

## **Administrative Procedures Regarding the Application of Flood Damage Prevention**

A floodplain development permit, conforming to the provisions of the Orange County Unified Development Ordinance (hereafter 'the UDO') shall be required before the commencement of any land disturbance activity, construction, substantial improvement or repairs to a substantially damaged structure for properties located within a floodplain, commonly referred to within the UDO as a Special Flood Hazard Areas (SFHAs).

Please note no structure or land within a SFHA in Orange County shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of the UDO and other applicable regulations. In accordance with existing regulations within the UDO, no new residence, building, accessory building, or structure shall be built within a SFHA. New fill material is also prohibited within the SFHA.

### **I. Floodplain development permit and certification requirements.**

Planning and Inspections Department staff has placed notices in the County permit system identifying all parcels containing SFHAs. For all development/permit requests received by the County, planning staff reviews the proposal and in order to determine the lowest adjacent grade of the property where development activity is proposed (i.e. location of structure). If this grade is a minimum of five (5) feet or greater above established base flood elevations, as depicted on adopted Federal Insurance Rate Maps (FIRM), the permit is processed and the appropriate elevation information is included in the approval. If not, then the applicant is required to complete a Floodplain Development Permit Application and follow the procedures described herein.

### **II. General Standards – Development within SFHAs.**

In all SFHAs, the following provisions are required. Any alteration, repair, reconstruction, or improvements to a structure shall meet the requirements of "new construction." Permit holders or their contractors shall:

1. Anchor substantial improvements or damage repairs to prevent flotation, collapse, or lateral movement of the structure.
2. Construct substantial improvements or damage repairs with materials and utility equipment resistant to flood damage.
3. Construct substantial improvements or damage repairs using methods and practices that minimize flood damages.
4. Design and locate electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities to prevent water from entering or accumulating within the components during conditions of flooding. These include, but are not limited to HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric meter panels/boxes, utility/cable

boxes, appliances (washers, dryers, refrigerator, etc.), hot water heaters, and electric outlets/switches.

5. Design replacement water supply systems to eliminate infiltration of floodwaters into the system.
6. Design replacement sanitary sewage systems to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
7. Locate and construct on-site waste disposal systems outside the SFHA and the required stream buffer to avoid impairment to them or contamination from them during flooding.
8. Not enlarge, replace, or rebuild non-conforming buildings or uses or other development, unless such enlargement or reconstruction conforms to the provisions above. The repair, reconstruction, or replacement of a building or structure existing on March 16, 1981, which is located totally or partially within the floodway non-encroachment area, or stream setback is permitted. The bulk of the building or structure below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback cannot be increased and if such repair, reconstruction, or replacement meets all other requirements.
9. Not permit new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities in SFHAs. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a SFHA only if the structure or tank is either elevated or flood proofed to at least the regulatory flood protection elevation and certified as such.

#### **IV. Floodplain Development Permit Application Requirements.**

To apply for a Floodplain Development Permit, the following information shall be presented to the staff as detailed in Section 2.6.2 of the UDO:

- A. Completed application form,
- B. A site plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
  - i. The nature, location, dimensions, and elevations of the area of development/disturbance;
  - ii. existing and proposed structures, driveways, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;

- iii. The boundary of the SFHA as delineated on the FIRM or other flood map as determined in Section 4.3.5 or a statement that the entire lot is within the SFHA;
  - iv. Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Section 4.3.5 of the UDO;
  - v. The boundary of the floodway(s) or non-encroachment area(s) as determined in Section 4.3.5 of the UDO;
  - vi. The Base Flood Elevation (BFE) where provided as set forth in Section(s) 1.10.2 (K) and (L) ; 4.3.5 ; and 6.6.1 of the UDO;
  - vii. The old and new location of any watercourse that will be altered or relocated as a result of proposed development; and
  - viii. Preparation of the plot plan by or under the direct supervision of a North Carolina licensed professional Land Surveyor or Professional Engineer and certified by them.
- C. Proposed elevation, and method thereof, of all development within a SFHA including but not limited to:
- i. Elevation in relation to mean sea level of the proposed reference level (including basement) of all structures;
  - ii. Elevation in relation to mean sea level to which any non-residential structure in Zone AE will be flood-proofed; and
  - iii. Elevation in relation to mean sea level to which any proposed utility systems will be elevated or flood proofed.
- D. If flood proofing, a flood proofing certificate and back-up plans from a registered professional engineer or architect certifying that the non-residential flood proofed development will meet the flood-proofing criteria in Section 6.6.1 of the UDO.
- E. A Foundation Plan drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this Ordinance are met. These details include but are not limited to:
- i. Proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear wall); and
  - ii. Openings to facilitate equalization of hydrostatic flood forces on walls according to Section 6.6.1(B), when solid foundation perimeter walls are used in Zones.
- F. Usage details of any enclosed space below the regulatory flood protection elevation.
- G. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage;

- H. Copy of all other Local, State and Federal permits required prior to floodplain development permit issuance (i.e. Wetlands, Erosion and Sedimentation Control, Riparian Buffers, Mining, etc.);
- I. If the application is for placement of recreational vehicles and/or temporary structures, documentation to ensure compliance with Section 6.6.1(B)(5) and (7) of the UDO.
- J. If a watercourse is proposed to be altered and/or relocated, a description of the extent of watercourse alteration or relocation, an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map, drawn to scale, (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

As required by Section 2.6.3 of the UDO the following information shall also be provided in order for the project to be deemed compliant with applicable regulations.

- A description of the development under the floodplain development permit issuance.
- The Special Flood Hazard Area (SFHA) determination for the proposed development per available data specified in Section 4.3.5 of the UDO.
- The regulatory flood protection elevation required for the reference level and all attendant utilities.
- The regulatory flood protection elevation required for the protection of all public utilities.
- All certification submittal requirements with timelines.
- A statement that no fill material shall encroach into the floodway or non-encroachment area of any watercourse, if applicable.
- If in an AE zone, specify the minimum foundation opening requirements.
- State limitations of below BFE enclosure uses (if applicable) such as, parking, building access and limited storage only.

## **V. Certification Requirements**

An Elevation Certificate (FEMA Form 81-31) or Flood Proofing Certificate (FEMA Form 81-65) is required after the reference level is completed in order for staff to complete the processing of a development application. As required under Section 2.6.4 of the UDO this certification is required within 21 calendar days of:

- (1) Establishment of the reference level elevation, or
- (2) flood proofing, by whatever construction means, whichever is applicable,

It is the duty of the permit holder to submit to staff a certification of the elevation of the reference level, or flood proofing elevation, whichever is applicable, in relation to mean sea level. Said certification shall be prepared by, or under the direct supervision of, a North Carolina licensed professional Land Surveyor or Professional Engineer and certified by them.

Please note any work done within the 21 day calendar period, and before submission of the certification, shall be at the permit holder's risk.

Staff shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and before further work being permitted to proceed. Failure to submit the certification or failure to make required corrections shall be cause to issue a stop-work order for the project. A Final As-Built Elevation Certificate (FEMA Form 81-31) is required after construction is completed and prior to the issuance of a Certificate of Compliance/Occupancy allowing for the use of the structure.

It is the responsibility of the permit holder to submit to staff a certification of final as-built construction of the elevation of the reference level and all attendant utilities. This elevation certification shall be prepared by, or under the direct supervision of, a North Carolina licensed professional Land Surveyor or Professional Engineer and certified by the same. In some instances, another certification may be required to certify corrected as-built construction.

### **Guidelines for Completing Elevation Certificates**

- The licensed professional certifying the elevations shall file out the original document in other than black ink to minimize or eliminate potential fraud.
- The licensed professional shall complete all data fields with appropriate information.
- Any data field, which is not applicable to the particular situation, shall be completed as not applicable (NA).
- No one shall make any changes to an old certificate. Instead, a new certificate shall be prepared to reflect new conditions or finished construction.
- The licensed professional certifying the elevations shall sign Sections C and D.
- Floor elevation of attached garages, not garages directly underneath an elevated structure, is documented in line item C3 (d), not in C3 (a).
- The Comments Section is to provide additional details.
- Photographs of the structure showing pertinent features on at least two sides (four sides for a split level) are required.

### **VI. Corrective procedures.**

All violations shall be corrected. When staff finds violations of applicable State and local laws, they shall notify the owner or occupant of the building in violation in accordance with the provisions of Section 9.7 of the UDO.

The owner or occupant shall immediately remedy each of the violations listed. If the building or property owner fails to take prompt corrective action, staff shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating that:

- i. The building or property is in violation of the UDO;
- ii. Staff shall schedule a hearing at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
- iii. Following the hearing, staff may issue such order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.

If, upon a hearing held pursuant to the notice detailed herein, staff finds the building or development is in violation of the UDO, they shall make an order in writing to the owner, requiring the owner to remedy the violation within a specified time, but not less than sixty (60) days. If staff finds that there is imminent danger to life or other property, corrective action may be taken in such lesser period, as may be feasible.

Please note any owner who has received an order to take corrective action may appeal the order to the Board of Adjustment by giving notice of appeal in accordance with Section 2.26.7 of the UDO. In the absence of an appeal, the order shall be final.

If the owner of a building or property fails to comply with an order to take corrective action from which there was no appeal or fails to comply with the Board of Adjustment decision following an appeal, the owner shall be guilty of a Class 3 misdemeanor and shall be punished in the discretion of the court of competent jurisdiction.