DRAFT AMENDMENT TO TITLE 16 – ENVIRONMENT

Chapter 16.57 – FREQUENLTY FLOODED AREAS

Note to reader: The following proposed amendment is shown as underlined. The full content of each chapter is not included, which means that if changes are not shown in this document then they are not intended.

16.57.050 - Performance standards—General requirements.

All Elevation Certificates (FEMA Form 81-31), Floodproofing Certificates for non-residential structures (FEMA Form 81-65), documents, and records pertaining to the provisions of this ordinance shall be maintained by the City for public inspection.

A. All Necessary Permits Shall be Obtained. Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local government agencies from which prior approval is required. A development permit shall be obtained before construction or development begins within any frequently flooded area established in Section 16.57.010. The permit shall be for all structures, including manufactured homes, as set forth in the "Definitions," and for all development, including fill and other activities, also as set forth in the "Definitions."

B. Area of Special Flood Hazards with Base Flood Elevation. When the base flood elevation is provided, but a regulatory floodway has not been designated, new construction, substantial improvements, or other development, including fill, shall not be permitted within frequently flooded areas, 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 inch at any point within the City limits.

C. Areas Without Base Flood Elevation Data. Where base flood elevation data is not available (Zone A), and there is insufficient data then a report shall be submitted by a qualified professional that includes analysis of historical data and field surveys. The reports shall include reasonable mapping to ensure proposed buildings are safe from flooding and to demonstrate 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 inch at any point within the City limits.

D. Construction Materials and Methods.

1. Methods that Minimize Flood Damage. All new construction and substantial improvements shall be constructed using flood resistant materials and utility equipment, and with methods and practices that minimize flood damage.

2. Buildings shall be located outside the floodplain. For sites with no buildable area out of the floodplain, buildings may be allowed provided they are placed on the highest land on the site, oriented parallel to flow rather than perpendicular, and sited as far from the watercourse and other critical areas as possible. If the City detects any evidence of active hyporheic exchange on a site, the development shall be located to minimize disruption of such exchange.

3. Utilities Shall be Protected. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

E. Elevation Certificate Required Following Construction. Following construction of a building within the floodplain where the base flood elevation is provided, the applicant shall obtain a "finished

construction" elevation certificate (FEMA Form 81-31, most current edition) from a registered professional engineer or architect that records the elevation of the lowest floor.

F. Floodproofing (Non-Residential Only).

1. When a building is to be floodproofed, it shall be designed and constructed using methods that meet the following requirements:

   a. Watertight Building. The building shall be watertight with walls substantially impermeable to the passage of water below one foot above the base flood level;

   b. Hydrostatic and Hydrodynamic Resistance. Structural components shall be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

   c. Certified by a Registered Professional Engineer or Architect. The building shall be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications, and plans.

2. Floodproofing Certificate Required Following Construction. Following construction of the building, the applicant shall obtain a floodproofing certificate (FEMA Form 81-65, most current edition) from a registered professional engineer or architect that records the actual (as-built) elevation to which the building was floodproofed.

G. Anchoring. All new construction and substantial improvements within the floodplain shall be anchored to prevent flotation, collapse, or lateral movement of the building. All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frames tied to ground anchors.

H. Fill and Grading. Fill and grading within the floodplain shall only occur upon a determination from a registered professional engineer that the fill or grading will not block side channels, inhibit channel migration, increase flood hazards to others, or be placed within a channel migration zone, whether or not the City has delineated such zones as of the time of the application. If fill or grading is located in a floodway, CMC Section 16.57.020 applies.