

TREE PRESERVATION SPECIFICATIONS

TREE PROTECTION ZONE

The Contractor shall provide and install tree protection fencing to protect all existing trees that are to be preserved. The tree protection fencing shall be placed as indicated on Sheet 1 of this Tree Conservation Plan so that the Critical Root Zone (CRZ) within the Tree Protection Zone (TPZ) of the trees to remain shall be guarded to ensure future tree health and stability. The final TPZ shall be set as part of the review process and preconstruction meeting. The Contractor shall install all tree protection fencing before site clearing or construction activities begin.

The Contractor shall not disturb the soil within the TPZ and shall maintain the natural grade within the TPZ. Surface drainage shall not be altered so as to direct water into or out of the TPZ. Construction trailers, traffic, and storage areas shall remain outside fenced areas at all times. No materials, equipment, spoil, or waste/washout water shall be deposited, stored, or parked within the fenced tree protection zone. Spoil from grading shall not be placed within the tree protection zone.

If excavation must occur within the TPZ to meet the project scope, a Maryland Licensed Tree Expert or an International Society of Arboriculture Certified Arborist (ISA-CA) hired by the Contractor shall determine where tunneling, hand work, and root pruning are required. The Contractor shall complete all required root pruning before grading begins (see Root Pruning Specifications on this sheet). Utilities that must pass through the TPZ to meet project scope shall tunnel under the roots if possible. If tunneling is not possible, the Contractor shall, within the TPZ, dig the trench by hand, bridging roots greater than one inch in diameter. Soil removed from the trenches within the TPZ shall be placed on the side of the trench away from the tree(s) and replaced as soon as possible. Utility junction boxes, splice boxes, and manholes shall not be placed within the TPZ. If the Contractor must replace existing pavement within the TPZ to meet the project scope, then the Contractor shall replace the pavement in a manner that will limit root damage to the trees that are to remain. Pavement shall only be cut to its

ADDITIONAL TREE PRESERVATION NOTES

The Contractor shall accomplish the following work before any demolition or site clearing activity occurs within 100 feet of the trees to be preserved:

- 1. The limits of all tree protection zones shall be staked in the field at the preconstruction meeting and
- 2. Structures and underground features to be removed within the tree protection zone shall use the smallest equipment possible, and operate from outside the tree protection zone.
- 3. Additional tree pruning required for clearance during construction shall be performed by an ISA certified arborist/Maryland Licensed Tree Expert and not by construction personnel. All trees shall be pruned in accordance with the provided Tree Pruning Specifications (see below).
- 4. Any root damage during demolition, grading, or construction shall be exposed to sound tissue and cut
- 5. The Contractor shall maintain fire-safe areas around fenced areas. The Contractor shall insure that no heat sources, flames, ignition sources, or smoking is allowed near mulch or trees.

TREE PROTECTION FENCE SPECIFICATIONS

The Contractor shall use a minimum four-foot tall welded wire fencing securely anchored into the ground with eight (8) foot minimum metal "T" fence posts driven a minimum of three (3) feet into the ground. The Contractor shall space the fence posts a maximum of ten (10) feet on-center. Fencing shall be secured to the fence posts and flagged. All sections of tree protection fencing should be clearly marked with signs stating that the area within is a Tree Protection Zone and that grading, excavation, equipment parking, storage of materials, and all other activities that would disturb or compact the soil is strictly prohibited in this area. The signage should be in English and Spanish and clearly state any consequences that are associated with violations. Fencing shall meet or exceed local ordinances.

ROOT PRUNING SPECIFICATIONS

Before demolition, trees that require root pruning (as indicated on Sheet 1) shall be pruned by an ISA certified arborist one (1) foot outside the tree protection zone by cutting all roots cleanly to a depth of 18 inches. The trench shall be a maximum of six (6) inches wide. Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, or other approved root-pruning equipment. Soil removed from the trenches shall be placed on the side of the trench away from the tree(s) and replaced as soon as possible. The Contractor shall cover the back-filled trenches with 3" of mulch.

The trench shall be erected in line with the tree protection fence. The exact location of the trench shall be determined in the field in coordination with the Forest Conservation (FC) Inspector.

TREE REMOVAL, GRUBBING, AND STUMP REMOVAL **SPECIFICATIONS**

TREE REMOVAL SPECIFICATIONS

- An ISA certified arborist/Maryland Licensed Tree Expert shall remove tree(s) that have branches extending into the canopy of tree(s) to remain and not by demolition or construction contractors. The ISA certified
- arborist/Tree Expert shall remove the tree in a manner that causes no damage to the tree(s) to remain. The ISA certified arborist/Maryland Licensed Tree Export shall fell trees to be removed so as to fall away from tree protection zones and to avoid pulling and breaking of roots of trees to remain. If roots are entwined, an ISA certified arborist/Tree Export shall sever the major woody root mass before extracting the trees. The arborist shall accomplish this extraction by cutting through the roots by hand with a vibrating knife, rock saw, or other approved root-pruning equipment.

GRUBBING AND STUMP REMOVAL SPECIFICATIONS

- The Contractor shall grind stumps 18 to 30 inches below the ground surface
- The Contractor shall remove and dispose of all logs, shrubs, brush, matted roots, roots larger than two inches in diameter, and other debris within the clearing limits to a depth of at least 18 inches below the around surface.
- 3. The Contractor shall remove any roots located adjacent to the Tree Protection Fence (TPF) by hand.

FILLING DEPRESSIONS RESULTING FROM TREE REMOVAL SPECIFICATIONS

- The Contractor shall fill any depressions in the soil resulting from stump removal and grubbing with
- The Contractor shall mound the topsoil two inches above the adjacent surface to allow for settling.
- 3. Top soil shall satisfy the specifications of top soil detailed on this sheet.

DISPOSAL OF CLEARING AND GRUBBING RESIDUE SPECIFICATIONS

All grubbing and clearing residue generated by this project shall be hauled off site by the Contractor.

2. On-site burning shall is not permitted. TOPSOIL SPECIFICATIONS

- The Contractor may use topsoil salvaged from the existing conditions provided it meets the standards as specified. The Contractor shall salvage topsoil to a typical depth that is found in the soil survey published by
- USDA-SCS in cooperation with the Maryland Agricultural Experimental Station.
- Soil is considered topsoil if it originates from an "A" horizon of a natural soil or is a mineral soil with 3% or greater organic matter content and a NRCS textural class similar to pre-development "A" horizon soils from the site.
- The Contractor shall not use blended soils. In addition, the Contractor shall use topsoil that:
- a. Is friable and well drained
- b. Has a pH between 5.2 and 7.5
- c. Has an organic matter content not less than 3% d. Has low salinity as indicated by an electrical conductivity (EC) of less than 4.0 mmhos/cm
- e. Is free of debris, stones, gravel, trash, large sticks, heavy metals, and other deterious contaminants (if screening is used to remove debris, the Contractor shall use a screen size that is $\frac{3}{4}$ inch or larger) f. Has a nutrient profile such that it is able to support plant growth
- g. Is free of all plants, plant parts, and noxious weed seeds including, but not limited to, Bermuda Grass, Quack Grass, Johnsongrass, Nutsedge, Poison Ivy, and/or thistle
- h. Is not delivered in a frozen or muddy condition
- 5. The Contractor shall use soil that is free of contaminates which includes, but is not limited to, oil products, concentrated soluble salts, ferrous iron, soluble aluminum, and soluble manganese.

TREE STRESS REDUCTION TECHNIQUES SPECIFICATIONS

TREE CROWN REDUCTION AND/OR PRUNING SPECIFICATIONS

If the County Inspector requires crown reduction and/or pruning, the Contractor shall comply with the following

- 1. A Maryland Licensed Tree Expert shall provide crown reduction and pruning. The arborist or tree worker shall provide proof of workers compensation and general liability insurance.
- The Tree Expert shall prune in accordance with the Tree Pruning Guidelines (International Society of Arboriculture) and/or the ANSI A300 Pruning Standards (American National Standard for Tree Care Operations) and adhere to the most recent edition of ANSI Z133.1.
- The Tree Expert shall prune all protected trees to:
- a. clear the crown of diseased, crossing, weak, and dead wood to a minimum size of $1\frac{1}{2}$ inches
- b. provide eight (8) feet of clearance over walkways and courtyards: c. remove stubs, cutting outside the woundwood tissue that has formed around the branch; d. reduce end weight on heavy, horizontal branches by selectively removing small diameter branches, no greater than two to three inches (2-3") near the ends of the scaffolds; and
- e. preserve the natural character of the tree. 4. The Tree Expert shall not perform pruning during periods of flight of adult boring insects because fresh
- wounds attracts pests. Prune only when the danger of infestation is past. The Tree Expert shall avoid pruning cuts larger than four inches (4") except for dead wood.
- Whenever possible, the Tree Expert shall avoid pruning cuts that exposes heartwood. The Tree Expert shall remove no more than twenty percent (20%) of the live foliage within the tree(s).
- The Tree Expert shall not remove the central leader/ The Tree Expert shall not strip out interior branches.
- 10. The Tree Expert shall tie back branches where temporary clearance is required for demolition, grading, and construction access to hold them out of the clearance zone.
- While in the tree, the arborist shall perform an aerial inspection to identify defects that require treatment. Any additional work needed shall be reported to the owner.

WATERING SPECIFICATIONS

If the County Inspector requires watering of the tree(s) to remain, the Contractor shall comply with the following

- 1. The Contractor shall water the trees to remain during times of low rainfall (less than 1" of rain per 14 day period) twice per six day period at four hours per event.
- 2. The Contractor shall water the entire critical root zone of the tree(s) with the prescription.

FERTILIZATION SPECIFICATIONS

If the County Inspector requires fertilization of the tree(s) to remain, the Contractor shall comply with the following

- 1. The Contractor shall use a slow release fertilizer at a rate of no less than 1 lb. of N/1000² and no more than 1.5 lb. of $N/1000^2$.
- The Owner shall provide proof to the County Inspector of the rates of nitrogen installed if fertilization is not done by a Maryland Licensed Tree Expert.

SOIL COMPACTION MITIGATION SPECIFICATIONS

If the County Inspector requires soil compaction mitigation, the Contractor shall comply with the following specifications:

- 1. If vertical mulching is used the Contractor shall drill holes $2 2\frac{1}{2}$ inches in diameter and 12 to 18 inches deep into the compacted soil. The holes shall encompass the critical root zones of the affected tree(s) and
- spaced two (2) feet apart in a grid pattern. The Contractor shall fill the holes with a porous material mixture such as leaf mulch, perlite, pea gravel, or vermiculite. 2. If radial mulching/trenching is used the Contractor shall make radial trenches in a spoke pattern around the tree. The trenches shall have soil replacement done by using a mixture of topsoil, organic mixes, leaf
- 10 feet but no closer than five (5) feet from each other. 3. If an air spade is used the Contractor shall remove the compacted soil and immediately replace the soil removed with a highly organic soil mix.

mulch, or vermiculite. The trenches shall start at least four feet from the base of the tree, extend out at least

PEST AND PATHOGEN CONTROL SPECIFICATIONS

- 1. The Contractor shall treat any affected trees that experience an insect or disease infestation during the
- 2. A Licensed Tree Expert and a Certified Pesticide Applicator with the State of Maryland shall carry out the

construction phase of this project to control and/or eliminate the infestation at the property owner's expense.

REMOVAL OF HAZARDOUS TREES OR LIMBS

- 1. The Developer and/or Builder is responsible for the complete preservation of all forested areas shown on the approved plan to remain undisturbed. Only trees or parts thereof designated by the county as dead, dying, or
- hazardous may be removed. A tree is considered hazardous if a condition is present which leads a Certified Arborist or Licensed Tree Expert to believe that the tree or a portion of the tree has a potential to fall and strike a structure, parking area. or other high use area and result in personal injury or property damage.
- During the initial stages of clearing and grading, if hazardous trees are present, or trees are present that are not hazardous but are leaning into the disturbed area, the Permitee shall remove said trees using a chain saw. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the County Inspector. With a chainsaw cut the tree near the existing ground level only after approval by the inspector. Do not remove the stump or cover it with soil, mulch, or other materials that would inhibit sprouting. 4. If a tree or trees become hazardous prior to bond release for the project, due to storm events or other
- situations not resulting from an action by the Permitee, prior to a removal, a Certified Arborist or a Licensed Tree Expert must certify that the tree or the portion of the tree in question has a potential to fall and strike a structure, parking area, or other high use area and may result in personal injury or property damage. If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the Permitee shall take corrective action immediately. Fully document the condition of the area through photographs prior to taking corrective action. The Developer and/or Builder shall submit the photos to the inspector for documentation of the damage.

If corrective pruning may alleviate a hazardous condition, the Certified Arborist or a Licensed Tree Expert may proceed without further authorization. The Certified Arborist or Licensed Tree Expert shall prune in accordance with the latest addition of the appropriate ANSI A-300 Pruning Standards. Fully document the condition of the area through photographs prior to take corrective action. The Developer or Builder shall submit the photos to the Inspector for documentation of the damage.

The Developer and/or Builder may remove debris from the tree removal or pruning that occurs within thirty-five feet (35') of the woodland edge and properly disposed of it by recycling, chipping, or other acceptable methods. The Developer or Builder shall cut up all debris that is more than thirty-five feet (35') from the woodland edge and allow it to contact the ground, thus encouraging decomposition. The Developer or Builder shall place the smaller materials into brush piles that will serve as wildlife habitat.

A permit from the Maryland Department of Natural Resources is required for tree work completed within a road right-of-way unless the tree removal is shown within the approved limits of disturbance on a TCP2. A required Licensed Tree Expert shall conduct the work.

POST DEVELOPMENT NOTES

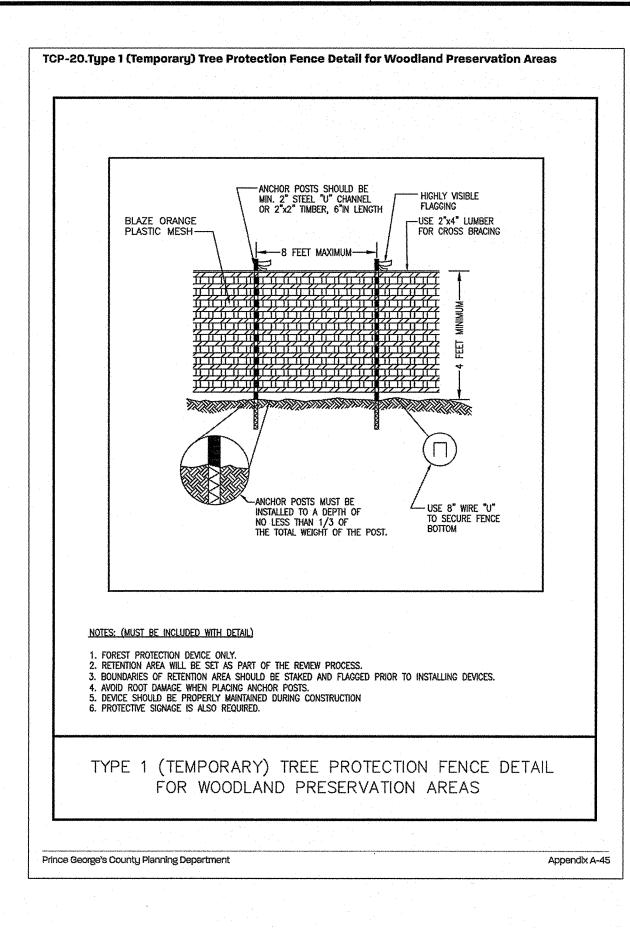
1. If the Developer or Builder no longer has an interest in the property and the New Owner desires to remove a hazardous tree or portion thereof, the New Owner shall obtain a written statement from a Certified Arborist or Licensed Tree Expert identifying the hazardous condition and the proposed corrective measures prior to having the work conducted. After proper documentation has been completed per the handout "Guidance for Prince George's County Property Owners, Preservation of Woodland Conservation Areas", the Arborist or Tree Expert may then remove the tree. The Arborist or Tree Expert shall cut the stump as close to the ground as possible and leave it in place. The removal or grinding of the stumps in the woodland conservation area is not permitted.

If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the Permitee shall take corrective action immediately. Fully document the condition of the area through photographs prior to taking corrective action. The New Owner shall submit the photos to the Inspector for documentation of the damage.

A permit from the Maryland Department of Natural Resources is required for tree work completed within a road right-of-way unless the tree removal is shown within the approved limits of disturbance on a TCP2. A

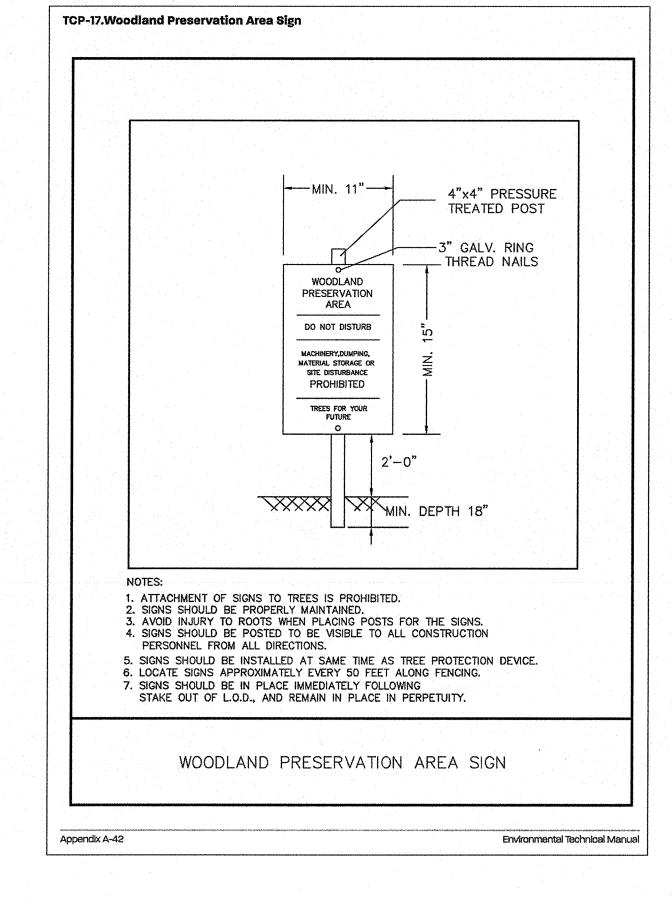
- The New Owner shall only remove noxious, invasive, and non-native plant species from any woodland preservation area with the use of hand-held equipment (pruners or a chain saw). The New Owner may cut these plants near the ground and may remove the plant material less than two-inches (2") diameter from the area and dispose of it appropriately. Cut all noxious, invasive, and non-native plant material inches (2") diameter and allow it to contact the ground, thus encouraging decomposition.
- The use of broadcast spraying of herbicides is not permitted. However, the use of herbicides to discourage re-sprouting of invasive, noxious, or non-native plants is permitted if done as an application of the chemical directly to the cut stump immediately following cutting of plant tops. The New Owner shall use any herbicide in accordance with the label instructions.
- The use of chainsaws is extremely dangerous. Do not use poorly maintained equipment, without safety equipment, or if not trained in the use of this equipment for the pruning and/or cutting of trees.

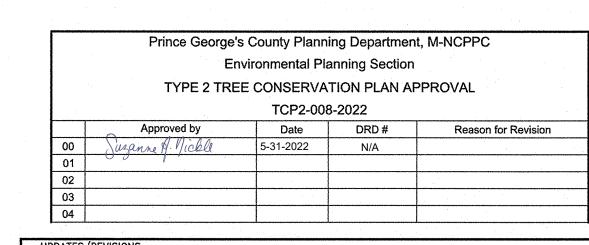
required Licensed Tree Expert shall conduct the work.



TCP-26.Root Pruning Detail FENCE WITHIN 1 FOOT OF TRENCH LINE 1 BACK OF UNIT OF DISTURBANCE LINE Source: Maryland State Forest Conservation Technical Manual, 3rd Edition - 1997 1. RETENTION AREAS TO BE ESTABLISHED AS PART OF THE FOREST CONSERVATION 2. BOUNDARIES OF RETENTION AREAS SHOULD BE STAKED, FLAGGED AND/OR FENCED PRIOR TO TRENCHING.

3. EXACT LOCATION OF TRENCH SHOULD BE IDENTIFIED. 4. TRENCH SHOULD BE IMMEDIALTEY BACKFILLED WITH SOIL REMOVED OR OTHER HIGH 5. ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE ROOT PRUNING Prince George's County Planning Department Appendix A-51





UPDATES/REVISIONS: 03/17/22 ADDRESS REVIEW COMMENTS. RPI

> TREE CONSERVATION PLAN 2 TCP2 - 008 - 2022 TCP PLAN 13700 BADEN NAYLOR ROAD - LOT 9

MANSFIELD NOTTINGHAM (4th) ELECTION DISTRICT PRINCE GEORGE'S COUNTY, MARYLAND



Charles P. Johnson & Associates, Inc. ASSOCIATES / 1751 Elton Rd., Ste. 300 Silver Spring, MD 20903 301-434-7000 Fax: 301-434-9394 www.cpja.com • Silver Spring, MD • Galthersburg, MD • Annapolis, MD • Greenbelt, MD • Frederick, MD • Fairfax, V.

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plan is true and accurate and meets the minimum submittal standards provided in the Prince George's County Environmental Techinal Manual. I hereby certify that I have either personally prepared the plans or reviewed the work of others for accuracy and completeness. Sallie Patarait 5/26/22

TREE CONSERVATION PLAN CERTIFIED BY:

I hereby certify that the information on this

SALLIE P. STEWART, RLA MD Registered Landscape Architect #612 Exp. Date: 09/08/2023 Seal not valid without signatur

are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2. Contract Purchaser

Owner or Owners Representative

PROPERTY OWNERS AWARENESS CERTIFICATE

understand the requirements as set forth in this TCP2.

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_ hereby acknowledge that we

_ hereby acknowledge that we

Date