

September 7, 2021



TO: Mayor Jerry L. Demings
— AND —
County Commissioners

FROM: Joseph C. Kunkel, P.E., Director
Public Works Department

A handwritten signature in black ink, appearing to read "Joseph C. Kunkel".

**CONTACT PERSON: Daniel Negron, P. E., CFM, Chief Engineer
Stormwater Management Division
(407) 836-7743**

SUBJECT: September 14, 2021 – Public Hearing
Proposed Amendments to Orange County Code
Chapters 19 and 34

As a participating community in FEMA's National Flood Insurance Program (NFIP) and Community Rating System (CRS), Orange County is required to have floodplain management regulations that meet or exceed the minimum requirements of the NFIP. The NFIP allows property owners in participating communities to purchase federally backed flood insurance and CRS participation allows residents to obtain discounts on their flood insurance policies.

When FEMA issues a Letter of Final Determination (LFD), the community must amend its floodplain management regulations six months after the LFD's effective date. The effective date of the LFD for Orange County is March 24, 2021. The deadline for amending floodplain management regulations is September 24, 2021.

The Public Works Department is proposing to amend Chapter 19, Floodplain Management; and Section 34-228 of Chapter 34, Subdivision Regulations of the Orange County Code in order to meet FEMA's minimum requirements. The proposed changes will also allow the County to pursue a higher CRS classification to benefit our residents through higher flood insurance discounts.

The Florida Division of Emergency Management (FDEM) provided a model ordinance that meets and exceeds FEMA's minimum requirements. FDEM's model ordinance is the basis for the proposed changes to the ordinances. The proposed changes better coordinate the floodplain management regulations with the Florida Building Code.

Stormwater Management Division presented the proposed Code amendments at the July 27th, 2021 BCC Work Session. To obtain public input, staff presented proposed Code amendments to the County's Development Advisory Board (DAB). Staff also distributed drafts of proposed amendments to professional associations and stakeholders, including the American Society of Civil Engineers, Florida Engineering Society, and Greater Orlando Builders Association for review and comments.

The Planning and Zoning Commission/Local Planning Agency found the proposed Code amendments to be consistent with the Orange County Comprehensive Plan at their August 19, 2021, meeting.

Action Requested: Approval of proposed amendments to Chapter 19 ("Floodplain Management"), and Chapter 34 ("Subdivision Regulations"). All Districts.

JCK/DN/

Attachments

C: Chris Testerman, Deputy County Administrator
Joseph C. Kunkel, P.E., Director, Public Works Department
Diana M. Almodovar, Deputy Director, Public Works Department
Michael J. Drozeck, P.E., Manager, Stormwater Management Division
Daniel Negron, P.E., Chief Engineer, Stormwater Management Division

ORDINANCE NO. 2021 -

AN ORDINANCE AMENDING THE ORANGE COUNTY CODE OF ORDINANCES RELATING TO FLOODPLAIN MANAGEMENT; AMENDING CHAPTER 19 ("FLOODPLAIN MANAGEMENT") TO ADOPT FLOOD HAZARD MAPS, TO DESIGNATE A FLOODPLAIN ADMINISTRATOR, TO ADOPT PROCEDURES AND CRITERIA FOR DEVELOPMENT IN FLOOD HAZARD AREAS, AND FOR OTHER PURPOSES; AND AMENDING CHAPTER 34 ("SUBDIVISION REGULATIONS") TO GOVERN DEVELOPMENT WITHIN SPECIAL FLOOD HAZARD AREAS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 125, Florida Statutes, confers upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

WHEREAS, the Federal Emergency Management Agency has identified special flood hazard areas within the boundaries of Orange County, and these areas may be subject to periodic inundation, which may result in loss of life and property, create health and safety hazards, disrupt commerce and governmental services, cause extraordinary public expenditures for flood protection and relief, and impair the tax base, all of which adversely affect the public health, safety and general welfare; and

WHEREAS, Orange County has participated in the National Flood Insurance Program (the "NFIP") since December 1, 1981; and

WHEREAS, the Board of County Commissioners desires to continue to meet the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60, necessary for participation in the NFIP; and

WHEREAS, the Florida Legislature enacted Chapter 553, Florida Statutes, to provide a mechanism for the uniform adoption, updating, amendment, interpretation and enforcement of a state building code, called the *Florida Building Code*; and

WHEREAS, the Board of County Commissioners has determined that it is in the public interest to adopt the proposed floodplain management regulations that are coordinated with the *Florida Building Code* regulations.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF

ORANGE COUNTY, FLORIDA:

Section 1. Repeal of Section 3 of Ordinance No. 2009-24, Chapter 19, Floodplain

Management of the Orange County Code, and replacement of Chapter 19, Floodplain

Management of the Orange County Code. This ordinance specifically repeals Section 3 of

Ordinance Number 2009-24 and replaces Orange County Code Chapter 19, Floodplain

Management in its entirety, as follows:

ARTICLE I

ADMINISTRATION

DIVISION 1. GENERAL

Sec. 19-1. Title.

These regulations established in this chapter are to be known as the *Floodplain Management Ordinance* of Orange County.

Sec. 19-2. Scope.

The provisions of this chapter apply to all development within the unincorporated areas of Orange County that is wholly within or partially within any flood hazard area, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities that are exempt from the *Florida Building Code*; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development.

Sec. 19-3. Intent.

The purposes of this chapter and the flood load and flood resistant construction requirements of the *Florida Building Code* are to establish minimum requirements to safeguard the public health, safety, and general welfare, and to minimize public and private losses due to flooding through regulation of development in flood

hazard areas to:

(1) Minimize unnecessary disruption of commerce, access and public service during times of flooding;

(2) Require the use of appropriate construction practices in order to prevent or minimize future flood damage;

(3) Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development that may increase flood damage or erosion potential;

(4) Manage the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;

(5) Minimize damage to public and private facilities and utilities;

(6) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;

(7) Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events; and

(8) Meet the requirements of the National Flood Insurance Program ("NFIP") for community participation as set forth in Section 59.22 of Title 44 of the Code of Federal Regulations.

Sec. 19-4. Coordination with the *Florida Building Code*.

This chapter is intended to be administered and enforced in conjunction with the *Florida Building Code*.

Sec. 19-5. Definitions.

Unless otherwise expressly stated, the following words and terms, for the purposes of this chapter, have the meanings set forth in this section. Where terms are not defined in this chapter and are defined in the *Florida Building Code*, such terms have the meanings ascribed to them in that code. Where terms are not defined in this chapter or the *Florida Building Code* nor Section 1-2 of the Code, such terms shall have ordinarily accepted meanings such as the context implies.

Accessory structure or use means a subordinate structure situated on the same lot or parcel as the principal structure, or a subordinate use of land, and which the structure or use is customarily incidental to and typically found in association with the

principal structure or use. Factors to be considered in determining whether a structure or use is "subordinate" and "customarily incidental" include the size of the lot or parcel, the uses of adjacent lots or parcels, and the size, shape, height, and roof type (if any) of the building or structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and must be designed to have minimal flood damage potential. Examples of accessory structures are carports, storage sheds, pole barns, and hay sheds.

Adversely affected means likely damage to adjacent properties because of rises in flood stages attributed to physical changes of the channel and the adjacent overbank areas. Without limiting the foregoing, a development is presumed to adversely affect the flood-carrying and flood-storage capacities of the floodplain if it proposes or requires the filling of land in an area of special flood hazard without simultaneously providing additional flood-carrying and flood-storage capacities to compensate for that capacity which is lost because of such filling.

Agricultural structures means a walled and roofed structure used exclusively for agricultural purposes or uses in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock, including aquatic organisms. Structures that house tools or equipment used in connection with these purposes or uses are also considered to have agricultural purposes or uses.

Alteration of a watercourse means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification, which may alter, impede, retard or change the direction or velocity of the riverine flow of water during conditions of the base flood.

Appeal means a request for an administrative review of the Floodplain Administrator's interpretation of any provision of this chapter, or a request for subsequent review of the decision of the DRC relating to the review of an interpretation of the Floodplain Administrator, or the request for judicial review of the decision of the Board of County Commissioners relating to the interpretation of the Floodplain Administrator.

ASCE 24 means the standard titled *Flood Resistant Design and Construction* that is referenced by the *Florida Building Code*. ASCE 24 is developed and published by the American Society of

Civil Engineers, Reston, VA. Where cited, ASCE 24 refers to the edition of the standard referenced by the *Florida Building Code*.

Base flood means a flood having a 1-percent chance of being equaled or exceeded in any given year. [This term is also defined in *FBC*, B, Section 202.] The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation means the elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM). [This term is also defined in *FBC*, B, Section 202.]

Basement means the portion of a building having its floor subgrade (below ground level) on all sides. [This term is also defined in *FBC*, B, Section 202; see "Basement (for flood loads)".]

Compensating storage means the equivalent physical replacement of natural floodwater storage volumes that would be displaced in areas of special flood hazard due to development.

Critical facility means all or any portion of an integral and readily identifiable facility such as a school, nursing home, hospital, police, fire, or emergency response installation, penal institution, installation that produces, uses or stores hazardous materials or hazardous waste, or any other facility that would potentially create a danger to the public health, safety, or welfare if the facility was compromised by flooding.

Design flood means the flood associated with the greater of the following two areas:

(1) Area with a floodplain subject to a 1-percent or greater chance of flooding in any year; or

(2) Area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Design flood elevation means the elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal

220 to 2 feet. [This term is also defined in *FBC*, B, Section 202.]

222 *Development* means any man-made change to improved or
224 unimproved real estate, including but not limited to, buildings or
226 other structures, tanks, temporary structures, temporary or
228 permanent storage of equipment or materials, mining, dredging,
filling, grading, paving, excavations, drilling operations, or any
other land disturbing activities.

DRC means the Development Review Committee as defined
in Section 34-5.

Encroachment means the placement of fill, excavation,
buildings, permanent structures or other development into a flood
hazard area that may impede or alter the flow capacity of riverine
flood hazard areas.

Existing building and *existing structure* means any buildings
and structures for which the “start of construction” commenced
before December 1, 1981. [These terms are also defined in *FBC*, B,
Section 202.]

Existing manufactured home park or subdivision means a
manufactured home park or subdivision for which the construction
of facilities for servicing the lots on which the manufactured homes
are to be affixed (including, at a minimum, the installation of
utilities, the construction of streets, and either final site grading or
the pouring of concrete pads) is completed before December 1,
1981.

Federal Emergency Management Agency (FEMA) means
the federal agency that, in addition to carrying out other functions,
administers the National Flood Insurance Program.

Flood or *flooding* means a general and temporary condition
of partial or complete inundation of normally dry land from:

- (1) The overflow of inland or tidal waters; or
- (2) The unusual and rapid accumulation or runoff of
surface waters from any source.

Flood damage-resistant materials means any construction
material capable of withstanding direct and prolonged contact with
floodwaters without sustaining any damage that requires more than
cosmetic repair. [This term is also defined in *FBC*, B, Section 202.]

56 *Flood hazard area* means the greater of the following two
areas:

268 (1) The area within a floodplain subject to a 1-percent or
greater chance of flooding in any year; or

270 (2) The area designated as a flood hazard area on the
community's flood hazard map, or otherwise legally designated.

272 *Flood Insurance Rate Map (FIRM)* means the official map
of the County on which FEMA has delineated both special flood
274 hazard areas and the risk premium zones applicable to the
community. [This term is also defined in *FBC*, B, Section 202.]

276 *Flood Insurance Study (FIS)* means the official report
provided by FEMA that contains the FIRM, the Flood Boundary and
278 Floodway Map (if applicable), the water surface elevations of the
base flood, and supporting technical data. [This term is also defined
280 in *FBC*, B, Section 202.]

282 *Floodplain Administrator* means the office or position
designated under Section 19-21 and charged with the administration
284 and enforcement of this chapter (may also be referred to as the
Floodplain Manager).
6

288 *Floodplain development permit or approval* means an
official document or certificate issued by the County, or other
290 evidence of approval or concurrence, which authorizes performance
of specific development activities that are located in flood hazard
292 areas and that are determined to be compliant with this chapter.

294 *Floodway* means the channel of a river or other riverine
watercourse and the adjacent land areas that must be reserved in
296 order to discharge the base flood without cumulatively increasing
the water surface elevation more than one (1) foot. [This term is also
298 defined in *FBC*, B, Section 202.]

300 *Floodway encroachment analysis* means an engineering
analysis of the impact that a proposed encroachment into a floodway
302 is expected to have on the floodway boundaries and base flood
elevations; the evaluation must be prepared by a qualified Florida
304 licensed engineer using standard engineering methods and models.

306 *Florida Building Code (FBC)* means the family of codes
adopted by the Florida Building Commission, including: *Florida*
3 *Building Code, Building; Florida Building Code, Residential;*
Florida Building Code, Existing Building; Florida Building Code,

310 *Mechanical; Florida Building Code, Plumbing; Florida Building*
312 *Code, Fuel Gas.*

314 *Functionally dependent use* means a use which cannot
316 perform its intended purpose unless it is located or carried out in
318 close proximity to water, including only docking facilities, port
facilities that are necessary for the loading and unloading of cargo
or passengers, and ship building and ship repair facilities; the term
does not include long-term storage or related manufacturing
facilities.

320 *Hardship (as related to variances of this chapter)* means the
322 exceptional difficulty associated with the land that would result
324 from a failure to grant the requested variance. A hardship must be
exceptional, unusual, and peculiar to the property involved. Mere
economic or financial hardship alone is not exceptional, unusual or
326 peculiar. Inconvenience, aesthetic considerations, physical
handicaps, personal preferences, or the disapproval of one's
328 neighbors likewise cannot, as a rule, qualify as a hardship. All of
these problems can be resolved through other means without
330 granting a variance, even if the alternative is more expensive, or
requires the property owner to build elsewhere or put the parcel to a
332 different use than originally intended.

334 *Highest adjacent grade* means the highest natural elevation
of the ground surface prior to construction next to the proposed walls
or foundation of a structure.

336 *Historic structure* means any structure that is determined
338 eligible for the exception to the flood hazard area requirements of
the *Florida Building Code, Existing Building*, Chapter 12 Historic
340 Buildings.

342 *Letter of Map Change (LOMC)* means an official
determination issued by FEMA that amends or revises an effective
344 FIRM or Flood Insurance Study. Letters of Map Change include:

346 (1) *Letter of Map Amendment (LOMA)* that means an
amendment based on technical data showing that a
348 property was incorrectly included in a designated special
flood hazard area. A LOMA amends the current
350 effective FIRM and establishes that a specific property,
portion of a property, or structure is not located in a
352 special flood hazard area.

354 (2) *Letter of Map Revision (LOMR)* that means a revision
based on technical data that may show changes to flood

356 zones, flood elevations, special flood hazard area
358 boundaries and floodway delineations, and other
planimetric features.

(3) *Letter of Map Revision Based on Fill (LOMR-F)* that
360 means a determination that a structure or parcel of land
362 has been elevated by fill above the base flood elevation,
and is, therefore, no longer located within the special
364 flood hazard area. In order to qualify for this
determination, the fill must have been permitted and
366 placed in accordance with the County's floodplain
management regulations.

(4) *Conditional Letter of Map Revision (CLOMR)* that
368 means a formal review and comment as to whether a
proposed flood protection project or other project
370 complies with the minimum NFIP requirements for such
projects with respect to delineation of special flood
372 hazard areas. A CLOMR does not revise the effective
FIRM or Flood Insurance Study; upon submission and
374 approval of certified as-built documentation, a Letter of
Map Revision may be issued by FEMA to revise the
376 effective FIRM.

Light-duty truck means, as defined in 40 C.F.R. 86.082-2,
378 any motor vehicle rated at 8,500 pounds Gross Vehicular Weight
Rating or less which has a vehicular curb weight of 6,000 pounds or
380 less and which has a basic vehicle frontal area of 45 square feet or
less, which is:

382 (1) Designed primarily for purposes of transportation of
384 property or is a derivation of such a vehicle; or

386 (2) Designed primarily for transportation of persons and
has a capacity of more than 12 persons; or
388

390 (3) Available with special features enabling off-street or
off-highway operation and use.

Lowest floor means the lowest floor of the lowest enclosed
392 area of a building or structure, including basement, but excluding
any unfinished or flood-resistant enclosure, other than a basement,
394 usable solely for vehicle parking, building access or limited storage
provided that such enclosure is not built so as to render the structure
396 in violation of the non-elevation requirements of the *Florida
Building Code* or ASCE 24. [This term is also defined in *FBC*, B,
3 Section 202.]

400 *Manufactured home* means a structure, transportable in one
402 or more sections, which is eight (8) feet or more in width and greater
404 than four hundred (400) square feet, and which is built on a
406 permanent, integral chassis and is designed for use with or without
408 a permanent foundation when attached to the required utilities. The
 term "manufactured home" does not include a "recreational vehicle"
 or "park trailer." [This term is also defined in rule 15C-1.0101,
 F.A.C.]

410 *Manufactured home park or subdivision* means a parcel (or
412 contiguous parcels) of land divided into two or more manufactured
 home lots for rent or sale.

414 *Market value* means the price at which a property will
416 change hands between a willing buyer and a willing seller, neither
418 party being under compulsion to buy or sell and both having
420 reasonable knowledge of relevant facts. As used in this chapter, the
422 term refers to the market value of buildings and structures,
424 excluding the land and other improvements on the parcel. Market
 value may be established by a qualified independent appraiser (other
 than limited or curbside appraisal or one based on income
 approach), Actual Cash Value (replacement cost depreciated for age
 and quality of construction), or tax assessment value adjusted to
 approximate market value by a factor provided by the Orange
 County Property Appraiser.

426 *New construction* means, for the purposes of administration
428 of this chapter and the flood resistant construction requirements of
430 the *Florida Building Code*, structures for which the "start of
 construction" commenced on or after December 1, 1981, and
 includes any subsequent improvements to such structures.

432 *Park trailer* means a transportable unit which has a body
434 width not exceeding fourteen (14) feet and which is built on a single
436 chassis and is designed to provide seasonal or temporary living
 quarters when connected to utilities necessary for operation of
 installed fixtures and appliances. [Defined in section 320.01, F.S.]

438 *Recreational vehicle* [see section 320.01, F.S.] means a
440 vehicle, including a park trailer, which is:

- 442 (1) Built on a single chassis;
- (2) Four hundred (400) square feet or less when
 measured at the largest horizontal projection;

444 (3) Designed to be self-propelled or permanently
towable by a light-duty truck; and

446 (4) Designed primarily not for use as a permanent
dwelling but as temporary living quarters for recreational, camping,
448 travel, or seasonal use.

450 *Special flood hazard area* means an area in the floodplain
subject to a 1 percent or greater chance of flooding in any given year.
Special flood hazard areas are shown on FIRMs as Zone A, AO,
452 A1-A30, AE, A99, AH, V1-V30, VE or V. [This term is also defined
in *FBC*, B Section 202.]

454 *Start of construction* means the date of issuance of permits
for new construction and substantial improvements, provided the
456 actual start of construction, repair, reconstruction, rehabilitation,
458 addition, placement, or other improvement is within 180 days of the
date of the issuance. The actual start of construction means either
460 the first placement of permanent construction of a building
(including a manufactured home) on a site, such as the pouring of
462 slab or footings, the installation of piles, or the construction of
columns.

464 Permanent construction does not include land preparation (such as
6 clearing, grading, or filling), the installation of streets or walkways,
excavation for a basement, footings, piers, or foundations, the
468 erection of temporary forms or the installation of accessory
buildings such as garages or sheds not occupied as dwelling units or
470 not part of the main buildings. For a substantial improvement, the
actual “start of construction” means the first alteration of any wall,
472 ceiling, floor or other structural part of a building, whether or not
that alteration affects the external dimensions of the building. [This
474 term is also defined in *FBC*, B Section 202.]

476 *Substantial damage* means damage of any origin sustained
by a building or structure whereby the cost of restoring the building
478 or structure to its before-damaged condition would equal or exceed
50 percent of the market value of the building or structure before the
480 damage occurred. The term also includes flood-related damage
sustained by a structure on two separate occasions during a 10-year
482 period for which the cost of repairs at the time of each such flood
event, on average, equals or exceeds 25 percent of the market value
484 of the structure before the damage occurred. [This term is also
defined in *FBC*, B Section 202.]

486 *Substantial improvement* means any combination of repair,
3 reconstruction, rehabilitation, alteration, addition, or other

improvement of a building or structure taking place during the life of the building or structure, the cumulative cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. The period of accumulation begins when the first improvement or repair of each building or structure is permitted subsequent to September 25, 2009. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

(1) Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions; or

(2) Any alteration of a historic structure provided the alteration will not preclude the structure's continued designation as a historic structure.

Variance means a grant of relief from the requirements of this chapter, or the flood resistant construction requirements of the *Florida Building Code*, which permits construction in a manner that would not otherwise be permitted by this chapter or the *Florida Building Code*.

Watercourse means a river, creek, stream, channel or other topographic feature in, on, through, or over which water flows at least periodically.

Sec. 19-6. Warning.

The degree of flood protection required by this chapter and the *Florida Building Code*, as may be amended from time to time by the Board of County Commissioners, is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering considerations. **Larger floods can and will occur.** Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside of mapped special flood hazard areas, or that uses permitted within such flood hazard areas, will be free from flooding or flood damage. The flood hazard areas and base flood elevations contained in the Flood Insurance Study and shown on FIRMs and the requirements of Sections 59 and 60 of Title 44 of the Code of Federal Regulations may be revised by FEMA requiring the County to revise these regulations to remain eligible for participation in the NFIP. No guaranty of vested use, existing use, or future use is implied or expressed by compliance with this chapter.

36 **Sec. 19-7. Disclaimer of liability.**

538 This chapter shall not create liability on the part of the
540 County, its Board of County Commissioners, or any officer or
542 employee of the County for any flood damage that results from
 reliance on this chapter or any administrative decision lawfully
 made pursuant to this chapter.

544 **Secs. 19-8—19-10. Reserved.**

546 **DIVISION 2. APPLICABILITY**

548 **Sec. 19-11. General.**

550 Where there is a conflict between a general requirement and
552 a specific requirement of this chapter, the specific requirement is
554 applicable.

556 **Sec. 19-12. Areas to which this chapter applies.**

 This chapter applies to all flood hazard areas, as established
8 in Section 19-13, within the unincorporated areas of Orange County.

560 **Sec. 19-13. Basis for establishing flood hazard areas.**

562 The Flood Insurance Study for Orange County, Florida and
564 Incorporated Areas dated September 24, 2021, and all subsequent
566 amendments and revisions, and the accompanying FIRMs, and all
568 subsequent amendments and revisions to FIRMs, are adopted by
 reference as a part of this chapter and serve as the minimum basis
 for establishing flood hazard areas. Studies and maps that establish
 flood hazard areas are on file at the Orange County Public Works
 Department.

570 **Sec. 19-14. Submission of additional data to establish flood**
572 **hazard areas.**

574 To establish flood hazard areas and base flood elevations,
576 pursuant to Article I, Division 5 of this chapter, the Floodplain
578 Administrator may require submission of additional data. Where
 field surveyed topography prepared by a Florida licensed
 professional surveyor or digital topography accepted by the
 community indicates that ground elevations:

- 0 (1) Are below the closest applicable base flood

elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area will be considered as flood hazard area and subject to the requirements of this chapter and, as applicable, the requirements of the *Florida Building Code*.

(2) Are above the closest applicable base flood elevation, the area will be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.

Sec. 19-15. Other laws.

The provisions of this chapter do not nullify any provisions of local, state or federal law, except as set forth in Section 19-16. Specifically:

(1) This chapter is cumulative and supplemental to other existing county regulations. Where this chapter and the regulations contained herein conflict, overlap, or are inconsistent with any other county ordinance or regulation, whichever ordinance or regulation imposes the more stringent restriction shall prevail.

(2) Receipt of a floodplain development permit or approval from the Floodplain Administrator does not relieve the permittee from compliance with any other applicable Code provisions including, but not limited to, article VI, pumping and dredging control, and article X, conservation ordinance, of chapter 15 of the Code, or from obtaining all other applicable local permits.

Sec. 19-16. Abrogation and greater restrictions.

This chapter supersedes any ordinance in effect for management of development in flood hazard areas. However, this chapter is not intended to repeal or abrogate any existing ordinances or regulations including but not limited to land development regulations, zoning ordinances, stormwater management regulations, or the *Florida Building Code*. In the event of a conflict between this chapter and any other ordinance, the more restrictive provision will govern. This chapter will not impair any deed restriction, covenant, or easement, but any land that is subject to such interests will also be governed by this chapter.

Sec. 19-17. Interpretation.

In the interpretation and application of this chapter, all provisions will be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body;
- and
- (3) Deemed neither to limit nor repeal any other powers granted to the County under state statutes.

Secs. 19-18—19-20. Reserved.

DIVISION 3. DUTIES AND POWERS OF THE FLOODPLAIN ADMINISTRATOR

Sec. 19-21. Designation.

The Director of Public Works is designated as the Floodplain Administrator. The Floodplain Administrator may delegate performance of certain duties to other employees.

Sec. 19-22. General.

The Floodplain Administrator is authorized and directed to administer and enforce the provisions of this chapter. The Floodplain Administrator has the authority to render interpretations of this chapter consistent with the intent and purpose of this chapter and may establish policies and procedures in order to clarify the application of its provisions. Interpretations, policies, and procedures will not have the effect of waiving requirements specifically provided in this chapter without the granting of a variance pursuant to Article I, Division 7 of this chapter.

Sec. 19-23. Applications and permits.

The Floodplain Administrator, in coordination with other pertinent offices of the County, shall:

- (1) Review applications and plans to determine whether proposed new development will be located in flood hazard areas;
- (2) Review applications for modification of any existing development in flood hazard areas for compliance with the requirements of this chapter;
- (3) Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries; a person contesting the determination will have the opportunity to appeal the interpretation;

670 (4) Provide available flood elevation and flood hazard
information;

672 (5) Determine whether additional flood hazard data will
be obtained from other sources or will be developed by an applicant;

674 (6) Review applications to determine whether proposed
development will be reasonably safe from flooding;

676 (7) Coordinate requests for changes to the FIS or FIRM
with the requester and FEMA;

678 (8) Participate and provide recommendations in public
hearings for variances to this chapter and the flood provisions of the
680 *Florida Building Code*;

682 (9) Issue floodplain development permits or approvals
for development other than buildings and structures that are subject
to the *Florida Building Code*, including buildings, structures and
684 facilities exempt from the *Florida Building Code*, when compliance
with this chapter is demonstrated, or disapprove the same in the
686 event of noncompliance; and

688 (10) Coordinate with and provide comments to the
Building Official to assure that applications, plan reviews, and
inspections for buildings and structures in flood hazard areas
690 comply with the applicable provisions of this chapter.

692 **Sec. 19-24. Substantial improvement and substantial damage**
694 **determinations.**

696 For applications for building permits to improve buildings
and structures, including alterations, movement, enlargement,
replacement, repair, change of occupancy, additions, rehabilitations,
698 renovations, substantial improvements, repairs of substantial
damage, and any other improvement of or work on such buildings
700 and structures, the Floodplain Administrator, in coordination with
the Building Official, shall:

702 (1) Estimate the market value, or require the applicant to
704 obtain an appraisal of the market value prepared by a qualified
independent appraiser, of the building or structure before the start of
706 construction of the proposed work; in the case of repair, the market
value of the building or structure must be the market value before
708 the damage occurred and before any repairs are made;

710 (2) Compare the cost to perform the improvement, the
cost to repair a damaged building to its pre-damaged condition, or

the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;

(3) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of “substantial improvement,” and for proposed work to repair damage caused by flooding, the determination requires evaluation of previous permits issued to repair flood-related damage as specified in the definition of “substantial damage;” and

(4) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the *Florida Building Code* and this chapter is required.

Sec. 19-25. Modifications of the strict application of the requirements of the *Florida Building Code*.

The Floodplain Administrator shall review requests submitted to the Building Official that seek approval to modify the strict application of the flood load and flood resistant construction requirements of the *Florida Building Code* to determine whether such requests require the granting of a variance pursuant to Article I, Division 7 of this chapter.

Sec. 19-26. Notices and orders.

The Floodplain Administrator shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this chapter.

Sec. 19-27. Inspections.

The Floodplain Administrator shall make the required inspections as specified in Article I, Division 6 of this chapter for development that is not subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect flood hazard areas to determine if development is undertaken without issuance of a permit.

758 **Sec. 19-28. Other duties of the Floodplain Administrator.**

760 Other duties of the Floodplain Administrator include, but are
762 not limited to:

764 (1) Establish, in coordination with the Building Official,
766 procedures for administering and documenting determinations of
 substantial improvement and substantial damage made pursuant to
 Section 19-24;

768 (2) Require that applicants proposing alteration of a
770 watercourse notify adjacent communities and the Florida Division
772 of Emergency Management, State Floodplain Management Office,
 or other State office to which the duties of the State Floodplain
 Management Office may be transferred, and submit copies of such
 notifications to FEMA;

774 (3) Require applicants who submit hydrologic and
776 hydraulic engineering analyses to support permit applications to
778 submit to FEMA the data and information necessary to maintain the
780 FIRMs if the analyses propose to change base flood elevations,
 flood hazard area boundaries, or floodway designations; such
 submissions must be made within six months of such data becoming
 available;

782 (4) Review required design certifications and
784 documentation of elevations specified by this chapter and the
 Florida Building Code to determine that such certifications and
 documentations are complete; and

786 (5) Notify FEMA when the boundaries of Orange
788 County are modified.

790 **Sec. 19-29. Floodplain management records.**

792 Regardless of any limitation on the period required for
794 retention of public records under State law, the Floodplain
796 Administrator will maintain and permanently keep and make
798 available for public inspection all records that are necessary for the
800 administration of this chapter and the flood resistant construction
 requirements of the *Florida Building Code*, including FIRMs;
 Letters of Map Change; records of issuance of permits and denial of
 permits; determinations of whether proposed work constitutes
 substantial improvement or repair of substantial damage; required
 design certifications and documentation of elevations specified by

the *Florida Building Code* and this chapter; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this chapter and the flood resistant construction requirements of the *Florida Building Code*. These records will be available for public inspection at the Orange County Public Works Department.

Sec. 19-30. Reserved.

DIVISION 4. PERMITS

Sec. 19-31. Permits required; fee.

(1) Any owner or owner's authorized agent (hereinafter "applicant") who intends to undertake any development activity within the scope of this chapter, including buildings, structures and facilities exempt from the *Florida Building Code*, which is wholly within or partially within any flood hazard area must first make application to the Floodplain Administrator, and the Building Official if applicable, and must obtain the required permit(s) and approval(s). No such permit or approval will be issued until compliance with the requirements of this chapter and all other applicable codes and regulations has been satisfied.

(2) Whenever a floodplain development permit or approval is required by this chapter, a fee must be paid at the time of filing the application for such permit or approval, as determined by resolution of the Board of County Commissioners from time to time.

Sec. 19-32. Floodplain development permits or approvals.

Floodplain development permits or approvals will be issued pursuant to this chapter for any development activities not subject to the requirements of the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*. Depending on the nature and extent of proposed development that includes a building or structure, the Floodplain Administrator may determine that a floodplain development permit or approval is required in addition to a building permit. The conditions and plans attached to the floodplain development permit will become part of the building permit. The Floodplain Administrator must issue or deny an application for floodplain development permits or approvals within fourteen (14) days from receipt of completed applications unless a

technical justification or additional information is required.

Sec. 19-33. Buildings, structures and facilities exempt from the *Florida Building Code*.

Pursuant to the requirements of federal regulation for participation in the NFIP (44 C.F.R. Sections 59 and 60), floodplain development permits or approvals are required for the following buildings, structures and facilities that are exempt from the *Florida Building Code* and any further exemptions provided by law, which are subject to the requirements of this chapter:

(1) Railroads and ancillary facilities associated with the railroad.

(2) Nonresidential farm buildings on farms, as provided in section 604.50, F.S.

(3) Temporary buildings or sheds used exclusively for construction purposes.

(4) Mobile or modular structures used as temporary offices.

(5) Those structures or facilities of electric utilities, as defined in section 366.02, F.S., which are directly involved in the generation, transmission, or distribution of electricity.

(6) Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term “chickee” means an open-sided wooden hut that has a thatched roof of palm or palmetto or other traditional materials, and that does not incorporate any electrical, plumbing, or other non-wood features.

(7) Family mausoleums not exceeding 250 square feet in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete.

(8) Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system.

(9) Structures identified in section 553.73(10)(k), F.S., are not exempt from the *Florida Building Code* if such structures are located in flood hazard areas established on Flood Insurance Rate Maps.

886 **Sec. 19-34. Application for a permit or approval.**

888 To obtain a floodplain development permit or approval the
890 applicant must first file an application in writing on a form furnished
 by the County. The information provided must:

892 (1) Identify and describe the development to be covered
 by the permit or approval;

894 (2) Describe the land on which the proposed
 development is to be conducted by legal description, street address
896 or similar description that will readily identify and definitively
 locate the site;

898 (3) Indicate the use and occupancy for which the
 proposed development is intended;

900 (4) Be accompanied by a site plan or construction
 documents as specified in Article I, Division 5 of this chapter;

902 (5) State the valuation of the proposed work;

904 (6) Be signed by the applicant and the applicant's
 authorized agent (if the applicant is represented by an agent); and

906 (7) Give such other data and information as required by
 the Floodplain Administrator.

908 **Sec. 19-35. Validity of permit or approval.**

910 The issuance of a floodplain development permit or approval
 pursuant to this chapter must not be construed to be a permit for, or
912 approval of, any violation of this chapter, the *Florida Building*
 Codes, or any other ordinance of this community. The issuance of
914 permits based on submitted applications, construction documents,
 and information will not prevent the Floodplain Administrator from
 requiring the correction of errors and omissions.

916 **Sec. 19-36. Expiration.**

918 A floodplain development permit or approval will become
920 invalid unless the work authorized by such permit is commenced
 within 180 days after its issuance, or if the work authorized is
922 suspended or abandoned for a period of 180 days after the work
 commences. Extensions for periods of not more than 180 days each
924 may be requested. Requests for extensions must be in writing, and
 may be issued only if justifiable cause is demonstrated.

926 **Sec. 19-37. Suspension or revocation.**

928 The Floodplain Administrator is authorized to suspend or
930 revoke a floodplain development permit or approval if the permit
932 was issued in error, on the basis of incorrect, inaccurate or
934 incomplete information, or in violation of this chapter or any other
 ordinance, regulation or requirement of the County related to the
 development.

936 **Sec. 19-38. Other permits required.**

938 Floodplain development permits and building permits must
940 include a condition that all other applicable local, state or federal
 permits be obtained before commencement of the permitted
 development, including but not limited to the following:

942 (1) The St. Johns River Water Management District or
 South Florida Water Management District; section 373.036, F.S.;

944 (2) Florida Department of Health for onsite sewage
946 treatment and disposal systems; section 381.0065, F.S., and Chapter
 64E-6, F.A.C.;

948 (3) Florida Department of Environmental Protection for
950 activities that affect wetlands and alter surface water flows, in
 conjunction with the U.S. Army Corps of Engineers; Section 404 of
 the Clean Water Act, or under its jurisdiction pursuant to part IV of
 Chapter 373, F.S.; and

952 (4) Federal permits and approvals.

954 **Secs. 19-39—19-40. Reserved.**

956 **DIVISION 5. SITE PLANS AND CONSTRUCTION**
958 **DOCUMENTS**

960 **Sec. 19-41. Information for development in flood hazard**
962 **areas.**

964 The site plan or construction documents for any
 development subject to the requirements of this chapter must be
 drawn to scale and must include, as applicable to the proposed
 development:

966 (1) Delineation of flood hazard areas, floodway

boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.

(2) Where base flood elevations or floodway data are not included on the FIRM or in the FIS, they must be established in accordance with Section 19-42(2).

(3) Where the parcel on which the proposed development will take place will have more than 50 lots or is larger than 5 acres and the base flood elevations are not included on the FIRM or in the FIS, such elevations must be established in accordance with Section 19-42(1).

(4) Location of the proposed activity and proposed structures, and locations of existing buildings and structures.

(5) Location, extent, amount, and proposed final grades of any filling, grading, or excavation.

(6) Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.

(7) Existing and proposed alignment of any proposed alteration of a watercourse.

The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by this chapter, but that are not required to be prepared by a registered design professional if the Floodplain Administrator determines that the nature of the proposed development is such that the review of such submissions is not necessary to ascertain compliance with this chapter.

Sec. 19-42. Information in flood hazard areas without base flood elevations (approximate Zone A).

Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Floodplain Administrator shall:

(1) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices;

(2) Obtain, review, and provide to applicants base flood elevation and floodway data available from a federal or state agency

1006 or other source or require applicant to obtain and use base flood
1008 elevation and floodway data available from a federal or state agency
or other source; and

1010 (3) Where the base flood elevation data are to be used to
1012 support a Letter of Map Change from FEMA, advise the applicant
1014 that the analyses must be prepared by a Florida licensed engineer in
a format required by FEMA, and that it must be the responsibility of
the applicant to satisfy the submittal requirements and pay the
processing fees.

Sec. 19-43. Additional analyses and certifications.

1016 As applicable to the location and nature of the proposed
1018 development activity, and in addition to the requirements of this
1020 section, the applicant must have the following analyses signed and
sealed by a Florida licensed engineer for submission with the site
plan and construction documents:

1022 (1) For development activities proposed to be located in
1024 a regulatory floodway, a floodway encroachment analysis that
demonstrates that the encroachment of the proposed development
will not cause any increase in base flood elevations; where the
1026 applicant proposes to undertake development activities that do
increase base flood elevations, the applicant must submit such
1028 analysis to FEMA as specified in Section 19-44 and must submit the
Conditional Letter of Map Revision, if issued by FEMA, with the
1030 site plan and construction documents.

1032 (2) For development activities proposed to be located in
a riverine flood hazard area for which base flood elevations are
1034 included in the FIS or on the FIRM and floodways have not been
designated, hydrologic and hydraulic analyses that demonstrate that
the cumulative effect of the proposed development, when combined
1036 with all other existing and anticipated flood hazard area
encroachments, will not increase the base flood elevation more than
1038 one (1) foot at any point within the County. This requirement does
not apply in isolated flood hazard areas not connected to a riverine
1040 flood hazard area or in flood hazard areas identified as Zone AO or
Zone AH.

1042 (3) For alteration of a watercourse, an engineering
analysis prepared in accordance with standard engineering practices
1044 which demonstrates that the flood-carrying capacity of the altered
or relocated portion of the watercourse will not be decreased or
1046 adversely affected, and certification that the altered watercourse
must be maintained in a manner which preserves the channel's flood-
1048 carrying capacity; the applicant must submit the analysis to FEMA

as specified in Section 19-44.

Sec. 19-44. Submission of additional data.

When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses must be prepared by a Florida licensed engineer in a format required by FEMA. Submittal requirements and processing fees are the responsibility of the applicant.

Secs. 19-45—19-50. Reserved.

DIVISION 6. INSPECTIONS

Sec. 19-51. General.

Development for which a floodplain development permit or approval is required will be subject to inspection.

Sec. 19-52. Development other than buildings and structures.

The Floodplain Administrator will inspect all development to determine compliance with the requirements of this chapter and the conditions of issued floodplain development permits or approvals.

Sec. 19-53. Buildings, structures and facilities exempt from the *Florida Building Code*.

The Floodplain Administrator will inspect buildings, structures and facilities exempt from the *Florida Building Code* to determine compliance with the requirements of this chapter and the conditions of issued floodplain development permits or approvals.

Sec. 19-54. Buildings, structures and facilities exempt from the *Florida Building Code*, lowest floor inspection.

Upon placement of the lowest floor, including basement, and prior to further vertical construction, the owner of a building, structure or facility exempt from the *Florida Building Code*, or the owner's authorized agent, must submit to the Floodplain

Administrator:

(1) If a design flood elevation was used to determine the required elevation of the lowest floor, the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor; or

(2) If the elevation used to determine the required elevation of the lowest floor was determined in accordance with Section 19-42, the documentation of height of the lowest floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.

Sec. 19-55. Buildings, structures and facilities exempt from the *Florida Building Code*, final inspection.

As part of the final inspection, the owner or owner's authorized agent must submit to the Floodplain Administrator a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade; such certifications and documentations must be prepared as specified in Section 19-54.

Sec. 19-56. Manufactured homes.

The Floodplain Administrator shall inspect manufactured homes that are installed or replaced in flood hazard areas to determine compliance with the requirements of this chapter and the conditions of the issued permit. Upon placement of a manufactured home, certification of the elevation of the lowest floor must be submitted to the Floodplain Administrator.

Secs. 19-57—19-60. Reserved.

DIVISION 7. VARIANCES AND APPEALS

Sec. 19-61. General.

The DRC will hear and decide on requests for appeals and applications for variances from the strict application of this chapter. Pursuant to section 553.73(5), F.S., the DRC will hear and decide on requests for appeals and applications for variances from the strict application of the flood resistant construction requirements of the *Florida Building Code*. All decisions of the DRC must be in writing.

1140 **Sec. 19-62. Conduct of public hearings on variance requests;**
1142 **appeals to DRC.**

1144 (1) On an application for a variance or an appeal from a
1146 decision of the Floodplain Administrator, the DRC will hold a
1148 public hearing. The hearing must be held within thirty (30) days
1150 from receipt of the appeal or application unless additional
 information is requested, in which case the DRC will hold a hearing
 on the appeal or application within thirty (30) days from the receipt
 of the information. At the hearing any party may appear in person
 or by agent or attorney and present written or oral evidence.

1152 (2) The DRC must decide an appeal from a decision of
1154 the Floodplain Administrator or a variance application within thirty
1156 (30) days after the hearing. In passing upon an appeal, the DRC may,
 in conformity with the terms of this chapter, reverse or affirm,
 wholly or in part, or modify the order, requirement, decision or
 determination appealed from.

1158 **Sec. 19-63. Appeals to board of county commissioners.**

1160 Any appeal of a final decision of the DRC must be made to
 the Board of County Commissioners within thirty (30) days of the
 mailing of notice of the action of the DRC. Hand delivery of notice
 may be substituted for mail delivery. All appeals must be in writing
1164 and filed with the clerk to the Board of County Commissioners with
 a copy of the appeal delivered to the Floodplain Administrator
 within the same time frame. All written appeals must state with
1166 particularity all the grounds of appeal. The Board of County
 Commissioners will conduct a de novo hearing upon the appeal
1168 taken from the ruling of the DRC and hear the testimony of
 witnesses and other evidence offered by the aggrieved person and
1170 interested parties to the appeal and may in conformity with this
 chapter and the rules and regulations adopted thereunder, reverse, or
1172 affirm, wholly or partly, or may modify the order, requirement,
 decision or determination of the DRC. Any person aggrieved by the
1174 decision of the Board of County Commissioners may file a petition
 for writ of certiorari as authorized in the manner prescribed by the
1176 state appellate rules with a court of competent jurisdiction, to review
 the decision of the Board of County Commissioners.

1178 **Sec. 19-64. Limitations on authority to grant variances.**

1180 The DRC will base its decisions on variances on technical
1182 justifications submitted by applicants, the considerations for
 issuance in Section 19-68, the conditions of issuance set forth in
 Section 19-69, and the comments and recommendations of the
 4

Floodplain Administrator and the Building Official. The DRC has the right to attach such conditions as it deems necessary to further the purposes and objectives of this chapter.

Sec. 19-65. Restrictions in floodways.

A variance will not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in Section 19-43.

Sec. 19-66. Historic buildings.

A variance is authorized to be issued for the repair, improvement, or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the *Florida Building Code, Existing Building*, Chapter 12 Historic Buildings, upon a determination that the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a variance will not be granted and the building and any repair, improvement, and rehabilitation will be subject to the requirements of the *Florida Building Code*.

Sec. 19-67. Functionally dependent uses.

A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this chapter, provided the variance meets the requirements of Section 19-65, is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials that minimize flood damage during occurrence of the base flood.

Sec. 19-68. Considerations for issuance of variances.

In reviewing requests for variances, the DRC will consider all technical evaluations, all relevant factors, all other applicable provisions of the *Florida Building Code*, this chapter, and the following:

- (1) The danger that materials and debris may be swept onto other lands resulting in further injury or damage;

2 (2) The danger to life and property due to flooding or erosion damage;

1234 (3) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;

1236 (4) The importance of the services provided by the proposed development to the community;

1238 (5) The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion;

1242 (6) The compatibility of the proposed development with existing and anticipated development;

1244 (7) The relationship of the proposed development to the comprehensive plan and floodplain management program for the area;

1246 (8) The safety of access to the property in times of flooding for ordinary and emergency vehicles;

8 (9) The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and

1252 (10) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.

1256 **Sec. 19-69. Conditions for issuance of variances.**

1258 Variances may be issued only upon:

1260 (1) Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this chapter or the required elevation standards;

(2) Determination by the DRC that:

1264 (a) Failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship;

1268 (b) The granting of a variance will not result in
1270 increased flood heights, additional threats to public safety,
extraordinary public expense, nor create nuisances, cause fraud on
1272 or victimization of the public or conflict with existing local laws and
ordinances; and

1274 (c) The variance is the minimum necessary,
considering the flood hazard, to afford relief;

1276 (3) Receipt of a signed statement by the applicant that
the variance, if granted, must be recorded by the Floodplain
Administrator in the official records of Orange County at the sole
1278 cost of the applicant in such a manner that it appears in the chain of
title of the affected parcel of land; and

1280 (4) If the request is for a variance to allow construction
of the lowest floor of a new building, or substantial improvement of
1282 a building, below the required elevation, a copy in the record of a
written notice from the Floodplain Administrator to the applicant for
1284 the variance, specifying the difference between the base flood
elevation and the proposed elevation of the lowest floor, stating that
1286 the cost of federal flood insurance will be commensurate with the
increased risk resulting from the reduced floor elevation (up to
1288 amounts as high as \$25 for \$100 of insurance coverage), and stating
that construction below the base flood elevation increases risks to
1290 life and property.

Secs. 19-70. Agricultural structures.

1292 A variance is authorized to be issued for the construction or
1294 substantial improvement of agricultural structures provided the
requirements of this section are satisfied and:

1296 (1) A determination has been made that the proposed
1298 agricultural structure:

1300 (a) Is used exclusively in connection with the
production, harvesting, storage, raising, or drying of
1302 agricultural commodities and livestock, or storage of
tools or equipment used in connection with these
1304 purposes or uses, and will be restricted to such
exclusive uses.

1306 (b) Has low damage potential (amount of physical
damage, contents damage, and loss of function).

1308 (c) Does not increase risks and pose a danger to public

health, safety, and welfare if flooded and contents are released, including but not limited to the effects of flooding on manure storage, livestock confinement operations, liquified natural gas terminals, and production and storage of highly volatile, toxic, or water-reactive materials.

(d) Complies with the wet floodproofing construction requirements of paragraph (2), below.

(2) Wet floodproofing construction requirements.

(a) Anchored to resist flotation, collapse, and lateral movement.

(b) When enclosed by walls, walls have flood openings that comply with the flood opening requirements of ASCE 24, Chapter 2.

(c) Flood damage-resistant materials are used below the base flood elevation plus one (1) foot.

(d) Mechanical, electrical, and utility equipment, including plumbing fixtures, are elevated above the base flood elevation plus one (1) foot.

DIVISION 8. VIOLATIONS; PENALTIES AND REMEDIES

Sec. 19-71. Violations.

Violation of the provisions of this chapter or failure to comply with any of its requirements, including violation of any resolutions adopted hereunder, or of any conditions and safeguards established in connection with the grant of a variance, may be punished as provided in section 1-9. Any person who violates any provision of this chapter, or any provision of any resolution enacted pursuant to the authority of this chapter, or allows a violation to continue, may be prosecuted before the code enforcement board or special master in accordance with chapter 11. Each day such violation continues will be considered a separate offense.

Sec. 19-72. Authority.

For development that is not within the scope of the *Florida Building Code*, but that is regulated by this chapter and that is determined to be a violation, the Floodplain Administrator is

1350 authorized to serve notices of violation or stop work orders to
1352 owners of the property involved, to the owner's agent, or to the
person or persons performing the work.

1354 **Sec. 19-73. Remedies, costs, and fees.**

1356 No provision of this chapter will prevent the county from
1358 taking any other legal or equitable remedy available to it, including,
without limitation, injunctive relief or revocation of any permit
1360 involved, as is necessary to prevent or remedy any violation. Any
person violating this chapter will be liable for all costs incurred by
1362 the county in connection with the enforcement hereof, including
without limitation, attorneys' fees. Fees, established by resolution of
the Board of County Commissioners, will be charged for
1364 reinspections necessary to verify correction of a violation.

1366 **Secs. 19-74—19-90. Reserved.**

1370 **ARTICLE II**

1372 **FLOOD RESISTANT DEVELOPMENT**

1374 **DIVISION 1. BUILDINGS AND STRUCTURES**

1376 **Sec. 19-91. Design and construction of buildings, structures**
1378 **and facilities exempt from the *Florida Building***
***Code*.**

1380 Pursuant to Section 19-33, buildings, structures, and facilities
1382 that are exempt from the *Florida Building Code*, including substantial
improvement or repair of substantial damage of such buildings,
1384 structures and facilities, must be designed and constructed in
accordance with the flood load and flood resistant construction
1386 requirements of ASCE 24. Structures exempt from the *Florida*
Building Code that are not walled and roofed buildings must comply
with the requirements of Article II, Division 8 of this chapter.

1388 **Secs. 19-92. Accessory structures.**

1390 Accessory structures are permitted below the base flood
1392 elevation provided the accessory structures are used only for
parking or storage and:

- 1394 (1) Are one-story and not larger than 600 sq. ft.;
- (2) Have flood openings in accordance with Section R322.2 of

- 1396 the Florida Building Code, Residential;
- 1398 (3) Are anchored to resist flotation, collapse or lateral movement resulting from flood loads;
- 1400 (4) Have flood damage-resistant materials used below the base flood elevation plus one (1) foot; and
- 1402 (5) Have mechanical, plumbing and electrical systems, including plumbing fixtures, elevated to or above the base flood elevation plus one (1) foot.

1404 **Secs. 19-93—19-95. Reserved.**

1406

1408 **DIVISION 2. SUBDIVISIONS**

1410 **Sec. 19-96. Minimum requirements.**

1412 Subdivision proposals, including proposals for manufactured home parks and subdivisions, will be reviewed to determine that:

1414 (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;

1418 (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

1420 (3) Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths must be provided to guide floodwaters around and away from proposed structures.

1424 **Sec. 19-97. Subdivision plats.**

1426 Where any portion of proposed subdivisions, including manufactured home parks and subdivisions, lies within a flood hazard area, the following will be required:

1428 (1) Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, must be shown on preliminary plats;

1430 (2) Where base flood elevations are not included on the FIRM, base flood elevations must be established by the applicant in

1432

1434 accordance with currently accepted engineering practices and
approved by the Floodplain Administrator; and

1436 (3) Compliance with the site improvement and utilities
requirements of Article II, Division 3 of this chapter.

1438 **Secs. 19-98—19-100. Reserved.**

1440 **DIVISION 3. SITE IMPROVEMENTS, UTILITIES AND** 1442 **LIMITATIONS**

1444 **Sec. 19-101. Minimum requirements.**

1446 All proposed new development will be reviewed to
determine that:

1448 (1) Such proposals are consistent with the need to
minimize flood damage and will be reasonably safe from flooding;

1450 (2) All public utilities and facilities such as sewer, gas,
1452 electric, communications, and water systems are located and
constructed to minimize or eliminate flood damage; and

1454 (3) Adequate drainage is provided to reduce exposure to
1456 flood hazards; in Zones AH and AO, adequate drainage paths must
be provided to guide floodwaters around and away from proposed
structures.

1458 **Sec. 19-102. Sanitary sewage facilities.**

1460 All new and replacement sanitary sewage facilities, private
1462 sewage treatment plants (including all pumping stations and
collector systems), and on-site waste disposal systems must be
1464 designed in accordance with the standards for onsite sewage
treatment and disposal systems in Chapter 64E-6, F.A.C., and ASCE
1466 24 Chapter 7 to minimize or eliminate infiltration of floodwaters
into the facilities and discharge from the facilities into flood waters,
1468 and impairment of the facilities and systems.

1470 **Sec. 19-103. Water supply facilities.**

1472 All new and replacement water supply facilities must be
designed in accordance with the water well construction standards
1474 in Chapter 62-532.500, F.A.C., and ASCE 24 Chapter 7 to minimize
or eliminate infiltration of floodwaters into the systems.

Sec. 19-104. Limitations on sites in regulatory floodways.

No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, will be authorized in the regulatory floodway unless the floodway encroachment analysis required in Section 19-43(1) demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.

Sec. 19-105. Limitations on encroachments in flood hazard areas without base flood elevations.

No encroachments, including fill materials and structures, may be located within a distance of the stream bank equal to five (5) times the width of the stream at the top of bank or twenty (20) feet on each side from the top of bank, whichever is greater, unless an analysis equivalent to the analysis specified in Section 19-43(2) demonstrates that such encroachment does not increase flood levels during the occurrence of the base flood discharge.

Sec. 19-106. Limitations on placement of fill.

Subject to the limitations of this chapter, fill must 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. In addition to these requirements, if intended to support buildings and structures (Zone A only), fill must comply with the requirements of the *Florida Building Code*.

Sec. 19-107. Compensatory storage.

Compensatory storage for all encroachments in special flood hazard areas must be provided in accordance with the following requirements:

(1) Compliance will be based upon a volume for volume ("cup for cup") methodology, with the volume of compensation equal to the volume of encroachment at each and every elevation (one-foot contour interval). Providing compensating storage equal to the volume of encroachment at each elevation will provide equivalent management for all storm events of magnitude less than the 100-year storm event, and is intended to prevent cumulative water quantity impacts.

(2) The County may approve alternate compensatory storage methods on a case-by-case basis.

1524 (3) Compensatory storage creation must occur below the
existing base flood elevation and above the predicted normal high
water elevation.

1526 (4) Compensatory storage must occur within storage
areas excavated contiguous to the existing special flood hazard area.

1528 (5) The County may approve the creation of off-site
compensatory storage areas located outside the property boundary
1530 on a case-by-case basis.

1532 (6) The County reserves the right to enforce additional
criteria upon any project that is located within what the County
1534 considers a special flood hazard area. At the County's discretion,
additional flood control measures may be required to adequately
1536 protect upstream systems, downstream systems, or off-site
properties.

1538 (7) Floodplain encroachment must be computed for all
fill placed within the special flood hazard area, or for any other
1540 volume displacing activities, below the base flood elevation and
above the predicted normal high water elevation.

1542 **Secs. 19-108—19-110. Reserved.**

1544 **DIVISION 4. MANUFACTURED HOMES**

1546 **Sec. 19-111. General.**

1548 All manufactured homes installed in flood hazard areas must
be installed by an installer that is licensed pursuant to section
1550 320.8249, F.S., and must comply with the requirements of Chapter
1552 15C-1, F.A.C., and the requirements of this chapter. Manufactured
homes will not be permitted in regulatory floodways except in
existing manufactured home parks or subdivisions.

1554 **Sec. 19-112. Foundations.**

1556 All new manufactured homes and replacement
1558 manufactured homes installed in flood hazard areas must be
installed on permanent, reinforced foundations that are designed in
1560 accordance with the foundation requirements of the *Florida*
Building Code Residential, Section R322.2 and this chapter.

Sec. 19-113. Anchoring.

All new manufactured homes and replacement manufactured homes must be installed using methods and practices which minimize flood damage and must be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Anchoring for wind resistance must be in accordance with the manufacturer's installation instructions and state anchoring requirements. Methods of anchoring must meet or exceed the following:

(1) Over-the-top ties at each corner of the manufactured home, with two (2) additional ties per side at intermediate locations; if longer than fifty (50) feet, one (1) additional tie per side; and

(2) Frame ties at each corner of the manufactured home, with five (5) additional ties per side at intermediate points; if longer than fifty (5) feet, four (4) additional frame ties per side.

Sec. 19-114. Elevation.

Manufactured homes that are placed, replaced, or substantially improved shall be elevated such that the bottom of the frame is at or above 48 inches above grade or base flood elevation plus one (1) foot, whichever is greater.

Sec. 19-115. Enclosures.

Enclosed areas below elevated manufactured homes must comply with the requirements of the *Florida Building Code, Residential*, Section R322.2 for such enclosed areas.

Sec. 19-116. Utility equipment.

Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, must comply with the requirements of the *Florida Building Code, Residential* Section R322.

Secs. 19-117—19-120. Reserved.

1610 **DIVISION 5. RECREATIONAL VEHICLES AND PARK**
1612 **TRAILERS**

1614 **Sec. 19-121. Temporary placement.**

1616 Recreational vehicles and park trailers placed temporarily in
1618 flood hazard areas must:

1620 (1) Be on the site for fewer than 180 consecutive days;
or

1622 (2) Be fully licensed and ready for highway use, which
1624 means the recreational vehicle or park model is on wheels or jacking
system, is attached to the site only by quick-disconnect type utilities
and security devices, and has no permanent attachments such as
additions, rooms, stairs, decks and porches.

1626 **Sec. 19-122. Permanent placement.**

1628 Recreational vehicles and park trailers that do not meet the
1630 limitations in Section 19-121 for temporary placement must meet
the requirements of Article II, Division 4 of this chapter for
1632 manufactured homes.

1634 **Secs. 19-123—19-130. Reserved.**

1636 **DIVISION 6. TANKS**

1638 **Sec. 19-131. Underground tanks.**

1640 Underground tanks in flood hazard areas must be anchored
1642 to prevent flotation, collapse or lateral movement resulting from
hydrodynamic and hydrostatic loads during conditions of the design
flood, including the effects of buoyancy assuming the tank is empty.

1644 **Sec. 19-132. Above-ground tanks, not elevated.**

1646 Above-ground tanks that do not meet the elevation
1648 requirements of Section 19-133 must be permitted in flood hazard
areas provided the tanks are anchored or otherwise designed and
constructed to prevent flotation, collapse or lateral movement
1650 resulting from hydrodynamic and hydrostatic loads during
conditions of the design flood, including the effects of buoyancy
1652 assuming the tank is empty and the effects of flood-borne debris.

1654
1656
Sec. 19-133. Above-ground tanks, elevated.

1658 Above-ground tanks in flood hazard areas must be elevated
1660 to or above the design flood elevation and attached to a supporting
1662 structure that is designed to prevent flotation, collapse or lateral
movement during conditions of the design flood. Tank-supporting
structures must meet the foundation requirements of the applicable
flood hazard area.

1664
Sec. 19-134. Tank inlets and vents.

1666 Tank inlets, fill openings, outlets and vents must be:

1668 (1) At or above the design flood elevation or fitted with
1670 covers designed to prevent the inflow of floodwater or outflow of
the contents of the tanks during conditions of the design flood; and

1672 (2) Anchored to prevent lateral movement resulting
from hydrodynamic and hydrostatic loads, including the effects of
buoyancy, during conditions of the design flood.

1674
Secs. 19-135—19-140. Reserved.

1676
DIVISION 7. CRITICAL FACILITIES

1678
Sec. 19-141. Critical facilities.

1680 Critical facilities must have at least one (1) access road
1682 connected to land outside the 0.2 percent annual chance (500-year)
floodplain that is capable of supporting a 4,000-pound vehicle. The
1684 top of the road must be no lower than six (6) inches below the
elevation of the 0.2 percent annual chance flood. Construction of
1686 new critical facilities may be permissible within special flood hazard
areas if no feasible alternative sites are available. Floodproofing and
1688 sealing measures must be taken to ensure that toxic substances will
not be displaced by or released into floodwaters. Access routes
1690 elevated to or above the level of the base flood elevation must be
provided to all critical facilities to the extent possible.

1692
Secs. 19-142—19-150. Reserved.

DIVISION 8. OTHER DEVELOPMENT

Sec. 19-151. General requirements for other development.

All development, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in this chapter or the *Florida Building Code*, must:

(1) Be located and constructed to minimize flood damage;

(2) Meet the limitations of Section 19-104 if located in a regulated floodway;

(3) Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;

(4) Be constructed of flood damage-resistant materials; and

(5) Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.

Sec. 19-152. Fences in regulated floodways.

Fences in regulated floodways that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, must meet the limitations of Section 19-104.

Sec. 19-153. Retaining walls, sidewalks and driveways in regulated floodways.

Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways must meet the limitations of Section 19-104.

Sec. 19-154. Roads and watercourse crossings in regulated floodways.

Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or

pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways must meet the limitations of Section 19-104. Alteration of a watercourse that is part of a road or watercourse crossing must meet the requirements of Section 19-43(3).

Section 2. Amendment to Chapter 34, Subdivision Regulations of the Orange County Code. This ordinance amends Chapter 34, Subdivision Regulations, with additions shown with underlining and deletions shown with strike-through, as follows:

Sec. 34-228. Development within areas of special flood hazard.

(a) All development within ~~areas of special flood hazard areas established in Section 19-13 as delineated on the official Federal Emergency Management Agency (FEMA) flood insurance rate maps (FIRM)~~ or as determined by the county engineer shall comply with the following requirements:

(1) Establish, to the satisfaction of the county engineer, the elevation of the base flood (one-hundred-year flood). The elevation as approved by the county engineer ~~shall~~ must be clearly identified on the subdivision lot grading plans. Supporting calculations to determine the normal high water elevation (NHWE) and base one-hundred-year flood elevation must be submitted for review and approval by the county engineer.

(2) Set the minimum lowest finished floor elevation at least one (1) foot above the elevation of the base flood.

(3) For commercial or industrial developments, dry floodproofing in accordance with the Florida Building Code is permitted ~~may be substituted in lieu of elevating the finished floor.~~

(4) Provide compensatory ~~compensating~~ storage in accordance with Section 19-107 for all floodwater displaced by development below the elevation of the one-hundred-year flood, unless waived by the county engineer.

(b) Compensating storage is to be accomplished between the normal high water of the special flood hazard area and the estimated one-hundred-year flood elevation.

~~(c) All developments within riverine flood hazard areas shall be~~

designed to maintain the flood carrying capacity of the floodway such that the base flood elevations are not increased, either upstream or downstream. However, the county engineer may approve an increase of up to one (1) foot in the base flood profile if the project engineer can satisfactorily demonstrate that such increase in the flood profile will not adversely affect upstream or downstream property.

Section 3. Effective Date. This ordinance shall become effective on September 24, 2021.

ADOPTED THIS ____ DAY OF _____, 2021.

ORANGE COUNTY, FLORIDA
By: Board of County Commissioners

By: _____
Jerry L. Demings
Orange County Mayor

ATTEST: Phil Diamond, CPA, County Comptroller
As Clerk of the Board of County Commissioners

By: _____
Deputy Clerk

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