Armed Forces Retirement Home Gulfport, Mississippi

Institutional Architecture

In late August 2005, residents of the Armed Forces Retirement Home were faced with lifealtering and unprecedented devastation. As the wrath of Hurricane Katrina subsided, it became clear that the severely damaged Home could not be salvaged. The attachment and commitment to the site remained strong, however, and a new Home was completed in 2010. Approximately 100 of the original residents returned to the site after 5 years in temporary lodging.

The design of the new facility focuses on artifacts which survived the devastation and emphasizes the prominence of the site as a driving force in the composition of the building. The 660,000 square-foot facility consists of 584 residential units located in a series of pavilions placed above a common level plinth which provides safe haven from potential future storms.



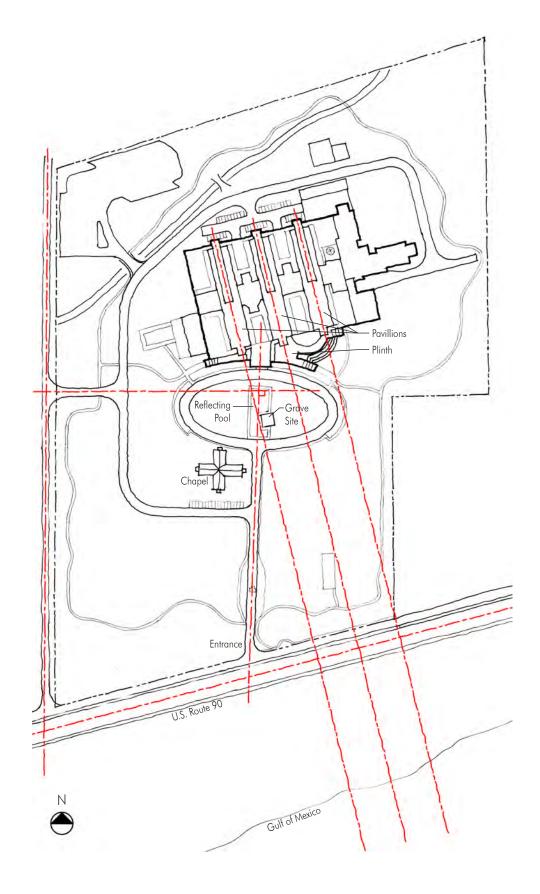
Original Facility destroyed by Katrina



Design Concept

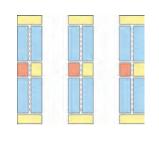
The project takes advantage of several key site features which dramatically influence the design. The axial orientation of the existing entrance drive, close proximity to the Gulf, and the scale of neighboring development all help define the placement and orientation of the building and its general organization and massing. The common level plinth is oriented to the entrance axis. Residential pavilions above the plinth are geometrically shifted off the entrance axis and are perpendicular to the coast-line, providing all residents equal views to the water (residents have a distinct egalitarian esprit de corps). The building massing steps down toward adjacent lower scaled development to the east and west.

The building focuses on a large elliptical entrance court, which contains surviving artifacts and a small grave site where former owners of the property are laid to rest. At the center of the ellipse, a large reflecting pool celebrates the rebuilding process and provides a contemplative reflection of the site and its past and future residents.





Service Area Secondary Circulation "Wayfinding Anchors" / Core "Main Street" Public / Social

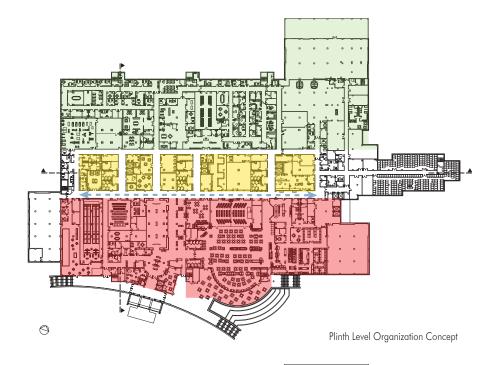


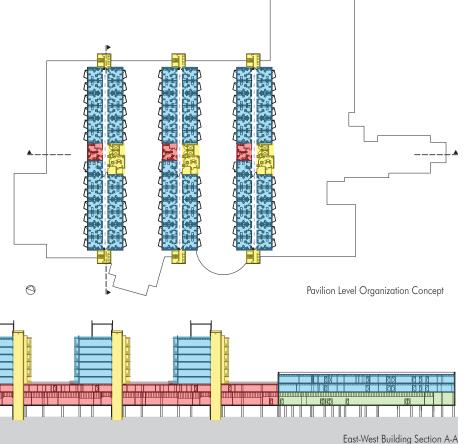
"Wayfinding Anchors" / Core Secondary Circulation Public / Social Residential

Organization Concept

The plinth level is raised 20' above sea level (and resident parking) and is organized into banded spatial layers which range from public (dining/café/ recreational) to service retail (shops/ learning center/arts and crafts) to service (medical clinic./administration/ central plant). The main circulation artery, or "Main Street", provides access to the public zones and links vertical circulation elements, which serve as building anchors.

Residential pavilions rise above the plinth and are aligned perpendicular to the coastline. Units are designed to be accessible to permit "aging in place," and each contains a balcony which is inflected outward toward the view and coastal breezes. Fabric scrims provide shade, privacy, and a sense of enclosure.







Energy & Atmosphere: Energy efficient lighting, HVAC and kitchen equipment has been installed. Lighting is controlled via occupancy sensors. Materials & Resources: Locally sourced and recycled content materials were utilized. Over 75% of construction debris was diverted from deposit in a landfill. Sun Screens: Perforated fabric screens limit low angle solar glare and heat gain.

Sustainable Sites:

Sustainable Design

Silver certification.

The design is on track to receive LEED

The brownfield site was remediated prior to construction. Open spaces are landscaped with native/adapted vegetation.

Green Roofing:

Green roofs reduce storm water runoff, limit glare into adjacent units, and provide attractive foreground views.

Indoor Environmental Quality: Occupant controllability of thermal and lighting controls, and Low-VOC paints, coatings, carpets and compos-ite wood products have been provided.

Water Efficiency:

The landscaping employs indigenous, drought-resistant material to minimize irrigation. High efficiency plumbing fixtures are employed throughout.

Hurricane Resistance and Sheltering in Place

The new building showcases several features designed specifically to address hurricane resistance and the possibility that residents will be sheltered in place in the event of a serious storm.

Hurricane Resistant Exterior:

6" thick pre-cast concrete panel combined with hurricane resistant glazing is designed to withstand significant impact from wind driven debris.

Progressive Collapse: The reinforced concrete structural design prevents additional storm related damage due to the loss of a perimeter column.

Emergency Power: Emergency power is provided by two diesel powered 13.2 KV generators. A 7 day supply of fuel will be on hand prior to a storm event.

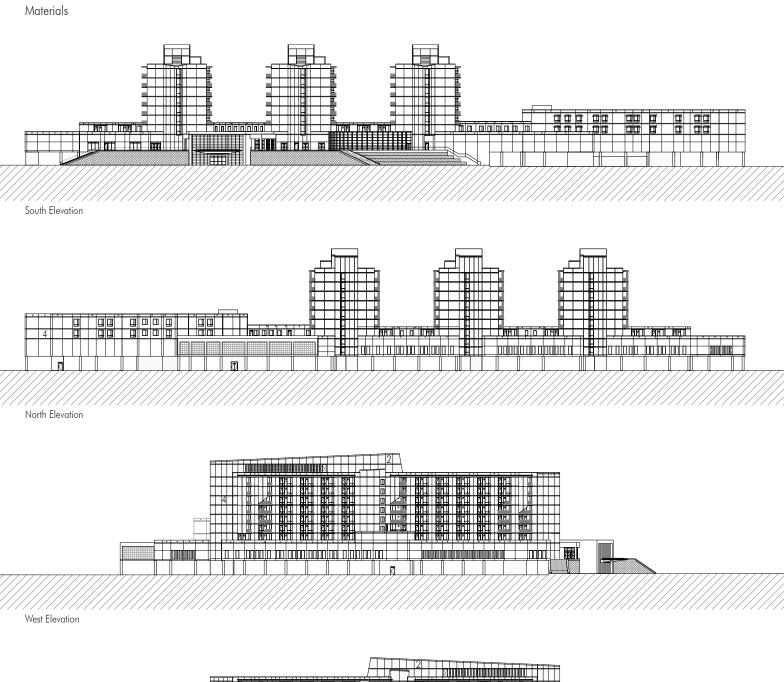
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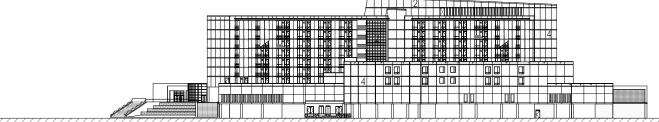
Wash-Out First Floor Level: All spaces on this level are considered non-essential to the operation of the building in the event of a hurricane and related storm surge.

Resident Care in the Event of a Hurricane: During a storm event residents take shelter in the Dining and Multi-Purpose Activity Rooms, and a 7 day stockpile of food is provided.

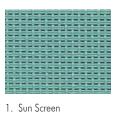
Sewage Holding Tank: The building provides a 7-day, 350,000 gallon sewage holding tank, preventing sewage from backing up into the building or polluting the Gulf.

Fire Suppression and Potable Water: In a storm event both fire suppression and potable water switch from city to well supplied via a 863' deep well, which is sealed from contamination during a storm surge.





East Elevation





2. Curtain wall with High Performance Glass



3. Stucco

4. Precast Concrete



5. Coated Aluminum







