

PLANNING

This area discusses planning future facilities to avoid some of the potential event problems. A guideline should be established to insure that in evaluating the design of future facilities that the possibilities of damages in events is included in determining value for the design in addition to the construction cost and operating costs.

1. Property Selection
 - a. Location near major water
 - b. Location with underground/above ground utilities
 - c. Location near hazardous areas- refinery, industrial plants
 - d. Location near potential debris for high winds
 - e. Location with access from main roads
 - f. Location with
2. Building Purpose
 - a. Decide if this building will be needed as a shelter
 - b. Decide if this building will be needed to accommodate emergency situations if other buildings will be damaged in an event.
3. Building Design
 - a. Determine the level of damage that the school district is willing to replace and evaluate with budget concerns.
 - b. Building Envelope- Building systems need to determine for their resistance to the elements of the event.
 - i. Roof-compare systems in regard to uplift, puncture damage and perimeter details
 - ii. Window- while all windows will have potential for breaking, the locations will determine the amount of damage to the interior
 - iii. Doors-compare types for resistance to leaking and impact
 - iv. Exterior Walls- compare systems for impact from storm surge and wind, also compare for resistance to elements.
 - c. Interior finishes- During an event all finishes have the potential for damage with building envelope damage. The more durable the finishes are the better they will be to handle event situations
 - d. Mechanical & Electrical Systems
 - i. Design main building equipment to be in location protected from potential flood or wind damage(head in equipment, fire alarm, phone, electrical rooms and such on 2nd floor)
 - ii. Systems located in the interior of the building will receive less damage than those items run on the exterior of the buildings.(flood and wind damage will affect items that are located on the exterior more easily than those items that can be located within the building envelope-when there is the option to locate either way)
 - iii. Design system to more easily accept emergency back up systems such as generators and portable ac units as may need required. Locate in area that has space to accommodate these items.(locate extra connections for

generators at the electrical service, tie in location and space for the portable ac/heat to connect, provide connections in the large outdoor spaces for temporary kitchens.)

e. Food Service

- i. Design teaching culinary kitchens on second floors so they can be used if needed for cafeteria for students.

f. Technology

- i. Design the technology with major components on second floors and redundancy for alternate temporary connections as required.