



Beatline Road

Planning and Environmental Linkage (PEL) Study

Attachment C – Constraints Report



Prepared For:

Mississippi Department of Transportation

January 2019



Introduction

Environmental constraints were investigated and mapped as part of the environmental review process. Detailed field studies were not conducted except for historic properties. The primary method of investigation was gathering GIS database information on known constraints along with windshield surveys to confirm the database findings. The following website databases were reviewed relative to the project study area:

Resource Identified	Source
Superfund Sites	https://www.epa.gov/superfund/search-superfund-sites-where-you-live
Brownsfield	https://www.epa.gov/enviro/epa-regional-kml-download
Hazardous Waste	http://www.deq.state.ms.us/MDEQ.nsf/page/Main_Home?OpenDocument and https://www.epa.gov/enviro/epa-regional-kml-download
FRS Facilities	http://www.deq.state.ms.us/MDEQ.nsf/page/Main_Home?OpenDocument and https://edg.epa.gov/metadata/catalog/main/home.page
Toxic Releases	https://www.epa.gov/toxics-release-inventory-tri-program
T&E	https://www.fws.gov/mississippiES/
Low Income and Minority Communities	http://www.maris.state.ms.us/ and http://mississippi.us.censusviewer.com/client
UST – LUST Sites	http://www.deq.state.ms.us/MDEQ.nsf/page/UST_PageHome
Cemeteries	http://www.maris.state.ms.us/
NHD Flowlines	http://www.maris.state.ms.us/
Perennial Streams	http://www.maris.state.ms.us/
Coastal Management Zones	http://www.dmr.ms.gov/index.php/coastal-resources-management
Churches	http://www.maris.state.ms.us/
City Parks	http://www.maris.state.ms.us/
State Parks	http://www.maris.state.ms.us/
National Parks	https://www.nps.gov/index.htm
NWI Wetlands	https://www.fws.gov/wetlands/Data/Mapper.html
Flood Zones	https://www.fema.gov/states/mississippi
Transmission Lines	http://www.maris.state.ms.us/
Historic Districts and Sites	https://www.nps.gov/index.htm

Additional research was conducted through a file review at the Mississippi Department of Archives and History (MDAH) for known archeological and historical sites. All resources that met the 50-year criterion were evaluated for their NRHP eligibility. Each evaluated architectural resource was photographed and documented with brief architectural description, which is required by MDAH. An IPAC Trust Resources Report for Threatened and Endangered species was reviewed. Census data was collected and reviewed for low income and minority populations. Mapped constraints were confirmed to the extent possible through a windshield survey.

The following described environmental constraints were provided to the design engineers as early as possible prior to or in some cases, during the design process so that impacts could be avoided or minimized to the greatest extent possible. Based on preliminary design concepts, possible impacts were assessed and are discussed below. Resources that are likely not impacted are not discussed. Alignment alternatives include eastern and western alternatives. If environmental constraints noted below differed

between the alternatives, impacts are discussed for each alternative, otherwise, the impacts are similar for each alternative.

Residences and Businesses: Most of the Study Corridor is developed and contains residences and businesses, some of which will be impacted by the proposed project. A Relocation Study was completed as a separate document and is attached to this report. To summarize the Relocation Report findings, the West Alternative could displace 52 residences and 26 businesses; the East Alternative could displace 50 residences and 29 businesses.

Coastal Management Zones: The entire corridor is located within the Coastal Management Zone. The Department of Marine Resources (DMR) is the point of contact. Implementation of the Mississippi Coastal Program is the primary responsibility of the DMR Office of Coastal Resources. The Mississippi Coastal Program was legislatively mandated in Section 57-15-6 of the Mississippi Code of 1972 and approved by the National Oceanic and Atmospheric Administration (NOAA) under the provisions of the Coastal Zone Management Act (CZMA) of 1972. In addition to coastal management responsibilities, Coastal Resources Management also administers the Coastal Preserves Program, Wetlands Permitting, and other special projects. Coordination with the DMR has been initiated to identify any potential issues of concern related to the implementation of this project. As of this Draft report, coordination is not complete, but comments from the DMR will be included as part of the Final report when coordination is complete.

Wetlands and Streams: The Department of Marine Resources (DMR) is the point of contact in Mississippi for wetland permits in the Mississippi Coastal Zone, which includes the counties of Hancock, Harrison, and Jackson. Under a Memorandum of Agreement with the Mobile and Vicksburg districts of the U.S. Army Corps of Engineers (USACE), applications for wetland activities in the Mississippi Coastal Zone are to be submitted to the DMR on the Joint Application and Notification form. The DMR will then evaluate the permit application for completeness and forward copies to the appropriate agencies. For minor activities within the jurisdiction of the DMR, at or below the watermark of ordinary high tide, the DMR will issue the joint USACE permit. For major activities, those not covered by the General Permit Guidelines, a separate permit will be issued by the DMR and by the USACE. All applications should be submitted to the DMR on the Joint Application Form.

Scattered wetlands occur throughout the general project area and include bottomland hardwood and herbaceous wetlands. However, density of wetlands in the project construction limits is light and therefore, regardless of the alternative selected, wetland impacts are not anticipated to be significant. If after avoidance and minimization there are still wetland impacts, compensatory mitigation will be required for those impacts in excess of 0.10 acre.

Both design Alternatives include bridges over Canal Numbers 1 and 3. Any fill impacts to streams will require a Section 404 permit from the USACE. Preliminary design concepts indicate that minimal impacts are anticipated as both crossings are anticipated to be bridges with minimal fill. There are several other unnamed minor drainages in the corridor that will need to be evaluated through a formal delineation process in coordination with the DMR and USACE to determine if they are jurisdictional waters of the U.S.

T&E Habitat: There are fifteen (15) federally-listed threatened or endangered species identified by the US Fish and Wildlife Service (USFWS) within the general project area (USFWS IPAC report). Coordination with

the USFWS has been initiated through the MDOT/USFWS liaison, and no comment has been received as of the date on this report. No T&E species are anticipated to be adversely impacted by the project. Designated critical habitat for the Piping Plover (*Charadrius melodus*) the Atlantic Sturgeon (*Acipenser oxyrinchus*) is located just out of the project area of direct impact. Field studies documenting important habitats and possibly biological assessments for specific wildlife or plant species may be required during future NEPA studies.

Hazardous Sites: Databases from MDEQ, EPA and Environmental Data Resources (EDR) were reviewed. Eight hazardous sites were identified within and/or adjacent to the project area. Hazardous sites include Leaking Underground Storage Tanks (LUST) and Underground Storage Tanks (UST) sites that may be impacted as a result of the project. Several gasoline service/auto repair businesses may be impacted by the project. An auto salvage yard may be partially impacted. All of the eight identified sites with potential impacts are considered to be low to moderate risk to the project. None of the sites are expected to directly impact the project viability, it would be a low to moderate risk to cause additional costs related to environmental remediation efforts. When future NEPA studies are completed, a current review of MDEQ and EPA databases should be completed to ascertain the current risk associated with hazardous materials.

Below is a summary of the hazardous materials sites identified with in the proposed ROW for both alternatives and their relative risk to the project.

- **Site 1 (EDR Site G19-22) – Hist. Auto, LUST, UST, RGA, FINDS**

This site is located within the proposed ROW of both alternatives and would need to be relocated or removed. This site was used historically as an auto repair facility between 1994 and 2002. The site has had at least one documented release in the past; however, the LUST cases involving this facility are now closed and received a No Further Action letter. Three temporarily out of service USTs that contained gasoline have been removed from this facility. Construction has a higher than usual likelihood of encountering petroleum products in the soil due to past release(s) that have occurred and the potential for underground piping to be present.

- **Site 2 (EDR Site K42 & 43) – Hist. Auto, UST**

This site is located within the proposed ROW of both alternatives and would need relocated or removed. This site was used historically as an auto repair facility between 2002 and 2008. The site is considered inactive and contained one UST that is documented as closed and removed. Construction has a low likelihood of encountering petroleum products in the soil primarily due to the potential for underground piping that may remain.

- **Site 3 (EDR Site F17, 39 & 40) – Hist. Auto, LUST, UST, FINDS**

This site is located within the proposed ROW of both alternatives and could be impacted by construction. This site was used historically as an auto repair facility between 2005 and 2014. The site has had at least one documented release in the past and has groundwater/vapor monitoring in place. There are three active USTs at this facility. Construction has a moderate likelihood of encountering petroleum products in the soil due to: 1) past release(s) that have occurred; 2) potential for underground piping to be present; and 3) proximity of grading activities relative to the tank pit.

- **Site 4 (EDR Site 41) – UST**

This site is located within the proposed ROW of both alternatives; however, greater impacts would occur with the Eastern Alternative. This site is considered active and contains 2 gasoline and one diesel UST. No leaks have been reported in connection with this facility. Construction of the East Alternative has a higher likelihood of encountering petroleum products in association with UST and/or piping relocations and fuel pump islands. The West Alternative would impact the site, but would have a lower potential for encountering USTs, piping and fueling islands.

- **Site 5 (EDR Site 9, C5-8) – Hist. Auto, LUST, UST, FINDS, ECHO, RGA LUST,**

This site is located within the proposed ROW of both alternatives. This site is considered active, has a closed LUST status, and was used historically as an auto repair facility (Gasoline Service Station and Engine Fuels and Oils) between 1994 and 1997. The site has been identified as an RGA LUST site from 1997 through 2012 and has had open and closed leak reports in 1993 and 2003. One active UST remains at this facility. Seven (7) other USTs are documented as having had releases in the past and were all removed in 2004. Both alternatives would impact the site and would have a moderate to high potential for encountering petroleum products in surface soils due to documented historical releases, USTs and piping in close proximity. The remaining features of the site are located outside proposed ROW.

- **Site 6 (EDR Site 46) – Hist. Auto**

This site is located within the proposed ROW of both alternatives. This site is identified as a historical auto facility (Gasoline Service Station). This site is currently an active gas station. Both alternatives would impact the site, but would have a low to moderate potential for encountering petroleum products due to the presence of USTs and/or piping.

- **Site 7 (EDR Site B) – UST, FINDS**

This site is located within the proposed ROW of both alternatives. This site is identified as containing active USTs, which has been confirmed. Both alternatives would impact the site, but would have a low to moderate potential for encountering petroleum products due to the presence of USTs and/or piping.

- **Site 8 (EDR Site D) – FINDS**

This site is located within the proposed ROW of both alternatives. This site is identified by EDR as a FINDS site; however, MARIS data has identified this site as inactive UST site. Both alternatives would impact the site, but would have a low to moderate potential for encountering petroleum products due to the previous presence of USTs and/or piping.

Environmental Justice: The EPA tool *EJ Screen* and the Census Bureau's *American Fact Finder* were used to identify the demographic characteristics of the project area. The demographic analysis study area was generally a half-mile buffer around the project corridor (see map inset). The 2010 Census reported a percent minority for the area of approximately 16%, and a percent Hispanic population of approximately 4%. Approximately 15% of the area's population was reported as aged 65 or older. In addition, 2012-2016 American Community Survey (ACS) data reported that approximately 4% of the area's population speak English "less than very well". A windshield survey of the project area identified no building signage or billboards in anything other than English and no minorities were noted. According to 2012-2016 ACS data, of the ten (10) Census block groups encompassing the study area, approximately 21% identified a

median household income of less than \$24,999.¹ The Department of Health and Human Services 2018 poverty guideline for a family of four is \$25,100. More information on the estimated property values for potentially impacted homes can be found in the associated Relocation Report.

During NEPA studies, potential direct and indirect impacts to this community should be fully considered and the community should be engaged in the NEPA process.

Floodplains: Conceptual plans indicate the West alternative will impact approximately 19.4 acres in the 100-year floodplain, and the East alternative will impact approximately 18.5 acres in the 100-year floodplain.

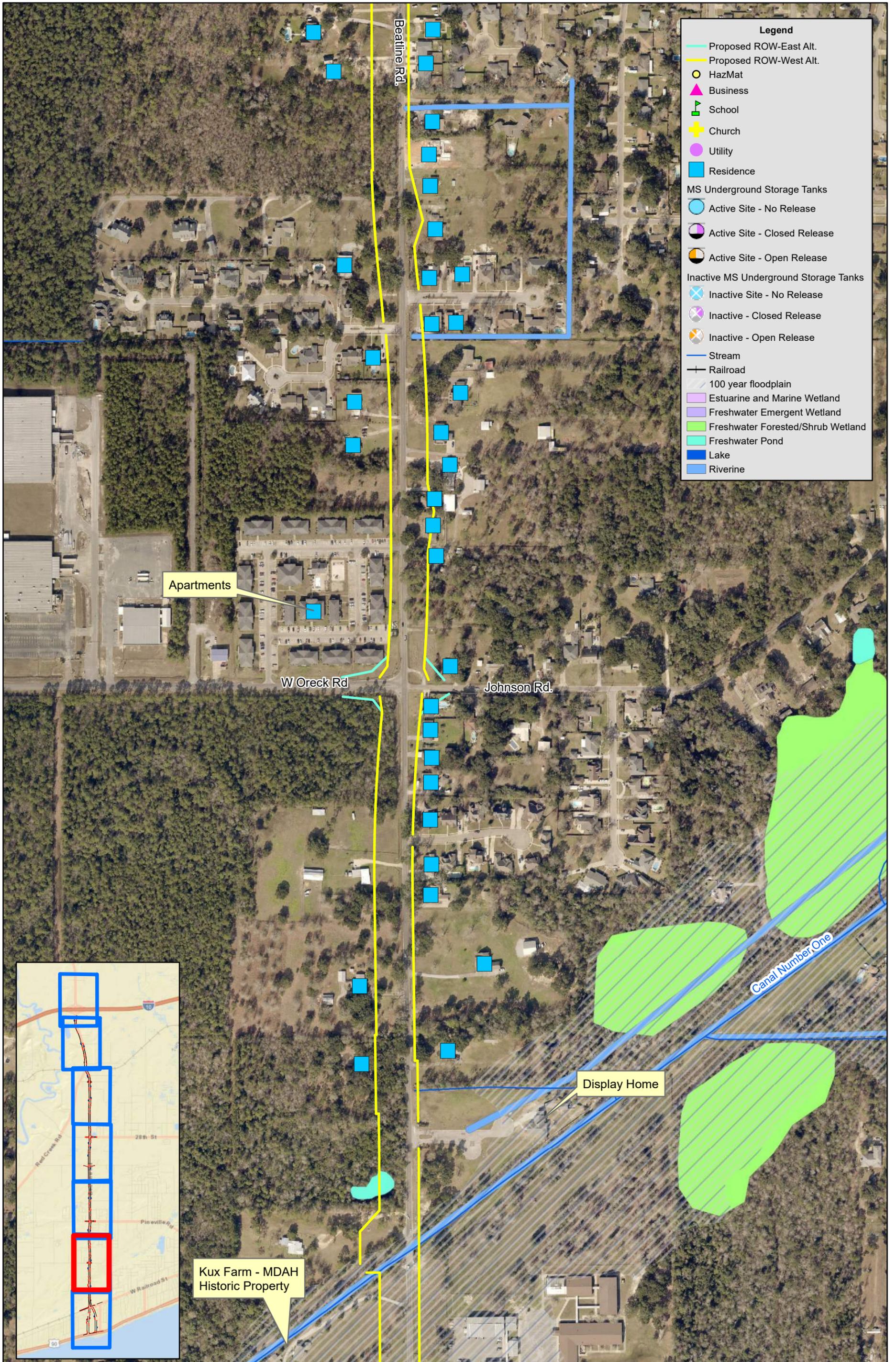
Harrison County, the City of Long Beach, and the City of Pass Christian participate in the National Flood Insurance Program. All of the floodplain/floodway encroachments within this roadway construction project will be designed to comply with the applicable community's local flood damage prevention ordinance. The project crosses the Zone AE Special Flood Hazard Area with Regulatory Floodway. The project will be designed to cause no rise to existing base flood elevations and no impact to the existing Regulatory Floodway. Adjacent properties will not be impacted nor have a greater flood risk than existed before construction of the project. No-rise/no-impact certifications sealed by a licensed Professional Engineer will be provided to the participating communities for their records. No coordination with FEMA will be required for the project.

Historic Properties: An architectural cultural resources investigation was completed for the proposed project in order to comply with Federal statutes including: Section 106 of the National Historic Preservation Act of 1966, as amended; Executive Order 11593; and the Advisory Council's *Protection of Historic Sites* (36 CFR Part 800), effective 17 June 1999. The report presents the assessment and National Register of Historic Places (NRHP) eligibility determinations of resources over 50 years of age within the Area of Potential Effect (APE). The report findings are summarized below.

No property within the APE for this project would meet the criteria for eligibility for the NRHP. No property within the APE was previously surveyed and /or elevated for NRHP eligibility. It is the opinion of the Report author that no properties merit further evaluation. The Findings Report has been submitted to the MDAH for review and a request for their agreement with the determinations.

Figures 1-7 shows the environmental constraints in the area.

¹ 2012-2016 American Community Survey (ACS); Household Income in the Past 12 Months; Table B19001.



- Legend**
- Proposed ROW-East Alt.
 - Proposed ROW-West Alt.
 - HazMat
 - Business
 - School
 - Church
 - Utility
 - Residence
 - MS Underground Storage Tanks
 - Active Site - No Release
 - Active Site - Closed Release
 - Active Site - Open Release
 - Inactive MS Underground Storage Tanks
 - Inactive Site - No Release
 - Inactive - Closed Release
 - Inactive - Open Release
 - Stream
 - Railroad
 - 100 year floodplain
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Riverine

Apartments

W Oreck Rd

Johnson Rd.

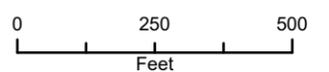
Canal Number One

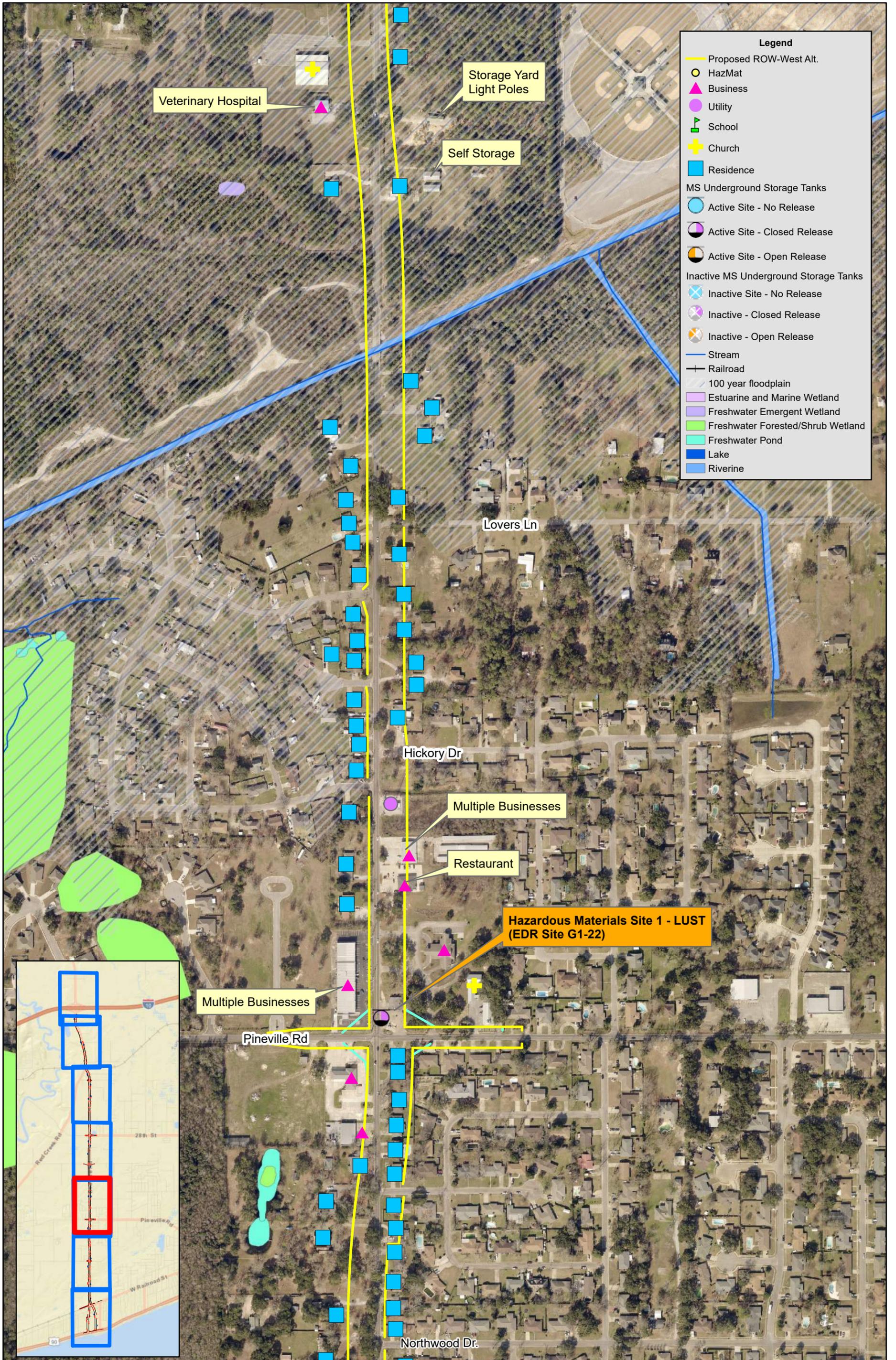
Display Home

Kux Farm - MDAH
Historic Property

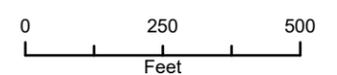


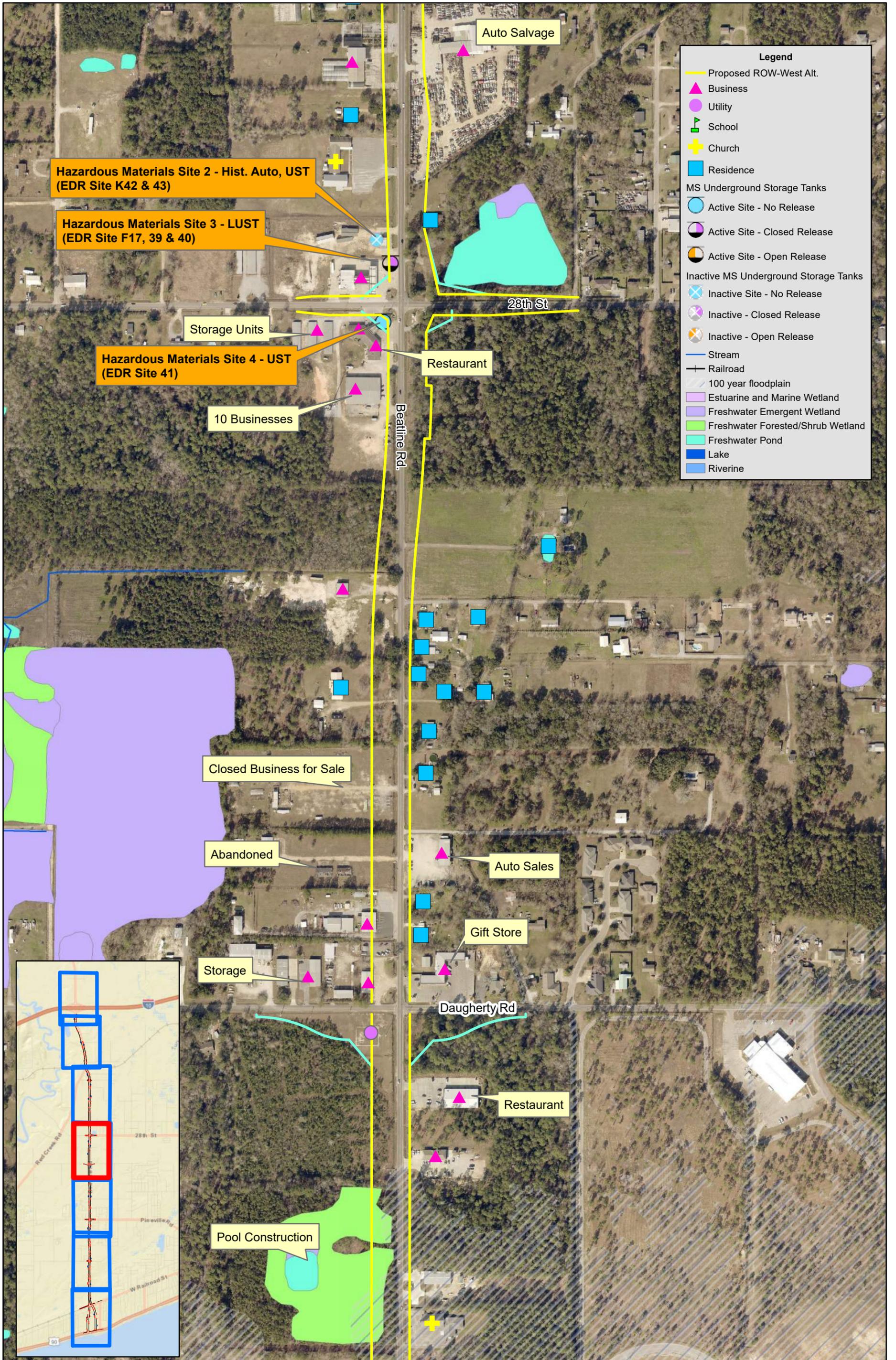
Beatline Road Constraints Map





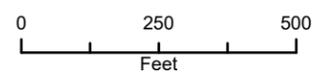
Beatline Road Constraints Map

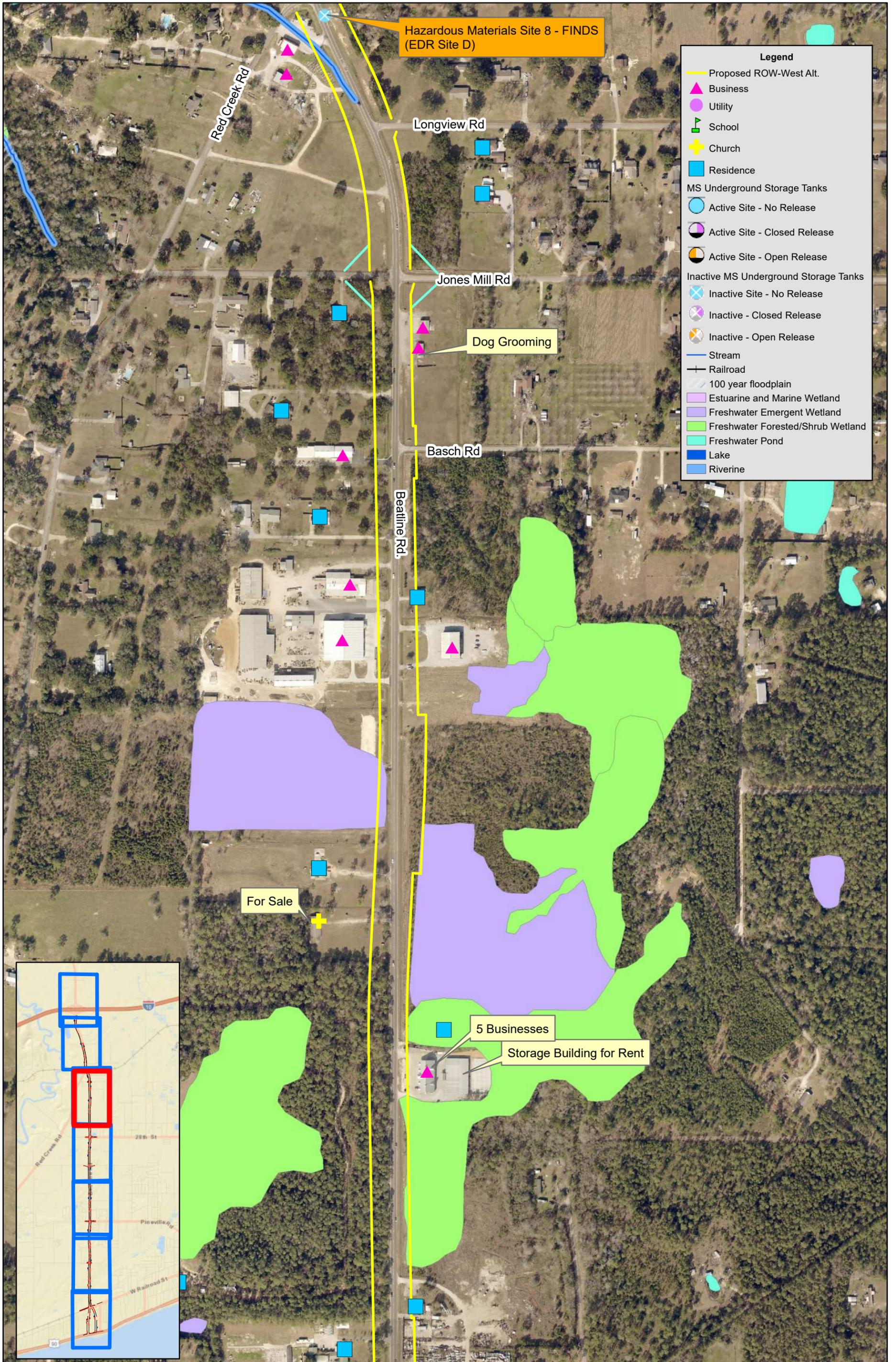




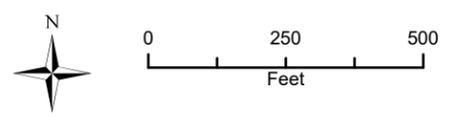
Legend	
	Proposed ROW-West Alt.
	Business
	Utility
	School
	Church
	Residence
MS Underground Storage Tanks	
	Active Site - No Release
	Active Site - Closed Release
	Active Site - Open Release
Inactive MS Underground Storage Tanks	
	Inactive Site - No Release
	Inactive - Closed Release
	Inactive - Open Release
	Stream
	Railroad
	100 year floodplain
	Estuarine and Marine Wetland
	Freshwater Emergent Wetland
	Freshwater Forested/Shrub Wetland
	Freshwater Pond
	Lake
	Riverine

Beatline Road Constraints Map





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Hazardous Materials Site 5 - FINDS, LUST, UST, Hist. Auto, ECHO, RGA LUST (EDR Site 9, C)

Hazardous Materials Site 6 - Hist. Auto (EDR Site 46)

Burned, Abandoned Home

Long Beach Auto Auction

Swimming Pool

Potential Wetland

Passport America

Rock Sales

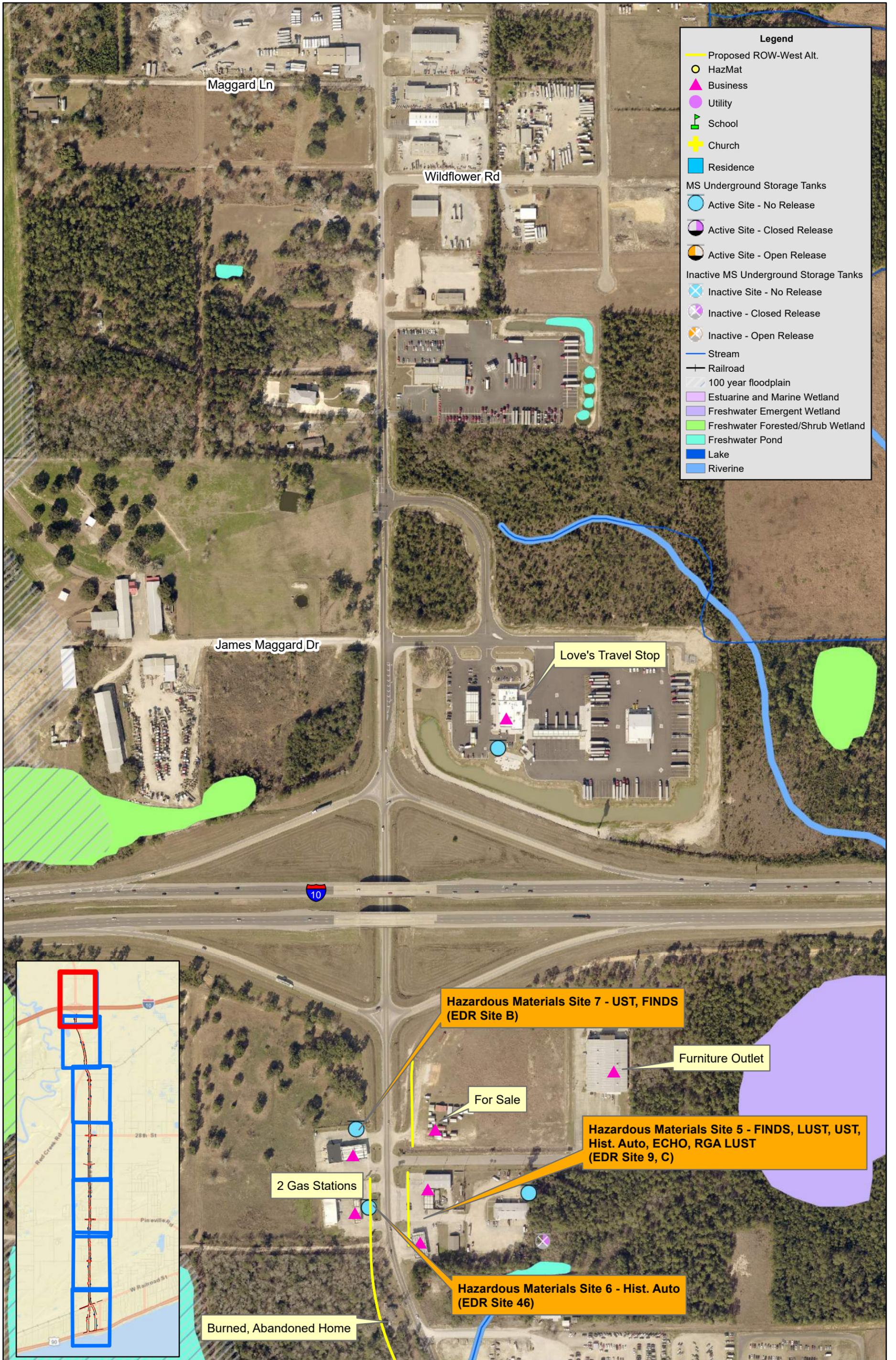
Legend

- Proposed ROW-West Alt.
- ▲ Business
- Utility
- ▲ School
- + Church
- Residence
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 - Active Site - No Release
 - Active Site - Closed Release
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