**REQUEST:** Amendment to the City's Unified Land Development Regulations ("ULDR"):

Proposed revision to Section 47-19.3 Boat slips, docks, boat davits, hoists and similar mooring structures to establish standards for seawall construction that contribute to coastal resilience and mitigate the effects of tidal flooding and sea level rise.

| | |
|---|---|
| **Case Number** | T16004 |
| **Applicant** | City of Fort Lauderdale |
| **ULDR Sections** | 47-19.3 Boat slips, docks, boat davits, hoists and similar mooring structures. |
| **Notification Requirements** | 10-day legal ad |
| **Action Required** | Recommend approval or denial to City Commission |
| **Authored By** | Nancy J. Gassman, Ph.D.<br>Assistant Public Works Director – Sustainability |

## BACKGROUND/DESCRIPTION:

The City of Fort Lauderdale Commission adopted amendments to Section 47-19.3 of the Unified Land Development Regulation on June 21, 2016 to establish construction standards that ensured that seawalls and similar structures contributed to coastal resilience and mitigated the effects of tidal flooding and sea level rise. Soon after the ordinance was adopted, the Department of Sustainable Development (DSD) building, planning, zoning, and engineering staff expressed concerns that modifications of the ordinance were needed to address dock elevations when a seawall was constructed to the maximum allowable elevation. In select instances, the interpretation of the adopted language resulted in designs and building plans which had the potential unintended consequence of increasing stormwater related flooding when seawalls built to the maximum allowable elevation include a dock.

The previous seawall ordinance adopted in 2010 set only a maximum height standard which included the dock height in the calculation of allowable seawall height. This resulted in a lower elevation for the seawall to accommodate the height of the dock. The City established the new seawall construction standards, which included both a maximum and a minimum elevation, to ensure that the seawall itself, exclusive of the dock, would be built to the minimum elevation. For this reason, a provision was included in the adopted ordinance to allow for dock heights to exceed the seawall elevation by up to 10 inches. The intent was to protect the minimum height of the seawall.

However, DSD is now receiving applications for plans that are proposing concrete docks installed 10 inches above a seawall built to the maximum allowable elevation. The adopted ordinance set the seawall maximum at the property's base flood elevation (BFE) with the intent also to protect the home from stormwater flooding, recognizing that the finished floor of the structure was likely to be at least one (1) foot above BFE. A 10-inch high dock built on top of a seawall constructed at the base flood elevation could result in the dock being at nearly the same elevation as the finished floor of the home. This would eliminate the customary sloping of the yard to allow stormwater to drain away from the home. Without an appropriate grade away from the finished floor, stormwater run-off could impact not only the owner's property but also the adjacent property. The proposed amendment to the ordinance resolves this issue by limiting the final dock elevation to the base flood elevation.

In addition, several terms in the adopted ordinance including "adjacent" and "substantial repair' were open to interpretation and needed to be clarified. Finally, staff determined that a conflict exists between the adopted ordinance and Section 47-19.5 Fences, walls and hedges, related to the allowable vertical difference of specified structures between adjacent properties. Specifically as stated for dimensional requirements within residential districts,

Section 47-19.5B.1.a.ii. *For properties abutting a waterway, no opaque fence, hedge or wall shall be permitted to exceed two and one-half (2½) feet in height as measured in accordance with Section 47-2.2.G, when located within ten (10) feet of the edge of the waterway.*

The proposed ordinance resolves these concerns and conflicts.

The ordinance modification has been discussed with a variety of individual stakeholders representing the dock and seawall design and construction industry. In addition, the proposed changes have been presented to additional stakeholders including the Marine Advisory Board (September 1, 2016) and the Sustainability Advisory Board (September 26, 2016). The proposed ordinance language has also been shared by e-mail with a stakeholder list compiled during the previous ordinance modification process in the Spring 2016. This list included current president of the Council of Civic Associations who recognized the need to make minor adjustments in the ordinance and agreed that additional stakeholder meetings targeting the neighborhood associations was not necessary (personal communication via email 9/29/2016).

The ordinance (Exhibit 1) as is being proposed before the Planning and Zoning Board includes the following key modifications:

1. Clarifies the maximum allowable height of a seawall and dock;
2. Replaces the term "adjacent" with the term "attached" to describe the context between a seawall and dock;
3. Better defines the term "substantial repair"; and
4. Notes that the seawall ordinance takes precedence over a related section in the ULDR code on vertical differentials of walls between properties.

The Planning and Zoning Board's will also be acting in its capacity as local planning agency with regard to this item, making a recommendation to the City Commission based on whether or not they find the Ordinance to be consistent with the local Comprehensive Plan. This ordinance supports Coastal Management Element of the Fort Lauderdale Comprehensive Plan, Policy 3.1.2 by incorporating adaptation strategies into the land development regulations.

**COASTAL MANAGEMENT ELEMENT**

GOAL 3: Increase the City's resiliency to the impacts of climate change and rising sea levels by developing and implementing adaptation strategies and measures in order to protect human life, natural systems and resources and adapt public infrastructure, services, and public and private property.

OBJECTIVE 3.1:

Develop and implement adaptation strategies for areas vulnerable to coastal flooding, tidal events, storm surge, flash floods, stormwater runoff, salt water intrusion and other impacts related to climate change or exacerbated by sea level rise, with the intent to increase the community's comprehensive adaptability and resiliency capacities.

Policy 3.1.2:

Adaptation strategies may include, but not be limited to:

a. Public infrastructure planning, siting, construction, replacement, operation and maintenance
b. Emergency management
c. Stormwater management
d. Land development regulations
e. Building codes
f. Comprehensive planning
g. Other strategies

In addition, the January 2016 Evaluation and Appraisal Report (EAR) of the Fort Lauderdale Comprehensive Plan Our City, our Plan 2016 references to need to address seawalls as part of the City's climate change resilience strategy (page 11).

**STRATEGIC AND VISION PLAN CONNECTIONS:**

This item is a *Commission Annual Action Plan* priority related to the Stormwater Management Plan.

This item is a *Press Play Fort Lauderdale Strategic Plan 2018* initiative, included within the Neighborhood Enhancement Cylinder of Excellence, specifically advancing:

- Goal 2: Be a sustainable and resilient community.
- Objective 2: Reduce flooding and adapt to sea level rise.

This item advances the *Fast Forward Fort Lauderdale 2035 Vision Plan*: We Are Ready.

**PLANNING & ZONING BOARD REVIEW OPTIONS:**

The Planning and Zoning Board, in its capacity as the Local Planning Agency, shall determine whether the proposed change is consistent with the City of Fort Lauderdale's Comprehensive Plan and whether the Planning and Zoning Board recommends approval of the proposed amendments to the City Commission.

**EXHIBITS:**

Exhibit 1 – Ordinance

ORDINANCE NO. C-16-

AN ORDINANCE AMENDING THE UNIFIED LAND DEVELOPMENT REGULATIONS OF THE CITY OF FORT LAUDERDALE, FLORIDA, AMENDING SECTION 47-19.3, "BOAT SLIPS, DOCKS, BOAT DAVITS, HOISTS AND SIMILAR MOORING STRUCTURES" TO CLARIFY CONSTRUCTION STANDARDS TO PREVENT STORMWATER CONCERNS WHEN CONSTRUCTING A DOCK; PROVIDING FOR SEVERABILITY; REPEAL OF CONFLICTING ORDINANCE PROVISIONS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Fort Lauderdale modified Section 47-19.3 of the Unified Land Development Regulation in June 2016 to establish construction standards that ensured that seawalls and similar structures contributed to coastal resilience and mitigated the effects of tidal flooding and sea level rise; and

WHEREAS, the previous seawall ordinance adopted in 2010 set only a maximum height standard which included the dock height in the calculation of allowable seawall height resulting in a lower elevation for the seawall; and

WHEREAS, the ordinance adopted in June 2016 included both a maximum and a minimum seawall elevation and allowed for dock heights to exceed the seawall elevation by not more than 10 inches above the adjacent seawall's elevation to ensure that the seawall would meet the minimum elevation standard; and

WHEREAS, concrete docks installed 10 inches above a seawall built to the maximum allowable elevation may cause stormwater run-off concern on the owner's property and the adjacent property; and

WHEREAS, the term "adjacent" seawall is open to interpretation and needs to be clarified;

WHEREAS, the term "substantial repair" is open to interpretation and needs to be more clearly defined;

WHEREAS, a conflict exists between the existing ordinance and Section 47-19.5 (Zoning Code) related to the allowable vertical difference of specified structures between adjacent properties.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That Section 47-19.3, Boat slips, docks, boat davits, hoists and similar mooring structures, of the Unified Land Development Regulations (hereinafter referred to as "ULDR") of the City of Fort Lauderdale, Florida, is proposed to read as follows:

Sec. 47-19.3. - Boat slips, docks, boat davits, hoists and similar mooring structures.

(f) The top surface of a seawall shall have a minimum elevation of 3.9 feet NAVD88 (see table). The elevation of a seawall or dock shall not exceed a maximum of the base flood elevation (BFE) as identified in the corresponding FEMA Flood Insurance Rate Map (FIRM) for the property, except as specifically set forth herein. For properties with a BFE of 4.0 feet NAVD88, the minimum seawall elevation shall meet 3.9 feet NAVD88 and the maximum seawall or dock elevation shall be 5.0 feet NAVD88. For waterfront properties with a habitable finished floor elevation of less than 3.9 feet NAVD88, a seawall may be constructed at less than the stated minimum elevation if a waiver is granted by the City Engineer. For properties within an X zone, the minimum seawall elevation shall meet 3.9 feet NAVD88 and the maximum seawall or dock elevation shall meet the definition of grade as determined by Section 47-2.2 (g)(1)(a). Section 47-19.5B.1.a.ii. related to allowable vertical differentials between adjacent properties shall be subordinate to this section with regard to seawalls and related structural components such as wing walls. Property owners choosing to construct seawalls at less than 5.0 feet NAVD88 are strongly encouraged to have the foundation designed to accommodate a future seawall height extension up to a minimum elevation of 5.0 feet NAVD88.

| **Property's FEMA Flood Insurance Rate Map Location** | **Minimum Allowable Seawall Elevation** | **Maximum Allowable Seawall or Dock Elevation** |
|---|---|---|
| In a floodplain with a base flood elevation greater than or equal to 5.0 feet NAVD88 | 3.9 feet NAVD88 | Base Flood elevation of the property |
| In a floodplain with a base flood elevation equal to 4.0 feet NAVD88 | 3.9 feet NAVD88 | 5 feet NAVD88 |
| In an X zone, not in a floodplain | 3.9 feet NAVD88 | Meet the definition of grade as determined by Section 47-2.2 (g)(1)(a) |

…

(2) Fixed docks may be constructed at an elevation less than the elevation of the ~~adjacent~~ seawall to which it is attached but shall not be constructed at an elevation more than 10 inches above the ~~adjacent~~ seawall's elevation. The dock elevation may not exceed the maximum elevation as described in 47 -19.3 (f). Floating docks shall be allowed and must be permitted and permanently attached to a marginal dock, finger pier, mooring pilings, or seawall.

(3) Seawall~~s~~ improvements constituting substantial repair at the time of permit application shall meet the minimum elevation and consider the design recommendations (see 47-19.3 (f)) of this section for the continuous seawall for the length of the property. For the purposes of this section, the substantial repair threshold shall ~~mean any improvement to a structure as defined in Section 47-3.6.B.3.~~ be triggered by one of the following:

(1) any improvement to the seawall of more than 50% of the length of the structure. Which for the purposes of this section, shall include both the seawall and or cap.
(2) any improvement to the seawall which results in an elevation change along more than 50% of the length of the structure.

SECTION 2. That if any clause, section or other part of this Ordinance shall be held invalid or unconstitutional by any court of competent jurisdiction, the remainder of this Ordinance shall not be affected thereby, but shall remain in full force and effect.

SECTION 3. That all ordinances or parts of ordinances in conflict herewith, be and the same are hereby repealed.

SECTION 4. That this Ordinance shall be in full force and effect ten days from the date of final passage.

PASSED FIRST READING this the ___ day of ____, 2016.
PASSED SECOND READING this the _____ day of _____, 2016.

_____
Mayor

JOHN P. “JACK” SEILER

ATTEST:

_____

City Clerk
JEFFREY A. MODARELLI

Staff draft for submission to City Attorney for review in advance of presentation to Marine Advisory Board, Planning and Zoning Board, or City Commission