

Growth Management Shelter-in-Place Development Policy
August 1, 2008

Standards for Shelter-In Place (SIP) requirements within the CGMU Land Use:

- 1) The shelter must be located at least 2000 feet horizontally from the waters of Charlotte Harbor, The Peace River, and the Myakka River – and 6,000 feet from the Gulf of Mexico.
- 2) The base floor elevation of any facility serving as a shelter shall be no less than 19' NVGD in elevation. (Floors below those serving as a shelter are allowed, but will not count as shelter space.) Essential mechanical equipment must be located at or above 19' NVGD as well.
- 3) The shelter(s) must be designed and constructed to withstand 155mph winds. Lower floors (below 19' NVGD), may be designed to allow water to pass through (break away) during a surge event.
- 4) Essential mechanical equipment shall include electrical generation equipment capable of maintaining power to other essential equipment (lights, fans, air conditioning, refrigeration) for at least 7 consecutive days. Such equipment shall be installed (protected) so as to withstand 155mph winds.
- 5) The fuel supply for electrical generation equipment shall be stored in such a manner that will allow rising water to reach the base floor elevation of the shelter without contaminating or otherwise rendering the fuel unusable.
- 6) The shelter must allow a minimum of 30 SF of space per individual required to be accommodated. (i.e. a shelter for 1,000 people must be at least 30,000SF in size.)
- 7) Required shelter space will be calculated based on the number of dwelling units within the CGMU area. Specifically, the number of dwelling units X 1.3 = the number of required shelter spaces. (i.e. a project with 769 dwelling units would need a shelter - or shelters - to support 1,000 people, of at least 30,000SF in total area.)
- 8) Multiple shelters may be established to meet total shelter requirements. (i.e. three 10,000SF facilities can meet the requirements for 1,000 people)
- 9) Shelters may be incorporated within multiple-use facilities. (They need not serve only as shelters)
- 10) Sufficient potable water storage capability must be in place at each shelter to allow for 2 gallons per person for a total of 7 days. (i.e. a shelter for 1,000 people would need 14,000 gallons of potable water stored.)

11) Sufficient food supplies must be stored in place to provide 1,500 calories per person, per day, for 7 days.

12) Toilet facilities shall be provided at the rate of at least one toilet per 25 people to be sheltered. In anticipation of sewers not functioning, shelters must have the ability to accommodate the storage of sewage on site (for later pump out) at the rate of two gallons per person, per day, for seven days.

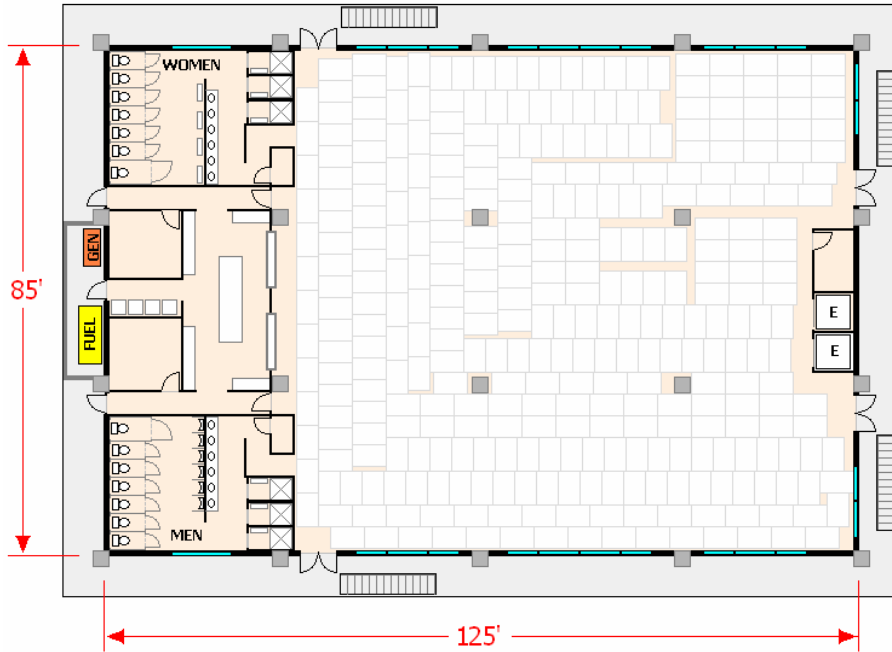
13) Shelters must have a Management and Operations plan in place that is approved by the Charlotte County Emergency Management Department. The Management and Operations plan must also be available for public review. Such a plan shall include at a minimum:

- a) The number of people the shelter is intended to accommodate.
- b) Who is responsible for the operation of the shelter (names/organizations)
- c) Procedures for opening the shelter (registration/communication)
- d) Rules applicable to those being sheltered
- e) A list of what the shelter expects to provide, and for what duration (food/water)
- f) A list of what shelter residents are expected or encouraged to bring to the shelter
- g) A list of specific items NOT to be brought to the shelter. (weapons, etc.)
- h) How information will be disseminated at the shelter
- i) Procedures for closing the shelter

14) Individual residences can meet the shelter-in-place requirement by meeting the following standards.

- a) The residence must be 2,000 feet horizontally from the waters of Charlotte harbor, the Peace River, and the Myakka River – and 6,000 feet from the Gulf of Mexico.
- b) The living areas of the residence, and all mechanical equipment to support the residence, must be located no less than 19' NVGD in elevation.
- c) Electrical generation equipment must be provided to support the residence (or a group of residences) for a period of seven (7) days. The electrical generating equipment must be located no less than 19' NVGD in elevation, and the fuel supply must be stored so as to not be rendered useless by flood water reaching 19' NVGD in elevation.
- d) The residences shall be designed and constructed to withstand 155 mph winds.
- e) A sewage handling plan must be developed to deal with all sewage generated by individual residents for seven (7) days.

Conceptual Shelter design:



- Number of Dwelling Units = 263
- Number of Shelter spaces = 340
- Area Required = 30 x 343 = 10,290 SF
- Toilets Required = 14
- Water required = 4,760 Gallons
- Sewage Tankage Req. = 4,760 Gallons
- Generator 15KW
- Fuel Burn = 1.25 GPH
- Tankage Required = 210 Gallons
- Food Storage 0.25 CF per meal = 595 CF

