

SECTION 02 41 00
DEMOLITION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

- A. The work covered by this section consists of furnishing all labor, materials and equipment necessary to perform the demolition and removal, salvaging of existing items specified herein or indicated on the drawings.

1.02 RELATED WORK:

- A. Section 01 28 00 - Cutting and Patching

1.03 REFERENCED STANDARDS:

- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this project.
- B. Refrigerant Recovery Technician Qualifications: Certified by an EPA approved certification program.
- C. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Standards: Comply with ANSI / ASSP A10.6-2006 (R2016) "Safety and Health Program Requirements for Demolition Operations" and NFPA 241 "Standard for Safeguarding Construction, Alteration, and Demolition Operations".
- E. Pre-demolition Conference: Conduct conference at Project site. Review methods and procedures related to selective demolition including, but not limited to, the following:
 - a. Inspect and discuss condition of construction to be selectively demolished.
 - b. Review structural load limitations of existing structure.
 - c. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - d. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
 - e. Review areas where existing construction is to remain and requires protection.

1.04 SUBMITTALS:

- A. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
 - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Locations of proposed dust-and noise-control temporary partitions and means of egress.
 - 5. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
 - 6. Means of protection for items to remain and items in path of waste removal from building.
- B. Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.
- C. Pre-demolition Photographs / Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damaged caused by selective demolition operations.
- D. The procedures shall provide for safe conduct of the work, protection of property that is to remain undisturbed, coordination with other work in progress, non-interference with other contractors, and timely disconnection of utility services.

1.05 RESTRICTIONS/CRITICAL CRITERIA

- A. Owner may occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered during selective demolition remain Owner's property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to Owner.
- C. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
- D. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Arrange to shut off indicated utilities with utility companies.

2. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
- E. Removed and Salvaged Items:
1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents of containers.
 3. Store items in a secure area until delivery to Owner.
 4. Transport items to Owner's storage area designed by Owner or as indicated on Drawings.
 5. Protect items from damage during transport and storage.
- F. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 3. Protect items from damage during transport and storage.
 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- G. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.
- H. Recycle existing materials to the greatest extent possible.
- J. Ownership of salvageable material/equipment to be determined by School District.
- Typical owner salvaged items might include:
1. Door hardware.
 2. Markerboards, tackboards.
 3. Cabinets, countertops
 4. Wall shelving
 5. Mechanical units, equipment
 6. Electrical panels, breakers
 7. Clock/bell/intercom components
 8. Fire/security detection and alarm components.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 PREPARATION:

- A. Coordinate the removal of debris with Owner's representative, a trash dumpster will not be allowed outside the construction area.

3.02 DEMOLITION AND REMOVAL:

- A. All items to be removed unless otherwise noted on the drawings shall become the Contractor's property and shall be removed from the property and disposed of at the Contractor's expense.
- B. Where removal to a line or point is required, except where tothing is specified, neatly and completely cut through material and remove demolished material as carefully as possible.
- C. Partial removal will be permitted only when an item extends beyond the limits of the project.
- D. Electrical work shall be removed as indicated or required with conduit and wire removed to the nearest junction. Remove controls and switches in conjunction with removed items. Abandoned boxes shall be removed not blanked.
- E. Mechanical work shall be removed as indicated or required with abandoned and piping capped. Remove abandoned exposed piping and cap or plug at nearest main or junction. Remove all controls along with equipment.

3.03 UTILITIES:

- A. Disconnection of Utilities: Utilities shall be disconnected at points required or as indicated on the drawings. Removal shall terminate in a manner and at a time satisfactory to the Architect and Owner. Where such disconnection will interrupt the utility services to an area not included in the contract, arrangements for such interruption shall be made with the Architect and Owner at least forty-eight (48) hours in advance of the interruption.
- B. Utilities Not Indicated: When utility lines are encountered that are not indicated on the drawings, they shall be removed and/or relocated, as required, to the extent that they would project into or interfere with the new construction. Removal shall be approved by Jefferson County Public Schools.
- C. All pipes and conduits that remain in service shall be protected or rerouted, as required.
- D. Take necessary precautions to avoid damage to all existing electrical, plumbing, heating and other service lines during breakthrough.

3.05 DISPOSITION OF MATERIALS AND EQUIPMENT:

- A. Title to Materials: Title to all material and equipment to be demolished, is vested in the Contractor upon receipt of notice to proceed unless material or equipment is to be returned to Owner. The Contractor will be responsible for the condition, loss, or damage to such property after the notice to proceed.
- B. Material and Equipment for Contractor Salvage: Salvage materials and equipment shall be promptly removed from the property.
- C. Unsalvageable Materials: Concrete, masonry, and other non-combustible materials shall be disposed of by the Contractor at a suitable disposal site and not on the property. The Contractor shall comply with and obtain all necessary permits and licenses required for disposal of unsalvageable materials.
- D. All materials indicated to be returned to Owner shall be delivered to Owner's storage facility. The facility shall be located within five (5) miles of the project. Verify exact location of storage unit with Owner

3.06 PROTECTION:

- A. The Contractor shall protect utility lines or appurtenances that are to remain and shall repair any construction-related damage.
- B. The dust resulting from demolition shall be controlled to prevent it from spreading and to avoid creating a nuisance in the surrounding area. If the dust creates a nuisance in the operating portions of the facility, the demolition shall be suspended until the dust ceases to be a problem. The use of water will not be permitted when it will result in, or create, hazardous or objectionable conditions.

3.07 REMODELING PATCH AND REPAIR WORK:

- A. Review drawings and trade sections carefully to determine extent of all remodeling and patch and repair work. It shall be the Contractor's responsibility to establish the extent of such work by each trade and to see that all such work is completed as required by the drawings and these specifications.
- B. Where shown or required as part of the work hereunder patching and repair work shall match in materials and finishes the adjoining or abutted surfaces. Although not specifically noted, sections of the detail specifications following shall apply to and govern the installation of such patching and repair work to the same extent as for new work of similar type and character.

- C. Where new partitions or remodeling work is shown within existing rooms or spaces of the building, or where existing rooms or spaces are expanded or enlarged by removal of existing partitions, existing finishes shall be patched, repair or replaced as required
- either to match new finishes if so scheduled or to match existing work to remain.
- D. Where minor alteration or remodeling work is required in an existing wall or partition to remain (such as a new door, cabinets, equipment, mechanical and electrical fixtures) such items shall be patched, repaired, or replaced as required to match existing adjacent finishes.
- E. Walls, and partitions to be removed, shall be removed carefully in small sections in order that adjacent surfaces and equipment to remain will not be damaged.
- F. Remove existing finish floor or walls surfaces where shown or scheduled; patch and repair concrete slabs as required due to demolition.
1. Protect all existing floors or walls to remain in areas to be remodeled from damage due to construction operations of every nature.
 2. Where existing floors or walls must be drilled or cut to accommodate mechanical ductwork and piping, cut necessary openings, set necessary sleeves (for piping), and patch and repair around new opening, as required to match existing adjacent construction.

3.08 CLEANUP:

- A. Debris and Rubbish: The Contractor shall remove debris and rubbish from the site as soon as practicable. Accumulation in buildings or on site will not be permitted.
- B. Local regulations regarding hauling and disposal shall apply.

END OF SECTION 02 4100