

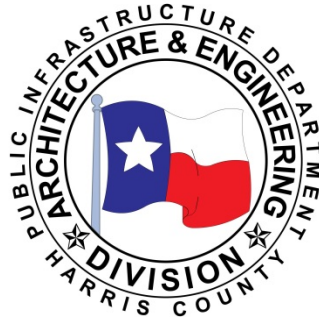
DRAFT CATEGORICAL EXCLUSION

FEDERAL ROAD GRADE SEPARATION PORT TERMINAL ASSOCIATION RAILWAY OVERPASS

HARRIS COUNTY, TEXAS

CSJ: 0912-72-336

Prepared for:



Prepared by:



and



U.S. Department
of Transportation
**Federal Highway
Administration**

DECEMBER 2014

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INTRODUCTION

The Houston District of the Texas Department of Transportation (TxDOT), in association with Harris County and the Federal Highway Administration (FHWA), proposes to elevate the profile of Federal Road with a new overpass structure spanning the Port Terminal Railroad Association (PTRA) railway, add truck turnaround lanes, and remove the at-grade railroad crossing. The proposed project is located in the City of Houston, Harris County, Texas. More specifically the proposed project is located within the Federal Road right-of-way (ROW) approximately 1.9 miles south of Interstate Highway (IH) 10, 1.1 miles north of Washburn Tunnel, 3.1 miles east of IH 610, and 4.0 miles west of the Sam Houston Parkway (Beltway 8). A **Vicinity Map** is enclosed as **Exhibit 1**, and a **2012 Aerial Photograph with Project Area Overlay** is enclosed as **Exhibit 2**.

Federal Road is a major thoroughfare on Houston's east side that connects IH 10 to the Washburn Tunnel. The road is heavily traveled, providing a link between IH 10 and the southern side of the Houston Ship Channel. The development in this area is primarily industrial, with commercial businesses located near IH 10. The City of Houston's East Water Purification Plant occupies a majority of the property adjacent to Federal Road, between the PTRA tracks and Clinton Drive. PTRA's American Yard is located northwest of the Federal Road and PTRA railway crossing.

At the existing PTRA railway crossing location, Federal Road consists of a four-lane boulevard section. Two tracks with concrete panels and four flasher and gate assemblies exist at the crossing. Electrical transmission towers parallel both sides of the tracks, and 15 to 20 pipelines exist to the north and south of the tracks. In the vicinity of the crossing, two industrial-supply businesses and the City of Houston water plant are located west of Federal Road.

PROPOSED ACTION

Existing Facility

The existing facility consists of a four-lane, divided asphalt section of roadway that runs north to south with open ditch drainages along portions of the east and west ROW lines. The existing ROW is 126 feet wide. The existing travel lanes are approximately 12 feet wide and are divided by curbed medians approximately 15 feet wide. Asphalt shoulders approximately 12 feet wide are flanked by slightly depressed grassy areas approximately 19.5 feet wide that give way to open ditch drainages in the central and southern portions of the eastern ROW. There are openings in the median at commercial business driveways, the PTRA railway crossing, and locations 200 feet north and 130 feet south of the PTRA crossing. No sidewalks or bikeways are associated with the existing facility. Drainage facilities in the area are limited to open ditch drainages located primarily in the central and southeastern portions of the ROW. There is also an isolated wetland in a microtopographic depression located immediately southeast of the railway crossing, where the ROW extends an additional 45 feet to the east.

Proposed Facility

The proposed project would consist of a grade separation elevating the profile for Federal Road with a new overpass structure spanning the PTRA railway, adding truck turnaround lanes at each end of the structure, and removing the at-grade railroad crossing. The proposed **Engineering Plans** are located in **Appendix A**. The proposed project would begin approximately 1,500 feet south of the existing PTRA railway crossing at Federal Road and ends approximately 1,500 feet north of the crossing. The proposed improvements at-grade would include four travel lanes approximately 13 feet wide divided by a curbed grassy median approximately 15 feet wide. Acceleration lanes would transition to 16 feet wide on the east and west sides of the main travel lanes to allow for local access. Striped medians would be constructed in transition areas. Hydromulch seeding would be applied to medians and shoulders.

The improvements at the embankment approach to the bridge over the PTRA railway would include mechanically stabilized earth (MSE) walls to be constructed at a width of 71-feet. The embankment approach would consist of four main travel lanes approximately 12 feet wide divided by a curbed concrete median approximately 6 feet wide. Shoulders approximately 1.5 feet wide and sidewalks approximately 6 feet wide would be constructed along the east and west perimeters of the main travel lanes. The improvements at the embankment approach at-grade would consist of two one-way lanes approximately 15 feet wide, with narrow shoulders approximately 1 foot wide.

The improvements at the overpass crossing the PTRA railway would consist of travel lanes approximately 12 feet wide divided by a curbed median approximately 6 feet wide. Shoulders approximately 1.5 feet wide and sidewalks approximately 6 feet wide would be constructed on both east and west perimeters of the main travel lanes. The proposed bridge width is 71 feet. Six drilled shaft columns 42 inches in diameter would support each of the ten proposed bridge bents. Pre-stressed concrete I-girders with 100- and 130-foot spans would be placed between the bents. Bridge clearance over existing grade at the PTRA railway tracks would be approximately 23 feet in height.

Traffic

The proposed and existing speed limit is 45 mph. The Average Daily Traffic (ADT) as of October 2013 is 21,412 vehicles per day (vpd).

Project Funding and Planning Information

The proposed project would receive funding from the Congestion Mitigation and Air Quality Improvement Program (CMAQ), a grant program jointly administered by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Federal funds would be funneled through TxDOT. The CMAQ Improvement Program funds projects meant to reduce vehicle emissions. Projects receiving funds through this program must have a local match of a minimum of 20 percent of the project cost.

Projects are considered for CMAQ funding only when they have been placed on the local Metropolitan Planning Organization's (MPO) Transportation Improvement Program (TIP). The local MPO in the vicinity of the proposed project is the Harris-Galveston Area Council (H-GAC), and its TIP is the implementation portion of its long-range planning tool, the Metropolitan Transportation Plan (MTP). Currently, Harris County is completing the TIP application that would be submitted to H-GAC in early 2015.

The proposed project has an estimated total construction cost of \$12.5 million (December 2014 estimate) and would include both federal and local funding. Federal funds would be obtained through TxDOT and local funding would be contributed by Harris County, with an 80/20 funding split, respectively. The project is scheduled for letting in 2018 with an estimated date of completion in 2019.

The proposed action is consistent with the Houston-Galveston Area Council's (H-GAC) 2035 Regional Transportation Plan and the 2013-2016 Transportation Improvement Program (TIP). All projects in the H-GAC TIP that are proposed for federal or state funds have been initiated in a manner consistent with the federal guidelines detailed in Section 450, of Title 23 Code of Federal Regulations (CFR) and Section 613.200, Subpart B, of Title 49 CFR. Energy, environmental, cost, and mobility considerations are addressed in the programming of the TIP.

Need and Purpose

In July 2004, a freight rail grade crossing study prepared on behalf of the Harris County Public Infrastructure Department and the Port of Houston Authority found the Federal Road crossing is at high risk for grade crossing accidents. The combination of switching activities in the rail yard and a large volume of vehicular traffic on Federal Road results in unsafe mobility for both rail operators and local traffic. The need for the proposed project is to increase public safety at the PTRA railway crossing of Federal Road and the surrounding area.

The purpose of the proposed project is to construct an overpass structure on Federal Road at the PTRA railway crossing that would separate the at-grade crossing and remove the existing railroad crossing, traffic controls, and warning equipment. Increased public safety is the primary objective. Additional benefits of the proposed project include eliminating significant wait times at the railway crossing and adding truck turnaround lanes for increased mobility of local cargo traffic. This plan would also facilitate the expressed desire by the PTRA to expand the capacity of rail service from the existing two tracks to four tracks in the near future. The project is intended to create a safer environment for both large and small vehicles that frequent the roadway.

Additionally, during tropical storms and hurricanes, local high-profile bridges including Beltway 8 and IH 610 bridges over the Houston Ship Channel and the SH 146 bridge over the San Jacinto River are closed when winds reach a certain speed. During these situations, the Washburn Tunnel becomes an integral evacuation route to access IH 10. The proposed project would

provide safe hurricane evacuation mobility to area residents by creating easier and more reliable access to the tunnel.

Alternatives

Two alternatives were evaluated for this study: the No-Build Alternative and the Proposed Alternative. Under the No-Build Alternative, no improvements would be made to Federal Road. This alternative was deemed unacceptable because it does not meet the needs of the proposed project. The Proposed Alternative would meet the needs of the project by improving public safety, eliminating wait times at the railroad crossing, and adding truck turnaround lanes for increased mobility of local cargo traffic.

Pedestrian and Bicycle Accommodations

Sidewalks are proposed for all portions of the project along the approaches, embankment, and overpass. There is negligible cycling traffic along Federal Road, and there are no multimodal facilities connected to the proposed project. The proposed improvements would not cause any detrimental changes in access and/or travel patterns of either vehicular, bicycle, or pedestrian traffic. The proposed project would augment access and travel patterns for vehicular, bicycle, and pedestrian traffic due to improvements in the roadway, sidewalks, and overall safety.

Right of Way and Utilities Adjustments

The existing ROW along Federal Road is generally 126 feet wide. There is a section of the existing ROW extending to approximately 216 feet wide located from approximately 275 feet north to 225 feet south of the PTRA railway tracks. There are no cross streets in the proposed project area. The proposed design would not require the acquisition of any additional ROW. No residential or business relocations or displacements are expected as a result of the proposed project. The proposed design would encroach on the necessary overhead clearance of two existing CenterPoint Energy overhead transmission lines that run parallel to the Federal Road ROW and cross the railway tracks perpendicularly at the Federal Road and PTRA railway tracks intersection. The overhead transmission lines would be adjusted vertically at station 18+23.84 on the northern side of the Federal Road ROW and at station 17+41.92 on the southern side of the ROW. There are 14 other utilities that conflict with the proposed design; however, Harris County is not responsible for the alteration of these utilities. **Engineering Plans** depicting proposed utility adjustments that Harris County is responsible for are available in **Appendix A**, and a complete **Utility Contact/Conflict Table** is available in **Appendix B**.

SURROUNDING AREA

Land Use

Federal Road is located within close proximity to four major highways; IH 610, IH 10, SH 225, and Beltway 8. The existing facility is used heavily by traffic to travel under the Houston-Galveston Ship Channel/Buffalo Bayou via the Washburn Tunnel, and to access industrial and commercial properties along the proposed project property.

The proposed project is located within an urban area that is dominated by commercial and industrial uses. There is an area of undeveloped land dominated by forest vegetation located east of Federal Road and south of the PTRA railway. The nearest residential areas are located outside of the project area to the north, near IH 10, and to the east, on the north side of Clinton Drive. There are multiple commercial and industrial developments located on Federal Road between IH 10 and SH 225 that generate high truck volumes. Federal Road serves as the main connector between these developments and the local highway system.

Site Photographs depicting the existing facility and the surrounding area are included in **Appendix C**. Additional description of the natural setting within the project corridor is provided in the Biological Resources portion of this document.

SPECIFIC AREAS OF ENVIRONMENTAL CONCERN

SOCIOECONOMIC RESOURCES

Community Impacts

Community cohesion is a term that refers to an aggregate quality of a residential area. Cohesion is a social attribute that indicates a sense of community, common responsibility, and social interaction within a limited geographic area.

A windshield survey performed on November 4, 2013, did not indicate the presence of minority or non-English speaking populations within the proposed project area. The proposed project area consists primarily of commercial and industrial developments with some undeveloped land. No displacements or relocations would be necessary, and no adverse impacts to neighborhoods, communities, or other social units are anticipated. The proposed project would not divide, separate, or isolate any neighborhoods or communities. The proposed improvements would provide increased pedestrian safety along the road and make Federal Road a more pedestrian-friendly corridor. Currently, there is a safety issue as there are no sidewalks providing safe access across the PTRA railway. The proposed project would provide sidewalks along the embankments and overpass, increasing pedestrian safety in the area.

Environmental Justice

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, requires each federal agency to "make achieving environmental justice a part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations."

According to the Texas Commission on Environmental Quality's (TCEQ) *Environmental Justice Guidance under the National Environmental Policy Act*, a minority is defined as: Individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. A minority population should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. In identifying minority communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds.

Low-income populations are defined as families that have incomes below the poverty guidelines. The U.S. Department of Health and Human Services has issued the revised the 2014 poverty guidelines. The average family size in the contiguous United States is 4 people per household, which has a poverty guideline set at an annual household income of \$23,850.

FHWA has identified three fundamental principles of environmental justice:

1. To avoid, minimize, or mitigate disproportionately high and adverse human or environmental effects, including social and economic effects, on minority populations and low-income populations.
2. To ensure full and fair participation by all potentially affected communities in the transportation decision-making process.
3. To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority populations and low-income populations.

Disproportionately high and adverse human health or environmental effects are defined by FHWA as adverse effects that:

- Are predominately borne by a minority population and/or a low-income population or
- Would be suffered by the minority population and/or low-income population and are appreciably more severe or greater in magnitude than the adverse effects that would be suffered by the nonminority population and/or non-low-income population.

As per TCEQ's definition, the project area does not contain a minority population. Additionally, there are no low-income populations on the project area. Therefore, no low-income or minority populations or neighborhoods would be adversely affected by the proposed roadway improvements.

If the No-Build Alternative is selected, no safety or pedestrian improvements would be implemented on Federal Road. These concerns are pivotal as there is heavy truck traffic along the corridor and no safe access for pedestrians.

If the Proposed Alternative is selected, the proposed safety improvements, as well as the increased access for pedestrians, would greatly increase the overall safety along the roadway. This would facilitate pedestrian access on Federal Road, as well as make for a safer travel corridor for all who utilize the roadway.

There are no environmental justice populations located within the proposed project area, so there would be no impacts to any population, groups, communities, or neighborhoods.

Executive Order 13166

EO 13166, *Improving Access to Services for Persons with Limited English Proficiency*, requires federal agencies to examine the services they provide to those with limited English proficiency (LEP), and develop and implement a system to provide those services in a way that provides meaningful access to LEP persons.

The site surveys conducted on November 4, 2013, found no evidence of LEP populations on or immediately adjacent to the proposed project area. However, evidence of LEP populations were observed approximately 0.75 miles to the north of the proposed project area, including business signage in Spanish along Federal Road near the intersection with Coulson Street.

This evidence shows that the proposed project area is near population concentrations of minority populations. As previously discussed in the land use section of this document, residential neighborhoods are located north and east of the proposed project area. This populace would not receive disproportionately high adverse human health or environmental impacts because of the proposed project. The proposed improvements would benefit the surrounding population, because the improved roadway would encourage traffic to use Federal Road instead of minor neighborhood streets. Also, the addition of sidewalks on the embankment and overpass would provide a safe way to cross the PTRR railway tracks.

No public meetings or public involvement has been initiated or proposed for this project. Any public involvement outreach for this project would be published in both English and Spanish and would be conducted in a manner so that all interested parties could provide both oral and written comments concerning the proposed project.

CULTURAL RESOURCES

Cultural resources are structures, buildings, archeological sites, districts (a collection of related structures, buildings, and/or archeological sites), cemeteries, and objects. Both federal and state laws require consideration of cultural resources during project planning. At the federal level, the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) of 1966, among others, apply to transportation projects such as this one. In addition, state laws such as the Antiquities Code of Texas also apply to these projects. Compliance with these laws often requires consultation with the Texas Historical Commission (THC) and the State Historic Preservation Officer (SHPO). Review and coordination with the THC and SHPO for this proposed project followed approved procedures for compliance with federal and state laws.

Historic Properties

A review of the National Register of Historic Places (NRHP), the list of State Archeological Landmarks (SAL), and the list of Recorded Texas Historic Landmarks (RTHL) indicated that no historically significant resources have been previously documented within the area of potential effects (APE). It has been determined through consultation with the SHPO that the APE for the proposed project is determined to be 150 feet from the existing/proposed ROW. A site visit revealed that there are no historic-age resources older than 45 years (built prior to 1969), located within the Project APE.

Pursuant to Stipulation V, *Undertakings with No Potential to Affect Historic Resources*, of the First Amended Programmatic Agreement Regarding the Implementation of Transportation Undertakings (PA-TU) between the FHWA, the SHPO, the Advisory Council on Historic Preservation, TxDOT, and the Memorandum of Understanding (MOU) between TxDOT and the THC, TxDOT historians determined that no historic-age properties are present and that individual project coordination with the SHPO is not required.

Archeological Resources

Based on the archeological study and consultation results, available in **Appendix D**, no further work is warranted. The background studies found that the project area had been extensively disturbed, precluding the possibility of it containing any intact archeological deposits. Consultation with federally-recognized Native American tribes with demonstrated historic interest in the area was not required for this project. Harris County submitted a request for project review to the THC/SHPO on November 19, 2013. On December 18, 2013, the THC/SHPO responded with a “No Survey Required” determination which concurred that the project would not affect archeological sites or cemeteries that would be afforded further

consideration under cultural resource laws. In addition, no public controversy exists regarding the project's potential impacts on archeological sites or cemeteries. In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area would cease, and TxDOT archeological staff would be contacted to initiate post-review discovery procedures.

According to the Houston-Potential Archeological Liability Map (PALM) GIS database compiled by the TxDOT Austin Environmental Affairs Division, the project is located in the area identified as Map 4. For those areas identified within Map 4, no archeological survey is recommended on the basis of extensive urban disturbances. A **Houston-Potential Archeological Liability Map** is enclosed as **Exhibit 3**.

SECTION 4(f) RESOURCES

The proposed project would not impact any wildlife or waterfowl refuges, publicly-owned parklands recreation areas, or historic sites therefore, a Section 4(f) statement is not required under the 1966 Transportation Act. In addition, this project would not impact any areas of unique scenic beauty or other lands of national, state, or local importance as defined by the U.S. Department of Agriculture (USDA) and the U.S. Forest Service.

WATER RESOURCES

Section 404 of the Clean Water Act: Waters of the US

This project would not result in the placement of temporary or permanent dredge or fill material into potentially jurisdictional waters of the US, including wetlands or other special aquatic sites; therefore, a Section 404 permit would not be required.

The United States Army Corps of Engineers (USACE) issued a jurisdictional determination on September 2, 2014, in response to a request by Harris County on June 17, 2014. Jurisdictional determination file number SWG-2014-00519 concurs with the wetland delineation report prepared by Crouch Environmental Services, Inc. (CESI) dated November 2013, which indicates there are no potentially jurisdictional waters of the U.S. within the proposed project area. This correspondence is available in **Appendix D**, and a **2012 Aerial Photograph with USACE Jurisdictionally Determined Aquatic Features Overlay** is enclosed as **Exhibit 4**. No Department of the Army permit would be required prior to discharge of any fill material into the project area.

Section 401 of the Clean Water Act: Water Quality Certification

This proposed project would not result in the placement of temporary or permanent dredge or fill material into traditionally navigable waters and, based on the letter issued by the USACE dated September 2, 2014, available in **Appendix D**, this project would not require a USACE Section 404 Permit; therefore, Section 401 Certification would not be required. Erosion control would be addressed through the use of temporary vegetation. Sedimentation control would be addressed through the use of silt fencing. Post-construction control of total suspended solids (TSS) would be addressed through the utilization of vegetative filter strips.

Executive Order 11990, Wetlands

EO 11990 on the limitation of destruction or modification of wetlands does not apply because no jurisdictional wetlands would be impacted.

Rivers and Harbors Act of 1899, Sections 9 and 10

This project does not involve work in or over a navigable water of the U.S; therefore, Sections 9 and 10 of the Rivers and Harbors Act do not apply.

Section 303(d) of the Clean Water Act

The identification of runoff from this project, in accordance with Section 303(d) of the Clean Water Act, would discharge directly into the following TCEQ-designated water body segments:

- Segment 1007_03 of Hunting Bayou Tidal (Houston Ship Channel confluence to IH-10). This segment is listed as threatened/impaired for dioxin in edible tissue and PCBs in edible tissue on the 2012 Texas 303(d) List. This project is not expected to contribute the constituent of concern to the impaired water body.

Runoff from the proposed project would discharge within 5 stream miles upstream into the following TCEQ-designated water body segments:

- Segment 1006_01 of the Houston Ship Channel Tidal (Greens Bayou confluence to Patrick Bayou confluence). This segment is listed as threatened/impaired for dioxin in edible tissue and PCBs in edible tissue on the 2012 Texas 303(d) List. The proposed project is not expected to contribute the constituent of concern to the impaired water body.
- Segment 1007_01 of the Houston Ship Channel (Greens Bayou to the 69th Street WWTP outfall). The proposed segment is listed as threatened/impaired for dioxin in edible tissue

and PCBs in edible tissue on the 2012 Texas 303(d) List. This project is not expected to contribute the constituent of concern to the impaired water body.

Section 402 of Clean Water Act: TPDES, Construction General Permit, MS4

CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate point source discharges of pollutants into waters of the United States. An NPDES permit sets specific discharge limits for point sources discharging pollutants into waters of the United States and establishes monitoring and reporting requirements, as well as special conditions.

The proposed project would include 5 or more acres of earth disturbance. TxDOT would comply with TCEQ's Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (CGP). A Storm Water Pollution Prevention Plan (SW3P) would be implemented, and a construction site notice would be posted on the construction site. A Notice of Intent (NOI) would be required.

The proposed project is located within the boundaries of the City of Houston (Phase I) Municipal Separate Storm Sewer System (MS4), and would comply with applicable MS4 requirements.

Floodplains

The proposed project is not located within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain. A **2012 Aerial Photograph with FEMA Floodplain Overlay** is enclosed as **Exhibit 5**. Coordination with the local floodplain administrator would not be required.

Texas Coastal Management Program

The proposed project is located within Harris County, which is within the Texas Coastal Management Program (TCMP) boundary. TxDOT has reviewed the proposed project activities for consistency with the TCMP goals and policies in accordance with the regulations of the Coastal Coordination Council and has determined that the proposed action is consistent with applicable TCMP goals and policies, and would not have a direct and significant adverse effect on the Coastal Natural Resource Areas (CNRAs), identified in 31 TAC Chapter 501.31.

Soils

The USDA Web Soil Survey provided a current report on the characteristics of soils within the proposed project area. Two types of soils are identified within the project corridor, Bacliff clay, 0 to 1 percent slopes, and Verland silty clay loam. The Bacliff clay, 0 to 1 percent slopes, consists of poorly drained soils that are derived from clayey fluviomarine deposits from igneous, metamorphic, and sedimentary rock. The Verland silty clay loam consists of somewhat poorly drained soils from loamy fluviomarine deposits of the late Pleistocene age. A **2012 Aerial Photograph with NRCS Soil Survey Overlay** is enclosed as **Exhibit 6**.

NOISE

Traffic

The proposed project would not be on a new location, and it would not increase the number of through traffic lanes, add capacity, or change the horizontal alignment. However, the proposed project would change the vertical alignment of the roadway with the embankments and overpass above grade. This would result in a Type I Project according to 23 CFR 772.5. Therefore, a Traffic Noise Analysis is required per TxDOT's "Guidelines for Analysis and Abatement of Highway Traffic Noise." This analysis for the proposed roadway improvements was accomplished with TxDOT's (FHWA-approved) Guidelines for Analysis and Abatement of Highway Traffic Noise (2011).

Sound from highway traffic is generated primarily from a vehicle's tires, engine, and exhaust. It is commonly measured in decibels and is expressed as "dB." Sound occurs over a wide range of frequencies; however, not all frequencies are detectable by the human ear. Therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called "A weighting" and is expressed as "dB(A)." Also, because traffic sound levels are never constant due to the changing number, type, and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as "L_{eq}." Traffic noise analyses typically include the following elements:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA and TxDOT have established Noise Abatement Criteria (NAC) for various land use activity areas that are used as one of two means to determine when a traffic impact would occur. The criteria are presented in **Table 1**.

Table 1: FHWA/TxDOT Noise Abatement Criteria

Activity Category	FHWA dB(A)/L _{eq}	Description of Land Use Activity Areas
A	57 (exterior)	Lands on which serenity and quiet are of extra-ordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential

Activity Category	FHWA dB(A)/L _{eq}	Description of Land Use Activity Areas
C	67 (exterior)	Active sports areas, amphitheaters, auditoriums, campgrounds, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
F	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	Undeveloped lands that are not permitted.

A noise impact occurs when either the absolute or relative criterion is met as described below:

Absolute criterion: the predicted noise level at a receiver approaches, equals, or exceeds the FHWA NAC. “Approach” is defined as 1 dB(A) below the FHWA NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.

Relative criterion: the predicted noise level substantially exceeds the existing noise level at a receiver, even though the predicted noise level does not approach, equal, or exceed the FHWA NAC. “Substantially exceeds” is defined as more than 10 dB(A). For example, a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A) (11-dB(A) increase).

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is a positive action taken to reduce the impact of traffic noise on an activity area.

The land use activity areas adjacent to the proposed project currently consist of commercial development (NAC F). Therefore, there are no receivers that would be impacted by traffic noise and benefit from any feasible and reasonable noise abatement measures.

Noise associated with construction of the proposed project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable

patterns. However, construction normally occurs during daylight hours when occasional loud noises are tolerable. None of the receivers is expected to be exposed to construction noise for long periods of time; therefore, extended disruption of normal activities is not expected. Provisions would be included in the plans and specifications to require the contractor to make reasonable efforts to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

On the date of approval of this document (date of public knowledge), the FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the proposed project area.

HAZARDOUS MATERIALS

Based on anticipated activities related to the roadway construction, an initial site assessment (ISA) was conducted to identify potential hazardous materials in the vicinity of the proposed project area. The ISA consisted of on-site assessment and review of regulatory database records. An analysis of the ISA data indicated that the proposed project does not involve known hazardous materials impacts that could be anticipated to adversely affect construction. A copy of the regulatory database search is on file at the TxDOT Houston District office.

A total of 15 sites mapped by the Environmental Data Resources (EDR) report occurring within 1 mile of the proposed project area were reviewed and investigated, and are detailed in **Table 2**.

Table 2: EDR-Listed Properties within One Mile of Proposed Project Area

Property	Address	Data Map ID	Distance from Project Area (Feet)	Database(s)
MI Drilling Fluids	2200 Federal Rd.	A1	26	LPST, UST
All States Steel Co.	2000 Federal Rd.	2	26	LPST, UST
East Purification Plant	2300 Federal Rd.	A3	26	AST
Casting Concepts, Inc.	2110 Federal Rd.	A4	26	RCRA-CESQG, FINDS
Hess Stations Fuel Oil Pipeline	2100 Federal Rd.	B5	100	UST
Southwest Wire Rope	1902 Federal Rd.	B6	164	VCP, Ind. Haz Waste, GCC
Unnamed Property	1842 Federal Rd.	C7	1,009	EDR US Hist Auto Stat
Unnamed Property	1840 Federal Rd.	C8	1,030	EDR US Hist Auto Stat
Quality Service Tank	1831 Federal Rd.	C9	1,246	AST
1720 Federal Road	1720 Federal Rd.	D10	1,927	VCP, GCC
Chevron 150	1731 Federal Rd.	D11	2,101	LPST, UST, Financial Assurance

Property	Address	Data Map ID	Distance from Project Area (Feet)	Database(s)
City of Galena Park	E of Holland Ave.	12	2,249	SWF/LF
National Strand Products	1727 Federal Rd.	E13	2,323	VCP
Market Transmission	1647 Federal Rd.	E14	2,534	LPST, GCC
Houston District Office	15210 American Petroleum Rd.	15	2,556	LPST, UST

LPST = Leaking Petroleum Storage Tank UST = Underground Storage Tank
 AST = Above Ground Storage Tank FINDS = Facility Index System
 VCP = Voluntary Cleanup Program GCC = Groundwater Contamination Cases
 SWF/LF = Permitted Solid Waste Facilities
 RCRA-CESQG = Resource Conservation and Recovery Act-Conditionally Exempt Small Quantity Generator

Based on data collected from interviews with knowledgeable personnel, reviews of available historical sources, aerial photographic information, and past site uses on adjoining properties and surrounding parcels, 8 of the 15 properties appear to represent potential Recognized Environmental Conditions (RECs) adjacent to the Federal Road proposed project area. Although there was no evidence of contamination or hazardous materials on the roadway or ROW along these properties, it would be prudent to further investigate the adjoining ROW prior to construction. The following facilities adjacent to the proposed project area represent potential RECs, due to their previous contamination issues: MI Drilling Fluids, All States Steel Co., Chevron 150, Market Transmission, Houston District Office, Southwest Wire Rope Houston, 1720 Federal Road, and National Strand Products.

In addition to the listed locations in the environmental regulatory databases, site inspections revealed three more potential RECs in the existing ROW:

- One pile of soil and gravel from an apparent off-site source was observed on the proposed project area at 2200 Federal Road.
- Stormwater runoff from the East Purification Plant, located at 2300 Federal Road, was observed to drain into the adjacent Federal Road ditch via PVC pipes.
- A ditch draining uplands adjacent to Federal Road was observed southwest of the intersection of Federal Road and the railway tracks. The observed ditch has the potential to carry pollutants from the nearby metal-working facility onto the proposed project area at 2200 Federal Road.

A limited subsurface investigation of soils and groundwater (Phase II ESA) may be conducted in the areas on or adjacent to the proposed project area where materials from an apparent off-site source, hazardous materials, and/or hydrocarbons may exist. This option would serve to better establish the presence or absence of subsurface contaminants, creating a thorough record of the existing condition of the proposed project area at the time of the investigation. If such a subsurface investigation is completed and contaminants are discovered, TCEQ should be

notified. These areas would include, but may not be limited to, the following areas of the property:

- The northern perimeter of the proposed project area, near the Southwest Wire Rope facility at 1902 Federal Road, where contaminated soil and groundwater may have impacted soil and groundwater in the ROW.
- A pile of soil at 2200 Federal Road of unknown origin.
- The ditches draining 2200 and 2300 Federal Road, located southwest of the intersection of Federal Road and the PTRR railway.

Appropriate measures should be taken to prevent, minimize, and control the release of hazardous materials. Unidentified containers, liquids, and odors encountered during construction would be handled in accordance with the appropriate federal, state, and local regulations. Any unanticipated hazardous materials and/or petroleum contamination encountered during construction would be handled in accordance with applicable federal and state regulations per TxDOT Standard Specifications.

BIOLOGICAL RESOURCES

Endangered Species Act of 1973

An on-site investigation for the presence/absence of listed species and their habitats was conducted by CESI on November 4, 2014. The report subsequently prepared by CESI in January 2014, to document the field assessment indicated that the proposed project would have no effect on any federally listed species and no impact on any state listed species, their habitat or designated critical habitat. **Table 3** lists the state and federal threatened and endangered species that occur in Harris County and includes those identified by the Natural Diversity Database (NDD) conducted by TPWD during this study. Although there are many listed federal and state species for Harris County, only six species have a known element of occurrence (EOID) within 10 miles of the proposed project area (**Table 4**). No other species occurrences were noted as per coordination with the TPWD.

Table 3: State and Federal Threatened and Endangered Species of Harris County

Common Name	Scientific Name	State Status	Federal Status	Habitat Description	Habitat Present	Species Effect	EOID
AMPHIBIANS							
Houston Toad	<i>Anaxyrus houstonensis</i>	E	E†	Sandy soil, breeds in ephemeral pools	No	No effect	3159
Southern Crawfish Frog	<i>Lithobates aureolatus</i>	*		Crawfish burrows, breeds in ephemeral pools	Yes – Sub-optimal	No impact	7944
BIRDS							
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	T	DL†	Potential migrant, nest in west Texas	No	No impact	n/a
Arctic Peregrine Falcon	<i>Falco peregrinus tundrius</i>	-	DL†	Potential migrant	No	No effect	n/a

Table 3: State and Federal Threatened and Endangered Species of Harris County

Common Name	Scientific Name	State Status	Federal Status	Habitat Description	Habitat Present	Species Effect	EOID
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T	DL	Near water areas, in tall trees	No	No impact	n/a
Black Rail	<i>Laterallus jamaicensis</i>	-		Marshes, pond borders, wet meadows, and grassy swamps	No	No impact	n/a
Brown Pelican	<i>Pelecanus occidentalis</i>	-	DL†	Island near coastal areas	No	No impact	n/a
Henslow Sparrow (wintering)	<i>Ammodramus henslowii</i>	-		weedy fields, fields with bunch grass, vines, and brambles, need bare ground	No	No impact	n/a
Mountain Plover	<i>Charadrius montanus</i>	-		Short grass plains and bare dirt (plowed fields)	No	No impact	n/a
Red-cockaded Woodpecker	<i>Picoides borealis</i>	E	E†	Nest in 60+ year pine, forages in 30+ pine	No	No effect	n/a
Snowy Plover	<i>Charadrius alexandrinus</i>	-		Coastal winter migrant	No	No impact	n/a
Southeastern Snowy Plover	<i>Charadrius alexandrinus tenuirostris</i>	-		Winter migrant on Texas coast beaches, bayside mud or salt flats	No	No impact	n/a
Sprague's Pipit	<i>Anthus spragueii</i>	-	C†	Winter migrant, native upland prairie	No	No impact	n/a
White-faced Ibis	<i>Plegadis chihi</i>	T		Freshwater marshes, but some brackish or salt marshes	No	No impact	n/a
White-tailed Hawk	<i>Buteo albicaudatus</i>	T		Coastal Prairies	No	No impact	n/a
Whooping Crane	<i>Grus americana</i>	E	E†	Winters in Aransas NWR	No	No effect	n/a
Wood Stork	<i>Mycteria americana</i>	T	E†	Prairie ponds and flooded pastures	No	No impact	n/a
FISHES							
American Eel	<i>Anguilla rostrata</i>	-	UR†	Coastal waterways below reservoirs to gulf	No	No impact	n/a
Creek Chubsucker	<i>Erimyzon oblongus</i>	T		Variety of small rivers and creeks, prefers headwaters	No	No impact	n/a
Smalltooth sawfish	<i>Pristis pectinata</i>	E	E†	Sheltered bays, shallow banks, estuaries and river mouths	No	No effect	n/a
MAMMALS							
Louisiana Black Bear	<i>Ursus americanus luteolus</i>	T	T†	Bottomland hardwoods; large, undisturbed forested areas	No	No effect	n/a
Plains Spotted Skunk	<i>Spilogale putoria interrupta</i>	-	UR†	Open fields, prairies, croplands, fence rows, farm yards, brushy areas, and tall grass prairies	No	No impact	n/a
Rafinesque's Big-Eared Bat	<i>Corynorhinus rafinesquii</i>	T		Cavity trees in hardwood forest, concrete culverts, abandon buildings	No	No impact	n/a
Red Wolf	<i>Canis rufus</i>	E	E†	Extirpated, brushy, forested areas, coastal prairies	No	No effect	n/a
Southeastern Myotis Bat	<i>Myotis austroriparius</i>	-		Cavity trees in hardwood forest, concrete culverts, abandon buildings	No	No impact	n/a
MOLLUSKS							
Little Spectaclecase	<i>Villosa lienosa</i>	-		creeks, rivers, and reservoirs, sandy substrates, slight to moderate currents, along banks in slower currents	No	No impact	n/a
Louisiana Pigtoe	<i>Pleurobema riddellii</i>	T		Streams & moderate-sized rivers, mud, sand, and gravel	No	No impact	n/a
Sandbank Pocketbook	<i>Lampsilis satura</i>	T		Rivers with moderate to swift flows, gravel-sand, and sand	No	No impact	n/a
Texas Pigtoe	<i>Fusconaia askewi</i>	T		Rivers with mixed mud, sand, and fine gravel in protected areas.	No	No impact	n/a
Wabash Pigtoe	<i>Fusconaia flava</i>	-		Creeks to rivers, mud, sand, and gravel, moderate to swift currents	No	No impact	n/a
REPTILES							
Alligator Snapping Turtle	<i>Macrolemys temminckii</i>	T	UR†	Deep water of rivers and canals	No	No impact	n/a
Green Sea Turtle	<i>Chelonia mydas</i>	T	T†	Gulf and bay system	No	No effect	n/a
Gulf Saltmarsh Snake	<i>Nerodia clarkia</i>	-		Saline flats, coastal bays, brackish river mouth	No	No effect	n/a

Table 3: State and Federal Threatened and Endangered Species of Harris County

Common Name	Scientific Name	State Status	Federal Status	Habitat Description	Habitat Present	Species Effect	EOID
Kemp's Ridley Sea Turtle	<i>Lepidochelys kempii</i>	E	E†	Gulf and bay system	No	No effect	n/a
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	E	E†	Gulf and bay system	No	No effect	n/a
Loggerhead Sea Turtle	<i>Caretta caretta</i>	T	T†	Gulf and bay system	No	No effect	n/a
Smooth Green Snake	<i>Liophorophis vernalis</i>	T		Gulf coastal prairies, prefers dense vegetation	No	No impact	n/a
Texas Horned Lizard	<i>Phrynosoma cornutum</i>	T		Open, semi-arid regions, with bunch grass	No	No impact	n/a
Timber/Cane brake Rattlesnake	<i>Crotalus horridus</i>	T		Swamps/floodplains of hardwood/upland pine	No	No impact	n/a
VASCULAR PLANTS							
Coastal Gay-feather	<i>Liatris bracteata</i>	-		Coastal prairie grasslands	No	No impact	n/a
Florida ladies-tresses	<i>Spiranthes brevilabris</i> var. <i>floridana</i>	-		Moist to wet, relatively open sites of pine-dominated landscapes,	No	No impact	n/a
Giant Sharpstem Umbrella-sedge	<i>Cyperus cephalanthus</i>	-		on saturated, fine sandy loam soils or on heavy black clay	No	No impact	n/a
Houston Daisy	<i>Rayjacksonia aurea</i>	-		Barren, sparsely vegetated saline slicks, pimple mounds, on sandy to sandy loam.	No	No impact	7313
Neglected coneflower	<i>Echinacea paradoxa</i> var. <i>neglecta</i>	-		Rocky prairies, glades, and crosstember open woodlands and savannas. Full sun.	No	No impact	n/a
Panicled indigobush	<i>Amorpha paniculata</i>	-		acid seep forests, peat bogs, wet floodplain forests, and seasonal wetlands	No	No impact	n/a
Texas ladies'-tresses	<i>Spiranthes brevilabris</i> var. <i>brevilabris</i>	-		Sandy soils in moist prairies,	No	No impact	n/a
Texas Meadow-rue	<i>Thalictrum texanum</i>	-		woodlands and woodland margins on sandy loam, on pimple mounds, clay pan savannahs	No	No impact	n/a
Texas prairie dawn	<i>Hymenoxys texana</i>	E	E	Poorly drained areas in open grasslands; pimple mounds	No	No effect	4247
Texas Windmill Grass	<i>Chloris texensis</i>	-		Sandy to sandy loam soils in bare areas	No	No impact	2166, 3942
Threeflower Broomweed	<i>Thurovia triflora</i>	-		Low vegetation, on light colored silt or fine sand over saline clay.	No	No impact	7357

- These species occur on the state listing of threatened or endangered species for Harris County as rare, but with no regulatory listing status.

"Texas Parks and Wildlife Department. Annotated County Lists of Rare Species. Harris County, Last Revision 8/7/2012"

http://www.tpwd.state.tx.us/gis/ris/es/ES_Reports.aspx?county=Harris (Accessed January 3, 2014).

† These species are listed statewide by USFWS but are not listed by the USFWS Region 2 – Clear Lake office as occurring in Harris County, Texas. http://www.fws.gov/southwest/es/ES_ListSpecies.cfm (Accessed January 3, 2014).

* These species have no state or federal regulatory listing status, but is listed by TPWD as a Species of Greatest Conservation Need in the Texas Conservation Action Plan (2012). <https://www.tpwd.state.tx.us/landwater/land/tcap/>

E = endangered, T = threatened, TM= transitory migrant, DM = delisted taxon, recovered, being monitored first five years, C = candidate species, UR=under review/species of concern.

Potential habitat for one TPWD Species of Greatest Conservation Need, the southern crawfish frog (*Lithobates areolatus*), was observed on the proposed project area. This species may occur within the herbaceous wetland and roadside ditches in the proposed project area. However, most of the potentially suitable habitat for this species has been removed through the construction of roadways and the PTRR railway. The remaining habitat is regularly disturbed by anthropogenic activities, including mowing. It is likely that any individuals of this species, if present, would relocate to more suitable habitats during construction activities. Therefore, the proposed project would not impact this species. Transitory migrant species that may visit the site include the American and Arctic peregrine falcons and the white-tailed hawk. The proposed project would

have no impact on these species because existing foraging habitats are suboptimal and no nesting or roosting habitat exists on the proposed project site.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) decrees that all migratory birds and their parts, including eggs, nests, and feathers, are fully protected from commercial trade and exploitation. A cursory nest survey was conducted on November 4, 2013 within the project ROW and areas immediately adjacent. No bird nests were observed, either active or abandoned within the proposed project area. Migratory bird nesting season generally runs from March 1st through August 31st. In accordance with the MBTA, vegetation clearing would be conducted outside peak-nesting seasons to avoid any adverse effects to migratory birds and their habitat. In the event that migratory birds or their nests are present prior to or during construction, actions would be implemented to ensure migratory birds, their nests, eggs, and young would not be harmed.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act directs all federal agencies whose actions would impact an essential fish habitat, must confer with the National Marine Fisheries Service regarding any potential effects to the habitat. There are tidally influenced waters located within Harris County; however, there are no tidally influenced waters located in the proposed project area. No essential fish habitat would be affected; therefore, the Magnuson-Stevens Fishery Conservation and Management Act is not applicable to the proposed project.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) provides the basic authority for the Fish and Wildlife Service's involvement in evaluating impacts to fish and wildlife for projects that would result in the control or modification of a natural stream or body of water and would require a Section 404 Individual Permit. No USACE permit is required for the proposed project therefore; no coordination under FWCA is required.

Farmland Protection Policy Act

The Farmland Policy Protection Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. Projects considered exempt under the FPPA are those that require no ROW acquisition, or require ROW that is developed, urbanized or zoned for urban use. This proposed project would not require the acquisition of any new ROW; therefore, the proposed project is considered exempt under the FPPA.

Executive Order 13112 on Invasive Species

EO 13112 on Invasive Species was issued to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts. In accordance with EO 13112 on Invasive Species, native plant species would be used in the landscaping and in the seed mixes where practicable according to TxDOT Standard Specifications.

Environmentally and Economically Beneficial Practices on Federal Landscaping Grounds

In accordance with the Memorandum on Environmentally Beneficial Landscaping of April 26, 1994, and the Guidance for Presidential Memorandum on Environmentally and Economically Beneficial Landscape Practices on Federal Landscaped Grounds of August 10, 1995, all agencies shall comply with the National Environmental Policy Act as it relates to vegetation management and landscaping practice for all federally assisted projects. The Memorandum directs that where cost-effective and to the extent practicable, agencies shall:

1. Use regionally native plants for landscaping.
2. Design, use, or promote construction practices that minimize adverse effects on the natural habitat.
3. Seed to prevent pollution by, among other things, reducing fertilizer and pesticide use.
4. Implementing water and energy efficient practices.
5. Create outdoor demonstration projects employing these practices.

Any landscaping plans associated with this project would be in compliance with the Memorandum.

TxDOT/TPWD MOU/MOA DETERMINATION

As required in the 1998 MOU between TxDOT and the Texas Parks and Wildlife Department (TPWD), the vegetation in the proposed project area was characterized using *The Vegetation Types of Texas* (TPWD, 1984). The proposed project area is located within the vegetation type (46) Urban.

A field survey conducted on November 4, 2013, revealed two vegetation types within the proposed project ROW: herbaceous upland and herbaceous wetland. The herbaceous upland vegetation is dominated by native and invasive grasses and forbs such as Bermuda grass (*Cynodon dactylon*), Vasey's grass (*Paspalum urvillei*), yellow bluestem (*Bothriochloa ischaemum* var. *songarica*), marsh bristlegass (*Setaria parviflora*), curly dock (*Rumex crispus*), and turkey tangle fogfruit (*Phyla nodiflora*). The herbaceous wetland vegetation is dominated by sedges such as yellow nutsedge (*Cyperus esculentus*) and woodrush flatsedge (*Cyperus*

entrerianus). The observed vegetation within the ROW agrees with the characterization in *The Vegetation Types of Texas* (TPWD, 1984).

There is one area located immediately outside of the Federal Road ROW where there is a notable difference between the vegetation observed and that characterized by *The Vegetation Types of Texas*. The forested area east of the Federal Road ROW and south of the PTRRA railway crossing is dominated by mixed deciduous hardwood forest vegetation.

In accordance with Provision (4)(a)(ii) of the Memorandum of Agreement (MOA) between TxDOT and TPWD, certain habitats are given consideration for non-regulatory mitigation. At the TxDOT District's discretion, habitats given consideration for non-regulatory mitigation during project planning include:

1. Habitat for federal candidate species (impacted by the project) if mitigation would assist in the prevention of the listing of the species.
2. Rare vegetation series (S1, S2, or S3) that also locally provide habitat for a state-listed species.
3. All vegetation communities listed as S1 or S2, regardless of whether or not the series in question provide habitat for state-listed species.
4. Bottomland hardwoods, native prairies, and riparian sites.
5. Any other habitat feature considered locally important that the TxDOT District chooses to consider.

The field survey of the proposed project area conducted on November 4, 2013, revealed no protected species, critical habitats, or any of the five habitat types discussed above. There is no habitat for federal candidate species; no rare vegetative series; no bottomland hardwood, native prairie, or riparian areas; and no locally important habitat on or near the project area. Furthermore, there are no un-maintained vegetation, fencerow vegetation, or unusually large trees within the proposed project area. All temporary impacts to herbaceous cover should return to normal conditions within one growing season after construction is completed. No compensatory mitigation for impacts to non-regulatory habitats is proposed.

MOA for Sharing and Maintaining Natural Diversity Database Information and TxDOT/TPWD MOU

A search of the Natural Diversity Database (NDD) was conducted on November 19, 2013, by TPWD staff in order to determine the potential occurrence of state and federally listed threatened and endangered species and their habitat within a 10-mile radius of the proposed project area (Table 4). An NDD search may not be used exclusively to determine the presence or absence of endangered species. Field surveys in conjunction with GIS analysis concluded that no suitable habitat exists for any state or federally listed species within the project limits.

Table 4 - Elements of Occurrence within 10 Miles of Project Site

Common Name	Scientific Name	EOI D	State Status	Federal Status	Distance (Miles)
Rookery	--	4957	--	--	8.8
Rookery	--	4757	--	--	9.9
Houston toad	<i>Anaxyrus houstonensis</i>	3159	E	E	7.7
Texas windmill grass	<i>Chloris texensis</i>	2166	Rare	--	8.6
Texas windmill grass	<i>Chloris texensis</i>	3942	Rare	--	8.0
Texas prairie dawn	<i>Hymenoxys texana</i>	4247	E	E	9.3
Southern crawfish frog	<i>Lithobates areolatus</i>	7944	*	--	4.8
Houston daisy	<i>Rayjacksonia aurea</i>	7313	Rare	--	9.4
Threeflower broomweed	<i>Thurovia triflora</i>	7357	Rare	--	6.9

E = endangered

* This species is identified as a Species of Greatest Conservation Need (SGCN) by the Texas Conservation Action Plan (TCAP), but has no state or federal listing status.

Sources: http://tpwd.texas.gov/GIS/RIS/ES/ES_REPORTS.ASPX?COUNTY=HARRIS (Accessed November 18, 2013).

http://www.fws.gov/southwest/es/ES_ListSpecies.cfm (Accessed November 18, 2013).

September 1, 2013, MOU between TxDOT and TPWD

Under §2.205(a)(2) of the MOU between TxDOT and TPWD, effective September 1, 2013, TxDOT would determine the need for coordinating a proposed transportation project with TPWD by comparing the results of a Tier I site assessment to the triggers in §2.206 and thresholds found in the threshold table of the Programmatic Agreement. The Tier I site assessment is a subsection of TxDOT’s Biological Evaluation Form (BEF).

TxDOT completed the BEF in December 2014, and a copy of the document is on file at the Houston District. The BEF concluded that early coordination with TPWD is required due to the following triggers:

- The proposed project area is within the range of a state threatened or endangered species or species of greatest conservation need, and suitable habitat is present. The proposed project area contains sub-optimal habitat for the southern crawfish frog (*Lithobates areolatus*).

- The proposed project area contains known isolated wetlands outside of the TxDOT ROW that would be directly impacted by the proposed project. The proposed project area includes 0.14 acres of isolated wetland that is non-jurisdictional to the USACE.

As a result of tripping these triggers, TxDOT would conduct early coordination with TPWD.

AIR QUALITY

Project Consistency with Transportation Plan and Funding

The proposed project is located within Harris County, Texas, which is part of the Houston-Galveston-Brazoria (HGB) area that has been designated by the Environmental Protection Agency (EPA) as a severe non-attainment area for the 8-hour ozone National Ambient Air Quality Standards (NAAQS); therefore, transportation conformity rules apply (Non-attainment area – Houston-Galveston-Brazoria (HGB); MPO – H-GAC; MTP 2035 RTP Update; MTP approval date: January 25, 2011, TIP/STIP 2013-2016 TIP; TIP/STIP approval date: April 27, 2012).

Harris County is currently preparing an application to include the proposed project on the Transportation Improvement Program (TIP). The application would be submitted in early 2015, and the proposed project is expected to be included on the TIP by the end of 2015.

The proposed action would be consistent with the area's financially constrained Metropolitan Transportation Plan (MTP) Houston-Galveston Area Council (H-GAC) 2035 Regional Transportation Plan (RTP) Update and the 2013-2016 TIP. Both the MTP and the TIP were found to conform to the TCEQ State Implementation Plan (SIP) by the FHWA on July 19, 2013. All projects in the H-GAC TIP that are proposed for federal or state funds were initiated in a manner consistent with federal guidelines in Section 450, of Title 23 Code of Federal Regulations (CFR) and Section 613.200, Subpart B, of Title 49 CFR. Energy, environmental, air quality, cost, and mobility considerations are addressed in the programming of the TIP.

The proposed project has an estimated total construction cost of \$12.5 million and includes both federal and local funding. Federal funds would be obtained through TxDOT, and local funding would be contributed by Harris County.

Carbon Monoxide Traffic Air Quality Analysis

Generally, railway crossing improvement projects, such as the Federal Road grade separation, are considered exempt from a Carbon Monoxide (CO) Traffic Air Quality Analysis (TAQA) because they are intended to enhance traffic safety and improve traffic flow. The proposed action would not add capacity to an existing facility. Current and future emissions should continue to follow existing trends not being affected by this project. Due to the nature of this proposed project, further carbon monoxide analysis was not required.

Congestion Management Process

This proposed project is not adding single occupancy vehicle (SOV) capacity to an existing facility; therefore, a Congestion Management Process (CMP) analysis is not required.

Mobile Source Air Toxics

The purpose of the proposed project is to construct an overpass structure on Federal Road at the PTRA railway crossing that would separate the at-grade crossing. This proposed project has been determined to generate minimal air quality impacts for Clean Air Act Amendment (CAAA) criteria pollutants and has not been linked with any special Mobile Source Air Toxics (MSAT) concerns. As such, this proposed project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the proposed project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels would cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's Motor Vehicle Emission Simulator (MOVES) model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent. This would both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from the proposed project.

Construction Emissions

During the construction phase of the proposed project, temporary increases in air pollutant emissions may occur from construction activities. The primary construction-related emissions are particulate matter (fugitive dust) from site preparation. These emissions are temporary in nature (only occurring during construction); it is not possible to reasonably estimate impacts from these emissions due to limitations of the existing models. However, the potential impacts of particulate matter emissions would be minimized by using fugitive dust control measures such as covering or treating disturbed areas with dust suppression techniques, sprinkling, covering loaded trucks, and other dust abatement controls, as appropriate.

The construction activity phase of this proposed project may generate a temporary increase in MSAT emissions from construction activities, equipment, and related vehicles. The primary MSAT construction-related emissions are particulate matter from site preparation and diesel particulate matter from diesel-powered construction equipment and vehicles.

However, considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized, it is not anticipated that emissions from construction of this proposed project would have any significant impact on air quality in the area.

PERMITS/COMMITMENTS

The following commitments have been made for the proposed project:

- Texas Pollution Discharge Pollution Elimination System (TPDES) Construction General Permit (CGP)
- Stormwater Pollution Prevention Plan (SW3P)
- Applicable Municipal Separate Storm Sewer System (MS4) Requirements
- Notice of Intent (NOI)

PUBLIC INVOLVEMENT

Public involvement for this proposed project would comply with Title VI of the Civil Rights Act and EO 13166. Any public involvement/outreach would be conducted in a manner so that all interested parties could provide both oral and written comments concerning the proposed project. Reasonable arrangements (such as special communication interpreters or accommodation needs) would be available if requested to ensure all persons have meaningful access to the programs, services, and information TxDOT provides.

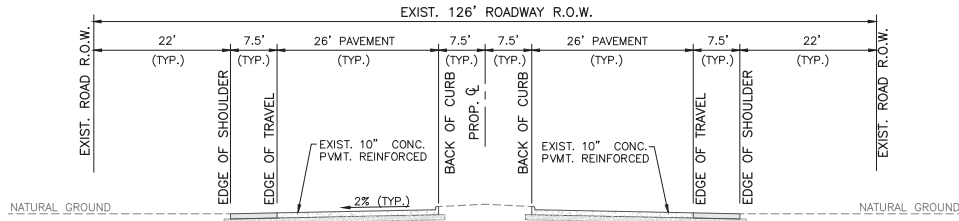
According to the TxDOT Environmental Handbook (Public Involvement, Version 1, March 2013), the level of public involvement for a project is based on the project's type, complexity, and level of public concern on environmental issues. Public participation efforts may include meetings with affected property owners (MAPOs), public meetings, opportunities of a public hearing, or public hearings. Due to the nature of the proposed project, the level of public concern is expected to be minimal, and public involvement would likely be limited to MAPOs. Affected property owners would be contacted by telephone or certified letter by the project sponsor (Harris County). MAPOs would be scheduled at a convenient time and location for each affected property owner. MAPOs would be completed prior to the final environmental decision.

CATEGORICAL EXCLUSION DETERMINATION

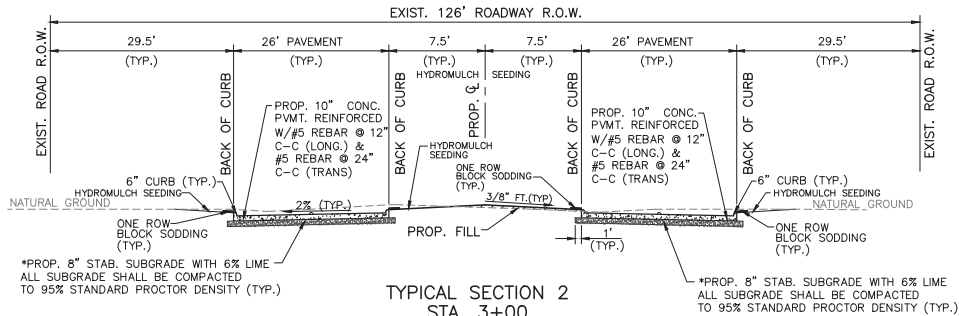
The proposed action meets the criteria for a Categorical Exclusion as defined in the MOU between the FHWA, Texas Division, and TxDOT regarding State Assumption of Responsibility for Categorical Exclusions executed on December 6, 2013.

Appendix A

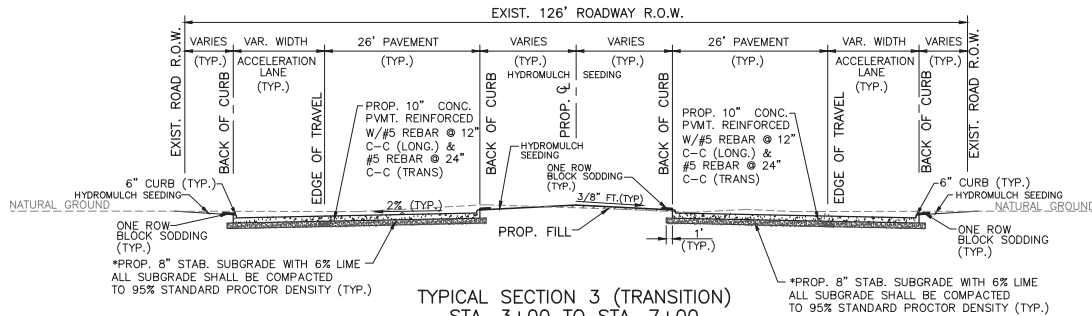
Engineering Plans



TYPICAL SECTION 1
 STA. 0+00 TO STA. 3+00
 & STA. 29+60 TO STA. 30+00



TYPICAL SECTION 2
 STA. 3+00
 & STA. 29+00 TO STA. 29+60



TYPICAL SECTION 3 (TRANSITION)
 STA. 3+00 TO STA. 7+00
 & STA. 25+60 TO STA. 29+00

- NOTES:
1. BEHIND CURB SWALES SHALL BE PLACED AS SHOWN ON PLAN & PROFILE DRAWINGS AND CROSS SECTION SHEETS.
 2. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RESTORED WITH HYDROMULCH SEEDING.
 3. *IF THE SUBGRADE IS SILTY SAND OR SAND, IT IS TO BE STABILIZED WITH 3% LIME & 7% FLY ASH.

INTERIM REVIEW
 Not intended for construction, bidding or permit purposes.
 J.A. Costanza & Associates Engineering, Inc.
 T.B.P.E. Firm Registration No. F-452
 Engineer: JOSEPH A. COSTANZA
 P.E. Serial No. 49384
 Issued Date: 11/19/14

REVISIONS			
NUMBER	DESCRIPTION	DATE	INITIALS

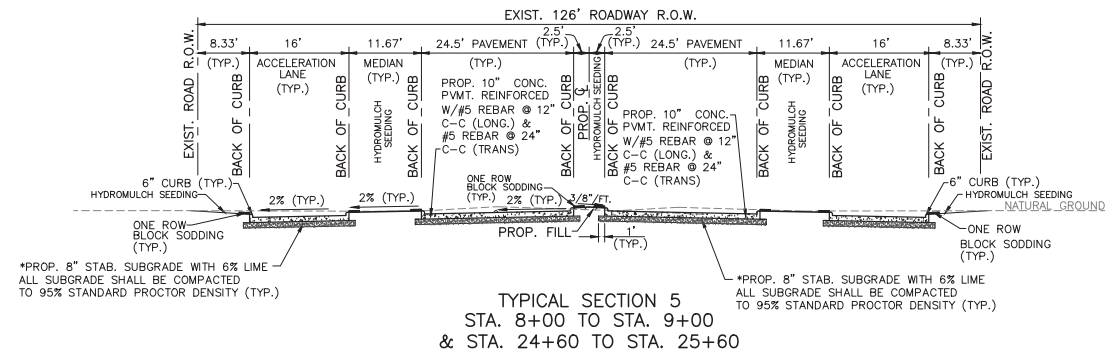
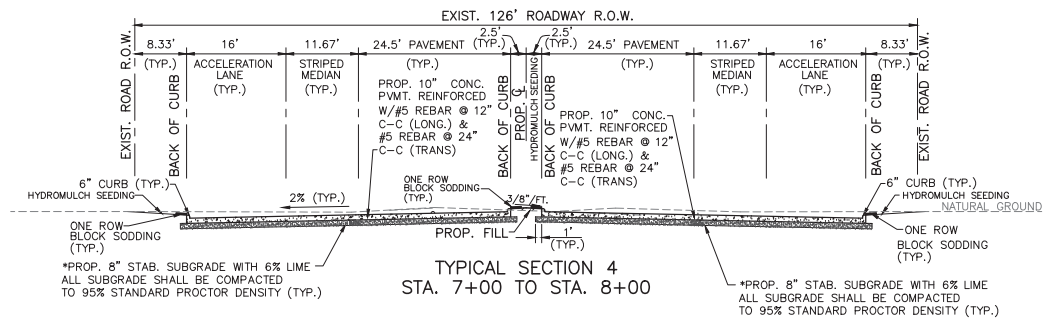
J.A. COSTANZA & ASSOCIATES
 ENGINEERING, INC.

T.B.P.E. FIRM REGISTRATION NO. F-452
 4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
 HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
 FEDERAL ROAD GRADE SEPARATION
 AT P.T.R.A. RAILROAD

TYPICAL PAVEMENT SECTIONS 1-3

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DRAWN BY:	ALP
DRAWING SCALE:	N/A
SHEET No:	7 OF 200

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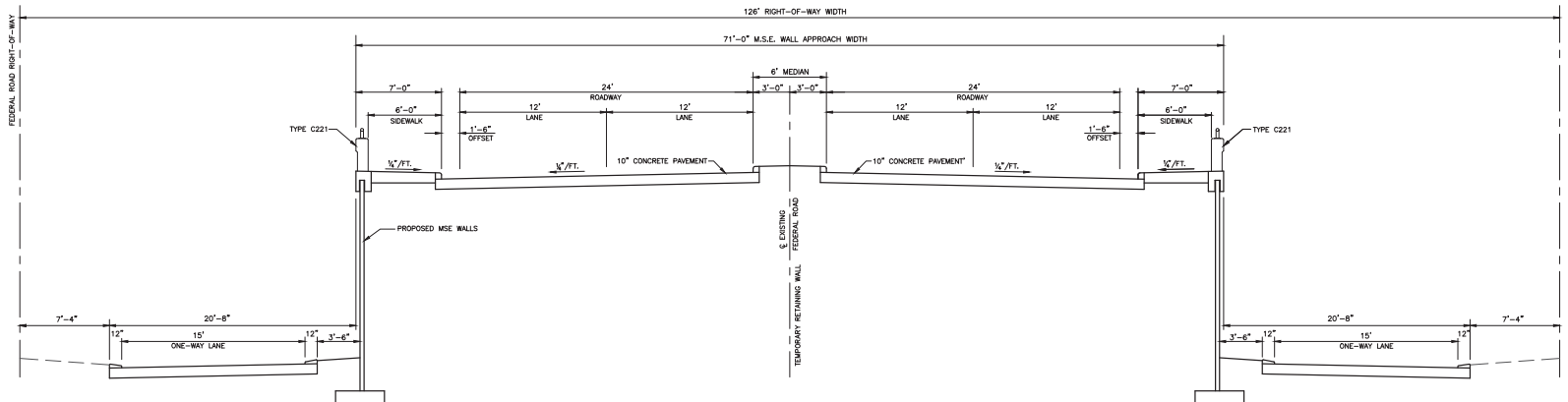
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 2. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RESTORED WITH HYDROMULCH SEEDING.
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 Engineer: JOSEPH A. COSTANZA
 P.E. Serial No. 49384
 Issued Date: 11/19/14

REVISIONS			
NUMBER	DESCRIPTION	DATE	INITIALS

J.A. COSTANZA & ASSOCIATES
 ENGINEERING, INC.
 T.B.P.E. FIRM REGISTRATION NO. F-652
 4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
 HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
 FEDERAL ROAD GRADE SEPARATION
 AT P.T.R.A. RAILROAD
 TYPICAL PAVEMENT SECTIONS 4-5

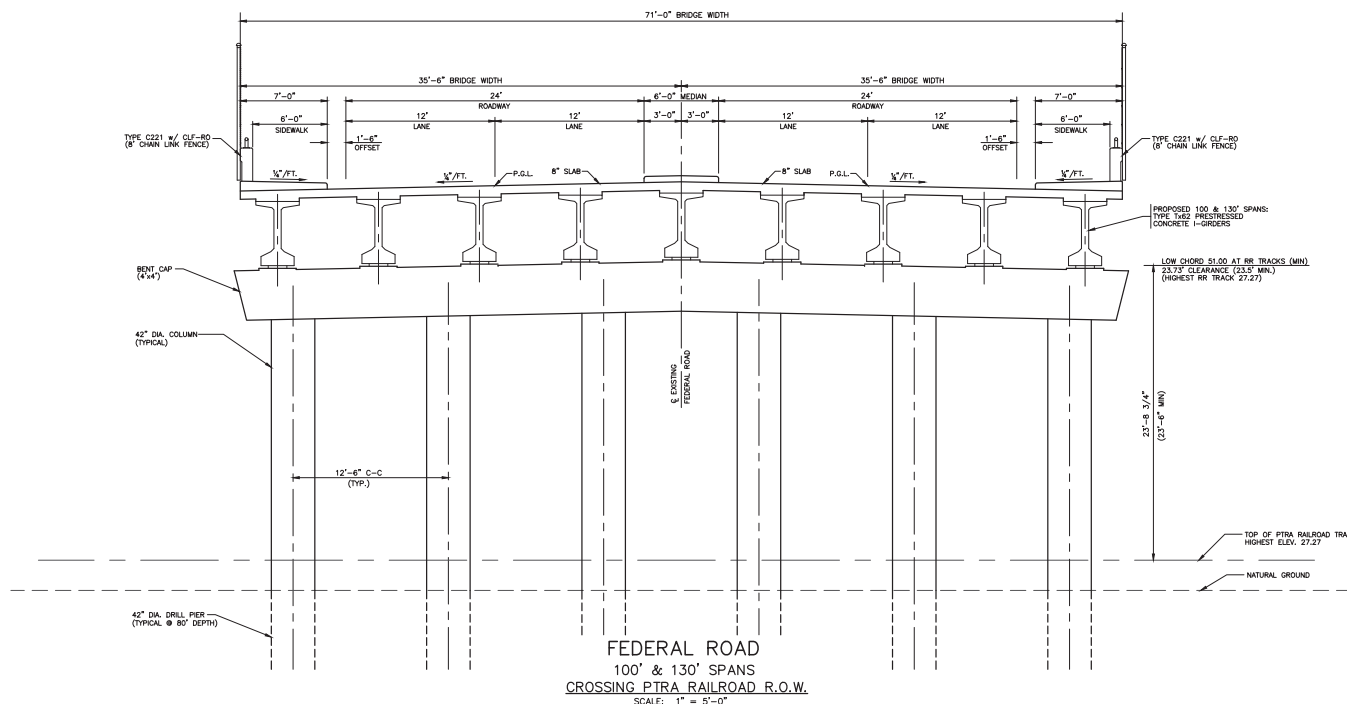
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DRAWN BY:	ALP
DRAWING SCALE:	N/A
SHEET No:	8 OF 200



EMBANKMENT AT APPROACH TO BRIDGE OVER PTRa RAILROAD

SCALE: 1" = 5'-0"

TYPICAL SECTION
STA. 9+00 TO STA. 14+00 & STA. 19+60 TO STA. 24+60



FEDERAL ROAD
100' & 130' SPANS
CROSSING PTRa RAILROAD R.O.W.

SCALE: 1" = 5'-0"

TYPICAL SECTION
STA. 14+00 TO STA. 16+00 & STA. 18+60 TO STA. 19+60



INTERIM REVIEW
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J.A. Costanza & Associates Engineering, Inc.
I.B.P.E. Firm Registration No. F-652
Engineer: JOSEPH A. COSTANZA
P.E. Serial No. 49384
Issued Date: 11/19/14

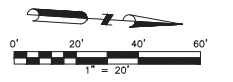
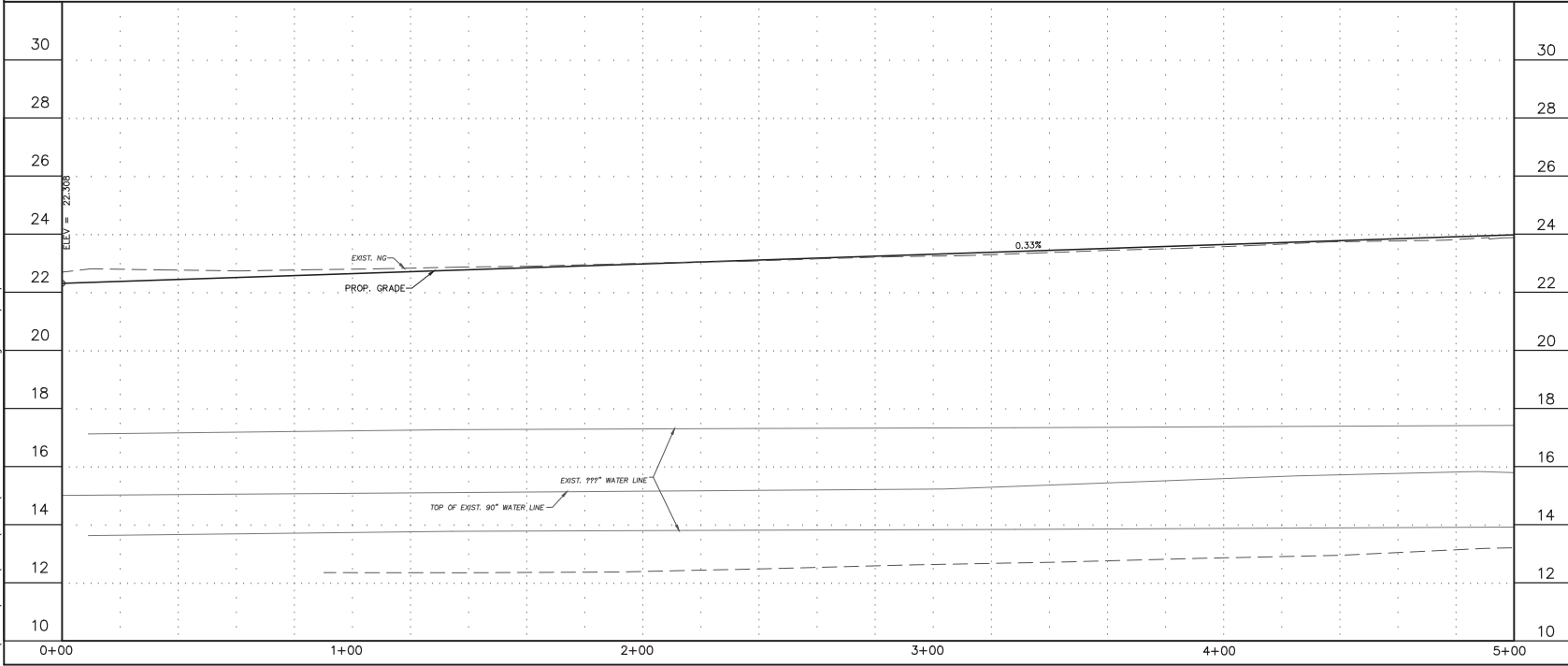
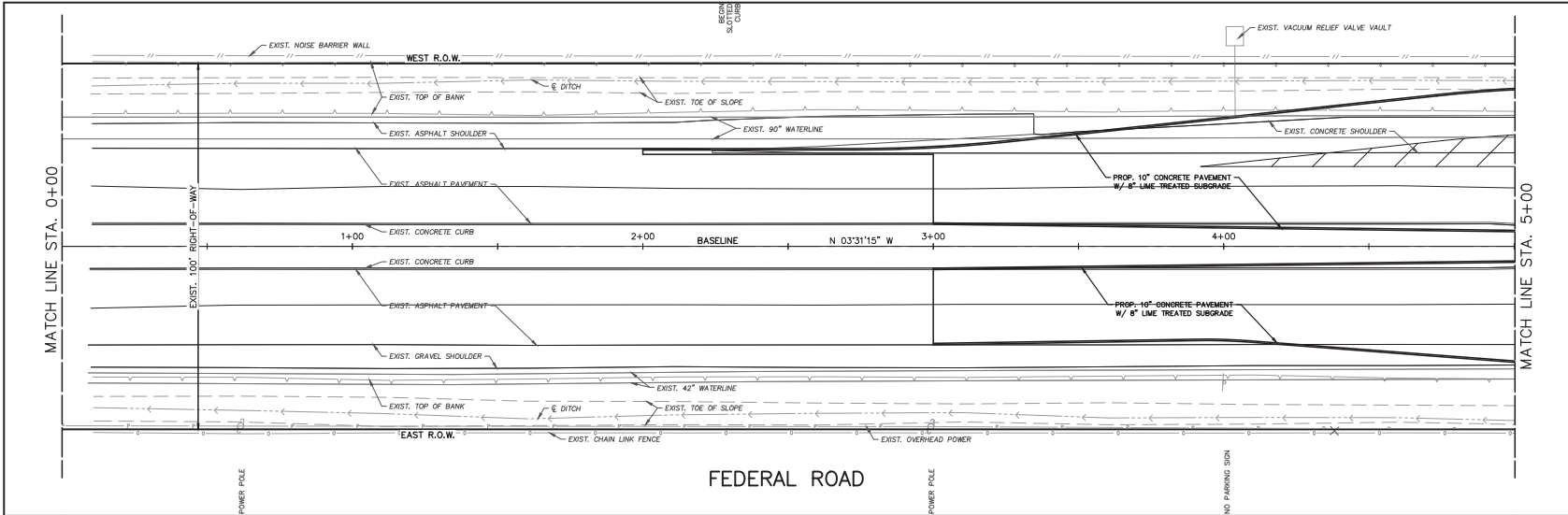
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NUMBER	DESCRIPTION	DATE	INITIALS

J.A. COSTANZA & ASSOCIATES
ENGINEERING, INC.
I.B.P.E. FIRM REGISTRATION NO. F-652
4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
FEDERAL ROAD GRADE SEPARATION
AT P.T.R.A. RAILROAD
TYPICAL BRIDGE SECTIONS

JAC JOB NO:	H005 1331
DRAWN BY:	ALP
DRAWING SCALE:	(FULL) 1"=5' (HALF) 1"=10'
SHEET No:	10 OF 200

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- LEGEND**
- TRAFFIC SIGN
 - TRAFFIC LIGHT POLE
 - POWER POLE
 - PIPE BOLLARD
 - COMMUNICATIONS MANHOLE
 - SANITARY SEWER MANHOLE
 - STORM SEWER MANHOLE
 - GRATE INLET
 - FIRE HYDRANT
 - WATER VALVE
 - TELEPHONE PEDESTAL
 - PIPELINE MARKER
 - MAILBOX
 - GATE POST
 - TREE
 - PIPELINE CASING VENT
 - CATHODIC PROTECTION RECTIFIER
 - ASPHALT
 - TOP BANK/DITCH
 - UNDERGROUND PHONE LINE
 - OVERHEAD POWER LINE
 - DOWN GUY WIRE
 - FENCE LINE
 - BARB WIRE FENCE
 - PIPELINE(S)
 - HEDGE/BRUSH LINE
 - CULVERT
 - H.G.L. HYDRAULIC GRADIENT LINE
 - 6" REINFORCED COLORED CONCRETE

REVISIONS			
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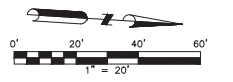
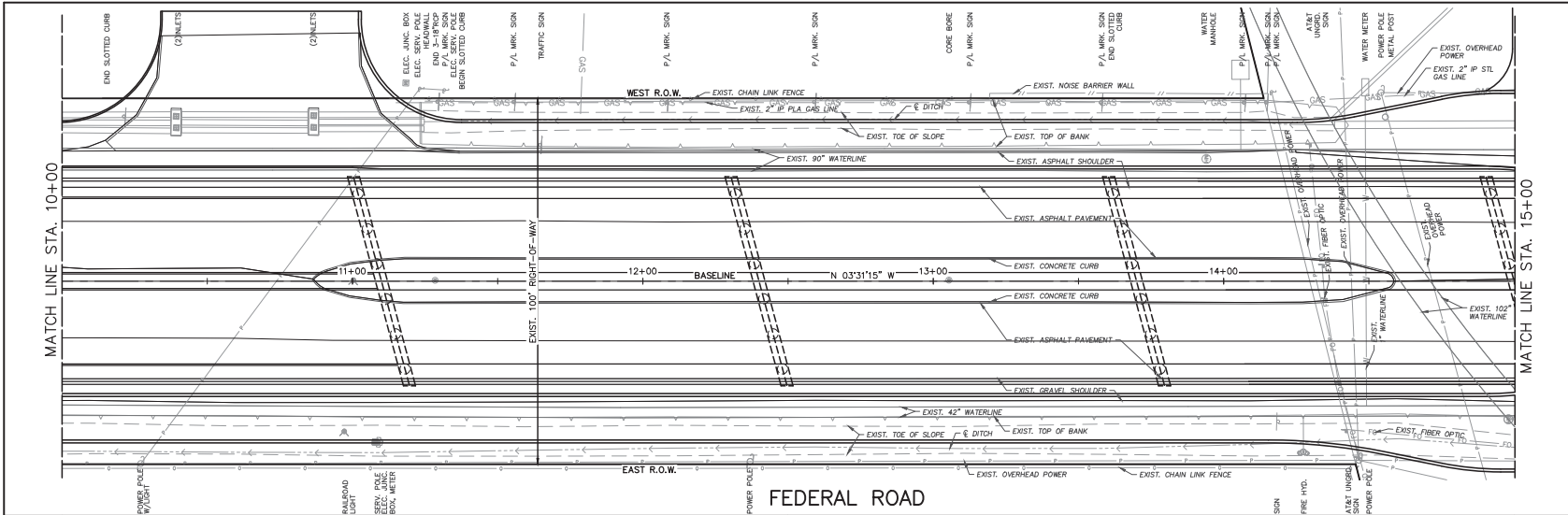
JACOSTANZA & ASSOCIATES
ENGINEERING, INC.

T.B.P.E. FIRM REGISTRATION NO. F-652
4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS

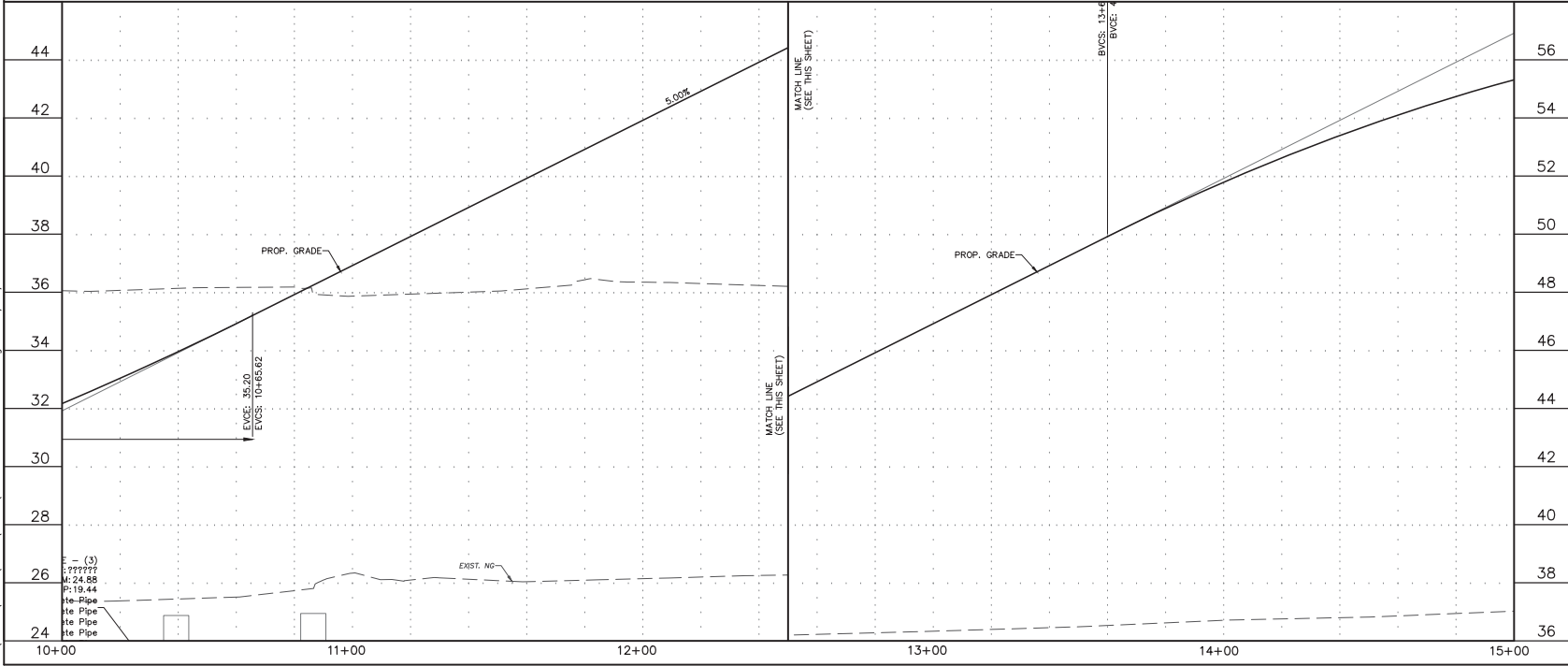
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AT P.T.R.A. RAILROAD**

PLAN & PROFILE STATIONS 0+00 TO 5+00

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DRAWING SCALE:	
VERT.:	HORZ.:
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1"=4'	(HALF) 1"=40'
SHEET No: 19 OF 200	



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 - TRAFFIC LIGHT POLE
 - POWER POLE
 - PIPE BOLLARD
 - COMMUNICATIONS MANHOLE
 - SANITARY SEWER MANHOLE
 - STORM SEWER MANHOLE
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 - MAILBOX
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 - TREE
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 - ASPHALT
 - TOP BANK/DITCH
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 - HEDGE/BRUSH LINE
 - CULVERT
 - H.G.L.
 - 6" REINFORCED COLORED CONCRETE



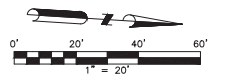
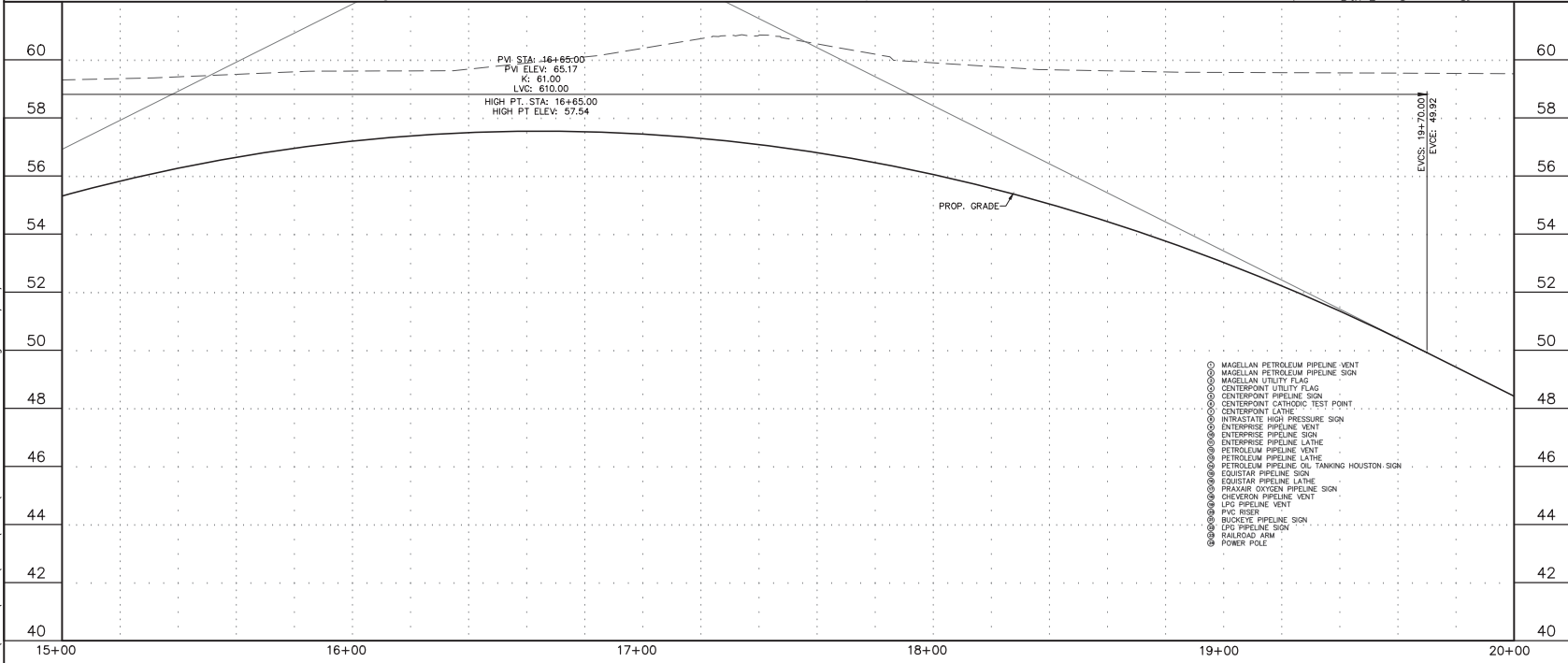
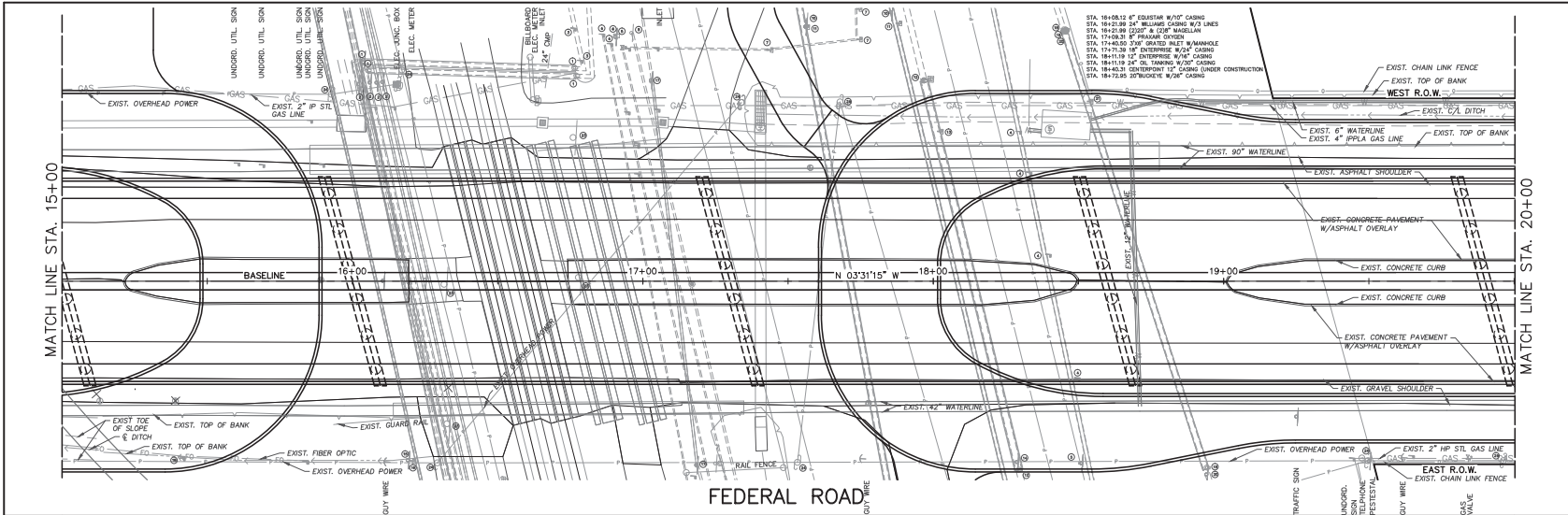
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 4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
 HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
 FEDERAL ROAD GRADE SEPARATION
 AT P.T.R.A. RAILROAD
 PLAN & PROFILE STATIONS 10+00 TO 15+00

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SHEET No:	21 OF 200

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 - ⊕ POWER POLE
 - ⊕ PIPE BOLLARD
 - ⊕ COMMUNICATIONS MANHOLE
 - ⊕ SANITARY SEWER MANHOLE
 - ⊕ STORM SEWER MANHOLE
 - ⊕ GRATE INLET
 - ⊕ FIRE HYDRANT
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 - ⊕ CATHODIC PROTECTION RECTIFIER
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 - ⊕ TOP BANK/DITCH
 - ⊕ UNDERGROUND PHONE LINE
 - ⊕ OVERHEAD POWER LINE
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 - ⊕ FENCE LINE
 - ⊕ BARB WIRE FENCE
 - ⊕ PIPELINE(S)
 - ⊕ HEDGE/BRUSH LINE
 - ⊕ CULVERT
 - ⊕ H.G.L. HYDRAULIC GRADIENT LINE
 - ⊕ 6" REINFORCED COLORED CONCRETE

- ⊕ MAGELLAN PETROLEUM PIPELINE VENT
- ⊕ MAGELLAN PETROLEUM PIPELINE SIGN
- ⊕ MAGELLAN UTILITY FLAG
- ⊕ CENTERPOINT UTILITY FLAG
- ⊕ CENTERPOINT PIPELINE SIGN
- ⊕ CENTERPOINT CATHODIC TEST POINT
- ⊕ CENTERPOINT LATHE
- ⊕ INTRASTATE HIGH PRESSURE SIGN
- ⊕ ENTERPRISE PIPELINE VENT
- ⊕ ENTERPRISE PIPELINE SIGN
- ⊕ ENTERPRISE PIPELINE LATHE
- ⊕ PETROLEUM PIPELINE VENT
- ⊕ PETROLEUM PIPELINE OIL TANKING HOUSTON SIGN
- ⊕ EQUSTAR PIPELINE SIGN
- ⊕ EQUSTAR PIPELINE LATHE
- ⊕ PRAXAIR OXYGEN PIPELINE SIGN
- ⊕ CHEVRON PIPELINE VENT
- ⊕ LPG PIPELINE VENT
- ⊕ PVC RISER
- ⊕ BUCKEYE PIPELINE SIGN
- ⊕ LPG PIPELINE SIGN
- ⊕ RAILROAD ARM
- ⊕ POWER POLE

REVISIONS			
NUMBER	DESCRIPTION	DATE	INITIALS

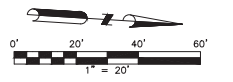
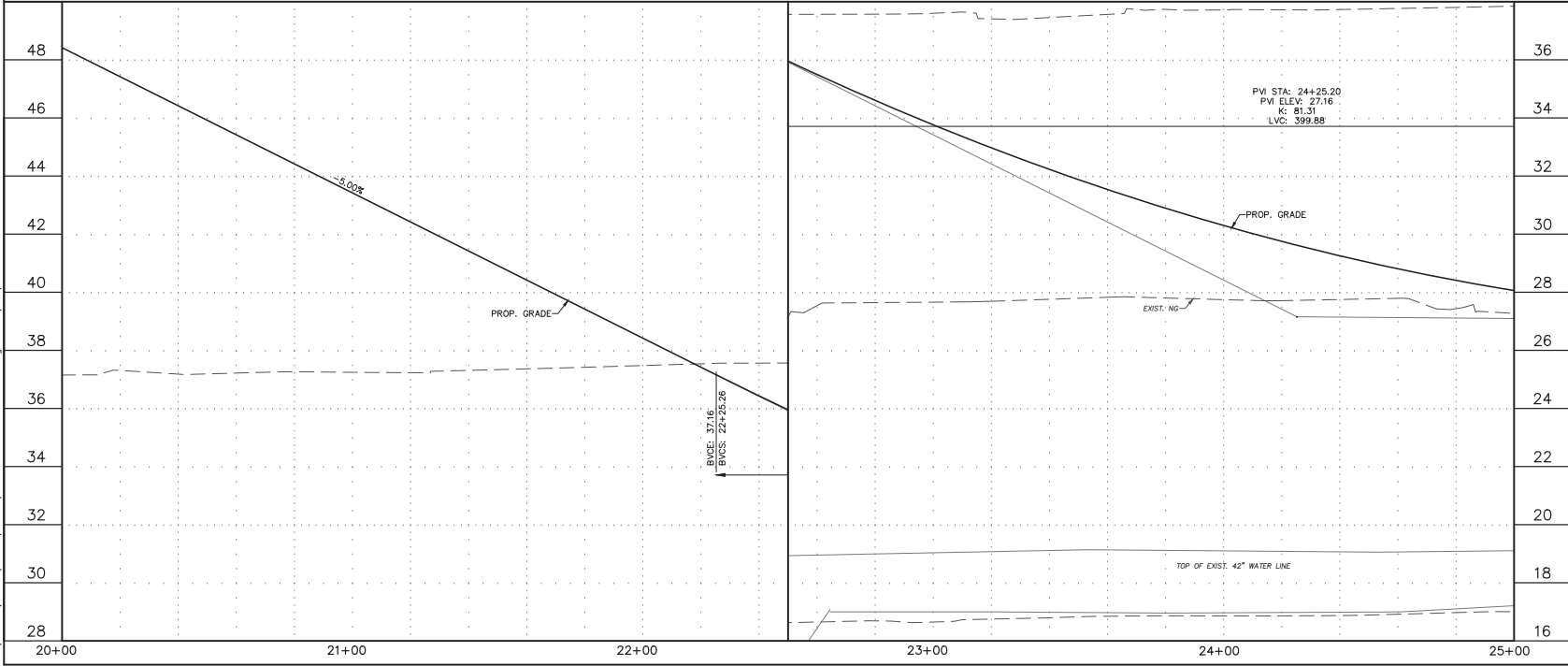
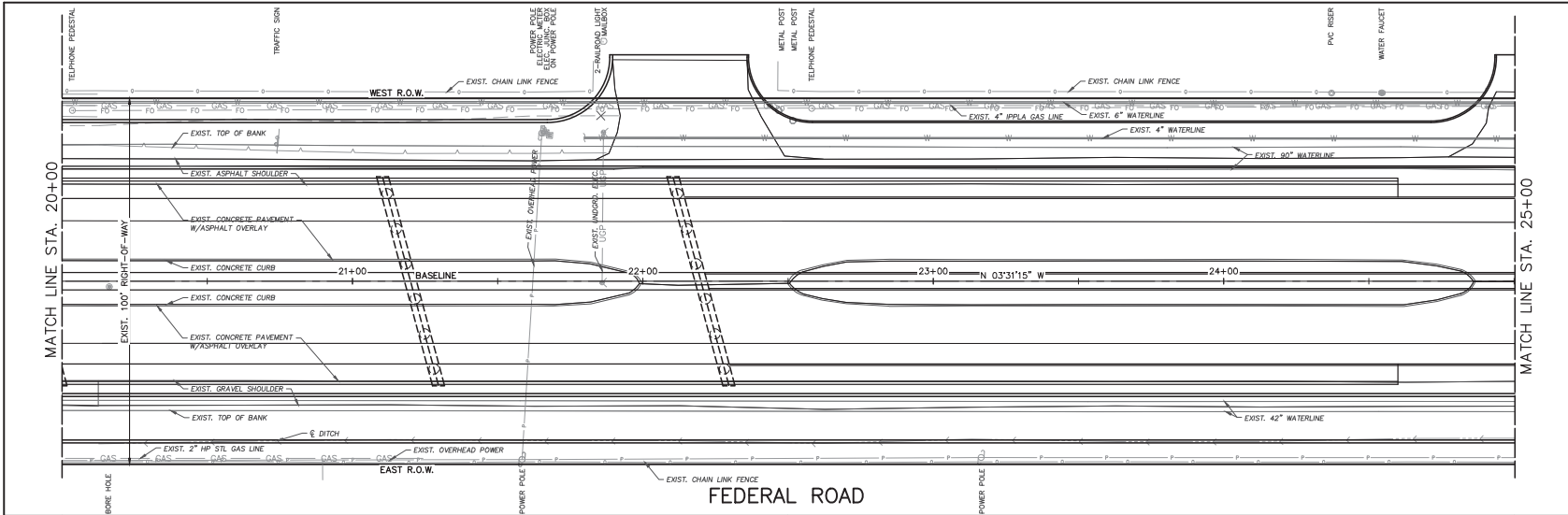


T.B.P.E. FIRM REGISTRATION NO. F-652
 4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
 HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS

FEDERAL ROAD GRADE SEPARATION
 AT P.T.R.A. RAILROAD
 PLAN & PROFILE STATIONS 15+00 TO 20+00

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- LEGEND**
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 - POWER POLE
 - PIPE BOLLARD
 - COMMUNICATIONS MANHOLE
 - SANITARY SEWER MANHOLE
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 - HEDGE/BRUSH LINE
 - CULVERT
 - H.G.L. HYDRAULIC GRADIENT LINE
 - ① 6" REINFORCED COLORED CONCRETE

REVISIONS			
NUMBER	DESCRIPTION	DATE	INITIALS

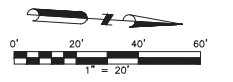
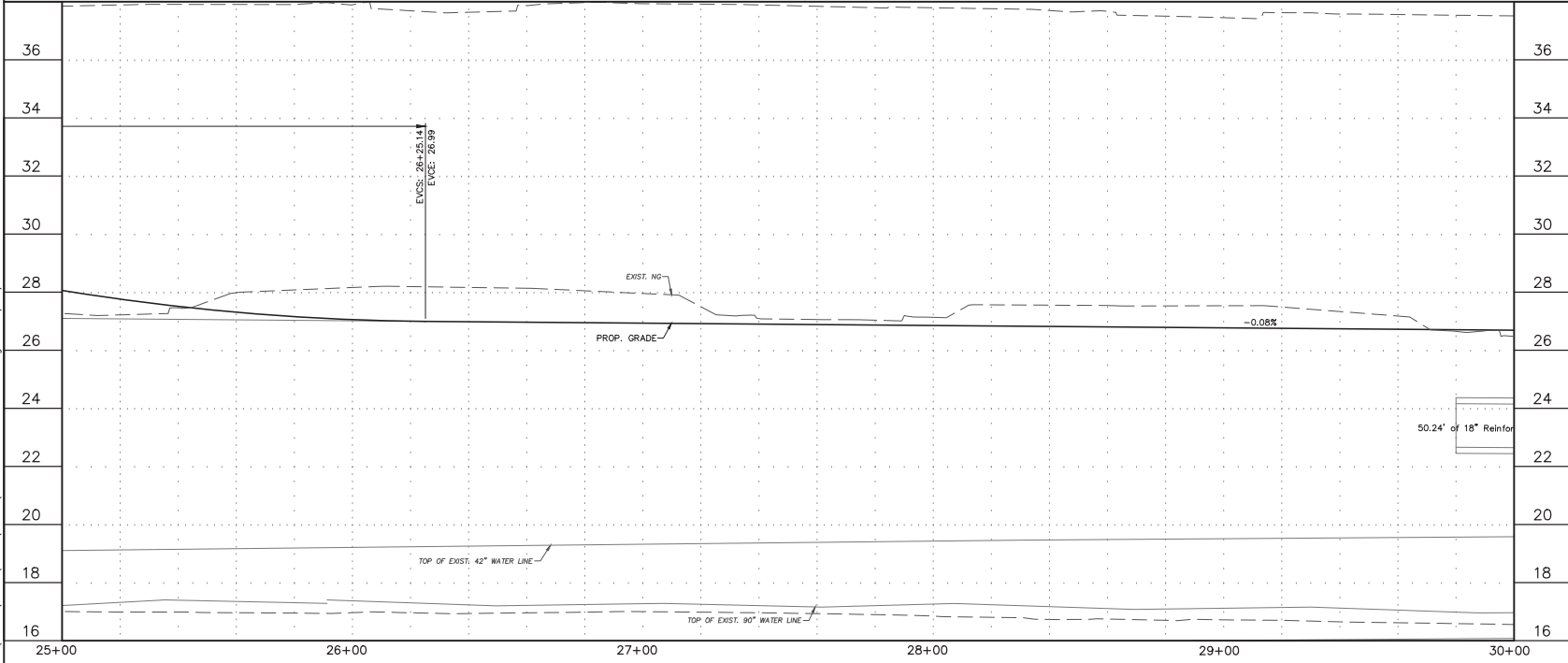
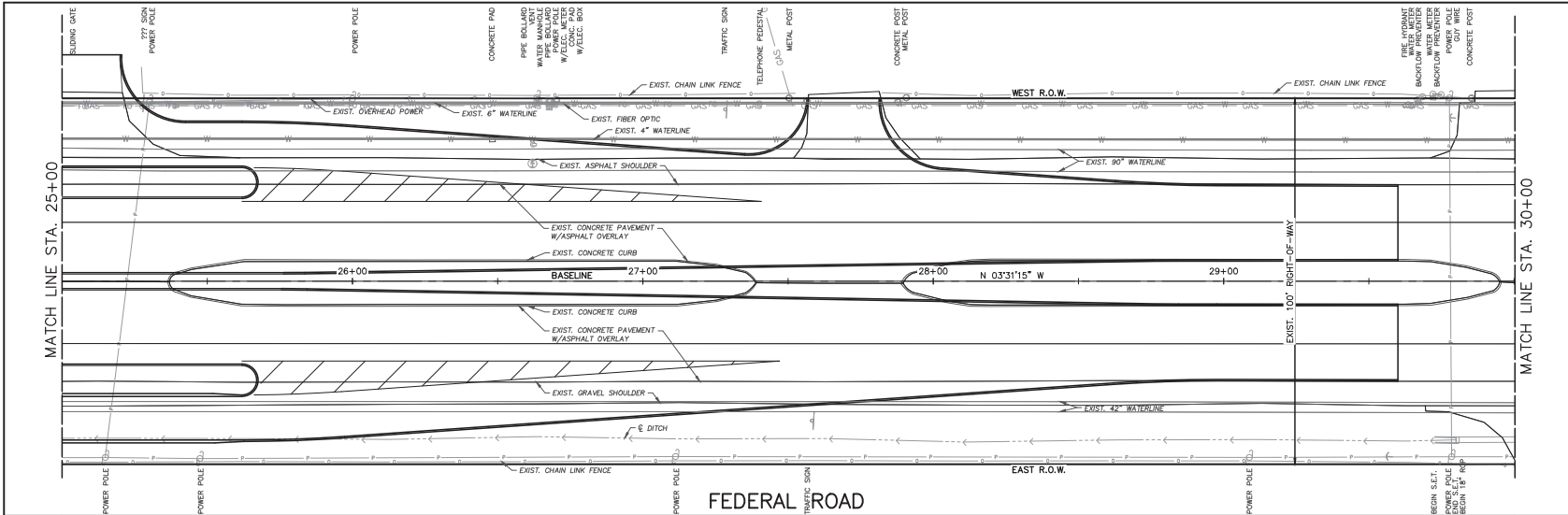
JACOSTANZA & ASSOCIATES
ENGINEERING, INC.

T.B.P.E. FIRM REGISTRATION NO. F-652
4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
FEDERAL ROAD GRADE SEPARATION
AT P.T.R.A. RAILROAD
PLAN & PROFILE STATIONS 20+00 TO 25+00

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SHEET No: 23 OF 200

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- LEGEND**
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 - POWER POLE
 - PIPE BOLLARD
 - COMMUNICATIONS MANHOLE
 - SANITARY SEWER MANHOLE
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REVISIONS			
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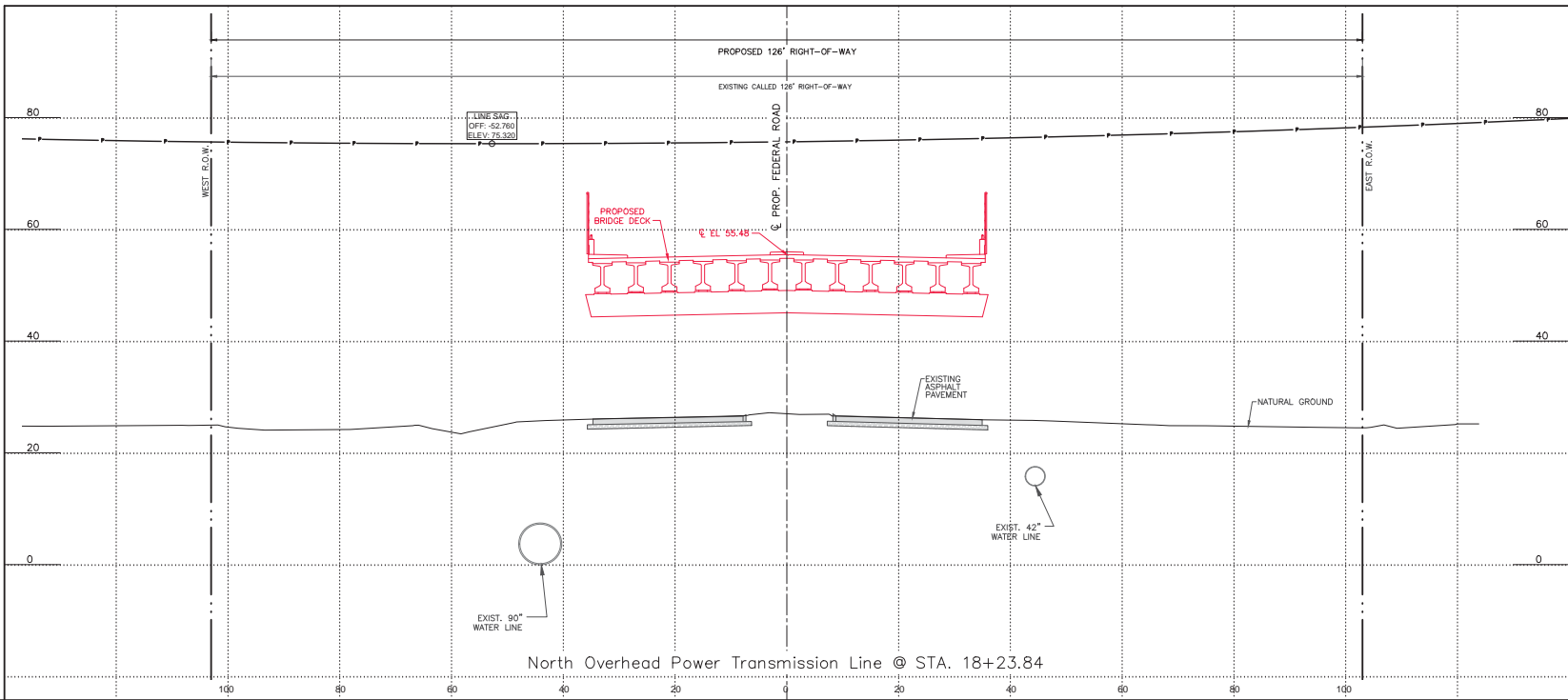
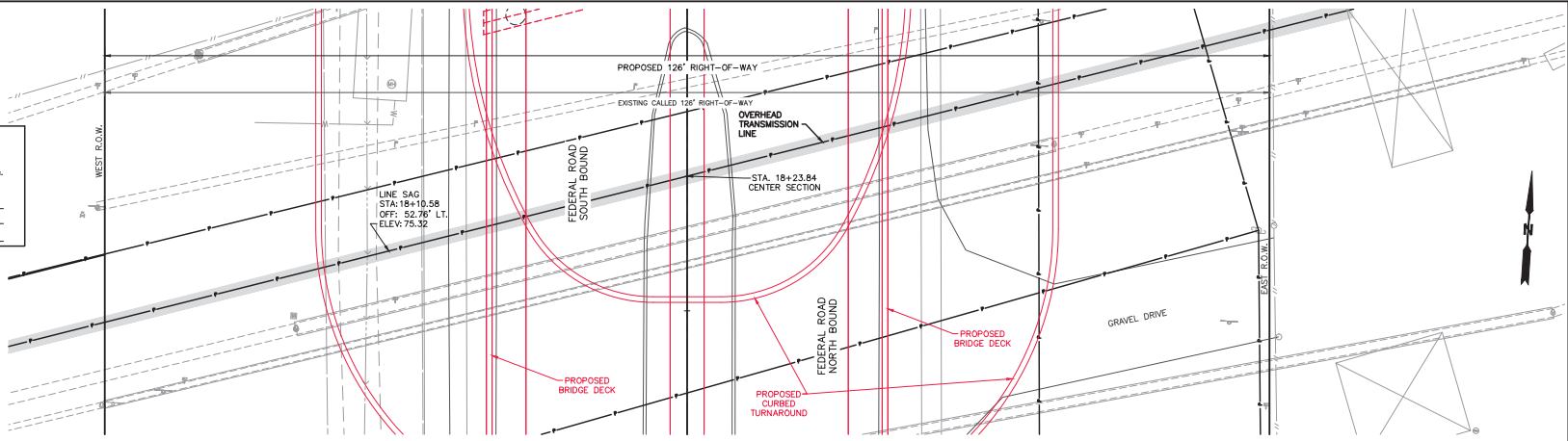
JACOSTANZA & ASSOCIATES
ENGINEERING, INC.

T.B.P.E. FIRM REGISTRATION NO. F-652
4301 CENTER ST. DEER PARK, TX 77536 281-930-9339
HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
FEDERAL ROAD GRADE SEPARATION
AT P.T.R.A. RAILROAD
PLAN & PROFILE STATIONS 25+00 TO 30+00

JAC JOB NO:	H005 1331
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1"=4'	(HALF) 1"=40'
SHEET No:	24 OF 200

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INTERIM REVIEW
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 bidding or permits purposes.
 J.A. Costanza & Associates Engineering, Inc.
 T.B.P.E. Firm Registration No. F-652
 Engineer: JOSEPH A. COSTANZA
 P.E. Serial No. 48384
 Issued Date: 6/24/14



REVISIONS			
NO.	DATE	DESCRIPTION	BY

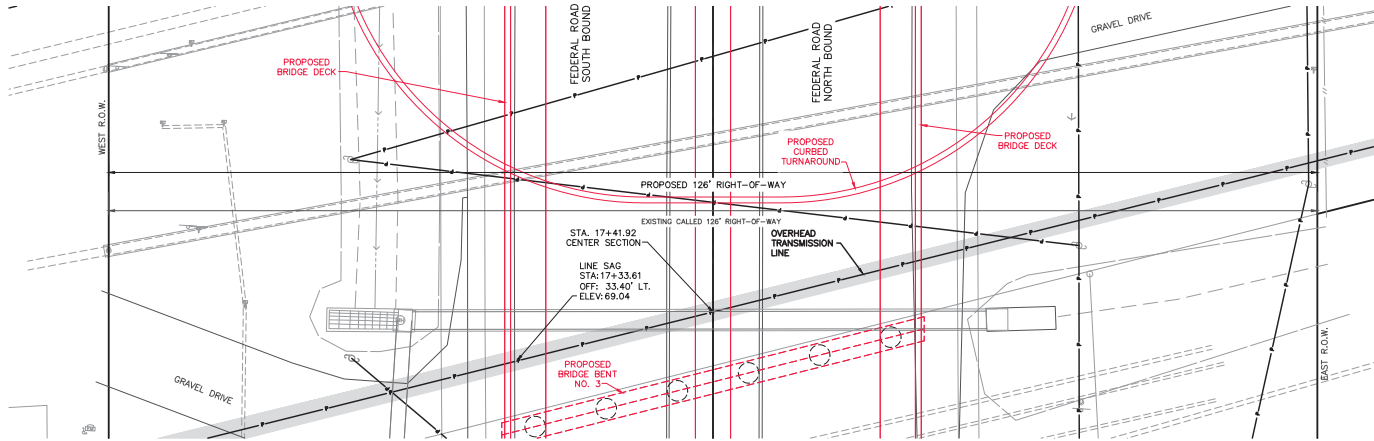
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 VERT.: 1"=2' (HALF) 1"=20'

HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
FEDERAL ROAD
 North Overhead Power Transmission Line @ STA. 18+23.84 +/-



SHEET
 2
 OF
 8
 (20) NUT-1004-001

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 J.A. Costanza & Associates Engineering, Inc.
 T.B.P.E. Firm Registration No. F-652
 Engineer: JOSEPH A. COSTANZA
 P.E. Serial No. 49384
 Issued Date: 6/24/14

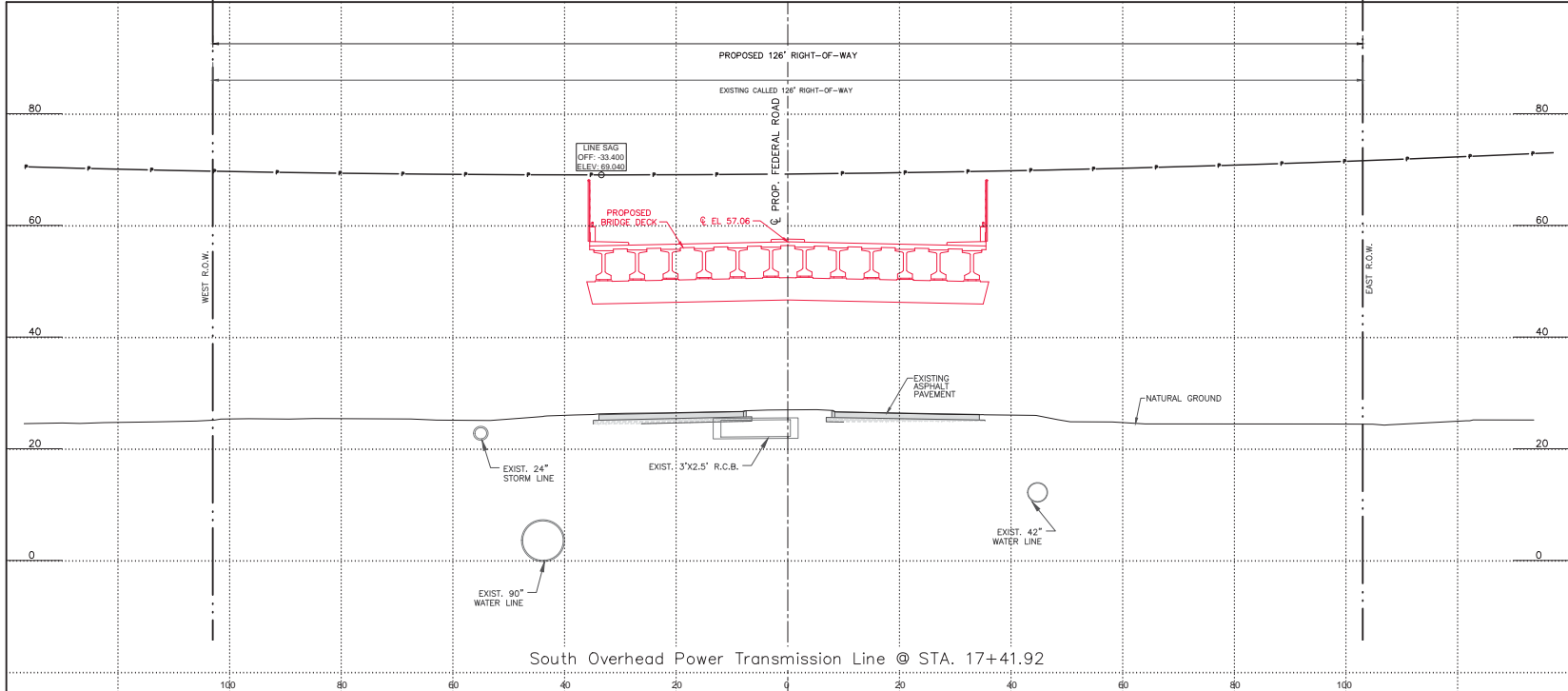
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NO.	DATE	DESCRIPTION	BY
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DRAWING SCALE: HORIZ.: 1"=100'
 VERT.: 1"=2' (HALF) 1"=20'

HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT, TEXAS
FEDERAL ROAD
 South Overhead Power Transmission Line @ STA. 17+41.92 +/-



SHEET 1 OF 8
 2014-10-01



South Overhead Power Transmission Line @ STA. 17+41.92

Appendix B

Utility Contact/Conflict Table

Utility Contact/Conflict Table

Project Name: Federal Road (Schematic Phase)

Project Limits: Railroad Grade Separation at Port Terminal Railroad Association (PTRA)

UPIN No. 14102MF08501

Consultant Name/Project Mgr: J.A. Costanza & Associates Engineering, Inc. / Greg Phipps

No.	Station	Utility Type	Owner	Does Utility Co. have an Easement	Conflict	Probed	Contact Name	Address	Phone No.	Email	Describe Conflict (if applicable)	Est. Cost	Fiscal Responsibility
				Yes/No	Yes/No	Yes/No							(if adjustment required)
1	Length	90" Waterline (West side of ROW)	City of Houston	No	No	No	Thomas Artz	611 Walker Houston, TX 77002	(713)837-0670	thomas.artz@cityofhouston.net	None - Outside Bridge Drill Piers and Under Existing/Proposed Road	\$0	Owner
2	Length	42" Waterline (East side of ROW)	City of Houston	No	No	No	Thomas Artz	611 Walker Houston, TX 77002	(713)837-0670	thomas.artz@cityofhouston.net	None - Outside Bridge Drill Piers and Under Existing/Proposed Road	\$0	Owner
3	10+75	Overhead Power Service	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138	janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
4	11+00	RR Warning Lights	PTRA	No	Yes	NA	Jeff Norwood	8934 Manchester Street Houston, Texas 77012	(713)393-6507	jnorwood@ptracom.com	To be removed (Crossing Eliminated)	\$0	Owner
5	14+32	Overhead Power Service	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138	janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
6	14+44	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138	janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
7	14+49	12" Water Line	City of Houston	No	No	No	Thomas Artz	611 Walker Houston, TX 77002	(713)837-0670	thomas.artz@cityofhouston.net	None - Under Proposed Bridge	\$0	Owner
8	14+65	102" Water Line (22' Depth by Plans)	Coastal Water Authority	No	No	No	Bill Schlafer, PE (Consultant)	2925 Briarpark, Ste. 400 Houston, TX 77042	(713)266-6900	weschlafer@laninc.com	None - Under Proposed Bridge	\$0	Owner
9	14+72	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138	janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
10	16+08	6" Pipeline	Equistar	No	No	Yes	Rick Galvan	LyondellBasell Tower, 1221 McKinney, Ste. 700 Houston, TX 77010	(832)205-1834	rick.galvan@lyondellbasell.com	None - Under Proposed Bridge	\$0	Owner
11	16+18	24" Casing w/ 2x4" Equistar & 1x6" Williams	Williams and Equistar	No	No	Yes	Jack Andrus	2800 Post Oak Blvd Houston, TX 77056	(281)457-4040	jake.andrus@williams.com	None - Under Proposed Bridge	\$0	Owner
12	16+19	16" Pipeline	Magellan	No	No	Yes	Sean Forey	7901 Wallisville Road Houston, TX 77029	(281)409-8667	sean.forey@megellanlp.com	None - Under Proposed Bridge	\$0	Owner
13	16+22	16" Pipeline	Magellan	No	No	Yes	Sean Forey	7901 Wallisville Road Houston, TX 77029	(281)409-8667	sean.forey@megellanlp.com	None - Under Proposed Bridge	\$0	Owner
14	16+25	8" Pipeline	Magellan	No	No	Yes	Sean Forey	7901 Wallisville Road Houston, TX 77029	(281)409-8667	sean.forey@megellanlp.com	None - Under Proposed Bridge	\$0	Owner
15	16+27	8" Pipeline	Magellan	No	No	Yes	Sean Forey	7901 Wallisville Road Houston, TX 77029	(281)409-8667	sean.forey@megellanlp.com	None - Under Proposed Bridge	\$0	Owner
16	16+33	Railroad Signal/Arm (North Bound)	PTRA	No	No	NA	Jeff Norwood	8934 Manchester Street Houston, Texas 77012	(713)393-6507		To be removed (Crossing Eliminated)	\$0	Owner
17	16+35	Overhead Light Service	CenterPoint/PTRA	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138	janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
18	16+48	Railroad	PTRA	Yes - Outside 80'	No	NA	Jeff Norwood	8934 Manchester Street Houston, Texas 77012	(713)393-6507		None - Maintain 23'6" minimum clearance	\$0	Harris County
19	16+62	Railroad	PTRA	Yes - Outside 80'	No	NA	Jeff Norwood	8934 Manchester Street Houston, Texas 77012	(713)393-6507		None - Maintain 23'6" minimum clearance	\$0	Harris County
20	16+78	Railroad Signal/Arm (South Bound)	PTRA	No	No	NA	Jeff Norwood	8934 Manchester Street Houston, Texas 77012	(713)393-6507		To be removed (Crossing Eliminated)	\$0	Owner

Utility Contact/Conflict Table

Project Name: Federal Road (Schematic Phase)

Project Limits: Railroad Grade Separation at Port Terminal Railroad Association (PTRA)

UPIN No. 14102MF08501

21	16+82	Overhead Power Service	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
22	17+03	5" Pipeline	CenterPoint	No	No	No	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	None - Under Proposed Bridge	\$0	Owner
23	17+07	6" Pipeline	CenterPoint	No	No	No	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	None - Under Proposed Bridge	\$0	Owner
24	17+11	8" Pipeline	Praxair	No	No	Yes	Gary L. Blanchat	9200 Telephone Rd Houston, TX 77075	(281)478-1936 gary.blanchat@praxair.com	None - Under Proposed Bridge	\$0	Owner
25	17+12	6" Pipeline	CenterPoint	No	No	No	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	None - Under Proposed Bridge	\$0	Owner
26	17+16	8" Pipeline	Intrastate	No	No	No	Rick Harris	P.O. Box 1700 Houston, TX 77251	(713)967-7054 enrique.harris@centerpointenergy.com	None - Under Proposed Bridge	\$0	Owner
27	17+42	Overhead Transmission	CenterPoint	Yes - Outside 80' Federal Road R.O.W.	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance due to proposed elevated bridge	\$1.1M	Harris County
28	17+60	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance	\$0	Owner
29	17+71	24" Casing w/18" Pipeline	Enterprise	No	No	Yes	Duane Rankin	2727 North Loop W Houston, TX 77008	(281)739-0035 derankin@eprod.com	None - Under Proposed Bridge	\$0	Owner
30	17+60	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
31	17+85	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
32	18+08	12" Pipeline	Enterprise	No	No	Yes	Duane Rankin	2727 North Loop W Houston, TX 77008	(281)739-0035 derankin@eprod.com	None - Under Proposed Bridge	\$0	Owner
33	18+14	30" Casing w/24" Pipeline	OilTanking	No	No	Yes	Shawn Schimming	15602 Jacintoport Blvd. Houston, TX 77015	(281)860-4019 shawn.schimming@oiltanking.com	None - Under Proposed Bridge	\$0	Owner
34	18+24	Overhead Transmission	CenterPoint	Yes - Outside 80' Federal Road R.O.W.	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance due to proposed elevated bridge	\$1.1M	Harris County
35	18+36	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
36	18+40	18" Pipeline	CenterPoint	No	No	Yes	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	None - Under Proposed Bridge	\$0	Owner
37	18+67	12" Waterline	City of Houston	No	No	No	Thomas Artz	611 Walker Houston, TX 77002	(713)837-0670 thomas.artz@cityofhouston.net	None - Under Proposed Bridge	\$0	Owner
38	18+73	36" Casing w/20" Pipeline	Buckeye	No	No	Yes	David Clark	1 Greenway Plz # 600 Houston, TX 77046	dclark@buckeye.com	None - Under Proposed Bridge	\$0	Owner
39	21+62	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner
40	21+86	RR Warning Lights	PTRA	No	Yes	NA	Jeff Norwood	8934 Manchester Street Houston, Texas 77012	(713)393-6507	To be removed (Crossing Eliminated)	\$0	Owner
41	25+22	Overhead Power	CenterPoint	No	Yes	NA	Janice Coburn Right-of-Way Agent	P.O. Box 1700 Houston, TX 77251	(713)207-6138 janice.coburn@centerpointenergy.com	Overhead Clearance - Within Existing Federal Road R.O.W.	\$0	Owner

Appendix C

Site Photographs



Facing south, this is a view of the northern section of the Federal Road ROW.



Facing east, this is a view of a Houston Rail Terminal located at 2103 Federal Road.



Facing north, this is a view of the western portion of the proposed project area.



Facing east, this is a view of a portion of the transmission ROW located north of the PTRA railway.



Facing south, this is a view of the PTRA railway tracks that traverse the central portion of the proposed project area.



Facing west, this is a view of the PTRA railway tracks that traverse the central portion of the proposed project area.



Facing east, this is a view of the PTRA railway tracks that traverse the central portion of the proposed project area.



Facing west, this is a view of the drainage ditch located south of the PTRA railway. This ditch drains adjacent uplands, including the steel fabrication company located at 2200 Federal Road, which is visible in the background of the photograph.



Facing south, this is a view of the pile of soil and gravel observed on the proposed project area at 2200 Federal Road.



Facing east, this is a view of the non-jurisdictional wetland observed on the proposed project area.



Facing north, this is a view of the Federal Road ROW.



Facing south, this is a view of the East Purification Plant, adjacent to the proposed project area at 2300 Federal Road. A roadside ditch draining the proposed project area and adjacent properties is visible in the foreground.



Facing west, this is a view of the PVC pipes that appear to drain runoff from the East Purification Plant into the roadside ditch.



Facing north, this is view of the southern portion of the proposed project area.

Appendix D

Agency Coordination

HARRIS COUNTY

Public Infrastructure Department
Architecture & Engineering Division

1001 Preston, 7th Floor
Houston, Texas 77002
(713) 755-5370

Certified Mail – 7011 0110 0001 3467 9395

November 19, 2013

Mr. Mark Wolfe
State Historic Preservation Officer
Texas Historic Commission
P.O. Box 12276
Austin, TX 78711

**SUBJECT: SHPO Review Request: Federal Road Grade Separation over PTR
Tracks, Precinct 2, UPIN 14102MF08501**

Dear Mr. Wolfe:

Harris County is submitting for the Texas Historical Commissions review the Texas Historic Commission's Request for SHPO Consultation request form and Moore Archeological Consulting, Inc. desk top assessment.

Please direct all correspondence and inquires to Mr. Dwayne Rogers, Environmental Planner for HCPID-AED, at (713) 755-7144 or dwayne.rogers@hcpid.org.

Sincerely,



Nick J. Russo III
Team Leader – Environmental Services

NJR/CDR/pj
Enclosures

Cc: Ryan Robol, Crouch Environmental Services, Inc.
Greg Phipps, J.A. Costanza & Associates Engineering, Inc.
Commissioner Jack Morman, Pct. 2
Jeremy Phillips, Pct. 2
Arcadio Avalos, Pct. 2
Misty Rios, Pct. 2
Terry Jones, HCPID
Loyd Smith, HCPID
Grace Tsai, HCPID
Mike Chang, HCPID
Teresa L. Beavers, HCPID
Kathy L. Williams, HCPID
C. Dwayne Rogers, HCPID
Central File

TEXAS HISTORICAL COMMISSION

REQUEST FOR SHPO CONSULTATION:

Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

Please see instructions for completing this form and additional information on Section 106 and Antiquities Code consultation on the Texas Historical Commission website at <http://www.thc.state.tx.us/crm/crmsend.shtml>.

- This is a new submission.
 This is additional information relating to THC tracking number(s): _____

Project Information		
PROJECT NAME Federal Road Grade Separation at Port Terminal Railroad Association Tracks		
PROJECT ADDRESS Approximately 2000 Block of Federal Road	PROJECT CITY Galena Park	PROJECT ZIP CODE(S) 77015
PROJECT COUNTY OR COUNTIES Harris County		
PROJECT TYPE (Check all that apply)		
<input checked="" type="checkbox"/> Road/Highway Construction or Improvement	<input type="checkbox"/> Repair, Rehabilitation, or Renovation of Structure(s)	
<input type="checkbox"/> Site Excavation	<input type="checkbox"/> Addition to Existing Structure(s)	
<input type="checkbox"/> Utilities and Infrastructure	<input type="checkbox"/> Demolition or Relocation of Existing Structure(s)	
<input type="checkbox"/> New Construction	<input type="checkbox"/> None of these	
BRIEF PROJECT DESCRIPTION: Please explain the project in one or two sentences. More details should be included as an attachment to this form. See attached desktop assessment prepared by Moore Archeological Consulting, Inc.		

Project Contact Information			
PROJECT CONTACT NAME Dwayne Rogers	TITLE Environmental Planner	ORGANIZATION Harris County PID-AED	
ADDRESS 1001 Preston, 7th Floor	CITY Houston	STATE TX	ZIP CODE 77002
PHONE 713-755-7144	EMAIL dwayne.rogers@hcpid.org		

Federal Involvement (Section 106 of the National Historic Preservation Act)	
Does this project involve approval, funding, permit, or license from a federal agency?	
<input type="checkbox"/> Yes (Please complete this section)	<input checked="" type="checkbox"/> No (Skip to next section)
FEDERAL AGENCY	FEDERAL PROGRAM, FUNDING, OR PERMIT TYPE
CONTACT PERSON	PHONE
ADDRESS	EMAIL

State Involvement (Antiquities Code of Texas)	
Does this project occur on land or property owned by the State of Texas or a political subdivision of the state?	
<input checked="" type="checkbox"/> Yes (Please complete this section)	<input type="checkbox"/> No (Skip to next section)
CURRENT OR FUTURE OWNER OF THE PUBLIC LAND Harris County	
CONTACT PERSON Dwayne Rogers	PHONE Same as above
ADDRESS Same as above	EMAIL Same as above

Identification of Historic Properties: Archeology

Does this project involve ground-disturbing activity?
 Yes (Please complete this section) No (Skip to next section)

Describe the nature of the ground-disturbing activity, including but not limited to depth, width, and length.
 See attached report

Describe the previous and current land use, conditions, and disturbances.
 Harris County is the previous and current land owner and the property is used for transportation.

Identification of Historic Properties: Structures

Does the project area or area of potential effects include buildings, structures, or designed landscape features (such as parks or cemeteries) that are 45 years of age or older?
 Yes (Please complete this section) No (Skip to next section)

Is the project area or area of potential effects within or adjacent to a property or district that is listed in or eligible for listing in the National Register of Historic Places?
 Yes, name of property or district: No Unknown

In the space below or as an attachment, describe each building, structure, or landscape feature within the project area or area of potential effect that is 45 years of age or older.

ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE

Attachments
 Please see detailed instructions regarding attachments.
 Include the following with each submission:

- Project Work Description
- Maps
- Identification of Historic Properties
- Photographs

For Section 106 reviews only, also include:

- Consulting Parties/Public Notification
- Area of Potential Effects
- Determination of Eligibility
- Determination of Effect

Submit completed form and attachments to the address below. Faxes and email are not acceptable.
 Mark Wolfe
 State Historic Preservation Officer
 Texas Historical Commission
 P.O. Box 12276, Austin, TX 78711-2276 (mail service)
 108 W. 16th Street, Austin, TX 78701 (courier service)

For SHPO Use Only

Moore Archeological Consulting, Inc.



3511 Houston Avenue Suite B
Houston, Texas 77009
www.moore-archeological.com

Office (713) 861-8663
Laboratory (713) 861-2323
Fax (713) 861-8627

Ryan K. Robol
Senior Environmental Consultant
Crouch Environmental Services, Inc.
402 Teetshorn Street
Houston, TX 77006

November 13, 2013

Re: Proposed Federal Road Grade Separation, Harris County, Texas - Desk Based
Assessment
MAC Project Number 13-40
UPIN 14102MF08501

Dear Mr. Robol,

I have assessed the map plotting for the above referenced project for archeological potential, as per your request. The subject property has been reviewed with reference to the State of Texas archeological site files, previous archeological investigations, soil classification in Harris County, topography, and possible tract disturbances. These data were compared to an existing site location predictive model developed by Dr. Roger Moore (1995) for prehistoric sites in Harris and surrounding counties. This model was derived from the digitization of the site records for Harris County.

The proposed construction will involve improvements to the existing Federal Road, primarily the construction of a 4-lane boulevard with grade separation over the Port Terminal Railroad Association (PTRA) tracks. The project will generally consist of improvements to paving, construction of a bridge over PTRA railroad, storm-water drainage improvements, and other related improvements. All construction will occur solely within the existing right of way (ROW) of the road. The precise depth of impact is not known, however, many of the improvements are likely to result in significantly deep (as far as archeology is concerned) excavations. The project is found on the Pasadena and Jacinto City USGS Quadrangle maps (299523 and 299515) in Harris County (see attached figures).

A review of the site records at the Texas Archeological Research Laboratory (TARL) at the University of Texas indicated that there are no previously recorded sites within the vicinity of the project area. However, no archeological investigation has ever occurred within the footprint of the project either.

I assessed the tract with respect to a hierarchy of environmental factors that combine to make a locality attractive for prehistoric settlement in Texas counties. The factors in combination simply constitute a set of “settlement rules” that define good campsites in similar environments. These include preferences for the following:

1. Site location in the floodplain or on the floodplain/upland margin.
2. Site locations in proximity to regular sources of potable water.
3. Site locations in forested environments.
4. Site locations on well-drained, loamy soils.
5. Site locations on topographic high points.

Distance to water is a dominant factor affecting the probability of finding prehistoric sites. Most sites in the region are found within 300 meters (984 feet) of potable water. There are two water sources that impact the project area. These are Hunting Bayou and Buffalo Bayou. Hunting Bayou is north to south flowing channel more than 600 meters to the west and south of the project area. It is a perennial stream that flows into Buffalo Bayou some 700 meters south of the project area. Buffalo Bayou is a major stream running west to east some 700 meters south of the project area. There are no other streams or water sources closer to the current project corridor than these two channels.

The proposed project area is depicted on sheet 105 of the Soil Survey of Harris County, Texas (Wheeler, 1976). Only two soils appear within the project area as defined by the Soil Survey; Midland silty clay loam and Beaumont clay. Midland soils, which cover roughly 80% of the project area, are poorly drained, loamy ancient alluvium. They have a low geoarcheological potential (Abbott 2001). Beaumont clay soils are poorly drained, loamy clayey alluvium. They also have a low geoarcheological potential (Abbott 2001).

Review of the project area as it relates to TxDOT’s PALM model show that the footprint is considered to not require survey (i.e. it falls within the PALM Unit 4). It is probable that the primary factor in Abbot’s assessment of the tract was the intensive amount of prior disturbance from development, most of which is industrial. There is one area of PALM Unit 2 immediately east of the project tract in an area currently wooded. However, the footprint of the current project area does not impact this wooded tract at all.

We examined a range of aerial photographs of the project area taken from 1944 to 2012. These show that Federal Road and the railroad have been there since the earliest image. At that time the land around the road and railroad was entirely wooded. However, over the ensuing 70 plus years, development occurred and removed most of the woods. The only area that appears to have remained untouched is the woods east of Federal Road and south of the railroad. The road and railroad themselves have been frequently updated and expanded over the decades, and it is highly unlikely that any intact cultural resources have remained within the ROW of either of these features.

Examination of the USGS topographical maps in relation to current FEMA flood maps shows that the entire project area is situated more than 350 meters from the nearest floodplain margin.

As previously mentioned, a TARL search determined that there are no previously recorded archeological sites within the proposed project area. However, a review of the Texas Archeological Sites Atlas and Moore Archeological Consulting's own database of previous surveys reveals that no previous archeological investigations have ever occurred within the footprint of the immediate project area. A survey was conducted in 1997 for the EPA, presumably in advance of construction for the City of Houston Waste Water Treatment Plan that makes up the southwestern boundary of the current project area (though I could not discover who performed the investigation). No sites were found during this investigation. Another survey was conducted in 1956 along Hunting Bayou roughly 800 meters northwest of the Project Area. This survey discovered nine prehistoric sites. The work was done by Raymond Ring, an avocational archeologist active in the 50's. No other archeological investigations have occurred within close proximity to the current project area.

As a result of the factors discussed above, I recommend that no further archeological investigation are needed within the proposed project area before construction begins. The only match from the set of "settlement rules" discussed above is that the tract was wooded prior to development. Aside from that the project area is moderately distant from natural water sources and the floodplain. The soils present are poorly drained and there are no particular topographical highpoints. Further, the landform has been used and modified extensively over the last 70 years as road and railroad ROW. Further development outside of the ROW has further impacted the landform to a significant extent in all but one area. Given the long history of impacts to the ROW it is highly unlikely that any intact, significant historic or prehistoric cultural resources remain, assuming any were present to begin with.

Moore Archeological Consulting recommends that a copy of this assessment be forwarded to the Archeology Division of the THC and/or the U. S. Army Corps of Engineers (as appropriate) for their review and concurrence. As always, should archeological deposits or features be encountered during construction, it is advised that construction cease in the immediate area of the finds and the Archeology Division of the THC be contacted for further consultation.

We would like to thank Crouch Environmental Services for the opportunity to assess this project. If you or your staff have any questions or comments regarding this letter report please feel free to contact us.

Sincerely,

A handwritten signature in black ink, reading "Douglas G. Mangum". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Douglas G. Mangum
Principal Investigator, Historian

References Cited

- Abbott, James T.
2001 *Houston Area Geoarcheology; A Framework for Archeological Investigation, Interpretation, and Cultural Resource Management in the Houston Highway District*. Texas Department of Transportation, Environmental Affairs Division, Archeological Studies Program, Report 27.
- Moore, Roger G.
1995 *An Empirical Analysis of Elements of Prehistoric Site location and Formation In Harris County, Texas*. Moore Archeological Consulting, Report of Investigations, Number 149.
- Wheeler, Frankie F.
1976 *Soil Survey of Harris County, Texas*. United States Department of Agriculture, Soil Conservation Service, Washington, D.C.

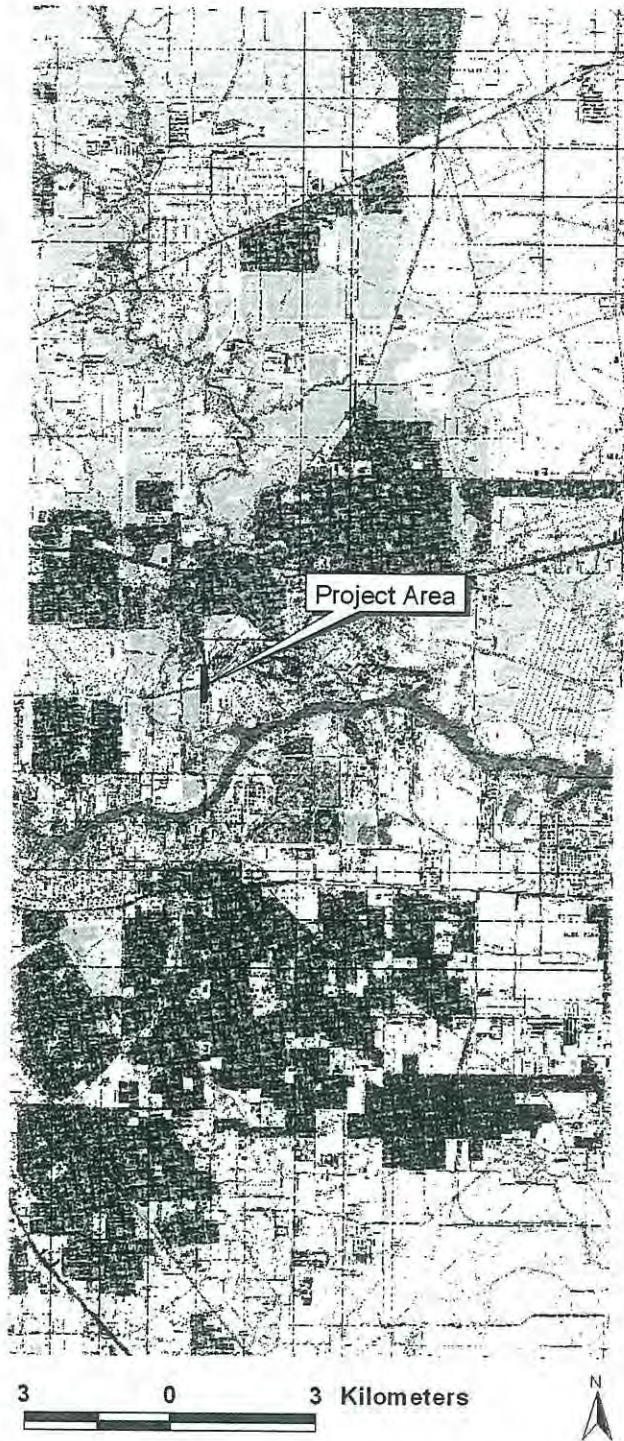


Figure 1: Proposed Federal Road Grade Separation Project Area on the Pasadena and Jacinto City USGS quadrangle maps.



Figure 2: Detail of the proposed Federal Road Grade Separation Project Area on the Pasadena and Jacinto City USGS quadrangle maps



Figure 3: Proposed Federal Road Grade Separation Project Area on a near infrared aerial photograph.

RECEIVED HCPID
ENGINEERING DIVISION

TEXAS HISTORICAL COMMISSION

RECEIVED
NOV 25 2013
Texas Historical Commission

113 DEC 23 PM 3 25 REQUEST FOR SHPO CONSULTATION:

Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

Please see instructions for completing this form and additional information on Section 106 and Antiquities Code consultation on the Texas Historical Commission website at <http://www.thc.state.tx.us/crm/crmsend.shtml>.

- This is a new submission.
- This is additional information relating to THC tracking number(s):

Tsa
Chang

Jones
Mrsay
Smith
Russo
Rogers
Bennett
William

Project Information		
UPIN # 1410 2MF 08 501		
PROJECT NAME Federal Road Grade Separation at Port Terminal Railroad Association Tracks		
PROJECT ADDRESS Approximately 2000 Block of Federal Road	PROJECT CITY Galena Park	PROJECT ZIP CODE(S) 77015
PROJECT COUNTY OR COUNTIES Harris County		
PROJECT TYPE (Check all that apply)		
<input checked="" type="checkbox"/> Road/Highway Construction or Improvement	<input type="checkbox"/> Repair, Rehabilitation, or Renovation of Structure(s)	
<input type="checkbox"/> Site Excavation	<input type="checkbox"/> Addition to Existing Structure(s)	
<input type="checkbox"/> Utilities and Infrastructure	<input type="checkbox"/> Demolition or Relocation of Existing Structure(s)	
<input type="checkbox"/> New Construction	<input type="checkbox"/> None of these	
BRIEF PROJECT DESCRIPTION: Please explain the project in one or two sentences. More details should be included as an attachment to this form. See attached desktop assessment prepared by Moore Archeological Consulting, Inc.		

Project Contact Information			
PROJECT CONTACT NAME Dwayne Rogers	TITLE Environmental Planner	ORGANIZATION Harris County PID-AED	
ADDRESS 1001 Preston, 7th Floor	CITY Houston	STATE TX	ZIP CODE 77002
PHONE 713-755-7144	EMAIL dwayne.rogers@hcpid.org		

Federal Involvement (Section 106 of the National Historic Preservation Act)	
Does this project involve approval, funding, permit, or license from a federal agency?	
<input type="checkbox"/> Yes (Please complete this section)	<input checked="" type="checkbox"/> No (Skip to next section)
FEDERAL AGENCY	FEDERAL PROGRAM, FUNDING, OR PERMIT TYPE
CONTACT PERSON	PHONE
ADDRESS	EMAIL

State Involvement (Antiquities Code of Texas)	
Does this project occur on land or property owned by the State of Texas or a political subdivision of the state?	
<input checked="" type="checkbox"/> Yes (Please complete this section)	<input type="checkbox"/> No (Skip to next section)
CURRENT OR FUTURE OWNER OF THE PUBLIC LAND Harris County	
CONTACT PERSON Dwayne Rogers	PHONE Same as above
ADDRESS Same as above	EMAIL Same as above

Identification of Historic Properties: Archeology

Does this project involve ground-disturbing activity?

- Yes (Please complete this section) No (Skip to next section)

Describe the nature of the ground-disturbing activity, including but not limited to depth, width, and length.
 See attached report

Describe the previous and current land use, conditions, and disturbances.
 Harris County is the previous and current land owner and the property is used for transportation.

Identification of Historic Properties: Structures

Does the project area or area of potential effects include buildings, structures, or designed landscape features (such as parks or cemeteries) that are 45 years of age or older?

- Yes (Please complete this section) No (Skip to next section)

Is the project area or area of potential effects within or adjacent to a property or district that is listed in or eligible for listing in the National Register of Historic Places?

- Yes, name of property or district: _____ No Unknown

In the space below or as an attachment, describe each building, structure, or landscape feature within the project area or area of potential effect that is 45 years of age or older.

ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE
ADDRESS	DATE OF CONSTRUCTION	SOURCE FOR CONSTRUCTION DATE

Attachments

[Please see detailed instructions regarding attachments.](#)

Include the following with each submission:

- Project Work Description
- Maps
- Identification of Historic Properties
- Photographs

For Section 106 reviews only, also include:

- Consulting Parties/Public Notification
- Area of Potential Effects
- Determination of Eligibility
- Determination of Effect

Submit completed form and attachments to the address below. Faxes and email are not acceptable.

Mark Wolfe
 State Historic Preservation Officer
 Texas Historical Commission
 P.O. Box 12276, Austin, TX 78711-2276 (mail service)
 108 W. 16th Street, Austin, TX 78701 (courier service)

For SHPO Use Only

ANTIQUITIES CODE OF TEXAS REVIEW
 NO SURVEY REQUIRED
 PROJECT MAY PROCEED
 by William A. Wolfe
 for Mark Wolfe
 Executive Director, THC
 Date 12/19/13
 Track# _____

RECEIVED HCPID
 ENGINEERING DIVISION
 013 DEC 23 PM 3 25

HARRIS COUNTY

Public Infrastructure Department
Architecture & Engineering Division

1001 Preston, 7th Floor
Houston, Texas 77002
(713) 755-5370

Certified Mail 7011 0110 0001 3467 9982

June 17, 2014

Dwayne Johnson, Project Manager, Policy Group
U.S. Army Corps of Engineers; Galveston District
P.O.Box 1229
Galveston, Texas 77553-1229

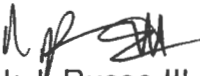
SUBJECT: Federal Road Grade Separation, Precinct 2, UPIN 14102MF08501

Dear Mr. Johnson:

The Harris County Public Infrastructure Department – Architecture & Engineering Division (HCPID-AED) respectfully submits to the U.S. Army Corps of Engineers (USACE) a Wetland Delineation report for your review, verification, and jurisdictional determination.

If you have any question or concerns regarding the attached report please contact Mr. Dwayne Rogers Environmental Planner for HCPID-AED at (713) 755-7144.

Sincerely,



Nick J. Russo III
Team Leader – Environmental Services

TLB/CDR/pmj

Enclosures

Cc: Stephen Ross, SWCA Environmental Consultants, Inc.
Commissioner Jack Morman, Pct. 2
Dave Walden, HCPID
Jeremy Phillips, HCPID
Arcadio Avalos, HCPID
Misty Rios, HCPID
Tammy Fuselier, HCPID
Terry Jones, HCPID
Reid Mrsny, HCPID
Loyd Smith, HCPID
Grace Tsai, HCPID
Mike Chang, HCPID
Eric Heppen, HCPID
Teresa L. Beavers, HCPID
Kathy L. Williams, HCPID
C. Dwayne Rogers, HCPID
Central File



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

SEP 02 2014

Policy Analysis Branch

SUBJECT: **SWG-2014-00519**; Approved Jurisdictional Determination, Federal Road
Grade Separation Project, Harris County, Texas

UPIN# 14102MF08501

Nick J. Russo III
Harris County Public Infrastructure Department
1001 Preston, 7th Floor
Houston, Texas 77002

Dear Mr. Russo:

This correspondence concerns our June 17, 2014, delineation verification request for the proposed Federal Road Grade Separation Project. The subject 2,200 linear feet of right-of-way is located north of the intersection of Clinton Drive and Federal Road, in Harris County, Texas.

Based on the jurisdictional delineation report performed by Crouch Environmental Services, Inc. dated November 2013, we have determined that the subject site does not contain areas subject to our jurisdiction. According to 33 CFR 328, water filled depressions created in dry for drainage purposes typically are not considered waters of the United States. Therefore, no Department of the Army permit is required prior to discharge.

This determination has been conducted to identify the limits of the United States Army Corps of Engineers Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Jones
MrsNy
Tsai
Heppen
Smith
Jenson
Russo
Beavers
Rogers
Williams
Martinez
w/org

24 SEP 11 10 30 AM '14
ENGINEERING

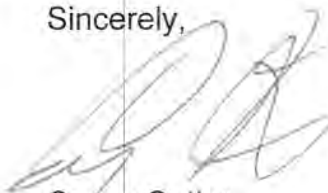
This letter contains an approved jurisdictional determination for your subject site, which is valid for 5 years from the date of this letter, unless new information warrants a revision prior to the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeals Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination, you must submit a completed RFA form to the Southwest Division Office at the following address:

Mr. Elliott Carman
Appeal Review Officer, CESWD-PD-O
U.S. Army Corps of Engineer Division,
Southwestern
1100 Commerce Street, Suite 831
Dallas, Texas 75242-1317
Telephone: 469-487-7061; FAX: 469-487-7199

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within **60 days** of the date of the NAP. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

If you have any questions concerning this determination, please reference file number **SWG-2014-00519** and contact Mr. Dwayne Johnson at the letterhead address or by telephone at 409-766-6353.

Sincerely,



Casey Cutler
Chief, Policy Analysis Branch

Enclosure

24 2 11 4 - 233 (70)
2014 SEP 4 PM 2 42

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Harris County Public Infrastructure	File Number: SWG-2014-00519	Date 09/02/2014
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

109 SEP 4 PM 2 42

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Mr. Dwayne Johnson, Project Manager
CESWG-RD-P, P.O. Box 1229
Galveston, Texas 77553-1229
Telephone: 409-766-6353; FAX: 409-766-6301

If you only have questions regarding the appeal process you may also contact:

Mr. Elliott Carman
Administrative Appeals Review Officer (CESWD-PDO)
U.S. Army Corps of Engineers
1100 Commerce Street, Suite 831
Dallas, Texas 75242
469-487-7061 (phone)

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date: _____

Telephone number: _____

Exhibits

Exhibit 1: Vicinity Map

Exhibit 2: 2012 Aerial Photograph with Project Area Overlay

Exhibit 3: Houston-Potential Archeological Liability Map

*Exhibit 4: 2012 Aerial Photograph with USACE Jurisdictionally Determined Aquatic Features
Overlay*

Exhibit 5: 2012 Aerial Photograph with FEMA Floodplain Data Overlay

Exhibit 6: 2012 Aerial Photograph with NRCS Soil Survey Data Overlay



Proposed Project Area

N

0 3 6 Miles

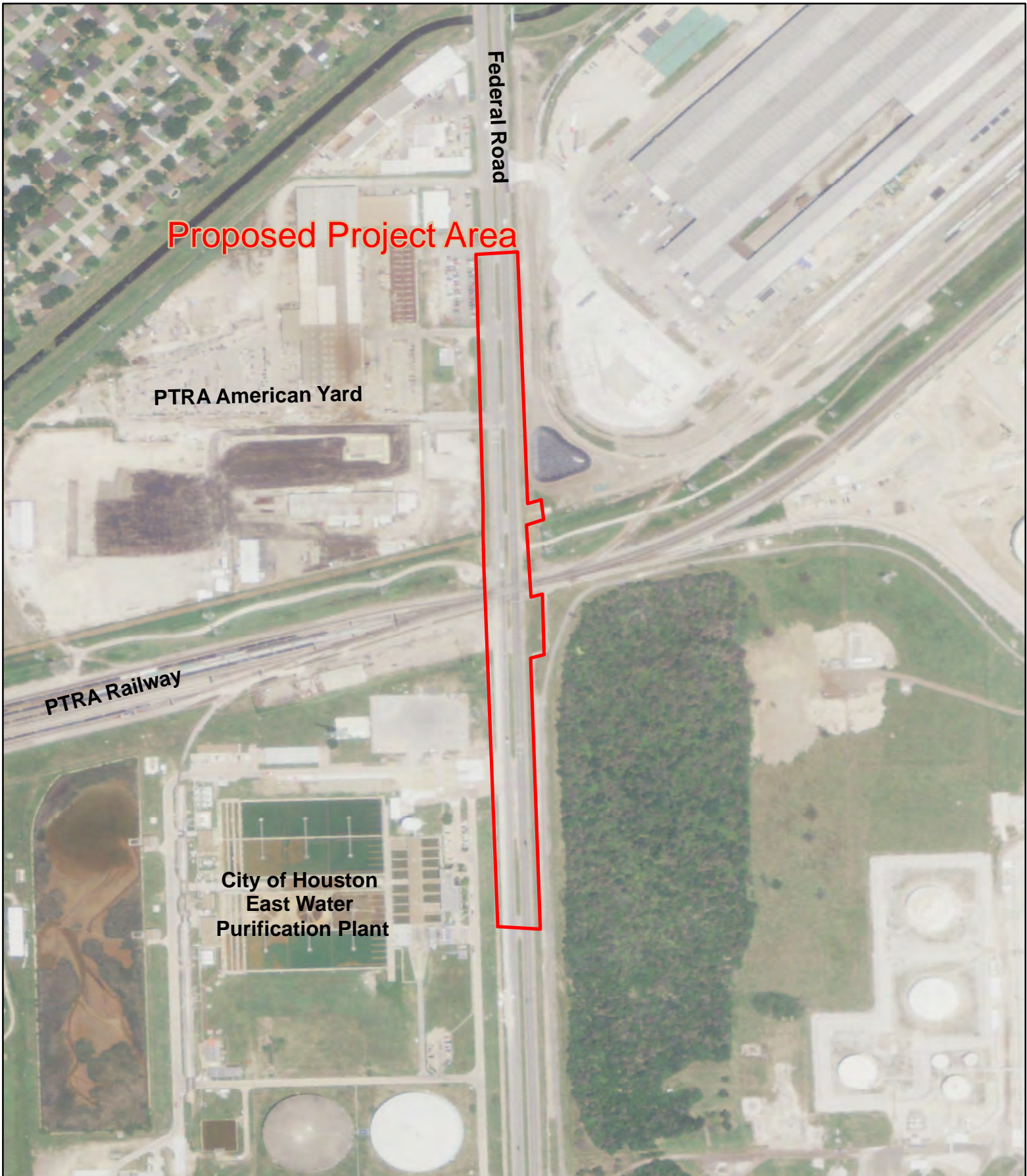
CROUCH ENVIRONMENTAL SERVICES, INC.



Harris County Public Infrastructure
 Department - Architecture and Engineering Division
 Federal Road Grade Separation
 CSJ 0912-72-336

EXHIBIT 1: VICINITY MAP

Harris County, Texas



Proposed Project Area

Federal Road

PTRA American Yard

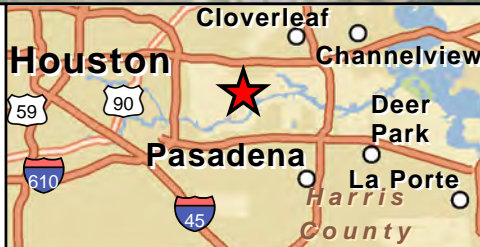
PTRA Railway

**City of Houston
East Water
Purification Plant**

N

0 125 250
Feet

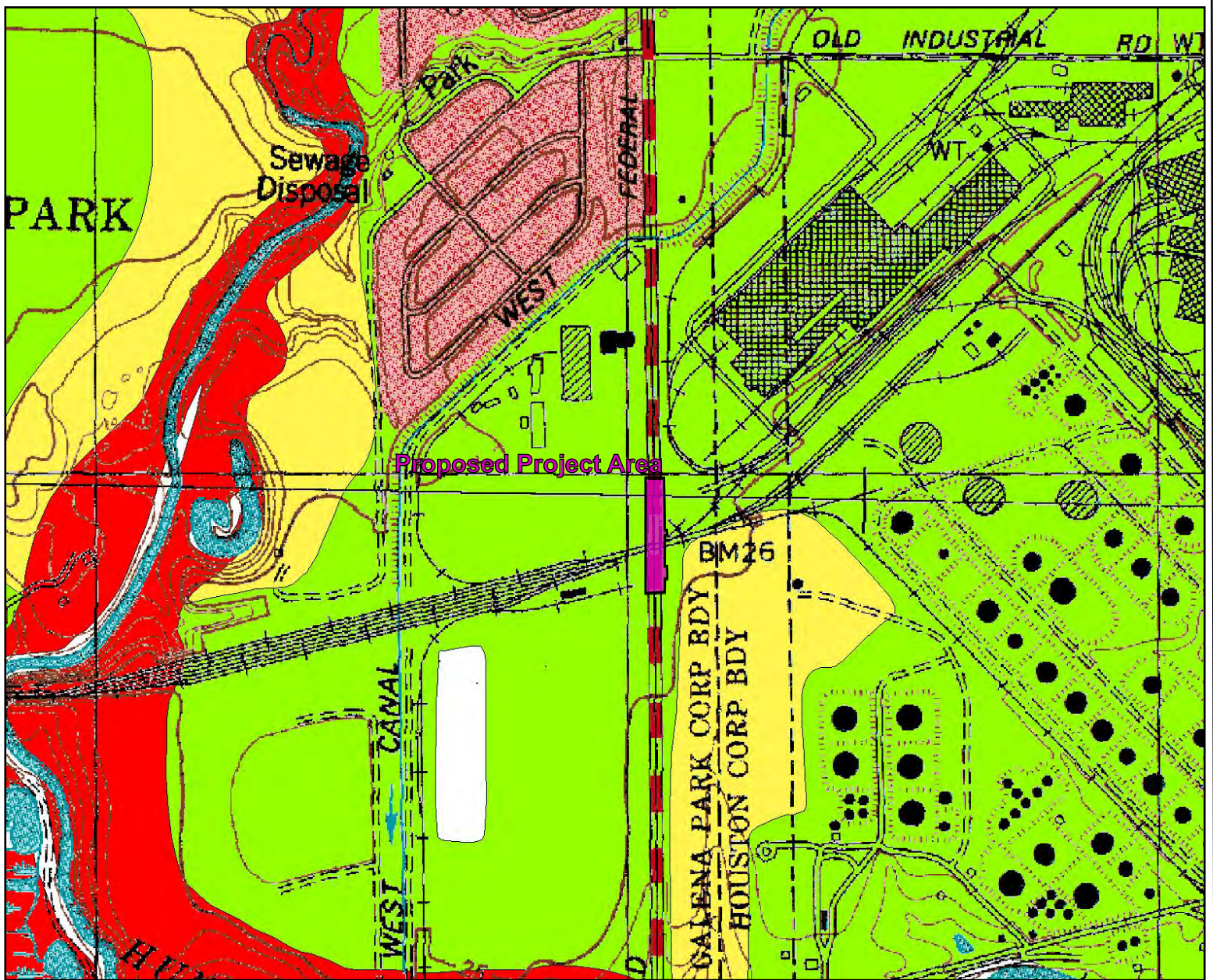
Texas Department of Transportation



Harris County Public Infrastructure
Department - Architecture and Engineering Division
Federal Road Grade Separation
CSJ 0912-72-336

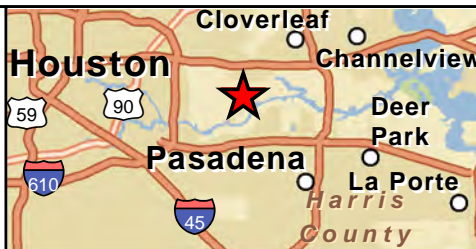
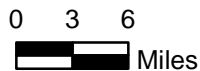
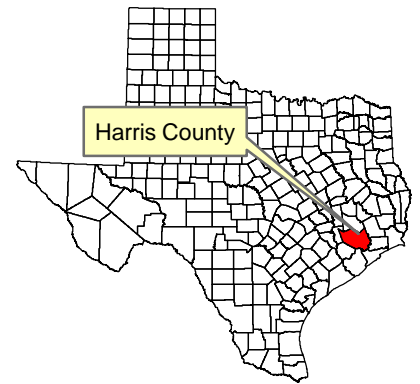
EXHIBIT 2: 2012 AERIAL PHOTOGRAPH
WITH PROJECT AREA OVERLAY

Harris County, Texas



Legend
PALM_CLASS

- 1 - Surface Survey Recommended, Deep Reconnaissance Recommended if Deep Impacts are Anticipated.
- 2 - Surface Survey Recommended, No Deep Reconnaissance Recommended.
- 4 - No Survey Recommended.

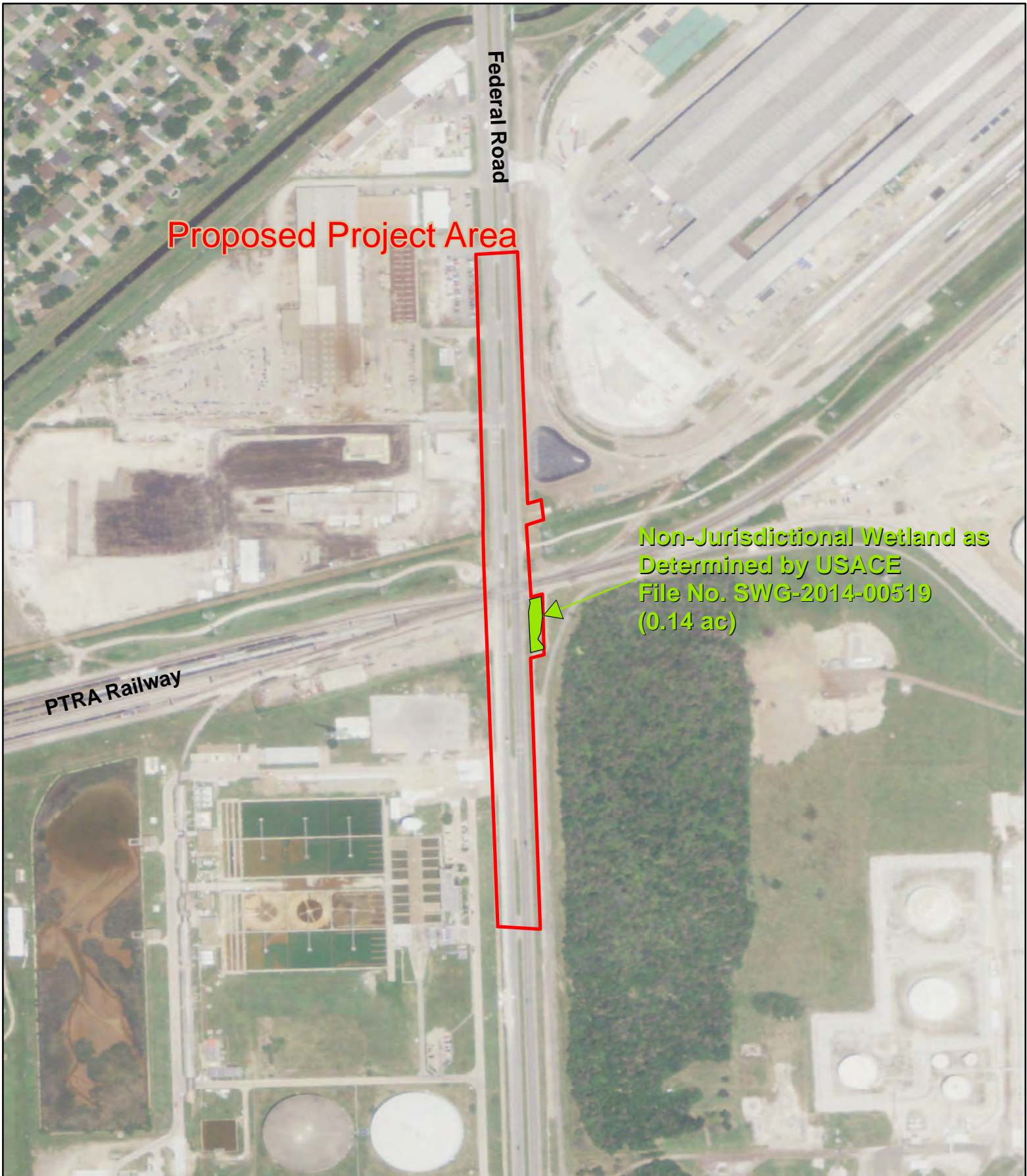


Harris County Public Infrastructure
Department - Architecture and Engineering Division
Federal Road Grade Separation
CSJ 0912-72-336

EXHIBIT 3: HOUSTON - POTENTIAL
ARCHEOLOGICAL LIABILITY MAP

Harris County, Texas





Proposed Project Area

Non-Jurisdictional Wetland as Determined by USACE
File No. SWG-2014-00519
(0.14 ac)

PTRA Railway

Federal Road

0 125 250 Feet

Texas Department of Transportation



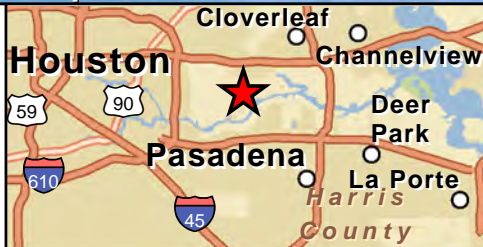
Harris County Public Infrastructure
Department - Architecture and Engineering Division
Federal Road Grade Separation
CSJ 0912-72-336

EXHIBIT 4: 2012 AERIAL PHOTOGRAPH
WITH USACE JURISDICTIONALLY DETERMINED
AQUATIC FEATURES OVERLAY

Harris County, Texas



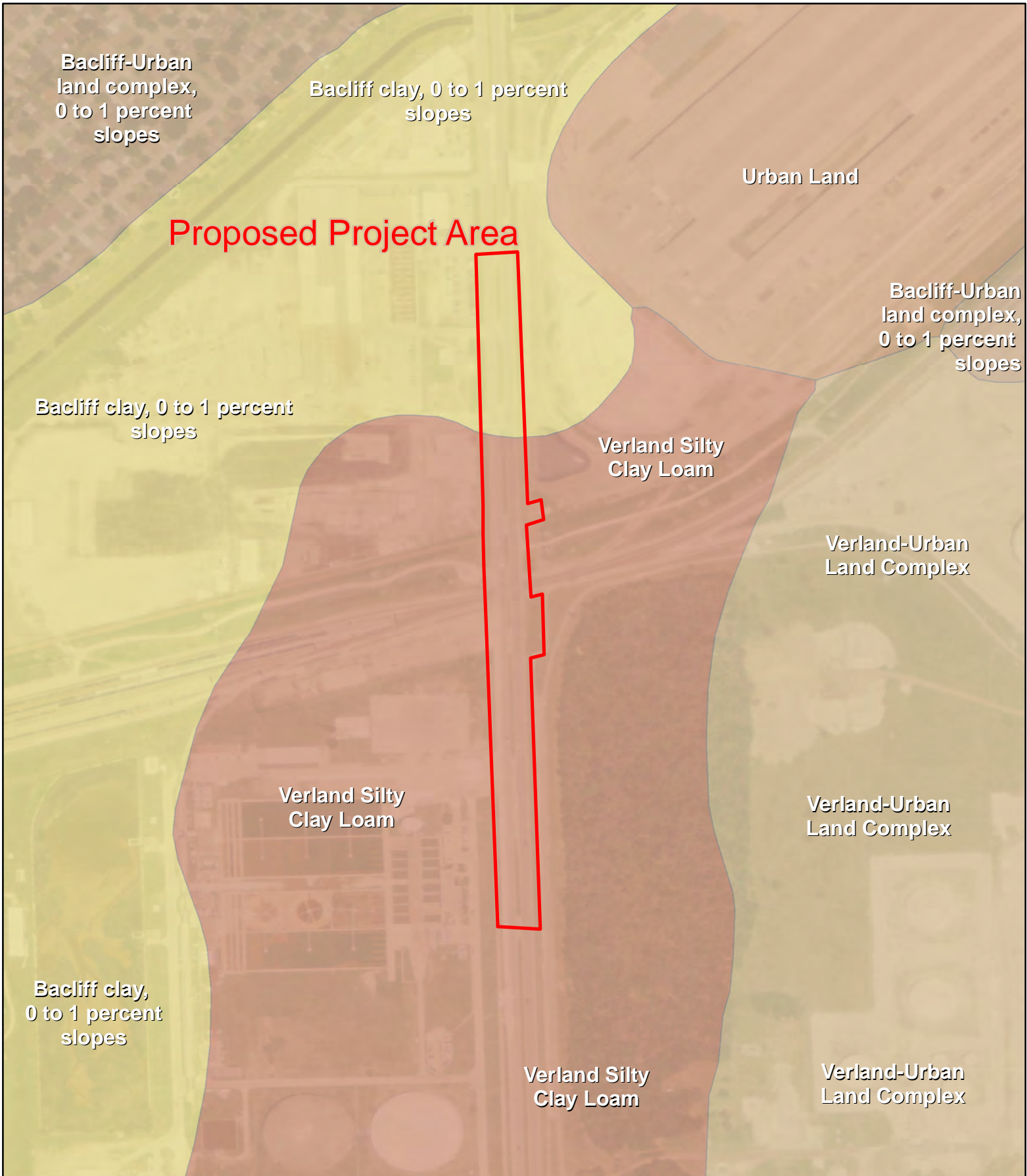
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Feet



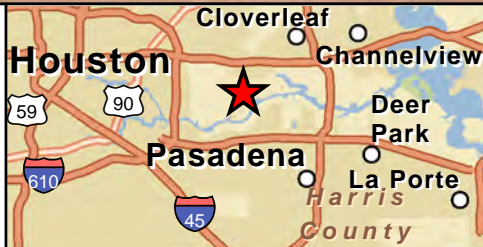
Harris County Public Infrastructure
Department - Architecture and Engineering Division
Federal Road Grade Separation
CSJ 0912-72-336

EXHIBIT 5: 2012 AERIAL PHOTOGRAPH
WITH FEMA FLOODPLAIN DATA OVERLAY

Harris County, Texas



0 125 250
 Feet



Harris County Public Infrastructure
 Department - Architecture and Engineering Division
 Federal Road Grade Separation
 CSJ 0912-72-336

EXHIBIT 6: 2012 AERIAL PHOTOGRAPH
 WITH NRCS SOIL SURVEY DATA OVERLAY

Harris County, Texas