

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION
FLEXIBLE PIPE

SHEET 1 OF 2
300.01

Diagram showing a pipe in a trench with normal earth foundation. The pipe is surrounded by compacted material. Dimensions include TOP OF FILL, GROUND LINE, H (fill height), I.D. /6 MIN. NOT LESS THAN 6", and O.D. + 3'.

NORMAL EARTH FOUNDATION

Diagram showing a pipe in a trench with a rock foundation. The pipe is surrounded by compacted material, with a rock layer at the bottom. Dimensions include TOP OF FILL, GROUND LINE, H, I.D. /6 MIN. NOT LESS THAN 6", O.D. + 3', and ROCK.

**ROCK FOUNDATION
PIPE IN TRENCH**

Diagram showing a pipe in a trench with an unsuitable material foundation. The pipe is surrounded by compacted material, with a layer of unsuitable material at the bottom. Dimensions include TOP OF FILL, GROUND LINE, H, I.D. /6 MIN. NOT LESS THAN 6", O.D. + 3', TYPE 4a GEOTEXTILE, and EARTH.

UNSUITABLE MATERIAL FOUNDATION

Diagram showing a pipe above ground with normal earth foundation. The pipe is surrounded by compacted material. Dimensions include TOP OF FILL, GROUND LINE, H, MIN. O.D., I.D. /6 MIN. NOT LESS THAN 6", and O.D. + 2'.

NORMAL EARTH FOUNDATION

Diagram showing a pipe above ground with a rock foundation. The pipe is surrounded by compacted material, with a rock layer at the bottom. Dimensions include TOP OF FILL, GROUND LINE, H, MIN. O.D., I.D. /6 MIN. NOT LESS THAN 6", O.D. + 2', and ROCK.

**ROCK FOUNDATION
PIPE ABOVE GROUND**

Diagram showing a pipe above ground with an unsuitable material foundation. The pipe is surrounded by compacted material, with a layer of unsuitable material at the bottom. Dimensions include TOP OF FILL, GROUND LINE, H, MIN. O.D., I.D. /6 MIN. NOT LESS THAN 6", O.D. + 2', TYPE 4a GEOTEXTILE, and AS DIRECTED BY ENGINEER.

UNSUITABLE MATERIAL FOUNDATION

GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

SPRINGLINE OF PIPE

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINGLINE.

UNDISTURBED EARTH MATERIAL

SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

Signed by:

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACTS STANDARDS
AND DEVELOPMENT UNIT
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