#### Final Notice and Public Explanation of a Proposed Activity in a Wetlands

To: All interested Agencies (FEMA, U.S. EPA Region 6, U.S. Army Corps of Engineers, Harris County Flood Control District, Texas Floodplain Management Association, Texas GLO, Texas Water Development Board, U.S. Fish and Wildlife Service, Texas Park and Wildlife Department and City of Houston Floodplain Administrator), Groups and Individuals (Super Neighborhood) and the Public at Large.

This is to give notice that the City of Houston Housing & Community Development Dept. (HCDD), as Responsible Entity under Part 58, has conducted an evaluation as required by Executive Order 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management and Wetlands Protection. The activity is funded under B-16-MH-48-0001. The proposed project is generally bound by Bankside Rd. on the north, Bellbrook Dr. on the east, West Bellfort St. on the south and Unit No. D140-00-00 (Fondren Diversion Channel) to the west, Houston, Harris County, TX 77096.

The City has identified three parcels of land adjacent to HCFCD Unit No. D140-00-00 (Fondren Diversion Channel) in the Brays Bayou watershed, on which to locate a detention basin, known as Spellman Detention Basin.

The Spellman Detention Basin project consist of real estate acquisition of three parcels, demolition of nine (9) existing storage facilities and paving on the first parcel, demolition of library building and parking lot on the second parcel and clearing of undeveloped land on the third parcel. Excavation and construction of a detention basin and associated drainage structures would be located on all three parcels. Approximately 40-feet along the existing Gallo Road will provide maintenance access. In addition, storm sewer improvements along West Bellfort, and associated pavement repairs, will be included.

Houston Public Works (HPW) will utilize \$17,752,586.00 in CDBG DR15 Second Allocation Flood Events funds to mitigate flooding by reducing water surface elevations in surrounding low-income areas in order to diminish flood risks and decrease downstream flooding in the surrounding neighborhoods. The detention basin will provide a reduction in the water surface elevation during the 100-year storm event for both Willow Waterhole and the Fondren Diversion Channel. The basin is proposed to have a maximum volume of 208 acre-feet. This Project will benefit approximately 309 houses.

According to National Wetlands Inventory (NWI) map, no wetlands are present on site, nevertheless an investigation of the referenced site was conducted by Halff Associates, Inc., to assess the study area for the presence of wetlands and other potential waters of the United States, in order to determine impacts to waters of the United States, if any. The investigation concluded that several features meet wetland criteria. Two emergent wetlands and one scrub-shrub wetland were observed within the study area. No stream features were observed within or near the study area. The observed wetland features are partially located within the 500-year floodplain (Zone X – 0.2% annual chance flood hazard area). No wetland features are located within the 100-year floodplain (Zone AE - 1% annual chance flood hazard area). The area of wetland features to a stream features totals 1.11 acres.

**HCDD** has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values:

## List (i) ALL of the reasons why the action must take place in a wetlands resource

These siting criteria are designed to exclude from further evaluation alternatives which would clearly not be practicable due to unavailability to Applicant or as a result of logistical challenges that do not advance the purpose or need for the Project. The primary siting criteria included the following:

- 1. Location adjacent the Fondren Diversion Channel, upstream of the confluence with Willow Waterhole Bayou, or adjacent Willow Water Hole Bayou, downstream of the Fondren confluence and upstream of the affected neighborhood;
- 2. Geometric suitability to allow for the needed detention volume (a minimum of 200 acre-feet);
- 3. Absence of substantial physical constraints that would preclude the site use for the intended purpose or as a less damaging alternative;
- 4. Must be available to the Applicant.

As demonstrated below, meeting these criteria rendered the selected site (in wetland) the only one practicable as far as development.

### (ii) alternatives considered and reasons for non-selection

1) No-Action Alternative: Under the No Action Alternative, aquatic features associated with the Spellman Detention Basin could remain in their current state. However, the no build alternative would involve the termination of the land sale to the Applicant. The current owner would likely develop the site into single-family residences (since the owner is a developer and the parcels have already been platted). The Bob White Detention Basin (Off-Site Alternative Pond 2) alone would not provide adequate stormwater storage for significant flood reduction, nor would a reduced scale of the Spellman Detention that avoids impacts. Even if the latter effectively served the project purpose, the avoided resources would be adversely indirectly impacted by the substantial modification of local drainage patterns. Additionally, other flood risk reduction measures such as tunneling can be constructed without adverse impacts to waters of the United States. However, these types of activities are difficult and costly to design/build and are not practicable solutions for dealing with localized flood risk reduction needs. The No Action Alternative would not result in adverse impacts to waters of the United States; however, this alternative would also not meet the stated purpose and need for the project.

2) Off-site Alternatives:

- Alternative Pond 1: This location consists of approximately 6.32 acres of land adjacent to the confluence of Fondren Diversion Channel and Willow Water Hole Bayou that is currently being used for multifamily residential housing. Modelling of the alternative determined the maximum detention pond volume at this location to be 70.65 acre-feet. Impacts to waters of the United States would be minimal (due to the developed nature of the site) and would likely be limited to construction of an inflow weir and associated activities within the Fondren Diversion Channel. Estimated cost for acquisition of the site and excavation of the proposed detention basin is approximately \$7.3 million. Additionally, there would be substantial costs associated with relocation, moving costs (people and property), permitting cost, waste characterization, and haul off. These costs would likely double the cost of the project at this location. Furthermore, the social cost of relocation for the tenants is immense. This site is not considered a practicable alternative because it is not geometrically suitable for the volume of detention required by the purpose and need.
- Alternative Pond 2 (Bob White Detention Basin): This location consists of approximately 13.83 acres

of land adjacent to Willow Water Hole Bayou, immediately upstream of the neighborhood affected by severe flooding. Current land use at the site consists of multifamily residential housing. Modelling of the alternative determined the maximum detention pond volume at this location to be 148.41 acrefeet. Impacts to waters of the United States would be minimal (due to the developed nature of the site) and would likely be limited to construction of an inflow weir and associated activities within Willow Waterhole Bayou. Estimated cost for acquisition of the site and excavation of the proposed detention basin is approximately \$13.2 million. Additionally, there would be substantial costs associated with relocation, moving costs (people and property), permitting cost, waster characterization, and haul off. These costs would likely double the cost of the project at this location. Furthermore, the social cost of relocation for the tenants is immense. This site is not considered a practicable alternative because it is not geometrically suitable for the volume of detention required by the purpose and need.

- Alternative Pond 3: This location consists of three parcels totaling approximately 18.38 acres south of Willowbend Boulevard and west of the Fondren Diversion Channel. The parcels are currently owned by Braeswood Assembly of God, and approximately 10 acres are currently occupied by a church and parking areas. It is assumed that the developed portions of these properties are unavailable to the Applicant due to current land use restrictions. However, approximately 8 acres are currently undeveloped. This portion may be available to the Applicant for detention, but it is presently unknown if the current landowner would be amenable to dedication of a drainage easement and excavation of a detention basin. The entirety of the 8-acre undeveloped area is outside of the FEMA current effective 100-year floodplain and could be slated for future development by the current landowner. Assuming, the availability of this area, and a similar detention design (average depth of approximately 18 feet with 3:1 side slopes) the maximum detention volume is approximately 180 acrefeet. There are no National Wetland Inventory (NWI) wetlands mapped on the site; however, aerial signatures suggest potentially saturated soil/vegetation changes in a 0.45-acre area in the southern portion of the site, and a delineation would need to be conducted to confirm the presence/absence of wetlands. Impacts to waters of the United States likely be limited to construction of an inflow weir and associated activities within the Fondren Diversion Channel, as well as potential impacts to emergent wetlands within the southern end of the undeveloped portion of the location. This alternative is not considered practicable as availability to the Applicant is unlikely and it is not geometrically suitable to meet the project purpose and need.
- Alternative Pond 4: This location consists of a single parcel totaling approximately 23 acres, southwest of the intersection of South Braeswood Boulevard and Bob White Drive and adjacent the Fondren Diversion Channel. The parcel is owned by Houston Independent School District and is currently occupied by Fondren Middle School. Development on the parcel consists of the school, parking areas, and other attendant features such as driveways, a track, playing fields, and outbuildings. Excavation for detention is incompatible with the current land use as it would necessitate conversion of the track and playing fields, and relocation of a middle school (especially in a fully developed area) is not feasible. Therefore, this alternative is not considered available to the Applicant and therefore not practicable.

### 3) On-site Alternatives:

On-Site Design Considerations: Within the Spellman Basin location, multiple design alternatives were
evaluated to attempt to avoid and minimize impacts to waters of the United States. However, due to
the location of the wetland areas in the center of the property, no design alternatives were identified

that minimized impacts while maintaining the requisite detention volume. Therefore, alternative onsite design does not provide a practicable means to minimize adverse effects to the aquatic environment. Additionally, the Applicant considered combinations of off-site alternatives (Alternative Pond 1 and a portion of Alternative Pond 2) with the proposed Spellman Basin location. However, these alternatives still required the use of the entire Spellman site to achieve the necessary detention volumes to meet the project purpose, and therefore did not offer any practicable means to minimize adverse effects on the aquatic environment.

Fund the development as proposed: The proposed Spellman Basin is located near the confluence of the Fondren Diversion Channel and Willow Waterhole Bayou, immediately north of the intersection of West Bellfort Avenue and Spellman Road. The location consists of multiple tracts totaling approximately 17.7 acres and currently occupied by a self-storage facility, the former City of Houston Frank Branch Library, and approximately 10 acres of undeveloped land. The detention solution at this location would include a rectangular basin approximately 1,600 feet long and 385 feet wide, the bottom of which would be approximately 1,500 feet long and 280 feet wide, with a maximum-depth of 20.5 feet. The basin would be designed for dry-bottom with a one-foot deep pilot channel transecting the length of the basin to proposed outfall culverts. A concrete inflow weir would be placed at the southern end of the detention basin to capture flow from the Fondren Diversion Channel. Additionally, an overflow weir would be constructed near the northern end of the basin to convey overflow into the Fondren Diversion Channel. The proposed Spellman Basin would impact waters of the United States including 0.91-acre of emergent wetland and 0.20-acre of scrub-shrub wetland. Additionally, placement of fill within the Fondren Diversion Channel and Willow Waterhole Bayou would be associated with protective armoring at-grade within existing channelized systems and, while this is a permanent modification to the channels, there would be no loss of aquatic function.

# (iii) all mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial functions

Clean Water Act Section 404(b)(1) guidelines (40 CFR 230) are regulations that constitute the substantive environmental criteria used in evaluating activities regulated under Section 404. Within 40 CFR 230, compensatory mitigation for losses of aquatic resources is described in Subpart J. Additional regulations for general compensatory mitigation requirements are described in 33 CFR 332, finalized in 2008. This rule states that compensatory mitigation requirements must be commensurate with the amount and type of aquatic resource impacts associated with permit actions. Purchase of credits from a mitigation bank has been determined as the best way to compensate for losses of waters of the United States resulting from construction of the project. The City of Houston proposes to purchase credits from the Greens Bayou Wetland Mitigation Bank (GBWMB). The project is located within the primary service area of the GBWMB.

The credits would be deducted from Subdivision B of the GBWMB. This unit utilizes the Wet 2 Model for ecological functional assessment rather than the Hydrogeomorphic (HGM) Method. The City will submit an application form, required documentation, and the reservation fee to GBWMB. GBWMB staff will conduct the Wet 2 evaluations and submit documentation directly to the USACE Galveston District.

The "Early Notice and Public Review of a Proposed Activity in a 100-Year/500-Year Floodplain and Wetlands" for this project ran on April 10, 2020 in the Houston Chronicle. HCDD has reevaluated the alternatives to building in wetland resources and has determined that it has no practicable alternative. Environmental files that document compliance with steps 3 through 6 of Executive Order 11990, are available for public inspection, review and copying upon request at the times and location delineated in

the last paragraph of this notice for receipt of comments.

There are three primary purposes for this notice. First, people who may be affected by activities in **wetlands** and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information and request for public comment about **wetlands** can facilitate and enhance Federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in **wetlands**, it must inform those who may be put at greater or continued risk.

This notice is required by Section 2(b) of Executive Order 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Protection of Wetlands. The Wetlands Delineation Process includes public notices and the examination of practicable alternatives to building in the wetland. Additional project information, including maps of wetlands for the project area, is contained in the Environmental Review Record (ERR) on file at the City of Houston Housing & Community Development Department, 2100 Travis, 9<sup>th</sup> Floor, Houston, Harris County, Texas 77002, and may be examined or copied weekdays 8am to 5pm. It can also be access online at <a href="https://www.hudexchange.info/programs/environmental-review/environmental-review-records/">https://www.hudexchange.info/programs/environmental-review/environmental-review-records/</a>.

Written comments must be received by the HCDD at the following address on or before May 6, 2020. 2100 Travis, 9th Floor, Houston, Harris County, Texas, 77002 or by email to hcdenvironmental@houstontx.gov. Attention: HCDD Environmental Team. A full description of the project may also be reviewed from 8:00 AM to 5:00 PM at the address provided above or in HEROS https://www.hudexchange.info/programs/environmental-review/environmental-review-records/, or electronically upon request. Comments may also be submitted via phone at (832) 394-6018 or via email at hcdenvironmental@houstontx.gov

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