

STANDARD SPECIFICATION
SECTION 02222 PROTECTING EXISTING UNDERGROUND UTILITIES

PART 1 - GENERAL

1.01 DESCRIPTION

This section includes materials and procedures for protecting existing underground utilities.

1.02 RELATED WORK SPECIFIED ELSEWHERE

Trenching, Backfilling, and Compacting: STD SPEC 02223.

PART 2 - MATERIALS

2.01 REPLACEMENT IN KIND

Except as indicated or as specifically authorized by the District's Representative, reconstruct utilities with new material of the same size, type, and quality as that removed.

2.02 CONTRACTOR SUPPLIED TEMPORARY MATERIALS

Contractor shall supply all materials, including but not limited to, steel beams and bracing, support straps, sheeting and shoring, timbers, and all other items necessary to protect existing underground utilities.

PART 3 - EXECUTION

3.01 GENERAL

- A. Replace in kind street improvements, such as curbs and gutters; fences; signs; paved surfaces; etcetera, that are cut, removed, damaged, or otherwise disturbed by the construction.
- B. Where utilities are parallel to or cross the pipeline trench but do not conflict with the permanent work to be constructed, follow the procedures given below and as indicated on the Drawings. Notify the utility owner 48 hours in advance of the crossing construction and coordinate the construction schedule with the utility owner's requirements. For utility crossings not shown on the Drawings, refer to the instructions of the District's Representative for guidance.
- C. Determine the true location and depth of utilities and service connections which may be affected by or affect the work. Determine the type, material, and condition of these utilities. In order to provide sufficient lead time to resolve unforeseen conflicts, order materials and take appropriate measures to ensure that there is no delay in work. Expose utilities in advance of the pipeline construction by potholing a minimum of 250 feet ahead of pipe laying.

3.02 PROCEDURES

- A. Protect in Place: Protect utilities in place, unless abandoned, and maintain the utility in service, unless otherwise specified.
- B. Cut and Plug Ends: Cut abandoned utility lines and plug the ends with concrete plug. Pour a concrete lug completely around the plugged end of the abandoned utility line such that the line is encapsulated with a minimum of 6 inches of concrete on all sides. Dispose of the cut pipe as unsuitable material.
- C. Remove and Reconstruct: Where necessary or as required by the District's Representative, remove the utility and, after passage, reconstruct it with new materials. Provide temporary service for the disconnected utility.

3.03 COMPACTION

- A. Utilities Protected in Place: Backfill and compact under and around the utility so that no voids are left. Where utilities are concrete encased, use the alternative construction method (sand slurry) for backfill around the utility.
- B. Alternative Construction - Sand Slurry: Sand slurry consisting of one sack (94 pounds) of portland cement per cubic yard of sand and sufficient moisture for workability may be required for backfill to aid in reducing compaction difficulties. Submit specific methods and procedures for the review of the District's Representative prior to construction.

3.04 ADJACENT PARALLEL UTILITIES

Protect existing parallel utilities from any disturbances and repair the lines and associated appurtenances if they are damaged in any way. All costs incurred for protection of utilities or any costs incurred due to the presence of the lines, whether or not they lie within the new construction, shall be borne in full by the Contractor.

END OF SECTION