SUBSTANTIAL DAMAGE: Pre-FIRM buildings, with lowest floors below the base flood elevation (BFE), must be elevated if damaged by any cause for which repair costs are 50% or more of the value of the building. This applies to all buildings in a Special Flood Hazard Area (SFHA), even if the building has flood insurance. The cost to repair must be calculated for full repair to "before-damage" condition, even if the owner elects to do less. And the total cost to repair must include both structural and finish materials and labor.

SUBSTANTIAL IMPROVEMENT: When a Pre-FIRM building is proposed to be remodeled, renovated, rehabilitated, added to, or in any way improved, the proposed modifications must be evaluated for substantial improvement. If the total costs of improvement are 50% or more of the building value, the building must be elevated, etc., just like substantial damage. Total costs means all structural costs, including all finish materials, built in appliances, hardware, profit and overhead.

BUILDING VALUE: Building value equals market value of structure. Land and exterior improvements such as a swimming pool, pool enclosure, landscaping, paving, etc. are excluded. Market value equals adjusted tax assessed value, depreciated replacement value, or certified appraisal value. The assessed value may be adjusted upward to reflect the market more accurately. The building's replacement value must be fairly depreciated to reflect the age of the building and the deterioration of building components. Certified appraisals must be based on the comparable sales method. The location and land value are not considered.

COSTS TO BE INCLUDED: The construction costs to be calculated for both substantial damage and improvement include both structural and finish labor and materials. This includes lighting fixtures, built-in appliances, interior moldings, paneling, tiling, wall -to-wall carpet over subflooring, built-in cabinets, etc. The value of donated materials and labor must be included. The cost to demolish undamaged building components must be established and included. Overhead and profit are also included, but not the costs of permits.

WHEN MAPS ARE REVISED: Substantial Damage and Improvement can affect Post-FIRM buildings too! If the FIRM’s are revised, the new elevations along with a community's freeboard requirement must be used. All additions to a Post-FIRM structure must be elevated to or above the current BFE, whether they are "substantial" or not.