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CHAPTER 19

FLOOD PLAIN ORDINANCE

ARTICLE 1 GENERAL AUTHORIZATION

19.0101 STATUTORY AUTHORIZATION

The Legislature of the State of North Dakota has in North Dakota Century Code, Chapters 40-47, 11-33, and 58-03, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Therefore, the City Council of the City of Harvey, North Dakota does ordain as follows:

19.0102 FINDINGS OF FACT

1. The special flood hazard areas of the City of Harvey are subject to periodic inundation which can endanger life, result in loss of 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.
2. Flood losses caused by the cumulative effect of obstructions in the special flood hazard areas cause increases in flood heights and velocities. Inadequately flood proofed, elevated or otherwise unprotected structures also contribute to the flood loss.

19.0103 METHODS OF REDUCING FLOOD LOSSES

In order to limit and prevent flood damages in the City of Harvey, this ordinance has provisions for restricting, prohibiting, and guiding development activities that can be subject to flood damage.

19.0104 DISCLAIMER

This ordinance shall not create liability on the part of the City of Harvey, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damage that results from reliance on this ordinance or any administrative decision lawfully made thereunder.

19.0105 DEFINITIONS

1. "Base flood or 100-year flood" means the flood having a one percent chance of being equaled or exceeded in any given year.
2. "Base Flood Elevation" (BFE) means the height of the base flood or 100 - year flood usually in feet above mean sea level.

3. "Basement" means any area of the building having its floor subgrade (below ground level) on all sides.
4. "Best Available Data" (BAD) means water elevation information from any source used to estimate or determine a base flood elevation (i.e. high water mark).
5. Conveyance or hydraulic conveyance" means a geometric characteristic of a river or watercourse at a given point that determines the flow-carrying capacity at that point.
6. "Development" means any man made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the special flood hazard area.
7. "Flood Insurance Rate Map" (FIRM) means the official map issued by the Federal Emergency Management Agency where special flood hazard areas are designated as Zone A.
8. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters and/or; from the unusual and rapid accumulation or runoff of surface waters from any source.
9. "Flood proofing" (Dry) means protection provided a structure, together with attendant utilities and sanitary facilities, which is watertight two feet above the base flood elevation with walls that are substantially impermeable to the passage of water.
10. "Floodway or regulatory floodway" means protection provided a structure, together with attendant utilities and sanitary facilities, which is watertight two feet above the base flood elevation with walls that are substantially impermeable to the passage of water.
11. "Lowest Floor" Means the lowest floor of a structure including the basement.
12. "Manufactured Home" means a structure, transportable in one or more sections, which is built on permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle", but does include "mobile home".
13. "Manufactured Home Park or Subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
14. "New Construction" means structures for which the "start of construction" commenced on or after the effective date of this ordinance.

15. "Reasonably Safe from Flooding" means base flood waters will not inundate the land or damage structures to be removed from the special flood hazard area, and that any subsurface waters related to the base flood will not damage existing or proposed buildings.
16. "Recreational Vehicle" means a vehicle which is:
 - a. built on a single chassis;
 - b. 400 square feet or less when measured at the largest horizontal projection;
 - c. designed to be self-propelled or permanently towable by a light duty truck;
 - d. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal use; including but not limited to;
 - e. travel trailers, trailers on wheels, park-model trailers, and other similar vehicles.
17. "Special Flood Hazard Area" (SFHA) means an area of land that would be inundated by a flood having one-percent chance of occurring in any given year.
18. "Start of Construction" includes substantial improvement, and means the date building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.
19. "Structure" means a walled and roofed building, including manufactured homes and gas or liquid above-ground storage tanks.
20. "Substantial Damage" means damage of any origin sustained by a structure whereby the cost of restoring the building to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
21. "Substantial Improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:
 - a. Before the improvement or repair is started; or
 - b. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or

other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

c. The term does not, however, include either:

- (1) Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
- (2) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

19.0106 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all special flood hazard areas within the jurisdiction of the City of Harvey as identified by the Federal Emergency Management Agency in its latest Flood Insurance Rate Map, and all subsequent revisions thereto. This map is adopted by reference and declared to be a part of this ordinance. It is on file at the Office of the City Auditor.

ARTICLE 2 PERMIT PROCEDURES

19.0201 PERMITS

Before any construction or development begins within a special flood hazard area, a permit shall be obtained from the City Auditor, hereinafter referred to as the responsible person. The permit shall include:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all proposed structures;
2. Elevation in relation to mean sea level to which any structure will be flood proofed;
3. Certification by a registered professional engineer or architect that the flood proofing methods for any non-residential structure meet the flood proofing criteria in section 19.0302(2); and
4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

19.0202 USE OF OTHER BASE FLOOD DATA

When base flood elevation data has not been provided in accordance with Section 19.0106, LANDS TO WHICH THIS ORDINANCE APPLIES, the responsible person shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, (known as best available data) in order to administer this section, Section 19.0301, GENERAL STANDARDS, and Section 19.0302, SPECIFIC STANDARDS.

19.0203 PERMIT REVIEW

All permit applications shall be reviewed (using the best available base flood elevation data from any federal, state, or local source) to: a) assure sites are reasonably safe from flooding; b) determine that all necessary permits have been obtained from those federal, state, or local agencies from which prior approval is required; and c) to determine if the proposed development adversely affects the flood carrying capacity of a flood-prone area. For the purposes of this ordinance, "adversely affects" means damage to adjacent properties because of rises in flood stages attributed to physical changes of the channel and the adjacent overbank areas.

1. If it is determined that there is no adverse effect and the development is not a building, then the permit shall be granted without further considerations.
2. If it is determined that there is an adverse effect, then technical justification (i.e., a registered professional engineer) for the proposed development shall be required, generally, the engineer shall be the City Engineer, unless another engineer is approved by the City Council.
3. If the proposed development is a building, then the following provisions of this ordinance shall apply.

ARTICLE 3 STANDARDS

19.0301 GENERAL STANDARDS

In all special flood hazard areas, the following standards are required:

1. Anchoring
 - a. All new construction and substantial improvements (including additions) shall be anchored to prevent flotation, collapse or lateral movement of the structure.
 - b. All manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
2. Construction Materials and Methods
 - a. All new construction and substantial improvements shall be constructed using methods and with materials and utility equipment that resist or minimize flood damage.
 - b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

- c. All new construction and 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.

3. Utilities

- a. All new and replacement water supply systems and sanitary sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
- c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

4. Subdivision Proposals

- a. All subdivision proposals shall be consistent with the need to minimize flood damage.
- b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
- d. Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least 50 lots or 5 acres (whichever is less).

5. Encroachments

Encroachments, including fill, new construction, substantial improvements, and other development shall be prohibited in any floodway unless a technical evaluation demonstrates that the encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge.

19.0302 SPECIFIC STANDARDS

1. Residential Construction

- a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated on fill to at least one foot above the base flood elevation.

- b. Manufactured homes shall be placed so that the lowest floor is elevated on fill to at least one foot above the base flood elevation.

2. Nonresidential Construction

New construction and substantial improvement of any nonresidential structure shall either have the lowest floor, including basement, elevated on fill to at least one foot above the base flood elevation or, together with attendant utility and sanitary facilities shall:

- a. Be adequately flood proofed up to an elevation no lower than two feet above the base flood elevation.
- b. Be flood proofed so that below the two feet above the base flood elevation, the structure is watertight with walls substantially impermeable to the passage of water. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design methods of construction are in accordance with accepted standards of practice.
- c. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- d. Be certified by a registered professional engineer or architect that the standards of the subsection are satisfied. Such certification shall be provided to the responsible person as set forth in Section 19.0401.

ARTICLE 4 ADMINISTRATIVE REQUIREMENTS

19.0401 INFORMATION TO BE OBTAINED AND MAINTAINED

The responsible person shall:

- 1. Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, whether or not the structure contains a basement.
- 2. For all new or substantially improved flood proofed structures:
 - a. Obtain and record the actual elevation (in relation to mean sea level) to which the structure has been flood proofed.
 - b. Maintain the flood proofing certifications required in Section 19.0302(2).
- 3. Maintain for public inspection all records pertaining to the provisions of this ordinance.

19.0402 ALTERATION OF WATERCOURSES

The responsible person shall:

1. Notify nearby communities, water resource districts and the North Dakota State Engineer, as necessary, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
2. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished; and
3. Notify the appropriate water resource district prior to removal or placement of fill within two hundred feet of the bank of the body of water during normal flow or stage.

19.0403 PENALTIES FOR NON-COMPLIANCE

1. Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violations on conditions and safeguards established in connection with grants or variances or conditional uses, shall constitute a B misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be punished by a fines, and/or imprisonment pursuant to the fines and imprisonment for a B Misdemeanor, for each such offense, and in addition shall pay costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense.
2. Nothing herein contained shall prevent the City Council of the City of Harvey from taking such other lawful action as is necessary to prevent or remedy any violation.