# 33 16 20 DEMOLITION OF EXISTING STEEL WATER STORAGE TANK

# **PART 1 - GENERAL**

#### 1.1 SCOPE

- A. Provide all labor, equipment, materials, and professions services required to demolish and make proper disposal in accordance with applicable regulatory requirements of scrap metal associated with the removal of the existing LCPW 40,000-gallon Countryside Manor Elevated Water Storage Tank.
- B. Secure a demolition permit from the County prior to initiating demolition of the elevated tank. Contractor will pay all fees associated with said permit.
- C. The contractor is responsible to carry out and pay for any test of material deemed necessary in order to do the work and dispose of waste or salvage material.

#### 1.2 SUBMITTALS

- A. Comply with pertinent provisions of Section 01 33 01.
- B. Submit the following for Owner and Engineer review:
  - 1. Demolition Plan
  - 2. Regulatory and Environmental Compliance Plan
  - 3. Health and Site Safety Plan

# 1.3 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

## PART 2 - PRODUCTS - NOT USED

#### **PART 3 - EXECUTION**

## 3.1 GENERAL

A. The Contractor shall make his own inspection and assessment of the condition of the tank prior to demolition, as well as carry out any testing or sampling necessary. The Contractor will then prepare all required submittals as specified and obtain the required permits. The site will be prepared in accordance with the plans and demolition work commenced. The material shall be removed from the site and the site restored.

## 3.2 TANK SWITCH OVER AND DEMOLITION PLAN

A. The Contractor shall submit a tank switch over and demolition plan that details all procedures for demolition of the elevated storage tank in conjunction after putting the new elevated tank in service. The demolition plan shall confirm the tank has been structurally assessed and that the demolition plan and sequence

STEEL WATER STORAGE TANKS/SINGLE PEDESTAL
33 16 19.13-1 (LCPW-COUNTRYSIDE MANOR ELEVATED TANK)

- of demolition will not result in a premature tank structural failure. Plan should provide the most expeditious dismantling of the structure safely feasible to minimize the duration of time partially standing structures remain.
- B. The demolition of the existing storage tank shall only commence once the new elevated storage tank has been planned in service. Six weeks before the new elevated tank is scheduled to be put into service, the existing tank shall be filled and taken offline. The system pressure will then be increased 2 to 3 psi per week over six weeks until the systems pressure is raised from around 35 psi to 50 psi. The new elevated tank shall be activated during these six weeks as appropriate. After the system has operated at the new system pressure (50 psi) to the satisfaction of the Owner, but not less than 7 days, the demolition of the existing storage tank may commence.
- C. During the demolition phase, Contractor shall continue to make inspections and notify the Owner and Engineer of any defects or structural weaknesses of items as they are partially demolished, cut or removed. The demolition plan should include procedures for handling such conditions.

# 3.3 PREPARATION

- A. Protect existing structures, appurtenances, and landscaping which are not to be demolished and/or which are to be salvaged.
- B. Verify the location of existing above and below ground utilities prior to the start of any demolition. This includes, but is not limited to, electric, phone and water lines. Coordinate with utility personnel when disconnecting, removing, capping or relocating a utility within the demolition area.
- C. Upon mobilization, the Contractor shall secure the site and shall provide barricades, fencing, signs, lights, etc to restrict access and to warn the public of possible dangers associated with the demolition.
- D. The Owner will be responsible for draining the tank of water and valving the tank off and isolating it from the distribution system.

#### 3.4 DEMOLITION REQUIREMENTS

- A. Erect and maintain temporary bracing and other means as required to safeguard the structural integrity of the existing portions of the tank as demolition is taking place.
- B. Conduct demolition to minimize interference with adjacent roadways, structures or utilities.
- C. Cease operations immediately if structures, the public or roadways appear to be in danger and notify the Owner immediately.
- D. Demolish the elevated tank structure in an orderly and careful manner.
- E. Demolish the existing concrete foundation a minimum of 24" below grade or as required by the demolition permit from Lake County Planning, Building & Development.
- F. Contractor shall take all precautions during the demolition and removal of the tank from the site to minimize chipping or flaking of pain and deposit of pain particles on Owner's property and surrounding residents.
- G. Blasting, scraping or other similar procedures which may cause paint to removed from the tank surfaces shall not be permitted as part of the demolition operations.
- H. Contractor shall plug with concrete all open ends of pipelines exposed during demolition operations. The open ends of abandoned piping shall be tightly sealed with at least 12-inch thick cast-in-place concrete plugs. Piping shall be disconnected, dismantled and removed as require and in such a manner as to

STEEL WATER STORAGE TANKS/SINGLE PEDESTAL
33 16 19.13-2 (LCPW-COUNTRYSIDE MANOR ELEVATED TANK)

- minimize disturbing or damaging adjacent facilities.
- I. Clean up site, perform all testing required by regulatory and environmental compliance plans.

## 3.5 DISPOSAL

- A. All removed materials, debris and rubbish resulting from the demolition operations shall be removed from the site and disposed of by and at the expense of the Contractor.
- B. Contractor shall provide thorough and complete written documentation of the removal and snapping of the elevated tank. The documentation shall include a description of the material, date of removal, date of delivery to the receiving facility, and date of "destruction" of the material in the processing facility's waste stream. The documentation shall include the written verification of the receiving facility.
- C. All fess and transpiration costs are the responsibility of the Contractor. The Contractor shall bear full responsibility for any and all fines agains the project resulting from improper handling and disposal of the waste materials.

## 3.5 RESTORATION

A. At the completion of the demolition work, the entire site shall be cleaned of all debris and rubbish. Restoration shall be made as required to return the site to equivalent of better condition than existed prior to the work. This shall include redressing of disturbed areas, repairs to any paved surfaces, sodding of disturbed areas, and restoration of any fencing temporarily taken down or damaged.

**END OF SECTION**