

Floodplain Checklist – for Residential Construction

- 1. Municipal approval **Land Use Permit** signed by a representative of the municipality. [Will only accept if signed by the municipality]
- 2. **All applicable requirements of the municipalities floodplain ordinance must be met.** You must include a copy of your municipalities floodplain ordinance with the **Floodplain Development Permit Application.** (a copy is available from your municipality or from PMCA) most municipalities have special requirements for construction within the floodplain. Some municipalities require review by the planning commission, local conservation district and the municipal engineer.
- 3. **Plot Plan** of the proposed location prepared by a registered surveyor or a licensed engineer, plan must clearly define flood boundaries (including floodways & floodplain). Location of the proposed structure must be clearly defined on plan.
- 4. **Elevation Certificate** prepared by a registered surveyor or a licensed engineer, all applicable sections must be completed, certificate must include base flood elevation (if the proposed structure is located in Zone-A the elevation must be established by the surveyor/engineer of record), all applicable elevations in section C must be completed (a-h). **At the completion of the project an As-Built certificate verifying all elevations must be provided before occupancy will be granted.** *[Is required if in the Floodway or Flood Zone]*
- 5. **No Rise Certificate** prepared by a licensed engineer must be completed when the proposed structure is located within the floodway or within 50' of the creek bank. (Copy available from your local PMCA office). *[Is mandatory if in the Floodway]*
- 6. Work on Existing Buildings in Special Flood Hazard Areas of Substantial Improvement / Substantial Damage Worksheets. **Substantial improvement** means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement.]
- 7. Detailed foundation/pier drawings signed and sealed by a licensed engineer must be provided, foundation drawings must include method to securely anchor propose structure to the foundation.
- 8. All mechanical & electrical systems must be located at least 18" above the base flood elevation, mechanical system are permitted below the base flood elevation provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic & hydrodynamic loads and stresses including the effects of buoyancy. Electrical systems are permitted to be located below the base flood elevation provided they conform to the provisions of the 2008 NEC for wet locations. (Some local ordinances require electrical distribution panels to be located above the base flood elevation. Locating mechanical & electrical systems below the base flood elevation could adversely affect cost of flood insurance.)
- 9. Location of propane or fuel oil tanks (if applicable) must be defined on the plot plan; tanks must be securely anchored to prevent uplift from the effects of buoyancy in a flood event.
- 10. Water supply systems must be designed to eliminate infiltration of floodwaters into the system in compliance with all applicable requirements in the 2009 IPC. Sanitary sewage system must be designed to eliminate infiltration of floodwaters into the system and discharges from the system into the floodwaters.
- 11. Landings & stairways must be provided at all exits, detailed plans that comply with all applicable requirements in the 2009 IRC must be provided.
- 12. All enclosed areas below the base flood elevation including basements, crawl spaces, garages and areas below decks and porches that are enclosed must be provided with at least 2 openings (floodgates) that meet requirements of section 322.2.2 IRC. The design of the openings must provide for equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters. The net area of opening shall be at least 1 in.² for each square foot of enclosed area. The bottom of each opening shall be 1 foot or less above the adjacent ground level. (Location and size of flood openings must be clearly depicted on the drawings.)

► Commercial Projects have similar requirements – Reference local ordinance, International Building Code & DHS-FEMA ◀