# **SECTION S617 - TREE PROTECTION**

### S617 GENERAL

It is responsibility of Contractor to provide tree protection fencing for all existing trees and tree root systems that are located within and immediately adjacent to Project limits to minimize any possible damage due to construction activities.

References to NYSDOT specifications are to be in accordance with latest edition of NYSDOT Standard Specifications (US Customary Units).

### S617-1 DESCRIPTION

Work consists of protection and care of existing trees as required in Contract Documents and as directed by Project Manager.

#### S617-2 MATERIALS

Tree protection fence material may be either fluorescent orange construction safety fencing, or wood rail and post. Tree protection fence is to be at least 4 feet high.

Water is to be in accordance with NYSDOT Section 712-01 Water.

#### **S617-3 CONSTRUCTION DETAILS**

#### S617-3.01 General

Tree protection is to be provided to protect all existing trees within and immediately adjacent to project limits against any accidental cutting, breaking, skinning, or bruising of tree roots, tree bark and tree branches due to Contractor's operations. Tree protection fencing is to be installed before any construction activities commence, and is to remain in place until Contractor is ready to perform final grading and seeding operations. Before commencing any work within any established tree protection zone, Contractor is to receive written authorization from representative of City Forester's office.

Contractor is not to place or stockpile any construction or excavated materials within limits of canopy of any existing tree to prevent smothering of existing tree's root system. Vehicles and other construction equipment are not to be parked on any tree root system, nor left running (idling) under limits of canopy of any existing tree.

Cutting of existing sod and topsoil materials within 4 feet of existing tree trunk for removal to establish new finished grade must be done manually.

Existing tree root system must remain adequate for existing tree to withstand heavy windstorms. If any existing tree roots that are 2 inches in diameter or larger are in conflict with any proposed work and need to be cut, before cutting those tree roots Contractor must notify City Forestry section by calling (585) 428-7581 to arrange for inspection of existing tree root system.

### S617-3.02 Fencing

Existing tree is to be fenced in such manner that tree protection fencing encompasses entire limit of canopy of existing tree. In no case is tree protection fencing to be less than 2 feet from outer edge of existing tree trunk. In those areas where existing tree is bordered by paved surface, curb, wall or building, and minimum tree protection fence dimensions cannot be achieved, tree protection fence is to be installed to within 12 inches of nearest edge of such paved surface, curb, wall or building.

Tree protection fencing is to be installed around existing tree according to following extents:

| Tree Diameter (DBH) (inches) | Minimum Distance of Fence<br>from Tree Trunk – each side<br>(feet) |
|------------------------------|--|
| less than 10                 | 6  |
| 10 thru 14                   | 10   |
| 15 thru 19                   | 12   |
| 20 and over                  | 15   |

### S617-3.03 Maintenance

Tree protection fencing is to be maintained in good condition, and in an upright position. Tree protection fencing that has been damaged, collapsed or been knocked down, or otherwise damaged, is to be restored within 24 hours.

Where cutting of existing tree roots is necessary, it is to be done with sharp cutting tools. Exposed tree roots are to be re-buried as soon as possible. Until exposed tree roots can be re-buried, exposed tree roots are to be covered with wet burlap. Burlap is to be kept wet until exposed tree roots can be re-buried.

Where extensive cutting of existing tree root system has occurred, existing tree root system is to be watered to extent of limits of canopy of existing tree. Apply minimum 1/2 inch of water within 72 hours of when extensive cutting of existing tree root system has occurred.

When weather conditions are consistently dry and when less than 1/2 inch of rain has fallen during any given week, water existing tree root system to extent of limits of canopy of existing tree with at least 1 inch of water.

Existing trees that are damaged by construction activities are to be repaired within 72 hours using current arboricultural standards. Those existing trees that are determined by City Forester to be damaged beyond repair, are to be removed and replaced by Contractor.

## S617-3.04 Utility Installation

Where underground installation of new utility is required to be done within outer limits of canopy of existing tree, tunneling operation is to be used for installation of new utility. Tunneling within outer limits of canopy of existing tree is to be done according to following:

| Tree Diameter (DBH) (inches) | Distance of Tunnel<br>From Tree Trunk – each side<br>(feet) | Minimum<br>Recommended Depth<br>(feet) |
|------------------------------|---|--|
| less than 10                 | 6   | 3                                      |
| 10 thru 14                   | 10  | 3                                      |
| 15 thru 19                   | 12  | 3-1/2                                  |
| 20 and over                  | 15  | 4                                      |

#### S617-4 METHOD OF MEASUREMENT

Quantity to be measured for payment will be number of linear feet of tree protection fence installed, as measured along top of tree protection fence, center to center of end posts.

### **S617-5 BASIS OF PAYMENT**

Unit price bid includes cost of: furnishing, installing, maintaining and removing tree protection fence; hardware; watering; cutting, maintenance and repair of damaged tree roots; burlap; repair or replacement of damaged existing trees; and furnishing all labor, material and equipment necessary to complete the work.

Payment will be made under:

| ITEM NO. | ITEM                        | PAY UNIT    |
|----------|-----------------------------|-------------|
| S617.01  | Fencing for Tree Protection | Linear Foot |