



Section 11.1 Purpose and Authority

11.1.1 Purpose - To improve water quality and to minimize losses due to floods through the on-site control of stormwater. In addition, the standards in this Section of the CDC are intended to:

- A. Prevent natural floodwaters from being obstructed, diverted, displaced, or channelized by maintaining the natural hydrological and ecological functions of wetlands, coastal resources, estuarine environments, shorelines, fisheries, and marine habitats;
- B. Maintain desirable ground and surface water levels and quality;
- C. Prevent increased erosion and sedimentation;
- D. Restrict adverse interference with the normal movement of surface waters;
- E. Maintain the optimum storage capacity of watersheds;
- F. Minimize unreasonable risk of personal injury and property damage within flood prone areas;
- G. Minimize expensive and dangerous search, rescue, and disaster relief operations due to floods;

H. Minimize the damage and repair costs to roads and utilities due to floods; and

I. Prevent the need to construct expensive and environmentally damaging public projects to control floodwaters.

11.1.2 Authority - Stormwater shall be controlled and treated pursuant to appropriate statutory provisions and any additional requirements as may be imposed by the City Engineer, the Southwest Florida Water Management District (SWFWMD), the Florida Department of Environmental Protection (FDEP) or other appropriate regulatory agencies. Where there is a conflict, the more stringent regulation shall prevail.

Section 11.2 On-Site Stormwater Management System Requirements

11.2.1 Objective - To protect the proper function of natural water bodies by minimizing runoff through the on-site management of stormwater.

11.2.2 Submission Requirements - A drainage plan must be submitted as part of the final site plan review process. Approval of the drainage plan by the City is required prior to issuance of a Development Order (DO).

A. Drainage plan

(1) In general - Grading plans shall be designed to direct stormwater away from structures and building pads towards public rights-of-way, drainage conveyances, and retention/detention areas.

(2) Drainage plans shall include the following:

- a. Existing and proposed topographic information showing existing and proposed contours at less than two (2) foot intervals with high and low points indicated by spot elevations.
- b. Drawings that indicate the direction of flow of stormwater and all drainage facilities, such as ditches, canals, streams, storm sewers, etc., within or directly adjacent to the land to be developed.

(3) Wetland boundaries identified - A field determination and mapping of the boundaries of wetland areas within or adjacent to the boundaries of development sites shall be made and initially approved by the Pinellas County Department of Environment and Infrastructure and, as necessary, by other appropriate regulatory agencies such as the FDEP, the SWFWMD and the United States Army Corps of Engineers (USACE).



B. Soil tests

(1) Pre-construction soil borings shall be made on and around potential retention pond sites where the soils pose constraints to construction of excavated ponds and embankments, as listed in "Engineering Standards" of the USDA Soil Conservation Service Soils Survey of Pinellas County, Florida.

(2) Absorption basins will be required, subject to the review and approval of the City Engineer. A percolation test furnished by a soils testing laboratory shall be required to verify ground absorption capabilities. A safety factor of two (2) shall be used for calculating the absorption rate.

(3) A soils survey supplied at the time of DO application shall verify the presence of upland soils in these areas. Measures necessary to overcome soil constraints shall be required as a condition of approval.

C. Water quantity and quality - All calculations for runoff shall be included in the drainage plan submittal. The method of analysis must be in accordance with SWFWMD Basis of Review, Chapter 4, Water Quantity, and Chapter 5, Water Quality, unless otherwise defined in this Section or determined by the City Engineer that conditions warrant more stringent requirements.

D. Required easements

(1) Maintenance Easement - A minimum twenty (20) foot drainage easement, measured from the top of the bank, which will allow maintenance of drainage ways through the retention area, shall be granted to the City upon request of the City Engineer at the time of platting or site plan approval. Multiple easements may be required based on size and configuration of the proposed stormwater controls. These easements shall in no way relieve the property owner of maintenance of the retention area (for example, mowing of grass or weed control). The granting of a maintenance easement shall not require the City to maintain the easement and shall not render the City responsible for maintaining the drainage capacity of the drainage area. The easements shall confirm the preservation of the drainage area and allow the City to maintain the existing drainage capacity.

(2) Conservation Easement - A vegetated buffer area shall be created, or preferably retained in its natural state, along the banks of any natural watercourse, waterbody, or freshwater and saltwater wetlands pursuant to applicable standards of jurisdictional agencies. The width of the vegetated area shall be a minimum of fifteen (15) feet and sufficient to prevent erosion;

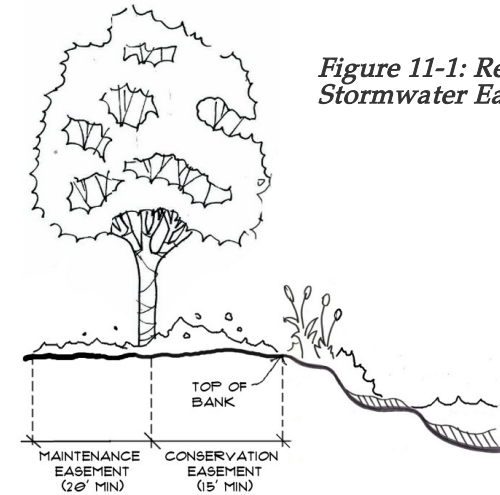


Figure 11-1: Required Stormwater Easements

trap sediment and pollutants in overland runoff; provide access to the waterbody; and allow for periodic flooding without damage to buildings, roads, or other structures. Conveyance of such buffer shall be by conservation easement in accordance with Chapter 704.06, F.S., or as a conservation easement by recorded plat.

E. Prohibited activities within easements -

The following activities shall be prohibited within conservation easements and clearly stated on the final plat: placement of structures, roads, and utilities, planting of exotic species, native vegetation removal, mowing or trimming, filling by any material, excavation, maintaining livestock, storage of materials, or application of herbicides, pesticides, fertilizers or other chemical agents injurious to vegetation. In addition, the area must be properly marked as a conservation area through signage, fences, or similar structures.



F. Design standards for retention/detention -
Where there is a conflict between the requirements of other regulatory agencies and the provisions listed below, the more stringent shall prevail.

(1) All new development is to control drainage, including roof drainage.

(2) Upland sites shall be chosen for the location of buildings and other impervious structures.

(3) Post-development stormwater discharge rates shall not exceed that of the pre-developed or pre-existing state. If pre-existing stormwater discharge causes adverse off-site impacts, site development shall include improvements required to mitigate all adverse off-site impacts.

(4) Retention and detention systems must be used to retard, retain and/or detain accelerated runoff which a development generates. Water must be released from detention ponds into watercourses or wetlands at a rate and in a manner approximating the natural flow that would have occurred before development. Design capacity will be calculated considering variations between dry season and wet season water levels.

(5) Retention/detention ponds shall be designed in accordance with the SWFWMD Basis of Review, Chapter 4, Water Quantity, and Chapter 5, Water Quality, unless it is determined by the City Engineer that conditions warrant more stringent requirements.

(6) Retention/detention areas shall be designed so that stormwater runoff may be utilized for on-site irrigation.

(7) Design of retention/detention ponds shall be governed by site constraints and opportunities resulting from the underlying soils and bedrock, and shall utilize state of the art engineering standards and techniques. The bank shall be sodded or landscaped with a maximum slope of 4:1. The provision for maximum slope may be waived if the developer can demonstrate that unusual hardship will be created by strict application thereof. The City Engineer may approve a steeper slope and require a protective fence or barrier.

(8) All drainage not originating on the proposed developed land shall be kept separate from on-site drainage and shall not drain into the on-site retention area. No contours shall be altered which would adversely affect abutting properties.

(9) Runoff shall not be discharged directly into open waters. Instead, vegetated buffers, swales, vegetated watercourses, wetlands, underground drains, catch basins, ponds, porous pavements, and similar systems for the detention, retention, treatment, and percolation of runoff shall be used, as appropriate, to increase time of concentration, decrease velocity, increase infiltration, allow suspended solids to settle, and remove pollutants.

(10) Discharge into a public drainage system shall be governed by the regulations of the entity having jurisdiction over said system. For example, discharge to drainage facilities serving State roads shall be governed by the standards of the Drainage Manual published by the Florida Department of Transportation (FDOT), most recent edition.

(11) Retention/detention ponds without a positive outfall may be approved if it is impractical to discharge into a public drainage system. These ponds shall be designed for a one hundred (100) year storm.

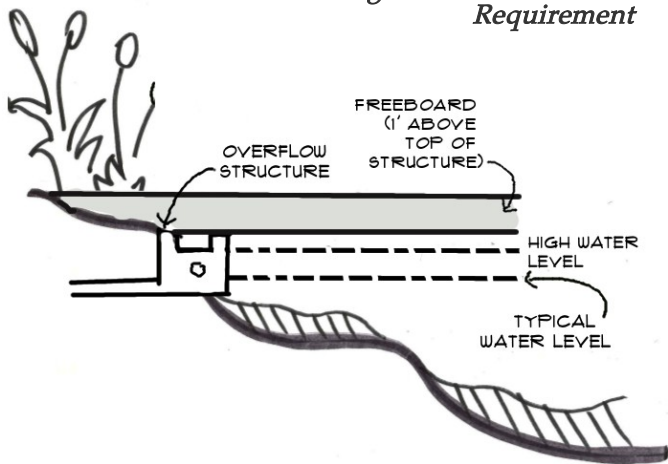
(12) Where applicable, the use of Low Impact Development (LID) controls such as bioswales, pervious pavement, stormwater harvesting, rainwater harvesting, rainbarrels and cisterns,



rain gardens, etc., is encouraged to reduce the rate and volume of runoff for the protection of downstream water quality. The use of LID controls may be considered as credit toward the City's requirement for the treatment of the first one-half inch of rainfall subject to the approval of the City Engineer. To qualify for the credit, the developer shall supply calculations and methods of analysis demonstrating equivalent water quality treatment using LID.

(13) One (1) foot of freeboard is required above high water level. Freeboard shall be defined as the distance from the top of the overflow structure up to the lowest point of top of bank, back of curb, or edge of pavement at the first upstream catch basin, whichever is lowest.

Figure 11-2: Freeboard Requirement



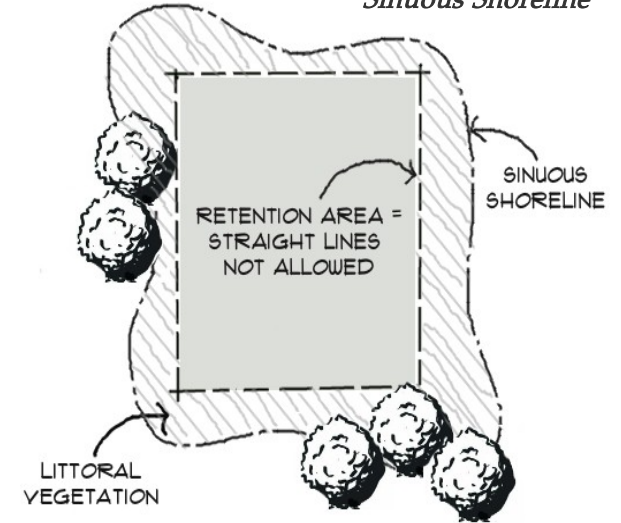
(14) Runoff from newly developed or redeveloped parking lots shall be treated to remove oil and sediment before entering receiving waters.

(15) Normally isolated wetlands tend to fill and overflow during floods. Flowage areas should be protected from incompatible development. The construction of roads across such areas shall be limited. For example, roads that are built shall be constructed on pilings or with adequate culverts so as not to obstruct normal flows.

(16) Natural watercourses shall not be filled, dredged, cleared, deepened, straightened, stabilized, or otherwise altered, except in cases of overriding public interest and approved by the City Engineer.

(17) A vegetated buffer area shall be created, or preferably retained in its natural state, along the banks of any natural watercourse, waterbody, or freshwater and saltwater wetlands pursuant to applicable standards of jurisdictional agencies. The width of the vegetated area shall be sufficient to prevent erosion, trap sediment and pollutants in overland runoff, provide access to the waterbody, and allow for periodic flooding without damage to buildings, roads, or other structures.

Figure 11-3: Retention Area with Sinuous Shoreline



(18) Wet detention systems and retention areas:

a. Shall be designed so that shorelines are sinuous rather than straight, and so that the length of shoreline is maximized, thus offering more space for the growth of littoral vegetation (see Figure 11-3), unless approved by the City Engineer. Care shall be exercised not to create stagnant areas therein.

b. A wet pond must be able to maintain a permanent pool. If the soil at the site is not sufficiently impermeable to prevent excessive seepage, as determined by the City Engineer, construction of an impermeable liner or other soil



modifications will be required.

c. Decorative fountains shall be included in all wet ponds, unless the DCO allows the substitution of a comparable aesthetic or functional enhancement to the pond for the fountain. The falling water from the fountain must be centered in the pond, away from the shoreline.

d. Vegetation is an integral part of a wet pond system. The use of wetland and/or aquatic plants is required at the edge of all ponds to provide pollutant filtration, reduce algal growth, limit erosion and increase the aesthetic value of the pond. Except in maintenance easements, turf grass shall not be used. The planting requirement may be reduced or waived by the DCO if substituted by a comparable aesthetic or functional treatment.

(19) Although the use of wetlands for storing and purifying water is encouraged, care shall be taken not to overload their capacity to perform this function, thereby harming the wetland and transitional vegetation. Wetlands shall not be damaged or replaced by the construction of detention ponds unless equivalent wetlands are created as a replacement. Appropriate replacement ratios and the types of wetlands to be created shall be determined by the agency having jurisdiction at the

time of permitting. Mitigative measures, including but not limited to, wetlands recreation, as required by the FDEP, the USACE, Pinellas County, the SWFWMD, and other regulatory agencies, will be required as a condition of approval if construction is to take place upon soils having constraints for development.

(20) Retention/detention areas in residential subdivisions shall have direct access from public rights-of-way. The stormwater system shall be platted as part of the common areas to be the responsibility of the Homeowners Association (HOA). The HOA documents shall clearly specify the HOA's maintenance responsibility for the stormwater system.

(21) Where a sidewalk or public right-of-way is immediately adjacent to a retention/detention pond, a guardrail or other protective device shall be installed along the sidewalk or right-of-way. Such device shall be required only where the retention pond and sidewalk or right-of-way are abutting. The City Engineer may waive such requirements when side slopes are less than a 4:1 ratio.

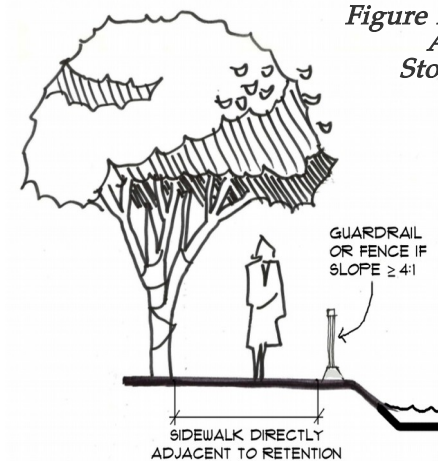


Figure 11-4: Sidewalk Abutting Steep Stormwater Slope

(22) Ancillary retention areas shall be:

- a. located adjacent to the site benefiting from such improvements, and
- b. under the same ownership as the primary use or designated as a drainage easement under a recordable agreement between the property owners of both parcels. Such agreement shall clearly designate the liability and responsibility for maintenance and shall be subject to City approval prior to recording.

(23) All impervious areas shall have a minimum slope of three-tenths (0.3) percent.



G. Co-location of stormwater system with other site improvements

- (1) The use of drainage facilities and vegetated buffer zones for a combination of open space, recreation, and conservation areas is a priority of the City.
- (2) Parking areas may be used as retention areas by the use of restrictive inlets or restrictive pipe sizes. The parking area shall have sufficient retention area, and the discharge rate shall conform to all City requirements. A maximum water level of six (6) inches above grade will be allowed.
- (3) Proposed building design may allow for a certain amount of water retention or storage on the roof area.
- (4) Underground retention/detention areas (vaults) with an outfall to a public drainage facility are permissible if the requirements of this Section are otherwise met.

H. Design standards for storm sewers, drainage ditches, and swales - All stormwater facilities in City rights-of-way or easements shall meet the following City standards:

- (1) All pipes shall be reinforced in concrete Class III and a minimum of fifteen (15) inches in diameter.
- (2) The maximum velocity for storm sewers shall be ten (10) feet per second with a minimum velocity of two (2) feet per second. The hydraulic gradient elevation shall be one (1) foot below ground elevation.
- (3) Prevention of soil erosion by stormwater shall be accomplished through control of stormwater velocity in swales and ditches. All swales and ditches shall be sodded, vegetated or lined with riprap or concrete if projected maximum stormwater velocities are greater than the maximum allowed velocity in a grassed channel. The maximum velocity in a grassed channel shall be a three and one-half (3.5) feet per second (fps). In other areas the maximum allowed stormwater velocity shall be limited by underlying soils conditions (see Table 11-1).
- (4) Existing swales and drainage ditches shall not be filled unless adequate alternative provisions are made for conveyance of water.
- (5) All intermittent watercourses, such as swales, shall be vegetated.

Table 11-1: Maximum Stormwater Velocity by Soil Type

Type of Soil	Maximum allowable FPS
Fine Sand	1.5
Sandy Loam	1.7
Silt Loam	2
Firm Loam	2.5
Fine Gravel	2.5
Stiff Clay	3.7
Coarse Gravel	4
Hard Pans	6

(6) Artificial watercourses shall be designed, considering the soil type, so that the velocity of flow is low enough to prevent erosion.

11.2.3 Compliance - Property owners and contractors shall be required to implement and comply with the City’s notice to contractors regarding measures to eliminate erosion and adverse drainage impacts caused by construction activity. The City may, at its discretion, inspect construction activities for compliance, as indicated in the Code of Ordinances, and impose additional requirements or penalties, as deemed necessary.



11.2.4 Exemptions to Required Retention

A. Other agency requirements - Areas exempt from retention by the City must meet all other agencies' requirements for stormwater.

B. Existing drainage facilities credit - Proposed developments on sites with existing drainage facilities will be given credit toward the retention/detention and treatment requirements, however; at a minimum, treatment of runoff for the first one-half inch of rainfall from the contributing area shall be required as a condition of a DO.

C. Municipal separate storm sewer system (MS4) - On-site retention and treatment shall not be exempted for those businesses and industries that have the potential for adverse environmental impact on the City's Municipal Separate Storm Sewer System (MS4). These businesses may include, but are not limited to, industries requiring coverage under the Multisector General Permit or those requiring an Individual Permit under the guidelines of the EPA's National Pollution Discharge Elimination System (NPDES).

Section 11.3 Flood Damage Prevention Standards

11.3.1 Objective - To minimize public and private losses due to flood conditions. More specifically, standards described in this Section are intended to:

A. Provide for continued and equivalent temporary storage capacity for flood waters on flood-prone lands in wetlands;

B. Regulate flood elevations and the timing, velocity, and rate of flood discharges, thereby minimizing the potential for property damage and personal injury from flooding;

C. Protect the public from the economic and social disruption of flood damage;

D. Protect the public from the costs of flood relief;

E. Avoid the need to construct costly and environmentally disruptive flood management structures;

F. Ensure continued participation by the City in the National Flood Insurance Program; and

G. Implement a development review system for flood-prone areas that:

(1) Restricts the construction of buildings within 5-, 10- and 25-year flood plains;

(2) Requires the elevation or flood-proofing of buildings above the 100-year flood elevation;

(3) Restricts interference with the normal movement of floodwaters; and

(4) Restricts increases in the rate or volume of surface water discharge.

11.3.2 Authority - Chapter 163, F.S., and the Future Land Use Element and Natural Resources Element of the Comprehensive Plan.

11.3.3 Hazard Prone Areas - All areas of special flood hazards within the City of Largo, identified by the Federal Emergency Management Agency (FEMA) on the Flood Insurance Rate Maps (FIRMs) dated 2005 edition, together with any subsequent studies and amended FIRMS. The following information shall be used to identify flood-prone lands and areas of special flood hazard. In the event of any question regarding the location of a parcel within a flood hazard area, the City Engineer or his designee shall make such a determination.



A. Flood zones

(1) Areas of Special Flood Hazard - An area of special flood hazard includes all lands subject to inundation by a 100-year flood, i.e., the flood that occurs, on average, once every 100-years;

(2) Flood Plains - A flood plain shall encompass all of the following:

a. Lands subject to inundation by a 100-year flood;

b. Wetlands, watercourses, and waterbodies;

c. Isolated topographical depressions with a history of flooding or a high potential for flooding; and

d. Floodways - A floodway shall include the normal channel of a watercourse and adjacent lands that must remain unobstructed to convey a 100-year flood discharge without causing flood elevations to rise along any stretch of the watercourse above a specified permissible increase known as the floodway surcharge. The floodway surcharge shall be established, considering both existing and potential development, at a level that avoids an increase in potential flood damage. The floodway surcharge may be increased if a developer who wishes to construct some additional obstruction obtains flowage easements from the owners of all

land that would be affected by increased levels. In no case, however, may a floodway surcharge exceed one (1) foot. The floodway shall normally be calculated assuming equal encroachment on the flood plain from both sides of the watercourse, unless legally enforceable deed restrictions limiting development rights are recorded for the lands needed for the floodway.

B. Coastal high hazard area - Area shown as Evacuation Level A in the most current Official Hurricane Guide for the Tampa Bay Area.

11.3.4 Criteria for Allowing Development in Flood Hazard Areas - Development may be allowed in hazard-prone areas only when the following conditions are met:

A. The elevation or velocity of the 100-year flood will not be increased as a result of any obstruction or displacement of floodwaters;

B. There is no threat of releasing harmful quantities of pollutants to surface or groundwater during the 100-year flood;

C. The capacity of the critical flood zone to store, convey, or purify surface waters, recharge groundwater, or perform other significant water management functions will not be impaired; and

D. The site can be designed such that the potential property damage due to flooding is minimized and comply with the standards contained in Section 11.4.

Section 11.4 Supplemental Standards for Development in Flood Hazard Areas

- All development within flood hazard areas shall comply with the standards set forth below. The cumulative effects of a development in combination with other existing or potential development will be considered in evaluating compliance with these standards. A parcel identified as being in a flood hazard area shall be subject to Pinellas County Ordinance Nos. 77-12 and 83-21, the flood damage prevention and flood plain management ordinances, together with subsequent amendments thereto, which are hereby adopted by reference. Where there is a conflict, the most stringent provision shall prevail.

11.4.1 Applicability - All new construction, redevelopment, reconstruction, repairs of substantially damaged buildings or structures, and undeveloped land shall be subject to these flood protection standards.



11.4.2 Exemptions - Structural additions or improvements to existing buildings may be exempted from these standards subject to the following conditions:

A. If the cumulative total dollar value of all structural additions and improvements permitted in a five year period, beginning the date of when the first permit is granted by the City, and each five year period thereafter, does not exceed forty-nine (49) percent of the replacement cost depreciated of the original building and improvements on the date, then the additions or improvements existing shall be exempt from flood protection standards.

B. The total dollar value of structural additions and improvements to a portion of the structure that is in conformity with flood protection standards shall not be included in the forty-nine (49) percent cumulative total specified above.

C. The dollar value of structural additions and/or improvements permitted after the date the first permit is granted by the City as it relates to this Section, shall be the value listed on the application for construction permit, subject to verification and final approval by the DCO.

D. It shall be the responsibility of the property owner to document the fair market value of the original building, exclusive of land, landscaping, or detached accessory improvements. Acceptable documentation shall consist of a written determination by the Pinellas County Property Appraiser's Office, a certified appraisal by a professional appraiser licensed to practice in Pinellas County, Florida, or similar documentation subject to approval by the Community Development Director. Otherwise, the fair market value will be determined by Community Development staff, using information from the Pinellas County Property Tax Roll. The replacement cost depreciated of the structures shall be determined on the date the first permit is granted by the City as it relates to this Section, and every five years thereafter.

E. The established five year cumulative value of all permitted nonconforming structural additions and improvements shall not be allowed to exceed forty-nine (49) percent of the documented replacement cost depreciated of the original building and improvements until the original building, additions, and improvements have been reconstructed to the flood protection elevation and brought into conformity with all other applicable flood protection requirements.

11.4.3 Construction Standards - Compliance with these provisions must be certified by a registered State of Florida civil engineer or architect, as applicable.

A. The flood protection elevation shall be set at the elevation of the 100-year flood plus one (1) foot.

B. If an Elevation Certificate (FEMA form) is not on file for an existing principal structure, then one must be prepared, certified, and submitted before any permit is issued for a structural addition or improvement. After completion of any new construction or structural addition, an Elevation Certificate must be prepared and certified by a registered land surveyor or civil engineer, and must be submitted to the City Building Division before a Certificate of Occupancy or Certificate of Completion will be issued.

C. An equal volume of storage capacity (compensatory storage) must be created within the same drainage basin for any volume of the 100-year flood that would be displaced by fill or structures.

D. The velocity of the 100-year flood must not be adversely altered on any watercourse.



City of Largo, FL: Comprehensive Development Code
Chapter 11: Flood Prevention & Stormwater Management Standards

E. All structures, including buried storage tanks, shall be anchored to resist flotation, lateral forces, and the impact of floating debris.

F. Sewage treatment and potable water systems must be designed and located to prevent infiltration or contamination of surface waters up to the flood protection elevation. Electrical and communications utilities must be designed to avoid flood damage up to the flood protection elevation. Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

G. Runoff from the site after development must have approximately the same rate of flow, volume, timing, and quality as runoff that would have occurred

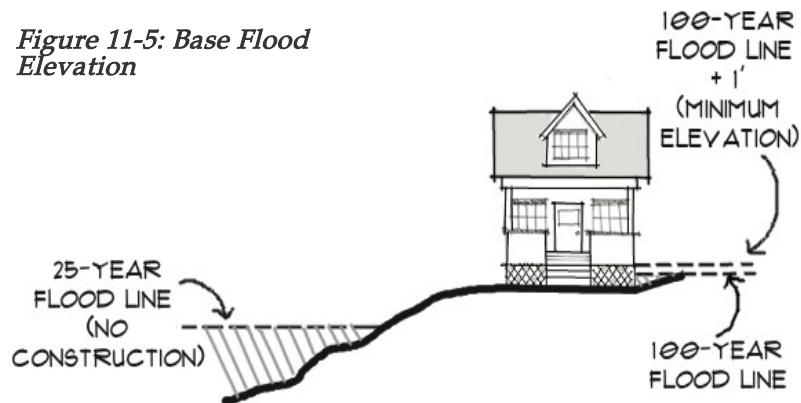
following the same rainfall under pre-development conditions.

H. For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria: Minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be equipped with screens, louvers or other coverings or devices, provided they permit the automatic entry and exit of floodwaters.

open so as not to impede the flow of water. Such space must not be used for human habitation nor enclosed in the future. Lattice work or decorative screening may be constructed below the flood protection elevation, provided it is not a part of the structural support of the building and is designed so as to break away under abnormally high tides or wave action without damage to the structural integrity of the building. Solid walls shall not be allowed. Only wood or mesh screening shall be used.

NOTE: Specifications for breakaway walls should be determined in consultation with local engineers and architects based on local conditions. Standard practice is to use a loading of twenty (20) or thirty (30) pounds per square foot (psf) as a wind load on a vertical panel facing directly into the wind. This load would correspond to a wind speed of about one hundred (100) miles per hour and should be the minimum load which would cause the panels to break away. The maximum loading which would not cause failure to the superstructure is more difficult to determine, but is probably about fifty (50) to seventy-five (75) psf. Designation of this limit should be based on such factors as material, cross-section, and spacing of pilings or columns upon which the structure sits, the elevation above the ground, and other assumed loadings on the structure.

Figure 11-5: Base Flood Elevation



I. All buildings or structures will be located landward of the reach of mean high water.

J. All buildings or structures will be elevated so that the lowest supporting member is located no lower than the flood protection elevation, with all space below the lowest supporting member



K. All buildings or structures shall be securely anchored on pilings or columns. Pilings or columns used as structural support must be designed and anchored to withstand all applied loads of the 100-year flood, including velocity flow and hurricane wave wash. Fill must not be used as structural support.

L. Sand dunes must not be altered so as to increase potential flood damage.

M. Accessory buildings may be constructed below the flood protection elevation, provided there is minimal potential for significant damage by flooding.

N. A professional engineer, registered in the State of Florida, must certify that the building has been designed and constructed so that the structure and attendant utility facilities below the flood protection elevation are watertight and capable of resisting the effects of a 100-year flood. The design must take into account flood duration, rate of rise, buoyancy, and impact from debris.

O. Flood-proofing measures must be operable without human intervention and without an outside source of electricity.

Section 11.5 Filling of Waterbodies - The total or partial filling of any lake, pond, retention pond, or other fresh waterbody shall be subject to permitting procedures of the FDEP, the SWFWMD, the USACE, and other appropriate regulatory agencies, and requires a subsidiary permit issued by the City of Largo. A statement of public purpose shall be required including evidence that filling of fresh waterbody is clearly in the best interest of the general population of Largo.

Section 11.6 Maintenance of On-Site Stormwater Management System

Property owners shall be responsible for the cleaning, maintenance and repair of stormwater drains and drainage channels located on private property to minimize release of pollutants to the public stormwater system to the maximum extent practicable and to maintain the capacity of the stormwater facilities. Stormwater treatment facilities shall be operated and maintained pursuant to appropriate statutory provisions by the SWFWMD or other appropriate regulatory agencies. This shall include the removal of nuisance vegetation and sediment accumulations, the repair of eroded areas, routine grounds maintenance such as ground mowing and trash/debris removal, and maintenance of

vegetation within easements. Where present, fountains must receive regular, consistent maintenance, which may include but not be limited to, filter systems cleaning, pump system maintenance and periodic removal of any accumulated dirt, leaves and debris.