Date: 05/19/2020

# Rebuild Florida CDBG - Mitigation
# Critical Facilities Hardening Program Application

**Official Project Title**

Tavernier Fire Station #22: Critical Facility Hardening Project

**Applicant Information**

| | | | | | |
|---|---|---|---|---|---|
| Official Applicant Entity Name: | Monroe County Board of County Commissioners | | | FEIN #: | 59-60000749 |
| Primary Project Contact Name: | Cary Knight | | | DUNS #: | 0738767570000 |
| Title: | Director of Project Management | | E-mail: | | Knight-Cary@monroecounty-fl.gov |
| Mailing Address: | 1100 Simonton Street | | | Phone Number: | 305-292-4527 |
| City: | Key West | State: | Fl | Zip Code: | 33040 |

| Please list co-applicant entities if any: | Contact Person: | E-mail Address: |
|---|---|---|
| NA | | |
| | | |
| | | |

**Project Description**

Write an overview/summary, not to exceed 2,500 words, of the project being proposed. 1) State the project purpose and include a description of the critical facility to be hardened. 2) Specify the risk(s) that will be mitigated by completion of this project. 3) Describe how the work will be completed and the team that will be responsible. 4) Explain the method used to determine project funding requirements. 5) Describe anticipated outcomes. 6) Describe how the facility will be maintained after it is hardened.

| Insert Attachment: | | Please title doc: EntityNamePD_CFHP |
|---|---|---|

**Community Value**

Describe, in 1,500 words or less, the critical facility's value to the community in normal circumstances and in times of natural disasters. Which of the seven community lifelines will be served by completion of this project? How does this project enhance community resilience? Does the facility have any cultural or historical significance? Attach a maximum of ten photographs that provide both interior and exterior views.

| Insert Attachment: | | Please title zip folder: EntityNameCV_CFHP |
|---|---|---|

| **Capacity Plan** | | |
|---|---|---|
| Provide a strategic plan overview of 1,500 words or less that addresses goals, stakeholders, the work plan, (major tasks and deliverables), resources (staffing and budget) and monitoring/quality controls. Identify the staff members who will be responsible and/or positions that will be filled for CFHP project management and maintenance. Provide a short profile on each person on your current staff who perform project-related tasks and a position description for any new hires who will be assigned to project responsibilities. Have any project contractors been identified? If so, briefly describe your selection process. | | |
| Insert Attachment: | | Please title doc: EntityNameCP_CFHP |

| **Implementation Plan** | | |
|---|---|---|
| Prepare a chronological timeline for the entire life of the project that organizes work into logical, manageable tasks and deliverables. The Implementation Plan Template has been provided in Appendix D of the CFHP Guidelines. | | |
| Insert Attachment: | | Please rename template: EntityNameIP_CFHP |

| **Budget** | | |
|---|---|---|
| Include your project budget using the Budget Template found in Appendix E in the CFHP Guidelines. Ensure your budget is reasonable, appropriate and accurate. Are the budgeted items consistent with the project description and tasks? Does the amount requested fall within the CFHP applicant's allowable minimum ($50,000) and maximum ($15,000,000)? Ensure there is no duplication of benefits. | | |
| Insert Attachment: | | Please rename template: EntityNameBudget_CFHP |
| Is there any duplication of benefits? | Yes: ☐ | No: ☑ |
| All funds identified for use on your project must be fully disclosed and detailed to ensure budget accuracy and no duplication of benefits. | | |
| Do you anticipate receiving any funds for this project that will not be supplied by the CDBG-MIT program? If yes, detail the anticipated or committed funds in the Leveraged Dollars section. | Yes: ☐ | No: ☑ |

**Leveraged Dollars**

If your project involves the qualified use of matching or leveraged funds or services in any capacity, (see Part 4.6 in the CFHP Guidelines) then describe the specifics of leveraged fund/service usage. Answer: 1) Are there local or other funds available to address the proposed project in whole or in part? If yes, report all sources of funding and the amount available. 2) Disclose sources and uses of non CDBG-MIT funds. 3) What other federal, state and/ or local entities have you contacted concerning funding for the proposed project and what were the results? Put "N/A" if this section is not applicable to your project.

NA

**County Selection**

Select each county that your project benefits. DEO will use this information to assess MID, social vulnerability, rural and fiscally-constrained areas. Only counties eligible for CDBG-MIT funds are listed below.

| | | | |
|---|---|---|---|
| ☐ Alachua | ☐ Flagler | ☐ Leon | ☐ Pasco |
| ☐ Baker | ☐ Gilchrist | ☐ Levy | ☐ Pinellas |
| ☐ Bradford | ☐ Glades | ☐ Manatee | ☐ Polk |
| ☐ Brevard | ☐ Hardee | ☐ Marion | ☐ Putnam |
| ☐ Broward | ☐ Hendry | ☐ Martin | ☐ Sarasota |
| ☐ Charlotte | ☐ Hernando | ☐ Miami-Dade | ☐ Seminole |
| ☐ Citrus | ☐ Highlands | ☑ Monroe | ☐ St. Johns |
| ☐ Clay | ☐ Hillsborough | ☐ Nassau | ☐ St. Lucie |
| ☐ Collier | ☐ Indian River | ☐ Okeechobee | ☐ Sumter |
| ☐ Columbia | ☐ Lafayette | ☐ Orange | ☐ Suwannee |
| ☐ DeSoto | ☐ Lake | ☐ Osceola | ☐ Union |
| ☐ Dixie | ☐ Lee | ☐ Palm Beach | ☐ Volusia |
| ☐ Duval | | | |

| **Overall LMI Benefit** |
|---|
| Identify and list the Census Tract number followed by all LMI Block Groups your project benefits. Example: Tract: 200, Block group: 2, 3; Tract: 2902, Block group: 1, 3, 4, 5, etc. |
| 970600 3<br>970700 1, 2, 3<br>970800 2<br><br>LMI in Service Area = 76.8645%<br><br>This percentage was derived by using the HUD Exchange Map Application Tool. |

| **Special Designations** | | |
|---|---|---|
| Does your project benefit an Area of Critical State Concern according to Florida Statutes 380.05? | Yes: ☑ | No: ☐ |
| What is the area of critical state concern? | City of Key West and the Florida Keys Areas (Monroe County) | |

| **Compliance** | | |
|---|---|---|
| According to 84 FR 45838 August 30, 2019 Section V.A.(18), “The State shall make reviews and audits, including on-site reviews of any subrecipients, designated public agencies, and local governments, as may be necessary or appropriate to meet the requirements of section 104(e)(2) of the HCDA, as amended, as modified by this notice. In the case of noncompliance with these requirements, the State shall take such actions as may be appropriate to prevent a continuance of the deficiency, mitigate any adverse effects or consequences, and prevent a recurrence. The State shall establish remedies for noncompliance by any designated subrecipients, public agencies, or local governments.” | | |
| Can you certify to comply with state and federal register regulations as outlined in 84 FR 45838? | Yes: ☑ | No: ☐ |

| **Maintenance Agreement** | | |
|---|---|---|
| According to 84 FR 45838 August 30, 2019 Section V.A.2.a(10), “Each grantee must plan for the long-term operation and maintenance of infrastructure and public facility projects funded with CDBG-MIT funds. The grantee must describe in its action plan how it will fund long-term operation and maintenance for CDBG-MIT projects. Additionally, the grantee must describe any State or local resources that have been identified for the operation and maintenance costs of projects assisted with CDBG-MIT funds.” As such, Federal Register expectations on maintenance for CDBG-MIT projects are expected to be maintained by each entity who proposes a CFHP project. | | |
| Can you certify that your entity will comply with state and subrecipient monitoring and maintenance requirements as outlined by 84 FR 45838? | Yes: ☑ | No: ☐ |

**Sign and Date**

As the primary entity contact for this project, I certify that staff, contractors, vendors and community partners of our mitigation initiative:

A. Will comply with all HUD and Florida requirements in the administration of the proposed CDBG-MIT funded activities;
B. Will work in a cooperative manner to execute the Subrecipient Agreement that provides the pathway for successful CDBG-MIT program(s) and/or project(s) and;
C. Certify that all information submitted in this Application is true and accurate

Signature: _____ Date: 06/22/2020

Print button will only print application and not attached documents. Submit button will deliver application to email to the cdbg-mit@deo.myflorida.com. Please attach all relevant documents to this email.

Print Application  Submit Application


COMMUNITY DEVELOPMENT BLOCK GRANT –MITIGATION PROGRAM
CRITICAL FACILITY HARDENING PROGRAM

HURRICANE IRMA GRANT FUNDING APPLICATION

# MONROE COUNTY FIRE RESCUE, TAVERNIER FIRE STATION #22

JUNE 15, 2020

MONROE COUNTY
BOARD OF COUNTY COMMISSIONERS
2798 OVERSEAS HIGHWAY
MARATHON, FLORIDA 33050

CARY KNIGHT
DIRECTOR, PROJECT MANAGEMENT

## Monroe County Fire Rescue - Tavernier Fire Station #22

## Critical Facility Hardening Project

## Project Description

**Purpose and Description:** Monroe County is the Southernmost County in the Continental United States. It is comprised of the Florida Keys, which are a string of over 800 low-lying islands stretching 130 miles in length and connected by only one road in and out, the Overseas Highway (US1).

Monroe County Fire Rescue (MCFR) and Emergency Services operates nine fire stations throughout the Florida Keys and includes Trauma Star Air Ambulance services. Station 22, considered part of Monroe County's critical infrastructure, is located at 151 Marine Avenue, (MM92) in Tavernier, Fl 33070. This Fire Station serves three LMI Census Tracts. The total service area of Low to Moderate Income (LMI) populations is 76.86%. This is the most North/Eastern Fire Station in the Florida Keys.

The Department plans for, responds to, and mitigates the effects of emergency situations, including natural and man-made events. This is in addition to daily emergency medical services and fire related responses. Station 22 is staffed by certified firefighters that are cross-trained as paramedics, flight medics, emergency medical technicians, and Aircraft Rescue and Fire Fighting personnel that provide critical life safety services to residents and visitors in Monroe County.

**This project would involve flood-proofing, increasing the wind-loading capability, and creating additional energy efficiency to enhance the continuity of operations for MCFR in the upper Florida Keys.**

**Mitigated Risks**: Station 22 is housed in an aging structure, which was constructed prior to the Florida Building Code's changes to wind load design and requirements for buildings to withstand minimum wind speeds of 150 mph; and is, therefore highly vulnerable to high winds, storm surge, sea level rise, and frequent high water flooding events. The building is located within an AE 9 FEMA Flood Zone. Additionally, the Florida Building Code Wind Speed Maps have categorized the coastal areas of Florida, including the Florida Keys, as high wind velocity impact areas. Consequently, Station 22 is within a high-impact coastal area identified as highly susceptible to risk to sea level rise, wind damage, wind-driven rain damage, storm surge inundation, erosion and scour, flooding, flood borne debris, and high wind speeds and velocities.

During Hurricane Irma, this 4300 square foot building sustained wind-related roof damage. This damage occurred despite the fact that Fire Station 22 is located over 70

miles away from Hurricane Irma's landfall in the middle keys revealing the structural vulnerability of this critical facility.

Because of the extraordinary environmental sensitivity of the Florida Keys, in 1980, through legislative act, the State of Florida designated the Florida Keys as "**Areas of Critical State Concern**." The purpose of the program is to protect the unique environment, vegetation, and natural resources of the designated area by regulating land development and other activities regarded as detrimental to the environment. The County has also been designated a "**Rural County"**.

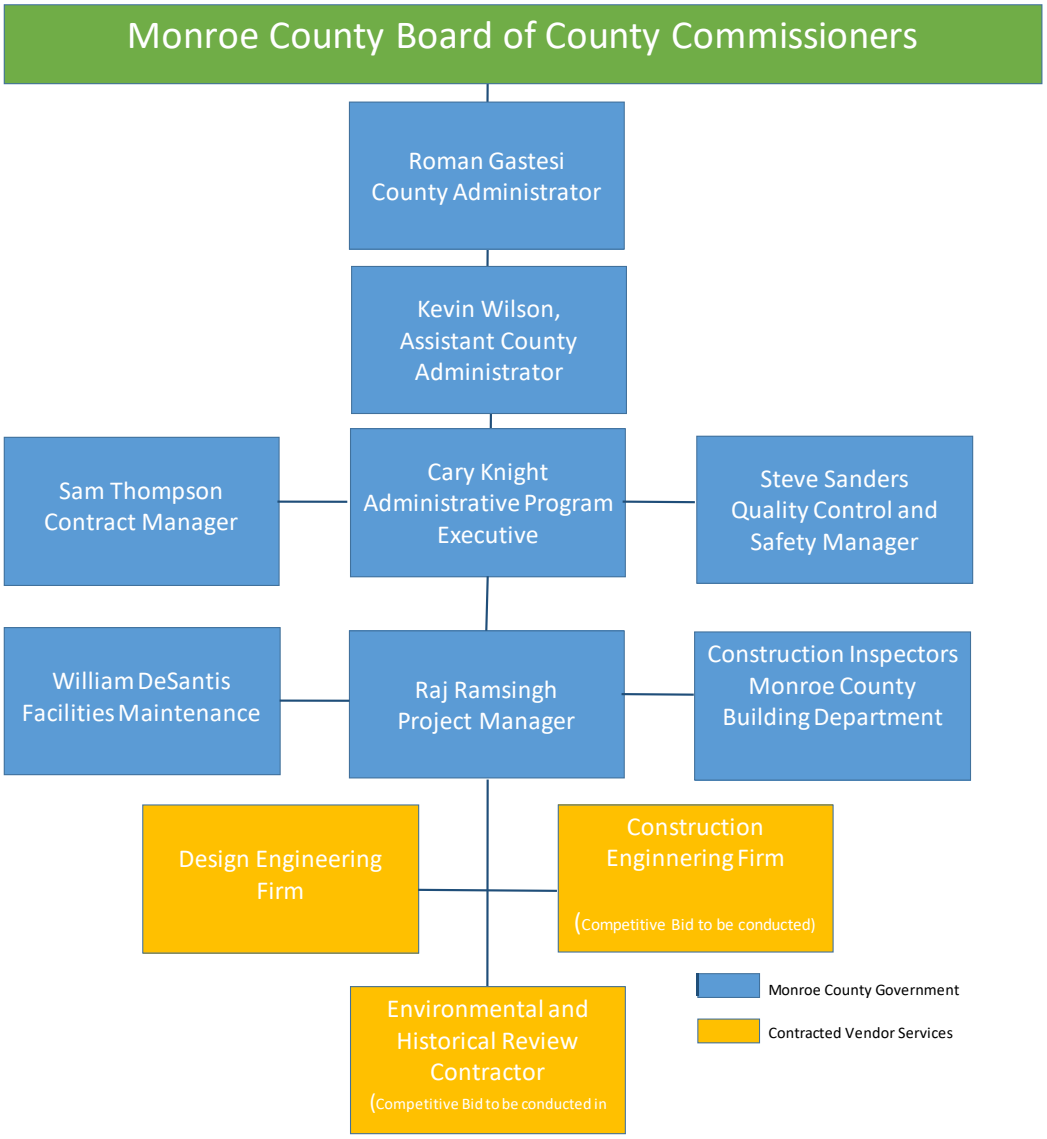
The Keys provide unique challenges for the provision of life saving response services. The island chain is connected by a series of bridges and a single connecting roadway (US 1) that extends through all of the islands from Key Largo to Key West. Traffic flow is frequently impacted by bridge closures due to traffic incidents, construction projects, and damage to infrastructure. Each fire station covers a unique geographic service area with limited ability to rely upon immediate back-up or mutual aid due to the geographic challenges and roadway limitations. With these response challenges, it is vital that each fire station establishes the highest level of redundancy and resilience.

**Workplan and Staffing:** The project will be implemented by a highly experienced and qualified project management team consisting of the following individuals:

- Administrative Program Executive, Cary Knight
- Project Manager, Raj Ramsingh
- Contract Manager, Sam Thompson
- Construction Quality Control and Safety Manager, Steven Sanders
- Facilities Maintenance Director, William DeSantis
- Construction Inspectors / Permitting Inspectors from Building Department
- Supported by the Finance and Budgeting Department, the Clerk of the Court, as well as the County Attorney Office

Further information on each of the team members is detailed in the Capacity Plan Section of this application including a biographical summary of each team member.


## Monroe County Project Organization Chart




In addition to internal staff, Monroe County will solicit vendor services for Project Design Services, Project Construction Services, and Historical and Environmental Review Services. All procurement processes will comply with the procurement standards in 2 C.F.R. §200.318 - §200.326 when procuring property and services under this Agreement.

**Work Plan**: Monroe County will complete the project over a period of two years and four months (September 2020 through January 2023). Once the sub-recipient agreement is executed, and the vendors procured, we estimate that the design phase may begin within 5-6 months. Once the permitting process and the environmental review processes are

complete, we estimate that construction phase will be conducted between September 2021 and January 2023 assuming that contracts are executed within a timely manner.

**Funding and Costing Methodology:** The Monroe County Project Management Department working in close partnership with MCFR as comprehensively evaluated Fire Station #22 for internal and external opportunities to harden the structure, build redundancy and resilience. The following proposed mitigation initiatives will create a structure that is not only able to withstand higher windloads and avoid flooding, but will also ensure increased energy efficiency to reduce electrical load.

1. **Generator**: This project will provide funding for a permanently anchored generator with an automatic transfer switch for continuous power to the Station 22 building. The generator will be anchored for wind resistance and elevated above the base flood elevation as required by code. Station 22's current generator is on a movable trailer with a plug mounted connection that is 4 inches above the ground which is not an adequate option to ensure power resilience. See photos at the end of this chapter. Estimated cost is **$90,000**.
2. **Underground Fuel Tank**: This project will fund placement of the fuel tank below ground to protect this vital fuel reserve from high winds and storm surge. Burying the fuel tank will also provide the added benefit of avoiding environmental contamination in the sensitive land and marine environment of the Florida Keys. Estimated cost is **$47,000**.
3. **HVAC Unit**: We propose to replace one exterior-mounted Heating, Ventilating, and Air Conditioning (HVAC) unit. Station 22 has three (3) central air conditioning units mounted on the building. One was installed in 2013 and is due to be replaced. There are two other existing HVAC units which are roof top mounted will not be replaced with this project. Exterior electrical equipment such as HVAC units are frequently damaged by high winds and flooding during disaster events. Mounting these units on the roof will protect these system. The estimated cost for replacing one roof mounted HVAC unit is **$35,000**.
4. **Mount HVAC Unit**: We propose to mount the facility heating unit on the roof of the building to protect it from storm surge and enhance wind resilience at an estimated cost of **$9,000**.
5. **Underground Service**: We propose to bury the electrical service lines below ground to avoid electrical power disruption due to flying debris, fallen trees, or flooding. Burying the power lines will also expedite power restoration in the aftermath of a disaster. The estimated Cost is **$30,000**.

Project Components:

- Elevated Generator
- Bury Fuel Tank
- Replace HVAC Unit
- Mount Rooftop Heating Unit
- Bury Electrical Service Line
- Replace Doors and Windows
- Replace Garage Bay Doors
- Install Flood Panels
- Install LED Light Fixtures
- Install Insulation Foam

6. **Doors and Windows**: We propose to replace four (4) impact entry doors and ten (10) windows with hurricane impact resistant components. Retrofitting the entryway with impact resistant doors and windows will protect the Fire Station from wind-borne debris and will provide enhanced windloading capacity on the exterior hull of the structure. The estimated cost is **$50,000**.
7. **Bay Doors**: The project will fund the installation of eight (8) new garage doors that are hurricane impact resistant and open at a speed of 6 to 7 seconds. Replacing the garage bay doors for fire apparatus access will provide protection for the largest opening(s) in this critical facility ensuring rescue equipment is functional following a natural or man-made disaster. To properly mitigate the facility and its equipment from corrosion and wind damage, the large rolling doors should comply with the high-impact wind load testing and design factors as provided in the Building Code ASTM E330 or ANSI/DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108, and additionally DASMA Technical Data Sheet 115, including door type, size, assembly, latching, frame fasteners, etc. (Note: 115 is a cyclical pressure test and an impact test, whereas 108 and E330 are static pressure tests.) The estimated cost is **$250,000** for 8 doors.

8. **Flood Panels**: Installing flood panels at the lower elevation of building over doorways. The flood panels are a dry flood-proofing measure making the entryway watertight and mitigating the potential for flood damage by reducing the probability that the building interior will be inundated. We also propose to fill the CBS Blocks to enhance windloading capabilities as research has shown unreinforced concrete block structures can be vulnerable to high winds. Filling the CBS Blocks and installing flood panels is estimated to cost approximately **$45,000**.
9. **Light Fixtures**: This project proposes to replace interior and exterior light fixtures of the Station 22 building to LED lighting. Replacing the lighting of this critical facility will provide for a higher level of energy efficiency. LED lights operate at low voltage so are cool to touch and much safer to handle during installation and maintenance and can be exposed to adverse weather conditions. The benefit of LED Lights is that they are an eco-friendly form of lighting as they do not contain mercury or other harmful gasses or emit any harmful UV rays. The estimated cost of eighty (80) light fixtures is **$90,000**.
10. **Insulation Foam**: We propose to install thermal insulation spray foam on the ceiling of the apparatus bay. Providing a dedicated self-contained foam insulation inside the apparatus bay will protect the valuable fire equipment from severe weather such as wind-driven rains and high heat. Estimated cost is **$35,000**.

11. **Planning and Design Engineer**: We propose to hire a design engineer for the design component to complete the scope of the grant work. Estimated cost is **$75,000.**
12. **Administration**: Compensate Project Manager and Project Team for project administration and implementation. Estimated cost is **$37,800**.

Total estimated cost for critical facility and infrastructure hardening improvements to Station 22: **$ 818,800.**

**Outcomes:** This important project will provide flood and wind protection to a critical facility that will ensure that on-duty first responders are protected when sheltered at the fire station facility during tropical events, fire rescue equipment is protected and fully functional post disaster impact, and allow public safety service before, during and after a disaster. This project primarily serves low-income populations. **Tavernier Fire Station 22 serves 5 LMI Census Tract areas including (970600 (Block 3), 970700 (Block 1, 2, 3); 970800 (Block 2)) which has a cumulative LMI of 76.86%.**

**Maintenance:** Facilities Maintenance and Public Works is responsible for the day-to-day maintenance and operations of more than 100 County-owned parks and buildings including Tavernier Fire Station (Station #22). Staff will continue to maintain this facility within their routine maintenance schedule.

When any facility construction, renovation, or hardening project is conducted, Monroe County assigns a building commissioning team. The Commissioning Team consists of members of the project management team, the Facilities Management Department, and Fire Rescue. This team conducts a comprehensive systematic quality assurance process to ensure that building systems are designed, installed, tested, and capable of being operated and maintained to perform interactively according to the design intent and Monroe County Fire Rescue's operational needs.

During the commissioning process, the Facilities Maintenance Department will update the structural information of the building within the electronic facilities maintenance management system (Dude Solutions Asset Essentials). This system contains all vital building information including design information, warranty requirements for scheduled maintenance, and schedules for all key systems. The system automatically generates routine preventative maintenance and annual inspection work orders for the Facilities Management team. This system also allows transparency into the long-term cost of building maintenance. Monroe County Facilities Maintenance Department maintains a facilities work order data management system for preventative maintenance of all County facilities. The system also generates forecasting for future work, which annually is incorporated into the Monroe County Board of County Commissioner's budgeting process. Based upon publically available funds, the Board of County Commissioners will direct the percentage of the budget, which is, dedicated to facilities maintenance operations.

## Monroe County Fire Rescue - Tavernier Fire Station #22

## Critical Facility Hardening Project

## Community Value

**Function**: As one of the oldest departments in Monroe County, the Tavernier Fire Station #22 has served Monroe County for over 50 years and remains of vital importance to public safety in the community. Following is a list of primary functions performed by the personnel at this critical facility.

- **Fire Suppression**: This station has a total of four (4) bays and operates at least 6 fire rescue apparatus including a ladder truck, rescue vehicle, engine, hose tender, and utility/cascade vehicle and two (2) ambulances for emergency medical services. There are a total of four (4) on-duty personnel, supplemented by active support volunteers, operating on three (3) separate daily shifts of 24 hours a day for 365 days a year. In an average year, the station responds to between 530 and 680 service calls. All Monroe County personnel are dual Florida state-certified Firefighter and Emergency Medical Technicians (EMT's).
- **Emergency Medical Services (EMS):** Fire Station 22 provides emergency medical and trauma rescue services to the community. All personnel are dual Florida state-certified Firefighter and EMT's and there is always at least one dual Florida state-certified Firefighter/Paramedic on shift. Having highly trained and qualified staff is essential due to high volume of EMS incidences and the length of transport time to a critical care facility. Medical calls comprise approximately 90% of the incidents at this Station.


- **Hazardous Materials Response:** There are 589 registered fuel storage tank sites[1] throughout the Florida Keys that have the potential for hazardous materials release. Fire Rescue personnel conduct annual Life and Fire Safety inspections of these sites to ensure compliance with the National Fire Protection Association standards. Fire rescue personnel are also trained to identify and isolate hazardous materials releases resulting from transportation accidents, or inadvertent releases at facility sites where fuels or gaseous materials are stored. On average, Fire Rescue personnel respond to approximately five (5) to ten (10) hazardous materials incidences per year.
- **Technical Rescue:** Station 22 Fire Rescue personnel have the capability to conduct specialized rescue operations including vehicle and machinery extrication,

[1] According to the Florida Department of Environmental Protection.

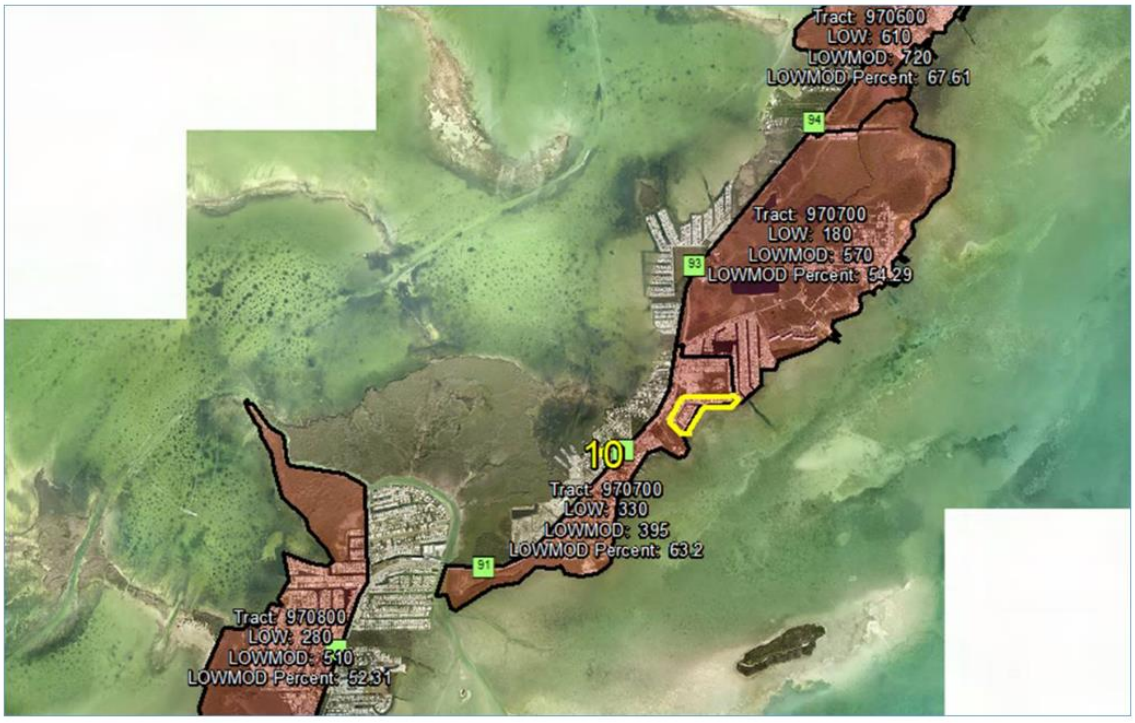
confined-space rescue, trench and excavation rescue, structural collapse rescue, water rescue, and wilderness search and rescue.

- **Trauma Star Air Ambulance:** Annually Trauma Star provides approximately 1000 emergency helicopter transportation trips for individuals who are critically injured. They fly from the incident site to a medical facility or conduct inter-facility transport to the mainland when services are insufficient to meet the medical need of the victims. For an island chain that is isolated from the mainland by distance and a busy single highway, Trauma Star saves critical minutes for patients to receive life-saving interventions.

**Low To Moderate Income Populations**: Virtually the entire service area of Tavernier Fire Station #22 serves low to moderate income population. A total of 4 LMI Census Tracts are affected as follows:

- Tract 970600, Low 610, Low to Moderate 720, Low to Moderate Percent 67.61%
- Tract 970700, Low 180, Low to Moderate 570, Low to Moderate Percent 54.29%
- Tract 970700, Low 330, Low to Moderate 395, Low to Moderate Percent 63.2%
- Tract 970800, Low 280, Low to Moderate 510, Low to Moderate Percent 52.31%

Map: Low to Moderate Income Census Tracts served by Station 22




**Community Lifelines**: With the completion of the Tavernier Fire Station #22 Critical

Facility Hardening Project, we would be strengthening numerous Monroe County lifelines including the following:


**Safety and Security**: MCFR Fire Station 22 is the sole Fire Service responder with dual Florida state certified Firefighter/EMS staff in the upper Keys. They are responsible for Fire Suppression, Search and Rescue operations and Community Safety.


**Health and Medical**: MCFR Fire Station 22 is also responsible for the provision emergency medical services care, and patient transportation by both land and air.


**Communications**: MCFR Fire Station 22 is also responsible for supporting emergency alerts and warning, 911 and Dispatch, and responder communications. MCFR provides mutual aid responses to other jurisdictions as emergency situations require additional support.


**Hazardous Materials:** MCFR Fire Station 22 is also responsible for inspection of hazardous materials facilities and responding to hazardous materials incidents, and monitoring potential community contaminants.


**Transportation:** MCFR Fire Station 22 also serves an important role in maintaining accessibility to roadways by responding to traffic incidents on roadways and clearing impediments. They may also support the response to air incidents at the Marathon Airport in the event that additional resources are needed.

**Community Value During Disasters:** In the aftermath of a natural or manmade disaster, MCFR personnel lead lifesaving operations supporting numerous essential services related to public health, safety and economic security. Within the Florida Keys, all areas are highly vulnerable to hurricane storm surge and flooding caused by tropical weather events. Therefore, all residents, visitors, and workers must evacuate Monroe County depending on the severity of the expected event. During Hurricane Irma (2017) and many previous hurricane events, many residents did not heed the evacuation order reinforcing the immediate need for life-saving first response services. First responders, including fire rescue personnel, can not evacuate the Florida Keys and must be assured safe shelter while serving the public.

In the aftermath of large-scale disasters, fire rescue personnel clear the roadways to create travel and hydrant areas. Debris clearance allows rescue teams to move through affected areas to assess impacts, search for survivors who are injured or trapped, or for other reasons unable to reach safety. Having resilient fire stations with redundant communications, reserve fuel supplies, safe shelter for the fire rescue personnel, and back up emergency power is vital to ensure that Fire Rescue can provide continuity of services to the community while guaranteeing their own safety and the protection of

equipment. Furthermore, the fire station may serve a number of post disaster function including incident command post and logistics support for fire rescue operations.

First responders working in the community cannot rely upon automatic external mutual aid support to provide immediate lifesaving assistance in the aftermath of a large-scale disaster due to limited access and travel time into the Florida Keys. Additionally, travel is often limited to a single lane of traffic in many segments, which slows rescue efforts. The 42 bridges that connect the islands are a further point of vulnerability as failure of any of these structures could stop all traffic movement for extended period of time .

*Figure: FS 22 Nuclear Power Plant Exercise*

**Community Resilience:** Being an island community, we must contend with the reality that virtually all critical facilities are vulnerable to storm surge and flooding. Fire Station #22 is located within AE 9 FEMA Flood Zone. All levels of government maintaining infrastructure in the Keys have invested heavily in building resilience; however, it takes only a single bridge outage to stop all traffic flow for extended periods of time. Community resilience and self-sufficiency is vital in the provision of all life safety services.

**Community Value**: In addition to the MCFR day-to-day fire and rescue responsibilities, fire rescue personnel provide a wide range of public services such as elderly welfare/wellness checks, blood pressure, glucose and heartrate monitoring, and assistance with private home safety and smoke detectors. The MCFR and its staff are firmly committed to being a community partner. Fire Station 22 hosts and/or participates in a variety of community outreach and engagement activities throughout the year including the following:

- **Pre-Fire Planning for Commercial Properties:** MCFR staff perform annual inspections of businesses to assist a business owner to plan and prepare for emergency incidents before they occur. Fire Rescue inspectors document data and potential vulnerabilities of the building to ensure preventive measures can be taken and expedite response efforts.
- **Safe Haven for Newborns**: Each of the fire stations in Monroe County is a “Safe Haven for Newborns” which allows parents to anonymously leave unwanted

newborns. The fire station will contact a participating private adoption agency to arrange placement of the newborn with a waiting family.

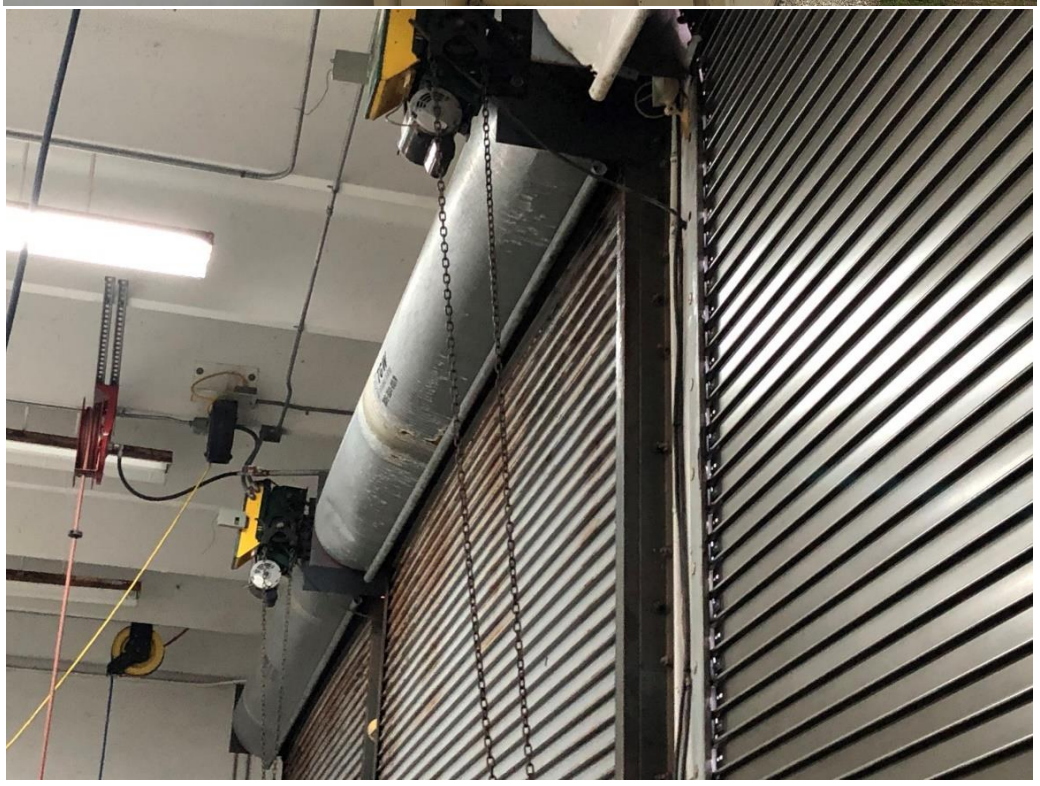
- **Beat the Heat:** Each summer Station 22 firefighters provide a "Beat the Heat" event in Tavernier. Firemen sprinkle misting water for children of all ages to run through and enjoy in a safe and fun environment.
- **National Night Out**: During the first week of August, each area of the Florida Keys hosts an event. The Upper Keys gather at the Key Largo Community Park, with other agencies such as the Fish and Wildlife Conservation Commission, Florida Highway Patrol, Border Patrol, Coast Guard, U.S. Navy and others to discuss ways to make the community safer.
- **Fire Prevention Week: D**uring National Fire Prevention Week, firefighters teach students at local elementary schools and daycares how to prepare, prevent, and escape fires.
- **Flight to the North Pole:** The Flight to the North Pole takes place in early December and firefighters volunteer at this event to bring community holiday cheer.
- **Holiday Parades**: Annually, firefighters drive decorated and well-lit fire engines with Mr. and Mrs. Santa Claus through community neighborhoods entertaining families and passing out candy to children.

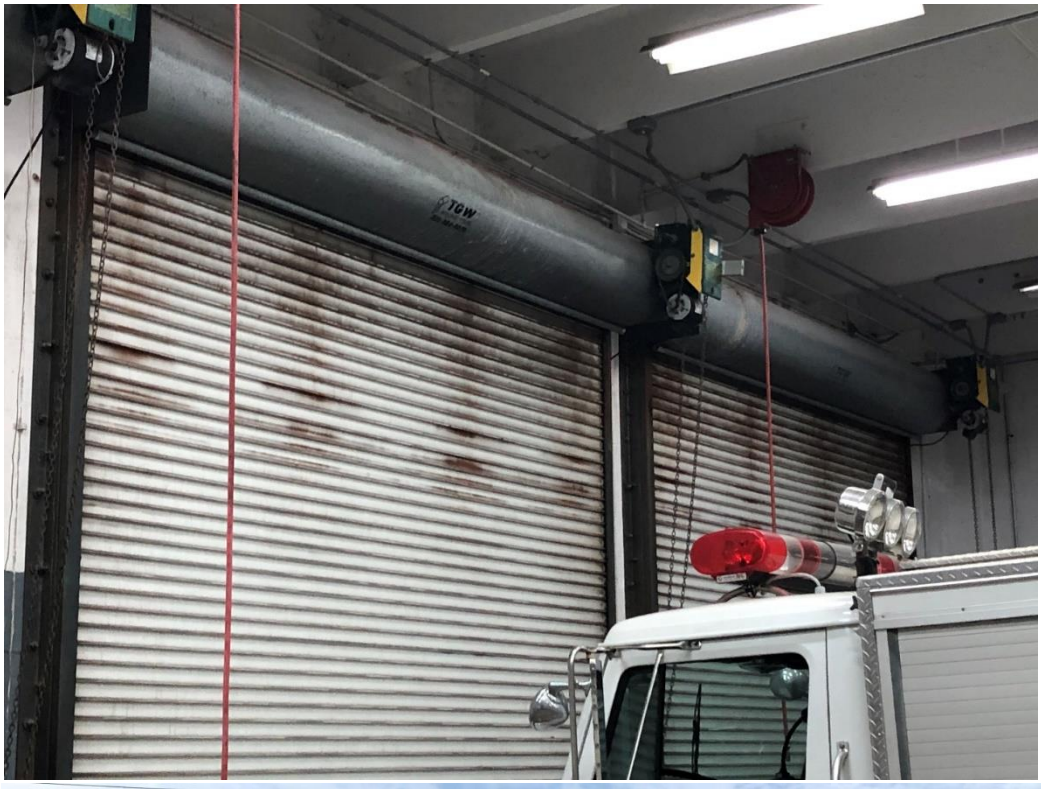
Attached 10 photos of the Tavernier Fire Station 22 Critical Facility Hardening project, critical mechanical and electrical components.

Attachments: Pictures of Fire Rescue Station #22



SuperVault MH
(888) 333-TANK





# Monroe County Fire Rescue - Tavernier Fire Station #22

## Critical Facility Hardening Project

## Capacity Plan

**Goal:** Monroe County proposes to comprehensively harden the Monroe County Fire Rescue Station 22 in Tavernier against flood hazards, wind hazards and increase energy efficiency.

**Major Tasks:** Major tasks to be completed include vendor acquisition for engineering design and construction services, permitting approvals, environmental and historical review, construction, inspections and maintenance. This will be completed with $818,800 of CDBG-MIT funds.

Tasks To Be Accomplished:

1. Execute Sub-recipient agreement (Administrative Program Executive and Board of County Commissioners) – 10/15/2020
2. Solicit competitive quotes/bids utilizing Federal Procurement Requirements (Project Manager and Contractor Selection Committee) – 10/30/2020
3. Select a contractors for design, construction, equipment and materials (Project Manager and Contractor Selection Committee) – 12/30/2021
4. Execute contract for the design and construction. (Administrative Program Executive and the Monroe County Board of County Commissioners) - 1/15/2021
5. Issue Notice To Proceed (Project Manager) – 1/30/2021
6. Conduct Environmental Review in compliance with federal requirements (Project Manager and Contractor) – 6/30/2021
7. Process necessary permits (Contractor) - 08/01/2021
8. Monitor Constructions Phase (Project Manager) – 01/30/2023
    a. 25% completion:1/30/2022
    b. 50% completion: 5/30/2022
    c. 75 % completion: 9/30/2022
    d. 100 % completion: 1/30/2023
9. Close-out Project (Project Manager) – 4/30/2023
10. Structure Commissioning (Project Manager and Facilities Management Director) – 4/1/2023

**Deliverables:** The following deliverables will be developed for verification of project success.

- BOCC Approved Sub-recipient Agreement – First Quarter
- BOCC Approval of Vendor Request for Proposals- First Quarter
- Release of Request for Proposals for Design Services, Public Notice, Website Post, Demand Star Posting – First Quarter
- BOCC Approval of Contractor Selection – First Quarter
- BOCC Approved Vendor Contracts – Second Quarter

- 50% and 100% Construction Design Plans – Second Quarter
- Approved Permits and Inspection Approvals – Second Quarter / Third Quarter
- Environmental Review Approval- Second Quarter
- Project construction completion target Audits – Third Quarter through sixth Quarter
- Progress Reports, Financial Reports, Invoice Documentation - Quarterly
- Project Close-out Report – Final Quarter

**Stakeholders and Staffing Resources**

**Administrative Program Executive, Cary Knight:** He will serve as the Administrative Program Executive in charge of communicating with the administrative and politically elected leadership team on the status of the Project. He will approve budgetary issues, financial expenditures, revenues and ensure sufficient resources are available.

**Project Manager, Raj Ramsingh**: The Project Manager oversees all aspects of the building process, working closely with engineers, vendors, Fire Rescue, Planning and Building Department as well as Facilities Maintenance. He develops plans, establish timetables, determine labor and material costs, and ensures the project is completed on budget and within scope. He will issue the Notice To Proceed, monitor engineering design and project construction, verify permit and inspections are conducted in accordance with local, state, and federal requirements governing construction and requirements detailed in the sub-receipient agreement with DEO.

> **Experience**: Raj Ramsingh has been a State of Florida certified contractor since 1999. He currently works for Monroe County Project Management. He owns a construction company as well as a Private Provider inspection company. Besides his contractor's license, he also holds a Chief Building Official certification, Commercial building inspector's license, Residential (building, plumbing, electrical & mechanical) inspector's licenses. Before working with the Monroe County he held the Chief Building Official position within the City of Key West.

**Contracts Administrator, Stan Thompson** – The Contract Manager will work with the Project Manager to verify all contractual requirements of the CDBG-DR Subapplicant agreement and vendor contracts are met. This manager is responsible for coordinating every aspect of the project from reviewing and approving contract terms to coordinating deadlines, approving budgets and ensuring procurement follows Federal Register and grantor requirements, ensures schedules and budget requirements are maintained,

assists with procurement and closeout of all contracts and grants. The Contract Manager will process all invoices from vendors and grant reimbursement requests.

> **Experience**: Stan Thompson earned a BBA degree in Finance from the University of West Georgia. Upon graduating, Stan gained over 15 years of in-depth experience managing the development and implementation of complex business systems, software, and improved operational processes and policies focusing on HR/Payroll. He provided end-to-end project leadership during all phases of development initiatives, including leading enterprise Software Development Lifecycles (SDLC). Stan has several years of experience in contract administration, contract management, and budget management. Also he is a Florida Certified Contract Manager (FCCM), and he held a purchasing administration position responsible for purchase requisitions and purchase orders

**Construction Quality Control and Safety Manager, Steven Sanders –** The Construction Quality Control and Safety Manager perform the daily quality control to ensure construction is in accordance with the design and building standards. This position conducts physical inspections of the work flow process and working closely with the Project Manager and external vendors to produce and document a quality construction project. Mr. Thompson also identifies and resolve safety related issues and risks on the project site.

> **Experience:** Steve has worked in Construction for the last 30+ years as a Supervisor or a site Foreman for larger projects with crews of up to 15 or more. His experience includes clearing and hauling, burning or grinding of debris, elevating buildings or house pads and roads, level and compaction for all commercial and residential buildings pads and roads. Since he completed OSHA training in 2018, Steve conducts daily inspections for all County Capital projects, and OSHA safety checks as well as Quality Control on Contractors for work completed. He also provides OSHA training to employees.

**Facilities Maintenance, William DeSantis**: Mr. Desantis and his team are responsible for the day-to-day maintenance, operations, and repair of the Facilities Maintenance Department, which is responsible for more than 100 buildings with over one million square feet, as well as a few leased buildings throughout the Keys. The mission of the Facilities Maintenance Department is to maintain all county buildings, grounds, constitutional offices, parks, and beaches at the highest level of quality and in the most efficient manner to provide employees, citizens, and visitors with clean, safe, and comfortable facilities. This includes the

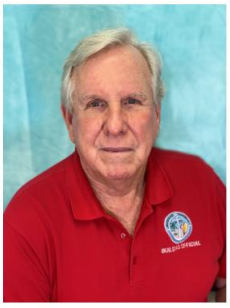
maintainance of more than 100 acres of Monroe County Parks and Beaches and eight Monroe County Boat Ramps from Stock Island to Key Largo

The department also monitors contracts for building maintenance, such as:

- Air quality testing
- Alarm system certification and maintenance
- Elevator inspection and maintenance
- Sewage treatment plant operations and maintenance

For the Tavernier Fire Station, Mr Desantis will be responsible for Commissioning the building once it has been renovated to ensure that all improvements meet the operational needs of the staff, equipment is maintained including associated warranties, and routine inspections are conducted.

**The Finance and Budgeting Department, the Clerk of the Court, as well as the County Attorney Office**, will work with the Project Manager to ensure procurement follows Federal Register and grantor requirements, ensures schedules and budget requirements are maintained, assists with procurement and closeout of all contracts and grants.



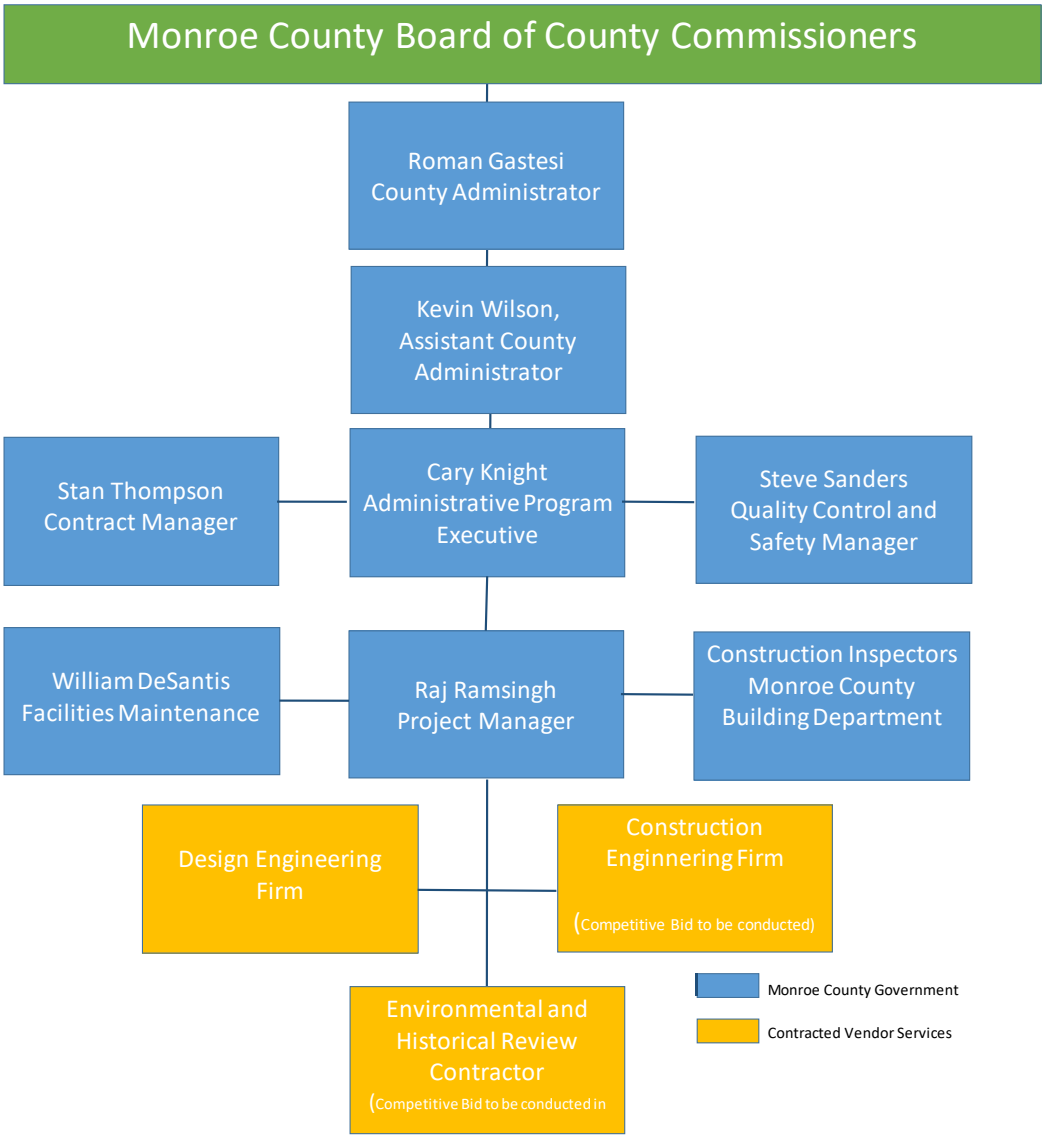
The **Construction Inspectors and plan examiners**, lead by the Monroe County Building Official Rick Griffin**,** meet the qualifications for licensing in the appropriate trade as established by the state. They will ensure all construction meets local building code requirements and adhere to engineering, budget, safety and outcomes.

**Team Experience**: The Project Management Department has a team of 10 experienced, certified Project Managers, Contract Managers, and construction professionals. This team has successfully completed numerous construction projects in the last ten years of which over $100 Million have been grant funded projects from Federal, State and local sources including HUD CDBG-DR, FEMA Public Assistance, Federal Highway Administration, Division of Historical Resources among others. Current staff will manage the implementation of the project tasks and compliance with CDBG-MIT requirements. At this time, the Project Team is already formed. This process will include all required federal and state requirements for construction contracts that include but are not limited to Davis Bacon and Section 3. All procurement process will comply with the procurement standards in 2 C.F.R. §200.318 - §200.326 when procuring property and services under this Agreement.

**Contracted Vendors:** In addition to the internal staff listed above, Monroe County will solicit vendor services for Project Design Services, Project Construction Services, and Historical and Environmental Review Services. All procurement process will comply with the procurement standards in 2 C.F.R. §200.318 - §200.326 when procuring property and services under this Agreement.

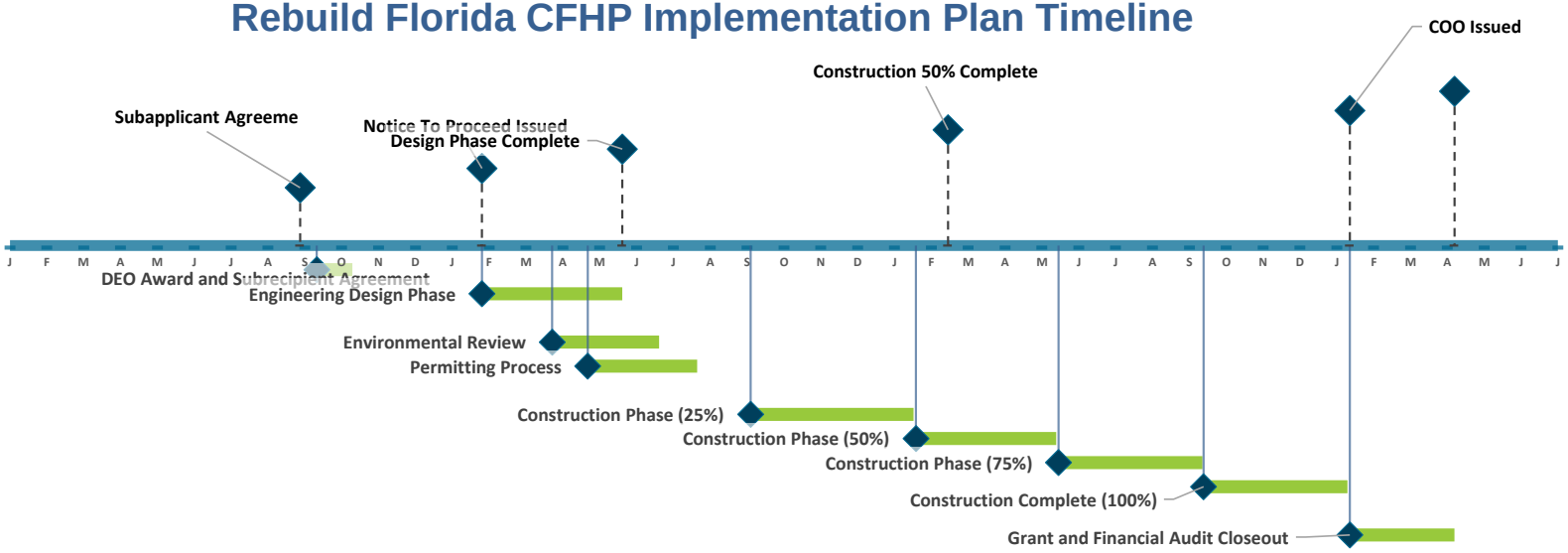
**Budget Resources:** In 2017 Hurricane Irma left not only a devastating blow to the community but also to the local government budget. As payments have been received from the Federal Emergency Management Agency and insurance proceeds, the county has been able to regain financial solvency. The Covid-19 epidemic, however, has again left a deep impact on revenue sources that derive from tourism and sales. These revenue losses will likely have long lasting impacts. The county is currently under a hiring freeze and purchasing freeze with many employees furloughed. It is Monroe County's goal to continue to move forward in these important mitigation projects. Approving CDBG-DR Infrastructure Repair Program funds to fund this project will ensure that Monroe County can build resilience within the Safety and Security Lifeline of our community.

# Monroe County Project Organization Chart



*Monroe County Fire Rescue, Tavernier Fire Station #22 Critical Facility Hardening Project*

# Rebuild Florida CFHP Implementation Plan Timeline



**FL CDBG Mitigation**

**Rebuild Florida Critical Facilities Hardening Program Project Budget**

**Monroe County Fire Rescue - Tavernier Fire Station #22**

| Project Name: | Tavernier Fire Station #22 Mitigation | Primary Contact Name and Phone Number: | Cary Knight 305-292-4527 | Official Applicant Entity Name: | Monroe County Board of County Commissioners |
|---|---|---|---|---|---|

| **Project** | | **Budget** | | | **Notes** |
|---|---|---|---|---|---|
| Description | CDBG-MIT Amount | Other non CDBG-MIT Funds | Source of Funds* | Total Funds (CDBG-MIT and Other) | |
| **1. Critical Facilities Hardening** | | | | | |
| Wet Proofing: flood panels over doorways and filling CBS Blocks | $45,000 | | | $45,000 | Installing flood panels at lower elevation part of building over doorways. This is a dry flood proofing measure making the entryway watertight mitigating the potential for flood damage by reducing the probability that the building interior will be inundated. |
| Anchoring Roof Mounted Heating | $9,000 | | | $9,000 | Mount the heating unit on the roof. |
| Upgrade the underground service | $30,000 | | | $30,000 | Upgrade the underground electrical service. |
| Storm Proofing Windows and entry doors | $50,000 | | | $50,000 | Installing impact entry door and windows. Retrofitting the entryway with impact resistant door and winds will protect the Fire Station's main access from wind-borne debris and will provide wind speed mitigation. |
| Replace 8 Fire Garage/Bay Doors | $250,000 | | | $250,000 | Installing new garage doors that are hurricane rated and open at a speed of 6 to 7 seconds. Replacing the 8 rolling garage bay doors for fire apparatus access will provide protection for the largest opening(s) in |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | this critical facility ensuring rescue equipment is functional following a natural or man-made disaster. To properly mitigate the facility and its equipment from corrosion and wind damage, the large rolling doors should comply with the high-impact wind load testing and design factors provided as provided in the Building Code ASTM E330 or ANSI/DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108, and additionally DASMA Technical Data Sheet 115, including door type, size, assembly, latching, frame fasteners, etc. (Note: 115 is a cyclical pressure test and an impact test, whereas 108 and E330 are static pressure tests.) |
| | | | | | **2. Mechanical Hardening** |
| Ventilation/Air Conditioning Units Replace 1 of 3 units and roof top mounting | $35,000 | | | $35,000 | Replace one exterior-mounted HVAC unit. Station 22 has three (3) central air conditioning units on the building one is from 2013 and is due to be replaced. There are two other existing HVAC units, which are roof top, mounted. Exterior equipment such as this is typically damaged by high winds and flooding. |
| Generator Unit Elevation and windproofing | $90,000 | | | $90,000 | Install a permanently anchored generator and fuel tank with an automatic transfer switch for continuous power to the Station 22 building that is anchored for wind resistance and elevated above the Design Flood Elevation as a flood proofing measure. Station 22's current generator is on a movable trailer with a plug mounted connection that is 4 inches above the ground. |
| **3. Other** Place Fuel Tank underground | $47,000 | | | $47,000 | Recommend a permanently anchored generator and fuel tank with an automatic transfer switch for continuous power to the Station 22 building that is anchored for wind resistance and elevated above the Design Flood Elevation as a flood proofing measure. Station 22's current generator is on a movable trailer with a plug mounted connection that is 4 inches above the ground. |

| | | | | | |
|---|---|---|---|---|---|
| Replace interior and Exterior Lights for LED energy efficient lights | $90,000 | | | $90,000 | Replace interior and exterior light fixtures of the Station 22 building to LED lighting. Replacing the lighting of this critical facility will provide for a higher level of energy efficiency and the safety of the emergency medical technicians, fire fighters and other staff in the event of a natural or man-made disaster event. |
| Spray foam insulation to ceiling for energy savings | $35,000 | | | $35,000 | Install thermal insulation spray foam system applied on the ceiling of the apparatus bay. Providing a dedicated self-contained foam insulation inside the apparatus bay will protect the valuable fire equipment from severe weather such as wind-driven rains and high heat. |
| Administration (5 %) | $37,800 | | | $37,800 | The time spent by the Project Manager and other support personnel on the Project Team to manage the project will compensated and their standard hourly rate. |
| Planning and Engineering Design | $100,000 | | | $100,000 | Hire an design engineer for the design component to complete the scope of the grant work. |
| **Totals:** | **$818,800** | | | **$818,000** | |

| Source of Other Funds | Amount |
|---|---|
| 1. NA – there are no additional funds for this project and no duplication of benefits. | NA |
| 2. | |