



Hillsborough County, Florida COOPERATING TECHNICAL PARTNERS MAPPING ACTIVITY STATEMENT

Mapping Activity Statement No. 2 – Digital Flood Insurance Rate Map Production and Development of Updated Flood Data

In accordance with the Cooperating Technical Partners (CTP) Partnership Agreement dated March 28, 2000, between Hillsborough County, Florida, and the Federal Emergency Management Agency (FEMA), Mapping Activity Statement (MAS) No. 2, contingent upon the approval of the FEMA Cooperative Agreement in which the MAS No. 2 is used as a scope of services, is as follows.

SECTION 1—OBJECTIVE AND SCOPE

The objective of the Flood Map Project documented in this MAS is to develop a conveyance way for approximately 300 to 400 miles of stream in the County. The conveyance ways will be derived from the County's SWMM modeling from their seventeen (17) Watershed Master Plans. These conveyance ways will be plotted as floodways with a zero surcharge limit on the DFIRMs and reflected in the Floodway Data Table in the FIS report which is being produced as part of MAS No.1.

Flooding Source	Reach Limits (stream length in miles)	Hydrologic Analyses	Hydraulic Analyses	Floodplain Mapping	Redelineation Using Effective Flood Profiles and Updated Topographic Data	Refinement or Creation of Zone A
17 Watersheds	300 to 400 miles			X		

This Flood Map Project will be completed by the following:

- Hillsborough County;
- Dewberry & Davis LLC (contractor);

The activities for this Flood Map Project, including required Quality Assurance/Quality Control (QA/QC) reviews, and the Mapping Partners that will complete them are summarized in the table below. The

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sections of this MAS that follow the table below describe the specific activities, responsible Mapping Partner(s), FEMA standards that must be met, and resultant map components.

Activities	CTP	FEMA
Activity 8 – Floodplain Mapping (Detailed Riverine/Conveyance Way)	X	
Activity 9 – Independent QA/QC Review of Conveyance Way Mapping	X	X

Activity 8 - Floodplain Mapping (Detailed Riverine/Conveyance Way)

Responsible Mapping Partner: Hillsborough County and their contractor.

Scope: Hillsborough County and their contractor shall delineate the 1% annual-chance conveyance way for those streams (approximately 300 to 400 miles) where flood profiles are being developed, but regulatory floodways have not been computed. The County’s SWMM files will be used to determine the conveyance way widths and these will be plotted onto the present digital floodway layers on the GIS product for the countywide DFIRM. The conveyance way will be reflected in the FIS text as a floodway with a zero (0.00) foot surcharge for most SWMM Junctions. The conveyance ways will reflect the floodplain widths for the open channel conduits in the County’s Watershed Master Plan SWMM files. Hillsborough County and their contractor shall address all concerns or questions regarding Activity 8 that are raised during the internal QA/QC review under Activity 9.

Standards: All work under Activity 8 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: Upon completion of conveyance way mapping, Hillsborough County and their contractor shall internally review the results through a QA/QC process identified in Activity 9.

In accordance with the TSDN format described in described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, Hillsborough County shall make the following products available to FEMA:

- Digital work maps showing the 1-percent-annual-chance conveyance way boundary delineations;
- DFIRM mapping files, prepared in accordance with the requirements in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- Metadata files describing the DFIRM data, including all required information shown in *Guidelines and Specifications for Flood Hazard Mapping Partners*;
- Complete set of plots of DFIRM panels showing all detailed flood hazard information at a suitable scale;
- A Summary Report that describes and provides the results of all automated or manual QA/QC review steps taken during the preparation of the DFIRM; and

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- Any backup or supplemental information used in the mapping required for the independent QA/QC review outlined under Activity 9.

Activity 9 - Independent QA/QC Review of Conveyance Way Mapping

Responsible Mapping Partner: FEMA, Hillsborough County and their contractor.

Scope: Hillsborough County's contractor and FEMA shall perform an independent review of the conveyance way mapping prepared under Activity 8 to ensure that the mapping is consistent with FEMA standards and is sufficient to prepare the DFIRM. A list of what was reviewed by Hillsborough County DNR as QA/QC will be submitted to FEMA in order to determine if further review is necessary. This work shall include, at a minimum, the activities listed below.

- Review the cross sections for proper location and orientation on the work map and agreement with the Floodway Data Table.
- Review the conveyance way widths for agreement with the widths shown in the Floodway Data Table and the results of the hydraulic modeling.
- Review the floodplain widths at cross sections as shown on the work maps to ensure they match the Floodway Data Table.

Standards: All work under Activity 9 shall be performed in accordance with the standards specified in Section 5 of this MAS.

Deliverables: In accordance with the TSDN format described in Appendix M of *Guidelines and Specifications for Flood Hazard Mapping Partners*, Hillsborough County, Florida, shall make the following products available to FEMA:

- A Summary Report that describes the findings of the QA/QC review, noting any deficiencies in or agreeing with the mapping results;
- Recommendations to resolve any problems that are identified during the independent QA/QC review;
- An annotated work map with all questions and/or concerns indicated, if necessary.

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**SECTION 2—TECHNICAL AND ADMINISTRATIVE SUPPORT DATA
SUBMITTAL**

The Project Team members for this Flood Map Project that have responsibilities for activities included in this MAS shall comply with the data submittal requirements summarized below.

All supporting documentation for the activities in this Mapping Activity Statement shall be submitted in the TSDN format in accordance with Appendix M of the FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners*, dated April 2003. Table 2-1 indicates the sections of the TSDN that apply to each mapping activity.

If any issues arise that could affect the completion of an activity within the proposed scope or budget, the responsible Mapping Partner shall complete a Special Problem Report (SPR) as soon as possible after the issue is identified and submitted to FEMA. The SPR is to describe the issue and propose possible resolutions.

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Table 2-1. Mapping Activities and Applicable TSDN Sections

TSDN Section	Mapping Activities													
	1	2	3	4, 4A	5, 5A	6	7	8	9	10	11, 11A	12, 12A	13	14
General Documentation														
Special Problem Reports	X			X	X	X	X	X	X	X	X	X	X	X
Telephone Conversation Reports	X			X	X	X	X	X	X	X	X	X	X	X
Meeting Minutes/Reports	X			X	X	X	X	X	X	X	X	X	X	X
General Correspondence	X			X	X	X	X	X	X	X	X	X	X	X
Engineering Analyses														
Hydrologic Analyses	X			X	X	X	X	X	X					
Hydraulic Analyses	X			X	X	X	X	X	X					
Key to Cross-Section Labeling	X			X	X	X	X	X	X					
Key to Transect Labeling	X			X	X	X	X	X	X					
Draft FIS Report				X	X	X	X							
Mapping Information								X	X	X	X	X	X	X
Miscellaneous Reference Information	X			X	X	X	X	X	X	X	X	X	X	X

SECTION 3—PERIOD OF PERFORMANCE

The mapping activities outlined in this MAS for the FY 03 funds will begin upon the Notice to Proceed (NTP) issuance from FEMA and will be completed no later than 4 months from the NTP. The mapping activities may be terminated at the option of FEMA or Hillsborough County in accordance with the provisions of the Partnership Agreement dated March 28, 2000.

SECTION 4—FUNDING/LEVERAGE

FEMA is providing funding in FY 03, in the amount of _____ to Hillsborough County for the completion of this Flood Map Project. Hillsborough County shall provide any additional resources required to complete the assigned activities for this Flood Map Project.

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SECTION 5—STANDARDS

The standards relevant to this Mapping Activity Statement are provided in Tables 5-1 and 5-2. Information on the correct volume, appendix, section, or subsection of the FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners* to be referenced for each mapping activity are summarized in Table 5-2.

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Table 5-1. Applicable Standards for Project Activities

Applicable Standards	Activities													
	1	2	3	4, 4A	5, 5A	6	7	8	9	10	11, 11A	12, 12A	13	14
<i>Guidelines and Specifications for Flood Hazard Mapping Partners</i> , April 2003	X			X	X	X	X	X	X	X	X	X	X	X
American Congress on Surveying and Mapping (ACSM) procedures	X													
Global Positioning System (GPS) Surveys: National Geodetic Survey (NGS-58), "Guidelines for Establishing GPS-Derived Ellipsoid Heights," November 1997	X													
EM 1000-1-1000, <i>Photogrammetric Mapping</i> , March 31, 1993	X													
EM 1110-2-1003, <i>Hydrographic Surveys</i> , October 31, 1994	X													
Numerical Models Accepted by FEMA for NFIP Usage, January 11, 2002				X	X	X	X							
<i>Content Standards for Digital Geospatial Metadata</i> (Federal Geographic Data Committee, 1998)							X					X	X	X
<i>Document Control Procedures Manual</i> , December 2000												X	X	X

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Table 5-2. Project Activities and Applicable Portions of FEMA Guidelines and Specifications

Activity Number	Activity Description	Applicable Volume, Section/Subsection, and Appendix
1	Field Surveys and Reconnaissance	Volume 1, Sections 1.2, 1.3, 1.4 (specifically Subsection 1.4.2.1) Appendix A, Sections A.5, A.6, A.7, and A.8 Appendices B, C, and M
3	QA/QC Review of Topographic Data	Volume 1, Section 1.4 (specifically Subsections 1.4.1 and 1.4.2.1) Appendix A, Sections A.2, A.3, A.7 (specifically Subsection A.7.5), and A.8 (specifically Subsection A.8.6) Appendix M
4	Hydrologic Analyses	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.4) Appendix C, Sections C.1 and C.7 Appendices E, F, G, H, and M
4A	Coastal Hazard Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.2.2) Appendix A, Section A.4 Appendices B, D, and M
5	QA/QC Review of Hydrologic Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix C, Section C.2 Appendices E, F, G, H, and M
5A	Independent QA/QC Review of Coastal Hazard Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix A, Section A.4 Appendices B, D, H, and M

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Table 5-2. Project Activities and Applicable Portions of FEMA Guidelines and Specifications (Cont'd)

Activity Number	Activity Description	Applicable Volume, Section/Subsection, and Appendix
6	Hydraulic Analyses	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.4) Appendix C, Sections C.3 and C.7 Appendices B, E, F, G, H, and M
7	Independent QA/QC Review of Hydraulic Analyses	Volume 1, Section 1.4 (specifically Subsection 1.4.1) Appendix A, Section A.4 (specifically Subsection A.4.7) Appendix C, Section C.5
8	Floodplain Mapping (Detailed Riverine or Coastal Analysis)	Appendices B, E, F, G, H, and M
8A	Floodplain Mapping (Redelineation Using Effective Flood Profiles and Updated Topographic Data)	Volume 1, Section 1.4 (specifically Subsection 1.4.2.3) Appendix C, Sections C. 4 and C.6 Appendices K, L, and M
8B	Floodplain Mapping (Refinement or Creation of Zone A)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.2 and 1.4.2.3) Appendices K, L, and M
9	QA/QC Review of Floodplain Mapping (Revised Areas)	Volume 1, Section 1.4 (specifically Subsection 1.4.2.3) Appendix C, Sections C.4 and C.6 Appendices K, L, and M

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Table 5-2. Project Activities and Applicable Portions of FEMA Guidelines and Specifications (Cont'd)

Activity Number	Activity Description	Applicable Volume, Section/Subsection, and Appendix
10	Base Map Acquisition and Preparation	Volume 1, Section 1.3 (specifically Subsection 1.3.1.8) and 1.4 (specifically Subsection 1.4.3) Appendices A and B
11	Independent QA/QC Review of DFIRM Production (Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3 and 1.4.3.2) Appendices K, L, and M
11A	DFIRM Production (Merging Revised and Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsection 1.4.3) Appendices K, L, and M
12	DFIRM Production (Merging Revised and Non-Revised Areas)	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3 and 1.4.3.3) Appendices K, L, and M
12A	DFIRM Production (Application of DFIRM Graphic and Database Specifications)	Volume 1, Section 1.4 (specifically Subsection 1.4.3) Appendices K, L, and M
12B	Independent QA/QC Review of DFIRM Product Meeting FEMA Graphic and Database Specifications	Volume 1, Section 1.4 (specifically Subsections 1.4.2.3 and 1.4.3.3) Appendices K, L, and M
13	Preliminary DFIRM and FIS Report Distribution	Volume 1, Section 1.4 (specifically Subsections 1.4.2 and 1.4.3) Appendix C, Sections C.4 and C.6 Appendices J, K, L, and M
14	Post-Preliminary Processing	Volume 1, Section 1.4 (specifically Subsection 1.4.2 and 1.4.3) Appendices J, K, L, and M

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SECTION 7—CERTIFICATIONS

The following certifications apply to this MAS:

Activity 8 (Conveyance Way Mapping—Detailed Riverine Analysis)

- A Registered Professional Engineer or Licensed Land Surveyor will certify hydrologic and hydraulic analyses and data in accordance with 44 CFR 65.6(f).

SECTION 8—TECHNICAL ASSISTANCE AND RESOURCES

Project Team members may obtain copies of FEMA-issued LOMCs, archived engineering backup data, and data collected as part of the Mapping Needs Assessment Process from FEMA's National Contractor.

General technical and programmatic information, such as FEMA 265 and the Quick-2 computer program, can be downloaded from the FEMA Web site (www.fema.gov/fhm).

Project Team members also may consult with the FEMA Regional Project Officer to request support in the areas of selection of data sources, digital data accuracy standards, assessment of vertical data accuracy, data collection methods or subcontractors, and GIS-based engineering and modeling training.

SECTION 9—CONTRACTORS

Hillsborough County intends to use the services of Dewberry & Davis LLC for this Flood Map Project. Hillsborough County shall ensure that the procurement for all contractors used for this Flood Map Project complies with the requirements of 44 CFR 13.36.

SECTION 10—REPORTING

Financial Reporting: Financial reporting requirements will be in accordance with Cooperative Agreement Articles V & VI.

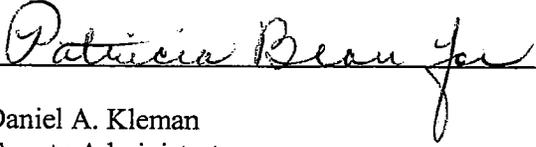
Status Reporting: Status reports will be submitted on a quarterly basis in accordance with the financial reporting submittals. At a minimum these reports will include a summary of the work that was completed during the quarter and a comparison for the % work completed to the % of funds expended. The FEMA Regional Project Officer, as needed, may request additional information on status.

SECTION 11—POINTS OF CONTACT

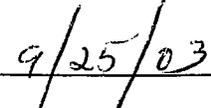
The points of contact for this Flood Map Project are Laura Algeo, the FEMA Regional Project Officer; Eugene Henry, the Project Manager, or Chris Zambito for Hillsborough County; or subsequent personnel of comparable experience who are appointed to fulfill these responsibilities. When necessary, additional assistance should be requested through the FEMA Regional Project Officer.

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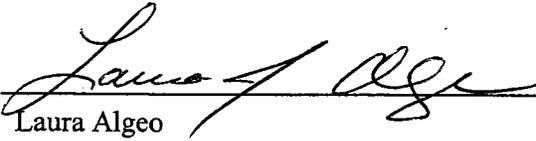
Each party has caused this MAS to be executed by its duly authorized representative.



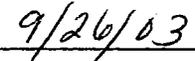
Daniel A. Kleman
County Administrator
Hillsborough County, Florida



Date



Laura Algeo
Regional Project Officer
Federal Emergency Management Agency, Region IV



Date

RESOLUTION AUTHORIZING THE COUNTY ADMINISTRATOR TO APPROVE AND SUBMIT GRANT APPLICATIONS WHICH DO NOT BIND THE COUNTY IN CONTRACT.

Upon motion by Commissioner Calson, seconded by Commissioner Padgett, the following Resolution was adopted by a vote of 6 to 1; Commissioner(s) Salvey voting "No".

WHEREAS, Hillsborough County frequently makes applications for grant awards to both the state and Federal governments, as well as private foundations; and

WHEREAS, in many cases, applications for the grants do not bind the County in contract until such award is accepted by the Board of County Commissioners; and

WHEREAS, the approval and submission of such grant applications is a ministerial function; and

WHEREAS, substantial time could be saved by allowing the County Administrator to approve and submit those grant applications which do not bind the County until such award is accepted by the Board of Commissioners, and the time saved would be beneficial to the citizens of Hillsborough County by improving the quality of competitive applications submitted.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF HILLSBOROUGH COUNTY, FLORIDA, IN REGULAR MEETING ASSEMBLED THIS 16th DAY OF August, 1989:

1. That the Board of County Commissioners of Hillsborough County finds that approval and submission of grant applications, which do not bind the County in contract until after such grant award is accepted by the Board of County Commissioners, is a ministerial function.

2. That by giving the County Administrator the right to approve and submit such grant applications, substantial time is afforded to staff, thereby improving the quality of competitive applications submitted.

3. That the County Administrator is hereby given authority to approve and submit grant applications which do not bind the County in contract.

STATE OF FLORIDA
HILLSBOROUGH COUNTY

I, RICHARD AKE, Clerk of the Circuit Court and Ex officio Clerk of the Board of County Commissioners of Hillsborough County, Florida, do hereby certify that the above and foregoing is a true and correct copy of a resolution adopted by the Board of County Commissioners at its regular meeting of 8-16-89, as it appears on record in Minute Book 159 of the public records of Hillsborough County, Florida.

WITNESS my hand and official seal this 17th day of August, 1989.

APPROVED BY COUNTY ATTORNEY
BY Richard A. Ake
Approved as to form and legal sufficiency

RICHARD AKE
Clerk of Circuit Court

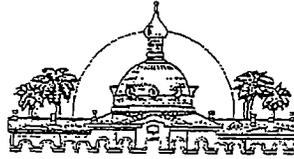
By: Edgar J. Fitzpatrick
Deputy Clerk

RS072041/88-975

HILLSBOROUGH COUNTY

Florida

Office of the County Administrator
Daniel A. Kleman



MEMORANDUM

BOARD OF COUNTY COMMISSIONERS
Doris Berger
Phyllis Busansky
Joe Chifura
Chris Hart
Jim Norman
Ed Turanchik
Sandra Helen Wilson

Senior Assistant County Administrator
Patricia Bean

Assistant County Administrators
Edwin Hunzeker
Cecilia Johnson
Jimmie Keel
Robert Taylor

DATE: September 27, 1995
TO: Patricia Bean, Deputy County Administrator
FROM: Daniel A. Kleman, County Administrator
SUBJECT: Signature Authorization

By way of this memo I am authorizing you to sign County documents in my behalf during my absence or when items are time sensitive and I am unavailable. Thank you for your assistance with these matters.

PB/cc