

P. **Development Standards within Flood Plain Overlay District.** In addition to the general development standards found elsewhere in this Code, in all areas of special flood hazards, the following standards are required:

1. Anchoring

- a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure and capable of resisting the hydrostatic and hydrodynamic loads.
- b. All manufactured homes must 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 four corners of the manufactured home, with two additional ties per side at intermediate locations, with manufactured homes less than 50 feet long requiring one additional tie per side;
 2. Frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with manufactured homes less than 50 feet long requiring four 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.

2. 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 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 shall be designed to minimize or eliminate infiltration of flood waters into the system;
- b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate

infiltration of flood waters into the systems and discharge from the systems into flood waters; and

- c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during the flooding.
4. Subdivision Proposals
 1. All subdivision proposals shall be consistent with the need to minimize flood damage;
 2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
 3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
 4. Base flood elevation data shall be provided for subdivision proposals and other proposed development.
 5. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of 1 (one) foot above the base flood elevation.
 6. Non-residential Construction. New construction and substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, including basement, elevated to a minimum of 1 (one) above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
 - a. Be floodproofed so that below 1 (one) foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water.
 - a. Have structural components capable of resisting hydrostatic and hydrodynamic loads and affects of buoyance; and
 - b. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Community Development Director.
 7. Openings in Enclosures Below the Lowest Floor. For all new construction and substantial improvements, fully enclosed areas below the lowest floor that 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 either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - e. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - f. The bottom of all openings shall be no higher than one foot above grade;
 - g. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

8. Manufactured Homes

- a. Manufactured homes shall be anchored in accordance with this Section.
 - b. All manufactured homes or those to be substantially improved shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and is securely anchored to an adequately anchored foundation system.
 - c. All manufactured homes or those to be substantially improved shall conform to the following requirements:
 1. Require that manufactured homes that are placed or substantially improved on a site (I) outside of a 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, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 2. Require that manufactured homes to be placed or substantially improved on sites in existing manufactured home parks or subdivisions that are not subject to the provisions in (A) above be elevated so that either (I) the lowest floor of the manufactured home is at or above the base flood elevation, or (ii) the manufactured home chassis is supported by reinforced piers or other foundation elements that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
9. Recreational Vehicles. Require that recreational vehicles either (I) be on site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements and elevation and anchoring requirements for resisting wind forces.