

Programming and Conceptual Design
Tricoche Community Center, Ponce
FEMA Safe Community Room
Mitigation Grant



Tricoche Community Center

This project is a collaboration between resilientSEE-PR and Voluntariado de Ingenieros to assist Once Stop Center in developing a conceptual program and design with cost estimation feedback to transform a historic registry building into a community center. The center transforms into a shelter in time of emergency.

The scope includes gathering technical information and design conceptualization needed to secure a \$8.5M FEMA Mitigation Grant for Community Safe Room.



Old Tricoche Hospital, Ponce, Puerto Rico



Team



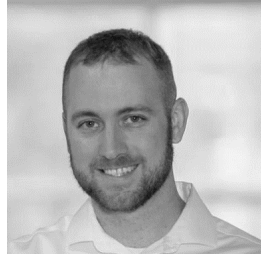
Yanel de Angel

FAIA, Principal, Perkins and Will / Co-fundadora resilientSEE-PR



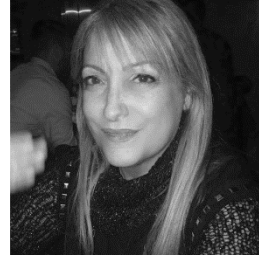
Danniely Staback

Diseñadora, RISD and University of Illinois Design Critic in Architecture / resilientSEE-PR



Christopher Lizewski

P.E., Life Safety, Code Red Consultants



Diana Ortiz Torres

Architect & Planner, Puerto Rico



Cesar Torres Vega

Executive Director, One Stop Career Center of Puerto Rico, Inc.



Carmen Cosme

Executive Director, One Stop Career Center of Puerto Rico, Inc.



Jesabel Rivera

MPH, CHES, Community Impact & Engagement Solutions, Co-fundadora Voluntariado de Ingenieros



Carlos Montenegro

PE, Ingeniero Estructural, Voluntariado de Ingenieros



Luiber Lugo

Contratista / Voluntariado de Ingenieros

Tricoche Community Center

Location: Ponce, Puerto Rico

Client: One Stop Center

Former Tricoche Hospital is part of the Department of Interior Historic Monuments Registry. Of Neoclassical style and built by the Spanish Corp of Engineers in built in 1873 and 1928, the building has 4 courtyards. Mr. Tricoche's Testament leaves the structure to the Municipality to be used as a community asset.



Old postcard likely from the 1873 original construction before the collapse in the 1918 earthquake which prompted the 1928 reconstruction.



Existing Conditions: plans and photos provided by SHPO and the Ponce Municipality

Structural and Cost Estimate Recommendations



Structural recommendations include creating an independent structure from the historic building envelope and stabilizing the non-reinforced masonry walls.



Cost estimate recommendations include structural stabilization, contingency for unknown problems and focus on life safety issues for the FEMA grant.

Preliminary Estimate Cost - Community Safe Room Hospital Tricoche - Ponce, PR					
Narrative	List Item	Unit Description	Number of Units	Unit Cost	Cost
Administrative costs. In house architect for contract document review, contract award and supervision, permit coordination with agencies for 3 years - Estimate on Colegio de Arquitecto y Agrimensores	Administrative and legal expenses	Contract for its service.	1	\$180,000.00	\$180,000.00
Prepare Operation and Maintenance plan and training	Administrative and legal expenses	Contract Services	1	\$25,000.00	\$25,000.00
RFP for Hiring of Draftperson, Civil Engineer, Structural, electrical, Mechanical Fireproof and Specialties. Cost per construction.	Architectural and engineering fees	monthly	6	\$77,350.00	\$464,100.00
Preparation of final construction cost by independent estimator, Review of plans by Independent code compliance Firm. Supervision by Engineers during construction phases	Other architectural and engineering fees	yearly estimate	3	\$90,000.00	\$270,000.00
Hiring of Geotechnical Engineer for soil report.	Other architectural and engineering fees	Service Contract	1	\$50,000.00	\$50,000.00
Inspection of project by full time Licensed Engineer or Architect - Regular Fee in Puerto Rico	Project inspection fees	yearly	3	\$36,000.00	\$108,000.00
Repair of pavements, construction of dumpster walls, repair of water meters, sanitary boxes, drainage boxes, connectors to electrical system, repair of fences and gates, stairs and ramps, clearing and disposal	Site work	months	3	\$90,000.00	\$270,000.00
Demolition and removal of partitions, debris, metal roof, wood planks, and deteriorated doors and stairs	Demolition and removal	lump sum	1	\$65,000.00	\$65,000.00
Construction and retrofitting of Building A, and B. Reinforcement of foundations, walls and roof. Retrofitting of systems: electrical, Plumbing, Mechanical, AC, Fire System, Emergency Generator, Solar System, Water Cisterns, Elevators, Hurricane shutters, and finishes such as floors, windows, doors, partitions, repair stairs, floors, signage, kitchen and bathroom equipment and paint, in 44,000 sq. ft	Construction	sq ft	44000	\$142.50	\$6,270,000.00
Chairs, mobile divisions, plexiglass dividers	Equipment	lump sum	1	\$148,900.00	\$148,900.00
Handicap signage, traffic paint, wall protection, shelves, blackboards, bulletin boards, alarms and sensors	Miscellaneous	lump sum	1	\$149,000.00	\$149,000.00
Hidden conditions in Existing building or unforeseen conditions for being a historic site.	Contingencies	lump sum	1	\$500,000.00	\$500,000.00
Total					\$8,900,000.00

This preliminary Cost Estimate identifies the task to be performed. Because of limited design information available, preliminary estimates are based on construction rules of thumb, gross square footage for buildings similar in type, and recommendations by professional Architects, Engineers, and Contractors.