

Section 02 41 00 Demolition

Specifications

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QUALITY CONTROL

PART 1 – GENERAL

- 1.01 WORK INCLUDED:
- A. Removal and disposal of designated foundations, walls, concrete, utilities, mechanical, lighting and other structures.
- 1.02 RELATED WORK
- A. Section 01 73 29: Cutting and Patching
- 1.03 QUALITY ASSURANCE:
- A. Contractor Qualifications: Minimum of 5 years experience in demolition of comparable structures.
 - B. Requirements of Regulatory Agencies:
 - 1. Comply with requirements of codes.
 - 2. Comply with requirements of local Public Health Authority.
 - 3. Comply with local utility companies and/or utility districts.
- 1.04 SUBMITTALS:
- A. Certificates of severance of utility services.
 - B. Permit for transport and disposal of debris.
 - C. Demolition procedures and operational sequence for review by Owner's Representative
- 1.05 JOB CONDITIONS:
- A. Protection:
 - 1. Erect barriers, fences, guard rails, enclosures, chutes, and shoring to protect structures, and utilities remaining intact.
 - 2. Protect designated trees and plants from damage.
 - B. Maintaining Traffic:
 - 1. Ensure minimum interference with roads, street, driveways, sidewalks, and adjacent facilities.
 - 2. Do not close or obstruct streets, sidewalks, alleys or passageways without permission from authorities having jurisdiction.
 - 3. If required by governing authorities, provide alternate routes around closed or obstructed traffic ways.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

- 3.01 PREPARATION:
- A. Prepare adjacent areas to prevent injury, movement or settlement of structures which are to remain.
 - B. Arrange for, and verify termination of utility services to include removing meters and capping lines.
 - C. Examine the areas and conditions under which the work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
 - D. Remove items scheduled to be salvaged for Owner, and place in designated storage area.

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3.02 DEMOLITION:

- A. Remove designated foundations, walls, concrete, utilities, mechanical, lighting & other structures and dispose of as follows:
 - 1. Dispose of items which are not more than two feet below subgrade elevation.
 - 2. Break items more than two feet below subgrade elevation into sizes not to exceed twelve inches in maximum dimension and leave in place, unless it interferes with succeeding items of construction.
 - 3. Stockpile ballast, gravel other pavement materials when required.
- B. Coordinate removal and relocation of power poles, street lighting, telephone lines and site lighting, with the local electric utility.
- C. Remove existing water services, sanitary sewer and storm drainage pipe and structures as indicated and as necessary to facilitate new construction.
- D. Remove old foundations, cisterns, etc., which may be encountered within the building area.

3.03 SELECTIVE STRUCTURAL DEMOLITION

- A. General:
 - 1. Prior to the start of demolition, carefully study the drawings and these Specifications.
 - 2. In company with the Owner or the Owner's representative, visit the site and verify the extent of demolition to be performed under this contract.
- B. Observe all safety and health precautions as required for removal of hazardous materials when hazardous materials are identified as part of the demolition activity. Refer to specific work requirements associated with hazardous material removal.
- C. Protect other components, materials and landscaping in the vicinity of the demolition to prevent unintentional damage to components and materials that are not to be removed. Provide temporary support of structures that are to remain that are affected by the materials to be demolished and removed.
- D. Remove materials as designated on the drawings. Salvage brick to the extent reasonably feasible for use in re-constructing exterior facades.
- E. Demolished materials that are not to be salvaged for reuse on this project shall be considered to be the property of the contractor and shall be completely removed from the jobsite and disposed of properly.
- F. The contractor shall be responsible for repair of all components, materials and landscaping damaged as part of the demolition process at no additional cost to the Owner.

3.04 DEBRIS REMOVAL:

- A. Promptly remove demolition debris from site.
- B. Obtain permission from applicable regulatory authority for disposal of debris to waste disposal site.
- C. Do not store or burn materials on site.

END OF SECTION

Section 03 30 00 Cast-In-Place Concrete

Specifications

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PART 1 GENERAL

1.01 WORK INCLUDED

- A. Cast-in-place concrete as shown on the drawings.
- B. Formwork, shoring, bracing and anchorage.
- C. Reinforcing steel bars, welded steel wire fabric for cast-in-place and precast concrete.
- D. Support chairs for supporting reinforcement.
- E. Concrete fill and reinforcing steel in concrete masonry units.

1.02 RELATED WORK

- A. Section 04 22 00 - Concrete Unit Masonry

1.03 REFERENCES

- A. ASTM C33 - Concrete Aggregates.
- B. ASTM C94 - Ready-Mixed Concrete.
- C. ASTM C150 - Portland Cement.
- D. ASTM C171 - Sheet Materials for Curing Concrete.
- E. ASTM C260 - Air-Entraining Admixtures for Concrete.
- F. ASTM C309 - Liquid Membrane-Forming Compounds for Curing Concrete.
- G. ASTM C494 - Chemical Admixtures for Concrete.
- H. ASTM D2103 - Polyethylene Film and Sheeting.
- I. ASTM A82 - Cold Drawn Steel Wire for Concrete Reinforcement.
- J. ASTM A185 - Welded Steel Wire Fabric for Concrete Reinforcement.
- K. ASTM A497 - Welded Deformed Steel Wire Fabric for Concrete Reinforcement.
- L. ASTM A615 - Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
- M. ASTM A616 - Rail-Steel Deformed and Plain Bars for Concrete Reinforcement.
- N. ASTM A617 - Axle-Steel Deformed and Plain Bars for Concrete Reinforcement.
- O. ASTM E1155-87 Standard Test Method for Determining Floor Flatness and Levelness Using the F-Number System (Inch-Pound Units)
- P. ASTM E1643-98 – Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
- Q. ASTM E1745-97 – Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs.
- R. ACI 117-90 – Specifications for Tolerances for Concrete Construction and Materials.
- S. ACI 301 - Standard Specifications for Structural Concrete.
- T. ACI 318 - Building Code Requirements for Reinforced Concrete.
- U. ACI 315 - Details and Detailing of Concrete Reinforcement.
- V. AWS D1.4 - Structural Welding Code Reinforcing Steel.
- W. CRSI - Manual of Practice.
- X. CRSI 63 - Recommended Practice for Placing Reinforcing Bars.
- Y. CRSI 65 - Recommended Practice for Placing Bar Supports, Specifications and Nomenclature.

1.04 QUALITY ASSURANCE

- A. Work on the project shall conform to all requirements of ACI 301, Standard Specifications for Structural Concrete, published by the American Concrete Institute, Detroit, Michigan, except as modified by the requirements of these contract documents. Maintain copy of ACI 301 on site.
- B. Tolerances for concrete construction and materials shall conform to all requirements of ACI 117-90.
- C. Obtain materials from same source throughout the project.
- D. Perform concrete reinforcement work in accordance with CRSI Manual of Standard Practice, and Documents 63 and 65. Maintain copy of documents on site.
- E. No later than 48 hours prior to first concrete pour, assemble all personnel responsible for concrete work, including concrete supplier, admixture, manufacturer's representative, testing agency, pump operator, project superintendent, structural engineer, architect, owner, for pre pour conference.

1.05 TESTS

- A. Testing and analysis of concrete will be performed under provisions of Division 1.
- B. Employ at Contractor's expense a testing laboratory to perform material evaluation tests and to design concrete mixes only. All other testing under provisions of Division 1.
- C. Submit proposed mix design for each mix to appointed firm for review prior to commencement of work.