

LOCAL TECHNICAL AMENDMENT
FLORIDA BUILDING CODE 2004 – BUILDING

AMEND EXISTING SECTION

SECTION 3109

PINELLAS GULF BEACHES COASTAL CONSTRUCTION CODE

3109.1 Title

The provisions herein contained shall constitute the Coastal Construction Code for Pinellas County and its municipalities and hereinafter will be referred to as the Coastal Code.

3109.2 PURPOSE

3109.2.1 General

The purpose of this Coastal Code is to regulate coastal construction and excavation with a locally administered program meeting the intent of Section 161.053, Florida Statutes, as amended, under the agreement between the PCCLB and the Florida Department of Environmental Protection pursuant to Section 161.053(4), Florida Statutes, as amended. This Coastal Code provides minimum standards for the design and construction of residential and commercial structures and other structures of a permanent or semi-permanent nature. Construction standards are intended to address design features that affect the structural stability of improvements under design storm conditions and which affect the stability of the beach, dunes, environmental features and physical features of adjacent property.

3109.2.2 Application

In the event of a conflict between this Coastal Code and other Chapters of applicable Building Code, or other Federal, State, or local laws or regulations, the more restrictive standard shall apply. No provision in this Coastal Code shall be construed as permitting any construction in any area prohibited by local zoning regulations.

3109.2.3 Issuance of Permits, Conduct of Inspections, and Enforcement Actions

3109.2.3.1 The local permitting, inspection, and enforcement authorities of the jurisdictions listed in section 3109.2.3.2 shall be empowered to issue permits, conduct inspections, and take enforcement action in a manner consistent with this Coastal Code and the Agreement between the PCCLB and the Florida Department of Environmental Protection.

3109.2.3.2 The City of Clearwater, the City of Belleair Beach, the Town of Belleair Shore, the Town of Redington Beach, the Town of North Redington Beach, the Town of Redington Shores, the City of Madeira Beach, the City of Indian Rocks Beach, the Town of Indian Shores, the City of Treasure Island, the City of St. Pete Beach, and Pinellas County, if applicable.

3109.2.3.3 A City may delegate the operation of permitting, inspection and enforcement activities required under the Coastal Code to another local government by an interlocal agreement pursuant to Section 553.80, Florida Statutes, as amended. The local government to whom powers have been delegated shall serve as the jurisdiction's Local Permitting, Inspection and Enforcement Authority.

3109.3 SCOPE

3109.3.1 Construction to Which Applicable

The requirement of this Coastal Code shall apply to the following types of construction in the coastal zones of Pinellas County and its municipalities.

1. New construction of, or substantial improvement to, residential and non-residential structures.
2. Mobile homes.
3. Construction, which would change or alter the character of the shoreline of Pinellas County or its municipalities (e.g, excavation, grading, paving). The Coastal Code does not apply to minor work in nature of normal beach clearing or debris removal.

4. Minor structures need not meet specific requirements of this chapter. However, all structures whether major or minor shall be designed to produce the minimum adverse impact on the beach and dune system and adjacent properties and to reduce the potential for water or wind blown materials.

3109.3.2 Exemptions

Construction seaward of mean high water structures or construction extending seaward of the mean high waterline and regulated by Section 161.041, Florida Statutes (e.g., groins, jetties, moles, breakwaters, seawalls, revetments, bench nourishment, inlet dredging, etc.) are specifically exempt from the provisions of this Coastal Code. In addition, the Coastal Code does not apply to piers, pipelines, or outfalls, which are regulated pursuant to the provisions of Section 161.053, Florida Statutes.

3109.3.3 Pre-existing Structures

The requirements of this Coastal Code shall not apply to existing structures or structures under construction or for which a valid Pinellas County or municipal building permits were issued, prior to December 19, 1978.

3109.3.4 Multi-Zone Structures

For structures located in more than one zone, the requirements of the more restrictive design shall apply to the entire structure.

3109.3.5 Applications for Permits

Applications for building permits for construction of all structural elements in Zone 1 and Zone 2 shall be certified by a design professional certifying that the design plans and specifications for the construction are in compliance with the criteria established by this Coastal Code and the applicable Building Code.

3109.4 DEFINITIONS

3109.4.1 General

The following terms are defined for general use in this Coastal Code; specific definitions appear in individual sections.

ACTIVE BEACH ZONE. The seaward most area of the shoreline which is particularly responsive to wind, waves, tides, currents and long-range variations in sea level.

A-ZONE. The land in the flood plain with a greater chance of flooding in any given year and as established by the Federal Emergency Management Agency and shown on flood insurance rate maps.

BASE FLOOD ELEVATION. The elevation above mean sea level, expressed in feet, as published on current Flood Insurance Rate Maps produced by the Federal Emergency Management Agency, which represents the crest of a flood that has a one percent chance of occurring in any given year.

BREAKAWAY WALL. A wall that extends below the base flood elevation of a building, is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portions of the building or the supporting foundation system.

BUILDING SUPPORT STRUCTURE. Any structure, or structural element, which supports floor, wall or column loads and transmits them to the foundation (i.e. beams, grade beams, joists, etc.).

COASTAL. Of or relating to shoreline features openly exposed to weather events impinging from the Gulf of Mexico, Florida Bay, or Straits of Florida. This definition excludes shoreline features on the mainland peninsula of Pinellas County protected by barrier islands.

COASTAL BARRIER ISLAND. Geological features, which are completely, surrounded by marine waters that front upon open waters of the Gulf of Mexico, Florida Bay, or Straits of Florida, which features lie above the line of mean high water.

COASTAL BUILDING ZONE. The land area from the seasonal high water line landward to a line 1,500 feet landward from the Coastal Construction Control Line as adopted by the Governor and Cabinet on December 19, 1978 and filed with the Clerk of the Circuit Court, Pinellas County, Florida and as established pursuant to Section 161.053, Florida Statutes

and for those areas fronting on the Gulf of Mexico and not included under Section 161.053, Florida Statutes, the land area seaward of the; most landward velocity zone (V-zone) as established by the Federal Emergency Management Agency and shown on flood insurance rate maps. The coastal building zone on coastal barrier islands shall be the land area from the seasonal high water line to a line 5,000 feet landward from the Coastal Construction Control Line established pursuant to Section 161.053, Florida Statutes, or the entire island, whichever is less.

COASTAL CONSTRUCTION CONTROL LINE. The line as established by the State of Florida pursuant to Section 161.053, Florida Statutes, and as adopted by the Governor and Cabinet on December 19, 1978, and filed with the Clerk of the Circuit Court, Pinellas County, Florida.

COLUMN ACTION. Potential elastic instability in piles or columns resulting in buckling or lateral bending of the member, resulting from compressive stresses due to direct axial and bending loads.

DEPARTMENT. The Pinellas County Administrator or designated Department or any successor department within Pinellas County government.

DEPARTMENT OF ENVIRONMENTAL PROTECTION, (DEP) the Office of Beaches and Coastal Systems. This is the agency of the State of Florida charged with the preservation and management of Florida's sandy beaches seaward of the Coastal Construction Control Line.

DESIGN PROFESSIONAL. A professional engineer or architect licensed by the State of Florida.

ENCLOSED. Any walled and roofed structure, either temporary or permanent, which is used or constructed for the shelter, storage, enclosure or security of persons, animals, chattels, equipment, materials or property of any kind.

EROSION. The wearing away of land by the action of natural forces. On a beach, the carrying away of beach material by wave action, tidal currents, littoral currents or by deflation.

EXISTING STRUCTURE. Any structure for which a valid building permit was issued, or which was erected prior to the adoption of this Coastal Code.

FOOTING. Structural unit of a substructure used to distribute loads to the underlying strata.

FREEBOARD. The distance measured vertically between a FEMA Base Flood Elevation and the bottom of the building support structure in a FEMA "V" Zone, or the top of a finished floor in a FEMA "A" Zone.

GLARE. The sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance and visibility.

INUNDATE. To cover or overflow, as with a flood.

LANDWARD. In a direction away from the seas (Gulf of Mexico).

LOCAL PERMITTING, INSPECTION AND ENFORCEMENT AUTHORITY. The organization within a City or County government, where a city or unincorporated area is subject to a delegation agreement executed pursuant to Section 161.053, Florida Statutes, as amended, and having responsibility pursuant to Section 553.7, Florida Statutes, as amended, to regulate building construction by establishing and operating of a required permitting and inspection program to another local government by an interlocal agreement pursuant to Section 553.80, Florida Statutes, as amended, the local government to whom powers have been delegated shall serve as the Local Permitting, Inspection and Enforcement Authority.

LOWEST FLOOR. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for the parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements.

MAJOR STRUCTURE. Houses, mobile homes, apartment buildings, condominiums, motels, hotels, restaurants, towers, other types of residential, commercial, or public

buildings, and other construction having the potential for substantial impact on coastal zones.

MAT FOUNDATION. A spread footing covering the entire area of a structure and reinforced to provide rigidity.

MEAN HIGH WATER LINE. The intersection of the plane of mean high water with the shore. Mean high water is the average height of the higher high waters over a 19-year period.

MINOR STRUCTURE. Pile-supported, elevated dune and beach walkover structures; beach access ramps and walkways, stairways, pile-supported, elevated viewing platforms, gazebos, boardwalks, lifeguard support stands, public and private bathhouses, sidewalks, driveways, parking areas, shuffleboard courts, tennis courts, handball courts, racquetball courts, and other uncovered paved areas, earth retaining walls, sand fences, privacy fences, ornamental walls, ornamental garden structures, aviaries, and other ornamental construction. It shall be a characteristic of minor structures that they are considered to be expendable under design wind, wave, and storm forces.

NGVD B NATIONAL GEODETIC VERTICAL DATUM. A geodetic datum established in 1929 by the National Coast and Geodetic Survey. Frequently referred to as 1929 Mean Sea Level Datum.

NONHABITABLE MAJOR STRUCTURE. Swimming pools, parking garages, pipelines, piers, canals, lakes, ditches, drainage structures, and other water retention structures, water and sewage treatment plants, electrical power plants, and all related structures or facilities, transmission lines, distribution lines, transformer pads, vaults, and substations, roads, bridges, streets, and highways, and underground storage tanks.

PCCLB. The Pinellas County Construction Licensing Board. The agency created by special act of the Legislature (Chapter 73-595 Part II and Chapter 75-489 Part III, Laws of Florida, as amended) having sole authority in Pinellas County to adopt, enact, amend, and grant variances to applicable building codes.

PILING FOUNDATION. Includes pilings used as columns and those terminating below grade at pile caps.

PROTECTED SPREAD FOOTING. A conventional spread footing set at an appropriate elevation and protected by adequate concrete, masonry or street piling protective wall.

RESIDENTIAL STRUCTURE. Any building or portion thereof, which is designed, built, rented or leased to be occupied as a home or residence by one or more persons or families.

SEAWARD. In a direction toward the sea (Gulf of Mexico).

SIGNIFICANT ADVERSE IMPACT. Impacts of such magnitude that they may:

1. Alter the coastal system by:
 - a. Measurably affecting the existing shoreline change rate;
 - b. Significantly interfering with its ability to recover from a coastal storm;
 - c. Disturbing topography or vegetation such that the system becomes unstable, or suffers catastrophic failure; or
2. Cause a take, as defined in Section 370.12(1), Florida Statutes, unless the take is incidental pursuant to Section 370.12(1)(f), Florida Statutes.

SITE SPECIFIC. Of or related to a particular location.

SPELL LIGHT. Light which falls outside its intended target area due to improper luminaire light distribution, mounting height and physical location.

SPREAD FOOTING. Footing that distributes the building loads over a sufficient area of soil to secure adequate bearing capacity.

STABLE SOIL ELEVATION. Minimum elevation of soil resulting from design erosion.

STRUCTURE. That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built or compounded of parts joined together in some definite manner.

STRUCTURE, PERMANENT. Structures requiring a permanent foundation, designed for human habitation, and are not temporary in nature.

STRUCTURE, SEMI-PERMANENT. Those structures which do not require a permanent foundation and which are not designed to be permanently occupied or those which are

temporary in nature such as, but not limited to, sheds, canopies, gazebos, parking slabs, shuffleboard court, etc.

SUBSTANTIAL IMPROVEMENT. All repairs, additions to, reconstruction or improvements of a structure, the costs of which in the aggregate equal or exceed 50 percent of the permit value assessment of the structure either (a) before the first improvement is started, or (b) if, the structure has been damaged and is being restored, before the damage occurred.

UNDERSTRUCTURES. Any wall, partition or other solid fabrication not comprising a part of the structural support system and located below the first floor support structure.

UPLIFT PRESSURE. The upward water pressure on the base, deck or floor of the structure.

V-ZONE. A velocity zone (V-Zone) as established by the Federal Emergency Management Agency and shown on flood insurance rate maps.

3109.5 ZONES

3109.5.1 General

Minimum design criteria for construction in the designated zones of the coastal areas within the Coastal Building Zone of Pinellas County, Florida, are established by this Coastal Code. These criteria are based upon evaluation of storm related conditions, including erosion, rising water, wave and wind forces. Notwithstanding the criteria below all structures shall be designed to produce the minimum adverse impact on the beach and dune system and adjacent properties and to reduce the potential for water or wind blown debris. No construction shall be permitted that will result in a significant adverse impact. No construction shall be permitted unless in accordance with this Coastal Code.

3109.5.2 Definition

Coastal construction areas of Pinellas County and its municipalities within the Coastal Building Zone shall be divided into three (3) zones as defined below.

Zone 1 - The active beach zone from existing mean high water line to the coastal construction control line as adopted by the Governor and Cabinet on December 19, 1978, and as filed with the Clerk of the Circuit Court, Pinellas County, Florida.

Zone 2 - This zone extends landward for 300 feet from the coastal construction control line established on December 19, 1978, and filed with the Clerk of the Circuit Court, Pinellas County, Florida, or to where the seaward right-of-way line of a State or County road occurs closer to the coastal construction control line than 300 ft, as indicated on Attachment A.

Zone 3 - All lands lying landward of Zone 2 within the Coastal Building Zone.

3109.6 COASTAL CONSTRUCTION REQUIREMENTS

3109.6.1 Construction Requirements - Zone 1

3109.6.1.1 Construction and excavation in Zone 1 are generally prohibited except for that work which is authorized by the municipality or county, and the Department of Environmental Protection pursuant to the permit provisions of Section 161.053, Florida Statutes.

3109.6.1.2 New seawalls, or substantial improvements to seawalls, seaward of the coastal construction control line shall require permits from DEP and local government authorities. Normal and routine maintenance or repair of existing seawalls in their present location and original configuration will require no DEP permit; however, where such maintenance or repair is the result of erosion or, storm damage, a permit shall be required from the DEP and the municipality or county.

3109.6.2 Construction Requirements - Zone 2

Construction within Zone 2 shall meet the following specific requirements of this Coastal Code.

3109.6.2.1 Environmental Controls

3109.6.2.1.1 The construction shall not result in removal or destruction of native vegetation, which will either destabilize a frontal, primary or significant dune or cause a significant adverse impact to the beach and dune system due. Under such conditions, the Building

Official shall require restoration of the site to mitigate any adverse impact to the site.

3109.6.2.1.2 No operation, transportation, or storage of equipment or materials is authorized seaward of the dune crest or rigid coastal structure during the marine turtle nesting season (May 1 through October 31).

3109.6.2.1.3 Hours of Construction during turtle nesting season shall be between the hours of 7:00 AM and 6:00 PM. This requirement shall not be construed to overrule any federal, state, county, or municipal requirement, which may be more restrictive.

3109.6.2.1.4 No artificial public or private light source shall be permitted that illuminate areas where it may deter adult female sea turtles from nesting or disorient hatchlings. Fixture lights shall be designed and/or positioned such that they do not cause direct illumination, glare or excessive spill light on the sandy beach and that only deflected light may be directly visible from the ground level of the beach as follows:

- a. The use of lighting for decorative and accent purposes, such as that emanating from spotlights or floodlights is prohibited.
- b. Wall-mount fixtures, landscape lighting and other sources or lighting shall be designed, positioned and/or shielded such that they do not cause direct illumination, glare or excessive spill light on the sandy beach and that only deflected light may be directly visible from the ground level of the beach.
- c. All lights on balconies shall be shielded from the beach.
- d. Lighting in open parking areas or under buildings shall be positioned and/or shielded such that they do not cause direct illumination, glare or excessive spill light on the sandy beach and that only deflected light may be directly visible from the ground level of the beach.
- e. Pedestrian lighting and lighting on beach access points, dune crossovers, beach walkways, piers or any other structure on visible from the sandy beach shall use the minimum amount of light necessary to ensure safety and be positioned such that they do not cause direct illumination, glare or excessive spill light on the sandy beach and that only deflected light may be directly visible from the ground level of the beach.

3109.6.2.1.5 No temporary lighting of the construction area shall be permitted that is visible from the marine turtle nesting areas on the beach, during the marine turtle nesting season.

3109.6.2.1.6 All windows and glass doors visible from the marine turtle nesting areas of the beach must be tinted to a transmittance value (light transmission from inside to outside) of 45% or less through the use of tinted glass, window film, or similar light control measures. The Building Department shall suspend any permitted construction when the permittee has not provided the required protection for marine turtles and their habitat.

3109.6.2.1.7 Prior to the issuance of a certificate of occupancy or final inspection, the permitting authority shall certify that the project is in compliance with the standards set forth in this section.

3109.6.2.2 Seawalls

3109.6.2.2.1 All seawalls in Zones 2 must be in alignment with the existing adjoining seawalls, or seawall line, unless specifically authorized by the municipality or county.

3109.6.2.2.2 No construction shall be permitted within 18 feet of existing or new seawalls or the seawall line, unless designed by a design professional, in order to allow adequate tiebacks, tieback maintenance, and filter systems. All new seawalls shall have filter systems.

3109.6.2.2.3 Present installations may be permitted if it is determined that the private structures or public infrastructure is vulnerable to damage from frequent coastal storms.

3109.6.2.2.4 Future installations of coastal armoring structures may be permitted contingent upon the occurrence of specified changes to the coastal system which would leave upland structures vulnerable to damage from frequent coastal storms. Assistance may be provided to agencies, political subdivisions of the state, or municipalities, at their request, in identifying areas within their jurisdictions, which may require permits for future installations of rigid coastal armoring structures.

3109.6.2.2.5 Present installations of coastal armoring may be permitted where such installation is between and adjoins at both ends rigid coastal armoring structures, follows a continuous and uniform armoring structure construction line with existing coastal armoring structures, and is no more than 250 feet in length.

3109.6.2.3 Construction, Excavation and Grading

3109.6.2.3.1 No construction shall be undertaken in Zone 2 which would result in the destruction of an existing dune ridge or the lowering of general existing ground elevations. At locations within this zone where the grade has been artificially raised through the placement of fill or dredge spoil, ground elevations may be lowered but not below elevation +6 feet NGVD. This requirement shall not preclude temporary excavation for installation of utilities, piles or other similar activities.

3109.6.2.3.2 No excavation shall be permitted except that which is incidental to the placement of the foundation or subgrade utilities. For grading for semi-permanent structures located in Zone 2, a one-foot excavation limitation shall be the maximum allowable.

3109.6.2.3.3 Excavation for swimming pools in Zone 2 may be permitted to an elevation of 6 feet or less below existing grade structure, provided that the pool excavation is located no closer than 18 feet to any seawall line unless designed by a design professional so that the location of the pool will not effect the integrity of the seawall or tieback system.

3109.6.2.3.4 The pool shall be located and designed so that its failure resulting from a storm does not adversely affect the seawall or any adjoining major structure.

3109.6.2.3.5 If due to limited site availability the pool needs to be located in close proximity to an existing major structure or coastal protection structure, the pool shall be designed with an adequate pile foundation for the erosion and scour conditions of a one-hundred-year storm event.

3109.6.2.4 Foundations

3109.6.2.4.1 All permanent structures other than single-family residential structures shall have a soil analysis by a geotechnical engineer registered in the State of Florida. Semi-permanent structures may be exempt from this requirement. Structures subject to this Coastal Code shall be supported by and anchored to pile foundations, or to mat foundations where approved by variance.

3109.6.2.5 Piles

3109.6.2.5.1 Pile type, dimensions, spacing and embedment shall be specified by the design professional consistent with the requirements of the site, taking into account all vertical, lateral, erosion and scour producing elements.

3109.6.2.5.2 Pile foundation systems shall be designed for appropriate horizontal loads applied to any single row of piles parallel to the shoreline.

3109.6.2.5.3 In addition to normal foundation analysis, pile foundation analysis shall include consideration of piles in column action from the bottom of the structure to the stable soil elevation of the site.

3109.6.2.5.4 Column action stresses are to be derived from loads resulting from wind and waves superimposed upon normal structure loads. Structures shall be adequately secured to the foundations to insure stability against loads resulting from wind, wave and wave uplift.

3109.6.2.5.5 For Zone 2, in addition to loadings required herein, structural design shall be adequate for wave forces which would occur during 100-year storm conditions. Calculations for wave forces on the pile foundation and superstructures may be based on criteria and methods given in the U.S. Army Corps of Engineers, Coastal Engineering Manual (2001) or the FEMA Coastal Construction Manual (June 2000). Breaking and nonbreaking waves likelihood shall be determined and considered. Any other design method may be used if the resulting design is compatible with the aforementioned methods. For wave force calculations, use the following minimum criteria:

1. Current Federal Emergency Management Agency 100-year storm surge elevation, wave height of 6 feet and wave period.
2. Calculations for wave forces and structural design for these forces shall be sent to the Building Official for record purposes if requested.

3109.6.2.6 Mat Foundations

3109.6.2.6.1 Mat foundations may be used only by variance and according to section 3109.6.2.12, where soil conditions permit and if located at an elevation as to minimize their effect on the beach and adjacent properties. Due consideration shall be given to vulnerability to erosion.

3109.6.2.6.2 In the event that a mat foundation is used in Zone 2, the maximum elevation of the top of the mat is to be below the design scour depth, below the design stable soil elevation.

3109.6.2.7 Spread Footings

Spread footings shall not be permitted in Zone 2.

3109.6.2.8 Understructures

3109.6.2.8.1 Only non-supporting breakaway walls or partitions may be constructed below the level of the lowest floor in Zone 2. Exceptions:

1. Stairways and elevator shafts and dedicated storage if part of a dedicated shear wall.
2. Shearwalls essentially perpendicular to breaking waves.
3. Shearwalls essentially parallel to breaking waves shall be limited to a maximum of 20% of the building length.
4. Wind/sand screens constructed of fabric, wire mesh, or lattice strips.

3109.6.2.9 Building and Floor Elevations

3109.6.2.9.1 The minimum elevation for the underside of the building support structure (excluding foundation) shall be the lowest flood elevation for the site as indicated on the latest set of Flood Insurance Rate Maps (FIRM) issued by the Federal Emergency Management Agency (FEMA) issued prior to the effective date of this Code plus 2.5 additional feet of freeboard. At such time as the Federal Emergency Management Agency promulgates updated FIRM, then the lowest flood elevation for the site shall be that indicated on the updated FIRM with no additional freeboard required.

3109.6.2.9.2 Structures shall be designed for all pressures generated by wave loads above the Federal Emergency Management Agency flood level minimum requirement and shall be designed to withstand or relieve all pressures or forces acting on the underside of the lowest solid structural deck or floor and which are to be considered to act in a moving horizontal plane as wide as the structure.

3109.6.2.9.3 The underside of any solid structural deck or floor which is lower than the Federal Emergency Management Agency flood level minimum requirements shall be designed to withstand or relieve all pressures or forces acting on the underside of the lowest solid structural deck or floor and which are to be considered to act in a moving horizontal plane as wide as the structure.

3109.6.2.10 Windloads

All semi-permanent structures in this zone shall be designed to withstand windloads as adopted by the Pinellas County Construction Licensing Board.

3109.6.2.11 Exceptions to Zone Requirements

3109.6.2.11.1 Exceptions to the provisions of this Coastal Code may be authorized for the landward 50 feet of zone 2, of special non-residential commercial structures which, because of their intended use, must be constructed on grade. Examples of such special non-residential commercial structures would include, but not be limited to, service stations, warehouses, and shopping centers.

3109.6.2.11.2 Structures included under such exception shall be flood-proofed to or above elevation as outlined for the various zones and be in accordance with the standards of the U.S. Army Corps of Engineers' publication entitled Flood-proofing Regulations, June 1972.

3109.6.2.12 Variance

3109.6.2.12.1 A variance may be granted by the Pinellas County Construction Licensing Board, to allow a structure lying partially within the landward 50 feet of Zone 2 and lying partially seaward thereof to be built on grade, provided the following requirements are met:

1. A substantial portion of the structure to be built will be within the landward 50 feet of Zone 2.
2. Granting the variance is required because of the practical difficulties or unnecessary hardships in carrying out the strict letter of this Coastal Code.
3. Granting the variance will be in harmony with the general purposes of this Coastal Code so that the public safety and welfare will be protected.

3109.6.2.12.2 Procedure

3109.6.2.12..2.1 Application for variance shall be considered as an appeal under the applicable Building Code and shall follow the appeal provisions of this Coastal Code and Chapter 75-489, Laws of Florida, as amended. The Department of Environmental Protection shall be notified in writing of any variance granted hereunder upon issuance of the variance.

3109.6.2.12.2.2 Exceptions may be authorized by the Building Official without special public hearing or variance request for the following kinds of construction:

- a. Modular type construction which allows easy removal where used as a temporary construction office or temporary construction storage building.
- b. Redesign of the tieback system by a professional engineer to allow for ease of maintenance and/or replacement of the filter or tieback system.

Granting of exception shall be in harmony with the general intent of this Code so that the public safety and welfare will be protected.

3109.6.3 Construction Requirements - Zone 3

Construction within Zone 3 shall meet the following specific requirements of this Coastal Code, the applicable Building Code, and the Federal Emergency Management Agency, if applicable.

3109.6.3.1 Seawalls

3109.6.3.1.1 All seawalls in Zone 3 must be in alignment with the existing adjoining seawalls, or seawall line, unless specifically authorized by the municipality or county. No construction shall be permitted within 18 feet of existing or new seawalls, or the seawall line, unless designed by a design professional, in order to allow adequate tiebacks and tieback maintenance and filter systems. All new seawalls shall have filter systems.

3109.6.3.2 Excavation and Grading

Excavations and grading. No Restrictions.

3109.6.3.3 Foundations

Structures within Zone 3 may utilize any foundation system consistent with protection of the foundation against the effects of flooding and erosion.

3109.6.3.4 Understructures

Walls and partitions for Zone 3 may be designed as either expendable or flood proofed depending on the building design. Flood proofing must be accomplished with appropriate consideration of effects on adjacent properties such that its inclusion will not increase the water surface elevation more than one foot.

3109.6.3.5 Building and Floor Elevations

The minimum lowest floor elevations within these zones shall be the base flood elevation as established by the Federal Emergency Management Agency (FEMA).

3109.6.3.6 Windloads

All semi-permanent structures in this zone shall be designed to withstand windloads as adopted by the Pinellas County Construction Licensing Board.

3109.7 MONITORING AND ENFORCEMENT

3109.7.1 Responsibility for Administering, Monitoring, and Enforcing the Coastal Code

3109.7.1.1 Responsibility for monitoring compliance with this Coastal Code is delegated to the Pinellas County Administrator or designated Department. Specific duties, including the collection and dissemination of permitting and inspection information for projects permitted pursuant to this Coastal Code, and the responsibilities for monitoring compliance with this Coastal Code by the Local Permitting, Inspection and Enforcement Authorities, are enumerated below:

1. Project Name
2. Project Location
3. Project Description
4. Category of Construction

5. Type of Construction per the applicable Building Code

6. Square Footage

7. Any other information reasonably necessary to describe building activity conducted permitted pursuant to the Coastal Code

3109.7.1.2 Each Local Permitting, Inspection and Enforcement Authority shall be required to notify the Department of the official charged with administering the Coastal Code within their jurisdiction, and supply a copy of the officials credentials. The Department shall review submitted credentials to verify that the official is able to perform such duties pursuant to Part 12 of Section 468, Florida Statutes, as amended.

3109.7.1.3 The PCCLB shall investigate allegations of non-compliance where there is reasonable cause. Local Permitting, Inspection and Enforcement Authorities shall advise any person wishing to file an allegation of non-compliance to the PCCLB official responsible for investigating such matters, and shall cooperate fully with the PCCLB in the course of researching an allegation of non-compliance.

3109.7.2 Enforcement of the Coastal Code

Violation of any of the provisions of this Coastal Code shall be deemed a violation of the applicable Building Code. Penalties shall be assessed in accordance with the applicable Building Code, State Statute, and local ordinance. Additionally, for activities seaward of the Coastal Construction Control Line, DEP may invoke penalties specified in Section 161.053 and 161.054, Florida Statutes, as amended, for violations of this Coastal Code.

3109.7.3 Sanctions Against Local Permitting, Inspection and Enforcement Authorities Found to be Acting in Substantial Non-Compliance with the Coastal Code.

3109.7.3.1 The Department shall notify the PCCLB in writing of any allegations that the Local Permitting, Inspection and Enforcement Authority is in substantial non-compliance with this Coastal Code.

3109.7.3.2 Substantial non-compliance shall comprise of the following:

3109.7.3.2.1 The issuance of a permit or permits, failure to properly perform inspections pursuant to a permit, or failure to take enforcement action after a violation is revealed during an inspection, that represents a violation of the Coastal Code and where the

improvement in question would have otherwise required changes to the project site plan, foundation system, or elevation.

3109.7.3.3 The PCCLB shall, at the earliest available meeting date, conduct a public hearing for the purpose of overturning or upholding a finding of substantial non-compliance. If a finding of substantial non-compliance is upheld, the PCCLB shall take one or more of the following actions:

1. Require the Local Permitting, Inspection and Enforcement Authority to adopt or alter Coastal Code interpretations, procedures, or operating methods to correct deficiencies, as a condition of maintaining permitting, inspection, and enforcement authority.

2. Suspend, for a specified period of time, or revoke, indefinitely, the Local Permitting, Inspection, and Enforcement Authority's power to issue permits and conduct inspections pursuant to this Coastal Code. In such an eventuality, the PCCLB shall notify the legislative body of the Local Permitting, Inspection, and Enforcement Authority of said suspension or revocation. The local legislative body will no longer have the authority to issue permits, conduct inspections, and enforce regulations pursuant to this Coastal Code. The PCCLB shall request that the local jurisdiction designate another Local Permitting, Inspection, and Enforcement Authority of the jurisdiction listed in 3109.2.3.2 of this Coastal Code to issue permits and conduct inspections pursuant to the Coastal Code in that jurisdiction. Should the PCCLB suspend, for an indefinite period of time, a Local Permitting, Inspection, and Enforcement Authority's power to issue permits pursuant to the Coastal Code, the legislative body of the Local Permitting, Inspection, and Enforcement Authority may petition the PCCLB for reinstatement of authority after having shown cause that the reasons for the revocation have been eliminated.

3109.8 EFFECTIVE DATE

3109.8.1 Effective Date

This chapter shall become effective upon the date the Coastal Construction Control line is set by the Governor and Cabinet of the State of Florida, but not prior to 60 days after September 19, 1978. All proper permit applications submitted to the applicable building department prior to the effective date shall not be required to comply with this Coastal Code.

NOTE: This chapter was adopted at a public hearing on September 19, 1978, and became effective on January 9, 1979, which was the date the Coastal Construction Control Line became effective after adoption by the Florida Cabinet. Section 3906.4(b) was added by amendment at a public hearing September 16, 1980, and subsections 3906.4(b)(1)(B) and 3906.4(b)(2) were further amended January 6, 1981, to conform to the language approved by the Florida Cabinet. This chapter was further amended May 16, 1989, to include three construction zones within the Coastal Building Zone as defined by the Florida Legislature. This chapter was further amended on January 18, 2000, to comport with the FEMA A- and V-zones and was substantially rewritten. The chapter was amended on March 21, 2001, to prohibit the use of protected spread footers 300' landward of the Coastal Construction Control Line. This chapter was amended at a public hearing on September 18, 2001. This chapter was subsequently amended at a public hearing conducted on November 20, 2001 subject to the adoption of interlocal agreements with the communities listed in section 3109.2.3.2 and an agreement between DEP, PCCLB, and Pinellas County. Interlocal agreements with communities listed in section 3109.2.3.2 were adopted. The agreement between DEP, PCCLB, and Pinellas County was adopted by Pinellas County on November 20, 2001 and by DEP on December 10, 2001. This Coastal Code became effective December 10, 2001. This Coastal Code was designated as Florida Building Code 2001 - Building, Section 3107 and renumbered accordingly at a public hearing on March 26, 2002. This Coastal Code was approved as a local technical amendment to the Section 3109, Florida Building Code 2004 - Building and numbered accordingly at a public hearing on May 17, 2005.

SECTION 3109

~~STRUCTURES SEAWARD OF A COASTAL CONSTRUCTION CONTROL LINE~~

~~3109.1 General.~~

~~3109.1.1 Scope.~~ The provisions of Section 3109 shall ensure that structures located seaward of the coastal construction control line are designed to resist the predicted forces associated with a 100-year storm event and shall apply to the following:

- ~~1. All habitable structures which extend wholly or partially seaward of a coastal construction control line (CCCL) or 50-foot (15.3 m) setback line.~~
- ~~2. Substantial improvement of or additions to existing habitable structures.~~

~~3. Swimming pools that are located in close proximity to a habitable structure or armoring. An environmental permit from the Florida Department of Environmental Protection, requiring special siting considerations to protect the beach dune system, proposed or existing structures and public beach access, is required prior to the start of construction. The environmental permit may condition the nature, timing and sequence of construction of permitted activities to provide protection to nesting sea turtles and hatchlings and their dune system, alter the natural coastal currents or stabilize the mouths of inlets.~~

~~**BAREAKWAY WALL.** A partition independent of supporting structural members that is intended to withstand design wind forces but to collapse from a water load less than that which would occur during a 100-year storm event without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system.~~

~~**COASTAL CONSTRUCTION CONTROL LINE.** The line established by the State of Florida pursuant to Section 161.053, Florida Statutes, and recorded in the official records of the county which defines that portion of the beach dune system subject to severe fluctuations based on a 100-year storm surge, storm waves or other predictable weather conditions.~~

~~**DESIGN GRADE.** The predicted eroded grade caused by the 100-year storm.~~

~~**FIFTY-FOOT SETBACK LINE.** A line of jurisdiction, established pursuant to the provisions of Section 161.052, Florida Statutes, in which construction is prohibited within 50 feet (15.24 m) of the line of mean high water at any riparian coastal location fronting the Gulf of Mexico or the Atlantic coast shoreline.~~

~~**HABITABLE STRUCTURE.** Structures designed primarily for human occupancy and are potential locations for shelter from storms. Typically included within this category are residences, hotels and restaurants.~~

~~**LOWEST HORIZONTAL STRUCTURE MEMBER.** Any shore-parallel structural member which supports floor, wall or column loads and transmits them to the pile foundation.~~

~~**ONE-HUNDRED-YEAR STORM ELEVATION.** The height of the breaking wave crest or wave approach as superimposed on the storm surge with dynamic wave set-up of a 100-year storm. This 100-year storm elevation is determined by the Florida Department of Environmental~~

Protection based on studies published as part of the coastal construction control line establishment process and an analysis of topographic and other site specific data.

REBUILDING. See definition of “Substantial improvement.”

STUBSTANIAL IMPROVEMENT. See definition in Section 161.54(12), Florida Statutes.

3109.3 Elevation standards. All habitable structures shall be elevated at or above an elevation which places the lowest horizontal structural member above the 100-year storm elevation as determined by the Florida Department of Environmental Protection in the report titled “One Hundred Year Storm Elevation Requirements for Habitable Structures Located Seaward of a Coastal Construction Control Line.” An applicant may request the Department of Environmental Protection to determine a site specific 100-year storm elevation for the applicant’s proposed habitable structure as part of the environmental permit application process. The elevation will be provided as part of the applicant’s environmental permit and shall be subject to review under the provisions of Chapter 120, Florida Statutes.

Exceptions:

1. Additions, repairs or modifications to existing nonconforming habitable structures that do not advance the seaward limits of the existing habitable structure and do not constitute rebuilding of the existing structure.
2. Habitable structures located landward of existing armoring which is capable of protecting buildings from the effects of erosion from a 100-year storm surge.

The applicant shall provide scientific and engineering evidence that the armoring has been designed, constructed and maintained to survive the effects of the design storm and provide protection to existing and proposed structures from the erosion associated with that event. Evidence shall include a report with data and supporting analysis, and shall be certified by a professional engineer registered in this state, that the armoring was designed and constructed and is in adequate condition to meet the following criteria:

- a. The top must be at or above the still water level, including setup, for the design storm plus the breaking wave calculated at its highest achievable level based on the maximum eroded beach profile and highest surge level combination, and must be high enough to preclude runup overtopping.

b. ~~The armorings must be stable under the design storm including maximum localized scour, with adequate penetration and toe protection to avoid settlement, toe failure, or loss of material from beneath or behind the armorings.~~

c. ~~The armorings must have sufficient continuity or return walls to prevent flanking under the design storm from impacting the proposed construction.~~

d. ~~The armorings must withstand the static and hydrodynamic forces of the design storm.~~

3. ~~A higher elevation standard is required by either the National Flood Insurance Program (NFIP), as found on a community's Flood Insurance Rate Map (FIRM), or the local flood damage prevention ordinance. In such instances, the higher elevation standard shall apply.~~

3109.4 Construction standards.

3109.4.1 Pile foundations. ~~All habitable structures shall be elevated on, and securely anchored to, an adequate pile foundation. Pile foundations for habitable structures shall be designed to withstand all reasonable anticipated erosion, scour and loads resulting from a 100-year storm including wind, wave, hydrostatic and hydrodynamic forces acting simultaneously with typical structural (live and dead) loads. All habitable structures should be anchored to their pile foundation in such a manner as to prevent flotation, collapse or lateral displacement. The elevation of the soil surface to be used in the calculation of pile reactions and bearing capacities for habitable structures shall not be greater than that which would result from erosion caused by a 100-year storm event. Calculation of the design grade shall account for localized scour resulting from the presence of structural components. Design ratio or pile spacing to pile diameter should not be less than 8:1 for individual piles located above the design grade. Pile caps shall be set below the design grade unless designed to resist increased flood loads associated with setting the cap above the design grade, but at or below the natural grade. Pile penetration shall take into consideration the anticipated loss of soil above the design grade.~~

Exceptions:

1. ~~Additions, repairs or modifications to existing nonconforming habitable structures that do not advance the seaward limits of the existing habitable structure and do not constitute rebuilding of the existing structure.~~

~~2. Habitable structures located landward of existing armoring which is capable of protecting buildings from the effects of erosion from a 100-year storm surge. The applicant shall provide scientific and engineering evidence that the armoring has been designed, constructed and maintained to survive the effects of the design storm and provide protection to existing and proposed structures from the erosion associated with that event. Evidence shall include a report with data and supporting analysis, and shall be certified by a professional engineer registered in this state, that the armoring was designed and constructed and is in adequate condition to meet the following criteria:~~

~~a. The top must be at or above the still water level, including setup, for the design storm plus the breaking wave calculated at its highest achievable level based on the maximum eroded beach profile and highest surge level combination, and must be high enough to preclude runup overtopping.~~

~~b. The armoring must be stable under the design storm including maximum localized scour, with adequate penetration and toe protection to avoid settlement, toe failure or loss of material from beneath or behind the armoring.~~

~~c. The armoring must have sufficient continuity or return walls to prevent flanking under the design storm from impacting the proposed construction.~~

~~d. The armoring must withstand the static and hydrodynamic forces of the design storm.~~

~~**3109.4.2 Walls below the 100-year storm elevation.** No substantial walls or partitions shall be constructed below the level of the first finished floor of habitable structures. All other walls shall be designed to break away.~~

Exceptions:

~~1. Stairways and stairwells;~~

~~2. Shear walls perpendicular to the shoreline;~~

~~3. Shear walls parallel to the shoreline, which are limited to a maximum of 20 percent of the building length in the direction running parallel to the shore;~~

~~4. Shear walls parallel to the shoreline, which exceed 20 percent of the total building length (including any attached major structure) when they meet the following criteria:~~

~~a. A certification is provided by a Florida-registered professional engineer that certifies that the increased length of shear walls, over 20 percent, are located landward of the 100-year erosion limit;~~

~~b. A hydraulic analysis is provided and certified by a Florida-registered professional engineer that evaluates the potential impact of flow increase on the subject parcel and adjacent properties;~~

~~c. The hydraulic analysis demonstrates that although the overall shearwall coverage is more than 20 percent, the increased shearwall length will not result in substantial increase of flow velocities and drag forces on the structural components of the proposed structure and neighboring structures; and~~

~~d. The provisions under Section 3109.4.2 (Exception 4) do not include any low-rise building as defined in Section 1609.2. 5. Wind or sand screens constructed of fiber or wire mesh;~~

~~6. Light, open lattice partitions with individual, wooden lattice strips not greater than 3/4 inch (19 mm) thick and 3 inches (76 mm) wide;~~

~~7. Elevator shafts;~~

~~8. Small mechanical and electrical rooms; and~~

~~9. Break-away or frangible walls.~~

3109.5 Flood loads during a 100-year storm.

3109.5.1 Load basis. ~~The structural design shall be based on the 100-year storm as determined by the Florida Department of Environmental Protection in studies published as part of the coastal construction control line establishment process. Breaking, broken and nonbreaking waves shall be considered as applicable. Design wave loading analysis shall consider vertical uplift pressures and all lateral pressures to include impact, as well as dynamic loading and the harmonic intensification resulting from repetitive waves.~~

3109.5.2 Hydrostatic load. Habitable structures shall be designed in consideration of the hydrostatic loads which would be expected under the conditions of maximum inundation associated with a 100-year storm event. Calculations for hydrostatic loads shall consider the maximum water pressure resulting from a fully peaked, breaking wave superimposed on the design storm surge with dynamic wave setup. Both free and confined hydrostatic loads shall be considered. Hydrostatic loads which are confined shall be determined using the maximum elevation to which the confined water would freely rise if unconfined. Vertical hydrostatic loads shall be considered as forces acting both vertically downward and upward on horizontal or inclined surfaces of major structures (e.g., floors, slabs, roofs, walls). Lateral hydrostatic loads shall be considered as forces acting horizontally above and below grade on vertical or inclined surfaces of major structures and coastal or shore protection structures. Hydrostatic loads on irregular or curving geometric surfaces may be determined in consideration of separate vertical and horizontal components acting simultaneously under the distribution of the hydrostatic pressures.

3109.5.3 Hydrodynamic loads. Habitable structures shall be designed in consideration of the hydrodynamic loads which would be expected under the conditions of a 100-year storm event. Calculations for hydrodynamic loads shall consider the maximum water pressures resulting from the motion of the water mass associated with a 100-year storm event. Full intensity loading shall be applied on all structural surfaces above the design grade which would affect the flow velocities.

3109.6 Wind loads. All habitable structures shall be designed in accordance with Chapter 16.

3109.7 Swimming pools. Swimming pools located in close proximity to an existing habitable structure or armoring shall be designed with an adequate pile foundation for the erosion and scour conditions of a 100-year storm event.

3109.8 Storm debris. All structures will be designed to minimize the potential for wind and water borne debris during a storm.