



Iglesia Ciudad de Salvación, Inc.

MICS002 – Main Chapel Building Damages

Esta nota es para clarificar que el RFP para este proyecto incluye solamente los daños asociados al Facility Maintenance Building. Para esto, también incluimos como parte de los documentos la evaluación del edificio existente realizado por una firma de Ingeniería.

Agradecemos su interés en ser considerado para el desempeño de los servicios descritos en la solicitud de propuesta. Para más información, favor escribir correo electrónico al Sr. Waldemar Tavarez, Gerente de Proyectos, a **wtavarez.pm@gmail.com**.

Department of Homeland Security Federal Emergency Management Agency

General Info

Project #	55972	Project Type	Standard
Project Category	E - Buildings and Equipment	Applicant	IGLEISA CIUDAD DE SALVACION (071-U5LLL-00)
Project Title	MICS002 - Main Chapel Building Damages	Event	4339DR-PR (4339DR)

Damage Description and Dimensions

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

Main Chapel Building is an octagonal shaped House of Worship. The main level (1st Floor) has a seating area for approximately 600 people, while the second floor balcony has seating for about 200 additional people. The building is climate controlled with roof mounted air cooling units. Primary interior damages resulted from blown in doors and include ceiling tiles, lighting, carpeting, flooring, drywall, and painting. Exterior damages include building facade, A/C units, duct work, and painting. The Maintenance Building is located north of the Main Chapel. The Maintenance Building suffered blown out roof and wall panels, and metal framing materials. The wood framed Gazebo structure experienced roof damage.

Damage #140774; ICSE001 - Main Chapel Building

General Facility Information:

- **Facility Type:** Building
- **Building Type:** House of Worship (Religious)
- **Facility:** Ciudad de Salvacion
- **Facility Description:** Main facility is a octagonal shaped House of Worship, with a steel building shell, standing seam roof, and interior concrete walls. Maintenance Bldg. is a open shed design, welded steel frame building with corrugated metal walls and roof.
- **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:** 2

General Damage Information:

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

Building Damage:

Facility Maint. Building:

- Exterior Site, 210 SF of 26 Gauge Corrugated Metal galvanized roofing material, 42 FT long x 5 FT wide, High winds, 0% work completed.
- Exterior Site, 400 SF of 26 Gauge Corrugated Metal galvanized roofing material, 20 FT long x 20 FT wide, High winds, 0% work completed.
- Exterior Site, 540 SF of 26 Gauge Corrugated Metal galvanized roofing material, 54 FT long x 10 FT wide, High winds, 0% work completed.
- Exterior Site, 250 SF of 26 Gauge Corrugated Metal corrugated siding, 25 FT long x 10 FT wide, High winds, 0% work completed.
- Exterior Site, 60 each of 8 IN x 3 IN Cee Channel Galvanized purlin material, 60 FT long,

High winds, 0% work completed.

Gazebo Structure:

- Exterior Site, 100 SF of Asphalt Composite Rolled Asphalt Roofing Material, 10 FT long x 10 FT wide, High winds, 0% work completed.

Main Chapel:

- Building Exterior, 220 SF of EIFS Exterior Cladding, 220 FT long x 1 FT wide, Wind-driven debris, 0% work completed.
- Building Exterior, 15,500 SF of Exterior Painting, 775 FT long x 20 FT wide, Wind-driven debris, 0% work completed.
- Building Exterior, 840 CF of Formed Sheet Metal Exterior Insulated Air Conditioning Duct, 20 FT long x 3 FT wide x 2 FT deep, High winds, 0% work completed.
- Building Exterior, 1 each of Trane 40 Ton Unit Air Handling Unit, Wind blown debris, 100% work completed.
- Building Interior, 1 each of 10 FT W x 9 FT Tall Rolling metal overhead door, High winds, 0% work completed.
- Building Interior, 190 SF of Tounge and Groove Bamboo hardwood flooring, 10 FT long x 19 FT wide, Wind-driven rain, 0% work completed.
- Building Interior, 618 SF of 3/4 IN Plywood Musician Stage, 47.5 FT long x 13 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Interior, 618 SF of Commercial Grade Stage Carpeting, 47.5 FT long x 13 FT wide, Wind-driven rain, 0% work completed.
- Building Interior, 618 SF of Various sizes, No. 2 & Better Stage Framing, 47.5 FT long x 13 FT wide, High winds and wind-driven rain, 0% work completed.
- Building Interior, 2,400 SF of 1/2 IN Thickness Sheetrock, 400 FT long x 6 FT wide, Wind-driven rain, 50% work completed.
- Building Interior, 3,500 SF of Interior Painting, 175 FT long x 20 FT wide, Wind-driven rain, 0% work completed.

Main Chapel Ceiling:

- Building Interior, 7,213 SF of (4 FT x 4 FT) & (2 FT x 4 FT) Panels White acoustic ceiling tiles, 84.93 FT long x 84.93 FT wide, High winds and wind-driven rain, 100% work completed.
- Building Interior, 22 each of 2 FT x 4 FT Fluorescent ceiling light fixtures, High winds and wind-driven rain, 100% work completed.
- Building Interior, 35 each of 100 watt down lights Halogen type ceiling spot lights, High winds and wind-driven rain, 100% work completed.

Main Chapel Floor:

- Building Interior, 15,000 SF of Commercial Grade Carpeting, 122.5 FT long x 122.5 FT wide, Wind-driven rain, 0% work completed.

Main Chapel Roof:

- Building Exterior, 1,855 SF of corrugated metal roof panels, The main chapel corrugated metal roof panels were damaged by detachment caused by high winds, wind driven rain and wind blown debris. The roof portion has a triangular shape., 100% work completed.

Main Chapel Roof East Wing:

- Building Exterior, 2,200 SF of Corrugated Metal Roof Panels, The main chapel corrugated metal roof panels at the building East Wing were damaged by detachment caused by high winds, wind driven rain and wind blown debris. The roof area has an irregular shape., 100% work completed.

Main Chapel Roof South Wing:

- Building Exterior, 1,634 SF of Corrugated Metal Roof Panels, The main chapel corrugated metal roof panels at the building South Wing were damaged by detachment caused by high winds, wind driven rain and wind blown debris. The roof area has an irregular shape., 100% work completed.

Final Scope

140774 ICSE001 - Main Chapel Building

Work Completed

The applicant utilized force account labor, equipment, materials, and contracts for repairs to the Chapel to restore facilities back to pre-disaster design, function and capacity (in-kind) within the existing footprint.

Main Chapel Ceiling:

A Remove, dispose and replace 1 each of Trane 40 Ton Unit Air Handling Unit.

B. Remove, dispose and replace 7,213 SF of (4 FT x 4 FT) and (2 FT x 4 FT) Panels White acoustic ceiling tiles, 84.93 FT long x 84.93 FT wide.

C. Remove, dispose and replace 22 each of 2 FT x 4 FT Fluorescent ceiling light fixtures.

D. Remove, dispose and replace 35 each of 100 watts down lights Halogen type ceiling spot lights.

Main Chapel Roof:

A. Remove, dispose and replace 1,855 SF of corrugated triangular shape metal roof panels.

Main Chapel Roof East Wing:

A. Remove, dispose and replace 2,200 SF of Corrugated Metal Roof Panels.

Main Chapel Roof South Wing:

A. Remove, dispose and replace 1,634 SF of Corrugated Metal Roof Panels.

Work Completed Totals:

1. Materials: \$1,770.69

a. Acoustic Tiles: \$1,260.28

b. Halogen Lights: \$510.41

2. Contracts: \$41,493.24

a. Metal Roof Repairs: \$3,693.24

b. Acoustic Ceiling: \$1,600.00

c. 40 TON AC Unit: \$36,200.00

Work Completed totals: \$43,264.00

Work to be completed

The applicant will utilize contracts and (or) force accounts for repairs to the chapel to restore facilities back to pre-disaster design, function and capacity (in-kind) within the existing footprint.

Facility Maint. Building:

- A. Remove, dispose and replace 210 SF of 26 Gauge Corrugated Metal galvanized roofing material, 42 FT long x 5 FT wide.
- B. Remove, dispose and replace 400 SF of 26 Gauge Corrugated Metal galvanized roofing material, 20 FT long x 20 FT wide.
- C. Remove, dispose and replace 540 SF of 26 Gauge Corrugated Metal galvanized roofing material, 54 FT long x 10 FT wide.
- D. Remove, dispose and replace 250 SF of 26 Gauge Corrugated Metal corrugated siding, 25 FT long x 10 FT wide.
- E. Remove, dispose and replace 60 each of 8 IN x 3 IN Cee Channel Galvanized purlin material, 60 FT long.

Gazebo Structure:

- A. Remove, dispose and replace 100 SF of Asphalt Composite Rolled Asphalt Roofing Material, 10 FT long x 10 FT wide.

Main Chapel:

- A. Remove, dispose and replace 220 SF of EFS Exterior Cladding, 220 FT long x 1 FT wide.
- B. Prepare, prime and paint 15,500 SF of Exterior Painting, 775 FT long x 20 FT wide.
- C. Remove, dispose and replace 840 CF of Formed Sheet Metal Exterior Insulated Air Conditioning Duct, 20 FT long x 3 FT wide x 2 FT deep. The 20 FT at approximately 8 LBS/LF were used to calculate 160 LBS in the in the Cost Estimate, Damage Inventory tab.
- D. Remove and reset 1 each of 10 FT W x 9 FT Tall Rolling metal overhead door.
- E. Remove, dispose and replace 190 SF of Tongue and Groove Bamboo hardwood flooring, 10 FT long x 19 FT wide.
- F. Remove, dispose and replace 618 SF of 3/4 IN Plywood Musician Stage, 47.5 FT long x 13 FT wide.
- G. Remove, dispose and replace 618 SF of Commercial Grade Stage Carpeting, 47.5 FT long x 13 FT wide.
- H. Remove, dispose and replace 618 SF of Various sizes, No. 2 & Better Stage Framing, 47.5 FT long x 13 FT wide.
- I. Remove, dispose and replace 2,400 SF of 1/2 IN Thickness Sheetrock, 400 FT long x 6 FT wide.

J. Prepare, prime and paint 3,500 SF of Interior Painting, 175 FT long x 20 FT wide.

Main Chapel Floor:

A. Remove, dispose and replace 15,000 SF of Commercial Grade Carpeting, 122.5 FT long x 122.5 FT wide.

Work to be Completed total: \$305,757.34

Cost Estimating Format (CEF) total: \$527,440.00

Total Damage Inventory: \$570,704.00

Project Notes:

1. All site estimates for work to be completed were generated using RS means. See attachment labeled ST55972-DR4339PR-Cost Estimate.
2. All site estimates for work completed were provided by the applicant and validated using RS means. See attachment labeled ST55972-DR4339PR-Cost Estimate.
3. GPS coordinates have been checked for accuracy.
4. Applicant will comply with local, commonwealth, federal procurement laws, regulations and procedures.
5. Please look for Maintenance Records in project or applicant section. See document labeled: Letter Maintenance revised.pdf.
6. Please look for Procurement Policy in project or applicant section. See document labeled: 5972-DR4339PR- Procurement Policy.pdf
7. Please look for SBA Determination Letter in project or applicant section. See document labeled: MICS002-SBA Loan Determination Letter.pdf.
8. When disposing of debris (fencing, retention walls, light poles, demolition [case by case], new construction [case by case], among other activities) include the following:

- a. Staging area (coordinates)
- b. Quantity
- c. Type of material
- d. Final disposal site (coordinates)

406 HMP Scope

Hazard Mitigation Proposal – Project Summary

Project Title:	Main Chapel Building Damages		
Sector (if, applicable):	HSS		
406 Hazard Mitigation Specialist:	Anely Latalladi		
Category of Work:	E	Critical Facility	N

Grants Manager Project #:	55972	EMMIE PW #:	
GM Damage Inventory #(s):	140774		
Sub-Applicant/Applicant:	Iglesia Ciudad de Salvación		
Facility Name:	Iglesia Ciudad de Salvación		
Site Name/No.(s):	Main Chapel		
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 consisting of several separate buildings. This HMP covers the damages sustained by the main building which houses the main worship assembly area and administrative offices. This facility is a two-story steel building shell and interior concrete walls with a standing seam roof system at the centered octagonal shaped area and flat concrete roofs at the remaining surrounding areas. High velocity winds deformed and displaced several steel roof panels and blew in and displaced from its rails a steel roll-up door located to the north side of the building which allowed the wind to penetrate the building damaging the acoustic ceiling assembly and lighting. This damage also resulted in rain water intrusion that affected interior finishes, furnishings and equipment. Other damages include wind damage to roof mounted A/C units duct work and damages to the steel roof of the adjacent Maintenance Building.

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 the roofing panels, siding panels and rolling door with stronger ones and adding anchors to mechanical duct work.

Cost Effectiveness Summary:

The total cost of this Hazard Mitigation Proposal is **\$13,267.00** after applying Cost Estimate Format (CEF) Factors. The net cost of this Hazard Mitigation Proposal for the **Main Chapel** is **\$7,689.55**, which accounts for **2.51 %** of the eligible repair costs (prior to any insurance reductions) of facilities being protected. The total net cost of this Hazard Mitigation Proposal is **\$7,689.55**. 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

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.

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I. Eligible Damages to be Mitigated

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

Facility Maintenance Building:

1. 1,150 SF of 26 gauge corrugated galvanized steel roofing panels – Damaged by high velocity winds, 0% work completed.
2. 250 SF of 26 gauge corrugated galvanized steel roofing panels – Damaged by high velocity winds, 0% work completed.

Main Chapel:

1. 20' LF of 3'-0" W x 2'-0" D of insulated sheet metal, exterior, A/C duct work – Deformed and displaced by high velocity winds, 0% work completed.
2. 1 each of 9'-0" W x 10'-0" H, motorized, aluminum, roll-up door - Damaged by high velocity winds, 0% work completed.

I. Hazard Mitigation Proposal (HMP) Scope of Work

Facility Maintenance Building:

1. Steel panels will be replaced with a stronger, thicker model to add strength to the assembly and the perimeter of the roof will be reinforced with additional fasteners.
 - a. Replace 1,150 SF, 26 gauge corrugated galvanized steel roofing and siding panels with **24 gauge (lower gauge)** corrugated galvanized steel roofing and siding panels.
 - b. Install corrosion resistant sheet metal screws with neoprene washer, every 6" along perimeter of each roof.
1. Replace 250 SF, 26 gauge corrugated galvanized steel siding panels with **24 gauge (lower gauge)** corrugated siding panels.
 - a. Install corrosion resistant siding screws with neoprene washer, every 6" along perimeter of each roof.

Main Chapel:

1. Roll-up door was pushed towards the inside of the building, deformed and displaced from its rails by the force of the wind. This door is installed on the interior of the wall which makes it more vulnerable to wind damage. The Applicant is proposing to
 - a. Change the installation of the door to the outside of the building to add resistance to the wind.
 - i. Demolish existing concrete decorative molding around door opening 6" D x 6" W x 30 LF to install door rails flush to the outside wall.
 - ii. Re-plaster concrete wall surface were molding was removed.
 - iii. Dispose of demolished material.

- iv. Install door steel rails on the outside of the opening wall and reinforce to withstand expected wind forces.
- a. Install a wind rated, commercial grade, steel, motorized roll-up door with manual override and weatherstripping.
- 1. Brace duct work to adjacent wall to protect from dislodging movements caused by wind.
 - a. Install 4 rigid braces to anchor duct work to concrete wall. Ducts are 3'-0" W x 2'-0" D of insulated sheet metal, exterior and they go up from a roof mounted AHU to an adjacent concrete wall (See Attachment 3). Distance from concrete wall to outer side of the duct work is 4"-6".

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

Total Cost for Pre-disaster (PA) Repair/Replacement SOW for Eligible Damages to be Mitigated = \$305,757.34

Total Cost of Hazard Mitigation Proposal Scope of Work = \$ 7,689.55

Net Cost of Hazard Mitigation = \$ 7,689.55 (HMP SOW Cost – PA SOW Cost)

Attachment 3 - GM Project 55972 HMP CEF

Total Net Cost of Hazard Mitigation = \$ 7,689.55

Total Cost of Hazard Mitigation (after applying Cost Estimate Format (CEF) Factors) = \$ 13,267.00

Attachment 3 - GM Project 55973 HMP_CEG Preliminary HMP CEF

I. Cost Effectiveness Calculation

HMP Cost/ Benefit = $(7,689.55 / 305,757.34) \times 100$

Ratio of HMP C/B = 2.51% < 100% and Appendix J

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 55972 HMP_Hurricane Maria Event Wind Speed
2. Attachment 2 - GM Project 55972 HMP_Design Wind Speed – Microzone Analysis
3. Attachment 3 - GM Project 55972 HMP CEF

Cost

Code	Quantity	Unit	Total Cost	Section
9001 (Contract)	1.00	Lump Sum	\$43,264.00	Completed
9000 (CEF Cost Estimate)	1.00	Lump Sum	\$527,440.00	Uncompleted

CRC Gross Cost	\$570,704.00
Total 406 HMP Cost	\$13,267.00
Total Insurance Reductions	\$0.00
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CRC Net Cost	\$583,971.00
Federal Share (90.00%)	\$525,573.90
Non-Federal Share (10.00%)	\$58,397.10

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 #140774; Main Chapel Building \$570,704.00 + \$13,267.00 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. A reduction on anticipated insurance proceeds will be applied in the amount of \$300,000.00 from the Miscellaneous Insurance Guarantee Association An O&M requirement will be mandated in the amount of \$583,971.00 (Repairs \$570,704.00 + \$13,267.00 HMP)

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, Main Chapel Building must obtain and maintain wind property insurance in the amount of \$583,971.00 (Repairs \$570,704.00 + \$13,267.00 HMP)

Eric Miranda, PA Insurance Specialist FEMA CRC Atlantic PR. 12/19/2019.

O&M Requirements

Insured Peril	Item Type	Description	Required Coverage Amount
Wind	Building	Iglesia Ciudad De Salvación, Main Chapel Building must obtain and maintain wind property insurance in the amount of \$583,971.00 (Repairs \$570,704.00 + \$13,267.00 HMP)	\$583,971.00

406 Mitigation

There is no additional mitigation information on **MICS002 - Main Chapel Building 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 **MICS002 - Main Chapel Building Damages** .

Final Reviews

Final Review

Reviewed By Moreno Rivera, Jose A.

Reviewed On 02/03/2020 6:12 PM AST

Review Comments

Review by HSS in FEMA Final. Forwarded to Recipient Final.

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



Prepared For :

Eng. Waldemar Tavaréz, PE

Project:

Warehouse Facility,
Isabela PR

MAY 09, 2022



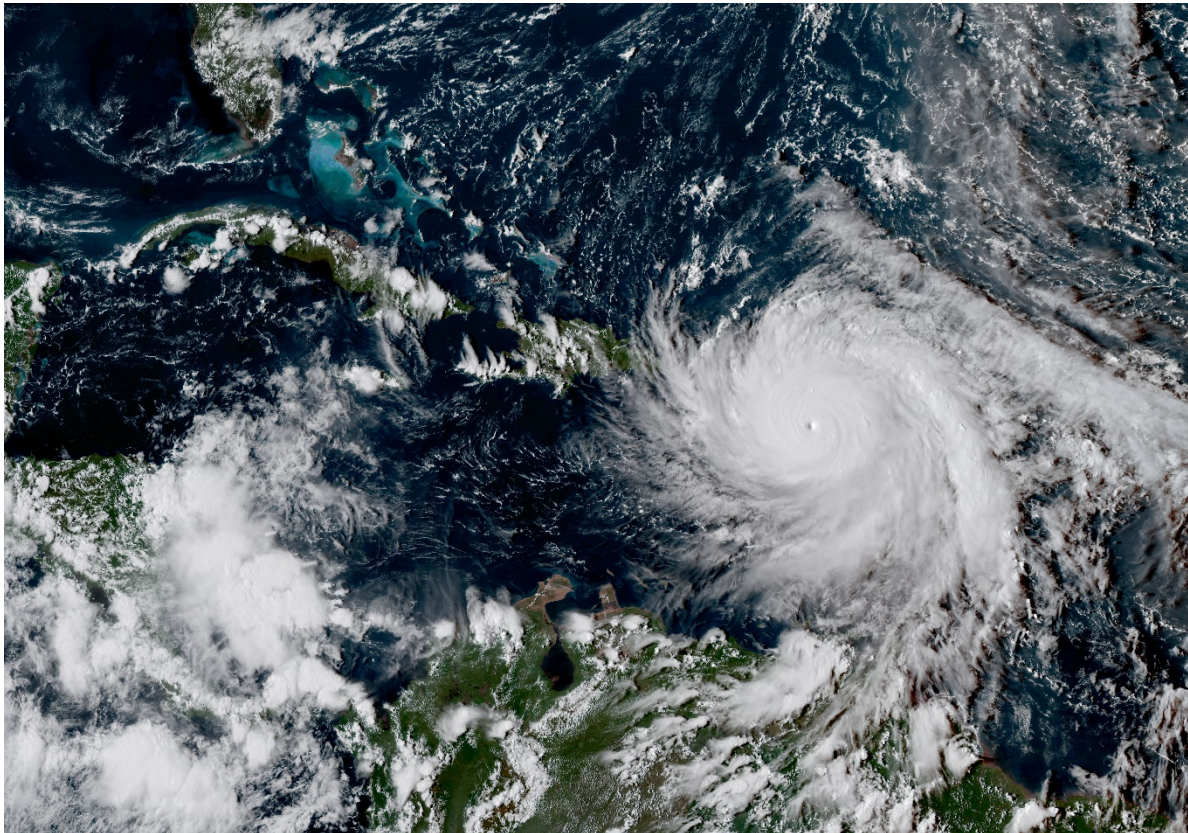
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Executive Summary

During the incident period of September 20, 2017, wind driven rain caused, surface water flooding and mudslides as well as high winds causing blown scattered debris throughout the Municipality of Isabela. President Trump declared that a major disaster exists in the Commonwealth of Puerto Rico. This declaration made Individual Assistance requested by the Governor available to affected individuals and households in the municipalities. This declaration also made debris removal and emergency protective measures (Categories A and B), including direct federal assistance, under the Public Assistance program requested by the Governor available to commonwealth and eligible local governments and certain private nonprofit organizations on a cost-sharing basis for all municipalities in the Commonwealth of Puerto Rico. Finally, this declaration made Hazard Mitigation Grant Program assistance requested by the Governor available for hazard mitigation measures to all municipalities in the Commonwealth.



Hurricane Maria -NOAA

1. Introduction

1.1. Maintenance Warehouse Location description

“Ciudad de Salvación” existing warehouse, consists of a composite structure with steel containers combined with metal roof and walls and galvanized C sections (Purlins) frame. The building is located in the Municipality of Isabela, PR. The facilities all footprint area is 3,690 square feet approximately.

1.2. AOI (Area of Interest)



Figure 1 – Aerial Photo

Location: 18.490139 N, -66.997697W
54 Calle Barbosa, Isabela, PR 00662

2. Facility Aerial Photo:



Figure 2 Building aerial photo.

3. Damage Description Summary Reported on DI # 140774

a. Damages

- 1) Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed.
- 2) Steel roofing panels, on steel frame, corrugated or ribbed, galvanized, 26 gauge.
- 3) Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed.
- 4) Steel roofing panels, on steel frame, corrugated or ribbed, galvanized, 26 gauge.
- 5) Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed.
- 6) Steel roofing panels, on steel frame, corrugated or ribbed, galvanized, 26 gauge.
- 7) Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed.
- 8) Steel siding, galvanized, corrugated or ribbed, on steel frame, 26 gauge, incl. fasteners.
- 9) Selective metals demolition, structural framing members, up to 500 lb, remove whole or cut up into smaller pieces, incl loading, excl shoring, bracing, cutting, hauling, dumping.
- 10) Girt/purlin, C/Z-shapes, 8" x 2-3/4" x 2-3/4", 16 ga., 3.4 lb/LF, shop fabricated, includes primer coat, clips and bolts, materials only.



b. Total estimate for damage repairs as reported on DI #140774 -\$ 76,155.04

Location	Description	Unit	Quantity	Ext. Total	Ext. Mat. O&P	Ext. Total O&P
1	Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed	S.F.	210	\$ 48.30	\$ -	\$ 77.70
2	Steel roofing panels, on steel frame, corrugated or ribbed, galvanized, 26 gauge	S.F.	210	\$ 588.00	\$ 495.60	\$ 714.00
3	Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed	S.F.	400	\$ 92.00	\$ -	\$ 148.00
4	Steel roofing panels, on steel frame, corrugated or ribbed, galvanized, 26 gauge	S.F.	400	\$ 1,120.00	\$ 944.00	\$ 1,360.00
5	Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed	S.F.	540	\$ 124.20	\$ -	\$ 199.80
6	Steel roofing panels, on steel frame, corrugated or ribbed, galvanized, 26 gauge	S.F.	540	\$ 1,512.00	\$ 1,274.40	\$ 1,836.00
7	Selective demolition, thermal and moisture protection, steel siding, corrugated/ribbed	S.F.	250	\$ 57.50	\$ -	\$ 92.50
8	Steel siding, galvanized, corrugated or ribbed, on steel frame, 26 gauge, incl. fasteners	S.F.	250	\$ 655.00	\$ 495.00	\$ 825.00
9	Selective metals demolition, structural framing members, up to 500 lb, remove whole or cut up into smaller pieces, incl loading, excl shoring, bracing, cutting, hauling, dumping	Ea.	1	\$ 27.61	\$ -	\$ 36.43
10	Girt/purlin, C/Z-shapes, 8" x 2-3/4" x 2-3/4", 16 ga., 3.4 lb/LF, shop fabricated, includes primer coat, clips and bolts, materials only	L.F.	3600	\$ 19,800.00	\$ 21,816.00	\$ 21,816.00
Subtotal				\$ 24,024.61	\$ 25,025.00	\$ 27,105.43
Total Damage per DI # 14						\$ 76,155.04

c. Memorial

Since the events of Hurricane Maria to the present day, increases in building codes requirements added to the emerging inflation in materials and construction work costs mean that such repair exceeds the actual market value of the building. To avoid future damage and more stable construction, resistance to atmospheric phenomemum and according to the requirements of current building codes, the following repairs are recommended according to the attached estimated.



d. Substantial Damage Cost Estimate

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
DESIGN/ DESIGN MANAGEMENT					\$ 8,500.00
A	Design, Inspection and Supervision	1	ls	\$ 8,500.00	\$ 8,500.00
CONSTRUCTION MANAGEMENT					\$ 7,500.00
B	Mobilization or demobilization, delivery charge for equipment	1	ls	\$ 1,500.00	\$ 1,500.00
C	Safety and Security	8	week	\$ 750.00	\$ 6,000.00
FEMA DAMAGE REPORT					
I-DEMOLITION OR SELECTIVE DEMOLITION					\$ 28,814.10
D	Remove and dispose all electrical systems	1	ls	\$ 2,500.00	\$ 2,500.00
E	Remove and dispose the metal wall panels	2496	sf	\$ 0.60	\$ 1,497.60
F	Remove and dispose the metal Roof panels	3402	sf	\$ 0.75	\$ 2,551.50
G	Remove and dispose Roof Purlings and walls Girts	1	ls	\$ 1,200.00	\$ 1,200.00
H	Remove and dispose 40' Steel Container	2	ea.	\$ 725.00	\$ 1,450.00
I	Cut, Remove and dispose all Steel Main and secondary Frame	1	l	\$ 750.00	\$ 750.00
J	Concrete floor, footing or asphalt demolition	3900	sf	\$ 0.95	\$ 3,705.00
K	Clearing, Grading, Hauling	3900	sf	\$ 1.40	\$ 5,460.00
L	40' Forklift and operator	1	week	\$ 3,600.00	\$ 3,600.00
M	Dump Truck and operator	1	week	\$ 2,600.00	\$ 2,600.00
N	Backhoe and operator	1	week	\$ 3,500.00	\$ 3,500.00
II-SITE PREPARATION					\$35,302.00
O	Clearing, Grading, Hauling	3900	sf	\$1.40	\$5,460.00
P	footing and perimetral foundation wall	8	cy	\$375.00	\$3,000.00
R	6" Concrete Floor	70	cy	\$375.00	\$26,250.00
S	Anchor bolts 3/4" x 18"	32	ea.	\$18.50	\$592.00
III-PRE FAB METAL BUILDING					\$ 118,930.00
T	Pre Fab Metal Building 54' wide x 70' long x 15' Eave Height	1	ls	\$ 85,500.00	\$ 85,500.00
U	Building Installation	1	ls	\$ 15,400.00	\$ 15,400.00
V	4" x 4" Industrial metal Downspout 20' long	8	ea.	\$ 85.00	\$ 680.00
W	12' wide x 10' height Metal Rolling Door, include inst.	1	ls	\$ 6,500.00	\$ 6,500.00
X	36" wide x 96" height Hollow Metal Door with all hardware and installation.	1	ea.	\$ 1,350.00	\$ 1,350.00
y	Electrical Systems	1	ls	\$ 9,500.00	\$ 9,500.00
IV-MISCELLANEOUS WORKS					\$ 10,090.00
z	4' Wide x 12' long sidewalk (Doors side)	1	cy	\$ 375.00	\$ 375.00
AA	14' wide x 12' long Concrete Driveway (Rollup Side)	3.5	cy	\$ 375.00	\$ 1,312.50
AB	3' wide x 10' long Translucent roof panel	6	ea.	\$ 65.00	\$ 390.00
AC	Wall and Roof Batt Insulation R-13	6410	sf	\$ 1.25	\$ 8,012.50
SUBTOTAL					\$ 209,136.10
EQUIPMENT TAX 4%					\$ 8,365.44
MATERIAL TAX 11.5%					\$ 24,050.65
O&P (20%)					\$ 41,827.22
BONDS 6%					\$ 12,548.17
PATENTS .5%					\$ 10,456.81
TAX					\$ 10,456.81
TOTAL					\$ 316,841.19



e. Pictures:



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12

Certification

I hereby certify that the information included in the reference report is true, correct, and complete to my better knowledge and understanding. For that instance, I sign the present certification on April 26, 2022.

A handwritten signature in blue ink, appearing to read 'Wm2'.

Dr. William Meléndez, PhD, MEM, PE, PMP, CCM
Consultant

