

## **ORDINANCE NO. 2022-29**

**AN ORDINANCE ADOPTED BY THE CITY COUNCIL OF THE CITY OF GREENACRES, FLORIDA, AMENDING CHAPTER 12, SUBDIVISIONS AND LAND DEVELOPMENT REGULATIONS, ARTICLE III, IMPROVEMENTS AND DESIGN STANDARDS, SECTION 12-58, DRAINAGE, BY ADDING SUB-SECTION 12-58(K), IMPOSING DRAINAGE REQUIREMENTS BETWEEN PROPERTIES; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; SEVERABILITY, INCLUSION IN THE CODE, AND AN EFFECTIVE DATE.**

**WHEREAS**, the City of Greenacres, Florida (the “City”) is a duly constituted municipality having such home rule power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

**WHEREAS**, the Development and Neighborhood Services Department has submitted a request for a Code Text Amendment to revise Chapter 12, Article III, specifically adding section 12-58(k) to add requirements for drainage impacts between residential property; and

**WHEREAS**, the Development Review Committee determined that the proposed amendments to section 12-58 are appropriate as further stated in the Committee’s Staff Report and Recommendation, “Exhibit A” dated August 15, 2022 (attached); and

**WHEREAS**, the proposed amendments are required to address drainage impacts that City Staff has observed in the field; and

**WHEREAS**, the City Council deems approval of this Ordinance to be in the best interest of the residents and citizens of the City of Greenacres and serves a valid public purpose.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GREENACRES, FLORIDA, THAT:**

**SECTION 1.** The City of Greenacres Code of Ordinance is hereby amended at Chapter 12, "Subdivisions and Land Development Regulations", Article III, "Improvements and Design Standards", section 12-58, "Drainage" as follows (additions are indicated by underscoring and deletions are indicated by ~~strikeout~~):

**Sec. 12-58. - Drainage.**

(a) All subdivisions and other development shall have comprehensive stormwater drainage facilities which manage, treat, and discharge water through a legal positive outfall connection to a public street, canal, or natural water course subject to the permission of the entity controlling the receiving body. The stormwater drainage facilities shall be designed in accordance with the standards of Article III.

(b) Stormwater shall be contained on-site in accordance with the provisions and requirements of the South Florida Water Management District (SFWMD) and the Lake Worth Drainage District (LWDD). Rainfall runoff, surface water and ground water shall be managed to minimize degradation of water quality; reduce harmful nutrients, turbidity, debris and other deleterious substances; and to maximize percolation and detention. Runoff from roads, parking lots, roofs and other impervious surfaces should be directed over areas where percolation into the soil can be accomplished prior to introduction into any storm sewer or other receiving facilities. Pervious areas shall be covered with vegetation requiring periodic cutting and removal.

(c) The following features shall be provided with protection against flooding from the below-listed design storm events:

(1) The lowest habitable space of residential and commercial buildings shall be protected from inundation resulting from a 100-year, 3-day rainfall assuming zero discharge; or the 100-year flood elevation per Federal Emergency Management Agency (FEMA) flood insurance rate maps plus one (1) foot; or the 100-year flood elevation as established by SFWMD rule; whichever is most restrictive.

(2) Residential subdivision lots of one-quarter ( $\frac{1}{4}$ ) acre gross area or less shall be protected from a 3-year, 24-hour rainfall.

(3) Residential subdivision lots greater than one-quarter ( $\frac{1}{4}$ ) acre gross area shall be protected from a 3-year, 24-hour rainfall within twenty (20) feet of all habitable buildings and from a duration of inundation of a maximum of eight (8) hours subsequent to the 3-year, 24-hour rainfall for the remainder of the lot.

(4) Local streets, marginal access streets, private streets, and collector streets not included in the thoroughfare plan shall be protected from a 5-year, 24-hour rainfall.

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(5) Thoroughfare plan streets shall be protected in accordance with the requirements of the FDOT Drainage Manual.

(6) Residential parking lots shall be protected from a 3-year, 24-hour rainfall; if an exfiltration system is used for storm drainage the parking lot shall be protected from a 5-year, 24-hour rainfall.

(7) Commercial parking lots shall be protected from a 3-year, 1-hour rainfall; if an exfiltration system is used for storm drainage the parking lot shall be protected from a 5-year, 1-hour rainfall.

(8) Recreation and open space areas not specifically designated for stormwater management purposes shall not be subject to inundation exceeding eight (8) hours following a 3-year, 24-hour rainfall.

(9) Preserve areas shall not be subject to inundation of greater or less intensity or duration than pre-development conditions. In order to support the health of existing plant communities, flows and hydrology shall be maintained to the greatest extent possible.

(d) The above listed design storm events shall be based on rainstorms of maximum intensity predicted by the current Florida Department of Transportation Intensity Duration Frequency (IDF) curve charts for Palm Beach County.

(e) The drainage system shall provide for drainage of lots, streets, roads, and other public areas including surface waters which drain into or through the property and historic flow across property lines.

(f) The runoff coefficients used in the design of the system shall be those applicable after complete development has occurred and shall be calculated on sample areas of each type of ultimate use.

(g) The storm sewer system within the right-of-way shall be designed so that the elevation of the hydraulic gradient is never higher than three (3) inches below the grate elevation of any inlet in the system during a 3-year 1-hour storm event.

(h) Pipes and structures used in the drainage system shall meet the following requirements:

(1) Minimum pipe size is to be fifteen (15) inches diameter, except that yard drains serving solely pervious areas on private property and not located beneath paved areas or sidewalks may be no smaller than eight (8) inches in diameter.

(2) The distance between terminating or intermediate structures shall not exceed that required by Florida Department of Transportation Standards for the construction and maintenance of inlets and manholes. The pipe shall be sloped to develop sufficient scouring to minimize sediment.

(3) Structure design shall meet or exceed current Palm Beach County Standards or standards adopted by the City of Greenacres. In order to simplify maintenance and catch sediment and debris that may be carried in the drainage structures and move through the drainage system obstructing pipes and/or the control structures and also degrading downstream water quality, sumps shall be provided in each of the following: the last drainage structure prior to outfall of the system, the control structure, and all drainage structures preceding an exfiltration trench. The minimum depth of the sump shall be twenty-four (24) inches, measured between the inside bottom of the lowest entering pipe and the inside bottom of the structure.

(4) Drainage pipe shall be fitted with headwalls, endwalls, inlets, manholes, and other terminating and intermediate structures.

(5) Pipe used in the drainage system shall meet current American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), and FDOT specifications. Approved pipe materials shall consist of the following:

a. Reinforced concrete pipe, with gasketed joints meeting the requirements of AASHTO.

b. Aluminum, with all joints made using twelve (12) inches wide bands having a watertight gasket of mastic or neoprene.

c. Coated steel, with all joints made using twelve (12) inches wide bands having a watertight gasket of mastic or neoprene. The pipe shall have an approved corrosion resistant coating.

d. High density polyethylene (HDPE) meeting ASTM F 8904 or ASTM D 714 standards. This pipe material is not allowed for use within the public road right-of-way except as a "slip-lining" insert for the repair of deteriorated existing pipe.

(i) Swales may be used in lieu of storm sewers to convey and collect surface waters. Maximum swale grade shall be limited to that grade which will produce water velocities below the threshold of erosion. The side slopes on swale sections shall not be steeper than 4:1 and the swale may occupy all of a water management tract. Swales within the road right-of-way shall be no deeper than six (6) inches.

(j) All major treatment facilities such as lakes and other detention areas used for stormwater management prior to discharge from development shall be placed in the platted water management tracts and dedicated to the entity responsible for their maintenance. All water management tracts shall include, for maintenance access, a twenty (20) foot maintenance easement around the perimeter and above the maintained water elevation, with a side slope not steeper than 8:1.

(k) Stormwater runoff shall be retained onsite with the exception of a permitted legal positive outfall piping or direct conveyance to a drainage easement that includes a drainage pipe or swale system, direct conveyance to a lake, and direct conveyance to a retention area. Properties shall be graded such that stormwater runoff does not sheet flow between properties unless the flow is through a drainage easement that is part of master drainage

permit for the entire development; is a perimeter berm; or, a solid concrete drainage retaining wall with the top at the peak stage of the 25 year, 3 day storm event. In residential planned developments swales can be used along the side lot lines in lieu of berms and drainage walls to direct stormwater runoff from between properties to a drainage collection system in either the front or rear of the residential properties. A berm or wall around the outside of the master residential plan development will still be required.

## **SECTION 2. Repeal of Conflicting Ordinances.**

All ordinances or parts thereof conflicting or inconsistent with the provisions of this Ordinance are hereby repealed.

## **SECTION 3. Severability**

If any section, part of a section, paragraph, sentence, clause, phrase or word of this Ordinance is for any reason held or declared to be unconstitutional, inoperative or void, such holdings of invalidity shall not affect the remaining portion of this Ordinance and it shall be construed to have been the legislative intent to pass the Ordinance without such unconstitutional, invalid or inoperative part therein, and the remainder of this Ordinance after the exclusion of such part or parts shall be deemed to be held valid as if such part or parts had not been included therein, or if this Ordinance or any of the provisions thereof shall be held inapplicable to any person, group of persons, property, kind of property, circumstances, or set of circumstances, such holdings shall not affect the applicability thereof to any other person, property or circumstances.

## **SECTION 4. Inclusion in Code**

It is the intention of the City Council, entered as hereby ordained, that the provisions of this Ordinance shall become and be made a part of the Code of Ordinances of the City of Greenacres, Florida; that the Section(s) of this Ordinance may be renumbered or re-lettered

to accomplish such intention, and that the word “Ordinance” may be changed to “Section”,  
“Article” or another word.

**SECTION 5. Effective Date**

The provisions of this Ordinance shall become effective upon adoption.

**PASSED** on the first reading this 17<sup>th</sup> day of October, 2022.

**PASSED AND ADOPTED** on the second reading this \_\_\_\_ day of \_\_\_\_ 2022.

Voted:

\_\_\_\_\_  
**Joel Flores**, Mayor

\_\_\_\_\_  
**John Tharp**, Deputy Mayor

**Attest:**

Voted:

\_\_\_\_\_  
**Quintella Moorer**, City Clerk

\_\_\_\_\_  
**Peter Noble**, Council Member, *District II*

Voted:

\_\_\_\_\_  
**Judith Dugo**, Council Member, *District III*

Voted:

\_\_\_\_\_  
**Susy Diaz**, Council Member, *District IV*

Voted:

\_\_\_\_\_  
**Paula Bousquet**, Council Member, *District V*

**Approved as to Form and Legal Sufficiency:**

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**Glen J. Torcivia**, City Attorney