SECTION 31 13 13

SELECTIVE TREE AND SHRUB REMOVAL AND PRUNING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. This specification provides for furnishing all labor, materials and equipment, together with all work incidental thereto, required for the removal and disposal of trees and stumps, as per the Contract Documents. The work includes removal of designated trees and stumps, surface and buttress roots, and generated debris, furnishing and placing screened topsoil that meets Housing Authority Specification, resetting existing granite blocks (if needed), and any other incidental work.
- B. Pruning of trees.

1.02 RELATED REQUIREMENTS

- A. Section 01 50 00 Temporary Facilities and Controls: Includes Temporary Tree and Plant Protection.
- B. Section 01 74 19 Construction Waste Management and Disposal: Limitations on disposal of removed materials; requirements for recycling.

1.03 GENERAL PROVISIONS

- A. The Contractor is directed to sign the Contractors Log located at the Maintenance Office whenever they arrive at a Development. The Contractor shall advise the Development's Superintendent or Manager of the location and work that they shall perform on that day.
 - 1. The Contractor shall verify all locations for the work herein specified as indicated on the Contract Drawings.
 - 2. Workmanship required in the execution of the work herein specified shall be of good quality and subject to the approval of the Authority.
 - At least one employee on each Company crew working within ten (10) feet of energized conductors must be an EHAP certified line clearance tree trimmer and shall be able to produce current evidence of this certification upon demand by NYCHA
 - b. The Contractor must prove to the Agency that at least one member of the
 - Company possesses either a certificate as an "ARBORIST" from the International Society of Arboriculture (I.S.A.) or an equivalent certification or experience which will be determined by the Authority.
 - c. Upon request the Contractor must provide documentation certifying that the
 - majority of the Company's work for the past (3) years has been engaged primarily in the performance of tree removal/maintenance work. Upon request, the Contractor must provide references from previous clients verifying that the company has performed work on contracts of comparable size.
 - (a) The Contractor shall be certified by the New York State Department of Agriculture and Markets to perform work within the Asian Longhorned Beetle Quarantine Zone and provide proof of certification.
 - The Contractor shall supervise and be responsible for the proper location of all trees and/or stumps to be removed as indicated by the Contract Drawings. All work shall be performed in a professional manner and in accordance with the most current revision of the American National Standards for Tree Care Operations: Tree, Shrub and other Woody Plant Maintenance and Standard Practices A-300-1995, published by the American National Standards Institute (ANSI). ANSI Standards A-300-1995 are made part of this contract by this reference.
 - (a) All work shall be performed by skilled persons, directly employed and supervised by the Contractor. All bidders must have in their possession or available to them by formal agreement at the time of bidding the following materials and equipment to perform the work: trucks, aerial lifts, chippers,

stump grinders, hand tools, and other equipment and supplies required to perform the work specified for this contract. A portable stump cutter may also be required at some locations where stumps are inaccessible to larger units, including stumps behind fences, walls and in playgrounds.

- B. The Contractor shall not store vehicles, equipment, tools, materials, on the Development Grounds after working hours, or on Saturdays, Sundays, or Holidays. He shall make all his own arrangements off the site for this.
 - 1. All equipment shall be in good working condition. The Contractor shall remove and replace any equipment in unsatisfactory condition or unsuitable for the required work as deemed by the Authority.
 - Equipment that does not comply with the specifications of this contract or lack of equipment shall be grounds for disqualification of the Contractor.
 - 1) Failure by the Contractor to comply with the above General Provisions will result in the default of the Contractor with all its penalties.

PART 2 PRODUCTS - NOT USED PART 3 EXECUTION

3.01 REMOVAL OF TREES AND STUMPS

- A. The Contractor shall remove the trees as designated by the Authority. The cutting of the tree to be removed shall be done in moderate stages to insure the fullest protection to pedestrians and property. All cuts, branches, limbs and trunks shall be lowered to the ground with stout ropes. Dropping branches, limbs and sections of trunk to the ground or felling of the entire tree in one operation will not be permitted. The stump shall be ground to a depth of 24 inches below the existing grade by use of a stump-grinding machine (See paragraph B. below exceptions)
 - 1. Wood chips shall be removed. The resulting hole shall be backfilled with approved topsoil and compacted to the level of the finished grade and restored as per adjacent areas.
- B. All stumps (either existing OR those to be removed with trees) shall be ground to a depth of 24 inches below the existing grade by use of a stump grinding machine EXCEPT where stumps are located behind a fence hence inaccessible to a stump grinding machine capable of cutting to such a depth; THEN the acceptable grinding depth will be 8-10". Wood chips shall be removed unless requested by the Superintendent to be stockpiled. The resulting hole shall be backfilled with approved topsoil and compacted to the level of the finished grade.
- C. The point of measurement for caliper of a tree shall be 4.5 feet above ground level.
 - When removing a tree(s) that has fallen, the Contractor shall remove the entire tree, stump and all roots/root ball complete. The pit shall be backfilled with approved topsoil to the level of finished grade.

D. RESPONSIBILITY FOR DAMAGES

- 1. The Contractor shall be responsible for any damages to shrubbery, pavements, lawns, trees or other Development property due to the Contract work, during the removal of existing trees and stumps. The Contractor shall restore all existing shrubbery, pavements, lawns, trees or other installations, disturbed or damaged by work under this Contract to their original conditions, with materials matching and equal to the installation, without extra cost to the Authority and to the satisfaction of the Authority.
 - a. The Authority reserves the right to assess liquidated damages of \$50 per day until the damaged area(s) is/are restored.

E. CLEANING UP

- 1. All debris, woodchips and cut wood shall be removed each day from the Development site. Burning debris and cut wood at the Development Site will not be permitted. All excess excavation as well as other material not required or in the opinion of the Authority unsuitable in connection with the work of this Contract is to be immediately removed from the site the same day of excavation or other specific activity by the Contractor.
 - a. If debris is left at a location after 4 p.m., the Contractor shall be charged the full cost of removal of said debris as deemed by the New York City Housing Authority.

- 1) Debris left behind after 4 p.m. poses a hazard to the residents of the Authority.
- F. After completion of the work and before final acceptance, the work shall be thoroughly cleared. The Contractor shall remove from the site all materials, rubbish, stains and defacements which may have come or have been placed thereon as a result of the Contractor's work and which are not required by the Contract to be left as part of the finished work. The entire work shall be left in a clean condition satisfactory to the Authority.

3.02 SITE CLEARING

A. Minimize production of dust due to clearing operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

3.03 VEGETATION

- Do not remove or damage vegetation beyond the limits indicated on drawings.
- B. Install substantial, highly visible fences at least 3 feet (1 m) high to prevent inadvertent damage to vegetation to remain:
 - 1. At vegetation removal limits.
- C. In areas where vegetation must be removed but no construction will occur other than pervious paving, remove vegetation with minimum disturbance of the subsoil.
- D. Vegetation Removed: Do not burn, bury, landfill, or leave on site, except as indicated.
 - 1. Chip, grind, crush, or shred vegetation for mulching, composting, or other purposes; preference should be given to on-site uses.
 - 2. Trees: Sell if marketable; if not, treat as specified for other vegetation removed; remove stumps and roots to depth of 18 inches (450 mm).
 - 3. Sod: Re-use on site if possible; otherwise sell if marketable, and if not, treat as specified for other vegetation removed.
- E. Restoration: If vegetation outside removal limits or within specified protective fences is damaged or destroyed due to subsequent construction operations, replace at no cost to NYCHA.

3.04 PRUNING OF TREES AND SHRUBS

- A. Pruning: Unless otherwise indicated, prune only to maintain balanced natural shape; follow recommendations of ANSI A300 and ANSI Z133.1 and best local practices for species involved.
- B. Shrubs: Prune at least once during maintenance period at best time to influence ultimate shape and size for the particular species.
 - 1. Prune to balance the plant's form and according to its natural growth characteristics.
 - 2. Remove water shoots, suckers, and branches not conforming to desired shape and size.
- C. Hedges: Trim to encourage growth into voids and gaps.
- D. Young Trees: Prune at least once during maintenance period at best time to influence ultimate shape and size for the particular species; do not remove or cut off leader.
- E. Renovation of Established Shrubs: Prune and trim as required to improve shape and balance as appropriate to the particular species; remove dead, damaged, and diseased branches and limbs; do not remove excess growth except as follows:
 - 1. Remove growth in front of windows, above or obstructing entranceways and walkways, leaning against structures, and obstructing vision at street intersections.
 - 2. Where indicated, remove excess growth by pruning technique best suited to future growth for the particular species.
- F. Renovation of Established Trees:
 - 1. Remove dead, damaged, and diseased branches and limbs and structurally weak limbs that may be a safety hazard.
 - 2. Remove growth in front of windows, above or obstructing entranceways and walkways, and leaning against structures.
 - 3. Remove growth obstructing traffic signs or vision at street intersections.

- 4. Remove branches that extend over buildings or otherwise endanger roofs.
- 5. Remove low-hanging branches over vehicular traffic routes to height necessary to clear expected traffic .
- 6. Where indicated, remove excess growth by pruning technique best suited to future growth for the particular species.

3.05 DEBRIS

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

