

**CODE OF ORDINANCES
County of
ORANGE, FLORIDA**

**Codified through
Ord. No. 2001-17, enacted Aug. 28, 2001.
(Supplement No. 40)**

Chapter 24 LANDSCAPING, BUFFERING AND OPEN SPACE*

Editor's note--Ord. No. 92-42, § 1, approved Dec. 15, 1992, deleted in its entirety, in effect repealed, former Ch. 24, which pertained to landscaping, and enacted similar new provisions as set out in this chapter. Formerly, Ch. 24 consisted of substantive §§ 24-26--24-35, and derived from §§ 19A-11--19A-19, 19A-22 of the county's 1965 Code as amended by Ord. No. 74-1, §§ 1--7, 7A, 8, 11, approved Jan. 8, 1974.

Charter reference(s)--General powers of county, § 103.

Cross reference(s)--Buildings and construction regulations, ch. 9; environmental control, ch. 15; tree protection and removal, § 15-276 et seq.; planning and development, ch. 30; subdivision regulations, ch. 34; zoning, ch. 38; landscaping in public rights-of-way, § 21-240.

State law reference(s)--Powers of chartered counties, Fla. Const. art. VIII, § 1(g); adoption of land development regulations, F.S. § 163.3194(2).

ARTICLE I. IN GENERAL

Sec. 24-1. Purpose and intent.

These regulations are enacted by the county for the purpose of the following:

(1) Maintaining and protecting property values;

(2) Providing an acceptable degree of transition between abutting uses;

(3) Providing appropriate barriers and relief from traffic, noise, heat, glare, and the spread of dust and debris;

(4) Conserving and extending the county's water supply and natural resources through the implementation of water-efficient landscape practices;

(5) Enhancing the visual and aesthetic appearance of the community; and

(6) Preserving the natural terrain and vegetation where possible.

(Ord. No. 92-42, § 1, 12-15-92)

Sec. 24-2. Definitions.

As used in this chapter/article, the following terms shall have the meanings given herein.

Berms. Maximum slope permitted is three-to-one (3:1). Berms must be completely covered with shrubs, sod or other landscape quality living ground cover.

Buffer yard. A land area, together with a specified type and quantity of planting and/or structures thereon, required between abutting land uses to eliminate or minimize the impacts of one (1) or both such land uses on each other.

Caliper. A measurement of the size of a tree equal to the diameter of its trunk six (6) inches above the top of the root ball.

Certificate of completion. An official document issued by the county evidencing that facilities constructed in support of a subdivision have been completed in a form and manner acceptable to the county.

Certificate of occupancy (C.O.). Certificate of occupancy shall mean an official document evidencing that a building satisfies the requirements of the county for the occupancy of the building.

Change of use. Change of use shall mean a change from one (1) zoning use classification to another.

Encroachment. The protrusion of a vehicle into a vehicular accessway, pedestrian way or landscaped area.

Hedge. A close planting of shrubs which forms a compact, dense, living barrier which protects, shields, separates or demarcates an area from view and which is eighty (80) percent opaque within twelve (12) months from planting. Material used shall be a minimum of five (5) gallon plants and not be less than thirty (30) inches in height at the time of planting.

Landscape plan. A scaled plan that clearly delineates vehicular use areas, and displays and describes all landscaping, to include method of irrigation and maintenance of the landscaped areas.

Landscaping. The use of plants, construction and grading to create a desired effect. Landscaping elements may consist of, but are not limited to, turf and other ground covers, shrubs, vines, hedges, trees, berms and complementary structural landscape features such as rock, fountains, sculpture, decorative walls and tree wells.

Masonry wall. A wall and footing constructed of masonry material and meeting the requirements of the Southern Building Code.

Qualified professional. For projects other than single-family and two-family dwellings on individual lots, qualified professionals can be an engineer, architect or landscape architect registered in the state or any nurseryman, nursery stock dealer, or agent as defined by F.S. ch. 581, who is required under ch. 581 to hold a valid license issued by the division of plant industry of the department of agriculture and consumer services and who does hold a valid license to engage in the selling of nursery stock in this state, insofar as he engages in the preparation of plans or drawings as an adjunct to merchandising his product, so long as he does not use the title, term or designation "landscape architect," "landscape architectural," "landscape architecture," "L.A.," "landscape engineering," or any description tending to convey the impression that he is a landscape architect unless he is registered as provided in F.S. ch. 481, or is exempt.

Reuse water. Water that has received at least secondary treatment and is reused after flowing out of a wastewater treatment system.

Service area. An equipment area, loading area or dock, trash collection area, trash compaction area, truck parking area, recycling area, or other similar service function area.

Shade trees. Acceptable species shall mean a species of tree, which normally grows to a mature height of forty (40) feet or more and is listed in section 15-283, "Recommended stock list." Each shade tree must be a minimum of ten (10) feet tall, with a minimum three-inch caliper.

Site plan review. Site plan review refers to commercial site plan review (chapter 30, Orange County Code).

Understory trees. Material used shall not be less than four (4) feet tall, one and one-half ($1\frac{1}{2}$) inch caliper.

Vehicular use area. Any ground surface area (paved or unpaved) used for storage, display, temporary parking and/or maneuvering of vehicles by employees or customers, either for compensation or to provide an accessory service to a commercial, industrial or residential use, excluding single-family and duplex residences.

Water-efficient landscaping. Landscaping that maximizes the conservation of water, via the application of one (1) or more of the principles of Xeriscape™.

Xeriscape™. A set of design and maintenance principles which promote good horticultural practice and economic and efficient use of water.

Zoning manager. The manager of the Orange County Zoning Division, or his authorized designee.

Sec. 24-3. Applicability; certificates of occupancy; maintenance; penalties; deviations.

(a) *Applicability.* The provisions of this chapter shall apply to the development of all real property in unincorporated Orange County that is subject to commercial site plan review (chapter 30, Orange County Code), unless otherwise found exempt by this chapter.

(b) *Landscape plan.* Construction requiring site plan review shall not be permitted until a landscape plan prepared by a qualified professional, consistent with this Code, has been approved by the zoning manager.

(c) *Exemptions.* The redevelopment, reconfiguration, expansion or change of use of a previously developed site requiring site plan review must comply with all elements of this chapter, unless any of the following exemptions apply:

(1) The provisions of this Code shall not apply to any property, structure or building for which a building permit has been issued by the county building official, a complete application for a building permit has been submitted to the county building department, a complete application for a development plan or preliminary subdivision plan has been submitted to the county, prior to December 31, 1992.

(2) Existing development of five thousand (5,000) square feet or less if the expansion is less than fifteen hundred (1500) square feet.

(3) Existing development greater than five thousand (5,000) square feet if the expansion is less than twenty (20) percent of the existing gross floor area on the parcel or lot, and not in excess of five thousand (5,000) square feet.

(d) *Aggregated.*

(1) Expansions exempt via (c)(2) or (3) shall be aggregated over the five-year period following the issuance of a building permit. If at any time during that five-year period additional permit(s) for expansion exceed that allowed by exemptions in (c)(2) or (3), the permit for construction that exceeds the exempted amount shall require full compliance with this chapter.

(2) The exemptions provided for in (c)(2) and (3) do not apply to new vehicular use areas that may be associated with the exempt development.

(e) *Final approval and acceptance.* No final certificate of occupancy/completion shall be given or issued to the owner or his/her agent until all conditions of this chapter have been met and the zoning division has granted final approval and acceptance of the finished landscape product. Final approval shall include either a landscape inspection conducted by the zoning division or as-built certification from a qualified professional that the landscaping is installed and functioning as intended.

A temporary certificate of occupancy/completion may be issued in those instances where all site improvements except landscaping have been completed, and where electrical power is required to operate irrigation, or where lighting is needed to conduct preliminary business within the permitted structures or where weather conditions are not conducive to planting. Such temporary issuance is subject to the developer of the project certifying in writing that the required landscaping, as depicted on the approved plan, will be installed within a time period acceptable to the zoning manager. The applicant may be required to post as surety a letter of credit or cash escrow with the board of county commissioners in a form acceptable to the county. Such surety, if posted, shall be in an amount no less than one hundred twenty-five (125) percent of the estimated cost of completing the approved landscape plan including, but not limited to, plant material, irrigation and labor. Failure to satisfactorily complete the required landscaping within the specified time period shall be grounds for the immediate and summary revocation of the temporary certificate of occupancy/completion by the county and/or the forfeiture of the bond fund.

(f) *Maintenance.* All requisite landscaping, whether preserved or newly planted, must demonstrate health and viability after issuance of the certificate of occupancy/completion. The county may perform a courtesy inspection of the landscaping within ninety (90) days after issuance of the certificate of occupancy/completion. If the landscaping appears to be under stress, staff shall notify the property owner. A compliance inspection will be performed approximately one (1) year after issuance of a certificate of occupancy/completion, or after actual landscape installation, whichever occurred last.

Alternatively, a qualified professional may certify in writing to the zoning division that the landscape functions as designed and has been maintained properly. If the landscaping is not viable, notice shall be given to the property owner, and the property owner shall be responsible for restoring the landscaping within a time period acceptable to the zoning manager.

(g) *Penalties.* Failure to have viable landscaping consistent with the approved landscape plan shall constitute a violation subject to penalties and shall be prosecuted and punished in accordance with Orange County Code section 1-9. The board of county commissioners may bring suit in the circuit court to restrain, enjoin or otherwise prevent violation of and/or enforce compliance with this chapter.

(h) *Deviations from regulations; variances.* The provisions of this chapter shall be liberally construed in order to effectively carry out the purpose of this chapter in the interest of the health, safety and welfare of the residents of the county. The zoning manager is authorized to grant deviations from this chapter where the application of this chapter to a specific site would result in a practical difficulty or a physical hardship affecting the economic use of the property. Where substantial deviation from this chapter is proposed, that in the opinion of the zoning manager does not further the intent and purpose of this chapter, the board of county commissioners may consider an appeal of the zoning manager's decision, pursuant to the standards contained in Orange County Code section 34-27. In applying section 34-27 to a variance request hereunder, the term "subdivision improvements" shall be interpreted to mean "landscaping improvements."

(Ord. No. 92-42, § 1, 12-15-92; Ord. No. 2001-14, § 4, 6-19-01)

Sec. 24-4. General design and development standards.

The requirements of this section shall apply in all circumstances, unless otherwise specified in this chapter. When a required buffer lies within ten (10) feet of an aboveground power or other utility line, understory trees may be planted in the affected buffer in lieu of shade trees. However, in such instance, the understory trees shall be a minimum of seven (7) feet in height, have at least a two-inch caliper, and shall be planted at a rate of one (1) tree for every twenty-five (25) feet.

▪ (a) *Vehicular use areas.*

(1) *Landscaping adjacent to public street right-of-way.* Where a vehicular use area lies adjacent to a public right-of-way (a vehicular use area shall be deemed adjacent to a public right-of-way if it lies within seventy-five (75) feet of the public right-of-way), landscaping shall be provided as follows:

a. A landscape strip at least seven (7) feet in width.

b. One (1) shade tree for each forty (40) lineal feet, or fraction thereof;

c. A continuous hedge at least thirty (30) inches high at planting of a species capable of growing to at least thirty-six (36) inches in height within eighteen (18) months, which hedge shall be maintained at a height not less than thirty-six (36) inches. The height of the hedge shall be measured from parking lot grade; and

d. Where wheel stops are not used, the required plantings shall not be planted within two (2) feet of the curb, to allow for vehicle overhang.

(2) *Landscaping adjacent to other properties.* Where a vehicular use area lies adjacent to other property (a vehicular use area shall be deemed adjacent to other property if it lies within thirty (30) feet of the property boundary), landscaping shall be installed to screen the vehicular use area from the adjacent properties as follows:

a. Where a vehicular use area is adjacent to properties zoned or designated for residential use on the official zoning maps or the future land use map of the comprehensive policy plan, a landscape buffer shall be provided. The buffer shall be completely opaque from the ground to height of at least six (6) feet and shall be a minimum of seven (7) feet in width. The buffer may utilize a masonry wall, berm, planted and/or existing vegetation, or any combination thereof which maintains the minimum requirements. The buffer shall be four (4) feet in height and seventy (70) percent opaque at planting and be capable of attaining full height and opacity within three (3) years. The buffer shall have at least one (1) shade tree every fifty (50) feet of common lot line or fraction thereof.

b. Where the adjacent property is zoned or designated for nonresidential use, or where the adjacent property maintains a conforming hedge, hedge/berm or wall, the provisions of subsection (a)(2)a. above may not apply, except for the tree planting provisions, which provision shall apply along the property line regardless of the proximity of the vehicular use area.

c. For sites where spacing between nonresidential structures is ten (10) feet or more, regardless of whether the separation is utilized for a vehicular use area, a shade tree at fifty (50) foot on center shall be planted to comply with section 9-118(m)(1).

d. The provisions of this section shall not apply in the following situations:

1. When the property line abuts a dedicated alley or railroad right-of-way; and/or

2. For those portions of the property where a nonresidential structure is opposite and within ten (10) feet of another nonresidential structure located on the abutting property.

e. Plantings required in this section may be counted against the buffer requirements of section 24-5.

(3) *Interior landscaping.* Landscaped areas shall be provided within any interior vehicular use areas to provide visual and climatic relief from broad expanses of pavement and to define logical areas for pedestrian and vehicular circulation. This subsection shall only apply to paved vehicular use areas used for employee and customer parking and maneuvering.

a. An interior vehicular use areas shall be deemed to consist of all vehicular use areas except for those parking spaces located contiguous to a perimeter for which a landscape screen (hedge and trees) is required.

b. At least ten (10) percent of the interior vehicular use area for properties in C-1, C-2 or C-3 zoning districts, non-ancillary commercial uses permitted in the P-O zoning district by special exception, and commercial components of a PD shall be landscaped. Otherwise, at least five (5) percent of the remaining interior vehicular use area shall be landscaped.

c. Each separate landscaped area shall be a minimum of twenty-five (25) square feet, with one (1) shade tree planted for each one hundred (100) square feet of required interior landscaping. All landscaped areas adjacent to parking areas shall be protected from vehicle encroachment by curbing or wheel stops.

d. A maximum of ten (10) continuous parking spaces shall be permitted without a landscape break. The landscape break shall be a minimum of eight (8) feet in length and eight (8) feet in width and include one (1) shade tree of an acceptable species. Landscape breaks that are head-to-head and are eight (8) feet by sixteen (16) feet shall require two (2) shade trees. The shade tree shall be a minimum of ten (10) feet in height with a three-inch caliper. As an alternative, landscaped seven-foot wide center medians located between all lineal rows of parking which face head-to-head may be provided, with one (1) shade tree provided per sixty (60) lineal feet of median.

e. A landscaped island (singular or head-to-head) shall be required at the ends of each row of parking spaces. Where singular, one (1) tree shall be required. Where head-to-head, two (2) trees shall be required.

(b) *Intersection visibility.* When an accessway intersects a public right-of-way, landscaping shall be used to define the intersection, provided, however, that all landscaping within the triangular areas described in subsections (b)(1) and (2) below shall provide unobstructed cross-visibility at a level between two (2) feet in height and six (6) feet in height. Trees and foliage shall be periodically pruned and trimmed so that no limbs or foliage extend into the cross-visibility zone. Landscaping, except for grass and similar low ground cover, shall not be located closer than three (3) feet from the edge of any accessway. The triangular areas referenced above shall satisfy the following dimensional requirements, except to the extent deemed unnecessary by the county engineer.

(1) The areas of property on both sides of an accessway formed by the intersection of each side of the accessway and the public right-of-way line with two (2) sides of each triangle being ten (10) feet in length from the point of intersection and the third side being a line connecting the ends of the other sides; and

(2) The area of property located at a corner formed by the intersection of two (2) or more public rights-of-way with two (2) sides of the triangular area being measured thirty (30) feet in length along the abutting edges of pavement, from their point of intersection, and the third being a line connecting the ends of the other two (2) lines.

(c) *Parking garages.* Perimeter landscaping required for parking garages shall be the same as for buildings.

(d) *Building perimeter.* A landscaped area shall be provided between all buildings and the public right-of-way and along the primary facade.

(1) The landscaped area shall be equal to the full linear length of the building base oriented toward the public right-of-way and have a minimum depth of eight (8) feet.

(2) At least fifty (50) percent of the required landscaped area shall consist of landscaping capable of achieving a minimum of thirty (30) inches in height, with one (1) shade tree planted for each twenty-five (25) feet or fraction thereof of the lineal building facade, or one (1) understory tree or palm tree planted for each fifteen (15) feet or fraction thereof of the lineal building facade.

(3) The layout of the required landscape shall be at the discretion of the owner, such that the required square footage may be aggregated to provide maximum aesthetic value. However, each perimeter requiring landscape must have at least fifty (50) percent of the required landscape along that perimeter.

(e) *Service areas.* A service areas visible from a public right-of-way or abutting other property shall be screened by a masonry wall and landscape buffer. The wall shall be a minimum of six (6) feet in height using architectural design, materials and colors that are consistent with those of the primary structure. The landscape buffer shall be a minimum of five (5) feet in width, a minimum of three (3) feet in height, fifty (50) percent opaque at planting and capable of attaining a height of five (5) feet and seventy-five (75) percent opaqueness within eighteen (18) months.

(f) *Solid waste storage areas.* A solid waste refuse facility shall be screened on three (3) sides by a six-foot high masonry wall if it is located within the building setback area or located in an areas visible to customers or from a public right-of-way.

(g) *Screening walls.* A walls on a side property lines shall be no more than four (4) feet in height where it projects forward of the building setback line. Landscaping shall be provided in the form of hedge and shrubs planted adjacent to the wall, and shall be equal to at least twenty-five (25) percent of its length.

(h) *Open storage areas.* An open storage area shall not be permitted unless it is totally screened from the public right-of-way and any adjacent properties. An open storage area shall be screened by a six-foot high masonry wall or ten-foot wide landscape buffer. The landscape buffer must be a minimum of three (3) feet in height and fifty (50) percent opaque at planting and be capable of attaining a height of five (5) feet and seventy-five (75) percent opaqueness within eighteen (18) months.

(i) *Merchandise display areas on properties zoned C-2 or C-3 and commercial components of PD's.* A merchandise display areas (e.g. garden centers), that is visible from a public right-of-way shall be fenced by a vinyl coated chain-link or other decorative metal fencing. Additionally, the merchandise display area shall be landscaped, integrated into the design of the primary structure using landscaping adjacent to the perimeter, and utilize one of the following techniques:

(1) Masonry columns constructed of the same materials and color of the main building, spaced a minimum of twenty-five (25) feet apart; or

(2) A free standing wall constructed of the same material, color, height and style of the main building along the entire length of the fenced merchandise display area that covers at least fifty (50) percent of the fenced storage area.

(j) *Landscaping of drive-through windows and lanes adjacent to or visible from public right-of-ways.* An eight-foot wide or five-foot wide buffer (whichever is applicable) and of an appropriate length shall be required. The buffer shall be a minimum of three (3) feet in height and fifty (50) percent opaque at planting, be capable of attaining a height of five (5) feet, and be seventy-five (75) percent opaque within eighteen (18) months.

(Ord. No. 92-42, § 1, 12-15-92; Ord. No. 98-29, §§ 2--4, 10-20-98; Ord. No. 2001-14, § 5, 6-19-01)

Sec. 24-5. Buffer yards.

The buffer yards prescribed in this section are intended to reduce, both visually and physically, the negative impacts generated by abutting uses. Buffer yards shall be located on the outer perimeter of a lot or parcel, extending to the parcel boundary. Buffer yards shall not be located on any portion of an existing or dedicated public or private street or right-of-way.

▪ (a) *Buffer classifications:*

(1) *Type A, opaque buffer.* This buffer classification shall be used to separate heavy industrial (I-4 and M-1) uses from all residential uses. This buffer shall be completely opaque from the ground up to a height of at least eight (8) feet and shall be a minimum of fifty (50) feet wide. The type A buffer shall utilize a masonry wall.

(2) *Type B, opaque buffer.* This buffer classification shall be used to separate community commercial (C-2) and general industrial (I-2, I-3 or I-5) uses from all residential uses. This buffer shall be completely opaque from the ground up to a height of at least six (6) feet and shall be a minimum of twenty-five (25) feet wide. The type B buffer may utilize a masonry wall, berm, planted and/or existing vegetation or any combination thereof which maintains a completely opaque buffer. This buffer must be four (4) feet high and seventy (70) percent opaque at planting and be capable of attaining full height and opacity within three (3) years.

(3) *Type C, opaque buffer.* This buffer classification shall be used to separate neighborhood commercial (C-1) and light industrial (I-L) uses from all residential uses. This buffer shall be completely opaque from the ground up to a height of at least six (6) feet and shall be a minimum of fifteen (15) feet wide. The type C buffer may utilize a masonry wall, berm, planted and/or existing vegetation or any combination thereof which maintains a completely opaque buffer. This buffer must be three (3) feet high and fifty (50) percent opaque at planting and be capable of attaining full height and opacity within three (3) years.

(4) *Type D, opaque buffer.* This buffer classification shall be used to separate professional office (P-O) uses from all residential uses. This buffer shall be completely opaque from the ground up to a height of at least six (6) feet and shall be a minimum of ten (10) feet wide. The type D buffer may utilize a masonry wall, berm, planted and/or existing vegetation or any combination thereof which maintains a completely opaque buffer. This buffer must be three (3) feet high and fifty (50) percent opaque at planting and be capable of attaining full height and opacity within three (3) years.

(5) *Type E, mobile home and RV park buffer.* This buffer classification shall be used to separate mobile home and RV parks from all abutting uses. This buffer shall be twenty-five (25) feet wide. Where the park abuts an arterial highway, the buffer shall be fifty (50) feet wide. This buffer shall not be considered to be part of an abutting mobile home space, nor shall such buffer be used as part of the required recreation area or drainage system (ditch or canal). This buffer may utilize a masonry wall, berm, planted and/or existing vegetation or any combination thereof. This buffer must be at least five (5) feet in height and fifty (50) percent opaque within eighteen (18) months after installation.

_____ (6) *Type F, residential subdivision buffer.* See subdivision regulations (chapter 34, Orange County Code).

▪ (b) *Shade trees.* All buffers shall include one (1) shade tree for each forty (40) lineal feet or fraction thereof.

▪ (c) *Decrease of widths, types B through E.* Minimum buffer yard widths of types B through E may be decreased by twenty (20) percent if the buffer incorporates any of the following components:

_____ (1) Utilize plantings and berms to meet minimum buffer requirements.

_____ (2) Utilize plantings, berms and wall to meet minimum buffer requirements, where wall is combined with berm to meet minimum height requirements.

_____ (3) Utilize wall with plantings, where the plantings are parallel for at least seventy-five (75) percent of the linear length of the wall, and covers at least twenty-five (25) percent of the required buffer width.

▪ (d) *Use of buffer yards.* All of the buffer yard options may be counted toward zoning district yard setbacks and open space requirements. Passive recreational uses such as walkways, par courses, golf courses, bikeways and retention areas may be located within buffer yards to the extent they are allowed by zoning, provided that buffer yard width and screening requirements are maintained. The following uses are prohibited in buffer yards: playgrounds, swimming pools, tennis courts, vehicular use areas, storage or buildings.

▪ (e) *Buffer yard maintenance.* Buffer yards may be maintained as follows:

_____ (1) The buffer yards may be placed in common ownership of the property owners with maintenance by the property owners' association; or

(2) The buffer yard may be placed on private property within a landscape buffer easement dedicated to the property owners' association, with maintenance provided by the property owners' association.

(Ord. No. 92-42, § 1, 12-15-92)

Sec. 24-6. Water-efficient landscaping.

(a) *Purpose.* Because water restrictions have become a common occurrence in Central Florida, the county is incorporating water-efficient landscape standards into this section; however, where reuse water is utilized, water-efficient landscaping may be inappropriate. Xeriscape™ is a set of landscape design and maintenance principles which promote good horticultural practice and the economic and efficient use of water. The term Xeriscape™ is the registered trademark of the National Xeriscape™ Council and means water conserving, drought tolerant landscaping or simply the use of appropriate plant materials that do not require special attention and which require little supplemental water to grow properly. Xeriscape™ designs do not resemble desert landscapes, but reflect the lush traditional appearance of Florida gardens.

(b) *Water-efficient design.* The following water-efficient principles shall be considered when designing the landscape plan:

(1) *Design.* Tree and plant material shall be grouped into zones designated by the water requirements of the plants. The water use zones shall be shown on the landscape plan. Plants of lower water use may be used in a zone of higher water use, but higher water use plants shall not be placed into a lower water use zone. All newly installed plants require regular watering for the first year to become established. Installed trees and vegetation shall be spaced and located to accommodate their mature size on the site. The water use zones are as follows:

a. *High water use zone.* A zone containing plants which are associated with moist soils and require supplemental water in addition to natural rainfall to survive. This zone includes most turf grass areas.

b. *Moderate water use zone.* A zone containing plants which survive on natural rainfall with supplemental water during seasonal dry periods. This zone includes St. Augustine, Bahia and other turf grass areas.

c. *Low water use zone.* A zone containing plants which survive on natural rainfall without supplemental water.

(2) *Plant selection.* Plant material shall be selected that is best suited to withstand the growing and soil conditions which are found in the microclimate of each particular location on a site. Plant species that are freeze and drought tolerant are preferred.

(3) *Turf grass.* Turf grass areas shall be consolidated and limited to those areas on the site that receive pedestrian traffic, provide for recreational uses, provide soil erosion control such as on slopes or in swales, where turf grass is used as a design unifier, or other similar practical use. The landscape plan shall label the use of turf areas.

(4) *Mulch.* A layer of organic mulch to a minimum depth of two (2) inches shall be specified on the landscape plans in plant beds and around individual trees in turf grass areas. Mulch shall not be required in annual beds.

(5) *Irrigation.* Reuse water may be used. The irrigation system shall be designed to correlate to the organization of plants into zones as described in (b)(1)a. above. The water use zones shall be shown on the irrigation plan, when required by this part. Irrigation shall be required as follows:

a. *High water use zone.* All portions of high water use zones shall be provided with central automatic irrigation systems.

b. *Moderate water use zone.* All portions of moderate water use zones shall be provided with a readily available water supply within twenty-five (25) feet.

c. *Low water use zone.* All portions of low water use zones shall be provided with a readily available water supply within fifty (50) feet.

Turf grass areas shall be irrigated on separate irrigation zones from tree, shrub and ground cover beds. Moisture sensor and/or rain gauge equipment shall be required on automatic irrigation systems to avoid irrigation during periods of sufficient rainfall. The use of low water volume, emitter or target irrigation is preferred for trees, shrubs and ground covers. No significant irrigation overthrow shall be allowed onto impervious surfaces.

(c) *Reuse water design.* Where reuse water is utilized, the design principles of water-efficient landscaping may be used in conjunction with plantings consistent with the volume of reuse water to be discharged on the property.

(Ord. No. 92-42, § 1, 12-15-92)

Sec. 24-7. Irrigation.

A permanent underground central irrigation system providing one hundred (100) percent coverage of all landscape/buffer areas is required. This central irrigation system shall use reuse water if the reuse source is adjacent to the parcel boundary and available with adequate capacity and pressure. All nonreuse central irrigation systems shall have a rain sensor device or switch which will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred. The requirement for central irrigation providing one hundred (100) percent coverage may be waived by the planning manager under the following circumstances:

— (1) When site dimensions and landscape requirements could be serviced by spigots within fifty (50) feet of all plant material;

— (2) Where native plant habitat is retained;

— (3) Where water-efficient landscaping and irrigation is proposed as defined in section 24-6.

(Ord. No. 92-42, § 1, 12-15-92)

Sec. 24-8. Landscape materials/installation.

▪ (a) *Materials.*

— (1) *Plant quality.* Plant material used to satisfy sections 24-4 and 24-5 must meet or exceed "Florida No. 1," as established in the latest publication by the State of Florida, Department of Agriculture and Consumer Services, Tallahassee, Florida.

(2) *Potable water conservation.* Unless reuse water is utilized, plant material must be native to or adaptable to the site and possess appropriate water requirements according to appropriate water management district guidelines.

(b) *Installation.* All landscaping shall be installed according to accepted commercial planting procedures. Soil shall be free of lime rock and other construction debris. All landscaped areas shall be protected from vehicle encroachment by wheel stops or curbing.

(Ord. No. 92-42, § 1, 12-15-92)

Sec. 24-9. Planned developments.

The following are additional requirements that apply to nonresidential projects submitted for review under the Planned Development (P-D) district:

(1) *Land use plan.* The land use plan shall graphically display and/or note the location, width and opacity requirements of all landscape buffers required in this chapter.

(2) *Development/subdivision plan.* Landscape plans shall contain the following information:

a. Location of all existing or proposed structures, vehicular use areas, easements and surveyed conservation boundaries, if applicable.

Sec. 24-29. Open space requirements.

(a) In the following residential zoning districts, residential private open space shall be forty (40) percent:

R-A

RCE-5

RCE-2

A-R

R-CE

R-1AAAA

R-1AAA

R-1AA

R-1A

R-1

R-2 (single-family detached housing only)

R-3 (single-family detached housing only).

R-L-D

Provided, however, that when a variance to the building setbacks for an addition to the principal residence is successfully obtained from the board of zoning adjustment, then the residential private open space requirements shall be automatically reduced by an amount sufficient to accommodate the setback variance.

- (b) In the following residential zoning districts, residential private open space shall be forty-five (45) percent:

_____ R-2 (excluding single-family detached housing)

_____ R-3 (excluding single-family detached housing).

- (c) In the nonresidential zoning districts, open space shall be provided as follows:

_____ Office--Twenty-five (25) percent

_____ Commercial--Twenty (20) percent

_____ Industrial--Fifteen (15) percent

Institutional--Thirty-five (35) percent.

- (d) For planned development zoning districts, open space shall be provided in accordance with section 38-1234 of the Orange County Code.

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(e) For residential cluster districts, common open space shall be provided as follows:

TABLE INSET:

Gross Residential Density	% Common Open Space Required
Less than or equal to 1 unit/acre	None required
Greater than 1 unit/acre	10%

▪ (f) For urban village zoning districts, open space shall be provided outside of the village center as follows:

— Residential private open space--Twenty-five (25) percent.