

City of Madison

Morgan County

Not located in a MSA.

2003 Population Estimate 3,779; +3.9% change from 2000 Census.

Tree City USA for 16 years.

City Tree Board with 7 members; no meeting frequency required by ordinance.

Chapter 86 VEGETATION

Year first adopted or last revised unknown.

Addresses public and private property.

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Chapter 86 VEGETATION*

***Cross references:** Buildings and building regulations, ch. 18; environment, ch. 38; planning, ch. 54; streets, sidewalks and other public places, ch. 62; subdivisions, ch. 66; zoning, ch. 90.

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Sec. 86-1. Purpose and intent of chapter.

The city council finds that the city is blessed with a diverse and abundant cover of trees and vegetation which is of general aesthetic value to the city. This ecological diversity makes the city a desirable place for residents and visitors alike. The appearance of the city from the public ways contributes ecologically and aesthetically to the economic prosperity of the city and demonstrates pride in its natural heritage. However, the growth and development of the city oftentimes requires the removal of trees and other plant material, thereby contributing to the depletion of a most valuable natural resource. Therefore, it is necessary to protect, preserve and restore this valuable asset; and the city council declares the purposes and intent of this article to be as follows:

- (1) To aid in stabilizing the environment's ecological balance by contributing to the processes of air purification, oxygen regeneration and carbon dioxide reduction, and stormwater runoff retardation, while at the same time aiding in noise, glare and heat abatement.
- (2) Prevent reductions in the drainage holding capacity of land.
- (3) Prevent soil erosion.
- (4) Prevent streams, ditches and other waterways from silting.
- (5) Maintain moderate temperature extremes with natural tree cover.
- (6) Maintain moisture levels in the air.
- (7) Minimize noise and glare.
- (8) To provide a habitat for living things that might not otherwise live or survive in urban and suburban environs.
- (9) To encourage the preservation of existing trees and vegetation.
- (10) To provide visual buffering and enhance the beauty of the city.
- (11) To safeguard and enhance property values, thereby protecting public and private investments.

(12) To preserve the unique identity and environment of the city.

(13) To conserve energy and to protect the public health, safety and general welfare.

(Code 1991, § 27-108(A))

Sec. 86-2. Definitions.

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

Arborist means a specialist in the care and maintenance of trees.

Buffer means any visual buffer or screening.

Buildable area means that portion of a lot on which a structure or improvements may be erected according to current zoning requirements.

Building means any structure having a roof supported by columns or walls that encloses a space and intended for the shelter, housing or enclosure of any individual, animal, process, equipment, goods or materials of any kind or nature or as further defined in the building codes of the city.

Building official means the individual appointed by the city to enforce its building and zoning ordinances and regulations.

Caliper means tree trunk diameter measured at a point six inches above ground level. (Acceptable diameter is within ± 0.5 inch of caliper in the table, unless caliper is two inches or less, in which case diameter must be within $-0.25, +0.5$ inch.)

Canopy dripline means a vertical line extending from the outer surface of a tree's branch tips down to the ground.

Cover area means that area which falls within the dripline of any tree.

Critical root zone means the land area circular in shape and centered on the trunk of a tree, the radius of which circle is defined by the farthest canopy dripline.

dbh means diameter-at-breast-height, which is the tree trunk diameter (in inches) at a height of 4 1/2 feet above the ground. If a tree splits into multiple trunks below 4 1/2 feet, then each trunk is measured as a separate tree.

Destroy means any intentional or negligent act which will cause a tree to decline and die within a period of two years, including but not limited to such damage inflicted upon the root system of a tree by the application of toxic substances, the operation of heavy machinery, the change of natural grade by excavation or filling the covered area or around the trunk of a tree, and damages from injury or from fire inflicted on trees which result in or permit pest infestation.

Developed property means property upon which a building, structure, pavement or other improvements have been placed.

Development area means, under an approved tree protection plan, the portion of a tract exempted from the tree protection zone; consisting of the area to be occupied by buildings, the area to be occupied by unenclosed accessory uses, and the area necessary to meet minimum parking requirements.

Exceptional tree means any tree determined by the mayor and council to be of notable historic interest, high aesthetic value, or of unique character because of species, type, age or size.

Green space means any area retained as permeable unpaved ground and dedicated to supporting vegetation.

Height means the height of mature specimens under favorable growing conditions. (If expressed as a range, the midpoint of the range is the average height and the bottom of the range is the minimum height.)

Historic tree means a tree which has been determined to be of notable historic interest because of its age, size or historic association and has been so designed in the official records of the city.

Pine means a tree of the family Pinaceae, genus Pinus.

Public utility means any publicly, privately or cooperatively owned line, facility or system for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil products, water, steam, clay, waste, stormwater not connected with highway drainage and other similar services and commodities, including publicly owned fire, police, traffic signals and lighting systems, which directly or indirectly serve the public or any part of the public.

Shade tree means a broad-leaf tree having an average height at maturity of at least 20 feet and having a broad spread relative to its height (excluding trees with pyramidal, conical or columnar crowns) and a dense canopy, so as to provide shade to structures or parking areas in the summer months.

Specimen tree means any tree in fair or better condition which:

- (1) Equals or exceeds the following diameter sizes (except as provided in subsection (2) of this definition):
 - a. Large hardwoods, e.g., oaks, hickories, yellow poplars; 30 inches dbh;
 - b. Large softwoods, e.g., pines, deodar cedars, 36 inches dbh;
 - c. Small trees, e.g., dogwoods, redbuds, sourwoods, 12 inches dbh;
- (2) Meets the following minimum standards:
 - a. Life expectancy of greater than 15 years;
 - b. A relatively sound and solid trunk with no extensive decay or hollow, and less than 20 percent radial trunk dieback;
 - c. No more than one major and several minor dead limbs (hardwoods only);
 - d. No major insect or pathological problem;
 - e. If lesser sized, is a rare or unusual species or of historical significance;
 - f. If lesser sized, is specifically used by a builder, developer or design professional as a focal point in a project or landscape;
 - g. Has been designated in the official records of the city.

Specimen tree stand means a contiguous grouping of trees which is of high value because it is a:

- (1) Relatively mature, even-aged stand;
- (2) Stand with purity of species composition or of a rare or unusual nature;
- (3) Stand of historical significance; or

(4) Stand with exceptional aesthetic qualities.

Tree means any self-supporting woody perennial plant, usually with one main stem or trunk and many branches, which has a trunk diameter of two inches or more measured at a point six inches above ground level and which normally attains a height of at least ten feet at maturity.

Tree establishment plan means a map and supporting documentations which describes for a particular site where trees are to be planted in compliance with the requirements of this chapter, the types of trees, and their corresponding tree quality points.

Tree, large, means a tree with a height at maturity of 40 feet or more.

Tree protection plan means a map and supporting documentation which describes for a particular site where existing trees are to be retained in compliance with the requirements of this chapter, the types of trees, and their corresponding tree quality points.

Tree protection zone means the area surrounding a preserved or planted tree that is essential to that tree's health and survival, and is protected within the guidelines of this chapter.

Tree replacement plan means a plan indicating the location, size, quantity and species of replacement trees.

Tree, small, means a tree with a height at maturity of not more than 40 feet.

Undeveloped property means property upon which no building, structure, pavement or other improvements have been placed.

Yard area means an open space which is unoccupied and unobstructed from the ground upward, with the exception of trees and other natural vegetation, on the same lot with a building.

(Code 1991, § 27-108(B))

Cross references: Definitions generally, § 1-2.

Sec. 86-3. Tree board established.

There is created and established a city tree board, which shall consist of seven members. Members shall be residents of the city, though one member may be a nonresident with professional expertise in arboriculture or horticulture. They shall be appointed by the mayor and city council and shall serve without compensation.

(Code 1991, § 27-108(C))

Cross references: Authorities, boards, commissions and committees, § 2-141 et seq.

Sec. 86-4. Term of office of tree board members.

Each member of the city tree board shall serve for three years, with the exception of the members of the first board, which shall have three members serving for only one year, three members serving for two years, with only one original member serving a full three-year term. If a vacancy occurs during the term of any member, his successor shall be appointed for the unexpired portion of the term. The chairman of the tree board shall recommend to the mayor and city council a replacement of members for the nonperformance of duties.

(Code 1991, § 27-108(D))

Sec. 86-5. Applicability.

- (a) This article provides full power and authority over all trees located within street rights-of-way, parks and public places of the city, and to trees located on private property except as otherwise noted in this section.
- (b) The tree protection zone shall correspond to the entirety of a tract of land for which no tree protection plan has been approved. After such approval, the tree protection zone shall correspond to that part of a tract of land designated as a tree protection area in the plan.
- (c) This chapter shall not apply to the following:
- (1) Tracts of land for which the zoning ordinance imposes no yard requirements and permits 100 percent coverage of the lot by buildings.
 - (2) Property occupied by single-family dwelling, unless nonresidential uses or additional dwelling units are proposed for such property or construction, paving or other activity on the property will damage trees on the public right-of-way.
 - (3) Property containing at least five acres in areas zoned industrial according to the latest zoning atlas of the city.
 - (4) Property upon which is located improvements in the amount of at least \$50,000.00, and the owner of the property is not increasing the value of the improvements by more than 50 percent.

(Code 1991, § 27-108(E))

Sec. 86-6. Tree protection plan.

- (a) *Protective measures.* In the tree protection zone, protective measures shall be applied to the aboveground portion of a tree and to roots within the critical root zone, as follows:
- (1) *Damage prohibited.* No person shall:
 - a. Cut, carve, transplant, or otherwise damage or remove any tree;
 - b. Attach any rope, wire, nails, advertising posters, or other contrivance to any trees;
 - c. Allow any gaseous, liquid or solid substance which is harmful to trees (such as concrete washout, fuel, lubricants, herbicides, paint) to come in contact with them; or
 - d. Set a fire or permit any fire to burn when such fire or the heat of the fire will injure any portion of any tree.
 - (2) *Fence required.* During excavation, filling, construction or demolition operations, each tree or stand of trees shall be protected against damage to bark, roots and low-hanging branches with a fence enclosing the critical root zone (four feet high, two-inch by four-inch posts; with double one-inch by four-inch rails, plastic construction area fencing, or 12-gauge two-inch by four-inch wire mesh). "Tree save area" signs shall be posted on all sides of the fenced area.
 - (3) *Compaction prohibited.* All buildings materials, vehicles, construction equipment, dirt, debris or other objects likely to cause soil compaction or aboveground damage shall be kept outside the critical root zone. Where a limited amount of encroachment is unavoidable and is approved by the building official,

the critical root zone shall first be mulched with a four-inch layer of processed pine bark or wood chips or a six-inch layer of pine straw.

(4) *Grade changes prohibited.* There shall be no raising or lowering of the ground level within the critical root zone. Stripping of topsoil in the critical root zone shall not be permitted. Where necessary, the use of moderate fill is permitted only with prior installation of an aeration system approved by the building official. Deposition of sediment in the critical root zone shall be prevented by placement of sediment barriers, which shall be backed by two-inch by four-inch wire mesh in areas of steep slope.

(5) *Ditches, trenches prohibited.* No person shall excavate any ditch, tunnel or trench within the critical root zone. Where such encroachment is unavoidable and is approved by the building official, tunneling rather than trenching shall be used. If roots must be cut, root pruning procedures approved by the building official must be employed.

(6) *Paving prohibited.* No person shall pave with concrete, asphalt or other impervious material within the critical root zone.

(b) *Plan required; contents.* A proposal for development or improvement of any tract of land shall include a tree protection plan, including trees to be planted in order to meet the minimum requirements of this chapter. The tree protection plan may be included in the soil erosion and sediment control plan; see chapter 38. Such plan shall be submitted to the building official prior to any grading, bulldozing or other removal of the existing vegetation that may affect the health of existing tree coverage. The plan shall show the following:

(1) Names and addresses of the owner of record and the applicant.

(2) Boundary lines of the tract by lengths and bearings, streets adjoining the property, total area of the tract, north point, graphic scale and date.

(3) All existing specimen trees, including those to be removed, and all other trees ten inches dbh or greater which will remain on the site and be protected during construction; and trees less than ten inches dbh which are submitted for credit under subsection (b)(6) of this section. The owner of the property shall indicate the common and botanical names and the size of each tree. In heavily wooded areas that will not be disturbed, the site plan may show only the boundaries of each stand of trees and a list of the number, size and species of ten inches dbh or large trees in each stand.

(4) Locations of proposed buildings, structures and paved areas.

(5) Locations of all utility lines. Utility lines must be placed along corridors between critical root zones of trees which will remain on the site.

(6) Limits of land disturbance, clearing, grading and trenching.

(7) Limits of tree protection areas, showing trees to be maintained and planted, specifying species and size.

(8) Grade changes or other work adjacent to a tree which would affect it adversely, with drawings or descriptions as to how the grade, drainage and aeration will be maintained around the tree.

(9) Planting schedule.

(c) *Determination of site density factor.* The minimum required quantity of trees on a site after development must produce a total site density factor (sdf) of 25 units per acre. The site density factor is determined as follows: $sdf = (\text{total site area, in acres}) \times 25$. The

number of new trees to be planted is determined as follows:

- (1) Using table 1, calculate the existing density factor (edf) of trees ten inches dbh or greater which will remain on the site and be protected during construction. Existing trees less than ten inches dbh but at least two inches dbh may be counted as 0.5 unit each, provided such trees have grown in uncrowded conditions and have developed normal spread or such trees are part of a specimen tree stand. (Add together the individual units for each tree to get the edf.)

Table 1. Conversion From dbh to Existing Density Factor

TABLE INSET:

dbh	Units	dbh	Units
10	6	16	11
11	7	17	11
12	8	18	11
13	9	19	11
14	10	20	12
15	11	Greater than 20	12

- (2) To calculate the replacement density factor (rdf), subtract the edf from the sdf.

$$rdf = sdf - edf$$

Table 2. Conversion From dbh or Caliper to Replacement

Density Factor

TABLE INSET:

Caliper	Units	dbh	Units	dbh	Units	dbh	Units
1	1.5	1	2.0	7	6.0	13	11.5
2	2.0	2	2.5	8	6.5	14	12.5
3	2.5	3	3.0	9	7.5		
4	3.0	4	3.5	10	8.5		

5	3.5	5	4.5	11	9.5		
6	4.0	6	5.0	12	10.5		

The unit value of specimen trees shall be 20 percent greater than table value.

(d) *Application of density factors to the plan.*

(1) Required planting areas shall be as follows:

- a. 1. The tree protection zone shall include at least strips of the following depths adjacent to property lines (plus strips required by buffer or landscape requirements elsewhere in this chapter), permitting only the encroachment of driveways necessary to serve the property:

TABLE INSET:

Zoning District	Adjoining Street Right-of-Way (feet)	Adjoining Other Side Line (feet)	Adjoining Other Rear Line (feet)
Residential	20	10	10
Commercial	20	10	10
Industrial	20	10	10

- 2. No tree shall be planted closer to a building foundation or water, sewer, electrical or natural gas line than as follows:

- i. For a mature small tree, five feet.
- ii. For a mature medium tree, ten feet.
- iii. For a mature large tree, 15 feet.

- 3. No tree shall be planted under overhead utility distribution lines if the average mature height of the tree is greater than the lowest overhead wire.

- b. Landscape islands shall be provided within parking areas of six or more spaces, but shall not be required within vehicle storage or display areas.

- 1. The total area of all islands shall comprise at least five percent of parking lot area in commercial and residential zoning districts or three percent of parking lot area in industrial zoning district; plus one percent of other vehicle use area on the property (such as loading, storage or display areas).

- 2. Each island shall contain a minimum of 50 square feet. It shall be so shaped that a five-foot-diameter circle will fit within the island. No portion of an island less than three feet in width may be counted in the area.

- 3. Landscape islands shall be located in such a manner as to divide and break up the expanse of paving.

4. Vehicles may overhang a landscape island provided the island is at least 3.5 feet in depth per abutting parking space, at least five feet in depth overall, and protected by wheel stops or curbing. Two feet of the landscaped area may count as part of the required depth of each abutting parking space.
- (2) Distribution of trees shall be as follows:
 - a. At least one shade tree shall be planted in each required landscape island, and at least one tree shall be planted for every 30 linear feet of length in each required planting strip.
 - b. Where trees must be added to achieve the total density factor (sdf), such additions shall be made between the street and the front of the building until such additions comprise at least half the total density factor (sdf).
 - (3) Existing trees in excess of the sdf shall be as follows: Existing trees which are in excess of the minimum total density factor (sdf) requirement but are outside the development area shall not be removed unless adjacent development would cause irreparable damage to the critical root zones.
 - (4) Criteria for replacement trees shall be as follows:
 - a. Spacing and the potential size of species chosen shall be compatible with spatial limitations of the site.
 - b. The species must be ecologically compatible with the specifically intended growing site.
 - c. The trees must have the potential for size and quality comparable to those removed.
 - d. Preference shall be given to specimens of no more than three inches dbh.
 - e. Authority for questions of tree characteristics shall be Elbert L. Little, *The Audubon Society Field Guide to North American Trees: Eastern Region* (New York: Alfred A. Knopf, 1980); Barbara Ferguson, ed., *All About Trees* (San Francisco: Ortho Books, 1982); publications of the state forestry commission; publications of the cooperative extension service of the University of Georgia College of Agriculture; or other authority acceptable to the city.
 - (5) For specimen and nonspecimen trees, emphasis shall be given to the preservation of specimen trees, even isolated individual trees, over retention of other trees. Nonspecimen trees, however, should be saved in stands rather than as individual trees scattered over a site.
 - (6) Where the proposed development area is so large that the minimum total density factor (sdf) cannot be achieved, the development area shall be reduced by removing parking spaces in excess of the minimum required, placing additional planting islands within the development area, or reducing the area to be occupied by buildings.
 - (7) The property owner shall maintain trees on the property in accordance with this article and the approved plan, including replacing trees which die or are irreparably damaged.

(Code 1991, § 27-108(F))

Sec. 86-7. Easement.

The mayor and city council are authorized to enter into agreements with the owners of private property located within the city for the purpose of acquiring easements to plant trees on such property, in consideration for which the private property owner shall acquire ownership of such trees as the city may plant; however, any such agreement shall limit the duration of the easement to a time period of two years and shall limit the property interest acquired by the city to that distance sufficient to allow the planting of trees, in no case to exceed a maximum of a 15-foot setback from the property line or right-of-way held by the city. Under such agreement the private property owner shall agree to maintain the trees planted on his property and shall also agree to hold the city harmless for any liability attributable to the planting or presence of the trees on the private property.

(Code 1991, § 27-108(G))

Sec. 86-8. Permits.

(a) A permit shall be required to remove or cause the death of existing trees located within the tree protection zone, or for grading or other work adjacent to a tree which would affect it adversely. An approved tree protection plan is required for issuance of a permit.

(b) Exceptions to permit requirements are as follows:

(1) Permits are not required by public utility companies and government agencies for the conduct of operations having the purpose of assuring uninterrupted utility and governmental services and unobstructed passage on public rights-of-way.

(2) Permit requirements are waived where the building official determines that trees to be removed are dead or have been damaged by lightning, wind, ice or other disasters to the extent that public safety is endangered.

(Code 1991, § 27-108(H))

Sec. 86-9. Enforcement.

The city manager shall have the power to promulgate and enforce rules, regulations and specifications concerning the trimming, spraying, removal, planting, pruning and protection of trees upon the right-of-way of any street, alley, sidewalk or other public place in the city and in areas described in the tree protection zone as set down under section 86-5.

(Code 1991, § 27-108(I))

Sec. 86-10. Penalties, claims and appeals.

(a) *Violations.*

(1) Any person who violates any provision of this chapter or who fails to comply with any notice issued pursuant to provisions of this chapter, upon being found guilty of a violation, shall be subject to section 1-12. Each day during which any violation of the provisions of this section shall occur or continue shall be a separate offense.

(2) If as the result of the violation of any provision of this article the injury, mutilation or death of a tree located on city-owned property is caused, the cost of repair or replacement of such tree, shrub or other plant shall be borne by the party in violation. The replacement value of trees shall be determined in accordance with the latest revision of *A Guide to the Professional Evaluation of Landscape Trees, Specimen Shrubs, and Evergreens*, as published by the International Society of Arboriculture.

(b) *Assessment of claim.* If a nuisance (down trees) is not abated by the date specified in the notice, the city manager is authorized to cause the abatement of the nuisance. The reasonable cost of such abatement shall be filed as a lien against the property on which the nuisance was located. In addition, the owner of the property upon which the nuisance was located shall be subject to prosecution.

(c) *Appeals.* Any person adversely affected by any action of the city manager or the tree board may appeal such recommendation to the mayor and city council. The appeal must be filed with the city clerk within 30 days after the decision is rendered. The city may approve, modify or reject the decision made by the city manager or tree board if the mayor and council finds that the city manager or the tree board abused its discretion in reaching its decision. Appeals from decisions of the city made pursuant to this subsection may be taken to the superior court of the county in the manner provided by law from convictions for municipal ordinance violations.

(Code 1991, § 27-108(J))