DRAFT NOISE STUDY REPORT

Florida Department of Transportation

District 1

Bradenton-Palmetto Connector

Limits of Project: US 41/SR 55

from US 301/SR 683 at 9th Street East to North of 25th Street East

Manatee, Florida

Financial Management Number: 444843-1-22-01

ETDM Number: 14507

Date: June 2026

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 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

Executive Summary

The Florida Department of Transportation (FDOT), District One (D1) is conducting a Project Development and Environment (PD&E) study, known as the Bradenton-Palmetto Connector (BPC), to evaluate capacity and mobility improvements to United States (US) 41/State Road (SR) 55/1st Street (St)/Tamiami Trail (Trl) and US 301/SR 683 including roadway widening, bridge reconstruction, new stormwater management facilities (SMF), new floodplain compensation (FPC) sites, and bicycle and pedestrian accommodations. This PD&E study begins at US 301/SR 683 at 9th St East in the City of Bradenton, Florida and continues north to US 41 north of 25th St East in the City of Palmetto, Florida. The project also crosses the Manatee River. The study limits extend approximately 4.5 miles, all within Manatee County.

In 2025, FDOT D1 completed a PD&E study for the Hernando DeSoto Bridge (structure #130053) Replacement from westbound SR 64 to Haben Boulevard (Blvd) in Manatee County, Florida (FPID 442630-1-22-01, ETDM 14510). That study evaluated replacing the existing four lane DeSoto Bridge with a new four lane bridge that included wider shoulders, upgraded pedestrian facilities and other safety features. The DeSoto Bridge Replacement PD&E study limits fall within the BPC PD&E study limits; however, it did not include adding lanes for capacity improvements. This BPC PD&E study does include adding additional lanes both on the roadway and the DeSoto Bridge to accommodate capacity needed within the project study area.

The objectives of this Noise Study Report (NSR) are to identify noise sensitive land uses within the project limits, evaluate existing and future traffic noise levels at the sensitive land uses with and without the proposed improvements, and to evaluate the need for and effectiveness of noise abatement measures. Additional objectives include the evaluation of potential construction noise impacts and the identification of noise impact contours adjacent to the corridor.

The traffic noise analysis was performed following FDOT procedures that comply with Title 23 Code of Federal Regulations (CFR), Part 772 "Procedures for Abatement of Highway Traffic Noise and Construction Noise." The evaluation follows the FDOT's traffic noise policy documented in the FDOT PD&E Manual. The prediction of future traffic noise levels with the roadway improvements was performed using Version 2.5 of the Federal Highway Administration's (FHWA's) Traffic Noise Model (TNM).

Within the project limits, 823 TNM receptors representing the various noise sensitive sites were modeled to represent 1,075 residences, 37 recreation areas, three schools, eight places of worship, one hospital, two hotel pools, one office outdoor use area, and one restaurant outdoor seating area. Of these, there are 224 residences, 15 recreation uses, one hospital, two hotel pools, one office outdoor use area and one restaurant outdoor seating area that were evaluated within the limits of the proposed Interim Improvements. Depending on the location, a TNM receptor may represent more than one noise sensitive site.

Existing (2024) and Future No-Build (2050) exterior traffic noise levels are predicted to range from 48.3 to 75.9 dB(A) at the residences and recreation areas (Activity Categories B and C, respectively) and from 48.3

to 66.5 dB(A) at the outdoor use areas considered Activity Category E. Interior traffic noise levels are predicted to range from 34.4 to 50.7 dB(A).

With the proposed Interim Improvements, future design year (2050) traffic noise levels are predicted to range from 53.2 to 75.7 dB(A) at the residences and from 49.3 to 72.7 dB(A) at the recreation uses. Traffic noise levels are predicted to approach, meet, or exceed the FHWA Noise Abatement Criteria (NAC) for Activity Categories B and C, respectively, at 66 residences and six recreation uses. Interior traffic noise levels are predicted to range from 48.3 to 50.4 and are not predicted to approach, meet, or exceed the NAC for Activity Category D. Traffic noise levels are predicted to range from 48.4 to 65.8 dB(A) and are not expected to approach, meet, or exceed the NAC for Activity Category E.

When compared to existing conditions, traffic noise levels are predicted to increase up to 2.7 dB(A), which does not constitute a substantial increase of 15 dB(A) or more.

Traffic management and alternative roadway alignments were determined to be unreasonable noise abatement measures with the Interim Improvements. When used in conjunction with compatible land use planning, noise buffer zones can be an effective abatement measure. Noise contours, which can be used to establish noise buffer zones, have been prepared for the future improved roadway facility and are discussed in this report.

Based on the noise analyses performed to date for the proposed Interim Improvements, there are no feasible and reasonable solutions available to mitigate the predicted traffic noise impacts at the impacted residences and recreation uses.

With the Preferred Alternative, future design year (2050) traffic noise levels are predicted to range from 53.7 to 76.7 dB(A) at the 1,075 residences evaluated, and are predicted to approach, meet, or exceed the NAC for Activity Category B at 319 residences. Traffic noise levels at the recreation uses are predicted to range from 50.8 to 73.6 dB(A), and are predicted to approach, meet, or exceed the NAC for Activity Category C at 22 recreation uses. Interior traffic noise levels are not predicted to approach, meet, or exceed the NAC for Activity Category D, ranging from 35.4 to 50.7 dB(A). Traffic noise levels are predicted to range from 49.8 to 67.3 dB(A) and are not predicted to approach, meet, or exceed the NAC for Activity Category E. When compared to existing traffic noise levels, the largest increase with the proposed Preferred Alternative is 10.3 dB(A). As such, no substantial increases are predicted to occur.

Traffic management and alternative roadway alignments were determined to be unreasonable noise abatement measures with the Preferred Alternative. When used in conjunction with compatible land use planning, noise buffer zones can be an effective abatement measure. Noise contours, which can be used to establish noise buffer zones, have been prepared for the future improved roadway facility and are discussed in this report.

The results of the analysis indicate that noise barriers are a potentially feasible and cost reasonable measure with the proposed Preferred Alternative for up to 110 impacted residences within the Nest Apartments, Lone Oak RV Park, Palmetto Trace Apartments, residences in the northwest quadrant of the US 41/10th Street West interchange, and at two recreation uses also located at Palmetto Trace

Apartments. There does not appear to be any other method of reducing the predicted traffic noise impacts at the remaining impacted residential receptors and recreation uses.

The FDOT is committed to the construction of the potentially feasible and cost reasonable noise abatement measures identified for the Preferred Alternative at the Nest Apartments, Lone Oak RV Park, Palmetto Trace Apartments and residences in the northwest quadrant of the US 41/10th Street West interchange, contingent upon the following conditions:

1. Final recommendations on the construction of the abatement measure are determined during the project's final design and through the public involvement process;
2. Detailed noise analyses during the final design process support the need for, feasibility, and reasonableness of providing abatement;
3. Cost analysis indicates that the cost of the noise barrier will not exceed the cost reasonable criterion;
4. Community input supporting types, heights, and locations of the noise barrier is provided to the District Office; and
5. Safety and engineering aspects related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.

At each potential noise barrier location for both future build alternatives, there is the potential for conflicts with the construction and placement of noise barriers due to limited available right-of-way, planned stormwater management facilities, and the presence of overhead and/or underground utilities. Additionally, residences in Lone Oak RV Park may need to be acquired to accommodate the right-of-way necessary for the proposed improvements, which may impact the cost reasonableness of the potential noise barrier. The extent of these potential residential relocations was unknown at the time of this analysis. Each of these items will be evaluated in greater detail as part of the design phase for each of the proposed build alternatives. A summary of the potentially feasible and cost reasonable noise barriers for the Preferred Alternative is provided in **Table ES-1**.

Land uses such as residences, schools, parks, places of worship, hospitals/medical facilities, daycare centers, and hotels are located within the project limits and are identified in the FDOT's listing of noise and vibration-sensitive sites. It is anticipated that the application of the FDOT "Standard Specifications for Road and Bridge Construction" will minimize or eliminate potential construction noise and vibration impacts.

Table ES-1 Summary of Potentially Feasible and Cost Reasonable Noise Barriers[1]

Future Build Alternative	Barrier ID	Adjacent Community / Communities	Evaluated Location	Maximum Number of Benefited Receptors[2]			Maximum Number of Receptors Achieving Noise Reduction Design Goal	Maximum Average Noise Reduction – Leq (dB(A))[4]	Total Estimated Cost	Cost Per Benefited Receptor
				Impacted	Other[3]	Total				
Preferred Alternative	5	Nest Apartments	10' or less inside FDOT right-of-way	17	17	34	13	7.2	$621,280	$18,273
	14	Lone Oak RV Park	10' or less inside FDOT right-of-way	47	2	49	26	9.5	$975,920	$19,917
	15	Palmetto Trace Apartments	10' or less inside FDOT right-of-way	34.41[5]	4	38.41[5]	28.41[5]	8.0	$1,190,640	$30,998
	16	Residences in NW Quadrant of US 41/10th Street West Interchange	10' or less inside FDOT right-of-way	12	0	12	4	6.2	$345,840	$28,820

1 The locations of the potentially feasible and cost reasonable noise barriers are provided on the Project Aerials in Appendix B

2 This table provides the maximum number of benefited receptors predicted to occur with a maximum height noise barrier. Please refer to individual barrier results tables for benefited receptors provided at barrier heights lower than 22 feet.

3 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

4 Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the barrier.

5 Includes "equivalent receptors" representing the playground and volleyball court at Palmetto Trace Apartments.

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SECTION 1 INTRODUCTION

1.1 PD&E STUDY PURPOSE

The objective of this Project Development & Environment (PD&E) study is to assist the Florida Department of Transportation (FDOT) Office of Environmental Management (OEM) in reaching a decision on the type, location, and conceptual design of the proposed improvements for the widening of US 41 and US 301. This study documents the need for improvements as well as the procedures utilized to develop and evaluate various improvements, including elements such as proposed typical sections, preliminary horizontal alignments, and intersection enhancements.

The PD&E study satisfies all applicable requirements, including the National Environmental Policy Act (NEPA), to qualify for federal-aid funding of subsequent development phases (design, right-of-way acquisition, and construction).

1.2 PROJECT DESCRIPTION

The FDOT District One (D1) is conducting a PD&E study, known as the Bradenton-Palmetto Connector (BPC), to evaluate capacity and mobility improvements to United States (US) 41/State Road (SR) 55/1st Street (St)/Tamiami Trail (Trl) and US 301/SR 683 including roadway widening, bridge reconstruction, new stormwater management facilities (SMF), new floodplain compensation (FPC) sites, and bicycle and pedestrian accommodations. The study limits begin at US 301/SR 683 from 9th St East, north of the City of Bradenton, Florida, and continues along US 41 to north of 25th St East, north of the City of Palmetto, Florida. The project also crosses the Manatee River. The study limits extend approximately 4.5 miles, all within Manatee County. The project location and study limits are shown in **Figure 1-1**.

In 2025, FDOT D1 completed a PD&E study for the Hernando DeSoto Bridge (structure #130053) Replacement from westbound SR 64 to Haben Boulevard (Blvd) in Manatee County, Florida (FPID 442630-1-22-01, ETDM 14510). That study evaluated replacing the existing four lane DeSoto Bridge with a new four lane bridge that included wider shoulders, upgraded pedestrian facilities and other safety features. The DeSoto Bridge Replacement PD&E study limits fall within the BPC PD&E study limits; however, it did not include adding lanes for capacity improvements. This BPC PD&E study does include adding additional lanes both on the roadway and the DeSoto Bridge to accommodate capacity needed within the project study area.

Figure 1-1 Project Location Map

1.3 EXISTING FACILITY AND PROPOSED IMPROVEMENTS

1.3.1 Existing Facility

The study begins on US 301 starting from 9th St East where the alignment traverses west then turns north as it crosses over the northbound leg of South Tamiami Trl. US 301 then combines with US 41 north of the CSX Railroad at-grade crossing (RR#624712-B). US 301 is a four-lane divided roadway where the median alternates between grassed vegetation and a concrete barrier. The facility contains open drainage and paved shoulders. There are no bicycle lanes or sidewalks. A representation of the lane arrangement is shown in **Figure 1-2**.

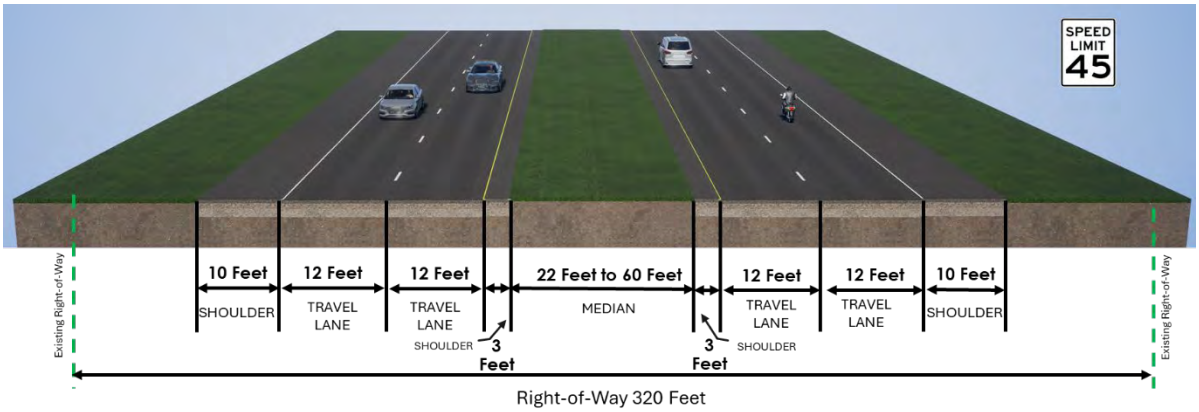

Figure 1-2 Existing Roadway Typical Section: US 301

North of the US 301 junction with US 41, from the CSX Railroad at-grade crossing (RR#624712-B) to north of westbound SR 64, the US 41/US 301 roadway varies between a maximum of four northbound lanes to a minimum of two northbound lanes and a maximum of three southbound lanes to a minimum of two southbound lanes. The median varies between a grassed median, concrete separator, and concrete barrier. Stormwater runoff is conveyed through a closed drainage system and there are sidewalks along both sides of the roadway until north of westbound SR 64 where there is no sidewalk on the east side and sporadic sidewalk on the west side. There are no bicycle lanes within these limits. Exclusive right- and left-turn lanes are used at select intersections, including all signalized intersections at 13th Avenue (Ave), 9th Ave, eastbound SR 64/6th Ave, and westbound SR 64. Although the roadway's right-of-way width varies, it is generally 125 feet wide. The posted speed limit is 45 miles per hour (mph). A representation of the lane arrangements is shown in **Figure 1-3**.

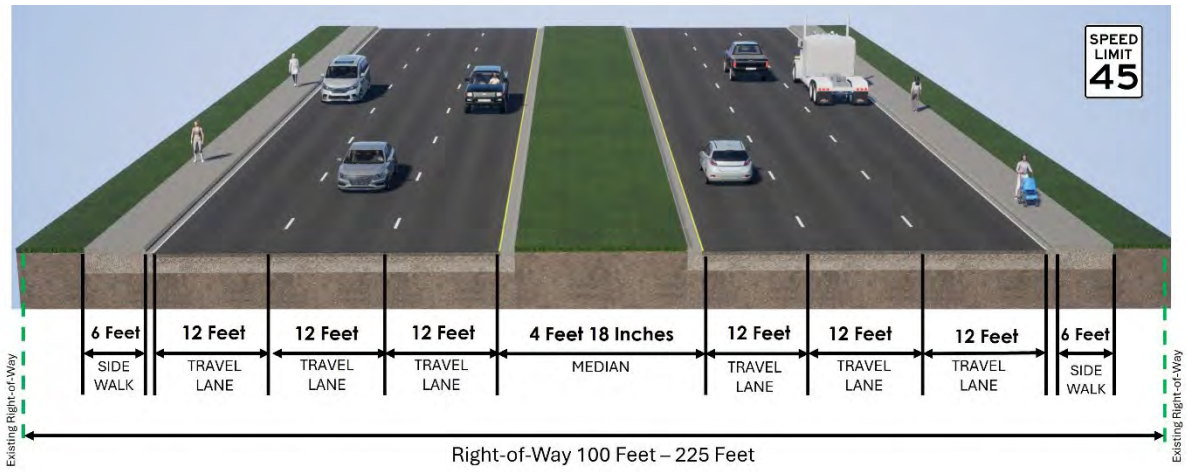

Figure 1-3 Existing Roadway Typical Section: South of DeSoto Bridge

North of westbound SR 64, US 41 continues as a four-lane divided roadway and crosses the Manatee River via the DeSoto Bridge. The bridge has substandard elements with design deficiencies, including narrow shoulders, discontinuous pedestrian facilities, and substandard bridge rails.

The existing typical section for the DeSoto Bridge is a divided four-lane highway comprised of two 12-foot travel lanes, a two-foot outside shoulder in each direction, and a four-foot raised median and barrier wall**,** as shown in **Figure 1-4**. The total bridge width is approximately 62 feet. The posted speed limit is 50 mph.

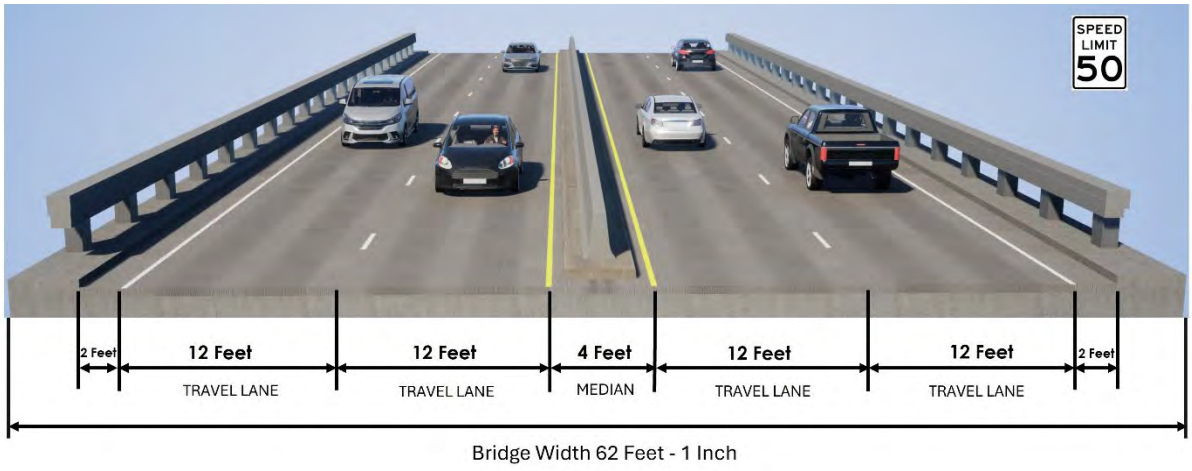

Figure 1-4 Existing Structure Typical Section: DeSoto Bridge

North of the DeSoto Bridge to north of 25th St E the typical roadway section consists of two 12-foot travel lanes in each direction. The median varies between a grass median and concrete traffic separator. The roadway transitions from paved shoulders and open drainage to curb and gutter and closed drainage north of the US 301/10th St E interchange. There are no sidewalks from north of the DeSoto bridge to 17th St E, there are continuous sidewalks from 17th St E to 25th St E, and there are no sidewalks north of 25th St E to the end of the project limits. There are no bicycle lanes. The roadway's right-of-way width varies, but

it is generally 120 feet. The posted speed limit is 50 mph. A representation of the lane arrangements is shown in **Figure 1-5**.

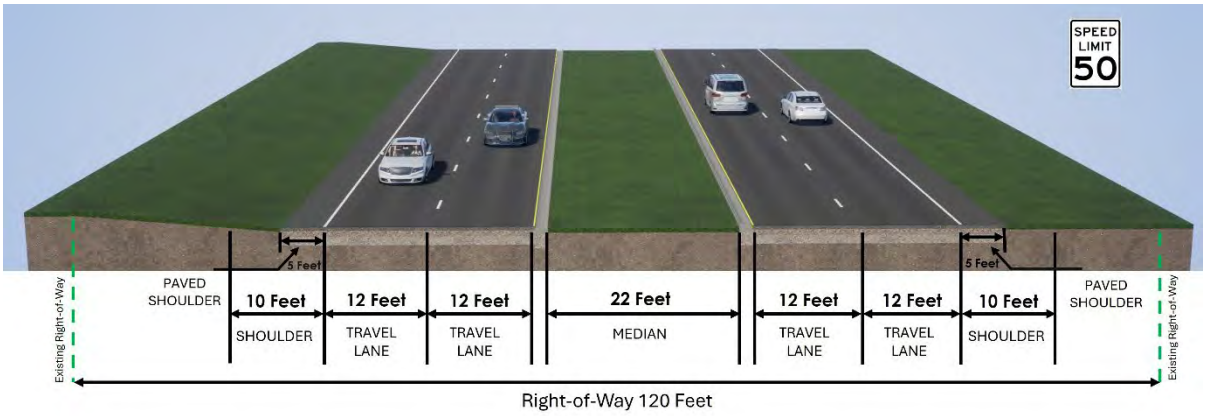

Figure 1-5 Existing Roadway Typical Section: North of DeSoto Bridge

1.3.2 Proposed Improvements

The proposed improvements associated with the Preferred Alternative include widening the roadway from four to six general purpose lanes and adding two elevated proposed express lanes supported by median piers. Additional improvements include drainage upgrades and enhanced bicycle and pedestrian facilities, including sidewalks south of the DeSoto Bridge and shared use paths north of the DeSoto Bridge. In addition to the Preferred Alternative, due to funding constraints and the potential need for the elevated lanes of the Preferred Alternative to be tolled, an Interim Improvement is proposed between westbound SR 64 and US 301. This Interim Improvement would widen the roadway from four to six lanes and remove and replace the DeSoto Bridge with six travel lanes and a shared use path on both sides. The Interim Improvements are 1.7 miles of the total project length and do not include the elevated proposed express lanes.

Analysis of the Preferred Alternative does not assume any of the Interim Improvements are constructed. Instead, the study compares the Preferred Alternative to the existing/No-Build condition. This PD&E study evaluates the No-Build alternative and the Preferred Alternative. However, this study also includes information on the Interim Improvements to clearly quantify impacts of both Preferred Alternative and Interim Improvements. The Preferred Improvement and Interim Improvement limits are shown in **Figure 1-6**.

Figure 1-6 Preferred Alternative and Interim Improvements

Preferred Alternative

Corridor improvements begin at US 301 and 9th St East which travels west to intersect US 41 and continues north, crossing the Manatee River and ending north of 25th St East. The improvements are divided into three typical sections: south of the DeSoto Bridge, the DeSoto Bridge, and north of the DeSoto Bridge, to demonstrate the roadway and bridge configurations along the Preferred Alternative.

South of the DeSoto Bridge: The proposed typical section consists of six 11-foot lanes divided by a median that widens to 22 feet to accommodate the elevated structure. The at-grade roadway includes six-foot sidewalks on both sides and no bicycle lanes. The proposed right-of-way is approximately 120 feet wide. The proposed design speed is 45 mph. Two 15-foot proposed express lanes are provided in the US 301 median via an elevated structure that begins just west of 9th St East. The elevated structure follows US 301 through a northern curve near US 41/SR 45/S Tamiami Trail, where US 301 joins US 41. This typical section is shown in **Figure 1-7**.

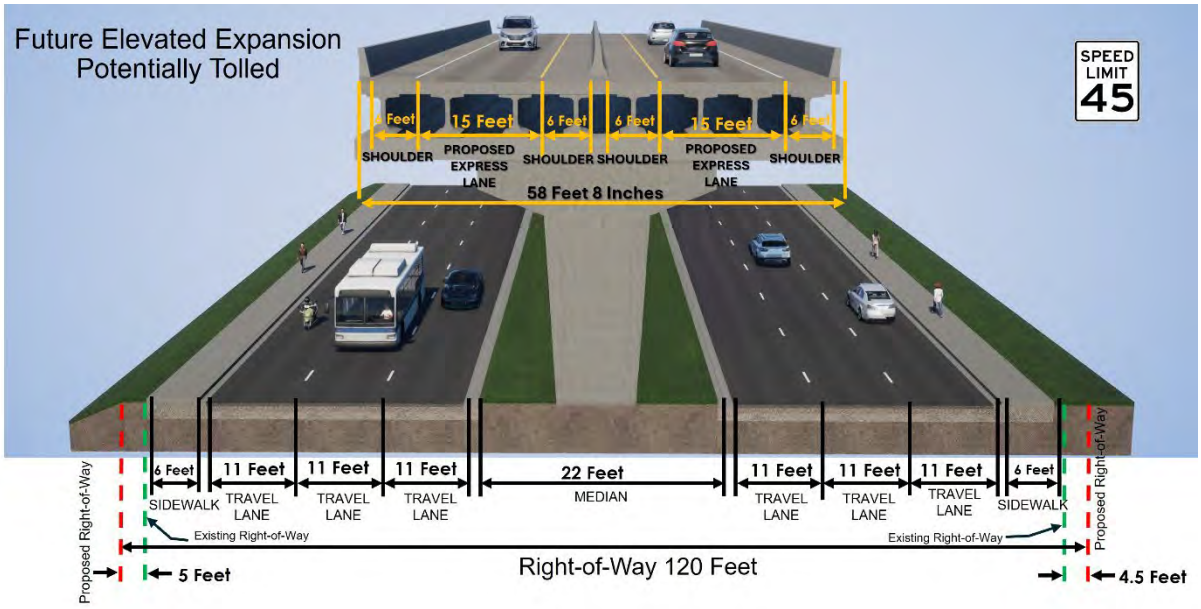

Figure 1-7 Preferred Roadway Typical Section: South of DeSoto Bridge

DeSoto Bridge: The proposed express lanes transition from an elevated structure to match the elevation of the travel lanes on DeSoto Bridge. The transition occurs just north of westbound SR 64. The new DeSoto Bridge consists of eight travel lanes (six travel lanes and two proposed express lanes), plus a barrier separated 12-foot shared use path on both sides. The bridge is approximately 164 feet wide. The proposed design speed is 45 mph. In addition, the proposed express lanes are buffer separated from the travel lanes via flexible tubular markers as shown in **Figure 1-8**.

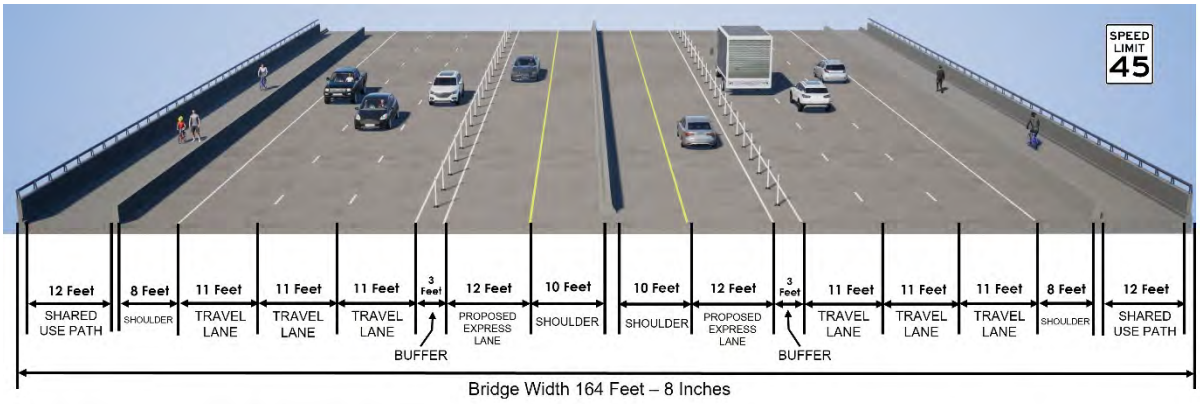

Figure 1-8 Preferred Roadway Typical Section: DeSoto Bridge

North of the DeSoto Bridge: This typical section is comprised of six 11-foot lanes divided by a median that widens to 32.5 feet to accommodate the elevated structure. The at-grade roadway includes a 12-foot shared use path on both sides of US 41. The proposed right-of-way is approximately 176 feet, and the proposed design speed is 45 mph. The proposed express lanes transition back to an elevated structure in the roadway median, north of the bridge over the CSX Railroad Short Line, spanning the intersections from 17th St East to 25th St East. A conceptual view of the proposed express lanes elevated over the travel lanes is shown in **Figure 1-9**.

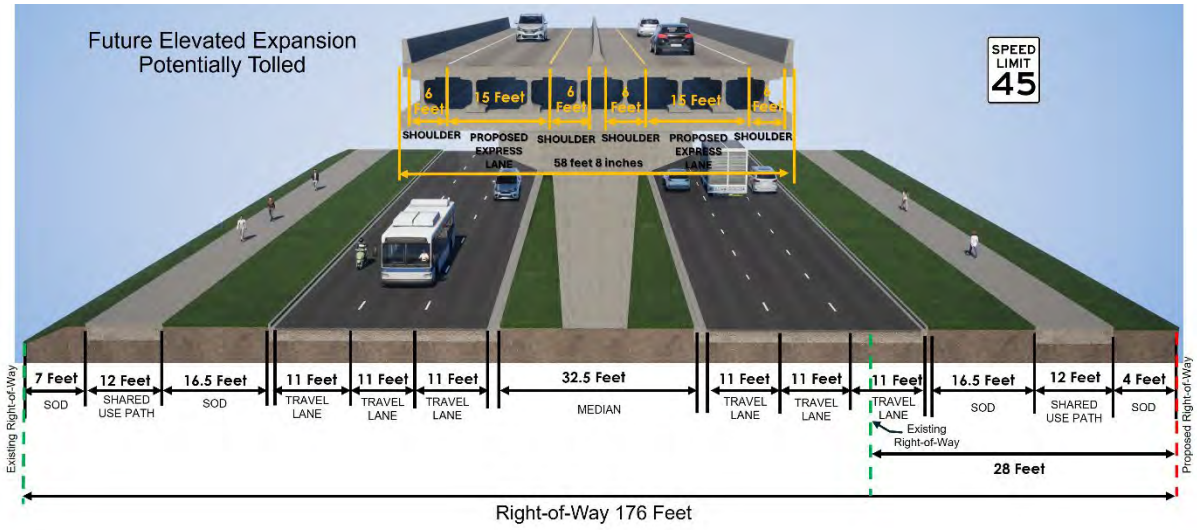

Figure 1-9 Preferred Roadway Typical Section: North of DeSoto Bridge

Interim Improvements:

The limits of the Interim Improvements are from westbound SR 64 to north of 7th Street West as shown in **Figure 1-10**. The improvements are divided into three typical sections: south of the DeSoto Bridge, the DeSoto Bridge, and north of the DeSoto Bridge, to demonstrate the roadway and bridge configurations. The Interim Improvements are consistent with the full limits of the previously approved DeSoto Bridge Replacement PD&E Study (FPID 442630-1-22-01, ETDM 14510). The difference between the prior study and the Interim Improvements is the prior DeSoto Bridge Replacement PD&E studied only replacing the DeSoto Bridge with a new four-lane structure but did not evaluate capacity improvements. Whereas the Interim Improvements would widen the roadway from four to six lanes and remove and replace the DeSoto Bridge with six travel lanes and a shared use path on both sides.

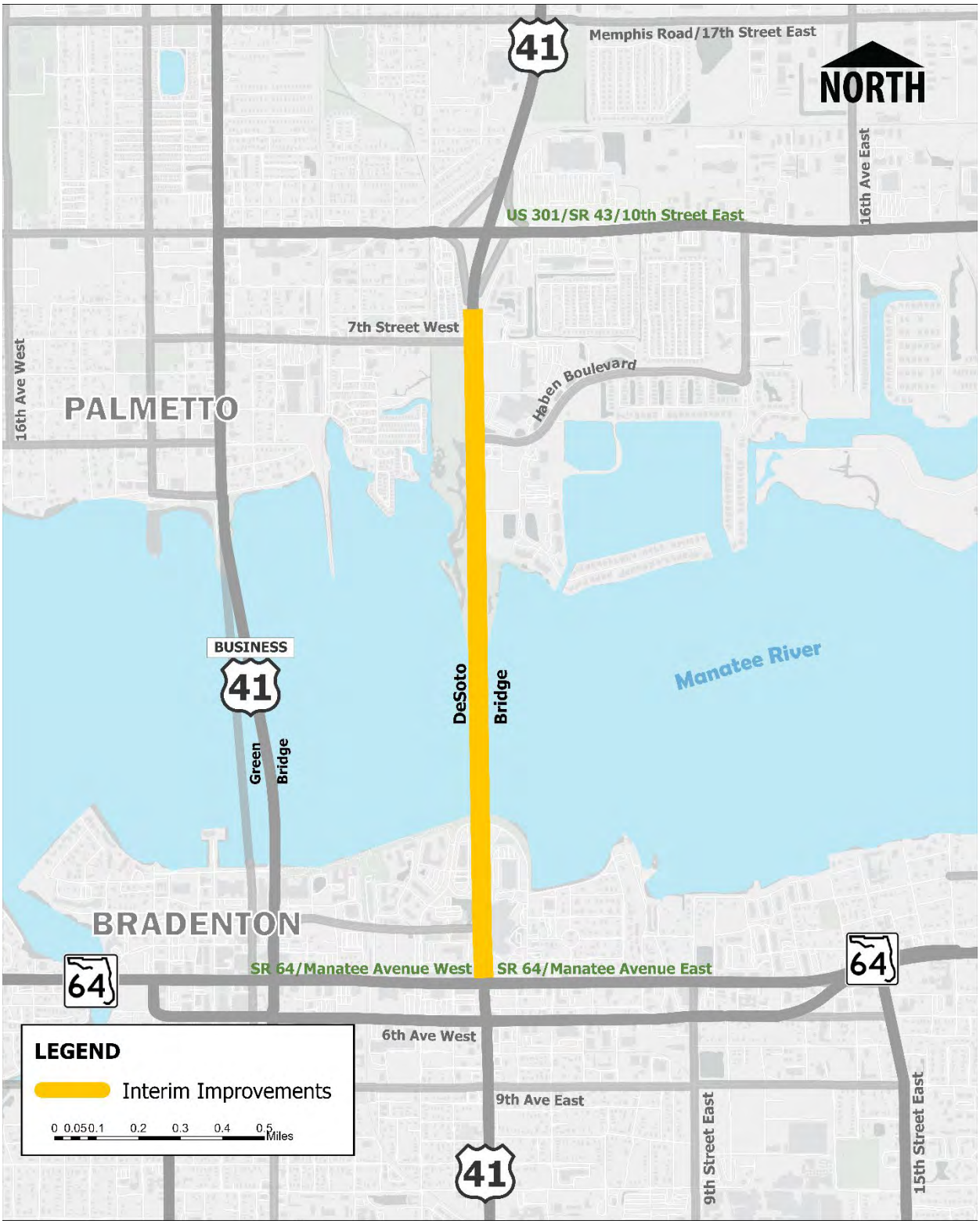

Figure 1-10 Interim Improvements Project Limits

South of the DeSoto Bridge: The typical section consists of six 11-foot travel lanes, divided by a median that varies from eight to 18 feet, and provides six-foot sidewalks on both sides of US 41 with no bike lanes. The proposed right-of-way is approximately 136 feet, which is wide enough to accommodate the elevated structure for future proposed express lanes when the Preferred Alternative is constructed. The proposed design speed is 45 mph. The conceptual lane arrangements for the Interim Improvements north of the DeSoto Bridge are shown in **Figure 1-11**.

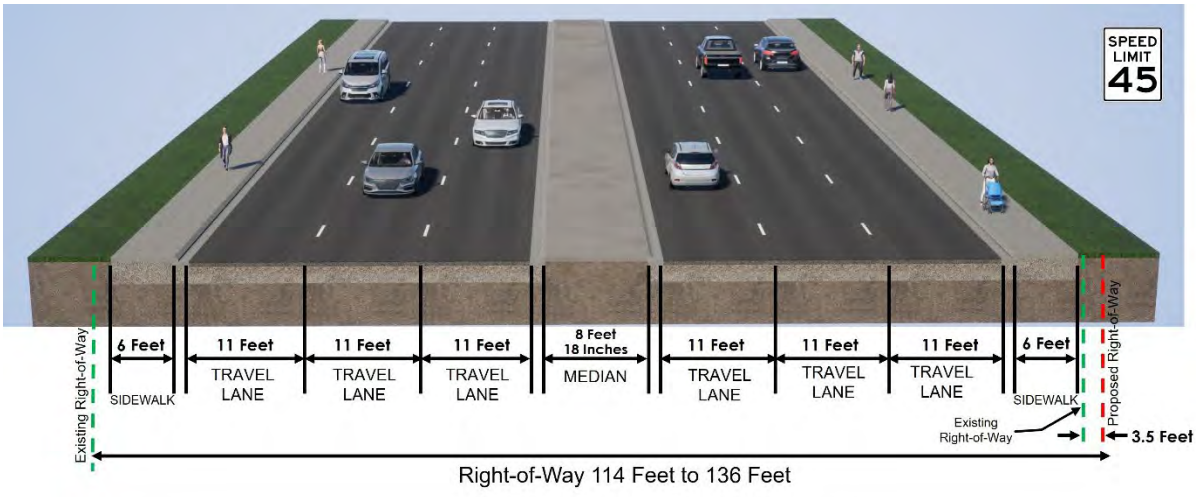

Figure 1-11 Interim Improvements South of DeSoto Bridge

DeSoto Bridge: The Interim Improvement includes the replacement of the DeSoto Bridge in which six 11-foot travel lanes divided by a concrete barrier median, with eight-foot inside shoulders in each direction are proposed. The typical section also includes a 12-foot shared use path and outside shoulders on both sides of the bridge. The bridge will be designed to accommodate future widening of the structure so proposed express lanes could be added when the Preferred Alternative is constructed. The proposed right-of-way is approximately 128 feet, and the proposed design speed is 45 mph. The lane arrangements on the DeSoto Bridge with the Interim Improvements are shown in **Figure 1-12**.

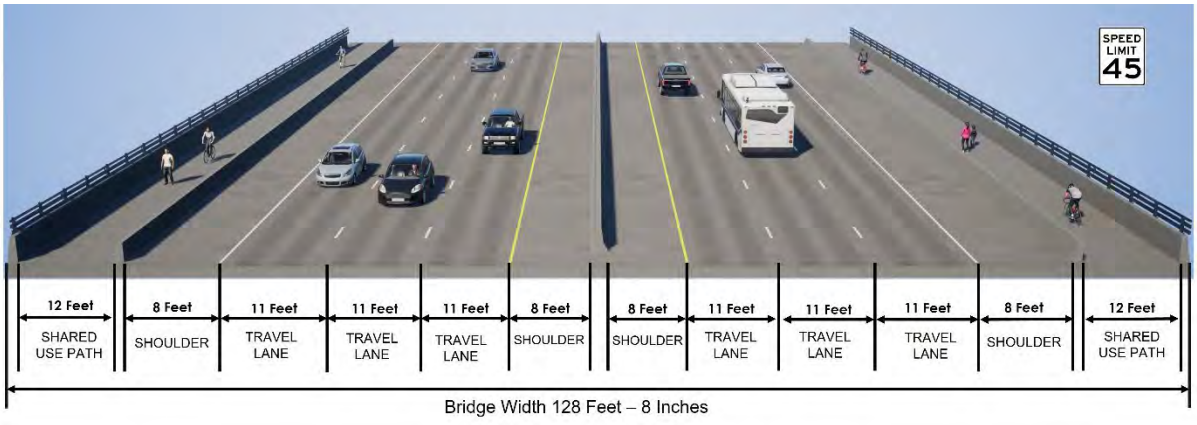

Figure 1-12 Interim Improvements DeSoto Bridge

North of the DeSoto Bridge: The typical section consists of six 11-foot travel lanes divided by a 32.5-foot median, which is wide enough to accommodate the elevated structure for future proposed express lanes when the Preferred Alternative is constructed. A 12-foot shared use path is provided on both sides of the roadway. The proposed right-of-way is approximately 176 feet, and the proposed design speed is 45 mph. The conceptual lane arrangements for the Interim Improvements north of the DeSoto Bridge are shown in **Figure 1-13.**

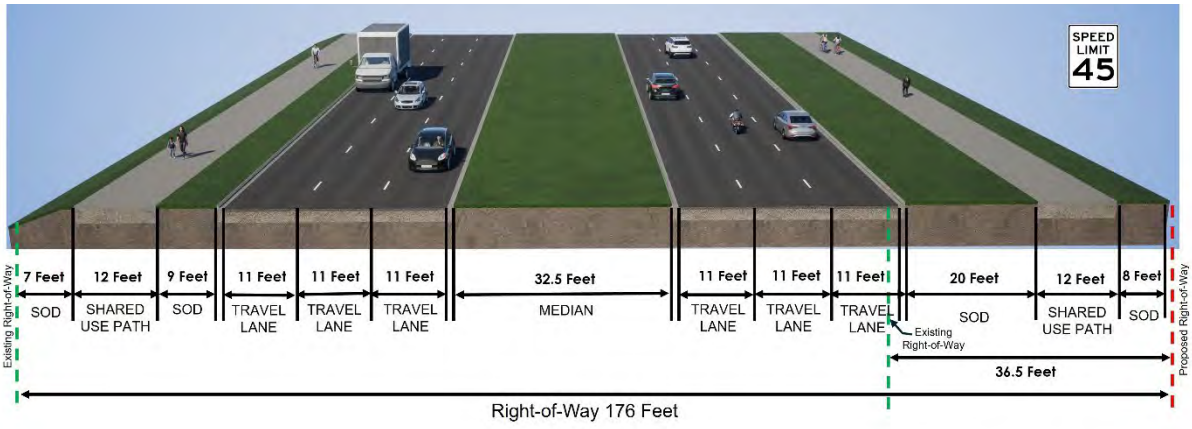

Figure 1-13 Interim Improvements North of DeSoto Bridge

1.4 NOISE STUDY REPORT

The objectives of this Noise Study Report (NSR) are to identify noise sensitive land uses within the project limits, to evaluate existing and future traffic noise levels at the sites with and without the proposed improvements, and to evaluate the need for and effectiveness of noise abatement measures. Additional objectives include the evaluation of construction noise impacts and the identification of noise impact contours adjacent to the corridor.

SECTION 2 METHODOLOGY

This traffic noise study was prepared in accordance with Title 23 Code of Federal Regulations (CFR) Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise."[1] The evaluation uses methodology established by the FDOT Traffic Noise Policy documented in the "Highway Traffic Noise" chapter of the PD&E Manual.[2] Additional guidance was obtained from the FDOT document "Traffic Noise Modeling and Analysis Practitioners Handbook".[3]

In accordance with 23 CFR Part 772 and the FDOT Traffic Noise Policy, this project will result in additional roadway capacity via new through lanes as well as a significant shift in the horizontal alignment of the DeSoto Bridge and qualifies as a "Type I" project for which a traffic noise study is required.

The prediction of existing and future traffic noise levels, with and without the roadway improvements, was performed using the Federal Highway Administration's (FHWA's) computer model for highway traffic noise prediction and analysis – the Traffic Noise Model (TNM-Version 2.5). The TNM predicts sound energy, in one-third octave bands, between highways and nearby receptors taking the intervening ground's acoustical characteristics, topography, and rows of buildings into account.

The predicted noise levels presented in this report are expressed in decibels (dB) on the A-weighted scale, or dB(A). This scale most closely approximates the response characteristics of the human ear to traffic noise. All noise levels are reported as hourly equivalent level Leq(h) values, which is the equivalent steady-state sound level for a one-hour period that contains the same acoustic energy as the time-varying sound level during the same time period. The use of the Leq metric and dB(A) as the unit of measurement is required by 23 CFR Part 772.

2.1 TRAFFIC DATA

The traffic data generated for use in the noise analysis is provided in **Appendix A**. Level of Service "C" (LOS C) or demand volumes, whichever is less, were used for modeled roadway segments within the project limits. The lesser of the two volumes is used since traffic noise is a combination of volume and speed, not necessarily one or the other. If the traffic analysis shows that demand volumes exceed roadway capacity (i.e., LOS C volumes), there would be a decrease in speed and as a result, a decrease in predicted traffic noise levels. Conversely, if demand traffic volumes are predicted to be less than LOS C/roadway capacity, it's determined that maximum capacity volumes would not be achieved, and the demand volumes are appropriate for use. This approach ensures that the worst-case traffic noise levels are predicted at noise sensitive land uses. Depending on the condition being evaluated (existing, Future No-Build, Interim Improvements, and the Preferred Alternative) a combination of LOS C and demand volumes were used in the analysis. Vehicle speeds are based on the posted speed limit for the Existing and Future No-Build conditions, and the proposed posted speed limits for the future build conditions for each build alternative.

2.2 NOISE ABATEMENT CRITERIA

To evaluate traffic noise, the FHWA has established Noise Abatement Criteria (NAC). The criteria vary according to a property's activity category and are provided in **Table 2-1**.

Table 2-1 Noise Abatement Criteria

Activity Category	Activity Leq(h)[1] FHWA	Activity Leq(h)[1] FDOT	Evaluation Location	Description of Activity Category
A	57	56	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	66	Exterior	Residential.
C[2]	67	66	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	51	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E[2]	72	71	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.

2.2.1 Noise Sensitive Land Uses

Noise sensitive land uses are any such use shown in **Table 2-1** located in proximity to US 301/US 41 within the project limits. When traffic noise levels are predicted to "approach" or exceed the NAC during the design year with a proposed transportation improvement project, or when predicted future noise levels increase substantially from existing levels, FDOT policy requires the consideration of noise abatement measures. The FDOT defines the word "approach" to mean within one dB(A) of the NAC (i.e., one dB(A) less than the NAC) and states that a substantial increase will occur if traffic noise levels are predicted to increase 15 dB(A) or more when compared to existing noise levels as a direct result of a transportation improvement project.

Within the project limits from 9th Street East to north of 25th Street East, 823 TNM receptors (i.e., a discrete or representative location of a noise sensitive area(s)) representing the various noise sensitive sites were modeled to represent 1,128 noise sensitive uses. The following provides a description of those evaluated within each Activity Category present within the project limits:

- **Activity Category B:** 710 receptors were modeled to represent 1,075 residences within the project limits, including single-family residences and residences in multi-family buildings. There are 447 residences south of the Manatee River, and 628 residences north of the Manatee River. At the south end of the project, 31 single-family residences and 126 residences in the Nest at Robins Apartments are located south of US 301 between US 41 (1st Street West) and 9th Street East. Two residences were evaluated west of 1st Street West. 75 residences were evaluated in Bradenton Village, located on the west side of US 301 and south of the CSX railroad. Between the CSX railroad and westbound SR 64, 81 residences were evaluated (39 west of US 41 and 42 east of US 41). Between westbound SR 64 and the Manatee River, 128 residences were evaluated with the Aria at Bradenton Apartments, 3 residences at the 210 Watermark Apartments, and a single-family residence located east of Manatee Memorial Hospital. North of the Manatee River, 30 residences were evaluated in the Pegel Point community. Within Riviera Dunes, six single-family residences and 56 residences in multi-family buildings were evaluated. Palmetto Trace Apartments included the evaluation of 100 residences in multi-family buildings, and 110 residences were evaluated within the Lone Oak RV Park. In the northwest quadrant of US 41 and 10th Street east, 76 residences in multi-family buildings were evaluated. Eleven single-family residences were considered west of US 41 and north of the CSX railroad. From 17th Street East to the northern project limits, 239 residences were evaluated, 143 west of US 41 and 96 east of US 41.
- **Activity Category C:** 93 receptors were modeled to represent 38 various recreation areas and uses. Seven receptors were modeled to represent a courtyard, pool, clubhouse, tennis court and pavilions with picnic tables at Bradenton Village. Two receptors were modeled to represent a basketball court and athletic field at Team Success School. Four receptors were modeled within Love Park. One receptor was evaluated for the pool at the Aria at Bradenton Apartments, and one receptor was evaluated representing the playground at Kids Castle Learning Center Daycare. Within the Bradenton Riverwalk, two receptors were evaluated at the Donald L. Courtney Veterans Monuments Park, six receptors were modeled to represent the riverwalk path, one receptor each was evaluated at the

pavilions and volleyball court, and 13 receptors were evaluated at various locations within the skatepark. At Palmetto Estuary Preserve, 16 receptors were evaluated along the walking trail, four receptors represent various pavilions and picnic tables, and one receptor was evaluated at the playground. Four receptors were modeled to represent outdoor use areas/tables at the primitive boat ramp north of the Manatee River on the east side of US 41. Two receptors were modeled to represent tennis courts and a pool at Riviera Dunes condominiums. At Palmetto Trace Apartments, three receptors were modeled to evaluate a pool, playground and volleyball court. One receptor was evaluated to represent an outdoor use area with picnic tables at Lincoln Memorial Middle School. Within Coach Eddie Shannon Park, 24 receptors were modeled to represent various uses including a trail, basketball courts, various pavilions with picnic tables, athletic fields, bleachers, and aquatic center features including a waterslide, pools, playground, pavilions, and splash pad.

- **Activity Category D:** Interior traffic noise levels were evaluated at 12 locations. These include three schools (Team Success School, Lincoln Memorial Middle School, and the Anna Gayle Resource Center), Manatee Memorial Hospital, and eight places of worship (St. Mary Missionary Baptist Church, Mt Pilgrim Primitive Baptist Church, Miracle Healing and Deliverance Ministries Church, Pentecostal of Faith Church, Iglesia De Dios Pentecostal Church, Mt. Olive Missionary Baptist Church, Mt. Raymond Baptist Church, and Iglesia Evangelica Cristiana Church).
- **Activity Category E:** Four receptors were modeled to evaluate four Activity Category E land uses, including an office building outdoor use area, outdoor seating at the Riverwalk Grille, and two Marriott Hotel Pools.

Exterior traffic noise levels were predicted for the residences, recreation areas, and outdoor seating areas at the office building and restaurant.

Interior traffic noise levels were predicted at Manatee Memorial Hospital, schools, and places of worship. Interior traffic noise levels were determined by applying a building reduction factor to the predicted exterior traffic noise level at the face of the building structure closest to the roadway. Field reviews as well as information available from the Manatee County Property Appraiser confirmed that all locations where interior traffic noise levels were predicted are built of concrete block/masonry construction, which warranted a 25 dB(A) reduction factor consistent with guidance found in the FHWA publication "Highway Traffic Noise: Analysis and Abatement Guidance".[4]

All receptor heights were assumed to be five feet above ground level for first floor residential units, recreation uses, and outdoor seating areas at office buildings and restaurants. Additional receptors above the ground floor in multi-family residential buildings and at Manatee Memorial Hospital were assumed to be an additional 10 feet above ground for each subsequent level (i.e., a second-floor receptor is 15 feet above ground, a 3rd floor receptor is 25 feet above ground, etc.). The letters A, B, C, and D, etc. following a receptor ID (i.e., 1A, 1B, 1C, 1D) denote first, second, third, fourth, and subsequent floor receptors, respectively. Receptors are numbered numerically beginning with 1 at the southern project limits and extending to Receptor 634 at the north limits. Receptors 1 through 234 are south of the Manatee River, while Receptors 235 through 634 are north of the Manatee River.

As discussed in Section 1.3, the limits for the Preferred Alternative extend from 9th Street East in Bradenton to north of 25th Street East in Palmetto. Interim Improvements are being considered for the limits from westbound SR 64 to north of 7th Street West and was also given consideration as part of this study. Since the limits of the Interim Improvements are within the limits of the Preferred Alternative, some noise sensitive land uses were evaluated under both the Preferred Alternative and the Interim Improvements, while those that are located outside the limits of the Interim Improvements were only evaluated as part of the Preferred Alternative. Receptors 181 through 290 were evaluated as part of the proposed Interim Improvements.

The modeled receptor locations are provided on the figures in **Appendix B**. Noise sensitive land uses were verified during field reviews of the project area conducted in March 2026 and based on property records available online from the Manatee County Property Appraiser.

2.3 NOISE ABATEMENT MEASURES

2.3.1 Traffic Management

Traffic management measures that limit motor vehicle speeds and/or reduce traffic volumes can be effective mitigation measures. However, they also negate the ability of the project to accommodate the forecast future travel demand. For example, if the posted speed were reduced, the ability of US 41/US 301 to accommodate the forecast motor vehicle demand would also be reduced. As such, traffic management measures are not considered a reasonable noise abatement measure for this project.

2.3.2 Alignment Modifications

The alignment for the proposed build alternatives follow the existing roadway alignment and seek to minimize the need for additional right-of-way within the project limits beyond that proposed for acquisition. Shifting the roadway alignment further would result in additional right-of-way acquisition costs and would not provide a positive benefit since noise sensitive land uses are located on both the east and west sides of US 41/US 301 within the project limits. As such, an alternative roadway alignment is not considered a reasonable noise abatement measure.

2.3.3 Buffer Zones

Land uses such as residences, hotels, schools, churches, and recreation areas are considered incompatible with highway traffic noise levels that exceed the NAC for their respective Activity Category as detailed previously in **Table 2-1**. To reduce the possibility of noise related impacts to future development, noise level contours were developed for the future improved roadway facility, for both the Interim Improvements and the Preferred Alternative. These noise contours estimate the distance from the outside edge of the nearest travel lane for both of the alternatives under consideration where the NAC for each Activity Category (A through E) is expected to be approached (i.e. within one dB(A) of the NAC) in the design year (2050). Upon completion of this report, copies will be provided to Manatee County to promote compatibility between the proposed project and additional development that may occur in the future. Noise contour distances for the proposed Interim Improvements are provided in **Table 2-2** and

shown in **Figure 2-1**. Noise contours for the proposed Preferred Alternative are provided in **Table 2-3** and on **Figures 2-2 and 2-3**.

Table 2-2 Noise Contours – Interim Improvements

US 41/US 301 Roadway Segment	Activity Category (NAC)	Distance to Approach (within 1 dB(A)) of NAC for Activity Category (feet)[1]
Westbound SR 64 to 7th Street West	A (57 dB(A))	725
	B/C (67 dB(A))	225
	D[2] (52 dB(A))	90
	E (72 dB(A))	90

1 Distances are measured from the outside edge of the nearest travel lane for the improved roadway, do not account for any reduction in noise levels that may occur from shielding and/or terrain, and should be used for planning purposes only.

2 The distance to the interior impact criteria for Activity Category D is based on a conservative reduction factor of 20 dB(A) due to the building envelope that is applied to the predicted exterior traffic noise level.

Table 2-3 Noise Contours – Preferred Alternative

US 41/US 301 Roadway Segment	Activity Category (NAC)	Distance to Approach (within 1 dB(A)) of NAC for Activity Category (feet)[1]
South of Manatee River	A (57 dB(A))	800
	B/C (67 dB(A))	180
	D[2] (52 dB(A))	70
	E (72 dB(A))	70
North of Manatee River	A (57 dB(A))	800
	B/C (67 dB(A))	170
	D[2] (52 dB(A))	75
	E (72 dB(A))	75

1 Distances are measured from the outside edge of the nearest travel lane for the improved roadway, do not account for any reduction in noise levels that may occur from shielding and/or terrain, and should be used for planning purposes only.

2 The distance to the interior impact criteria for Activity Category D is based on a conservative reduction factor of 20 dB(A) due to the building envelope that is applied to the predicted exterior traffic noise level.

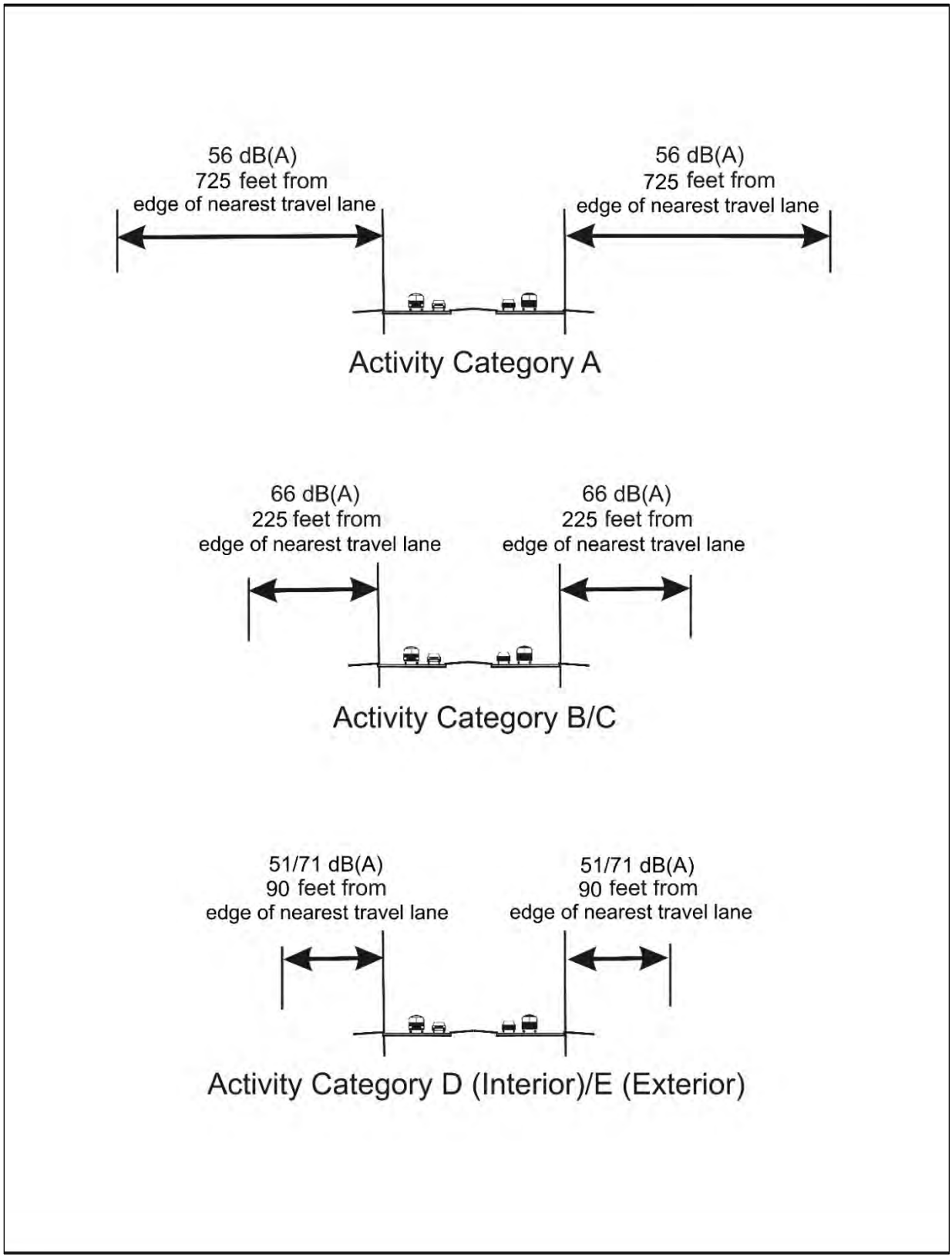

Figure 2-1 Noise Contours: Interim Improvements (Westbound SR 64 to 7th Street West)

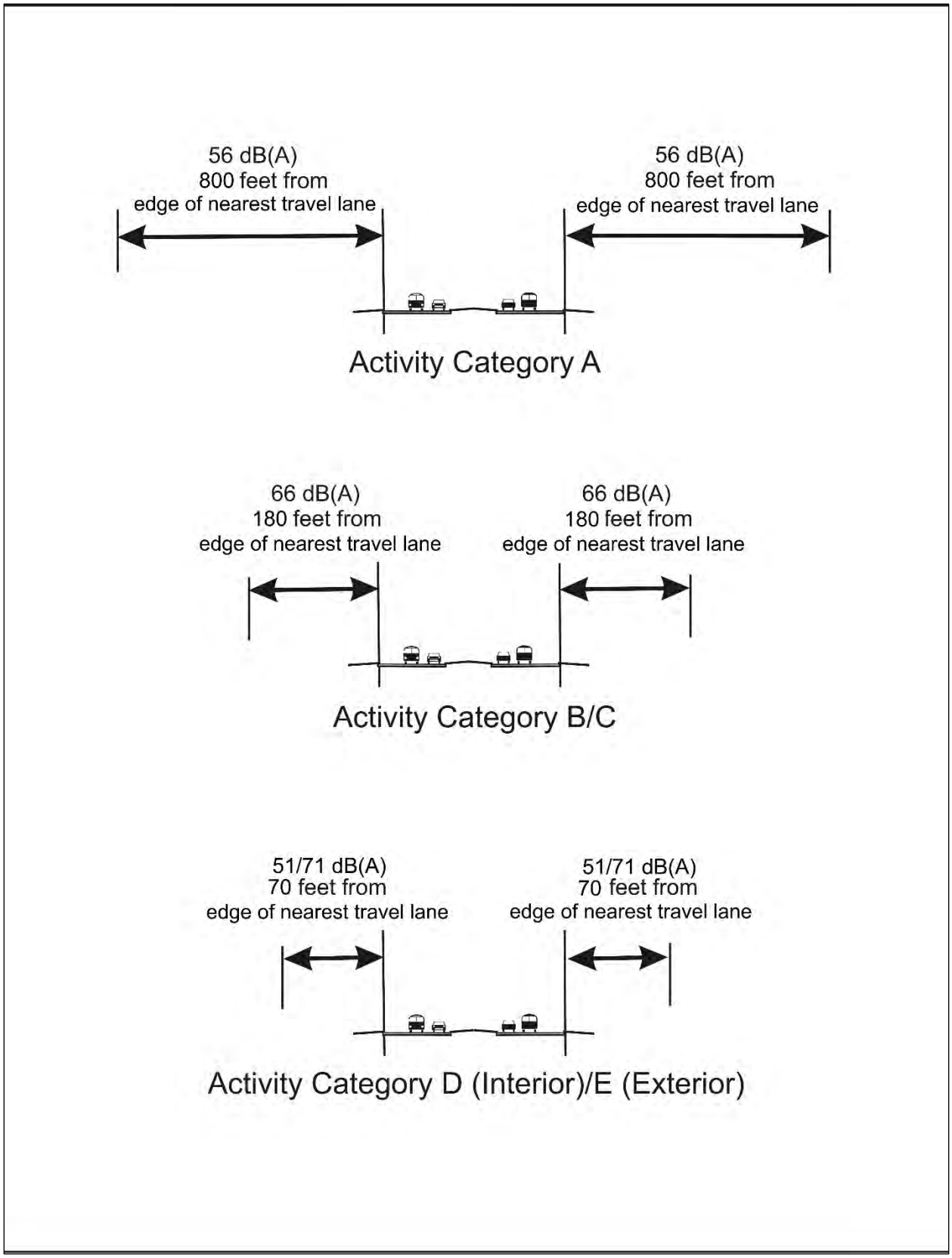

Figure 2-2 Noise Contours: Preferred Alternative (South of Manatee River)

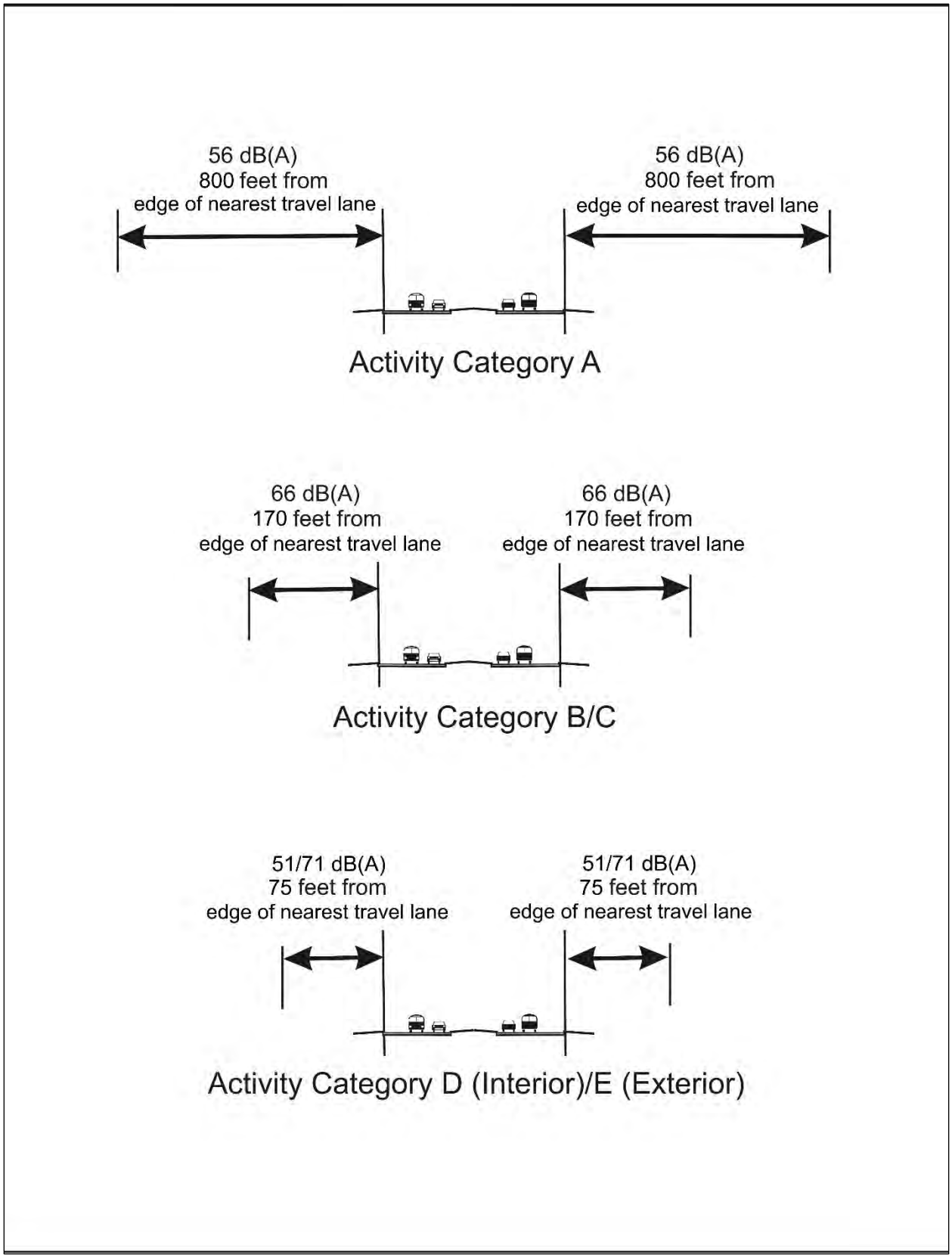

Figure 2-3 Noise Contours: Preferred Alternative (North of Manatee River)

2.3.4 Noise Barriers

Noise barriers reduce noise levels by altering the propagation path between the noise source and the receptor. To effectively reduce traffic noise, a noise barrier must be relatively long, continuous (without gaps or intermittent openings), and sufficiently tall to provide a discernable reduction in traffic noise. Consistent with FDOT's traffic noise policy, the minimum requirements for a noise barrier to be considered acoustically feasible and reasonable, and economically reasonable are:

- A noise barrier must provide at least a five dB(A) reduction in traffic noise for at least two impacted noise sensitive receptors to be considered an acoustically feasible abatement measure. A receptor that meets the minimum five dB(A) noise reduction requirement is considered "benefited",
- To be considered acoustically reasonable, a noise barrier must provide at least a seven dB(A) reduction (i.e., the FDOT's noise reduction design goal) for at least one benefited receptor and,
- A noise barrier should not cost more than $64,000 per benefited noise sensitive receptor. The current statewide cost estimate for noise barrier construction, which includes materials and labor, is $40 per square foot ($ft^2$).

The evaluation of noise abatement at non-residential land uses (parks, recreation areas, etc.) follows methodology developed by FDOT and documented in the publication "Methodology to Evaluate Highway Traffic Noise at Special Land Uses".[5]

After considering the amount of reduction that may be provided and the cost effectiveness, additional factors must also be considered when evaluating a noise barrier. These additional factors address the feasibility and reasonableness of providing a noise barrier as an abatement measure. Additional feasibility factors include factors that relate to design and construction (i.e., site-specific constructability), safety, access to and from adjacent properties, right-of-way requirements, maintenance, and impacts on utilities and drainage. In addition to the cost and noise reduction design goal requirement, the other reasonableness factor considered is the viewpoint of the benefited property owners and residents, if applicable, who may, or may not, desire a noise barrier as an abatement measure. The desires of the benefited property owners and residents are typically solicited during the project's design phase if feasible and cost reasonable abatement is recommended for construction as part of the roadway improvement project.

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SECTION 3 TRAFFIC NOISE ANALYSIS

3.1 MODEL VALIDATION

As discussed, existing and future traffic noise levels were modeled using the TNM. To ensure that these predictions are as accurate as possible, the computer model was validated using sound levels measured at locations adjacent to the project corridor. Traffic data including motor vehicle volumes, vehicle mix, vehicle speeds (obtained using a handheld radar gun), and meteorological conditions were observed and recorded during each measurement period. The field measurements and model validation were conducted in accordance with 23 CFR Part 772 and the FDOT's traffic noise policy.

The field measurements for this project were conducted in accordance with the FHWA's "Noise Measurement Handbook".[6] Each field measurement was obtained using a Larson Davis Model 720 Sound Level Meter (SLM). The SLM was calibrated before and after each monitoring period with a Larson Davis Model CAL150 Sound-Level Calibrator. Measurements were conducted at three locations within the project limits and are shown on the figures in **Appendix B**.

The vehicle data (volumes, fleet mix, and speeds) observed and recorded during each monitoring period were used as input for the TNM to determine if, along with the existing roadway geometry and area site conditions, the computer model could "re-create" the measured levels with the existing roadway. Consistent with the FDOT's traffic noise policy, a traffic noise prediction model is considered within the accepted level of accuracy if the measured and predicted noise levels are within a tolerance standard of plus or minus three dB(A). Each measurement period lasted for a duration of 10 minutes, with three 10-minute periods occurring at each measurement site. Observed traffic data for each 10-minute period was multiplied by six to determine hourly volumes for input to the TNM. Vehicle speeds were averaged for each of the five vehicle classifications observed and recorded during each measurement period.

Table 3-1 presents the field measurements and the validation results for the project. As shown, the ability of the model to predict noise levels within the acceptable range of plus or minus three dB(A) for the project was confirmed. During the second measurement period at Site 1, several blasts from a locomotive as it approached an at-grade crossing resulted in measured levels higher than those predicted by the TNM since the model cannot account for the sound levels produced by the horn. In all other cases, modeled traffic noise levels using TNM were higher than those measured in the field. Documentation in support of the model validation measurements is provided in **Appendix C** of this report.

Table 3-1 Model Validation Results

Validation Monitoring Site ID/Location[1]	Measurement Period	Leq(h) – dB(A)		
		Measured	Modeled	Difference[2]
Site 1: West of 9th Street East, North of U.S. 301	1	59.2	61.7	-2.5
	2	73.3	62.3	11.0
	3	60.6	61.7	-1.1
Site 2: Palmetto Estuary Preserve	1	66.4	68.3	-1.9
	2	66.6	68.5	-1.9
	3	66.0	67.9	-1.9
Site 3: East Side of U.S. 41, at 3rd Avenue East Intersection	1	65.8	68.7	-2.9
	2	68.1	69.1	-1.0
	3	67.6	68.8	-1.2

1 Measurements were obtained on March 26, 2026. Measurement locations are provided on the Figures in Appendix B.

2 A negative "Difference" value indicates computer modeled noise levels are higher than those measured in the field.

3.2 EXISTING AND FUTURE NO-BUILD NOISE LEVELS

A summary of the traffic noise levels predicted for the Existing (2024) and Future No-Build (2050) conditions for all receptors within the project limits is provided in **Table 3-2**.

Table 3-2 Summary of Predicted Existing and Future No-Build Traffic Noise Levels[1]

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels Leq (dB(A))	
				Existing (2024)	Future No-Build (2050)
1-29	1	Residences South of US 301/West of 9th Street E	B	55.1 – 65.8	56.7 – 67.5
30-43	1-2	The Nest Apartments	B	50.8 – 70.2	51.7 – 70.5
44	2	Residence West of 1st Street	B	57.5	57.9
45	2	Oaks at Greenbriar Nursing Home	B	56.8	57.6
46-73, 81-100	2-3	Bradenton Village Residences	B	54.6 – 69.4	55.5 – 70.0
74-80	2-3	Bradenton Village recreation uses (Courtyard, pool, clubhouse, tennis court, pavilions/picnic tables)	C	69.5 – 73.0	69.9 – 73.3
101-102	2-3	Team Success School Basketball Court and Athletic Field	C	61.3 – 62.8	61.9 – 63.3
103	3	Team Success School (Interior)	D	39.8	39.9

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels Leq (dB(A))	
				Existing (2024)	Future No-Build (2050)
104-121, 127-136, 138-140	3-4	Residences on west side of US 301/US 41, between 13th Avenue W and westbound SR 64	B	57.9 – 66.6	57.9 – 66.6
141-180, 211	3-4	Residences on east side of US 301/US 41, between 13th Avenue W and Manatee River	B	53.0 – 67.9	53.0 – 68.0
122-125	3	Love Park	C	61.2 – 65.4	61.2 – 65.4
126	3	St. Mary Missionary Baptist Church (Interior)	D	50.6	50.7
137	3	Mt. Pilgrim Primitive Baptist Church (Interior)	D	36.7	36.7
181-189, 191-203	4	Aria at Bradenton Apartments Residences	B	55.5 – 74.8	55.5 – 74.8
190	4	Pool at Aria at Bradenton Apartments	C	48.3	48.3
204	4	Office Building Outdoor Use Area	E	64.9	64.9
205	4	210 Watermark Apartments Residences	B	53.8 – 59.3	53.8 – 59.4
206	4	Marriott Hotel Pool	E	57.5	57.5
207	4	Mattison's City Grille Outdoor Seating	E	66.5	66.5
208-209	4	Manatee Memorial Hospital (Interior)	D	47.5 – 48.8	47.5 – 48.8
210	4	Kids Castle Learning Center Daycare Playground	C	54.2	54.2
212-213	4	Donald L. Courtney Veterans Monuments Park	C	61.7 – 63.4	61.7 – 63.4
214	4	Bradenton Riverwalk Pavilions	C	62.6	62.6
215-217, 232-234	4	Bradenton Riverwalk	C	62.5 – 67.0	62.5 – 67.0
218	4	Bradenton Riverwalk – Volleyball Court	C	65.2	65.2
219-231	4	Bradenton Riverwalk – Skatepark	C	64.0 – 67.9	64.1 – 67.9
235-255	5-6	Palmetto Estuary Preserve (Trail, Playground, Pavilions/Picnic Tables)	C	62.8 – 72.9	62.8 – 72.9
256-272	6	Pegel Point Residences	B	55.0 – 58.2	55.0 – 58.2
273-276	5-6	Outdoor Tables at Boat Ramp	C	65.7 – 67.0	65.7 – 67.0
277-286, 288-289	5-6	Riviera Dunes Residences	B	51.7 – 63.2	51.7 – 63.3
287	6	Riviera Dunes Tennis Courts	C	54.6	54.6
290	6	Marriott Hotel Pool	E	48.3	48.3

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels Leq (dB(A))	
				Existing (2024)	Future No-Build (2050)
291	7	Palmetto Trace Apartments Pool	C	58.3	58.3
292-307, 310-313	7	Residences at Palmetto Trace Apartments	B	52.2 – 70.3	52.2 – 70.4
308-309	7	Palmetto Trace Apartments Playground and Volleyball Court	C	65.4 – 67.9	65.5 – 68.0
314-377	7	Lone Oak RV Park Residences	B	59.6 – 73.7	59.6 – 73.8
378-399	7	Residences in NW Quadrant of US 41/US 310/10th St. W Interchange	B	60.4 – 70.1	60.5 – 70.2
400-404, 406-411	7-8	Residences West of US 41 and North of CSX Railroad	B	57.7 – 64.1	57.7 – 64.2
405	8	Miracle Healing and Deliverance Ministries Church (Interior)	D	39.4	39.5
412	8	Lincoln Middle School (Interior)	D	40.5	40.5
413	8	Lincoln Middle School Outdoor Use Area / Picnic Tables	C	62.7	62.7
414-437	8	Coach Eddie Shannon Park	C	57.8 – 67.1	57.8 – 67.1
438-488, 490-496, 498-513, 515-545	8-10	Residences West of US 41 Between 17th Street East and North Project Limits	B	56.2 – 75.8	56.3 – 75.9
489	9	Anna Gayle Resource Center	D	47.6	47.6
497	9	Pentecostal of Faith Church (Interior)	D	46.9	47.2
514	9-10	Iglesia De Dios Pentecostal Church (Interior)	D	36.4	37.0
546-550, 552-576, 577-612, 613-634	8-10	Residences East of US 41 Between 17th Street East and North Project Limits	B	55.9 – 75.3	56.5 – 75.4
551	9	Mt. Olive Missionary Baptist Church (Interior)	D	35.7	35.7
577	9	Mt. Raymond Baptist Church (Interior)	D	34.4	34.9
612	10	Iglesia Evangelica Cristiana Church (Interior)	D	36.7	37.3

1 A full list of Predicted Traffic Noise Levels is provided in Appendix D.

2 Please refer to the Figures in Appendix B.

As shown, existing traffic noise levels are predicted to range from 50.8 to 75.8 dB(A) at the residences evaluated as Activity Category B. Traffic noise levels at recreation uses evaluated as Activity Category C are predicted to range from 48.3 to 73.0 dB(A). Interior traffic noise levels at the schools, places of worship, and Manatee Memorial Hospital, evaluated as Activity Category D, are predicted to range from 34.4 to 50.6 dB(A). Existing traffic noise levels at the four locations evaluated as Activity Category E are predicted to range from 48.3 to 66.5 dB(A).

In the future without the proposed project (Future No-Build), traffic noise levels at the residences are predicted to range from 51.7 to 75.9 dB(A), and from 48.3 to 73.3 dB(A) at the recreation uses. Interior traffic noise levels are predicted to range from 34.9 to 50.7 dB(A). Future No-Build noise levels at the Activity Category E land uses are predicted to range from 48.3 to 66.5 dB(A).

When comparing traffic noise levels between the existing and Future No-Build conditions, the largest difference is 1.7 dB(A), with most locations predicted to experience a difference in traffic noise levels of less than one dB(A).

3.3 PREDICTED FUTURE TRAFFIC NOISE LEVELS – INTERIM IMPROVEMENTS

A summary of the traffic noise levels predicted for the Interim Improvements during the design year (2050) is provided in **Table 3-3**. As shown, traffic noise levels are predicted to range from 53.2 to 76.4 dB(A) at the 434 residences evaluated. Traffic noise levels are predicted to approach, meet, or exceed the NAC for Activity Category B at 66 residences located in the Aria at Bradenton Apartments. Traffic noise levels at the impacted residences are predicted to range from 66.0 to 75.7 dB(A). When compared to existing levels, traffic noise levels with the Interim Improvements are predicted to increase a maximum of 2.7 dB(A). As such, none of the residences are predicted to experience a substantial increase in traffic noise as a result of the proposed Interim Improvements. Predicted traffic noise levels for all receptors are provided in **Appendix D**.

Fifty-one receptors were modeled to evaluate traffic noise levels at 15 recreation uses considered Activity Category C. Traffic noise levels with the proposed Interim Option are predicted to range from 49.3 to 72.7 dB(A), and are predicted to approach, meet, or exceed the NAC for Activity Category C at eight locations, including the Bradenton Riverwalk, Bradenton Riverwalk Skatepark, Palmetto Estuary Preserve trail, playground, and pavilion with picnic tables, and outdoor tables at the boat ramp. Traffic noise levels at the impacted sites are predicted to range from 66.0 to 72.7 dB(A). The largest increase in predicted traffic noise levels when compared to the existing condition is 2.3 dB(A), an amount that is not considered a substantial increase.

Interior traffic noise levels at Manatee Memorial Hospital are predicted to range from 48.3 to 50.4 dB(A), and are not predicted to approach, meet, or exceed the NAC for Activity Category D. When compared to existing levels, future traffic noise levels with the Interim Improvements are predicted to increase to a maximum of 1.8 dB(A), which does not constitute a substantial increase.

Table 3-3 Summary of Predicted Future Build Traffic Noise Levels – Interim Improvements[1]

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels – Leq(h) - [dB(A)]		Number of Predicted Traffic Noise Impacts – Interim Improvements	Barrier Number[3]
				Interim Improvements (2050)	Increase from Existing		
181-189, 191-203	1	Aria at Bradenton Apartments Residences	B	55.8 – 75.7	-0.5 – 2.0	66	1
190	1	Pool at Aria at Bradenton Apartments	C	49.3	1.0	0	N/A
204	1	Office Building Outdoor Use Area	E	65.3	0.4	0	N/A
205	1	Residential Apartment Balconies, 210 Watermark Apartments	B	56.5 – 59.7	0.4 – 2.7	0	N/A
206	1	Marriott Hotel Pool	E	59.3	1.8	0	N/A
207	1	Mattison's City Grille Outdoor Seating	E	65.8	-0.7	0	N/A
208-209	1	Manatee Memorial Hospital (Interior)	D	48.3 – 50.4	0.8 – 1.7	0	N/A
210	1	Kids Castle Learning Center Daycare Playground	C	55.1	0.9	0	N/A
211	1	2nd Street E Residence	B	55.1	2.1	0	N/A
212-213	1	Donald L. Courtney Veterans Monuments Park	C	63.7 – 65.7	2.0 – 2.3	0	N/A
214	1	Bradenton Riverwalk Pavilions	C	62.8	0.2	0	N/A

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels – Leq(h) - [dB(A)]		Number of Predicted Traffic Noise Impacts – Interim Improvements	Barrier Number[3]
				Interim Improvements (2050)	Increase from Existing		
215-217, 232-234	1	Bradenton Riverwalk	C	64.1 – 67.2	-0.3 – 1.9	1	2
218	1	Bradenton Riverwalk – Volleyball Court	C	64.9	-0.3	0	N/A
219-231	1	Bradenton Riverwalk – Skatepark	C	65.5 – 68.5	-0.6 – 2.0	1	3
235-250	2	Palmetto Estuary Preserve Trail	C	66.1 – 72.7	-1.4 – 1.4	1	4
251-253, 255	2	Palmetto Estuary Preserve Pavilions/Picnic Tables	C	62.5 – 68.6	-0.1 – 1.6	1	
254	2	Palmetto Estuary Preserve Playground	C	69.6	-0.7	1	
256-272	2	Pegel Point Residences	B	56.0 – 58.4	0.2 – 1.2	0	N/A
273-276	2	Outdoor Tables at Boat Ramp	C	67.8 – 68.6	1.6 – 2.3	1	N/A[4]
277-286, 288-289	2	Riviera Dunes Residences	B	53.2 – 65.3	0.4 – 2.1	0	N/A
287	2	Riviera Dunes Tennis Courts	C	55.4	0.8	0	N/A
290	2	Marriott Hotel Pool	E	48.4	0.1	0	N/A

1 A full list of Predicted Traffic Noise Levels is provided in Appendix D.

2 Please refer to the Figures in Appendix B.

3 Please refer to Section 3.3.1 of this report.

4 Abatement not evaluated since minimum usage requirements cannot be achieved. See Section 3.3.1 for additional information.

Traffic noise levels were evaluated at four Activity Category E land uses, including an office building outdoor use area, outdoor seating at Mattisons City Grille restaurant, and two Marriott Hotel pools. Future traffic noise levels with the Interim Improvements are predicted to range from 48.4 to 65.8 dB(A),

and are not predicted to approach, meet, or exceed the NAC for Activity Category E. The largest increase with the Interim Improvements when compared to existing traffic noise levels is 1.8 dB(A). No substantial increases in traffic noise are predicted to occur.

3.3.1 Noise Barrier Analysis – Interim Improvements

Noise barriers were evaluated as a potential abatement measure for the 168 residences, and seven of the eight recreation uses predicted to experience future traffic noise levels that approach, meet, or exceed the NAC for their respective Activity Category with the proposed Interim Improvements. A noise barrier was not evaluated as a potential abatement measure for the outdoor tables at the boat ramp located north of the Manatee River on the east side of the roadway. As mentioned, the evaluation of noise abatement at non-residential land uses is performed using guidance contained in the FDOT's "Methodology to Evaluate Highway Traffic Noise at Special Land Uses". The methodology contains a provision for an "optional preliminary screening" for isolated/single use facilities to determine if that facility would have a minimum of 45,026 person-hours of use per year within the area potentially benefited by a noise barrier to meet minimum feasibility requirements. The primitive boat ramp is open seven days a week, 52 weeks per year. Assuming the average visit to the area would be one hour, a minimum of 122 persons per day would need to occupy the area potentially benefitted by a noise barrier. Due to the small size of the facility and since the potentially benefited area would be smaller than the total size of the facility it is not reasonable to assume this level of usage would occur, and minimum feasibility requirements cannot be achieved. As such, the noise barrier is not a feasible abatement measure for the impacted outdoor tables at the boat ramp. The preliminary screening worksheet is provided in **Appendix F**.

The TNM was used to evaluate the effectiveness of a noise barrier as a potential abatement measure for the remaining impacted residential and recreation receptors. Noise barrier lengths are optimized at each height evaluated to maintain at least the minimum noise reduction requirements while minimizing excess barrier length at each end (thereby reducing cost). In some instances, noise barriers may provide a benefit to non-impacted receptors (i.e., those with a predicted future build traffic noise level that does not approach, meet, or exceed the NAC for its respective Activity Category). Benefits at these locations are considered incidental. Noise barrier lengths and/or heights are not optimized to provide a benefit at non-impacted locations; however, the non-impacted and benefited receptors are included in the calculations for the cost per benefited receptor and determination of cost reasonableness.

3.3.1.1 Noise Barrier 1 – Interim Improvements

Noise Barrier 1 was evaluated for the 66 residences located in the Aria at Bradenton Apartments (Receptor IDs 181-186, 192-195, 198-202) at the intersection of westbound SR 64 and US 41. The residences are located on the first, second, third, and fourth floors of the apartment buildings. There is limited right-of-way available for the placement of a noise barrier at this location, and a noise barrier could not be evaluated that would "cover" all three of the buildings that contain the impacted residences.

The results of the barrier analysis are provided in **Table 3-4**. As shown, none of the impacted receptors could achieve a reduction in traffic noise until a barrier height of 18 feet, and the noise reduction design goal of seven dB(A) could not be achieved at any barrier height evaluated. As such, Noise Barrier 1 is not a reasonable abatement measure for the impacted residences. Constraints on barrier placement due to extremely limited right-of-way did not allow for a barrier of sufficient length to be evaluated for the impacted residential receptors, and there does not appear to be any other methods of reducing the predicted traffic noise impacts.

Table 3-4 Noise Barrier 1 – Interim Improvements

Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/322	0	0	0	0	0	0	-	-	-	-
10/322	0	0	0	0	0	0	-	-	-	-
12/322	0	0	0	0	0	0	-	-	-	-
14/322	0	0	0	0	1	1	-	N/A[3]		
16/322	0	0	0	0	3	3	-	N/A[3]		
18/322	1	0	0	1	8	9	5.1	N/A[3]		
20/322	1	0	0	1	16	17	5.5	N/A[3]		
22/322	2	0	0	2	18	20	5.4	N/A[3]		

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length combination.

3.3.1.2 Noise Barriers 2 & 3 – Interim Improvements

Noise Barriers 2 and 3 were evaluated for the impacted portions of the Bradenton Riverwalk (Receptor IDs 217, 219-230, and 233) that include the riverwalk path and skatepark. With the proposed Interim Improvements, the impacted areas are predicted to experience future traffic noise levels ranging from 66.0 to 68.5 dB(A), levels that approach and exceed the NAC for Activity Category C.

Impacted portions of the riverwalk path and skatepark are located on both sides of the DeSoto Bridge. Noise barriers were evaluated at the outside edge of the shared use path on the bridge structure transitioning to the outside edge of the roadway shoulder south of the bridge. Per Chapter 264 of the FDOT Design Manual[7], noise barriers located on bridge and retaining wall structures are limited to a maximum height of eight feet. Barrier 2 was evaluated for the impacted receptors on the west side of DeSoto Bridge, and Barrier 3 was evaluated for the impacted receptors on the east side of the DeSoto Bridge. Each barrier was evaluated independently.

The results of the barrier analysis show that neither barrier could provide a minimum reduction in traffic noise of at least five dB(A) at any of the impacted receptors. As such, neither barrier is considered a feasible abatement measure for the impacted portions of the Bradenton Riverwalk and skatepark. Barrier ineffectiveness can be attributed to the height limitations of noise barriers located on bridge and retaining wall structures and there are no other means of reducing predicted traffic noise levels at the impacted receptors.

3.3.1.3 Noise Barrier 4 – Interim Improvements

Noise Barrier 4 was evaluated for the trail, playground and pavilions/picnic tables within Palmetto Estuary Preserve (Receptor IDs 235-251, 254) predicted to experience future traffic noise levels with the Interim Improvements ranging from 66.1 to 72.7 dB(A), levels that approach and exceed the NAC for Activity Category C.

Using the FDOT's "Methodology to Evaluate Highway Traffic Noise at Special Land Uses", a number of residential receptor "equivalents" is determined based on the amount (number of people) and intensity (duration) of use at a recreation facility. The City of Palmetto did not respond to requests for usage data for Palmetto Estuary Preserve. For the purpose of this barrier evaluation, it was assumed that on an average day, 300 people use the facility for one hour, an amount that is considered conservative, with actual usage numbers likely less based on the amount of available parking and observations during visits to the facility. Palmetto Estuary Preserve is open seven days a week, 52 weeks per year. With the usage assumptions noted above, this translates to 4.93 equivalent residences. Twenty-one receptors were modeled using the TNM to represent the various recreation uses at the facility, which translates to each receptor being "worth" 0.235 equivalent residences.

The results of the barrier analysis are provided in **Table 3-5**. As shown, up to four equivalent residences could achieve a reduction in traffic noise of at least five dB(A) and the noise reduction design goal could also be achieved for at least one residential equivalent at all heights ranging from 10 to 22 feet. At those heights, the cost per benefited receptor ranges from $322,021 to $498,638, costs that exceed the cost reasonableness criteria. Although Noise Barrier 4 could achieve noise reduction requirements, since the cost per benefited receptor exceeds the maximum of $64,000, the barrier is not considered a reasonable abatement measure for the impacted trail, playground, and pavilions/picnic tables at Palmetto Estuary Preserve. The facility does not have enough use that translates into equivalent residences.

Table 3-5 Noise Barrier 4 – Interim Improvements

Barrier Height / Length (ft.)	Impacted Equivalent Residences With Insertion Loss of (dB(A))			Number of Benefited Equivalent Residences			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/3,027	0.71	1.41	0.94	3.06	0	3.06	6.6	$968,640	$317,067	No
10/3,027	0.47	0.94	2.35	3.06	0	3.76	7.8	$1,210,800	$322,021	No
12/3,027	0	0.71	3.06	3.76	0.23	4.00	9.1	$1,452,960	$363,695	No
14/3,027	0	0	3.76	3.76	0.23	4.00	10.0	$1,695,120	$424,310	No
16/3,283	0.24	0	3.76	4.00	0.71	4.71	10.7	$2,101,120	$447,047	No
18/3,255	0.24	0	3.76	4.00	0.71	4.71	11.3	$2,343,600	$498,638	No
20/3,255	0.24	0	3.76	4.00	0.71	4.71	11.9	$2,604,000	$554,043	No
22/3,255	0.24	0	3.76	4.00	0.71	4.71	12.4	$2,864,400	$609,447	No

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3.4 SUMMARY – INTERIM IMPROVEMENTS

In the design year (2050) with the proposed Interim Improvements, traffic noise levels are predicted to approach, meet, or exceed the NAC for Activity Category B at 66 residences and Activity Category C at six recreation uses. The residences are located in the Aria at Bradenton Apartments, and the six impacted recreation uses include the Bradenton Riverwalk and Skatepark, Palmetto Estuary Preserve trail, playground, pavilions/picnic tables, and outdoor tables at a boat ramp.

A noise barrier was not evaluated for the impacted outdoor tables at the boat ramp located east of US 41 on the north side of the Manatee River. A preliminary screening indicates that the facility would likely not have enough use on an average day to meet minimum feasibility requirements.

Noise barriers were evaluated as a potential abatement measure for the remaining impacted residences and recreation uses. The analysis shows that noise barriers are not a potentially feasible and reasonable abatement measure for any of the impacted residences and recreation uses as they could not achieve minimum noise reduction requirements at a reasonable cost.

3.4.1 Statement of Likelihood – Interim Improvements

Based on the noise analyses performed to date for the proposed Interim Improvements, there are no feasible and reasonable solutions available to mitigate the predicted traffic noise impacts at the impacted residences and recreation uses.

3.5 PREDICTED FUTURE TRAFFIC NOISE LEVELS – PREFERRED ALTERNATIVE

A summary of the predicted traffic noise levels for the Preferred Alternative is provided in **Table 3-6**. A full list of predicted traffic noise levels for all receptors is provided in **Appendix D**.

As shown, traffic noise levels at the 1,075 residences evaluated as Activity Category B are predicted to range from 53.7 to 76.7 dB(A) with the Preferred Alternative during the design year, and are predicted to approach, meet, or exceed the NAC at 319 residences.

Design year traffic noise levels with the Preferred Alternative are predicted to range from 50.8 to 73.6 dB(A) at the recreation uses, and are predicted to approach, meet, or exceed the NAC for Activity Category C at 22 locations, including outdoor use areas at Bradenton Village, Bradenton Riverwalk, Palmetto Estuary Preserve, boat ramp outdoor tables, Palmetto Trace Apartments, and Coach Eddie Shannon Park.

Table 3-6 Summary of Predicted Future Build Traffic Noise Levels – Preferred Alternative[1]

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels – Leq(h) - [dB(A)]		Number of Predicted Traffic Noise Impacts – Preferred Alternative	Barrier Number[3]
				Preferred Alternative (2050)	Increase from Existing		
1-29	1	Residences South of US 301/West of 9th Street E	B	56.1 – 65.7	-0.5 – 2.7	0	N/A
30-43	1-2	The Nest Apartments	B	53.7 – 71.1	0.0 – 10.3	66	5
44	2	Residence West of 1st Street	B	59.0	1.5	0	N/A
45	2	Oaks at Greenbriar Nursing Home	B	60.1	3.3	0	N/A
46-73, 81-100	2-3	Bradenton Village Residences	B	57.3 – 69.5	-0.1 – 3.0	3	6
74-80	2-3	Bradenton Village recreation uses (Courtyard, pool, clubhouse, tennis court, pavilions/picnic tables)	C	69.1 – 72.4	-0.6 – 0.0	6	6

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels – Leq(h) - [dB(A)]		Number of Predicted Traffic Noise Impacts – Preferred Alternative	Barrier Number[3]
				Preferred Alternative (2050)	Increase from Existing		
101-102	2-3	Team Success School Basketball Court and Athletic Field	C	62.5 – 64.0	1.2	0	N/A
103	3	Team Success School (Interior)	D	40.7	0.9	0	N/A
104-121, 127-136, 138-140	3-4	Residences on west side of US 301/US 41, between 13th Avenue W and westbound SR 64	B	59.4 – 66.7	-0.1 – 2.1	3	7
141-180, 211	3-4	Residences on east side of US 301/US 41, between 13th Avenue W and Manatee River	B	57.2 – 67.9	0.5 – 4.2	4	8
122-125	3	Love Park	C	63.1 – 64.9	-0.5 – 2.4	0	N/A
126	3	St. Mary Missionary Baptist Church (Interior)	D	49.8	-0.8	0	N/A
137	3	Mt. Pilgrim Primitive Baptist Church (Interior)	D	38.3	1.6	0	N/A
181-189, 191-203	4	Aria at Bradenton Apartments Residences	B	57.7 – 76.6	-0.1 – 3.5	75	9
190	4	Pool at Aria at Bradenton Apartments	C	50.8	2.5	0	N/A
204	4	Office Building Outdoor Use Area	E	67.3	2.4	0	N/A

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels – Leq(h) - [dB(A)]		Number of Predicted Traffic Noise Impacts – Preferred Alternative	Barrier Number[3]
				Preferred Alternative (2050)	Increase from Existing		
205	4	210 Watermark Apartments Residences	B	58.8 – 61.4	2.1 – 5.0	0	N/A
206	4	Marriott Hotel Pool	E	61.1	3.6	0	N/A
207	4	Mattison's City Grille Outdoor Seating	E	67.0	0.5	0	N/A
208-209	4	Manatee Memorial Hospital (Interior)	D	49.2 – 50.7	1.2 – 2.6	0	N/A
210	4	Kids Castle Learning Center Daycare Playground	C	57.3	3.1	0	N/A
212-213	4	Donald L. Courtney Veterans Monuments Park	C	65.4 – 67.2	3.7 – 3.8	1	11
214	4	Bradenton Riverwalk Pavilions	C	64.6	2.0	0	N/A
215-217, 232-234	4	Bradenton Riverwalk	C	65.9 – 69.0	1.5 – 3.6	1	11
218	4	Bradenton Riverwalk – Volleyball Court	C	66.6	1.4	0	N/A
219-231	4	Bradenton Riverwalk – Skatepark	C	67.0 – 70.5	1.3 – 4.1	1	11
235-255	5-6	Palmetto Estuary Preserve (Trail, Playground, Pavilions/Picnic Tables)	C	64.1 – 73.6	-2.5 – 2.4	3	12

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels – Leq(h) - [dB(A)]		Number of Predicted Traffic Noise Impacts – Preferred Alternative	Barrier Number[3]
				Preferred Alternative (2050)	Increase from Existing		
256-272	6	Pegel Point Residences	B	58.8 – 60.0	1.8 – 3.3	0	N/A
273-276	5-6	Outdoor Tables at Boat Ramp	C	66.6 – 67.7	0.7 – 1.0	1	N/A[3]
277-286, 288-289	5-6	Riviera Dunes Residences	B	55.2 – 66.6	1.7 – 3.7	4	13
287	6	Riviera Dunes Tennis Courts	C	57.2	2.6	0	N/A
290	6	Marriott Hotel Pool	E	49.8	1.5	0	N/A
291	7	Palmetto Trace Apartments Pool	C	61.2	2.9	0	N/A
292-307, 310-313	7	Residences at Palmetto Trace Apartments	B	55.5 – 71.7	0.4 – 3.8	49	15
308-309	7	Palmetto Trace Apartments Playground and Volleyball Court	C	67.0 – 69.7	1.6 – 1.8	2	15
314-377	7	Lone Oak RV Park Residences	B	62.0 – 76.7	0.6 – 3.0	63	14
378-399	7	Residences in NW Quadrant of US 41/US 310/10th St. W Interchange	B	62.1 – 70.4	0.3 – 2.3	12	16
400-404, 406-411	7-8	Residences West of US 41 and North of CSX Railroad	B	59.6 – 64.8	0.7 – 2.0	0	N/A
405	8	Miracle Healing and Deliverance Ministries Church (Interior)	D	41.1	1.7	0	N/A
412	8	Lincoln Middle School (Interior)	D	41.5	1.0	0	N/A

Site ID's	Sheet[2]	Type of Sites Represented / Location	NAC Activity Category	Range of Predicted Traffic Noise Levels – Leq(h) - [dB(A)]		Number of Predicted Traffic Noise Impacts – Preferred Alternative	Barrier Number[3]
				Preferred Alternative (2050)	Increase from Existing		
413	8	Lincoln Middle School Outdoor Use Area / Picnic Tables	C	64.8	2.1	0	N/A
414-437	8	Coach Eddie Shannon Park	C	60.6 – 68.7	1.3 – 3.8	5	17
438-488, 490-496, 498-513, 515-545	8-10	Residences West of US 41 Between 17th Street East and North Project Limits	B	58.7 – 77.9	-0.7 – 2.6	26	18, 19
489	9	Anna Gayle Resource Center	D	48.6	1.0	0	N/A
497	9	Pentecostal of Faith Church (Interior)	D	47.3	0.4	0	N/A
514	9-10	Iglesia De Dios Pentecostal Church (Interior)	D	37.9	1.5	0	N/A
546-550, 552-576, 577-612, 613-634	8-10	Residences East of US 41 Between 17th Street East and North Project Limits	B	56.9 – 76.6	-2.7 – 1.8	16	20, 21, 22
551	9	Mt. Olive Missionary Baptist Church (Interior)	D	36.9	1.2	0	N/A
577	9	Mt. Raymond Baptist Church (Interior)	D	35.4	1.0	0	N/A
612	10	Iglesia Evangelica Cristiana Church (Interior)	D	37.2	0.5	0	N/A

1 A full list of Predicted Traffic Noise Levels is provided in Appendix D.
2 Please refer to the Figures in Appendix B.
3 Please refer to Section 3.5.1 of this report.
4 Abatement not evaluated since minimum usage requirements cannot be achieved. See Section 3.3.1 for additional information.

Interior traffic noise levels are predicted to range from 35.4 to 50.7 dB(A) and are not expected to approach, meet, or exceed the NAC for Activity Category D with the Preferred Alternative.

At the four land uses evaluated as Activity Category E, future traffic noise levels are predicted to range from 49.8 to 67.3 d(A), and are not predicted to approach, meet, or exceed the NAC.

With the proposed Preferred Alternative, the largest increase in traffic noise at any location is predicted to be 10.3 dB(A), an amount that is not considered a substantial increase. Some locations may experience small decreases in traffic noise due to the shielding provided by elevated roadway segments that are proposed to be constructed on embankment/retaining wall as part of the Preferred Alternative.

Six residences (Receptor IDs 441-444, 485, and 569) were not evaluated with the Preferred Alternative since they are proposed for acquisition/relocation in order to construct the proposed improvements and would not exist under that condition.

3.5.1 Noise Barrier Analysis – Preferred Alternative

Noise barriers were evaluated as a potential abatement measure for the 315 of the 319 impacted residences, and 22 recreation uses predicted to experience future traffic noise levels that approach, meet, or exceed the NAC for Activity Categories B and C, respectively, with the Preferred Alternative. Three residences (Receptor IDs 132, 143, and 546) are considered isolated impacts, where there is only one impacted receptor to potentially benefit from a noise barrier and as a result, would not meet the minimum feasibility requirement of providing a reduction of at least five dB(A) at two impacted receptors. Noise barriers were not evaluated at these locations and there does not appear to be any other methods of reducing predicted traffic noise levels at these residences.

As with the Interim Improvements, a noise barrier was not evaluated as a potential abatement measure for the outdoor tables at the boat ramp located north of the Manatee River on the east side of the roadway. Due to the small size of the facility, it is not reasonable to assume a level of usage would occur for minimum feasibility requirements to be achieved. As such, the noise barrier is not a feasible abatement measure for the impacted outdoor tables at the boat ramp.

3.5.1.1 Noise Barrier 5 – Preferred Alternative

Noise Barrier 5 was evaluated for the 66 impacted residences in the Nest Apartments (Receptors IDs 30-42), located south of US 301 and east of 1st Street South. The impacted residences are located on the first, second, and third floors of the apartment buildings, and with the Preferred Alternative, are predicted to experience design year traffic noise levels ranging from 66.3 to 71.1 dB(A), levels that approach and exceed the NAC for Activity Category B. A ground-mounted noise barrier was evaluated ten feet or less inside the roadway right-of-way due to a proposed stormwater pond location inside the right-of-way between the roadway and the apartment buildings.

The results of the barrier analysis are provided in **Table 3-7**. As shown, the barrier could not provide a minimum of two impacted receptors with a reduction in traffic noise of at least five dB(A) until a height of 20 feet. At 22 feet, 17 impacted residences could potentially benefit from the barrier, with the noise reduction design goal achieved at up to 13 residences. At a height of 22 feet, the cost per benefited receptor is $18,273, which is below the cost reasonable criteria. Additional considerations for the potentially feasible and cost reasonable barrier are provided in **Table 3-8**.

Table 3-7 Noise Barrier 5 – Preferred Alternative

Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/1,061	0	0	0	0	0	0	-	N/A[3]		
10/1,061	0	0	0	0	0	0	-	N/A[3]		
12/1,061	0	0	0	0	0	0	-	N/A[3]		
14/1,061	0	0	0	0	17	17	-	N/A[3]		
16/1,061	0	0	0	0	17	17	-	N/A[3]		
18/1,061	0	0	0	0	17	17	-	N/A[3]		
20/645	16	0	0	16	17	33	5.3	$516,000	$15,636	Yes
22/706	4	0	13	17	17	34	7.2	$621,280	$18,273	Yes

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

Table 3-8 Additional Considerations – Noise Barrier 5: Nest Apartments

Evaluation Criteria	Comment
1. Relationship of future levels to the abatement criteria	The 66 impacted residences are predicted to experience future traffic noise levels ranging from 66.3 to 71.1 dB(A) with the proposed Preferred Alternative These levels approach and exceed the NAC for Activity Category B.
2. Amount of noise reduction	Up to 17 impacted residential receptors may be provided with a reduction in traffic noise of at least five dB(A), with the potential for the noise reduction design goal to be achieved at up to 13 residences. The average reduction for impacted and benefited receptors may be up to 7.2 dB(A).
3. Safety	To be evaluated during the design phase of the project.
4. Community desires	Community desires for reasonable and feasible abatement measures will be solicited during the project design phase.

Evaluation Criteria	Comment
5. Accessibility	To be evaluated during the design phase of the project.
6. Local controls	Manatee County does not have an active noise control program.
7. Views of local officials with jurisdiction	The views of local officials with jurisdiction related to reasonable and feasible abatement measures will be solicited during the project design phase.
8. Constructability	The potential noise barrier may pose a conflict with a proposed stormwater pond location. This item will be evaluated in greater detail during the design phase of the project.
9. Maintainability	To be evaluated during the design phase of the project.
10. Aesthetics	Aesthetic options for reasonable and feasible abatement measures will be solicited during the project design phase.
11. Right-of-way needs including access rights, easements for construction and/or maintenance, and additional land	The potential noise barrier may pose a conflict with a proposed stormwater pond location. This item will be evaluated in greater detail during the design phase of the project.
12. Cost	Determined to be potentially cost reasonable.
13. Utilities	This item will be evaluated in greater detail during the project design phase.
14. Drainage	The potential noise barrier may pose a conflict with a proposed stormwater pond location. This item will be evaluated in greater detail during the design phase of the project.
15. Special land use considerations	The adjacent residences are not considered Special Land Uses.
16. Other environmental considerations	To be evaluated during the design phase of the project.

3.5.1.2 Noise Barrier 6 – Preferred Alternative

Noise Barrier 6 was evaluated for the three residences (Receptor IDs 55-57) and recreation uses (Receptor IDs 74-80) at Bradenton Village predicted to experience traffic noise impacts resulting from the Preferred Alternative. Design year traffic noise levels are predicted to range from 66.2 to 72.4 dB(A), levels that approach and exceed the NAC for Activity Category B and C. Impacted recreation uses include a courtyard, pool, clubhouse, tennis court and pavilions with picnic tables. There is insufficient space available for the placement of a noise barrier within the right-of-way. A noise barrier was evaluated on the outside edge of the roadway shoulder along 1st Street South. Per the FDOT Design Manual, since the noise barrier would be a combination of a traffic railing barrier and a noise barrier, the height is limited to 14 feet, and the termini are limited by 17th Avenue West to the south and the CSX railroad at the north end. Combined with this noise barrier, a barrier was also evaluated on the outside shoulder of the proposed elevated roadway, limited to a height of eight feet due to placement on the bridge structure.

There are 160 residential units at Bradenton Village. Assuming the average of 2.53 persons per residence based on 2018-2022 census data, that equals 405 people eligible to use the various recreation uses. While it isn't reasonable to assume that all residents would occupy these areas on an average day, it was

assumed that half (203) could potentially occupy these areas on an average day for the purpose of this evaluation and to be conservative, and that each person would spend an average of one hour there. That amount of use translates to 3.33 equivalent residences with each of the seven evaluated receptors worth 0.48 residential equivalents.

Table 3-9 provides the results of the analysis. As shown, while the minimum required reduction of five dB(A) could be achieved at up to 2.92 residences and residential equivalents, the noise reduction design goal could not be achieved. As such, Noise Barrier 8 is not a reasonable abatement measure for the impacted residences and recreation uses at Bradenton Village, and there does not appear to be any other methods of reducing predicted traffic noise levels.

Table 3-9 Noise Barrier 6 – Preferred Alternative

8' Structure Barrier Length (ft.)	Shoulder Barrier Height/ Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
		5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
1,500	8/663	0	0	0	0	0	0	-	N/A[3]		
1,500	10/663	0.96	0	0	0.96	0	0.96	5.1	N/A[3]		
1,500	12/663	2.92	0	0	2.92	1	3.92	5.7	N/A[3]		
1,500	14/663	1.48	1.44	0	2.92	1	3.92	6.0	N/A[3]		

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

3.5.1.3 Noise Barrier 7 – Preferred Alternative

Noise Barrier 7 was evaluated for impacted residences (Receptors 106 and 114) located on the west side of US 41/US 301 between 13th Avenue West and 11th Avenue West. The impacted residences are predicted to experience future traffic noise levels ranging from 66.6 to 66.7 dB(A) with the Preferred Alternative, levels that approach the NAC for Activity Category B. Due to limited available right-of-way and ingress/egress requirements for commercial properties with frontage on US 41/US 301, a noise barrier could only be evaluated on the elevated bridge structure at the outside edge of the roadway shoulder, and would be limited to a height of eight feet.

The results of the analysis show that an eight-foot-tall noise barrier could not provide either of the impacted receptors with a reduction in traffic noise of at least five dB(A) due to height limitations for noise barriers located on bridge structures, and the inability to mitigate for traffic noise emanating from the at-grade roadway travel lanes. There does not appear to be any other methods of reducing predicted traffic noise levels at the impacted residential receptors.

3.5.1.4 Noise Barrier 8 – Preferred Alternative

Noise Barrier 8 was evaluated for Receptors 164 and 165, located east of US 41/US 301 between 11th Avenue East and 10th Avenue East. The single-family residences are predicted to experience future traffic noise levels ranging from 66.7 to 67.9 dB(A), levels that approach and exceed the NAC for Activity Category B. As with Noise Barrier 7, ingress/egress for commercial properties along US 41/US 310 prevents the evaluation of a ground-mounted noise barrier, so the barrier was evaluated at the outside edge of the roadway shoulder on the elevated bridge structure.

The analysis showed that neither of the impacted receptors could achieve a reduction in traffic noise of at least five dB(A). As such, Noise Barrier 8 is not considered a reasonable abatement measure for the impacted residences. Height limitations for noise barriers on bridge structures and the inability to reduce traffic noise generated from the at-grade roadways contributed to the barrier's ineffectiveness. There do not appear to be any other methods of reducing predicted traffic noise levels at the impacted receptors.

3.5.1.5 Noise Barrier 9 – Preferred Alternative

Noise Barrier 9 was evaluated for impacted receptors (Receptor IDs 181-186, 192-195, 197-203) located in the Aria at Bradenton Apartments, located in the northwest quadrant of US 41/US 301 and westbound SR 64. With the Preferred Alternative, 77 residences are predicted to experience future traffic noise levels that approach and exceed the NAC for Activity Category B, ranging from 66.0 to 76.6 dB(A). Impacted receptors are located on the first, second, third, and fourth floors of the apartment buildings.

As with the noise barrier evaluated at this location for the Interim Improvements, there is limited right-of-way available for the construction and placement of a noise barrier. Noise Barrier 9 was considered as a combination of two ground mounted noise barrier segments within the right-of-way (with a gap to accommodate an existing sidewalk connection) and an eight-foot-tall barrier located along the outside edge of the elevated roadway. The dimensions of the shoulder barrier did not change with the different right-of-way barrier heights evaluated and as such, the barrier dimensions shown in the table below are for the ground mounted noise barrier segments.

The results of the evaluation are provided in **Table 3-10**. As shown, the minimum of two impacted receptors could not achieve a reduction in traffic noise of at least five dB(A) until a barrier height of 18 feet. As also shown, the barriers could not provide the noise reduction design goal at any of the barrier height/length combinations evaluated. As such, Noise Barrier 9 is not considered a reasonable abatement measure for the impacted residential receptors at the Aria at Bradenton Apartments. There do not appear to be any methods of reducing traffic noise levels at the impacted receptors.

Table 3-10 Noise Barrier 9 – Preferred Alternative

Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/415	0	0	0	0	0	0	-	N/A[3]		
10/415	0	0	0	0	0	0	-	N/A[3]		
12/415	0	0	0	0	0	0	-	N/A[3]		
14/415	0	0	0	0	0	0	-	N/A[3]		
16/415	0	0	0	0	0	0	-	N/A[3]		
18/415	2	0	0	2	0	2	5.0	N/A[3]		
20/415	3	0	0	3	4	7	5.2	N/A[3]		
22/415	5	0	0	5	5	10	5.8	N/A[3]		

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

3.5.1.6 Noise Barriers 10 and 11

Noise Barriers 10 and 11 were evaluated for the impacted portions of the Bradenton Riverwalk (Receptors 216-231, 233-234) including the Donald L. Courtney Veterans Monuments Park (Receptor 212). The impacted portions include the riverwalk path, volleyball court, and skatepark. The riverwalk path and skatepark are located on either side of the DeSoto Bridge, while the volleyball court and Donald L. Courtney Veterans Monuments Park are located on the west and east sides, respectively.

Noise barriers were evaluated at the outside edge of the shared use path on the bridge structure transitioning to the outside edge of the roadway shoulder south of the bridge. While on bridge or retaining wall structures, noise barriers are limited to a height of eight feet and are limited to a height of 14 feet when located on embankment at the roadway shoulder. A short ground mounted barrier segment was also evaluated on the east side of the roadway.

The results of the evaluation determined that neither barrier could provide a minimum reduction in traffic noise of at least five dB(A) at any of the impacted receptors. As such, neither barrier is considered a feasible abatement measure for the impacted portions of the Bradenton Riverwalk, skatepark, and Donald L. Courtney Veterans Monuments Park. Barrier ineffectiveness can be attributed to the height limitations of noise barriers located on bridge and retaining wall structures. There does not appear to be any other means of reducing predicted traffic noise levels at the impacted receptors.

3.5.1.7 Noise Barrier 12 – Preferred Alternative

Noise Barrier 12 was evaluated for the impacted recreation uses within Palmetto Estuary Preserve that include the trail (Receptor IDs 235-250), playground (Receptor 254), and pavilions/picnic tables (Receptors 251 and 255). With the proposed Preferred Alternative, the impacted receptors are predicted to experience future traffic noise levels ranging from 66.6 to 73.6 dB(A), levels that approach and exceed the NAC for Activity Category C. A ground mounted noise barrier was evaluated in two segments (to maintain access) between the proposed shared use path and the right-of-way.

Assumptions on preserve usage were identical to that used in the evaluation of Noise Barrier 4 for the proposed Interim Improvements. Those usage assumptions translate to 4.93 equivalent residences. Twenty-one receptors were modeled using the TNM to represent the various recreation uses at the facility, which equates to each receptor being "worth" 0.235 equivalent residences.

The results of the evaluation are provided in **Table 3-11**. As shown, up to 4.23 equivalent residences could achieve a reduction in traffic noise of at least five dB(A) and the noise reduction design goal could also be achieved for at least one residential equivalent at all heights ranging from 10 to 22 feet. At those heights, the cost per benefited receptor ranges from $466,667 to $679,868, costs that exceed the cost reasonableness criteria. Although Noise Barrier 12 could achieve noise reduction requirements, since the cost per benefited receptor exceeds the maximum of $64,000, the barrier is not considered a reasonable abatement measure for the impacted trail, playground, and pavilions/picnic tables at Palmetto Estuary Preserve. The facility does not have enough use on an average day equating to equivalent residences for the noise barrier to meet const reasonableness requirements.

Table 3-11 Noise Barrier 12 – Preferred Alternative

Barrier Height / Length (ft.)	Impacted Equivalent Residences With Insertion Loss of (dB(A))			Number of Benefited Equivalent Residences			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/3,833	0.71	0.24	0	0.94	0	0.94	5.8	N/A[3]		
10/3,290	0.94	1.65	0.24	2.82	0	2.82	6.3	$1,316,000	$466,667	No
12/3,068	0.47	0.71	1.88	3.06	0	3.06	7.8	$1,472,640	$481,255	No
14/3,068	0.71	0.24	2.59	3.53	0	3.53	8.7	$1,718,080	$486,708	No
16/3,068	0.24	0.47	2.82	3.53	0	3.53	9.7	$1,963,520	$556,238	No
18/3,068	0.24	0.47	3.06	3.76	0	3.76	10.3	$2,208,960	$587,489	No
20/3,296	0.24	0.24	3.53	4.00	0	4.00	11.0	$2,636,800	$659,200	No
22/3,268	0.47	0	3.76	4.23	0	4.23	11.0	$2,875,840	$679,868	No

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

3.5.1.8 Noise Barrier 13 – Preferred Alternative

Noise Barrier 13 was evaluated for the four impacted residential receptors (Receptor IDs 277E-277H) located in Riviera Dunes. The receptors are located on the 5th through 8th floors of a high-rise building, and are predicted to experience future traffic noise levels ranging from 66.4 to 66.6 dB(A) with the Preferred Alternative, levels that approach the NAC for Activity Category B. A combination ground mounted noise barrier inside the right-of-way with a structure-mounted barrier (eight-foot maximum height) located on the outside edge of the elevated roadway shoulder was evaluated. The north end of the ground mounted noise barrier was limited by the intersection of US 41 and 1st Street E.

The analysis shows that at a maximum height of 22 feet for the ground mounted noise barrier, combined with the eight-foot shoulder barrier, the minimum required reduction in traffic noise could not be achieved. Since the impacted receptors are located on the upper floors of a high-rise building, the evaluated barriers could not effectively break the line of sight to meet noise reduction requirements. As such, Noise Barrier 13 is not considered a feasible abatement measure for the impacted receptors and there does not appear to be any other methods of reducing predicted traffic noise levels at this location.

3.5.1.9 Noise Barrier 14

Noise Barrier 14 was evaluated for the 63 impacted residences at Lone Oak RV Park (Receptor IDs 320-321, 324-353, 362-363, 367-370, 372-377), located in the southwest quadrant of the US 41/10th Street interchange. The impacted residences are predicted to experience design year traffic noise levels ranging from 66.1 to 76.7 dB(A) with the Preferred Alternative, levels that approach and exceed the NAC for

Activity Category B. The barrier was evaluated between the proposed shared use path and the FDOT right-of-way.

The results of the barrier analysis are presented in **Table 3-12**. The barrier could provide up to 47 of the impacted residences with a reduction of at least five dB(A), while also achieving the noise reduction design goal at up to 26 residences. The barrier meets noise reduction requirements at all height/length combinations evaluated (with the exception of the eight-foot height), and the cost per benefited receptor ranges from $16,696 to $22,180, costs that are below the cost reasonableness criteria. Since Noise Barrier 14 is predicted to meet noise reduction requirements at a reasonable cost, additional items were given consideration and are presented in **Table 3-13**.

Table 3-12 Noise Barrier 14 – Preferred Alternative

Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/1,109	10	2	0	12	0	12	5.4	N/A[3]		
10/960	4	16	3	23	0	23	6.7	$384,000	$16,696	Yes
12/1,109	2	0	23	25	0	25	8.2	$532,320	$21,293	Yes
14/1,109	4	1	23	28	0	28	8.8	$621,040	$22,180	Yes
16/1,109	13	4	23	40	0	40	8.5	$709,760	$17,744	Yes
18/1,109	16	5	23	44	0	44	8.9	$798,480	$18,147	Yes
20/1,109	4	16	24	44	0	44	9.4	$887,200	$20,164	Yes
22/1,109	5	16	26	47	2	49	9.5	$975,920	$19,917	Yes

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

Table 3-13 Additional Considerations – Noise Barrier 14: Lone Oak RV Park (Preferred Alternative)

Evaluation Criteria	Comment
1. Relationship of future levels to the abatement criteria	The 63 impacted receptors are predicted to experience future traffic noise levels ranging from 66.1 to 76.7 dB(A) with the proposed Preferred Alternative. These levels approach and exceed the NAC for Activity Category B land uses.
2. Amount of noise reduction	Up to 47 impacted receptors may be provided with a reduction in traffic noise of at least five dB(A), with the potential for the noise reduction design goal to be achieved at up to 26 receptors. The

Evaluation Criteria	Comment
	average reduction for impacted and benefited receptors ranges from 6.7 to 9.5 dB(A).
3. Safety	To be evaluated during the design phase of the project.
4. Community desires	Community desires for reasonable and feasible abatement measures will be solicited during the project design phase.
5. Accessibility	To be evaluated during the design phase of the project.
6. Local controls	Manatee County does not have an active noise control program.
7. Views of local officials with jurisdiction	The views of local officials with jurisdiction related to reasonable and feasible abatement measures will be solicited during the project design phase.
8. Constructability	There is limited right-of-way available for the construction and placement of the potential noise barrier. Additionally, overhead utilities exist near the evaluated barrier location. These items will be evaluated in greater detail during the project design phase.
9. Maintainability	To be evaluated during the design phase of the project.
10. Aesthetics	Aesthetic options for reasonable and feasible abatement measures will be solicited during the project design phase.
11. Right-of-way needs including access rights, easements for construction and/or maintenance, and additional land	There is limited right-of-way available for the construction and placement of the potential noise barrier. This item will be evaluated in greater detail during the project design phase.
12. Cost	Determined to be potentially cost reasonable.
13. Utilities	Overhead utilities exist near the evaluated barrier location. This item will be evaluated in greater detail during the project design phase.
14. Drainage	To be evaluated during the design phase of the project.
15. Special land use considerations	The adjacent properties are not considered special land uses.
16. Other environmental considerations	To be evaluated during the design phase of the project.

3.5.1.10 Noise Barrier 15 – Preferred Alternative

Noise Barrier 15 was evaluated for the 49 residences (Receptors 292-297, 302-303, 307, 310-311, 313), playground (Receptor 308), and volleyball court (Receptor 309) at Palmetto Trace Apartments predicted to experience traffic noise levels ranging from 66.2 to 71.7 dB(A) with the proposed Preferred Alternative. These levels approach and exceed the NAC for Activity Categories B and C. The barrier was evaluated between the proposed shared use path and the FDOT right-of-way.

The impacted playground and volleyball court were assigned the same number of “equivalent residences” based on the methodology described in Section 3.4.3 and detailed in the barrier analysis for this location under the proposed Interim Improvements. The amount of use translates to 0.41 equivalent residences which was split evenly between the two receptors for 0.21 “equivalent residences” each.

As shown in **Table 3-14**, the noise reduction design goal could not be achieved for at least one benefited receptor/equivalent residence until a barrier height of 14 feet. Up to 34.41 impacted receptors (34 residences and the 0.41 "equivalent residences") could achieve a reduction in traffic noise of at least five dB(A), with 28.41 impacted receptors achieving the noise reduction design goal at a barrier height of 22 feet. Since Noise Barrier 15 is predicted to meet noise reduction requirements at a reasonable cost, the barrier was evaluated further, and items given consideration are provided in **Table 3-15**.

Table 3-14 Noise Barrier 15 – Preferred Alternative

Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/1,403	0	0	0	0	0	0		N/A[3]		
10/1,403	0	0.21	0	0.21	0	0.21	6.3	N/A[3]		
12/529	0	2	0.21	2.21	0	2.21	6.8	$253,920	$114,896	No
14/1,175	10.21	0	2.21	12.41	0	12.41	6.0	$658,000	$53,022	Yes
16/971	10.21	6	0.21	16.41	0	16.41	6.0	$621,440	$37,870	Yes
18/1,117	10	4.21	10.21	24.41	2	26.41	6.6	$804,240	$30,452	Yes
20/1,030	6	8	14.41	28.41	2	30.41	7.1	$824,000	$27,096	Yes
22/1,353	6	0	28.41	34.41	4	38.41	8.0	$1,190,640	$30,998	Yes

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since the noise reduction design goal cannot be achieved at this barrier height/length.

Table 3-15 Additional Considerations – Noise Barrier 15: Palmetto Trace Apartments (Preferred Alternative)

Evaluation Criteria	Comment
1. Relationship of future levels to the abatement criteria	The 42 impacted receptors (40 residences, playground and volleyball court) are predicted to experience future traffic noise levels ranging from 66.2 to 71.7 dB(A) with the proposed Preferred Alternative. These levels approach and exceed the NAC for Activity Category B and C land uses.
2. Amount of noise reduction	Up to 34 impacted residential receptors and the 0.41 equivalent residences that represent the playground and volleyball court may be provided with a reduction in traffic noise of at least five dB(A), with the potential for the noise reduction design goal to be achieved at up to 28 residences and 0.41 equivalent residences. The average reduction for impacted and benefited receptors ranges from 6.0 to 8.0 dB(A).

Evaluation Criteria	Comment
3. Safety	To be evaluated during the design phase of the project.
4. Community desires	Community desires for reasonable and feasible abatement measures will be solicited during the project design phase.
5. Accessibility	To be evaluated during the design phase of the project.
6. Local controls	Manatee County does not have an active noise control program.
7. Views of local officials with jurisdiction	The views of local officials with jurisdiction related to reasonable and feasible abatement measures will be solicited during the project design phase.
8. Constructability	There is limited right-of-way available for the construction and placement of the potential noise barrier. Additionally, overhead utilities exist near the evaluated barrier location. These items will be evaluated in greater detail during the project design phase.
9. Maintainability	To be evaluated during the design phase of the project.
10. Aesthetics	Aesthetic options for reasonable and feasible abatement measures will be solicited during the project design phase.
11. Right-of-way needs including access rights, easements for construction and/or maintenance, and additional land	There is limited right-of-way available for the construction and placement of the potential noise barrier. This item will be evaluated in greater detail during the project design phase.
12. Cost	Determined to be potentially cost reasonable.
13. Utilities	Overhead utilities exist near the evaluated barrier location. This item will be evaluated in greater detail during the project design phase.
14. Drainage	To be evaluated during the design phase of the project.
15. Special land use considerations	The playground and volleyball court at Palmetto Trace Apartments are considered Special Land Uses.
16. Other environmental considerations	To be evaluated during the design phase of the project.

3.5.1.11 Noise Barrier 16 – Preferred Alternative

Noise Barrier 18 was evaluated for the 12 residences (Receptors 378-399) located in the northwest quadrant of the US 41/10th Street West interchange. With the proposed Preferred Alternative, the impacted residences are predicted to experience future traffic noise levels ranging from 66.2 to 70.4 dB(A), levels that approach and exceed the NAC for Activity Category B. A ground mounted noise barrier was evaluated approximately 10 feet inside the FDOT right-of-way.

Table 3-16 provides the results of the barrier evaluation. As shown, the noise reduction design goal could not be achieved until a barrier height of 12 feet. All 12 impacted receptors could achieve a reduction in traffic noise of at least five dB(A) at barrier heights of 16 to 22 feet. At heights ranging from 12 to 22 feet, the cost per benefited receptor ranges from $23,450 to $36,000, costs that are below the cost reasonableness criteria. Since it appears the noise barrier could achieve noise reduction requirements at

a reasonable cost, the barrier was evaluated further, with additional considerations provided in **Table 3-17**.

Table 3-16 Noise Barrier 16 – Preferred Alternative

Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/595	0	0	0	0	0	0	-	N/A[3]		
10/595	0	4	0	4	0	4	6.0	N/A[3]		
12/300	0	0	4	4	0	4	7.0	$144,000	$36,000	Yes
14/335	4	0	4	8	0	8	6.4	$187,600	$23,450	Yes
16/470	8	0	4	12	0	12	6.4	$300,800	$25,067	Yes
18/440	4	4	4	12	0	12	6.6	$316,800	$26,400	Yes
20/393	8	0	4	12	0	12	6.0	$314,400	$26,200	Yes
22/393	8	0	4	12	0	12	6.2	$345,840	$28,820	Yes

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

Table 3-17 Additional Considerations – Noise Barrier 16 (Preferred Alternative)

Evaluation Criteria	Comment
1. Relationship of future levels to the abatement criteria	The 12 impacted receptors are predicted to experience future traffic noise levels ranging from 66.2 to 70.4 dB(A) with the proposed Preferred Alternative. These levels approach and exceed the NAC for Activity Category B land uses.
2. Amount of noise reduction	All 12 impacted receptors may be provided with a reduction in traffic noise of at least five dB(A), with the potential for the noise reduction design goal to be achieved at four receptors. The average reduction for impacted and benefited receptors ranges from 6.0 to 7.0 dB(A).
3. Safety	To be evaluated during the design phase of the project.
4. Community desires	Community desires for reasonable and feasible abatement measures will be solicited during the project design phase.
5. Accessibility	To be evaluated during the design phase of the project.
6. Local controls	Manatee County does not have an active noise control program.
7. Views of local officials with jurisdiction	The views of local officials with jurisdiction related to reasonable and feasible abatement measures will be solicited during the project design phase.

Evaluation Criteria	Comment
8. Constructability	A portion of the potential noise barrier is in a location with limited right-of-way available for the construction and placement of a barrier. Additionally, underground utilities may be present. These items will be evaluated in greater detail during the project design phase.
9. Maintainability	To be evaluated during the design phase of the project.
10. Aesthetics	Aesthetic options for reasonable and feasible abatement measures will be solicited during the project design phase.
11. Right-of-way needs including access rights, easements for construction and/or maintenance, and additional land	A portion of the potential noise barrier is in a location with limited right-of-way available for the construction and placement of a barrier. This item will be evaluated in greater detail during the project design phase.
12. Cost	Determined to be potentially cost reasonable.
13. Utilities	Underground utilities may be present near the potential barrier location. This item will be evaluated in greater detail during the project design phase.
14. Drainage	To be evaluated during the design phase of the project.
15. Special land use considerations	The adjacent properties are not considered special land uses.
16. Other environmental considerations	To be evaluated during the design phase of the project.

3.5.1.12 Noise Barrier 17 – Preferred Alternative

Noise Barrier 17 was evaluated for impacted recreation uses within Coach Eddie Shannon Park that include the walking trail, pavilions/picnic tables, and aquatic center uses including the waterslide, pool, and splash pad. The impacted areas are represented by Receptor IDs 416, 419, 427-428, and 434, and are predicted to experience future traffic noise levels ranging from 66.6 to 68.7 dB(A), levels that approach and exceed the NAC for Activity Category C.

Usage data for the park was obtained from the Sports and Leisure Department of Manatee County that manages the facility. Based on the data received, it was stated that in calendar year 2025 the aquatic center had 11,000 visitors with an average visit time of 27 minutes (which was rounded up to 30 minutes for this evaluation). The remainder of the facility (park, athletic fields, pavilions, etc.) averages 60-80 people per day, so an average of 80 per day was used. Average visit times vary for these park users depending on activity and were not provided by Manatee County. It was assumed that the park users would spend an average of 2.5 hours per visit for athletic competitions and that 10% of the daily users utilizing the park pavilions could remain for up to six hours. When all use at the facility, including the aquatic center, is evaluated on a user amount and time-weighted average, the average daily use equals 111 users per day for an average of 2.21 hours, which was rounded up to 2.5 hours to be conservative. Using the FDOT "Special Land Use" methodology, this amount of use translates to 4.56 equivalent residences. Twenty-four receptors were evaluated at Coach Eddie Shannon Park, with each receptor "worth" 0.19 residential equivalents. Documentation supporting these calculations is provided in **Appendix F**.

Noise Barrier 17 was evaluated as a combination of a ground mounted barrier inside the right-of-way and a 14-foot-tall barrier on embankment along the northbound roadway shoulder. The results of the analysis are provided in **Table 3-18**. As shown, individual receptors could potentially achieve reductions of at least five dB(A) while also achieving the noise reduction design goal, since the barriers could not achieve the minimum five dB(A) reduction at two impacted residential equivalents (the maximum achievable is 1.14), Noise Barrier 17 is not considered a feasible abatement measure for the impacted recreation uses at Coach Eddie Shannon Park. The park does not have enough use on an average day that translates to enough residential equivalents for a noise barrier to meet minimum feasibility requirements. There do not appear to be any other methods of reducing the predicted traffic noise impacts at Coach Eddie Shannon Park.

Table 3-18 Noise Barrier 17 – Preferred Alternative

14' Shoulder Barrier Length (ft.)	Right-of-Way Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Equivalent Residences			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
		5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
505	8/484	0	0.19	0.38	0.57	0	0.57	8.2	N/A[3]		
505	10/0	0.19	0	0.38	0.57	0	0.57	7.8	N/A[3]		
505	12/0	0.19	0	0.38	0.57	0	0.57	7.8	N/A[3]		
404	14/0	0.19	0	0.38	0.57	0	0.57	7.5	N/A[3]		
404	16/0	0.19	0	0.38	0.57	0	0.57	7.5	N/A[3]		
657	18/543	0.19	0	0.57	0.76	0.38	1.14	7.9	N/A[3]		
505	20/627	0.38	0	0.57	0.95	0	0.95	7.0	N/A[3]		
300	22/776	0.19	0	0.95	1.14	2.47	3.61	10.0	N/A[3]		

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

3.5.1.13 Noise Barrier 18 – Preferred Alternative

Noise Barrier 18 was evaluated for 11 impacted receptors (Receptor IDs 461-468, 486-488) located west of US 41 between 17th Street E and 21st Street E. With the Preferred Alternative, the impacted residences are predicted to experience future traffic noise levels ranging from 66.2 to 76.4 dB(A), levels that approach and exceed the NAC for Activity Category B. Due to the lack of sufficient right-of-way and intersecting roadways, it was not possible to consider a ground mounted noise barrier for the impacted receptors. A noise barrier on the outside shoulder of the elevated roadway structure was evaluated at a height of eight feet.

The barrier analysis determined that the noise barrier could not provide any of the impacted receptors with a reduction in traffic noise of at least five dB(A) due to the height limitation for noise barriers on bridge structures and the inability to reduce the contribution from the at-grade roadways. As such, Noise Barrier 18 is not a feasible abatement measure for the impacted receptors, and there does not appear to be any other methods of reducing predicted traffic noise levels at these locations.

3.5.1.14 Noise Barrier 19 – Preferred Alternative

Noise Barrier 19 was evaluated for 13 impacted receptors located west of US 41 near the northern project limits (Receptor IDs 498, 502-503, 518-522, 528-530, 544-545). With the Preferred Alternative, the impacted residences are predicted to experience future traffic noise levels ranging from 66.1 to 74.8 dB(A), levels which approach and exceed the NAC for Activity Category B. The barrier was evaluated as a combination of a ground mounted noise barrier approximately 10 feet inside the right-of-way and a barrier on the outside of the elevated roadway shoulder.

The results of the analysis are provided in **Table 3-19**. As shown, a minimum of two impacted receptors receiving a reduction of at least five dB(A) and the noise reduction design goal could not be achieved until a right-of-way barrier height of 14 feet. A maximum of seven impacted receptors could potentially benefit from the noise barriers at heights of 20 and 22 feet while also achieving the noise reduction design goal. At heights ranging from 14 to 22 feet, the cost per benefited receptor ranges from $95,280 to $132,720, costs that exceed the cost reasonableness criteria. As such, Noise Barrier 19 is not considered a reasonable abatement measure for the impacted residences and there does not appear to be any other methods of reducing the predicted traffic noise impacts.

Table 3-19 Noise Barrier 19 – Preferred Alternative

Right-of-Way Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/1,084	1	0	0	1	0	1	5.1	N/A[3]		
10/1,084	0	1	0	1	0	1	6.8	N/A[3]		
12/1,084[4]	0	0	1	1	0	1	10.2	N/A[3]		
14/711	2	0	1	3	0	3	7.9	$398,160	$132,720	No
16/688	0	2	2	4	0	4	8.3	$440,320	$110,080	No
18/1,029[4]	1	1	3	5	0	5	8.8	$913,680	$182,736	No
20/975[4]	4	0	3	7	3	10	7.9	$952,800	$95,280	No
22/975[4]	2	2	3	7	3	10	8.3	$1,018,000	$101,800	No

1 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

2 Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier.

3 Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this barrier height/length.

4 Results and associated costs for this right-of-way barrier height/length combination also include the contribution from 540' of shoulder-mounted noise barrier at a height of eight feet.

3.5.1.15 Noise Barrier 20 – Preferred Alternative

Noise Barrier 20 was evaluated for eight impacted residences (Receptor IDs 554-555, 560-561, 564-565, 570-571) located on the east side of US 41 between 21st Street E and 3rd Avenue E. With the Preferred Alternative, the impacted receptors are predicted to experience future traffic noise levels ranging from 66.0 to 72.7 dB(A), levels that approach and exceed the NAC for Activity Category B. Due to the lack of sufficient right-of-way and intersecting roadways, it was not possible to consider a ground mounted noise barrier for the impacted receptors. A noise barrier on the outside shoulder of the elevated roadway structure was evaluated at a height of eight feet.

The results of the analysis show that the noise barrier could not provide any of the impacted receptors with a reduction in traffic noise of at least five dB(A) due to the height limitation for noise barriers on bridge structures and the inability to mitigate for the contribution from the at-grade roadways. As such, Noise Barrier 20 is not a feasible abatement measure for the impacted receptors, and there does not appear to be any other methods of reducing predicted traffic noise levels at these locations.

3.5.1.16 Noise Barrier 21 – Preferred Alternative

Noise Barrier 21 was evaluated for three impacted residential receptors (Receptor IDs 579-581) located east of US 41 and on either side of 25th Street E near the northern project limits. With the Preferred Alternative, the impacted residences are predicted to experience future traffic noise levels ranging from

67.2 to 68.3 dB(A), levels that exceed the NAC for Activity Category B. A combination of ground mounted noise barrier segments inside the FDOT right-of-way and a barrier on the outside edge of the elevated roadway structure was evaluated.

The results of the analysis indicate that at the maximum height of 22 feet for the ground mounted noise barriers, the noise reduction design goal could not be achieved and as such, the barrier is not considered a reasonable abatement measure for the impacted residences. Limitations on noise barrier length due to cross streets/intersecting roadways did not allow for a barrier of sufficient length to be evaluated, and there does not appear to be any other methods of reducing the predicted traffic noise impacts.

3.5.1.17 Noise Barrier 22 – Preferred Alternative

Noise Barrier 22 was evaluated for three impacted single-family residences represented by Receptor IDs 623 and 627, located east of US 41 at the northern project limits. With the Preferred Alternative, the impacted receptors are predicted to experience future traffic noise levels ranging from 66.9 to 67.4 dB(A), levels that approach and exceed the NAC for Activity Category B. Due to differences in elevation between the roadway and the ground where the homes are located, a ground mounted noise barrier would not provide sufficient height to effectively break the line of sight. A noise barrier was evaluated on the roadway shoulder embankment and would be limited to a maximum height of 14 feet. The northern end of the barrier would need to be terminated before the bridge over the CSX railroad since the existing bridge structure cannot be retrofitted to accommodate a noise barrier.

The results of the analysis show that at the maximum height of 14 feet, the noise barrier could not provide any of the impacted receptors with a reduction of at least five dB(A) and is not considered a feasible abatement measure. Height and length limitations due to barrier placement did not allow for a barrier of sufficient dimensions to effectively break the line of sight and meet noise reduction requirements to be evaluated. There does not appear to be any other means of reducing predicted traffic noise levels at the impacted receptors.

3.6 SUMMARY – PREFERRED ALTERNATIVE

In the design year (2050) with the proposed Preferred Alternative, traffic noise levels are predicted to approach, meet, or exceed the NAC for Activity Category B at 319 residences and Activity Category C at 22 recreation uses.

Noise barriers were not evaluated at three of the impacted residences that are considered isolated impacts, where there is only one impacted receptor to potentially benefit and would not meet minimum feasibility requirements. Additionally, a noise barrier was not evaluated for the impacted outdoor tables at the boat ramp located east of US 41 on the north side of the Manatee River. A preliminary screening indicates that the facility would likely not have enough use on an average day to meet minimum feasibility requirements.

Noise barriers were evaluated as a potential abatement measure for the remaining impacted residences and recreation uses. The analysis shows that noise barriers are a potentially feasible and reasonable abatement measure for up to 110 impacted residential receptors at the Nest Apartments, Lone Oak RV

Park, Palmetto Trace Apartments, and residences in the northwest quadrant of the US 41/10th Street West interchange, and at two impacted recreation uses (playground and volleyball court at Palmetto Trace Apartments). At the remaining impacted locations where noise barriers are not potentially feasible and cost reasonable, noise barriers could not provide minimum noise reduction requirements at a reasonable cost, and there does not appear to be any other method of reducing the predicted traffic noise impacts at the remaining impacted receptors.

3.6.1 Statement of Likelihood – Preferred Alternative

The FDOT is committed to the construction of the potentially feasible and cost reasonable noise abatement measures identified at the Nest Apartments, Lone Oak RV Park, Palmetto Trace Apartments, and residences in the northwest quadrant of the US 41/10th Street West interchange with the Preferred Alternative contingent upon the following conditions:

1. Final recommendations on the construction of the abatement measure are determined during the project's final design and through the public involvement process;
2. Detailed noise analyses during the final design process support the need for, feasibility, and reasonableness of providing abatement;
3. Cost analysis indicates that the cost of the noise barrier will not exceed the cost reasonable criterion;
4. Community input supporting types, heights, and locations of the noise barrier is provided to the District Office; and
5. Safety and engineering aspects related to the roadway user and the adjacent property owner have been reviewed and any conflicts or issues resolved.

At each potential noise barrier location, there is the potential for conflicts with the placement and construction of noise barriers due to limited available right-of-way, planned stormwater management facilities, and the presence of overhead and/or underground utilities. Additionally, residences in Lone Oak RV Park may need to be acquired to accommodate the right-of-way necessary for the proposed improvements, which may impact the cost reasonableness of the potential noise barrier. The extent of these potential residential relocations was unknown at the time of this analysis.

SECTION 4 CONCLUSIONS

With the proposed Interim Improvements, traffic noise levels are predicted to approach, meet, or exceed the NAC at 66 residences (Activity Category B) and six recreation uses (Activity Category C). With the proposed Preferred Alternative, traffic noise levels are predicted to approach, meet, or exceed the NAC for Activity Category B at 319 residences and 22 recreation uses. No Activity Category D or E land uses are predicted to experience future traffic noise levels with either of the proposed alternatives that approach, meet, or exceed the NAC for their respective activity category. None of the evaluated noise sensitive land uses are predicted to experience a substantial increase in traffic noise with either of the proposed alternatives.

Traffic management and alternative roadway alignments were determined to not be reasonable noise abatement measures. When used in conjunction with noise compatible land use planning, noise buffer zones can be an effective abatement measure and were previously discussed in **Section 2.3.3** of this report.

Based on the noise analyses performed to date for the proposed Interim Improvements, there are no feasible and reasonable solutions available to mitigate the predicted traffic noise impacts at the impacted residences and recreation uses.

The results of the analysis indicate that noise barriers are a potentially feasible and cost reasonable measure for up to 110 residences and two recreation uses with the proposed Preferred Alternative. There does not appear to be any other method of reducing the predicted traffic noise impacts at the remaining impacted receptors for either of the proposed build alternatives. A summary of the potentially feasible and cost reasonable noise barriers for the Preferred Alternative is provided in **Table 4-1**.

Table 4-1 Summary of Potentially Feasible and Cost Reasonable Noise Barriers[1]

Future Build Alternative	Barrier ID	Adjacent Community / Communities	Evaluated Location	Maximum Number of Benefited Receptors[2]			Maximum Number of Receptors Achieving Noise Reduction Design Goal	Maximum Average Noise Reduction – Leq (dB(A))[4]	Total Estimated Cost	Cost Per Benefited Receptor
				Impacted	Other[3]	Total				
Preferred Alternative	5	Nest Apartments	10’ or less inside FDOT right-of-way	17	17	34	13	7.2	$621,280	$18,273
	14	Lone Oak RV Park	10’ or less inside FDOT right-of-way	47	2	49	26	9.5	$975,920	$19,917
	15	Palmetto Trace Apartments	10’ or less inside FDOT right-of-way	34.41[5]	4	38.41[5]	28.41[5]	8.0	$1,190,640	$30,998
	16	Residences in NW Quadrant of US 41/10th Street West Interchange	10’ or less inside FDOT right-of-way	12	0	12	4	6.2	$345,840	$28,820

1 The locations of the potentially feasible and cost reasonable noise barriers are provided on the Project Aerials in Appendix B

2 This table provides the maximum number of benefited receptors predicted to occur with a maximum height noise barrier. Please refer to individual barrier results tables for benefited receptors provided at barrier heights lower than 22 feet.

3 Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

4 Average noise reduction applies only to “impacted” receptors that would receive at least a five dB(A) benefit from the barrier.

5 Includes “equivalent receptors” representing the playground and volleyball court at Palmetto Trace Apartments.

SECTION 5 CONSTRUCTION NOISE AND VIBRATION

Land uses within the project limits are identified in the FDOT listing of noise and vibration-sensitive sites (e.g., residences, schools, parks, places of worship, hospitals/medical facilities, daycare centers, and hotels). Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact. If additional sensitive land uses are developed adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the FDOT's "Standard Specifications for Road and Bridge Construction"[8] will minimize or eliminate potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

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SECTION 6 COMMUNITY COORDINATION

Public involvement and community coordination have been an integral element of the PD&E Study to ensure residents and stakeholders have the opportunity to provide input to the project development process.

An in-person Alternatives Public Workshop was held on Tuesday February 3, 2026, from 5:00 pm to 7:00 pm at the Manatee County Fairgrounds, Veterans Hall, located at 1402 14th Avenue West, Palmetto, FL 34221. Various display boards were available showing the Preferred Alternative as well as alternative corridors that had previously been given consideration. A video presentation was also played on a continuous loop throughout the duration of the meeting. Members of the FDOT and project consultant team were available to answer questions and address concerns from stakeholders and the public. No traffic noise inquiries or concerns were received during the meeting, and no additional traffic noise-related concerns were received during the comment period that followed.

A live online Public Workshop was conducted online on Thursday February 5, 2026, at 6:00 pm. The virtual meeting consisted of a presentation with various project information that was also available via display boards provided at the in-person meeting two days before. The virtual meeting concluded with a question-and-answer session. No traffic noise concerns were received during the virtual meeting, and the materials used in the meeting were posted to the project website located at: 444843-1 Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study.

This section will be completed after the Public Hearing for the project, currently anticipated in Summer 2026.

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SECTION 7 REFERENCES

1. 23 Code of Federal Regulations, Part 772: “Procedures for Abatement of Highway Traffic Noise and Construction Noise.” Federal Highway Administration; July 13, 2010.
2. Project Development and Environment Manual, Part 2, Chapter 18. Florida Department of Transportation. May 1, 2026.
3. Traffic Noise Modeling and Analysis Practitioners Handbook. Florida Department of Transportation. September 2025.
4. Noise Measurement Handbook. Federal Highway Administration. FHWA- HEP-18-065. June 2018.
5. Highway Traffic Noise: Analysis and Abatement Guidance. Federal Highway Administration. FHWA-HEP-10-025. December 2011.
6. Methodology to Evaluate Highway Traffic Noise at Special Land Uses. Florida Department of Transportation Office of Environmental Management. December 2023.
7. FDOT Design Manual Chapter 264 “Noise Barriers and Perimeter Walls”. Florida Department of Transportation. January 2026.
8. Florida Department of Transportation Standard Specifications for Road and Bridge Construction. January 2026.

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APPENDICES

Appendix A Noise Study Traffic Data

Appendix B Project Aerials

Appendix C Validation Measurement Documentation

Appendix D Predicted Traffic Noise Levels

Appendix E TNM Files (Provided Electronically)

Appendix F Special Land Use Documentation

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Appendix A

Noise Study Traffic Data

These columns (A-U) below should be provided in the Noise Study Report as an Appendix.
If additional rowas are needed for additional traffic segments, **Traffic Segment Numbers** (Column A) should be provided for each roadway segment.

Highway Traffic Noise: Traffic Data

Project/Data Information

Project Name	Bradenton Palmetto Connector
Project Number	444843-1-22-01
Condition	Existing
Year	2024
Source	Mainline Vehicle Classification from 170027 Vehicle Classification Report, Ramp classifications pulled from ramp synopsis reports; 10th Street is from 130180 Vehicle Classification Report
Preparer [Traffic Engineer]	Daniel R. Miller, P.E.
Prepared Date	4/7/2026
Notes	The ramps are directly from the synopsis reports found on the corridor.

	Roadway Details					Traffic Details										Raw Traffic Data Selection & Off-Peak Calculation		
Traffic Segment Number	**Roadway Name**	**From**	**To**	**Roadway Type**	**Number of Lanes** *In 1 direction	**LOS C Peak Hour Peak Direction (PHPD)**	**Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)**	**% Autos**	**% Medium Trucks**	**% Heavy Trucks**	**% Buses**	**% Motorcycles**	**Standard K-factor**	**D-factor**	**Posted Speed (mph)**	**LOS C vs. DHV Comparison**	**Peak Direction Volume*** *Used on both sides for LOS C	**Off-Peak Direction Volume*** *DHV only
1	US 301	9th St E	Tamiami Trail	Arterial	2	1,520	1,154	93%	4%	2%	0%	0%	7.50%	57.00%	45	DHV	1154	871
2	US 301 / US 41	Tamiami Trail	13th Ave E	Arterial	3	2,360	2,800	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
3	US 301 / US 41	13th Ave E	9th Ave E	Arterial	3	2,360	2,766	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
4	US 301 / US 41	9th Ave E	6th Ave E	Arterial	3	2,360	2,672	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
5	US 301 / US 41	6th Ave E	SR 64 (Manatee Ave)	Arterial	3	2,210	2,629	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2210	N/A
6	US 301 / US 41	SR 64 (Manatee Ave)	Haben Blvd	Arterial	2	1,520	2,779	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1520	N/A
7	US 301 / US 41	Haben Blvd	7th St E	Arterial	2	1,520	2,676	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1520	N/A
8	US 301 / US 41	7th St E	US 301 (10th St W)	Arterial	2	1,700	2,535	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
9	US 41	US 301 (10th St W)	17th St E	Arterial	2	1,700	2,009	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
10	US 41	17th St E	23rd St. E	Arterial	2	1,700	1,949	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
11	US 41	23rd St. E	33rd St	Arterial	2	1,700	1,667	93%	4%	2%	0%	0%	7.50%	57.00%	50	DHV	1667	1258
12	Tamiami Trail	26th Ave E	US 301	Arterial	2	1,520	1,689	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1520	N/A
13	US 301	NB Off-Ramp		Ramp	1		655	92%	5%	2%	0%	0%	7.50%	57.00%	50	DHV	655	494
14	US 301	NB On-Ramp		Ramp	1		305	93%	4%	2%	0%	0%	7.50%	57.00%	50	DHV	305	230
15	US 301	SB Off Ramp		Ramp	1		319	95%	3%	2%	0%	0%	7.50%	57.00%	50	DHV	319	241
16	US 301	SB On Ramp		Ramp	1		715	92%	5%	2%	0%	0%	7.50%	57.00%	50	DHV	715	539
17	10th Street	3rd Avenue W	6th Ave E	Arterial	2	1,520	1,521	91%	4%	4%	0%	0%	7.50%	56.00%	40	LOS C	1520	N/A

These columns (A-U) below should be provided in the Noise Study Report as an Appendix.
If additional rowas are needed for additional traffic segments, **Traffic Segment Numbers** (Column A) should be provided for each roadway segment.

Highway Traffic Noise: Traffic Data

Project/Data Information

Project Name	Bradenton Palmetto Connector
Project Number	444843-1-22-01
Condition	No-Build
Year	2050
Source	Mainline Vehicle Classification from 170027 Vehicle Classification Report, Ramp classifications pulled from ramp synopsis reports; 10th Street is from 130180 Vehicle Classification Report
Preparer [Traffic Engineer]	Daniel R. Miller, P.E.
Prepared Date	4/7/2026
Notes	

	Roadway Details					Traffic Details										Raw Traffic Data Selection & Off-Peak Calculation		
Traffic Segment Number	**Roadway Name**	**From**	**To**	**Roadway Type**	**Number of Lanes** *In 1 direction	**LOS C Peak Hour Peak Direction (PHPD)**	**Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)**	**% Autos**	**% Medium Trucks**	**% Heavy Trucks**	**% Buses**	**% Motorcycles**	**Standard K-factor**	**D-factor**	**Posted Speed (mph)**	**LOS C vs. DHV Comparison**	**Peak Direction Volume*** *Used on both sides for LOS C	**Off-Peak Direction Volume*** *DHV only
1	US 301	9th St E	Tamiami Trail	Arterial	2	1,520	1,620	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1520	N/A
2	US 301 / US 41	Tamiami Trail	13th Ave E	Arterial	3	2,360	3,942	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
3	US 301 / US 41	13th Ave E	9th Ave E	Arterial	3	2,360	3,736	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
4	US 301 / US 41	9th Ave E	6th Ave E	Arterial	3	2,360	3,223	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
5	US 301 / US 41	6th Ave E	SR 64 (Manatee Ave)	Arterial	3	2,210	3,121	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2210	N/A
6	US 301 / US 41	SR 64 (Manatee Ave)	Haben Blvd	Arterial	2	1,520	3,758	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1520	N/A
7	US 301 / US 41	Haben Blvd	7th St E	Arterial	2	1,520	3,236	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1520	N/A
8	US 301 / US 41	7th St E	US 301 (10th St W)	Arterial	2	1,700	3,027	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
9	US 41	US 301 (10th St W)	17th St E	Arterial	2	1,700	2,484	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
10	US 41	17th St E	23rd St. E	Arterial	2	1,700	2,116	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
11	US 41	23rd St. E	33rd St	Arterial	2	1,700	2,039	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
12	Tamiami Trail	26th Ave E	US 301	Arterial	2	1,520	2,368	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1520	N/A
13	US 301	NB Off-Ramp		Ramp	1		679	92%	5%	2%	0%	0%	7.50%	57.00%	50	DHV	679	512
14	US 301	NB On-Ramp		Ramp	1		347	93%	4%	2%	0%	0%	7.50%	57.00%	50	DHV	347	262
15	US 301	SB Off Ramp		Ramp	1		362	95%	3%	2%	0%	0%	7.50%	57.00%	50	DHV	362	273
16	US 301	SB On Ramp		Ramp	1		833	92%	5%	2%	0%	0%	7.50%	57.00%	50	DHV	833	628
17	10th Street	3rd Avenue W	6th Ave E	Arterial	2	1,520	1,521	91%	4%	4%	0%	0%	7.50%	56.00%	40	LOS C	1520	N/A

These columns (A-U) below should be provided in the Noise Study Report as an Appendix.
If additional rowas are needed for additional traffic segments, **Traffic Segment Numbers** (Column A) should be provided for each roadway segment.

Highway Traffic Noise: Traffic Data

Project/Data Information

Project Name	Bradenton Palmetto Connector
Project Number	444843-1-22-01
Condition	Build
Year	2050
Source	Mainline Vehicle Classification from 170027 Vehicle Classification Report, Ramp classifications pulled from ramp synopsis reports; 10th Street is from 130180 Vehicle Classification Report
Preparer [Traffic Engineer]	Daniel R. Miller, P.E.
Prepared Date	4/9/2026
Notes	Interim

	Roadway Details					Traffic Details										Raw Traffic Data Selection & Off-Peak Calculation		
Traffic Segment Number	**Roadway Name**	**From**	**To**	**Roadway Type**	**Number of Lanes** *In 1 direction	**LOS C Peak Hour Peak Direction (PHPD)**	**Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)**	**% Autos**	**% Medium Trucks**	**% Heavy Trucks**	**% Buses**	**% Motorcycles**	**Standard K-factor**	**D-factor**	**Posted Speed (mph)**	**LOS C vs. DHV Comparison**	**Peak Direction Volume*** *Used on both sides for LOS C	**Off-Peak Direction Volume*** *DHV only
1	US 301	9th St E	Tamiami Trail	Arterial	2	1,520	1,693	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1520	N/A
2	US 301 / US 41	Tamiami Trail	13th Ave E	Arterial	3	2,360	4,006	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
3	US 301 / US 41	13th Ave E	9th Ave E	Arterial	3	2,360	3,612	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
4	US 301 / US 41	9th Ave E	6th Ave E	Arterial	3	2,360	3,420	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
5	US 301 / US 41	6th Ave E	SR 64 (Manatee Ave)	Arterial	3	2,210	3,732	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2210	N/A
6	US 301 / US 41	SR 64 (Manatee Ave)	Haben Blvd	Arterial	3	2,360	4,271	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	2360	N/A
7	US 301 / US 41	Haben Blvd	7th St E	Arterial	3	2,360	4,190	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	2360	N/A
8	US 301 / US 41	7th St E	US 301 (10th St W)	Arterial	3	2,620	3,826	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	2620	N/A
9	US 41	US 301 (10th St W)	17th St E	Arterial	2	1,700	2,608	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
10	US 41	17th St E	23rd St. E	Arterial	2	1,700	2,454	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
11	US 41	23rd St. E	33rd St	Arterial	2	1,700	2,163	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	1700	N/A
12	Tamiami Trail	26th Ave E	US 301	Arterial	2	1,520	2,373	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1520	N/A
13	US 301	NB Off-Ramp		Ramp	2		1,174	92%	5%	2%	0%	0%	7.50%	57.00%	50	DHV	1174	886
14	US 301	NB On-Ramp		Ramp	1		339	93%	4%	2%	0%	0%	7.50%	57.00%	50	DHV	339	256
15	US 301	SB Off Ramp		Ramp	1		340	95%	3%	2%	0%	0%	7.50%	57.00%	50	DHV	340	257
16	US 301	SB On Ramp		Ramp	1		1,110	92%	5%	2%	0%	0%	7.50%	57.00%	50	DHV	1110	838
17	10th Street	3rd Avenue W	6th Ave E	Arterial	2	1,520	1,521	91%	4%	4%	0%	0%	7.50%	57.00%	40	LOS C	1520	N/A

These columns (A-U) below should be provided in the Noise Study Report as an Appendix.
If additional rowas are needed for additional traffic segments, **Traffic Segment Numbers** (Column A) should be provided for each roadway segment.

Highway Traffic Noise: Traffic Data

Project/Data Information

Project Name	Bradenton Palmetto Connector
Project Number	444843-1-22-01
Condition	Build
Year	2050
Source	Mainline Vehicle Classification from 170027 Vehicle Classification Report, Ramp classifications pulled from ramp synopsis reports
Preparer [Traffic Engineer]	Daniel R. Miller, P.E.
Prepared Date	6/17/2026
Notes	Ultimate - Elevated Lane LOS is Limited Access interpolated to one lane per direction

	Roadway Details					Traffic Details										Raw Traffic Data Selection & Off-Peak Calculation		
Traffic Segment Number	**Roadway Name**	**From**	**To**	**Roadway Type**	**Number of Lanes** *In 1 direction	**LOS C Peak Hour Peak Direction (PHPD)**	**Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)**	**% Autos**	**% Medium Trucks**	**% Heavy Trucks**	**% Buses**	**% Motorcycles**	**Standard K-factor**	**D-factor**	**Posted Speed (mph)**	**LOS C vs. DHV Comparison**	**Peak Direction Volume*** *Used on both sides for LOS C	**Off-Peak Direction Volume*** *DHV only
1	US 301	9th St E	Elevated Lane	Arterial	2	1,520	3,121	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1520	N/A
2	US 301	Elevated Lane	Tamiami Trail	Arterial	2	2,360	1,000	93%	4%	2%	0%	0%	7.50%	57.00%	45	DHV	1000	755
3	US 301 / US 41	Tamiami Trail	13th Ave E	Arterial	3	2,360	3,206	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	2360	N/A
4	US 301 / US 41	13th Ave E	9th Ave E	Arterial	3	2,360	3,087	93%	4%	2%	0%	0%	7.50%	57.00%	40	LOS C	2360	N/A
5	US 301 / US 41	9th Ave E	6th Ave E	Arterial	3	2,360	3,048	93%	4%	2%	0%	0%	7.50%	57.00%	40	LOS C	2360	N/A
6	US 301 / US 41	6th Ave E	SR 64 (Manatee Ave)	Arterial	3	2,210	3,001	93%	4%	2%	0%	0%	7.50%	57.00%	40	LOS C	2210	N/A
7	US 301 / US 41	SR 64 (Manatee Ave)	Haben Blvd	Arterial	3	2,360	3,514	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	2360	N/A
8	US 301 / US 41	Haben Blvd	7th St E	Arterial	3	2,360	3,540	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	2360	N/A
9	US 301 / US 41	7th St E	US 301 (10th St W)	Arterial	3	2,620	3,454	93%	4%	2%	0%	0%	7.50%	57.00%	50	LOS C	2620	N/A
10	US 41	US 301 (10th St W)	17th St E	Arterial	3	2,620	2,035	93%	4%	2%	0%	0%	7.50%	57.00%	50	DHV	2035	1535
11	US 41	17th St E	23rd St. E	Arterial	3	2,620	1,954	93%	4%	2%	0%	0%	7.50%	57.00%	50	DHV	1954	1474
12	US 41	23rd St. E	33rd St	Arterial	3	2,620	1,629	93%	4%	2%	0%	0%	7.50%	57.00%	50	DHV	1629	1229
13	Tamiami Trail	26th Ave E	US 301	Arterial	2	1,520	2,022	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1520	N/A
14	US 301	NB Off-Ramp		Ramp	2		1,070	92%	5%	2%	0%	0%	7.50%	57.00%		DHV	1070	807
15	US 301	NB On-Ramp		Ramp	1		322	93%	4%	2%	0%	0%	7.50%	57.00%		DHV	322	243
16	US 301	SB Off Ramp		Ramp	1		383	95%	3%	2%	0%	0%	7.50%	57.00%		DHV	383	289
17	US 301	SB On Ramp		Ramp	1		1,043	92%	5%	2%	0%	0%	7.50%	57.00%		DHV	1043	787
18	10th Street	3rd Avenue W	6th Ave E	Arterial	2	1,520	1,521	91%	4%	4%	0%	0%	7.50%	57.00%	40	LOS C	1520	N/A
19	Elevated Lane	9th St E	23rd St. E	Mainline	1	1,740	2,120	93%	4%	2%	0%	0%	7.50%	57.00%	45	LOS C	1740	N/A

Appendix B

Project Aerials

Project Aerials – Interim Improvements

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Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
Interim Alternative
Manatee County, Florida
FPID: 444843-1
Page 1 of 2

Receptors
- Impacted & Benefited
- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited

Floor
D
C
B
A

- Validation Monitoring Site
- Potential Noise Barrier
- Existing ROW
- Proposed ROW

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

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Manatee County, Florida
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Receptors
- Impacted & Benefited
- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited

D C B A Floor

- Validation Monitoring Site
- Potential Noise Barrier
- Existing ROW
- Proposed ROW

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

Project Aerials – Preferred Alternative

Draft Noise Study Report Appendix B: Project Aerials
Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
Preferred Alternative
Manatee County, Florida
FPID: 444843-1

Receptors
- Impacted & Benefited
- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited
- D C B A Floor

- Validation Monitoring Site
- Potential Noise Barrier
- Existing ROW
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

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Receptors
- Impacted & Benefited
- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited

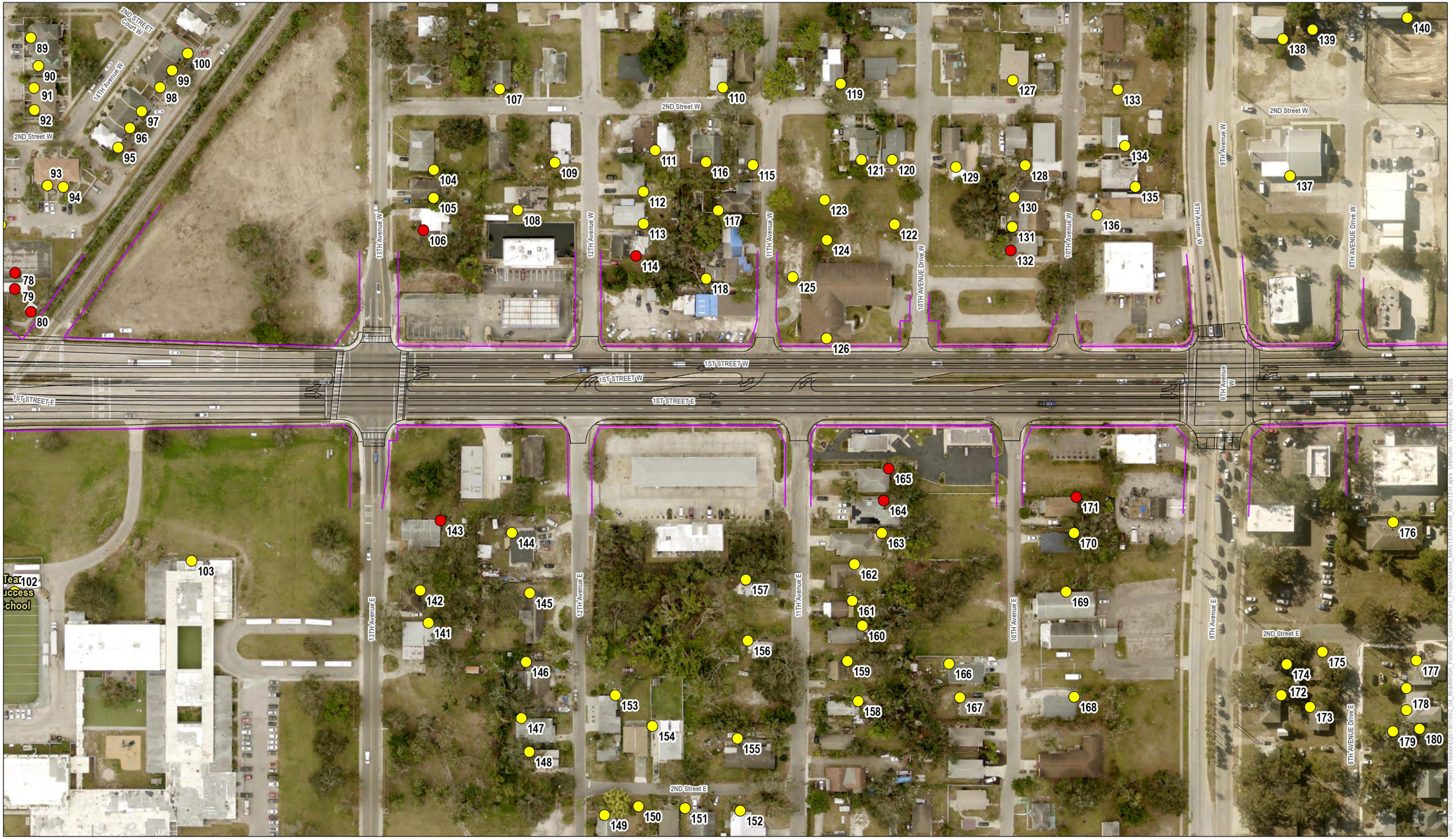
Floor
D
C
B
A

- Validation Monitoring Site
- Potential Noise Barrier
- Existing ROW
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT



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Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
Preferred Alternative
Manatee County, Florida
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Receptors
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- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited

Floor
D
C
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- Validation Monitoring Site
- Potential Noise Barrier
- Existing ROW
- Proposed ROW
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

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Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
Preferred Alternative
Manatee County, Florida
FPID: 444843-1
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- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited

Floor
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C
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A

- Validation Monitoring Site
- Potential Noise Barrier
- Existing ROW
- Proposed ROW
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

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Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
Preferred Alternative
Manatee County, Florida
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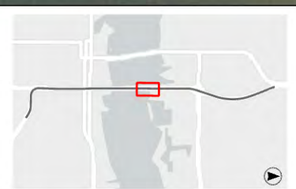

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0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

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Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
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Manatee County, Florida
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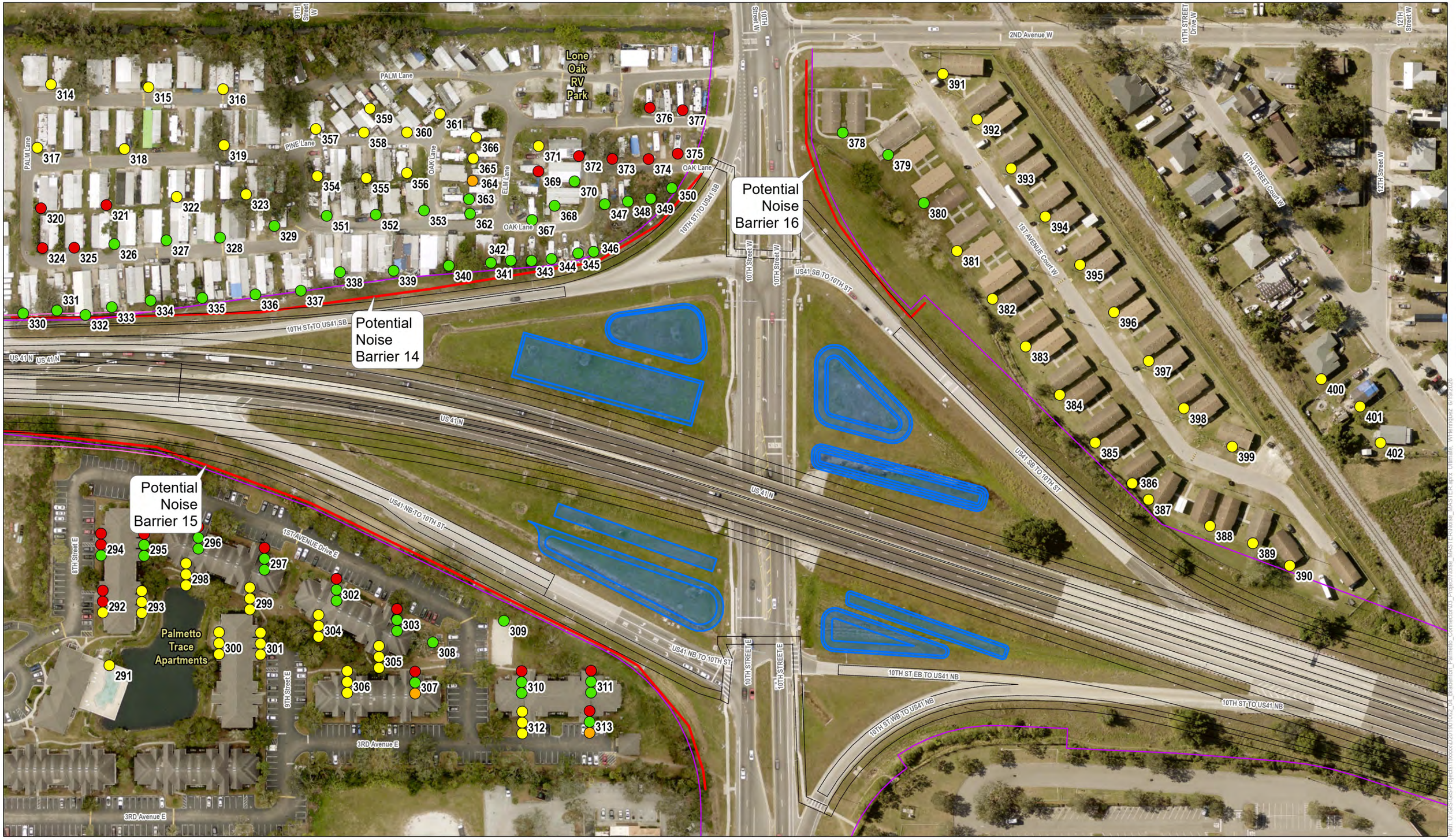
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT



Draft Noise Study Report Appendix B: Project Aerials
Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
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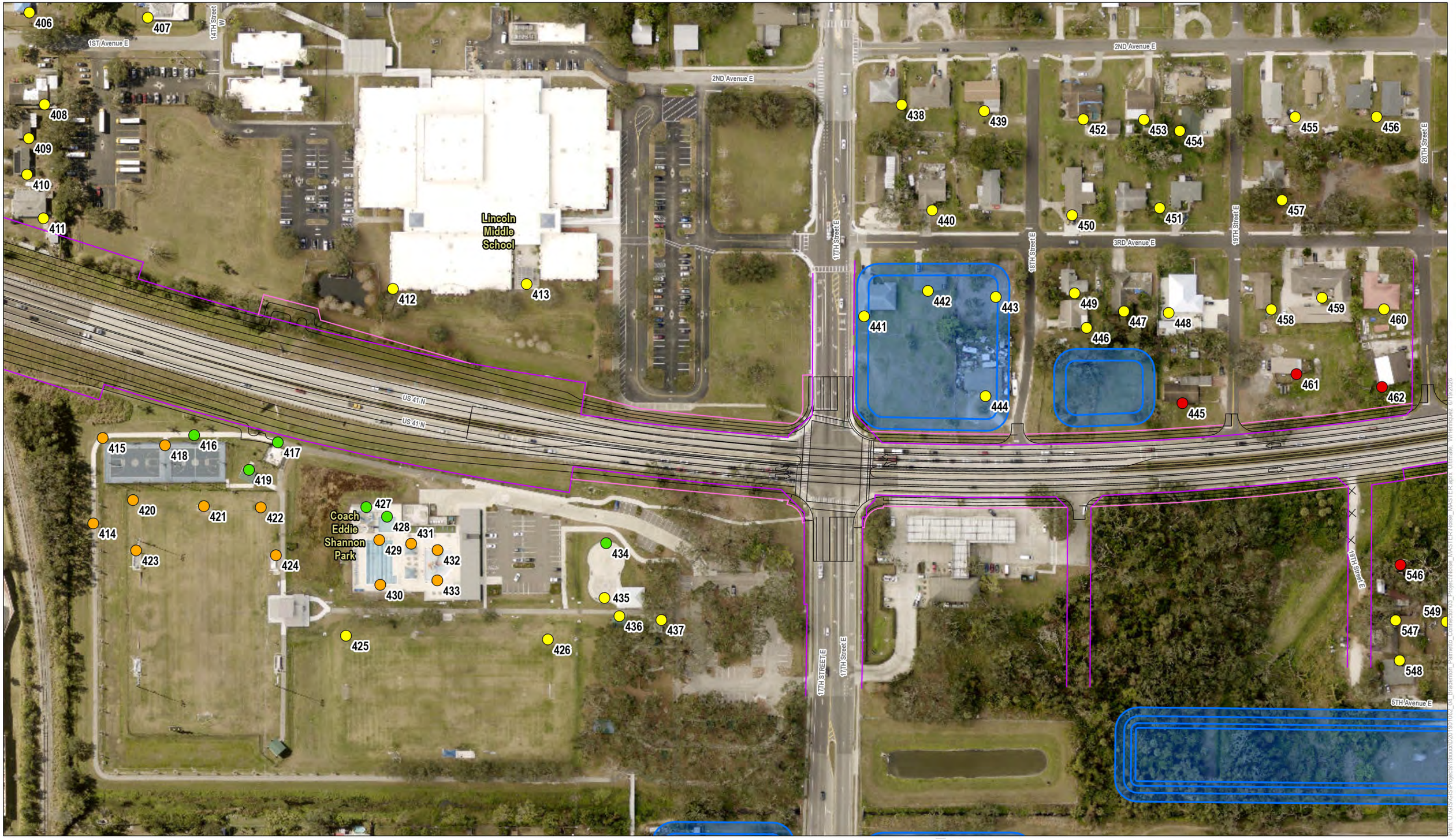

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Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
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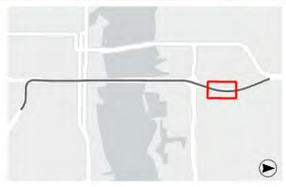

Receptors
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- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited

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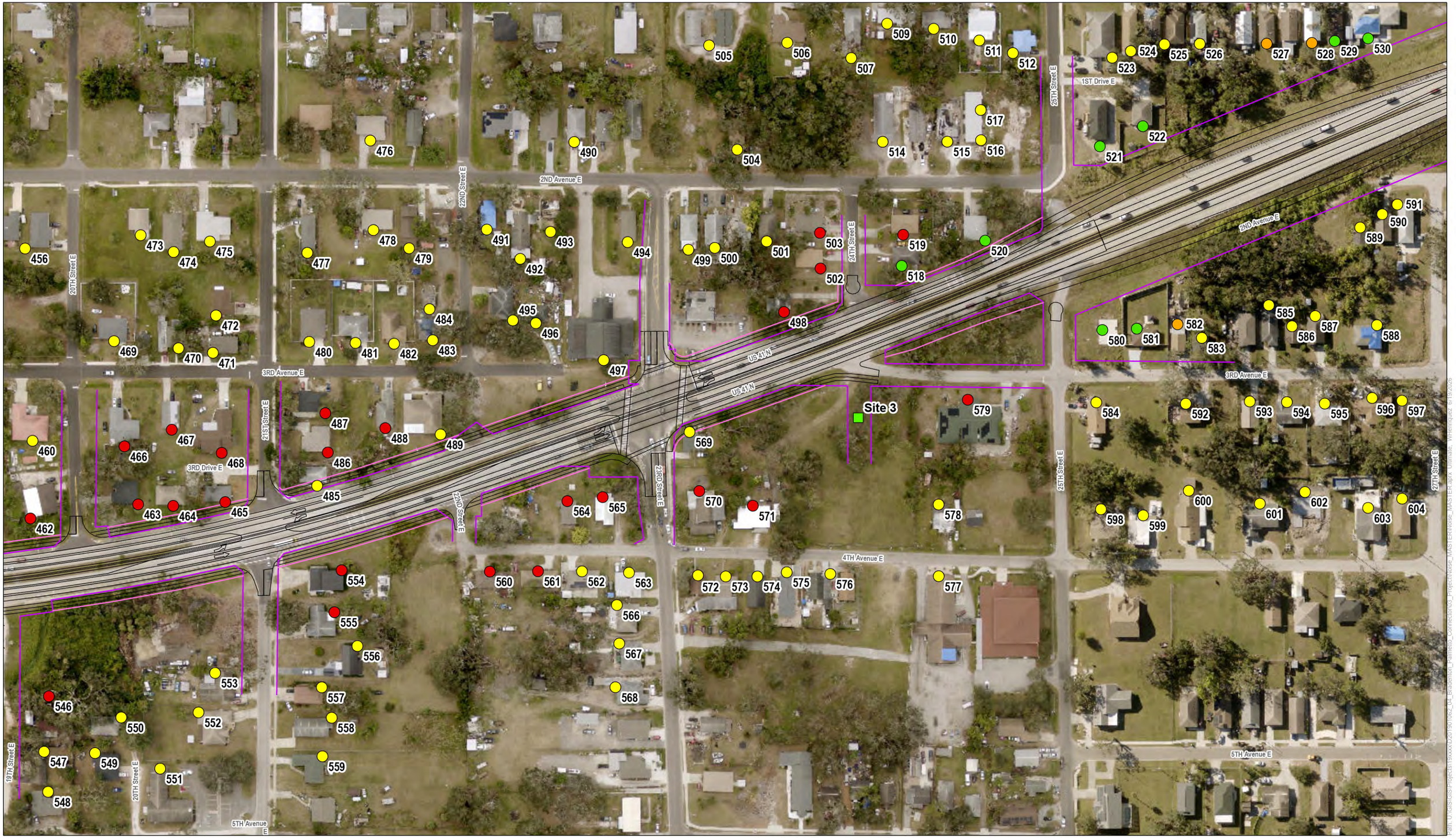
- Existing ROW
- Proposed ROW
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT



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Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
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Receptors
- Impacted & Benefited
- Impacted & Not Benefited
- Not Impacted & Benefited
- Not Impacted & Not Benefited

Floor
D
C
B
A

- Validation Monitoring Site
- Potential Noise Barrier
- Existing ROW
- Proposed ROW
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

Draft Noise Study Report Appendix B: Project Aerials
Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study
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Receptors
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- Not Impacted & Benefited
- Not Impacted & Not Benefited

Floor
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- Validation Monitoring Site
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- Existing ROW
- Proposed ROW
- Preferred Pond

0 200 US Feet

Source(s): Esri Basemap, ESA, FDOT

FDOT

Appendix C

Validation Measurement Documentation

Noise Measurement Data Sheet

Date: March 26, 2026 **Measurement Taken By:** MSM

Project: 444843-1 / Bradenton-Palmetto Connector PD&E Study

Site ID: 1 - West of 9th Street East, North of U.S. 301

Weather Conditions

Cloud: Clear

Temperature: **Start:** 76 **End:** 81 **(°F)**

Wind Direction: **Start:** East **End:** East

Wind Speed (Start): Min: 2 **Max:** 6 **Average:** 4 **(mph)**

Wind Speed (End): Min: 3 **Max:** 9 **Average:** 6 **(mph)**

Humidity: **Start:** 54 **End:** 58

Equipment Data

Sound Level Meter: Larson Davis 720 SLM **Serial Number:** 409

Date of Last Traceable Calibration: 1/6/2026

Calibration: **Start:** 114 **End:** 114

Battery: **Start:** 100 **End:** 92

Weighting Scale: A **Response:** Slow

Calibrator: Larson Davis CAL 150 **Serial Number:** 2282

Results

Run 1 (11:15-11:25am): 66.4 dB(A)
Run 2 (11:27-11:28am): 66.6 dB(A)
Run 3 (11:40-11:50am): 66.0 dB(A)

Major Noise Sources: US 301 traffic

Background Noise Sources: birds chirping, activity at Tropicana Plant

Other Notes/Observations: Train warning horn (multiple blasts) during second period, 10:24-10:25am

Observed Traffic Data: Site 1

Measurement Period 1

Vehicle Types	Northbound U.S. 301		Southbound U.S. 301	
	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	107	55	110	55
Medium Truck	3	53	8	53
Heavy Truck	6	51	14	51
Bus	1	49	0	0
Motorcycle	0	0	0	0

Measurement Period 2

Vehicle Types	Northbound U.S. 301		Southbound U.S. 301	
	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	89	56	140	56
Medium Truck	6	53	3	53
Heavy Truck	11	52	19	52
Bus	1	54	0	0
Motorcycle	0	0	0	0

Measurement Period 3

Vehicle Types	Northbound U.S. 301		Southbound U.S. 301	
	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	104	51	112	51
Medium Truck	4	49	7	49
Heavy Truck	15	51	10	51
Bus	0	0	0	0
Motorcycle	0	0	0	0

Site 1 Photos

Noise Measurement Data Sheet

Date: March 26, 2026 **Measurement Taken By:** MSM

Project: 444843-1 / Bradenton-Palmetto Connector PD&E Study

Site ID: 2 - Palmetto Estuary Preserve

Weather Conditions

Cloud Cover: Clear

Temperature: **Start:** 76 **End:** 78 **(°F)**

Wind Direction: **Start:** Southeast **End:** Southeast

Wind Speed (Start): Min: 2 **Max:** 5 **Average:** 3 **(mph)**

Wind Speed (End): Min: 2 **Max:** 6 **Average:** 3 **(mph)**

Humidity: **Start:** 51 **End:** 41

Equipment Data

Sound Level Meter: Larson Davis 720 SLM **Serial Number:** 409

Date of Last Traceable Calibration: 1/6/2026

Calibration: **Start:** 114 **End:** 114

Battery: **Start:** 96 **End:** 89

Weighting Scale: A **Response:** Slow

Calibrator: Larson Davis CAL 150 **Serial Number:** 2282

Results

Run 1 (10:05-10:15am): 59.2 dB(A)
Run 2 (10:19-10:29am): 73.3 dB(A)
Run 3 (10:34-10:44am): 60.6 dB(A)

Major Noise Sources: US 41 traffic

Background Noise Sources: birds chirping

Other Notes/Observations: aircraft over flight at 11:28am, loud motorcycle exhaust at 11:43am

Observed Traffic Data: Site 2

Measurement Period 1

	Northbound U.S. 41		Southbound U.S. 41	
Vehicle Types	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	257	48	286	48
Medium Truck	20	45	16	45
Heavy Truck	20	47	14	47
Bus	0	0	1	50
Motorcycle	0	0	0	0

Measurement Period 2

	Northbound U.S. 41		Southbound U.S. 41	
Vehicle Types	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	281	49	294	49
Medium Truck	15	47	14	47
Heavy Truck	15	48	16	48
Bus	0	0	0	0
Motorcycle	1	42	1	42

Measurement Period 3

	Northbound U.S. 41		Southbound U.S. 41	
Vehicle Types	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	302	50	284	50
Medium Truck	13	50	8	50
Heavy Truck	14	52	7	52
Bus	0	0	1	51
Motorcycle	2	51	0	0

Site 2 Photos

Noise Measurement Data Sheet

Date: March 26, 2026 **Measurement Taken By:** MSM

Project: 444843-1 / Bradenton-Palmetto Connector PD&E Study

Site ID: 3 - East side of U.S. 41 at 3rd Avenue East Intersection

Weather Conditions

Cloud: Clear

Temperature: **Start:** 81 **End:** 83 **(°F)**

Wind Direction: **Start:** South/Southeast **End:** South/Southwest

Wind Speed (Start): Min: 3 **Max:** 5 **Average:** 3 **(mph)**

Wind Speed (End): Min: 2 **Max:** 5 **Average:** 3 **(mph)**

Humidity: **Start:** 40 **End:** 41

Equipment Data

Sound Level Meter: Larson Davis 720 SLM **Serial Number:** 409

Date of Last Traceable Calibration: 1/6/2026

Calibration: **Start:** 114 **End:** 114

Battery: **Start:** 90 **End:** 87

Weighting Scale: A **Response:** Slow

Calibrator: Larson Davis CAL 150 **Serial Number:** 2282

Results

Run 1 (12:31-12:41pm): 65.8 dB(A)
Run 2 (12:44-12:54pm): 68.1 dB(A)
Run 3 (12:58-1:08pm): 67.6 dB(A)

Major Noise Sources: US 41 traffic

Background Noise Sources: birds chirping, sirens at 12:53pm, squeaky truck brakes at 12:54pm

Other Notes/Observations: Wind turned south/SW by end of monitoring periods

Observed Traffic Data: Site 3

Measurement Period 1

	Northbound U.S. 41		Southbound U.S. 41	
Vehicle Types	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	172	48	228	48
Medium Truck	12	49	12	49
Heavy Truck	16	47	13	47
Bus	0	0	0	0
Motorcycle	0	0	0	0

Measurement Period 2

	Northbound U.S. 41		Southbound U.S. 41	
Vehicle Types	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	198	46	212	46
Medium Truck	7	42	14	42
Heavy Truck	15	45	13	45
Bus	0	0	0	0
Motorcycle	2	48	0	0

Measurement Period 3

	Northbound U.S. 41		Southbound U.S. 41	
Vehicle Types	Volume	AverageSpeed (mph)	Volume	AverageSpeed (mph)
Auto	213	48	149	48
Medium Truck	11	49	6	49
Heavy Truck	11	47	12	47
Bus	1	48	0	0
Motorcycle	0	0	2	48

Site 3 Photos

Appendix D

Predicted Traffic Noise Levels

Predicted Traffic Noise Levels – Interim Improvements

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Appendix D: Predicted Traffic Noise Levels - INTERIM IMPROVEMENTS

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A) Existing (2024)	Future No-Build (2050)	Future Build (2050) Interim Improvements	Change From Existing	Does Future Build Approach, Meet, or Exceed NAC?
181A	2	Residence	B	63.8	63.8	64.3	0.5	No
181B	2	Residence	B	65.9	65.9	66.3	0.4	**Yes**
181C	2	Residence	B	66.0	66.0	66.9	0.9	**Yes**
181D	2	Residence	B	66.4	66.4	67.3	0.9	**Yes**
182A	2	Residence	B	68.8	68.8	68.8	0.0	**Yes**
182B	2	Residence	B	69.3	69.3	70.1	0.8	**Yes**
182C	2	Residence	B	69.6	69.6	70.6	1.0	**Yes**
182D	2	Residence	B	69.5	69.5	70.5	1.0	**Yes**
183A	1	Residence	B	74.7	74.7	75.2	0.5	**Yes**
183B	1	Residence	B	74.8	74.8	75.7	0.9	**Yes**
183C	1	Residence	B	74.5	74.5	75.5	1.0	**Yes**
183D	1	Residence	B	74.4	74.4	75.2	0.8	**Yes**
184A	1	Residence	B	73.4	73.4	73.8	0.4	**Yes**
184B	1	Residence	B	73.4	73.4	74.5	1.1	**Yes**
184C	1	Residence	B	73.3	73.3	74.4	1.1	**Yes**
184D	1	Residence	B	73.1	73.1	74.2	1.1	**Yes**
185A	1	Residence	B	73.2	73.2	73.7	0.5	**Yes**
185B	1	Residence	B	73.2	73.2	74.4	1.2	**Yes**
185C	1	Residence	B	73.1	73.1	74.2	1.1	**Yes**
185D	1	Residence	B	72.9	72.9	74.1	1.2	**Yes**
186A	1	Residence	B	63.1	63.1	62.6	-0.5	No
186B	1	Residence	B	64.0	64.0	65.4	1.4	No
186C	1	Residence	B	64.3	64.3	66.0	1.7	**Yes**
186D	1	Residence	B	64.5	64.5	66.2	1.7	**Yes**
187A	1	Residence	B	60.0	60.0	59.9	-0.1	No
187B	1	Residence	B	62.0	62.0	63.0	1.0	No
187C	1	Residence	B	62.2	62.2	64.1	1.9	No
187D	1	Residence	B	62.6	62.6	64.4	1.8	No
188B	2	Residence	B	61.7	61.7	62.4	0.7	No
188C	2	Residence	B	62.0	62.0	63.8	1.8	No
188D	2	Residence	B	62.3	62.3	64.1	1.8	No
189B	2	Residence	B	60.8	60.8	61.1	0.3	No
189C	2	Residence	B	61.1	61.1	62.5	1.4	No
189D	2	Residence	B	61.4	61.4	63.2	1.8	No
190	1	Recreation - Pool at Aria at Bradenton Apartments	C	48.3	48.3	49.3	1.0	No
191A	1	Residence	B	55.5	55.5	55.8	0.3	No
191B	1	Residence	B	58.3	58.3	58.7	0.4	No
191C	1	Residence	B	58.4	58.4	59.5	1.1	No
191D	1	Residence	B	58.8	58.8	60.5	1.7	No
192A	1	Residence	B	62.9	62.9	63.2	0.3	No
192B	1	Residence	B	65.3	65.3	66.0	0.7	**Yes**
192C	1	Residence	B	65.5	65.5	67.3	1.8	**Yes**
192D	1	Residence	B	65.7	65.7	67.5	1.8	**Yes**
193A	3	Residence	B	63.2	63.2	63.6	0.4	No
193B	3	Residence	B	65.7	65.7	66.4	0.7	**Yes**
193C	3	Residence	B	65.8	65.8	67.6	1.8	**Yes**
193D	3	Residence	B	66.0	66.0	67.9	1.9	**Yes**
194A	1	Residence	B	63.8	63.8	64.3	0.5	No
194B	1	Residence	B	66.3	66.3	67.0	0.7	**Yes**
194C	1	Residence	B	66.4	66.4	68.2	1.8	**Yes**
194D	1	Residence	B	66.6	66.6	68.4	1.8	**Yes**
195A	1	Residence	B	60.8	60.8	61.4	0.6	No
195B	1	Residence	B	63.8	63.8	64.2	0.4	No
195C	1	Residence	B	63.9	63.9	65.3	1.4	No
195D	1	Residence	B	64.1	64.1	66.0	1.9	**Yes**
196A	2	Residence	B	57.5	57.5	58.0	0.5	No
196B	2	Residence	B	60.7	60.7	60.9	0.2	No
196C	2	Residence	B	60.8	60.8	61.8	1.0	No
196D	2	Residence	B	61.1	61.1	62.9	1.8	No
197A	2	Residence	B	59.2	59.2	59.9	0.7	No
197B	2	Residence	B	62.4	62.4	62.7	0.3	No
197C	2	Residence	B	62.5	62.5	63.8	1.3	No

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Appendix D: Predicted Traffic Noise Levels - INTERIM IMPROVEMENTS

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A) Existing (2024)	Future No-Build (2050)	Future Build (2050) Interim Improvements	Change From Existing	Does Future Build Approach, Meet, or Exceed NAC?
197D	2	Residence	B	62.8	62.8	64.6	1.8	No
198A	1	Residence	B	62.0	62.0	62.6	0.6	No
198B	1	Residence	B	64.7	64.7	65.3	0.6	No
198C	1	Residence	B	64.8	64.8	66.6	1.8	**Yes**
198D	1	Residence	B	65.1	65.1	66.9	1.8	**Yes**
199A	2	Residence	B	63.8	63.8	64.3	0.5	No
199B	2	Residence	B	66.0	66.0	67.0	1.0	**Yes**
199C	2	Residence	B	66.2	66.2	68.0	1.8	**Yes**
199D	2	Residence	B	66.4	66.4	68.2	1.8	**Yes**
200A	1	Residence	B	69.9	69.9	70.0	0.1	**Yes**
200B	1	Residence	B	70.2	70.2	72.1	1.9	**Yes**
200C	1	Residence	B	70.3	70.3	72.2	1.9	**Yes**
200D	1	Residence	B	70.2	70.2	72.0	1.8	**Yes**
201A	1	Residence	B	69.7	69.7	69.8	0.1	**Yes**
201B	1	Residence	B	70.2	70.2	72.2	2.0	**Yes**
201C	1	Residence	B	70.3	70.3	72.2	1.9	**Yes**
201D	1	Residence	B	70.2	70.2	72.1	1.9	**Yes**
202A	2	Residence	B	63.4	63.4	63.7	0.3	No
202B	2	Residence	B	65.7	65.7	66.8	1.1	**Yes**
202C	2	Residence	B	65.9	65.9	67.9	2.0	**Yes**
202D	2	Residence	B	66.2	66.2	68.1	1.9	**Yes**
203A	2	Residence	B	59.7	59.7	59.9	0.2	No
203B	2	Residence	B	62.6	62.6	63.0	0.4	No
203C	2	Residence	B	63.3	63.3	64.7	1.4	No
203D	2	Residence	B	63.8	63.8	65.7	1.9	No
204	1	Office Building Outdoor Use Area	E	64.9	64.9	65.3	0.4	No
205A	1	Residence	B	53.8	53.8	56.5	2.7	No
205B	1	Residence	B	57.4	57.4	58.4	1.0	No
205C	1	Residence	B	59.3	59.4	59.7	0.4	No
206	1	Marriott Hotel Pool	E	57.5	57.5	59.3	1.8	No
207	1	Riverwalk Grill Outdoor Seating	E	66.5	66.5	65.8	-0.7	No
208A	1	Manatee Memorial Hospital (Interior)	D	48.8	48.8	49.9	1.1	No
208B				48.7	48.7	50.4	1.7	No
208C				48.4	48.4	50.1	1.7	No
209A				47.5	47.5	48.3	0.8	No
209B				47.7	47.7	49.2	1.5	No
209C				47.5	47.5	49.0	1.5	No
210	1	Kids Castle Learning Center Daycare - Playground	C	54.2	54.2	55.1	0.9	No
211	1	Residence	B	53.0	53.0	55.1	2.1	No
212	1	Donald L. Courtney Veterans Monuments Park	C	63.4	63.4	65.7	2.3	No
213				61.7	61.7	63.7	2.0	No
214	1	Bradenton Riverwalk Pavilions	C	62.6	62.6	62.8	0.2	No
215	1	Bradenton Riverwalk	C	64.0	64.0	64.1	0.1	No
216				65.9	65.9	65.6	-0.3	No
217				67.0	67.0	67.2	0.2	**Yes**
218	1	Bradenton Riverwalk - Volleyball Court	C	65.2	65.2	64.9	-0.3	No
219	1	Bradenton Riverwalk - Skatepark	C	66.7	66.7	66.4	-0.3	**Yes**
220				66.8	66.9	66.5	-0.3	**Yes**
221				67.9	67.9	67.4	-0.5	**Yes**
222				67.6	67.6	67.0	-0.6	**Yes**
223				66.2	66.2	68.1	1.9	**Yes**
224				66.7	66.7	68.0	1.3	**Yes**
225				66.5	66.5	68.3	1.8	**Yes**
226				66.5	66.5	68.5	2.0	**Yes**
227				65.5	65.5	67.4	1.9	**Yes**
228				65.5	65.5	67.4	1.9	**Yes**
229				64.5	64.5	66.1	1.6	**Yes**
230				64.3	64.3	66.0	1.7	**Yes**
231				64.0	64.1	65.5	1.5	No
232	1	Bradenton Riverwalk	C	62.5	62.5	64.2	1.7	No
233				65.5	65.5	67.1	1.6	**Yes**
234				63.6	63.6	65.5	1.9	No

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Appendix D: Predicted Traffic Noise Levels - INTERIM IMPROVEMENTS

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A) Existing (2024)	Future No-Build (2050)	Future Build (2050) Interim Improvements	Change From Existing	Does Future Build Approach, Meet, or Exceed NAC?
235	1	Palmetto Estuary Preserve - Trail	C	66.2	66.2	66.1	-0.1	**Yes**
236				70.4	70.4	69.0	-1.4	**Yes**
237				72.6	72.6	71.6	-1.0	**Yes**
238				72.2	72.2	71.5	-0.7	**Yes**
239				71.9	71.9	71.2	-0.7	**Yes**
240				72.1	72.2	72.1	0.0	**Yes**
241				72.3	72.3	72.4	0.1	**Yes**
242				72.1	72.1	72.1	0.0	**Yes**
243				72.5	72.5	72.5	0.0	**Yes**
244				72.9	72.9	72.7	-0.2	**Yes**
245				70.5	70.5	69.8	-0.7	**Yes**
246				70.4	70.4	70.5	0.1	**Yes**
247				66.3	66.3	67.3	1.0	**Yes**
248				70.4	70.4	71.3	0.9	**Yes**
249				70.9	70.9	72.3	1.4	**Yes**
250				69.7	69.7	70.7	1.0	**Yes**
251	1	Palmetto Estuary Preserve - Pavilion / Picnic Tables	C	67.0	67.0	68.6	1.6	**Yes**
252	1	Palmetto Estuary Preserve - Picnic Tables	C	62.8	62.8	62.5	-0.3	No
253	1	Palmetto Estuary Preserve - Picnic Tables	C	63.3	63.4	63.2	-0.1	No
254	1	Palmetto Estuary Preserve - Playground	C	70.3	70.3	69.6	-0.7	**Yes**
255	1	Palmetto Estuary Preserve - Pavilion	C	65.3	65.3	65.6	0.3	No
256	1	Residence	B	55.3	55.3	56.5	1.2	No
257	1	Residence	B	55.5	55.5	56.7	1.2	No
258	2	Residence	B	55.4	55.4	56.5	1.1	No
259	2	Residence	B	55.2	55.2	56.4	1.2	No
260	4	Residence	B	55.0	55.0	56.0	1.0	No
261	1	Residence	B	56.1	56.1	56.9	0.8	No
262	1	Residence	B	56.5	56.5	57.3	0.8	No
263	4	Residence	B	55.4	55.5	56.3	0.9	No
264	1	Residence	B	57.9	57.9	58.1	0.2	No
265	1	Residence	B	57.9	57.9	58.1	0.2	No
266	1	Residence	B	58.0	58.0	58.2	0.2	No
267	2	Residence	B	57.9	57.9	58.2	0.3	No
268	1	Residence	B	58.0	58.0	58.2	0.2	No
269	2	Residence	B	58.0	58.0	58.3	0.3	No
270	2	Residence	B	58.1	58.1	58.4	0.3	No
271	2	Residence	B	58.1	58.1	58.4	0.3	No
272	2	Residence	B	58.2	58.2	58.4	0.2	No
273	1	Recreation - Outdoor Tables at Boat Ramp	C	65.7	65.7	68.0	2.3	**Yes**
274				65.8	65.8	67.8	2.0	**Yes**
275				66.2	66.2	67.9	1.7	**Yes**
276				67.0	67.0	68.6	1.6	**Yes**
277B	1	Residence	B	61.0	61.0	61.9	0.9	No
277C	1	Residence	B	62.7	62.7	63.3	0.6	No
277D	1	Residence	B	62.9	62.9	64.1	1.2	No
277E	1	Residence	B	63.0	63.0	64.7	1.7	No
277F	1	Residence	B	63.1	63.1	65.2	2.1	No
277G	1	Residence	B	63.2	63.2	65.3	2.1	No
277H	1	Residence	B	63.2	63.3	65.3	2.1	No
278B	1	Residence	B	56.1	56.1	57.3	1.2	No
278C	1	Residence	B	58.0	58.1	58.8	0.8	No
278D	1	Residence	B	58.9	58.9	59.5	0.6	No
278E	1	Residence	B	59.0	59.0	60.0	1.0	No
278F	1	Residence	B	59.2	59.2	60.5	1.3	No
278G	1	Residence	B	59.2	59.3	60.8	1.6	No
278H	1	Residence	B	59.3	59.3	61.2	1.9	No
279	1	Residence	B	54.6	54.6	56.3	1.7	No
280	1	Residence	B	54.0	54.0	55.6	1.6	No
281	1	Residence	B	52.9	52.9	54.5	1.6	No
282	1	Residence	B	53.3	53.3	54.9	1.6	No
283	1	Residence	B	52.2	52.2	53.7	1.5	No
284	1	Residence	B	51.7	51.7	53.2	1.5	No

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Appendix D: Predicted Traffic Noise Levels - INTERIM IMPROVEMENTS

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A) Existing (2024)	Future No-Build (2050)	Future Build (2050) Interim Improvements	Change From Existing	Does Future Build Approach, Meet, or Exceed NAC?
285B	1	Residence	B	53.1	53.1	53.8	0.7	No
285C	1	Residence	B	54.5	54.5	55.4	0.9	No
285D	1	Residence	B	56.1	56.1	56.7	0.6	No
285E	1	Residence	B	56.9	56.9	57.3	0.4	No
285F	1	Residence	B	57.1	57.1	57.7	0.6	No
285G	1	Residence	B	57.2	57.2	58.1	0.9	No
285H	1	Residence	B	57.3	57.3	58.4	1.1	No
285I	1	Residence	B	57.4	57.4	58.8	1.4	No
268B	1	Residence	B	54.2	54.3	55.1	0.9	No
286C	1	Residence	B	55.6	55.7	56.6	1.0	No
286D	1	Residence	B	57.2	57.2	57.8	0.6	No
286E	1	Residence	B	58.0	58.0	58.4	0.4	No
286F	1	Residence	B	58.1	58.1	58.9	0.8	No
286G	1	Residence	B	58.2	58.2	59.2	1.0	No
286H	1	Residence	B	58.3	58.3	59.6	1.3	No
286I	85	Residence	B	58.4	58.4	59.9	1.5	No
287	1	Recreation - Tennis Courts	C	54.6	54.6	55.4	0.8	No
288B	1	Residence	B	56.9	56.9	58.0	1.1	No
288C	1	Residence	B	59.2	59.2	60.0	0.8	No
288D	1	Residence	B	60.5	60.5	60.9	0.4	No
288E	1	Residence	B	60.7	60.7	61.5	0.8	No
288F	1	Residence	B	60.8	60.8	62.0	1.2	No
288G	1	Residence	B	60.9	60.9	62.4	1.5	No
288H	1	Residence	B	61.0	61.0	62.8	1.8	No
288I	1	Residence	B	61.1	61.1	63.0	1.9	No
288J	1	Residence	B	61.2	61.2	63.1	1.9	No
288K	1	Residence	B	61.3	61.3	63.2	1.9	No
288L	1	Residence	B	61.3	61.4	63.3	2.0	No
288M	1	Residence	B	61.4	61.4	63.3	1.9	No
288N	1	Residence	B	61.5	61.5	63.3	1.8	No
289B	1	Residence	B	56.0	56.0	56.7	0.7	No
289C	1	Residence	B	57.7	57.7	58.6	0.9	No
289D	1	Residence	B	59.5	59.5	59.9	0.4	No
289E	1	Residence	B	59.9	59.9	60.4	0.5	No
289F	1	Residence	B	60.0	60.0	60.9	0.9	No
289G	1	Residence	B	60.1	60.1	61.3	1.2	No
289H	1	Residence	B	60.2	60.2	61.6	1.4	No
289I	1	Residence	B	60.2	60.3	62.0	1.8	No
289J	1	Residence	B	60.4	60.4	62.2	1.8	No
289K	1	Residence	B	60.5	60.5	62.3	1.8	No
289L	1	Residence	B	60.6	60.6	62.4	1.8	No
289M	1	Residence	B	60.7	60.7	62.5	1.8	No
289N	1	Residence	B	60.8	60.8	62.6	1.8	No
290	1	Marriott Hotel Pool	E	48.3	48.3	48.4	0.1	No

[1] Receptor locations are provided on the Figures in Appendix B. The letters "A", "B", "C", "D" following a Site ID refer to first, second, third, fourth and subsequent additional floors, respectively for residences located in multi-family apartment/condominium buildings.

Predicted Traffic Noise Levels – Preferred Alternative

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Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
1	1	Residence	B	55.1	56.7	56.1	1.0	No
2	1	Residence	B	56.5	58.1	57.3	0.8	No
3	1	Residence	B	56.1	57.8	57.4	1.3	No
4	1	Residence	B	61.7	63.3	61.5	-0.2	No
5	1	Residence	B	60.4	62.0	60.9	0.5	No
6	1	Residence	B	59.0	60.7	60.1	1.1	No
7	1	Residence	B	58.8	60.5	60.3	1.5	No
8	2	Residence	B	58.6	60.3	60.4	1.8	No
9	1	Residence	B	58.5	60.2	60.7	2.2	No
10	1	Residence	B	60.3	62.0	62.1	1.8	No
11	1	Residence	B	65.2	66.8	65.7	0.5	No
12	2	Residence	B	65.1	66.7	64.8	-0.3	No
13	1	Residence	B	65.8	67.5	65.4	-0.4	No
14	1	Residence	B	61.0	62.6	62.1	1.1	No
15	1	Residence	B	59.1	60.8	60.8	1.7	No
16	1	Residence	B	60.7	62.3	61.9	1.2	No
17	1	Residence	B	63.2	64.8	63.2	0.0	No
18	1	Residence	B	65.5	67.1	65.0	-0.5	No
19	1	Residence	B	65.4	67.0	64.9	-0.5	No
20	1	Residence	B	62.4	64.0	62.8	0.4	No
21	1	Residence	B	58.0	59.6	60.2	2.2	No
22	1	Residence	B	65.0	66.6	65.0	0.0	No
23	1	Residence	B	62.9	64.4	63.2	0.3	No
24	1	Residence	B	60.9	62.4	62.0	1.1	No
25	1	Residence	B	59.0	60.4	60.9	1.9	No
26	1	Residence	B	63.9	65.4	64.8	0.9	No
27	1	Residence	B	60.2	61.8	61.8	1.6	No
28	1	Residence	B	58.1	59.6	60.3	2.2	No
29	1	Residence	B	56.5	57.9	59.2	2.7	No
30A	1	Residence	B	70.0	70.1	70.2	0.2	**Yes**
30B	1	Residence	B	70.2	70.5	70.5	0.3	**Yes**
30C	1	Residence	B	70.2	70.5	71.1	0.9	**Yes**
31A	4	Residence	B	62.7	63.7	64.0	1.3	No
31B	4	Residence	B	65.6	66.4	66.5	0.9	**Yes**
31C	4	Residence	B	66.1	67.0	67.8	1.7	**Yes**
32A	8	Residence	B	62.2	63.5	63.9	1.7	No
32B	8	Residence	B	64.7	65.9	66.3	1.6	**Yes**
32C	8	Residence	B	65.4	66.6	67.7	2.3	**Yes**
33A	4	Residence	B	63.1	64.5	64.6	1.5	No
33B	4	Residence	B	64.9	66.3	66.7	1.8	**Yes**
33C	4	Residence	B	65.6	67.0	68.2	2.6	**Yes**
34A	1	Residence	B	63.9	65.4	65.1	1.2	No
34B	1	Residence	B	65.3	66.8	67.1	1.8	**Yes**
34C	1	Residence	B	66.1	67.6	68.5	2.4	**Yes**
35A	1	Residence	B	69.2	69.2	69.2	0.0	**Yes**
35B	1	Residence	B	69.4	69.4	69.5	0.1	**Yes**
35C	1	Residence	B	69.2	69.2	70.6	1.4	**Yes**
36A	4	Residence	B	57.0	57.1	57.6	0.6	No
36B	4	Residence	B	59.9	60.0	60.7	0.8	No
36C	4	Residence	B	60.3	60.4	66.3	6.0	**Yes**
37A	8	Residence	B	52.7	53.0	54.2	1.5	No
37B	8	Residence	B	56.8	57.0	58.2	1.4	No
37C	8	Residence	B	57.4	57.7	66.5	9.1	**Yes**
38A	4	Residence	B	51.8	52.4	53.7	1.9	No
38B	4	Residence	B	55.1	55.7	57.2	2.1	No
38C	4	Residence	B	56.5	57.1	66.4	9.9	**Yes**
39A	1	Residence	B	59.4	60.9	59.6	0.2	No
39B	1	Residence	B	60.7	62.2	61.9	1.2	No
39C	1	Residence	B	61.4	62.9	67.2	5.8	**Yes**
40A	1	Residence	B	69.3	69.3	69.4	0.1	**Yes**
40B	1	Residence	B	69.5	69.6	69.7	0.2	**Yes**
40C	1	Residence	B	69.4	69.5	70.1	0.7	**Yes**
41A	1	Residence	B	58.4	58.5	59.2	0.8	No
41B	1	Residence	B	59.6	59.7	60.9	1.3	No
41C	1	Residence	B	60.1	60.3	65.7	5.6	No
42A	2	Residence	B	68.5	68.5	68.6	0.1	**Yes**
42B	2	Residence	B	69.0	69.1	69.1	0.1	**Yes**
42C	2	Residence	B	69.0	69.1	69.5	0.5	**Yes**
43A	2	Residence	B	50.8	51.7	54.7	3.9	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
43B	2	Residence	B	52.4	53.3	58.3	5.9	No
43C	2	Residence	B	54.2	55.0	64.5	10.3	No
44	1	Residence	B	57.5	57.9	59.0	1.5	No
45	1	Oaks at Greenbriar Nursing Home	B	56.8	57.6	60.1	3.3	No
46	5	Residence	B	54.6	55.5	57.6	3.0	No
47	2	Residence	B	56.4	57.3	58.3	1.9	No
48	2	Residence	B	59.0	60.0	61.3	2.3	No
49	2	Residence	B	59.0	60.0	61.2	2.2	No
50	2	Residence	B	58.5	59.5	60.5	2.0	No
51	1	Residence	B	59.2	60.1	61.1	1.9	No
52	1	Residence	B	61.6	62.5	62.6	1.0	No
53	1	Residence	B	63.1	63.9	63.9	0.8	No
54	2	Residence	B	64.6	65.4	65.0	0.4	No
55	1	Residence	B	65.8	66.5	66.2	0.4	**Yes**
56	1	Residence	B	69.4	70.0	69.5	0.1	**Yes**
57	1	Residence	B	68.5	69.2	68.4	-0.1	**Yes**
58	1	Residence	B	65.7	66.3	65.6	-0.1	No
59	2	Residence	B	63.9	64.6	64.2	0.3	No
60	1	Residence	B	62.5	63.3	63.1	0.6	No
61	1	Residence	B	61.1	61.9	61.9	0.8	No
62	3	Residence	B	61.2	62.1	62.3	1.1	No
63	1	Residence	B	55.7	56.4	57.3	1.6	No
64	2	Residence	B	55.8	56.5	57.6	1.8	No
65	1	Residence	B	55.9	56.7	58.2	2.3	No
66	2	Residence	B	56.8	57.4	58.4	1.6	No
67	1	Residence	B	57.2	57.9	58.8	1.6	No
68	2	Residence	B	57.9	58.6	59.7	1.8	No
69	1	Residence	B	58.4	59.1	60.2	1.8	No
70	2	Residence	B	59.6	60.6	60.6	1.0	No
71	2	Residence	B	61.1	62.1	62.0	0.9	No
72	1	Residence	B	62.5	63.4	63.3	0.8	No
73	1	Residence	B	64.6	65.4	65.3	0.7	No
74	1	Recreation - Courtyard	C	69.5	70.2	69.5	0.0	**Yes**
75				71.2	71.8	71.0	-0.2	**Yes**
76	1	Recreation - Pool	C	71.8	72.4	71.7	-0.1	**Yes**
77	1	Recreation - Clubhouse	C	71.9	72.5	71.8	-0.1	**Yes**
78	1	Recreation - Tennis Court	C	69.6	69.9	69.1	-0.5	**Yes**
79	1	Recreation - Pavilion/Picnic Tables	C	71.0	71.3	70.5	-0.5	**Yes**
80	1	Recreation - Pavilion/Picnic Tables	C	73.0	73.3	72.4	-0.6	**Yes**
81	2	Residence	B	56.6	57.0	58.4	1.8	No
82	1	Residence	B	57.1	57.5	58.9	1.8	No
83	2	Residence	B	58.0	58.4	59.7	1.7	No
84	1	Residence	B	58.7	59.2	60.3	1.6	No
85	1	Residence	B	61.0	61.1	62.1	1.1	No
86	2	Residence	B	61.4	61.6	62.5	1.1	No
87	2	Residence	B	62.9	63.1	63.8	0.9	No
88	1	Residence	B	64.8	65.1	65.7	0.9	No
89	2	Residence	B	55.9	56.3	57.7	1.8	No
90	1	Residence	B	57.0	57.4	58.3	1.3	No
91	2	Residence	B	57.9	58.3	59.0	1.1	No
92	1	Residence	B	58.2	58.5	59.2	1.0	No
93	1	Residence	B	62.9	63.1	64.1	1.2	No
94	2	Residence	B	63.1	63.3	64.2	1.1	No
95	1	Residence	B	61.7	61.8	62.9	1.2	No
96	2	Residence	B	61.0	61.2	62.0	1.0	No
97	2	Residence	B	60.5	60.7	61.5	1.0	No
98	1	Residence	B	59.9	60.1	60.9	1.0	No
99	2	Residence	B	59.5	59.6	60.6	1.1	No
100	1	Residence	B	59.0	59.1	60.2	1.2	No
101	1	Recreation - Team Succes School Basketball Court	C	61.3	61.9	62.5	1.2	No
102	1	Recreation - Team Success School Athletic Field	C	62.8	63.3	64.0	1.2	No
103	1	Team Success School (Interior)	D	39.8	39.9	40.7	0.9	No
104	1	Residence	B	62.7	62.8	63.9	1.2	No
105	1	Residence	B	64.1	64.2	64.9	0.8	No
106	1	Residence	B	66.4	66.4	66.6	0.2	**Yes**
107	1	Residence	B	59.6	59.7	61.0	1.4	No
108	1	Residence	B	62.5	62.6	63.8	1.3	No
109	1	Residence	B	61.2	61.2	62.8	1.6	No
110	1	Residence	B	58.3	58.4	60.1	1.8	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A) Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	Does Future Build Approach, Meet, or Exceed NAC?
111	2	Residence	B	59.9	60.0	62.0	2.1	No
112	1	Residence	B	61.3	61.4	63.2	1.9	No
113	1	Residence	B	63.5	63.5	64.6	1.1	No
114	1	Residence	B	66.6	66.6	66.7	0.1	**Yes**
115	1	Residence	B	60.2	60.3	62.2	2.0	No
116	1	Residence	B	60.1	60.1	62.2	2.1	No
117	1	Residence	B	61.8	61.8	63.6	1.8	No
118	3	Residence	B	64.6	64.7	65.6	1.0	No
119	1	Residence	B	58.2	58.3	59.9	1.7	No
120	1	Residence	B	60.3	60.4	62.1	1.8	No
121	1	Residence	B	60.1	60.2	62.1	2.0	No
122	1	Recreation - Love Park	C	63.1	63.1	64.3	1.2	No
123				61.2	61.2	63.1	1.9	No
124				61.4	61.4	63.8	2.4	No
125				65.4	65.4	64.9	-0.5	No
126	1	St. Mary Missionary Baptist Church (Interior)	D	50.6	50.7	49.8	-0.8	No
127	3	Residence	B	58.3	58.3	59.9	1.6	No
128	2	Residence	B	60.8	60.8	62.2	1.4	No
129	1	Residence	B	60.7	60.7	62.5	1.8	No
130	1	Residence	B	62.2	62.2	63.5	1.3	No
131	1	Residence	B	64.2	64.2	64.8	0.6	No
132	1	Residence	B	66.3	66.3	66.2	-0.1	**Yes**
133	1	Residence	B	59.2	59.3	60.4	1.2	No
134	1	Residence	B	60.4	60.4	61.9	1.5	No
135	1	Residence	B	61.5	61.5	62.9	1.4	No
136	3	Residence	B	62.1	62.1	63.6	1.5	No
137	1	Mt. Pilgrim Primitive Baptist Church (Interior)	D	36.7	36.7	38.3	1.6	No
138	1	Residence	B	58.4	58.4	59.8	1.4	No
139	1	Residence	B	58.2	58.2	59.7	1.5	No
140	1	Residence	B	57.9	57.9	59.4	1.5	No
141	1	Residence	B	62.2	62.3	63.1	0.9	No
142	1	Residence	B	63.3	63.4	64.0	0.7	No
143	1	Residence	B	66.2	66.3	66.6	0.4	**Yes**
144	1	Residence	B	63.2	63.3	64.9	1.7	No
145	1	Residence	B	62.1	62.2	63.3	1.2	No
146	1	Residence	B	60.4	60.5	61.7	1.3	No
147	1	Residence	B	59.1	59.2	60.3	1.2	No
148	1	Residence	B	58.2	58.3	59.7	1.5	No
149	1	Residence	B	56.2	56.3	58.3	2.1	No
150	1	Residence	B	56.1	56.3	58.4	2.3	No
151	2	Residence	B	55.9	56.1	58.2	2.3	No
152	1	Residence	B	55.8	55.9	58.1	2.3	No
153	1	Residence	B	58.5	58.6	60.1	1.6	No
154	2	Residence	B	57.6	57.7	59.4	1.8	No
155	1	Residence	B	57.1	57.2	59.1	2.0	No
156	1	Residence	B	58.9	59.0	60.9	2.0	No
157	1	Residence	B	60.8	60.9	62.3	1.5	No
158	1	Residence	B	58.0	58.1	59.7	1.7	No
159	1	Residence	B	59.0	59.1	60.8	1.8	No
160	1	Residence	B	60.0	60.0	61.7	1.7	No
161	1	Residence	B	60.6	60.7	62.3	1.7	No
162	1	Residence	B	62.0	62.0	63.7	1.7	No
163	1	Residence	B	63.2	63.2	65.1	1.9	No
164	1	Residence	B	65.4	65.4	66.7	1.3	**Yes**
165	1	Residence	B	67.9	68.0	67.9	0.0	**Yes**
166	1	Residence	B	59.3	59.4	60.7	1.4	No
167	1	Residence	B	58.5	58.5	60.0	1.5	No
168	1	Residence	B	59.1	59.1	60.3	1.2	No
169	1	Residence	B	61.7	61.7	63.1	1.4	No
170	1	Residence	B	63.6	63.7	65.3	1.7	No
171	1	Residence	B	66.3	66.3	67.1	0.8	**Yes**
172	1	Residence	B	58.5	58.5	60.1	1.6	No
173	1	Residence	B	58.1	58.1	59.9	1.8	No
174	1	Residence	B	59.1	59.1	60.9	1.8	No
175	1	Residence	B	59.1	59.1	61.2	2.1	No
176	1	Residence	B	62.0	62.0	64.7	2.7	No
177	1	Residence	B	59.6	59.6	61.3	1.7	No
178	1	Residence	B	58.7	58.7	60.3	1.6	No
179	1	Residence	B	57.8	57.8	59.6	1.8	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
180	1	Residence	B	57.9	57.9	59.7	1.8	No
181A	2	Residence	B	63.8	63.8	64.5	0.7	No
181B	2	Residence	B	65.9	65.9	67.0	1.1	**Yes**
181C	2	Residence	B	66.0	66.0	67.8	1.8	**Yes**
181D	2	Residence	B	66.4	66.4	68.2	1.8	**Yes**
182A	2	Residence	B	68.8	68.8	68.7	-0.1	**Yes**
182B	2	Residence	B	69.3	69.3	70.7	1.4	**Yes**
182C	2	Residence	B	69.6	69.6	71.4	1.8	**Yes**
182D	2	Residence	B	69.5	69.5	71.4	1.9	**Yes**
183A	1	Residence	B	74.7	74.7	76.1	1.4	**Yes**
183B	1	Residence	B	74.8	74.8	76.4	1.6	**Yes**
183C	1	Residence	B	74.5	74.5	76.6	2.1	**Yes**
183D	1	Residence	B	74.4	74.4	76.6	2.2	**Yes**
184A	1	Residence	B	73.4	73.4	75.1	1.7	**Yes**
184B	1	Residence	B	73.4	73.4	75.6	2.2	**Yes**
184C	1	Residence	B	73.3	73.3	75.8	2.5	**Yes**
184D	1	Residence	B	73.1	73.1	75.7	2.6	**Yes**
185A	1	Residence	B	73.2	73.2	75.2	2.0	**Yes**
185B	1	Residence	B	73.2	73.2	75.7	2.5	**Yes**
185C	1	Residence	B	73.1	73.1	75.9	2.8	**Yes**
185D	1	Residence	B	72.9	72.9	75.8	2.9	**Yes**
186A	1	Residence	B	63.1	63.1	64.1	1.0	No
186B	1	Residence	B	64.0	64.0	66.7	2.7	**Yes**
186C	1	Residence	B	64.3	64.3	67.5	3.2	**Yes**
186D	1	Residence	B	64.5	64.5	67.7	3.2	**Yes**
187A	1	Residence	B	60.0	60.0	61.5	1.5	No
187B	1	Residence	B	62.0	62.0	64.6	2.6	No
187C	1	Residence	B	62.2	62.2	65.4	3.2	No
187D	1	Residence	B	62.6	62.6	65.7	3.1	No
188B	2	Residence	B	61.7	61.7	64.1	2.4	No
188C	2	Residence	B	62.0	62.0	65.1	3.1	No
188D	2	Residence	B	62.3	62.3	65.5	3.2	No
189B	2	Residence	B	60.8	60.8	62.9	2.1	No
189C	2	Residence	B	61.1	61.1	64.0	2.9	No
189D	2	Residence	B	61.4	61.4	64.6	3.2	No
190	1	Recreation - Pool at Aria at Bradenton Apartments	C	48.3	48.3	50.8	2.5	No
191A	1	Residence	B	55.5	55.5	57.7	2.2	No
191B	1	Residence	B	58.3	58.3	60.2	1.9	No
191C	1	Residence	B	58.4	58.4	61.3	2.9	No
191D	1	Residence	B	58.8	58.8	62.1	3.3	No
192A	1	Residence	B	62.9	62.9	64.8	1.9	No
192B	1	Residence	B	65.3	65.3	67.5	2.2	**Yes**
192C	1	Residence	B	65.5	65.5	68.7	3.2	**Yes**
192D	1	Residence	B	65.7	65.7	68.9	3.2	**Yes**
193A	3	Residence	B	63.2	63.2	65.1	1.9	No
193B	3	Residence	B	65.7	65.7	67.9	2.2	**Yes**
193C	3	Residence	B	65.8	65.8	69.1	3.3	**Yes**
193D	3	Residence	B	66.0	66.0	69.3	3.3	**Yes**
194A	1	Residence	B	63.8	63.8	65.7	1.9	No
194B	1	Residence	B	66.3	66.3	68.4	2.1	**Yes**
194C	1	Residence	B	66.4	66.4	69.6	3.2	**Yes**
194D	1	Residence	B	66.6	66.6	69.8	3.2	**Yes**
195A	1	Residence	B	60.8	60.8	62.9	2.1	No
195B	1	Residence	B	63.8	63.8	65.9	2.1	No
195C	1	Residence	B	63.9	63.9	66.9	3.0	**Yes**
195D	1	Residence	B	64.1	64.1	67.5	3.4	**Yes**
196A	2	Residence	B	57.5	57.5	59.7	2.2	No
196B	2	Residence	B	60.7	60.7	62.4	1.7	No
196C	2	Residence	B	60.8	60.8	63.6	2.8	No
196D	2	Residence	B	61.1	61.1	64.4	3.3	No
197A	2	Residence	B	59.2	59.2	61.5	2.3	No
197B	2	Residence	B	62.4	62.4	64.3	1.9	No
197C	2	Residence	B	62.5	62.5	65.4	2.9	No
197D	2	Residence	B	62.8	62.8	66.1	3.3	**Yes**
198A	1	Residence	B	62.0	62.0	64.0	2.0	No
198B	1	Residence	B	64.7	64.7	66.7	2.0	**Yes**
198C	1	Residence	B	64.8	64.8	68.0	3.2	**Yes**
198D	1	Residence	B	65.1	65.1	68.3	3.2	**Yes**
199A	2	Residence	B	63.8	63.8	65.7	1.9	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
199B	2	Residence	B	66.0	66.0	68.2	2.2	**Yes**
199C	2	Residence	B	66.2	66.2	69.4	3.2	**Yes**
199D	2	Residence	B	66.4	66.4	69.5	3.1	**Yes**
200A	1	Residence	B	69.9	69.9	71.2	1.3	**Yes**
200B	1	Residence	B	70.2	70.2	73.2	3.0	**Yes**
200C	1	Residence	B	70.3	70.3	73.6	3.3	**Yes**
200D	1	Residence	B	70.2	70.2	73.6	3.4	**Yes**
201A	1	Residence	B	69.7	69.7	71.4	1.7	**Yes**
201B	1	Residence	B	70.2	70.2	73.3	3.1	**Yes**
201C	1	Residence	B	70.3	70.3	73.7	3.4	**Yes**
201D	1	Residence	B	70.2	70.2	73.7	3.5	**Yes**
202A	2	Residence	B	63.4	63.4	65.5	2.1	No
202B	2	Residence	B	65.7	65.7	68.1	2.4	**Yes**
202C	2	Residence	B	65.9	65.9	69.3	3.4	**Yes**
202D	2	Residence	B	66.2	66.2	69.5	3.3	**Yes**
203A	2	Residence	B	59.7	59.7	61.4	1.7	No
203B	2	Residence	B	62.6	62.6	64.6	2.0	No
203C	2	Residence	B	63.3	63.3	66.2	2.9	**Yes**
203D	2	Residence	B	63.8	63.8	66.8	3.0	**Yes**
204	1	Office Building Outdoor Use Area	E	64.9	64.9	67.3	2.4	No
205A	1	Residence	B	53.8	53.8	58.8	5.0	No
205B	1	Residence	B	57.4	57.4	60.7	3.3	No
205C	1	Residence	B	59.3	59.4	61.4	2.1	No
206	1	Marriott Hotel Pool	E	57.5	57.5	61.1	3.6	No
207	1	Riverwalk Grill Outdoor Seating	E	66.5	66.5	67.0	0.5	No
208A	1	Manatee Memorial Hospital (Interior)	D	48.8	48.8	50.0	1.2	No
208B				48.7	48.7	50.6	1.9	No
208C				48.4	48.4	50.7	2.3	No
209A				47.5	47.5	49.2	1.7	No
209B				47.7	47.7	49.8	2.1	No
209C				47.5	47.5	50.1	2.6	No
210	1	Kids Castle Learning Center Daycare - Playground	C	54.2	54.2	57.3	3.1	No
211	1	Residence	B	53.0	53.0	57.2	4.2	No
212	1	Donald L. Courtney Veterans Monuments Park	C	63.4	63.4	67.2	3.8	**Yes**
213				61.7	61.7	65.4	3.7	No
214	1	Bradenton Riverwalk Pavilions	C	62.6	62.6	64.6	2.0	No
215	1	Bradenton Riverwalk	C	64.0	64.0	65.9	1.9	No
216				65.9	65.9	67.4	1.5	**Yes**
217				67.0	67.0	69.0	2.0	**Yes**
218	1	Bradenton Riverwalk - Volleyball Court	C	65.2	65.2	66.6	1.4	**Yes**
219	1	Bradenton Riverwalk - Skatepark	C	66.7	66.7	68.1	1.4	**Yes**
220				66.8	66.9	68.2	1.4	**Yes**
221				67.9	67.9	69.3	1.4	**Yes**
222				67.6	67.6	68.9	1.3	**Yes**
223				66.2	66.2	70.3	4.1	**Yes**
224				66.7	66.7	70.3	3.6	**Yes**
225				66.5	66.5	70.5	4.0	**Yes**
226				66.5	66.5	70.3	3.8	**Yes**
227				65.5	65.5	69.0	3.5	**Yes**
228				65.5	65.5	68.6	3.1	**Yes**
229				64.5	64.5	67.3	2.8	**Yes**
230				64.3	64.3	67.5	3.2	**Yes**
231				64.0	64.1	67.0	3.0	**Yes**
232	1	Bradenton Riverwalk	C	62.5	62.5	65.9	3.4	No
233				65.5	65.5	68.8	3.3	**Yes**
234				63.6	63.6	67.2	3.6	**Yes**
235	1	Palmetto Estuary Preserve - Trail	C	66.2	66.2	66.7	0.5	**Yes**
236				70.4	70.4	67.9	-2.5	**Yes**
237				72.6	72.6	71.7	-0.9	**Yes**
238				72.2	72.2	73.6	1.4	**Yes**
239				71.9	71.9	73.0	1.1	**Yes**
240				72.1	72.2	73.3	1.2	**Yes**
241				72.3	72.3	73.1	0.8	**Yes**
242				72.1	72.1	72.7	0.6	**Yes**
243				72.5	72.5	73.2	0.7	**Yes**
244				72.9	72.9	73.4	0.5	**Yes**
245				70.5	70.5	71.1	0.6	**Yes**
246				70.4	70.4	71.1	0.7	**Yes**
247				66.3	66.3	68.2	1.9	**Yes**

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
248				70.4	70.4	71.9	1.5	**Yes**
249				70.9	70.9	73.0	2.1	**Yes**
250				69.7	69.7	71.6	1.9	**Yes**
251	1	Palmetto Estuary Preserve - Pavilion / Picnic Tables	C	67.0	67.0	69.4	2.4	**Yes**
252	1	Palmetto Estuary Preserve - Picnic Tables	C	62.8	62.8	64.1	1.3	No
253	1	Palmetto Estuary Preserve - Picnic Tables	C	63.3	63.4	65.1	1.8	No
254	1	Palmetto Estuary Preserve - Playground	C	70.3	70.3	70.8	0.5	**Yes**
255	1	Palmetto Estuary Preserve - Pavilion	C	65.3	65.3	67.1	1.8	**Yes**
256	1	Residence	B	55.3	55.3	58.5	3.2	No
257	1	Residence	B	55.5	55.5	58.8	3.3	No
258	2	Residence	B	55.4	55.4	58.6	3.2	No
259	2	Residence	B	55.2	55.2	58.4	3.2	No
260	4	Residence	B	55.0	55.0	58.0	3.0	No
261	1	Residence	B	56.1	56.1	58.8	2.7	No
262	1	Residence	B	56.5	56.5	59.4	2.9	No
263	4	Residence	B	55.4	55.5	58.2	2.8	No
264	1	Residence	B	57.9	57.9	59.8	1.9	No
265	1	Residence	B	57.9	57.9	59.7	1.8	No
266	1	Residence	B	58.0	58.0	59.8	1.8	No
267	2	Residence	B	57.9	57.9	59.8	1.9	No
268	1	Residence	B	58.0	58.0	59.8	1.8	No
269	2	Residence	B	58.0	58.0	59.8	1.8	No
270	2	Residence	B	58.1	58.1	60.0	1.9	No
271	2	Residence	B	58.1	58.1	60.0	1.9	No
272	2	Residence	B	58.2	58.2	60.0	1.8	No
273				65.7	65.7	66.6	0.9	**Yes**
274	1	Recreation - Outdoor Tables at Boat Ramp	C	65.8	65.8	66.8	1.0	**Yes**
275				66.2	66.2	67.2	1.0	**Yes**
276				67.0	67.0	67.7	0.7	**Yes**
277B	1	Residence	B	61.0	61.0	63.6	2.6	No
277C	1	Residence	B	62.7	62.7	64.9	2.2	No
277D	1	Residence	B	62.9	62.9	65.9	3.0	No
277E	1	Residence	B	63.0	63.0	66.4	3.4	**Yes**
277F	1	Residence	B	63.1	63.1	66.6	3.5	**Yes**
277G	1	Residence	B	63.2	63.2	66.6	3.4	**Yes**
277H	1	Residence	B	63.2	63.3	66.6	3.4	**Yes**
278B	1	Residence	B	56.1	56.1	59.1	3.0	No
178C	1	Residence	B	58.0	58.1	60.0	2.0	No
278D	1	Residence	B	58.9	58.9	60.8	1.9	No
278E	1	Residence	B	59.0	59.0	61.5	2.5	No
278F	1	Residence	B	59.2	59.2	62.0	2.8	No
278G	1	Residence	B	59.2	59.3	62.4	3.2	No
278H	1	Residence	B	59.3	59.3	62.7	3.4	No
279	1	Residence	B	54.6	54.6	58.3	3.7	No
280	1	Residence	B	54.0	54.0	57.5	3.5	No
281	1	Residence	B	52.9	52.9	56.5	3.6	No
282	1	Residence	B	53.3	53.3	56.9	3.6	No
283	1	Residence	B	52.2	52.2	55.8	3.6	No
284	1	Residence	B	51.7	51.7	55.2	3.5	No
285B	1	Residence	B	53.1	53.1	56.0	2.9	No
285C	1	Residence	B	54.5	54.5	57.1	2.6	No
285D	1	Residence	B	56.1	56.1	58.0	1.9	No
285E	1	Residence	B	56.9	56.9	58.7	1.8	No
285F	1	Residence	B	57.1	57.1	59.1	2.0	No
285G	1	Residence	B	57.2	57.2	59.5	2.3	No
285H	1	Residence	B	57.3	57.3	59.9	2.6	No
285I	1	Residence	B	57.4	57.4	60.3	2.9	No
268B	1	Residence	B	54.2	54.3	57.2	3.0	No
286C	1	Residence	B	55.6	55.7	58.3	2.7	No
286D	1	Residence	B	57.2	57.2	59.3	2.1	No
286E	1	Residence	B	58.0	58.0	59.8	1.8	No
286F	1	Residence	B	58.1	58.1	60.3	2.2	No
286G	1	Residence	B	58.2	58.2	60.7	2.5	No
286H	1	Residence	B	58.3	58.3	61.1	2.8	No
286I	85	Residence	B	58.4	58.4	61.4	3.0	No
287	1	Recreation - Tennis Courts	C	54.6	54.6	57.2	2.6	No
288B	1	Residence	B	56.9	56.9	60.1	3.2	No
288C	1	Residence	B	59.2	59.2	61.6	2.4	No
288D	1	Residence	B	60.5	60.5	62.4	1.9	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
288E	1	Residence	B	60.7	60.7	63.0	2.3	No
288F	1	Residence	B	60.8	60.8	63.6	2.8	No
288G	1	Residence	B	60.9	60.9	63.9	3.0	No
288H	1	Residence	B	61.0	61.0	64.2	3.2	No
288I	1	Residence	B	61.1	61.1	64.4	3.3	No
288J	1	Residence	B	61.2	61.2	64.5	3.3	No
288K	1	Residence	B	61.3	61.3	64.5	3.2	No
288L	1	Residence	B	61.3	61.4	64.6	3.3	No
288M	1	Residence	B	61.4	61.4	64.6	3.2	No
288N	1	Residence	B	61.5	61.5	64.7	3.2	No
289B	1	Residence	B	56.0	56.0	58.9	2.9	No
289C	1	Residence	B	57.7	57.7	60.3	2.6	No
289D	1	Residence	B	59.5	59.5	61.2	1.7	No
289E	1	Residence	B	59.9	59.9	61.8	1.9	No
289F	1	Residence	B	60.0	60.0	62.3	2.3	No
289G	1	Residence	B	60.1	60.1	62.8	2.7	No
289H	1	Residence	B	60.2	60.2	63.1	2.9	No
289I	1	Residence	B	60.2	60.3	63.4	3.2	No
289J	1	Residence	B	60.4	60.4	63.5	3.1	No
289K	1	Residence	B	60.5	60.5	63.7	3.2	No
289L	1	Residence	B	60.6	60.6	63.7	3.1	No
289M	1	Residence	B	60.7	60.7	63.8	3.1	No
289N	1	Residence	B	60.8	60.8	63.9	3.1	No
290	1	Marriott Hotel Pool	E	48.3	48.3	49.8	1.5	No
291	1	Recreation - Pool	C	58.3	58.3	61.2	2.9	No
292A	2	Residence	B	60.0	60.0	63.6	3.6	No
292B	2	Residence	B	63.4	63.5	66.2	2.8	**Yes**
292C	1	Residence	B	64.0	64.1	67.1	3.1	**Yes**
293A	2	Residence	B	58.1	58.2	60.8	2.7	No
293B	2	Residence	B	60.7	60.8	62.8	2.1	No
293C	1	Residence	B	61.8	62.0	64.4	2.6	No
294A	2	Residence	B	63.3	63.4	67.1	3.8	**Yes**
294B	2	Residence	B	66.5	66.5	69.4	2.9	**Yes**
294C	1	Residence	B	66.8	66.9	70.0	3.2	**Yes**
295A	2	Residence	B	64.2	64.3	67.1	2.9	**Yes**
295B	2	Residence	B	66.9	67.0	69.1	2.2	**Yes**
295C	1	Residence	B	67.5	67.6	70.1	2.6	**Yes**
296A	2	Residence	B	66.2	66.3	69.1	2.9	**Yes**
296B	2	Residence	B	68.6	68.6	70.9	2.3	**Yes**
296C	1	Residence	B	69.0	69.1	71.7	2.7	**Yes**
297A	2	Residence	B	66.1	66.1	68.5	2.4	**Yes**
297B	2	Residence	B	68.3	68.3	70.3	2.0	**Yes**
297C	1	Residence	B	68.8	68.9	71.3	2.5	**Yes**
298A	2	Residence	B	54.9	54.9	58.2	3.3	No
298B	2	Residence	B	57.5	57.6	60.4	2.9	No
298C	1	Residence	B	59.5	59.6	62.7	3.2	No
299A	2	Residence	B	54.8	54.8	57.5	2.7	No
299B	2	Residence	B	56.9	56.9	59.4	2.5	No
299C	1	Residence	B	60.0	60.0	62.5	2.5	No
300A	2	Residence	B	52.2	52.2	55.5	3.3	No
300B	2	Residence	B	54.2	54.3	57.3	3.1	No
300C	1	Residence	B	56.3	56.4	59.5	3.2	No
301A	2	Residence	B	56.8	56.8	57.8	1.0	No
301B	2	Residence	B	58.9	59.0	59.7	0.8	No
301C	1	Residence	B	60.5	60.6	62.8	2.3	No
302A	2	Residence	B	65.9	66.0	67.9	2.0	**Yes**
302B	2	Residence	B	67.9	68.0	69.6	1.7	**Yes**
302C	1	Residence	B	68.5	68.5	70.8	2.3	**Yes**
303A	2	Residence	B	65.7	65.8	67.4	1.7	**Yes**
303B	2	Residence	B	67.7	67.8	69.2	1.5	**Yes**
303C	1	Residence	B	68.4	68.5	70.5	2.1	**Yes**
304A	2	Residence	B	54.5	54.6	57.3	2.8	No
304B	2	Residence	B	56.9	57.0	59.3	2.4	No
304C	1	Residence	B	59.3	59.4	62.3	3.0	No
305A	2	Residence	B	57.3	57.4	58.7	1.4	No
305B	2	Residence	B	58.9	59.0	60.6	1.7	No
305C	1	Residence	B	61.9	62.0	63.7	1.8	No
306A	2	Residence	B	57.8	57.8	59.6	1.8	No
306B	2	Residence	B	59.7	59.8	61.7	2.0	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
306C	1	Residence	B	61.9	61.9	63.8	1.9	No
307A	2	Residence	B	62.5	62.6	63.9	1.4	No
307B	2	Residence	B	64.7	64.8	66.2	1.5	**Yes**
307C	1	Residence	B	65.9	66.0	67.7	1.8	**Yes**
308	1	Recreation - Playground	C	65.4	65.5	67.0	1.6	**Yes**
309	1	Recreation - Volleyball Court	C	67.9	68.0	69.7	1.8	**Yes**
310A	2	Residence	B	65.7	65.8	67.3	1.6	**Yes**
310B	2	Residence	B	67.8	67.8	69.3	1.5	**Yes**
310C	1	Residence	B	68.4	68.4	70.2	1.8	**Yes**
311A	2	Residence	B	67.9	68.0	69.3	1.4	**Yes**
311B	2	Residence	B	69.9	69.9	71.0	1.1	**Yes**
311C	1	Residence	B	70.3	70.4	71.7	1.4	**Yes**
312A	2	Residence	B	58.8	58.8	59.3	0.5	No
312B	2	Residence	B	61.9	61.9	62.4	0.5	No
312C	1	Residence	B	63.8	63.9	64.6	0.8	No
313A	2	Residence	B	63.1	63.1	63.5	0.4	No
313B	2	Residence	B	66.1	66.2	66.6	0.5	**Yes**
313C	1	Residence	B	67.5	67.5	68.2	0.7	**Yes**
314	2	Residence	B	59.6	59.6	62.0	2.4	No
315	4	Residence	B	59.6	59.6	62.0	2.4	No
316	3	Residence	B	59.6	59.7	62.0	2.4	No
317	1	Residence	B	61.2	61.2	63.8	2.6	No
318	4	Residence	B	60.5	60.6	63.1	2.6	No
319	4	Residence	B	60.6	60.7	63.0	2.4	No
320	1	Residence	B	64.0	64.1	66.7	2.7	**Yes**
321	3	Residence	B	63.7	63.8	66.0	2.3	**Yes**
322	3	Residence	B	63.0	63.1	65.1	2.1	No
323	3	Residence	B	63.5	63.6	65.4	1.9	No
324	1	Residence	B	67.1	67.2	69.5	2.4	**Yes**
325	1	Residence	B	67.2	67.3	69.4	2.2	**Yes**
326	2	Residence	B	67.0	67.1	68.9	1.9	**Yes**
327	2	Residence	B	66.6	66.7	68.4	1.8	**Yes**
328	2	Residence	B	66.4	66.5	68.1	1.7	**Yes**
329	2	Residence	B	65.5	65.7	67.4	1.9	**Yes**
330	1	Residence	B	73.5	73.6	76.4	2.9	**Yes**
331	1	Residence	B	73.2	73.4	75.9	2.7	**Yes**
332	1	Residence	B	73.7	73.8	76.7	3.0	**Yes**
333	1	Residence	B	72.9	73.1	75.3	2.4	**Yes**
334	2	Residence	B	72.1	72.3	74.1	2.0	**Yes**
335	2	Residence	B	71.5	71.8	73.5	2.0	**Yes**
336	2	Residence	B	71.3	71.5	73.0	1.7	**Yes**
337	1	Residence	B	70.7	71.1	72.5	1.8	**Yes**
338	2	Residence	B	69.2	69.6	70.8	1.6	**Yes**
339	2	Residence	B	69.3	69.6	70.8	1.5	**Yes**
340	2	Residence	B	69.0	69.4	70.6	1.6	**Yes**
341	1	Residence	B	69.2	69.6	70.8	1.6	**Yes**
342	1	Residence	B	69.3	69.7	70.9	1.6	**Yes**
343	1	Residence	B	69.6	70.1	71.2	1.6	**Yes**
344	1	Residence	B	69.9	70.3	71.4	1.5	**Yes**
345	1	Residence	B	70.2	70.6	71.6	1.4	**Yes**
346	1	Residence	B	70.7	71.1	72.1	1.4	**Yes**
347	1	Residence	B	68.2	68.5	69.3	1.1	**Yes**
348	1	Residence	B	69.3	69.6	70.3	1.0	**Yes**
349	1	Residence	B	70.6	70.8	71.6	1.0	**Yes**
350	1	Residence	B	71.9	72.2	72.8	0.9	**Yes**
351	1	Residence	B	64.8	65.0	66.7	1.9	**Yes**
352	3	Residence	B	64.7	64.9	66.6	1.9	**Yes**
353	1	Residence	B	65.0	65.2	66.6	1.6	**Yes**
354	1	Residence	B	63.0	63.1	64.8	1.8	No
355	3	Residence	B	62.4	62.5	64.5	2.1	No
356	1	Residence	B	62.4	62.6	64.4	2.0	No
357	1	Residence	B	60.9	61.0	62.9	2.0	No
358	2	Residence	B	60.7	60.8	62.9	2.2	No
359	3	Residence	B	60.6	60.7	62.8	2.2	No
360	2	Residence	B	61.6	61.7	63.6	2.0	No
361	3	Residence	B	61.9	62.0	63.7	1.8	No
362	2	Residence	B	65.5	65.7	67.1	1.6	**Yes**
363	2	Residence	B	64.9	65.1	66.4	1.5	**Yes**
364	2	Residence	B	64.2	64.4	65.7	1.5	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A) Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	Does Future Build Approach, Meet, or Exceed NAC?
365	2	Residence	B	63.5	63.7	65.0	1.5	No
366	2	Residence	B	63.2	63.3	64.6	1.4	No
367	1	Residence	B	66.7	67.0	68.1	1.4	**Yes**
368	1	Residence	B	66.5	66.8	67.8	1.3	**Yes**
369	1	Residence	B	65.0	65.2	66.3	1.3	**Yes**
370	1	Residence	B	66.1	66.3	67.2	1.1	**Yes**
371	1	Residence	B	64.5	64.6	65.6	1.1	No
372	1	Residence	B	65.6	65.8	66.7	1.1	**Yes**
373	2	Residence	B	66.9	67.1	67.8	0.9	**Yes**
374	2	Residence	B	68.9	69.1	69.7	0.8	**Yes**
375	1	Residence	B	71.2	71.5	72.0	0.8	**Yes**
376	1	Residence	B	68.0	68.1	68.6	0.6	**Yes**
377	2	Residence	B	70.8	70.9	71.4	0.6	**Yes**
378	4	Residence	B	70.1	70.2	70.4	0.3	**Yes**
379	4	Residence	B	66.9	66.9	67.3	0.4	**Yes**
380	4	Residence	B	65.4	65.4	66.0	0.6	**Yes**
381	4	Residence	B	64.2	64.3	65.0	0.8	No
382	4	Residence	B	63.2	63.3	64.2	1.0	No
383	4	Residence	B	62.0	62.2	62.9	0.9	No
384	4	Residence	B	61.0	61.1	62.2	1.2	No
385	4	Residence	B	60.4	60.6	62.1	1.7	No
386	2	Residence	B	60.4	60.5	62.3	1.9	No
387	2	Residence	B	60.6	60.7	62.6	2.0	No
388	4	Residence	B	61.3	61.4	63.5	2.2	No
389	2	Residence	B	61.7	61.7	63.8	2.1	No
390	2	Residence	B	61.9	62.0	64.2	2.3	No
391	2	Residence	B	63.7	63.7	64.1	0.4	No
392	4	Residence	B	62.8	62.8	63.4	0.6	No
393	4	Residence	B	62.2	62.3	62.9	0.7	No
394	4	Residence	B	61.5	61.6	62.5	1.0	No
395	4	Residence	B	61.3	61.4	62.5	1.2	No
396	4	Residence	B	60.6	60.7	62.6	2.0	No
397	4	Residence	B	60.5	60.6	62.5	2.0	No
398	4	Residence	B	60.6	60.7	62.7	2.1	No
399	2	Residence	B	60.7	60.8	63.0	2.3	No
400	1	Residence	B	60.1	60.2	62.1	2.0	No
401	1	Residence	B	60.4	60.4	62.2	1.8	No
402	1	Residence	B	60.6	60.7	62.4	1.8	No
403	1	Residence	B	60.0	60.0	61.7	1.7	No
404	1	Residence	B	62.3	62.4	64.0	1.7	No
405	1	Miracle Healing and Deliverance Ministries Church (Interior)	D	39.4	39.5	41.1	1.7	No
406	1	Residence	B	58.9	58.9	60.9	2.0	No
407	1	Residence	B	57.7	57.7	59.6	1.9	No
408	1	Residence	B	60.9	61.0	62.7	1.8	No
409	1	Residence	B	62.1	62.2	63.6	1.5	No
410	1	Residence	B	63.3	63.3	64.5	1.2	No
411	1	Residence	B	64.1	64.2	64.8	0.7	No
412	1	Lincoln Middle School (Interior)	D	40.5	40.5	41.5	1.0	No
413	1	Lincoln Middle School Outdoor Use Area / Picnic Tables	C	62.7	62.7	64.8	2.1	No
414	1	Coach Eddie Shannon Park - Trail	C	59.9	60.0	62.6	2.7	No
415				62.4	62.4	64.8	2.4	No
416				63.1	63.1	66.6	3.5	**Yes**
417				64.9	64.9	68.7	3.8	**Yes**
418	1	Coach Eddie Shannon Park - 2 Basketball Courts	C	62.2	62.2	65.3	3.1	No
419	1	Coach Eddie Shannon Park - Pavilion / Picnic Tables	C	63.8	63.8	66.2	2.4	**Yes**
420	1	Coach Eddie Shannon Park - Athletic Field	C	61.0	61.1	63.6	2.6	No
421				62.1	62.2	64.2	2.1	No
422				62.8	62.8	64.9	2.1	No
423		Coach Eddie Shannon Park - Athletic Field / Bleachers	C	59.4	59.5	62.1	2.7	No
424				60.8	60.8	63.0	2.2	No
425	1	Coach Eddie Shannon Park - Athletic Field	C	57.8	57.8	60.6	2.8	No
426				59.1	59.1	61.8	2.7	No
427	1	Coach Eddie Shannon Park - Aquatic Center / Waterslide	C	65.3	65.3	67.0	1.7	**Yes**
428		Coach Eddie Shannon Park - Aquatic Center / Pool	C	65.2	65.2	66.8	1.6	**Yes**
429				63.1	63.1	65.0	1.9	No
430				59.7	59.8	62.5	2.8	No
431		Coach Eddie Shannon Park - Aquatic Center / Pavilions	C	63.1	63.1	65.2	2.1	No
432		Coach Eddie Shannon Park - Aquatic Center / Playground	C	62.2	62.2	64.3	2.1	No
433				59.9	59.9	62.2	2.3	No

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
434	1	Coach Eddie Shannon Park - Aquatic Center / Splash Pad	C	67.1	67.1	68.4	1.3	**Yes**
435				61.2	61.2	63.8	2.6	No
436	1	Coach Eddie Shannon Park - Pavilion / Picnic Tables	C	59.1	59.1	61.4	2.3	No
437	1	Coach Eddie Shannon Park - Pavilion / Picnic Tables	C	61.3	61.3	63.2	1.9	No
438	2	Residence	B	56.2	56.3	58.8	2.6	No
439	1	Residence	B	56.3	56.3	58.8	2.5	No
440	3	Residence	B	59.8	59.8	61.0	1.2	No
441	1	Residence	B	63.8	63.8			
442	1	Residence	B	62.3	62.3			
443	1	Residence	B	62.3	62.3			
444	1	Residence	B	70.2	70.2			
445	1	Residence	B	71.4	71.4	71.8	0.4	**Yes**
446	1	Residence	B	63.6	63.6	65.1	1.5	No
447	1	Residence	B	62.8	62.8	64.3	1.5	No
448	1	Residence	B	63.0	63.0	64.4	1.4	No
449	1	Residence	B	60.6	60.6	62.7	2.1	No
450	1	Residence	B	59.5	59.5	60.8	1.3	No
451	2	Residence	B	59.0	59.1	60.6	1.6	No
452	1	Residence	B	56.3	56.3	58.7	2.4	No
453	1	Residence	B	56.3	56.3	58.7	2.4	No
454	1	Residence	B	56.6	56.6	58.9	2.3	No
455	2	Residence	B	56.3	56.3	58.8	2.5	No
456	2	Residence	B	56.7	56.8	59.0	2.3	No
457	1	Residence	B	58.4	58.4	60.0	1.6	No
458	1	Residence	B	62.7	62.7	64.0	1.3	No
459	8	Residence	B	57.6	57.6	59.2	1.6	No
460	1	Residence	B	63.8	63.8	65.2	1.4	No
461	1	Residence	B	69.4	69.4	69.5	0.1	**Yes**
462	1	Residence	B	71.8	71.8	72.4	0.6	**Yes**
463	1	Residence	B	72.3	72.3	73.0	0.7	**Yes**
464	1	Residence	B	73.4	73.4	74.6	1.2	**Yes**
465	1	Residence	B	74.6	74.7	76.4	1.8	**Yes**
466	1	Residence	B	65.6	65.6	66.7	1.1	**Yes**
467	1	Residence	B	65.1	65.1	66.2	1.1	**Yes**
468	1	Residence	B	68.9	68.9	69.1	0.2	**Yes**
469	1	Residence	B	60.4	60.4	61.8	1.4	No
470	1	Residence	B	61.2	61.2	62.4	1.2	No
471	1	Residence	B	61.6	61.6	62.9	1.3	No
472	1	Residence	B	60.5	60.5	61.7	1.2	No
473	1	Residence	B	57.3	57.3	59.3	2.0	No
474	1	Residence	B	58.1	58.1	59.7	1.6	No
475	1	Residence	B	58.2	58.2	59.7	1.5	No
476	3	Residence	B	56.3	56.4	58.4	2.1	No
477	1	Residence	B	59.4	59.5	60.4	1.0	No
478	1	Residence	B	59.2	59.2	60.3	1.1	No
479	1	Residence	B	59.8	59.9	61.1	1.3	No
480	1	Residence	B	62.2	62.2	63.4	1.2	No
481	1	Residence	B	62.8	62.8	64.0	1.2	No
482	1	Residence	B	63.4	63.4	64.6	1.2	No
483	1	Residence	B	63.8	63.8	65.0	1.2	No
484	1	Residence	B	61.7	61.7	63.2	1.5	No
485	1	Residence	B	75.8	75.9			
486	1	Residence	B	71.7	71.7	71.9	0.2	**Yes**
487	1	Residence	B	67.3	67.3	67.9	0.6	**Yes**
488	1	Residence	B	70.8	70.8	70.9	0.1	**Yes**
489	1	Anna Gayle Resource Center	D	47.6	47.6	48.6	1.0	No
490	5	Residence	B	57.9	58.3	59.6	1.7	No
491	1	Residence	B	59.1	59.3	61.0	1.9	No
492	1	Residence	B	59.9	60.0	61.8	1.9	No
493	1	Residence	B	59.4	59.6	61.5	2.1	No
494	1	Residence	B	60.8	61.2	62.8	2.0	No
495	1	Residence	B	63.3	63.5	64.7	1.4	No
496	1	Residence	B	63.6	63.7	64.8	1.2	No
497	1	Pentecostal of Faith Church (Interior)	D	46.9	47.2	47.3	0.4	No
498	1	Residence	B	72.8	73.2	74.0	1.2	**Yes**
499	1	Residence	B	62.1	62.6	64.1	2.0	No
500	1	Residence	B	62.5	63.0	64.4	1.9	No
501	1	Residence	B	64.5	64.9	65.6	1.1	No
502	1	Residence	B	69.7	70.1	69.6	-0.1	**Yes**

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A)				Does Future Build Approach, Meet, or Exceed NAC?
				Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	
503	1	Residence	B	65.8	66.2	66.5	0.7	**Yes**
504	1	Residence	B	59.4	60.0	61.1	1.7	No
505	4	Residence	B	56.7	57.3	58.6	1.9	No
506	1	Residence	B	57.4	58.0	59.0	1.6	No
507	1	Residence	B	58.5	59.2	59.9	1.4	No
508	1	Residence	B	56.5	57.1	58.0	1.5	No
509	1	Residence	B	58.1	58.8	59.4	1.3	No
510	1	Residence	B	58.7	59.4	60.0	1.3	No
511	1	Residence	B	59.6	60.3	60.6	1.0	No
512	1	Residence	B	60.5	61.1	61.4	0.9	No
513	1	Residence	B	57.3	57.9	58.7	1.4	No
514	1	Iglesia De Dios Pentecostal Church (Interior)	D	36.4	37.0	37.9	1.5	No
515	1	Residence	B	62.7	63.3	63.9	1.2	No
516	2	Residence	B	63.5	64.0	64.4	0.9	No
517	2	Residence	B	61.2	61.7	62.4	1.2	No
518	1	Residence	B	72.6	73.1	73.5	0.9	**Yes**
519	1	Residence	B	69.5	69.9	69.2	-0.3	**Yes**
520	1	Residence	B	73.7	74.1	74.8	1.1	**Yes**
521	1	Residence	B	67.5	67.9	67.9	0.4	**Yes**
522	1	Residence	B	66.9	67.2	68.0	1.1	**Yes**
523	1	Residence	B	62.2	62.8	62.9	0.7	No
524	1	Residence	B	61.9	62.3	63.0	1.1	No
525	2	Residence	B	62.4	62.8	63.3	0.9	No
526	1	Residence	B	62.9	63.3	64.1	1.2	No
527	3	Residence	B	63.6	64.0	65.2	1.6	No
528	1	Residence	B	64.3	64.7	65.9	1.6	No
529	1	Residence	B	64.2	64.6	66.1	1.9	**Yes**
530	1	Residence	B	64.3	64.6	66.2	1.9	**Yes**
531	1	Residence	B	59.9	60.3	60.9	1.0	No
532	2	Residence	B	60.6	61.0	61.6	1.0	No
533	3	Residence	B	61.6	62.0	62.5	0.9	No
534	1	Residence	B	62.6	63.0	63.3	0.7	No
535	1	Residence	B	63.6	63.9	64.2	0.6	No
536	1	Residence	B	58.0	58.3	58.7	0.7	No
537	3	Residence	B	59.6	59.9	59.8	0.2	No
538	3	Residence	B	60.4	60.7	60.9	0.5	No
539	4	Residence	B	62.1	62.3	62.4	0.3	No
540	2	Residence	B	63.7	63.9	64.0	0.3	No
541	1	Residence	B	64.8	65.0	65.2	0.4	No
542	1	Residence	B	65.2	65.4	65.4	0.2	No
543	1	Residence	B	65.9	66.1	65.8	-0.1	No
544	1	Residence	B	66.9	67.2	66.2	-0.7	**Yes**
545	1	Residence	B	70.7	70.7	70.6	-0.1	**Yes**
546	1	Residence	B	65.3	65.3	66.2	0.9	**Yes**
547	1	Residence	B	62.0	62.0	63.3	1.3	No
548	1	Residence	B	60.5	60.6	61.8	1.3	No
549	1	Residence	B	61.6	61.6	62.9	1.3	No
550	1	Residence	B	63.0	63.1	64.3	1.3	No
551	1	Mt. Olive Missionary Baptist Church (Interior)	D	35.7	35.7	36.9	1.2	No
552	1	Residence	B	62.6	62.6	63.8	1.2	No
553	1	Residence	B	64.7	64.7	65.8	1.1	No
554	1	Residence	B	71.9	71.9	72.7	0.8	**Yes**
555	1	Residence	B	67.8	67.8	68.2	0.4	**Yes**
556	1	Residence	B	64.1	64.1	65.3	1.2	No
557	1	Residence	B	62.4	62.5	63.7	1.3	No
558	1	Residence	B	61.2	61.2	62.3	1.1	No
559	1	Residence	B	60.1	60.1	61.2	1.1	No
560	1	Residence	B	67.1	67.1	67.6	0.5	**Yes**
561	1	Residence	B	65.7	65.7	66.5	0.8	**Yes**
562	1	Residence	B	64.7	64.8	65.8	1.1	No
563	1	Residence	B	63.9	64.0	64.9	1.0	No
564	1	Residence	B	71.8	71.8	72.1	0.3	**Yes**
565	1	Residence	B	71.3	71.4	71.4	0.1	**Yes**
566	1	Residence	B	62.5	62.6	63.4	0.9	No
567	1	Residence	B	61.1	61.3	62.0	0.9	No
568	1	Residence	B	59.9	60.1	60.8	0.9	No
569	1	Residence	B	75.3	75.4			
570	1	Residence	B	68.5	68.7	68.6	0.1	**Yes**
571	1	Residence	B	65.1	65.4	66.0	0.9	**Yes**

Appendix D: Predicted Traffic Noise Levels - PREFERRED ALTERNATIVE

Site ID[1]	# of Units	Land Use / Activity	NAC Activity Category	Leq(h) - dB(A) Existing (2024)	Future No-Build (2050)	Future Build (2050) Preferred Alternative	Change From Existing	Does Future Build Approach, Meet, or Exceed NAC?
572	1	Residence	B	62.8	63.0	63.7	0.9	No
573	1	Residence	B	62.3	62.5	63.2	0.9	No
574	1	Residence	B	61.8	62.1	62.8	1.0	No
575	1	Residence	B	61.5	61.8	62.5	1.0	No
576	2	Residence	B	60.8	61.2	61.9	1.1	No
577	1	Mt. Raymond Baptist Church (Interior)	D	34.4	34.9	35.4	1.0	No
578	1	Residence	B	61.2	61.7	62.6	1.4	No
579	1	Residence	B	66.6	67.0	67.2	0.6	**Yes**
580	1	Residence	B	68.2	68.6	68.3	0.1	**Yes**
581	1	Residence	B	67.3	67.7	67.5	0.2	**Yes**
582	1	Residence	B	65.4	65.8	65.8	0.4	No
583	1	Residence	B	63.8	64.2	64.4	0.6	No
584	1	Residence	B	62.8	63.3	64.1	1.3	No
584	1	Residence	B	64.2	64.6	64.6	0.4	No
585	1	Residence	B	63.7	64.1	64.4	0.7	No
586	1	Residence	B	61.9	62.4	63.0	1.1	No
587	1	Residence	B	62.2	62.7	63.1	0.9	No
588	1	Residence	B	60.8	61.3	61.9	1.1	No
589	1	Residence	B	64.3	64.7	65.6	1.3	No
590	1	Residence	B	64.3	64.7	65.8	1.5	No
591	1	Residence	B	64.1	64.5	65.6	1.5	No
592	1	Residence	B	61.2	61.8	62.2	1.0	No
593	1	Residence	B	60.3	60.9	61.5	1.2	No
594	1	Residence	B	59.5	60.1	61.0	1.5	No
595	1	Residence	B	58.8	59.3	60.4	1.6	No
596	1	Residence	B	58.7	59.2	60.0	1.3	No
597	1	Residence	B	58.5	59.1	59.5	1.0	No
598	1	Residence	B	59.3	59.9	60.5	1.2	No
599	1	Residence	B	58.7	59.4	59.8	1.1	No
600	1	Residence	B	58.8	59.4	59.9	1.1	No
601	1	Residence	B	57.6	58.2	58.8	1.2	No
602	1	Residence	B	56.7	57.2	58.4	1.7	No
603	1	Residence	B	56.0	56.6	57.8	1.8	No
604	1	Residence	B	55.9	56.5	57.6	1.7	No
605	1	Residence	B	56.0	56.6	56.9	0.9	No
606	1	Residence	B	57.6	58.2	58.6	1.0	No
607	2	Residence	B	57.9	58.6	57.8	-0.1	No
608	3	Residence	B	56.9	57.5	57.2	0.3	No
609	1	Residence	B	60.4	60.9	61.3	0.9	No
610	2	Residence	B	59.2	59.8	59.8	0.6	No
611	1	Residence	B	63.6	64.1	64.1	0.5	No
612	1	Iglesia Evangelica Cristiana Church (Interior)	D	36.7	37.3	37.2	0.5	No
613	1	Residence	B	61.7	62.2	61.8	0.1	No
614	3	Residence	B	58.9	59.5	59.0	0.1	No
615	1	Residence	B	59.2	59.8	58.9	-0.3	No
616	1	Residence	B	61.6	62.1	61.5	-0.1	No
617	1	Residence	B	61.7	62.3	61.2	-0.5	No
618	1	Residence	B	64.4	64.9	64.9	0.5	No
619	1	Residence	B	64.1	64.7	64.2	0.1	No
620	1	Residence	B	64.6	65.2	63.8	-0.8	No
621	1	Residence	B	64.7	65.3	63.5	-1.2	No
622	1	Residence	B	65.1	65.7	63.4	-1.7	No
623	1	Residence	B	69.6	70.2	66.9	-2.7	**Yes**
624	1	Residence	B	61.9	62.6	60.9	-1.0	No
625	1	Residence	B	60.7	61.4	58.8	-1.9	No
626	1	Residence	B	59.8	60.5	58.1	-1.7	No
627	2	Residence	B	69.3	69.8	67.4	-1.9	**Yes**
628	1	Residence	B	66.2	66.7	65.0	-1.2	No
629	1	Residence	B	64.8	65.3	63.8	-1.0	No
630	2	Residence	B	65.8	66.2	64.8	-1.0	No
631	1	Residence	B	61.1	61.8	59.0	-2.1	No
632	1	Residence	B	62.3	63.0	60.5	-1.8	No
633	1	Residence	B	62.0	62.6	60.4	-1.6	No
634	1	Residence	B	61.6	62.1	60.5	-1.1	No

[1] Receptor locations are provided on the Figures in Appendix B. The letters "A", "B", "C", "D" following a Site ID refer to first, second, third, fourth and subsequent additional floors, respectively for residences located in multi-family apartment/condominium buildings.

Potential Right-of-Way Acquisition/Relocation with Preferred Alternative. Future traffic noise levels not evaluated.

Appendix E

TNM Files (Provided Electronically)

Appendix F

Special Land Use Documentation

Usage Screening - To be used for IMPACTED ISOLATED SLUS ONLY

An isolated SLU must have enough person-hour usage to equate to at least 2 residences to satisfy the FDOT requirement that 2 residences must be provided a benefit for a noise barrier to be found feasible.

Note: An SLU would need to be utilized by approximately 122 people for 1 hour per day for 365 days in a year to meet the required 44,326 person-hours.

Outdoor Tables at Boat Ramp (Receptors 273-276)

Average Single-Family Residence in Florida - Person Hours per Year	
Average number of people in a single-family residence in Florida (US CENSUS, 2018-2022 data)	2.53
Hours a single-family residence is available for use (24 hours x 365 days)	8,760
Residential Person-Hours per Year Available for Use	22,163
Isolated SLU Person-Hours per Year	
Average number of users per day at the SLU	122
Approximate daily hourly usage by each person at the SLU	1
Number of Days per week the SLU is operational	7
Number of weeks per year the SLU is operational	52
Person-Hours per Year SLU is available for use	44,408
Equivalent Residence (ER)	**2.00**
Isolated SLU Eligible for Noise Barrier Evaluation?	ELIGIBLE

The assumption that 2.53 persons utilize the average single-family home in Florida was obtained from the Florida Census data from 2018-2022 (https://www.census.gov/quickfacts/fact/table/FL/HSD310220).

SLU NAME	Palmetto Esturary Preserve
SLU DESCRIPTION	Trail, Playground, Pavilions
NAC	C

SLU Equivalent Residence (ER) Identification

Step	Sub-Step	Description	Value
		Average Single-Family Residence in Florida - Person Hours per Year	
A1	a	Average number of people in a single-family residence in Florida (US CENSUS, 2018-2022 data)	2.53
	b	Hours a single-family residence is available for use (24 hours x 365 days)	8,760
	c	**Residential Person-Hours per Year Available for Use**	22,163
		SLU Person Hours per Year	
A2	a	Average number of users per day *in the area evaluated* at the SLU	300
	b	Approximate daily hourly usage by each person *in the area evaluated* at the SLU	1
	c	Number of days per week the SLU is operational	7
	d	Number of weeks per year the SLU is operational	52
	e	**Person-Hours per Year Available for Use at the SLU**	109,200
		SLU Area Evaluated Equivalent Residence (ER)	
A3	a	**Equivalent Residence (ER)**	**4.93**
		SLU Receptor Equivalent Residence (ER)	
A4	a	Identify the number of receptors evaluated at the SLU	21
	b	Individual Receptor Equivalent Residence (i.e., each receptor point evaluated is worth…)	0.235

SLU NAME	Palmetto Trace Apartments
SLU DESCRIPTION	Playground and Volleyball Court
NAC	C

SLU Equivalent Residence (ER) Identification

Step	Sub-Step	Description	Value
		Average Single-Family Residence in Florida - Person Hours per Year	
A1	a	Average number of people in a single-family residence in Florida (US CENSUS, 2018-2022 data)	2.53
	b	Hours a single-family residence is available for use (24 hours x 365 days)	8,760
	c	**Residential Person-Hours per Year Available for Use**	22,163
		SLU Person Hours per Year	
A2	a	Average number of users per day *in the area evaluated* at the SLU	25
	b	Approximate daily hourly usage by each person *in the area evaluated* at the SLU	1
	c	Number of days per week the SLU is operational	7
	d	Number of weeks per year the SLU is operational	52
	e	**Person-Hours per Year Available for Use at the SLU**	9,100
		SLU Area Evaluated Equivalent Residence (ER)	
A3	a	**Equivalent Residence (ER)**	**0.41**
		SLU Receptor Equivalent Residence (ER)	
A4	a	Identify the number of receptors evaluated at the SLU	2
	b	Individual Receptor Equivalent Residence (i.e., each receptor point evaluated is worth…)	0.205

SLU NAME	Bradenton Village
SLU DESCRIPTION	Courtyard, Clubhouse, Pool, Tennis Court, Pavilions/Picnic Tables
NAC	C

SLU Equivalent Residence (ER) Identification

Step	Sub-Step	Description	Value
		Average Single-Family Residence in Florida - Person Hours per Year	
A1	a	Average number of people in a single-family residence in Florida (US CENSUS, 2018-2022 data)	2.53
	b	Hours a single-family residence is available for use (24 hours x 365 days)	8,760
	c	**Residential Person-Hours per Year Available for Use**	22,163
		SLU Person Hours per Year	
A2	a	Average number of users per day *in the area evaluated* at the SLU	203
	b	Approximate daily hourly usage by each person *in the area evaluated* at the SLU	1
	c	Number of days per week the SLU is operational	7
	d	Number of weeks per year the SLU is operational	52
	e	**Person-Hours per Year Available for Use at the SLU**	73,892
		SLU Area Evaluated Equivalent Residence (ER)	
A3	a	**Equivalent Residence (ER)**	**3.33**
		SLU Receptor Equivalent Residence (ER)	
A4	a	Identify the number of receptors evaluated at the SLU	7
	b	Individual Receptor Equivalent Residence (i.e., each receptor point evaluated is worth…)	0.476

SLU NAME	Coach Eddie Shannon Park (Formerly Lincoln Park)
SLU DESCRIPTION	Walking Trail, Pavilions/Picnic Tables, Aquatic Center
NAC	C

SLU Equivalent Residence (ER) Identification

Step	Sub-Step	Description	Value
		Average Single-Family Residence in Florida - Person Hours per Year	
A1	a	Average number of people in a single-family residence in Florida (US CENSUS, 2018-2022 data)	2.53
	b	Hours a single-family residence is available for use (24 hours x 365 days)	8,760
	c	**Residential Person-Hours per Year Available for Use**	22,163
		SLU Person Hours per Year	
A2	a	Average number of users per day *in the area evaluated* at the SLU	111
	b	Approximate daily hourly usage by each person *in the area evaluated* at the SLU	2.5
	c	Number of days per week the SLU is operational	7
	d	Number of weeks per year the SLU is operational	52
	e	**Person-Hours per Year Available for Use at the SLU**	101,010
		SLU Area Evaluated Equivalent Residence (ER)	
A3	a	**Equivalent Residence (ER)**	**4.56**
		SLU Receptor Equivalent Residence (ER)	
A4	a	Identify the number of receptors evaluated at the SLU	24
	b	Individual Receptor Equivalent Residence (i.e., each receptor point evaluated is worth…)	0.190

User Group	Annual Users	Avg Hours per Day	Annual User-Hours	Summary	
Short Visit Users	11,000	0.5	2,007,500	Total Annual Users	40200
Typical Visit Users	26,280	2.5	23,980,500	**Average Users per Day**	**110.136986**
Long Visit Users	2,920	6	6,394,800	**Weighted Avg Hours per User**	**2.20696517**
Total	40,200		88,720		

Placer.ai

watchtower

Property Overview

Jan 1 - Dec 31, 2025

Properties:

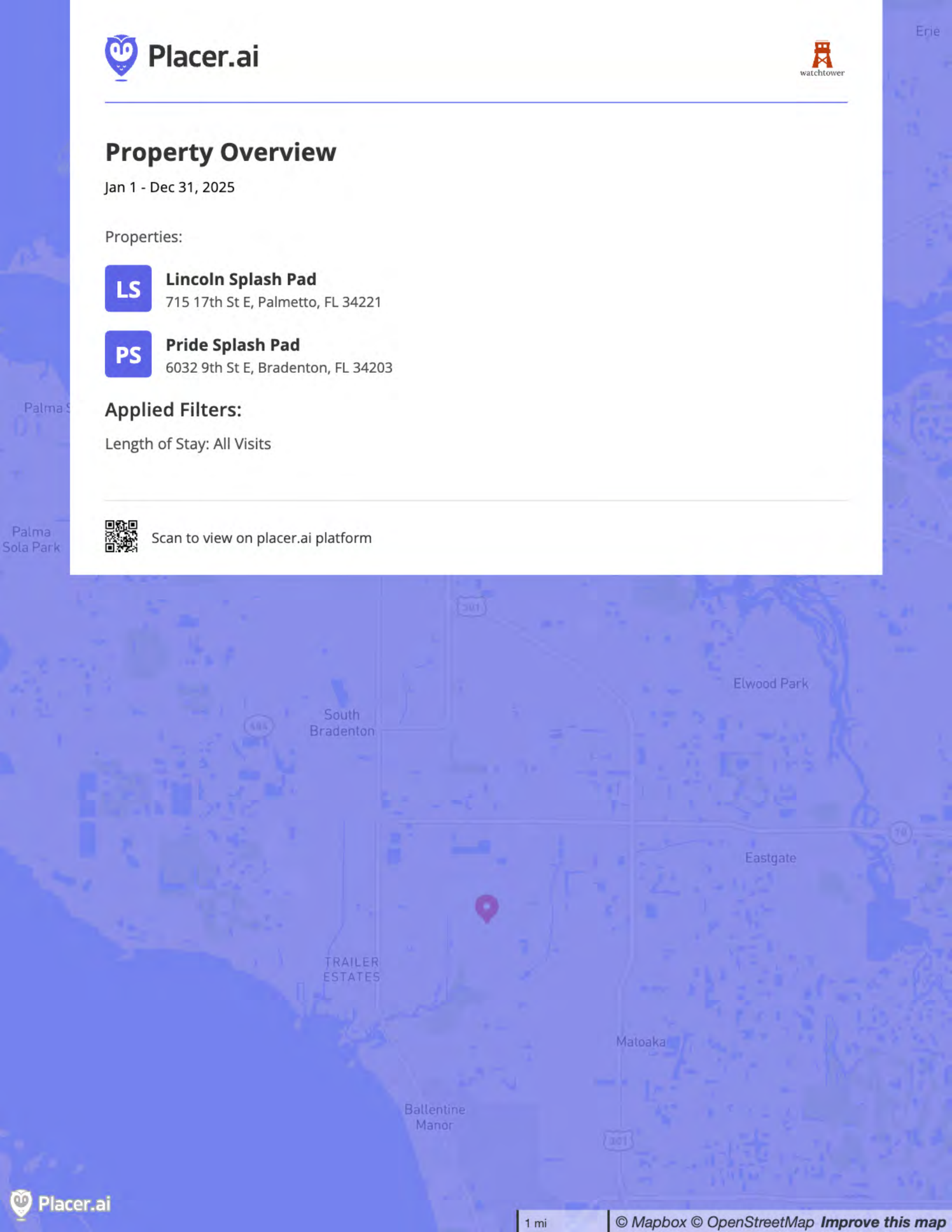
LS **Lincoln Splash Pad**
715 17th St E, Palmetto, FL 34221

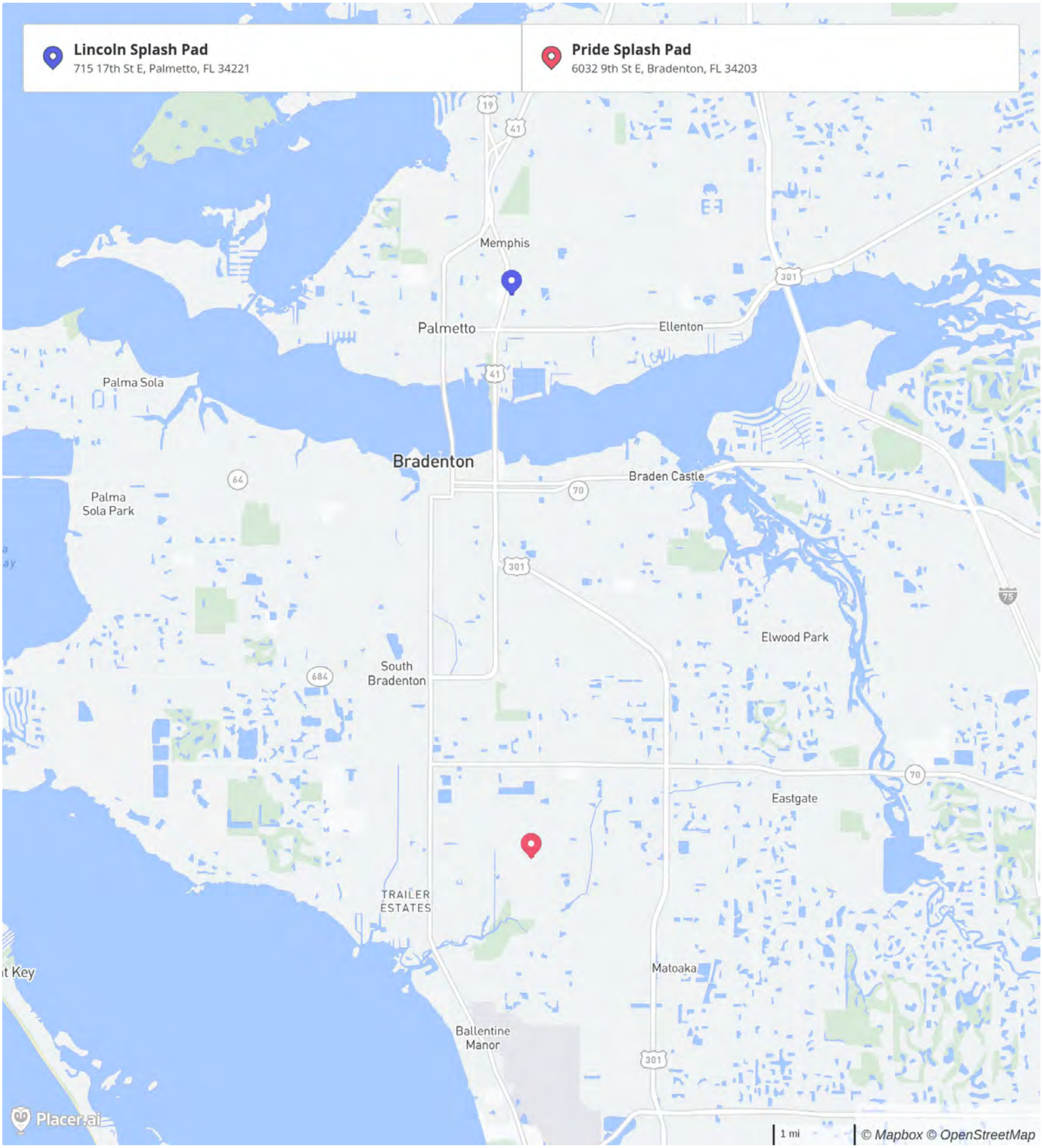
PS **Pride Splash Pad**
6032 9th St E, Bradenton, FL 34203

Applied Filters:

Length of Stay: All Visits

Scan to view on placer.ai platform




Lincoln Splash Pad
715 17th St E, Palmetto, FL 34221
Pride Splash Pad
6032 9th St E, Bradenton, FL 34203
Memphis
Palmetto
Ellenton
Palma Sola
Bradenton
Braden Castle
Palma Sola Park
South Bradenton
Elwood Park
Eastgate
TRAILER ESTATES
Matoaka
Ballentine Manor
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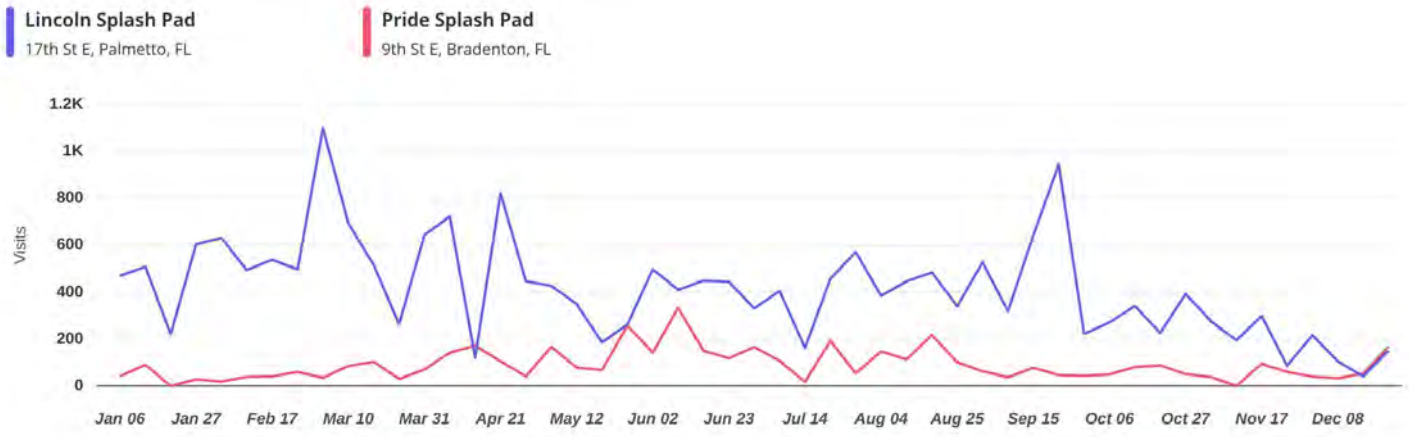
Metrics

Metric Name	Lincoln Splash Pad 17th St E, Palmetto, FL	Pride Splash Pad 9th St E, Bradenton, FL
Visits	21.6K	4.6K
Visitors	11K	1.6K
Visit Frequency	1.97	2.88
Avg. Dwell Time	27 Min	34 Min
Visits Yo3Y	+163.3%	+72.5%

Jan 1st, 2025 - Dec 31st, 2025
Data provided by Placer Labs Inc. (www.placer.ai)

Placer.ai

Visits Trend



Weekly | Visits | Jan 1st, 2025 - Dec 31st, 2025
Data provided by Placer Labs Inc. (www.placer.ai)

Placer.ai

Outlook

RE: Bradenton-Palmetto Connector PD&E Study - Coach Eddie Shannon Park

From Molly White <molly.white@mymanatee.org>
Date Wed 3/25/2026 4:39 PM
To Michael Mulbarger <MMulbarger@esassoc.com>

Peak attendance would be 150 at a time, just varies during the week. There are 2 fields there, football/soccer- so roster sizes vary and sports vary for a daily average I would go with 60-80.

Molly White, Med, BS, CPRP | Director
Manatee County Government
Sports & Leisure Services Department
5502 33rd Ave Dr West
Bradenton, FL 34209
Office: 941-742-5923 x6007
Cell: 941-290-8017 (no text)
mymanatee.org/parks

From: Michael Mulbarger <MMulbarger@esassoc.com>
Sent: Wednesday, March 25, 2026 2:00 PM
To: Molly White <molly.white@mymanatee.org>
Subject: Re: Bradenton-Palmetto Connector PD&E Study - Coach Eddie Shannon Park

Thank you for the quick response, it is greatly appreciated!

Regarding the use at the athletic fields, are the player averages per day during those seasons or is it based on some other time metric?

Thank You,

Mike Mulbarger, PMP
Senior Managing Associate

ESA | Environmental Science Associates
813.732.6852 **cell**
813.207.7207 **direct**

From: Molly White <molly.white@mymanatee.org>
Sent: Wednesday, March 25, 2026 8:28 AM
To: Michael Mulbarger <MMulbarger@esassoc.com>
Subject: FW: Bradenton-Palmetto Connector PD&E Study - Coach Eddie Shannon Park

Good morning, see page 3-4. It has the 2025 yearly and daily numbers at Lincoln pool- athletics information is below.

Molly White, Med, BS, CPRP | Director
Manatee County Government
Sports & Leisure Services Department
5502 33rd Ave Dr West
Bradenton, FL 34209
Office: 941-742-5923 x6007
Cell: 941-290-8017 (no text)
mymanatee.org/parks

From: Marcus Francis <marcus.francis@mymanatee.org>
Sent: Tuesday, March 24, 2026 7:34 PM
To: Molly White <molly.white@mymanatee.org>; John Linxwiler <john.linxwiler@mymanatee.org>
Cc: Allison Minardi <allison.minardi@mymanatee.org>; Chet Brown <chet.brown@mymanatee.org>
Subject: Re: Bradenton-Palmetto Connector PD&E Study - Coach Eddie Shannon Park

Overview; (2025 Calendar Year)

Two Host Programs:

- Bradenton Youth Gladiators (August - May)
  - Fall - Tackle Season (August - November)
    - Avg. 140 Players
    - 2 Fields: Monday - Thursdays (6pm - 8pm) / Roughly 5 Saturday Home Games (All Day)
  - Winter / Spring - Flag Season & Conditioning (December - May)
    - Avg. 40 - 60 Players
    - 1 Field: Tuesday & Thursdays (6pm - 8pm) / Few Random Saturday Games (All Day)

- Manatee Adult Soccer (August - May)
  - Sunday Nights - 2 Fields (8am - 5pm)
  - Friday Nights (Winter & Spring after High School Swim Season) - 2 Fields (7pm - 10pm)
  - 100+ Players & Spectators

Additional Uses Vary;
- Hosting 2nd Tackle Football Program in the Fall on Open Saturdays (5+)
- Local Charter Schools (3x) Flag Football & Soccer Games.

Between the two Fields & Pavilions, the Park sees Consistent Activity with Fridays - Sundays much busier & Saturday subject to Pool Opening & Football Games in the Fall.

Estimated 130 Reservations & over 2,200 Hours in Total (Pavilions included).

Thank you,

Marcus Francis | Athletics/Camps Manager
Manatee County Government
Sports & Leisure Services Department
5502 33rd Ave Dr West
Bradenton, FL 34209
Office: 941-742-5923 x6063
mymanatee.org/parks

From: Molly White <molly.white@mymanatee.org>
Sent: Tuesday, March 24, 2026 8:09 AM
To: Marcus Francis <marcus.francis@mymanatee.org>; John Linxwiler <john.linxwiler@mymanatee.org>
Cc: Allison Minardi <allison.minardi@mymanatee.org>; Chet Brown <chet.brown@mymanatee.org>
Subject: FW: Bradenton-Palmetto Connector PD&E Study - Coach Eddie Shannon Park

Good Morning,

Team work needed- can you send me the usage for Lincoln Pool- daily/yearly as well as the field reservations?

Thank you!

Molly White, Med, BS, CPRP | Director
Manatee County Government
Sports & Leisure Services Department
5502 33rd Ave Dr West
Bradenton, FL 34209
Office: 941-742-5923 x6007
Cell: 941-290-8017 (no text)
mymanatee.org/parks

From: Michael Mulbarger <MMulbarger@esassoc.com>
Sent: Tuesday, March 24, 2026 8:00 AM
To: Molly White <molly.white@mymanatee.org>
Subject: Bradenton-Palmetto Connector PD&E Study - Coach Eddie Shannon Park

Hello and Good Morning -

The Florida Department of Transportation (FDOT) is currently conducting a Project Development and Environment (PD&E) Study to evaluate improvements to U.S. 41/U.S. 301 from 9th Street East in Bradenton to the CSX railroad in Palmetto in Manatee County (known as the Bradenton-Palmetto Connector). I am one of the subconsultants to the FDOT responsible for conducting the traffic noise analysis for the proposed improvements. Coach Eddie Shannon Park (formerly Lincoln Park) is located within the study area and is included in our analysis.

Part of the traffic noise analysis involves determining the amount of usage at the facility. To that end, and if available, can you please provide usage data, along with how this usage was determined, for the park? Whatever format you can provide would be appreciated, but a daily average or annual figure would be the most helpful.

A link to the project website with additional information is provided below. Thank you for your time, and I can be reached at the contact information below if you have any questions or would like to discuss further.

444843-1 Bradenton-Palmetto Connector Project Development and Environment (PD&E) Study

Thank You,
Mike

Mike Mulbarger, PMP
Senior Managing Associate

ESA | **Environmental Science Associates**
Tampa, FL

813.732.6852 **cell**
813.207.7207 **direct**
MMulbarger@esassoc.com | **esassoc.com**