

any proposed change shall have been given to the building inspector, and his/her written assent to this change shall have been obtained. (Prior code § 12-7)

15.04.080 Revocation of permit.

Any permit issued under the provisions of this chapter shall be revoked by the building inspector if the work covered thereby shall not be prosecuted in accordance with the terms of the permit, and in accordance with the approved plans and specifications, or when the work is prosecuted in violation of any of the terms or provisions of this chapter or any other ordinance of the township or in violation of the laws of the state of New Jersey relating to the work. Notice of revocation shall be given by the building inspector in writing to the owner or to his/her agent or to the builder or contractor, and all work shall immediately be suspended until the cause of such revocation shall have been removed or corrected and the building inspector has reinstated the permit in writing. (Prior code § 12-8)

15.04.090 Additions and extensions.

Additions and extensions to existing buildings shall, except as otherwise provided, conform in all respects to the requirements of this chapter for new construction. (Prior code § 12-9)

15.04.100 Materials.

All materials used in the construction of buildings shall be subject to the approval of the building inspector and shall comply with this chapter where such materials are specified. (Prior code § 12-12)

15.04.110 FHS approved materials.

All materials which are now, or may hereafter be approved by the Federal Housing

Administration shall be acceptable under this chapter unless otherwise specified in this chapter. (Prior code § 12-14)

15.04.120 Construction of bulkheads.

A. Definitions.

“Lagoon” means any natural, man-made, or man-improved body of water, providing access for watercraft to any property.

“Marine bulkhead” means any bulkhead or retaining wall which retains earth (or other materials) on one side and is exposed to water in a lagoon or other body of water along all or part of any of its boundary lines.

“Waterfront lot” means any lot which has a lagoon or other body of water along or part of any of its boundary lines.

“Township bulkhead inspector” means an inspector appointed by the township committee to inspect the condition and construction of bulkheads under this chapter and to enforce the provisions of this chapter or in the alternative, the township building inspector.

B. Permits Required.

1. No marine bulkhead shall be altered, constructed, reconstructed, or installed, and no fill shall be placed on any waterfront lot, unless and until a permit has been obtained from the township of Ocean.

2. No marine bulkhead shall be altered, constructed, reconstructed, or installed, and no fill shall be placed on any waterfront lot, unless and until a permit has been obtained from the New Jersey Department of Environmental Protection and from any other governmental agency with jurisdiction. (Ord. 2004-19 § 1 (part), 2004)

15.04.121 Applications for permits.

A. Applications for a bulkhead permit shall be submitted to the township construc-

tion office, and shall be on the form provided by the township.

B. All proposed new, altered, replacement, or reconstructed marine bulkheads in the township of Ocean shall be designed by a professional engineer licensed to practice in the state of New Jersey and/or homeowner.

C. Applications shall be accompanied by signed and sealed plans and specifications, showing the size, shape, configuration, materials, dimensions, and location of the bulkhead(s), including existing and proposed bulkheads.

D. All plans shall be based upon an accurate, current survey of the premises prepared by a New Jersey licensed land surveyor.

E. Applications shall be accompanied by fees established by the township committee of the township of Ocean.

F. Applications shall be accompanied by copies of permits from the New Jersey Department of Environmental Protection regarding the proposed bulkhead, and/or other documentation verifying that the proposed bulkhead has been approved by the department or is in conformance with the department's rules and regulations governing bulkheads.

G. A minimum of two pictures of existing bulkhead permit required for exceeding fifty percent (50%) re-sheathing. (Ord. 2004-19 § 1 (part), 2004)

15.04.122 Permit approvals.

A. The township construction office shall review the application and plans and grant or deny the application within twenty (20) business days upon receipt of a complete application.

B. The review by the township construction office shall be in conformity with the chapter, consistent with the minimum stan-

dards and specifications contained herein. (Ord. 2004-19 § 1 (part), 2004)

15.04.123 Conformance to standards.

A. The design engineer shall certify on the plan the type of water (i.e., freshwater or salt-water) to which the exposed side of the marine bulkhead will be exposed.

B. All bulkhead designs shall take into account the following minimum factors:

1. Soil type(s) and conditions in front of wall;
2. Soil type(s) and conditions behind the wall;
3. Water depth in front of the wall (to mud line and to firm bottom, with allowance for future dredging, if needed);
4. Water depth behind the wall;
5. Tide fluctuations;
6. Sheet pile and face pile (if used) embedment depth;
7. Sheet pile face pile (if used) exposed length above bottom of lagoon and above water;
8. Sheet pile anchorage conditions behind wall;
9. Currents, scour and wave action potential;
10. Use of wall and land behind the wall (boat anchorage davit attachments, special loadings, driveways, buildings, surcharges, etc.);
11. Drainage behind the wall;
12. Wall backfill materials;
13. Slope behind the wall;
14. Type and strength of materials used in wall; and
15. If deadmen drag and anchor piles are eliminated, an alternative design must be submitted.

C. All marine bulkheads shall be generally of the deep-water, anchored (or "navy") type

unless otherwise approved by the township engineer, which typically consists of the following elements:

1. Face piles (tapered, round piles seaward of all other bulkhead components);
2. Sheet piles (sheathing);
3. Walers (horizontal beams between face piles and she piles):
 - a. One at the top of the wall,
 - b. One at low tide (if needed for design conditions), and
 - c. Intermediate (if needed for design conditions).
4. Steel tie rods with ogee washers and nuts, through the face piles and sheet piles and tied into deadmen drag, and/or anchor piling;
5. Key logs, deadmen, drag, and/or anchor piles for tie rod anchorage; and
6. Wall caps.

D. If the bulkhead will be constructed of interlocking vinyl sheet piles and will utilize a design in which face piles will not be used, the design shall be subject to the approval by the township engineer. Such bulkheads, however, shall include all other bulkhead elements listed in this chapter for marine bulkheads.

E. All marine bulkheads shall be installed by contractors who are equipped, experienced, qualified, and competent to install such structures and shall be constructed in a good workmanlike manner.

F. All development on waterfront properties abutting lagoons shall provide for marine bulkheading along the entire lagoon frontage. Only marine bulkheads are permitted along such lagoon frontages; in no case shall bank slopes, rip-rap, revetments, sod, vegetated or other types of bank stabilization be permitted.

G. Only clean fill shall be used for fill behind or on the landward side of the bulkhead and no construction debris.

H. All bulkheads shall be constructed to tie into existing bulkheads on either or both sides, if any exist, or shall be constructed with returns (at ninety (90) degrees to the main bulkhead) into the protected property, to prevent flanking of the main bulkhead. If the requirements of the New Jersey Department of Environmental Protection do not permit either of these alternatives, then the department's determination shall govern.

Section 12-14.6.J Bulkhead Penetration.

No pipe may penetrate a bulkhead unless there is an authorized easement by the Township of Ocean.

Section 12-14.6.J Notification of Commencement of Construction.

a. No construction shall commence before and unless a permit for construction has been obtained in accordance with the requirements of this Chapter.

b. The permittee shall notify the Township Construction Office at least two (2) business days before construction is to commence or recommence on any bulkhead for which a permit has been issued.

c. Any work performed without notification to the Township Construction Office is subject to removal by and at the cost and expense of the permittee.

d. The Township Inspector shall inspect the materials delivered to the job site and verify that they are in conformance with the permit issued for that work, in size, quantity and quality. If such materials do not conform to permit requirements, they shall be marked as "rejected" and re-

moved from the job site by the permittee, and shall not be incorporated into the bulkhead construction.

e. The Township Inspector shall make back pile and final inspections at the job site to verify that the work is in accordance with permit requirements.

f. The permittee and the contractor shall provide safe and adequate access to the site of the work for the Township Inspector for purposes of making the required inspections.

g. Back system must be exposed for inspection to be performed.

(Ord. 2004-19 § 1 (part), 2004)

15.04.124 Final inspection.

A. The permittee shall notify the township inspector of the completion of the work done under the permit issued.

B. The township inspector shall, within three business days of the notification, make an inspection of the completed work to determine if it conforms to the approved plans issued with the permit.

c. If it is in conformance, the permittee will be so advised, and the permit file shall be marked as "completed."

If it is not in conformance, the permittee will be so advised, and will be provided with a list of specific deficiencies requiring correction. The permittee shall then advise the township construction office when corrections have been made, and a reinspection will be made. (Ord. 2004-19 § 1 (part), 2004)

15.04.125 Utilities.

A. It is the responsibility of the permittee to protect all existing utilities at the bulkhead site.

B. The permittee shall obtain current utility mark-out from all applicable utilities prior to commencement of construction. (Ord. 2004-19 § 1 (part), 2004)

15.04.126 Minimum standards.

A. Materials.

1. All materials incorporated into bulkheads constructed within the township shall conform to the requirements contained herein.

2. On or after January 1, 2004, wood that has been treated with chromated copper arsenate (CCA) shall not be used as sheet piles in any bulkhead regulated by these requirements, if commercial production of such wood has been discontinued, except to repair an existing structure as regulated in 12-14.4f.

3. On or about January 1, 2004, only vinyl shall be used as sheet piles in any bulkhead regulated by these requirements, if commercial production of CCA-treated wood has been discontinued, except to repair an existing structure as regulated in 12-14.4f.

4. Wood.

a. Material. All wood used in marine bulkhead construction shall be Southern Pine (or a wood of equivalent strength and durability approved by the township engineer), and graded by a recognized lumber grading agency, meeting the following minimum standards:

i. Round piles, ASTM D 25, minimum eight inch tip diameter, natural taper spaced a maximum of six feet on center and driven a minimum of eight feet into solid bottom, or greater if determined by the design engineer.

ii. Square or sawn piling, not permitted.

iii. Waler. Marine framing grade number two, minimum four inches by six inches with a maximum spacing of four feet between top and bottom walers, and with intermediate walers if required by the design engineer.

iv. Sheet Piles. Seawall grade number two, clearly marked "This Side Seaward", tongue and groove, minimum two inch nominal thickness, or greater if determined by the design engineer. Length shall be determined by the depth of the water six feet from the bulkhead and shall be driven a minimum of five feet into solid bottom or greater if determined by the design engineer.

v. Cross-Bracing. Marine framing grade number two.

vi. Spilt Pile Caps. Number one dense.

vii. Stringers. Number one.

viii. Decking. Number one or premium.

ix. Handrails. Number one, number one dense, or select structural.

x. Wallcaps. Number one.

xi. Anchor Piles. ASTM D 25 minimum eight inch tip diameter, natural taper, and length and depth as determined by the design engineer.

xii. Key Logs. Minimum six inch by eight inch or eight inch diameter and sixteen (16) feet long, continuous for the entire length of the bulkhead with four foot overlaps.

b. Preservative. All wood used in bulkhead construction shall be pressure-treated in accordance with the following specifications:

i. Round Piles (including deadmen, anchor, or drag piles). Saltwater 2.5 CCA, AWPAC3 and C18.

ii. Walers. Saltwater 2.5 CCA, AWPAC2 and C.

iii. Sheet Piles. Saltwater 2.5 CCA, AWPAC2 and C18.

iv. Cross-Bracing. Saltwater 2.5 CCA, AWPAC2 and C18.

v. Split Pile Caps. 0.60 CCA, AWPAC2 and C18.

vi. Stringers. 0.60 CCA, AWPAC2 and C18.

vii. Decking. 0.25 CCA.

viii. Handrails. 0.25 CCA.

ix. Wallcaps. 0.25 CCA.

B. Installation. All wood materials shall be installed in strict accordance with the specifications, recommendations, and installation instructions of the Southern Pine Council (SPC) as contained in the current edition of the SPC Marine Construction Manual. The design engineer shall certify that the particular type, length, thickness, and shape of bulkhead is adequate and appropriate for the loads and conditions anticipated at the site.

1. Vinyl.

a. Vinyl used in bulkheading shall be extruded from ridge, impact modified, weatherable, UV resistant, polyvinyl chloride (PVC). Such PVC shall meet the minimum requirements of ASTM D-4216 for cell classification, current edition, and shall be guaranteed in writing by the manufacturer to resist rot, decay, marine borer, termite, and ultraviolet deterioration on a pro-rated basis for a minimum of fifty (50) years from the date of installation.

b. Vinyl bulkheads shall consist of the following minimum components: interlocking PVC sheet piles; one or more horizontal beams as wafers; and an anchoring system consisting of tie rods and anchors.

c. Components of vinyl bulkhead systems which will consist of wood or metal parts shall conform to the standards of this chapter for wood or metal components.

d. The design engineer shall certify that the particular type, length, thickness and sectional shape of vinyl sheet pile used is adequate and appropriate for the loads and conditions anticipated at the site.

e. All vinyl materials shall be installed in strict accordance with the specifications, recommendations, and installation instructions of the vinyl sheet pile manufacturer.

2. Steel.

a. Galvanized Steel.

i. All tie rods shall be ASTM A-36 steel three-fourths inch minimum diameter, hot dipped galvanized steel, per ASTM A-153 with two ounces of zinc per square foot, with matching hexagonal nuts (ASTM A-307) and cast iron ogee washer (ASTM A-47).

ii. All bolts shall be three-fourths inch minimum diameter, hot-forged bolts with hexagonal heads (ASTM A-307), with matching hexagonal nuts and washers.

iii. Stainless Steel. If stainless steel is used for tie rods or hardware, it shall be three hundred (300) series stainless steel, with matching hexagonal nuts and washers.

iv. All hardware (including plates and turnbuckles) shall be of the same materials and protective coatings as the tie rods. (Ord. 2004-19 § 1 (part), 2004)

15.04.127 Maintenance and duty to repair.

A. All private bulkheads within the township of Ocean shall be maintained so that they shall not pose a danger to the health, safety and welfare of the citizens of the township.

B. All bulkheads shall be kept in a state of repair which will prevent erosion or damage to abutting, adjacent, or adjoining properties or the lagoon on which it fronts.

C. Whenever a bulkhead has deteriorated to such a degree that it poses a danger to the property, or to abutting, adjacent or adjoining properties, or to the lagoon on which it fronts, the owner shall be required to make the necessary repairs to correct such conditions.

D. The indications that a bulkhead has deteriorated shall include (but not be limited to):

i. Members which are bowed, bent, leaning, leaking;

ii. Holes in the sheet piles;

iii. Settlement or sinkholes in the ground landward of the bulkhead;

iv Bulkhead backfill deposited in the lagoon seaward of the bulkhead; and

v. Other indications that it is structurally unsound or unsafe.

E. When notified by the township construction office of a deteriorated bulkhead, a property owner shall submit a plan of corrective action to the township no later than thirty (30) days from the receipt of the notice.

F. Upon approval of the plan of corrective action by the township construction office, the property owner shall complete all necessary repairs within one hundred twenty (120) days.

G. If permits are required from state or federal government agencies such permits shall be immediately applied for prior to township approval. In the event the property owner fails to submit a corrective action plan, or fails to implement such plan following approval by the township, he shall be liable for the penalties and violations contained herein. (Ord. 2004-19 § 1 (part), 2004)

15.04.128 Violations—Penalties.

A. Anyone violating any of the provisions of this chapter shall be subject to a fine not to exceed the sum of two thousand dollars (\$2,000.00) and/or imprisonment not to exceed ninety (90) days for each violation.

B. Each day of a violation shall be a separate offense and shall be punishable as a separate offense. (Ord. 2004-19 § 1 (part), 2004)

15.04.130 Fees charged for permits.

The fees for building permits shall be as provided in Chapter 15.28. (Prior code § 12-17)

15.04.140 Public safety.

In all buildings of a public character such as hotels, churches, theaters, restaurants, railroad depots, public halls and other buildings used or intended to be used for purposes of public assembly, amusements or instruction and including department stores and other business and manufacturing buildings where large numbers of people are congregated, the halls, doors, stairways, seats, passageways and aisles, and all lighting and heating appliances and apparatus shall be arranged as the building inspector shall direct to facilitate egress in cases of fire or accident and to afford the requisite and proper accommodation for the public protection in such cases. (Prior code § 12-18)

15.04.150 Certificate of occupancy.

A. After the completion of each building or improvement provided for in this chapter, the owner or contractor shall notify the building inspector in writing that the building or improvement has been completed and is ready for occupancy. After receipt of the notice, the building inspector shall inspect the building or improvement to determine whether the same meets the requirements of this chapter. If the building or improvement meets the requirements hereof, the building inspector shall forthwith issue a certificate of occupancy; but if the building or improvement does not meet with the requirements hereof, the building inspector shall notify the owner or contractor of the details in which the building or improvement does not meet the requirements hereof and when such details have been per-

fectured, the owner or contractor shall notify the building inspector that the items have been corrected.

B. No building or improvement shall be occupied or used until the certificate of occupancy has been issued. The initial fee for a certificate of occupancy has been issued. The initial fee shall be charged for the return of the building inspector in order to determine if all required improvements have been made. However, in the event a third or subsequent inspection is required, a fee of twenty-five dollars (\$25.00) shall be charged to the owner or contractor for the third and each such additional inspection thereafter. All such fees shall become the property of the township. (Ord. 1999-35 § 1, 1999; prior code § 12-19)

15.04.160 Elevation certification.

A. In addition to any and all other requirements of the township the owner of any home or dwelling located in the township and which is designated as existing in the A-5 Flood Zone area prior to the issuance of a certificate of occupancy for any new construction, or resale of an existing dwelling, shall file with the building department of the township engineering certification prepared by a licensed engineer, licensed by the state of New Jersey establishing:

1. The elevation of the lowest floor which shall include but not be limited to slabs on grade;
2. The elevation of the first floor living level.

B. The foregoing elevations shall be supplied in relation to the mean sea level datum based on the U.S. Coast and Geodetic Survey information as required by the Federal Emergency Management Agency. (Ord. 1995-12 § 2, 1995; prior code § 12-19.1)

15.04.170 Interpretation of terms.

All terms mentioned in this chapter shall be understood to have the meaning applied to such terms by the trade in common practice. (Prior code § 12-20)

15.04.180 As built surveys and final house plans required.

Upon completion of all building construction and related required site improvements, the applicant shall provide to the construction official two copies of "As Built" plans showing the following on an overall plan, as well as depicting the same data in a tabulation format on the plan:

- A. Property lines and dimensions;
- B. Existing elevations of the lot and street conditions, as well as contours and critical spot elevations;
- C. Finished floor grades of all buildings on the subject property, a description of the type of buildings constructed, (ranch, bi-level, commercial, garage or other structures such as sheds) and critical grade that applies;
- D. All building setbacks;
- E. A description of the building constructed, (basement, pilings, crawl space or slab); and
- F. Where applicable, sufficient information to show any impact on adjoining properties, if any.

Said "as built" plans shall be accompanied by a certificate from the preparer that the same conforms with the requirements set forth above as well as with the plan previously submitted at the time of application. One copy of said original plans shall be attached. If any changes have been made, same shall be explained in notes attached, with explanation of how said changes will have no significant impact on the original plans or on adjoining property owners. (Ord. 2004-20 § 1, 2004)