

SECTION 01070**CUTTING AND PATCHING****PART 1 GENERAL**

1.01 SCOPE OF WORK

- A. Work Included: This section includes work required to provide complete, in place, cutting, fitting, and patching of new and existing work.
1. Do not imperil any work by cutting or altering work or any part of it.
 2. Do not cut structural or reinforcing steel without the written consent of the Engineer.

1.02 DESCRIPTION OF WORK

- A. Execute cutting (including excavating), fitting or patching of work, required to:
1. Make the several parts fit properly.
 2. Uncover work to provide for the installation of ill-timed work.
 3. Remove samples of installed work as specified for testing.
 4. Install specified work in existing construction.
- B. In addition to Contract requirements, upon written instructions from the Engineer:
1. Uncover work to provide for Engineer's observation of covered work.
 2. Remove samples of installed materials for testing.

1.03 SUBMITTALS DURING CONSTRUCTION

- A. Prior to cutting which affects structural integrity or safety, submit written notice to the Engineer and other Contractors, requesting consent to proceed with cutting.
- B. All cutting and patching, to be performed at no additional cost to the Department.
- C. Should conditions of work, schedule, indicate change of materials or methods, submit written recommendation to the Engineer, including:
1. Conditions indicating change.
 2. Recommendations for alternative materials and/or methods.
 3. Submittals as required for substitutions.
 4. Submit written notice to the Engineer, designating time work will be uncovered, to provide for observation.

PART 2 PRODUCTS

2.01 GENERAL

- A. Materials for replacement of work removed shall comply with applicable sections of these specifications for type of work to be performed. Materials not specified herein

shall be replaced as specified in Sub- Section 3.03 of this Section, Restoration.

- B. Provide all tools and equipment required to accomplish cutting and patching.
- C. Completely remove damaged or deteriorated concrete or other material.
- D. Legally dispose of all demolition debris generated by the project. The Contractor shall pay for all loading, hauling, transportation and applicable tipping fees.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect existing condition of work, including elements subject to movement or damage during cutting, patching, excavating, and backfilling.
- B. After uncovering work, inspect conditions affecting installation of new products.

3.02 PERFORMANCE

- A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances and finishes.
- B. Execute cutting and demolition as specified below:
 - 1. The cutting and removal of existing work necessary for modifications and installation of new work shall be made with a minimum of damage to the work that is to remain. Any damage done to existing facilities which are to remain shall be repaired at the Contractor's expense to the satisfaction of the Department.
 - 2. When removing materials, or portions of existing structures, and when making openings in walls and partitions, the Contractor shall take all precautions and use all necessary barriers and other protective devices so as not to damage the structures beyond the limits necessary for the new work, and not to damage the structures or contents by falling or flying debris. Unless otherwise permitted, line drilling will be required in cutting existing concrete.
 - 3. Surfaces of seals visible in the completed work shall be made to match as nearly as possible the adjacent surfaces.
 - 4. Non-shrink grout shall be used for setting wall casting, sleeves, and leveling equipment bases. Doweling anchors into existing concrete and elsewhere as required shall be done with an approved type of epoxy material.
 - 5. Debris created within facilities, which are to remain in service during the modification work, shall be removed daily. Operators of the Department and Contractor's employees shall not be subjected to hazardous areas, when performing their duties.
 - 6. Follow other specific instructions for the modification work given in other sections of these specifications and as shown on the Drawings. Should these instructions conflict, the more stringent conditions shall prevail.
- C. Restore work which has been cut or removed; install new products to provide completed work in accordance with the requirements of Contract Documents.

3.03 RESTORATION

- A. Restore structures and surfaces damaged during the course of this Contract that are to remain in the completed work.
- B. Restoration shall be done with new materials and appropriate methods as specified elsewhere in these specifications for new work of similar nature; if not specified, best recommended practice of manufacturer, or appropriate trade association.
- C. Restore damaged work in such a way that there is a secure intimate bond or fastening between new and old work. Restored surfaces shall be finished to such planes, shapes, and textures that no transition between new and old work is evident in finished surfaces.

3.04 CLEANING

- A. Remove from site all debris, rubbish, and extra material caused by cutting and patching.

END OF SECTION