Draft Environmental Assessment

Jefferson County Drainage District No. 6
Delaware Street Detention Project
EMT-2021-FM-022-0001
Beaumont, Jefferson County, Texas

April 2025

Prepared By:

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Austin, Texas 78741

Federal Emergency Management Agency
Region 6
800 N. Loop 288
Denton TX 76209

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LIST OF ACRONYMS

ALERT – Automated Local Evaluation in Real Time
APE – Area of Potential Effect
ASTM – American Society for Testing and Materials
BFE – Base Flood Elevation
BMP – Best Management Practice
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System
CFR – Code of Federal Regulations
EA – Environmental Assessment
EPA – US Environmental Protection Agency
EPCRA - Emergency Planning and Community Right-To-Know Act
ESA – Endangered Species Act
FEMA – Federal Emergency Management Agency
FIRM – Flood Insurance Rate Map
FONSI – Finding of No Significant Impact
FPPA – Farmland Protection Policy Act
GLO – General Land Office
H&H Study – Hydrology and Hydraulics Study
HEC-1 – Hydrologic Engineering Center – 1 Model
HECRAS – Hydrologic Engineering Center River Analysis System
HECHMS – Hydrologic Engineering Center Hydrologic Modeling System
HIST RCRA NONRCRA - Historical RCRA-Non-RCRA
HMGP – Hazard Mitigation Grant Program
IH – Interstate Highway
IT – InControl Technologies
JCCAD – Jefferson County Central Appraisal District
JCDD6 – Jefferson County Drainage District No. 6
LFUN – TCEQ Solid Waste Facilities and Unauthorized and Unpermitted Landfill
LOMA – Letter of Map Adjustment
LOMR – Letter of Map Revision
LPST – Leaking Petroleum Storage Tank
MSA – Metropolitan Statistical Area
MSL – Mean Sea Level
NDD – Natural Diversity Database
NEPA – National Environmental Policy Act
NFIP – National Flood Insurance Program
NHPA – National Historic Preservation Act
NOI – Notice of Intent
NOx – Nitrogen Oxides
NPL – National Priority List
NPS – National Park Service
NRCS – Natural Resources Conservation Service
NRHP – National Register of Historic Places
NWI – National Wetland Inventory
NWS – National Weather Service
PCL – Protective Concentration Limits
PEM1Cd – Palustrine, Emergent, Persistent, Seasonally Flooded, Partly Drained/Ditched

PFO1Ad – Palustrine, Forested, Broad-leaved Deciduous, Temporarily Flooded, Partly Drained/Ditched
PUBHx – Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
RCB – Reinforced Concrete Box
RCRA – Resource Conservation and Recovery Act
RCT – Railroad Commission of Texas
ROW – Right-of-Way
SALs – State Archeological Landmarks
SARA – Superfund Amendments and Reauthorization Act
SH – State Highway
SHPO – State Historic Preservation Office
SQGs – Small-Quantity Generators
SWPPP – Stormwater Pollution Prevention Plan
TAC – Texas Administrative Code
TCEQ – Texas Commission on Environmental Quality
THC – Texas Historical Commission
TMDL – Total Maximum Daily Load
TPDES – Texas Pollutant Discharge Elimination System
TPH – Total Petroleum Hydrocarbons
TPWD – Texas Parks and Wildlife Department
TSMASS – Texas State Minimum Archeological Survey Standards
TWDB – Texas Water Development Board
USACE – US Army Corps of Engineers
USDA – US Department of Agriculture
USFWS – US Fish and Wildlife Service
UT-BEG – University of Texas Bureau of Economic Geology
VOC – Volatile Organic Compound

1.0 INTRODUCTION

1.1 PROJECT AUTHORITY

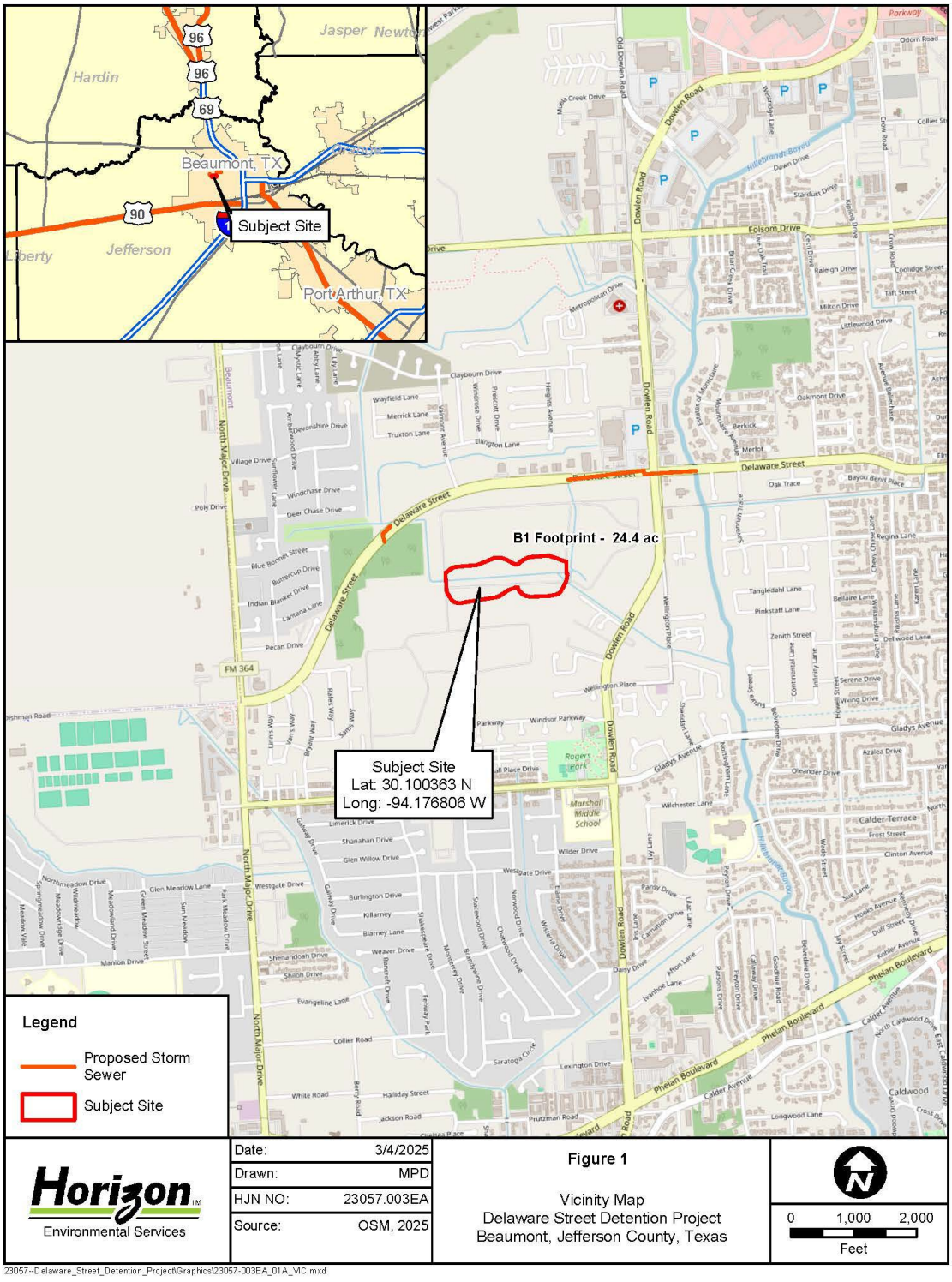
Jefferson County Drainage District No. 6 (JCDD6) (the Applicant) is a conservation and reclamation district and a political subdivision of the State of Texas. JCDD6 was established on 21 January 1920, after a favorable vote by the Texas Legislature on 10 January 1920. The JCDD6 district boundary was extended and enlarged (Vol. 63, P. 478) according to the authority of the 57th Legislature, Chapter 349, and Chapter 7, Title 128, Revised Civil Statutes of Texas, Article 8129. Enlargement came about in 1961 through legislation (HB 1063) that also established JCDD6 as a Conservation and Reclamation District under Section 59, Article XVI, of the Texas Constitution. Containing approximately 450 square miles, JCDD6 lies wholly within Jefferson County, which includes much of the City of Beaumont, and was created primarily to provide drainage for flood-prone areas within the district. JCDD6 is governed by a five-member Board of Directors appointed by the County Commissioners Court of Jefferson County, Texas (the Commissioners Court).

Funding for the Delaware Street Detention Project is being requested from the Federal Emergency Management Agency (FEMA) under the Flood Mitigation Assistance Program (FMA). FEMA's project number is EMT-2021-FM-022-0001. This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations Parts 1500-1508), and FEMA's procedures for implementing NEPA (FEMA Instruction 108-1-1). FEMA is aware of the 12 November 2024 decision in *Marin Audubon Society v. Federal Aviation Administration*, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding on this agency action, FEMA has nonetheless elected to follow those regulations at 40 C.F.R. Parts 1500–1508, in addition to the Department of Homeland Security (DHS) and FEMA's procedures implementing NEPA found in DHS Directive 023-01-01, DHS Instruction 023-01-001-01, FEMA Directive 108-1, and FEMA Instruction 108-1-1to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed project. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.2 PROJECT LOCATION

The project includes a proposed detention basin and associated storm sewers in an area of Beaumont, Jefferson County, Texas, bounded by Delaware Street, Dowlen Road, and Gladys Avenue (Figure 1). Approximate Global Positioning System (GPS) coordinates for the center of the project area are Latitude: 30.097278; Longitude: -94.177753. The Benefit Area for the project is shown in Figure 2. The adjacent land use surrounding the project area consists largely of residential development with commercial development along major arterials.


Subject Site
Beaumont, TX
Port Arthur, TX
Hardin
Jefferson
Liberty
Jasper
B1 Footprint - 24.4 ac
Subject Site
Lat: 30.100363 N
Long: -94.176806 W
Delaware Street
Dowlen Road
North Major Drive
FM 364
Folsom Drive
Phelan Boulevard
Legend
Proposed Storm Sewer
Subject Site
Horizon
Environmental Services
Date: 3/4/2025
Drawn: MPD
HJN NO: 23057.003EA
Source: OSM, 2025
Figure 1
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Delaware Street Detention Project
Beaumont, Jefferson County, Texas
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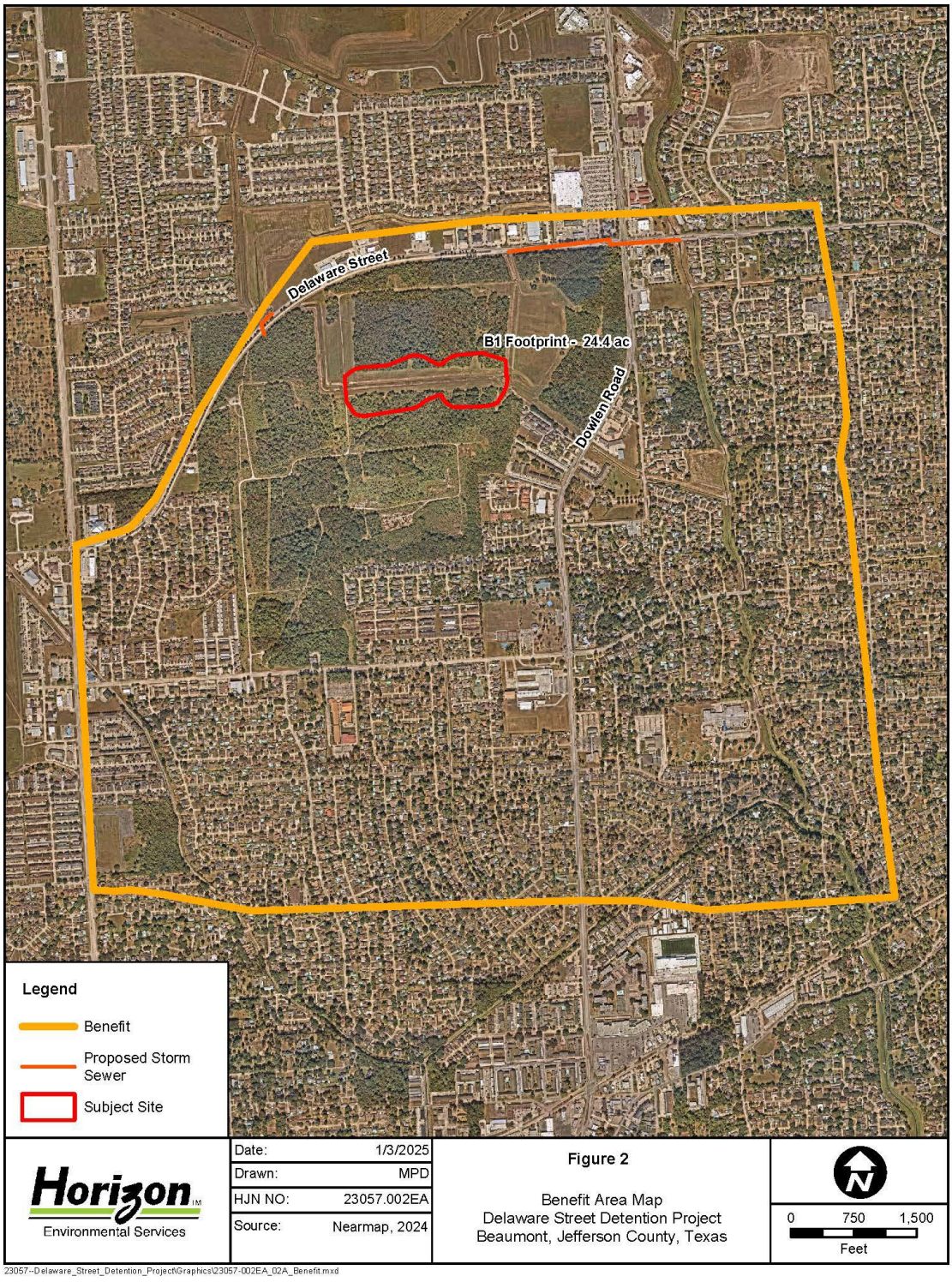
Delaware Street
B1 Footprint - 24.4 ac
Dowlen Road
Legend
Benefit
Proposed Storm Sewer
Subject Site
Horizon
Environmental Services
Date: 1/3/2025
Drawn: MPD
HJN NO: 23057.002EA
Source: Nearmap, 2024
Figure 2
Benefit Area Map
Delaware Street Detention Project
Beaumont, Jefferson County, Texas
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Major transportation arteries in the area include North Major Drive, Gladys Street, Delaware Street, and Dowlen Road. Topography is generally flat, with elevations ranging from 24 to 26 feet above mean sea level (AMSL) (Figure 3). Drainage is to the east and southeast into Hillebrandt Bayou.

1.3 PURPOSE AND NEED OF PROJECT

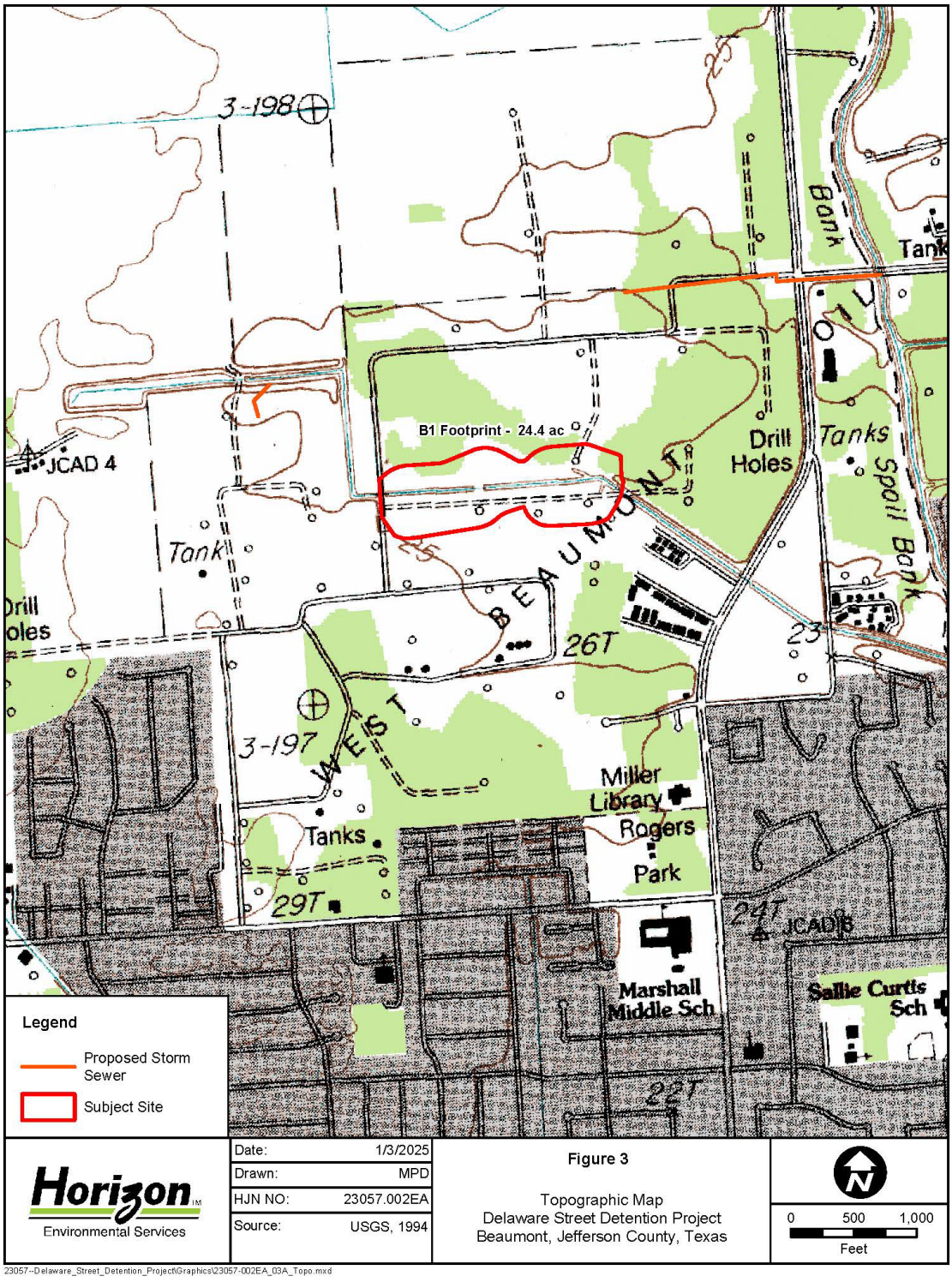
1.3.1 Purpose

The purpose of the project is to provide improved drainage for the Delaware Street Benefit Area, thus significantly reducing flooding to structures in this area (see Figure 2). Through FMA, FEMA provides funding to states, federally recognized Tribal governments, US territories, and local governments. Since the National Flood Insurance Reform Act of 1994 was signed into law, funds are used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program.

1.3.2 Need

Jefferson County experiences a relatively high level of rainfall. National Weather Service (NWS) statistics currently indicate an average annual rainfall rate of 56 inches. In 2001, Automated Local Evaluation in Real Time (ALERT) stations measured 103 inches of rainfall, and the Applicant's gauges have measured 80 inches of rainfall in various years. The NWS statistics also indicate that a 24-hour rain event with a 100-year recurrence interval is 13 inches, though the highest point rainfall for a 24-hour period recorded by the Applicant is 24 inches, which occurred on 7 June 2001 during Tropical Storm Allison. Other tropical systems have impacted the region in recent years, including Ike, Rita, Gustav, Harvey, and Imelda.

The local watershed suffers flooding from a rainfall event that may last only 2 hours. This area is heavily influenced by tailwater conditions on Hillebrandt Bayou. When Hillebrandt becomes full, ponding stacks up on the street and flooding occurs. Some of the most flood-prone streets include Belvedere Drive, Candlestick Circle, Futara Street, Ventura Street, and Gladys Avenue. In the 25-year, 24-hour storm, the project area experiences ponding typically between 0.5 and 2 feet. Approximately 2,491 structures in the project area are at risk of flooding under the existing conditions. Hillebrandt Bayou causes elevated tailwater conditions and yields deep ponding and long ponding durations. These conditions are present for the 100-year, 24-hour storm as well and ponding depths and extents only increased compared to the 25-year, 24-hour storm event. Ponding depths vary but are consistently over 2 feet of ponding. For less severe events, such as the 2- and 5-year, 24-hour storm events, ponding is generally contained to the right-of-way (ROW) but is deep in certain topographically low areas such as Gladys Avenue. Ponding depths are typically under 1 foot for this storm event. For the 10-year, 24-hour storm event, Hillebrandt Bayou becomes bank full and yields high tailwater conditions. This further hinders the area, and ponding depths worsen to over 1 foot of ponding throughout the region.


3-198
B1 Footprint - 24.4 ac
JCAD 4
Tank
Drill Holes
Tanks
Spoil Bank
BEAUMONT
26T
23
3-197
WEST
Tanks
29T
Miller Library
Rogers Park
24T
JCAD 6
Marshall Middle Sch
Sallie Curtis Sch
22T
Legend
Proposed Storm Sewer
Subject Site
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Date: 1/3/2025
Drawn: MPD
HJN NO: 23057.002EA
Source: USGS, 1994
Figure 3
Topographic Map
Delaware Street Detention Project
Beaumont, Jefferson County, Texas
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2.0 ALTERNATIVES ANALYSIS

2.1 ALTERNATIVE 1: NO-ACTION ALTERNATIVE

The no-action alternative would not result in the expenditure of grant funds or the described impacts to the project site but would result in continued frequent and severe structure flooding in the Delaware Street Benefit Area. Doing nothing is unacceptable because of the life-threatening conditions, as well as the quality-of-life impacts, costs, and extreme hardships these floods cause the citizens that are affected.

2.2 ALTERNATIVE 2: BUYOUT ALTERNATIVE

This alternative would require the buyout of at least 1,024 existing residential properties that experience repetitive flood damage for which Benefit-Cost Analyses (BCAs) were run. The existing homes are those within the Benefit Area map as shown on Figure 2. Within that area, there are an additional 1,467 properties that were not included in the BCA, but which also experience repetitive flood damage and risk. Based on Jefferson County Central Appraisal District (JCCAD) values plus ancillary fees, it is estimated that it would cost nearly $284 million to acquire and demolish the 1,024 homes and relocate residents for which benefits were calculated. Buyouts would displace many residents, and the redevelopment of this land would not be recommended due to the low-lying topography of the region. No offer to purchase these homes has been made to date. If this alternative were determined to be the least-damaging practicable alternative and pursued further, it is likely that funding for the buyout would be sought from federal sources and local matches.

2.3 ALTERNATIVE 3: PROPOSED ALTERNATIVE

The proposed detention facility and storm sewer improvements are intended to provide relief to Hillebrandt Bayou by diverting flow from the mainstem Hillebrandt Bayou into the large sub-regional detention basin and freeing up capacity in the channels that the neighborhoods can drain to. The detention basin will provide increased capacity to the system and critical storage during extreme events when Hillebrandt Bayou is overwhelmed.

The proposed improvements in the Delaware Detention Project include a 24.4-acre detention pond south of Delaware Street and approximately 6,700 linear feet of storm sewer upgrades. This improvement operates as a diversion system for Hillebrandt Bayou by directing flow from Hillebrandt through proposed triple 8-foot by 6-foot reinforced concrete boxes (RCBs) to the west along Delaware Street, then into the detention basin that outfalls to JCDD6 ditch 121 and back to Hillebrandt Bayou just north of Sheridan Oaks Drive.

These improvements provide a significant increase in stormwater storage capacity. The total inundated area within the Benefit Area with these improvements is reduced by 11% for the 25-year, 24-hour storm event. The depth reduction provided by the improvements in the Benefit Area range from 0.25 to 0.8 feet.

2.4 COST COMPARISON OF ALTERNATIVES

There are 2,491 properties in the Benefit Area that are protected by this project. BCAs were run on 1,024 of the residential properties. BCAs were not run on the remaining 1,467 properties.

No-Action Alternative:

Calculated avoided damages are $53,824,268 for 1,024 of the 2,491 properties in the Benefit Area for which BCAs were evaluated.

Buyout Alternative:

Buyout of 1,024 residential properties for which BCAs were evaluated at approximately $277,114 each is $283,764,736.

Proposed Project Alternative:

The project cost is estimated at $13,181,257 with a benefit-cost ratio of 4.08. FEMA grant funds will be used in part for construction costs. No structures will be acquired or demolished as part of this project.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 PHYSICAL ENVIRONMENT

3.1.1 Geology, Seismicity, and Soils

Geologic development of the Texas Coastal Plain began approximately 220 million years ago during the early Mesozoic Era with the separation of the North American and European continental plates (Hentz, 2019). This Gulfian cycle consisted of several periods of continental extension (rifting) and compression. During the Triassic Period, discontinuous rift basins were formed that were generally oriented parallel to the edge of the developing ocean basin and extending from Mexico to Nova Scotia. Later, as continental separation continued, the rift basins in Texas were eventually filled by deposits of marine salt. Subsequent burial by river sediment carried in from the newly emerging Rocky Mountains caused instability and deformation in the buried salt layers. This led to an upward migration of the salt deposits to a lower confining pressure, forming a variety of structures collectively known as salt domes. These structures, which are prominent subsurface features of the Texas Gulf Coast region, formed significant oil and natural gas traps in the sedimentary rocks that immediately surround them. Additionally, rapid deposition of deltaic sands over marine mud resulted in an unstable sediment column, leading to displacement of the sediments by growth faults (large, curved faults that formed during sediment accumulation and continue to grow with increasing depth of burial). Linear zones of growth faults of various ages extend from northeastern Mexico into Louisiana and compose traps for large oil and gas fields.

A review of existing literature indicates that the proposed project is located in an area of outcropping sediments belonging to the Beaumont Formation (UT-BEG, 1992). In the region, the Beaumont Formation consists of varying proportions of clays, silts, and sands originating from primarily stream channel, point-bar, natural levee, backswamp, and, to a lesser extent, coastal marsh and mud-flat depositional systems. Concretions of calcium carbonate, iron oxide, and iron-manganese oxides are common in the weathered zone. The surface topography of the region tends to be characterized by relict river channels shown by meander patterns and pimple mounds on meander belt ridges. The majority of the project area is located within an area of the Beaumont Formation that predominantly consists of clay and mud of low permeability, high water-holding capacity, high compressibility, high to very high shrink-swell potential, poor drainage, level to depressed relief, low shear strength, and high plasticity. Geological units include interdistributary muds, abandoned channel-fill muds, and fluvial overbank muds.

A literature review indicated no known seismic faults on the site or in the nearby area (UT-BEG, 1992). Occasional earthquakes do occur within the Coastal Plain, but these are usually situated between San Antonio and Corpus Christi. Additionally, much seismic activity (earthquakes and subsidence) within the Coastal Plain has been attributed to well injections associated with oil and gas field operations and groundwater pumping. There is a very low probability of structure damage due to the rarity and lack of severity of seismic activity in the project area.

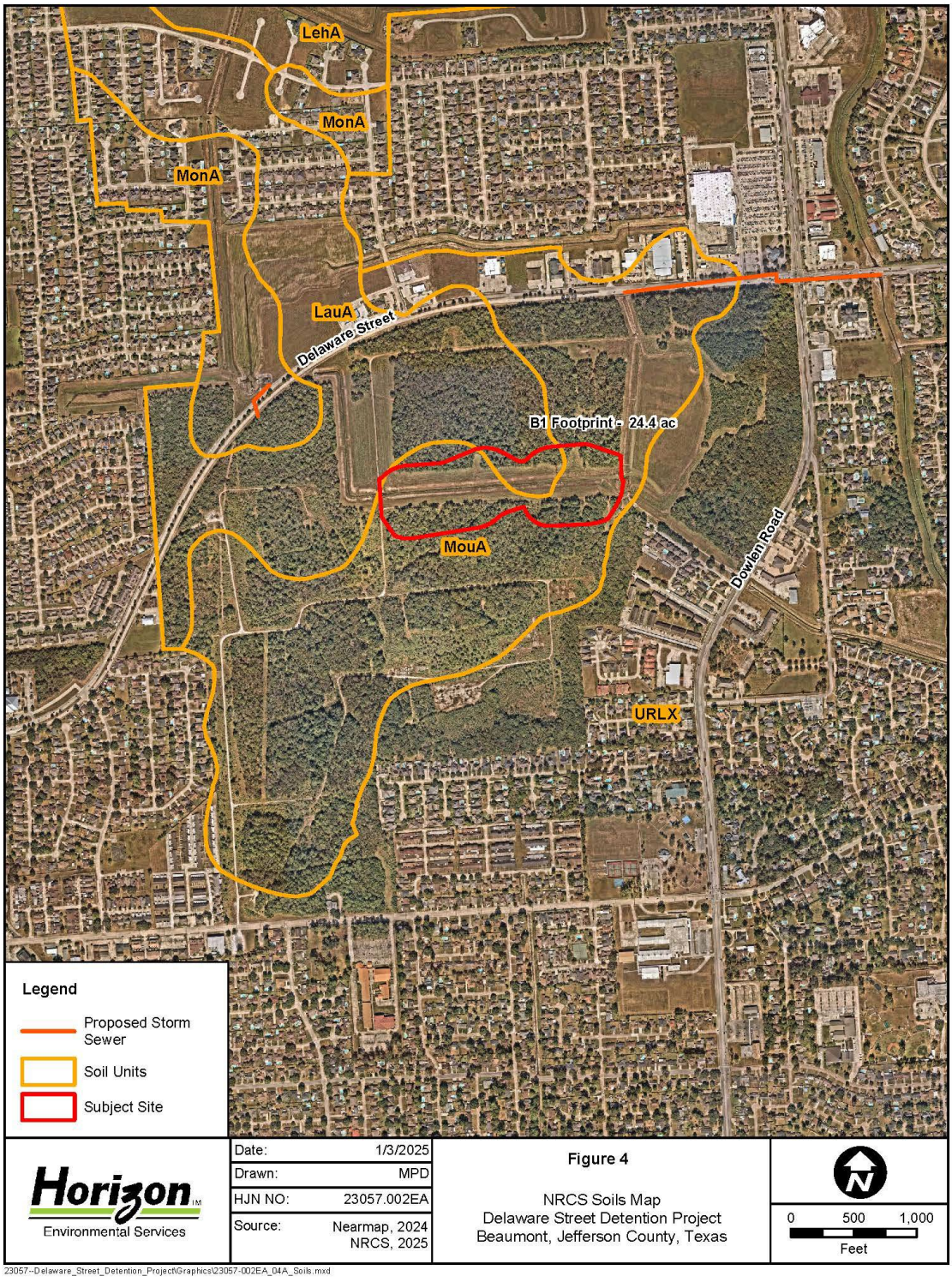
The sediments exposed in Jefferson County are divided into two groups: those of Pleistocene origin and those of more recent origin. Recent time began with the withdrawal of large continental ice sheets that were characteristic of Pleistocene times. Generally, soils of the coastal prairie and timberlands are of Pleistocene origin, while those of the floodplains, coastal marshes, and beaches are of more recent origin.

Soils observed on site during field reconnaissance consist of loams, loamy clays, and clays. According to the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey of Jefferson County, the property is composed of two (2) soil map units, Morey Urban Land Complex (MouA) and Labelle Urban Land Complex (LauA) (Figure 4) (NRCS 2024).

A literature review indicated no known seismic faults on the site or in the nearby area (UT-BEG, 1992). Occasional earthquakes do occur within the Coastal Plain, but these are usually situated between San Antonio and Corpus Christi. Additionally, much seismic activity (earthquakes and subsidence) within the Coastal Plain has been attributed to well injections associated with oil and gas field operations and groundwater pumping. There is a very low probability of structure damage due to the rarity and lack of severity of seismic activity in the project area.

3.1.1.1 No-Action Alternative

The no-action alternative would not affect geology, seismicity, or soils.


LehA
MonA
MonA
LauA
Delaware Street
B1 Footprint - 24.4 ac
MouA
Dowlen Road
URLX
Legend
Proposed Storm Sewer
Soil Units
Subject Site
Horizon
Environmental Services
Date: 1/3/2025
Drawn: MPD
HJN NO: 23057.002EA
Source: Nearmap, 2024
NRCS, 2025
Figure 4
NRCS Soils Map
Delaware Street Detention Project
Beaumont, Jefferson County, Texas
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3.1.1.2 Buy-out Alternative

Since properties that would be involved with the buyout alternative are already developed and disturbed, this alternative would not affect geology or seismicity. Minor soil disturbance would likely result from demolition of the structures but would not be significant.

3.1.1.3 Proposed Alternative

Construction of the drainage improvements will result in the excavation of soils for the detention basin and the installation of underground drainage utilities. The Morey and Labelle Urban Land Complex soils are not considered prime farmland soils. Because the project area is "land committed to urban development," it is considered exempt from the provisions of the Farmland Protection Policy Act (FPPA). The NRCS was contacted to evaluate the proposed project for impacts to prime farmland soils under the requirements of the FPPA. The correspondence with NRCS is included in Attachment 1.

3.1.2 Water Resources and Water Quality

The Chicot Aquifer (in Holocene- and Pleistocene-age sediments) and the Evangeline Aquifer (in Pliocene- and Miocene-age sediments) are the two primary sources of fresh (less than 1000 milligrams per liter dissolved solids concentration) groundwater in the Beaumont area and are part of the Gulf Coast aquifer system. The hydrogeologic units are laterally discontinuous fluvial-deltaic deposits of gravel, sand, silt, and clay that dip and thicken from northwest to southeast. Recharge to the aquifers generally occurs through the percolation of fresh water (precipitation, stream flow, lakes, etc.) along the aquifers' area of outcrop at the surface. The aquifers crop out in bands inland from and approximately parallel to the coast and become progressively more deeply buried and confined toward the coast. The Chicot, which comprises the youngest sediments, outcrops nearest to the coast, followed farther inland by the Evangeline outcrop. These outcrop areas are located a number of miles north and west of the project area. Groundwater movement is generally from the area of outcrop toward the southeast (down-dip) but may vary in the vicinity of natural discharge points (along stream banks) or artificial discharge points (groundwater wells).

Horizon Environmental Services (Horizon) conducted an online search of water well records at both the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ) for water wells located on and within a 0.5-mile radius from the project area. The records indicated no water wells within the project boundary and eight water wells south of the project boundary, likely related to former oil and gas well sites. Based on well drillers' records, water wells in the region draw water from the Chicot aquifer system, which yields water at depths greater than 60 feet in the vicinity of the project area (TWDB, 2024).

The results of this survey do not preclude the existence of abandoned wells that may be in the project footprint. If a water well or casing is encountered during construction, work should be halted near the feature until TCEQ is contacted.

All abandoned wells must be capped or properly abandoned according to the Administrative Rules of the Texas Department of Licensing and Regulation, 16 Texas Administrative Code (TAC), Chapter 76, effective 3 January 1999. A plugging report must be submitted (by a licensed water well driller) to the Texas Department of Licensing and Regulation, Water Well Drillers Program, Austin, Texas. If a well is intended for use, it must comply with rules stipulated in16 TAC §76.

The receiving stream for the proposed project, Hillebrandt Bayou (Segment 0704), is listed as an impaired water. Hillebrandt Bayou is listed as a Category 5c segment with depressed oxygen levels by the TCEQ (2024). The TCEQ is required, under Section 303(d) of the federal Clean Water Act, to identify water bodies for which effluent limitations are not stringent enough to implement water quality standards. Category 5c segment water bodies do not meet applicable water quality standards or are threatened for one or more designated uses by one or more pollutants, and a review of the water quality standards for this water body is conducted before a Total Maximum Daily Load (TMDL) is scheduled. The TCEQ monitors the condition of the state's surface waters and assesses the status of water quality every two years. The TCEQ also develops a schedule identifying TMDLs that will be initiated in the next two years for priority impaired waters. The TCEQ submits this assessment to the US Environmental Protection Agency (EPA). The report is also published on the TCEQ web site as the Texas Water Quality Inventory and 303(d) List (Inventory and List) (TCEQ, 2024). The Inventory assigns each assessed water body to one of five categories to provide information to the public, EPA, and internal agency programs about water quality status and management activities.

3.1.2.1 No-Action Alternative

The no-action alternative would not be expected to affect water resources or water quality.

3.1.2.2 Buyout Alternative

The buyout alternative would not be expected to affect groundwater water resources. The demolition of 1,024 structures could result in the release of pollutants and sediments that could adversely affect water quality in Hillebrandt Bayou.

3.1.2.3 Proposed Alternative

Runoff water quality entering Hillebrandt Bayou from the Benefit Area could be slightly increased due to retained runoff of sediment and nutrients in the detention basins. As more than 5 acres of land disturbance will occur, the project will be subject to the requirements of the Texas Pollutant Discharge Elimination System (TPDES), Construction Stormwater General Permit (TXR 150000). As such, JCDD6 will prepare a Stormwater Pollution Prevention Plan (SWPPP) and will file a Notice of Intent (NOI) with the TCEQ at least 48 hours prior to the start of construction. Monitoring and maintenance of emplaced Best Management Practices (BMPs) for stormwater management will be conducted on a regular basis as prescribed by the TPDES General Permit. The

proposed project would not adversely affect freshwater supply canals, sources, or water conservation projects in the region.

3.1.3 Floodplain Management (Executive Order 11988)

Executive Order 11988 mandates that all federal agencies shall provide leadership and take action to reduce the risk of flood loss; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains in carrying out their responsibilities for (1) acquiring, managing, and disposing of federal lands and facilities; (2) providing federally undertaken, financed, or assisted construction and improvements; and (3) conducting federal activities and programs affecting land use, including, but not limited to, water and related land resources planning, regulating, and licensing activities.

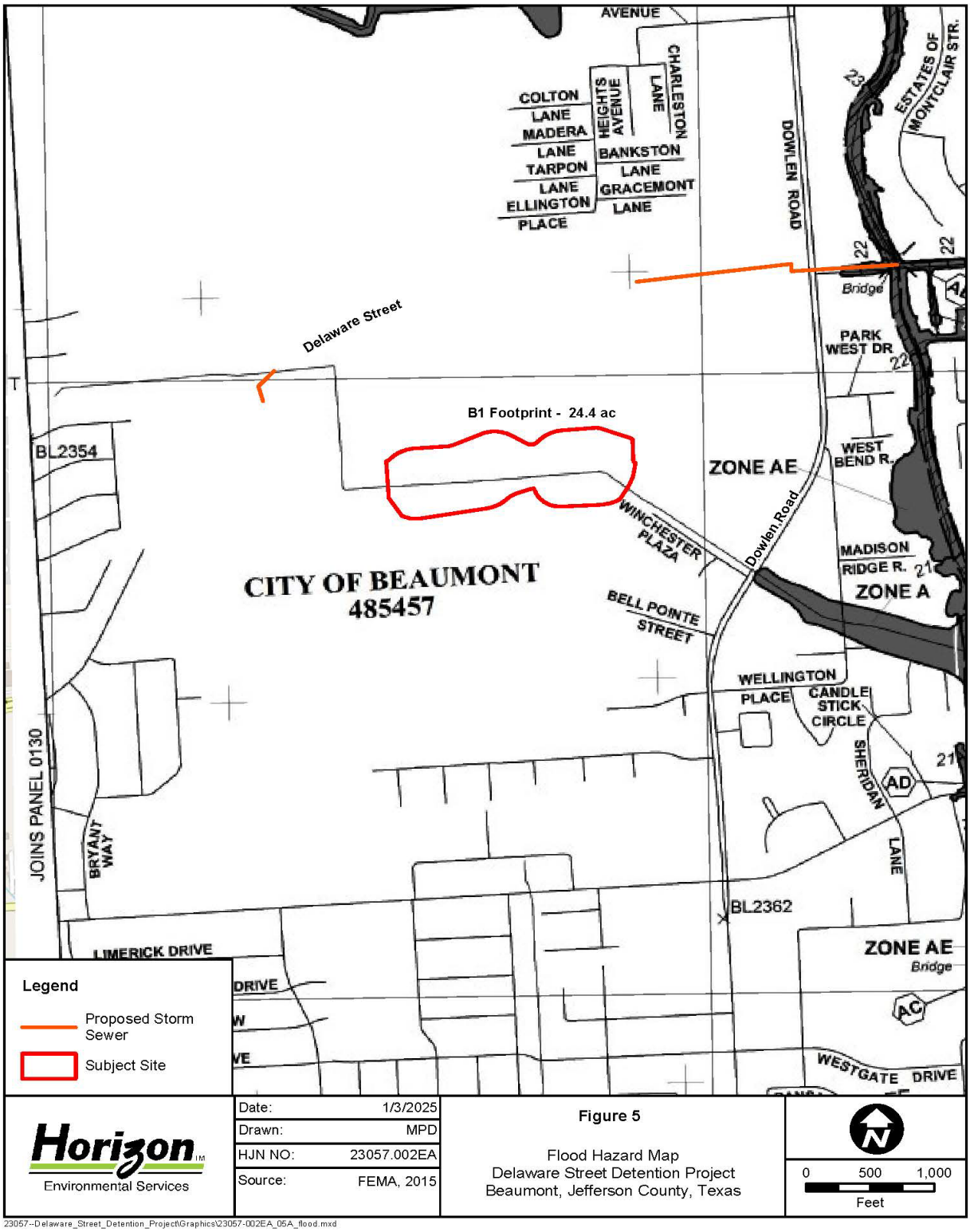
Before taking an action, each agency shall determine whether the proposed action will occur in a floodplain. For major federal actions significantly affecting the quality of the human environment, the evaluation would be included in any statement prepared under Section 102(2)(C) of the NEPA. The agency shall make a determination of the location of the floodplain based on the best available information.

There are many flood mitigation activities within areas of Jefferson County. The County has land use, building code, and permit authority over the land within its boundaries, including the authority to regulate development proposed within the special flood hazard areas designated on the county's Flood Insurance Rate Maps (FIRMs). The Applicant seeks to obtain a FEMA grant that would help reduce the flooding of existing structures in the Benefit Area.

According to FEMA Revised Preliminary FIRM panel number 48245C0135G, dated December 11, 2015, the majority of proposed improvements are located in Zone X (unshaded), which is an area that is not inundated by 100- or 500-year flooding (Figure 5). Small portions of the proposed storm sewer along the western portion of Delaware Street is located in the AE Floodway, area of 100-year flooding. Significant structure flooding in the Benefit Area occurs under moderate to heavy storm events due to the inadequacy of existing drainage and retention conveyances. The proposed improvements would provide a flood reduction benefit to all residential areas within the Benefit Area.

3.1.3.1 No-Action Alternative

The no-action alternative would not adversely affect the floodplain. However, the purpose of the proposed action to relieve flooding for numerous structures in Beaumont would not be realized, and repetitive losses would continue to occur.


AVENUE
CHARLESTON LANE
COLTON LANE
MADERA LANE
TARPON LANE
ELLINGTON PLACE
HEIGHTS AVENUE
BANKSTON LANE
GRACEMONT LANE
DOWLEN ROAD
ESTATES OF MONTCLAIR STR.
Bridge
PARK WEST DR
Delaware Street
B1 Footprint - 24.4 ac
BL2354
ZONE AE
WEST BEND R.
WINCHESTER PLAZA
Dowlen Road
MADISON RIDGE R.
ZONE A
CITY OF BEAUMONT
485457
BELL POINTE STREET
WELLINGTON PLACE
CANDLE STICK CIRCLE
SHERIDAN LANE
JOINS PANEL 0130
BRYANT WAY
BL2362
LIMERICK DRIVE
ZONE AE
Bridge
WESTGATE DRIVE
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Source: FEMA, 2015
Figure 5
Flood Hazard Map
Delaware Street Detention Project
Beaumont, Jefferson County, Texas
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3.1.3.2 Buyout Alternative

This alternative would not adversely affect the 100- or 500-year floodplain. The buyout alternative may restore some natural or beneficial functions of the floodplain by reducing impervious cover in the watershed. It would remove potential repetitive loss structures and infrastructure from areas that are subject to flooding.

3.1.3.3 Proposed Alternative

As mentioned previously, the Benefit Area suffers from frequent and severe structure flooding due to ponding of local runoff caused by an inadequate drainage system. The project has been carefully designed so that it will not aggravate any downstream flooding situations. The project will provide the greatest benefit to the most severely flooded areas in the local watershed. Frequent flooding presently occurs within the Benefit Area. The improvements would help retain floodwaters and relieve the frequent flooding within the Benefit Area. This project will not require a Letter of Map Adjustment (LOMA) or Letter of Map Revision (LOMR) since the majority of the Benefit Area is not within the 100-year floodplain.

The majority of the Benefit Area includes residential development. Significant amounts of land transformation have occurred in this area in the past due to historical agricultural uses and residential/commercial development with streets and other infrastructure. Residential development has not previously been restricted due to flooding issues since the majority of the Benefit Area is not within the mapped floodplain. The project is intended to reduce flooding hazards that exist for established residential development in the watershed. Therefore, it is not expected that this project will lead to other significant secondary impacts. The 8-step decision-making process for EO 11988 and 44 CFR Part 9 compliance is documented in Attachment 2.

JCDD6 must coordinate with the local floodplain administrator and obtain required permits prior to initiating work, including any necessary certifications that encroachments within the adopted regulatory floodway would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. JCDD6 must comply with any conditions of the permit to ensure harm to and from the floodplain is minimized. All coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.

3.1.4 Air Resources and Air Quality

Jefferson County is located in extreme southeastern Texas and exhibits a subtropical climate. Extremely high summer temperatures are rare due to sea breezes from the Gulf of Mexico, and winter cold temperatures are generally moderate due to the county's southern location. Average temperatures range from 52.5 degrees Fahrenheit (°F) in January to 82.5°F in August. Relative humidity is high due to the nearby Gulf of Mexico. Yearly rainfall averages 65 inches and is distributed unevenly throughout the year. Heavy rains associated with tropical disturbances generally strike the area from June through August. Eighty to 100 inches of precipitation have not been uncommon in certain areas over the past several years.

Jefferson County is currently unclassified or is in attainment of the National Air Quality Standards for all six criteria air pollutants. Therefore, general conformity rules for these standards do not apply. Two precursors to ozone formation are volatile organic compounds (VOCs) and nitrogen oxides (NOx). An increase of 100 tons per year for VOCs or NOx resulting from the proposed project could trigger general conformity analysis. However, the proposed project would be expected to be well below the 100 tons per year significance level.

3.1.4.1 No-Action Alternative

This alternative would not be expected to adversely affect ambient air quality.

3.1.4.2 Buyout Alternative

Demolition of purchased structures would be expected to have temporary impacts to air quality from fugitive dust and equipment exhaust. This alternative would not have any expected long-term adverse effects on air quality.

3.1.4.3 Proposed Alternative

During construction, if dry weather conditions prevailed, fugitive dust emissions could occur from equipment movements and earth-moving activities. Additionally, some minor and temporary exhaust emissions from equipment during construction could also occur, but the proposed project would have no long-term adverse effect on air quality.

To reduce the temporary impacts, contractors will be required to water down construction areas as needed in order to mitigate excess dust. To reduce emissions, vehicle running times on-site will be kept to a minimum and engines will be properly maintained.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 Terrestrial and Aquatic Environment

The surrounding area is generally characterized as residential and commercial development with a few undeveloped spaces. The basin sites are wooded or disturbed due to past oil and gas activity. Typical vegetation species include various trees such as water oak, loblolly pine, cedar elm, sugarberry, live oak, Chinese tallow, and juniper. Shrubs include yaupon, ligustrum, and wax myrtle.

Limited and temporary aquatic habitat is provided in the various drainage ditches, many of which are concrete-lined (see Section 3.2.2).

Attachment 4 provides representative on-site photographs of the project area and surrounding Benefit Area.

3.2.1.1 No-Action Alternative

The no-action alternative would not adversely affect terrestrial or aquatic habitats.

3.2.1.2 Buyout Alternative

The buyout of existing structures would not adversely affect terrestrial or aquatic habitats.

3.2.1.3 Proposed Alternative

The proposed detention basin will be cleared of existing trees, shrubs, and herbaceous vegetation for construction. Approximately 24.4 acres of existing vegetation will be cleared in the basins. The construction of the underground drainage utilities will largely be in street ROWs with no significant vegetation removal. The disturbed areas will be revegetated with herbaceous species following construction.

3.2.2 Wetlands (Executive Order 11990)

Executive Order 11990 provides that, in order to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative, all federal agencies shall provide leadership and shall take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of federal lands and facilities; (2) providing federally undertaken, financed, or assisted construction and improvements; and (3) conducting federal activities and programs affecting land use, including, but not limited to, water and related land resources planning, regulating, and licensing activities. Under the Clean Water Act (CWA), the US Army Corps of Engineers (USACE) is the regulatory authority for the discharge of dredged or fill material into "waters of the United States" (WOTUS), including jurisdictional wetlands, pursuant to Section 404 of the CWA.

According to the National Wetlands Inventory (NWI) map (USFWS, 2025), the proposed detention basin may contain forested wetlands (PFO1A) and excavated ditches (R2UBHx) (Figure 6). The PFO1A signature areas were noted to contain dense yaupon and ligustrum undergrowth which is often mischaracterized as wetlands from aerial photo interpretation.

A field reconnaissance conducted in the proposed detention basin area and interpretation of aerial photography did not identify any wetland areas within the project footprint (Figure 7). One man-made ditch in the project footprint is excavated in uplands and drains only uplands, and thus is considered non-jurisdictional.

3.2.2.1 No-Action Alternative

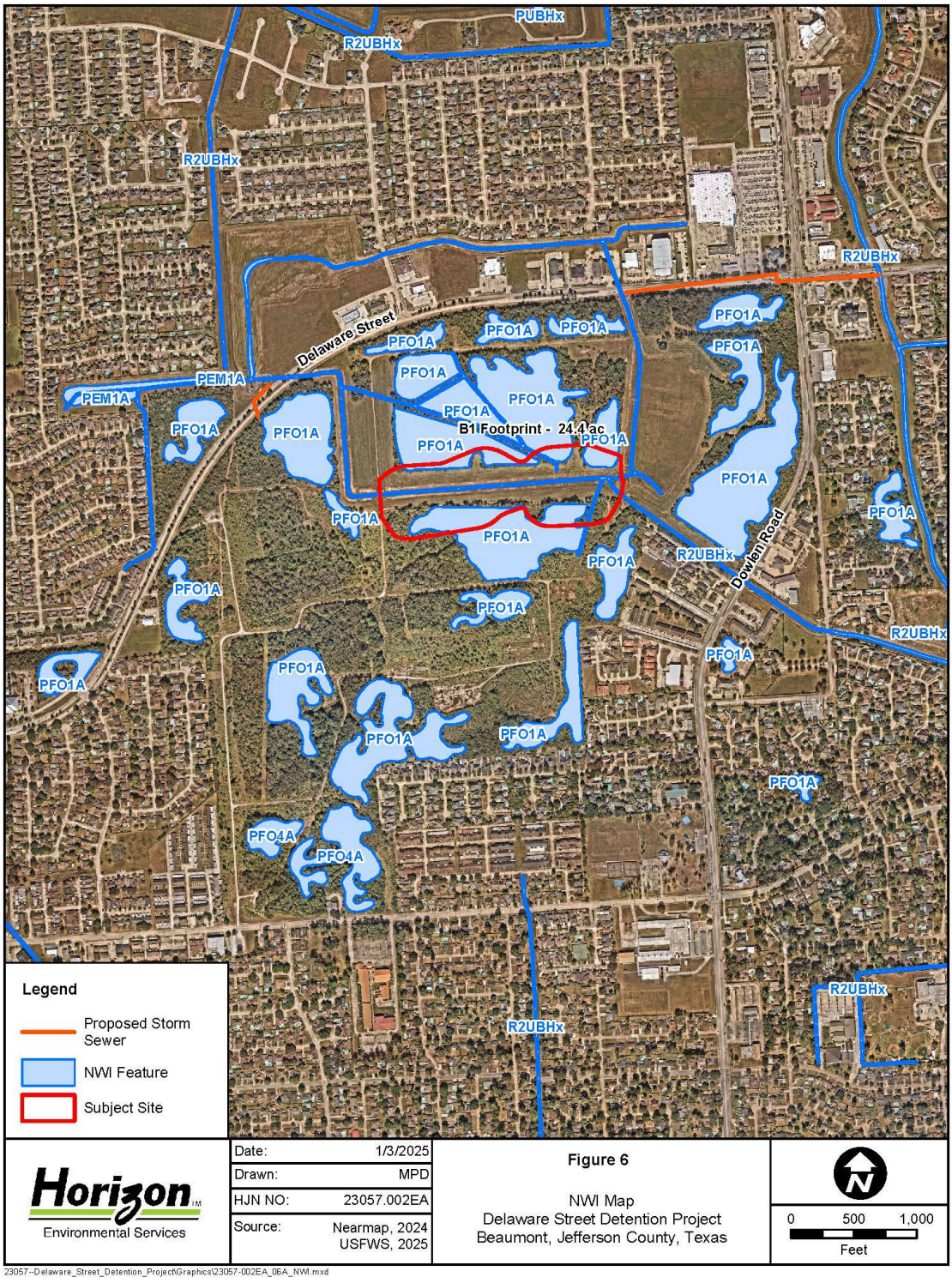
The no-action alternative would not adversely affect wetlands or other WOTUS.

3.2.2.2 Buyout Alternative

The buyout of existing structures would not adversely affect wetlands or other WOTUS.

3.2.2.3 Proposed Alternative

JCDD6 is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the USACE and/or any Section 401/402 Permit(s) from the State prior to initiating work and complying with all permit conditions. However, the proposed drainage improvements will not affect any areas determined to be jurisdictional under Section 404 of the CWA. No jurisdictional wetlands or WOTUS were identified within the proposed construction areas. A request for jurisdictional verification has been made to the USACE and their response remained pending at the time of the issuance of this Draft EA (Attachment 5).


PUBHx
R2UBHx
R2UBHx
R2UBHx
Delaware Street
PEM1A
PEM1A
PFO1A
PFO1A
PFO1A
PFO1A
PFO1A
PFO1A
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PFO1A
PFO1A
PFO4A
PFO4A
B1 Footprint - 24.4 ac
Dowlen Road
R2UBHx
R2UBHx
R2UBHx
R2UBHx
R2UBHx
Legend
Proposed Storm Sewer
NWI Feature
Subject Site
Horizon
Environmental Services
Date: 1/3/2025
Drawn: MPD
HJN NO: 23057.002EA
Source: Nearmap, 2024
USFWS, 2025
Figure 6
NWI Map
Delaware Street Detention Project
Beaumont, Jefferson County, Texas
N
0 500 1,000
Feet
23057--Delaware_Street_Detention_Project\Graphics\23057-002EA_06A_NWI.mxd

FIGURE 7
JURISDICTIONAL DETERMINATION
DELAWARE STREET DETENTION PROJECT
BEAUMONT, TEXAS

Horizon
Environmental Services

3.2.3 Threatened or Endangered Species and Critical Habitat

Federally listed threatened or endangered (T/E) species of potential occurrence in Jefferson County include the eastern black rail (*Laterallus jamaicensis*), piping plover (*Charadrius melodus*), rufa red knot (C*alidris canutus rufa*), whooping crane (*Grus americana*), green sea turtle (*Chelonia mydas*), Atlantic hawksbill sea turtle (*Eretmochelys imbricata*), Kemp's ridley sea turtle (*Lepidochelys kempii*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*) (USFWS, 2025). The US Fish and Wildlife Service (USFWS) additionally lists two proposed species of potential occurrence in Jefferson County including the tricolored bat (*Perimyotis subflavus*) and the monarch butterfly (*Danaus plexippus*).

There is no designated critical habitat for any listed species within this portion of Jefferson County.

Birds

Piping plover habitat in Texas consists of sandy beaches and lakeshores that provide marine worms, flies, beetles, spiders, crustaceans, mollusks, and other small marine

invertebrates during the over-wintering portion of their migration. None have been reported from the project area, and no suitable habitat is present.

The rufa red knot has similar distribution and habitat preferences to the piping plover. No red knots have been reported in the project vicinity and suitable habitat is not present.

The eastern black rail inhabits fresh and saltwater marshes and wet meadows. The project area does not contain marshes or wet meadows that would typically be associated with the species; therefore, the species would not be expected to be impacted by the project as currently proposed.

The whooping crane winters on the Texas coast, primarily along the central coast, utilizing salt marshes and agricultural fields for foraging on crabs, crayfish, and other crustaceans. Whooping cranes have occasionally been seen in Jefferson County during winter migration. The highly developed nature of the project area would not provide foraging habitat for whooping cranes and the species would not be expected to be impacted by the project as currently proposed.

Sea Turtles

All five federally listed sea turtle species are known to occur sporadically along the Texas Coast in bays and along the Gulf shore. Sea turtles do not occur upstream of saltwater influence and would not be affected by the proposed project.

Proposed Species

The tricolored bat (TCB) and the monarch butterfly are currently listed as proposed species.

The TCB occurs in forests, woodlands, and riparian areas. Most foraging occurs in riparian areas. Caves are important to this species. Roosts probably occur in tree foliage, caves, mines, and rock crevices. Potentially suitable woodland habitat for the TCB was observed on the project area.

The preferred forage species for the proposed monarch butterfly, milkweed (*Asclepias* spp.), was not observed in the project area during the site reconnaissance, and impacts to the proposed species are not expected to occur with the proposed project.

3.2.3.1 No-Action Alternative

The no action alternative would not affect habitat for any listed, proposed, or candidate species; therefore, the no-action alternative would not affect listed species.

3.2.3.2 Buyout Alternative

The buyout and demolition of existing structures would not affect habitat for any listed, proposed, or candidate species; therefore, the buyout alternative would have no effect on listed species.

3.2.3.3 Proposed Alternative

Based on a review of the species' habitat requirements, the TCB and monarch's wide range and distribution, and the scope of the proposed project, FEMA has determined that the proposed action is not likely to jeopardize the continued existence of these proposed species.

To evaluate the effects of the action on TCB, the project proponent's consultant (Horizon) entered the project through the Service's Information for Planning and Consultation (IPaC) Beta Determination Key (Ecosphere project code 2025-0001875), which resulted in a "may affect" determination (Attachment 6). However, due to the fact that only 10 acres of trees are proposed for removal, JCDD6 proposes implementation of conservation measures to reduce effects to TCB. JCDD6 also reviewed the potential suitable TCB habitat as outlined in the Draft Consultation Guidance for Construction Projects using the "clamped grid" approach (USFWS 2024) and estimated 10 acres of potential TCB roosting and foraging habitat would be removed from the action area (Attachment 6). The proposed project area intersects one 0 to 9.9% forest density category grid (USFWS 2024) and the amount of trees to be removed is 10 acres greater than the threshold in that grid. However, the action area is surrounded by residential neighborhoods and commercial operations with significant human disturbances and noise, the project site is located greater than 0.5 miles from a known bat hibernaculum, and there are no permanent water sources in the action area. These characteristics are likely to deter TCB occurrence in the action area (Lehrer et al., 2021). Although it is possible that TCB may fly through, forage, or roost in the action area, the applicant will be implementing seasonal clearing restrictions to avoid interactions with maternal colonies and pups during extreme winter temperatures.

To reduce effects of the proposed project on TCB, the JCDD6 will voluntarily implement the following species-specific conservation measures:

- JCDD6 will avoid clearing trees during the active pup season (15 May to 15 July) when flightless pups may be present.
- Within the portion of the TCB range where bats remain active year-round and continue to roost in trees during the winter, and where mean winter temperatures fall below 40 degrees Fahrenheit (°F) (4.4 degrees Celsius [°C]) for 3 consecutive days between 15 December and 15 February, JCDD6 will immediately halt tree clearing activities until temperatures remain above 40°F (4.4°C) for a 24-hour period after the initial temperature drop.

Critical habitat is not present within the project area; therefore, the proposed alternative will not adversely modify any critical habitat.

In compliance with the Migratory Bird Treaty Act, JCDD6 will limit vegetation management work during the peak migratory bird-nesting period of March through August as

much as possible to avoid destruction of individuals, nests, or eggs. If vegetation reduction activities must occur during the nesting season, applicant will deploy a qualified biological monitor with experience conducting breeding bird surveys to survey the vegetation management area for nests prior to conducting work. The biologist will determine the appropriate timing of surveys in advance of work activities. If an occupied migratory bird nest is found, work within a buffer zone around the nest will be postponed until the nest is vacated and juveniles have fledged. The biological monitor will determine an appropriate buffering radius based on species present, real-time site conditions, and proposed vegetation management methodology and equipment. For work near an occupied nest, the biological monitor would prepare a report documenting the migratory species present and the rationale for the buffer radius determination and submit that report to FEMA for inclusion in project files.

3.2.4 Coastal Zone Management

The project does not lay within the Coastal Zone Management (CZM) boundary of Texas (Figure 8).

3.2.4.1 No-Action Alternative

The no-action alternative would not affect significant resources within the Coastal Zone.

3.2.4.2 Buyout Alternative

The buyout alternative would not affect significant resources within the Coastal Zone.

3.2.4.3 Proposed Alternative

The proposed alternative would not affect significant resources within the Coastal Zone. The Texas General Land Office (GLO) has been contacted regarding Coastal Zone effects (Attachment 3). GLO confirmed in a March 24, 2025, response that the project is not located within the coastal zone and a federal consistency review is not required.

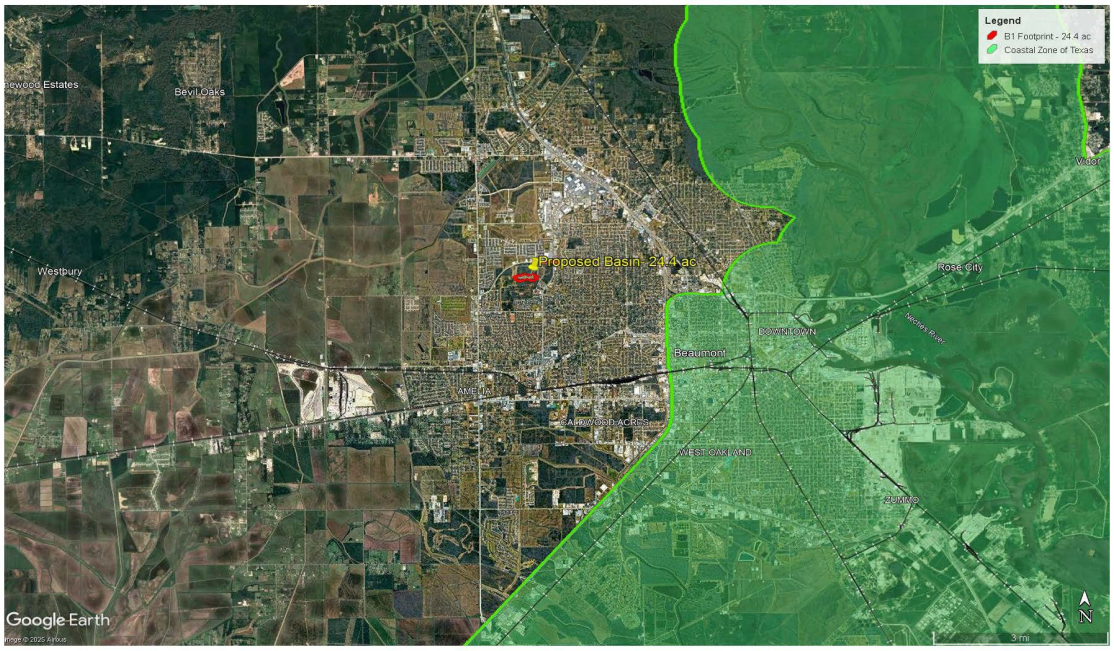

FIGURE 8
PROJECT IN RELATION TO COASTAL ZONE OF TEXAS
DELAWARE STREET DETENTION PROJECT
BEAUMONT, TEXAS

Horizon Environmental Services

3.2 HAZARDOUS MATERIALS

Horizon commissioned Environmental Risk Information Services (ERIS) of Austin, Texas, to review state and federal agency records required by ASTM Practice E1527-21. ERIS conducted its data search using minimum search distances outlined in the ASTM standard (ASTM, 2021). ERIS's search results for Standard Environmental Records can be found within its complete Database Report provided in Attachment 7.

ERIS found seven (7) records in the database search in the vicinity of the project area. One record was a leaking petroleum storage tank (LPST) located at Gators West, 2890 Dowlen Road (0.42 miles from the project area). The records indicate that groundwater was impacted but with no apparent threats or impacts to receptors. Another record was an inactive or no longer registered Resource Conservation and Recovery Act (RCRA) or non-RCRA facility (HIST RCRA NONRCRA) identified as the CVS Pharmacy at 2950 Dowlen Road (0.49 miles from the project site). The records indicate this registration is inactive. ERIS also noted five (5) historical listings of facilities that store hazardous chemicals and are required to report them under the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 (TIER 2). These sites are not specifically identified but are shown on the map as 0.07 miles south of the proposed basins and are likely related to historical oil and gas production on the larger property on which the basins are located.

Railroad Commission of Texas (RRC) records were investigated to determine the presence of active natural gas, crude oil, or refined product pipelines, as well as oil or gas wells that may exist on or within 1000 feet from the Property. The records reviewed indicated the presence of several plugged oil and gas wells within and adjacent to the proposed basin as well as numerous pipeline corridors crossing the basin site (RRC, 2025) (Figure 9). Historical aerial photography reviewed between 1987 and present indicates oil and gas activity on and surrounding the project area, with three or four potential oil/gas well sites and numerous pipelines evident within the basin site (Figure 10). No active wells were observed during Horizon's field reconnaissance, but numerous pipeline corridors and previous site disturbances likely related to oil and gas activity, as well as several existing groundwater monitoring wells, were evident in the area.

Horizon also reviewed site investigation reports prepared by InControl Technologies (IT) for the 366-acre property within which the project is located regarding potential hazardous materials (IT, 2022 and 2023). The 2022 Site Investigation report referenced a previous Phase I Environmental Site Assessment (ESA) by Timberwolf Environmental in May of 2017 that concluded the historical oil and gas activity on the property represented recognized or potential recognized environmental conditions (RECs), noting numerous wells, tank batteries, pits, and compressor/separator stations. IT (2022) also noted that Timberwolf Environmental had additionally conducted limited Phase II ESA investigations in September and October of 2017 and concluded that the historical oil and gas activities had affected soil and/or groundwater.


Delaware Street
B1 Footprint - 24.4 ac
Dowlen Road
NATURAL GAS
CRUDE OIL
Legend
Permitted Location
Dry Hole
Oil Well
Oil/Gas Well
Plugged Oil
Plugged Gas
Canceled/Aband... Location
Plugged Oil/Gas Well
Shut In Gas
Pipelines
Proposed Storm Sewer
Subject Site
Horizon Environmental Services
Date: 1/3/2025
Drawn: MPD
HJN NO: 23057.002EA
Source: Nearmap, 2024 RRC, 2025
FIGURE 9
Oil and Gas Wells and Pipeline Map
Delaware Street Detention Project
Beaumont, Jefferson County, Texas
0 500 1,000
Feet
23057--Delaware_Street_Detention_Project\Graphics\23057-002EA_08A_Oil.mxd

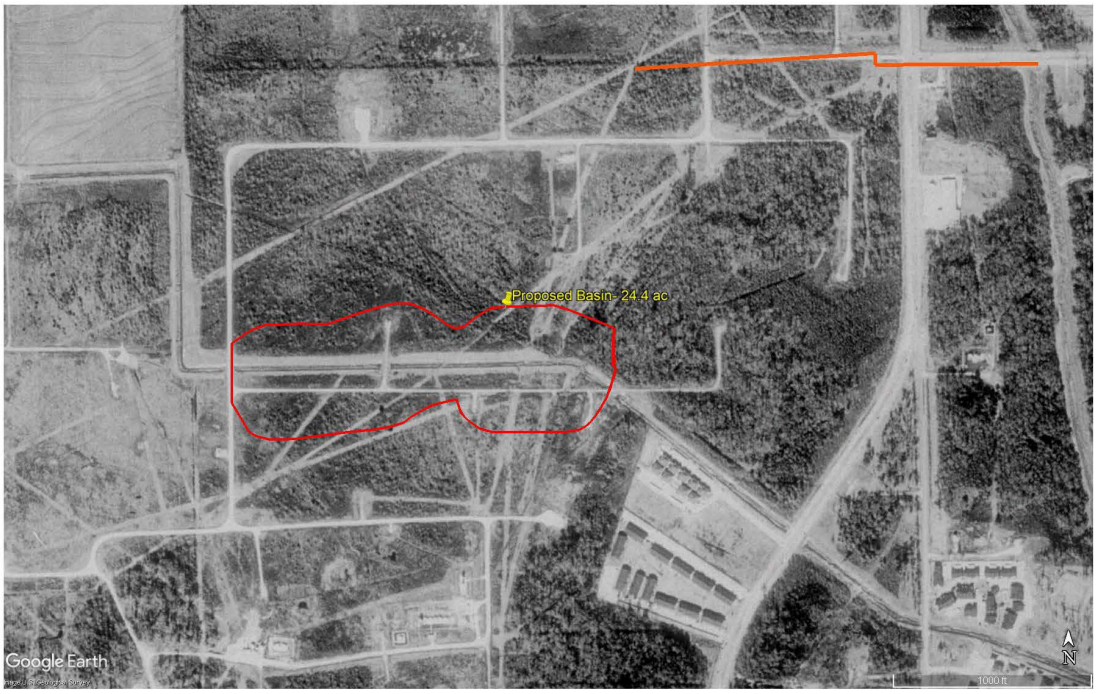

FIGURE 10
OIL AND GAS ACTIVITY (1989)
DELAWARE STREET DETENTION PROJECT
BEAUMONT, TEXAS

Horizon
Environmental Services

IT's additional site assessment in 2022 provided soil and groundwater sampling at additional sites within the property to further define and characterize potential contamination areas. Results of these analyses indicated soil and shallow groundwater contamination by total petroleum hydrocarbons (TPH) and chlorides. A number of sampling sites also had exceedances of TCEQ Tier 1 Protective Concentration Limits (PCLs) for residential soils of various RCRA metals in soil, including arsenic, barium, cadmium, lead, and mercury. IT recommended additional soil and groundwater sampling to delineate elevated TPH and chlorides in soils and groundwater and additional soil sampling around wellhead locations within the project area to better delineate mercury contamination.

IT conducted additional soil and groundwater sampling in January of 2023 per the recommendation above. Elevated TPH and chlorides were again detected in soils and shallow groundwater at various locations. Additional samples for barium and mercury indicated that the concentrations were within naturally occurring limits. IT recommended that a soil remediation plan be developed for TPH and chlorides. They also recommended that any soils excavated from the site be additionally tested for TPH to make sure they met criteria for disposal on-site or at other locations.

3.3.1 No-Action Alternative

The no-action alternative would not contribute to potential downstream pollution as a result of any identified sources of pollution in the project area.

3.3.2 Buyout Alternative

The buyout and demolition of structures in the Benefit Area has the potential to encounter and potentially release asbestos, lead-based paint, and other potentially hazardous household, lawn, or agricultural chemicals that might be stored on these properties into the environment.

3.3.3 Proposed Alternative

The proposed alternative has the possibility to uncover hazardous substances during excavation activities due to identified sources of potential pollution in the project area, particularly TPH and chlorides. In the event potential contaminants (or evidence thereof) are discovered during implementation of the project, the TCEQ shall be notified, and the applicant shall handle, manage, and dispose of petroleum products, hazardous materials, and toxic waste in accordance with the requirements and to the satisfaction of the governing local, state, and federal agencies.

3.4 SOCIOECONOMICS

US Census Bureau estimates for 2021 indicate a population of 115,000 for the City of Beaumont (DataUSA, 2024). A demographic profile of the area shows that approximately 29.4% of the population is reported as white, 45.8% as Black, 19.2% as Hispanic, and 5.6% as other. The project is not expected to affect the population of the area.

Local employment in the City of Beaumont is dominated by healthcare, retail trade, and construction (DataUSA, 2024). The median household income is reported as $51,248 (2023) and is approximately $11,595 less than the US average.

3.4.1 Zoning and Land Use

The majority of the project area is within the city limits of Beaumont and is affected by the City's development and zoning laws. The surrounding area is generally developed for residential, commercial, and retail uses.

3.4.2 Visual Resources

The proposed project area is adjacent to residential development and open spaces with commercial and retail development along the major roadways.

3.4.3 Noise

The project location is currently open space with nearby residential development. Existing noise is generally generated by traffic on residential and connector streets and is noise associated with residential areas. The noise level is generally low to moderate.

3.4.4 Public Services and Utilities

Public services and utilities are provided to local residents by the City of Beaumont, Entergy, and JCDD6. Residential streets and arterials are maintained by the City.

3.4.5 Traffic and Circulation

Major transportation arteries in the area include Major Drive, Delaware Street, Dowlen Road, and Gladys Avenue. Temporary traffic diversions or congestion may be necessary during mobilization for the project construction, particularly on Delaware Street where new drainage facilities will be constructed.

3.4.6 Safety and Security

The property within the project area is privately owned and currently undeveloped. JCDD6 will purchase fee titles or obtain easements for the facilities. Current safety issues in the area include construction traffic traversing residential and arterial streets as necessary for construction of the facilities. The completed facilities (basin) will be fenced.

3.4.7 No-Action Alternative

The no-action alternative will not provide relief of concerns for property, health, and welfare protection during flood events. Continued flooding of structures in the Benefit Area would continue to place a burden on local, state, and federal flood relief resources and would also continue to depress property values. The no-action alternative has a cost of nearly $38 million in repetitive damages.

3.4.8 Buyout Alternative

The buyout alternative would remove 1,024 private properties from the local tax rolls with a substantial loss in future tax revenues to local governments and service providers. The buyout alternative would cost more than $284,000,0000.

3.4.9 Proposed Alternative

The project yields $53,824,268 in benefits (avoided damages). The proposed project alternative has a total cost of $13,181,257 with a benefit-cost ratio of 4.08.

The proposed project would not significantly affect or change current land uses. The site selected for the detention basin is currently vacant land. Surrounding areas would remain in their current residential and commercial uses.

Visual resources (aesthetics) are not expected to be significantly changed by the proposed drainage improvements. The selected detention basin site is currently partially wooded with an excavated drainage ditch and would be converted to an open, excavated grassy area.

The only anticipated significant noises associated with the project would be due to heavy equipment operation during the construction phase. Following construction activities, there would be no noise-generating activities at the site other than occasional mowing. To minimize the effects of elevated noise levels during construction, construction activities will take place during normal business hours. No equipment or machinery will be installed at the proposed project site.

The proposed project is not expected to impede the access of nearby residents to any public services. There may be temporary traffic congestion due to construction activities, particularly along Delaware Street, where new underground storm sewers will be constructed. Appropriate construction barricades and signage will be utilized during construction. There will be no anticipated impediments to traffic due to the operation of the proposed drainage improvements.

The benefits of the proposed project are expected to be proportional to all residents in the Benefit Area. No existing residential properties or structures will be eliminated by the project.

No significant safety or security issues are expected with the proposed project. The appropriate signage and barriers will be in place prior to construction activities to alert pedestrians and motorists of project activities.

3.5 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, requires federal agencies “to take into account” the “effect” that an undertaking would have on historic properties. Historic properties are those included in or eligible for inclusion in the National Register of Historic Places (NRHP) and may include archeological sites, buildings, structures, sites, objects, and districts. In accordance with the Advisory Council on Historic Preservation regulations pertaining to the protection of historic properties (36 CFR 800.4), federal agencies are required to identify and evaluate historic resources for NRHP eligibility and assess the effects that the undertaking would have on historic properties. Additionally, since the proposed improvements would be sponsored by a subdivision of the state, the project is also regulated by the Antiquities Code of Texas (ACT).

To assess the potential for intact, significant cultural resources within the Area of Potential Effect (APE) of the proposed project, Horizon conducted an archival review of the project area. The archival review consisted of a review of existing maps and records to determine the degree of prior disturbances in the area, the potential for intact cultural deposits, and the presence

or absence of significant cultural resources. The APE for the project was the extent of disturbance for the project (approximately 24 acres). The APE is shown on Figure 1.

3.5.1 Archival Research

Environmental Setting

The project area is situated within the city limits of Beaumont, Texas. The proposed stormwater detention pond tract has remained largely undeveloped except for historical agricultural and oil and gas activity and is currently characterized by forest and an open, excavated drainage ditch. The proposed storm sewer pipeline segments are located within the existing ROW of Delaware Street. No natural streams traverse the project area.

Geologically, the project area is underlain by the Beaumont Formation (Qbc) (USGS 2025). The Beaumont, or Prairie, terrace is the youngest continuous coastwise terrace fronting the modern Gulf (Abbot 2001). The Beaumont Formation consists of clay, silt, and fine sand arranged in spatial patterns that reflect the distribution of fluvial (e.g., channel, point bar, levee, and backswamp) and mudflat/coastal marsh facies (Van Siclen 1985). Sandy deposits associated with littoral facies are also frequently considered part of the Beaumont. Many investigators (cf. DuBar et al. 1991; Fisk 1938, 1940) have correlated the Beaumont terrace with the Sangamon Interglacial (ca. 130 to 75 thousand years ago [kya]), although age estimates range from Middle Wisconsinan (Alford and Holmes 1985) to 100 to 600 kya (Blum and Price 1994). While debate about the temporal affiliations of and correlations among the deposits that underlie the major coastline terraces remain active, they are of little direct geoarcheological relevance because virtually all investigators agree that these deposits considerably predate the earliest demonstrated dates of human occupation in North America.

Soils within the project area consist of a mosaic of loamy fluviomarine deposits of Pleistocene age associated with the Labelle and Morey soil units and urban land, which consist of various historical and modern artificial fills deposited to provide a level grade for urban and suburban construction (Figure 4) (NRCS 2025). The majority of the project area is characterized by natural fluviomarine sediments of Pleistocene age. No alluvial sediments or natural soils of Holocene age are mapped within the project area.

Previously Recorded Archeological Sites and Cemeteries

Records on file on the Texas Historical Commission's (THC) online Texas Archeological Sites Atlas (TASA) and Texas State Historical Association (TSHA) databases were examined for information on previously recorded archeological sites and previous archeological investigations conducted within a 1.0-mile radius of the project area (THC 2025). This archival research revealed that no previously recorded archeological sites, cemeteries, or historic properties listed on the NRHP or designated as State Archeological Landmarks (SALs) are present within 1.0 mile of the project area.

Historical Map Research

Examination of historical US Geological Survey (USGS) topographic maps dating from 1932 to the present and aerial photographs dating from 1930 to the present indicate that several standing structures of historic age (i.e., 50 years of age or older) are or were formerly present within the project area (NETR 2025).

Numerous oil and gas wells sites, storage tanks, and pipelines are visible on historical USGS maps dating from 1962 to the present in the area. No structures of historic age are visible on historical imagery within the proposed stormwater detention basin tract or along either of the proposed storm sewer lines. Historical land use within the project area has been predominantly agricultural since at least the early 20th century, though the agricultural fields were abandoned in the 1980s; by 1989, the detention basin tract has become partially overgrown in forest vegetation and a drainage ditch extended through the site. Delaware Street was constructed in the late 1990s to early 2000s, though an earlier roadway ran along the east-to-west-oriented segment of Delaware Street extending westward from Dowlen Road as early as the 1950s. Oil and gas extraction and storage activities have also occurred within the stormwater detention basin tract since the early 20th century. Development in the area surrounding the project area is predominantly residential.

Previous Cultural Resources Surveys

According to the THC's online TASA database, one prior cultural resources survey has been conducted within one of the project area segments (THC 2025). The ROW of an artificial irrigation ditch that flows north to south across Delaware Street at the eastern end of the Delaware Street stormwater sewer segment of the project area was surveyed for cultural resources. The date and purpose of this survey are unknown, and there is no technical report available in the THC's TASA database. This survey covered only the easternmost terminus of the Delaware Street stormwater sewer segment of the project area. The remaining segments of the project area have not been surveyed for cultural resources.

3.5.2 Assessment of Cultural Resources Potential

In Southeast Texas, aboriginal cultural resources are relatively common on alluvial terraces adjacent to prominent rivers, creeks, and springs, as well as in upland settings. While significant aboriginal sites may occur at great depths adjacent to streams that contain deep Holocene-age alluvial packages, deeply buried aboriginal sites are uncommon in upland areas. In upland settings, aboriginal sites tend to be constrained to the modern ground surface or in shallowly buried contexts and subject to erosive processes.

Based on the physiographic setting of the project area on an undeveloped coastal flat surrounded by residential neighborhoods and industrial facilities that is set well away from natural water bodies, it is Horizon's opinion that there exists a low potential for undocumented prehistoric archeological resources within the boundaries of the project area.

Historic-age cultural resources may occur in virtually any physiographic setting but are most common in urban settings and in rural areas suitable for agriculture. Based on the presence of historic-age oil and gas objects within the project area's boundaries on historical aerial photographs and topographic maps, it is Horizon's opinion that there exists at least a moderate potential for historic-age architectural and/or archeological resources within the boundaries of the project area.

3.5.3 No-Action Alternative

The no-action alternative would have the continued possibility to result in flood damage to any potentially significant historical properties that may exist in the Benefit Area. No impacts to prehistoric resources would be anticipated.

3.5.4 Buyout Alternative

The buyout alternative would not likely affect prehistoric cultural resources since no significant ground disturbance would be involved in previously undisturbed areas. However, none of the 1,024 structures to be bought out and torn down in the Benefit Area has been evaluated for historic significance. That evaluation would need to be conducted to determine the level of impact that might occur.

3.5.5 Proposed Alternative

It is Horizon's opinion that no cultural resources determined to be eligible for listing on the NRHP will be affected by the project. The proposed project has been coordinated with the THC, the State Historic Preservation Office (SHPO). Correspondence documenting coordination activities with the THC-SHPO is included in Attachment 8. The THC's concurrence of no historic properties affected is also included in Attachment 8.

In accordance with 36 CFR §800.2(c)(2)(i)(B), FEMA conducted tribal consultations with federally recognized Indian tribal governments with interest to exchange information, receive input, and consider their views on actions that have tribal implications (Attachment 8). Consultation with the Alabama-Coushatta Tribe of Texas, Jena Band of Choctaw Indians, Kiowa Indian Tribe of Oklahoma (Kiowa Tribe), and Tonkawa Tribe of Indians of Oklahoma was conducted per 36 CFR §800.2(c)(2)(i)(B), dated April 2, 2025. Tribes are given 30 days to respond and or identify possible historic properties effected by this Project. At the time of issuance of the Draft EA, the Alabama-Coushatta Tribe of Texas, Jena Band of Choctaw Indians, Kiowa Indian Tribe of Oklahoma (Kiowa Tribe), and Tonkawa Tribe of Indians of Oklahoma had not provided comments. Should comments be received during the remainder of the 30 day comment period, FEMA will address accordingly at that time as part of the completion of the environmental and historic preservation compliance review.

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 JCDD6, and access to the sensitive area will be restricted by JCDD6. JCDD6 will inform FEMA immediately, and FEMA will consult with the 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 NHPA and its implementing regulations.

4.0 CUMULATIVE IMPACTS

An assessment of cumulative impacts takes into consideration the consequences that past, present, and reasonably foreseeable future projects have had, have, or will have on an ecosystem. Every project must be considered on its own merits. However, its impacts on the environment must be assessed in light of historical activity, along with anticipated future activities in the area. Although a particular project may constitute a minor impact in itself, the cumulative impacts that result from a large number of such projects could cause significant impairment of natural resources.

Cumulative impacts can result from many different activities, including the introduction of materials into the environment from multiple sources, repeated removal of materials or organisms from the environment, and repeated environmental changes over large areas and long periods. More complicated cumulative effects occur when stresses of different types combine to produce a single effect or accumulation of effects. Large, contiguous habitats can become fragmented, making it difficult for organisms to locate and maintain populations between disjunctive habitat fragments. Cumulative impacts may also occur when the timing of perturbations are so closely spaced that their effects overlap.

4.1 NO-ACTION ALTERNATIVE

The no-action alternative would not have any additive effects to other regional impacts to environmental resources. However, the continued flooding and cost of responses and damages in the Benefit Area would continue to contribute to regional financial and socioeconomic impacts.

4.2 BUYOUT ALTERNATIVE

The buyout alternative would not have many additive effects to other regional impacts to environmental resources. However, this alternative would temporarily affect regional air quality due to emissions of fugitive dust and equipment exhaust during demolition of purchased residences and outbuildings. The potential also exists for the encounter and release of toxic or harmful materials during the demolition process that could include asbestos, lead-based paint, and other potentially hazardous household or agricultural chemicals into the soil, surface water, and groundwater. These materials could temporarily affect air or surface water quality. These impacts would generally be short-term in nature.

The only long-term effect that would contribute to regional cumulative effects would be the loss of at least 1,024 private properties from the local tax rolls, with a substantial loss in future

tax revenues to local governments and service providers as well as the displacement of those residents.

4.3 PROPOSED ALTERNATIVE

The primary purpose of the proposed project is to reduce potential future flood damage to existing structures in the Benefit Area. The project is not intended to provide for increased development potential in the area since the Benefit Area is almost entirely developed. Therefore, it is not expected that this project will lead to other significant secondary impacts.

The proposed drainage improvement project will have minimal impacts to natural resources. These impacts include temporary disturbance to about 24 acres of vacant land in an area that consists largely of residential and commercial/retail development. The disturbed areas would be revegetated and maintained as open space.

No prime farmland soils will be affected. The NRCS has been contacted to evaluate the proposed project for impacts to prime farmland soils under requirements of the FPPA (Attachment 1). The project area is classified as “land committed to urban development” and would be expected to be exempt from the provisions of the FPPA. The response from the NRCS is included in Attachment 1.

The project may affect the tricolored bat, a species proposed for listing as endangered. Approximately 10 acres of woodland habitat that could provide roosting habitat for tricolored bats will be cleared for the project. The USFWS has determined that this impact could adversely affect the bat. Conservation measures, including timing restrictions for clearing, are proposed to compensate for loss of potential habitat resources. Approximately 300 acres of potentially suitable roosting habitat for the tricolored bat will remain within the immediately surrounding area of the project basin. The remainder of the area beyond that is largely developed for residential or commercial purposes, with minimal remaining woodland habitat. The future of the remaining habitat is uncertain, but could be further reduced if additional development takes place by the landowner.

The proposed project does not have any other impacts that are of such significance as to add materially to cumulative impacts in the region. Impacts are summarized in Table 1.

5.0 PUBLIC PARTICIPATION

A Notice of Availability for the Draft Environmental Assessment will be published in the *Beaumont Enterprise* (Attachment 9) and on JCDD6’s website (https://dd6.org/public-notices-news/) requesting public comments. The Draft EA will be made available on JCDD6’s website, in hard copy at Beaumont Public Library and the JCDD6 Office, and upon request electronically or in hard copy from FEMA. The public comment period will last for 30 days upon publication of the initial public notice. FEMA will consider and respond to all public comments in the Final EA. If no substantive comments are received, the Draft EA will become final and a FONSI will be issued for the project.

6.0 CONSULTATIONS

Consultation letters to resource agencies such as the NRCS (Attachment 1), TPWD, TCEQ, TWDB, and GLO (Attachment 3), USFWS (Attachment 6), and the THC-SHPO and Tribes (Attachment 8) are provided.

7.0 LIST OF PREPARERS

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Greg Sherrod, Senior Environmental Project Manager, Horizon Environmental Services

Doug Canant, Acting District Manager, Jefferson County Drainage District No. 6

Government Contributors

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Dorothy Cook, Senior Environmental Specialist, FEMA Region 6

TABLE 1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES
AND MITIGATION MEASURES FOR THE
PROPOSED DELAWARE STREET DETENTION PROJECT

RESOURCE	ANTICIPATED EFFECTS	MITIGATION MEASURES
Geology, Seismicity, and Soils	Geology – no impacts Seismicity – no impacts Soils – No Prime Farmland Soils	No mitigation measures proposed.
Water Resources and Water Quality	Groundwater – no impacts Surface water quality – minor, temporary effects Developed water resources – no impacts	JCDD6 will comply with conditions of Construction Stormwater General Permit TXR 150000, including preparation of SWPPP and implementing BMPs.
Floodplains	No adverse impacts to the 100-year or 500-year floodplain	JCDD6 must coordinate with the local floodplain administrator and obtain required permits prior to initiating work.
Air Quality	Temporary increase of fugitive dust and exhaust emissions during construction. No post-construction effects	Contractors will be required to water down construction areas as needed in order to mitigate excess dust. Vehicle running times on site will be kept to a minimum and engines will be properly maintained.
Terrestrial and Aquatic Environment	Approximately 24 acres of vacant property will be temporarily disturbed	Disturbed areas will be revegetated.
Wetlands	No jurisdictional wetlands or WOTUS will be adversely affected	No mitigation measures proposed.
Threatened or Endangered Species and Critical Habitat	Not likely to jeopardize the tricolored bat or monarch butterfly.	Seasonal restriction of clearing to avoid pupping season and migratory bird nesting season. Halt tree clearing when temperature drops 40 degrees Fahrenheit (°F) (4.4 degrees Celsius (°C)) for 3 consecutive days.
Coastal Zone Management	No impacts	Project is not within the Coastal Management Plan (CMP) Boundary. Consistency verified by GLO.
Hazardous Materials	Likelihood of encountering hazardous materials during construction	In the event potential contaminants (or evidence thereof) are discovered during implementation of the project, the TCEQ shall be notified, and JCDD6 shall handle, manage, and dispose of petroleum products, hazardous materials, and toxic waste in accordance with the requirements and to the satisfaction of the governing local, state, and federal agencies.
Zoning and Land Use	No impacts	No mitigation measures proposed.
Visual Resources	No impacts	No mitigation measures proposed.

RESOURCE	ANTICIPATED EFFECTS	MITIGATION MEASURES
Noise	Temporary construction equipment noise	Construction activities will take place during normal business hours. Machinery operating at the proposed project site will meet all local, state, and federal noise regulations.
Public Services/Utilities	Public services – no impacts Utilities – no impacts Pipelines – no impacts	No mitigation measures proposed.
Traffic and Circulation	Possible, short-duration traffic interruptions during construction	Implement traffic control procedures as needed.
Safety and Security	No impacts	The appropriate signage and barriers will be in place prior to construction activities to alert pedestrians and motorists of project activities.
Cultural Resources	No impacts to significant historic or prehistoric resources are anticipated	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 JCDD6, and access to the sensitive area will be restricted by JCDD6. JCDD6 will inform FEMA immediately, and FEMA will consult with the 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 NHPA and its implementing regulations.

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ATTACHMENTS 1-8

AVAILABLE UPON REQUEST FROM

DOROTHY.COOK@FEMA.DHS.GOV

ATTACHMENT 9

DRAFT NOTICE OF AVAILABILITY

FEMA PUBLIC NOTICE OF AVAILABILITY
JEFFERSON COUNTY DRAINAGE DISTRICT NO. 6
DELAWARE STREET DETENTION PROJECT
EMT-2021-FM-022-0001
BEAUMONT, JEFFERSON COUNTY, TEXAS

Interested persons are hereby notified that the Jefferson County Drainage District No. 6 (JCDD6) has applied to the Federal Emergency Management Agency (FEMA) for Flood Mitigation Assistance (FMA) Program funding through the Texas Water Development Board (TWDB). Through FMA, FEMA provides grants for flood hazard mitigation projects as well as plan development. The FMA Program is authorized by Section 1366 of the National Flood Insurance Act of 1968, as amended (NFIA), 42. U.S.C. 4104c with the purpose of reducing or eliminating claims under the National Flood Insurance Program (NFIP). This notice also serves as FEMA's final notice in compliance with Executive Orders 11988 Floodplain Management (44 CFR Part 9).

FEMA proposes to provide funding to JCDD6 for drainage improvements for the Delaware Street area in west Beaumont, Jefferson County, Texas. The proposed project will construct 1 detention basin on unimproved properties and provide upgraded drainage connections between Hillebrandt Bayou and the detention basin. The total inundated area within the Benefit Area with these improvements is reduced by 11% for the 25-year, 24-hour storm event. The depth reduction provided by the improvements in the Benefit Area range from 0.25 to 0.8 feet. No jurisdictional wetlands, floodplains, or cultural resources will be adversely affected by the proposed project. The tricolored bat, a species proposed for listing as endangered, may be affected by the proposed project. JCDD6 will provide conservation measures to offset potential negative effects to the bat. Disturbed areas will be seeded with a native grass mix.

The draft EA is available for review and comment at the Beaumont Public Library located at 801 Pearl Street; and at the Jefferson County Drainage District No. 6 Offices located at 6550 Walden Road in Beaumont, Texas. Electronic copies can be accessed on the JCDD6 website at https://dd6.org/public-notices-news/ or by request from Dorothy Cook, Environmental Protection Specialist, FEMA Region 6, at dorothy.cook@fema.dhs.gov.

The comment period will begin on April XX, 2025, and end 30 days later by close of business May XX, 2025. Written comments on the draft EA can be mailed or emailed to Dorothy Cook, Senior Environmental Protection Specialist, FEMA Region 6, 800 N Loop 288, Denton, TX 76209, dorothy.cook@fema.dhs.gov. If no substantive comments are received, the draft EA will become final, and a Finding of No Significant Impact (FONSI) will be issued for the project. Substantive comments will be addressed as appropriate in the final documents.

All other questions regarding disaster assistance should be directed to FEMA's Helpline at 1-800-621-3362 or visit www.DisasterAssistance.gov.

ATTACHMENT 10

DRAFT FINDING OF NO SIGNIFICANT IMPACT

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

FEMA

FINDING OF NO SIGNIFICANT IMPACT
JEFFERSON COUNTY DRAINAGE DISTRICT NO. 6
DELAWARE STREET DETENTION PROJECT
EMT-2021-FM-022-0001
BEAUMONT, JEFFERSON COUNTY, TEXAS

BACKGROUND

In accordance with the Federal Emergency Management Agency's (FEMA) Instruction 108-1-1, 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 improved drainage for the Delaware Street Benefit Area in Beaumont, Texas, thus significantly reducing flooding to structures in this area. This EA informed FEMA's decision on whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

Jefferson County Drainage District No. 6 (JCDD6) has applied through the Texas Water Development Board (TWDB) for FEMA Flood Mitigation Assistance (FMA) funding, project EMT-2021-FM-022-0001, to provide improved drainage and water storage to provide relief to Hillebrandt Bayou and reduce flooding in the Delaware Street Benefit Area. Through FMA, FEMA provides grants for flood hazard mitigation projects as well as plan development. The FMA Program is authorized by Section 1366 of the National Flood Insurance Act of 1968, as amended (NFIA), 42. U.S.C. 4104c with the purpose of reducing or eliminating claims under the National Flood Insurance Program (NFIP).

Three project alternatives were considered in this EA: 1) No Action Alternative; 2) Buyout Alternative; and 3) Proposed Action Alternative- Detention and drainage improvements. Under the No Action Alternative, JCDD6 would take no action for flood mitigation and frequent and severe flooding would continue to occur. Alternative 2, Buyout Alternative, would require the buyout of at least 1,024 existing residential properties that experience repetitive flood damage. The Buyout Alternative would displace many residents, and the redevelopment of this land would not be recommended due to the low-lying topography of the region.

Under the Proposed Action Alternative, JCDD6 proposes to construct a 24.4-acre detention pond south of Delaware Street and approximately 6,700 linear feet of storm sewer upgrades. This improvement operates as a diversion system for Hillebrandt Bayou by directing flow from Hillebrandt through proposed triple 8-foot by 6-foot reinforced concrete boxes (RCBs) to the west along Delaware Street, then into the detention basin that outfalls to JCDD6 ditch 121 and back to Hillebrandt Bayou. The detention basin will provide increased capacity to

the system and critical storage during extreme events when Hillebrandt Bayou is overwhelmed.

A public notice was posted in the local newspaper of record and on JCDD6's website. The draft EA was made available for public comment for 30 days at Beaumont Public Library and the JCDD6 Office; on JCDD6's website; and upon request in hard or electronic copy from FEMA. No comments were received from the public during the comment period.

FINDING OF NO SIGNIFICANT IMPACT

The Proposed Action as described in the EA will not significantly impact geology, seismicity, prime farmland soils, groundwater, floodplains, wetlands, migratory birds, threatened and endangered species or critical habitat, coastal zone resources, zoning and land use, visual resources, public services, safety and security, and cultural resources. FEMA has determined that the proposed action will not jeopardize the continued existence of the proposed tricolored bat or monarch butterfly. JCDD6 will implement voluntary conservation measures to offset potential negative effects to the bat. During construction, short-term, minor impacts to surface water quality, air quality, hazardous materials, noise, utilities, 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. This review does not address all federal, state, and local requirements. Acceptance of federal funding requires recipients to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

2. Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

3. All abandoned water wells must be capped or properly abandoned according to the Administrative Rules of the Texas Department of Licensing and Regulation, 16 Texas Administrative Code (TAC), Chapter 76, effective 3 January 1999. A plugging report must be submitted by a licensed water well driller to the Texas Department of Licensing and Regulation, Water Well Drillers Program, Austin, Texas. If a well is intended for use, it must comply with rules stipulated in16 TAC §76.

4. JCDD6 must prepare a Storm Water Pollution Prevention Plan (SWPPP) and file a Notice of Intent (NOI) with the Texas Commission on Environmental Quality (TCEQ) at least 48 hours prior to start of construction. Monitoring and maintenance of emplaced Best Management Practices (BMPs) for storm water management will be conducted on a regular basis as prescribed by the Texas Pollutant Discharge Elimination System (TPDES) General Permit.

5. JCDD6 must coordinate with the local floodplain administrator and obtain required permits prior to initiating work, including any necessary certifications that encroachments within the adopted regulatory floodway would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Applicant must comply with any conditions of permit and all coordination pertaining to these activities should be retained as part of the project file in accordance with the respective grant program instructions.

6. Contractors are required to water down construction areas as needed in order to mitigate excess dust. To reduce emissions, vehicle running times on site will be kept to a minimum and engines will be properly maintained.

7. JCDD6 is responsible for coordinating with and obtaining any required Section 404 Permit(s) from the United States Army Corps of Engineers (USACE) and/or any Section 401/402 Permit(s) from the State prior to initiating work and complying with all permit conditions.

8. JCDD6 will avoid clearing trees and vegetation during the active pup season for the tricolored bat (May 15 to July 15) when flightless pups may be present.

9. Within the portion of the tricolored bat range where bats remain active year-round and continue to roost in trees during the winter, and where mean winter temperatures fall below 40 degrees Fahrenheit (°F) (4.4 degrees Celsius (°C)) for 3 consecutive days between December 15 and February 15, JCDD6 will immediately halt tree clearing activities until temperatures remain above 40°F (4.4°C) for a 24-hour period after the initial temperature drop.

10. JCDD6 will limit vegetation management work during the peak migratory bird-nesting period of March through August as much as possible to avoid destruction of individuals, nests, or eggs. If vegetation reduction activities must occur during the nesting season, applicant will deploy a qualified biological monitor with experience conducting breeding bird surveys to survey the vegetation management area for nests prior to conducting work. The biologist will determine the appropriate timing of surveys in advance of work activities. If an occupied migratory bird nest is found, work within a buffer zone around the nest will be postponed until the nest is vacated and juveniles have fledged. The biological monitor will determine an appropriate buffering radius based on species present, real-time site conditions, and proposed vegetation management methodology and equipment. For work near an occupied nest, the biological monitor would prepare a

report documenting the migratory species present and the rationale for the buffer radius determination and submit that report to FEMA for inclusion in project files.

11. In the event potential contaminants (or evidence thereof) are discovered during implementation of the project, the TCEQ shall be notified, and JCDD6 shall handle, manage, and dispose of petroleum products, hazardous materials, and toxic waste in accordance with the requirements and to the satisfaction of the governing local, state, and federal agencies.

12. To reduce noise levels during construction, construction activities will take place during normal business hours.

13. Appropriate construction barricades and signage will be utilized during construction.

14. 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 JCDD6, and access to the sensitive area will be restricted by JCDD6. JCDD6 will inform FEMA immediately, and FEMA will consult with the 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.

CONCLUSION

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 (FEMA Instruction 108-1-1) and the proposed project as described in the attached EA may proceed.

APPROVAL AND ENDORSEMENT

_____

Latoya Leger-Taylor
Regional Environmental Officer
FEMA Region 6

_____

Marty Chester
Hazard Mitigation Assistance Senior Advisor
FEMA Region 6