Pinellas County Local Mitigation Strategy (LMS) Working Group
Intent to Apply: Hazard Mitigation Grant Program (HMGP) Application for Hurricane Milton (DR-4834)

Applicant Name	Project Name*	LMS Goal Project Addresses	LMS Objective Project Addresses	Estimated Total Project Cost	HMGP Funds Reqested**
Pinellas County Utilities	North Booster Station Rehab and Hardening (PID 005218A)	Minimize Storm Wind Losses in the County	Prevention	$11,500,000	$8,625,000

Project Description (Include how the project will address the Goal and Objective identified above.)

The North County Water Booster Station provides potable water to approximately 420,000 Pinellas County residents in Northern Pinellas County. The benefits of this water booster station include distributing water pressure to higher elevations i for domestic use and fire flow. Hardening the water booster station will mitigate against wind, flooding, and power outages during a storm. The North Booster Station has been evaluated in its existing condition to determine the estimated currer Simpson Scale of Hurricane Intensity Storm (Category 1 through 5) and its rated FEMA flood zone according to the current FIRM (Flood Insurance Rate Maps) maps. The current 2017 Florida Building Code, 6th Edition requires that a new similar st treatment plant, be categorized as a Risk Factor III as defined by Chapter 16 Table 1604.5. The minimum design wind speed for a new Risk Category III building located at this site would be 154 mph Vult (Ultimate Wind Speed). Furthermore, build less and located in an area with a probable wind speed of 140 mph (Vult) or greater are required to be protected from large missile-type wind-borne debris. The structure was found to be constructed in two phases, the first in the early 1970s anc 2000. The original structural drawings did not indicate the code that was used to construct the first building area. However, based on the code in effect when it was built, it is likely that the 1969 Southern Standard Building Code was used as a bas addition was designed under the 1997 Standard Building Code, with the design drawings noting that the building was designed for 102 mph VASD (Allowable Wind Speed Design) wind speed, which would equate to approximate wind pressures of storm. To harden the building to resist a higher intensity storm, such as a high Category 3 or higher-level storm, and prevent outages, the building would need to be replaced. As an alternative to the replacement of the structure, the existing stru encapsulation of the existing building with a newly designed enclosure surrounding the building. The Saffir Simpson hurricane rating system provides an open-ended range of wind speeds for Category 5 storms above a sustained wind speed of 15 225 VULT. Therefore, we have reviewed similar designs we have completed in Pinellas county for EOC type buildings. These structures were designed to be resistant to a maximum wind speed of 245 VULT, which would be equivalent to a low cate accompanying document provided to group: "Capacity Assessement Final Draft (North Booster Station only)" which supports the service population estimate.

Attachments:
Limited Wind Classification Study - North Booster Station (*includes relevant photos on pp. 21-27, Exhibit B - FEMA flood maps, Exhibit D - Equivalent Wind Velocity Summary Table*)

***If the project is already listed in the LMS, please use the same project name as what is shown in Table D-1 Mitigation Initiatives.**
Please fill out a scoring sheet for each project even if the project is already listed in the Table D-1.
****Note that applicants can only request a maximum of 75% of the total project cost unless seeking a Global Match (Global Match process is explained in the Notice of Funding Availability - Page 4).**

	Is 25% Match Currently Funded?	**Is project currently listed in the LMS?**
	Yes	Yes

n order to provide adequate water nt capacity to resist a Saffir- ructure, such as a water ings with an elevation of 30 feet or l an addition in approximately sis of design for this area. The f a high Category 2 hurricane cture could be hardened by 57 mph or a gusting wind speed of egory 5 storm. Please see