

# Contamination Screening Evaluation Report

SR-9/I-95 @ SR 842/Broward Boulevard (Broward Boulevard from West of SW 24th Avenue to East of NW/SW 18th Avenue)
Project Development & Environment (PD&E) Study

Efficient Transportation Decision Making (ETDM) No.: 14226

Broward County, Florida Financial Project ID Number: 435513-1-22-02

Prepared for: Florida Department of Transportation, District Four 3400 West Commercial Boulevard Fort Lauderdale, FL 33309

**April 2019** 

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.



#### **TECHNICAL REPORT COVERSHEET**

#### Contamination Screening Evaluation Report

Florida Department of Transportation

District 4

SR-9/I-95 @ SR-842/Broward Boulevard

Limits of Project: Broward Boulevard from West of SR 24th Avenue to East of NW/SW 18th Avenue

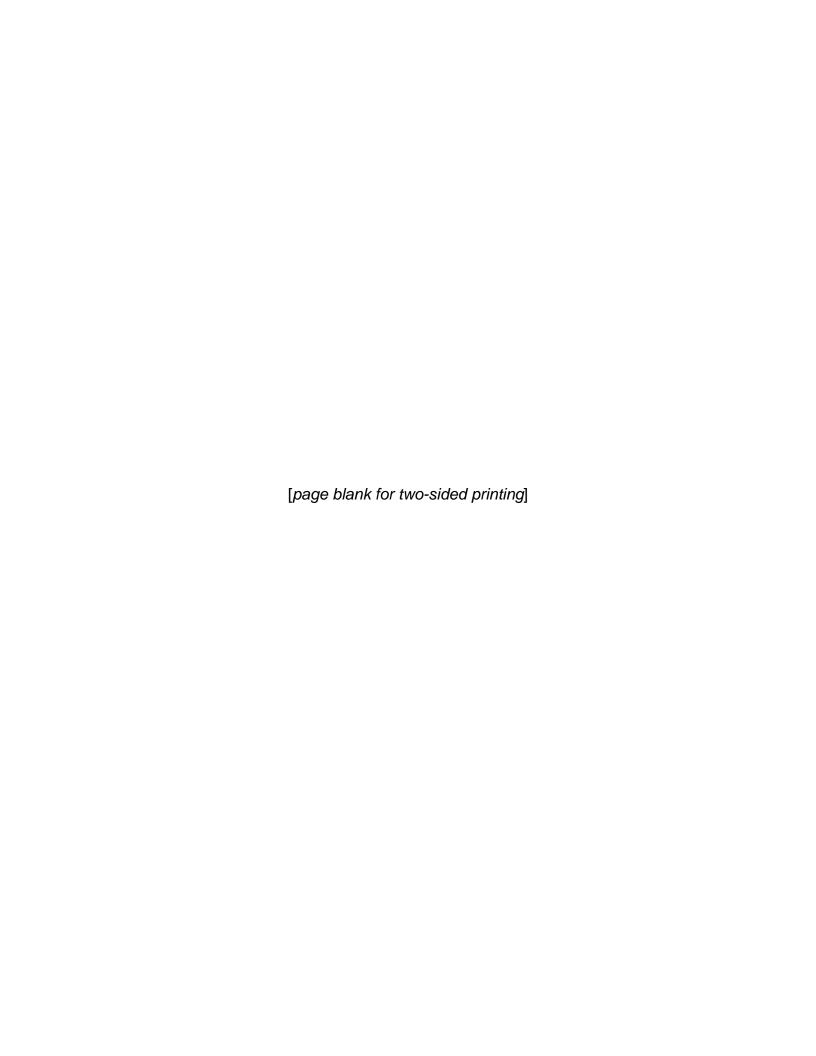
Broward County, Florida

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# **Executive Summary**

The Florida Department of Transportation (FDOT), District Four, is currently conducting a Project Development and Environment (PD&E) Study that is evaluating potential improvements to the SR-9/I-95 and SR-842/Broward Boulevard Interchange in the City of Fort Lauderdale, Broward County, Florida. The primary purpose of this project is to improve system linkage, traffic operations, and modal interrelationships at the I-95 and Broward Boulevard Interchange. Additional goals of this project are to address Capacity, Safety, Travel Demands, and Emergency Evacuation.

The project area extends along SR-9/I-95 from just south of Davie Boulevard to just south of Sunrise Boulevard, a distance of approximately two miles, and along Broward Boulevard from NW 24th Avenue to NW/SW 18th Avenue, a distance of approximately one half mile. The study area includes the median ramp connections to the Park-and-Ride lots from I-95 north and south of Broward Boulevard.

As part of the engineering process, this Contamination Screening Evaluation Report (CSER) was prepared in accordance with Part 2, Chapter 20 "Contamination" of the FDOT Project Development & Environment Manual, revised January 14, 2019, and District 4 requirements. The objectives of this contamination screening evaluation (Level I Assessment) are to identify and evaluate potential contamination sources that can impact proposed project schedule and costs.

The preliminary evaluation included reviewing an environmental database and aerial imagery, performing a visual reconnaissance of the project corridor and surrounding area, obtaining pertinent environmental records from state and local agencies, and assigning potential contamination ratings for each source within and adjacent to the project corridor.

Available records reported many sources associated with hazardous waste management, petroleum storage systems/spills, cleaning or dry cleaning activities, and environmental contamination within a 500 foot radius of the project corridor. An evaluation of site characteristics for these sources and associated environmental information (e.g. undocumented or documented soil, groundwater, and/or hazardous material impacts) identified 78 sources/facilities with a risk rating distribution as follows: 13 - High, 17 - Medium, 27 - Low, and 21 - No. Based on these risk ratings, construction activities may encounter soil or groundwater contamination which can potentially impact worker health, the environment, and construction schedule and costs if these sites are not addressed in the design.

A Level II Assessment is recommended for 13 sources/facilities that have the potential to adversely impact the project. The Level II Assessment should include the advancement of



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environmental soil borings and discrete groundwater sampling at specific locations within the project corridor that require subsurface construction (i.e. soil excavation and/or dewatering activities) near sources identified as having potential contamination. The Level II Assessment should include the collection and analysis of soil and groundwater samples for the appropriate analytical group parameters.

Knowing the extent of impacted media at these areas of concern during the design phase can expedite handling, disposal and/or treatment requirements, as well as protecting worker safety during construction. It can also identify locations within the project corridor where certain construction methods may exacerbate contaminant plumes and identify measures to mitigate those effects.



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# **Electronic Documentation**

Environmental Data Resources, Inc. DatatMap<sup>™</sup> Area Study Historical Aerial Photographs Regulatory Documents



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### **Abbreviations**

**2020 COR ACTION** 2020 Corrective Action Program Database

ABANDONED MINES Inventory of land and water impacted by past mining

APLUS Aerial Photo Look-Up System

**AST** Aboveground Storage Tank

ATRP Abandoned Tank Restoration Program

BCEPD Broward County Environmental Protection Department

BRS Biennial Reporting System for Hazardous Waste Generation and Management

**CAR** Contamination Assessment Report

**CD** Collector-Distributor

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CERCLIS Comprehensive Environmental Response, Compensation, and Liability

Information System

**CESQG** Conditionally Exempt Small Quantity Generator

**CLM** FDEP Contamination Locator Map

COAL ASH DOE Department of Energy Database of Steam-Electric Plant Operation

COAL ASH EPA Coal Combustion Residues Surface Impoundments Database

**CoC** Constituents of Concern

**CONSENT** Superfund (CERCLA) Consent Decrees Database

**CORRACTS** Corrective Action Reports Database

**CSER** Contamination Screening Evaluation Report

CTL Cleanup Target Level

**DDMS** Disaster Debris Management Site

**DELISTED NPL** Database of sites deleted from the National Priority List

DOCKET HWC Hazardous Waste Compliance Docket Listing

**DOD** Department of Defense Database

**DOE** Degree of Effect



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**DOT OPS**Department of Transportation, Office of Pipeline Safety Database

**DRF** Discharge Reporting Form

**ECHO** Enforcement and Compliance History Information Database

**EDI** Early Detection Incentive

**EDIEAR** Broward County's Early Detection Incentive/Environmental Assessment

Remediation - Semi-Annual Inventory Report on Contaminated Locations

**EDR** Environmental Data Resources

**EDR MGP** EDR Proprietary Database of Manufactured Gas Plants

**EDR US Hist Auto** EDR Proprietary Database of Historic Gas Stations

**EDR US Hist Cleaner** EDR Proprietary Database of Historic Dry Cleaners

**EPA WATCH LIST**Listing of facilities with alleged yet unproved environmental violations

**ERNS** Emergency Response Notification System

**ETAT** Environmental Technical Advisory Team

ETDM Efficient Transportation Decision Making

**fbls** Feet below Land Surface

**FAC** Florida Administrative Code

FDEP Florida Department of Environmental Protection

FDER Florida Department of Environmental Regulation

**FDOT** Florida Department of Transportation

FEDERAL FACILITY Listing of National Priority List and Base Realignment and Closure sites in the

CERCLIS database

FEMA UST Listing of Federal Emergency Management Agency-owned underground storage

tanks

FHWA Federal Highway Administration

FINDS Facility Index System

FLUCFCS Florida Land Use, Cover, and Forms Classification System

**FL AIRS** FDEP database of Air Resources Management permits

**FL AST** FDEP database of Aboveground Storage Tanks



FL BROWNFIELDS Database of Brownfields Sites maintained by FDEP

FL BROWNFIELDS AREA Database of Brownfields Areas maintained by FDEP

FL BSRA FDEP Brownfield Site Rehabilitation Agreements Listing

FL CATTLE DIP VATS FDEP list of identified cattle dipping vats

**FL CLEANUP SITES** FDEP listing of locations of waste cleanup sites from various programs

FL DEDB Florida database of delineated areas of ethylene dibromide (EDB) groundwater

contamination

FL DRYCLEANERS FDEP listing of dry cleaning facilities

**FL DWM CONTAM** Florida listing of active or known sites that need cleanup

FL ENG CONTROLS Database of all contaminated sites in FL, which are subject to engineering controls

**FL FF Tanks** Florida listing of federal facility storage tanks

FL INST CONTROL Institutional Controls Registry is a database of all contaminated sites in FL which

are subject to institutional and engineering controls

FL LAST Florida Leaking Aboveground Storage Tanks Database

FL LUST Florida Leaking Underground Storage Tank Database

FL NPDES Listing of Domestic and Industrial Wastewater Facilities

FL PRIORITY CLEANERS FDEP priority ranking list of drycleaners

FL RESP PARTY Listing of open, inactive, and closed responsible party sites

**FL SHWS** Florida's State Hazardous Waste Sites Database

FL SITE INV SITES Florida listing of site investigation section sites

FL SITES Summary report compilation of other existing lists including the Eckhardt list, the

Moffit list, the USEPA Hazardous Waste Sites list, USEPA's RCRA Section 3012, and existing department lists such as the obsolete uncontrolled Hazardous Waste

Sites list

FL SPILLS FDEP listing of inland oil and hazardous material incidents

FL SWF/LF Florida Solid Waste Facilities/Landfills Database

**FL SWRCY** Florida Recycling Centers Database

**FL TANKS** Florida listing of storage tank facilities that do not have tank information



# Contamination Screening Evaluation Report SR-9/I-95 at SR-842/Broward Boulevard Interchange PD&E Study

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**FL TIER 2** FDEP listing of facilities which store or manufacture hazardous materials that

submit a chemical inventory report.

**FL UIC** Florida Underground Injection Wells Database

FL UST FDEP database of registered underground storage tanks

FL VCP Florida Voluntary Cleanup Priority Sites Database

FL WASTEWATER Wastewater Facility Regulation Database

FTTS Federal Insecticide, Fungicide and Rodenticide Act / Toxic Substances Control

Act Tracking System

FTTS INSP A listing of inspections and enforcements under the Federal Insecticide,

Fungicide and Rodenticide Act / Toxic Substances Control Act

**FUDS** Formerly Used Defense Sites Database

**FUELS PROGRAM** Listing of facilities registered under the EPA Fuels Programs

FUSRAP Formerly Utilized Sites Remedial Action Program Database

GCTL Groundwater Cleanup Target Level

GIS Geographic Information System

HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing

HIST FTTS INSP FIFRA/TSCA Tracking System Inspection and Enforcement Case Listing

**HM** Hazardous Material

**HMIRS** Hazardous Materials Information Reporting System

**HOV** High Occupancy Vehicles

Integrated Compliance Information System

**ID** Identification

**IHS OPEN DUMPS** Listing of all open dumps located on Indian Land in the U.S.

IRA Initial Remedial Action

**LEAD SMELTERS** Listing of former lead smelter sites

LIENS 2 CERCLIS Superfund Liens Database

**LOS** Level of Service

**LRTP** Long Range Transportation Plan



**LUCIS** Land Use Control Information System

MLTS Material Licensing Tracking System

MPO Metropolitan Planning Organization

MSE Mechanically Stabilized Earth

MW Monitoring Well

**NFA** No Further Action

**NFAP** No Further Action Proposal

NOV Notice of Violation

**NPL** National Priority List Database

NPL LIENS USEPA Superfund Liens Database

NRCS National Resources Conservation Service

**NWI** National Welands Inventory

NY MANIFEST Facility and manifest data tracking hazardous waste from the generator through

transporters to a TSD facility.

OCULUS FDEP Document Management System

**ODI** Open Dump Inventory

OHMIT Office of Hazardous Materials Initiatives and Training

PADS Polychlorinated Biphenyl Activity Database System

PCAR Preliminary Contamination Assessment Report

PCB Polychlorinated Biphenyl

PCB TRANSFORMER Polychlorinated Biphenyl Transformer Registrations Database

PCTS Petroleum Contamination Tracking System

PD&E Project Development and Environment

**PLRIP** Petroleum Liability and Restoration Insurance Program

PROPOSED NPL Proposed Superfund Sites Database

PRP Potentially Responsible Parties Database

**PWS** Public Water Supply



RAATS Resource Conservation and Recovery Act Administrative Action Tracking System

RADINFO Radiation Information Database

RAP Remedial Action Plan

RCRA Resource Conservation and Recovery Act

RCRA NonGen / NLR RCRA - Non Generators Database

RCRA-CESQG RCRA - Conditionally Exempt Small Quantity Generators Database

RCRA-LQG RCRA - Large Quantity Generators Database

RCRA-SQG RCRA - Small Quantity Generators Database

RCRA-TSDF RCRA - Treatment, Storage, and Disposal Facilities Database

**RGA HWS** EDR Proprietary Database of Recovered Government Archives for State

Hazardous Waste Facilities

**RGA LF** EDR Proprietary Database of Recovered Government Archives for Solid Waste

**Facilities** 

RGA LUST EDR Proprietary Database of Recovered Government Archives for Leaking

**Underground Storage Tanks** 

**RMP** Risk Management Plans Database

**ROD** Record of Decision Database

**ROW** Right-of-way

SA Semi-annual

SAR Site Assessment Report

SCRD State Coalition for Remediation of Drycleaners Database

SEMS Superfund Enterprise Management System

SEMS-ARCHIVE Superfund Enterprise Management System Archive

SFWMD South Florida Water Management District

SIS Strategic Intermodal System

**SOPF** Source-separated Organics Processing Facility

**SQG** Small Quantity Generator

SR State Road



SRCO Site Rehabilitation Completion Order

SSTS Section 7 Tracking System

STCM Storage Tank Contamination Monitoring

SUPER Act State Underground Petroleum Environmental Response Act

TCAR Tank Closure Assessment Report

TRIS Toxic Chemical Release Inventory System

**TSAR** Template Site Assessment Report

TSCA Toxic Substances Control Act Database

μg/L Micrograms per Liter

UMTRA Uranium Mill Tailing Sites Database

US AIRS (AFS)

Aerometric Information Retrieval System Facility Subsystem

**US AIRS MINOR** Air Facility System Database of Minor Source Facilities

**US BROWNFIELDS** Brownfield Sites Database

**US CDL** Clandestine Drug Lab Database

US ENG CONTROLS Database of sites with engineering controls in place

**US FIN ASSUR** Financial Assurance Information Database

**US HIST CDL** National Clandestine Laboratory Register

**US INST CONTROL** Database of sites with institutional controls in place

**US MINES**Mine Identification Numbers Database

**USEPA** United States Environmental Protection Agency

**USGS** United States Geological Survey

**UST** Underground Storage Tank

**UXO** Listing of Unexploded Ordnance Sites

VOC Volatile Organic Compound



### 1.0 Introduction

The Florida Department of Transportation (FDOT), District Four, is currently conducting a Project Development and Environment (PD&E) Study that is evaluating potential improvements to the SR-9/I-95 and SR-842/Broward Boulevard Interchange in the City of Fort Lauderdale, Broward County, Florida. The primary purpose of this study is to develop and evaluate design concepts that will improve traffic flow to and from I-95, as well as along Broward Boulevard, increase connectivity between the 95 Express Lanes and Broward Boulevard, and improve intermodal connectivity. Improved connectivity and traffic flow will be achieved via widening along Broward Boulevard and I-95, new ramps to connect the 95 Express Lanes, and the re-alignment of existing ramps. As part of this PD&E Study, a contamination screening was performed.

This Contamination Screening Evaluation Report (CSER) contains the findings of the contamination screening evaluation for the I-95 mainline south of Davie Boulevard to just south of West Sunrise Boulevard and the SR-9/I-95 at SR-842/Broward Boulevard Interchange Project. This report is prepared in accordance with the FDOT PD&E Manual, Part 2, Chapter 20, "Contamination," dated June 14, 2017, and District 4 requirements. The purpose of this report is to identify, evaluate, and document potential contamination impacts that may exist within or adjacent to the limits of the proposed right-of-way and to provide recommendations relative to the identified present/past use of properties that may require further assessment, remediation, special handling, or that may have a potential for liability in support of the PD&E study consistent with federal, state and local objectives. Addressing contamination in soil, groundwater, surface water, and structures early in the project development process can reduce potential risks, impacts, and costs to FDOT.



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Figure 1-1 | Study Limits





# 2.0 Project Description

## 2.1 Project Location

The Interchange of I-95 at Broward Boulevard is located in central Broward County in the City of Fort Lauderdale, in Sections 4, 5, 8, and 9 of Township 50 S, Range 42 E. The PD&E Study limits extend along SR-9/I-95, from just south of Davie Boulevard to just south of Sunrise Boulevard, a distance of approximately two miles, and along Broward Boulevard from NW 24<sup>th</sup> Avenue to east of NW/SW 18<sup>th</sup> Avenue, a distance of approximately one half mile. The study area includes the median ramp connections to the Park-and-Ride lots from I-95 north and south of Broward Boulevard. The South Florida Rail Corridor (SFRC) / CSX Railroad is adjacent to and runs parallel along the west side of I-95 in this area. The study limits are shown in **Figure 1-1**.

# 2.2 Description of Existing Facilities

The typical section of I-95 within the study area varies. From the Davie Boulevard interchange to SW 5<sup>th</sup> Place the typical section of I-95 is an eight-lane facility comprised of three General Purpose Lanes in each direction and one Special Use Lane (previously designated for High Occupancy Vehicle (HOV) use and in transition to managed toll lanes under the 95 Express Project) in each direction. From the vicinity of SW 5<sup>th</sup> Place, where the northbound Collector-Distributor (CD) road ramp system merges traffic from I-595 into the General Purpose Lanes, and through to the Sunrise Boulevard interchange, I-95 is a 10-lane facility comprised of four General Purpose Lanes in each direction and one Special Use Lane in each direction (same condition as noted above). Southbound ingress to I-95 from Broward Boulevard is provided at the western terminal intersection by a single lane access right turn lane from eastbound Broward Boulevard and a double left turn lane from westbound Broward Boulevard. Egress from southbound I-95 to Broward Boulevard is provided by a ramp with a single right turn lane for traffic heading west on Broward Boulevard and a double left turn lane for traffic heading east on Broward Boulevard.

Currently, northbound ingress to I-95 from Broward Boulevard is provided by a single lane access ramp from westbound Broward Boulevard at the eastern terminal intersection and a single lane flyover from eastbound Broward Boulevard west of the western terminal intersection. Egress to Broward Boulevard from northbound I-95 is provided by a ramp, which is part of the northbound CD road ramp system that was recently reconstructed to include triple right turn lanes for traffic heading eastbound on Broward Boulevard and double left turn lanes for traffic heading westbound on Broward Boulevard. Additional ingress and egress to I-95 is provided through the Park-and-Ride lot. For both directions of travel along I-95 ingress and



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egress is provided by single lane ramps that cross over the southbound lanes of I-95 and connect with the Special Use Lanes (conversion of single HOV to dual Express Lanes under construction) located in the inside roadway of northbound and southbound I-95.

Broward Boulevard is a six-lane urban divided roadway with a raised median within the vicinity of the I-95 Interchange. In its current configuration there are no provisions for dedicated bicycle traffic within these limits outside of the general travel lanes. Seven-foot wide sidewalks are provided on both sides of Broward Boulevard between NW/SW 22<sup>nd</sup> Avenue and NW/SW 18<sup>th</sup> Avenue west of NW/SW 22<sup>nd</sup> Avenue. Westbound Broward Boulevard to the west of NW/SW 22<sup>nd</sup> Avenue the sidewalk is seven feet wide, and in the eastbound direction the sidewalk is six feet wide. Broward Boulevard provides the main entry way to the downtown Fort Lauderdale Central Business District from I-95 and the east-west connection between US-1 and SR-817/University Drive in the City of Plantation.

There are a number of transit options within the operating area of the I-95 at Broward Boulevard Interchange that provide direct service and transfer connections along the northsouth and east-west corridors. These include passenger rail services (Tri-Rail and Amtrak) and bus services (Broward County Transit, Breeze, Sun Trolley, 95 Express Bus, and Tri-Rail Commuter Connector). There is a Park-and-Ride lot located within the interchange area on the southwest and northwest quadrants. The existing conditions at the Park-and-Ride lot include the provision of 794 parking spaces throughout five parking lots, shown in Figure E-1 in Appendix E. Spaces in Lot 5 are designated for Amtrak and Tri-Rail parking only while the spaces in Lots 1-4 are available for any purpose, including car pools and 95 Express Bus. There are no designated bicycle facilities within the Park-and-Ride lot and minimal sidewalk facilities. Access to the Park-and-Ride lots is provided via Broward Boulevard and I-95. Ingress from eastbound Broward Boulevard is provided via a left turn lane at NW 24th Avenue (Lots 1-3) and via right turn lane at SW 22<sup>nd</sup> Avenue / SW 1<sup>st</sup> Street (Lots 4-5). Ingress from westbound Broward Boulevard is provided via right turn lanes at NW 22<sup>nd</sup> Avenue and NW 24<sup>th</sup> Avenue. Egress to westbound Broward Boulevard is provided via the intersections with NW 22<sup>nd</sup> Avenue and NW 24<sup>th</sup> Avenue, requiring drivers coming from the south to circulate through the northern parking areas. Egress to eastbound Broward Boulevard is provided via SW 22<sup>nd</sup> Avenue / SW 1st Street and NW 24th Avenue. Ingress from both northbound and southbound I-95 are provided in a similar manner with northbound vehicles exiting on the south side of Broward Boulevard and merging into SW 21st Terrace and southbound vehicles existing on the north side of Broward Boulevard with connections to NW 22<sup>nd</sup> Avenue and SW 22<sup>nd</sup> Avenue / SW 1<sup>st</sup> Street provided via access roads within the parking areas. Egress to southbound I-95 is provided on the south side of Broward Boulevard via a ramp that crosses over the southbound General Use Lanes of I-95 and connects to the southbound HOV lane. Egress to northbound I-95 is provided by a direct connect flyover ramp on the north side of Broward Boulevard.



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accessed from the northern parking area, which crosses over the southbound General Use Lanes of I-95 and connects to the northbound HOV lane.

# 2.3 Purpose and Need

The primary purpose of this project is to improve system linkage, traffic operations, and modal interrelationships at the I-95 and Broward Boulevard Interchange. Additional goals of this project are to address Capacity, Safety, Travel Demands, and Emergency Evacuation.

Broward Boulevard is a State Road (SR 842) that provides the main entryway to the downtown Fort Lauderdale Central Business District from I-95. The sections of Broward Boulevard from I-95 to NE 3rd Avenue and north and south of Broward Boulevard on I-95 are part of the state's Strategic Intermodal System (SIS), which consists of high-priority transportation facilities and services of statewide and interregional significance and are critical to the movement of people and goods in Florida. The existing links throughout the system in the study area need improvements based on forecasted traffic demands resulting from regional population growth and employment growth. Currently, the 95 Express Lanes do not directly connect to Broward Boulevard.

The improvements proposed as part of the interchange project will complement the 95 Express Lanes improvements by enhancing existing connectivity within the Park-and-Ride lots, improve existing I-95/Broward Boulevard terminal intersections, and provide improved Express Lane access to Broward Boulevard.

Transit services along Broward Boulevard, 95 Express, and within the Park and Ride Lot/Transit Station areas are currently experiencing recurring congestion that reduces transit vehicle speeds, increases operating costs, and makes scheduling of buses from a system level challenging. The existing geometry and operational features are not allowing optimal bus travel times, multimodal connectivity, or access to bus stops and transfers. The purpose of this study is to address these transit needs.

I-95 within the project limits currently operates at Level of Service (LOS) F. Broward Boulevard within the project limits also operates at LOS F. Without improvements, the driving conditions will continue to operate well below acceptable LOS targets into the future. Congestion on these routes also impacts emergency evacuations.

This study will also propose improvements to address multimodal and safety needs such as the lack of sufficient bicycle and pedestrian facilities on Broward Boulevard and along SW 1st Street and it will address safety concerns that are generated by the at grade weave condition that currently exists between the Sunrise Boulevard and Broward Boulevard interchanges from



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95 Express traffic. 95 Express traffic will also be circulating through a low speed Park and Ride lot which poses potential pedestrian conflicts.

## 2.4 Description of the Proposed Action

This project proposes improvements to the I-95 at Broward Boulevard Interchange complementing the surrounding multimodal facilities. The proposed interchange improvements will be compatible with the proposed 95 Express Phase 3 program, which will introduce two tolled, express lanes each direction, in place of the existing former HOV lanes, from Stirling Road in Broward County to Linton Boulevard in Palm Beach County. 95 Express Phase 3A, which extends from Broward Boulevard to south of SW 10<sup>th</sup> Street, and includes the limits of the proposed interchange improvements, began construction in mid-2016. Functionality of the I-95 median ramps and Park-and-Ride road network is to be improved for the intermodal services within the interchange area.

The proposed improvements evaluated for the I-95 at Broward Boulevard Interchange consisted of four elements:

- Improvements to the mainline of I-95 to accommodate ingress and egress ramps for 95
   Express and the existing Broward Boulevard Interchange ramps,
- Three alternatives for the Broward Boulevard east and west terminal intersections to improve interchange operations,
- Two options for the eastbound Broward Boulevard to southbound 95 Express movement, and
- Conceptual plans for the Park-and-Ride lot to improve circulation and conditions for all users.

The mainline improvements are consistent across each of the three interchange alternatives. Each of the Park-and-Ride concepts was designed to work with the proposed mainline and interchange improvements.

The Build Alternatives under consideration are described in **Sections 2.4.1, 2.4.2, 2.4.3, 2.4.4, and 2.4.5**. Also, under consideration is the No Action Alternative. The No Action Alternative assumes no proposed improvements and serves as a baseline for comparison against the Build Alternatives.

### 2.4.1 Mainline I-95 Build Alternative

The proposed improvements to the I-95 mainline account for the programmed implementation of 95 Express (under construction at the time of this PD&E Study), which adds one additional Special Use Lane in each direction and modifies the use of these lanes to include managed toll



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lanes. The resulting typical section becomes a 12-lane facility comprised of four General Purpose Lanes and two Special Use Lanes in each direction.

The ingress and egress ramps connecting to Broward Boulevard are proposed to be modified in a similar manner for each of the Interchange Build Alternatives. For northbound ingress to I-95 there are no proposed modifications to the existing single lane ramps that provide access from westbound and eastbound Broward Boulevard. For northbound egress from I-95, the existing ramp is proposed to be widened to allow for additional storage, however the turn lane configuration remains the same with dual left-turn and triple right-turn lanes. Southbound ingress to I-95 differs based on the Interchange Build Alternative and is addressed in those sections that follow. Southbound egress from I-95 is proposed to be widened for each of the Interchange Build Alternatives to accommodate one additional turn lane for left turns and two additional turn lanes for right turns, resulting in triple left and triple right turn lanes.

The primary proposed improvements for the mainline, which are shown in **Figures E-2 and E-3 in Appendix E**, are for new braided ramps providing direct ingress and egress between the 95 Express lanes and the existing Broward Boulevard service interchange ramps without requiring drivers to weave through the General Use Lanes. For southbound 95 Express egress, the proposed improvements include a braided ramp (in the vicinity of NW 6<sup>th</sup> Street/Sistrunk Boulevard) over the southbound I-95 General Use Lanes with a connection to the west terminal intersection of the Broward Boulevard service interchange. Similarly, ingress to southbound 95 Express includes a braided ramp over the southbound I-95 General Use Lanes located just south of Broward Boulevard.

For the northbound direction, egress from 95 Express near Davie Boulevard is proposed through the use of a braided ramp over the northbound I-95 General Use Lanes with a connection to the northbound CD road ramp system that terminates at the east terminal intersection of the Broward Boulevard service interchange. Ingress from the Broward Boulevard service interchange to the northbound 95 Express lanes is proposed through a braided ramp over the northbound I-95 General Use Lanes in the vicinity of NW 6<sup>th</sup> Street/Sistrunk Boulevard.

### 2.4.2 Broward Boulevard Interchange Build Alternatives

The proposed improvements to Broward Boulevard include the replacement of the bridge that spans I-95 and the SFRC with a wider and higher bridge span, the provision of three through lanes of traffic with six-foot wide sidewalks and seven-foot wide bicycle lanes in each direction, and three interchange alternatives, which are further described below. The replacement of this bridge span is common to all three interchange alternatives and is being proposed to accommodate necessary turn lanes at the intersections as well as to provide an envelope for a



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future premium transit stop with connectivity between East-West service along Broward Boulevard, and the many multimodal transit services provided in the Broward Boulevard Parkand-Ride Lot/Transit Station on the north and south sides of Broward Boulevard. In each of the interchange alternatives, the service interchange ramps are proposed for reconstruction to accommodate the wider and higher proposed bridge span. Most of the ingress and egress ramps are also proposed to include additional lanes to accommodate the forecasted 2040-year traffic.

The proposed interchange alternatives include Tight Diamond, Displaced Left Turn, and Modified Displaced Left Turn. Each of these alternatives is described below. For each of these alternatives the northbound ingress to I-95 remains as a single lane flyover access ramp.

### Interchange Build Alternative 1 – Tight Diamond

The Tight Diamond Interchange is a compressed version of the diamond interchange designed to accommodate right-of-way constraints. The interchange consists of two closely spaced signalized intersections at the crossing of the ramp terminals. The key operational aspect of a Tight Diamond Interchange is signal coordination to ensure efficient progression of traffic and minimum storage of vehicles between the terminals. The existing interchange is a Tight Diamond Interchange and this alternative will improve the existing operation through the addition of turn lanes at the ramp terminal locations and optimization of the intersection signal timings. Specifically, one additional left turn lane is proposed for southbound ingress from Broward Boulevard to I-95 resulting in triple left turn lanes for traffic traveling westbound. An additional right turn lane is also proposed resulting in double right turn lanes for eastbound traffic on Broward Boulevard. There are no proposed improvements to the northbound ingress ramps from Broward Boulevard. These improvements are illustrated in **Figure E-4 in Appendix E**.

### Interchange Build Alternative 2A - Displaced Left

The Displaced Left Turn Interchange is also known as the Continuous Flow Interchange. The main geometric feature of the Displaced Left Turn Interchange is the removal of left turn movements from the main intersection to an upstream signalized location to reduce the number of traffic signal phases and conflict points. For this alternative, the westbound left turn movements are displaced at the east ramp terminal intersection to a new roadway that is south and runs parallel to the eastbound through lanes where it combines with the displaced left turn lanes from the northbound ramp. This configuration enables the westbound left turn lanes to execute the left turn simultaneously with the westbound through traffic and, under a different signal phase, transition the traffic from the northbound ramp on to the westbound at the west ramp terminal intersection. This proposed alternative increases the number of right turn lanes for the southbound ingress to I-95 from eastbound Broward Boulevard, resulting in dual right



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turn lanes. Although displaced as previously described, the left turn lanes for southbound ingress remain as dual left turn lanes as is currently provided. These improvements are illustrated in **Figure E-5 in Appendix E**.

### Interchange Build Alternative 2B – Modified Displaced Left

The Modified Displaced Left Turn Interchange provides for the displacement of the northbound exit ramp onto a new roadway (bridge structure) over I-95 that is on the south side of Broward Boulevard, and runs south of and parallel to the eastbound Broward Boulevard through lanes. The northbound ramp left-turn traffic is then transitioned on to westbound Broward Boulevard at the west ramp terminal intersection. There are three westbound left-turn lanes at the east ramp terminal intersection. The inner left-turn lane is a buffer left turn lane providing direct connection to southbound 95 Express and the outer two left-turn lanes are for general use that feed into southbound I-95 and the CD road. This alternative involves partial right-of-way acquisitions along Broward Boulevard near NW/SW 18th Avenue. These improvements are illustrated in **Figure E-6 in Appendix E**. Interchange Build Alternative 2B – Modified Displaced Left is the preferred interchange build alternative for having the best operational results.

### 2.4.3 Eastbound Broward Boulevard to Southbound 95 Express Alternatives

In the Preferred Broward Boulevard Build Alternative (Build Alternative 2B – Modified Displaced Left), there is a barrier separation on the southbound entrance ramp that restricts Broward Boulevard eastbound right turn traffic from entering the express lanes via the new braided ramp for westbound to southbound 95 Express. Thus, the eastbound traffic on Broward Boulevard destined to the southbound 95 Express lanes must use an alternative route. For eastbound motorists seeking access to southbound 95 Express, there are two options as follows:

- Option 1 (via SW 1<sup>st</sup> St) This option directs eastbound Broward Boulevard traffic seeking southbound 95 Express to use SW 1<sup>st</sup> Street, from SW 22<sup>nd</sup> Avenue, to access the existing former HOV southbound entrance ramp at the south side of the Park and Ride Lot just south of Broward Boulevard.
  - Alternative 1: No Action
  - Alternative 2 T-Intersection at SW 21<sup>st</sup> Terrace and Roundabout at Access Road
  - Alternative 3 Double Roundabout
  - Alternative 4 Combined Roundabout
- Option 2 (via Flyover) This option provides a free flow flyover ramp to provide ingress access for the eastbound Broward Boulevard traffic. The flyover ramp spurs off of the



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existing Broward Boulevard eastbound to northbound on-ramp and connects to the existing former HOV southbound entrance ramp prior to merging on 95 Express.

Of these, Option 1, Alternative 4 (Combined Roundabout) was selected as the Preferred Alternative. These improvements are illustrated in **Figure E-6 in Appendix E**. This alternative also calls for the modification to SW 1st Street eastbound at SW 22nd Avenue, converting the access point to allow for eastbound Right-In/Right-Out traffic movements only, at this local street connection point. Further description and evaluation of each alternative is in the Preliminary Engineering Report.

### 2.4.4 Park-and-Ride Lot Build Alternatives

Three concept alternatives were developed to address vehicular circulation through the northern lots. Each of the alternatives includes a realignment of Access Road to provide for a straighter geometry and adjusts the parking areas and other roadway connections as necessary. Specifically, the parking spaces provided in Lot 3 will be shifted west and accommodated in the area currently identified as Lots 1 and 2. Each alternative also provides additional sidewalk throughout the northern parking areas, identifies crosswalks, and proposes a canopy for the sidewalks connecting the train station to the newly created area underneath the expanded Broward Boulevard bridge structure.

The primary difference between these alternatives is the proposed location of the 95 Express Bus stops and the use of the newly created space underneath the expanded Broward Boulevard bridge structure. These alternatives are concepts and the details of the improvements will be determined as part of the Design phase of the project.

### Park-and-Ride Alternative 1

The 95 Express Bus stop in the northern parking area is retained in its current location and a Park-and-Ride facility is provided on the opposite side of the existing bus stop. The 95 Express Bus stops currently located on Access Road just south of the Broward Boulevard bridge structure are relocated north to allow for passenger loading underneath the expanded bridge structure. A traffic signal is proposed at the intersection of Access Road with the roadway that provides ingress and egress from I-95 on the north side of the parking area to accommodate left turns by transit vehicles. The additional space provided underneath the bridge is not identified for any specific use aside from being reserved to accommodate an elevator and other access features to allow for a transfer between the possible future transit station in the median of Broward Boulevard and this lower level. These concepts are illustrated in **Figure E-7 in Appendix E**.



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#### Park-and-Ride Alternative 2

In this alternative the 95 Express Bus stop in the northern parking area is shifted south and a Park-and-Ride facility is provided on the east-west access road that becomes the I-95 ingress and egress ramps. At the terminus of the I-95 ramps in the northern lot, a roundabout is proposed in lieu of the existing three-sided interchange. The area underneath the expanded bridge structure is proposed to be used for the 95 Express Bus stops currently located just south of the bridge structure. This concept provides for a more formal transit boarding and alighting area. These concepts are illustrated in **Figure E-8 in Appendix E**.

#### Park-and-Ride Alternative 3

This alternative builds on the previous Alternative 2 with the addition of a roundabout to access the formal transit station area created underneath the expanded bridge structure. These concepts are illustrated in **Figure E-9 in Appendix E**.

### 2.4.5 Preferred Alternative

The Preferred Alternative for this study is a combination of the Mainline I-95 Build Alternative; Interchange Build Alternative 2B; Eastbound Broward Boulevard to Southbound 95 Express Option 1, Sub-Alternative 4, Combined Roundabout Sub-Alternative; and Park-and-Ride Alternative 3. This alternative meets the purpose and need for the project and was selected for having the best operational results at the I-95 ramps' intersections with Broward Boulevard. A typical section package for the Preferred Alternative is provided in Preliminary Engineering Report.

The Preferred Alternative includes the following improvements.

#### **Mainline I-95 Improvements**

- The construction of single-lane elevated braided ramps over the General Use Lanes to provide access to and from the southbound and northbound 95 Express Lanes (Figure E-6 in Appendix E).
  - Southbound 95 Express Egress: New braided ramp over the southbound I-95
    General Use Lanes with a connection to the west ramp terminal intersection of the
    Broward Boulevard service interchange to provide egress from 95 Express near
    NW 6<sup>th</sup> Street/Sistrunk Boulevard.
  - Southbound 95 Express Ingress: New braided ramp over the southbound I-95 General Use Lanes located just south of Broward Boulevard that provides ingress access for the westbound traffic on Broward Boulevard via the west ramp terminal intersection of the Broward Boulevard service interchange.



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- Northbound 95 Express Egress: New braided ramp from 95 Express near Davie Boulevard over the northbound I-95 General Use Lanes with a connection to the northbound CD road ramp system that terminates at the east terminal intersection of the Broward Boulevard service interchange.
- Northbound 95 Express Ingress: New braided ramp over the northbound I-95 General Use Lanes in the vicinity of NW 6<sup>th</sup> Street/Sistrunk Boulevard. This elevated braided ramp provides direct access between Broward Boulevard and the northbound 95 Express Lanes, using the existing eastbound to northbound flyover, and westbound to northbound ramp, for access to northbound 95 Express.

### **Broward Boulevard Interchange Improvements**

- The addition of triple left and triple right turn lanes for the southbound I-95 exit ramp to Broward Boulevard.
- Replacement of the Broward Boulevard bridge structures over I-95 and the SFRC to accommodate additional turn lanes, a minimum of six-foot sidewalks and seven-foot bike lanes in each direction, and a future premium transit stop in the median.
- Provide three westbound left-turn lanes at the east ramp terminal intersection. The inner left-turn lane is a buffer left turn lane providing direct connection to southbound 95 Express and the outer two left-turn lanes are for general use that feed into southbound I-95 and the CD road.
- Displacement of northbound exit ramp traffic heading west onto a new two-lane roadway (bridge structure) that is on the south of Broward Boulevard over I-95, and runs south of and parallel to the eastbound Broward Boulevard through lanes. The northbound ramp left-turn traffic is transitioned on to the westbound Broward Boulevard roadway at the west ramp terminal intersection (Figure E-6 in Appendix E).

### **Broward Boulevard Eastbound to 95 Express Southbound Improvements**

- Barrier separation on the southbound entrance ramp that restricts Broward Boulevard eastbound right turn traffic from entering the express lanes via the new braided ramp for westbound to southbound 95 Express. Eastbound to southbound express lane traffic must continue to use the existing former HOV ramps via SW 22<sup>nd</sup> Avenue and SW 1<sup>st</sup> Street.
- Modification to SW 1<sup>st</sup> Street eastbound at SW 22<sup>nd</sup> Avenue, converting the access point to allow for eastbound Right-In/Right-Out traffic movements only.
- Construct a combined dual intersection roundabout along SW 1<sup>st</sup> Street at SW 21<sup>st</sup> Terrace and the Connector Ramps to and from southbound 95 Express (**Figure E-6 in Appendix E**).

#### Park and Ride Lot Improvements



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Improvements to the Park-and-Ride facility that provide additional sidewalks for pedestrians, a covered waiting area for Express Bus users and improved circulation for vehicles by constructing roundabouts (**Figure E-9 in Appendix E**).



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# 3.0 Land Use

## 3.1 Existing Land Use

The Existing Land Use Map of the I-95 at Broward Boulevard interchange study area is depicted on **Figure 3-1**. The interchange occurs within central Broward County in the City of Fort Lauderdale. The interchange is located in an urbanized area primarily surrounded by residential uses. Pockets of industrial uses are located to the west of I-95, while commercial uses are located along Broward and Davie Boulevard.

### 3.2 Future Land Use

Future land use is based on the 2040 LRTP, Commitment 2040, developed by the Broward Metropolitan Planning Organization. Because the study area is fully developed, significant future land use changes are not anticipated. The proposed project is expected to support increasing population and employment forecasts within the interchange area and surrounding region. Overall effects on the area's character resulting from the interchange improvement are anticipated to be minimal. **Figure 3-2** illustrates the Future Land Use in the study area.



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Figure 3-1 | Existing Land Use Map



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Figure 3-2 | Future Land Use Map



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# 4.0 Hydrological Features

## 4.1 Regional Physiography, Geology, and Hydrogeology

The project study area is centrally located at the I-95/Broward Boulevard Interchange in Broward County, Florida, and extends 1 mile north to the Sunrise Boulevard interchange and 1.5 miles south (0.5 miles south of the Davie Boulevard interchange). The study area is located in the Atlantic Coastal Ridge, a subdivision of the Atlantic Coastal Plain Physiographic Province. Regionally, the Atlantic Coastal Ridge extends along the coast as a low ridge of sand over limestone that ranges in altitude from about 10 to 50 feet above sea level.

At the surface, Pamlico Sand ranges from 2 to 10 feet in thickness. Both the Miami Limestone and Anastasia Formation (geological units of the Biscayne Aquifer) immediately underlie the surface sands. The Miami Limestone consists of sandy onlitic and fossiliferous limestone with a thickness of approximately 40 feet. The Anastasia Formation is composed of sand, sandstone, limestone coquina, and shell beds with a thickness of approximately 120 feet.

The marly sands, sandy marl, and clay marl of the Tamiami Formation, and upper Hawthorn Formations underlie the Anastasia Formation, and form a confining bed overlying the Floridan Aquifer. The upper part of the Hawthorn Formation is encountered at a depth of approximately 320 feet near the project corridor, where it has a thickness of approximately 600 feet.

Hydrogeologic units underlying the project area may be described as two distinct aquifers separated by a confining layer. The Pamlico Sand, Miami Limestone, and Anastasia Formation composed of permeable, sand, limestone, and shell beds comprise the Biscayne Aquifer. The base of the Biscayne Aquifer is approximately 140 feet beneath the land surface in the vicinity of the study area. The confining beds that separate the Biscayne and Floridan Aquifers consists of approximately 620 feet of marly sand, sandy marl, and clay marl of the Tamiami and Hawthorn formations. The Floridan Aquifer, approximately 900 feet beneath the area, is composed of limestone of the Hawthorn (lower part), Tampa, Suwannee, and Avon Park Formations ranging in age from 30 to 60 million years.

The permeable surficial sediments along the alignment are conducive to the contamination of underlying hydrogeologic units. If contamination were present beneath a particular property of interest the likelihood of soil contamination in the unsaturated zone would be elevated. Similarly the contamination of groundwater beneath this property would also be elevated. The likelihood for light non-aqueous phase liquids (i.e. petroleum products), or dissolved constituents to migrate from the area would largely be controlled by the permeability of sediments and the hydrogeologic gradient in the area. Dense non-aqueous phase liquids, commonly associated with chlorinated solvent losses, typically are influenced by permeability differentials in the



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subsurface such that pooling can occur on low permeability horizons located beneath the water table.

**Figure 4-1** shows the topography of the study area, obtained from United States Geological Survey (USGS). Topography in the area is relatively level with the exception of the embankments supporting the I-95 at Broward Boulevard interchange. Areas outside the corridor are also relatively level, having a slight downward slope toward New River North and South Forks. The hydrogeologic gradient and associated groundwater flow direction would be primarily controlled by topography and the presence of surface water bodies exerting an influence on the potentiometric surface. Groundwater flow in the study area is generally toward the east.



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Figure 4-1 | Topographic Map



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# 4.2 Soils

Groundwater flow and contaminant transport are highly dependent on underlying sediments. Based on the Natural Resources Conservation Service (NRCS) Soil Survey, soil types within 500 feet of proposed improvements are classified in **Table 4-1** and shown in **Figure 4-2**. The primary soil types within the project area are Urban Land, Udorthents (shaped), Immokalee (limestone substratum)-Urban land complex, Duette-Urban Land Complex, Basinger Fine Sand, and Arents-Urban Land Complex. In addition, there are small areas of Immokalee-Urban Land Complex.

Most of the soils within the project area are characterized by urban development. These soils have been placed as fill and/or altered by grading. Together, these soils make up approximately 70% of soils in the study area 500-foot buffer.

Table 4-1 | Soils within 500 feet of Proposed Improvements

Soil Polygo n ID	Soil Name	Slop e (Avg.)	Drainage Class	Depth to Water Table (feet below land surface (fbls))	Acres in Project Area	% of Project Area
40	Urban Land	1%	Variable	0.0	112	28.0%
38	Udorthents, shaped	4.4%	Somewhat Poorly Drained	3.0	72.5	18.1%
16	Immokalee, limestone substratum - Urban Land Complex	1%	Poorly Drained	1.0	56.9	14.2%
10	Duette-Urban Land Complex	1%	Moderately Well Drained	5.0	48.5	12.1%
4	Basinger Fine Sand, 0 to 2 percent slopes	0.5%	Poorly Drained	0.5	45.2	11.3%
2	Arents-Urban Land Complex	2.4%	Somewhat Poorly Drained	1.9	44.2	11.0%
17	Immokalee-Urban Land Complex	1%	Poorly Drained	1.0	18.9	4.7%
99	Water				2.1	0.5%
				Total	400.3	100%

Source: NRCS Soil Survey



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Figure 4-2 | Soils Map



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A description of each soil complex identified within the project corridor is provided below:

**Urban Land** (28.0% of study area 500-foot buffer) consists of areas that are 60 to more than 75 percent covered by streets, buildings, large parking lots, shopping centers, industrial parks, airports, and related facilities. Other areas, mostly lawns, parks, vacant lots, and playgrounds are generally altered to such an extent that the former soils cannot be easily recognized and are in tracts too small to be mapped separately.

**Udorthents, shaped** (18.1% of study area 500-foot buffer) consist of nearly level to steep, excessively drained, unconsolidated geological material. They formed in material excavated in the construction of canals and deposited along the banks in long narrow ridges. This material is shaped to form levees that have side slopes of about 35 percent and narrow, flat tops used as roadways. They have no water table within 60 inches. Permeability is rapid with low available water capacity.

Immokalee, limestone substratum-Urban land complex (14.2% of study area 500-foot buffer) consists of nearly level, poorly drained, deep, sandy soil that has a dark colored layer below a depth of 30 inches that is weakly cemented with organic matter, mixed with areas of urban land. The water table is within 10 inches of the surface for 2 to 4 months during wet periods, within 10 to 40 inches for 8 months or more in most years, but it is below 40 inches in dry periods.

**Duette-Urban Land Complex** (12.1% of study area 500-foot buffer) consists of very deep, moderately well drained, moderately rapidly permeable soils on slightly elevated knolls of ridges in flatwoods areas of the Lower Coastal Plains of Florida. They formed in thick beds of sandy marine sediments. Slopes range from 0 to 5 percent.

**Basinger Fine Sand**, **0 to 2 percent slopes** (11.3% of study area 500-foot buffer) consists of nearly level, poorly drained, deep, sandy soil in broad grassy sloughs. The water table is within 10 inches of the surface for 2 to 6 months in most years and within 10 to 30 inches for the rest of the year.

**Arents-Urban Land Complex** (11.0% of study area 500-foot buffer) consists of nearly level, somewhat poorly drained, sandy soils and Urban Land. The soils formed in thick layers of sandy fill material that were placed over low, wet mineral soils to make the areas suitable for urban use. This complex is about 60 to 75 percent Arents and 25 to 40 percent Urban Land. The soil material is generally rapidly permeable in all layers. The available water capacity is low or very low.

**Immokalee-Urban Land Complex** (4.7% of study area 500-foot buffer) consists of 20 to 45 percent open land, such as lawns and vacant lots, and 40 to 70 percent Urban Land or areas covered by sidewalks, streets, patios, driveways, and buildings where the natural soil cannot be



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observed. The open land consists of nearly level, poorly drained Immokalee soils that have been modified in most places by spreading sandy material on the surface of the soil.

# 4.3 Drainage and Surface Waters

The project study area is located in the C-12 and North New River regional drainage basins as shown in **Figure 4-3**.

**Figure 4-4** shows surface water features in the vicinity of the project area. The North Fork of the New River is adjacent to the project's right-of-way running east-west under the I-95 overpass and north-south under the Broward Boulevard overpass. In addition, man-made surface waters (i.e. canals and retention ponds) are in close proximity to the project area 500 foot buffer. One retention pond is located approximately 950 feet north of Broward Boulevard, west of I-95. The other retention pond is located at the Sunrise Boulevard interchange. Four canals are located south of Broward Boulevard between I-95 and the North Fork of the New River.

Existing drainage within the project limits can be divided into four distinct systems based on existing collection and conveyance systems, interconnected stormwater management facilities, and outfalls. The collection systems consist of French drains, multiple dry detention ponds, linear dry detention swales, and curb inlets and solid pipe. Stormwater is conveyed between the management facilities via a series of closed pipes and ultimately outfalls into either the South Fork or North Fork of the New River. Refer to the Preliminary Drainage Report for additional details and figures illustrating existing drainage systems within the project limits.

Drainage for the proposed project consists of closed collection and conveyance drainage systems interconnected by piping to modified, existing stormwater treatment facilities, and French drains to collect, convey, treat, and attenuate stormwater runoff. Local stormwater management will prevent negative impacts to existing conveyances. Attenuation and water quality requirements will be met as required. Refer to the Preliminary Drainage Report for additional details and figures illustrating proposed drainage systems within the project limits.



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Figure 4-3 | Regional Drainage Basins Map



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Figure 4-4 | Surface Waters Map



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# 4.4 Potable Water Supplies

The proximity of the project corridor to public and private wellfields was investigated using Florida Department of Environmental Protection's (FDEP) Map Direct Public Water Supply (PWS) Wells data and the National States Geographic Information Council's Geographic Information System (GIS) Inventory for State Underground Petroleum Environmental Response (SUPER) Act Program Risk Sources in Florida. The SUPER Act was enacted by Florida State Legislature in 1986 in order to conduct drinking water well sampling and investigation around known or suspected contaminated petroleum facilities.

The PWS data provides statewide coverage of PWS wells, excluding federally owned facilities. For this investigation, PWS wells are defined as municipal or community well fields of greater than 100,000 gallons per day permitted capacity. A search radius of one-half mile was used to identify PWS wells for analysis. No PWS wells are located within one-half mile of the project corridor. The nearest PWS well is located approximately 3.2 miles northwest of the project corridor.

The SUPER Act Risk Sources in Florida data provides statewide coverage of information, including well locations, associated with petroleum and dry cleaning facilities investigated as part of the SUPER Act and the Drycleaning Solvent Surveillance Program. A search radius of one-half mile was used to identify public wells. A one-quarter mile search radius was used to identify private wells. No public SUPER Act wells are located within one-half mile of the project corridor. No private SUPER Act wells are located within one-quarter mile of the project corridor. The nearest SUPER Act well is located approximately 1.7 miles southeast of the project corridor.



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# 5.0 Methodology

This report identifies and evaluates known or potential contamination problems, presents recommendations concerning these problems, and discusses possible impacts to the proposed project. Methodologies used to complete this evaluation are in general conformance with the assessment standards as specified in Part 2, Chapter 20 of the FDOT PD&E Manual, as practical. Hazardous materials surveys for asbestos containing materials and metal based coatings were not included in this evaluation.

Data collected from preliminary site reconnaissance, regulatory agency database information review, and subsequent historical land use research was used to identify critical areas for subsequent detailed review. A standard buffer distance of 500 feet was utilized to complete the primary search for registered facilities, historical research, and site reconnaissance to identify land uses with potential concerns. The 500-foot screening distance extends from the outer limits of the project area along the I-95 corridor and Broward Boulevard. The 500-feet distance was selected to include potential offsite drainage ponds and to identify contamination sources that may be of concern when dewatering within the project limits. This buffer distance was extended to 1,000 feet to search for non-landfill solid waste sites and 0.5 miles to search for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA / Superfund), National Priorities List (NPL), and landfill sites.

# 5.1 Data Collection

# 5.1.1 Environmental Database

As part of this Contamination Screening Evaluation, a computerized database search was requested from Environmental Data Resources, Inc. (EDR). The database search included the entire project corridor and a maximum radius of 1,500 feet.

The results of the database search served as a basis for the environmental regulatory review included in a typical Level I Assessment as described in Part 2, Chapter 20 "Contamination" of the FDOT PD&E Manual. **Table 5-1** summarizes the results of the database search; sites may be listed in more than one database. A description of each database included in the search is provided in **Appendix A**. An electronic version of the EDR Corridor Study Report is included with this publication in the associated zip file.



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**Table 5-1 | Summary of Database Findings** 

Database	No. of Sites Found	Database	No. of Sites Found	Database	No. of Sites Found			
Federal Records								
NPL	0	LUCIS	0	2020 COR ACTION	1			
PROPOSED NPL	0	CONSENT	0	LEAD SMELTERS	0			
DELISTED NPL	0	ROD	0	PRP	0			
NPL LIENS	0	UMTRA	0	UXO	0			
SEMS	2	ODI	0	US HIST CDL	0			
SEMS-ARCHIVE	0	US MINES	0	IHS OPEN DUMPS	0			
LIENS 2	0	TRIS	0	SCRD	0			
CORRACTS	1	TSCA	0	FEMA UST	0			
RCRA-TSDF	1	FTTS	1	COAL ASH EPA	0			
RCRA-LQG	0	FTTS INSP	1	FEDERAL FACILITY	0			
RCRA-SQG	3	HIST FTTS	1	COAL ASH DOE	0			
RCRA-CESQG	13	HIST FTTS INSP	1	US AIRS (AFS)	5			
RCRA NonGen / NLR	13	SSTS	0	US AIRS MINOR	5			
US ENG CONTROLS	0	ICIS	1	US FIN ASSUR	0			
US INST CONTROL	1	PADS	0	EPA WATCH LIST	0			
ERNS	38	MLTS	0	FUSRAP	0			
HMIRS	1	RADINFO	0	PCB TRANSFORMER	0			
DOT OPS	0	FINDS	54	FUELS PROGRAM	0			
US CDL	0	RAATS	0	ECHO	47			
US BROWNFIELDS	2	RMP	0	ABANDONED MINES	0			
DOD	0	BRS	0					
FUDS	0	DOCKET HWC	0					



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Table 5-1 | Summary of Database Findings (continued)

Database	No. of Sites Found	Database	No. of Sites Found	Database	No. of Sites Found
State Records		State Records (Cont'd)		Broward County Records	
FL SHWS	0	FL Cattle Dip. Vats	0	AST	9
FL SWF/LF	7	FL TIER 2	19	EDIEAR	10
FL UIC	0	FL SITE INV SITES	2	HM Sites	62
FL SWRCY	0	FL RESP PARTY	5	NOV Sites	5
FL LUST	29	FL FF TANKS	0	UST	16
FL TANKS	6	FL CLEANUP SITES	10		
FL UST	45	FL DWM CONTAM	10	EDR Historical Records	
FL LAST	0	FL NPDES	10	EDR MGP	0
FL AST	11	NY MANIFEST	1	EDR US Hist Auto	74
FL SITES	0	STCM	29	EDR US Hist Cleaner	21
FL SPILLS	34	PCTS	20	RGA LUST	41
FL ENG CONTROLS	1	CLM	6	RGA LF	5
FL INST CONTROL	1			RGA HWS	0
FL VCP	0				
FL DRYCLEANERS	1	Tribal Records		Other Records	
FL PRIORITY CLEANERS	1	INDIAN RESERVE	0	Oil/Gas Pipelines	0
FL DEDB	0	INDIAN ODI	0	Electric Power Transmission Line Data	0
FL BROWNFIELDS	0	INDIAN LUST	0	Sensitive Receptors	0
FL BROWNFIELDS AREAS	0	INDIAN UST	0	Flood Zone Data	0
FL BSRA	0	INDIAN VCP	0	NWI	0
FL WASTEWATER	10			State Wetlands Data	0
FL AIRS	3			Earthquake Fault Lines	0



# 5.1.2 Search Engines and Other Database Resources

Specialized search engines such as FDEP's Document Management System (OCULUS), Information Portal, Map Direct, and Contaminator Locator Map, along with Broward County's Contaminated Locations Database and Contaminated Sites Map, were used to identify regulated facilities within the study area. OCULUS is used by FDEP to store and organize regulatory documents. OCULUS and the Information Portal were used in this analysis to obtain regulatory information regarding Storage Tanks, Hazardous Waste, Solid Waste, and Waste Cleanup. Broward County's Contaminated Locations Database provides information on known contaminated locations within Broward County. These sites include those contaminated with petroleum and non-petroleum constituents. Site information furnished includes facility name, number, location and type, site program type, description of contamination identified, current cleanup status and remediation progress. **Table B-1** in **Appendix B** provides documentation of identified facilities.

# 5.1.3 Historical Imagery Review

Available aerial photographs from 1958 to present were reviewed to identify previous and current land uses which may have the potential to adversely impact project implementation at the proposed interchange. Historical aerial photographs were obtained from the FDOT's Aerial Photo Look-Up System (APLUS) database and Google Earth Services. A minimum of one aerial photograph was reviewed per decade starting with the 1950's. When available, additional historical aerial photographs were reviewed within a decade. Aerial photographs from 1958 through 2016 are provided in **Appendix C**.

# 5.1.4 Corridor Reconnaissance

A project corridor walk-through was performed on April 25 and 26, 2017 and November 12, 2018 for the purpose of observing signs of possible contamination sources such as odors, spills, stains, excavations, storage areas, drains, and the presence of stressed vegetation. The site visits included a visual inspection of properties of concern, within the buffer distances discussed above, for visible signs of potential contamination sources that could adversely impact the project corridor. **Appendix D** provides photographic documentation of the project corridor. Photo numbers were assigned to correspond to Site Numbers as listed in **Table B-1 in Appendix B**.

## 5.1.5 Field Methods

No additional soil and/or groundwater testing was performed as part of this investigation.



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# 5.1.6 Interview with Local Agency Officials

On April 27, 2017, an interview was conducted with Mr. David Singleton, P.G. with the Broward County Environmental Protection and Growth Management Department regarding potential contamination sources along the project corridor. Mr. Singleton did not identify additional contamination sources that were not already identified prior to the interview. Field personnel specifically inquired about Site No. 73 regarding the monitoring well on the southwest corner and the soil berm around the property. Mr. Singleton had no knowledge of the site and was not able to provide information regarding the site's former use.

On April 27, 2017, a meeting was also conducted with Mr. Paul Wierzbicki, P.G. with the FDEP Southeast District, Waste Management Program. Field personnel reviewed and discussed a draft figure of the potential contamination sources along the project corridor with Mr. Wierzbicki. During the interview, Mr. Wierzbicki noted Site No. 21, Transflo Terminal Services, Inc. had numerous spills of various materials during loading activities of tank cars. He also corrected the mapped location of Site No. 41, the former Everglades Fertilizer Company, and suggested this site is of concern due to a fire that occurred at the facility in 1969. Field personnel also inquired about Site No. 73 regarding the monitoring well on the southwest corner and the soil berm around the property. Mr. Wierzbicki had no knowledge of the site and was not able to provide information regarding the site's former use. Furthermore, Mr. Wierzbicki also concurred that the evaluation team's initial research had identified the pertinent potential contamination sources within the project study area.

# 5.2 Potential Impact Determination

Seventy-eight sites were evaluated within the proposed project area. Each site identified within the defined 500-foot screening area from the proposed improvements was evaluated for its potential impact and assigned a rating of High, Medium, Low, or No potential risk. Sites within 200 feet of the project corridor were defined as adjacent to the corridor and rated based on their characteristics. Sites greater than 200 feet from the corridor were rated based on their characteristics and distance from proposed improvements. Risk ratings were assigned in accordance with Part 2, Chapter 20, Section 2.2.4 of the FDOT PD&E Manual and District 4 requirements. Details of the rating criteria for all risk levels are discussed below.

Additionally, sites were evaluated for potential dewatering concerns. Sites within 500 feet of the project corridor with documented, unresolved groundwater contamination have the potential to impact dewatering operations during construction activities. Site assessment maps are provided in **Appendix B** for sites with potential dewatering concerns.



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# 5.2.1 High Risk

Any site that has had a release that has not been resolved and is not under investigation, monitoring, or cleanup in a federal, state, or county program is rated a High risk. Sites historically or currently operating as gas stations, dry cleaning facilities, nurseries, or salvage yards that are not in a program, have never been assessed, and are adjacent to the corridor are also rated a High risk. Reconnaissance observations, information obtained from local agency officials, and details obtained from site research can also cause a site to be rated a High risk. A High risk rating indicates that after review of all available information, it has been determined that contamination could substantially impact the project. In addition, further assessment may be required to determine the actual presence and/or levels of contamination and the need for remedial action.

## 5.2.2 Medium Risk

Any site that is adjacent to the corridor and has had a release that is under investigation, monitoring, or cleanup in a federal, state, or county program is rated a Medium risk. Sites adjacent to the corridor with resolved releases that have been "finalized" [e.g. Site Rehabilitation Completion Order (SRCO)] are also rated a Medium risk. While it appears the release/spill has been "addressed" there are many examples of rebound and/or missed or migrated contaminants for this type of site that preclude a Low risk rating. In addition, it can be difficult to determine why the release occurred (i.e. faulty equipment, poor procedures and practices, undertrained employees etc.) so the "risk" associated with the original release could still be present thereby earning at least a Medium risk for the property as a release/spill can occur at any time and might not be detected. A Medium risk rating indicates that after review of all available data, there is a potential for contamination impacts to the project.

Additionally, if an underground storage tank (UST) or aboveground storage tank (AST) was removed from a site, but there is no Tank Closure Assessment Report (TCAR) or other assessment data on file, and the site is adjacent to the corridor, then the site is rated a Medium risk. Reconnaissance observations, information obtained from local agency officials, and certain details obtained from site research can also cause a site to be rated a Medium risk.

#### **5.2.3** Low Risk

A Low risk rating indicates that the former or current operation has a hazardous waste generator identification (ID) number, or deals with hazardous materials, and is adjacent to the corridor. However, based on all available information, there is no reason to believe contamination exists onsite. A Low risk site can be any licensed facility that stores hazardous materials and/or potential contaminants and has never had a documented release or violation for a release. If a



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licensed material "storer" had a minor, well documented violation in the past that was well manage, not repeated, and completely addressed and documented, this site would be a Low risk.

If a UST or AST was removed from a site, and there is a TCAR which documents that no soil or groundwater contamination was detected during removal, then the site can be rated a Low risk.

A Low risk rating indicates it is not likely there would be any contamination impacts to the project from these sites. Distance from the project corridor can cause a site to be rated a Low risk that might otherwise be rated higher.

## 5.2.4 No Risk

A No risk rating indicates that after a review of all available information, including distance from the project corridor, there is nothing to indicate contamination would be a problem. It is possible contaminants were handled on the property; however, all information indicates contamination problems should not be expected.



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# 6.0 Project Impacts

Section 8 of this report provides a summary table of the historical imagery review, depicts the location of each potential contamination source within 500 feet of the project corridor, and provides a narrative discussion detailing sources of concern.

# 6.1 Historical Imagery Review

Aerial photographs from 1958 through 2016 are presented in **Appendix C** as **Figures C-1 through C-7**. A map grid has been superimposed on each photograph to orient the image in reference to the current project study area. The results of the historical imagery review are presented in tabular form as **Table C-1** in **Appendix C**. Further detail is provided in the digital files, included with this publication, allowing electronic manipulation of each photograph.

To facilitate aerial photograph review, the interchange was sub-divided into three geographic sections: South (1), Center (2), and North (3). These sections cover areas within one-quarter mile of the I-95 corridor and extend from the South Fork of the New River at I-95 northward to NW 14<sup>th</sup> Street. No new areas of contamination concern were identified, as a result of the aerial photograph review, within the limits of the defined 500-foot buffer distance from the proposed improvements. A brief summary of the historical imagery review for each interchange is presented below.

# South (1)

In the 1958 aerial, I-95 is not yet present. The section is already heavily developed with approximately 75% of land area improved with residential neighborhoods. The area that will later become the I-95 north/south corridor is predominantly wooded and undeveloped.

By 2016, the section is extensively built-out. The I-95 corridor runs through the center of the section and has been widened to accommodate additional lanes. The western side of the I-95 corridor has commercial development throughout the section, including to the north. In the northwest of the section, an area that was previously residential development north and adjacent to Riverland Elementary School has been redeveloped as Riverland Park.

# Center (2)

In the 1958 aerial, I-95 is not yet present. Large undeveloped tracts of land (fields with some wooded areas) are present in the northwest corner of the section. A large commercial building surrounded by a parking lot is visible in the center of the section just to the south of West Broward Boulevard, within the present-day I-95 north-south corridor. The remainder of the present day corridor is primarily undeveloped.



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By 2016, I-95 has been constructed from north to south in the center of the section, with multiple lanes, parallel access roads, and elevated roadways. A large pond now appears in the northwest corner of the section. Commercial/industrial development exists to the south of this pond, to the East of I-95 just south of the river, and just west of I-95 in the south-central part of the section. The Broward Regional Detention center can be seen just to the west of the I-95 corridor and just south of the river. A large parking lot north of the Fort Lauderdale Tri-rail station is visible just west of the I-95 corridor and north of West Broward Boulevard.

## North (3)

In the 1958 aerial, I-95 has not yet been constructed. Dense residential development exists east of the present-day I-95 corridor, which is undeveloped and predominantly wooded. To the west of the present-day I-95 corridor, a network of roads has been established. Residential development exists in the northwest portion of the section, while the southwest portion has larger tracts of undeveloped land.

In the 2016 aerial, I-95 extends north/south through the center of the section. A retention pond can be seen just east of the corridor and just north of West Sunrise Boulevard. Warehouse/commercial buildings are visible in the southwest corner of the section, and also just west of the I-95 corridor and just north of West Sunrise Boulevard. The median between I-95 north and south has been redeveloped to add additional lanes. The section is extensively built out with little room for new development.

# 6.2 Potential Contamination Sources

Potential contamination sources along the project corridor were identified using a combination of data systems that include a computerized database search, environmental records, aerial photographs, and right-of-way survey maps, as well as a corridor reconnaissance performed in April 2017 and November 2018.

After a thorough review of records and information obtained from site reconnaissance, it was discovered that multiple database listings (e.g. sources with different names with an identical address) actually represented one source. In these situations, these sources were combined into a single potential contamination source using the best available descriptor to name the source (i.e. current business name, vacant lot, etc.).

One of the data systems (EDR DataMap<sup>™</sup> Area Study) used to identify potential contamination sources found 108 unmapped sites. These sites, known as Orphan Sites, are unmapped due to poor or inadequate address information. Each Orphan Site was reviewed in an attempt to manually locate these potential contamination sources. **Table B-1 in Appendix B** lists potential



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contamination sources and includes contamination risk ratings, sampling recommendations, and regulatory review for each source identified within the 500-foot project study area.

# 6.3 Contamination Risk Rating

Interviews were conducted, available EDR information reviewed, and documents obtained from FDEP's OCULUS database to determine the current regulatory status of each potential contamination source. Each source's history and regulatory status was evaluated (and in some cases the lack of available regulatory information was noted), and then each source was assigned a contamination risk rating in accordance with the FDOT PD&E Manual, Part 2, Chapter 20 guidance and FDOT District 4 requirements relative to encountering impacted soil or groundwater (reference **Appendix B, Table B-1**). **Table 6-1** provides a summary of the High, Medium, Low, and No risk ratings. An electronic version of the EDR Corridor Study Report and regulatory documents are included with this publication in the associated zip file.

Table 6-1 | Summary of Potential Contamination Sources Risk Ratings

Risk Rating	Number of Sites		
High	13		
Medium	17		
Low	27		
No	21		
Total	78		

The High and Medium risk rated sites are detailed in Sections 7.5 and 7.6, respectively. **Figures B-1 through B-4, in Appendix B**, illustrate the location of potential contamination sources within the project study area.

# 6.4 Analysis of Potential Contamination Sources

This evaluation identified 78 non-residential facilities (sites) within the study area. Some sites occupy more than one address, some addresses have more than one site, and there are many inconsistencies in the business names and addresses used in the databases. Therefore, parcel boundaries are used to organize the data rather than addresses or business names. The use of parcel boundaries also facilitates the evaluation of potential contamination risks during right-of-way acquisition.



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Sites were evaluated independently. If applicable, pathways for potential contamination migration were identified. Former activities and conditions are described in each site narrative if known and applicable. **Table B-1** lists all the potential contamination sites identified within the 500-foot screening area, arranged by site number (Site No.). Locations of the sites are shown on **Figures B-1 through B-4 in Appendix B**. The parcel boundaries are color-coded by risk rating as noted in the legend. Site numbers were assigned geographically, starting in the south quadrant, then moving from west to east across a horizontal transect, and concluding in the north quadrant. As noted above, some sites contain multiple business names and addresses.

The following narratives summarize site activities, regulatory status (if any), and risk rating rationale for identified potential contamination sources. In addition to each source's name, address, and facility IDs, the narratives include photo numbers, figure references, distances to the project corridor, and references to state or local contamination resources, if applicable.



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# 6.5 High Risk Potential Sites

This section addresses all High Risk potential sites that are located within the 500-foot screening area.

#### Site No. 6 (High Risk)

Site Address: 1321 SW 20<sup>th</sup> Terrace

Ft. Lauderdale, FL 33302

Site Names: FDOT ROW

(Former) Rad-Air

Photo ID Nos.: 5-1, 5-2

Figure Nos.: B-1, B-2

Facility IDs: 8901971

FL0000109611 FLTMP8901971

Distance to Project: Within Corridor

Contamination Concern: Volatile Organic Compounds (VOCs), Lead, Uncontrolled

Waste Disposal

This site is assigned a High risk rating based on documented soil contamination that may be present at the site and the lack of groundwater assessment data.

FDEP indicates the site address is 1321 21st Terrace, but this appears to be an error based on mapped locations of the site. The site address is actually 1321 20th Terrace. The site was a former vehicular radiator repair shop. A September 1991, Preliminary Contamination Assessment Plan (Plan) states stained soil with a deep blue color was encountered and a sheen was observed floating on the water table within an excavated area. Elevated VOCs were detected in soil samples. Local property owners indicated the vicinity of the site had been subjected to previous dumping and collection of random trash before the site was developed. The Plan discusses field work, sampling, surveys, and inspections that will be conducted. No additional information was available for review.

Additionally, the site was issued a temporary waste handler ID for 10,285 pounds of "non-hazardous waste determined to be hazardous (Lead)."



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## Site No. 8 (High Risk)

Site Address: 1300 SW 20<sup>th</sup> Terrace

Ft. Lauderdale, FL 33302

Site Names: FDOT ROW

(Former) Hamid Imports

Photo ID Nos.: 5-1, 5-2

Figure Nos.: B-1, B-2

Facility ID: 8733227

Distance to Project: Within Corridor

Contamination Concern: Petroleum

This site is assigned a High risk rating based on documented contamination that may be present at the site.

A 1986 Storage Tank Notification Form indicates one, 550-gallon waste oil UST was installed in January 1980. A 1991 Facility Detail Report indicates a second UST also existed at the facility. This 2,000-gallon UST with unknown contents was installed in December 1969. Both tanks were removed in December 1989.

In December 1988, an Early Detection Incentive (EDI) program application was submitted for the site in response to unleaded gasoline, diesel, and used oil contamination discovered during groundwater analysis. In an April 1990 decision letter, the facility was deemed ineligible for the EDI program because the Florida Department of Environmental Regulation (FDER) could not verify that contamination existed at the facility. The groundwater analysis that lead to the EDI application was not available for review.

A 2016 Site Manager Summary report agrees with the EDI decision letter that the contamination cannot be verified and concludes no additional cleanup is required for this discharge. No assessment or other investigative methodology was available for review.



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## Site No. 10 (High Risk)

Site Address: 2010-2015 Davie Boulevard

Ft. Lauderdale, FL 33312

Site Names: FDOT Broward Boulevard I-95 Overpass

(Former) Exxon #5587

(Former) Davie Boulevard Exxon Service (Former) Taylor Tom Boulevard Enco Service

(Former) PT Texaco Service

(Former) Welchs Dick Texaco Service

Photo ID Nos.: 10-1, 10-2

Figure Nos.: B-1, B-2

Facility ID: 8501823

Distance to Project: Within Corridor

Contamination Concern: Petroleum

This site is assigned a High risk rating based on a former discharge at the site and potential contamination that may be present.

One 4,000-gallon UST and four 3,000-gallon USTs containing leaded and unleaded gasoline and one 550-gallon UST (contents unknown) were installed in 1967 and removed in December 1986.

An FDEP file summary review in March 2004 indicates that a discharge occurred in July 1987. Available data indicates the facility applied to the EDI program as a result of this discharge and was deemed ineligible in April 1990. The facility's cleanup status is listed as "completed."

A 2016 Site Manager Report indicates no information is available about the quantity or type of discharge reported. A Site Manager request to BCDEP for the 1987 Discharge Reporting Form and 1990 Eligibility Decision Letter indicate these documents no longer exist in County records because the site has been closed for many years.

This site has a minimal history. No assessment or other investigative methodology was available for review. The presence or nature of soil and/or groundwater contamination cannot be determined for this site other than the file entry stating the cleanup status as "completed."



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Field reconnaissance personnel noted a groundwater monitoring well at the location of the former gas station.



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## Site No. 11 (High Risk)

Site Address: 1900 Davie Boulevard

Ft. Lauderdale, FL 33312

Site Names: FDOT Broward Boulevard I-95 Overpass

(Former) Carl's Riverside Standard Service

(Former) Riverside Standard Service

(Former) Mike's Standard Oil

Photo ID Nos.: 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7

Figure Nos.: B-1, B-2

Facility ID: None

Distance to Project: Within ROW

Contamination Concern: Petroleum

This site is assigned a High risk rating based on records of historical gas station operations from 1957-1975 and no records indicating the site has been assessed. The site could not be located in FDEP's information portal and no documents were available for review. Field reconnaissance personnel noted a groundwater monitoring well at the location of the former gas station.



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## Site No. 17 (High Risk)

Site Address: 2015 SW 11<sup>th</sup> Court

Ft. Lauderdale, FL 33312

Site Names: FDOT ROW

(Former) Bryan Electric, Inc.

Photo ID Nos.: 17-1, 17-2

Figure Nos.: B-1, B-2

Facility ID: 8838191

Distance to Project: 90 feet

Contamination Concern: Petroleum

This site is assigned a High risk rating based on documented contamination that may be present within the ROW.

A 1991 Facility Detail Report and a 1990 Storage Tank Notification Form indicate one, 4,000-gallon unleaded gasoline UST was removed in December 1989.

In December 1988, an EDI program application was submitted for the site in response to unleaded gasoline contamination discovered during groundwater analysis. In a July 1990 decision letter, the facility was deemed ineligible for the EDI program because FDER could not verify that contamination existed at the facility on or prior to the December 31, 1988 reporting deadline. The groundwater analysis that lead to the EDI application was not available for review.

A 2016 Site Manager Summary report agrees with the EDI decision letter that the contamination cannot be verified and concludes no additional cleanup is required for this discharge. No assessment or other investigative methodology was available for review.



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## Site No. 21 (High Risk)

Site Address: 890 SW 21st Avenue

Ft. Lauderdale, FL 33312

Site Names: Transflo Terminal Services, Inc. (TTSI)

(Former) Arrow Material Services

(Former) Carmen's Siding (Former) Bulk Intermodal

(Former) Distribution Services First Recovery

Photo ID Nos.: 21-1, 21-2

Figure Nos.: B-1, B-2

Facility IDs: FLD984239145

FLD984253542 ERNS 9167689

OHMIT Incident No. 47526 OHMIT Incident No. 15943

Distance to Project: 119 feet

Contamination Concerns: Petroleum, Hazardous Waste – Cadmium, Chromium, Lead,

Benzene

This site is assigned a High risk rating based on an interview with a FDEP official who noted this facility had numerous spills of various materials onsite during loading activities.

This facility has records in FDEP's Information Portal under two different facility numbers and business names (Transflo Terminal and Ft. Lauderdale Transflo Terminal) that appear to pertain to the same site and business. In May 1992, the site registered as a Conditionally Exempt Small Quantity Generator (CESQG) under former business name "First Recovery." Wastes identified included Cadmium, Chromium, Lead, and Benzene. The site also registered as a Used Oil Transfer Facility from 1995 through 1999. A March 2014 site inspection of the facility under business name Arrow Material Services indicated the site was operating as a CESQG and was in compliance. No records or violations of enforcement activities were found in FDEP's electronic documents. Field personnel did not enter the property during the reconnaissance.



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## Site No. 29 (High Risk)

Site Address: 300 SW 21st Terrace

Ft. Lauderdale, FL 33312

Site Name: CSX Transportation Railyard

Photo ID Nos.: 29-1, 29-2, 29-3, 29-4

Figure Nos.: B-1, B-3

Facility ID: FLD981022478

**ERNS 51005** 

Distance to Project: 122 feet

Contamination Concerns: Petroleum, Hazardous Waste, Herbicides, Pesticides, Coal

Ash, PCBs, Hazardous Material - Hydrochloric Acid

This site is assigned a High risk rating based on the potential for contamination from historical railway operations. The site does not have documented contamination but is presumed contaminated.

In January 1988, a hydrochloric acid spill of one gallon was reported to the Emergency Response Notification System (ERNS) as the result of a corroded rail car valve. The file summary records indicate the spill was neutralized.

Rail corridors are at high risk for soil and/or groundwater contamination. This risk derives from the potential for unreported spills associated with historical and ongoing use in transporting freight, as well as rail industry maintenance practices. The USEPA considers railfields, which include rail tracks and railroad rights-of-way, as a subset of brownfield properties. The USEPA states that "residual contamination including herbicides, petroleum products and byproducts, metals, and creosote, is often present as a result of the former railroad operations and associated industrial activities" (August 2005).

In many cases, rail corridors through urban areas connect or previously connected to loading/unloading areas at adjacent industrial sites with a spur. The USEPA notes that railway yards may consist of any combination of track and switching areas, engine maintenance buildings, engine fueling areas, bulk and container storage and transfer stations, and storage areas for materials used in track and engine maintenance. The USEPA also notes that, "virtually any type of chemical contamination could be present because of the variety of chemicals used at and transported through railroad yards" (BTSC July 2017).



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This site was inspected during corridor reconnaissance. Field personnel did not identify stressed vegetation, surface staining, groundwater monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS or internet search databases for review.



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## Site No. 41 (High Risk)

Site Address: 2001 W Broward Boulevard

Ft. Lauderdale, FL

Site Names: FDOT Transportation Corridor & right-of-way

(Former) Everglades Fertilizer Co

Photo ID Nos.: 41-1, 41-2

Figure Nos.: B-1, B-3

Facility ID: FLD984262774

Distance to Project: Within Corridor

Contamination Concerns: Barium, Cadmium, Chromium, Lead, Mercury, Silver,

Hexachlorocyclohexane (Lindane) and Chlordane

This site is assigned a High risk rating based on an interview with an FDEP official who noted the facility's history as a large quantity generator (LQG) and an onsite fire in 1969.

The facility burned in 1969. No details were available as to the severity or environmental impact of the fire. Typical fire department responses do not include recovery of the extinguishing media and often result in spreading the constituents of concern (CoCs).

The facility was issued a LQG permit in November 1993 for waste codes associated with Barium, Cadmium, Chromium, Lead, Mercury, Silver, Hexachlorocyclohexane (Lindane), and Chlordane. The records also indicate the facility stored Cyanide and Copper salts and "sludges." This permit has been included on the USEPA "No Longer Listed" list. The facility was listed as "Closed/Moved" in September 1996. No documentation of facility inspections was available for review.

The site has minimal reviewable history, but the available history does indicate the severity of the potential contamination at this site. The Environmental First Search report, purchased for the 2013 CSER, included the following statement: "It could be argued that this site was addressed by a cap when the DOT constructed I-95's southbound exit ramp for Broward Boulevard directly above it. The acreage was covered with 10 to 15 feet of compacted fill. The state is seeking assurance from DOT that any future modification to the roadway take into account the potential for contaminated soils to be exposed."



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## Site No. 47 (High Risk)

Site Address: Rail Corridor - 100 feet north and south of the Broward

Boulevard Intersection, Parallel to I-95

Ft. Lauderdale, FL

Site Name: CXS Railroad Corridor

Photo ID Nos.: 47-1, 47-2

Figure Nos.: B-1, B-3

Facility ID: None

Distance to Project: Within Corridor

Contamination Concerns: Petroleum, Hazardous Waste, Herbicides, Pesticides, Coal

Ash, Polychlorinated Biphenyls (PCBs)

This site is assigned a High risk rating based on the potential for contamination from historical railway operations. The site does not have documented contamination but is presumed contaminated.

The entire rail corridor within the project buffer is not identified as High risk. Site No. 47 is a section of the rail corridor defined as 100 feet north and south of the Broward Boulevard and CSX intersection. Based on alternatives presented in Section 2 of this report and the concept plans presented in **Appendix E**, the rail corridor in this area will be directly impacted by construction activities. If a design change encroaches on other areas of the rail corridor beyond this site, those areas should be re-evaluated.

Rail corridors are at high risk for soil and/or groundwater contamination. This risk derives from the potential for unreported spills associated with historical and ongoing use in transporting freight, as well as rail industry maintenance practices. The USEPA considers railfields, which include rail tracks and railroad rights-of-way, as a subset of brownfield properties. The USEPA states that "residual contamination including herbicides, petroleum products and byproducts, metals, and creosote, is often present as a result of the former railroad operations and associated industrial activities" (August 2005).

In many cases, rail corridors through urban areas connect or previously connected to loading/unloading areas at adjacent industrial sites with a spur. The USEPA notes that railway yards may consist of any combination of track and switching areas, engine maintenance buildings, engine fueling areas, bulk and container storage and transfer stations, and storage areas for materials used in track and engine maintenance. The USEPA also notes that, "virtually



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any type of chemical contamination could be present because of the variety of chemicals used at and transported through railroad yards" (BTSC July 2017).

This site was inspected during corridor reconnaissance. Field personnel did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS or internet search databases for review.



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## Site No. 50 (High Risk)

Site Address: 1800 W Broward Boulevard

Ft. Lauderdale, FL 33312

Site Names: Vacant Building

(Former) Neals American Service (Former) RD American Service

(Former) Bill's Amoco Service Garage

Photo ID Nos.: 50-1, 50-2, 50-3, 50-4

Figure Nos.: B-1, B-3

Facility ID: None

Distance to Project: Adjacent

Contamination Concerns: Petroleum, Hazardous Waste

This site is assigned a High risk rating based on historical operations as a gas station with no records indicating the site has been assessed.

EDR lists this site as a Historical Gas Station from 1965-1975. Field reconnaissance personnel noted the existing building was currently under construction to be converted into office space. A groundwater monitoring well was noted in the parking lot in the rear of the building. No additional environmental concerns were noted.



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## Site No. 61 (High Risk)

Site Address: 2130-2140 NW 6<sup>th</sup> Street

Ft. Lauderdale, FL 33311

Site Names: Vacant Land

City of Fort Lauderdale Community Redevelopment Agency

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ETDM: 14226

(Former) Haygood Property (Former) JDS Pure Oil Service (Former) Chucks Cities Service

(Former) Modern Garage Service Station

(Former) Seymores Union 76

(Former) JD's Union 76

Photo ID Nos.: 61-1, 61-2, 61-3, 61-4

Figure Nos.: B-1, B-3, B-4

Facility IDs: 9806560

8942733

BCEPD-7644

Distance to Project: 100 feet

Contamination Concerns: Petroleum

This site is assigned a High risk rating based on historical operations as a gas station and the lack of site assessment records.

A closure license issued in September 1987, by the Broward County Environmental Control Board indicates two, 1,000-gallon USTs were removed from former site occupant Seymour's Union 76. A November 2005 TCAR Review Form indicates an additional two, 500-gallon USTs were removed. This form indicates the tank removal met Chapter 62-761 Florida Administrative Code (FAC) requirements, no contamination was present, and no further action (NFA) was required. No other documents were available for review.



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## Site No. 67 (High Risk)

Site Address: 700 NW 21st Terrace

Ft. Lauderdale, FL 33311

Site Name: Ferrous Processing and Trading Co., FPT Fort Lauderdale

LLC, dba Sunrise Recycling

Photo ID Nos.: 67-1, 67-2

Figure Nos.: B-1, B-4

Facility ID: 4985057

BCEPD-107

Distance to Project: 187 feet

Contamination Concern: Hazardous Waste, Petroleum

This site is assigned a High risk rating based on site operations and field observations.

This site operates as a metal recycling/salvage yard. Poor housekeeping practices, typical of salvage yards, were observed from the public right-of-way. Field reconnaissance personnel noted heavy machinery operating onsite and numerous piles of salvaged material scattered throughout the property. No documents were available for review in FDEP's Information Portal.



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## Site No. 75 (High Risk)

Site Address: 977 NW 19<sup>th</sup> Avenue

Ft. Lauderdale, FL 33311

Site Name: Sunrise Used Auto Parts

Photo ID Nos.: 75-1, 75-2

Figure Nos.: B-1, B-4

Facility IDs: BCEPT-1135

ERNS 590684

OHMIT Incident No. 16092

Distance to Project: 157 feet

Contamination Concern: Petroleum

This site is assigned a High risk rating based on field observations and records indicating poor housekeeping operations onsite.

This site is located adjacent to the I-95 northbound lanes at the southeast corner of I-95 and Sunrise Boulevard and operates as an automotive and truck parts recycling/salvage yard. Poor housekeeping practices, typical of older salvage yards, were observed from the public right-of-way. A report filed with ERNS in August 1998, referenced the following: "oily mess all over lot coming from tanks and cars." The site has no records of assessment and/or remedial actions. Field reconnaissance personnel noted this facility has numerous auto parts scattered throughout the property. Several drums and apparent petroleum staining were also noted at the facility.



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# 6.6 Medium Risk Potential Sites

This section addresses all Medium Risk potential sites that are located within the 500-foot screening area.

## Site No. 1 (Medium Risk)

Site Address: 1050 SW 20<sup>th</sup> Way

Ft. Lauderdale, FL 33312

Site Names: FDOT I-95 Corridor

(Former) Reliance Supply Company

Photo ID Nos.: 1-1, 1-2

Figure Nos.: B-1, B-2

Facility ID: 8732560

Distance to Project: Within ROW

Contamination Concern: Xylene

This site is assigned a Medium risk rating based on UST removal from the site and lack of an associated TCAR or assessment data on file for review.

A January 1987 Storage Tank Notification Form indicates Reliance Supply Company had a 2,000-gallon UST containing Xylene at the site. A January 1991 Facility Detail Report indicates FDOT became the property owner in 1988. The report notes one, 2,000-gallon UST has been removed from the site, and lists no active, closed, or inactive tanks.



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## Site No. 3 (Medium Risk)

Site Address: 1491 SW 21<sup>st</sup> Avenue

Ft. Lauderdale, FL 33312

Site Names: 3 Brothers Custom Interior and Exterior Yacht Painting

(Former) Florida Electric Service Company Inc.

Photo ID Nos.: 3-1, 3-2, 3-3, 3-4

Figure Nos.: B-1, B-2

Facility IDs: SQG-9667

**BCEPD-3002** 

Distance to Project: 160 feet

Contamination Concern: Hazardous Waste

This site is assigned a Medium risk rating based on the observation of asphalt staining and poor housekeeping practices during field reconnaissance.

This site has no reported discharges or violations. The site is listed in FDEP's Information Portal as a SQG, however, no documents were available for review. Field reconnaissance personnel noted the facility had several 55-gallon drums, 5-gallon buckets, and one 5-gallon gas can stored onsite in the southeast corner of the property. Field personnel did not identify the contents stored in each container. The gas container was laying on its side and there appeared to be staining on the asphalt in the vicinity.



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## Site No. 5 (Medium Risk)

Site Address: 1350 SW 20<sup>th</sup> Terrace

Ft. Lauderdale, FL 33312

Site Names: FDOT ROW

(Former) Holland Builders (Former) The Steering Wheel

Photo ID Nos.: 5-1, 5-2

Figure Nos.: B-1, B-2

Facility ID: 8944445

Distance to Project: Within Corridor

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on former USTs and lack of associated assessment data on file for review.

A 1991 Facility Information Report indicates two USTs were removed in 1989: one, 5,000-gallon leaded gasoline UST with an install date of 1970, and one, 550-gallon UST with unknown contents and install date.

A 2017 Site Manager Summary report states an EDI application was submitted in December 1988 in response to leaded gasoline contamination discovered during groundwater analysis. An FDER letter dated July 1990 confirms the site had applied to the EDI program, and was determined to be ineligible because FDER could not verify that contamination existed at the facility on or prior to the December 31, 1988 reporting deadline. The groundwater analysis that lead to the EDI application was not available for review.

The Site Manager Summary report also states a Preliminary Contamination Assessment Plan was developed in September 1991. This assessment plan was not available for review.

The Site Manager Summary report agrees with the EDI decision letter that the contamination cannot be verified and concludes no additional cleanup is required for this discharge.



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## Site No. 7 (Medium Risk)

Site Address: 1309 SW 21st Terrace

Ft. Lauderdale, FL 33316

Site Names: R. Hamann & Sons Demolition

(Former) 1-800 Asphalt Inc.

Photo ID Nos.: 7-1, 7-2

Figure Nos.: B-1, B-2

Facility ID: 9814916

Distance to Project: 387 feet

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on documented cleanup of petroleum contamination.

A July 2015 Discharge Reporting Form indicates soil and groundwater were impacted by an unknown quantity of asphalt/waste oil. No tanks were present onsite and the source of the spill was unknown. A No Further Action Proposal (NFAP) was approved in March 2016. In June 2016, FDEP issued an SRCO for the site after a Site Assessment Report (SAR) report indicated no constituents above CTLs. The SAR indicated Groundwater flow at the site is towards the north.



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#### Site No. 9 (Medium Risk)

Site Address: 2120 Davie Boulevard

Ft. Lauderdale, FL 33312

Site Names: FDOT ROW

(Former) BP #00367219 (Former) A One Gulf

(Former) Herbies Gulf Station (Former) Davis Matt Gulf Service

Photo ID Nos.: 9-1, 9-2, 9-3

Figure Nos.: B-1, B-2

Facility ID: 8501433

Distance to Project: Within ROW

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on documented contamination from former USTs that has been remediated and issued an SRCO.

Five 3,000 gallon USTs containing leaded and unleaded gasoline and a 550 gallon waste oil UST were installed in 1965 through 1966 and removed in June 1989. The site's contamination history begins when a Discharge Reporting Form (DRF) was filed in December 1988 after free-floating product was discovered in a monitoring well. Initial Remedial Actions (IRAs) performed in February 1989 recovered 2,890 gallons of petroleum impacted groundwater and free-floating product by vacuum truck (1,360 gallons of gasoline) and excavated approximately 220 tons of petroleum impacted soil. In March 1989, and in accordance with EDI requirements, FDER requested a complete Contamination Assessment Report (CAR)/Remedial Action Plan (RAP) be submitted. As of November 1989, 3,195 gallons of free-floating product had been recovered. The site was assigned an EDI score of 18 in February 1990.

The CAR submitted in September 1990 indicated that the premium grade unleaded UST had been breached and had an inventory discrepancy indicating 1,500 gallons of product had discharged. Groundwater flow direction was determined to be south and excessively contaminated soil and groundwater exceeding CTLs remained on site. In August 1991, FDER approved the RAP, consisting of groundwater pump and treat (air stripping) methodology. The remediation system operated from February 1992 to April 1992 and was removed prior to



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attaining the desired CTLs due to encroaching FDOT ramp construction at the Davie Boulevard/I-95 interchange. FDEP considered the passage of time and proposed construction activities more than adequate to mitigate the remaining contamination. A RAP Addendum, submitted in March 1995, indicated that CTLs had been attained and the site was issued an SRCO in October 1995. A visual reconnaissance of the site confirmed that the site has been redeveloped as part of the western Davie Boulevard/I-95 interchange.



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#### Site No. 12 (Medium Risk)

Site Address: 1880 Davie Boulevard

Ft. Lauderdale, FL 33312

Site Names: FDOT ROW

(Former) Texaco #240211355 (Former) Tenneco Station #145

Photo ID Nos.: 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7

Figure Nos.: B-1, B-2

Facility IDs: 8502757

FLD984190173 BCEPD-1577

Distance to Project: Within ROW

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on documented contamination that has been remediated and the site issued an SRCO. This site is listed on Broward County's Contaminated Sites Map.

A September 1990 Tank Registration Form indicates three, 12,000-gallon UST's were removed in September 1990. In an attached letter, it is indicated remedial activities were initiated to address excessively contaminated soils encountered during the tank removal. An August 1996 Approval Letter indicated an SRCO was issued that demonstrated the site met cleanup criteria and was considered closed. Groundwater flow at the site is towards the south-southwest.

A July 2000 Free Product Recovery Inspection listed the facility's status as closed.



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#### Site No. 13 (Medium Risk)

Site Address: 2101 Davie Boulevard

Ft. Lauderdale, FL 33312

Site Names: Tech Center - Shell-Davie Auto Care

(Former) STM Automotive & Radiator

(Former) Davie I-95 Shell

(Former) Hokes Shell Service Station (Former) Bocar Shell Service Station (Former) Clarks Shell Service Station

Photo ID Nos.: 13-1, 13-2, 13-3, 13-4

Figure Nos.: B-1, B-2

Facility ID: 8502630

Distance to Project: 198 feet

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on documented contamination that has been remediated and the site issued an SRCO.

An August 1994 Storage Tank Registration Form indicates the site had three, 10,000-gallon and one, 500-gallon USTs installed in December 1983. Petroleum contamination was noted when the tanks were removed in March 1994. Completion related documents in FDEP Oculus indicate the site received the SRCO in December 1995. A November 1995 report indicates groundwater flow was towards the south-southeast. Field reconnaissance personnel noted a groundwater monitoring well on the property.



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#### Site No. 14 (Medium Risk)

Site Address: 1905 Davie Boulevard

Ft. Lauderdale, FL 33312

Site Names: Abandoned Gas Station

(Former) Exxon Station / Texaco-Debs

(Former) Dawn Donuts Exxon

(Former) Exxon-Siler

(Former) Sunmark Industries (Former) Sunoco Service Station (Former) Midway Sunoco Service

Photo ID Nos.: 14-1, 14-2, 14-3, 14-4

Figure Nos.: B-1, B-2

Facility IDs: 8630272

8842246

FLD000655142 BCEPD-3333

Distance to Project: 90 feet

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on documented contamination that has been remediated and the site issued an SRCO.

The site has a history of assessment and remedial activities related to two discharges in 1987 and 1991. A DRF was submitted in October 1987 in response to petroleum contamination discovered in groundwater monitoring wells. A DRF was filed in February 1991 after a non-tight union was discovered on two dispensers. An SRCO was issued in February 2002 for the 1987 discharge and an approved TCAR for the 1991 discharge. Field reconnaissance personnel noted the fuel dispensers were removed from the property and the fuel lines capped. No aboveground storage containers were noted on the property.



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#### Site No. 22 (Medium Risk)

Site Address: 1000 SW 20<sup>th</sup> Way

Ft. Lauderdale, FL 33312

Site Names: FDOT I-95 Corridor

(Former) American Land Cruisers / Cruise America

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ETDM: 14226

(Former) Coney Island Racetrack

Photo ID Nos.: 22-1, 22-2

Figure Nos.: B-1, B-2, B-3

Facility IDs: 8944444

**BCEPD-1589** 

Distance to Project: Within Corridor

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on eligibility for the EDI program and a remediation status of Inactive. This site is listed on the FDEP Contamination Locator Map and Broward County's Contaminated Sites Map. This site is a potential dewatering concern due documented groundwater contamination.

From 1976 to 1985 this site operated as a go-cart racetrack/arcade by Coney Island Racetrack. In April 1985, the property was sold to American Land Cruiser. In 1986, the racetrack/arcade was demolished and the site redeveloped as a recreation vehicle sales and maintenance facility.

An April 1989 Tank Registration Form indicates the facility had one, 2,000-gallon leaded gasoline UST and the property was to be purchased by FDOT as part of the I-595 project. A July 1989 letter, from FDOT regarding re-application to the EDI program, details conversations with facility personnel indicating the tank had been removed. FDOT was to conduct an investigation to verify tank removal. No TCAR or other assessment data was available for review.

A March 1990 letter confirms the site is eligible for state administered cleanup under the EDI program. The eligibility checklist indicates the site had a discharge prior to January 1989. No data was available regarding this discharge.

A July 2000 Free Product Recovery Initiative Report indicates the site was demolished during construction of I-95. An August 2010 FDEP Scoring Review indicates the site was EDI eligible and had a score of 10. This score is based on groundwater contamination at the site from a light petroleum product. No data was available regarding this groundwater contamination.



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#### Site No. 46 (Medium Risk)

Site Address: 2101 W Broward Boulevard

Ft. Lauderdale, FL

Site Names: Broward Boulevard Park N' Ride

(Former) C&L Transportation

(Former) King Pancallo Gulf Super Service

(Former) West Broward Gulf Service (Former) Johnnie & Mack Paint & Body

Photo ID Nos.: 46-1, 46-2, 46-3

Figure Nos.: B-1, B-3

Facility IDs: 98972

8501664

FLD981865876

Distance to Project: Within Corridor

Contamination Concerns: Petroleum, Hazardous Waste

This site is assigned a Medium risk rating based on former USTs at the site and lack of a TCAR or other assessment data for review.

The C&L Transportation site is located at the Broward Park-n-Ride located north of Broward Boulevard and west of I-95. The site is currently owned by FDOT. A Tank Registration, dated December 20, 1984, showed the facility had one, 2,000-gallon and four, 6,000-gallon USTs containing leaded gasoline. An October 3, 1991, Tank Registration Report indicates one, 2,000-gallon and four, 6,000-gallon tanks were removed, the facility had a Broward County Storage Tank closure license, and states no problems were observed during tank removal. A May 20, 1995, Source Removal Related Report states three steel tanks, four, 6,000-gallon tanks, and one, 500-gallon waste oil tank were removed on April 24, 1991. No contamination or free product was observed during the tank removal.

The Johnnie & Mack Paint & Body site was issued a SQG permit in January 1987 for waste codes associated with Halogenated/Non-Halogenated solvents. This permit has been included on the USEPA "No Longer Listed" list. The site has minimal reviewable history. The file consists of the USEPA Hazardous Waste Activity application filed in 1987; however, a 1973 historical



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aerial indicates this site was cleared for the construction of the Broward Boulevard/I-95 interchange. No documentation of facility inspections was available for review.

This site is currently authorized as a disaster debris management site (DDMS), with potential for solid/hazardous waste being stored onsite during disaster cleanup. A May 2016 letter from FDEP confirms the site's designation as a DDMS.



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#### Site No. 51 (Medium Risk)

Site Address: 1776 W Broward Boulevard

Ft. Lauderdale, FL 33312

Site Names: Marathon-Broward #572

(Former) ACM Auto Repair (Former) Automated Petrol (Former) BP Amoco #958 (Former) Peters Amoco III

(Former) Amocos West Broward Service Center

Photo ID Nos.: 51-1, 51-2, 51-3, 51-4

Figure Nos.: B-1, B-3

Facility IDs: 501538

FLD984212241 BCEPD - 1211

Distance to Project: Adjacent

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on documented contamination with ongoing remedial activities. This site is listed on the FDEP Contamination Locator Map and Broward County's Contaminated Sites Map. This site is a potential dewatering concern due to documented groundwater contamination; site assessment maps are provided in **Appendix B**.

The site formerly had two 10,000-gallon, one 6,000-gallon, and one 4,000-gallon unleaded gasoline USTs installed in May 1972. These four USTs were removed in April 2010 and replaced with one 12,000-gallon unleaded gasoline and two 10,000-gallon unleaded gasoline and vehicular diesel USTs. Additionally, the site had one 4,000-gallon non-regulated UST installed in January 1991 and removed in March 2010, and one 550-gallon waste oil UST (unknown install date) removed in July 1997.

The site had three documented petroleum discharges: September 1987, March 1993, and December 1996. The 1987 discharge was deemed eligible for the EDI program. The 1993 and 1996 discharges were deemed eligible for the Petroleum Liability and Restoration Insurance Program (PLRIP). The site currently has a state priority score of 10.

A 1989 CAR documented free product in three monitoring wells. The free product plume and dissolved petroleum hyrdrocarbon plume were defined both horizontally and vertically in the



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vicinity of the tank field. A RAP was approved in December 1990. Operation of a pump and treat remediation system began in May 1991 and continued until March 1995. A February 1991 Soil Remediation Report documented the excavation of a 186 tons of contaminated soil during the installation of new underground product transfer piping. An April 2010 Limited Closure Summary Report documented the excavation of an additional 247 tons of soil during the UST upgrade project.

A January 2017 Low Scored Site Initiative (LSSI) report documented groundwater contamination above GCTLs and/or NADCs for several CoC (dissolved phase petroleum impacts). The groundwater flow direction was generally towards the southeast in October 2016 and generally radiated from the central portion of the site in January 2017. The LSSI report also documented soil impacts exceeding SCTLs for direct exposure within the top 2 feet of the subsurface. This report recommended discontinuing assessment activities under the LSSI program.

A January 2017 FDEP letter agreed with the LSSI report stating the petroleum contamination had been generally characterized and existed over a large area of the site. Remediation of the known contamination was beyond the current funding availability. As a result, assessment activities were discontinued and the discharges were placed back into priority score funding order.

A contract was awarded in November 2017 for a Performance Based Advanced Cleanup (PBAC) of this site. A RAP modification will be developed and an active remediation system will be installed and operated at the site until June 2022.



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#### Site No. 56 (Medium Risk)

Site Address: 2201-2327 W Broward Boulevard

Ft. Lauderdale, FL 33312

Site Names: Riverbend Corporate Park

(Former) Broward Boulevard Shopping Center

(Former) Zayre Department Store #691

(Former) Fashion Cleaners (Former) Frank's Spic N Span (Former) CL Coin Laundry (Former) Ted's Pure Oil Station (Former) Tony's Service & Repairs

Photo ID Nos.: 56-1, 56-2, 56-3, 56-4, 56-5

Figure Nos.: B-1, B-3

Facility IDs: 8733224

9100153

BCEPD-13747

Distance to Project: Adjacent

Contamination Concerns: Petroleum. Hazardous Waste

This site is assigned a Medium risk rating based on participation in the ATRP and documented contamination with no ongoing assessment activities. This site is listed on the FDEP Contamination Locator Map. This site is a potential dewatering concern due to documented groundwater contamination; site assessment maps are provided in **Appendix B**.

The Zayre Department Store was the former location of an Automotive Center which had a 500-gallon waste oil UST installed in November 1965 and removed in December 1988. During tank removal, a leak/stained soil was noted around the overfill port and a DRF filed with FDER. In December 1989, an EDI application was submitted for the site in response to this discharge. FDER determined the site was eligible for the EDI program as stated in an August 1990 decision letter. Site assessment activities, conducted in 2004, did not find any CoC above CTLs in soil or groundwater. Groundwater flow in 2004, as documented in the SAR, was toward the east. The site was issued an SRCO in February 2005.

The Broward Boulevard Shopping Center was the former location of the Oasis Gas Station. EDR reports this site had four, 4,000-gallon USTs (two unleaded gas, one leaded gas, and one



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vehicular diesel). FDEP's Information Portal did not contain Storage Tank Registration Forms or UST closure records. Other site records indicate the tanks were removed from the site in June 1986.

An IRA was conducted in July 1990. The IRA indicates 231 cubic yards of contaminated soils (50 feet x 25 feet x 5 feet) were removed from the site. The water table was encountered at a depth of approximately 3.8 feet. During the IRA free floating product was discovered in the excavation and 3,464 gallons of petroleum contaminated water were removed from the site. Laboratory analytical results indicate both soil and groundwater have been impacted by petroleum products. A CAR was submitted to Broward County's Environmental Quality Control Board in November 1990. Groundwater flow in 1990, as documented in the SAR, was toward the southeast. A November 1990 correspondence letter indicates the CAR was deemed acceptable and the site was re-classified as Inactive. An IRA Report Form was submitted to FDER in November 1992. FDER rejected the IRA stating the report was very poor, soil was removed below the groundwater table, groundwater was removed, and OVA readings were not valid.

In January 1990, an Abandoned Tank Restoration Program (ATRP) application was submitted for the site in response to documented contamination from an abandoned petroleum storage system. In a May 1991 decision letter, the facility was deemed eligible for the ATRP. Based on an April 2007 Score Tracking Sheet, the site has a current state priority score of 10; records indicate funding is available for site assessment. FDEP has contacted the property owner in 2015, 2016, and 2017 to gain site access to allow cleanup of the contamination. To-date, there has been no response to these requests.

Field reconnaissance personnel noted the current facility has a diesel emergency generator onsite. No environmental concerns were noted near the generator.



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#### Site No. 57 (Medium Risk)

Site Address: 1901 W Broward Boulevard

Ft. Lauderdale, FL 33312

Site Name: The Salvation Army

(Former) Ryder Truck

Photo ID Nos.: 57-1, 57-2, 57-3, 57-4, 57-5, 57-6, 57-7, 57-8, 57-9, 57-10,

57-11, 57-12, 57-13, 57-14, 57-15, 57-16, 57-17, 57-18, 57-

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ETDM: 14226

19, 57-20, 57-21

Figure Nos.: B-1, B-3

Facility IDs: 8943416

BCEPD-1588A

OHMIT Incident No. 55383

Distance to Project: Adjacent

Contamination Concerns: Hazardous waste, Petroleum

This site is assigned a Medium risk rating based on participation in the EDI program, documented contamination, and ongoing assessment activities. This site is listed on the FDEP Contamination Locator Map and Broward County's Contaminated Sites Map. This site is a potential dewatering concern due to documented groundwater contamination; site assessment maps are provided in **Appendix B**.

The current facility operates as an adult rehabilitation center, used goods sales outlet, collection, and distribution center for the Salvation Army. Vehicle maintenance and cleaning is also performed at this site. The site was a Ryder Truck Facility prior to its current operations. The Salvation Army has also acquired several parcels located in the vicinity of this original property. This history of these parcels are discussed separately.

The facility formerly had six USTs. One 2,000-gallon leaded gas UST was installed in July 1962. Two 3,000-gallon heating oil USTs were installed in 1988. Three 3,000-gallon USTs with unknown contents have an unspecified installation date. These six USTs were removed between 1988 and 1993. The 2017 Template Site Assessment Report (TSAR) indicates an additional three USTs may have been present at some time during the site's history. A 1,000 gallon diesel AST for auxiliary electrical generation was installed in August 2009 and is currently in service. During a January 2018 inspection, this tank was found to be in compliance.



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The site had three documented petroleum discharges: December 1988, February 1995, and December 2011. The 1988 discharge was deemed eligible for the EDI program and currently has a cleanup status of Inactive. The 1995 and 2011 discharges have a cleanup status of Completed. The site currently has a state priority score of 10.

The USTs were formerly located in two areas on the site. Area 1 is on the west side of the property near NW 20<sup>th</sup> Avenue. Six USTs were located south of the existing storage building. Area 2 is on the east side of the property near NW 18<sup>th</sup> Avenue. One UST was located north of the northwest corner of the existing building. The groundwater plume has been defined to the north and east of Area 1 and very minor in Area 2.

The site's contamination history dates back to January 1988 when an Incident Reporting Form was filed with the FDER after petroleum contamination was found at a former UST area located near the east side of the parcel (Area 2). In December 1988, a report of moderate to strong hydrocarbon odors was noted in the subsurface soil and groundwater. IRAs performed in September 1989 resulted in the excavation of approximately 18 cubic yards of suspected contaminated soil. The available records indicate analysis of the excavated soil showed it met clean fill requirements and was later used on site as clean fill. After a succession of assessment and remedial activities, the site was issued an SRCO from FDEP in February 1994 for this discharge.

A Preliminary Contamination Assessment Report (PCAR) submitted in March 1995 indicated that during construction and renovation activities at the northwest corner of the site (Area 1), contaminated soil and groundwater was encountered. Laboratory analyses confirmed the presence of FDEP "kerosene group" CoC and halogenated solvents in both matrices. A TCAR for a second UST farm submitted in May 1997 indicated excessively contaminated soil remained under a building south of the former UST farm. Additional groundwater sampling was conducted in April 1999. A Natural Attenuation Monitoring Only Plan was approved in October 1999. The site was monitored for at least five quarters.

In a letter from FDEP to the Salvation Army, dated September 2001, FDEP stated that the area associated with this second discharge was not assessed during the 1994 NFA Order and the NFA Order would be rescinded and the discharges combined. In November 2001, FDEP rescinded the SRCO citing an increase in the CoC concentrations without a subsequent discharge being documented. The discharge was still eligible for State funding.

A Low Score Assessment to assess the extent of the petroleum contamination at the facility was conducted in 2017. Assessment activities included the advancement of soil borings, soil sampling, installation of monitoring wells, and groundwater sampling on three different occasions. Soil and groundwater samples from Area 1 had petroleum CoC concentrations above CTLs. Horizontal delineation of the contamination has been completed in the surficial aquifer.



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Vertical delineation of the contamination has not been completed in the plume area. The one soil and groundwater sample for Area 2 did not have petroleum CoC above CTLs. The TSAR recommends removing this area from further study.

In the Low Score Assessment groundwater flow was delineated on three occasions and found to be generally to the east and south-east.

The Low Score Assessment TSAR concluded the site should be transferred to the LSSI program where the plume should be delineated and the site monitored for 12 months prior to LSSI-Closure.



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#### Site No. 57 (Medium Risk) continued

Site Address: 101 NW 20<sup>th</sup> Avenue

Ft. Lauderdale, FL

Site Names: Vacant Building

(Former) Fabrication Plus

Facility ID: FLD984194373

Contamination Concern: Hazardous Waste

This site is now part of the Salvation Army property.

This site is identified as a hazardous waste generator. The facility was issued a CESQG hazardous waste permit in April 1991 for waste codes associated with Halogenated/Non-Halogenated solvents. The site is listed in the FDEP databases as "no longer listed" and is closed.

Field reconnaissance noted a former monitoring well on the property. The building was vacant during the site visit.

#### Site No. 57 (Medium Risk) continued

Site Address: 108 NW 20<sup>th</sup> Avenue

Ft. Lauderdale, FL 33311

Site Names: Vacant Building

(Former) Yellow Freight Systems, Inc.

Facility ID: 9100558

Contamination Concern: Petroleum

This site is now part of the Salvation Army property.

Little information is available for this site. A February 1996 Storage Tank Notification form indicates one, 1,000-gallon AST was installed in February 1987 and removed in December 1990. No other documentation exists in FDEP's Information Portal. Field reconnaissance personnel noted several monitoring wells on the property. Several 5-gallon paint buckets were also noted on the property.



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#### Site No. 57 (Medium Risk) continued

Site Address: 177-200 NW 18<sup>th</sup> Avenue

Ft. Lauderdale, FL 33311

Site Names: Corporate Connection Lines, Inc. (Land & Sea Petrol)

(Former) Deb-Li Enterprises Inc.

Facility IDs: 8622594

BCEPD-14544

**OHMIT Incident No. 8319** 

Contamination Concern: Petroleum

This site is now part of the Salvation Army property.

A 10,000-gallon diesel UST, installed in November 1984, was removed in December 1998. A DRF indicates 6-8 cubic yards of diesel contaminated soil were removed from the site during tank removal activities. A June 1999 correspondence letter indicated the site was ineligible for participation in the PLRIP. Tank Registration records indicate a 2,000-gallon diesel AST was installed in November 2001. This tank was inspected by FDEP and found in compliance in May 2007. Field reconnaissance personnel noted one groundwater monitoring well onsite. No other environmental concerns were noted.

#### Site No. 57 (Medium Risk) continued

Site Address: 201 NW 20<sup>th</sup> Avenue

Ft. Lauderdale, FL 33313

Site Names: MCM Construction / Equipment Yard

(Former) Kauff's Towing

(Former) Charlie Frymyer Paving, Inc.

Facility IDs: 9300638

**BCEPD-4002** 

Contamination Concerns: Petroleum, Hazardous Waste

This site is now part of the Salvation Army property.

A 2,000-gallon diesel steel AST, registered in December 1990, was removed from the site in June 1995. The site formerly operated as a towing company storage yard. Field reconnaissance



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personnel noted this property is currently operating as a construction yard with heavy equipment onsite.



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#### Site No. 57 (Medium Risk) continued

Site Address: 1901 NW 2<sup>nd</sup> Street

Ft. Lauderdale, FL 3331

Site Names: Vacant Building

(Former) National Lift Truck Service

Facility IDs: 9401868

**BCEPD-1707** 

Contamination Concerns: Petroleum, Hazardous Waste, Arsenic

This site is now part of the Salvation Army property. The site was undeveloped land until 1983 when the existing warehouse building was constructed. The site was occupied by National Lift Truck Service from 1983 until the late 2000's and has since been unoccupied.

An August 1994, Storage Tank Registration Form indicates the site had one, 1,000-gallon UST installed in November 1986 for a non-regulated substance. This tank was reportedly used for containing truck wash oily water. The tank is still located on the site but disconnected and out of service since 2007. FDEP's facility inspection cover page for the site in October 1994 indicates no open violations or discharge information were found for the site.

A Phase II Environmental Property Assessment for this parcel was performed by the Salvation Army in 2011. Soil sampling did not find any CoC above SCTLs. Groundwater sampling found arsenic levels above the GCTL. A 2012 Limited Site Assessment and Addendum found arsenic concentrations in groundwater at or below the GCTL. FDEP granted a SCRO in September 2013.



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#### Site No. 62 (Medium Risk)

Site Address: 1901-2101 NW 6<sup>th</sup> Street

Ft. Lauderdale, FL 33311

Site Names: City of Fort Lauderdale Wastewater Treatment Plant and

Repump Station

(Former) Fort Lauderdale Incinerator

(Former) Fort Lauderdale Trash Transfer Station

(Former) Fort Lauderdale Waste Tire Collection Center

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ETDM: 14226

Photo ID Nos.: 62-1, 62-2, 62-3, 62-4

Figure Nos.: B-1, B-3, B-4

Facility IDs: 95125

53380 8943045

FLTMP9203814 BCEPD-2823A BCEPD-1690B

OHMIT Incident No. 49179

Distance to Project: Adjacent

Contamination Concern: Petroleum

This site is assigned a Medium risk rating based on documented petroleum contamination that has been granted an NFA with Controls. This site is listed on the FDEP Contamination Locator Map and Broward County's Contaminated Sites Map. This site is a potential dewatering concern due to documented groundwater contamination; site assessment maps are provided in **Appendix B**.

The site formerly had one 6,000-gallon and one 2,000-gallon diesel USTs installed in 1972, and one 20,000-gallon diesel UST installed in 1978. These tanks were all removed (dates not specified). The site currently has one 6,000-gallon diesel UST installed in September 1993 to support an emergency generator. This tank was deemed in compliance during a December 2017 inspection.

The site had a release on May 31, 2013, of approximately 560-gallons of diesel fuel from a day tank due to a mechanical malfunction. The spill migrated to the south and west off the day tank concrete pad to the ground, east of the pump station building. In June 2013, 65 tons of petroleum



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impacted soil around the day tank were removed with the exception of the soil directly beneath and/or adjacent to the tank (non-accessible areas). Additionally, approximately 0.5-inches of free floating product was observed in monitoring well MW-1, which is located in the spill area. Additional site assessments performed in March and July 2014, delineated the petroleum impacted soil and groundwater and confirmed contamination was contained within the property boundaries. Groundwater flow direction on February 12, 2014 was south-southeast and on February 28, 2014 was west-northwest.

From August 2014 through May 2015, the groundwater was monitored to identify a No Further Action with Conditions for the discharge. Sampling results identified intermittent free floating product and/or groundwater analytical results that exceeded GCTLs in monitoring well MW-1. No other site well had free floating product or analytes above GCTLs. A Site Rehabilitation Completion Report, dated September 2016, recommended approval of an NFA with Conditions for the site, which has limited remaining contamination managed with engineering controls. The NFA with Conditions was granted in February 2018.

This site was also a source-separated organics processing facility (SOPF), operating as a yard trash processing facility from 2001-2007. The site has annual SOPF registration documents dated 2001 through 2006 in FDEP's Information Portal, under FDEP No. 95125. The SOPF is listed as closed.

Field reconnaissance personnel noted several monitoring wells onsite. A diesel emergency generator was also present onsite.



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#### Site No. 63 (Medium Risk)

Site Address: I-95 to NW 17th Avenue

NW 6th Street to NW 8th Street

Ft. Lauderdale, FL

Site Name: Lincoln Park / Durrs Neighborhood Brownfield

Photo ID Nos.: 63-1, 63-2, 63-3, 63-4

Figure Nos.: B-1, B-3, B-4

Facility IDs: COM\_211581

FLN000407550 BCEPD-2649

Distance to Project: 60 feet

Contamination Concerns: Incinerator Ash, Lead, Dioxin Metals

This site is assigned a Medium risk rating based on ongoing monitoring for the continued presence of soil and groundwater contamination. This site is listed on Broward County's Contaminated Sites Map. This site is a potential dewatering concern due to documented groundwater contamination; site assessment maps are provided in **Appendix B**.

The Lincoln Park Complex site comprises three properties: the former City of Fort Lauderdale Incinerator/Sistrunk Wastewater Treatment Plant property, Lincoln Park, and the former Lincoln Park Elementary School property. The former incinerator/wastewater treatment plant property is located on the north side of Sistrunk Boulevard (NW 6th Street) between 19th Avenue and I-95. Lincoln Park and the former Lincoln Park Elementary School property are located directly east and northeast of the former incinerator property, between 18th and 19th Avenues. The City's former Municipal incinerator was reportedly operated from the early 1920's-1950s. It was located on a parcel of property that lies on the Northwest corner of Sistrunk Boulevard and NW 19th Street. Lincoln Park is located adjacent to the former incinerator site and reportedly used by the City to stage incinerator ash. A former elementary school bordering the northern boundary of the Park has been used by the City to operate an after-school program for area children. Residential properties are located east and north of the park and incinerator properties.

An environmental assessment of the site by the City confirmed the presence of elevated levels of Arsenic and Lead in soils at the former incinerator site and Lincoln Park. In 2002, FDEP's Superfund Site Screening Subsection initiated a combined CERCLA Preliminary Assessment / Site Inspection of the Lincoln Park Complex site. The CERCLA Site Inspection involved soil

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screening using L-level x-ray fluorescence technology and the collection of soil and groundwater samples for laboratory analyses. The sample results confirmed the presence of soil contamination above FDEP soil screening criteria at the former incinerator property, Lincoln Park, and the southern portion of the former elementary school property. The groundwater samples contained Iron and Manganese; however no contamination was detected above primary drinking water standards.

A June 4, 2004, Overview and Status report document stated cleanup at the former elementary school property had been completed. The City agreed to implement Risk Based Corrective Actions to address the contamination at Lincoln Park and the former incinerator properties in two phases. A Natural Attenuation Monitoring (NAM) Plan was implemented for the Lincoln Park Complex Area including Lincoln Park, CFL One-Stop Shop, Former CFL Trash Transfer Station, and the adjoining residential neighborhood.

A September 2012 NAM Report indicates groundwater samples collected from some monitoring wells between 2009 and 2012 contained Arsenic, Antimony, and Lead at concentrations above GCTLs, but not above Natural Attenuation Default Criteria. Affected areas of groundwater were located on the northern portion of Lincoln Park (for Antimony) and on the northeastern-central portion of the former Trash Transfer facility (for Arsenic with a limited area of Lead). The report recommended abandonment of wells pursuant to an NFA with a Restrictive Covenant placed on the Lincoln Park property, along with adjoining ROWs and the City-owned lot at the northeastern corner of NW 7th Street and NW 20th Avenue. The most recent documents in FDEP's Information Portal indicate that the groundwater monitoring wells would be maintained until FDEP approved the Restrictive Covenant.



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#### Site No. 72 (Medium Risk)

Site Address: 2200 W Sunrise Boulevard

Ft. Lauderdale, FL 33311

Site Names: Bridge Point I-95

(Former) U.S. Concrete Pipe Co.

Photo ID Nos.: 72-1, 72-2, 72-3, 72-4

Figure Nos.: B-1, B-4

Facility IDs: 4354941

8622335

BCEPD-1262 BCEPD-2079

Distance to Project: 152 feet

Contamination Concern: Petroleum, Hazardous Materials, Arsenic

This site is assigned a Medium risk rating based on a previous release with a documented SRCO and based on the removal of various tanks from the site with no TCAR or other assessment data for review. This site is listed on Broward County's Contaminated Sites Map.

Tank Registration Forms indicate the site had the following tanks:

- One 4,000-gallon gasoline AST installation/removal dates not specified
- Two 1,000-gallon diesel USTs installed in 1957, removal date not specified
- One, 4,000-gallon diesel UST installed in August 1985, removed in September 1990
- One, 4,000-gallon diesel UST installed in May 1986, removed in January 2000
- One, 3,000-gallon diesel AST installed in March 2006, removed in December 2007

The site had one documented petroleum discharge in October 1990, based on a Discharge Notification Form filed with FDER. This discharge occurred from an overflow spillage. No other information was available regarding this discharge.

A February 2000 TCAR documented the removal of one 4,000-gallon diesel fuel UST on January 6, 2000. Petroleum constituents above GCTLs were detected in a groundwater grab sample at the bottom of the tank pit and the maximum organic vapor analysis reading was above 10 ppm. A subsequent sampling event, in October 2000, did not detect petroleum constituents above



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GCTLs in groundwater from a new monitoring well sample. Groundwater flow direction in October 2000 was to the northwest. FDEP issued an SRCO for this tank removal and associated contamination on August 2001.



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#### Site No. 73 (Medium Risk)

Site Address: 820 NW 20<sup>th</sup> Terrace

Ft. Lauderdale, FL 33311

Site Name: Vacant Lot

Photo ID Nos.: 73-1, 73-2, 73-3, 73-4

Figure Nos.: B-1, B-4

Facility ID: None

Distance to Project: 47 feet

Contamination Concern: Unknown

This site is assigned a Medium risk rating based on field observations noting a groundwater monitoring well onsite.

This site could not be located in FDEP's Information Portal and no documents were available for review. Field reconnaissance personnel observed a monitoring well located on the southwest corner of this property indicating contamination may be present onsite. A soil berm was also present around the property.

Neither FDEP nor SFWMD officials were aware of or had information pertaining to this site.



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# 6.7 Analysis of Proposed Improvements Alternatives

As part of the PD&E Study, the proposed mainline improvement along with several Broward Boulevard interchange alternatives are being considered for improving traffic operations and safety in the project study area. **Table 6-2** below provides a summary of the potential contamination sites impacting the proposed mainline improvement and each Broward Boulevard interchange alternative. Impacts evaluated include pier excavations, installation of mechanically stabilized earth (MSE) walls, and elements associated with roadway reconstruction.

Table 6-2 | Summary of Potential Contamination Source Impacts Per Alternative

Risk Rating	Mainline Improvement s	Alternative 1	Alternative 2A	Alternative 2B
	Site No(s).			
High	6, 8, 10, 21, 61, 67	41, 47	41, 47	41, 47
Medium	5, 22, 63, 72	46	46	46
Low	0	48	48	48
No	0	0	0	0
Total	10	4	4	4

The hydrogeologic gradient and associated groundwater flow direction in the study area is generally toward the east across the project corridor. Because of the groundwater flow direction, potential contamination sources to the west of I-95 have a greater impact on construction activities.

The mainline improvements require new braided ramps north of the Davie Boulevard interchange and South of the Sunrise Boulevard interchange. Pier excavations and installation of MSE walls to accommodate the braided ramps could be impacted by 10 potential contamination sites.

The Broward Boulevard interchange improvements require the replacement of the bridge span for all three interchange alternatives. Alternative 2B is the preferred alternative. The reconstruction to accommodate the wider and higher proposed bridge span requires pier excavations and MSE walls and could be impacted by four potential contamination sites. In addition, the new southbound Express lanes ingress ramp south of the Broward Boulevard interchange could be impacted by the same four potential contamination sites.



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# 7.0 Regulatory Status

The acquisition of contaminated property could transfer environmental responsibility to FDOT if cleanup is required. Exacerbation of an existing contaminant plume could result in added liability to FDOT. Sections 7.5 and 7.6 detail site-specific activities where a regulatory agency is taking, has taken, or may take action on a property with known or potential contamination problems.

# 7.1 ETDM ETAT Regulatory Review

This project has been coordinated through the Efficient Transportation Decision Making (ETDM) Environmental Technical Advisory Team (ETAT) regulatory review. The contamination-related ETDM ETAT comments are detailed below. All comments have been reviewed and the type and number of sites identified in this report concur with the ETDM ETAT comments.

#### FDOT District Four (10/01/2015)

- 1. Coordinator Summary Degree of Effect: 3 Moderate
- 2. Comments: A review of Geographic Information System data revealed the presence of dry cleaning sites, hazardous waste facilities, petroleum contamination monitoring sites, solid waste facilities, storage tank contamination monitoring sites and Resource Conservation and Recovery Act regulated facilities within the 500-foot project buffer zone. The CSER prepared for the I-95 corridor from Stirling Road (SR 848) to north of Oakland Park Boulevard (SR 816) indicated that asbestos containing materials (ACMs) testing was conducted for bridges along this corridor; however, ACM were not detected.

Due to the potential presence or documented presence of contamination associated with these sites, a Summary Degree of Effect (DOE) of Moderate has been assigned to the contamination issue.

A CSER will be prepared in accordance with Part 2, Chapter 22 of the FDOT Project PD&E Manual, including site specific surveys to assess existing or historical contamination sources and their proximity to construction activities. Contamination (including any required permits) will be evaluated during project development in accordance with federal, state, and local laws and regulations. The South Florida Water Management District (SFWMD) noted that if dewatering is necessary, a water use permit may be required. A general permit under rule 40E-2.061(2), FAC may be applicable.

#### Federal Highway Administration (FHWA 08/12/2015)

- 1. **Degree of Effect**: 3, Moderate assigned by Luis D Lopez
- 2. Coordination Document: PD&E Support Document As Per PD&E Manual



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### Florida Department of Environmental Protection (FDEP 08/10/2015)

- 1. **Degree of Effect**: 3, Moderate assigned by Lauren P. Milligan
- 2. Coordination Document: To Be Determined: Further Coordination Required
- 3. Direct Effects
  - a. <u>Identified Resources and Level of Importance</u>: GIS data indicates that there is 1 FDEP dry cleaning program site, 5 hazardous waste facilities, 11 petroleum contamination monitoring sites, 2 solid waste facilities, 12 storage tank contamination monitoring sites, and 7 RCRA regulated facilities within the 500-foot project buffer zone.
  - b. Comments on Effects to Resources: A Contamination Screening Evaluation (similar to Phase I and Phase II Audits) may need to be conducted along the project rights-of way considering the proximity to the listed petroleum and hazardous material handling facilities. The Contamination Screening Evaluation should outline specific procedures that would be followed by the applicant in the event drums, wastes, tanks, or potentially contaminated soils are encountered during construction. Special attention should be made in the screening evaluation to historical land uses (such as solid waste disposal) that may have an affect on the proposed project, including stormwater retention and treatment areas.

### <u>US Environmental Protection Agency (USEPA 08/03/2015)</u>

- 1. **Degree of Effect**: 3, Moderate assigned by Maher Budeir,
- 2. Coordination Document: PD&E Support Document As Per PD&E Manual
- 3. Direct Effects
  - a. <u>Identified Resources and Level of Importance</u>: Groundwater aquifer and soils
  - b. <u>Comments on Effects to Resources</u>: Given the number of potentially contaminated facilities within 500 feet, existing subsurface contamination is likely. Construction activities can potentially mobilize and negatively impact existing plumes. A CSER is recommended to better identify potential subsurface contamination plumes in the vicinity of the project. In addition to the CSER, The USEPA recommends having contingencies in place to identify and properly manage contaminated media as well as hazardous waste that maybe encountered during construction.

### South Florida Water Management District (SFWMD 07/27/2015)

- 1. Degree of Effect: 3, Moderate assigned by Mindy Parrott,
- 2. Coordination Document: To Be Determined: Further Coordination Required



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<u>Coordination Document Comments</u>: If dewatering is necessary, a water use permit may be required. A general permit is available in rule 40E-2.061(2), FAC. Projects that do not qualify for the general permit will require a water use permit from SFWMD.

#### 3. Direct Effects

- a. Identified Resources and Level of Importance: Surface and ground water
- b. <u>Comments on Effects to Resources</u>: There are multiple contaminated sites within the area, as noted by the preliminary comments. Construction methodologies, such as dewatering, must be designed to minimize movement of contaminant plumes.

# 7.2 Permits and Specifications

The SFWMD administers groundwater monitoring well construction and abandonment permits, Environmental Resource Permits (ERP), and dewatering permits. All permits necessary for the current project design will be obtained in accordance with federal, state, and local laws and regulations.

Right-of-way acquisition and project construction activities will not impede on existing monitoring wells at identified potential contamination sources. Additionally, groundwater monitoring well installation is not required for discrete groundwater sampling as recommended for Level II Assessments. A permit for construction or abandonment of monitoring wells will not be required for the current project design.

An ERP is required when proposed improvements and subsequent roadway construction activities alter surface water flow. The additional impervious area for the proposed improvements will require alteration of existing stormwater facilities. An ERP will be required for the current project design.

Dewatering permits are dependent on construction methods used for pier installation and other subsurface work. Pier locations and construction methods have not been determined for the current project design. Dewatering operations in the vicinity of potentially contaminated areas may require the implementation of engineering controls. Seven sites have been identified as a potential dewatering concern due to documented groundwater contamination. A dewatering plan may be necessary to avoid potential contamination plume exacerbation.

Additionally, Section 120 Excavation and Embankment – Subarticle 120-1.2 Unidentified Areas of Contamination of the Standard Specifications for Road and Bridge Construction should be



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provided in the proposed project's construction contract documents. This specification requires that in the event any material or suspected contamination is encountered during construction, or if any spills caused by construction-related activities should occur, the contractor shall be instructed to stop work immediately and notify the Planning and Environmental Management Office, as well as, the appropriate regulatory agencies for assistance.



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## 8.0 Conclusions and Recommendations

### 8.1 Conclusions

FDOT is considering improvements to the SR 9 / I-95 at SR 842 / Broward Boulevard interchange located in Broward County, Florida. As part of the engineering process for the proposed project corridor, a contamination screening evaluation was performed in accordance with Part 2, Chapter 20 "Contamination" of the FDOT PD&E Manual, revised January 14, 2019. The objective of this contamination screening was to identify and evaluate contamination sources that can potentially impact the proposed project schedule and costs.

The project corridor is surrounded by a mixture of residential and commercial land use. The evaluation included reviewing environmental databases and aerial photographs, performing a visual reconnaissance of the project corridor and surrounding area, obtaining pertinent environmental records from state and local agencies, and assigning potential contamination ratings for each source within and adjacent to the project corridor. Through this process, 78 potential contamination sources were identified within 500 feet of the project corridor. In general, the environmental databases indicated these sources were associated with hazardous waste generators, former or current petroleum/spill sites containing UST and/or AST systems, and known or former cleaning/dry cleaning facilities. **Table 8-1** details the type of sites identified; sites may be listed as more than one type.

Table 8-1 | Summary of Types of Potential Contamination Sources

Site Type	Number of Sites	Site Nos.
Superfund Waste Cleanup	0	
US Brownfield	1	63
Solid Waste Facilities	3	34, 46, 62
<b>Drycleaning Solvent Program</b>	0	
FDEP Contaminated Sites	6	22, 34, 51, 56, 57, 62
Broward County Contaminated Sites	9	12, 22, 34, 39, 51, 57, 62, 63, 72
Petroleum Contamination Monitoring	20	5, 7, 8, 9, 10, 12, 13, 14, 17, 22, 24, 27, 33, 46, 51, 56, 57, 62, 71, 72
Storage Tank Contamination Monitoring	29	1, 5, 7, 8, 9, 10, 12, 13, 14, 17, 22, 24, 25, 26, 27, 28, 34, 36, 42,



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45, 46, 51, 56, 57, 60, 61, 62, 71, 72

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ETDM: 14226

	LQG	0	
USEPA	SQG	2	16, 23
RCRA-	CESQG	7	21, 24, 25, 29, 31, 33, 57
Regulated Facilities	One-Time Generator / Non- Handler / Closed	13	2, 6, 12, 14, 15, 18, 19, 32, 41, 46, 51, 59, 62

Evaluation of each site's history and characteristics identified 13 - High, 17 - Medium, 27 - Low, and 21 - No contamination risk rated sources associated with hazardous waste or petroleum. Based on these risk ratings, construction activities may encounter soil or groundwater contamination which can potentially impact worker health, the environment, and construction schedule and costs if these sites are not addressed during the design phase. Furthermore, certain construction activities, such as dewatering, can exacerbate existing groundwater contamination plumes, if not controlled.

The proposed improvements and subsequent roadway construction activities, such as dredging and filling in wetlands or surface waters, constructing flood protection facilities, providing storm water containment and treatment, and site grading, will alter surface water flow in the project study area and require an ERP.

### 8.2 Recommendations

Since contaminated soil and groundwater has the potential to exist at or in close proximity to the project corridor, further site-specific Level II Assessments are recommended as detailed in **Table 8-2**. In addition, High and Medium risk rated sites not listed in **Table 8-2** should be re-evaluated for their impact to the project when the construction design and methods have been finalized.



Table 8-2 | Level II Site-Specific Assessments

Site No.	Risk Rating	Site Description	Alternative Impact	Sampling Rationale
5	Medium	Transportation ROW Former Construction Business	Braided ramp construction	Records indicate groundwater contamination exists.
6	High	Transportation ROW Former Light Industrial	Braided ramp construction	Documented soil and groundwater contamination at the former facility.
8	High	Transportation ROW Former Business	Braided ramp construction	Former business operated USTs and reported groundwater contamination.
10	High	Transportation ROW Former Gas Station	Braided ramp construction	Records indicate a petroleum discharge occurred.
21	High	Light Industrial/ Rail yard	Braided ramp construction	FDEP staff stated the facility has had numerous spills of various materials onsite during loading activities.
22	Medium	Transportation Corridor Former Vehicle Dealership	Braided ramp construction	Records indicate one, leaded gasoline AST formerly existed at the site and a petroleum discharge occurred.



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Table 8-2 | Level II Site-Specific Assessments (continued)

Site No.	Risk Rating	Site Description	Alternative Impact	Sampling Rationale
41	High	Transportation ROW Former Industrial	Bridge re- construction	This site operated as a fertilizer manufacturer until 1996 and was permitted as a LQG handling heavy metals and halogenated compounds. A fire occurred at the site in 1969 and the potential exists to expose contaminated soils.
46	Medium	Park-and-Ride Former Transportation Company	Bridge re- construction	Records indicate five, gasoline USTs formerly existed at the site. No records exist regarding assessment activities.
47	High	Rail Corridor	Bridge re- construction	Contamination may be present on site due to historical railway operations.
61	High	Vacant Lot Former Gas Station	Braided ramp construction	Records indicate two to four USTs formerly existed at the site. No records exist regarding assessment activities.
63	Medium	Park, Municipal, Residential Former Incinerator Site	Braided ramp construction	Designated brownfield with documented soil and groundwater contamination from historical incinerator operations.
67	High	Metal Recycling	Braided ramp construction	Observed poor housekeeping practices and use of heavy machinery onsite.
72	Medium	Industrial Warehouse	Braided ramp construction	History of tanks onsite since 1957. Records indicate former groundwater contamination. Residual contamination may exist even though SRCO issued.

The Level II Assessments include the advancement of soil borings and the collection of soil and discrete groundwater samples in areas where excavation and/or dewatering activities are anticipated to accommodate MSE walls, noise walls, ponds, storm water drainage, and bridge expansion. It is estimated soil borings would be no deeper than 15 fbls since depth to water in the project area is typically within 10 feet of natural grade. Soil and discrete groundwater samples should be collected from each boring location and submitted for analytical parameters related to the former and/or current facility type. Soil samples should also be field analyzed for the



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presence of petroleum hydrocarbon vapors. The frequency, exact location, sampling depths, sampled media, and associated laboratory analyses should be site-specific and can be finalized once construction designs have been developed.

Sampling activities should be performed in accordance with FDEP's current version of standard operating procedures (SOPs) for Field Activities, DEP-SOP-001/01. Soil and groundwater assessment activities should be in accordance with sections FS 3000 and FS 2200, respectively. These SOPs are designed to ensure collected samples will be representative of current site conditions and that samples have not been altered or contaminated by sampling and handling procedures.

The objective of the recommended Level II Assessments is to evaluate potentially impacted soil and groundwater. The Level II Assessments can determine the extent of CoC within the project corridor that may be encountered during construction. Recommended laboratory analyses for those applicable CoC are referenced at the end of Chapter 62-780.900 FAC. Sample analytical results should be evaluated against CTLs for groundwater and soil as detailed in CH 62-777 FAC, Tables I and II, respectively. Analytical results above CTLs are indicative of environmental liability associated with the property from current or historical operations.

Knowing the extent of impacted media at these areas of concern in the design phase can expedite handling, disposal and/or treatment requirements, as well as protecting worker health and the environment during construction. It can also identify locations, within the project corridor, where certain construction methods require engineering controls so as not to exacerbate contaminant plumes.

Additional site investigation is not recommended for all sites directly impacted by roadway improvement alternatives as detailed in **Table 6-2** and discussed in Section 6.7 of this report. A recommendation of "No Sampling" is based on site attributes, history, and the specific construction activity affecting the site. Impacted sites with "No Sampling" recommendations are detailed in **Table 8-3**.

Table 8-3 | "No Sampling" Recommendations

Sit No		Site Description	Alternative Impact	"No Sampling" Rationale
48	B Low	Spill in transportation corridor	Bridge re- construction	Spill did not require on scene response and location of the spill has undergone significant roadway improvements.



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For the site listed in **Table 8-3**, no further investigation is recommended because it is unlikely the identified contamination source would impact the project based on the rationale provided. If a higher degree of confidence is required, a Level II Assessment would be recommended for this site.

It is recommended the contractor be held responsible for ensuring compliance with necessary ERPs issued by the SFWMD for this project.

Dewatering permits are dependent on construction methods. Dewatering operations in the vicinity of potentially contaminated areas may require the implementation of engineering controls. Seven sites, as detailed in **Table 8-4**, have been identified as a potential dewatering concern due to documented groundwater contamination.

Table 8-4 | Potential Dewatering Concerns

Site No.	Risk Rating	Site Description	Groundwater Flow Direction	Plume Map Available?
22	Medium	Transportation Corridor Former Vehicle Dealership	Not documented	No assessment data available for review.
34	Low	Railway Operations Former Waste Tire Processing Facility	South-Southeast 1990	No. Analytical data from a single MW located at the former tank location.
51	Medium	Gas Station	Radiates from central portion of the site January 2017	Yes
56	Medium	Office Building & Vacant Land Former Gas Station	Southeast 1990	Yes
57	Medium	Distribution Center / Vehicle Maintenance Former Light Industrial	East and Southeast January 2017	Yes
62	Medium	Wastewater Treatment Plant and Repump Station	West-Northwest February 2014	Yes
63	Medium	Park, Municipal, Residential Former Incinerator Site	Southeast October 2012	Yes

If dewatering will be necessary during construction, a SFWMD Water Use Permit will be required. The contractor will be held responsible for ensuring compliance with any necessary dewatering



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permit(s). Any dewatering operations in the vicinity of potentially contaminated areas shall be limited to low-flow and short-term. A dewatering plan may be necessary to avoid potential contamination plume exacerbation. All permits will be obtained in accordance with federal, state, and local laws and regulations.

Additionally, Section 120 Excavation and Embankment – Subarticle 120-1.2 *Unidentified Areas* of Contamination of the Standard Specifications for Road and Bridge Construction will be provided in the proposed project's construction contract documents.

A hazardous material survey is recommended if construction activities will disturb existing infrastructure, equipment, or utilities that potentially contain asbestos, PCBs, or paint with heavy metals.

Finally, sampling recommendations, as detailed in this section, apply only to the current project design. A re-evaluation of this CSER is recommended if the project design changes substantially.



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### 9.0 References

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- "Contamination Screening Evaluation Report," SR 9/I-95 PD&E Study from Stirling Road (MP 5.093) to North of Oakland Park Boulevard (MP 13.742), FM 429804-1-22-01, ETDM 13168, Florida Department of Transportation District Four, September 2013.
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**Appendix A** | Government Database Descriptions

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SITE NO.	PHOTO NUMBER(S)	GRID SECTION	SITE NAME AND ADDRESS	FACILITY ID (EPA / FDEP / BCEPD)	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	RATIONALE FOR RISK RATING
1	1-1 1-2	1	FDOT ROW (Former) Reliance Supply Company 1050 SW 20th Way Ft. Lauderdale, FL 33312	8732560	STCM FL UST	Transportation Corridor Former Light Industrial	Within ROW	Xylene	N/A No documented contamination	Medium		This site is assigned a Medium risk rating based on UST removal from the site and lack of associated assessment data on file for review. A January 1987 Storage Tank Notification Form indicates Reliance Supply Company had a 2,000-gallon UST containing Xylene at the site. A January 1991 Facility Detail Report indicates the tank had been removed from the site.
2	2-1 2-2	1	All White Manufacturing / All - White Roofs & MFG 1507 SW 21st Avenue Ft. Lauderdale, FL 33312	FLT950052662 BCEPD-1693	FL AST RCRA Broward Co. AST Broward Co. HM	Light Industrial	244	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. FDEP's Information Portal contains a record for this site under the hazardous waste program, however, no documents were available for review. The site was issued a Temporary Hazardous Waste ID for the one time pickup of hazardous waste drums. FDEP information indicates the site generated 4,675 pounds of hazardous waste with waste code D001 (ignitable waste). In addition, EDR lists the site as having five polyethylene ASTs: two, 1,200-gallon; one, 2,500-gallon; one, 3,000-gallon, and one, 1,000-gallon. The installation date for all five ATS is listed as December 1979 and the tanks are listed as in-service.
3	3-1 3-2 3-3 3-4	1	3 Brothers Custom Interior and Exterior Yacht Painting (Former) Florida Electric Service Company Inc. 1491 SW 21st Avenue Ft. Lauderdale, FL 33312	SQG-9667 BCEPD-3002	Broward Co. HM	Light Industrial	160	Hazardous Waste	N/A No documented contamination	Medium	Conduct Level II sampling if	This site is assigned a Medium risk rating based on the observation of asphalt staining and poor housekeeping practices during field reconnaissance. This site has no reported discharges or violations. The site is listed in FDEP's Information Portal as a SQG, however, no documents were available for review. Field reconnaissance personnel noted the facility had several 55-gallon drums, 5-gallon buckets, and one 5-gallon gas can stored onsite in the southeast corner of the property. Field personnel did not identify the contents stored in each container. The gas container was laying on its side and there appeared to be staining on the asphalt in the vicinity.
4	4-1 4-2	1	Steve's Garage / Steve's Automotive Inc. 1359 SW 21st Terrace Ft. Lauderdale, FL 33312	BCEPD-2298	Broward Co. HM EDR Hist Auto	Auto Service Shop	383	Petroleum Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. This site is listed in EDR as an Historical Auto Station with records in 2002 and 2003. The site could not be located in FDEPs Information Portal, therefore, no documents were available for review. Field reconnaissance noted this facility is an active automotive service garage.
5	5-1 5-2	1	FDOT ROW (Former) Holland Builders (Former) The Steering Wheel 1350 SW 20th Terrace Ft. Lauderdale, FL 33312	8944445	PCTS STCM FL UST FL LUST	Transportation Corridor Former Construction Business	Within Corridor	Petroleum	Not eligible for EDI program  Pre-1989 contamination could not be verified; No additional cleanup required	Medium	Conduct Level II sampling in braided ramp construction area.	This site is assigned a Medium risk rating based on former USTs and lack of associated assessment data on file for review. A July 1990 FDER letter determined the site was not eligible for the EDI program because the existence of contamination at the property on or prior to December 1988 could not be verified. A 1991 Facility Information Report indicated two USTs were removed in July 1989. No assessment or other investigative methodology was available for review. A 2017 Site Manager Summary report agrees with the EDI decision and states no additional cleanup is required for the discharge.
6	5-1 5-2	1	FDOT ROW (Former) Rad-Air 1321 SW 20th Terrace Ft. Lauderdale, FL 32212	8901971 FL0000109611 FLTMP8901971	RCRA Historical Aerial	Transportation Corridor Former Light Industrial	Within Corridor	VOCs, Lead, Uncontrolled Waste Disposal	Documented soil contamination; No assessment data available to verify groundwater contamination Remediation status unknown	High	Conduct Level II sampling in braided ramp construction area.	This site is assigned a High risk rating based on documented soil contamination that may be present at the site and the lack of groundwater assessment data. The site was a former vehicular radiator repair shop. A September 1991 Preliminary Contamination Assessment Plan (Plan) states stained soil with a deep blue color was encountered and a sheen was observed floating on the water table within an excavated area. Elevated VOCs were detected in soil samples. The Plan discusses field work, sampling, surveys, and inspections that will be conducted. No additional information was available for review.

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7	7-1 7-2	1	R. Hamann & Sons Demolition (Former) 1-800 Asphalt Inc. 1309 SW 21st Terrace Ft Lauderdale, FL 33312	9814916	PCTS STCM FL SPILLS	Industrial / Asphalt Business	387	Petroleum	SRCO June 2016	Medium	Conduct Level II sampling if site could impact construction.	This site is assigned a Medium risk rating based on documented cleanup of petroleum contamination. A July 2015 Discharge Reporting Form indicates soil and groundwater were impacted by an unknown quantity of asphalt/waste oil. No tanks were present onsite and the source of the spill was unknown. in June 2016, FDEP issued a SRCO for the site after a SAR report indicated no constituents above CTLs.
8	5-1 5-2	1	FDOT ROW (Former) Hamid Imports 1300 SW 20th Terrace Ft. Lauderdale, FL 33312	8733227	PCTS STCM FL UST	Transportation Corridor	Within Corridor	Petroleum	Not eligible for EDI program  Pre-1989 contamination could not be verified; No additional cleanup required	High	Conduct Level II sampling in braided ramp construction area.	This site is assigned a High risk rating based on documented contamination that may be present at the site. A 2,000-gallon UST with unknown contents and a 550-gallon waste oil UST were removed from the site in 1989. In December 1988, an EDI application was submitted for the site in response to unleaded gasoline, diesel, and used oil contamination discovered during groundwater analysis. In April 1990, the site was deemed ineligible for the EDI program because FDER could not verify that contamination existed at the facility. No assessment data or other investigative methodology was available for review. A 2016 Site Manager Summary report agrees with the EDI decision and states no additional cleanup is required for the discharge.
9	9-1 9-2 9-3	1	FDOT ROW (Former) BP #00367219 (Former) A One Gulf (Former) Herbies Gulf Station (Former) Davis Matt Gulf Service 2120 Davie Boulevard Ft. Lauderdale, FL 33312	8501433	PCTS STCM FL UST FL LUST EDR Hist Auto	Transportation Corridor Former Gas Station	Within ROW	Petroleum	SRCO October 1995	Medium		This site is assigned a Medium risk rating based on documented contamination from former USTs that has been remediated and issued a SRCO. The site formerly had six USTs. The CAR, submitted in September 1990, indicated the premium grade unleaded UST had breached and had an inventory discrepancy indicating 1,500-gallons of product was discharged from the tank. Remediation efforts included the removal of 1,360-gallons of gasoline by vacuum truck, and the removal of petroleum impacted groundwater and soil off site. An air stripping remediation system operated at the site from February 1992 to April 1992. A RAP Addendum, submitted in March 1995, indicated CTLs were met. In October 1995 the site was issued an SRCO.
10	10-1 10-2	1	FDOT Broward Boulevard I-95 Overpass (Former) Exxon #5587 (Former) Davie Boulevard Exxon Service (Former) Taylor Tom Boulevard Enco Service (Former) PT Texaco Service (Former) Welchs Dick Texaco Service 2010-2015 Davie Boulevard Ft. Lauderdale, FL 33312	8501823	PCTS STCM FL UST FL LUST EDR Hist Auto	Transportation Corridor Former Gas Station	Within Corridor	Petroleum	Not eligible for EDI program Remediation Completed	High	Conduct Level II sampling in braided ramp construction area.	This site is assigned a High risk rating based on a former discharge at the site and potential contamination that may be present. In December 1986, six USTs were removed from the site. An FDEP file summary review in March 2004, indicates a discharge occurred in July 1987. The cleanup status is listed as "completed." FDEP's 2016 Site Manager Report and Facility Area Report indicates no information is available about the quantity or type of discharge reported. Field reconnaissance personnel noted a groundwater monitoring well at the location of the former gas station.
11	11-1 11-2 11-3 11-4 11-5 11-6 11-7	1	FDOT Broward Boulevard I-95 Overpass (Former) Carl's Riverside Standard Service (Former) Riverside Standard Service (Former) Mike's Standard Oil 1900 Davie Boulevard Ft. Lauderdale, FL 33312	None	EDR Hist Auto	Transportation Corridor Former Gas Station	Within ROW	Petroleum	N/A No documented contamination	High	O	This site is assigned a High risk rating based on records of historical gas station operations from 1957-1975 and no records indicating the site has been assessed. No records were available in FDEP Information Portal or internet search databases for review. Field reconnaissance personnel noted a groundwater monitoring well at the location of the former gas station.

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12	11-1 11-2 11-3 11-4 11-5 11-6 11-7		FDOT ROW (Former) Texaco #240211355 (Former) Tenneco Station #145 1880 Davie Boulevard Ft. Lauderdale, FL 33312	8502757 FLD984190173 BCEPD-1577	PCTS STCM FL UST FL LUST RCRA Broward County Contaminated Sites (EDIEAR)	Transportation ROW Former Gas Station	Within ROW	Petroleum	SRCO August 1996	Medium	Conduct Level II sampling if site could impact construction	This site is assigned a Medium risk rating based on documented contamination that has been remediated and the site issued a SRCO. A September 1990 Tank Registration Form indicates three, 12,000-gallon UST's were removed in September 1990. A letter attached to the form indicates remedial activities were initiated to address excessively contaminated soils encountered during the tank removal. An August 1996 Approval Letter indicated a SRCO was issued.
13	13-1 13-2 13-3 13-4	1	Tech Center - Shell-Davie Auto Care (Former) STM Automotive & Radiator (Former) Davie I-95 Shell (Former) Hokes Shell Service Station (Former) Bocar Shell Service Station (Former) Clarks Shell Service Station 2101 Davie Boulevard Ft. Lauderdale, FL 33312	8502630	PCTS STCM FL UST FL LUST EDR Hist Auto	Auto Service Shop Former Gas Station	198	Petroleum	SRCO December 1995	Medium	Conduct Level II sampling if site could impact construction	This site is assigned a Medium risk rating based on documented contamination that has been remediated and the site issued a SRCO. An August 1994 Storage Tank Registration Form indicates the site had three, 10,000-gallon and one, 500-gallon USTs installed in December 1983. Petroleum contamination was noted when the tanks were removed in March 1994. Completion related documents in FDEP Oculus indicate the site received the SRCO in December 1995. Field reconnaissance personnel noted a groundwater monitoring well on the property.
14	14-1 14-2 14-3 14-4	1	Abandoned Gas Station (Former) Exxon Station / Texaco- Debs (Former) Dawn Donuts Exxon (Former) Exxon-Siler (Former) Sunnark Industries (Former) Sunoco Service Station (Former) Midway Sunoco Service  1905 Davie Boulevard Ft. Lauderdale, FL 33312	8630272 8842246 FLD000655142 BCEPD-3333	PCTS STCM FL UST FL LUST RCRA Broward Co. HM EDR Hist Auto	Gas Station	90	Petroleum	Eligible for EDI program SRCO February 2002	Medium	Conduct Level II sampling if site could impact construction	This site is assigned a Medium risk rating based on documented contamination which has been remediated and issued a SRCO. The site has a history of assessment and remedial activities related to two discharges in 1987 and 1991. The site was granted an SRCO in February 2002. Field reconnaissance personnel noted the fuel dispensers were removed from the property and the fuel lines capped. No aboveground storage containers were noted on the property.
15	15-1 15-2 15-3 15-4		Speedy's Food Store (Former) Kwality Kwick Cleaners 1879-1881 Davie Boulevard Ft. Lauderdale, FL 33312	FLD981004096 OHMIT Incident No. 18564	RCRA FL SPILLS EDR Hist Cleaner	Convenience Store Former Dry Cleaners	390	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. EDR lists this site as a Historical Cleaner and Dryer with records from 1970-1986. A May 1985, hazardous waste notification form indicates the facility generated HW Code F002, which includes spent halogenated solvents used in dry cleaning. Enforcement tracking records from 1985 indicate the facility was investigated by FDEP for possible illegal dumping of hazardous waste and was fined for failing to ensure delivery of HW to proper treatment or disposal facility. FDEP's Information Portal currently lists the site as a non-handler of hazardous waste and a previous SQG.

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16	16-1 16-2 16-3 16-4 16-5 16-6	1	Cyril's Auto Repair / Cyril's Automotive 811999-Deon BRA165 AT&T Mobility - Deon New Cingular Wireless Deon 1111 SW 21st Avenue Ft. Lauderdale, FL 33312	FLD982095572 BCEPD-1104 BCEPD-3145 BCEPD-11478	FL AST RCRA Broward Co. HM EDR Hist Auto	Multi-tenant Warehouse Cell Tower	198	Petroleum Hazardous Waste	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on its hazardous waste generator ID and no records of releases or contamination. The property is a 36,000 square foot warehouse building with multiple businesses. Business tenants include a cabinet shop, an auto repair facility, marine service company, and a roofing and construction company. The site is listed as an SQG in FDEP's Information Portal as of February 2011. A June 1987, Notification of Hazardous Waste Activity form indicates the site generated HW code D001 (ignitable waste). A February 2011, Hazardous Waste Inspection Report indicates the facility met the requirements for CESQG classification and was in compliance. The waste stream included parts washer waste, used oil, used oil filters, and spent battery cores.  There is also a cell tower and emergency generator diesel AST onsite. The AST has no records of releases or contamination. Field reconnaissance personnel did not observe any environmental issues onsite.
17	17-1 17-2	1	FDOT ROW (Former) Bryan Electric, Inc. 2015 SW 11th Court Ft. Lauderdale, FL 33312	8838191	PCTS STCM FL UST FL LUST	Transportation Corridor	90	Petroleum	Not eligible for EDI program  Pre-1989  contamination could  not be verified; No additional cleanup required	High	Conduct Level II sampling if site could impact construction.	This site is assigned a High risk rating based on documented contamination that may be present within the ROW. A 1991 Facility Information Report indicates one regulated UST was removed in January 1988, and contamination was present. A 2016 Site Manager Summary report stated an EDI application was submitted in December 1988, in response to unleaded gasoline contamination discovered during groundwater analysis. The summary also indicated no additional cleanup is required for the discharge since FDER could not verify that contamination existed on or prior to December 31, 1988. No assessment or other investigative methodology was available for review.
18	18-1 18-2	1	FDOT ROW (Former) Steve's Garage 2010 SW 11th Street Ft. Lauderdale, FL 33312	FLD982169492	RCRA	Residential Former Auto Service Shop	70	Hazardous Waste: Halogenated/Non- Halogenated Solvents	N/A No documented contamination	Low		This site is assigned a Low risk rating based on its handling of hazardous waste with no records of discharges or contamination. Two documents related to this site exist in FDEP's Information Portal indicating the site as a SQG of hazardous waste. A December 2010, Hazardous Waste Inspection Report indicates the site was closed and the address no longer exists.
19	18-1 18-2	1	FDOT ROW (Former) Harrell Rick's Auto Sales Inc. 2003 SW 11th Street Ft. Lauderdale, FL 33312	FLD981930951 FLD982076440	RCRA	Vehicle Dealership	150	Hazardous Waste	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on its handling of hazardous waste with no records of releases or contamination. In 1998, the facility was issued a hazardous waste SQG permit. A December 2010, Hazardous Waste Inspection Report indicates the site was closed and the address no longer exists.
20	20-1 20-2 20-3 20-4	1	Dixie Plywood and Lumber Company 2121 SW 10th Court 950-990 SW 21st Terrace Ft. Lauderdale, FL 33312	8628043	FL UST FL LUST	Light Industrial Warehouse	277	Petroleum	Not eligible for EDI program Pre-1989 contamination could not be verified; No additional cleanup required	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. The site is a 22,500 square foot warehouse occupied by a plywood and lumber distributer. A June 1990, Storage Tank Notification form indicates a 10,000-gallon diesel UST was installed in 1980 and removed in February 1990. A January 1989, DRF indicates discovery of an unknown quantity of unleaded gasoline discharge through odors or visible signs at the facility. An April 1990 decision letter determined the site was ineligible for state funded cleanup because FDER could not verify the existence of contamination. A September 2016, Site Manager Summary Report indicates no additional cleanup is required for the discharge because it could not be verified that contamination exists. No TCAR, NFA, or SRCO was found in FDEP's electronic document file. Field reconnaissance personnel noted several storage containers were present on site. No environmental concerns were noted.

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21	21-1 21-2	1, 2	Transflo Terminal Services, Inc. (TTSI) (Former) Arrow Material Services (Former) Carmen's Siding (Former) Bulk Intermodal (Former) Distribution Services First Recovery 890 SW 21st Avenue Ft. Lauderdale, FL 33312	FLD984239145 FLD984253542 ERNS 9167689 OHMIT Incident No. 47526 OHMIT Incident No. 15943	ERNS FL SPILLS RCRA	Light Industrial / Rail yard	119	Petroleum Hazardous Waste - Cadmium, Chromium, Lead, Benzene	N/A No documented contamination	High	Conduct Level II sampling in braided ramp construction area.	This site is assigned a High risk rating based on an interview with a FDEP official who noted this facility has had numerous spills of various materials onsite during loading activities. In May 1992, the site registered as a CESQG under former business name "First Recovery". Wastes identified included Cadmium, Chromium, Lead, and Benzene. The site also registered as a Used Oil Transfer Facility from 1995 through 1999. A March 2014 site inspection of the facility under business name Arrow Material Services indicated the site was operating as CESQG and was in compliance. No records or violations of enforcement activities were found in FDEP's electronic documents. Field personnel did not enter the property during reconnaissance.
22	22-1 22-2	1	FDOT I-95 Corridor (Former) American Land Cruisers / Cruise America (Former) Coney Island Racetrack 1000 SW 20th Way Ft. Lauderdale, FL 33312	8944444 BCEPD-1589	PCTS STCM FL UST FL LUST FDEP Contamination Locator Map Broward County Contaminated Sites (EDIEAR)	Transportation Corridor Former Vehicle Dealership	Within Corridor	Petroleum	Eligible for EDI program Documented groundwater contamination; Remediation Inactive	Medium	Conduct Level II sampling in braided ramp construction area. Potential dewatering concern due to documented groundwater contamination.	This site is assigned a Medium risk rating based on eligibility for the EDI program and a remediation status of Inactive. An April 1989 Tank Registration Form indicates the facility had one, 2,000-gallon leaded gasoline UST and that the property was to be purchased by FDOT as part of the I-595 project. No TCAR or assessment documents were available for review. A March 1990 letter confirms the site is eligible for state administered cleanup under the EDI program. The eligibility checklist indicates the site had a discharge prior to January 1989. A July 2000 Free Product Recovery Initiative Report indicates the site was demolished during construction of I-95. An August 2010, FDEP Scoring Review indicates the site had an EDI program score of 10 based on groundwater contamination at the site from a light petroleum product.
23	23-1 23-2	1	Interplex Proto-Stamp, Inc. (Former) Sun Belt Interplex, Inc. 900-920 SW 21st Terrace Ft. Lauderdale, FL 33312	FLD038086872 FLR000038539 BCEPD-14700	RCRA FL ENG CONTROLS Broward Co. HM	Industrial / Manufacturing Warehouse	279	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is a warehouse occupied by Interplex Protostamp, a manufacturer of precision metal parts. An April 2012 Hazardous Material Inspection report by Broward County found numerous violations and confirmed Interplex required a hazardous materials license from the county.
24	24-1 24-2 24-3 24-4	1, 2	Stranahan High School Broward County School Board 1800 SW 5th Place Fort Lauderdale, FL 33312	9047391 FLD984201533 BCEPD-1518	PCTS STCM FL UST FL LUST RCRA Broward Co. HM	School	254	Petroleum Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. A Storage Tank Notification Form, dated December 1990, indicates three fuel oil USTs were installed in 1951 and were to be removed. No records indicate if the tanks were removed; no TCAR or tank closure documents were available for review.
25	25-1 25-2	1	Megawattage (Former) Laumar Roofing Services Inc. (Former) Georgia Pacific Gypsum Corp. 850 SW 21st Terrace Ft. Lauderdale, FL 33312	982153843 9400607 FLD982153843 BCEPD-853 OHMIT Incident No. 16194	STCM FL AST RCRA FL SPILLS Broward Co. HM Broward Co. AST	Industrial / Manufacturing Warehouse	280	Petroleum Hazardous Material / Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site was formerly occupied by Georgia-Pacific Gypsum Corp, which registered one, 4,000-gallon AST in 1994. The tank contents are unknown. Field reconnaissance personnel noted this facility is a generator rental equipment company, fabrication shop, or repair facility. Field personnel noted a smaller AST at the southeast corner of the building and fuel tanker trucks parked in the front of the property.

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26	26-1 26-2	1	Matrix-Z LLC (Former) Laumar Roofing Systems, LLC (Former) Florida Home Insulation (Former) Lank Como Oil Co. 800 SW 21st Terrace Ft. Lauderdale, FL 33312	8838095 BCEPD-14145	STCM FL UST FL AST Broward Co. HM	Light Industrial Warehouse	281	Petroleum	No assessment data available to verify noted soil and groundwater contamination; Remediation status unknown	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. A January 1988 Storage Tank Notification Form indicates one, 1,000-gallon leaded gasoline and one, 275-gallon unleaded gasoline ASTs existed at the site (install dates unknown). A letter to FDER indicates the tanks were removed in March 1988. No TCAR or other assessment data was available for review. A March 2012 Incident Notification Form indicates petroleum impacted soil (staining) and groundwater (odor) were removed from the site in the former location of the tanks. No assessment data associated with this investigation was available for review. Field reconnaissance personnel noted several storage totes of approximately 250-gallons located at the south side of the facility. The content of these totes was not identified during reconnaissance.
27	27-1 27-2 27-3 27-4	1	Jet Dock Systems Verizon Wireless - Esler Site (Former) Broward Power Equipment Inc. 790 SW 21st Terrace Ft. Lauderdale, FL 33312	8628070 BCEPD-6007	PCTS STCM FL UST FL LUST FL AST Broward Co. HM	Light Industrial Warehouse Cell Tower	303	Petroleum	SRCO July 2004	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. A November 1986 Tank Registration Form noted one, 3,000-gallon gasoline UST and one, 3,000-gallon diesel UST were installed in December 1969. A May 1991 Inspection report states the USTs were removed by a contractor in March 1989 and soil and groundwater contamination was observed at the time of removal. Natural attenuation monitoring was conducted for 3 years and a SRCO issued in July 2004.  Field reconnaissance personnel also identified a cell tower on the property with a propane emergency generator. No environmental concerns were noted during reconnaissance.
28	28-1 28-2	1, 2	Colaianni Italian Floor Tile Manufacturing (Former) Super Stone Inc. 700 SW 21st Terrace Ft. Lauderdale, FL 33312	8622393	STCM FL UST	Industrial	116	Petroleum	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. FDEP records indicate a 10,000 gallon diesel UST was installed in 1982 and removed in 1990. No TCAR or other assessment data was available for review.
29	29-1 29-2 29-3 29-4	1, 2	CSX Transportation Railyard 300 SW 21st Terrace Ft. Lauderdale, FL 33312	FLD981022478 ERNS 51005	RCRA ERNS	Railway Rail Yard	122	Petroleum Hazardous Waste Herbicides Pesticides Coal Ash PCBs Hazardous Material - Hydrochloric Acid	N/A Presumed contaminated	High	Conduct Level II sampling if site could impact construction.	This site is assigned a High risk rating based on the potential for contamination from historical railway operations. The site does not have documented contamination but is presumed contaminated. This site was inspected during field reconnaissance which did not identify stressed vegetation, surface staining, groundwater monitoring wells or other visual environmental concerns at the site. However, the operation of a rail system has a variety of potential sources that can contribute to environmental impacts along rail corridors. Typical sources include petroleum or chemical leaks from rail cars, leaking transformers, herbicides, railroad ties, and coal ash and cinder. No records were available in FDEP OCULUS or internet search databases for review.
30	30-1 30-2 30-3 30-4	1, 2	New Cingular Wireless #16120 - Riverland Identity Graphics & Printing Acoustic Engineering Company of FL Squeegee Science 500 SW 21st Terrace Ft. Lauderdale, FL 33312	SQG_138764 SQG_11647 BCEPD-5955 BCEPD-3290 BCEPD-14947	Broward Co. HM	Multi-tenant Light Industrial Warehouses Cell Tower	339	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. FDEP's Information Portal identified two businesses with SQG identification numbers at this address. No other documentation was available. Field reconnaissance personnel noted a cell tower onsite with a propane AST for an emergency generator. No environmental concerns were noted during reconnaissance.

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31	31-1 31-2	2	Jam Environmental & Vacuum Services LLC 250 SW 21st Terrace Ft. Lauderdale, FL 33312	FLR000176842 LW-00761 LW-00655	RCRA	Light Industrial / Waste Recovery	167	Petroleum Hazardous Waste	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on its handling of hazardous waste and petroleum products with no records of releases or contamination. In July 2011, the site was registered as a CESQG, Petroleum Contact Water Management, and Used Oil Transporter facility. A November 2012 inspection noted the facility handled waste streams including used oil, used oil filters, used oily rags, used antifreeze, and universal waste mercury lamps. The site had one, 500-gallon used oil tank and one, 500-gallon diesel fuel tank. The facility was issued procedural violations related to improper labelling of used oil, halogen testing of used oil, unboxed mercury-containing lamps, and manifest paperwork. An email dated March 2013, indicated the facility had returned to compliance. An August 2016, inspection report noted the facility was in compliance except for a minor violation related to improper storage of used lamps, which was rectified within one week.
32	32-1 32-2	2	AA Carbonics 256 SW 21st Terrace Ft. Lauderdale, FL 33312	FLTMP9102780	RCRA	Light Industrial	309	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is listed as a HW-OTG (one-time generator) in FDEP's Information Portal. No documents were available for review. The site's Temporary EPA ID was issued in April 1991 for an estimated 80 pounds of generated waste.
33	33-1 33-2	2	Neptune Boat Lifts (Former) Huron Machine Products, Inc. (Former) Jam Environmental & Vacuum Services LLC 228 SW 21st Terrace Ft. Lauderdale, FL 33312	FLR000046318 SQG_8657 BCEPD-14024 BCEPD-1434	RCRA Broward Co. HM	Light Industrial Building	309	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. FDEP's Information Portal contains a 1998 Hazardous Waste Notification Letter for the site that identifies Huron Machine as a SQG. No other documentation was available for review. Field reconnaissance personnel noted several small storage containers inside the facility and a National Fire Protection Agency diamond placard onsite with a 2-4-0-0 hazard level indicator.
34	34-1 34-2	2	FDOT (Former) CSX Transportation (Former) Tire Eliminators Inc. 401 SW 21st Terrace Ft. Lauderdale, FL 33312	54410 9100189 BCEPD-2639	SWF/LF PCTS STCM FL UST FL LUST FL Cleanup Sites FDEP Contamination Locator Map Broward County Contaminated Sites (EDIEAR)	Railway Operations Former Waste Tire Processing Facility	209	Arsenic, Cadmium, Chromium, Lead, Petroleum	Not eligible for ATRP or PCPP  Documented soil and groundwater contamination; Remediation Inactive	Low	Potential dewatering concern due to documented groundwater contamination.	This site is assigned a Low risk rating based on site distance from the project corridor. A May 1991 Storage Tank Registration Form indicates a 2,000-gallon UST was installed in December 1969 and removed in April 1990. A May 1990 TCAR indicated a consultant sampled the 2,000-gallon UST and determined it contained hazardous waste with code F004. During UST removal 22 cubic yards of soil were excavated. Laboratory analytical results (samples from the center of the tank excavation) noted Arsenic, Cadmium, Chromium, and Lead in groundwater and leachable Chromium and Lead in soil exceeded respective MCLs. It was determined since these CoCs were not present in the tank, the tank was not the source of the soil contamination. Groundwater flow at the site in 1990 was toward the south-southeast. The TCAR recommended a monitoring only plan where monitoring wells would be sample quarterly for one year. The fourth and final groundwater sampling event in August 1991 found all CoCs below regulatory standards.  A May 1993 decision from FDER found the site ineligible to participate in the ATRP because contamination was not from an abandoned petroleum storage system and was not a result of petroleum products. An April 2002 decision from FDEP found the site ineligible to participate in the PCPP because contamination was not from a petroleum storage system. An FDEP Site Priority Score Sheet from April 2007 indicates the site has a score of 9 based on contaminated groundwater from a heavy petroleum product. The FDEP Facility Inspection Cover Page lists the site's cleanup status as Inactive.

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35	35-1 35-2	2	Roberts Brothers Auto Service 226 SW 21st Terrace Ft. Lauderdale, FL 33312	SQG_7575 BCEPD-550	Broward Co. HM EDR Hist Auto	Auto Service Shop	309	Petroleum Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is improved with a 3,800 square foot warehouse building constructed in 1967 that is currently used as an auto repair garage. FDEP's Information Portal search results indicate the site is listed as a SQG in the Hazardous Waste program, but no supporting documents were available for review. Field reconnaissance noted several drums were present in the garage. No environmental concerns were noted.
36	36-1 36-2	2	D&D Mobile Welding and Fabrication Inc. (Former) Professional Funeral Services Inc. 222 & 225 SW 21st Terrace Ft. Lauderdale, FL 33312	8944924 BCEPD-4950	STCM FL UST Broward Co. HM	Office Building & Light Industrial Warehouse	309	Petroleum Hazardous Waste	N/A No documented contamination	No		This site is assigned a No risk rating based on distance from the project corridor. A 1992 Storage Tank Registration Form indicates the site had one, 1,000-gallon and one, 2,000-gallon unleaded gasoline USTs. No other pertinent records were available for review in FDEP's Information Portal.  The property is listed in FDEP's air program and has a permit to operate as a Surface Coating Operations Facility. No hazardous waste records were available for review.
37	37-1 37-2	2	Omni Boat Canvas (Former) Newmil Marine 214 SW 21st Terrace Ft. Lauderdale, FL 33312	BCEPD-13956	Broward Co. HM	Light Industrial Warehouse	310	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is registered with BCEPD hazardous materials program. No records were available in FDEP's Information Portal or internet search databases for review.
38	38-1 38-2	2	JAS Powder Coating, LLC 219 SW 21st Terrace Ft. Lauderdale, FL 33312	BCEPD-04343	Broward Co. HM	Light Industrial	545	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is registered with BCEPD hazardous materials program. No records were available in FDEP's Information Portal or internet search databases for review.
39	39-1 39-2	2	Riverbend Retail Development SW Corner of West Broward Boulevard and 24th Avenue Ft. Lauderdale, FL 33312	BCEPD-2029	Broward County Contaminated Sites (EDIEAR)	Shopping Center Former Mobile Home Park	127	Arsenic	No assessment data available to verify contamination; Remediation status unknown	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. This site was identified in Broward County's Contaminated Locations Database and listed as a nonfunded cleanup. This site could not be located in FDEP's Information Portal. No documents were available for review. Field personnel observed this site undergoing redevelopment. A Walmart had been built onsite and a McDonald's fast food restaurant was under construction. No environmental concerns were noted.
40	40-1	2	Truck/Auto Accident-Spill I-95 at Broward Boulevard Exit Ft. Lauderdale, FL 33312	ERNS 456722	ERNS	Spill in Transportation Corridor	Within Corridor	Petroleum	N/A No documented contamination	Low		This site is assigned a Low risk rating based on a documented discharge of less than 25 gallons. The site is located on the I-95 northbound travel lanes at the Broward Boulevard exit. A reported 10 gallons of diesel was discharged as the result of a truck accident in September 1995. No documentation for this site was found in FDEP's Information Portal.
41	41-1 41-2	2	FDOT Transportation Corridor (Former) Everglades Fertilizer Co. 2001 W Broward Boulevard Ft. Lauderdale, FL 33311	FLD984262774	RCRA FL Resp Party	Transportation ROW Former Industrial	Within Corridor	Barium, Cadmium, Chromium, Lead, Mercury, Silver, Hexachlorocyclo- hexane, Chlordane, Cyanide and Copper Salts	Soil cap; No documented contamination	High	Conduct Level II sampling in bridge re-construction area.	This site is assigned a High risk rating based an interview with an FDEP official who noted the facility's history as a LQG and an onsite fire in 1969. DOT constructed I-95 directly above the site and the acreage was covered with 10 to 15 feet of compacted fill. Limited environmental documentation was available for review. FDEP Information Portal contains a November 1993 correspondence letter from FDEP confirming the site's hazardous waste generator status. A September 1996 letter from FDEP indicates the hazardous waste generator status was inactivated due to the closure of the facility. The Environmental First Search report included the following statement: "The state is seeking assurance from DOT that any future modification to the roadway take into account the potential for contaminated soils to be exposed."

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42	42-1 42-2	2	Sunnyreach Acres - Housing Authority, City of Ft. Lauderdale 100 SW 18th Avenue Ft. Lauderdale, FL 33312	8733093 BCEPD-16207	STCM FL UST Broward Co. HM	Multi-tenant Residences	125	Petroleum	TCAR requirements satisfied	Low	None	This site is assigned a Low risk rating based on an approved TCAR. The June 2015, TCAR indicated a 250-gallon single-walled steel UST was removed from the site. Over 7 tons of soil were removed and disposed offsite during tank removal and follow up activities. Subsequent laboratory analyses reported no impact to soil or groundwater. Broward County TCAR review comments dated June 2015, determined the TCAR complies with the FDEP's Storage Tank Closure Assessment Requirements, and did not require additional assessment relative to UST removal activities.
43	43-1 43-2 43-3	2	Spill 1544 Argyle Drive Ft. Lauderdale, FL	OHMIT Incident No. 8193 OHMIT Incident No. 45887 OHMIT Incident No. 45926	ERNS FL SPILLS	Spill in Transportation Corridor or Waterway	385	Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. According to EDR records, OHMIT Incident No. 8193 occured in May 2000, and Incident Nos. 45887 and 45926 occurred in September 2011. No additional details are available regarding the material or quantity involved in the incidents. On-scene response was necessary and each incident is "Closed." These incidents could not be located in FDEP's Information Portal and no other documents were available for review. There are no records of remedial actions taken.
44	44-1 44-2	2	Spill 1560 Argyle Drive Ft. Lauderdale, FL	OHMIT Incident No. 50738	ERNS FL SPILLS	Spill in Transportation Corridor or Waterway	330	Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. According to EDR records, OHMIT Incident No. 50738 occurred in March 2014 and no additional details are available regarding the material or quantity involved in the incident. On-scene response was necessary and the incident is "Closed." This incident could not be located in FDEP's Information Portal and no other documents were available for review. There are no records of remedial actions taken.
45	45-1 45-2 45-3 45-4	2	RaceTrac #665 2300 W Broward Boulevard Ft. Lauderdale, FL 33312	9803839 BCEPD-3448	STCM FL UST Broward Co. HM EDR Hist Auto	Gas Station	Adjacent	Petroleum	N/A No documented contamination	No	None	This site is assigned a No Risk rating based on distance from the project corridor. FDEP facility information indicates the site has two, 12,000-gallon and two, 10,000-gallon USTs. All tanks were installed in April 2001. A November 2015, inspection report indicates the four USTs were inspected and found in compliance. Several procedural non-compliance letters are in FDEP's Information Portal. No environmental concerns were noted.
46	46-1 46-2 46-3	2	Broward Boulevard Park-and-Ride (Former) C&L Transportation (Former) King Pancallo Gulf Super Service (Former) West Broward Gulf Service (Former) Johnnie & Mack Paint & Body  2101 W Broward Boulevard (Former 2121 & 2165 W Broward Boulevard) Ft. Lauderdale, FL 33312		SWF/LF PCTS STCM FL UST FL LUST RCRA EDR Hist Auto	Parking Lot & Transportation ROW  Solid Waste Facility Hurricane Debris Staging Area  Former Gas Station / Auto Body Shop	Within Corridor	Petroleum Hazardous Waste	N/A No documented contamination	Medium	Conduct Level II sampling in bridge re-construction area.	This site is assigned a Medium risk rating based on former USTs at the site and lack of a TCAR or other assessment data for review. The site is currently owned by FDOT.  C&L Transportation: A Tank Registration dated December 1984 noted the facility had one, 2,000-gallon, and four, 6,000-gallon USTs containing leaded gasoline installed between 1972 and 1980. The facility had a Broward County Storage Tank closure license and a Closure Inspection Form states no problems were observed during tank removal.  Johnnie & Mack Paint & Body: This site was issued a SQG permit in January 1987 for waste codes associated with Halogenated/Non-Halogenated solvents. This permit has been included on the USEPA "No Longer Listed" list.  This site is currently authorized as a disaster debris management site (DDMS), with potential for solid/hazardous waste being stored onsite during disaster cleanup. A May 2016 letter from FDEP confirms the site's designation as a DDMS.

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47	47-1 47-2	2	CSX Rail Corridor  Rail corridor - 100 feet north and south of the Broward Boulevard Intersection, Parallel to I-95  Ft. Lauderdale, FL	None	Site Recon	Rail Corridor	Within Corridor	Petroleum Hazardous Waste Herbicides Pesticides Coal Ash PCBs	N/A Presumed contamination; No documented contamination	High	Conduct Level II sampling in bridge re-construction area.	This site is assigned a High risk rating based on the potential for contamination from historical railway operations. The site does not have documented contamination but is presumed contaminated. This site was inspected during field reconnaissance which did not identify stressed vegetation, surface staining, groundwater monitoring wells or other visual environmental concerns at the site. However, the operation of a rail system has a variety of potential sources that can contribute to environmental impacts along rail corridors. Typical sources include petroleum or chemical leaks from rail cars, leaking transformers, herbicides, railroad ties, and coal ash and cinder. No records were available in FDEP OCULUS or internet search databases for review.
48	48-1	2	Spill I-95 at Broward Boulevard Ft. Lauderdale, FL	OHMIT Incident No. 18472	FL SPILLS ERNS	Spill in Transportation Corridor	Within Corridor	Unknown	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on the lack of on-scene response for the incident. According to EDR records, OHMIT Incident No. 18472 occurred in July 1999 and no additional details are available regarding the material or quantity involved in the incident. On-scene response was not necessary and the incident is "Closed." This incident could not be located in FDEP's Information Portal and no other documents were available for review. There are no records of remedial actions taken.
49	49-1 49-2	2	SCI FI Megaplex T. (Former) Max LLC 1830 W Broward Boulevard Ft. Lauderdale, FL 33312	SQG_11140 BCEPD-3628	FL AST Broward Co. AST	Commercial	Adjacent	Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on the presence of an AST at the site with no records of releases or contamination. Little information is available for this site. EDR records indicate this site, formerly occupied by "Max LLC", has an in-service, 1,000 gallon diesel AST for an emergency generator that was installed in January 1998. Field personnel observed a generator on the south side of the building. The site has a record in FDEP's Information Portal under the business name "SCI FI Megaplex T" as a SQG, but no documents were available for review.
50	50-1 50-2 50-3 50-4	2	Vacant Building (Former) Neals American Service (Former) RD American Service (Former) Bill's Amoco Service Garage  1800 W Broward Boulevard Ft. Lauderdale, FL 33312	None	EDR Hist Auto	Vacant Building Former Gas Station	Adjacent	Petroleum Hazardous Waste	N/A No documented contamination	High	Conduct Level II sampling if site could impact construction	This site is assigned a High risk rating based on historical operations as a gas station with no records indicating the site has been assessed. EDR lists this site as a Historical Gas Station from 1965-1975. Field reconnaissance personnel noted the building was currently under construction. A groundwater monitoring well was noted in the parking lot at the rear of the building. No additional environmental concerns were observed.

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51	51-1 51-2 51-3 51-4	2	Marathon-Broward #572 (Former) ACM Auto Repair (Former) Automated Petrol (Former) BP Amoco #958 (Former) Peters Amoco III (Former) Amocos West Broward Service Center  1776 W Broward Boulevard Ft. Lauderdale, FL 33312	8501538 FLD984212241 BCEPD-1211	PCTS STCM FL UST FL LUST FL Cleanup Sites RCRA EDR Hist Auto  FDEP Contamination Locator Map  Broward County Contaminated Sites (EDIEAR)	Gas Station	Adjacent	Petroleum	Eligible for EDI program and PLRIP Documented soil and groundwater contamination; RAP to be developed and implemented	Medium	Conduct Level II sampling if site could impact construction.  Potential dewatering concern	This site is assigned a Medium risk rating based on documented contamination with ongoing remedial activities. A January 2017 LSSI report states six former USTs were removed and replaced with one, 12,000-gallon and two, 10,000-gallon USTs in April 2010. The site had three documented petroleum discharges: September 1987, March 1993, and December 1996. The 1987 discharge was deemed eligible for the EDI program. The 1993 and 1996 discharges were deemed eligible for the PLRIP. The site currently has a state priority score of 10.  A 1989 CAR documented free product in three monitoring wells. The free product plume and dissolved petroleum hydrocarbon plume were defined both horizontally and vertically in the vicinity of the tank field. The groundwater flow direction was generally towards the southeast in October 2016 and generally radiated from the central portion of the site in January 2017. The LSSI report documented groundwater contamination above GCTLs and/or NADCs and soil impacts exceeding SCTLs for direct exposure within the top 2 feet of the subsurface.  A contract was awarded in November 2017 for a Performance Based Advanced Cleanup (PBAC) of this site. A RAP modification will be developed and an active remediation system will be installed and operated at the site until June 2022.
52	52-1 52-2 52-3 52-4	2	Seven Seas Yacht Sales, Inc. 1500 W Broward Boulevard Ft. Lauderdale, FL 33312	BCEPD-05869	Broward Co. HM ERNS	Boat Dealership	265	Hazardous Waste Petroleum	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is registered with BCEPD hazardous materials program. No records were available in FDEP's Information Portal or internet search databases for review.
53	53-1 53-2 53-3 53-4		Broward Tires & Auto Repair / Tire Express of Broward, Inc. (Former) R&R Lube Express Inc. [2006] (Former) Tech Master Auto Repair [2003] (Former) Precision Tune Auto Care [1999] 1490 W Broward Boulevard Ft. Lauderdale, FL 33312	BCEPD-05053 BCEPD-07631 BCEPD-09304 BCEPD-13351	Broward Co. HM EDR Hist Auto	Auto Service Shop	445	Hazardous Waste Petroleum	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is registered with BCEPD hazardous materials program. No records were available in FDEP's Information Portal or internet search databases for review.
54	54-1 54-2 54-3 54-4	2	Vacant Lot (Former) Transmission King 2501 W Broward Boulevard Ft. Lauderdale, FL 33312	9814239 BCEPD-04485 BCEPD-15961	STCM FL UST Broward Co. HM Broward Co. UST EDR Hist. Auto	Vacant Lot Former Auto Service Shop	428	Petroleum	N/A No documented contamination	No	None	This site is assigned a No risk rating since the site is not adjacent to the project corridor, is in a state program, and does not have documented petroleum contamination. According to the EDR Historical Auto database and historical aerials, the site operated as an auto repair business until 2007. In June 2014, one 550 gallon, single-walled, steel UST containing waste oil was discovered and removed from the northeast portion of the site. Soil and groundwater assessment of the tank excavation indicated petroleum CoC did not exceed FDEP cleanup target levels. At the time of the site reconnaissance, the site was a vacant lot. The site is located on the northwest corner of W Broward Boulevard and NW 25th Avenue.

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55	55-1 55-2 55-3 55-4	2	Fashion Cleaners Inc. 2427 W Broward Boulevard Ft. Lauderdale, FL 33312	9500294 9202386 FLD032271686 BCEPD-1682A BCEPD-1682B	PCTS STCM FL UST FL LUST DRYCLEANER PRIORITY CLEANER RCRA Broward Co. HM EDR Hist Cleaner  FDEP Contamination Locator Map  Broward County Contaminated Sites (EDIEAR)	Drycleaner	260	Hazardous Waste Petroleum	Eligible for DSCP  Documented soil and groundwater contamination; Remediation Inactive  Petroleum SRCO June 2017	Low	None	This site is assigned a low risk rating based on distance from the project corridor. According to FDEP documents, the site has operated as a drycleaner since 1952, is in a state program, has documented petroleum contamination with issuance of a Site Rehabilitation Completion Order (SRCO), and has documented drycleaning solvent contamination without a No Further Action (NFA) approval or issuance of an SRCO. At the time of the site reconnaissance, the site was an active drycleaning business. Site reconnaissance noted at least two groundwater monitoring wells at the site. The site is located on the northeast corner of W Broward Boulevard and NW 25th Avenue.
56	56-1 56-2 56-3 56-4 56-5	2	Riverbend Corporate Park (Former) Broward Boulevard Shopping Center (Former) Zayre Dept Store #691 (Former) Fashion Cleaners (Former) Frank's Spic N Span (Former) CL Coin Laundry (Former) Ted's Pure Oil Station (Former) Tony's Service & Repairs 2201-2327 W Broward Boulevard Ft. Lauderdale, FL 33312	8733224 9100153 BCEPD-13747	PCTS STCM FL UST FL LUST FL Cleanup Sites Broward Co. HM EDR Hist Auto EDR Hist Cleaners FDEP Contamination Locator Map	Office Building & Vacant Land Former Shopping Center	Adjacent	Petroleum Hazardous Waste	Eligible for ATRP  Documented soil and groundwater contamination; Remediation Inactive	Medium	Conduct Level II sampling if site could impact construction Potential dewatering concerr due to documented groundwater contamination; site assessment maps are provided in Appendix B.	1. This site is assigned a medium risk rating based on participation in the ATKP and documented contamination with no ongoing assessment activities. The Broward Boulevard Shopping Center was the former location of the Oasis Gas Station. This station had four USTs which

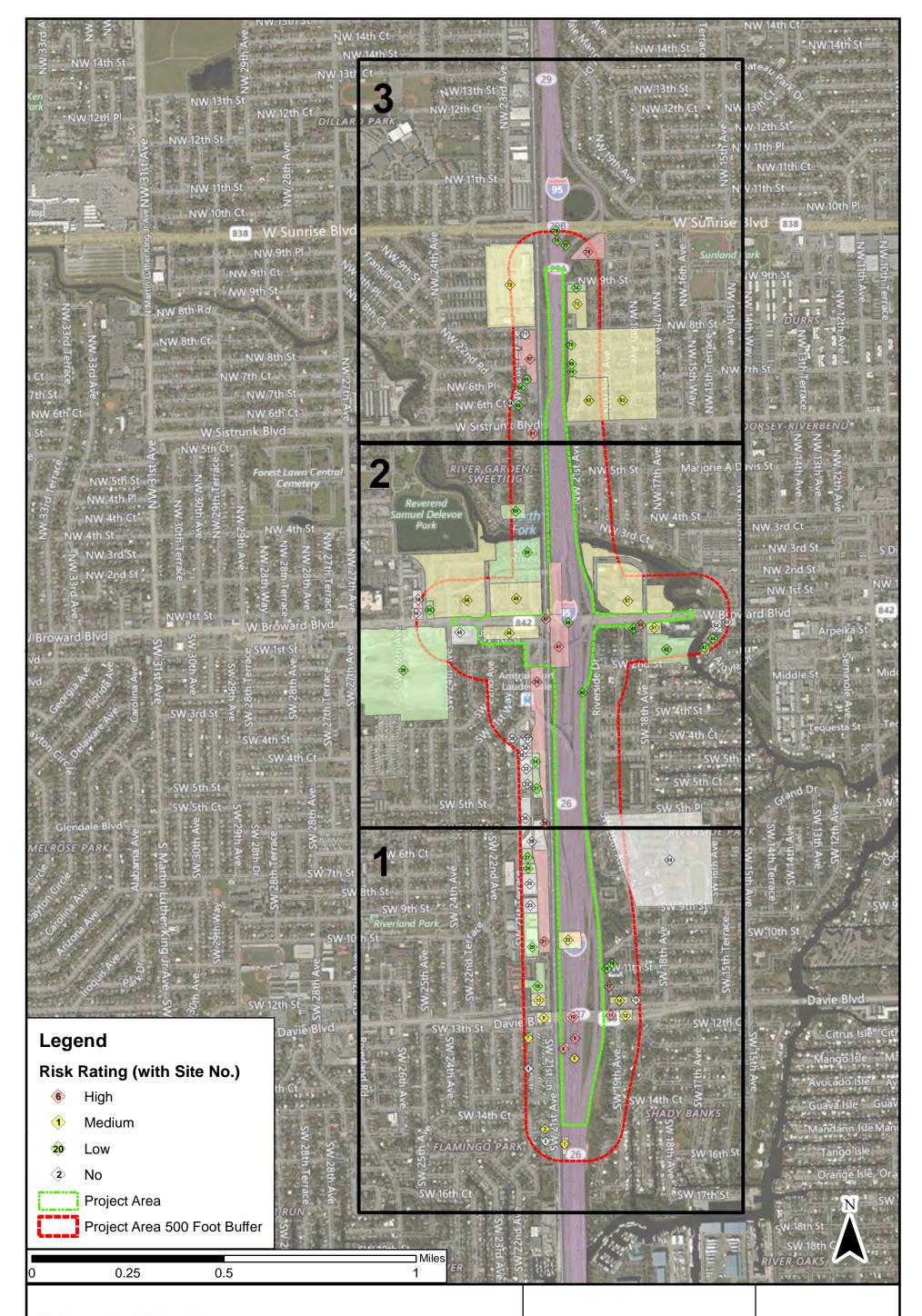
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57	57-1 57-2 57-3 57-4 57-5 57-6 57-7 57-8 57-9 57-10 57-11 57-12 57-13 57-14 57-15 57-16 57-17 57-18 57-19 57-20 57-21	2	The Salvation Army Corporate Connection Lines, Inc. (Land & Sea Petrol) MCM Construction / Equipment Yard (Former) Ryder Truck (Former) Fabrications Plus (Former) Yellow Freight System Inc. (Former) Deb-Li Enterprises Inc. (Former) Kauff's Towing (Former) Charlie Frymyer Paving, Inc. (Former) National Lift Truck Service 1901 W Broward Boulevard Ft. Lauderdale, FL 33312	8943416 9100558 8622594 9300638 9401868 FLD984194373 BCEPD-1588A BCEPD-14544 BCEPD-4002 BCEPD-1707 OHMIT Incident No. 55383 No. 8319	PCTS STCM FL AST FL UST FL UST FL SPILLS RCRA ERNS FL Cleanup Sites Broward Co. HM  FDEP Contamination Locator Map  Broward County Contaminated Sites (EDIEAR)	Distribution Center (Vehicle Maintenance)  Light Industrial, Commercial Buildings / Warehouse  Truck Storage Yard for Transportation Logistics Company  Former Auto / Industrial	Adjacent	Hazardous Waste Petroleum Arsenic	Eligible for EDI program  Documented soil and groundwater contamination; Remediation Inactive	Medium	·	This site is assigned a Medium risk rating based on participation in the EDI program, documented contamination, and ongoing assessment activities. The facility formerly had six USTs from 1962 to 1993 located in two areas (Area 1 and Area 2). The site also had three documented discharges (1988, 1995, and 2011). These discharges are eligible for EDI program funding and the site has a current state priority score of 10.  A 2017 Low Score Assessment report found soil and groundwater samples from Area 1 had petroleum CoC concentrations above CTLs. Horizontal delineation of the contamination has been completed in the surficial aquifer. Vertical delineation of the contamination has not been completed in the plume area. The one soil and groundwater sample for Area 2 did not have petroleum CoC above CTLs. This report recommended removing Area 2 from further study. The report also concluded the site should be transferred to the LSSI program where the plume should be delineated and the site monitored for 12 months prior to LSSI-Closure. Field reconnaissance personnel noted several groundwater monitoring wells onsite.
58	58-1 58-2	2	A1A Atlantic Moving & Storage  111 NW 25th Avenue Ft. Lauderdale, FL 33311	BCEPD-00341	Broward Co. HM	Moving -Relocation Company	444	Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. The site is registered with BCEPD hazardous materials program. Site reconnaissance noted one 550 gallon diesel AST with secondary containment. No records were available in FDEP's Information Portal or internet search databases for review.
59	59-1 59-2	2	Broward Regional Juvenile Detention Center 222 NW 22nd Avenue Ft. Lauderdale, FL 33311	OHMIT Incident No. 54277	FL SPILLS	Juvenile Detention Center	113	Drilling Mud	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on a reported spill of 1,000 gallons of drilling mud in December 2015. The incident was investigated by the Fish and Wildlife Conservation Commission. No records were available in FDEP Information Portal or internet search databases for review.
60	60-1 60-2 60-3	2	Vacant Land - City of Ft. Lauderdale Community Redevelopment Agency (Former) Nursing Home 2137 NW 4th Street Ft. Lauderdale, FL 33311	9806409 BCEPD-7498	STCM FL UST Broward Co. HM	Vacant Land Former Nursing Home	300	Petroleum	TCAR requirements satisfied	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. A March 2004 Storage Tank Registration Form indicates one 1,000-gallon diesel UST and one, 550-gallon diesel UST were removed from the site in February 2004 (install dates unknown). A TCAR review letter from BCEPD, dated August 2004, indicates contaminated soil was encountered and removed at the time of tank removal. Based on this information, BCEPD requested a TCAR Addendum to include additional soil assessment for PAHs and TRPH and did not approve the TCAR. A September 2004 FDEP TCAR Review Form indicates no contamination was present and the TCAR met Chapter 62-761 FAC requirements. The TCAR and associated addendum were not available for review.

SITE NO.	PHOTO NUMBER(S)	GRID SECTION	SITE NAME AND ADDRESS	FACILITY ID (EPA / FDEP / BCEPD)	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	RATIONALE FOR RISK RATING
61	61-1 61-2 61-3 61-4	3	Vacant Land - City of Fort Lauderdale Community Redevelopment Agency (Former) Haygood Property (Former) JDS Pure Oil Service (Former) Chucks Cities Service (Former) Modern Garage Service Station (Former) Seymores Union 76 (Former) JD's Union 76 2130-2140 NW 6th Street Ft. Lauderdale, FL 33311	9806560 8942733 BCEPD-7644	STCM FL UST Broward Co. HM EDR Hist Auto	Vacant Lot Former Gas Station / Auto Service Shop		Petroleum	N/A No documented contamination	High	Conduct Level II sampling in braided ramp construction area.	This site is assigned a High risk rating based on historical operations as a gas station and the lack of site assessment records. A closure license, issued in September 1987, by the Broward County Environmental Control Board indicated two, 1,000-gallon USTs were removed from the site. A November 2005 FDEP TCAR Review Form indicated two, 500-gallon USTs were removed from the site. According to this form, no contamination was present and the tank closure met Chapter 62-761 FAC requirements. No TCAR or other assessment documents were available for review.
62	62-1 62-2 62-3 62-4	3	City of Fort Lauderdale Wastewater Treatment Plant and Repump Station (Former) Fort Lauderdale Incinerator (Former) Fort Lauderdale Trash Transfer Station (Former) Fort Lauderdale Waste Tire Collection Center 1901-2102 NW 6th Street Ft. Lauderdale, FL 33311	95125 53380 8943045 FLTMP9203814 BCEPD-2823A BCEPD-1690B OHMIT Incident No. 49179	SWF/LF PCTS STCM FL UST FL LUST FL SPILLS FL CLEANUP SITES RCRA FDEP Contamination Locator Map Broward County Contaminated Sites (EDIEAR)	Wastewater Treatment Plant  Disaster Debris Mgmt Site  Former Yard Trash Processing Facility  Former Waste Tire Collection Center	Adjacent	Petroleum	NFA with Controls February 2018	Medium	site could impact construction.  Potential dewatering concern due to documented	This site is assigned a Medium risk rating based on documented petroleum contamination that has been granted an NFA with controls. In May 2013 the site had a release of approximately 500 gallons of diesel fuel. The spill migrated to the south and west off the day tank concrete pad to the ground, east of the pump station building. In June 2013, 65 tons of petroleum impacted soil around the day tank were removed. Assessments indicate petroleum impacted soil and groundwater is contained within the property boundary. A SRCR, dated September 2016, recommended approval of a NFA with Controls for the site, which has limited remaining contamination managed with engineering controls. The NFA with Controls was granted in February 2018. Field reconnaissance personnel noted several monitoring wells and a diesel emergency generator onsite.
63	63-1 63-2 63-3 63-4	3	Lincoln Park / Durrs Neighborhood Brownfield I-95 to NW 17th Avenue NW 6th Street to NW 8th Street Ft. Lauderdale, FL 33311	COM_211581 FLN000407550 BCEPD-2649 BCEPD-2823A	US Brownfields FL Cleanup Sites Broward County Contaminated Sites (EDIEAR)	Park Municipal Residential Former Incinerator Site	60	Incinerator Ash Lead Dioxin Metals	Superfund Site  Documented soil and groundwater contamination; Monitoring Only	Medium	braided ramp construction area.  Potential dewatering concern due to documented groundwater contamination; site assessment maps are provided in Appendix B.	This site is assigned a Medium risk rating based on ongoing monitoring for the continued presence of soil and groundwater contamination. The City's former Municipal incinerator operated from the early 1920's-1950s on a parcel of property that lies on the northwest corner of Sistrunk Boulevard and NW 19th Street. Lincoln Park is adjacent to the former incinerator site and was reportedly used to stage incinerator ash. An environmental assessment of the site by the City confirmed the presence of elevated levels of Arsenic and Lead in soils at the former incinerator site and Lincoln Park. In 2004, a NAM Plan was implemented for the Lincoln Park Complex Area. A September 2012 NAM Report indicates groundwater samples collected from several monitoring wells between 2009 and 2012 contained Arsenic, Antimony, and Lead at concentrations above GCTLs, but not above NADSC. This report indicates the City is pursuing an NFA with Restrictive Covenant for the site.
64	64-1 64-2	3	Residence (Former) Eluetts Service Station (Former) Taylor Bros Service Station 631 NW 22nd Road Ft. Lauderdale, FL 33311	None	EDR Hist Auto	Residential Former Gas Station	471	Petroleum Hazardous Waste	N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. Records indicate the site was a historical auto station from 1957-1962. The site could not be located in FDEPs Information Portal, therefore, no documents were available for review.

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65	65-1 65-2	3	Spill 601 21st Terrace Ft. Lauderdale, FL 33311	OHMIT Incident No. 42590	FL SPILLS	Residential	372	Unknown	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. According to EDR records, OHMIT Incident No. 42590 occurred in November 2009 and no additional details are available regarding the material or quantity involved in the incident. On-scene response was necessary and the incident is "Closed." This incident could not be located in FDEP's Information Portal and no other documents were available for review. There are no records of remedial actions taken.
66	66-1 66-2	3	Salvage Auto Repair, Inc. / Salvage Auto Center 640 NW 21st Terrace 2115 NW 6th Place Ft. Lauderdale, FL 33311	SQG_5551 BCEPD-6641	Broward Co. HM EDR Hist Auto	Auto Service Shop	283	Hazardous Waste Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. The site has a record in FDEP's Information Portal and a SQG identification number, but no documents are available for review. Field reconnaissance personnel noted this site is an active automotive car repair facility. Numerous car parts were scattered on the property and apparent petroleum staining was noted on the asphalt.
67	67-1 67-2	3	Ferrous Processing and Trading Co., FPT Fort Lauderdale LLC, dba Sunrise Recycling 700 NW 21st Terrace Ft. Lauderdale, FL 33311	4985057 BCEPD-107	FL Tier 2 Broward Co. HM	Metal Recycling Collection & Staging	187	Hazardous Waste Petroleum	N/A No documented contamination	High	braided ramp construction	This site is assigned a High risk rating based on site operations and field observations. This site operates as a metal recycling/salvage yard. Poor housekeeping practices, typical of salvage yards, were observed from the public right-of-way. Field reconnaissance personnel noted heavy machinery operating onsite and numerous piles of salvaged material scattered throughout the property. No documents were available for review in FDEP's Information Portal.
68	68-1 68-2	3	Auto Service/Storage Facility 701 NW 20th Avenue Ft. Lauderdale, FL 33311	None	Site Recon	Auto Service Shop or Storage Facility	68	Hazardous Waste Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on field observations and no records of releases or contamination. Field reconnaissance personnel noted this site was an active car repair facility with approximately 8 garage/bay doors on each side of the building. Field personnel were unable to visually inspect behind the fence of the facility. No records were available in FDEP Information Portal or internet search databases for review.
69	68-1 69-1 69-2	3	Sign-D-Sign 715 NW 20th Avenue Ft. Lauderdale, FL 33311	None	Site Recon	Sign Fabrication Shop Former Auto Service Shop	66	Hazardous Waste	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on field observations and no records of releases or contamination. Field reconnaissance personnel identified this site as a sign fabrication facility. No environmental concerns were noted. No records were available in FDEP Information Portal or internet search databases for review.
70	70-1 70-2	3	Rodney's Relocation Services Inc. (Former) Salt & Pepper Body Shop 2001 NW 7th Place Ft. Lauderdale, FL 33311	None	EDR Hist Auto	Moving -Relocation Company Former Auto Service Shop	59	Hazardous Waste Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on operations as an auto service shop from 1999-2002 with no records of releases or contamination. Little documentation is available for review and no records were available in FDEP Information Portal or internet search databases. Field reconnaissance personnel noted this facility is currently a moving/relocation company. The building onsite has five garage bay doors.
71	71-1 71-2 71-3 71-4	3	Vacant Land (Former) Diamond Towing 2201 NW 8th Street Ft. Lauderdale, FL 33311	9046003	PCTS STCM FL UST FL LUST	Vacant Land / Residential Former Auto Service Station	286	Petroleum	Not eligible for EDI program N/A No documented contamination	No	None	This site is assigned a No risk rating based on distance from the project corridor. A Tank Registration Form, dated March 1990, indicated the facility was formerly Diamond Towing and had an unknown number of tanks removed prior to 1980. The cover letter for the Tank Registration indicated the facility had a Phase II audit indicating the property was clean; however, this document was not in FDEP's file and could not be reviewed and/or verified. An EDI Eligibility Review Checklist indicates the site was deemed ineligible for the program because of the lack of documented contamination.

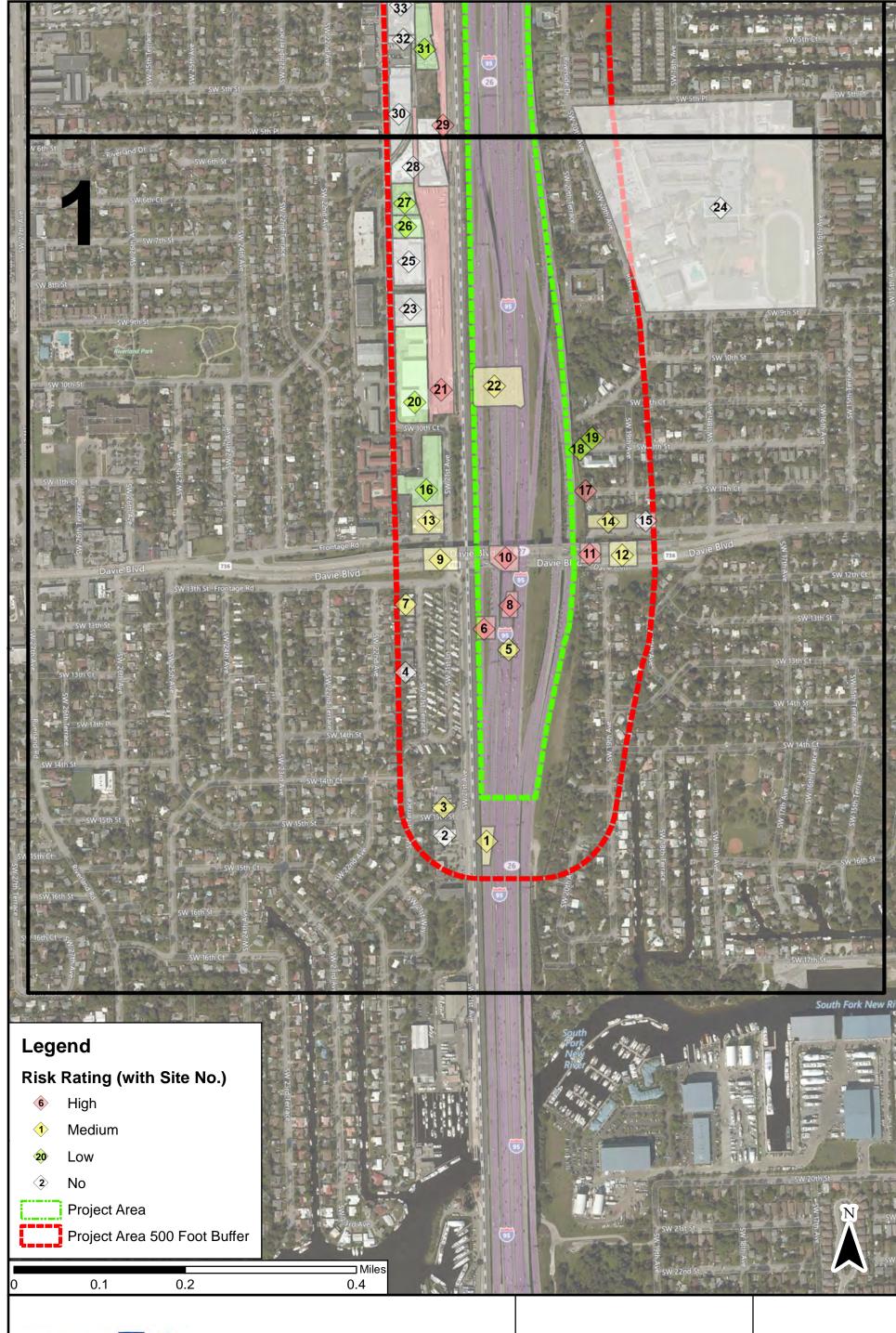
SITE NO.	PHOTO NUMBER(S)	GRID SECTION	SITE NAME AND ADDRESS	FACILITY ID (EPA / FDEP / BCEPD)	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	RATIONALE FOR RISK RATING
72	72-1 72-2 72-3 72-4	3	Bridge Point I-95 (Former) U.S. Concrete Pipe Co. 2200 W Sunrise Boulevard Ft. Lauderdale, FL 33311	4354941 8622335 BCEPD-1262 BCEPD-2079	PCTS STCM FL AST FL UST FL LUST FL Tier 2 Broward Co. HM Broward County Contaminated Sites (EDIEAR)	Industrial Warehouse Former Concrete Facility	152	Petroleum Hazardous Materials Arsenic	SRCO August 2001	Medium	Conduct Level II sampling in braided ramp construction	This site is assigned a Medium risk rating based on a previous release with a documented SRCO and based on the removal of various tanks from the site with no TCAR or closure documents. Tank Registration Forms indicate the site has had several tanks since 1957. A TCAR documents removal of one 4,000-gallon diesel fuel UST in January 2000. Petroleum constituents above GCTLs were detected in a groundwater sample at the bottom of the tank pit and the maximum OVA detected was above 10 ppm. A subsequent sampling event did not detect petroleum constituents above GCTLs in groundwater. FDEP issued an SRCO for this tank removal and associated contamination in August 2001. Field reconnaissance personnel noted this site is currently under construction. No environmental concerns were noted at the site.
73	73-1 73-2 73-3 73-4	3	Vacant Lot 820 NW 20th Terrace Ft. Lauderdale, FL 33311	None	Site Recon	Vacant Lot	47	Unknown	N/A No documented contamination	Medium	Conduct Level II sampling if site could impact construction.	This site is assigned a Medium risk rating based on field observations noting a groundwater monitoring well onsite. This site could not be located in FDEP's Information Portal and no documents were available for review. Field reconnaissance personnel observed a monitoring well located on the southwest corner of this property indicating contamination may be present onsite. A soil berm was also present around the property.
74	74-1 74-2 74-3 74-4	3	Battery Express Well Made Cabinets T-Shirt Screen Printing (Former) CJ Paint & Body Shop  1920-1922 NW 9th Street Ft. Lauderdale, FL 33311	None	EDR Hist Auto	Multi-tenant Light Industrial Warehouse / Auto Service Shop	47	Hazardous Waste Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on historical operations as an auto service shop from 1999-2010. No records were available in FDEP Information Portal or internet search databases for review.
75	75-1 75-2	3	Sunrise Used Auto Parts 977 NW 19th Avenue Ft. Lauderdale, FL 33311	BCEPD-1135 ERNS 590684 OHMIT Incident No. 16092	ERNS FL SPILLS Broward Co. HM	Junk Yard/ Auto Salvage Yard Former Spill Site	157	Petroleum	N/A No documented contamination	High	Conduct Level II sampling if	This site is assigned a High risk rating based on field observations and records indicating poor housekeeping operations onsite. This site operates as an automotive and truck parts recycling/salvage yard. Poor housekeeping practices, typical of older salvage yards, were observed from the public right-of-way. A report filed with ERNS in August 1998, referenced the following: "oily mess all over lot coming from tanks and cars." The site has no records of assessment and/or remedial actions. Field reconnaissance personnel noted this facility has numerous auto parts scattered throughout the property. Several drums and apparent petroleum staining were also noted at the facility.
76	76-1	3	Truck/Auto Accident-Spill I-95 South of Sunrise Boulevard Ft. Lauderdale, FL 33311	ERNS 127771	ERNS	Spill in Transportation Corridor	370	Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on distance from the project corridor and a documented discharge of less than 25 gallons. This site is located on the I-95 southbound lanes south of Sunrise Boulevard. A reported 10 gallons of gasoline were discharged as the result of a truck accident in November 1989. The fire department on scene used sorbent materials to remediate the discharge. The shoulder and swale areas were impacted. There are no records of remedial actions taken.

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77	76-1	3	•	OHMIT Incident No. 39082 OHMIT Incident No. 11294	FL SPILLS	Spill in Transportation Corridor	350	Unknown	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on distance from the project corridor, documented discharges of less than 25 gallons, and the lack of on-scene responses for both incidents. According to EDR records, OHMIT Incident No. 39082 occurred in March 2008 and resulted in a spill of 5 gallons of diesel fuel. No on-scene response was necessary and the incident is "Closed." OHMIT Incident No. 11294 occurred in August 2001 and no additional details are available regarding the material or quantity involved in the incident. No on-scene response was necessary and the incident is "Closed." These incidents could not be located in FDEP's Information Portal and no other documents were available for review. There are no records of remedial actions taken.
78	76-1	3	S.B.Hatergate, Inc. Truck Spill I-95 at Sunrise Boulevard Ft. Lauderdale, FL 33311	ERNS 52141	ERNS	Spill in Transportation Corridor	485	Petroleum	N/A No documented contamination	Low	None	This site is assigned a Low risk rating based on distance from the project corridor. This site is located on the I-95 travel lanes at Sunrise Boulevard. Approximately 50 gallons of diesel fuel discharged as the result of a truck accident in February 1988. The records of remedial actions indicate that "the land" was impacted. The site has a minimal record in the reviewed databases. No records were available in FDEP Information Portal or internet searches for review. Typical fuel spill remedial actions on existing roads do not address contamination which has migrated under the roadbed. Excavation of the existing roadbed to recover impacted soils is usually not permitted. This site has not been remediated or received an SRCO.



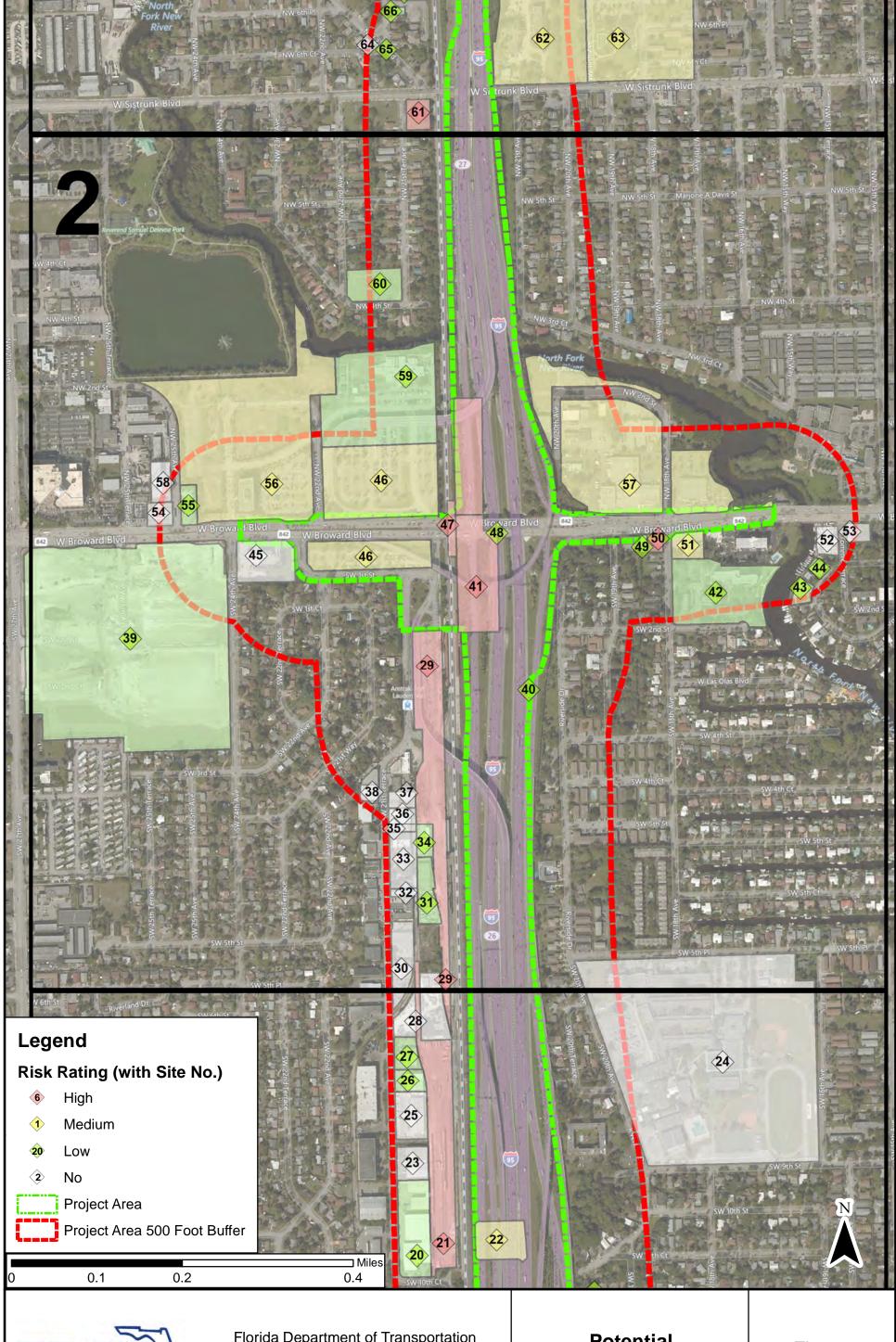


Potential
Contamination Sites
Map Section Index





Potential
Contamination Sites
Grid Section 1





Potential
Contamination Sites
Grid Section 2





Potential
Contamination Sites
Grid Section 3

## Site No. 51 | Marathon-Broward #572

**Source:** Low Scored Site Initiative Report (January 2017)

- Figure 2 Groundwater Analytical Summary Map
- Figure 3A Groundwater Elevation Contour Map (10-5-16)
- Figure 3B Groundwater Elevation Contour Map (1-5-17)

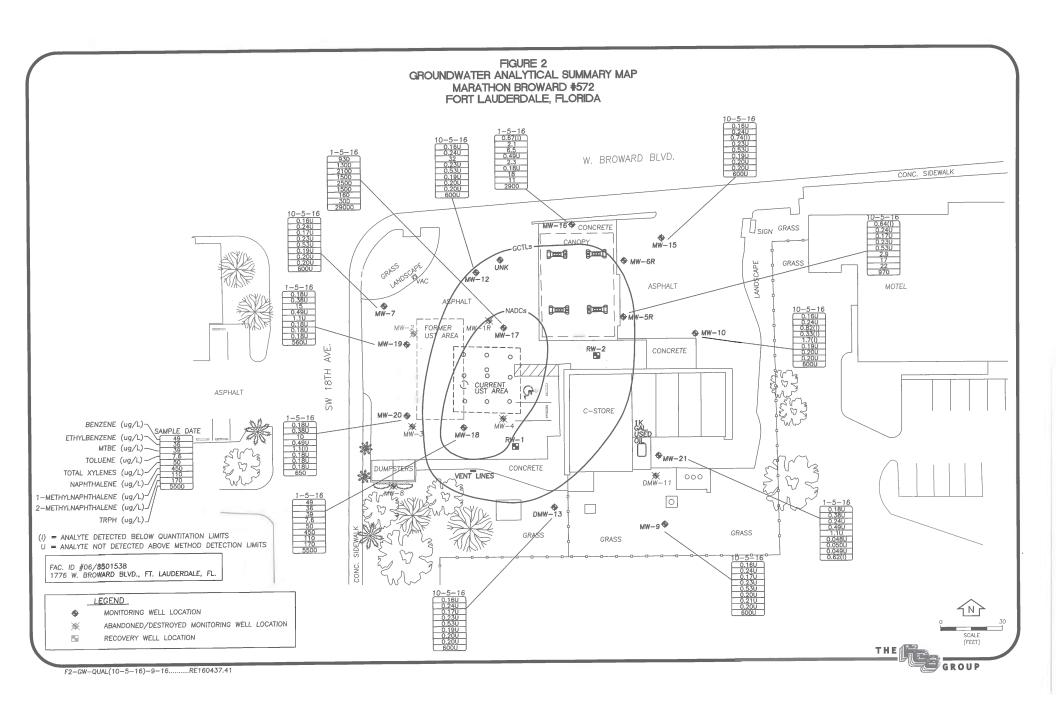
**Source:** Contamination Assessment Report (January 1989)

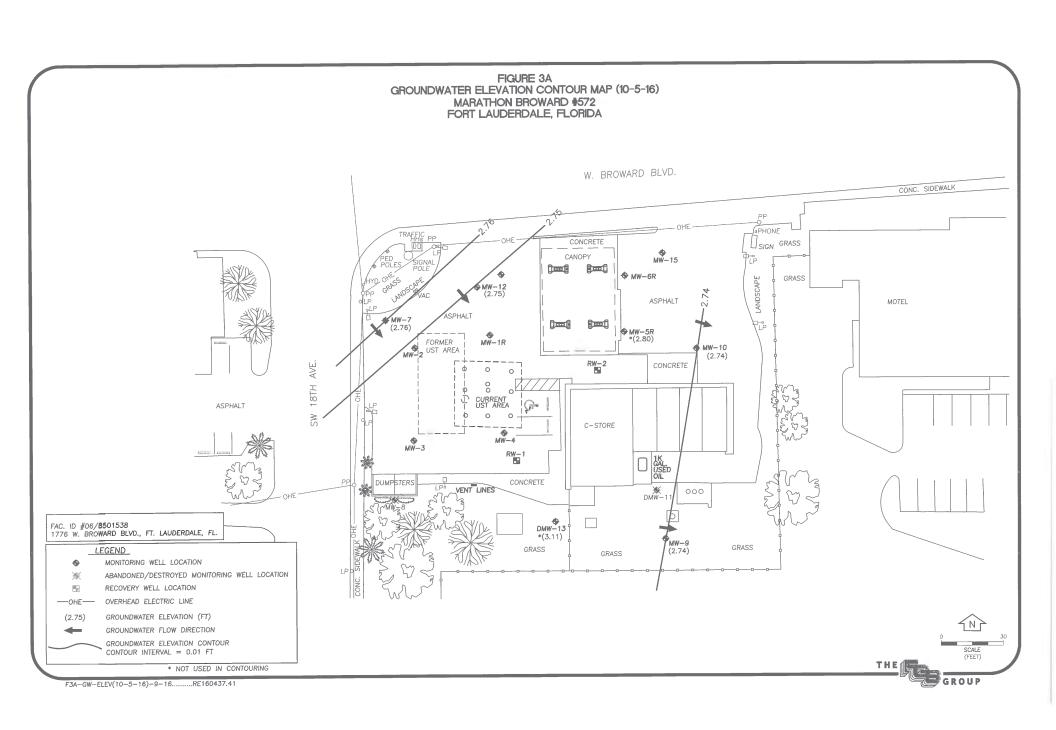
- Figure 6 Groundwater Elevation Map
- Figure 7 Hydrocarbon Contamination Plume Map

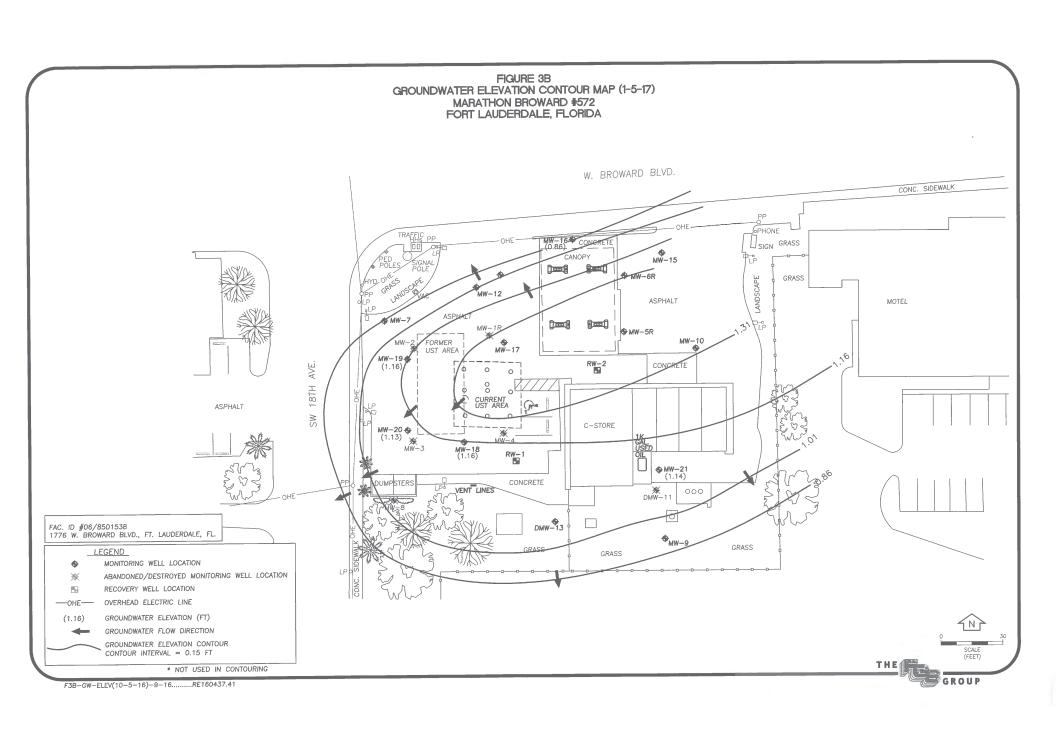


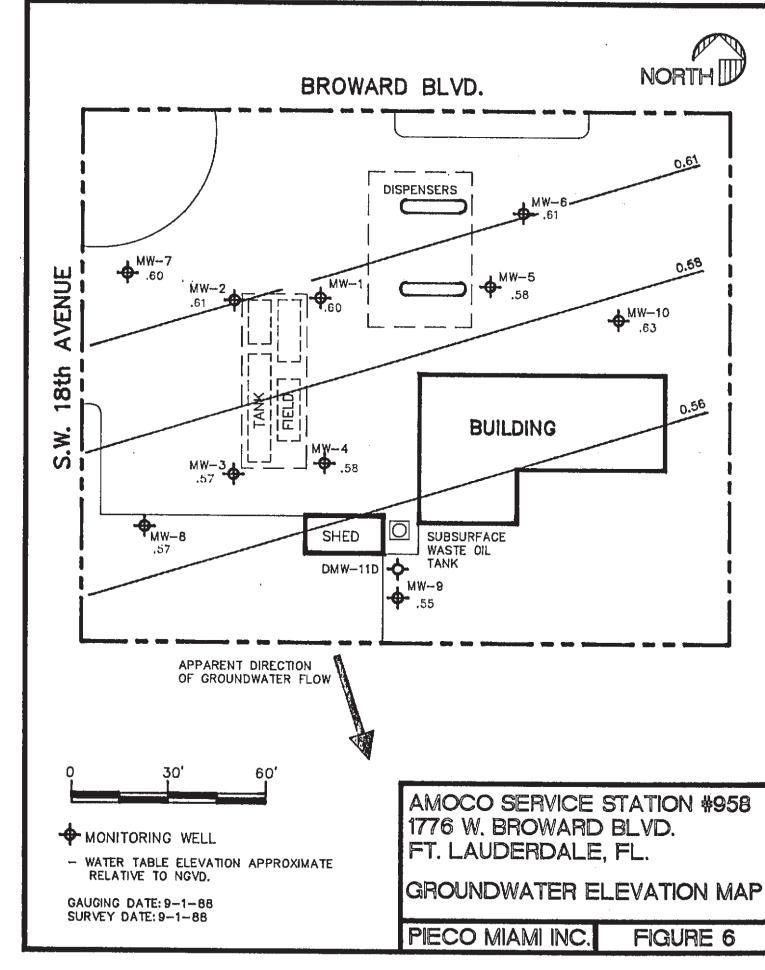
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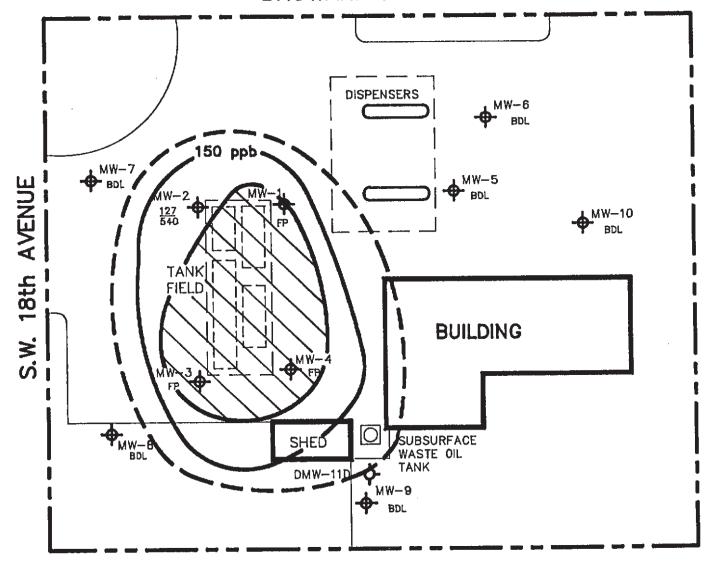








#### BROWARD BLVD.





APPROXIMATE EXTENT
OF DISSOLVED HYDROCARBON PLUME



SAMPLING DATES:

4-29-88 6-15-88 9-30-88 FP = FREE PRODUCT
ND = NONE DETECTED
BDL = BELOW DETECTABLE LIMITS

127 = BENZENE IN ppb 540 = TOTAL VOA

> AMOCO SERVICE STATION #958 1776 W. BROWARD BLVD. FT. LAUDERDALE, FL. HYDROCARBON CONTAMINATION PLUME MAP PIECO MIAMI INC. FIGURE 7

# Site No. 56 | Riverbend Corporate Park

**Source:** Summary of IRA/CAR Activities (date unknown)

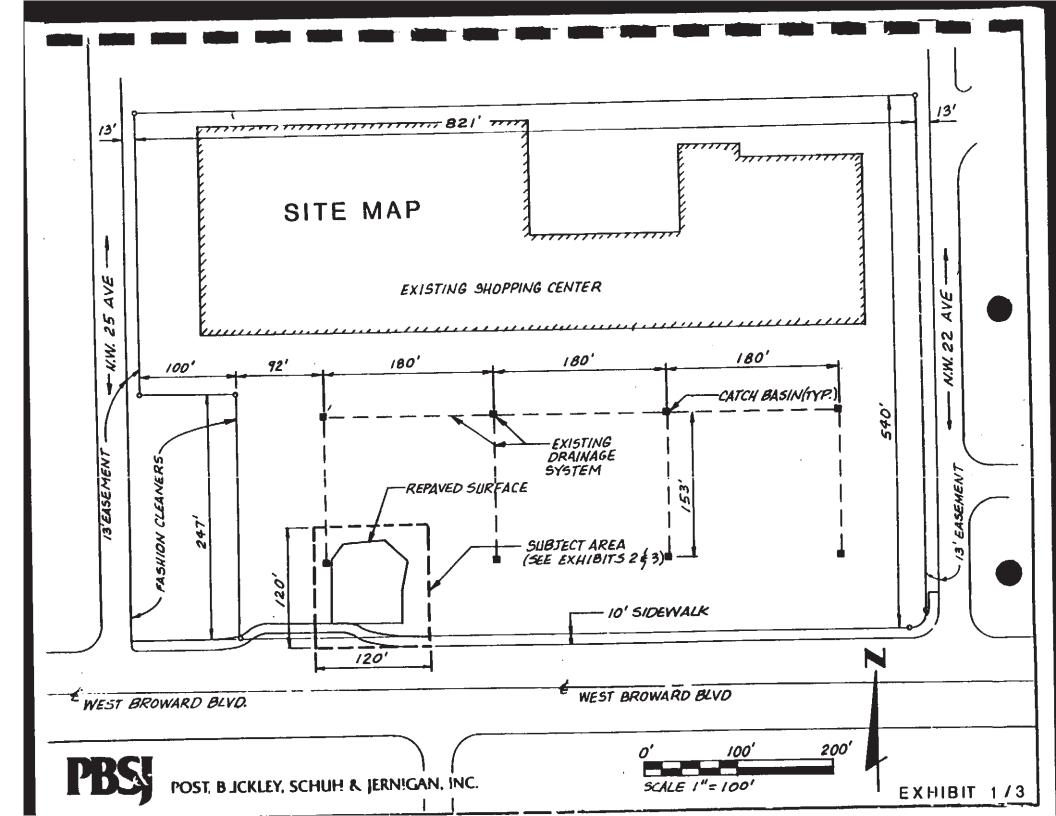
- Exhibit 1/3 Broward Boulevard Shopping Center Layout
- Figure 2/3 Former UST and Gas Pump Locations
- Figure 3/4 Area of Soil Removed during the IRA

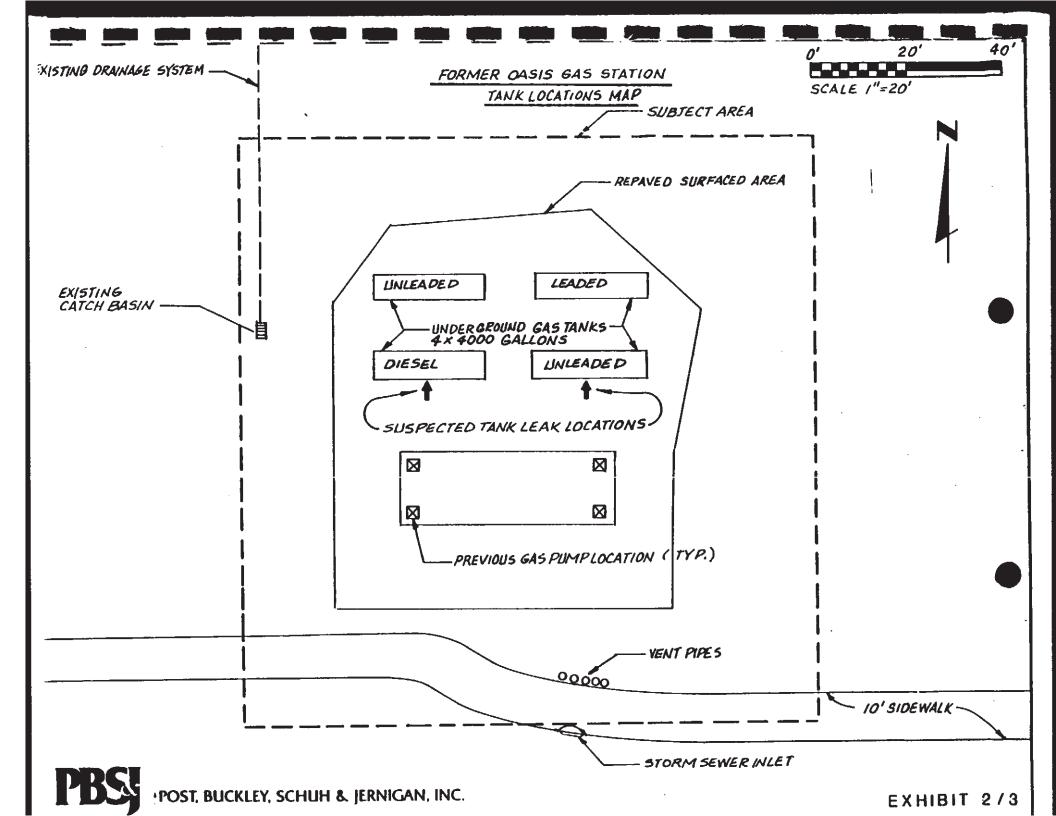
**Source:** Contamination Assessment Report (1990)

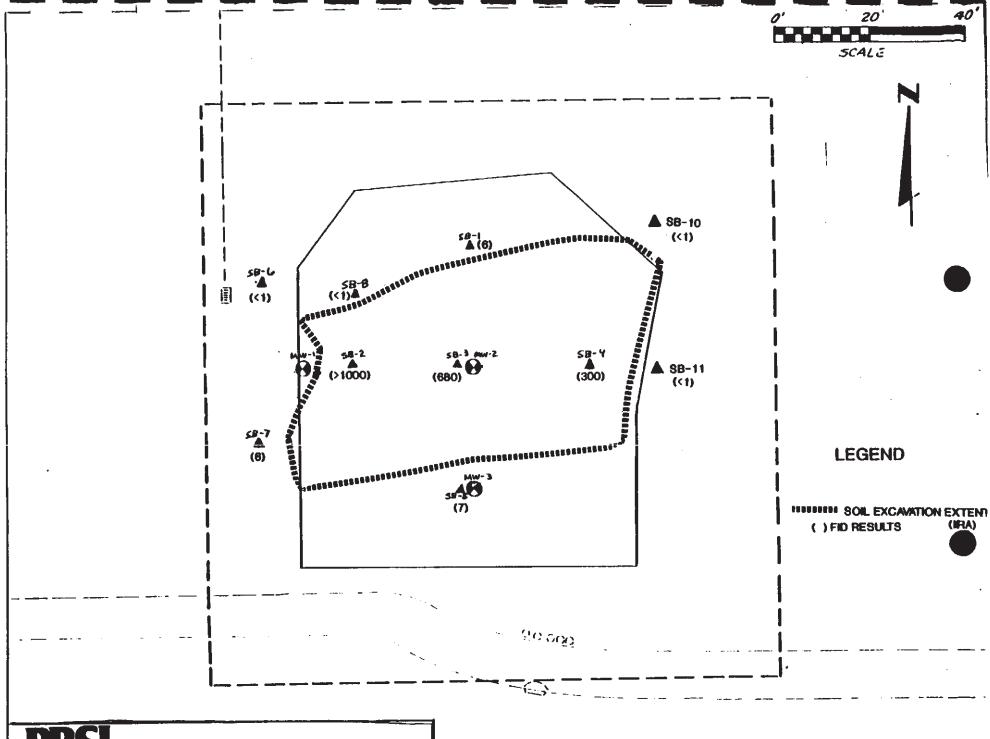
- Figure 3 Water Table Elevations
- Figure 4 Soil Borings Isopleth Map
- Figure 5 Soil Borings Isopleth Map
- Figure 6 Groundwater Plume Map (VOCs)
- Figure 7 Groundwater Plume Map (PAHs)
- Figure 8 Groundwater Plume Map (Benzene)
- Figure 9 Groundwater Plume Map (Xylene)
- Figure 10 Groundwater Plume Map (Chrysene)
- Figure 11 Groundwater Plume Map (VOCs)



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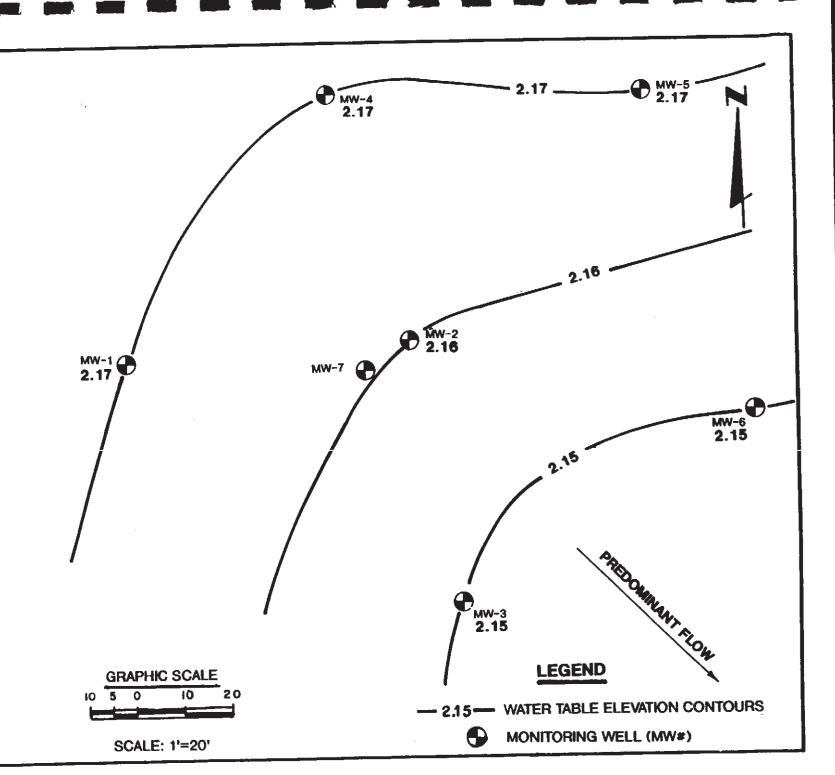




POST, BUCKLEY, SCHUH & JERNIGAN, INC BROWARD BLVD ---

**EXHIBIT 3/4** 

2245 W. BROWARD BOULEVARD FT.LAUDERDALE, FLORIDA



29. SOIL BORINGS ISOPLETH MAPS
 (1-1.5 feet, 4-4.5 feet)



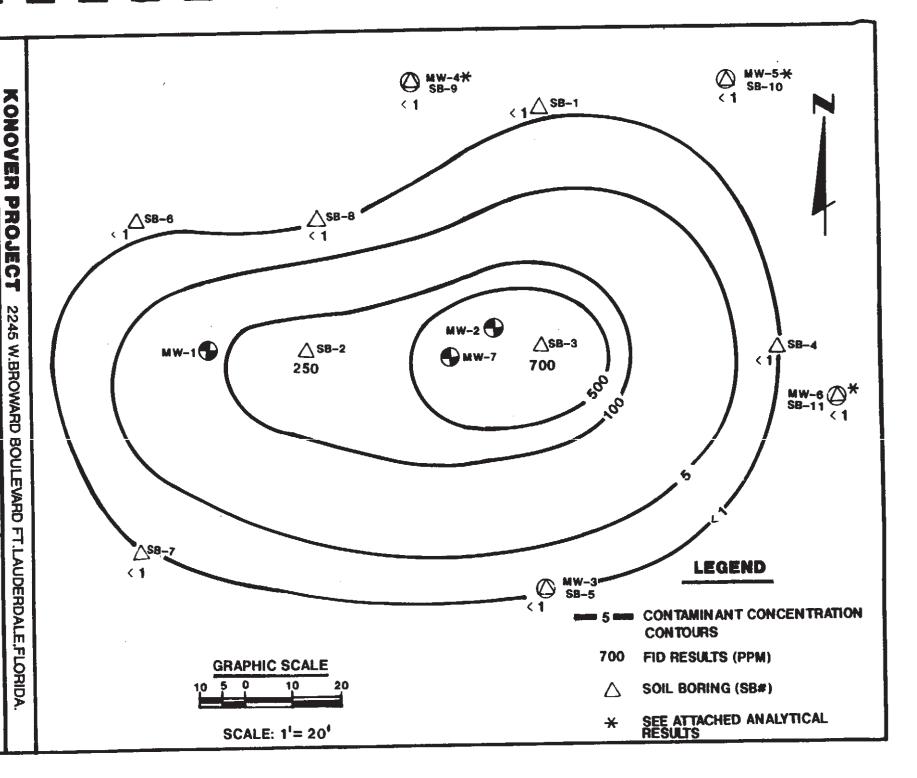
FIELD

**ANALYSIS** 

**4.0** 

POST, BUCKLEY, SCHUH & JERNIGAN, INC. SOIL BORING ISOPLETH

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32. GROUNDWATER PLUME MAPS

Figures 6 - 11



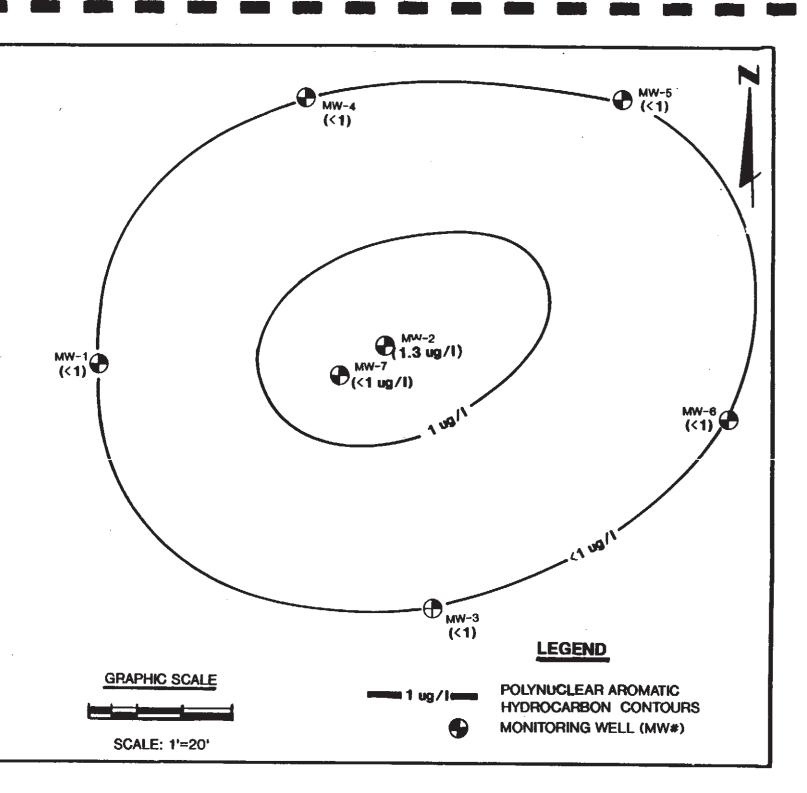
2245 W. BROWARD BOULEVARD FT.LAUDERDALE,

FLORIDA

2245 W. BROWARD BOULEVARD FT.LAUDERDALE,

FLORIDA

POST, BUCKLEY, SCHUH & JERNIGAN, INC..
POLYNUCLEAR AROMATIC
HYDROCARBON (vg/I)



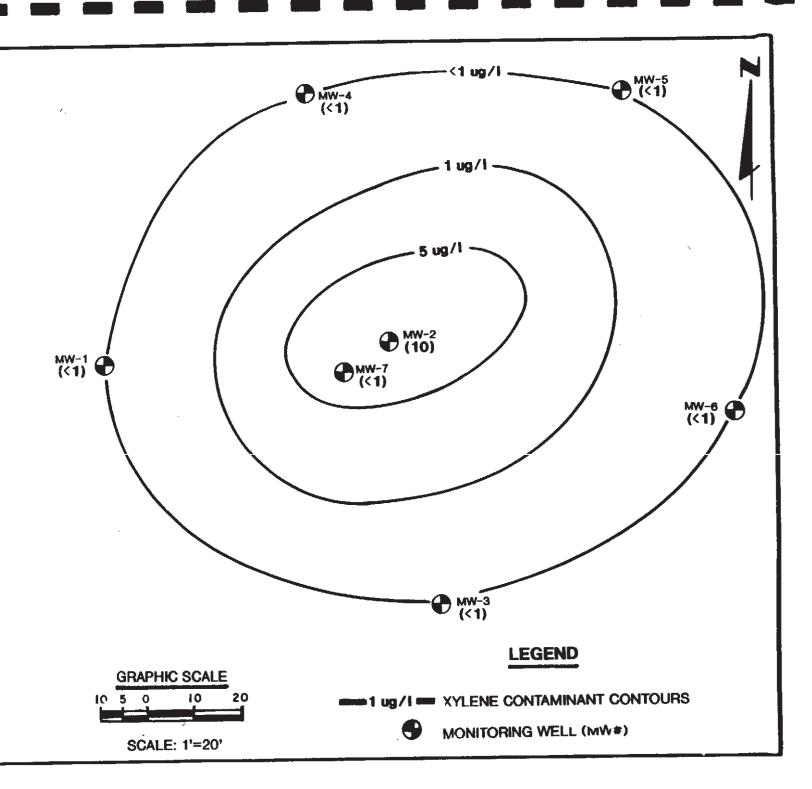
## PBS

KONOVER PROJECT

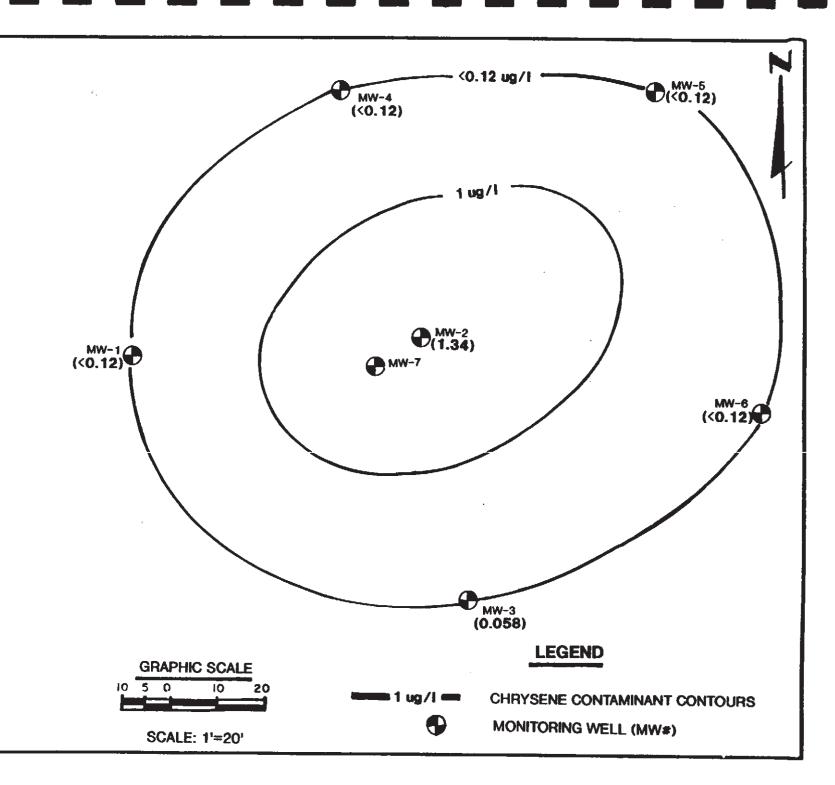
2245 W. BROWARD BOULEVARD FT.LAUDERDALE, FLORIDA

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

XYLENE CONTAMINANT CONTOURS ( ug/I)



2245 W. BROWARD BOULEVARD FT.LAUDERDALE, FLORIDA



## Site No. 57 | The Salvation Army

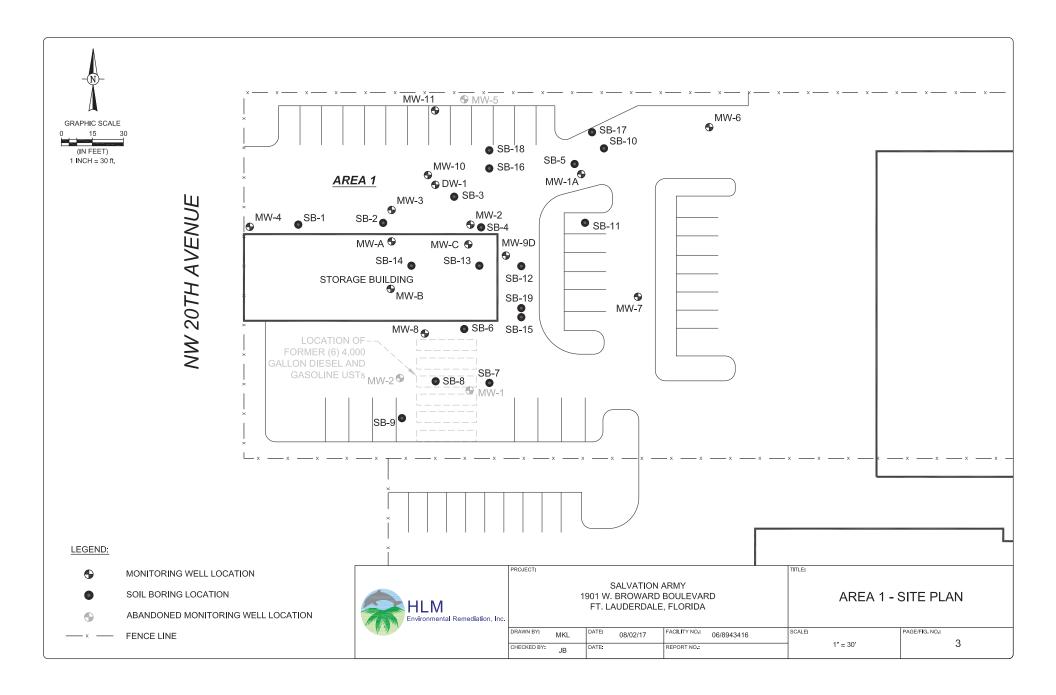
**Source:** Template Site Assessment Report (November 2017)

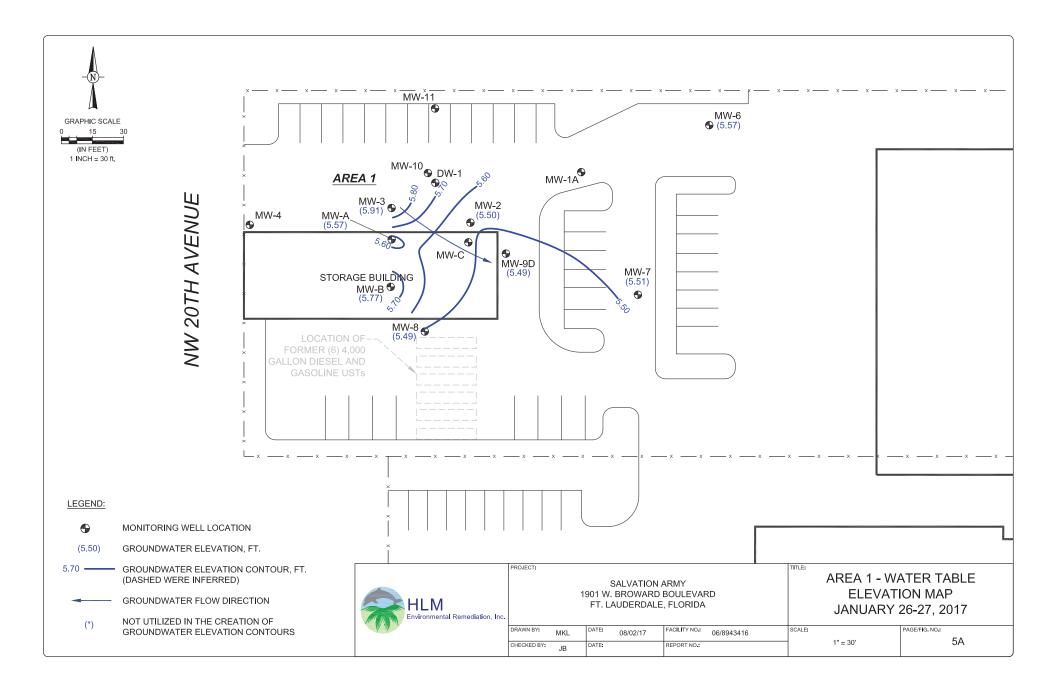
- Area 1 Site Plan
- Area 1 Water Table Elevation Map, January 26-27, 2017
- Area 1 Water Table Elevation Map , July 7, 2017
- Area 1 Soil Screening Map
- Area 1 Soil Analyses Map
- Area 1 VOA Plume in Groundwater Map
- Area 1 PAH Plume in Groundwater Map
- Area 2 Site Plan
- Area 2 Soil Screening Map

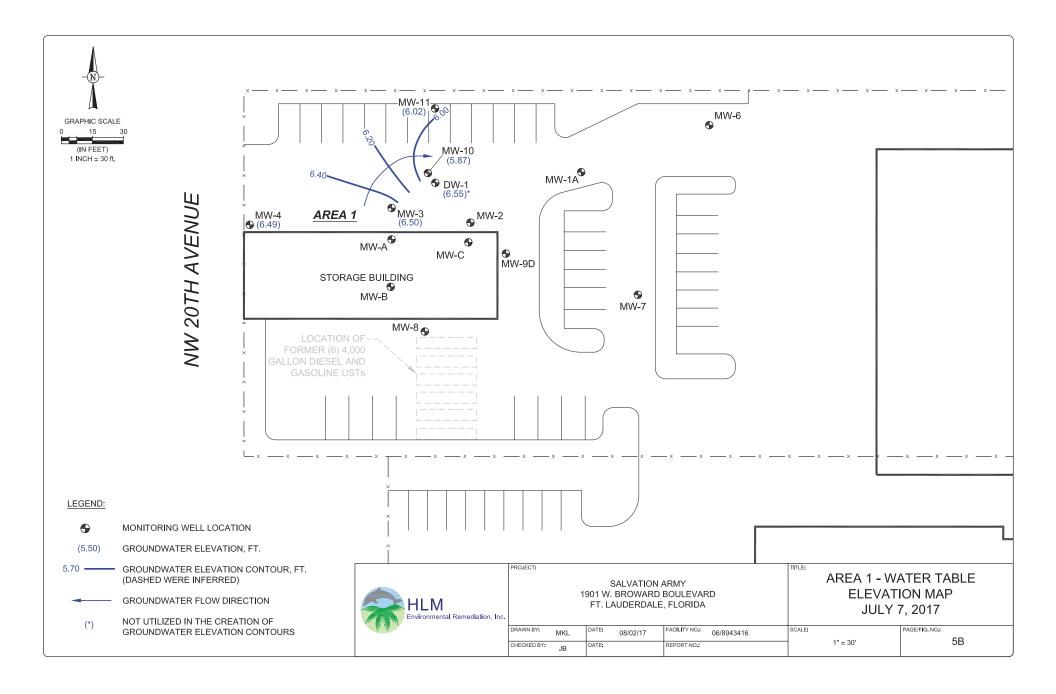


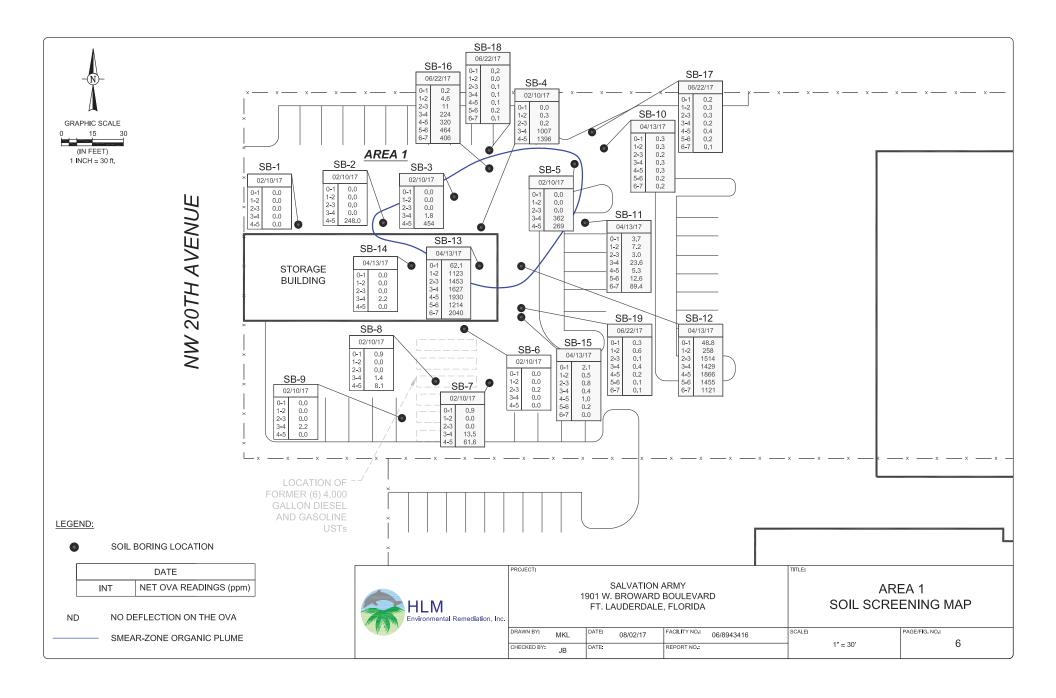
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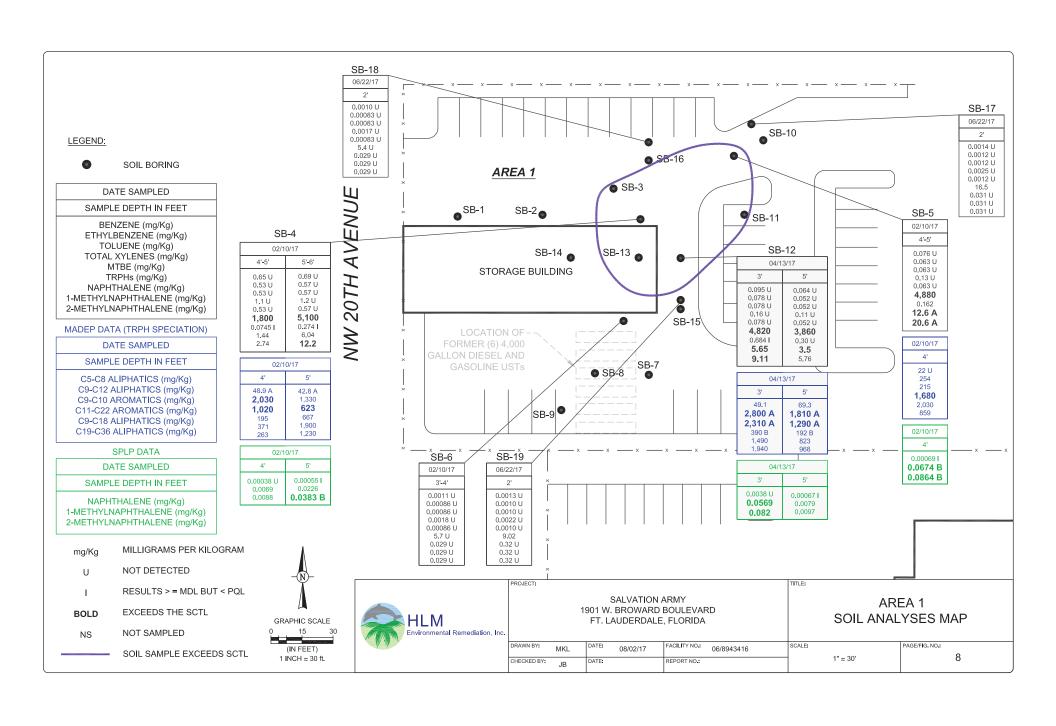
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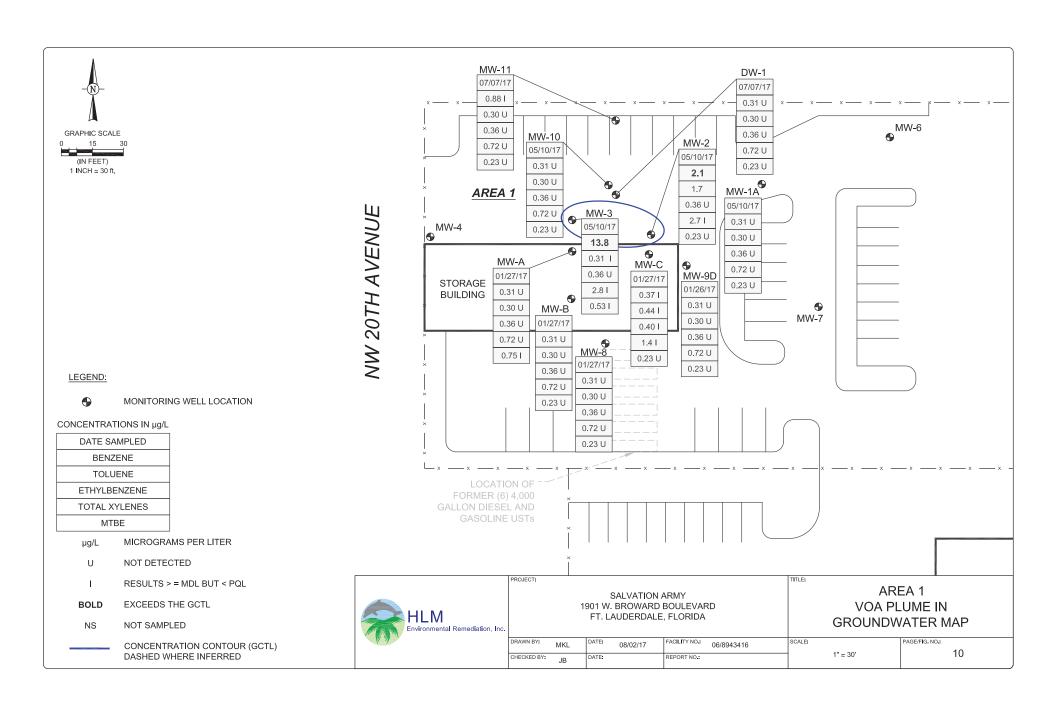


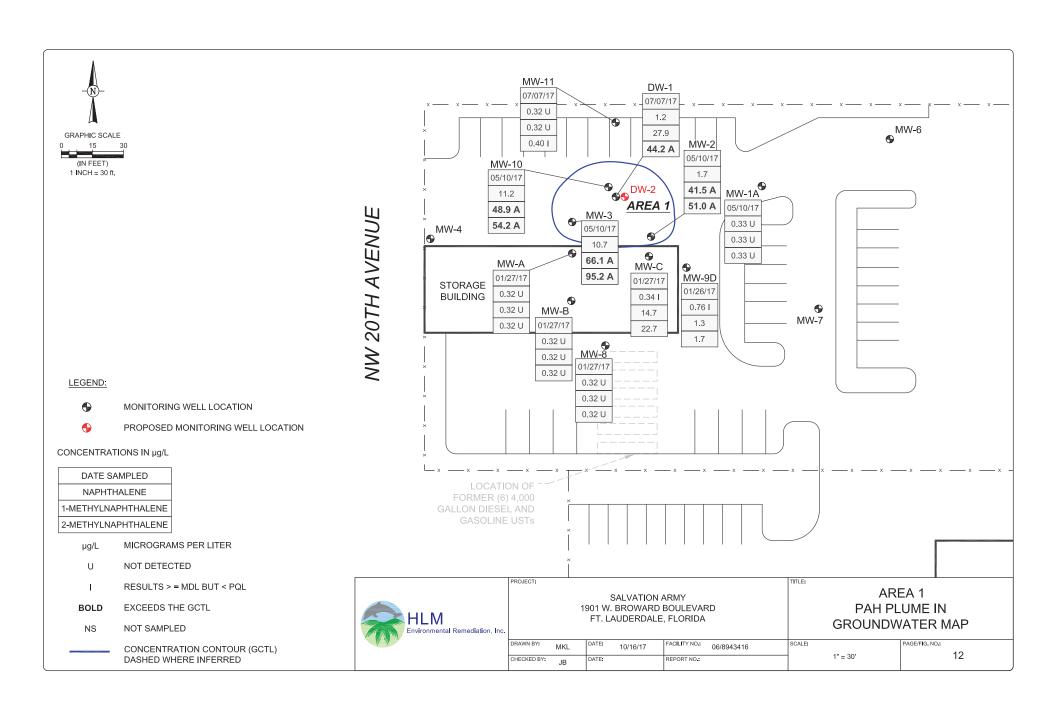


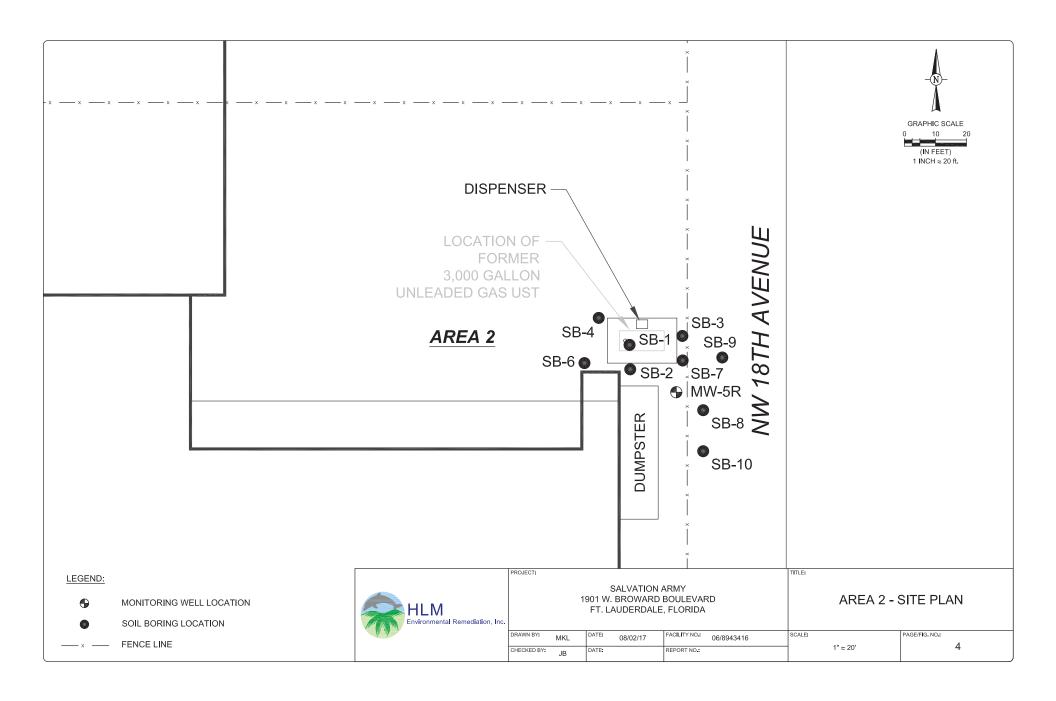


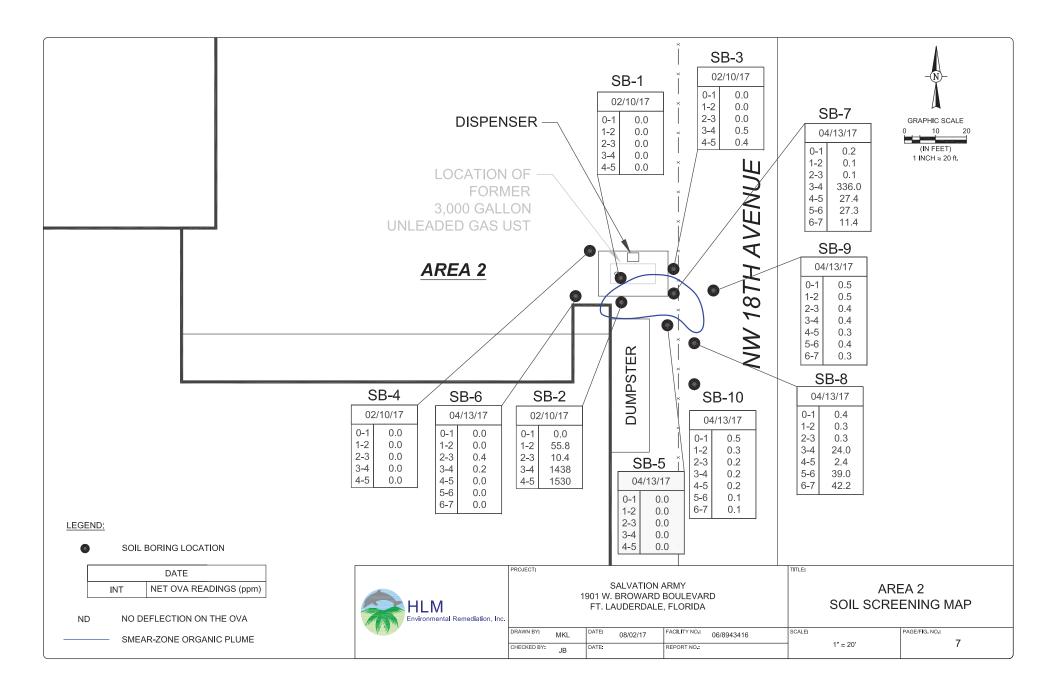












## Site No. 62 | City of Fort Lauderdale Wastewater Treatment Plant and Repump Station

**Source**: Revised Site Rehabilitation Completion Report (September 2016)

- Figure 1 Aerial Photograph
- Figure 2 Source Removal Areas
- Figure 4 Historic Soil Sample Results
- Figure 5 Historic Groundwater Results Map

**Source:** Site Assessment Report (March 2014)

- Figure 12 DTW Survey (2-12-14)
- Figure 13 DTW Survey (2-28-14)



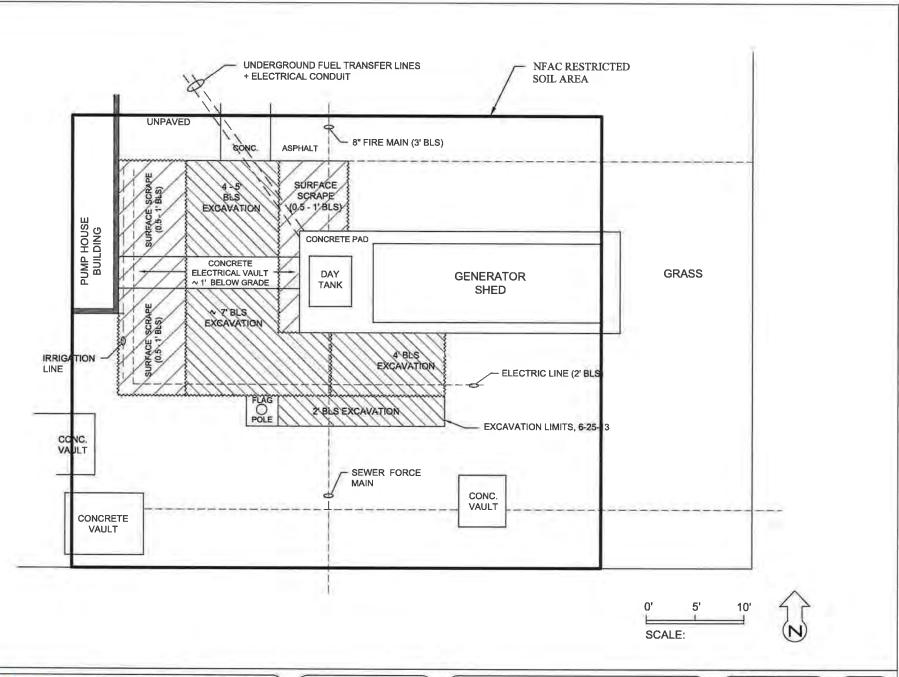
FPID: 435513-1-22-02

5751 Miami Lakes Drive Miami Lakes, Florida 33014 Phone (305)374-8300 Fax (305)374-9004



WW GTL Repump Station A 1901 NW 6<sup>th</sup> Street Fort Lauderdale, Florida Project #: 2013-3210

**AERIAL PHOTOGRAPH** 





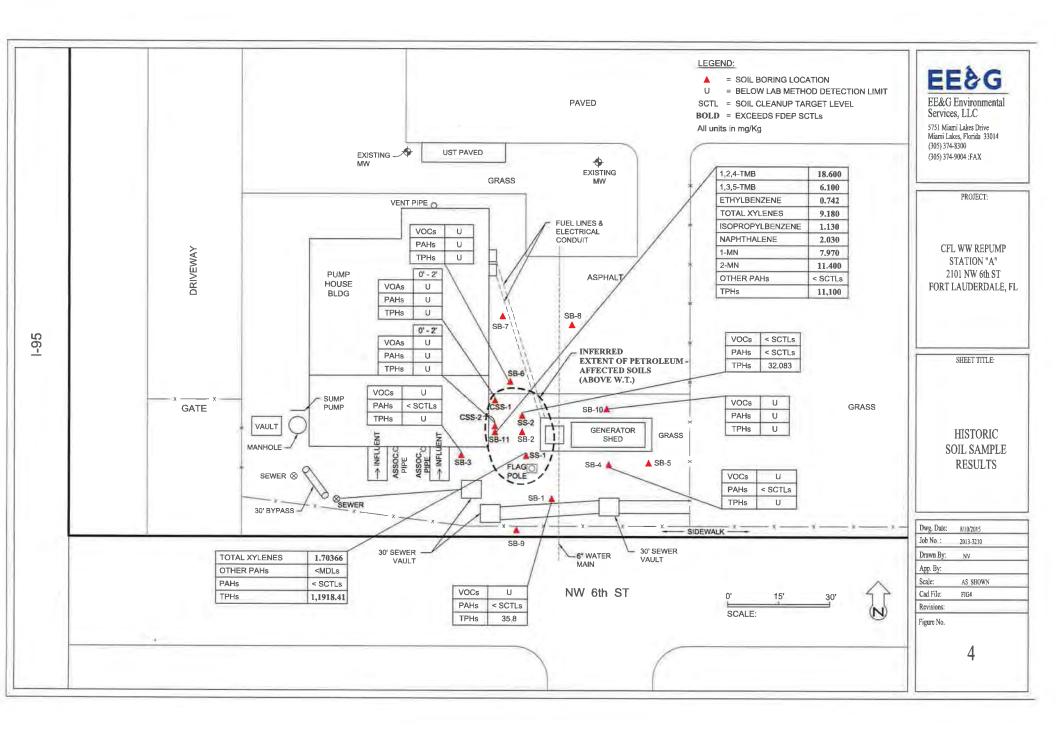
ENVIRONMENTAL SERVICES, LLC 5751 MIAMI LAKES DRIVE MIAMI LAKES, FLORIDA 33014 (305) 374-8300 (305) 374-9004 FAX

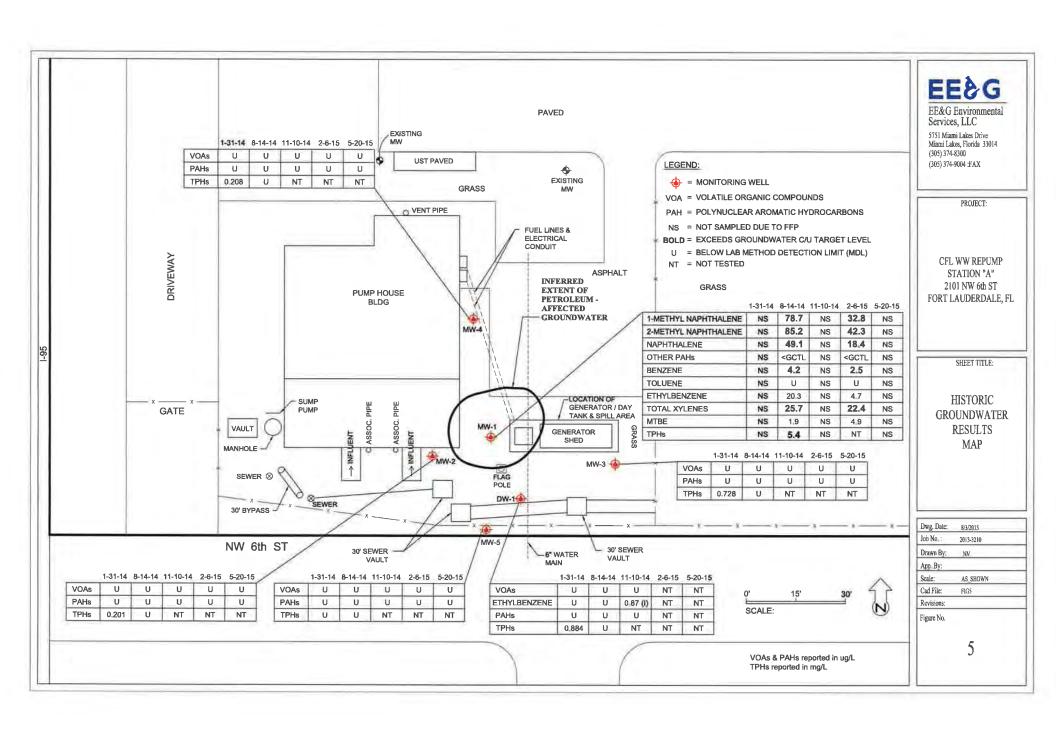
SOURCE REMOVAL AREAS CFL LINCOLN PARK TRANSFER STATION - PLANT "A" 1901 NW 6th ST FORT LAUDERDALE, FL Date: 8/4/15

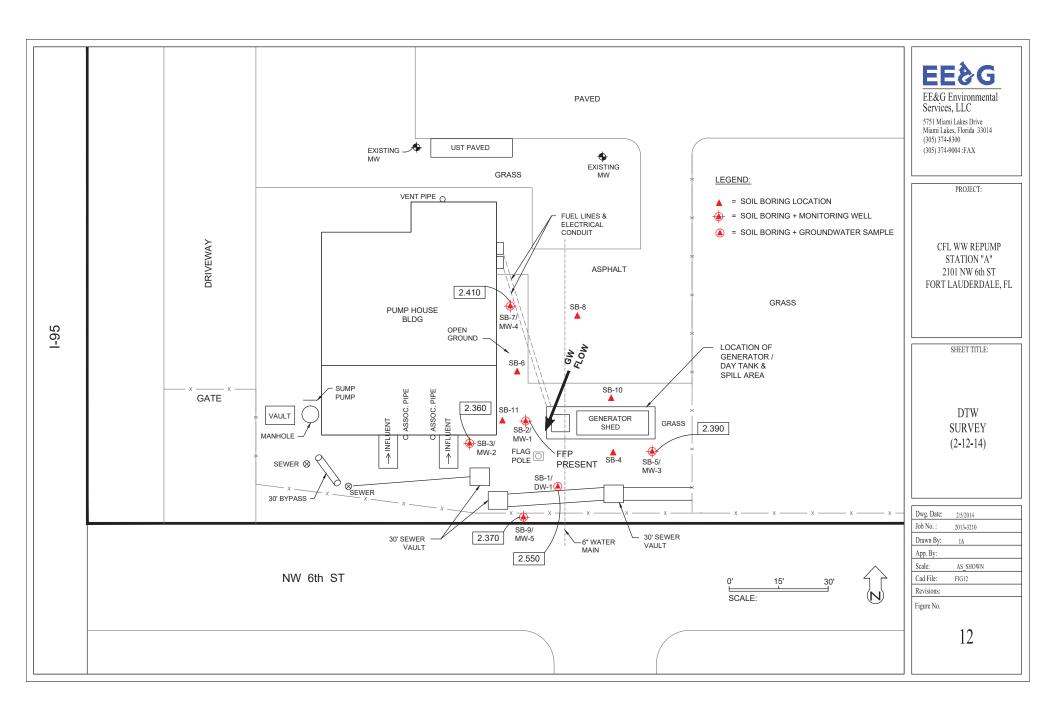
Project # 2013-3210

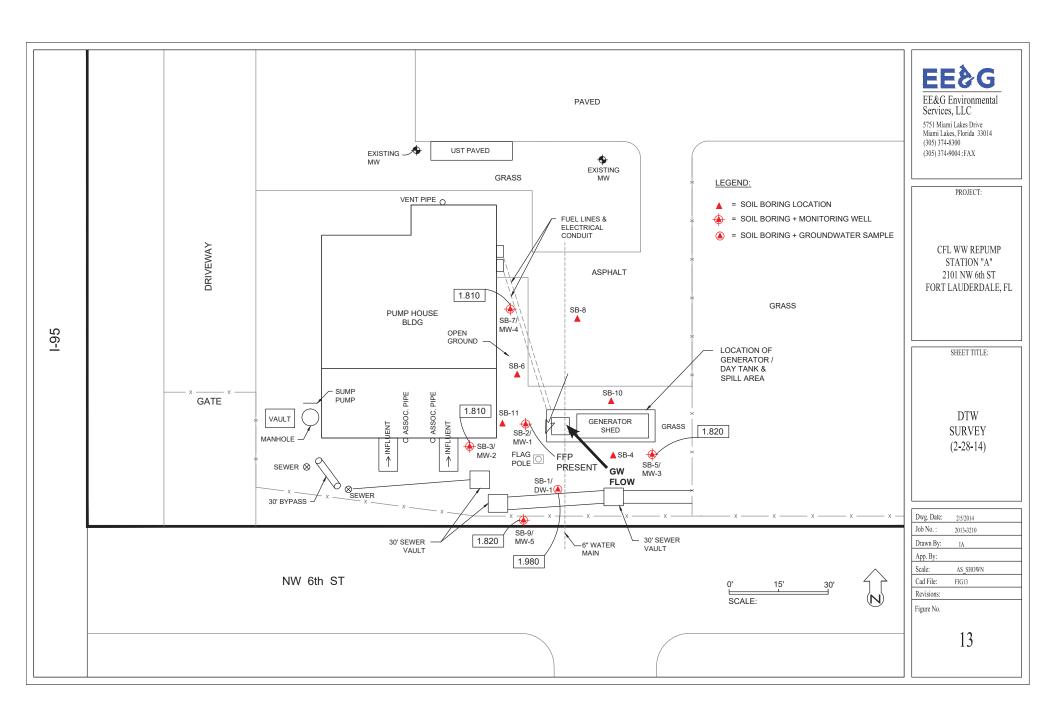
Drawn by: NV

Cad File: FIG2 Dwg. Scale: As Noted









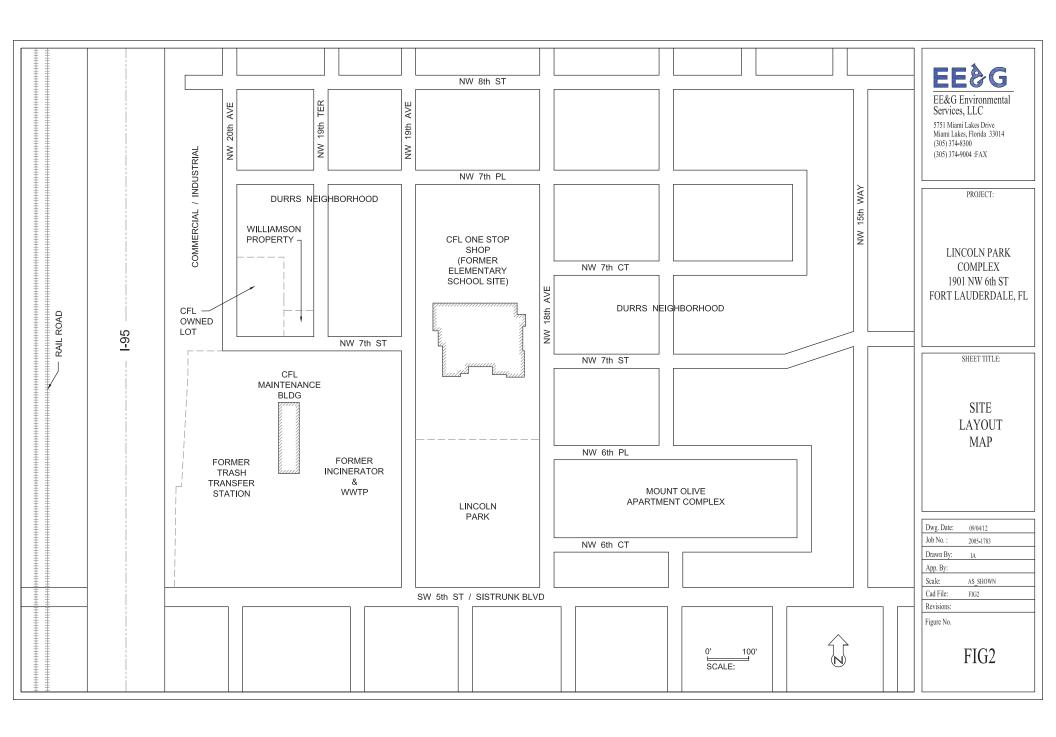
## Site No. 63 | Lincoln Park / Durrs Neighborhood Brownfield

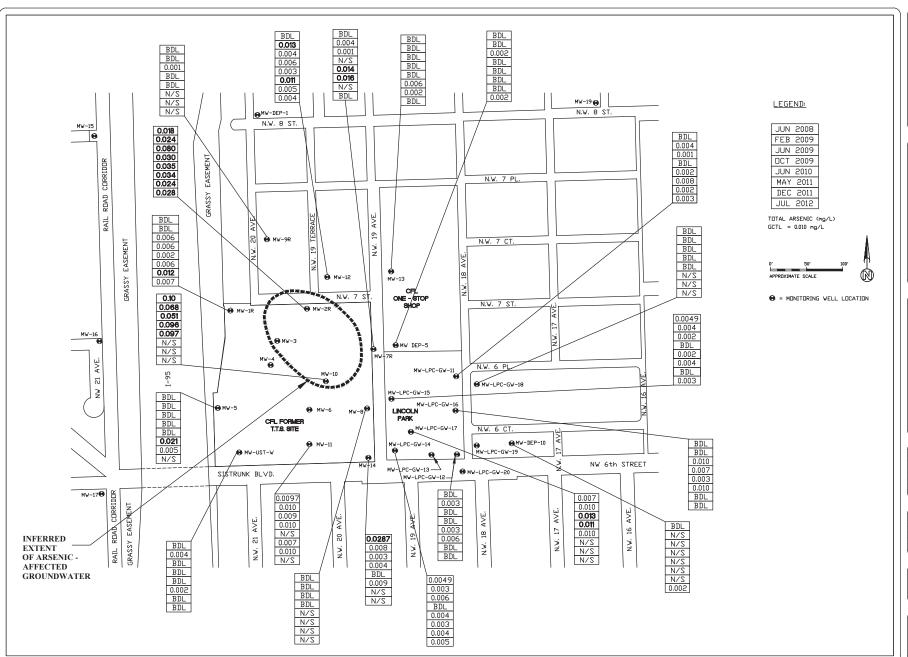
**Source**: Semi-Annual Natural Attenuation Monitoring Report (September 2012)

- Figure 2 Site Layout Map
- Figure 4 Groundwater Sampling Results (Arsenic)
- Figure 5 Groundwater Sampling Results (Antimony)
- Figure 6 Groundwater Sampling Results (Lead)
- Figure 7 Groundwater Flow, September 2012



FPID: 435513-1-22-02





CITY OF FORT LAUDERDALE
FORMER TRASH
TRANSFER STATION
1901 NW 6th STREET
FORT LAUDERDALE, FL

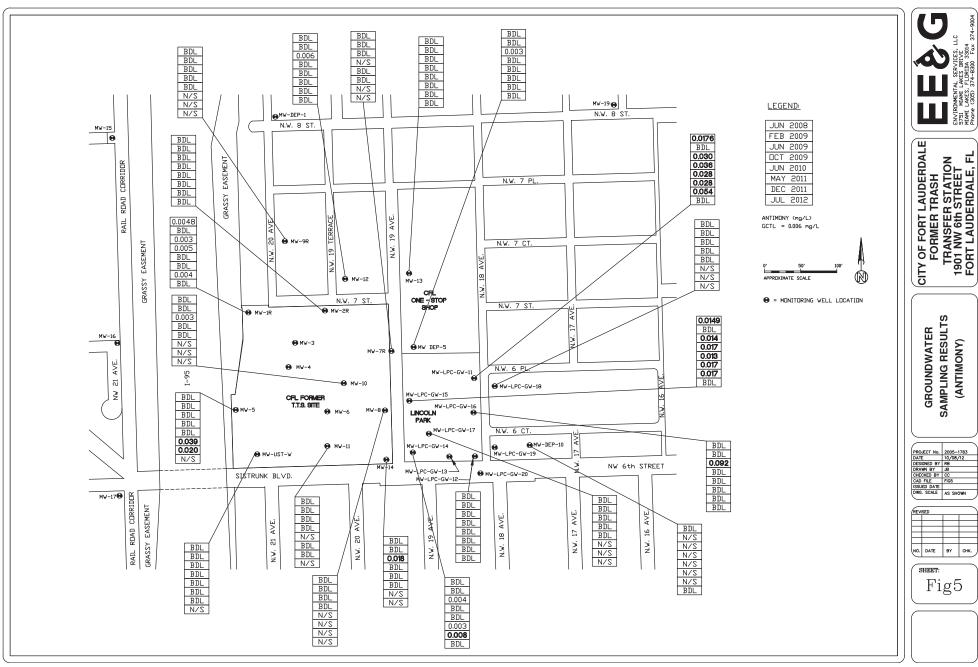
GROUNDWATER SAMPLING RESULTS (ARSENIC)





SHEET:

Fig4



PROJECT No. 2005–1783

DATE 10/08/12

DESIGNED BY R8

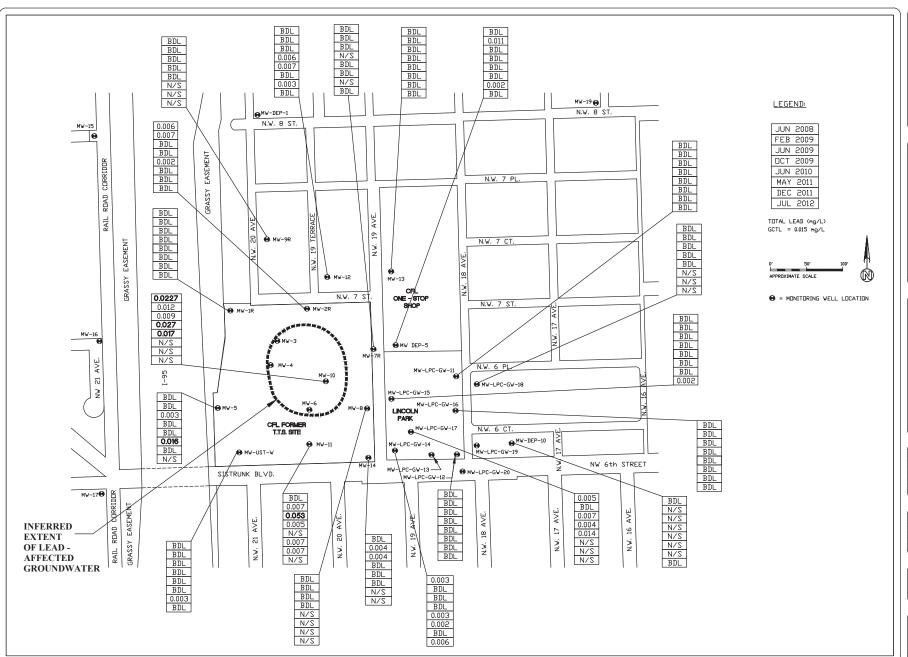
DRAWN BY J8

CHECKED BY FIGS

CAD FILE FIGS

DWG. SCALE AS SHOWN





ENVIRONMENTAL SERVICES, LLC
STSIL WANT LAKES, RRIVE, LLC
HAMINAL LAKES, FILEBIAN 2003 174-2004
Phone (308) 374-8300 Fox 374-8004

CITY OF FORT LAUDERDALE
FORMER TRASH
TRANSFER STATION
1901 NW 6th STREET
FORT LAUDERDALE, FL

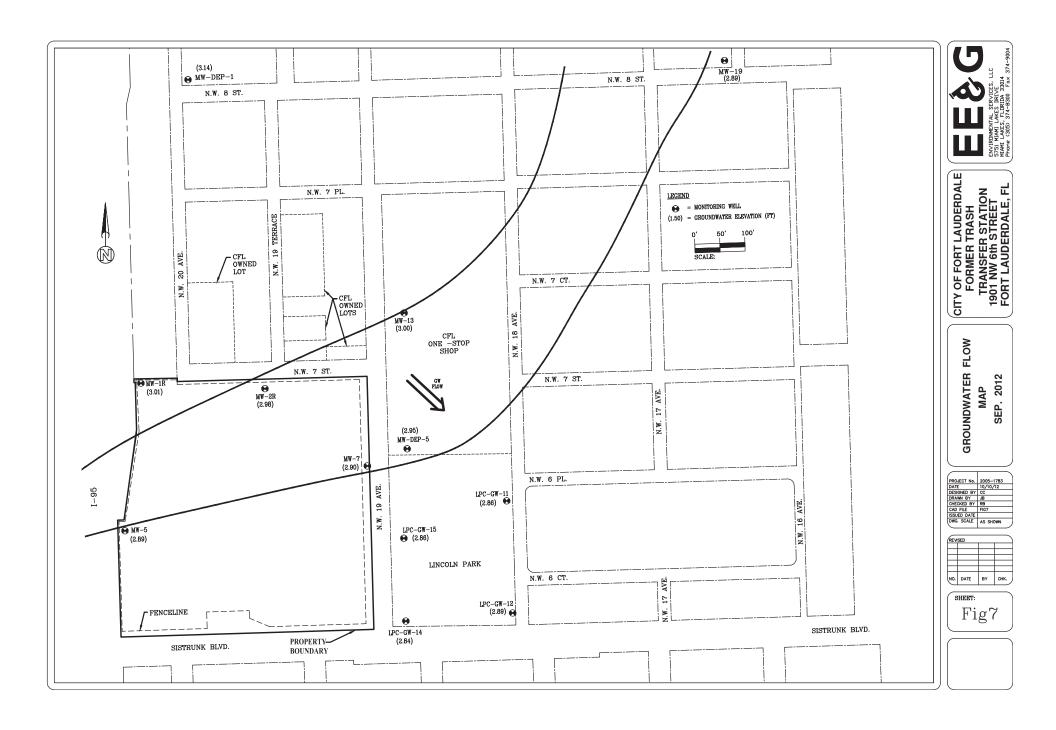
GROUNDWATER SAMPLING RESULTS (LEAD)

PROJECT No. 2005–1783
DATE 10/08/12
DESIGNED BY RB
DRAWN BY JB
CHECKED BY CC
CAD FILE FIGG
ISSUED DATE
DWG. SCALE AS SHOWN



SHEET:

Fig6



Appendix C | Historical Imagery Review Table C-1 and Figures

FPID: 435513-1-22-02



FPID: 435513-122-02 ETDM: 14226

## I-95 at Broward Boulevard Interchange CSER PD&E Study

## **Table C-1 | Historical Imagery Review**

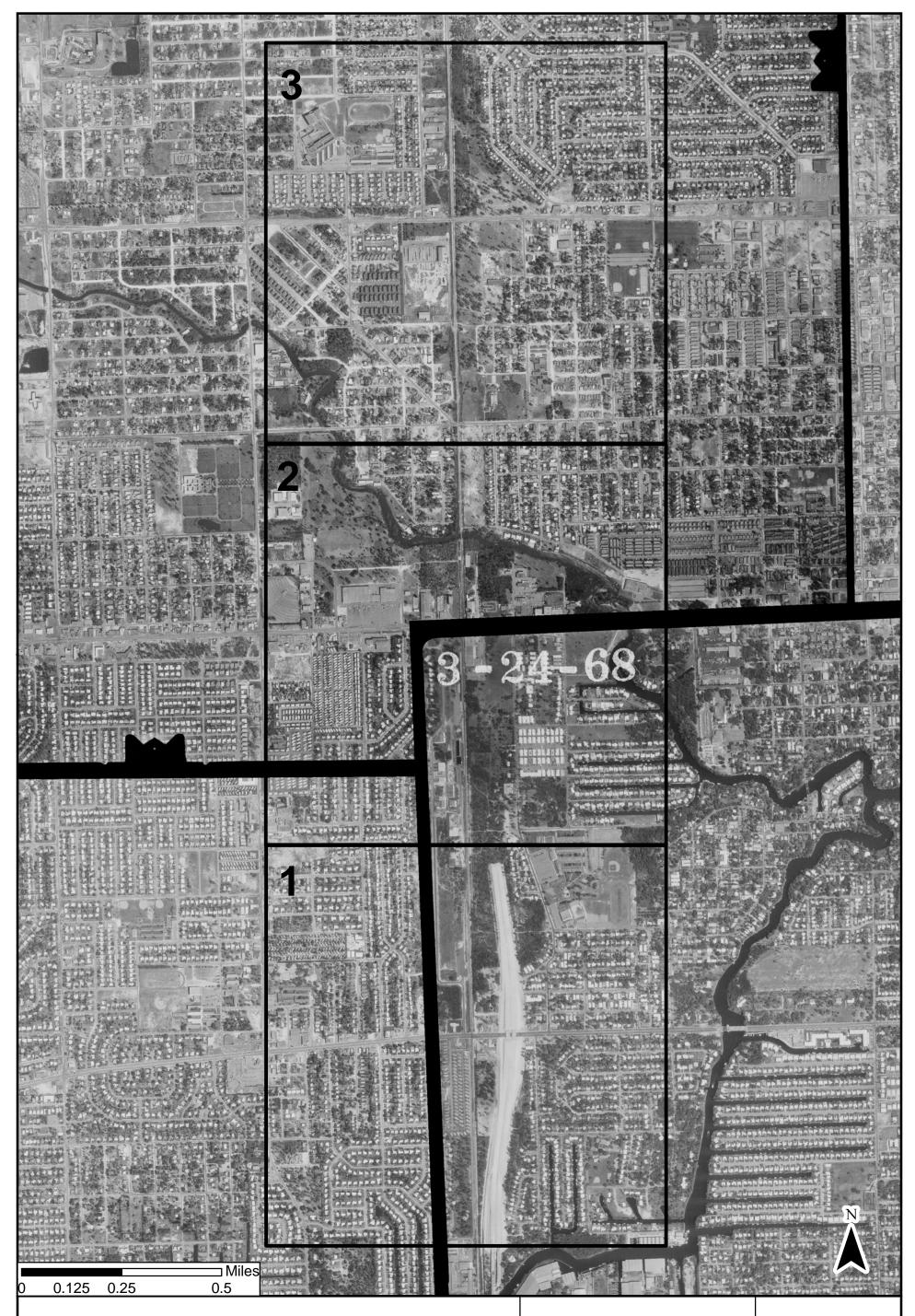
Section	Year of Aerial Photograph						
	1958	1968	1976	1988	1995	2008	2016
1 - South	approximately 75% of land area improved with residential neighborhoods. Residential developments are already		I-95 construction is completed and traffic is seen flowing north and south. A large, distinctive rectangular housing complex with atrium has been constructed near I-95 in the northeast corner of the section. Commercial development can be seen just to the west of I-95 in the central and southern portions of the section, in an area that is part of the present-day I-95 corridor. To the north and immediately west of the I-95 corridor is still undeveloped land.		on the west to accommodate additional lanes. Commercial development formerly in this area has been razed and the roadway now extends in a straight line from north to south along the western edge of the corridor. Riverland Elementary School on the western edge of the section has been	Color aerial imagery is available for 2008. It shows few changes from the 1995 imagery, due to the extensive build-out of the area. In the northwest of the section, an area that was previously residential development north and adjacent to Riverland Elementary School has been redeveloped as Riverland Park, featuring a large open field, basketball courts, and a swimming pool. The improved quality of the imagery allows railroad sidings to be seen in the commercial/warehousing area to the west of the I-95 corridor.	No significant changes are evident from the 2008 image.
2 - Center	undeveloped tracts of land (fields with some wooded areas) are present in the northwest corner of the section. A large commercial building surrounded by a parking lot is visible in the center of the section just south of W. Broward Boulevard, within the present-day I-95 north-south corridor. The remainder of the present day corridor is primarily undeveloped.	north-central portion of the section, a wooded area adjacent and east of the present day corridor has been	I-95 has been constructed from north to south in the center of the section. A large pond now appears in the northwest corner of the section. Additional commercial/warehouse development has occurred south of this pond. Land has been cleared just west of the I-95 corridor and directly south of the North Fork of the New River. On the east side of the I-95 corridor, a road (NW 22nd Ave) has been constructed in the area between W. Broward Boulevard and south of the river near I-95.	Boulevard.	Three elevated ramps/roadways have been constructed along the I-95 corridor. Three large warehouse /commercial buildings just west of the I-95 corridor and south of W. Broward Boulevard. have been razed.	Color aerial imagery is available for 2008. The Lauderdale Tri-rail station is constructed adjacent and west of I-95 and south of W. Broward Boulevard. A large parking lot north of the Lauderdale Tri-rail station has been developed and is visible west of the I-95 corridor and north of W. Broward Boulevard. Approximately 1/4 mile west of the Tri-rail station a residential area south of W. Broward Boulevard. has been razed.	On the west side of the section, the razed residential area noted in 2008 has been redeveloped as a Walmart.
3 - North	which is undeveloped and predominantly wooded. To the west of the present-day I-95 corridor, a network of roads has been established. Residential development exists in the northwest	commenced in this section. Open fields in the northwest corner of the section have been developed as residential neighborhoods. The southwest corner also has increased residential development including many large apartment		appear west of the I-95 corridor and north of W. Sunrise Boulevard. Dillard High School in the northwest	south has been redeveloped to add additional lanes. Only a few minor changes to building footprints are	Color imagery is available for 2008. The industrial facility with tanks at the southern edge of the section just east of the I-95 corridor has been razed. Tanks have been removed and in their place appears to be an open field. A ball field and track have been developed in the Dillard Park area at the northwest corner of the section.	The section remains relatively unchanged from the 2008 aerial photo.





Potential Contamination Sites Historical Imagery December 19, 1958

Source: FDOT APLUS





Potential Contamination Sites Historical Imagery March 24, 1968

Source: FDOT APLUS





Potential Contamination Sites Historical Imagery January 23, 1976

C-3

Figure

Source: FDOT APLUS





Potential Contamination Sites Historical Imagery February 26, 1988

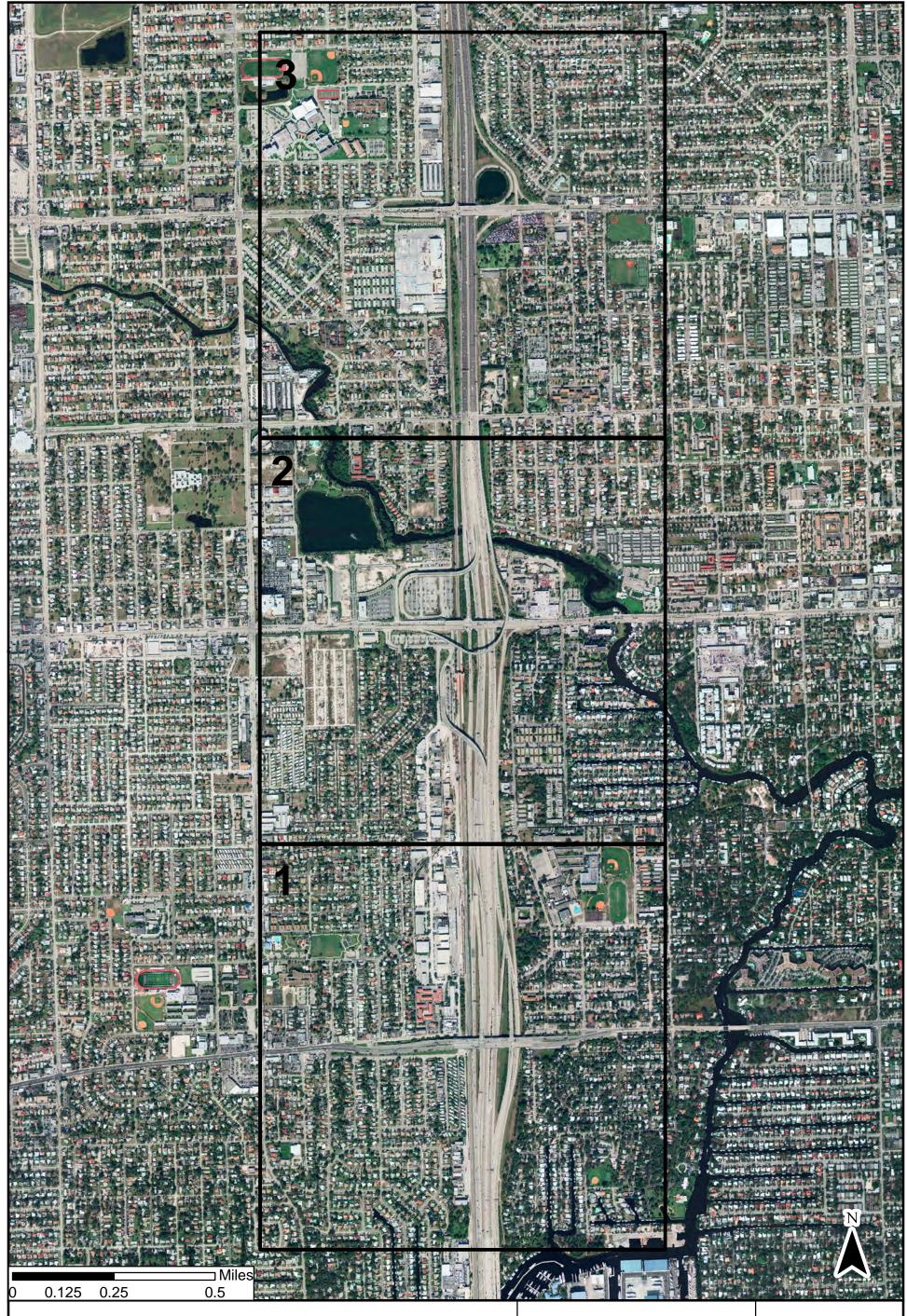
Source: FDOT APLUS





Potential Contamination Sites Historical Imagery 1995

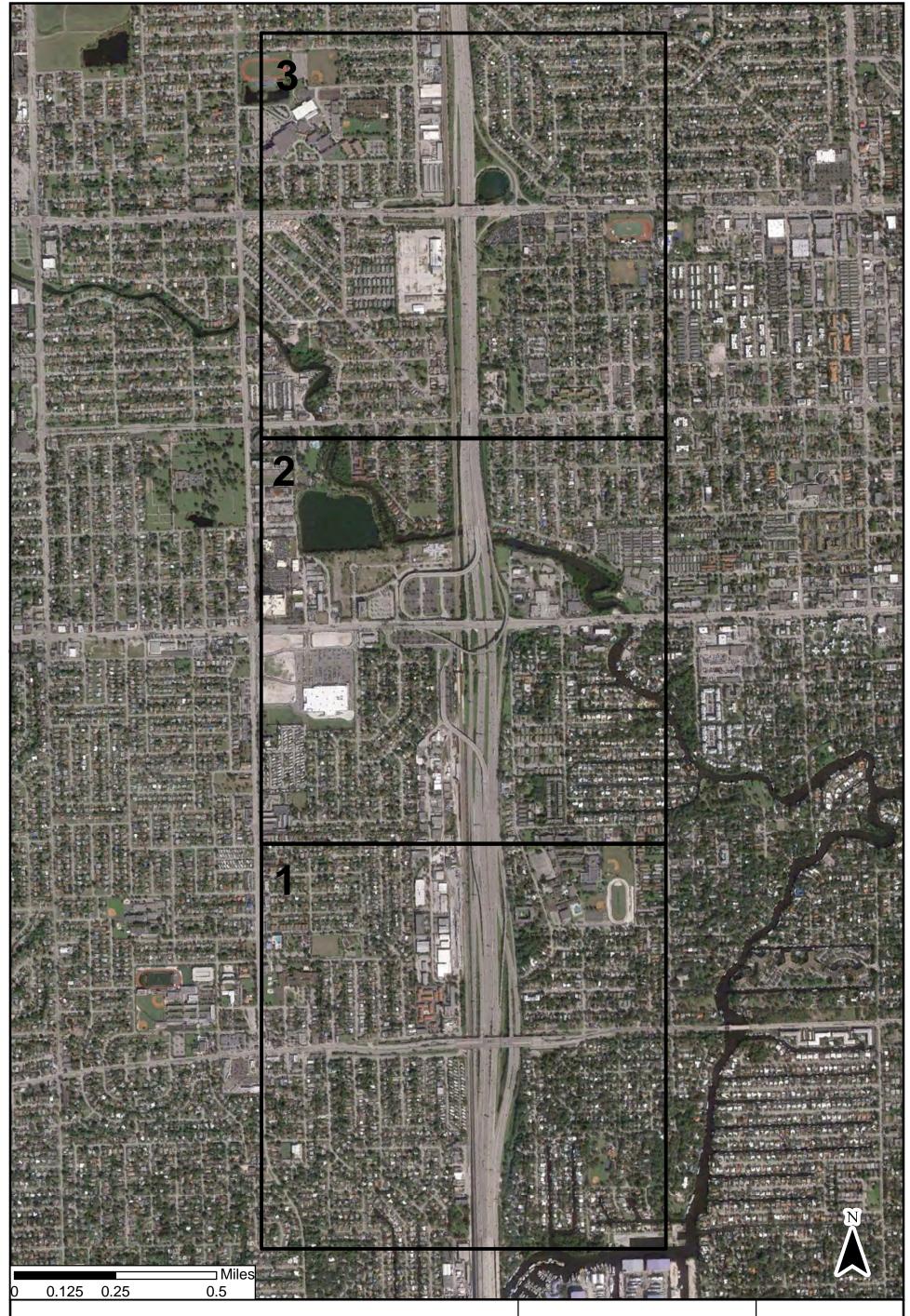
Source: Google Earth





Potential Contamination Sites Historical Imagery 2008

Source: Google Earth





Potential Contamination Sites Historical Imagery 2016

Source: Google Earth

## Appendix D | Site Photo Documentation

FPID: 435513-1-22-02





Photo 1-1

Site No. 1 – FDOT I-95 ROW/Corridor, (Former) Reliance Supply Company Aerial March 2017



Photo 1-2

Site No. 1 – FDOT I-95 ROW/Corridor, (Former) Reliance Supply Company Aerial January 1976





Photo 2-1 Site No. 2 – All White Manufacturing – Aerial March 2017



Photo 2-2 Site No. 2 – All White Manufacturing – View Towards the West





Photo 3-1

Site No. 3 – 3 Brothers Custom Interior and Exterior Yacht Painting Aerial March 2017



Photo 3-2

Site No. 3 – 3 Brothers Custom Interior and Exterior Yacht Painting View Towards the Northwest





Photo 3-3

Site No. 3 – 3 Brothers Custom Interior and Exterior Yacht Painting View Towards the Northwest



Photo 3-4

Site No. 3 – 3 Brothers Custom Interior and Exterior Yacht Painting View Towards the Northeast





Photo 4-1

Site No. 4 – Steve's Garage – Aerial March 2017



Photo 4-2

Site No. 4 - Steve's Garage - View Towards the West



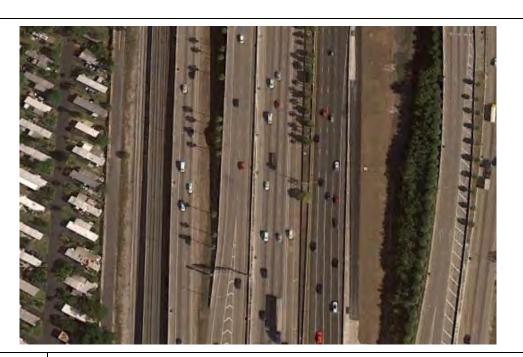


Photo 5-1

Site Nos. 5, 6, & 8 – FDOT I-95 ROW/Corridor, (Former) Holland Builders, (Former) The Steering Wheel, (Former) Rad-Air – Aerial March 2017



Photo 5-2

Site Nos. 5, 6, & 8 – FDOT I-95 ROW/Corridor, (Former) Holland Builders, (Former) The Steering Wheel, (Former) Rad-Air – Aerial January 1976





Photo 7-1 Site No. 7 – R. Hamann & Sons Demolition – Aerial March 2017



**Photo 7-2** Site No. 7 – R. Hamann & Sons Demolition – View Towards the Southwest





Photo 9-1

Site No. 9 - FDOT ROW, (Former) BP #00367219 - Aerial March 2017

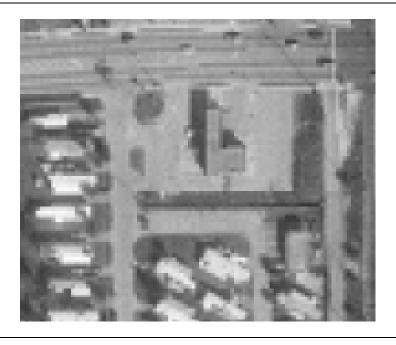
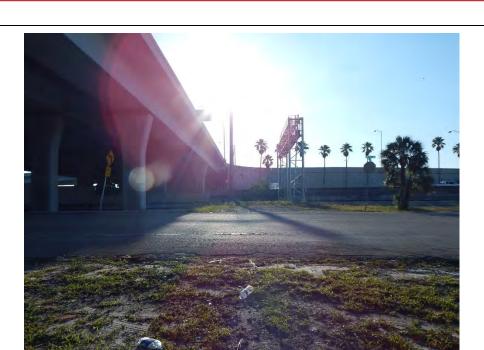


Photo 9-2

Site No. 9 – FDOT ROW, (Former) BP #00367219 – Aerial January 1976



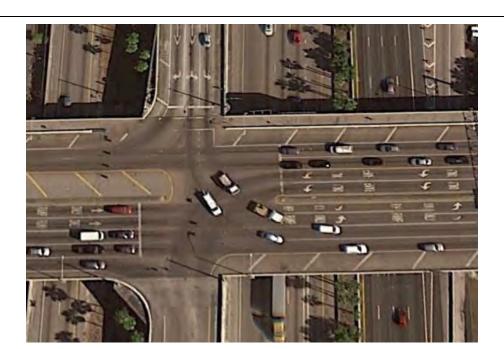


**Photo 9-3** Site No. 9 – FDOT ROW, (Former) BP #00367219 – View Towards the East



D-9

FPID: 435513-1-22-02



**Photo 10-1** 

Site No. 10 – FDOT Broward Boulevard I-95 Overpass, (Former) Exxon #5587 – Aerial March 2017



**Photo 10-2** 

Site No. 10 – FDOT Broward Boulevard I-95 Overpass, (Former) Exxon #5587 – Aerial January 1976



FPID: 435513-1-22-02

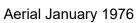


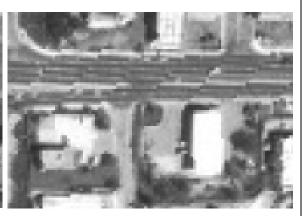
Photo 11-1

Site Nos. 11 & 12 – FDOT Broward Blvd I-95 Overpass, (Former) Carl's Riverside Standard Service, (Former) Texaco #240211355

Aerial March 2017







Aerial February 1988

Photos 11-2 & 11-3

Site Nos. 11 & 12 – FDOT Broward Blvd I-95 Overpass, (Former) Carl's Riverside Standard Service, (Former) Texaco #240211355

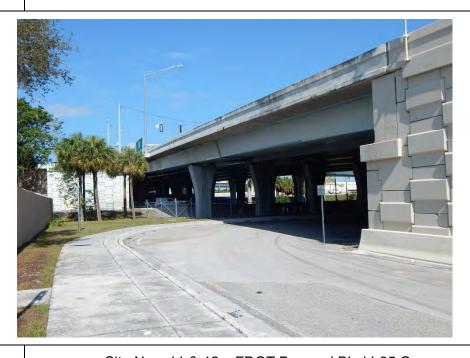


FPID: 435513-1-22-02



**Photo 11-4** 

Site Nos. 11 & 12 – FDOT Broward Blvd I-95 Overpass, (Former) Carl's Riverside Standard Service, (Former) Texaco #240211355 View Towards the West



**Photo 11-5** 

Site Nos. 11 & 12 – FDOT Broward Blvd I-95 Overpass, (Former) Carl's Riverside Standard Service, (Former) Texaco #240211355 View Towards the West



FPID: 435513-1-22-02



**Photo 11-6** 

Site Nos. 11 & 12 – FDOT Broward Blvd I-95 Overpass, (Former) Carl's Riverside Standard Service, (Former) Texaco #240211355 View Towards the West, Monitoring Well in Foreground



**Photo 11-7** 

Site Nos. 11 & 12 – FDOT Broward Blvd I-95 Overpass, (Former) Carl's Riverside Standard Service, (Former) Texaco #240211355 View Towards the Northwest





Photo 13-1

Site No. 13 – Tech Center - Shell-Davie Auto Care Aerial March 2017



**Photo 13-2** 

Site No. 13 – Tech Center - Shell-Davie Auto Care View Towards the Northeast





Photo 13-3

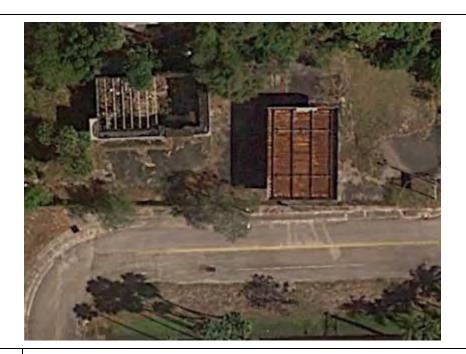
Site No. 13 – Tech Center - Shell-Davie Auto Care View Towards the Northeast



Photo 13-4

Site No. 13 – Tech Center - Shell-Davie Auto Care View Towards the West





**Photo 14-1** 

Site No. 14 – Abandoned Gas Station – Aerial March 2017



**Photo 14-2** 

Site No. 14 – Abandoned Gas Station - View Towards the West





Photo 14-3 Site No. 14 – Abandoned Gas Station - View Towards the North



Photo 14-4 Site No. 14 – Abandoned Gas Station - View Towards the Northwest





**Photo 15-1** 

Site No. 15 - Speedy's Food Store - Aerial March 2017



Photo 15-2

Site No. 15 - Speedy's Food Store - View Towards the East





Photo 15-3 Site No. 15 - Speedy's Food Store – View Towards the Southeast



**Photo 15-4** 

Site No. 15 - Speedy's Food Store - View Towards the East





**Photo 16-1** 

Site No. 16 – Multi-tenant Warehouse and Cell Tower Aerial March 2017



**Photo 16-2** 

Site No. 16 – Multi-tenant Warehouse and Cell Tower View Towards the West





**Photo 16-3** 

Site No. 16 – Multi-tenant Warehouse and Cell Tower View Towards the South



Photo 16-4

Site No. 16 – Multi-tenant Warehouse and Cell Tower View Towards the South





**Photo 16-5** 

Site No. 16 – Multi-tenant Warehouse and Cell Tower View Towards the Northwest



Photo 16-6

Site No. 16 – Multi-tenant Warehouse and Cell Tower View Towards the West





Photo 17-1 Site No. 17 - FDOT ROW, (Former) Bryan Electric , Inc. – Aerial March 2017



**Photo 17-2** 

Site No. 17 – FDOT ROW, (Former) Bryan Electric , Inc. View Towards the West





**Photo 18-1** 

Site Nos. 18 & 19 – FDOT ROW, (Former) Steve's Garage, (Former) Harrell Rick's Auto Sales Inc. – Aerial March 2017



**Photo 18-2** 

Site Nos. 18 & 19 – FDOT ROW, (Former) Steve's Garage, (Former) Harrell Rick's Auto Sales Inc. – View Towards the West



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Photo 20-1

Site No. 20 – Dixie Plywood and Lumber Company – Aerial March 2017



Photo 20-2

Site No. 20 - Dixie Plywood and Lumber Company – View Towards the Northwest





Photo 20-3

Site No. 20 - Dixie Plywood and Lumber Company – View Towards the Southeast



Photo 20-4

Site No. 20 - Dixie Plywood and Lumber Company – View Towards the East



North



Photo 21-1 Site No. 21 – Transflo Terminal Services, Inc. – Aerial March 2017



Photo 21-2 Site No. 21 – Transflo Terminal Services, Inc. – View Towards the North



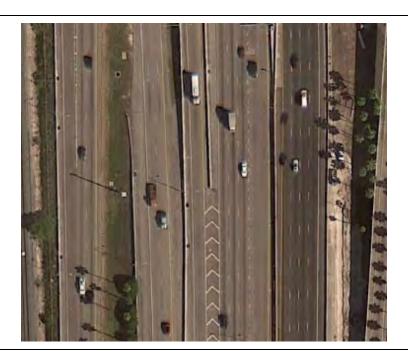
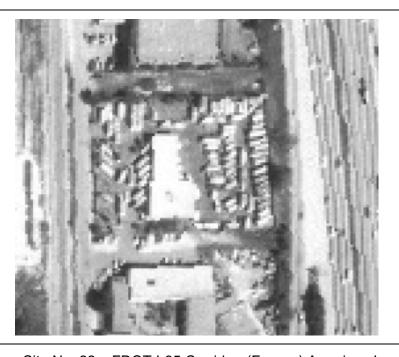


Photo 22-1

Site No. 22 – FDOT I-95 Corridor, (Former) American Land Cruisers Aerial March 2017



**Photo 22-2** 

Site No. 22 – FDOT I-95 Corridor, (Former) American Land Cruisers Aerial February 1988



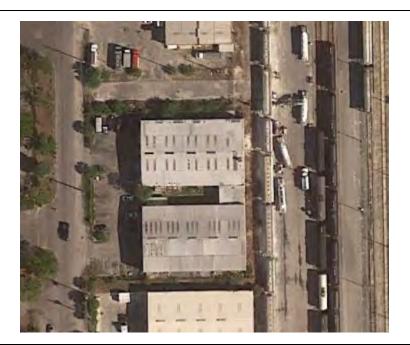


Photo 23-1

Site No. 23 - Interplex Proto-Stamp, Inc. - Aerial March 2017



Photo 23-2

Site No. 23 - Interplex Proto-Stamp, Inc. – View Towards the East





**Photo 24-1** 

Site No. 24 - Stranahan High School - Aerial March 2017



**Photo 24-2** 

Site No. 24 - Stranahan High School – View Towards the East





Photo 24-3 Site No. 24 - Stranahan High School – View Towards the East



Photo 24-4

Site No. 24 - Stranahan High School – View Towards the Northeast





**Photo 25-1** 

Site No. 25 – Megawattage – Aerial March 2017



Photo 25-2

Site No. 25 – Megawattage – View Towards the East-Southeast





**Photo 26-1** 

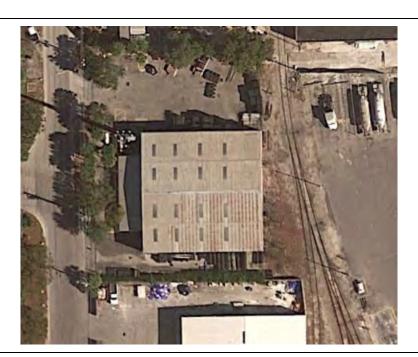
Site No. 26 - Matrix-Z LLC - Aerial March 2017



Photo 26-2

Site No. 26 – Matrix-Z LLC – View Towards the East





**Photo 27-1** 

Site No. 27 - Jet Dock Systems, Verizon Wireless - Esler Site Aerial March 2017



**Photo 27-2** 

Site No. 27 - Jet Dock Systems, Verizon Wireless - Esler Site View Towards the East





**Photo 27-3** 

Site No. 27 - Jet Dock Systems, Verizon Wireless - Esler Site View Towards the Southeast



**Photo 27-4** 

Site No. 27 - Jet Dock Systems, Verizon Wireless - Esler Site View Towards the East



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Photo 28-1

Site No. 28 – Colaianni Italian Floor Tile Manufacturing Aerial March 2017



Photo 28-2

Site No. 28 – Colaianni Italian Floor Tile Manufacturing View Towards the Southwest







North =

Photo 29-1

Site No. 29 – CSX Transportation Railyard Aerial March 2017



**Photo 29-2** 

Site No. 29 – CSX Transportation Railyard View Towards the South





**Photo 29-3** 

Site No. 29 – CSX Transportation Railyard & Spill View Towards the North



**Photo 29-4** 

Site No. 29 – CSX Transportation Railyard & Spill View Towards the East





Photo 30-1

Site No. 30 – Multi-tenant Light Industrial Warehouses & Cell Tower Aerial March 2017



Photo 30-2

Site No. 30 – Multi-tenant Light Industrial Warehouses & Cell Tower View Towards the Southeast



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Photo 30-3

Site No. 30 – Multi-tenant Light Industrial Warehouses & Cell Tower View Towards the East



Photo 30-4

Site No. 30 – Multi-tenant Light Industrial Warehouses & Cell Tower View Towards the Southeast



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**Photo 31-1** 

Site No. 31 - Jam Environmental & Vacuum Services LLC Aerial March 2017



**Photo 31-2** 

Site No. 31 - Jam Environmental & Vacuum Services LLC View Towards the Northwest





**Photo 32-1** 

Site No. 32 - AA Carbonics - Aerial March 2017



Photo 32-2

Site No. 32 - AA Carbonics - View Towards the East





Photo 33-1

Site No. 33 - Neptune Boat Lifts - Aerial March 2017



Photo 33-2

Site No. 33 – Neptune Boast Lifts – View Towards the East





Photo 34-1

Site No. 34 - CSX Transportation Railyard, (Former) Tire Eliminators Inc. Aerial March 2017



**Photo 34-2** 

Site No. 34 - CSX Transportation Railyard, (Former) Tire Eliminators Inc.

View Towards the Southwest





**Photo 35-1** 





**Photo 35-2** 

Site No. 35 - Roberts Brothers Auto Service View Towards the Southeast





Photo 36-1

Site No. 36 - D&D Mobile Welding and Fabrication Inc. Aerial March 2017



Photo 36-2

Site No. 36 - D&D Mobile Welding and Fabrication Inc. View Towards the Southeast





**Photo 37-1** 

Site No. 37 - Omni Boat Canvas - Aerial March 2017



**Photo 37-2** 

Site No. 37 - Omni Boat Canvas - View Towards the Northeast





Photo 38-1

Site No. 38 – JAS Powder Coating – Aerial December 2017



Photo 38-2

Site No. 38 – JAS Powder Coating





**Photo 39-1** 

Site No. 39 - Riverbend Retail Development - Aerial March 2017



**Photo 39-2** 

Site No. 39 - Riverbend Retail Development – Northeast Corner, McDonald's View Towards the Northeast





**Photo 40-1** 

Site No. 40 – Truck/Auto Accident-Spill – Aerial March 2017





North —

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ETDM: 14226

Photo 41-1

Site No. 41 - FDOT Transportation Corridor (Former) Everglades Fertilizer Co. – Aerial March 2017



North =

**Photo 41-2** 

Site No. 41 - FDOT Transportation Corridor (Former) Everglades Fertilizer Co. – Aerial December 1958





Photo 42-1

Site No. 42 - Sunnyreach Acres - Housing Authority, City of Ft. Lauderdale Aerial March 2017



Photo 42-2

Site No. 42 - Sunnyreach Acres - Housing Authority, City of Ft. Lauderdale View Towards the North





Photo 43-1

Site No. 43 - Spill – Aerial December 2017



Photo 43-2

Site No. 43 – Spill – Aerial March 2011



FPID: 435513-1-22-02



**Photo 43-3** 

Site No. 43 - Spill – View towards the South





**Photo 44-1** 

Site No. 44 - Spill – Aerial December 2017



**Photo 44-2** 

Site No. 44 – Spill View towards the Southwest





Photo 45-1

Site No. 45 - RaceTrac #665 - Aerial March 2017



Photo 45-2

Site No. 45 - RaceTrac #665 - View Towards the Southeast





Photo 45-3

Site No. 45 - RaceTrac #665 - View Towards the East



**Photo 45-4** 

Site No. 45 - RaceTrac #665 - View Towards the South





**Photo 46-1** 

Site No. 46 - Broward Blvd Park N' Ride - Aerial March 2017



Photo 46-2

Site No. 46 - Broward Blvd Park N' Ride - Aerial January 1976



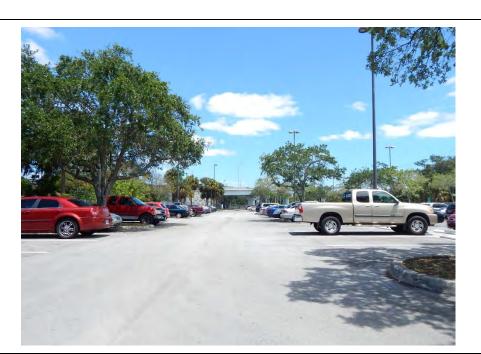


Photo 46-3 Si

Site No. 46 - Broward Blvd Park N' Ride - View Towards the East





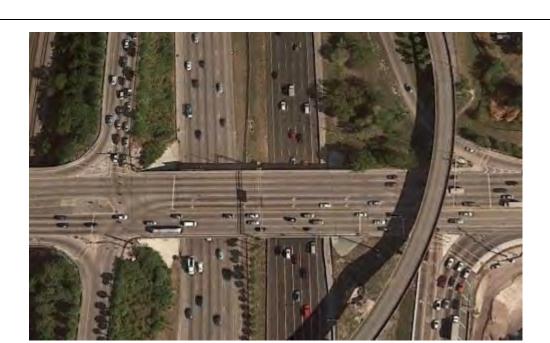
Photo 47-1 Site No. 47 – CSX Rail Corridor at Broward Boulevard – Aerial March 2017



**Photo 47-2** 

Site No. 47 - CSX Rail Corridor at Broward Boulevard
View Towards the South





**Photo 48-1** 

Site No. 48 - Spill - Aerial March 2017





**Photo 49-1** 

Site No. 49 - SCI FI Megaplex T. - Aerial March 2017



**Photo 49-2** 

Site No. 49 - SCI FI Megaplex T. - View Towards the West





Photo 50-1

Site No. 50 - Vacant Building, (Former) Neals American Service Aerial March 2017



Photo 50-2

Site No. 50 - Vacant Building, (Former) Neals American Service View Towards the Northwest





**Photo 50-3** 

Site No. 50 - Vacant Building, (Former) Neals American Service View Towards the Northeast



Photo 50-4

Site No. 50 - Vacant Building, (Former) Neals American Service View of Monitoring Well in Parking Lot





Photo 51-1

Site No. 51 - Marathon-Broward #572 - Aerial March 2017



**Photo 51-2** 

Site No. 51 - Marathon-Broward #572 - View Towards the Southeast





Photo 51-3 Site No. 51 - Marathon-Broward #572 – View Towards the South



Photo 51-4 Site No. 51 - Marathon-Broward #572 – View Towards the Southwest





**Photo 52-1** 

Site No. 52 – Seven Seas Yacht Sales, Inc. Aerial December 2017



**Photo 52-2** 

Site No. 52 – Seven Seas Yacht Sales, Inc. View towards the Southwest





**Photo 52-3** 

Site No. 52 – Seven Seas Yacht Sales, Inc. View towards the South



**Photo 52-4** 

Site No. 52 – Seven Seas Yacht Sales, Inc. View towards the Southeast





Photo 53-1

Site No. 53 – Broward Tires & Auto Repair Aerial December 2017



**Photo 53-2** 

Site No. 53 – Broward Tires & Auto Repair View towards the Northeast





**Photo 53-3** 

Site No. 53 – Broward Tires & Auto Repair View towards the Northeast



**Photo 53-4** 

Site No. 53 – Broward Tires & Auto Repair View towards the Southwest





Photo 54-1

Site No. 54 – Vacant Lot, (Former) Transmission King Aerial December 2017



**Photo 54-2** 

Site No. 54 – Vacant Lot, (Former) Transmission King Aerial November 2005





**Photo 54-3** 

Site No. 54 – Vacant Lot, (Former) Transmission King View towards the Northwest



Photo 54-4

Site No. 54 – Vacant Lot, (Former) Transmission King View towards the Northeast





Photo 55-1

Site No. 55 – Fashion Cleaners, Inc. Aerial December 2017



Photo 55-2

Site No. 55 – Fashion Cleaners, Inc. View towards the West





Photo 55-3

Site No. 55 – Fashion Cleaners, Inc. View towards the Northeast



Photo 55-4

Site No. 55 – Fashion Cleaners, Inc. View towards the South





Photo 56-1

Site No. 56 - Riverbend Corporate Park Aerial March 2017



Photo 56-2

Site No. 56 - Riverbend Corporate Park Aerial January 1976





**Photo 56-3** 

Site No. 56 - Riverbend Corporate Park View Towards the Southeast



**Photo 56-4** 

Site No. 56 - Riverbend Corporate Park View Towards the South





**Photo 56-5** 

Site No. 56 - Riverbend Corporate Park View Towards the South







Site No. 57 - Salvation Army Property – Aerial March 2017





**Photo 57-2** 

Site No. 57 - Salvation Army - Aerial March 2017



**Photo 57-3** 

Site No. 57 - Salvation Army – View Towards the Southwest



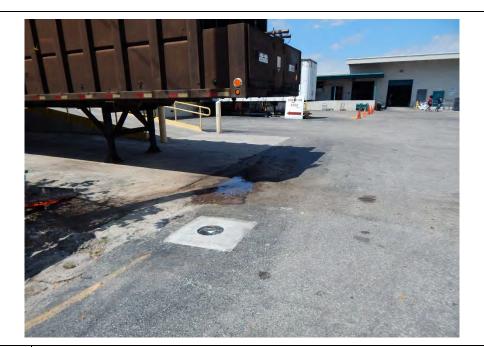


Photo 57-4 Site No. 57 - Salvation Army – View Towards the Southwest



**Photo 57-5** 

Site No. 57 - Salvation Army - View Towards the South





**Photo 57-6** 

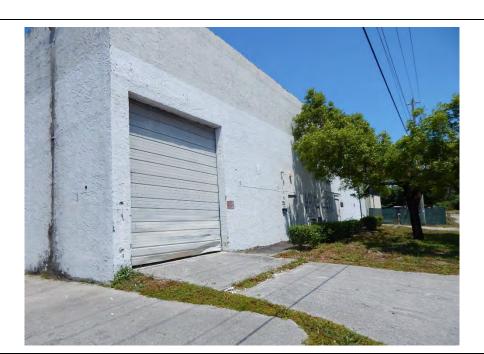
Site No. 57 - Vacant Building, (Former) Fabrications Plus Aerial March 2017



**Photo 57-7** 

Site No. 57 - Vacant Building, (Former) Fabrications Plus View Towards the Northwest





**Photo 57-8** 

Site No. 57 - Vacant Building, (Former) Fabrications Plus View Towards the Northwest



**Photo 57-9** 

Site No. 57 - Vacant Building, (Former) Fabrications Plus View Towards the North





Photo **57-10** 

Site No. 57 - Vacant Building, (Former) Yellow Freight Systems Inc. Aerial March 2017



Site No. 57 - Vacant Building, (Former) Yellow Freight Systems Inc.
View Towards the Southwest



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Photo **57-12** 

Site No. 57 - Vacant Building, (Former) Yellow Freight Systems Inc. View Towards the East



Site No. 57 - Vacant Building, (Former) Yellow Freight Systems Inc.
View Towards the Southheast



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Photo **57-14** 

Site No. 57 - Corporate Connection Lines, Inc. (Land & Sea Petrol)
Aerial March 2017



Site No. 57 - Corporate Connection Lines, Inc. (Land & Sea Petrol)
View Towards the West



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Photo **57-16** 

Site No. 57 - Corporate Connection Lines, Inc. (Land & Sea Petrol) View Towards the West



Site No. 57 - Corporate Connection Lines, Inc. (Land & Sea Petrol)
View Towards the West



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Photo **57-18** 

Site No. 57 – MCM Construction / Equipment Yard Aerial March 2017



Site No. 57 – MCM Construction / Equipment Yard View Towards the Southwest



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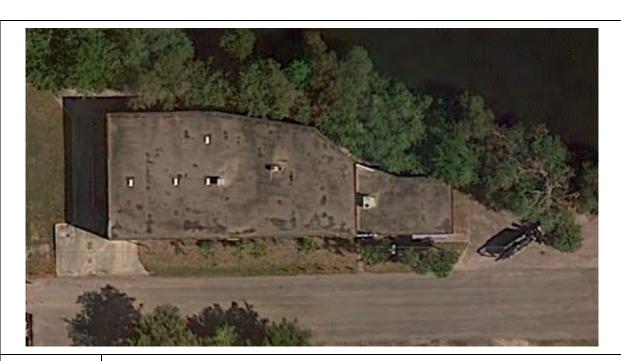


Photo **57-20** 

Site No. 57 - Vacant Building, (Former) National Lift Truck Service Aerial March 2017



Photo **57-21** 

Site No. 57 - Vacant Building, (Former) National Lift Truck Service View Towards the Northeast





Photo 58-1

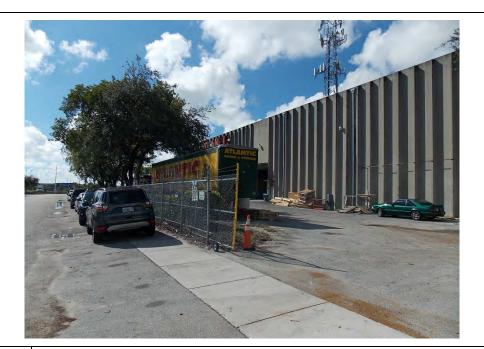
Site No. 58 – A1A Atlantic Moving & Storage Aerial December 2017



Photo 58-2

Site No. 58 – A1A Atlantic Moving & Storage View towards the Northwest





**Photo 58-3** 

Site No. 58 – A1A Atlantic Moving & Storage View towards the Southwest

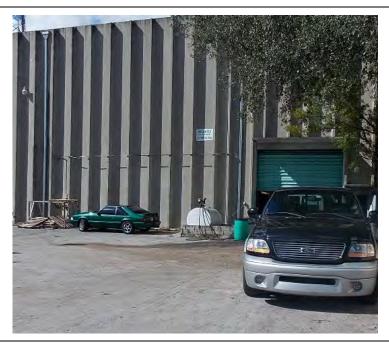


Photo 58-4

Site No. 58 – A1A Atlantic Moving & Storage View towards the West



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Photo 59-1

Site No. 59 - Broward Regional Juvenile Detention Center Aerial March 2017



**Photo 59-2** 

Site No. 59 - Broward Regional Juvenile Detention Center View Towards the North





Photo 60-1

Site No. 60 - Vacant Land, (Former) Nursing Home Aerial March 2017



Photo 60-2

Site No. 60 - Vacant Land, (Former) Nursing Home Aerial January 1976





Photo 60-3

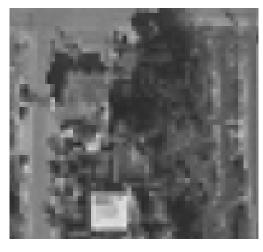
Site No. 60 - Vacant Land, (Former) Nursing Home View Towards the Northeast

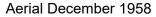


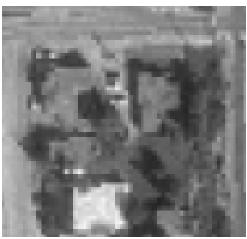


Photo 61-1

Site No. 61 - Vacant Land, (Former) Gas Station / Auto Service Shop Aerial March 2017







Aerial January 1976

Photos 61-2 & 61-3

Site No. 61 - Vacant Land, (Former) Gas Station / Auto Service Shop



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Photo 61-4

Site No. 61 - Vacant Land, (Former) Gas Station / Auto Service Shop View Towards the Southwest



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Photo 62-1

Site No. 62 - City of Fort Lauderdale Wastewater Treatment Plant and Repump Station – Aerial March 2017



**Photo 62-2** 

Site No. 62 - City of Fort Lauderdale Wastewater Treatment Plant and Repump Station – View Towards the East





**Photo 62-3** 

Site No. 62 - City of Fort Lauderdale Wastewater Treatment Plant and Repump Station – View Towards the Northeast



**Photo 62-4** 

Site No. 62 - City of Fort Lauderdale Wastewater Treatment Plant and Repump Station – View Towards the Northwest



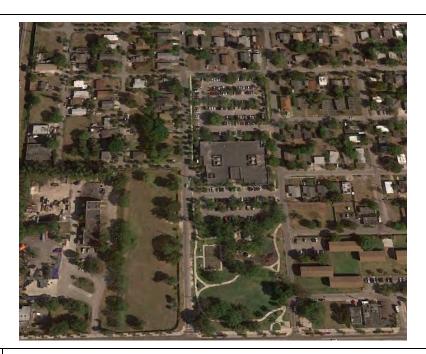


Photo 63-1

Site No. 63 - Lincoln Park / Durrs Neighborhood Brownfield Aerial March 2017



Photo 63-2

Site No. 63 - Lincoln Park / Durrs Neighborhood Brownfield Aerial December 1958





Photo 63-3

Site No. 63 - Lincoln Park / Durrs Neighborhood Brownfield Aerial January 1976



Photo 63-4

Site No. 63 - Lincoln Park / Durrs Neighborhood Brownfield Aerial January 2008





Photo 64-1

Site No. 64 – Residence, (Former) Eluetts Service Station Aerial March 2017



Photo 64-2

Site No. 64 – Residence, (Former) Eluetts Service Station View Towards the West





**Photo 65-1** 

Site No. 65 - Spill - Aerial March 2017



**Photo 65-2** 

Site No. 65 - Spill - View Towards the Southwest





**Photo 66-1** 

Site No. 66 - Salvage Auto Repair, Inc. - Aerial March 2017



Photo 66-2

Site No. 66 - Salvage Auto Repair, Inc. - View Towards the South





**Photo 67-1** 

Site No. 67 - Ferrous Processing and Trading Co., FPT Fort Lauderdale LLC, dba Sunrise Recycling – Aerial March 2017



**Photo 67-2** 

Site No. 67 - Ferrous Processing and Trading Co., FPT Fort Lauderdale LLC, dba Sunrise Recycling – View Towards the East





Photo 68-1

Site Nos. 68 & 69 - Auto Service/Storage Facility and Sign-D-Sign Aerial March 2017



Photo 68-2

Site No. 68 - Auto Service/Storage Facility – View Towards the Northwest



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**Photo 69-1** 

Site No. 69 - Sign-D-Sign - View Towards the West



Photo 69-2

Site No. 69 - Sign-D-Sign – View Towards the Northwest





Photo 70-1 Site No. 70 - Rodney's Relocation Services Inc. – Aerial March 2017



Photo 70-2 Site No. 70 - Rodney's Relocation Services Inc.- View Towards the West





**Photo 71-1** 

Site No. 71 - Vacant Land, (Former) Diamond Towing Aerial March 2017



Aerial January 1976



Aerial 2008

Photos 71-2 & 71-3

Site No. 71 - Vacant Land, (Former) Diamond Towing



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**Photo 71-4** 

Site No. 71 - Vacant Land, (Former) Diamond Towing View Towards the Southeast





Photo 72-1

Site No. 72 - Bridge Point I-95, (Former) U.S. Concrete Pipe Co. Aerial March 2017



Photo 72-2

Site No. 72 - Bridge Point I-95, (Former) U.S. Concrete Pipe Co. Aerial March 1958



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**Photo 72-3** 

Site No. 72 - Bridge Point I-95, (Former) U.S. Concrete Pipe Co. Aerial 2008



**Photo 72-4** 

Site No. 72 - Bridge Point I-95, (Former) U.S. Concrete Pipe Co. View Towards the South



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**Photo 73-1** 

Site No. 73 - Vacant Lot - Aerial March 2017



**Photo 73-2** 

Site No. 73 - Vacant Lot - View Towards the North





**Photo 73-3** 

Site No. 73 - Vacant Lot – View Towards the Northeast



**Photo 73-4** 

Site No. 73 - Vacant Lot - View of Piezometer / Monitoring Well





Photo 74-1 Site No. 74 – Multi-tenant Warehouse – Aerial March 2017



Photo 74-2 Site No. 74 – Multi-tenant Warehouse – View Towards the Southwest





Photo 74-3 Site No. 74 – Multi-tenant Warehouse – View Towards the South



Photo 74-4 Site No. 74 – Multi-tenant Warehouse – View Towards the North





**Photo 75-1** 

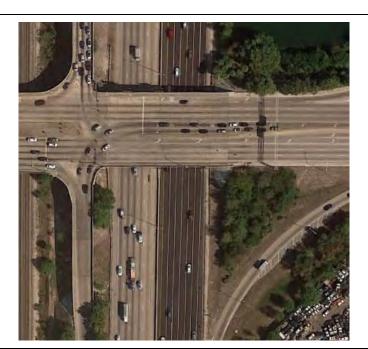
Site No. 75 - Sunrise Used Auto Parts - Aerial March 2017



**Photo 75-2** 

Site No. 75 - Sunrise Used Auto Parts - View Towards the West





**Photo 76-1** 

Site Nos. 76, 77, & 78 - Truck/Auto Accident-Spill; Spill; S.B. Hatergate, Inc. Truck Spill – Aerial March 2017



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## Appendix E | Existing Conditions and Proposed Improvement Exhibits

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Figure E-1 | Existing Park-and-Ride Conditions

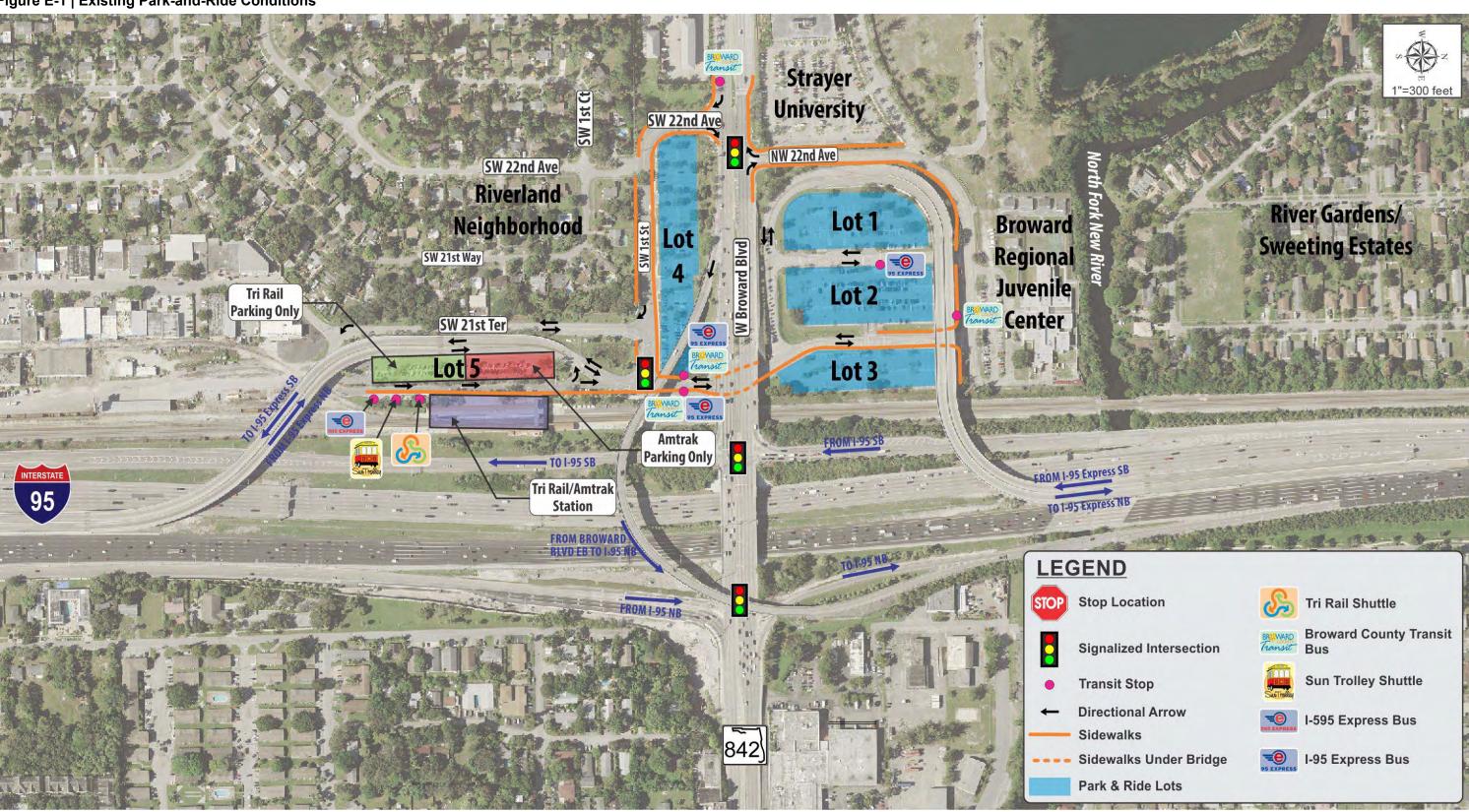




Figure E-2 | Mainline Build Alternative – 95 Express Ingress-Egress Connections with Broward Boulevard Interchange

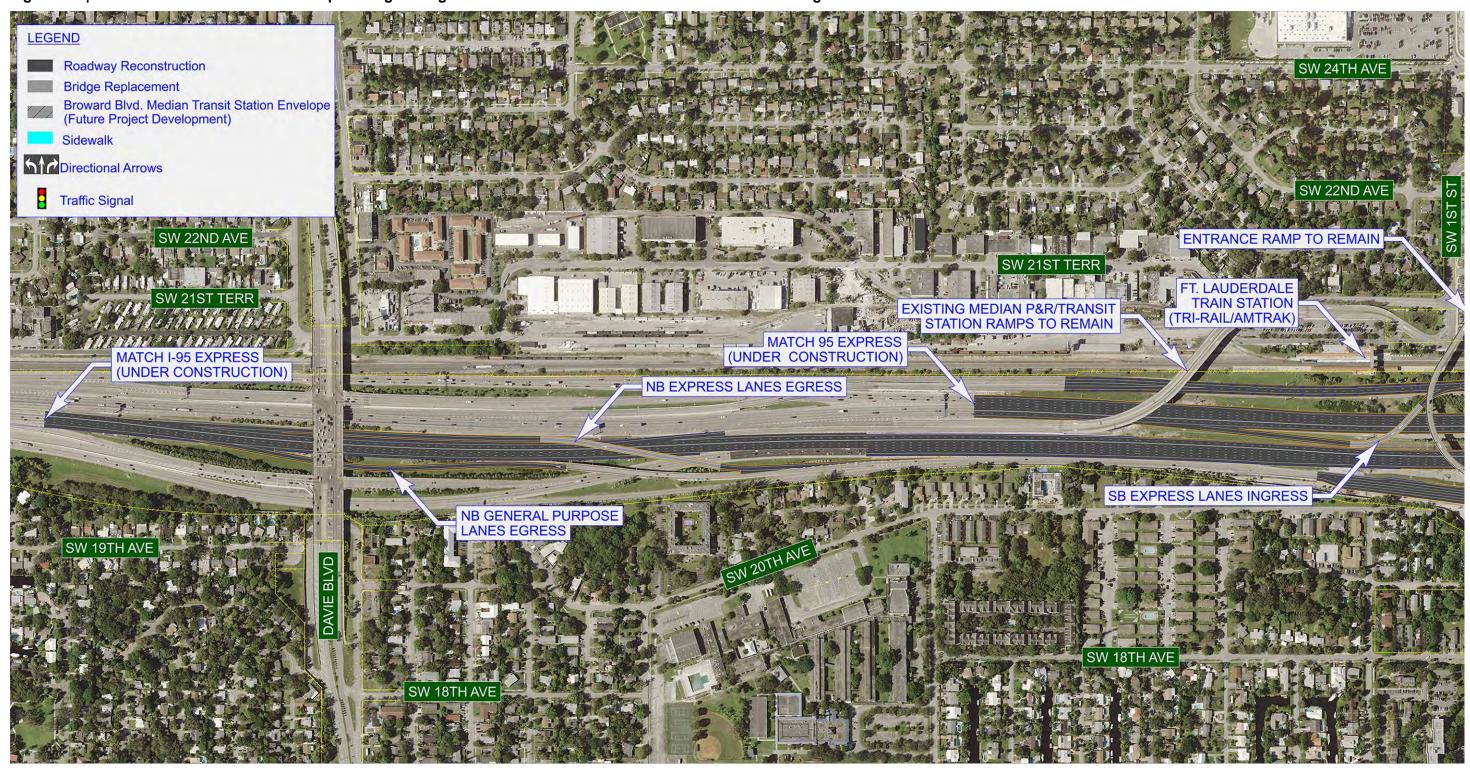




Figure E-3 | Mainline Build Alternative – 95 Express Ingress-Egress Connections with Broward Boulevard Interchange

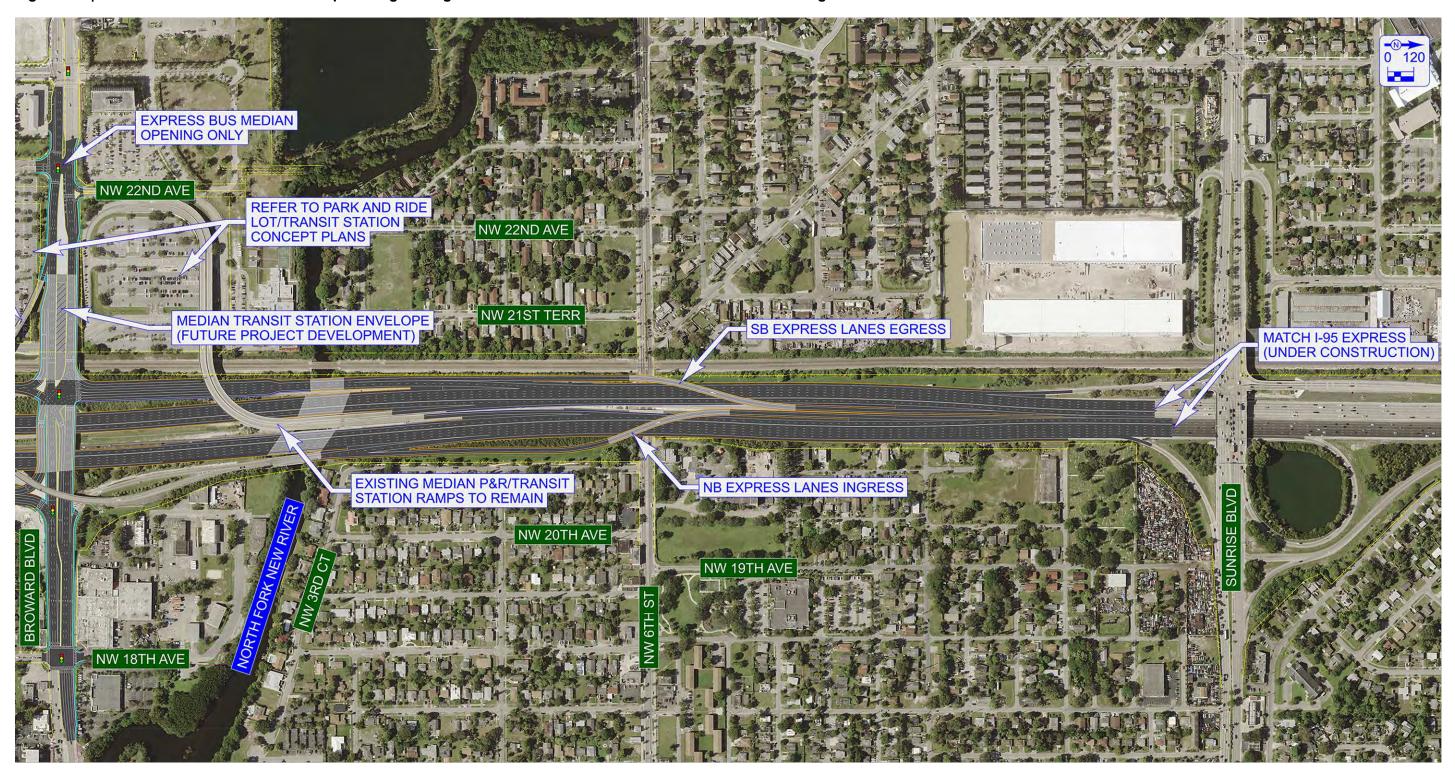




Figure E-4 | Interchange Alternative 1 – Tight Diamond





Figure E-5 | Interchange Alternative 2A – Displaced Left Turn





Figure E-6 | Alternative 2B - Modified Displaced Left

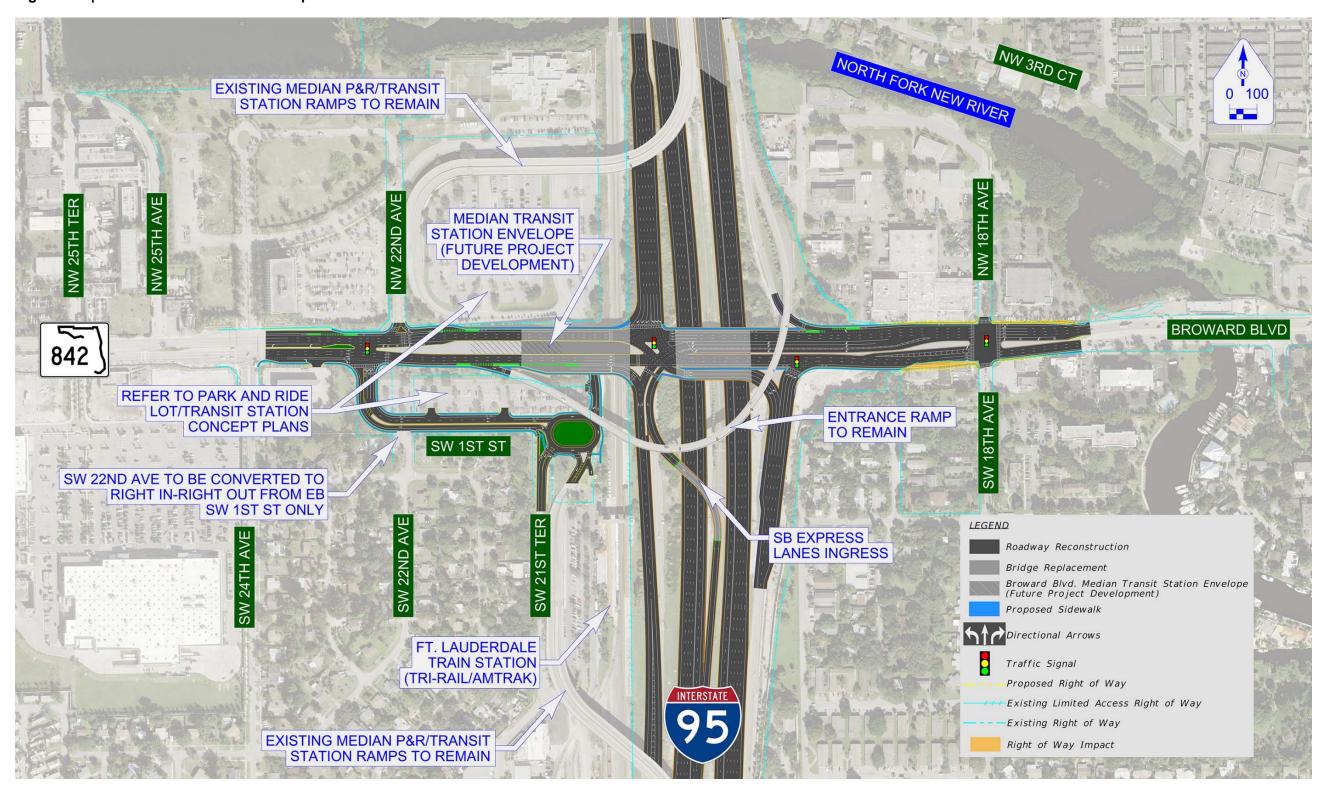




Figure E-7 | Alternative 1 – With I-95 at Broward Boulevard Interchange Modified Displaced Left Alternative

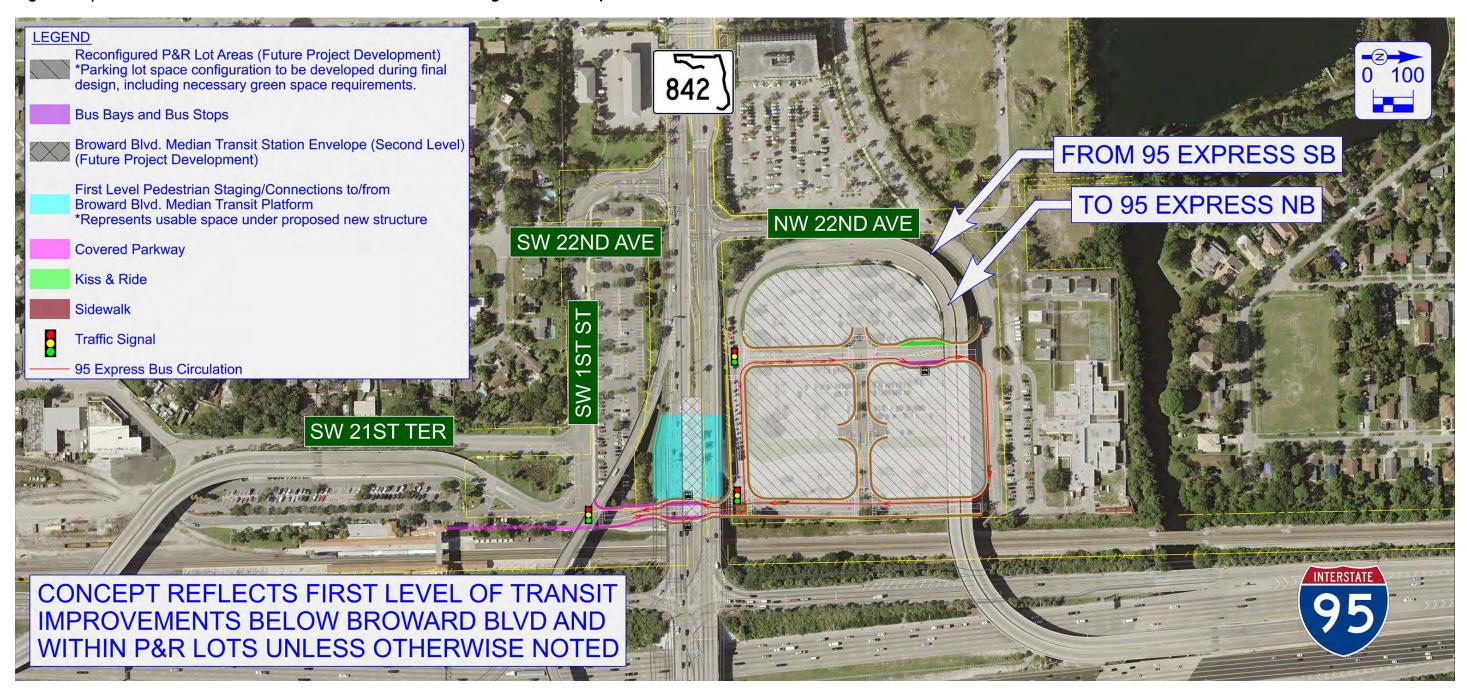




Figure E-8 | Alternative 2 – With I-95 at Broward Boulevard Interchange Modified Displaced Left Alternative

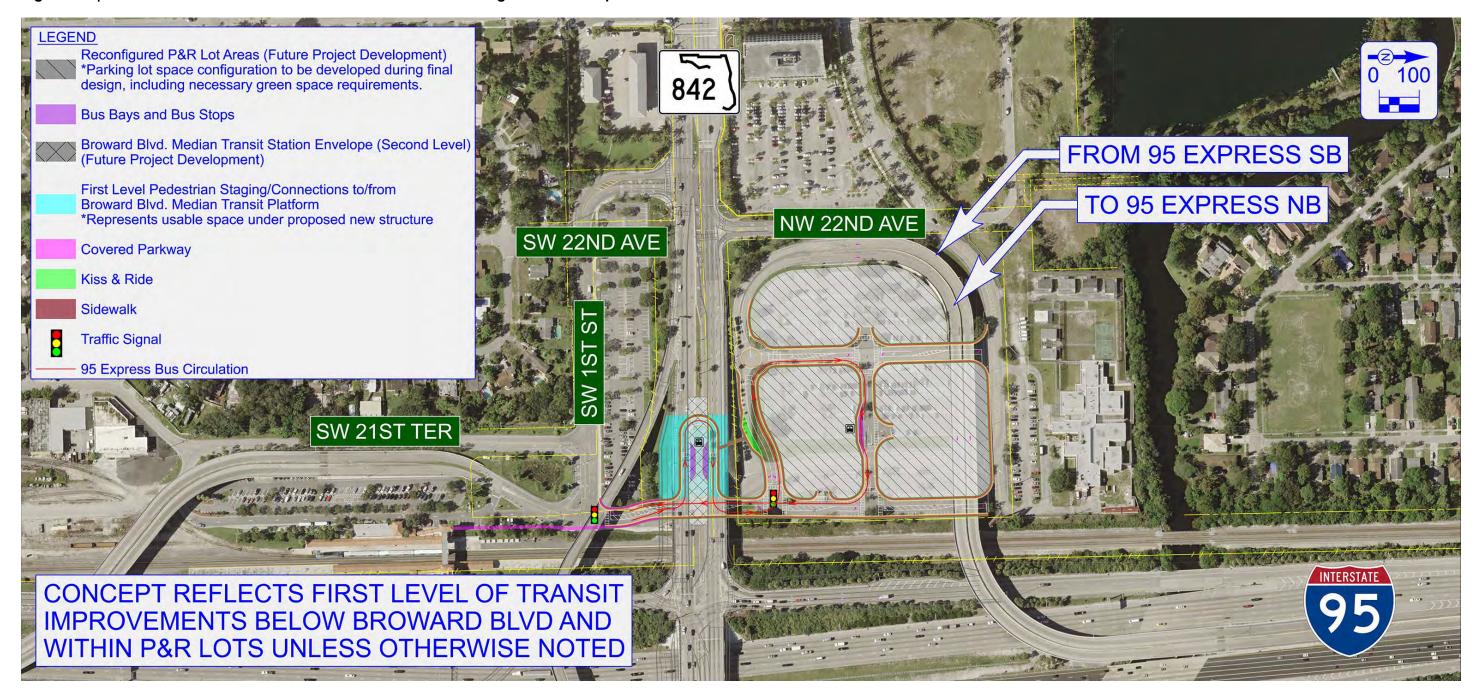




Figure E-9 | Alternative 3 – With I-95 at Broward Boulevard Interchange Modified Displaced Left Alternative

