TEXAS HISTORICAL COMMISSION

ANTIQUITIES PERMIT APPLICATION FORM ARCHEOLOGY

GENERAL INFORMATION

I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) P1555 138 kilovolt Transmission Line Rebuild Project
County (ies) Fort Bend County
USGS Quadrangle Name and Number Richmond NE
UTM Coordinates Zone 15R E 227101 N 3287601 Zone 15 R E 227132 N 3281991
Location Approximately 0.40 mile west of the intersection FM723 and Fulshear Gaston Road Richmond, Texas and approximately 0.55 mile northwest of the intersection of FM359 and FM723 Richmond, Texas
Federal Involvement ♦ Yes ❑ No
Name of Federal Agency USACE-Galveston
Agency Representative Jerry Androy

II. OWNER (OR CONTROLLING AGENCY)

Owner Fort County Municipal Utility District 142
Representative Randal Carter
Address 1300 Post Oak Blvd, Suite 2500
City/State/Zip Houston, Texas 77056
Telephone (include area code) 713-623-4531 Email Address

Owner Fort Bend County
Representative
Address 1300 Post Oak Blvd, Suite 2500
City/State/Zip Houston, Texas 77056
Telephone (include area code) 713-623-4531 Email Address

III. PROJECT SPONSOR (IF DIFFERENT FROM OWNER)

Sponsor CenterPoint Energy Houston Electric
Representative D. Lance Gillaspie
Address 4500 South Shaver Road Building D Room 278
City/State/Zip Houston, TX 77034
Telephone (include area code) 713-945-8042 Email Address david.l.gillaspie@centerpointenergy.com

PROJECT INFORMATION

I. PRINCIPAL INVESTIGATOR (ARCHEOLOGIST)

Name Emily Duke
Affiliation POWER Engineers, Inc.
Address 16825 Northchase Drive, Suite 1200
City/State/Zip Houston, TX 77060

Telephone (include area code) 281-765-5527 Email Address emily.duke@powereng.com

(OVER)

ANTIQUITIES PERMIT APPLICATION FORM (CONTINUED)

II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork December 2022
Requested Permit Duration 5 Years 0 Months (1 year minimum)
Scope of Work (Provided an Outline of Proposed Work) Pedestrian survey and shovel testing of 100-foot-wide existing transmission line ROW on approximately 1998 feet of Fort Bend MUD 142 and 732 feet of Fort Bend County-owned land. Survey will be performed to CTA standards introduced in 2020. See attached scope of work and maps

III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility POWER Engineers, Inc., Houston, TX
Permanent Curatorial Facility Texas Archeological Research Laboratory

IV. LAND OWNER'S CERTIFICATION

I, Randal Carter, as legal representative of the Land Owner,
Fort Bend County Municipal Utility District 142, do certify that I have reviewed the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Owner, Sponsor, and Principal Investigator are responsible for completing the terms of the permit.
Signature _____ Date Jan 12 2023

I, _____, as legal representative of the Land Owner,
Fort Bend County, do certify that I have reviewed the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Owner, Sponsor, and Principal Investigator are responsible for completing the terms of the permit.
Signature _____ Date _____

V. SPONSOR'S CERTIFICATION

I, D. Lance Gillaspie, as legal representative of the Sponsor, CenterPoint Energy Houston Electric, do certify that I have review the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Sponsor, Owner, and Principal Investigator are responsible for completing the terms of this permit.
Signature D. Lance Gillaspie Date 11/22/2022

VI. INVESTIGATOR'S CERTIFICATION

I, Emily Duke, as Principal Investigator employed by POWER Engineers, Inc. (Investigative Firm), do certify that I will execute this project according to the submitted plans and research design, and will not conduct any work prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Principal

Investigator (and the Investigative Firm), as well as the Owner and Sponsor, are responsible for completing the terms of this permit.

Signature _____ Date 11-17-2022

Principal Investigator must attach a research design, a copy of the USGS quadrangle showing project boundaries, and any additional pertinent information. Curriculum vita must be on file with the Archeology Division.

FOR OFFICIAL USE ONLY

Reviewer _____ Date Permit Issues _____

Permit Number _____ Permit Expiration Date _____

Type of Permit _____ Date Received for Data Entry _____

Texas Historical Commission
Archeology Division
P.O. Box 12276, Austin, TX 78711-2276
Phone 512-463-6096
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TEXAS HISTORICAL COMMISSION
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TEXAS ANTIQUITIES PERMIT APPLICATION SCOPE OF WORK

INTENSIVE CULTURAL RESOURCE SURVEY FOR THE PROPOSED CENTERPOINT ENERGY HOUSTON ELECTRIC P1555 138 KILOVOLT TRANSMISSION LINE REBUILD PROJECT ON FORT BEND COUNTY AND FORT BEND MUNICIPAL UTILITY DISTRICT 142 PROPERTY IN FORT BEND COUNTY, TEXAS

POWER Engineers, Inc. (POWER) was contracted by CenterPoint Energy Houston Electric (CenterPoint Energy) to assist CenterPoint Energy in complying with the Texas Antiquities Code for the P1555 138 Kilovolt (kV) Transmission Line Rebuild Project (Project) in Fort Bend County, Texas. Depicted in Figures 1 and 2 (attached), the proposed Project includes approximately 8.1 kilometers (5 miles) of 138-kV transmission line rebuild within the existing easement that consists of a 30-meter (100-foot) right-of-way (ROW). The Project connects CenterPoint Energy's existing Flewellen Substation, located 2.37 kilometers (1.47 miles) east of the intersection of Farm to Market (FM) 1463 and FM 1093, approximately 7.6 kilometers (4.73 miles) east of Fulshear, Texas and the Brazos Valley Substation located 604 meters (1,982 feet) northwest of the intersection of FM 723 and Beadle Lane, approximately 7.7-kilometers (4.8 mile) north of Rosenberg, Texas. Approximately 609 meters (1,998 feet) of the proposed ROW is on Fort Bend 142 Municipal Utility District (MUD) 142 Property and approximately 223 meters (732 feet) of the ROW is on Fort Bend County Property (Figure 3).

The proposed cultural resource study will consist of an intensive archeological survey (as described in 13 TAC 26.15) of the ROW on Fort Bend County and Fort Bend County MUD 142 property in Fort Bend County (Permit Area[s]). Proposed construction activities include preparation of the ROW, replacement of the existing lattice structures with either steel monopole or lattice structure infrastructure, and stringing of new conductor and shield wires. Woody vegetation removal is not anticipated on Fort Bend County and Fort Bend County MUD property as the existing ROW appears to be regularly maintained. It is anticipated that any disturbances (i.e., rutting in wet conditions) from clearing and ROW preparation activities will be superficial and not exceed 40 centimeters (15.8 inches) below surface or matting depth. Based on a preliminary design of the transmission line, three structures are anticipated to be replaced on Fort Bend County MUD 142 property and one structure is proposed on Fort Bend County property.

CenterPoint Energy is currently in the preliminary design phase of the Project, however, the following tower types and dimensions would cover the anticipated impacts the Project would incur. The final Project design will either be monopole and/or lattice structures. The pole structures typically 15.3 meters (50 feet) tall with the diameter of the pole foundation being at most 3.1 meters (10 feet) in diameter. The concrete foundations will be 18.3 to 30.5 meters (60 to 100 feet) in depth. The anticipated footprint for the lattice structure will be between 1.49 by 1.49 meters (4.89 by 4.89 feet) and1.75 by 1.75 meters (5.75 by 5.75 feet) depending on the final engineering design. Four two-meter- (seven-foot-) diameter reinforced concrete drilled supports for the lattice structure would be drilled up to 30.5 meters (100 feet) deep to support the approximately 30-meter- (100-foot-) tall lattice structure.

The proposed cultural resources survey will be undertaken to identify potential State Antiquities Landmarks (SALs) on state-owned lands prior to actions that could potentially affect them. To the extent

possible, the potential of any cultural resources discovered during the survey for SAL designation and eligibility for inclusion on the National Register of Historic Places (NRHP) will be assessed.

GEOLOGICAL SETTING

The proposed Project is within the Northern Humid Gulf Coastal Prairies sub-province of the Western Gulf Coastal Plains Physiographic Region of Texas (USEPA 2003). The Northern Humid Gulf Coastal Prairies sub-province consists of Quaternary-age clays, silts, and sands associated with the Lissie and Beaumont Formations. Cropland, pasture, and urban land have replaced the grassland and clusters of oaks that once covered the ecoregion. Invasive to the region, Chinese Tallow now covers large areas in the region (USEPA 2003).

The Permit Areas are underlain by the Quaternary-age Lissie Formation and Alluvium. The Lissie Formation consisted of clay, silt, and sand, with little gravel comprised of a featureless flat surface with numerous rounded shallow depressions and pimple mounds. Alluvium floodplain and terrace deposits consist of clay, silt, and sand comprised of point bars, oxbows, and abandoned channels (USGS 2022).

Katy-Urban land complex, Alluvial Land, Norwood, and Churnabog series soils are mapped within the Permit Areas (Soil Survey Staff 2022). Katy series soils are very deep and moderately well-drained soils that formed on coastal prairies in loamy sediments from the Lissie Formation (NCSS-USA 2019). Urban Land soils are located in mostly built environments with a high population (USDA 2019).

Sloping Alluvial Land is described as well-drained, rarely flooded soils that form from loamy alluvium on slopes ranging from 2 to 20 percent (Soil Survey Staff 2022). Norwood series soils form on natural levees and floodplains in loamy alluvium formed from reddish loamy alluvial sediments with high calcium content (NCSS-USA 2015 and Soil Survey Staff 2022). Churnabog series soils are very deep, poorly drained soils in shallow depressions associated with abandoned channels, backswamp, and flats on flood plains in Holocene age clayey alluvium (NCSS-USA 2013).

Katy series soils have low geoarcheological potential and Norwood series soils have high geoarcheological potential (Abbot 2001). Churnabog series soils have not been evaluated for geoarcheological potential, however, Churnabog series was formally included with Pledger series (NCSS-USA 2013) and Abbot (2001) judged Pledger series soil to have a moderate-high geoarcheological potential.

TABLE 1 SOILS RECORDED IN SURVEY AREAS

SOIL SERIES	SOIL TYPE	SOIL DESCRIPTION (INCHES)	LANDFORMS	ALLUVIUM?	GEOARCHEOLOGICAL POTENTIAL (ABBOT 2001)
Katy-Urban Land Complex	Katy -alfisols	A: 0 -12: fine sandy loam E:12 - 25: fine sandy loam Bt1: 25 - 28: loam Bt2: 28 - 80: clay loam	flats	no	low
	Urban Land-none	M: 0 - 40: variable	--	--	--

SOIL SERIES	SOIL TYPE	SOIL DESCRIPTION (INCHES)	LANDFORMS	ALLUVIUM?	GEOARCHEOLOGICAL POTENTIAL (ABBOT 2001)
Sloping Alluvial Land	--	H1: 0 - 80: clay loam	--	--	--
Norwood	--	Ap :0 - 10 inches: loam Bw1: 10 - 28 inches: silt loam Bw2: 28 - 44 inches: silt loam BC: 44 - 49 inches: silty clay loam Ab: 49 - 53 inches: clay Bib: 53 - 80 inches: very fine sandy loam	natural levees	yes	high
Churnabog	vertisol	A: 0 - 14: clay Boss: 14 - 41: clay BC: 41 - 80: silty clay	depressions	yes	moderate-high*

Source: Soil Survey Staff 2022; Abbot 2001.
Notes: asterisk = based on former inclusion in Pledger series soils

PREVIOUS ARCHEOLOGICAL RESEARCH

POWER conducted a review of records available online to identify cultural resources and previous investigations recorded within a study area that extends one mile from the proposed Permit Areas. The review indicated no National Register of Historic Places-listed or eligible properties, or SALs are recorded within the study area (THC 2022 and TxDOT 2022). Three previously recorded archeological sites, two cemeteries, two Official State of Texas Historical Markers (OTHMs), and six previous investigations are recorded within study area. No previously recorded cultural resources are located within the Permit Areas.

Archeological sites 41FB352, 41FB371, and 41FB372 are recorded within the study area (THC 2022). Site 41FB371 is historic in age and 41FB352 and 41FB372 are both pre-contact sites. Site 41FB371 is a farmstead that consists of a demolished concrete slab, a water tank, and a wellhead. Historic maps showed the original construction between 1953 and 1958. Site 41FB352 is a lithic scatter and 41FB372 is a lithic and ceramic scatter with debitage, utilized flakes, and Goose Creek Plain ceramic sherds. Site 41FB352 has not been evaluated for inclusion on the NRHP and 41FB371 and 41FB372 have been determined ineligible for listing the NRHP (THC 2022).

Two cemeteries, the Briscoe Family (FB-C045) and Wilderness Branch (FB-C136) cemeteries, are recorded within the study area. Neither of these cemeteries is a designated Historic Texas Cemetery (THC 2022). A total of three OTHMs are recorded within the study area, commemorating the Foster Community (13291), John Foster (12960), and Randolph Foster (12725). The Foster Community grew out of a permanent campsite located within the John Foster grant established by Randolph Foster. The grant was deeded to Randolph's father, John Foster from Stephen F. Austin (THC 2022).

A total of six previous investigation have been conducted within the study area (THC 2022). These investigations, beginning in 1987, were in advance of EPA (THC 2022), roadway (Butler 2012; Darnell et

al 2018), urban development (Bludau 2014; Donachie and Moore 2004; Quennoz and Wampler 2018) project (Table 2).

TABLE 2 PREVIOUS INVESTIGATIONS WITHIN STUDY AREA

Atlas #	AUTHOR(S)	DATE	REPORT TITLE	INVESTIGATION AGENCY
8500002146/ 8500012639	--	1987	--	Environmental Protection Agency, Texas Water Development Board
8500021165	Butler, Joel B.	2012	Archeological Survey in Advance of Westpark Tollway Construction Along FM 1093 from FM 1463/359 to SH 99, Fort Bend County, Texas — Fort Bend County (Butler 2012)	AmaTerra Environmental, Inc.
8500013152/ 8500012405	Madeleine Donachie and Roger Moore	2004	An Archeological Survey of a Proposed Expansion of the Sendero Ranch Stage I Development Tract, Fort Bend County, Texas — Fort Bend County (Donachie and Moore 2004)	MAC, Inc., Houston
8500061009	Charles E. Bludau, Jr.	2014	An Intensive Pedestrian Cultural Resources Survey of Approximately 226.5 Acres In Fort Bend County, Texas — Fort Bend County (Bludau 2014)	HRA Gray & Pape, LLC
8500081179	Bruce Darnell, Julian A. Sitters, and Heath Bentley	2018	Archaeological Survey of the FM 723 Expansion Project from Avenue D to FM 1093, Fort Bend County, TX, CSJ: 0188-09-040 — Fort Bend County (Darnell et al. 2018)	AmaTerra Environmental, Inc.
8500081119/ 8100020435	Michael Quennoz, and Morgan Wampler	2018	Cultural Resources Survey of the 64.4-Acre Deer Run Meadows Site Development in Fort Bend County, Texas (Quennoz and Wampler 2018)	HRA Gray & Pape, LLC

Notes: bold entries crossed by the Project

METHODS AND REPORTING

Intensive Shovel Test Survey Methodology

POWER proposes to conduct an intensive 100-percent pedestrian survey of the proposed Permit Areas. This survey will adhere to the guidelines of the Council of Texas Archeologists (CTA) Intensive Terrestrial Survey Guidelines (CTA 2020), and the Secretary of the Interior's Standards and Guidelines (NPS 1983). The survey will consist of an inspection of the ground surface within the Permit Areas by archeologists walking along parallel transects spaced no more than 30 meters (100 feet) apart. Shovel tests will be excavated at the discretion of the Principal Investigator or Project Archeologist in areas deemed most likely to have the potential to contain buried archeological deposits and within and near site boundaries as determined by their surface expressions. The minimum number of shovel tests per the CTA (2020) guidelines will be met or exceeded in all surveyed areas unless irrefutable evidence of bedrock across

the entire surface of the area or the water inundation covering the area can be provided, slopes are greater than 20 percent (approximately 11 degrees), or there is evidence of significant ground disturbance. All such locations will be clearly delineated on project maps, photo-documented, and discussed in the report.

Shovel tests will be a minimum of 30 x 30 centimeters (12 x 12 inches) in size and excavated in arbitrary 10- to 20-centimeter (4.0- to 7.9-inch) levels. Shovel test will be excavated to the lesser of the Project's vertical Area of Potential Effect (APE); bedrock; deposits that represent facies beneath where archeological potential is minimal; deposits that substantially predate the Holocene and are considered subsoils; or to the maximum depth that can be reached via manual excavations (typically 80 centimeters [2.6 feet] below the surface in clay or 1.0 meter [3.2 feet] below ground surface in sand or sandy loam). All soil matrices removed from the shovel tests will be screened through 1/4-inch wire mesh to recover artifacts. Clayey matrix will be finely divided by trowel and visually inspected. Data concerning the soils and provenience of any artifacts recovered from shovel tests will be recorded on a standardized shovel test form, and each shovel test will be plotted with hand-held global positioning system (GPS) receivers. All shovel tests will be backfilled after they are excavated and recorded.

Any cultural materials greater than 50 years of age identified during survey will at least minimally be designated as an isolated find. Site boundaries will be delineated based on site surface expression, where applicable, and shovel testing, within the ROW. Shovel tests will be excavated in a cruciform pattern at intervals no greater than 15 meters (49.5 feet) until two negative shovel tests are excavated in each direction, topographic limits are reached, or the Project boundaries are reached. Sites will be defined as three or more non-retrofitting artifacts in an area measuring 30 meters by 30 meters (100 feet by 100 feet), or an archeological feature older than 50 years and associated scatter. Isolated finds will be defined as less than three non-retrofitting artifacts in an area measuring 30 square meters (100 square feet) that shovel testing and surface inspection have shown is unlikely to extend outside the ROW (two negative tests inside each project boundary, for instance).

Sites will be delineated only within the Project. Any archeological sites discovered during the survey will be recorded on Texas Archeological Site Data Forms and submitted electronically to the Texas Archeological Research Laboratory (TARL). The horizontal and vertical extent of cultural deposits, a description of cultural materials within the site, and an overview of the site's environmental setting will be included in the site forms. Furthermore, sites will be evaluated to the extent possible based on the survey data for potential significance and eligibility for SAL designation. Further archeological investigations may be recommended to determine such eligibility if the survey-level data is insufficient to make such a determination. Photo documentation of the field investigations will include general views of the Permit Areas, any sites recorded, and artifacts. Site polygons, diagnostic artifact point data, and relevant natural and man-made landscape features will be included on site maps.

The proposed archeological investigations will utilize a no-collection strategy. Artifacts will be documented in the field and returned to where they were located. If rare or unusual items are observed during the survey, such materials, with the approval of the THC, will be collected. All documentation (i.e., field notes, shovel test forms, photos, etc.) and any artifacts collected will be curated at TARL.

POWER will assure that all materials produced as part of this Project (original field notes, maps, drawings, photos, artifacts, etc.) will be prepared and submitted for curation as required by the Texas Antiquities Permit Terms and Conditions and TAC Title 13, pt. 2, Ch. 26.C26.17. We intend to curate these materials with TARL and upon completion of the project, a curation form will accompany the complete collections to the THC.

Potential for Deeply Buried Deposits within the Permit Areas

A review of topographic maps (USGS 1955, 1971a, and 1971b) and aerial images indicates that the Permit Area within the Fort Bend MUD 142 property has been disturbed by recent urban development. The Fort Bend MUD 142 property is bordered to the east and west by the Canyon Lakes at Westheimer Lakes subdivision which appears on aerial images as under construction in 2005 (Google Earth 2022). Katy-Urban Land complex soils are mapped within the Permit Area on Fort Bend MUD 142 property and these soils have low probability of deeply buried in situ deposits (Abbot 2001 and USDA 2019). POWER asserts that the Permit Area within the Fort Bend MUD 142 property has a low probability of deeply buried archeological deposits and deep prospection is not anticipated.

A review of topographic maps (USGS 1943, 1950, 1968, and 1975) and aerial images indicates that the Permit Area within the Fort Bend County property is less disturbed than the Fort Bend MUD 142 property. Norwood series soils are mapped within the Fort Bend County property south of Oyster Creek. Norwood series soils are described as having high geoarcheological potential (Abbot 2001) and have the potential for a buried A-horizon below depths that can be reached by shovel testing (i.e., 1 meter [3.2 feet]) (NCSS-USA 2015). Thus, POWER anticipates the Permit Area on Fort Bend County property has the potential for deeply buried archeological deposits. If field conditions indicate that pre-Holocene soils were not reached or impediments to excavation (i.e., water table or bedrock) are not encountered, POWER will implement the following methodology based on the CTA's guidelines for mechanical deep prospection (CTA 2020).

Mechanical Deep Prospection Survey Methodology

Where Holocene deposits extend deeper than can be reached during shovel testing, POWER will conduct mechanical deep prospection to assess the presence or absence of deeply buried cultural resources where deep impacts are anticipated (i.e., proposed new structure locations). CenterPoint Energy is currently evaluating structure and foundation types and construction techniques; however, the maximum proposed depth of foundation excavation is approximately 30.5 meters (100 feet) below the surface. As such, the vertical APE at proposed structure locations could extend to a depth of 30.5 meters (100 feet) below the surface grade. It is anticipated that the area of deep disturbance at such locations can be investigated with a single trench near the proposed structure location.

When possible, the preferred method for deep testing investigations would utilize a standard-sized backhoe loader (Caterpillar 416 or 420, John Deere 310, Volvo BL60, or similar model) equipped with a 61-centimeter (24-inch) -wide bucket with a smooth-edged cleanout. Backhoe trenches will be at least 61 centimeters (2.0 feet) -wide and 4.0 meters (13 feet(long, and excavated to the lesser of the project's vertical APE; bedrock; deposits that represent facies beneath which archeological potential is

minimal, such as thick (50-centimeter+ [20-inch+]) channel gravels; deposits that substantially predate the Holocene; or the maximum depth that can be reached by an appropriately scaled and powered machine (i.e., 4.0-5.0 meters [13-16 feet]) below surface grade for trenches). Recent survey and mechanical trenching in the area suggests trenches may reach the water table before the above conditions are met.

Consistent with the CTA (2020) Survey Level Mechanical Prospection standards, trenches in loamy and clayey sediments will be either excavated by peeling off 5.0 centimeter (2.0-inch) or thinner layers under close monitoring using a smooth-bladed bucket, with subsequent hand cleaning and inspection of the walls and monitoring and inspection of spoil; using a smooth-bladed or toothed bucket, with screening of at least one five-gallon bucket from every third excavator bucket load during excavation, and careful cleaning and inspection of the trench wall; or using a smooth-bladed or toothed bucket, with controlled hand excavation and screening of a contiguous column measuring at least 30 x 30 centimeters (12 x 12 inches), and careful cleaning and inspection of the walls. In sandy sediments, one of the first two approaches will be employed. Perpendicular ramps or "step-outs" will be excavated as necessary to provide safe access to trenches following Occupational Safety and Health Administration guidelines.

A standard backhoe trenching form will be completed for each trench detailing soil characteristics, stratigraphy, and the presence or absence of cultural materials. Color digital photographs (with a scale) will be taken of each trench and profile exposure, and photographs of the trenches will be included in the report of the investigations. After recording is completed, each trench will be immediately backfilled, and the ground surface will be restored as closely as possible to its original condition. At no time will an open trench be left unattended. Trench locations will be recorded using hand-held GPS devices, and their lengths, widths, and orientation recorded in the field.

If during trenching or augering, cultural resources are identified at depths greater than can be reached with shovel testing, a minimum of four trenches or mechanical auger tests will be used for site definition unless other criteria can be used to constrain site size. If it is determined that deep testing may disturb shallower components, boundary definition may be deferred to a testing phase.

Where backhoe trenching is not possible due to standing water that may prevent access, and/or refusal of access of landowners to permit excavation of trenches, mechanical augering may be utilized as an alternate deep prospection method. Mechanical augering operations would utilize a solid-stem auger bit measuring at least 20 centimeters (8.0 inches) in diameter. Auger tests will be limited to areas where the APE extends deeper than could be reached during shovel testing and at proposed structure locations where the APE is deeper than could be reached during shovel testing. In such areas with deep impacts, auger tests will be excavated at the same rate as shovel tests (1.6 kilometers [16 per mile]) per the CTA (2020) guidelines. For each of the auger tests, location, maximum depth, soil strata, soil color and texture, and the presence or absence of cultural resources will be recorded. Soil matrices will be screened through 0.64-centimeter (1/4-inch) mesh hardware cloth unless the matrix is dominated by clay. Clay matrices will be finely divided by hand tools and visually inspected for cultural remains. In the event that a new archeological site is located, the site will be delineated using auger tests using the same methodology as delineating sites via shovel testing, and a minimum of four auger tests will be

excavated to define sites. Color digital photographs (with a scale) will be taken of representative auger test holes. After recording is completed, each auger test will be immediately backfilled, and the ground surface will be restored as closely as possible to its original condition. At no time will an open auger test hole be left unattended.

Reporting

A report documenting the results of the investigations will be produced in accordance with the report guidelines as outlined by the Council of Texas Archeologists' Guidelines for Cultural Resource Management Reports. The report will evaluate, to the extent possible, the potential eligibility of archeological sites within the Permit Area for formal SAL designation. Recommendations for any additional archeological work, if needed, will be included in the report.

A draft report will be submitted to the THC for review and comment. Following review of the draft report, all comments and edits will be addressed, and the report will be finalized, with one unbound printed copy of the final report with the plotted location of any and all sites recorded, and two copies of a tagged PDF format of the report on an archival quality CD or DVD. One tagged PDF on a CD or DVD will include the plotted location of all sites recorded during the survey, and one will not include the site location data, as per the requirements of the Antiquities Permit.

REFERENCES

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_____. 1971a. Richmond, Texas 7.5 Minute Series Quadrangle

_____. 1971b. Richmond NE, Texas 7.5 Minute Series Quadrangle

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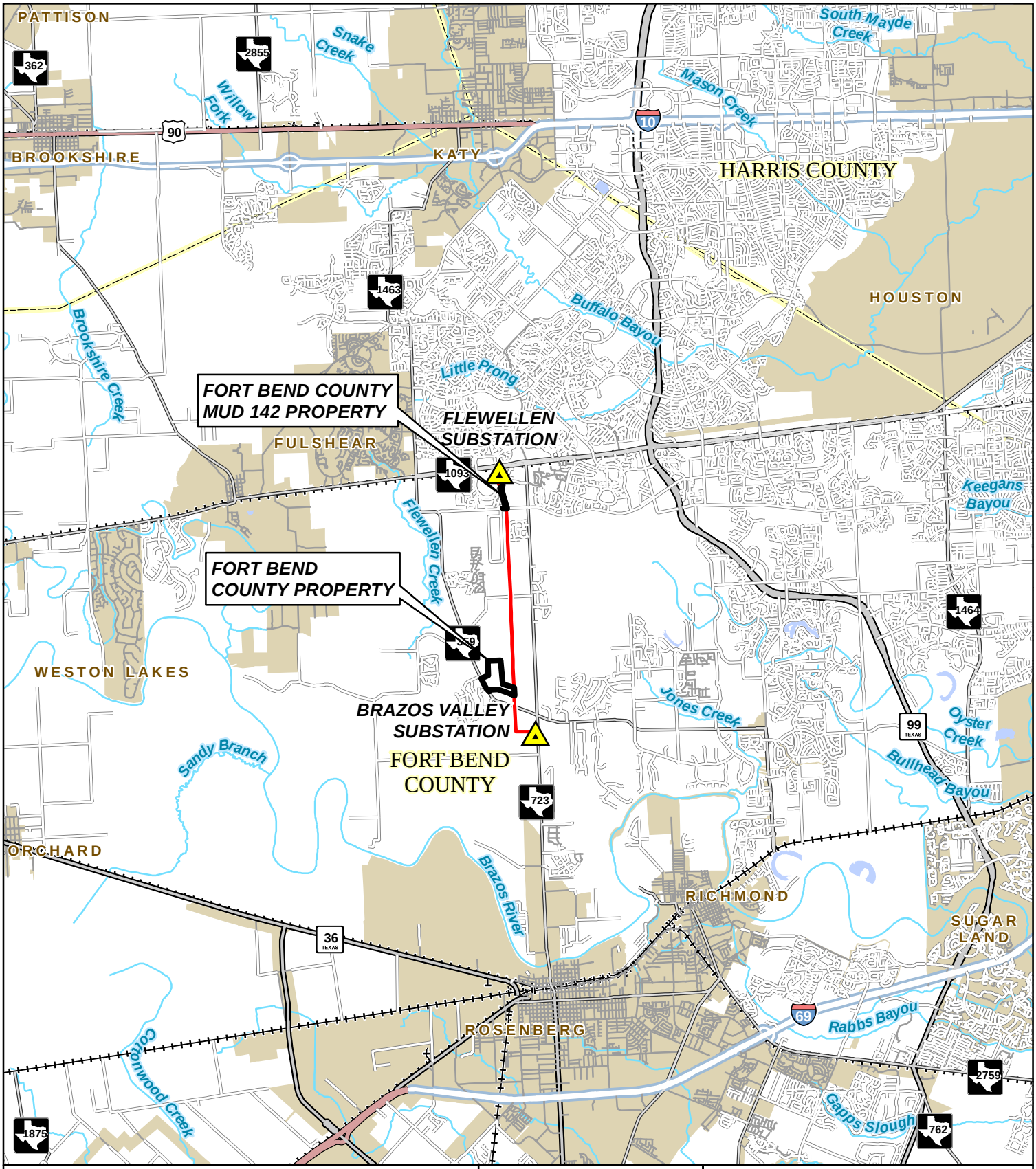


Legend

- Project Substation
- Proposed Rebuild Alignment
- State-Owned Land
- River or Stream
- Waterbody
- Railroad
- City Limit
- County Boundary
- Interstate Highway
- US Highway
- State Highway
- FM Road
- County Road
- Local Road

Project Location

CENTERPOINT
P1555 138 KILOVOLT
TRANSMISSION LINE REBUILD PROJECT

Figure 1: Vicinity Map

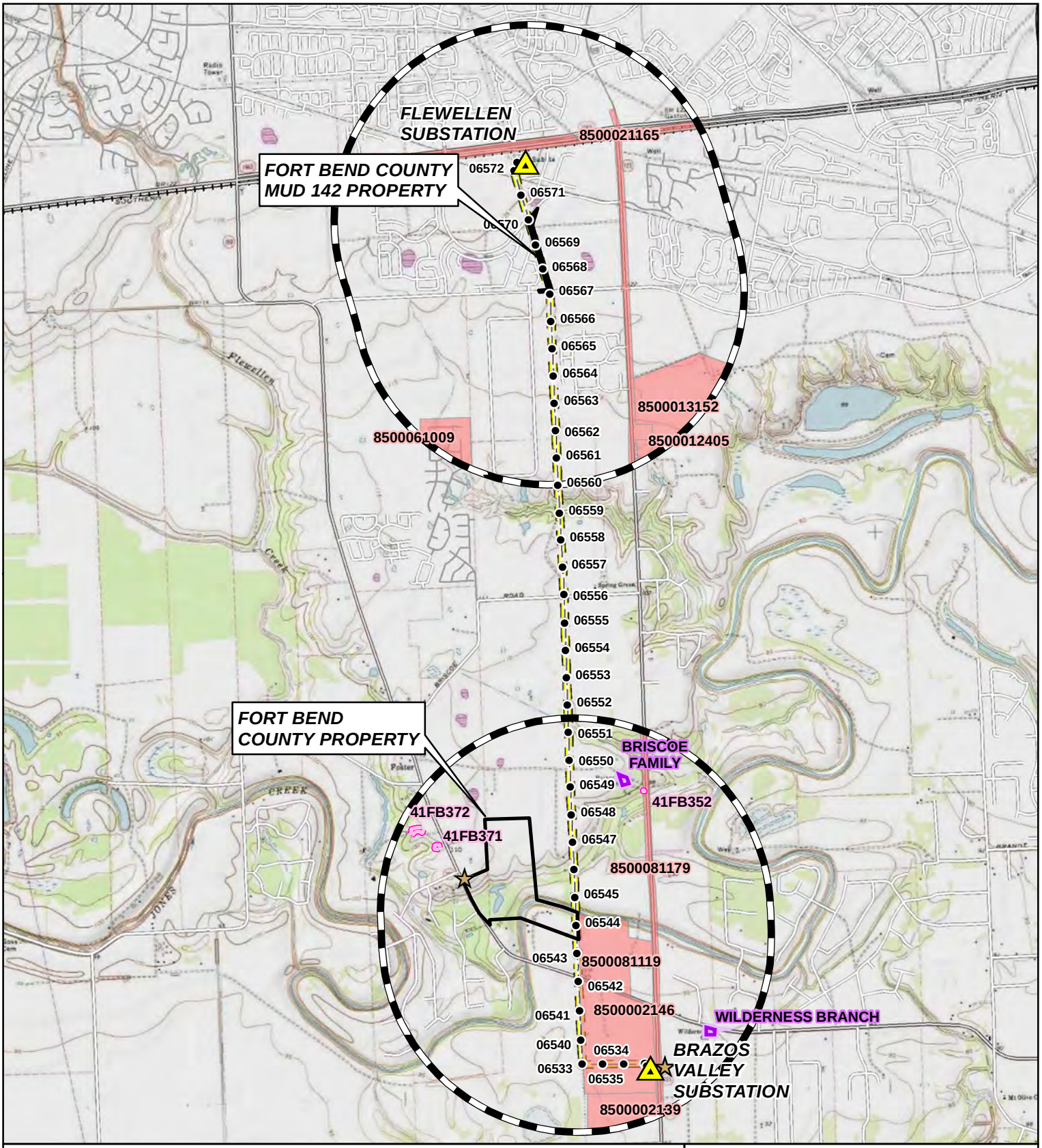
0 1 2
Miles

CenterPoint Energy

POWER ENGINEERS

Date: 11/17/2022

Document Path: G:\Projects\0_Centerpoint_Energy\178646_CNP_P1554_5\Apps\Cultural\1_Vicinity_Map.mxd



Project Substation
Proposed Rebuild Alignment
Proposed Structure
ROW
Study Area
State-Owned Land
Official Texas Historical Marker
Previously Recorded Archeological Site
Cemetery
Previous Investigation

0 2,000 4,000
Feet

0 1,000 2,000
Meters

NOT FOR PUBLIC DISCLOSURE

CENTERPOINT
P1555 138 KILOVOLT
TRANSMISSION LINE REBUILD PROJECT

FIGURE 2
PROJECT AREA MAP (TOPOGRAPHIC)

RICHMOND (29095-E7) &
RICHMOND NE QUADRANGLE (29095-F7)
7.5 MINUTE TOPOGRAPHIC MAP

CenterPoint Energy
POWER ENGINEERS

Date: 11/17/2022

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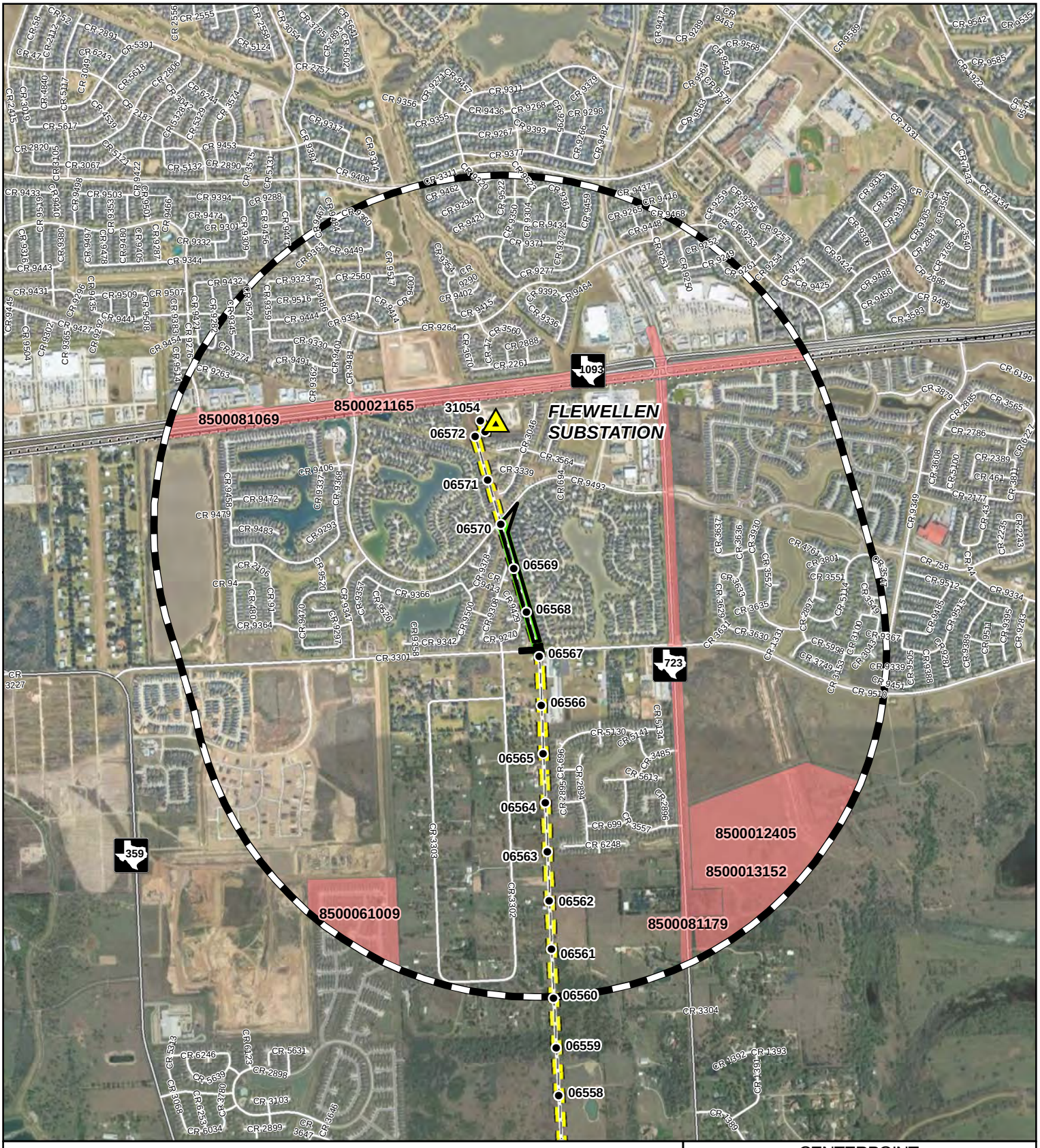


Project Substation
Proposed Rebuild Alignment
Proposed Structure
ROW
Study Area
State-Owned Land
Permit Area
Previous Investigation

0 1,000 2,000
Feet
0 500 1,000
Meters

NOT FOR PUBLIC DISCLOSURE

CENTERPOINT
P1555 138 KILOVOLT
TRANSMISSION LINE REBUILD PROJECT

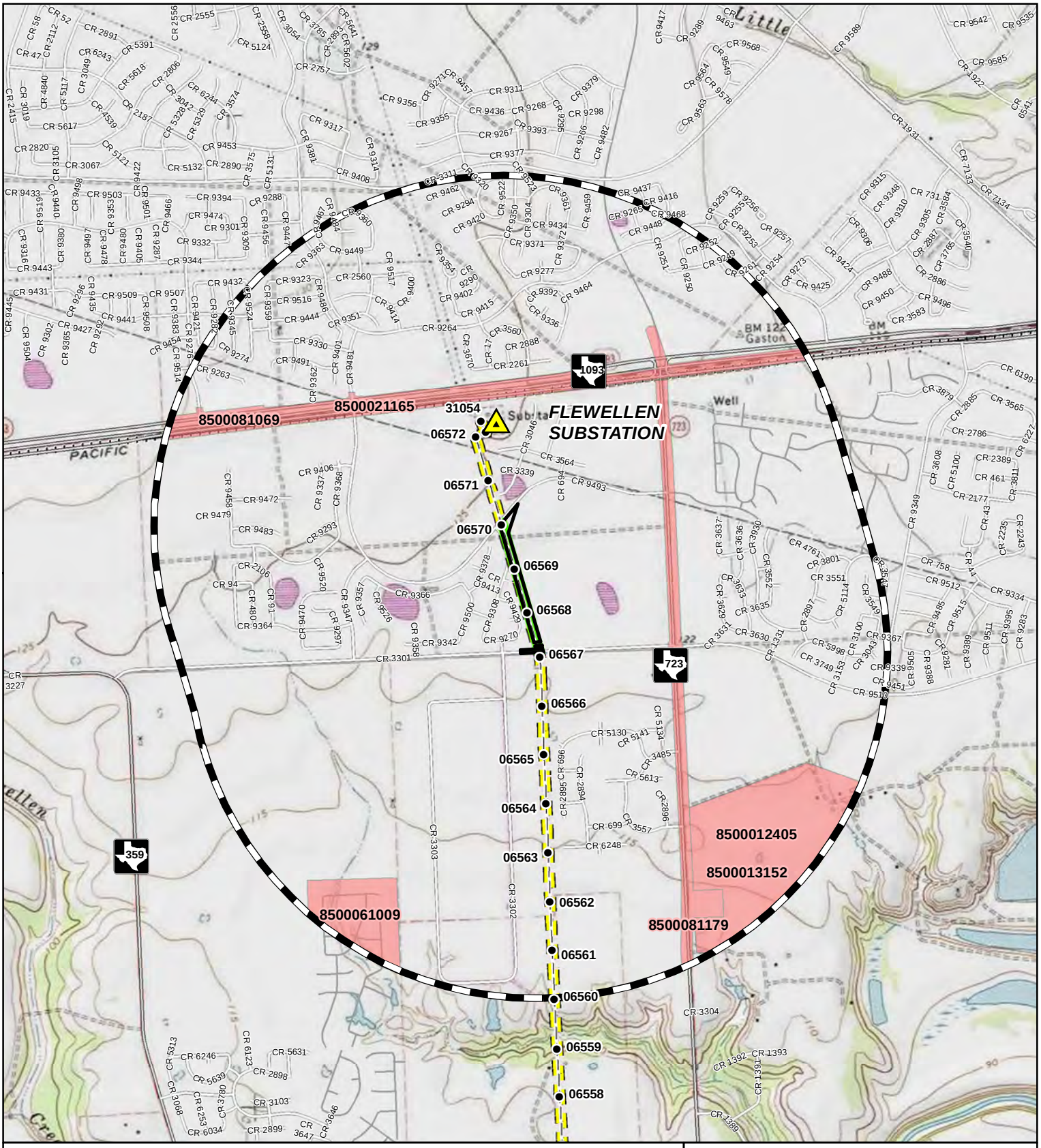
FIGURE 3
PROJECT AREA MAP

PAGE 1 OF 4:
FORT BEND COUNTY MUD 14
PROPERTY UNDERLAIN BY AN AERIAL IMAGE

CenterPoint Energy
POWER ENGINEERS

Date: 11/17/2022

Document Path: G:\Projects\0_Centerpoint_Energy\178646_CNP_P1554_5\Apps\Cultural\3_Project_Area_Page1.mxd



CENTERPOINT
P1555 138 KILOVOLT
TRANSMISSION LINE REBUILD PROJECT

FIGURE 3
PROJECT AREA MAP

PAGE 2 OF 4:
FORT BEND COUNTY MUD 14
PROPERTY UNDERLAIN BY A TOPOGRAPHIC MAP

CenterPoint Energy
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Date: 11/17/2022

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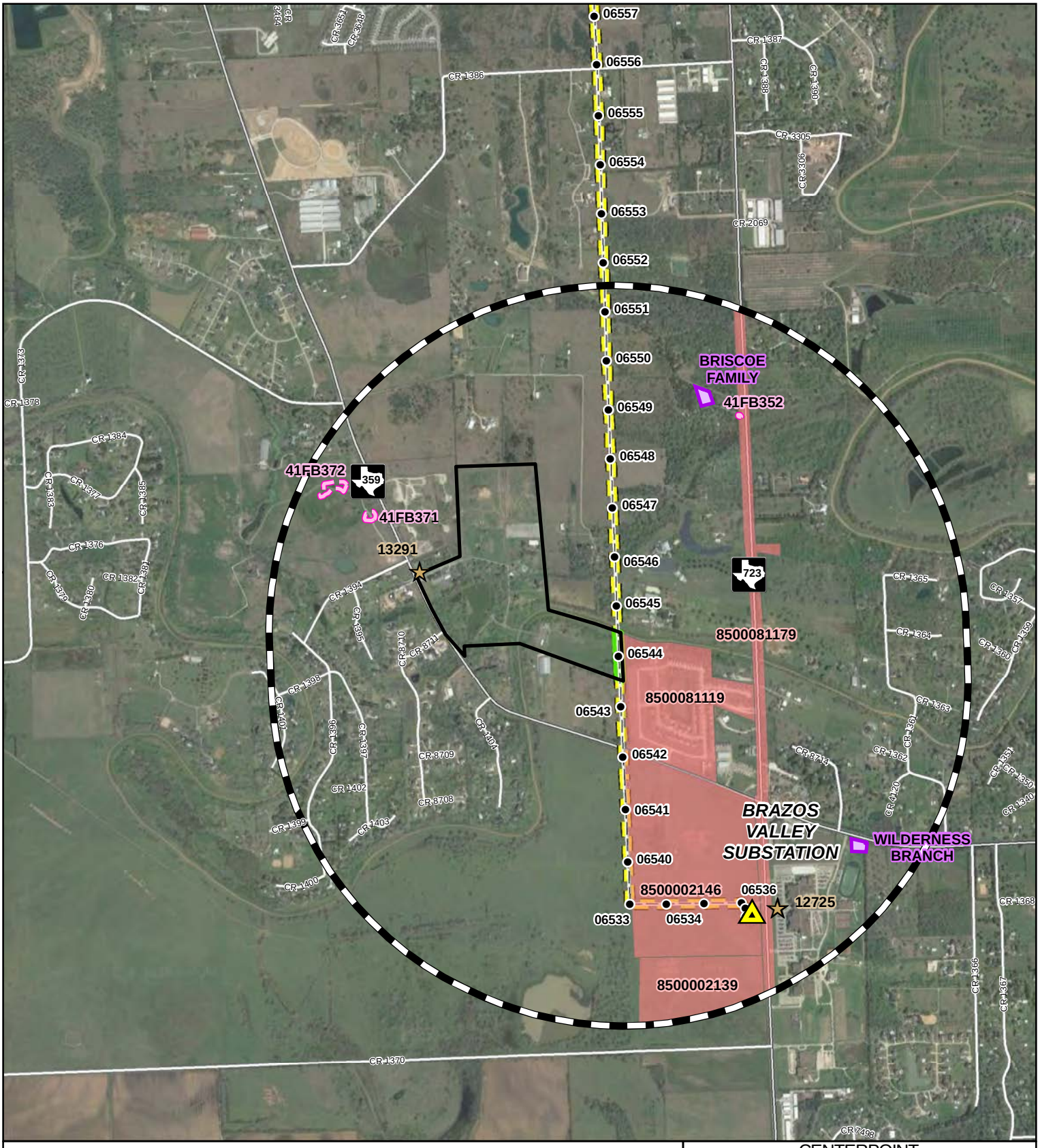

Project Substation
Proposed Rebuild Alignment
Proposed Structure
ROW
Study Area
State-Owned Land
Permit Area
Official Texas Historical Marker
Previously Recorded Archeological Site
Cemetery
Previous Investigation

0 1,000 2,000
Feet

0 500 1,000
Meters

NOT FOR PUBLIC DISCLOSURE

CENTERPOINT
P1555 138 KILOVOLT
TRANSMISSION LINE REBUILD PROJECT

FIGURE 3
PROJECT AREA MAP

PAGE 3 OF 4:
FORT BEND COUNTY PROPERTY
UNDERLAIN BY AN AERIAL IMAGE

CenterPoint Energy
POWER ENGINEERS

Date: 11/17/2022

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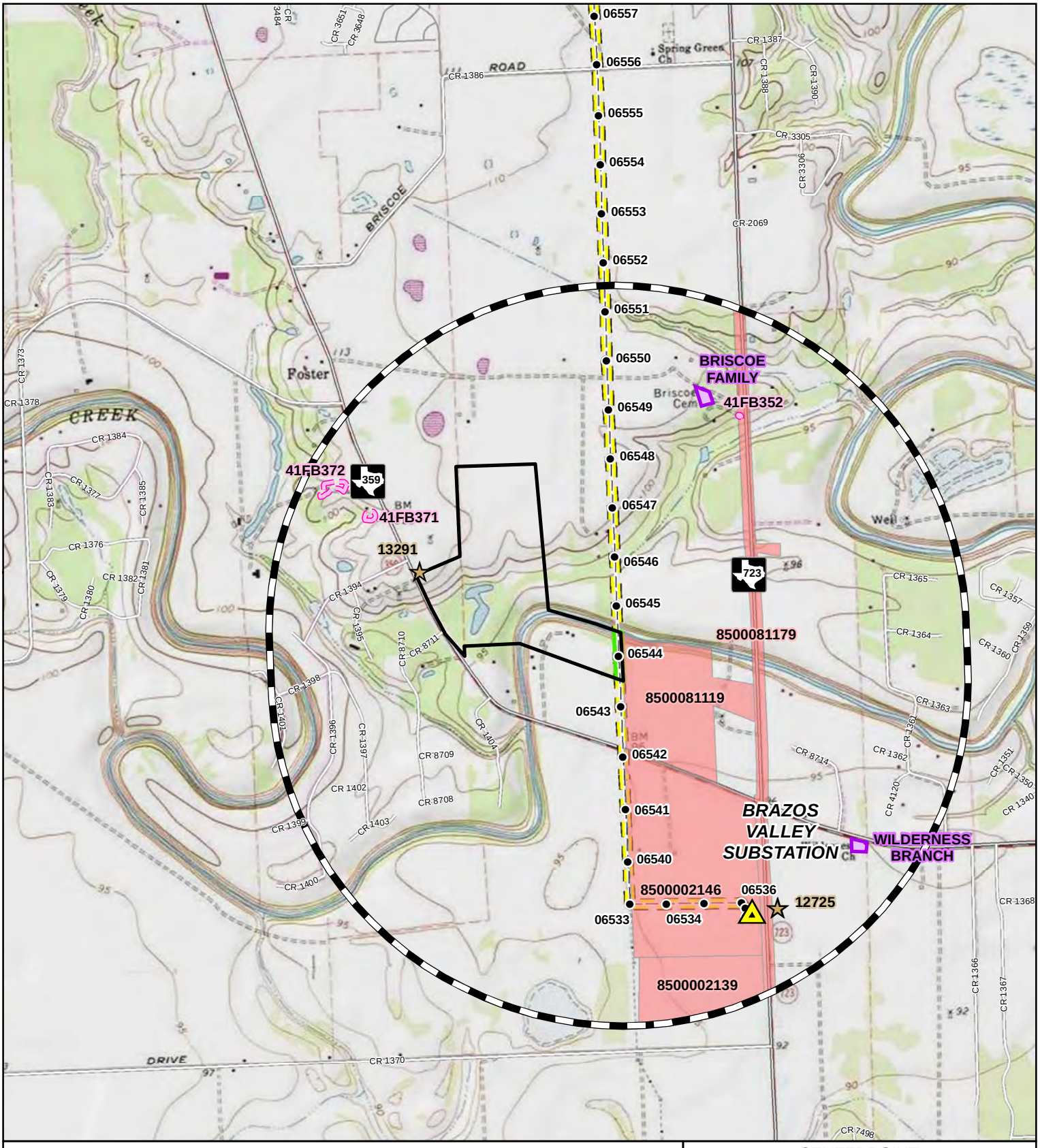

Project Substation
Proposed Rebuild Alignment
Proposed Structure
ROW
Study Area
State-Owned Land
Permit Area
Official Texas Historical Marker
Previously Recorded Archeological Site
Cemetery
Previous Investigation

0 1,000 2,000
Feet

0 500 1,000
Meters

NOT FOR PUBLIC DISCLOSURE

CENTERPOINT
P1555 138 KILOVOLT
TRANSMISSION LINE REBUILD PROJECT

FIGURE 3
PROJECT AREA MAP

PAGE 4 OF 4:
FORT BEND COUNTY PROPERTY
UNDERLAIN BY A TOPOGRAPHIC MAP

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