Subject Matter: Tree Protection & Landscape

Ordinance

Date First Presented to Council at Public

Meeting: December 19, 2005

Date of Second Reading and Date of Adoption: January 16, 2006

TOWN OF SHARPSBURG COUNTY OF COWETA STATE OF GEORGIA

# ORDINANCE NUMBER <u>06-01</u> TOWN OF SHARPSBURG, GEORGIA PREAMBLE & FINDINGS

WHEREAS, it is the finding of the Mayor and Town Council of the Town of Sharpsburg that the historical, cultural and aesthetic heritage of the Town of Sharpsburg are some of its most valued and important assets and that the protection of this heritage is essential to the promotion of the health, prosperity and general welfare of its people; that the landscape features of the Town have a special historical, cultural and aesthetic interest and value to the Town and its people; and

WHEREAS, the Town of Sharpsburg finds the preservation of mature trees within the Town of Sharpsburg promotes the health, safety and general welfare of the Town and its people because mature trees serve in the purification of air, the moderation of the microclimate, the reduction of noise and glare, the conservation of energy, the prevention of soil erosion, improvement of storm water management, enhancement and the stabilization of property values and is important in the preservation of the Town's wooded character; and

**WHEREAS**, it is the desire of the Town of Sharpsburg to promote and to provide for the health, safety and general welfare of its citizens, it is the desire of the Town to enact this Tree Protection and Landscape Ordinance.

WHEREFORE, THE TOWN OF SHARPSBURG HEREBY ADOPTS, ORDAINS AND ENACTS THE FORGOING TREE PROTECTION AND LANDSCAPE ORDINANCE AS FOLLOWS:

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## **ARTICLE ONE**

## Sec. 38-100. PURPOSE

This tree protection and landscaping ordinance has been developed to benefit the environmental and aesthetic quality of the Town. The intent is to create an opportunity for and to promote the protection of the Town's natural resources and promote growth in a way that will provide a healthy environment for the Town's future. The purpose of this article is to provide standards for the protection of trees as part of the land development process; to prevent massive grading of land, both developed and undeveloped, without provision for replacement of trees; and to protect trees during construction whenever possible in order to enhance the quality of life within the Town. The regulations of this tree protection and landscaping ordinance shall be the definitive, unless otherwise directed by the zoning ordinance or Town Code of Ordinances.

It shall be the duty of the Town landscape architect to enforce the provisions and requirements of this article. The Town landscape architect shall have the authority to revoke, suspend, or void any land disturbance permit and shall have the authority to suspend all work on a site or a portion thereof.

#### Sec. 38-101. DEFINITIONS

The following words, terms and phrases, when used in this ordinance, shall have the meanings ascribed to them in the Section, except where the context clearly indicates a different meaning:

**Adjoining land, lot, or parcel**: A lot or parcel of land that shares all or part of a common lot line with another lot or parcel of land.

**Aesthetic:** The perception of artistic elements or elements in the natural or created environment that is pleasing to the eye.

Amenities: A natural or created feature that enhances the aesthetic quality, visual appeal, or makes more attractive or satisfying a particular property, place, or area.

#### **Buffer:**

1. Open spaces, landscaped areas, fences, walls, berms, or any combination thereof used to physically separate or screen one use or property from another so as to visually shield or block noise, light, or other environmental nuisance;

- 2. An area along some natural feature designated to protect and/or preserve the essential character of such feature and allow it to be maintained in an undisturbed and natural condition;
- 3. A natural undisturbed portion of a lot, except for approved access and utility crossings, which is set aside to achieve a visual barrier between the use on the lot and adjacent lots and/or uses. A buffer is achieved with vegetation, and must be replanted subject to approval of the Town landscape architect when sparsely vegetated. Clearing of undergrowth from a buffer is prohibited excepted when accomplished under the supervision of the Town landscape architect. Land area used to visibly separate one use from another through screening and distance, to shield or block noise, light, glare, visual, or other conditions, to block physical passage to non-similar areas, or to reduce air pollution, dust, dirt, and litter. Also "buffer area" or "buffer strip."

**Caliper:** A measure of the diameter of a tree trunk for the purpose of size grading or classification. The caliper of the trunk is measured six inches above the ground, up to and including four-inch caliper size, and at diameter breast height (dbh) when the trunk is larger than 4".

**Clearing:** The removal of vegetation from a property, whether by cutting or other means.

**Clear-cutting:** The indiscriminate and broad removal of trees, shrubs, or undergrowth. This definition shall not include the selective removal of non-native tree and shrub species when the soil is left relatively undisturbed; removal of dead trees; or normal mowing operations. See also "clearing."

**Critical root zone: (CRZ)** The minimum area beneath a tree which must be left undisturbed in order to preserve a sufficient root mass to give a tree a reasonable chance of survival. The critical root zone is approximately one foot (1') of radial distance for every inch of tree's DBH, with a minimum of eight feet (8').

#### Cut:

- 1. A portion of land surface or area from which soil, earth, rock. Or other materials has been removed or will be removed by excavation;
- 2. The height below original ground surface after the material has been or will be removed.

**DBH** (**Diameter-at-breast-height**): is the trunk diameter (in inches) at a height of four and one-half feet above the ground. If a tree has multiple trunks below four and one-half feet, then the trunk is measured at its most narrow point beneath the split.

Deciduous: Plants that annually lose their leaves.

**Development:** All structures and other modifications of the natural landscape above and below ground or water, on a particular site, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating or drilling operations.

**Drip line:** A vertical line extending from the outer surface of a tree's branch tips to the ground.

**Erosion:** The process by which land surface is worn away by the action of wind, water, ice, or gravity.

**Evergreen:** Plants that retain foliage throughout the year.

**EDF (Existing Density Factor):** The tree density units awarded for the protection of existing trees which will remain on site to be protected during construction.

**Fill:** A portion of land surface to which soil or other solid material has been added; the depth above the original ground; the height above original ground surface after the material has been or will be added.

**Grade**, existing: The vertical location of the existing ground surface prior to cutting or filling.

**Grade, finished:** The final grade or elevation of the ground surface after cutting or filling and conforming to a proposed and approved design.

**Grading:** Altering the shape of ground surfaces to specified elevations, dimensions, and/or slopes; this shall include stripping, cutting, filling, stockpiling and shaping or a combination thereof, and shall include the land in its cut or filled condition.

Grubbing: The removal of stumps or roots from a site.

Land clearance: Removal of trees and/or vegetation from the land surface.

Land disturbance activity: Any activity which may result in soil erosion from water or wind and the movement of sediments into state and local waters or onto lands within the state, including but not limited to clearing, dredging, grading, excavating, transporting, or filling of land but not including agricultural practices such as a family vegetable plot or forestry which is defined by law as a non-land disturbing activity

**LDP** (Land Disturbance Permit): Any permit other than a building permit issued by the Town that authorizes clearing, grubbing, excavating, filling, grading or other land disturbance activities on a site or portion of a site. Said permit may be clearing, clearing and grubbing, or development permit as defined and authorized under the development regulations of the Town.

**Landscape plan:** A planting plan for a development, required by this ordinance.

**Landscape strip:** Land area located within the boundary of a lot and required to be set aside and used for landscaping upon which only limited encroachments are allowed.

# Landscaping:

- 1. An expanse of natural scenery; or
- 2. Any combination of natural and man-planted and maintained features including lawns, trees, shrubs, other plants, decorative or natural ground cover, exposed rock, mulch, wood chips, water features, sculpture, paths, etc.

**Legitimate Timber Harvesting:** The act of removing harvestable trees and wooded areas which qualify as forestry land management practices or agricultural operations as defined in O.C.G.A. 12-7-17, as amended, on tracts of land zoned for or used for forestry, silvicultural, or agricultural purposes.

**Natural features:** Trees or other living vegetation, and rocks.

**RDF** (Replacement density factor): The minimum number of tree density units which must be achieved on a property after subtracting tree density units for existing trees (EDF) which will remain on site and be protected during construction.

**Screening:** The method of visually shielding or obscuring one abutting land use from another, using densely planted vegetation.

**Sediment:** Solid material, both mineral and organic, that is in suspension, is being transported or has been moved from its site of origin by air, water, ice, or gravity; the product of erosion.

**Sedimentation:** The process by which eroded material is transported and deposited by the action of wind, water, ice, or gravity.

**Shrub:** A woody plants, either, evergreen or deciduous, with a mature height usually less than ten feet.

#### Site:

- 1. Any tract, lot, or parcel or land in combination of tracts, lots, or parcels of land which are in one (1) ownership or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision, or project;
- 2. All contiguous land and bodies of water in one (1) ownership, graded or proposed for grading or development as a unit, although not necessarily at one time;
- 3. Regarding historic properties, a site is the location of a significant event, a prehistoric or historical occupation or activity, or a building or structure, whether standing,

ruined, or vanished, where the location itself maintains historical or archaeological value regardless of the value of any existing structure.

**SDF** (Site density factor): The minimum number of tree density units per acre which must be achieved on a property after development (16 units per acre, exclusive of any acreage within a zoning buffer and any trees required to be preserved or planted in a zoning buffer).

Site plan: A document or group of documents containing sketches, text, drawings, maps, photographs, and other material intended to present and explain certain elements of a proposed development, including physical design, siting of buildings and structures, interior vehicular and pedestrian access, the provision of improvements, and the interrelationship of these elements.

**Specimen tree:** Any tree which qualifies for special consideration for protection due to its size, species or historic relevance. Further defined at Article Two Sec. 38-109.

Stripping: see 'Grubbing'

Timber Harvesting: The act of removing trees as permissible by law or zoning

**Topography:** The configuration of surface features of a region, including its relief and rivers, lakes, and showing relative elevations.

Town: The Town of Sharpsburg Georgia.

**Town landscape architect:** The landscape architect acting as agent for the Town of Sharpsburg having the primary responsibilities of administration and enforcement of the tree Protection and landscape ordinance.

**Tract:** An area, parcel, site, piece of land, or property that is subject of a development application.

Tree: Any living, self-supporting woody perennial plant.

Tree, overstory: Trees that will generally reach a mature height of greater than 40 feet.

**Tree, understory:** Trees that will generally reach a mature height of under 40 feet.

Tree density standard: The minimum number of tree density units per acre which must be achieved on a property after development.

Tree diameter: see DBH, see Caliper.

Tree Protection area: Any portion of a site wherein are located existing trees which are proposed to be retained in order to comply with the requirements of this article. The tree

protection area shall include no less than the total area beneath the tree canopy as defined by the dripline of the tree plus any additional area encompassing the critical root zone of a tree or group of trees collectively.

**Tree Protection plan:** A plan that identifies tree protection areas, existing trees to be retained and proposed trees to be planted on a property to meet minimum requirements, as well as methods of tree protection to be undertaken on the site and other pertinent information.

**Tree removal:** Any act which causes a tree to die within **two years** after commission of the act, including but not limited to damage inflicted upon the **CRZ** or trunk as a result of:

- 1. The improper use of machinery on the trees;
- 2. The storage of materials in or around the trees;
- 3. Soil compaction;
- 4. Altering the natural grade to expose the roots or to cover the tree's root system with more than four inches of soil;
- 5. Pruning judged to be excessive by the Town landscape architect or not in accordance with the standards set forth by the International Society of Arboriculture (ISA);
- 6. Paving with concrete, asphalt, or other impervious surface within such proximity as to be harmful to the tree or its root system; and
- 7. Application of herbicides or defoliates to any trees without first obtaining a permit.

**Tree save area:** see Tree Protection Area.

Tree thinning: Selective cutting or thinning of trees for the clear purpose of good forestry management in order to protect said forest from disease or infestation and in no way shall be construed as clear cutting.

**Weeds:** Any undesired, uncultivated plant, especially one growing. In profusion so as to crowd out a desired crop, disfigure a lawn, etc. For the purposes of this article, weeds shall also include grass and/or underbrush in non-agriculturally used property, which is at least 12 inches tall.

**Zoning buffer:** A buffer, as defined in and required by the zoning ordinance or as a condition of zoning, special exception, or variance approval for a specific property.

#### Sec 38-102 APPLICABILITY

1. The terms and provisions of this article shall apply to all activity which requires the issuance of a land disturbance permit on any real property within the Town. No clearing, grubbing, grading, or other removal of existing vegetation that may effect the health of existing tree coverage may occur until it is determined that the proposed development is in conformance with the provisions of this article and other applicable city codes and regulations.

- 2. Exemptions from the provisions of this article include the following project types:
  - a) Grandfathered Projects Any property included within the limits of a LDP (Land Disturbance Permit) approved prior to the effective date of this article, and remaining portion of a project where 75 percent of area has already been included in LDP's approval prior to the effective date of this Ordinance.
  - b) Horticultural or agricultural operations Land clearing for clearly agricultural purposes, including legitimate timber harvesting operations which qualify as forestry land management practices or agricultural operations as defined in O.C.G.A. 12-7-17, as amended, on land zoned for or used for forestry, silvicultural, or agricultural purposes; plant or tree nurseries; orchards, are exempt.

This exemption shall not include tree harvesting incidental to the development of land, or tree harvesting on land that is anticipated to be developed for non horticultural uses. Further, the operation of legitimate timber harvesting shall provide a 50-foot undisturbed buffer measured from the Right of Way, provided and maintained along all road frontages, during the land disturbance activity, except for authorized access crossings to ensure the efficient operation of the Town's street system and to protect the health and general welfare of persons using the Town street system. No timber harvesting shall be undertaken on any parcel of land unless the transitional buffer zones required by the zoning regulations of the district in which located, are preserved in a natural and undisturbed state.

This Ordinance only regulates timber harvesting where such harvesting is incidental to development or tree harvesting on land that is anticipated to be developed for non horticultural uses and recognizes the preemptive power of the State of Georgia with the regulation of legitimate timber harvesting as defined in this Ordinance.

c) The removal of diseased or infested trees - Removal upon advice and written finding of the county extension service, Georgia Forestry Commission, a certified arborist, or state registered urban forester, or the Town landscape architect.

The following Matrix indicates which requirements of this ordinance apply to each zoning classification. Note: any requirement can be applied or removed through conditions of zoning or variance.

TREE PRESERVATION ORDINANCE APPLICABILITY SUMMARY										
ARTICLE II	REQUIREMENT	ZONING DISTRICT								
SECTION		Σ	R2	QNT	TMF	TC	TNC	THC	PCD	LI
Sec. 38-108	SITE DENSITY	Х	Х	Х	Χ	Х	Х	Х	Х	Χ
Sec. 38-109	SPECIMEN TREE REPLACEMENT	X	Х	Х	Х	Х	Х	Х	Х	Χ
Sec. 38-110	PARKING LOT TREES		Х	Х	Χ	Х	Х	Х	Х	Χ
Sec. 38-111	LANDSCAPE STRIP		X	X	Х	Х	Х	Х	Χ	Χ
Sec. 38-112	BUFFERS		Χ	Х	Χ	Х	Χ	Χ	Χ	Χ
Sec. 38-113	SCREENING	Х	Х	Χ	Х	Χ	Χ	Х	Χ	Х
Sec. 38-114	BUILDING LANDSCAPING REQUIREMENTS	Х	X	X	Χ	Х	X	Χ	Χ	Х

#### Sec. 38-102.1 LEGITIMATE TIMBER HARVESTING NOTICE

Any persons or firms performing legitimate timber harvesting operations in any incorporated area of the Town the for delivery as pulpwood, logs, poles, or wood chips to any wood yard or processing plant located inside or outside the State of Georgia shall provide notice of such legitimate harvesting operations to the Town Administrator or the designated agent thereof prior to cutting any such timber.

The notice to the Town shall include:

- (1) Prior written notice of legitimate timber harvesting for each separate tract to be harvested thereby;
- (2) A map of the area which identifies the location of the tract to be harvested and, as to those trucks which will be traveling to and from such tract for purposes of picking up and hauling loads of cut forest products, the main point of ingress to such tract from a public road and, if different, the main point of egress from such tract to a public road;
- (3) A statement as to whether the timber will be removed pursuant to a lump sum sale, per unit sale, or owner harvest for purposes of ad valorem taxation under O.C.G.A Sec. 48-5-7.5;
- (4) The name, address, and daytime telephone number of the timber seller if the harvest is pursuant to a lump sum or per unit sale or of the timber owner if the harvest is an owner harvest; and
- (5) The name, business address, business telephone number, and nighttime or emergency telephone number of the person or firm harvesting such timber.

The notice may be submitted in person, by transmission of an electronic record via telefacsimile or by mail.

The persons or firms subject to such notice requirement shall deliver a bond or letter of credit to the Town, in which case notice shall not be or remain effective for such legitimate harvesting operations unless and until the person or firm providing such notice has delivered to the Town Administrator or its designated agent a valid surety bond, executed

by a surety corporation authorized to transact business in this state, protecting the Town against any damage caused by such person or firm in an amount specified by the Town not exceeding \$5,000.00 or, at the option of the person or firm harvesting timber, a valid irrevocable letter of credit issued by a bank or savings and loan association, as defined in O.C.G.A. sec. 7-1-4, in the amount of and in lieu of such bond. The surety bond or letter of credit shall be valid only for the calendar year in which delivered.

The notice shall be effective for such harvesting operation on such tract within the Town upon receipt of the same by the Town or its designated agent and, if applicable, compliance with the above surety requirements of this Ordinance and until such time as the person or firm giving such notice has completed the harvesting operation for such tract; provided, however, that any subsequent change in the facts required to be provided for purposes of such notice shall be reported to the Town or its designated agent within three (3) business days after such change.

Violation of the notice requirements of this Ordinance shall be punishable by a fine of \$500.00. Each day of a violation shall be considered a separate offence.

#### Sec. 38-102.2 LEGITIMATE TIMBER HARVESTING DEVELOPMENT MORATORIUM

Once legitimate tree harvesting takes place in conformity with the above regulations, no other land disturbing activities, shall be permitted on the entire property for a period of two years after completion of the legitimate tree harvesting operations. For purposes of this paragraph the last date of legitimate tree harvesting shall be the last day in which a legitimate tree harvesting operation is conducted. The property owner who conducts a legitimate tree harvesting operation within the Town shall be required, within thirty (30) days of the last day of legitimate tree harvesting operation, to deliver to the Town Administrator a written notice setting forth the last date of the legitimate tree harvesting operation and the identity and location of the property. Upon a property owner failing to timely notify the Town Administrator as provided above, the Town Administrator shall establish the last day of deforestation based upon the best information available, which estimated date shall not be rebutable.

#### Sec. 38-103 ZONING CONDITIONS AND VARIANCES

The Town landscape architect, as part of the review team, will conduct a preliminary review of all rezoning cases, special use permit applications and variance requests. Conditions for approval will be applied where determined necessary by the preliminary review. These conditions may be either general, or specific in nature, and will reflect the standards or provisions of this article and the zoning ordinance. Compliance to these conditions will be verified by review of a revised site plan prior to the issuance of a land disturbance permit.

The Town reserves the right to waive any or all requirements as part of conditions of rezoning, special use permit and variance.

# Sec. 38-104 PERMITTING PROCEDURES

- 1. A tree removal permit is required to remove any tree larger than eight inches in diameter from any property that is subject to a Land Disturbance Permit. The fee for obtaining a tree removal permit will be part of the Land Disturbance Permit fee and will be based on the number of trees to be removed. Some tree removal permits may be granted without a tree removal fee in accordance with Article IV of this ordinance. If any specimen trees are removed from any property without a tree removal permit, the property owner shall pay a fine of twice the tree removal fee calculated. Minimum required site tree densities must be maintained at all times. Failure to maintain the required tree densities may result in re-plantings.
- 2. Prior to the submission of any permit drawings, the applicant is encouraged to meet with the Town landscape architect to discuss the tree protection/landscape ordinance as it relates to the applicant's property. The purpose of the pre-submittal conference is to clarify the provisions and procedures of this article and review applicable standards and guidelines for the submittal of documents, and required tree protection, replacement, and maintenance measures.
- 3. A Tree Protection and Replacement Plan shall be prepared and submitted with other permit drawings, as part of the plan approval and/or land disturbance permit process to the Town building department. These plans will be reviewed by the Town landscape architect for compliance with the Town zoning ordinance and this ordinance in particular and either approved, denied, or returned for revisions. Any comments will be made available to the designer for response or revision to the drawings. The plans shall then be resubmitted (along with previous red line comments), with the necessary changes, following the same procedure as if it were an original application. Issuance of a land disturbance permit is contingent upon approval of the tree protection plan/replacement plan.
- 4. An approved Tree Protection and Replacement Plan must be implemented prior to the issuance of a certificate of occupancy. When the developer/owner has installed the

required landscaping improvements, he shall request an inspection by the Town landscape architect. If the Town landscape architect approves the installation, the project will be released for the issuance of a certificate of occupancy. If the Town landscape architect does not approve the plan, he shall submit a report stating his reasons for disapproval so that the developer can make the necessary corrections. After the corrections have been made, a re-inspection shall be requested.

# ARTICLE TWO

# Sec. 38-105 TREE PROTECTION AND REPLACEMENT

The trees in the Town of Sharpsburg are a Town resource worth protecting and maintaining. Existing trees on public property and rights- of - ways shall not be disturbed, except as provided in this article. No person shall cut carve or otherwise damage any tree. No person shall attach rope, wire, nails, or advertising posters to any tree. No person shall set fire or permit any fire to burn when such fire or the heat thereof will injure any portion of any tree. Any large, rare, or historically significant trees on a project site shall be highlighted by the designer (see subsection (6), specimen trees). It is required that all reasonable efforts be made to save specimen trees. "Reasonable effort" shall include, but not be limited to, alteration of building design, alternate building location, parking area, detention area, drainage system, or relocation of utilities. Careful thought and consideration is expected to be given to saving trees in the development process.

In the plan review process of a proposed project, the first indicator of how well trees have been incorporated in the design process is how the proposed development impact specimen trees. These trees are considered on an individual basis and a proposal to remove any of them is carefully scrutinized. Another indicator is how the proposed development impact smaller, significant trees. These trees are typically considered in mass as they relate to the overall protection of the natural character of the site. Removals which are not adequately justified may require site plan alterations.

#### Sec. 38-106 PLANNING AND DESIGN CONSIDERATION

- 1. Tree space is the most critical factor in tree protection throughout the site development process. The root system can easily extend beyond the dripline of the tree canopy. The root system within the dripline region is generally considered to be the critical root zone. Disturbance within this zone can directly affect a tree's chances for survival. To protect these critical root zones the following planning considerations should be applied:
  - a) The use of tree save islands and stands is encouraged rather than the protection of individual (non-specimen) trees scattered throughout a site. This will facilitate ease in overall organization as related to tree protection.
  - b) The protective zone of specimen trees or stands of trees or otherwise designated tree save areas shall include no less than the total area defined as the critical root zone.
  - c) Tree protection and grading requirements are two design constraints, which are most often in conflict. A grade change of a few inches can be detrimental to a tree, yet most sites require extensive cut and fill in order to manage drainage. The use of berms or retaining walls, instead of cutting, to provide detention should be used to

- preserve significant trees. Detention ponds can be designed around significant trees by adding depth to minimize width where possible. Retaining walls can also be used to mitigate cuts and fills. Tree wells and/or aeration systems can also be provided for trees in areas of fill.
- d) Underground water and wastewater lines, storm sewers, irrigation lines and both underground and overhead electric and telephone lines can have a considerable impact on trees. The layout of the project site utility plans should accommodate the required tree protective zones. Utilities should be placed along corridors between tree protective zones. Developers shall coordinate the location of utility lines, including irrigation and electric lighting, with the utility companies in order to prevent root damage within the critical root zones of protected trees and to minimize damage to trees located in protected zones.
- e) Construction activities such as parking, material storage, concrete washout, burnhole placement, etc. shall be arranged so as to prevent disturbances within tree protective zones. No disturbance shall occur within the protective zone of specimen trees or stands of trees without prior approval of the Town landscape architect.
- f) Sidewalks often appear innocuous on plans, but can be very detrimental to trees due to grading requirements. Considerations should be given to move sidewalks as far from tree trunks as possible and provide a finished grade above the existing grade for sidewalks required in close proximity to a tree trunk. Drainage can be routed under sidewalks where an elevated grade is required.

#### Sec. 38-107 PROTECTION OF EXISTING TREES

- Tree protection devices are necessary to eliminate activities detrimental to trees including, but not limited to:
  - a) Soil compaction in the critical root zone resulting from heavy equipment, vehicular or excessive pedestrian traffic, or storage of equipment or materials;
  - b) Root disturbance due to cuts, fills, or trenching;
  - c) Wounds to exposed roots, trunks, or limbs by mechanical equipment;
  - d) Other activities such as chemical storage, cement truck cleaning, fire, etc.
- 2. Existing trees identified to be preserved and counted as credit towards meeting required site tree density shall have a four-foot tree protection fencing installed at the critical root zones. For methods of tree protection, see subsections (4)a through f of this Sec. 38-107. Tree protection devices shall be installed prior to the start of any land disturbance and maintained until final landscaping is installed. No construction activities are to occur within tree protection areas. Areas designated for parking, materials and equipment storage or staging areas are to be located outside of the drip line of existing trees.

3. The Town landscape architect will conduct periodic inspections of the site before work begins and during clearing, construction, and post construction phases of development in order to ensure compliance with these regulations and the intent of this article. Tree protection must remain in functioning condition throughout all phases of development. Failure to comply with and/or maintain approved tree protection measures may result in a stop work order issued by the Town landscape architect.

# 4. Methods of tree protection

The root system within the drip line is generally considered to be the critical root zone. Most trees can tolerate only a small percentage of critical root zone loss. To protect these critical root zones, a tree protection area shall be established around each tree or group of trees to be retained. The following section describes ways to help control unnecessary encroachment on existing trees. These methods and guidelines will be followed for tree protection throughout all phases of construction. These guidelines are designed to reduce damage to critical root zones and wounds to exposed roots, trunks, and limbs by chemical, mechanical, and other means. Tree protection areas will be delineated on tree protection plan and methods of protection will be clearly noted and detailed.

- a) Active protective barriers Barriers shall be installed along the outer edge of and completely around the critical root zones of all specimen trees or stands of trees, or otherwise designated tree protective zones, prior to any land disturbance. Deviations from this must be approved on an individual basis by the Town landscape architect. Barriers will be a minimum four (4) feet high. Construction of the fence shall conform to the detail provided in Appendix B. All tree protection zones should be designated as such with "tree save area" signs posted visibly on all sides of the fenced in area. All tree fencing shall be maintained throughout the land disturbance and building construction, and should not be removed until all construction and landscaping is complete.
- b) Passive protective barriers Tree save areas and their critical root zones not within 60 feet of any grading, storage, construction or traffic areas may be protected by four-foot orange plastic safety fencing or continuous plastic flagging. Tree protection materials shall consist of heavy mil, plastic flagging, a minimum four inches in width with dark letters reading "Tree Protection Area. Do Not Enter" or equivalent signage on a continuous durable restraint. Passive tree protection fencing is to be used only for areas remote from construction activity.
- c) *Boring* No open trenching will be allowed within the protected zone as defined by the protective barricades. All underground utilities to be installed within this protection zone shall be installed by boring underneath the root zone. Any exceptions must be approved by the Town landscape architect. Utilities may be tunneled in the root zone at a twenty-four-inch minimum depth providing that plans are approved showing the location and method.
- d) *Filling/clearing within root zone* Fill dirt no deeper than two inches may be allowed within the drip line of the tree. No grubbing is permitted in the root zone.

- In the protected root zone, any stumps, dead trees and shrub growth to be removed shall be cut flush or ground out. Stump grinding will be accomplished with equipment and methods acceptable in normal arboriculture operations. All holes will be backfilled completely the same day of the operation.
- e) Clearing adjacent to tree save areas Roots often fuse and tangle amongst trees. The removal of trees adjacent to tree save areas can cause inadvertent damage to the protected trees. Wherever possible, it is advisable to cut minimum two-foot trenches (e.g. with a ditch witch) along the limits of land disturbance, so as to cut, rather than tear, the roots. Trenching may be required for the protection of specimen trees. The cutting down and then grinding the stump of the adjacent removed trees, as opposed to bulldozing them and ripping their roots, can also aid the protected trees.
- f) *Tree removal* To minimize potential root loss from soil disturbance in an overlapping root situation. All roots attached to a tree inside a tree save area that extend outside the tree save areas shall be cut by hand if the soil is to be disturbed. The removal of any tree adjacent to a tree within a tree save area shall not be removed by heavy equipment. Cutting the roots by hand or with a ditch witch is acceptable.

#### Sec. 38-108 DETERMINATION OF SITE DENSITY FACTORS

1. All projects within the Town, with the exception of the construction of individual single-family and detached dwellings, shall maintain in perpetuity or exceed a minimum site density factor of 16 units per acre.

Minimum tree site density shall be calculated as shown below

# **EXAMPLE**

Total acres 25
-Area of buffers 5
Net area 20 acres

Required Minimum Site Density = 16 units x 20 acres = 320 units required.

- 2. The term "unit" is not synonymous with "tree." The density may be achieved by counting existing trees to be preserved, and or planting new trees in accordance with the minimum standards of this Article, or some combination of the two. Unit values are computed as provided at Appendix "C".
- 3. <u>Existing and proposed trees outside established zoning buffers</u> can be used for density credit. Proposed trees shall be reasonably distributed throughout the site with

- emphasis on tree groupings to achieve results following professional landscape standards.
- 4. The minimum sized existing tree that will count toward tree density credit is 8"caliper dbh (eight inches). All existing trees that are to be counted toward meeting density requirements must be inventoried as specified in Appendix C.
- 5. New trees shall be provided utilizing a combination of shade/canopy trees and understory trees in a ratio of 1 to 3. The site density requirement must be met whether or not a site had trees prior to development.
- 6. Individual single-family lots, with four or less residential units per acre are required to provide a site density factor of 2 tree units per acre. This density shall be achieved by planting a combination of shade/canopy trees and understory trees in a ratio of 1 to 3 with a minimum of 1 Shade/canopy required. Shade/canopy trees shall be at least ten feet tall planted and have a trunk of not less than three caliper inches. Understory shall be at least six feet tall planted and have a trunk of not less than two caliper inches. Fifty percent of the required planting shall be placed in the front yard. All residential lots shall require that improvements be located so as to provide minimum disturbance to the natural topography of the site and protection to the maximum number of trees. Existing trees that are protected and saved on the lot can be credited toward the lot density requirement as well as the overall subdivision requirement.
- 7. Where the proposed development area is so dense that the minimum site density factor can not reasonably be achieved, the development area shall be reduced by removing parking spaces in excess of the minimum number of spaces required by zoning, placing additional planting islands within the development area, or reducing the area to be occupied by buildings.
- 8. Any tree, designated on the tree protection plan to be saved, which is damaged during construction or as a result of construction, as determined by the Town landscape architect, shall be replaced with a tree or trees equal to the unit value of the tree damaged
- 9. Trees which are used to meet the tree density requirements shall be maintained for two years after the date of final inspection and kept in perpetuity in all zoning classifications. It is the responsibility of the property owner to water and fertilize trees in order to maintain tree health and vigor. Failure to maintain the required tree density factor at any time during the life of the project shall be a violation of this article.
- 10. The developer/owner shall guarantee all plant materials for a minimum of two years from implementation. The Town landscape architect shall inspect said improvements

and shall make a determination of whether or not the required trees and landscaping are healthy and have a reasonable chance of surviving to maturity. The owner shall be notified by letter of any replacements or restoration that must be made to maintain compliance with this article. All unhealthy and dead plant material shall be replaced within 45 days in conformance with the approved landscaping plan.

#### Sec. 38-109 SPECIMEN TREES

- 1. Some trees on a site warrant special consideration and encouragement for protection. These trees are referred to as specimen trees. Trees unique due to age, size, species or historic relevance are to be identified during the survey process and special consideration must be made to work around them. It is required that all reasonable efforts be made to save specimen trees. Reasonable effort shall include, but not limited to, alteration of building design, alternate building location, parking area, detention area, drainage system, or relocation of utilities. These trees are to be identified and highlighted on the tree protection plan. Design of buildings, hardscapes and utilities are to be developed with consideration to preserving and featuring specimen trees.
- 2. The following criteria are used by the Town to identify specimen trees. Both the size and condition criteria must be met for a tree to qualify:
  - a). Size criteria:
    - 1. Large hardwoods (oaks, poplars, sweetgums, etc.): twenty-seven-inch (27") diameter or larger. Some communities find this too large and use between 20 to 24" instead.
    - 2. Large softwoods (pines, deodar cedar, etc.): thirty-inch (30") diameter or larger.
    - 3. Small trees (dogwoods, redbuds, sourwoods, etc.); eight-inch (8") diameter or larger.
  - b). Condition criteria:
    - 1. Life expectancy of more than 15 years.
    - 2. Relatively sound and solid trunk with no extensive decay.
    - 3. No more than one major and several minor dead limbs (hardwoods only).
    - 4. No major insect or pathological problem.
  - c). A lesser sized tree can be considered a specimen tree, if in the judgment of the Town landscape architect:
    - 1. It is a rare or unusual species or of historical significance.

- 2. It is specifically used by a builder, developer, or design professional as a focal point in a project or landscape.
- 3. It is a tree with exceptional aesthetic quality.

# 3. Replacement of specimen trees

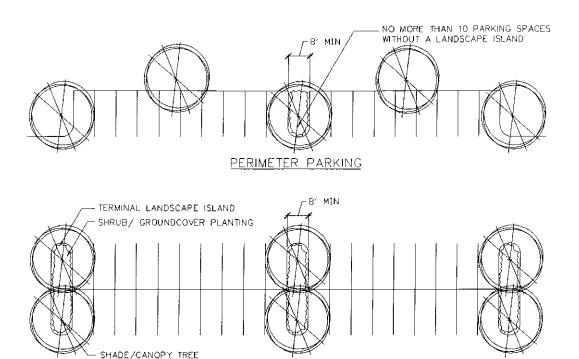
- a. In the event any specimen trees are to be removed during the land development process, the applicant shall be required to replace the specimen trees being removed with suitable replacement trees. Removed specimen trees shall be replaced by species with potential for comparable size and quality.
- b. Specimen tree replacement will be required, in addition to the minimum required tree density requirements.
- c. Specimen trees that are removed must be replaced by trees, minimum threeinch caliper, and equal to the unit value of the specimen tree removed. To determine if the replacement is reasonable the Town landscape architect shall consider intended use of:
  - 1. Existing tree coverage, size, and type.
  - 2. Number of trees to be removed on the entire property.
  - 3. Number of trees to be saved on the entire property.
  - 4. Area to be covered with structures, parking, and driveways.
  - 5. Grading and drainage requirements.
  - 6. Character of the site and its environs.
- d. Disturbance or encroachment into the critical root zone of a specimen tree exceeding 30% of the root zone will constitute the loss of the tree and require recompense as described in Article II, Section 38-109.3c, above.
- e. In the event any specimen tree or trees should not survive more than 24 months following completion of development, the owner of the property shall be required to replace said tree or trees with replacement trees (three-inch minimum caliper) equal to the unit value of the specimen tree.
- f. Any specimen tree which is removed without appropriate review and approval of the Town landscape architect must be replaced by trees equaling a two times the unit value of the specimen tree removed. The owner of the property shall be required to replace said tree or trees with replacement trees which will be fourinch minimum caliper. Size alone will determine whether a tree was of specimen quality if the tree is removed without approval and there is not sufficient evidence of its condition. Such action may also result in a stop work order issued by the Town landscape architect.

# Sec. 38-110 PARKING LOT TREE REQUIREMENTS

- 1. Parking lots containing 10 or more parking spaces shall be landscaped as indicated below. All trees planted to satisfy parking lot requirements can be applied to site density requirements.
- 2. Trees shall be provided and maintained adjacent to and in the interior of parking lots in the ratio of one tree for each 5 parking spaces. In addition each parking space shall be within 60 feet of the trunk of a tree.
- 3. Trees provided to comply with this section shall be deciduous shade trees from Appendix "A" Large Canopy / Shade Tree List and shall be at least 2-1/2"caliper inches at the time of planting.

# A. Parking lot planting

- There shall be a minimum curb radii of three feet required on the corners of all landscape islands and medians to allow for free movement of motor vehicles around planting materials. Although innovative storm water management techniques are strongly encouraged, all islands and medians shall have raised curbs unless other storm water management techniques are approved.
- 2. Striping of parking islands is not permitted.
- 3. Parking lot lighting shall be coordinated with the tree locations in the parking lot
- 4. At the end of all rows of parking a terminal landscape island or area shall be provided to protect parked vehicles, confine moving traffic to aisles and driveways, and provide space for landscaping. A terminal island for a single row of parking spaces shall be planted with a least one canopy/shade tree. A terminal island for a double row of parking spaces shall contain two shade/canopy trees.



5. All landscape islands within parking lots shall be 100 percent landscaped with deciduous trees, evergreen shrubs (not to exceed three feet high at maturity), ground cover (which does not require mowing) and/or flowers in mulched beds (red mulch is prohibited).

INTERIOR PARKING

- 6. Parking areas designated to comply with this section must install landscape islands so that no more than 10 adjacent parking spaces exist without a landscaped island. If significant tree save areas or natural areas exist within a parking area, the Town landscape architect may make an exception to this requirement, as appropriate.
- 7. All landscape islands shall be reasonably dispersed throughout the parking lot.
- 8. Parking lot islands shall have a minimum width of eight feet measured from back of curb to back of curb and be equal in length to the adjoining parking space.
- 9. Landscaped areas between parking areas and buildings shall not be considered as interior landscaping.
- 10. Areas used principally for storage of vehicles or display areas do not require interior islands if such areas are screened from adjacent properties and public streets.

- 11. The perimeter of all parking areas shall be landscaped as a minimum with groundcover or turf.
- 12. Where parking lots abut a public right of way a 10 foot wide landscape strip should be provided between the property line and the back of curb or edge of pavement. The strip should contain a continuous evergreen hedge to screen parking lot. Plantings in the hedge should be spaced such that a continuous hedge is created within 3 years of planting. The hedge should not exceed 3' in height or block vehicular site distance at the site entry. This requirement shall be coordinated with any requirement of Section 38-111 "Landscape Strip Planting" when requirements overlap.
- 13. Where parking lots abut side or rear property lines or differing uses within mixed use developments the strip should contain a continuous evergreen hedge to screen the parking lot. When a parking lot abuts an undisturbed zoning buffer this requirement can be waived by the Town Landscape Architect.
- 14. Trees shall be planted at a minimum of three feet from any curb, so as to prevent injury to trees by vehicle bumpers. Where landscaped areas are located adjacent to vehicle overhangs, the trees shall be planted in line with the striping between parking spaces in order to avoid injury to trees by vehicle bumpers. Curb stops must be used to prevent vehicle overhang into required landscape strips and parking islands when curbing is not used.

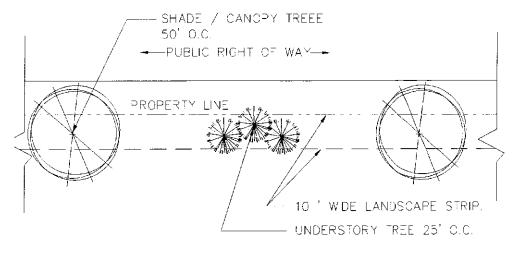
#### Sec. 38-111 LANDSCAPE PLANTING STRIP REQUIREMENTS

1. Landscape strips shall be used to enhance the public appearance of any non residential property located along a public right of way. The following minimum requirements shall apply to landscape planting strips:

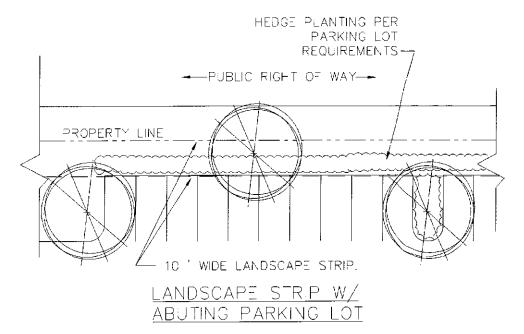
# 2. Landscape strips

- A. Landscape plantings shall be provided in a landscape strip of at least ten feet in width adjacent to any street right-of-way abutting the property and running the length of the entire property frontage, or as required by a condition of zoning, special use or variance approval.
- B. No permanent structures are permitted within landscape strips, with the exception of identification signage and light posts. This includes pavement, retaining walls, curbing, dumpsters, drainage structures, detention facilities, rip-rap, utility boxes, vacuum/air/water, etc.

C. Landscape strips shall contain one canopy tree (min 2-1/2" caliper) per 50 feet (50') and one understory (min. 1-1/2" caliper) tree per twenty five (25'). Clumping is permitted provided that adequate spacing is allowed for future growth of the tree and there is no gap greater than 50 feet.



# LANDSCAPE STRIP



- D. The remaining ground area shall be sodded, seeded, or hydroseeded with grass, and/or planted with shrubs. Landscape strips located adjacent to parking lots must comply with the requirements of Section 38-110.
- E. Where landscaping areas adjoin grassed rights-of way, such areas shall be considered part of the landscaped area for purposes of maintenance. As of completion of site improvements, the property owner shall have an implied

- easement on rights-of-way extending from the site to the road pavement in order to complete the required maintenance.
- F. Where existing tree save areas abut the public right of way, the landscape strip requirements may be waived at the discretion of the Town's landscape architect.

#### Sec. 38-112 BUFFERS

- As directed by the Sharpsburg Zoning Ordinance buffers are required to achieve a
  visual barrier between properties of different use. However, existing or proposed plant
  material located within a buffer cannot be applied toward density requirements of a site.
  The area of a buffer can be subtracted from the total area of a site when calculating
  density requirements.
- 2. Buffer widths shall be as indicated in the zoning ordinance or as allowed by variance or zoning conditions. Unless otherwise directed by zoning or this ordinance buffers shall remain undisturbed. When existing vegetation exists in a buffer it shall be protected from encroachment during construction.
- 3. Where buffers are void of existing vegetation adequate enough to provide a visual barrier or the buffers have been violated, the owner / developer is responsible for replanting. A formula based on the square footage of the entire buffer or portion thereof that is void of adequate material will be applied.
- 4. Adequacy of the undisturbed buffers to provide a visual barrier will be determined by the Town Landscape Architect based on visual analysis and the types of existing plant material and reserves the right to require remedial evergreen understory planting if it is determined that the undisturbed buffer does not provide an adequate visual buffer.
- 5. The Town of Sharpsburg encourages the control or elimination of invasive plant material including Chinese Privet, Kudzu, Wisteria, etc. Selective clearing in buffers to remove noxious or invasive plant material and the methods of removal will require the approval of the Town Landscape Architect. Selective buffer clearing will be reviewed on a case by case basis. Removal of material may require the replanting to buffer standards if the buffer is over cleared.

# Type I Buffer shall be applied to all buffers less than 50' wide:

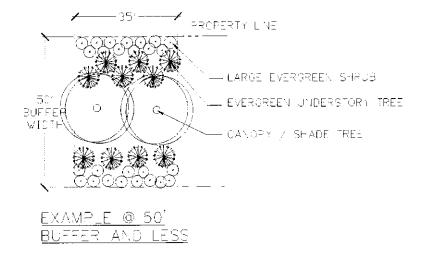
The following plant material shall be provided per 1000 square foot of buffer area to be vegetated.

1 Shade/Canopy trees5 Evergreen understory trees15 large evergreen shrubs

# EXAMPLE 1 - 50 FOOT BUFFER 1750sf Buffer area

 $1.75 \times 1$  tree= 2 trees  $1.75 \times 5$  Understory trees = 9 trees  $1.75 \times 15$  Large shrubs = 26 shrubs

Round up when quantity exceeds.



# Type II Buffer shall be applied to all buffers 50 feet wide and more:

The following plant material shall be provided per 1000 square foot of buffer area to be vegetated.

1 Shade/Canopy trees 5 Evergreen understory trees 15 large evergreen shrubs

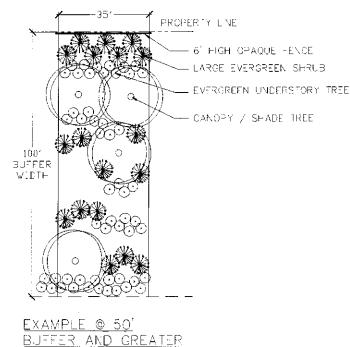
# EXAMPLE 2 - 100 FOOT BUFFER

3500sf Buffer area 3.5 x 1 tree= 4 trees 3.5 x 5 Understory trees = 18 trees 3.5 x 15 Large shrubs = 53 shrubs

Round up when quantity exceeds .5

Minimum tree sizes upon installation are as follows:

Canopy/shade tree size: 2inch caliper Understory evergreen: 6 feet high



Large shrub size 24" high

In addition to the material required for the Type II Buffer a continuous 6' high opaque wood fence shall be installed at the property line along the entire buffer when no effective vegetation exists.

#### Sec. 38-113 SCREENING

Screening shall consist of the visual blocking of views of onsite service equipment and areas. The following items shall be screened as indicated below.

- 1. Dumpster and trash storage/collection areas shall be adequately screened so as not to be visible from streets and/or adjacent properties regardless of adjacent land use or zoning classification. Enclosures must be constructed of the same exterior wall material used for the building. The enclosure shall be a foot higher than what is contained in the interior.
- Loading / service areas shall be adequately screened so as not to be visible from any streets and/or adjacent properties. These areas shall be screened using upright evergreen plantings, 6 feet tall at the time of installation, spaced at a maximum of 8 feet on center.
- Heating and cooling units for all developments including single-family shall be adequately screened with vegetation so as not to be visible from streets and/or adjoining properties.
- 4. Non-amenity detention ponds and other related storm water management facilities shall be screened from view by a continuous evergreen screen 36 inches tall at the time of installation and maintained at a minimum height of 42 inches. Maintenance access may remain open but arranged to prevent direct view into the facility.
- 5. Plants shall be spaced so as to provide for effective visual screening within three growing seasons.

# Sec. 38-114 BUILDING LANDSCAPE REQUIREMENTS

This section relates to landscaping required adjacent to proposed buildings that are subject to this ordinance including single family residences. Any building subject to a building permit will be required to provide a 5 foot wide landscape strip along any face of the building that faces a public way. Landscaping in this area shall be comprised of a combination of shrubs and understory trees that soften the façade of the building. The following combination of plant material shall be provided:

# 1. Building Landscaping:

- A. Provide one understory tree per 25 feet of building width. The required understory tree must be a minimum of 6 feet tall at installation and should be chosen from the Town's approved plant list.
- B. Provide one evergreen shrub per 4 linear feet of building width. The required shrub must be a minimum of 24 inches tall at installation and should be chosen from the towns approved plant list for small shrubs.
- C. Building width is defined as the width of the portion of the building that faced a public right of way.

#### **ARTICLE THREE**

# Sec. 38-115 PREPARATION OF THE TREE PROTECTION PLAN

- 1. Tree protection plan requirements: Any proposal for development or improvement of any tract of land shall include a tree protection/ replacement plan, including trees to be planted in order to meet the minimum requirements of this ordinance. Such plan shall be submitted, along with other permit drawings, to the Town building department prior to any clearing, grubbing, grading or other removal of the existing vegetation that may affect the health of existing tree coverage. No tree removal shall occur prior to approval of the tree protection plan. The tree protection plan may be submitted as part of a landscape plan, provided that all required information is legible, or as a separate drawing which includes, as a minimum, the following:
  - a) Name, address, and phone number of owner of record and applicant.
  - b) Boundary lines of the tract by lengths and bearings, streets adjoining the property, total area of the tract, land lot, land district, north point, graphic scale, and date.
  - c) Surveyed location of all specimen trees and their critical root zones. Indicate those specimen trees proposed for removal or for protection. Removal of specimen trees is subject to Town landscape architect's approval. When encroaching on the critical root zone of a specimen tree, indicate the percent of impact.
  - d) Approximate location of all trees or stands of trees proposed to be protected and their critical root zone. Only trees that are designated on the tree protection plan will be counted towards density requirements.
  - e) Location of proposed buildings, structures and paved areas.
  - f) Locations of all existing and proposed utility lines. (Utility lines must be placed along corridors outside critical root zones of trees which will remain on the site.)
  - g) Limits of land disturbance, clearing, grading, and trenching.
  - h) Limits of tree protection areas, showing trees to be maintained and planted, specifying species and size.
  - i) Grade changes or other work adjacent to a tree, which would effect it adversely, with drawings or descriptions as to how the grade, drainage, and aeration will be maintained around the tree.
  - j) Methods of tree protection shall be indicated for all tree protection zones, including tree fencing, retaining walls, tunneling for utilities, aeration systems, transplanting, staking, signage, etc.
  - k) Procedures and schedules for the implementation, installation, and maintenance of all tree protection measures.
  - l) Plan should indicate staging areas for parking, materials storage, concrete washout, and debris burn where these areas might affect tree protection.
  - m) The required site tree density factor must be satisfied. Compliance shall be clearly demonstrated on the tree protection plan. Existing trees or stands of trees used in the density calculation must be clearly indicated on the drawing. A summary table of the number of existing trees to remain and new trees to be planted, by diameter

- shall be shown along with the calculations showing tree density achieved for the site.
- n) Additional information as required on a case by case basis. This could include, but is not limited to, a certified arborist's appraisal of the tree's viability and projected life span.
- o) Tree protection plans must be prepared and sealed by a landscape architect licensed to practice in the state of Georgia.
- p) The following notes shall be indicated on both the tree protection plan and the grading plan in large bold letters. Additional notes may be required on a case by case basis.
  - 1. CONTACT THE BUILDING DEPARTMENT TO ARRANGE A PRE-CONSTRUCTION CONFERENCE WITH THE TOWN LANDSCAPE ARCHITECT PRIOR TO ANY LAND DISTURBANCE.
  - 2. ALL TREE PROTECTION MEASURES SHALL BE INSTALLED AND INSPECTED PRIOR TO THE START OF ANY LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPING IS INSTALLED. CALL THE BUILDING DEPARTMENT FOR AN INSPECTION BY THE TOWN LANDSCAPE ARCHITECT.
  - 3. NO PARKING, STORAGE, OR ANY OTHER CONSTRUCTION ACTIVITIES ARE TO OCCUR WITHIN TREE PROTECTION AREAS.
  - 4. A MAINTENANCE INSPECTION OF TREES WILL BE PERFORMED AFTER TWO FULL GROWING SEASONS FROM THE DATE OF THE FINAL CONSTRUCTION INSPECTION. PROJECT OWNERS AT THE TIME OF THE MAINTENANCE INSPECTION ARE RESPONSIBLE FOR ORDINANCE COMPLIANCE.

# **ARTICLE FOUR**

#### Sec. 38-116 TREE REMOVAL STANDARDS AND GUIDELINES

This section pertains to tree removal for reasons other than land development

- 1. Safety standards Contractors engaged in tree removal shall be solely responsible for pedestrian and vehicular safety and control within the work site and shall provide the necessary warning devices, barricades, and ground personnel needed to give safety, protection, and warning within the area where tree removal or pruning is to occur. Blocking of public streets shall not be permitted unless prior arrangements have been made with the Town and is coordinated with appropriate departments. Traffic control is the responsibility of the contractor and shall be accomplished in conformance with state, county and local highway construction codes.
- 2. Debris and logs shall not be left on the public right-of-way overnight. It shall be the responsibility of the contractor to remove and dispose of, in a proper and acceptable manner, all logs, brush and debris resulting from the tree removal operation unless otherwise directed by the Town. No person shall be issued a tree removal permit unless said person agrees to remove all cut logs, brush, and debris from the premises. Removal of such debris shall be performed daily so as to not disrupt the work of other contractors on the site. Absolutely no burying on site is allowed. No burning on site is allowed.
- 3. It shall be the duty of any person or persons owning or occupying property bordering on any street upon which property there may be trees, to prune such trees in such a manner that they will not obstruct or shade street lights, obstruct passage of pedestrians on sidewalks, obstruct vision of traffic signs, or obstruct views of any street intersection. Any trees that are diseased or insect infested shall be removed, sprayed, or treated in such a manner that they will not infect or damage nearby public vegetation or cause harm to the community or citizens therein. The Town landscape architect may order trees on private land that causes obstructions, present insect or disease problems, or otherwise present a danger to public health or safety be pruned, removed, or treated.
- 4. Permits shall be obtained by the landowner engaged in the removal of trees for a fee set by the Mayor and Town Council. The Town landscape architect will review the tree removal plans and inspect the project site when necessary prior to tree removal of any trees. In the event an inspection is necessary to be determined at the sole discretion of the Town Administrator, an inspection fee set by the Mayor and Town Council shall be charged. If significant trees are removed from any property without a tree removal permit, the <u>property owner</u> shall pay a fine of three times the tree removal fee calculated. Minimum site tree densities must be maintained at all times. Permit fees shall be as set forth in the fee schedule for the Town.

5. Any person, firm, corporation, company, or partnership violating any provision of this Ordinance shall be fined the maximum amount as provided for in the Town of Sharpsburg's Charter and/or penalized as provided in an ordinance which may be adopted by the Town. Where an offense continues from day to day, each day's continuance thereof shall be deemed a separate offense. The owner of premises, where anything in violation of this article shall exist, or any person, firm, corporation, company, or partnership which may have assisted in the commission of such violation shall be guilty of a separate offense and, upon conviction thereof, shall be punished as herein provided. Further, a violation of this ordinance shall result in the denial of any permit or application, including but not limited to building and rezoning for the entire property where the violation occurred for a period of three years after the violation.

### Sec. 38-117 TREE REMOVAL

- 1. Within the Town of Sharpsburg a tree removal permit is required prior to the removal of trees. A permit will be necessary regardless of whether a permit fee is assessed. Exemptions from permit fees include the following:
  - a. The removal of trees on their own residential property, without cost of a person or company engaged in removing the trees for a fee, shall not require a permit or pay any fee until they remove more than five trees at a time within a single calendar year.
- 2. Specimen tree removal regardless of location will require a permit. See Article II, Section 38-109.2 for specimen tree criteria.
- 3. The removal of specimen trees from any property without a tree removal permit, the property owner shall pay a fine of three times the tree removal fee calculated. All contractors for tree removal must be licensed, bonded, and insured.
- 4. Trees shall be removed in accordance with accepted industry standards and procedures and in accordance with the following minimum requirements: Extreme care shall be taken so as to prevent limbs, branches and trunks from falling and creating damage to adjacent homes, driveways, sidewalks, trees, shrubs, streets and other property, both public and private. This type of work is a potentially hazardous occupation and is to be undertaken only by trained personnel or under the supervision of trained personnel, all of whom are covered with workers compensation, property damage, public liability, and completed operations insurance.

#### Sec. 38-118 TREE PRUNING

- 1. No permit is required for pruning trees.
- 2. Pruning is to be performed by tree workers who, through related training and on the job experience, are familiar with the techniques and hazards of this work including trimming, maintenance, repairing or removal, and equipment used in such operations and in Accordance with ISA standards. The use of climbing spurs or irons is not approved in pruning operations on live trees. This type of work is a potentially hazardous occupation and is to be undertaken only by trained personnel or under the supervision of trained personnel, all of whom are covered with workers compensation, property damage, public liability, and completed operations insurance.

#### Sec. 38-119 MAINTENANCE

Two full growing seasons after the date of the inspection of new tree installations, the Town landscape architect will inspect all trees on the project site. Any trees planted to meet the required tree site density factor which are dead or near death must be replaced.

Trees preserved to meet the required site densities which are dead or near death at the time of the maintenance inspection must be replaced if there is evidence that the demise of such trees was due to construction injury. Trees which are used to meet the requirements for this ordinance shall be maintained for 24 months after the date of the final inspection. Maintenance on replacement trees will be required for an additional two years.

It shall be the duty of any person or persons owning or occupying property subject to this article to maintain said property in good condition so as to present a healthy, neat, and orderly appearance. Property shall be kept free from refuse and debris. Planting beds shall be mulched to prevent weed growth and maintain soil moisture. Plant materials shall be pruned as required to maintain good health and character. Turf areas shall be mowed periodically. All roadways, curbs, and sidewalks shall be edged when necessary in order to prevent encroachment from adjacent grassed areas.

All undisturbed buffers shall be maintained to insure the containment of invasive plant material. The spreading of any material from the buffer onto adjacent property or into the public right of way is not permitted. The property owner is responsible for the control of this material and may be subject to a fine if these areas are not maintained.

## Sec. 38-120 IRRIGATION

1. In order to facilitate maintenance and help establish plant material required by this Ordinance water shall be available in one or both of the following methods:

- 2. As a minimum, provide a water resource (hose connection) within 200 feet of all plantings to facilitate hand watering as necessary to establish planting.
- 3. In lieu of or in addition to the above, Irrigation can be provided.
- 4. An underground irrigation system is required for landscaped areas on multi-family, commercial and industrial developments fronting on a public right of way.
- 5. Wherever feasible, sprinkler head irrigating lawns or other high water demand landscape areas shall be zoned so that they are on a separate zone from zones irrigating trees, shrubbery or other reduced water requirement areas.
- 6. Automatically controlled irrigation systems shall be operated by an irrigation controller that is capable of watering high water requirement areas on a different schedule from low water requirement areas.
- 7. No significant overthrow shall be allowed onto nonpervious areas.
- 8. Irrigation circuits shall apply water onto lawn areas on a different schedule than those irrigating the planting beds. Low trajectory heads or low volume water distributing devices shall be used.
- 9. Irrigation systems shall include rain sensor equipment and follow all requirements established by the State of Georgia.

# APPENDIX A TOWN OF SHARPSBURG APPROVED PLANT LIST

Botanical Name	Common Name						
LARGE CANOPY/SHADE TREES							
Acer barbatum	Florida Maple						
Acer rubrum	Red Maple						
Acer saccharum	Sugar Maple						
Betula nigra	River Birch						
Carya species	Hickory						
Cercidiphyllum japonicum	Katsura Tree						
Fagus grandiflora	American Beech						
Fraxinus americana	White Ash						
Fraxinus pennsylvanica	Red Ash						
Ginkgo biloba	Gingko						
Liriodendron tulipifera	Tulip Poplar						
Magnolia grandiflora*	Southern Magnolia						
Metasequoia glyptostroboides*	Dawn Redwood						
Nyssa sylvatica	Black Gum						
Ostrya virginiana	Ironwood						

Pinus taeda*	Loblolly Pine
Pinus virginiana*	Virginia Pine
Platanus occidentalis	Sycamore
Quercus alba	White Oak
Quercus coccinea	Scarlet Oak
Quercus falcata	Southern Red Oak
Quercus laurifolia	Laurel Oak
Quercus nigra	Water Oak
Quercus palustris	Pin Oak
Quercus rubra	Northern Red Oak
Quercus shumardii	Shumard Oak
Quercus stellata	Post Oak
Quercus phellos	Willow Oak
Tilia cordata	Littleleaf Linden
Ulmus parvifolia	Lacebark Elm
Zelkova japonica	Japanese Zelkova
UNDERSTORY AND ORN	NAMENTAL TREES
Acer buergerianum	Trident Maple
Acer campestre	Hedge Maple

Amur Maple
Paperbark Maple
Japanese Maple
Serviceberry
American Hornbeam
Deodar Cedar
Eastern Red Bud
Fringe Tree
Flowering Dogwood
Kousa Dogwood
Washington Hawthorne
Cryptomeria
Carolina Silverbell
Florida Anise Tree
Nellie R. Stevens Holly
Foster's Holly
Savannah Holly
American Holly

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Ilex vomitoria (treeform)*	Treeform Yaupon Holly
Ilex opaca*	American Holly
Juniperus virginiana*	Red Cedar
Koelreuteria paniculata	Goldenrain Tree
Lagerstroemia indica	Crape Myrtle
Magnolia soulangiana	Saucer Magnolia
Magnolia stellata	Star Magnolia
Magnolia virginiana*	Sweetbay Magnolia
Malus species	Flowering Crabapple
Myrica cerifera (treeform)*	Treeform Wax Myrtle
Ostrya virginiana	Eastern Hophornbeam
Oxydendrum arboreum	Sourwood
Pistacia chinensis	Chinese Pistache
Prunus caroliniana*	Cherry Laurel
Prunus species	Flowering Cherry
Sassafras albidum	Sassafras
Sophora japonica	Japanese Pagodatree
Taxodium distichum	Bald Cypress

Vitex agnus-castus	Chaste Tree
LARGE SHRUBS	LARGE SHRUBS
Abelia grandiflora*	Glossy Abelia
Aesculus pavia	Red Buckeye
Aesculus parviflora	Bottlebrush Buckeye
Aucuba japonica*	Aucuba
Buxus sempervirens*	Common Boxwood
Camellia japonica*	Camellia
Camellia sasanqua*	Sasanqua Camellia
Cleyera japonica*	Japanese Cleyera
Elaeagnus pungens*	Elaeagnus
Forsythia suspensa	Border Forsythia
Hibiscus syriacus	Shrubalthea
Hydrangea quercifolia	Oakleaf Hydrangea
Hamamelis virginiana	Witch Hazel
Ilex cornuta 'Burfordii'*	Burford Holly
Ilex verticillata	Deciduous Holly

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Ilex vomitoria*	Yaupon Holly
Kerria japonica	Kerria
Loropetalum chinense*	Loropetalum
Miscanthus varieties	Miscanthus
Myrica cerifera*	Wax Myrtle
Osmanthus fragrans*	Fragrant Tea Olive
Pieris □aponica*	Japanese Pieris
Prunus caroliniana*	Cherry Laurel
Rhodendron indica*	Indica Azaleas
Rhododendron species	Native Azalea
Rhododendron species*	Rhododendron
Viburnum opulus	Snowball Viburnum
Viburnum sieboldi	Siebold Viburnum
Vibernum plicatum X tomentosum	Doublefile Viburnum
SMALL/MEDIUM	SHRUBS
Azalea obtusum*	Kurume Azalea
Azalea hybrida*	Glenn Dale Azalea
Berberis thunbergi	Japanese Barberry

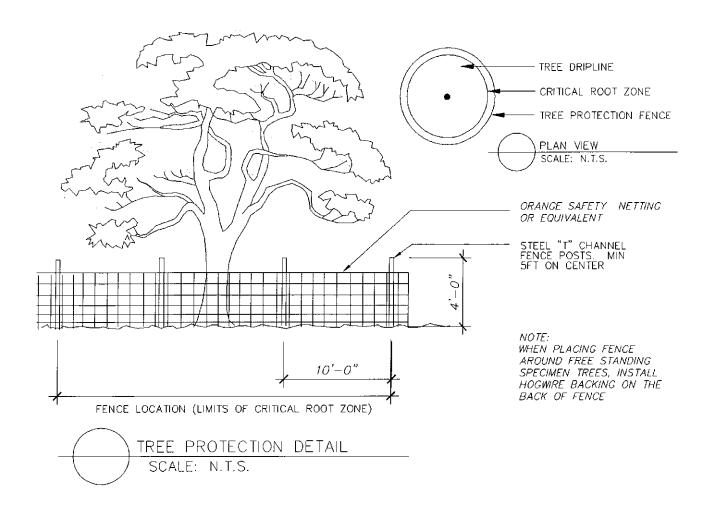
Dwarf Boxwood
Beautyberry
Sweet Shrub
Common Flowering Quince
Summersweet Clethra
Rock Cotoneaster
Slender Deutzia
Dwarf Winged Euonymus
Forsythia
Dwarf Fothergilla
Gardenia
Snowhill Hydrangea
Bigleaf Hydrangea
Panicle Hydrangea
Oakleaf Hydrangea
Dwarf Burford Holly
Carissa Holly
Dwarf Yanpon Holly

Itea virginica	Virginia Sweetspire
Jasminum floridanum*	Flowering Jasmine
Jasminum nudiflorum	Winter Jasmine
Juniper species*	Spreading Junipers
Juniper species*	Upright Junipers
Leucothoe populifolia*	Florida Leucothoe
Mahonia aquifolium*	Oregon Grape Holly
Mahonia bealei*	Leatherleaf Mahonia
Nandina domestica*	Nandina
Prunus laurocerasus 'Otto Lukyen'*	Otto Lukyen Laurel
Prunus laurocerasus 'Schipkaensis'*	Skip Laurel
Prunus laurocerasus 'Zabeliana'*	Zabel Laurel
Rhaphiolepis indica*	Indian Hawthorn
Rosa species	Shrub Roses/Old Roses
Spiraea species	Spirea
Weiglea florida	Old Fashioned Weiglea
GROUND COV	VERS
Hedera helix*	English Ivy
Hemerocallis species	Day Lilies

Hosta species	Hosta
Iberis sempervirens*	Evergreen Candytuft
Iris species	Iris
Juniperus horizontalis*	Creeping Junipers
Lantana sellowiana	Trailing Lantana
Liriope muscari*	Big blue Liriope
Liriope spicata*	Creeping Liriope
Narcissus species	Daffodils
Ophiopogon japonicus*	Mondo Grass
Pachysandra terminalis*	Pachysandra
Phlox subulata	Thrift
Vinca minor*	Common Periwinkle
Vinca major*	Large Periwinkle
VINES	
Campsis radicans	Trumpet Vine
Clematis species	Clematis
Euonymus fortunei*	Wintercreeper
Gelsemium sempervirens*	Carolina Yellow Jessamine

Trumpet Honeysuckle
Virginia Creeper
Lady Banks Rose
Climbing Roses
Maidenhair Fern
Southern Lady Fern
Ebony Spleenwort
Cinnamon Fern
Royal Fern
Christmas Fern

# APPENDIX B TREE PROTECTION FENCING



# APPENDIX C CALCULATION CHARTS FOR REQUIRED TREE DENSITY

# CONVERSION FROM DIAMETER TO DENSITY FACTOR UNITS FOR EXISTING TREES TO BEPRESERVED.

DIAMETER (DBH)	UNIT VALUE
4 inches	0.1
5-8 8 inches	0.3
9-12 inches	0.6
13-16 inches	1.2
17-20 inches	1.9
21-24 inches	2.8
25-28 inches	3.8
29-32 inches	5.1
33-36 inches	6.5
37-40 inches	8.1
41-43 inches	9.6
44-46 inches	11.0

The unit value for any tree can be determined by using the following formula  $(Diameter)^2 \times .7854 \div 144$ 

### CONVERSION FROM DIAMETER TO DENSITY FACTOR UNITS FOR REPLACEMENT TREES

1-1 1/2"	.4
2-2 1/2"	.5
3-3 1/2"	.6
4-4 1/2"	.7
5-5 1/2"	.9
6-6 1/2"	1.0
7-7 1/2"	1.2
8-8 1/2"	1.3
9-9 1/2"	1.4

### CONVERSION FROM HEIGHT TO DENSITY FACTOR UNITS FOR REPLACEMENT TREES

FOR TREES TYPICALLY SOLD BY HEIGHT

6-8 feet	.4
10-12 feet	.5
14-16 feet	.6
18-20 feet	.7
22-24 feet	.9

#### **ARTICLE FIVE**

This Ordinance shall be codified within the Code of Ordinances of the Town of Sharpsburg, Georgia at Chapter 38, in a manner consistent with the laws of the State of Georgia and of the Town of Sharpsburg and shall be referred to as "Chapter 38 "Tree Protection Ordinance."

#### **ARTICLE SIX**

This Ordinance was enacted in accordance with the Zoning Procedures Law, O.C.G.A. Section 36-66-1, et seq, and shall become immediately effective upon its second reading and adoption by the Town Council.

#### ARTICLE SEVEN

The Preamble of this Ordinance shall be construed to be, and is hereby incorporated by reference as is fully set out herein.

#### ARTICLE EIGHT

The sections, paragraphs, sentences, clauses, and phrases of this Ordinance are severable, and if any phrase, sentence, paragraph, or section of this Ordinance shall be declared illegal by the valid judgment or decree of any court of competent jurisdiction, such an illegality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Ordinance.

#### **ARTICLE NINE**

All ordinances and parts of ordinances in conflict herewith are hereby expressly repealed.

[Signatures on next page]

APPROVED BY THE MAYOR AND COUNCIL OF THE TOWN OF
SHARPSBURG at a regular meeting of the Mayor and Council on the 🔢 day o
January, 2006, by the following voting for adoption:
11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1
Wendell L. Staley, Mayor
James Clay Cole
J. Clay Cole, Council Member
Ja W. Hele
Larry/W. Hyde, Council Member
1 11/16
Derrick McElwaney, Council Member
Millingtont
Standly D. Parten, Council Member

Attest:

Donna M. Camp, Town Clerk