- existing structure where the costs of which would equal or exceed fifty (50) percent of the pre-improvement market value shall constitute a substantial improvement and shall fully comply with the provisions of this ordinance.
- iii. Any addition, alteration, reconstruction, or improvement of any kind to an existing structure in the floodway shall comply with the provisions of 5.1 (C).
- iv. Any addition, alteration, reconstruction, or improvement of any kind to an existing structure that will change the compliance requirements of the building shall require applicable documentation including an elevation certificate, floodproofing certificate, or no rise certification.

5.3 DESIGN AND CONSTRUCTION STANDARDS

A. Fill

i. Filling of the flood fringe associated with new development within the Papillion Creek System shall be limited to 25% of the flood fringe in the floodplain development application project area, unless approved mitigation measures are implemented. The remaining 75% of flood fringe within the project area shall be designated as a restricted fill zone. For redevelopment, these provisions may be modified or waived in whole or in part by the Village Engineer and Street Superintendent.

B. Anchoring

i. All buildings or structures shall be firmly anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

C. Building Materials and Utilities

- All buildings or structures shall be constructed with materials and utility equipment resistant to flood damage. All buildings or structures shall also be constructed by methods and practices that minimize flood and flood-related damages.
- ii. All buildings or structures shall be constructed with electrical, heating, ventilation, plumbing, 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.

D. Drainage

 Within Zones AO and AH, adequate drainage paths around structures on slopes shall be required in order to guide floodwaters around and away from proposed structures.

E. Water Supply and Sanitary Sewer Systems

i. All new or replacement water supply and sanitary sewer systems shall be located, designed, and constructed to minimize or eliminate flood damages to such