
Sec. 4.07.12. Site improvement, utilities and limitations.

- (A) *Minimum requirements.* All proposed new development shall be reviewed to determine that:
- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
 - (2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
 - (3) Adequate drainage is provided to reduce exposure to flood hazards; in zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.
- (B) *Sanitary sewage facilities.* All new and replacement sanitary sewage facilities, private sewage treatment plants (including all pumping stations and collector systems), and on-site waste disposal systems shall be designed in accordance with the standards for onsite sewage treatment and disposal systems in Chapter 64E-6, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into flood waters, and impairment of the facilities and systems.
- (C) *Water supply facilities.* All new and replacement water supply facilities shall be designed in accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.
- (D) *Limitations on placement of fill.* Subject to the limitations of this article:
- (1) Fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour.
 - (2) If intended to support buildings and structures (zone A only), fill shall comply with the requirements of the Florida Building Code.
 - (3) In special flood hazard areas (other than coastal high hazard areas and coastal A zones) and in the Mirror Lake Overlay District, if the placement of fill is proposed, compensatory storage shall be provided at a one (1) to one (1) ratio to minimize increases in flood levels. Activities exempt from this requirement include: seawalls, accessory structures, shoreline hardening, pool/patio construction, sidewalks and driveways, filled stemwall foundations, restoration earthwork due to erosion and scour, and other minor activities not exceeding a volume of fifty (50) cubic yards.
 - (4) In coastal high hazard areas (zone V) and coastal A zones, non-compacted fill may be used around buildings for landscaping, drainage and aesthetic purposes provided the fill will wash out during storm surge to minimize obstruction to the passage of waves and to minimize ramping effects or wave deflection. Applications for placement of non-compacted fill shall include an analysis by an engineer, architect, or soil scientist demonstrating that the following have been considered:
 - (a) Particle composition of the fill does not have a tendency for excessive natural compaction;
 - (b) Volume and distribution of fill will not cause wave deflection to adjacent properties; and
 - (c) The slope of fill will not cause wave run-up or ramping.
- (E) *Limitations on sites in coastal high hazard areas (zone V).* In coastal high hazard areas, alteration of sand dunes and mangrove stands shall be permitted only if such alteration is approved by the state department of environmental protection and only if the engineering analysis required by Section 4.07.05(B)(4) demonstrates that the proposed alteration will not increase the potential for flood damage. Construction or restoration of dunes under or around elevated buildings and structures shall comply with Section 4.07.16(E)(3).

(Ord. No. 2015-03, § 2, 2-12-15)

Sec. 9.04.04. Fill.

- (a) Proposed fill shall be limited to the minimum amount of fill necessary to provide positive drainage flow and to abide by any applicable floodplain protection or building code regulations. Positive drainage shall be established on the grading plan. The city shall consider a thirty-three (33) percent maximum grade (1:3) or elevation of six (6) inches above side lot or front swale as the standards for positive drainage unless the existing grades dictate otherwise. At no point shall a lot or parcel be filled higher than the final average grade of any adjacent developed properties if original natural grade was not already higher than the adjacent developed properties. No fill shall be permitted on right-of-way areas except as required for driveway and culvert installation. Fill shall be defined as imported soil or material used to raise the grade of existing lands, excluding sod, gravel and other permeable materials used as ground cover.
- (b) *AE SFHA flood zone.*
 - (1) Fill is limited to the compacted amount needed inside the perimeter of a stem wall foundation in order to achieve a solid subsurface to pour a concrete slab to the elevation of the approved FFE.
 - (2) Additional fill is permissible to bring driveways and/or sidewalks to the approved elevations proposed on the site plan.
 - (3) Any additional fill is then limited to 50 cubic yards outside the building, driveway and sidewalk footprints, generally, not to exceed six (6) inches in overall grade change and with slopes constructed no greater than 3:1 slopes to meet adjacent property grades.
 - (4) Detention is required to keep runoff due to the development contained on the property.
- (c) *X flood zone.*
 - (1) Fill is limited to the compacted amount needed inside the perimeter of a stem wall foundation in order to achieve a solid subsurface to pour a concrete slab to the elevation of the approved FFE.
 - (2) Fill is permitted, not necessarily limited to fifty (50) cubic yards, outside the building footprint, under the driveway(s), walkways, and other flatwork, sufficient to provide proper drainage away from structures and into onsite detention areas and R-O-W swales.
 - (3) Final grades generally shall not exceed six (6) inches in overall elevation change and constructed at no greater than 3:1 slopes to meet adjacent property grades.

(Ord. No. 2023-01, § 2, 5-25-23)