Prospectus Checklist for Mitigation Banks per CFR 332.8(d)(2)
Cypress Creek Mitigation Bank
SWG-2017-00518

The objectives of the proposed mitigation bank.

- **Identify the habitat type(s) (bottomland hardwoods, swamp, fresh marsh, pine savannah, etc.) that will be provided.**
  - Section II. B 1,2, and 3. Page 4 and 5.
- **Identify the amount (acres) of each habitat type that will be provided.**
  - Section II. B 1,2, and 3. Page 4 and 5.
- **Identify the aquatic functions to be restored/enhanced.**
  - Section II. B 1,2, and 3. Page 4 and 5.
- **Identify the methods of compensation (re-establishment, rehabilitation, enhancement, preservation) used to establish the mitigation bank.**
  - Section II. B 1,2, and 3. Page 4 and 5.
- **Identify the mitigation bank's plan of operation.**
  - Section III.A-G, pages 5 and 6.

Describe how the bank or in-lieu fee program will be established.

- **Identify the work necessary to accomplish site restoration/enhancement and describe how the proposed work will meet identified goals and objectives.**
  - Section II.B.2 and 3, page 4
- **Provide a vicinity map (USGS topographic map).**
  - Please reference ***Appendix D*** of the Prospectus.
- **Provide a current aerial photograph identifying the area to be protected by the conservation servitude.**
  - Please reference ***Appendix H***- Conceptual Development Plan.
- **Provide site-specific maps and cross sections showing proposed work. Include an elevation map, soil map, map showing the location of each method of compensation per habitat type, and a map showing the hydrologic restoration. This should include cross-sections of any earthen work where applicable.**
  - Please reference ***Appendix B***- Fort Bend County Soil Map.
  - Please reference ***Appendix H***- Conceptual Development Plan.
- **For the prospectus public notice to serve as the public notice for any necessary Department of the Army permit, a permit application must be submitted otherwise, a separate public notice will be necessary.**
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Identify the proposed service area

- **Provide a map identifying the proposed service area of the bank.**
  - ***Appendix A***- Proposed Service Area.
- **Provide a rationale for determining the limits of the proposed service area.**
  - The proposed service areas were determined by the existing adjacent watersheds of the proposed mitigation bank. Additionally, the proposed bank site was chose due to the close proximity to Cypress Creek and is located within the watersheds of the Addicks and Barker reservoirs. These reservoirs and associated dam structures have historically been in danger of breaching and stressed from flooding within the region. The creation of an upstream wetland mitigation bank can provide valuable water attenuation to relieve aging infrastructure and reduce the risk of dam failure during flood events.

Identify the general need for and technical feasibility of the proposed mitigation bank or in-lieu fee program.

- **Identify any watershed plans the mitigation project would accommodate.**
  - The proposed bank site was chose due to the close proximity to Cypress Creek and is located within the watersheds of the Addicks and Barker reservoirs. These reservoirs and associated dam structures have historically been in danger of breaching and stressed from flooding within the region. The creation of an upstream wetland mitigation bank can provide valuable water attenuation to relieve aging infrastructure and reduce the risk of dam failure during flood events.
- **Identify any regional or local benefits derived from the bank.**
  - There is tremendous need for a wetland and stream mitigation bank in Harris and surrounding counties. The continued growth of residential multi-home developments within this proposed CCMB service area has created a significant market for wetland mitigation credits with permitted impacts for these types of projects.

- **Identify any potential threats to the bank site or resource type the bank intends to provide and/or protect.**
  - A potential threat to the bank site would be future development. The Sponsor agrees to protect the property in perpetuity as it serves as the mitigation bank.
- **Discuss the feasibility of the proposed construction work required to develop the bank.**
  - The feasibility of the proposed construction work required is very manageable with the location of the site. The Sponsor is proposing enhance the approximate 16 acres of low quality wetlands by excavating to a depth of 6-12 inches below the surface level to replicate the historical wetland habitat that was present.
  - The Sponsor is also proposing to restore approximately 3 acres of existing agricultural ponds that were likely excavated within existing wetlands or low lying areas for the purpose of watering livestock. The ponds will be filled or regraded as necessary to correspond to the 6-12 inch depth below surface level design wetlands that will also be restored.
  - Approximately 85 acres of historical wetlands will be restored and excavated to a depth of 6-12 inches, to replicate conditions prior to being drained for agriculture. These areas were selected based on studying aerial imagery from 1938-1995. Areas inundated with water were observed and targeted as areas to create wetlands that historically existed, but have been drained for the purpose of agriculture or livestock grazing.
  - The Sponsor also proposes to restore approximately 15,000 linear feet of historical streams utilizing historical contours to determine the best location and depth that will match the contours of nearby Cypress Creek tributaries. The ~5,500 linear feet of on-site ditches will be removed to increase overland flow and restore flow to the created stream channels.

Identify the proposed future ownership arrangements and long-term management strategy for the proposed mitigation bank or in-lieu fee program.

- A qualified third party land trust will be contacted to be the conservation easement holder. The entity and a draft conservation easement document will be provided to the IRT along with the Draft Mitigation Banking Instrument (DMBI).

Provide contact information (name, address, telephone number, e-mail address, etc.) for the Sponsor, land owner, and agent.

- Identify the proposed long-term ownership.
  - Mr. Christopher Gilbert on behalf of Cunningham Interests II Ltd.
- Identify the party responsible for long-term management.
  - Mr. Christopher Gilbert on behalf of Cunningham Interests II Ltd.
- Identify the proposed site protection instrument that would be utilized.
  - Mr. Christopher Gilbert on behalf of Cunningham Interests II Ltd.
- Identify the "holder" of that instrument if a "holder" is required.
  - Mr. Christopher Gilbert on behalf of Cunningham Interests II Ltd.

Summarize the qualifications of the Sponsor to successfully complete the type of mitigation project proposed as well as any similar previous activities completed by the Sponsor.

<u>For mitigation banks, the prospectus must also address</u>:

- **The ecological suitability of the site to achieve the objectives of the proposed mitigation bank, including the physical, chemical, and biological characteristics of the bank site and how that site will support the planned types of aquatic resources and functions.**
  - The subject property is directly abutting Cypress Creek to the north and surrounded by existing agricultural lands to the east, south, and west.

<u>Summarize current site conditions including land use, vegetation, hydrology, and soils.</u>

- **Identify all known encumbrances including mortgages, liens, rights-of-way, servitudes, easements, etc.**
  - No mortgages, liens, right-of-ways, servitudes, or easements exist on the property that the Sponsor is aware of.
- **Identify previous land uses of the site and adjacent properties.**
  - The subject property is dominated by open pasture areas improved for grazing currently used for livestock production. The tract has historically been used for agricultural activities such as rice cultivation based upon historical imagery from 1944 and converted to livestock pasture prior to 1978. Adjacent properties to the proposed bank include additional undeveloped agricultural lands to the east, west, and south. Cypress Creek borders the property to the north.
- **Identify zoning and any existing and/or proposed development adjacent to the bank.**
  - No existing development is adjacent to the proposed bank property. Additionally, the Sponsor is unaware if any potential future development will occur surrounding the bank property. However, if proposed

development occurs adjacent to the property, this will not affect the hydrological needs for the created and enhanced areas, as Cypress Creek will supply hydrology to the site.

- **Summarize the historical hydrology of the site.**
  - The 509-acre proposed bank site, with the exception of the southeast corner, lies entirely within the 100-year floodplain of Cypress Creek as published by the Federal Emergency Management Agency (FEMA).
- **Include a jurisdictional determination of "waters of the U.S." from the Corps. Please note that this item is necessary to support the method of compensation statement.**
  - To date, a jurisdictional determination has not been conducted on the subject property, however the Sponsor believes that based on a preliminary wetland and stream delineation the subject property contains, approximately 16 acres of potential adjacent jurisdictional wetlands, 3 acres of man-made stock ponds, and 5,500 linear feet of drainage ditches currently exist on the tract.

Assurance of sufficient water rights and/or hydrological influences on the site to support the long-term sustainability of the mitigation bank.

- **Describe any existing hydrologic disturbances on and adjacent to the site over which the Sponsor has no control.**
  - At this time, there are no existing hydrological disturbances on or adjacent to the site of which the Sponsor does not have control over.
- **Identify any temporary or long-term structural management requirements (levees, weirs, culverts, etc.,) needed to assure hydrologic/vegetative restoration.**
  - The Sponsor is not proposing to create temporary or long-term structural management features to assure hydrologic/vegetative restoration. The Sponsor is proposing to fill in the existing agricultural drainage ditches to ensure the site retains and adequate amount of rainfall. Additionally, the Sponsor will be excavating historical wetlands and existing ponds to the original depth to ensure that hydrology is maintained within these wetland areas. Further, the Sponsor will be restoring 15,000 linear feet of historic streams on the property to further revert this agricultural landscape back to the original landscape features prior to 1938.
- **Describe:**
  - **Water source(s) and losses(s) (precipitation, surface runoff, groundwater, stream, tidal).**
    - The 509-acre proposed bank site, with the exception of the southeast corner, lies entirely within the 100-year floodplain of Cypress Creek as published by the Federal Emergency Management Agency (FEMA). The proposed site is also within the watershed of the Addicks and Barker reservoirs. These reservoirs and associated dam structures have historically been in danger of breaching and stressed from flooding within the region. The creation of an upstream wetland mitigation bank can provide valuable water attenuation to relieve aging infrastructure and reduce the risk of dam failure during flood events. The service area proposed was evaluated based on the 8-digit Hydrologic Unit Code (HUC) in which the tract resides, relation to the EPA Level III eco-region, and all watersheds that contribute and flow into Cypress Creek. The proposed primary service area includes Hydrologic Unit Code (HUC) Spring Creek HUC (12040102) and the proposed Secondary Service Area is the Buffalo-San Jacinto HUC (12040104) and the West Fork San Jacinto HUC (12040101).
  - **For sites with overbank flow: Hydro-period (seasonal depth, duration, and timing of inundation and/or saturation). Contributing drainage area (map and size).**
    - The subject property lies within the 100-year FEMA floodplain of Cypress Creek and is subject to periodic flooding during strong storm events. Overflow occurs on a seasonal basis and during periodic storm events. The rate of flow will be sufficient enough to sustain hydrology to the created and enhanced wetlands on the subject property. Additionally, the service area includes the Hydrologic Unit Code (HUC) of Spring Creek HUC (12040102) and the proposed Secondary Service Area is the Buffalo-San Jacinto HUC (12040104) and the West Fork San Jacinto HUC (12040101).

Reviewer:_____

Date:_____

Complete: Yes / No