

ARTICLE VIII. - DEVELOPMENT DESIGN AND IMPROVEMENT STANDARDS ^[69]

⁽⁶⁹⁾ **Editor's note**— Ord. No. 2011-04, § 3, adopted July 18, 2011, repealed former Art. VIII, §§ 33-86—33-95, and enacted a new Art. VIII as set out herein. Former Art. VIII pertained to the same subject matter. See the Code Comparative Table and editor's note at the beginning and end of this chapter for complete derivation.

Sec. 33-86. - Statement of intent.

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Sec. 33-86. - Statement of intent.

The purpose of this article is to provide design and improvement standards for all development, including subdivisions of land.

Sec. 33-87. - Dimensional requirements.

33-87.01. *Minimum dimension requirements.*

(a) *Lot requirements for all developments.* All developments shall have a total land area sufficient to meet all development design standards including, but not limited to, land required to provide setbacks from abutting rights-of-way, buffers, stormwater management, off-street parking and circulation, protection of environmentally sensitive lands, and any other provisions which may require land area to be set aside. Specific standards for each district are contained in that district's description in Chapter 33, Article II.

(b) All buildings within any flight, approach and transitional zones must comply with Federal Aviation Administration regulations in addition to the requirements of this chapter.

(c) *Setbacks, building separation, and lot coverage.* Minimum setbacks, minimum separation between buildings, and maximum impervious surface shall be as prescribed in Chapter 33, Article II.

1. *Exception to front setback.* Except in the Gateway Overlay Zoning

Districts, where lots comprising 40 percent or more of the frontage on one side of a block are developed with buildings at the time of the adoption of this chapter, the average alignment of the existing buildings along such frontage shall be the front yard line of said side of said block and no building hereafter erected or structurally altered shall project beyond it, provided however that no front yards shall be less than 20 feet in depth.

2. *Effect of established setback lines for street widening.* Where setback lines have been established on streets, roads or highways the front yard and side yard of corner lots shall be measured from said setback lines.
3. *Redevelopment.* All redevelopment projects that require a Class I, II or III site plan shall be required to meet the setback requirements of section 33-87 to the fullest extent possible. Due to site limitations the technical review committee, planning board or city commission, depending on the type of site plan, may allow modifications that still meet the intent of the regulations.
4. *Yards.*
 - a. Every part of a required yard shall be open from its lowest point to the sky, unobstructed, except for the ordinary projection of sills, belt courses, cornices, buttresses, ornamental features, chimneys, flues and eaves; however, no such projection shall exceed 24 inches in width.
 - b. On double frontage through lots, the required front yard shall be provided on each street.
 - c. Whenever a lot abuts upon an alley, one-half of the alley width may be considered as a portion of the required rear yard; however, such width, shall not exceed ten feet.
 - d. An open, paved terrace, excluding sidewalks, may project into a required front yard for a distance not exceeding ten feet.
 - e. The narrow width of a corner lot shall determine its front for purposes of meeting the requirements of front and the side yards. In cases of reversed frontages the city shall make the determination of front and side yard depths.
5. *Additional location standards.* No dwelling shall be erected on a lot or portion of a lot, which does not abut on at least one street for at least 25 feet.
6. *Impervious surface ratio calculation.*

- a. The impervious surface ratio is calculated by dividing the total impervious surface by the net site area. Water bodies are pervious and shall be included as such in the impervious surface utilizing the mean high water mark to determine area calculation.
 - b. Because the impervious surface ratio is calculated for the gross site, cluster development or other site design alternatives may result in individual lots within a development project exceeding the impervious surface ratio, while other lots may be devoted entirely to open space. The planning board may require, as a condition of approval, deed restrictions or covenants that guarantee the maintenance of such open space in perpetuity.
 - c. If porous paving materials are used in accord with the technical construction standards maintained by the city engineer, then the area covered with porous paving materials shall be counted as pervious or as a percent pervious surface as determined by the city engineer.
 - d. Redevelopment. All redevelopment projects that require a Class I, II or III site plan shall be required to meet the impervious surface requirements of section 33-87 to the fullest extent possible. Due to site limitations the technical review committee, planning board or city commission, depending on the type of site plan, may allow modifications that still meet the intent of the regulations.
7. *Setbacks for churches and other religious institutions.* In the R-R, R-R1, R-1AA, R-1A, R-1B, R-1, R-2, and R-M zoning districts setbacks shall be determined by the height of the proposed structure in compliance with the provisions of section 33-87.03 (d) 2. below.
- (d) *Building dimensions.* The dimensions of buildings shall be as prescribed in Chapter 33, Article II. For the purposes of determining the floor area of dwelling units the following definition will apply:
1. *Floor area.* The heated areas of a dwelling measured from the exterior faces of the exterior walls or from the center line of walls separating two buildings, but excluding:
 - a. Unheated attic areas with a headroom of less than seven feet;
 - b. Unenclosed stairs or fire escape;
 - c. Elevator structures;
 - d. Cooling towers;
 - e. Areas devoted to air conditioning, ventilating or heating or other building machinery and equipment;

- f. Vehicle parking structures;
 - g. Unheated basement space not devoted to residential use;
 - h. Porches, patios, breezeways, sun porches or other similar structural additions that are unenclosed or are enclosed with screening.
2. *Exceptions to height limitations.* Chimneys, water, fire, radio and television towers; church spires; domes, cupolas, stage towers and scenery lofts, cooling towers, elevator bulkheads, smokestacks, flag poles, parapet walls and similar structures and their necessary mechanical appurtenances may be erected above the height limits herein established.

Sec. 33-88. - Utilities.

33-88.01. *Requirements for all developments.*

- (a) *Generally.* The following basic utilities are required for all developments subject to the criteria listed herein.
- (b) *Electricity.* Every primary use and every lot within a subdivision shall have available to it a source of electric power adequate to accommodate the reasonable needs of such use and every lot within such subdivision.
- (c) *Telephone/data communication.* Every primary use and every lot within a subdivision shall have available to it a telephone and/or data communication service cable adequate to accommodate the reasonable needs of such use and every lot within such subdivision.
- (d) *Water, reclaimed water and sewer.* Every primary use and every lot within a subdivision shall have central potable water and wastewater hookup whenever required by the City of DeLand Comprehensive Plan and where the topography permits the connection to a city water or sewer line. Every primary use and every lot within a subdivision shall have central reclaimed water irrigation hookup and shall connect to the reclaimed water distribution system for irrigation supply upon determination of the city engineer that reclaimed water for reuse is available.
- (e) *Illumination.* All streets, driveways, sidewalks, bikeways, parking lots and other common areas and facilities in developments shall provide illumination meeting the technical construction standards maintained by the city engineer and in accordance with Section 33-92.03(g).
- (f) *Fire hydrants.* All developments served by a central water system shall include a system of fire hydrants consistent with the technical construction standards maintained by the city engineer. Prior to the delivery of combustible materials and construction of buildings, the water supply for fire protection, either temporary or permanent and acceptable to the fire

department, shall be made available.

- (g) *Natural gas.* Every primary use and every lot within a subdivision should have available to it a source of natural gas adequate to accommodate the reasonable needs of such use and every lot within such subdivision, if the source is adjacent to the subdivision, including but not limited to:
1. Gas metering station, i.e.: city gate station;
 2. Regulator stations;
 3. Creek and/or drainage canal crossings;
 4. Bridge crossings;
 5. Telemetering stations;
 6. Rectifiers;
 7. Above-ground vaults;
 8. Compressor stations;
 9. Vent stacks;
 10. Line markers.
- (h) *Cable television.* Every primary use and every lot within a subdivision should have available to it a source of cable television adequate to accommodate the reasonable needs of such use and every lot within such subdivision.
- (i) *Utility development standards.* (Formerly Chapter 33, Article II, section 33-16.04[b])
1. In areas of new development (either residential or nonresidential), the subdivision review process shall address the need for sites and easements for all utilities.
 2. In all areas of existing development (either residential or nonresidential), site plans for utility cabinets, vaults, pumping stations, huts, etc., shall be treated as Class II site plans.
 3. Site plans for utility facilities shall have a minimum five-foot-wide landscape buffer, which shall be screened from all adjacent properties and street rights-of-way, and a minimum two and one-half-foot wide landscape buffer to protect the lesser. The landscape buffer shall contain trees and shrubs, which are listed in the city's document, entitled city list of permitted shrubs and trees for landscaping and tree protection regulations. (Addendum "A" to article 6 herein.)

4. Regarding the landscape buffer area in zones which are identified in item 2, where the city feels that the existing vegetation does not provide adequate opaque screening, the buffer area shall include a minimum six-foot high wooden fence or other form of approved opaque screening.
5. For a period of one year from the date of the certificate of occupancy or final inspection, the utility company will provide a maintenance bond or other form of fiscal assurance, in the amount of 110 percent of the replacement costs of trees and landscape materials guaranteeing the survival of all required trees and/or landscape materials.
6. The minimum size of the lease parcel shall be not less than 200 percent of the total impervious area of the proposed site plan.

33-88.02. *Design standards.*

- (a) *Water and sewer systems.* Water and sewer systems shall conform to technical construction standards maintained by the city engineer and shall be designed by a professional engineer currently registered to practice engineering in the State of Florida. The costs of installing water and sewer lines and connecting into the existing municipal system shall be borne by the developer or subdivider. All water and sewer systems and connections shall be approved by the applicable regulatory agencies and shall be approved by the city engineer.
- (b) *Stormwater management system.* Stormwater management systems shall conform to technical construction standards maintained by the city engineer and be designed by a professional engineer currently registered to practice engineering in the State of Florida. The costs of installing the stormwater management system shall be borne by the developer or subdivider. Stormwater drainage shall be connected to an existing system or constructed to assure adequate disposal of on-site drainage water, as approved by the city engineer.
- (c) *Street drainage.* Curbs and gutters shall be installed along all streets in accordance with technical construction standards maintained by the city engineer. Open drainage swales shall be permitted only as approved by the city engineer.
- (d) *Fire hydrants.* Fire hydrants shall be installed in accordance with requirements of the Florida Fire Prevention Code. All costs of installing the hydrants shall be borne by the developer or subdivider. The types and installation of valves and hydrants shall be approved by the city engineer and shall conform to technical construction standards maintained by the city engineer.
- (e) *Oversized utilities.* If it is adjudged that oversized utilities are necessary and part of a coordinated water and sewer plan which is in accordance

with the city's future land use plan, the city shall pay the cost difference between purchasing and installing the oversized and standard sized utilities. Minimum requirements shall be those to serve the individual development meeting minimum applicable standards as shall be approved by the city engineer, subject to the provisions of Resolution Numbers 72-10 and 72-14 of the City of DeLand.

- (f) *Underground electric power, telephone data, and cable television services.* All electric, power, telephone, data communications, and CATV service lines shall be installed underground, but main feeder lines for electric power may be installed above ground.

33-88.03. *Utility easements.* When a developer installs or causes the installation of water, sewer, electrical, power, telephone, television cable, data communication, pedestrian facilities or intends that such facilities shall be owned, operated, or maintained by a public utility or any entity other than the developer, the developer shall transfer to such utility or entity the necessary ownership or easement rights to enable the utility or entity to operate and maintain such facilities.

Sec. 33-89. - Public sites and facilities.

33-89.01. *Relationship of requirement for dedication and Comprehensive Plan.*

- (a) *Facilities shown on Comprehensive Plan.* When a proposed park, transportation facility, utility line, school site or other public site is shown on the city's Comprehensive Land Use Plan and is located in whole or in part within a development, the city commission may require the dedication or reservation of such areas within the development.
- (b) *Facilities not shown on Comprehensive Plan.* When deemed essential by the city, upon consideration of the particular type of development proposed, and especially in large scale Planned Developments (PDs) and/or development of regional impact (DRI) not anticipated in the Comprehensive Plan, the city may require the dedication and reservation of roads and streets, potable water lines, wastewater lines, wastewater lift stations, and stormwater lines within the public rights-of-way, parks, playgrounds, school sites, conservation easements and similar facilities and land uses, to meet the demands created by such development.

33-89.02. *Dedication of sites and transportation facilities and utilities for public use.*

- (a) *Generally.* Notwithstanding the requirements of section 33-89.01 above, at the time of the development plan review, either site plan and/or subdivision, the city may require the developer or subdivider to construct and/or dedicate facilities and sites for public use. Such facilities and sites shall include roads and streets, potable water lines, wastewater lines,

wastewater lift stations, and stormwater lines within the public rights-of-way, parks, playgrounds, school sites, conservation easements and similar facilities and land uses.

- (b) *Dedication of necessary transportation facilities and utilities.* Notwithstanding the requirements of section 33-89.01 above, as a condition of either site plan approval or subdivision approval, the city shall require the construction and dedication of any streets, roadways, potable water lines, wastewater lines, wastewater lift stations, and stormwater lines within public rights-of-way or public easements necessary to serve the proposed development.
- (c) *Dedication of utility easements.* Notwithstanding the requirements of section 33-89.01 above, as a condition of either site plan approval or subdivision approval, the city shall require the dedication of an easement along all potable water and wastewater lines, owned and maintained by the city, when such utility lines are located on privately owned property. The city engineer as required by best management practices shall establish the minimum width of the easements.
- (d) *Dedication of other easements.* Notwithstanding the requirements of section 33-89.01 above, as a condition of either site plan approval or subdivision approval, the city may require the dedication of a conservation easement or other types of easements. The minimum area covered by the easements shall be determined on a case-by-case basis; however, in no case shall the area of the easement exceed that needed to meet the minimum requirements.
- (e) *Dedication of park and school sites.* Notwithstanding the requirements of section 33-89.01 above if, as a condition of either site plan approval or subdivision approval, the city requires the dedication of one or more park or school sites, the city may approve a reduction in the minimum lot size. Where there are 20 or more lots within a proposed subdivision, the subdivider may reduce the area of each lot by not more than ten percent of the minimum lot area, provided that each lot contains a minimum of 6,000 square feet of area after the ten-percent reduction and the subdivider sets aside an equivalent amount of land within the subdivision for use as a public park. These regulations are not applicable to any park, open area or other recreational facility which is not dedicated to the city or the Volusia County School Board.

Sec. 33-90. - Transportation systems.

33-90.01. *General provisions.*

- (a) *Purpose.* This section establishes minimum requirements applicable to the development of a transportation system, including public and private streets, bikeways, pedestrian ways, and access control to and from public

streets. The standards in this section are intended to minimize the traffic impacts of development, and to assure that all developments adequately and safely provide for vehicle, pedestrian and bicycle circulation.

- (b) *Compliance with technical construction standards.* All required elements of the transportation system shall be provided in compliance with the technical construction standards maintained by the city engineer.
- (c) *City thoroughfare map.* The city thoroughfare map and any amendments thereto, adopted by the city as a part of the Comprehensive Plan, is hereby incorporated by reference into this section. Any street abutting or affecting the design of a subdivision or land development which is not already classified on the city thoroughfare map shall be classified according to its function, design, and use by the city at the request of the applicant or during plan review. The map shall be the basis for all decisions regarding required road improvements, reservation or dedication of rights-of-way for required road improvements, or access of proposed uses to existing or proposed roadways.
- (d) *House numbering.* The street numbers (addresses) of all houses and buildings in the city shall be such as may be assigned by the building department of the city. The owners or occupants of all houses, stores, and other premises are required to make application to the building department for the assignment of a correct street number prior to the application for a building permit of any new building or prior to occupancy of any existing building which is not numbered, and display such number assigned on the particular building or occupied premises. The address number shall be visible from the street and shall be made up of numbers at least four inches in size. Any failure to comply with the provisions of this paragraph shall be punished as provided in section 33-136.02 of this chapter.

33-90.02. *Rights-of-way.*

- (a) *Right-of-way widths.* The following minimum street right-of-way widths shall be provided:

1.	Principal arterial	120 feet
2.	Secondary arterial	100 feet
3.	Minor arterial	80 feet
4.	Collectors	60 feet
5.	Local streets	50 feet
6.	Cul-de-sacs	50 feet
7.	Marginal access streets	50 feet
8.	Alleys	30 feet

- (b) *Future rights-of-way.* Future right-of-way requirements are identified in

the transportation element of the Comprehensive Plan. Where roadway construction, improvement, or reconstruction is not required to serve the needs of the proposed development project, future rights-of-way shall nevertheless be reserved for future use. No part of the reserved area shall be used to satisfy minimum requirements of this chapter.

(c) *Protection and use of rights-of-way.*

1. No encroachment shall be permitted into existing rights-of-way, except for temporary use authorized by the city.
2. Use of the right-of-way for public or private utilities, including, but not limited to, sanitary sewer, potable water, telephone wires, data transmission wires, cable television wires, gas lines, or electricity transmission, shall be allowed, subject to the placement standards maintained by the city engineer, and other applicable city regulations.
3. Sidewalks and bicycle ways along roadways shall be placed within the right-of-way, or as required by section 33-90.04, on private property within ten feet of the edge of the right-of-way.

(d) *Vacation of right-of-way.* Applications to vacate a right-of-way shall be approved upon a finding that all of the following requirements are met:

1. The requested vacation is consistent with the transportation element of the city Comprehensive Plan.
2. The right-of-way does not provide the sole access to any property. Remaining access shall not be by easement.
3. The vacation will not jeopardize the current or future location of any utility.
4. The proposed vacation is not detrimental to the public interest, and provides a positive benefit to the city.

33-90.03. *Streets.*

(a) *Street plans.*

1. All arterial and collector streets shall be planned in conformity with the city thoroughfare plan in the City of DeLand Comprehensive Plan.
2. The proposed street layout shall be coordinated with the street system of the surrounding area or with plans for streets in said area on file in the city engineer's office.
3. Where, in the opinion of the planning director, it is desirable to provide for street access to an adjoining property, proposed streets

shall be extended by dedication to the boundary of such property and a temporary turnaround provided.

4. Streets ending in cul-de-sacs reduce traffic flow and discourage connectivity and, as such are strongly discouraged. Where, in the opinion of the planning director, it is desirable to promote traffic flow or beneficial to establish connectivity within or between proposed or existing developments, the installation of cul-de-sacs shall be denied.

- (b) *Public streets.* All streets shall be public streets; there shall be no private streets unless a variance for such is granted pursuant to section 33-149.02 of this chapter. All streets shall be open to the exterior property lines of the subdivision unless a cul-de-sac or an intersection with another street permanently terminates them.

The fire department requires access to allow for the entrance and egress of emergency response equipment. Such access includes construction of a hardened pathway compacted sufficiently for use by emergency vehicles. Fire department access shall have an unobstructed width of not less than 20 ft. Fire department access roads shall have an unobstructed vertical clearance of not less than 13 ft 6 in.

The angle of approach and departure for any fire department access shall not exceed 1 ft drop in 20 ft or the design limitations of the fire apparatus of the fire department, and shall be subject to approval by the authority having jurisdiction.

- (c) *Street names.* Proposed streets which are obviously in alignment with others existing and named, shall bear the assigned name of the existing streets. In no case shall the name of the proposed street duplicate or be phonetically similar to existing street names, irrespective of the use of the suffix street, avenue, boulevard, drive, place, court, etc. Street names shall require the approval of Volusia County and the planning department.

- (d) *Paving.*

1. Except as exempted by the city commission, all streets shall be paved to the full required paving width by the developer or subdivider.
2. All street paving shall conform to the technical construction standards maintained by the city engineer and shall be installed by a contractor licensed to do paving work in the City of DeLand. The city engineer shall approve all paving materials used.
3. Street pavement widths from curb back to curb back shall not be less than the following:

Type of Street	Right-of-Way Width (Feet)	Number and Width of Traveling and Turning Lanes	Number and Width of Parking Lanes	Width of Median Divider (Feet)
Principal arterial	120	4 travel lanes of 12 feet each	None required	20
Secondary arterial	100	4 travel lanes of 12 feet each	None required	20
Minor arterial	80	2 travel lanes of 12 feet each 1 turning lane of 12 feet	2 parking lanes of 8 feet each	None required
Collector	60	2 travel lanes of 12 feet each	2 parking lanes of 8 feet each	None required
Local	50	Same as collector	Not applicable	None required
Cul-de-sac	50	Same as collector	Not applicable	None required
Marginal access	50	10 feet	Not applicable	None required
Alley	30	10 feet	Not applicable	None required

(e) *Design speed and maximum daily traffic count.*

1. *Maximum design speed; anticipated daily traffic.* The maximum design speed and anticipated daily traffic count shall be as follows:

Type of Street	Design Speed (MPH)	Maximum Daily Traffic Count
Principal arterial	55	Not applicable
Secondary arterial	45	Not applicable
Minor arterial	45	Not applicable
Collector	30	Not applicable
Local	25	2,000
Cul-de-sac	25	200
Marginal access	N/A	N/A
Alley	N/A	N/A

2. *Safe stopping distances.* In addition to the design speeds in the foregoing table, all street designs shall provide a 25-mile-per-hour design speed for safe stopping distances on vertical curves.
- (f) *Grades and grading.* Minimum centerline grade for all streets shall be twenty-four one-hundredths percent. Maximum centerline grades for designated state roads and other arterial streets shall not exceed five percent. Maximum grades for all other streets shall not exceed eight percent.
- (g) *Base preparation.*
1. All base preparation shall conform to city specification on file in the city engineer's office.
 2. The base for all street pavements shall be prepared by the developer or subdivider for the full required paving width except on arterial streets where the developer or subdivider shall only be required to bear the costs of base preparation to a width of 28 feet, unless otherwise required by the city commission.
- (h) *Cul-de-sacs where approved.*
1. The length of a cul-de-sac may only exceed 500 feet if the following conditions are met:
 - a. Additional fire hydrants are provided as deemed necessary by the city's fire marshal.
 - b. Cul-de-sacs in excess of 1,000 feet shall be provided with alternative emergency access that can support emergency fire and rescue equipment. This access must be at least 20 feet wide in order to support a minimum of a 20-ton emergency vehicle. The alternative access area must be free of impediments and marked as emergency access. The alternative access area may be secured with a crash gate and provided with a gate lock approved by the Fire Marshall.
 2. The turnaround area shall have a right-of-way diameter of at least 90 feet and a minimum paved surface diameter of 80 feet.
- (i) *Horizontal curves.* Where a centerline deflection angle of more than two degrees occurs, a circular curve shall be inserted having a centerline radius of not less than the following:

1.	Principal arterial	500 feet
2.	Secondary arterial	500 feet

3.	Minor arterial	300 feet
4.	Collector streets	200 feet
5.	All other streets	100 feet

(j) *Intersections.*

1. When practical, streets shall intersect at an angle of approximately 90 degrees. In no case shall the angles of intersection be less than 60 degrees.
2. Street jogs or centerline offsets between streets on the opposite side of an intersection shall be no less than 150 feet.
3. Street curb lines at street intersections shall be rounded with no more than the minimum safe radius for the design speed of the road. When truck traffic is routinely anticipated, a larger turn radius may be required in accordance with the criteria set forth by the city engineer. At an angle of intersection of less than 75 degrees the city engineer may require a greater radius. When an arterial street intersects with another arterial street the right-of-way intersects shall be increased 20 feet for a distance of 150 feet from the point of intersecting property lines.

(k) *Tangents.* A tangent of not less than 100 feet in length shall be provided between reverse curves on all arterial and collector streets.

(l) *Divided streets.* For the purposes of protecting environmental features or avoiding excessive grading, the city may require that a street be divided. In such a case, the design standards shall be applied to the aggregate dimension of the two street segments.

(m) *Blocks.*

1. Block lengths shall not exceed 1,400 feet or be less than 500 feet.
2. The width of any block shall be of sufficient dimensions to accommodate two tiers of lots except where one tier of lots abuts an area of nonresidential development, an arterial street, a railroad or water body.

(n) *Bridges.* Bridges shall be constructed to the width of the connection roadway pavement or such additional width as required by the planning board with an allowance on each side for a pedestrian walk. Bridges extending over waterways shall have a center span and a vertical clearance if determined necessary by the city engineer. Bridges shall be designed by a Florida registered and professional engineer and conform to technical

construction standards maintained by the city engineer.

- (o) *Clear visibility triangle.* In order to provide a clear view of intersecting streets to the motorist, there shall be a triangular area of clear visibility formed by two intersecting streets or the intersection of a driveway and a street. The following standards shall be met:
 1. Nothing shall be erected, placed, parked, planted, or allowed to grow in such a manner as to materially impede vision between a height of two feet and ten feet above the grade, measured at the centerline of the intersection.
 2. The clear visibility triangle for a driveway and a street shall be formed by the intersection of each side of the driveway and the public right-of-way line with two sides of each triangle being ten feet in length from the point of intersection and the third side being a line connecting the ends of the two other sides.
 3. The clear visibility triangle of the intersection of any streets shall be as depicted in the "FDOT Roadway and Traffic Design Standards Index No. 546," or as amended.
- (p) *Signage and signalization.* All signage and traffic control devices shall be installed in accordance with the approved plans for the development or as directed by the city engineer. Unless installed by the developer, the developer shall reimburse the city the full costs of materials and installation for all required signage and traffic control devices.
- (q) *Changing street name signs without authority.* It shall be unlawful for any person to place or cause to be placed any sign designating a street, avenue or other public place by a different name than that by which it is generally and legally known, or shall refuse to remove the same from their property when requested to do so by an officer of the city.
- (r) *Damaging or removing street signs.* It shall be unlawful for any person willfully and maliciously to damage, deface or remove any of the street signs posted at or near the corner of the streets in the city.
- (s) *Street trees.*
 1. The city manager is hereby authorized and directed to make plans for the replacement of any and all shade trees along the public streets of the city which have been or shall be, of necessity, removed and for the planting of shade trees along public streets and parkways of the city where such trees do not at present exist, and that the city manager is hereby authorized and directed annually to determine and designate the number and species of trees to be planted; the areas in which trees shall be planted; the spacing of trees and the size and condition of the saplings to be planted during the fiscal year and shall obtain bids for

the planting thereof, and advise the city commission of the amount required to be appropriated in the budget of the city for such fiscal year to provide for the planting and maintenance of such trees.

2. The city commission shall upon the advice of the city manager annually appropriate in the budget for each fiscal year such sums as they deem advisable of the planting and maintenance of shade trees along the public streets and parkways of the city.
 - a. The city will accept the request, in writing, of any property owner for the planting or replacement of trees along the public streets and parkways of the city in such areas and under such terms and conditions as the city shall designate.
 - b. The owner of any property in the city may file a written request with the city requesting that a tree or trees be planted along the streets or parkways in front of the property of such property owner, which request shall contain an agreement to water and otherwise maintain such tree or trees for a period of two years from the date of such planting and shall be accompanied by the sum of \$100.00 or the actual cost of plant materials, whichever is greater, per tree to defray a portion of the cost of planting such trees, which sum shall be used solely for such purposes.
 - c. Upon the receipt of the written request of any property owner for the planting of trees along the street in front of the property of such applicant together with the sum of \$100.00 or the actual cost of plant materials, whichever is greater, per tree and the agreement of the applicant to keep and maintain the trees for a period of two years from the date of planting, the city shall arrange to have such tree or trees planted in front of the property of the applicant and the city shall pay all expenses of planting of such tree or trees in excess of the sum of \$100.00 or the actual cost of plant materials, whichever is greater, per tree paid by the applicant.
 - d. In the event the budget allowance for the planting of trees for the fiscal year is exhausted, the city may deny the application filed and return the sums paid to the applicant.

33-90.04. Sidewalks.

(a) When required.

1. The developer shall construct sidewalks according to city standards along that part of the perimeter of the property that is adjacent to collector or arterial streets as defined in the city thoroughfare plan in the City of DeLand Comprehensive Plan and along both sides of all streets within a subdivision. Sidewalks within a subdivision will be required along the property line prior to the certificate of occupancy

for an individual structure.

2. Residential projects adjacent to or in the immediate vicinity of a city-designated activity center, as identified in the City of DeLand Comprehensive Plan, comprised of commercial, office, service, or recreation activities shall provide pedestrian access to and from the development to the activity center.
3. Pedestrian-ways or crosswalks shall comply with the requirements of the Americans with Disabilities Act or subsequent legislation; however, such crosswalks shall be not less than five feet wide with a sidewalk meeting the requirements of this section, may be required by the city to be placed in the center of blocks more than 800 feet long where deemed necessary to provide circulation or access to schools, playgrounds, shopping centers, transportation and other community facilities.
4. The approval of a plat or a site plan shall require the construction of a sidewalk along the portion of the property adjacent to all roadways, as shown on the sidewalk master plan; provided, however, that properties within the DeLand Airport Industrial Park are exempt from the requirement to construct sidewalks or to contribute the city's sidewalk reserve account, as set forth below. Sidewalks for residential subdivisions shall comply with the requirements of section 1. above.
5. Notwithstanding the foregoing, the city may allow the developer to pay a fee in lieu of constructing sidewalks otherwise required by this section. The amount of the fee shall be based on the cost per linear foot of required sidewalk as determined by the city, and may be paid when one or more of the following circumstances exist:
 - a. The area/block is already developed and there are no sidewalks on the same side of the thoroughfare as the proposed development, redevelopment does not seem likely, and the city does not have plans to construct sidewalks within one year of the site plan approval, as identified in the city's sidewalk master plan.
 - b. There are physical constraints, which would make the construction of a sidewalk impossible or impractical. These include, but shall not be limited to, insufficient right-of-way, grade problems, and when construction would have a negative effect upon the natural environment.
 - c. The roadway improvements scheduled in the first year of the city's capital improvement plan would result in construction activities that would destroy the sidewalk constructed by the developer.
 - d. The requirement to build a sidewalk would create a safety hazard, which could result in liability to the city.

- e. The site proposed for development is isolated from other development and there are no existing sidewalks within 1,000 feet of the site, on either side of the roadway.
- f. When the city commission makes a determination that sidewalks are not appropriate within a specified area.

If the city allows a developer to make a contribution to the sidewalk reserve account in lieu of construction, and there is future development of the site or the sidewalk master plan is revised to include the subject property, the developer shall not be required to make an additional contribution or construct sidewalks for the same sidewalks on property for which a contribution was already made. If new sidewalks are required, the developer must comply with the relevant portions of this section. The city shall maintain records of those properties, which make contributions to the sidewalk reserve account, filed by the tax parcel identification number of the property.

(b) *Design and construction standards.*

- 1. Sidewalks shall be at least five feet wide and located within and along the city rights-of-way. Sidewalks along arterial streets or county rights-of-way shall be at least five feet wide. Sidewalks may be reduced to four feet under the following conditions:
 - a. Connection to an existing sidewalk that is four feet wide to allow for a transition distance.
 - b. Site limitations are present that prevent the installation of a five-foot sidewalk.
- 2. If a sidewalk is to be used jointly as a bikeway, then the width shall be a minimum of twelve feet unless existing conditions as recognized by the city engineer warrant a lesser width, but in no event less than 8 feet.
- 3. In addition, design and construction of sidewalks, or other footpaths shall conform to the requirements of city standards, including provisions for access by physically handicapped persons.

(c) *Benches.*

- 1. *Permit required; criteria for issuance; marking; city benches.* No person or business firm shall place any bench upon any sidewalk or public place in the city without first having obtained a permit from the city. In issuing such permit, the city shall designate the location where such bench may be placed or located, and such bench shall have marked thereon the permit number for such bench. All benches

supplied by the city shall be marked "Property of City of DeLand".

2. *General maintenance.* All such benches placed upon any sidewalk or other public place in the city shall be kept in good state of repair by the entity placing the bench on public property or right of way.
3. *Removal of violations.* The city may request the removal of all benches, hereafter found upon the sidewalks or other public places in the city, that are in a state of disrepair. If the owner of such bench shall not claim the same within ten days after such removal and notice, the city shall dispose of such bench as shall be deemed proper.
4. *Revocation of permits; relocation of benches.* The city may revoke any such permit as to location and require the same to be relocated if the public's interests will be best served by such relocation.
5. *Penalty.* Any person or firm violating the provisions of this article shall be fined as provided by section 33-136.02 of this chapter.

33-90.05. *Access to streets.* All proposed development shall meet the following standards for vehicular access and circulation:

- (a) *Approval for access required.* No point of access for vehicles from property within the city onto any street shall be established without a building permit issued pursuant to an approved site plan or subdivision plat. Any point of access must meet the standards contained in this section and must have a permit issued by the government with jurisdiction over the street, including a permit issued by the city for any streets subject to city jurisdiction.
- (b) *Application of regulations.* The regulations in this section shall apply to all new construction and driveways. The regulations shall also apply to all existing uses, buildings, structures and driveways when application is made for a building permit for improvements or alterations on the property after the effective date of this section.
- (c) *Number of access points.* The maximum number of points of vehicular access to any street shall be one point of access for each lot with a minimum frontage adjacent to that street of 65 feet up to 300 feet, with an additional access point for each additional 300 feet of frontage adjacent to that street. The maximum number of points of access to any street for any single premises used principally and currently for the retail sale of motor vehicle fuel, including the retail sale of gasoline in connection with the sale of other products, shall not exceed two for each 100 feet frontage adjacent to that street.
- (d) *Separation of access points.*
 1. The separation between access points onto arterial and collector

roadways, or between an access point and an intersection of an arterial or collector with another road, shall be as shown in the following Table:

Functional Class of Roadway	Distance Between Access Points
Major arterial	300 feet
Minor arterial	250 feet
Collector	150 feet

2. The distance between access points shall be measured from the centerline of the proposed driveway or roadway to the centerline of the nearest adjacent roadway or driveway.
- (e) *Width of access.* Except for driveways serving one- or two-family residential land uses, all driveways shall be a minimum of 24 feet wide at the right-of-way. The city engineer in compliance with sound traffic engineering practices shall determine the maximum number of lanes and driveway width. For individual lots in single-family or duplex uses of districts, the minimum width shall be 12 feet and the maximum width shall be 20 feet. Also, circular drives may be allowed.
- (f) *Frontage on service roads and common driveways.*
1. Projects proposed on arterial and major collectors may include frontage or service roads, and shall take access from the frontage road rather than the arterial or major collector. Frontage road design shall conform to DOT standards. This access requirement may be met through the use of interconnecting parking lots.
 2. The provisions in this section shall be interpreted and applied to encourage and allow the use of shared access drives, service roads and similar common vehicular access facilities, and the foregoing lot line distance standards shall not apply to such facilities. Furthermore, adjoining lot widths may be combined for consideration of the number of access points allowed for lots with dedicated common access facilities.
- (g) *Access to residential lots.*
1. Access to nonresidential uses shall not be through a parcel zoned exclusively for residential use.
 2. All lots in a proposed residential subdivision shall have frontage on and access from an existing street meeting the requirements of this section except that rural residential subdivisions of one unit per 20 acres or lower density may take access from a private graded road.

3. Access to all lots in a proposed residential subdivision shall be by way of a residential access or residential street.
4. All residential subdivisions that exceed 12 lots shall contain a minimum of two separate access points. If two access points are not feasible due to physical constraints then an emergency access must be provided as described in subsection 33-90.03(h)1.b.

33-90.06. *Standards for drive-up facilities.*

(a) *Generally.* All facilities providing drive-up or drive-through service shall provide on-site stacking lanes in accordance with the following standards.

(b) *Standards.*

1. The facilities and stacking lanes shall be located and designed to minimize turning movements in relation to the driveway access to streets and intersection.
2. The facilities and stacking lanes shall be located and designed to minimize or avoid conflicts between vehicular traffic and pedestrian areas such as sidewalks, crosswalks, or other pedestrian access ways.
3. A bypass lane shall be provided.
4. Stacking lane distance shall be measured from the service window to the property line bordering the furthest street providing access to the facility.
5. Minimum stacking lane distance shall be as follows:
 - a. Financial institutions shall have a minimum distance of 200 feet. Two or more stacking lanes may be provided which together total 200 feet.
 - b. All other uses shall have a minimum distance of 120 feet.
6. Alleys or driveways in or abutting areas designed, approved, or developed for residential use shall not be used for circulation of traffic for drive-up facilities.
7. Where turns are required in the exit lane, the minimum distance from any drive-up station to the beginning point of the curve shall be 34 feet. The minimum inside turning radius shall be 25 feet.
8. Construction of stacking lanes shall conform to the technical construction standards maintained by the city engineer.

Sec. 33-91. - Off-street parking and loading.

33-91.01. *Generally.*

- (a) *Applicability.* Off-street parking facilities shall be provided for all development within the city pursuant to the requirements of this section. The facilities shall be maintained as long as the use exists that the facilities were designed to serve.
- (b) *Plans submitted to city.* All plans for improvement to, enlargements of and additions to off-street parking or loading areas shall first be submitted to the city as part of a site plan and approved in writing before construction commences. The city shall confirm the plans meet the terms of the off-street parking and loading zone requirements, specifications are satisfactory in every respect and adequate access and egress is provided.
- (c) *Computation.*
 - 1. When determination of the number of off-street spaces required by this section results in a fractional space, the fraction of one-half or less may be disregarded, and a fraction in excess of one-half shall be counted as one parking space.
 - 2. In stadiums, sports arenas, churches and other places of assembly in which those in attendance occupy benches, pews or other similar seating facilities, and/or which contain an open assembly area, the occupancy shall be based on the maximum occupancy rating given when the determination of the number of off-street spaces required by this section results in a building by the fire marshal.
 - 3. The required number of parking spaces shall be determined by the factors listed in section 33-91.02. If the area of a structure is used to determine the number of parking spaces, the net square footage of the structure, excluding halls, rest rooms, elevators and other such areas, shall be used. The square footage of waiting rooms, areas of offices, pedestrian areas of malls and other similar areas shall be counted in determining the number of required parking spaces.
- (d) *Parking study.* A parking study shall include, but not be limited to:
 - 1. Estimates of parking requirements based on recommendations in studies such as those from ULI, ITE, or the Traffic Institute, and based on data collected from uses or combinations of uses which are the same or comparable to the proposed use. Density, scale, bulk, area, type of activity, and location shall determine comparability. The study shall document the source of data used to develop recommendations.
 - 2. An analysis of the extent to which a transportation system management program and/or use of alternative forms of transportation lessen the need for parking.

33-91.02 *Special parking restrictions applicable to certain districts.*

(Formerly Chapter 33, Article II, section 33-20).

33-91.021 *Parking restrictions for commercial vehicles.*

- (a) *Residential and professional-residential districts.* Within the R-R, R-R1, R-1AA, R-1A, R-1B, R-1, R-2, R-8, R-12, R-16, R-M, and P-1 zoning districts:
 - 1. Commercial vehicles shall not be parked at any time within the hours of 8:00 p.m. to 7:00 a.m.
 - 2. Commercial vehicles shall not be parked at any time within the hours of 7:00 a.m. to 8:00 p.m. unless the vehicle is engaged in the delivery of goods or services to the subject property.
- (b) *Commercial districts.* Within the BR, C-1, C-2 (unless approved by special exception), C-2A, C-2AC and C-2A & H zoning districts, no commercial vehicle shall be parked for an uninterrupted period that exceed 24 hours.
- (c) *Planned developments.* The restrictions in [subsection] (a) above shall apply to Planned Developments, unless the restrictions in [subsection] (b) above are specifically approved by the city commission.

33-91.022. *Parking restrictions for recreational vehicles.* Within the R-R, R-R1, R-1AA, R-1A, R-1B, R-1, R-2, R-8, R-12, R-16 and R-M zoning districts, and for residential uses within the P-1, C-1, C-2, C-2A, C-3, C-4 and M-1 zoning districts, recreational vehicles shall be subject to the following restrictions:

- (a) They shall have a current license plate or validation sticker and shall be parked or stored in full compliance with all yard requirements for accessory structures. The ground area beneath such vehicles shall be kept free of debris, including excessive weed growth.
- (b) They may be temporarily parked in the driveway of the primary structure for trip preparation, loading, unloading, and clean-up, for a maximum of 36 hours per week.
- (c) They shall not be parked either within a street or within that portion of the lot lying across the full width of the lot between the front lot line and the front most part of the primary structure, except on driveways.
- (d) No sewage shall be permitted to escape from such vehicles on to a lot or street.
- (e) They shall not be connected to water, sewer, or electrical lines or be used for residential purposes.

33-91.03 *Number and type of parking spaces required.*

- (a) *Requirements in matrix.* The matrix below specifies the required minimum number of off-street automobile parking spaces and, in the notes, any special requirements that may apply.
- (b) *Uses not specifically listed in matrix.* The number of parking spaces required for uses not specifically listed in the matrix shall be determined by the city commission, or its designee. The commission shall consider requirements for similar uses and appropriate traffic engineering and planning data, and shall establish a minimum number of parking spaces based upon the principles of this section.
- (c) *When parking study required.* For several uses listed in the matrix the parking requirement is to be determined by the commission. These uses have a large variability in parking demand, making it impossible to specify a single parking requirement. A developer proposing to develop or expand one of these uses must submit eight copies of a parking study, as described at section 33-91.01(d) of this section, to the planning department that provides justification for the requirement proposed. The commission will review this study along with any traffic engineering and planning data that are appropriate to the establishment of a parking requirement for the use proposed.
- (d) *Treatment of mixed uses.* Where a combination of uses is developed, the required parking shall be calculated for each of the uses as prescribed by the matrix in subsection (f) below. Except for emergency vehicle access, loading zone and employee parking, where customer parking is shared between co-located buildings with separate business operations, the customer parking required for each individual operation may be reduced up to 20 percent (20%).
- (e) *Tandem parking spaces.* The term "tandem parking space" used in the matrix means a parking space that abuts a second parking space in such a manner that vehicular access to the second space can be made only through the abutting (tandem) space.
- (f) *Matrix.*

Residential Uses	Minimum Off-Street Parking Requirement	Notes
Conventional detached and duplex	1, 2, 3, and 4 bedrooms: 2 spaces/unit	Single-family residential parking spaces may be tandem. Parking is prohibited on front lawns.
Cluster/multifamily development	Resident parking: Studio: 1 space/unit, 1 bedroom: 1.5 spaces/unit, 2, 3, or	Resident parking spaces may be tandem. On-street parking provided in accordance with the dimensions required for parallel spaces may count toward visitor parking requirements. These spaces must be located

	more bedrooms: 2 spaces/unit, visitor parking .5 space/unit	within the minimum distance specified in section 33-91.05. Parking is prohibited on front lawns.
Mobile home parks	Resident parking * 2 spaces/unit, visitor parking: ** .25 space per unit	* Resident parking spaces may be tandem ** On-street parking provided in accordance with the dimensions required for parallel spaces may count toward fulfilling visitor parking requirements. These spaces must be located with the maximum distance specified in section 33-91.05 below.
Bed and breakfast homestays and bed and breakfast inns (accessory and nonaccessory)	Minimum of two parking spaces, plus one parking space per guestroom.	Parking spaces may be compacted mulch or gravel, if approved by city engineer.
Commercial and Service Uses	Minimum Off-Street Parking Requirement	Notes
All such uses not otherwise listed	1 space/250 square feet of net floor area *	For any individual permitted uses that are enumerated in this matrix, the minimum number of parking spaces shall be figured separately * Computations per section 33-91.01(c)3.
Reserved		
Auto sales	1 space/400 square feet of net floor area *	* Computations per section 33-91.01(c)3.
Auto service station and auto repair	2 spaces plus 2 for each service bay	
Auto washing	2 spaces/washing area or bay	
Bank, savings and loan	1 space/ 300 square feet of net floor area *	* Computations per section 33-91.01(c)3.
Hotel/motel	1 space per unit and 1 space for each 3 employees	Accessory uses will require additional spaces dependent upon use.
Lumberyards/nurseries/home improvement	1 space/400 square feet of net floor area * for retail sales plus 1 space/1,000 square feet of outdoor area devoted to display storage	* Computations per section 33-91.01(c)3.
Administrative, business and professional offices	200 square feet of net floor area *	* Computations per section 33-91.01(c)3.
Governmental offices	1 space/200 square	For on-site parking facilities containing 1,000 or

	feet of net floor area *	more parking spaces, the parking requirement shall be 1 space per 500 square feet of net floor area for parking spaces required in excess of 1,000. For an office building of 6 or more stories in height and which contains less than 250,000 square feet of net floor area of office uses, the parking requirement shall be 1 space per 300 square feet of net floor area * Computations per subsection 33-91.01(c)3.
Restaurants except fast food	1 space/75 net square feet of floor area * up to 6,000 net square feet plus 1 space/55 net square feet of floor area over 6,000 net square feet	* Computations per section 33-91.01(c)3.
Fast food restaurant	1 space/100 square feet of net floor area *	* Computations per section 33-91.01(c)3. Fast food restaurants dispense food items that are typically prepared in quantity by a standardized method and dispensed quickly frequently utilizing a drive through window.
Retail general (i.e. department stores, markets, etc.)	3 spaces/300 square feet of net floor area * and 1 space/every additional 250 square feet	* Computations per section 33-91.01(c)3.
Retail furniture and appliances	1 space/400 square feet of net floor area *	* Computations per section 33-91.01(c)3.
Educational	Minimum Off-Street Parking Requirement	Notes
Elementary and junior high schools	2 spaces/classroom	
Senior high schools	1 space/faculty member and employee, plus 1 space/3 students	
Colleges	1 space faculty member and employee, plus 1 space/3 students	
Health Services	Minimum Off-Street Parking Requirements	Notes
Convalescent, elder	1 space/4 beds	Reduction may be proposed through submittal of a

housing and nursing homes		parking study.
Medical and dental offices and clinics, hospitals, veterinary hospitals and clinics.	1 space/150 square feet of net floor area *	* Computations per section 33-91.01(c)3.
Industrial uses	Minimum off-street parking requirement	Notes
Manufacturing, research and development	1 space/625 square feet of net floor area * devoted to manufacturing plus the required parking for square footage devoted to other uses	* Computations per section 33-91.01(c)3.
Warehouse	1 space/1,000 square feet of net floor area * for the first 20,000 square feet devoted to warehousing plus the required parking for square footage devoted to other uses 1 space/2,000 square feet for the second 20,000 square feet 1 space/4,000 square feet for floor area in excess of 40,000 square feet	* Computations per section 33-91.01(c)3.
Entertainment and Recreation	Minimum off-street parking requirement	Notes
Arcades, games	1 space/200 square feet of net floor area *	* Computations per section 33-91.01(c)3.
Bowling alleys/billiard halls	4 spaces/alley plus 2 for each billiard table plus required parking for other uses on site	
Commercial stables	1 space/5 horses boarded on site	
Driving range (golf)	1 space/tee plus required parking for other uses on the site	
Golf course	6 spaces/hole plus	

(regulation)	required parking for any other uses on the site	
Miniature golf	3 spaces/hole plus required parking for any other uses on the site	
Parks (public and private)	To be determined by city commission	Parking study to be provided by developer.
Skating rinks	1 space/100 square feet of net floor area *	Skating rink shall be counted as floor area. * Computations per section 33-91.01(c)3.
Tennis, handball, and racquetball facilities	2 spaces/court plus required parking for additional uses on the site	
Health club	1 space/150 square feet of net floor area *	Swimming pool shall be counted as floor area. *Computations per section 33-91.01(c)3.
Theaters, movie, single screen	1 space/2 seats plus 5 spaces for employees	
Theaters, movie, multiscreen	1 space/3 seats plus 5 spaces for employees	
Miscellaneous	Minimum off-street parking requirement	Notes
Auditoriums	1 space/3 seats or 1 space/35 square feet of floor area where there are no fixed seats	
Churches and other spaces of public assembly	1 space/4 seats within the main auditorium or, if there are no fixed seats, 1 space/45 square feet of net floor area * within the main auditorium	* Computations per section 33-91.01(c)3.
Day care, preschools, and nursery schools.	1 space/staff member plus 1 space/5 children or 1 space/10 children if adequate drop-off facilities are	Drop-off facilities must be designed to accommodate a continuous flow of passenger vehicles to load and unload children safely. The adequacy of drop-off facilities proposed shall be determined by the transportation engineer on standard traffic safety principles. Parking is

	provided	prohibited on front yards.
Model home	3 spaces/model home plus 1 space/salesperson	Salesperson space may be a vacant garage space in the model home. On-street parking adjacent to the site's frontage may count toward fulfilling required parking if doing so does not produce a shortage of residential parking or obstruct traffic.
Utilities	To be determined by city commission	Developer must submit a parking study.
Libraries	2 spaces/300 square feet of net floor area *	* Computations per section 33-91.01(c)3.

(g) *Special parking spaces.*

1. Any parking area to be used by the general public shall provide suitable, marked parking spaces for handicapped persons. The number, design, and location of these spaces shall be consistent with the requirements of sections Chapter 553, Florida Statutes and the requirements of the current edition of the Florida Accessibility Code.
2. A portion of the parking spaces required by this section may be designated as exclusively for motorcycle parking if the following conditions are met:
 - a. The spaces be so designated, based upon projected demand for them and a significantly decreased lessened demand for automobile spaces.
 - b. The designated spaces are shown on the Final Development Plan.
 - c. The designated spaces are suitably marked and striped.
 - d. The designation does not reduce the overall area devoted to parking so that if the motorcycle spaces are converted to automobile spaces the minimum requirements for automobile spaces will be met.

The approval may later be withdrawn, and the spaces returned to car spaces, if the city finds that the purposes of this section would be better served thereby, based upon actual demand for motorcycle and automobile parking.

(h) *Parking deferral.*

1. To avoid requiring more parking spaces than actually needed to serve a development, the city commission may defer the provision of some portion of the off-street parking spaces required by this section if the conditions and requirements of paragraphs 2. through 7. below are

satisfied.

2. As a condition precedent to obtaining a partial deferral by the city commission, the developer must show any one or more of the following:
 - a. A parking study as described in section 33-91.01(d) of this section indicates that there is not a present need for the deferred parking.
 - b. Public transportation satisfies transportation demands for a portion of the users of the facility that corresponds to the amount of parking sought to be deferred.
 - c. The developer has established or will establish an alternative means of access to the use that will justify deferring the number of parking spaces sought to be deferred. Alternative programs that may be considered by the city commission include, but are not limited to:
 3. Private and public car pools and van pools.
 4. Charging for parking.
 5. Subscription bus services.
 6. Flexible work-hour scheduling.
 7. Capital improvement for transit services.
 8. Ride sharing.
 9. Establishment of a transportation coordination position to implement car pool, van pool, and transit programs.
 - a. *Nonmotorized transportation.* The percentage of parking spaces sought to be deferred corresponds to the percentage residents, employees, and customers who regularly walk, use bicycles and other nonmotorized forms of transportation, or use mass transportation to come to the facility.
 - b. *On-street parking.* The percentage of parking spaces sought to be deferred corresponds to the percentage of vehicles that may be accommodated by on-street parking within 200 feet of the development.
 - c. *Transportation system management.* An alternative method of transportation designed to address the short term transportation system needs through more efficient use of existing transportation facilities.
 - d. *Transportation demand management.* A transportation planning

process that is aimed at relieving congestion on highways by following several types of actions: (1) actions that promote alternative automobile use; (2) actions that encourage more efficient use of alternative transportation systems; and (3) action that discourages automobile use.

10. If the developer satisfies one or more of the criteria in [subsection] (2), the city commission may approve a deferred parking plan submitted by the developer. The number of parking spaces deferred shall correspond to the estimated number of parking spaces that will not be needed because of the condition or conditions established.
11. A deferred parking plan:
 - a. Shall be designed to contain sufficient space to meet the full parking requirements of this section, shall illustrate the layout for the full number of parking spaces, and shall designate which are to be deferred.
 - b. Shall not assign deferred spaces to areas required for landscaping, Buffer Zones, setbacks, or areas that would otherwise be unsuitable for parking spaces because of the physical characteristics of the land or other requirements of this chapter.
 - c. Shall include a landscaping plan for the deferred parking area.
 - d. Shall include a written agreement with the city that, one year from the date of issuance of the certificate of occupancy, the deferred spaces will be converted to parking spaces that conform to this section at the developer's expense should the city commission determine from experience that the additional parking spaces are needed.
 - e. Shall include a written agreement that the developer will cover the expense of a traffic study to be undertaken by the city to determine the advisability of providing the full parking requirement.
12. When authorized by the city commission upon a preliminary finding that the parking is inadequate, but not sooner than one year after the date of issuance of the certificate of occupancy for the development, the city shall undertake a study to determine the need of providing the full parking requirement to satisfy the proven demand for parking.
13. Based upon the recommendations of the study, the city engineer, the planning director, and the planning board shall determine if the deferred spaces shall be converted to operable parking spaces by the developer or retained as deferred parking area.
14. The developer may at any time request that the planning department

approves a revised development plan to allow converting the deferred spaces to operable parking spaces.

- (i) *Reduction for mixed or joint use of parking spaces.* The planning board shall authorize a reduction in the total number of required parking spaces for two or more uses jointly providing off-street parking when their respective hours of need of maximum parking do not normally overlap. Reduction of parking requirements because of joint use shall be approved if the following conditions are met:
 - 1. The developer submits sufficient data to demonstrate that hours of maximum demand for parking at the respective uses do not normally overlap.
 - 2. The developer submits a legal agreement approved by the city legal department guaranteeing the joint use of the off-street parking spaces as long as the uses requiring parking are in existence or until the required parking is provided elsewhere in accordance with the provisions of this section.
- (j) *Reduction for low percentage of leasable space.* The requirements of section 33-91.03(f)5. of this section assume an average percentage of gross leasable building to total gross building area (approximately 85 percent). If a use has a much lower percentage of leasable space because of cafeterias, athletic facilities or covered patios; atriums; conversion of historic residential structures to commercial use; or for other reasons; the city may reduce the parking requirements if the following conditions are met:
 - 1. The developer submits a detailed floor plan describing how all of the floor area in the building will be used.
 - 2. The developer agrees in writing that the usage of the square footage identified as not leasable shall remain as identified; unless and until additional parking is provided to conform fully with this section.
- (k) *Special parking districts.* The city commission may designate special parking districts where parking or transit facilities may be provided by the city, thus lessening the demand for on-site parking. For development proposed in these districts, the city commission may allow the developer to pay a fee in lieu of providing some or all of the spaces required by this section. The fee shall be a one-time, nonrefundable fee per parking space avoided, paid to the city prior to the issuance of a certificate of occupancy. The amount of the fee shall be determined by the city commission and shall be equal to the land acquisition, construction and maintenance costs of parking spaces that are deferred by this provision. These fees shall be used by the city solely for the purchase, construction, operation and maintenance of parking or transit facilities serving the area of the

development. The city commission may, at the time of accepting the fee, enter into an agreement with the developer to construct or provide parking or transit facilities.

- (l) **Bicycle Parking.** To facilitate the lessening of car-related congestion in the city and to promote the use of alternative modes of transportation, to provide for general health and fitness and to promote air quality and reduce pollution the accommodation of bicycle commuting is required through the provision of adequate and safe facilities for the storage of bicycles. Further, as specified by this section a reduction in required automobile parking spaces is allowed when bicycle parking is provided, creating an incentive for providing bicycle parking in accordance with the provisions of this Chapter.

1. Locations and Facilities

- a. Bicycle parking shall be provided in a well-lighted area.
- b. Bicycle parking shall be at least as conveniently located as the most convenient automobile spaces, other than those spaces for persons with disabilities. Safe and convenient means of ingress and egress to bicycle parking facilities shall be provided. Safe and convenient access shall include, but is not limited to stairways, elevators and escalators.
- c. Bicycle parking facilities shall not interfere with accessible paths of travel or accessible parking as required by the Americans with Disabilities Act of 1990.
- d. Protected and unprotected bicycle racks shall be located in highly visible areas to minimize theft and vandalism.
- e. In cases of structured automobile parking, protected bicycle parking spaces shall be used.
- f. In the event compliance with location requirements set forth above is not feasible because of demonstrable hardship, the technical review committee may approve an alternative storage location as guided by the following criteria:
 1. Such alternative facilities shall be well-lighted and secure.
 2. All Bicycle parking spaces outside of a building shall be located within one hundred (100) feet of the primary building entrance.

2. Layout of Spaces. Bicycle Parking Spaces or alternative spaces approved by the technical review committee shall be laid out according to the following:
 - a. A bicycle parking space shall be four (4) feet by six (6) feet and shall provide for locking up to two (2) bicycles to a bicycle rack or a bicycle locker that can store up to two (2) bicycles per unit.
 - b. At a minimum, bicycle racks shall consist of a stationary device with a base that can wedge anchors for surface mounting, provides steel tubing one (1) inch to four (4) inches outside diameter, containing locking points between one (1) feet and three (3) feet off the ground and a gap near the bottom for pedal clearance, enabling one to lock a bicycle frame and one of the wheels with a standard U-Lock. Such a rack must be able to accommodate at least two (2) bicycles upright by rack frame. Bicycle racks within Historic Overlays shall reflect the historic nature of the area in design aesthetic and finish.
 - c. At a minimum protected bicycle parking spaces shall be secure facilities which protect the entire bicycle, its components and accessories against theft and against inclement weather, including wind-driven rain. This type of facility includes, but is not limited to bicycle lockers, check-in facilities, monitored bicycle parking, restricted access parking, and personal storage.
 - d. All bicycle parking areas shall afford a four (4) foot wide access aisle to ensure safe access to spaces.
 - e. Bicycle parking and automobile parking shall be located so as to protect bicycles from damage.
 - f. Where bicycle parking spaces are not visible from the primary street, signage shall be used to direct cyclists safely to bicycle parking areas.
 - g. All bicycle racks and lockers shall be securely anchored to the ground or building structure.
 - h. Bicycle parking spaces shall not interfere with pedestrian circulation and shall adhere to ADA requirements.
 - i. Bicycle parking shall be an integral part of the overall site layout and designed to minimize visual clutter. In any designated historic district, the design shall compliment the surrounding structures.

3. Off-Street Parking Reduction for Bicycle Parking

a. A reduction in the number of off-street parking spaces required (excluding parking spaces for persons with disabilities) shall be permitted for the provision of bicycle parking provided that:

- (1) No fee is required for using the bicycle parking made available;
- (2) When calculation of the maximum number of reduced parking spaces results in a fraction, the resulting number shall be rounded to the next highest integer.
- (3) Complies with the bicycle Parking Spaces table below:

b. The reduction in the number of automobile parking spaces shall be reduced by no more than one (1) space for each bicycle parking space, but by no more than thirty (30) percent of the total required spaces.

c. This provision cannot be applied to single-unit residential, animal care, car wash, salvage yard, service station, and vehicle/equipment repair uses.

4. Bicycle Parking Standards

If bicycle parking spaces are provided they shall be provided in accordance with the following tables:

For all non-single family residential uses except, hotel/motel, commercial parking, parking structure, and

a. Low Occupancy Facilities with limited customer or non-employee contact and less than one (1) employee per every ten thousand (10,000) square feet of gross floor area:

<i>Gross Floor Area</i>	<i>Required Minimum Number of Bicycle Parking Spaces</i>
<i>0 – 6,000 square feet</i>	<i>0</i>
<i>6,001 – 20,000 square feet</i>	<i>1</i>
<i>Over 20,000 square feet</i>	<i>1 per every 10,000 square feet or fraction thereof</i>

b. For Multi-Unit Residential:

<i>Number of Dwelling Units</i>	<i>Required Minimum Number of Bicycle Parking Spaces</i>
<i>Less than 12</i>	<i>0</i>
<i>12 or more</i>	<i>1 per every 4 dwelling units or a fraction thereof</i>

(1) At least sixty (60) percent of all bicycle parking spaces provided must be protected bicycle parking spaces.

c. For Commercial Parking and Parking Structure uses:

<i>Number of Automobile Spaces</i>	<i>Required Minimum Number of Bicycle Parking Spaces</i>
<i>0-4</i>	<i>0</i>
<i>4-20</i>	<i>1</i>
<i>21-40</i>	<i>2</i>
<i>Over 40</i>	<i>1 per every 20 spaces or a fraction thereof</i>

d. For Low Occupancy Facilities and Hotel/Motel uses:

<i>Number of Employees</i>	<i>Required Minimum Number of Bicycle Parking Spaces</i>
<i>0-5</i>	<i>0</i>
<i>6-20</i>	<i>1</i>
<i>21-80</i>	<i>2</i>
<i>Over 80</i>	<i>1 per every 20 employees or a fraction thereof</i>

(1) To certify a building or use as a low occupancy facility, the building owner or applicant shall attach to any zoning permit application, an affidavit attesting to the number of employees required for the use.

e. When calculating the minimum number of protected and/or unprotected parking spaces required results in a fractional number, a fraction of less than one-half (1/2) shall be disregarded and a fraction of one-half (1/2) or more shall be rounded to the next highest whole number.

f. Bicycle parking shall be included as part of the parking study performed for public parks and recreation facilities.

(m) *Historic preservation exemption.* The preservation of any property that has been placed on the Local Register of Historic Places or that is located in a Historic District and contributes to the historic character of the district

shall be grounds for a grant by the city commission of a reduction in, or complete exemption from, the parking requirements in section 33-91.02(a) of this section. Such exemption shall not apply to residentially zoned property. The reduction or exemption needed to allow a viable use of the historic structure shall be granted unless a severe parking shortage or severe traffic congestion will result.

- (n) *Increase in requirements.* The number of required parking spaces may be increased by the city commission if a parking study demonstrates that the proposed use would have a parking demand in excess of the requirements in section 33-91.02(a) of this section. The city commission may require the developer to provide a parking study, as described in section 33-91.01(d) of this section, when the city staff presents preliminary data indicating that an increase in the number of parking spaces may be warranted.
- (o) Except for special events as permitted by the city, parking lots may not be utilized for outdoor display of merchandise or merchandise examples or for the establishment of temporary housing unauthorized by the city, county, state and/or federal government as part of a declared disaster.

33-91.04. *Off-street loading.*

- (a) *Generally.* Spaces to accommodate off-street loading or business vehicles shall be provided as required below:
 1. Every hospital, institution, hotel, commercial or industrial building or similar use having a floor area in excess of 5,000 square feet requiring the receipt or distribution by vehicle of materials and merchandise shall have at least one permanently maintained off-street loading space for the first 5,000 square feet and one additional space for each 20,000 square feet of gross floor area, or fraction thereof, over and above the first 5,000 square feet.
 2. Retail operations, wholesale and industrial operations with a gross floor area of less than 5,000 square feet shall provide sufficient spaces (but not necessarily a full berth) so as not to hinder the free movement of vehicles and pedestrians over a sidewalk, street or alley.
- (b) *Adjustments to requirements.* The city commission may, upon the recommendation of the city staff require that a study be done to determine the actual number of loading spaces needed for a proposed use. Staff shall recommend the need for a study when it appears that the characteristics of the proposed use require a greater or lesser number of loading spaces than that required or proposed.

33-91.05. *Alteration of conforming development.*

- (a) *Decreased demand for parking or loading.* The number of off-street

parking or loading spaces may be reduced if the city commission finds that a diminution in floor area, seating capacity, or other factor controlling the number of parking or loading spaces would permit the site to remain in conformity with this section after the reduction.

- (b) *Increased demand for parking or loading.* The number of off-street parking or loading spaces must be increased to meet the requirements of this section if the city commission finds that an increase in floor area, seating capacity, or other factor controlling the number of parking or loading spaces required by this section causes the site not to conform with this section.

33-91.06. *Design standards for off-street parking and loading areas.*

(a) *Location.*

1. Except as provided herein, all required off-street parking spaces and the use they are intended to serve shall be located on the same parcel.
2. Minimum separation between vehicle use areas (driveways and parking areas) and property lines.
 - a. In the C-2A zoning district, vehicular use areas shall have a minimum separation of five feet from any property line, unless determined by the city that the vehicular use areas cannot be practically separated from the property line, then the distance may be reduced to zero.
 - b. Except for all one- and two-family residences, which shall have a minimum one-foot separation between the vehicular use areas and the property line, and except within the C-2A zoning district, all other zoning districts shall have a minimum separation of ten feet from any property line.
 - c. If shared vehicular use areas are proposed between adjacent properties, staff may waive the minimum separation requirement upon presentation by the applicant of a shared access agreement in a form and content acceptable to the city.
3. The city commission may approve off-site parking facilities for nonresidential uses as part of the parking required by this section if:
 - a. The location of the off-site parking spaces will adequately serve the use for which it is intended. The following factors shall be considered:
 1. Proximity of the off-site spaces to the use that they will serve.
 2. Ease of pedestrian access to the off-site parking spaces.

3. Whether or not off-site parking spaces are compatible with the use intended to be served, e.g., off-site parking is not ordinarily compatible with high turnover uses such as retail.

b. The location of the off-site parking spaces will not create unreasonable:

1. Hazards to pedestrians.
2. Hazards to vehicular traffic.
3. Traffic congestion.
4. Interference with access to other parking spaces in the vicinity.
5. Detriment to any nearby use.

c. The developer supplies a written agreement, approved in form by the city attorney, assuring the continued availability of the off-site parking facilities for the use they are intended to serve.

(b) *Size.*

1. Parking spaces in surface parking lots shall be sized according to Figure 33-91.06(b). All parking spaces in multistory parking garages shall be eight and one-half feet in width, and 18 feet in length. The parking striping dividing perpendicular parking spaces shall be double-lined and set on center every eight and one-half feet.
2. Parallel parking spaces shall be a minimum of eight and one-half feet wide and 20 feet long. If a parallel space abuts no more than one other parallel space, and adequate access room is available, then the length may be reduced to 18 feet.
3. Tandem parking spaces must be a minimum of nine feet wide and 19 feet long.
4. A standard motorcycle parking space shall be four and one-quarter feet wide and nine and one-quarter feet long.
5. Spaces for handicapped parking shall measure 12 feet wide by 20 feet long and shall be located adjacent to handicap access ramps.
6. The standard off-street loading space shall be ten feet wide, 25 feet long, provide vertical clearance of 15 feet, and provide adequate area for maneuvering, ingress and egress. The length of one or more of the loading spaces may be increased up to 55 feet if full-length tractor-trailers must be accommodated. Developers may install spaces that are larger than the standard, but the number of spaces shall not be reduced on that account.

7. The city commission may modify these requirements where necessary to promote a substantial public interest relating to environmental protection, tree protection, or drainage. The city shall certify that the modification does not create a serious hazard or inconvenience.

Figure 33-91.06(b)

Parking Standards				
A (Degrees)	B (Feet)	C (Feet)	D (Feet)	E (Feet)
0	9.0	22.0		
30	9.0	17.0	12.0	46.0
45	9.0	18.0	12.0	48.0
50	9.0	20.0	16.0	56.0
60	9.0	21.0	18.0	60.0
90	9.0	19.0	24.0	62.0

A = Parking angle

B = Stall width

C = Stall depth

D = Aisle width

E = Lot width

(c) *Layout.*

1. All parking layouts, traffic lanes and turnarounds shall be designed in accordance with technical construction standards maintained by the city engineer.
2. Pedestrian circulation facilities, roadways, driveways, and off-street parking and loading areas shall be designed to be safe and convenient, and shall be designed to provide for adequate police and fire protection and garbage and trash collection.
3. Parking and loading areas, aisles, pedestrian walks, landscaping, and open space shall be designed as integral parts of an overall development plan and shall be properly related to existing and proposed buildings.
4. Buildings, parking and loading areas, landscaping and open spaces shall be designed so that pedestrians moving from parking areas to buildings and between buildings are not unreasonably exposed to vehicular traffic. Sites shall be planned to accomplish a desirable transition between pedestrian and vehicular areas in order to provide for adequate landscaping and to provide for safe pedestrian and

vehicular movement. Paving materials for pedestrian areas transecting vehicle use areas shall be contrasting or marked in a manner clearly identifying pedestrian cross access paths. Where possible, pedestrian walkways shall be buffered from vehicular areas by landscape material. Where greater than three rows of parking are created, and where the rows contain fifteen or greater parking spaces per row, the required landscaped island area for every continuous fifteen parking spaces, or in the case where more than one landscape island is required, the set of islands creating the most direct path between the parking lot and building entrance, shall be expanded to include a paved contrasting material or marked pedestrian cross parking pathway. The cross parking pathway shall be connected to the required pedestrian street access pathway either directly or by a contiguously and similarly marked cross property access pathway.

5. Landscaped, paved, and gradually inclined or flat pedestrian walks shall be provided along the lines of the most intense use, particularly from building entrances to streets, parking areas, and adjacent buildings. Pedestrian walks should be designed to discourage incursions into landscape buffer and conservation areas except at designated crossings.
6. Each off-street parking space shall open directly onto an aisle or driveway that, except for single-family and two-family residences, is not a public street. Where possible, parking lots between commercial and professional uses shall be joined in either the front or rear of the primary structures(s) to facilitate cross access. The required vehicle separation area between such conjoined parking lots may be waived by staff in accordance with Section 33-91.06; however the ability to install landscape islands between the lots to meet either the individual or combined interior vehicle use area landscaping requirements shall be retained.
7. Aisles and driveways shall not be used for parking vehicles, except that the driveway of a single-family or two-family residence shall be counted as a parking space for the dwelling unit, or as a number of parking spaces as determined by the planning director based on the size and accessibility of the driveway.
8. The design shall be based on a definite and logical system of drive lanes to serve the parking and loading spaces. A physical separation or barrier, such as vertical curbs, may be required to separate parking spaces from travel lanes.
9. Parking spaces for all uses, except single-family and two-family residences, shall be designed to permit entry and exit without moving any other motor vehicle.

10. No parking space shall be located so as to block access by emergency vehicles.

(d) *Paving.*

1. Except as provided in [subsections] 3. and 5. below, all areas reserved for off-street parking spaces, loading zones and/or vehicle use areas, in accordance with the requirements of this section, shall have one of the following surface treatments: (a) concrete; (b) asphalt concrete; or (c) an industry recognized porous paving system such as Turf Stone*, porous concrete, Grass Pave*, or other types of paver blocks. All surface treatments shall be installed to comply with all relevant industry standards and the standards of the City of DeLand. Manufacturer's data providing product details shall be submitted to the city engineer. The city engineer shall determine the percent impervious value of the proposed material accordingly.

*Indicates specific proprietary paving system.

2. Parking spaces shall be delineated in accordance with the regulations of this section and arranged to allow ingress and egress to each space.
3. In the following circumstances, paving of parking spaces is not required:
 - a. In all zoning districts, 50 percent of the parking spaces in excess of the minimum number of parking spaces required by this section may be unpaved.
 - b. For all churches and places of public assembly, those spaces in excess of the sum of handicapped spaces and those spaces needed on a Monday-through-Friday basis, may be unpaved.
 - c. When a residential dwelling is converted to an office use in the P-1 professional residential zoning district, with the exception of handicapped parking spaces, the parking spaces may be unpaved.
 - d. When the parking is solely for the purpose of longterm storage of vehicles, "longterm storage" shall mean that vehicles are left in place for periods exceeding seven days.
 - e. For all bed and breakfast homestays and bed and breakfast inns.
 - f. Overflow parking parking as determined by the city during the site plan design and review process. Overflow parking stalls may be unpaved where the traffic movement lanes servicing the unpaved parking are paved. The unpaved parking needs to be stabilized in a manner allowing for both private vehicle use and access and use by emergency vehicles. Stalls shall be planted with grass or sod of a

variety durable under such use and may be fitted with wheel stops designating individual spaces. Overflow parking shall be segregated from regular parking by landscaping or other divider (fencing, berms, gates etc.) and curbs and wheel cuts need to be installed and secured in a manner which discourages casual use of these areas. Stormwater management for overflow and holiday parking must be included and addressed in the site's stormwater permit. Examples of overflow parking include parking for sports events and parking for holiday peak utilization.

4. All redevelopment projects that require Class II, III or IV site plans shall be required to meet the paving requirements of Section 3903 to the fullest extent possible. Due to site limitations the technical review committee, planning board or the city commission, depending on the type of site plan may allow modifications that still meet the intent of the regulations. For redevelopment alternative pavement may be proposed for a portion of the required off street parking where:
 - a. The alternative pavement is crushed concrete or equivalent, excludes mulch and other vegetative and/or readily degraded material, is approved by the city engineer and is accessed by a paved drive lane.
 - b. Acceptable applications may include: pick up and drop off travel lanes for schools and day care facilities; continued use of existing gravel parking that is currently well maintained and in good repair; in the rear of buildings for employee parking; overflow and overnight fleet parking; conversion of a historic residential building to nonresidential; and where low traffic volume uses such as appointment only beauty salons and similar personal service facilities with three or less stations are proposed (excluding such uses as medical offices, utility collection services and other high traffic turnover uses).
 - c. In the event a land use change(s) is proposed at a site utilizing approved alternative pavement for on-site parking, and the proposed new use does not meet the criteria in b. above and/or the new use requires additional parking not currently provided, the previously allowed alternative pavement parking needs to be upgraded to meet the general pavement requirements in effect at that time.
5. The city must approve the design of unpaved parking areas and stormwater must be based upon the assumption that all parking spaces, drives, and aisles are paved. All plans for unpaved parking and all stormwater calculations shall be properly signed and sealed by a Florida registered professional engineer.

6. Vehicle overhang areas may be paved or unpaved, but, if unpaved, may not be counted as landscape area. The vehicle overhang area is that area, not to exceed two feet in depth, between the wheel stop and end of the parking space.
- (e) *Covered parking.* Covered parking may be provided either within or outside of the principal structure. If provided outside a principal structure, it may be considered as open landscaped area provided it has a landscaped periphery and the top is utilized for recreation.

33-91.07. *Central business district regulations.*

- (a) *Where applicable.* The regulations in this section are applicable within the C-2A zoning district.
- (b) *When parking required.* Parking shall be required in the C-2A zoning district in conformance with the requirements of this section only when there is an expansion of an existing structure. The applicant shall provide parking spaces as required by section 33-91.03(f) to accommodate the additional square footage, employees or other factors affecting parking which may be created by the expansion.

Sec. 33-92. - Landscaping.

33-92.01. *Generally.*

- (a) *Statement of intent.* The intent of this section is to:
 1. Ensure that for all new development in DeLand, Florida, where off-street parking, open lot sales, vehicular use areas, and service areas are provided, a portion of such areas shall be devoted to landscape beautification and natural plant growth.
 2. Require that landscaped areas be created that provide an appropriate buffer between incompatible land uses, as an attractive boundary of the parcel or use, or as both a buffer and attractive boundary.
 3. Protect trees in DeLand, to assist in the control of flooding, soil erosion, dust, heat, air quality and noise pollution, and to improve the appearance, environment, character and value of the total urban area and to protect nearby properties, thereby promoting the public health and general welfare.
 4. Provide landscape regulations that are applied generally throughout the City of DeLand and are supplemented by the Gateway Corridor Overlay District.
 5. Promote xeriscape landscaping techniques that conserve water and protect the environment by utilizing drought tolerant and native plant material and is consistent with Volusia County's Minimum Standards

for Environmental Protection section called "Water Wise Landscape Irrigation.

- (b) *Exemptions.* These exemptions shall apply to vehicular use areas but not to buffering between land uses, pursuant to section 33-92.02(b). This section does not apply to the following:
 - 1. *Single- or two-family residences.* This shall not be construed to exempt any residential developments that require the approval of a development plan or plat under this chapter.
 - 2. *Existing building on which five or fewer parking spaces are provided.*
- (c) *Redevelopment.* All redevelopment projects that require a Class II, III or IV site plan shall be required to meet the landscaping requirements of section 33-92 to the fullest extent possible. Due to site limitations the technical review committee, planning board or the city commission, depending on the type of site plan, may allow modifications that still meet the intent of the regulations.
- (d) *Buffer alteration.* Alteration of an existing buffer requires submittal of a site plan in accordance with Section 33-132.03 and, at a minimum, approval of the technical review committee.

33-92.02. *Required landscaping.*

- (a) *Vehicular use areas, interior.*
 - 1. Landscaped areas shall be provided to break up excessively long continuous runs of parking space. Generally, a parking bay shall not contain more than 15 continuous parking spaces or extend more than 150 feet, whichever is more restrictive, without being broken up by a landscaped area.
 - 2. Each row of interior parking spaces shall be terminated at each end by a landscaped area.
 - 3. The landscaped areas required in paragraphs 1. and 2. above shall have a minimum width of nine feet, and a minimum size of 72 square feet.
 - 4. If required to meet the city's tree protection requirements, the planning director may require the developer to relocate or modify the location or size of specific interior landscape areas. However, in no instance shall such areas be smaller than as required in [paragraph] 3. above.
 - 5. At a minimum, interior landscaping shall meet or exceed the square footage requirements in paragraph 8. below. If the square footage arrived at through the application of paragraphs 1., 2. and 3. above is

greater than that required in paragraph 8. below, then such greater amount shall be provided. However, in areas where industrial uses are permitted, the required minimum shall be half of what is shown in paragraph 8. below.

6. In no instance shall there be less than one canopy tree for each 75 square feet, or fraction thereof, of required interior landscaped area. Flexibility will be allowed in the location of the interior trees required, and the planning department will have the final approval.
7. In a vehicular use area where the strict application of the foregoing requirements will seriously limit the function of said area, or be injurious to trees proposed to be retained, the location and shape of required interior landscaping may be altered so long as the full square footage of landscaped area is provided. If landscaped areas are relocated near the perimeter of the paved area, these landscaped areas shall be in addition to the buffer requirements below.

Required landscaping for vehicular use areas:

- Parking spaces: Five to 50 yields seven square feet per space.
- Parking spaces: 51 to 100 yields ten square feet per space.
- Parking spaces: 100+ yields 13 square feet per space.

Table 33-92.02(a). RESERVED FOR FUTURE USE.

- (b) *Buffer Zones.* A Buffer Zone is a landscaped strip along parcel boundaries that serves as a buffer between incompatible uses and zoning districts, as an attractive boundary of the parcel or use, or as both a buffer and an attractive boundary.
 1. Nothing in the section shall be interpreted to mean that parcels zoned C-2A (downtown commercial) must meet these buffering requirements. Developments that have an approved PD designation must meet the above requirements unless specifically addressed in the development agreement. The width and degree of vegetation required depends upon the nature of the adjoining thoroughfares and land uses.
 2. The standards for Buffer Zones for development outside of the gateway corridors are set out in Table 33-92.02(b) below specifying the width and number of plants required per 100 linear feet. The developer may choose among the available widths within a given standard, so long as the corresponding number of plants is provided. To determine the total number of plants required, the length of each side of the property requiring a buffer shall be divided by 100 and multiplied by the appropriate number of plants shown in the table. Percentages of trees, bushes and shrubs shall be rounded to the closest

whole number, except that the requirement shall never be less than one tree, bush or shrub. The minimum sizes of the canopy trees are also provided in the table below. As illustrated below, when the smallest buffer area is selected the larger trees are required or the number of trees are increased. The canopy trees shall be spread approximately 25 feet apart along the length of the buffer. Flexibility will be allowed in the location of the plant material required, and the planning department will have the final approval.

Table 33-92.02(b)

Buffer Standard "A"

Width of Buffer	20 feet	15 feet
<i>Required Plant Material</i>		
Canopy	2.4 (2" dbh)	1.8 (3" dbh)
Understory	0.4	0.6
Shrubs	4.0	6.0

Buffer Standard "B"

Width of Buffer	25 feet	20 feet	15 feet
<i>Required Plant Material</i>			
Canopy	4.4 (2" dbh)	4.0 (3" dbh)	3.6 (4" dbh)
Understory	1.0	1.2	1.2
Shrubs	10.0	12.0	12.0

Core Gateway District—Buffer Standard "B" Superseding Requirements

Minimum buffer width	15 feet
Tree minimum diameter	4" dbh
Tree minimum height	14 feet
See also: Section 33-36.05 <i>Landscaping in the Gateway Overlay Districts</i>	

Buffer Standard "C"

Width of Buffer	35 feet	30 feet	25 feet	20 feet
<i>Required Plant Material</i>				
Canopy	6.2 (2" dbh)	5.6 (3" dbh)	5.2 (4" dbh)	4.8 (5" dbh) 5.6 (3" dbh)
Understory	1.8	2.0	2.2	2.4
Shrubs	18.0	20.0	22.0	24.0

Buffer Standard "D"

<i>Required Plant Material</i>				
Width of Buffer	60 feet	50 feet	40 feet	30 feet
Canopy	8.0 (2" dbh)	7.6 (3" dbh)	7.2 (4" dbh)	6.8 (5" dbh)

				7.6 (3" dbh)
Understory	3.0	3.5	4.0	4.5
Shrubs	24.0	27.0	30.0	33.0

Redevelopment Gateway District—Buffer Standard "D" Superseding Requirements

Minimum buffer width	30 feet
Tree minimum diameter	4" dbh
Tree minimum height	14 feet
See also: Section 33-36.05 <i>Landscaping in the Gateway Overlay Districts</i>	

Emerging Gateway District—Buffer Standard "D" Superseding Requirements

Minimum buffer width	40 feet
Tree minimum diameter	4" dbh
Tree minimum height	14 feet
See also: Section 33-36.05 <i>Landscaping in the Gateway Overlay Districts</i>	

Use Specific Buffer Standards and Exceptions

Solid waste containers	Must be screened on three sides with plant material, building material or a combination of both which exceed the height of the facility. See also section 33-92.02 (d).
Utility facilities	Require a minimum 5-foot wide screening adjacent properties and street right-of-way and a minimum 2.5-foot wide to protect the lesser. See also section 33-88 Utilities.
Tattoo parlors	Require Class "D" Buffers which comply with the opaque screen standard. See also section 33-19.09.
Vehicle use areas, interior	Landscaped areas shall be provided to break up excessively long continuous runs of parking space. See also section 33-92.02.(a).
Xeric and native exception	Special consideration may be given to reduction in same part of the required buffer standards where the creation of xeric and native landscapes substantially meeting the intent of the city's tree and landscape ordinances are proposed. See also section 33-57.07(b).

3. The foregoing standards shall be applied between abutting parcels as follows

Type of Use	Residential Single-Family	Multifamily	Office	Educational	Limited and General Commercial	Rail Spur Commercial	Wholesale Commercial	Industrial
Residential single-	N/A	C	C	C	C*	C*	D*	D*

family								
Residential multifamily	C	N/A	B	C	C	C*	C*	D
Office	C	B	N/A	B	A	C	C	C
Educational	C	C	B	N/A	C	C*	D	D
Limited and general commercial	C*	C	A	C	N/A	A	B	C
Rail spur commercial	C*	C*	C	C*	A	N/A	N/A	N/A
Wholesale commercial	D	C*	C	D	B	N/A	N/A	N/A
Industrial	D	D	C	D	C	N/A	N/A	N/A

* In addition to the specific requirements for Buffer Standards "A", "B", "C", "D" contained in Table 33-92.02(b), the buffer must also include a 100 percent opaque screen (fence or wall) along the rear or side lot line. Chain link, open mesh, or similar fencing shall not be used to satisfy this requirement. The screen shall be architecturally compatible with the adjacent residential property. The screen shall be a minimum of six feet high and a maximum of eight feet high. The screen shall be located no closer than ten feet to the abutting property line and landscape materials shall be located between the screen and the abutting property line.

4. The foregoing standards shall be applied along abutting thoroughfares as follows; unless the roadway is classified as a gateway then the applicable standard for that gateway must be followed:

Abutting Street Type of Use	Arterials	Collectors	Local
Residential single-family(Subdivision)	C	C	B
Residential multifamily	C	B	B
Office	C	B	B
Educational	D	C	C
Limited and general commercial	D	C	D
Rail spur commercial	N/A	B	B
Wholesale commercial	D	C	D
Industrial	D	B	B

5. Buffering around the exterior of a mixed use development shall be based on the predominant use in the development. If the design of a mixed use development protects adjacent uses without the full buffer

required by this section, the planning board may approve a lesser buffer if the decision to allow the lesser buffer is supported by written findings.

6. The use of existing native vegetation in Buffer Zones is preferred. If a developer proposes to landscape a Buffer Zone with existing native vegetation, a buffer with fewer plants than required by this section may be approved if:

- a. Such is necessary to prevent harm to the existing native vegetation;
- b. The buffering and/or aesthetic purposes of the Buffer Zone are substantially fulfilled despite the lesser amount of vegetation.

7. *Redevelopment.* All redevelopment projects that require a Class I, II or III site plan shall be required to meet the buffer requirements of section 33-92 to the fullest extent possible. Due to site limitations, the technical review committee, planning board or city commission, depending on the type of site plan, may allow modifications that still meet the intent of the regulations.

(c) *Front yard trees.*

1. *For single-family uses.* The developer shall plant, within each front yard setback area, no closer than five feet or further than 15 feet from the right-of-way, one shade tree for every 75 linear feet of right-of-way. Except where property on one side of the right-of-way is not owned by the developer, the trees shall be planted alternately on either side of the street. Existing trees and native tree species that need less water and maintenance are preferred.
2. Trees planted pursuant to this section shall be selected from the approved list of canopy trees contained in the document entitled "List of permitted shrubs and trees for landscaping and tree protection," and shall have a minimum overall height of eight feet at time of planting. The planning department shall be consulted in selecting appropriate tree species and planting procedures. Existing trees and native tree species that need less water and maintenance are preferred.

(d) *Use of required areas.* No accessory structures, garbage or trash collection points or receptacles, parking, or any other functional use contrary to the intent and purpose of this section shall be permitted in a required landscape area. This does not prohibit the combining of compatible functions such as landscaping, tree protection, and drainage facilities.

(e) *Building perimeter landscaping.* Building perimeters are required to be landscaped in accordance with Article VIII, section 33-94.05(c).

33-92.03. *Landscape design and materials.*

(a) *Design principles.* All landscaped areas required by this section should conform to the following general design principles, however, no development plan shall be denied solely on the basis of these design principles:

1. Landscaping should integrate the proposed development into existing site features through consideration of existing topography, hydrology, soils and vegetation. In order to assure landscaping shall remain viable and shall enhance rather than detract from the overall site appearance and utility, including maintaining visibility for site signs and similar identifying features essential to site identification and safety, proposed landscaping shall be signed and sealed by a Florida licensed landscape architect.
2. The functional elements of the development plan, particularly the drainage systems and internal circulation systems for vehicles and pedestrians, should be integrated into the landscaping plan.
3. Landscaping should be used to minimize potential erosion through the use of ground covers or any other type of landscape material that aids in soil stabilization.
4. Existing native vegetation should be preserved and used to meet landscaping requirements.
5. Landscaping should enhance the visual environment through the use of materials that achieve variety with respect to seasonal changes, species of living material selected, textures, colors and size at maturity.
6. Landscaping design should consider the aesthetic and functional aspects of vegetation, both when initially installed and when the vegetation has reached maturity. Newly installed plants should be placed at intervals appropriate to the size of the plant at maturity. The design should use short term and long term elements to satisfy the general design principles of this section over time. Landscaping material shall be clustered through the use of species variety, compatibility and aesthetic where planted material may interfere with visibility, site lighting or safety when mature or where preservation of existing trees warrants.
7. Landscaping should enhance public safety and minimize nuisances.
8. Landscaping should be used to provide windbreaks, channel wind and increase ventilation.
9. Landscaping should maximize the shading of streets and vehicle use

areas.

(b) *Plant and installation standards.*

1. Plant materials specified by this section shall conform to Florida No. 1 standards or better as given in the current "Grades and Standards for Nursery Plants," State of Florida, Department of Agriculture, Tallahassee, or equal thereto.
2. All plants shall be healthy and free of diseases and pests.
3. Palms shall be considered trees. If palms are used, they shall consist of no more than 25 percent of the total tree requirement and shall have a minimum size as defined in this section.
4. Trees planted within 12 feet of a public street right-of-way or other public work shall be selected from a list of trees prepared and periodically updated by the public works department.
5. Shrubs and hedges shall have a minimum 30 inches height when measured immediately after planting. Hedges, where required, shall be planted and maintained so as to form a continuous, unbroken, visual screen within one year after planting.
6. Grass areas may be sodded, plugged, sprigged or seeded, except that sod shall be used in swales or other areas subject to erosion. In areas where plant materials other than sod or grass seed are used, nurse-grass seed shall be sown for immediate effect and protection until coverage is otherwise achieved. Sod shall be clean and reasonably free of weeds and noxious pests or diseases.
7. Other ground covers must present a finished appearance and have reasonably complete coverage at time of planting.
8. Landscaping shall be protected from vehicular and pedestrian encroachment by means of raised planting surfaces, depressed walks, curbs, edges, and the like.
9. Whether at or before maturity, the landscaping shall not interfere with power, cable television, or telephone lines, sewer or water lines, or any other existing or proposed overhead or underground utility service appearing in Section 33-88 Utilities.
10. All plants shall be installed according to standards adopted by the planning department.
11. The developer shall provide sufficient soil and water to sustain healthy growth of all plants.
12. Where no landscaping exists on sites undergoing redevelopment or

where existing landscaping is being altered the landscaping proposed shall be designed by a Florida licensed landscape architect. Where landscaping exists on sites proposed for redevelopment, the Applicant may request TRC review of alteration and improvement of the existing landscaping to meet compliance with this section as proposed by the site engineer where the site engineer demonstrates professional expertise in this area and where the site engineer signs and seals the landscaping plan. Should the TRCs determine the proposed landscaping does not adequately meet the standards or intent of this code, the TRC may require submittal of a landscaping plan executed and sealed by a Florida licensed landscape architect.

- (c) *Approved plants.* Ninety percent of canopy trees, understory trees, and shrubs shall be selected from those listed in the document entitled "List of Permitted Shrubs and Trees for Landscaping and Tree Protection" (contained in article VI, Addendum A) to satisfy the landscaping and tree protection requirements of the city. The planning department may authorize the use of an appropriate species not shown on the lists in accordance with generally accepted horticultural practices and should take steps to have the substitute species added to the list. Seventy-five percent of the total number of individual plants selected from each of the categories on the list and used to satisfy the requirements of this section shall be selected from the list of native species in the category.
- (d) *Prohibited plants.* Trees listed as invasive in Chapter 33 Article I may not be planted.
- (e) *Irrigation.*
 - 1. *Irrigation required.* Underground automatic irrigation systems that conform to the technical construction standards maintained by the city engineer or to the standards of Volusia County's Water Wise Landscape Irrigation Ordinance are required for all development. Consideration of relief from this requirement may be given for:
 - a. New construction which does not require any supplemental landscaping or which contains cultivated landscape areas may be exempt from this provision.
 - b. Landscaped areas containing primarily species native to the immediate region. Once xeric landscaping has been established, the planning director or planning board may waive the requirement for installation of an irrigation system.

To qualify as xeric landscaping the plant material must be identified as drought tolerant.
 - 2. *Irrigation system design.*

a. *Landscape demand.*

1. Irrigation of existing and undisturbed vegetation shall not be required.
2. Irrigation of reestablished native vegetative communities shall be required for a minimum of one year after initial installation. Once the landscape materials have been firmly established, the irrigation system may be abandoned.
3. Cultivated landscape areas shall be watered with an underground irrigation system designed to provide 100 percent coverage on a day when winds are no more than five miles per hour. Cultivated landscape areas shall include all areas not described in subparagraphs 1. and 2. above.

b. *Required system features.*

1. All landscape irrigation systems shall be low-volume irrigation systems. A low-volume irrigation system is designed to provide no more than the minimum amount of water required by any specific landscape material to ensure survival of that material. Such a system utilizes a combination of sprinkler mechanisms and zones to accommodate the individual irrigation requirements of each type of landscape material, including trees, shrubs, ornamentals and turf areas.
2. All underground irrigation systems shall be regulated by an automatic timer or controller.
3. The design of the system shall include sprinkler heads and devices appropriate for the landscape material to be irrigated.
4. Low-trajectory heads or low-volume water distributing devices shall be used to irrigate confined areas in order to prevent overspray onto impervious areas.
5. Irrigation systems shall be designed to place high water demand areas, such as lawns, on separate zones from those areas with reduced water requirements.
6. Automatically controlled irrigation systems shall be operated by an irrigation controller that is capable of irrigating high requirement areas and a different schedule from low water requirement areas, provided that separate zones exist as described in subparagraph 5. above.

7. Irrigation systems shall be designed so that impervious areas are not watered.
8. Moisture sensing devices (i.e., rain check valve) shall be installed to regulate the controller's operation during wet weather.
9. Precipitation rates for each zone shall be calculated and noted on the irrigation plans.
10. The watering schedule recommended by the urban forester shall be noted on the irrigation plans.
11. All irrigation systems using a well shall be outfitted with backflow protection.

c. *Reclaimed water.*

1. Landscape irrigation systems shall be required to connect to reclaimed water lines if the city has made reclaimed water available to the property and planned for its connection. The use of reclaimed water shall be required for all uses with the exception of one - and two -family residential uses.
2. Landscape irrigation systems shall be designed for ultimate connection to proposed reclaimed water lines where it is determined that the property is planned for ultimate connection to the reclaimed water system.
3. All connections to the city's reclaimed water system shall comply with the City of DeLand Standard Construction Details.

(f) *Nonliving materials.* Mulches shall be installed according to current version of the University of Florida, Institute of Food and Agricultural Sciences, Florida Yards & Neighborhoods Handbook. All mulches must be installed so that they are at least six inches away from the trunks of all newly planted and existing trees.

(g) *Maintenance and replacement of plants.*

1. The owner or his agent shall be jointly and severally responsible for the maintenance of all landscaping. All required plant materials shall be maintained to the standards for Florida No. 1 or better, as given in the most current "Grades and Standards for Nursery Plants," State of Florida, Department of Agriculture, Tallahassee, or equal thereto.
2. The owner or his agent as part of routine maintenance shall replace any dead or severely damaged plant materials.

Sec. 33-93. - Stormwater management.

33-93.01. *Findings.* The city commission has determined that the preservation of the water resources of the city and its environs is critical to the public health, safety and welfare. Uncontrolled stormwater runoff causes erosion, sedimentation and flooding and prevents recharge of the aquifer upon which the public depends for potable, fresh water. The city commission finds it is necessary to impose these minimum standards to control stormwater runoff and conserve the water resources of the city and the areas around the city.

33-93.02. *Intent.* The regulations in this section are designed to allow landowners reasonable use of their property while promoting the following objectives: protecting the quantity and quality of ground and surface waters; preventing the lowering of existing groundwater table elevations to the detriment of these other stated objectives; perpetuating recharge into the groundwater system; preventing and reducing salt water intrusion; minimizing the production of nuisance and disease vectoring mosquitoes; discouraging reliance on drainage systems which depend on the use of electrical energy or petroleum fuels to move water, remove pollutants or maintain the systems; reducing wind or water caused erosion, loss of valuable top soils and subsequent sedimentation of surface water bodies; alleviating downstream flood hazards; preventing significant loss of life and property due to runoff from any foreseeable rainfall event; reducing the capital expenditures associated with flood proofing and the installation and maintenance of storm drainage systems; minimizing the adverse impact of development on the water resources of the city and county; and maximizing the protection of Class II waters. This section is intended to allow landowners reasonable use of their property provided stormwater runoff peak rates and volumes and the quality of stormwater retained after development shall approximate existing predevelopment conditions and precautions will be taken to prevent erosion, sedimentation and flooding.

33-93.03. *Relationship to other stormwater management requirements.* In addition to meeting the requirements of this chapter, the design and performance of all stormwater management systems shall comply with applicable rules of the St. Johns River Water Management District and no construction shall commence until a district permit is approved, if required.

33-93.04. *Regulated activity.*

- (a) *Generally.* No person may develop or make any change in the use of land or construct a structure or change the size of a structure without first obtaining a permit which fulfills the minimum stormwater management standards of this section, unless otherwise exempted in these regulations.
- (b) *Approval by city required.* No building permit, development order or other form of construction approval shall be granted without prior approval by the city. The applicant shall submit plans exhibiting the methods by which these stormwater management regulations shall be met or exceeded.

(c) *Type of development regulated.* The following activities may alter or disrupt existing stormwater runoff patterns, and as such will, unless otherwise exempt from this section, require a permit prior to the commencement of construction or beginning of development:

1. Clearing or draining of land as an adjunct to construction;
2. Clearing or draining of nonagricultural land for agricultural purposes;
3. Converting agricultural lands to nonagricultural uses;
4. Subdividing land;
5. Replatting recorded subdivisions and the development of recorded and unrecorded subdivisions;
6. Changing the use of land and/or the construction of a structure or a change in the size of one or more structures;
7. Altering the shoreline or bank of any surface water body;
8. Filling of depressional areas; and
9. The lowering of the water table.

33-93.05. *Exemptions.* The following activities are exempt from this section:

1. The construction or alteration of individual single-family and duplex residences and accessory structures.
2. Bona fide agricultural pursuits, including forestry, except where an artificial drainage system will be used to increase the flow of surface water from the applicant's land.
3. Maintenance work performed on existing mosquito control and drainage canals for the purpose of public health, safety and welfare.
4. Maintenance work on utility or transportation systems provided the maintenance work does not alter the purpose and intent of the constructed drainage system.
5. Any maintenance, alteration, renewal, use or improvement to an existing structure not changing or affecting the rate or volume of stormwater runoff.
6. Any additions to an existing impervious area(s) of 1,000 square feet or less, provided however that multiple additions to the same impervious area(s) totaling more than 1,000 square feet shall not be exempt.

33-93.06. *Stormwater management requirements.*

- (a) *Review and approval of structures and systems.* The design of all stormwater management systems, water retention or detention structures and flow attenuation devices shall be reviewed for compliance with these regulations during the site plan or subdivision approval process. No design shall be approved unless it meets the standards contained in these regulations and all other applicable laws.
- (b) *General standards for stormwater and stormwater systems.* All stormwater management systems required by this section, shall comply with the following minimum standards.
 - 1. *Best management practice.* Stormwater runoff shall be subjected to best management practice prior to discharge into natural or artificial drainage systems.
 - 2. *Miscellaneous development standards.* Additional standards for development activities are as follows:
 - a. No site alteration shall cause siltation of wetlands, pollution of downstream wetlands, or reduce the natural retention or filtering capabilities of wetlands.
 - b. No site alteration shall allow water to become a health hazard or contribute to the breeding of mosquitoes.
 - c. All site alteration activities shall provide for such water retention and settling structures and flow attenuation devices as may be necessary to ensure that the foregoing standards and requirements are met.
 - 3. *Design of detention structures.* Detention structures shall be designed and constructed to release runoff over a period of time to the downstream drainage system in a manner and in quantities that will not exceed the capacity of the existing downstream system. For aesthetic reasons, and to increase shoreline habitat, the shorelines of detention and retention areas may be sinuous rather than straight if approved by the city engineer.
 - 4. *Minimum slope standards.* The city engineer shall establish minimum side slope standards for open retention and detention areas in accordance with the objectives of these regulations provided, however, that under no circumstance shall retention areas have side slopes of one foot vertical to four feet horizontal or steeper.
 - 5. *Positive drainage system.* A positive drainage system shall be provided which will not adversely impact downstream owners or adjacent lands.
 - 6. *Use of natural vegetation.* Where possible, natural vegetation shall be

used as a component of drainage design. The water table shall not be manipulated to endanger natural vegetation beneficial to water quality unless natural vegetation can be replanted and survive with a lowered water table condition.

7. *Runoff from other lands.* Runoff from higher adjacent lands shall be considered in the design and construction of stormwater systems, and provisions for conveyance of this runoff shall be included in the drainage plan.
 8. *Treatment of runoff to remove pollutants.* Runoff shall be treated to remove oil and floatable solids before discharge from the site in a manner approved by the city engineer.
 9. *Erosion during construction.* Erosion by wind or water shall be prevented throughout the construction process.
 10. *Discharge to Class II waters prohibited.* Direct discharge to Class II waters is prohibited. A workable filter system shall be provided prior to any discharge to Class II waters.
 11. *Accessibility.* All detention and retention basins, except natural water bodies used for this purpose, shall be accessible for maintenance from streets or public rights-of-way.
- (c) *Standards for development up to one acre.* For development on parcels up to one acre in size the minimum volume of retention to be provided shall be equivalent to one inch of depth over the entire project area. For certain soil conditions or groundwater table conditions which do not permit the percolation of this volume within the five days following a storm event, the city may approve detention with filtration systems in lieu of retention.
- (d) *Standards for developments larger than one acre.* For development on parcels larger than one acre in size the following additional performance standards are to be followed in the design of the project:
1. The discharge hydrograph produced for the developed or redeveloped site shall not exceed, in terms of peak flow and total volume, the hydrograph produced by conditions existing before development or redevelopment for a 24-hour, 25-year frequency storm, unless the intent of this recharge provision is met through detention of the difference between those volumes, in which case the volume difference may be released over not less than a 24-hour nor greater than a 72-hour period of time. However, the design standards for wet retention areas when approved by the city shall prevail. The city engineer, for sites consisting predominately of poorly drained soils having permanently and naturally impaired recharge potentials may waive this requirement. However, the runoff from the first one inch of rainfall for each storm falling on all areas of the project shall be

retained on-site except in cases where the city engineer concurs that soil or groundwater table conditions are not conducive to such practice, in which case the first one inch shall be detained and released over a period of 24 to 72 hours, in a manner acceptable to the city engineer. However, in the case of wet detention, standards approved by the city shall prevail. In addition, the cumulative impact of the outflow hydrograph on down stream flow shall be considered. Runoff rates and volumes resulting from the project, in excess of existing amounts, shall be accomplished on-site. Off-site retention may be permitted if, in the opinion of the city, the recharge requirements of this section are met.

2. Runoff computations shall be based on the most critical situation (rainfall duration, distribution and antecedent soil moisture condition) and conform to acceptable engineering practices using rainfall data and other local information applicable to the affected area.

(e) *Lowering of water table; conditions.* For the purpose of these regulations, it is presumed that the lowering of the water table for the purpose of constructing detention or retention basins and for the purpose of permanently protecting road construction does not conflict with the stated objectives of these regulations if all of the following are met:

1. The development site is not in an area known to the city to be important to recharge or to prevention of discharge of the Floridian [Floridan] aquifer, based on data collected and interpreted by the U.S. Geological Survey, the St. Johns River Water Management District, Volusia County or the city engineer, or other professional investigators.
2. The proposed lowering of the water table shall be no more than 15 percent of the site to a depth of five feet below the surface of the existing undisturbed ground, or an equivalent volume, provided that there be a maximum depth of five feet, with the area to be measured at the overflow elevation of any retention areas.
3. If ditches, under drains or similar devices are used to lower the water table, the lateral volumetric effect will be calculated, and the volume will be deducted from that allowed for retention areas.
4. The high water table may be lowered up to two feet below the undisturbed ground in the vicinity of roads for the purpose of protecting the sub-base and base of the roadway and/or for the purpose of preventing mosquito breeding in the roadside swales.
5. The lowering of the water table has no adverse effect on wetlands as defined in this section.
6. The lowering of the water table does not increase flows to the

detriment of neighboring lands.

- (f) *Basis for standards.* The hydrologic requirements mandated by this section shall be developed in accordance with the latest releases and revisions of the U.S. Department of Agriculture, Soil Conservation Service's technical release number 55 entitled, "Urban Hydrology for Small Watersheds", and SCS National Engineering Handbook, section 4, entitled, "Hydrology". Alternate methods may be used if, in the opinion of the city engineer, the method produces similar results to the above listed technical guides. Innovative approaches to stormwater management shall be encouraged and the concurrent control of erosion, sedimentation and flooding shall be mandatory.

33-93.07. *Permit application procedures.*

(a) *Preliminary permit application.*

1. Any persons proposing to make any change in the size of any structure or the use of land or to construct a new structure, except as may be otherwise exempt from this section, when in doubt as to whether a standard permit application is necessary, may furnish a completed preliminary application form to the city engineer. No fee shall be charged for preliminary application. The preliminary application form shall be filed by the owner/applicant and shall contain the following elements:
 - a. A location map;
 - b. A statement and sketch expressing the intent and scope of the proposed project.
2. The city engineer shall review the preliminary application. After submission of the complete preliminary application, the city engineer will notify the applicant that either the project is approved, is exempt, or a standard permit application must be filed for the project.
3. The following factors shall be considered:
 - a. Whether the proposed project is exempt;
 - b. Whether the proposed project appears to increase the rate or volume of runoff in excess of ten percent from the existing site;
 - c. Whether the proposed project appears to adversely affect water quality; and
 - d. Whether there are other criteria, which would require a standard application.

(b) *Standard permit application.* If a standard permit application is required

for the project, the applicant shall furnish three copies of the following information to the city engineer together with the completed standard permit application form:

1. The detailed site plan, including general location map for the proposed project, construction plans, specifications, computations and hydro-graphs necessary to indicate compliance with the requirements of this section, prepared by a professional engineer registered in the State of Florida;
2. Topographic maps of the site before and after the proposed alteration;
3. General vegetation maps of the site before and after the proposed alteration.

(c) *Review.* The city engineer will ascertain the completeness of the permit application.

(d) *Consideration.* The city engineer in approving or denying a permit application shall consider as a minimum, the following factors:

1. The characteristics and limitations of the soil at the proposed site;
2. The existing topography of the proposed site and the extent of topographical changes after development;
3. The existing vegetation of the proposed site and the extent of vegetational changes after development;
4. The existing hydrologic cycle of the proposed site and the impact of the proposed alterations on the existing hydrologic cycle;
5. The impact the proposed project will have on the natural recharge capabilities of the site;
6. The impact the proposed project will have on downstream water quantity and quality and specifically the potential for downstream flooding conditions;
7. The plans and specifications of structures or devices the applicant intends to employ for on-site water retention, detention, erosion control and flow attenuation;
8. And the effect the proposed water retention or detention structures will have upon mosquito breeding habitat.

(e) *Determination of compliance.* After submission of the completed permit application package, the city engineer shall approve, with or without specified conditions or modification, or reject the proposed plan and shall

notify the applicant accordingly. If the city engineer has not rendered a decision within 30 days after plan submission, it must inform the applicant of the status of the review and the anticipated completion date. If the plan is rejected or modified, the city engineer shall state his reasons for rejection or modification. If the applicant feels aggrieved due to rejection, modification or delay, he may request a hearing before the city commission of the City of DeLand, Florida.

(f) *Emergency exemption.* This section shall not be construed to prevent the doing of any act necessary to prevent material harm to or destruction of real or personal property as a result of a present emergency, including but not limited to fire, infestation by pests, or hazards resulting from violent storms or hurricanes or when the property is in imminent peril and the necessity of obtaining a permit is impractical and would cause undue hardship in the protection of the property. A report of any such emergency action shall be made to the city engineer by the owner or person in control of the property upon which emergency action was taken as soon as practicable, but not more than 20 days following such action. Remedial action may be required by the city engineer subject to appeal to the city commission in the event of dispute.

(g) *Permit fees.*

1. A permit fee shall be collected at the time the standard application package is submitted and will reflect the cost of the administration and management of the permitting process. The city commission will establish, by resolution, a fee schedule based upon the relative complexity of the project and such schedule shall be set by ordinance. The fee schedule may be amended from time to time by the city commission, by resolution. Notice of said resolution shall be published as provided by law.
2. Where work for which a permit is required by this section is commenced prior to obtaining said permit, the fees herein specified shall be doubled, but the payment of such double fee shall not relieve any persons from fully complying with the requirements of this section in the execution of the work nor from any other penalties prescribed herein.

33-93.08. *Variance procedure.* Upon request by any person required to obtain a permit here under and where it may be shown that an increase in the rate or volume of surface runoff shall not be harmful to the water resources of the City of DeLand, Florida, the planning board may grant or deny a variance to this section.

33-93.09. *Dedication or maintenance of stormwater management systems.* The installed systems required by this section shall be maintained by the owner, except that the city commission may accept certain systems for maintenance after

review and recommendation by the planning board. All areas and/or structures to be maintained by the city must be dedicated to the city by plat or separate instrument and accepted by the city commission. The systems to be maintained by the owner shall have adequate easements to permit the city to inspect and, if necessary, to take corrective action should the owner fail to maintain the system. Should the owner fail to properly maintain the system, the city shall give such owner written notice of the nature of the corrective action necessary. Should the owner fail to take or to commence taking the necessary corrective action within 30 days of the date of the notice, the city may enter the property, take corrective action and place a lien on the property of the owner for the costs of the corrective action.

33-93.10. *Compliance and enforcement.*

- (a) *Plan adherence.* The applicant shall be required to adhere strictly to the plan as permitted. The city engineer in accordance with the procedures set forth in [section] 33-93.07 of this section must approve any changes or amendments to the plan. After the completion of the project, the owner/applicant shall furnish the city engineer as-built plans of the complete project. Such plans shall be signed and sealed by a Florida registered professional engineer or land surveyor. Enforcement officials shall be granted inspection rights and right-of-entry privileges in order to insure compliance with the requirements of this section.
- (b) *Enforcement.* If the enforcement official determines that the project is not being carried out in accordance with the approved plan or if any project subject to this section is being carried out without a permit, the enforcement official is authorized to:
 - 1. Issue written notice to the applicant specifying the nature and location of the alleged noncompliance, with a description of the remedial actions necessary to bring the project into compliance within a reasonable specified time; or
 - 2. Issue a Stop Work Order directing the applicant or persons in possession to cease and desist all or any portion of the work which violates the provisions of this section, if the remedial work is not completed within the specified time. The applicant shall then bring the project into compliance or be subject to immediate revocation of his permit and to penalties provided for in section 33-93.11.

33-93.11. *Penalties.* Any person who violates or causes to be violated any provision of this section or permits any such violation or fails to comply with any of the requirements hereof shall be punished by a fine not to exceed \$500.00 or by imprisonment in the county jail for a period not to exceed 60 days, or by both such fine and imprisonment. Each day upon which such violation occurs shall constitute a separate offense. In addition to any other remedies, whether civil or criminal, the violation of this section may be restrained by injunction, including a

mandatory injunction, and otherwise abated in any manner provided by law.

33-93.12. *Vested rights.* This chapter shall not in any way limit or modify the vested rights of any person to complete any development or improvements to lands based upon prior law where a previous permit or authorization has been granted or applied for and where such previous permit or authorization remains in effect. The city commission may acknowledge vested rights in other circumstances where it is equitable and just.

33-93.13. *Savings provisions.* If any part of this chapter is held to be unconstitutional, it shall be construed to have been the legislative intent to pass this chapter without such unconstitutional part and the remainder of this chapter as to the exclusive of such part shall be deemed and held to be valid as if such part had not been included herein. If this chapter or any provision hereof is held to be inapplicable to any person, persons, group of persons, property, kind of property, circumstances, or set of circumstances, such holding shall not affect the applicability hereof to any person, property, or circumstances.

Sec. 33-94. Community Design Standards.

33-94.01. *Purpose and intent.* The purpose of these standards is to ensure quality commercial and industrial development and enhance an attractive physical environment compatible with the historic resources within the City of DeLand. Their intent is to:

- (a) Create and maintain a strong community image, identity and sense of place through the use of quality design and building materials;
- (b) Promote variety and diversity in architectural design, while relating to the historic past and architectural character of DeLand;
- (c) Minimize incompatible surroundings and visual blight, which prevent orderly community development and reduce community property values;
- (d) Encourage and promote development which features amenities and excellence in the form of variations of siting, types of structures and adaptation to and conservation of, native vegetation and other environmental design features;
- (e) Foster civic pride and community spirit by maximizing the positive impact of development;
- (f) Enhance and sustain property values; and
- (g) Promote a high degree of compatibility between structures and land uses.

33-94.02. *General provisions.*

- (a) *Applicability.*

1. All structures in the Thoroughfare Design District shall comply with section 33-94.03.
2. Structures located within the Historic Design and Downtown Support District shall comply with section 33-94.04.
3. Single-family and two-family dwellings outside of commercial zoning districts are exempt from the provisions of this section.
4. Class I developments shall comply with section 33-94.03 based on the applicable Community Design District.
5. Rehabilitation, remodeling, and additions to existing properties that involve exterior modifications shall conform to the applicable requirements contained in section 33-94, on that portion being altered.
6. Destruction. If a building or structure is destroyed by more than 50 percent of its appraised value, then when redevelopment of that building or structure occurs, it must be redeveloped in accordance with the standards of this section.
7. Properties located inside the DeLand Aeronautical and Technical Park (aka DeLand Air Tech Park) are exempt from this section 33-94 but must meet the requirements of Resolution 94-50, exhibit A.

(b) *Architectural styles.* The following styles shall not be considered appropriate for the City of DeLand:

1. Any architecture having a historical reference which is so unique or contrasting with the prevailing design character of the city, that it will be inconsistent with surrounding structures. Examples of such include igloos, tepees, medieval castles, and the like.
2. Any architecture, which attempts to resemble plant, animal, fish, edible food or other such nonbuilding items. This does not apply to appropriate ornamental decorations, such as fountains, doorknobs, dentils, etc.

(c) *Required submittal items.* Minimum submittal requirements are:

1. Architectural building elevations, in color, of all facades of buildings with material and texture indications, and with any exterior building signage illustrated.
2. In addition to the above building elevation requirements, the following must also be submitted, if applicable: exterior lighting scheme, lighting photometric design, fences and walls, landscaping, site furnishings, building landscaping design, specified pedestrian access paving and/or marking details and building signage.

3. The applicant may submit additional documentation in support of the proposed design, including but not limited to: information regarding adjacent and surrounding properties, the overall architectural style of the surrounding area or other documents referenced in the "Creating a DeLand Vision Through Architecture Report".

33-94.03. *General design criteria.*

The following shall apply to all development projects within the City of DeLand.

(a) *Relationship of the structures to the site.*

1. For new commercial and multi-family development within the core area of the city, along Woodland Boulevard, Florida Avenue, Clara Avenue and Alabama Avenue from Ohio Avenue to Voorhis Avenue and along New York Avenue from Amelia Avenue to Clara Avenue all buildings shall be constructed fronting the street right-of-way, or, if none, the utility easement where present. All parking, if provided on-site, shall be located at the side or rear of buildings and drive through windows and lanes are prohibited on New York Avenue and Woodland Boulevard. Additional set back to accommodate cafe dining, unique land and hard scaping, sculpture, unique architectural detail and similar design enhancements may be proposed to the planning director and/or associated expert(s) as assigned by the planning director for consideration.
2. Existing natural topography and site features shall be respected, or when modified shall improve the overall appearance of the site. Extreme changes in grade shall be avoided.
3. A transition will be required between single-family residential and nonresidential uses, such as heavy vegetative screening, greater setbacks, lower overall building intensities, less intensive parking facilities and substantially screened solid waste facilities as specified in Article VIII.
4. Building mechanical equipment, service, delivery, and work areas, shall be visually screened from pedestrian areas and from public view. These areas shall be located as far as reasonably possible from adjoining residential uses. Vertical lift and overhead garage type doors should not be located on principal facades abutting public rights-of-way.
5. Spacing and siting of multiple buildings on a single site shall provide for a variety of spacing between structures. While architectural design continuity for multiple structures on a single site is encouraged, monotonous repetition of identical structures on a single site shall be avoided.

6. Covered pedestrian connections between related buildings are encouraged, along with the development of pedestrian "friendly" landscaped exterior courtyards and patios between and around buildings.
7. Where group residential mailboxes are proposed, they shall be located in a central location accessible to pedestrians or central locations where the number of residences exceeds the practicality of a single mailbox location. All group mailbox installations shall comply with the requirements of the US Postal Service. Where mailbox stations are also directly accessed by vehicle, vehicular traffic shall be managed such that pedestrian access is protected, safe and clearly defined.
 - a. Pedestrian pathways transecting mailbox vehicle use areas shall be contrasting or marked in a manner clearly identifying pedestrian cross access paths.
 - b. Mailboxes shall be of uniform composition and appearance and shall be numbered in clearly visible, but not over expressed, characters.
 - c. Mail box areas shall be landscaped in an attractive manner consistent with the overall site landscaping scheme.
 - d. Installation of an overhead structure allowing for protection from the elements while accessing the mail boxes is encouraged and shall be constructed and roofed in a manner consistent with the site's architectural design and materials.
8. Accent towers, cupolas, fountains, architectural art and sculpture, porches and other architectural features are encouraged as a means of focusing attention on important areas, or emphasizing entranceways.
9. Signage shall conform to Article 7 of this code, and in addition, shall be compatible in scale, design, color, materials and construction with the principal structure. Additional signage is prohibited from appearing on equipment or appurtenances independent of site primary structures except as required by code.

(b) *General architectural building design.*

1. The design shall provide for a consistent architectural treatment of the entire building.
2. The design of new buildings and additions that reflect contemporary elements and design character is allowed as long as the link between any historic character and "new" is maintained through application of these guidelines and standards.

3. Buildings in established areas shall be designed for a compatible relationship to the existing surrounding neighborhood. Structures shall utilize similar architectural style, character, massing, materials, color, or other elements so as to relate to the surrounding neighborhood, or else various architectural techniques (landscaping, fences, walls, screens, etc.) shall be used to provide a suitable transition between the existing neighborhood and the proposed construction. To accomplish appropriate façade transitions and to maximize city streetscape aesthetics, the following transitional techniques shall be applied to new development and to redevelopment within 300 feet of an existing building displaying individual architectural and historic value and contribution to the streetscape:
 - a. Buildings shall be designed to provide transitional elements and architectural features (style, scale, design details, construction materials, etc.) that are architecturally compatible with adjacent structures.
 - b. Buildings that are twice the height or greater than adjacent structures shall provide transitional elements and features that provide for the transitional blending of heights.
 - c. The pattern of placement, proportions and materials of windows and doors shall be harmonious with surrounding structures.
 - d. The ratio of wall surface to openings and the ratio of width and height of windows and doors shall be consistent and compatible with surrounding structures.
4. Building design, scale and details shall be such that architectural interest is created from both the pedestrian and the vehicular (street) point of view. Building design shall be undertaken in a manner which excludes box and rectangular structures comprised entirely of blank walls. In order to maintain the unique character of DeLand, the following techniques shall be utilized:
 - a. Each principal entrance shall be clearly defined and highly visible as a customer entrance. Entryways shall be designed to provide focal points and protection from the sun and weather. In the event the entryway is not oriented toward the major street right-of-way that provides access to the building, as determined by the city, the side of the building facing said street right-of-way shall comply with the following criteria and shall be designated as ground floor frontage visible from the public right-of-way.
 1. Entryways shall be differentiated from the remainder of the facade through the use of color, change in materials, application of architectural features (arches, columns,

colonnades, etc.), setbacks, offsets, level changes or similar details.

2. Entryway design, except in industrial zoned districts, shall incorporate hardscape features such as low walls, decorative paving, water features and the like.
 3. Entryway design shall incorporate landscaping, landscaping planters or wing walls with landscaped areas.
- b. Building mass shall be varied by height and width so it appears to be divided into distinct massing elements and architectural details can be viewed from a pedestrian view point.
 - c. For structures with 75 or less linear feet of building ground floor frontage, fronting on or visible from the public right-of-way, no uninterrupted horizontal length or uninterrupted curve of the building facade shall exceed 35 linear feet, except for architectural facades, which may be allowed to have an uninterrupted length of 60 linear feet.
 - d. For structures with greater than 75 but less than 200 linear feet of building ground floor frontage, fronting on or visible from the public right-of-way, no uninterrupted horizontal length or uninterrupted curve of the building facade shall exceed 100 linear feet, except for architectural facades, which may be allowed to have an uninterrupted length of 120 linear feet.
 - e. For structures with greater than 200 linear feet of building ground floor frontage, fronting on or visible from the public right-of-way, no interrupted horizontal length or uninterrupted curve of the building facade shall exceed 300 linear feet, except for architectural facades, which may be allowed to have an uninterrupted length of 550 linear feet.
 - f. In order to allow for the expression of exceptional design and/or the use or reuse of custom unique details not disposed to alteration, such as hand created mill work or similar, a transition zone of within 5% of the classifications appearing in Section 33-94.4(1) c. through e. may be proposed to the planning director and/or associated expert(s) as assigned by the planning director.
 - g. Projections and recesses from uninterrupted facade lengths shall be architectural features and have a minimum depth of three feet. A minimum of 25 percent of the uninterrupted facade lengths shall be of varied length.
 - h. Blank wall areas shall incorporate the use of landscaping to break up the monolithic and monotonous appearance of such areas.

Blank wall areas shall not exceed 20 feet in vertical direction or 20 feet in horizontal direction of any building façade unless the use of landscaping or other appropriate artwork, as an alternative to the inclusion of wall area architectural design elements, is approved during the plan review and approval process.

- i. Buildings shall have consistent window expression visible from the street. A punched window expression is encouraged. Large expansions of glass or glass curtain walls above the first floor are prohibited within the historic design or downtown support districts as being inconsistent with the character of the existing buildings.
5. The following techniques for focusing attention and providing aesthetic detail shall be incorporated into building design:
- a. All buildings shall be required to provide a minimum of three of the following exterior design treatments.
 - 1. Canopies or porticos, integrated with building massing and style.
 - 2. Roof overhangs.
 - 3. Arcades, a minimum of eight feet clear in width.
 - 4. Sculptured artwork either wall or ground mounted with approval of the planning board and city commission.
 - 5. Murals or artwork applied to exterior walls with approval of the planning board and city commission.
 - 6. Raised cornice parapets over doors.
 - 7. Peaked roof forms.
 - 8. Arches.
 - 9. Ornamental and structural architectural details, such as bays, columns, gables, belt courses, lintels, pilasters and fascia.
 - 10. Clock towers, bell towers, cupolas and the like.
 - 11. Other similar treatments determined by the city to meet the intent of this chapter.

6. Building facades shall, on all sides that are, or will be, exposed to the general public, include a repeating pattern that shall consist of a minimum of two of the elements listed below. At least one of the elements shall repeat horizontally.

1. Color change.

2. Texture change.

3. Material change.

4. Pattern change.

1. Architectural banding.

2. Expression of architectural or structural bays, such as a reveal, an offset, or a projecting rib, through a change in plane of no less than 12 inches in width.

3. Building setbacks or projections, a minimum of three feet in width, on upper level(s).

4. Windows (real or false) shall be placed along at least 30 percent of any facade length that is visible from a public right-of-way. Windows shall be recessed or shall project at least one-half inch and shall include prominent sills, shutters, cementitious material reliefs or other such forms of framing.

(c) *Historical styles.*

Architectural design needs to reflect, enhance, or favorably relate to the existing historic architectural character of the city.

1. New construction, remodeling or additions to buildings incorporating a historical style for the building's exterior shall utilize various materials, architectural elements and details consistent with that particular style of architecture.

2. Mixing of inappropriate elements from different styles is discouraged.

(d) *Materials.* Use of similar materials is an important way in which a building can blend with the architectural context of the city and surrounding neighborhoods.

1. Materials shall be selected for durable quality and suitability to the type of buildings and the design in which they are used. Preferred materials are: thick cementitious material brick, stone, split-faced concrete masonry, architectural concrete (stamped patterned and colored). Ribbed metal siding shall not be used as an exclusive exterior finish, especially for facades that have visibility from public

rights-of-way. Exposed standard concrete block is not allowed.

2. Inappropriate use of materials in terms of weatherability, application or appearance, should be avoided.
3. Materials usage shall be consistent on all facades of the structure, for continuity of the design appearance and character.
4. Materials shall be consistent with the architectural style and character of the structure. In particular, materials used on buildings with a historic style shall be consistent with that style.

(e) *Color.* Use of colors is an important way in which a building can blend with the architectural context of the city and surrounding neighborhoods.

1. Building colors shall be limited to those colors having a light reflectance value (LRV) of 50 or greater per the manufacturer's standard which may be applied to no more than 80% of the building and an LRV of 20 or greater which may be applied to no more than for 40% of the building. The requirement shall not apply to in natural materials such as brick or stone, unless such material has been artificially colored in a manner contrary to the intent of these regulations.
2. All colors, excluding fluorescents, may be permitted as accent colors not to exceed ten percent of the surface area of any one elevation.
3. Color treatment shall be consistent for the entire building and any accessory buildings.
4. For color selection that does not comply with the above criteria, an appeal may be made to the planning director to present the request to the City Architect for compliance determination. A decision by the City Architect to not approve the requested scheme, maybe appealed to the City Commission.

(f) *Roof types, profiles, appearance.* Variations in rooflines shall be used to add interest to and reduce the massing of buildings. Pitched or sloped roofs are the preferred method of covering a building. Roof features shall be in scale with the building's mass and compliment the character of adjoining and/or adjacent buildings and neighborhoods.

1. The design of visible roof structures shall be consistent with the architectural style of the building. Roof treatment shall be consistent for all facades of the building that are or can be exposed to the general public.
2. Roof-like appurtenances such as false roofs, parapets and other similar features shall appear as an integral part of the overall design

and shall be integrated into the design in a manner that avoids the appearance of being applied to, rather than incorporated in the building's exterior. Application of such roof-like features shall be accomplished in such a manner as to eliminate the appearance of a flat roof design.

- herein:
3. Roof features shall be in scale with the building's mass and complement the character of adjoining structures, developments and neighborhoods. Roofs shall be constructed to enhance the appearance and attractiveness of the community.
 4. Roofs shall incorporate the design elements and materials listed
 - a. The massing of the roof shall reflect the massing of the building as required in Section 33-94.03.6.
 - b. Roofs shall be designed to be of such height, bulk and mass so as to appear structural even when the design is non-structural.
 - c. Roof materials shall consist of concrete tiles, terra cotta, metal or asphalt shingles (laminated, 25-year architectural grade or better) or other roofing materials that meet city building code requirements.
 5. Green roofs and roof top gardens may be utilized providing:
 - a. The roof meets or exceeds the community design standards, including the standards governing visibility from the street and adjoining properties.
 - c. The proposed roof is presented in a minimum Class II site plan signed and sealed by an engineer qualified to determine the structural stability and safety of the proposed features.
 - c. Access to a roof top garden is secured and accessible only to residents, guests under the supervision of a resident, the property owner or representative of an on-site business licensed in the City of DeLand and granted access by the owner or residential manager or managing agency for such propose.

- d. The roof top garden is for recreational purposes only and shall not be utilized to produce crops or food stuff for sale, trade or for financial compensation.
- e. Plants grown on roof top gardens may not exceed six feet in height.

d. Public access to a green roof is prohibited.

- 6. Roof top agricultural facilities shall be considered part of the building, shall require at a minimum a Class II site plan and shall meet all the community design, Florida Building Code and similar standards accordingly. Roof top agricultural facilities within the city are considered commercial businesses unsuitable for public access and shall secure all structures and appurtenances accordingly. Methods for meeting this standard shall be presented on the site plan.

(g) *Lighting.*

- 1. Site lighting shall be scaled for the intended use and be compatible with the architectural character of the building. The use of thematic lighting is encouraged for projects with a historical character, or where such historic character helps the project relate to the surrounding neighborhood or to the historic DeLand streetscape. Proposed historic fixtures are subject to city review and the appropriateness of such fixtures will be determined during the site review process. Landscape lighting is encouraged. A lighting plan, including photometric calculations, shall be submitted to the city for review.
- 2. Off-site areas shall be shielded from offensive or excessive illumination. Illumination from any light source onto adjacent properties or into the public right-of-way shall not exceed 0.5 foot-candles.
- 3. Mixing of different types of lamp sources with differing color output is discouraged.
- 4. Pedestrian areas shall have lighting of such scale, intensity and character as appropriate for pedestrian movement. Light sources shall be indirect or designed so as to reduce direct glare from the light source.
- 5. Lighting for parking areas shall provide adequate illumination, for the safe use of the area by the public. Light sources shall be indirect, or

designed so as to reduce direct glare from the light source.

6. General architectural lighting of building exteriors, including canopies, shall be designed so as to conceal illumination sources from direct view, by use of recessed lamps, shielding, or other means.
7. Decorative use of lower wattage bare lamps or use of reproduction bare lamps in a historical context is permitted, excluding the use of holiday lighting as an architectural application.
8. If security and/or free standing parking lot lighting is provided, it should be incorporated into the lighting scheme for the entire project.
9. All lighting shall be downward and of the full cut off shield variety in which the light source is recessed and shielded in a manner which prohibits upward light overspill into the night sky. Upward illumination is prohibited except:
 - a. Ground level light fixtures, which shall be of the burial vault type and shall be fully screened by landscaping. Illumination from ground level light fixtures shall not exceed the roof line of the illuminated structure by greater than 0.01 foot-candles.
 - b. Illumination from building wall lights providing architectural detail where a component of the lighting is designed to illuminate the building in an upward manner as part of the building aesthetic design shall not exceed the roof line of the illuminated structure by greater than 0.01 foot-candles.

(h) *Fences, walls, screens and landscape buffers.*

1. Any fence, wall or visual screen which is visible from any public right-of-way shall be designed as an integral feature of the design of the principal structure, expressing similar character through the use of materials, colors, or textures, excluding the use of shade cloth and woven slats.
2. Long stretches of fence, wall, or screen shall be relieved through use of offsets, bends, breaks, landscaping, or other design device.
3. Landscaped berms may be utilized in lieu of a fence or wall when specifically approved by the city.
4. The use of chain link fencing is prohibited except for industrial and governmental owned uses that do not front on an arterial roadway. An exception may be made from this requirement, where existing vegetation or proposed landscaping will effectively screen the fence from view and vinyl or other permanently coated chain link is used. Vinyl webbing, shade screen or slats may not be used to provide the

required screening.

5. Visual screens such as walls or landscaping are required to block the view between single-family residential and nonresidential uses. In lieu of the extensive visual screen, scaled down buildings or greater setbacks may be used to achieve compatibility.

(i) *Accessory uses and structures.*

1. Accessory structures and uses shall be consistent in design character with the principal structure. Outdoor storage areas shall be located behind the front facade of the main building and shall be fully screened from view from both vehicular and pedestrian traffic from both side and front view vantage points by structural means, vegetative means, or a combination of earthen berms and vegetation. Where screening is accomplished by structural means, the structure shall be compatible in design and color with the main building. Outdoor garden supply, propane dispensers, ice dispensers and similar use areas utilized for retail sales shall be screened from view and integrated with the overall architectural design and structure of the building.
2. Miscellaneous structures such as drink, ice and food dispensers and coin-operated vending devices shall only be permitted within the principle structure unless fully screened from view in accordance with 33-94.03.5.(i)
3. Unless otherwise permitted, outdoor storage shall be located behind the front facade of the main building and shall be screened from view.
4. Solid waste disposal facilities and any area used for recycling materials must be screened from view by adjacent properties.

(j) *Special building considerations.*

1. Gas stations and convenience stores with canopies should be constructed with the same or compatible roof design and materials as the main building and are encouraged to be attached to the main building. Canopy facing and support poles shall be constructed of complimentary material as the main building facade.
2. Auto repair facilities shall be oriented on a site and landscaped in such a fashion that open bays are not apparent from the public road on which they are located.
3. Retail or mixed use:
 - a. Projects that contain attached buildings with multiple owners or tenants should provide a covered facade treatment, a minimum of

eight feet in width, to facilitate pedestrian travel between businesses.

b. *Parking and vehicular and pedestrian traffic.*

1. Large expanses of unbroken parking areas are discouraged. Parking shall be separated into distinct areas through landscaping or other site features.
2. Outdoor display and sales areas shall be limited to arcaded areas that are structurally integrated into the architectural design of the principle structure. Displays and sales in these areas shall not be of a permanent nature and shall not impede the flow of pedestrian or vehicular traffic.
3. Permanent shopping cart storage shall be contained within the principal structure or screened from view.

c. *Building perimeter landscaping.* The building perimeter shall be required to be landscaped in addition to the requirements of section 33-92, Landscaping.

1. Perimeter landscape plantings shall be located adjacent to the primary facade(s). Plantings should also be included at public entrance areas. Landscape material should be located within 15 to 25 feet of the building foundation.
2. One canopy tree shall be required for every 75 feet of the exterior building perimeter, excluding building areas not designed for public view or access. Understory trees and shrubs shall be utilized along the exterior building perimeter, excluding building areas not designed for public view or access, to enhance building facades. Plants are encouraged to be grouped, in order to provide relief to building facades.
3. Canopy trees used for the building perimeter landscaping may be counted towards any required tree replacement for the final development plan.

33-94.04. *Design criteria for Historic Design and Downtown Support*

District.

The Historic Design District combines the historic areas of Stetson University and areas of the Core District as defined by the City of DeLand Comprehensive Plan, and as illustrated on the city's zoning district and zoning district overlay maps. The Downtown Support District includes non-residential parcels not included in, but associated with, the Historic Design District. The Downtown Support District ranges between Plymouth Avenue to Beresford Avenues and between Hill Street and Spring Garden Avenue.

Development within the Downtown Commercial land use shall comply with the standards set forth in the most current revision of *Design Guidelines for Commercial Building in Downtown DeLand* which is incorporated herein by reference.

(a) *General architectural design.*

1. Structures within this district shall specifically reflect and/or enhance the historic character of this part of the community and should complement the architecture of the existing historic structures. Architectural design of structures shall bear a complementary relationship to the existing architectural context of the surrounding area through the use of the following methods:
 - a. Similar or related architectural styling or character.
 - b. Similar or related massing, proportions and scale, along with the repetition of the relationship of solids and voids in the architectural design.
 - c. Similar or related fenestration treatment, relating to the repetition and rhythm of openings in exterior walls.
 - d. Similar or related architectural details and decorative treatments, such as cornices and moldings, awnings, parapets, columns, colonnades, arcades, and arches.
 - e. Glazing at street level may be tinted, but shall not utilize reflective glass, Plexiglas or similar.
2. Use of appropriate materials and treatments
 - a. Similar or related materials and textures.
 - b. Colors shall be approved by the historic preservation board (HPB).
3. Structures should be located as close to the street as possible, as long as it remains compatible with adjacent buildings.
4. Modifications and additions to existing structures shall be consistent with the style and character of the existing structure. Structures within the Downtown Support District shall result in a consistent and uniform treatment for the entire building.
5. Structures in these districts shall be designed to extend and to enhance the attractiveness of the city's streetscape. Building design shall have characteristics and elements that relate favorably to the predominantly pedestrian scale of the district.
6. The following historical architectural styles are the preferred styles:

Classical Revival, Mediterranean revival, Colonial Revival, Craftsman Bungalow and Commercial Style, Chicago School.

- a. Classical Revival architecture mirrors the classical forms of Greece and Rome as incorporated into building dating from the late 1890s through 1920. Examples include the Virginia State Capitol Building in Richmond, Virginia and the historic Volusia County Courthouse in DeLand, Florida.
- b. Mediterranean Revival architecture mirrors the architectural influences of the Mediterranean coast including Italian, Byzantine and Moorish themes from southern Spain and the French style as displayed by buildings constructed in Miami, Florida from the 1920s through the 1930s. Examples include the Vinoy Park Hotel in Saint Petersburg, Florida and Flagler Hall at Stetson University in DeLand, Florida.
- c. Colonial Revival architecture mirrors classical, but refrained, forms of Greece and Rome as incorporated into buildings dating from the 1880s to the mid 1950s. Examples include the Claramount Inn in Ontario, Canada and Elizabeth Hall at Stetson University in DeLand, Florida.
- d. Craftsman Bungalow mirrors the Arts and Crafts architecture movement as incorporated into buildings from 1900 to 1930. The building exteriors are typically finished in wood siding, stucco, brick and stone, used in combination of at least two of these. Examples include the 511 and 528 West New York Avenue, 220 and 228 West Wisconsin Avenue and 237 West Minnesota Avenue, DeLand, Florida.
- e. Commercial Style, Chicago School means architecture that mirrors the architecture of the early modern movement incorporated in commercial and office buildings from 1895 to 1930. Examples include the commercial multistory buildings occupying Woodland Boulevard from Voorhis Avenue to Wisconsin Avenue such as 100 and 200 North Woodland Boulevard and 112 South Woodland Boulevard.

(b) *Certificate of Appropriateness*

Properties within a Historic District must receive a Certificate of Appropriateness (COA) in accordance with Section 33-34 in addition to the review required under this section.

33-94.06. *Administration.*

- (a) *Application process.*
1. Design review shall be conducted by the City of DeLand for the purpose of determining compliance with this section.
 2. A predesign conference with the city is recommended, prior to the beginning of design work on any project subject to regulation by this ordinance.
 3. No building permits shall be issued without prior approval of the building design by the city.
 4. Whichever is applicable, required submittals for design review shall be submitted at the time of an application for:
 - a. *Final development plan review.* Architectural designs shall be submitted with the site plan application for review by the TRC, or
 - b. *Building permit.* Architectural designs shall be submitted with building permit applications if a site plan is not required.
 5. Applications shall be approved, approved with specific conditions or modifications, or denied, based upon their conformance or nonconformance with the requirements of this section as reviewed by the city. The review will include the oversight of an architect. Upon denial of an application, the city shall provide the applicant with specific objections to the design.
- (b) *Approval.* Final approval of all architectural designs shall be determined by the city as part of the development plan approval process per section 33-132.07 and as provided for below. Such approval shall include as a minimum: site plans, building elevations, roof type, construction materials, lighting, screening and colors. All projects should be consistent with the Creating a DeLand Vision through Architecture (aka "DeLand Vision") Report.
1. *Class I developments.* In instances where a Final Development Plan is not required the building official shall be the decision making authority, after receiving a compliance determination by the city's architect.
 2. *Class II developments.* The TRC will be the final decision making authority for final development plans having 40,000 square feet or less of total floor area or multifamily development with 40 or fewer units.
 3. *Class III developments.* The planning board will be the final decision-making authority for site plans with a total floor area greater than 40,000 but not more than 80,000 square feet or multifamily

developments with 41 to 80 units.

4. *Class IV developments.* The city commission will be the final decision-making authority for site plans with a total floor area greater than 80,000 square feet or multifamily developments with more than 80 units.

(c) *Appeals.* Within ten days of the approval with conditions or denial of a completed application or after the second submittal of a revised building design without receiving approval, an aggrieved person may appeal any decision by the city in writing to the planning director. The planning director will forward the appeal to the applicable body according to the type of development as described below:

1. *Class I site plan.* City commission as provided in the Land Development Regulations.
2. *Class II site plan.* City commission as provided in the Land Development Regulations.
3. *Class III site plan.* City commission as provided in the Land Development Regulations.
4. *[Class IV site plan.]* Class IV site plans must be appealed to the circuit court in and for Volusia County, Florida, within 30 days of the decision by the city in accordance with law.

(d) *Vested rights.* Projects having received a building permit as of the adoption of these regulations shall be allowed to complete construction under the terms of the building permit so long as the permit remains in effect. Projects having previously received approval under the Land Development Regulations shall be permitted to obtain a building permit in accordance with the previously received site plan approval and conditions for the term of the site plan approval.

Any property owner who contends that the application of this section to his or her property illegally interferes with a vested right shall submit an application to the planning director, or his designee for administrative relief. The application shall contain all evidence known to the property owner that supports the property owner's contention that the imposition of this section to his or her property illegally interferes with a vested right.

1. An application which contains an allegation of a regulatory taking shall be evaluated pursuant to the following criteria:
 - a. Whether the property owner will be denied substantially all beneficial use of the property;
 - b. Consideration of economic impact; and

- c. The extent to which these regulations have interfered with the property owner's investment-backed expectations.
2. The following is a nonexclusive list of the factors to be analyzed under foregoing criteria:
 - a. The history of the property;
 - b. Any change in development when ownership changed;
 - c. The present nature and extent of the property;
 - d. The reasonable expectations of the property owner and the neighboring property owners; and
 - e. Any diminution of the property owner's investment-backed expectations.

The planning director shall make a determination within ten days of receipt of a complete application alleging vested rights, whether to grant or deny such an application. Determination made by the planning director pursuant to this section may be appealed to the city commission by filing a written request with the planning director within ten days of the planning director's determination. Failure to file such an appeal shall constitute a waiver of the property owner's right to challenge the planning director's determination.

Sec. 33-95. - Public safety 800 MHZ radio amplification system.

33-95.01. *General.* Except as otherwise provided, no person shall erect, construct, change the use of or provide an addition of more than 50 percent to any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for Volusia County 800 MHz radio communications system, including but not limited to firefighters and police officers. For purposes of this section, adequate radio coverage shall include all of the following:

- (a) A minimum signal strength of -95 dBm available in 95 percent of the area of each floor of the building when transmitted from the Volusia County 800 MHz radio communications system;
- (b) A minimum signal strength of -95 dBm received at the closest Volusia County 800 MHz radio communications site when transmitted from 95 percent of the area of each floor of the building;
- (c) The frequency range which must be supported shall be 806—825 MHz transmit and 851—870 receive, with a 95 percent reliability factor.

33-95.02. *Amplification systems allowed.* Buildings and structures which cannot support the required level of radio coverage shall be equipped with any of the following in order to achieve the required adequate radio coverage, a radiating

cable system or an internal multiple antenna system with or without FCC type accepted bi-directional 800 MHz amplifiers as needed. If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least 12 hours without external power input. The battery system shall automatically charge in the presence of an external power input.

33-95.03. *Testing procedures.*

- (a) *Acceptance test procedure.* When an in-building radio system is required, and upon completion of installations, it will be the building owner's responsibility to have the radio system tested to ensure that two-way coverage on each floor of the building is a minimum of 95 percent. Each floor of the building shall be divided into a grid of approximately 20 equal areas. A maximum of one of the areas will be allowed to fail the test. If the system continues to fail, it will be the building owner's responsibility to have the system altered to meet the 95 percent coverage requirement. The test shall be conducted using an EDACS portable radio, talking through the Volusia County MHz radio communications system (VCRCS). A spot located approximately in the center of a grid area will be selected for the test, then the radio will be keyed to verify two-way communications to and from the outside of the building through the VCRCS. Once the spot has been selected, prospecting for a better spot within the grid area will not be permitted. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results become lost, the building owner will be required to re-run the acceptance test to reestablish the gain values.
- (b) *Annual tests.* When an in-building radio system is required, it shall be the building owner's responsibility to have all active components of the system, such as amplifiers and power supplies and backup batteries tested a minimum of once every 12 months. Amplifiers shall be tested to ensure that the gain remains within manufacture tolerances. Backup batteries and power supplies shall be tested under load to verify that they will properly operate during an actual power outage. All other active components shall be checked to determine that they are operating within the manufacturers specifications for the intended purpose.
- (c) *Test records.* All tests shall be documents and signed by a designee from Volusia County or the municipality with jurisdiction over the tested area. All test records shall be retained on the inspected premises by the building owner and shall be subject to inspection by fire department official upon request.

33-95.04. *Field testing.* Police and fire personnel, after providing reasonable notice to the owner or his representative, shall have the right to enter onto the property to conduct field testing to be certain that the required level of radio

coverage is present.

33-95.05. *Exemptions.*

- (a) This section shall not apply to buildings less than 10,000 square feet or any R-1 or R-2 occupancy.
- (b) All buildings that meet the requirement for adequate radio coverage as described in subsection 33-95.01, General, of this section.

Secs. 33-96—33-100. - Reserved for future use.