

**ORDINANCE NO. 08-24**

**AN ORDINANCE OF THE VILLAGE COUNCIL OF THE VILLAGE OF TEQUESTA, FLORIDA, AMENDING CHAPTER 76. WATERWAY CONTROL. CREATING AN ENTIRELY NEW ARTICLE IV. ENTITLED “ BULKHEADS AND SEAWALLS”; AND AN ENTIRELY NEW ARTICLE V. ENTITLED “FILL PERMITS”; WHICH NEW ARTICLES ARE INTENDED TO LIMIT THE USE OF BULKHEADS AND SEAWALLS IN FAVOR OF PROMOTING LIVING SHORELINES, AND REGULATE THE USE OF FILL WATERWARD OF ADJACENT PROPERTY LINES; PROVIDING THAT EACH AND EVERY OTHER SECTION AND SUBSECTION OF CHAPTER 76. WATERWAY CONTROL SHALL REMAIN IN FULL FORCE AND EFFECT AS PREVIOUSLY ADOPTED; PROVIDING A CONFLICTS CLAUSE; A SEVERABILITY CLAUSE, AND AUTHORITY TO CODIFY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.**

**WHEREAS**, the Village Council desires to protect and enhance coastal and estuarine environmental quality by creating specific code provision requirements to promote the construction of living shorelines; and

**WHEREAS**, The Village of Tequesta Comprehensive Plan’s Conversation Element Policy 2.11.8 prioritizes the adoption of such requirements: “Bulkheads and seawalls shall be permitted only to stabilize disturbed shorelines or to replace deteriorated existing bulkheads and seawalls. Riprap shall be placed at the toe of all replaced bulkheads and seawalls.”; and

**WHEREAS**, The Village Code does not currently include a permitting process for bulkheads and seawalls, or a fill permit process; and

**WHEREAS**, the Village Council desires to adopt code provisions to require maintenance of its existing natural shorelines, and to require the placement of riprap at all new bulkheads and seawalls to achieve this purpose; and

**WHEREAS**, the Village Council has determined that the adoption of such regulations will serve to promote and protect the public health, safety, and welfare.

**NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE COUNCIL OF THE VILLAGE OF TEQUESTA, FLORIDA, THAT:**

**Section 1:** Chapter 76. Waterway Control. of the Code of Ordinances of the

Village of Tequesta is hereby amended to create Article IV. Bulkheads and Seawalls which shall hereafter read as follows:

## **ARTICLE IV. – BULKHEADS AND SEAWALLS**

### **Sec. 76-32. Specifications.**

Bulkheads and seawalls shall be permitted only to stabilize disturbed shorelines or to replace deteriorated existing bulkheads and seawalls. All bulkheads and seawalls constructed within the Village shall be subject to the requirements of this division. Material substitutions and deviations and alternative construction methods may be administratively approved with the consent of the Village Building Official.

- (1) Bulkheads and seawalls may be of either the king pile or concrete sheet pile type.
- (2) All bulkheads and seawalls shall be capped with a continuous reinforced concrete cap. All concrete corners shall be chamfered three quarters ( $\frac{3}{4}$ ) of an inch minimum.
- (3) The design of the bulkhead wall shall conform to recognized engineering standards and calculation methods for bulkhead structures and shall take into account the following:
  - (a) Load and resistance factors applicable for the engineering analysis and design of the wall;
  - (b) Differential hydrostatic pressure due to tides and stormwater runoff;
  - (c) Surcharge loads on the bulkhead wall;
  - (d) Potential for erosion at the toe of the wall; and
  - (e) Backflow prevention for drainage outfalls, where applicable.
- (5) The dimensions of each component of the concrete wall shall be sized so that the concrete cover over the steel reinforcing bar is a minimum of four (4) inches for all external surfaces and surfaces exposed to saltwater and cast against earth and a minimum of three (3) inches for all formed surfaces not in contact with saltwater.

(6) In accordance with Comprehensive Plan Policy 2.11.8 of the Conservation Element, the Village encourages existing natural shorelines to remain in their natural state. Properties with natural shorelines or riprap revetments shall attempt to utilize living shorelines techniques to stabilize the shoreline in lieu of armoring the shoreline with a bulkhead or seawall. Property owners with natural shorelines or riprap revetments that seek to armor a shoreline with a new bulkhead or seawall shall apply to the Planning & Zoning Board for a Variance as outlined in Section 76-7. The application for a Variance shall provide evidence that the existing natural shoreline is disturbed and needs to be armored to stabilize the shoreline. The Building Official and Community Director shall make a determination as to whether the existing natural shoreline is sufficiently disturbed, so as to necessitate armoring. The Village may bring in a 3<sup>rd</sup> party expert to provide an additional review and determination of a Variance request, at the expense of the applicant.

**Sec. 76-33. Minimum design requirements for seawalls.**

All bulkheads and seawalls constructed within the Village shall comply with the dimensional and compatibility requirements of this section. The provisions of this section shall not apply to repairs to existing bulkheads and seawalls where the total cost of the repairs is less than fifty (50) percent of the replacement cost of the bulkhead or seawall.

(1) Seawalls and bulkheads shall not be constructed beyond the rear property line, provided however, a property owner may reconstruct an existing seawall or bulkhead no more than eighteen (18) inches waterside of the property line. Any extension waterside beyond eighteen (18) inches from the property line shall only be approved by the Village Council in accordance with the fill permit process set forth in Article V of this Code.

(2) Seawall caps shall extend no farther than three (3) feet from the wet face of the seawall or bulkhead or the rear property line, whichever is greater. A portion of the seawall cap may exceed this limitation provided that it meets the required setbacks and dimensions for docks.

(3) The seawall or bulkhead cap shall be placed at the following established

minimums and maximum cap elevations:

<u>Property Location</u>	<u>Minimum Cap Elevation</u>	<u>Maximum Cap Elevation (NAVD88)</u>
<u>Zone X &amp; X500 - not in the FEMA Special Flood Hazard Area or Coastal High Hazard Area</u>	<u>Four feet (4') NAVD88</u>	<u>Six inches (6") above grade or four feet and six inches (4'6") NAVD88, whichever is greater. The grade (natural elevation) shall be calculated by selecting a minimum of two (2) elevation points within 1 foot (1') of the rear property line on each adjoining side property line and calculating the average of the selected elevation points.</u>
<u>In the FEMA Special Flood Hazard Area or Coastal High Hazard Area with an established base flood elevation (BFE)</u>	<u>Four feet (4') NAVD88</u>	<u>Six inches (6") above grade as defined above or five feet (5') NAVD88, whichever is greater.</u>

(4) Seawall caps placed at an elevation greater than the adjacent property shall provide a wall return of the same material and type as the seawall cap, as well as a drainage plan. The drainage plan shall demonstrate that there will be no sheet flow of water to the waterway and adjacent properties. The Building Official may require the modification of plans when it is determined that seawall caps and/or retaining walls will lead to erosion or the degradation of adjacent properties.

(5) All areas of the seawall cap or retaining wall that are visible from adjacent property shall have a finished appearance equivalent to or better than painted concrete stucco. The height of any wall or fence placed on top of the return shall

be measured from the grade of the adjacent property. The Building Official may allow relief from fence height requirements when it is necessary for a property to meet pool barrier requirements in Florida Building Code section 454.

- (6) In lieu of a replacement seawall or bulkhead, a revetment or natural shoreline may be constructed to replace an existing bulkhead in accordance with Section 76-36 of the Village Code.
- (7) The Community Development Director shall maintain a list of the typical expense by linear foot of the various types of bulkheads or seawalls. This list shall be utilized to determine whether the total cost of repairs is more or less than fifty (50) percent of the replacement cost of the bulkhead or seawall.

### **Section 76-34. Living Shorelines.**

When a new bulkhead or seawall is constructed (if allowed by 76-32(6)) or an existing bulkhead or seawall is replaced, 100 percent of the bulkhead or seawall shall be faced with riprap or mangroves in accordance with Section 76-36. Portions of the bulkhead or seawall where a dock or pier extends waterward, are exempt from the 100 percent calculation.

- (1) Upon final inspection of a bulkhead or seawall, a mangrove planting plan shall be provided to the Community Development Director per Sec. 76-36 (2) of this code.
- (2) Within two years of final inspection of the bulkhead or seawall, at least ten percent of the shoreline shall be comprised of established mangroves.
- (3) If, after two years from the final inspection of bulkhead or seawall less than ten percent of the shoreline is comprised of mangroves, then 20 percent of the shoreline shall be planted with mangroves. If some mangroves have been established, but the minimum requirement of ten percent has not been met, Village Staff may grant a one-year extension to the monitoring period. The mangroves shall meet the standards within Section 76-36 of this Code.
- (4) Properties designated on the shoreline exemption map (Figure 1) shall be exempt from installing riprap or mangroves. The exemption only applies to that portion of the property at the mouth of the canal as shown on the shoreline exemption map and shall not apply to the portion of property along the natural waterway.



Figure 1. Shoreline Exemption Map

### **Section 76-35. Revetments.**

Existing riprap revetments may be replaced with a new riprap revetment provided it meets the following standards:

- (1) The revetment shall be constructed in the same place as the existing revetment.
- (2) An existing revetment which was constructed with loose boulders, rocks, or clean concrete rubble with no exposed reinforcing rods or protrusions may remain and riprap may be placed over top of the existing materials.
- (3) An existing revetment constructed of material not consistent with loose boulders, rocks, or clean concrete rubble with no exposed reinforcing rods or protrusions shall be removed prior to replacement.
- (4) When at least 50% of an existing revetment is replaced with a new revetment, mangroves shall be planted in accordance with the regulations set forth in

Section 76-34 and 76-36 of this Code.

- (5) Properties with existing riprap revetments shall attempt to utilize living shorelines techniques to stabilize the shoreline in lieu of armoring the shoreline with a bulkhead or seawall. Property owners with riprap revetments that seek to armor a shoreline with a new bulkhead or seawall shall apply to the Planning & Zoning Board for a Variance as outlined in Section 76-7.

**Section 76-36. Riprap And Mangrove Installation.**

- (1) When riprap is installed in conjunction with a new or replacement seawall, it shall be placed such that the bottom 50 percent of the bulkhead is covered, and sloped at a maximum two to one, vertical to horizontal ratio. At no point shall riprap extend more than eight feet waterward of the mean high water line or jurisdictional line of the state. Riprap placed waterward of bulkheads does not require filter cloth.
- (2) Following the final inspection of the bulkhead or seawall as outlined in Section 76-34 of this Code, a mangrove planting plan shall be submitted to the Village which shall include:
  - (a) The species of mangroves and whether they are appropriate for the location;
  - (b) The size, species, number, and spacing of mangroves to be planted;
  - (c) The identification of the location of at least two photo stations which shall be the designated photo station from which photos will be provided for each monitoring report;
  - (d) Photos clearly showing the mangrove plantings in their entirety;
  - (e) The location of bulkheads, docks, or other structures relative to the plantings.
- (3) The property owner shall submit a time zero monitoring report to the Village within 30 days from the Village's initial inspection, marking the beginning of the monitoring period.

- (4) The property owner shall monitor the mangroves annually for survivability for five years. On or before the anniversary date of the annual time zero report each year, the property owner shall submit at least two photographs taken from each of the designated photo stations and submit these photos to the town for its review and approval. The report shall also identify the number and location of the mangroves which have been planted. If less than 80 percent of originally planted mangroves have survived, the property owner shall replant the number of mangroves which have expired. If photographs are not received by the required date, an inspection will be conducted by Village staff in order to inspect the condition of the mangroves.
- (5) The Village may require that hand placed riprap be installed to support the growth of mangroves which have been planted in high wave energy areas.
- (6) In the event a jurisdictional agency requires a permit for the placement of riprap or mangroves within their jurisdiction, but will not issue the permit, then the property shall be exempt from providing riprap or mangroves in the jurisdictional area.
- (7) Where the placement of riprap would result in the destruction of sea grasses, the property owner shall not be required to install riprap or mangroves. The property owner must submit a sea grass study, not more than six months old, documenting the location of the sea grasses.

**Sec. 76-37. Permitting and inspection.**

All seawalls and bulkheads shall be subject to the following permitting and inspection requirements:

- (1) Permitting. The Building Department shall review all permits for seawalls and bulkheads for structural integrity and consistency with the requirements of this division. All permit applications shall include the following information:
  - (a) Engineering plans signed and sealed by a professional engineer licensed in the State of Florida.
  - (b) A cross section of wall indicating the channel bottom elevation, the cap elevation and identifying the type, size and location of wall components.

- (d) Documentation demonstrating that all concrete satisfies the requirements of ACI 318 Exposure Class C2.
  - (h) Plans demonstrating that exposed steel tie back anchor rods and other anchors shall be coated with a heavy-duty protective coating to prohibit corrosion.
  - (i) A copy of the pollution control plan required by the Florida Department of Environmental Protection (FDEP) permit depicting the location and types of pollution control mitigation measures. During the course of construction, the permittee shall be required to submit to the village all reports required by the National Pollutant Discharge Elimination System (NPDES) permit prior to the village's issuance of a certificate of occupancy.
- (2) Inspection. The permittee shall notify the Village Building Inspector at least forty-eight (48) hours prior to the following events so as to allow for inspection:
- (a) the first installation of any structural support, including a king pile or concrete sheet;
  - (b) the backfilling of structural supports, including any anchors or tie rods;
  - (c) the pouring any cast-in-place construction; and
  - (d) the final cap pouring.
  - (e) Pile driving certifications by a licensed engineer.

## **ARTICLE V. FILL PERMITS**

### **Sec 76-38 Filling operations beyond property line; prohibited.**

No fill shall be made, deposited or maintained in the waters of the Loxahatchee River, Indian River Lagoon, canals, or other tidal waters within the corporate limits of the village, waterward or outward from any shoreline, in such a manner so that such fill shall extend beyond any property line except as provided in sections 76-33 through 76-36 and 76-42 of this Code. Fill needed to construct, repair, or maintain living shorelines, mangroves, or riprap revetments may extend beyond the property line if approved by the building official and community development director.

**Section 76-39 Unlawful fill; removal.**

Any fill which shall be made contrary to the provisions of this Chapter shall be unlawful and subject to removal upon order of the Village Council.

**Section 76-40 Fill Permit Required**

- (a) No person may make or deposit any fill or undertake the filling, creation or extension of land by pumping, dredging, pumping sand, rock or earth or otherwise within the waters of the Loxahatchee River, Indian River Lagoon, canals, or other tidal waters within the limits of the village without first having received a permit therefor from the Village Council. All filling shall be made in accordance with the plans and specifications designated in the application for such permit.
- (b) Notwithstanding the foregoing, a fill permit shall not be required for any fill associated with the replacement or reconstruction of an existing seawall or bulkhead no more than eighteen (18) inches waterward of the property line as provided in Section 76-33 of this Code or fill needed to construct, repair, or maintain living shorelines, mangroves, or riprap revetments if approved by the building official and community development director.
- (c) In the event that emergency repairs are needed as the result of a natural emergency, such as a hurricane, the Village may choose to not require a fill permit if a permit is obtained from the Florida Department of Environmental Protection or Army Corps of Engineers.

**Sec. 76-41 Public hearing.**

- (a) Before any petition or application for a permit to fill or dredge, the Village Council shall consider all applications for a fill permit at a duly noticed public hearing.
- (b) Notice of the public hearing shall be published in a newspaper of general circulation or the Village's Public Notices Portal at least seven (7) days prior to the hearing at which the application is considered. Additionally, notice shall be mailed to all property owners of record within three hundred (300) feet of the property to which the application relates, as derived from the official tax roll of Palm Beach County, at last ten (10) days prior to the hearing. The applicant shall provide an affidavit attesting to

the completeness and accuracy of the property owner's list and confirming that the notice was sent to all property owners included on the list. The notice shall contain the following information:

- (1) A brief description of the fill permit application;
- (2) Time, date and location of the public hearing;
- (3) The street address of the property upon which the fill activities are proposed (or in the event there is no address, a legal description and location map); and
- (4) Name, address and telephone number of the office where additional information may be obtained.

(c) The terms of this Chapter shall be in addition to any terms set forth in this Code which are concerned with applications for dredge and fill permits, and shall not be considered to be in lieu of any requirements contained herein.

#### **Section 76-42 Application; issuance.**

(a) Applications for the permit required by this article shall be in writing and directed to the Community Development Director and shall be accompanied by a surveyor's sketch plan of what is proposed to be done and shall also show the details of any proposed construction, the proposed area to be filled, the area to be dredged for procuring fill materials, if the proposed construction is intended to be created from dredged material, and such other information and data as may be pertinent to the proposed filling.

(b) The Village Council shall not grant any fill permit that would violate any statute, zoning law, ordinance or other applicable restriction. In determining whether to grant, grant with conditions or deny any fill permit application, the village council shall consider:

- (1) whether any harmful obstruction to or alteration of the natural flow of the adjacent navigable waters will arise from the proposed construction;
- (2) whether any harmful or increased erosion, shoaling of channels or stagnant areas of water will be created thereby; and

(3) whether any material injury or monetary damage to adjoining land will accrue from the proposed activities. All fill permits are subject to approval by the trustees of the internal improvement fund of the state and by the U.S. Army Corps of Engineers, as applicable.

**Section 76-43 Application fees.**

Each application shall be accompanied by a deposit of the estimated costs of the Village in processing the application. Upon the Village determining the actual costs, applicants shall pay the balance, if any, in full of such costs including advertising and cost of review by the Village Staff prior to final consideration of the application by the Village Council. If the deposit exceeds actual costs, the balance shall be refunded to applicant. Each change in plans and specifications subsequent to the issuance of a permit shall be the subject of a new or supplemental application and a like fee shall be paid upon the filing of such application as was paid in the case of the original application.

**Section 76-44 Expiration date; renewal; revocation**

- (a) All permits issued under this article shall be valid for a period of two (2) years from the date thereof, but shall be automatically revoked if the proposed work is not completed within such period except for good cause shown.
- (b) The renewal of any permit prior to sixty (60) days after its expiration may be granted by the Community Development Director for good cause shown.
- (c) For violation of or noncompliance with the terms of a permit, such permit may be revoked after notice of intention to do so has been communicated to the holder and opportunity afforded within a reasonable time for a hearing thereon before the Village Council.

**Section 2:** Each and every other section and subsection of Chapter 76. Waterway Control. shall remain in full force and effect as previously adopted.

**Section 3:** All ordinances or parts of ordinances in conflict be and the same are hereby repealed.

**Section 4:** Should any section or provision of this Ordinance or any portion

thereof, any paragraph, sentence or word be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remainder of this Ordinance.

**Section 5:** Specific authority is hereby granted to codify this Ordinance.

**Section 6:** This Ordinance shall take effect immediately upon adoption.