Sec. 50-61. - Basis for establishing areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in the Flood Insurance Study in the current scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Galveston County, Texas, and incorporated areas dated August 15, 2019, with the accompanying flood insurance rate maps and flood boundary-floodway maps (FIRM and FBFM) dated August 15, 2019, and any revisions thereto are hereby adopted by reference and declared to be part of this ordinance.

Sec. 50-66. - Appeals and variances.

- (a) The planning and zoning commission, as established by the city, shall hear and render judgment on requests for variances from the requirements of this article. The Director of Engineering may grant variances from the requirements of this article for non-inhabitable structures only.
- (b) The planning and zoning commission shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this article.
- (c) Any person aggrieved by the decision of the planning and zoning commission may appeal such decision to the city council. Any person aggrieved by the decision of the city council may appeal such decision in the courts of competent jurisdiction.
- (d) The floodplain administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- (e) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this article.
- (f) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size below the base flood level, providing the relevant factors in subsection 50-65(b) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (g) Upon consideration of the factors noted above and the intent of this article, the planning and zoning commission may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this article.
- (h) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (i) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (j) Prerequisites for granting variances:
  - (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
  - (2) Variances shall only be issued upon:
    - a. Showing a good and sufficient cause;
    - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
    - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
  - (3) Any application to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (k) Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria outlined in subsections (a)—(j) of this section are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

## Sec. 50-81. - General standards.

In all areas of special flood hazard, the following provisions are required for all new construction and substantial improvements:

- All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- (4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the system into flood waters; and
- (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- (8) All elevation requirements noted in this chapter shall be documented using the FEMA elevation certificate, shall be certified by a registered professional engineer, surveyor, or architect, and shall be submitted to the floodplain administrator.
- (9) Elevation certificates shall be submitted to the city floodplain coordinator for review and acceptance prior to a certificate of occupancy being issued.
- (10) A structure shall be deemed to be substantially improved or substantially damaged when the cumulative costs of the improvements or damage repairs, when combined incrementally over a five-year period of time, equal or exceed 50 percent of the market value of the structure. Structures located within the 0.2% Flood Zone will be excluded from this requirement.
- (11) For all new and substantially improved construction permitted on or after October 1, 2018, the electrical, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork) must be elevated (residential) or floodproofed (nonresidential) to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood elevation.
- (12) Substantial improvements to structures completed prior to October 1, 2018, must have the electrical, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork) elevated (residential) or floodproofed (nonresidential) to a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building.
- (13) For all new and substantially improved construction in areas of special flood hazard and 0.2 percent annual chance floodplain permitted on or after October 1, 2018, the lowest floor and all attendant utilities must be elevated (residential) or floodproofed (nonresidential) to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood elevation.

- (14) Substantial improvements to structures completed prior to October 1, 2018, in areas of special flood hazard and 0.2 percent annual chance floodplain, must have the lowest floor and all attendant utilities elevated (residential) or floodproofed (nonresidential) to a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building.
- (15) When fill or any other development is placed in the special flood hazard area that has the effect of reducing the storage volume of flood waters in the floodplain, then an equal amount of storage volume must be created in another location of the same floodplain to compensate for the storage capacity lost. Fill or other development within the special floodplain hazard area and the 0.2% floodplain shall not negatively affect upstream/downstream properties.
- (16) All new construction and substantial improvements permitted on or after October 1, 2018, shall have the lowest floor (including basement) elevated a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood.