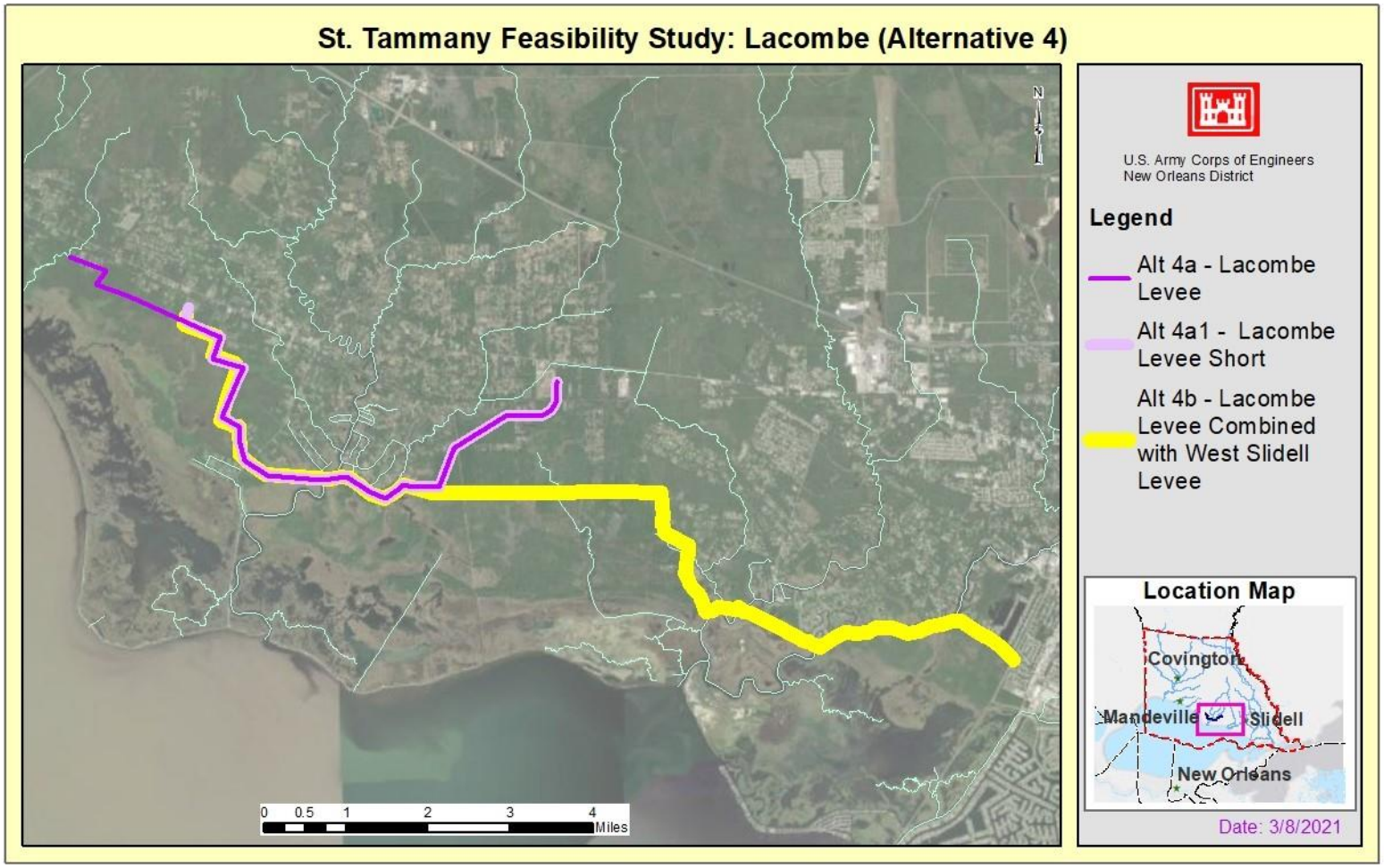
St. Tammany Parish, Louisiana

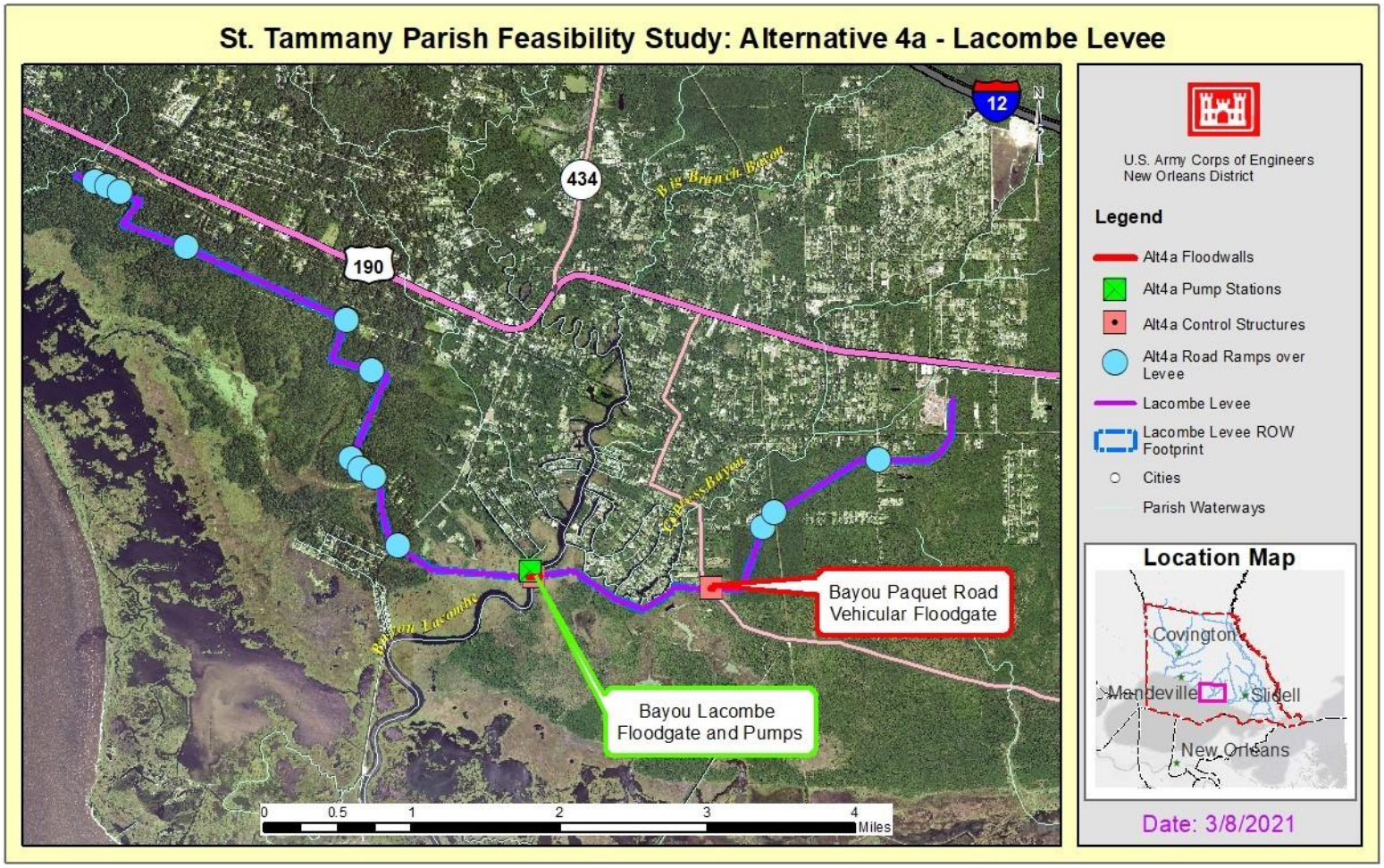
Final Integrated Feasibility Report and

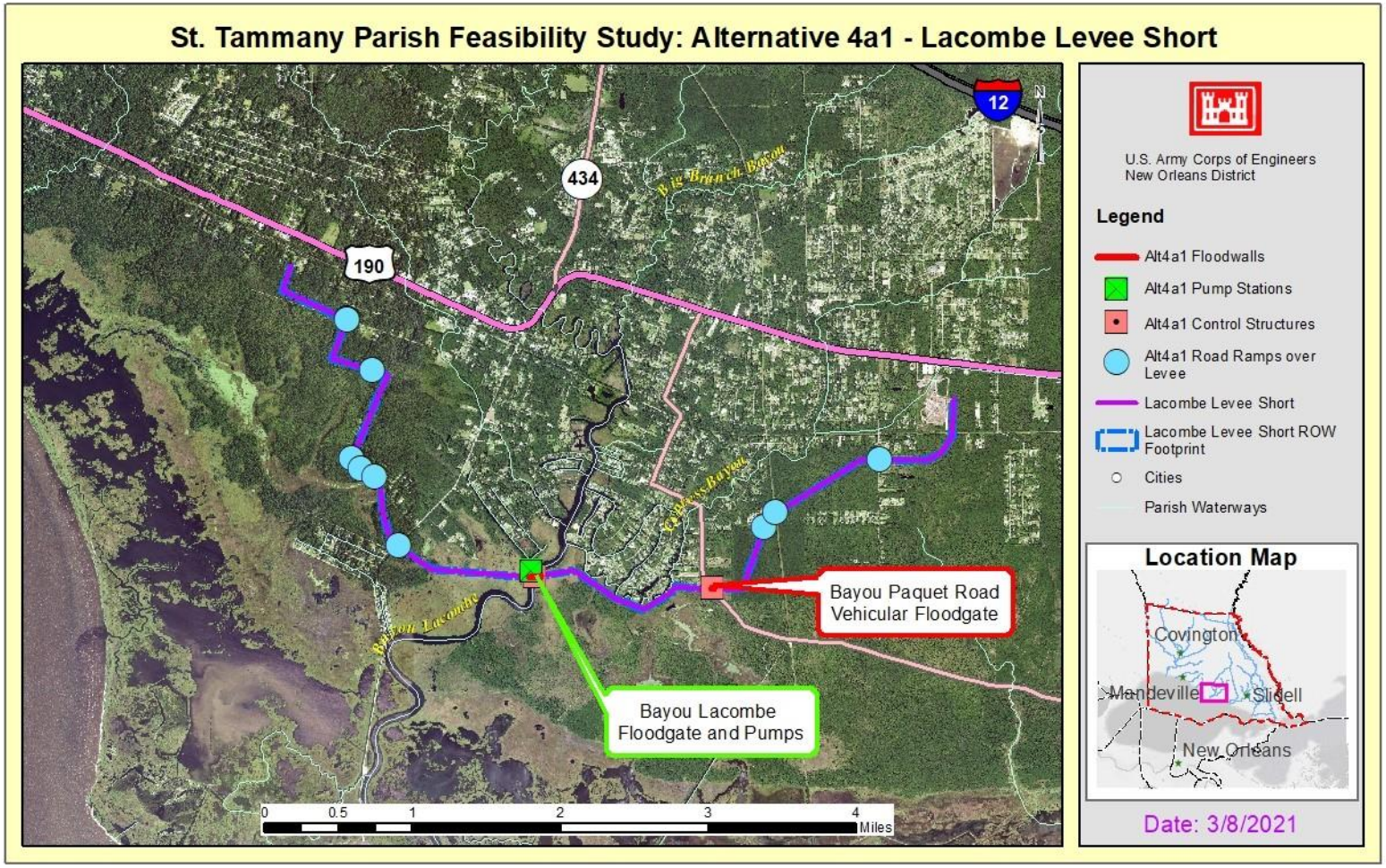
Environmental Impact Statement

Annex 1 to the Engineering Appendix D

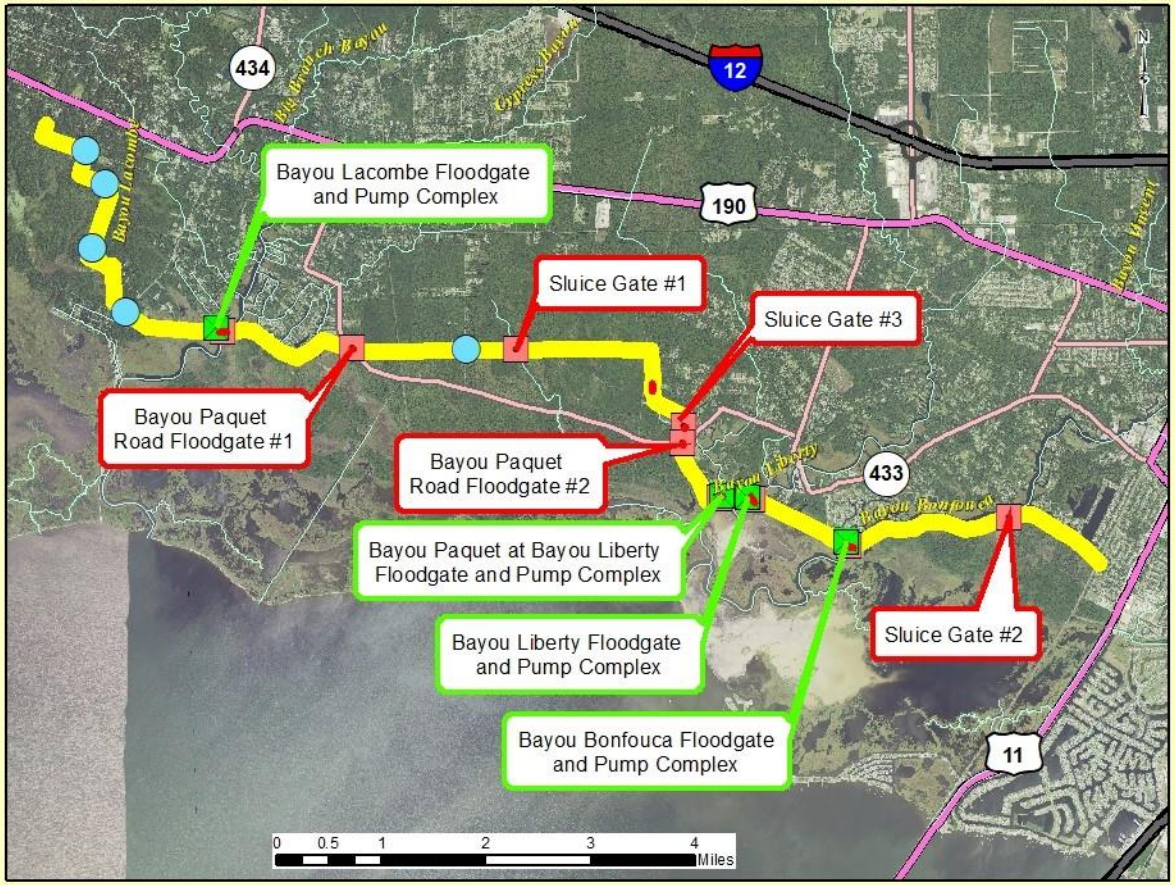
February 2024


St. Tammany Feasibility Study: Lacombe (Alternative 4)
N
0 0.5 1 2 3 4
Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt 4a - Lacombe Levee
Alt 4a1 - Lacombe Levee Short
Alt 4b - Lacombe Levee Combined with West Slidell Levee
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 3/8/2021


St. Tammany Parish Feasibility Study: Alternative 4a - Lacombe Levee
12
434
190
Big Branch Bayou
Cypress Bayou
Bayou Lacombe
Bayou Paquet Road
Vehicular Floodgate
Bayou Lacombe
Floodgate and Pumps
0
0.5
1
2
3
4
Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt4a Floodwalls
Alt4a Pump Stations
Alt4a Control Structures
Alt4a Road Ramps over Levee
Lacombe Levee
Lacombe Levee ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 3/8/2021


St. Tammany Parish Feasibility Study: Alternative 4a1 - Lacombe Levee Short
12
434
190
Big Branch Bayou
Cypress Bayou
Bayou Lacombe
Bayou Paquet Road
Vehicular Floodgate
Bayou Lacombe
Floodgate and Pumps
0
0.5
1
2
3
4
Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt4a1 Floodwalls
Alt4a1 Pump Stations
Alt4a1 Control Structures
Alt4a1 Road Ramps over Levee
Lacombe Levee Short
Lacombe Levee Short ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 3/8/2021

St. Tammany Parish Study: Alternative 4b - Lacombe Levee Combined with West Slidell Levee



U.S. Army Corps of Engineers
New Orleans District

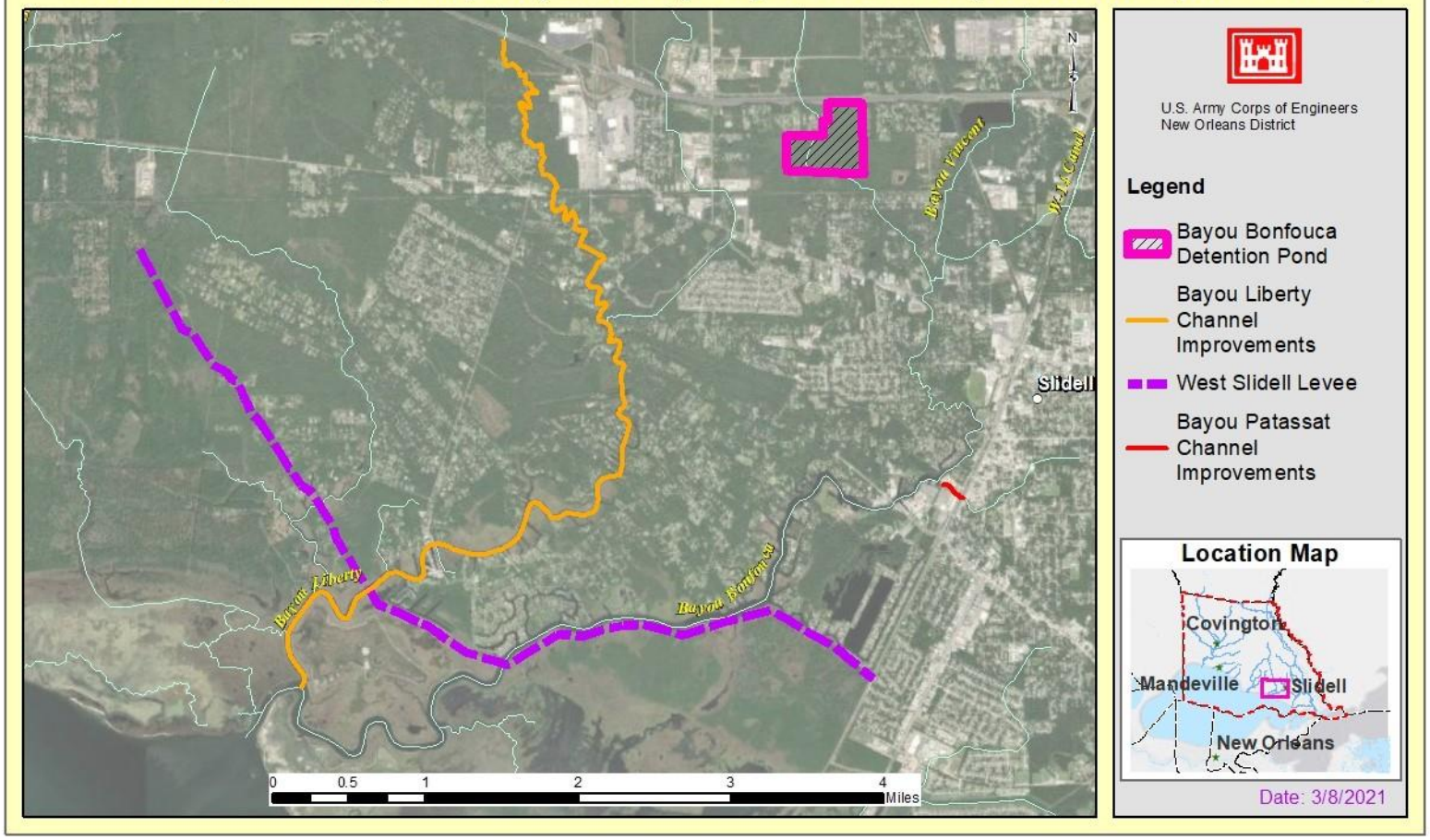
Legend

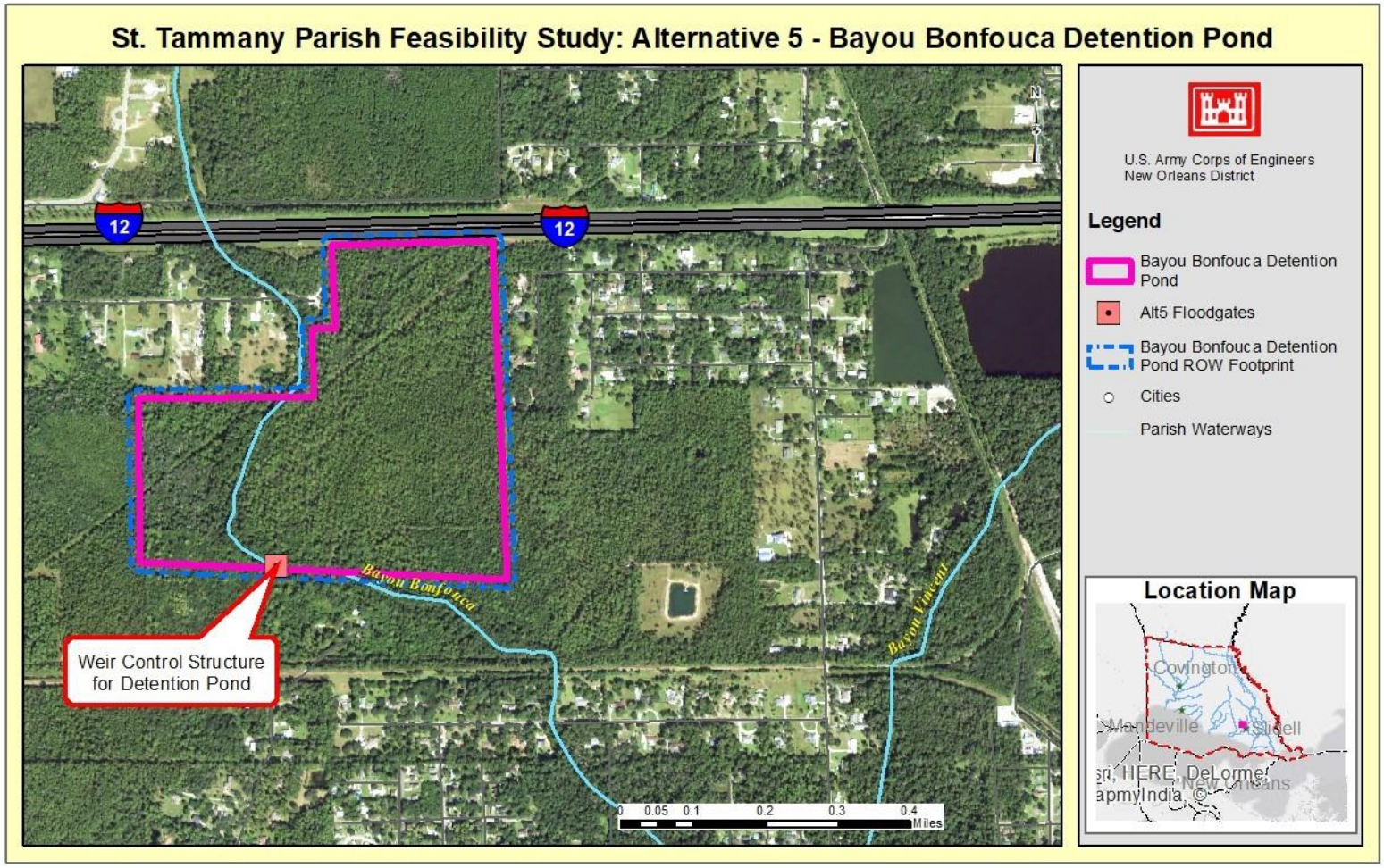
- Alt4b Floodwalls
- Alt4b Pump Stations
- Alt4b Control Structures
- Alt4b Road Ramps over Levee
- Lacombe Levee Combined with West Slidell Levee
- Lacombe Levee Combined with West Slidell Levee ROW Footprint

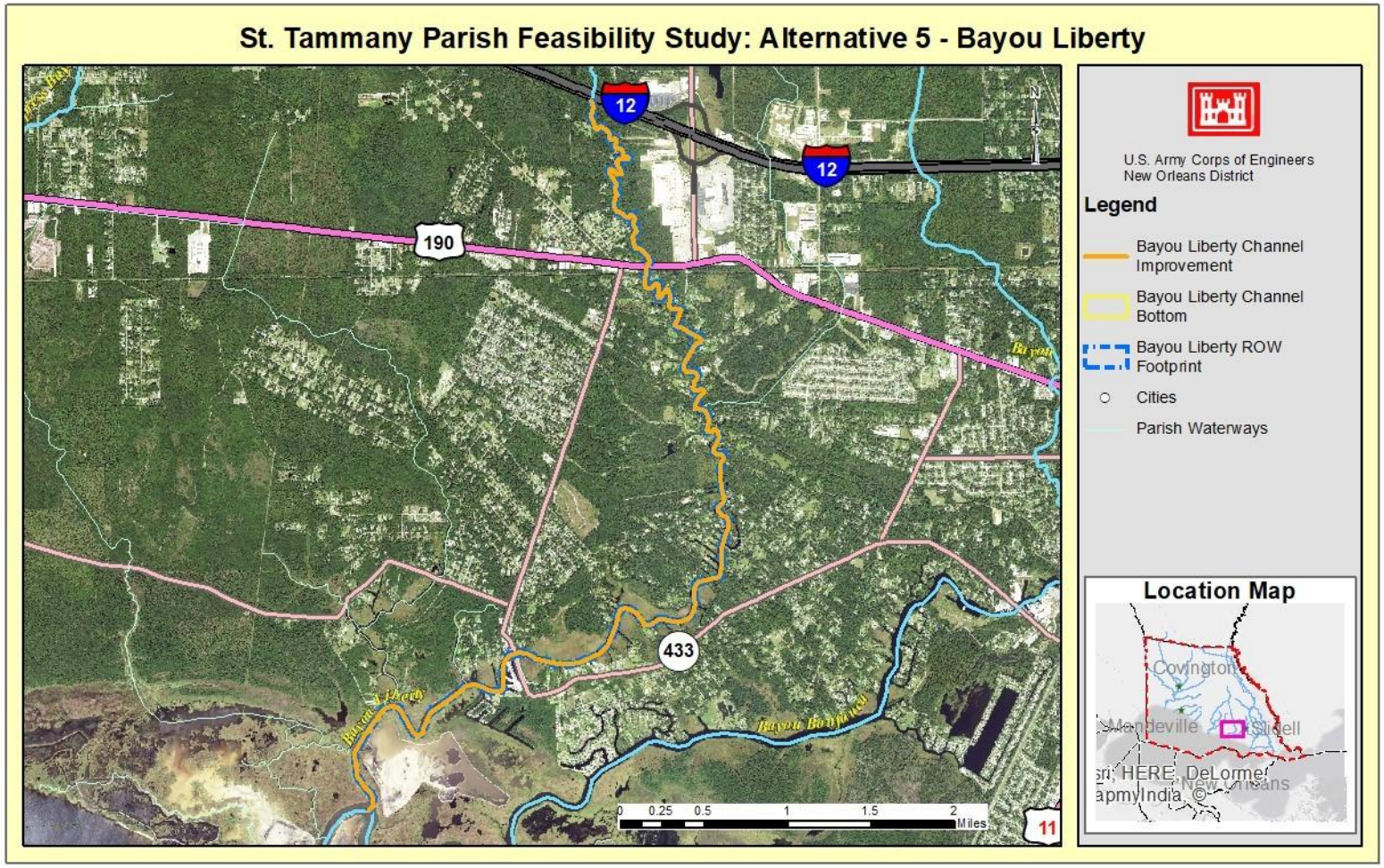
Location Map

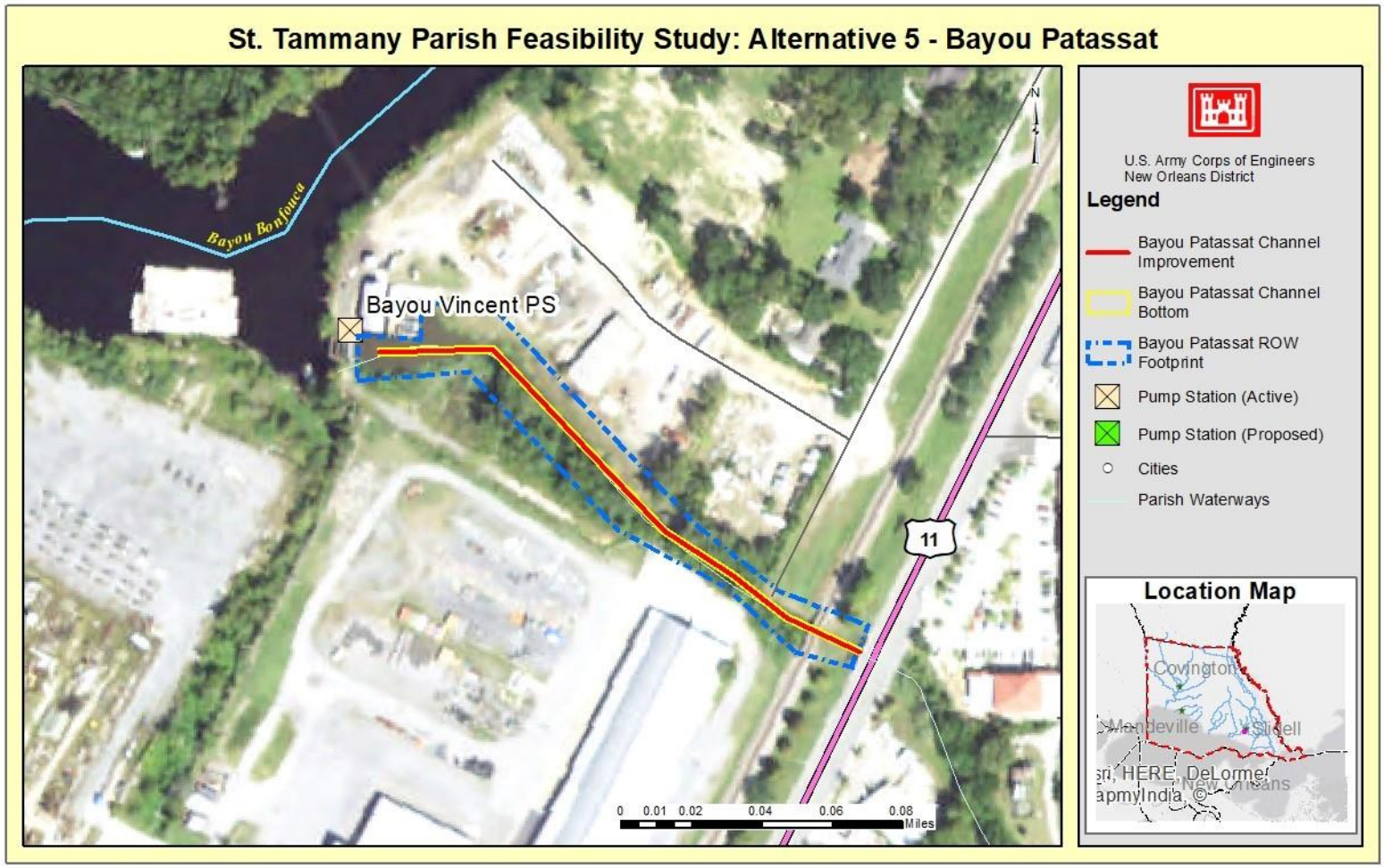
Date: 3/8/2021

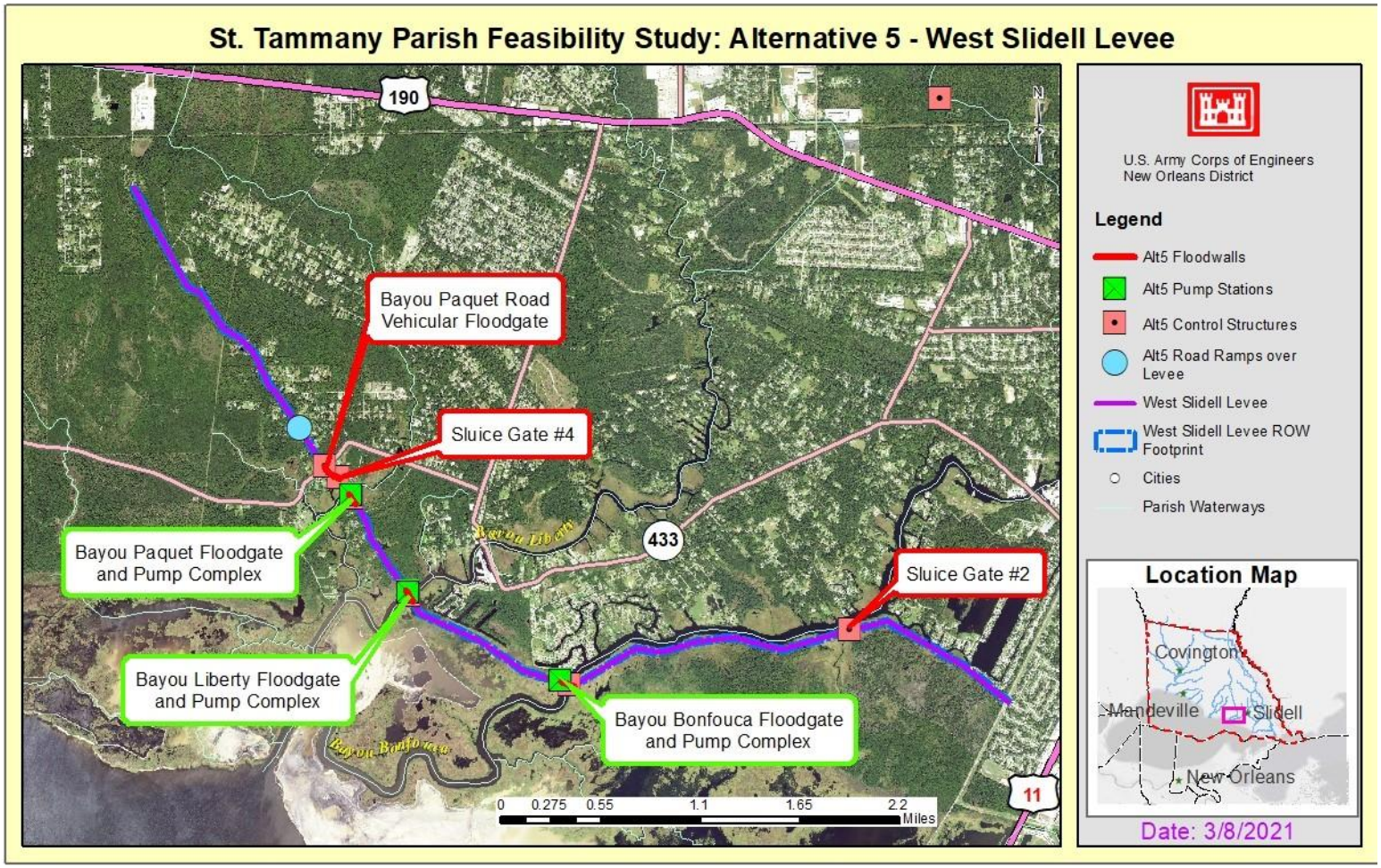
St. Tammany Feasibility Study: Bayou Liberty/ Bayou Vincent/ Bayou Bonfouca (Alternative 5)

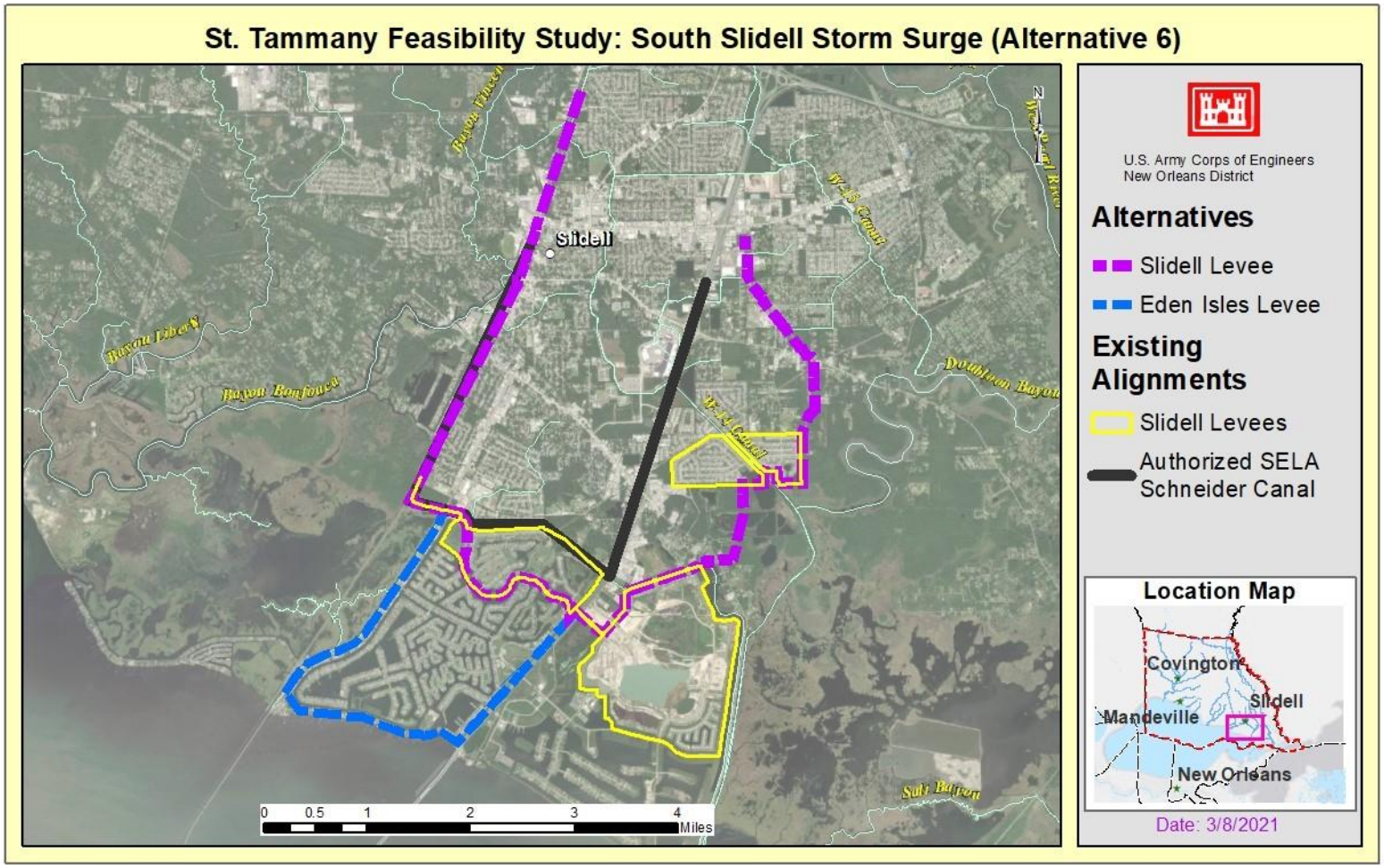


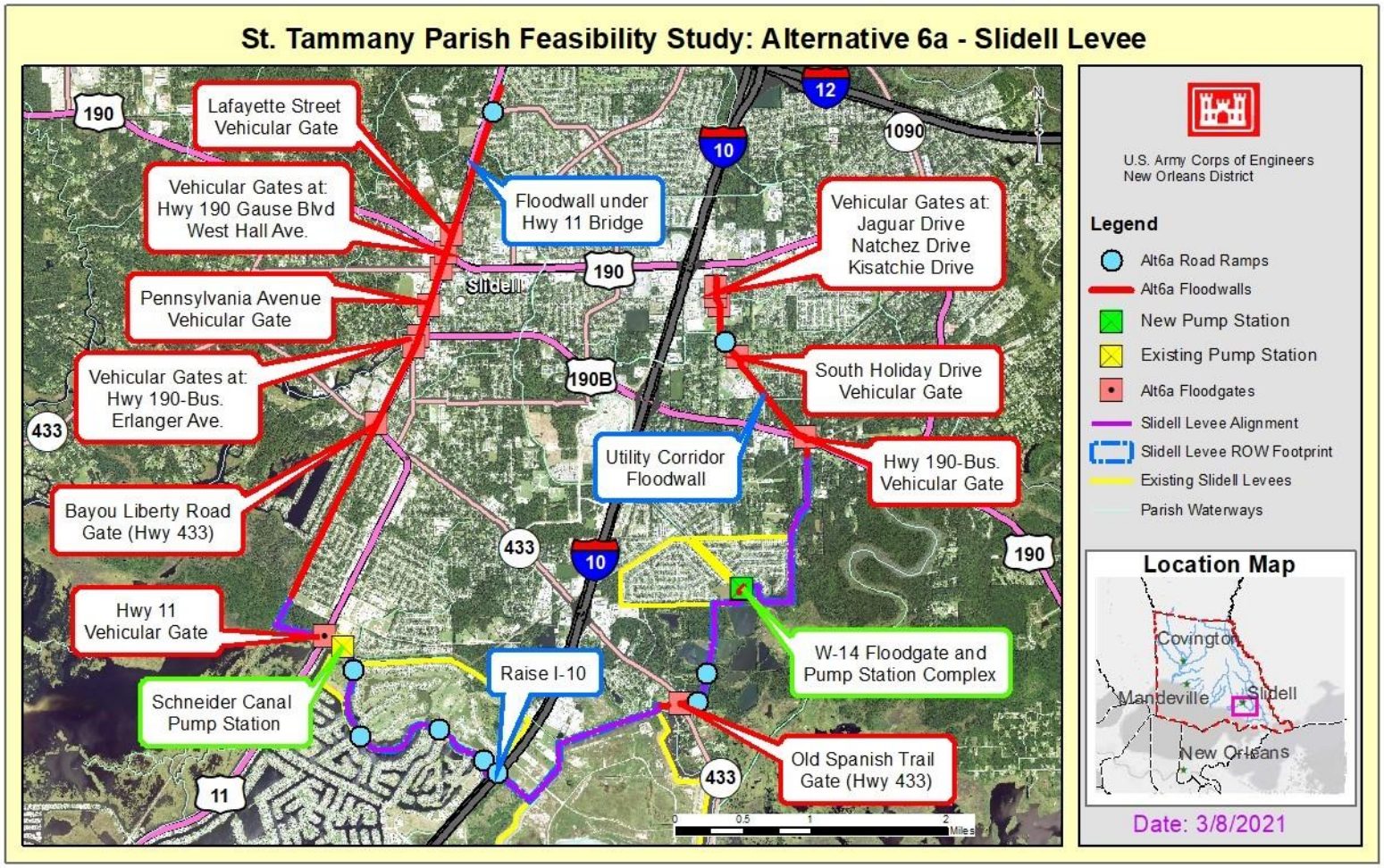

St. Tammany Parish Feasibility Study: Alternative 5 - Bayou Bonfouca Detention Pond
12
12
Bayou Bonfouca
Bayou Vincent
Weir Control Structure for Detention Pond
0 0.05 0.1 0.2 0.3 0.4 Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Bayou Bonfouca Detention Pond
Alt5 Floodgates
Bayou Bonfouca Detention Pond ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans

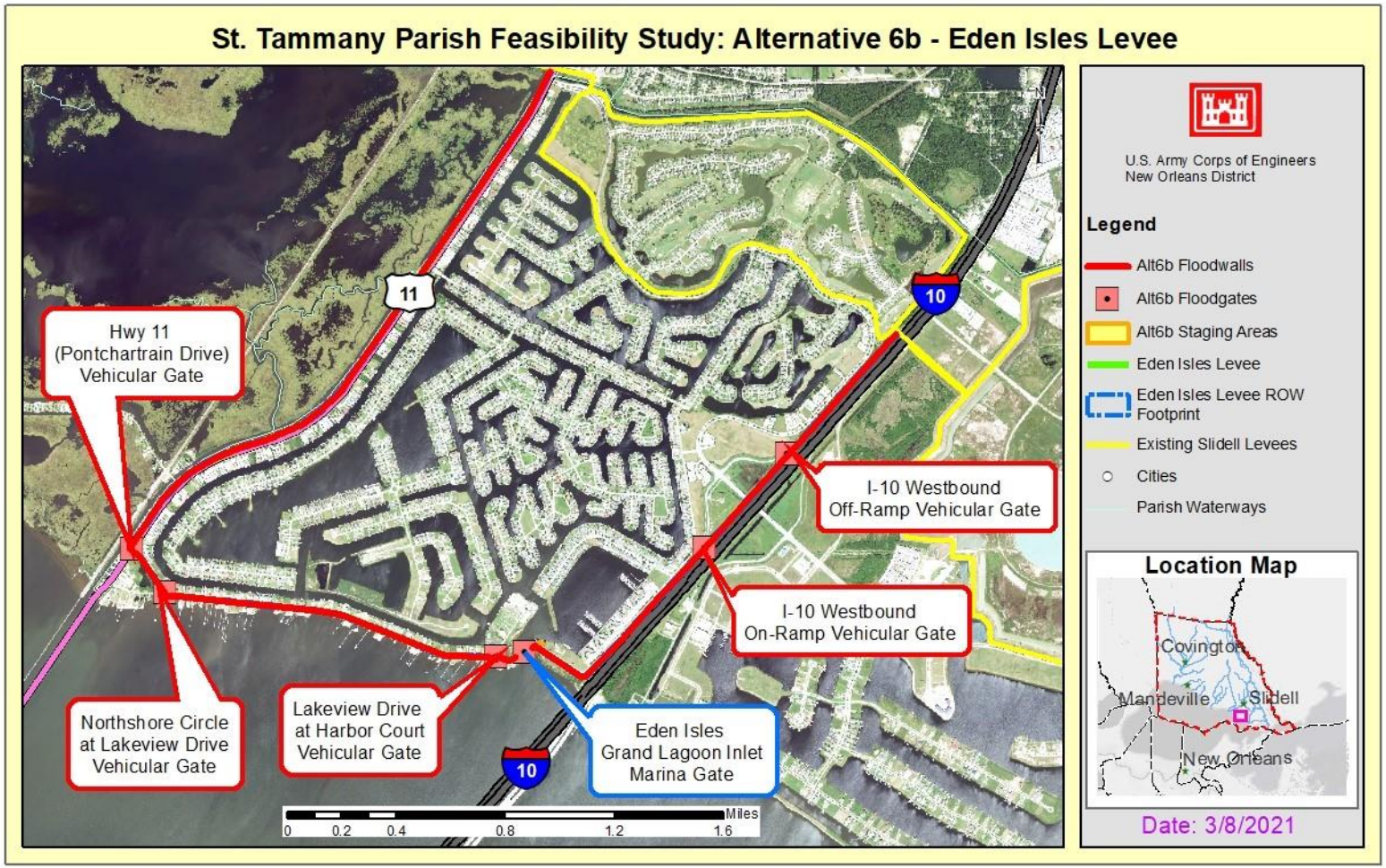

St. Tammany Parish Feasibility Study: Alternative 5 - Bayou Liberty
12
12
190
433
Bayou Liberty
Bayou Bonfouca
0 0.25 0.5 1 1.5 2 Miles
11
U.S. Army Corps of Engineers
New Orleans District
Legend
Bayou Liberty Channel Improvement
Bayou Liberty Channel Bottom
Bayou Liberty ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans


St. Tammany Parish Feasibility Study: Alternative 5 - Bayou Patassat
Bayou Bonfouca
Bayou Vincent PS
11
N
0 0.01 0.02 0.04 0.06 0.08
Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Bayou Patassat Channel Improvement
Bayou Patassat Channel Bottom
Bayou Patassat ROW Footprint
Pump Station (Active)
Pump Station (Proposed)
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans

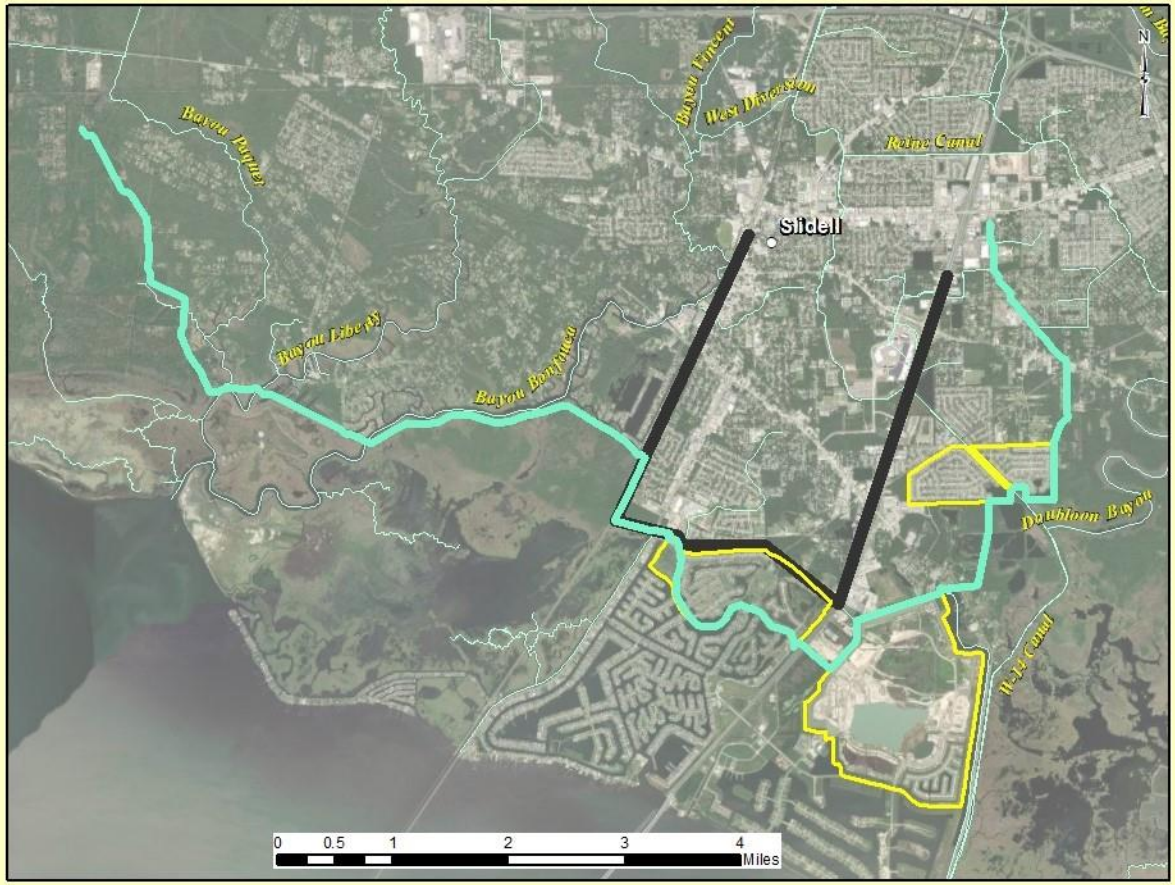

St. Tammany Parish Feasibility Study: Alternative 5 - West Slidell Levee
190
Bayou Paquet Road Vehicular Floodgate
Sluice Gate #4
Bayou Paquet Floodgate and Pump Complex
Bayou Liberty
433
Sluice Gate #2
Bayou Liberty Floodgate and Pump Complex
Bayou Bonfouca Floodgate and Pump Complex
Bayou Bonfouca
11
0 0.275 0.55 1.1 1.65 2.2 Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt5 Floodwalls
Alt5 Pump Stations
Alt5 Control Structures
Alt5 Road Ramps over Levee
West Slidell Levee
West Slidell Levee ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 3/8/2021


St. Tammany Feasibility Study: South Slidell Storm Surge (Alternative 6)
Slidell
Bayou Liberty
Bayou Bonfouca
Doubleton Bayou
Salt Bayou
0 0.5 1 2 3 4 Miles
U.S. Army Corps of Engineers
New Orleans District
Alternatives
Slidell Levee
Eden Isles Levee
Existing Alignments
Slidell Levees
Authorized SELA Schneider Canal
Location Map
Covington
Slidell
Mandeville
New Orleans
Date: 3/8/2021


St. Tammany Parish Feasibility Study: Alternative 6a - Slidell Levee
Lafayette Street Vehicular Gate
Vehicular Gates at: Hwy 190 Gause Blvd West Hall Ave.
Floodwall under Hwy 11 Bridge
Vehicular Gates at: Jaguar Drive Natchez Drive Kisatchie Drive
Pennsylvania Avenue Vehicular Gate
Vehicular Gates at: Hwy 190-Bus. Erlanger Ave.
South Holiday Drive Vehicular Gate
Utility Corridor Floodwall
Hwy 190-Bus. Vehicular Gate
Bayou Liberty Road Gate (Hwy 433)
Hwy 11 Vehicular Gate
Schneider Canal Pump Station
Raise I-10
W-14 Floodgate and Pump Station Complex
Old Spanish Trail Gate (Hwy 433)
Slidell
190
12
10
1090
190B
433
11
Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt6a Road Ramps
Alt6a Floodwalls
New Pump Station
Existing Pump Station
Alt6a Floodgates
Slidell Levee Alignment
Slidell Levee ROW Footprint
Existing Slidell Levees
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 3/8/2021


St. Tammany Parish Feasibility Study: Alternative 6b - Eden Isles Levee
Hwy 11 (Pontchartrain Drive) Vehicular Gate
Northshore Circle at Lakeview Drive Vehicular Gate
Lakeview Drive at Harbor Court Vehicular Gate
Eden Isles Grand Lagoon Inlet Marina Gate
I-10 Westbound On-Ramp Vehicular Gate
I-10 Westbound Off-Ramp Vehicular Gate
11
10
10
Miles
0 0.2 0.4 0.8 1.2 1.6
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt6b Floodwalls
Alt6b Floodgates
Alt6b Staging Areas
Eden Isles Levee
Eden Isles Levee ROW Footprint
Existing Slidell Levees
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 3/8/2021

St. Tammany Feasibility Study: South and West Slidell Combined Levee (Alternative 6c)



U.S. Army Corps of Engineers
New Orleans District

Alternatives

South and West Slidell Combined Levee

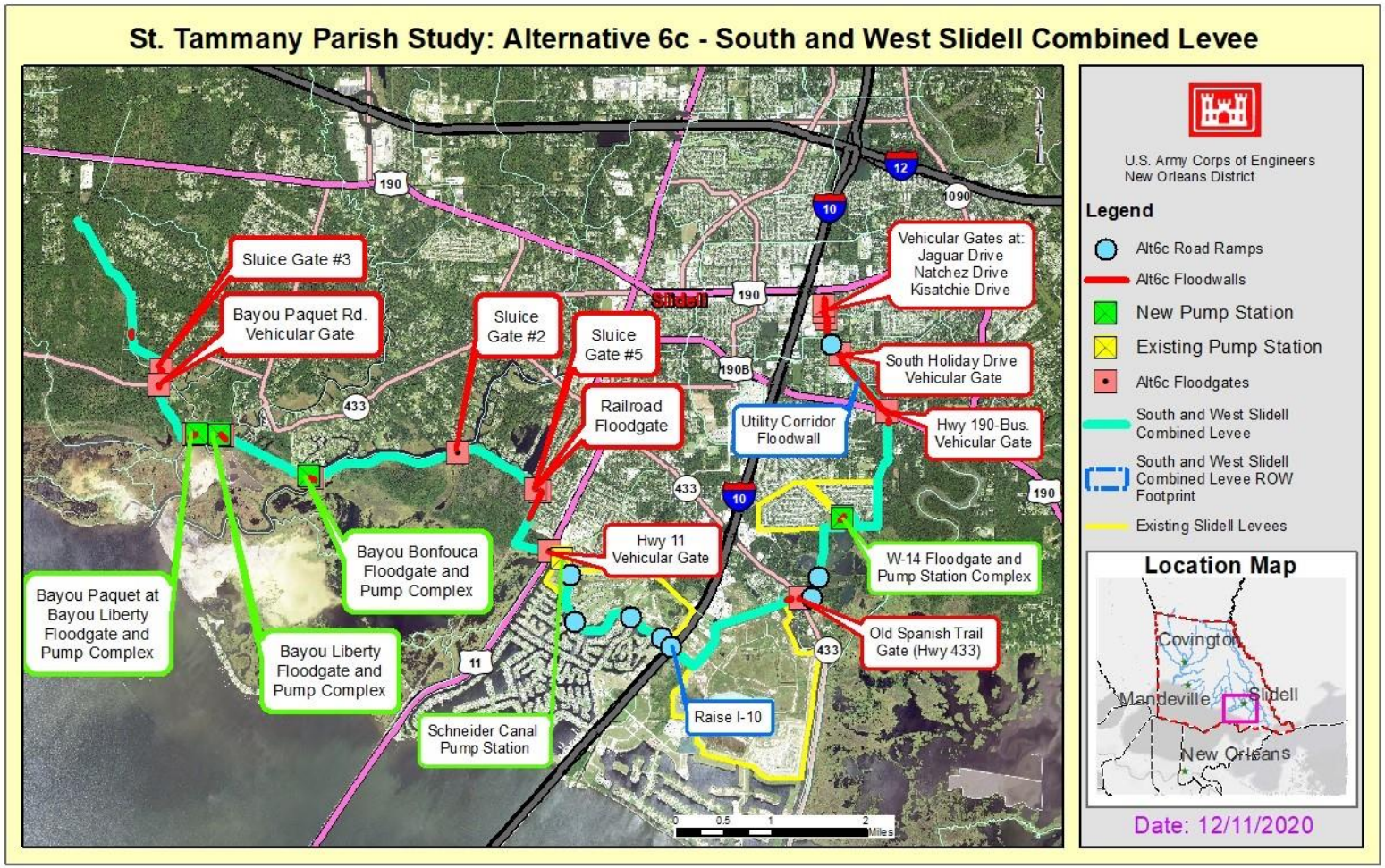
Existing Alignments

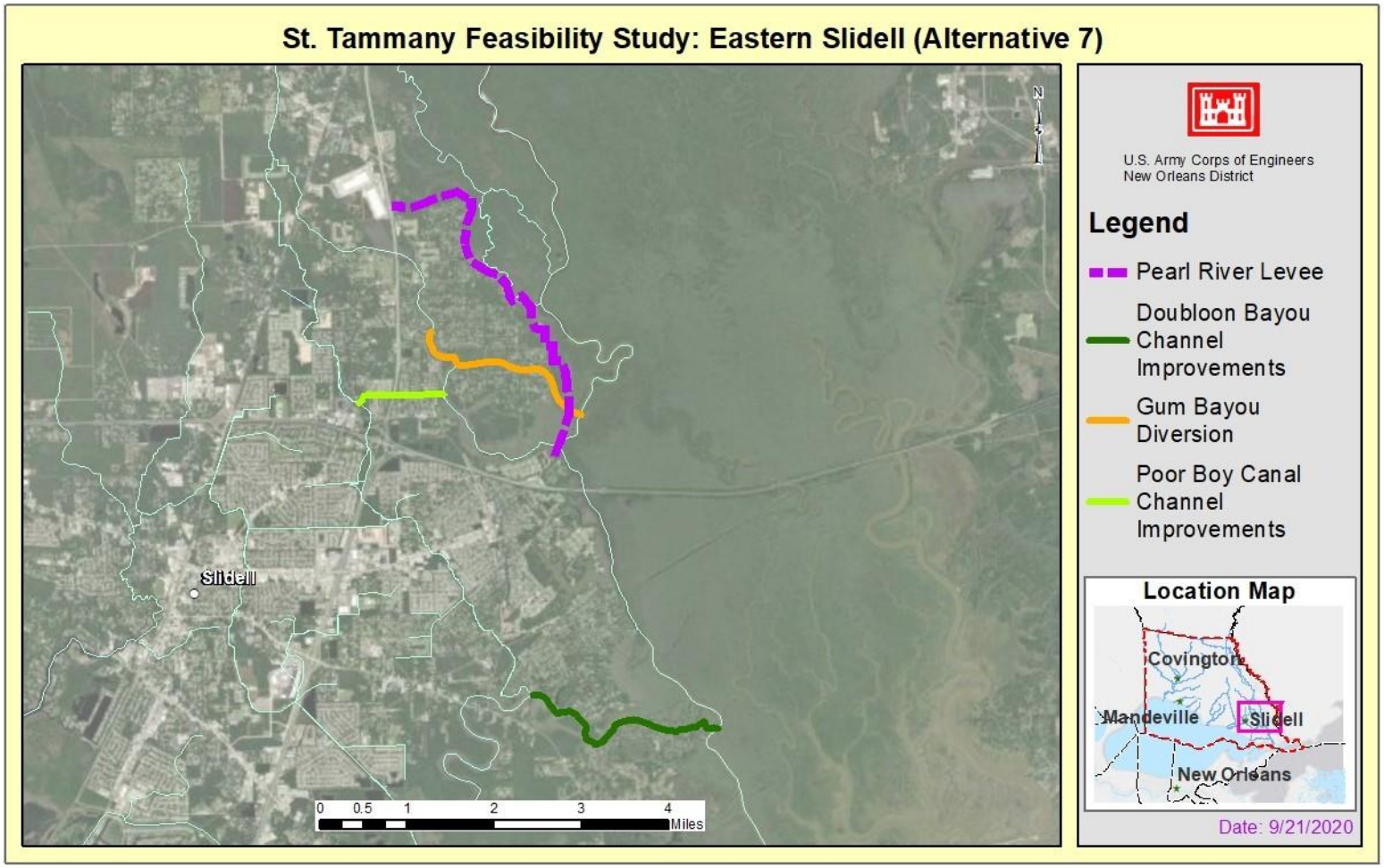
Slidell Levees

Authorized SELA Schneider Canal

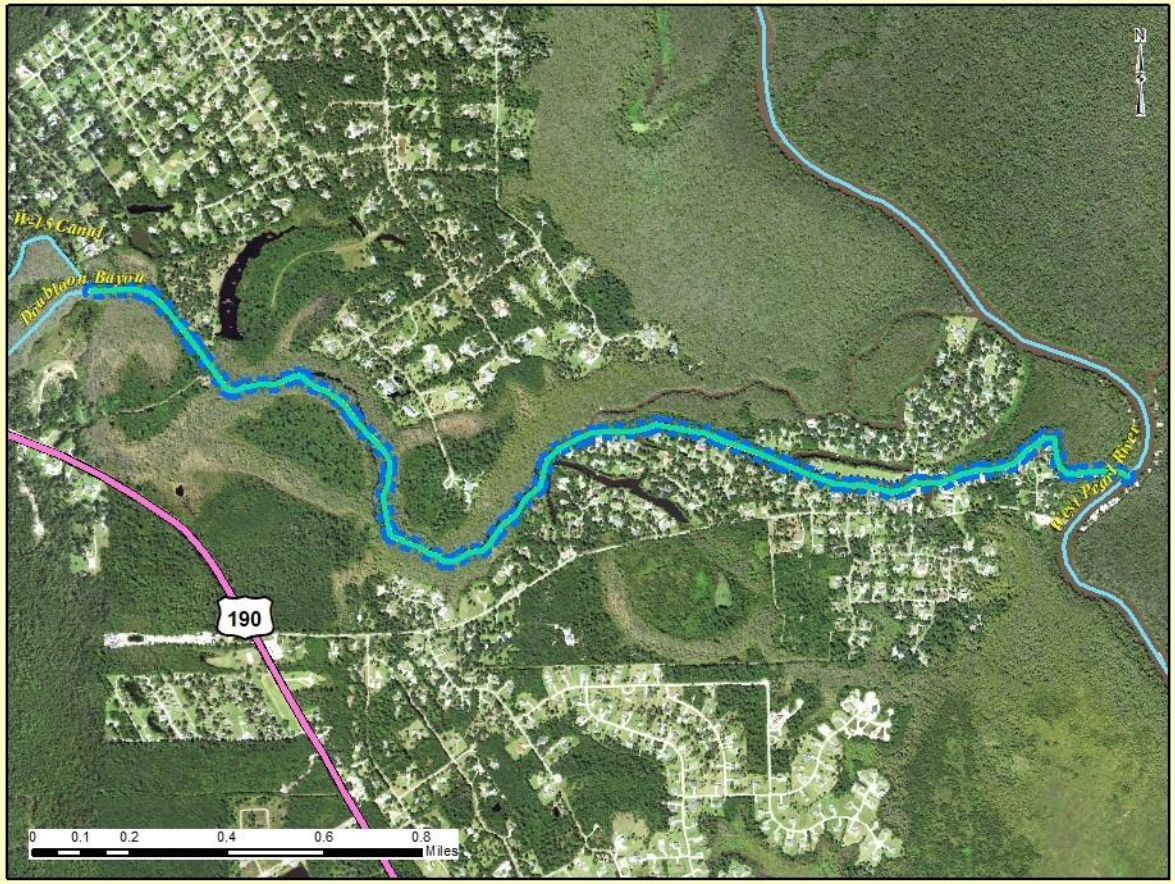
Location Map

Date: 12/15/2020


St. Tammany Parish Study: Alternative 6c - South and West Slidell Combined Levee
Sluice Gate #3
Bayou Paquet Rd. Vehicular Gate
Sluice Gate #2
Sluice Gate #5
Railroad Floodgate
Vehicular Gates at: Jaguar Drive Natchez Drive Kisatchie Drive
South Holiday Drive Vehicular Gate
Hwy 190-Bus. Vehicular Gate
Utility Corridor Floodwall
Hwy 11 Vehicular Gate
W-14 Floodgate and Pump Station Complex
Old Spanish Trail Gate (Hwy 433)
Raise I-10
Bayou Bonfouca Floodgate and Pump Complex
Bayou Paquet at Bayou Liberty Floodgate and Pump Complex
Bayou Liberty Floodgate and Pump Complex
Schneider Canal Pump Station
Slidell
190
190B
433
10
12
1090
11
0 0.5 1 2 Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt6c Road Ramps
Alt6c Floodwalls
New Pump Station
Existing Pump Station
Alt6c Floodgates
South and West Slidell Combined Levee
South and West Slidell Combined Levee ROW Footprint
Existing Slidell Levees
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 12/11/2020


St. Tammany Feasibility Study: Eastern Slidell (Alternative 7)
Slidell
0 0.5 1 2 3 4 Miles
N
U.S. Army Corps of Engineers
New Orleans District
Legend
Pearl River Levee
Doubloon Bayou Channel Improvements
Gum Bayou Diversion
Poor Boy Canal Channel Improvements
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 9/21/2020

St. Tammany Parish Feasibility Study: Alternative 7 - Doubloon Bayou

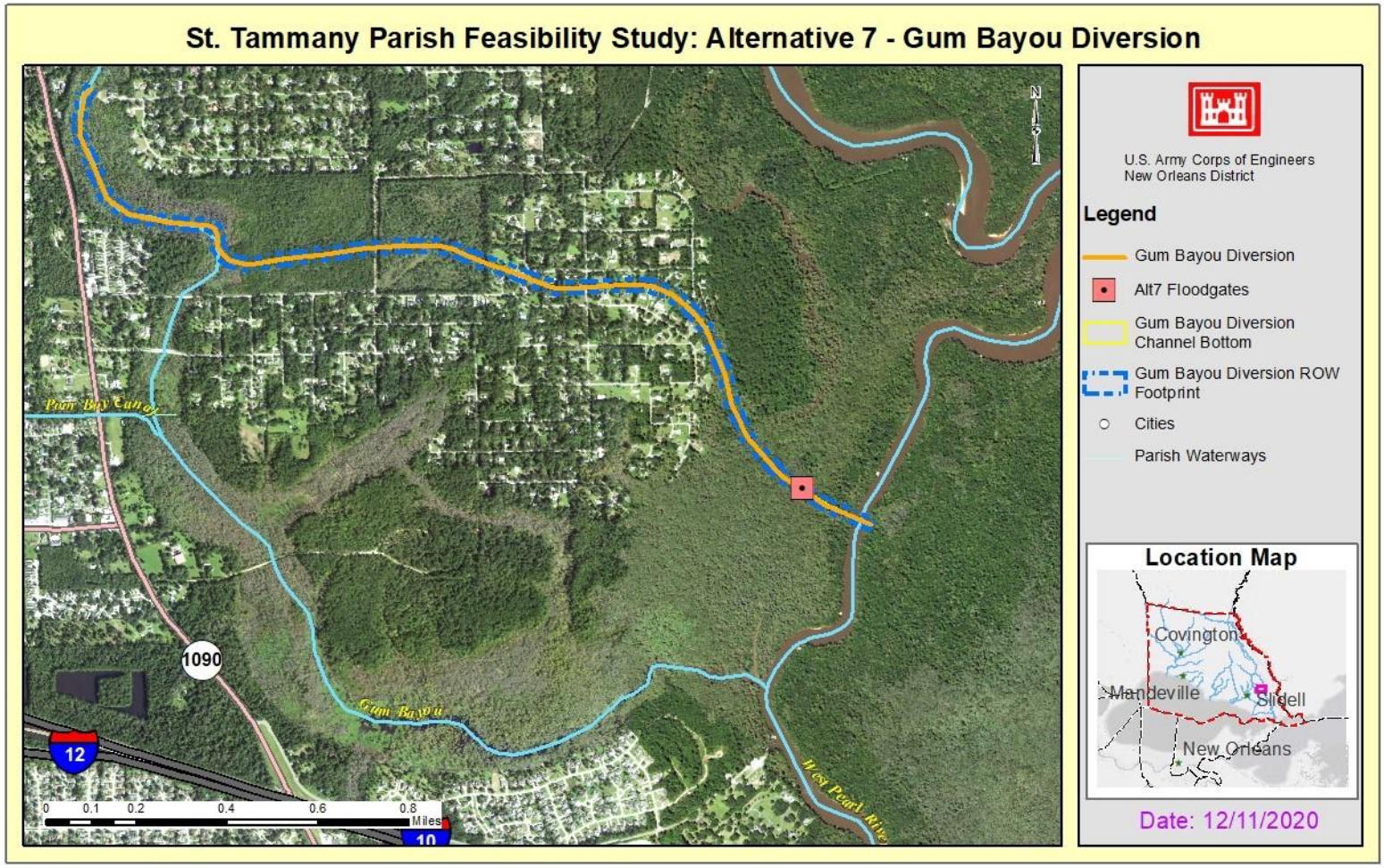


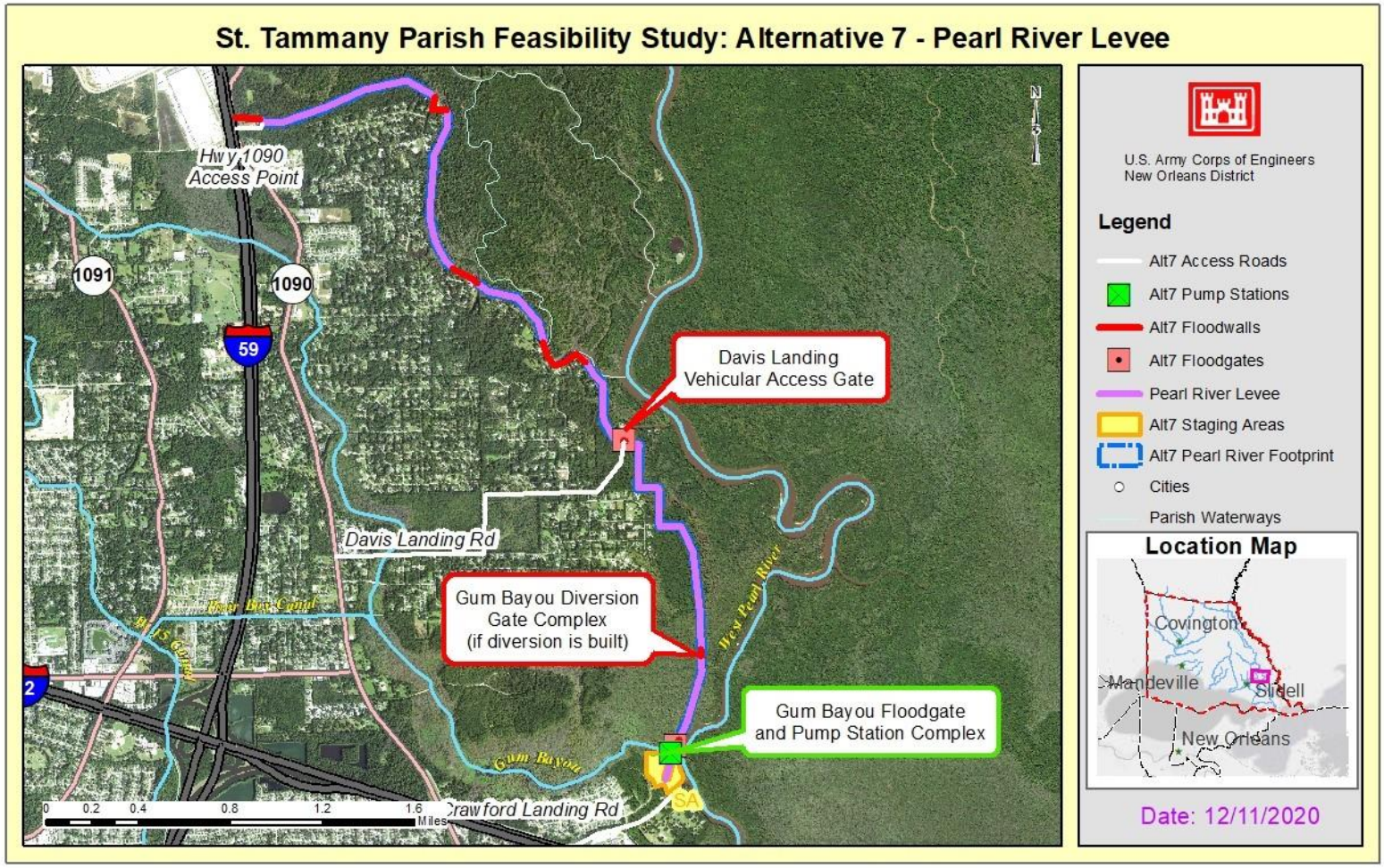
U.S. Army Corps of Engineers
New Orleans District

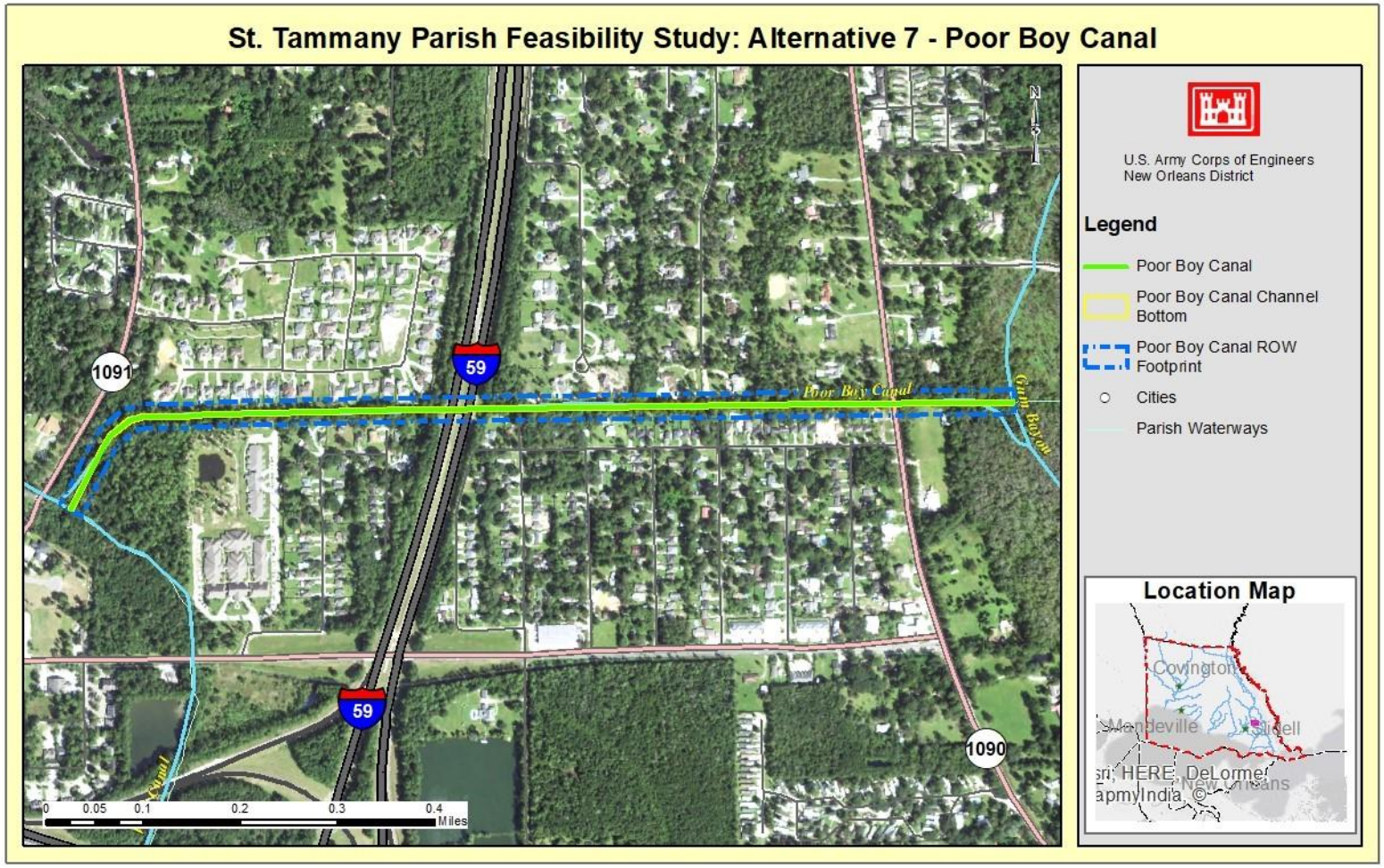
Legend

- Doubloon Bayou Channel Improvement
- Doubloon Bayou Channel Bottom
- Doubloon Bayou ROW Footprint
- Cities
- Parish Waterways

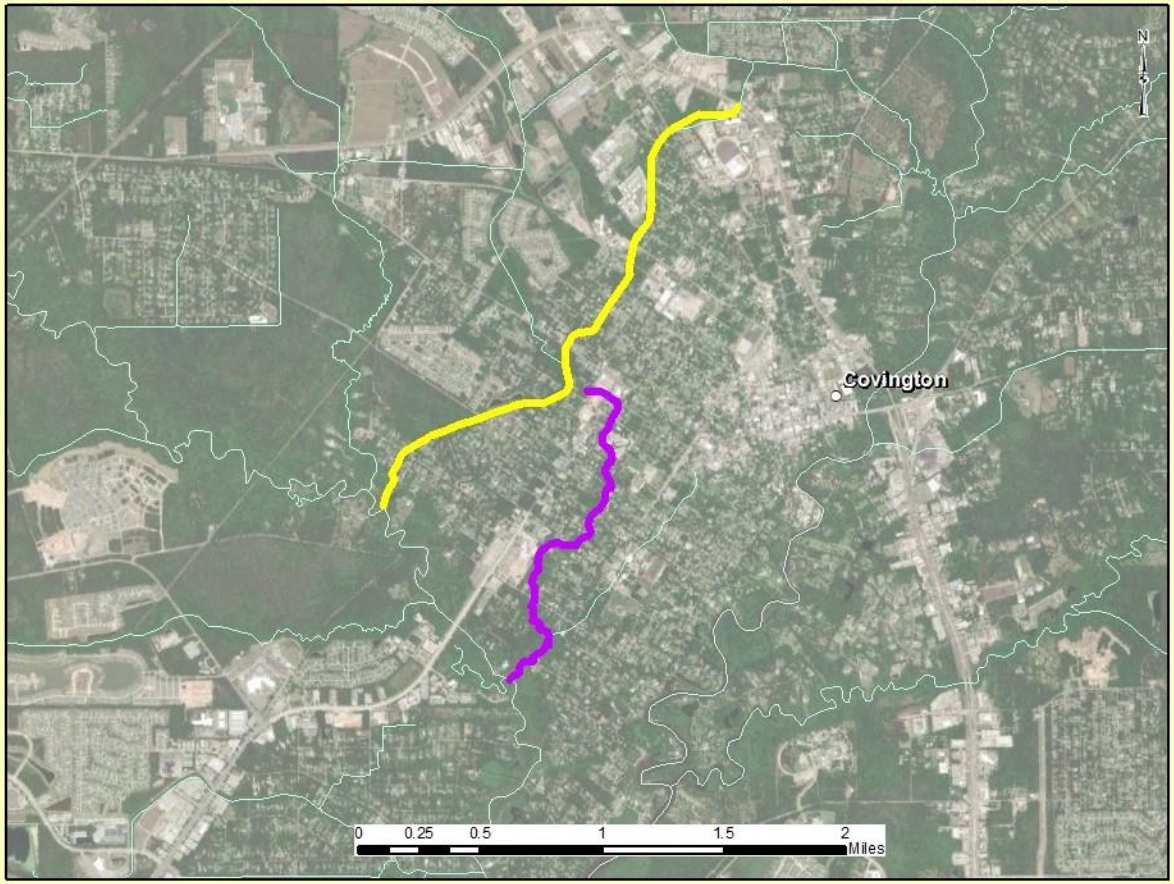
Location Map


St. Tammany Parish Feasibility Study: Alternative 7 - Gum Bayou Diversion
Poor Boy Canal
1090
Gum Bayou
West Pearl River
12
10
0 0.1 0.2 0.4 0.6 0.8
Miles
N
U.S. Army Corps of Engineers
New Orleans District
Legend
Gum Bayou Diversion
Alt7 Floodgates
Gum Bayou Diversion Channel Bottom
Gum Bayou Diversion ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 12/11/2020


St. Tammany Parish Feasibility Study: Alternative 7 - Pearl River Levee
Hwy 1090
Access Point
1091
1090
59
Davis Landing
Vehicular Access Gate
Davis Landing Rd
Gum Bayou Diversion
Gate Complex
(if diversion is built)
West Pearl River
Gum Bayou Floodgate
and Pump Station Complex
Gum Bayou
Crawford Landing Rd
SA
0 0.2 0.4 0.8 1.2 1.6
Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt7 Access Roads
Alt7 Pump Stations
Alt7 Floodwalls
Alt7 Floodgates
Pearl River Levee
Alt7 Staging Areas
Alt7 Pearl River Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 12/11/2020


St. Tammany Parish Feasibility Study: Alternative 7 - Poor Boy Canal
U.S. Army Corps of Engineers
New Orleans District
Legend
Poor Boy Canal
Poor Boy Canal Channel Bottom
Poor Boy Canal ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans
1091
59
1090
Poor Boy Canal
Grub Bayou
0 0.05 0.1 0.2 0.3 0.4 Miles

St. Tammany Feasibility Study: Upper Tchefuncte/ Covington (Alternative 8)



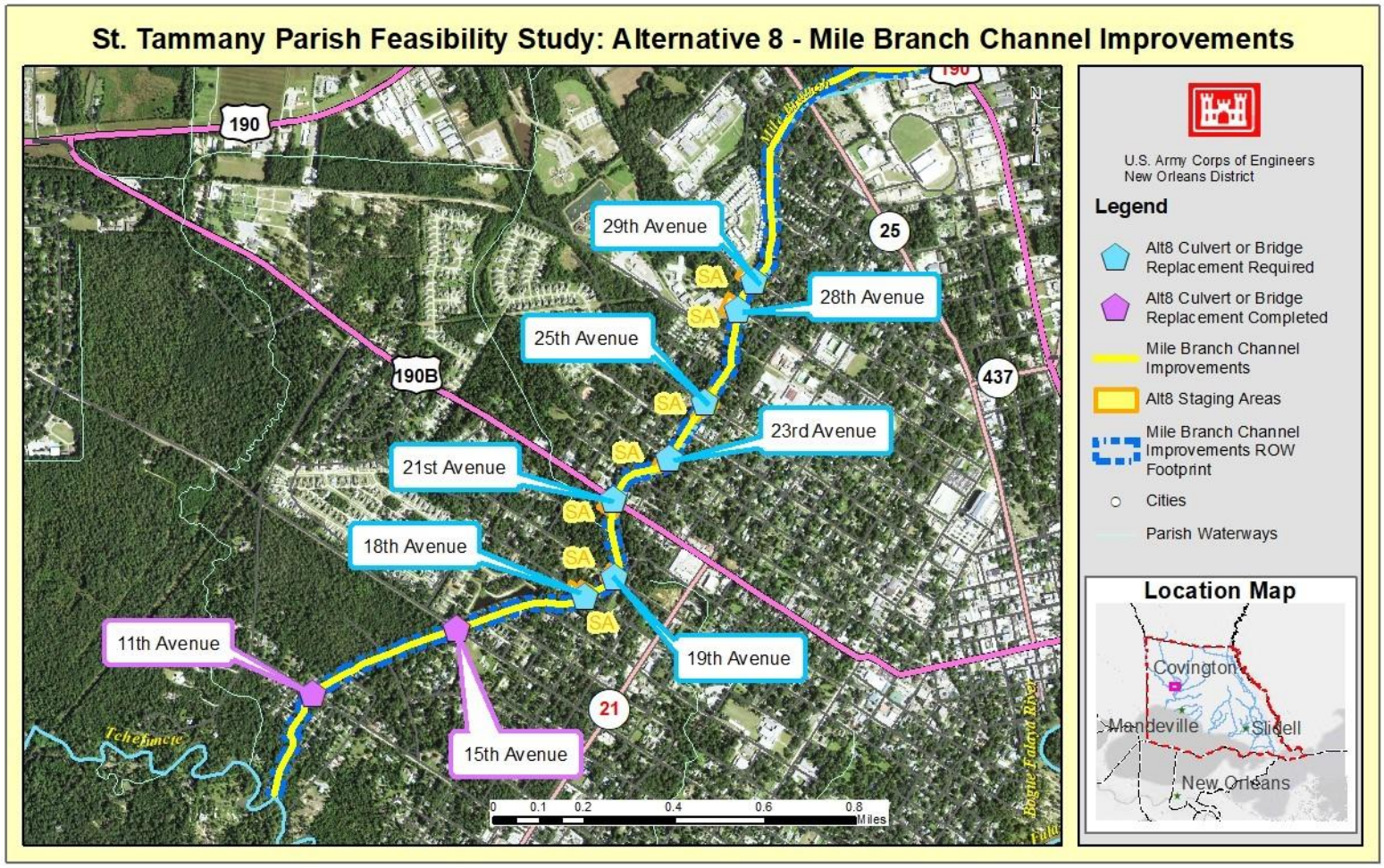
U.S. Army Corps of Engineers
New Orleans District

Legend

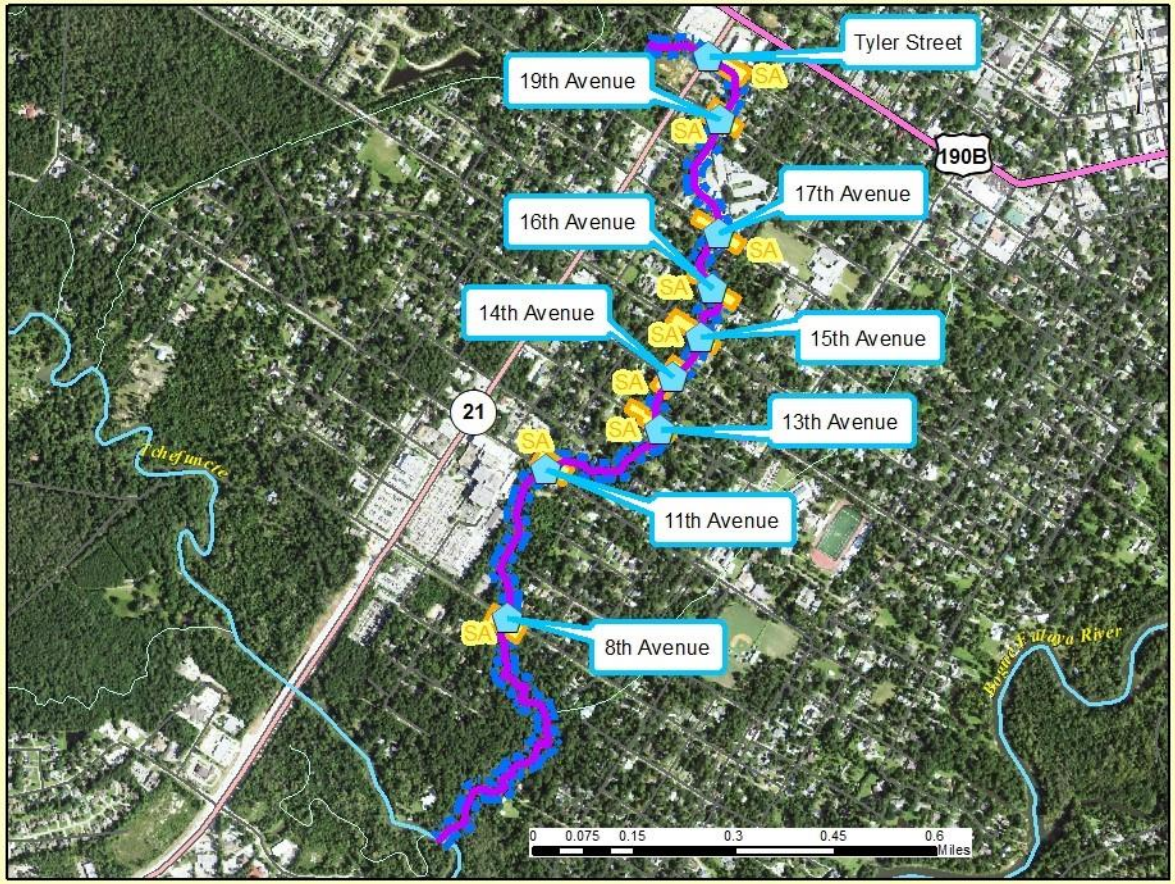
- Mile Branch Channel Improvements
- Mile Branch Lateral A Channel Improvements

Location Map

Date: 3/8/2021


St. Tammany Parish Feasibility Study: Alternative 8 - Mile Branch Channel Improvements
190
190B
25
437
21
29th Avenue
28th Avenue
25th Avenue
23rd Avenue
21st Avenue
18th Avenue
19th Avenue
11th Avenue
15th Avenue
SA
Tchefuncte
Bogue Falaya River
0 0.1 0.2 0.4 0.6 0.8 Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt8 Culvert or Bridge Replacement Required
Alt8 Culvert or Bridge Replacement Completed
Mile Branch Channel Improvements
Alt8 Staging Areas
Mile Branch Channel Improvements ROW Footprint
Cities
Parish Waterways
Location Map
Covington
Mandeville
Slidell
New Orleans

St. Tammany Parish Feasibility Study: Alternative 8 - Mile Branch Lateral A Channel Improvements



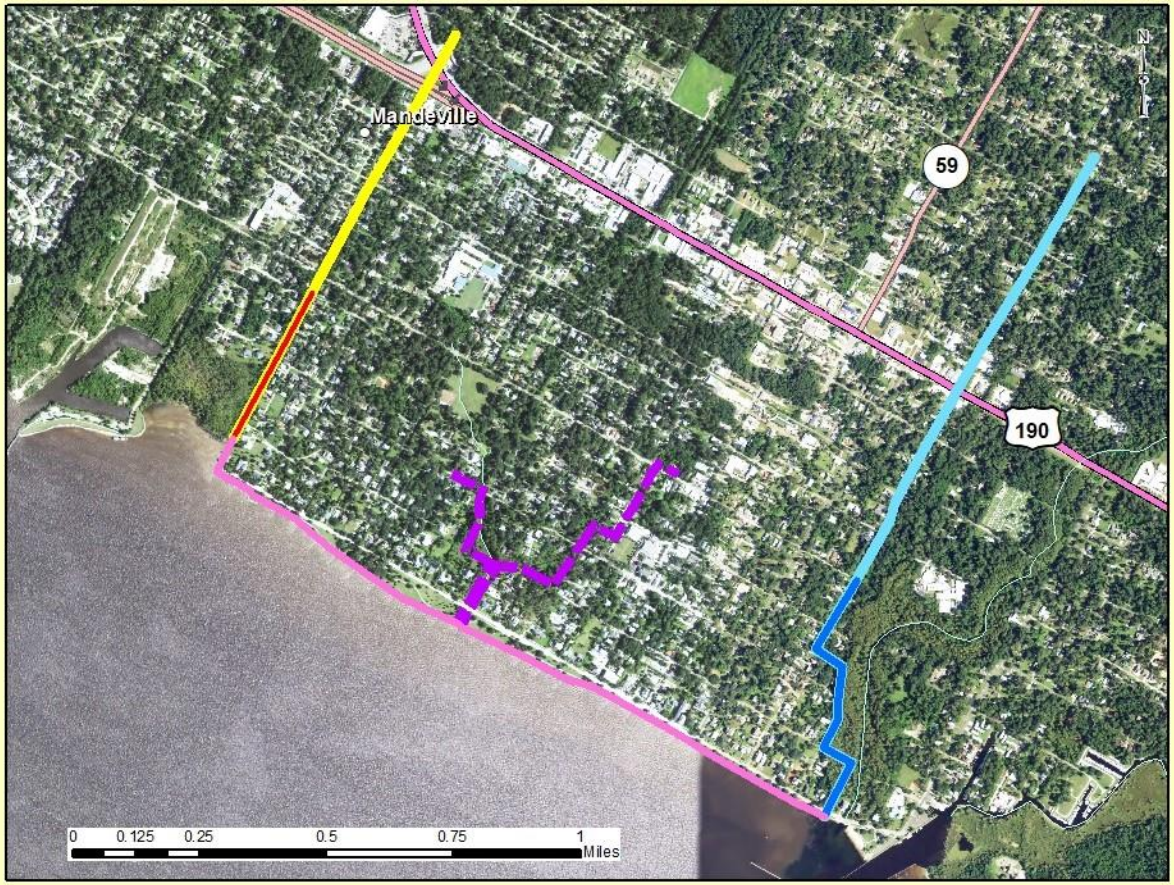
U.S. Army Corps of Engineers
New Orleans District

Legend

- Alt8 Culvert or Bridge Replacement Required
- Alt8 Culvert or Bridge Replacement Completed
- Mile Branch Lateral A Channel Improvements
- Alt8 Staging Areas
- Mile Branch Lateral A ROW Channel Improvements Footprint
- Cities
- Parish Waterways

Location Map

St. Tammany Feasibility Study: Mandeville Lakefront (Alternative 9)



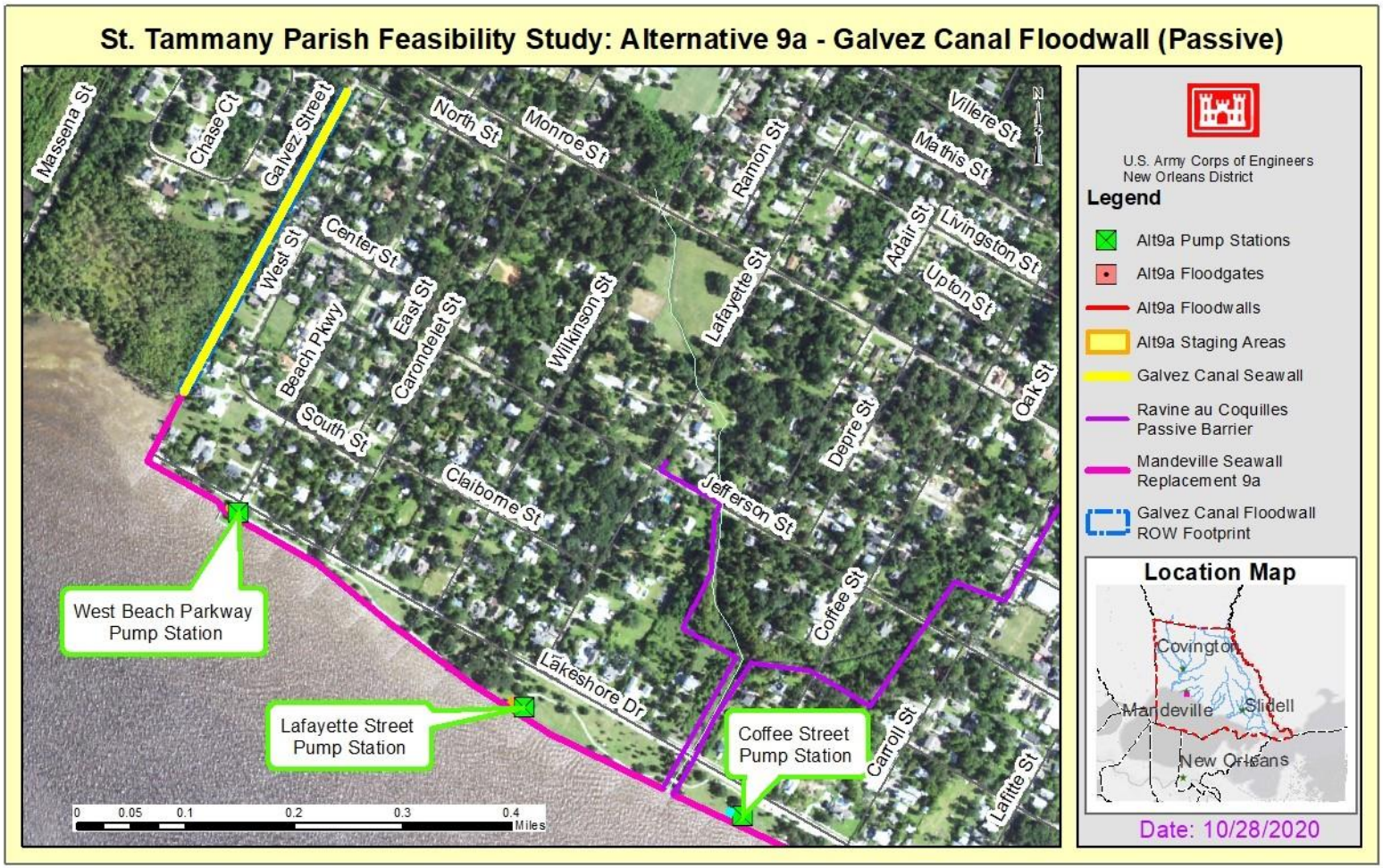
U.S. Army Corps of Engineers
New Orleans District

Legend

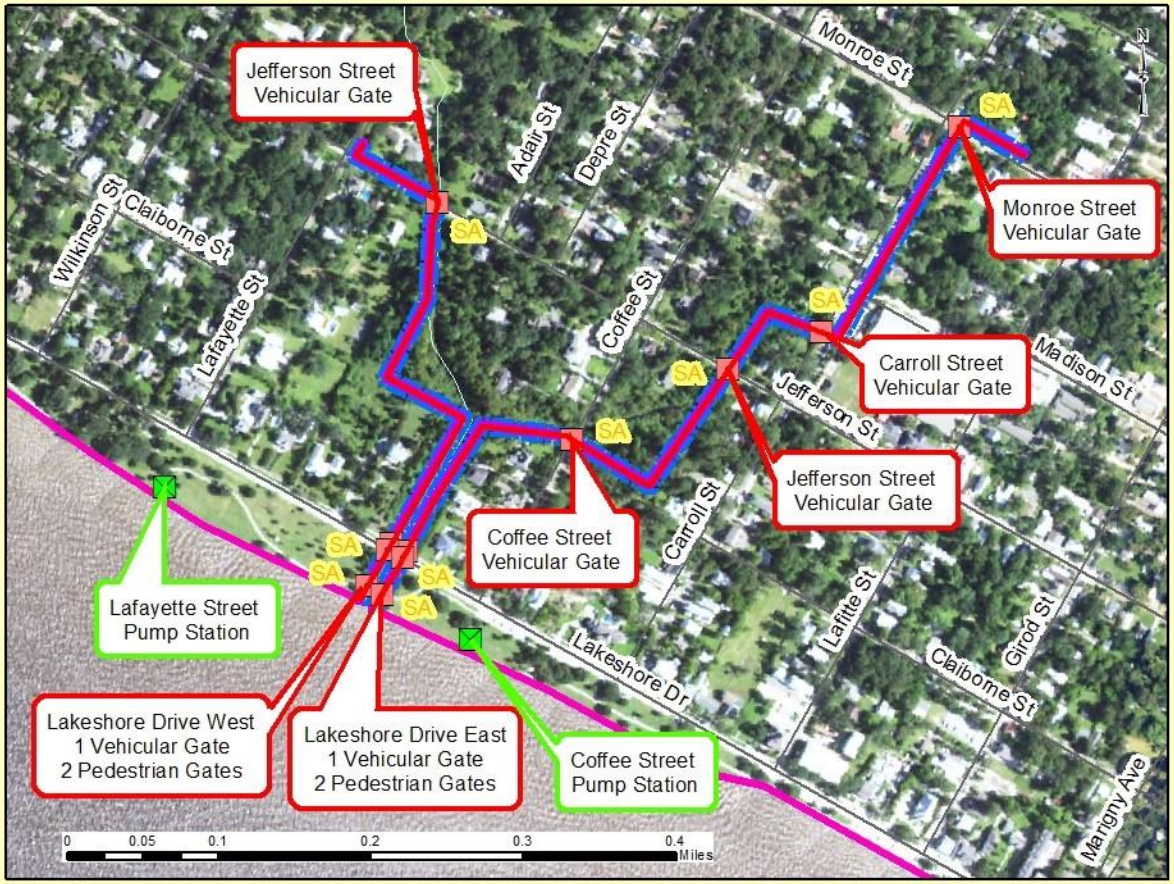
- Mandeville Seawall Replacement
- Galvez Canal Floodwall 7.3 ft
- Galvez Canal Floodwall 18.0 ft
- Revine aux Coquilles Barrier (Alt 9a only)
- Little Bayou Castine 7.3 ft
- Little Bayou Castine 18.0 ft

Location Map

Date: 10/15/2020


St. Tammany Parish Feasibility Study: Alternative 9a - Galvez Canal Floodwall (Passive)
Massena St
Chase Ct
Galvez Street
North St
Monroe St
Ramon St
Villere St
Mathis St
Adair St
Livingston St
Upton St
Oak St
West St
Center St
East St
Beach Pkwy
Carondelet St
Wilkinson St
Lafayette St
South St
Claiborne St
Depre St
Jefferson St
Coffee St
Lakeshore Dr
Carroll St
Lafitte St
West Beach Parkway Pump Station
Lafayette Street Pump Station
Coffee Street Pump Station
0 0.05 0.1 0.2 0.3 0.4 Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt9a Pump Stations
Alt9a Floodgates
Alt9a Floodwalls
Alt9a Staging Areas
Galvez Canal Seawall
Ravine au Coquilles Passive Barrier
Mandeville Seawall Replacement 9a
Galvez Canal Floodwall ROW Footprint
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 10/28/2020

St. Tammany Parish Feasibility Study: Alternative 9a - Revine Aux Coquilles (Passive)



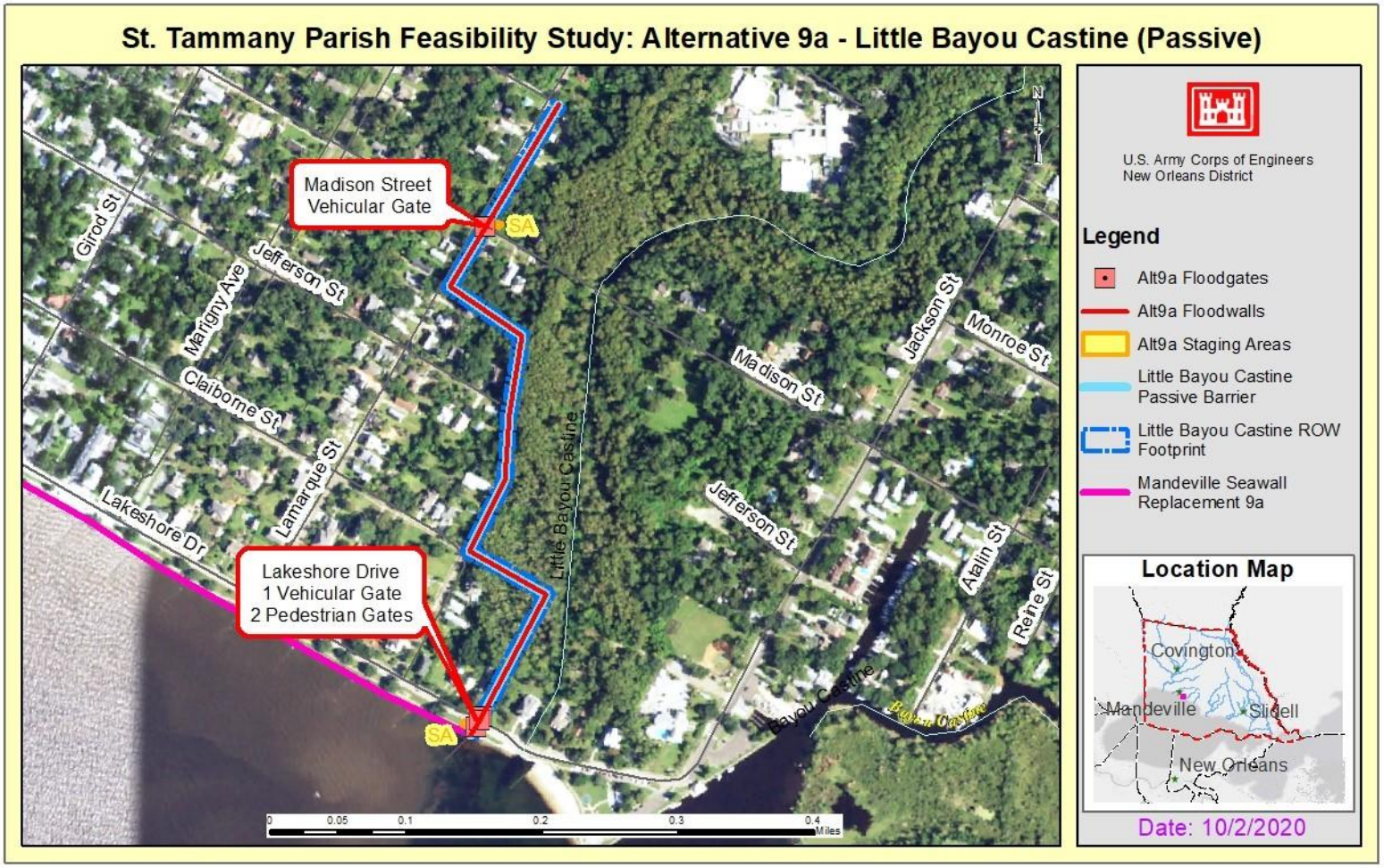
U.S. Army Corps of Engineers
New Orleans District

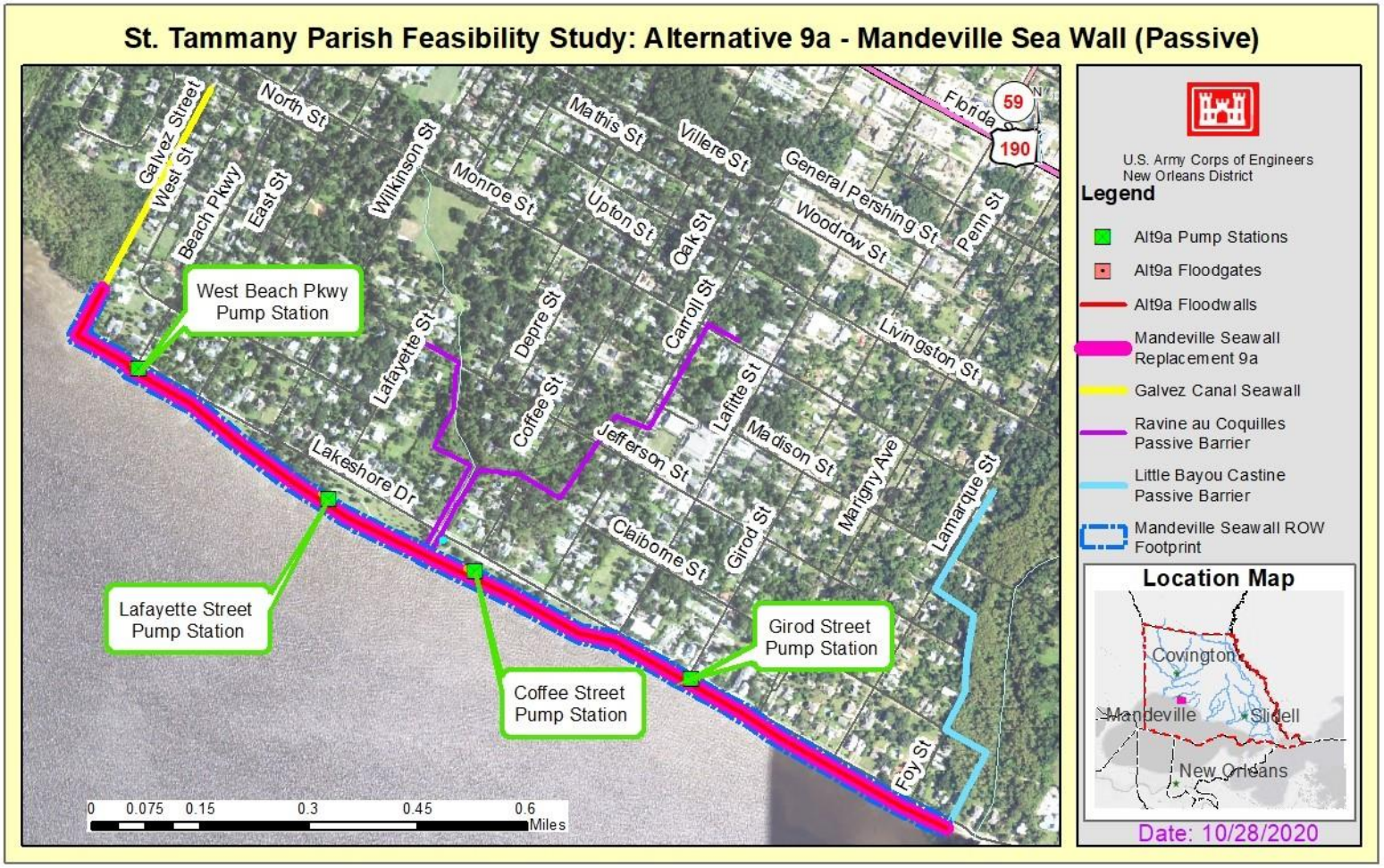
Legend

- Alt9a Pump Stations
- Alt9a Floodgates
- Alt9a Floodwalls
- Alt9a Staging Areas
- Ravine au Coquilles Passive Barrier
- Ravine au Coquilles ROW Footprint
- Mandeville Seawall Replacement 9a

Location Map

Date: 10/2/2020


St. Tammany Parish Feasibility Study: Alternative 9a - Little Bayou Castine (Passive)
Madison Street
Vehicular Gate
SA
Lakeshore Drive
1 Vehicular Gate
2 Pedestrian Gates
SA
Girod St
Marigny Ave
Jefferson St
Claiborne St
Lamarque St
Lakeshore Dr
Little Bayou Castine
Madison St
Jefferson St
Jackson St
Monroe St
Atalin St
Reine St
Bayou Castine
Bayou Castine
0
0.05
0.1
0.2
0.3
0.4
Miles
N
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt9a Floodgates
Alt9a Floodwalls
Alt9a Staging Areas
Little Bayou Castine
Passive Barrier
Little Bayou Castine ROW
Footprint
Mandeville Seawall
Replacement 9a
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 10/2/2020


St. Tammany Parish Feasibility Study: Alternative 9a - Mandeville Sea Wall (Passive)
West Beach Pkwy Pump Station
Lafayette Street Pump Station
Coffee Street Pump Station
Girod Street Pump Station
Galvez Street
West St
Beach Pkwy
East St
North St
Wilkinson St
Monroe St
Mathis St
Villere St
Upton St
Oak St
General Pershing St
Woodrow St
Penn St
Florida
59
190
Lafayette St
Depre St
Carroll St
Livingston St
Coffee St
Lafitte St
Madison St
Jefferson St
Lakeshore Dr
Marigny Ave
Lamarque St
Claiborne St
Girod St
Foy St
0 0.075 0.15 0.3 0.45 0.6 Miles
U.S. Army Corps of Engineers
New Orleans District
Legend
Alt9a Pump Stations
Alt9a Floodgates
Alt9a Floodwalls
Mandeville Seawall Replacement 9a
Galvez Canal Seawall
Ravine au Coquilles Passive Barrier
Little Bayou Castine Passive Barrier
Mandeville Seawall ROW Footprint
Location Map
Covington
Mandeville
Slidell
New Orleans
Date: 10/28/2020

St. Tammany Parish Feasibility Study: Alternative 9b - Galvez Canal Floodwall (Forced Drainage)

U.S. Army Corps of Engineers
New Orleans District

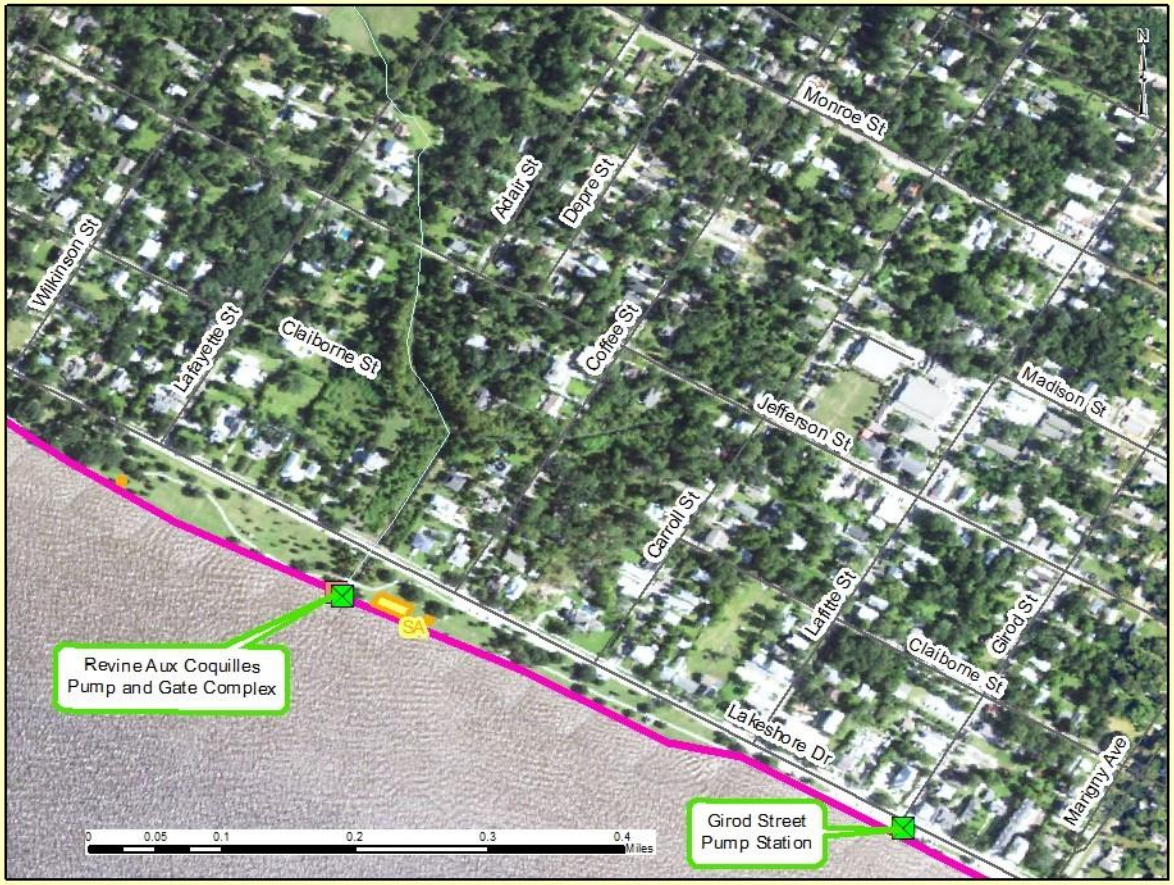
Legend

- Alt9b Pump Stations
- Alt9b Floodgates
- Alt9b Floodwalls
- Alt9b Staging Areas
- Galvez Canal Seawall
- Mandeville Seawall Replacement 9b
- Galvez Canal Floodwall ROW Footprint

Location Map

Date: 10/28/2020

St. Tammany Parish Feasibility Study: Alternative 9b - Revine Aux Coquilles (Forced Drainage)



U.S. Army Corps of Engineers
New Orleans District

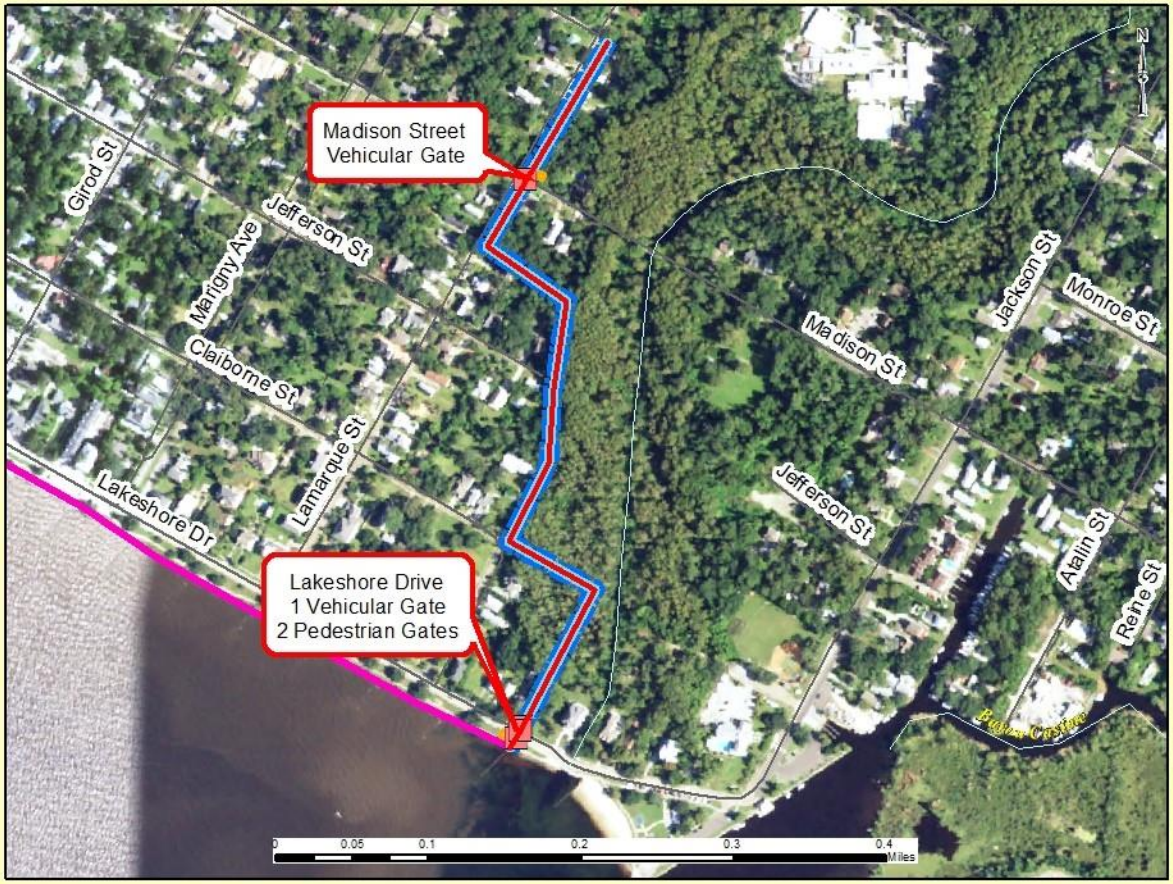
Legend

- Alt9b Pump Stations
- Alt9b Floodgates
- Alt9b Floodwalls
- Alt9b Staging Areas
- Mandeville Seawall Replacement 9b

Location Map

Date: 10/15/2020

St. Tammany Parish Feasibility Study: Alternative 9b - Little Bayou Castine (Forced Drainage)



U.S. Army Corps of Engineers
New Orleans District

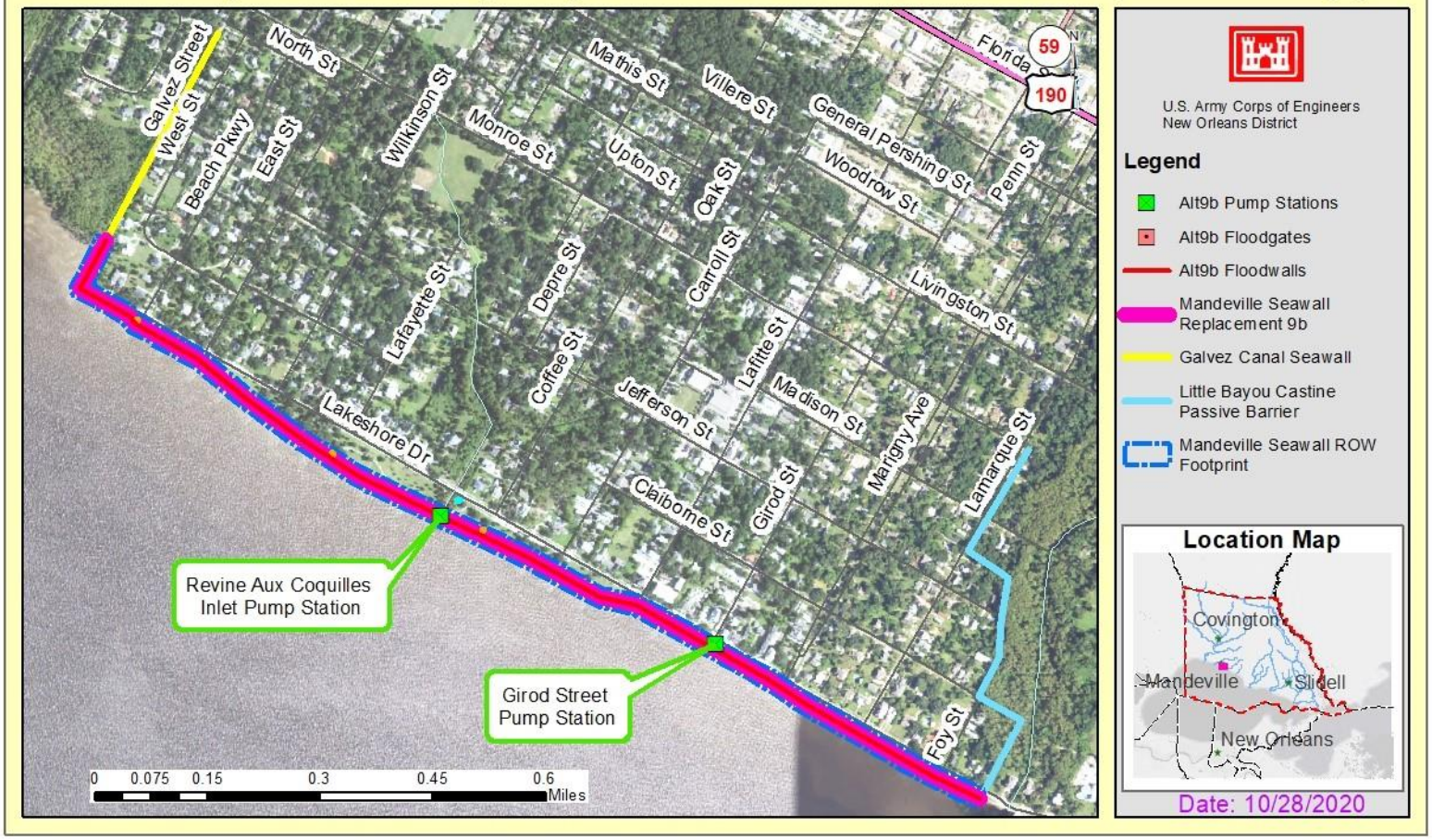
Legend

- Alt9b Floodgates
- Alt9b Floodwalls
- Alt9Staging Areas
- Little Bayou Castine Passive Barrier
- Mandeville Seawall Replacement 9b
- Little Bayou Castine ROW Footprint

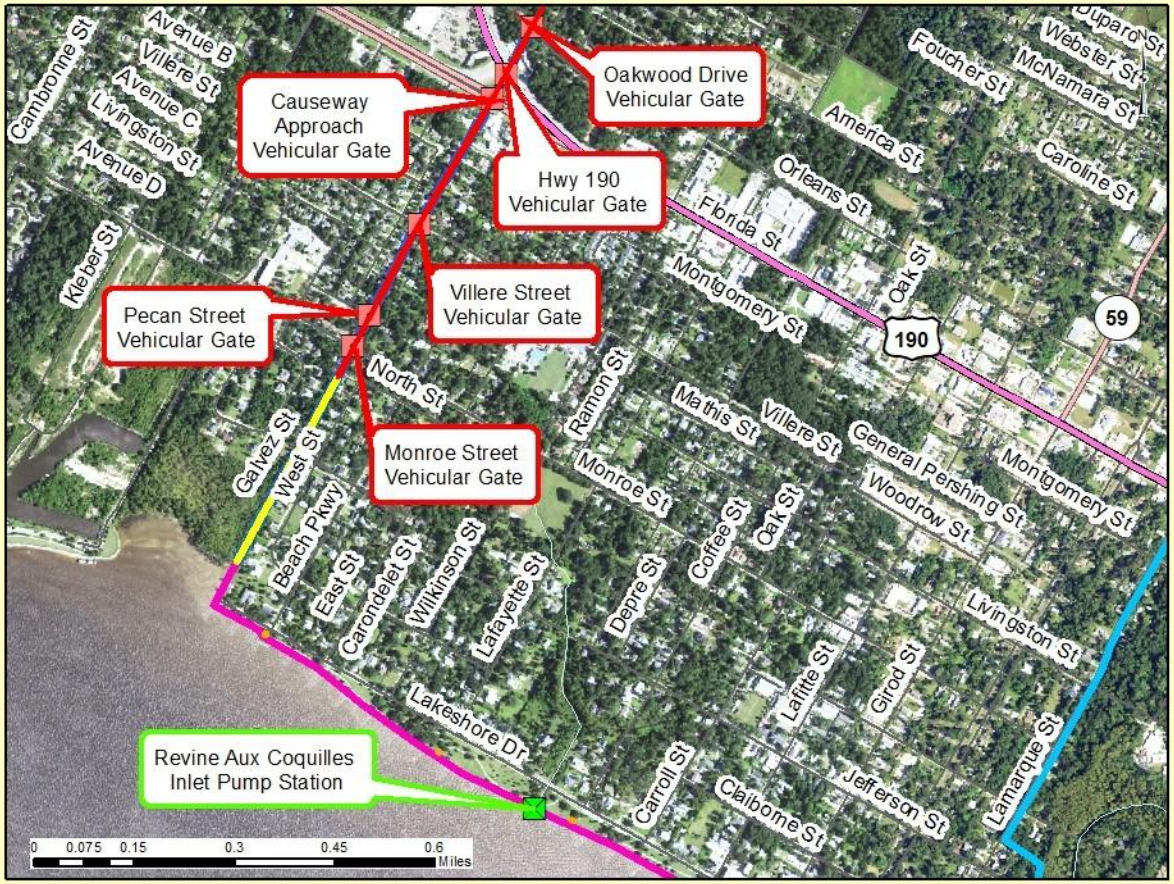
Location Map

Date: 10/2/2020

St. Tammany Parish Feasibility Study: Alternative 9b - Mandeville Sea Wall (Forced Drainage)



St. Tammany Feasibility Study: Alternative 9c - Galvez Canal Floodwall 18ft Design (Forced Drainage)



U.S. Army Corps of Engineers
New Orleans District

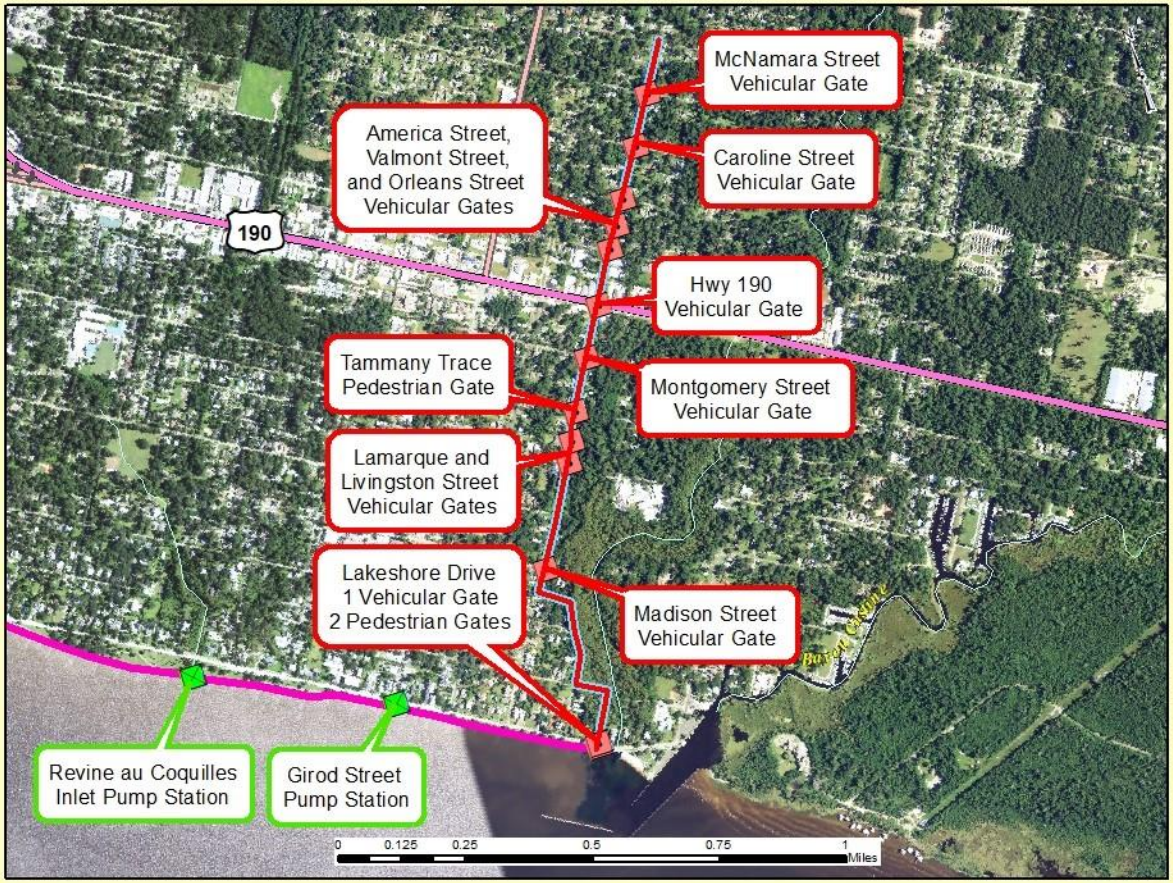
Legend

- Alt9c Pump Stations
- Alt9c Floodgates
- Alt9c Floodwalls
- Galvez Canal Seawall 18ft
- Galvez Canal Floodwall 18ft
- Little Bayou Castine 18ft
- Mandeville Seawall Replacement 9c
- Galvez Canal Floodwall 18ft Design ROW Footprint

Location Map

Date: 12/11/2020

St. Tammany Feasibility Study: Alternative 9c - Little Bayou Castine 18 ft Design (Forced Drainage)

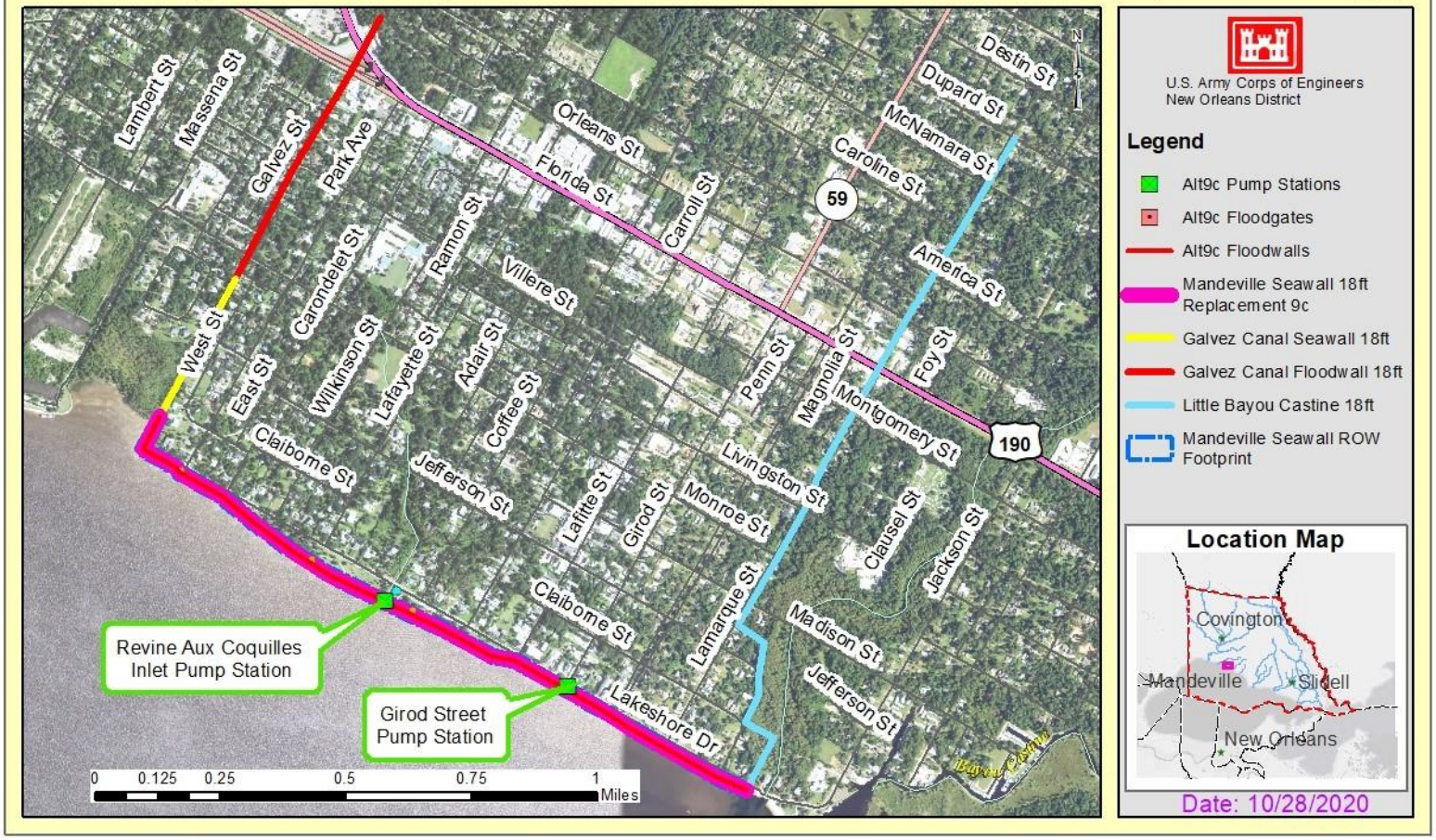


U.S. Army Corps of Engineers
New Orleans District

Legend

- Alt9c Floodgates
- Alt9c Pump Stations
- Alt9c Floodwalls
- Mandeville Seawall Replacement 9b
- Little Bayou Castine 18ft Design
- Little Bayou Castine 18ft Design ROW Footprint

Location Map

Date: 12/11/2020

St. Tammany Feasibility Study: Alternative 9c - Mandeville Sea Wall 18ft Design (Forced Drainage)