

Part II
Division 2

Sitework

SECTION 02 05 10
SELECTIVE DEMOLITION

1 PART 1 GENERAL

1.1 SUMMARY

- A. Section is limited to selective demolition within structures indicated to remain. Refer to Section 02050 Demolition for buildings scheduled to be removed.
- B. Section Includes:
 - 1. Demolishing designated portions of structures.
 - 2. Demolishing designated portions of foundations.
 - 3. Demolishing designated portions of slabs-on-grade.
 - 4. Demolishing, disconnecting and capping designated utilities.
 - 5. Demolishing designated building components, equipment and fixtures.
 - 6. Removing designated items for reuse and Owner's retention.
 - 7. Protecting items designated to remain.
 - 8. Removing demolished materials from site.

1.2 SUBMITTALS

- A. Shop Drawings and Schedule: Describe demolition, removal procedures, sequence and schedule.
- B. Design Data: Submit calculations for bracing, shoring, and underpinning as may be required to protect portions of structures indicated to remain, signed and sealed by professional engineer.

1.3 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations of capped utilities.

2 PART 2 PRODUCTS

Not Used.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Document condition of adjacent portions of structures indicated to remain.
- B. Monitor buildings for movement during demolition operations. Notify Architect/Engineer of measured movement.

3.2 PREPARATION

- A. Call Local Utility Line Information service at not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Provide, erect, and maintain temporary barriers and security devices.
- C. Notify adjacent owners of work which may affect their property, potential noise, utility outage, or disruption prior to the start of Work. Coordinate with Owner.
- D. Layout cuts in post tensioned concrete elements to avoid cutting concrete within 12 inches (300 mm) of any stressing tendon. Notify Architect/Engineer seven days in advance of cutting post-tensioned concrete.
- E. Prevent movement or settlement of adjacent portions of structures. Provide bracing and shoring.
- F. Protect existing landscaping materials indicated to remain.
- G. Erect and maintain weatherproof airtight insulated closures for exterior openings.
- H. Erect and maintain temporary partitions to prevent spread of dust, odors and noise.
- I. Protect existing items indicated to remain.

3.3 DEMOLITION REQUIREMENTS

- A. Conduct demolition to minimize interference with adjacent building areas.
- B. Conduct operations with minimum interference to public or private accesses.
- C. Maintain protected egress and access at all times. Do not close or obstruct roadways sidewalks without permits.
- D. Cease operations immediately when adjacent portions of structures appear to be in danger. Notify authority having jurisdiction and Architect/Engineer.

3.4 BUILDING DEMOLITION

- A. Refer to Section 02050 Demolition.

3.5 SELECTIVE DEMOLITION

- A. Demolish and remove components in orderly and careful manner.
- B. Protect existing supporting structural members.

3.6 CLEAN UP

- A. Remove demolished materials from site as work progresses and dispose of in a legal manner. Recycle demolished materials to the greatest extent possible.
- B. Leave areas of work in clean condition.

3.7 SCHEDULE OF PRODUCTS TO BE REMOVED

- A. Refer to Drawings.

...END OF SECTION

SECTION 02 41 00

DEMOLITION

1 PART 1 GENERAL

DRAFT

1.1 DESCRIPTION:

A. Section Includes:

1. Demolition shall include, unless otherwise noted on Drawings, removal of existing objects or improvements, whether indicated on drawings or not, that would, in the opinion of the owner, prevent or interfere with progress or completion of proposed work.
2. Permits, fees and licenses shall be secured and paid for by Contractor, including disposal charges as required to ensure progress of work will proceed.
3. Work shall comply with requirements of governing authorities in demolition of existing pavement, curbs and gutters, drainage structures and utilities as may be required.
4. Demolition requires removal and disposal charges as required to ensure progress of work will proceed. Protect items designated to remain.
 - a. Building structures as indicated on Drawings or as required by Specifications. Including demolition of designated structures, foundations, slabs-on-grade, building components and fixtures, designated utilities (including disconnecting and capping).
 - b. Entrance drive, parking structures and adjacent landscape work to limits indicated on Drawings, or as required by Specifications.
 - c. Building foundations and supporting walls shall be removed to uniform depth of 18 inches below lowest subgrade elevation.

1.2 SUBMITTALS:

- A. Shop Drawings and Schedule: Describe demolition, removal procedures, sequence and schedule.
- B. Design Data: Submit calculations for bracing, shoring, and underpinning to protect structures indicated to remain signed and sealed by professional engineer.
- C. Closeout Submittals - Project Record Documents: Record actual locations of capped utilities.

1.3 JOB CONDITIONS

- A. Structures to be demolished will be discontinued in use and vacated prior to start of work.
- B. Owner assumes no responsibility for condition of structures to be demolished.

- C. Conditions existing at time of inspection for bidding purposes will be maintained by Owner in so far as practicable. Variations within structure may occur by Owner's removal and salvage operations prior to start of demolition work.
- D. Items of salvageable value to Contractor may be removed from structure as work progresses. Salvaged items must be transported from site as they are removed. Storage or sale of removed items on site will not be permitted.
- E. Explosives shall not be brought to site or used without written consent of authorities having jurisdiction. Such written consent will not relieve Contractor of total responsibility for injury to persons or for damage to property due to blasting operations. The performance of any required blasting shall comply with governing regulations.

1.4 PROTECTIONS

A. Summary:

1. Ensure safe passage of persons around all areas of demolition.
2. Conduct operations to prevent damage to adjacent buildings, structures, other facilities, or injury to persons.
3. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structures to be demolished and of adjacent facilities to remain.
4. Promptly repair damages caused to adjacent facilities by demolition operations at no cost to Owner.
5. Maintain existing utilities indicated to remain, keep in service and protect against damage during demolition operations.
6. Prevent interruption of existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction.
7. Provide temporary services during interruptions to existing utilities as acceptable to governing authorities.
8. Make arrangements, before initiating demolition, for relocating, disconnection, rerouting, abandoning, or similar action as may be required relative to utilities and other underground piping, to permit work to proceed without delay. Arrangements shall be made in accordance with regulations of authorities of utilities concerned, including by not restricting any other services not mentioned, such as overhead and underground power and telephone lines and equipment, gas piping, storm sewers, sanitary sewers, or water piping. Contractor shall not use water when it may create hazardous or objectionable conditions, such as ice, flooding and/or pollution.
9. Use water sprinkling and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level.
10. Comply with governing regulations pertaining to environmental protection.
11. Clean adjacent structures, streets and improvements of dust, dirt and debris caused by demolition operations. Return adjacent areas to condition existing prior to start of work.

12. Notify abutting property owners of demolition schedule in advance of demolition. Notify adjacent owners of work which may affect their property, potential noise, utility outage, or disruption prior to the start of Work. Coordinate with Owner's Representative.

2 PART 2 PRODUCTS

2.1 MATERIAL:

- A. Fill Material: Refer to Specifications Division 31 – Earthwork.

3 PART 3 EXECUTION

3.1 IMPLEMENTATION

- A. Permits - Perform all work in accordance with the demolition requirements of the applicable building code as adopted and, if applicable, amended by the authority having jurisdiction. Apply for, pay for and obtain required demolition permits.
- B. Examination
 1. Document condition of adjacent structures indicated to remain.
 2. Monitor buildings for movement during demolition operations. Notify Owner's Representative of measured movement.
- C. Preparation
 1. Call Local Utility Line Information service "Dig Safe" as per their notification requirements. Request underground utilities to be located and marked within and surrounding construction areas.
 2. Provide, erect, and maintain temporary barriers and security devices.
- D. Standards
 1. Conduct operations with minimum interference to public or private accessways.
 2. Maintain egress and access at all times. Do not close or obstruct roadways, sidewalks without permits.
 3. Cease operations immediately when adjacent structures appear to be in danger. Notify authority having jurisdiction and Owner's Representative.
 4. Disconnect, remove and cap designated utilities to a location acceptable to authority having jurisdiction and utility company. Identify utilities at termination of demolition. Record termination or capped location on Record Documents.
 5. Demolish building(s) completely and remove from site using methods as required to complete work within limitations of governing regulations. Small structures may be removed intact when acceptable to owner and authorities having jurisdiction.

6. Proceed with demolition in a systematic manner, from top of structure to ground and complete demolition work above each floor or tier before disturbing supporting members on lower levels.
7. Locate demolition equipment and remove materials so as to prevent excessive loading to supporting walls, floors, or framing.
8. Remove structural framing members and lower to ground by hoists, derricks, or other suitable methods.
9. Demolish concrete and masonry in small sections. Break up and remove concrete slabs-on-grade unless otherwise shown to remain. Concrete and/or masonry debris to be buried within the basement shall be crushed and compacted.
10. Demolish and remove below grade construction and concrete slabs on grade to a minimum depth of 18 inches below proposed subgrade.

E. Filling Basements and Voids

1. Completely fill below approved subgrade areas and voids resulting from demolition or removal of structures (underground fuel storage tanks, wells, cisterns, etc.) using approved crushed inert demolition debris, compact material and fill voids with select fill materials consisting of stone, gravel and sand free from debris, trash, frozen materials, roots and other organic matter.
2. Ensure that areas to be filled are free of standing water, frost, frozen material, trash and debris prior to fill placement.
3. Place fill materials in horizontal layers not exceeding eight inches (8") in loose depth and compact each layer at optimum moisture content of fill material to density equal to original adjacent ground, unless subsequent excavation for new work is required.
4. Grade surface to match adjacent grades and to provide flow to surface drainage structures after fill placement and compaction.

3.2 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from the site all debris, rubbish and other materials resulting from demolition.
- B. Demolition debris removed from the site shall be disposed of at an approved licensed recycling or disposal facility in accordance with state regulations.
- C. No burning of any materials, debris or trash on-site will be allowed.
- D. Leave areas of work in clean condition.

...END OF SECTION 02 41 00