U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, Texas 76209

FEMA

FINDING OF NO SIGNIFICANT IMPACT
HUNTING BAYOU DETENTION BASIN
HOUSTON, HARRIS COUNTY, TEXAS
HMGP-DR-1791-TX PROJECT #233

BACKGROUND

In accordance with 44 Code of Federal Regulations (CFR) for the Federal Emergency Management Agency (FEMA), Subpart B, Agency Implementing Procedures, Part 10.9, an Environmental Assessment (EA) has been prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). The purpose of the proposed project is to provide flood protection to the citizens in the Hunting Bayou area of Houston, Texas, and reduce the loss of life and property due to natural disasters. This EA informed FEMA's decision on whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

The Harris County Flood Control District (HCFCD) has applied for Hazard Mitigation Grant Program (HMGP) funding, through the Texas Division of Emergency Management (TDEM), under HMGP-DR-1791-TX Project #233. Through HMGP, which is authorized under Section 404 the Robert T. Stafford Disaster Relief and Emergency Assistance Act, FEMA provides grants to states and local governments to implement long-term hazard mitigation measures that reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Two project alternatives were considered in this EA: 1) No Action; and 2) Construction of an Improved Drainage System (Proposed Action). Under the No Action alternative, no improvements to stormwater drainage would be made in the project area. The citizens living adjacent to Hunting Bayou and its associated tributaries would remain vulnerable to flooding from storm events and could experience flood inundation that could result in property damage to surrounding homes and businesses and lead to unnecessary costs to the local community.

The Proposed Action would provide stormwater detention that would reduce flood water volumes during excessive rainfall events. Under this alternative, FEMA proposes to provide funding to HCFCD for the construction of a detention basin within a 75-acre tract of land east of Homestead Road and north of the Union Pacific railroad tracks, centered at 29°48'47.48"N, 95°17'55.86"W. The proposed project would include enlarging an existing basin with the addition of 244 acre-feet of storage for a total effective storage volume of 449 acre-feet. The basin bottom will be graded with 1% cross slope to provide positive drainage. The proposed side slopes of the basin are 4(H):1(V). The basin would include a 20-foot maintenance berm and 10-

foot wide backslope swales and interceptor structures approximately every 400 feet around the basin boundary. The top surface area of the basin would be approximately 50 acres. The berm elevation is typically set at 40 feet based on natural ground.

In order to utilize the existing storm sewer outfall, the longitudinal slope of the main pilot channel is limited to 0.01%. Secondary pilot channels with slopes of 0.2% are proposed to facilitate drainage. The existing double 10-foot by 10-foot monolithic reinforced box culvert, as it enters the basin from the north, will be cut off and headwalls installed. The existing double 10-foot by 10-foot monolithic reinforced box culvert, as it exits the basin to the south, will be cut off and headwalls installed. This will act as the outfall to Hunting Bayou as well as an inflow from the rising waters on Hunting Bayou.

A public notice was posted in the Houston Chronicle and on FEMA's website, and the draft EA was made available at the Houston Public Library (McCrane-Kashmere Gardens branch) and on FEMA's website for a 30-day public comment period. No comments on the draft EA were received from the public during the 30-day comment period.

FINDINGS

The Proposed Action as described in the EA will not impact geology, climate change, wetlands, threatened and endangered species or critical habitat, cultural resources, minority or low-income populations, public services and utilities, or hazardous materials. Long-term positive impacts to water quality, floodplains, and public health and safety are expected. During the construction period, minor short-term impacts to soils, air quality, water quality, vegetation, wildlife and fish, noise, and traffic are anticipated. All adverse impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

CONDITIONS

The following conditions must be met as part of this project. Failure to comply with these conditions may jeopardize the receipt of federal funding.

1. Harris County Flood Control District (HCFCD) is required to obtain and comply with all local, state, and federal permits, approvals, and requirements prior to initiating work on this project.

2. Unusable equipment, debris, and material shall be disposed of in an approved manner and location. In the event significant items are discovered during implementation of the project, HCFCD will handle, manage, and dispose of petroleum products, hazardous materials and toxic waste in accordance with the requirements of local, state and federal agencies. HCFCD will take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area.

3. Dust control techniques, such as covering or treating disturbed areas with dust suppression techniques, sprinkling, and other dust abatement controls will be implemented during construction of the proposed project. Construction equipment with Environmental Protection Agency (EPA)-designated Tier 2 and Tier 3 engines will be utilized during construction. Emissions will be minimized by measures to encourage use of EPA required cleaner diesel fuels, limits on idling, increasing use of cleaner burning diesel engines, and other emission limitation techniques, as appropriate.

4. A Stormwater Pollution and Prevention Plan (SW3P) will be prepared and implemented, and a Notice of Intent (NOI) will be posted at the construction site. Erosion and sedimentation Best Management Practices (BMPs) will be installed, monitored and maintained during construction to minimize any detrimental effects to water quality during construction. HCFCD will obtain a Texas Pollutant Discharge Elimination System (TPDES) stormwater permit from the Texas Commission on Environmental Quality (TCEQ) before the start of construction and will comply with all permit conditions.

5. HCFCD is responsible for proper identification of wetlands and must ensure that there is no net loss of wetlands. HCFCD is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the United States Army Corps of Engineers (USACE) prior to initiating work. The applicant shall comply with all conditions of the required permit. All coordination pertaining to these activities should be documented and copies forwarded to the State and FEMA as part of the permanent project files.

6. HCFCD will ensure that BMPs are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the Clean Water Act and Executive Order 11990.

7. HCFCD will coordinate with the local floodplain administrator and obtain required permits prior to initiating work. All coordination pertaining to these activities and applicant compliance with any conditions would be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

8. HCFCD must prepare and provide a Public Notice issued 15 days prior to the start of construction of any final decision where a proposed floodplain or wetland project is the only practicable alternative. Documentation of the final public notice is to be forwarded to FEMA for inclusion in the permanent project files.

9. In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured by HCFCD and access to the sensitive area will be restricted by HCFCD. The applicant will inform the Texas Division of Emergency Management (TDEM) and

FEMA immediately, and FEMA will consult with the State Historic Preservation Officer (SHPO). Work in sensitive areas shall not resume until consultation is completed and until FEMA determines that the appropriate measures have been taken to ensure complete project compliance with the National Historic Preservation Act (NHPA) and its implementing regulations.

10. Construction of the proposed project will adhere to local noise ordinances and construction equipment will not operate between the hours of 10:01 p.m. and 6:59 a.m.

11. Changes, additions, and/or supplements to the approved scope of work which alter the existing use and function of the structure, including additional work not funded by FEMA but performed substantially at the same time, will require re-submission of the application prior to construction to FEMA for re-evaluation under the National Environmental Policy Act.

CONCLUSIONS

Based on the findings of the EA, coordination with the appropriate agencies, comments from the public, and adherence to the project conditions set forth in this FONSI, FEMA has determined that the proposed project qualifies as a major federal action that will not significantly affect the quality of the natural and human environment, nor does it have the potential for significant cumulative effects. As a result of this FONSI, an EIS will not be prepared (44 CFR Part 10.9) and the proposed project as described in the attached EA may proceed.

APPROVAL

_____ Date _____

Kevin Jaynes, CHMM
Regional Environmental Officer
FEMA Region 6

_____ Date _____

Tony Russell
Regional Administrator
FEMA Region 6