

Hurricane Wind Retrofit: Application

*The following information is intended for guidance only and is not a request for information. The following template is only intended to help the reader understand FEMA Hazard Mitigation Grant Program (HMGP) application process.

A. Applicant/Subapplicant Information

1. Applicant/Subapplicant Legal Name: _____

2. Organizational Unit: _____

3. Project Title: _____

4. Applicant/Subapplicant Type:

Local Government State Government

Private Nonprofit Other: _____
(attach copy of Form 501c3)

Territory/Commonwealth

Federally Recognized Tribal Government

5. Proposed Project Total Cost: \$ _____

Federal Share (_____%): \$ _____ Local Share (_____%): \$ _____

6. Certifications

The undersigned assures fulfillment of all requirements of the Hazard Mitigation Grant Program, as contained in the program guidelines, and affirms that all information contained herein is true and correct to the best of my knowledge. The governing body of the applicant duly authorized the document, and hereby applies for the assistance documented in this application. The applicant recognizes that the project may proceed ONLY AFTER FEMA APPROVAL is granted.

Typed Name of Authorized Representative/Applicant Agent Title Phone Number

Signature of Authorized Representative/Applicant Agent Date Signed



7. Does your community or Tribe have a current FEMA approved hazard mitigation plan?

Yes No

Title of the Plan: _____ Adoption date: _____

Location of proposed project in mitigation plan strategies: Page ____ Section _____

Does the project align with the State/Territorial/Tribal Hazard Mitigation Plan?

Yes Page ____ Section _____

8. Does the community participate in the National Flood Insurance Program? Yes No

9. Tax ID Number: _____ **FIPS Code (5 digits):** _____
Community ID Number (6 digits): _____ **DUNS Number (9 characters):** _____

10. U.S. Congressional District: _____

11. State Legislative District: _____

12. Primary Point of Contact

If the project is awarded, person responsible for coordinating the implementation of this grant throughout the application process.

First Name: _____ **Last Name:** _____

Title: _____

Address Line 1: _____

Address Line 2: _____

City: _____ **State:** _____ **Zip:** _____

Office Phone: _____ **Mobile Phone:** _____ **Fax Number:** _____

Email Address: _____

13. Alternate Point of Contact

First Name: _____ **Last Name:** _____

Title: _____

Address Line 1: _____

Address Line 2: _____

City: _____ **State:** _____ **Zip:** _____

Office Phone: _____ **Mobile Phone:** _____ **Fax Number:** _____

Email Address: _____

14. Authorized Applicant/Subapplicant Agent

MUST be the chief executive officer, mayor, or person of comparable status who is authorized to sign contracts, authorize funding allocations or payments, etc.

First Name: _____ Last Name: _____

Title: _____

Address Line 1: _____

Address Line 2: _____

City: _____ State: _____ Zip: _____

Office Phone: _____ Mobile Phone: _____ Fax Number: _____

Email Address: _____

B. Project Narrative and Scope of Work

1. The _____ proposes to implement the hurricane wind retrofit of:

- _____ Number of residential buildings
- _____ Number of non-residential buildings

2. Describe the hurricane risk being mitigated. Explain how the project will mitigate the identified risk(s).

Provide a detailed description of the hurricane risk being mitigated, including damage history in the project area, if available. Describe the need mitigation and how the project will protect inhabitants and reduce/eliminate the risk of future damage.

3. Provide a project narrative clearly outlining the existing conditions of the structure(s) to be mitigated (including components that are susceptible to damage) and its ability to resist hurricane-force winds.

Describe the existing conditions of the structure(s).

4. Provide a detailed scope of work. Describe the proposed activity and define tasks to be accomplished. The scope of work should include key milestones and coincide with the design information. Provide the design criteria the project will comply with, including relevant building code(s) and standard(s) (e.g., International Building Code (IBC), American Society of Civil Engineers (ASCE) 7 *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*, FEMA P-804 *Wind Retrofit Guide for Residential Buildings*). Include the relevant edition(s) of the code(s) and standard(s). Describe access to the site, staging areas, vehicles and equipment that would be used, and any activities that would require ground disturbance.

Describe the proposed activity and tasks in detail.

5. Describe how the scope of work solves a problem independently or is a functional portion of a solution where there is verification that the overall project is being completed.

Describe the proposed scope of work in detail.

6. Provide technical data to support the scope of work. Describe any engineering analyses, drawings, or plans included in the project documentation. Specify if signed/stamped design drawings matching the project scope and level of protection are provided, or are conceptual designs (to be finalized later) provided?

Describe and provide copies of technical data to support the proposed level of protection. Include product data information indicating code performance level for shutters, glazing, and other impact-protective systems (compliance with ASTM E 1886/ASTM E 1996). Briefly describe the documentation attached to support the scope of work; list the name and relevant page numbers for each attachment.

Describe and provide copies of technical data to support the proposed level of protection.

7. Has a vulnerability assessment of the building(s) been performed? For a retrofit to be successful, the structure must be evaluated for continuous load path and a vulnerability assessment of the structure must be performed before the retrofit is implemented.

Yes (provide a copy of the assessment in the subapplication documents)

No (explain below)

Describe the plan and time frame for future completion of a vulnerability assessment.

8. **For one- or two- family residential house where the load path is NOT being modified:** Is a signed and sealed statement from a professional engineer or licensed architect—indicating the existing structure is capable of resisting the currently enforced design level wind speeds and corresponding loads—included in the subapplication documentation? (This must be included to demonstrate technical feasibility.)

Yes No

9. **For non-residential buildings where the load path is NOT being modified:** Is a signed and sealed statement from a professional engineer or licensed architect—indicating the existing structure is capable of resisting the currently enforced design level wind speeds and corresponding loads—included in the subapplication documentation? (This **must** be included to demonstrate technical feasibility.)

Yes No

C. Building Information

Fill out the Hurricane Wind Retrofit Application – Building Information spreadsheet and attach to the application. Ensure all buildings being mitigated are included in the spreadsheet.

D. Alternatives Considered

Include details for one No Action Alternative and consequences of at least one Alternative Action. Include a description of why the selected project was chosen.

No Action Alternative and resulting consequences, and why this alternative was not selected.

Alternative Action considered but not selected, and why.

Additional Alternative Actions, if applicable.

Explain why the selected project was the best alternative.

E. Compliance Requirement

Please check boxes next to the following, indicating acknowledgement and populate, if necessary:

- Project follows the most recent versions of ASCE 7; IBC, International Existing Building Code (IEBC) or International Residential Code (IRC); other local codes, standards and ordinances, as applicable; and federal requirements.
- For structures located in the Special Flood Hazard Area (SFHA), the subapplicant must verify if the proposed project triggers a substantial improvement and confirm that the project will be in compliance with the current local floodplain management ordinance.
- For structures that remain in the SFHA after the implementation of the mitigation project, flood insurance must be maintained for the life of the structure to an amount at least equal to the project cost or to the maximum limit of coverage made available with respect to the particular property, whichever is less. The maximum limit of coverage made available is defined as the replacement cost value of the structure up to \$250,000 for residential and \$500,000 for nonresidential. Insurance coverage on the property must be maintained during the life of the property regardless of transfer of ownership of such property.
- The wind retrofit projects of one- and two-family residential buildings must be designed in conformance with the design criteria found in FEMA P-804 *Wind Retrofit Guide for Residential Buildings* (2010).

F. Environmental Planning and Historic Preservation Considerations

1. Has the public been notified or provided input? If so, provide dates and methods of outreach. If not, describe any planned public engagement activities in the project.

Explain

2. Describe any agency coordination and permits obtained for the project. Provide copies of these, if applicable.

Explain. If not applicable, write N/A.

3. Describe any studies that have been conducted for the project. Provide copies of these, if applicable.

Explain. If not applicable, write N/A.

4. Describe the project activities in the floodplain, if applicable.

Explain. If not applicable, write N/A.

5. Describe any surface waters in or near the project area (ponds, lakes, rivers, streams, wetlands, other waterbodies). Describe any measure that would be used to avoid waterbodies or avoid impacting water (setbacks, silt fence).

Explain. If not applicable, write N/A.

6. Describe any known hazardous or contaminated materials at the project site including underground storage tanks. Describe how underground tanks (e.g., fuel, septic) would be removed or decommissioned in place. If the project requires the use of hazardous materials (including herbicides), describe their use and best management practices to minimize environmental exposure.

Explain. If not applicable, write N/A.

7. Does your project involve the use of imported fill? Yes No

If yes, describe the type and source of the fill material.

Explain. If not applicable, write N/A.

8. If the project would remove vegetation for any reason, describe the type and amount or area of vegetation (e.g., two oak trees, one-quarter acre of turf grass). Describe how vegetation would be removed, if applicable (e.g., root ball removal, flush cut, dug up, chemical weed killer). If using herbicides, describe best management practices for their use. Estimate during which season(s) or months vegetation removal would occur. Will the project replant or restore vegetation when construction is complete? Describe the plants that would be installed and the equipment and methods to be used. Would any special techniques be used to ensure survival of the plants/seeds (e.g., mulch, irrigation, protective fencing)?

Explain. If not applicable, write N/A.

9. List any best management practices that would be used during project construction.

Explain.

G. Estimated Work Schedule

Enter the estimated duration for each listed activity. Although the activities listed may not be necessarily sequential, the total grant timeline cannot exceed 36 months.

Task/Activity	Start Month	End Month	Timeline
Total timeline (must not exceed 36 months):			

H. Budget Estimating

1. Costing Methodology

The method(s) used to estimate project costs is (provide backup documentation for method(s) used):

- Estimates obtained from contractors/consultants and similar vendors
- Historical data from previous projects/activities with an inflation factor, as needed
- Public Works personnel or other qualified staff from local jurisdictions provided estimates based on experience or field associate experience
- RS Means, Marshall & Swift or other national cost estimating service
- Other, please explain.

Enter explanations, as needed.

2. Cost Estimate

The Applicant/Subapplicant must ensure that all grant costs are reasonable and necessary for the activity according to 2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

Line Item	Unit Quantity	Unit Measure	Unit Cost	Line-Item Cost
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
				\$
Total Project Cost				\$
Federal Share (____%)				\$
Nonfederal Share (____%)				\$

3. Budget Narrative

Provide a budget narrative with explanations, justifications, and line-item details of the project costs noted in the table above. Attach an additional sheet, if necessary.

Define cost line items, provide information of how they were estimated, and disclose any assumptions to justify the values used.

I. Nonfederal Funding Share (25% of Total Project Costs)

List all sources and amounts used in the nonfederal share, including all in-kind services. In-kind services may not exceed the 25% nonfederal share. Attach letters of funding commitment for each source.

Source	Name of Source Agency	Type of Funding	Amount	Commitment Letter Attached
			\$	<input type="checkbox"/> Yes <input type="checkbox"/> No
			\$	<input type="checkbox"/> Yes <input type="checkbox"/> No
			\$	<input type="checkbox"/> Yes <input type="checkbox"/> No

J. Cost-Effectiveness

1. The Cost-Effectiveness methodology used for this project is:

- Pre-calculated Benefits for Residential Hurricane Wind Retrofit Measures:** Project meets all eligibility requirements per HMA Guidance Part IV, I.10, Cost Effectiveness Determination for Residential Hurricane Wind Retrofit Measures Funded by FEMA.
- Pre-calculated Benefits for Non-Residential Hurricane Wind Retrofit Measures:** Project complies with “Nonresidential Wind Retrofit Cost Effectiveness Determination” memo issued by FEMA March 1, 2018, or “Cost Effectiveness Determination for Non-Residential Hurricane Wind Retrofit Measures Funded by FEMA in PR and the USVI” memo issued by FEMA March 7, 2019, (for projects located in Puerto Rico or the US Virgin Islands).
- Benefit-Cost Analysis (BCA) Toolkit:** Cost-effectiveness for this project has been calculated using the FEMA-approved BCA toolkit. The Benefit-Cost Ratio has been determined to be _____.

An export of the BCA tool and pdf of the BCA is to be included with this application as required documentation. It is recommended that the application includes a BCA narrative describing the methodology, assumptions, and

justifications for all inputs to the subapplication documentation. Provide a brief explanation of the BCA methodology below and list the documents attached to this application that are provided in support of the application:

Describe the BCA methodology and list the documents attached to the application that supports the BCA.

2. If the FEMA standard project useful life (PUL) was not used, was documentation provided to justify the PUL?

Yes No

3. Maintenance Costs: Maintenance costs for the hurricane wind retrofit **must** be included in the BCA, although they are not eligible project cost line items in the application budget.

The annual maintenance costs are _____.

4. Wind Speeds: Were the default wind speeds used in the BCA?

Yes No (explain below)

If no, please explain how the wind speeds were determined.

K. Required Documentation Attached

Photographs of each property – photos of all sides of the structure from the north, east, south, west, and looking outward from each side of the structure and down the road from each direction; see **Step 8** of the **Technical Job Aid** and **Step 2** of the **Environmental Planning and Historic Preservation (EHP) Job Aid**.

Vicinity map with project location clearly marked; see **Step 6** of the **Technical Job Aid**

FIRMette with project location(s) clearly marked; see **Step 9** of the **Technical Job Aid**

- Completed Hurricane Wind Retrofit Application – “Building Information” spreadsheet
- Building information supporting documentation including, but not limited to:
 - Tax cards
 - City of county property records
 - Building permit information
 - Parcel databases
 - Information from online mapping programs and/or high-quality aerial photos used to estimate size of building
 - As-built drawings (as available)
 - Statement from licensed engineer, architect, or building inspector who performed the vulnerability assessment
- Technical data (signed/sealed from a professional engineer or licensed architect) to support the scope of work, as available:
 - Designs, schematics, plans
 - Vulnerability study
 - Inspection reports
 - Product data information
 - Project specifications
 - Calculations
- For one- and two-family residential buildings: Signed/sealed statement from a professional engineer or licensed architect that stipulates the project will be designed to comply with FEMA P-804
- Detailed schedule, if necessary, to support the scope of work
- EHP documents, as available
 - Public outreach documentation
 - Obtained permits
 - Coordination documents with regulatory agencies
 - Environmental and historic studies
 - Maps that include known surface water and vegetation removal locations
 - Photographs
 - Other documents (describe)

Documents to support cost-effectiveness, including:

- Export of the BCA and pdf of the BCA report from the toolkit (if applicable)
- BCA narrative (recommended)

Fund commitment letter(s) that list(s) the sources and amounts used in the nonfederal share requirement, including all in-kind services.

Completed and signed assurances (FEMA Form 112-0-3C or 20-16c (Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements), and SF-LLL (Disclosure of Lobbying Programs) if applicable)

- FEMA Form 112-0-3C will also be accepted in place of 20-16c.

SF-424 (Application for Federal Assistance) (optional for subapplications in HMGP)

SF-424d (Construction Programs) (if required by the Grantee; contact applicant agency)

SF-424c (Budget Information for Construction Programs) (if required by the Grantee; contact applicant agency)

Detailed budget with budget narrative and documentation to support all costs, including:

- Estimates or quotes from construction contractors and similar vendors
- Historical data from previous projects/activities
- Estimates from public works personnel or personnel with experience on similar projects
- Copies of information from national cost estimating services or guides

Documentation to support annual maintenance costs, including an assurance letter from the signature authority that indicates annual maintenance costs, what position or department will be responsible for maintenance, and how often it will be performed

Designated Authorized Agent Documentation, designating the Chief Executive Officer or Mayor to be able to sign contracts, authorize funding allocations or payments, etc., and signed by the ruling body of the applicant

Statement from subapplicant, professional engineer, or licensed architect stipulating the project will be designed to comply with federal requirements and the latest versions of ASCE 7, IBC, IEBC, IRC, or other local codes, standards, and ordinances, as applicable

Other comments, information, or explanation:

Enter explanations, justifications, and other details, as needed.

SAMPLE

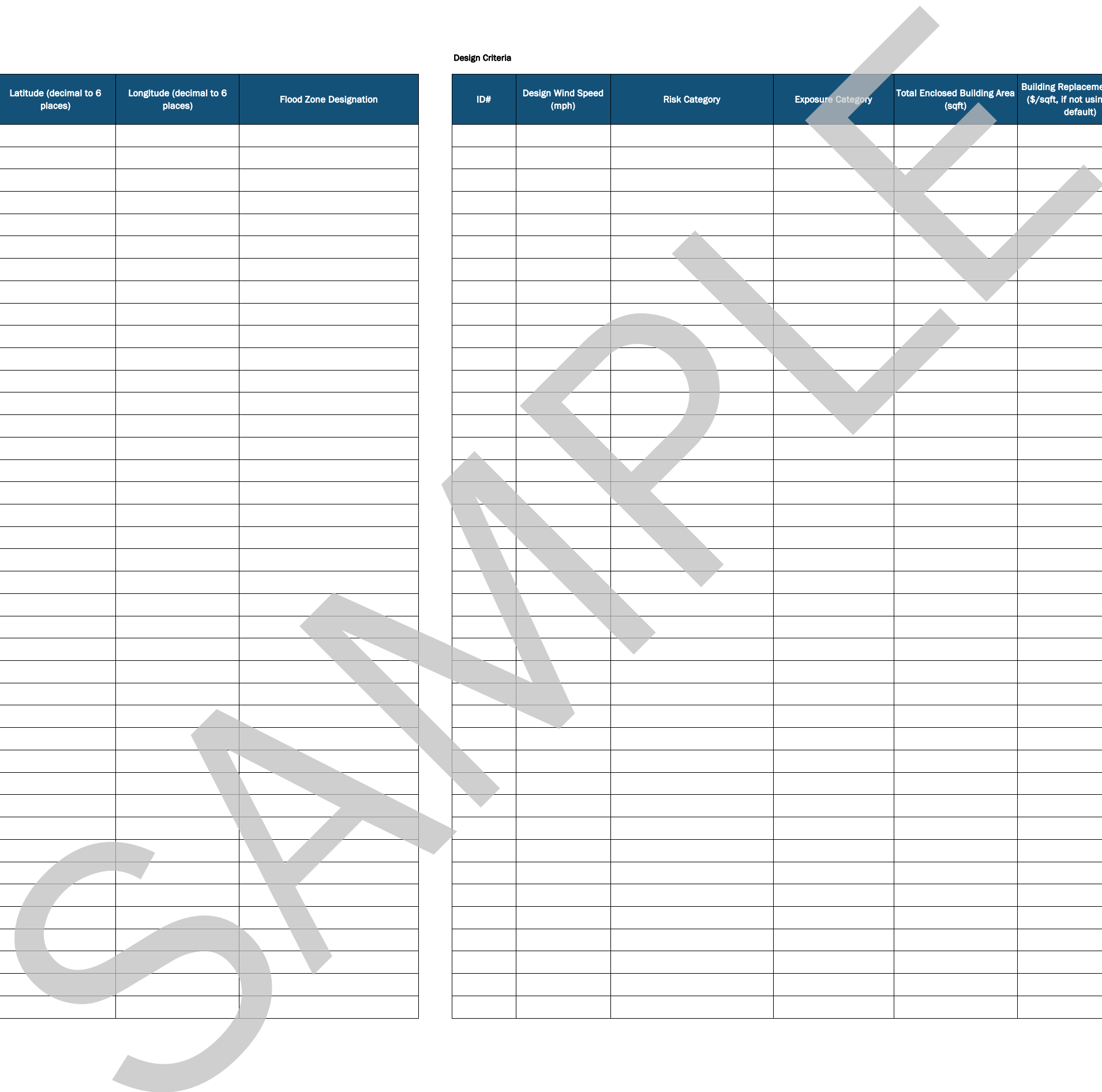
Hurricane Wind Retrofit Application - Building Information

Location Details

ID#	Building/Facility Name	Address (number, street, city, state, zip)	Latitude (decimal to 6 places)	Longitude (decimal to 6 places)	Flood Zone Designation

Design Criteria

ID#	Design Wind Speed (mph)	Risk Category	Exposure Category	Total Enclosed Building Area (sqft)	Building Replacement Value (\$/sqft, if not using FEMA default)	Content Value (optional input, if not using FEMA default)	Annual Operating Budget (optional input, if building is a non-residential building)



Hurricane Wind Retrofit Application - Building Information

Building-Specific Details

ID#	Facility Type	Critical Facility?	Building Use	Is the building >50 years older?	Year of Construction	Non-Residential Building Occupancy Class	Type of Construction	Building Type	Proposed Mitigation Action Type	Opening Protection before Mitigation	Type of Garage Doors or Openings	Window Area (Low/Med/High)	Roof Shape	Roof Cover Type (non-resident only)	Roof Deck Attachment (non-resident only)	Roof Deck Age (resident only)	Secondary Roof Waterproofing Membrane (resident only)	Roof Wall Connection (resident only)