

APPENDIX R

Columbia Gas Transmission
Guidelines

**Columbia Gas Transmission Corp.
Minimum guidelines for construction near natural gas pipeline facilities**

Interstate natural gas pipelines are an important part of the nation's energy infrastructure. Pipelines and related facilities operated by Columbia Gas Transmission Corp. safely transport much of the clean-burning fuel used in homes, businesses and factories of the United States.

These minimum guidelines for construction near Columbia's natural gas pipeline facilities are intended to protect public safety and help assure the continuous safe flow of the nation's natural gas supplies.

Consult Columbia early in your plans

To expedite construction or excavation projects safely and without delay, property owners and developers planning any such activities in the vicinity of Columbia pipelines should consult with Columbia in the design phase of the project. Have your construction plans reviewed by company personnel before you apply for zoning permits or commit to construction schedules.

For more information, call the appropriate Columbia telephone number on the back of this brochure.

Note: *These guidelines supersede any and all prior guidelines pertaining to activities and placements on or near Columbia Gas Transmission facilities. Existence of, or the ramifications from, the implementation of prior guidelines will not dictate, direct or provide for exemption of any of the above guidelines.*

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Notify Columbia before construction begins

Columbia must be notified according to the state law before construction begins in the vicinity of its facilities. This notification shall be made through the appropriate state One-Call notification service, but follow up contact should be made with the local Columbia Gas Transmission office.

No construction or excavation activities of any kind, including blasting, shall be done on Columbia's right of way area before Columbia personnel have established the actual location of all affected facilities and the limits of the right of way. Columbia personnel must be present during any construction or excavation activities.

Excavation near pipelines/buried facilities

No excavation shall be made on the pipeline right of way without prior notification to Columbia through the state One-Call notification service. Subsequent follow-up must be made to Columbia to seek approval for the proposed construction. Approved excavations above, below or within three-feet of either side of the pipeline shall be dug using hand tools.

Crossing pipelines with heavy equipment

Columbia may require heavy equipment operators to install mats, dirt pads, or other approved protective materials to adequately protect Columbia pipelines from potential damage by heavy equipment crossing the right of way. All proposed road crossings of buried facilities must be evaluated by Columbia personnel. Any additional over-burden must be removed after construction unless otherwise directed by Columbia personnel.

Blasting plans must be approved

Any blasting proposed within 300 feet of Columbia facilities must be submitted to Columbia in advance along with a blasting plan outlining such proposed activity. No blasting may begin unless and until Columbia provides written confirmation that it does not object to such blasting. Any modifications to the blasting plan must also be submitted to Columbia for review and should not be implemented unless and until Columbia provides written confirmation that it does not object to such modifications. The blasting contractor may be required to monitor and record seismic shock at the facilities.

Allow adequate clearance for directional drilling

Any directional drilling or boring proposed under Columbia's buried facilities must be submitted to Columbia for review and approval. Adequate clearance must be maintained from Columbia's facilities and additional excavations may be required to ensure adequate clearance. As-built plans are required for all borings.

Maintain up to 300-foot clear area around storage well heads

Property owners or developers must notify Columbia of any proposed construction or excavation within 300 feet in any direction of a natural gas storage well. For safety, Columbia reserves the right to object to any such proposed activities or placement of objects closer than 300 feet to a storage wellhead.

Construction requirements within a right of way

The requirements listed below are minimum guidelines for construction in the vicinity of Columbia pipeline rights of way to protect public safety and the integrity of Columbia's facilities. A review of individual plans and property rights may reveal more specific requirements.

1. The existing cover over pipelines and rights of way, which is normally a minimum of 36-inches and a maximum of 48-inches, shall be maintained. The minimum earth cover over pipelines at all street and road crossings, including the adjacent ditch line, shall be 36-inches; 60-inches minimum cover shall be maintained at stream and river crossings.
2. Above-ground or below-ground structures or obstructions of any type shall not be placed within the easement area of any pipeline, which generally extends 25 feet on each side from the center of the pipeline, or as defined in the applicable right of way or land rights agreement.
3. Pipeline easements shall not be shared longitudinally with other utilities. All water valves, curb boxes, manholes, etc. must be outside the easement. Other utilities which cross Columbia pipelines must do so at or as near 90 degrees as practical and with a minimum of 12-inches vertical clearance. Any crossing not installed below Columbia's pipelines must have prior written consent from Columbia (Location of Buried Facilities Form – Form 1050-P17). All crossings (excluding single telephone and single television drops) of Columbia facilities by cable and/or wire utilities, including but not limited to electric, fiber optic, telephone, and television lines crossing Columbia's pipelines must be encased with a minimum of 2-inch Schedule 80 PVC pipe. For safety reasons, electric and fiber optic lines shall also be surrounded with a minimum of six inches of concrete or encased with 4-inch minimum diameter, .250-wall, coated steel pipe for the full width of the right-of-way. Metallic warning flags shall also be buried above all cable, wire utility, or fiber optic lines crossing a Columbia right-of-way. All crossings must be approved by Columbia before installation begins.
4. Roads shall cross pipelines at or as near 90 degrees as practical, but at angles not less than 45 degrees. The entity constructing the street must pay for any measures required by Columbia to protect its pipeline(s). Such protective measures shall be designed and/or approved by Columbia personnel.
5. Paved areas, such as parking lots, shall not be allowed over the easement unless the pavement can be altered so as not to impact the safe and reliable operation and maintenance of Columbia's pipeline. Concrete paving in Columbia's right-of-way, except for sidewalks and curbs, is prohibited. Consequently, all plans for pavement within a Columbia right-of-way must be submitted and approved by Columbia personnel before paving can begin.
6. Septic tanks and leach fields should be placed so they drain away from the pipeline where practical. In no case shall they be placed in the easement area.
7. The right-of-way may be planted in lawn and small shrubs (less than 5 feet tall) or may be used for normal agricultural purposes. However, shrubs will not be allowed within 5 feet each side of the pipeline. Shrubs greater than 5 feet tall and trees, including fruit or nut bearing trees of any kind, are prohibited within the right of way.
8. Fences that block visual inspection or interfere with access to Columbia's facilities are prohibited within Columbia rights of way. Fences permitted by Columbia to cross its rights of way must be designed with 12-foot gates centered on the pipelines and must cross at or as near to 90 degrees as possible.

State One-Call Notification Services Call Before Digging

Delaware, Maryland:	1-800-257-7777
Kentucky:	1-800-752-6007
New Jersey:	1-800-272-1000
New York:	1-800-962-7962
North Carolina:	1-800-632-4949
Ohio:	1-800-362-2764
Pennsylvania:	1-800-242-1776
Virginia:	1-800-552-7001
West Virginia:	1-800-245-4848

For more information, call the appropriate Columbia representative.

Ohio, West Virginia & Kentucky:	1-304-373-2410
Delaware, Maryland, North Carolina New Jersey, New York, Pennsylvania, Virginia	1-540-465-6429