

ORDINANCE 14-09

AN ORDINANCE AMENDING CHAPTER 6, ARTICLE III, DIVISION 2, OF THE CODE OF ORDINANCES, OF THE CITY OF MARCO ISLAND, FLORIDA ENTITLED "SEAWALLS AND REVETMENTS" BY AMENDING SECTION 6-82, DEFINITIONS, AMENDING SECTION 6-85 REVISING THE VERTICAL DATUM AND PROVIDING FOR INSPECTIONS; PROVIDING FOR INCLUSION IN THE CODE OF ORDINANCES; PROVIDING FOR REPEAL OF CONFLICTS AND SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, The City of Marco Island has adopted an ordinance for the construction, maintenance and repair of seawalls and revetments; and

WHEREAS, properly maintained seawalls and revetments serve to protect waterfront upland property and improvements located thereon against wave action and serve to stabilize the position of the shoreline; and

WHEREAS, a failed seawall or revetment with accompanying loss of soil, unless promptly replaced or repaired, may cause continuing loss of soil on adjoining properties which can seriously and adversely affect the stability of seawalls and revetments on those adjoining properties as well as the value of adjoining properties; and

WHEREAS, individual property owners are responsible for maintenance, repair, and replacement of seawalls and revetments along their property; and

WHEREAS, there exists a threat to public health, safety, and welfare because of the failure of some individual property owners to maintain, repair, or replace their failed seawalls or revetments; and

WHEREAS, general indicators of a failed seawall have been identified by the Waterways Advisory Committee following consultation with representatives of the marine construction and contracting industry; and

WHEREAS, a definition of a failed seawall is necessary to ensure uniform enforcement of the requirements for repair, maintenance and replacement of failing seawalls;

WHEREAS, construction of a new seawall waterward of an existing seawall can provide an alternative solution to removal and replacement of a failed seawall;

WHEREAS, after considering the recommendation of the Planning Board, Waterways Advisory Committee and City Staff, and following a public hearing on the subject, the City Council has determined that it is in the best interest of the City of Marco Island to adopt this Ordinance; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MARCO ISLAND, FLORIDA:

42 **SECTION 1. Recitals.** The foregoing "WHEREAS" clauses are hereby ratified
43 and confirmed as being true, correct and reflective of the legislative intent underlying
44 this Ordinance and are hereby made a specific part of this Ordinance.

45
46 **SECTION 2. Amendment and Adoption.** The following sections of the City
47 of Marco Island Code of Ordinances are amended as follows:

48
49 **DIVISION 2. SEAWALLS AND REVETMENTS**

50
51 **Sec. 6-82. Definitions:** As used in this division, the following words shall have the
52 following meanings:

53
54 *Anchor.* The buried portion of the tie-back rod that is typically a reinforced concrete
55 block, which engages the soil to resist the pull on the tie-back rod, also known as a
56 Deadman.

57
58 *Batter.* The angle from plumb (vertical) deliberately constructed for a bearing pile.

59
60 *Concrete cap.* The structural element on top of the seawall panels.

61
62 *City.* The City of Marco Island, Collier County, Florida.

63
64 *Exposed height.* The distance measured from the top of the toe-berm to the top of the
65 seawall cap.

66
67 *Failed seawall or revetment.* A seawall or revetment that has failed structurally for
68 purposes of this Chapter is one that has collapsed or no longer functions to stabilize the
69 shoreline.

70
71 *Filter fabric.* A geosynthetic fabric manufactured specifically as a filter to inhibit soil
72 movement through the fabric while allowing water to move through it. The fabric shall
73 comply with Florida Department of Transportation specification for woven fabric
74 specifically used for shore protection and filter applications.

75
76 *French Drain.* Stone wrapped with filter fabric to direct water to seawall weep holes to
77 reduce hydrostatic pressure on the seawall.

78
79 *Minor repairs.* Those repairs that do not include work on existing reinforcing steel or
80 tiebacks, epoxy injection of concrete cracks, or replacement of seawall components.
81 Examples of minor repairs include exterior coatings and repair of concrete spalling that
82 does not have exposed reinforcing steel.

83
84 *N.A.V.D.* North American Vertical Datum of 1988.

85
86 *Pre-construction depth.* The depth profile of the waterway in front of and to either side
87 of the seawall requiring repairs prior to initiation of construction. Impact from soil

88 migration into the waterway from the seawall property does not affect pre-construction
89 depth.

90
91 *Return wall.* The portion of a seawall that is parallel to and abutting the adjacent
92 property line. The wall provides anchorage and stability to the seawall and provides soil
93 containment.

94
95 *Revetment.* A sloping structure that serves to separate real property and/or
96 improvements thereon from any natural or manmade body of water.

97
98 *Riprap.* Stone placed on filter fabric to aid in stabilizing soil.

99
100 *Seawall.* Any solid vertical structure, which serves to separate landward real property
101 and/or any improvements thereon from any natural or manmade body of water.

102
103 *Sheet pile.* Preformed structural element providing vertical stability and separation of
104 soil from an adjacent waterway.

105
106 *Tie-back system.* The structural system installed to laterally support the seawall. This
107 system typically consists of a steel rod with one end embedded into the cap and a
108 buried concrete anchor attached to the other end of the rod. However, it could be
109 another assembly performing the same function such as a screw anchor.

110
111 *T-pile seawall.* Seawall consisting of specially formed support piles that support sheet
112 piles horizontally with a concrete cap and tie-back at each pile.

113
114 *Technical Specification.* Construction regulations for seawalls and revetments adopted
115 by resolution by the City Council.

116
117 *Tie-back rod.* The rod connecting the cap to the anchor; part of the tie-back system.

118
119 *Toe-berm.* Soil on waterward side of seawall, typically underwater.

120
121 *Turbidity barrier.* A floating geotextile barrier that confines turbid water to the immediate
122 construction area in accordance with state law.

123
124 *Waler/Wale.* A horizontal structural element laterally supporting sheet piles. A concrete
125 cap typically performs this function, but a wale can be positioned vertically anywhere
126 along the height of the sheet piles.

127
128 *Waterward face:* For purposes of Section 6-85 (e) 2, the measurement shall be from the
129 seaward face of the existing seawall panel to the seaward face of the restored seawall
130 panel; for purposes of measurements related to dock protrusion and to required yards, if
131 a wall in front of an existing wall is used, the waterward face shall be synonymous with
132 the wet-face, and shall be measured from the face of the existing (encapsulated) face.

134 Weep hole. A hole through a sheet pile to allow water from behind the sheet pile to
135 drain through the wall without allowing loss of soil.

136
137 **Sec. 6-83. Failed seawall or revetment declared to be unlawful and a public**
138 **nuisance:** It is hereby declared unlawful and a public nuisance for any Marco Island
139 property owner to allow, or fail to repair or reconstruct, a failed seawall or revetment on
140 the owner's property. Within 60 days of notification of a failed seawall or revetment by
141 the City of Marco Island, the property owner or his representative shall submit a building
142 permit application to the Building Services Division, or otherwise provide proof of
143 contract with a licensed Florida Engineer, for repair or replacement of a failed seawall or
144 revetment. Property owners who disagree with the determination of the City of Marco
145 Island that a seawall or revetment has failed may provide, within 60 days, an
146 independent inspection report completed by a licensed Florida Engineer describing the
147 condition of the seawall or revetment.

148
149 **Sec. 6-85. Technical specification for seawalls and revetments:** The City shall
150 adopt by resolution the technical specification that establishes minimum performance
151 based standards for seawall and revetment construction and repair. Site-specific
152 designs and specifications are required and shall be appropriate for conditions at each
153 location and construction materials employed. All seawalls and revetments constructed,
154 reconstructed, repaired, or altered in the City after the effective date of this division shall
155 meet or exceed this technical specification as follows:

156
157 (a) Minor repairs to the seawall or revetment that do not require physical alteration to
158 the existing structural support system are exempt from the technical specification.

159
160 (b) Major repairs to the seawall or revetment that requires replacement of any portion
161 of the structural support system, shall comply with all applicable provisions of the
162 technical specification for that portion of the seawall or revetment. Repairs shall restore
163 the original integrity of the seawall or revetment.

164
165 (c) Reconstruction of any seawall or revetment requiring complete reinstallation of the
166 sheet pile portion of the structural support system, or any new seawall or revetment
167 section installed adjacent to or independent from any existing seawall or revetment shall
168 comply with all applicable provisions of the technical specification for that portion of the
169 seawall or revetment.

170
171 (d) Seawalls shall be placed so that the waterward face of the wall is coincidental with
172 the platted property or bulkhead line, if one exists, or at the intersection of the mean
173 high water line with the existing shoreline. Upon specific request to the City, an
174 administrative variance to the above may be approved by the City for seawalls that were
175 originally constructed with an intentional offset from the property line provided the offset
176 shall not be increased.

177
178 (e) The placing of a new seawall water ward (in front of) of an existing seawall is
179 permitted in artificially created waterway such as a man-made canal/basin or in a

180 natural or man-altered waterbody in accordance with 40E-4.051 (4) (a), (b), and (c) of
181 Florida Administrative Code (FAC), pursuant to the following conditions:
182

- 183 1. A Florida registered Professional Engineer certifies the new seawall design.
- 184 2. The new seawall does not extend more than 18 inches from the waterward face
185 of the existing vertical seawall location.
- 186 3. The new seawall is placed vertically plumb.
- 187 4. Placing a seawall in front of an existing seawall shall only be permitted once.
- 188 5. Existing seawall sections that interfere with new seawall location shall be
189 removed.
- 190 6. The new seawall shall include an adequate "closure" at each property line.

191
192 (f) The placing of a new seawall waterward (in front of) of an existing seawall where the
193 seawall is located on sovereign submerged land (Barfield Bay) may qualify for a
194 consent by rule (18-21.005 (1)(b), FAC or a letter of consent (18-21.005 (1)(c), FAC if it
195 meets the regulatory exemption criteria listed in these Rules.
196

197 (g) The top of cap elevation for all replacement and new seawalls and top elevation for
198 all other revetments shall be equal to or greater than 3.2 feet N.A.V.D. but not
199 exceeding 4.2 feet N.A.V.D. If the top of a seawall cap is constructed at an elevation
200 differing from the adjacent property owner top of cap elevation by greater than one foot,
201 then a return wall is required to sufficiently provide for the break in grade at the property
202 line.
203

204 (h) The City Manager or his designee may approve after-the-fact height
205 encroachments of up to three inches for seawall caps for which a certificate of
206 completion or a final development order has not been granted. After-the-fact
207 encroachments are subject to the following criteria:
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- 209 (1) A survey must be prepared and certified by a Florida licensed registered
210 Engineer or Surveyor identifying the exact location and size of the
211 encroachment;
212
- 213 (2) A statement of how and when the encroachment was created;
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- 215 (3) A statement of current ownership and ownership at the time the
216 encroachment was created;
217
- 218 (4) A letter of no objection from each adjacent property owner;
219
- 220 (5) Any other factors which may show the encroachment was not intentionally
221 created; and
222
- 223 (6) Payment of any applicable fees imposed by the City Council.
224

(i) A property owner desiring shoreline protection may request permission from the City to construct a seawall or revetment. In general, revetments would be constructed adjoining natural bodies of water (if allowed by the State of Florida), and seawalls adjoining manmade channels, or canals.

(j) A building permit is required for all seawall and revetment work. The building and planning divisions shall review the plans and specifications to determine compliance with the minimum requirements set forth herein.

(1) For minor repairs only, with a value of less than \$2500.00, the application for permit shall include a drawing prepared by a licensed contractor with the legal description of the property signed by the owner or contractor as owner's representative.

(2) For all other seawall and revetment repair, alteration, reconstruction, or replacement, the application for permit shall include two copies of scaled plans and specifications signed and sealed by a professional engineer registered in the State of Florida including the legal description of the property.

(3) Seawall construction shall be subject to inspections by The City Manager or his designee or the City Manager may accept inspections by a licensed Florida Professional Engineer in lieu of City staff, for the purpose of determining conformance of seawall construction with the permitted plans and this division. A schedule of quality control and inspections is given in the technical specification.

(4) Note there are State of Florida environmental regulations (F.A.C. ch. 40E-4) governing seawall and revetment work including exemptions to the state permit process. It remains the responsibility of the property owner where seawall and revetment work is to be performed to comply with all state and federal regulations governing the work. Additionally, the property owner shall comply with state and federal regulations concerning vegetation affected by the work, including the restoration of mangroves.

(k) Existing seawall construction does not coordinate with location of perpendicular platted property lines throughout the City. Accordingly, a burden exists on the property owners to cooperate during seawall repair or replacement. If the permitted seawall or revetment repair or replacement would require entry onto neighboring properties to properly locate and construct the seawall expansion, joint tie-in or return wall, the owner seeking the repair or replacement should seek permission from the neighboring property owner. If said neighbor owner consents to entry, a temporary construction easement or license should be obtained of approximately six feet by 17 feet adjacent to the seawall and common boundary to accommodate the construction. The property owner undertaking the repairs shall be responsible for restoring the neighboring property to pre-work condition prior to receipt of a certificate of completion. These repairs shall be completed prior to final inspection. Depending on job site conditions, or if the adjoining property owner does not consent to entry, the seawall to be replaced or repaired shall include a return wall.

() Seawalls shall include adequate provision for pipe penetrations through the seawall as required by the City. The seawall design details for such penetrations shall be provided as part of the engineered design seawall plans for building permit.

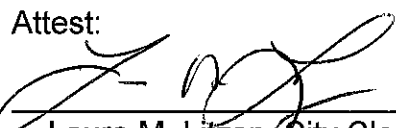
SECTION 3. Inclusion in the Code of Ordinances. It is the intention of the City Council and it is hereby ordained that the amendments to the Code of Ordinances adopted by this Ordinance shall be included and become a part of the Code of Ordinances of the City of Marco Island. The sections of this Ordinance, as adopted, may be renumbered or relettered and that the word "ordinance" may be changed to "section," "article," or other appropriate word.

SECTION 4. Conflicts and Severability. If any word, phrase, clause, subsection, or section of this Ordinance is for any reason held unconstitutional or invalid for any reason or cause, the remaining portion of this Ordinance shall remain in full force and effect and shall be valid as if the invalid portion was not included in the Ordinance. All sections or parts of sections of all existing ordinances in conflict with this Ordinance shall be and the same are hereby repealed to the extent of such conflict.

SECTION 5. Effective Date. This Ordinance shall take effect immediately upon adoption.

ADOPTED BY THE CITY COUNCIL OF THE CITY OF MARCO ISLAND this 22nd day of September 2014.

Attest:



Laura M. Litzan, City Clerk

CITY OF MARCO ISLAND, FLORIDA

BY: 

Kenneth E. Honecker, Chairman

Approved as to form and legal sufficiency:



Burt L. Saunders, City Attorney

