

(b) Longitudinal installations must be located on uniform alignment as near as practicable to the right-of-way line so as to provide a safe environment for traffic operation and preserve space for future highway improvements or other utility installations.

(c) To the extent feasible and practicable, a utility facility should cross the highway on a line generally normal to the highway alignment.

(d) With pole type facilities, where a guide rail is present, poles shall be located behind the guide rail allowing sufficient clear distance behind the guide rail for the guide rail's design deflection in accordance with N.J.A.C. 16:25-5.5.

(e) In all cases, full consideration must be given to the measures, reflecting sound engineering principles and economic factors necessary to preserve and protect the integrity and visual quality of the highway, its maintenance, efficiency and the safety of highway traffic.

(f) Utility crossings of freeways are to be held to a practical minimum and where permitted will meet all applicable provisions of this chapter.

(g) The Department may allow a fiber-optic utility facility to consist of more than four innerducts in the case of a multi-duct system, or more than four individual pipes in the case of a single-duct system, to be decided by the Department on a case-by-case basis.

Amended by R.1990 d.53, effective February 5, 1990.  
See: 21 N.J.R. 2234(b), 22 N.J.R. 359(a).

New (g) added upon adoption.  
Amended by R.1992 d.194, effective May 4, 1992.  
See: 23 N.J.R. 3739(c), 24 N.J.R. 1801(b).

Revised (g).  
Amended by R.1993 d.433, effective September 7, 1993.  
See: 25 N.J.R. 2217(a), 25 N.J.R. 4111(a).  
Amended by R.1998 d.401, effective August 3, 1998.  
See: 30 N.J.R. 1755(a), 30 N.J.R. 2940(a).

In (a), substituted references to utility facilities for references to utility lines throughout, and substituted a reference to State highways for a reference to highways; in (c), substituted a reference to utility facilities for a reference to utility lines; rewrote (d); in (f), substituted a reference to this chapter for a reference to these rules; and in (g), substituted a reference to fiber-optic utility facilities for a reference to fiber-optic systems.

### 16:25-2.2 Design of utility facilities

(a) The utility shall be responsible for the design of the utility facility to be installed within the highway rights-of-way or attached to a highway structure.

(b) The Department shall be responsible for review and approval of the utility's proposal with respect to the location of the utility facilities to be installed and the manner of attachment. This includes the measures to be taken to preserve the safe and free flow of traffic, structural integrity of the roadway, maintenance, appearance of the highway, and the integrity of the utility facility.

(c) Utility installations on, over, or under the rights-of-way of State highways and utility attachments to highway structures must meet the following minimum requirements:

1. Electric power and communication facilities shall conform with the currently applicable National Electrical Safety Code <sup>1</sup>.

2. Water lines shall conform with the currently applicable specifications of the American Water Works Association <sup>2</sup>.

3. Pressure pipelines shall conform with the currently applicable sections of the Standard Code of Pressure Piping of the American National Standards Institute<sup>3</sup>; 49 CFR Parts 192, 193, and 195; applicable industry codes; and Title 14 of the New Jersey Administrative Code.

4. Liquid petroleum pipelines shall conform with the currently applicable recommended practice of the American Petroleum Institute for pipeline crossings under railroads and highways <sup>4</sup>.

5. Fiber-optic communication facilities installation standards shall conform with the currently applicable sections of the Standard Codes of the American National Standard Institute (ANSI)-E1A472-B, 472B-XXO, incorporated herein by reference<sup>5</sup> and the National Electrical Safety Code (NESC)<sup>1</sup>.

(d) Ground-mounted utility facilities shall be of a design compatible with the visual quality of the specific highway section being traversed.

(e) All utility installation on, over, or under highway rights-of-way and attachments to highway structures shall be of durable materials designed for long service life expectancy and relatively free from routine servicing and maintenance.

(f) On new installments or adjustments of existing utility lines, provision should be made for known or planned expansion of the utility facilities, particularly those located underground or attached to bridges. The utility lines shall be planned so as to minimize hazards and interference with highway traffic when additional overhead or underground lines are installed at some future date.

Amended by R.1990 d.53, effective February 5, 1990.  
See: 21 N.J.R. 2234(b), 22 N.J.R. 359(a).

Incorporated by reference the Standard Codes of the American National Standards Institute at new (c)5.  
Amended by R.1993 d.433, effective September 7, 1993.  
See: 25 N.J.R. 2217(a), 25 N.J.R. 4111(a).  
Amended by R.1998 d.401, effective August 3, 1998.  
See: 30 N.J.R. 1755(a), 30 N.J.R. 2940(a).

In (c), added a reference to Title 14 of the New Jersey Administrative Code at the end of 3, and added a reference to the National Electric Safety Code at the end of 5.

<sup>1</sup> National Electrical Safety Code (NESC), current issue, Bureau of Standards, U.S., Department of Commerce. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402).

<sup>2</sup> American Water Works Association Standards and Specifications, current issue, AWWA, 2 Park Avenue, New York, NY 10016.

<sup>3</sup> ANSI Standard Code for Pressure Piping of the American National Standards Institute, 1430 Broadway, New York, NY 10018.

<sup>4</sup> API RP 1102. Recommended Practice for Liquid Petroleum Pipelines Crossing Railroads and Highways, current issue, American Petroleum Institute, 1271 Avenue of the Americans, New York, NY 10020.

<sup>5</sup> ANSI Standard Code for Fiber-Optic Facilities EIA472-B, 472B-XXO of the American National Standards Institute, 1430 Broadway, New York, NY 10018.

## Case Notes

Department of Transportation found primarily responsible for ensuring appropriate safety standards are satisfied by facilities installed in highway rights of way. *Ball v. New Jersey Bell Telephone Co.*, 207 N.J.Super. 100, 504 A.2d 29 (App.Div.1986), certification denied 104 N.J. 383, 517 A.2d 391 (1986).

**16:25-2.3 Waivers**

(a) No waivers or other relief from design standards or other provisions of this chapter may be granted unless the waiver can be granted without substantial detriment to the safety and operation of the highway and without substantially impairing the intent and purpose of this chapter.

(b) If an applicant wishes to seek a waiver, a request must be submitted to the Department. The request for waiver shall state reasons why a waiver is appropriate and include documentation to support the waiver. The waiver may also need to be approved by the Federal Highway Administration if the highway involves Federal funds.

(c) If a waiver is granted, the approval will be incorporated in the conditions of the permit or agreement.

New Rule, R.1993 d.433, effective September 7, 1993.  
See: 25 N.J.R. 2217(a), 25 N.J.R. 4111(a).  
Amended by R.1998 d.401, effective August 3, 1998.  
See: 30 N.J.R. 1755(a), 30 N.J.R. 2940(a).

In (a), substituted a reference to this chapter for a reference to N.J.A.C. 16:25-3.5; and in (b), deleted "as an attachment to the permit application" at the end of the first sentence, and added a third sentence.

**SUBCHAPTER 3. PIPELINES****16:25-3.1 Location and alignment**

(a) For all crossings, the angle of crossing should be based on economic considerations of practical alternates. The crossing shall be located as near normal to the highway alignment as practical.

(b) Conditions which are generally unsuitable or undesirable for pipeline crossing should be avoided. These include locations such as:

1. In deep cuts;
2. Near footings of bridges and retaining walls;
3. Across intersections at grade or ramp terminals;
4. At cross drains where flow of water, drift, or stream bedload may be obstructed;
5. Within basins of an underpass drained by a pump if pipeline carries a liquid or a liquified gas;
6. In wet or rocky terrain where it would be difficult to attain minimum bury.

(c) On longitudinal installations, utility locations parallel to the pavement at or adjacent to the right-of-way line are preferable so as to minimize interference with highway drainage, the structural integrity of the traveled way, shoulders, and embankment; and the safe operation of the highway. As a minimum, their lateral location shall be offset a suitable distance beyond the slope, ditch, or curb line, as the Department may stipulate.

(d) Vertical and horizontal clearance between a pipeline and a structure or other highway or utility facilities should be sufficient to permit maintenance of the pipeline and the other facilities.

(e) The locations of all pipelines will be reviewed by the Department to ensure that the proposed utility installation will not interfere with existing or planned highway facilities or with highway maintenance and operation processes.

**16:25-3.2 Bury**

(a) The critical controls for bury over a pipeline crossing are the low points in the highway cross-section. Usually these are the bottoms of the longitudinal ditches.

(b) In establishing the bury below an unpaved ditch, consideration should be given to potential increases in ditch depth resulting from scour, ditch maintenance operations, or the need to increase the capacity of the ditch.

(c) On longitudinal installations, the critical controls for bury are the depths of lateral drainage facilities, landscaping, buried utility lines, bridge structures, and likely highway maintenance operations.

(d) The depth of frost penetration should be taken into consideration in determining the bury. The bury shall be sufficient so that the liquid transmitted will not freeze. In addition, the depth shall be sufficient to withstand the greatly increased impact loads transmitted through the frozen soil.

**16:25-3.3 Controls for the bury of pipelines**

(a) The bury over pipelines shall be at a minimum of 36 inches (900 mm); however, special consideration shall be given on the basis of engineering and safety factors for the area, the product carried, and maximum working or test pressures for the pipelines before varying from minimum depth.

(b) Pipelines will be designed, installed and tested in accordance with the Minimum Federal Safety Standards of the U.S. Department of Transportation as published in 49 CFR Part 192, and any amendments thereof and other applicable Federal and State regulations.