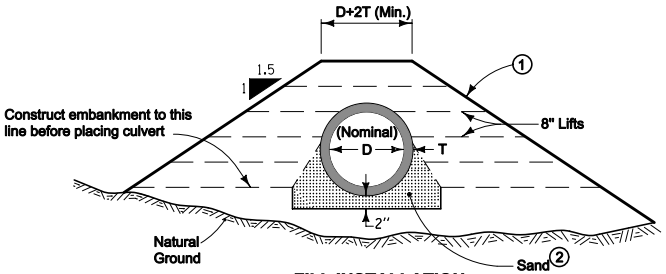
DESIGNER INFO



TRENCH INSTALLATION
(H)≤4'



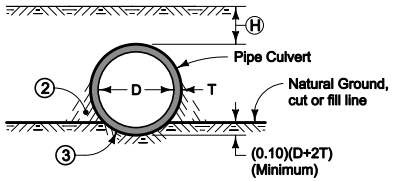
TRENCH INSTALLATION
(H)>4'



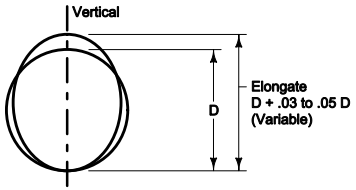
FILL INSTALLATION
(FOR RIGID PIPES ONLY)

CLASS 'B' BEDDING & BACKFILL (4)

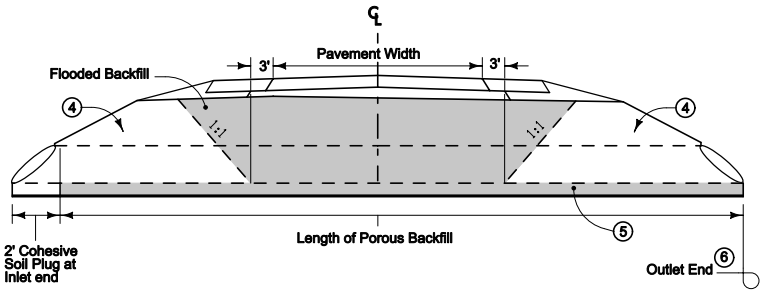
Denotes pay limits for flooded backfill



CLASS 'C' BEDDING & BACKFILL



ELONGATED PIPE



TYPICAL SECTION - SOIL PLUG

Where a corrugated metal pipe culvert requiring elongation is to be installed, such elongation shall be accomplished by means approved by the Engineer. Elongation may be developed either as part of shop fabrication or field installation.

Minimum and maximum allowable cover (H) for pipe culverts shall be as shown on the appropriate Standard Road Plans for the particular kind of culvert, as follows:

RF-31 Depth of Cover Tables for Concrete Pipe
RF-32 Depth of Cover Tables for Corrugated Pipe

(1) The backfill adjacent to and above the pipe culvert may be placed in conjunction with normal embankment construction. The embankment within the limits shown shall be thoroughly tamped.

(2) Extra care shall be taken to ensure complete and satisfactory tamping of backfill material in the area immediately adjacent to the lower portion of pipe.

(3) The excavation below groundline shall be carefully made with a template or shaped by other means and checked with a template conforming to the actual dimension and shape of the pipe.

(4) For culverts backfilled by flooding, place a cohesive soil plug at the inlet, outlet, and, when necessary, sides, prior to flooding.

(5) 4-inch Porous Backfill bedding. 2-inch Floodable Backfill bedding may be used under unsealed rigid pipe.

(6) Extend Porous Backfill through the outlet end soil plug when used for bedding.

(7) Quantity calculations are based upon a 1:1 slope and minimum trench dimension. Actual slope of trench may vary based upon contractor's operations.

(8) Groundline at time of pipe installation. When existing ground exceeds 5 feet depth over pipe, backfill and compaction by flooding is not required more than 5 feet above the pipe.

Possible Contract Items:
Flowable Mortar
Flooded Backfill
Excavation, Class 20

Possible Tabulation:
104-3
104-4

Iowa Department of Transportation

REVISION
12 | 10-19-10

STANDARD ROAD PLAN

RF-30A

SHEET 1 of 1

REVISIONS: Added dashed box culvert, modified length of Porous Backfill on typical section - Soil Plug, and modified notes.

Deanna Maifield
APPROVED BY DESIGN METHODS ENGINEER

CULVERT (BEDDING AND BACKFILL)