NOISE STUDY REPORT

Florida Department of Transportation

District Five

I-75 (SR 93)

SR 200 to SR 326

Marion County, Florida

Financial Management Number: 452074-1

ETDM Number: 14542

March 2024

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 USC § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration and FDOT.

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FDOT

Executive Summary

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) study for proposed operational improvements to the I-75 corridor in the City of Ocala and Marion County, Florida. These interim improvements were identified as part of Phase 1 of a master planning effort for the I-75 corridor between Florida's Turnpike and C.R. 234.

The purpose of this project is to evaluate operational improvements between existing interchanges for I-75 between S.R. 200 and S.R. 326. The primary needs for this project are to enhance current transportation safety and modal interrelationships while providing additional capacity between existing interchanges.

For the year 2050 Build condition, noise levels were predicted using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM), version 2.5. A total of 165 receptor locations representing 427 residential and eight special land use noise sensitive sites were included in the TNM. Noise levels at 357 residences and four nonresidential "special land use" sites are predicted to approach or exceed the NAC for the year 2050 Build Alternative and are therefore considered "impacted."

Analyses of the impacted locations were performed to determine if noise abatement was feasible and reasonable under FDOT policy. The PD&E study phase analysis indicates that noise barriers are potentially feasible and reasonable in three noise sensitive areas. These three noise barriers could potentially provide reasonable and feasible noise abatement for 277 of the 297 impacted residences. Noise abatement was not determined feasible and reasonable for any of the four impacted special use sites; however, some of the special use locations will receive incidental benefits from noise barriers for the residential areas.

The potentially feasible and reasonable noise barriers meet the FDOT's cost per benefit criteria with a preliminary cost of under the $42,000 per benefited receptor criterion. Noise barriers at these three locations will be given further consideration during the Design phase of this project. The dimensions of noise walls are subject to change during the project's design phase. The results of the noise barrier evaluations where noise abatement was determined to be feasible and reasonable are summarized by noise-sensitive area in **Table 4-1**.

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ACRONYMS AND ABBREVIATIONS

AADT	Average Annual Daily Traffic
C.R.	County Road
CFR	Code of Federal Regulations
CNE	Common Noise Environment
EOP	Edge of Pavement
FDOT	Florida Department of Transportation
ILC	Intermodal Logistic Center
LOS	Level of Service
MSE	Mechanically Stabilized Earth
NEPA	National Environmental Policy Act
NAC	Noise Abatement Criteria
NRDG	Noise Reduction Design Goal
NSA	Noise Study Area
PD&E	Project Development and Environment
PTAR	Project Traffic Analysis Report
ROW	Right of Way
SIS	Strategic Intermodal System
S.R.	State Road
U.S.C.	United States Code

1.0 Introduction

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study for proposed operational improvements to the I-75 corridor in the City of Ocala and Marion County, Florida. These interim improvements were identified as part of Phase 1 of a master planning effort for the I-75 corridor between Florida's Turnpike and County Road 234. The operational improvements being evaluated by this PD&E Study include construction of auxiliary lanes between interchanges for an eight-mile segment of I-75 between S.R. 200 and S.R. 326. The limits of the project are shown in **Figure 1-1**. Within the study limits, I-75 is an urban principal arterial interstate that runs in a north and south direction with a posted speed of 70 miles per hour. I-75 is part of the Florida Intrastate Highway System, the Florida Strategic Intermodal System (SIS), and is designated by the Florida Department of Emergency Management as a critical link evacuation route. Within the study limits, I-75 is a six-lane limited access facility situated within approximately 300 feet of right-of-way. No transit facilities, frontage roads, or managed lanes are currently provided.

Figure 1-1 | Project Location Map

1.1 Project Purpose

1.1.1 Project Purpose

The purpose of this project is to evaluate operational improvements between existing interchanges for I-75 between S.R. 200 and S.R. 326.

1.1.2 Project Need

The primary needs for this project are to enhance current transportation safety and modal interrelationships while providing additional capacity between existing interchanges.

1.1.2.1 Project Status

The project is within the jurisdiction of the Ocala-Marion Transportation Planning Organization (TPO) boundaries. The Ocala-Marion TPO 2045 Long Range Transportation Plan (LRTP) includes adding auxiliary lanes to I-75 from S.R. 200 to S.R. 326. The I-75 improvements are included in the FDOT 2023-2028 Work Program and 2024-2028 Ocala-Marion TPO Transportation Improvement Program (TIP). The I-75 improvements are funded for design and right-of-way in the Department's Five-Year Work Program as part of the Moving Florida Forward Initiative. This project begins at S.R. 200, which is the northern terminus for the I-75 PD&E from South of S.R. 44 to S.R. 200, ETDM #14542.

1.1.2.2 Saftey

I-75 experiences crash rates (1.85) greater than the statewide average (1.0) for similar facilities. Crash data analyzed between 2018 and 2022 indicates there was a total of 1,228 vehicle crashes between S.R. 200 and S.R. 326. Of these, 297 resulted in at least one injury and 7 resulted in a fatality. The number of crashes increased every year from 161 crashes in 2018 to 272 crashes in 2022.

Based on the data, rear end collisions and sideswipes are cited as the primary types of crashes on I-75 mainline and the on/off-ramps. Contributing factors includes the closely spaced interchanges in the Ocala area that cause vehicles to “stack” in the right-hand lane with insufficient weaving distance between interchanges, weaving associated with vehicles entering and existing the I-75 mainline, and congestion at off-ramps that cause vehicles to queue from off-ramps onto the mainline.

1.1.2.3 Modal Interrelationships

Truck traffic on I-75 is substantial and accounts for over 20 percent of all daily vehicle trips within the study limits based on the FDOT, Traffic Characteristics Inventory. The segment of I-75 between U.S. 27 and S.R. 326 experiences the highest volume of trucks with more than 30 percent of the total trips made by trucks. Multiple existing and planned Intermodal Logistic Centers (ILC) and freight activity centers in Ocala contribute to the growth in truck volumes.

These facilities include the Ocala/Marion County Commerce Park (Ocala 489), Ocala 275 ILC, and the Ocala International Airport and Business Park.

The interaction between heavy freight vehicles and passenger vehicles between interchanges contributes to both operational congestion and safety concerns.

1.1.2.4 Capacity/Transportation Demand

Existing annual average daily traffic (AADT) on I-75 within the study limits ranges from 74,000 vehicles per day (vpd) to 97,500 vpd, with the highest volume of traffic occurring between S.R. 200 and S.R. 40. I-75 northbound and southbound operates at level of service (LOS) C or better during the average weekday AM and PM peak hours. The LOS target for I-75 is D. As early as 2030, the Opening Year, I-75 northbound from S.R. 200 to S.R. 40 and I-75 southbound from S.R. 326 to S.R. 40 will operate at Level of Service (LOS) F in the no-build condition. By 2040, the Design Year, AADT's within the study limits will range between 122,000 and 142,500, with the highest volumes of traffic continuing to occur between S.R. 200 and S.R. 40.

I-75 is a unique corridor that experiences substantial increases in traffic during holidays, peak tourism seasons, weekends, and special events and experiences frequent closures because of incidents leading to non-recurring congestion. I-75 is part of the emergency evacuation route network designated by the Florida Division of Emergency Management (FDEM).

1.2 Alternatives

1.2.1 No-Build Alternative

The No-Build Alternative is defined as the scenario in which the proposed activity would not take place. The existing six-lane I-75 facility, the existing interchange configurations, and the programmed new interchange at NW 49th Street are considered the No-Build Alternative. The No-Build Alternative does not address the purpose and need for this project; however, it serves as the baseline against which the build alternative is evaluated.

1.2.2 Auxiliary Lanes Alternative

The Auxiliary Lanes Alternative is the sole build alternative evaluated in this PD&E study and is based on recommendations from previous master planning activities. The Auxiliary Lanes Alternative proposes to add one 12-foot auxiliary lane (additional lane between interchanges) to the outside of the general purpose lanes in each direction. The auxiliary lanes would not impact the interchange bridges. The typical section is shown in **Figure 1-2**.

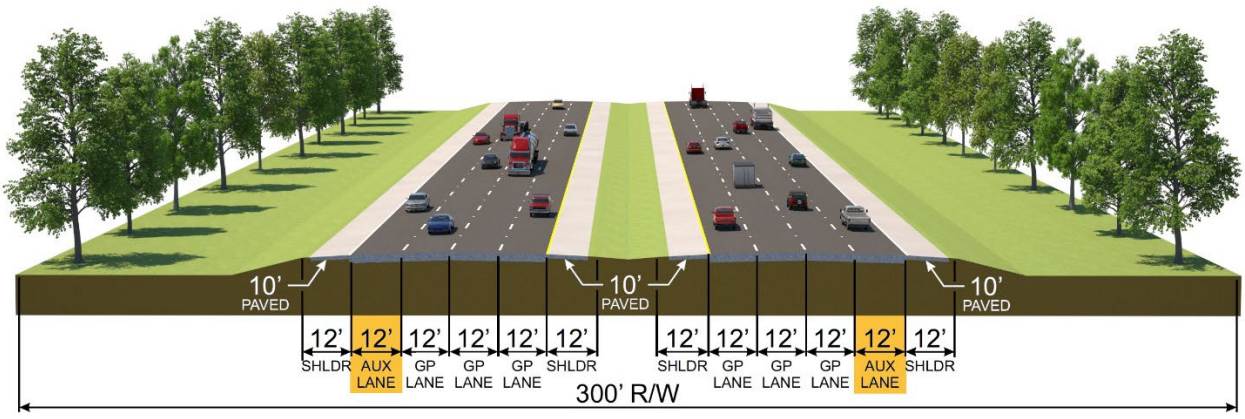


Figure 1-2 | Auxiliary Lanes Alternative Typical Section

2.0 Methodology

The traffic noise impact analysis conducted for this project is consistent with Title 23, *Code of Federal Regulations* (C.F.R.), § 772, Part II, Chapter 18 of the FDOT *Project Development and Environment Manual*, and Chapter 335, Section 335.17, *Florida Statutes*. This assessment also adheres to current Federal Highway Administration (FHWA) traffic noise analysis guidelines contained in *FHWA-HEP-10-025*. The FHWA Traffic Noise Model (TNM) - version 2.5 was used to predict traffic noise levels for this project following guidelines set forth in the FDOT *Traffic Noise Modeling and Analysis Practitioners Handbook*. The analysis evaluated noise levels for the 2022 Existing Condition and the 2050 No-Build and Build Alternatives.

Noise receptor coordinates used in the TNM correlate to exterior areas where frequent human use may occur, usually at the edge of the residential structure closest to the project roadways, unless the analyst's professional judgment determines otherwise.

The project design files (State Plane West) were used to determine the location of the Build Alternative for input into TNM. Vertical elevations (existing and proposed) for I-75 and analyzed receptors were derived from as-built plans (previous widening). Vertical elevations for noise receptors and cross/side streets were obtained from the United States Geological Survey digital elevation models.

2.1 Noise Metrics

Sound levels for this analysis are expressed in decibels (dB) using an "A"-scale weighting expressed as dB(A). This scale most closely approximates the response characteristics of the human ear to typical traffic sound levels. All reported sound levels are hourly equivalent noise levels [L_{eq}]. The L_{eq} is defined as the equivalent steady-state sound level that, in a given hourly period, contains the same acoustic energy as the time-varying sound level for the same hourly period.

2.2 Traffic Data

Traffic noise is heavily dependent on traffic volume and speed, with the amount of noise generated by traffic increasing as the vehicle speed and number of vehicles increase. Characteristics contributing to the 2050 Design Year's highest traffic noise levels were used to predict project noise levels. Worst-case noise conditions occur with the maximum traffic traveling at the posted speed and represent a Level of Service (LOS) C operating condition. However, if the traffic analysis indicates the roadway will operate below LOS C, the project's demand peak-hour directional traffic volumes are used per Chapter 18 of the FDOT PD&E Manual. Traffic volumes and speeds used in the analysis are included in **Appendix A**.

2.3 Noise Abatement Criteria

Land use plays an important role in traffic noise analyses. To determine which land uses are "noise sensitive," this noise impact analysis used the FHWA Noise Abatement Criteria (NAC) shown in **Table 2-1.** The FDOT has established noise levels for each activity category at which noise abatement must be considered. In Florida, noise levels that meet or exceed 66.0 dB(A) at Activity Category B and C land uses require noise abatement consideration. A 71.0 dB(A) noise level is required for an Activity Category E land use to be considered impacted by traffic noise. Another criterion for determining when project impacts warrant abatement consideration occurs when project noise levels are below the NAC but show a substantial increase (15.0 dB(A) or more) over existing levels. A substantial increase typically occurs in areas where traffic noise is a minor component of the existing noise environment but would become a major component after the project is constructed (e.g., a new alignment project).

Table 2-1 | Noise Abatement Criteria

Hourly A-Weighted Sound Level-decibels (dB(A))				Description of Activity Category
Activity Category	Activity Leq(h) [1]		Evaluation Location	
	FHWA	FDOT		
A	57.0	56.0	Exterior	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.
B[2]	67.0	66.0	Exterior	Residential.
C[2]	67.0	66.0	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, golf courses, places of worship, playgrounds, public meeting rooms, public/nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52.0	51.0	Interior	Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public/nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E[2]	72.0	71.0	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
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.

(Based on Table 1 of 23 CFR Part 772)

[1] The Leq(h) Activity Criteria values are for impact determination only and are not design standards for noise abatement measures.

[2] Includes undeveloped lands permitted for this activity category.

For comparison purposes, typical noise levels for common indoor and outdoor activities are provided in **Table 2-2**.

Table 2-2 | Comparative Sound Levels

Common Outdoor Activities	dB(A)	Common Inside Activities
Jet Flyover at 1,000 ft.	-110-	Rock Band
Gas Lawn Mower at 3 ft.	-100-	
Diesel Truck at 50 ft. (at 50 mph)	-90-	
		Food Blender at 3 ft.
Busy Urban Area Daytime	-80-	Garbage Disposal at 3 ft.
Gas Mower at 100 ft. Commercial Area Heavy Traffic at 300 ft.	-70- -60-	Vacuum Cleaner at 10 ft. Normal Speech at 3 ft. Large Business Office
Quiet Urban Daytime	-50-	Dishwasher Next Room
Quiet Urban Nighttime Quiet Suburban Nighttime	-40-	Theater, Large Conference Room (Background)
Quiet Rural Nighttime	-30-	Library
	-20-	
	-10-	
Lowest Threshold of Human Hearing	-0-	Lowest Threshold of Human Hearing
Source: California Dept. of Transportation Technical Noise Supplement, Oct. 1998, Page 18.		

2.4 Noise Abatement Measures

When traffic noise impacts are identified as part of the traffic noise analysis, noise abatement must be considered. The potential abatement alternatives considered during the PD&E included traffic management, alternative roadway alignments, buffer zones, and noise barriers.

2.4.1 Traffic Management

Traffic management measures that limit motor vehicle speeds and reduce volumes can be effective as a noise mitigation option; however, these measures may also negate a project's ability to meet the need of the facility. For example, if the posted speed on I-75 were reduced, the capacity of the roadway to handle the forecasted motor vehicle demand would also be

reduced. Therefore, reducing traffic speeds and or traffic volumes is inconsistent with the goal of improving the ability of the roadway to handle the forecasted volumes. As such, although feasible, traffic management measures are not considered a reasonable noise mitigation measure for the project.

2.4.2 Alignment Modifications

Alignment modification involves orienting and or siting the roadway at sufficient distances from noise sensitive sites to minimize traffic noise. Based on the noise contours developed for this project and shown in **Section 6** of this NSR**,** any alignment shift that would avoid traffic-related noise impacts of the proposed project would introduce noise impacts to other noise sensitive sites, and no net benefit would result. Therefore, alignment modifications are not considered a reasonable noise mitigation measure.

2.4.3 Buffer Zones & Land Use Controls

Noise buffer zones that separate the roadway and noise sensitive land uses can minimize or eliminate noise impacts to areas of future development. This measure requires local land use planning not currently in place within the project corridor. Because the noise impact analysis applies to existing land uses, buffer zones are not an applicable abatement measure. However, for any new development or redevelopment occurring in the future, local officials can use the noise contour information provided in **Section 6** of this NSR to establish buffer zones, thereby minimizing or avoiding noise impacts on future sensitive land uses.

2.4.4 Noise Barriers

The most common type of noise abatement measure is the construction of a noise barrier. Due to the limited right of way (ROW) and proposed typical sections, noise barriers are the only measure being considered for this project. The following feasibility and reasonableness factors must be evaluated when considering noise barriers for abatement.

Feasibility Factors

The FDOT PD&E Manual stipulates that a noise barrier must meet acoustic and engineering criteria to be considered feasible, as summarized below:

- Acoustic feasibility: The barrier must provide a minimum of 5.0 dB(A) reduction in traffic noise for at least two impacted receptors. Consequently, noise barriers are not evaluated for isolated and single impacted receptors.
- Engineering feasibility: The engineering review identifies whether other factors must be evaluated for the barrier to be considered feasible.
- Safety: If a noise barrier and safety conflict exist, primary consideration must be given to safety. An example of such a conflict would be the loss of a safe sight distance (line of sight) at an intersection or driveway resulting from a noise barrier placement.

- Accessibility to adjacent properties: On non-limited access roadways, the noise barrier placement cannot block ingress and egress. Other access issues to be considered include access to a local sidewalk or normal routes of travel. Neither applies to noise barriers on limited-access roadways.
- Right-of-way needs: Does the noise barrier require additional land, access rights, or easements for construction and maintenance?
- Maintenance: Maintenance crews must have reasonable access to both sides of the barrier for personnel and equipment using standard practices.
- Drainage: Does the barrier impact existing or planned drainage?
- Utilities: Does the barrier impact existing utilities?

Reasonableness Factors

If a noise barrier meets the feasibility criteria, the following reasonableness factors must collectively be achieved for the noise abatement measure to be deemed reasonable.

- Acoustic reasonableness: The barrier must attain the FDOT noise reduction design goal (NRDG) of 7.0 dB(A) for at least one benefited receptor. (Note: to be considered "benefited," the receptor must receive a minimum of 5.0 dB(A) in traffic noise reduction from the barrier.) Failure to achieve the NRDG results in the noise abatement measure being deemed not reasonable.
- Cost reasonableness: Using the current $30.00 per square foot statewide average, a cost of $42,000 per benefited receptor is the upper limit for cost-reasonableness.
- Benefited property owner and resident viewpoints: During project development, FDOT solicits the opinion of benefited owners and residents regarding noise abatement. Affected owners and residents are given the opportunity to provide input regarding their desires to have the proposed noise abatement measure constructed. This process aims to obtain a response for or against the noise barrier from a majority of respondents to the survey. The noise barrier is not deemed reasonable if a majority consensus is not obtained in favor of the barrier.

2.4.5 Special-Use Site Barrier Analysis

The methodology used to evaluate noise barrier systems for special-use sites differs from those used for residential locations. The standard procedure for determining the feasibility and reasonableness of a noise barrier for a special-use site is documented in *A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special-Use Locations* (FDOT 2009). This special-use site analysis procedure starts with the established cost threshold for residential locations and generalizes it to a person-hours of use criteria that can be applied to non-residential sites using this equation from the above-referenced document. A noise barrier for a

special-use site is considered cost reasonable if the calculated "abatement cost factor" is below the $995,935/person-hr/ft^2.

3.0 Traffic Noise Analysis and Abatement Evaluation

3.1 Model Validation

Existing noise levels are measured in the project corridor to confirm if traffic is the primary source of noise. These field measurements are also required to verify the accuracy of the TNM before it can be used to predict noise levels. A series of three 10-minute measurements were taken on March 31, 2023, using an Extech Instruments Model 407780 Type 2 Integrating Sound Level Meter. The sound level meter, calibrated at 114.0 dB(A) with an Extech Instruments Model 407766 calibrator, was adjusted to the A-weighted frequency scale, which approximates the frequency sensitivity of the human ear. Traffic data, including vehicle volumes, speeds by type, and meteorological conditions, were recorded during each measurement session. The data collection effort also recorded the travel speed for each type of vehicle using a Bushnell Speedster handheld radar gun.

One location within the study corridor was selected to undergo a series of three 10-minute measurements. The validation site, illustrated on page **C-6** in **Appendix C**, was selected for measurement because it presented a clear view of traffic conditions on I-75. Though there were some slow-downs in the northbound direction, no unusual noise events occurred during this location's three 10-minute monitoring sessions. During the monitoring session, the weather was 71° with 78% humidity under clear skies with mild east-southeast breezes ranging from 3 to 7 m.p.h.

Validation of TNM occurs when the model-predicted noise levels are within three decibels of the field-measured levels. Table 3-1 shows that TNM predicted within the 3.0-decibel acceptance range for each 10-minute session. Consequently, the model is acceptable for predicting noise levels for this project.

Table 3-1 | TNM Validation Results Summary

Location	Validation Session	Field Measured (dB(A))	TNM Predicted (dB(A))	Variance (dB(A))
VS-1	Session 1	76.0	76.3	0.3
	Session 2	76.9	77.1	0.2
	Session 3	76.9	77.6	0.7

3.2 Noise Sensitive Receptors

Within the project limits, TNM receptor points representing residences are located in accordance with the FDOT PD&E Manual as follows:

- Residential receptor points are located at areas of frequent outdoor use or the corner of the residential building closest to the major traffic noise source.
- Where residences are clustered together, single receptor points are analyzed as representative of a group of residences with similar characteristics.
- Ground floor receptor points are assumed to be 5 feet above the ground elevation, and all receptors are assumed to be at ground level unless otherwise noted.
- Higher floor receptors are assumed to increase in elevation in 10-foot increments above the ground floor receptor.
- Non-residential receptor points are located at the edge of the outdoor use area closest to the major traffic noise source.

Using **Table 2-1** as a guide, most noise-sensitive land uses within the study corridor fall under NAC B - Residential. The NAC C land uses within the study corridor pertain to recreation areas within the Ocala RV Camp Resort, Oaktree Village, and Sweetwater Oaks. The NAC E land uses include several motels with on-site resources consisting of swimming pools, a mini-golf course, and ball courts.

The remainder of the corridor is NAC G undeveloped land. A permit search of these areas was conducted to identify any active building permits for noise-sensitive land uses. As of January 10, 2024, no such permits were discovered adjacent to the corridor. If a future noise-sensitive land use receives a building permit before the project's Date of Public Knowledge, they will be assessed for traffic noise impacts during the project's final design phase of development.

Analysis of interior (NAC D) noise levels is not required for this project as all NAC C locations have areas of exterior use. There are no land uses in the study corridor that warrant an NAC A analysis. While NAC F land uses are in the project corridor, this is not considered a noise-sensitive activity and is not included in the analysis.

3.3 Predicted Noise Levels and Abatement Analysis

Noise levels were predicted at 165 noise sensitive sites representing 427 residences (NAC B), three special land use (SLU) NAC C receptors, and five SLU NAC E receptors. Due to the number of receptors, the analysis divided the study corridor into Noise Study Areas (NSA). The reporting of project noise levels was further simplified by using receptors representing similar adjacent noise sensitive sites. The grouping within a representative receptor is referred to as a Common Noise Environment (CNE). There may be several CNEs within one NSA.

Receptor points are labeled according to the NSA within which they are located. NSAs are named as follows:

- The first two letters (i.e., SB, NB) describe on which side of the mainline road the NSA is located (e.g., "NB" indicates the receptor is in an NSA on the northbound side of the mainline travel lanes).
- The number following the first two letters is a numeric sequencing number (e.g., NB2 is the 2nd NSA on the northbound side of the mainline road).
- The final two characters are the individual receptor number and are separated from the first string of characters with a dash (e.g., NB2-07 is the 7th receptor in the 2nd NSA on the northbound side of the mainline road).
- Where there are multi-family residential apartment complexes in the study corridor, the letter "a" represents ground-floor units, "b" represents 2nd-floor units, and "c" represents 3rd-floor units, etc. (e.g., NB2-07a)

The 2022 existing condition, the 2050 No-Build Alternative, and the 2050 Build Alternative noise analysis results discussed in this section are also summarized in a noise impact comparison matrix provided in **Appendix B**. When discussing noise level increases, the general rule that applies to perception is:

- A 3 dB(A) increase is barely perceptible to most people.
- A 5 dB(A) increase is noticeable to most people.
- A 10 dB(A) increase is perceived as twice as loud and is considered a doubling of noise.

Overall, 214 noise receptors are currently affected by I-75 traffic noise. Under the No-Build Alternative, noise levels are predicted to meet or exceed the NAC for 313 noise receptors. By comparison, predicted noise levels for the Build Alternative meet or exceed the NAC at 357 noise receptors with an average 2.8 dB(A) increase in noise over the existing condition. The greatest increase, 5.0 dB(A), occurs in NSA SB4 at receptor SB4-07. None of the noise increases are considered substantial (defined as 15 dB(A) or higher).

3.3.1 Noise Study Area SB1

NSA SB1, shown on pages **C2 through C4** in the project aerials **Appendix C**, is located west of I-75 and spans from the project's beginning limits to SW 20th Street. Noise sensitive land uses in this NSA consist of NAC B and one SLU NAC C land uses. Forty-nine NAC B receptor points, identified as SB1-01 through SB1-49, representing 87 residences, were evaluated for traffic noise impacts. The Ocala RV Camp Resort is also in this NSA and is represented by receptors SB1-SLU1.

Currently, the average noise level is 66.5 dB(A) with 44 residences and the campground exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 68.2 dB(A), with the 60 residential receptors and the campground meeting or exceeding the NAC. The Build Alternative's average noise level of 69.3 dB(A) is an increase of 2.8 dB(A) over existing conditions, with the greatest increase being 3.4 dB(A) at multiple receptors. While the project noise increases are not considered substantial, the predicted noise levels at 68 residences and the campground meet or exceed the NAC and require abatement consideration. Two separate barrier analyses, one for the campground and one for the residences, were conducted.

Noise barrier SB-A1 was evaluated to abate the noise impact on the Ocala RV Camp Resort (SB1-SLU1). The barrier was analyzed approximately 10 feet inside the SB I-75 ROW following the FDOT Special Land Use procedures outlined in **Section 2.4.4**. The evaluated barrier achieves the 7 dB(A) FDOT Noise Reduction Design Goal (NRDG). The second step in the analysis determines if the barrier is cost reasonable.

As summarized in **Table 3-2**, for a 22-foot ROW noise barrier to be cost-reasonable, an average of 101 people would need to use all the campground resources within the impacted/benefited area – 30 campsites, two swimming pools, one ball court, green spaces, and roads [assumed to be for pedestrian usage] for twelve hours per day, every day of the year. This is an unreasonable expectation. For this reason, the person-hours necessary to make a noise barrier cost reasonable in this location cannot be met, and noise barriers are not a potentially feasible and reasonable method to abate traffic-related noise for the special use site in NSA SB1.

Table 3-2 | Noise Barrier SB-A1 Evaluation (NSA SB1)

SB1-SLU1: Ocala RV Camp Resort NAC C								
Evaluated Barrier Options					Percentage of Impacted Area Benefited	Does the barrier satisfy the Noise Reduction Design Goal (-7 dB(A))	Required Daily Person Uasage Within Benefited Area	Possible for Person-Hours of Daily Use Within Benefited Area to be met?
Option	Height*2 (feet)	Length (feet)	Barrier Location	Total Cost*1				
1	22	1,299	ROW	$857,340	100%	Yes	101	No*3

*1 = Based on FDOT Statewide average of $30 per square foot.

*2 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

*3 = Impacted area: 30 sites (approx.), 2 pools, 1 ball court, green space, and roads [pedestrian usage].

Noise barrier SB1, as illustrated on pages **D1 and D2** in **Appendix D**, was evaluated as a two-segment barrier system to reduce traffic noise for the 68 impacted residences within NSA SB1. Segment 1 consists of a maximum allowed height barrier (e.g., 22 feet tall) located approximately 10 feet inside the SB I-75 ROW. Segment 2 consists of a barrier located along the SB I-75 shoulder edge of pavement (EOP). Approximately 1,105 feet of Segment 2 is at the 14-foot maximum allowed height, then reduces to eight feet on top of the Mechanically Stabilized Earth (MSE) and SW 20th Street overpass structure. As summarized in **Table 3-3**, this barrier system meets all FDOT requirements and is a potentially feasible and reasonable method to abate traffic-related noise for 72 residences (56 impacted and 16 non-impacted) in NSA SB1. This barrier system also provides meaningful noise reduction to the Ocala RV Camp Resort. The final design evaluation may change this potential noise barrier's length, height, or viability. Four legally permitted, conforming billboards (Tag Numbers: BR194, BR195, CH859, and CH860) are located behind this barrier system. Any potential noise barrier/billboard conflict will be addressed during the final design evaluation.

Table 3-3 | Noise Barrier SB1 Evaluation (NSA SB1)

NSA SB1: Barrier SB1 Evaluation Summary (Residential)														
Evaluated Barrier Options				Number of Impacted Residential Sites	Number of Impacted Sites Within a Noise Reduction Range			Number of Benefited Residential Sites *1				Total Estimated Cost *4	Cost per Benefited Receptor *5	Recommended for further consideration in final design?
Option	Barrier Type/Location	Height (feet)*6	Length (feet)		5-5.9 dB(A)	6-6.9 dB(A)	≥ 7.0 dB(A) *2	Impacted	Other *3	Total	Avg. Reduction dB(A)			
1	ROW	22	3,508	68	4	4	48	56	16	72	7.5	$ 2,968,020	$ 41,223	Yes
	Shoulder	8 & 14	1,891											

*1 = Minimum of 5.0 dB(A) required to be considered benefited by noise barrier.
*2 = FDOT Noise Reduction Design Goal is 7.0 dB(A) at a minimum of 1 benefited receptor.
*3 = Refers to non-impacted noise-sensitive sites.
*4 = Based on FDOT Statewide average of $30 per square foot.
*5 = FDOT Reasonable Cost Guideline is $42,000.
*6 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

3.3.2 Noise Study Area SB2

NSA SB2, shown on pages **C4 through C6** in the project aerials **Appendix C**, is located west of I-75 and spans from SW 20th Street to S.R. 40. Noise sensitive land uses in this NSA consist of NAC B and one SLU NAC E land uses. Twelve NAC B receptor points, identified as SB2-01 through SB2-12, representing 32 residences, were evaluated for traffic noise impacts. The Super 8 Motel pool is represented by receptor SB2-SLU2-1.

Currently, the average noise level is 66.5 dB(A) with 16 residences exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 68.5 dB(A), with the 25 residential receptors meeting or exceeding the NAC. The Build Alternative's average noise level of 69.2 dB(A) is an increase of 2.7 dB(A) over existing conditions, with the greatest increase being 3.0 dB(A) at multiple receptors. While the project noise increases are not considered substantial, the predicted noise levels at 28 residences meet or exceed the NAC and require abatement consideration.

Noise barrier SB-A2, as illustrated on page **D5** in **Appendix D**, was evaluated approximately 10 feet inside the SB I-75 ROW to reduce traffic noise for the 28 impacted residences within NSA SB2. As summarized in **Table 3-4**, this barrier meets all FDOT acoustic requirements but fails to meet cost reasonableness criteria. There are no potentially feasible and reasonable methods available to abate traffic-related noise for the 28 impacted residences in NSA SB2.

Table 3-4 | Noise Barrier SB-A2 Evaluation (NSA SB2)

NSA SB2: Barrier SB-A2 Evaluation Summary														
Evaluated Barrier Options				Number of Impacted Residential Sites	Number of Impacted Sites Within a Noise Reduction Range			Number of Benefited Residential Sites *1				Total Estimated Cost *4	Cost per Benefited Receptor *5	Recommended for further consideration in final design?
Option	Barrier Type/Location	Height (feet)*6	Length (feet)		5-5.9 dB(A)	6-6.9 dB(A)	≥ 7.0 dB(A) *2	Impacted	Other *3	Total	Avg. Reduction dB(A)			
1 *Illustrated*	ROW	22	2,264	28	12	6	10	28	0	28	6.8	$ 1,494,240	$ 53,366	No
2	ROW	20	2,507		6	4	9	19	0	19	6.8	$ 1,504,200	$ 79,168	No

*1 = Minimum of 5.0 dB(A) required to be considered benefited by noise barrier.
*2 = FDOT Noise Reduction Design Goal is 7.0 dB(A) at a minimum of 1 benefited receptor.
*3 = Refers to non-impacted noise-sensitive sites.
*4 = Based on FDOT Statewide average of $30 per square foot.
*5 = FDOT Reasonable Cost Guideline is $42,000.
*6 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

3.3.3 Noise Study Area SB3

NSA SB3, shown on pages **C6 through C9** in the project aerials **Appendix C**, is located west of I-75 and spans from S.R. 40 to U.S. 27. Noise sensitive land uses in this NSA consist of NAC B and one SLU NAC E land uses. Nineteen NAC B receptor points, identified as SB3-01 through SB3-19, representing 38 residences, were evaluated for traffic noise impacts. The Motel 6 pool is represented by receptor SB3-SLU3-1.

Currently, the average noise level is 66.5 dB(A) with 19 residences exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 68.6 dB(A), with the 27 residential receptors meeting or exceeding the NAC. The Build Alternative's average noise level of 68.9 dB(A) is an increase of 2.4 dB(A) over existing conditions, with the greatest increase being 2.7 dB(A) at multiple receptors. While the project noise increases are not considered substantial, the predicted noise levels at 27 residences meet or exceed the NAC and require abatement consideration.

Noise barrier SB-A3 was evaluated with different barrier combinations (types, heights, lengths) to reduce traffic noise for the 20 impacted residences within the Classic Oaks Village neighborhood in NSA SB3. As summarized in **Table 3-5**, all evaluated barrier scenarios meet FDOT acoustic requirements but fail to meet cost reasonableness criteria. Though found to be above cost reasonableness criteria, the lowest cost option, Option 2, is illustrated on page **D6** in **Appendix D** and consists of a two-segment barrier system to provide noise reduction to all 20 impacted residences. There are no potentially feasible and reasonable methods available to abate traffic-related noise for the 20 impacted residences in Classic Oaks Village in NSA SB3.

Table 3-5 | Noise Barrier SB-A3 Evaluation (NSA SB3)

NSA SB3: Barrier SB-A3 Evaluation Summary														
Evaluated Barrier Options				Number of Impacted Residential Sites	Number of Impacted Sites Within a Noise Reduction Range			Number of Benefited Residential Sites *1				Total Estimated Cost *4	Cost per Benefited Receptor *5	Recommended for further consideration in final design?
Option	Barrier Type/Location	Height (feet) *6	Length (feet)		5-5.9 dB(A)	6-6.9 dB(A)	≥ 7.0 dB(A) *2	Impacted	Other *3	Total	Avg. Reduction dB(A)			
1	ROW	22	1,602	20	5	5	4	14	0	14	7.0	$ 1,057,320	$ 75,523	No
	Shoulder	0	0											
2 *Illustrated*	ROW	22	993		6	5	8	19	1	20	6.9	$ 1,019,100	$ 50,955	No
	Shoulder	14	866											
3	ROW	20	1,290		9	6	4	19	1	20	6.6	$ 1,137,720	$ 56,886	No
	Shoulder	14	866											

*1 = Minimum of 5.0 dB(A) required to be considered benefited by noise barrier.
*2 = FDOT Noise Reduction Design Goal is 7.0 dB(A) at a minimum of 1 benefited receptor.
*3 = Refers to non-impacted noise-sensitive sites.
*4 = Based on FDOT Statewide average of $30 per square foot.
*5 = FDOT Reasonable Cost Guideline is $42,000.
*6 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

Noise barrier SB-A4 was evaluated with different barrier height options to reduce traffic noise for the nine impacted residences within the unnamed mobile home park in the northern portion of NSA SB3. As summarized in **Table 3-6**, all evaluated barrier scenarios meet FDOT acoustic requirements but fail to meet cost reasonableness criteria. Though found to be above cost reasonableness criteria, the lowest cost option, Option 3, is illustrated on page **D7** in **Appendix D** and consists of a 22-foot-tall barrier system to provide noise reduction to all nine impacted residences. There are no potentially feasible and reasonable methods available to abate traffic-related noise to these impacted receptors.

Table 3-6 | Noise Barrier SB-A4 Evaluation (NSA SB3)

NSA SB3: Barrier SB-A4 Evaluation Summary														
Evaluated Barrier Options				Number of Impacted Residential Sites	Number of Impacted Sites Within a Noise Reduction Range			Number of Benefited Residential Sites *1				Total Estimated Cost *4	Cost per Benefited Receptor *5	Recommended for further consideration in final design?
Option	Barrier Type/Location	Height (feet) *6	Length (feet)		5-5.9 dB(A)	6-6.9 dB(A)	≥ 7.0 dB(A) *2	Impacted	Other *3	Total	Avg. Reduction dB(A)			
1	ROW	22	2,708	9	0	2	7	9	4	13	7.5	$ 1,787,280	$ 137,483	No
2	ROW	22	2,010		1	1	7	9	3	12	7.5	$ 1,326,600	$ 110,550	No
3 *Illustrated*	ROW	22	1,198		2	2	5	9	0	9	7.2	$ 790,680	$ 87,853	No
4	ROW	20	1,411		2	2	5	9	0	9	7.0	$ 846,600	$ 94,067	No
5	ROW	18	1,411		3	0	5	8	0	8	6.9	$ 761,940	$ 95,243	No

*1 = Minimum of 5.0 dB(A) required to be considered benefited by noise barrier.
*2 = FDOT Noise Reduction Design Goal is 7.0 dB(A) at a minimum of 1 benefited receptor.
*3 = Refers to non-impacted noise-sensitive sites.
*4 = Based on FDOT Statewide average of $30 per square foot.
*5 = FDOT Reasonable Cost Guideline is $42,000.
*6 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

3.3.4 Noise Study Area SB4

NSA SB4, shown on pages **C9 through C12** in the project aerials **Appendix C**, is located west of I-75 and spans from U.S. 27 to the future but yet-to-be-constructed NW 49th Street interchange. Noise sensitive land uses in this NSA consist of NAC B, two SLU NAC C, and two SLU NAC E land uses. Twenty NAC B receptor points, identified as SB4-01 through SB4-20, representing 192 residences, were evaluated for traffic noise impacts. The Days Inn (pool) and Howard Johnson (mini-golf, ball court, pool) are NAC E land uses and are represented by receptors SB4-SLU4-1 and SB4-SLU4-2, respectively. The two NAC C land uses are the community pools associated with Oaktree Village and Sweetwater Oaks, referred to as SB4-SLU4-3 and SB4-SLU4-4, respectively.

Currently, the average noise level is 64.6 dB(A) with 95 residences and SB4-SLU4-3 [NAC C] exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 67.5 dB(A), with the 150 residential receptors, SB4-SLU4-2 [NAC E], and SB4-SLU4-3 [NAC C] meeting or exceeding the NAC. The Build Alternative's average noise level of 68.4 dB(A) is an increase of 3.8 dB(A) over existing conditions, with the greatest increase being 5.0 dB(A) at receptor SB4-07. While the project noise increases are not considered substantial, the predicted noise levels at 174 residences, two NAC C, and one NAC E sites meet or exceed the NAC and require abatement consideration.

To reduce traffic noise at SB4-SLU4-2, Noise barrier SB-A5 was evaluated approximately 10 feet inside the SB I-75 ROW following the FDOT Special Land Use procedures outlined in **Section 2.4.4**. The evaluated barrier achieves the NRDG. The second step in the analysis determines if the barrier is cost reasonable.

As summarized in **Table 3-7**, for a noise barrier to be cost-reasonable, an average of 311 people would need to use all resources within the SLUs impacted/benefited area – mini-golf, ball court, and swimming pool for three hours per day, every day of the year. This is an unreasonable expectation. For this reason, the person-hours necessary to make a noise barrier cost reasonable in this location cannot be met, and noise barriers are not a potentially feasible and reasonable method to abate traffic-related noise for the Howard Johnson special use site in NSA SB4.

Table 3-7 | Noise Barrier SB-A5 Evaluation (NSA SB4)

SB4-SLU4-2: Howard Johnson NAC E								
Evaluated Barrier Options					Percentage of Impacted Area Benefited	Does the barrier satisfy the Noise Reduction Design Goal (-7 dB(A))	Required Daily Person Usage Within Benefited Area	Possible for Person-Hours of Daily Use Within Benefited Area to be met?
Option	Height*2 (feet)	Length (feet)	Barrier Location	Total Cost*1				
1	22	1,005	ROW	$663,300	100%	Yes	311	No*3

*1 = Based on FDOT Statewide average of $30 per square foot.

*2 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

*3 = Impacted area: mini-golf course, ball court, pool

Noise barrier SB2 was evaluated with the 22-foot maximum allowed height barrier to reduce traffic noise for the 140 impacted residences (long-term RV/mobile home) within Oaktree Village and 34 impacted mobile home residences within the Sweetwater Oaks community. As summarized in **Table 3-8**, this barrier system meets all FDOT requirements and is a potentially feasible and reasonable method to abate traffic-related noise for 169 residences (167 impacted and two non-impacted) in NSA SB4. The barrier also provides meaningful noise reduction (8.4 dB(A)) to the Oaktree Village community pool. The final design evaluation may change this potential noise barrier's length, height, or viability. Five legally permitted, *non-conforming* billboards (Tag Numbers: BL849, BL850, BR316, BR318, BR319) are located behind this barrier. Any potential noise barrier/billboard conflict will be addressed during the final design evaluation. Barrier SB2 is illustrated on pages **D8 and D9** in **Appendix D**.

Table 3-8 | Noise Barrier SB2 Evaluation (NSA SB4)

NSA SB4: Barrier SB2 Evaluation Summary														
Evaluated Barrier Options				Number of Impacted Residential Sites	Number of Impacted Sites Within a Noise Reduction Range			Number of Benefited Residential Sites *1				Total Estimated Cost *4	Cost per Benefited Receptor *5	Recommended for further consideration in final design?
Option	Barrier Type/Location	Height (feet)*6	Length (feet)		5-5.9 dB(A)	6-6.9 dB(A)	≥ 7.0 dB(A) *2	Impacted	Other *3	Total	Avg. Reduction dB(A)			
1	ROW	22	3,997	174	44	34	89	167	2	169	7.3	$ 2,638,020	$ 15,610	Yes

*1 = Minimum of 5.0 dB(A) required to be considered benefited by noise barrier.
*2 = FDOT Noise Reduction Design Goal is 7.0 dB(A) at a minimum of 1 benefited receptor.
*3 = Refers to non-impacted noise-sensitive sites.
*4 = Based on FDOT Statewide average of $30 per square foot.
*5 = FDOT Reasonable Cost Guideline is $42,000.
*6 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

3.3.5 Noise Study Area SB5

NSA SB5, shown on pages **C13 through C14** in the project aerials **Appendix C,** is located west of I-75 and spans from NW 49th Street to NW 63rd Street. There are no noise sensitive sites within this NSA.

3.3.6 Noise Study Area SB6

NSA SB6, shown on pages **C14 through C16** in the project aerials **Appendix C**, is located west of I-75 and spans from NW 63rd Street to S.R. 326. Noise sensitive land uses in this NSA consist of two NAC B residences, identified as SB6-01 and SB6-02.

Currently, the average noise level is 63.8 dB(A), with SB06-01 exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 66.4 dB(A), with SB06-01 exceeding the NAC. The Build Alternative's average noise level of 67.2 dB(A) is an increase of 3.4 dB(A) over existing conditions, with the greatest increase being 3.4 dB(A) at both receptors. While the project noise increases are not considered substantial, the predicted noise level at SB06-01 exceeds the NAC. Because this site is considered an isolated impact, a noise barrier was not evaluated, as outlined in the Feasibility Factors discussion in **Section 2.4.3**.

3.3.7 Noise Study Area NB1

NSA NB1, shown on pages **C2 through C4** in the project aerials **Appendix C**, is located east of I-75 and spans from the project's beginning limits to SW 20th Street. The only noise sensitive land use in this NSA is single-family and multi-family residential. Fifty NAC B receptor points, identified as NB1-01 through NB1-41, representing 71 residences, were evaluated for traffic noise impacts.

Currently, the average noise level is 65.7 dB(A) with 38 residences exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 67.5 dB(A), with the 47 noise receptors meeting or exceeding the NAC. The Build Alternative's average noise level of

68.3 dB(A) is an increase of 2.5 dB(A) over existing conditions, with the greatest increase being 2.8 dB(A) at multiple receptors. While the project noise increases are not considered substantial, the predicted noise levels at 55 residences meet or exceed the NAC and require abatement consideration.

Noise barrier NB1 was evaluated with the 22-foot maximum allowed height barrier to reduce traffic noise for the 55 impacted residences within the College Park neighborhood, including the 19 multi-family units (NB1-01 through NB1-01.7) associated with the College Park Townhomes, which are currently under construction. As summarized in **Table 3-9**, this barrier meets all FDOT requirements and is a potentially feasible and reasonable method to abate traffic-related noise for 68 residences (54 impacted and 14 non-impacted) in NSA NB1. The final design evaluation may change this potential noise barrier's length, height, or viability. Ten legally permitted, *non-conforming* billboards (Tag Numbers: AW062, AW063, AW064, AW065, BR333, BR336, BY249, CL852, CL853, CM830) are located behind this barrier. Any potential noise barrier/billboard conflict will be addressed during the final design evaluation. Barrier NB1 is illustrated on pages **D3 and D4** in **Appendix D**.

Table 3-9 | Noise Barrier NB1 Evaluation (NSA NB1)

NSA NB1: Barrier NB1 Evaluation Summary														
Evaluated Barrier Options				Number of Impacted Residential Sites	Number of Impacted Sites Within a Noise Reduction Range			Number of Benefited Residential Sites *1				Total Estimated Cost *4	Cost per Benefited Receptor *5	Recommended for further consideration in final design?
Option	Barrier Type/Location	Height (feet) *6	Length (feet)		5-5.9 dB(A)	6-6.9 dB(A)	≥ 7.0 dB(A) *2	Impacted	Other *3	Total	Avg. Reduction dB(A)			
1	ROW	22	4,004	55	5	6	43	54	14	68	7.7	$ 2,642,640	$ 38,862	Yes

*1 = Minimum of 5.0 dB(A) required to be considered benefited by noise barrier.
*2 = FDOT Noise Reduction Design Goal is 7.0 dB(A) at a minimum of 1 benefited receptor.
*3 = Refers to non-impacted noise-sensitive sites.
*4 = Based on FDOT Statewide average of $30 per square foot.
*5 = FDOT Reasonable Cost Guideline is $42,000.
*6 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

3.3.8 Noise Study Area NB2

NSA NB2, shown on pages **C4 through C6** in the project aerials **Appendix C**, is located east of I-75 and spans from SW 20th Street to S.R. 40. The only noise sensitive land use in this NSA is residential NAC B. Two NAC B receptor points, identified as NB2-01 through NB2-02, were evaluated for traffic noise impacts.

Currently, the average noise level is 65.6 dB(A) with neither residence meeting nor exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 65.6 dB(A), with the receptor NB2-01 exceeding the NAC. The Build Alternative's average noise level of 68.5 dB(A) is an increase of 2.9 dB(A) over existing conditions, with the greatest increase being 2.9

dB(A) at NB2-01. While the project noise increases are not considered substantial, the predicted noise levels at both residences exceed the NAC and require abatement consideration.

Noise barrier NB-A1, as illustrated on page **D5** in **Appendix D**, was evaluated approximately 10 feet inside the NB I-75 ROW to reduce traffic noise for the two impacted residences. As summarized in **Table 3-10**, this maximum height barrier fails to meet the required minimum 5.0 dB(A) noise reduction to be considered feasible. There are no potentially feasible and reasonable methods available to abate traffic-related noise for the two impacted residences in NSA NB2.

Table 3-10 | Noise Barrier NB-A1 Evaluation (NSA NB2)

NSA NB2: Barrier NB-A1 Evaluation Summary														
Evaluated Barrier Options				Number of Impacted Residential Sites	Number of Impacted Sites Within a Noise Reduction Range			Number of Benefited Residential Sites *1				Total Estimated Cost *4	Cost per Benefited Receptor *5	Recommended for further consideration in final design?
Option	Barrier Type/Location	Height (feet) *6	Length (feet)		5-5.9 dB(A)	6-6.9 dB(A)	≥ 7.0 dB(A) *2	Impacted	Other *3	Total	Avg. Reduction dB(A)			
1	ROW	22	1,402	2	0	0	0	0	0	0	< 5.0	$ 925,320	n/a	No

*1 = Minimum of 5.0 dB(A) required to be considered benefited by noise barrier.
*2 = FDOT Noise Reduction Design Goal is 7.0 dB(A) at a minimum of 1 benefited receptor.
*3 = Refers to non-impacted noise-sensitive sites.
*4 = Based on FDOT Statewide average of $30 per square foot.
*5 = FDOT Reasonable Cost Guideline is $42,000.
*6 = 8-ft max on MSE/Bridge; 14-ft max on shoulder; 22-ft max at ROW or offset from shoulder.

3.3.9 Noise Study Area NB3

NSA NB3, shown on pages **C6 through C8** in the project aerials **Appendix C**, is located east of I-75 and spans from S.R. 40 to U.S. 27. There are no noise sensitive sites within this NSA.

3.3.10 Noise Study Area NB4

NSA NB4, shown on pages **C9 through C12** in the project aerials **Appendix C**, is located east of I-75 and spans from U.S. 27 to the future but yet-to-be-constructed NW 49th Street interchange. The only noise sensitive land use in this NSA is the Golden Palms motel pool, identified as NB4-SLU4-1 was evaluated for traffic noise impacts.

Currently, the noise level is 56.8 dB(A); thus, it does not meet or exceed the 66.0 dB(A) FDOT NAC. The predicted noise levels with the No-Build Alternative and Build Alternative are 59.4 dB(A) and 59.3 dB(A), respectively. The predicted noise levels do not meet or exceed the NAC, nor are the project noise increases considered substantial. Thus, abatement consideration for NSA NB4 is not warranted.

3.3.11 Noise Study Area NB5

NSA NB5, shown on pages **C13 through C14** in the project aerials **Appendix C**, is located east of I-75 and spans from the NW 49th Street interchange to NW 63rd Street. There are no noise sensitive sites within this NSA.

3.3.12 Noise Study Area NB6

NSA NB6, shown on pages **C14 through C16** in the project aerials **Appendix C**, is located east of I-75 and spans from NW 63rd Street to S.R. 326. Noise sensitive land uses in this NSA consist of three NAC B residences, identified as NB6-01 through NB6-03.

Currently, the average noise level is 65.7 dB(A) with NB06-01 exceeding the 66.0 dB(A) FDOT NAC. Predicted noise levels with the No-Build Alternative average 68.4 dB(A), with NB06-01 and NB6-02 exceeding the NAC. The Build Alternative's average noise level of 69.1 dB(A) is an increase of 3.3 dB(A) over existing conditions, with the greatest increase being 3.4 dB(A) at receptor NB6-01. While the project noise increases are not considered substantial, the predicted noise levels at NB06-01 and NB6-02 exceed the NAC. Noise barriers were not evaluated because each site is considered isolated, as outlined in the Feasibility Factors discussion in **Section 2.4.3**.

4.0 Conclusions

Noise levels at 357 residences and four special-use sites are predicted to approach or exceed the NAC for the design year 2050 Build Alternative. Except for sites determined to be isolated, noise barriers were considered for all impacted sites identified in the noise modeling. The PD&E noise analysis indicates that three noise barriers could potentially provide reasonable and feasible noise abatement for 277 of the 297 impacted residences in NSAs SB1, SB4, and NB1 and provide a benefit to 32 non-impacted residences.

Noise barriers SB-A2, SB-A3, and SB-A4 were evaluated to reduce traffic noise for 57 impacted receptors in NSAs SB2 and SB3. The barriers meet FDOT acoustic criteria but were unable to meet the cost-reasonableness criterion of $42,000 per benefited receptor. Based on the analyses performed to date, there appear to be no feasible and reasonable solutions available to mitigate the noise impacts for these 57 receptors.

The special-use barrier analyses, SB-A1 and SB-A5, determined that noise abatement was not cost reasonable for the impacted sites identified as SB1-SLU1-1 and SB4-SLU4-2; however, select special-use sites in NSAs SB1 and SB4 will receive incidental benefits from potential noise barriers for the adjacent residential areas.

4.1 Statement of Likelihood

The FDOT is committed to the construction of feasible and reasonable noise abatement measures. Three potentially feasible and reasonable barriers have been identified for this project (see **Table 4-1** for more detail on the noise barriers and their locations in the maps in **Appendix D**), contingent upon the following conditions:

- Final recommendations on the construction of abatement measures are determined during the project's final design and through the public involvement process; and
- Detailed noise analyses during the final design process support the need, feasibility, and reasonableness of providing abatement; and
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost-reasonable criterion; and
- Community input supporting types, heights, and locations of the noise barrier(s) is provided to FDOT; and
- Safety and engineering aspects have been reviewed, and any conflicts or issues resolved.

The date that FDOT approves the Type 2 Categorical Exclusion will be the Date of Public Knowledge. During the design phase, a land use review will be performed to identify all noise sensitive sites that may have received a building permit between the time the PD&E noise study is finalized and prior to the project's Date of Public Knowledge. If the review identifies noise sensitive sites that have been permitted prior to the Date of Public Knowledge, then those sensitive sites will be evaluated for traffic noise impacts and abatement considerations.

Table 4-1 | Potentially Feasible and Reasonable Noise Barrier Evaluation Summary

Noise Study Area	Barrier ID	Number of Impacted Residences	Preliminary Noise Barrier Height (ft)	Preliminary Noise Barrier Length (ft)*1	Preliminary Noise Barrier Location*2	Estimated Barrier Cost *3	Number of Residences Potentially Benefited by a Noise Barrier *4	Cost Per Benefited Residence*6	Meets All FDOT Criteria?*5
NSA SB1	SB1	68	22	3,508	ROW	$2,968,020	72	$41,223	Yes
			8 & 14	1,891	MSE / SHDR				
NSA SB4	SB2	174	22	3,997	ROW	$2,638,020	167	$15,610	Yes
NSA NB1	NB1	55	22	4,004	ROW	$2,642,640	68	$38,862	Yes

*1 Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

*2 ROW = Noise barrier offset 10' inside FDOT ROW.
MSE = Noise barrier mounted on outside shoulder of MSE wall. Height includes safety barrier on which noise barrier is mounted.
SHDR = Noise barrier mounted on outside shoulder of roadway or bridge structure. Height includes safety barrier on which noise barrier is mounted, where necessary.

*3 Unit cost of $30/ft2.

*4 Residences that receive a minimum 5 dB(A) reduction from proposed noise barrier.

*5 Barrier meets 5.0 dB(A) feasibility criterion, 7.0 dB(A) Noise Reduction Design Goal, and $42,000 cost per benefited receptor reasonable cost criterion.

*6 Benefited Special-Use sites are not included in the $42,000 cost per benefited receptor calculation.

5.0 Construction Noise and Vibration

Based on the existing land use within the limits of this project, the construction of the proposed roadway improvements will have temporary noise and vibration impacts. Construction noise sensitive sites include all sites detailed in **Section 3.0** of this report. Vibration-sensitive sites on the project include residences and medical offices. Trucks, compaction equipment, earth-moving equipment, pumps, and generators are sources of construction noise and vibration. During the construction phase of the proposed project, short-term noise and vibration may be generated by stationary and mobile construction equipment. The construction noise and vibration will be temporary at any location and controlled by adherence to the most recent edition of the *FDOT Standard Specifications for Road and Bridge Construction*.

6.0 Public Coordination

A Public Hearing was held to present the preferred alternative and give the public a chance to provide comments and ask questions. The Public Hearing consisted of an In-Person Public Hearing, held on March 4, 2024 and a Virtual Public Hearing held on March 6, 2024. All stakeholder comments and questions received during the public comment period are available under separate cover.

6.1 Noise Impact Contours

To promote compatibility between land development planning and I-75, the distance between the edge of the outside travel lane and the point where the roadway-related noise is predicted to reach the NAC for each activity category was estimated. These estimates are referred to as noise contours and are shown in **Table 6-1**. These estimates provide the general distance at which the traffic noise meets or exceeds the FDOT NAC for each activity type. These contours represent the approximate distance from the nearest edge of pavement to the limits of the area predicted to meet or exceed the NAC in the 2050 Design Year. These contours do not consider any shielding of noise provided by structures or vegetation between the receptor site and the proposed travel lanes.

Table 6-1 | Project Noise Contours

NAC Impact Distance		
Activity Category *1	**Corresponding Noise Abatement Criterion**	**Approximate Distance to I-75 EOP***2
Category A	56 dB(A)	> 1,500 ft
Category B and C	66 dB(A)	465 ft
Category E	71 dB(A)	310 ft

*1 Activity Categories as defined in 23 CFR 772.
*2 EOP = Edge of Pavement; does not account for variation caused by topography, local roads, intervening structures, etc.

7.0 References

1. 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise Federal Register, Vol. 75, No. 133, July 2010.
2. *Project Development and Environment Manual*; FDOT. July 1, 2023.
3. Section 335.17, *Florida Statutes. State Highway Construction; Means Of Noise Abatement.* 2012.
4. *Highway Traffic Noise: Analysis and Abatement Guidance, FHWA-HEP-10-025;* FHWA. December 2011.
5. *Traffic Noise Modeling and Analysis Practitioners Handbook*; FDOT. January 2016.
6. *A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special-Use Locations;* FDOT. 2009.
7. Noise Measurement Handbook; FHWA. June 2018.
8. Standard Specifications for Road and Bridge Construction; FDOT. 2023.

Appendix A Project Noise Traffic Data

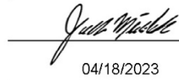
Noise Analysis Traffic Data - I-75 Master Plan (North Section)
2022 Existing Weekday Conditions

Freeway Mainline													
I-75 Mainline Segments	Number of Lanes	Two-Way AADT	Two-Way LOS C AADT	PM Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	PM D-factor	Posted Speed (mph)
I-75													
South of SR 200	6	97,000	99,000	3,598	4,900	10.45%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 200 and SR 40	6	97,500	99,000	3,648	4,900	10.45%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 40 and US 27	6	83,000	99,000	3,399	4,900	10.45%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between US 27 and SR 326	6	74,000	99,000	2,968	4,900	10.45%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 326 and CR 318	6	66,000	69,000	2,437	3,990	10.45%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
Between CR 318 and CR 234	6	67,500	69,000	2,470	3,990	10.45%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
North of CR 234	6	70,500	69,000	2,278	3,990	10.45%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
I-75 Ramps													
I-75 Ramps	Number of Lanes	One-Way AADT	One-Way LOS C AADT	PM Peak Hour Peak Direction	Peak Hour Peak Direction HCM Capacity	Design Hr. % T	PM Design Hr. % MT	PM Design Hr. % HT	PM Design Hr. % Buses	PM Design Hr. % Motorcycles	K-factor	PM D-factor	Operational Speed (mph)
I-75 at SR 200													
Northbound off	1	7,900	*	536	2,000	5.20%	3.16%	2.02%	0.47%	0.07%	9.0%	100.0%	35
Southbound on	1	7,600	*	657	2,100	6.20%	4.11%	2.13%	0.47%	0.04%	9.0%	100.0%	45
Northbound on	1	8,000	*	624	2,100	3.40%	2.21%	1.22%	0.25%	0.14%	9.0%	100.0%	45
Southbound off	1	7,800	*	707	2,000	5.10%	3.61%	1.52%	0.39%	0.93%	9.0%	100.0%	35
I-75 at SR 40													
Northbound off	1	5,900	*	311	2,000	11.40%	6.42%	4.93%	0.98%	0.13%	9.0%	100.0%	35
Southbound on	1	6,100	*	592	2,100	9.70%	4.59%	5.13%	1.06%	0.08%	9.0%	100.0%	45
Northbound on	1	5,200	*	412	2,100	11.40%	5.86%	5.48%	0.96%	0.06%	9.0%	100.0%	45
Southbound off	1	4,900	*	343	2,000	10.70%	5.14%	5.57%	0.86%	0.08%	9.0%	100.0%	35
I-75 at US 27													
Northbound off	1	8,400	*	630	2,000	7.10%	2.72%	4.36%	0.18%	0.03%	9.0%	100.0%	30
Southbound on	1	8,700	*	627	2,100	9.40%	4.12%	5.32%	0.55%	1.47%	9.0%	100.0%	45
Northbound on	1	2,300	*	161	2,100	14.20%	4.60%	9.62%	0.85%	2.03%	9.0%	100.0%	45
Southbound off	1	2,800	*	196	2,000	11.80%	3.49%	8.34%	0.59%	1.06%	9.0%	100.0%	35
I-75 at SR 326													
Northbound off	1	9,300	*	627	2,000	8.20%	2.37%	6.26%	0.17%	0.04%	9.0%	100.0%	35
Southbound on (from EB SR 326)	1	3,500	*	215	2,100	11.90%	3.34%	8.63%	0.80%	3.97%	9.0%	100.0%	45
Southbound on (from WB SR 326 Loop)	1	6,800	*	569	1,900	16.20%	0.92%	15.25%	0.12%	0.06%	9.0%	100.0%	25
Northbound on	1	3,300	*	187	2,100	17.30%	0.94%	16.37%	0.12%	0.36%	9.0%	100.0%	45
Southbound off	1	4,000	*	253	2,100	13.40%	1.42%	12.00%	0.12%	0.13%	9.0%	100.0%	45
I-75 at CR 318													
Northbound off	1	2,000	*	148	2,000	16.90%	1.44%	15.41%	0.34%	0.50%	10.5%	100.0%	35
Southbound on	1	1,900	*	104	2,100	19.30%	5.30%	13.99%	1.95%	0.16%	10.5%	100.0%	45
Northbound on	1	1,900	*	115	2,100	19.50%	6.04%	13.43%	2.31%	0.08%	10.5%	100.0%	45
Southbound off	1	2,000	*	137	2,000	13.30%	0.77%	12.47%	0.11%	0.17%	10.5%	100.0%	35
I-75 at CR 234													
Northbound off	1	2,700	*	165	2,000	8.40%	4.70%	3.74%	0.92%	1.16%	10.5%	100.0%	35
Southbound on	1	3,100	*	302	2,100	6.40%	3.04%	3.36%	0.81%	0.04%	10.5%	100.0%	45
Northbound on	1	1,400	*	65	2,100	7.70%	5.35%	2.38%	0.45%	1.79%	10.5%	100.0%	45
Southbound off	1	1,400	*	110	2,000	6.50%	2.94%	3.52%	0.28%	0.38%	10.5%	100.0%	35
Arterials and Cross Streets													
Arterial Segment	Number of Lanes	Two-Way AADT	Two-Way LOS C AADT	PM Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	PM D-factor	Posted Speed (mph)
SR 200													
West of I-75	6	36,500	47,700	2,262	2,360	4.40%	3.01%	1.68%	1.21%	1.10%	9.0%	55.2%	45
East of I-75	6	43,500	47,700	2,228	2,360	4.90%	3.25%	1.76%	0.32%	0.17%	9.0%	54.1%	45
SR 40													
West of I-75	4	28,500	30,700	1,445	1,520	6.40%	3.49%	3.12%	0.44%	0.19%	9.0%	56.1%	50
East of I-75	4	33,500	30,700	1,547	1,520	5.90%	3.00%	3.04%	0.51%	0.47%	9.0%	52.9%	50
US 27													
West of I-75	4	29,000	30,700	1,444	1,520	6.60%	3.31%	2.93%	0.32%	0.34%	9.0%	56.9%	45
East of I-75	4	31,000	30,700	1,497	1,520	6.20%	2.73%	3.32%	0.43%	0.16%	9.0%	53.9%	45
SR 326													
West of I-75	4	11,000	45,800	411	2,390	14.80%	4.63%	10.18%	1.03%	0.56%	9.0%	54.7%	45
East of I-75	4	24,500	45,800	1,054	2,390	12.00%	5.35%	8.42%	1.53%	0.76%	9.0%	53.7%	45
CR 318													
West of I-75	2	3,500	8,200	152	430	7.20%	4.15%	2.95%	0.26%	0.18%	9.5%	55.2%	45
East of I-75	2	6,400	8,200	332	430	15.30%	7.69%	12.83%	2.34%	1.15%	9.5%	55.4%	45
CR 234													
West of I-75	2	1,900	8,200	137	430	6.40%	5.34%	1.06%	0.20%	0.17%	9.5%	71.0%	45
East of I-75	2	7,700	8,200	446	430	5.30%	3.30%	1.96%	0.52%	0.27%	9.5%	63.8%	45

AADT: Annual Average Daily Traffic *MT: Medium Trucks* *HT: Heavy Trucks*

(1) Number of lanes were obtained from field observations and aerial maps. Number of lanes shown are based on direction with fewer lanes. Noise analysis to consider correct laneage per guidelines.
(2) Traffic data is obtained from the operational analysis for the I-75 Master Plan (North Section) study.
(3) Peak hour demand and LOS C peak hour maximum service volumes are provided directionally.
(4) LOS C targets are based on the FDOT 2023 Quality/Level of Service Handbook tables and adjusted for local conditions.
(5) LOS C AADTs are estimated using K and D factors and the design hour peak direction LOS C maximum service volumes.
(6) The vehicle classification factors are obtained from Florida Traffic Online and 2019 vehicle classification counts.
(7) Posted speed data are obtained by field observations.
(8) Context classifications for 2023 QLOS methodologies were determined based on FDOT Straight Line Diagrams (SLDs).
(9) No QLOS Generalized Service Volume or HCM thresholds are available for ramp LOS C AADTs.
(10) No QLOS Generalized Service Volumes for ramp LOS C directional peak hour volumes, therefore HCM 6th Edition Exhibit 14-12 was used to determine ramp capacity for comparison purposes.

Engineer: Jacob Mirabella

Signature: 

Date: 04/18/2023

Noise Analysis Traffic Data - I-75 Master Plan (North Section)
2050 No Build Weekday Conditions

Freeway Mainline

I-75 Mainline Segments	Number of Lanes	Two-Way AADT	Two-Way LOS C AADT	PM Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	PM D-factor	Posted Speed (mph)
I-75													
South of SR 200	6	164,000	99,000	8,679	4,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 200 and SR 40	6	163,500	99,000	8,566	4,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 40 and US 27	6	164,400	99,000	8,356	4,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between US 27 and NW 49th St	6	152,800	99,000	7,882	4,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between NW 49th St and SR 326	6	142,500	99,000	7,522	4,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 326 and CR 318	6	123,500	69,000	6,650	3,990	10.90%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
Between CR 318 and CR 234	6	119,300	69,000	6,540	3,990	10.90%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
North of CR 234	6	109,300	69,000	5,825	3,990	10.90%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70

I-75 Ramps

I-75 Ramps	Number of Lanes	One-Way AADT	One-Way LOS C AADT	PM Peak Hour Peak Direction	Peak Hour Peak Direction	Design Hr. % T	PM Design Hr. % MT	PM Design Hr. % HT	PM Design Hr. % Buses	PM Design Hr. % Motorcycles	K-factor	PM D-factor	Operational Speed (mph)
I-75 at SR 200													
Northbound off	1	12,000	*	909	2,000	5.20%	3.16%	2.02%	0.47%	0.07%	9.0%	100.0%	35
Southbound on	1	11,500	*	1,206	2,100	6.20%	4.11%	2.13%	0.47%	0.04%	9.0%	100.0%	45
Northbound on	1	12,000	*	977	2,100	3.40%	2.21%	1.22%	0.25%	0.14%	9.0%	100.0%	45
Southbound off	1	11,000	*	1,093	2,000	5.10%	3.61%	1.52%	0.39%	0.93%	9.0%	100.0%	35
I-75 at SR 40													
Northbound off	1	7,600	*	483	2,000	11.40%	6.42%	4.93%	0.98%	0.13%	9.0%	100.0%	35
Southbound on	1	7,500	*	867	2,100	9.70%	4.59%	5.13%	1.06%	0.08%	9.0%	100.0%	45
Northbound on	1	7,800	*	783	2,100	11.40%	5.86%	5.48%	0.96%	0.06%	9.0%	100.0%	45
Southbound off	1	8,200	*	657	2,000	10.70%	5.14%	5.57%	0.86%	0.08%	9.0%	100.0%	35
I-75 at US 27													
Northbound off	1	12,000	*	1,069	2,000	7.10%	2.72%	4.36%	0.18%	0.03%	9.0%	100.0%	30
Southbound on	1	12,500	*	1,136	2,100	9.40%	4.12%	5.32%	0.55%	1.47%	9.0%	100.0%	45
Northbound on	1	6,300	*	508	2,100	14.20%	4.60%	9.62%	0.85%	2.03%	9.0%	100.0%	45
Southbound off	1	6,600	*	662	2,000	11.80%	3.49%	8.34%	0.59%	1.06%	9.0%	100.0%	35
I-75 at NW 49th St													
Northbound off	1	9,900	*	951	2,000	12.00%	2.54%	5.31%	0.17%	0.04%	9.0%	100.0%	35
Southbound on	1	9,500	*	804	2,100	12.00%	2.80%	9.73%	0.49%	1.83%	9.0%	100.0%	45
Northbound on	1	4,600	*	375	2,100	12.00%	2.77%	12.99%	0.49%	1.20%	9.0%	100.0%	45
Southbound off	1	4,500	*	444	2,000	12.00%	2.46%	10.17%	0.35%	0.60%	9.0%	100.0%	35
I-75 at SR 326													
Northbound off	1	19,500	*	1,521	2,000	8.20%	2.37%	6.26%	0.17%	0.04%	9.0%	100.0%	35
Southbound on (from EB SR 326)	1	8,100	*	640	2,100	11.90%	3.34%	8.63%	0.80%	3.97%	9.0%	100.0%	45
Southbound on (from WB SR 326 Loop)	1	11,000	*	1,304	1,900	16.20%	0.92%	15.25%	0.12%	0.06%	9.0%	100.0%	25
Northbound on	1	8,600	*	697	2,100	17.30%	0.94%	16.37%	0.12%	0.36%	9.0%	100.0%	45
Southbound off	1	11,000	*	1,072	2,100	13.40%	1.42%	12.00%	0.12%	0.13%	9.0%	100.0%	45
I-75 at CR 318													
Northbound off	1	4,800	*	641	2,000	16.90%	1.44%	15.41%	0.34%	0.50%	10.5%	100.0%	35
Southbound on	1	6,100	*	495	2,100	19.30%	5.30%	13.99%	1.95%	0.16%	10.5%	100.0%	45
Northbound on	1	3,000	*	306	2,100	19.50%	6.04%	13.43%	2.31%	0.08%	10.5%	100.0%	45
Southbound off	1	3,700	*	385	2,000	13.30%	0.77%	12.47%	0.11%	0.17%	10.5%	100.0%	35
I-75 at CR 234													
Northbound off	1	6,700	*	506	2,000	8.40%	4.70%	3.74%	0.92%	1.16%	10.5%	100.0%	35
Southbound on	1	7,300	*	964	2,100	6.40%	3.04%	3.36%	0.81%	0.04%	10.5%	100.0%	45
Northbound on	1	1,900	*	171	2,100	7.70%	5.35%	2.38%	0.45%	1.79%	10.5%	100.0%	45
Southbound off	1	2,100	*	249	2,000	6.50%	2.94%	3.52%	0.28%	0.38%	10.5%	100.0%	35

Arterials and Cross Streets

Arterial Segment	Number of Lanes	Two-Way AADT	Two-Way LOS C AADT	PM Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	PM D-factor	Posted Speed (mph)
SR 200													
West of I-75	6	45,000	47,700	2,815	2,360	4.40%	3.01%	1.68%	1.21%	1.10%	9.0%	55.2%	45
East of I-75	6	53,500	47,700	2,776	2,360	4.90%	3.25%	1.76%	0.32%	0.17%	9.0%	54.1%	45
SR 40													
West of I-75	4	38,000	30,700	1,919	1,520	6.40%	3.49%	3.12%	0.44%	0.19%	9.0%	56.1%	50
East of I-75	4	44,500	30,700	2,119	1,520	5.90%	3.00%	3.04%	0.51%	0.47%	9.0%	52.9%	50
US 27													
West of I-75	4	42,000	30,700	2,151	1,520	6.60%	3.31%	2.93%	0.32%	0.34%	9.0%	56.9%	45
East of I-75	4	40,500	30,700	1,965	1,520	6.20%	2.73%	3.32%	0.43%	0.16%	9.0%	53.9%	45
NW 49th St													
West of I-75	4	23,000	45,800	1,048	2,390	12.00%	3.97%	6.56%	0.67%	0.45%	9.0%	50.6%	45
East of I-75	4	19,000	45,800	950	2,390	12.00%	4.04%	5.87%	0.98%	0.46%	9.0%	55.6%	45
SR 326													
West of I-75	4	21,500	45,800	1,058	2,390	14.80%	4.63%	10.18%	1.03%	0.56%	9.0%	54.7%	45
East of I-75	4	35,000	45,800	1,692	2,390	12.00%	5.35%	8.42%	1.53%	0.76%	9.0%	53.7%	45
CR 318													
West of I-75	2	8,200	8,200	430	430	7.20%	4.15%	2.95%	0.26%	0.18%	9.5%	55.2%	45
East of I-75	2	12,000	8,200	632	430	15.30%	7.69%	12.83%	2.34%	1.15%	9.5%	55.4%	45
CR 234													
West of I-75	2	7,500	8,200	506	430	6.40%	5.34%	1.06%	0.20%	0.17%	9.5%	71.0%	45
East of I-75	2	13,000	8,200	788	430	5.30%	3.30%	1.96%	0.52%	0.27%	9.5%	63.8%	45

AADT: Annual Average Daily Traffic *MT: Medium Trucks* *HT: Heavy Trucks*

(1) Number of lanes were obtained from field observations and aerial maps. Number of lanes shown are based on direction with fewer lanes. Noise analysis to consider correct laneage per guidelines.
(2) Traffic data is obtained from the operational analysis for the I-75 Master Plan (North Section) study.
(3) Peak hour demand and LOS C peak hour maximum service volumes are provided directionally.
(4) LOS C targets are based on the FDOT 2023 Quality/Level of Service Handbook tables and adjusted for local conditions.
(5) LOS C AADTs are estimated using K and D factors and the design hour peak direction LOS C maximum service volumes.
(6) The vehicle classification factors are obtained from Florida Traffic Online and 2019 vehicle classification counts.
(7) Posted speed data are obtained by field observations.
(8) Context classifications for 2023 QLOS methodologies were determined based on FDOT Straight Line Diagrams (SLDs).
(9) No QLOS Generalized Service Volume or HCM thresholds are available for ramp LOS C AADTs.
(10) No QLOS Generalized Service Volumes for ramp LOS C directional peak hour volumes, therefore HCM 6th Edition Exhibit 14-12 was used to determine ramp capacity for comparison purposes.
(11) I-75 at NW 49th Street is a future interchange. The future posted speed is not confirmed at this time, therefore, 45mph is assumed, similar to nearby facilities.
(12) I-75 at NW 49th Street is a future interchange. Therefore, existing vehicle classification data is not available, nor have future vehicle classifications been determine. Therefore, the averages of nearby similar interchanges are assumed.
(13) No vehicle classification forecasts are available. This summary assumes that future vehicle classification percentages of overall traffic will be the same as existing conditions.

Engineer: Jacob Mirabella
Signature:
Date: 04/18/2023

Noise Analysis Traffic Data - I-75 Master Plan (North Section)
2050 Interim Build Weekday Conditions

Freeway Mainline													
I-75 Mainline Segments	Number of Lanes	Two-Way AADT	Two-Way LOS C AADT	PM Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	PM D-factor	Posted Speed (mph)
I-75													
South of SR 200	8	164,000	119,000	8,679	5,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 200 and SR 40	8	163,500	119,000	8,566	5,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 40 and US 27	8	164,400	119,000	8,356	5,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between US 27 and NW 49th St	8	152,800	119,000	7,882	5,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between NW 49th St and SR 326	8	142,500	119,000	7,522	5,900	10.90%	6.13%	9.12%	0.48%	0.15%	9.0%	58.8%	70
Between SR 326 and CR 318	6	123,500	69,000	6,650	3,990	10.90%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
Between CR 318 and CR 234	6	119,300	69,000	6,540	3,990	10.90%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
North of CR 234	6	109,300	69,000	5,825	3,990	10.90%	6.13%	9.12%	0.48%	0.15%	10.5%	58.8%	70
I-75 Ramps													
I-75 Ramps	Number of Lanes	One-Way AADT	One-Way LOS C AADT	PM Peak Hour Peak Direction	Peak Hour Peak Direction	Design Hr. % T	PM Design Hr. % MT	PM Design Hr. % HT	PM Design Hr. % Buses	PM Design Hr. % Motorcycles	K-factor	PM D-factor	Operational Speed (mph)
I-75 at SR 200													
Northbound off	1	12,000	*	909	2,000	5.20%	3.16%	2.02%	0.47%	0.07%	9.0%	100.0%	35
Southbound on	1	11,500	*	1,206	2,100	6.20%	4.11%	2.13%	0.47%	0.04%	9.0%	100.0%	45
Northbound on	1	12,000	*	977	2,100	3.40%	2.21%	1.22%	0.25%	0.14%	9.0%	100.0%	45
Southbound off	1	11,000	*	1,093	2,000	5.10%	3.61%	1.52%	0.39%	0.93%	9.0%	100.0%	35
I-75 at SR 40													
Northbound off	1	7,600	*	483	2,000	11.40%	6.42%	4.93%	0.98%	0.13%	9.0%	100.0%	35
Southbound on	1	7,500	*	867	2,100	9.70%	4.59%	5.13%	1.08%	0.08%	9.0%	100.0%	45
Northbound on	1	7,800	*	783	2,100	11.40%	5.86%	5.48%	0.96%	0.06%	9.0%	100.0%	45
Southbound off	1	8,200	*	657	2,000	10.70%	5.14%	5.57%	0.86%	0.08%	9.0%	100.0%	35
I-75 at US 27													
Northbound off	1	12,000	*	1,069	2,000	7.10%	2.72%	4.36%	0.18%	0.03%	9.0%	100.0%	30
Southbound on	1	12,500	*	1,136	2,100	9.40%	4.12%	5.32%	0.55%	1.47%	9.0%	100.0%	45
Northbound on	1	6,300	*	508	2,100	14.20%	4.60%	9.62%	0.85%	2.03%	9.0%	100.0%	45
Southbound off	1	6,600	*	662	2,000	11.80%	3.49%	8.34%	0.59%	1.06%	9.0%	100.0%	35
I-75 at NW 49th St													
Northbound off	1	9,900	*	951	2,000	12.00%	2.54%	5.31%	0.17%	0.04%	9.0%	100.0%	35
Southbound on	1	9,500	*	804	2,100	12.00%	2.80%	9.73%	0.49%	1.83%	9.0%	100.0%	45
Northbound on	1	4,600	*	375	2,100	12.00%	2.77%	12.99%	0.49%	1.20%	9.0%	100.0%	45
Southbound off	1	4,500	*	444	2,000	12.00%	2.46%	10.17%	0.35%	0.60%	9.0%	100.0%	35
I-75 at SR 326													
Northbound off	1	19,500	*	1,521	2,000	8.20%	2.37%	6.26%	0.17%	0.04%	9.0%	100.0%	35
Southbound on (from EB SR 326)	1	8,100	*	640	2,100	11.90%	3.34%	8.63%	0.80%	3.97%	9.0%	100.0%	45
Southbound on (from WB SR 326 Loop)	1	11,000	*	1,304	1,900	16.20%	0.92%	15.25%	0.12%	0.06%	9.0%	100.0%	25
Northbound on	1	8,600	*	697	2,100	17.30%	0.94%	16.37%	0.12%	0.38%	9.0%	100.0%	45
Southbound off	1	11,000	*	1,072	2,100	13.40%	1.42%	12.00%	0.12%	0.13%	9.0%	100.0%	45
I-75 at CR 318													
Northbound off	1	4,800	*	641	2,000	16.90%	1.44%	15.41%	0.34%	0.50%	10.5%	100.0%	35
Southbound on	1	6,100	*	495	2,100	19.30%	5.30%	13.99%	1.95%	0.16%	10.5%	100.0%	45
Northbound on	1	3,000	*	306	2,100	19.50%	6.04%	13.43%	2.31%	0.08%	10.5%	100.0%	45
Southbound off	1	3,700	*	385	2,000	13.30%	0.77%	12.47%	0.11%	0.17%	10.5%	100.0%	35
I-75 at CR 234													
Northbound off	1	6,700	*	506	2,000	8.40%	4.70%	3.74%	0.92%	1.16%	10.5%	100.0%	35
Southbound on	1	7,300	*	964	2,100	6.40%	3.04%	3.36%	0.81%	0.04%	10.5%	100.0%	45
Northbound on	1	1,900	*	171	2,100	7.70%	5.35%	2.38%	0.45%	1.79%	10.5%	100.0%	45
Southbound off	1	2,100	*	249	2,000	6.50%	2.94%	3.52%	0.28%	0.38%	10.5%	100.0%	35
Arterials and Cross Streets													
Arterial Segment	Number of Lanes	Two-Way AADT	Two-Way LOS C AADT	PM Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	PM D-factor	Posted Speed (mph)
SR 200													
West of I-75	6	45,000	47,700	2,815	2,360	4.40%	3.01%	1.68%	1.21%	1.10%	9.0%	55.2%	45
East of I-75	6	53,500	47,700	2,776	2,360	4.90%	3.25%	1.76%	0.32%	0.17%	9.0%	54.1%	45
SR 40													
West of I-75	4	38,000	30,700	1,919	1,520	6.40%	3.49%	3.12%	0.44%	0.19%	9.0%	56.1%	50
East of I-75	4	44,500	30,700	2,119	1,520	5.90%	3.00%	3.04%	0.51%	0.47%	9.0%	52.9%	50
US 27													
West of I-75	4	42,000	30,700	2,151	1,520	6.60%	3.31%	2.93%	0.32%	0.34%	9.0%	56.9%	45
East of I-75	4	40,500	30,700	1,965	1,520	6.20%	2.73%	3.32%	0.43%	0.16%	9.0%	53.9%	45
NW 49th St													
West of I-75	4	23,000	45,800	1,048	2,390	12.00%	3.97%	6.56%	0.67%	0.45%	9.0%	50.6%	45
East of I-75	4	19,000	45,800	950	2,390	12.00%	4.04%	5.87%	0.98%	0.46%	9.0%	55.6%	45
SR 326													
West of I-75	4	21,500	45,800	1,058	2,390	14.80%	4.63%	10.18%	1.03%	0.56%	9.0%	54.7%	45
East of I-75	4	35,000	45,800	1,692	2,390	12.00%	5.35%	8.42%	1.53%	0.76%	9.0%	53.7%	45
CR 318													
West of I-75	2	8,200	8,200	430	430	7.20%	4.15%	2.95%	0.26%	0.18%	9.5%	55.2%	45
East of I-75	2	12,000	8,200	632	430	15.30%	7.69%	12.83%	2.34%	1.15%	9.5%	55.4%	45
CR 234													
West of I-75	2	7,500	8,200	506	430	6.40%	5.34%	1.06%	0.20%	0.17%	9.5%	71.0%	45
East of I-75	2	13,000	8,200	788	430	5.30%	3.30%	1.96%	0.52%	0.27%	9.5%	63.8%	45

AADT: Annual Average Daily Traffic *MT: Medium Trucks* *HT: Heavy Trucks*

(1) Number of lanes were obtained from field observations and aerial maps. Number of lanes shown are based on direction with fewer lanes. Noise analysis to consider correct laneage per guidelines.
(2) Traffic data is obtained from the operational analysis for the I-75 Master Plan (North Section) study.
(3) Peak hour demand and LOS C peak hour maximum service volumes are provided directionally.
(4) LOS C targets are based on the FDOT 2023 Quality/Level of Service Handbook tables and adjusted for local conditions.
(5) LOS C AADTs are estimated using K and D factors and the design hour peak direction LOS C maximum service volumes.
(6) The vehicle classification factors are obtained from Florida Traffic Online and 2019 vehicle classification counts.
(7) Posted speed data are obtained by field observations.
(8) Context classifications for 2023 QLOS methodologies were determined based on FDOT Straight Line Diagrams (SLDs).
(9) No QLOS Generalized Service Volume or HCM thresholds are available for ramp LOS C AADTs.
(10) No QLOS Generalized Service Volumes for ramp LOS C directional peak hour volumes, therefore HCM 6th Edition Exhibit 14-12 was used to determine ramp capacity for comparison purposes.
(11) I-75 at NW 49th Street is a future interchange. The future posted speed is not confirmed at this time, therefore, 45mph is assumed, similar to nearby facilities.
(12) I-75 at NW 49th Street is a future interchange. Therefore, existing vehicle classification data is not available, nor have future vehicle classifications been determine. Therefore, the averages of nearby similar interchanges are assumed.
(13) No vehicle classification forecasts are available. This summary assumes that future vehicle classification percentages of overall traffic will be the same as existing conditions.

Engineer: Jacob Mirabella
Signature: Jacob Mirabella
Date: 04/18/2023

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

(C3C-Suburban Commercial)

Peak Hour Directional SW 20th St

	B	C	D	E
1 Lane	*	760	1,070	**
2 Lane	*	1,520	1,810	**
3 Lane	*	2,360	2,680	**
4 Lane	*	3,170	3,180	**

Peak Hour Two-Way SW 38th St

	B	C	D	E
2 Lane	*	1,380	1,950	**
4 Lane	*	2,760	3,290	**
6 Lane	*	4,290	4,870	**
8 Lane	*	5,760	5,780	**

AADT

	B	C	D	E
2 Lane	*	15,300	21,700	**
4 Lane	*	30,700	36,600	**
6 Lane	*	47,700	54,100	**
8 Lane	*	64,000	64,200	**

(C3R-Suburban Residential)

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

Adjustment Factors

The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities
The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80
Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.
* Cannot be achieved using table input value defaults.
** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.

Appendix B Noise Impact Comparison Matrix

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
NSA SB1: West of I-75 from Project Begin to SW 20th St.- Illustrated on Pages C2 through C4 - Appendix C							
SB1-01	3	66.0	**75.0**	**76.6**	**77.5**	2.5	*Yes*
SB1-02	1	66.0	**72.4**	**74.2**	**75.2**	2.8	*Yes*
SB1-03	4	66.0	**69.4**	**71.2**	**72.3**	2.9	*Yes*
SB1-04	1	66.0	**70.7**	**72.5**	**73.5**	2.8	*Yes*
SB1-05	1	66.0	**70.4**	**72.1**	**73.2**	2.8	*Yes*
SB1-06	4	66.0	**68.7**	**70.6**	**71.5**	2.8	*Yes*
SB1-07	1	66.0	**69.2**	**71.0**	**72.1**	2.9	*Yes*
SB1-08	1	66.0	**69.0**	**70.9**	**71.9**	2.9	*Yes*
SB1-09	1	66.0	**67.2**	**69.0**	**70.3**	3.1	*Yes*
SB1-10	4	66.0	**66.3**	**68.2**	**69.4**	3.1	*Yes*
SB1-11	3	66.0	**66.7**	**68.6**	**69.8**	3.1	*Yes*
SB1-12	3	66.0	65.2	**67.0**	**68.4**	3.2	*Yes*
SB1-13	4	66.0	64.9	**66.8**	**68.1**	3.2	*Yes*
SB1-14	2	66.0	64.1	**66.0**	**67.3**	3.2	*Yes*
SB1-15	1	66.0	63.2	65.1	**66.3**	3.1	*Yes*
SB1-16	1	66.0	63.2	65.1	**66.2**	3.0	*Yes*
SB1-17	4	66.0	61.9	63.8	64.9	3.0	-
SB1-18	2	66.0	62.3	64.2	65.3	3.0	-
SB1-19	1	66.0	61.3	63.3	64.2	2.9	-
SB1-20	3	66.0	**70.9**	**72.5**	**74.1**	3.2	*Yes*

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
SB1-21	3	66.0	**68.7**	**70.4**	**72.1**	3.4	*Yes*
SB1-22	1	66.0	**67.4**	**69.1**	**70.8**	3.4	*Yes*
SB1-23	2	66.0	**66.7**	**68.5**	**70.1**	3.4	*Yes*
SB1-24	3	66.0	65.4	**67.2**	**68.6**	3.2	*Yes*
SB1-25	2	66.0	64.7	**66.4**	**67.9**	3.2	*Yes*
SB1-26	3	66.0	63.6	65.5	**66.8**	3.2	*Yes*
SB1-27	2	66.0	62.7	64.6	65.9	3.2	-
SB1-28	3	66.0	62.0	63.9	65.1	3.1	-
SB1-29	3	66.0	61.3	63.3	64.3	3.0	-
SB1-30	1	66.0	**70.6**	**72.2**	**73.2**	2.6	*Yes*
SB1-31	1	66.0	**70.1**	**71.6**	**72.8**	2.7	*Yes*
SB1-32	1	66.0	**70.3**	**71.7**	**72.8**	2.5	*Yes*
SB1-33	1	66.0	**70.7**	**72.1**	**73.0**	2.3	*Yes*
SB1-34	1	66.0	**67.1**	**68.9**	**70.2**	3.1	*Yes*
SB1-35	1	66.0	**67.5**	**69.2**	**70.7**	3.2	*Yes*
SB1-36	1	66.0	**67.0**	**68.8**	**70.1**	3.1	*Yes*
SB1-37	1	66.0	**67.3**	**69.0**	**70.2**	2.9	*Yes*
SB1-38	1	66.0	**68.9**	**70.2**	**71.0**	2.1	*Yes*
SB1-39	1	66.0	63.8	65.7	**66.7**	2.9	*Yes*
SB1-40	1	66.0	64.0	65.8	**67.0**	3.0	*Yes*
SB1-41	1	66.0	64.2	65.9	**67.0**	2.8	*Yes*
SB1-42	1	66.0	64.5	**66.1**	**67.2**	2.7	*Yes*

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
SB1-43	1	66.0	65.4	**66.7**	**67.6**	2.2	*Yes*
SB1-44	1	66.0	**67.7**	**68.5**	**69.0**	1.3	*Yes*
SB1-45	1	66.0	62.1	64.0	65.1	3.0	-
SB1-46	1	66.0	61.5	63.1	64.2	2.7	-
SB1-47	1	66.0	62.0	63.4	64.3	2.3	-
SB1-48	1	66.0	63.4	64.4	65.2	1.8	-
SB1-49	1	66.0	**67.4**	**67.8**	**68.2**	0.8	*Yes*
SB1-SLU1-1 NAC C	1	66.0	**73.2**	**74.8**	**76.0**	2.8	*Yes*
SLU1-1.2			63.4	*65.4*	**66.3**	*2.9*	
SLU1-1.3			62.3	*64.3*	*65.8*	*3.5*	
NSA Summary	***88***		***66.5***	***68.2***	***69.3***	***2.8***	
NSA SB2: West of I-75 from SW 20th St to SR 40 - Illustrated on Pages C4 through C6 - Appendix C							
SB2-01	3	66.0	**72.2**	**74.0**	**74.6**	2.4	*Yes*
SB2-02	3	66.0	**71.0**	**72.8**	**73.5**	2.5	*Yes*
SB2-03	3	66.0	**69.5**	**71.4**	**72.1**	2.6	*Yes*
SB2-04	1	66.0	**68.5**	**70.4**	**71.3**	2.8	*Yes*
SB2-05	3	66.0	**67.4**	**69.3**	**70.1**	2.7	*Yes*
SB2-06	3	66.0	**66.3**	**68.3**	**69.1**	2.8	*Yes*

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
SB2-07	3	66.0	65.6	**67.6**	**68.6**	3.0	*Yes*
SB2-08	3	66.0	64.7	**66.7**	**67.6**	2.9	*Yes*
SB2-09	3	66.0	64.0	**66.0**	**67.0**	3.0	*Yes*
SB2-10	3	66.0	63.4	65.4	**66.3**	2.9	*Yes*
SB2-11	3	66.0	62.6	64.7	65.6	3.0	-
SB2-12	1	66.0	61.9	64.0	64.8	2.9	-
SB2-SLU2-1 NAC E	1	71.0	67.4	69.4	69.2	1.8	-
NSA Summary	***33***		***66.5***	***68.5***	***69.2***	***2.7***	
NSA SB3: West of I-75 from SR 40 to US 27 - Illustrated on Pages C6 and C9 - Appendix C							
SB3-01	1	66.0	64.5	**66.7**	**66.8**	2.3	*Yes*
SB3-02	2	66.0	**72.5**	**74.3**	**74.9**	2.4	*Yes*
SB3-03	1	66.0	**71.4**	**73.3**	**73.5**	2.1	*Yes*
SB3-04	4	66.0	**68.1**	**70.0**	**70.2**	2.1	*Yes*
SB3-05	1	66.0	**67.0**	**69.0**	**69.2**	2.2	*Yes*
SB3-06	4	66.0	**66.3**	**68.3**	**68.6**	2.3	*Yes*
SB3-07	1	66.0	65.1	**67.2**	**67.3**	2.2	*Yes*
SB3-08	3	66.0	64.0	**66.1**	**66.3**	2.3	*Yes*
SB3-09	1	66.0	64.3	**66.0**	**66.3**	2.0	*Yes*

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
SB3-10	6	66.0	63.0	65.1	65.3	2.3	-
SB3-11	1	66.0	63.0	64.8	65.1	2.1	-
SB3-12	1	66.0	**72.6**	**74.4**	**75.0**	2.4	*Yes*
SB3-13	3	66.0	**73.7**	**75.5**	**76.1**	2.4	*Yes*
SB3-14	1	66.0	**70.5**	**72.5**	**73.1**	2.6	*Yes*
SB3-15	2	66.0	**67.3**	**69.4**	**69.9**	2.6	*Yes*
SB3-16	1	66.0	65.9	**68.1**	**68.6**	2.7	*Yes*
SB3-17	1	66.0	64.8	**67.1**	**67.5**	2.7	*Yes*
SB3-18	3	66.0	63.1	65.4	65.7	2.6	-
SB3-19	1	66.0	62.0	64.3	64.6	2.6	-
SB3-SLU3-1 NAC E	1	71.0	61.7	64.3	64.3	2.6	-
NSA Summary	**39**		**66.5**	**68.6**	**68.9**	**2.4**	
NSA SB4: West of I-75 from US 27 to NW 49th - Illustrated on Pages C9 through C12 - Appendix C							
SB4-01	20	66.0	**71.3**	**74.2**	**75.5**	4.2	*Yes*
SB4-02	20	66.0	**69.0**	**72.0**	**73.2**	4.2	*Yes*
SB4-03	20	66.0	**66.8**	**69.7**	**70.9**	4.1	*Yes*
SB4-04	20	66.0	**66.2**	**69.0**	**70.6**	4.4	*Yes*
SB4-05	20	66.0	64.8	**67.5**	**68.6**	3.8	*Yes*

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
SB4-06	20	66.0	63.4	**66.1**	**67.2**	3.8	*Yes*
SB4-07	20	66.0	61.2	64.1	**66.2**	5.0	*Yes*
SB4-08	1	66.0	60.7	63.3	65.1	4.4	-
SB4-09	7	66.0	**71.2**	**73.9**	**72.7**	1.5	*Yes*
SB4-10	8	66.0	**66.8**	**69.6**	**69.6**	2.8	*Yes*
SB4-11	1	66.0	65.9	**68.8**	**69.3**	3.4	*Yes*
SB4-12	8	66.0	64.4	**67.3**	**67.9**	3.5	*Yes*
SB4-13	2	66.0	64.0	**67.0**	**67.9**	3.9	*Yes*
SB4-14	3	66.0	63.1	**66.1**	**66.8**	3.7	*Yes*
SB4-15	1	66.0	63.0	**66.0**	**66.9**	3.9	*Yes*
SB4-16	2	66.0	62.9	65.9	**67.0**	4.1	*Yes*
SB4-17	2	66.0	62.3	65.3	**66.2**	3.9	*Yes*
SB4-18	8	66.0	61.5	64.6	65.5	4.0	-
SB4-19	4	66.0	61.0	63.9	65.2	4.2	-
SB4-20	5	66.0	60.2	63.2	64.4	4.2	-
SB4-SLU4-1 NAC E	1	71.0	60.3	63.0	63.0	2.7	-
SB4-SLU4-2 NAC E	1	71.0	**70.8**	**73.7**	**73.9**	3.1	*Yes*
SLU4-2.2		71.0	**68.8**	**71.7**	**71.9**	*3.1*	
SLU4-2.3		71.0	**66.4**	**69.3**	**70.0**	3.6	

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
SB4-SLU4-3 NAC C	1	66.0	**66.8**	**69.6**	**71.1**	4.3	*Yes*
SB4-SLU4-4 NAC C	1	66.0	62.9	65.9	**67.0**	4.1	*Yes*
NSA Summary	***196***		***64.6***	***67.5***	***68.4***	***3.8***	
NSA SB5: West of I-75 from NW 49th St to NW 63rd St - Illustrated on Pages C13 through C14 - Appendix C							
No noise sensitive sites							
NSA SB6: West of I-75 from NW 63rd St to SR 326 - Illustrated on Pages C15 and C16 - Appendix C							
SB6-01	1	66.0	**67.2**	**69.8**	**70.6**	3.4	*Yes*
SB6-02	1	66.0	60.3	63.0	63.7	3.4	-
NSA Summary	***2***		***63.8***	***66.4***	***67.2***	***3.4***	
NSA NB1: East of I-75 from Project Begin to SW 20th St - Illustrated on Pages C2 through C4 - Appendix C							
NB1-01	4	66.0	**73.5**	**75.0**	**75.8**	2.3	*Yes*
NB1-01.2	4	66.0	**70.8**	**72.4**	**73.2**	2.4	*Yes*
NB1-01.3	4	66.0	**69.0**	**70.6**	**71.3**	2.3	*Yes*

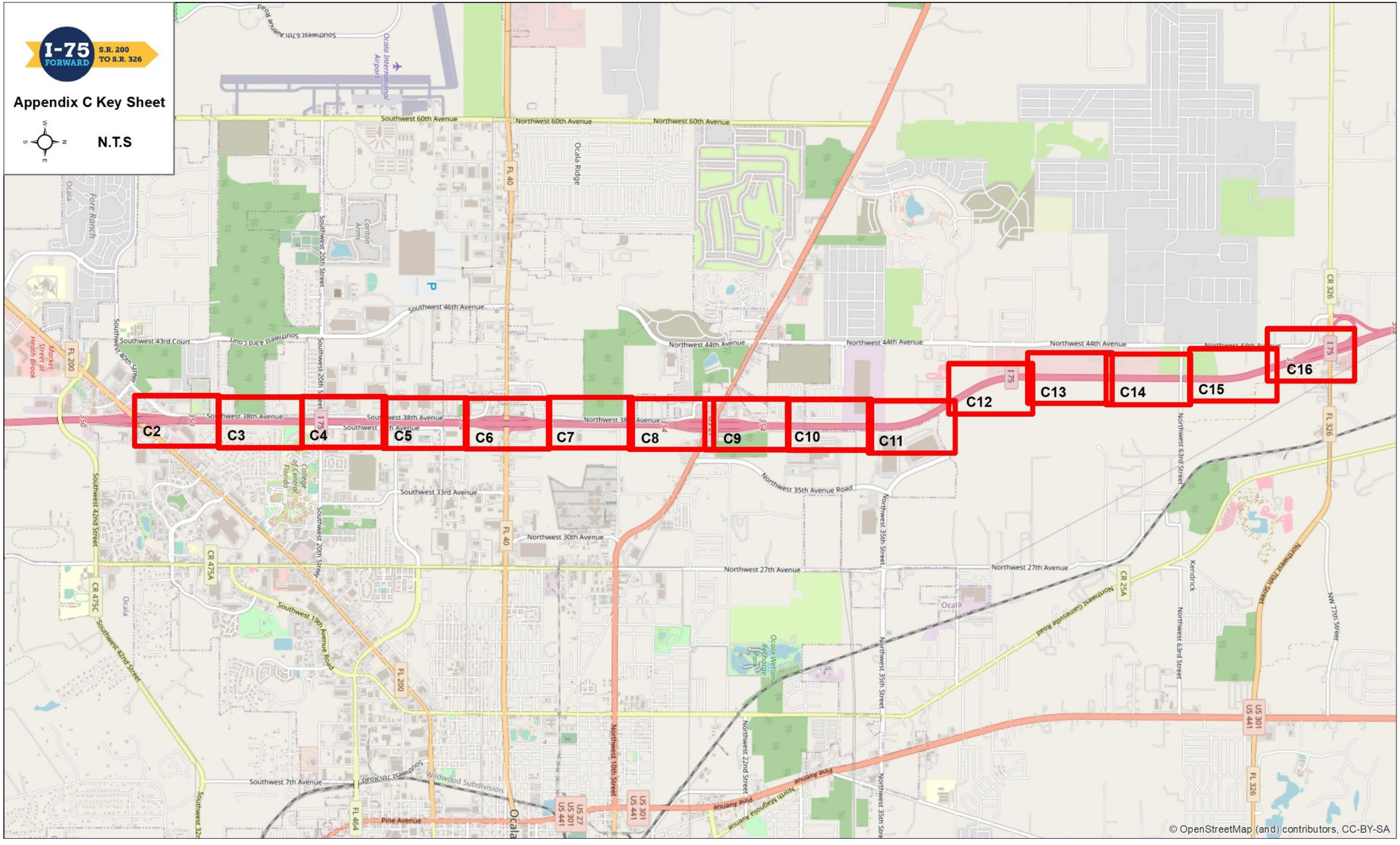
Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
NB1-01.4	2	66.0	**67.3**	**69.0**	**69.7**	2.4	*Yes*
NB1-01.5	2	66.0	**66.7**	**68.3**	**69.1**	2.4	*Yes*
NB1-01.6	2	66.0	65.5	**67.1**	**67.9**	2.4	*Yes*
NB1-01.7	1	66.0	64.1	65.8	**66.6**	2.5	*Yes*
NB1-02	2	66.0	**73.2**	**74.8**	**75.8**	2.6	*Yes*
NB1-02.2	2	66.0	**70.3**	**71.9**	**72.7**	2.4	*Yes*
NB1-03	1	66.0	**74.8**	**76.5**	**77.3**	2.5	*Yes*
NB1-04	2	66.0	**67.0**	**68.7**	**69.5**	2.5	*Yes*
NB1-05	1	66.0	65.7	**67.5**	**68.5**	2.8	*Yes*
NB1-06	1	66.0	**67.1**	**68.8**	**69.7**	2.6	*Yes*
NB1-07a	2	66.0	63.6	65.3	65.9	2.3	-
NB1-07b	2	66.0	**67.8**	**69.5**	**70.0**	2.2	*Yes*
NB1-08a	2	66.0	62.6	64.4	64.9	2.3	-
NB1-08b	2	66.0	**66.9**	**68.6**	**69.1**	2.2	*Yes*
NB1-09	1	66.0	64.0	65.7	**66.4**	2.4	*Yes*
NB1-10	1	66.0	64.3	**66.1**	**67.1**	2.8	*Yes*
NB1-11	1	66.0	64.1	**66.0**	**66.9**	2.8	*Yes*
NB1-12	1	66.0	65.6	**67.3**	**68.2**	2.6	*Yes*
NB1-13	1	66.0	**66.6**	**68.3**	**69.1**	2.5	*Yes*
NB1-14	1	66.0	**67.0**	**68.7**	**69.4**	2.4	*Yes*
NB1-15	1	66.0	**67.2**	**68.9**	**69.6**	2.4	*Yes*
NB1-16	1	66.0	**67.1**	**68.8**	**69.5**	2.4	*Yes*

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
NB1-17	1	66.0	62.2	64.1	64.7	2.5	-
NB1-18	1	66.0	62.4	64.3	65.0	2.6	-
NB1-19	1	66.0	62.6	64.4	65.3	2.7	-
NB1-20	1	66.0	63.3	65.1	**66.0**	2.7	*Yes*
NB1-21	1	66.0	62.2	64.2	65.0	2.8	-
NB1-22	1	66.0	62.1	64.1	64.9	2.8	-
NB1-23	1	66.0	62.7	64.6	65.4	2.7	-
NB1-24	1	66.0	63.3	65.2	**66.0**	2.7	*Yes*
NB1-25	1	66.0	63.6	65.4	**66.3**	2.7	*Yes*
NB1-26	1	66.0	63.6	65.4	**66.2**	2.6	*Yes*
NB1-27	1	66.0	63.3	65.2	65.9	2.6	-
NB1-28	1	66.0	63.5	65.4	**66.1**	2.6	*Yes*
NB1-29	1	66.0	60.7	62.6	63.2	2.5	-
NB1-30	1	66.0	61.5	63.4	64.1	2.6	-
NB1-31	1	66.0	**74.0**	**75.5**	**76.2**	2.2	*Yes*
NB1-32	2	66.0	**71.7**	**73.3**	**73.8**	2.1	*Yes*
NB1-33	1	66.0	**69.3**	**70.9**	**71.6**	2.3	*Yes*
NB1-34	2	66.0	**67.5**	**69.2**	**69.9**	2.4	*Yes*
NB1-35	1	66.0	65.5	**67.2**	**68.0**	2.5	*Yes*
NB1-36	1	66.0	64.6	**66.4**	**67.2**	2.6	*Yes*
NB1-37	1	66.0	65.0	**66.7**	**67.5**	2.5	-
NB1-38	1	66.0	62.7	64.6	65.4	2.7	-

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
NB1-39	1	66.0	63.4	65.3	**66.1**	2.7	*Yes*
NB1-40	1	66.0	62.7	64.6	65.5	2.8	-
NB1-41	1	66.0	61.9	63.8	64.7	2.8	-
NSA Summary	***71***		***65.7***	***67.5***	***68.3***	***2.5***	
NSA NB2: East of I-75 from SW 20th St to SR 40 - Illustrated on Pages C4 through C6 - Appendix C							
NB2-01	1	66.0	65.8	**67.6**	**68.7**	2.9	*Yes*
NB2-02	1	66.0	65.4	63.5	**68.2**	2.8	*Yes*
NSA Summary	***2***		***65.6***	***65.6***	***68.5***	***2.9***	
NSA NB3: East of I-75 from SR 40 to US 27 - Illustrated on Pages C6 thru C8 - Appendix C							
No noise sensitive sites							
NSA NB4: East of I-75 from US 27 to SW 49th - Illustrated on Pages C9 and C12 - Appendix C							
NB4-SLU4-1 NAC E	1	71.0	56.8	59.4	59.3	2.5	-

Noise Sensitive Sites			Predicted Noise Levels (dB(A)) *Red = Noise Level above NAC*				
Receptor ID	**# Sites Represented**	**Impact Criterion (dB(A))**	**2022 Existing**	**2050 No-Build Alternative**	**2050 Build Alternative**	**Change From Existing**	***Consider Abatement***
NSA Summary	***1***		***56.8***	***59.4***	***59.3***	***2.5***	
NSA NB5: East of I-75 from SW 49th St to SW 63rd St - Illustrated on Pages C13 thru C14 - Appendix C							
No noise sensitive sites							
NSA NB6: East of I-75 from NW 63rd St to SR 326 - Illustrated on Pages C13 and C14 - Appendix C							
NB6-01	1	66.0	**70.5**	**73.1**	**73.9**	3.4	*Yes*
NB6-02	1	66.0	64.7	**67.4**	**68.0**	3.3	*Yes*
NB6-03	1	66.0	62.0	64.8	65.3	3.3	-
NSA Summary	***3***		***65.7***	***68.4***	***69.1***	***3.3***	

Appendix C Project Aerials


I-75 FORWARD S.R. 200 TO S.R. 326
Appendix C Key Sheet
N.T.S
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
C15
C16
Southwest 60th Avenue
Northwest 60th Avenue
Northwest 60th Avenue
Ocala International Airport
Ocala Ridge
FL 40
Southwest 20th Street
Carlton Arms
Southwest 46th Avenue
Southwest 43rd Court
Northwest 44th Avenue
Northwest 44th Avenue
Northwest 44th Avenue
I 75
CR 326
FL 200
Market Street at Heath Brook
Fore Ranch
Ocala
Southwest 38th Avenue
Northwest 38th Avenue
Southwest 33rd Avenue
Northwest 35th Avenue Road
Northwest 30th Avenue
Northwest 27th Avenue
Northwest 27th Avenue
College of Central Florida
Southwest 42nd Street
CR 475A
CR 475C
Southwest 19th Avenue Road
Southwest 7th Avenue
Wildwood Subdivision
Pine Avenue
FL 464
US 27
US 301
US 441
Northwest 10th Street
Northwest 22nd Street
Northwest 35th Street
Northwest 63rd Street
Kendrick
Northwest Gainesville Road
Northwest 70th Street
NW 77th Street
CR 25A
FL 326
US 301
US 441
North Magnolia Avenue
Pine Avenue
Ocala Wetlands Recharge Park
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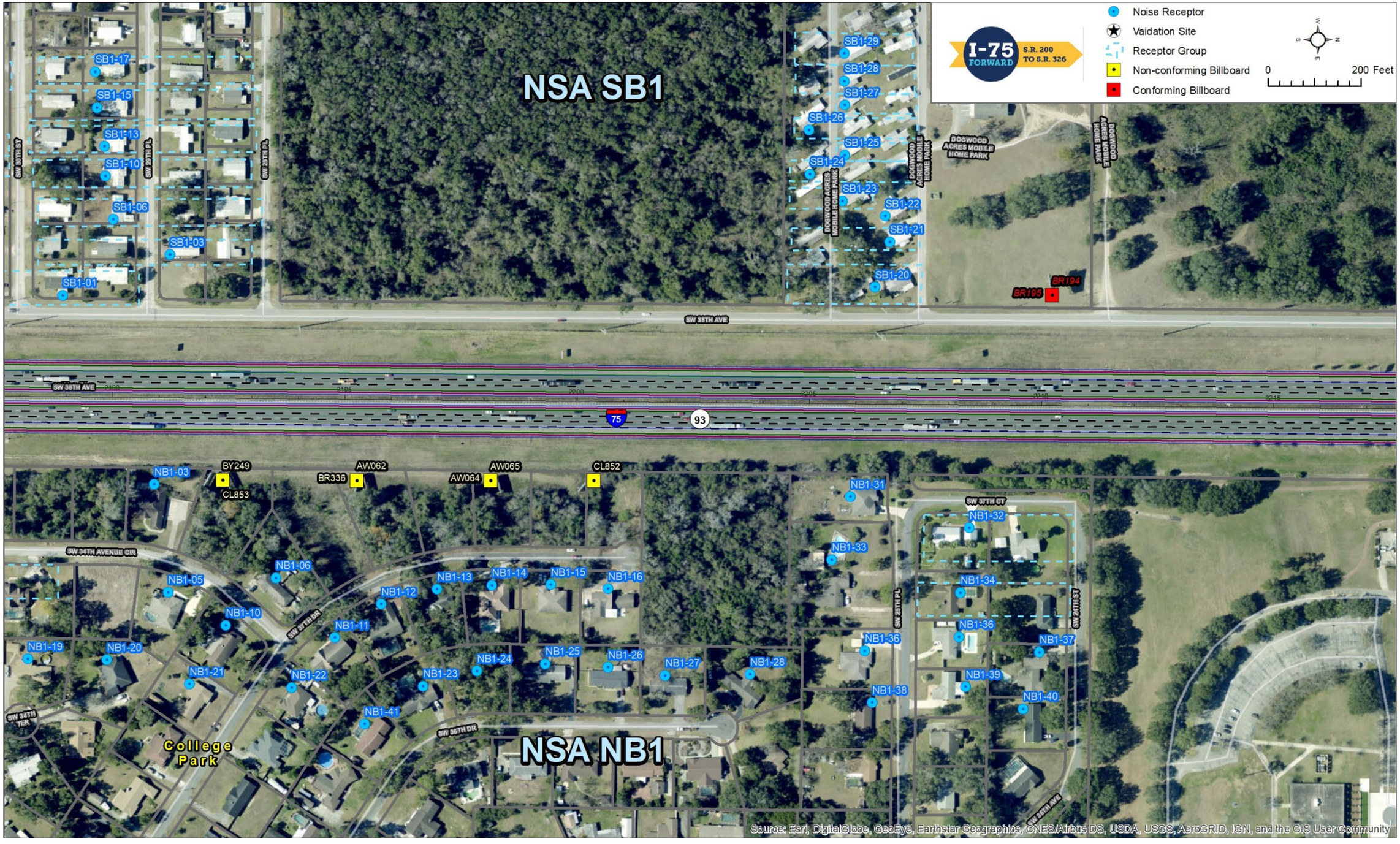
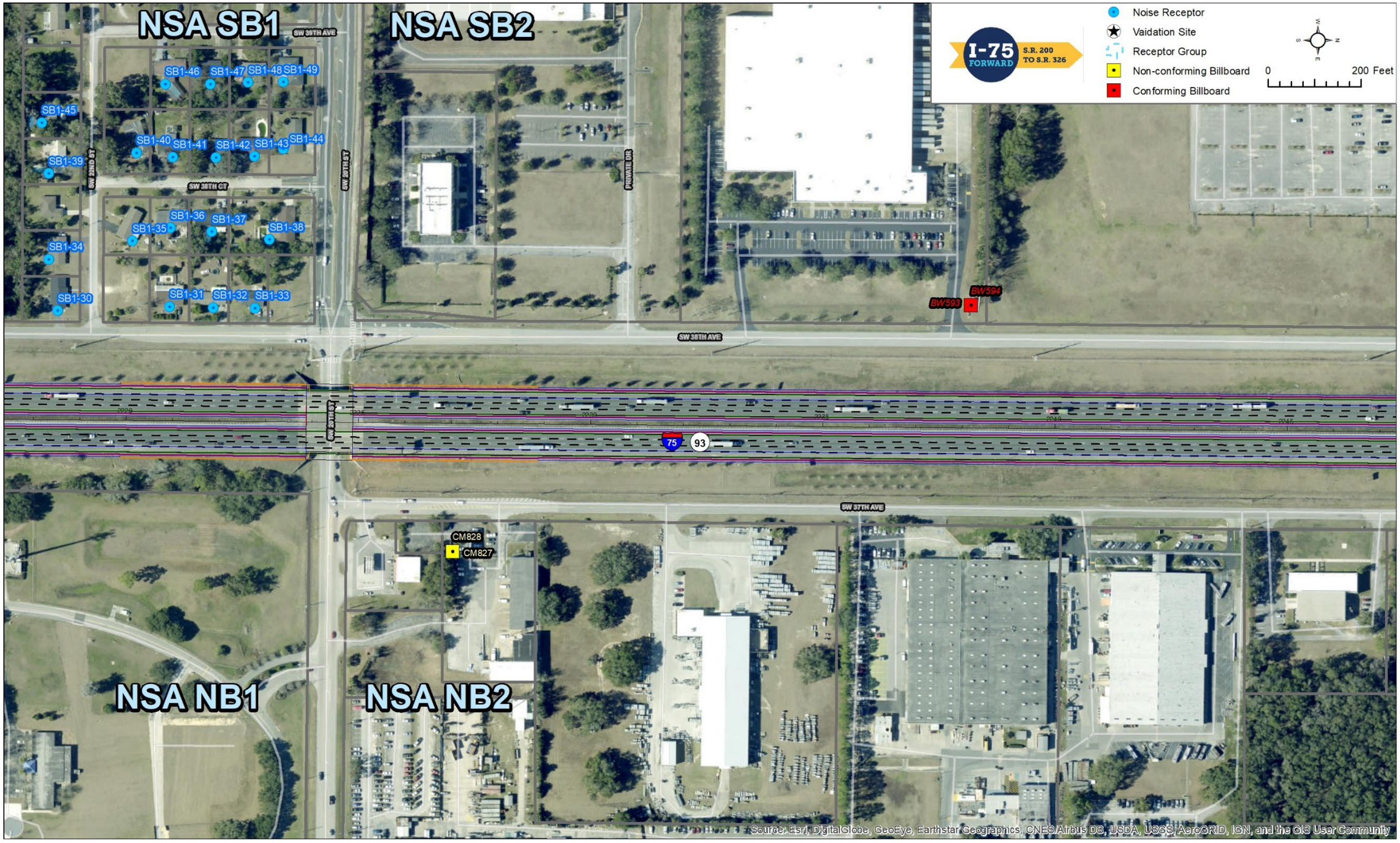
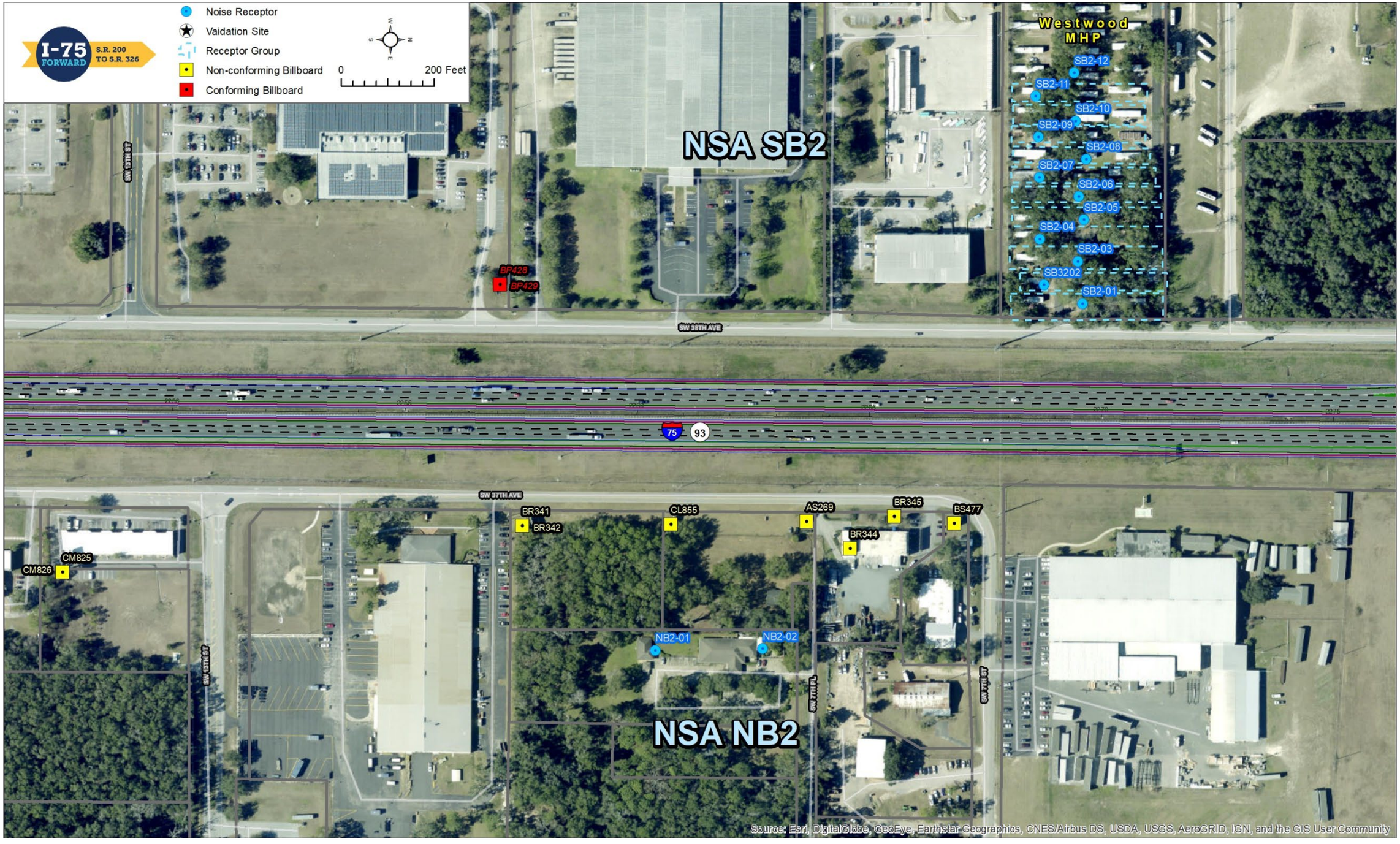
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB1
White Oaks Mobile Home Park
Ocala RV Camp Resort
SB1-19
SB1-18
SB1-16
SB1-SLU1-1.3
SB1-SLU1-1.2
SB1-14
SB1-12
SB1-11
SB1-09
SB1-08
SB1-07
SB1-05
SB1-04
SB1-02
SB1-SLU1-1
CH859
CH860
Begin PD&E Limits
SW 38TH AVE
BR333
AW063
NB1-01
NB1-02
NB1-01.2
NB1-2.2
NB1-01.3
NB1-01.4
NB1-01.5
NB1-01.6
N1B201.7
NB1-04
NB1-07a/b
NB1-08a/b
NB1-09
NB1-17
NB1-18
NB1-29
NB1-30
College Park
NSA NB1
AE439
AE440
75
93
200
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


NSA SB1
NSA NB1
I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
SB1-01
SB1-03
SB1-06
SB1-10
SB1-13
SB1-15
SB1-17
SB1-20
SB1-21
SB1-22
SB1-23
SB1-24
SB1-25
SB1-26
SB1-27
SB1-28
SB1-29
BR194
BR195
SW 38TH AVE
SW 30TH ST
SW 29TH PL
SW 28TH PL
DOGWOOD ACRES MOBILE HOME PARK
75
93
BY249
CL853
AW062
BR336
AW064
AW065
CL852
NB1-03
NB1-05
NB1-06
NB1-10
NB1-11
NB1-12
NB1-13
NB1-14
NB1-15
NB1-16
NB1-19
NB1-20
NB1-21
NB1-22
NB1-23
NB1-24
NB1-25
NB1-26
NB1-27
NB1-28
NB1-31
NB1-32
NB1-33
NB1-34
NB1-36
NB1-37
NB1-38
NB1-39
NB1-40
NB1-41
SW 34TH AVENUE CIR
SW 37TH DR
SW 34TH TER
SW 36TH DR
SW 37TH CT
SW 25TH PL
SW 24TH ST
College Park
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


NSA SB1
NSA SB2
NSA NB1
NSA NB2
SW 39TH AVE
SW 38TH CT
SW 38TH AVE
SW 37TH AVE
SW 22ND ST
SW 20TH ST
PRIVATE DR
SW 17TH AVE
SB1-30
SB1-31
SB1-32
SB1-33
SB1-34
SB1-35
SB1-36
SB1-37
SB1-38
SB1-39
SB1-40
SB1-41
SB1-42
SB1-43
SB1-44
SB1-45
SB1-46
SB1-47
SB1-48
SB1-49
BW593
BW594
CM827
CM828
75
93
I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
N
S
E
Westwood MHP
SB2-12
SB2-11
SB2-10
SB2-09
SB2-08
SB2-07
SB2-06
SB2-05
SB2-04
SB2-03
SB3202
SB2-01
NSA SB2
BP428
BP429
SW 40TH ST
SW 38TH AVE
75
93
SW 37TH AVE
BR341
BR342
CL855
AS269
BR345
BS477
BR344
CM825
CM826
NB2-01
NB2-02
SW 43RD ST
SW 41ST PL
SW 41ST ST
NSA NB2
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB2
NSA SB3
NSA NB2
NSA NB3
Super 8 Motel
SB2-SLU2-1
SB3-01
SB3-02
SB3-03
SB3-04
SB3-05
SB3-06
SB3-07
SB3-08
SB3-09
SB3-10
SB3-11
HOLIDAY TRAVEL PARK
CLASSIC OAKS VILLAGE
SW 3RD ST
NW 3RD ST
SW 38TH AVE
CM855
CM856
BS511
CL987
BS479
CE928
BY248
BX510
BX511
BT262
BT261
40
93
75
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

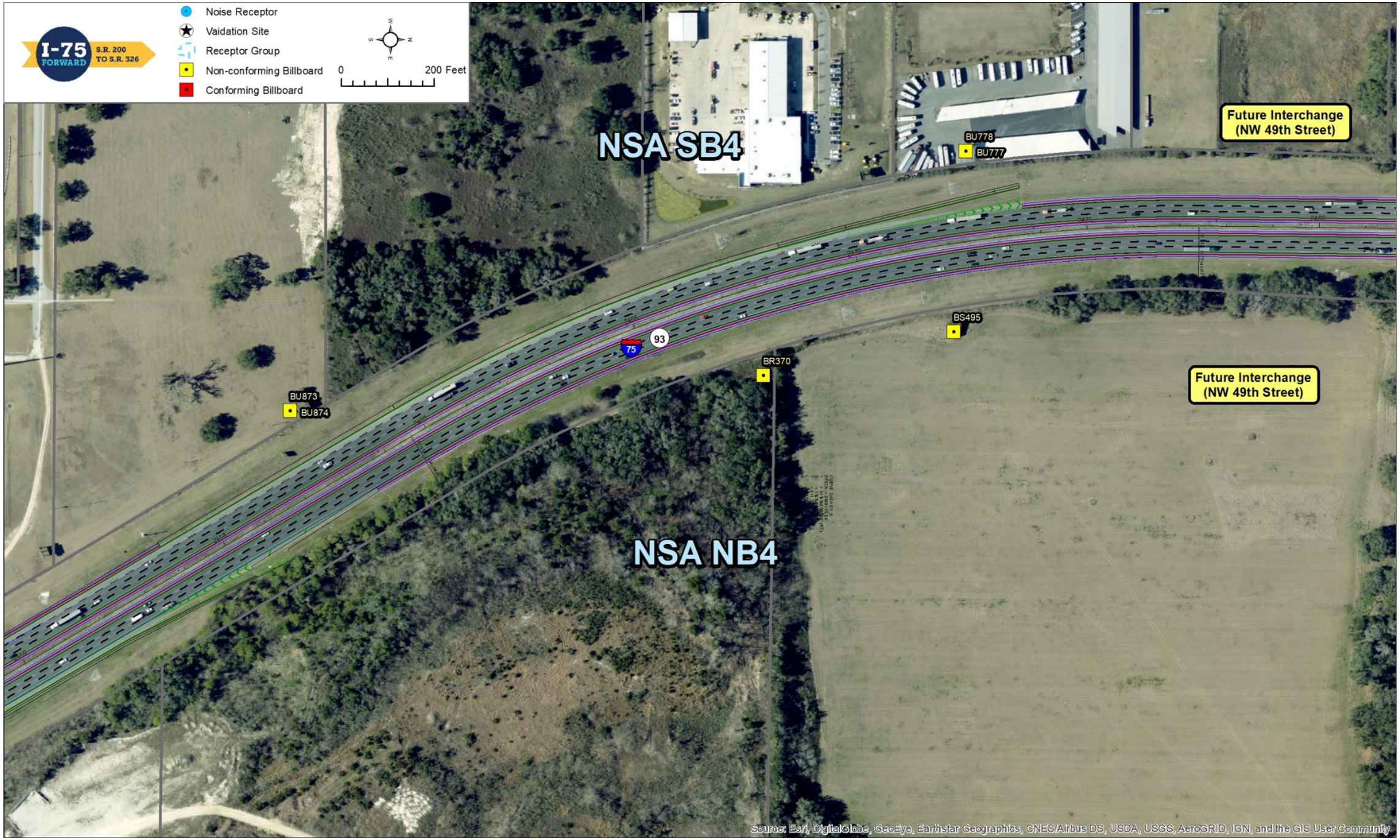

I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
N
S
E
W
NSA SB3
NSA NB3
CF872
CF871
CL854
CL857
CA786
BS481
NW 3RD ST
NW 38TH AVE
NW 37TH AVE
NW 103RD ST
75
93
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


SB3-19
SB3-18
SB3-17
SB3-16
SB3-15
SB3-14
SB3-12
SB3-13
NW 145TH ST
NW 147TH ST
NW 151ST ST
NW 38TH AVE
BI674
CM824
NSA SB3
SB3-SLU3-1
Motel 6
75
93
BT313
BT314
BT311
BT312
NW 171TH PL
500
BU374
BU375
NSA NB3
NSA NB4
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

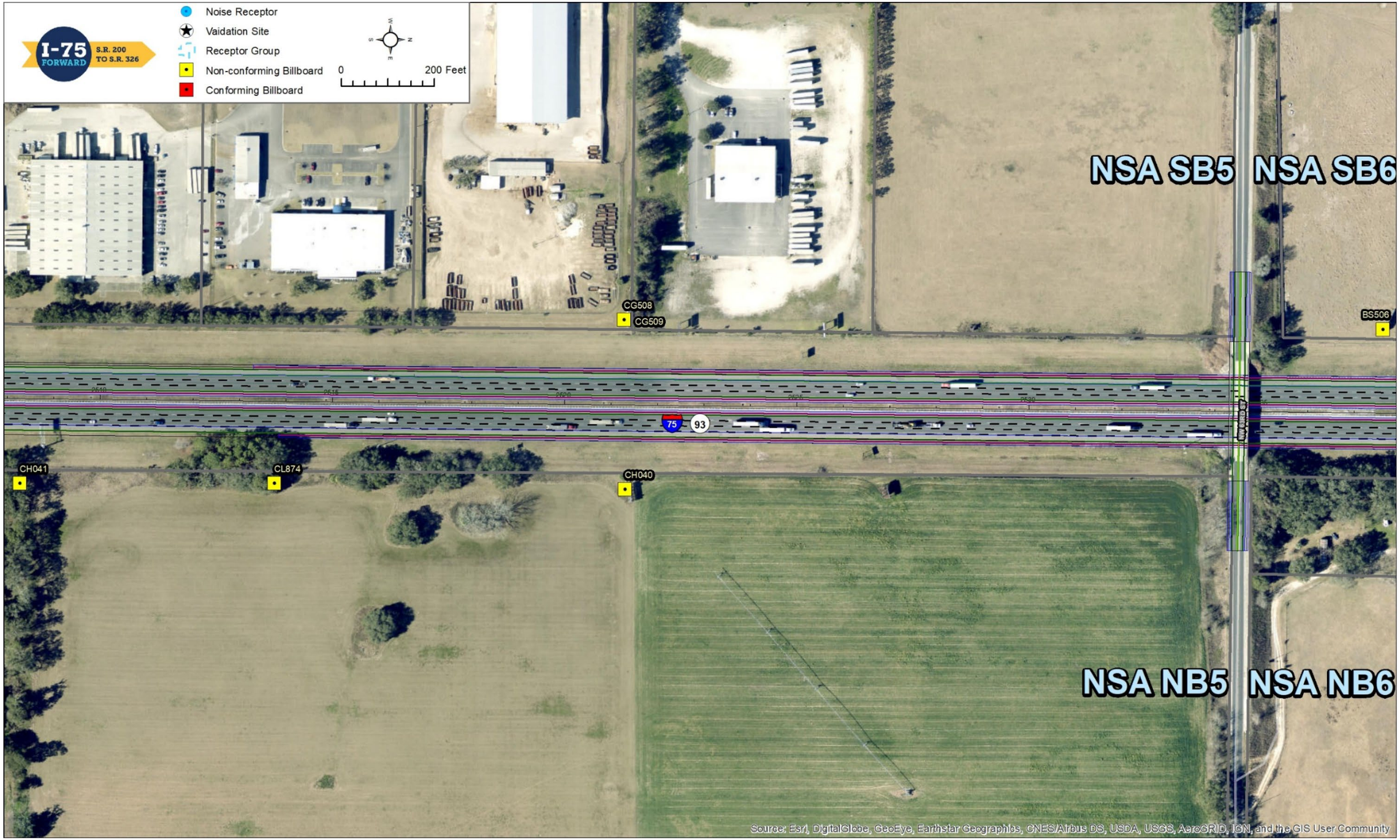

NSA SB3
NSA SB4
NW 38TH AVE
BU886
BU883
SB3-SLU3-1
Motel 6
SB4-SLU4-1
Days Inn
500
OAK TREE VILLAGE
Howard Johnson
SB4-SLU4-2.3
SB4-SLU4-2.2
SB4-SLU4-2
BY275
BY274
Oaktree Village
SB4-07
SB4-04
SB4-SLU4-3
SB4-02
SB4-01
75
93
Golden Palms
NB4-SLU4-1
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Sweetwater Oaks
NSA SB4
NSA NB4
SB4-08
SB4-06
SB4-05
SB4-03
SB4-20
SB4-19
SB4-18
SB4-17
SB4-16
SB4-SLU4-4
SB4-15
SB4-14
SB4-13
SB4-12
SB4-11
SB4-10
SB4-09
OAK TREE VILLAGE
OAK TREE VILLAGE
OAK TREE VILLAGE
OAK TREE VILLAGE
MAGNOLIA CT
CLIFF CIR
SYCAMORE WAY
HOLLY ST
LAUREL LN
BL850
BL849
BR316
BR319
BR318
BV831
BV832
75
93
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

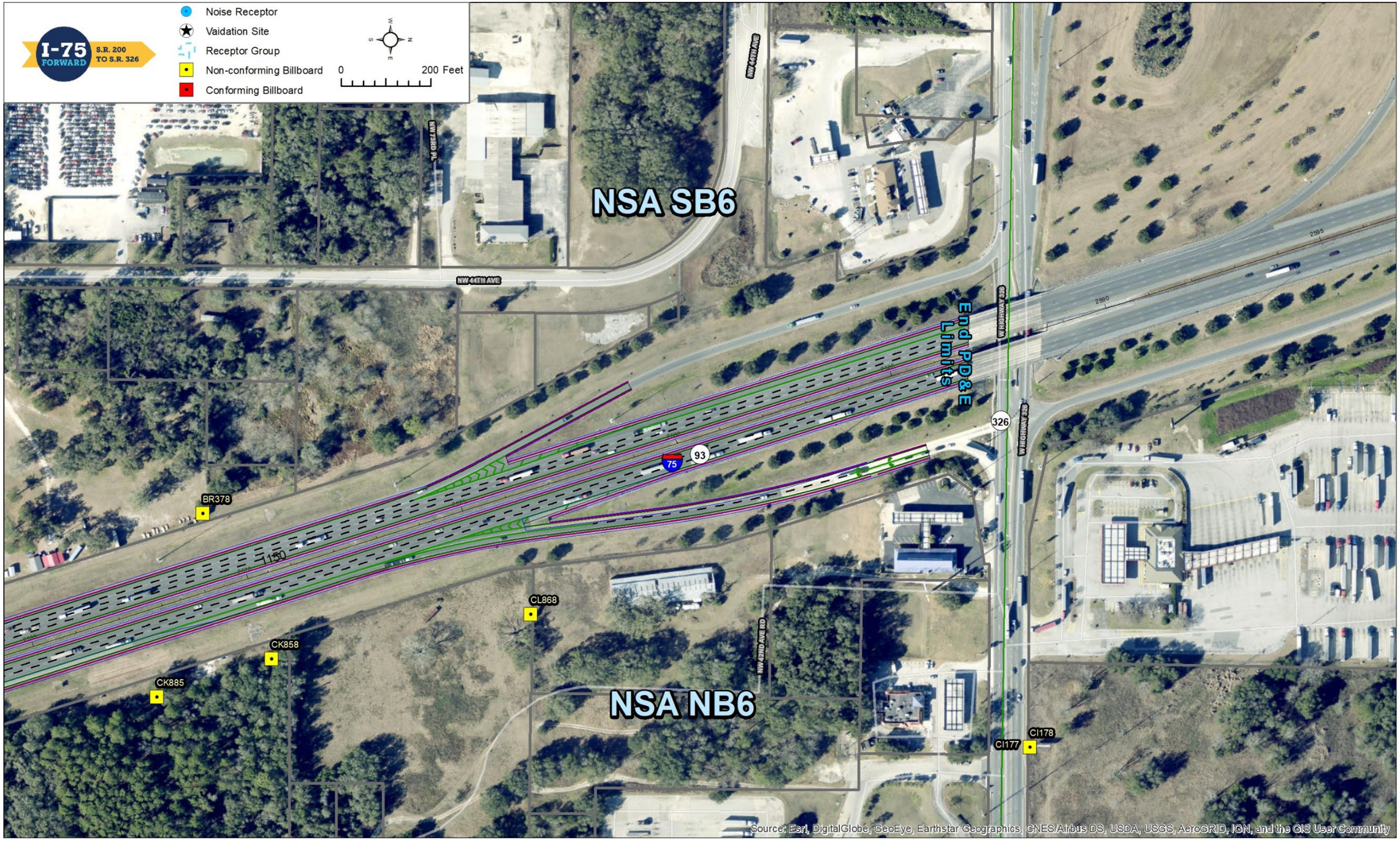

NSA SB4
BW071
BW072
BU887
BU888
93
75
BV835
BV836
CE849
CG503
NSA NB4
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
I-75 FORWARD S.R. 200 TO S.R. 326
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB4
NSA NB4
Future Interchange (NW 49th Street)
Future Interchange (NW 49th Street)
BU778
BU777
BS495
BR370
BU873
BU874
93
75
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB5
Future Interchange (NW 49th Street)
BB631
BB630
CD293
CD294
75
93
CH041
NSA NB5
Future Interchange (NW 49th Street)
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB5
NSA SB6
CG508
CG509
BS506
75
93
CH041
CL874
CH040
NSA NB5
NSA NB6
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

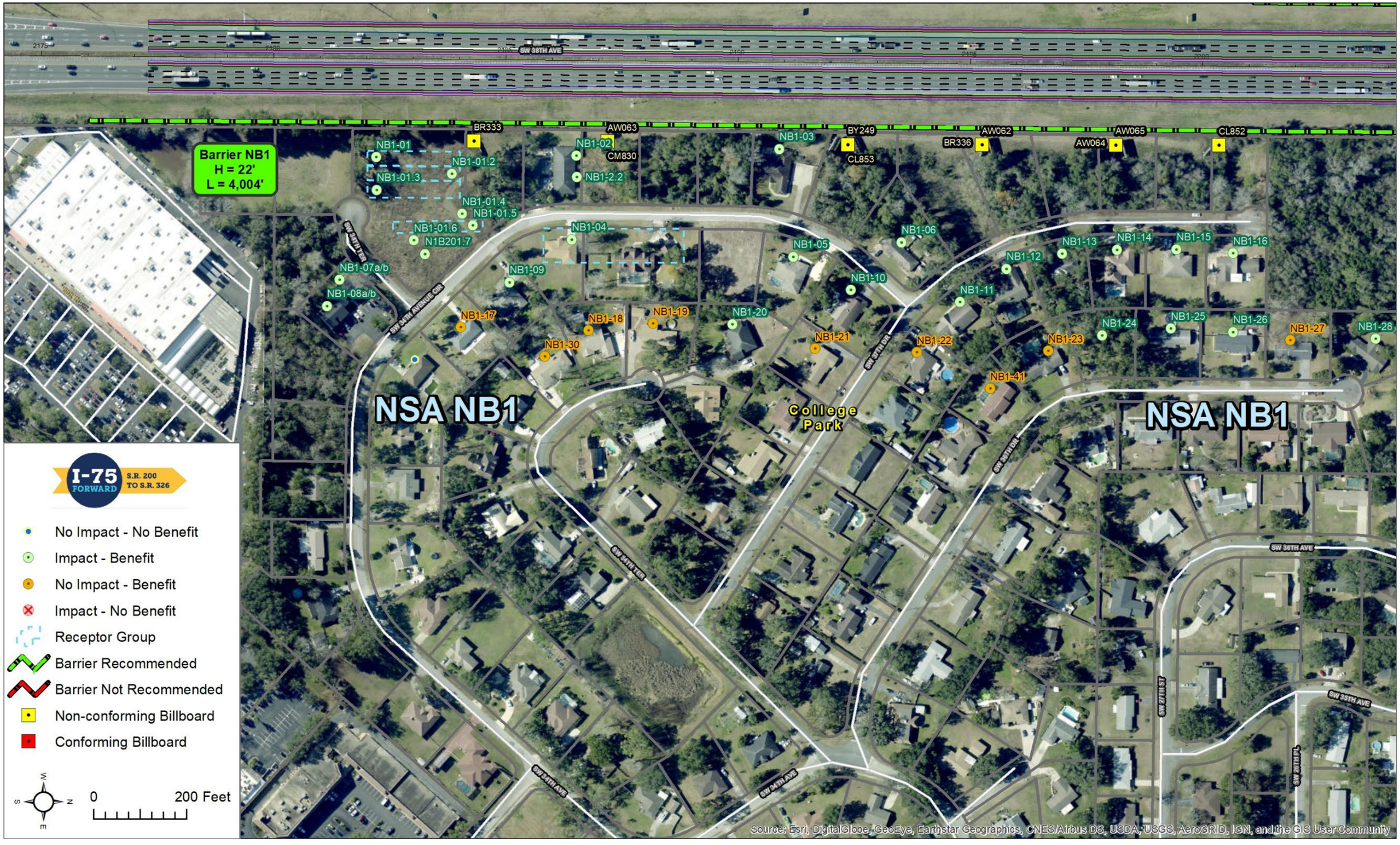

I-75 FORWARD S.R. 200 TO S.R. 326
Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB6
SB6-02
SB6-01
BR379
BR380
BS503
CM872
CK885
1150
BS499
75
93
BR730
BR729
BR369
BS500
NSA NB6
NB6-01
NB6-02
NB6-03
NW 42ND AVE RD
NW 61ST AVE
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community


Noise Receptor
Vaidation Site
Receptor Group
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB6
NSA NB6
NW 44TH AVE
NW 73RD PL
NW 44TH AVE
W HIGHWAY 326
End PD&E Limits
BR378
CL868
CK858
CK885
CI177
CI178
93
75
326
1150
2590
2595
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix D Noise Barrier Location Maps


I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
W
S
N
E
0
200 Feet
SW 41ST AVE
SW 39TH CT
SW 39TH PL
SW 38TH AVE
SW 30TH ST
NSA SB1
White Oaks Mobile Home Park
Ocala RV Camp Resort
SB1-19
SB1-18
SB1-16
SB1-14
SB1-12
SB1-11
SB1-09
SB1-08
SB1-07
SB1-05
SB1-04
SB1-02
SB1-01
SB1-17
SB1-15
SB1-13
SB1-10
SB1-06
SB1-03
SB1-SLU1-1
SB1-SLU1-1.2
SB1-SLU1-1.3
CH859
CH860
Barrier SB1
Segment 1
H = 22'
L = 3,508'
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
W
S
N
E
0
200 Feet
NSA SB1
NSA SB2
SW 41ST AVE
SW 40TH AVE
SW 39TH AVE
SW 38TH CT
SW 38TH AVE
SW 2ND ST
SW 20TH ST
SW 16TH ST
PRIVATE DR
DOGWOOD ACRES MOBILE HOME PARK
SB1-20
SB1-21
SB1-22
SB1-23
SB1-24
SB1-25
SB1-26
SB1-27
SB1-28
SB1-29
SB1-30
SB1-31
SB1-32
SB1-33
SB1-34
SB1-35
SB1-36
SB1-37
SB1-38
SB1-39
SB1-40
SB1-41
SB1-42
SB1-43
SB1-44
SB1-45
SB1-49
BR193
BR194
Barrier SB1 Segment 2 H = 14' L = 1,105'
Barrier SB1 Segment 2 H = 8' L = 786'
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

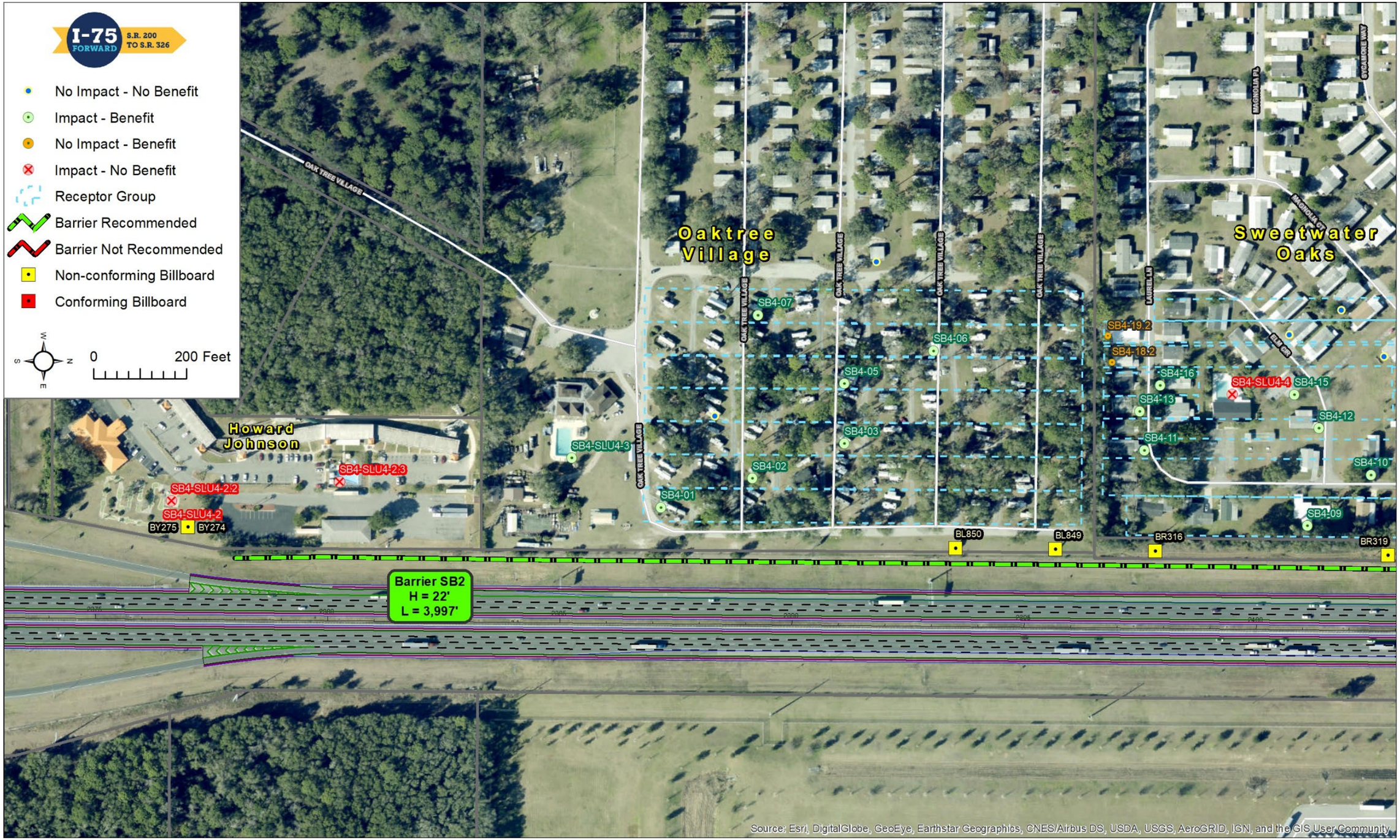

Barrier NB1
H = 22'
L = 4,004'
NB1-01
NB1-01.2
NB1-01.3
NB1-01.4
NB1-01.5
NB1-01.6
N1B201.7
NB1-07a/b
NB1-08a/b
BR333
AW063
NB1-02
CM830
NB1-2.2
NB1-03
BY249
CL853
BR336
AW062
AW064
AW065
CL852
NB1-04
NB1-05
NB1-06
NB1-09
NB1-10
NB1-11
NB1-12
NB1-13
NB1-14
NB1-15
NB1-16
NB1-17
NB1-18
NB1-19
NB1-20
NB1-21
NB1-22
NB1-23
NB1-24
NB1-25
NB1-26
NB1-27
NB1-28
NB1-30
NB1-41
SW 38TH AVE
SW 34TH TER
SW 34TH AVENUE CIR
SW 37TH DR
SW 36TH DR
SW 35TH AVE
SW 34TH AVE
NSA NB1
College Park
NSA NB1
I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
W
S
N
E
0
200 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Barrier NB1
H = 22'
L = 4,004'
NSA NB1
NSA NB2
NB1-31
NB1-32
NB1-33
NB1-34
NB1-36
NB1-37
NB1-28
NB1-38
NB1-39
CM827
CM828
SW 37TH CT
SW 37TH AVE
SW 35TH AVE
SW 34TH CT
SW 35TH ST
SW 20TH ST
SW 61ST PL
SW 61ST ST
SW 61ST AVE
SW 61ST TER
SW 61ST WAY
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
0
200 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
0
200 Feet
NSA SB2
Westwood MHP
SB2-10
SB2-09
SB2-08
SB2-07
SB2-06
SB2-05
SB2-04
SB2-03
SB3202
SB2-01
BP428
BP429
CM855
CM856
Barrier SB-A2
SW 38TH AVE
Barrier NB-A1
SW 37TH AVE
BR341
BR342
CL855
AS269
BR345
BS477
BR344
NB2-01
NB2-02
SW 7TH PL
SW 7TH ST
NSA NB2
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
0
200 Feet
HOLIDAY TRAVEL PARK
HOLIDAY TRAVEL PARK
HOLIDAY TRAVEL PARK
HOLIDAY TRAVEL PARK
HOLIDAY TRAVEL PARK
HOLIDAY TRAVEL PARK
CLASSIC OAKS VILLAGE
Classic Oaks Village
NSA SB3
SB3-10.2
SB3-09
SB3-08
SB3-01
SB3-07
CLASSIC OAKS VILLAGE
CLASSIC OAKS VILLAGE
NW 33RD ST
SB3-06
SB3-05
SB3-04
CLASSIC OAKS VILLAGE
CLASSIC OAKS VILLAGE
SB3-03
SB3-02
BS511
CL987
NW 38TH AVE
Barrier SB-A3
Barrier SB-A3
BS479
CA786
BS481
CE928
BY248
NW 37TH AVE
NSA NB2
NSA NB3
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
W
S
N
E
0
200 Feet
SB3-17
SB3-16
SB3-15
SB3-14
SB3-12
SB3-13
BI674
CM824
NW 38TH AVE
Barrier SB-A4
NW 37TH AVE
BT313
BT314
BT311
BT312
NW 9TH PL
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
W
S
N
E
0
200 Feet
OAK TREE VILLAGE
Oaktree Village
Sweetwater Oaks
MAGNOLIA PL
SYCAMORE WAY
MAGNOLIA CIR
LAUREL LN
ELM CIR
Howard Johnson
SB4-07
SB4-06
SB4-05
SB4-03
SB4-02
SB4-01
SB4-SLU4-3
SB4-SLU4-2.3
SB4-SLU4-2.2
SB4-SLU4-2
SB4-19.2
SB4-18.2
SB4-16
SB4-SLU4-4
SB4-15
SB4-13
SB4-12
SB4-11
SB4-10
SB4-09
BY275
BY274
BL850
BL849
BR316
BR319
Barrier SB2
H = 22'
L = 3,997'
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Sweetwater Oaks
NSA SB4
MAGNOLIA PL
SYCAMORE WAY
MAGNOLIA TRL
HOLLY CT
MAGNOLIA CT
ELM CIR
LAUREL LN
SB4-17
SB4-SLU4-4
SB4-15
SB4-14
SB4-12
SB4-12.3
SB4-10
SB4-10.3
SB4-09
BR319
BR318
BU888
BU887
Barrier SB2
H = 22'
L = 3,997'
BV831
BV832
CE849
CG503
I-75 FORWARD S.R. 200 TO S.R. 326
No Impact - No Benefit
Impact - Benefit
No Impact - Benefit
Impact - No Benefit
Receptor Group
Barrier Recommended
Barrier Not Recommended
Non-conforming Billboard
Conforming Billboard
W
S
N
E
0
200 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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