



Livingston Public Works Department

Building in Flood Prone Areas

In order to properly evaluate building permit applications and insure compliance with FEMA flood hazard requirements, BOCA building code standards, NJDEP stream encroachment regulations and Township of Livingston ordinances, the Engineering Department is charged with reviewing all building permit applications within the Township of Livingston.

When an building permit application comes into the Building Department, the application is reviewed by the Engineering Department to determine if the property in question is located either fully or partially in the 100 year designated flood hazard zones "A" or "AE" or is near a water course. This determination is performed utilizing the latest approved FIRM maps which are published by FEMA. If the property is located in flood hazard zone "X" and is not near a water course, the Building Department is notified and the application is approved for flood related issues.

A flood elevation survey prepared by a New Jersey licensed land surveyor will be required for any of the following situations:

1. The property is either partially or fully located within a designated 100 year flood hazard zone of "AE" or 100 year approximate flood hazard zone "A" and the cost of the proposed construction exceeds 50% of the value of the existing structure.
2. The property is located within 100 feet of the top of bank of a water course. Construction is not allowed within 30 feet of the top of bank of a water course.

When the flood elevation survey is received by the Engineering Department, it will be reviewed for the following:

1. In the case of a designated 100 year flood hazard zone "AE"; the provided flood elevation survey elevations will be reviewed to see if they confirm the FIRM map flood hazard zone determination. If the elevations confirm the FIRM map flood hazard zone determination, all construction will have to be done in conformance with "Article X - Flood Hazard Areas". Also, if the property is located near a water course, a State of New Jersey Stream Encroachment permit may be required. If the flood elevation survey elevations show that the property or a portion thereof might not be in the designated 100 year flood hazard zone "AE", the applicant will be required to obtain a LOMA (Letter of Map

Amendment) from FEMA, if the cost of the proposed construction exceeds 50% of the value of the existing structure. The LOMA has the effect of removing either the entire property or a portion thereof from the designated flood hazard zone.

2. In the case of a designated 100 year approximate flood hazard zone "A"; the provided flood elevation survey will also need to contain a base flood elevation, which is to be determined by the applicant's engineer and land surveyor. Calculations will need to be provided for the purpose of review and approval by the Engineering Department. The approved elevations will then be reviewed to see if they confirm the FIRM map flood hazard zone determination. If the elevations confirm the FIRM map flood zone determination, all construction will have to be done in conformance with "Article X - Flood Hazard Areas". Also, if the property is located near a water course, a State of New Jersey Stream Encroachment permit may be required. If the flood elevation survey elevations show that the property or a portion thereof might not be in the designated 100 year flood hazard zone, the applicant will be required to obtain a LOMA (Letter of Map Amendment) from FEMA, if the cost of the proposed construction exceeds 50% of the value of the existing structure. The LOMA has the effect of removing either the entire property or a portion thereof from the designated flood hazard zone. If a base flood elevation cannot be determined and the cost of the proposed construction exceeds 50% of the value of the existing structure, the entire structure must have its lowest floor elevation raised to a minimum of 2 feet above the existing ground elevation at the site of the improvement.

3. If the proposed project is not located in a designated flood hazard zone, but is located within 100 feet of the top of bank of a water course, the provided flood elevation survey elevations will be reviewed and utilized to insure conformance with Section 170-87P of the Township of Livingston Ordinances.

4. The applicant may be required to submit additional information and data depending upon the complexity of the building permit application or the flooding issues.

Additional information is available from the Engineering Department in regards to flood elevation surveys, Stream Encroachment Regulations of the State of New Jersey, Article X - Flood Hazard Areas of the Township of Livingston Ordinances and Section 170-87P of the Township of Livingston Ordinances.

Applications for building in areas near flood zones are complex and require additional work. We know that this process may become time consuming for you and we appreciate your patience.



Livingston Public Works Department

May 19, 2005

MEMORANDUM

TO: All Interested Parties
FROM: Robert J. Schaefer, Township Engineer
SUBJECT: Requirements for Flood Elevation Surveys.

The following details are required for flood elevation surveys:

- 1) All existing and proposed structures and alterations.
- 2) Existing and proposed first floor and lowest floor elevations including crawl spaces and basements.
- 3) Plan view of top of bank and bottom of bank on both sides of all brooks and streams.
- 4) All constructed drainage structures.
- 5) All easements & right of ways.
- 6) The elevation datum shall be referenced on the survey and shall be one of the the FEMA provided "Elevation Reference Marks".
- 7) Elevations of the top of bank and bottom of bank of all brooks and streams shall be shown at a minimum of three locations along the stream or brook on the property in question.
- 8) Ground elevations at the outside corners of all existing and proposed structures.
- 9) Sufficient ground elevations to establish the general slope of the property.
- 10) The survey must be performed by a New Jersey licensed surveyor.
- 11) In the case of a 100 year approximate flood hazard zone "A"; the provided flood elevation survey will also need to contain a base flood elevation

Robert J. Schaefer, PE, PP