

Ordinance No. 5922

AN ORDINANCE TO REVISE THE FLOOD AREA CONSTRUCTION REGULATIONS BY
REVISING CHAPTER 15.32 OF THE RAPID CITY MUNICIPAL CODE

WHEREAS, the City of Rapid City has adopted ordinances regulating flood area construction, which are codified in Chapter 15.32 of the Rapid City Municipal Code; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has issued revised Flood Insurance Rate Maps (FIRMs) for Pennington County, including the City of Rapid City; and

WHEREAS, federal regulations require the City of Rapid City adopt minimum requirements for flood plain management measures; and

WHEREAS, these minimum flood plain management measures are required for participation in the National Flood Insurance Program (NFIP); and

WHEREAS, revised FIRMs for Pennington County become effective June 3, 2013; and

WHEREAS, revisions to Chapter 15.32 are required to comply with federal regulations; and

WHEREAS, the revisions are required to be effective by June 3, 2013; and

WHEREAS, the Common Council desires to implement the required changes to continue participation in the NFIP.

NOW THEREFORE, BE IT ORDAINED by the City of Rapid City, that Chapter 15.32 of the Rapid City Municipal Code be and is hereby revised to read in its entirety as follows:

CHAPTER 15.32: FLOOD AREA CONSTRUCTION REGULATIONS**Statutory Authorization, Findings of Fact, Purpose and Methods**

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Statutory Authorization, Findings of Fact, Purpose and Methods

15.32.010 Statutory authorization.

A. The legislature of the state has in its state statutes delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses.

B. The City of Rapid City elects to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended). The National Flood Insurance Program, established in the aforesaid act, provides that areas of the city having a special flood hazard be identified by the Federal Emergency Management Agency and that floodplain management measures be applied in such flood hazard areas. The National Flood Insurance Program was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and other legislative measures. It was further modified by the National Flood Insurance Reform Act of 1994. The National Flood Insurance Program is administered by the Federal Emergency Management Agency, a component of the U.S. Department of Homeland Security.

15.32.020 Findings.

A. The special flood hazard areas of Rapid City are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

B. These flood losses are created by the cumulative effect of obstructions in areas of special flood hazards which cause an increase in flood heights and velocities, and by the occupancy of special flood hazard areas by uses vulnerable to floods and hazardous to other

lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

15.32.030 Purpose of provisions.

It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions to specific areas by provisions designed:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard in such a manner as to minimize future flood blight areas; and
- G. Ensure that potential buyers are notified that property is located in an area of special flood hazard.

15.32.040 Methods of Reducing Flood Losses.

In order to accomplish its purposes, this chapter uses the following:

- A. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in erosion or in flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which accommodate floodwaters;
- D. Control filling, grading, dredging, and other development which may increase flood damage; and
- E. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other lands.

Definitions

15.32.050 Definitions.

A. For the purposes of this chapter and in order to carry out the provisions and intentions as set forth herein, certain words, terms and phrases are to be used and interpreted as defined hereafter. Words used in the present tense shall include the future tense; words in the singular number include the plural, and words in the plural number include the singular; the word **PERSON** includes a firm, partnership, or corporation, as well as an individual; the word **BUILDING** includes the word **STRUCTURES**; the term **SHALL** is always mandatory and not discretionary; and the word **MAY** is permissive. The word **USED** or **OCCUPIED** as applied to any land or building shall be construed to include the word **INTENDED, ARRANGED, or DESIGNED** to be used or occupied.

B. The following words, terms and phrases are defined and shall be interpreted as such through this chapter. Terms not herein defined shall have the meaning customarily assigned to them.

1. **ACCESSORY USE OR STRUCTURE.** A use or structure on the same lot, with, and of a nature customarily incidental and subordinate to, a principal use or structure.
2. **APPEAL.** A request for a review of the Common Council's interpretation of any provisions of this chapter or a request for a variance.
3. **AREA OF FUTURE-CONDITIONS FLOOD HAZARD.** The land area that would be inundated by the one (1) percent-annual-chance (100-year) flood based on future-conditions hydrology.
4. **AREA OF SHALLOW FLOODING.** A designated AO, AH or VO zone on a community's Flood Insurance Rate Map (FIRM) with a 1% chance or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. The flooding is characterized by ponding or sheet flow.
5. **AREA OF SPECIAL FLOOD HAZARD.** The land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V. The term "special flood hazard area", for purposes of these regulations, is synonymous with the phrase "area of special flood hazard".

6. **BASE FLOOD.** The flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the 100-year flood and “regulatory flood”.
7. **BASE FLOOD ELEVATION.** The water surface elevation of the 1% annual chance flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplain of coastal and riverine areas.
8. **BASEMENT.** Any area of a building having its floor sub-grade (below ground level) on all sides.
9. **BUILDING.** See **STRUCTURE**.
10. **CERTIFICATION.** A certification by a registered professional engineer or other party does not constitute a warranty or guarantee of performance, expressed or implied. Certification of data is a statement that the data is accurate to the best of the certifier’s knowledge. Certification of analyses is a statement that the analyses have been performed correctly and in accordance with sound engineering practices. Certification of structural works is a statement that the works are designed in accordance with sound engineering practices to provide protection from the base flood. Certification of “as built” conditions is a statement that the structure(s) has been built according to the plans being certified, is in place, and if fully functioning.
11. **CRITICAL FACILITY.** A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use, or store hazardous waste.
12. **DEVELOPMENT.** Any manmade change to improved or unimproved real estate including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment or materials.
13. **EXISTING CONSTRUCTION.** For the purposes of determining rates, structures for which the “start of construction” commenced before the effective date of the FIRM or before September 14, 1973, for FIRMs effective before that date. **EXISTING CONSTRUCTION** may also be referred to as **EXISTING STRUCTURES**.
14. **EXISTING MANUFACTURED HOME PARK OR SUBDIVISION.** 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 the effective date of the floodplain management regulations adopted by the city.

15. **EXISTING STRUCTURES.** See **EXISTING CONSTRUCTION.**
16. **EXPANSION TO AN EXISTING MANUFACTURED HOME PARK or SUBDIVISION.** The preparation of additional sites by the construction of facilities for serving the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).
17. **FLOOD OR FLOODING.** A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters or the unusual and rapid accumulation or runoff of surface waters from any source.
18. **FLOOD INSURANCE RATE MAP (FIRM).** The official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.
19. **FLOOD INSURANCE STUDY (FIS).** The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, and the water surface elevation of the base flood.
20. **FLOODPLAIN or FLOOD-PRONE AREA.** Any land area susceptible to being inundated by water from any source. See definition of **FLOODING.**
21. **FLOODPROOFING.** Any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and wastewater facilities, structures and their contents.
22. **FLOODWAY (REGULATORY FLOODWAY).** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height, which is typically one foot.
23. **FREEBOARD.** A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. **FREEBOARD** tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings and the hydrological effect of urbanization of the watershed.
24. **HIGHEST ADJACENT GRADE.** The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

25. **HISTORIC STRUCTURE.** Any structure that is:
- a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
 - b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic or a district preliminarily determined by the Secretary to qualify as a registered historic district;
 - c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the interior;
or
 - d) Individually listed on a local inventory historic places in communities with historic preservation programs that have been certified either:
 - 1) By an approved state program as determined by the Secretary of Interior, or
 - 2) Directly by the Secretary of the Interior in states without approved programs.
26. **IMPROVEMENT.** Any repair, reconstruction, rehabilitation, addition, or alteration of a structure, the cost of which does not equal or exceed fifty (50) percent of the market value of the structure.
27. **LEVEE.** A human-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.
28. **LEVEE SYSTEM.** A flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.
29. **LOWEST FLOOR.** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that, the enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 C.F.R. § 60.3 of the National Flood Insurance Program regulations.
30. **MANUFACTURED HOME.** A structure, transportable or movable in one or more sections, which is built on a permanent chassis and 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".
31. **MANUFACTURED HOME PARK** or **SUBDIVISION.** A parcel (or contiguous parcels) of land divided into 2 or more manufactured home lots for rent or sale.
32. **MARKET VALUE.** For the purposes of determining substantial improvement and substantial damage, **MARKET VALUE** is based on the condition of the structure

before the start of the improvement or before the damage occurred. Only the value of the structure is pertinent, the value of site improvements such as pools, accessory structures, and landscaping are not included. The market value for any structure shall be equal to the current year's equalized, assessed value as shown by the records of the Pennington County Director of Equalization.

33. **MEAN SEA LEVEL.** Means, for purposes of the National Flood Insurance Program, the North American Vertical Datum 1988 (NAVD), to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
34. **NEW CONSTRUCTION.** For the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after September 14, 1973, whichever is later, and includes any subsequent improvements to the structures. For floodplain management purposes, **NEW CONSTRUCTION** means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to the structures.
35. **NEW MANUFACTURED HOME PARK OR SUBDIVISION.** 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 on or after the effective date of floodplain management regulations adopted by a community.
36. **NONCONFORMING USE.** A structure or the use of a structure or premises which was lawful before the passage or amendment of this chapter but which is not in conformity with the provisions of this chapter.
37. **OBSTRUCTION.** Any dam; wall; wharf; embankment; levee; dike; pipe; abutment; projection; excavation; channel; rectification; bridge; conduit; culvert; building; fence; rock; gravel; refuse; fill; structure; diversion; riprap; pile revetment; auto body; building materials or matter in, along, across, or projecting into any channel, watercourse, or regulatory flood hazard area which may impede, retard, increase or change the direction of the flow of water, either in itself or by catching or collecting debris carried by the water or that is placed where the flow of water might carry the same downstream to the damage of life or property.
38. **RECREATIONAL VEHICLE.** A vehicle which is: 1) Built on a single chassis; 2) Four hundred square feet or less when measured at the largest horizontal projections; 3) Designed to be self-propelled or permanently towable by a light duty truck; and 4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

39. **REGULATORY FLOODWAY.** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height (typically one foot).
40. **START OF CONSTRUCTION.** Includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either 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 street and/or walkways; nor does it include excavation for a basement, footings, piers or foundation, 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. For a substantial improvement, the actual **START OF CONSTRUCTION** means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building
41. **STRUCTURE.** For floodplain development purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.
42. **SUBSTANTIAL DAMAGE.** Damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.
43. **SUBSTANTIAL IMPROVEMENT.** Any repair, reconstruction, rehabilitation, addition, or improvement of a structure, the cost of which equals or exceeds 50% 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, the value before the damage occurred. For the purpose 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.

The term does not however include either:

- a) Any project for improvement of a structure to correct existing state or local health, sanitary or safety code specifications which have been identified by the local code enforcement or building official and which are the minimum necessary to assure safe living conditions; or
- b) Any alteration of a **HISTORIC STRUCTURE**, provided the alteration would not preclude the structure's continued designation as a "historic structure".
44. **TEMPORARY STRUCTURE.** Structures associated with festivals, carnivals, and other temporary uses, which are not attached to a permanent foundation and can be removed within 8 hours.
45. **VALUE.** See **MARKET VALUE**.
46. **VARIANCE.** Is a grant of relief to a person from the requirements of this chapter when specific enforcement would result in unnecessary hardship. A **VARIANCE**, therefore, permits construction or development in a manner otherwise prohibited by this chapter. (For full requirements, see 44 C.F.R. § 60.6 of the National Flood Insurance Program regulations.)
47. **VIOLATION.** The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications or other evidence of compliance required in 44 C.F.R. §§ 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4) or (e)(5) of the National Flood Insurance Program regulations is presumed to be in **VIOLATION** until a time as that documentation is provided.
48. **WATERCOURSE.** The channel and banks of an identifiable watercourse. The **WATERCOURSE** does include adjoining floodplain areas. The flood carrying capacity of a **WATERCOURSE** refers to the flood carrying capacity of the channel (except in the case of alluvial fans, where a channel is not typically defined).
49. **WATERCOURSE ALTERATION.** Any realignment or diversion of a channel, stream, ditch, river, or watercourse, whether the water flows continuously or intermittently.
50. **WATER SURFACE ELEVATION.** The height, in relation to the North American Vertical Datum 1988 (NAVD), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

General Provisions

15.32.060 Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled, "The Flood Insurance Study for Pennington County, South Dakota and Incorporated Areas" dated June 3, 2013, with accompanying Flood Insurance Rate Maps, dated June 3, 2013 and any revisions thereto are hereby adopted by reference and declared to be a part of this chapter. The Flood Insurance Study and FIRM's are on file at the Rapid City Public Works Department – Engineering Services Division, 300 Sixth Street, Rapid City, South Dakota.

15.32.070 Compliance.

No structure or land shall hereafter be located, altered or have its use changed without full compliance with the terms of this chapter and other applicable regulations.

15.32.080 Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

15.32.090 Interpretation.

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

- A. Considered as minimum requirements.
- B. Liberally construed in favor of the Common Council.
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

15.32.100 Warning and disclaimer of liability.

A. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by manmade or natural causes.

B. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within the areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city or any official or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

15.32.110 Severability.

If any section, provision or portion of this chapter is adjudged unconstitutional or invalid by a court, the remainder of the chapter shall not be affected.

15.32.120 Establishment of floodplain development permits and certificates.

A floodplain development permit shall be required to ensure conformance with the provisions of this chapter. The fee for the permit application shall be as established by resolution of Common Council.

A. *Required.* Any person, owner, or authorized agent who intends to conduct any development in a special flood hazard area shall first make application to the floodplain administrator and shall obtain the required flood plain development permit prior to the start of development.

B. *Application for flood plain development permit.* The applicant shall file an application in writing on a form furnished by the floodplain administrator. The application shall:

1. Identify and describe the development to be covered by the permit;
2. Describe the land on which the proposed development is to be conducted by legal description, street address, or similar description that will readily identify and definitely locate the site;
3. Include a site plan showing the delineation of special flood hazard areas, floodway boundaries, flood zones, base flood elevations, ground elevations, proposed fill and excavation, drainage patterns and facilities;
4. Indicate the use and occupancy for which the proposed development is intended;
5. Be accompanied by construction documents, grading and filling plans, and other information deemed appropriate by the floodplain administrator;
6. State the valuation of the proposed work when required;
7. Be signed by the owner or the owner's authorized agent.

C. *Validity of permit.* The issuance of a floodplain development permit under this chapter shall not be construed to be a permit for, or approval of, any violation of this chapter or any other ordinance of the jurisdiction. The issuance of a permit based on submitted documents and information shall not prevent the flood plain administrator from requiring the correction of errors. The building official is authorized to prevent occupancy or use of a structure or site which is in violation of this chapter.

D. *Expiration.* A floodplain development permit shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commence. The floodplain administrator is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. The requirement that all work

authorized by the floodplain administrator be commenced within 180 days does not operate to change timelines established in any notice and/or order issued by the floodplain administrator.

E. *Suspension or revocation.* The floodplain administrator is authorized to suspend or revoke a permit issued under this chapter whenever the permit is issued in error or on the basis of incorrect, inaccurate, or incomplete information, or in violation of any ordinance or code of this jurisdiction.

F. *Flood hazard certificates.* The following certificates shall be submitted to the floodplain administrator:

1. *Elevation Certificate* upon the placement of the lowest floor, including basement, prepared by a registered professional engineer or land surveyor, of the elevation of the lowest floor, including basement. The floodplain administrator may require submission upon the placement of the lowest floor, including basement, prior to further vertical construction;
2. *Designed Opening Certificate* prepared by a registered professional engineer for fully enclosed areas below the base flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in §15.32.180;
3. *"No-Rise" Certificate* along with supporting hydraulic computations, prepared by a registered professional engineer, that development in a designated floodway will result in no increase in the base flood heights during the occurrence of a base flood (100-year) discharge;
4. *Floodproofing Certificate* documentation of certification by a registered professional engineer that the design and methods of construction of a nonresidential building are in accordance with accepted practices for meeting the floodproofing requirements in §15.32.170 ;
5. *Fill Placement Certification* prepared by a registered professional engineer when required by the floodplain administrator to ensure proper compaction and slope protection for fill placed in the floodplain;
6. *Manufactured home foundation design certification* by a registered professional engineer to meet the requirements in §15.32.190; and
7. *Floodplain development permit for improvements to an existing structure* shall require:
 - a) Detailed improvement list; and
 - b) A market value assessment of the structure. If the total improvements of the current project, and the total improvements made over the period of the last twenty (20) years equals or exceeds fifty (50) percent of the current market value

of the structure, the property must be brought to current floodplain management standards and requirements of this chapter.

PROVISIONS FOR FLOOD HAZARD REDUCTION

15.32.130 General Standards

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

15.32.140 Residential construction.

A. New construction and substantial improvements of residential structures within Zones A1-30, AE or AH shall have the lowest floor (including basement) elevated 1 foot above the base flood elevation.

B. New construction and substantial improvements of residential structures within AO Zone shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least 2 feet if no depth number is specified).

C. A registered professional engineer or land surveyor shall submit a certification to the floodplain administrator that the provisions of this chapter are satisfied.

D. Newly constructed and substantially improved residential structures shall not be used until post-construction elevation and/or floodproofing certificates have been approved by the floodplain administrator.

15.32.150 Nonresidential construction.

A. New construction and substantial improvements of commercial, industrial or other nonresidential structure shall have the lowest floor (including basement) elevated to the level of the regulatory flood elevation.

B. New construction and substantial improvements of commercial, industrial or other nonresidential structures within Zones A1-30, AE or AH may be flood-proofed in lieu of being elevated provided that together with attendant utility and sanitary facilities be designed so that at elevations of one foot above the base flood elevation and below, the structure is watertight with walls substantially impermeable to the passage of water, and with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

C. New construction and substantial improvements of commercial, industrial or other nonresidential structures within Zone AO shall (i) have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least 2 feet if no depth number specified), or (ii) together with attendant utility and sanitary facilities, be designed to be completely floodproofed to that level, such that the

structure is watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

D. A registered professional engineer shall develop and/or review structural design, specifications and plans for the construction, and shall certify that the design and methods of construction, are in accordance with accepted standards of practice for meeting the provisions of this chapter. The certifications shall be provided to the floodplain administrator as set forth in § 15.32.270.

E. Newly constructed and substantially improved commercial, industrial or other nonresidential structures shall not be used until post-construction elevation and/or floodproofing certificates have been approved by the floodplain administrator.

15.32.160 Construction materials and methods.

A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to 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 improvement 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.

D. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

E. All new on-site wastewater systems shall be located to prevent contamination during flooding, shall be approved by South Dakota Department of Natural Resources (SDDENR) and shall comply with all local regulations. Repairs or alterations to existing wastewater systems shall be approved by SDDENR and shall comply with all local regulations.

F. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent floatation, collapse, or lateral movement of the structure resulting from hydrodynamic loads, including the effects of buoyancy.

15.32.170 Floodproofing safeguards.

Floodproofing safeguards such as the following shall be designed consistent with the flood protection elevation for the particular area, flood velocities, durations, rate of rise, hydrostatic forces and hydrodynamic forces, and other factors associated with the regulatory flood. Before the floodplain administrator approves a floodplain development permit for any structures under this chapter, he or she shall require that the applicant submit a plan or document certified by a

registered professional engineer that the floodproofing safeguards are consistent with the regulatory flood protection elevation and associated flood factors for the particular area. The following floodproofing safeguards may be required without limitation because of specific enumeration:

- A. Anchorage to resist flotation and lateral movement;
- B. Reinforcement of walls to resist water pressures;
- C. Addition of mass or weight to structures to resist flotation;
- D. Pumping facilities or comparable practices for subsurface drainage systems for building to relieve external foundation wall and basement flood pressures;
- E. Construction of water supply and wastewater systems so as to prevent the entrance of floodwaters;
- F. Construction to resist rupture or collapse caused by water pressure or floating debris;
- G. Installation of valves or controls on wastewater and storm drains which will permit the drains to be closed to prevent backup of sewage and storm waters into the buildings or structures. Gravity draining of basements may be eliminated by mechanical devices;
- H. Location of all electrical equipment, circuits and installed electrical appliances in a manner which will assure that they are not subject to flooding and to provide protection from inundation by the regulatory flood;
- I. Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids, or other toxic materials which could be hazardous to public health, safety and welfare in a manner which will assure that the facilities are situated at elevations above the height associated with the regulatory flood protection elevation or are adequately floodproofed to prevent flotation of storage containers or damage to storage containers which could result in the escape of toxic materials into floodwaters; and
- J. Such other safeguards that the Planning Commission and/or Common Council shall determine necessary.

15.32.180 Enclosures.

A. New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by a registered professional

engineer or meet or exceed the following minimum criteria from FEMA Technical Bulletins 7-93 and 3-93:

1. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
2. The bottom of all openings shall be no higher than one (1) foot above grade.
3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

15.32.190 Manufactured homes.

A. All manufactured homes that are placed, or substantially improved within Zones A1-30, AH or AE, on sites (i) outside of an existing manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated on a permanent foundation such that the lowest floor to the manufactured home is one foot above the base flood elevation and is securely anchored to an adequately anchored foundation system to resist foundation collapse and lateral movement.

B. All manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision within Zones A1-30, AH and AE, that are not subject to the provisions of the previous paragraph shall be elevated so that either the lowest floor of the manufactured home is at or above the base flood elevation, or the manufactured home chassis is supported by reinforced piers or other foundation elements that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

C. All manufactured homes shall be elevated and anchored to resist flotation, collapse, or lateral movement and capable of resisting the hydrostatic and hydrodynamic loads. 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. Specific requirements may be:

1. Over-the-top ties be provided at each of the 4 corners of the manufactured home, with 2 additional ties per side, at intermediate locations, with manufactured homes less than 50 feet per side;
2. Frame ties be provided at each corner of the home with 5 additional ties per side at intermediate points, with manufactured homes less than 50 feet long requiring 4 additional ties per side;
3. All components of the anchoring system be capable of carrying a force of 4,800 pounds; and

4. Any additions to the manufactured home be similarly anchored.

15.32.200 Recreational vehicles.

A. All recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM are required to:

1. Be on the site for fewer than one hundred eighty (180) consecutive days; and
2. Be fully licensed and ready for highway use.

15.32.210 Temporary structures.

A. All temporary structures associated with festivals, carnivals, and other temporary uses placed on sites within Zones A1-30, AH, and AE on the community's FIRM are required to:

1. Be on the site for fewer than fourteen (14) consecutive days; and
2. Be capable of being removed within 8 hours.

15.32.220 Subdivisions.

A. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with provisions of this chapter.

B. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

C. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood damage.

D. Base flood elevation data shall be generated for all subdivision proposals and other proposed developments including the placement of manufactured home parks and subdivisions.

E. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet floodplain development permit requirements of this chapter.

15.32.230 Watercourse alterations.

A. No alteration to a channel, river, stream, drainageway or other watercourse shall diminish the flood-carrying capacity of that watercourse. The altered or relocated watercourse shall have the same or greater capacity as the original watercourse.

B. All proposals for a watercourse alteration require submittal of a floodplain development permit. The applicant shall submit a set of plans and calculations prepared by a registered professional engineer of the proposed alteration and its effect on flows. Generally, an applicant shall provide the following information:

1. Topographic map of the project area;
2. A comparison of the existing and proposed channel capacity, including engineering calculations prepared by a registered professional engineer;
3. A description of the proposed alteration extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;
4. Land use of adjacent properties;
5. Description of any obstructions; and
6. Photos of the area.

C. Prior to approval of the floodplain development permit, the applicant shall:

1. Submit an application and obtain a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA);
2. Notify adjacent communities, property owners and the and the State Coordinating Agency which is the Water Management Board SDCL § 46-1-6, prior to any alteration or relocation of a watercourse and submit evidence of such notification to the floodplain administrator and to the Federal Emergency Management Agency (FEMA); and
3. Require that maintenance is provided within the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished.

15.32.240 Floodways.

Located within areas of special flood hazard established in §15.32.060 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and have significant erosion potential, the following provisions apply:

A. Encroachments are prohibited, including fill, new construction, substantial improvements, obstructions, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, by a registered professional engineer, that the proposed encroachments-would not result in any increase in flood levels within the community during the occurrence of the base flood discharge;

B. If subsection A. of this section is satisfied, all new construction and substantial improvements shall comply with all applicable Provisions for Flood Hazard Reduction §§ 15.32.120 through 15.32.250.

C. Under the provisions of 44 C.F.R. Chapter 1, § 65.12, of the National Flood Insurance regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the applicant first applies for a conditional FIRM and floodway revision through FEMA (Conditional Letter of Map Revision).

15.32.250 Nonconforming uses.

A structure or the use of a structure or premises which was lawful before the passage or amendment of this chapter but which is not in conformity with the provisions of this chapter may continue subject to the following conditions:

A. No modifications or additions to a nonconforming use or structure shall be permitted unless they comply with this chapter. The words "modification" and "addition" include, but are not limited to, any alteration, addition, modification, structural repair, rebuilding or replacement of any such existing use, structure or accessory structure or use. Ordinary maintenance repairs are not considered modifications or additions; these include internal and external painting, decorating, paneling and the replacement of doors, windows, shingles and other nonstructural components and the maintenance, repair or replacement of existing private wastewater or water supply systems or connections to public utilities. Ordinary maintenance repairs do not include any costs associated with the repair of a damaged structure.

B. No modification or addition to any nonconforming structure or any structure with a nonconforming use which over the period of the last twenty (20) years would equal or exceed 50% of its current market value shall be allowed unless the entire structure is permanently changed to a conforming use in compliance with the applicable requirements of this chapter.

C. If a nonconforming use or the use of a nonconforming structure is discontinued for one year, it is no longer permitted, and any future use of the property, and any structure or building thereon shall conform to the applicable requirements of this chapter.

D. If any nonconforming structure or any structure with a nonconforming use is destroyed or is substantially damaged by a means, including floods, it shall not be replaced, reconstructed or rebuilt except in conformity with the provisions of this chapter. A structure is considered substantially damaged if the total cost to restore the structure to its predamaged condition equals or exceeds 50% of the structure's current market value.

E. Uses or adjuncts thereof which are or become a nuisance shall not be entitled to continue as nonconforming uses.

F. The floodplain administrator shall keep a record which lists all nonconforming uses and nonconforming structures, at the time they are identified as being nonconforming, their current

market value, the cost of all modifications or additions which have been permitted, and the percentage of the structure's total current value those modifications represent.

G. No nonconforming structure, use or development shall be used after completion of modifications or additions until post-construction elevation and/or floodproofing certificate has been approved by the floodplain administrator.

H. No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use in a floodway area, unless such modification or addition:

1. Has been granted a permit or variance which meets all ordinance requirements.
2. Meets the requirements of A-G above paragraphs.
3. Meets the requirements of §15.32.240.

ADMINISTRATION

15.32.260 Designation of the floodplain administrator.

The City Engineer, or his or her designee, as designated by the mayor and the Common Council of Rapid City, is hereby appointed the floodplain administrator to administer and implement the provisions of this chapter and other appropriate sections of title 44 of the Code of Federal Regulations (National Flood Insurance Program Regulations) pertaining to floodplain management.

15.32.270 Duties and responsibilities of floodplain administrator.

The duties of the floodplain administrator shall include, but not be limited to, the following:

- A. *Permit review.*
 1. Review, approve or deny all applications for floodplain development permits to determine that the permit requirements of this chapter have been satisfied;
 2. Review all floodplain development permits to determine that all necessary permits have been obtained from federal, state or local governmental agencies (including § 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1334) from which prior approval is required;
 3. Review all floodplain development permits to determine if the proposed development is located in the floodway, and, if located in the floodway, assure that the provisions of §15.32.240 are met; and
 4. Review floodplain development permits to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.

B. *Use of other base flood data.* When base flood elevation data has not been provided in accordance with §15.32.060, the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from any federal, state or other source in order to administer the provisions of §§15.32.120 through 15.32.250.

C. *Information to be obtained and maintained.*

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 and whether or not the structure contains a basement.
2. For all new or substantially improved floodproofed structures 1) Verify and record the actual elevation (in relation to mean sea level) to which the structure has been floodproofed; and 2) Maintain the floodproofing certifications as provided in §15.32.120.
3. Maintain for public inspection all records pertaining to the provisions of this chapter.

D. *Alteration of watercourses.*

1. Notify, in riverine situations, adjacent communities, South Dakota Office of Emergency Management and the State Coordinating Agency which is the Water Management Board SDCL § 46-1-6, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
2. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained

E. *Interpretation of FIRM boundaries.* Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in § 15.32.300.

F. When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

G. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one (1) foot, provided that the applicant first applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision).

15.32.280 Permit Procedure

A. A floodplain development permit shall be obtained before construction or development begins within any area of special flood hazard established in § 15.32.060. Application for a floodplain development permit shall be filed with the Community Planning and Development Services Department and may include, but not be limited to, plans drawn to scale, showing the nature, location, dimensions, and elevations of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, fill, storage of materials, drainage facilities; and the location of the foregoing in relation to areas of special flood hazard.

B. Additionally, the following information is required:

1. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;
2. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;
3. A certificate from a registered professional engineer that the nonresidential floodproofed structure shall meet the floodproofing criteria of §15.32.150; and
4. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;

15.32.290 Permit Review.

A. Approval or denial of a floodplain development permit by the floodplain administrator shall be based on all of the provisions of this chapter and the following relevant factors:

1. The danger to life and property due to flooding or erosion damage;
2. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
3. The danger that materials may be swept onto other lands to the injury of others;
4. The compatibility of the proposed use with existing and anticipated development;
5. The safety of access to the property in times of flood for ordinary and emergency vehicles;
6. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;

7. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
8. The necessity to the facility of a waterfront location, where applicable;
9. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use; and
10. The relationship of the proposed use to the comprehensive plan for that area.

15.32.300 Application for Variances

All applications for variances shall be filed with the Community Planning and Development Services Department, which shall schedule a review of the variance application by the Planning Commission. The fee for the variance application shall be as established by resolution of Common Council.

A. *Time for action by the Planning Commission.* Within 30 days after receiving an official application, the Planning Commission shall either recommend approval or disapproval of the application or require additional information. In those cases where additional information is requested, time for action by the Planning Commission to recommend approval or disapproval of an application shall be extended an additional 30 days. No more than 2 extensions shall be granted.

B. *Time for action by the Common Council.* After the Planning Commission has recommended either approval or denial, a copy of their decision shall be filed within 5 days with the city's Finance Officer. The Common Council shall set, within 30 days following the date of Planning Commission action, a hearing on the application for the variance. The Common Counsel shall, within 30 days of the hearing, either approve or deny or require additional information of the applicant. In those cases where additional information may be required, time for action by the Common Council to approve or deny an application shall be extended additional 30 days. No more than 2 extensions shall be granted by the Common Council; however, the failure of the Common Council to approve or deny shall not be construed as approval.

C. *Procedure to be followed by Planning Commission in variance applications.* Upon receiving an application for a variance involving the use of fill or construction of structures, the Planning Commission or Common Council shall require prior to rendering a recommendation thereon:

1. The applications shall include postal registration data that substantiates petitioners' good faith attempt of mailing certified letters with return receipts to all property owners within 250 feet, inclusive of dedicated ways, of the area described. The certified mailings shall include the dates set for the hearings before the Planning Commission on the variance and shall be on a form provided by the Community Planning and Development Services Department;

2. Require the applicant to furnish the following information as is deemed necessary by the Planning Commission or Common Council for determining the suitability of the particular site for the proposed use:

a. Five (5) sets of plans drawn to scale showing the nature, location, dimensions and elevation of the lot, existing or proposed structures, fill, storage of materials, flood proofing measures, and the relationship of the preceding to the location of the channel or floodway, the base flood elevation, and regulatory flood protection elevations;

b. A typical valley cross section, to scale, showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross section areas to be occupied by the proposed development, and high-water information;

c. Plan (surface view), to scale, showing elevations or contours of the ground; pertinent structures, fill or storage elevations; size, location and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary, facilities; photographs showing existing land uses and vegetation upstream and downstream for a significant reach, soil types, and other pertinent information;

d. Profile, to scale, showing the slope of the bottom of the channel or flow line of the stream and the existing and proposed flood elevations; and

e. Specifications of building construction and materials, floodproofing, storage of materials, water supply and sanitary facilities.

3. Transmit 1 copy of the information described in subsection C.2.a. of this section to a registered professional engineer for technical assistance, where necessary, in evaluating the proposed project in relation to flood heights and velocities; the seriousness of flood damage to the use, the adequacy of the plans for protection and other technical matters;

4. Based upon the technical evaluation of the designated engineer or expert, the Commission shall determine the specific flood hazard at the site and shall evaluate the suitability of the proposed use in relation to the flood hazard.

D. *Factors upon which the decision of the Planning Commission or Common Council shall be based.* In passing upon the applications, the Planning Commission and Common Council shall consider all relevant factors specified in other sections of this chapter and:

1. The danger to health, safety, welfare and property due to increased flood heights or velocities caused by encroachments.

2. The danger that materials may be swept onto other lands or downstream to the injury of any person or property;

3. The proposed water supply and wastewater systems and the ability of these systems to prevent disease, contamination and unsanitary conditions;

4. The susceptibility of the proposed facility and its contents to flood damage and the effect of the damage on the individual occupant, both present and future;
5. The importance of the services provided by the proposed facility to the community;
6. The requirements of the facility for a waterfront location, where applicable;
7. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
8. The compatibility of the proposed use with existing, anticipated, or other proposed developments in the foreseeable future;
9. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area;
10. The safety of access to the property in times of flood for ordinary and emergency vehicles;
11. The expected heights, velocity, duration, rate of rise and sediment transportation of the floodwaters expected at the site;
12. 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; and
13. Such other factors which are relevant to the purpose of this chapter.

E. *Conditions attached to variances.*

1. Upon consideration of the preceding factors and the purposes of this chapter, the Planning Commission or Common Council may attach such conditions to be granting of variances as it deems necessary to further the purposes of this chapter.
2. Conditions for variances:
 - a. Variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and with surrounded by lots with existing structures constructed below the base level, providing subdivisions 1. through 13. of subsection D. of this section have been fully considered. As the lot size increases beyond the 1/2 acre, the technical justifications required for issuing the variance increase.
 - b. 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.

c. Variances shall not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.

d. Variances shall only be issued upon determination that the variance is the minimum necessary deviation from the requirements of this chapter.

e. Variances shall only be issued upon:

i. A showing of good and sufficient cause;

ii. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

iii. 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 as identified in subsection D. of this section or conflict with existing local laws or ordinances.

f. Any applicant to whom a variance is granted shall be notified in writing that:

i. The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance; and

ii. Such construction below the base flood level increases risks to life and property.

3. Among such conditions without limitation because of specific enumeration may be included:

a. Modification of waste disposal and water supply facilities;

b. Limitations on period of use and operation;

c. Imposition of operational controls, sureties and deed restrictions;

d. Requirements for construction of channel modification dikes, levees, and other protective measures;

e. Floodproofing safeguard. Floodproofing safeguards such as the following shall be designed consistent with the flood protection elevation for the particular area, flood velocities, durations, rare of rise, hydrostatic and hydrodynamic forces and other factors associated with the regulatory flood. The Planning Commission shall require that the applicant submit a plan or document certified by the registered professional engineer that the floodproofing safeguards are consistent with the regulatory flood protection elevation and associated flood factors for the particular area. The following floodproofing safeguards may be required without limitation because of specific enumeration:

- i. Anchorage to resist flotation and lateral movement;
 - ii. Installation of watertight doors, bulkheads and shutters, or similar methods of construction;
 - iii. Reinforcement of walls to resist water pressures;
 - iv. Use of paints, membranes or mortars to reduce seepage of water through walls;
 - v. Addition of mass or weight to structures to resist flotation;
 - vi. Installation of pumps to lower water levels in the structure;
 - vii. Pumping facilities or comparable practices for subsurface drainage systems for building to relieve external foundation wall and basement flood pressures;
 - viii. Construction of water supply and waste treatment systems so as to prevent the entrance of floodwaters;
 - ix. Construction to resist rupture or collapse caused by water pressure or floating debris;
 - x. Installation of valves or controls on sanitary and storm drains which will permit the drains to be closed to prevent backup of sewage and storm waters into the buildings or structures. Gravity draining of basement may be eliminated by mechanical devices;
 - xi. Location of all electrical equipment, circuits and installed electrical appliances in a manner which will assure they are not subject to flooding and to provide protection from inundation by the regulatory flood;
 - xii. Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids, or other toxic materials which could be hazardous to public health, safety and welfare in a manner which will assure that the facilities are situated at elevations above the height associated with the regulatory flood protection elevation or are adequately floodproofed to prevent flotation of storage containers, which could result in the escape of toxic materials into floodwaters;
 - xiii. Such other safeguards that the Planning Commission and/or Common Council shall determine necessary.
- E. *Overriding recommendation of Planning Commission.* It shall take a majority vote of the entire membership of the Common Council to over-ride the recommendation of the Planning Commission.

15.32.310 Amendments.

A. The regulations, restrictions and boundaries set forth in this chapter may, from time to time, be amended, supplemented, changed or repealed, as provided by law. However, no such action may be taken until a public hearing in relation thereto has been held at which parties in interest and citizens shall have an opportunity to be heard. At least 15-days' notice of the time and place of the hearing shall be published in a newspaper of general circulation in the city.

B. Nothing herein contained shall prevent the city from taking such other lawful action as is necessary to prevent or remedy any violation.

15.32.320 Violation–Penalty.

A. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, move, remove, demolish or occupy any building, structure or equipment regulated by this chapter, or cause same to be done, in conflict with or in violation of any of the provisions of this chapter.

B. Violation of the provisions of this chapter or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants or variances of special exceptions) shall be subject to the general penalty provision as set forth in § 1.12.010 of the code.

C. Nothing herein contained shall prevent the city from taking such other lawful action as is necessary to prevent or remedy any violation.

CITY OF RAPID CITY

Mayor

ATTEST:

Finance Officer

(SEAL)