

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	55973	Project Type	Standard
Project Category	E - Buildings and Equipment	Applicant	IGLEISA CIUDAD DE SALVACION (071-U5LLL-00)
Project Title	MICS003 - Annex Buildings/Miscellaneous Damages	Event	4339DR-PR (4339DR)

Damage Description and Dimensions

The Disaster # 4339DR, which occurred between 09/17/2017 and 11/15/2017, caused:

Annex Buildings are mostly wood frame buildings and are categorized from A to O. Both the bathroom building and the lunch room building (comedor) are constructed of reinforced concrete. These buildings serve the church in various capacities including administrative, storage, class rooms and other types of use. Buildings range in size from approximately 400 square feet to almost 1800 square feet. Buildings have a slight pitch roof, foundation screening, boxcar style exterior siding, louvre shutter style windows, sheet rock, acoustic tile ceilings, and guttering over the primary entrance location. Most are climate controlled with wall mounted air-conditioning units. One building has a central air unit with duct work and a compressor coil.

Concrete sidewalk is used between the buildings. Various heights of galvanized chain-link fencing are used within the site for perimeter fencing and safety fencing. Wood rail fencing is used to border the drive entrance into the site. Light poles with both metal halide and cobra style luminaires illuminate the main drive entrance and main parking lot.

Damage #140775; ISCE-001- Annex Buildings and Misc Site Damages

General Facility Information:

- **Facility Type:** Building
- **Building Type:** House of Worship (Religious)
- **Facility:** Iglesia Ciudad de Salvacion
- **Facility Description:** Annex Buildings and other Site Improvements that serve the Church in various capacity and function as Classrooms, Administrative, Storage, Lunchroom, and Bathrooms
- **Approx. Year Built:** 2005
- **Location Description:** CARRETERA 113 KM 3 HM 4, Bo. Guayabos, Isabela, PR,
- **GPS Latitude/Longitude:** 18.48909, -66.99748
- **Number of Stories:** 1

General Damage Information:

- **Date Damaged:** 9/20/2017
- **Cause of Damage:** Hurricane

Building Damage:

Bathroom Building:

- Building Exterior, 264 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 24 FT long x 11 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 264 SF of Asphalt Composite Rolled Roofing Material, 24 FT long x 11 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 480 SF of Exterior Painting, 48 FT long x 10 FT high, Wind-driven debris, 0% work completed.

Building A-B:

- Building Exterior, 50 SF of Corrugated Galvanized Metal Roofing, 10 FT long x 5 FT wide, High winds, 100% work completed.
- Building Exterior, 1,350 SF of Exterior Painting, 168 FT long x 8.04 FT high, Wind-driven debris, 100% work completed.
- Building Interior, 1,728 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 48 FT long x 36 FT wide, Water Infiltration/Water Leak, 100% work completed.

Building C:

- Building Exterior, 1 each of White Vinyl 4 IN Guttering, 45 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1,260 SF of Asphalt Composite Rolled Roofing Material, 45 FT long x 28 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of No. 2 & BTR. 2 IN x 12 IN Facia Board, 146 FT long, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 180 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 90 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 75 SF of Boxcar Plywood Siding 16 IN Wide 5/8 IN Soffit Material, 56 FT long x 1.33 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 120 SF of 0.2 IN Vinyl Plastic Lattice Foundation Screening Material, 30 FT long x 4 FT high, Wind-driven debris, 0% work completed.
- Building Exterior, 1,320 SF of Exterior Painting, 132 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Interior, 820 SF of Including Adhesive 1 FT x 1 FT Vinyl Floor Tiles, 41 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1,008 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 42 FT long x 24 FT wide, Water Infiltration/Water Leak, 0% work completed.

Building D:

- Building Exterior, 1 each of White Vinyl 4 IN Guttering, 30 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1,350 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 45 FT long x 30 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 1,350 SF of Asphalt Composite Rolled Roofing Material, 45 FT long x 30 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 180 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 90 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 110 SF of Boxcar Plywood Siding 16 IN Wide 5/8 IN Soffit Material, 80 FT long x 1.33 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 180 SF of 0.2 IN Vinyl Plastic Lattice Foundation Screening Material, 45 FT long x 4 FT high, Wind-driven debris, 0% work completed.
- Building Exterior, 1,320 SF of Exterior Painting, 132 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Interior, 150 SF of Including Adhesive 1 FT x 1 FT Vinyl Floor Tiles, 15 FT long x 10 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1,040 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 40 FT long x 26 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1,056 SF of 1/2 IN Thick Sheetrock, 132 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.

Building E:

- Building Exterior, 1 each of White Vinyl 4 IN Guttering, 25 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 600 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 25 FT long x 24 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 600 SF of Asphalt Composite Rolled Roofing Material, 25 FT long x 24

FT wide, High winds and wind-driven rain, 0% work completed.

- Building Exterior, 80 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 40 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 54 SF of Boxcar Plywood Siding 16 IN Wide 5/8 IN Soffit Material, 40 FT long x 1.33 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 840 SF of Exterior Painting, 84 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Interior, 440 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 22 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 672 SF of 1/2 IN Thick Sheetrock, 84 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.

Building F:

- Building Exterior, 1 each of White Vinyl 4 IN Guttering, 24 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 624 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 26 FT long x 24 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 624 SF of Asphalt Composite Rolled Roofing Material, 26 FT long x 24 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of No. 2 & BTR. 2 IN x 12 IN Facia Board, 100 FT long, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 96 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 48 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 44 SF of Boxcar Plywood Siding 16 IN Wide 5/8 IN Soffit Material, 44 FT long x 1 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 920 SF of Exterior Painting, 92 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Interior, 400 SF of Including Adhesive 1 FT x 1 FT Vinyl Floor Tiles, 20 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 400 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 20 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 640 SF of 1/2 IN Thick Sheetrock, 80 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.

Building G:

- Building Exterior, 36 each of Pressure Treated Lumber Foundation Support (4 IN X 4 IN), 6 FT long, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1,280 SF of Pressure Treated Lumber Sub Floor Framing (2 IN x 12 IN), 40 FT long x 32 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1,280 SF of Pressure Treated Lumber 3/4 IN Plywood (Sub Floor), 40 FT long x 32 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1,280 SF of No. 2 & BTR. Exterior Wall Framing (2 IN x 4 IN), 40 FT long x 32 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1,280 SF of 1/2 IN Thick Exterior Moisture Barrier/Sheathing, 40 FT long x 32 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1,280 SF of (5/8 IN Boxcar Style) 5/8 IN Exterior Plywood Siding, 40 FT long x 32 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1 each of Glu-Lam Style Rafter Support Beam (8 IN x 4 IN), 32 FT long, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1,512 SF of No. 2 & BTR. Roof Framing (2 IN x 12 IN), 42 FT long x 36 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Exterior, 1 each of White Vinyl 4 IN Guttering incl Supports, 36 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1,512 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 42 FT long x 36 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1,512 SF of Asphalt Composite Rolled Roofing Material, 42 FT long x 36 FT wide, High winds and wind-driven rain, 0% work completed.

- Building Exterior, 128 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 64 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 106 SF of Boxcar Plywood Siding 1.33 FT Wide 5/8 IN Soffit Material, 80 FT long x 1.33 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 404 each of Rough Finish Cedar Exterior Trim Material (1 IN x 4 IN), 404 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 240 SF of Pressure Treated Lumber Decking Material (2 IN x 6 IN), 40 FT long x 6 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 240 SF of Pressure Treated Lumber Deck Framing Material (2 IN x 8 IN), 40 FT long x 6 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 280 SF of Pressure Treated Lumber Overhang Framing (2 IN x 8 IN), 40 FT long x 7 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 280 SF of Pressure Treated Lumber 3/4 IN Plywood - Overhang Decking, 40 FT long x 7 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 280 SF of Asphalt Composite Rolled Roofing Material, 40 FT long x 7 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 616 SF of 0.2 IN Vinyl Plastic Lattice Foundation Screening Material, 154 FT long x 4 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of Pressure Treated Lumber Stair Stringers (2 IN x 12 IN), 40 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of Pressure Treated Lumber Stair Treads (2 IN x 12 IN), 48 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of Pressure Treated Lumber Stair Risers (2 IN x 8 IN), 48 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of Pressure Treated Lumber Overhang Support Posts (4 IN x 4 IN), 40 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of Pressure Treated Lumber Stair Railing: (2 IN x 4 IN), 40 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of Pressure Treated Lumber Deck Railing (3 IN x 6 IN), 80 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of Pressure Treated Lumber Deck Rail Pickets: (2 IN x 8 IN), 252 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1,272 SF of Exterior Painting, 159 FT long x 8 FT high, Wind-driven debris, 0% work completed.
- Building Exterior, 4 each of Full Glass Steel with/latch Exterior Doors (3.0 FT x 6.67 FT), High winds and wind-driven rain, 0% work completed.
- Building Exterior, 14 each of Aluminum Shutter Style Window Units (3.5 FT x 2.0 FT), High winds and wind-driven rain, 0% work completed.
- Building Interior, 416 SF of No. 2 & BTR. Interior Wall Framing, 52 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 3 each of (Wood/Hollow Core/Vented) Door w/passage set (2.67 FT x 6.5 FT), Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1,200 SF of Including Adhesive Vinyl Floor Tiles (1FT x 1FT), 40 FT long x 30 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1,200 SF of Acoustic ceiling (2 FT x 4 FT grid), 40 FT long x 30 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 416 SF of 1/2 IN Thick Sheetrock, 52 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 8 each of 2 FT x 4 FT incl cover Fluorescent Ceiling Lights units, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1 each of plugs/switches/jboxes/etc. 100 AMP Electrical System, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1 each of coils/duct/piping/etc. 3.5 Ton Central A/C System, Water Infiltration/Water Leak, 0% work completed.

Building J - K:

- Building Exterior, 970 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 44 FT long x 22 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 970 SF of Asphalt Composite Rolled Roofing Material, 44 FT long x 22 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 1 each of No. 2 & BTR. 2 IN x 12 IN Facia Board, 132 FT long, High winds

and wind-driven rain, 0% work completed.

- Building Exterior, 96 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 48 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 920 SF of Exterior Painting, 92 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Interior, 800 SF of Including Adhesive 1 FT x 1 FT Vinyl Floor Tiles, 40 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 800 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 40 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 1,024 SF of 1/2 IN Thick Sheetrock, 128 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.

Building L:

- Building Exterior, 1 each of White Vinyl 4 IN Guttering, 25 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long, Wind-driven debris, 0% work completed.
- Building Exterior, 624 SF of Asphalt Composite Rolled Roofing Material, 26 FT long x 24 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 1 each of No. 2 & BTR. 2 IN x 12 IN Facia Board, 100 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 48 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 24 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 42 SF of Boxcar Plywood Siding 1 FT Wide 5/8 IN Soffit Material, 21 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 920 SF of Exterior Painting, 92 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of Aluminum, White Exterior Metal Door (3.0 FT x 6.67 FT), Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 400 SF of Including Adhesive 1 FT x 1 FT Vinyl Floor Tiles, 20 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 200 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 20 FT long x 10 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 512 SF of 1/2 IN Thick Sheetrock, 64 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.

Building M - N:

- Building Exterior, 1,408 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 44 FT long x 32 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 1,408 SF of Asphalt Composite Rolled Roofing Material, 44 FT long x 32 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 1 each of No. 2 & BTR. 2 IN x 12 IN Facia Board, 140 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 50 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 25 FT long x 2 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 920 SF of Exterior Painting, 92 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Interior, 950 SF of Including Adhesive 1 FT x 1 FT Vinyl Floor Tiles, 50 FT long x 19 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 600 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 30 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 960 SF of 1/2 IN Thick Sheetrock, 120 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.

Building O:

- Building Exterior, 675 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 27 FT long x 25 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 675 SF of Asphalt Composite Rolled Roofing Material, 27 FT long x 25 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Exterior, 1 each of No. 2 & BTR. 2 IN x 12 IN Facia Board, 104 FT long, High winds and wind-driven rain, 0% work completed.
- Building Exterior, 120 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 60 FT

long x 2 FT wide, High winds and wind-driven rain, 0% work completed.

- Building Exterior, 600 SF of Exterior Painting, 60 FT long x 10 FT high, Wind-driven debris, 0% work completed.
- Building Interior, 50 SF of Including Adhesive 1 FT x 1 FT Vinyl Floor Tiles, 10 FT long x 5 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 420 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 21 FT long x 20 FT wide, Water Infiltration/Water Leak, 0% work completed.
- Building Interior, 590 SF of 1/2 IN Thick Sheetrock, 74 FT long x 8 FT high, Water Infiltration/Water Leak, 0% work completed.

Comedor Building:

- Building Exterior, 2,120 SF of Exterior Painting, 120 FT long x 17.67 FT high, Wind-driven debris, 0% work completed.
- Building Exterior, 1 each of Elkay EZS8L Refrigerated Drinking Fountain or Equivalent Water Cooler/Drinking Fountain, Wind-driven debris, 0% work completed.

Site Fencing Entrance:

- Exterior Site, 1 each of 1 IN x 6 IN Boards - Pressure Treated Lumber 3 Rail Wooden Rail Type Fence, 591 FT long, Wind-driven debris, 0% work completed.

Site Fencing Interior Site:

- Exterior Site, 1 each of 2.5 IN Posts (@ 10 FT Ctrs) 1.5 IN Top Rail Galvanized Chain Link Fence (3 FT), 118 FT long, Wind-driven debris, 0% work completed.

Site Fencing Perimeter:

- Exterior Site, 1 each of 2.5 IN Posts (@ 10 FT Ctrs) 1.5 IN Top Rail Galvanized Chain Link Fence (5 FT), 1,481 FT long, Wind-driven debris, 0% work completed.

Site Fencing Water Channel:

- Exterior Site, 1 each of 2.5 IN Posts (@ 10 FT Ctrs) 1.5 IN Top Rail Galvanized Chain Link Fence (4 FT), 164 FT long, Wind-driven debris, 0% work completed.

Site Lighting Parking Lot Fixture:

- Exterior Site, 1 each of 1 FT x 1 FT Metal Halide Light Fixture, High winds, 0% work completed.
- Exterior Site, 10 each of Pole Mounted Cobra Style Light Fixture, High winds, 0% work completed.

Site Lighting Parking Lot Pole:

- Exterior Site, 1 each of 3 IN Square, Steel Light Pole (20 FT Tall), High winds, 0% work completed.

Site Sidewalk Courtyard Area:

- Exterior Site, 368 SF of Four (4) Inch Thickness/Non Reinforced Concrete Sidewalk, 92 FT long x 4 FT wide, Heavy Rains, 0% work completed.

Final Scope

140775 ISCE-001- Annex Buildings and Misc Site Damages

Work Completed

The applicant utilized contracts and force accounts for repairs to the House of Worship to restore facilities back to pre-disaster design, capacity and function within the existing footprint.

Bathroom Building:

- A. Replaced, 264 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking.
- B. Replaced, 264 SF of Asphalt Composite Rolled Roofing Material.

Building A-B:

- A. Replaced, 50 SF of Corrugated Galvanized Metal Roofing.
- B. Painted, 1,350 SF of Exterior Building.
- C. Replaced, 1,728 SF of 2 FT x 4 FT Grid Acoustic Ceiling.

Building D:

- A. Replaced, 1,350 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking.
- B. Replaced, 1,350 SF of Asphalt Composite Rolled Roofing Material.

Building J-K:

- A. Replaced, 970 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking.
- B. Replaced, 970 SF of Asphalt Composite Rolled Roofing Material.

- 1. F/A Labor – 1 labor - 143 hours - \$1,644.50
- 2. F/A Material - \$10,274.45

Work Completed totals: **\$11,919.00**

Work to be completed

The applicant will utilize contracts and/or force account for repairs to the House of Worship to restore facilities back to pre-disaster design, capacity and function within the existing footprint with in-kind materials.

Bathroom Building:

- A. Prepare and paint, 480 SF of Exterior Building.

Building C:

- A. Remove and replace, 1 White Vinyl 4 IN Gutter, 45 FT long.
- B. Remove and replace, 1 White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long.
- C. Remove and replace, 1,260 SF of Asphalt Composite Rolled Roofing Material, 45 FT long x 28 FT wide.
- D. Remove and replace, 1 of No. 2 & BTR. 2 IN x 12 IN Facia Board, 146 FT long.
- E. Remove and replace, 180 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material.
- F. Remove and replace, 75 SF of Boxcar Plywood Siding 16 IN Wide 5/8 IN Soffit Material.
- G. Remove and replace, 120 SF of 0.2 IN Vinyl Plastic Lattice Foundation Screening Material.

- H. Prepare and paint, 1,320 SF of Exterior Building.
- I. Remove and replace, 820 SF of 1 FT x 1 FT Vinyl Floor Tiles, 41 FT long x 20 FT wide.
- J. Remove and replace, 1,008 SF of 2 FT x 4 FT Grid Acoustic Ceiling.

Building D:

- A. Remove and replace, 1 White Vinyl 4-IN Gutter, 30 FT long.
- B. Remove and replace, 1 White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long.
- C. Remove and replace, 180 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material.
- D. Remove and replace, 110 SF of Boxcar Plywood Siding 16 IN Wide, 5/8 IN Soffit Material.
- E. Remove and replace, 180 SF of 0.2 IN Vinyl Plastic Lattice Foundation Screening Material, 45 FT long x 4 FT high.
- F. Prepare and paint, 1,320 SF of Exterior Painting, 132 FT long x 10 FT high.
- G. Remove and replace, 150 SF of 1 FT x 1 FT Vinyl Floor Tiles.
- H. Remove and replace, 1,040 SF of 2 FT x 4 FT Grid Acoustic Ceiling.
- I. Remove and replace, 1,056 SF of 1/2 IN Thick Sheetrock.

Building E:

- A. Remove and replace, 1 White Vinyl 4 IN Guttering, 25 FT long.
- B. Remove and replace, 1 White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long.
- C. Remove and replace, 600 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking, 25 FT long x 24 FT wide.
- D. Remove and replace, 600 SF of Asphalt Composite Rolled Roofing Material.
- E. Replace, 80 SF of Boxcar Plywood Siding 2 FT Wide, 5/8 IN Soffit Material.
- F. Remove and replace, 54 SF of Boxcar Plywood Siding 16 IN Wide, 5/8 IN Soffit Material.
- G. Prepare and paint, 840 SF of Exterior Walls.
- H. Remove and replace, 440 SF of 2 FT x 4 FT Grid Acoustic Ceiling.
- I. Remove and replace, 672 SF of 1/2 IN thick Sheetrock.

Building F:

- A. Remove and replace, 1 each of White Vinyl 4 IN Guttering, 24 FT long.
- B. Remove and replace, 1 each of White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long.
- C. Remove and replace, 624 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking.
- D. Replace, 624 SF of Asphalt Composite Rolled Roofing Material, 26 FT long x 24 FT wide.
- E. Remove and replace, 1 No. 2 & BTR. 2 IN x 12 IN Facia Board, 100 FT long.
- F. Remove and replace, 96 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material.
- G. Remove and replace, 44 SF of Boxcar Plywood Siding 16 IN Wide, 5/8 IN Soffit Material.
- H. Prepare and paint, 920 SF of Exterior Building.
- I. Remove and replace, 400 SF of 1 FT x 1 FT Vinyl Floor Tiles.

J. Remove and replace, 400 SF of 2 FT x 4 FT Grid Acoustic Ceiling.

K. Remove and replace, 640 SF of 1/2 IN Thick Sheetrock.

Building G:

A. Remove and replace, 36 Pressure Treated Lumber Foundation Support (4 IN X 4 IN), 6 FT long.

B. Remove and replace, 1,280 SF of Pressure Treated Lumber Sub Floor Framing (2 IN x 12 IN).

C. Remove and replace, 1,280 SF of Pressure Treated Lumber 3/4 IN Plywood (Sub Floor).

D. Remove and replace, 1,280 SF of No. 2 & BTR. Exterior Wall Framing (2 IN x 4 IN), 40 FT long x 32 FT wide.

E. Remove and replace, 1,280 SF of 1/2 IN Thick Exterior Moisture Barrier/Sheathing.

F. Remove and replace, 1,280 SF of (5/8 IN Boxcar Style) 5/8 IN Exterior Plywood Siding.

G. Remove and replace, 1 Glu-Lam Style Rafter Support Beam (8 IN x 4 IN), 32 FT long.

H. Remove and replace, 1,512 SF of No. 2 & BTR. Roof Framing (2 IN x 12 IN), 42 FT long x 36 FT wide.

I. Remove and replace, 1 White Vinyl 4 IN Gutter, 36 FT long.

J. Remove and replace, 1 White Vinyl 3 IN x 4 IN Downspout Material, 12 FT long.

K. Remove and replace, 1,512 SF of Pressure Treated Lumber 3/4 IN Plywood - Roof Decking.

L. Replace, 1,512 SF of Asphalt Composite Rolled Roofing Material.

M. Remove and replace, 128 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material.

N. Remove and replace, 106 SF of Boxcar Plywood Siding 1.33 FT Wide 5/8 IN Soffit Material.

O. Remove and replace, 404 Rough Finish Cedar Exterior Trim Material (1 IN x 4 IN), 404 FT long.

P. Remove and replace, 240 SF of Pressure Treated Lumber Decking Material (2 IN x 6 IN), 40 FT long x 6 FT wide.

Q. Remove and replace, 240 SF of Pressure Treated Lumber Deck Framing Material (2 IN x 8 IN), 40 FT long x 6 FT wide.

R. Remove and replace, 280 SF of Pressure Treated Lumber Overhang Framing (2 IN x 8 IN), 40 FT long x 7 FT wide.

S. Remove and replace, 280 SF of Pressure Treated Lumber 3/4 IN Plywood - Overhang Decking, 40 FT long x 7 FT wide.

T. Replace, 280 SF of Asphalt Composite Rolled Roofing Material, 40 FT long x 7 FT wide.

U. Remove and replace, 616 SF of 0.2 IN Vinyl Plastic Lattice Foundation Screening Material, 154 FT long x 4 FT wide.

V. Remove and replace, 1 Pressure Treated Lumber Stair Stringers (2 IN x 12 IN), 40 FT long.

W. Remove and replace, 1 Pressure Treated Lumber Stair Treads (2 IN x 12 IN), 48 FT long.

X. Remove and replace, 1 Pressure Treated Lumber Stair Risers (2 IN x 8 IN), 48 FT long.

Y. Remove and replace, 1 Pressure Treated Lumber Overhang Support Posts (4 IN x 4 IN), 40 FT long.

Z. Remove and replace, 1 Pressure Treated Lumber Stair Railing: (2 IN x 4 IN), 40 FT long.

AA. Remove and replace, 1 Pressure Treated Lumber Deck Railing (3 IN x 6 IN), 80 FT long.

BB. Remove and replace, 1 Pressure Treated Lumber Deck Rail Pickets: (2 IN x 8 IN), 252 FT long.

CC. Prepare and Paint, 1,272 SF of Exterior Building, 159 FT long x 8 FT high.

DD. Remove and replace, 4 Full Glass Steel with/latch Exterior Doors (3.0 FT x 6.67 FT).

- EE. Remove and replace, 14 Aluminum Shutter Style Window Units (3.5 FT x 2.0 FT).
- FF. Remove and replace, 416 SF of No. 2 & BTR. Interior Wall Framing, 52 FT long x 8 FT high.
- GG. Remove and replace, 3 (Wood/Hollow Core/Vented) Door w/passage set (2.67 FT x 6.5 FT).
- HH. Remove and replace, 1,200 SF of Vinyl Floor Tiles (1FT x 1FT), 40 FT long x 30 FT wide.
- II. Remove and replace, 1,200 SF of Acoustic ceiling (2 FT x 4 FT grid), 40 FT long x 30 FT wide.
- JJ. Remove and replace, 416 SF of 1/2 IN Thick Sheetrock, 52 FT long x 8 FT high.
- KK. Remove and replace, 8 of 2 FT x 4 FT Fluorescent Ceiling Lights with cover.
- LL. Remove and replace, 1 of plugs/switches/jboxes/etc. 100 AMP Electrical System.
- MM. Remove and replace, 1 each of coils/duct/piping/etc. 3.5 Ton Central A/C System.

Building J - K:

- A. Remove and replace, 1 No. 2 & BTR. 2 IN x 12 IN Facia Board, 132 FT long.
- B. Remove and replace, 96 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material, 48 FT long x 2 FT wide.
- C. Prepare and paint, 920 SF of Exterior Building.
- D. Remove and replace, 800 SF of 1 FT x 1 FT Vinyl Floor Tiles.
- E. Remove and replace, 800 SF of 2 FT x 4 FT Grid Acoustic Ceiling.
- F. Remove and replace, 1,024 SF of 1/2 IN Thick Sheetrock.

Building L:

- A. Remove and replace, 1 White Vinyl 4 IN Gutter, 25 FT long.
- B. Remove and replace, 1 White Vinyl 3 IN x 4 IN Downspout, 12 FT long.
- C. Remove and replace, 624 SF of Asphalt Composite Rolled Roofing Material.
- D. Remove and replace, 1 No. 2 & BTR. 2 IN x 12 IN Facia Board, 100 FT long.
- E. Remove and replace, 48 SF of Boxcar Plywood Siding 2 FT Wide, 5/8 IN Soffit Material, 24 FT long x 2 FT wide.
- F. Remove and replace, 42 SF of Boxcar Plywood Siding 1 FT Wide, 5/8 IN Soffit Material, 21 FT long x 2 FT wide.
- G. Prepare and paint, 920 SF of Exterior Building.
- H. Remove and replace, 1 Aluminum, White Exterior Metal Door (3.0 FT x 6.67 FT).
- I. Remove and replace, 400 SF of 1 FT x 1 FT Vinyl Floor Tiles.
- J. Remove and replace, 200 SF of 2 FT x 4 FT Grid Acoustic Ceiling.
- K. Remove and replace, 512 SF of 1/2 IN Thick Sheetrock.

Building M - N:

- A. Remove and replace, 1 No. 2 & BTR. 2 IN x 12 IN Facia Board, 140 FT long.
- B. Remove and replace, 50 SF of Boxcar Plywood Siding, 2 FT Wide 5/8 IN Soffit Material, 25 FT long x 2 FT wide.
- C. Prepare and paint, 920 SF of Exterior Building.
- D. Remove and replace, 950 SF of 1 FT x 1 FT Vinyl Floor Tiles.

E. Remove and replace, 600 SF of 2 FT x 4 FT Grid Acoustic Ceiling.

F. Remove and replace, 960 SF of 1/2 IN Thick Sheetrock.

Building O:

A. Remove and replace, 1 No. 2 & BTR. 2 IN x 12 IN Fascia Board, 104 FT long.

B. Remove and replace, 120 SF of Boxcar Plywood Siding 2 FT Wide 5/8 IN Soffit Material.

C. Prepare and paint, 600 SF of Exterior Building.

D. Remove and replace, 50 SF of 1 FT x 1 FT Vinyl Floor Tiles.

E. Remove and replace, 420 SF of 2 FT x 4 FT Grid Acoustic Ceiling, 21 FT long x 20 FT wide.

F. Remove and replace, 590 SF of 1/2 IN Thick Sheetrock.

Comedor Building:

A. Prepare and paint, 2,120 SF of Exterior Building.

B. Remove and replace, 1 Elkay EZS8L Refrigerated Drinking Fountain or Equivalent Water Cooler/Drinking Fountain.

Site Fencing Entrance:

A. Remove and replace, 1 of 1 IN x 6 IN Boards - Pressure Treated Lumber 3 Rail Wooden Rail Type Fence, 591 FT long.

Site Fencing Interior Site:

A. Remove and replace, 1 of 2.5 IN Posts (@ 10 FT Ctrs) 1.5 IN Top Rail Galvanized Chain Link Fence (3 FT), 118 FT long.

Site Fencing Perimeter:

A. Remove and replace, 1 of 2.5 IN Posts (@ 10 FT Ctrs) 1.5 IN Top Rail Galvanized Chain Link Fence (5 FT), 1,481 FT long.

Site Fencing Water Channel:

A. Remove and replace, 1 of 2.5 IN Posts (@ 10 FT Ctrs) 1.5 IN Top Rail Galvanized Chain Link Fence (4 FT), 164 FT long.

Site Lighting Parking Lot Fixture:

A. Remove and replace, 1 of 1 FT x 1 FT Metal Halide Light Fixture.

B. Remove and replace, 10 of Pole Mounted Cobra Style Light Fixture.

Site Lighting Parking Lot Pole:

A. Remove and replace, 1 of 3 IN Square, Steel Light Pole (20 FT Tall).

Site Sidewalk Courtyard Area:

A. Remove and replace, 368 SF of Four (4) Inch Thickness/Non Reinforced Concrete Sidewalk, 92 FT long x 4 FT wide.

Work to be Completed total: **\$683,501.76**

Work to be Completed CEF Total: **\$1,258,158.00**

Total Damage Inventory: **\$1,270,077.00**

Resident Engineer: **\$34,562.00**

Total Project CEF Estimate: \$1,304,639.00

Project Notes:

1. All site estimates for work to be completed were generated using RS means. See attachment labeled *ST55973-DR4339PR-CEF*.
2. All site estimates for work completed were provided by the applicant and validated using RS means. See attachment labeled *ST55973-DR4339PR-CEF*.
3. CEF Total as per CEF Worksheet.
4. GPS coordinates have been checked for accuracy.
5. The contractor/owner will be responsible for the proper disposition of construction debris in authorized landfills. He will provide the name, location, coordinates and permits of the facility to the corresponding authorities
6. Please look for Maintenance Records in project section. See document labeled: *MICS003_Maintenance_Certification_Letter.pdf*.
7. Please look for Procurement Policy in applicant section. See document labeled: *55972-DR4339PR- Procurement Policy.pdf*.
8. Applicant will comply with local, commonwealth, federal procurement laws, regulations and procedures.
9. Building G repair cost is 60% of the replacement cost. The 50% Rule was applied, and the replacement cost was used in the Estimate instead of the repair cost. Se document labeled: *ST55973-DR4339PR-50 Percent Rule Calculation.xlsx*.
10. Acoustic ceiling and sheetrock walls on Building O were not considered, as provided documentation didn't show any damages.
11. Landfill charges include all demolition and construction activities.

406 HMP Scope

Hazard Mitigation Proposal – Project Summary

Project Title:	Annex Buildings and Misc Site Damages		
Sector (if, applicable):	HSS		
406 Hazard Mitigation Specialist:	Anely Latalladi		
Category of Work:	E	Critical Facility	N
Grants Manager Project #:	55973	EMMIE PW #:	
GM Damage Inventory #(s):	140775		
Sub-Applicant/Applicant:	Iglesia Ciudad de Salvación		
Facility Name:	Iglesia Ciudad de Salvación		
Site Name/No.(s):	Annex Buildings		
GPS Lat/Long:	18.48909, -66.99748		
Site Address	Carretera 113 KM 3 HM 4 Bo Guayabos, Isabela PR		

I. Hazard Mitigation Narrative

This facility is a House of Worship and School complex consisting of several separate buildings. This HMP covers the damages sustained by the annex buildings which house the school, administrative offices and support functions like storage, lunchroom, bathrooms, site and parking lot elements like fences and lighting poles. These buildings are wood frame structures with wood frame pitched roofs. High velocity wind and wind driven rain affected the buildings envelopes causing water intrusion and damages to interior finishes. One of the buildings sustained severe damages and will be replaced.

The proposed mitigation measures will reinforce the building's envelope to reduce risk of water intrusion and site elements to withstand expected wind forces. This will be accomplished by replacing and reinforcing the roofing material and siding and providing finishes with higher capacity to endure humid conditions. The building to be replaced will be rebuilt in concrete in substitution of wood to add strength and resiliency.

Cost Effectiveness Summary:

The total cost of this Hazard Mitigation Proposal is **\$467,783.00** after applying Cost Estimate Format (CEF) Factors. The net cost of this Hazard Mitigation Proposal for the **Annex Buildings and Site** is **\$17,393.00**, which accounts for **19.1 %** of the eligible repair costs. The net cost for the replacement of **Building G** is **\$232,282.00** which accounts for **89.4%** of the eligible replacement cost (prior to any insurance reductions) of facilities being protected. The total net cost of this Hazard Mitigation Proposal is **\$249,674.00**. This project is considered cost-effective because the measures are specifically listed in Appendix J of the PAPPG v3.1 and are within 100% of the eligible repair costs.

I. Facility Hazard Data

FACILITY WIND DATA:

Event Wind Speed

Hurricane María Wind Speed – 94 mph

Attachment 1 - GM Project 55972 HMP_Hurricane Maria Event Wind Speed

Hazard Mitigation Measure Minimum Design Wind Speed

ASCE-07-2016 Section 1.5.1 Structure Wind Risk Category Risk Category: III

For municipalities with PRBC 2018 Microzoning Analysis:

Puerto Rico Building Code (PRBC) 2018, Appendix P-Microzone Wind Speed: 162 mph

Attachment 2 - GM Project 55972 HMP_Design Wind Speed – Microzone Analysis

Mitigation Design Wind Speed:

Based on the best available data, the mitigation measure will be implemented to protect the facility up to a Design Wind Speed of 162 mph.

I. Eligible Damages to be Mitigated

The eligible damages to be mitigated included in the Public Assistance Project Damage Description and Dimensions are:

Damage #140775

1. Wood roofs – Damaged by high velocity wind and wind driven rain.
2. Vinyl flooring – Damaged by rain water intrusion through roof.
3. Paint - Damaged by high velocity wind and wind driven rain.
4. Gutters - Deformed and displaced by high velocity wind.

5. Downspouts - Deformed and displaced by high velocity wind.
6. Wood sheathing - Deformed and displaced by high velocity wind.
7. Lighting pole - Damaged by high velocity wind.
8. Building G (To be replaced) - Damaged by high velocity wind and wind driven rain.

I. Hazard Mitigation Proposal (HMP) Scope of Work

The proposed mitigation measures will prevent future, similar damages by reinforcing the roofing material and siding, providing finishes with higher capacity to endure humid conditions and reinforcing site elements with additional and stronger materials and supports. The building to be replaced will be rebuilt in reinforced concrete in substitution of wood to add strength and resiliency.

Bathroom Building:

- a. (Replacement) – Replace 264 SF (24' x 11') of 3/4" pressure treated lumber with galvanized steel roof panels 24 ga. (100% completed).
- b. (Supplementary) – Install stainless steel, self-tapping screws with neoprene washers every 12" along roof perimeter.

Building C

- a. (Supplementary) – Anchor 45 linear feet of 4" vinyl box gutter using galvanized steel straps every 24" using self-tapping screws (Horizontal, 1st floor).
- b. (Supplementary) – Anchor 12 linear feet of 3"x 4" of downspout pipe with galvanized steel straps every 24" using self-tapping screws (Vertical, 1st floor).
- c. (Supplementary) - Fasten wood siding to be replaced by PA with self-tapping screws every 6" on top and bottom edges and at center (400 screws).
- a. (Replacement) – Replace vinyl flooring adhesive cement included in PA SOW with elastomeric sheet waterproofing, EPDM, adhesive, 820 SF.

Building D:

- a. (Replacement) – Replace 1,350 SF (24' x 11') of 3/4" pressure treated lumber with galvanized steel roof panels 24 ga.(100% completed).
- b. (Supplementary) – Install stainless steel, self-tapping screws with neoprene washers every 12" along roof perimeter.
- a. (Supplementary) – Anchor 30 linear feet of 4" vinyl box gutter using galvanized steel straps every 24" using self-tapping screws (Horizontal, 1st floor).
- a. (Supplementary) – Anchor 12 linear feet of 3"x 4" of downspout pipe with galvanized steel straps every 24" using self-tapping screws (Vertical, 1st floor).
- b. (Supplementary) - Fasten wood siding to be replaced by PA with self-tapping screws every 6" on top and bottom edges and at center (400 screws).
- a. (Replacement) – Replace vinyl flooring adhesive cement included in PA SOW with elastomeric sheet waterproofing, EPDM, adhesive, 150 SF.
- b. (Supplementary) – Apply one coat of waterproof sealer to 1,056 SF of interior wall surface.

Building E:

- a. (Replacement) – Replace 600 SF (25' x 24') of 3/4" pressure treated lumber with galvanized steel roof panels (100% completed).
- b. (Supplementary) – Install stainless steel, self-tapping screws with neoprene washers every 12" along roof perimeter.
- a. (Supplementary) – Anchor 25 linear feet of 4" vinyl box gutter using galvanized steel straps every 24" using self-drilling screws (Horizontal, 1st floor).
- b. (Supplementary) – Anchor 12 linear feet of 3"x 4" of downspout pipe with galvanized steel straps every 24" using self-drilling screws (Vertical, 1st floor).
- a. (Supplementary) - Fasten wood siding to be replaced by PA with self-tapping screws every 6" on top and bottom edges and at center (200 screws).

Building F:

- a. (Replacement) – Replace 624 SF (25' x 24') of 3/4" pressure treated lumber with galvanized steel roof panels (100% completed).
- a. (Supplementary) – Install stainless steel, self-tapping screws with neoprene washers every 12" along roof perimeter.
- a. (Supplementary) – Anchor 24 linear feet of 4" vinyl box gutter using galvanized steel straps every 24" using self-drilling screws (Horizontal, 1st floor).
- b. (Supplementary) – Anchor 12 linear feet of 3"x 4" of downspout pipe with galvanized steel straps every 24" using self-drilling screws (Vertical, 1st floor).
- a. (Replacement) – Replace vinyl flooring adhesive cement included in PA SOW with elastomeric sheet waterproofing, EPDM, adhesive, 150 SF.
- b. (Supplementary) – Apply one coat of waterproof sealer to 624 SF of interior wall surface.

Building J - K:

- a. (Replacement) – Replace 970 SF (25' x 24') of 3/4" pressure treated lumber with galvanized steel roof panels (100% completed).
- b. (Supplementary) – Install stainless steel, self-tapping screws with neoprene washers every 12" along roof perimeter.
- c. (Replacement) – Replace vinyl flooring adhesive cement included in PA SOW with elastomeric sheet waterproofing, EPDM, adhesive, 800 SF.
- a. (Supplementary) – Apply one coat of waterproof sealer to 1,024 SF of interior wall surface.
- b. (Supplementary) – Anchor 25 linear feet of 4" vinyl box gutter using galvanized steel straps every 24" using self-drilling screws (Horizontal, 1st floor).
- c. (Supplementary) – Anchor 12 linear feet of 3"x4" of downspout pipe with galvanized steel straps every 24" using self-drilling screws (Vertical, 1st floor).
- d. (Replacement) – Replace vinyl flooring adhesive cement included in PA SOW with elastomeric sheet waterproofing, EPDM, adhesive, 400 SF.
- e. (Supplementary) – Apply one coat of waterproof sealer to 512 SF of interior wall surface.

Building M - N:

- a. (Replacement) – Replace vinyl flooring adhesive cement included in PA SOW with elastomeric sheet waterproofing, EPDM, adhesive, 950 SF.

Building O:

- a. (Replacement) – Replace vinyl flooring adhesive cement included in PA SOW with elastomeric sheet waterproofing, EPDM, adhesive, 50 SF.

Site Lighting Parking Lot Fixture:

- a. (Supplementary) – Provide concrete base for 20' high, anchor base, galvanized steel lighting pole.

Building G:

- a. (Replacement) – Replace damaged wood frame structure included in PA SOW with a code compliant, reinforce concrete structure o, 1,280 SF x 10' high.

HMP Notes:

Note 1: HMP SOW: Per the Public Assistance Alternative Procedures (PAAP) (Section 428), Guide for Permanent Work, April 2018, "FEMA will evaluate each mitigation opportunity to first determine what measures or portions of solutions could be funded through Section 406 mitigation" (Page 7) and "FEMA, the Applicant, Recipient, and Sub-recipients will develop and agree to scopes of work (SOW) and cost estimates to repair, restore, or replace eligible facilities including 406 hazard mitigation" (Page 6).

Note 2: TIMEFRAME: Per PAAP (Section 428), Guide for Permanent Work, April 2018, "In order to expedite assistance, agreement on the cost estimate of each project must be reached (by October 11, 2019) within 18 months of the date of publication of this guide (April 11, 2018)" (Page 12).

Note 3: HMP SOW CHANGE: Per PAAP (Section 428), Guide for Permanent Work, April 2018, "After the project is obligated, the SOW for the HMP can be changed only once and the change must occur within the 18-month period" (Page 14).

Note 4: PERMITS: Per PAAP (Section 428), Guide for Permanent Work, April 2018, "Once the project is obligated, FEMA's EHP review process is complete for that obligated project and the Recipient or Subrecipient is responsible for complying with all grant conditions, including obtaining all necessary permits prior to start of construction" (Page 15).

Note 5: H & H STUDY: Public Assistance Program and Policy Guide (PAPPG), published April 26, 2018, Appendix J, Cost-Effective Hazard Mitigation Measures, Sections I.A.1 and C.1 requires a watershed hydrology and hydraulics (H&H) study, with an emphasis on downstream effects, for projects involving replacing or upsizing drainage structures or culverts, page 190. Projects located outside the special flood hazard area (SFHA) may not require an H & H Study per the July 9, 2018 policy clarification letter from Keith Turi, Assistant Administrator Recovery Directorate.

I. Hazard Mitigation Proposal (HMP) Cost

Annex Buildings and Site:

Total Cost for Pre-disaster (PA) Repair/Replacement SOW for Eligible Damages to be Mitigated = \$ 90,972.29

Total Cost of Hazard Mitigation Proposal Scope of Work = \$ 17,393.00

Net Cost of Hazard Mitigation = \$ 17,393.00 (HMP SOW Cost – PA SOW Cost)

Attachment 3 - GM Project 55972 HMP_CEG Preliminary HMP CEF

Building G:

Total Cost for Pre-disaster (PA) Repair/Replacement SOW for Eligible Damages to be Mitigated = \$259,815.00

Total Cost of Hazard Mitigation Proposal Scope of Work = \$ 232,282.00

Total Net Cost of Hazard Mitigation = \$249,674.86

Total Cost of Hazard Mitigation (after applying Cost Estimate Format (CEF) Factors) = \$467,783.00 Attachment 3 - GM Project 55973 HMP_CEG Preliminary HMP CEF

I. Cost Effectiveness Calculation

Annex Buildings and Site

HMP Cost/ Benefit = $(17,392.86 / 90,972.29) \times 100$

Ratio of HMP C/B = 19.1% < 100%

Building G:

HMP Cost/ Benefit = $(232,282 / 259,815.00) \times 100$

Ratio of HMP C/B = 89.4% < 100%

In accordance with FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April 2018, Chapter 2.VII. Section C cost effectiveness is achieved when "the mitigation measure is specifically listed in Appendix J: Cost-Effective Hazard Mitigation Measures, AND the cost of the mitigation measure does not exceed 100 percent of the eligible repair cost (prior to any insurance reductions) of the facility or facilities for which the mitigation measure applies." The Hazard Mitigation Proposed cost estimate is listed in Appendix J and within 100% of the eligible repair and restoration costs and meets cost effective requirements.

I. Compliance and Assurance Requirements

General Requirements

By agreeing to implement the hazard mitigation measures in this HMP, the Applicant/Sub-Applicant is bound by the specific guidelines listed within this document.

If this HMP is approved and the mitigation is not performed, the Applicant must apply for a change in the Scope of Work and a de-obligation of the HMP funding. Failure to complete the work of the HMP may limit future FEMA funding of repairs at the site in the event that a similar disaster event results in similar damage at the site.

This HMP is for estimating purposes only and not to be construed as a project design. If the site's final placement and configuration are different than the preliminary estimate, the Applicant should submit a change in scope request. This HMP is subject to further review prior to award.

The Applicant is responsible for final design, placement, configuration, choice of contractors or vendors, permits and compliance with all regulatory codes and standards of the Commonwealth of Puerto Rico. FEMA will pay only the incremental difference in cost between repairs and mitigation and will not duplicate funding for repair or replacement of eligible work.

To ensure proper installation, the applicant-contracted design professional contractor must specify the rating/type of windows based on wind and windborne debris load calculations and be required to perform a special inspection to ensure that all mitigation measures are installed and constructed per their design specifications.

The Applicant shall ensure proper maintenance of the installed mitigation measures, per manufacturer and designer specifications. Any adaptations or installations not approved or that renders the hazard mitigation measure ineffective shall be removed by the Applicant. Examples include, but are not limited to, improper installation of roof-mounted equipment or installation of window-mounted air-conditioning units.

Eligibility and funding for the mitigation at this site on this project will be subject to the compliance of all environmental laws, regulations, and executive orders applicable to the site.

The Applicant must provide & maintain competent & adequate engineering design & supervision during the construction phase to ensure that the completed work conforms to the approved plans & specifications & all applicable material & construction standards.

As a condition of the FEMA mitigation grant, the Applicant is responsible for the determination of and compliance with all applicable requirements, codes, standards and specifications in connection with the project, including but not limited to the Puerto Rico Building Code of 2018 (2018 PRBC), IBC, IRBC, NFIP Floodplain Management Regulations outlined in 44 C.F.R 60.3, ASCE 24, ASCE 7, and receiving all applicable permits & approvals prior to construction.

I. Documentation

1. Attachment 1 - GM Project 55973 HMP_Hurricane Maria Event Wind Speed
2. Attachment 2 - GM Project 55973 HMP_Design Wind Speed – Microzone Analysis
3. Attachment 3 - GM Project 55973 HMP_CEG Preliminary HMP CEF

Cost

Code	Quantity	Unit	Total Cost	Section
9007 (Labor)	1.00	Lump Sum	\$1,645.00	Completed
9009 (Material)	1.00	Lump Sum	\$10,274.00	Completed
9000 (CEF Cost Estimate)	1.00	Lump Sum	\$34,562.00	Completed
9000 (CEF Cost Estimate)	1.00	Lump Sum	\$1,258,158.00	Uncompleted

CRC Gross Cost	\$1,304,639.00
Total 406 HMP Cost	\$467,782.00
Total Insurance Reductions	\$0.00
<hr/>	
CRC Net Cost	\$1,772,421.00
Federal Share (90.00%)	\$1,595,178.90
Non-Federal Share (10.00%)	\$177,242.10

Subgrant Conditions

- As described in 2 CFR, Part 200 § 200.333, financial records, supporting documents, statistical records and all other non-Federal entity records pertinent to a Federal award must be retained for a period of three (3) years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the Federal awarding agency or pass-through entity in the case of a sub-recipient. Federal awarding agencies and pass-through entities must not impose any other record retention requirements upon non-Federal entities. Exceptions, Part 200.333, (a) – (f), (1), (2). All records relative to this Project Worksheet are subject to examination and audit by the State, FEMA and the Comptroller General of the United States and must reflect work related to disaster-specific costs.
- In the seeking of proposals and letting of contracts for eligible work, the Applicant/Subrecipient must comply with its Local, State (provided that the procurements conform to applicable Federal law) and Federal procurement laws, regulations, and procedures as required by FEMA Policy 2 CFR Part 200, Procurement Standards, §§ 317-326.
- The Applicant has elected to participate in the Public Assistance Alternative Procedures for Direct Administrative Costs described in the FEMA Recovery Policy dated June 12, 2018. In accordance with the policy, all Direct Administrative Costs (DAC) for the sub-recipient will be awarded on a single consolidated DAC Project for that sub-recipient. The sub-recipient may not claim DAC on individual projects.
- The Recipient must submit its certification of the applicant's completion of this project, the final claim for payment, and supporting documentation within 180 days from the date that the applicant completes the scope of work. Project Worksheets written as large projects (costs above the large project threshold) are reimbursed based on the actual eligible final project costs. Therefore, during the final project reconciliation (closeout), the project may be amended to reflect the reconciliation of actual eligible costs.
- The terms of the FEMA-State Agreement are incorporated by reference into this project award under the Public Assistance grant and the applicant must comply with all applicable laws, regulations, policy, and guidance. This includes, among others, the Robert T. Stafford Disaster Relief and Emergency Assistance Act; Title 44 of the Code of Federal Regulations; FEMA Policy No. 104-009-2, Public Assistance Policy and Program Guide; and other FEMA policy and guidance.
- The DHS Standard Terms and Conditions in effect as of the date of the declaration of this major disaster are incorporated by reference into this project award under the Public Assistance grant, which flow down from the Recipient to subrecipients unless a particular term or condition indicates otherwise.
- The Uniform Administrative Requirements, Cost Principles, and Audit Requirements set forth at 2 C.F.R. pt. 200 apply to this project award under the Public Assistance grant, which flow down from the Recipient to all subrecipients unless a particular section of 2 C.F.R. pt. 200, the FEMA-State Agreement, or the terms and conditions of this project award indicate

otherwise. See 2 C.F.R. §§ 200.101 and 110.

- The applicant must submit a written request through the Recipient to FEMA before it makes a change to the approved scope of work in this project. If the applicant commences work associated with a change before FEMA approves the change, it will jeopardize financial assistance for this project. See FEMA Policy No. 104-009-2, Public Assistance Program and Policy Guide.

Insurance

Additional Information

FACTS

During the declared incident period heavy rains and high winds caused outages, mudslides, flooding and accumulation of vegetative debris throughout the island of Puerto Rico.

FINDINGS

The applicant has provided declarations for a commercial insurance policy #CP593360 for the period of 04/11/17 to 04/11/18 issued by Integrand Assurance Company. The loss limit for Annex Buildings and Misc. is \$2,700,000.00 subject to a 2% windstorm deductible or \$54,000.00

Integrand Assurance was placed under liquidation order by the PR local court as petitioned by Office of the Commissioner on January 18, 2019 largely for losses stemming from hurricanes Irma and Maria. The liquidation process ordered by the court also activates the coverage of the Miscellaneous Insurance Guarantee Association, a mechanism whereby valid claims against Integrand Assurance can be met within a maximum limit of \$300,000.00 per event, or \$1 million in aggregate in accordance with PR Insurance Code 26 L.P.R.A §3808. The association will be considered as the insurer with respect to the pending claims against Integrand Assurance.

Damage #140775; Annex Buildings and Misc. Site Damages \$1,304,639.00 + \$467,782.00 HMP Cost

Facility was damaged by wind. No prior O&M requirement was found for this facility. No insurance coverage is anticipated because their insurance carrier went bankrupt. No reduction will be applied to this project, because the \$300,000 Miscellaneous Insurance Guarantee Association coverage was used in project #55972 for the same applicant. An O&M requirement will be mandated in the amount of \$1,196,075.33 (\$1,304,639.00 Repairs - \$108,563.67 Uninsured Items) There is an additional amount of \$467,782.00 HMP Cost.

REPETITIVE DAMAGES

No previous disaster requirements were found for locations identified in this project.

REQUIREMENTS

§ 206.253 Insurance requirements for facilities damaged by disasters other than flood.

(d) The requirements of section 311 of the Stafford Act are waived when eligible costs for an insurable facility do not exceed \$5,000. The Regional Administrator may establish a higher waiver amount based on hazard mitigation initiatives which reduce the risk of future damages by a disaster similar to the one which resulted in the major disaster declaration which is the basis for the application for disaster assistance.

(e) The recipient shall provide assurances that the required insurance coverage will be maintained for the anticipated life of the restorative work or the insured facility, whichever is the lesser.

(f) No assistance shall be provided under section 406 of the Stafford Act for any facility for which assistance was provided as a result of a previous major disaster unless all insurance required by FEMA as a condition of the previous assistance has been obtained and maintained.

Final Obtain and Maintain requirement amount will be determined during the closeout process after the final actual eligible costs to repair or replace the insurable facility have been determined.

FEMA Policy 206-086-1

F. Timeframes for Obtaining Insurance. FEMA will only approve assistance under the condition that an applicant obtains and maintains the required insurance.

1. The applicant must document its commitment to comply with the insurance requirement with proof of insurance.
2. If an applicant cannot insure a facility prior to grant approval (for example, if a building is being reconstructed), the applicant may provide a letter of commitment stating that they agree to the insurance requirement and will obtain the types and extent of insurance required, followed at a later date by proof of insurance once it is obtained. In these cases, the applicant should insure the property:
 - a. When the applicant resumes use of or legal responsibility for the property (for example, per terms of construction contract or at beneficial use of the property); or
 - b. When the scope of work is complete.
3. FEMA and the recipient will verify proof of insurance prior to grant closeout to ensure the applicant has complied with the insurance requirement.
4. An applicant should notify FEMA—in writing through the recipient—of changes to their insurance which impact their ability to satisfy the insurance requirement after it provides proof of insurance to FEMA. This includes changes related to self-insurance. If an applicant fails to do this, FEMA may de-obligate assistance and not provide assistance in a future disaster.

Obtain and maintain requirements exist on the following locations:

- Iglesia Ciudad De Salvación, Annex Buildings and Misc. must obtain and maintain wind property insurance in the amount of \$1,196,075.33

Eric Miranda, PA Insurance Specialist FEMA CRC Atlantic PR. 12/23/2019.

O&M Requirements

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Building	Iglesia Ciudad De Salvación, Annex Buildings and Misc. must obtain and maintain wind property insurance in the amount of \$1,196,075.33	\$1,196,075.33

406 Mitigation

There is no additional mitigation information on **MICS003 - Annex Buildings/Miscellaneous Damages**.

Environmental Historical Preservation

Is this project compliant with EHP laws and orders?

Yes

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.

- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- Endanger Species Act (ESA) PR & USVI BOA: 1. Inform all personnel about the potential presence of the PR boa and the VI boa in areas where the proposed work will be conducted. Photographs of the PR and VI Boa are to be prominently displayed at the site. This measure will be conducted in accordance with the FEMA/USFWS/DNER-approved SOP for employee boa awareness training and project site preparation; 2. Train project personnel on the identification and handling of snakes so they can be available to respond to sightings and as necessary safely handle boas found at project sites. Verify with the Puerto Rico DNER if a permit is needed for snake handling and/or relocation activities. This measure will be conducted in accordance with the FEMA/USFWS/DNER-approved SOP for employee boa awareness training and project site preparation. Alternatively, biological professionals can be hired for this task; 3. Prior to any construction activity, including removal of vegetation and earth movement, the contractor-delineated boundaries of the project area, the buffer zones, and areas to be excluded and protected should be clearly marked in the project plan and in the field to avoid further habitat degradation into forested areas. Once areas are clearly marked, and prior to any construction activity, including site preparation, personnel trained in boa identification must survey the areas to be cleared to ensure that no boas are present within the work area. Vehicle and equipment operation must remain on designated access roads/paths and within rights-of-way. This measure will be conducted in accordance with the FEMA/USFWS/DNER-approved SOP for employee boa awareness training and project site preparation. Alternatively, biological professionals can be hired for this task; 4. If boas are found within any of the working or construction areas, activities shall stop in the area where boas are found. Boas must be safely captured and relocated at least 1 km from project, within suitable forested habitat, and away from construction areas and roads. Relocation of boas shall be done by trained and designated personnel and shall not harm or injure captured boas. Activities at other work sites, where no boas have been found after surveying the area, may continue. If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Another option is to call DNER Rangers for safe capture and relocation (DNER phone #'s: 787-724-5700, 787-230-5550, 787-771-1124). This measure will be conducted in accordance with the FEMA/USFWS/DNER-approved SOP for employee boa awareness training and project site preparation. Alternatively, biological professionals can be hired for this task; 5. Any heavy machinery left on site (in staging) within 50 meters of forest vegetation needs to be thoroughly inspected each morning before work starts to ensure that no boas are sheltered within engine compartments or other areas of the equipment. If boas are found within vehicles or equipment, boas need to be safely captured and relocated. This measure will be conducted in accordance with the FEMA/USFWS/DNER-approved SOP for employee boa awareness training and project site preparation. Alternatively, biological professionals can be hired for this task; 6. Prior to moving, disposing or shredding, debris piles shall be carefully inspected for the presence of boas. If boas are found in debris piles, contractors shall wait for boas to move away on their own; if this does not occur, boas need to be safely captured and relocated. This measure will be conducted in accordance with the FEMA/USFWS/DNER-approved SOP for employee boa awareness training and project site preparation. Alternatively, biological professionals can be hired for this task; 7. For all boa sightings (dead or alive), the Applicant must record the time and date of the sighting and the specific location where it was found. Boa data should also include a photo of the animal (dead or alive), relocation site GPS coordinates, and the time and date of the relocation. All boa sightings and relocation reports should be sent to the USFWS Caribbean Ecological Services Field Office, Marelisa Rivera - Deputy Field Supervisor, 787-851-7297 extension 206, 787-510-5207, marelisa_rivera@fws.gov. This measure will be conducted in accordance with the FEMA/USFWS/DNER-approved SOP for employee boa awareness training and project site preparation. Alternatively, biological professionals can be hired for this task. ***The Applicant must provide documentation at close-out that proves completion of required Conservation Measures.
- Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA): The Applicant shall handle, manage, and dispose of all solid and hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Applicant shall ensure that all debris is separated and disposed of in a manner consistent with the JCA/eqb guidelines at a permitted site or landfill. Unusable equipment, debris, white goods, scrap metal any other material shall be disposed in approved manner and location. In the event significant items are discovered during the implementation or development of the project the Applicant shall handle, manage and dispose petroleum products, hazardous materials and toxic waste in accordance to the requirements of the local and federal agencies. Noncompliance with these requirements may jeopardize receipt of federal funds.

EHP Additional Info

There is no additional environmental historical preservation on **MICS003 - Annex Buildings/Miscellaneous Damages**.

Final Reviews

Final Review

Reviewed By Moreno Rivera, Jose A.

Reviewed On 02/04/2020 2:45 PM AST

Review Comments

Per PDMG review using the CRC Atlantic 4339DR-PR Costing Guidance for Cost Factors, and CEF dated October 8, 2019 factors were found to be within what is expected. Reviewed by HSS in Final, advanced to Recipient Final Review.

Recipient Review

Reviewed By Not Reviewed

Reviewed On Not Reviewed

Review Comments

No comments available for the Recipient Review step

Project Signatures

Signed By Unsigned

Signed On Unsigned