



# Final Noise Study Report

**Project Development and Environment  
(PD&E) Study**

**I-275/SR 93**

From South of 54th Avenue South  
to North of 4th Street North

*Pinellas County, Florida*

**April 2016**

**PROJECT DEVELOPMENT &  
ENVIRONMENT (PD&E) STUDY**

**Work Program Item Segment No: 424501-1**

# Executive Summary

The Florida Department of Transportation (FDOT), District Seven, conducted a Project Development and Environment (PD&E) Study to evaluate the need for capacity and operational improvements along 16.3 miles of Interstate 275 (I-275) (State Road (SR) 93) from south of 54th Avenue South to north of 4th Street North in Pinellas County, Florida.

The objective of the PD&E Study was to assist the FDOT and the Federal Highway Administration (FHWA) in reaching a decision on the type, location, and conceptual design of the necessary improvements for I-275 to safely and efficiently accommodate future travel demand. This study documented the need for the improvements as well as the procedures utilized to develop and evaluate various improvements including elements such as proposed typical sections, special designation of travel lanes, preliminary horizontal alignments, and interchange enhancement alternatives. The anticipated social, physical, and natural environmental effects and costs of these improvements were identified. The alternatives were evaluated and compared based on a variety of parameters utilizing a matrix format. This process identified the alternative that best balanced the benefits (such as improved traffic operations and safety) with the impacts (such as environmental effects and construction costs).

The PD&E Study satisfies all applicable federal and state requirements, including the National Environmental Policy Act (NEPA), in order for this project to qualify for federal-aid funding of subsequent development phases (design, right of way acquisition, and construction). The project was evaluated through the FDOT's Efficient Transportation Decision Making (ETDM) process. This project is designated as ETDM Project #12556. On July 15, 2016, the FDOT received Location Design and Concept Acceptance (LDCA) from FHWA for lane continuity improvements along I-275 from 54th Avenue South to south of Gandy Boulevard and express lane improvements related to the TBX Master Plan project along I-275 from south of Gandy Boulevard to north of 4th Street North.

This Final Noise Study Report (NSR) is one of several documents that was prepared as part of the I-275 (SR 93) PD&E Study. Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772), Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 13, 2010), requires that projects requiring approval, or that are funded by, the FHWA be subjected to a traffic noise analysis and, if applicable, an evaluation of abatement measures.

Two-thousand one hundred and eighty noise sensitive receptors (i.e., discrete representative locations on a property that has a noise sensitive land use) were evaluated within 72 noise sensitive areas (NSAs). Two thousand one hundred and thirty one receptors were evaluated on residential properties, three in active sports areas, one at a cemetery, two at day care centers, one for an exterior use at a medical facility, six at parks, three for exterior uses at places of worship, seven for interior uses at places of worship, one at a public institutional structure, five in public recreational areas, three in residential recreational areas, and five for exterior uses at schools. Because there are no exterior uses identified, interior traffic noise levels were evaluated at one medical facility, a nonprofit institutional structure, seven places of worship, one public institutional structure, and one public meeting room. Finally, three receptors were evaluated at hotel/motels, two at properties designated as "other developed properties" (i.e., a for-profit theater and a private lodge) and three for the outdoor dining areas of restaurants.



Of the evaluated receptors, 1,013 are predicted to be impacted by traffic noise with existing conditions. In the future without the improvements 989 of the 2,180 receptors are predicted to be impacted (forecast changes in the future number of heavy trucks and buses on I-275 result in a decrease in the number of impacted properties). Finally, with the improvements, 1,054 receptors, representing 1,050 properties, are predicted to be impacted by traffic noise. Of these receptors, 1,034 were evaluated on residential properties (Activity Category B), 19 were evaluated for exterior uses at active sports areas, a cemetery, day care centers, institutional structures, medical facilities, parks, and schools (Activity Category C), and one was evaluated for the exterior dining area at a restaurant (Activity Category E).

Traffic management measures, modifications to the roadway alignment, buffer zones and noise barriers were considered as abatement measures. With the exception of the proposed noise barriers for the impacted properties within the following Noise Sensitive Areas (NSAs), the noise abatement measures were not determined to be both feasible and reasonable.

- NSA 10: Residences in the Lakewood Gateway and Country Club subdivisions.
- NSA 17: Residences in the Highland Terrace Park subdivision.
- NSA 20: Residences in the Highland Terrace Park and Gateway subdivisions.
- NSA 21: Residences in Tangerine Terrace subdivision.
- NSA 23: Residences in Tangerine Terrace subdivision.
- NSA 25: Residences in the Tangerine Terrace, Grand Central, Revere, Rosa E. Royal's, Prather's 31<sup>st</sup> Acreage, Don's, William's, and E.C. Fishers subdivisions.
- NSA 37: Residences in the S.V. Smith's and H.A. Murphy's subdivisions.
- NSA 45: Residences in the Fuller's Gough's and Bronx subdivisions and the Northside Apartments.
- NSAs 54 and 59: Residences in the Reisset, Bunson's Woodlawn Estates, Pine City, Townsend's R.I. Williamson's, Herkimer Heights, Shelton Heights, Clearview Park, Flemings, Harris School Park, Tetreault, Cross Corners, Larry's Bryan Heights, and Thrumstons Bilmar subdivisions.
- NSAs 55 and 57: Residences in the Brunsun's Woodlawn, Pine City, Herkimer Heights, Bengers, Rochester Heights, D.C. White, Coolidge Park, Lynndale, Mar-Mick, and Lakeside subdivisions, Silver Lake Mobile Home Resort, and North Ridge Mobile Home Park.
- NSA 61: Residences in the Heinz subdivision and a mobile home park in the southwest quadrant of I-275 and 54<sup>th</sup> Avenue interchange.
- NSAs 63 and 67: Residences in the Erle Renwick and Fairview Estates subdivisions and the Southern Mobile Home Park.
- NSA 66: Residences in the Chateaux Versailles, Oaks at Meadowlawn, and Meadowlawn Cardinal subdivisions.
- NSA 69: Residences in the Village Green Mobile Home Park.
- NSA 70: Residences in Bay Isle Townhomes.

- NSA 71: Residences in the Azure Apartments.

The location and limits of the evaluated noise barriers for the above NSAs are illustrated on aerials in Appendix B of this report. The estimated total cost to construct the barriers ranges from \$13 to \$26 million depending on barrier length and height.

### Statement of Likelihood

The FDOT is committed to the construction of noise barriers at the locations above, contingent upon the following:

- Detailed noise analysis during the final design process continues to support the need for, and the feasibility and reasonableness of providing the barriers as abatement;
- The detailed analysis demonstrates that the cost of the noise barrier will not exceed the cost effective limit;
- The residents/property owners benefitted by the noise barrier desire that a noise barrier be constructed; and
- All safety and engineering conflicts or issues related to construction of a noise barrier are resolved.

Notably, the noise barriers for the impacted properties in NSA 23, NSA 25 and NSA 61 have the potential to visually block outdoor advertising signs. Should the barriers at these locations remain a feasible and reasonable abatement measure after the detailed noise analysis performed during the project's design phase and the signs are determined to be conforming and legally permitted signs, a notice of the possible screening of the outdoor advertising signs will be provided to the affected sign permit holder(s) and the appropriate local sign regulating agency. A public hearing will also be held to receive input on the proposed noise barrier/sign conflict.

Some land uses adjacent to I-275 are identified on the FDOT listing of noise- and vibration-sensitive sites (e.g., residential use). Application of the ***FDOT Standard Specifications for Road and Bridge Construction*** may minimize or eliminate potential issues should they arise during the construction process.

To reduce the possibility of additional traffic noise related impacts, noise level contours were developed for the future improved roadway facility. These noise contours delineate the distance from the improved roadway's edge-of-travel lane where exterior traffic noise is predicted to meet the Noise Abatement Criteria (NAC). Notably, these distances do not consider any reduction in traffic noise due to shielding from structures and vary depending on the segment of I-275.

- Activity Category "A" (land uses for which serenity and quiet are of extraordinary significance) – From 1,070 to 1,700 feet.
- Activity Categories "B" and "C" (includes residential land uses, places of worship, and day care centers) – From 360 to 720 feet.
- Activity Category "E" (includes land uses such as hotels/motels and the outdoor dining areas of restaurants) – From 220 to 390 feet.

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# 1.0 Introduction

## 1.1 Project Description

The Interstate 275 (I-275) (State Road (SR) 93) project corridor extends from south of 54th Avenue South to north of 4th Street North in Pinellas County, Florida, a distance of approximately 16.3 miles. The study map is shown on **Figure 1-1** on the following page. To effectively describe and evaluate the unique transportation characteristics of the project, the study corridor was divided into three segments as listed below, and graphically displayed on **Figure 1-1**:

- Segment A: From south of 54th Avenue South to I-175, a distance of 4.6 miles;
- Segment B: From I-175 to south of Gandy Boulevard, a distance of 6.0 miles; and
- Segment C: From south of Gandy Boulevard to north of 4th Street North, a distance of 5.7 miles.

The study corridor is contained within the townships, ranges, and sections listed in **Table 1-1** (United States Geological Survey [USGS] Pass-A-Grille Beach, Fla. 1956; St. Petersburg, Fla. 1956; Safety Harbor, Fla. 1956).

**Table 1-1. Township, Range, and Section Coordinates**

Township	Range	Sections
32 South	16 East	2, 3, 10, and 11
31 South	16 East	1, 2, 11, 12, 13, 24, 26, 27, 34, and 35
30 South	16 East	6, 12, 13, 14, 23 through 26, 35, and 36

With respect to the Project Development and Environment (PD&E) Study section of I-275 within Segments A and B, only lane continuity improvements were evaluated. Segment C is the focus of express lane improvements.

## 1.2 Project Background

The Florida Department of Transportation (FDOT) conducted this PD&E Study to evaluate the need for capacity and operational improvements along I-275 from 54th Avenue South to north of 4th Street North in Pinellas County, a distance of approximately 16.3 miles. The objective of this PD&E Study was to provide documented environmental and engineering analyses to assist the FDOT and the Federal Highway Administration (FHWA) in reaching a decision on the type, conceptual design and location of the necessary improvements within the I-275 PD&E Study limits.



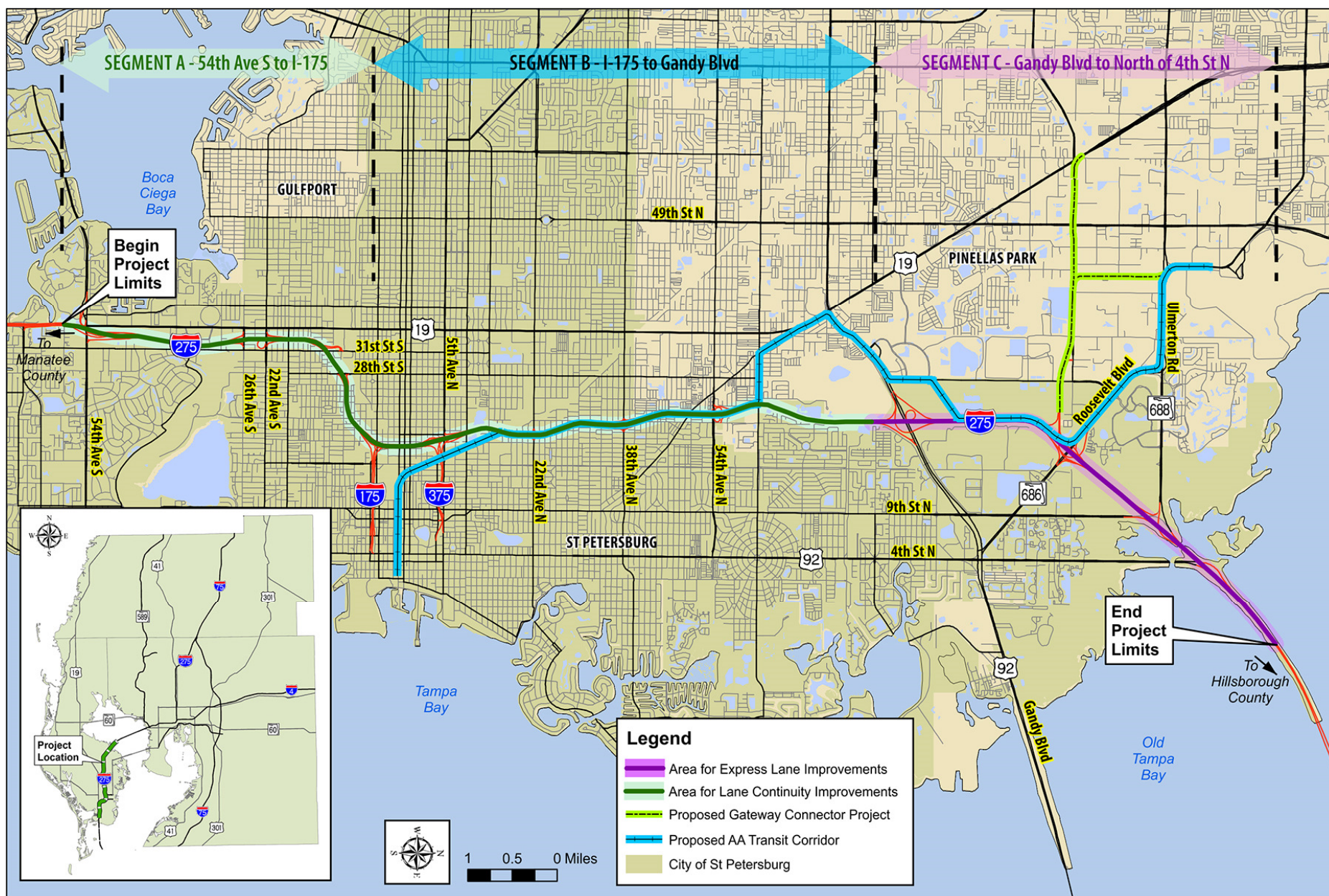


Figure 1-1. Project Location Map

Several multimodal transportation planning studies for the I-275 PD&E Study Corridor within Pinellas County have been completed while others are presently underway. The findings from these studies are assisting the FDOT in identifying transportation improvements needed to adequately meet local and regional travel demands, as well as to support the development of the PD&E Study's Preferred Alternative. The following sections describe the relevant multimodal planning studies prepared for the I-275 corridor in Pinellas County.

### 1.2.1 Tampa Bay Express (TBX) Master Plan

FDOT District Seven developed the TBX Master Plan that indicates on which interstate facilities, and specific freeway segments of these facilities, it would be cost feasible to implement express lanes. This Plan ensures that the impacts of implementing express lanes on the Tampa Bay interstate system would be evaluated on a system-wide basis in lieu of treating each corridor as its own stand-alone project. The I-275 PD&E Study incorporates the TBX Master Plan improvements proposed for the I-275 study corridor as part of the Preferred Alternative along with the lane continuity improvements which would occur generally between 54th Avenue South to south of Gandy Boulevard.

Realizing a potential shortfall in funding for implementation of the Plan's ultimate capacity improvements planned for the Tampa Bay Region, the FDOT underwent an evaluation to identify a series of lower cost express lane projects that can be funded in the FDOT's Five-Year Work Program. These initial projects could be built within a five-year or less time period and then later be incorporated into the Master Plan projects at minimal additional costs. The shorter-term, lower-cost improvements are considered the "Starter Projects."

Further information regarding the development of the Master Plan and its proposed projects are documented in the TBX Master Plan document.

### 1.2.2 Pinellas Alternative Analysis (AA)

In addition to addressing highway capacity deficiencies, this PD&E Study also considered multimodal accommodations envisioned for the I-275 study corridor and its regional connections to the rest of Tampa Bay. The Tampa Bay Area Regional Transportation Authority (TBARTA) adopted a Transportation Master Plan for Citrus, Hernando, Hillsborough, Manatee, Pasco, Pinellas, and Sarasota Counties in May 2009. While considering all modes of transportation, the TBARTA Master Plan focused on providing the framework for an integrated transit system to serve all parts of the region. In 2009, the Hillsborough, Pinellas, Pasco, and Hernando County Metropolitan Planning Organizations (MPOs) and Citrus County all adopted the TBARTA Mid Term (2040) Networks in their 2040 Needs plans and included several key elements of the Master Plan in their 2040 Cost Affordable Long Range Transportation Plans (L RTPs).

As a first step in moving toward implementation of this Plan, the Hillsborough Area Regional Transit Authority (HART) had undertaken an AA for a light rail transit corridor running from the University of South Florida, through downtown Tampa, to the Westshore area. This HART analysis included a service connection to a proposed High Speed Rail station in downtown Tampa. A second AA has been completed by the FDOT, TBARTA, the Pinellas County MPO and the Pinellas Suncoast Transit Authority (PSTA) for a premium transit corridor from downtown St. Petersburg, through the Pinellas Gateway area, to downtown Clearwater. In addition, the FDOT, local transit agencies, and MPOs



have planned several Regional Transit Corridor Evaluations for other elements of the TBARTA Master Plan.

The 2012 Pinellas AA evaluated transit options connecting major residential, employment and activity centers in Pinellas County to Hillsborough County via the Howard Frankland Bridge corridor. The study identified a 24-mile light rail Locally Preferred Alternative (LPA) for its ability to offer transportation options that are safe, sustainable, affordable, and efficient. Significant countywide local bus enhancements were recommended to support the LPA, nearly doubling the existing local bus service with portions being implemented before the light rail.

A key element of the TBARTA Master Plan is to provide a transit linkage across Upper Tampa Bay linking Hillsborough and Pinellas Counties. Specifically, both the TBARTA Master Plan and the MPO LRTPs call for the linkage to be provided across the Howard Frankland Bridge (I-275/SR 93) corridor. This linkage would run from Hillsborough County's proposed Westshore Regional Multimodal Center (service connection to the proposed High Speed Rail Station in downtown Tampa) to Pinellas County's proposed Gateway Station. These stations would not serve as termini, but would allow uninterrupted transit movements from the St. Petersburg and Clearwater areas across the Howard Frankland Bridge to and through Tampa's Central Business District (CBD) and vice versa. However, for this linkage to be possible, the Howard Frankland Bridge corridor must be able to accommodate the appropriate transit provisions. The FDOT plans to replace the northbound Howard Frankland Bridge in the future since it is approaching the end of its useful service life. Therefore, the I-275 PD&E Study will provide recommended improvements that provide the transit accommodations envisioned by TBARTA and the needed highway improvements consistent with the planned northbound bridge replacement.

### 1.2.3 Lane Continuity Study

Completed in October 2008, the I-275 Lane Continuity Study evaluated operational improvements on I-275 from the Sunshine Skyway Bridge North Toll Plaza to Gandy Boulevard in Pinellas County. The study documented existing and future operational and safety conditions within the corridor for the purposes of recommending possible improvements to alleviate identified deficiencies. The study addressed both short-term traffic operational type improvements and longer-term major geometric improvements. As a long range improvement, the study recommended providing lane improvements to achieve one additional continuous lane on I-275 in each direction from 54th Avenue South to Gandy Boulevard.

The I-275 Pinellas PD&E Study incorporated and updated the Lane Continuity Study recommendations. Currently, I-275 from south of 54th Avenue South to 4th Street North has one continuous lane in the northbound direction and no continuous lanes in the southbound direction. According to the previous Lane Continuity Study recommendations, proposed lane additions to I-275 are anticipated to provide three continuous lanes in the northbound direction and two continuous lanes in the southbound direction between 54th Avenue South and 4th Street North. These new lane connections will improve the safety for motorists traveling the I-275 corridor by substantially reducing the number of lane changes for both directions of travel. The study also recommended modifications to certain interchanges within the study limits, allowing for a more refined analysis of those locations.



## 1.2.4 NEPA Process

The proposed project has been evaluated through the FDOT's Efficient Transportation Decision Making (ETDM) process. Agency coordination for this project has been initiated as part of ETDM Project Number 12556. The FDOT received Location Design and Concept Acceptance (LDCA) from FHWA on July 15, 2016 for lane continuity improvements along I-275 from 54th Avenue South to south of Gandy Boulevard and express lane improvements related to the TBX Master Plan project along I-275 from south of Gandy Boulevard to north of 4th Street North.

## 1.3 Existing Conditions

I-275 is a limited access urban interstate highway facility that runs in a north and south direction through Pinellas County. The posted speed limit is 65 miles per hour (mph). Within the project limits, I-275 is comprised of a four-lane divided typical section with auxiliary lanes from south of 54th Avenue South to I-375. From I-375 to north of 4th Street North, I-275 is comprised of a six-lane divided typical section with auxiliary lanes.

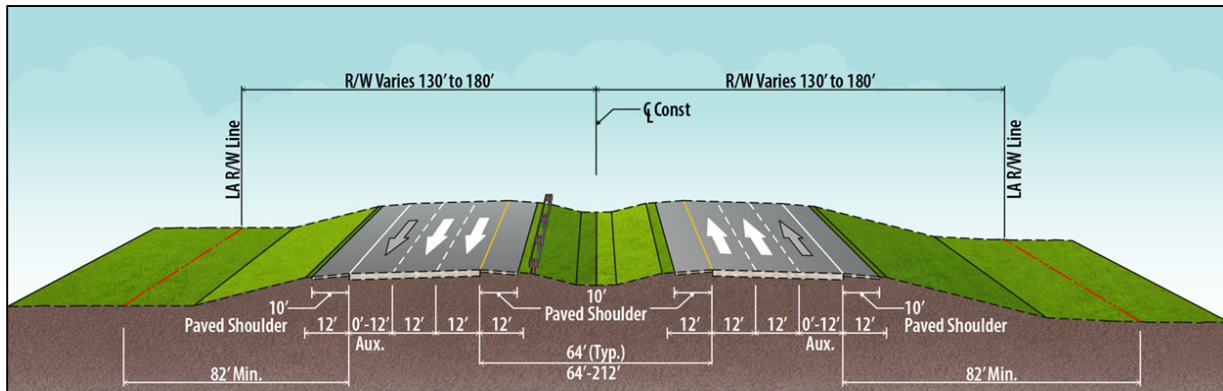
The existing roadway typical sections, as shown on **Figure 1-2(a-f)**, are described as follows:

- Segment A (from south of 54th Avenue South to I-175): consists of four 12-foot general purpose travel lanes, two 12-foot auxiliary travel lanes, 12-foot inside and outside shoulders (10-foot paved) and generally open drainage with a median width that varies from 64 to 212 feet;
- Segment B (from I-175 to south of Gandy Boulevard): consists of six 12-foot general purpose travel lanes, two or four 12-foot auxiliary travel lanes, 12-foot inside and outside shoulders (10-foot paved) and generally open drainage with a median width that varies from 64 to 204 feet; and
- Segment C (from south of Gandy Boulevard to north of 4th Street North): There are four separate typical sections within Segment C (labeled separately as C1-C4).
  - C-1 (from south of Gandy Boulevard to Roosevelt Boulevard) consists of six 12-foot general purpose travel lanes, two or four 12-foot auxiliary travel lanes, 12-foot inside and outside shoulders (10-foot paved) and generally open drainage with a median width that varies from 64 to 204 feet;
  - C-2 (from Roosevelt Boulevard to south of 9th Street North): consists of six 12-foot general purpose travel lanes, zero to four 12-foot auxiliary travel lanes, 12-foot inside and outside shoulders (10-foot paved) and generally open drainage with a median width of 40 feet;
  - C-3 (from south of 9th Street North to north of 4th Street North): consists of six 12-foot general purpose travel lanes, two to four 12-foot auxiliary travel lanes, 12-foot inside and outside shoulders (10-foot paved) with a 26-foot wide concrete median containing a two-foot traffic barrier used to separate northbound and southbound traffic on I-275;
  - C-4 (from north of 4th Street North to 1.0 mile south of the Howard Frankland Bridge): the I-275 causeway consists of six 12-foot general purpose travel lanes, two 12-foot auxiliary lanes, 10-foot paved inside and outside shoulders, and a 22-foot median. The face of the outside barrier mounted on the sea walls is approximately 40 feet from the travel lanes.

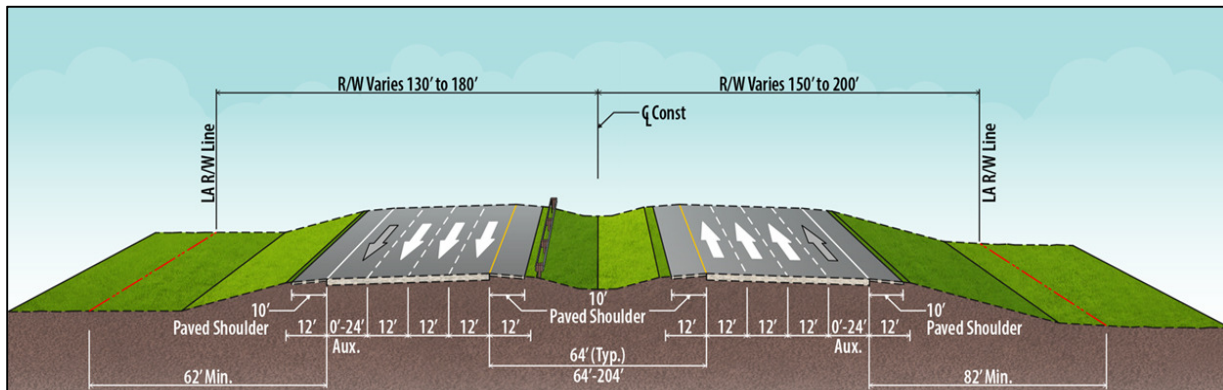
No dedicated transit facilities, frontage roads or high-occupancy vehicle (HOV) lanes are currently provided within any of the I-275 mainline Segments. I-275 includes 15 interchanges within the project limits:

- |                       |   |
|-----------------------|---|
| 1. 54th Avenue South; | 9. 22nd Avenue North;                   |
| 2. 26th Avenue South; | 10. 38th Avenue North;                  |
| 3. 22nd Avenue South; | 11. 54th Avenue North;                  |
| 4. 31st Street South; | 12. Gandy Boulevard;                    |
| 5. 28th Street South; | 13. Roosevelt Boulevard /118th Avenue   |
| 6. I-175;             | 14. Ulmerton Road/9th Street North; and |
| 7. I-375;             | 15. 4th Street North.                   |
| 8. 5th Avenue North;  |   |

**Figure 1-2. Existing Typical Sections**



**Figure 1-2a. Existing I-275 Mainline Typical Section from south of 54th Avenue South to I-175 (Segment A)**



**Figure 1-2b. Existing I-275 Mainline Typical Section from I-175 to south of Gandy Boulevard (Segments B)**

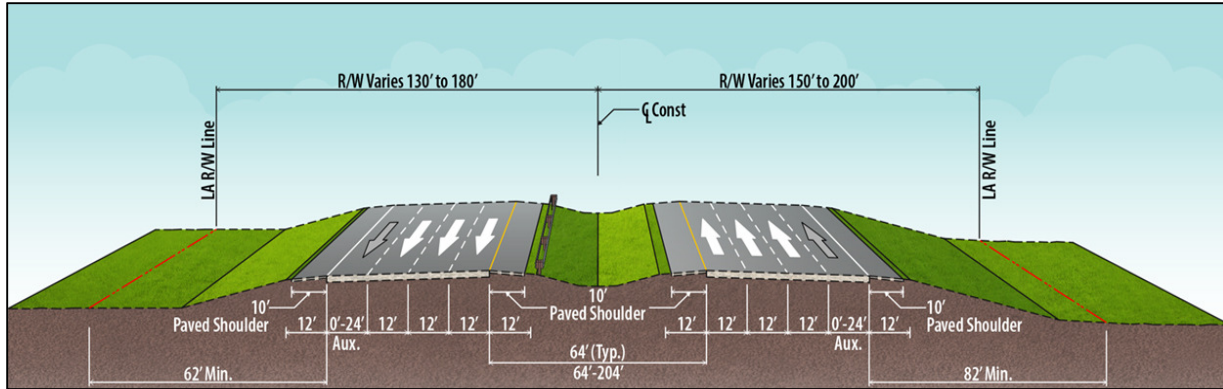


Figure 1-2c. Existing I-275 Mainline Typical Section from south of Gandy Boulevard to Roosevelt Boulevard (Segment C-1)

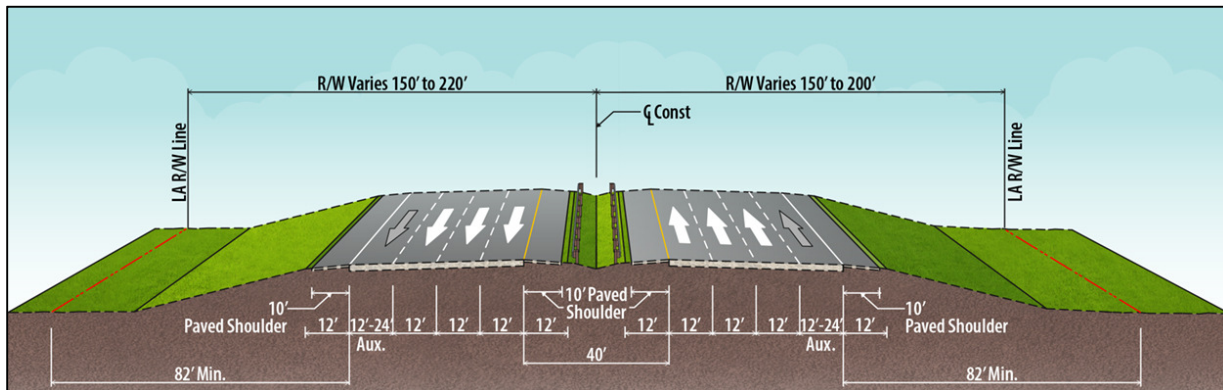


Figure 1-2d. Existing I-275 Mainline Typical Section from Roosevelt Boulevard to south of 9th Street North (Segment C-2)

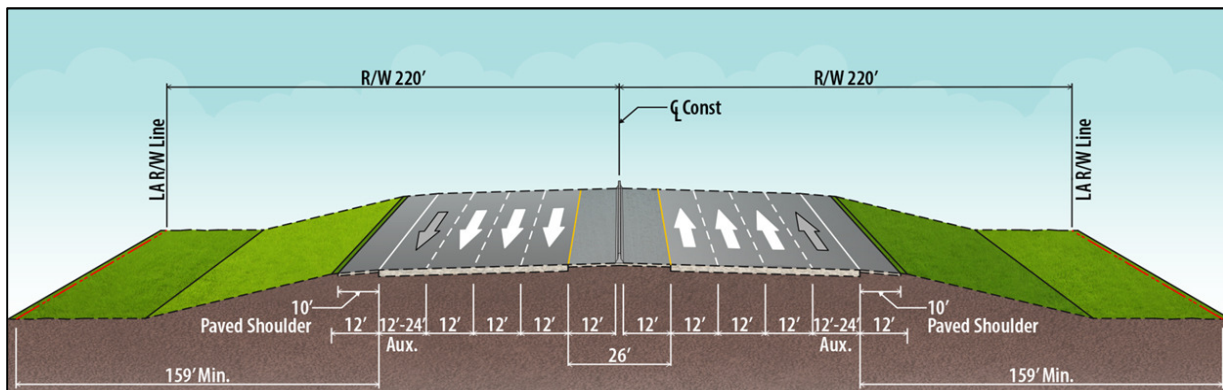


Figure 1-2e. Existing I-275 Mainline Typical Section from south of 9th Street North to south of 4th Street North (Segment C-3)



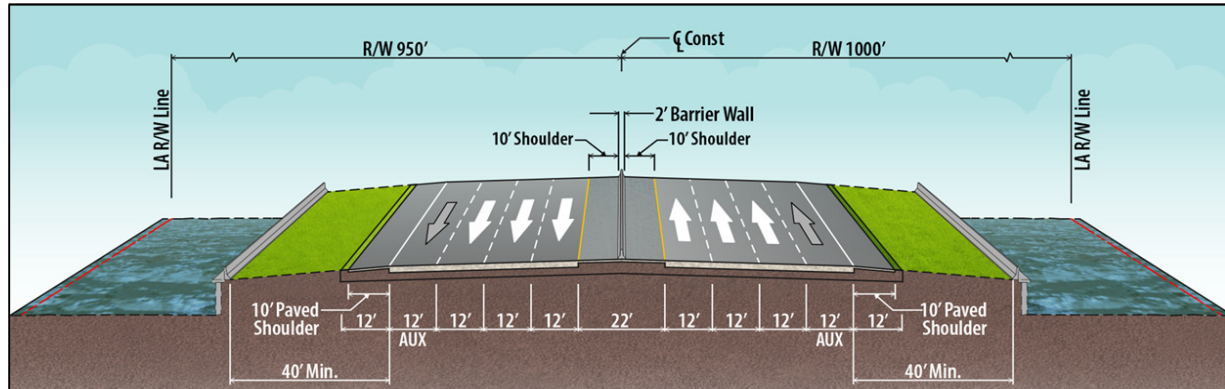


Figure 1-2f. Existing I-275 Mainline Typical Section from south of 4th Street North to 1.0 mile south of Howard Frankland Bridge (Segment C-4)

## 1.4 Project Purpose and Need

The purpose of this project is to provide for operational and safety improvements that maximize capacity within the I-275 corridor, improve lane continuity and connect I-275 within Pinellas County to the future network of express lanes planned for the Tampa Bay Region. Improvements are needed within the I-275 corridor to help alleviate existing traffic congestion, enhance safety and better accommodate future travel demands associated with projected growth in employment and population. The addition of special use/express lanes is included in the FDOT's Approved SIS Highway Component 2040 Cost Feasible Plan.

In 2012, Annual Average Daily Traffic (AADT) volumes on I-275 ranged from a low of 82,000 vehicles per day north of 54th Avenue South to a high of 142,500 vehicles per day north of 4th Street North. Under these existing traffic loadings, several sections along the I-275 mainline operate deficiently (Level of Service – LOS E) during both the morning and afternoon peak travel periods and does not meet the minimum LOS standard D for SIS highway facilities. Without improvements, the operating conditions along I-275 will continue to deteriorate, resulting in unacceptable levels of service throughout the entire study corridor.

The following information supports the proposed project's purpose and need:

### Safety/Crash Rate Issues

Crash data from the Florida Department of Highway Safety and Motor Vehicles indicated there were 2,082 crashes recorded in the project limits during the five year period of 2009 through 2013. There were a total of 976 injuries and 18 fatalities. The crash rates were higher than the average statewide crash rate for urban interstates within the vicinity of certain interchanges within the project limits, and along mainline sections between 22nd Avenue and 54<sup>th</sup> Avenue North.

Safety within the project limits will be enhanced due to maximizing capacity that will be provided by the proposed lane continuity improvements on I-275. The lane continuity improvements will reduce driving decisions related to lane changes, thereby decreasing potential conflicts among vehicles.

### Lane Continuity Issues

Currently, I-275 from south of 54th Avenue South to 4th Street North has one continuous lane in the northbound direction and no continuous lanes in the southbound direction. The proposed intermittent

widening and restriping of existing lanes within I-275 Segments A and B comprise the lane continuity improvements that will form two continuous lanes on I-275 in each direction between 54th Avenue South and 4th Street North; thereby improving the safety of motorists by reducing driving decisions which relate to lane changes and the incidence of associated crashes.

### **Managed/Special Use Lanes Intent**

I-275 Segment C is a component of the Tampa Bay Express (TBX) toll lanes. As part of the TBX Master Plan, one tolled lane is to be added to I-275 in each direction from Gandy Boulevard to 118th Avenue North. From 118th Avenue North to north of 4th Street North, two tolled lanes will be provided in each direction on I-275. Access will be provided between the tolled and non-tolled lanes near Gandy Boulevard, at 118th Avenue North, and between 4<sup>th</sup> Street North and the Howard Frankland Bridge.

### **Proposed Improvements**

The proposed action involves the provision of capacity and operational improvements along 16.3 miles of I-275 from south of 54th Avenue South to north of 4th Street North in Pinellas County, Florida. This evaluation considers the operational and highway safety benefits of implementing capacity improvements and compares them to the cost savings and minimization of adverse impacts associated with a No Build Alternative. The No Build and Build Alternatives are evaluated and compared based on a variety of parameters utilizing a matrix format. This process identifies the alternative that best balances the benefits (such as improved traffic operations and safety) with the impacts (such as environmental effects and construction costs). In addition to capacity and operational improvements, the proposed action also considers the multimodal transportation needs of the I-275 project corridor, specifically incorporation of a multimodal envelope as part of the proposed improvements in order to be consistent with the Locally Preferred Alternative (LPA) of the Pinellas Alternatives Analysis (AA).

The Preferred Build Alternative consists of providing lane continuity improvements within Segments A and B (from south of 54th Avenue South to south of Gandy Boulevard), and express lane improvements in Segment C (from south of Gandy Boulevard to north of 4th Street North). The lane continuity improvements consists of intermittent widening and restriping of existing lanes on I-275 to form two continuous lanes in each direction. In Segment B, a 40-foot (ft) multimodal transportation envelope within the I-275 median is preserved for the future implementation of light rail transit use envisioned as part of the Federal Transit Administration (FTA) approved Pinellas AA. The express lanes proposed in Segment C are part of the Tampa Bay Express (TBX) Master Plan, which consists of an integrated system of express lanes identified for the Tampa Bay Region.

The I-275 interchange modifications proposed within the project segments are as follows, these future interchange improvements will be further analyzed in appropriate interchange analysis documents:

#### **Segment A**

- 31st Street South – moving SB on ramp from a left hand merge to a right hand merge

## Segment B

- 5th Avenue North – SB off ramp contains a new auxiliary lane (connected with 22nd Avenue North) 22nd Avenue North – SB on ramp contains a new auxiliary lane with connection to 5th Avenue North
- 38th Avenue North – Additional lane on NB off ramp (from 1 to 2).

## Segment C

- 118th Avenue – new GUL and SUL ramps
- Roosevelt Boulevard – new GUL NB on ramp
- MLK Boulevard – NB on ramp widening
- Ulmerton Boulevard – NB on ramp widening
- 4th Street North – NB on ramp and SB off-ramp widening

The proposed express lane improvements initially considers (prior to the design year 2040) one express lane (EL) in each direction of I-275 from south of Gandy Boulevard to north of 4th Street North. This near-term express lanes project is known as the Starter Project. The longer-term Master Plan Project shall provide for one EL in each direction of I-275 from south of Gandy Boulevard to 118th Avenue North/Roosevelt Boulevard and two ELs in each direction of I-275 from 118th Avenue North/Roosevelt Boulevard to north of 4th Street North. The separately prepared Final Preliminary Engineering Report (PER) documents the engineering and environmental analyses conducted to assess the environmental and sociocultural effects of implementing the No Build and Build Alternatives.

## 1.5 Report Purpose

This Final NSR is one of several documents that was prepared as part of the I-275 (SR 93) Project Development and Environment (PD&E) Study. Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772), Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 13, 2010), requires that projects requiring approval, or that are funded by, the Federal Highway Administration (FHWA) be subjected to a traffic noise analysis and, if applicable, an evaluation of abatement measures.

To implement this guidance, the FDOT authored Part 2, Chapter 17 of the PD&E Manual (May 4, 2011), which identifies and explains the purpose, process and procedures that are to be used when conducting a traffic noise analysis. This Final NSR has been prepared in accordance with all applicable guidelines as stated within both 23 CFR 772 and Part 2, Chapter 17 of the FDOT PD&E Manual.

## 2.0 Improvement Alternatives

A detailed *Design Traffic Technical Memorandum* (DTTM) was prepared as part of the PD&E Study to document the existing travel conditions along I-275, present traffic forecasts of the opening year (2020), interim year (2030) and design year (2040) travel demand along I-275 and the crossing corridors, and summarize level of service evaluations of improvement alternatives for the I-275 mainline. The DTTM concluded that the proposed improvements should consist of providing lane continuity improvements only in Segment A (from south of 54th Avenue South to I-175), lane continuity improvements which are compatible with potential multimodal improvements in Segment B (from I-175 to south of Gandy Boulevard) and adding express lanes (ELs) to the existing general use lanes (GULs) in each direction of the I-275 mainline to form express lanes in study Segment C (from south of Gandy Boulevard to north of 4th Street North). For the express lane section, two ELs would be provided in each direction of the I-275 mainline to accommodate traffic volumes forecasted in the design year (2040) under the Master Plan scenario. Alternatively, one EL would be provided in each direction of the I-275 mainline under the Starter Project scenario, in order to cost effectively provide mobility options and preserve acceptable levels of service for the regional travelers prior to the design year.

### 2.1 No-Build Alternative

The No Build Alternative assumes that, with the exception of the improvements that are already planned and funded, the existing conditions would remain for I-275 within the project limits and only routine maintenance activities would occur until the design year 2040. The advantages to the No Build Alternative include no new costs for design and construction, no effects to existing land uses and natural resources and no disruption to the public during construction. However, the No Build Alternative would not address the project's purpose and need and would result in increased congestion and user costs. The traffic analyses for this alternative indicates that by the year 2040 a significant portion of the I-275 mainline, merge/diverge areas and ramp termini intersections would operate below acceptable levels of service.

### 2.2 Mainline Build Alternatives

For the I-275 mainline, two build alternatives were developed and evaluated based on alternate typical sections. In Segments A and B, the build alternative consists of lane continuity improvements, while in Segment C express lanes are considered as the build alternative. The proposed lane continuity improvements in Segments A and B provide for intermittent widening and restriping of existing lanes on I-275 to form two continuous lanes in each direction. In Segment B, a 40-foot multimodal envelope is preserved for the future implementation of light rail transit within the I-275 median as part of the Federal Transit Administration (FTA) approved Pinellas AA. This Final NSR did not evaluate any changes in noise levels if the Pinellas AA project were to be implemented.

As part of the Master Plan improvements in Segment C, a single express lane is to be added in the northbound direction of mainline I-275 north of Gandy Boulevard. A second express lane is added to the northbound I-275 mainline as a direct connection from the 118th Avenue North corridor. Only one access point, located between 4th Street North and the Howard Frankland Bridge, is provided

for travel between ELs and GULs. In the southbound direction, two ELs on the I-275 mainline will originate from points north/east of the Howard Frankland Bridge, with one of the ELs terminating as a direct connection to the 118th Avenue North corridor, and the second southbound I-275 mainline EL will transition back into the GULs south of Gandy Boulevard. Similar to the northbound direction, only one access point is to be located between the Howard Frankland Bridge and 4th Street North. The express lane typical section in Segment C generally consists of six GULs (three lanes in each direction) and four ELs (two in each direction). A marked four-foot buffer containing traffic delineators (i.e., vertical PVC flexible posts) separate the ELs and the GULs.

The Starter Project improvements in Segment C consist of re-designating the existing auxiliary lanes on mainline I-275 to form a single express lane in each direction from south of the Roosevelt Boulevard corridor to the Howard Frankland Bridge. Access to the EL from the GULs is provided at three locations along the northbound I-275 mainline: 1) between Gandy Boulevard and Roosevelt Boulevard, 2) a direct connection from the 118th Avenue North corridor, and 3) between 4th Street North and the Howard Frankland Bridge. In the southbound direction of mainline I-275, the single express lane originating from points north/east of the Howard Frankland Bridge will terminate south of Gandy Boulevard. Access from the EL to the GULs is provided at three locations along the southbound I-275 mainline: 1) between the Howard Frankland Bridge and 4th Street North, 2) a direction connection to the 118th Avenue North corridor, and 3) between Gandy Boulevard and 54th Avenue North.

The widening of I-275, under both lane continuity and Starter and Master Plan express lane mainline alternatives, can be constructed within the existing right of way. Additional right of way may be required, however, for stormwater management facilities and floodplain compensation sites.

A detailed description of each mainline alternative is provided in the following pages, and a graphical depiction of the conceptual design layout of the proposed build alternative is provided in **Appendix A**.

## 2.2.1 Mainline Build Alternative – Segment A

Mainline Build Alternative – Segment A, proposed lane continuity improvements mainly consists of providing intermittent widening that varies between 0 and 12 ft and restriping of the existing four-lane typical section with auxiliary lanes. The proposed I-275 mainline build alternative typical section in Segment A is shown on **Figure 2-1**. As seen in this graphic, widening of I-275 is only proposed to the outside in the southbound direction.

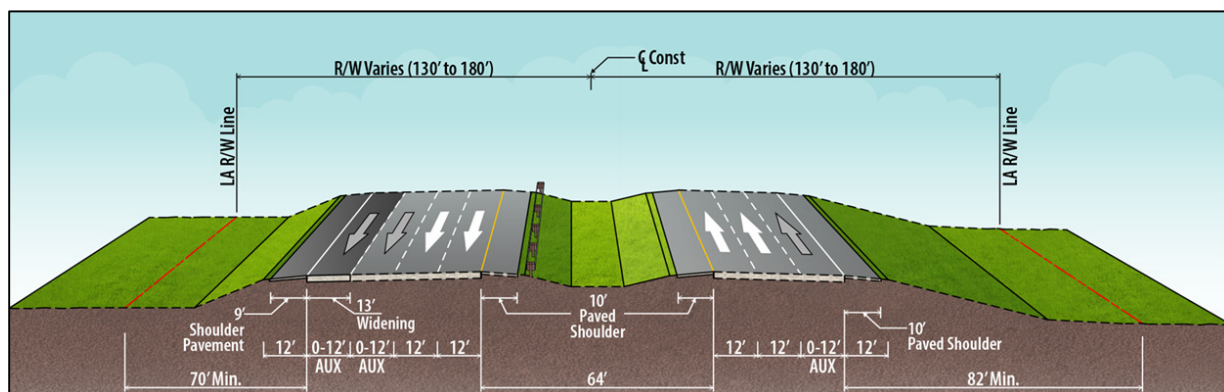




Figure 2-1. I-275 Mainline Build Alternative Typical Section from south of 54th Avenue I-175 (Segment A)

## 2.2.2 Mainline Build Alternative – Segment B

Mainline Build Alternative – Segment B, proposed lane continuity improvements mainly consists of providing intermittent widening that varies between 0 and 24 ft and restriping of the existing six-lane typical section with auxiliary lanes. As previously mentioned in Section 2.2, lane continuity improvements and accommodations for future light rail transit within the I-275 median as planned in the Pinellas Alternatives Analysis are provided. The proposed I-275 mainline build alternative typical section in Segment B is shown on **Figure 2-2**.

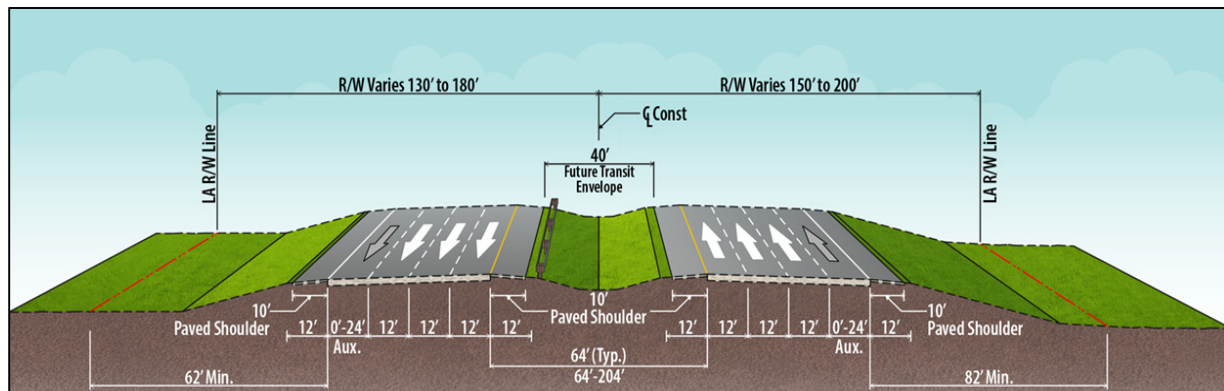


Figure 2-2. I-275 Mainline Build Alternative Typical Section from I-175 to south of Gandy Boulevard (Segment B)

## 2.2.3 Mainline Build Alternative – Segment C

Mainline Build Alternative – Segment C, proposed widening of I-275 consists of the addition of express lanes to form the Master Plan and Starter projects. The proposed I-275 mainline build alternative typical sections in Segment C are shown **Figure 2-3(a-d)** and **Figure 2-4(a-c)** for the Master and Starter projects, respectively.

### 2.2.3.1 Proposed Master Plan Improvements

The Master Plan proposes to widen the existing I-275 mainline towards the median in order to accommodate one EL in each direction from south of Gandy Boulevard to 118th Avenue North (see **Figure 2-3a** for a graphical depiction of the proposed typical section). The proposed ELs are to be separated from the GULS by a four-foot painted buffer that is to contain traffic delineators. Direct connections from the 118th Avenue North/Gateway corridor to I-275 are provided via new flyover ramps that enter and exit I-275 from the median. **Figure 2-3b** illustrates the use of Mechanically Stabilized Earth (MSE) wall to transition 118th Avenue North flyover ramps to the at-grade I-275 mainline. From 118th Avenue North to 1.0 mile south of the Howard Frankland Bridge, two express lanes are provided in each direction of travel along I-275 (see **Figure 2-3c** and **Figure 2-3d**). In order to accommodate the proposed express lanes, the existing I-275 causeway extending into Tampa Bay will need to be widened and the existing sea wall replaced.

Figure 2-3. I-275 Mainline Build Alternative Typical Sections – Master Plan Project

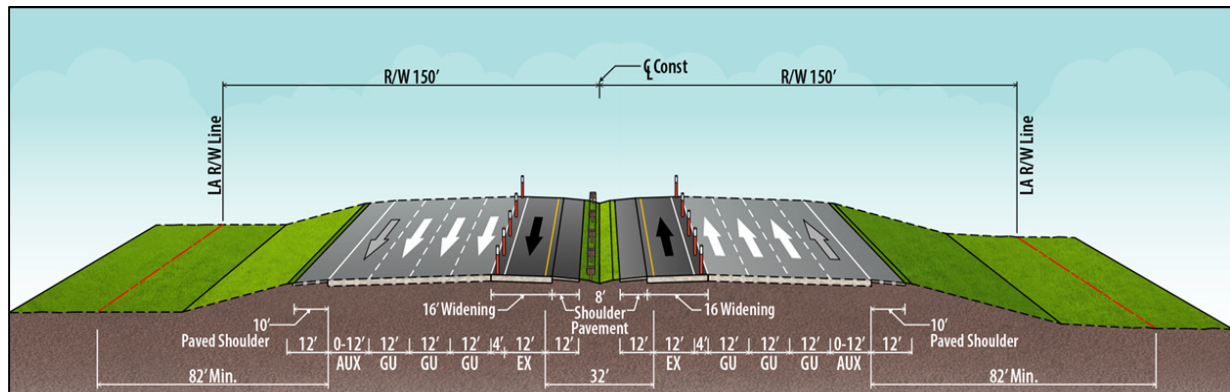


Figure 2-3a. I-275 Mainline Master Plan Build Alternative Typical Section from south of Gandy Boulevard to Roosevelt Boulevard (Segment C-MP1)

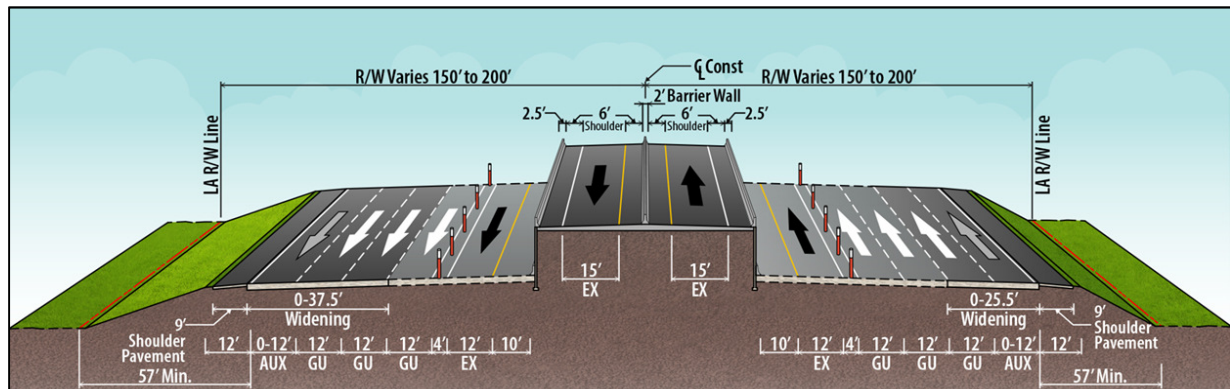


Figure 2-3b. I-275 Mainline Master Plan Build Alternative Typical Section from Roosevelt Boulevard to south of 9th Street North (Segment C-MP2)

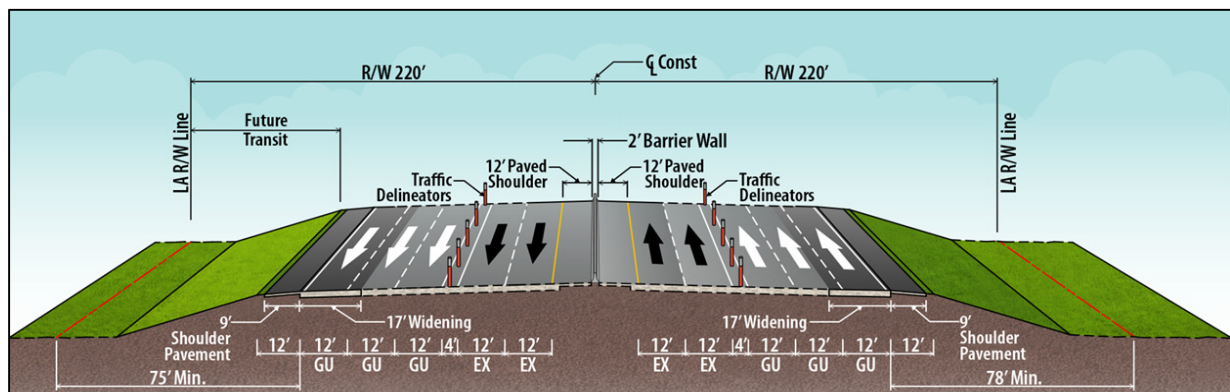


Figure 2-3c. I-275 Mainline Master Plan Build Alternative Typical Section from south of 9th Street North to north of 4th Street North (Segment C-MP3)

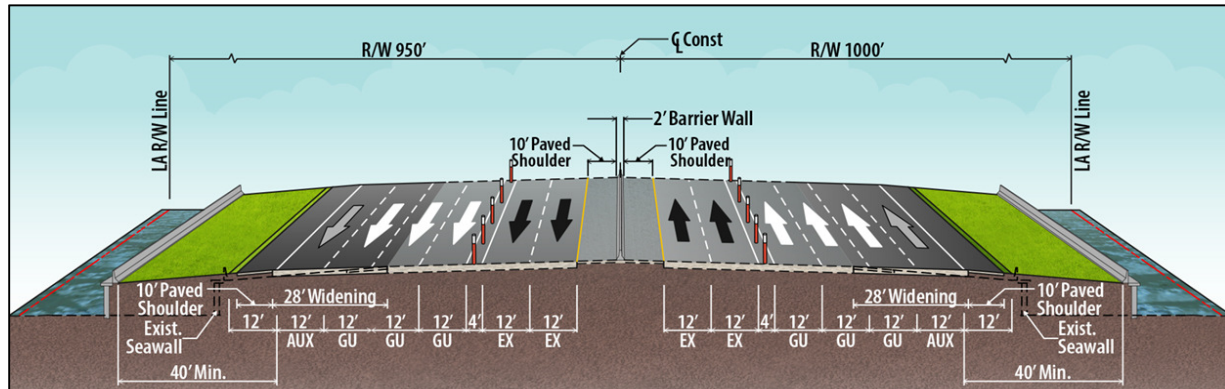


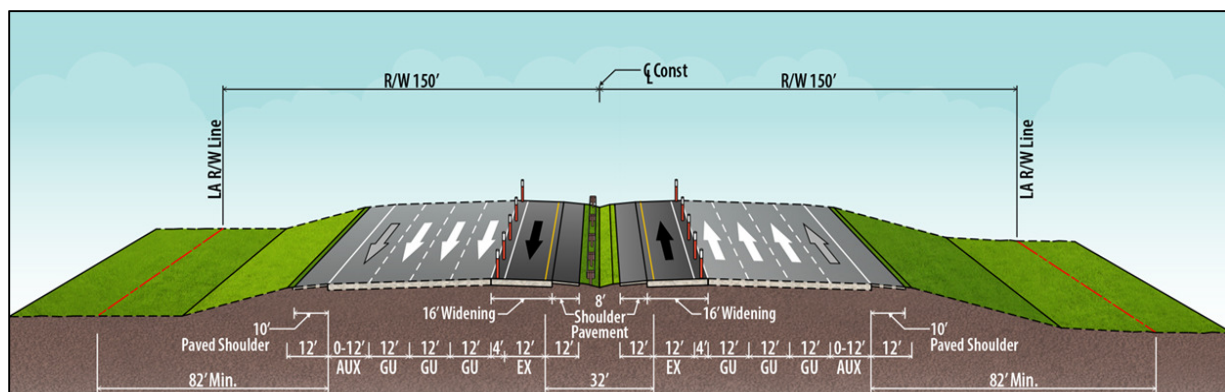
Figure 2-3d. I-275 Mainline Master Plan Build Alternative Typical Section from north of 4th Street North to 1.0 mile south of the Howard Frankland Bridge (Segment C-MP4)

### 2.2.3.2 Proposed Starter Project Improvements

The Starter Project improvements are similar to those of the Master Plan, with the exception that instead of two express lanes proposed in each direction of I-275 under the Master Plan Project, only one lane is provided in each direction of I-275. The southern termini of the Starter Project express lane improvements consist of a lane addition north of Gandy Boulevard, and in the southbound direction the proposed inside (i.e., towards the median) express lane transitions back into the existing southbound I-275 typical section south of Gandy Boulevard.

The Starter Plan proposes to widen the existing I-275 mainline towards the median in order to accommodate one EL in each direction from south of Gandy Boulevard to 118th Avenue North (see **Figure 2-4a** for a graphical depiction of the proposed typical section). As illustrated on **Figure 2-4b**, an MSE wall is utilized in the design of the direct connection to transition 118th Avenue flyover ramps into the at-grade I-275 mainline just south of 9th Street North. The remaining limits of the Starter Project, from north of 9th Street to 1.0 mile south of the Howard Frankland Bridge, involve outside widening and re-designating the existing auxiliary lane on I-275 to form an express lane to the inside. As shown on **Figure 2-4c** and **Figure 2-4d**, no additional travel lanes above-and-beyond the number of existing travel lanes are added under the Starter Project north of 9th Street North.

Figure 2-4. I-275 Mainline Build Alternative Typical Sections – Starter Project







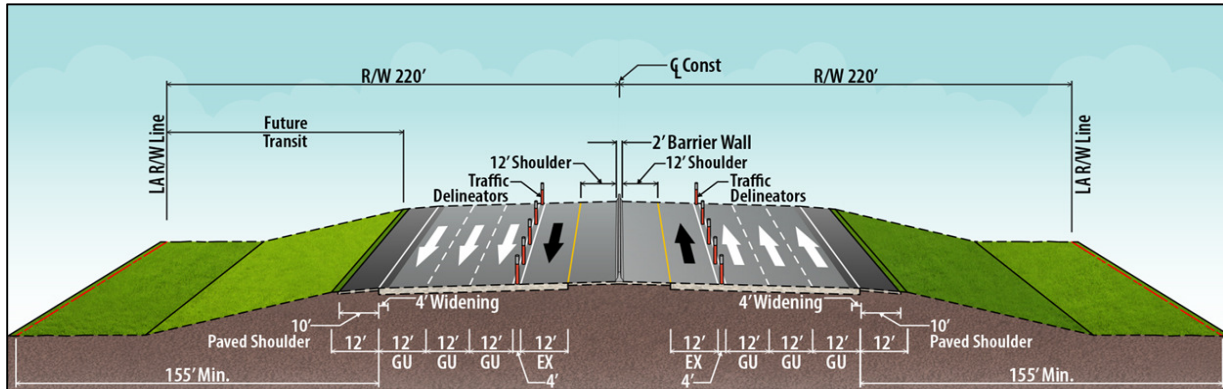


Figure 2-4c. I-275 Mainline Starter Project Build Alternative Typical Section from south of 9th Street North to north of 4th Street North (Segment C-SP3)

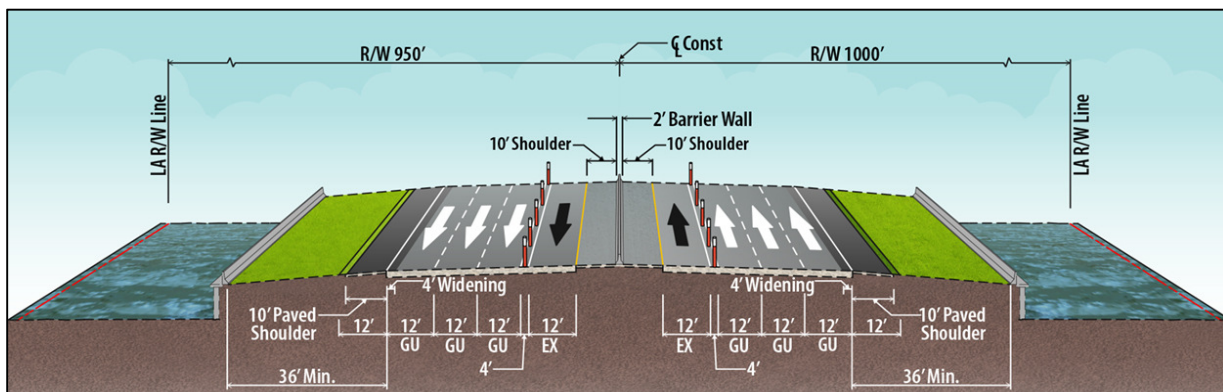


Figure 2-4d. I-275 Mainline Starter Project Build Alternative Typical Section from north of 4th Street North to 1.0 mile south of the Howard Frankland Bridge (Segment C-SP4)



## 3.0 Methodology

As stated in the Introduction of this Final NSR, the traffic noise analysis has been prepared in accordance with all applicable guidelines as stated within both 23 CFR 772 and Part 2, Chapter 17 of the FDOT PD&E Manual. As such, the analysis was performed using the FHWA's Traffic Noise Model (TNM, Version 2.5). Use of the TNM is required when evaluating the potential for traffic noise impacts during the design year of roadway improvement projects for which the regulations, policies and guidelines with 23 CFR 772 and Part 2, Chapter 17 of the PD&E Manual are applicable.

For properties with uses other than residential, the methodologies described in the FDOT's *A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations* were also used. Special land uses include churches, schools, and parks.

### 3.1 Noise Metrics

The predicted traffic noise levels presented in this report are expressed in decibels on the "A"-weighted scale (dB(A)). This scale most closely approximates the response characteristics of the human ear to traffic noise. All traffic noise levels are reported as equivalent levels (Leq(h)). Levels reported as Leq(h) are equivalent steady-state sound levels that contain the same acoustic energy as time-varying sound levels over a period of one hour.

### 3.2 Traffic Data

Noise levels are low when traffic volumes are low and operating conditions are good (level-of-service (LOS) A or B) and when traffic is so congested that movement is slow (LOS D, E, or F). Generally, the maximum hourly noise level occurs between these two conditions (i.e., LOS C).

The traffic volumes used in the analysis were either the roadway design LOS C volume or the forecast demand volume, whichever was less, so that the predicted traffic noise levels with the improvements to I-275 represent the maximum hourly noise level during the project's design year. The Existing (year 2012), Future No-Build (year 2040) and Future Build (year 2040) traffic data used in the analysis are provided in **Appendix A** of this Report.

### 3.3 Noise Abatement Criteria (NAC)

For the purpose of evaluating traffic noise, the FHWA established NAC. As shown in **Table 3-1**, these criteria vary according to a properties' activity category (i.e., land use). For comparative purposes, typical noise levels for common indoor and outdoor activities are provided in **Table 3-2**.

When predicted traffic noise levels "approach" or exceed the NAC, or when predicted future noise levels increase substantially from existing levels, the FHWA requires that noise abatement measures be considered. FDOT defines the word "approach" to mean within 1 dB(A) of the NAC. The FDOT's NAC are also shown in Table 3-1.

**Table 3-1. FHWA/FDOT NAC**

Activity Category	Description of Activity Category	Activity Leq(h) <sup>1</sup>	
		FHWA	FDOT
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)	56 (Exterior)
B <sup>2</sup>	Residential	67 (Exterior)	66 (Exterior)
C <sup>2</sup>	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails and trail crossings.	67 (Exterior)	66 (Exterior)
D	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools and television studios.	52 (Interior)	51 (Interior)
E <sup>2</sup>	Hotels, motels, offices, restaurants/bars and other developed lands, properties or activities not included in A-D or F.	72 (Exterior)	71 (Exterior)
F	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical) and warehousing.	--	--
G	Undeveloped lands that are not permitted.	--	--

Sources: Table 1 of 23 CFR Part 772 and Table 17.1 of Chapter 17 of the FDOT's PD&E Manual (dated 5-24-11).

<sup>1</sup> The Leq(h) activity criteria values are for impact determination only, and are not design standards for noise abatement measures.

<sup>2</sup> Includes undeveloped lands permitted for this activity category.

*Note:* Noise abatement considerations are also warranted when a substantial noise increase is predicted to occur (i.e., when the predicted future traffic noise level with an improvement project is equal to or greater than 15 dB(A) when compared to the existing traffic noise level.

**Table 3-2. Typical Noise Levels**

Common Outdoor Activities	Noise Level dB(A)	Common Indoor Activities
	<b>110</b>	Rock band
Jet flyover at 1,000 feet		
	<b>100</b>	
Gas lawnmower at 3 feet		
	<b>90</b>	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	<b>80</b>	Garbage disposal at 3 feet
Noisy urban area daytime		
Gas lawnmower at 100 feet	<b>70</b>	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	<b>60</b>	
		Large business office
Quiet urban daytime	<b>50</b>	Dishwasher in next room
Quiet urban nighttime	<b>40</b>	Theater, large conference room (background)
Quiet suburban nighttime		
	<b>30</b>	Library
		Bedroom at night, concert hall (background)
Quiet rural nighttime	<b>20</b>	
		Broadcast/recording studio
	<b>10</b>	
	<b>0</b>	

FHWA regulations also state that a traffic noise impact is predicted to occur when predicted traffic noise levels with a proposed improvement are considered substantial when compared to existing

levels. The FDOT considers a substantial increase to be when traffic noise levels are predicted to increase 15 dB(A) or more above existing conditions as a direct result of a transportation improvement project.

## 3.4 Noise Abatement Measures

When traffic noise impacts are predicted, noise abatement measures are considered for the impacted properties and the feasibility and reasonableness of providing an abatement measure are considered. Feasibility factors are related to the acoustical and engineering properties of an abatement measure while reasonableness factors relate to the social, economic and environmental properties of a measure.

The following subsections of this NSR present and discuss four methods of abating traffic noise impacts.

### 3.4.1 Traffic Management

Some types of traffic management reduce noise levels. For example, trucks can be prohibited from certain streets and roads, or be permitted to only use certain streets and roads during daylight hours. The timing of traffic lights can also be changed to smooth out the flow of traffic and eliminate the need for frequent stops and starts. Speed limits can also be reduced.

### 3.4.2 Alignment Modifications

Modifying the horizontal and/or vertical alignment of a roadway can also be an effective traffic noise mitigation measure. When the horizontal alignment is shifted (i.e., moved) away from a noise sensitive property or when the vertical alignment is shifted below (i.e., placing the roadway below the elevation of a noise sensitive land use) or above a noise sensitive property.

### 3.4.3 Buffer Zones

Providing a buffer between a roadway and noise-sensitive land uses is an abatement measure that can minimize/eliminate noise impacts. To abate traffic noise at an existing noise sensitive land use, the property would be acquired to create a buffer zone. Buffer zones can also be used to eliminate the potential for new noise sensitive land uses to be impacted by traffic noise. For this purpose, and to encourage use of this abatement measure through local land use planning, noise contours have been developed and are further discussed in Section 5.0 of this NSR.

### 3.4.4 Noise Barriers

The most common type of noise abatement measure is construction of a noise barrier. Noise barriers have the potential to reduce traffic noise levels by blocking the sound path between the motor vehicles on the roadway (the source) and the noise-sensitive land uses adjacent to the roadway.

In order to effectively reduce traffic noise, a noise barrier must be relatively long, continuous (without intermittent openings) and sufficiently tall. For a noise barrier to be considered a potential abatement measure the barrier must also provide the following noise reduction requirements:

- Minimum Noise Reduction Requirements - A barrier must provide at least a 5 dB(A) reduction in traffic noise for two or more impacted noise-sensitive receptors and also provide

at least a 7 dB(A) reduction (i.e., the FDOT's noise reduction design goal) for at least one benefited receptor. Receptors are discrete representative locations on a property that has noise sensitive land uses (see Table 3-1).

The cost of a noise barrier must also be reasonable. For this purpose, the FDOT established the following cost effective limit:

- Cost Effective Limit – At a cost of \$30 per square foot, a barrier should not cost more than \$42,000 per benefited noise sensitive receptor (a benefited receptor is a receptor that receives at least a 5 dB(A) reduction in noise from a mitigation measure). For special land uses (e.g., the outdoor eating area of a restaurant), the basis for the cost effective limit is also \$42,000 but the usage of the area (i.e., time spent in the impacted and benefited area is also considered).

If the results of the preliminary analysis indicate that a noise barrier would provide the required reduction in traffic noise at a cost at or below the cost effective limit, additional factors are then considered. These factors relate to barrier design and construction (i.e., given site-specific details, can a barrier actually be constructed), safety, access to and from adjacent properties, ROW requirements, maintenance and impacts on utilities and drainage. The viewpoint of the impacted property owners (and renters if applicable) who may, or may not, desire a noise barrier, is also a factor that is considered when evaluating noise barriers as an abatement measure.



## 4.0 Traffic Noise Analysis

### 4.1 Noise Sensitive Receptors

As previously stated, noise sensitive receptors are representative locations of a noise sensitive land use. The location of the receptors evaluated for the I-275 improvements are shown on aerials provided in **Appendix B**. Two-thousand one hundred and eighty noise sensitive receptors (i.e., discrete representative locations on a property that has a noise sensitive land use) were evaluated within 72 NSAs. Two thousand one hundred and thirty one receptors were evaluated on residential property, three in active sports areas, one at a cemetery, two at day care centers, one for an exterior use at a medical facility, six at parks, three for exterior uses at places of worship, seven for interior uses at places of worship, one at a public institutional structure, five in public recreational areas, three in residential recreational areas, and five for exterior uses at schools. Because there are no exterior uses identified, one receptor was evaluated for an interior use at a medical facility, one for the interior use of a nonprofit institutional structure, seven for places of worship, one for the interior use at a public institutional structure, and one for a public meeting room. Finally, three receptors were evaluated at hotel/motels, two at properties designated as “other developed properties” (i.e., a for-profit theater and a private lodge) and two for the outdoor dining areas of restaurants.

**Table 4-1** lists and describes each NSA and provides the number and categories of the evaluated noise sensitive receptors in each area.

**Table 4-1 Noise Sensitive Areas**

NSA No.	Sheet No. (See Appendix B)	Activity Category	Description of Activity Category	Number of Evaluated Receptors	Name and/or Location of Noise Sensitive Properties
1	1,2	C	Active Sports Area	3	31 <sup>st</sup> Street Sports Complex (also known as Maximo Athletic Complex)
2	2	B	Residential	17	Whitehall Horizons Townhomes
3	2	C	Recreational Area (Residential)	1	Whitehall Horizons Townhomes – Pool
4	2	E	Hotel/Motel	1	Crystal Inn
5	2	E	Hotel/Motel	1	Bayway Inn
6	2	B	Residential	1	Angel Care Assisted Living Facility
7	2,3	B	Residential	1	Bay Pointe Nursing Pavilion
8	3	D	Place of Worship	1	Kingdom Hall of Jehovah’s Witnesses
9	3	E	Other Developed Property	1	St. Petersburg City Theatre
10	3	B	Residential	38	Lakewood Gateway and Country Club Subdivisions
11	3	C	Place of Worship	1	Friendship Missionary Baptist Church
12	3	C	Recreational Area (Residential)	1	Palazzo D’Oro
		C	Recreational Area	1	Florida National Guard
13	4	B	Residential	1	Residence north of 30 <sup>th</sup> Avenue South.
14	4	C	Park	1	Boyd Hill Nature Preserve
15	4	B	Residential	2	Beauclaire Villas Subdivision
16	4	C	Place of Worship	1	Positive Impact Worldwide Ministries
17	4	B	Residential	30	Highland Terrace Park Subdivision
18	5	C	Day Care Center	1	Imagination Station Daycare
19	5	D	Public Meeting Room	1	Lighthouse Family Community and Development Center

NSA No.	Sheet No. (See Appendix B)	Activity Category	Description of Activity Category	Number of Evaluated Receptors	Name and/or Location of Noise Sensitive Properties
20	4,5	B	Residential	17	Highland Terrace Park and Gateway Subdivisions
21	5	B	Residential	31	Tangerine Terrace Subdivision
22	5	E	Other Developed Property	1	Masonic Lodge
23	5,6	B	Residential	106	Tangerine Terrace Subdivision
24	6	D	Place of Worship	1	New Mount Sinai Missionary Baptist
25	5-7	B	Residential	119	Tangerine Terrace, Grand Central, Revere, Rosa E. Royals, Prather's 31 <sup>st</sup> Acreage, Don's, William's, E.C. Fisher's Subdivisions
26	7	C	Public Institutional Structure	1	Juvenile Justice Department
		C	Recreational Area	1	Wildwood Recreation Center
		C	Park	1	Wildwood Park
27	7	D	Place of Worship	1	Word of Life Baptist Church
28	7	C	Place of Worship	1	New Faith Free Methodist
29	7	B	Residential	15	Prather's Sixth Royal Subdivision
30	7	C	School	1	Jordan Elementary School
31	7	B	Residential	19	Jordan Park Apartments
32	8	D	Public Institutional Structure	1	Dr. Carter G. Woodson African American History Museum
33	7,8	B	Residential	6	Prather's Third Royal and Highland Crest Subdivisions
34	8	C	Recreational Area	1	Pinellas County Job Corps Center
35	8	D	Place of Worship	3	Mount Moriah Primitive Baptist Church, People of Christ Church, New Congregational Church of God
36	8	C	Recreational Area	1	City of St. Petersburg Playlot
37	8	B	Residential	30	S.V. Smith's and H.A. Murphy's Subdivisions
38	8	D	Place of Worship	1	House of God Church
39	8,9	C	School	1	Johns Hopkins Middle School
40	9	B	Residential	6	Fuller's Subdivision
41	9	E	Restaurant	1	The Burg Bar and Grill
42	9	C	School	1	Imagine School of St. Petersburg
43	9	E	Restaurant	1	Urban Brew and BBQ
44	10	C	Day Care Center	1	Country Learning Center
45	9,10	B	Residential	62	Fuller's, Gough's, Bronx Subdivisions and Northside Apartments
46	10	C	Park	3	Kenwood Dog Park
47	10	D	Medical Facility	1	Southwest Corner of 20 <sup>th</sup> St North and 5 <sup>th</sup> Avenue North Intersection
48	9,10	B	Residential	19	Fuller's Subdivision
49	10,11	B	Residential	54	Sunshine Park Subdivision
50	11	B	Restaurant	1	Simply Delicious
51	10	D	Nonprofit Institutional Structure	1	Westcare Foundation
52	11	C	Medical Facility	1	Edward White Hospital
53	11	C	Recreational Area	1	Booker Creek Park
54	11-14	B	Residential	247	Reisset, Brunson's, Woodlawn Estates, Pine City, Townsend's, R.I. Williamson's Herkimer Heights, Shelton Heights, and Clearview Park Subdivisions

NSA No.	Sheet No. (See Appendix B)	Activity Category	Description of Activity Category	Number of Evaluated Receptors	Name and/or Location of Noise Sensitive Properties
55	12,13	B	Residential	60	Brunson's, Woodlawn Estates, and Pine City Subdivisions
56	13	C	School	1	Norwood Secondary School
57	13-16	B	Residential	313	Pine City, Herkimer Heights, Benger's Rochester Heights, D.C. White, Coolidge Park, Lynndale, Mar-Mick, and Lakeside Subdivisions, Silver Lake Mobile Home Resort and North Ridge Mobile Home Park
58	14	B	Residential	1	Assisted Living Facility
59	14-16	B	Residential	144	Fleming's, Harris School Park, Tetreault, Cross Corners, Sunshine, Larry's, Bryan Heights, and Thrumstons Billmar Subdivisions
60	16	E	Hotel/Motel	1	Comfort Inn
61	16	B	Residential	34	Heinz Subdivision and Mobile Home Park in Southwest Quadrant of I-275 and 54 <sup>th</sup> Avenue North Interchange
62	16	C	Recreational (Residential)	1	Calais Park Lofts & Apartments
63	16	B	Residential	68	Erle Renwick Subdivision and Southern Mobile Home Resort
64	17	B	Residential	1	Committee Against Spouse Abuse (CASA) Women's Shelter
65	17	C	School	1	St Petersburg Christian School
66	17-19	B	Residential	133	Chateaux Versailles and the Oaks at Meadowlawn, Meadowlawn Cardinal Subdivisions
67	17	B	Residential	26	Fairview Estates
68	19	C	Park	1	Sawgrass Lake Park
69	19	B	Residential	35	Village Green Mobile Home Park
70	24,25	B	Residential	200	Bay Isle Key Townhomes
71	24,25	B	Residential	295	Azure Apartments
72	19,20	C	Cemetery	1	Royal Palm North Funeral Chapel and Cemetery
Total				2,180*	

\* These receptors represent 2,175 evaluated properties.

Following FHWA/FDOT guidance, the residences were evaluated as Activity Category "B" (i.e. abatement considered at a predicted traffic noise of 66 dB(A)) and the active sports areas, cemetery, day care centers, parks, and recreational areas were evaluated as Activity Category "C": (i.e., abatement considered at predicted traffic noise of 66 dB(A)). Where exterior areas of use exist the medical facilities, the places of worship the public institutional structures and the schools were also evaluated as Activity Category "C". Where exterior uses do not exist, the property uses were evaluated as Activity Category "D" (i.e., abatement considered at predicted interior traffic noise of 51 dB(A)). Finally, the hotel/motels, other developed properties and the outdoor dining areas of the restaurants were evaluated as Activity Category "E".

Notably, within the project study limits, there is one existing noise barrier. The barrier parallels I-275 from 26<sup>th</sup> Street South to 22<sup>nd</sup> Street South. This barrier was considered in the evaluation of traffic noise for the noise sensitive sites adjacent to I-275.

## 4.2 Measured Noise Levels

Both existing and future noise levels (with and without the improvements) were modeled using the TNM. To verify the accuracy of the predictions, the computer model was validated using field measured noise levels adjacent to the project corridor. Traffic data including motor vehicle volumes, vehicle mix, vehicle speeds and meteorological conditions were recorded during each measurement period.

The field measurements were conducted in accordance with the FHWA's *Measurement of Highway-Related Noise*. The measurements were obtained using a Larson Davis Model 831, Type II integrating sound level meter (SLM). The SLM was calibrated before and after the measurement period with a Larson Davis CAL200 calibrator.

The recorded traffic data were used as input for the TNM to determine if, given the topography and site conditions of the area, the computer model could “re-create” the measured levels with the existing roadway. Following FDOT guidelines, a noise prediction model is considered within the accepted level of accuracy if the measured and predicted noise levels are within a tolerance standard of 3 dB(A).

**Table 4-2** presents the field measurements and the validation results. As shown, the ability of the model to predict noise levels within the FDOT limits of plus or minus three dB(A) for the project was confirmed. Documentation in support of the validation is provided in **Appendix C** of this Final NSR.

**Table 4-2 Validation Data**

Location	Measurement Period	Modeled (dB(A))	Measured (dB(A))	Difference
Site 1 – 22 <sup>nd</sup> Street North	1	69.6	70.9	1.3
	2	69.3	71.0	1.7
	3	68.9	70.8	1.9
Site 2 – 30 <sup>th</sup> Avenue South	1	68.7	71.6	2.9
	2	69.4	71.7	2.3
	3	69.3	71.4	2.1

## 4.3 Predicted Traffic Noise Levels

The predicted traffic noise levels for each evaluated receptor are provided in **Appendix D. Table 4-3** lists the number of evaluated receptors in each NSA and the number of receptors predicted to be impacted by traffic noise with existing conditions and for future conditions with and without the improvements to I-275.

**Table 4-3 Summary of the Traffic Noise Analysis Results**

NSA No.	Sheet No. (See Appendix B)	Activity Category	Description of Activity Category	Number of Evaluated Receptors	Number of Impacted Properties		
					Existing	No-Build	Build
1	1	C	Active Sports Area	3	1	1	1
2	1	B	Residential	17	0	0	0
3	1	C	Recreational Area (Residential)	1	0	0	0
4	1	E	Hotel/Motel	1	0	0	0
5	2	E	Hotel/Motel	1	0	0	0
6	2	B	Residential	1	1	1	1
7	2	B	Residential	1	0	0	0
8	2	D	Place of Worship	1	0	0	0
9	2	E	Other Developed Property	1	0	0	0
10	2-3	B	Residential	38	15	15	17
11	3	C	Place of Worship	1	0	0	0
12	3	C	Recreational Area (Residential)	1	0	0	0
		C	Recreational Area	1	1	1	1
13	3	B	Residential	1	1	1	1
14	3	C	Park	1	0	0	0
15	3	B	Residential	2	2	2	2
16	4	C	Place of Worship	1	0	0	0
17	4	B	Residential	30	22	22	20
18	4	C	Day Care Center	1	1	1	1
19	4	D	Public Meeting Room	1	0	0	0
20	4	B	Residential	17	7	9	11
21	4-5	B	Residential	31	9	11	16
22	5	E	Other Developed Property	1	0	0	0
23	5	B	Residential	106	19	19	30
24	5	D	Place of Worship	1	0	0	0
25	5-6	B	Residential	119	64	64	62
26	6	C	Public Institutional Structure	1	0	0	0
		C	Recreational Area	1	1	1	1
		C	Park	1	0	0	0
27	6	D	Place of Worship	1	0	0	0
28	7	C	Place of Worship	1	0	0	0
29	6-7	B	Residential	15	0	0	0
30	7	C	School	1	0	0	0
31	7	B	Residential	19	0	0	0
32	7	D	Public Institutional Structure	1	0	0	0
33	7	B	Residential	6	1	1	1
34	7	C	Recreational Area	1	1	1	1
35	7	D	Place of Worship	3	0	0	0
36	7	C	Recreational Area	1	0	0	0
37	7-8	B	Residential	30	3	3	3
38	7	D	Place of Worship	1	0	0	0
39	8	C	School	1	0	0	0
40	8	B	Residential	6	6	6	6
41	8	E	Restaurant	1	0	0	1
42	8	C	School	1	1	1	1
43	8	E	Restaurant	1	0	0	0



NSA No.	Sheet No. (See Appendix B)	Activity Category	Description of Activity Category	Number of Evaluated Receptors	Number of Impacted Properties		
					Existing	No-Build	Build
44	8	C	Day Care Center	1	1	1	1
45	9	B	Residential	62	42	44	47
46	9	C	Park	3	1	1	1
47	9	D	Medical Facility	1	0	0	0
48	9	B	Residential	19	3	5	19
49	9-10	B	Residential	54	24	25	30
50	10	B	Restaurant	1	0	0	0
51	9	D	Nonprofit Institutional Structure	1	0	0	0
52	10	C	Medical Facility	1	1	1	1
53	10	C	Recreational Area	1	1	1	1
54 <sup>a</sup>	11-13	B	Residential	247	136	130	144
55	11-12	B	Residential	60	43	44	41
56	12	C	School	1	1	1	1
57 <sup>a</sup>	12-14	B	Residential	313	197	182	157
58	13	B	Residential	1	0	1	1
59 <sup>a</sup>	13-14	B	Residential	144	110	107	87
60	14	E	Hotel/Motel	1	0	0	0
61	14-15	B	Residential	34	28	30	24
62	15	B	Recreational Area (Residential)	1	1	1	1
63 <sup>a</sup>	15	B	Residential	68	14	12	26
64	15	B	Residential	1	1	1	1
65	15	C	School	1	1	1	1
66 <sup>a</sup>	16	B	Residential	133	82	70	89
67	16	B	Residential	26	9	9	11
68	17	C	Park	1	1	1	1
69	18	B	Residential	35	19	19	30
70	22-23	B	Residential	200	27	27	30
71	22	B	Residential	295	113	114	127
72	20	C	Cemetery	1	1	1	1
Total				2,180 <sup>b</sup>	1,013	989	1,050
<sup>a</sup> Denotes noise sensitive areas that are estimated to have a greater number of existing impacted receptors than the number of receptors impacted in the future with the No-Build alternative. The reduced number of impacts is due to a projected decrease in the percentage of trucks traveling during peak traffic periods. For further details refer to the I-275 PD&E Study Design Traffic Technical Memorandum. <sup>b</sup> These receptors represent 2,175 evaluated properties.							

As shown in the table above, of the 2,180 evaluated receptors, 1,013 are predicted to be impacted by traffic noise with existing conditions. In the future without the improvements 989 of the 2,180 receptors are predicted to be impacted. Finally, with the improvements, 1,054 of the 2,180 receptors, located on 1,050 properties, are predicted to be impacted by traffic noise. Of the 1,054 receptors predicted to be impacted with the improvements, 1,034 were evaluated on residential property (Activity Category B), 19 were evaluated for exterior uses at active sports areas, a cemetery, day care centers, institutional structures, medical facilities, parks, and schools (Activity Category C), and one was evaluated for the exterior dining area at a restaurant (Activity Category E).

## 4.4 Abatement Considerations

As previously stated, when traffic noise impacts are predicted, noise abatement measures are considered for the impacted properties. The following discusses the FDOT's consideration of each of the measures for which an overview was provided in Section 2.4 of this Final NSR.

### 4.4.1 Traffic Management

Reducing traffic speeds and/or the traffic volume or changing the motor vehicle fleet on I-275 is inconsistent with the goal of improving the ability of the roadway to handle the forecast traffic volume. Therefore traffic management measures are not considered to be a reasonable noise abatement measure for the I-275 project.

### 4.4.2 Alignment Modifications

The improvements would be constructed to follow the existing roadway alignment. Because shifting the alignment horizontally would require substantial right-of-way (ROW) acquisitions and, because noise sensitive land uses are located on both sides of the roadway, a modification to the alignment of I-275 for the purpose of reducing traffic impacts is not considered to be a reasonable noise abatement measure.

### 4.4.3 Buffer Zones

As previously stated, to abate predicted traffic noise at an existing noise sensitive land use, the property would have to be acquired. The same cost effective limit that applies to noise barriers (i.e., \$42,000 per benefited noise sensitive receptor) would apply to the purchase price of any impacted noise sensitive property. A review of data from the Pinellas County Property Appraiser indicates that the cost to acquire the developed properties adjacent to I-275 exceeds the cost effective limit. Therefore, creating a buffer zone by acquiring existing noise sensitive properties is not considered to be a reasonable noise abatement measures.

### 4.4.4 Noise Barriers

The TNM was used to evaluate the ability of noise barriers to reduce traffic noise levels for the impacted noise sensitive receptors adjacent to I-275. Within Segments A and C, barriers evaluated at the right-of-way (ROW) were evaluated at heights from eight to 22 feet (in two-foot increments) and barriers on the shoulder of the roadway and the edge of the roadway when on structure were evaluated at maximum heights of 14 and 8 feet, respectively. The length of each barrier was optimized to determine if at least the minimum noise reduction requirements (i.e., a minimum reduction of 5 dB(A) for two impacted receptors and a minimum reduction of 7 dB(A) for one benefitted receptor) could be achieved. Notably, because at least two receptors must be benefited by a noise barrier, barriers were not evaluated in NSAs where only one non-special land use receptor was predicted to be impacted (i.e., NSA 6, 13, 33 and 58).

For the majority of the NSAs within Segments A and C, noise barriers were evaluated five feet within the FDOT's ROW. In areas where frontage roads<sup>1</sup> abut and parallel I-275, barriers were evaluated on the roadway shoulder. Shoulder barriers were also evaluated for impacted receptors in NSAs located near elevated portions of I-275 (e.g., overpasses at interchanges). Notably, shoulder barriers were not evaluated at all locations where a ROW barrier wouldn't provide at least the minimum noise reduction requirements because a shoulder barrier would be limited in height to a maximum of 14 feet and a barrier of this height would provide less reduction in traffic noise than a ROW barrier.

Notably, barriers were optimized (length and height) in an attempt to benefit all of the impacted receptors in an NSA. In areas with varying densities of receptors (e.g., NSA 35). The barriers were optimized by inserting gaps in the barrier, where possible, between the areas of higher density impacted receptors.

Barriers were evaluated within Segment B for two improvement scenarios. The scenario that was evaluated first was primarily comprised of the addition of auxiliary lanes. The results of the traffic noise analysis and abatement evaluation for this improvement identified the NSAs for which noise abatement, in the form of optimal noise barriers, would be considered both feasible and reasonable. Subsequent to finalizing the analysis, a decision was made not to consider the auxiliary lane improvement and the build alternative for Segment B was modified to exclude the lanes from further consideration. The second improvement scenario, referred to as the lane continuity improvements, is described in Section 2.2.2 of this Final NSR. Instead of re-evaluating barriers at heights from eight to 22 feet at the ROW and maximum heights of 14 and 8 feet, respectively, on the shoulder of the roadway and on structure, only the most optimal barriers identified in the analysis of the auxiliary lane improvement were evaluated for the lane continuity improvements. This approach served the purpose of the PD&E analysis which is to identify locations where noise abatement (in this case noise barriers) would be both feasible and reasonable (i.e., if the optimal barrier from the auxiliary lane evaluation is feasible and reasonable with the lane continuity improvement, the barrier would be recommended for further analysis in the project's design phase).

The following provides the results of the noise barrier evaluation and discusses the potential amount of noise reduction and the cost effectiveness of providing barriers as an abatement measure for the NSAs in which traffic noise has been predicted to impact noise sensitive properties (i.e., the NSAs listed in Table 4-3 for which receptors are predicted to be impacted with the Build Alternative). Notably, noise barriers were not evaluated for the isolated (i.e., single) residential receptors in NSAs 6, 13, and 33, because in order for a noise barrier to be considered feasible a barrier must provide at least a five dB(A) reduction in traffic noise for at least two impacted noise sensitive receptors.

#### 4.4.4.1 NSA 1

An ROW noise barrier was evaluated for the impacted area of the active sports area in NSA 1 (31<sup>st</sup> Street Sports Complex soccer and football fields – Receptors 1-3). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure. For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 749 feet and an

optimal height of 14 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the sports area would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 1,990 person-hours (i.e., 1,990 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the sports area.

#### 4.4.4.2 NSA 10

Two noise barriers were evaluated for the 17 impacted residences in NSA 10 (Lakewood Gateway and Country Club Subdivisions - Receptors 2, 3, 5, 6, 8-14, 24, 29-31, 36, and 37). The first barrier was evaluated five feet within the FDOT's ROW. The results of the evaluation for this barrier are provided in **Table 4-4**. As shown, at barrier heights between 12 and 22 feet, at least two of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more and the noise reduction design goal of 7 dB(A) would be achieved. However, because the cost of the barrier at all barrier heights would be above the FDOT's cost reasonable limit, a barrier five feet within the FDOT's ROW is not considered a reasonable noise abatement measure.

**Table 4-4. NSA 10: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 17										
8	NA <sup>5,6</sup>	0	0	0	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
10	297	0	0	1	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
12	297	0	1	1	2	0	2	\$106,920	\$53,460	No
14	463	2	0	2	4	0	4	\$194,460	\$48,615	No
16	1,563	7	1	2	10	0	10	\$750,240	\$75,024	No
18	1,533	2	7	2	11	0	11	\$827,820	\$75,256	No
20	1,363	3	6	3	12	0	12	\$817,800	\$68,150	No
22	2,118	6	3	8	15	2	17	\$1,397,880	\$82,228	No

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

<sup>6</sup> 5 dB(A) reduction or greater was not achieved at two or more receptors.

The subdivisions in NSA 10 are located in an area where I-275 is elevated. As previously stated, for those impacted receptors located near elevated portions of the highway, shoulder barriers were also

evaluated if the results of the analysis indicates that a barrier five feet within the ROW would not be feasible and reasonable. The results of the evaluation are provided in **Table 4-5**.

**Table 4-5. NSA 10: Shoulder Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 17										
8	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
12	2,411	16	13	2	16	15	31	\$867,960	\$27,999	Yes
14 <sup>6</sup>	2,511	13	15	6	17	17	34	\$1,054,620	\$31,018	Yes

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

<sup>6</sup> Shoulder barriers are limited to 14 feet in height.

As shown in Table 4-5, at barrier heights of 12 and 14 feet, at least 16 of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-6**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 10. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheets 2 and 3 in Appendix B.

**Table 4-6 NSA 10: Additional Shoulder Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location. Because the barrier would be on structure over 38 <sup>th</sup> Avenue South a determination will be required as to whether the existing structure is sufficient for the additional weight of a noise barrier.
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located on the roadway shoulder and would not block ingress or egress to any property.



	ROW	No acquisition of ROW or easements for construction/ maintenance would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that water would be directed along, under, or away from the barrier will be made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.
Reasonable -ness	Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.

#### 4.4.4.3 NSA 12

An ROW noise barrier was evaluated for the impacted recreational area in NSA 12 (the outdoor fitness area of the Florida National Guard Station (Receptor 2). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 308 feet and an optimal height of 18 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the recreational area would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 351 person-hours (i.e., 351 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the recreational area in NSA 12.

#### 4.4.4.4 NSA 15

A noise barrier was evaluated for two impacted residences in NSA 15 (Beauclaire Villas subdivision - Receptors 1 and 2). The results of the evaluation for this barrier are provided in **Table 4-7**. As shown, at barrier heights of 20 and 22 feet, the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more and the noise reduction design goal of 7 dB(A) would be achieved. However, because the cost of the barrier would be above the FDOT's cost reasonable limit, a barrier is not considered a reasonable noise abatement measure for the impacted residences in NSA 15.

**Table 4-7. NSA 15: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 2										
8	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
10	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
12	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
14	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
16	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
18	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
20	723	0	1	1	2	0	2	\$433,800	\$411,180	No
22	623	1	0	1	2	0	2	\$216,900	\$205,590	No

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

<sup>6</sup> 5 dB(A) reduction or greater was not achieved at two or more receptors.

#### 4.4.4.5 NSA 17

An ROW noise barrier was evaluated for 20 impacted residences in NSA 17 (Highland Terrace Park subdivision - Receptors 1 – 9, 15-22, and 28-30). As shown in **Table 4-8**, at barrier heights of 16 and 18 feet, 17 of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-9**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 10. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheet 4 in Appendix B.

**Table 4-8. NSA 17: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 20										
8	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
10	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
12	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
14	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
16	1,205	1	10	6	17	0	17	\$578,400	\$34,024	Yes
18	1,205	0	1	16	17	0	17	\$650,700	\$38,276	Yes
20	1,205	0	1	16	17	0	17	\$723,000	\$42,529	No
22	1,205	0	1	16	17	0	17	\$795,300	\$46,782	No

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

<sup>6</sup> 5 dB(A) reduction or greater was not achieved at two or more receptors.

**Table 4-9 NSA 17: Additional ROW Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Notably, additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location.
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located on the FDOT ROW for I-275 and would not block ingress or egress to any property.
	ROW	No acquisition of ROW or easements for construction/ maintenance would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that water would be directed along, under, or away from the barrier will be made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.

Type of Factor	Evaluation Criteria	Comment
Reasonable-ness	Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.

#### 4.4.4.6 NSA 18

An ROW noise barrier was evaluated for the impacted day care center in NSA 18 (Imagination Station Daycare - Receptor 1). For the day care center, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 100 feet and an optimal height of 12 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the day care center would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 228 person-hours (i.e., 228 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted area of the day care center.

#### 4.4.4.7 NSA 20

An ROW noise barrier was evaluated for the 11 impacted residences in NSA 20 (Highland Terrace Park and Gateway subdivisions - Receptors 1-7, and 9-12). As shown in **Table 4-10**, at a barrier height of 14 feet, 5 of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-11**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 20. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheet 4 in Appendix B.

**Table 4-10. NSA 20: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 11										
8	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
10	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
12	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
14	446	2	1	2	5	0	6	\$187,320	\$37,464	Yes
16	446	2	1	2	5	0	6	\$214,080	\$42,816	No
18	567	2	1	3	6	0	6	\$306,180	\$51,030	No
20	567	2	1	3	6	0	6	\$340,200	\$56,700	No
22	567	1	2	3	6	0	6	\$374,220	\$62,370	No

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

<sup>6</sup> 5 dB(A) reduction or greater was not achieved at two or more receptors.

**Table 4-11 NSA 20: Additional ROW Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Notably, additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location.
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located on the FDOT ROW for I-275 and would not block ingress or egress to any property.
	ROW	No acquisition of ROW or easements for construction/ maintenance would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that water would be directed along, under, or away from the barrier will be made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.



Type of Factor	Evaluation Criteria	Comment
Reasonable-ness	Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.

#### 4.4.4.8 NSA 21

An ROW noise barrier was evaluated for the 16 impacted residences in NSA 21 (Tangerine Terrace subdivision - Receptors 1-3, 6-7, 11, 15, 16, 19-22, and 26-29). The results of the evaluation for this barrier are provided in **Table 4-12**. As shown, at barrier heights of 8 to 22 feet, the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more and the noise reduction design goal of 7 dB(A) would be achieved. However, because the cost of the barrier would be above the FDOT's cost reasonable limit, a barrier is not considered a reasonable noise abatement measure for the impacted residences in NSA 21.

**Table 4-12 NSA 21: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 16										
8	960	0	2	2	4	0	4	\$230,400	\$57,600	No
10	960	0	2	4	6	0	6	\$288,000	\$48,000	No
12	960	0	0	6	6	0	6	\$345,600	\$57,600	No
14	1059	2	0	6	8	0	8	\$444,780	\$55,598	No
16	990	1	1	6	8	0	8	\$475,200	\$59,400	No
18	1,095	3	0	6	9	1	10	\$591,300	\$53,755	No
20	1,108	4	0	7	11	1	12	\$664,800	\$55,400	No
22	1,150	2	3	7	12	2	14	\$759,000	\$54,214	No

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

As previously stated, for those impacted receptors located near elevated portions of I-275, shoulder barriers were also evaluated if the results of the analysis indicates that a barrier five feet within the ROW would not be feasible and reasonable. The results of the evaluation for the shoulder barrier are provided in **Table 4-13**.

**Table 4-13. NSA 21: Shoulder Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 30										
8	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
12	1,488	3	2	2	7	5	12	\$535,680	\$44,640	No
14	1,523	4	5	1	10	13	23	\$639,660	\$27,811	Yes

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

As shown in Table 4-13, at a barrier height of 14 feet, 10 impacted residences in NSA 21 would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved, and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-14**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 21. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheet 5 in Appendix B.

**Table 4-14 NSA 21: Additional Shoulder Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location. Because the barrier would be on structure over 22 <sup>nd</sup> Avenue South and 18 <sup>th</sup> Avenue South a determination will be required as to whether the existing structure is sufficient for the additional weight of a noise barrier.
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located on the FDOT ROW for I-275 and would not block ingress or egress to any property.
	ROW	No acquisition of ROW or easements for construction/ maintenance would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that water would be directed along, under, or away from the barrier will be

Type of Factor	Evaluation Criteria	Comment
		made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.
Reasonable -ness	Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.

#### 4.4.4.9 NSA 23

An ROW noise barrier was evaluated for the 30 impacted residences in NSA 23 (Tangerine Terrace subdivision - Receptors 6, 20, 23-25, 29-34, 37, 38, 42-44, 47-52, 55, and 59-64). The results of the evaluation for this barrier are provided in **Table 4-15**. As shown, at barrier heights between 10 and 22 feet, at least two of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more and the noise reduction design goal of 7 dB(A) would be achieved. However, because the cost of the barrier at all barrier heights would be above the FDOT's cost reasonable limit, a barrier five feet within the FDOT's ROW is not considered a reasonable noise abatement measure.

**Table 4-15. NSA 23: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 30										
8	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	414	1	0	1	2	0	2	\$124,200	\$62,100	No
12	668	1	1	2	4	0	4	\$240,480	\$60,120	No
14	1,414	7	2	2	11	0	11	\$593,880	\$53,989	No
16	1,496	2	9	4	14	1	15	\$718,080	\$47,872	No
18	1,614	3	4	8	15	0	15	\$871,560	\$58,104	No
20	1,614	7	2	11	20	0	20	\$968,400	\$48,420	No
22	1,614	7	4	13	23	1	24	\$1,065,240	\$44,385	No

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

As previously stated, for those impacted receptors located near elevated portions of I-275, shoulder barriers were also evaluated if the results of the analysis indicates that a barrier five feet within the ROW would not be feasible and reasonable. The results of the evaluation for the shoulder barrier are provided in **Table 4-16**.

**Table 4-16. NSA 23: Shoulder Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 30										
8	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
10	3,496	6	16	2	24	20	44	\$1,048,800	\$23,836	Yes
12	3,507	4	6	16	26	26	52	\$1,262,520	\$24,279	Yes
14 <sup>6</sup>	3,106	5	4	19	28	31	59	\$1,304,520	\$22,111	Yes

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not achieved at any receptor.

<sup>6</sup> Shoulder barriers are limited to 14 feet in height.

As shown in Table 4-16, at barrier heights of 10 to 4 feet, 28 impacted residences in NSA 23 would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved, and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-17**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 23. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheets 5 and 6 in Appendix B.

**Table 4-17 NSA 23: Additional Shoulder Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location. Because the barrier would be on structure over 18 <sup>th</sup> Avenue South a determination will be required as to whether the existing structure is sufficient for the additional weight of a noise barrier.
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located on the FDOT ROW for I-275 and would not block ingress or egress to any property.
	ROW	No acquisition of ROW or easements for construction/ maintenance would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that

Type of Factor	Evaluation Criteria	Comment
		water would be directed along, under, or away from the barrier will be made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.
Reasonable -ness	Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.

Notably, should a final determination be made that a noise barrier is a feasible and reasonable abatement measure during the project's design phase and depending on the final length of the barrier, there is a potential for an outdoor advertising sign to be visually blocked. The sign is located north of 18<sup>th</sup> Street South (at latitude 27.752313, longitude -82.677796).

#### 4.4.4.10 NSA 25, 37, 45, 54, 55, 57, 59, 61, 63, 66 and 67

As previously stated, within Segment B only the optimal noise barriers determined to be both feasible and reasonable for the analysis of the auxiliary lane improvement were evaluated for the lane continuity improvement as this approach serves the purpose of the PD&E analysis which is to identify locations where noise abatement would be both feasible and reasonable (i.e., if the optimal barrier from the auxiliary lane evaluation is feasible and reasonable with the lane continuity improvement, the barrier would be recommended for further analysis in the project's design phase).

The results are evaluation of the optimal barriers are shown in **Table 4-18**.

Notably, should a final determination be made that noise barriers are a feasible and reasonable abatement measure during the project's design phase, and depending on the final length of the barrier, there is a potential for outdoor advertising signs to be visually blocked at NSAs 25 and 61. The signs are located west of 28<sup>th</sup> Street South (at latitude 27.759348, longitude -82.672129) and west of 28th Street South (at latitude 27.818027, longitude -82.665280) for NSAs 25 and 61, respectively.



**Table 4-18. NSAs 25, 37, 45, 54, 55, 57, 59, 61, 63, 66, and 67: Barrier Reevaluation Results**

NSA	Impacted? Yes/No	Barrier Dimensions Corresponding to Lowest Cost Per Benefited Receptor		Is Barrier Still Reasonable and Feasible? Yes/No		
		Height (feet)	Length (feet)	Feasible <sup>1</sup>	NRDG <sup>2</sup>	Cost Reasonable <sup>3</sup>
25	Yes	22	2,970	Yes	Yes	Yes
37	Yes	12	1,705	Yes	Yes	Yes
45	Yes	8	2,294	Yes	Yes	Yes
54/59	Yes	20	10,935	Yes	Yes	Yes
55/57	Yes	20	8,839	Yes	Yes	Yes
61	Yes	10	579	Yes	Yes	Yes
63/67	Yes	12	2,233	Yes	Yes	Yes
66	Yes	14	4,393	Yes	Yes	Yes

<sup>1</sup> The noise barrier should provide a reduction of at least 5 dB(A) for two or more impacted receptors.

<sup>2</sup> The noise barrier should provide a reduction of at least 7 dB(A) for at least one impacted receptor.

<sup>3</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

#### 4.4.4.11 NSA 26

An ROW noise barrier was evaluated for the impacted recreational area (football field) in NSA 26 (Wildwood Park - Receptor 3). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 1,000 feet and an optimal height of 22 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the recreational area would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the park in order for a barrier to be considered cost effective is 1,082 person-hours (i.e., 1,082 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted recreational area in NSA 26.

#### 4.4.4.12 NSA 34

An ROW noise barrier was evaluated for the recreational area in NSA 34 (the outdoor fitness center and walking track at the Pinellas County Job Corps Center - Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 200 feet and an optimal height of 16 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A).

Because it is not known how frequently the impacted and benefited area of the church would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 450 person-hours (i.e., 450 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted recreational area in NSA 34.

#### 4.4.4.13 NSA 40

An ROW noise barrier was evaluated for the 6 impacted residences in NSA 40 (Fuller's subdivision - Receptors 1a, 1b, 2, 3, 4a and 4b). In this area, I-275 is elevated on structure. Therefore, a barrier was not evaluated on the ROW, only on the roadway shoulder. Based on the results of the analysis, the minimum required reduction in traffic noise (5 dB(A)) could not be achieved at any of the impacted residences in NSA 40. Therefore, a noise barrier is not considered to be a feasible noise abatement measure for the impacted residences in NSA 40.

#### 4.4.4.14 NSA 41

An ROW noise barrier was evaluated for the impacted restaurant in NSA 41 (The Burg Bar and Grill – Receptor 1). As stated above, I-275 is elevated on structure in this area. Therefore, a barrier was not evaluated on the ROW, only on the roadway shoulder. Based on the results of the analysis, the minimum required reduction in traffic noise (5 dB(A)) could not be achieved for the impacted exterior area of the restaurant in NSA 41. Therefore, a noise barrier is not considered to be a feasible noise abatement measure for the impacted restaurant in NSA 47.

#### 4.4.4.15 NSA 42

An ROW noise barrier was evaluated for the impacted school in NSA 42 (Imagine School of St. Petersburg – Receptor 1). I-275 is also elevated in this area. Therefore, a barrier was not evaluated on the ROW, only on the roadway shoulder. Based on the results of the analysis, the minimum required reduction in traffic noise (5 dB(A)) could not be achieved for the impacted exterior area of the school. Therefore, a noise barrier is not considered to be a feasible noise abatement measure for the impacted school in NSA 42.

#### 4.4.4.16 NSA 44

An ROW noise barrier was evaluated for the impacted day care center NSA 44 (Country Learning Center – Receptor 1). I-275 is also elevated in this area. Therefore, a barrier was not evaluated on the ROW, only on the roadway shoulder. Based on the results of the analysis, the minimum required reduction in traffic noise (5 dB(A)) could not be achieved for the impacted exterior area of the day care center. Therefore, a noise barrier is not considered to be a feasible noise abatement measure for the day care center in NSA 44.

#### 4.4.4.17 NSA 46

An ROW noise barrier was evaluated for the impacted park in NSA 46 (Kenwood Dog Park – Receptors 1-3). I-275 is also elevated in this area. Therefore, a barrier was not evaluated on the ROW, only on the roadway shoulder. Based on the results of the analysis, the minimum required reduction in traffic noise (5 dB(A)) could not be achieved for the impacted exterior area of the dog park. Therefore, a noise barrier is not considered to be a feasible noise abatement measure for the impacted area of impacted park in NSA 46.

#### 4.4.4.18 NSA 48

An ROW noise barrier was evaluated for the 19 impacted residences in NSA 48 (Fuller's subdivision – Receptors 1-19). I-275 is also elevated in this area. Therefore, a barrier was not evaluated on the ROW, only on the roadway shoulder. Based on the results of the analysis, the minimum required reduction in traffic noise (5 dB(A)) could not be achieved. Therefore, a noise barrier is not considered to be a feasible noise abatement measure for the impacted residences in NSA 48.

#### 4.4.4.19 NSA 49

An ROW noise barrier was evaluated for the 30 impacted residences in NSA 49 (Sunshine Park subdivision – Receptors 1-4, 10, 11, 15-17, 22-25, 30-34, 40-49, 53, and 54). I-275 is also elevated in the majority of this area. Therefore, a barrier was not evaluated on the ROW, only on the roadway shoulder. Based on the results of the analysis, the design reduction goal (7 dB(A)) could not be achieved. Therefore, a noise barrier is not considered to be a reasonable noise abatement measure for the impacted residences in NSA 49.

#### 4.4.4.20 NSA 52

An ROW noise barrier was evaluated for the impacted medical facility in NSA 52 (Edward White Hospital – Receptor 1). The impacted area is a break area with picnic tables. For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 1,226 feet and an optimal height of 14 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the medical facility would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 724 person-hours (i.e., 724 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted exterior area of the medical facility.

#### 4.4.4.21 NSA 53

An ROW noise barrier was evaluated for the impacted recreational area in NSA 53 (Booker Creek Park – Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 1,095 feet and an optimal height of 12 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the church would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 554 person-hours (i.e., 554 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the impacted recreational area in NSA 53.

#### 4.4.4.22 NSA 56

An ROW noise barrier was evaluated for the impacted school in NSA 56 (Norwood Secondary School – Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 851 feet and an optimal height of 20 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the school would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 718 person-hours (i.e., 718 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement

measure for the impacted areas of the impacted school in NSA 56. However, since NSA 56 is located between the impacted NSAs 55 and 57,

#### 4.4.4.23 NSA 58

An ROW noise barrier was evaluated for the impacted assisted living facility in NSA 58 (Receptor 1). The results of the analysis indicate that the design reduction goal (7 dB(A)) could not be achieved at this location. Therefore, a noise barrier is not considered to be a reasonable noise abatement measure for the assisted living facility in NSA 58.

#### 4.4.4.24 NSA 62

An ROW noise barrier was evaluated for the impacted mixed use recreational area in the Calais Park Lofts and Apartments (an area with picnic tables – Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 809 feet and an optimal height of 12 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of seven dB(A). Because it is not known how frequently the impacted and benefited area of the school would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 614 person-hours (i.e., 614 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the impacted recreational area in NSA 62.

#### 4.4.4.25 NSA 64

An ROW noise barrier was evaluated for the impacted institutional structure in NSA 64 (CASA's Women's Shelter – Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 502 feet and an optimal height of 22 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the institutional structure would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the women's shelter in order for a barrier to be considered cost effective is 466 person-hours (i.e., 466 people would have to use the area for one hour each day of



the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the impacted institutional structure in NSA 64.

#### 4.4.4.26 NSA 65

An ROW noise barrier was evaluated for the impacted soccer field at a school in NSA 65 (St. Petersburg Christian School – Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 744 feet and an optimal height of 22 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the institutional structure would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 1,553 person-hours (i.e., 1,553 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the impacted institutional structure in NSA 65.

#### 4.4.4.27 NSA 68

An ROW noise barrier was evaluated for the impacted park in NSA 68 (Sawgrass Lake Park – Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 1,043 feet and an optimal height of 20 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the institutional structure would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 1,539 person-hours (i.e., 1,539 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the impacted park in NSA 68.

#### 4.4.4.28 NSA 69

An ROW noise barrier was evaluated for the 30 impacted residences in NSA 69 (Village Green Mobile Home Park - Receptors 1-22, 25-29 and 32-35). As shown in **Table 4-35**, at barrier heights of 8 feet and 12 to 22 feet, at least 8 of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-36**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 66. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheet 18 in Appendix B.

**Table 4-19. NSA 69: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 30										
8	786	4	3	1	8	0	8	\$188,640	\$23,580	Yes
10	1,728	2	2	8	12	0	12	\$518,400	\$43,200	No
12	1,106	6	2	9	17	0	17	\$398,160	\$23,421	Yes
14	1,078	5	5	11	21	0	21	\$452,760	\$21,560	Yes
16	2,218	4	4	18	26	0	26	\$1,064,640	\$40,948	Yes
18	1,351	6	3	19	28	0	28	\$729,540	\$26,055	Yes
20	1,378	7	2	21	30	3	33	\$826,800	\$25,055	Yes
22	1,278	6	3	21	30	4	34	\$843,480	\$24,808	Yes

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

**Table 4-20 NSA 69: Additional ROW Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Notably, additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location.
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located on the FDOT ROW for I-275 and would not block ingress or egress to any property.
	ROW	No acquisition of ROW or easements for construction/ maintenance

Type of Factor	Evaluation Criteria	Comment
		would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that water would be directed along, under, or away from the barrier will be made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.
Reasonable -ness	Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.

#### 4.4.4.29 NSA 70

An ROW noise barrier was evaluated for the 30 impacted residences in NSA 70 (Bay Isle Key Townhomes – Receptors 10-12, 17, 21-25, 27, 33, 44, 52,-57 and 59). As shown in **Table 4-37**, at barrier heights of 20 to 22 feet, at least 18 of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-38**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 70. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheets 22 and 23 in Appendix B.

**Table 4-21. NSA 70: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 30										
8	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
10	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
12	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
14	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>	NA <sup>5,6</sup>
16	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
18	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>	NA <sup>5</sup>
20	1,634	13	3	2	18	12	30	\$980,400	\$32,680	Yes
22	1,736	12	8	5	25	16	41	\$1,145,760	\$27,945	Yes

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

<sup>5</sup> 7 dB(A) reduction not be achieved at any receptor.

<sup>6</sup> 5 dB(A) reduction or greater was not achieved at two or more receptors.

**Table 4-22 NSA 70: Additional ROW Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Notably, additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location.
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located within the FDOT ROW for I-275 and would not block ingress or egress to any property.
	ROW	No acquisition of ROW or easements for construction/ maintenance would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that water would be directed along, under, or away from the barrier will be made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.
Reasonable	Community desires	The desires of the property owners and renters (if applicable) will be

Type of Factor	Evaluation Criteria	Comment
-ness		solicited during the design phase of the project.

#### 4.4.4.30 NSA 71

An ROW noise barrier was evaluated for the 127 impacted residences in NSA 71 (Azure Apartments – Receptors 1-6, 10-15, 17-23, 25, 27-36, 38-47, 49-57, 65 and 89-91). As shown in **Table 4-39**, at barrier heights of 8 to 12 and 16 to 22 feet, at least 3 of the impacted residences would receive a benefit from a reduction in traffic noise of 5 dB(A) or more, the noise reduction design goal of 7 dB(A) would be achieved and the cost of the barrier would be below the FDOT's cost reasonable limit. Because a barrier is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. A summary of the additional barrier considerations is provided in **Table 4-40**. Based on the review of these factors, a barrier was determined to be a potential noise abatement measure for the impacted residences in NSA 71. The limits of the most cost reasonable barrier (based on the results of this PD&E analysis) are depicted on Sheet 22 in Appendix B.

**Table 4-23. NSA 71: ROW Barrier Results**

Barrier Height (feet)	Barrier Length (feet)	Noise Reduction at Impacted Receptors (dB(A)) <sup>1</sup>			Number of Benefited Receptors <sup>2</sup>			Total Estimated Cost <sup>3</sup>	Cost per Benefited Receptor <sup>4</sup>	Cost Reasonable Yes/No
		5 -5.9	6 – 6.9	≥7	Impacted	Not Impacted	Total			
Number of Impacted Receptors = 113										
8	398	2	0	1	3	0	3	\$95,520	\$31,840	Yes
10	509	3	2	3	8	0	8	\$152,700	\$19,088	Yes
12	612	4	1	7	12	0	12	\$220,320	\$18,360	Yes
14	1,490	1	4	9	14	0	14	\$625,800	\$44,700	No
16	2,028	18	5	14	33	4	37	\$973,440	\$26,309	Yes
18	1,631	32	7	21	48	12	60	\$880,740	\$14,679	Yes
20	1,525	19	25	28	57	15	72	\$915,000	\$12,708	Yes
22	2,104	31	19	57	77	30	107	\$1,388,640	\$12,978	Yes

<sup>1</sup> Receptors with a predicted noise level of 66 dB(A) or greater.

<sup>2</sup> Receptors with a predicted reduction of five dB(A) or more are considered benefited.

<sup>3</sup> Based on a unit cost of \$30 per square foot.

<sup>4</sup> FDOT cost reasonable criterion is \$42,000 per benefited receptor.

**Table 4-24 NSA 71: Additional ROW Barrier Considerations**

Type of Factor	Evaluation Criteria	Comment
Feasibility	Design and Construction	A determination of whether a noise barrier can be constructed using standard construction methods and techniques will be made during the project's design phase. Notably, additional costs to solely construct a noise barrier will be included in the final cost reasonableness evaluation of a noise barrier at this location.

Type of Factor	Evaluation Criteria	Comment
	Safety	It does not appear that there would be any safety concerns (e.g., loss of sight distance).
	Accessibility	The barrier would be located on the roadway and would not block ingress or egress to any property.
	ROW	No acquisition of ROW or easements for construction/ maintenance would be necessary to construct a barrier within the FDOT's ROW.
	Maintenance	The FDOT should be able to maintain a barrier at this location using standard practices.
	Drainage	A determination as to whether the barrier can be designed so that water would be directed along, under, or away from the barrier will be made during the project's design phase.
	Utilities	A determination of utility conflicts will be made during the project's design phase.
Reasonable -ness	Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.

#### 4.4.4.31 NSA 72

An ROW noise barrier was evaluated for the impacted cemetery in NSA 72 (Royal Palms North Funeral Chapel and Cemetery – Receptor 1). For this area, the FDOT's special land use procedures were used to determine if a noise barrier could be considered a potential abatement measure.

For the purpose of this special land use evaluation, the optimal length and height for a noise barrier was determined using TNM. At an optimal length of 829 feet and an optimal height of 22 feet, a barrier would reduce predicted traffic noise levels within the impacted area a minimum of 7 dB(A). Because it is not known how frequently the impacted and benefited area of the cemetery would be used and by how many people, the minimum number of person-hours of use on an average day in order for a barrier to be considered cost effective was calculated.

The cost effectiveness calculations were based on the formulas from the special land use procedures. Assuming the optimal barrier length and height, the minimum daily use required within the impacted and benefited area of the church in order for a barrier to be considered cost effective is 2,154 person-hours (i.e., 2,154 people would have to use the area for one hour each day of the year). Because it is not reasonable to assume that this level of activity would occur within the impacted area that would be benefited by a barrier, a barrier is not considered a reasonable noise abatement measure for the impacted areas of the sports area.



## 5.0 Conclusions

As previously stated, future traffic noise levels with the improvements are predicted to approach, meet, or exceed the NAC at 1,054 receptors located on 1,050 properties. The results of the evaluation indicate that construction of noise barriers is a potentially reasonable and feasible noise abatement method to reduce predicted traffic noise for up to 981 of the 1,050 impacted properties. These properties are located at:

- NSA 10: Residences in the Lakewood Gateway and Country Club subdivisions.
- NSA 17: Residences in the Highland Terrace Park subdivision.
- NSA 20: Residences in the Highland Terrace Park and Gateway subdivisions.
- NSA 21: Residences in Tangerine Terrace subdivision.
- NSA 23: Residences in Tangerine Terrace subdivision.
- NSA 25: Residences in the Tangerine Terrace, Grand Central, Revere, Rosa E. Royal's, Prather's 31<sup>st</sup> Acreage, Don's, William's, E.C. Fishers subdivisions.
- NSA 37: Residences in the S.V. Smith's and H.A. Murphy's subdivisions.
- NSA 45: Residences in the Fuller's Gough's and Bronx subdivisions and the Northside Apartments.
- NSAs 54 and 59: Residences in the Reisset, Bunson's Woodlawn Estates, Pine City, Townsend's R.I. Williamson's, Herkimer Heights, Shelton Heights, Clearview Park, Flemings, Harris School Park, Tetreault, Cross Corners, Larry's Bryan Heights, and Thrumstons Bilmar subdivisions.
- NSAs 55 and 57: Residences in the Brunsun's Woodlawn, Pine City, Herkimer Heights, Bengers Rochester Heights, D.C. White, Coolidge Park, Lynndale, Mar-Mick, and Lakeside subdivisions, Silver Lake Mobile Home Resort, and North Ridge Mobile Home Park.
- NSA 61: Residences in the Heinz subdivision and the mobile home park in the southwest quadrant of I-275 and 54<sup>th</sup> Avenue interchange.
- NSAs 63 and 67: Residences in the Erle Renwick and Fairview Estates subdivisions and the Southern Mobile Home Park.
- NSA 66: Residences in the Chateaux Versailles, the Oaks at Meadowlawn, and the Meadowlawn Cardinal subdivisions.
- NSA 69: Residences in the Village Green Mobile Home Park.
- NSA 70: Residences in Bay Isle Townhomes.
- NSA 71: Residences in the Azure Apartments,

The estimated total cost to construct the noise barriers ranges from \$13 to \$26 million depending on barrier length and height.

## 5.1 Statement of Likelihood

The FDOT is committed to the construction noise barriers at the locations above, contingent upon the following:

- Detailed noise analysis during the final design process continues to support the need for, and the feasibility and reasonableness of providing the barriers as abatement;
- The detailed analysis demonstrates that the cost of the noise barrier will not exceed the cost effective limit;
- The residents/property owners benefitted by the noise barrier desire that a noise barrier be constructed; and
- All safety and engineering conflicts or issues related to construction of a noise barrier are resolved.

## 6.0 Noise Contours

Land uses such as residences and recreational areas are considered incompatible with highway noise levels that approach or exceed the NAC. To reduce the possibility of additional traffic noise-related impacts, noise level contours were developed for the future improved roadway facility. These noise contours delineate the extent of the predicted traffic noise impact area from the improved roadway's edge-of-travel lane for each of the land use Activity Categories (Table 3-1).

**Table 6-1** provides the distance from the edge-of-travel lane at which traffic noise levels are predicted to be 56 dB(A)—the NAC for land uses classified as Activity Category A, to 66 dB(A)—the NAC for land uses classified as Activity Category B and C, and to 71 dB(A)—the NAC for land uses classified as Activity Category E.

Local officials will be provided a copy of the Final NSR to promote compatibility between any future land developments within the limits of the project's PD&E study.

**Table 6-1. Noise Contour Limits**

Roadway Segment	Distance from Improved Roadway's Edge-of-Pavement (ft) <sup>a</sup>		
	Activity Category A 56 dB(A)	Activity Category B/C 66 dB(A)	Activity Category E 71 dB(A)
54 <sup>th</sup> Avenue South to I-175	1,070	360	220
I-175 to Gandy Boulevard	1,000	340	200
Gandy Boulevard to Roosevelt Boulevard	1,300	500	290
Roosevelt Boulevard to 9 <sup>th</sup> Street North	1,700	720	390
9 <sup>th</sup> Street North to 4 <sup>th</sup> Street North	1,500	690	380
4 <sup>th</sup> Street North to End of Project	1,500	690	380

<sup>a</sup> See Table 2-1 for a description of the activities that occur within each category. Distances do not reflect any reduction in noise levels that would occur from existing structures (shielding) and should be used for planning purposes only.

## 7.0 Construction Noise and Vibration

Some land uses adjacent I-275 are identified on the FDOT listing of noise- and vibration-sensitive sites (e.g., residential use). Construction of the roadway improvements is not expected to have a significant noise or vibration effect. Additionally, the application of the *FDOT Standard Specifications for Road and Bridge Construction* may minimize or eliminate potential issues. Should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

## 8.0 Community Coordination

The Public Hearing was Held on September 29, 2015. Attendees included 125 citizens and 21 of these citizens provided verbal Comments. The written comment period was held open through Oct. 9, 2015 and a total of 30 written comments were received. The consensus of noise related feedback received at and following the Public Hearing was in support of the construction of noise walls. Many of those expressing support for the noise wall construction also voiced a desire to expedite those improvements.

## 9.0 References

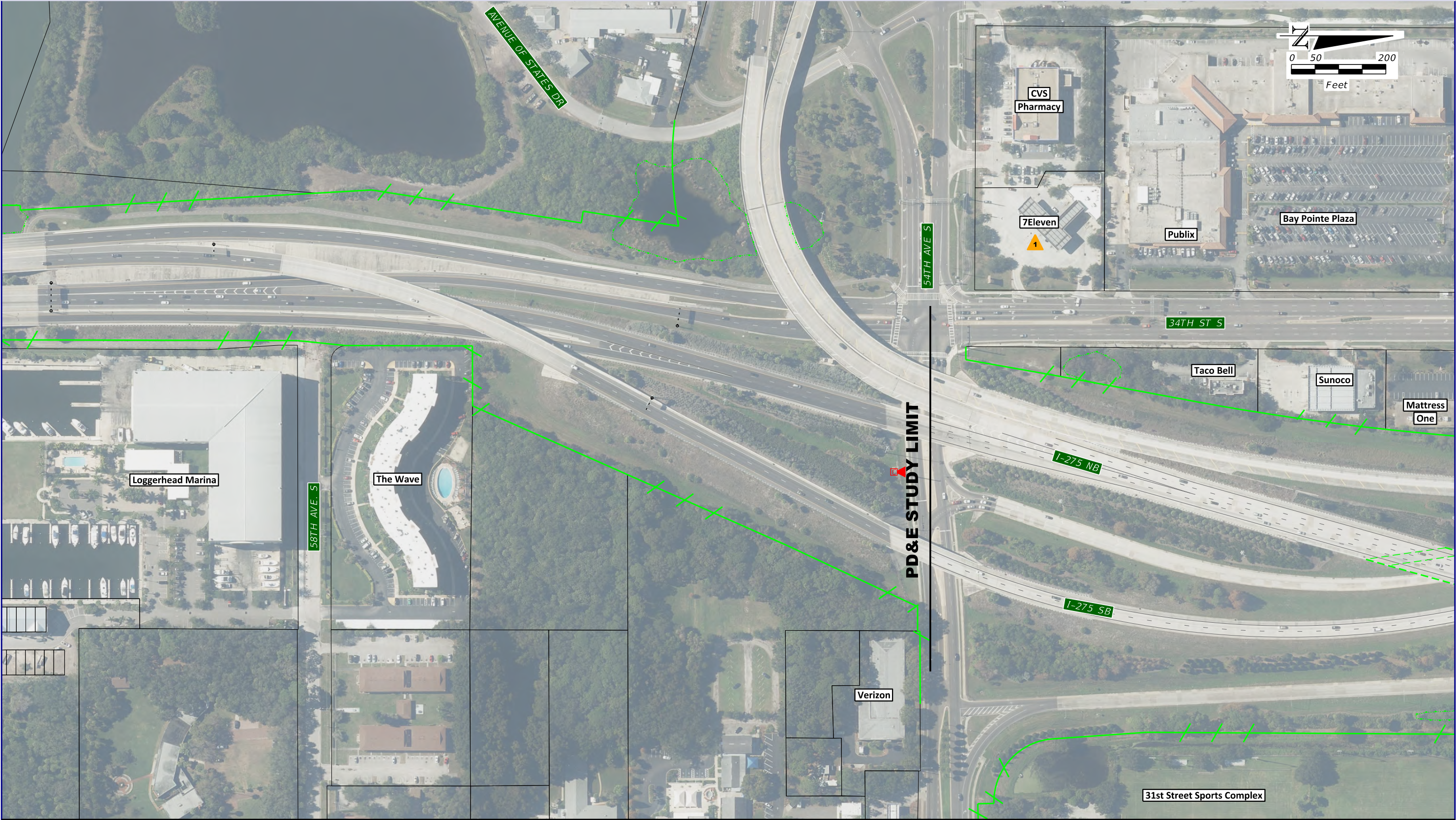
- Federal Highway Administration. U.S. Department of Transportation. July 13, 2010. Title 23 CFR, Part 772. *Procedures for Abatement of Highway Traffic Noise and Construction Noise*.
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- Florida Department of Transportation. May 24, 2011. *Project Development and Environment Manual*, Part 2, Chapter 17 – Noise.
- Florida Department of Transportation. July 1, 2013. *Plans Preparation Manual*, Volume 1, Chapter 32 – Sound Barriers.
- Florida Department of Transportation. 2014. *Standard Specifications for Road and Bridge Construction*.
- California Department of Transportation. September 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*.



## Appendices

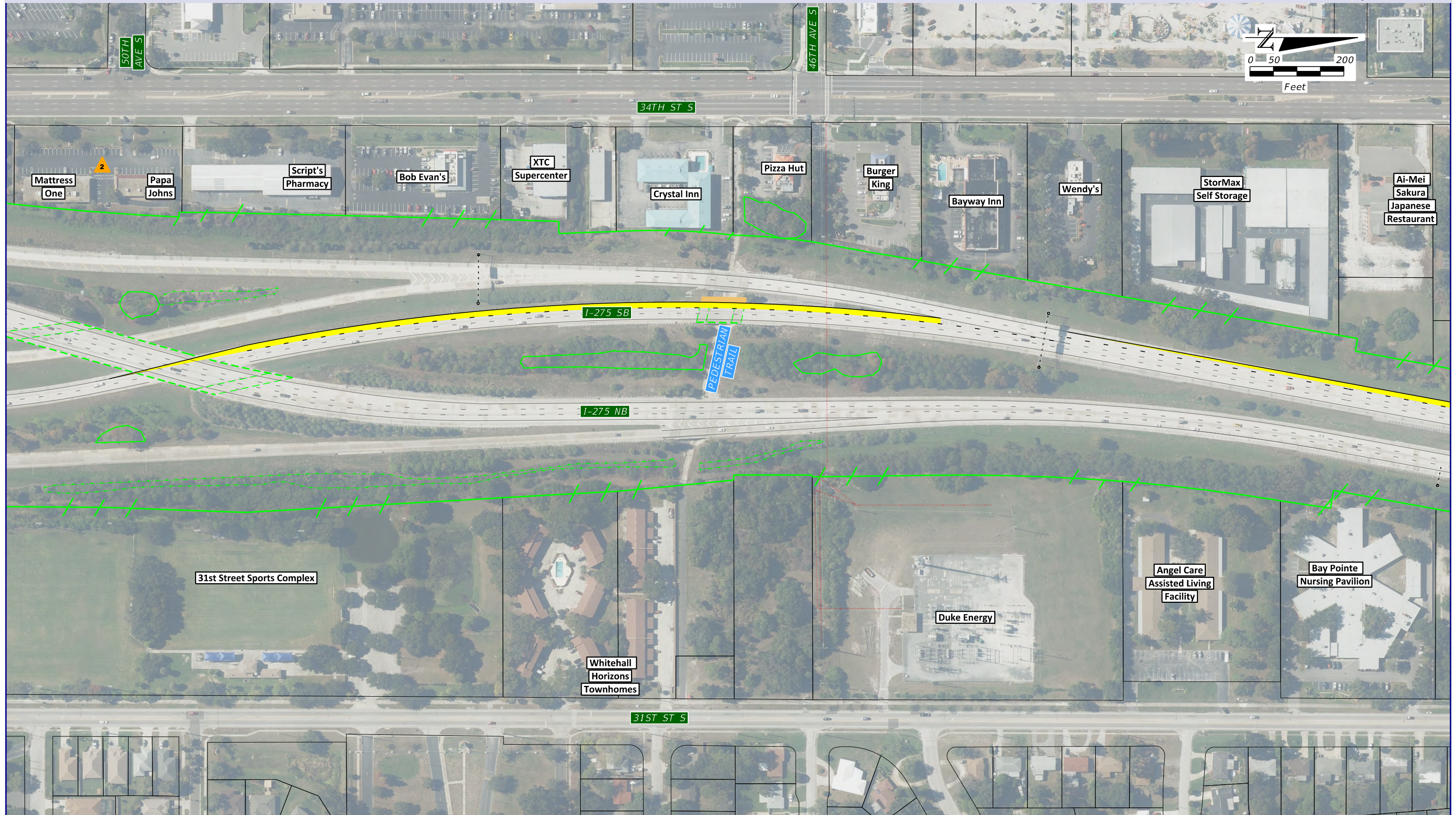
Appendix A.  
Conceptual Design Plans and Traffic Data





<b>LEGEND:</b>					
	PAVEMENT WIDENING		BRIDGE WIDENING		WETLANDS
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER
	BARRIER WALL		HISTORIC SITE		FLOOD PLAINS
			MANGROVES		CONTAMINATION
			OVERHEAD SIGN STRUCTURE		KENWOOD HISTORIC DISTRICT
			NOISE WALL		ITS CAMERA





## LEGEND:

PAVEMENT WIDENING	BRIDGE WIDENING	WETLANDS	RIGHT OF WAY	OVERHEAD SIGN STRUCTURE	KENWOOD HISTORIC DISTRICT
PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	CONTAMINATION	ITS CAMERA	

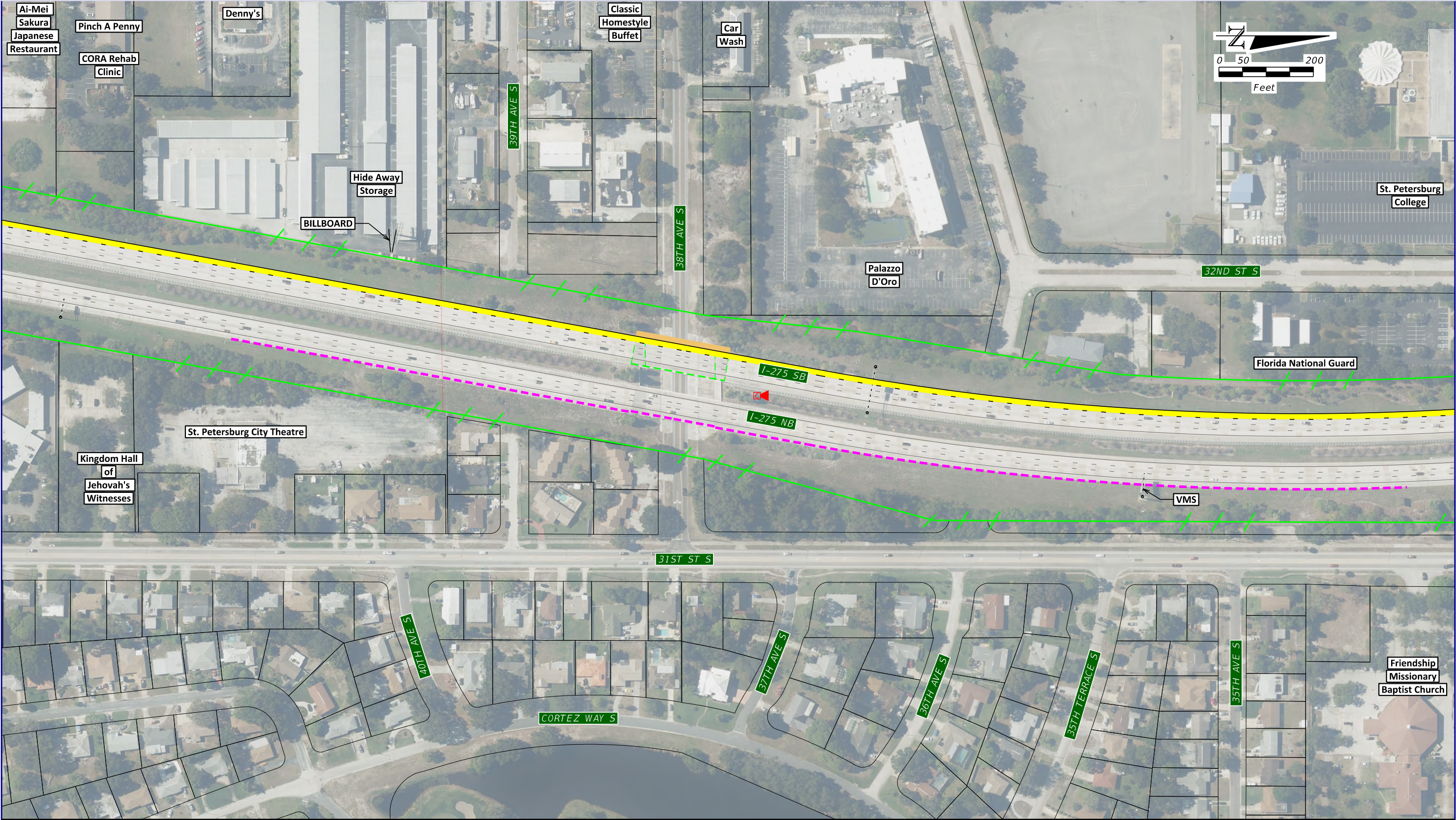
Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

2





**LEGEND:**

PAVEMENT WIDENING	BRIDGE WIDENING	WETLANDS	RIGHT OF WAY	OVERHEAD SIGN STRUCTURE	KENWOOD HISTORIC DISTRICT
PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	FLOOD PLAINS CONTAMINATION	ITS CAMERA	

Aerial Photos Dec. '13 - Feb. '14

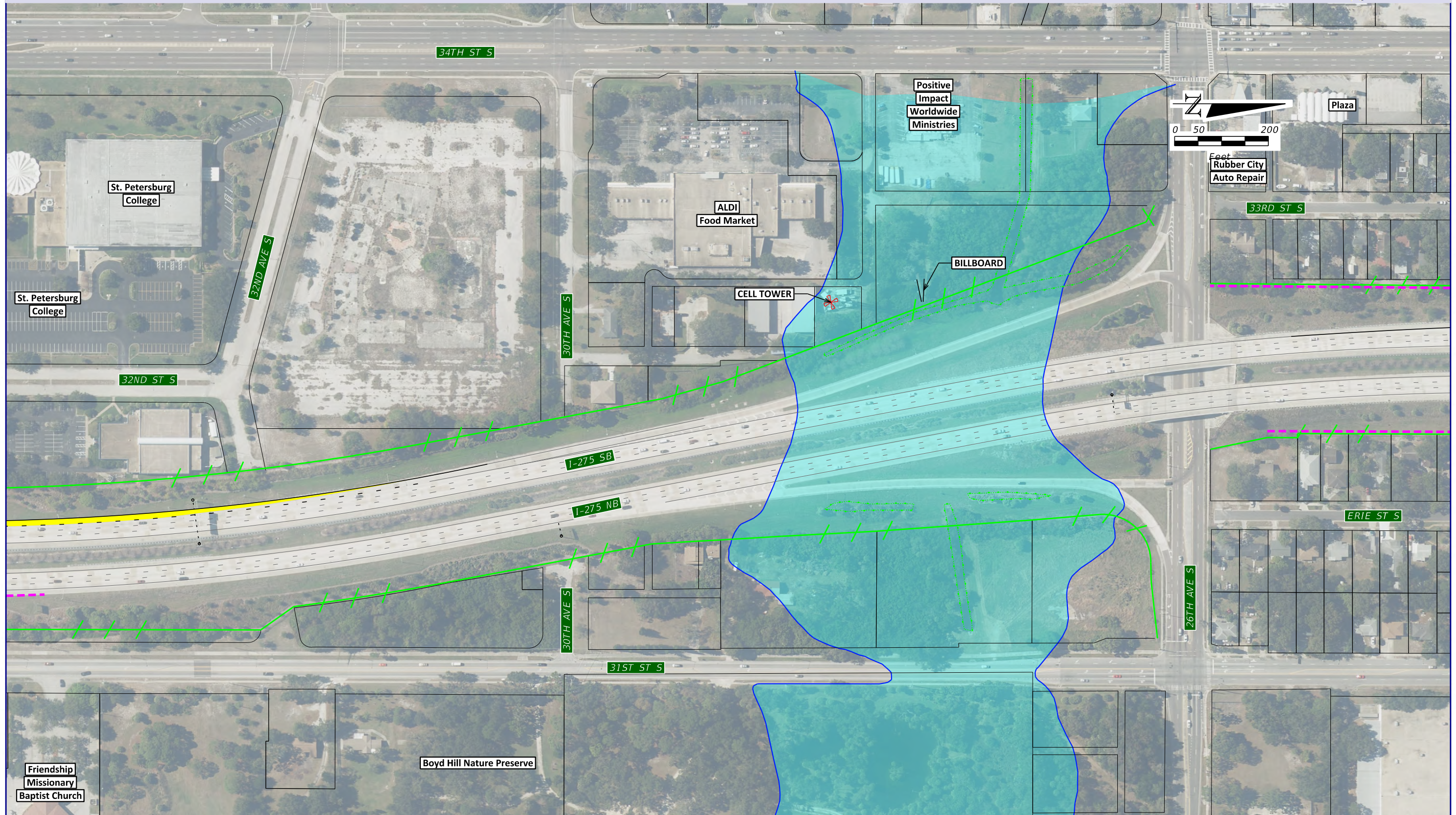
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## CONCEPT PLANS

### LANE CONTINUITY

SHEET NO. 3





<b>LEGEND:</b>					
	PAVEMENT WIDENING		BRIDGE WIDENING		WETLANDS
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER
	BARRIER WALL		HISTORIC SITE		FLOOD PLAINS
			MANGROVES		KENWOOD HISTORIC DISTRICT
			RIGHT OF WAY		OVERHEAD SIGN STRUCTURE
			CONTAMINATION		NOISE WALL
					ITS CAMERA

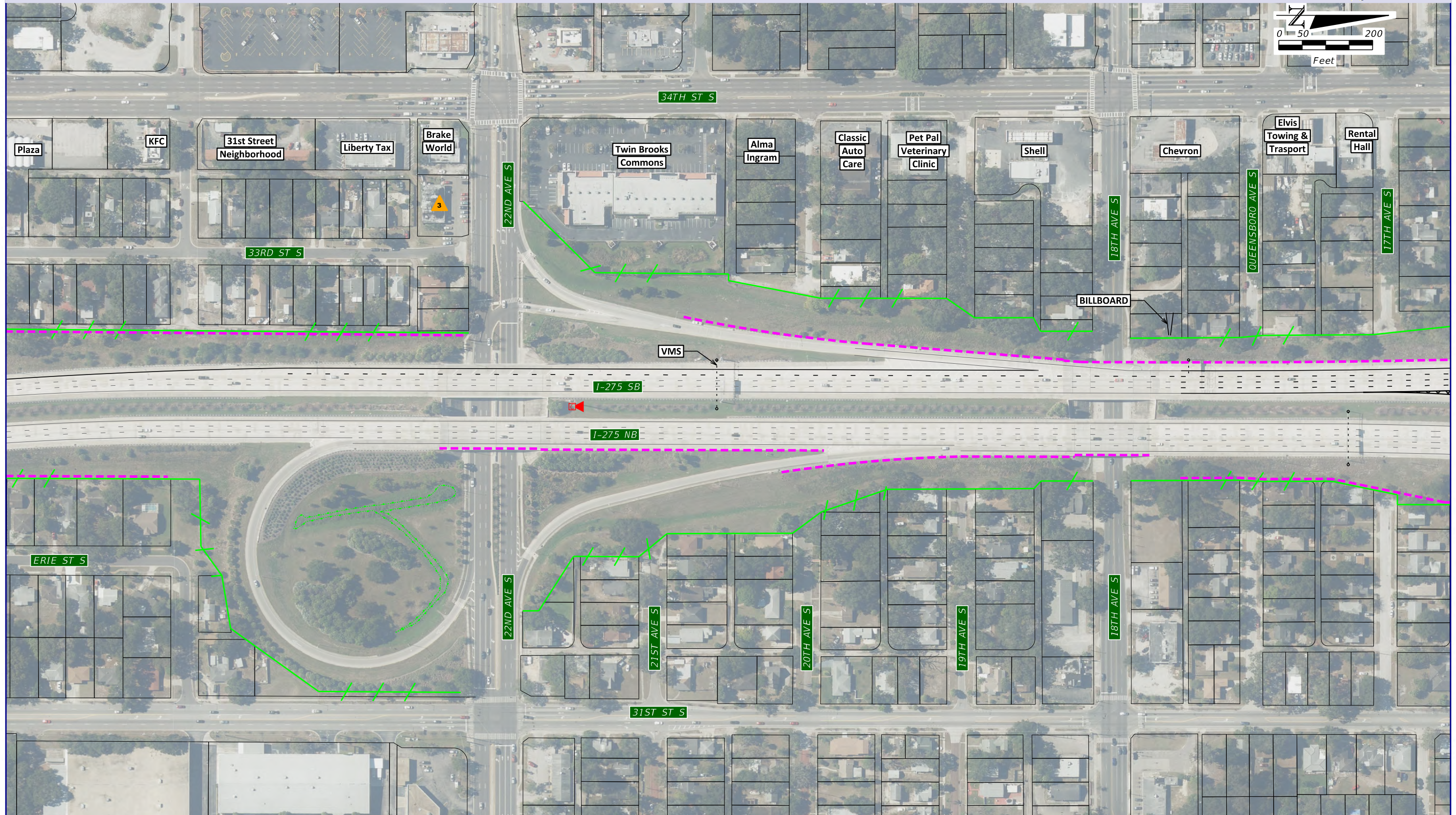
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

4





## LEGEND:

PAVEMENT WIDENING	BRIDGE WIDENING	WETLANDS	RIGHT OF WAY	OVERHEAD SIGN STRUCTURE	KENWOOD HISTORIC DISTRICT
PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	FLOOD PLAINS CONTAMINATION	ITS CAMERA	

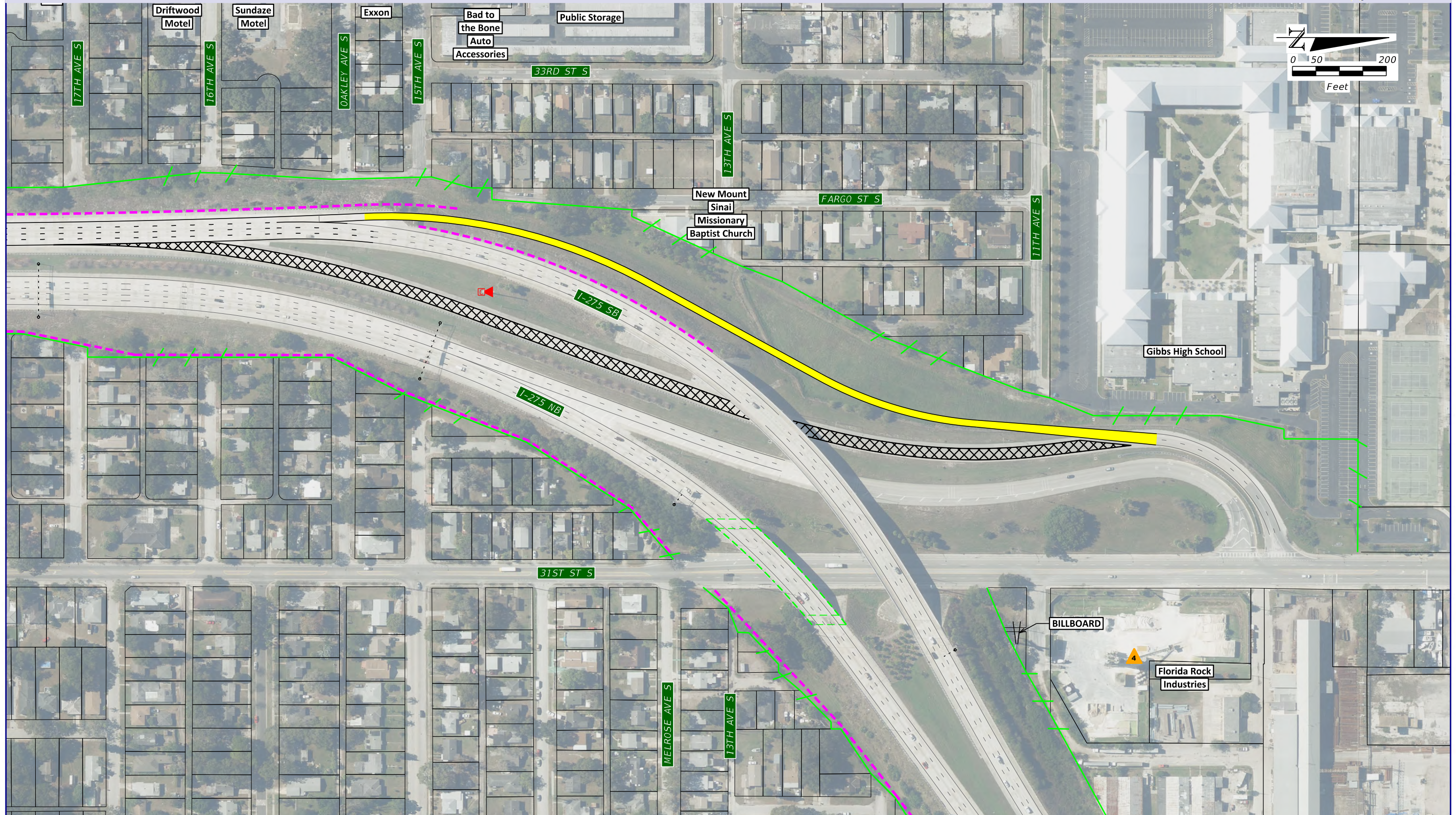
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

5





<b>LEGEND:</b>					
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	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER
	BARRIER WALL		HISTORIC SITE		MANGROVES
	RIGHT OF WAY		FLOOD PLAINS		NOISE WALL
	OVERHEAD SIGN STRUCTURE		KENWOOD HISTORIC DISTRICT		ITS CAMERA
	CONTAMINATION				

Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.  
6





## LEGEND:

PAVEMENT WIDENING	BRIDGE WIDENING	WETLANDS	RIGHT OF WAY	OVERHEAD SIGN STRUCTURE	KENWOOD HISTORIC DISTRICT
PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	CONTAMINATION	ITS CAMERA	

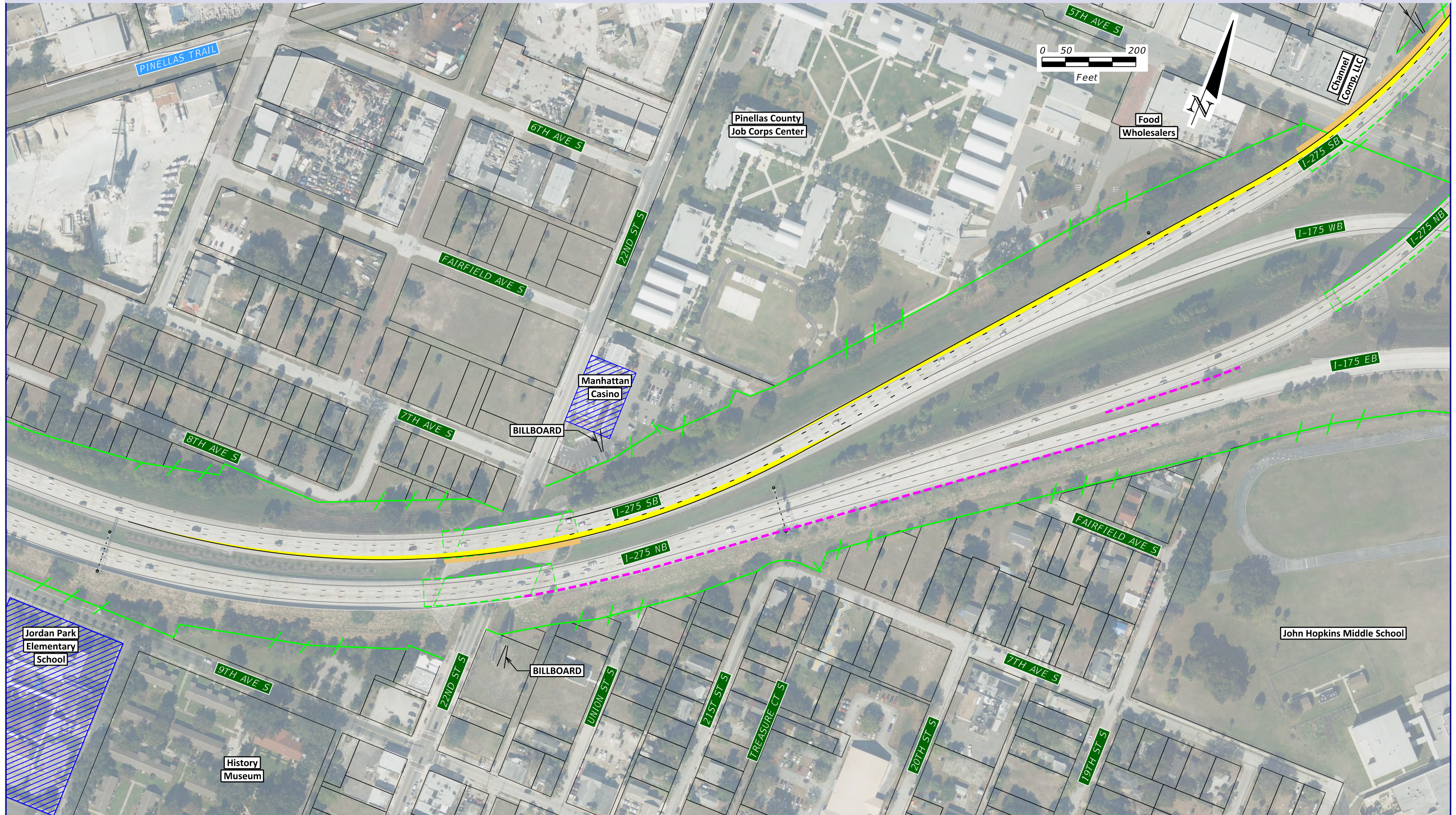
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

7





## LEGEND:

PAVEMENT WIDENING	BRIDGE WIDENING	WETLANDS	RIGHT OF WAY	OVERHEAD SIGN STRUCTURE	KENWOOD HISTORIC DISTRICT
PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	CONTAMINATION	ITS CAMERA	

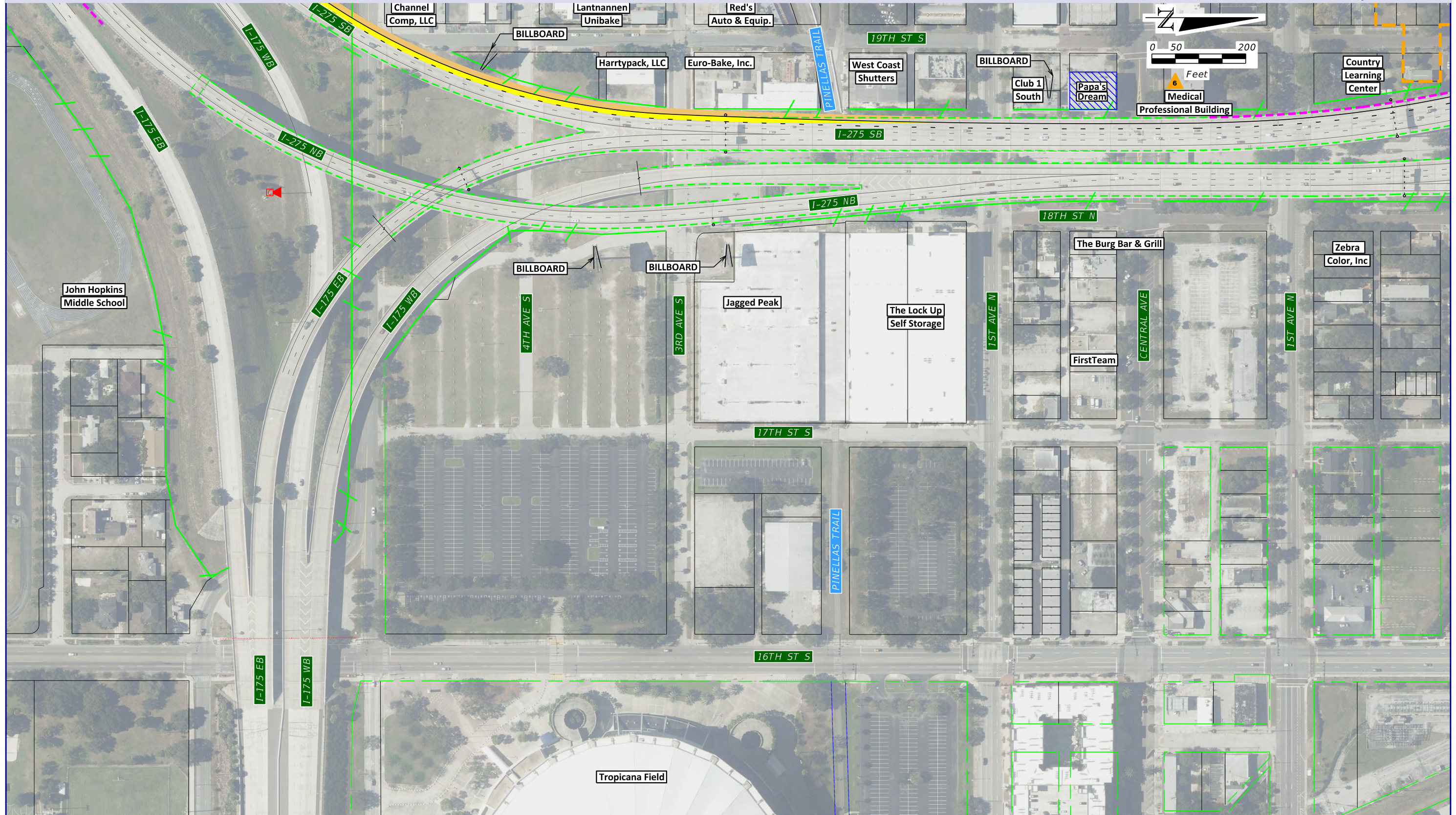
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

8





## LEGEND:

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	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER		FLOOD PLAINS		NOISE WALL		
	BARRIER WALL		HISTORIC SITE		MANGROVES		CONTAMINATION		ITS CAMERA		

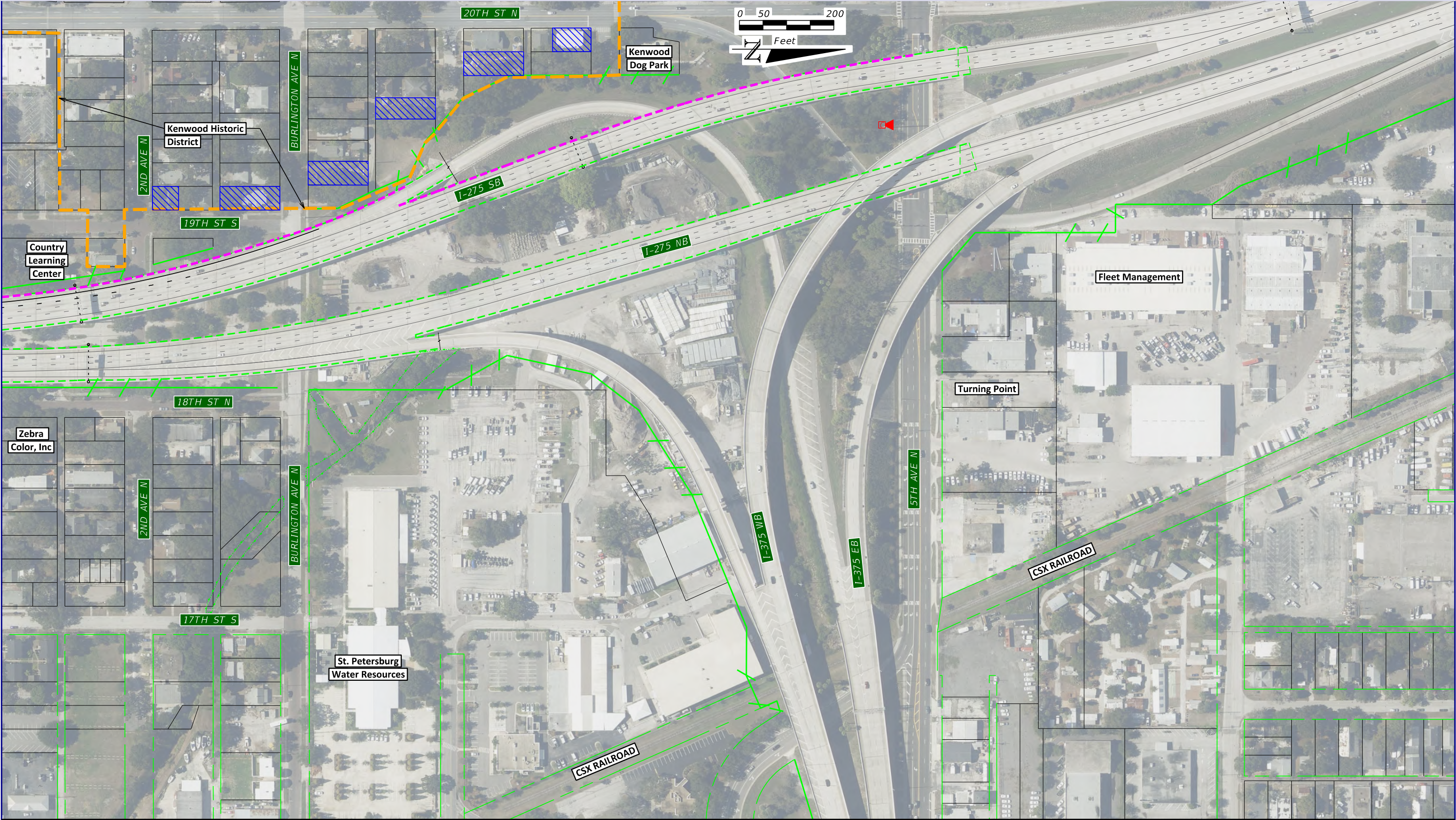
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

9





**LEGEND:**  

PAVEMENT WIDENING  
 PAVEMENT REMOVAL  
 BARRIER WALL

BRIDGE WIDENING  
 BRIDGES  
 HISTORIC SITE

WETLANDS  
 SURFACE WATER  
 MANGROVES

RIGHT OF WAY  
 FLOOD PLAINS  
 CONTAMINATION

OVERHEAD SIGN STRUCTURE  
 NOISE WALL  
 ITS CAMERA

KENWOOD HISTORIC DISTRICT

CONCEPT PLANS

LANE CONTINUITY

SHEET NO.

10

Aerial Photos Dec. '13 - Feb. '14

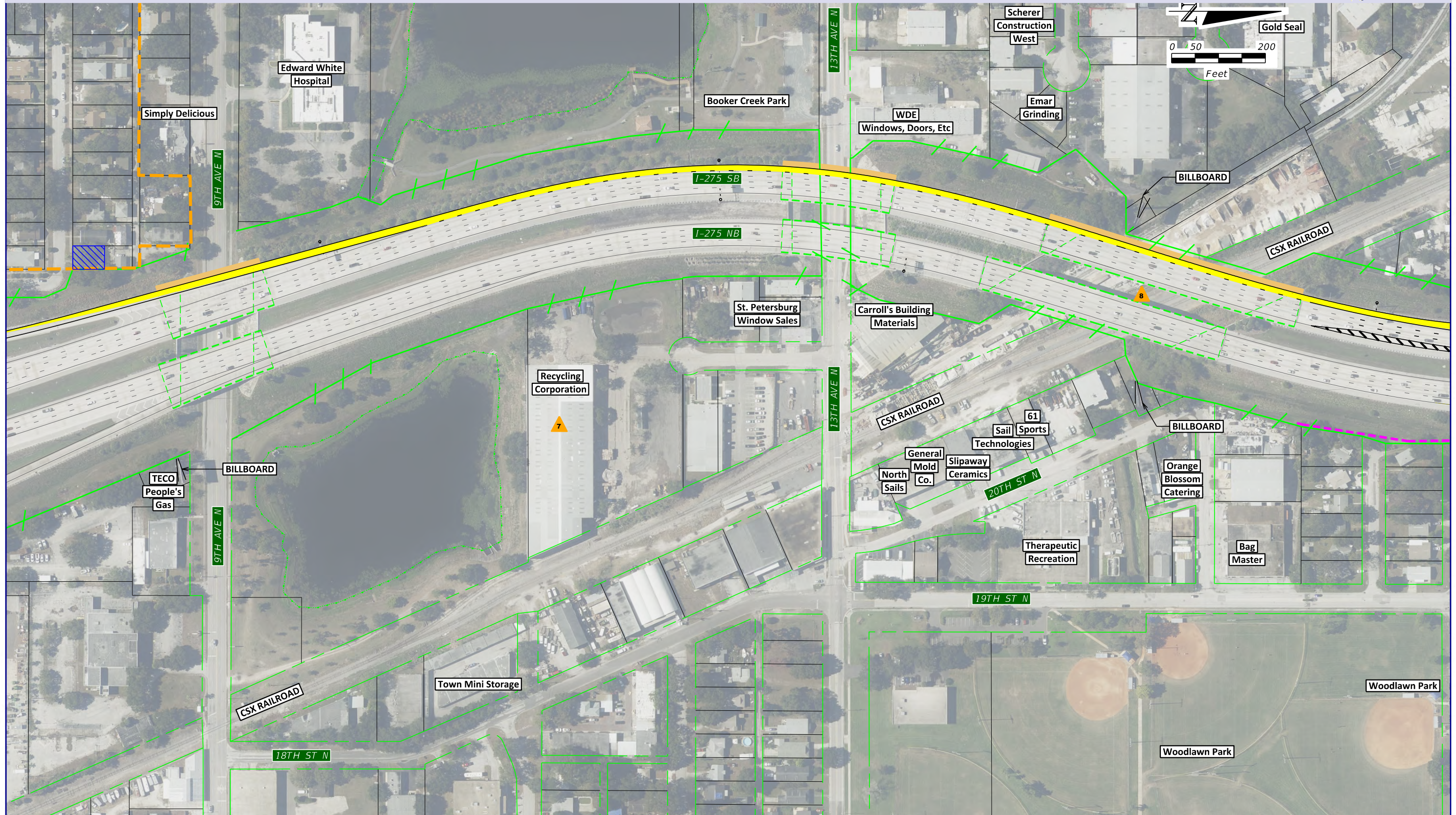
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## LEGEND:

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PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	CONTAMINATION	ITS CAMERA	

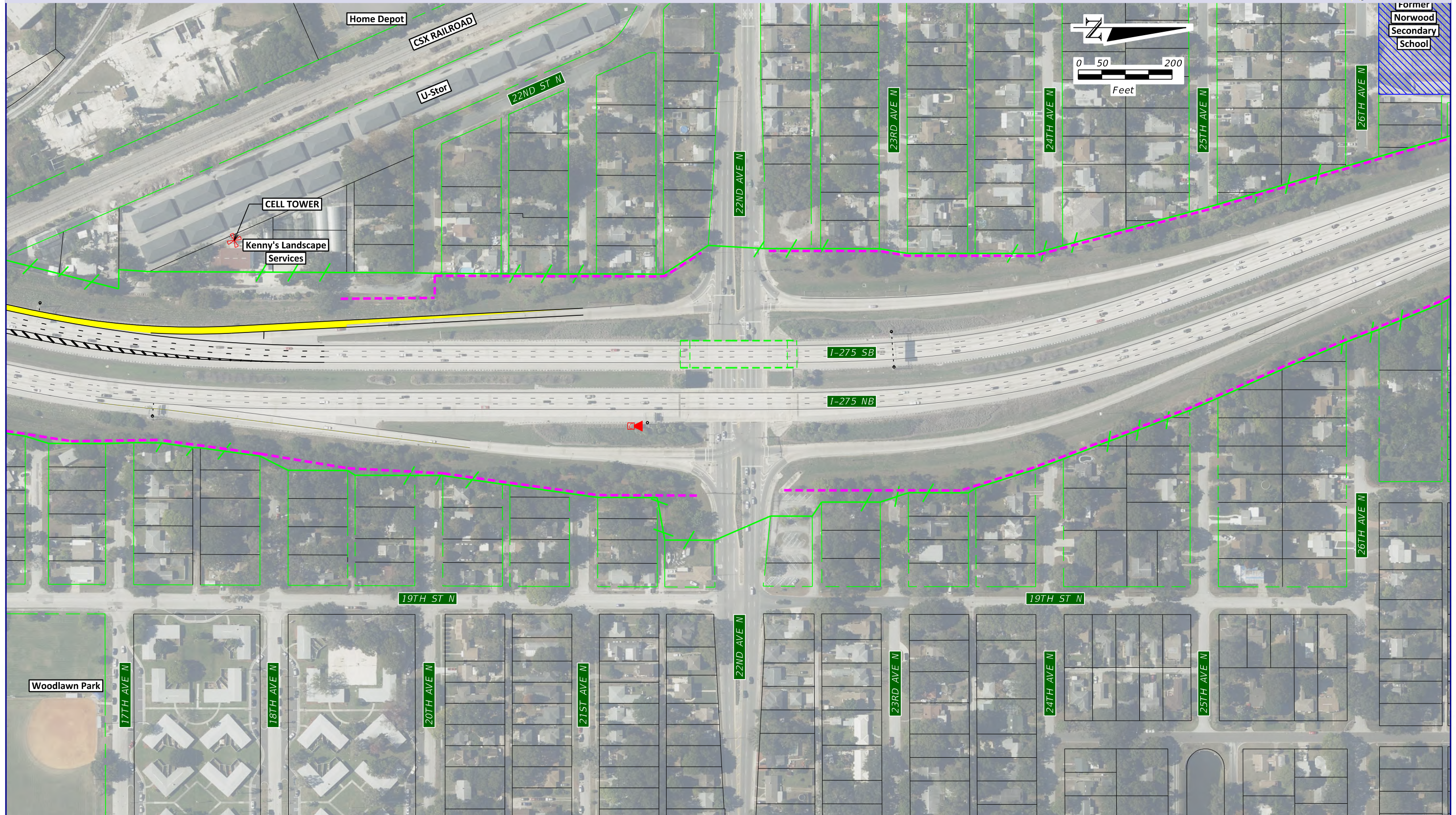
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

11





## LEGEND:

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PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	CONTAMINATION	ITS CAMERA	

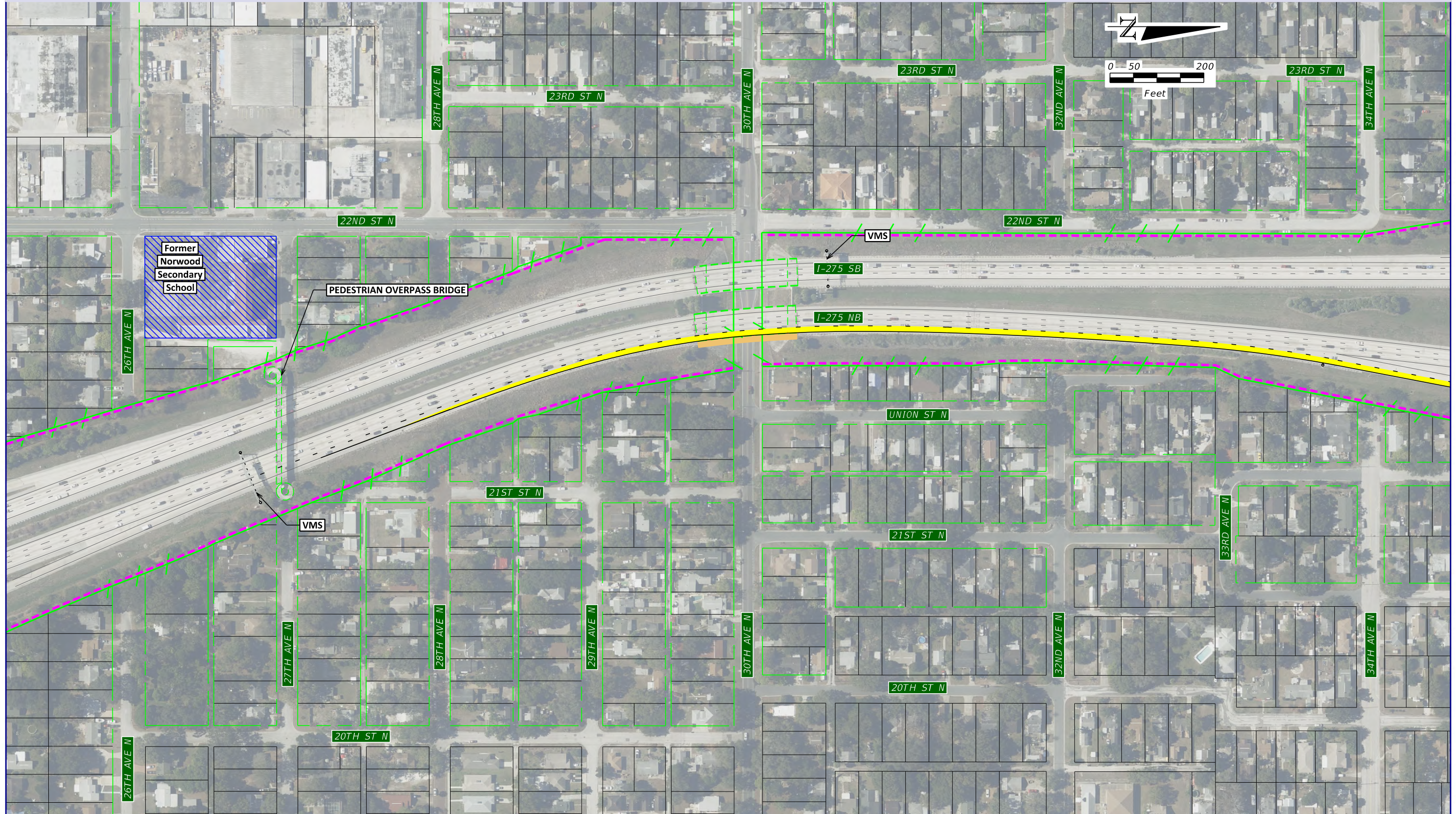
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

12





## LEGEND:

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BARRIER WALL	HISTORIC SITE	MANGROVES	CONTAMINATION	ITS CAMERA	

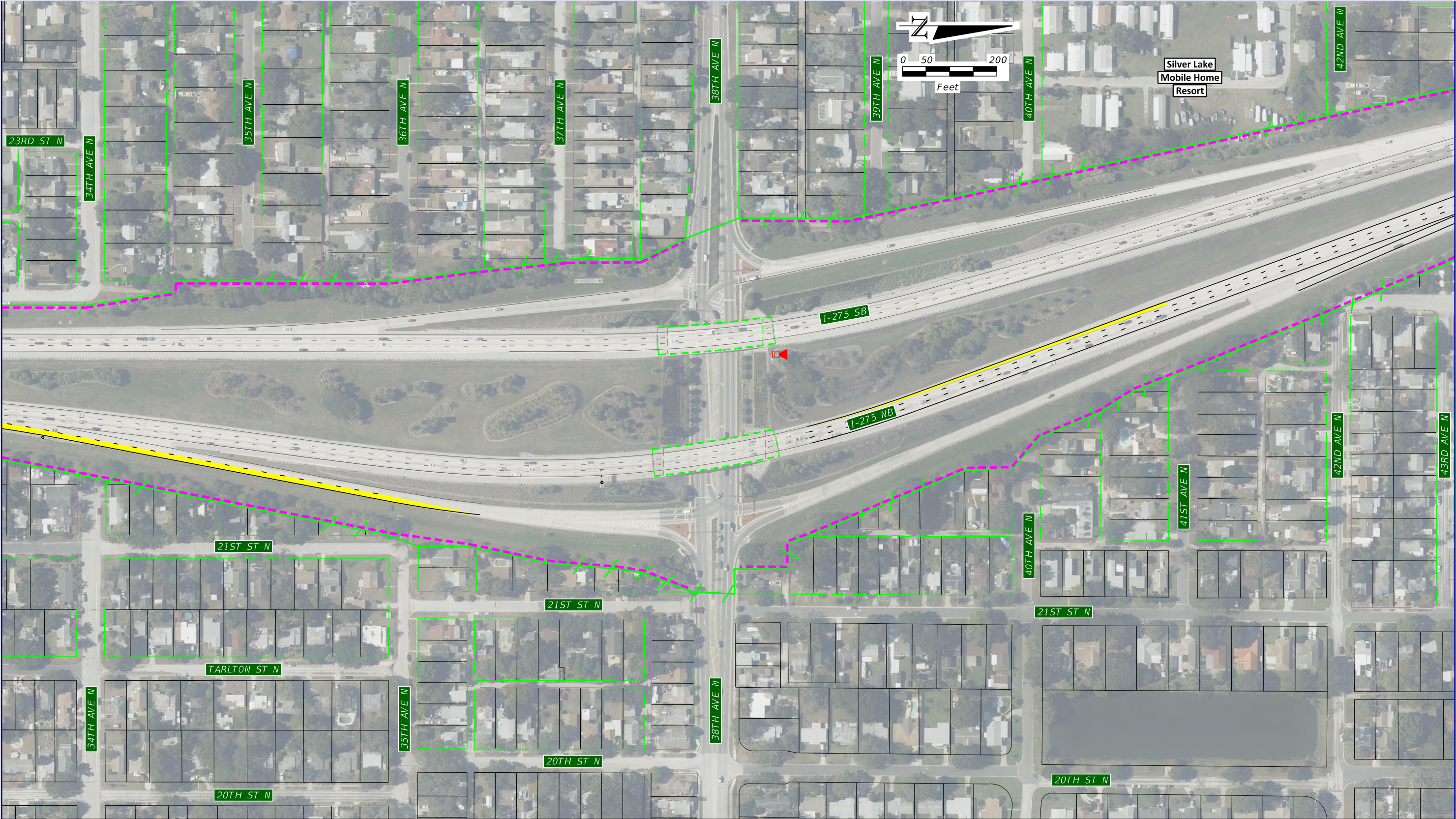
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13



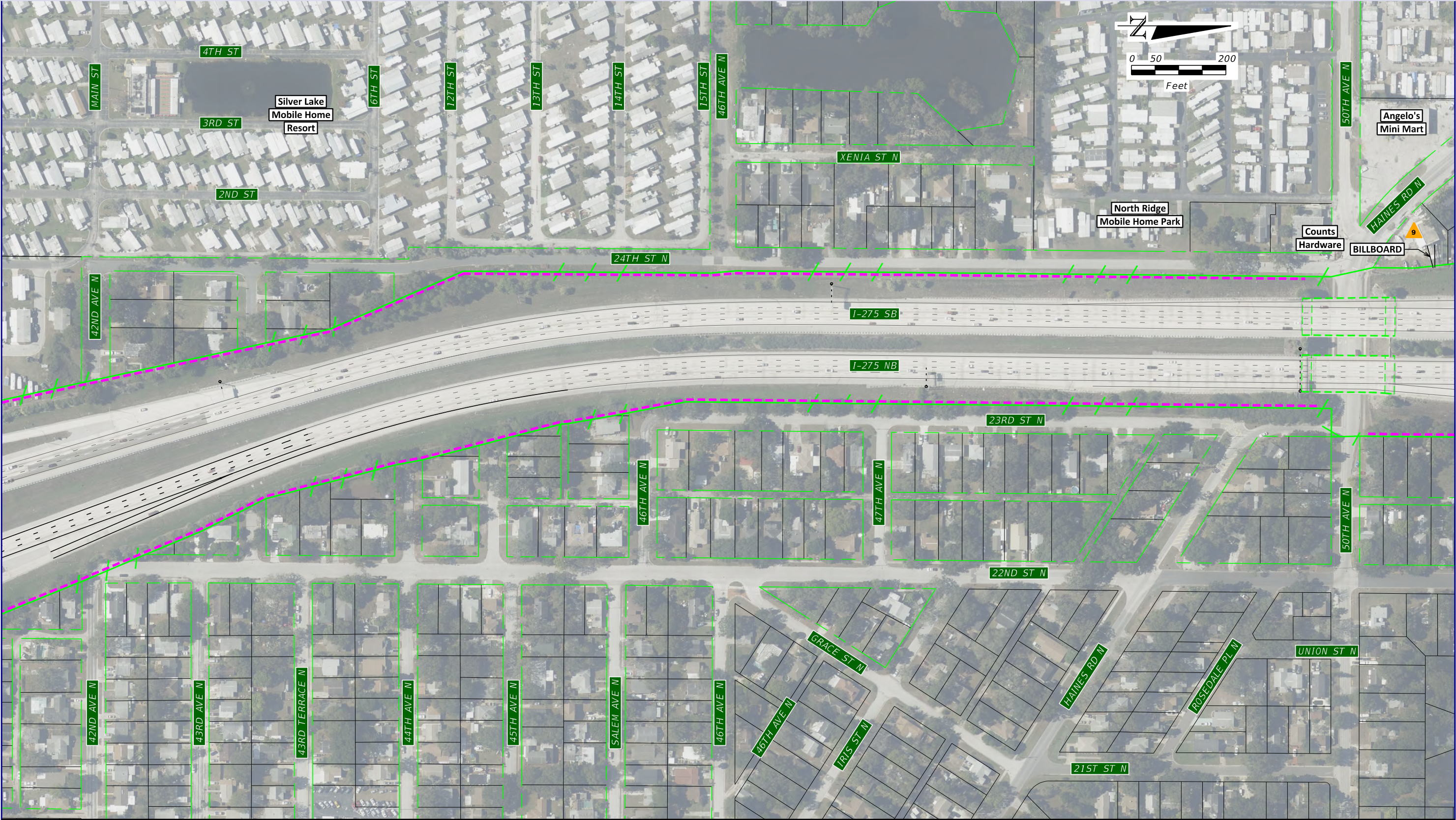


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 PAVEMENT WIDENING  
 PAVEMENT REMOVAL  
 BARRIER WALL  
 BRIDGE WIDENING  
 BRIDGES  
 HISTORIC SITE

WETLANDS  
 SURFACE WATER  
 MANGROVES  
 RIGHT OF WAY  
 FLOOD PLAINS  
 CONTAMINATION

OVERHEAD SIGN STRUCTURE  
 NOISE WALL  
 ITS CAMERA  
 KENWOOD HISTORIC DISTRICT





**LEGEND:**  
 PAVEMENT WIDENING  
 PAVEMENT REMOVAL  
 BARRIER WALL  
 BRIDGE WIDENING  
 BRIDGES  
 HISTORIC SITE  
 WETLANDS  
 SURFACE WATER  
 MANGROVES  
 RIGHT OF WAY  
 FLOOD PLAINS  
 CONTAMINATION  
 OVERHEAD SIGN STRUCTURE  
 NOISE WALL  
 ITS CAMERA  
 KENWOOD HISTORIC DISTRICT

## CONCEPT PLANS

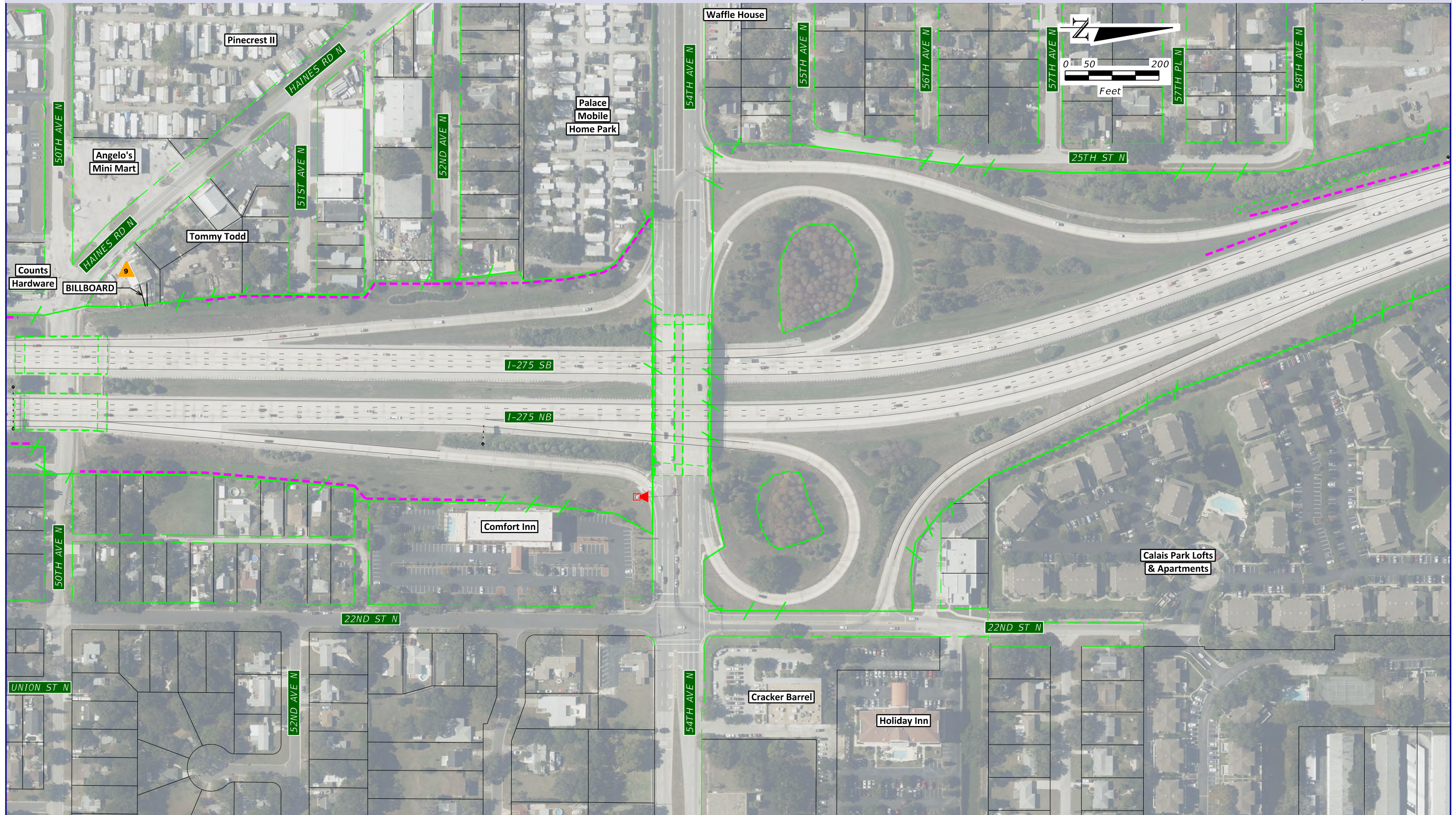
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## LEGEND:

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	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER		FLOOD PLAINS		NOISE WALL		
	BARRIER WALL		HISTORIC SITE		MANGROVES		CONTAMINATION		ITS CAMERA		

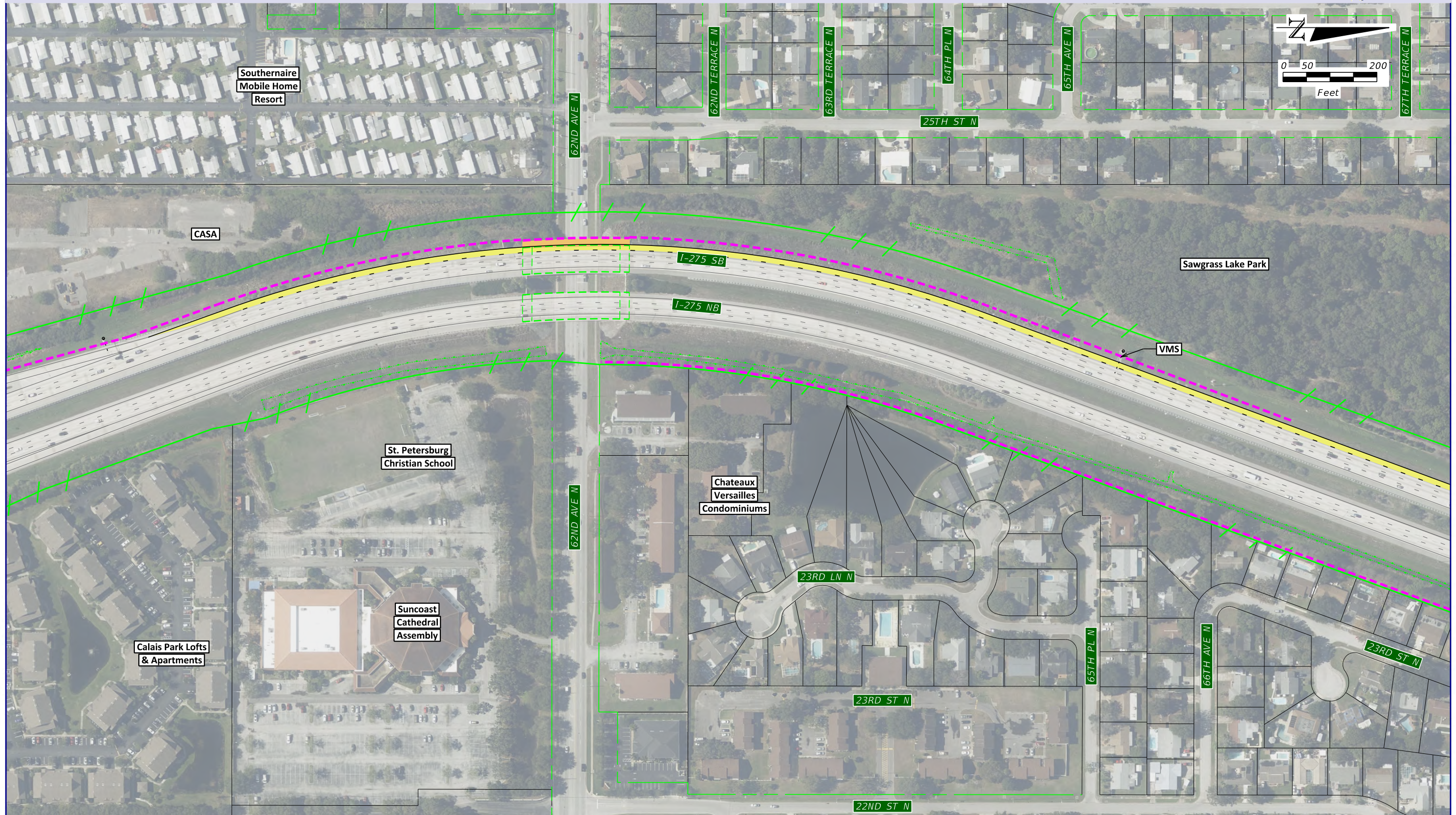
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

16





## LEGEND:

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PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	FLOOD PLAINS	NOISE WALL	
BARRIER WALL	HISTORIC SITE	MANGROVES	FLOOD PLAINS CONTAMINATION	ITS CAMERA	

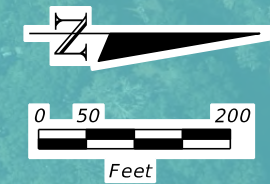
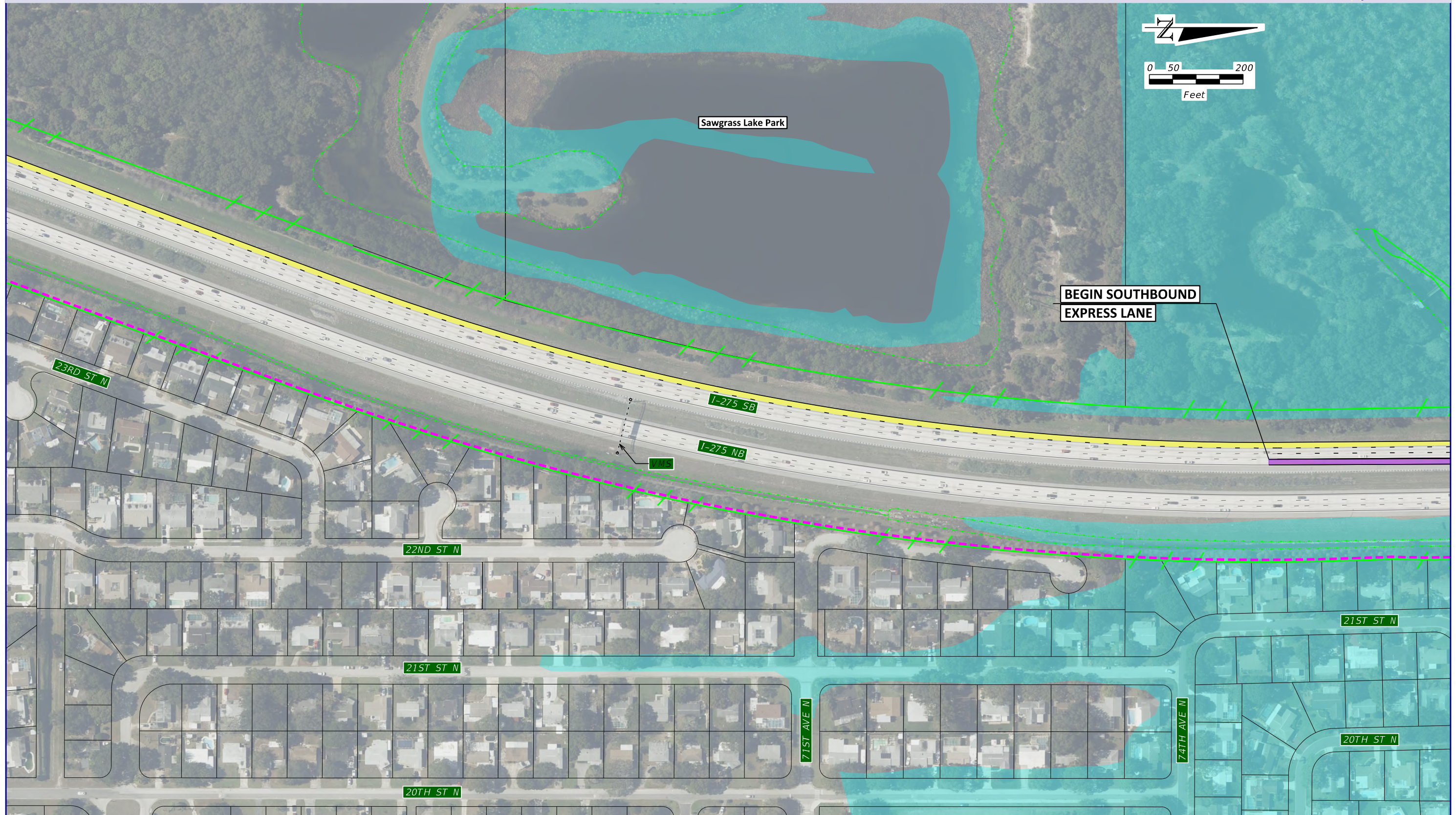
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## CONCEPT PLANS LANE CONTINUITY

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17





**LEGEND:**

- |                   |                 |               |               |                         |                           |
|-------------------|-----------------|---------------|---------------|-------------------------|---------------------------|
| PAVEMENT WIDENING | BRIDGE WIDENING | WETLANDS      | RIGHT OF WAY  | OVERHEAD SIGN STRUCTURE | KENWOOD HISTORIC DISTRICT |
| PAVEMENT REMOVAL  | BRIDGES         | SURFACE WATER | FLOOD PLAINS  | NOISE WALL              |                           |
| BARRIER WALL      | HISTORIC SITE   | MANGROVES     | CONTAMINATION | ITS CAMERA              |                           |

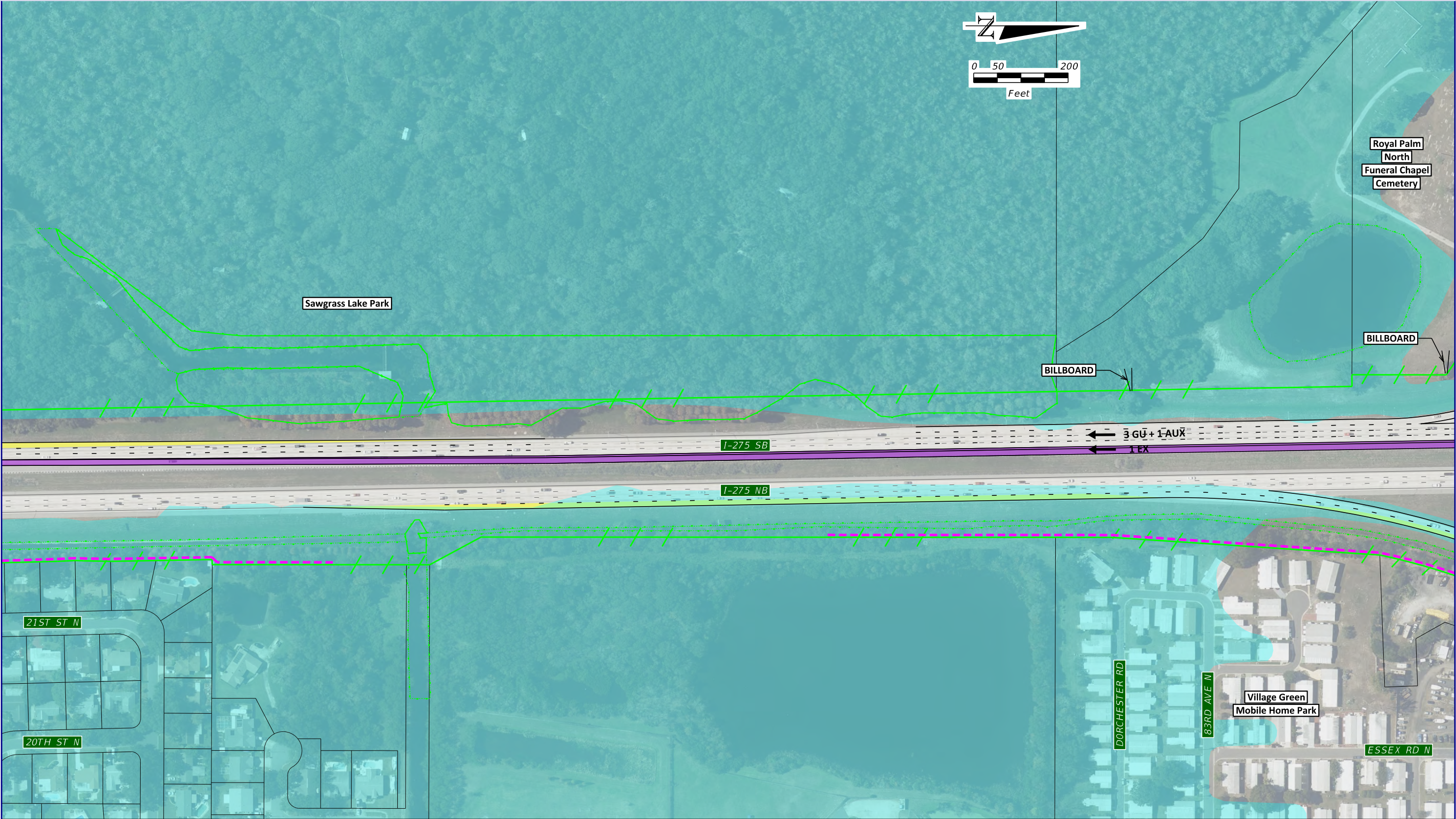
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## CONCEPT PLANS LANE CONTINUITY

SHEET  
NO.

18





LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION
	STARTER WIDENING		BARRIER WALL		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA
	HISTORIC SITE		RIGHT OF WAY						

EX = EXPRESS TOLL LANES  
 GU = GENERAL USE LANES  
 AUX = AUXILIARY LANES

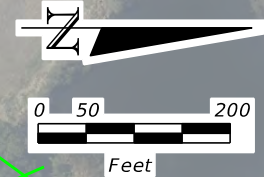
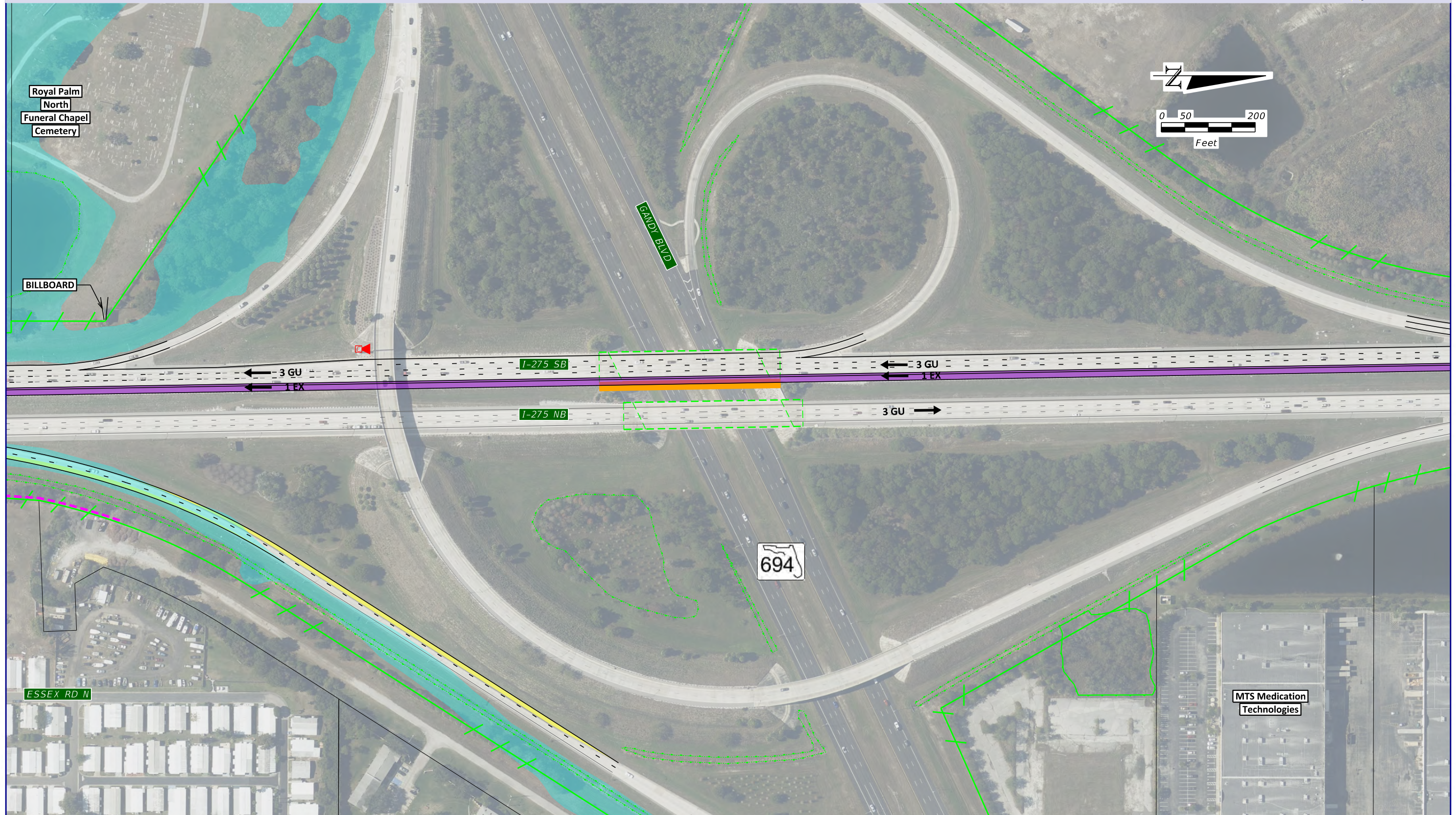
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## CONCEPT PLANS EXPRESS MASTER PLAN

SHEET  
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19





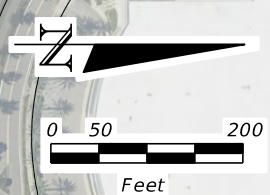
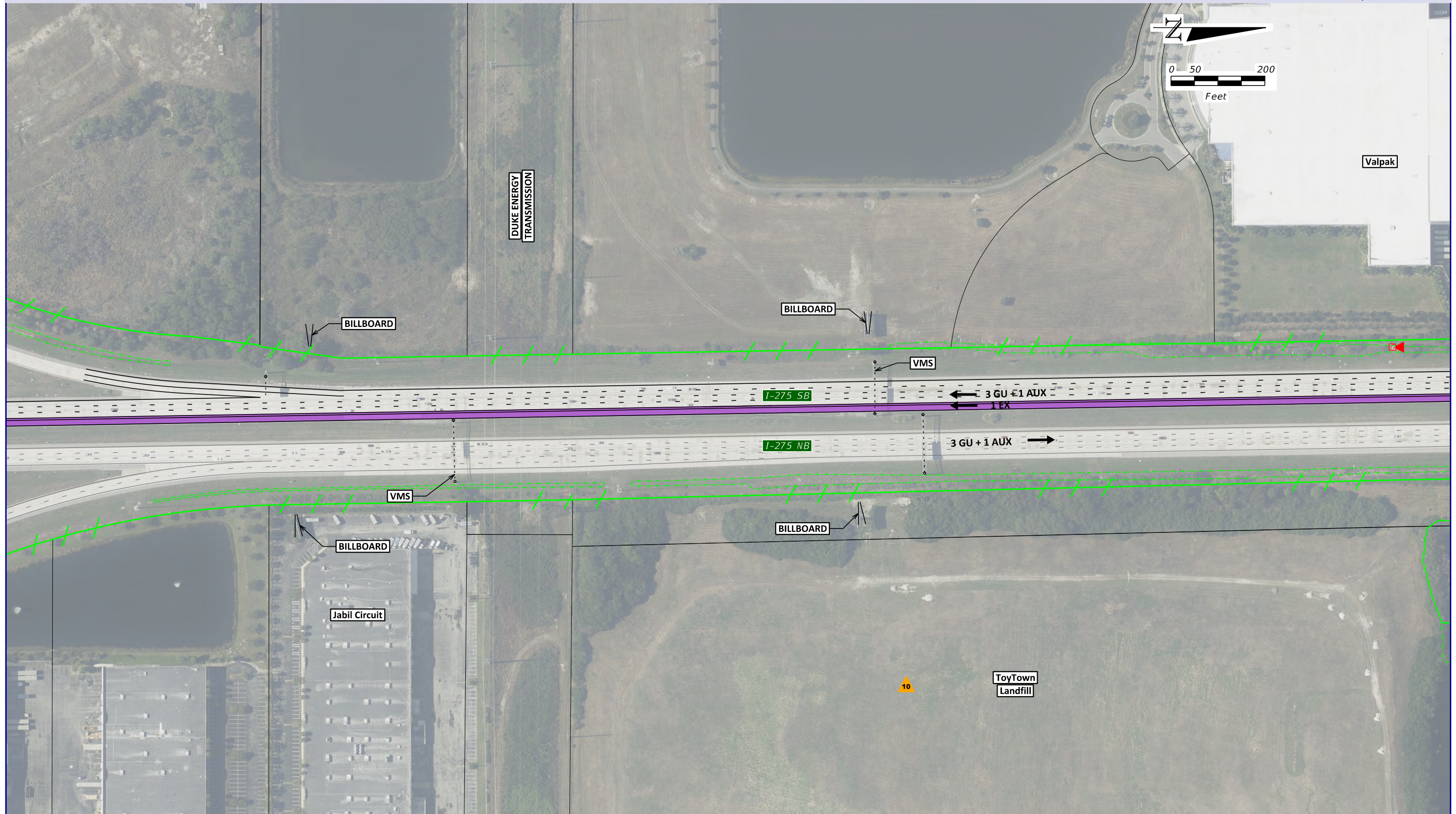
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CONTINUITY WIDENING	BRIDGE WIDENING	WETLANDS	FLOOD PLAINS	OVERHEAD SIGN STRUCTURE	EX = EXPRESS TOLL LANES
MASTER WIDENING	BRIDGES	SURFACE WATER	CONTINUOUS SEA GRASS	CONTAMINATION	GU = GENERAL USE LANES
STARTER WIDENING	BARRIER WALL	MANGROVES	DISCONTINUOUS SEA GRASS	ITS CAMERA	AUX = AUXILIARY LANES
HISTORIC SITE	RIGHT OF WAY				Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS MASTER PLAN

SHEET  
NO.  
20

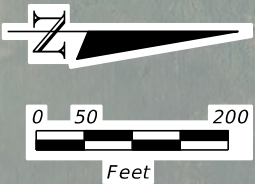
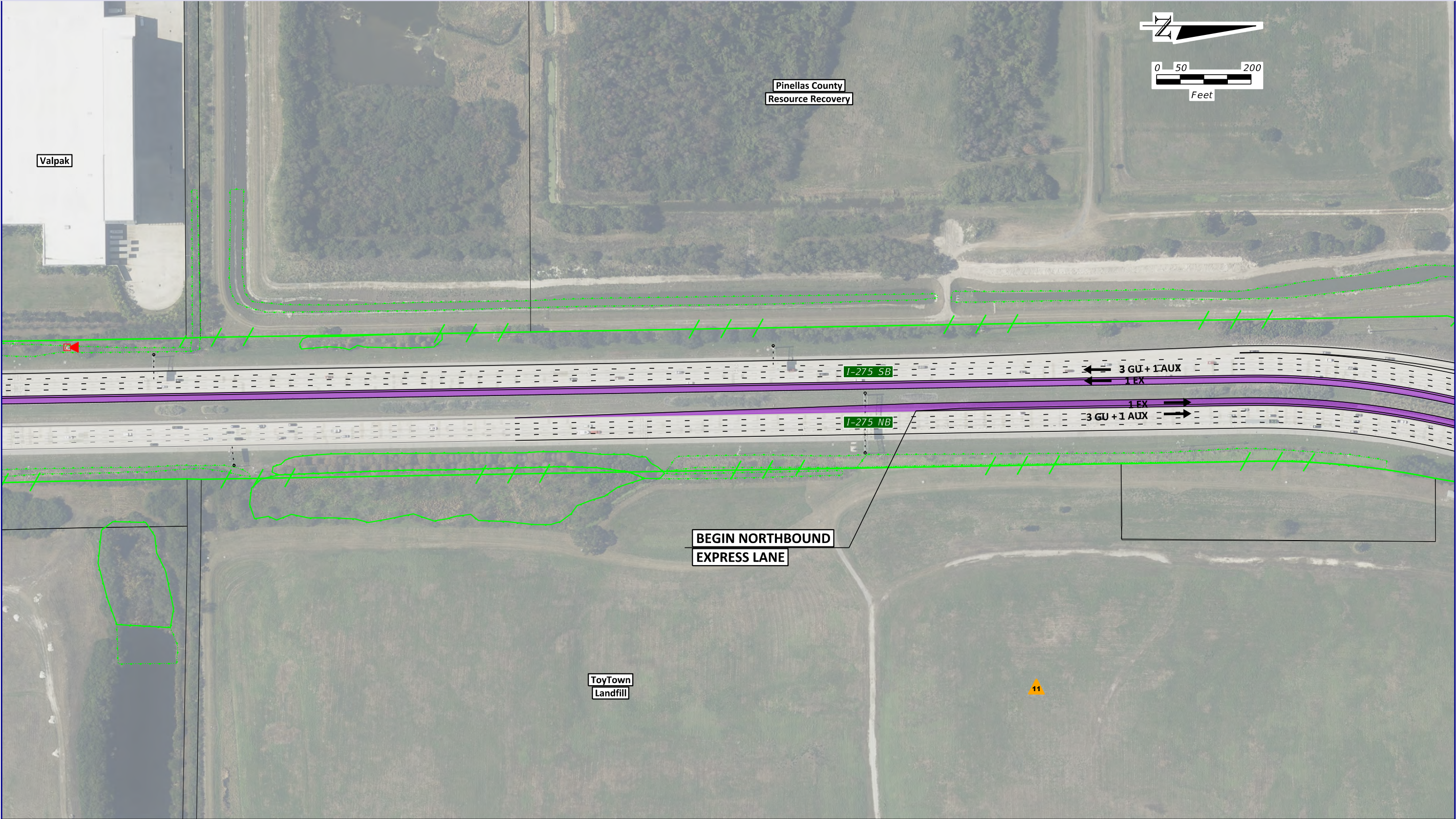




LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION
	STARTER WIDENING		BARRIER WALL		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA
	HISTORIC SITE		RIGHT OF WAY						

EX = EXPRESS TOLL LANES  
 GU = GENERAL USE LANES  
 AUX = AUXILIARY LANES  
 Aerial Photos Dec. '13 - Feb. '14





LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION
	STARTER WIDENING		BARRIER WALL		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA
	HISTORIC SITE		RIGHT OF WAY						

EX = EXPRESS TOLL LANES  
 GU = GENERAL USE LANES  
 AUX = AUXILIARY LANES

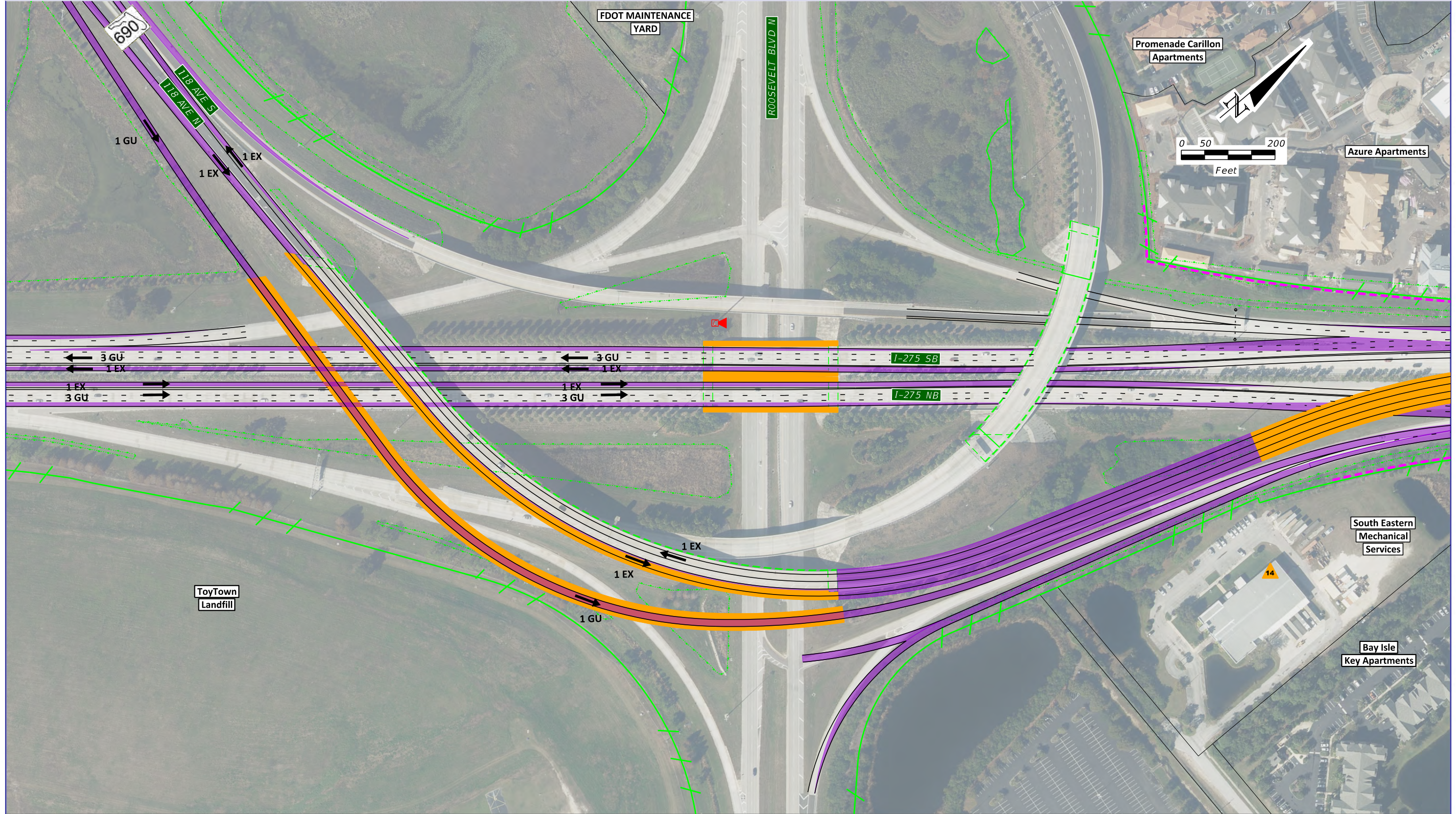
Aerial Photos Dec. '13 - Feb. '14

# CONCEPT PLANS EXPRESS MASTER PLAN









## LEGEND:

- CONTINUITY WIDENING
- MASTER WIDENING
- STARTER WIDENING

- BRIDGE WIDENING
- BRIDGES
- BARRIER WALL
- HISTORIC SITE

- WETLANDS
- SURFACE WATER
- MANGROVES
- RIGHT OF WAY

- FLOOD PLAINS
- CONTINUOUS SEA GRASS
- DISCONTINUOUS SEA GRASS

- OVERHEAD SIGN STRUCTURE
- CONTAMINATION
- ITS CAMERA

- EX = EXPRESS TOLL LANES
- GU = GENERAL USE LANES
- AUX = AUXILIARY LANES

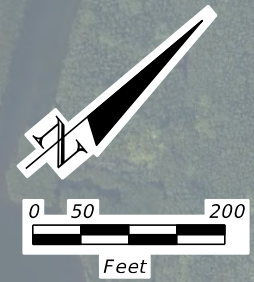
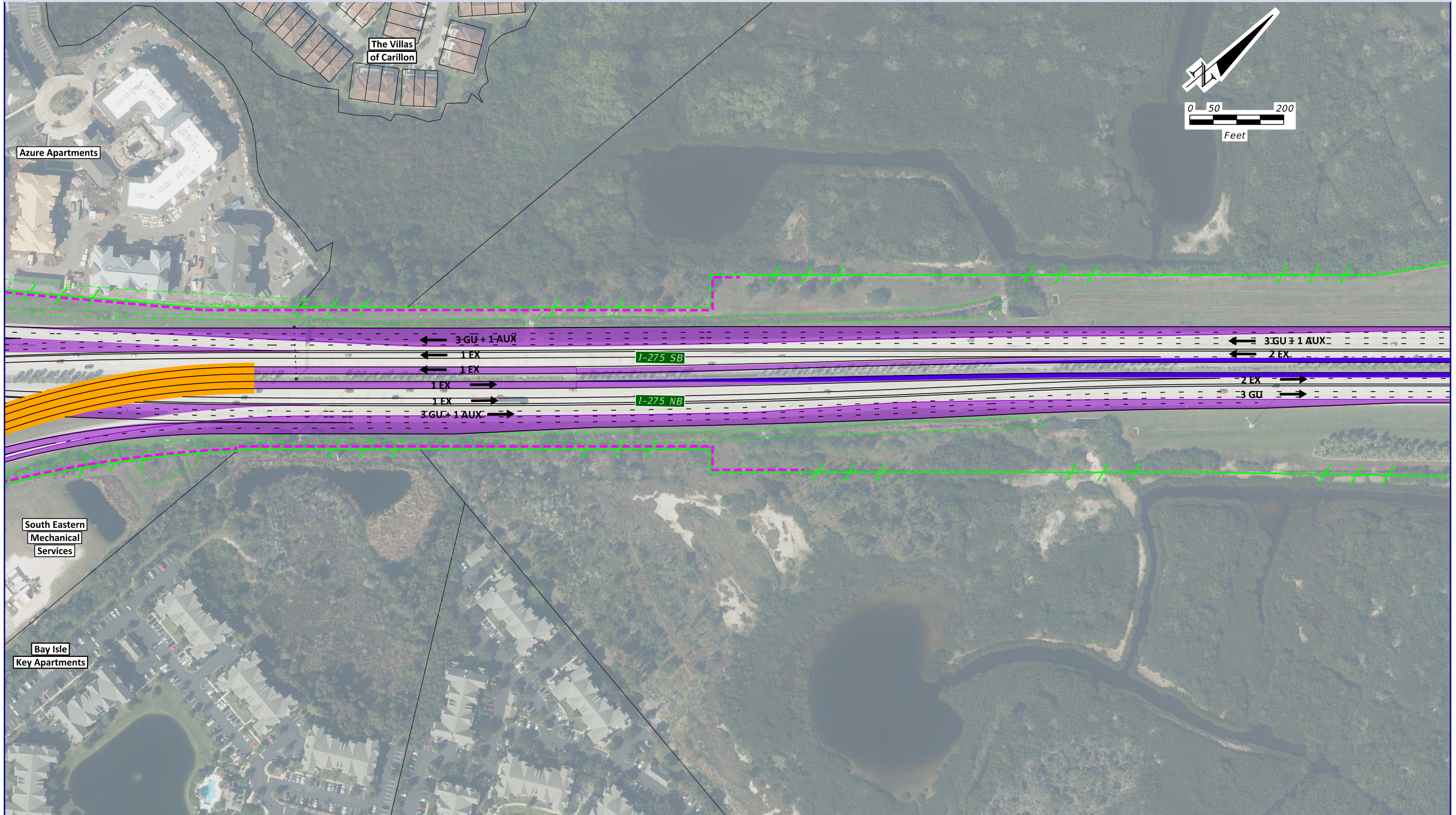
Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS MASTER PLAN

SHEET  
NO.

24



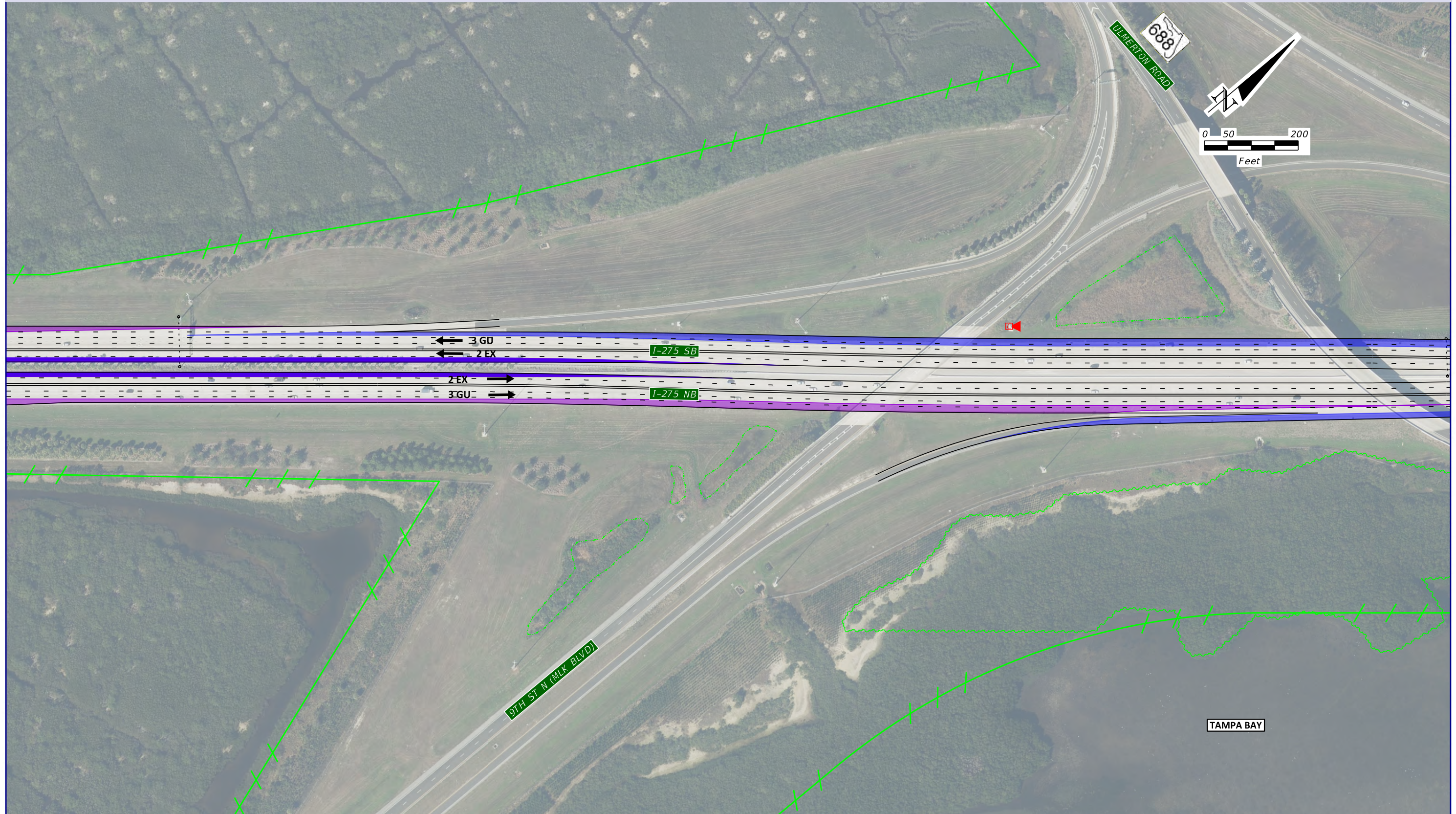


LEGEND:					
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<span style="background-color: blue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> MASTER WIDENING	<span style="border: 2px dashed green; display: inline-block; width: 15px; height: 10px;"></span> BRIDGES	<span style="color: blue; font-weight: bold;">---</span> SURFACE WATER	<span style="background-color: lightgreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> CONTINUOUS SEA GRASS	<span style="color: orange; font-weight: bold;">x</span> CONTAMINATION	GU = GENERAL USE LANES
<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> STARTER WIDENING	<span style="border: 2px solid orange; display: inline-block; width: 15px; height: 10px;"></span> BARRIER WALL	<span style="color: green; font-weight: bold;">~</span> MANGROVES	<span style="background-color: pink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> DISCONTINUOUS SEA GRASS	<span style="color: red; font-weight: bold;">x</span> ITS CAMERA	AUX = AUXILIARY LANES
	<span style="border: 2px solid blue; display: inline-block; width: 15px; height: 10px;"></span> HISTORIC SITE	<span style="color: green; font-weight: bold;">-/-/-/</span> RIGHT OF WAY			

## CONCEPT PLANS EXPRESS MASTER PLAN

SHEET  
NO.  
25

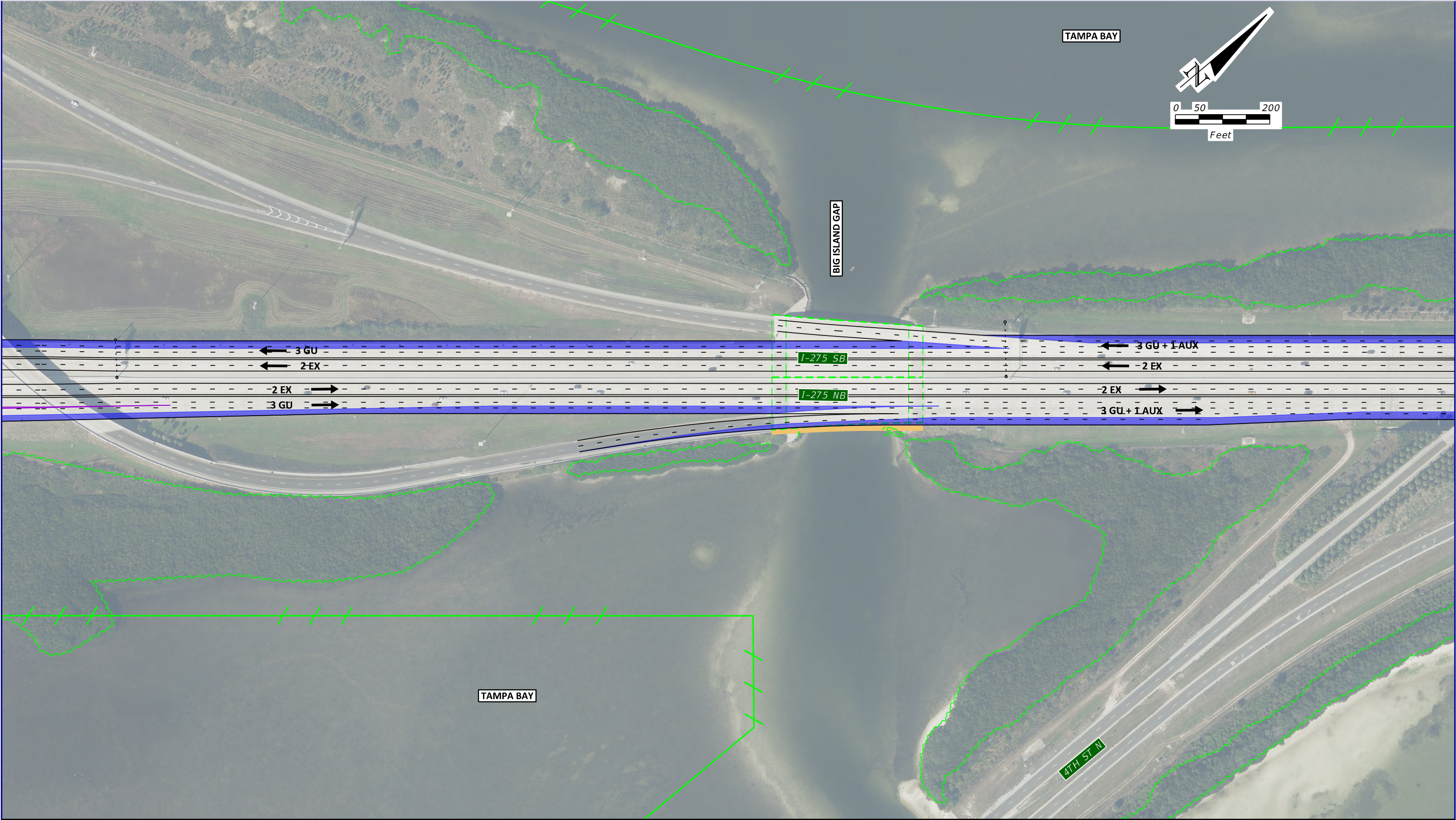




LEGEND:					
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS
	MASTER WIDENING		BRIDGES		SURFACE WATER
	STARTER WIDENING		BARRIER WALL		MANGROVES
			HISTORIC SITE		RIGHT OF WAY
			FLOOD PLAINS		CONTINUOUS SEA GRASS
			DISCONTINUOUS SEA GRASS		OVERHEAD SIGN STRUCTURE
			CONTAMINATION		ITS CAMERA
					EX = EXPRESS TOLL LANES
					GU = GENERAL USE LANES
					AUX = AUXILIARY LANES

Aerial Photos Dec. '13 - Feb. '14





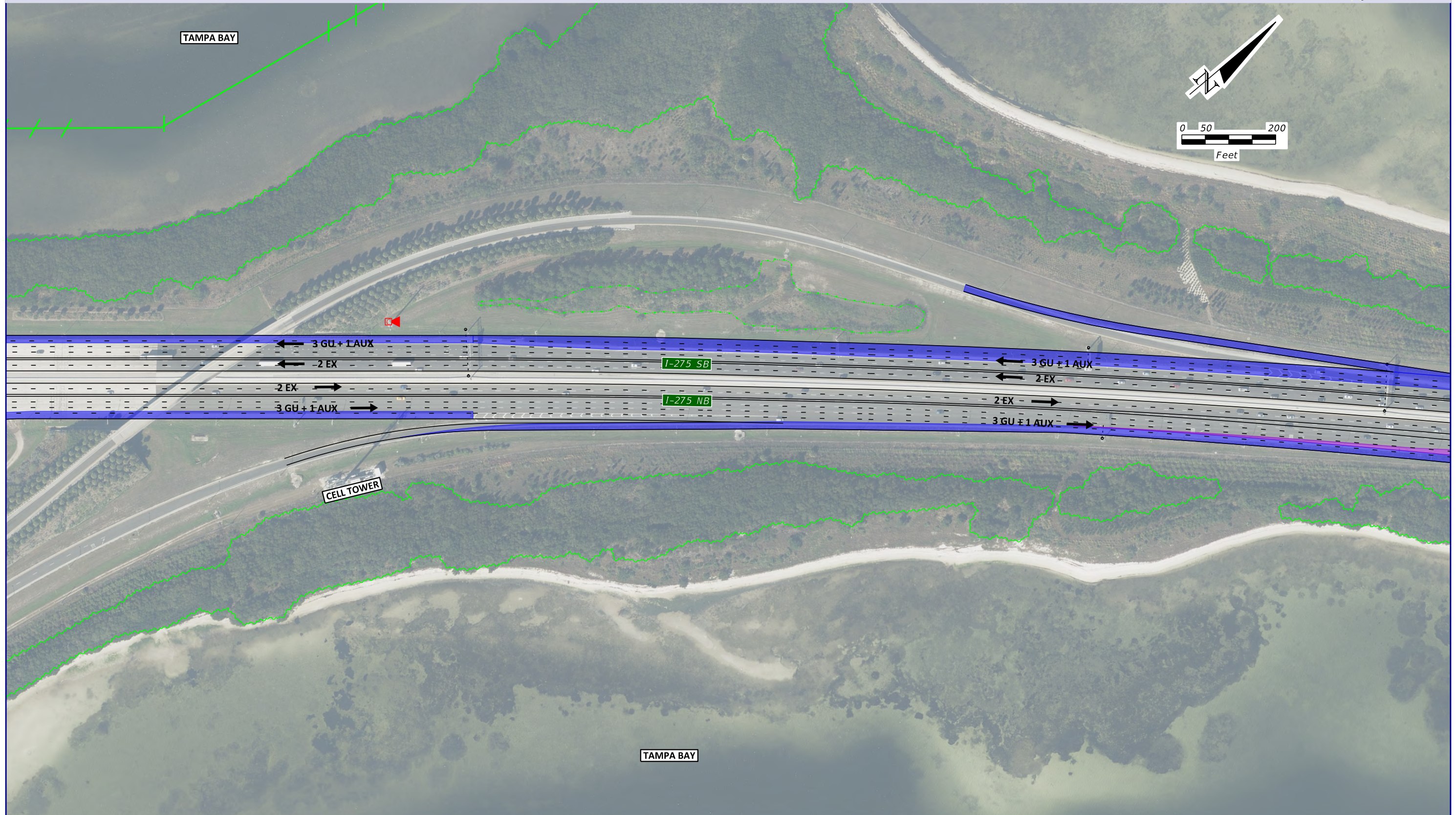
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	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION
	STARTER WIDENING		BARRIER WALL		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA
			HISTORIC SITE		RIGHT OF WAY				

EX = EXPRESS TOLL LANES  
GU = GENERAL USE LANES  
AUX = AUXILIARY LANES

Aerial Photos Dec. '13 - Feb. '14

CONCEPT PLANS  
EXPRESS MASTER PLAN





**LEGEND:**

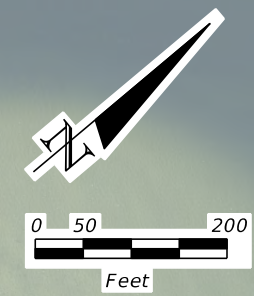
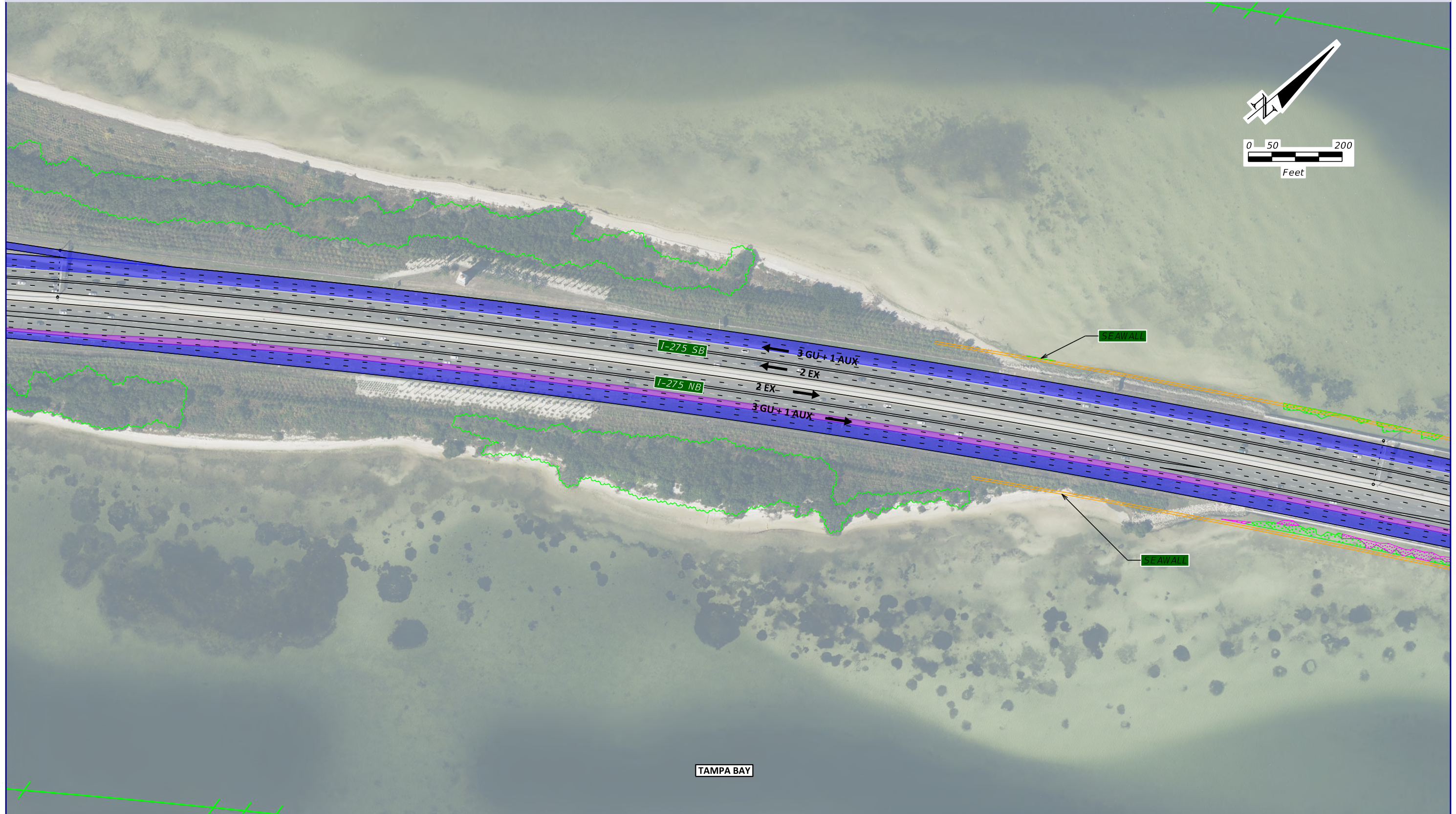
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE	<b>EX = EXPRESS TOLL LANES</b>
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION	<b>GU = GENERAL USE LANES</b>
	STARTER WIDENING		BARRIER WALL		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA	<b>AUX = AUXILIARY LANES</b>
			HISTORIC SITE		RIGHT OF WAY					<b>Aerial Photos Dec. '13 - Feb. '14</b>

## CONCEPT PLANS EXPRESS MASTER PLAN

SHEET  
NO.

28

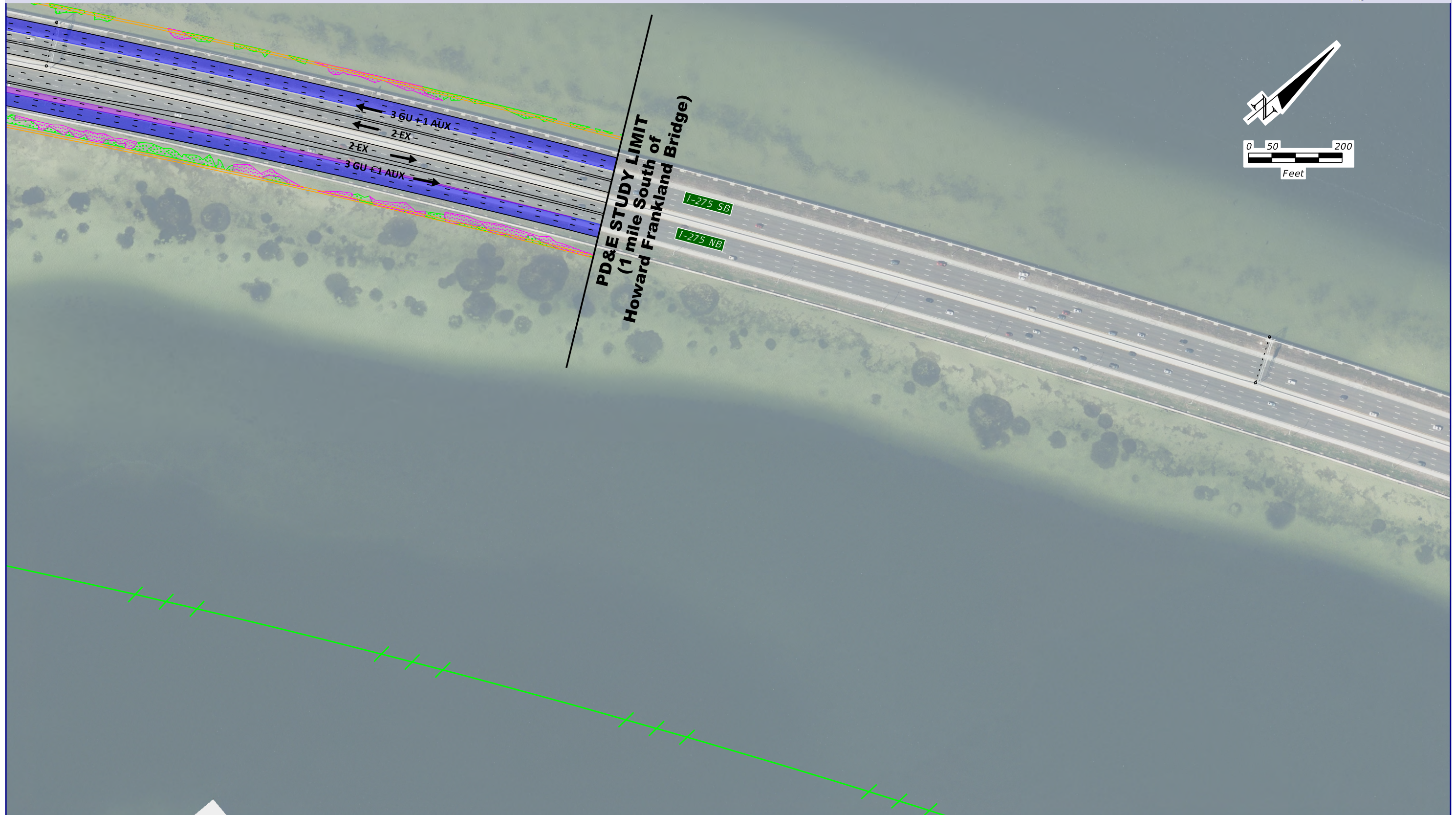




LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION
	STARTER WIDENING		BARRIER WALL		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA
	HISTORIC SITE		RIGHT OF WAY						

EX = EXPRESS TOLL LANES  
 GU = GENERAL USE LANES  
 AUX = AUXILIARY LANES  
 Aerial Photos Dec. '13 - Feb. '14





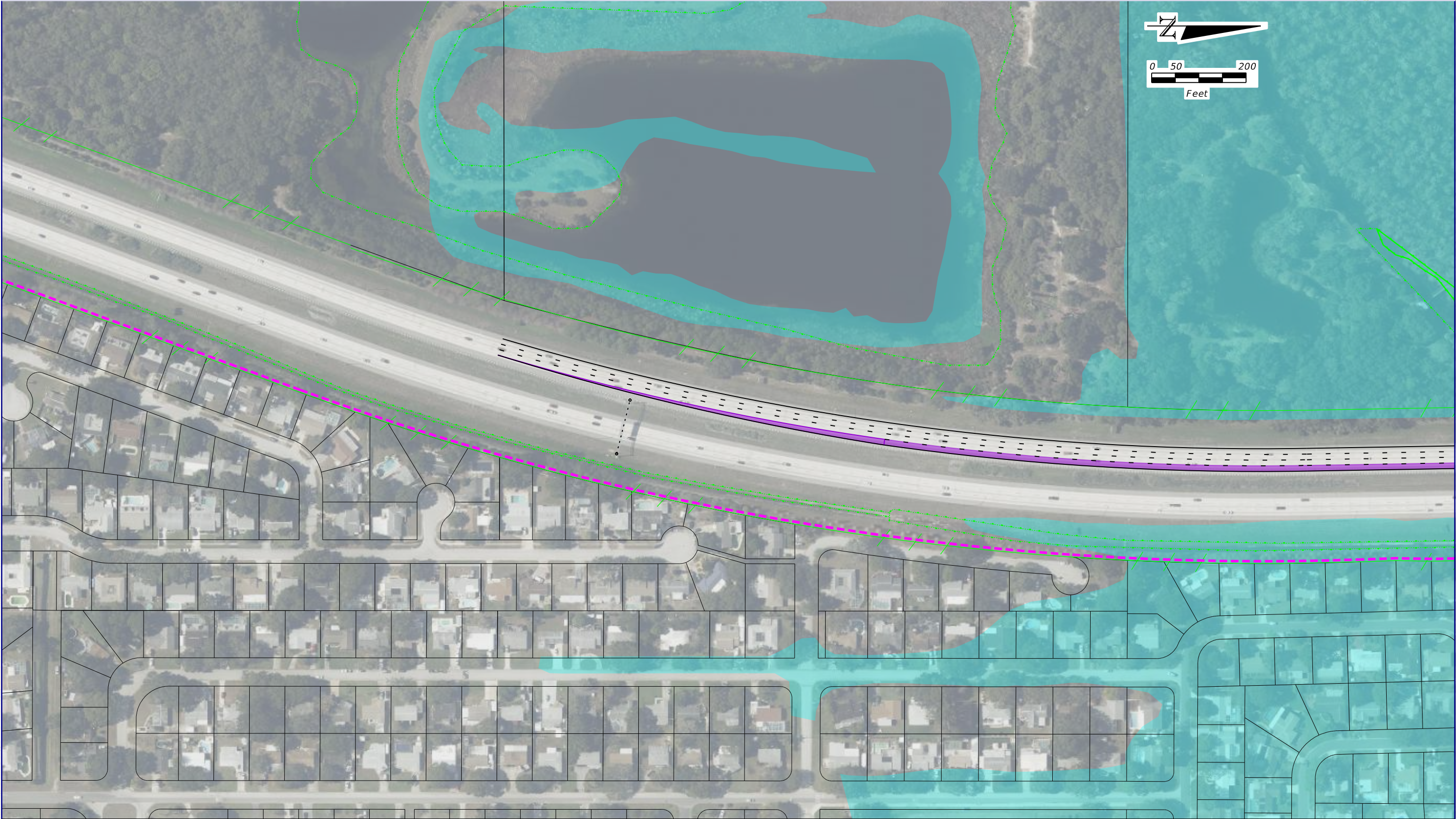
LEGEND:					
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	MASTER WIDENING		BRIDGES		SURFACE WATER
	STARTER WIDENING		BARRIER WALL		MANGROVES
			HISTORIC SITE		RIGHT OF WAY
			FLOOD PLAINS		CONTINUOUS SEA GRASS
			DISCONTINUOUS SEA GRASS		OVERHEAD SIGN STRUCTURE
			CONTAMINATION		ITS CAMERA
					EX = EXPRESS TOLL LANES
					GU = GENERAL USE LANES
					AUX = AUXILIARY LANES

Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS MASTER PLAN

SHEET  
NO.  
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LEGEND:					
	STARTER WIDENING		BRIDGE WIDENING		WETLANDS
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER
	BARRIER WALL		RIGHT OF WAY		MANGROVES
			FLOOD PLAINS		CONTINUOUS SEA GRASS
			DISCONTINUOUS SEA GRASS		OVERHEAD SIGN STRUCTURE
			CONTAMINATION		ITS CAMERA
			NOISE WALL		

CONCEPT PLANS  
EXPRESS STARTER PLAN

SHEET  
NO.

Aerial Photos Dec. '13 - Feb. '14

rhutchinson 7/8/2016 4:17:12 PM H:\PD&E\I-275ManagedLanesPinellas\42450112201\roadway\PLANRD19\_Starter.DGN





**LEGEND:**

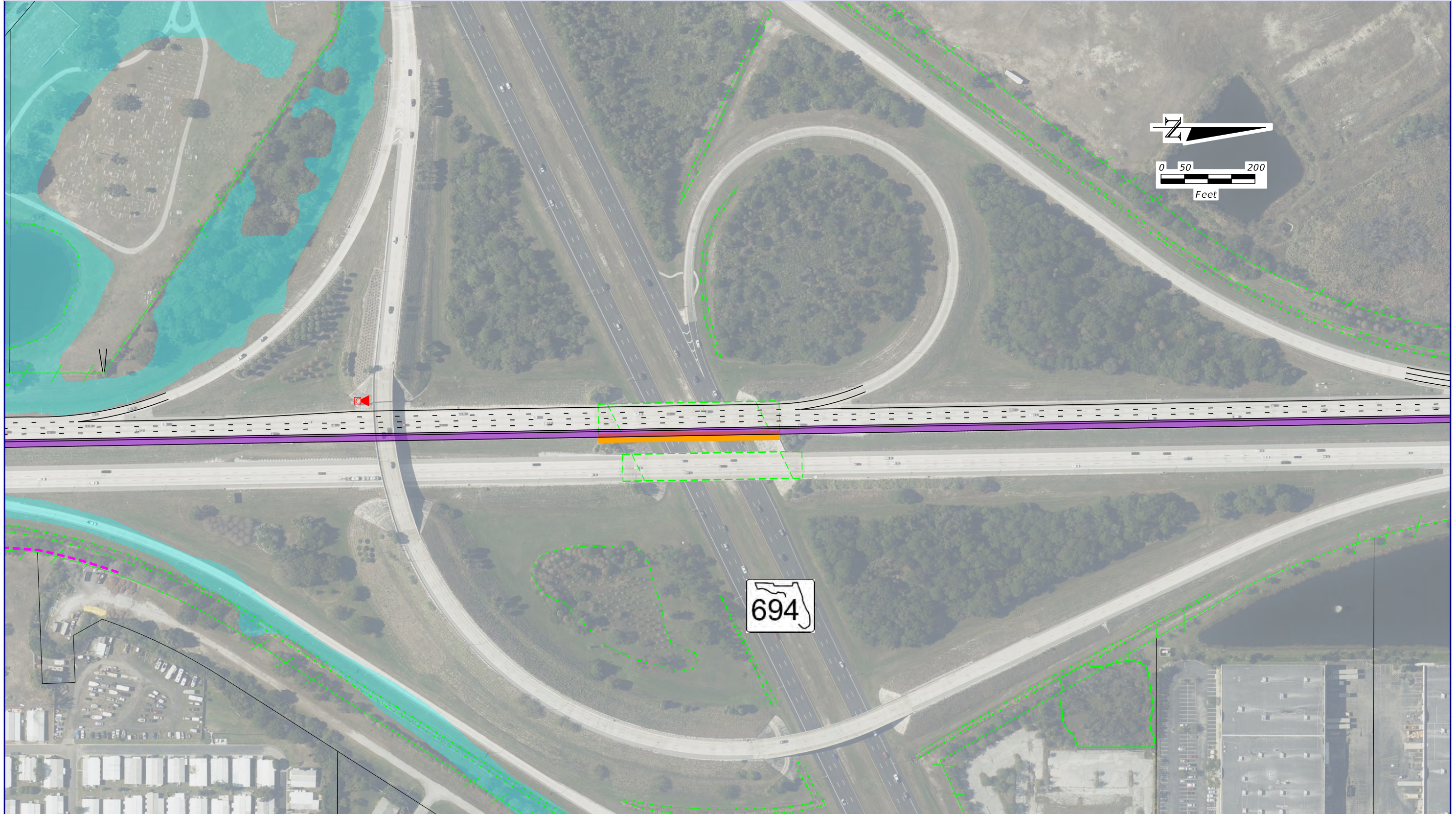


**Aerial Photos Dec. '13 - Feb. '14**

CONCEPT PLANS  
EXPRESS STARTER PLAN

*SHEET*  
*NO.*





**LEGEND:**

- |                         |                        |                      |                                |                                |                   |
|-------------------------|------------------------|----------------------|--------------------------------|--------------------------------|-------------------|
| <b>STARTER WIDENING</b> | <b>BRIDGE WIDENING</b> | <b>WETLANDS</b>      | <b>FLOOD PLAINS</b>            | <b>OVERHEAD SIGN STRUCTURE</b> | <b>NOISE WALL</b> |
| <b>PAVEMENT REMOVAL</b> | <b>BRIDGES</b>         | <b>SURFACE WATER</b> | <b>CONTINUOUS SEA GRASS</b>    | <b>CONTAMINATION</b>           |                   |
| <b>BARRIER WALL</b>     | <b>RIGHT OF WAY</b>    | <b>MANGROVES</b>     | <b>DISCONTINUOUS SEA GRASS</b> | <b>ITS CAMERA</b>              |                   |

Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

SHEET  
NO.

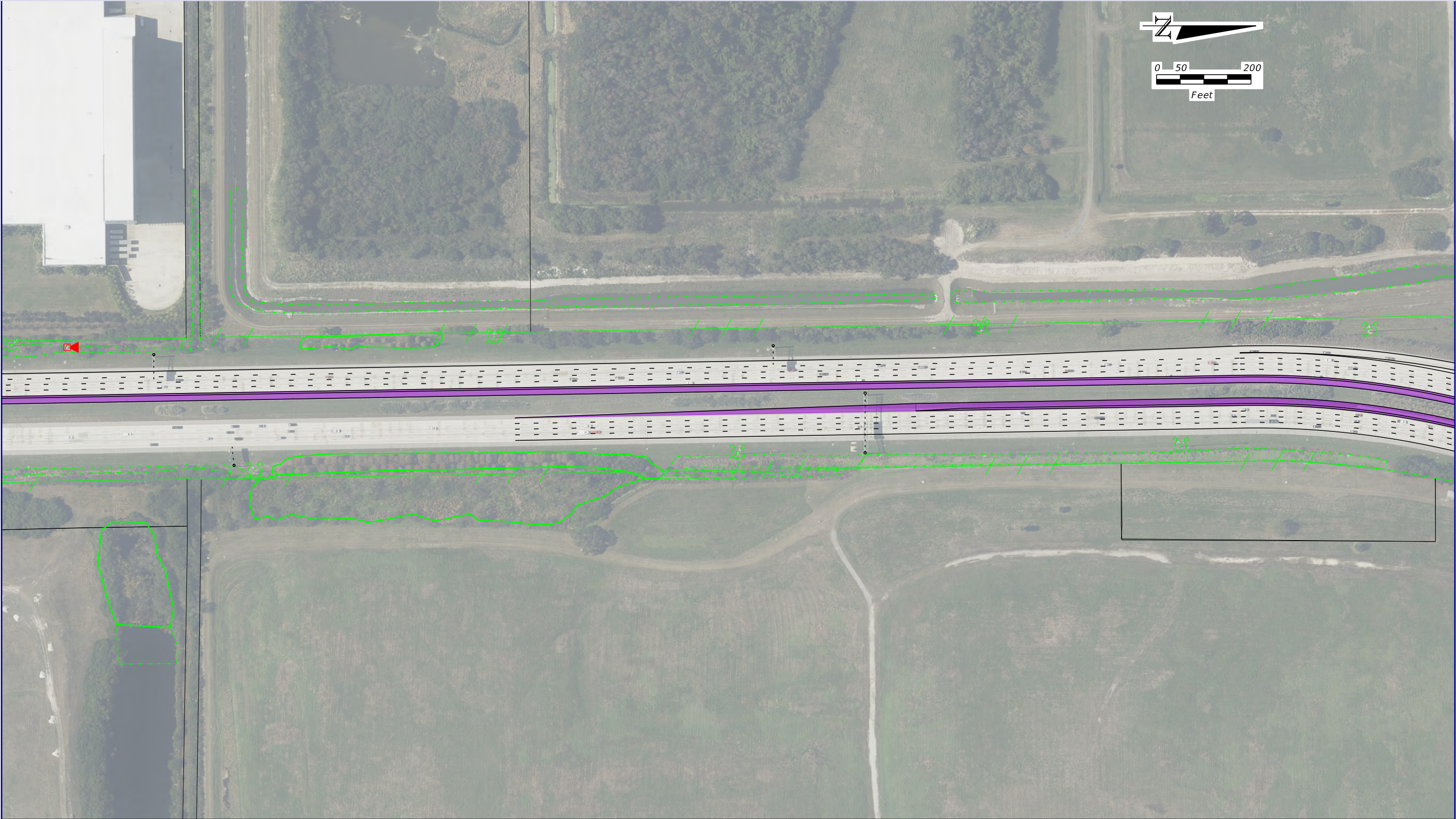
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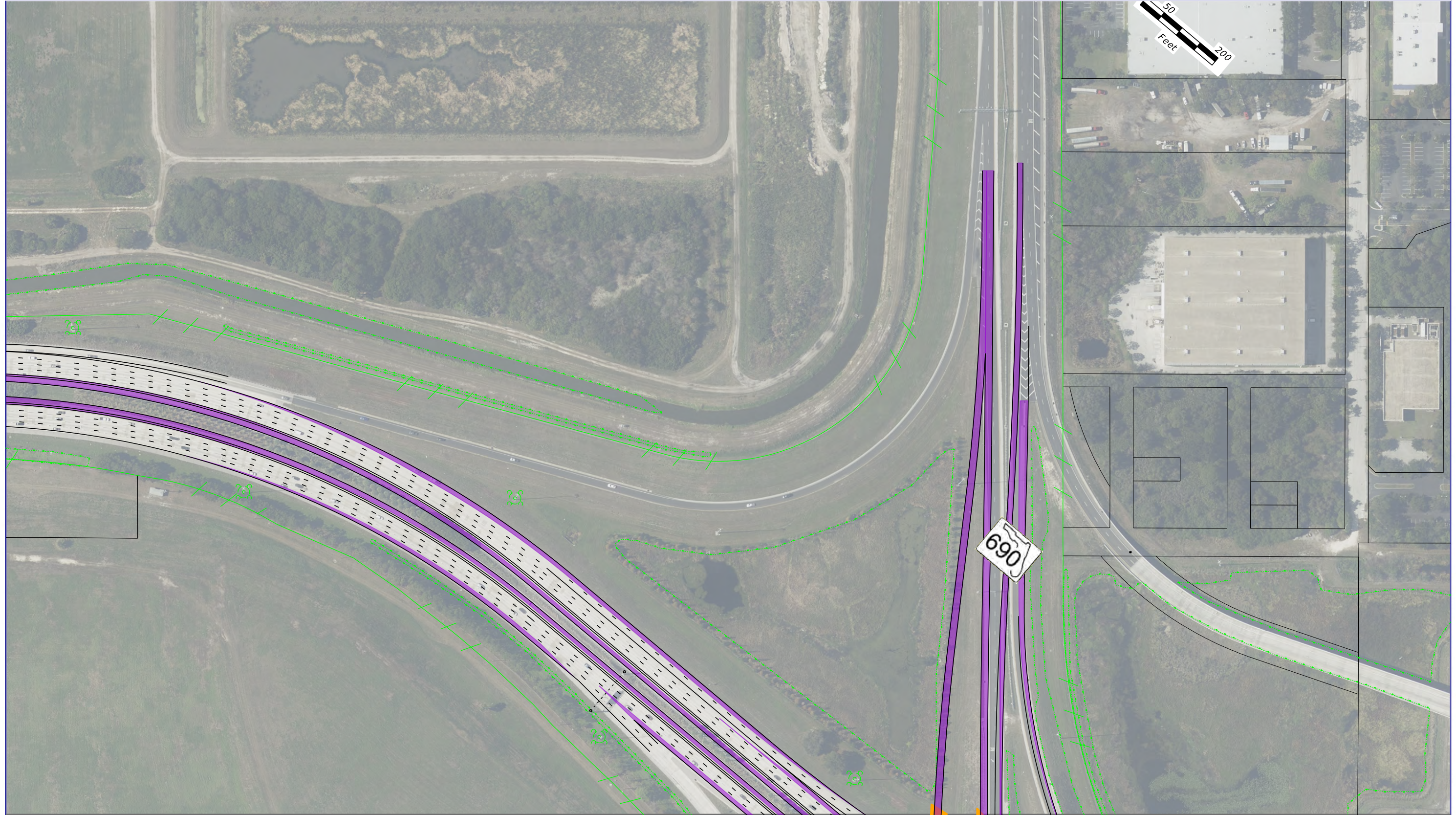
<b>LEGEND:</b>					
<b>STARTER WIDENING</b>	<b>BRIDGE WIDENING</b>	<b>WETLANDS</b>	<b>FLOOD PLAINS</b>	<b>OVERHEAD SIGN STRUCTURE</b>	<b>NOISE WALL</b>
<b>PAVEMENT REMOVAL</b>	<b>BRIDGES</b>	<b>SURFACE WATER</b>	<b>CONTINUOUS SEA GRASS</b>	<b>CONTAMINATION</b>	
<b>BARRIER WALL</b>	<b>RIGHT OF WAY</b>	<b>MANGROVES</b>	<b>DISCONTINUOUS SEA GRASS</b>	<b>ITS CAMERA</b>	
<b>Aerial Photos Dec. '13 - Feb. '14</b>					




















<b>LEGEND:</b>					
<b>STARTER WIDENING</b>	<b>BRIDGE WIDENING</b>	<b>WETLANDS</b>	<b>FLOOD PLAINS</b>	<b>OVERHEAD SIGN STRUCTURE</b>	<b>NOISE WALL</b>
<b>PAVEMENT REMOVAL</b>	<b>BRIDGES</b>	<b>SURFACE WATER</b>	<b>CONTINUOUS SEA GRASS</b>	<b>CONTAMINATION</b>	
<b>BARRIER WALL</b>	<b>RIGHT OF WAY</b>	<b>MANGROVES</b>	<b>DISCONTINUOUS SEA GRASS</b>	<b>ITS CAMERA</b>	
Aerial Photos Dec. '13 - Feb. '14					





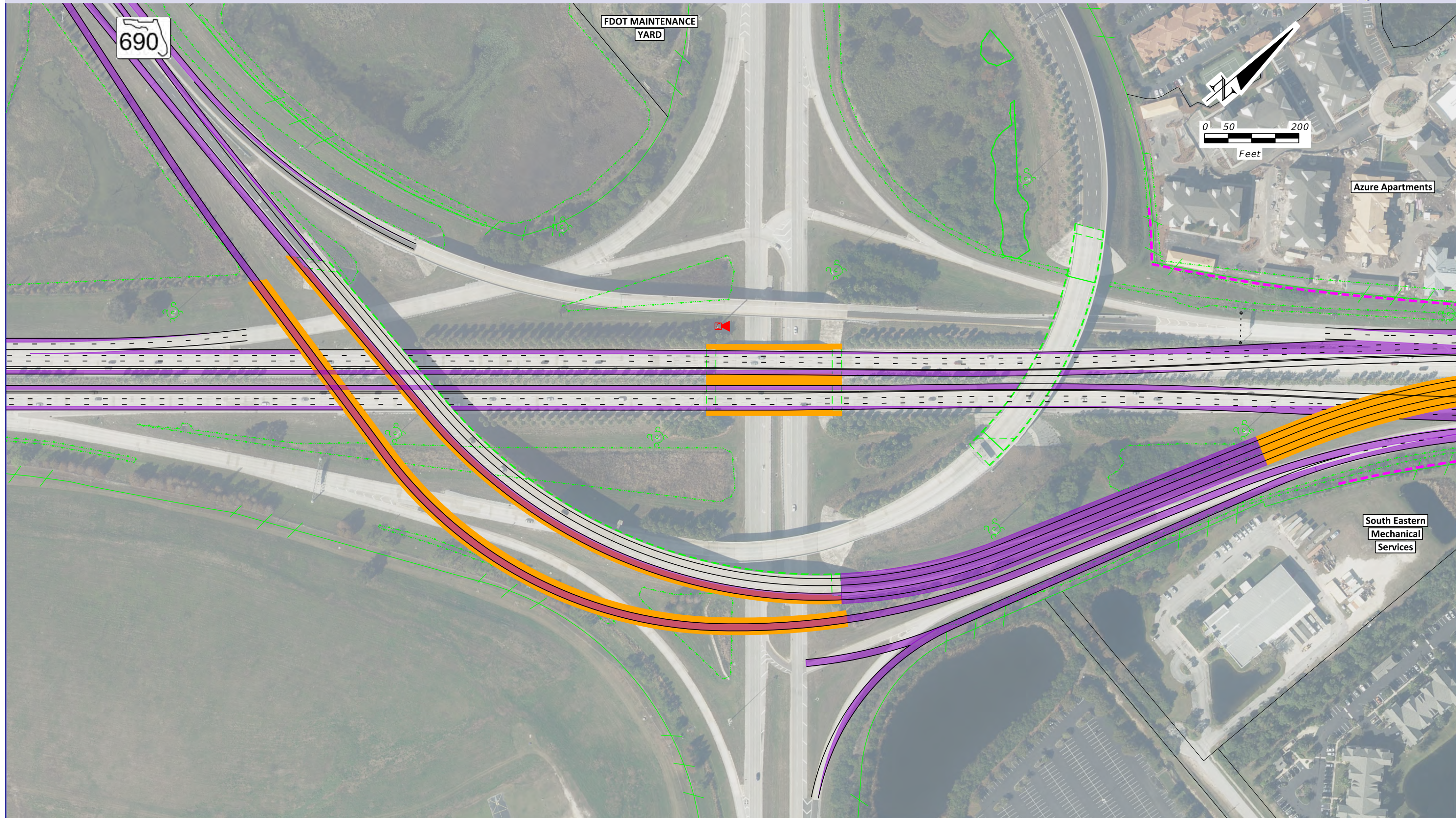
LEGEND:											
	STARTER WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE		NOISE WALL
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION		
	BARRIER WALL		RIGHT OF WAY		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA		

Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

SHEET  
NO.  
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## LEGEND:

STARTER WIDENING	BRIDGE WIDENING	WETLANDS	FLOOD PLAINS	OVERHEAD SIGN STRUCTURE	NOISE WALL
PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	CONTINUOUS SEA GRASS	CONTAMINATION	
BARRIER WALL	RIGHT OF WAY	MANGROVES	DISCONTINUOUS SEA GRASS	ITS CAMERA	

Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

SHEET  
NO.

37

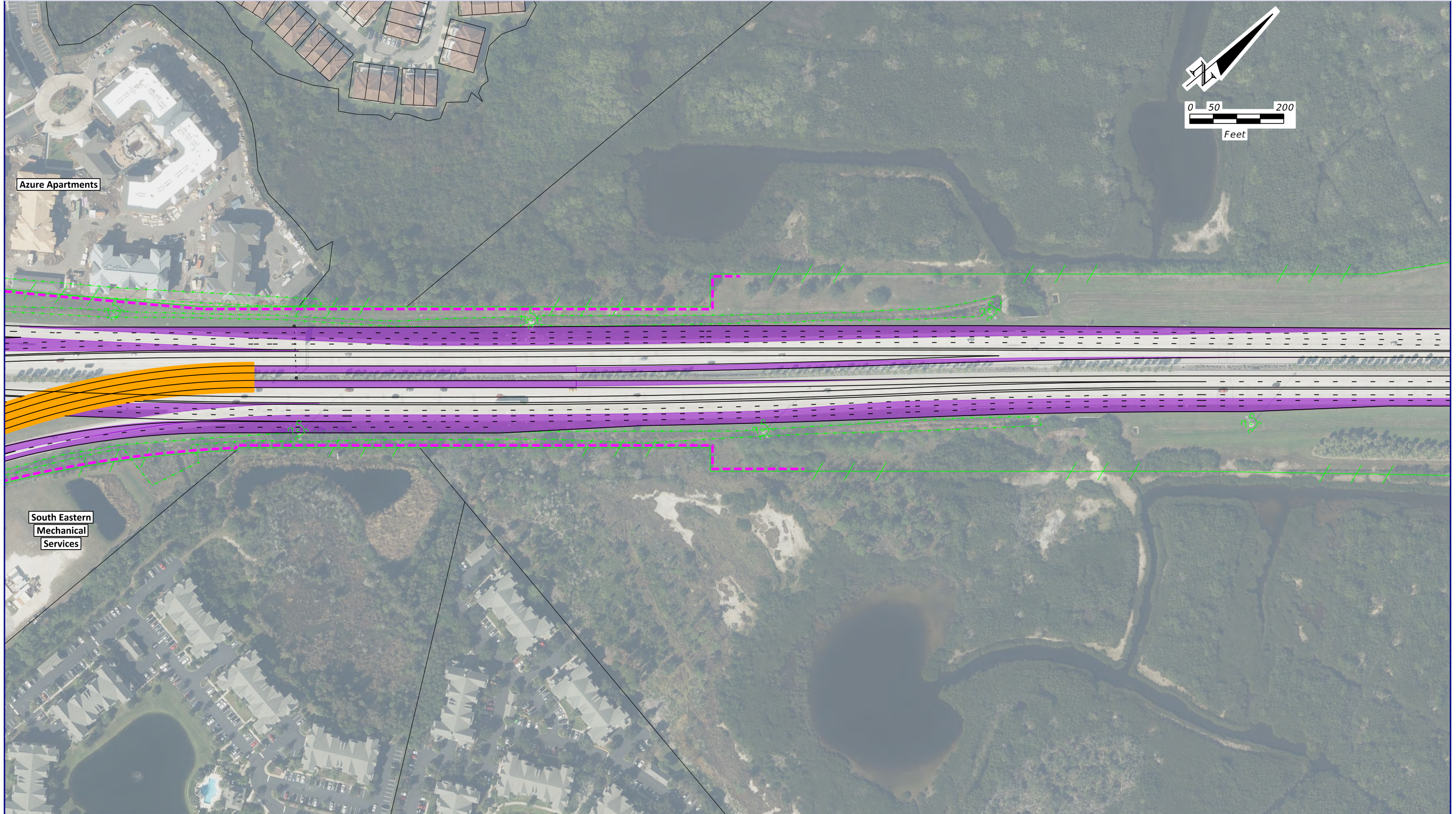
SUSERS

SDATES

STIMES

SFILES





**LEGEND:**

	STARTER WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE		NOISE WALL
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION		
	BARRIER WALL		RIGHT OF WAY		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA		

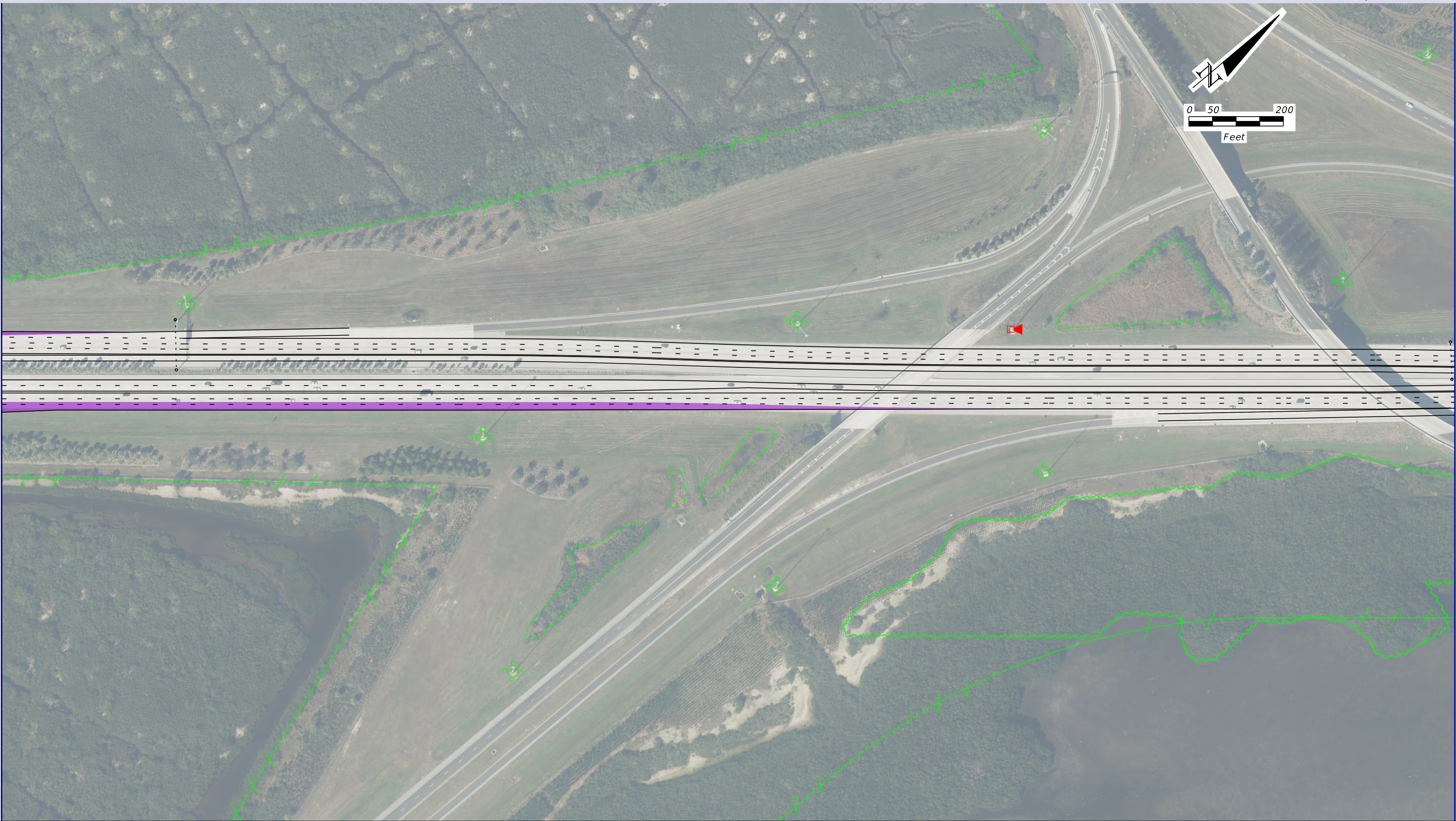
Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

SHEET  
NO.

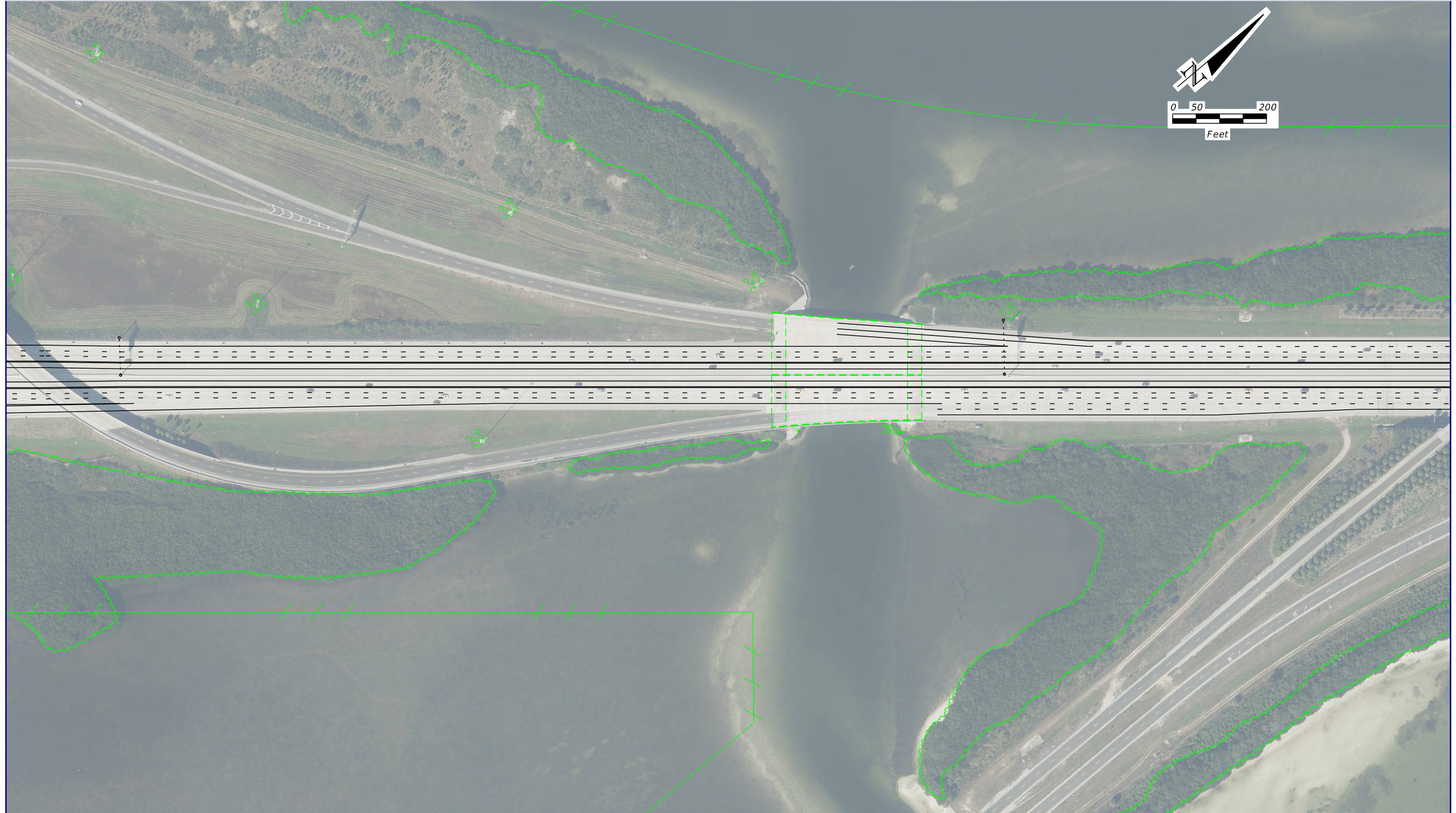
38





LEGEND:					
	STARTER WIDENING		BRIDGE WIDENING		WETLANDS
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER
	BARRIER WALL		RIGHT OF WAY		MANGROVES
			FLOOD PLAINS		CONTINUOUS SEA GRASS
			DISCONTINUOUS SEA GRASS		OVERHEAD SIGN STRUCTURE
			ITS CAMERA		NOISE WALL





**LEGEND:**

<b>STARTER WIDENING</b>	<b>BRIDGE WIDENING</b>	<b>WETLANDS</b>	<b>FLOOD PLAINS</b>	<b>OVERHEAD SIGN STRUCTURE</b>	<b>NOISE WALL</b>
<b>PAVEMENT REMOVAL</b>	<b>BRIDGES</b>	<b>SURFACE WATER</b>	<b>CONTINUOUS SEA GRASS</b>	<b>CONTAMINATION</b>	
<b>BARRIER WALL</b>	<b>RIGHT OF WAY</b>	<b>MANGROVES</b>	<b>DISCONTINUOUS SEA GRASS</b>	<b>ITS CAMERA</b>	

Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

SHEET  
NO.

40





## LEGEND:

	STARTER WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE		NOISE WALL
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		CONTAMINATION		
	BARRIER WALL		RIGHT OF WAY		MANGROVES		DISCONTINUOUS SEA GRASS		ITS CAMERA		

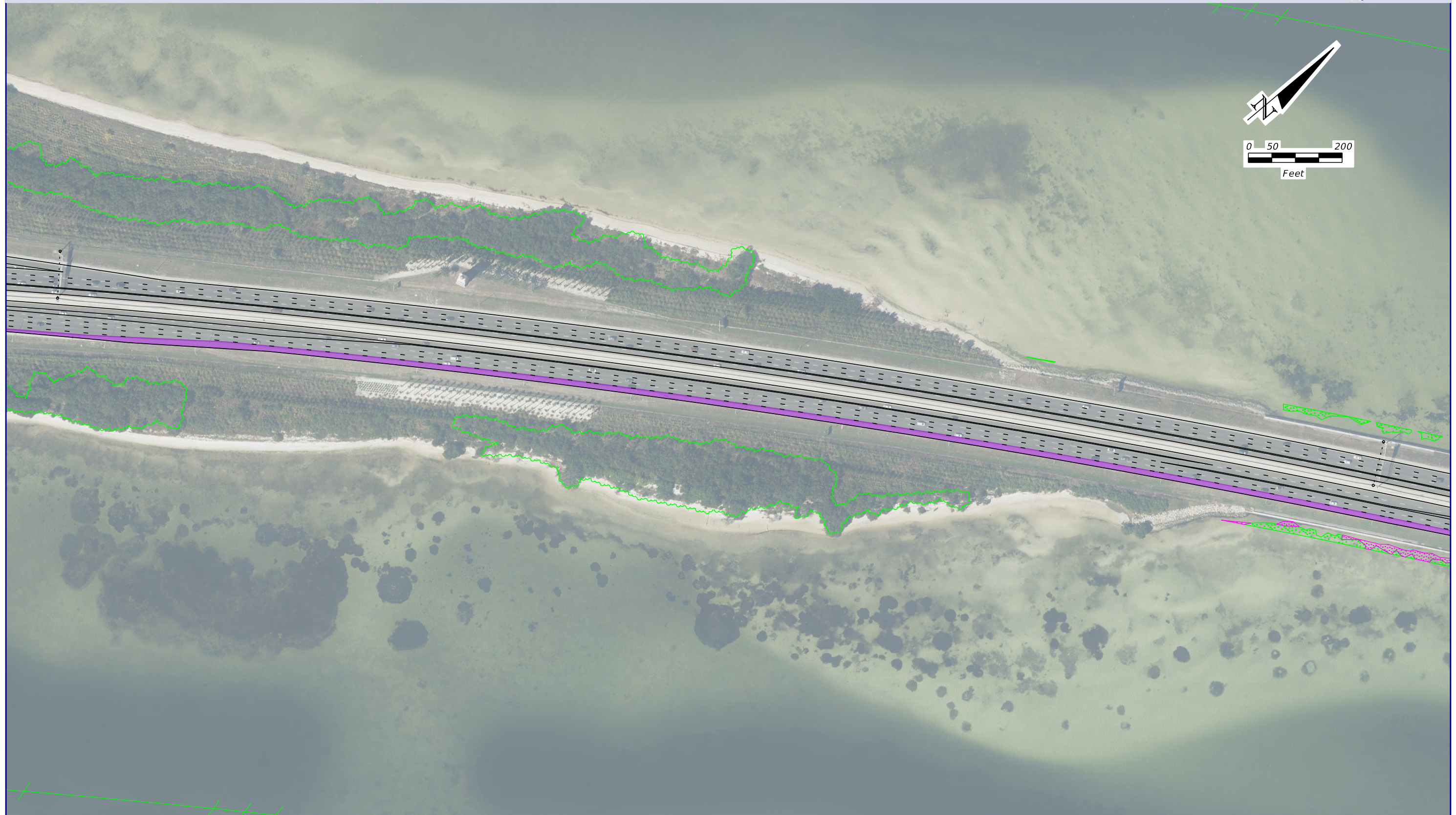
Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

















SHEET  
NO.

41





## LEGEND:

 <b>STARTER WIDENING</b>	 <b>BRIDGE WIDENING</b>	 <b>WETLANDS</b>	 <b>FLOOD PLAINS</b>	 <b>OVERHEAD SIGN STRUCTURE</b>	 <b>NOISE WALL</b>
 <b>PAVEMENT REMOVAL</b>	 <b>BRIDGES</b>	 <b>SURFACE WATER</b>	 <b>CONTINUOUS SEA GRASS</b>	 <b>CONTAMINATION</b>	
 <b>BARRIER WALL</b>	 <b>RIGHT OF WAY</b>	 <b>MANGROVES</b>	 <b>DISCONTINUOUS SEA GRASS</b>	 <b>ITS CAMERA</b>	

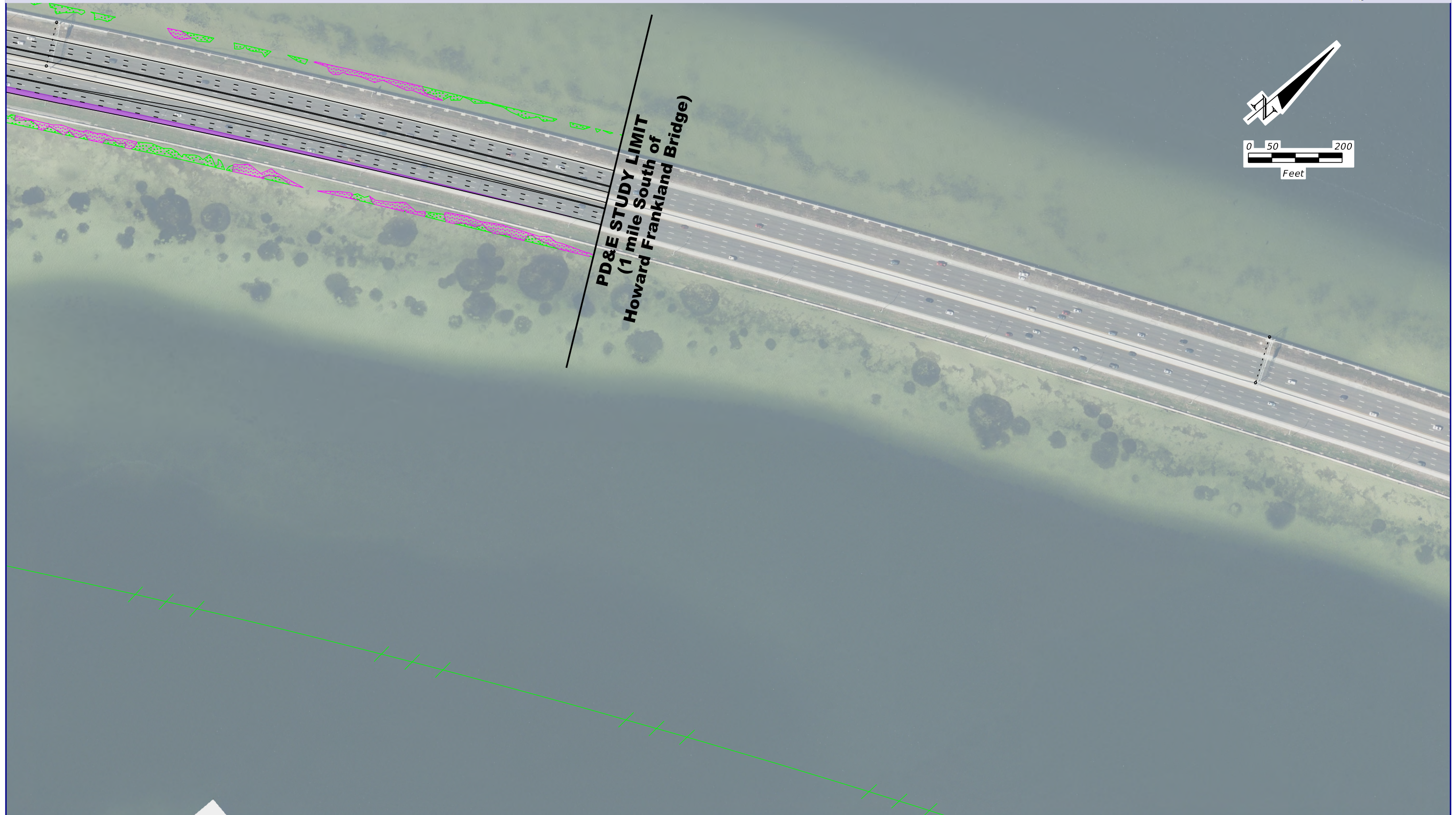
Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

SHEET  
NO.

42





## LEGEND:

STARTER WIDENING	BRIDGE WIDENING	WETLANDS	FLOOD PLAINS	OVERHEAD SIGN STRUCTURE	NOISE WALL
PAVEMENT REMOVAL	BRIDGES	SURFACE WATER	CONTINUOUS SEA GRASS	CONTAMINATION	
BARRIER WALL	RIGHT OF WAY	MANGROVES	DISCONTINUOUS SEA GRASS	ITS CAMERA	

Aerial Photos Dec. '13 - Feb. '14

## CONCEPT PLANS EXPRESS STARTER PLAN

SHEET  
NO.

43



## Page 1

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	1			2			3			4			5			6		
From/To:	South of 54th Ave S			54th Ave S to 26th Ave S			26h Ave S to 22nd Ave S			22nd Ave S to 31st St S			31st St S to 28th St S			28th St S to I-175		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	2	2	2	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 2 Aux	2 + 2 Aux	2 + 2 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	32000	32000	32000	42000	42000	42000	42000	42000	42000	52000	52000	52000	42000	42000	42000	42000	42000	42000
Speed: (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	3,283	3,283	3,283	4,309	4,309	4,309	4,309	4,309	4,309	5,335	5,335	5,335	4,309	4,309	4,309	4,309	4,309	4,309
DDHV (Demand)	2,207	4,380	4,380	3,928	7,070	7,070	3,560	6,440	6,440	4,632	8,120	8,120	4,291	7,630	7,630	4,653	8,360	8,360
Stamina/TNM Input	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)
LOS (C)																		
Autos	3,174	3,206	3,206	4,165	4,208	4,208	4,165	4,208	4,208	5,157	5,210	5,210	4,165	4,208	4,208	4,165	4,208	4,208
Med Trucks	60	40	40	78	52	52	78	52	52	97	65	65	78	52	52	78	52	52
Hvy Trucks	39	26	26	51	34	34	51	34	34	63	42	42	51	34	34	51	34	34
Buses	14	10	10	19	12	12	19	12	12	23	15	15	19	12	12	19	12	12
Motorcycles	11	11	11	15	15	15	15	15	15	18	18	18	15	15	15	15	15	15
Total	3,284	3,283	3,283	4,309	4,309	4,309	4,309	4,309	4,309	5,335	5,335	5,335	4,309	4,309	4,309			



## TRAFFIC DATA FOR NOISE STUDIES

Page 2

<b>Project:</b>	I-275 (SR 93) Pinellas PD&E Study
<b>State Project Number(s):</b>	
<b>Financial Project ID:</b>	424501-1-22-01
<b>Federal Aid Number(s):</b>	TBD
<b>Segment Description:</b>	I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North

Date: 3/5/2015  
Prepared By: HDR

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

### Northbound I-275 GUL Mainline - AM Peak Hour

Segment No:	7			8			9			10			11			12		
From/To:	I-175 to I-375			I-375 to 5th Ave N			5th Ave N to 22nd Ave N			22nd Ave N to 38th Ave N			38th Ave N to 54th Ave N			54th Ave N to 22nd St N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3	3	3	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3	3	3 + 1 Aux	4	4	3 + 1 Aux	3	3	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	47600	47600	47600	57600	57600	57600	57600	57600	57600	47600	47600	57600	63200	63200	57600	47600	47600	47600
Speed: (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	4,884	4,884	4,884	5,910	5,910	5,910	5,910	5,910	5,910	4,884	4,884	5,910	6,484	6,484	5,910	4,884	4,884	4,884
DDHV (Demand)	4,713	8,150	8,150	4,959	8,150	8,150	6,140	9,970	9,970	6,610	10,740	10,740	7,035	11,230	11,230	6,218	9,660	9,660
Stamina/TNM Input	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)
LOS (C)																		
Autos	4,721	4,769	4,769	5,712	5,771	5,771	5,712	5,771	5,771	4,721	4,769	5,771	6,268	6,333	5,771	4,721	4,769	4,769
Med Trucks	89	59	59	108	72	72	108	72	72	89	59	72	118	78	72	89	59	59
Hvy Trucks	58	39	39	70	47	47	70	47	47	58	39	47	77	51	47	58	39	39
Buses	21	14	14	26	17	17	26	17	17	21	14	17	29	19	17	21	14	14
Motorcycles	17	17	17	20	20	20	20	20	20	17	17	20	22	22	20	17	17	17
Total	4,885	4,884	4,884	5,910	5,910	5,910	5,910	5,910	5,910	4,885	4,884	5,910	6,485	6,484	5,910	4,885	4,884	4,884
Demand																		
Autos	4,556	7,959	7,959	4,793	7,959	7,959	5,935	9,737	9,737	6,389	10,489	10,489	6,800	10,967	10,967	6,010	9,434	9,434
Med Trucks	86	99	99	90	99	99	112	121	121	120	130	130	128	136	136	113	117	117
Hvy Trucks	56	64	64	59	64	64	72	79	79	78	85	85	83	89	89	73	76	76
Buses	21	24	24	22	24	24	27	29	29	29	31	31	31	33	33	27	28	28
Motorcycles	16	28	28	17	28	28	21	34	34	22	37	37	24	38	38	21	33	33
Total	4,714	8,150	8,150	4,959	8,150	8,150	6,140	9,971	9,971	6,609	10,741	10,741	7,035	11,230	11,230	6,217	9,660	9,660



## Page 3

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	13			14			15			16			17			18		
From/To:	22nd St N to Gandy Blvd			Gandy Blvd to Roosevelt Blvd/118th Ave N			Roosevelt Blvd/118th Ave N to Dr MLK Jr St N			Dr MLK Jr St N to Ulmerton Rd			Ulmerton Rd to 4th St N			North of 4th St N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3	3	3	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	4	4	3	4	4	3	4 + 1 Aux	4 + 1 Aux	3 + 1 Aux	4	4	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	47600	47600	47600	57600	57600	57600	63200	63200	47600	63200	63200	47600	93200	93200	57600	63200	63200	47600
Speed: (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	4,884	4,884	4,884	5,910	5,910	5,910	6,484	6,484	4,884	6,484	6,484	4,884	9,562	9,562	5,910	6,484	6,484	4,884
DDHV (Demand)	6,681	10,780	10,780	6,190	9,200	7,940	3,940	6,610	4,180	4,220	7,030	4,800	5,432	8,780	6,850	6,291	10,040	8,110
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	Demand	Demand	LOS (C)	Demand	Demand	Demand	LOS (C)	Demand	LOS (C)	LOS (C)
LOS (C)																		
Autos	4,721	4,769	4,769	5,712	5,771	5,771	6,268	6,333	4,769	6,268	6,333	4,769	9,243	9,339	5,771	6,268	6,333	4,769
Med Trucks	89	59	59	108	72	72	118	78	59	118	78	59	174	116	72	118	78	59
Hvy Trucks	58	39	39	70	47	47	77	51	39	77	51	39	113	76	47	77	51	39
Buses	21	14	14	26	17	17	29	19	14	29	19	14	42	28	17	29	19	14
Motorcycles	17	17	17	20	20	20	22	22	17	22	22	17	33	33	20	22	22	17
Total	4,885	4,884	4,884	5,910	5,910	5,910	6,485	6,484	4,884	6,485	6,484	4,884	9,563	9,564	5,910	6,485	6,484	4,8



## Page 4

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	1			2			3			4			5			6		
From/To:	North of 4th St N			4th St N to Ulmerton Rd			Ulmerton Rd to Roosevelt Blvd/118th Ave N			118th Ave N to Gandy Blvd			Gandy Blvd to 54th Ave N			54th Ave N to 38th Ave N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	4	4	3	4	4	3	4	4	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3	3	4	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	63200	63200	47600	63200	63200	47600	63200	63200	77600	57600	57600	57600	47600	47600	63200	57600	57600	57600
Speed (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	6,484	6,484	4,884	6,484	6,484	4,884	6,484	6,484	7,962	5,910	5,910	5,910	4,884	4,884	6,484	5,910	5,910	5,910
DDHV (Demand)	5,460	7,350	6,890	4,786	6,650	6,190	2,804	3,690	3,660	3,777	5,620	5,180	5,063	7,360	7,360	5,764	8,520	8,520
Stamina/TNM Input	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)
LOS (C)																		
Autos	6,268	6,333	4,769	6,268	6,333	4,769	6,268	6,333	7,775	5,712	5,771	5,771	4,721	4,769	6,333	5,712	5,771	5,771
Med Trucks	118	78	59	118	78	59	118	78	96	108	72	72	89	59	78	108	72	72
Hvy Trucks	77	51	39	77	51	39	77	51	63	70	47	47	58	39	51	70	47	47
Buses	29	19	14	29	19	14	29	19	23	26	17	17	21	14	19	26	17	17
Motorcycles	22	22	17	22	22	17	22	22	27	20	20	20	17	17	22	20	20	20
Total	6,485	6,484	4,884	6,485	6,484	4,884	6,485	6,484	7,961	5,910	5,910	5,910	4,885	4,884	6,484	5,910	5,910	5,910
Demand																		



## Page 5

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	7			8			9			10			11			12		
From/To:	38th Ave N to 22nd Ave N			22nd Ave N to 5th Ave N			5th Ave N to I-375			I-375 to I-175			I-175 to 28th St S			28th St S to 31st St S		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3	3	3	3 + Aux 1	3 + Aux 1	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	2 + 1 Aux	2 + 1 Aux	3 + 1 Aux	2 + 1 Aux	2 + 1 Aux	3	2 + 1 Aux	2 + 1 Aux	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	47600	47600	47600	77600	77600	57600	57600	57600	57600	42000	42000	57600	42000	42000	47600	42000	42000	47600
Speed (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	4,884	4,884	4,884	7,962	7,962	5,910	5,910	5,910	5,910	4,309	4,309	5,910	4,309	4,309	4,884	4,309	4,309	4,884
DDHV (Demand)	6,259	9,150	9,150	6,352	9,190	9,190	5,248	7,510	7,510	4,179	6,180	6,180	3,084	4,710	4,710	2,758	4,160	4,160
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	Demand	Demand	Demand	Demand
LOS (C)																		
Autos	4,721	4,769	4,769	7,696	7,775	5,771	5,712	5,771	5,771	4,165	4,208	5,771	4,165	4,208	4,769	4,165	4,208	4,769
Med Trucks	89	59	59	145	96	72	108	72	72	78	52	72	78	52	59	78	52	59
Hvy Trucks	58	39	39	94	63	47	70	47	47	51	34	47	51	34	39	51	34	39
Buses	21	14	14	35	23	17	26	17	17	19	12	17	19	12	14	19	12	14
Motorcycles	17	17	17	27	27	20	20	20	20	15	15	20	15	15	17	15	15	17
Total	4,885	4,884	4,884	7,962	7,961	5,910	5,910	5,910	5,910	4,309	4,309	5,910	4,309	4,309	4,884	4,309		



## Page 6

Date: 3/5/2015  
Prepared By: HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	13			14			15			16		
From/To:	31st St S to 22nd Ave S			22nd Ave S to 26th Ave S			26th Ave S to 54th Ave S			South of 54th Ave S		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3	3	3	3	3	3 + 1 Aux	3	3	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	57600	57600	57600	47600	47600	47600	47600	47600	57600	47600	47600	47600
Speed (mph)	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	5,910	5,910	5,910	4,884	4,884	4,884	4,884	4,884	5,910	4,884	4,884	4,884
DDHV (Demand)	2,992	4,860	4,860	2,157	3,600	3,600	2,384	4,100	4,100	1,440	2,430	2,430
Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand
LOS (C)												
Autos	5,712	5,771	5,771	4,721	4,769	4,769	4,721	4,769	5,771	4,721	4,769	4,769
Med Trucks	108	72	72	89	59	59	89	59	72	89	59	59
Hvy Trucks	70	47	47	58	39	39	58	39	47	58	39	39
Buses	26	17	17	21	14	14	21	14	17	21	14	14
Motorcycles	20	20	20	17	17	17	17	17	20	17	17	17
Total	5,910	5,910	5,910	4,885	4,884	4,884	4,885	4,884	5,910	4,885	4,884	4,884
Demand												
Autos	2,892	4,746	4,746	2,085	3,516	3,516	2,304	4,004	4,004	1,392	2,373	2,373
Med Trucks	54	59	59	39	44	44	43	50	50	26	29	29
Hvy Trucks	35	38	38	25	28	28	28	32	32	17	19	19
Buses	13	14	14	9	10	10	10	12	12	6	7	7
Motorcycles	10	17	17	7	12	12	8	14	14	5	8	8
Total	2,991	4,860	4,860	2,156	3,600	3,600	2,383	4,100	4,100	1,440	2,429	2,429



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**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	1			2			3			4			5			6		
From/To:	South of 54th Ave S			54th Ave S to 26th Ave S			26h Ave S to 22nd Ave S			22nd Ave S to 31st St S			31st St S to 28th St S			28th St S to I-175		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	2	2	2	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 2 Aux	2 + 2 Aux	2 + 2 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux	2 + 1 Aux
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	32000	32000	32000	42000	42000	42000	42000	42000	42000	52000	52000	52000	42000	42000	42000	42000	42000	42000
Speed: (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	3,283	3,283	3,283	4,309	4,309	4,309	4,309	4,309	4,309	5,335	5,335	5,335	4,309	4,309	4,309	4,309	4,309	4,309
DDHV (Demand)	1,221	2,460	2,460	2,285	4,120	4,120	2,047	3,420	3,420	3,011	5,010	5,010	2,707	4,130	4,130	3,011	4,760	4,760
Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)
LOS (C)																		
Autos	3,174	3,206	3,206	4,165	4,208	4,208	4,165	4,208	4,208	5,157	5,210	5,210	4,165	4,208	4,208	4,165	4,208	4,208
Med Trucks	60	40	40	78	52	52	78	52	52	97	65	65	78	52	52	78	52	52
Hvy Trucks	39	26	26	51	34	34	51	34	34	63	42	42	51	34	34	51	34	34
Buses	14	10	10	19	12	12	19	12	12	23	15	15	19	12	12	19	12	12
Motorcycles	11	11	11	15	15	15	15	15	15	18	18	18	15	15	15	15	15	15
Total	3,284	3,283	3,283	4,309	4,309	4,309	4,309	4,309	4,309	5,335	5,335	5,335	4,309	4,309	4,309	4,309	4	



## Page 2

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	7			8			9			10			11			12		
From/To:	I-175 to I-375			I-375 to 5th Ave N			5th Ave N to 22nd Ave N			22nd Ave N to 38th Ave N			38th Ave N to 54th Ave N			54th Ave N to 22nd St N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3	3	3	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3	3	3 + 1 Aux	4	4	3 + 1 Aux	3	3	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	47600	47600	47600	57600	57600	57600	57600	57600	57600	47600	47600	57600	63200	63200	57600	47600	47600	47600
Speed: (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	4,884	4,884	4,884	5,910	5,910	5,910	5,910	5,910	5,910	4,884	4,884	5,910	6,484	6,484	5,910	4,884	4,884	4,884
DDHV (Demand)	4,005	5,770	5,770	4,938	6,920	6,920	6,142	8,780	8,780	6,074	8,780	8,780	5,870	8,510	8,510	4,673	6,730	6,730
Stamina/TNM Input	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)
LOS (C)																		
Autos	4,721	4,769	4,769	5,712	5,771	5,771	5,712	5,771	5,771	4,721	4,769	5,771	6,268	6,333	5,771	4,721	4,769	4,769
Med Trucks	89	59	59	108	72	72	108	72	72	89	59	72	118	78	72	89	59	59
Hvy Trucks	58	39	39	70	47	47	70	47	47	58	39	47	77	51	47	58	39	39
Buses	21	14	14	26	17	17	26	17	17	21	14	17	29	19	17	21	14	14
Motorcycles	17	17	17	20	20	20	20	20	20	17	17	20	22	22	20	17	17	17
Total	4,885	4,884	4,884	5,910	5,910	5,910	5,910	5,910	5,910	4,885	4,884	5,910	6,485	6,484	5,910	4,885	4,884	



## Page 3

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	13			14			15			16			17			18		
From/To:	22nd St N to Gandy Blvd			Gandy Blvd to Roosevelt Blvd/118th Ave N			Roosevelt Blvd/118th Ave N to Dr MLK Jr St N			Dr MLK Jr St N to Ulmerton Rd			Ulmerton Rd to 4th St N			North of 4th St N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3	3	3	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	4	4	3	4	4	3	4 + 1 Aux	4 + 1 Aux	3 + 1 Aux	4	4	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	47600	47600	47600	57600	57600	57600	63200	63200	47600	63200	63200	47600	93200	93200	57600	63200	63200	47600
Speed: (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	4,884	4,884	4,884	5,910	5,910	5,910	6,484	6,484	4,884	6,484	6,484	4,884	9,562	9,562	5,910	6,484	6,484	4,884
DDHV (Demand)	5,080	7,470	7,470	4,052	6,110	5,190	3,045	4,630	3,870	3,369	5,120	4,360	4,994	7,510	6,220	5,434	8,390	7,100
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	LOS (C)	Demand	LOS (C)	LOS (C)
LOS (C)																		
Autos	4,721	4,769	4,769	5,712	5,771	5,771	6,268	6,333	4,769	6,268	6,333	4,769	9,243	9,339	5,771	6,268	6,333	4,769
Med Trucks	89	59	59	108	72	72	118	78	59	118	78	59	174	116	72	118	78	59
Hvy Trucks	58	39	39	70	47	47	77	51	39	77	51	39	113	76	47	77	51	39
Buses	21	14	14	26	17	17	29	19	14	29	19	14	42	28	17	29	19	14
Motorcycles	17	17	17	20	20	20	22	22	17	22	22	17	33	33	20	22	22	17
Total	4,885	4,884	4,884	5,910	5,910	5,910	6,485	6,484	4,884	6,485	6,484	4,884	9,563	9,564	5,910	6,485	6,484	4,884
D																		



## Page 4

Date: 3/5/2015  
Prepared By: HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	1			2			3			4			5			6		
From/To:	North of 4th St N			4th St N to Ulmerton Rd			Ulmerton Rd to Roosevelt Blvd/118th Ave N			118th Ave N to Gandy Blvd			Gandy Blvd to 54th Ave N			54th Ave N to 38th Ave N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	4	4	3	4	4	3	4	4	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3	3	4	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	63200	63200	47600	63200	63200	47600	63200	63200	77600	57600	57600	57600	47600	47600	63200	57600	57600	57600
Speed (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	6,484	6,484	4,884	6,484	6,484	4,884	6,484	6,484	7,962	5,910	5,910	5,910	4,884	4,884	6,484	5,910	5,910	5,910
DDHV (Demand)	6,314	9,290	8,520	5,389	7,850	7,080	4,497	6,640	5,870	5,730	8,760	7,990	6,260	9,480	9,480	6,506	9,810	9,810
Stamina/TNM Input	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	Demand	Demand	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)
LOS (C)																		
Autos	6,268	6,333	4,769	6,268	6,333	4,769	6,268	6,333	7,775	5,712	5,771	5,771	4,721	4,769	6,333	5,712	5,771	5,771
Med Trucks	118	78	59	118	78	59	118	78	96	108	72	72	89	59	78	108	72	72
Hvy Trucks	77	51	39	77	51	39	77	51	63	70	47	47	58	39	51	70	47	47
Buses	29	19	14	29	19	14	29	19	23	26	17	17	21	14	19	26	17	17
Motorcycles	22	22	17	22	22	17	22	22	27	20	20	20	17	17	22	20	20	20
Total	6,485	6,484	4,884	6,485	6,484	4,884	6,485	6,484	7,961	5,910	5,910	5,910	4,885	4,884	6,484	5,910	5,910	5,910



## Page 5

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	7			8			9			10			11			12		
From/To:	38th Ave N to 22nd Ave N			22nd Ave N to 5th Ave N			5th Ave N to I-375			I-375 to I-175			I-175 to 28th St S			28th St S to 31st St S		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3	3	3	3 + Aux 1	3 + Aux 1	3 + Aux 1	3 + 1 Aux	3 + 1 Aux	3	2 + 1 Aux	2 + 1 Aux	3 + 1 Aux	2 + 1 Aux	2 + 1 Aux	3	2 + 1 Aux	2 + 1 Aux	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	47600	47600	47600	77600	77600	77600	57600	57600	47600	42000	42000	57600	42000	42000	47600	42000	42000	47600
Speed (mph)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	4,884	4,884	4,884	7,962	7,962	7,962	5,910	5,910	4,884	4,309	4,309	5,910	4,309	4,309	4,884	4,309	4,309	4,884
DDHV (Demand)	6,118	9,530	9,530	5,817	9,150	9,150	4,641	7,180	7,180	4,153	6,670	6,670	4,003	6,790	6,790	3,677	6,300	6,300
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)
LOS (C)																		
Autos	4,721	4,769	4,769	7,696	7,775	7,775	5,712	5,771	4,769	4,165	4,208	5,771	4,165	4,208	4,769	4,165	4,208	4,769
Med Trucks	89	59	59	145	96	96	108	72	59	78	52	72	78	52	59	78	52	59
Hvy Trucks	58	39	39	94	63	63	70	47	39	51	34	47	51	34	39	51	34	39
Buses	21	14	14	35	23	23	26	17	14	19	12	17	19	12	14	19	12	14
Motorcycles	17	17	17	27	27	27	20	20	17	15	15	20	15	15	17	15	15	17
Total	4,885	4,884	4,884	7,962	7,961	7,961	5,910	5,910	4,884	4,309	4,309	5,910	4,309	4,309	4,884	4,309		



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Date: 3/5/2015  
Prepared By: HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	13			14			15			16		
From/To:	31st St S to 22nd Ave S			22nd Ave S to 26th Ave S			26th Ave S to 54th Ave S			South of 54th Ave S		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	3 + 1 Aux	3 + 1 Aux	3 + 1 Aux	3	3	3	3	3	3 + 1 Aux	3	3	3
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	57600	57600	57600	47600	47600	47600	47600	47600	57600	47600	47600	47600
Speed (mph)	65	65	65	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105	105	105	105
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	5,910	5,910	5,910	4,884	4,884	4,884	4,884	4,884	5,910	4,884	4,884	4,884
DDHV (Demand)	4,069	7,100	7,100	3,204	5,730	5,730	3,478	6,430	6,430	1,868	3,570	3,570
Stamina/TNM Input	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand
LOS (C)												
Autos	5,712	5,771	5,771	4,721	4,769	4,769	4,721	4,769	5,771	4,721	4,769	4,769
Med Trucks	108	72	72	89	59	59	89	59	72	89	59	59
Hvy Trucks	70	47	47	58	39	39	58	39	47	58	39	39
Buses	26	17	17	21	14	14	21	14	17	21	14	14
Motorcycles	20	20	20	17	17	17	17	17	20	17	17	17
Total	5,910	5,910	5,910	4,885	4,884	4,884	4,885	4,884	5,910	4,885	4,884	4,884
Demand												
Autos	3,933	6,934	6,934	3,097	5,596	5,596	3,362	6,280	6,280	1,806	3,487	3,487
Med Trucks	74	86	86	58	69	69	63	78	78	34	43	43
Hvy Trucks	48	56	56	38	45	45	41	51	51	22	28	28
Buses	18	21	21	14	17	17	15	19	19	8	10	10
Motorcycles	14	24	24	11	19	19	12	22	22	6	12	12
Total	4,069	7,100	7,100	3,204	5,729	5,729	3,478	6,431	6,431	1,868	3,570	3,570



TRAFFIC DATA FOR NOISE STUDIES  
Page 1

Project:	I-275 (SR 93) Pinellas PD&E Study	Date:	3/5/2015
State Project Number(s):		Prepared By:	HDR
Financial Project ID:	424501-1-22-01		
Federal Aid Number(s):	TBD		
Segment Description:	I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North		

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)  
NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Northbound I-275 Express Lanes - AM Peak Hour

Segment No:	1			2			3		
From/To:	South of Roosevelt Blvd/118th Ave N to 118th Ave N Flyover On-Ramp			118th Ave N Flyover On-Ramp to On/Off Slip Ramps North of 4th St N			North of On/Off Slip Ramps North of 4th St N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	0	0	1	0	0	2	0	0	2
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040
Speed: (mph)	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	0.0%	6.0%	4.0%	0.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	0.0%	3.0%	2.0%	0.0%
% Medium Trucks DHV	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%
% Heavy Trucks DHV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% Buses DHV	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	0	0	1,600	0	0	3,200	0	0	3,200
DDHV (Demand)	0	0	1,260	0	0	2,450	0	0	2,780
Stamina/TNM Input	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand
LOS (C)									
Autos	0	0	1,563	0	0	3,125	0	0	3,125
Med Trucks	0	0	32	0	0	64	0	0	64
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	8	0	0	15	0	0	15
Motorcycles	0	0	5	0	0	11	0	0	11
Total	0	0	1,600	0	0	3,200	0	0	3,200
Demand									
Autos	0	0	1,231	0	0	2,393	0	0	2,715
Med Trucks	0	0	25	0	0	49	0	0	56
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	6	0	0	12	0	0	13
Motorcycles	0	0	4	0	0	8	0	0	9
Total	0	0	1,260	0	0	2,450	0	0	2,780

Southbound I-275 Express Lanes - AM Peak Hour

Segment No:	1			2			3		
From/To:	North of On/Off Slip Ramps North of 4th St N			On/Off Slip Ramps North of 4th St N to 118th Ave N Flyover Off-Ramp			118th Ave N Flyover Off-Ramp to South of Gandy Blvd		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	0	0	2	0	0	2	0	0	1
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040
Speed (mph)	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%
% Heavy Trucks DHV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% Buses DHV	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	0	0	3,200	0	0	3,200	0	0	1,600
DDHV (Demand)	0	0	2,580	0	0	2,280	0	0	770
Stamina/TNM Input	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand
LOS (C)									
Autos	0	0	3,125	0	0	3,125	0	0	1,563
Med Trucks	0	0	64	0	0	64	0	0	32
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	15	0	0	15	0	0	8
Motorcycles	0	0	11	0	0	11	0	0	5
Total	0	0	3,200	0	0	3,200	0	0	1,600
Demand									
Autos	0	0	2,520	0	0	2,227	0	0	752
Med Trucks	0	0	52	0	0	46	0	0	15
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	12	0	0	11	0	0	4
Motorcycles	0	0	9	0	0	8	0	0	3
Total	0	0	2,581	0	0	2,281	0	0	770



TRAFFIC DATA FOR NOISE STUDIES  
Page 1

Project:	I-275 (SR 93) Pinellas PD&E Study	Date:	3/5/2015
State Project Number(s):		Prepared By:	HDR
Financial Project ID:	424501-1-22-01		
Federal Aid Number(s):	TBD		
Segment Description:	I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North		

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)  
NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Northbound I-275 Express Lanes - PM Peak Hour

Segment No:	1			2			3		
From/To:	South of Roosevelt Blvd/118th Ave N to 118th Ave N Flyover On-Ramp			118th Ave N Flyover On-Ramp to On/Off Slip Ramps North of 4th St N			North of On/Off Slip Ramps North of 4th St N		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	0	0	1	0	0	2	0	0	2
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040
Speed: (mph)	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%
% Heavy Trucks DHV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% Buses DHV	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	0	0	1,600	0	0	3,200	0	0	3,200
DDHV (Demand)	0	0	1,040	0	0	2,240	0	0	2,550
Stamina/TNM Input	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand
LOS (C)									
Autos	0	0	1,563	0	0	3,125	0	0	3,125
Med Trucks	0	0	32	0	0	64	0	0	64
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	8	0	0	15	0	0	15
Motorcycles	0	0	5	0	0	11	0	0	11
Total	0	0	1,600	0	0	3,200	0	0	3,200
Demand									
Autos	0	0	1,016	0	0	2,188	0	0	2,490
Med Trucks	0	0	21	0	0	45	0	0	51
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	5	0	0	11	0	0	12
Motorcycles	0	0	4	0	0	8	0	0	9
Total	0	0	1,041	0	0	2,241	0	0	2,550

Southbound I-275 Express Lanes - PM Peak Hour

Segment No:	1			2			3		
From/To:	North of On/Off Slip Ramps North of 4th St N			On/Off Slip Ramps North of 4th St N to 118th Ave N Flyover Off-Ramp			118th Ave N Flyover Off-Ramp to South of Gandy Blvd		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	0	0	2	0	0	2	0	0	1
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040
Speed (mph)	65	65	65	65	65	65	65	65	65
(kmh)	105	105	105	105	105	105	105	105	105
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%	3.00%	2.00%	2.00%
% Heavy Trucks DHV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% Buses DHV	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%	0.72%	0.48%	0.48%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	0	0	3,200	0	0	3,200	0	0	1,600
DDHV (Demand)	0	0	2,380	0	0	2,190	0	0	440
Stamina/TNM Input	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand
LOS (C)									
Autos	0	0	3,125	0	0	3,125	0	0	1,563
Med Trucks	0	0	64	0	0	64	0	0	32
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	15	0	0	15	0	0	8
Motorcycles	0	0	11	0	0	11	0	0	5
Total	0	0	3,200	0	0	3,200	0	0	1,600
Demand									
Autos	0	0	2,324	0	0	2,139	0	0	430
Med Trucks	0	0	48	0	0	44	0	0	9
Hvy Trucks	0	0	0	0	0	0	0	0	0
Buses	0	0	11	0	0	11	0	0	2
Motorcycles	0	0	8	0	0	7	0	0	1
Total	0	0	2,380	0	0	2,190	0	0	440



TRAFFIC DATA FOR NOISE STUDIES

Page 1

Project: I-275 (SR 93) Pinellas PD&E Study  
State Project Number(s):  
Financial Project ID: 424501-1-22-01  
Federal Aid Number(s): TBD  
Segment Description: I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North

Date: 3/5/2015  
Prepared By: HDR

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)  
NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Northbound I-275 Ramps - AM Peak Hour

Segment No:	1			2			3			4			5			6			7			8			9		
From/To:	54th Ave S EB On Ramp			54th Ave S WB On Ramp			26th Ave S Off Ramp			22nd Ave S EB On Ramp			22nd Ave S WB On Ramp			31st St S Off Ramp			28th St S On Ramp			I-175 Off Ramp			I-175 On Ramp		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	2	2	2	1	1	1
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	35,100	35,100	35,100	17,600	17,600	17,600	17,600	17,600	17,600	15,900	17,600	15,900	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600
Speed: (mph)	50	50	50	50	50	50	50	50	50	30	30	30	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
(kmh)	80	80	80	80	80	80	80	80	80	48	48	48	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	3,159	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,431	1,431	1,431	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584
DDHV (Demand)	803	1,290	1,290	918	1,400	1,400	368	630	630	662	980	980	410	700	700	341	490	490	237	730	730	806	1,610	1,610	866	1,400	1,400
Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand
LOS (C)																											
Autos	3,053	3,085	3,085	1,531	1,547	1,547	1,531	1,547	1,547	1,383	1,398	1,398	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547
Med Trucks	57	38	38	29	19	19	29	19	19	26	17	17	29	19	19	57	38	38	29	19	19	57	38	38	29	19	19
Hvy Trucks	37	25	25	19	13	13	19	13	13	17	11	11	19	13	13	37	25	25	19	13	13	37	25	25	19	13	13
Buses	14	9	9	7	5	5	7	5	5	6	4	4	7	5	5	14	9	9	7	5	5	14	9	9	7	5	5
Motorcycles	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	11	11	11	5	5	5	11	11	11	5	5	5
Total	3,158	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,431	1,431	1,431	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584
Demand																											
Autos	776	1,260	1,260	887	1,367	1,367	356	615	615	640	957	957	396	684	684	330	479	479	229	713	713	779	1,572	1,572	837	1,367	1,367
Med Trucks	15	16	16	17	17	17	7	8	8	12	12	12	7	8	8	6	6	6	4	9	9	15	19	19	16	17	17
Hvy Trucks	9	10	10	11	11	11	4	5	5	8	8	8	5	6	6	4	4	4	3	6	6	10	13	13	10	11	11
Buses	4	4	4	4	4	4	2	2	2	3	3	3	2	2	2	2	1	1	1	2	2	4	5	5	4	4	4
Motorcycles	3	4	4	3	5	5	1	2	2	2	3	3	1	2	2	1	2	2	1	2	2	3	5	5	3	5	5
Total	803	1,290	1,290	918	1,400	1,400	368	630	630	662	980	980	409	700	700	341	491	491	237	730	730	807	1,609	1,609	866	1,400	1,400

Southbound I-275 Ramps - AM Peak Hour

Segment No:	1			2			3			4			5			6			7			8			9		
From/To:	4th St N Off Ramp			Ulmerton Rd Off Ramp			Ulmerton Rd On Ramp			Roosevelt Blvd/118th Ave N Off Ramp			Roosevelt Blvd On Ramp			118th Ave N On Ramp			Gandy Blvd Off Ramp			Gandy Blvd WB On Ramp			Gandy Blvd EB On Ramp		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	1	1	1	2	2	2	1	1	1	2	2	2	2	2	2	1	1	1	2	2	2	1	1	1	1	1	1
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	15,900	15,900	15,900	17,600	17,600	17,600
Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	30	30	30	50	50	50
(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	48	48	48	80	80	80
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	1,431	1,431	1,431	1,584	1,584	1,584
DDHV (Demand)	337	700	700	2,529	3,300	3,300	210	770	770	736	1,250	1,250	892	1,170	1,170	819	1,600	1,600	487	1,200	1,200	854	1,400	1,400	919	1,540	1,540
Stamina/TNM Input	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand
LOS (C)																											
Autos	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	1,383	1,398	1,398	1,531	1,547	1,547
Med Trucks	29	19	19	57	38	38	29	19	19	57	38	38	57	38	38	29	19	19	57	38	38	26	17	17	29	19	19
Hvy Trucks	19	13	13	37	25	25	19	13	13	37	25	25	37	25	25	19	13	13	37	25	25	17	11	11	19	13	13
Buses	7	5	5	14	9	9	7	5	5	14	9	9	14	9	9	7	5	5	14	9	9	6	4	4	7	5	5
Motorcycles	5	5	5	11	11	11	5	5	5	11	11	11	11	11	11	5	5	5	11	11	11	5	5	5	5	5	5
Total	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	1,431	1,431	1,431	1,584	1,584	1,584
Demand																											
Autos	326	684	684	2,445	3,223	3,223	203	752	752	711	1,221	1,221	862	1,143	1,143	792	1,563	1,563	471	1,172	1,172	826	1,367	1,367	888	1,504	1,504
Med Trucks	6	8	8	46	40	40	46	3	9	13	15	15	16	14	14	15	19	19	9	15	15	16	17	17	17	19	19
Hvy Trucks	4	6	6	30	26	26	2	6	6	9	10	10	11	9	9	10	13	13	6	9	9	10	11	11	11	12	12
Buses	1	2	2	11	10	10	1	2	2	3	4	4	4	3	3	4	5	5	2	3	3	4	4	4	4	4	4
Motorcycles	1	2	2	9	11	11	1	3	3	3	4	4	3	4	4	3	5	5	2	4	4	3	5	5	3	5	5
Total	337	700	700	2,530	3,300	3,300	210	770	770	736	1,250	1,250	892	1,170	1,170	820	1,600	1,600	488	1,200	1,200	855	1,400	1,400	919	1,540	1,540



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Date: 3/5/2015  
Prepared By: HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	Segment No:	10			11			12			13			14			15			16			17			18		
From/To:	From/To:	I-375 Off Ramp			I-375 On Ramp			5th Ave N On Ramp			22nd Ave N Off Ramp			22nd Ave N On Ramp			38th Ave N Off Ramp			38th Ave N On Ramp			54th Ave N EB Off Ramp			54th Ave N WB Off Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	Lanes:	1	1	1	2	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	
Year:	Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	
ADT: LOS (C)	ADT: LOS (C)	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	35,100	17,600	17,600	17,600	17,600	17,600	15,900	15,900		
Speed: (mph)	Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	30	30		
(kmh)	(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	48	48	48		
K =	K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%		
D =	D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
T <sub>24</sub> =	T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	4.0%		
DHT =	DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	2.0%		
% Medium Trucks DHV	% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%		
% Heavy Trucks DHV	% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%		
% Buses DHV	% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%		
% Motorcycles DHV	% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%		
DDHV LOS (C)	DDHV LOS (C)	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,159	1,584	1,584	1,584	1,584	1,584	1,431	1,431		
DDHV (Demand)	DDHV (Demand)	344	1,050	1,050	590	1,050	1,050	1,181	1,820	1,820	541	840	840	1,011	1,610	1,610	549	910	910	974	1,400	1,400	313	7				

Segment No:	Segment No:	10			11			12			13			14			15			16			17			18		
From/To:	From/To:	54th Ave N Off Ramp			54th Ave N WB On Ramp			54th Ave N EB On Ramp			38th Ave N Off Ramp			38th Ave N On Ramp			22nd Ave N Off Ramp			22nd Ave N On Ramp			5th Ave N Off Ramp			I-375 Off Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes: Year: ADT: LOS (C) Speed: (mph)  (kmh)	Lanes: Year: ADT: LOS (C) Speed: (mph)  (kmh)	1 2012 17,600 50  80	1 2040 17,600 50  80	1 2040 17,600 50  80	1 2012 15,900 30  48	1 2040 15,900 30  48	1 2040 15,900 30  48	1 2012 17,600 50  80	1 2040 17,600 50  80	1 2040 17,600 50  80	1 2012 17,600 50  80	1 2040 17,600 50  80	1 2040 17,600 50  80	1 2012 17,600 50  80	1 2040 17,600 50  80	1 2040 17,600 50  80	1 2012 17,600 50  80	1 2040 17,600 50  80	1 2040 17,600 50  80	1 2012 17,600 50  80	1 2040 17,600 50  80	1 2040 17,600 50  80	1 2012 17,600 50  80	1 2040 17,600 50  80	1 2040 17,600 50  80			
K = D = T <sub>24</sub> = DHT =	K = D = T <sub>24</sub> = DHT =	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 6.0% 3.0%	9.00% 100.00% 4.0% 2.0%	9.00% 100.00% 4.0% 2.0%			
% Medium Trucks DHV % Heavy Trucks DHV % Buses DHV % Motorcycles DHV DDHV LOS (C) DDHV (Demand) Stamina/TNM Input	% Medium Trucks DHV % Heavy Trucks DHV % Buses DHV % Motorcycles DHV DDHV LOS (C) DDHV (Demand) Stamina/TNM Input	1.82% 1.18% 0.44% 0.34% 1,584 357 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,080 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,080 Demand	1.82% 1.18% 0.44% 0.34% 1,431 448 Demand	1.21% 0.79% 0.29% 0.34% 1,431 980 Demand	1.21% 0.79% 0.29% 0.34% 1,431 980 Demand	1.82% 1.18% 0.44% 0.34% 1,584 610 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,260 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,260 Demand	1.82% 1.18% 0.44% 0.34% 1,584 363 Demand	1.21% 0.79% 0.29% 0.34% 1,584 840 Demand	1.21% 0.79% 0.29% 0.34% 1,584 840 Demand	1.82% 1.18% 0.44% 0.34% 1,584 407 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,470 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,470 Demand	1.82% 1.18% 0.44% 0.34% 1,584 618 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,050 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,050 Demand	1.82% 1.18% 0.44% 0.34% 1,584 711 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,090 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,090 Demand	1.82% 1.18% 0.44% 0.34% 1,584 1,104 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,680 Demand	1.21% 0.79% 0.29% 0.34% 1,584 1,680 Demand			
LOS (C)	LOS (C)																											
Autos Med Trucks Hvy Trucks Buses Motorcycles Total	Autos Med Trucks Hvy Trucks Buses Motorcycles Total	1,531 29 19 7 5 1,584	1,547 19 13 5 5 1,584	1,547 19 13 5 5 1,584	1,383 26 17 6 5 1,431	1,398 17 11 4 5 1,431	1,398 17 11 4 5 1,431	1,531 29 19 7 5 1,584	1,547 19 13 5 5 1,584	1,547 19 13 5 5 1,584	1,531 29 19 7 5 1,584	1,547 19 13 5 5 1,584	1,547 19 13 5 5 1,584	1,531 29 19 7 5 1,584	1,547 19 13													



TRAFFIC DATA FOR NOISE STUDIES  
Page 2

Project: I-275 (SR 93) Pinellas PD&E Study  
State Project Number(s): State Project Number(s):  
Financial Project ID: 424501-1-22-01  
Federal Aid Number(s): TBD  
Segment Description: Segment Description: I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North

Date: 3/5/2015  
Prepared By: HDR

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)  
NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Northbound I-275 Ramps - ANorthbound I-275 Ramps - AM Peak Hour

Segment No:	Segment No:	19			20			21			22			23			24			25			26		
From/To:	From/To:	22nd St N On Ramp			Gandy Blvd Off Ramp			Gandy Blvd On Ramp			Roosevelt Blvd/118th Ave N Off Ramp			Roosevelt Blvd/118th Ave N On Ramp			Dr MLK Jr St N On Ramp			Ulmerton Rd On Ramp			4th St N On Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	Lanes:	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	1	1	1
Year:	Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	ADT: LOS (C)	17,600	17,600	17,600	17,600	17,600	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600
Speed: (mph)	Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
(kmh)	(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
K =	K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
T <sub>24</sub> =	T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	DDHV LOS (C)	1,584	1,584	1,584	1,584	1,584	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584
DDHV (Demand)	DDHV (Demand)	663	1,120	1,120	1,546	2,800	2,800	855	1,220	1,220	3,019	5,640	5,640	769	3,050	1,880	280	620	620	1,212	2,050	2,050	859	1,260	1,260
Stamina/TNM Input	Stamina/TNM Input	Demand	Demand	Demand	Demand	LOS (C)	Demand	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand
LOS (C)	LOS (C)																								
Autos	Autos	1,531	1,547	1,547	1,531	1,547	3,085	3,053	3,085	3,085	3,053	3,085	3,085	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547
Med Trucks	Med Trucks	29	19	19	29	19	38	57	38	38	57	38	38	57	38	38	29	19	19	57	38	38	29	19	19
Hvy Trucks	Hvy Trucks	19	13	13	19	13	25	37	25	25	37	25	25	37	25	25	19	13	13	37	25	25	19	13	13
Buses	Buses	7	5	5	7	5	9	14	9	9	14	9	9	14	9	9	7	5	5	14	9	9	7	5	5
Motorcycles	Motorcycles	5	5	5	5	5	11	11	11	11	11	11	11	11	11	11	5	5	5	11	11	11	5	5	5
Total	Total	1,584	1,584	1,584	1,584	1,584	3,159	3,158	3,159	3,159	3,158	3,159	3,159	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584
Demand	Demand																								
Autos	Autos	641	1,094	1,094	1,494	2,735	2,735	826	1,192	1,192	2,918	5,508	5,508	743	2,979	1,836	271	606	606	1,172	2,002	2,002	830	1,231	1,231
Med Trucks	Med Trucks	12	14	14	28	34	34	16	15	15	55	68	68	14	37	23	5	8	8	22	25	25	16	15	15
Hvy Trucks	Hvy Trucks	8	9	9	18	22	22	10	10	10	36	45	45	9	24	15	3	5	5	14	16	16	10	10	10
Buses	Buses	3	3	3	7	8	8	4	4	4	13	16	16	3	9	5	1	2	2	5	6	6	4	4	4
Motorcycles	Motorcycles	2	4	4	5	10	10	3	4	4	10	19	19	3	10	6	1	2	2	4	7	7	3	4	4
Total	Total	663	1,121	1,121	1,545	2,801	2,801	855	1,221	1,221	3,019	5,640	5,640	769	3,050	1,880	280	621	621	1,212	2,050	2,050	859	1,260	1,260

Southbound I-275 Ramps - ASouthbound I-275 Ramps - AM Peak Hour

Segment No:	Segment No:	19			20			21			22			23			24			25			26		
From/To:	From/To:	I-375 On Ramp			I-175 Off Ramp			I-175 On Ramp			28th St S Off Ramp			31st St S On Ramp			22nd Ave S Off Ramp			26th Ave S On Ramp			54th Ave S Off Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	Lanes:	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	
Year:	Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	ADT: LOS (C)	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	35,100	35,100	35,100	
Speed: (mph)	Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
(kmh)	(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
K =	K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
D =	D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
T <sub>24</sub> =	T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	
DHT =	DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	
% Medium Trucks DHV	% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	
% Heavy Trucks DHV	% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	
% Buses DHV	% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	
% Motorcycles DHV	% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	
DDHV LOS (C)	DDHV LOS (C)	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,159	3,159	3,159	
DDHV (Demand)	DDHV (Demand)	209	560	560	1,302	2,030	2,030	207	560	560	326	550	550	234	700	700	835	1,260	1,260	227	500	500	944	1,670	
Stamina/TNM Input	Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	
LOS (C)	LOS (C)																								
Autos	Autos	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	3,053	3,085	
Med Trucks	Med Trucks	29	19	19	57	38	38	29	19	19	29	19	19	29	19	19	29	19	19	29	19	19	57	38	
Hvy Trucks	Hvy Trucks	19	13	13	37	25	25	19	13	13	19	13	13	19	13	13	19	13	13	19	13	13	37	25	
Buses	Buses	7	5	5	14	9	9	7	5	5	7	5	5	7	5	5	7	5	5	7	5	5	14	9	
Motorcycles	Motorcycles	5	5	5	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	11	11	
Total	Total	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,158	3,159	
Demand	Demand																								
Autos	Autos	202	547	547	1,259	1,983	1,983	200	547	547	315	537	537	226	684	684	807	1,231	1,231	219	488	488	913	1,631	
Med Trucks	Med Trucks	4	7	7	24	25	25	4	7	7	6	7	7	4	8	8	15	15	15	4	6	6	17	20	
Hvy Trucks	Hvy Trucks	2	4	4	15	16	16	2	4	4	4	4	4	3	6	6	10	10	10	3	4	4	11	13	
Buses	Buses	1	2	2	6	6	6	1	2	2	1	2	2	1	2	2	4	4	4	1	1	1	4	5	
Motorcycles	Motorcycles	1	2	2	4	7	7	1	2	2	1	2	2	1	2	2	3	4	4	1	2	2	3	6	
Total	Total	209	560	560	1,302	2,031	2,031	207	560	560	326	550	550	234	700	700	835	1,260	1,260	227	500	500	944	1,670	



TRAFFIC DATA FOR NOISE STUDIES

Page 1

Project: I-275 (SR 93) Pinellas PD&E Study  
State Project Number(s):  
Financial Project ID: 424501-1-22-01  
Federal Aid Number(s): TBD  
Segment Description: I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North

Date: 3/5/2015  
Prepared By: HDR

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)  
NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Northbound I-275 Ramps - PM Peak Hour

Segment No:	1			2			3			4			5			6			7			8			9		
From/To:	54th Ave S EB On Ramp			54th Ave S WB On Ramp			26th Ave S Off Ramp			22nd Ave S EB On Ramp			22nd Ave S WB On Ramp			31st St S Off Ramp			28th St S On Ramp			I-175 Off Ramp			I-175 On Ramp		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	2	2	2	1	1	1
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	35,100	35,100	35,100	17,600	17,600	17,600	17,600	17,600	17,600	15,900	15,900	15,900	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600
Speed: (mph)	50	50	50	50	50	50	50	50	50	30	30	30	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
(kmh)	80	80	80	80	80	80	80	80	80	48	48	48	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	3,159	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,431	1,431	1,431	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584
DDHV (Demand)	624	900	900	440	760	760	238	700	700	550	920	920	414	670	670	304	880	880	304	630	630	332	980	980	1,326	1,990	1,990
Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)
LOS (C)																											
Autos	3,053	3,085	3,085	1,531	1,547	1,547	1,531	1,547	1,547	1,383	1,398	1,398	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547
Med Trucks	57	38	38	29	19	19	29	19	19	26	17	17	29	19	19	57	38	38	29	19	19	57	38	38	29	19	19
Hvy Trucks	37	25	25	19	13	13	19	13	13	17	11	11	19	13	13	37	25	25	19	13	13	37	25	25	19	13	13
Buses	14	9	9	7	5	5	7	5	5	6	4	4	7	5	5	14	9	9	7	5	5	14	9	9	7	5	5
Motorcycles	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	11	11	11	5	5	5	11	11	11	5	5	5
Total	3,158	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,431	1,431	1,431	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584
Demand																											
Autos	603	879	879	425	742	742	230	684	684	532	899	899	400	654	654	294	859	859	294	615	615	321	957	957	1,282	1,943	1,943
Med Trucks	11	11	11	8	9	9	4	8	8	10	11	11	8	8	8	6	11	11	6	8	8	12	12	12	24	24	24
Hvy Trucks	7	7	7	5	6	6	3	6	6	6	7	7	5	5	5	4	7	7	4	5	5	4	8	8	16	16	16
Buses	3	3	3	2	2	2	1	2	2	2	3	3	2	2	2	1	3	3	1	2	2	1	3	3	6	6	6
Motorcycles	2	3	3	1	3	3	1	2	2	2	3	3	1	2	2	1	3	3	1	2	2	1	3	3	5	7	7
Total	623	900	900	439	760	760	238	700	700	550	920	920	414	669	669	305	880	880	305	630	630	332	980	980	1,327	1,990	1,990

Southbound I-275 Ramps - PM Peak Hour

Segment No:	1			2			3			4			5			6			7			8			9		
From/To:	4th St N Off Ramp			Ulmerton Rd Off Ramp			Ulmerton Rd On Ramp			Roosevelt Blvd/118th Ave N Off Ramp			Roosevelt Blvd On Ramp			118th Ave N On Ramp			Gandy Blvd Off Ramp			Gandy Blvd WB On Ramp			Gandy Blvd EB On Ramp		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	1	1	1	2	2	2	1	1	1	2	2	2	2	2	2	1	1	1	2	2	2	1	1	1	1	1	1
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	15,900	15,900	15,900	17,600	17,600	17,600
Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	30	30	30	50	50	50
(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	48	48	48	80	80	80
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	1,431	1,431	1,431	1,584	1,584	1,584
DDHV (Demand)	925	1,440	1,440	1,427	2,180	2,180	535	970	970	1,336	2,290	2,290	1,556	2,420	2,420	1,013	1,990	1,990	962	1,650	1,650	704	1,250	1,250	788	1,120	1,120
Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand
LOS (C)																											
Autos	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	1,383	1,398	1,398	1,531	1,547	1,547
Med Trucks	29	19	19	57	38	38	29	19	19	57	38	38	57	38	38	29	19	19	57	38	38	26	17	17	29	19	19
Hvy Trucks	19	13	13	37	25	25	19	13	13	37	25	25	37	25	25	19	13	13	37	25	25	17	11	11	19	13	13
Buses	7	5	5	14	9	9	7	5	5	14	9	9	14	9	9	7	5	5	14	9	9	6	4	4	7	5	5
Motorcycles	5	5	5	11	11	11	5	5	5	11	11	11	11	11	11	5	5	5	11	11	11	5	5	5	5	5	5
Total	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	1,431	1,431	1,431	1,584	1,584	1,584
Demand																											
Autos	894	1,406	1,406	1,379	2,129	2,129	517	947	947	1,291	2,236	2,236	1,504	2,363	2,363	979	1,943	1,943	930	1,611	1,611	681	1,221	1,221	762	1,094	1,094
Med Trucks	17	17	17	26	28	28	17	12	12	24	28	28	18	24	24	18	24	24	18	20	20	14	15	15	14	14	14
Hvy Trucks	11	11	11	17	17	17	6	8	8	16	18	18	18	19	19	12	16	16	11	13	13	8	10	10	9	9	9
Buses	4	4	4	6	6	6	2	3	3	6	7	7	7	7	7	4	6	6	4	5	5	3	4	4	3	3	3
Motorcycles	3	5	5	5	7	7	2	3	3	5	8	8	5	8	8	3	6	6	3	6	6	2	4	4	3	4	4
Total	925	1,439	1,439	1,427	2,179	2,179	535	970	970	1,336	2,290	2,290	1,555	2,419	2,419	1,012	1,990	1,990	962	1,650	1,650	704	1,250	1,250	788	1,121	1,121



TRAFFIC DATA FOR NOISE STUDIES  
Page 2

Project: I-275 (SR 93) Pinellas PD&E Study  
State Project Number(s): State Project Number(s):  
Financial Project ID: 424501-1-22-01  
Federal Aid Number(s): Federal Aid Number(s): TBD  
Segment Description: Segment Description: I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North

Date: 3/5/2015  
Prepared By: HDR

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)  
NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Northbound I-275 Ramps - P  
Northbound I-275 Ramps - PM Peak Hour

Segment No:	Segment No:	10			11			12			13			14			15			16			17			18		
From/To:	From/To:	I-375 Off Ramp			I-375 On Ramp			5th Ave N On Ramp			22nd Ave N Off Ramp			22nd Ave N On Ramp			38th Ave N Off Ramp			38th Ave N On Ramp			54th Ave N EB Off Ramp			54th Ave N WB Off Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	Lanes:	1	1	1	2	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	
Year:	Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	
ADT: LOS (C)	ADT: LOS (C)	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	35,100	17,600	17,600	17,600	17,600	17,600	17,600	15,900	15,900	
Speed: (mph)	Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	30	30	
(kmh)	(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	48	48	
K =	K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
D =	D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
T <sub>24</sub> =	T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	
DHT =	DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	
% Medium Trucks DHV	% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	
% Heavy Trucks DHV	% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	
% Buses DHV	% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	
% Motorcycles DHV	% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	
DDHV LOS (C)	DDHV LOS (C)	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,431	1,431	
DDHV (Demand)	DDHV (Demand)	254	530	530	1,187	1,680	1,680	1,204	1,860	1,860	726	1,120	1,120	658	1,120	1,120	675	1,190	1,190	471	920	920	611	880	880	586	900	
Stamina/TNM Input	Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	
LOS (C)	LOS (C)																											
Autos	Autos	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	3,085	1,531	1,547	1,547	1,531	1,547	1,547	1,383	1,398	
Med Trucks	Med Trucks	29	19	19	57	38	38	29	19	19	29	19	19	29	19	19	29	19	38	29	19	19	29	19	19	26	17	
Hvy Trucks	Hvy Trucks	19	13	13	37	25	25	19	13	13	19	13	13	19	13	13	19	13	25	19	13	13	19	13	13	17	11	
Buses	Buses	7	5	5	14	9	9	7	5	5	7	5	5	7	5	5	7	5	9	7	5	5	7	5	5	6	4	
Motorcycles	Motorcycles	5	5	5	11	11	11	5	5	5	5	5	5	5	5	5	5	5	11	5	5	5	5	5	5	5	5	
Total	Total	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,431	1,431	
Demand	Demand																											
Autos	Autos	246	518	518	1,147	1,641	1,641	1,164	1,817	1,817	702	1,094	1,094	636	1,094	1,094	653	1,162	1,162	455	899	899	591	859	859	566	879	
Med Trucks	Med Trucks	5	6	6	22	20	20	22	23	23	13	14	14	12	14	14	12	14	14	9	11	11	11	11	11	11	11	
Hvy Trucks	Hvy Trucks	3	4	4	14	13	13	14	15	15	9	9	9	8	9	9	8	9	9	6	7	7	7	7	7	7	7	
Buses	Buses	1	2	2	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Motorcycles	Motorcycles	1	2	2	4	6	6	4	6	6	2	4	4	2	4	4	2	4	4	2	3	3	2	3	3	2	3	
Total	Total	255	530	530	1,187	1,680	1,680	1,204	1,861	1,861	726	1,121	1,121	658	1,121	1,121	675	1,189	1,189	472	920	920	611	880	880	586	900	

Southbound I-275 Ramps - P  
Southbound I-275 Ramps - PM Peak Hour

Segment No:	Segment No:	10			11			12			13			14			15			16			17			18		
From/To:	From/To:	54th Ave N Off Ramp			54th Ave N WB On Ramp			54th Ave N EB On Ramp			38th Ave N Off Ramp			38th Ave N On Ramp			22nd Ave N Off Ramp			22nd Ave N On Ramp			5th Ave N Off Ramp			I-375 Off Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	Lanes:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2			
Year:	Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040			
ADT: LOS (C)	ADT: LOS (C)	17,600	17,600	17,600	15,900	15,900	15,900	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	35,100	35,100	35,100			
Speed: (mph)	Speed: (mph)	50	50	50	30	30	30	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50			
(kmh)	(kmh)	80	80	80	48	48	48	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80			
K =	K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%			
D =	D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
T <sub>24</sub> =	T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%			
DHT =	DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%			
% Medium Trucks DHV	% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%			
% Heavy Trucks DHV	% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%			
% Buses DHV	% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%			
% Motorcycles DHV	% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%			
DDHV LOS (C)	DDHV LOS (C)	1,584	1,584	1,584	1,431	1,431	1,431	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,159	3,159	3,159			
DDHV (Demand)	DDHV (Demand)	622	1,090	1,090	370	640	640	498	780	780	948	1,430	1,430	560	1,150	1,150	953	1,440	1,440	652	1,060	1,060	1,176	1,970	1,270			
Stamina/TNM Input	Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand			
LOS (C)	LOS (C)																											
Autos	Autos	1,531	1,547	1,547	1,383	1,398	1,398	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547			
Med Trucks	Med Trucks	29	19	19	26	17	17	29	19	19	29	19	19	29	19	19	29	19	19	29	19	19	29	19	19			
Hvy Trucks	Hvy Trucks	19	13	13	17	11	11	19	13	13	19	13	13	19	13	13	19	13	13	19	13	13	19	13	13			
Buses	Buses	7	5	5	6	4	4	7	5	5	7	5	5	7	5	5	7	5	5	7	5	5	7	5	5			
Motorcycles	Motorcycles	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5			
Total	Total	1,584	1,584	1,584	1,431	1,431	1,431	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,158	3,159	3,159			
Demand	Demand																											
Autos	Autos	601	1,065	1,065	358	625	625	481	762	762	916	1,397	1,397	541	1,123	1,123	921	1,406	1,406	630	1,035	1,035	1,137	1,924	1,924			
Med Trucks	Med Trucks	11	13	13	7	8	8	9	9	9	17	17	17	10	14	14	17	24	24	12	13	13	21	24	24			
Hvy Trucks	Hvy Trucks	7	9	9	4	5	5	6	6	6	11	11	11	7	9	9	11	11	11	8	8	8	14	16	16			
Buses	Buses	3	3	3	2	2	2	2	2	2	4	4	4	2	3	3	4	4	4	3	3	3	5	6	6			
Motorcycles	Motorcycles	2	4	4	1	2	2	2	3	3	3	5	5	2	4	4	3	5	5	2	4	4	4	4	4			
Total	Total	621	1,091	1,091	370	640	640	498	780	780	947	1,430	1,430	560	1,150	1,150	952	1,439	1,439	652	1,060	1,060	1,176	1,971	1,971			



TRAFFIC DATA FOR NOISE STUDIES  
Page 2

Project: I-275 (SR 93) Pinellas PD&E Study  
State Project Number(s): State Project Number(s):  
Financial Project ID: 424501-1-22-01  
Federal Aid Number(s): TBD  
Segment Description: Segment Description: I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North

Date: 3/5/2015  
Prepared By: HDR

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)  
NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Northbound I-275 Ramps - P|Northbound I-275 Ramps - PM Peak Hour

Segment No:	Segment No:	19			20			21			22			23			24			25			26		
From/To:	From/To:	22nd St N On Ramp			Gandy Blvd Off Ramp			Gandy Blvd On Ramp			Roosevelt Blvd/118th Ave N Off Ramp			Roosevelt Blvd/118th Ave N On Ramp			Dr MLK Jr St N On Ramp			Ulmerton Rd On Ramp			4th St N On Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	Lanes:	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	1	1	1
Year:	Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	ADT: LOS (C)	17,600	17,600	17,600	17,600	17,600	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600
Speed: (mph)	Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
(kmh)	(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
K =	K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
T <sub>24</sub> =	T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%
% Heavy Trucks DHV	% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%
% Buses DHV	% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%
% Motorcycles DHV	% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
DDHV LOS (C)	DDHV LOS (C)	1,584	1,584	1,584	1,584	1,584	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	3,159	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584
DDHV (Demand)	DDHV (Demand)	407	740	740	1,624	2,440	2,440	596	1,200	1,200	1,880	3,000	3,000	873	2,880	1,680	324	490	490	1,625	1,860	1,860	440	880	880
Stamina/TNM Input	Stamina/TNM Input	Demand	Demand	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand
LOS (C)	LOS (C)																								
Autos	Autos	1,531	1,547	1,547	1,531	1,547	3,085	3,053	3,085	3,085	3,053	3,085	3,085	3,053	3,085	3,085	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547
Med Trucks	Med Trucks	29	19	19	29	19	38	57	38	38	57	38	38	57	38	38	29	19	19	57	38	38	29	19	19
Hvy Trucks	Hvy Trucks	19	13	13	19	13	25	37	25	25	37	25	25	37	25	25	19	13	13	37	25	25	19	13	13
Buses	Buses	7	5	5	7	5	9	14	9	9	14	9	9	14	9	9	7	5	5	14	9	9	7	5	5
Motorcycles	Motorcycles	5	5	5	5	5	11	11	11	11	11	11	11	11	11	11	5	5	5	11	11	11	5	5	5
Total	Total	1,584	1,584	1,584	1,584	1,584	3,159	3,158	3,159	3,159	3,158	3,159	3,159	3,158	3,159	3,159	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584
Demand	Demand																								
Autos	Autos	393	723	723	1,570	2,383	2,383	576	1,172	1,172	1,817	2,930	2,930	844	2,813	1,641	313	479	479	1,571	1,817	1,817	425	859	859
Med Trucks	Med Trucks	7	9	9	30	30	30	11	15	15	34	36	36	16	35	20	6	6	6	30	23	23	8	11	11
Hvy Trucks	Hvy Trucks	5	6	6	19	19	19	7	9	9	22	24	24	10	23	13	4	4	4	19	15	15	5	7	7
Buses	Buses	2	2	2	7	7	7	3	3	3	8	9	9	4	8	5	1	1	1	7	5	5	2	3	3
Motorcycles	Motorcycles	1	3	3	6	8	8	2	4	4	6	10	10	3	10	6	1	2	2	6	6	6	1	3	3
Total	Total	406	741	741	1,625	2,440	2,440	596	1,200	1,200	1,879	3,000	3,000	873	2,881	1,680	324	491	491	1,626	1,861	1,861	439	880	880

Southbound I-275 Ramps - P|Southbound I-275 Ramps - PM Peak Hour

Segment No:	Segment No:	19			20			21			22			23			24			25			26		
From/To:	From/To:	I-375 On Ramp			I-175 Off Ramp			I-175 On Ramp			28th St S Off Ramp			31st St S On Ramp			22nd Ave S Off Ramp			26th Ave S On Ramp			54th Ave S Off Ramp		
Model:	Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Lanes:	Lanes:	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	
Year:	Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	ADT: LOS (C)	17,600	17,600	17,600	35,100	35,100	35,100	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	35,100	35,100	35,100	
Speed: (mph)	Speed: (mph)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
(kmh)	(kmh)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
K =	K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	
D =	D =	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
T <sub>24</sub> =	T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	
DHT =	DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	
% Medium Trucks DHV	% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	
% Heavy Trucks DHV	% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	
% Buses DHV	% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	
% Motorcycles DHV	% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	
DDHV LOS (C)	DDHV LOS (C)	1,584	1,584	1,584	3,159	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,159	3,159	3,159	
DDHV (Demand)	DDHV (Demand)	326	760	760	920	1,430	1,430	770	1,550	1,550	326	490	490	392	800	800	865	1,370	1,370	274	700	700	1,610	2,860	
Stamina/TNM Input	Stamina/TNM Input	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	Demand	
LOS (C)	LOS (C)																								
Autos	Autos	1,531	1,547	1,547	3,053	3,085	3,085	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	1,531	1,547	1,547	3,053	3,085	
Med Trucks	Med Trucks	29	19	19	57	38	38	29	19	19	29	19	19	29	19	19	29	19	19	29	19	19	57	38	
Hvy Trucks	Hvy Trucks	19	13	13	37	25	25	19	13	13	19	13	13	19	13	13	19	13	13	19	13	13	37	25	
Buses	Buses	7	5	5	14	9	9	7	5	5	7	5	5	7	5	5	7	5	5	7	5	5	14	9	
Motorcycles	Motorcycles	5	5	5	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	11	11	
Total	Total	1,584	1,584	1,584	3,158	3,159	3,159	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	1,584	3,158	3,159	3,159	
Demand	Demand																								
Autos	Autos	315	742	742	889	1,397	1,397	744	1,514	1,514	315	479	479	379	781	781	836	1,338	1,338	265	684	684	1,556	2,793	
Med Trucks	Med Trucks	6	9	9	17	17	17	14	19	19	6	6	6	7	10	10	16	17	17	5	8	8	29	35	
Hvy Trucks	Hvy Trucks	4	6	6	11	11	11	9	12	12	4	4	4	5	6	6	10	11	11	3	6	6	19	23	
Buses	Buses	1	2	2	4	4	4	3	4	4	1	1	1	2	2	2	4	4	4	1	2	2	7	8	
Motorcycles	Motorcycles	1	3	3	3	5	5	3	5	5	1	2	2	1	3	3	3	5	5	1	2	2	5	10	
Total	Total	326	760	760	920	1,430	1,430	770	1,550	1,550	326	491	491	392	800	800	865	1,371	1,371	274	700	700	1,609	2,861	



## Page 1

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	1			2			3			4			5			6		
From/To:	22nd Ave S			22nd Ave N			38th Ave N			54th Ave N			Gandy Blvd			Roosevelt Blvd		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	2	2	2
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	6500	6500	6500	17100	17100	17100	17100	17100	17100	26300	26300	26300	29200	29200	29200	19000	19000	19000
Speed: (mph)	35	35	35	40	40	40	40	40	40	40	40	40	55	55	55	55	55	55
(kmh)	56	56	56	64	64	64	64	64	64	64	64	64	89	89	89	89	89	89
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.43%	0.95%	0.95%	1.67%	1.11%	1.11%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.57%	1.05%	1.05%	1.33%	0.89%	0.89%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.02%	0.01%	0.01%	0.23%	0.15%	0.15%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.91%	0.92%	0.92%	0.71%	0.72%	0.72%
DDHV LOS (C)	667	667	667	1,754	1,754	1,754	1,754	1,754	1,754	2,698	2,698	2,698	2,996	2,996	2,996	1,949	1,949	1,949
DDHV (Demand)	992	1,390	1,390	1,752	2,390	2,390	1,289	1,970	1,970	1,691	2,725	2,725	2,946	4,445	4,445	3,616	4,775	4,775
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)
LOS (C)																		
Autos	645	651	651	1,696	1,713	1,713	1,696	1,713	1,713	2,608	2,635	2,635	2,879	2,908	2,908	1,877	1,896	1,896
Med Trucks	12	8	8	32	21	21	32	21	21	49	33	33	43	28	28	33	22	22
Hvy Trucks	8	5	5	21	14	14	21	14	14	32	21	21	47	31	31	26	17	17
Buses	3	2	2	8	5	5	8	5	5	12	8	8	1	0	0	4	3	3
Motorcycles	2	2	2	6	6	6	6	6	6	9	9	9	27	28	28	14	14	14
Total	667	666	666	1,755	1,754	1,754	1,755	1,754	1,754	2,698	2,698	2,698	2,996	2,995	2,995	1,950	1,949	1,949
Demand																		
Autos	959	1,358	1,358	1,694	2,334	2,												



## TRAFFIC DATA FOR NOISE STUDIES

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<b>Project:</b>	I-275 (SR 93) Pinellas PD&E Study
<b>State Project Number(s):</b>	
<b>Financial Project ID:</b>	424501-1-22-01
<b>Federal Aid Number(s):</b>	TBD
<b>Segment Description:</b>	I-275 (SR 93) from south of 54th Avenue South to north of 4th Street North

**Date:** 3/5/2015  
**Prepared By:** HDR

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.)

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

**I-275 Major Cross Road East of I-275- AM Peak Hour**

Segment No:	1			2			3			4			5			6		
From/To:	22nd Ave S			22nd Ave N			38th Ave N			54th Ave N			Gandy Blvd			Roosevelt Blvd		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	2
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	6500	6500	6500	17100	17100	17100	17100	17100	17100	17100	17100	17100	29200	29200	29200	19000	19000	19000
Speed (mph)	35	35	35	40	40	40	40	40	40	40	40	40	55	55	55	55	55	55
(kmh)	56	56	56	64	64	64	64	64	64	64	64	64	89	89	89	89	89	89
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.43%	0.95%	0.95%	1.67%	1.11%	1.11%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.57%	1.05%	1.05%	1.33%	0.89%	0.89%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.02%	0.01%	0.01%	0.23%	0.15%	0.15%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.91%	0.92%	0.92%	0.71%	0.72%	0.72%
DDHV LOS (C)	667	667	667	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	2,996	2,996	2,996	1,949	1,949	1,949
DDHV (Demand)	748	1,210	1,210	1,379	2,025	2,025	1,495	2,155	2,155	1,503	2,525	2,525	2,050	3,415	3,415	2,263	2,970	2,970
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)
LOS (C)																		
Autos	645	651	651	1,696	1,713	1,713	1,696	1,713	1,713	1,696	1,713	1,713	2,879	2,908	2,908	1,877	1,896	1,896
Med Trucks	12	8	8	32	21	21	32	21	21	32	21	21	43	28	28	33	22	22
Hvy Trucks	8	5	5	21	14	14	21	14	14	21	14	14	47	31	31	26	17	17
Buses	3	2	2	8	5	5	8	5	5	8	5	5	1	0	0	4	3	3
Motorcycles	2	2	2	6	6	6	6	6	6	6	6	6	27	28	28	14	14	14
Total	667	666	666	1,755	1,754	1,754	1,755	1,754	1,754	1,755	1,754	1,754	2,996	2,995	2,995	1,950	1,949	1,949
Demand																		
Autos	723	1,182	1,182	1,333	1,978	1,978	1,445	2,105	2,105	1,453	2,466	2,466	1,970	3,315	3,315	2,179	2,889	2,889
Med Trucks	14	15	15	25	25	25	27	26	26	27	31	31	29	32	32	38	33	33
Hvy Trucks	9	10	10	16	16	16	18	17	17	18	20	20	32	36	36	30	26	26
Buses	3	4	4	6	6	6	7	6	6	7	7	7	0	0	0	5	4	4
Motorcycles	3	4	4	5	7	7	5	7	7	5	9	9	19	31	31	16	21	21
Total	749	1,211	1,211	1,379	2,026	2,026	1,495	2,155	2,155	1,503	2,526	2,526	2,050	3,414	3,414	2,263	2,969	2,969



## Page 1

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

Segment No:	1			2			3			4			5			6		
From/To:	22nd Ave S			22nd Ave N			38th Ave N			54th Ave N			Gandy Blvd			Roosevelt Blvd		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	2	2	2
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	6500	6500	6500	17100	17100	17100	17100	17100	17100	26300	26300	26300	29200	29200	29200	19000	19000	19000
Speed: (mph)	35	35	35	40	40	40	40	40	40	40	40	40	55	55	55	55	55	55
(kmh)	56	56	56	64	64	64	64	64	64	64	64	64	89	89	89	89	89	89
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.43%	0.95%	0.95%	1.67%	1.11%	1.11%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.57%	1.05%	1.05%	1.33%	0.89%	0.89%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.02%	0.01%	0.01%	0.23%	0.15%	0.15%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.91%	0.92%	0.92%	0.71%	0.72%	0.72%
DDHV LOS (C)	667	667	667	1,754	1,754	1,754	1,754	1,754	1,754	2,698	2,698	2,698	2,996	2,996	2,996	1,949	1,949	1,949
DDHV (Demand)	1,025	1,625	1,625	1,700	2,655	2,655	1,413	1,875	1,875	1,601	2,380	2,380	3,230	4,615	4,615	2,840	4,145	4,145
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	Demand	Demand	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)	LOS (C)
LOS (C)																		
Autos	645	651	651	1,696	1,713	1,713	1,696	1,713	1,713	2,608	2,635	2,635	2,879	2,908	2,908	1,877	1,896	1,896
Med Trucks	12	8	8	32	21	21	32	21	21	49	33	33	43	28	28	33	22	22
Hvy Trucks	8	5	5	21	14	14	21	14	14	32	21	21	47	31	31	26	17	17
Buses	3	2	2	8	5	5	8	5	5	12	8	8	1	0	0	4	3	3
Motorcycles	2	2	2	6	6	6	6	6	6	9	9	9	27	28	28	14	14	14
Total	667	666	666	1,755	1,754	1,754	1,755	1,754	1,754	2,698	2,698	2,698	2,996	2,995	2,995	1,950	1,949	1,949
Demand																		
Autos	991	1,587	1,587	1,643	2,593	2,												



## Page 4

**Date:** 3/5/2015  
**Prepared By:** HDR

NOTE: Modeled ADT is the LOS(C) volume referenced in the FDOT LOS tables or demand, whichever is less.

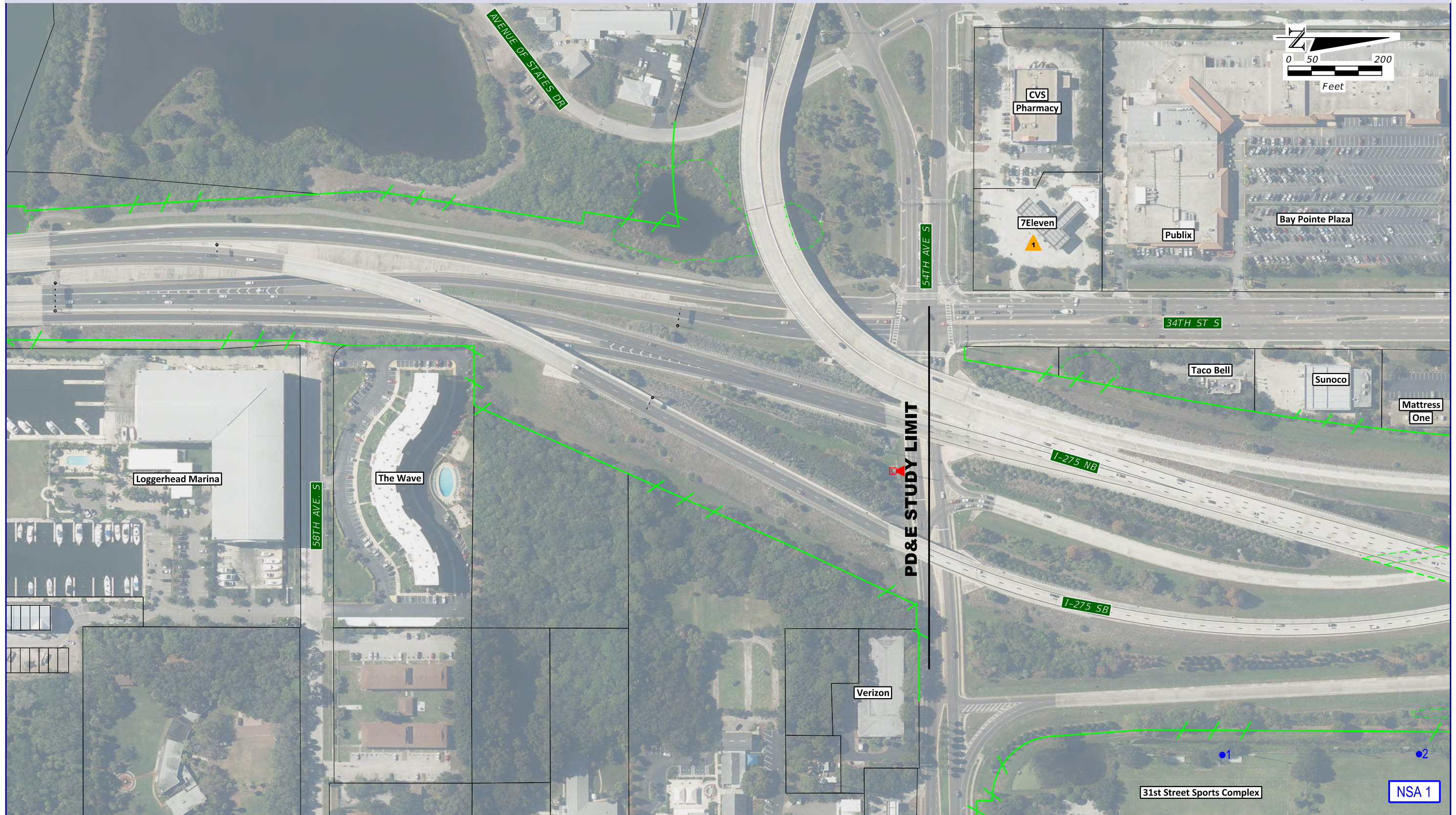
Segment No:	1			2			3			4			5			6		
From/To:	22nd Ave S			22nd Ave N			38th Ave N			54th Ave N			Gandy Blvd			Roosevelt Blvd		
Model:	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)	Existing Facility	No-Build (Design Year)	Build (Design Year)
Dir Lanes:	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	2
Year:	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040	2012	2040	2040
ADT: LOS (C)	6500	6500	6500	17100	17100	17100	17100	17100	17100	17100	17100	17100	29200	29200	29200	19000	19000	19000
Speed (mph)	35	35	35	40	40	40	40	40	40	40	40	40	55	55	55	55	55	55
(kmh)	56	56	56	64	64	64	64	64	64	64	64	64	89	89	89	89	89	89
K =	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
D =	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
T <sub>24</sub> =	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%	6.0%	4.0%	4.0%
DHT =	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%	3.0%	2.0%	2.0%
% Medium Trucks DHV	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.82%	1.21%	1.21%	1.43%	0.95%	0.95%	1.67%	1.11%	1.11%
% Heavy Trucks DHV	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.18%	0.79%	0.79%	1.57%	1.05%	1.05%	1.33%	0.89%	0.89%
% Buses DHV	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.44%	0.29%	0.29%	0.02%	0.01%	0.01%	0.23%	0.15%	0.15%
% Motorcycles DHV	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.91%	0.92%	0.92%	0.71%	0.72%	0.72%
DDHV LOS (C)	667	667	667	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	1,754	2,996	2,996	2,996	1,949	1,949	1,949
DDHV (Demand)	783	1,255	1,255	1,315	1,970	1,970	1,422	1,910	1,910	1,460	2,220	2,220	2,183	3,230	3,275	1,829	2,635	2,635
Stamina/TNM Input	LOS (C)	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)	Demand	LOS (C)	LOS (C)
LOS (C)																		
Autos	645	651	651	1,696	1,713	1,713	1,696	1,713	1,713	1,696	1,713	1,713	2,879	2,908	2,908	1,877	1,896	1,896
Med Trucks	12	8	8	32	21	21	32	21	21	32	21	21	43	28	28	33	22	22
Hvy Trucks	8	5	5	21	14	14	21	14	14	21	14	14	47	31	31	26	17	17
Buses	3	2	2	8	5	5	8	5	5	8	5	5	1	0	0	4	3	3
Motorcycles	2	2	2	6	6	6	6	6	6	6	6	6	27	28	28	14	14	14
Total	667	666	666	1,755	1,754	1,754	1,755	1,754	1,754	1,755	1,754	1,754	2,996	2,995	2,995	1,950	1,949	1,949
Demand																		
Autos	757	1,226	1,226	1,271	1,924	1,924</												



## Appendix B.

### Noise Sensitive Receptors





LEGEND:			
	PAVEMENT WIDENING		BRIDGE WIDENING
	PAVEMENT REMOVAL		BRIDGES
	BARRIER WALL		HISTORIC SITE
			ITS CAMERA
			OVERHEAD SIGN STRUCTURE
			WETLANDS
			SURFACE WATER
			MANGROVES
			FLOOD PLAINS
			CONTAMINATION
			RIGHT OF WAY
			NSA #
			NOISE SENSITIVE RECEPTOR
			NOISE BARRIER
			KENWOOD HISTORIC DISTRICT

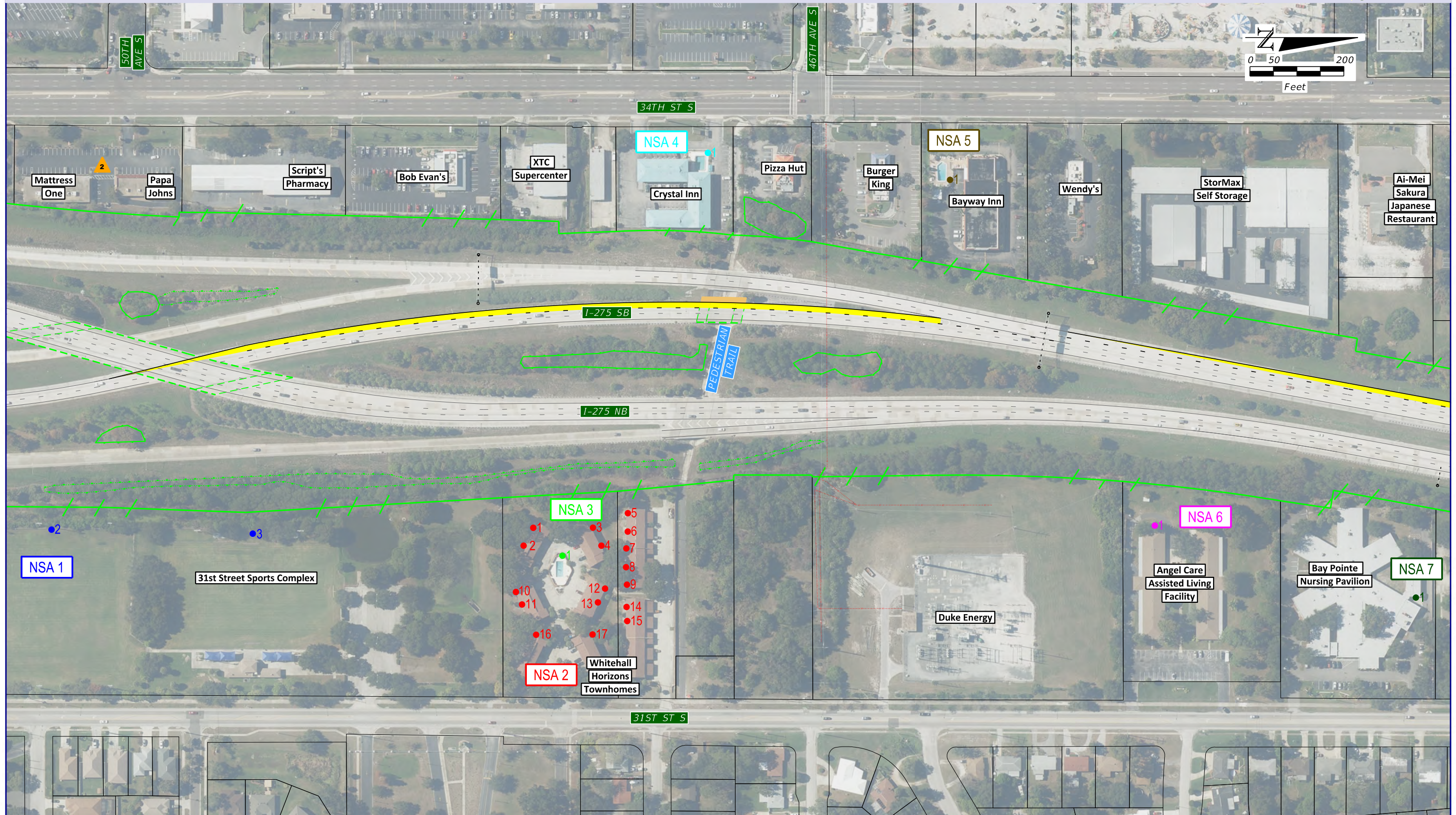
Aerial Photos Dec. '13 - Feb. '14
















I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
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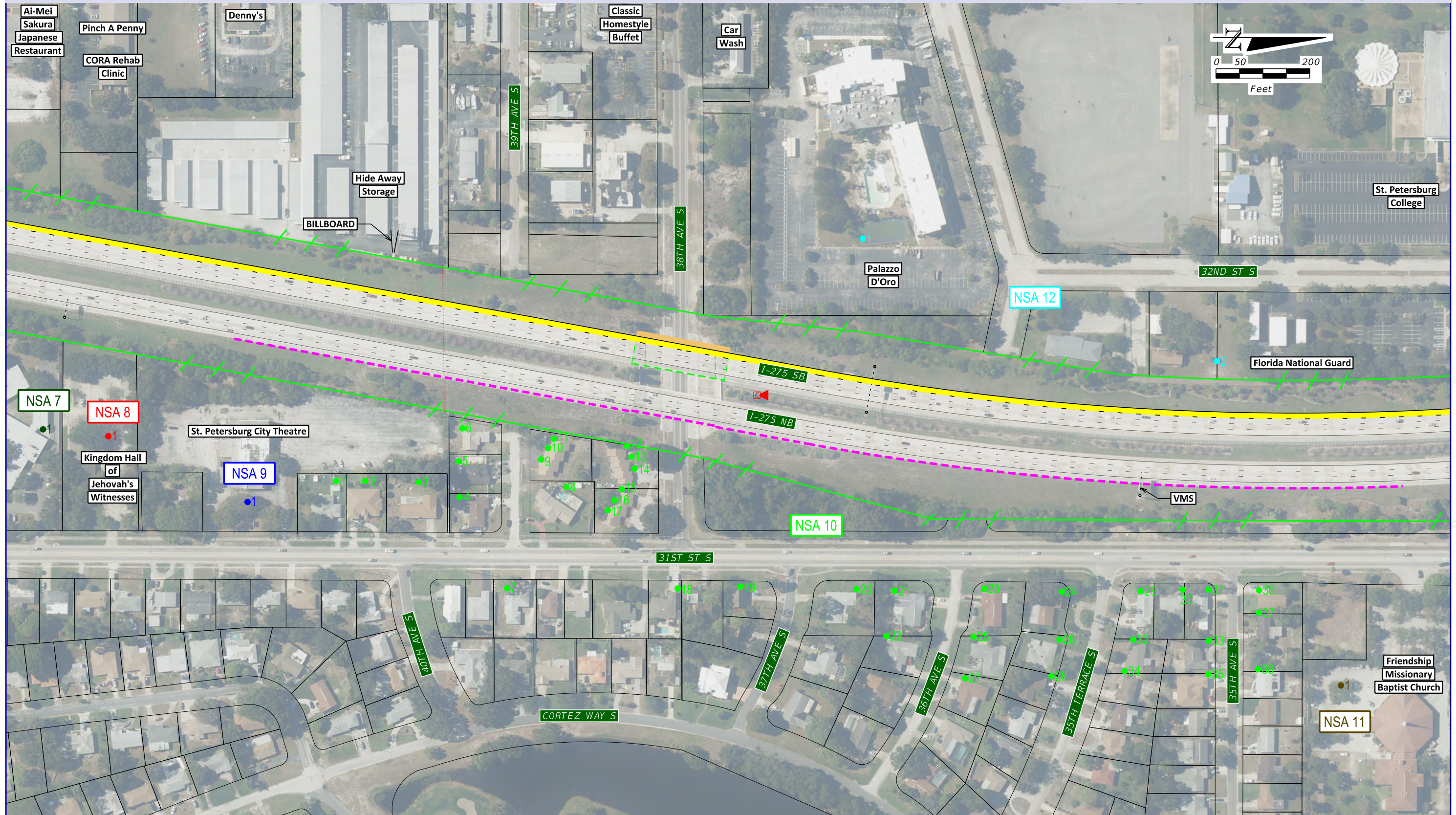
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LEGEND:											
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	PAVEMENT REMOVAL		BRIDGES		WETLANDS		RIGHT OF WAY		NOISE SENSITIVE RECEPTOR		
	BARRIER WALL		HISTORIC SITE		SURFACE WATER		FLOOD PLAINS		NOISE BARRIER		
	ITS CAMERA				MANGROVES		CONTAMINATION				





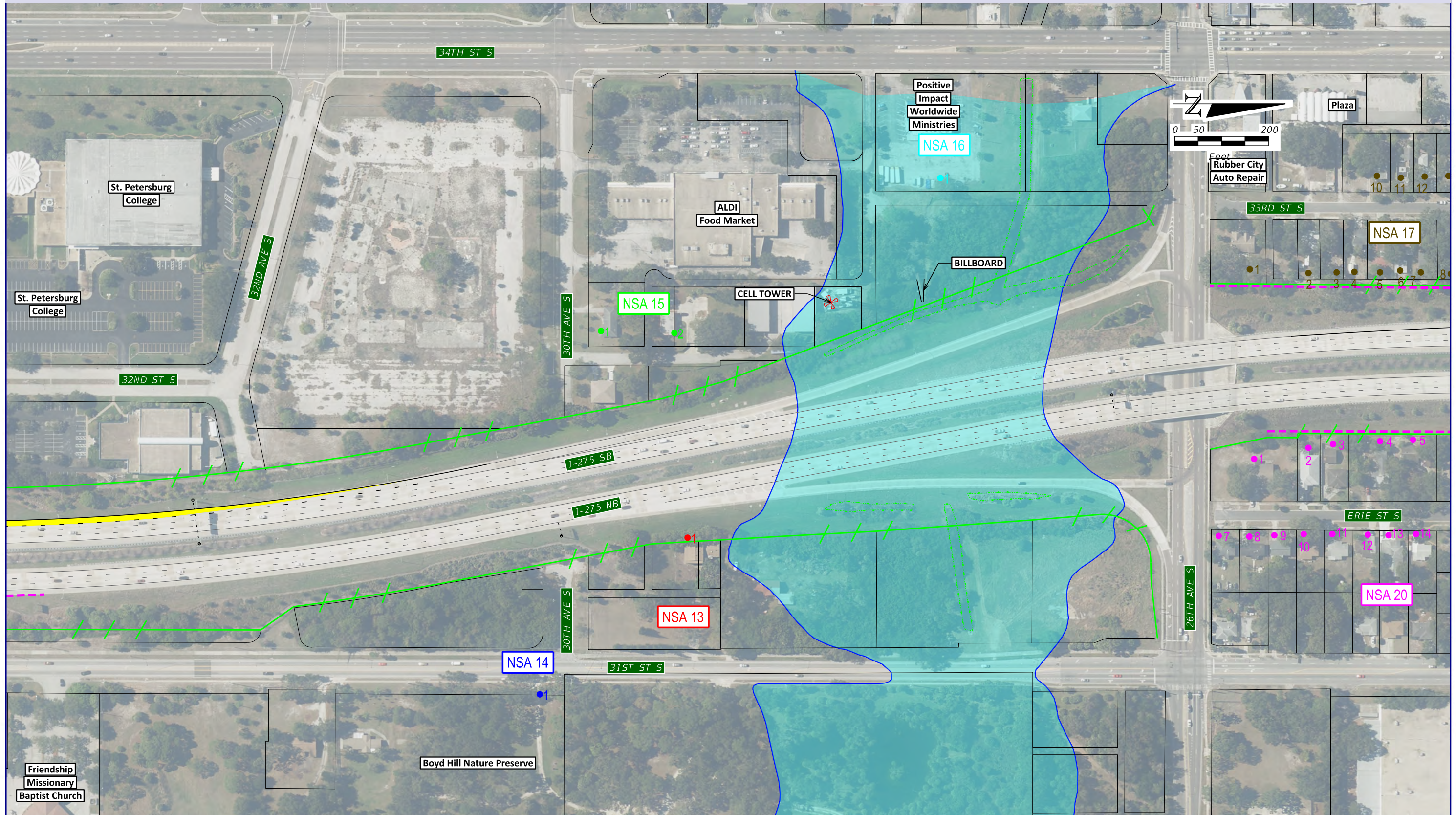
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	PAVEMENT WIDENING		NOISE SENSITIVE RECEPTOR
	PAVEMENT REMOVAL		NOISE BARRIER
	BARRIER WALL		
	BRIDGE WIDENING		
	BRIDGES		
	HISTORIC SITE		
	ITS CAMERA		
	OVERHEAD SIGN STRUCTURE		
	WETLANDS		
	SURFACE WATER		
	MANGROVES		
	RIGHT OF WAY		
	FLOOD PLAINS		
	CONTAMINATION		

I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.  
3

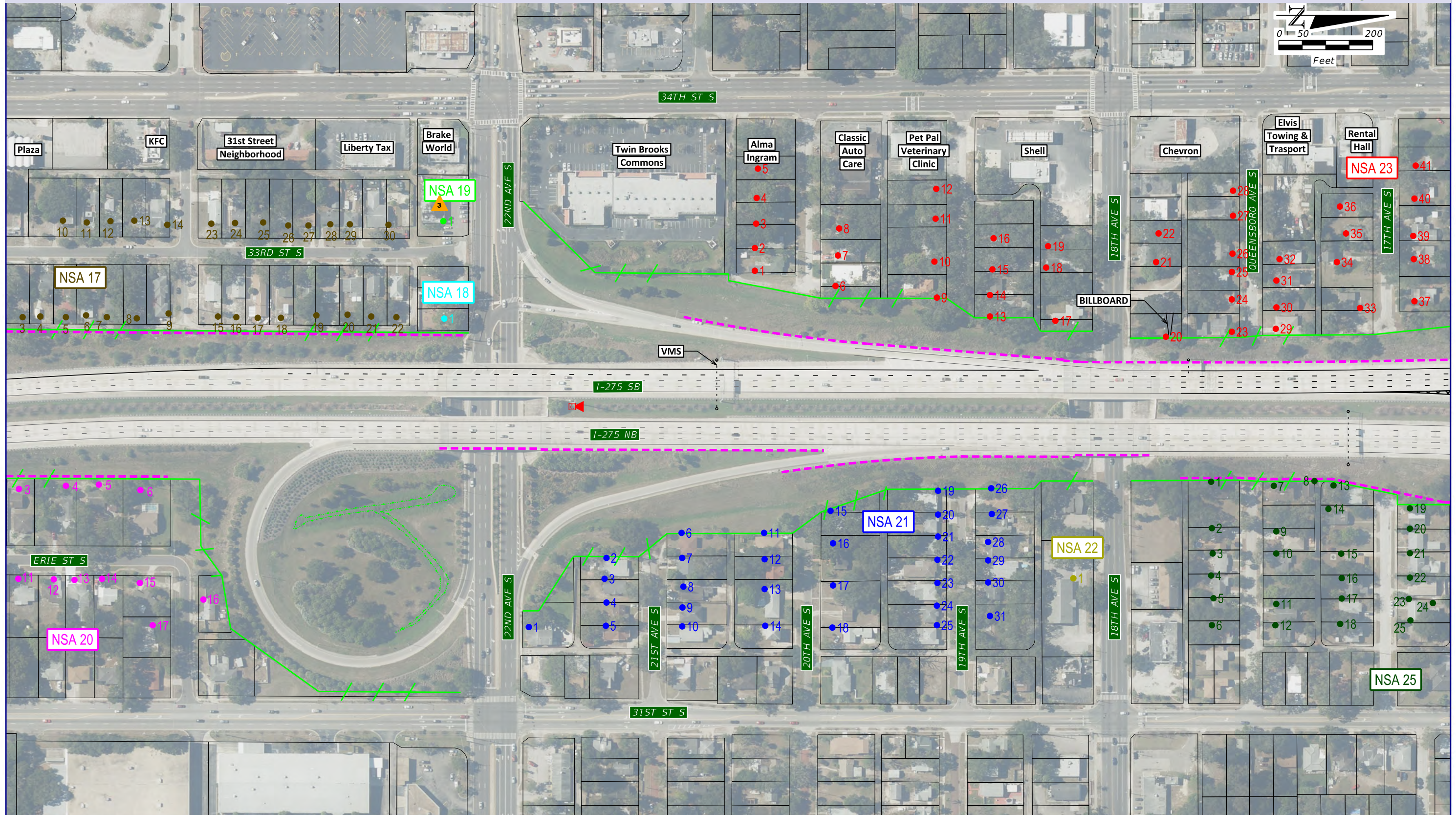
Aerial Photos Dec. '13 - Feb. '14





LEGEND:									
	PAVEMENT WIDENING		BRIDGE WIDENING		OVERHEAD SIGN STRUCTURE		WETLANDS		RIGHT OF WAY
	PAVEMENT REMOVAL		BRIDGES		SURFACE WATER		FLOOD PLAINS		NOISE SENSITIVE RECEPTOR
	BARRIER WALL		HISTORIC SITE		MANGROVES		CONTAMINATION		NOISE BARRIER
			ITS CAMERA						





## LEGEND:

- PAVEMENT WIDENING
- PAVEMENT REMOVAL
- BARRIER WALL

- BRIDGE WIDENING
- BRIDGES
- HISTORIC SITE
- ITS CAMERA

- OVERHEAD SIGN STRUCTURE
- WETLANDS
- SURFACE WATER
- MANGROVES

- RIGHT OF WAY
- FLOOD PLAINS
- CONTAMINATION

- NSA #
- NOISE SENSITIVE AREA
- NOISE SENSITIVE RECEPTOR
- NOISE BARRIER

- KENWOOD HISTORIC DISTRICT

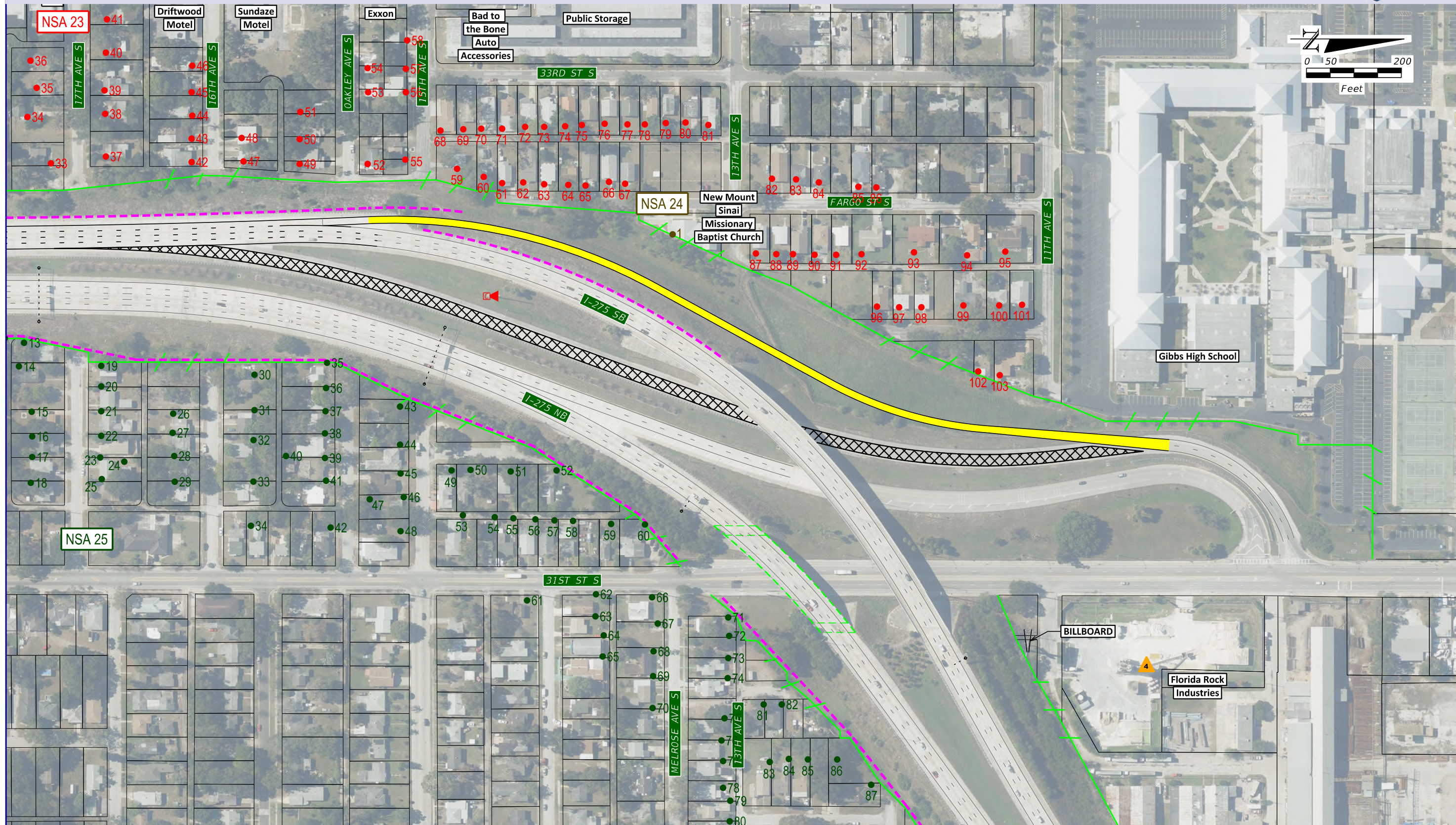
Aerial Photos Dec. '13 - Feb. '14

I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
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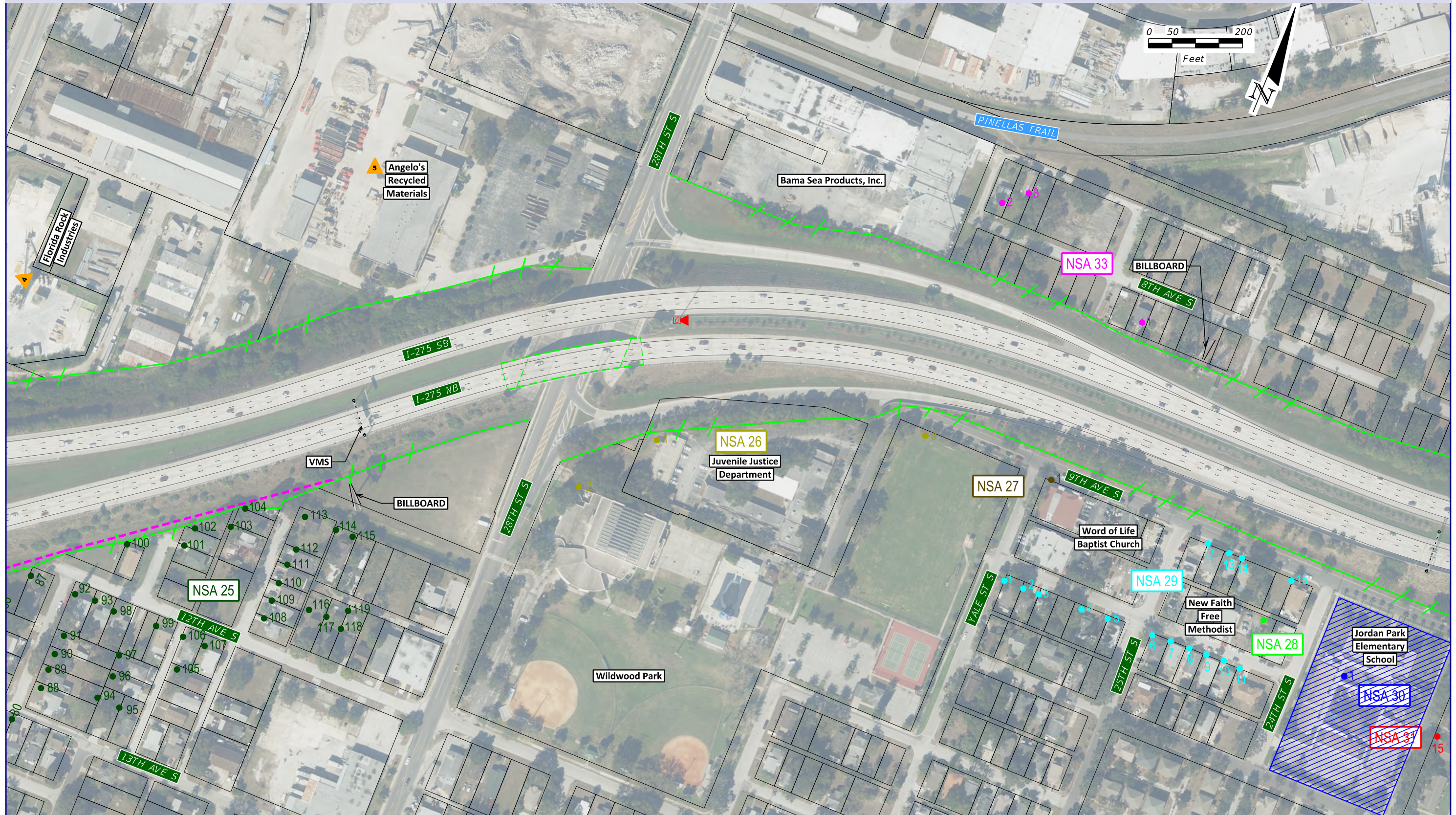
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<b>LEGEND:</b> PAVEMENT WIDENING PAVEMENT REMOVAL BARRIER WALL BRIDGE WIDENING BRIDGES HISTORIC SITE ITS CAMERA OVERHEAD SIGN STRUCTURE WETLANDS SURFACE WATER MANGROVES RIGHT OF WAY FLOOD PLAINS CONTAMINATION NSA # NOISE SENSITIVE RECEPTOR NOISE BARRIER KENWOOD HISTORIC DISTRICT	
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LEGEND:											
	PAVEMENT WIDENING		BRIDGE WIDENING		OVERHEAD SIGN STRUCTURE		NSA #		NOISE SENSITIVE AREA		KENWOOD HISTORIC DISTRICT
	PAVEMENT REMOVAL		BRIDGES		WETLANDS		1		NOISE SENSITIVE RECEPTOR		
	BARRIER WALL		HISTORIC SITE		SURFACE WATER		---		NOISE BARRIER		
			ITS CAMERA		RIGHT OF WAY		x		FLOOD PLAINS		
					MANGROVES				CONTAMINATION		

I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET NO.

7

Aerial Photos Dec. '13 - Feb. '14

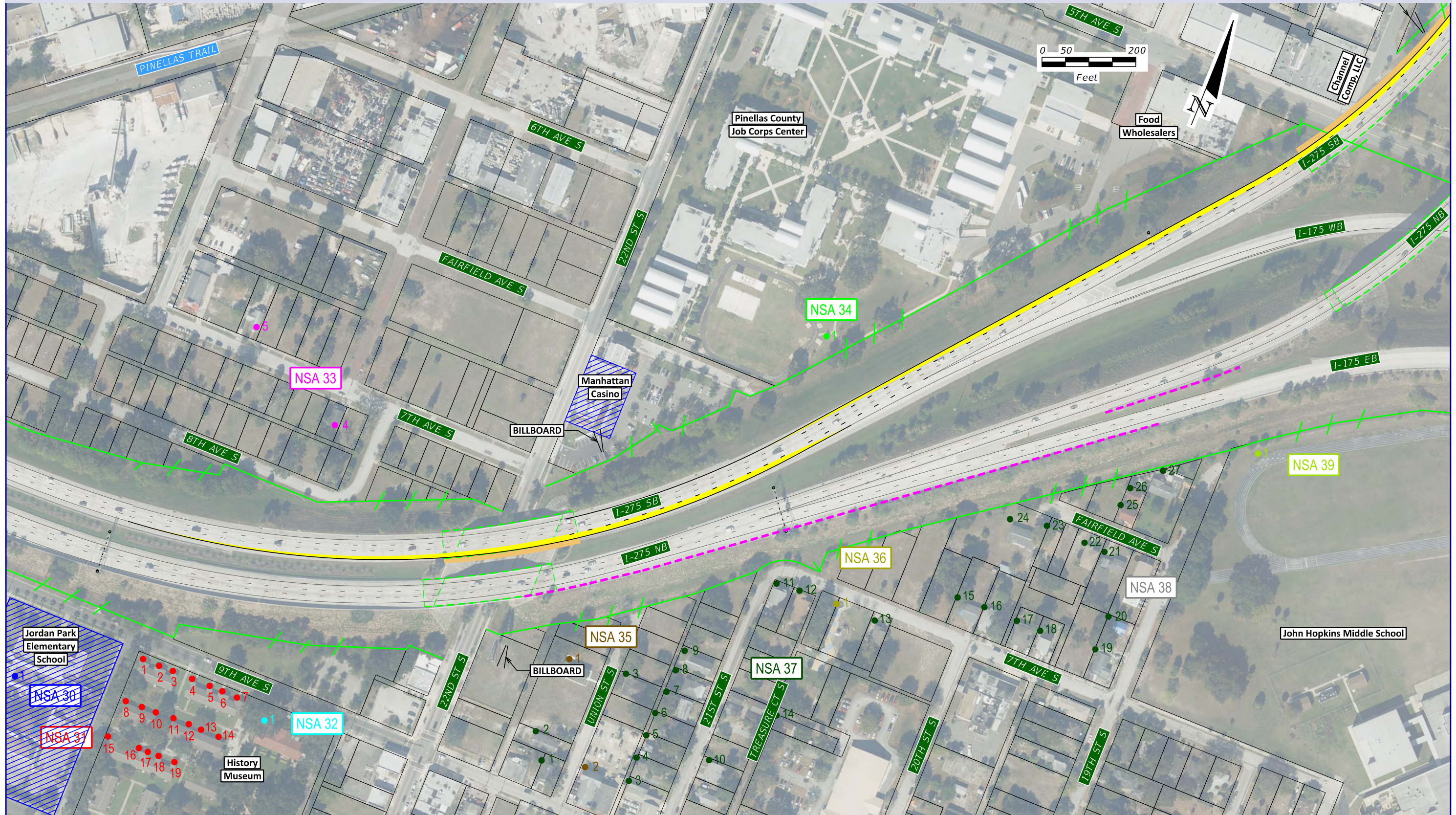
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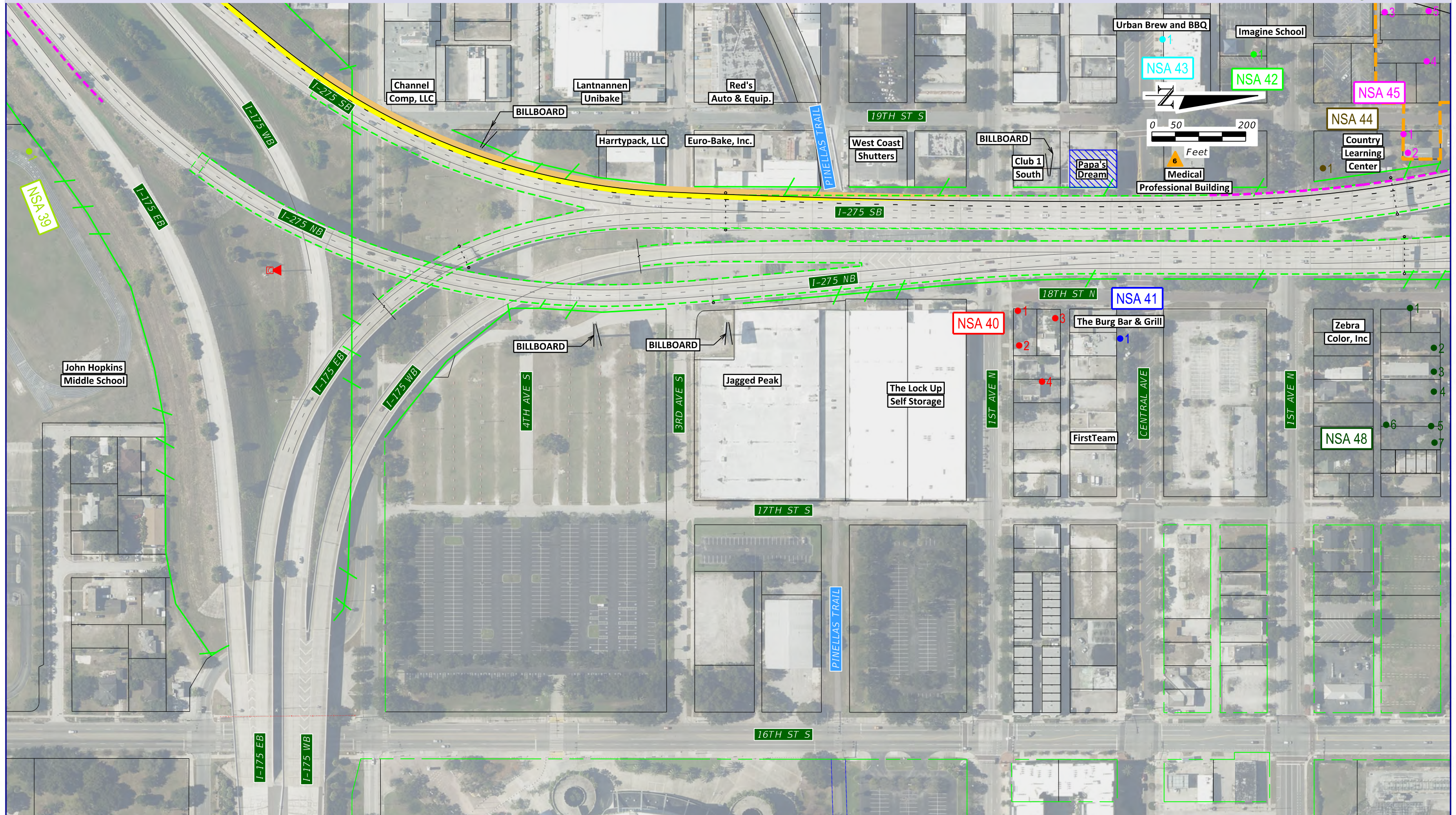















































































































LEGEND:			
	PAVEMENT WIDENING		BRIDGE WIDENING
	PAVEMENT REMOVAL		BRIDGES
	BARRIER WALL		HISTORIC SITE
	NOISE SENSITIVE RECEPTOR		ITS CAMERA
	NOISE SENSITIVE AREA		OVERHEAD SIGN STRUCTURE
	NOISE BARRIER		WETLANDS
	KENWOOD HISTORIC DISTRICT		SURFACE WATER
	RIGHT OF WAY		FLOOD PLAINS
	MANGROVES		CONTAMINATION

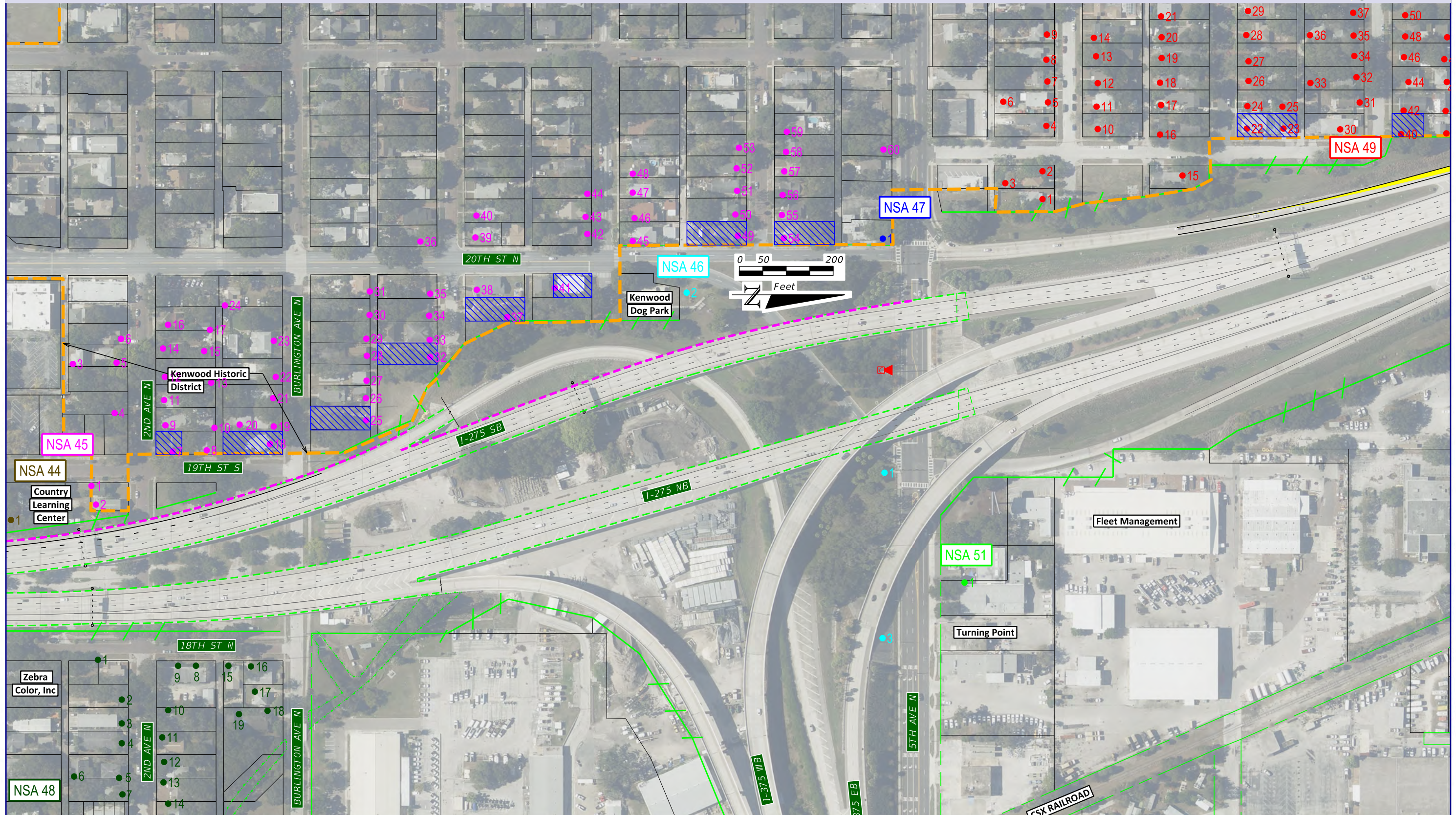
I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS





LEGEND:											
	PAVEMENT WIDENING		BRIDGE WIDENING		OVERHEAD SIGN STRUCTURE		NSA #		NOISE SENSITIVE AREA		KENWOOD HISTORIC DISTRICT
	PAVEMENT REMOVAL		BRIDGES		WETLANDS		1		NOISE SENSITIVE RECEPTOR		
	BARRIER WALL		HISTORIC SITE		SURFACE WATER		---		NOISE BARRIER		
			ITS CAMERA		MANGROVES		X				
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											
											





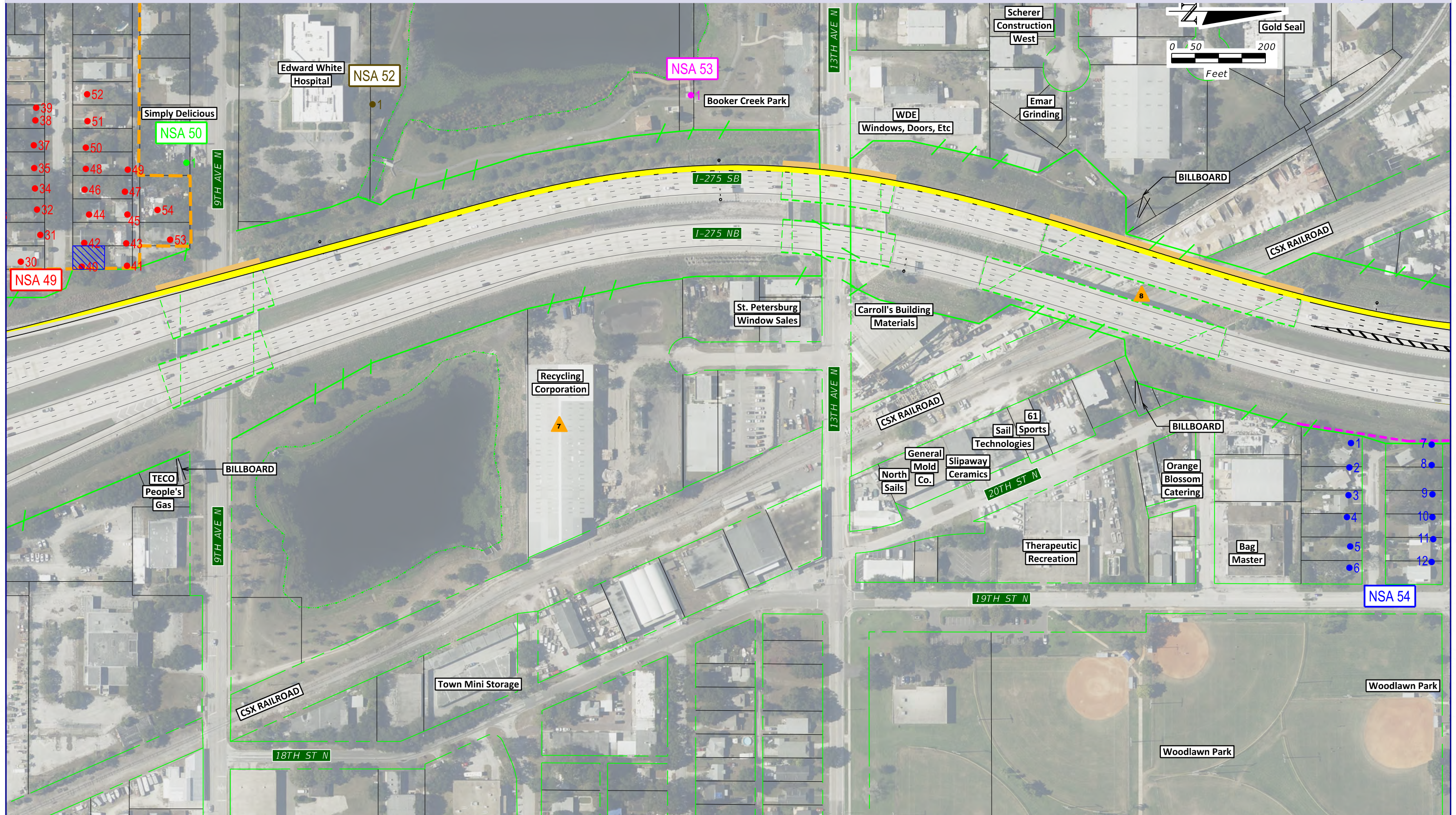
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	PAVEMENT REMOVAL		BRIDGES		WETLANDS		NOISE BARRIER		
	BARRIER WALL		HISTORIC SITE		SURFACE WATER		CONTAMINATION		
			ITS CAMERA		MANGROVES				

I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.  
10

Aerial Photos Dec. '13 - Feb. '14

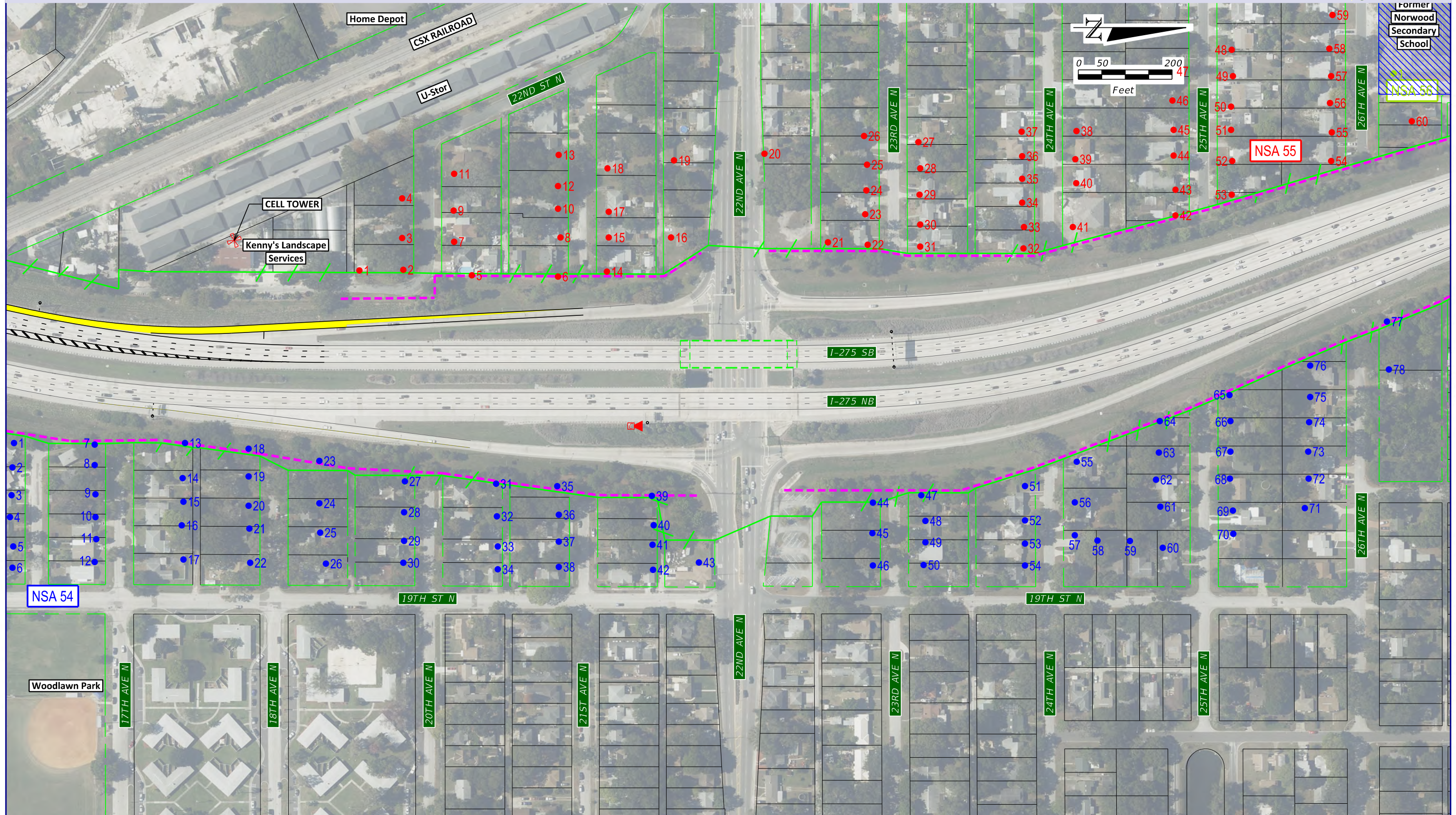




<b>LEGEND:</b> PAVEMENT WIDENING PAVEMENT REMOVAL BARRIER WALL BRIDGE WIDENING BRIDGES HISTORIC SITE ITS CAMERA OVERHEAD SIGN STRUCTURE WETLANDS SURFACE WATER MANGROVES RIGHT OF WAY FLOOD PLAINS CONTAMINATION NSA # NOISE SENSITIVE RECEPTOR NOISE BARRIER KENWOOD HISTORIC DISTRICT
---

I-275: 54TH AVE S TO N OF 4TH ST  
 CONCEPT PLANS AND  
 NOISE SENSITIVE RECEPTORS





LEGEND:											
	PAVEMENT WIDENING		BRIDGE WIDENING		OVERHEAD SIGN STRUCTURE		NSA #		NOISE SENSITIVE AREA		KENWOOD HISTORIC DISTRICT
	PAVEMENT REMOVAL		BRIDGES		WETLANDS		1		NOISE SENSITIVE RECEPTOR		
	BARRIER WALL		HISTORIC SITE		SURFACE WATER		---		NOISE BARRIER		
			ITS CAMERA		MANGROVES		FLOOD PLAINS		CONTAMINATION		

I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.

12

Aerial Photos Dec. '13 - Feb. '14

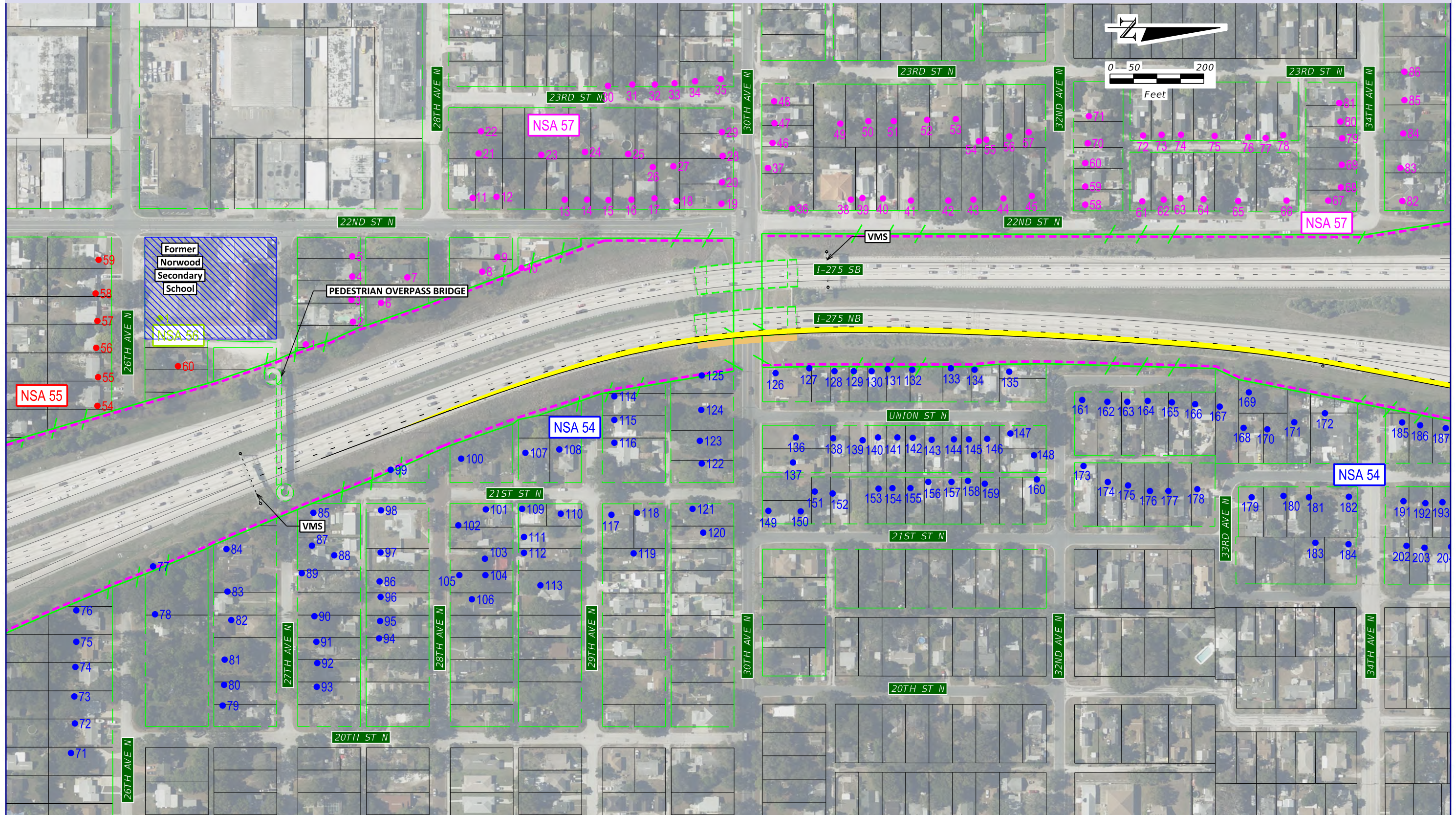
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## LEGEND:

- |                   |                 |                            |                           |
|-------------------|-----------------|----------------------------|---------------------------|
| PAVEMENT WIDENING | BRIDGE WIDENING | OVERHEAD SIGN STRUCTURE    | NOISE BARRIER             |
| PAVEMENT REMOVAL  | BRIDGES         | WETLANDS                   | NOISE SENSITIVE AREA      |
| BARRIER WALL      | HISTORIC SITE   | SURFACE WATER              | NOISE SENSITIVE RECEPTOR  |
|                   | ITS CAMERA      | FLOOD PLAINS CONTAMINATION |                           |
|                   |                 | MANGROVES                  |                           |
|                   |                 | RIGHT OF WAY               |                           |
|                   |                 |                            | KENWOOD HISTORIC DISTRICT |

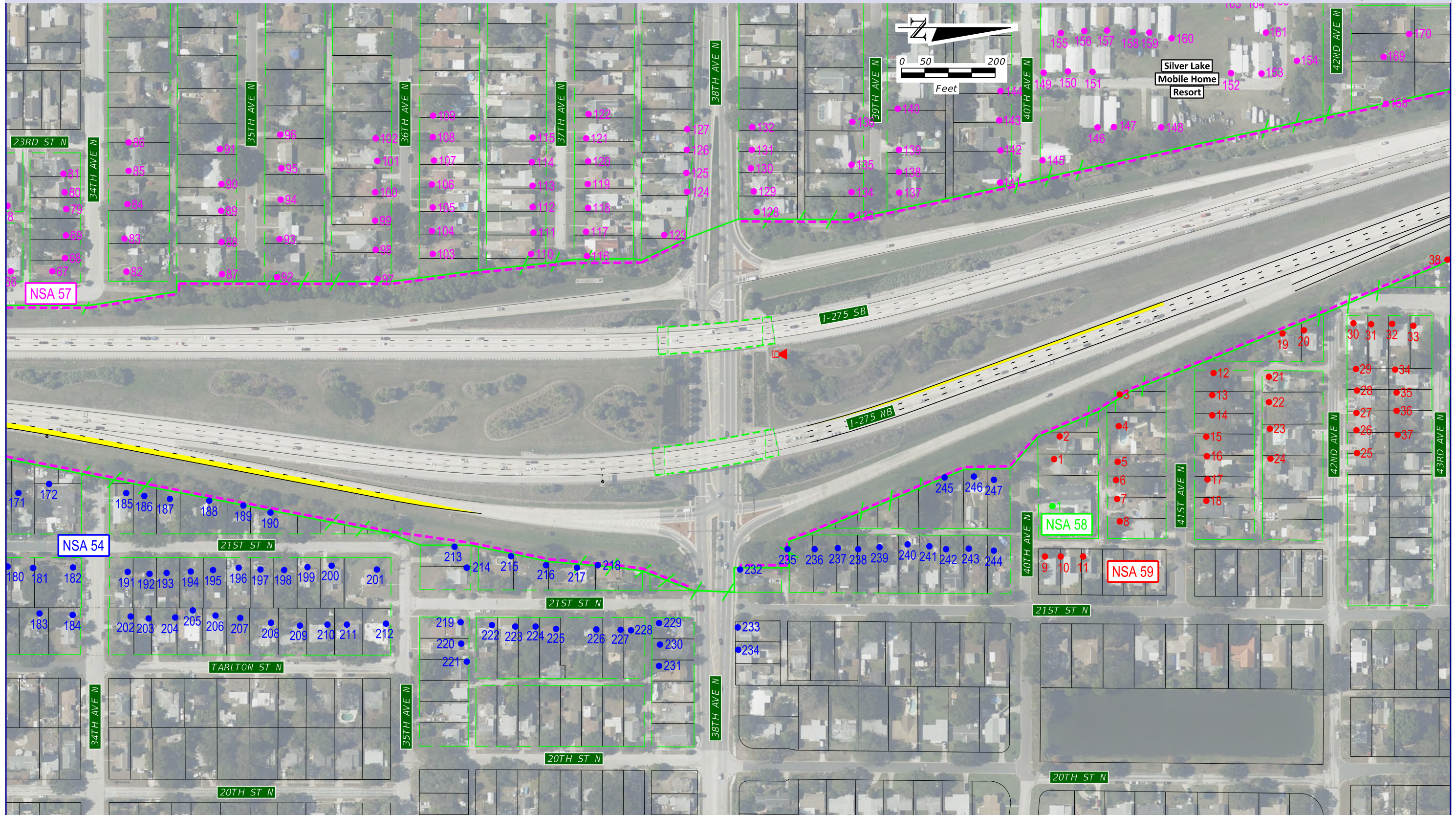
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I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.

13





LEGEND:											
	PAVEMENT WIDENING		BRIDGE WIDENING		OVERHEAD SIGN STRUCTURE		NSA #		NOISE SENSITIVE RECEPTOR		KENWOOD HISTORIC DISTRICT
	PAVEMENT REMOVAL		BRIDGES		WETLANDS		NOISE BARRIER				
	BARRIER WALL		HISTORIC SITE		SURFACE WATER						
			ITS CAMERA		MANGROVES						
					FLOOD PLAINS						
					CONTAMINATION						

I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.  
14

Aerial Photos Dec. '13 - Feb. '14

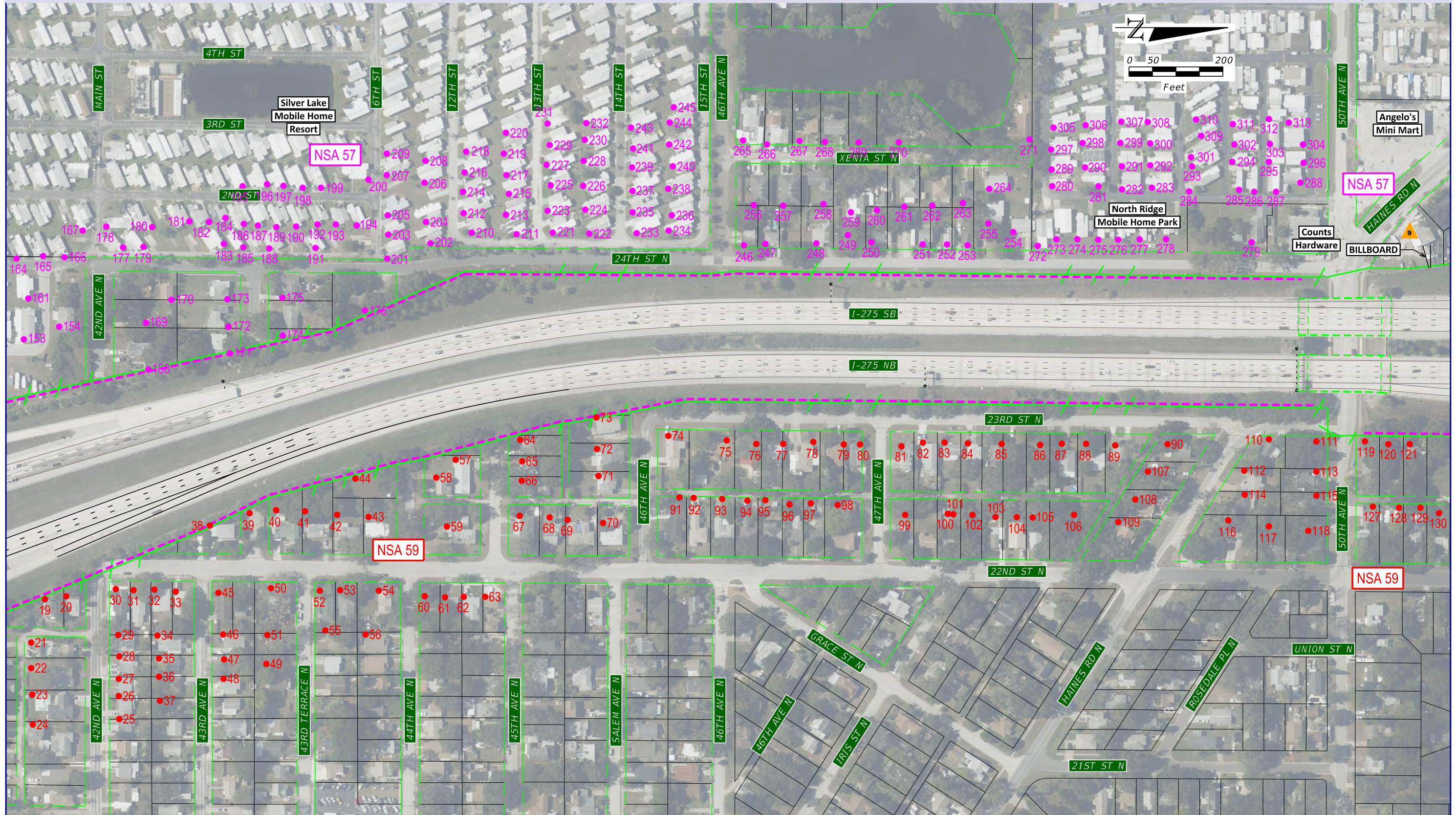
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## LEGEND:

- PAVEMENT WIDENING
- PAVEMENT REMOVAL
- BARRIER WALL

- BRIDGE WIDENING
- BRIDGES
- HISTORIC SITE
- ITS CAMERA

- OVERHEAD SIGN STRUCTURE
- WETLANDS
- SURFACE WATER
- MANGROVES

- RIGHT OF WAY
- FLOOD PLAINS
- CONTAMINATION

- NSA #
- NOISE SENSITIVE RECEPTOR
- NOISE BARRIER

- KENWOOD HISTORIC DISTRICT

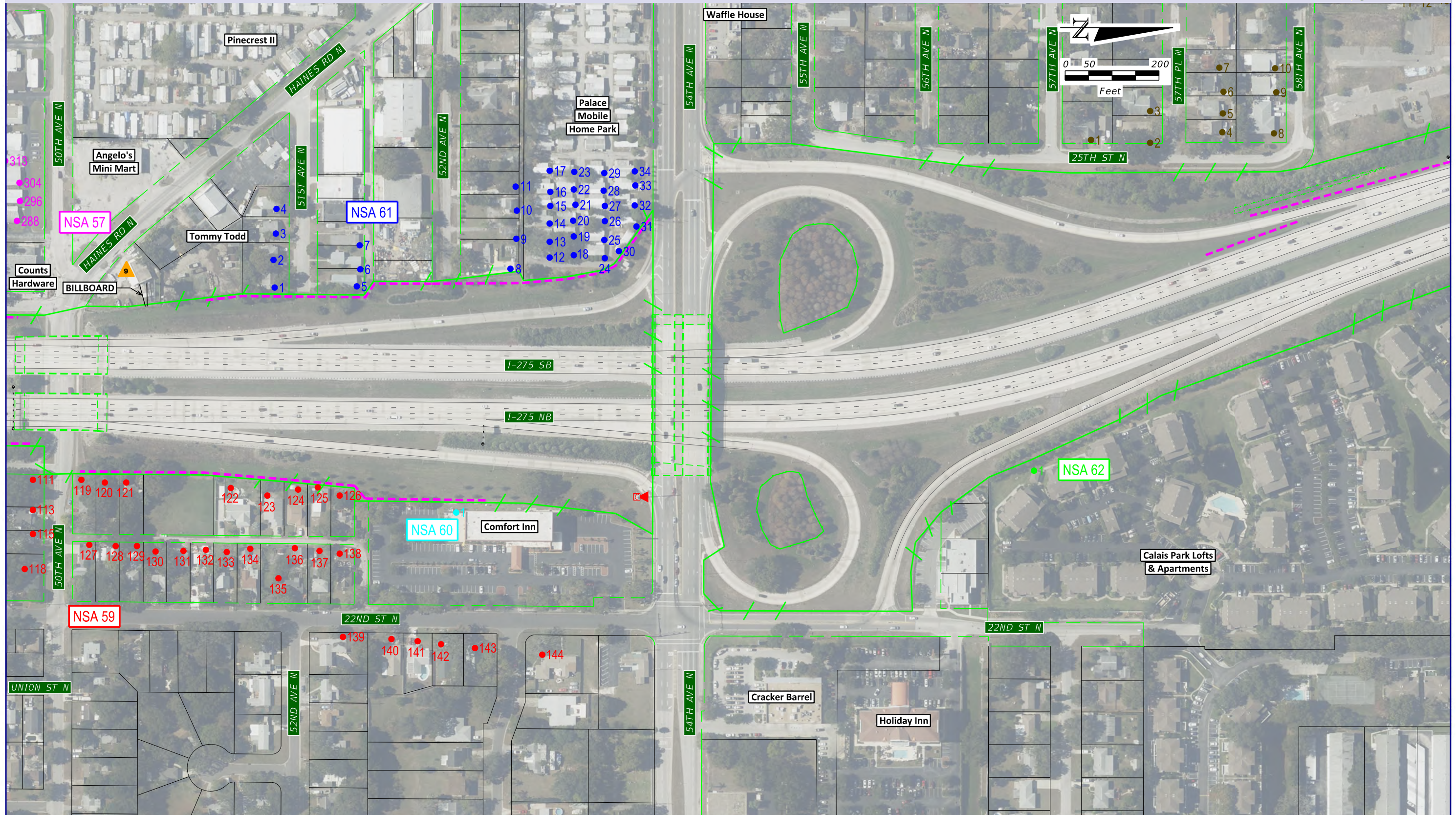
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I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.

15





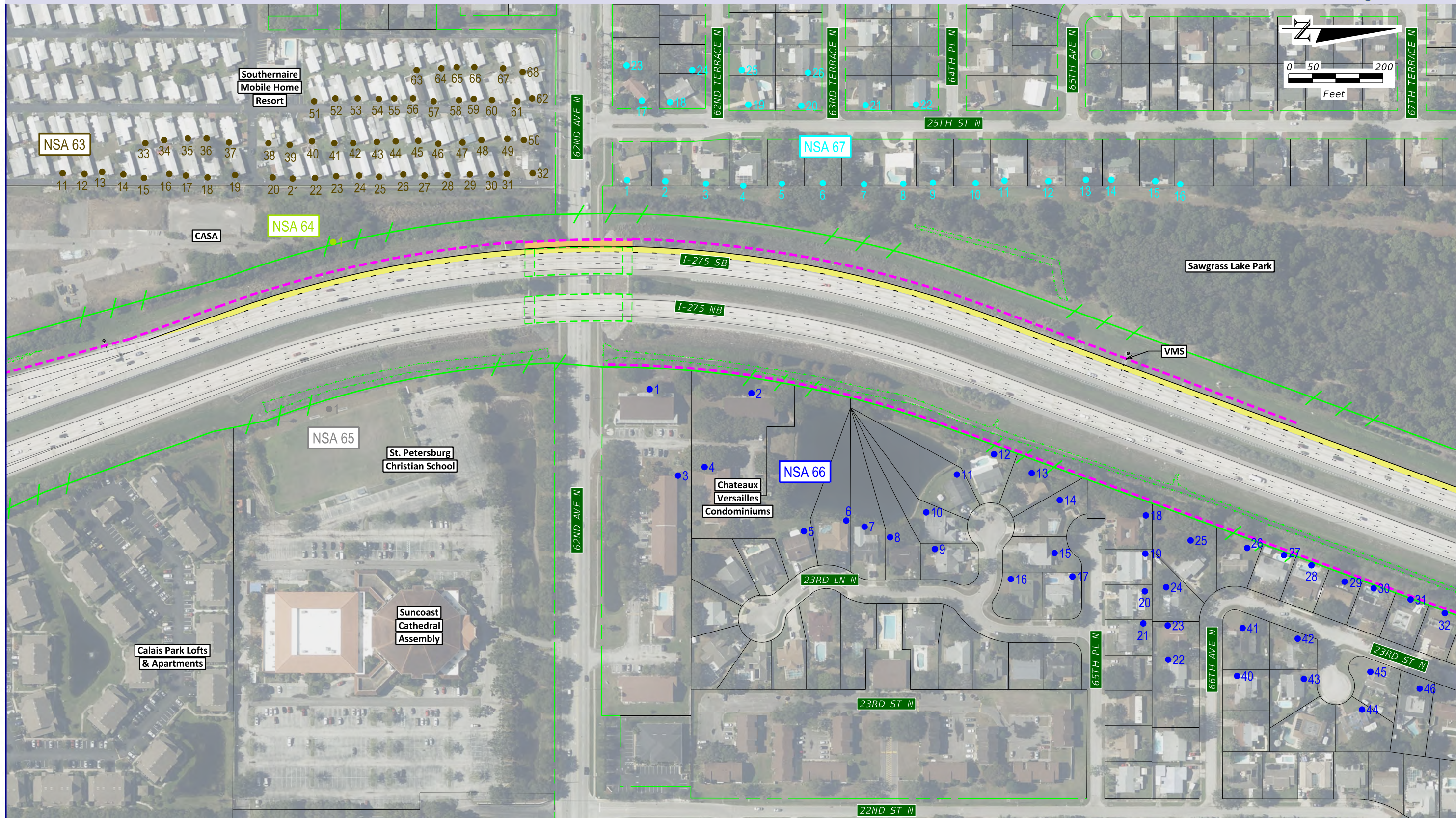
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	PAVEMENT REMOVAL		BRIDGES		WETLANDS		FLOOD PLAINS				NOISE BARRIER
	BARRIER WALL		HISTORIC SITE		SURFACE WATER		CONTAMINATION				
			ITS CAMERA		MANGROVES						

I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.  
16

Aerial Photos Dec. '13 - Feb. '14





## LEGEND:

- PAVEMENT WIDENING
- PAVEMENT REMOVAL
- BARRIER WALL

- BRIDGE WIDENING
- BRIDGES
- HISTORIC SITE
- ITS CAMERA

- OVERHEAD SIGN STRUCTURE
- WETLANDS
- SURFACE WATER
- MANGROVES

- RIGHT OF WAY
- FLOOD PLAINS
- CONTAMINATION

- NSA #
- NOISE SENSITIVE RECEPTOR
- NOISE BARRIER

- KENWOOD HISTORIC DISTRICT

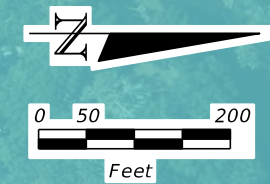
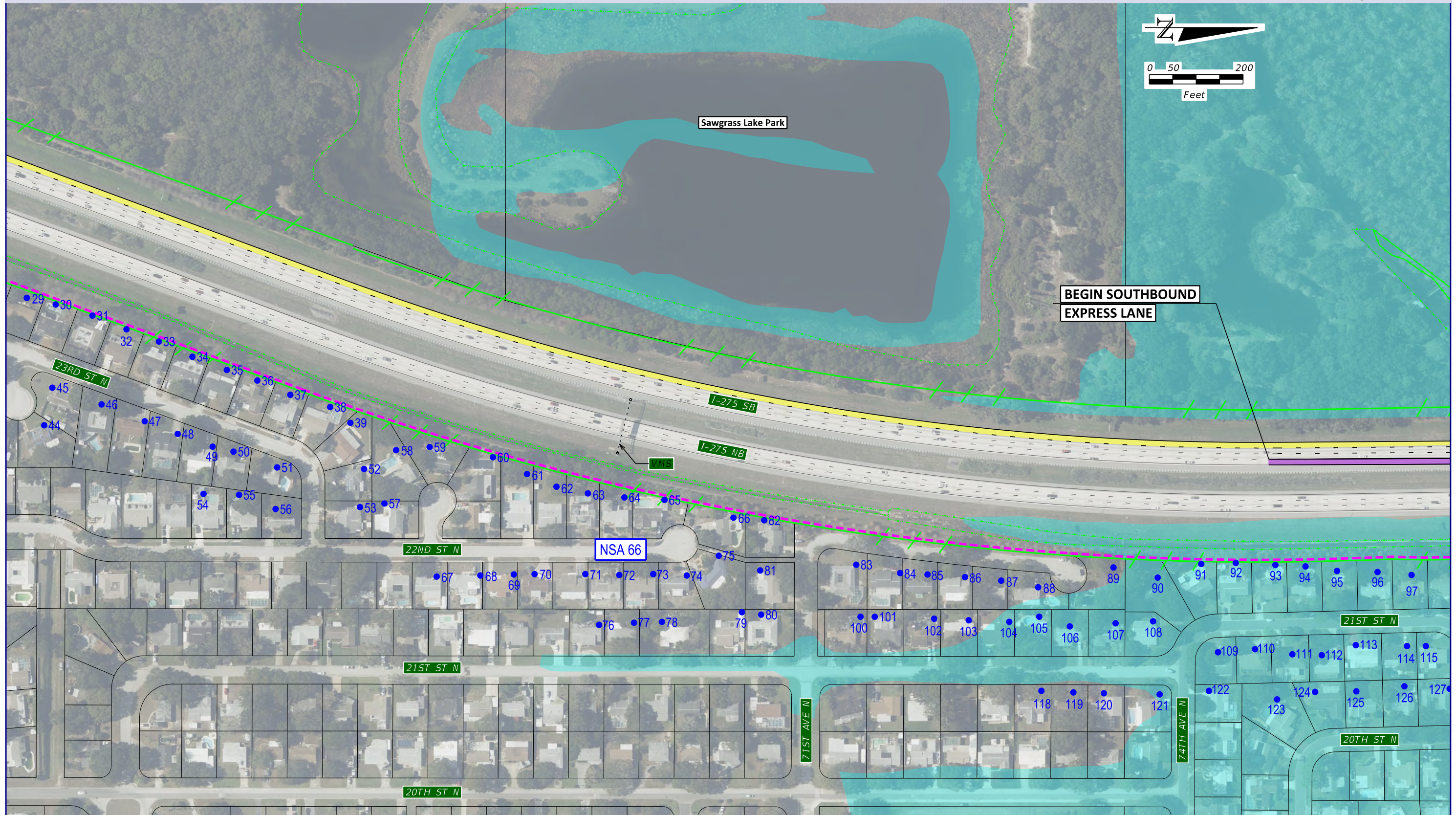
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I-275: 54TH AVE S TO N OF 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
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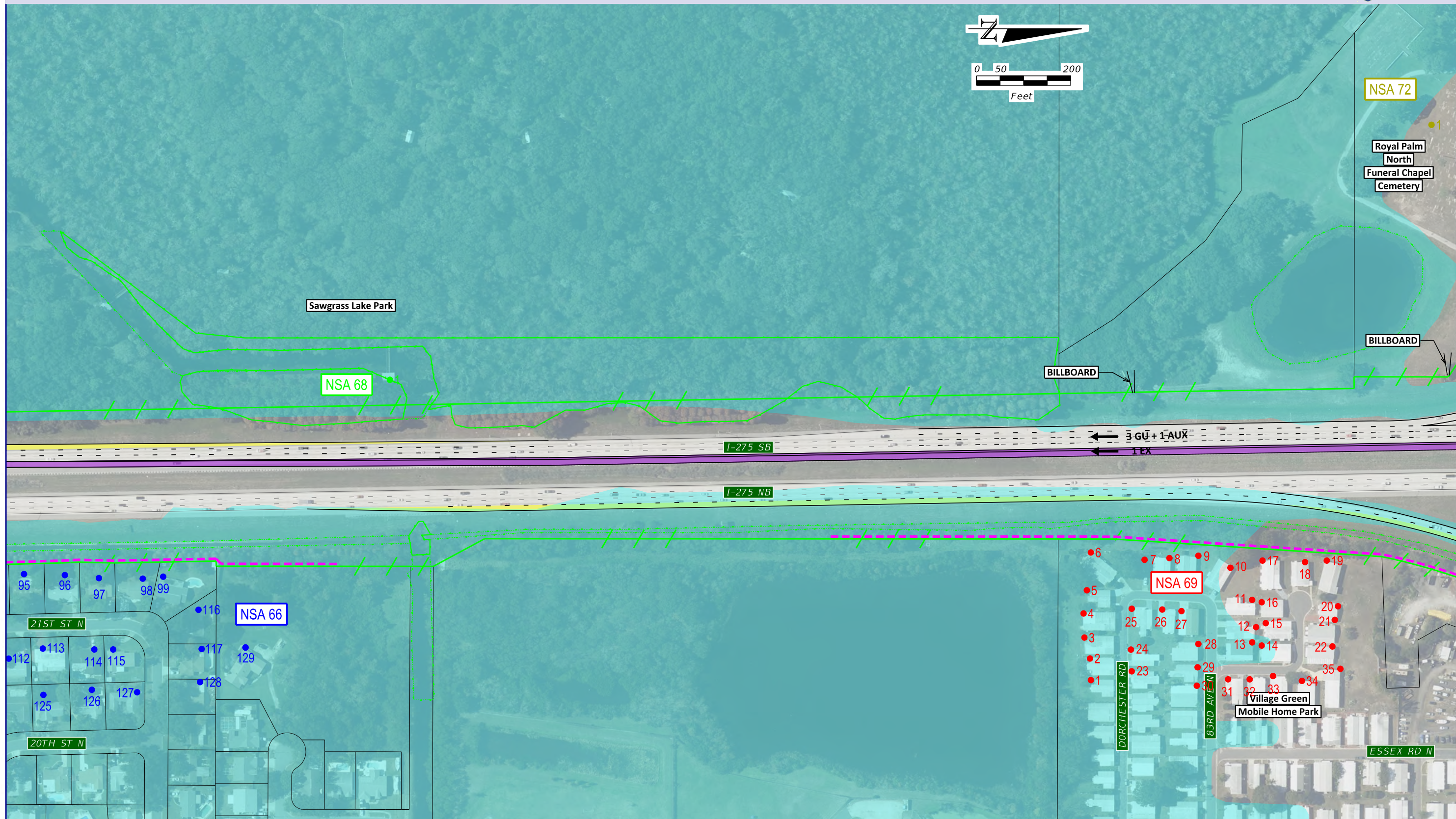
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LEGEND:									
	PAVEMENT WIDENING		BRIDGE WIDENING		OVERHEAD SIGN STRUCTURE		NOISE SENSITIVE AREA		KENWOOD HISTORIC DISTRICT
	PAVEMENT REMOVAL		BRIDGES		WETLANDS		NOISE SENSITIVE RECEPTOR		
	BARRIER WALL		HISTORIC SITE		RIGHT OF WAY		NOISE BARRIER		
			ITS CAMERA		SURFACE WATER				
					MANGROVES				
					FLOOD PLAINS				
					CONTAMINATION				





## LEGEND:

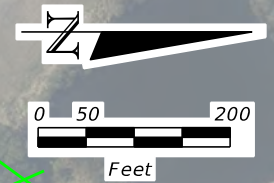
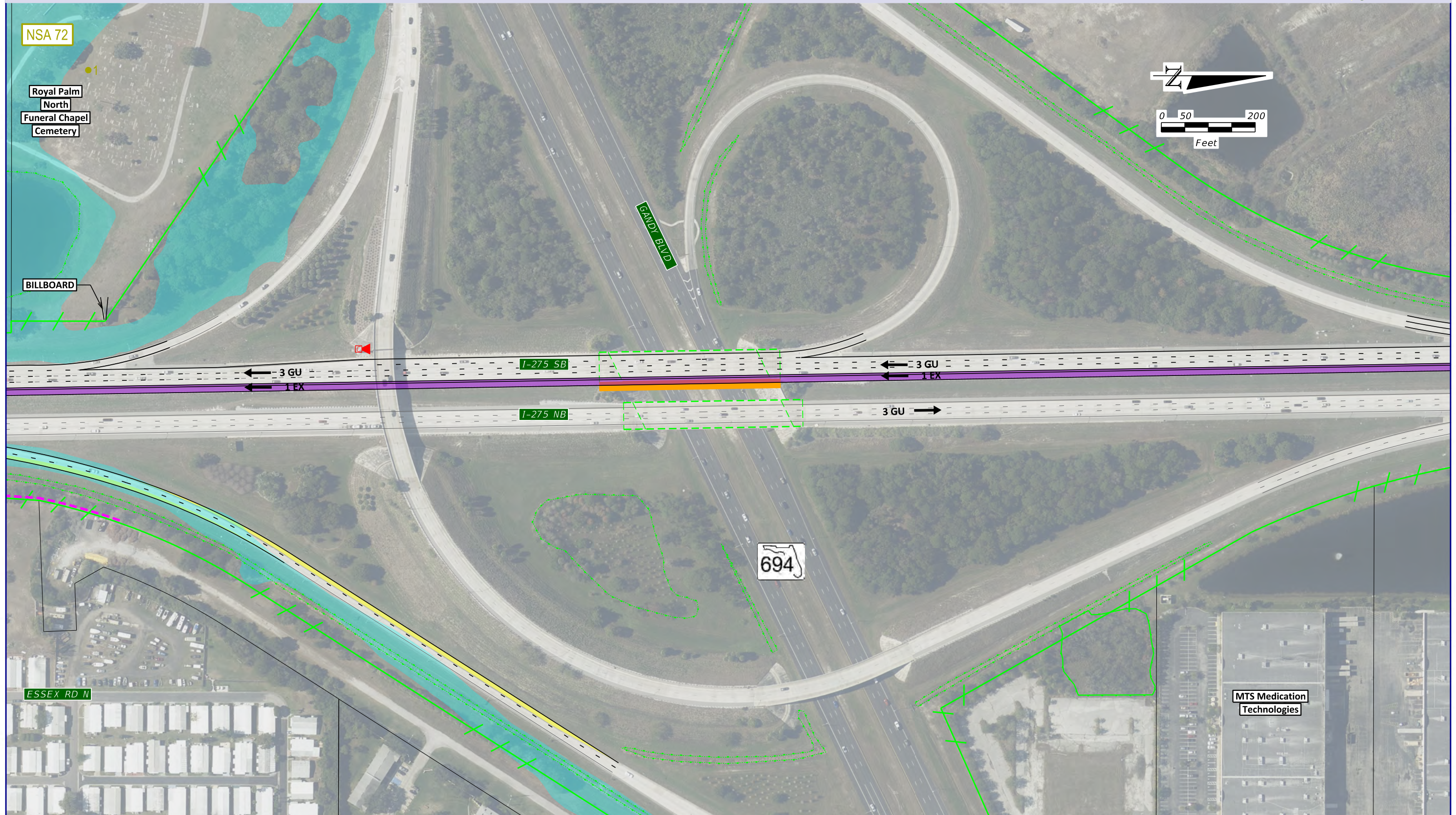
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	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA		GU = GENERAL USE LANES
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR		AUX = AUXILIARY LANES
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION		NOISE BARRIER				

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.

19



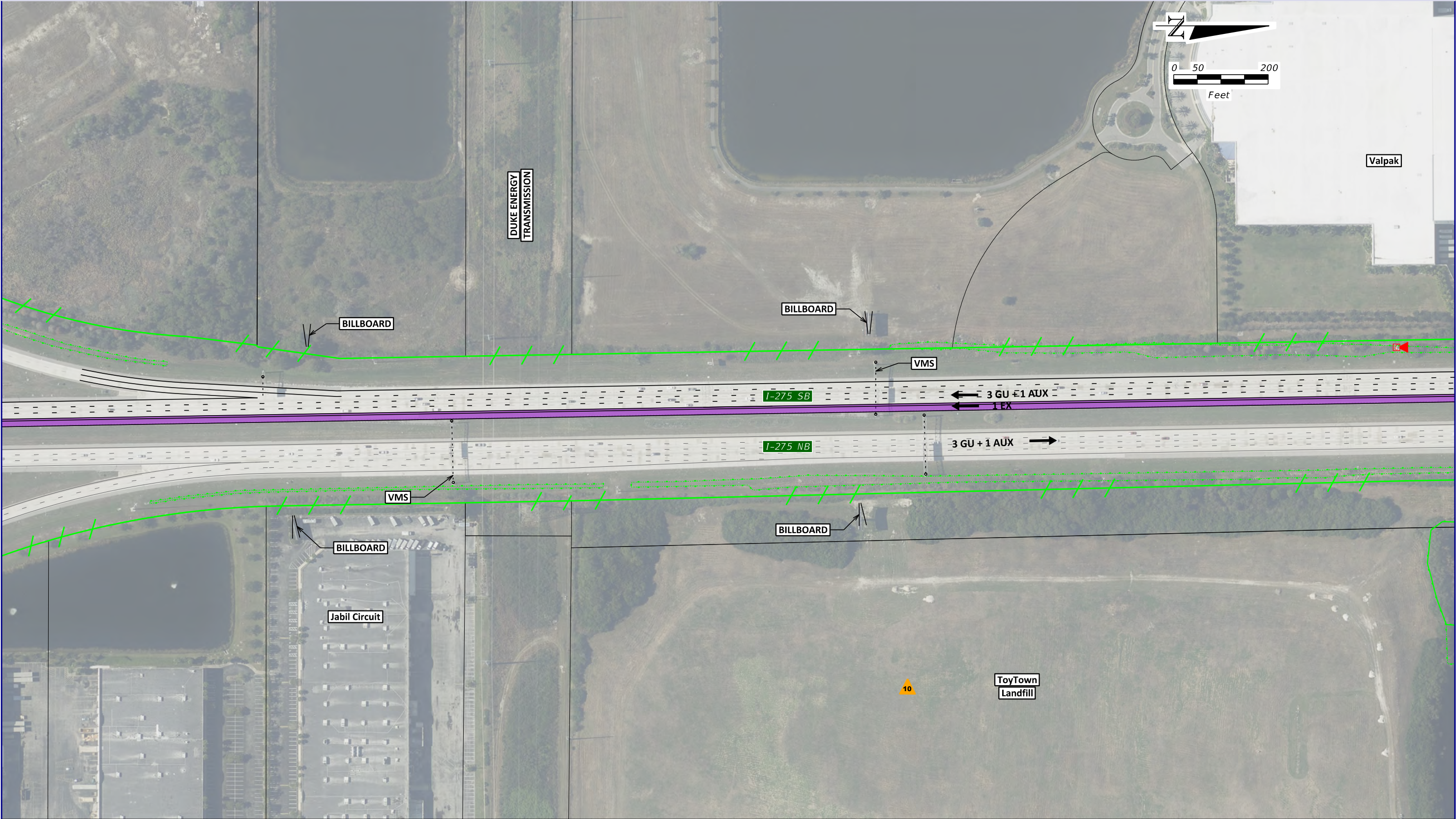


LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION		NSA #		NOISE BARRIER
					EX = EXPRESS TOLL LANES				
					GU = GENERAL USE LANES				
					AUX = AUXILIARY LANES				
					Aerial Photos Dec. '13 - Feb. '14				

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

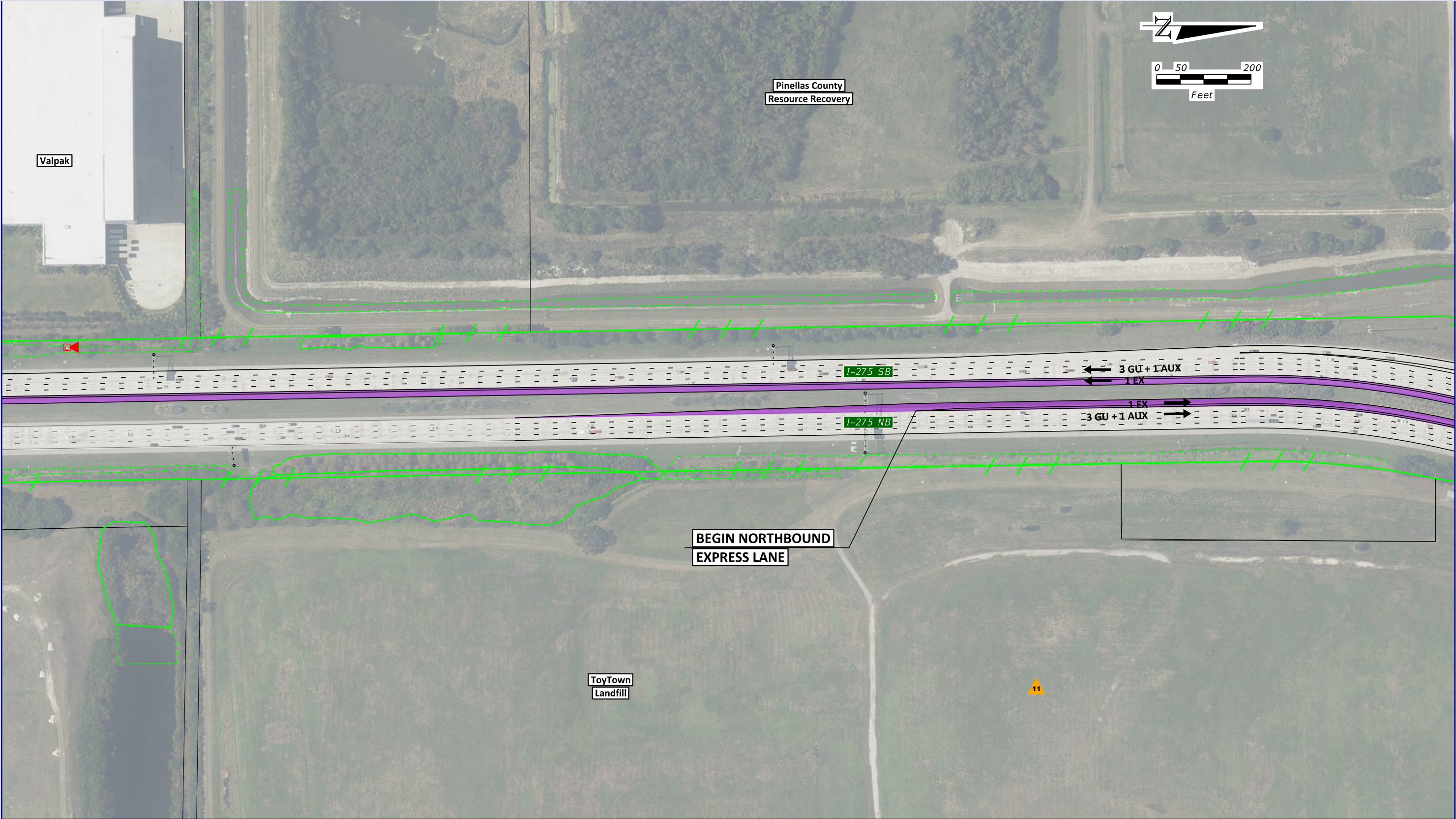
SHEET  
NO.  
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LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION		NOISE BARRIER		EX = EXPRESS TOLL LANES
									GU = GENERAL USE LANES
									AUX = AUXILIARY LANES
									Aerial Photos Dec. '13 - Feb. '14





LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION				NOISE BARRIER

EX = EXPRESS TOLL LANES  
 GU = GENERAL USE LANES  
 AUX = AUXILIARY LANES

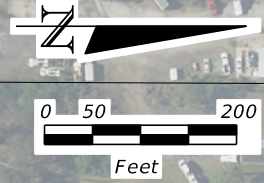
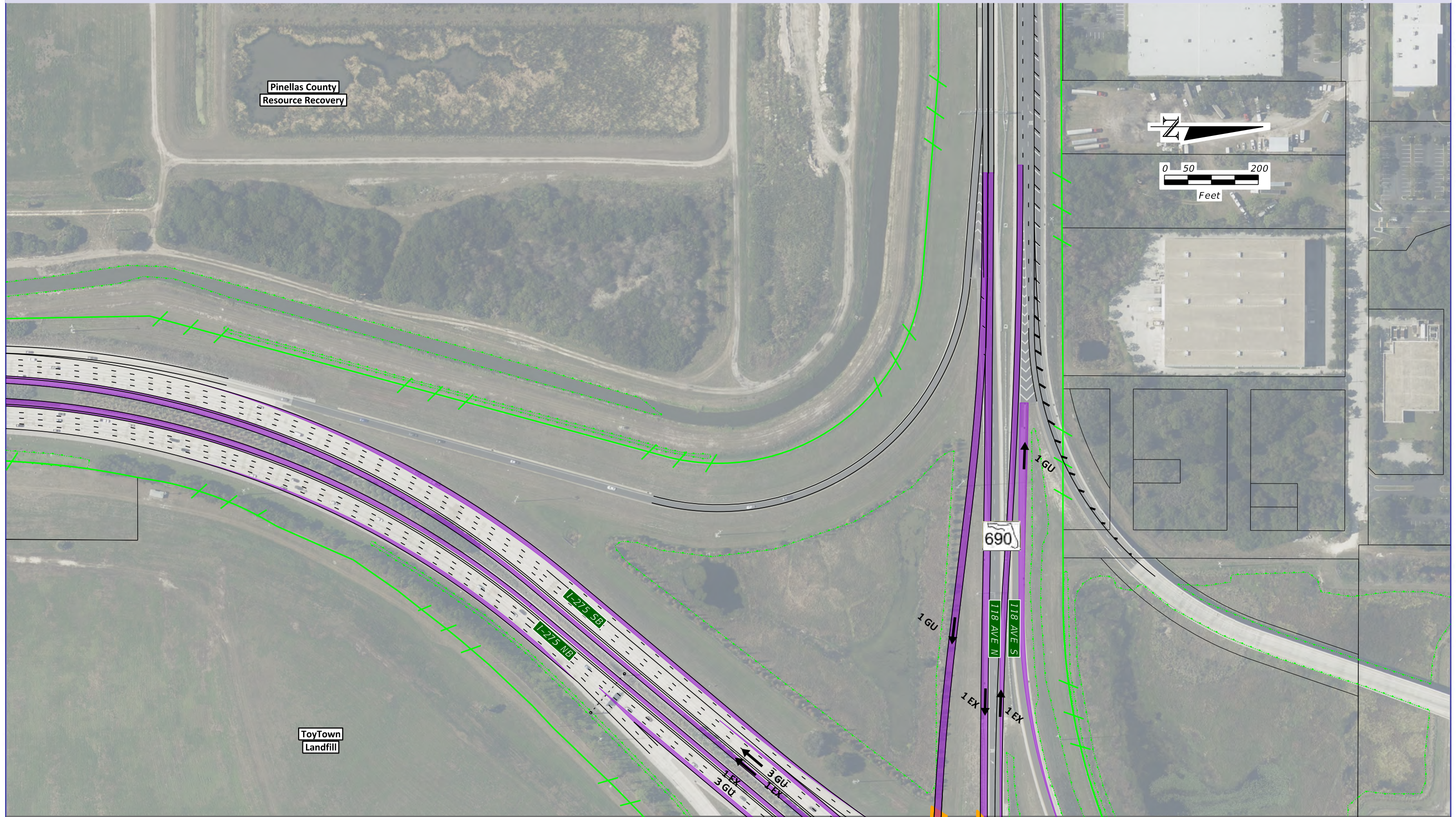
Aerial Photos Dec. '13 - Feb. '14

I-275: 54TH AVE S TO N 4TH ST  
 CONCEPT PLANS AND  
 NOISE SENSITIVE RECEPTORS

SHEET  
NO.

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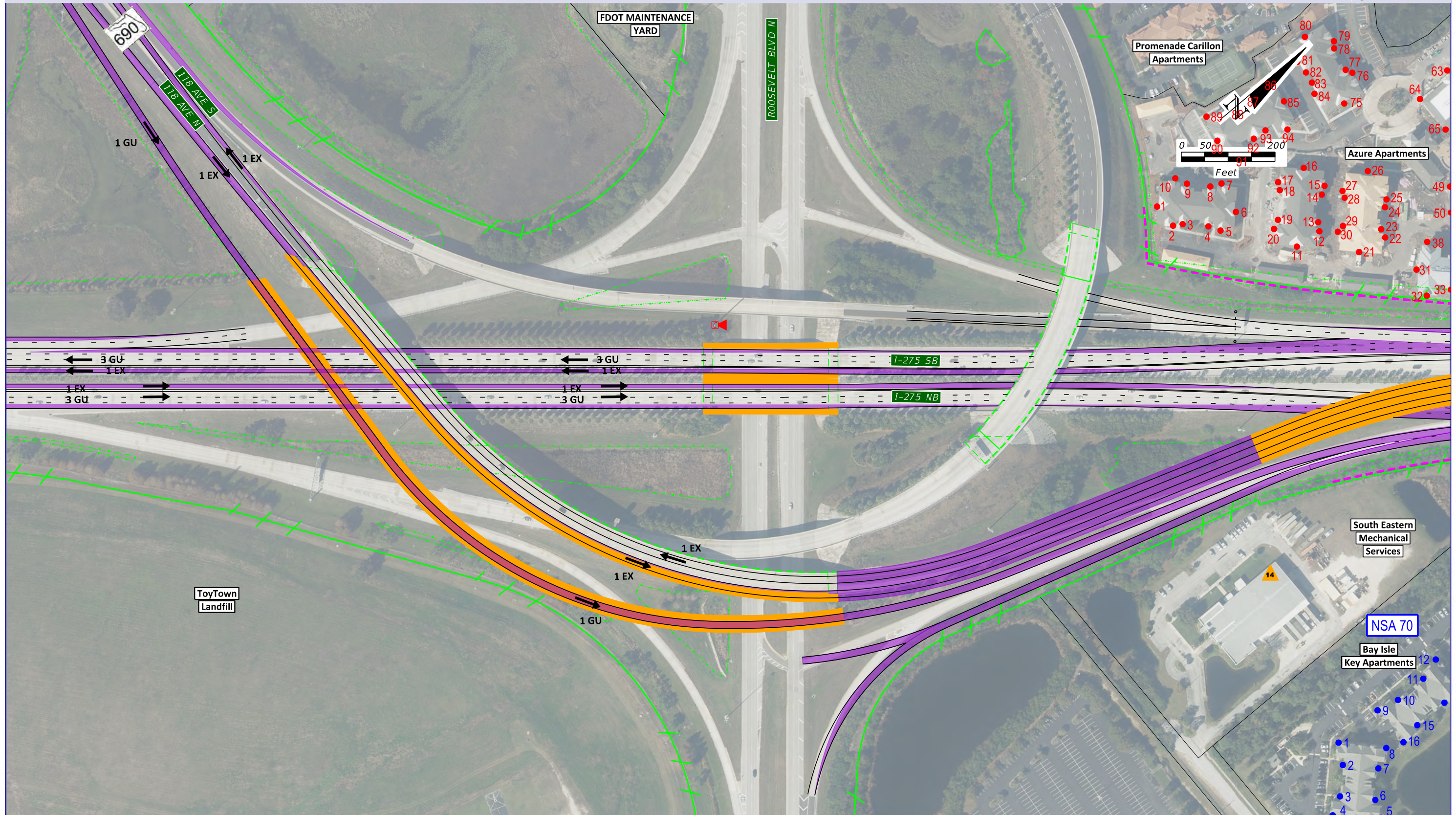
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	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION				NOISE BARRIER

EX = EXPRESS TOLL LANES  
 GU = GENERAL USE LANES  
 AUX = AUXILIARY LANES  
 Aerial Photos Dec. '13 - Feb. '14

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

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## LEGEND:

CONTINUITY WIDENING	BRIDGE WIDENING	WETLANDS	FLOOD PLAINS	OVERHEAD SIGN STRUCTURE	EX = EXPRESS TOLL LANES
MASTER WIDENING	BRIDGES	SURFACE WATER	CONTINUOUS SEA GRASS	NOISE SENSITIVE AREA	GU = GENERAL USE LANES
STARTER WIDENING	HISTORIC SITE	MANGROVES	DISCONTINUOUS SEA GRASS	NOISE SENSITIVE RECEPTOR	AUX = AUXILIARY LANES
RIGHT OF WAY	ITS CAMERA	CONTAMINATION	NOISE BARRIER		

Aerial Photos Dec. '13 - Feb. '14

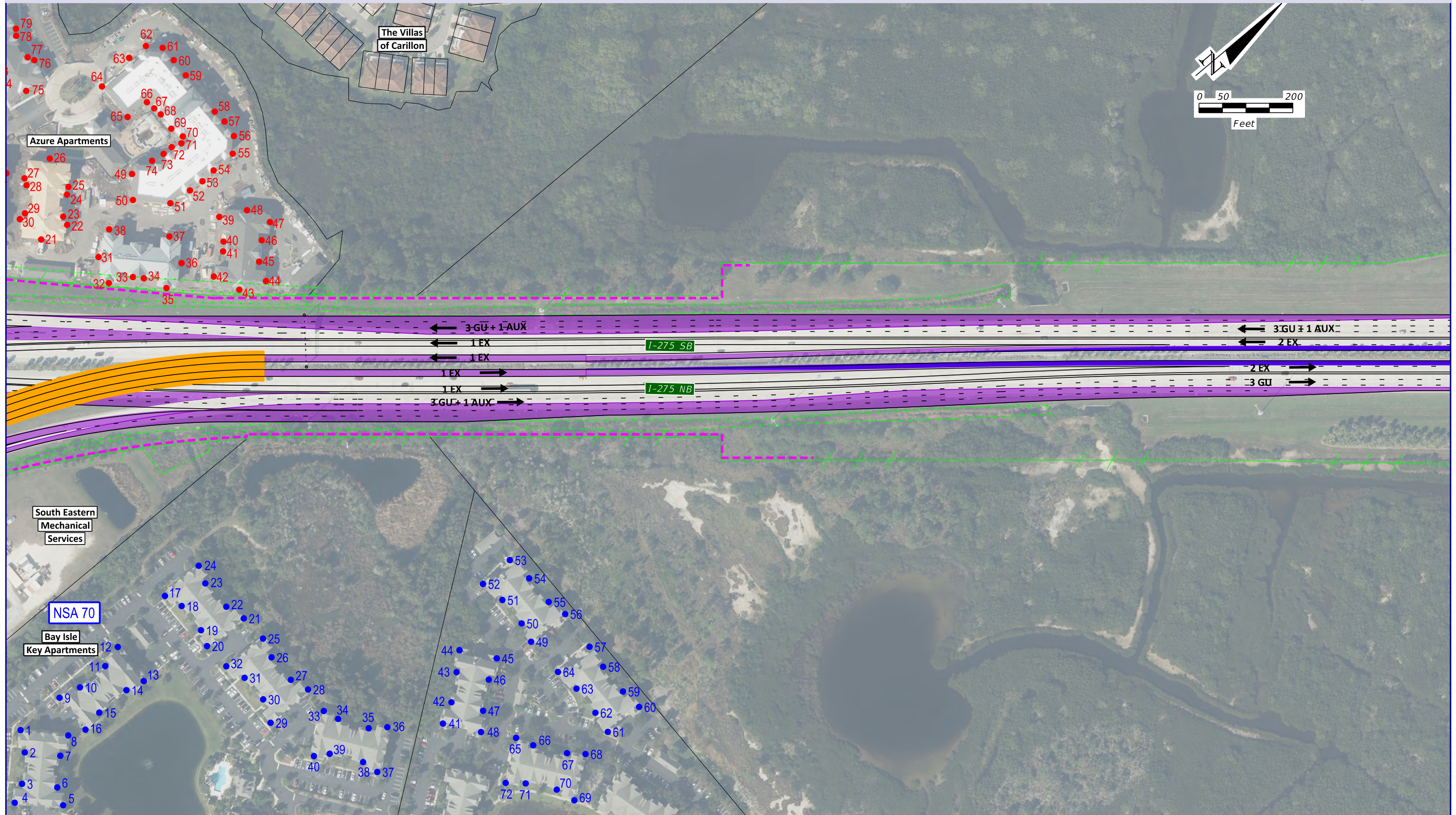
I-275: 54TH AVE S TO N 4TH ST

CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.

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## LEGEND:

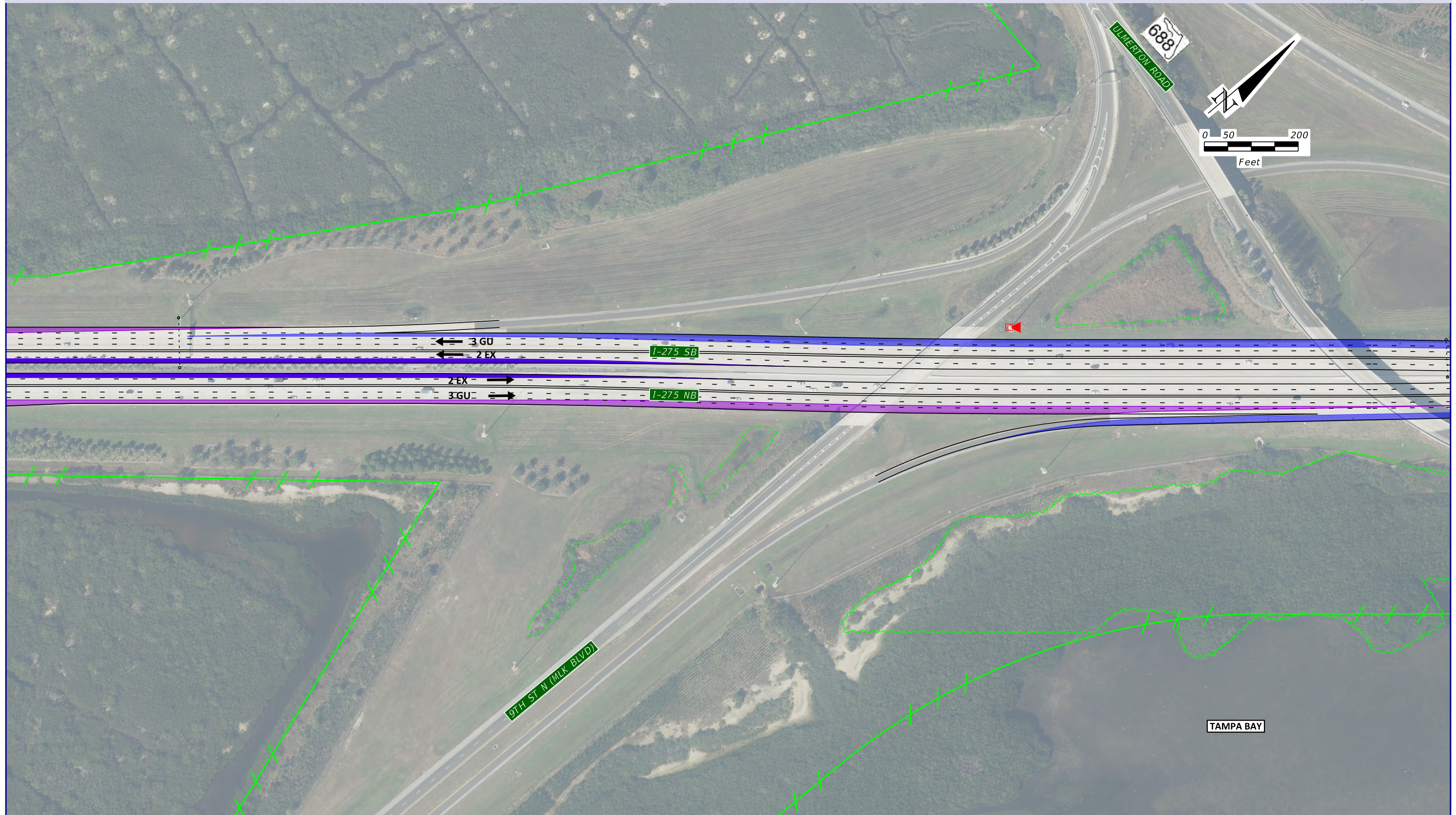
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	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA	GU = GENERAL USE LANES
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR	AUX = AUXILIARY LANES
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION		NOISE BARRIER			Aerial Photos Dec. '13 - Feb. '14

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
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## LEGEND:

CONTINUITY WIDENING	BRIDGE WIDENING	WETLANDS	FLOOD PLAINS	OVERHEAD SIGN STRUCTURE	EX = EXPRESS TOLL LANES
MASTER WIDENING	BRIDGES	SURFACE WATER	CONTINUOUS SEA GRASS	NOISE SENSITIVE AREA	GU = GENERAL USE LANES
STARTER WIDENING	HISTORIC SITE	MANGROVES	DISCONTINUOUS SEA GRASS	NOISE SENSITIVE RECEPTOR	AUX = AUXILIARY LANES
RIGHT OF WAY	ITS CAMERA	CONTAMINATION	NOISE BARRIER		

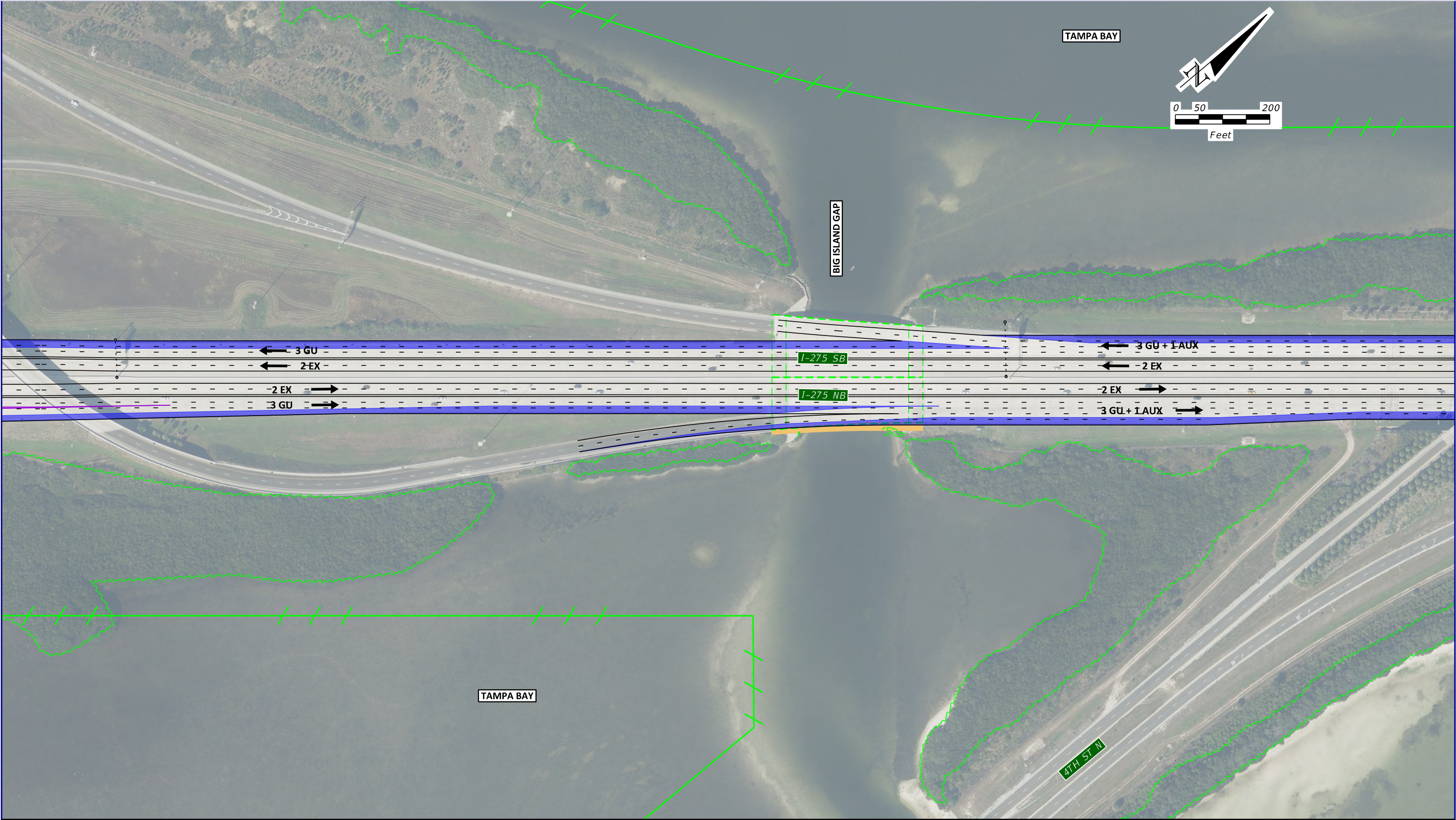
Aerial Photos Dec. '13 - Feb. '14

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

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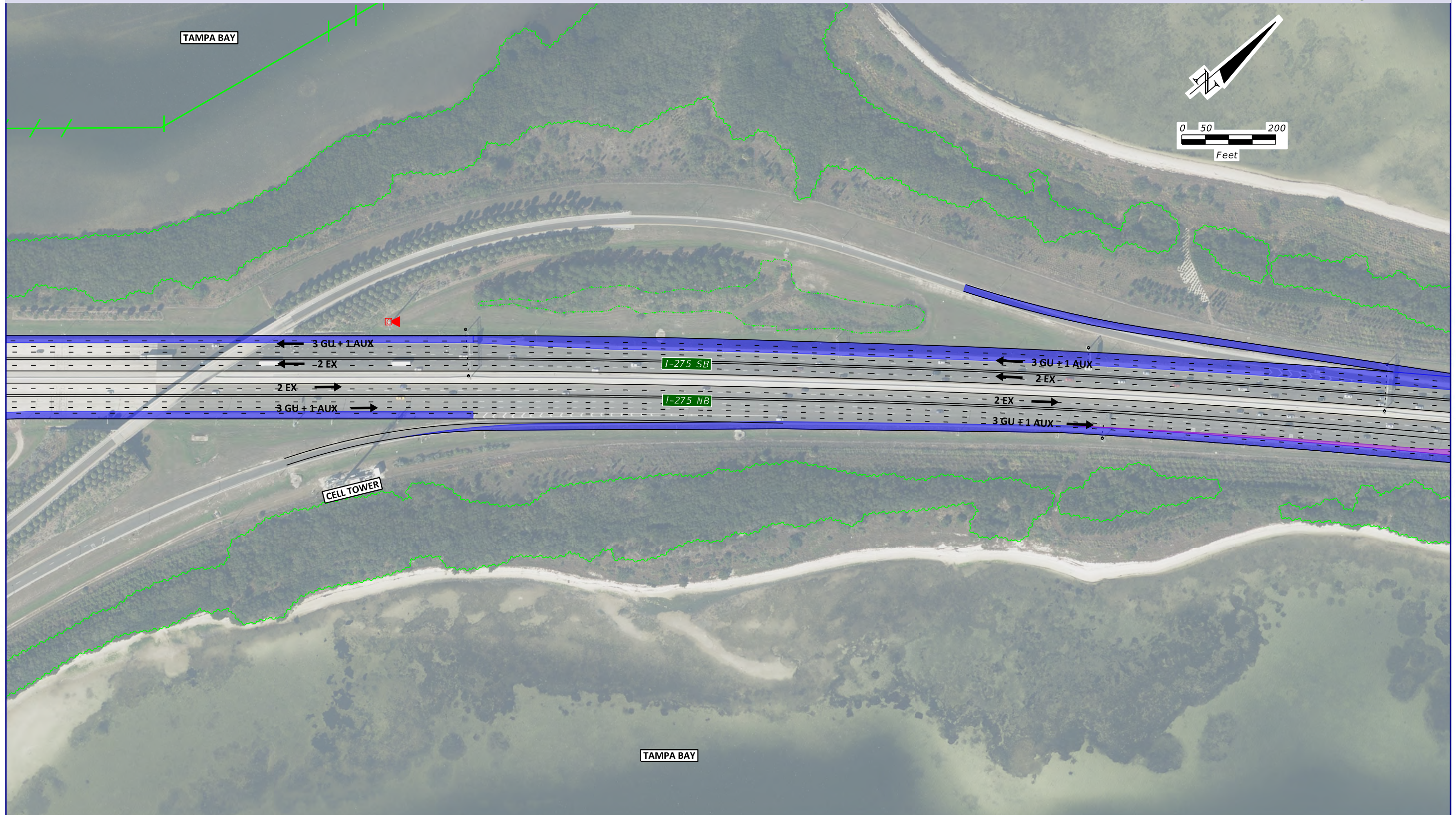
26





<b>LEGEND:</b>		BRIDGE WIDENING	WETLANDS	FLOOD PLAINS	OVERHEAD SIGN STRUCTURE	EX = EXPRESS TOLL LANES
CONTINUITY WIDENING	BRIDGES	SURFACE WATER	CONTINUOUS SEA GRASS	NOISE SENSITIVE AREA	GU = GENERAL USE LANES	AUX = AUXILIARY LANES
MASTER WIDENING	HISTORIC SITE	MANGROVES	DISCONTINUOUS SEA GRASS	NOISE SENSITIVE RECEPTOR		
STARTER WIDENING	RIGHT OF WAY	ITS CAMERA	CONTAMINATION	NOISE BARRIER		





## LEGEND:

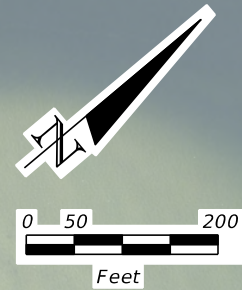
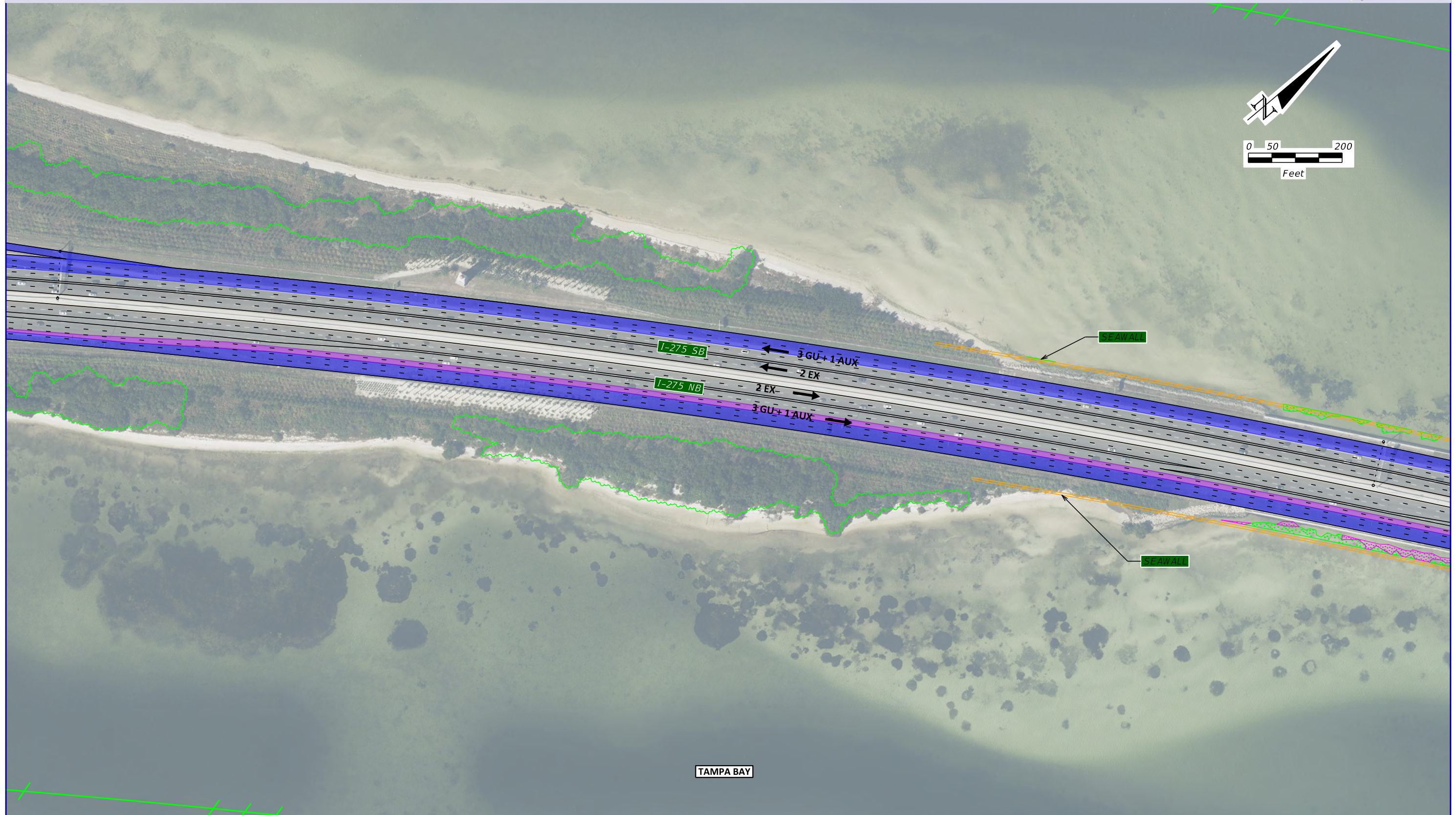
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	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA		GU = GENERAL USE LANES
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR		AUX = AUXILIARY LANES
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION		NOISE BARRIER				

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.

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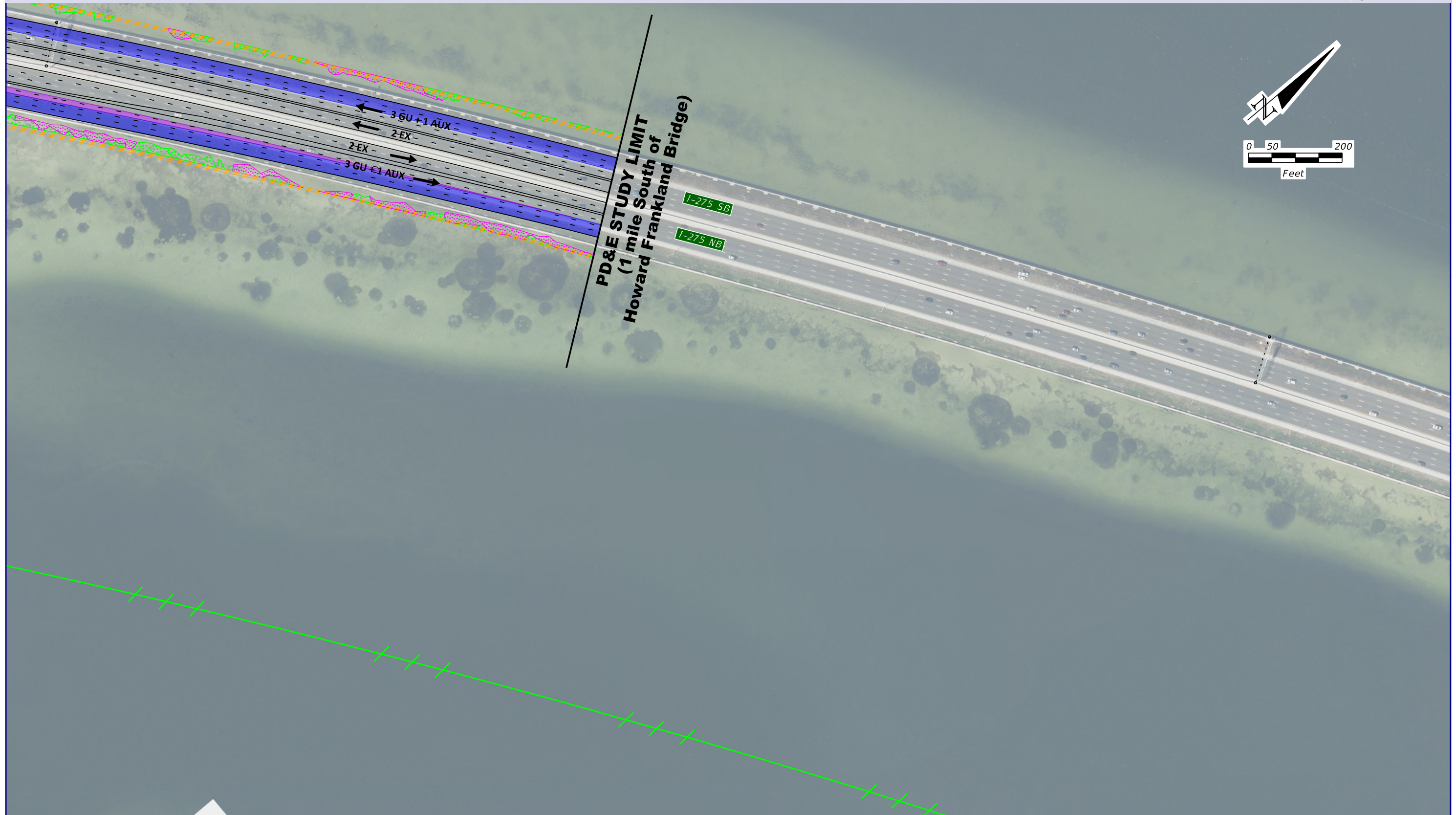


LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION				NOISE BARRIER
									EX = EXPRESS TOLL LANES
									GU = GENERAL USE LANES
									AUX = AUXILIARY LANES
									Aerial Photos Dec. '13 - Feb. '14

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.  
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LEGEND:									
	CONTINUITY WIDENING		BRIDGE WIDENING		WETLANDS		FLOOD PLAINS		OVERHEAD SIGN STRUCTURE
	MASTER WIDENING		BRIDGES		SURFACE WATER		CONTINUOUS SEA GRASS		NOISE SENSITIVE AREA
	STARTER WIDENING		HISTORIC SITE		MANGROVES		DISCONTINUOUS SEA GRASS		NOISE SENSITIVE RECEPTOR
	RIGHT OF WAY		ITS CAMERA		CONTAMINATION		NOISE BARRIER		NOISE BARRIER
					EX = EXPRESS TOLL LANES				
					GU = GENERAL USE LANES				
					AUX = AUXILIARY LANES				
					Aerial Photos Dec. '13 - Feb. '14				

I-275: 54TH AVE S TO N 4TH ST  
CONCEPT PLANS AND  
NOISE SENSITIVE RECEPTORS

SHEET  
NO.

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## Appendix C. Validation Data



# NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Lindsay Baumaister, Carrol Fowler, Nick Rhoads Date: 4/11/2015

Time Study Started: 08:32 Time Study Ended: 09:06

Project Identification:

Financial Project ID: 424501-1

Project Location: I-275 Managed Lanes

Site Identification: Site 1 - 22<sup>nd</sup> St N

Weather Conditions:

Sky: Clear Partly Cloudy X Cloudy Other

Temperature 77.4°F Wind Speed calm Wind Direction n/a Humidity 91%

Equipment:

Sound Level Meter:

Type: Larson Davis 831 Serial Number(s): 1285

Did you check the battery? Yes X No \_\_\_\_\_

Calibration Readings: Start 113.9 End 114.0

Response Settings: Fast \_\_\_\_\_ Slow X

Weighting: A X Other \_\_\_\_\_

Calibrator:

Type: Larson Davis CAL 200 Serial Number: 5592

Did you check the battery? Yes X No \_\_\_\_\_

## TRAFFIC DATA

Roadway Identification	I-275 Northbound		I-275 Southbound	
	Run 1-Run 2-Run 3		Run 1-Run 2-Run 3	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	499-524-474	62-60-60	588-635-646	62-60-60
Medium Trucks	9-5-9	58-59-56	6-10-8	58-59-56
Heavy Trucks	6-7-2	56-55-55	4-2-3	56-55-55
Buses	0-0-0	0-0-0	4-0-0	58-0-0
Motorcycles	3-3-5	62-60-60	6-4-2	62-60-60
Duration	10 minutes per run		10 minutes per run	

## RESULTS [dB(A)]

$L_{EQ}$  70.9-71.0-70.8  $L_{max}$  92.0-90.4-89.6

Background Noise: Birds chirping.

Major Sources: I-275

Unusual Events: Run 1: neighbor talking.





# NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Lindsay Baumaister, Carrol Fowler, Nick Rhoads Date: 4/11/2015

Time Study Started: 09:30 Time Study Ended: 10:05

Project Identification:

Financial Project ID: 424501-1

Project Location: I-275 Managed Lanes

Site Identification: Site 2 – 30<sup>th</sup> Ave S

Weather Conditions:

Sky: Clear ☐ Partly Cloudy ☒ Cloudy ☐ Other ☐

Temperature 81.3°F Wind Speed 1.0 mph Wind Direction E Humidity 80%

Equipment:

Sound Level Meter:

Type: Larson Davis 831 Serial Number(s): 1285

Did you check the battery? Yes ☒ No ☐

Calibration Readings: Start 114.0 End 114.2

Response Settings: Fast ☐ Slow ☒

Weighting: A ☒ Other ☐

Calibrator:

Type: Larson Davis CAL 200 Serial Number: 5592

Did you check the battery? Yes ☒ No ☐

## TRAFFIC DATA

Roadway Identification	I-275 Northbound		I-275 Southbound	
	Run 1-Run 2-Run 3		Run 1-Run 2-Run 3	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	525-556-511	55-56-56	434-489-481	55-56-56
Medium Trucks	3-1-5	53-54-53	2-3-1	53-54-53
Heavy Trucks	1-4-7	57-54-55	6-1-4	57-54-55
Buses	2-0-0	53-0-0	0-1-1	0-54-53
Motorcycles	0-1-0	0-56-0	5-3-3	55-56-56
Duration	10 minutes per run		10 minutes per run	

## RESULTS [dB(A)]

$L_{EQ}$  71.6-71.7-71.4  $L_{max}$  93.5-93.6-95.4

Background Noise: \_\_\_\_\_

Major Sources: I-275

Unusual Events: Cars driving over rumble strips.





Appendix D.  
Predicted Traffic Noise At Individual Receptors



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
1	1	C	Active Sports Area	67.0	67.4	67.4	0.4	Yes
1	2	C	Active Sports Area	67.1	67.5	67.6	0.5	Yes
1	3	C	Active Sports Area	66.0	66.3	66.5	0.5	Yes
2	1	B	Residential	64.6	64.8	65.0	0.4	--
2	2	B	Residential	64.1	64.3	64.5	0.4	--
2	3	B	Residential	64.1	64.4	64.6	0.5	--
2	4	B	Residential	62.3	62.6	62.8	0.5	--
2	5	B	Residential	64.3	64.5	64.8	0.5	--
2	6	B	Residential	63.0	63.2	63.4	0.4	--
2	7	B	Residential	61.8	62.0	62.4	0.6	--
2	8	B	Residential	59.6	59.8	60.1	0.5	--
2	9	B	Residential	57.7	57.9	58.2	0.5	--
2	10	B	Residential	60.3	60.5	60.7	0.4	--
2	11	B	Residential	59.2	59.4	59.6	0.4	--
2	12	B	Residential	51.3	52.5	55.3	4.0	--
2	13	B	Residential	48.3	48.5	48.6	0.3	--
2	14	B	Residential	57.0	57.2	57.5	0.5	--
2	15	B	Residential	55.7	55.9	56.2	0.5	--
2	16	B	Residential	58.3	58.5	58.6	0.3	--
2	17	B	Residential	49.4	49.8	50.4	1.0	--
3	1	C	Recreational Area (Residential)	60.8	61.0	61.3	0.5	--
4	1	E	Hotel/Motel	58.8	59.4	60.1	1.3	--
5	1	E	Hotel/Motel	61.8	62.4	63.1	1.3	--
6	1	B	Residential	68.3	68.3	68.6	0.3	Yes
7	1	B	Residential	57.2	57.2	57.5	0.3	--
8	1	D	Place of Worship (Interior)	41.4	41.4	41.6	0.2	--
9	1	E	Other Developed Property	64.4	64.4	64.6	0.2	--
10	1	B	Residential	65.5	65.6	65.8	0.3	--
10	2	B	Residential	65.8	65.8	66.1	0.3	Yes
10	3	B	Residential	66.1	66.1	66.4	0.3	Yes
10	4	B	Residential	65.6	65.6	65.9	0.3	--
10	5	B	Residential	67.3	67.3	67.6	0.3	Yes
10	6	B	Residential	68.4	68.4	68.7	0.3	Yes
10	7	B	Residential	62.5	62.5	62.6	0.1	--
10	8	B	Residential	65.8	65.8	66.2	0.4	Yes
10	9	B	Residential	66.6	66.6	66.8	0.2	Yes
10	10	B	Residential	67.1	67.1	67.3	0.2	Yes
10	11	B	Residential	68.2	68.2	68.4	0.2	Yes
10	12	B	Residential	68.3	68.3	68.5	0.2	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
10	13	B	Residential	67.8	67.8	68.1	0.3	Yes
10	14	B	Residential	67.2	67.2	67.4	0.2	Yes
10	15	B	Residential	63.6	63.6	63.8	0.2	--
10	16	B	Residential	64.4	64.4	64.6	0.2	--
10	17	B	Residential	64.5	64.5	64.8	0.3	--
10	18	B	Residential	63.6	63.6	63.5	-0.1	--
10	19	B	Residential	64.0	64.0	64.1	0.1	--
10	20	B	Residential	64.2	64.2	64.5	0.3	--
10	21	B	Residential	64.3	64.3	64.5	0.2	--
10	22	B	Residential	62.3	62.3	62.5	0.2	--
10	23	B	Residential	65.1	65.1	65.4	0.3	--
10	24	B	Residential	66.6	66.6	66.9	0.3	Yes
10	25	B	Residential	62.2	62.1	62.5	0.3	--
10	26	B	Residential	63.7	63.7	64.1	0.4	--
10	27	B	Residential	60.0	59.9	60.3	0.3	--
10	28	B	Residential	61.4	61.4	61.7	0.3	--
10	29	B	Residential	67.2	67.2	67.7	0.5	Yes
10	30	B	Residential	67.3	67.3	68.0	0.7	Yes
10	31	B	Residential	67.4	67.4	68.0	0.6	Yes
10	32	B	Residential	62.9	62.9	63.4	0.5	--
10	33	B	Residential	63.9	63.9	64.5	0.6	--
10	34	B	Residential	61.5	61.5	61.9	0.4	--
10	35	B	Residential	62.1	62.1	62.6	0.5	--
10	36	B	Residential	67.5	67.5	68.1	0.6	Yes
10	37	B	Residential	66.2	66.2	66.9	0.7	Yes
10	38	B	Residential	63.1	63.1	63.7	0.6	--
11	1	C	Place of Worship	62.0	62.0	62.4	0.4	--
12	1	C	Recreational Area (Residential)	65.0	65.0	65.8	0.8	--
12	2	C	Recreational Area	72.4	72.4	74.0	1.6	Yes
13	1	B	Residential	72.9	73.0	72.8	-0.1	Yes
14	1	C	Park	64.5	64.5	64.3	-0.2	--
15	1	B	Residential	67.4	67.5	67.3	-0.1	Yes
15	2	B	Residential	68.4	68.5	68.3	-0.1	Yes
16	1	C	Place of Worship	62.8	62.9	62.8		--
17	1	B	Residential	66.7	66.8	66.6	-0.1	Yes
17	2	B	Residential	67.0	67.0	66.8	-0.2	Yes
17	3	B	Residential	67.0	67.0	66.7	-0.3	Yes
17	4	B	Residential	67.2	67.2	67.0	-0.2	Yes
17	5	B	Residential	67.4	67.5	67.2	-0.2	Yes
17	6	B	Residential	67.4	67.4	67.2	-0.2	Yes
17	7	B	Residential	67.4	67.4	67.2	-0.2	Yes
17	8	B	Residential	67.6	67.7	67.4	-0.2	Yes
17	9	B	Residential	67.5	67.6	67.3	-0.2	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
17	10	B	Residential	65.3	65.3	65.2	-0.1	--
17	11	B	Residential	65.5	65.5	65.4	-0.1	--
17	12	B	Residential	65.6	65.6	65.5	-0.1	--
17	13	B	Residential	65.4	65.4	65.3	-0.1	--
17	14	B	Residential	65.7	65.7	65.6	-0.1	--
17	15	B	Residential	67.8	67.9	67.6	-0.2	Yes
17	16	B	Residential	67.9	67.9	67.7	-0.2	Yes
17	17	B	Residential	67.9	67.9	67.7	-0.2	Yes
17	18	B	Residential	67.8	67.9	67.7	-0.1	Yes
17	19	B	Residential	68.2	68.2	68.0	-0.2	Yes
17	20	B	Residential	68.3	68.3	68.2	-0.1	Yes
17	21	B	Residential	68.7	68.7	68.6	-0.1	Yes
17	22	B	Residential	69.0	69.0	68.9	-0.1	Yes
17	23	B	Residential	65.7	65.7	65.6	-0.1	--
17	24	B	Residential	65.8	65.8	65.7	-0.1	--
17	25	B	Residential	65.9	65.9	65.9		--
17	26	B	Residential	66.0	66.0	65.9	-0.1	--
17	27	B	Residential	66.0	66.0	65.9	-0.1	--
17	28	B	Residential	66.0	66.0	66.0		Yes
17	29	B	Residential	66.0	66.1	66.0		Yes
17	30	B	Residential	66.1	66.1	66.0	-0.1	Yes
18	1	C	Day Care Center	70.3	70.3	70.2	-0.1	Yes
19	1	D	Public Meeting Room (Interior)	41.9	41.9	41.9		--
20	1	B	Residential	67.8	67.9	68.0	0.2	Yes
20	2	B	Residential	68.1	68.1	68.3	0.2	Yes
20	3	B	Residential	67.8	67.8	68.0	0.2	Yes
20	4	B	Residential	68.1	68.1	68.2	0.1	Yes
20	5	B	Residential	68.1	68.1	68.3	0.2	Yes
20	6	B	Residential	67.8	67.8	67.9	0.1	Yes
20	7	B	Residential	65.7	65.9	66.0	0.3	Yes
20	8	B	Residential	65.6	65.7	65.8	0.2	--
20	9	B	Residential	65.8	65.9	66.0	0.2	Yes
20	10	B	Residential	65.9	66.0	66.1	0.2	Yes
20	11	B	Residential	66.1	66.1	66.2	0.1	Yes
20	12	B	Residential	65.9	66.0	66.1	0.2	Yes
20	13	B	Residential	65.8	65.8	65.9	0.1	--
20	14	B	Residential	65.6	65.6	65.8	0.2	--
20	15	B	Residential	65.0	65.0	65.1	0.1	--
20	16	B	Residential	63.8	63.9	63.9	0.1	--
20	17	B	Residential	63.6	63.7	63.7	0.1	--
21	1	B	Residential	67.5	67.6	67.5		Yes
21	2	B	Residential	66.7	67.0	67.3	0.6	Yes
21	3	B	Residential	65.6	65.8	66.1	0.5	Yes
21	4	B	Residential	65.0	65.1	65.4	0.4	--
21	5	B	Residential	64.3	64.4	64.6	0.3	--
21	6	B	Residential	66.5	66.8	67.1	0.6	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
21	7	B	Residential	65.9	66.1	66.4	0.5	Yes
21	8	B	Residential	65.0	65.1	65.4	0.4	--
21	9	B	Residential	64.2	64.3	64.7	0.5	--
21	10	B	Residential	64.0	64.0	64.4	0.4	--
21	11	B	Residential	65.8	66.0	66.5	0.7	Yes
21	12	B	Residential	65.1	65.3	65.6	0.5	--
21	13	B	Residential	64.0	64.1	64.5	0.5	--
21	14	B	Residential	63.3	63.4	63.8	0.5	--
21	15	B	Residential	65.6	65.9	66.3	0.7	Yes
21	16	B	Residential	65.7	65.9	66.3	0.6	Yes
21	17	B	Residential	64.2	64.3	64.7	0.5	--
21	18	B	Residential	63.0	63.1	63.5	0.5	--
21	19	B	Residential	66.6	66.8	67.2	0.6	Yes
21	20	B	Residential	66.4	66.6	67.1	0.7	Yes
21	21	B	Residential	66.3	66.5	66.9	0.6	Yes
21	22	B	Residential	65.5	65.6	66.1	0.6	Yes
21	23	B	Residential	64.8	64.9	65.3	0.5	--
21	24	B	Residential	63.9	64.0	64.4	0.5	--
21	25	B	Residential	63.2	63.3	63.7	0.5	--
21	26	B	Residential	67.2	67.4	67.8	0.6	Yes
21	27	B	Residential	67.3	67.4	67.8	0.5	Yes
21	28	B	Residential	66.5	66.7	67.1	0.6	Yes
21	29	B	Residential	65.8	65.9	66.4	0.6	Yes
21	30	B	Residential	65.2	65.3	65.7	0.5	--
21	31	B	Residential	63.3	63.4	63.8	0.5	--
22	1	E	Other Developed Property	65.5	65.5	65.9	0.4	--
23	1	B	Residential	65.4	65.8	65.9	0.5	--
23	2	B	Residential	64.9	65.2	65.4	0.5	--
23	3	B	Residential	64.5	64.8	64.9	0.4	--
23	4	B	Residential	63.7	63.9	64.0	0.3	--
23	5	B	Residential	63.0	63.2	63.3	0.3	--
23	6	B	Residential	67.1	67.6	67.7	0.6	Yes
23	7	B	Residential	63.8	64.2	64.3	0.5	--
23	8	B	Residential	63.4	63.7	63.8	0.4	--
23	9	B	Residential	62.5	63.1	63.2	0.7	--
23	10	B	Residential	62.9	63.4	63.5	0.6	--
23	11	B	Residential	62.4	62.7	62.8	0.4	--
23	12	B	Residential	62.0	62.3	62.4	0.4	--
23	13	B	Residential	63.6	64.3	64.4	0.8	--
23	14	B	Residential	63.7	64.3	64.3	0.6	--
23	15	B	Residential	63.5	64.0	64.1	0.6	--
23	16	B	Residential	63.0	63.3	63.5	0.5	--
23	17	B	Residential	64.1	64.7	64.7	0.6	--
23	18	B	Residential	63.9	64.3	64.4	0.5	--
23	19	B	Residential	63.6	63.9	64.1	0.5	--
23	20	B	Residential	67.3	67.5	67.4	0.1	Yes



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
23	21	B	Residential	65.1	65.3	65.6	0.5	--
23	22	B	Residential	64.3	64.5	64.8	0.5	--
23	23	B	Residential	67.8	67.8	67.8		Yes
23	24	B	Residential	66.9	66.9	67.3	0.4	Yes
23	25	B	Residential	65.9	65.9	66.3	0.4	Yes
23	26	B	Residential	65.3	65.3	65.8	0.5	--
23	27	B	Residential	63.9	63.9	64.4	0.5	--
23	28	B	Residential	62.9	63.0	63.5	0.6	--
23	29	B	Residential	67.8	67.8	67.8		Yes
23	30	B	Residential	67.4	67.4	67.6	0.2	Yes
23	31	B	Residential	66.7	66.7	67.1	0.4	Yes
23	32	B	Residential	65.7	65.8	66.2	0.5	Yes
23	33	B	Residential	67.7	67.7	68.2	0.5	Yes
23	34a	B	Residential	66.2	66.2	66.7	0.5	Yes
23	34b	B	Residential	69.1	69.2	69.7	0.6	Yes
23	35	B	Residential	65.2	65.2	65.8	0.6	--
23	36	B	Residential	64.0	64.0	64.6	0.6	--
23	37	B	Residential	67.3	67.3	67.8	0.5	Yes
23	38	B	Residential	66.2	66.2	66.8	0.6	Yes
23	39	B	Residential	65.1	65.1	65.6	0.5	--
23	40	B	Residential	63.6	63.6	64.1	0.5	--
23	41	B	Residential	62.4	62.4	63.0	0.6	--
23	42	B	Residential	67.5	67.5	67.9	0.4	Yes
23	43	B	Residential	66.7	66.8	67.3	0.6	Yes
23	44	B	Residential	66.1	66.1	66.7	0.6	Yes
23	45	B	Residential	65.2	65.2	65.7	0.5	--
23	46	B	Residential	64.2	64.2	64.7	0.5	--
23	47	B	Residential	67.2	67.2	67.6	0.4	Yes
23	48	B	Residential	65.9	65.9	66.4	0.5	Yes
23	49	B	Residential	67.1	67.1	67.7	0.6	Yes
23	50	B	Residential	66.6	66.6	67.1	0.5	Yes
23	51	B	Residential	65.5	65.5	66.1	0.6	Yes
23	52	B	Residential	66.4	66.4	67.0	0.6	Yes
23	53	B	Residential	63.8	63.8	64.5	0.7	--
23	54	B	Residential	63.0	63.0	63.8	0.8	--
23	55	B	Residential	65.7	65.7	66.5	0.8	Yes
23	56	B	Residential	63.5	63.5	64.2	0.7	--
23	57	B	Residential	62.6	62.6	63.5	0.9	--
23	58	B	Residential	61.8	61.9	62.8	1.0	--
23	59	B	Residential	65.3	65.3	66.4	1.1	Yes
23	60	B	Residential	65.6	65.6	66.9	1.3	Yes
23	61	B	Residential	65.4	65.4	66.9	1.5	Yes
23	62	B	Residential	65.1	65.1	66.5	1.4	Yes
23	63	B	Residential	64.7	64.7	66.2	1.5	Yes
23	64	B	Residential	64.5	64.5	66.1	1.6	Yes
23	65	B	Residential	64.0	64.0	65.7	1.7	--
23	66	B	Residential	63.9	63.9	65.6	1.7	--
23	67	B	Residential	63.7	63.7	65.5	1.8	--



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23	68	B	Residential	64.4	64.4	65.3	0.9	--
23	69	B	Residential	64.4	64.4	65.3	0.9	--
23	70	B	Residential	64.5	64.5	65.4	0.9	--
23	71	B	Residential	64.6	64.6	65.4	0.8	--
23	72	B	Residential	64.2	64.2	65.0	0.8	--
23	73	B	Residential	64.0	64.0	64.9	0.9	--
23	74	B	Residential	63.8	63.8	64.7	0.9	--
23	75	B	Residential	63.6	63.7	64.6	1.0	--
23	76	B	Residential	63.5	63.5	64.4	0.9	--
23	77	B	Residential	63.3	63.3	64.2	0.9	--
23	78	B	Residential	63.1	63.1	64.0	0.9	--
23	79	B	Residential	63.0	63.1	63.9	0.9	--
23	80	B	Residential	62.7	62.7	63.6	0.9	--
23	81	B	Residential	62.5	62.5	63.4	0.9	--
23	82	B	Residential	63.0	63.0	64.0	1.0	--
23	83a	B	Residential	62.8	62.8	63.7	0.9	--
23	83b	B	Residential	64.4	64.5	65.4	1.0	--
23	84a	B	Residential	62.6	62.6	63.5	0.9	--
23	84b	B	Residential	64.1	64.3	65.2	1.1	--
23	85	B	Residential	62.2	62.3	63.1	0.9	--
23	86	B	Residential	62.0	62.1	62.8	0.8	--
23	87	B	Residential	64.0	64.1	65.7	1.7	--
23	88	B	Residential	64.0	64.1	65.6	1.6	--
23	89	B	Residential	63.8	63.8	65.2	1.4	--
23	90	B	Residential	63.6	63.7	64.9	1.3	--
23	91	B	Residential	63.5	63.5	64.6	1.1	--
23	92	B	Residential	63.2	63.3	64.3	1.1	--
23	93	B	Residential	62.7	62.9	63.7	1.0	--
23	94	B	Residential	62.1	62.2	63.0	0.9	--
23	95	B	Residential	60.9	61.1	61.7	0.8	--
23	96	B	Residential	64.1	64.3	65.1	1.0	--
23	97	B	Residential	63.8	64.0	64.8	1.0	--
23	98	B	Residential	63.6	63.8	64.7	1.1	--
23	99	B	Residential	62.9	63.2	64.0	1.1	--
23	100	B	Residential	62.4	62.7	63.4	1.0	--
23	101	B	Residential	61.8	62.2	62.7	0.9	--
23	102	B	Residential	63.7	64.3	64.6	0.9	--
23	103	B	Residential	63.8	64.5	65.0	1.2	--
24	1	D	Place of Worship (interior)	39.2	39.2	41.2	2.0	--
25	1	B	Residential	69.2	69.3	69.0	-0.2	Yes
25	2	B	Residential	67.7	67.7	67.6	-0.1	Yes
25	3	B	Residential	66.7	66.7	66.7	0	Yes
25	4	B	Residential	65.8	65.8	65.8	0	--
25	5	B	Residential	64.2	64.2	64.2	0	--
25	6	B	Residential	63.1	63.2	63.1	0	--
25	7	B	Residential	68.7	68.8	68.5	-0.2	Yes



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25	8	B	Residential	69.2	69.2	69.0	-0.2	Yes
25	9	B	Residential	67.7	67.7	67.6	-0.1	Yes
25	10	B	Residential	66.8	66.9	66.8	0	Yes
25	11	B	Residential	64.6	64.6	64.6	0	--
25	12	B	Residential	63.7	63.8	63.8	0.1	--
25	13	B	Residential	69.2	69.2	69.0	-0.2	Yes
25	14	B	Residential	68.6	68.6	68.5	-0.1	Yes
25	15	B	Residential	67.0	67.0	67.0	0	Yes
25	16	B	Residential	65.8	65.8	65.7	-0.1	--
25	17	B	Residential	64.9	64.9	64.8	-0.1	--
25	18	B	Residential	63.8	63.9	63.8	0	--
25	19	B	Residential	68.2	68.2	68.1	-0.1	Yes
25	20	B	Residential	67.2	67.3	67.2	0	Yes
25	21	B	Residential	66.4	66.4	66.3	-0.1	Yes
25	22	B	Residential	65.6	65.6	65.5	-0.1	--
25	23	B	Residential	65.1	65.1	65.1	0	--
25	24	B	Residential	65.1	65.1	65.1	0	--
25	25	B	Residential	64.1	64.1	64.1	0	--
25	26	B	Residential	67.1	67.1	67.1	0	Yes
25	27	B	Residential	65.8	65.8	65.8	0	--
25	28	B	Residential	65.0	65.0	65.0	0	--
25	29	B	Residential	63.9	63.9	63.9	0	--
25	30	B	Residential	68.9	69.0	68.9	0	Yes
25	31	B	Residential	67.6	67.6	67.6	0	Yes
25	32	B	Residential	66.6	66.6	66.6	0	Yes
25	33	B	Residential	64.6	64.6	64.6	0	--
25	34	B	Residential	63.0	63.0	62.9	-0.1	--
25	35	B	Residential	71.0	71.1	70.8	-0.2	Yes
25	36	B	Residential	69.5	69.5	69.4	-0.1	Yes
25	37	B	Residential	68.2	68.3	68.1	-0.1	Yes
25	38	B	Residential	67.2	67.2	67.1	-0.1	Yes
25	39	B	Residential	66.4	66.4	66.3	-0.1	Yes
25	40	B	Residential	65.9	65.9	65.9	0	--
25	41	B	Residential	65.2	65.3	65.1	-0.1	--
25	42	B	Residential	63.4	63.4	63.2	-0.2	--
25	43	B	Residential	69.7	69.7	69.6	-0.1	Yes
25	44	B	Residential	67.8	67.8	67.7	-0.1	Yes
25	45	B	Residential	66.8	66.9	66.7	-0.1	Yes
25	46	B	Residential	65.3	65.4	65.2	-0.1	--
25	47	B	Residential	65.0	65.1	64.9	-0.1	--
25	48	B	Residential	64.1	64.2	64.1	0	--
25	49	B	Residential	67.9	68.0	67.8	-0.1	Yes
25	50	B	Residential	68.1	68.2	68.0	-0.1	Yes
25	51	B	Residential	69.2	69.3	69.0	-0.2	Yes
25	52	B	Residential	70.0	70.0	69.7	-0.3	Yes
25	53	B	Residential	66.1	66.2	66.0	-0.1	Yes
25	54	B	Residential	66.8	66.9	66.7	-0.1	Yes
25	55	B	Residential	67.2	67.3	67.1	-0.1	Yes



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25	56	B	Residential	67.8	67.8	67.6	-0.2	Yes
25	57	B	Residential	68.1	68.2	67.9	-0.2	Yes
25	58	B	Residential	68.4	68.5	68.2	-0.2	Yes
25	59	B	Residential	68.8	68.9	68.6	-0.2	Yes
25	60	B	Residential	69.1	69.1	68.8	-0.3	Yes
25	61	B	Residential	64.6	64.7	64.5	-0.1	--
25	62	B	Residential	66.2	66.2	66.0	-0.2	Yes
25	63	B	Residential	65.6	65.7	65.5	-0.1	--
25	64	B	Residential	65.5	65.5	65.3	-0.2	--
25	65	B	Residential	64.9	64.9	64.7	-0.2	--
25	66	B	Residential	67.5	67.5	67.3	-0.2	Yes
25	67	B	Residential	66.8	66.8	66.7	-0.1	Yes
25	68	B	Residential	66.0	66.0	65.8	-0.2	--
25	69	B	Residential	65.4	65.4	65.3	-0.1	--
25	70	B	Residential	64.6	64.6	64.4	-0.2	--
25	71	B	Residential	67.4	67.4	67.1	-0.3	Yes
25	72	B	Residential	66.9	66.9	66.7	-0.2	Yes
25	73	B	Residential	66.8	66.9	66.7	-0.1	Yes
25	74	B	Residential	66.7	66.7	66.6	-0.1	Yes
25	75	B	Residential	65.8	65.8	65.6	-0.2	--
25	76	B	Residential	65.2	65.2	65.0	-0.2	--
25	77	B	Residential	64.9	64.9	64.7	-0.2	--
25	78	B	Residential	64.4	64.4	64.2	-0.2	--
25	79	B	Residential	64.3	64.3	64.1	-0.2	--
25	80	B	Residential	63.8	63.9	63.7	-0.1	--
25	81	B	Residential	66.9	66.9	66.7	-0.2	Yes
25	82	B	Residential	66.8	66.8	66.6	-0.2	Yes
25	83	B	Residential	65.8	65.8	65.6	-0.2	--
25	84	B	Residential	66.3	66.3	66.1	-0.2	Yes
25	85	B	Residential	66.7	66.7	66.5	-0.2	Yes
25	86	B	Residential	66.8	66.9	66.6	-0.2	Yes
25	87	B	Residential	66.4	66.4	66.1	-0.3	Yes
25	88	B	Residential	64.5	64.5	64.3	-0.2	--
25	89	B	Residential	65.1	65.1	64.9	-0.2	--
25	90	B	Residential	65.5	65.5	65.3	-0.2	--
25	91	B	Residential	65.9	65.9	65.6	-0.3	--
25	92	B	Residential	66.6	66.6	66.4	-0.2	Yes
25	93	B	Residential	66.4	66.4	66.1	-0.3	Yes
25	94	B	Residential	64.2	64.3	64.1	-0.1	--
25	95	B	Residential	63.9	63.9	63.7	-0.2	--
25	96	B	Residential	64.7	64.7	64.6	-0.1	--
25	97	B	Residential	65.1	65.1	64.9	-0.2	--
25	98	B	Residential	66.1	66.1	65.9	-0.2	--
25	99	B	Residential	65.6	65.6	65.4	-0.2	--
25	100	B	Residential	66.9	66.9	66.5	-0.4	Yes
25	101	B	Residential	66.3	66.3	66.0	-0.3	Yes
25	102	B	Residential	66.8	66.8	66.4	-0.4	Yes
25	103	B	Residential	66.8	66.8	66.4	-0.4	Yes



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
25	104	B	Residential	67.2	67.2	66.9	-0.3	Yes
25	105	B	Residential	64.3	64.3	64.1	-0.2	--
25	106	B	Residential	65.0	65.0	64.8	-0.2	--
25	107	B	Residential	65.0	65.0	64.8	-0.2	--
25	108	B	Residential	65.0	65.0	64.8	-0.2	--
25	109	B	Residential	65.5	65.5	65.3	-0.2	--
25	110	B	Residential	65.9	65.9	65.6	-0.3	--
25	111	B	Residential	66.4	66.4	66.1	-0.3	Yes
25	112	B	Residential	66.7	66.7	66.4	-0.3	Yes
25	113	B	Residential	66.8	66.8	66.5	-0.3	Yes
25	114	B	Residential	67.0	67.0	66.7	-0.3	Yes
25	115	B	Residential	66.9	67.0	66.7	-0.2	Yes
25	116	B	Residential	65.1	65.1	64.9	-0.2	--
25	117	B	Residential	64.7	64.7	64.5	-0.2	--
25	118	B	Residential	63.9	63.9	63.7	-0.2	--
25	119	B	Residential	64.8	64.8	64.6	-0.2	--
26	1	C	Public Institutional Structure	65.0	65.4	65.7	0.7	--
26	2	C	Recreational Area	65.3	65.4	65.8	0.5	--
26	3	C	Park	67.5	67.6	68.2	0.7	Yes
27	1	D	Place of Worship (Interior)	42.1	42.2	42.8	0.7	--
28	1	C	Place of Worship	62.2	62.3	62.9	0.7	--
29	1	B	Residential	64.2	64.2	64.8	0.6	--
29	2	B	Residential	64.0	64.0	64.6	0.6	--
29	3	B	Residential	63.5	63.6	64.2	0.7	--
29	4	B	Residential	63.0	63.0	63.8	0.8	--
29	5	B	Residential	62.6	62.7	63.4	0.8	--
29	6	B	Residential	62.1	62.1	62.8	0.7	--
29	7	B	Residential	61.8	61.8	62.5	0.7	--
29	8	B	Residential	61.2	61.2	61.9	0.7	--
29	9	B	Residential	60.9	60.9	61.6	0.7	--
29	10	B	Residential	60.7	60.7	61.4	0.7	--
29	11	B	Residential	60.4	60.5	61.2	0.8	--
29	12	B	Residential	65.3	65.3	65.9	0.6	--
29	13	B	Residential	64.8	64.9	65.5	0.7	--
29	14	B	Residential	64.6	64.7	65.3	0.7	--
29	15	B	Residential	63.5	63.6	64.2	0.7	--
30	1	C	School	56.0	56.1	56.6	0.6	--
31	1	B	Residential	61.2	61.2	61.8	0.6	--
31	2	B	Residential	61.1	61.2	61.7	0.6	--
31	3	B	Residential	61.1	61.1	61.7	0.6	--
31	4	B	Residential	61.0	61.0	61.6	0.6	--



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
31	5	B	Residential	60.9	61.0	61.5	0.6	--
31	6	B	Residential	60.9	60.9	61.5	0.6	--
31	7	B	Residential	60.9	60.9	61.5	0.6	--
31	8	B	Residential	60.1	60.1	60.6	0.5	--
31	9	B	Residential	60.0	60.0	60.5	0.5	--
31	10	B	Residential	59.9	59.9	60.4	0.5	--
31	11	B	Residential	59.8	59.9	60.4	0.6	--
31	12	B	Residential	59.8	59.9	60.4	0.6	--
31	13	B	Residential	59.9	59.9	60.4	0.5	--
31	14	B	Residential	60.0	60.0	60.5	0.5	--
31	15	B	Residential	58.3	58.4	58.9	0.6	--
31	16	B	Residential	58.5	58.5	59.0	0.5	--
31	17	B	Residential	58.5	58.5	59.0	0.5	--
31	18	B	Residential	58.6	58.6	59.1	0.5	--
31	19	B	Residential	58.6	58.6	59.2	0.6	--
32	1	D	Public Institutional Structure	36.0	36.0	36.5	0.5	--
33	1	B	Residential	69.7	69.9	70.5	0.8	Yes
33	2	B	Residential	64.4	64.6	65.2	0.8	--
33	3a	B	Residential	56.3	56.4	57.5	1.2	--
33	3b	B	Residential	61.1	61.2	62.1	1.0	--
33	4	B	Residential	64.6	64.6	65.2	0.6	--
33	5	B	Residential	61.6	61.6	62.5	0.9	--
34	1	C	Recreational Area	66.7	66.8	67.4	0.7	Yes
35	1	D	Place of Worship (Interior)	41.6	41.6	42.1	0.5	--
35	2	D	Place of Worship (Interior)	42.5	42.5	43.4	0.9	--
35	3	D	Place of Worship (Interior)	36.7	36.7	37.6	0.9	--
36	1	C	Recreational Area	64.3	64.7	65.8	1.5	--
37	1	B	Residential	63.2	63.2	63.1	-0.1	--
37	2	B	Residential	64.1	64.2	64.0	-0.1	--
37	3	B	Residential	66.1	66.1	66.0	-0.1	Yes
37	4	B	Residential	62.7	62.7	62.6	-0.1	--
37	5	B	Residential	63.8	63.8	63.8	0	--
37	6	B	Residential	64.4	64.4	64.3	-0.1	--
37	7	B	Residential	65.1	65.2	65.1	0	--
37	8	B	Residential	65.7	65.7	65.6	-0.1	--
37	9	B	Residential	66.0	66.1	66.0	0	Yes
37	10	B	Residential	62.1	62.2	62.1	0	--
37	11a	B	Residential	65.4	65.7	65.5	0.1	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
37	11b	B	Residential	68.4	68.7	68.6	0.2	Yes
37	12	B	Residential	65.2	65.5	65.3	0.1	--
37	13	B	Residential	63.8	64.2	64.0	0.2	--
37	14	B	Residential	62.9	63.1	63.0	0.1	--
37	15	B	Residential	62.9	63.5	63.4	0.5	--
37	16	B	Residential	62.4	63.0	62.8	0.4	--
37	17	B	Residential	62.1	62.7	62.5	0.4	--
37	18	B	Residential	61.8	62.3	62.2	0.4	--
37	19	B	Residential	61.1	61.6	61.4	0.3	--
37	20	B	Residential	61.5	62.1	61.9	0.4	--
37	21	B	Residential	61.8	62.6	62.4	0.6	--
37	22	B	Residential	61.9	62.7	62.4	0.5	--
37	23	B	Residential	61.7	62.6	62.3	0.6	--
37	24	B	Residential	61.2	62.2	61.9	0.7	--
37	25	B	Residential	61.2	62.2	61.9	0.7	--
37	25	B	Residential	64.1	64.8	64.6	0.5	--
37	26	B	Residential	60.4	61.5	61.2	0.8	--
37	26	B	Residential	64.2	65.0	64.7	0.5	--
37	27	B	Residential	60.1	61.3	61.0	0.9	--
38	1	D	Place of Worship (interior)	36.8	37.5	38.6	1.8	--
39	1	C	School	59.4	60.7	61.3	1.9	--
40	1a	B	Residential	70.4	70.4	73.4	3.0	Yes
40	1b	B	Residential	70.9	70.9	73.4	2.5	Yes
40	2	B	Residential	69.1	69.1	72.2	3.1	Yes
40	3	B	Residential	70.0	70.0	73.3	3.3	Yes
40	4a	B	Residential	67.8	67.9	71.1	3.3	Yes
40	4b	B	Residential	68.3	68.4	71.1	2.8	Yes
41	1	E	Restaurant	68.5	68.6	72.5	4.0	Yes
42	1	C	School	68.3	68.3	70.8	2.5	Yes
43	1	E	Restaurant	67.9	67.9	70.2	2.3	--
44	1	C	Day Care Center	72.9	72.9	75.2	2.3	Yes
45	1	B	Residential	69.8	70.0	73.0	3.2	Yes
45	2	B	Residential	70.0	70.3	74.3	4.3	Yes
45	3	B	Residential	66.6	66.7	67.4	0.8	Yes
45	4	B	Residential	67.9	68.1	70.0	2.1	Yes
45	5	B	Residential	66.4	66.5	67.1	0.7	Yes
45	6	B	Residential	65.3	65.4	65.7	0.4	--
45	7	B	Residential	68.1	68.4	72.1	4.0	Yes
45	8	B	Residential	67.9	68.2	72.4	4.5	Yes
45	9	B	Residential	67.7	67.9	70.4	2.7	Yes
45	10	B	Residential	67.7	67.9	71.5	3.8	Yes
45	11	B	Residential	66.8	67.0	69.1	2.3	Yes
45	12	B	Residential	66.4	66.5	67.9	1.5	Yes
45	13	B	Residential	67.0	67.2	68.8	1.8	Yes
45	14	B	Residential	65.7	65.8	66.3	0.6	Yes



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
45	15	B	Residential	66.1	66.2	67.1	1.0	Yes
45	16	B	Residential	63.7	63.8	63.9	0.2	--
45	17	B	Residential	65.3	65.5	65.4	0.1	--
45	18	B	Residential	67.7	68.0	73.1	5.4	Yes
45	19	B	Residential	67.8	68.1	72.0	4.2	Yes
45	20	B	Residential	68.2	68.4	71.5	3.3	Yes
45	21	B	Residential	67.9	68.1	70.2	2.3	Yes
45	22	B	Residential	67.4	67.6	69.3	1.9	Yes
45	23	B	Residential	66.2	66.4	67.3	1.1	Yes
45	24	B	Residential	64.5	64.6	64.4	-0.1	--
45	25	B	Residential	67.8	68.4	73.1	5.3	Yes
45	26	B	Residential	68.2	68.5	71.4	3.2	Yes
45	27	B	Residential	68.1	68.4	70.1	2	Yes
45	28	B	Residential	67.7	68.0	68.9	1.2	Yes
45	29	B	Residential	67.2	67.4	68.1	0.9	Yes
45	30	B	Residential	66.4	66.6	66.8	0.4	Yes
45	31a	B	Residential	65.4	65.6	65.3	-0.1	Yes
45	31b	B	Residential	67.7	67.9	68.2	0.5	Yes
45	32	B	Residential	67.3	67.6	68.6	1.3	Yes
45	33	B	Residential	67.6	67.9	68.4	0.8	Yes
45	34	B	Residential	67.1	67.3	67.6	0.5	Yes
45	35	B	Residential	65.7	66.0	66.2	0.5	Yes
45	36	B	Residential	63.9	64.0	64.0	0.1	--
45	37	B	Residential	68.5	68.8	69.3	0.8	Yes
45	38	B	Residential	66.3	66.6	66.9	0.6	Yes
45	39	B	Residential	64.6	64.8	64.7	0.1	--
45	40	B	Residential	63.9	64.0	64.0	0.1	--
45	41a	B	Residential	68.2	68.4	68.8	0.6	Yes
45	41b	B	Residential	71.5	71.8	72.1	0.6	Yes
45	42	B	Residential	66.3	66.4	66.6	0.3	Yes
45	43	B	Residential	65.4	65.6	65.7	0.3	--
45	44	B	Residential	64.5	64.7	64.7	0.2	--
45	45	B	Residential	67.6	67.7	68.0	0.4	Yes
45	46	B	Residential	66.3	66.5	66.7	0.4	Yes
45	47	B	Residential	65.1	65.3	65.4	0.3	--
45	48	B	Residential	64.3	64.5	64.5	0.2	--
45	49	B	Residential	69.0	69.1	69.4	0.4	Yes
45	50	B	Residential	67.8	67.9	68.2	0.4	Yes
45	51	B	Residential	66.3	66.4	66.7	0.4	Yes
45	52	B	Residential	65.1	65.3	65.5	0.4	--
45	53	B	Residential	64.4	64.5	64.7	0.3	--
45	54	B	Residential	69.5	69.6	69.9	0.4	Yes
45	55	B	Residential	68.4	68.5	68.8	0.4	Yes
45	56	B	Residential	67.3	67.4	67.7	0.4	Yes
45	57	B	Residential	65.8	65.9	66.1	0.3	Yes
45	58	B	Residential	64.9	65.1	65.2	0.3	--
45	59	B	Residential	64.3	64.5	64.6	0.3	--
45	60	B	Residential	65.9	66.0	66.2	0.3	Yes



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46	1	C	Park	72.8	73.0	74.5	1.7	Yes
46	2	C	Park	71.5	71.6	72.6	1.1	Yes
46	3	C	Park	68.4	69.1	69.8	1.4	Yes
47	1	D	Medical Facility (Interior)	45.3	45.5	46.4	1.1	--
48	1	B	Residential	66.3	67.1	73.8	7.5	Yes
48	2	B	Residential	66.1	66.6	72.0	5.9	Yes
48	3	B	Residential	65.7	66.1	71.1	5.4	Yes
48	4	B	Residential	65.5	65.8	70.2	4.7	Yes
48	5	B	Residential	64.6	64.9	68.8	4.2	Yes
48	6	B	Residential	64.7	65.0	69.0	4.3	Yes
48	7	B	Residential	64.0	64.3	68.2	4.2	Yes
48	8	B	Residential	65.1	65.9	73.1	8.0	Yes
48	9	B	Residential	65.7	66.4	73.2	7.5	Yes
48	10	B	Residential	66.0	66.4	71.5	5.5	Yes
48	11	B	Residential	65.2	65.6	70.4	5.2	Yes
48	12	B	Residential	64.8	65.1	69.3	4.5	Yes
48	13	B	Residential	64.0	64.3	68.6	4.6	Yes
48	14	B	Residential	63.3	63.6	67.5	4.2	Yes
48	15	B	Residential	65.1	65.9	73.0	7.9	Yes
48	16	B	Residential	64.7	65.5	72.9	8.2	Yes
48	17	B	Residential	65.1	65.6	72.0	6.9	Yes
48	18	B	Residential	64.7	65.1	71.2	6.5	Yes
48	19	B	Residential	65.1	65.5	71.1	6.0	Yes
49	1	B	Residential	68.8	69.5	69.9	1.1	Yes
49	2	B	Residential	67.3	67.7	68.2	0.9	Yes
49	3	B	Residential	67.7	68.1	68.7	1.0	Yes
49	4	B	Residential	65.7	66.0	66.7	1.0	Yes
49	5	B	Residential	64.5	64.7	65.4	0.9	--
49	6	B	Residential	64.4	64.6	65.4	1.0	--
49	7	B	Residential	64.0	64.2	64.9	0.9	--
49	8	B	Residential	63.3	63.5	64.3	1.0	--
49	9	B	Residential	62.7	62.9	63.6	0.9	--
49	10	B	Residential	66.1	66.4	67.0	0.9	Yes
49	11	B	Residential	65.3	65.5	66.2	0.9	Yes
49	12	B	Residential	64.5	64.7	65.4	0.9	--
49	13	B	Residential	63.6	63.9	64.6	1.0	--
49	14	B	Residential	63.1	63.3	64.1	1.0	--
49	15	B	Residential	68.0	68.7	68.9	0.9	Yes
49	16	B	Residential	66.5	66.9	67.4	0.9	Yes
49	17	B	Residential	65.5	65.8	66.4	0.9	Yes
49	18	B	Residential	64.7	64.9	65.6	0.9	--
49	19	B	Residential	64.0	64.2	64.9	0.9	--
49	20	B	Residential	63.3	63.6	64.3	1.0	--
49	21	B	Residential	62.9	63.2	63.8	0.9	--
49	22	B	Residential	66.9	67.3	67.7	0.8	Yes
49	23	B	Residential	67.2	67.6	68.1	0.9	Yes
49	24	B	Residential	66.0	66.3	66.7	0.7	Yes



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49	25	B	Residential	66.7	67.0	67.6	0.9	Yes
49	26	B	Residential	65.0	65.3	65.8	0.8	--
49	27	B	Residential	64.6	64.9	65.4	0.8	--
49	28	B	Residential	63.8	64.1	64.8	1.0	--
49	29	B	Residential	63.4	63.6	64.3	0.9	--
49	30	B	Residential	67.0	67.4	67.9	0.9	Yes
49	31	B	Residential	67.2	67.5	67.9	0.7	Yes
49	32	B	Residential	66.5	66.7	67.4	0.9	Yes
49	33	B	Residential	66.0	66.3	66.9	0.9	Yes
49	34	B	Residential	65.7	65.9	66.5	0.8	Yes
49	35	B	Residential	65.0	65.2	65.7	0.7	--
49	36	B	Residential	64.4	64.6	65.2	0.8	--
49	37	B	Residential	64.2	64.4	65.0	0.8	--
49	38	B	Residential	63.5	63.7	64.5	1.0	--
49	39	B	Residential	63.2	63.4	64.2	1.0	--
49	40	B	Residential	67.4	68.0	68.4	1.0	Yes
49	41	B	Residential	67.1	67.7	68.0	0.9	Yes
49	42	B	Residential	67.2	67.6	68.1	0.9	Yes
49	43	B	Residential	67.6	68.1	68.6	1.0	Yes
49	44	B	Residential	66.7	67.0	67.2	0.5	Yes
49	45	B	Residential	67.3	67.7	68.0	0.7	Yes
49	46	B	Residential	66.0	66.3	66.9	0.9	Yes
49	47	B	Residential	66.5	66.8	67.4	0.9	Yes
49	48	B	Residential	65.5	65.7	66.4	0.9	Yes
49	49	B	Residential	65.7	65.9	66.4	0.7	Yes
49	50	B	Residential	64.4	64.6	65.3	0.9	--
49	51	B	Residential	63.7	63.9	64.7	1.0	--
49	52	B	Residential	63.1	63.3	64.0	0.9	--
49	53	B	Residential	67.2	67.6	68.0	0.8	Yes
49	54	B	Residential	66.5	66.9	67.5	1.0	Yes
50	1	E	Restaurant	66.0	66.2	66.7	0.7	--
51	1	D	Nonprofit Institutional Structure	43.0	43.4	44.6	1.6	--
52	1	C	Medical Facility	67.5	67.6	67.9	0.4	Yes
53	1	C	Recreational Area	68.1	68.1	67.9	-0.2	Yes
54	1	B	Residential	65.9	65.5	65.4	-0.5	--
54	2	B	Residential	65.7	65.4	65.0	-0.7	--
54	3	B	Residential	65.5	65.3	64.4	-1.1	--
54	4	B	Residential	65.1	65.0	63.9	-1.2	--
54	5	B	Residential	64.3	64.1	62.9	-1.4	--
54	6	B	Residential	63.8	63.7	62.3	-1.5	--
54	7	B	Residential	66.2	65.9	65.9	-0.3	--
54	8	B	Residential	65.8	65.6	65.4	-0.4	--
54	9	B	Residential	65.6	65.6	65.3	-0.3	--
54	10	B	Residential	65.2	65.2	64.8	-0.4	--
54	11	B	Residential	64.5	64.5	64.0	-0.5	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
54	12	B	Residential	63.9	63.9	63.3	-0.6	--
54	13	B	Residential	65.7	65.8	66.1	0.4	Yes
54	14	B	Residential	65.6	65.7	65.6	0	--
54	15	B	Residential	65.6	65.7	65.5	-0.1	--
54	16	B	Residential	65.2	65.3	65.1	-0.1	--
54	17	B	Residential	64.2	64.3	63.9	-0.3	--
54	18	B	Residential	65.6	65.7	66.3	0.7	Yes
54	19	B	Residential	65.2	65.5	65.6	0.4	--
54	20	B	Residential	65.3	65.6	65.4	0.1	--
54	21	B	Residential	65.0	65.2	65.2	0.2	--
54	22	B	Residential	64.0	64.2	63.9	-0.1	--
54	23	B	Residential	65.6	65.8	66.3	0.7	Yes
54	24	B	Residential	65.4	65.6	65.7	0.3	--
54	25	B	Residential	65.0	65.3	65.0	0	--
54	26	B	Residential	64.1	64.4	64.2	0.1	--
54	27	B	Residential	66.0	66.2	66.0	0	Yes
54	28	B	Residential	65.4	65.7	65.5	0.1	--
54	29	B	Residential	64.8	65.1	64.8	0	--
54	30	B	Residential	64.2	64.5	64.1	-0.1	--
54	31	B	Residential	67.7	68.0	67.9	0.2	Yes
54	32	B	Residential	66.8	67.2	66.9	0.1	Yes
54	33	B	Residential	65.8	66.1	65.7	-0.1	--
54	34	B	Residential	65.1	65.4	65.0	-0.1	--
54	35	B	Residential	69.0	69.3	69.3	0.3	Yes
54	36	B	Residential	67.4	67.7	67.4	0	Yes
54	37	B	Residential	66.4	66.8	66.4	0	Yes
54	38	B	Residential	65.5	65.9	65.5	0	--
54	39	B	Residential	69.7	70.0	69.9	0.2	Yes
54	40	B	Residential	68.2	68.4	68.1	-0.1	Yes
54	41	B	Residential	67.6	67.8	67.4	-0.2	Yes
54	42	B	Residential	66.6	66.8	66.4	-0.2	Yes
54	43	B	Residential	70.2	70.1	70.0	-0.2	Yes
54	44	B	Residential	68.8	68.8	68.9	0.1	Yes
54	45	B	Residential	67.5	67.5	67.4	-0.1	Yes
54	46	B	Residential	66.3	66.3	66.1	-0.2	Yes
54	47	B	Residential	68.7	68.7	68.9	0.2	Yes
54	48	B	Residential	67.0	67.0	66.9	-0.1	Yes
54	49	B	Residential	66.0	66.0	65.8	-0.2	--
54	50	B	Residential	65.4	65.4	65.2	-0.2	--
54	51	B	Residential	68.3	68.1	68.4	0.1	Yes
54	52	B	Residential	66.2	66.1	66.2	0	Yes
54	53	B	Residential	65.1	65.0	65.0	-0.1	--
54	54	B	Residential	64.2	64.0	64.0	-0.2	--
54	55	B	Residential	69.2	69.1	69.4	0.2	Yes
54	56	B	Residential	66.9	66.7	66.8	-0.1	Yes
54	57	B	Residential	65.4	65.3	65.3	-0.1	--
54	58	B	Residential	64.8	64.6	64.7	-0.1	--
54	59	B	Residential	64.2	64.0	64.1	-0.1	--



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
54	60	B	Residential	63.4	63.2	63.2	-0.2	--
54	61	B	Residential	65.6	65.4	65.5	-0.1	--
54	62	B	Residential	67.1	66.9	67.0	-0.1	Yes
54	63	B	Residential	69.2	69.0	69.2	0	Yes
54	64	B	Residential	71.5	71.3	71.8	0.3	Yes
54	65	B	Residential	73.0	72.8	73.1	0.1	Yes
54	66	B	Residential	70.5	70.3	70.5	0	Yes
54	67	B	Residential	68.2	68.0	68.2	0	Yes
54	68	B	Residential	66.6	66.4	66.5	-0.1	Yes
54	69	B	Residential	64.8	64.6	64.7	-0.1	--
54	70	B	Residential	63.9	63.6	63.7	-0.2	--
54	71	B	Residential	63.2	63.0	63.1	-0.1	--
54	72	B	Residential	64.6	64.3	64.5	-0.1	--
54	73	B	Residential	66.2	66.0	66.1	-0.1	Yes
54	74	B	Residential	68.0	67.8	68.0	0	Yes
54	75	B	Residential	70.0	69.8	70.0	0	Yes
54	76	B	Residential	72.9	72.7	72.9	0	Yes
54	77	B	Residential	74.5	74.3	74.6	0.1	Yes
54	78	B	Residential	69.8	69.6	69.8	0	Yes
54	79	B	Residential	63.2	62.9	63.2	0	--
54	80	B	Residential	64.1	63.9	64.2	0.1	--
54	81	B	Residential	65.4	65.2	65.5	0.1	--
54	82	B	Residential	67.5	67.3	67.5	0	Yes
54	83	B	Residential	69.8	69.6	69.8	0	Yes
54	84	B	Residential	73.6	73.4	73.6	0	Yes
54	85	B	Residential	73.9	73.7	74.1	0.2	Yes
54	96	B	Residential	71.1	70.9	67.2	-3.9	Yes
54	86	B	Residential	69.4	69.2	71.2	1.8	Yes
54	87	B	Residential	68.9	68.7	69.6	0.7	Yes
54	88	B	Residential	65.8	65.5	69.1	3.3	Yes
54	89	B	Residential	64.3	64.0	66.0	1.7	Yes
54	90	B	Residential	63.2	62.9	64.4	1.2	--
54	91	B	Residential	62.2	61.9	63.3	1.1	--
54	92	B	Residential	63.8	63.6	62.3	-1.5	--
54	93	B	Residential	64.6	64.3	64.3	-0.3	--
54	94	B	Residential	65.9	65.7	65.0	-0.9	--
54	95	B	Residential	66.9	66.6	66.0	-0.9	Yes
54	97	B	Residential	68.4	68.2	68.5	0.1	Yes
54	98	B	Residential	71.0	70.7	70.8	-0.2	Yes
54	99	B	Residential	72.3	72.1	72.3	0	Yes
54	100	B	Residential	69.4	69.1	69.4	0	Yes
54	101	B	Residential	66.7	66.4	66.7	0	Yes
54	102	B	Residential	67.0	66.7	67.1	0.1	Yes
54	103	B	Residential	64.8	64.5	64.8	0	--
54	104	B	Residential	64.3	64.0	64.3	0	--
54	105	B	Residential	64.8	64.5	64.8	0	--
54	106	B	Residential	63.7	63.4	63.7	0	--
54	107	B	Residential	67.6	67.3	67.6	0	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
54	108	B	Residential	67.0	66.7	67.0	0	Yes
54	109	B	Residential	66.2	65.9	66.2	0	Yes
54	110	B	Residential	65.5	65.2	65.4	-0.1	--
54	111	B	Residential	65.0	64.7	65.1	0.1	--
54	112	B	Residential	64.6	64.3	64.7	0.1	--
54	113	B	Residential	63.3	63.0	63.5	0.2	--
54	114	B	Residential	68.8	68.5	68.6	-0.2	Yes
54	115	B	Residential	67.3	67.0	67.3	0	Yes
54	116	B	Residential	66.4	66.1	66.4	0	Yes
54	117	B	Residential	64.5	64.2	64.5	0	--
54	118	B	Residential	64.3	64.0	64.4	0.1	--
54	119	B	Residential	63.0	62.7	63.1	0.1	--
54	120	B	Residential	63.3	63.0	63.4	0.1	--
54	121	B	Residential	64.2	63.9	64.4	0.2	--
54	122	B	Residential	65.8	65.5	65.8	0	--
54	123	B	Residential	66.5	66.2	66.5	0	Yes
54	124	B	Residential	67.1	66.8	67.2	0.1	Yes
54	125	B	Residential	71.5	71.2	68.5	-3	Yes
54	126	B	Residential	68.5	68.1	68.3	-0.2	Yes
54	127	B	Residential	68.6	68.3	68.3	-0.3	Yes
54	128	B	Residential	68.3	68.0	68.1	-0.2	Yes
54	129	B	Residential	68.4	68.0	68.1	-0.3	Yes
54	130	B	Residential	68.5	68.2	68.2	-0.3	Yes
54	131	B	Residential	68.5	68.2	68.2	-0.3	Yes
54	132	B	Residential	68.7	68.4	68.4	-0.3	Yes
54	133	B	Residential	69.2	68.8	68.8	-0.4	Yes
54	134	B	Residential	69.2	68.8	68.9	-0.3	Yes
54	135	B	Residential	69.6	69.3	69.8	0.2	Yes
54	136	B	Residential	66.8	66.6	66.8	0	Yes
54	137	B	Residential	66.1	65.9	66.2	0.1	Yes
54	138	B	Residential	67.0	66.7	67.0	0	Yes
54	139	B	Residential	67.0	66.7	67.1	0.1	Yes
54	140	B	Residential	67.0	66.8	67.1	0.1	Yes
54	141	B	Residential	67.2	66.9	67.3	0.1	Yes
54	142	B	Residential	67.2	66.9	67.3	0.1	Yes
54	143	B	Residential	67.2	66.9	67.2	0	Yes
54	144	B	Residential	67.1	66.9	67.2	0.1	Yes
54	145	B	Residential	67.1	66.8	67.2	0.1	Yes
54	146	B	Residential	67.1	66.8	67.2	0.1	Yes
54	147	B	Residential	67.3	67.0	67.4	0.1	Yes
54	148	B	Residential	65.9	65.7	66.1	0.2	Yes
54	149	B	Residential	64.3	64.0	64.4	0.1	--
54	150	B	Residential	64.5	64.2	64.7	0.2	--
54	151	B	Residential	65.0	64.7	65.1	0.1	--
54	152	B	Residential	65.1	64.8	65.3	0.2	--
54	153	B	Residential	65.4	65.1	65.6	0.2	--
54	154	B	Residential	65.3	65.1	65.5	0.2	--
54	155	B	Residential	65.3	65.1	65.5	0.2	--



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
54	156	B	Residential	65.5	65.3	65.6	0.1	--
54	157	B	Residential	65.4	65.1	65.5	0.1	--
54	158	B	Residential	65.4	65.1	65.5	0.1	--
54	159	B	Residential	65.3	65.0	65.5	0.2	--
54	160	B	Residential	65.2	65.0	65.6	0.4	--
54	161	B	Residential	68.6	68.3	68.7	0.1	Yes
54	162	B	Residential	68.8	68.5	68.9	0.1	Yes
54	163	B	Residential	69.3	69.0	69.5	0.2	Yes
54	164	B	Residential	69.6	69.4	69.8	0.2	Yes
54	165	B	Residential	70.1	69.9	70.3	0.2	Yes
54	166	B	Residential	69.9	69.7	70.4	0.5	Yes
54	167	B	Residential	70.5	70.3	71.1	0.6	Yes
54	168	B	Residential	69.1	68.9	70.3	1.2	Yes
54	169	B	Residential	72.4	72.1	73.3	0.9	Yes
54	170	B	Residential	69.3	69.0	70.6	1.3	Yes
54	171	B	Residential	69.6	69.4	71.2	1.6	Yes
54	172	B	Residential	70.8	70.6	72.3	1.5	Yes
54	173	B	Residential	66.0	65.7	66.3	0.3	Yes
54	174	B	Residential	65.7	65.4	65.9	0.2	--
54	175	B	Residential	65.6	65.4	65.9	0.3	--
54	176	B	Residential	65.5	65.2	65.9	0.4	--
54	177	B	Residential	65.1	64.9	65.6	0.5	--
54	178	B	Residential	65.8	65.5	66.5	0.7	Yes
54	179	B	Residential	65.6	65.4	66.9	1.3	Yes
54	180	B	Residential	65.3	65.1	66.5	1.2	Yes
54	181	B	Residential	65.6	65.4	66.7	1.1	Yes
54	182	B	Residential	66.0	65.8	67.0	1	Yes
54	183	B	Residential	63.5	63.3	64.4	0.9	--
54	184	B	Residential	63.2	62.9	64.0	0.8	--
54	185	B	Residential	72.1	71.9	72.9	0.8	Yes
54	186	B	Residential	71.8	71.6	72.6	0.8	Yes
54	187	B	Residential	71.9	71.7	72.7	0.8	Yes
54	188	B	Residential	71.3	71.1	72.2	0.9	Yes
54	189	B	Residential	70.9	70.7	72.0	1.1	Yes
54	190	B	Residential	70.1	69.9	71.3	1.2	Yes
54	191	B	Residential	66.1	65.9	66.8	0.7	Yes
54	192	B	Residential	66.3	66.0	66.8	0.5	Yes
54	193	B	Residential	66.5	66.3	67.0	0.5	Yes
54	194	B	Residential	66.7	66.4	67.2	0.5	Yes
54	195	B	Residential	67.1	66.9	67.5	0.4	Yes
54	196	B	Residential	67.6	67.4	68.0	0.4	Yes
54	197	B	Residential	67.1	66.9	67.5	0.4	Yes
54	198	B	Residential	66.7	66.5	67.1	0.4	Yes
54	199	B	Residential	66.4	66.1	66.9	0.5	Yes
54	200	B	Residential	66.6	66.3	67.1	0.5	Yes
54	201	B	Residential	66.6	66.3	67.1	0.5	Yes
54	202	B	Residential	63.1	62.8	63.8	0.7	--
54	203	B	Residential	63.1	62.9	63.8	0.7	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
54	204	B	Residential	63.3	63.1	63.9	0.6	--
54	205	B	Residential	63.7	63.4	64.1	0.4	--
54	206	B	Residential	63.9	63.6	64.3	0.4	--
54	207	B	Residential	64.1	63.9	64.4	0.3	--
54	208	B	Residential	64.3	64.1	64.6	0.3	--
54	209	B	Residential	64.3	64.0	64.5	0.2	--
54	210	B	Residential	64.5	64.3	64.7	0.2	--
54	211	B	Residential	64.2	64.0	64.4	0.2	--
54	212	B	Residential	64.6	64.4	64.7	0.1	--
54	213	B	Residential	68.2	68.0	69.9	1.7	Yes
54	214	B	Residential	67.2	67.0	68.1	0.9	Yes
54	215	B	Residential	68.1	67.9	69.7	1.6	Yes
54	216	B	Residential	67.9	67.7	69.4	1.5	Yes
54	217	B	Residential	68.0	67.8	69.4	1.4	Yes
54	218	B	Residential	68.5	68.3	69.9	1.4	Yes
54	219	B	Residential	65.1	64.9	65.2	0.1	--
54	220	B	Residential	63.0	62.7	63.0	0	--
54	221	B	Residential	63.1	62.8	63.1	0	--
54	222	B	Residential	65.0	64.8	65.1	0.1	--
54	223	B	Residential	65.4	65.2	65.5	0.1	--
54	224	B	Residential	65.6	65.4	65.7	0.1	--
54	225	B	Residential	65.5	65.3	65.5	0	--
54	226	B	Residential	65.9	65.6	65.9	0	--
54	227	B	Residential	66.3	66.1	66.3	0	Yes
54	228	B	Residential	66.5	66.2	66.4	-0.1	Yes
54	229	B	Residential	68.4	68.1	68.2	-0.2	Yes
54	230	B	Residential	67.9	67.6	67.7	-0.2	Yes
54	231	B	Residential	67.2	66.9	67.0	-0.2	Yes
54	232	B	Residential	73.8	73.5	73.6	-0.2	Yes
54	233	B	Residential	73.6	73.3	73.3	-0.3	Yes
54	234	B	Residential	73.2	72.9	72.9	-0.3	Yes
54	235	B	Residential	69.7	69.5	69.7	0	Yes
54	236	B	Residential	68.5	68.3	68.5	0	Yes
54	237	B	Residential	68.0	67.8	68.0	0	Yes
54	238	B	Residential	67.4	67.2	67.4	0	Yes
54	239	B	Residential	67.1	66.9	67.0	-0.1	Yes
54	240	B	Residential	66.7	66.5	66.6	-0.1	Yes
54	241	B	Residential	66.3	66.1	66.2	-0.1	Yes
54	242	B	Residential	66.1	65.9	66.0	-0.1	Yes
54	243	B	Residential	65.7	65.5	65.6	-0.1	--
54	244	B	Residential	65.3	65.1	65.2	-0.1	--
54	245	B	Residential	69.5	69.4	69.9	0.4	Yes
54	246	B	Residential	68.7	68.5	68.8	0.1	Yes
54	247	B	Residential	67.9	67.7	67.9	0	Yes
55	1	B	Residential	68.2	68.6	68.1	-0.1	Yes
55	2	B	Residential	68.8	69.2	68.9	0.1	Yes
55	3	B	Residential	67.2	67.7	67.1	-0.1	Yes
55	4	B	Residential	65.5	66.0	65.4	-0.1	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
55	5	B	Residential	69.0	69.4	69.3	0.3	Yes
55	6	B	Residential	69.6	70.0	69.7	0.1	Yes
55	7	B	Residential	67.2	67.6	67.1	-0.1	Yes
55	8	B	Residential	67.9	68.4	67.8	-0.1	Yes
55	9	B	Residential	66.0	66.5	65.9	-0.1	Yes
55	10	B	Residential	66.8	67.2	66.6	-0.2	Yes
55	11	B	Residential	64.5	64.9	64.3	-0.2	--
55	12	B	Residential	66.0	66.4	65.8	-0.2	--
55	13	B	Residential	65.0	65.4	64.8	-0.2	--
55	14	B	Residential	69.8	70.2	69.9	0.1	Yes
55	15	B	Residential	68.2	68.6	68.1	-0.1	Yes
55	16	B	Residential	69.7	69.9	69.5	-0.2	Yes
55	17	B	Residential	67.3	67.7	67.2	-0.1	Yes
55	18	B	Residential	65.5	65.8	65.3	-0.2	--
55	19	B	Residential	67.4	67.5	67.1	-0.3	Yes
55	20	B	Residential	72.7	72.5	72.5	-0.2	Yes
55	21	B	Residential	69.4	69.4	69.3	-0.1	Yes
55	22	B	Residential	69.2	69.2	69.2	0	Yes
55	23	B	Residential	67.6	67.6	67.5	-0.1	Yes
55	24	B	Residential	66.6	66.6	66.5	-0.1	Yes
55	25	B	Residential	65.7	65.7	65.5	-0.2	--
55	26	B	Residential	64.6	64.6	64.4	-0.2	--
55	27	B	Residential	65.2	65.2	65.0	-0.2	--
55	28	B	Residential	66.1	66.1	65.9	-0.2	--
55	29	B	Residential	66.9	66.9	66.8	-0.1	Yes
55	30	B	Residential	68.2	68.1	68.1	-0.1	Yes
55	31	B	Residential	69.2	69.2	69.3	0.1	Yes
55	32	B	Residential	71.1	71.0	71.4	0.3	Yes
55	33	B	Residential	69.5	69.3	69.5	0	Yes
55	34	B	Residential	68.0	67.9	68.0	0	Yes
55	35	B	Residential	66.9	66.7	66.8	-0.1	Yes
55	36	B	Residential	66.1	66.0	66.0	-0.1	Yes
55	37	B	Residential	65.1	65.0	65.0	-0.1	--
55	38	B	Residential	65.3	65.1	65.1	-0.2	--
55	39	B	Residential	66.6	66.4	66.5	-0.1	Yes
55	40	B	Residential	67.5	67.4	67.4	-0.1	Yes
55	41	B	Residential	70.6	70.5	70.7	0.1	Yes
55	42	B	Residential	72.8	72.6	72.8	0	Yes
55	43	B	Residential	70.1	69.9	70.1	0	Yes
55	44	B	Residential	67.9	67.6	67.7	-0.2	Yes
55	45	B	Residential	66.2	66.0	66.1	-0.1	Yes
55	46	B	Residential	64.7	64.5	64.6	-0.1	--
55	47	B	Residential	63.2	63.0	63.1	-0.1	--
55	48	B	Residential	63.1	62.8	62.9	-0.2	--
55	49	B	Residential	63.7	63.5	63.5	-0.2	--
55	50	B	Residential	65.4	65.2	65.3	-0.1	--
55	51	B	Residential	66.5	66.3	66.4	-0.1	Yes
55	52	B	Residential	69.3	69.1	69.2	-0.1	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
55	53	B	Residential	72.7	72.5	72.7	0	Yes
55	54	B	Residential	73.2	73.0	73.1	-0.1	Yes
55	55	B	Residential	69.4	69.2	69.2	-0.2	Yes
55	56	B	Residential	67.5	67.2	67.5	0	Yes
55	57	B	Residential	65.6	65.3	65.6	0	--
55	58	B	Residential	64.1	63.9	64.2	0.1	--
55	59	B	Residential	62.9	62.6	63.0	0.1	--
55	60	B	Residential	71.4	71.2	71.3	0.3	Yes
56	1	C	School	67.2	66.9	70.9	3.7	Yes
57	1	B	Residential	73.5	73.3	73.4	-0.1	Yes
57	2	B	Residential	71.1	70.9	71.0	-0.1	Yes
57	3	B	Residential	69.4	69.1	69.3	-0.1	Yes
57	4	B	Residential	67.5	67.2	67.5	0	Yes
57	5	B	Residential	66.4	66.1	66.3	-0.1	Yes
57	6	B	Residential	69.9	69.6	69.7	-0.2	Yes
57	7	B	Residential	68.4	68.1	68.3	-0.1	Yes
57	8	B	Residential	68.3	68.0	68.1	-0.2	Yes
57	9	B	Residential	67.8	67.5	67.7	-0.1	Yes
57	10	B	Residential	68.8	68.4	68.5	-0.3	Yes
57	11	B	Residential	65.7	65.4	65.4	-0.3	--
57	12	B	Residential	65.8	65.5	65.5	-0.3	--
57	13	B	Residential	66.8	66.5	65.5	-1.3	--
57	14	B	Residential	66.8	66.5	65.4	-1.4	--
57	15	B	Residential	67.0	66.7	65.6	-1.4	--
57	16	B	Residential	67.3	67.0	65.9	-1.4	--
57	17	B	Residential	67.6	67.4	66.2	-1.4	Yes
57	18	B	Residential	67.7	67.4	66.4	-1.3	Yes
57	19	B	Residential	67.8	67.5	66.7	-1.1	Yes
57	20	B	Residential	67.2	67.0	65.6	-1.6	--
57	21	B	Residential	64.2	64.0	63.3	-0.9	--
57	22	B	Residential	63.8	63.5	62.9	-0.9	--
57	23	B	Residential	65.3	65.0	63.7	-1.6	--
57	24	B	Residential	65.6	65.3	63.5	-2.1	--
57	25	B	Residential	66.1	65.8	63.8	-2.3	--
57	26	B	Residential	66.5	66.3	64.4	-2.1	--
57	27	B	Residential	66.7	66.4	64.6	-2.1	--
57	28	B	Residential	66.5	66.3	64.7	-1.8	--
57	29	B	Residential	66.0	65.7	64.3	-1.7	--
57	30	B	Residential	63.6	63.4	62.1	-1.5	--
57	31	B	Residential	63.7	63.4	62.2	-1.5	--
57	32	B	Residential	63.8	63.5	62.3	-1.5	--
57	33	B	Residential	64.0	63.7	62.5	-1.5	--
57	34	B	Residential	63.8	63.6	62.3	-1.5	--
57	35	B	Residential	64.1	63.9	62.6	-1.5	--
57	36	B	Residential	68.7	68.5	67.6	-1.1	Yes
57	37	B	Residential	67.0	66.8	65.4	-1.6	--
57	38	B	Residential	68.7	68.4	67.9	-0.8	Yes
57	39	B	Residential	68.6	68.3	68.0	-0.6	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
57	40	B	Residential	68.7	68.4	68.3	-0.4	Yes
57	41	B	Residential	68.7	68.4	68.5	-0.2	Yes
57	42	B	Residential	69.2	68.9	69.1	-0.1	Yes
57	43	B	Residential	69.1	68.8	69.0	-0.1	Yes
57	44	B	Residential	69.2	68.9	69.1	-0.1	Yes
57	45	B	Residential	69.2	69.0	69.1	-0.1	Yes
57	46	B	Residential	66.4	66.2	64.7	-1.7	--
57	47	B	Residential	66.1	65.8	64.6	-1.5	--
57	48	B	Residential	65.1	64.9	63.7	-1.4	--
57	49	B	Residential	66.3	66.1	65.4	-0.9	--
57	50	B	Residential	66.1	65.9	65.5	-0.6	--
57	51	B	Residential	66.2	66.0	65.6	-0.6	--
57	52	B	Residential	66.0	65.7	65.5	-0.5	--
57	53	B	Residential	65.9	65.7	65.5	-0.4	--
57	54	B	Residential	67.0	66.7	66.6	-0.4	Yes
57	55	B	Residential	66.9	66.6	66.6	-0.3	Yes
57	56	B	Residential	66.7	66.4	66.5	-0.2	Yes
57	57	B	Residential	66.4	66.2	66.2	-0.2	Yes
57	58	B	Residential	69.5	69.3	69.4	-0.1	Yes
57	59	B	Residential	68.4	68.2	68.3	-0.1	Yes
57	60	B	Residential	67.0	66.8	67.0	0	Yes
57	61	B	Residential	69.9	69.7	69.8	-0.1	Yes
57	62	B	Residential	70.1	69.9	70.0	-0.1	Yes
57	63	B	Residential	69.6	69.4	69.4	-0.2	Yes
57	64	B	Residential	69.9	69.7	69.8	-0.1	Yes
57	65	B	Residential	71.2	71.0	70.9	-0.3	Yes
57	66	B	Residential	71.0	70.9	70.5	-0.5	Yes
57	67	B	Residential	71.7	71.5	71.1	-0.6	Yes
57	68	B	Residential	71.7	71.6	70.7	-1	Yes
57	69	B	Residential	69.9	69.7	68.7	-1.2	Yes
57	70	B	Residential	65.4	65.1	65.3	-0.1	--
57	71	B	Residential	64.0	63.7	63.9	-0.1	--
57	72	B	Residential	66.2	65.9	65.9	-0.3	--
57	73	B	Residential	65.8	65.5	65.6	-0.2	--
57	74	B	Residential	66.5	66.3	66.2	-0.3	Yes
57	75	B	Residential	66.6	66.3	66.2	-0.4	Yes
57	76	B	Residential	67.0	66.8	66.4	-0.6	Yes
57	77	B	Residential	67.4	67.2	66.8	-0.6	Yes
57	78	B	Residential	66.8	66.6	66.1	-0.7	Yes
57	79	B	Residential	67.4	67.3	66.4	-1	Yes
57	80	B	Residential	66.2	66.0	65.2	-1	--
57	81	B	Residential	64.4	64.2	63.4	-1	--
57	82	B	Residential	72.9	72.9	71.8	-1.1	Yes
57	83	B	Residential	70.1	70.0	68.9	-1.2	Yes
57	84	B	Residential	67.1	66.9	65.9	-1.2	--
57	85	B	Residential	64.7	64.5	63.9	-0.8	--
57	86	B	Residential	63.2	63.0	62.5	-0.7	--
57	87	B	Residential	71.7	71.7	71.2	-0.5	Yes



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
57	88	B	Residential	69.8	69.8	68.8	-1	Yes
57	89	B	Residential	67.5	67.4	66.5	-1	Yes
57	90	B	Residential	65.3	65.1	64.4	-0.9	--
57	91	B	Residential	63.4	63.2	62.6	-0.8	--
57	92	B	Residential	70.8	70.9	70.5	-0.3	Yes
57	93	B	Residential	68.7	68.7	68.3	-0.4	Yes
57	94	B	Residential	65.9	65.8	65.3	-0.6	--
57	95	B	Residential	64.4	64.3	63.7	-0.7	--
57	96	B	Residential	62.5	62.3	61.8	-0.7	--
57	97	B	Residential	70.7	70.9	71.1	0.4	Yes
57	98	B	Residential	67.2	67.3	67.5	0.3	Yes
57	99	B	Residential	66.0	66.0	66.1	0.1	Yes
57	100	B	Residential	64.3	64.2	64.3	0	--
57	101	B	Residential	63.6	63.5	63.6	0	--
57	102	B	Residential	62.2	62.0	62.2	0	--
57	103	B	Residential	68.0	68.1	68.2	0.2	Yes
57	104	B	Residential	66.7	66.6	66.7	0	Yes
57	105	B	Residential	65.4	65.3	65.3	-0.1	--
57	106	B	Residential	64.4	64.2	64.3	-0.1	--
57	107	B	Residential	63.3	63.1	63.2	-0.1	--
57	108	B	Residential	62.7	62.5	62.5	-0.2	--
57	109	B	Residential	62.0	61.8	61.8	-0.2	--
57	110	B	Residential	68.4	68.5	68.6	0.2	Yes
57	111	B	Residential	67.5	67.5	67.6	0.1	Yes
57	112	B	Residential	66.4	66.3	66.4	0	Yes
57	113	B	Residential	65.4	65.3	65.3	-0.1	--
57	114	B	Residential	64.5	64.3	64.4	-0.1	--
57	115	B	Residential	63.6	63.4	63.5	-0.1	--
57	116	B	Residential	69.2	69.4	69.5	0.3	Yes
57	117	B	Residential	67.7	67.7	67.7	0	Yes
57	118	B	Residential	66.7	66.6	66.7	0	Yes
57	119	B	Residential	65.7	65.6	65.6	-0.1	Yes
57	120	B	Residential	64.7	64.5	64.6	-0.1	--
57	121	B	Residential	64.1	63.9	63.9	-0.2	--
57	122	B	Residential	63.3	63.1	63.1	-0.2	--
57	123	B	Residential	70.7	70.5	70.5	-0.2	Yes
57	124	B	Residential	72.5	72.2	72.2	-0.3	Yes
57	125	B	Residential	72.1	71.8	71.8	-0.3	Yes
57	126	B	Residential	71.9	71.6	71.5	-0.4	Yes
57	127	B	Residential	71.7	71.4	71.4	-0.3	Yes
57	128	B	Residential	71.6	71.4	71.3	-0.3	Yes
57	129	B	Residential	71.3	71.0	71.1	-0.2	Yes
57	130	B	Residential	71.4	71.1	71.1	-0.3	Yes
57	131	B	Residential	71.0	70.7	70.7	-0.3	Yes
57	132	B	Residential	70.7	70.5	70.5	-0.2	Yes
57	133	B	Residential	70.1	70.4	70.2	0.1	Yes
57	134	B	Residential	68.4	68.4	68.2	-0.2	Yes
57	135	B	Residential	67.0	66.9	66.7	-0.3	Yes



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57	136	B	Residential	65.3	65.1	64.9	-0.4	--
57	137	B	Residential	68.9	69.0	68.9	0	Yes
57	138	B	Residential	67.1	67.0	66.9	-0.2	Yes
57	139	B	Residential	66.2	66.1	65.9	-0.3	--
57	140	B	Residential	65.2	65.0	64.7	-0.5	--
57	141	B	Residential	71.2	71.3	70.9	-0.3	Yes
57	142	B	Residential	68.7	68.7	68.4	-0.3	Yes
57	143	B	Residential	66.7	66.6	66.1	-0.6	Yes
57	144	B	Residential	65.1	65.0	64.6	-0.5	--
57	145	B	Residential	69.9	69.9	69.4	-0.5	Yes
57	146	B	Residential	69.3	69.2	68.8	-0.5	Yes
57	147	B	Residential	69.5	69.5	69.1	-0.4	Yes
57	148	B	Residential	70.6	70.5	70.2	-0.4	Yes
57	149	B	Residential	64.9	64.8	64.5	-0.4	--
57	150	B	Residential	65.3	65.1	64.7	-0.6	--
57	151	B	Residential	65.3	65.1	64.8	-0.5	--
57	152	B	Residential	67.7	67.6	67.4	-0.3	Yes
57	153	B	Residential	68.0	67.9	67.5	-0.5	Yes
57	154	B	Residential	68.0	67.9	67.8	-0.2	Yes
57	155	B	Residential	63.3	63.1	62.8	-0.5	--
57	156	B	Residential	63.3	63.1	62.7	-0.6	--
57	157	B	Residential	63.6	63.4	63.0	-0.6	--
57	158	B	Residential	64.6	64.4	64.0	-0.6	--
57	159	B	Residential	64.9	64.7	64.2	-0.7	--
57	160	B	Residential	65.3	65.1	64.8	-0.5	--
57	161	B	Residential	65.9	65.7	65.5	-0.4	--
57	162	B	Residential	63.5	63.3	62.9	-0.6	--
57	163	B	Residential	63.6	63.4	63.1	-0.5	--
57	164	B	Residential	63.8	63.7	63.3	-0.5	--
57	165	B	Residential	64.1	63.9	63.6	-0.5	--
57	166	B	Residential	64.4	64.2	64.0	-0.4	--
57	167	B	Residential	63.7	63.5	63.1	-0.6	--
57	168	B	Residential	73.7	73.7	73.5	-0.2	Yes
57	169	B	Residential	69.9	69.8	69.6	-0.3	Yes
57	170	B	Residential	68.1	67.9	67.8	-0.3	Yes
57	171	B	Residential	73.8	73.8	74.6	0.8	Yes
57	172	B	Residential	70.7	70.6	71.1	0.4	Yes
57	173	B	Residential	68.4	68.2	68.4	0	Yes
57	174	B	Residential	71.8	71.8	72.7	0.9	Yes
57	175	B	Residential	68.3	68.2	69.3	1	Yes
57	176	B	Residential	72.4	72.3	73.1	0.7	Yes
57	177	B	Residential	64.5	64.4	64.2	-0.3	--
57	178	B	Residential	63.6	63.4	63.2	-0.4	--
57	179	B	Residential	64.8	64.6	64.4	-0.4	--
57	180	B	Residential	64.4	64.3	64.3	-0.1	--
57	181	B	Residential	64.6	64.4	64.4	-0.2	--
57	182	B	Residential	64.8	64.6	64.8	0	--
57	183	B	Residential	65.9	65.7	66.0	0.1	Yes



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57	184	B	Residential	64.7	64.5	64.7	0	--
57	185	B	Residential	66.2	66.0	66.5	0.3	Yes
57	186	B	Residential	65.2	65.0	65.3	0.1	--
57	187	B	Residential	65.3	65.1	65.5	0.2	--
57	188	B	Residential	66.4	66.3	66.6	0.2	Yes
57	189	B	Residential	65.6	65.4	66.0	0.4	Yes
57	190	B	Residential	65.8	65.7	66.0	0.2	Yes
57	191	B	Residential	67.0	66.8	67.2	0.2	Yes
57	192	B	Residential	66.0	65.8	66.2	0.2	Yes
57	193	B	Residential	66.3	66.1	66.4	0.1	Yes
57	194	B	Residential	66.6	66.4	66.6	0	Yes
57	195	B	Residential	63.6	63.4	63.5	-0.1	--
57	196	B	Residential	63.8	63.6	63.8	0	--
57	197	B	Residential	64.0	63.8	63.8	-0.2	--
57	198	B	Residential	64.2	64.0	64.1	-0.1	--
57	199	B	Residential	64.4	64.2	64.3	-0.1	--
57	200	B	Residential	64.4	64.1	64.3	-0.1	--
57	201	B	Residential	68.5	68.3	68.4	-0.1	Yes
57	202	B	Residential	70.1	69.9	69.6	-0.5	Yes
57	203	B	Residential	68.4	68.2	68.5	0.1	Yes
57	204	B	Residential	67.3	67.1	67.2	-0.1	Yes
57	205	B	Residential	67.3	67.1	67.3	0	Yes
57	206	B	Residential	66.2	65.9	65.6	-0.6	--
57	207	B	Residential	64.9	64.7	64.6	-0.3	--
57	208	B	Residential	64.9	64.7	64.3	-0.6	--
57	209	B	Residential	63.3	63.0	62.9	-0.4	--
57	210	B	Residential	69.3	69.1	68.5	-0.8	Yes
57	211	B	Residential	71.0	70.8	70.7	-0.3	Yes
57	212	B	Residential	68.0	67.8	67.3	-0.7	Yes
57	213	B	Residential	68.6	68.4	67.7	-0.9	Yes
57	214	B	Residential	66.7	66.4	66.2	-0.5	Yes
57	215	B	Residential	66.8	66.6	66.7	-0.1	Yes
57	216	B	Residential	65.8	65.5	65.0	-0.8	--
57	217	B	Residential	66.1	65.9	65.5	-0.6	--
57	218	B	Residential	64.1	63.9	63.6	-0.5	--
57	219	B	Residential	64.8	64.6	64.3	-0.5	--
57	220	B	Residential	64.1	63.9	63.1	-1	--
57	221	B	Residential	70.5	70.3	69.8	-0.7	Yes
57	222	B	Residential	70.6	70.4	70.6	0	Yes
57	223	B	Residential	68.9	68.7	68.2	-0.7	Yes
57	224	B	Residential	69.3	69.1	68.6	-0.7	Yes
57	225	B	Residential	67.2	66.9	66.6	-0.6	Yes
57	226	B	Residential	67.2	67.0	66.9	-0.3	Yes
57	227	B	Residential	66.2	65.9	65.4	-0.8	--
57	228	B	Residential	66.0	65.8	65.3	-0.7	--
57	229	B	Residential	65.0	64.8	64.1	-0.9	--
57	230	B	Residential	64.6	64.3	63.8	-0.8	--
57	231	B	Residential	63.9	63.6	62.8	-1.1	--



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57	232	B	Residential	63.8	63.6	62.9	-0.9	--
57	233	B	Residential	71.9	71.7	71.0	-0.9	Yes
57	234	B	Residential	71.1	70.9	70.7	-0.4	Yes
57	235	B	Residential	68.9	68.7	68.1	-0.8	Yes
57	236	B	Residential	70.8	70.6	70.4	-0.4	Yes
57	237	B	Residential	67.4	67.2	66.8	-0.6	Yes
57	238	B	Residential	67.3	67.1	66.7	-0.6	Yes
57	239	B	Residential	65.2	65.0	64.7	-0.5	--
57	240	B	Residential	65.9	65.6	65.2	-0.7	--
57	241	B	Residential	64.2	64.0	63.4	-0.8	--
57	242	B	Residential	64.3	64.0	63.9	-0.4	--
57	243	B	Residential	62.9	62.6	62.0	-0.9	--
57	244	B	Residential	63.5	63.3	62.7	-0.8	--
57	245	B	Residential	62.6	62.3	61.8	-0.8	--
57	246	B	Residential	72.3	72.1	71.6	-0.7	Yes
57	247	B	Residential	71.7	71.5	71.1	-0.6	Yes
57	248	B	Residential	71.1	70.8	70.4	-0.7	Yes
57	249	B	Residential	70.5	70.2	69.8	-0.7	Yes
57	250	B	Residential	70.5	70.2	69.9	-0.6	Yes
57	251	B	Residential	70.1	69.9	69.4	-0.7	Yes
57	252	B	Residential	70.0	69.7	69.3	-0.7	Yes
57	253	B	Residential	70.0	69.7	69.1	-0.9	Yes
57	254	B	Residential	69.3	69.1	68.3	-1	Yes
57	255	B	Residential	66.6	66.3	68.2	1.6	Yes
57	256	B	Residential	69.8	69.6	69.3	-0.5	Yes
57	257	B	Residential	68.7	68.5	68.1	-0.6	Yes
57	258	B	Residential	69.2	69.0	68.5	-0.7	Yes
57	259	B	Residential	69.4	69.1	68.7	-0.7	Yes
57	260	B	Residential	69.2	68.9	68.4	-0.8	Yes
57	261	B	Residential	69.0	68.8	68.2	-0.8	Yes
57	262	B	Residential	68.8	68.6	68.0	-0.8	Yes
57	263	B	Residential	68.7	68.5	67.6	-1.1	Yes
57	264	B	Residential	68.0	67.7	66.7	-1.3	Yes
57	265	B	Residential	65.1	64.9	64.6	-0.5	--
57	266	B	Residential	65.3	65.0	64.7	-0.6	--
57	267	B	Residential	65.3	65.0	64.5	-0.8	--
57	268	B	Residential	65.3	65.0	64.5	-0.8	--
57	269	B	Residential	65.4	65.2	64.5	-0.9	--
57	270	B	Residential	65.6	65.4	64.5	-1.1	--
57	271	B	Residential	66.1	65.9	64.4	-1.7	--
57	272	B	Residential	69.2	68.9	68.2	-1	Yes
57	273	B	Residential	69.2	68.9	68.0	-1.2	Yes
57	274	B	Residential	69.2	69.0	68.1	-1.1	Yes
57	275	B	Residential	69.1	68.8	67.9	-1.2	Yes
57	276	B	Residential	68.9	68.6	67.5	-1.4	Yes
57	277	B	Residential	68.8	68.6	67.0	-1.8	Yes
57	278	B	Residential	68.6	68.4	66.4	-2.2	Yes
57	279	B	Residential	68.5	68.3	66.2	-2.3	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
57	280	B	Residential	67.7	67.5	66.1	-1.6	Yes
57	281	B	Residential	67.5	67.3	65.7	-1.8	--
57	282	B	Residential	67.6	67.4	65.7	-1.9	--
57	283	B	Residential	67.3	67.1	65.4	-1.9	--
57	284	B	Residential	67.2	67.0	65.3	-1.9	--
57	285	B	Residential	66.8	66.6	64.9	-1.9	--
57	286	B	Residential	66.9	66.7	65.1	-1.8	--
57	287	B	Residential	66.7	66.5	65.0	-1.7	--
57	288	B	Residential	66.1	66.0	64.6	-1.5	--
57	289	B	Residential	67.1	66.9	65.4	-1.7	--
57	290	B	Residential	67.0	66.8	65.3	-1.7	--
57	291	B	Residential	66.8	66.5	64.9	-1.9	--
57	292	B	Residential	66.9	66.7	65.0	-1.9	--
57	293	B	Residential	66.5	66.3	64.6	-1.9	--
57	294	B	Residential	65.9	65.7	63.9	-2	--
57	295	B	Residential	65.6	65.4	63.6	-2	--
57	296	B	Residential	65.3	65.2	63.6	-1.7	--
57	297	B	Residential	66.4	66.2	64.7	-1.7	--
57	298	B	Residential	66.1	65.9	64.4	-1.7	--
57	299	B	Residential	66.0	65.8	64.3	-1.7	--
57	300	B	Residential	66.1	65.9	64.2	-1.9	--
57	301	B	Residential	66.2	66.0	64.2	-2	--
57	302	B	Residential	65.2	65.0	63.2	-2	--
57	303	B	Residential	64.9	64.7	62.9	-2	--
57	304	B	Residential	64.6	64.4	62.9	-1.7	--
57	305	B	Residential	65.7	65.4	63.9	-1.8	--
57	306	B	Residential	65.5	65.3	63.8	-1.7	--
57	307	B	Residential	65.3	65.0	63.5	-1.8	--
57	308	B	Residential	65.3	65.1	63.3	-2	--
57	309	B	Residential	65.2	64.9	63.2	-2	--
57	310	B	Residential	64.8	64.6	63.0	-1.8	--
57	311	B	Residential	64.5	64.3	62.7	-1.8	--
57	312	B	Residential	64.0	63.8	62.4	-1.6	--
57	313	B	Residential	64.0	63.8	62.4	-1.6	--
58	1	B	Residential (Asst Living Fac)	65.9	65.8	66.5	0.6	Yes
59	1	B	Residential	67.7	67.8	67.7	0.0	Yes
59	2	B	Residential	69.5	69.6	69.6	0.1	Yes
59	3	B	Residential	71.7	72.2	72.1	0.4	Yes
59	4	B	Residential	69.1	69.1	68.9	-0.2	Yes
59	5	B	Residential	67.2	67.1	66.9	-0.3	Yes
59	6	B	Residential	66.1	66.0	65.9	-0.2	--
59	7	B	Residential	65.3	65.2	65.1	-0.2	--
59	8	B	Residential	64.5	64.4	64.2	-0.3	--
59	9	B	Residential	64.4	64.2	64.2	-0.2	--
59	10	B	Residential	63.9	63.8	63.8	-0.1	--
59	11	B	Residential	63.7	63.6	63.5	-0.2	--
59	12	B	Residential	72.0	72.0	71.7	-0.3	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
59	13	B	Residential	70.7	70.6	70.3	-0.4	Yes
59	14	B	Residential	69.2	69.1	68.7	-0.5	Yes
59	15	B	Residential	68.2	68.1	67.5	-0.7	Yes
59	16	B	Residential	67.4	67.3	66.4	-1.0	Yes
59	17	B	Residential	66.1	65.9	65.2	-0.9	--
59	18	B	Residential	64.3	64.1	63.9	-0.4	--
59	19	B	Residential	73.1	73.2	72.8	-0.3	Yes
59	20	B	Residential	73.6	73.6	73.1	-0.5	Yes
59	21	B	Residential	71.8	71.7	70.6	-1.2	Yes
59	22	B	Residential	68.9	68.8	68.3	-0.6	Yes
59	23	B	Residential	68.1	68.0	66.8	-1.3	Yes
59	24	B	Residential	66.3	66.2	65.2	-1.1	--
59	25	B	Residential	64.9	64.8	63.6	-1.3	--
59	26	B	Residential	66.2	66.1	64.8	-1.4	--
59	27	B	Residential	67.0	66.8	65.5	-1.5	--
59	28	B	Residential	68.3	68.2	66.7	-1.6	Yes
59	29	B	Residential	69.9	69.8	68.3	-1.6	Yes
59	30	B	Residential	72.9	72.8	71.9	-1.0	Yes
59	31	B	Residential	72.6	72.5	71.2	-1.4	Yes
59	32	B	Residential	72.4	72.3	71.0	-1.4	Yes
59	33	B	Residential	71.2	71.1	69.7	-1.5	Yes
59	34	B	Residential	69.2	25.9	67.5	-1.7	Yes
59	35	B	Residential	67.6	69.0	65.9	-1.7	--
59	36	B	Residential	67.0	67.4	65.4	-1.6	--
59	37	B	Residential	65.5	66.8	64.0	-1.5	--
59	38	B	Residential	76.4	65.4	75.3	-1.1	Yes
59	39	B	Residential	75.6	76.4	74.9	-0.7	Yes
59	40	B	Residential	76.0	75.6	75.0	-1.0	Yes
59	41	B	Residential	74.9	75.9	73.9	-1.0	Yes
59	42	B	Residential	73.7	74.9	72.7	-1.0	Yes
59	43	B	Residential	72.7	73.6	71.8	-0.9	Yes
59	44	B	Residential	76.2	72.6	75.3	-0.9	Yes
59	45	B	Residential	70.8	76.0	69.3	-1.5	Yes
59	46	B	Residential	67.5	70.7	65.7	-1.8	--
59	47	B	Residential	65.9	67.3	64.3	-1.6	--
59	48	B	Residential	65.3	65.7	63.9	-1.4	--
59	49	B	Residential	65.1	65.2	63.8	-1.3	--
59	50	B	Residential	70.3	64.9	68.8	-1.5	Yes
59	51	B	Residential	66.9	70.2	65.4	-1.5	--
59	52	B	Residential	68.8	66.7	67.4	-1.4	Yes
59	53	B	Residential	68.6	68.7	67.3	-1.3	Yes
59	54	B	Residential	67.7	68.4	66.6	-1.1	Yes
59	55	B	Residential	65.9	67.6	64.6	-1.3	--
59	56	B	Residential	64.9	65.7	63.8	-1.1	--
59	57	B	Residential	75.4	64.7	74.7	-0.7	Yes
59	58	B	Residential	74.2	75.2	73.5	-0.7	Yes
59	59	B	Residential	70.0	74.1	69.0	-1.0	Yes
59	60	B	Residential	66.5	69.8	65.4	-1.1	--



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
59	61	B	Residential	66.2	66.3	65.2	-1.0	--
59	62	B	Residential	65.9	66.0	64.9	-1.0	--
59	63	B	Residential	65.6	65.7	64.7	-0.9	--
59	64	B	Residential	75.8	65.4	75.1	-0.7	Yes
59	65	B	Residential	74.0	75.6	73.2	-0.8	Yes
59	66	B	Residential	72.5	73.8	71.8	-0.7	Yes
59	67	B	Residential	69.9	72.3	69.1	-0.8	Yes
59	68	B	Residential	69.4	69.7	68.6	-0.8	Yes
59	69	B	Residential	69.2	69.2	68.3	-0.9	Yes
59	70	B	Residential	68.7	69.0	67.8	-0.9	Yes
59	71	B	Residential	71.8	68.4	71.1	-0.7	Yes
59	72	B	Residential	74.1	71.6	73.4	-0.7	Yes
59	73	B	Residential	77.2	73.9	76.6	-0.6	Yes
59	74	B	Residential	74.7	77.0	74.0	-0.7	Yes
59	75	B	Residential	74.2	74.5	73.5	-0.7	Yes
59	76	B	Residential	73.8	74.0	73.1	-0.7	Yes
59	77	B	Residential	73.9	73.6	73.3	-0.6	Yes
59	78	B	Residential	74.0	73.7	73.4	-0.6	Yes
59	79	B	Residential	73.5	73.8	72.8	-0.7	Yes
59	80	B	Residential	72.9	73.3	72.1	-0.8	Yes
59	81	B	Residential	71.0	72.6	70.2	-0.8	Yes
59	82	B	Residential	71.0	70.7	70.3	-0.7	Yes
59	83	B	Residential	70.2	70.7	69.5	-0.7	Yes
59	84	B	Residential	70.2	69.9	69.5	-0.7	Yes
59	85	B	Residential	69.6	69.9	68.9	-0.7	Yes
59	86	B	Residential	69.2	69.4	68.5	-0.7	Yes
59	87	B	Residential	69.1	69.0	68.3	-0.8	Yes
59	88	B	Residential	68.8	68.9	68.0	-0.8	Yes
59	89	B	Residential	68.5	68.6	67.3	-1.2	Yes
59	90	B	Residential	68.4	68.3	66.5	-1.9	Yes
59	91	B	Residential	70.2	70.0	69.4	-0.8	Yes
59	92	B	Residential	70.1	69.9	69.4	-0.7	Yes
59	93	B	Residential	70.0	69.8	69.3	-0.7	Yes
59	94	B	Residential	69.9	69.7	69.2	-0.7	Yes
59	95	B	Residential	69.9	69.7	69.2	-0.7	Yes
59	96	B	Residential	69.7	69.5	69.0	-0.7	Yes
59	97	B	Residential	69.7	69.5	69.0	-0.7	Yes
59	98	B	Residential	69.5	69.3	68.8	-0.7	Yes
59	99	B	Residential	67.9	67.6	67.1	-0.8	Yes
59	100	B	Residential	67.4	67.2	66.6	-0.8	Yes
59	101	B	Residential	67.3	67.1	66.5	-0.8	Yes
59	102	B	Residential	67.2	66.9	66.3	-0.9	Yes
59	103	B	Residential	67.0	66.8	66.0	-1.0	Yes
59	104	B	Residential	66.9	66.6	65.8	-1.1	--
59	105	B	Residential	66.7	66.5	65.6	-1.1	--
59	106	B	Residential	66.7	66.5	65.3	-1.4	--
59	107	B	Residential	67.4	67.2	65.8	-1.6	--
59	108	B	Residential	67.0	66.7	65.2	-1.8	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
59	109	B	Residential	66.2	66.0	64.6	-1.6	--
59	110	B	Residential	67.9	67.8	66.1	-1.8	Yes
59	111	B	Residential	67.3	67.1	65.9	-1.4	--
59	112	B	Residential	67.1	67.0	65.0	-2.1	--
59	113	B	Residential	66.9	66.8	65.6	-1.3	--
59	114	B	Residential	66.5	66.4	64.1	-2.4	--
59	115	B	Residential	66.0	65.8	64.3	-1.7	--
59	116	B	Residential	65.9	65.7	63.6	-2.3	--
59	117	B	Residential	65.5	65.3	63.4	-2.1	--
59	118	B	Residential	63.3	63.2	62.1	-1.2	--
59	119	B	Residential	67.1	66.9	66.3	-0.8	Yes
59	120	B	Residential	67.2	67.0	66.5	-0.7	Yes
59	121	B	Residential	67.4	67.2	66.7	-0.7	Yes
59	122	B	Residential	67.8	67.6	67.2	-0.6	Yes
59	123	B	Residential	67.4	67.3	66.9	-0.5	Yes
59	124	B	Residential	68.5	68.5	68.1	-0.4	Yes
59	125	B	Residential	68.5	68.5	68.1	-0.4	Yes
59	126	B	Residential	68.8	68.7	68.4	-0.4	Yes
59	127	B	Residential	65.8	65.7	64.6	-1.2	--
59	128	B	Residential	65.9	65.7	64.9	-1.0	--
59	129	B	Residential	65.6	65.4	64.7	-0.9	--
59	130	B	Residential	65.6	65.5	64.8	-0.8	--
59	131	B	Residential	65.4	65.2	64.7	-0.7	--
59	132	B	Residential	65.3	65.2	64.7	-0.6	--
59	133	B	Residential	65.4	65.2	64.8	-0.6	--
59	134	B	Residential	65.6	65.4	65.0	-0.6	--
59	135	B	Residential	61.2	61.1	64.6	3.4	--
59	136	B	Residential	66.8	66.7	66.2	-0.6	Yes
59	137	B	Residential	66.3	66.2	65.8	-0.5	--
59	138	B	Residential	65.6	65.5	65.1	-0.5	--
59	139	B	Residential	62.8	62.7	62.2	-0.6	--
59	140	B	Residential	63.9	63.9	63.0	-0.9	--
59	141	B	Residential	63.6	63.5	62.4	-1.2	--
59	142	B	Residential	63.4	63.4	62.3	-1.1	--
59	143	B	Residential	63.1	63.2	62.0	-1.1	--
59	144	B	Residential	63.1	63.5	62.6	-0.5	--
60	1	E	Hotel/Motel	70.4	70.3	70.9	0.5	--
61	1	B	Residential	67.9	68.2	67.4	-0.5	Yes
61	2	B	Residential	66.8	67.0	66.0	-0.8	Yes
61	3	B	Residential	66.0	66.1	64.9	-1.1	--
61	4	B	Residential	65.4	65.4	64.3	-1.1	--
61	5	B	Residential	69.7	70.2	69.8	0.1	Yes
61	6	B	Residential	68.1	68.3	67.7	-0.4	Yes
61	7	B	Residential	67.5	67.6	66.7	-0.8	Yes
61	8	B	Residential	70.7	71.0	70.2	-0.5	Yes
61	9	B	Residential	68.5	68.6	67.5	-1.0	Yes
61	10	B	Residential	66.8	66.9	65.8	-1.0	--
61	11	B	Residential	65.7	65.8	64.6	-1.1	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
61	12	B	Residential	69.1	69.4	68.6	-0.5	Yes
61	13	B	Residential	68.1	68.4	67.6	-0.5	Yes
61	14	B	Residential	67.4	67.6	66.6	-0.8	Yes
61	15	B	Residential	66.5	66.7	65.7	-0.8	--
61	16	B	Residential	65.9	66.1	64.9	-1.0	--
61	17	B	Residential	64.9	65.1	64.1	-0.8	--
61	18	B	Residential	69.0	69.5	68.7	-0.3	Yes
61	19	B	Residential	67.9	68.3	67.5	-0.4	Yes
61	20	B	Residential	67.2	67.6	66.7	-0.5	Yes
61	21	B	Residential	66.4	66.8	65.9	-0.5	--
61	22	B	Residential	65.6	66.1	65.1	-0.5	--
61	23	B	Residential	65.1	65.6	64.5	-0.6	--
61	24	B	Residential	69.9	70.7	69.9	0.0	Yes
61	25	B	Residential	68.9	69.6	68.7	-0.2	Yes
61	26	B	Residential	68.1	68.8	67.8	-0.3	Yes
61	27	B	Residential	67.7	68.5	67.4	-0.3	Yes
61	28	B	Residential	67.0	67.9	66.8	-0.2	Yes
61	29	B	Residential	66.7	67.6	66.4	-0.3	Yes
61	30	B	Residential	70.5	71.4	70.6	0.1	Yes
61	31	B	Residential	70.9	72.0	70.8	-0.1	Yes
61	32	B	Residential	70.1	71.3	70.0	-0.1	Yes
61	33	B	Residential	69.9	71.1	69.8	-0.1	Yes
61	34	B	Residential	69.6	70.9	69.6	0.0	Yes
62	1	C	Recreational Area (Residential)	69.9	70.1	72.1	2.2	Yes
63	1	B	Residential	64.9	65.0	64.6	-0.3	--
63	2	B	Residential	66.0	66.0	65.8	-0.2	--
63	3	B	Residential	62.6	62.5	62.3	-0.3	--
63	4	B	Residential	66.7	66.6	66.6	-0.1	Yes
63	5	B	Residential	65.5	65.4	65.4	-0.1	--
63	6	B	Residential	63.6	63.5	63.6	0.0	--
63	7	B	Residential	62.6	62.4	62.5	-0.1	--
63	8	B	Residential	69.4	69.3	69.3	-0.1	Yes
63	9	B	Residential	66.1	66.0	66.2	0.1	Yes
63	10	B	Residential	64.6	64.4	64.7	0.1	--
63	11	B	Residential	63.4	63.2	64.2	0.8	--
63	12	B	Residential	64.0	63.8	64.8	0.8	--
63	13	B	Residential	64.3	64.1	65.2	0.9	--
63	14	B	Residential	64.8	64.6	65.8	1.0	--
63	15	B	Residential	65.1	64.9	66.3	1.2	Yes
63	16	B	Residential	65.3	65.0	66.4	1.1	Yes
63	17	B	Residential	65.6	65.4	66.9	1.3	Yes
63	18	B	Residential	65.4	65.1	66.2	0.8	Yes
63	19	B	Residential	65.1	64.8	65.7	0.6	Yes
63	20	B	Residential	65.3	65.0	66.1	0.8	Yes
63	21	B	Residential	65.7	65.4	66.4	0.7	Yes
63	22	B	Residential	65.7	65.5	66.5	0.8	Yes



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
63	23	B	Residential	66.1	65.8	66.7	0.6	Yes
63	24	B	Residential	66.2	65.9	66.8	0.6	Yes
63	25	B	Residential	66.6	66.3	67.1	0.5	Yes
63	26	B	Residential	66.5	66.3	67.1	0.6	Yes
63	27	B	Residential	66.9	66.6	67.4	0.5	Yes
63	28	B	Residential	66.8	66.6	67.4	0.6	Yes
63	29	B	Residential	67.0	66.7	67.5	0.5	Yes
63	30	B	Residential	67.0	66.8	67.7	0.7	Yes
63	31	B	Residential	67.0	66.7	67.6	0.6	Yes
63	32	B	Residential	66.8	66.6	67.5	0.7	Yes
63	33	B	Residential	59.7	59.4	60.5	0.8	--
63	34	B	Residential	59.9	59.6	60.6	0.7	--
63	35	B	Residential	61.4	61.1	61.9	0.5	--
63	36	B	Residential	61.0	60.7	61.7	0.7	--
63	37	B	Residential	60.9	60.5	61.1	0.2	--
63	38	B	Residential	61.4	61.1	62.1	0.7	--
63	39	B	Residential	61.4	61.1	62.0	0.6	--
63	40	B	Residential	62.9	62.5	63.6	0.7	--
63	41	B	Residential	63.8	63.5	64.4	0.6	--
63	42	B	Residential	64.0	63.7	64.6	0.6	--
63	43	B	Residential	64.7	64.4	65.3	0.6	--
63	44	B	Residential	65.0	64.8	65.5	0.5	--
63	45	B	Residential	65.4	65.1	65.9	0.5	--
63	46	B	Residential	65.8	65.6	66.3	0.5	Yes
63	47	B	Residential	65.8	65.5	66.3	0.5	Yes
63	48	B	Residential	65.7	65.4	66.3	0.6	Yes
63	49	B	Residential	65.8	65.6	66.4	0.6	Yes
63	50	B	Residential	65.8	65.5	66.4	0.6	Yes
63	51	B	Residential	60.5	60.2	61.1	0.6	--
63	52	B	Residential	60.7	60.4	61.3	0.6	--
63	53	B	Residential	61.6	61.3	62.1	0.5	--
63	54	B	Residential	62.2	61.9	62.7	0.5	--
63	55	B	Residential	62.3	62.0	62.8	0.5	--
63	56	B	Residential	62.8	62.5	63.4	0.6	--
63	57	B	Residential	63.4	63.1	63.9	0.5	--
63	58	B	Residential	63.9	63.6	64.6	0.7	--
63	59	B	Residential	64.1	63.9	64.8	0.7	--
63	60	B	Residential	64.3	64.0	65.1	0.8	--
63	61	B	Residential	64.5	64.2	65.4	0.9	--
63	62	B	Residential	64.5	64.3	65.4	0.9	--
63	63	B	Residential	62.9	62.6	63.5	0.6	--
63	64	B	Residential	62.9	62.7	63.7	0.8	--
63	65	B	Residential	63.1	62.9	63.8	0.7	--
63	66	B	Residential	63.3	63.1	63.9	0.6	--
63	67	B	Residential	63.4	63.2	64.3	0.9	--
63	68	B	Residential	63.6	63.3	64.5	0.9	--
64	1	B	Residential	69.7	69.4	71.2	1.5	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
65	1	C	School	68.7	68.4	69.7	1.0	Yes
66	1a	B	Residential	67.2	66.9	67.0	-0.2	Yes
66	1b	B	Residential	69.9	69.6	69.8	-0.1	Yes
66	2a	B	Residential	67.5	67.2	67.4	-0.1	Yes
66	2b	B	Residential	70.6	70.3	70.5	-0.1	Yes
66	3a	B	Residential	65.1	64.8	65.1	0.0	--
66	3b	B	Residential	67.6	67.4	67.8	0.2	Yes
66	4a	B	Residential	65.4	65.2	65.4	0.0	--
66	4b	B	Residential	68.0	67.8	68.2	0.2	Yes
66	5	B	Residential	63.8	63.5	63.9	0.1	--
66	6	B	Residential	64.4	64.1	64.4	0.0	--
66	7	B	Residential	64.3	64.0	64.3	0.0	--
66	8	B	Residential	64.2	63.9	64.3	0.1	--
66	9	B	Residential	64.3	64.0	64.5	0.2	--
66	10	B	Residential	65.7	65.4	65.7	0.0	--
66	11	B	Residential	67.2	66.9	67.1	-0.1	Yes
66	12	B	Residential	68.4	68.1	68.3	-0.1	Yes
66	13	B	Residential	69.1	68.8	69.1	0.0	Yes
66	14	B	Residential	69.7	69.4	69.8	0.1	Yes
66	15	B	Residential	66.2	65.9	66.3	0.1	Yes
66	16	B	Residential	64.3	64.0	64.5	0.2	--
66	17	B	Residential	65.2	64.9	65.3	0.1	--
66	18	B	Residential	70.4	70.1	70.3	-0.1	Yes
66	19	B	Residential	68.4	68.2	68.5	0.1	Yes
66	20	B	Residential	66.0	65.7	66.2	0.2	Yes
66	21	B	Residential	64.1	63.8	64.4	0.3	--
66	22	B	Residential	62.1	61.8	62.5	0.4	--
66	23	B	Residential	63.9	63.6	64.3	0.4	--
66	24	B	Residential	66.8	66.6	67.0	0.2	Yes
66	25	B	Residential	70.7	70.5	70.7	0.0	Yes
66	26	B	Residential	70.4	70.1	70.4	0.0	Yes
66	27	B	Residential	72.3	72.1	72.3	0.0	Yes
66	28	B	Residential	72.4	72.2	72.4	0.0	Yes
66	29	B	Residential	71.9	71.7	71.9	0.0	Yes
66	30	B	Residential	72.5	72.3	72.5	0.0	Yes
66	31	B	Residential	72.9	72.7	73.0	0.1	Yes
66	32	B	Residential	72.8	72.6	72.8	0.0	Yes
66	33	B	Residential	72.8	72.6	72.9	0.1	Yes
66	34	B	Residential	72.4	72.2	72.5	0.1	Yes
66	35	B	Residential	72.4	72.2	72.5	0.1	Yes
66	36	B	Residential	72.4	72.2	72.6	0.2	Yes
66	37	B	Residential	72.2	72.0	72.4	0.2	Yes
66	38	B	Residential	72.4	72.2	72.6	0.2	Yes
66	39	B	Residential	71.2	71.0	71.6	0.4	Yes
66	40	B	Residential	62.5	62.2	63.0	0.5	--
66	41	B	Residential	65.9	65.7	66.1	0.2	Yes
66	42	B	Residential	65.9	65.7	66.1	0.2	Yes
66	43	B	Residential	63.7	63.5	63.9	0.2	--



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
66	44	B	Residential	63.3	63.0	63.6	0.3	--
66	45	B	Residential	65.6	65.4	65.8	0.2	--
66	46	B	Residential	66.2	65.9	66.4	0.2	Yes
66	47	B	Residential	66.1	65.9	66.3	0.2	Yes
66	48	B	Residential	66.5	66.3	66.9	0.4	Yes
66	49	B	Residential	66.4	66.1	66.6	0.2	Yes
66	50	B	Residential	66.5	66.2	66.7	0.2	Yes
66	51	B	Residential	66.0	65.8	66.3	0.3	Yes
66	52	B	Residential	68.3	68.1	68.7	0.4	Yes
66	53	B	Residential	65.4	65.2	65.8	0.4	--
66	54	B	Residential	63.5	63.3	64.0	0.5	--
66	55	B	Residential	64.1	63.8	64.5	0.4	--
66	56	B	Residential	63.5	63.2	63.8	0.3	--
66	57	B	Residential	65.8	65.5	66.2	0.4	Yes
66	58	B	Residential	70.8	70.6	71.1	0.3	Yes
66	59	B	Residential	71.4	71.2	71.8	0.4	Yes
66	60	B	Residential	72.6	72.4	73.0	0.4	Yes
66	61	B	Residential	71.6	71.4	72.0	0.4	Yes
66	62	B	Residential	71.0	70.8	71.4	0.4	Yes
66	63	B	Residential	71.2	71.0	71.6	0.4	Yes
66	64	B	Residential	71.9	71.7	72.3	0.4	Yes
66	65	B	Residential	72.8	72.6	73.1	0.3	Yes
66	66	B	Residential	72.3	72.1	72.7	0.4	Yes
66	67	B	Residential	62.6	62.3	63.2	0.6	--
66	68	B	Residential	63.3	63.0	63.9	0.6	--
66	69	B	Residential	63.8	63.6	64.5	0.7	--
66	70	B	Residential	64.2	63.9	64.8	0.6	--
66	71	B	Residential	64.9	64.7	65.5	0.6	--
66	72	B	Residential	65.3	65.0	65.9	0.6	--
66	73	B	Residential	65.9	65.7	66.5	0.6	Yes
66	74	B	Residential	66.4	66.1	66.9	0.5	Yes
66	75	B	Residential	66.8	66.6	67.4	0.6	Yes
66	76	B	Residential	62.5	62.2	63.2	0.7	--
66	77	B	Residential	63.1	62.8	63.8	0.7	--
66	78	B	Residential	63.7	63.5	64.5	0.8	--
66	79	B	Residential	64.3	64.1	64.9	0.6	--
66	80	B	Residential	63.9	63.6	64.4	0.5	--
66	81	B	Residential	67.5	67.2	68.0	0.5	Yes
66	82	B	Residential	72.7	72.5	73.1	0.4	Yes
66	83	B	Residential	69.3	69.1	69.6	0.3	Yes
66	84	B	Residential	69.3	69.0	69.6	0.3	Yes
66	85	B	Residential	68.9	68.7	69.1	0.2	Yes
66	86	B	Residential	68.6	68.4	68.7	0.1	Yes
66	87	B	Residential	69.2	68.9	69.3	0.1	Yes
66	88	B	Residential	69.8	69.6	70.1	0.3	Yes
66	89	B	Residential	72.6	72.4	72.7	0.1	Yes
66	90	B	Residential	71.4	71.2	71.5	0.1	Yes
66	91	B	Residential	72.9	72.7	72.9	0.0	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
66	92	B	Residential	73.1	72.9	73.1	0.0	Yes
66	93	B	Residential	72.9	72.7	73.0	0.1	Yes
66	94	B	Residential	72.4	72.2	72.4	0.0	Yes
66	95	B	Residential	72.5	72.3	72.6	0.1	Yes
66	96	B	Residential	72.4	72.2	72.4	0.0	Yes
66	97	B	Residential	72.0	71.8	72.1	0.1	Yes
66	98	B	Residential	72.0	71.8	72.1	0.1	Yes
66	99	B	Residential	72.1	71.9	72.2	0.1	Yes
66	100	B	Residential	66.0	65.7	66.4	0.4	Yes
66	101	B	Residential	66.2	65.9	66.6	0.4	Yes
66	102	B	Residential	65.8	65.6	66.1	0.3	Yes
66	103	B	Residential	66.3	66.1	66.6	0.3	Yes
66	104	B	Residential	66.8	66.6	67.1	0.3	Yes
66	105	B	Residential	67.5	67.3	67.8	0.3	Yes
66	106	B	Residential	66.7	66.5	66.9	0.2	Yes
66	107	B	Residential	67.3	67.1	67.5	0.2	Yes
66	108	B	Residential	67.8	67.5	68.0	0.2	Yes
66	109	B	Residential	65.6	65.4	65.8	0.2	--
66	110	B	Residential	66.0	65.7	66.1	0.1	Yes
66	111	B	Residential	66.1	65.8	66.3	0.2	Yes
66	112	B	Residential	66.0	65.8	66.3	0.3	Yes
66	113	B	Residential	66.2	66.0	66.4	0.2	Yes
66	114	B	Residential	66.2	65.9	66.3	0.1	Yes
66	115	B	Residential	66.2	65.9	66.3	0.1	Yes
66	116	B	Residential	68.7	68.5	68.8	0.1	Yes
66	117	B	Residential	65.9	65.7	66.0	0.1	Yes
66	118	B	Residential	62.5	62.2	62.7	0.2	--
66	119	B	Residential	62.8	62.6	63.1	0.3	--
66	120	B	Residential	63.0	62.7	63.3	0.3	--
66	121	B	Residential	63.0	62.7	63.2	0.2	--
66	122	B	Residential	62.8	62.5	63.0	0.2	--
66	123	B	Residential	62.7	62.5	63.1	0.4	--
66	124	B	Residential	63.0	62.8	63.3	0.3	--
66	125	B	Residential	63.0	62.8	63.3	0.3	--
66	126	B	Residential	62.8	62.5	62.9	0.1	--
66	127	B	Residential	62.7	62.4	62.8	0.1	--
66	128	B	Residential	63.7	63.4	63.8	0.1	--
66	129	B	Residential	65.9	65.7	66.0	0.1	Yes
67	1	B	Residential	67.0	66.7	67.4	0.4	Yes
67	2	B	Residential	67.2	66.9	67.7	0.5	Yes
67	3	B	Residential	67.3	67.0	67.8	0.5	Yes
67	4	B	Residential	67.2	67.0	67.8	0.6	Yes
67	5	B	Residential	67.2	66.9	67.8	0.6	Yes
67	6	B	Residential	67.1	66.9	67.7	0.6	Yes
67	7	B	Residential	66.9	66.6	67.4	0.5	Yes
67	8	B	Residential	66.6	66.3	67.3	0.7	Yes
67	9	B	Residential	66.3	66.0	67.1	0.8	Yes
67	10	B	Residential	65.8	65.6	66.6	0.8	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
67	11	B	Residential	65.3	65.0	66.1	0.8	Yes
67	12	B	Residential	64.7	64.4	65.4	0.7	--
67	13	B	Residential	64.0	63.7	64.8	0.8	--
67	14	B	Residential	63.8	63.5	64.5	0.7	--
67	15	B	Residential	63.4	63.1	64.6	1.2	--
67	16	B	Residential	63.3	63.0	64.6	1.3	--
67	17	B	Residential	65.0	64.7	65.5	0.5	--
67	18	B	Residential	65.2	64.9	65.6	0.4	--
67	19	B	Residential	65.0	64.7	65.5	0.5	--
67	20	B	Residential	64.6	64.4	65.2	0.6	--
67	21	B	Residential	63.9	63.7	64.5	0.6	--
67	22	B	Residential	63.5	63.2	64.1	0.6	--
67	23	B	Residential	63.5	63.2	64.2	0.7	--
67	24	B	Residential	63.9	63.7	64.5	0.6	--
67	25	B	Residential	63.9	63.6	64.4	0.5	--
67	26	B	Residential	63.5	63.3	64.1	0.6	--
68	1	C	Park	69.5	69.3	71.6	2.1	Yes
69	1	B	Residential	62.6	62.3	65.1	2.5	--
69	2	B	Residential	63.5	63.2	66.0	2.5	Yes
69	3	B	Residential	64.4	64.2	66.8	2.4	Yes
69	4	B	Residential	67.1	66.9	69.6	2.5	Yes
69	5	B	Residential	68.8	68.6	71.0	2.2	Yes
69	6	B	Residential	72.5	72.4	73.6	1.1	Yes
69	7	B	Residential	72.4	72.2	74.5	2.1	Yes
69	8	B	Residential	71.7	71.6	73.2	1.5	Yes
69	9	B	Residential	71.7	71.6	73.5	1.8	Yes
69	10	B	Residential	71.6	71.5	74.3	2.7	Yes
69	11	B	Residential	69.4	69.2	72.4	3.0	Yes
69	12	B	Residential	67.0	66.9	70.2	3.2	Yes
69	13	B	Residential	64.9	64.7	68.0	3.1	Yes
69	14	B	Residential	64.8	64.7	67.9	3.1	Yes
69	15	B	Residential	67.8	67.6	70.9	3.1	Yes
69	16	B	Residential	69.2	69.1	72.3	3.1	Yes
69	17	B	Residential	72.6	72.5	75.2	2.6	Yes
69	18	B	Residential	72.4	72.4	75.3	2.9	Yes
69	19	B	Residential	72.5	72.5	75.2	2.7	Yes
69	20	B	Residential	68.9	68.8	71.9	3.0	Yes
69	21	B	Residential	68.0	67.9	71.0	3.0	Yes
69	22	B	Residential	65.9	65.8	68.8	2.9	Yes
69	23	B	Residential	63.1	62.8	65.5	2.4	--
69	24	B	Residential	63.3	63.1	65.9	2.6	--
69	25	B	Residential	67.1	66.9	69.7	2.6	Yes
69	26	B	Residential	67.2	67.0	69.9	2.7	Yes
69	27	B	Residential	67.5	67.3	70.5	3.0	Yes
69	28	B	Residential	64.1	63.9	66.9	2.8	Yes
69	29	B	Residential	63.2	63.0	66.0	2.8	Yes
69	30	B	Residential	62.6	62.4	65.3	2.7	--
69	31	B	Residential	63.0	62.8	65.8	2.8	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
69	32	B	Residential	63.4	63.2	66.3	2.9	Yes
69	33	B	Residential	64.2	64.0	67.1	2.9	Yes
69	34	B	Residential	64.1	64.0	66.9	2.8	Yes
69	35	B	Residential	64.9	64.8	67.7	2.8	Yes
70	1a	B	Residential	61.4	61.8	62.5	1.1	--
70	1b	B	Residential	64.4	64.9	64.6	0.2	--
70	1c	B	Residential	66.1	66.6	65.6	-0.5	--
70	2a	B	Residential	58.2	58.9	57.5	-0.7	--
70	2b	B	Residential	61.0	61.8	58.7	-2.3	--
70	2c	B	Residential	62.4	63.1	59.4	-3.0	--
70	3a	B	Residential	58.5	59.1	58.6	0.1	--
70	3b	B	Residential	61.4	62.1	60.4	-1.0	--
70	3c	B	Residential	62.9	63.6	61.2	-1.7	--
70	4a	B	Residential	58.1	58.8	58.8	0.7	--
70	4b	B	Residential	61.2	61.9	60.8	-0.4	--
70	4c	B	Residential	62.8	63.4	61.4	-1.4	--
70	5a	B	Residential	49.2	49.3	49.1	-0.1	--
70	5b	B	Residential	52.1	52.2	52.5	0.4	--
70	5c	B	Residential	54.3	54.5	55.2	0.9	--
70	6a	B	Residential	48.6	48.7	49.2	0.6	--
70	6b	B	Residential	51.5	51.5	52.2	0.7	--
70	6c	B	Residential	53.7	53.9	54.8	1.1	--
70	7a	B	Residential	48.1	48.1	48.5	0.4	--
70	7b	B	Residential	51.7	51.7	52.3	0.6	--
70	7c	B	Residential	53.8	53.9	54.8	1.0	--
70	8a	B	Residential	59.0	59.6	59.0		--
70	8b	B	Residential	62.0	62.6	60.9	-1.1	--
70	8c	B	Residential	63.4	64.0	61.8	-1.6	--
70	9a	B	Residential	62.1	62.5	63.3	1.2	--
70	9b	B	Residential	65.2	65.7	65.4	0.2	--
70	10a	B	Residential	62.2	62.5	63.5	1.3	--
70	10b	B	Residential	65.3	65.7	65.6	0.3	--
70	10c	B	Residential	66.9	67.4	66.7	-0.2	Yes
70	11a	B	Residential	62.3	62.6	63.8	1.5	--
70	11b	B	Residential	65.4	65.8	65.8	0.4	--
70	11c	B	Residential	66.9	67.4	66.8	-0.1	Yes
70	12a	B	Residential	63.6	63.8	65.1	1.5	--
70	12b	B	Residential	66.7	67.1	67.2	0.5	Yes
70	13	B	Residential	59.4	59.6	62.3	2.9	--
70	13b	B	Residential	63.0	63.3	64.7	1.7	--
70	14a	B	Residential	40.0	40.4	42.4	2.4	--
70	14b	B	Residential	43.3	43.7	44.9	1.6	--
70	14c	B	Residential	46.4	46.7	48.4	2.0	--
70	15a	B	Residential	47.4	47.4	48.7	1.3	--
70	15b	B	Residential	50.9	51.0	52.2	1.3	--
70	15c	B	Residential	53.2	53.2	54.4	1.2	--
70	16a	B	Residential	57.3	58.0	56.2	-1.1	--
70	16b	B	Residential	59.9	60.7	57.6	-2.3	--



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
70	17a	B	Residential	65.4	65.6	67.2	1.8	Yes
70	17b	B	Residential	68.6	69.0	69.2	0.6	Yes
70	17c	B	Residential	69.8	70.2	70.0	0.2	Yes
70	18a	B	Residential	49.6	51.6	52.0	2.4	--
70	18b	B	Residential	52.3	54.2	54.1	1.8	--
70	18c	B	Residential	54.4	56.3	55.2	0.8	--
70	19a	B	Residential	57.6	58.1	57.2	-0.4	--
70	19b	B	Residential	60.7	61.2	59.2	-1.5	--
70	19c	B	Residential	62.0	62.7	60.0	-2.0	--
70	20a	B	Residential	59.7	60.0	59.9	0.2	--
70	20b	B	Residential	63.0	63.4	62.7	-0.3	--
70	20c	B	Residential	64.4	64.9	63.8	-0.6	--
70	21a	B	Residential	62.8	62.8	63.2	0.4	--
70	21b	B	Residential	65.7	65.9	66.1	0.4	Yes
70	21c	B	Residential	67.0	67.2	67.3	0.3	Yes
70	22a	B	Residential	64.3	64.3	65.6	1.3	--
70	22b	B	Residential	67.3	67.5	68.1	0.8	Yes
70	22c	B	Residential	68.5	68.8	69.1	0.6	Yes
70	23a	B	Residential	62.3	62.3	62.9	0.6	--
70	23b	B	Residential	65.2	65.4	65.4	0.2	--
70	23c	B	Residential	66.2	66.4	66.3	0.1	Yes
70	24a	B	Residential	67.5	67.6	68.9	1.4	Yes
70	24b	B	Residential	70.5	70.8	71.0	0.5	Yes
70	24c	B	Residential	71.5	71.9	71.8	0.3	Yes
70	25a	B	Residential	63.3	63.3	64.6	1.3	--
70	25b	B	Residential	66.4	66.6	67.5	1.1	Yes
70	25c	B	Residential	67.9	68.2	68.8	0.9	Yes
70	26a	B	Residential	59.3	59.3	60.0	0.7	--
70	26b	B	Residential	62.7	62.8	63.5	0.8	--
70	26c	B	Residential	64.2	64.4	65.2	1.0	--
70	27a	B	Residential	61.3	61.3	62.0	0.7	--
70	27b	B	Residential	64.5	64.6	65.4	0.9	--
70	27c	B	Residential	66.1	66.3	67.0	0.9	Yes
70	28a	B	Residential	58.3	58.2	58.7	0.4	--
70	28b	B	Residential	61.9	61.9	62.6	0.7	--
70	28c	B	Residential	63.4	63.6	64.4	1.0	--
70	29a	B	Residential	55.8	55.9	55.9	0.1	--
70	29b	B	Residential	59.3	59.5	58.9	-0.4	--
70	29c	B	Residential	61.0	61.3	60.6	-0.4	--
70	30a	B	Residential	53.8	54.1	51.9	-1.9	--
70	30b	B	Residential	56.8	57.1	53.8	-3.0	--
70	30c	B	Residential	58.1	58.5	54.8	-3.3	--
70	31a	B	Residential	40.6	40.9	42.6	2.0	--
70	31b	B	Residential	44.1	44.4	45.3	1.2	--
70	31c	B	Residential	46.0	46.4	47.8	1.8	--
70	32a	B	Residential	60.4	60.6	60.6	0.2	--
70	32b	B	Residential	63.6	63.9	63.5	-0.1	--
70	32c	B	Residential	65.1	65.4	64.8	-0.3	--



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
70	33a	B	Residential	60.3	60.2	61.2	0.9	--
70	33b	B	Residential	63.6	63.7	64.7	1.1	--
70	33c	B	Residential	65.4	65.5	66.4	1.0	Yes
70	34a	B	Residential	58.9	58.8	59.4	0.5	--
70	34b	B	Residential	62.4	62.5	63.2	0.8	--
70	34c	B	Residential	64.1	64.2	65.0	0.9	--
70	35a	B	Residential	53.9	54.1	53.5	-0.4	--
70	35b	B	Residential	51.4	52.0	50.3	-1.1	--
70	35c	B	Residential	58.7	58.8	58.4	-0.3	--
70	36a	B	Residential	59.4	59.3	60.2	0.8	--
70	36b	B	Residential	62.7	62.8	63.8	1.1	--
70	36c	B	Residential	64.4	64.6	65.3	0.9	--
70	37a	B	Residential	53.4	53.4	53.6	0.2	--
70	37b	B	Residential	56.9	56.9	57.6	0.7	--
70	37c	B	Residential	58.5	58.6	59.6	1.1	--
70	38a	B	Residential	40.7	41.0	41.7	1.0	--
70	38b	B	Residential	42.7	42.9	43.7	1.0	--
70	38c	B	Residential	46.1	46.5	48.4	2.3	--
70	39a	B	Residential	43.3	43.6	44.4	1.1	--
70	39b	B	Residential	42.3	42.7	43.4	1.1	--
70	39c	B	Residential	44.2	44.5	45.8	1.6	--
70	40a	B	Residential	55.7	55.7	55.4	-0.3	--
70	40b	B	Residential	58.9	59.0	58.5	-0.4	--
70	40c	B	Residential	60.5	60.7	60.2	-0.3	--
70	41a	B	Residential	58.3	58.3	59.9	1.6	--
70	41b	B	Residential	61.5	61.7	62.8	1.3	--
70	42a	B	Residential	59.2	59.2	60.6	1.4	--
70	42b	B	Residential	62.4	62.5	63.6	1.2	--
70	42c	B	Residential	64.2	64.4	64.9	0.7	--
70	43a	B	Residential	59.3	59.4	60.7	1.4	--
70	43b	B	Residential	62.5	62.6	63.4	0.9	--
70	43c	B	Residential	64.2	64.4	64.7	0.5	--
70	44a	B	Residential	62.6	62.6	63.3	0.7	--
70	44b	B	Residential	65.6	65.7	66.4	0.8	Yes
70	45a	B	Residential	61.0	61.0	61.5	0.5	--
70	45b	B	Residential	63.9	64.0	64.3	0.4	--
70	46a	B	Residential	51.9	51.9	47.0	-4.9	--
70	46b	B	Residential	54.5	54.5	51.3	-3.2	--
70	46c	B	Residential	56.6	56.6	53.7	-2.9	--
70	47a	B	Residential	52.5	52.5	52.6	0.1	--
70	47b	B	Residential	56.4	56.4	57.3	0.9	--
70	47c	B	Residential	58.5	58.5	59.2	0.7	--
70	48a	B	Residential	50.5	50.5	51.1	0.6	--
70	48b	B	Residential	54.5	54.5	55.9	1.4	--
70	49a	B	Residential	59.6	59.6	60.1	0.5	--
70	49b	B	Residential	62.6	62.7	63.0	0.4	--
70	50a	B	Residential	57.5	57.6	59.2	1.7	--
70	50b	B	Residential	60.5	60.7	61.5	1.0	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
70	50c	B	Residential	62.2	62.4	62.6	0.4	--
70	51a	B	Residential	54.5	54.6	56.0	1.5	--
70	51b	B	Residential	57.9	58.1	58.2	0.3	--
70	51c	B	Residential	59.4	59.7	59.4		--
70	52a	B	Residential	66.4	66.5	67.4	1.0	Yes
70	52b	B	Residential	69.5	69.7	70.3	0.8	Yes
70	53a	B	Residential	68.0	68.1	68.9	0.9	Yes
70	53b	B	Residential	70.8	71.0	71.5	0.7	Yes
70	54a	B	Residential	63.7	63.7	64.6	0.9	--
70	54b	B	Residential	67.0	67.1	68.1	1.1	Yes
70	54c	B	Residential	68.0	68.1	68.9	0.9	Yes
70	55a	B	Residential	64.4	64.4	65.4	1.0	--
70	55b	B	Residential	67.8	67.9	68.9	1.1	Yes
70	55c	B	Residential	68.8	69.0	69.6	0.8	Yes
70	56a	B	Residential	62.5	62.4	63.4	0.9	--
70	56b	B	Residential	66.1	66.2	67.4	1.3	Yes
70	57a	B	Residential	62.7	62.6	63.3	0.6	--
70	57b	B	Residential	66.2	66.3	67.3	1.1	Yes
70	58a	B	Residential	58.7	58.6	59.2	0.5	--
70	58b	B	Residential	62.8	62.8	63.7	0.9	--
70	58	B	Residential	64.5	64.5	65.0	0.5	--
70	59a	B	Residential	60.7	60.6	60.9	0.2	--
70	59b	B	Residential	64.5	64.5	65.4	0.9	--
70	59c	B	Residential	66.1	66.2	66.8	0.7	Yes
70	60a	B	Residential	57.4	57.3	56.6	-0.8	--
70	60b	B	Residential	61.1	61.1	61.4	0.3	--
70	61a	B	Residential	55.0	55.1	54.4	-0.6	--
70	61b	B	Residential	57.7	57.8	57.4	-0.3	--
70	62a	B	Residential	52.9	53.0	55.0	2.1	--
70	62b	B	Residential	55.7	55.9	57.8	2.1	--
70	62c	B	Residential	57.9	58.1	59.2	1.3	--
70	63a	B	Residential	49.2	49.2	50.3	1.1	--
70	63b	B	Residential	53.0	53.0	53.4	0.4	--
70	63c	B	Residential	54.9	55.0	55.3	0.4	--
70	64a	B	Residential	60.1	60.0	61.4	1.3	--
70	64b	B	Residential	63.8	63.9	65.5	1.7	--
70	65a	B	Residential	52.7	52.6	53.7	1.0	--
70	65b	B	Residential	56.0	56.0	58.1	2.1	--
70	65c	B	Residential	58.2	58.3	60.0	1.8	--
70	66a	B	Residential	51.4	51.3	52.3	0.9	--
70	66b	B	Residential	54.7	54.7	56.9	2.2	--
70	66c	B	Residential	56.6	56.7	58.4	1.8	--
70	67a	B	Residential	53.4	53.4	52.6	-0.8	--
70	67b	B	Residential	55.7	55.7	55.5	-0.2	--
70	67c	B	Residential	57.8	57.9	57.7	-0.1	--
70	68a	B	Residential	54.7	54.6	53.2	-1.5	--
70	68b	B	Residential	57.0	57.0	55.8	-1.2	--
70	68c	B	Residential	59.1	59.2	57.9	-1.2	--



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
70	69a	B	Residential	52.2	52.1	49.6	-2.6	--
70	69b	B	Residential	55.3	55.2	53.8	-1.5	--
70	69c	B	Residential	57.7	57.7	56.1	-1.6	--
70	70a	B	Residential	39.9	40.2	40.6	0.7	--
70	70b	B	Residential	42.7	42.9	43.5	0.8	--
70	70c	B	Residential	46.3	46.6	48.3	2.0	--
70	71a	B	Residential	39.0	39.2	39.7	0.7	--
70	71b	B	Residential	42.5	42.7	43.0	0.5	--
70	71c	B	Residential	44.2	44.4	45.1	0.9	--
70	72a	B	Residential	49.5	49.8	52.3	2.8	--
70	72b	B	Residential	52.0	52.4	54.7	2.7	--
70	72c	B	Residential	54.4	54.8	56.7	2.3	--
71	1a	B	Residential	66.4	67.2	67.6	1.2	Yes
71	1b	B	Residential	69.8	70.4	70.8	1.0	Yes
71	1c	B	Residential	72.5	73.4	73.2	0.7	Yes
71	2a	B	Residential	66.9	67.5	68.3	1.4	Yes
71	2b	B	Residential	72.3	72.5	73.1	0.8	Yes
71	2c	B	Residential	74.4	74.8	74.9	0.5	Yes
71	3a	B	Residential	66.9	67.3	68.4	1.5	Yes
71	3b	B	Residential	72.3	72.5	73.1	0.8	Yes
71	3c	B	Residential	74.3	74.6	74.7	0.4	Yes
71	4a	B	Residential	67.7	67.9	69.2	1.5	Yes
71	4b	B	Residential	72.6	72.7	73.4	0.8	Yes
71	4c	B	Residential	74.3	74.5	74.7	0.4	Yes
71	5a	B	Residential	68.1	68.2	69.8	1.7	Yes
71	5b	B	Residential	72.7	72.8	73.5	0.8	Yes
71	5c	B	Residential	74.5	74.6	74.9	0.4	Yes
71	6a	B	Residential	65.2	65.0	67.3	2.1	Yes
71	6b	B	Residential	68.6	68.5	69.2	0.6	Yes
71	6c	B	Residential	70.5	70.5	71.1	0.6	Yes
71	7a	B	Residential	57.1	59.3	58.2	1.1	--
71	7b	B	Residential	58.4	60.6	59.6	1.2	--
71	7c	B	Residential	61.9	64.1	63.2	1.3	--
71	8a	B	Residential	58.3	60.5	59.5	1.2	--
71	8b	B	Residential	61.9	64.2	63.1	1.2	--
71	9a	B	Residential	59.3	61.6	60.5	1.2	--
71	9b	B	Residential	62.9	65.2	64.1	1.2	--
71	10a	B	Residential	60.0	62.2	61.0	1.0	--
71	10b	B	Residential	61.7	63.8	62.8	1.1	--
71	10c	B	Residential	66.0	68.0	67.0	1.0	Yes
71	11a	B	Residential	68.0	68.1	69.8	1.8	Yes
71	11b	B	Residential	73.7	73.7	74.2	0.5	Yes
71	11c	B	Residential	75.2	75.3	75.6	0.4	Yes
71	12a	B	Residential	66.1	66.1	68.2	2.1	Yes
71	12b	B	Residential	70.1	70.1	70.8	0.7	Yes
71	12c	B	Residential	72.1	72.1	72.8	0.7	Yes
71	13a	B	Residential	64.4	64.3	66.6	2.2	Yes
71	13b	B	Residential	68.2	68.2	68.9	0.7	Yes



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				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
71	13c	B	Residential	70.2	70.2	71.1	0.9	Yes
71	14a	B	Residential	61.1	61.0	63.5	2.4	--
71	14b	B	Residential	64.7	64.6	65.6	0.9	--
71	14c	B	Residential	66.5	66.5	67.3	0.8	Yes
71	15a	B	Residential	60.3	60.1	62.6	2.3	--
71	15b	B	Residential	63.9	63.8	64.8	0.9	--
71	15c	B	Residential	65.6	65.6	66.3	0.7	Yes
71	16a	B	Residential	49.7	51.8	50.7	1.0	--
71	16b	B	Residential	51.2	53.1	52.2	1.0	--
71	16c	B	Residential	54.6	56.5	55.8	1.2	--
71	17a	B	Residential	63.6	63.7	64.6	1.0	--
71	17b	B	Residential	66.1	66.2	66.9	0.8	Yes
71	17c	B	Residential	68.1	68.2	68.5	0.4	Yes
71	18a	B	Residential	67.0	67.1	67.6	0.6	Yes
71	18b	B	Residential	68.8	69.0	69.2	0.4	Yes
71	19a	B	Residential	69.8	69.8	70.2	0.4	Yes
71	19b	B	Residential	71.4	71.6	71.8	0.4	Yes
71	20a	B	Residential	66.5	66.6	68.0	1.5	Yes
71	20b	B	Residential	71.0	71.0	71.4	0.4	Yes
71	20c	B	Residential	72.7	72.9	73.1	0.4	Yes
71	21a	B	Residential	68.6	68.6	70.3	1.7	Yes
71	21b	B	Residential	73.7	73.7	74.1	0.4	Yes
71	21c	B	Residential	75.1	75.2	75.7	0.6	Yes
71	22a	B	Residential	65.0	65.1	67.1	2.1	Yes
71	22b	B	Residential	69.2	69.1	70.1	0.9	Yes
71	22c	B	Residential	71.4	71.4	72.2	0.8	Yes
71	23a	B	Residential	67.2	67.2	68.1	0.9	Yes
71	23b	B	Residential	69.2	69.2	70.1	0.9	Yes
71	24c	B	Residential	61.5	61.4	63.7	2.2	--
71	25a	B	Residential	60.9	60.8	63.1	2.2	--
71	25b	B	Residential	64.5	64.5	65.3	0.8	--
71	25c	B	Residential	66.5	66.5	67.5	1.0	Yes
71	26a	B	Residential	47.2	48.8	48.1	0.9	--
71	26b	B	Residential	49.4	50.9	50.6	1.2	--
71	26c	B	Residential	53.1	54.4	54.5	1.4	--
71	27a	B	Residential	60.9	60.7	63.2	2.3	--
71	27b	B	Residential	64.5	64.5	65.4	0.9	--
71	27c	B	Residential	66.1	66.1	66.8	0.7	Yes
71	28a	B	Residential	61.5	61.4	63.8	2.3	--
71	28b	B	Residential	65.3	65.2	66.0	0.7	Yes
71	28c	B	Residential	66.7	66.7	67.4	0.7	Yes
71	29a	B	Residential	65.1	64.9	66.9	1.8	Yes
71	29b	B	Residential	69.1	69.0	69.6	0.5	Yes
71	29c	B	Residential	70.5	70.5	71.0	0.5	Yes
71	30a	B	Residential	66.2	66.1	68.0	1.8	Yes
71	30b	B	Residential	70.6	70.5	71.1	0.5	Yes
71	30c	B	Residential	72.2	72.2	72.7	0.5	Yes
71	31a	B	Residential	70.9	71.0	72.4	1.5	Yes



NSA	Rec. ID	Activity Category	Description of Activity	Predicted Traffic Noise Levels (Leq(h)) – Expressed as dB(A)				
				Existing (2014)	No-Build (2040)	Build (2040)	Increase from Existing	Approaches, Meets, or Exceeds the NAC?
71	31b	B	Residential	73.8	73.8	74.8	1.0	Yes
71	31c	B	Residential	74.6	74.7	75.3	0.7	Yes
71	32a	B	Residential	75.8	76.0	77.9	2.1	Yes
71	32b	B	Residential	77.8	77.9	79.0	1.2	Yes
71	32c	B	Residential	78.1	78.2	79.2	1.1	Yes
71	33a	B	Residential	74.9	75.1	76.7	1.8	Yes
71	33b	B	Residential	77.0	77.1	78.1	1.1	Yes
71	33c	B	Residential	77.4	77.4	78.3	0.9	Yes
71	34a	B	Residential	75.1	75.3	77.0	1.9	Yes
71	34b	B	Residential	77.2	77.3	78.3	1.1	Yes
71	34c	B	Residential	77.5	77.6	78.4	0.9	Yes
71	35a	B	Residential	76.1	76.3	78.5	2.4	Yes
71	35b	B	Residential	78.2	78.3	79.4	1.2	Yes
71	35c	B	Residential	78.4	78.5	79.5	1.1	Yes
71	36a	B	Residential	70.8	70.9	72.2	1.4	Yes
71	36b	B	Residential	73.0	73.2	73.7	0.7	Yes
71	36c	B	Residential	73.7	73.8	73.9	0.2	Yes
71	37a	B	Residential	46.8	47.3	47.6	0.8	--
71	37b	B	Residential	49.1	49.6	50.2	1.1	--
71	37c	B	Residential	53.2	53.6	54.3	1.1	--
71	38a	B	Residential	66.9	66.9	68.5	1.6	Yes
71	38b	B	Residential	70.4	70.4	71.1	0.7	Yes
71	38c	B	Residential	71.8	71.9	72.5	0.7	Yes
71	39a	B	Residential	64.0	64.0	65.9	1.9	--
71	39b	B	Residential	66.6	66.8	67.8	1.2	Yes
71	39c	B	Residential	68.1	68.2	69.1	1.0	Yes
71	40a	B	Residential	66.1	66.1	68.1	2.0	Yes
71	40b	B	Residential	68.5	68.6	69.8	1.3	Yes
71	40c	B	Residential	69.7	69.8	70.7	1.0	Yes
71	41a	B	Residential	67.1	67.1	69.0	1.9	Yes
71	41b	B	Residential	69.4	69.5	70.8	1.4	Yes
71	41c	B	Residential	70.5	70.6	71.4	0.9	Yes
71	42a	B	Residential	73.1	73.3	75.1	2.0	Yes
71	42b	B	Residential	75.4	75.5	76.5	1.1	Yes
71	42c	B	Residential	75.9	76.0	76.7	0.8	Yes
71	43a	B	Residential	75.6	75.9	78.5	2.9	Yes
71	43b	B	Residential	78.1	78.2	79.3	1.2	Yes
71	43c	B	Residential	78.5	78.6	79.3	0.8	Yes
71	44a	B	Residential	72.7	72.9	74.5	1.8	Yes
71	44b	B	Residential	74.9	74.9	75.6	0.7	Yes
71	44c	B	Residential	75.4	75.4	75.6	0.2	Yes
71	45a	B	Residential	66.6	66.7	67.4	0.8	Yes
71	45b	B	Residential	69.8	69.8	70.2	0.4	Yes
71	46a	B	Residential	66.8	66.8	67.7	0.9	Yes
71	46b	B	Residential	69.7	69.6	69.9	0.2	Yes
71	47a	B	Residential	66.3	66.2	67.4	1.1	Yes
71	47b	B	Residential	69.3	69.2	69.4	0.1	Yes
71	47c	B	Residential	71.8	71.8	71.7	-0.1	Yes



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71	48a	B	Residential	47.1	47.2	44.5	-2.6	--
71	48b	B	Residential	49.8	49.8	47.0	-2.8	--
71	48c	B	Residential	52.6	52.6	51.4	-1.2	--
71	49a	B	Residential	59.1	59.0	61.2	2.1	--
71	49b	B	Residential	63.1	63.0	63.8	0.7	--
71	49c	B	Residential	65.1	65.0	66.0	0.9	Yes
71	49d	B	Residential	67.4	67.5	68.8	1.4	Yes
71	50a	B	Residential	60.3	60.2	61.7	1.4	--
71	50b	B	Residential	64.3	64.2	64.6	0.3	--
71	50c	B	Residential	66.1	66.1	67.1	1.0	Yes
71	50d	B	Residential	68.8	68.9	69.8	1.0	Yes
71	51a	B	Residential	61.8	61.9	62.5	0.7	--
71	51b	B	Residential	64.3	64.4	64.5	0.2	--
71	51c	B	Residential	65.6	65.7	66.0	0.4	Yes
71	51d	B	Residential	68.3	68.4	69.1	0.8	Yes
71	52a	B	Residential	63.1	63.0	64.4	1.3	--
71	52b	B	Residential	65.9	66.0	66.5	0.6	Yes
71	52c	B	Residential	67.1	67.2	67.8	0.7	Yes
71	52d	B	Residential	68.8	68.9	69.8	1.0	Yes
71	53a	B	Residential	62.6	62.5	64.1	1.5	--
71	53b	B	Residential	65.6	65.6	66.4	0.8	Yes
71	53c	B	Residential	66.9	66.9	67.7	0.8	Yes
71	53d	B	Residential	68.4	68.4	69.7	1.3	Yes
71	54a	B	Residential	62.0	61.9	63.7	1.7	--
71	54b	B	Residential	65.5	65.4	66.4	0.9	Yes
71	54c	B	Residential	66.7	66.7	67.6	0.9	Yes
71	54d	B	Residential	68.1	68.1	69.6	1.5	Yes
71	55a	B	Residential	61.9	61.8	63.7	1.8	--
71	55b	B	Residential	65.7	65.6	66.4	0.7	Yes
71	55c	B	Residential	67.2	67.2	67.8	0.6	Yes
71	55d	B	Residential	68.4	68.4	69.6	1.2	Yes
71	56a	B	Residential	60.4	60.4	62.3	1.9	--
71	56b	B	Residential	64.6	64.5	65.1	0.5	--
71	56c	B	Residential	66.2	66.2	66.4	0.2	Yes
71	56d	B	Residential	67.4	67.4	67.9	0.5	Yes
71	57a	B	Residential	58.5	58.4	60.5	2.0	--
71	57b	B	Residential	63.0	62.9	63.5	0.5	--
71	57c	B	Residential	64.7	64.7	64.6	-0.1	--
71	57d	B	Residential	65.9	65.9	66.0	0.1	Yes
71	58a	B	Residential	57.7	57.6	59.6	1.9	--
71	58b	B	Residential	62.2	62.1	62.8	0.6	--
71	58c	B	Residential	64.1	64.0	64.0	-0.1	--
71	58d	B	Residential	65.1	65.1	65.2	0.1	--
71	59a	B	Residential	56.0	56.2	57.5	1.5	--
71	59b	B	Residential	60.5	60.4	61.1	0.6	--
71	59c	B	Residential	62.4	62.3	62.5	0.1	--
71	59d	B	Residential	63.3	63.2	63.4	0.1	--
71	60a	B	Residential	55.5	55.7	56.7	1.2	--



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71	60b	B	Residential	59.8	59.7	60.6	0.8	--
71	60c	B	Residential	61.9	61.8	61.9		--
71	60d	B	Residential	62.7	62.7	62.8	0.1	--
71	61a	B	Residential	55.3	55.6	56.3	1.0	--
71	61b	B	Residential	59.5	59.6	60.3	0.8	--
71	61c	B	Residential	61.7	61.8	61.7		--
71	61d	B	Residential	62.9	63.2	63.0	0.1	--
71	62a	B	Residential	49.9	50.5	49.5	-0.4	--
71	62b	B	Residential	52.7	53.3	52.2	-0.5	--
71	62c	B	Residential	55.1	55.9	55.0	-0.1	--
71	62d	B	Residential	59.9	60.9	60.6	0.7	--
71	63a	B	Residential	48.4	49.3	50.1	1.7	--
71	63b	B	Residential	50.9	52.0	52.4	1.5	--
71	63c	B	Residential	53.5	54.6	55.1	1.6	--
71	63d	B	Residential	59.7	60.9	61.3	1.6	--
71	64a	B	Residential	53.7	53.8	56.0	2.3	--
71	64b	B	Residential	58.3	58.4	59.9	1.6	--
71	64c	B	Residential	60.6	60.7	62.1	1.5	--
71	64d	B	Residential	63.7	64.2	65.5	1.8	--
71	65a	B	Residential	52.6	52.9	54.8	2.2	--
71	65b	B	Residential	59.7	59.7	60.8	1.1	--
71	65c	B	Residential	61.9	62.0	63.1	1.2	--
71	65d	B	Residential	64.7	65.1	66.3	1.6	Yes
71	66a	B	Residential	52.4	52.4	55.6	3.2	--
71	66b	B	Residential	57.8	57.6	59.1	1.3	--
71	66c	B	Residential	60.2	60.1	61.6	1.4	--
71	66d	B	Residential	62.7	62.9	64.5	1.8	--
71	67a	B	Residential	53.9	54.0	56.7	2.8	--
71	67b	B	Residential	58.4	58.4	59.6	1.2	--
71	67c	B	Residential	60.7	60.7	61.7	1.0	--
71	67d	B	Residential	63.3	63.5	64.8	1.5	--
71	68a	B	Residential	54.4	54.4	56.8	2.4	--
71	68b	B	Residential	58.5	58.4	59.5	1.0	--
71	68c	B	Residential	60.7	60.7	61.5	0.8	--
71	68d	B	Residential	63.4	63.6	64.7	1.3	--
71	69a	B	Residential	52.4	52.5	53.9	1.5	--
71	69b	B	Residential	55.8	55.9	56.5	0.7	--
71	69c	B	Residential	58.2	58.3	58.7	0.5	--
71	69d	B	Residential	61.9	62.4	63.1	1.2	--
71	70a	B	Residential	47.4	48.2	48.7	1.3	--
71	70b	B	Residential	50.3	51.2	51.5	1.2	--
71	70c	B	Residential	52.4	53.4	53.8	1.4	--
71	70d	B	Residential	59.5	60.3	60.7	1.2	--
71	71a	B	Residential	47.0	47.8	48.2	1.2	--
71	71b	B	Residential	49.8	50.8	51.0	1.2	--
71	71c	B	Residential	52.2	53.2	53.5	1.3	--
71	71d	B	Residential	59.1	60.0	60.0	0.9	--
71	72a	B	Residential	47.1	47.9	48.3	1.2	--



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71	72b	B	Residential	50.3	51.2	51.5	1.2	--
71	72c	B	Residential	52.4	53.4	53.6	1.2	--
71	72d	B	Residential	59.7	60.6	60.7	1.0	--
71	73a	B	Residential	46.5	47.3	47.7	1.2	--
71	73b	B	Residential	50.2	51.0	51.3	1.1	--
71	73c	B	Residential	52.1	53.0	53.2	1.1	--
71	73d	B	Residential	59.5	60.3	60.5	1.0	--
71	74a	B	Residential	46.0	46.7	46.9	0.9	--
71	74b	B	Residential	49.8	50.7	50.9	1.1	--
71	74c	B	Residential	52.1	53.1	53.2	1.1	--
71	74d	B	Residential	59.5	60.3	60.2	0.7	--
71	75a	B	Residential	55.4	55.4	57.7	2.3	--
71	75b	B	Residential	58.8	58.9	60.5	1.7	--
71	75c	B	Residential	60.4	60.5	62.1	1.7	--
71	76a	B	Residential	46.5	46.5	49.9	3.4	--
71	76b	B	Residential	48.7	48.9	53.4	4.7	--
71	76c	B	Residential	51.2	51.5	55.3	4.1	--
71	77a	B	Residential	45.3	45.7	47.4	2.1	--
71	77b	B	Residential	44.7	45.0	49.8	5.1	--
71	77c	B	Residential	47.7	48.1	51.9	4.2	--
71	78a	B	Residential	42.9	43.1	47.2	4.3	--
71	78b	B	Residential	45.0	45.4	50.0	5.0	--
71	78c	B	Residential	48.5	49.0	52.3	3.8	--
71	79a	B	Residential	44.2	44.6	48.3	4.1	--
71	79b	B	Residential	46.5	47.1	51.1	4.6	--
71	79c	B	Residential	49.8	50.6	53.5	3.7	--
71	80a	B	Residential	54.7	56.7	55.7	1.0	--
71	80b	B	Residential	56.7	58.8	57.9	1.2	--
71	80c	B	Residential	60.4	62.4	61.6	1.2	--
71	81a	B	Residential	56.0	57.8	57.2	1.2	--
71	81b	B	Residential	57.9	59.8	59.3	1.4	--
71	81c	B	Residential	61.7	63.4	63.2	1.5	--
71	82a	B	Residential	59.1	60.2	60.3	1.2	--
71	82b	B	Residential	61.7	63.0	63.0	1.3	--
71	83a	B	Residential	59.9	60.5	61.2	1.3	--
71	83b	B	Residential	62.1	62.9	63.2	1.1	--
71	84a	B	Residential	57.0	57.2	58.6	1.6	--
71	84b	B	Residential	59.7	60.0	61.1	1.4	--
71	84c	B	Residential	61.7	62.2	62.9	1.2	--
71	85a	B	Residential	49.3	50.2	50.1	0.8	--
71	85b	B	Residential	50.5	51.3	51.7	1.2	--
71	85c	B	Residential	55.0	55.9	56.3	1.3	--
71	86a	B	Residential	57.0	59.1	58.1	1.1	--
71	86b	B	Residential	58.8	60.8	60.0	1.2	--
71	86c	B	Residential	62.6	64.6	63.8	1.2	--
71	87a	B	Residential	57.6	59.8	58.7	1.1	--
71	87b	B	Residential	58.9	61.0	60.1	1.2	--
71	87c	B	Residential	62.8	64.8	63.9	1.1	--



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71	88a	B	Residential	58.0	60.2	59.1	1.1	--
71	88b	B	Residential	59.3	61.4	60.5	1.2	--
71	88c	B	Residential	63.3	65.2	64.4	1.1	--
71	89a	B	Residential	61.8	63.6	62.9	1.1	--
71	89b	B	Residential	63.6	65.1	64.6	1.0	--
71	89c	B	Residential	67.3	68.7	68.2	0.9	Yes
71	90a	B	Residential	60.3	62.1	61.5	1.2	--
71	90b	B	Residential	62.0	63.6	63.0	1.0	--
71	90c	B	Residential	66.2	67.6	67.1	0.9	Yes
71	91a	B	Residential	60.2	61.6	61.7	1.5	--
71	91b	B	Residential	62.5	63.5	63.3	0.8	--
71	91c	B	Residential	66.0	67.1	66.6	0.6	Yes
71	92a	B	Residential	62.0	62.0	62.7	0.7	--
71	92b	B	Residential	64.0	64.0	64.4	0.4	--
71	93a	B	Residential	61.6	61.5	62.4	0.8	--
71	93b	B	Residential	63.5	63.4	63.9	0.4	--
71	94a	B	Residential	59.6	59.5	60.7	1.1	--
71	94b	B	Residential	61.9	61.9	62.8	0.9	--
71	94c	B	Residential	63.7	63.7	64.2	0.5	--
72	1	C	Cemetery	67.9	67.8	71.1	3.2	Yes