

ARTICLE 7 LANDSCAPING, BUFFER AND OPEN SPACE

700. Intent

In order to maintain and enhance the existing tree coverage in Chapin, promote careful landscaping of outdoor areas, soften and enhance the manmade environment, reduce summer heat and provide shade, and to assist with stormwater drainage, the following minimum standards shall apply in all zoning districts unless otherwise noted.

701. Landscaping Plan Requirements

In addition to the site plan requirements from the appropriate land development regulation sections, the following standards shall apply:

- A. North arrow and scale;
- B. Topographic information and final grading adequate to identify and properly specify planting for areas needing slope protection;
- C. The location and contours, at one (1) foot intervals, of all proposed berms;
- D. The location and dimensions of all existing (to remain) and proposed structures, setback line and required buffer yards, parking lots, driveways, landscaped islands and strips, sidewalks, service areas, screening, fences, walls, berms, above or underground utilities and storm drainage systems, freestanding electrical equipment, recreational facilities, and other freestanding structural features as determined necessary by the Town;
- E. Location of plant material, including name of plants (botanical and common), installation size, spread at time of planting and at maturity, quantities of plants, and other remarks as appropriate to describe plant selection (lawns and beds of annual or perennial plants may be designated by common names only);
- F. Onsite and abutting land use features [within 50 feet], and use(s) of adjacent parcel(s);
- G. Protection plan for existing trees that are to be saved; and

H. Location of irrigation system, if any, to landscaped areas.

Such other information as may be deemed necessary because of the landscaping requirements or physical characteristics peculiar to the particular development.

702. Landscaping Standards

The landscaping standards included in this section shall apply, as appropriate, to all required landscaped areas in this article.

702.1 General Standards

- A.** Commercial outparcels shall be vegetated and maintained by the property owner while vacant to maintain an attractive appearance. Vegetation shall consist of turf grass, shrubs, trees, live ground cover, annuals, perennials, ornamental grasses or other vegetative cover that will secure the soil and create an attractive appearance.
- B.** All required plantings installed shall be:
 - 1. Nursery grown stock that is free from pests or growth problems, and
 - 2. Installed and maintained according to best management practices and standards set forth by the American Nursery and Landscape Association, ANSI Z60.1-2004, as amended; and
 - 3. Selected from the List of Approved Plant Species for the Town of Chapin and List of Approved Tree Species for the Town of Chapin as provided by the Zoning Administrator.
 - 4. The use of the following trees are prohibited:

Common Name(s)	Botanical Name
Jelly Palm or Pindo Palm	<i>Butia capitata</i>
Mediterranean Fan Palm	<i>Chamaerops humilis</i>
Needle Palm	<i>Rhapidophyllum hystrix</i>
Dwarf Palmetto	<i>Sabal minor</i>
Cabbage Palm or SC Palmetto	<i>Sabal palmetto</i>
Saw Palmetto or Scrub Palm	<i>Serenoa repens</i>
Windmill Palm	<i>Trachycarpus fortunei</i>
California Fan Palm	<i>Washingtonia filifera</i>
Mexican Fan Palm	<i>Washingtonia robusta</i>

- C.** All required landscaping shall be included in the required site plan
- D.** All required plantings shall be installed in a manner that ensures the availability of sufficient soil and water for healthy growth and that is not intrusive to above and below ground utilities.
- E.** Only landscaping and approved fences, berms and walls shall be permitted within a required buffer or street buffer area, except that sidewalks and other pedestrian walkways, bicycle paths, aboveground utilities, drainage ways, and approved signs shall be permitted where they do not comprise of more than twenty percent of the total area of the required buffer or street buffer or compromise the ability of the site to meet the intent and planting

requirements herein. Underground utilities are permitted wherever they do not interfere with the ability to provide the required buffer or street buffer area and landscaping.

- F.** Clustering and/or random spacing of plants and trees is encouraged to produce a natural appearance in the landscape, except where uniformity is required for opaque screening.
- G.** Landscaping, including berms, shall be installed and maintained so as not to interfere with the sight distance requirements of this ordinance or the sight distance needs of vehicular traffic in parking areas and at entrance and exit locations.
- H.** Small maturing trees are required to be substituted for required large maturing trees whenever overhead utility lines are present or planned.
- I.** Native species and related cultivars are encouraged.
- J.** Monocultures shall be avoided in formally designed parks, buffers, and screens.
- K.** Shrubs and trees shall be installed no closer than two feet to a curb, gutter, sidewalk or building. Small maturing trees shall be planted no closer than 10 feet to a building, medium maturing trees no closer than 20 feet to a building and large maturing tree no closer than 25 feet to a building, unless otherwise required.
- L.** Shrubs shall not be planted within six feet of tree trunks.
- M.** In landscaped areas adjacent to parking spaces or street curbs, no plant material with the potential to reach over six inches in height may be located within twelve inches of the curb or other protective barrier. This is intended to protect planted materials from damage by car bumpers and car doors.
- N.** The Zoning Administrator will conduct inspections as needed to determine that required landscaping is properly installed and maintained as provided in this Article.
- O.** The Zoning Administrator may require changes to any planting schedule or plant size requirement and may require plant substitution when, in their opinion, the size, nature, and/or spacing of plantings will compromise the safety and security of the public.
- P.** The Zoning Administrator may approve revisions to landscaping in an approved site plan in order to accommodate seasonal planting problems or a lack of plant availability as long as:
 - 1. There is no significant reduction in the quantity of plant material.
 - 2. There is no significant change in the size or location of plant materials.
 - 3. The plant substitutions are of the same general category and have the same general design characteristics as the materials being replaced.

702.2 Tree Size

The following standards shall apply to all required trees at the time of planting.

<u>Type</u>	<u>Minimum Caliper¹ at Planting (Inches)</u>
Large Maturing Tree	2”
Medium Maturing Tree	2”
Small Maturing Tree	1.5”

¹Caliper shall be measured six inches above the ground.

702.3 Existing Vegetation

During the building process, not less than 25% of existing trees shall be saved or replaced, excluding gums and pines. All historic trees (any tree having a trunk circumference greater than 75 inches) shall be saved during the building process. The only exception to this would be if an historic tree is situated such that the project would not be feasible. The Zoning Administrator shall make this determination. Use of existing trees or shrubs to satisfy off-street landscaping is strongly encouraged. If such existing landscaping is used and consists of mature and semi-mature trees, the Zoning Administrator shall have the authority to reduce the amount of required landscaping by up to fifty (50%) percent based on the following schedule. In no instance shall any paved area within a parking area extend closer to any existing tree used for landscaping than its drip line. Any parcel that is to be developed, in any district, and for all uses, shall comply with the Town of Chapin Tree Preservation Study.

702.4 Irrigation

Except for individual single-family lots, all newly-planted and relocated plant material shall be watered by permanent irrigation systems. Trees shall be watered at a rate of five gallons per inch of caliper at least one time per week or as needed based on soil and weather conditions. All other vegetation shall be watered sufficiently to ensure healthy growth and longevity in the landscape.

702.5 Landscape Installation and Maintenance Responsibility

1. All required landscaping materials shall be in place prior to the time of issuance of a final Certificate of Occupancy. In periods of adverse weather conditions, a temporary Certificate of Occupancy may be issued, subject to the posting of a cash escrow or irrevocable letter of credit in an amount equal to one and one-half (1-1/2) times the estimated cost of the landscaping, with said estimated cost to be certified by a registered landscape architect. A contract letter or bill of sale from a landscape company or nursery for the required landscape materials would be accepted in lieu of a cash escrow or irrevocable letter of credit. The cash escrow or irrevocable letter of credit may be forfeited if the landscaping is not completed within nine (9) months after the issuance of the temporary Certificate of Occupancy. Forfeiture of any cash escrow or irrevocable letter of credit shall not relieve the owner of the responsibility to complete the required landscaping. To ensure compliance with this section and to encourage required vegetation to be installed during the appropriate season and within the required time period as prescribed by this Article, a letter of compliance may be accepted by the Town in lieu of installation, along with the letter of credit mentioned above, prior to the issuance of a certificate of occupancy for the site. This letter shall be in the form of an affidavit signed by the property owner and shall:
 - 1.1. Acknowledge that such owner is aware of any landscaping and/or screening requirements which apply to the property; and
 - 1.2. Stipulate that he will comply with those requirements by a specific date within the next appropriate planting season, but in no case more than nine months after the date of the affidavit, unless otherwise approved by the Zoning Administrator; and
 - 1.3. Acknowledge that failure to comply with the provisions of this section within the time frame specified in the letter shall constitute a violation of this section which shall subject the property owner to any and all enforcement actions permitted by law.
2. All landscape materials required or installed voluntarily by the developer, whether used for screening, buffering, open space, street buffers, or other required landscaping areas shall be

properly maintained by the property owner. Maintenance includes all actions necessary to keep landscaping materials healthy, neat and orderly in appearance, and free of litter and debris. Any landscape material lost, stolen, vandalized, or irreparably or irreversibly damaged, to include by disease or pests; or dead shall be removed and replaced unless, in the determination of the Zoning Administrator, the maturity of the remaining vegetation compensates for the loss of an individual shrub or tree, thereby causing the intent of the landscape standard to still be met without replacement. Maintenance of trees planted or included in landscaped areas must follow best management practices.

703. Buffers

703.1 Purpose

The purpose of a landscaped buffer is to help provide transition between different types of land uses, to break up or soften the appearance of paved surfaces, to protect significant water bodies and to provide the shade and greenery necessary to create a livable urban environment. Notwithstanding any other requirements of this section, buffers shall be required for all development as follows.

703.2 Applicability

Buffers shall be required whenever new development is approved or an existing building is expanded by more than 20 percent.

703.3 Location

Buffers shall not be located on any portion of an existing street or right-of-way; however, they may occupy part or all of any required front, side or rear yard setback. Property buffers shall be located on the outer perimeter of a lot or parcel, extending to the lot or parcel boundary line.

703.4 Use of Buffers:

A buffer may be used for passive recreation. All other uses are prohibited, including off-street parking, however, where permitted, freestanding signs may be installed in required buffers. To prevent damage to existing trees, overhead utility lines and underground pipes cannot be installed in buffers. With approval of the Zoning Administrator, such pipes may cross, but shall not run longitudinally within, the buffer.

703.5 General Requirements

- A. Planting requirements in buffer areas may be altered on a case-by-case basis by the Zoning Administrator in locations where the required buffer is wholly or partially within an existing easement.

- B. Along areas that are scheduled for easement or right-of-way acquisition or expansion by the SC Department of Transportation in the near future, the Zoning Administrator may allow a postponement of all or a portion of the buffer planting. Whenever postponement is allowed, a letter of compliance pursuant to this section shall be required.
- C. Where the location of existing permanent buildings on an existing site reduces the area available for a buffer, buffer requirements shall be met to the maximum extent practicable.
- D. Where implementation of the buffer requirements on an existing site would require the removal of parking spaces, the Zoning Administrator may approve a reduction of up to 20 percent of the required parking spaces in order to make room for required landscaping.

703.6 Exception

In the event that unusual topography or elevation of a development site, the size of the parcel to be developed, the soil or sub-surface condition of the site would make strict adherence to the requirements of this section serve no meaningful purpose or would make it physically impractical to install and maintain the required buffer plantings, the Zoning Administrator may alter the requirements of this section as long as the existing features of the development site comply with the spirit and intent herein. Such an alteration may occur only at the request of the property owner who shall submit a plan to the Zoning Administrator showing existing site features that would buffer or screen the proposed use and any additional buffer materials the property owner will plant or construct to buffer the proposed use.

703.7 Street Buffers

- A. Street buffers shall be required along all streets for new development sites, except residential development with no more than four units; redevelopment sites; residential subdivisions; and expansion of a commercial building by more than 20 percent except that street buffers shall not be required in the CBD district.
- B. All required street buffers shall be no less than six feet in width at any point and average eight feet in width, as measured perpendicularly to the street, along the entire length of the property.
- C. Large maturing trees shall be planted unless overhead utility lines or other factors require the use of medium or small maturing trees, as approved by the Zoning Administrator. Fractions generated by applying the minimum number of plants to the actual linear footage of the buffer shall be rounded up to the nearest whole number. (For example, 125 feet of buffer length would be required to have two large trees or three medium trees or four small trees.) The planting schedule for street buffers shall be as follows:

<u>Type</u>	<u>Minimum Number (Per Linear Foot)</u>
Large Maturing Trees	.015
Medium Maturing Trees	.040
Small Maturing Trees	.060

- D. In addition to the tree planting requirements, a minimum of 30 percent of the buffer area shall be planted in a combination of approved shrubs, perennials, ornamental grasses, live ground cover, or turfgrass, except that additional plantings may not be required in significant natural forested areas maintained within the street buffer if so, approved by the Zoning Administrator. All other areas, including bare ground under trees, shall be covered in a minimum of three inches of mulch. Spacing and arrangement of plant material must be primarily based on the mature dimensions of the plants.
- E. Berms shall be allowed to augment required street buffer plantings as long as a minimum of 50 percent of all required trees and plantings shall be planted along the street front portion of the berm.

703.8 Property Buffers

- A. The purpose of a property buffer is to minimize the potential negative impact between adjacent land uses and streets, and to promote land use compatibility.
- B. Property buffers shall be required along all applicable property boundaries for new development sites, redevelopment sites, major subdivisions, and whenever an existing nonresidential use is expanded by more than 20 percent.
- C. The property buffer width shall be established for new development based upon the following buffer types:
 - a. Type A - Shall apply when any use is similar to an adjacent use or has only a slight impact on the adjacent use. This is similar to the standard street yard requirement. See Table 2 for specific zoning uses to which this type of buffer shall apply.
 - b. Type B - Shall apply when any use is somewhat different from an adjacent use or has a moderate impact on adjacent uses. See Table 2 for specific zoning uses to which this type of buffer shall apply.
 - c. Type C - Shall apply when any use is clearly different from an adjacent use or has a definite impact on adjacent uses. See Table 2 for specific zoning uses to which this type of buffer shall apply.
 - d. Type D - Shall apply when any use is incompatible with an adjacent use or has a large impact on adjacent uses. See Table 2 for specific zoning uses to which this type of buffer shall apply.
 - e. Type E - Shall apply when any use is incompatible with or has a severe impact on adjacent uses. See Table 2 for specific zoning uses to which this type of buffer shall apply.

	Low Impact	Medium Impact		High Impact	
	Type A	Type B	Type C	Type D	Type E
Minimum Width	5 ft	10 ft	20 ft	50 ft	100 ft
Trees per 100 linear ft.	4	6	8	10	12
Shrubs per 100 linear ft.	12	18	30	40	50

Note: The minimum width may be reduced by 25% if a solid wall or fence, at least six feet in height, is constructed. A 50% width reduction may be granted with the installation of a solid brick wall, masonry wall faced with brick or stucco, or a berm with a minimum height of six (6) feet. Any wall or fence shall be complimentary to the building in design and materials. Maximum Requirement - The buffer yard should not result in using more than 35% of the available lot and may be reduced accordingly by the Zoning Administrator. Fences, walls, and berms, and parking area surfaces & driveways shall be maintained in good condition and appearance at all times by the owner.

- D. The use of evergreen trees and plans are strongly encouraged. Large maturing trees shall be planted unless factors such as overhead utility lines or buffer size require the planting of smaller trees. Such substitutions must be approved by the Zoning Administrator. In addition to the tree planting requirements, a minimum of 40 percent of the buffer area shall be planted in a combination of approved shrubs, annuals perennials, live ground cover, ornamental grasses, or turfgrass. All areas shall be maintained in a minimum of three inches of mulch. Plant materials shall be designed and installed in a manner that provides variability of height at maturity. Spacing and arrangement of plant material must be primarily based on the mature dimensions of the plants. The property buffer according to the proposed and adjacent land uses shall be as follows:

Proposed Adjacent Land Uses	RS-1 and RS-2	RS-3 and RG	Multi-Family	Mobile Homes	Mixed Uses	Religious, Educational, Recreational, Institutional, NC and OC	GC and IC	LM
RS-1 and RS-2	N/A	N/A	B	B	C	C	E	E
RS-3 and RG	N/A	N/A	B	B	B	B	D	E

Multi-family	C	B	A	A	B	B	C	E
Mobile Homes	B	B	B	N/A	C	C	C	E
Mixed Uses	C	B	A	B	A	B	B	D
Religious, Educational, Recreational, Institutional, NC and OC	C	B	B	B	B	A	C	D
GC and IC	E	E	D	C	C	C/D	A/B	C/D
LM	E	E	E	D	D/E	D/E	C/D	A/B

703.9 Riparian Buffers: RESERVED

703.10 Parking Lot Landscaping

The following standards shall apply to all new parking areas with 10 or more spaces and all expansions to existing parking areas which add 10 or more spaces, unless otherwise noted. In an expansion, only the area of expansion is required to be included in the calculation; however, the landscaping may be provided anywhere within the parking area.

- A. Plant material shall be selected and arranged to ensure the maximum safety of the public. No landscaping area shall be designed, installed or maintained in such a way that it provides cover or refuge for criminal activities.
- B. Plant material is required along 10 percent of the length of exterior building walls and structures to provide separation between the building and the vehicular surface area.
- C. Landscaped islands at least 200 square feet in size and a minimum of five feet on any side shall be placed at the ends of each row of parking spaces. Intermediate islands at least 200 square feet in size and a minimum of five feet on any side shall be placed throughout the parking lot so that no parking space is further than 60 feet from a tree, as measured from the end or edge of the parking space. One tree is required at the end of every row of parking, even if the row terminates at a buffer area.
 - 1. Each landscaped island shall include one large maturing tree unless there is an overhead utility line or street light present, in which case a small or medium maturing tree shall be planted.
 - 2. In addition to the tree planting requirement, a minimum of 20 percent of each landscaped island shall be planted in a combination of small maturing shrubs, perennials, annuals, ornamental grasses, and/or live ground cover. All other areas shall be maintained in a minimum of three inches of mulch wherever plant material is placed.

- D. Landscaped areas within or adjacent to parking areas must be protected from vehicular damage by a raised curb, wheel stops or approved equivalent barrier of at least six inches in height.
- E. Alternative, creative landscaping plans that incorporate larger islands or different spacing of landscaped areas than required in this section may be approved by the Zoning Administrator, as long as the minimum area of landscaping and minimum number of trees is provided.

704. Screening

704.1 Purpose:

The purpose of screening is to provide a visual barrier between an unsightly or out of scale feature and the view from public streets and abutting properties.

704.2 Opaque Screening Required:

Unless otherwise specified in this section, all required screening shall be opaque. An opaque screen is intended to exclude all visual contact with the screened feature from an adjacent property, public street, or right-of-way. An opaque screen may be composed of a wall, fence, building, or berm; planted vegetation; existing vegetation; or a combination thereof; as approved by the Zoning Administrator. A wall, fence, or building, or combination thereof, must be used to screen dumpsters and loading and delivery areas.

704.3 Structural Screens

If structural materials are used for screening, such as for walls or fences, such structure must be augmented with vegetation to soften the appearance of the structure. Plants required for buffer landscaping per the provisions of this chapter may be incorporated to satisfy these requirements, per approval by the Zoning Administrator. Such vegetation shall be planted or in the case of incorporation of existing vegetation shall exist on the side of the fence or wall that faces away from the land use or feature that requires screening.

704.4 Height of Required Screening

The height of required screening shall be sufficient to block the view of the feature for which the screening is required from the adjoining property that is to be provided such protection. All required screening shall be opaque to a height of at least six feet above grade at maturity.

704.5 Length of Required Screening

The length of a required screen shall be that which is necessary to totally visually screen the feature from protected properties, streets, and rights-of-way as provided in this section. The Zoning Administrator may approve accommodations for reasonable access and use, as necessary.

704.6 Screening Required for Features

Screening to minimize views from adjacent existing residential properties, properties in

residential zoning districts, roads and public rights-of-way shall be required for the following features. To maximize site line obstruction, a screen shall be placed immediately adjacent to the feature to be screened except as otherwise approved by the Zoning Administrator. The Zoning Administrator may approve accommodations for reasonable access, use, and maintenance of the features and equipment, as necessary.

- A. Mechanical equipment for all non-residential uses at ground level and mounted on roofs, including, but not limited to HVAC equipment, transformers and generators;
 - 1. Roof mounted mechanical equipment shall not be visible in any direction from any adjacent existing residential properties, properties in residential zoning districts, roads and public rights-of-way. Where it can be clearly demonstrated that such equipment is not visible from any adjacent existing residential properties, properties in residential zoning districts, roads and public rights-of-way, the Zoning Administrator may waive screening requirements.
 - 2. Screening of roof-mounted equipment shall be accomplished by solid and permanent roof-mounted screens, compatible with the architectural style, materials and color of the building upon which the equipment is located.
- B. Garbage and Trash Collection Areas, including dumpsters;
- C. Delivery and Loading Areas; and
- D. Open storage areas accessory to non-residential uses must be totally screened from public view.

704.7 Fences and Walls

All fences and walls shall meet the requirements of outlined in the Zoning Ordinance.

704.8 Berms

The following standards shall apply to all berms:

- A. No structures, including fences, shall be placed on a berm unless approved by the Zoning Administrator as part of the landscaping requirements for a development site.
- B. Berms shall not be used for the display of vehicles or other merchandise.
- C. If included in the landscape design, berms shall:
 - 1. Have a minimum height of eighteen inches, a minimum crown width of two feet, and a side slope with a width to height ratio of no greater than three to one (3:1). No berm shall exceed four feet in height once the soil settles.
 - 2. Be designed and constructed with an undulating appearance which mimics, as much as is practicable, a natural topographical feature of the site.
 - 3. Be substantially planted and covered with live vegetation. No berm shall consist entirely of turf grass, ground cover, mulch or similar material.

4. Be fully installed, planted, stabilized and maintained prior to certification of zoning compliance.
 5. Be designed to prevent standing water or to impede the flow of stormwater from adjacent properties.
- D. **Berm Soil:** The following standards shall apply to soil to be used as a planting berm.
1. The soil shall be imported topsoil or manufactured topsoil from off-site sources.
 2. The soil should be obtained from naturally well-drained sites where topsoil occurs at least four inches deep, but shall not be obtained from agricultural land, bogs or marshes.
 3. Berm soil shall be free of stones of one inch or larger in any dimension; roots, plants, sod, clods, clay lumps, or pockets of coarse sand; contaminants such as chemicals, construction materials and building debris, fuels, and other extraneous materials harmful to plant growth; and obnoxious weeds and invasive plants, including but not limited to quack grass, Johnson grass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and brome grass.
 4. The soil shall not be infested with nematodes, grubs, other pests, pest eggs, or other undesirable organisms and disease-causing plant pathogens.
 5. Soil for berms shall be friable and with sufficient structure to give good tilth and aeration. Soil shall be within a pH range of 6.2 to 6.8.

705. Open Space

705.1 In General

In order to continue the development of a system of quality open spaces and recreation areas throughout the town's jurisdiction, the following standards shall apply to all developments and all open space and recreation areas in all zoning districts unless otherwise noted.

- A. In developments with 20 or more multi-family residential units (including townhouses and patio homes) or manufactured home parks with more than nine manufactured homes, open space shall account for a minimum of 20 percent of the total land area of the site. In developments with 20 or more single-family detached residential units, open space shall account for a minimum of 10 percent of the total land area of the site.
 1. No existing development, building or structure meeting the criteria above shall be expanded or enlarged unless the minimum open space requirements of this section are met.
 2. In single-family detached developments, open space may not include any required yard, setback or buffer area for individual residential lots or parcels.
 3. In multi-family developments and manufactured home parks, required buffer areas may be included in open space if held in common ownership.
- B. Public open space and recreation areas, except environmental open space, shall:

1. Have direct access from public streets;
 2. Be visible and easily accessible; and
 3. Have multiple points of entry.
- C. All open space and recreation areas, except environmental open space, shall be well separated from moving vehicles by vegetation, fencing, walls, sidewalks or a combination of those elements.
- D. Open space not meeting the criteria of environmental open space shall be substantially clustered around the edges of the development to buffer the development against adjacent tracts of land, especially land used for agriculture and low-density residential development.
- E. The land used for required open space and recreation areas, except environmental open space, shall have an average slope of five percent or less with no portion of the land exceeding a 15 percent slope.
- F. Required open space and recreation areas may be public or private. The planning, construction, and maintenance of privately owned facilities shall adhere to the following:
1. Private open space intended to count towards the open space requirements of this section shall be held and maintained by a legally constituted homeowner's association or corporation. Land designated as open space may not be separately sold, subdivided or developed.
 2. High maintenance cost facilities such as swimming pools shall not be counted in determining compliance with the minimum open space and recreation area requirements of this section. Bridges along pedestrian and bicycle paths and similar high-cost facilities shall not be permitted as an integral part of any required open space or recreational area unless no feasible alternative exists.
 3. Each phase of a phased development shall meet the minimum requirements for open space and recreational areas. All plans for such developments shall demonstrate compliance for each phase. No certificates of occupancy shall be issued until all such required facilities have been installed or bonded by the developer and approved by the Town.
 4. The responsibility for the perpetual maintenance of open space shall be with the owner. Maintenance for required open spaces shall include ensuring that no hazards, nuisances or unhealthy conditions exist; and keeping the property neat and orderly in appearance and free of litter and debris. Failure to adequately maintain open space shall constitute a violation of this ordinance and shall subject the owner to any and all remedies permitted herein.

706. Tree Conservation

706.1 Purpose

The Tree Conservation requirements for the Town of Chapin are intended to promote the conservation of healthy and structurally sound trees for the purpose of protecting the public

safety, health and welfare through benefits of such trees, including, but not limited to the following.

1. Improving air quality through the reduction of carbon dioxide and provision of oxygen.
2. Reducing air pollution by filtering dust and other unwanted airborne particles.
3. Filtering and purifying of stormwater passing through the ground to drinking water aquifers.
4. Stabilizing soil as an effective component of soil conservation, and erosion and flood control.
5. Providing shade, which reduces ambient temperatures and makes outdoor areas more habitable during warmer months.
6. Assisting in the reduction of noise levels and glare.
7. Assisting in the retention and improvement of the character and appearance of the Town, which increases the desirability of the area and consequently has a positive impact on residential and economic growth and property values.

706.2 Unlawful to Remove, Cut or Damage Significant Trees

Unless authorized by the terms of this section or approved by the Zoning Administrator during site plan review, no person shall cut down, remove, irreparably or irreversibly damage or destroy any significant tree located within a public right-of-way, or required buffer, setback, yard, landscaped area or open space, except when necessary to provide access to a site or insure the safety and security of people and property or when located on a single-family property. Violations of this ordinance are subject to any and all remedies, fines and fees as specified herein and in § 706.11—Penalties for Landscape, Tree Conservation and Buffer Violations.

706.3 Platting of Subdivisions

Developers shall design projects so that buildable areas exist on lots to minimize the need for future builders to remove significant trees to achieve a reasonable use of an individual lot.

706.4 Tree Conservation on Undeveloped or Redeveloped Properties

1. Removal of significant trees on all properties, except for single-family residential properties, shall be prohibited prior to any land disturbance on the site and prior to securing a grading permit, land development permit and/or building permit for new construction or development, redevelopment, or expansions to buildings or site elements such as parking lots or service areas. However, on parcels of 20 acres or more that are designated as tree plantations, trees internal to the property may be removed prior to development as long as a 50-foot-wide undisturbed tree protection zone is defined on the perimeter of the property, as identified on the site plan and approved by the Zoning Administrator. Within such specified tree protection zone, no trees or other vegetation may be removed without the approval of the Zoning Administrator, except

to accommodate permitted driveways and new roads.

2. All significant trees must be identified on the site plan and reviewed by the Zoning Administrator prior to any land disturbance on the site, and to securing a grading permit, land development and/or building permit. Notwithstanding this requirement, on parcels of 20 acres or more that are designated as tree plantations, the applicant will not be required to identify individual significant trees. It is required that applicants for grading, land development and/or building permits request a preliminary review of the site plan by the Zoning Administrator to maximize protection of significant trees while enabling efficient use of the property before finalizing all site, development and construction plans.
3. Replacement is required for the removal of significant trees identified on the site plan and approved by the Zoning Administrator, except as exempted in §706.6(4). One tree of appropriate caliper at the time of planting, as provided in §702.2 - Tree Size, selected from the List of Approved Tree Species for the Town of Chapin and approved by the Zoning Administrator, is required to be planted in a suitable location on the property to replace each tree removed. Replacement trees must be planted according to the §702 as provided by the Zoning Administrator. Trees included as part of required buffer areas and parking lot landscaping may be counted as replacement trees. A tree replacement plan, including the location, genus and size (DBH) of the tree to be removed; and the species and proposed locations and caliper at the time of planting (as provided in § 702.2- Tree Size) of replacement trees, must be approved by the Zoning Administrator prior to site plan approval.
4. On parcels of 20 acres or more in size that are designated as tree plantations, where trees internal to the property are to be removed prior to development as provided in § 706.5(1) above, required tree replacement shall be 15 large maturing trees per acre for each area that is cleared. Such trees shall be selected from the List of Approved Tree Species for the Town of Chapin and planted according to the §702 as approved by the Zoning Administrator. Trees included as part of required buffer areas and parking lot landscaping may be counted as replacement trees.
5. If replacement of significant trees to be removed is not possible due to factors including, but not limited to, the inability of the site to accommodate the required replacement trees, or site or development constraints, at a minimum, a fee in an amount established by the Town of Chapin Fee Schedule shall be assessed for each significant tree removed, which shall be deposited into the Town of Chapin Tree Fund.
6. In order to ensure the replacement of trees according to this section, where it is determined that trees can be replaced, a bond, letter of credit, or other surety satisfactory to the Town shall be deposited with the Zoning Administrator in an amount and of a term satisfactory to the Zoning Administrator prior to issuance of a certificate of occupancy or any use of the property. Trees shall be replaced, in compliance with this section, within the term of any such surety. In the event that adequate replacement trees have not been planted within 30 days of the expiration of any such surety, the Town shall be granted

the ability to draw upon the funds of any such surety in order to fund the planting of replacement trees as shown on the approved site plan.

7. Individual single family residential lots shall contain a minimum of 4 trees of which at least one shall be required to be in the front yard. A minimum of 1 tree shall be a large maturing tree. Newly planted trees shall meet the minimum size in § 702.2.

706.5 Tree Protection

Before and during any land disturbance, construction or development, the following measures shall be utilized to protect significant trees, including tree crowns and roots, designated for retention and protection per the site plan as approved by the Zoning Administrator.

1. Prior to clearing/grading/land disturbance, construction and/or development of a property, the owner shall be responsible for any and all tree and root protection necessary to protect identified significant trees from damage before, during and after construction. All significant trees, as well as other existing and newly planted vegetation that is required by the landscaping and buffer provisions, shall be protected with a sturdy and visible fence before any land disturbance begins. At a minimum, such Tree Protection Zone (TPZ) shall be established and be equal to a one-foot radius on the ground for every inch of Diameter at Breast Height (DBH) of each significant tree to be protected.
2. The location of the TPZ fencing and method of construction shall be noted on the site plan. Tree protection fencing shall be installed and remain in place and in good condition until all clearing/grading/land disturbance, development and construction activities are completed. The tree protection fencing shall be constructed from any material substantial enough to prohibit and keep out vehicles, people, and all other activities associated with the clearing/grading/land disturbance, development and construction process, as approved by the Zoning Administrator. Examples include wood posts and rails, chain link fencing, wire fencing and posts, and other substantial materials. Tree protection fencing shall be a minimum of four feet high.
3. All Tree Protection Zones shall be designated as such with “Tree Protection Zone – Caution Do Not Enter” signs posted visibly on all sides of the fenced protection area, with lettering and colors that provide maximum readability in terms of distance and contrast.
4. No soil disturbance or compaction, stock piling of soil or other construction, paving or landscaping materials, vehicular traffic, or storage of heavy equipment is allowed in the tree protection zones of trees to be retained.
5. In situations where strict adherence to the provision of tree protection zones is not possible due to factors including, but not limited to, site conditions, overlapping tree protection zones, or grade changes, the Zoning Administrator may, through field determination and consultation, allow modifications to the required tree protection zone based on accepted best practices and procedures.

706.6 Tree Removal Permit Required for Existing Developed Properties

1. **Permit Required.** Except for single-family residential properties, a permit shall be required for the removal of any significant tree.
2. **Responsible Party.** The property owner will be held responsible for all actions related to tree damage and removal.
3. **Acceptable Reasons for Tree Removal.** Removal of significant trees shall be permitted for the following reasons.
 - a. The tree is dead.
 - b. The tree is affected by a pest or disease problem that is untreatable or treatment is impractical and will result in rapidly declining tree health or a hazardous condition.
 - c. The tree is in irreversible decline due to mechanical damage, poor maintenance or environmental stresses or a combination thereof and its condition cannot be improved with standard maintenance techniques.
 - d. The tree has an uncorrectable structural defect that results in an increased risk of whole or partial tree failure.
 - e. The tree is reducing existing or proposed site visibility of traffic signs/signals, intersections or other situations, which may endanger life or property and the correction of the problem, will result in crown reduction encompassing more than 50 percent of the normal canopy.
 - f. The tree is in an existing or proposed restricted growth space resulting in conflict with the surrounding hardscape or infrastructure and the conflict cannot be resolved.
 - g. The tree is in conflict with overhead utility lines and proper pruning cannot adequately reduce the conflict without severely disfiguring the tree or will result in crown reduction encompassing more than 50 percent of the normal crown.
 - h. The tree is in conflict with proposed site reconfiguration/improvements or above/below ground utility upgrades and the conflict cannot be resolved or the correction of the problem will result in severe disfigurement of the tree or severe root damage which compromises structural stability or will result in crown reduction encompassing more than 50 percent of the normal crown.
4. **Replacement of Trees Removed.** All trees removed per an approved tree removal permit shall be replaced within 90 days after removal unless a longer period of time is approved by the Zoning Administrator after determining that construction activities or weather conditions warrant an extension. Trees that have been removed shall be replaced by a tree of comparable size at maturity and of appropriate caliper at the time of planting, as provided in § 702.2- Tree Size, selected from the List of Approved Tree Species for the Town of Chapin and approved by the Zoning Administrator. All replacement trees shall be planted in suitable locations on the property as approved by the Zoning Administrator. Replacement trees must be planted according to the Tree Installation Specifications for the Town of Chapin as provided by the Zoning Administrator.

5. **Tree Replacement Not Possible.** If tree replacement on the property is not possible for reasons approved by the Zoning Administrator including, but not limited to, unique site conditions, safety concerns, and/or limitations of reasonable use of the property, the property owner may submit a request in writing to the Zoning Administrator to pay a fee to the Town of Chapin Tree Fund in lieu of replacing the tree(s). The request shall include information that demonstrates why the on-site planting of replacement tree(s) is not possible. A fee in an amount established by the Town of Chapin Fee Schedule shall be assessed for each significant tree removed, which shall be deposited into the Town of Chapin Tree Fund as provided in § 706.11(E) – Establishment of Town of Chapin Tree Fund.

706.7 Exemption for the Removal of Significant Trees

In the event that a tree poses a severe or imminent threat to public safety or property, such as a result of a catastrophic event or when a tree is irreparably damaged, the Zoning Administrator may waive the requirements of this section. Written and photographic documentation must later be submitted to the Zoning Administrator, describing the threat which initiated the removal. The Zoning Administrator may require replacement of any trees which are removed where it is determined that the threat resulted from negligence.

706.8 Tree Maintenance

Maintenance of significant trees protected before and during development, planted as replacements for significant trees that were removed during development, or otherwise planted or protected by the provisions of the Tree Conservation Section, must be maintained using Best Management Practices included and referenced in the Town of Chapin Tree Maintenance Requirements as provided by the Zoning Administrator.

706.9 Forestry Activity

1. **Permitted Forestry Activity.** Pursuant to the provisions of the South Carolina Forestry Management Act Section 48-23-205, forestry activities are permitted on all forestland parcels within the Town of Chapin.
2. “Forestland” means land supporting a stand or potential stand of tree valuable for timber products, watershed or wildlife protection, recreational use, or for other purposes.
3. “Forestry Activities” include, but are not limited to, timber harvest, site preparation, controlled burning, tree planting, application of fertilizers, herbicides, pesticides, weed control, animal damage control, fire control, insect and disease control, forest road construction, and any other generally accepted forestry practices.
4. “Stand” means a contiguous group of trees sufficiently uniform in age-class distribution, composition and structure and growing on a site of sufficiently uniform quality, to be a distinguishable unit. A mixed stand is composed of a mixture

of species, a pure stand is composed of essentially a single species and in a stratified mixed stand different species occupy different strata of the total crown canopy.

5. All Forestry Activities are permitted on Forestland that is:
 - a. Taxed on the basis of its present value as forestland under S.C. Code of Laws Section 12-43-220(d); or
 - b. Managed in accordance with a forest management plan that is prepared or approved by a South Carolina Registered Forester; or
 - c. Certified under the Sustainable Forestry Initiative, the Forest Stewardship Council, the American Forest Foundations Tree Farm System, or any other nationally recognized forest certification system; or
 - d. Subject to a legally binding conservation easement under which the owner limits the right to develop or subdivide the land; or
 - e. Managed and harvested in accordance with the best management practices established by the State Forestry Commission pursuant to S.C. Code of Laws Section 48-36-30 as determined by the Zoning Administrator.
6. Time Restrictions on Permit Issuance after Completion of Certain Forestry Activities. In the event that the Zoning Administrator determines that any Forestry Activity on Forestland, that is otherwise permitted pursuant to subsection 5(a)-(e) above, has resulted in a change in the land from Forestland to nonforest or nonagricultural use, the Zoning Administrator may deny a grading permit, building permit or land development permit for a period of either:
 - a. One year after the completion of a timber harvest if the activity results in the removal of all or substantially all of the trees from the parcel.
 - b. Five years after the completion of a timber harvest if the harvest results in the removal of all or substantially all of the trees from the parcel and the harvest was a willful violation of Town regulations.

706.10 Site Monitoring and Inspections

The Zoning Administrator shall have access to all active and recently completed development, redevelopment and construction sites and all sites upon which land disturbance is planned or is occurring, to make sure that the requirements of § 706 – Tree Conservation, including any modifications approved by the Zoning Administrator, are being met.

706.11 Penalties for Landscape, Tree Conservation and Buffer Violations

(1) Where any landscaping, buffering, tree conservation or open space violation has occurred or is proposed to occur, the Zoning Administrator may, in accordance with the provisions of S.C. Code § 56-7-80, as amended, issue an ordinance summons, or institute injunction, mandamus, or other appropriate action or proceeding to prevent such unlawful action, or to correct or abate the violation or to prevent the occupancy of any building, structure or land

associated with the violation. In addition to any other remedies for penalties in general specified herein, the following remedies shall apply for these types of violations:

(a) If a significant tree is approved for removal and if the planting of a replacement tree is not possible per the provisions of § 706-Tree Conservation, a fee in an amount of no less than \$250 per tree as established by the Town of Chapin Fee Schedule shall be assessed against the property owner for each tree not planted.

(b) Failure to plant replacement trees in accordance with this Zoning Ordinance as required by the provisions of § 706-Tree Conservation shall be subject to a fee in an amount of no less than \$500 as established by the Town of Chapin Fee Schedule for each tree not planted. No fine shall be assessed until the person or entity alleged to be in violation has been notified of the violation. Such notification shall identify the nature of the violation and shall set forth the measures necessary to achieve compliance; shall specify a date by which the person or entity must comply; and shall advise that failure to correct the violation within the time specified will subject that person or entity to any and all remedies including fines as outlined in this Zoning Ordinance. If the site is not brought into compliance within the time specified in the notice of violation, a fine may be assessed from the date the notice of violation is received. The failure to plant each individual tree shall constitute a separate, daily and continuing violation.

(c) The willful, purposeful or negligent removal of a significant tree before, during or after development shall be assessed in accordance with generally accepted industry evaluation methods such as those in the Guide for Plant Appraisal authored by the Council of Tree and Landscape Appraisers and published by the International Society of Arboriculture. However, the maximum fine for each tree removed shall not exceed \$20,000. No notice of violation is needed prior to the assessment of a fine issued pursuant to this division.

(d) Irreparable injury or damage to, or destruction of trees protected by § 706 - Tree Conservation that result in the total loss of the tree shall be assessed in accordance with generally accepted industry evaluation methods such as those in the Guide for Plant Appraisal authored by the Council of Tree and Landscape Appraisers and published by the International Society of Arboriculture. However, the maximum fine for each tree irreparably injured, damaged or destroyed shall not exceed \$20,000. No notice of violation is needed prior to the assessment of a fine issued pursuant to this division.

(e) Injury or damage to trees protected by § 706 -Tree Conservation that do not result in the total loss of the tree(s) shall be assessed for each tree in accordance with generally accepted industry evaluation methods such as those in the Guide for Plant Appraisal authored by the Council of Tree and Landscape Appraisers and published by the International Society of Arboriculture. However, the maximum fine shall not exceed \$1,000. No notice of violation is needed prior to the assessment of a fine issued pursuant to this division.

(f) The fine for failure to install or maintain required tree protection measures in accordance with § 706-Tree Conservation shall not exceed \$1,000. No fine shall be assessed until the person or entity alleged to be in violation has been notified of the violation. Such notification

shall identify the nature of the violation and shall set forth the measures necessary to achieve compliance; shall specify a date by which the person or entity must comply; and shall advise that failure to correct the violation within the time specified will subject that person to any and all remedies including fines as outlined in this Zoning Ordinance. If the site is not brought into compliance within the time specified in the notice of violation, a fine may be assessed from the date the notice of violation is received. The failure to install the required tree protection measures shall constitute a separate, daily and continuing violation. Injury or damage to, or destruction of, significant trees required to be protected resulting from inadequate or omitted tree protection measures constitute a separate violation which may subject the violator to penalties and fines as well.

(2) Issuance of a fine or penalty does not relieve any party of complying with the mitigation requirements set forth in this subchapter.

(3) All fees collected shall be deposited into the Town of Chapin Tree Fund.

(4) Establishment of the Town of Chapin Tree Fund. All fines and fees collected pursuant to the provisions of division (1) of this section shall be recorded and maintained in a special account to be known as the Town of Chapin Tree Fund. All such funds and accrued interest shall be used only for the purpose of funding the installation, maintenance and management of trees on public property within the town. The town shall maintain financial records of the Tree Fund including revenues and disbursements from the Fund.